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ENGINEERING EXHIBIT  
AMENDED APPLICATION FOR  
MODIFICATION OF CONSTRUCTION PERMIT  
GOLDEN ORANGE BROADCASTING CO., INC.  
STATION KDOC-DT, ANAHEIM, CALIFORNIA  
CH.32 1000 KW (MAX-DA) 949 METERS

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ENGINEERING STATEMENT

The instant Engineering Exhibit has been prepared on behalf of Golden Orange Broadcasting Co., Inc. (hereafter, Golden Orange), the permittee in BMPCDT-20000427ABH for a digital television facility for KDOC-DT, Anaheim, California. The construction permit is for operation on Channel 32 with maximum effective radiated power of 1000 kW and antenna radiation center height of 938 meters above average terrain.

Golden Orange has an application pending, BMPCDT-20040323ATA, which seeks to modify the directional antenna radiation pattern. The antenna configuration was very carefully designed to avoid causing new interference within Mexico to the Mexican co-channel DTV allotment at Tijuana. The State Office of Radio & Television Systems of Mexico responded to the Notification of the Golden Orange proposal indicating that it would approve the KDOC-DT proposal if the U. S. would accede to an increase in antenna height for the co-channel Tijuana DTV allotment. The antenna height increase that was proposed was 70 meters.

Golden Orange was apprised of this offer by the FCC's International Bureau, and was afforded an opportunity to accept, or offer a counterproposal. Prior to this latest KDOC-DT proposal, Golden Orange had acceded to a power increase to 1000 kW (omni-directional) for the Tijuana allotment in order to achieve Mexican approval for the pattern that is now set forth in the outstanding KDOC-DT construction permit. This pattern limited the radiation toward the Mexican border area to 200 kW at the pertinent

depression angles. The Tijuana power increase created interference to KDOC-DT within the U.S., and the new demand for increased height for the Tijuana allotment would create additional new interference to KDOC-DT within the U. S. The instant amendment offers a counterproposal, which seeks a more equitable balancing of the interference issue. Golden Orange will accept the proffered modification to the Tijuana allotment if the instant proposal is, likewise, accepted by Mexico.

Although the August 3, 2004, freeze Order would normally preclude the filing of the instant amendment, the Order has an exception provision that permits the filing of a modification application when the modification application would resolve international coordination issues. It is believed that this exception provision is applicable in the present instance, and that the instant proposal, therefore, is acceptable for filing.

Golden Orange, now, seeks to modify the radiation pattern with an increase in the antenna height above average terrain. No change in site, or in the maximum effective radiated power, is proposed. Specifically, the proposed operation is for continued operation on allotted Channel 32 with maximum effective radiated power of 1000 kW. The antenna radiation center height above average terrain is increased to 949 meters.

The radiation now proposed toward the Tijuana allotment is increased, but is less than the 1000 kW that the Tijuana allotment is permitted toward the KDOC-DT service area. The height increase of 11 meters that is now proposed for KDOC-DT is significantly less than the 70-meter height increase proposed for the Tijuana allotment. On balance, the instant proposal for KDOC-DT only partially offsets the prospective gains for the Tijuana allotment.

The Antenna Structure Registration (ASR) number for the tower is 1221073. The site NAD '27 geographic coordinates are: 34° 13' 35" north latitude; 118° 03' 58" west

longitude. These coordinates were converted from the NAD'83 coordinates given in the ASR.

The antenna that will be employed is the master antenna at Mt. Wilson that has been manufactured by Radio Frequency Systems (RFS). The antenna model is PHP30CB. The antenna is authorized for use for several other stations. This "B" antenna is located higher on the same supporting structure as the "A" antenna that is now authorized for KDOC-DT use in BMPCDT-20000427ABH.

The antenna consists of a number of panels that are variously mounted on the supporting structure. Figure 1 is the composite azimuth pattern for the antenna using the maximum radiation in the vertical plane that occurs in each direction. The tabulation of azimuth data for the pattern, in 1° increments, is furnished in Figure 2. Figure 3 provides normalized vertical plane data for the antenna for each 5° azimuth angle for the vertical plane angular span from 0° (horizontal plane) to 8.3° below the horizontal plane.

In order to obtain the effective radiated power in a particular azimuth direction at some particular depression angle, the normalized relative vertical plane field value at the azimuth angle of interest from Figure 3 must be multiplied by the relative field value in the particular azimuth direction of interest from either Figure 1, or Figure 2. This product is then squared and multiplied by 1000 kW. The maximum radiation of 1000 kW occurs at a depression angle of 1.5° below the horizontal plane along the 112° true bearing. The maximum power gain is 16.33 dBd.

Figure 4 is the normalized composite relative field pattern at 10° azimuth intervals, with certain additional fill-in bearings at 15° azimuth intervals to permit better definition of the coverage than can be determined from use of only the standard 45° spaced intervals that are called for in the FCC Rules. The composite pattern of Figure 4 is

for depression angles to the radio horizon, and takes into account the requirement that the maximum radiation in the vertical plane be employed if the relative field at the depression angle to the radio horizon is 90% or more of the maximum that occurs in the vertical plane.

Figure 5 includes the tabulation of data for the pattern of Figure 4. Figure 5, also, includes the distances to the F(50,90), 48 dBu and 41 dBu contours which were determined using the radiation and elevation data of Figure 5. Figure 6 is a map that shows the 48 dBu (principal community) and 41 dBu (noise-limited) service contours that were drawn from the data in Figure 5. Figure 6 demonstrates that all of Anaheim is encompassed by the proposed 48 dBu contour, as required by the Rules.

The depression angle to the radio horizon that is listed for each direction was determined from the antenna radiation center height above the 3.2-16.1 kilometer terrain average using the empirical equation in Section 73.625(b)(2) of the FCC Rules. The U.S.G.S. 3 arc-second terrain elevation database was the source for the terrain elevation data. The data of Figure 3 were used to determine if the radiation to the radio horizon was equal to, or greater than, 90% of the maximum in the vertical plane in each direction of interest. 6.

Compliance with the FCC requirements for interference protection to domestic NTSC and DTV facilities is achieved with the facilities proposed herein. The studies that were made to determine compliance used a FCC matched computer analysis taking into account the facilities for other NTSC and DTV stations according to the conditions at the time of the original allotments in Appendix B of the Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders in MM Docket Number 87-268, and as currently authorized, or proposed, where the current existing or

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KDOC-DT, Anaheim, California

proposed facilities result in coverage exceeding the then authorized NTSC facilities, or the original DTV allotment facilities.

A Sunblade processor was used with the "tv\_process" program that was developed by Techware. Techware is the contractor for the FCC's in-house program that is used for determining compliance with the de minimis interference constraint of the Rules. The "tv\_process" program takes into account all possible interference scenarios in determining compliance with the FCC's interference criteria. The processor output was scanned for any "failed" condition. No report of a failed condition occurred. A "failed" condition would have signified that the proposed KDOC-DT facility would create more than 2%, de minimis, interference to the particular station under review.

The NTSC stations that were reviewed were: KCET, Los Angeles, CA, Channel 28; KPXN, San Bernardino, CA, Channel 30; KMEX-TV, Los Angeles, Channel 34; and KTBN-TV, Santa Ana, CA, Channel 40. The DTV stations that were reviewed were: KMCC-DT, Laughlin, AZ (formerly, Lake Havasu City, AZ), Channel 32; KBAK-DT, Bakersfield, CA, Channel 33; and KTLA-DT, Los Angeles, CA, Channel 31.

No television Class A stations are close enough to merit consideration. It is believed that the instant proposal is in compliance with all the Rules governing domestic interference issues.

The allocation concerns with respect to Mexico have been reviewed in earlier paragraphs and no additional comment is believed necessary.

As to environmental impact issues, the only concern for KDOC-DT relates to radio-frequency radiation exposure to persons at uncontrolled and controlled locations. Upon completion of the master antenna installation, and with all the participating stations

operating at their authorized power levels, measurements will be conducted in the vicinity of the tower to establish if there are any publicly accessible spots with levels of radiation that exceed the maximum permissible exposure (MPE). Appropriate corrective measures will be taken if it develops that excessive radiation levels are present.

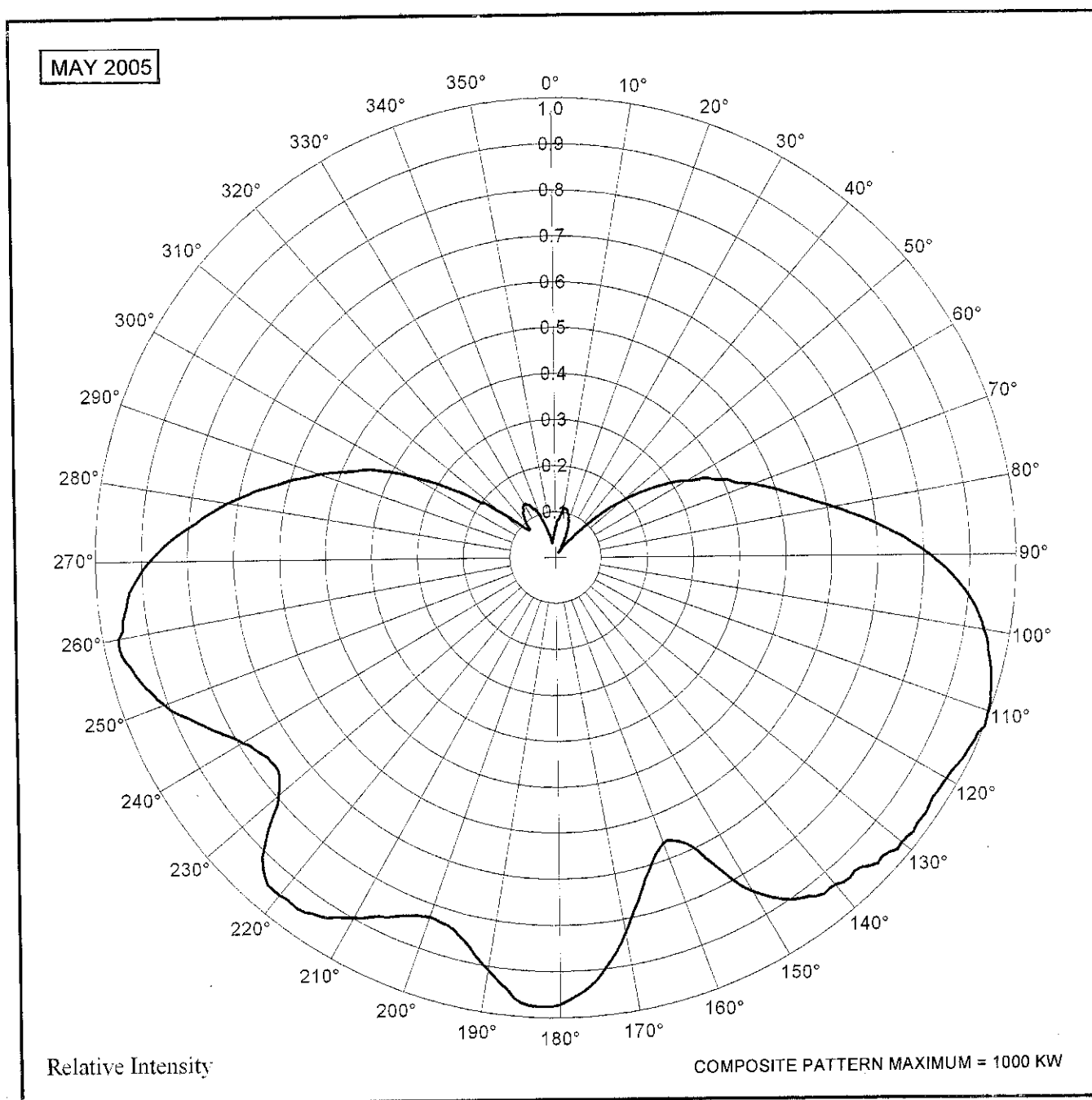
As to the avoidance of overexposure of workers to rfr at controlled locations, the following is germane. The tower is located within a fence-enclosed area. Access within the fence is permitted only to authorized personnel. Radiation hazard warning signs are posted on the fence. Thus, the fence-enclosed area is a controlled work area. The tower owner has instituted procedures that require the cessation of excitation to the master A and B antennas whenever a worker's activities will place him (or, her) so close as to otherwise result in excessive rfr exposure according to the ANSI/IEEE C95.1-1992 adopted standard. Based on the foregoing, both the public and workers will be protected from overexposure to rfr according to the adopted standard.

The instant amendment will not alter the conclusion that no significant impact on the environment will result from implementation of this modification application. An environmental assessment is not required for this proposal.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 17, 2005.

*Bernard R. Segal, P.E.*  
Bernard R. Segal, P. E.

FIGURE 1



**COMPOSITE AZIMUTH PATTERN USING  
MAXIMUM VERTICAL PLANE RADIATION VALUES**

GOLDEN ORANGE BROADCASTING CO., INC.  
STATION KDOC-DT ANAHEIM, CALIFORNIA  
CH. 32 1000KW (MAX-DA) 949 METERS

Bernard R. Segal, P. E. Consulting Engineer



COMPOSITE AZIMUTH PATTERN DATA USING  
MAXIMUM VERTICAL PLANE RADIATION VALUES  
(RELATIVE FIELD AT INDICATED AZIMUTH ANGLE)

0,0.0632	36,0.0362	72,0.4845	108,0.9894
1,0.0689	37,0.0406	73,0.4979	109,0.9939
2,0.0724	38,0.0467	74,0.5111	110,0.9951
3,0.0782	39,0.05	75,0.5253	111,0.9975
4,0.0821	40,0.053	76,0.5413	112,1
5,0.084	41,0.0633	77,0.5575	113,0.9916
6,0.0865	42,0.0745	78,0.5731	114,0.9909
7,0.09	43,0.0863	79,0.5913	115,0.9877
8,0.0974	44,0.101	80,0.6116	116,0.9858
9,0.1045	45,0.1168	81,0.6308	117,0.9836
10,0.1086	46,0.1311	82,0.6498	118,0.9795
11,0.1087	47,0.147	83,0.672	119,0.9751
12,0.1088	48,0.1629	84,0.6934	120,0.9735
13,0.1077	49,0.1716	85,0.7126	121,0.9717
14,0.1063	50,0.1891	86,0.734	122,0.9704
15,0.1041	51,0.2071	87,0.7555	123,0.9695
16,0.1004	52,0.2206	88,0.7727	124,0.9719
17,0.0984	53,0.2349	89,0.7938	125,0.975
18,0.0949	54,0.2488	90,0.8129	126,0.9738
19,0.0884	55,0.2623	91,0.8289	127,0.9729
20,0.0849	56,0.2779	92,0.8471	128,0.9778
21,0.0801	57,0.2924	93,0.8623	129,0.9736
22,0.075	58,0.3064	94,0.877	130,0.9715
23,0.0693	59,0.3181	95,0.8911	131,0.9742
24,0.062	60,0.327	96,0.9035	132,0.9648
25,0.0545	61,0.3411	97,0.9161	133,0.9598
26,0.0461	62,0.3622	98,0.9255	134,0.9627
27,0.0377	63,0.3731	99,0.9345	135,0.9544
28,0.0303	64,0.3814	100,0.9422	136,0.9426
29,0.0208	65,0.3934	101,0.9512	137,0.9397
30,0.0128	66,0.4096	102,0.9571	138,0.9432
31,0.0141	67,0.4171	103,0.9627	139,0.9409
32,0.0195	68,0.4256	104,0.97	140,0.9328
33,0.025	69,0.4399	105,0.9754	141,0.9313
34,0.0297	70,0.4575	106,0.9803	142,0.9327
35,0.0345	71,0.4695	107,0.9855	143,0.9263

COMPOSITE AZIMUTH PATTERN DATA USING  
MAXIMUM VERTICAL PLANE RADIATION VALUES  
(RELATIVE FIELD AT INDICATED AZIMUTH ANGLE)

144,0.9164	180,0.9705	216,0.9444	252,0.9247
145,0.9092	181,0.9743	217,0.9481	253,0.9352
146,0.9009	182,0.975	218,0.9467	254,0.9421
147,0.889	183,0.9756	219,0.9459	255,0.9484
148,0.8747	184,0.9744	220,0.9487	256,0.9535
149,0.8594	185,0.9696	221,0.9487	257,0.9616
150,0.8425	186,0.9618	222,0.9484	258,0.9668
151,0.8214	187,0.9432	223,0.9393	259,0.9681
152,0.7923	188,0.9337	224,0.9282	260,0.9667
153,0.7617	189,0.9197	225,0.9129	261,0.9539
154,0.7307	190,0.9062	226,0.8899	262,0.9512
155,0.7004	191,0.895	227,0.8643	263,0.9455
156,0.6832	192,0.8821	228,0.8381	264,0.9384
157,0.6735	193,0.8682	229,0.8106	265,0.9339
158,0.6653	194,0.8561	230,0.7929	266,0.9279
159,0.6598	195,0.847	231,0.781	267,0.9171
160,0.6629	196,0.8386	232,0.7704	268,0.9058
161,0.6711	197,0.8323	233,0.7609	269,0.8951
162,0.6798	198,0.8304	234,0.7598	270,0.8817
163,0.6934	199,0.828	235,0.7618	271,0.8688
164,0.7085	200,0.8277	236,0.7632	272,0.8542
165,0.723	201,0.8317	237,0.7701	273,0.8382
166,0.7429	202,0.834	238,0.7748	274,0.8208
167,0.764	203,0.8411	239,0.7801	275,0.8041
168,0.7832	204,0.8473	240,0.7906	276,0.7846
169,0.8054	205,0.857	241,0.7987	277,0.7715
170,0.8262	206,0.8651	242,0.8099	278,0.7544
171,0.8479	207,0.87	243,0.8232	279,0.7382
172,0.8682	208,0.8787	244,0.8354	280,0.7219
173,0.8858	209,0.8895	245,0.8463	281,0.7017
174,0.9038	210,0.8981	246,0.8591	282,0.6829
175,0.9214	211,0.9067	247,0.8714	283,0.668
176,0.9339	212,0.9158	248,0.8864	284,0.6497
177,0.9442	213,0.927	249,0.8992	285,0.6296
178,0.9529	214,0.9333	250,0.9087	286,0.6123
179,0.9628	215,0.9374	251,0.9176	287,0.5968

COMPOSITE AZIMUTH PATTERN DATA USING  
MAXIMUM VERTICAL PLANE RADIATION VALUES  
(RELATIVE FIELD AT INDICATED AZIMUTH ANGLE)

288,0.5765	324,0.1177
289,0.5589	325,0.1213
290,0.544	326,0.1231
291,0.5256	327,0.1284
292,0.5069	328,0.1321
293,0.487	329,0.1318
294,0.4726	330,0.1343
295,0.4591	331,0.1348
296,0.4449	332,0.1306
297,0.4241	333,0.1287
298,0.4039	334,0.1269
299,0.3811	335,0.122
300,0.3575	336,0.1156
301,0.3348	337,0.1157
302,0.3123	338,0.1126
303,0.2898	339,0.1043
304,0.2677	340,0.0976
305,0.248	341,0.0887
306,0.2215	342,0.0833
307,0.1983	343,0.0753
308,0.1943	344,0.0614
309,0.1747	345,0.0534
310,0.1565	346,0.0502
311,0.1416	347,0.0407
312,0.1256	348,0.0323
313,0.1104	349,0.0344
314,0.0969	350,0.0362
315,0.0904	351,0.0366
316,0.0866	352,0.0402
317,0.0822	353,0.0425
318,0.083	354,0.0434
319,0.0905	355,0.0462
320,0.0972	356,0.0494
321,0.1034	357,0.0508
322,0.1065	358,0.0545
323,0.1114	359,0.0584

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
0	5	10	15
0,0.5253	0,0.5107	0,0.5479	0,0.5668
-0.1,0.568	-0.1,0.5548	-0.1,0.5912	-0.1,0.61
-0.2,0.6108	-0.2,0.6	-0.2,0.6354	-0.2,0.6532
-0.3,0.6519	-0.3,0.644	-0.3,0.6777	-0.3,0.6945
-0.4,0.6946	-0.4,0.6869	-0.4,0.7201	-0.4,0.7358
-0.5,0.7358	-0.5,0.7286	-0.5,0.7606	-0.5,0.7752
-0.6,0.7737	-0.6,0.769	-0.6,0.7983	-0.6,0.8117
-0.7,0.8117	-0.7,0.8071	-0.7,0.8343	-0.7,0.8463
-0.8,0.8465	-0.8,0.8429	-0.8,0.8674	-0.8,0.879
-0.9,0.8782	-0.9,0.875	-0.9,0.8978	-0.9,0.9078
-1,0.9066	-1,0.9048	-1,0.9245	-1,0.9328
-1.1,0.932	-1.1,0.9298	-1.1,0.9475	-1.1,0.9539
-1.2,0.9541	-1.2,0.9524	-1.2,0.9659	-1.2,0.9721
-1.3,0.9715	-1.3,0.9702	-1.3,0.9816	-1.3,0.9856
-1.4,0.9858	-1.4,0.9845	-1.4,0.9917	-1.4,0.9942
-1.5,0.9937	-1.5,0.994	-1.5,0.9982	-1.5,0.999
-1.6,1	-1.6,0.9988	-1.6,1	-1.6,1
-1.7,1	-1.7,1	-1.7,0.9982	-1.7,0.9962
-1.8,0.9968	-1.8,0.9964	-1.8,0.9917	-1.8,0.9875
-1.9,0.9873	-1.9,0.9881	-1.9,0.9807	-1.9,0.975
-2,0.9747	-2,0.9762	-2,0.965	-2,0.9587
-2.1,0.9589	-2.1,0.9595	-2.1,0.9457	-2.1,0.9376
-2.2,0.9383	-2.2,0.9393	-2.2,0.9227	-2.2,0.9135
-2.3,0.913	-2.3,0.9155	-2.3,0.8959	-2.3,0.8847
-2.4,0.8845	-2.4,0.8881	-2.4,0.8665	-2.4,0.854
-2.5,0.8528	-2.5,0.8571	-2.5,0.8333	-2.5,0.8194
-2.6,0.818	-2.6,0.8238	-2.6,0.7974	-2.6,0.7829
-2.7,0.7816	-2.7,0.7881	-2.7,0.7597	-2.7,0.7435
-2.8,0.7421	-2.8,0.75	-2.8,0.7201	-2.8,0.7032
-2.9,0.7009	-2.9,0.7107	-2.9,0.6786	-2.9,0.6609
-3,0.6582	-3,0.669	-3,0.6363	-3,0.6177
-3.1,0.6139	-3.1,0.6274	-3.1,0.5939	-3.1,0.5744
-3.2,0.5696	-3.2,0.5857	-3.2,0.5516	-3.2,0.5312
-3.3,0.5253	-3.3,0.544	-3.3,0.5092	-3.3,0.489
-3.4,0.4826	-3.4,0.5024	-3.4,0.4687	-3.4,0.4476
-3.5,0.4399	-3.5,0.4631	-3.5,0.43	-3.5,0.4083
-3.6,0.3987	-3.6,0.4262	-3.6,0.3932	-3.6,0.3718
-3.7,0.3608	-3.7,0.3917	-3.7,0.36	-3.7,0.3381
-3.8,0.3259	-3.8,0.3595	-3.8,0.3306	-3.8,0.3084
-3.9,0.2959	-3.9,0.3321	-3.9,0.3057	-3.9,0.2843
-4,0.2706	-4,0.3095	-4,0.2855	-4,0.2651
-4.1,0.25	-4.1,0.2905	-4.1,0.2698	-4.1,0.2507

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
0	5	10	15
-4.2,0.2342	-4.2,0.2774	-4.2,0.2597	-4.2,0.2421
-4.3,0.2263	-4.3,0.269	-4.3,0.2541	-4.3,0.2373
-4.4,0.2231	-4.4,0.2643	-4.4,0.2523	-4.4,0.2373
-4.5,0.2231	-4.5,0.2619	-4.5,0.2523	-4.5,0.2392
-4.6,0.2263	-4.6,0.2631	-4.6,0.2551	-4.6,0.243
-4.7,0.231	-4.7,0.2643	-4.7,0.2578	-4.7,0.2469
-4.8,0.2358	-4.8,0.2667	-4.8,0.2606	-4.8,0.2507
-4.9,0.2405	-4.9,0.269	-4.9,0.2634	-4.9,0.2536
-5,0.2453	-5,0.2714	-5,0.2643	-5,0.2555
-5.1,0.2484	-5.1,0.2714	-5.1,0.2643	-5.1,0.2555
-5.2,0.2484	-5.2,0.2702	-5.2,0.2624	-5.2,0.2536
-5.3,0.2484	-5.3,0.2679	-5.3,0.2597	-5.3,0.2507
-5.4,0.2453	-5.4,0.2643	-5.4,0.2541	-5.4,0.2459
-5.5,0.2405	-5.5,0.2583	-5.5,0.2477	-5.5,0.2392
-5.6,0.2342	-5.6,0.2512	-5.6,0.2403	-5.6,0.2305
-5.7,0.2263	-5.7,0.2429	-5.7,0.2311	-5.7,0.2219
-5.8,0.2168	-5.8,0.2333	-5.8,0.221	-5.8,0.2113
-5.9,0.2073	-5.9,0.2238	-5.9,0.2109	-5.9,0.2008
-6,0.1962	-6,0.2131	-6,0.1998	-6,0.1892
-6.1,0.1851	-6.1,0.2024	-6.1,0.1897	-6.1,0.1787
-6.2,0.1741	-6.2,0.1929	-6.2,0.1786	-6.2,0.1681
-6.3,0.163	-6.3,0.1821	-6.3,0.1694	-6.3,0.1585
-6.4,0.1519	-6.4,0.1738	-6.4,0.1611	-6.4,0.1499
-6.5,0.144	-6.5,0.1667	-6.5,0.1547	-6.5,0.1441
-6.6,0.1361	-6.6,0.1607	-6.6,0.1501	-6.6,0.1393
-6.7,0.1313	-6.7,0.156	-6.7,0.1464	-6.7,0.1364
-6.8,0.1282	-6.8,0.1536	-6.8,0.1455	-6.8,0.1364
-6.9,0.1282	-6.9,0.1524	-6.9,0.1455	-6.9,0.1364
-7,0.1297	-7,0.1524	-7,0.1473	-7,0.1393
-7.1,0.1313	-7.1,0.1548	-7.1,0.1492	-7.1,0.1422
-7.2,0.1345	-7.2,0.156	-7.2,0.1519	-7.2,0.1451
-7.3,0.1377	-7.3,0.1583	-7.3,0.1547	-7.3,0.1479
-7.4,0.1424	-7.4,0.1607	-7.4,0.1565	-7.4,0.1508
-7.5,0.1456	-7.5,0.1631	-7.5,0.1584	-7.5,0.1527
-7.6,0.1472	-7.6,0.1643	-7.6,0.1593	-7.6,0.1537
-7.7,0.1487	-7.7,0.1643	-7.7,0.1602	-7.7,0.1537
-7.8,0.1487	-7.8,0.1643	-7.8,0.1593	-7.8,0.1527
-7.9,0.1487	-7.9,0.1631	-7.9,0.1575	-7.9,0.1508
-8,0.1472	-8,0.1607	-8,0.1547	-8,0.1489
-8.1,0.1456	-8.1,0.1583	-8.1,0.151	-8.1,0.1451
-8.2,0.1408	-8.2,0.1548	-8.2,0.1473	-8.2,0.1402
-8.3,0.1377	-8.3,0.15	-8.3,0.1418	-8.3,0.1354

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
20	25	30	35
0,0.5913	0,0.6459	0,0.9453	0,0.3362
-0.1,0.6325	-0.1,0.6826	-0.1,0.9609	-0.1,0.3768
-0.2,0.6737	-0.2,0.7211	-0.2,0.9688	-0.2,0.4203
-0.3,0.715	-0.3,0.7578	-0.3,0.9766	-0.3,0.4638
-0.4,0.7538	-0.4,0.7945	-0.4,0.9766	-0.4,0.5101
-0.5,0.7915	-0.5,0.8275	-0.5,0.9844	-0.5,0.5565
-0.6,0.828	-0.6,0.8587	-0.6,0.9844	-0.6,0.6029
-0.7,0.861	-0.7,0.8881	-0.7,0.9844	-0.7,0.6493
-0.8,0.8916	-0.8,0.9156	-0.8,0.9922	-0.8,0.6928
-0.9,0.9187	-0.9,0.9394	-0.9,0.9922	-0.9,0.7362
-1,0.9423	-1,0.9578	-1,0.9922	-1,0.7768
-1.1,0.9623	-1.1,0.9743	-1.1,0.9922	-1.1,0.8145
-1.2,0.9776	-1.2,0.9872	-1.2,0.9922	-1.2,0.8493
-1.3,0.9894	-1.3,0.9945	-1.3,0.9922	-1.3,0.8841
-1.4,0.9976	-1.4,1	-1.4,1	-1.4,0.913
-1.5,1	-1.5,1	-1.5,1	-1.5,0.9362
-1.6,0.9988	-1.6,0.9945	-1.6,1	-1.6,0.9594
-1.7,0.9941	-1.7,0.9853	-1.7,1	-1.7,0.9739
-1.8,0.9835	-1.8,0.9725	-1.8,1	-1.8,0.9884
-1.9,0.9694	-1.9,0.956	-1.9,0.9922	-1.9,0.9971
-2,0.9517	-2,0.9358	-2,0.9922	-2,1
-2.1,0.9293	-2.1,0.9101	-2.1,0.9844	-2.1,1
-2.2,0.9034	-2.2,0.8807	-2.2,0.9844	-2.2,0.9942
-2.3,0.874	-2.3,0.8495	-2.3,0.9766	-2.3,0.9826
-2.4,0.841	-2.4,0.8147	-2.4,0.9609	-2.4,0.9681
-2.5,0.8057	-2.5,0.7761	-2.5,0.9531	-2.5,0.9507
-2.6,0.7668	-2.6,0.7358	-2.6,0.9375	-2.6,0.9275
-2.7,0.7267	-2.7,0.6936	-2.7,0.9141	-2.7,0.9014
-2.8,0.6843	-2.8,0.6495	-2.8,0.8984	-2.8,0.8725
-2.9,0.6419	-2.9,0.6037	-2.9,0.875	-2.9,0.8406
-3,0.5972	-3,0.5578	-3,0.8438	-3,0.8058
-3.1,0.5524	-3.1,0.5101	-3.1,0.8203	-3.1,0.7681
-3.2,0.5077	-3.2,0.4624	-3.2,0.7891	-3.2,0.7275
-3.3,0.4641	-3.3,0.4165	-3.3,0.75	-3.3,0.687
-3.4,0.4217	-3.4,0.3706	-3.4,0.7109	-3.4,0.6435
-3.5,0.3804	-3.5,0.3266	-3.5,0.6719	-3.5,0.6029
-3.6,0.3428	-3.6,0.2862	-3.6,0.6328	-3.6,0.5594
-3.7,0.3086	-3.7,0.2477	-3.7,0.5859	-3.7,0.5188
-3.8,0.278	-3.8,0.2128	-3.8,0.5469	-3.8,0.4754
-3.9,0.2532	-3.9,0.1853	-3.9,0.5	-3.9,0.4377
-4,0.2332	-4,0.1615	-4,0.4531	-4,0.4029
-4.1,0.2203	-4.1,0.1486	-4.1,0.4063	-4.1,0.3681

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
20	25	30	35
-4.2,0.212	-4.2,0.1413	-4.2,0.3516	-4.2,0.3391
-4.3,0.2097	-4.3,0.1431	-4.3,0.3047	-4.3,0.3159
-4.4,0.212	-4.4,0.1505	-4.4,0.2656	-4.4,0.2957
-4.5,0.2155	-4.5,0.1596	-4.5,0.2187	-4.5,0.2812
-4.6,0.2214	-4.6,0.1706	-4.6,0.1797	-4.6,0.2696
-4.7,0.2273	-4.7,0.1798	-4.7,0.1406	-4.7,0.2667
-4.8,0.2332	-4.8,0.189	-4.8,0.1094	-4.8,0.2638
-4.9,0.2367	-4.9,0.1963	-4.9,0.0859	-4.9,0.2667
-5,0.2403	-5,0.2018	-5,0.0781	-5,0.2667
-5.1,0.2403	-5.1,0.2055	-5.1,0.0938	-5.1,0.2725
-5.2,0.2391	-5.2,0.2055	-5.2,0.1094	-5.2,0.2754
-5.3,0.2367	-5.3,0.2037	-5.3,0.1328	-5.3,0.2783
-5.4,0.232	-5.4,0.2	-5.4,0.1563	-5.4,0.2783
-5.5,0.225	-5.5,0.1927	-5.5,0.1719	-5.5,0.2783
-5.6,0.2167	-5.6,0.1853	-5.6,0.1953	-5.6,0.2783
-5.7,0.2073	-5.7,0.1761	-5.7,0.2031	-5.7,0.2754
-5.8,0.1967	-5.8,0.1651	-5.8,0.2187	-5.8,0.2696
-5.9,0.1861	-5.9,0.1523	-5.9,0.2266	-5.9,0.2638
-6,0.1743	-6,0.1413	-6,0.2344	-6,0.2551
-6.1,0.1625	-6.1,0.1284	-6.1,0.2344	-6.1,0.2464
-6.2,0.1519	-6.2,0.1156	-6.2,0.2344	-6.2,0.2377
-6.3,0.1425	-6.3,0.1046	-6.3,0.2266	-6.3,0.2261
-6.4,0.1331	-6.4,0.0954	-6.4,0.2187	-6.4,0.2145
-6.5,0.1272	-6.5,0.0881	-6.5,0.2109	-6.5,0.2029
-6.6,0.1225	-6.6,0.0826	-6.6,0.1953	-6.6,0.1942
-6.7,0.1201	-6.7,0.0807	-6.7,0.1875	-6.7,0.1826
-6.8,0.1201	-6.8,0.0826	-6.8,0.1719	-6.8,0.1739
-6.9,0.1225	-6.9,0.0862	-6.9,0.1484	-6.9,0.1681
-7,0.1249	-7,0.0917	-7,0.1328	-7,0.1623
-7.1,0.1284	-7.1,0.0972	-7.1,0.1172	-7.1,0.1594
-7.2,0.1331	-7.2,0.1028	-7.2,0.1016	-7.2,0.1565
-7.3,0.1366	-7.3,0.1083	-7.3,0.0859	-7.3,0.1565
-7.4,0.139	-7.4,0.1138	-7.4,0.0703	-7.4,0.1565
-7.5,0.1425	-7.5,0.1174	-7.5,0.0547	-7.5,0.1594
-7.6,0.1437	-7.6,0.1193	-7.6,0.0547	-7.6,0.1623
-7.7,0.1437	-7.7,0.1211	-7.7,0.0625	-7.7,0.1652
-7.8,0.1437	-7.8,0.1193	-7.8,0.0703	-7.8,0.1652
-7.9,0.1413	-7.9,0.1193	-7.9,0.0781	-7.9,0.1681
-8,0.139	-8,0.1156	-8,0.0938	-8,0.171
-8.1,0.1355	-8.1,0.1119	-8.1,0.1016	-8.1,0.171
-8.2,0.1307	-8.2,0.1083	-8.2,0.1172	-8.2,0.1681
-8.3,0.1249	-8.3,0.1028	-8.3,0.125	-8.3,0.1681

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
40	45	50	55
0,0.5868	0,0.639	0,0.6383	0,0.6306
-0.1,0.6245	-0.1,0.6798	-0.1,0.6806	-0.1,0.6729
-0.2,0.6623	-0.2,0.72	-0.2,0.7218	-0.2,0.7148
-0.3,0.7019	-0.3,0.7594	-0.3,0.7615	-0.3,0.7549
-0.4,0.7396	-0.4,0.7971	-0.4,0.799	-0.4,0.7934
-0.5,0.7755	-0.5,0.8322	-0.5,0.835	-0.5,0.8296
-0.6,0.8113	-0.6,0.8647	-0.6,0.8678	-0.6,0.8631
-0.7,0.8453	-0.7,0.8947	-0.7,0.8974	-0.7,0.8936
-0.8,0.8755	-0.8,0.9212	-0.8,0.9244	-0.8,0.9207
-0.9,0.9038	-0.9,0.9443	-0.9,0.9471	-0.9,0.9443
-1,0.9283	-1,0.964	-1,0.9662	-1,0.9638
-1.1,0.9509	-1.1,0.9795	-1.1,0.981	-1.1,0.9794
-1.2,0.9679	-1.2,0.9906	-1.2,0.9921	-1.2,0.9909
-1.3,0.983	-1.3,0.9974	-1.3,0.9984	-1.3,0.9977
-1.4,0.9925	-1.4,1	-1.4,1	-1.4,1
-1.5,0.9981	-1.5,0.9983	-1.5,0.9974	-1.5,0.9981
-1.6,1	-1.6,0.9914	-1.6,0.9905	-1.6,0.9916
-1.7,0.9981	-1.7,0.9812	-1.7,0.9788	-1.7,0.9809
-1.8,0.9906	-1.8,0.9658	-1.8,0.9635	-1.8,0.9657
-1.9,0.9792	-1.9,0.9469	-1.9,0.9434	-1.9,0.9466
-2,0.9642	-2,0.9238	-2,0.9196	-2,0.9234
-2.1,0.9453	-2.1,0.8964	-2.1,0.8921	-2.1,0.8963
-2.2,0.9226	-2.2,0.8656	-2.2,0.8609	-2.2,0.8658
-2.3,0.8943	-2.3,0.8322	-2.3,0.8271	-2.3,0.8323
-2.4,0.8642	-2.4,0.7954	-2.4,0.7901	-2.4,0.796
-2.5,0.8302	-2.5,0.756	-2.5,0.7504	-2.5,0.7575
-2.6,0.7943	-2.6,0.714	-2.6,0.7091	-2.6,0.7167
-2.7,0.7547	-2.7,0.6712	-2.7,0.6658	-2.7,0.6744
-2.8,0.7132	-2.8,0.6259	-2.8,0.6219	-2.8,0.631
-2.9,0.6698	-2.9,0.5805	-2.9,0.5769	-2.9,0.5871
-3,0.6245	-3,0.5342	-3,0.532	-3,0.5429
-3.1,0.5792	-3.1,0.488	-3.1,0.4876	-3.1,0.4994
-3.2,0.5321	-3.2,0.4426	-3.2,0.4437	-3.2,0.4567
-3.3,0.4849	-3.3,0.399	-3.3,0.4019	-3.3,0.4163
-3.4,0.4396	-3.4,0.3562	-3.4,0.3622	-3.4,0.3778
-3.5,0.3943	-3.5,0.3168	-3.5,0.3263	-3.5,0.3427
-3.6,0.3509	-3.6,0.28	-3.6,0.2935	-3.6,0.3119
-3.7,0.3094	-3.7,0.2483	-3.7,0.266	-3.7,0.2852
-3.8,0.2698	-3.8,0.2217	-3.8,0.2443	-3.8,0.2642
-3.9,0.2358	-3.9,0.2021	-3.9,0.2285	-3.9,0.249
-4,0.2057	-4,0.1892	-4,0.2189	-4,0.2394
-4.1,0.1811	-4.1,0.1824	-4.1,0.2147	-4.1,0.2348



NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
40	45	50	55
-4.2,0.1642	-4.2,0.1824	-4.2,0.2152	-4.2,0.2345
-4.3,0.1547	-4.3,0.1866	-4.3,0.2189	-4.3,0.2371
-4.4,0.1528	-4.4,0.1935	-4.4,0.2247	-4.4,0.2413
-4.5,0.1566	-4.5,0.2012	-4.5,0.2311	-4.5,0.2463
-4.6,0.1642	-4.6,0.2089	-4.6,0.2369	-4.6,0.2512
-4.7,0.1717	-4.7,0.2166	-4.7,0.2422	-4.7,0.2554
-4.8,0.1811	-4.8,0.2217	-4.8,0.2454	-4.8,0.2581
-4.9,0.1906	-4.9,0.226	-4.9,0.2475	-4.9,0.2592
-5.0,0.1981	-5.0,0.2277	-5.0,0.2475	-5.0,0.2585
-5.1,0.2038	-5.1,0.2269	-5.1,0.2454	-5.1,0.2562
-5.2,0.2057	-5.2,0.2243	-5.2,0.2411	-5.2,0.2516
-5.3,0.2075	-5.3,0.22	-5.3,0.2353	-5.3,0.2455
-5.4,0.2057	-5.4,0.2132	-5.4,0.2279	-5.4,0.2375
-5.5,0.2019	-5.5,0.2055	-5.5,0.2184	-5.5,0.2284
-5.6,0.1962	-5.6,0.1961	-5.6,0.2084	-5.6,0.2181
-5.7,0.1906	-5.7,0.1849	-5.7,0.1973	-5.7,0.207
-5.8,0.1811	-5.8,0.1729	-5.8,0.1856	-5.8,0.1956
-5.9,0.1717	-5.9,0.161	-5.9,0.1735	-5.9,0.1838
-6.0,0.1604	-6.0,0.149	-6.0,0.1623	-6.0,0.1727
-6.1,0.1472	-6.1,0.1378	-6.1,0.1512	-6.1,0.162
-6.2,0.1358	-6.2,0.1276	-6.2,0.1423	-6.2,0.1529
-6.3,0.1245	-6.3,0.1182	-6.3,0.1343	-6.3,0.1456
-6.4,0.1113	-6.4,0.1113	-6.4,0.1285	-6.4,0.1403
-6.5,0.1019	-6.5,0.107	-6.5,0.1253	-6.5,0.1369
-6.6,0.0943	-6.6,0.1053	-6.6,0.1243	-6.6,0.1357
-6.7,0.0887	-6.7,0.1053	-6.7,0.1253	-6.7,0.1361
-6.8,0.0849	-6.8,0.1079	-6.8,0.1274	-6.8,0.138
-6.9,0.0849	-6.9,0.1113	-6.9,0.1311	-6.9,0.1411
-7.0,0.0868	-7.0,0.1156	-7.0,0.1348	-7.0,0.1445
-7.1,0.0906	-7.1,0.1207	-7.1,0.1386	-7.1,0.1483
-7.2,0.0943	-7.2,0.125	-7.2,0.1423	-7.2,0.1514
-7.3,0.1	-7.3,0.1284	-7.3,0.1449	-7.3,0.154
-7.4,0.1038	-7.4,0.1318	-7.4,0.147	-7.4,0.1559
-7.5,0.1094	-7.5,0.1336	-7.5,0.1481	-7.5,0.1567
-7.6,0.1132	-7.6,0.1344	-7.6,0.1481	-7.6,0.1563
-7.7,0.1151	-7.7,0.1336	-7.7,0.147	-7.7,0.1552
-7.8,0.117	-7.8,0.1318	-7.8,0.1444	-7.8,0.1525
-7.9,0.117	-7.9,0.1293	-7.9,0.1412	-7.9,0.1491
-8.0,0.117	-8.0,0.125	-8.0,0.137	-8.0,0.1449
-8.1,0.1151	-8.1,0.1207	-8.1,0.1317	-8.1,0.1399
-8.2,0.1113	-8.2,0.1156	-8.2,0.1264	-8.2,0.1342
-8.3,0.1075	-8.3,0.1096	-8.3,0.12	-8.3,0.1281

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
60	65	70	75
0,0.6177	0,0.6014	0,0.5915	0,0.589
-0.1,0.6609	-0.1,0.6446	-0.1,0.635	-0.1,0.6324
-0.2,0.7028	-0.2,0.6873	-0.2,0.6776	-0.2,0.675
-0.3,0.7437	-0.3,0.7288	-0.3,0.7193	-0.3,0.7167
-0.4,0.7829	-0.4,0.7687	-0.4,0.7596	-0.4,0.7571
-0.5,0.8199	-0.5,0.8063	-0.5,0.7978	-0.5,0.7954
-0.6,0.8541	-0.6,0.8416	-0.6,0.8337	-0.6,0.8315
-0.7,0.8856	-0.7,0.8742	-0.7,0.8669	-0.7,0.8648
-0.8,0.9138	-0.8,0.9037	-0.8,0.897	-0.8,0.8951
-0.9,0.9382	-0.9,0.9296	-0.9,0.9237	-0.9,0.9219
-1,0.959	-1,0.9517	-1,0.9469	-1,0.9454
-1.1,0.9755	-1.1,0.9698	-1.1,0.9659	-1.1,0.9646
-1.2,0.9881	-1.2,0.9837	-1.2,0.9808	-1.2,0.98
-1.3,0.9963	-1.3,0.9936	-1.3,0.9915	-1.3,0.9911
-1.4,1	-1.4,0.999	-1.4,0.998	-1.4,0.9977
-1.5,0.9994	-1.5,1	-1.5,1	-1.5,1
-1.6,0.9942	-1.6,0.9964	-1.6,0.9976	-1.6,0.9979
-1.7,0.9847	-1.7,0.9886	-1.7,0.9908	-1.7,0.9914
-1.8,0.9709	-1.8,0.9764	-1.8,0.9795	-1.8,0.9804
-1.9,0.9529	-1.9,0.9601	-1.9,0.9642	-1.9,0.9654
-2,0.9309	-2,0.9395	-2,0.9447	-2,0.9461
-2.1,0.9052	-2.1,0.9154	-2.1,0.9213	-2.1,0.9231
-2.2,0.8758	-2.2,0.8874	-2.2,0.8944	-2.2,0.8962
-2.3,0.8434	-2.3,0.8564	-2.3,0.864	-2.3,0.866
-2.4,0.8083	-2.4,0.8223	-2.4,0.8306	-2.4,0.8327
-2.5,0.7703	-2.5,0.7857	-2.5,0.7945	-2.5,0.7969
-2.6,0.7306	-2.6,0.7468	-2.6,0.7561	-2.6,0.7584
-2.7,0.689	-2.7,0.7062	-2.7,0.7158	-2.7,0.7183
-2.8,0.6462	-2.8,0.6642	-2.8,0.6743	-2.8,0.6766
-2.9,0.6031	-2.9,0.6213	-2.9,0.6315	-2.9,0.6337
-3,0.5593	-3,0.5783	-3,0.5884	-3,0.5903
-3.1,0.5162	-3.1,0.5351	-3.1,0.5454	-3.1,0.5471
-3.2,0.474	-3.2,0.4929	-3.2,0.5027	-3.2,0.5043
-3.3,0.4333	-3.3,0.4522	-3.3,0.4616	-3.3,0.4626
-3.4,0.3951	-3.4,0.4133	-3.4,0.4223	-3.4,0.4228
-3.5,0.3599	-3.5,0.3775	-3.5,0.3854	-3.5,0.3855
-3.6,0.3284	-3.6,0.3449	-3.6,0.3519	-3.6,0.3514
-3.7,0.3015	-3.7,0.3165	-3.7,0.3222	-3.7,0.3213
-3.8,0.2795	-3.8,0.2928	-3.8,0.2973	-3.8,0.2956
-3.9,0.263	-3.9,0.2745	-3.9,0.2776	-3.9,0.2751
-4,0.2517	-4,0.2613	-4,0.263	-4,0.26
-4.1,0.2456	-4.1,0.2534	-4.1,0.2536	-4.1,0.2503

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
60	65	70	75
-4.2,0.2437	-4.2,0.2499	-4.2,0.249	-4.2,0.2452
-4.3,0.2453	-4.3,0.2496	-4.3,0.2481	-4.3,0.2442
-4.4,0.2486	-4.4,0.2519	-4.4,0.2496	-4.4,0.246
-4.5,0.2529	-4.5,0.2555	-4.5,0.2531	-4.5,0.2494
-4.6,0.2572	-4.6,0.2593	-4.6,0.257	-4.6,0.2534
-4.7,0.2609	-4.7,0.2628	-4.7,0.2608	-4.7,0.2576
-4.8,0.2636	-4.8,0.2656	-4.8,0.2638	-4.8,0.2608
-4.9,0.2645	-4.9,0.2669	-4.9,0.2656	-4.9,0.2629
-5,0.2639	-5,0.2669	-5,0.2658	-5,0.2635
-5.1,0.2618	-5.1,0.2649	-5.1,0.2643	-5.1,0.2621
-5.2,0.2575	-5.2,0.2611	-5.2,0.261	-5.2,0.2593
-5.3,0.2514	-5.3,0.2557	-5.3,0.2562	-5.3,0.2545
-5.4,0.244	-5.4,0.2489	-5.4,0.2496	-5.4,0.2482
-5.5,0.2352	-5.5,0.2402	-5.5,0.2415	-5.5,0.2402
-5.6,0.2251	-5.6,0.2308	-5.6,0.2321	-5.6,0.2311
-5.7,0.2141	-5.7,0.2201	-5.7,0.2219	-5.7,0.2208
-5.8,0.2028	-5.8,0.2089	-5.8,0.2109	-5.8,0.21
-5.9,0.1914	-5.9,0.1978	-5.9,0.1996	-5.9,0.1987
-6,0.1801	-6,0.1866	-6,0.1884	-6,0.1873
-6.1,0.1697	-6.1,0.1759	-6.1,0.1777	-6.1,0.1765
-6.2,0.1602	-6.2,0.1665	-6.2,0.1679	-6.2,0.1664
-6.3,0.1526	-6.3,0.1581	-6.3,0.1593	-6.3,0.1578
-6.4,0.1468	-6.4,0.1518	-6.4,0.1523	-6.4,0.1506
-6.5,0.1431	-6.5,0.1474	-6.5,0.1475	-6.5,0.1454
-6.6,0.1413	-6.6,0.1449	-6.6,0.1445	-6.6,0.1424
-6.7,0.1413	-6.7,0.1444	-6.7,0.1434	-6.7,0.1411
-6.8,0.1428	-6.8,0.1451	-6.8,0.144	-6.8,0.1416
-6.9,0.1456	-6.9,0.1474	-6.9,0.146	-6.9,0.1435
-7,0.1486	-7,0.1502	-7,0.1486	-7,0.1462
-7.1,0.152	-7.1,0.1535	-7.1,0.1517	-7.1,0.1494
-7.2,0.155	-7.2,0.1566	-7.2,0.155	-7.2,0.1525
-7.3,0.1578	-7.3,0.1591	-7.3,0.1576	-7.3,0.1555
-7.4,0.1596	-7.4,0.1612	-7.4,0.1598	-7.4,0.1578
-7.5,0.1606	-7.5,0.1622	-7.5,0.1611	-7.5,0.1593
-7.6,0.1602	-7.6,0.1624	-7.6,0.1615	-7.6,0.1599
-7.7,0.1593	-7.7,0.1617	-7.7,0.1611	-7.7,0.1593
-7.8,0.1569	-7.8,0.1596	-7.8,0.1593	-7.8,0.1578
-7.9,0.1538	-7.9,0.1568	-7.9,0.1567	-7.9,0.1553
-8,0.1495	-8,0.153	-8,0.1532	-8,0.1519
-8.1,0.1446	-8.1,0.1482	-8.1,0.1489	-8.1,0.1475
-8.2,0.1391	-8.2,0.1431	-8.2,0.1436	-8.2,0.1426
-8.3,0.1333	-8.3,0.1373	-8.3,0.1381	-8.3,0.1369

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
80	85	90	95
0,0.5878	0,0.5873	0,0.5863	0,0.5866
-0.1,0.631	-0.1,0.6304	-0.1,0.6292	-0.1,0.6294
-0.2,0.6738	-0.2,0.673	-0.2,0.6718	-0.2,0.672
-0.3,0.7155	-0.3,0.7147	-0.3,0.7135	-0.3,0.7136
-0.4,0.7557	-0.4,0.755	-0.4,0.7537	-0.4,0.7538
-0.5,0.7941	-0.5,0.7933	-0.5,0.7921	-0.5,0.7922
-0.6,0.8303	-0.6,0.8295	-0.6,0.8283	-0.6,0.8283
-0.7,0.8638	-0.7,0.8629	-0.7,0.8619	-0.7,0.8619
-0.8,0.894	-0.8,0.8933	-0.8,0.8924	-0.8,0.8924
-0.9,0.9212	-0.9,0.9206	-0.9,0.9197	-0.9,0.9195
-1,0.9446	-1,0.944	-1,0.9433	-1,0.9432
-1.1,0.964	-1.1,0.9637	-1.1,0.963	-1.1,0.963
-1.2,0.9796	-1.2,0.9791	-1.2,0.9786	-1.2,0.9786
-1.3,0.9907	-1.3,0.9905	-1.3,0.9902	-1.3,0.9901
-1.4,0.9975	-1.4,0.9975	-1.4,0.9973	-1.4,0.9972
-1.5,1	-1.5,1	-1.5,1	-1.5,1
-1.6,0.998	-1.6,0.9982	-1.6,0.9983	-1.6,0.9983
-1.7,0.9917	-1.7,0.9919	-1.7,0.9922	-1.7,0.9923
-1.8,0.9809	-1.8,0.9812	-1.8,0.9818	-1.8,0.9818
-1.9,0.9658	-1.9,0.9663	-1.9,0.967	-1.9,0.9671
-2,0.9469	-2,0.9474	-2,0.9482	-2,0.9483
-2.1,0.9238	-2.1,0.9244	-2.1,0.9253	-2.1,0.9255
-2.2,0.897	-2.2,0.8977	-2.2,0.8989	-2.2,0.899
-2.3,0.8669	-2.3,0.8677	-2.3,0.8689	-2.3,0.869
-2.4,0.8337	-2.4,0.8345	-2.4,0.8358	-2.4,0.8359
-2.5,0.7977	-2.5,0.7986	-2.5,0.8	-2.5,0.8
-2.6,0.7593	-2.6,0.7603	-2.6,0.7617	-2.6,0.7618
-2.7,0.7191	-2.7,0.72	-2.7,0.7214	-2.7,0.7215
-2.8,0.6772	-2.8,0.6781	-2.8,0.6795	-2.8,0.6795
-2.9,0.6344	-2.9,0.6351	-2.9,0.6365	-2.9,0.6365
-3,0.5911	-3,0.5916	-3,0.5929	-3,0.5929
-3.1,0.5476	-3.1,0.548	-3.1,0.5491	-3.1,0.549
-3.2,0.5046	-3.2,0.5048	-3.2,0.5058	-3.2,0.5056
-3.3,0.4627	-3.3,0.4627	-3.3,0.4635	-3.3,0.4631
-3.4,0.4227	-3.4,0.4224	-3.4,0.4229	-3.4,0.4224
-3.5,0.3851	-3.5,0.3844	-3.5,0.3847	-3.5,0.384
-3.6,0.3506	-3.6,0.3494	-3.6,0.3495	-3.6,0.3486
-3.7,0.32	-3.7,0.3184	-3.7,0.3181	-3.7,0.317
-3.8,0.2938	-3.8,0.292	-3.8,0.2912	-3.8,0.29
-3.9,0.2731	-3.9,0.2707	-3.9,0.2695	-3.9,0.2681
-4,0.2575	-4,0.2548	-4,0.2533	-4,0.2518
-4.1,0.2474	-4.1,0.2445	-4.1,0.2426	-4.1,0.2411

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
80	85	90	95
-4.2,0.2422	-4.2,0.2391	-4.2,0.2369	-4.2,0.2354
-4.3,0.241	-4.3,0.2377	-4.3,0.2356	-4.3,0.234
-4.4,0.2426	-4.4,0.2395	-4.4,0.2373	-4.4,0.2358
-4.5,0.2462	-4.5,0.2432	-4.5,0.241	-4.5,0.2396
-4.6,0.2505	-4.6,0.2475	-4.6,0.2455	-4.6,0.2442
-4.7,0.2546	-4.7,0.2519	-4.7,0.25	-4.7,0.2489
-4.8,0.2582	-4.8,0.2555	-4.8,0.2539	-4.8,0.2528
-4.9,0.2603	-4.9,0.2581	-4.9,0.2565	-4.9,0.2555
-5,0.2611	-5,0.2591	-5,0.2576	-5,0.2568
-5.1,0.2601	-5.1,0.2582	-5.1,0.257	-5.1,0.2562
-5.2,0.2574	-5.2,0.2555	-5.2,0.2545	-5.2,0.2538
-5.3,0.2528	-5.3,0.2512	-5.3,0.2502	-5.3,0.2497
-5.4,0.2466	-5.4,0.245	-5.4,0.2443	-5.4,0.2437
-5.5,0.2387	-5.5,0.2374	-5.5,0.2368	-5.5,0.2362
-5.6,0.2296	-5.6,0.2285	-5.6,0.2278	-5.6,0.2274
-5.7,0.2194	-5.7,0.2184	-5.7,0.2179	-5.7,0.2174
-5.8,0.2086	-5.8,0.2074	-5.8,0.2069	-5.8,0.2065
-5.9,0.1974	-5.9,0.1962	-5.9,0.1957	-5.9,0.1952
-6,0.1861	-6,0.1848	-6,0.1843	-6,0.1837
-6.1,0.1751	-6.1,0.1737	-6.1,0.1732	-6.1,0.1726
-6.2,0.165	-6.2,0.1636	-6.2,0.1629	-6.2,0.1623
-6.3,0.1561	-6.3,0.1546	-6.3,0.1538	-6.3,0.1532
-6.4,0.149	-6.4,0.1472	-6.4,0.1464	-6.4,0.1457
-6.5,0.1436	-6.5,0.1419	-6.5,0.1407	-6.5,0.1401
-6.6,0.1403	-6.6,0.1385	-6.6,0.1373	-6.6,0.1365
-6.7,0.139	-6.7,0.1371	-6.7,0.1358	-6.7,0.135
-6.8,0.1395	-6.8,0.1374	-6.8,0.1362	-6.8,0.1353
-6.9,0.1413	-6.9,0.1392	-6.9,0.1379	-6.9,0.137
-7,0.1439	-7,0.1419	-7,0.1406	-7,0.1398
-7.1,0.1472	-7.1,0.1451	-7.1,0.1439	-7.1,0.1432
-7.2,0.1503	-7.2,0.1485	-7.2,0.1473	-7.2,0.1466
-7.3,0.1532	-7.3,0.1514	-7.3,0.1503	-7.3,0.1497
-7.4,0.1557	-7.4,0.1539	-7.4,0.1529	-7.4,0.1523
-7.5,0.1571	-7.5,0.1556	-7.5,0.1546	-7.5,0.1541
-7.6,0.1578	-7.6,0.1563	-7.6,0.1554	-7.6,0.155
-7.7,0.1575	-7.7,0.156	-7.7,0.1552	-7.7,0.1548
-7.8,0.156	-7.8,0.1546	-7.8,0.154	-7.8,0.1536
-7.9,0.1535	-7.9,0.1523	-7.9,0.1517	-7.9,0.1513
-8,0.1501	-8,0.1489	-8,0.1484	-8,0.148
-8.1,0.1458	-8.1,0.1447	-8.1,0.1442	-8.1,0.1439
-8.2,0.1408	-8.2,0.1398	-8.2,0.1393	-8.2,0.1389
-8.3,0.1354	-8.3,0.1343	-8.3,0.1337	-8.3,0.1334

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
100	105	110	115
0,0.5879	0,0.5906	0,0.593	0,0.5902
-0.1,0.6307	-0.1,0.6335	-0.1,0.6359	-0.1,0.6333
-0.2,0.6731	-0.2,0.6758	-0.2,0.6783	-0.2,0.6759
-0.3,0.7147	-0.3,0.7172	-0.3,0.7197	-0.3,0.7176
-0.4,0.7548	-0.4,0.7572	-0.4,0.7597	-0.4,0.7577
-0.5,0.7931	-0.5,0.7955	-0.5,0.7978	-0.5,0.7961
-0.6,0.8292	-0.6,0.8314	-0.6,0.8336	-0.6,0.832
-0.7,0.8627	-0.7,0.8646	-0.7,0.8666	-0.7,0.8652
-0.8,0.893	-0.8,0.8948	-0.8,0.8967	-0.8,0.8955
-0.9,0.9202	-0.9,0.9217	-0.9,0.9234	-0.9,0.9223
-1,0.9437	-1,0.945	-1,0.9464	-1,0.9456
-1.1,0.9634	-1.1,0.9644	-1.1,0.9655	-1.1,0.9649
-1.2,0.979	-1.2,0.9797	-1.2,0.9806	-1.2,0.9801
-1.3,0.9903	-1.3,0.9908	-1.3,0.9915	-1.3,0.9911
-1.4,0.9973	-1.4,0.9976	-1.4,0.9979	-1.4,0.9977
-1.5,1	-1.5,1	-1.5,1	-1.5,1
-1.6,0.9983	-1.6,0.9979	-1.6,0.9977	-1.6,0.9978
-1.7,0.9921	-1.7,0.9915	-1.7,0.991	-1.7,0.9912
-1.8,0.9815	-1.8,0.9807	-1.8,0.9798	-1.8,0.9803
-1.9,0.9668	-1.9,0.9657	-1.9,0.9645	-1.9,0.9651
-2,0.9479	-2,0.9465	-2,0.9451	-2,0.9458
-2.1,0.925	-2.1,0.9233	-2.1,0.9217	-2.1,0.9226
-2.2,0.8983	-2.2,0.8965	-2.2,0.8946	-2.2,0.8958
-2.3,0.8683	-2.3,0.8662	-2.3,0.8641	-2.3,0.8655
-2.4,0.8352	-2.4,0.8329	-2.4,0.8307	-2.4,0.8322
-2.5,0.7992	-2.5,0.7967	-2.5,0.7944	-2.5,0.7963
-2.6,0.7608	-2.6,0.7583	-2.6,0.7558	-2.6,0.7579
-2.7,0.7204	-2.7,0.7178	-2.7,0.7152	-2.7,0.7176
-2.8,0.6784	-2.8,0.6756	-2.8,0.6731	-2.8,0.6758
-2.9,0.6353	-2.9,0.6325	-2.9,0.63	-2.9,0.633
-3,0.5916	-3,0.5887	-3,0.5863	-3,0.5897
-3.1,0.5477	-3.1,0.5447	-3.1,0.5425	-3.1,0.5462
-3.2,0.5042	-3.2,0.5013	-3.2,0.4992	-3.2,0.5033
-3.3,0.4618	-3.3,0.4589	-3.3,0.4571	-3.3,0.4617
-3.4,0.4209	-3.4,0.4182	-3.4,0.4167	-3.4,0.4218
-3.5,0.3825	-3.5,0.3799	-3.5,0.3789	-3.5,0.3843
-3.6,0.3472	-3.6,0.3448	-3.6,0.3442	-3.6,0.3501
-3.7,0.3155	-3.7,0.3135	-3.7,0.3134	-3.7,0.3197
-3.8,0.2886	-3.8,0.2868	-3.8,0.2873	-3.8,0.294
-3.9,0.2667	-3.9,0.2653	-3.9,0.2664	-3.9,0.2734
-4,0.2505	-4,0.2494	-4,0.2511	-4,0.2582
-4.1,0.2399	-4.1,0.2391	-4.1,0.2413	-4.1,0.2484

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
100	105	110	115
-4.2,0.2343	-4.2,0.234	-4.2,0.2365	-4.2,0.2433
-4.3,0.2331	-4.3,0.233	-4.3,0.2358	-4.3,0.2422
-4.4,0.235	-4.4,0.2351	-4.4,0.238	-4.4,0.2439
-4.5,0.2388	-4.5,0.2392	-4.5,0.2419	-4.5,0.2474
-4.6,0.2436	-4.6,0.2439	-4.6,0.2466	-4.6,0.2516
-4.7,0.2484	-4.7,0.2487	-4.7,0.2511	-4.7,0.2557
-4.8,0.2523	-4.8,0.2526	-4.8,0.2548	-4.8,0.2591
-4.9,0.255	-4.9,0.2554	-4.9,0.2574	-4.9,0.2612
-5.0,0.2563	-5.0,0.2565	-5.0,0.2583	-5.0,0.2618
-5.1,0.2558	-5.1,0.2559	-5.1,0.2574	-5.1,0.2607
-5.2,0.2534	-5.2,0.2534	-5.2,0.2546	-5.2,0.2578
-5.3,0.2492	-5.3,0.2491	-5.3,0.2501	-5.3,0.2531
-5.4,0.2433	-5.4,0.2431	-5.4,0.2439	-5.4,0.2467
-5.5,0.2358	-5.5,0.2354	-5.5,0.2362	-5.5,0.2389
-5.6,0.2269	-5.6,0.2265	-5.6,0.227	-5.6,0.2298
-5.7,0.2168	-5.7,0.2163	-5.7,0.2168	-5.7,0.2196
-5.8,0.206	-5.8,0.2054	-5.8,0.2058	-5.8,0.2087
-5.9,0.1947	-5.9,0.194	-5.9,0.1945	-5.9,0.1974
-6.0,0.1832	-6.0,0.1826	-6.0,0.183	-6.0,0.1861
-6.1,0.172	-6.1,0.1714	-6.1,0.1719	-6.1,0.1753
-6.2,0.1616	-6.2,0.1612	-6.2,0.1618	-6.2,0.1652
-6.3,0.1525	-6.3,0.152	-6.3,0.1529	-6.3,0.1564
-6.4,0.145	-6.4,0.1447	-6.4,0.1457	-6.4,0.1493
-6.5,0.1395	-6.5,0.1392	-6.5,0.1404	-6.5,0.1442
-6.6,0.136	-6.6,0.1358	-6.6,0.1373	-6.6,0.141
-6.7,0.1345	-6.7,0.1345	-6.7,0.1361	-6.7,0.1398
-6.8,0.1349	-6.8,0.135	-6.8,0.1368	-6.8,0.1403
-6.9,0.1367	-6.9,0.137	-6.9,0.1388	-6.9,0.1421
-7.0,0.1396	-7.0,0.1398	-7.0,0.1417	-7.0,0.1449
-7.1,0.1429	-7.1,0.1433	-7.1,0.145	-7.1,0.1481
-7.2,0.1464	-7.2,0.1467	-7.2,0.1484	-7.2,0.1514
-7.3,0.1495	-7.3,0.1499	-7.3,0.1515	-7.3,0.1542
-7.4,0.1521	-7.4,0.1526	-7.4,0.1541	-7.4,0.1565
-7.5,0.1539	-7.5,0.1543	-7.5,0.1557	-7.5,0.158
-7.6,0.1549	-7.6,0.1551	-7.6,0.1564	-7.6,0.1587
-7.7,0.1546	-7.7,0.1549	-7.7,0.1561	-7.7,0.1581
-7.8,0.1535	-7.8,0.1536	-7.8,0.1547	-7.8,0.1567
-7.9,0.1511	-7.9,0.1512	-7.9,0.1521	-7.9,0.1542
-8.0,0.1478	-8.0,0.1479	-8.0,0.1487	-8.0,0.1507
-8.1,0.1437	-8.1,0.1436	-8.1,0.1444	-8.1,0.1464
-8.2,0.1387	-8.2,0.1387	-8.2,0.1393	-8.2,0.1413
-8.3,0.1332	-8.3,0.1331	-8.3,0.1338	-8.3,0.1358

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
120	125	130	135
0,0.5814	0,0.5672	0,0.5497	0,0.5339
-0.1,0.6249	-0.1,0.611	-0.1,0.5936	-0.1,0.5775
-0.2,0.6679	-0.2,0.6545	-0.2,0.6374	-0.2,0.6213
-0.3,0.7099	-0.3,0.697	-0.3,0.6804	-0.3,0.6646
-0.4,0.7506	-0.4,0.7384	-0.4,0.7223	-0.4,0.7068
-0.5,0.7894	-0.5,0.7778	-0.5,0.7625	-0.5,0.7477
-0.6,0.8259	-0.6,0.8152	-0.6,0.8007	-0.6,0.7868
-0.7,0.8598	-0.7,0.8499	-0.7,0.8365	-0.7,0.8234
-0.8,0.8906	-0.8,0.8817	-0.8,0.8696	-0.8,0.8576
-0.9,0.9181	-0.9,0.9104	-0.9,0.8994	-0.9,0.8886
-1,0.942	-1,0.9355	-1,0.9259	-1,0.9164
-1.1,0.962	-1.1,0.9566	-1.1,0.9485	-1.1,0.9405
-1.2,0.9779	-1.2,0.9738	-1.2,0.9673	-1.2,0.9607
-1.3,0.9896	-1.3,0.9869	-1.3,0.9819	-1.3,0.9769
-1.4,0.997	-1.4,0.9956	-1.4,0.9923	-1.4,0.989
-1.5,1	-1.5,1	-1.5,0.9984	-1.5,0.9966
-1.6,0.9987	-1.6,0.9999	-1.6,1	-1.6,1
-1.7,0.9928	-1.7,0.9955	-1.7,0.9972	-1.7,0.999
-1.8,0.9826	-1.8,0.9867	-1.8,0.9901	-1.8,0.9935
-1.9,0.9683	-1.9,0.9736	-1.9,0.9787	-1.9,0.9837
-2,0.9498	-2,0.9565	-2,0.9631	-2,0.9696
-2.1,0.9273	-2.1,0.9353	-2.1,0.9434	-2.1,0.9515
-2.2,0.9012	-2.2,0.9103	-2.2,0.9199	-2.2,0.9294
-2.3,0.8716	-2.3,0.8819	-2.3,0.8929	-2.3,0.9036
-2.4,0.839	-2.4,0.8504	-2.4,0.8626	-2.4,0.8745
-2.5,0.8036	-2.5,0.8159	-2.5,0.8293	-2.5,0.8422
-2.6,0.7659	-2.6,0.7791	-2.6,0.7935	-2.6,0.8072
-2.7,0.7261	-2.7,0.7401	-2.7,0.7554	-2.7,0.7698
-2.8,0.685	-2.8,0.6996	-2.8,0.7155	-2.8,0.7304
-2.9,0.6426	-2.9,0.6578	-2.9,0.6743	-2.9,0.6895
-3,0.5997	-3,0.6154	-3,0.6322	-3,0.6475
-3.1,0.5568	-3.1,0.5727	-3.1,0.5897	-3.1,0.6049
-3.2,0.5142	-3.2,0.5304	-3.2,0.5473	-3.2,0.5621
-3.3,0.4728	-3.3,0.4889	-3.3,0.5056	-3.3,0.5199
-3.4,0.4332	-3.4,0.4491	-3.4,0.4653	-3.4,0.4786
-3.5,0.3959	-3.5,0.4115	-3.5,0.4269	-3.5,0.4391
-3.6,0.3618	-3.6,0.3767	-3.6,0.391	-3.6,0.4018
-3.7,0.3314	-3.7,0.3455	-3.7,0.3585	-3.7,0.3676
-3.8,0.3054	-3.8,0.3185	-3.8,0.3298	-3.8,0.3369
-3.9,0.2843	-3.9,0.2961	-3.9,0.3056	-3.9,0.3106
-4,0.2685	-4,0.2789	-4,0.2863	-4,0.289
-4.1,0.2578	-4.1,0.2666	-4.1,0.272	-4.1,0.2724



NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
120	125	130	135
-4.2,0.2519	-4.2,0.259	-4.2,0.2625	-4.2,0.2609
-4.3,0.2498	-4.3,0.2555	-4.3,0.2573	-4.3,0.2541
-4.4,0.2506	-4.4,0.2551	-4.4,0.2556	-4.4,0.2513
-4.5,0.2533	-4.5,0.2568	-4.5,0.2564	-4.5,0.2514
-4.6,0.2569	-4.6,0.2597	-4.6,0.2588	-4.6,0.2535
-4.7,0.2604	-4.7,0.2629	-4.7,0.2617	-4.7,0.2565
-4.8,0.2634	-4.8,0.2656	-4.8,0.2645	-4.8,0.2597
-4.9,0.2653	-4.9,0.2675	-4.9,0.2667	-4.9,0.2625
-5,0.2657	-5,0.2681	-5,0.2676	-5,0.2641
-5.1,0.2645	-5.1,0.2672	-5.1,0.2672	-5.1,0.2646
-5.2,0.2616	-5.2,0.2646	-5.2,0.2653	-5.2,0.2634
-5.3,0.257	-5.3,0.2603	-5.3,0.2617	-5.3,0.2606
-5.4,0.2508	-5.4,0.2545	-5.4,0.2564	-5.4,0.2562
-5.5,0.2431	-5.5,0.2472	-5.5,0.2497	-5.5,0.2502
-5.6,0.2341	-5.6,0.2386	-5.6,0.2417	-5.6,0.2428
-5.7,0.2241	-5.7,0.2289	-5.7,0.2324	-5.7,0.234
-5.8,0.2134	-5.8,0.2185	-5.8,0.2223	-5.8,0.2243
-5.9,0.2023	-5.9,0.2075	-5.9,0.2116	-5.9,0.2139
-6,0.1911	-6,0.1965	-6,0.2008	-6,0.203
-6.1,0.1804	-6.1,0.1857	-6.1,0.19	-6.1,0.1921
-6.2,0.1704	-6.2,0.1758	-6.2,0.1797	-6.2,0.1815
-6.3,0.1616	-6.3,0.1668	-6.3,0.1705	-6.3,0.1717
-6.4,0.1545	-6.4,0.1593	-6.4,0.1624	-6.4,0.163
-6.5,0.1492	-6.5,0.1534	-6.5,0.1559	-6.5,0.1558
-6.6,0.1457	-6.6,0.1495	-6.6,0.1513	-6.6,0.1504
-6.7,0.1442	-6.7,0.1475	-6.7,0.1484	-6.7,0.1467
-6.8,0.1443	-6.8,0.1471	-6.8,0.1474	-6.8,0.1449
-6.9,0.1459	-6.9,0.148	-6.9,0.1477	-6.9,0.1447
-7,0.1482	-7,0.1499	-7,0.1493	-7,0.1459
-7.1,0.1511	-7.1,0.1525	-7.1,0.1515	-7.1,0.1479
-7.2,0.1541	-7.2,0.1553	-7.2,0.1541	-7.2,0.1505
-7.3,0.1569	-7.3,0.1578	-7.3,0.1567	-7.3,0.1532
-7.4,0.159	-7.4,0.16	-7.4,0.1589	-7.4,0.1557
-7.5,0.1605	-7.5,0.1615	-7.5,0.1606	-7.5,0.1577
-7.6,0.161	-7.6,0.1622	-7.6,0.1615	-7.6,0.1591
-7.7,0.1606	-7.7,0.1619	-7.7,0.1616	-7.7,0.1595
-7.8,0.1591	-7.8,0.1607	-7.8,0.1607	-7.8,0.1591
-7.9,0.1567	-7.9,0.1585	-7.9,0.1588	-7.9,0.1577
-8,0.1533	-8,0.1553	-8,0.156	-8,0.1553
-8.1,0.149	-8.1,0.1514	-8.1,0.1523	-8.1,0.152
-8.2,0.1441	-8.2,0.1467	-8.2,0.148	-8.2,0.1481
-8.3,0.1387	-8.3,0.1414	-8.3,0.1431	-8.3,0.1433

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
140	145	150	155
0,0.5248	0,0.5241	0,0.5251	0,0.5154
-0.1,0.5678	-0.1,0.566	-0.1,0.5658	-0.1,0.5541
-0.2,0.6111	-0.2,0.6083	-0.2,0.607	-0.2,0.5938
-0.3,0.6541	-0.3,0.6507	-0.3,0.6484	-0.3,0.6341
-0.4,0.6963	-0.4,0.6925	-0.4,0.6895	-0.4,0.6743
-0.5,0.7373	-0.5,0.7332	-0.5,0.7296	-0.5,0.7142
-0.6,0.7766	-0.6,0.7723	-0.6,0.7684	-0.6,0.7529
-0.7,0.8139	-0.7,0.8095	-0.7,0.8053	-0.7,0.7901
-0.8,0.8486	-0.8,0.8443	-0.8,0.8401	-0.8,0.8254
-0.9,0.8805	-0.9,0.8763	-0.9,0.8723	-0.9,0.8584
-1,0.9091	-1,0.9053	-1,0.9014	-1,0.8886
-1.1,0.9342	-1.1,0.9307	-1.1,0.9272	-1.1,0.9158
-1.2,0.9556	-1.2,0.9526	-1.2,0.9494	-1.2,0.9396
-1.3,0.973	-1.3,0.9704	-1.3,0.9678	-1.3,0.9597
-1.4,0.9862	-1.4,0.9843	-1.4,0.9822	-1.4,0.976
-1.5,0.9952	-1.5,0.9938	-1.5,0.9924	-1.5,0.9883
-1.6,0.9998	-1.6,0.9991	-1.6,0.9983	-1.6,0.9963
-1.7,1	-1.7,1	-1.7,1	-1.7,1
-1.8,0.9958	-1.8,0.9965	-1.8,0.9972	-1.8,0.9994
-1.9,0.9872	-1.9,0.9886	-1.9,0.9899	-1.9,0.9944
-2,0.9744	-2,0.9764	-2,0.9784	-2,0.985
-2.1,0.9573	-2.1,0.9597	-2.1,0.9625	-2.1,0.9713
-2.2,0.9362	-2.2,0.9392	-2.2,0.9427	-2.2,0.9535
-2.3,0.9113	-2.3,0.9149	-2.3,0.9188	-2.3,0.9316
-2.4,0.883	-2.4,0.8868	-2.4,0.8913	-2.4,0.9058
-2.5,0.8514	-2.5,0.8556	-2.5,0.8604	-2.5,0.8765
-2.6,0.817	-2.6,0.8213	-2.6,0.8264	-2.6,0.8439
-2.7,0.7799	-2.7,0.7843	-2.7,0.7896	-2.7,0.8084
-2.8,0.7408	-2.8,0.7451	-2.8,0.7504	-2.8,0.7701
-2.9,0.6998	-2.9,0.7039	-2.9,0.7092	-2.9,0.7296
-3,0.6576	-3,0.6614	-3,0.6664	-3,0.6872
-3.1,0.6145	-3.1,0.6177	-3.1,0.6223	-3.1,0.6433
-3.2,0.5711	-3.2,0.5736	-3.2,0.5776	-3.2,0.5984
-3.3,0.5279	-3.3,0.5295	-3.3,0.5327	-3.3,0.5528
-3.4,0.4855	-3.4,0.486	-3.4,0.4882	-3.4,0.5074
-3.5,0.4445	-3.5,0.4437	-3.5,0.4446	-3.5,0.4625
-3.6,0.4056	-3.6,0.4033	-3.6,0.4026	-3.6,0.4186
-3.7,0.3693	-3.7,0.3653	-3.7,0.3628	-3.7,0.3765
-3.8,0.3365	-3.8,0.3306	-3.8,0.3262	-3.8,0.337
-3.9,0.3078	-3.9,0.2999	-3.9,0.2932	-3.9,0.3005
-4,0.2839	-4,0.274	-4,0.2648	-4,0.2684
-4.1,0.2651	-4.1,0.2534	-4.1,0.242	-4.1,0.2413

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
140	145	150	155
-4.2,0.2518	-4.2,0.2385	-4.2,0.225	-4.2,0.22
-4.3,0.2437	-4.3,0.2293	-4.3,0.2144	-4.3,0.2053
-4.4,0.2399	-4.4,0.2251	-4.4,0.2094	-4.4,0.1972
-4.5,0.2398	-4.5,0.225	-4.5,0.2091	-4.5,0.1949
-4.6,0.2421	-4.6,0.2279	-4.6,0.2125	-4.6,0.1973
-4.7,0.2457	-4.7,0.2324	-4.7,0.2178	-4.7,0.2026
-4.8,0.2498	-4.8,0.2375	-4.8,0.224	-4.8,0.2096
-4.9,0.2535	-4.9,0.2423	-4.9,0.23	-4.9,0.2169
-5.0,0.2563	-5.0,0.2463	-5.0,0.2353	-5.0,0.2237
-5.1,0.2578	-5.1,0.2489	-5.1,0.2391	-5.1,0.2292
-5.2,0.2577	-5.2,0.2498	-5.2,0.2412	-5.2,0.2332
-5.3,0.2559	-5.3,0.2489	-5.3,0.2413	-5.3,0.235
-5.4,0.2524	-5.4,0.2463	-5.4,0.2396	-5.4,0.2349
-5.5,0.2472	-5.5,0.2418	-5.5,0.236	-5.5,0.2327
-5.6,0.2404	-5.6,0.2355	-5.6,0.2304	-5.6,0.2286
-5.7,0.2321	-5.7,0.2277	-5.7,0.2231	-5.7,0.2224
-5.8,0.2228	-5.8,0.2185	-5.8,0.2144	-5.8,0.2146
-5.9,0.2125	-5.9,0.2083	-5.9,0.2044	-5.9,0.2053
-6.0,0.2015	-6.0,0.1974	-6.0,0.1935	-6.0,0.1947
-6.1,0.1904	-6.1,0.1861	-6.1,0.182	-6.1,0.1833
-6.2,0.1795	-6.2,0.1747	-6.2,0.1702	-6.2,0.1713
-6.3,0.1691	-6.3,0.1638	-6.3,0.1587	-6.3,0.1593
-6.4,0.1596	-6.4,0.1538	-6.4,0.148	-6.4,0.1476
-6.5,0.1516	-6.5,0.145	-6.5,0.1384	-6.5,0.1368
-6.6,0.1453	-6.6,0.1379	-6.6,0.1304	-6.6,0.1274
-6.7,0.1409	-6.7,0.1329	-6.7,0.1246	-6.7,0.1199
-6.8,0.1385	-6.8,0.13	-6.8,0.1209	-6.8,0.1146
-6.9,0.1379	-6.9,0.129	-6.9,0.1196	-6.9,0.1118
-7.0,0.1387	-7.0,0.1299	-7.0,0.1204	-7.0,0.1115
-7.1,0.1408	-7.1,0.1321	-7.1,0.1226	-7.1,0.1131
-7.2,0.1435	-7.2,0.1351	-7.2,0.1259	-7.2,0.1162
-7.3,0.1465	-7.3,0.1386	-7.3,0.1297	-7.3,0.1204
-7.4,0.1495	-7.4,0.142	-7.4,0.1338	-7.4,0.1248
-7.5,0.152	-7.5,0.1451	-7.5,0.1374	-7.5,0.1292
-7.6,0.1539	-7.6,0.1475	-7.6,0.1405	-7.6,0.1332
-7.7,0.155	-7.7,0.1491	-7.7,0.1428	-7.7,0.1364
-7.8,0.1551	-7.8,0.1498	-7.8,0.144	-7.8,0.1385
-7.9,0.1543	-7.9,0.1494	-7.9,0.1441	-7.9,0.1396
-8.0,0.1523	-8.0,0.1479	-8.0,0.1431	-8.0,0.1395
-8.1,0.1495	-8.1,0.1454	-8.1,0.141	-8.1,0.1382
-8.2,0.1458	-8.2,0.1419	-8.2,0.1379	-8.2,0.1359
-8.3,0.1413	-8.3,0.1376	-8.3,0.1338	-8.3,0.1324

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
160	165	170	175
0,0.4839	0,0.4589	0,0.453	0,0.4557
-0.1,0.5219	-0.1,0.4979	-0.1,0.4932	-0.1,0.4965
-0.2,0.5613	-0.2,0.5386	-0.2,0.535	-0.2,0.5387
-0.3,0.6017	-0.3,0.5801	-0.3,0.5776	-0.3,0.5817
-0.4,0.6425	-0.4,0.6221	-0.4,0.6204	-0.4,0.6248
-0.5,0.6831	-0.5,0.664	-0.5,0.6629	-0.5,0.6676
-0.6,0.7229	-0.6,0.7053	-0.6,0.7048	-0.6,0.7095
-0.7,0.7617	-0.7,0.7454	-0.7,0.7453	-0.7,0.7499
-0.8,0.7988	-0.8,0.784	-0.8,0.7842	-0.8,0.7887
-0.9,0.8338	-0.9,0.8203	-0.9,0.8209	-0.9,0.8252
-1,0.8662	-1,0.8544	-1,0.855	-1,0.859
-1.1,0.8958	-1.1,0.8855	-1.1,0.8862	-1.1,0.8898
-1.2,0.9222	-1.2,0.9133	-1.2,0.9142	-1.2,0.9173
-1.3,0.9451	-1.3,0.9378	-1.3,0.9385	-1.3,0.9413
-1.4,0.9642	-1.4,0.9585	-1.4,0.9591	-1.4,0.9614
-1.5,0.9796	-1.5,0.9752	-1.5,0.9757	-1.5,0.9774
-1.6,0.9906	-1.6,0.9878	-1.6,0.9881	-1.6,0.9893
-1.7,0.9976	-1.7,0.9961	-1.7,0.9962	-1.7,0.9969
-1.8,1	-1.8,1	-1.8,1	-1.8,1
-1.9,0.9982	-1.9,0.9996	-1.9,0.9993	-1.9,0.9987
-2,0.9919	-2,0.9947	-2,0.9942	-2,0.9931
-2.1,0.9811	-2.1,0.9853	-2.1,0.9845	-2.1,0.9829
-2.2,0.9662	-2.2,0.9716	-2.2,0.9706	-2.2,0.9684
-2.3,0.9471	-2.3,0.9537	-2.3,0.9526	-2.3,0.9499
-2.4,0.924	-2.4,0.9318	-2.4,0.9305	-2.4,0.9274
-2.5,0.8971	-2.5,0.9061	-2.5,0.9047	-2.5,0.9012
-2.6,0.8668	-2.6,0.8769	-2.6,0.8755	-2.6,0.8715
-2.7,0.8332	-2.7,0.8444	-2.7,0.843	-2.7,0.8387
-2.8,0.7968	-2.8,0.809	-2.8,0.8076	-2.8,0.8031
-2.9,0.7579	-2.9,0.771	-2.9,0.7697	-2.9,0.7651
-3,0.7167	-3,0.7307	-3,0.7297	-3,0.725
-3.1,0.6739	-3.1,0.6887	-3.1,0.688	-3.1,0.6832
-3.2,0.6297	-3.2,0.6452	-3.2,0.6449	-3.2,0.6402
-3.3,0.5847	-3.3,0.6011	-3.3,0.6011	-3.3,0.5967
-3.4,0.5394	-3.4,0.5564	-3.4,0.5571	-3.4,0.553
-3.5,0.4943	-3.5,0.512	-3.5,0.5134	-3.5,0.5096
-3.6,0.4501	-3.6,0.4685	-3.6,0.4706	-3.6,0.4672
-3.7,0.4072	-3.7,0.4261	-3.7,0.4292	-3.7,0.4264
-3.8,0.3664	-3.8,0.386	-3.8,0.3901	-3.8,0.388
-3.9,0.3284	-3.9,0.3485	-3.9,0.3538	-3.9,0.3525
-4,0.2942	-4,0.3147	-4,0.3211	-4,0.3207
-4.1,0.2644	-4.1,0.2852	-4.1,0.2929	-4.1,0.2935

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

	AZIMUTH - DEGREES TRUE			
160	165	170	175	
-4.2,0.24	-4.2,0.2607	-4.2,0.2697	-4.2,0.2712	
-4.3,0.2218	-4.3,0.242	-4.3,0.252	-4.3,0.2544	
-4.4,0.21	-4.4,0.2295	-4.4,0.24	-4.4,0.2432	
-4.5,0.2044	-4.5,0.2225	-4.5,0.2335	-4.5,0.237	
-4.6,0.204	-4.6,0.2206	-4.6,0.2313	-4.6,0.2353	
-4.7,0.2074	-4.7,0.2224	-4.7,0.2328	-4.7,0.2367	
-4.8,0.2132	-4.8,0.2267	-4.8,0.2364	-4.8,0.2403	
-4.9,0.2199	-4.9,0.2322	-4.9,0.2412	-4.9,0.2447	
-5,0.2267	-5,0.238	-5,0.2461	-5,0.2493	
-5.1,0.2328	-5.1,0.2433	-5.1,0.2504	-5.1,0.2532	
-5.2,0.2373	-5.2,0.2473	-5.2,0.2537	-5.2,0.256	
-5.3,0.2402	-5.3,0.2497	-5.3,0.2554	-5.3,0.2572	
-5.4,0.2411	-5.4,0.2503	-5.4,0.2554	-5.4,0.2569	
-5.5,0.24	-5.5,0.2491	-5.5,0.2536	-5.5,0.2546	
-5.6,0.2368	-5.6,0.2459	-5.6,0.2499	-5.6,0.2507	
-5.7,0.2317	-5.7,0.2408	-5.7,0.2445	-5.7,0.245	
-5.8,0.2248	-5.8,0.234	-5.8,0.2375	-5.8,0.2377	
-5.9,0.2162	-5.9,0.2257	-5.9,0.229	-5.9,0.229	
-6,0.2064	-6,0.216	-6,0.2193	-6,0.2192	
-6.1,0.1954	-6.1,0.2053	-6.1,0.2087	-6.1,0.2085	
-6.2,0.1836	-6.2,0.1939	-6.2,0.1974	-6.2,0.1973	
-6.3,0.1717	-6.3,0.1822	-6.3,0.1859	-6.3,0.186	
-6.4,0.1598	-6.4,0.1705	-6.4,0.1747	-6.4,0.175	
-6.5,0.1484	-6.5,0.1596	-6.5,0.1641	-6.5,0.1646	
-6.6,0.1382	-6.6,0.1495	-6.6,0.1546	-6.6,0.1554	
-6.7,0.1294	-6.7,0.1409	-6.7,0.1465	-6.7,0.1478	
-6.8,0.1229	-6.8,0.1343	-6.8,0.1403	-6.8,0.142	
-6.9,0.1186	-6.9,0.1297	-6.9,0.136	-6.9,0.1381	
-7,0.1168	-7,0.1274	-7,0.134	-7,0.1362	
-7.1,0.1171	-7.1,0.1271	-7.1,0.1337	-7.1,0.1362	
-7.2,0.1192	-7.2,0.1286	-7.2,0.1351	-7.2,0.1376	
-7.3,0.1226	-7.3,0.1314	-7.3,0.1376	-7.3,0.14	
-7.4,0.1267	-7.4,0.1349	-7.4,0.1408	-7.4,0.1432	
-7.5,0.1311	-7.5,0.1386	-7.5,0.1442	-7.5,0.1463	
-7.6,0.1352	-7.6,0.1423	-7.6,0.1473	-7.6,0.1493	
-7.7,0.1386	-7.7,0.1455	-7.7,0.1501	-7.7,0.1518	
-7.8,0.1413	-7.8,0.1479	-7.8,0.1521	-7.8,0.1537	
-7.9,0.143	-7.9,0.1494	-7.9,0.1532	-7.9,0.1545	
-8,0.1436	-8,0.1499	-8,0.1535	-8,0.1544	
-8.1,0.1429	-8.1,0.1492	-8.1,0.1525	-8.1,0.1534	
-8.2,0.1412	-8.2,0.1476	-8.2,0.1506	-8.2,0.1512	
-8.3,0.1383	-8.3,0.1448	-8.3,0.1477	-8.3,0.1481	

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
180	185	190	195
0,0.4565	0,0.456	0,0.4595	0,0.4753
-0.1,0.4976	-0.1,0.4969	-0.1,0.4997	-0.1,0.5145
-0.2,0.54	-0.2,0.5392	-0.2,0.5413	-0.2,0.5551
-0.3,0.5831	-0.3,0.5821	-0.3,0.5836	-0.3,0.5966
-0.4,0.6264	-0.4,0.6253	-0.4,0.6262	-0.4,0.6383
-0.5,0.6691	-0.5,0.6681	-0.5,0.6686	-0.5,0.6797
-0.6,0.7111	-0.6,0.71	-0.6,0.7102	-0.6,0.7203
-0.7,0.7516	-0.7,0.7504	-0.7,0.7504	-0.7,0.7596
-0.8,0.7902	-0.8,0.7892	-0.8,0.7889	-0.8,0.7972
-0.9,0.8266	-0.9,0.8256	-0.9,0.8252	-0.9,0.8327
-1,0.8604	-1,0.8594	-1,0.859	-1,0.8655
-1.1,0.8911	-1.1,0.8903	-1.1,0.8898	-1.1,0.8954
-1.2,0.9185	-1.2,0.9177	-1.2,0.9172	-1.2,0.922
-1.3,0.9422	-1.3,0.9416	-1.3,0.9411	-1.3,0.9451
-1.4,0.9621	-1.4,0.9616	-1.4,0.9612	-1.4,0.9643
-1.5,0.9781	-1.5,0.9776	-1.5,0.9773	-1.5,0.9797
-1.6,0.9897	-1.6,0.9895	-1.6,0.9892	-1.6,0.9908
-1.7,0.997	-1.7,0.9969	-1.7,0.9968	-1.7,0.9975
-1.8,1	-1.8,1	-1.8,1	-1.8,1
-1.9,0.9985	-1.9,0.9987	-1.9,0.9987	-1.9,0.998
-2,0.9926	-2,0.9929	-2,0.993	-2,0.9916
-2.1,0.9822	-2.1,0.9826	-2.1,0.9829	-2.1,0.9808
-2.2,0.9675	-2.2,0.9681	-2.2,0.9685	-2.2,0.9656
-2.3,0.9488	-2.3,0.9495	-2.3,0.95	-2.3,0.9465
-2.4,0.9261	-2.4,0.927	-2.4,0.9275	-2.4,0.9233
-2.5,0.8998	-2.5,0.9007	-2.5,0.9012	-2.5,0.8965
-2.6,0.8701	-2.6,0.871	-2.6,0.8716	-2.6,0.8661
-2.7,0.8372	-2.7,0.8381	-2.7,0.8387	-2.7,0.8326
-2.8,0.8014	-2.8,0.8025	-2.8,0.8029	-2.8,0.7963
-2.9,0.7633	-2.9,0.7643	-2.9,0.7647	-2.9,0.7575
-3,0.7232	-3,0.7242	-3,0.7245	-3,0.7166
-3.1,0.6815	-3.1,0.6824	-3.1,0.6824	-3.1,0.674
-3.2,0.6385	-3.2,0.6395	-3.2,0.6393	-3.2,0.6303
-3.3,0.5951	-3.3,0.5959	-3.3,0.5953	-3.3,0.5858
-3.4,0.5515	-3.4,0.5522	-3.4,0.5512	-3.4,0.5411
-3.5,0.5083	-3.5,0.5089	-3.5,0.5074	-3.5,0.4968
-3.6,0.466	-3.6,0.4666	-3.6,0.4646	-3.6,0.4534
-3.7,0.4256	-3.7,0.4259	-3.7,0.4233	-3.7,0.4116
-3.8,0.3874	-3.8,0.3876	-3.8,0.3842	-3.8,0.3719
-3.9,0.3523	-3.9,0.3522	-3.9,0.3482	-3.9,0.3353
-4,0.3209	-4,0.3205	-4,0.3158	-4,0.3025
-4.1,0.2939	-4.1,0.2933	-4.1,0.2879	-4.1,0.2741

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
180	185	190	195
-4.2,0.272	-4.2,0.2712	-4.2,0.2652	-4.2,0.2512
-4.3,0.2556	-4.3,0.2546	-4.3,0.2481	-4.3,0.2342
-4.4,0.2447	-4.4,0.2435	-4.4,0.2367	-4.4,0.2233
-4.5,0.2387	-4.5,0.2375	-4.5,0.2306	-4.5,0.2179
-4.6,0.2371	-4.6,0.2359	-4.6,0.2291	-4.6,0.2174
-4.7,0.2385	-4.7,0.2373	-4.7,0.231	-4.7,0.2202
-4.8,0.2419	-4.8,0.2408	-4.8,0.2349	-4.8,0.2251
-4.9,0.2463	-4.9,0.2453	-4.9,0.2399	-4.9,0.2311
-5,0.2507	-5,0.2498	-5,0.245	-5,0.2368
-5.1,0.2544	-5.1,0.2537	-5.1,0.2494	-5.1,0.2419
-5.2,0.257	-5.2,0.2564	-5.2,0.2525	-5.2,0.2456
-5.3,0.2581	-5.3,0.2576	-5.3,0.2541	-5.3,0.2476
-5.4,0.2576	-5.4,0.2571	-5.4,0.2541	-5.4,0.2478
-5.5,0.2552	-5.5,0.255	-5.5,0.2522	-5.5,0.246
-5.6,0.2511	-5.6,0.2508	-5.6,0.2484	-5.6,0.2424
-5.7,0.2452	-5.7,0.245	-5.7,0.2428	-5.7,0.2368
-5.8,0.2378	-5.8,0.2377	-5.8,0.2356	-5.8,0.2295
-5.9,0.2292	-5.9,0.2291	-5.9,0.2269	-5.9,0.2208
-6,0.2193	-6,0.2193	-6,0.2171	-6,0.2107
-6.1,0.2086	-6.1,0.2085	-6.1,0.2064	-6.1,0.1999
-6.2,0.1974	-6.2,0.1973	-6.2,0.195	-6.2,0.1883
-6.3,0.1862	-6.3,0.1861	-6.3,0.1835	-6.3,0.1765
-6.4,0.1753	-6.4,0.175	-6.4,0.1723	-6.4,0.1651
-6.5,0.1651	-6.5,0.1647	-6.5,0.1617	-6.5,0.1542
-6.6,0.156	-6.6,0.1555	-6.6,0.1522	-6.6,0.1445
-6.7,0.1485	-6.7,0.1479	-6.7,0.1442	-6.7,0.1365
-6.8,0.1427	-6.8,0.1421	-6.8,0.1383	-6.8,0.1303
-6.9,0.139	-6.9,0.1383	-6.9,0.1343	-6.9,0.1266
-7,0.1372	-7,0.1366	-7,0.1324	-7,0.1249
-7.1,0.1372	-7.1,0.1366	-7.1,0.1324	-7.1,0.1253
-7.2,0.1387	-7.2,0.138	-7.2,0.134	-7.2,0.1273
-7.3,0.1412	-7.3,0.1404	-7.3,0.1366	-7.3,0.1303
-7.4,0.1442	-7.4,0.1435	-7.4,0.1399	-7.4,0.1341
-7.5,0.1472	-7.5,0.1467	-7.5,0.1433	-7.5,0.138
-7.6,0.1502	-7.6,0.1496	-7.6,0.1467	-7.6,0.1416
-7.7,0.1526	-7.7,0.1521	-7.7,0.1494	-7.7,0.1446
-7.8,0.1544	-7.8,0.1539	-7.8,0.1514	-7.8,0.1469
-7.9,0.1551	-7.9,0.1548	-7.9,0.1525	-7.9,0.1482
-8,0.155	-8,0.1547	-8,0.1526	-8,0.1483
-8.1,0.1537	-8.1,0.1535	-8.1,0.1516	-8.1,0.1473
-8.2,0.1516	-8.2,0.1514	-8.2,0.1495	-8.2,0.1453
-8.3,0.1484	-8.3,0.1482	-8.3,0.1464	-8.3,0.1423

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
200	205	210	215
0,0.5071	0,0.5337	0,0.547	0,0.5501
-0.1,0.546	-0.1,0.5733	-0.1,0.5876	-0.1,0.592
-0.2,0.586	-0.2,0.6135	-0.2,0.6287	-0.2,0.634
-0.3,0.6266	-0.3,0.654	-0.3,0.6696	-0.3,0.6757
-0.4,0.6671	-0.4,0.6942	-0.4,0.7099	-0.4,0.7166
-0.5,0.7073	-0.5,0.7335	-0.5,0.7491	-0.5,0.7561
-0.6,0.7464	-0.6,0.7715	-0.6,0.7869	-0.6,0.7939
-0.7,0.7841	-0.7,0.8078	-0.7,0.8226	-0.7,0.8296
-0.8,0.82	-0.8,0.842	-0.8,0.856	-0.8,0.8627
-0.9,0.8534	-0.9,0.8737	-0.9,0.8866	-0.9,0.8929
-1,0.8843	-1,0.9025	-1,0.9142	-1,0.9199
-1.1,0.912	-1.1,0.9279	-1.1,0.9382	-1.1,0.9431
-1.2,0.9365	-1.2,0.9499	-1.2,0.9587	-1.2,0.9628
-1.3,0.9572	-1.3,0.9681	-1.3,0.9752	-1.3,0.9783
-1.4,0.9741	-1.4,0.9824	-1.4,0.9878	-1.4,0.9899
-1.5,0.987	-1.5,0.9925	-1.5,0.996	-1.5,0.9971
-1.6,0.9957	-1.6,0.9984	-1.6,1	-1.6,1
-1.7,1	-1.7,1	-1.7,0.9997	-1.7,0.9985
-1.8,1	-1.8,0.9972	-1.8,0.9949	-1.8,0.9925
-1.9,0.9957	-1.9,0.9901	-1.9,0.9859	-1.9,0.9824
-2,0.987	-2,0.9786	-2,0.9725	-2,0.9679
-2.1,0.9739	-2.1,0.9628	-2.1,0.9549	-2.1,0.9493
-2.2,0.9565	-2.2,0.9431	-2.2,0.9333	-2.2,0.9267
-2.3,0.9352	-2.3,0.9193	-2.3,0.9079	-2.3,0.9005
-2.4,0.9101	-2.4,0.8918	-2.4,0.879	-2.4,0.8707
-2.5,0.8814	-2.5,0.861	-2.5,0.8468	-2.5,0.8378
-2.6,0.8492	-2.6,0.8271	-2.6,0.8116	-2.6,0.8021
-2.7,0.8142	-2.7,0.7903	-2.7,0.7737	-2.7,0.7639
-2.8,0.7764	-2.8,0.751	-2.8,0.7337	-2.8,0.7237
-2.9,0.7363	-2.9,0.7097	-2.9,0.6917	-2.9,0.6818
-3,0.6942	-3,0.6667	-3,0.6483	-3,0.6386
-3.1,0.6506	-3.1,0.6225	-3.1,0.6038	-3.1,0.5946
-3.2,0.606	-3.2,0.5775	-3.2,0.559	-3.2,0.5504
-3.3,0.561	-3.3,0.5321	-3.3,0.514	-3.3,0.5063
-3.4,0.5158	-3.4,0.487	-3.4,0.4697	-3.4,0.4632
-3.5,0.4711	-3.5,0.4429	-3.5,0.4265	-3.5,0.4215
-3.6,0.4276	-3.6,0.4001	-3.6,0.385	-3.6,0.3819
-3.7,0.3858	-3.7,0.3595	-3.7,0.3461	-3.7,0.3452
-3.8,0.3464	-3.8,0.3216	-3.8,0.3104	-3.8,0.3119
-3.9,0.3103	-3.9,0.2875	-3.9,0.2788	-3.9,0.2831
-4,0.2782	-4,0.2579	-4,0.2521	-4,0.2593
-4.1,0.2511	-4.1,0.2336	-4.1,0.231	-4.1,0.2411



NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
200	205	210	215
-4.2,0.2298	-4.2,0.2155	-4.2,0.2161	-4.2,0.2286
-4.3,0.2148	-4.3,0.204	-4.3,0.2074	-4.3,0.2217
-4.4,0.2061	-4.4,0.1985	-4.4,0.2042	-4.4,0.2195
-4.5,0.2031	-4.5,0.1982	-4.5,0.2054	-4.5,0.221
-4.6,0.2047	-4.6,0.2018	-4.6,0.2098	-4.6,0.2249
-4.7,0.2093	-4.7,0.2077	-4.7,0.2157	-4.7,0.2299
-4.8,0.2155	-4.8,0.2146	-4.8,0.222	-4.8,0.2351
-4.9,0.2224	-4.9,0.2214	-4.9,0.228	-4.9,0.2397
-5,0.2287	-5,0.2273	-5,0.2329	-5,0.2432
-5.1,0.234	-5.1,0.2319	-5.1,0.2363	-5.1,0.2451
-5.2,0.2376	-5.2,0.2345	-5.2,0.2378	-5.2,0.2455
-5.3,0.2395	-5.3,0.2354	-5.3,0.2374	-5.3,0.2439
-5.4,0.2392	-5.4,0.2342	-5.4,0.2351	-5.4,0.2405
-5.5,0.237	-5.5,0.2309	-5.5,0.2308	-5.5,0.2352
-5.6,0.2329	-5.6,0.2258	-5.6,0.2247	-5.6,0.2283
-5.7,0.2268	-5.7,0.2189	-5.7,0.2169	-5.7,0.22
-5.8,0.219	-5.8,0.2104	-5.8,0.2078	-5.8,0.2104
-5.9,0.2099	-5.9,0.2005	-5.9,0.1974	-5.9,0.1998
-6,0.1995	-6,0.1896	-6,0.1863	-6,0.1887
-6.1,0.1881	-6.1,0.1781	-6.1,0.1747	-6.1,0.1774
-6.2,0.1763	-6.2,0.1662	-6.2,0.163	-6.2,0.1662
-6.3,0.1643	-6.3,0.1544	-6.3,0.1518	-6.3,0.1556
-6.4,0.1528	-6.4,0.1433	-6.4,0.1414	-6.4,0.1461
-6.5,0.1421	-6.5,0.1333	-6.5,0.1324	-6.5,0.1381
-6.6,0.1327	-6.6,0.125	-6.6,0.1253	-6.6,0.1321
-6.7,0.1252	-6.7,0.1187	-6.7,0.1201	-6.7,0.128
-6.8,0.1199	-6.8,0.1147	-6.8,0.1175	-6.8,0.1261
-6.9,0.117	-6.9,0.1132	-6.9,0.1169	-6.9,0.1262
-7,0.1163	-7,0.1138	-7,0.1184	-7,0.1278
-7.1,0.1177	-7.1,0.1161	-7.1,0.1211	-7.1,0.1305
-7.2,0.1206	-7.2,0.1197	-7.2,0.1248	-7.2,0.1339
-7.3,0.1243	-7.3,0.1239	-7.3,0.1288	-7.3,0.1374
-7.4,0.1285	-7.4,0.1282	-7.4,0.1328	-7.4,0.1408
-7.5,0.1328	-7.5,0.1323	-7.5,0.1364	-7.5,0.1437
-7.6,0.1365	-7.6,0.1357	-7.6,0.1393	-7.6,0.1458
-7.7,0.1397	-7.7,0.1383	-7.7,0.1412	-7.7,0.147
-7.8,0.1417	-7.8,0.1399	-7.8,0.1421	-7.8,0.1472
-7.9,0.1428	-7.9,0.1404	-7.9,0.1419	-7.9,0.1464
-8,0.1427	-8,0.1396	-8,0.1405	-8,0.1444
-8.1,0.1415	-8.1,0.1377	-8.1,0.138	-8.1,0.1415
-8.2,0.1391	-8.2,0.1348	-8.2,0.1345	-8.2,0.1376
-8.3,0.1357	-8.3,0.1308	-8.3,0.1302	-8.3,0.1329

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
220	225	230	235
0,0.551	0,0.5592	0,0.5876	0,0.6235
-0.1,0.594	-0.1,0.6032	-0.1,0.6321	-0.1,0.6672
-0.2,0.637	-0.2,0.6469	-0.2,0.6757	-0.2,0.7098
-0.3,0.6795	-0.3,0.6899	-0.3,0.7181	-0.3,0.7509
-0.4,0.7209	-0.4,0.7315	-0.4,0.7589	-0.4,0.79
-0.5,0.7608	-0.5,0.7714	-0.5,0.7975	-0.5,0.8266
-0.6,0.7988	-0.6,0.8091	-0.6,0.8336	-0.6,0.8606
-0.7,0.8345	-0.7,0.8443	-0.7,0.8671	-0.7,0.8914
-0.8,0.8674	-0.8,0.8767	-0.8,0.8972	-0.8,0.919
-0.9,0.8973	-0.9,0.9057	-0.9,0.9239	-0.9,0.9428
-1,0.9239	-1,0.9313	-1,0.947	-1,0.9627
-1.1,0.9468	-1.1,0.9531	-1.1,0.9659	-1.1,0.9785
-1.2,0.9657	-1.2,0.971	-1.2,0.981	-1.2,0.99
-1.3,0.9807	-1.3,0.9847	-1.3,0.9917	-1.3,0.9972
-1.4,0.9915	-1.4,0.9941	-1.4,0.998	-1.4,1
-1.5,0.9979	-1.5,0.9992	-1.5,1	-1.5,0.9984
-1.6,1	-1.6,1	-1.6,0.9977	-1.6,0.9924
-1.7,0.9977	-1.7,0.9964	-1.7,0.991	-1.7,0.9821
-1.8,0.9909	-1.8,0.9884	-1.8,0.9801	-1.8,0.9677
-1.9,0.98	-1.9,0.9762	-1.9,0.9651	-1.9,0.9492
-2,0.9648	-2,0.9599	-2,0.946	-2,0.927
-2.1,0.9455	-2.1,0.9395	-2.1,0.9233	-2.1,0.901
-2.2,0.9223	-2.2,0.9154	-2.2,0.897	-2.2,0.8718
-2.3,0.8955	-2.3,0.8879	-2.3,0.8676	-2.3,0.8396
-2.4,0.8655	-2.4,0.8573	-2.4,0.8352	-2.4,0.8047
-2.5,0.8323	-2.5,0.8237	-2.5,0.8004	-2.5,0.7677
-2.6,0.7966	-2.6,0.7877	-2.6,0.7634	-2.6,0.7288
-2.7,0.7584	-2.7,0.7496	-2.7,0.7248	-2.7,0.6886
-2.8,0.7184	-2.8,0.7098	-2.8,0.685	-2.8,0.6475
-2.9,0.6768	-2.9,0.6687	-2.9,0.6443	-2.9,0.6062
-3,0.6342	-3,0.627	-3,0.6035	-3,0.565
-3.1,0.5911	-3.1,0.5849	-3.1,0.5627	-3.1,0.5244
-3.2,0.5479	-3.2,0.5432	-3.2,0.5229	-3.2,0.4852
-3.3,0.5053	-3.3,0.5022	-3.3,0.4846	-3.3,0.4479
-3.4,0.4638	-3.4,0.4628	-3.4,0.4481	-3.4,0.4132
-3.5,0.4239	-3.5,0.4255	-3.5,0.4143	-3.5,0.3817
-3.6,0.3865	-3.6,0.3907	-3.6,0.3837	-3.6,0.354
-3.7,0.3523	-3.7,0.3593	-3.7,0.3568	-3.7,0.3305
-3.8,0.3217	-3.8,0.3319	-3.8,0.3341	-3.8,0.3118
-3.9,0.2955	-3.9,0.3088	-3.9,0.3157	-3.9,0.2976
-4,0.2743	-4,0.2905	-4,0.3018	-4,0.2877
-4.1,0.2584	-4.1,0.277	-4.1,0.2921	-4.1,0.282

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
220	225	230	235
-4.2,0.2476	-4.2,0.268	-4.2,0.286	-4.2,0.2793
-4.3,0.2417	-4.3,0.2631	-4.3,0.283	-4.3,0.2789
-4.4,0.2398	-4.4,0.2614	-4.4,0.2821	-4.4,0.2801
-4.5,0.2408	-4.5,0.2618	-4.5,0.2825	-4.5,0.2818
-4.6,0.2436	-4.6,0.2637	-4.6,0.2835	-4.6,0.2835
-4.7,0.2473	-4.7,0.266	-4.7,0.2845	-4.7,0.2847
-4.8,0.251	-4.8,0.268	-4.8,0.2849	-4.8,0.2847
-4.9,0.2541	-4.9,0.2695	-4.9,0.2844	-4.9,0.2835
-5,0.256	-5,0.2698	-5,0.2826	-5,0.2808
-5.1,0.2566	-5.1,0.2687	-5.1,0.2795	-5.1,0.2766
-5.2,0.2555	-5.2,0.2661	-5.2,0.2749	-5.2,0.2708
-5.3,0.2528	-5.3,0.262	-5.3,0.269	-5.3,0.2637
-5.4,0.2482	-5.4,0.2563	-5.4,0.2617	-5.4,0.2552
-5.5,0.2422	-5.5,0.2493	-5.5,0.2532	-5.5,0.2457
-5.6,0.2346	-5.6,0.241	-5.6,0.2439	-5.6,0.2355
-5.7,0.2259	-5.7,0.2317	-5.7,0.2338	-5.7,0.2246
-5.8,0.216	-5.8,0.2216	-5.8,0.2234	-5.8,0.2137
-5.9,0.2054	-5.9,0.2111	-5.9,0.2129	-5.9,0.2029
-6,0.1946	-6,0.2005	-6,0.2025	-6,0.1927
-6.1,0.1836	-6.1,0.1901	-6.1,0.193	-6.1,0.1835
-6.2,0.1731	-6.2,0.1802	-6.2,0.1843	-6.2,0.1755
-6.3,0.1633	-6.3,0.1714	-6.3,0.1768	-6.3,0.1691
-6.4,0.1547	-6.4,0.164	-6.4,0.1709	-6.4,0.1643
-6.5,0.1478	-6.5,0.1581	-6.5,0.1666	-6.5,0.1615
-6.6,0.1425	-6.6,0.1539	-6.6,0.164	-6.6,0.1603
-6.7,0.1392	-6.7,0.1514	-6.7,0.1628	-6.7,0.1604
-6.8,0.1379	-6.8,0.1506	-6.8,0.1628	-6.8,0.1616
-6.9,0.1381	-6.9,0.1511	-6.9,0.164	-6.9,0.1636
-7,0.1397	-7,0.1525	-7,0.1656	-7,0.1659
-7.1,0.1421	-7.1,0.1546	-7.1,0.1675	-7.1,0.1682
-7.2,0.1449	-7.2,0.1569	-7.2,0.1693	-7.2,0.1701
-7.3,0.1479	-7.3,0.1592	-7.3,0.1708	-7.3,0.1716
-7.4,0.1505	-7.4,0.161	-7.4,0.1718	-7.4,0.1722
-7.5,0.1526	-7.5,0.1623	-7.5,0.172	-7.5,0.1721
-7.6,0.154	-7.6,0.1628	-7.6,0.1715	-7.6,0.1709
-7.7,0.1544	-7.7,0.1624	-7.7,0.1701	-7.7,0.1689
-7.8,0.154	-7.8,0.1612	-7.8,0.1679	-7.8,0.1659
-7.9,0.1525	-7.9,0.1592	-7.9,0.1647	-7.9,0.1621
-8,0.1501	-8,0.1561	-8,0.1608	-8,0.1575
-8.1,0.1467	-8.1,0.1523	-8.1,0.1564	-8.1,0.1525
-8.2,0.1425	-8.2,0.1478	-8.2,0.1513	-8.2,0.147
-8.3,0.1378	-8.3,0.1428	-8.3,0.146	-8.3,0.1414

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
240	245	250	255
0,0.6447	0,0.6491	0,0.6445	0,0.6401
-0.1,0.6876	-0.1,0.6914	-0.1,0.6867	-0.1,0.6823
-0.2,0.7292	-0.2,0.7325	-0.2,0.7279	-0.2,0.7234
-0.3,0.7692	-0.3,0.7721	-0.3,0.7675	-0.3,0.7632
-0.4,0.807	-0.4,0.8095	-0.4,0.805	-0.4,0.801
-0.5,0.8424	-0.5,0.8446	-0.5,0.8403	-0.5,0.8365
-0.6,0.8749	-0.6,0.8768	-0.6,0.8728	-0.6,0.8693
-0.7,0.9044	-0.7,0.9058	-0.7,0.9022	-0.7,0.899
-0.8,0.9302	-0.8,0.9315	-0.8,0.9282	-0.8,0.9255
-0.9,0.9523	-0.9,0.9533	-0.9,0.9506	-0.9,0.9481
-1,0.9705	-1,0.9713	-1,0.969	-1,0.967
-1.1,0.9843	-1.1,0.985	-1.1,0.9832	-1.1,0.9818
-1.2,0.9939	-1.2,0.9943	-1.2,0.9932	-1.2,0.9922
-1.3,0.9992	-1.3,0.9994	-1.3,0.9988	-1.3,0.9983
-1.4,1	-1.4,1	-1.4,1	-1.4,1
-1.5,0.9963	-1.5,0.9961	-1.5,0.9967	-1.5,0.9974
-1.6,0.9884	-1.6,0.9878	-1.6,0.9891	-1.6,0.9902
-1.7,0.976	-1.7,0.9752	-1.7,0.9771	-1.7,0.9787
-1.8,0.9595	-1.8,0.9584	-1.8,0.9608	-1.8,0.963
-1.9,0.9389	-1.9,0.9376	-1.9,0.9406	-1.9,0.9433
-2,0.9146	-2,0.9129	-2,0.9165	-2,0.9195
-2.1,0.8867	-2.1,0.8846	-2.1,0.8885	-2.1,0.8921
-2.2,0.8554	-2.2,0.853	-2.2,0.8574	-2.2,0.8612
-2.3,0.8213	-2.3,0.8184	-2.3,0.823	-2.3,0.8274
-2.4,0.7847	-2.4,0.7812	-2.4,0.7862	-2.4,0.7907
-2.5,0.7459	-2.5,0.7417	-2.5,0.7469	-2.5,0.7518
-2.6,0.7053	-2.6,0.7006	-2.6,0.7058	-2.6,0.7109
-2.7,0.6634	-2.7,0.6579	-2.7,0.6633	-2.7,0.6684
-2.8,0.6209	-2.8,0.6146	-2.8,0.6197	-2.8,0.6249
-2.9,0.578	-2.9,0.5707	-2.9,0.5757	-2.9,0.5809
-3,0.5354	-3,0.5272	-3,0.5317	-3,0.5368
-3.1,0.4937	-3.1,0.4843	-3.1,0.4883	-3.1,0.4933
-3.2,0.4536	-3.2,0.4429	-3.2,0.4462	-3.2,0.4509
-3.3,0.4155	-3.3,0.4035	-3.3,0.406	-3.3,0.4102
-3.4,0.3803	-3.4,0.3669	-3.4,0.3683	-3.4,0.3721
-3.5,0.3486	-3.5,0.3338	-3.5,0.334	-3.5,0.3371
-3.6,0.3213	-3.6,0.305	-3.6,0.3038	-3.6,0.3062
-3.7,0.2986	-3.7,0.2811	-3.7,0.2785	-3.7,0.2799
-3.8,0.2811	-3.8,0.2627	-3.8,0.2587	-3.8,0.2592
-3.9,0.2688	-3.9,0.2499	-3.9,0.2445	-3.9,0.244
-4,0.2613	-4,0.2423	-4,0.2359	-4,0.2346
-4.1,0.2579	-4.1,0.2395	-4.1,0.2323	-4.1,0.2302

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
240	245	250	255
-4.2,0.2579	-4.2,0.2402	-4.2,0.2326	-4.2,0.23
-4.3,0.2599	-4.3,0.2433	-4.3,0.2356	-4.3,0.2327
-4.4,0.2632	-4.4,0.2478	-4.4,0.2402	-4.4,0.2371
-4.5,0.2668	-4.5,0.2525	-4.5,0.2453	-4.5,0.2423
-4.6,0.2699	-4.6,0.2568	-4.6,0.25	-4.6,0.2472
-4.7,0.2721	-4.7,0.26	-4.7,0.2538	-4.7,0.2512
-4.8,0.273	-4.8,0.2618	-4.8,0.2562	-4.8,0.2538
-4.9,0.2722	-4.9,0.262	-4.9,0.257	-4.9,0.2549
-5,0.2698	-5,0.2603	-5,0.2559	-5,0.2541
-5.1,0.2657	-5.1,0.2568	-5.1,0.2529	-5.1,0.2515
-5.2,0.2599	-5.2,0.2514	-5.2,0.248	-5.2,0.2469
-5.3,0.2525	-5.3,0.2445	-5.3,0.2416	-5.3,0.2406
-5.4,0.2437	-5.4,0.236	-5.4,0.2334	-5.4,0.2328
-5.5,0.2339	-5.5,0.2262	-5.5,0.2239	-5.5,0.2236
-5.6,0.2231	-5.6,0.2155	-5.6,0.2135	-5.6,0.2133
-5.7,0.2119	-5.7,0.2042	-5.7,0.2023	-5.7,0.2022
-5.8,0.2005	-5.8,0.1926	-5.8,0.1907	-5.8,0.1907
-5.9,0.1893	-5.9,0.1811	-5.9,0.1792	-5.9,0.1791
-6,0.1789	-6,0.1703	-6,0.1682	-6,0.1681
-6.1,0.1694	-6.1,0.1605	-6.1,0.158	-6.1,0.1578
-6.2,0.1615	-6.2,0.1522	-6.2,0.1493	-6.2,0.1489
-6.3,0.1553	-6.3,0.1457	-6.3,0.1424	-6.3,0.1416
-6.4,0.151	-6.4,0.1412	-6.4,0.1374	-6.4,0.1364
-6.5,0.1487	-6.5,0.1388	-6.5,0.1347	-6.5,0.1334
-6.6,0.1484	-6.6,0.1385	-6.6,0.134	-6.6,0.1324
-6.7,0.1494	-6.7,0.1397	-6.7,0.1351	-6.7,0.1332
-6.8,0.1515	-6.8,0.1421	-6.8,0.1374	-6.8,0.1354
-6.9,0.1543	-6.9,0.1453	-6.9,0.1406	-6.9,0.1385
-7,0.1573	-7,0.1489	-7,0.1443	-7,0.1421
-7.1,0.1603	-7.1,0.1522	-7.1,0.1478	-7.1,0.1457
-7.2,0.1628	-7.2,0.1551	-7.2,0.1509	-7.2,0.1489
-7.3,0.1646	-7.3,0.1573	-7.3,0.1533	-7.3,0.1514
-7.4,0.1654	-7.4,0.1586	-7.4,0.1549	-7.4,0.1531
-7.5,0.1654	-7.5,0.1589	-7.5,0.1555	-7.5,0.1538
-7.6,0.1643	-7.6,0.1581	-7.6,0.1549	-7.6,0.1535
-7.7,0.1622	-7.7,0.1562	-7.7,0.1534	-7.7,0.152
-7.8,0.1591	-7.8,0.1534	-7.8,0.1507	-7.8,0.1496
-7.9,0.1551	-7.9,0.1495	-7.9,0.147	-7.9,0.146
-8,0.1503	-8,0.1447	-8,0.1425	-8,0.1417
-8.1,0.1448	-8.1,0.1394	-8.1,0.1372	-8.1,0.1365
-8.2,0.1391	-8.2,0.1335	-8.2,0.1315	-8.2,0.1309
-8.3,0.1332	-8.3,0.1275	-8.3,0.1255	-8.3,0.1249

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
260	265	270	275
0,0.6355	0,0.6337	0,0.6331	0,0.6333
-0.1,0.6777	-0.1,0.676	-0.1,0.6754	-0.1,0.6757
-0.2,0.7189	-0.2,0.7173	-0.2,0.7168	-0.2,0.7171
-0.3,0.7589	-0.3,0.7573	-0.3,0.7568	-0.3,0.7571
-0.4,0.7968	-0.4,0.7954	-0.4,0.7951	-0.4,0.7953
-0.5,0.8326	-0.5,0.8312	-0.5,0.8309	-0.5,0.8312
-0.6,0.8657	-0.6,0.8644	-0.6,0.8642	-0.6,0.8644
-0.7,0.8958	-0.7,0.8946	-0.7,0.8944	-0.7,0.8948
-0.8,0.9225	-0.8,0.9216	-0.8,0.9214	-0.8,0.9217
-0.9,0.9457	-0.9,0.9449	-0.9,0.9448	-0.9,0.945
-1,0.965	-1,0.9643	-1,0.9643	-1,0.9644
-1.1,0.9801	-1.1,0.9797	-1.1,0.9796	-1.1,0.9797
-1.2,0.9911	-1.2,0.9908	-1.2,0.9908	-1.2,0.9909
-1.3,0.9977	-1.3,0.9975	-1.3,0.9976	-1.3,0.9976
-1.4,1	-1.4,1	-1.4,1	-1.4,1
-1.5,0.9977	-1.5,0.998	-1.5,0.9981	-1.5,0.998
-1.6,0.9911	-1.6,0.9914	-1.6,0.9916	-1.6,0.9915
-1.7,0.9801	-1.7,0.9806	-1.7,0.9808	-1.7,0.9807
-1.8,0.9649	-1.8,0.9656	-1.8,0.9659	-1.8,0.9657
-1.9,0.9456	-1.9,0.9465	-1.9,0.9468	-1.9,0.9465
-2,0.9224	-2,0.9234	-2,0.9237	-2,0.9234
-2.1,0.8954	-2.1,0.8966	-2.1,0.8969	-2.1,0.8967
-2.2,0.865	-2.2,0.8663	-2.2,0.8667	-2.2,0.8663
-2.3,0.8315	-2.3,0.8329	-2.3,0.8334	-2.3,0.833
-2.4,0.7952	-2.4,0.7968	-2.4,0.7972	-2.4,0.7969
-2.5,0.7565	-2.5,0.7581	-2.5,0.7586	-2.5,0.7584
-2.6,0.7158	-2.6,0.7176	-2.6,0.7182	-2.6,0.7178
-2.7,0.6735	-2.7,0.6754	-2.7,0.6761	-2.7,0.6758
-2.8,0.6303	-2.8,0.6322	-2.8,0.6329	-2.8,0.6326
-2.9,0.5863	-2.9,0.5884	-2.9,0.5891	-2.9,0.5889
-3,0.5423	-3,0.5444	-3,0.5452	-3,0.5451
-3.1,0.4986	-3.1,0.5008	-3.1,0.5016	-3.1,0.5017
-3.2,0.4561	-3.2,0.4583	-3.2,0.4592	-3.2,0.4594
-3.3,0.4152	-3.3,0.4175	-3.3,0.4185	-3.3,0.4187
-3.4,0.3768	-3.4,0.3791	-3.4,0.3802	-3.4,0.3805
-3.5,0.3415	-3.5,0.3437	-3.5,0.3449	-3.5,0.3455
-3.6,0.31	-3.6,0.3121	-3.6,0.3135	-3.6,0.3143
-3.7,0.2832	-3.7,0.2853	-3.7,0.2866	-3.7,0.2877
-3.8,0.2617	-3.8,0.2635	-3.8,0.2651	-3.8,0.2663
-3.9,0.2458	-3.9,0.2476	-3.9,0.249	-3.9,0.2505
-4,0.2356	-4,0.2371	-4,0.2386	-4,0.2403
-4.1,0.2306	-4.1,0.2318	-4.1,0.2333	-4.1,0.235

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
260	265	270	275
-4.2,0.2299	-4.2,0.2309	-4.2,0.2323	-4.2,0.2341
-4.3,0.2321	-4.3,0.233	-4.3,0.2343	-4.3,0.236
-4.4,0.2363	-4.4,0.237	-4.4,0.2382	-4.4,0.2399
-4.5,0.2412	-4.5,0.2419	-4.5,0.2429	-4.5,0.2446
-4.6,0.2461	-4.6,0.2466	-4.6,0.2477	-4.6,0.2492
-4.7,0.2502	-4.7,0.2507	-4.7,0.2517	-4.7,0.2531
-4.8,0.253	-4.8,0.2535	-4.8,0.2544	-4.8,0.2557
-4.9,0.2543	-4.9,0.2546	-4.9,0.2555	-4.9,0.2567
-5,0.2536	-5,0.2541	-5,0.2548	-5,0.2561
-5.1,0.2512	-5.1,0.2516	-5.1,0.2524	-5.1,0.2535
-5.2,0.2469	-5.2,0.2473	-5.2,0.248	-5.2,0.2491
-5.3,0.2408	-5.3,0.2414	-5.3,0.242	-5.3,0.243
-5.4,0.2332	-5.4,0.2338	-5.4,0.2344	-5.4,0.2353
-5.5,0.2242	-5.5,0.2248	-5.5,0.2255	-5.5,0.2262
-5.6,0.214	-5.6,0.2147	-5.6,0.2153	-5.6,0.216
-5.7,0.2031	-5.7,0.2037	-5.7,0.2044	-5.7,0.2051
-5.8,0.1916	-5.8,0.1923	-5.8,0.193	-5.8,0.1938
-5.9,0.1801	-5.9,0.1809	-5.9,0.1816	-5.9,0.1823
-6,0.1689	-6,0.1697	-6,0.1705	-6,0.1712
-6.1,0.1586	-6.1,0.1593	-6.1,0.1601	-6.1,0.1609
-6.2,0.1495	-6.2,0.1502	-6.2,0.151	-6.2,0.1518
-6.3,0.1421	-6.3,0.1428	-6.3,0.1436	-6.3,0.1445
-6.4,0.1367	-6.4,0.1373	-6.4,0.138	-6.4,0.1392
-6.5,0.1333	-6.5,0.134	-6.5,0.1347	-6.5,0.1358
-6.6,0.1321	-6.6,0.1326	-6.6,0.1334	-6.6,0.1346
-6.7,0.1327	-6.7,0.1331	-6.7,0.1338	-6.7,0.1351
-6.8,0.1348	-6.8,0.135	-6.8,0.1358	-6.8,0.1369
-6.9,0.1377	-6.9,0.138	-6.9,0.1387	-6.9,0.1398
-7,0.1412	-7,0.1414	-7,0.1421	-7,0.1433
-7.1,0.1447	-7.1,0.1449	-7.1,0.1455	-7.1,0.1466
-7.2,0.1479	-7.2,0.1481	-7.2,0.1487	-7.2,0.1497
-7.3,0.1506	-7.3,0.1507	-7.3,0.1513	-7.3,0.1522
-7.4,0.1524	-7.4,0.1525	-7.4,0.153	-7.4,0.154
-7.5,0.1532	-7.5,0.1533	-7.5,0.1538	-7.5,0.1547
-7.6,0.153	-7.6,0.1531	-7.6,0.1536	-7.6,0.1545
-7.7,0.1516	-7.7,0.1517	-7.7,0.1523	-7.7,0.1531
-7.8,0.1493	-7.8,0.1494	-7.8,0.1499	-7.8,0.1507
-7.9,0.1459	-7.9,0.1461	-7.9,0.1465	-7.9,0.1474
-8,0.1416	-8,0.1418	-8,0.1422	-8,0.143
-8.1,0.1365	-8.1,0.1367	-8.1,0.1372	-8.1,0.138
-8.2,0.131	-8.2,0.1312	-8.2,0.1317	-8.2,0.1324
-8.3,0.1251	-8.3,0.1253	-8.3,0.1258	-8.3,0.1265

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
280	285	290	295
0,0.6353	0,0.6382	0,0.6419	0,0.6443
-0.1,0.6777	-0.1,0.6804	-0.1,0.684	-0.1,0.6861
-0.2,0.7191	-0.2,0.7217	-0.2,0.725	-0.2,0.7269
-0.3,0.759	-0.3,0.7614	-0.3,0.7647	-0.3,0.7661
-0.4,0.7971	-0.4,0.7994	-0.4,0.8024	-0.4,0.8035
-0.5,0.8329	-0.5,0.835	-0.5,0.8377	-0.5,0.8388
-0.6,0.866	-0.6,0.868	-0.6,0.8704	-0.6,0.8713
-0.7,0.8961	-0.7,0.8979	-0.7,0.9	-0.7,0.9007
-0.8,0.9228	-0.8,0.9244	-0.8,0.9263	-0.8,0.9268
-0.9,0.946	-0.9,0.9473	-0.9,0.9489	-0.9,0.9495
-1,0.9654	-1,0.9663	-1,0.9676	-1,0.968
-1.1,0.9805	-1.1,0.9811	-1.1,0.9822	-1.1,0.9826
-1.2,0.9913	-1.2,0.9917	-1.2,0.9925	-1.2,0.9928
-1.3,0.9979	-1.3,0.9981	-1.3,0.9985	-1.3,0.9987
-1.4,1	-1.4,1	-1.4,1	-1.4,1
-1.5,0.9978	-1.5,0.9975	-1.5,0.9971	-1.5,0.9972
-1.6,0.9911	-1.6,0.9905	-1.6,0.9899	-1.6,0.9898
-1.7,0.9801	-1.7,0.9792	-1.7,0.9781	-1.7,0.978
-1.8,0.9648	-1.8,0.9636	-1.8,0.9623	-1.8,0.9621
-1.9,0.9454	-1.9,0.9439	-1.9,0.9423	-1.9,0.9421
-2,0.9221	-2,0.9204	-2,0.9184	-2,0.9181
-2.1,0.8951	-2.1,0.8931	-2.1,0.8908	-2.1,0.8902
-2.2,0.8647	-2.2,0.8625	-2.2,0.8597	-2.2,0.8591
-2.3,0.8311	-2.3,0.8286	-2.3,0.8257	-2.3,0.8249
-2.4,0.7948	-2.4,0.7921	-2.4,0.789	-2.4,0.7878
-2.5,0.7562	-2.5,0.7533	-2.5,0.7496	-2.5,0.7484
-2.6,0.7156	-2.6,0.7125	-2.6,0.7086	-2.6,0.707
-2.7,0.6735	-2.7,0.6701	-2.7,0.666	-2.7,0.6641
-2.8,0.6303	-2.8,0.6267	-2.8,0.6222	-2.8,0.6201
-2.9,0.5865	-2.9,0.5828	-2.9,0.5781	-2.9,0.5755
-3,0.5426	-3,0.5388	-3,0.5338	-3,0.5306
-3.1,0.4992	-3.1,0.4952	-3.1,0.4901	-3.1,0.4864
-3.2,0.457	-3.2,0.4528	-3.2,0.4474	-3.2,0.443
-3.3,0.4164	-3.3,0.4122	-3.3,0.4066	-3.3,0.4014
-3.4,0.3783	-3.4,0.3739	-3.4,0.3682	-3.4,0.3624
-3.5,0.3434	-3.5,0.3389	-3.5,0.3331	-3.5,0.3265
-3.6,0.3125	-3.6,0.308	-3.6,0.302	-3.6,0.2945
-3.7,0.2861	-3.7,0.2818	-3.7,0.2757	-3.7,0.2673
-3.8,0.265	-3.8,0.2608	-3.8,0.255	-3.8,0.2457
-3.9,0.2496	-3.9,0.2456	-3.9,0.2399	-3.9,0.2302
-4,0.2396	-4,0.236	-4,0.2307	-4,0.2206
-4.1,0.2348	-4.1,0.2314	-4.1,0.2265	-4.1,0.2165



NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
280	285	290	295
-4.2,0.2341	-4.2,0.2311	-4.2,0.2267	-4.2,0.2169
-4.3,0.2363	-4.3,0.2336	-4.3,0.2298	-4.3,0.2204
-4.4,0.2403	-4.4,0.2379	-4.4,0.2346	-4.4,0.2259
-4.5,0.245	-4.5,0.243	-4.5,0.2399	-4.5,0.2318
-4.6,0.2498	-4.6,0.2479	-4.6,0.245	-4.6,0.2376
-4.7,0.2535	-4.7,0.2519	-4.7,0.2493	-4.7,0.2424
-4.8,0.2561	-4.8,0.2544	-4.8,0.252	-4.8,0.2457
-4.9,0.2571	-4.9,0.2556	-4.9,0.2533	-4.9,0.2474
-5,0.2563	-5,0.2548	-5,0.2526	-5,0.2472
-5.1,0.2536	-5.1,0.2521	-5.1,0.25	-5.1,0.2448
-5.2,0.2492	-5.2,0.2476	-5.2,0.2454	-5.2,0.2407
-5.3,0.243	-5.3,0.2414	-5.3,0.2392	-5.3,0.2346
-5.4,0.2352	-5.4,0.2336	-5.4,0.2312	-5.4,0.227
-5.5,0.2261	-5.5,0.2244	-5.5,0.2221	-5.5,0.2178
-5.6,0.2158	-5.6,0.2141	-5.6,0.2118	-5.6,0.2076
-5.7,0.2049	-5.7,0.2031	-5.7,0.2006	-5.7,0.1965
-5.8,0.1934	-5.8,0.1916	-5.8,0.189	-5.8,0.1847
-5.9,0.1819	-5.9,0.1801	-5.9,0.1774	-5.9,0.1729
-6,0.1708	-6,0.169	-6,0.1662	-6,0.1616
-6.1,0.1605	-6.1,0.1587	-6.1,0.1559	-6.1,0.1509
-6.2,0.1517	-6.2,0.1496	-6.2,0.1469	-6.2,0.1418
-6.3,0.1443	-6.3,0.1425	-6.3,0.1395	-6.3,0.1342
-6.4,0.1391	-6.4,0.1372	-6.4,0.1344	-6.4,0.1289
-6.5,0.1358	-6.5,0.1341	-6.5,0.1314	-6.5,0.1257
-6.6,0.1346	-6.6,0.1329	-6.6,0.1305	-6.6,0.1248
-6.7,0.1353	-6.7,0.1337	-6.7,0.1314	-6.7,0.1257
-6.8,0.1373	-6.8,0.136	-6.8,0.1336	-6.8,0.1283
-6.9,0.1402	-6.9,0.139	-6.9,0.1369	-6.9,0.1316
-7,0.1436	-7,0.1425	-7,0.1406	-7,0.1355
-7.1,0.1471	-7.1,0.146	-7.1,0.1443	-7.1,0.1394
-7.2,0.1502	-7.2,0.1491	-7.2,0.1476	-7.2,0.1429
-7.3,0.1528	-7.3,0.1517	-7.3,0.1502	-7.3,0.1457
-7.4,0.1545	-7.4,0.1534	-7.4,0.152	-7.4,0.1479
-7.5,0.1551	-7.5,0.1542	-7.5,0.1528	-7.5,0.1488
-7.6,0.1549	-7.6,0.1539	-7.6,0.1524	-7.6,0.1486
-7.7,0.1535	-7.7,0.1525	-7.7,0.1509	-7.7,0.1472
-7.8,0.151	-7.8,0.1499	-7.8,0.1485	-7.8,0.1448
-7.9,0.1475	-7.9,0.1464	-7.9,0.1449	-7.9,0.1416
-8,0.1432	-8,0.1422	-8,0.1404	-8,0.1372
-8.1,0.1381	-8.1,0.1371	-8.1,0.1353	-8.1,0.132
-8.2,0.1324	-8.2,0.1314	-8.2,0.1296	-8.2,0.1263
-8.3,0.1266	-8.3,0.1253	-8.3,0.1235	-8.3,0.1202

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
300	305	310	315
0,0.6484	0,0.6613	0,0.6843	0,0.7035
-0.1,0.6895	-0.1,0.702	-0.1,0.724	-0.1,0.7434
-0.2,0.7301	-0.2,0.7415	-0.2,0.7623	-0.2,0.781
-0.3,0.769	-0.3,0.7794	-0.3,0.7994	-0.3,0.8175
-0.4,0.8059	-0.4,0.8157	-0.4,0.8339	-0.4,0.8507
-0.5,0.8408	-0.5,0.8496	-0.5,0.8665	-0.5,0.8816
-0.6,0.873	-0.6,0.881	-0.6,0.8958	-0.6,0.9104
-0.7,0.9021	-0.7,0.9093	-0.7,0.922	-0.7,0.9347
-0.8,0.9281	-0.8,0.9339	-0.8,0.945	-0.8,0.9558
-0.9,0.9502	-0.9,0.9552	-0.9,0.9642	-0.9,0.9735
-1,0.9687	-1,0.9726	-1,0.9796	-1,0.9856
-1.1,0.9829	-1.1,0.9859	-1.1,0.9911	-1.1,0.9945
-1.2,0.993	-1.2,0.9948	-1.2,0.9981	-1.2,0.9989
-1.3,0.9986	-1.3,0.9996	-1.3,1	-1.3,1
-1.4,1	-1.4,1	-1.4,0.9987	-1.4,0.9956
-1.5,0.9969	-1.5,0.9956	-1.5,0.9923	-1.5,0.9867
-1.6,0.9894	-1.6,0.9871	-1.6,0.9815	-1.6,0.9735
-1.7,0.9773	-1.7,0.9742	-1.7,0.9661	-1.7,0.9558
-1.8,0.9611	-1.8,0.9569	-1.8,0.947	-1.8,0.9336
-1.9,0.941	-1.9,0.9359	-1.9,0.924	-1.9,0.9082
-2,0.9169	-2,0.9105	-2,0.8971	-2,0.8794
-2.1,0.889	-2.1,0.8819	-2.1,0.8665	-2.1,0.8462
-2.2,0.8573	-2.2,0.8496	-2.2,0.8326	-2.2,0.8108
-2.3,0.8229	-2.3,0.8141	-2.3,0.7955	-2.3,0.7721
-2.4,0.7857	-2.4,0.7758	-2.4,0.7559	-2.4,0.7301
-2.5,0.746	-2.5,0.7355	-2.5,0.7137	-2.5,0.6869
-2.6,0.7043	-2.6,0.6927	-2.6,0.6696	-2.6,0.6427
-2.7,0.661	-2.7,0.6488	-2.7,0.6243	-2.7,0.5962
-2.8,0.6165	-2.8,0.6036	-2.8,0.5783	-2.8,0.5487
-2.9,0.5712	-2.9,0.5577	-2.9,0.5316	-2.9,0.5022
-3,0.5259	-3,0.5117	-3,0.4843	-3,0.4546
-3.1,0.4811	-3.1,0.4657	-3.1,0.4377	-3.1,0.4093
-3.2,0.4369	-3.2,0.421	-3.2,0.3923	-3.2,0.3639
-3.3,0.3947	-3.3,0.3778	-3.3,0.3489	-3.3,0.3219
-3.4,0.3547	-3.4,0.3371	-3.4,0.3073	-3.4,0.2821
-3.5,0.3175	-3.5,0.2992	-3.5,0.269	-3.5,0.2467
-3.6,0.2845	-3.6,0.2653	-3.6,0.2351	-3.6,0.2168
-3.7,0.2562	-3.7,0.2367	-3.7,0.2064	-3.7,0.1925
-3.8,0.2338	-3.8,0.2137	-3.8,0.1847	-3.8,0.1759
-3.9,0.2173	-3.9,0.1976	-3.9,0.17	-3.9,0.167
-4,0.2076	-4,0.1883	-4,0.1636	-4,0.1659
-4.1,0.2034	-4.1,0.1855	-4.1,0.1636	-4.1,0.1704

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
300	305	310	315
-4.2,0.2042	-4.2,0.1879	-4.2,0.1687	-4.2,0.1781
-4.3,0.2084	-4.3,0.1935	-4.3,0.177	-4.3,0.1881
-4.4,0.2145	-4.4,0.2012	-4.4,0.1866	-4.4,0.198
-4.5,0.2213	-4.5,0.2093	-4.5,0.1962	-4.5,0.208
-4.6,0.228	-4.6,0.2165	-4.6,0.2051	-4.6,0.2157
-4.7,0.2333	-4.7,0.223	-4.7,0.2121	-4.7,0.2212
-4.8,0.2375	-4.8,0.2274	-4.8,0.2166	-4.8,0.2246
-4.9,0.2397	-4.9,0.2302	-4.9,0.2192	-4.9,0.2268
-5,0.2397	-5,0.2306	-5,0.2198	-5,0.2257
-5.1,0.238	-5.1,0.229	-5.1,0.2179	-5.1,0.2223
-5.2,0.2341	-5.2,0.2254	-5.2,0.2141	-5.2,0.2168
-5.3,0.2285	-5.3,0.2194	-5.3,0.2077	-5.3,0.2091
-5.4,0.221	-5.4,0.2121	-5.4,0.2	-5.4,0.2002
-5.5,0.212	-5.5,0.2028	-5.5,0.1904	-5.5,0.1892
-5.6,0.2017	-5.6,0.1923	-5.6,0.1796	-5.6,0.1781
-5.7,0.1905	-5.7,0.181	-5.7,0.1674	-5.7,0.1659
-5.8,0.1787	-5.8,0.1694	-5.8,0.1553	-5.8,0.1527
-5.9,0.167	-5.9,0.1573	-5.9,0.1431	-5.9,0.1405
-6,0.1552	-6,0.1452	-6,0.131	-6,0.1294
-6.1,0.1443	-6.1,0.1343	-6.1,0.1195	-6.1,0.1195
-6.2,0.1348	-6.2,0.1246	-6.2,0.1099	-6.2,0.1106
-6.3,0.127	-6.3,0.1165	-6.3,0.1029	-6.3,0.1051
-6.4,0.1214	-6.4,0.1109	-6.4,0.0978	-6.4,0.1018
-6.5,0.118	-6.5,0.1081	-6.5,0.0958	-6.5,0.1018
-6.6,0.1172	-6.6,0.1073	-6.6,0.0965	-6.6,0.104
-6.7,0.1183	-6.7,0.1089	-6.7,0.0997	-6.7,0.1084
-6.8,0.1208	-6.8,0.1121	-6.8,0.1035	-6.8,0.1139
-6.9,0.1248	-6.9,0.1165	-6.9,0.1086	-6.9,0.1195
-7,0.129	-7,0.1214	-7,0.1144	-7,0.1239
-7.1,0.1329	-7.1,0.1258	-7.1,0.1188	-7.1,0.1294
-7.2,0.1368	-7.2,0.1298	-7.2,0.1233	-7.2,0.1327
-7.3,0.1399	-7.3,0.1331	-7.3,0.1272	-7.3,0.1361
-7.4,0.1421	-7.4,0.1355	-7.4,0.1291	-7.4,0.1372
-7.5,0.1432	-7.5,0.1367	-7.5,0.1304	-7.5,0.1383
-7.6,0.1432	-7.6,0.1371	-7.6,0.1297	-7.6,0.1372
-7.7,0.1421	-7.7,0.1359	-7.7,0.1284	-7.7,0.135
-7.8,0.1399	-7.8,0.1335	-7.8,0.1259	-7.8,0.1316
-7.9,0.1365	-7.9,0.1302	-7.9,0.122	-7.9,0.1272
-8,0.1323	-8,0.1258	-8,0.1176	-8,0.1217
-8.1,0.1273	-8.1,0.1206	-8.1,0.1118	-8.1,0.115
-8.2,0.1214	-8.2,0.1145	-8.2,0.1054	-8.2,0.1084
-8.3,0.1152	-8.3,0.1081	-8.3,0.099	-8.3,0.1018

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
320	325	330	335
0,0.6379	0,0.5894	0,0.5555	0,0.5115
-0.1,0.68	-0.1,0.6323	-0.1,0.5972	-0.1,0.5541
-0.2,0.7212	-0.2,0.6744	-0.2,0.6396	-0.2,0.5967
-0.3,0.7613	-0.3,0.7156	-0.3,0.6821	-0.3,0.6393
-0.4,0.7994	-0.4,0.7552	-0.4,0.723	-0.4,0.682
-0.5,0.8344	-0.5,0.7939	-0.5,0.7625	-0.5,0.723
-0.6,0.8673	-0.6,0.8293	-0.6,0.7997	-0.6,0.7631
-0.7,0.8971	-0.7,0.8623	-0.7,0.8354	-0.7,0.8008
-0.8,0.9239	-0.8,0.8928	-0.8,0.8682	-0.8,0.8369
-0.9,0.9465	-0.9,0.92	-0.9,0.898	-0.9,0.8697
-1,0.966	-1,0.9439	-1,0.9241	-1,0.8992
-1.1,0.9805	-1.1,0.9629	-1.1,0.9471	-1.1,0.9254
-1.2,0.9918	-1.2,0.9786	-1.2,0.9657	-1.2,0.9484
-1.3,0.9979	-1.3,0.9901	-1.3,0.9806	-1.3,0.9672
-1.4,1	-1.4,0.9975	-1.4,0.9911	-1.4,0.9811
-1.5,0.9969	-1.5,1	-1.5,0.9978	-1.5,0.9918
-1.6,0.9907	-1.6,0.9984	-1.6,1	-1.6,0.9984
-1.7,0.9794	-1.7,0.9926	-1.7,0.997	-1.7,1
-1.8,0.964	-1.8,0.9819	-1.8,0.9903	-1.8,0.9975
-1.9,0.9444	-1.9,0.967	-1.9,0.9792	-1.9,0.9902
-2,0.9208	-2,0.9481	-2,0.9643	-2,0.9787
-2.1,0.893	-2.1,0.9258	-2.1,0.9449	-2.1,0.9631
-2.2,0.8621	-2.2,0.8994	-2.2,0.9211	-2.2,0.9434
-2.3,0.8292	-2.3,0.8689	-2.3,0.8943	-2.3,0.9197
-2.4,0.7922	-2.4,0.8359	-2.4,0.8637	-2.4,0.8926
-2.5,0.7531	-2.5,0.8005	-2.5,0.8302	-2.5,0.8623
-2.6,0.7119	-2.6,0.7617	-2.6,0.7937	-2.6,0.8287
-2.7,0.6698	-2.7,0.7214	-2.7,0.755	-2.7,0.7926
-2.8,0.6255	-2.8,0.6793	-2.8,0.7148	-2.8,0.7541
-2.9,0.5813	-2.9,0.6364	-2.9,0.6724	-2.9,0.7139
-3,0.537	-3,0.5919	-3,0.6292	-3,0.6721
-3.1,0.4928	-3.1,0.5482	-3.1,0.5853	-3.1,0.6287
-3.2,0.4496	-3.2,0.5045	-3.2,0.5413	-3.2,0.5852
-3.3,0.4074	-3.3,0.4617	-3.3,0.4974	-3.3,0.5418
-3.4,0.3683	-3.4,0.4196	-3.4,0.455	-3.4,0.4992
-3.5,0.3323	-3.5,0.3809	-3.5,0.414	-3.5,0.4574
-3.6,0.3004	-3.6,0.3446	-3.6,0.3753	-3.6,0.4172
-3.7,0.2737	-3.7,0.3124	-3.7,0.3403	-3.7,0.3795
-3.8,0.2521	-3.8,0.2844	-3.8,0.3083	-3.8,0.3451
-3.9,0.2356	-3.9,0.2613	-3.9,0.2807	-3.9,0.3148
-4,0.2263	-4,0.244	-4,0.2591	-4,0.2893
-4.1,0.2222	-4.1,0.2325	-4.1,0.242	-4.1,0.268

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
320	325	330	335
-4.2,0.2222	-4.2,0.2267	-4.2,0.2316	-4.2,0.2525
-4.3,0.2253	-4.3,0.2251	-4.3,0.2264	-4.3,0.2426
-4.4,0.2305	-4.4,0.2275	-4.4,0.2249	-4.4,0.2377
-4.5,0.2366	-4.5,0.2308	-4.5,0.2271	-4.5,0.2361
-4.6,0.2418	-4.6,0.2366	-4.6,0.2308	-4.6,0.2377
-4.7,0.2469	-4.7,0.2415	-4.7,0.236	-4.7,0.241
-4.8,0.251	-4.8,0.2457	-4.8,0.2405	-4.8,0.2451
-4.9,0.2521	-4.9,0.249	-4.9,0.245	-4.9,0.2492
-5,0.2521	-5,0.2506	-5,0.248	-5,0.2525
-5.1,0.25	-5.1,0.2506	-5.1,0.2494	-5.1,0.2549
-5.2,0.2459	-5.2,0.249	-5.2,0.2487	-5.2,0.2557
-5.3,0.2397	-5.3,0.2448	-5.3,0.2465	-5.3,0.2549
-5.4,0.2325	-5.4,0.2391	-5.4,0.242	-5.4,0.2516
-5.5,0.2233	-5.5,0.2317	-5.5,0.2368	-5.5,0.2475
-5.6,0.213	-5.6,0.2234	-5.6,0.2293	-5.6,0.241
-5.7,0.2027	-5.7,0.2135	-5.7,0.2204	-5.7,0.2336
-5.8,0.1903	-5.8,0.2028	-5.8,0.2107	-5.8,0.2246
-5.9,0.179	-5.9,0.1913	-5.9,0.1996	-5.9,0.2148
-6,0.1677	-6,0.1797	-6,0.1884	-6,0.2041
-6.1,0.1564	-6.1,0.169	-6.1,0.1772	-6.1,0.1926
-6.2,0.1471	-6.2,0.1583	-6.2,0.166	-6.2,0.182
-6.3,0.1399	-6.3,0.1492	-6.3,0.1556	-6.3,0.1705
-6.4,0.1348	-6.4,0.141	-6.4,0.1467	-6.4,0.1607
-6.5,0.1317	-6.5,0.1352	-6.5,0.1392	-6.5,0.1525
-6.6,0.1307	-6.6,0.1319	-6.6,0.134	-6.6,0.1451
-6.7,0.1307	-6.7,0.1303	-6.7,0.1303	-6.7,0.1402
-6.8,0.1337	-6.8,0.1303	-6.8,0.1288	-6.8,0.1369
-6.9,0.1368	-6.9,0.1319	-6.9,0.1296	-6.9,0.1352
-7,0.1409	-7,0.1352	-7,0.131	-7,0.1361
-7.1,0.1451	-7.1,0.1385	-7.1,0.134	-7.1,0.1377
-7.2,0.1481	-7.2,0.1418	-7.2,0.1378	-7.2,0.1402
-7.3,0.1512	-7.3,0.1459	-7.3,0.1407	-7.3,0.1434
-7.4,0.1533	-7.4,0.1484	-7.4,0.1437	-7.4,0.1459
-7.5,0.1543	-7.5,0.15	-7.5,0.1467	-7.5,0.1492
-7.6,0.1543	-7.6,0.1517	-7.6,0.1482	-7.6,0.1508
-7.7,0.1533	-7.7,0.1517	-7.7,0.1489	-7.7,0.1525
-7.8,0.1512	-7.8,0.15	-7.8,0.1489	-7.8,0.1533
-7.9,0.1481	-7.9,0.1484	-7.9,0.1482	-7.9,0.1525
-8,0.143	-8,0.1451	-8,0.1459	-8,0.1516
-8.1,0.1389	-8.1,0.141	-8.1,0.1422	-8.1,0.1492
-8.2,0.1327	-8.2,0.136	-8.2,0.1385	-8.2,0.1451
-8.3,0.1265	-8.3,0.1311	-8.3,0.1333	-8.3,0.141

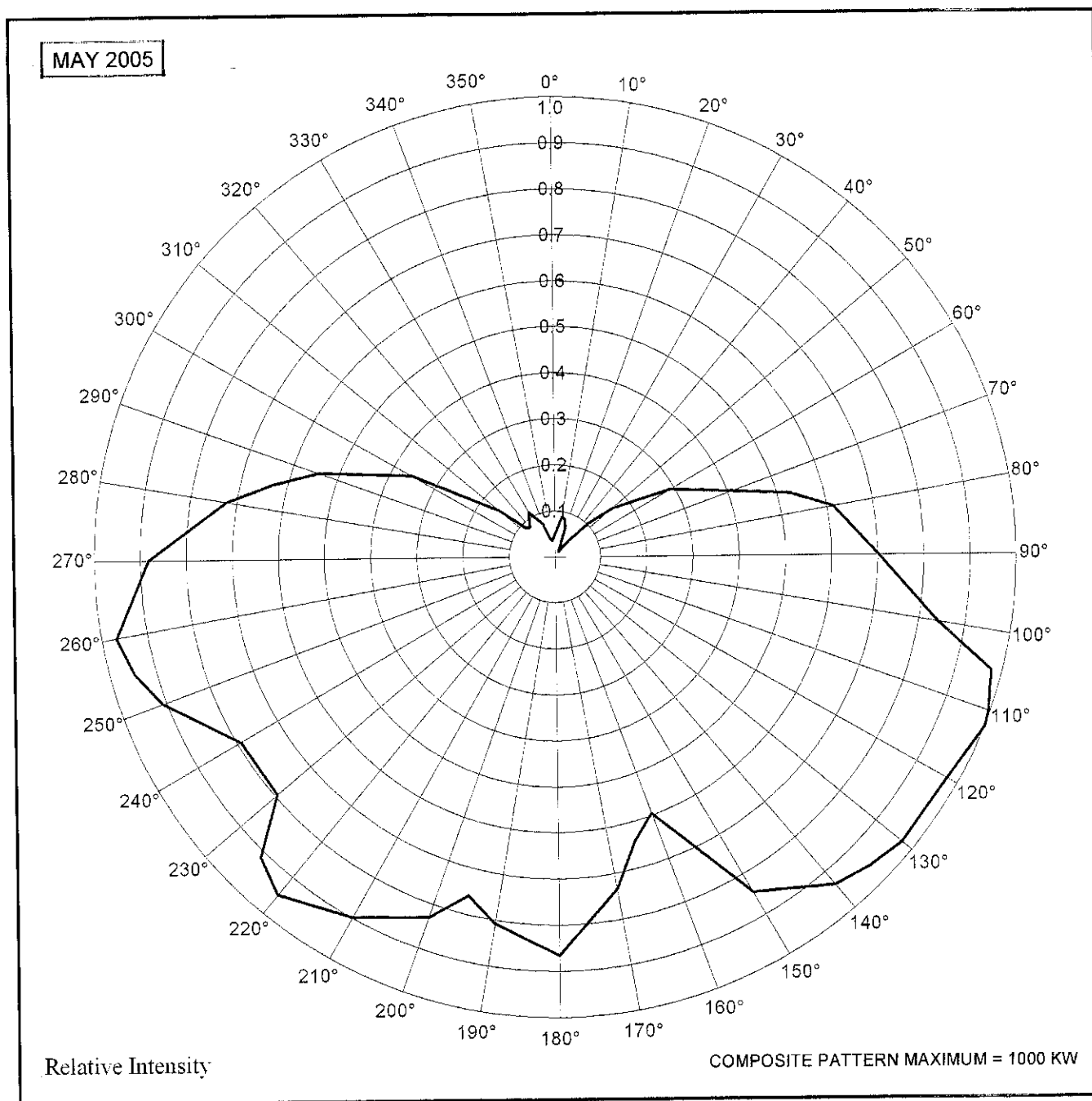
NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
340	345	350	355
0,0.4734	0,0.4513	0,0.6906	0,0.6342
-0.1,0.5174	-0.1,0.4981	-0.1,0.732	-0.1,0.6732
-0.2,0.5615	-0.2,0.5449	-0.2,0.7735	-0.2,0.7143
-0.3,0.6066	-0.3,0.5918	-0.3,0.8122	-0.3,0.7511
-0.4,0.6506	-0.4,0.6386	-0.4,0.8481	-0.4,0.7879
-0.5,0.6936	-0.5,0.6816	-0.5,0.8812	-0.5,0.8225
-0.6,0.7357	-0.6,0.7247	-0.6,0.9088	-0.6,0.8571
-0.7,0.7756	-0.7,0.7659	-0.7,0.9337	-0.7,0.8874
-0.8,0.8125	-0.8,0.8034	-0.8,0.9558	-0.8,0.9134
-0.9,0.8484	-0.9,0.8408	-0.9,0.9751	-0.9,0.9372
-1,0.8801	-1,0.8727	-1,0.9862	-1,0.9589
-1.1,0.9088	-1.1,0.9026	-1.1,0.9945	-1.1,0.9762
-1.2,0.9344	-1.2,0.927	-1.2,1	-1.2,0.987
-1.3,0.9559	-1.3,0.9494	-1.3,1	-1.3,0.9957
-1.4,0.9734	-1.4,0.9682	-1.4,0.9945	-1.4,1
-1.5,0.9867	-1.5,0.9813	-1.5,0.9862	-1.5,1
-1.6,0.9949	-1.6,0.9925	-1.6,0.9724	-1.6,0.9957
-1.7,1	-1.7,0.9981	-1.7,0.953	-1.7,0.987
-1.8,1	-1.8,1	-1.8,0.9309	-1.8,0.974
-1.9,0.9959	-1.9,0.9981	-1.9,0.9061	-1.9,0.9567
-2,0.9877	-2,0.9906	-2,0.8785	-2,0.9351
-2.1,0.9744	-2.1,0.9813	-2.1,0.8453	-2.1,0.9091
-2.2,0.957	-2.2,0.9663	-2.2,0.8122	-2.2,0.881
-2.3,0.9365	-2.3,0.9494	-2.3,0.7762	-2.3,0.8485
-2.4,0.9119	-2.4,0.927	-2.4,0.7376	-2.4,0.8117
-2.5,0.8832	-2.5,0.9026	-2.5,0.6989	-2.5,0.7727
-2.6,0.8525	-2.6,0.8764	-2.6,0.6575	-2.6,0.7338
-2.7,0.8186	-2.7,0.8464	-2.7,0.6188	-2.7,0.6905
-2.8,0.7818	-2.8,0.8146	-2.8,0.5773	-2.8,0.645
-2.9,0.7439	-2.9,0.7828	-2.9,0.5387	-2.9,0.5996
-3,0.7039	-3,0.7472	-3,0.5028	-3,0.5519
-3.1,0.6619	-3.1,0.7116	-3.1,0.4669	-3.1,0.5043
-3.2,0.6199	-3.2,0.676	-3.2,0.4337	-3.2,0.4589
-3.3,0.5779	-3.3,0.6404	-3.3,0.4061	-3.3,0.4113
-3.4,0.5369	-3.4,0.6049	-3.4,0.3812	-3.4,0.368
-3.5,0.4959	-3.5,0.5693	-3.5,0.3619	-3.5,0.3247
-3.6,0.457	-3.6,0.5375	-3.6,0.3481	-3.6,0.2835
-3.7,0.4201	-3.7,0.5056	-3.7,0.337	-3.7,0.2468
-3.8,0.3852	-3.8,0.4757	-3.8,0.3287	-3.8,0.2143
-3.9,0.3545	-3.9,0.4494	-3.9,0.326	-3.9,0.1883
-4,0.3279	-4,0.427	-4,0.326	-4,0.171
-4.1,0.3064	-4.1,0.4064	-4.1,0.326	-4.1,0.158

NORMALIZED VERTICAL PLANE RELATIVE FIELD DATA

AZIMUTH - DEGREES TRUE			
340	345	350	355
-4.2,0.2889	-4.2,0.3895	-4.2,0.326	-4.2,0.1558
-4.3,0.2766	-4.3,0.3745	-4.3,0.3287	-4.3,0.158
-4.4,0.2684	-4.4,0.3633	-4.4,0.3287	-4.4,0.1667
-4.5,0.2643	-4.5,0.3539	-4.5,0.3315	-4.5,0.1753
-4.6,0.2633	-4.6,0.3483	-4.6,0.3287	-4.6,0.1861
-4.7,0.2643	-4.7,0.3427	-4.7,0.326	-4.7,0.197
-4.8,0.2664	-4.8,0.339	-4.8,0.3232	-4.8,0.2035
-4.9,0.2684	-4.9,0.3352	-4.9,0.3177	-4.9,0.21
-5,0.2705	-5,0.3315	-5,0.3094	-5,0.2143
-5.1,0.2725	-5.1,0.3277	-5.1,0.3011	-5.1,0.2165
-5.2,0.2725	-5.2,0.324	-5.2,0.2901	-5.2,0.2165
-5.3,0.2715	-5.3,0.3184	-5.3,0.279	-5.3,0.2143
-5.4,0.2684	-5.4,0.3146	-5.4,0.268	-5.4,0.2078
-5.5,0.2643	-5.5,0.3071	-5.5,0.2541	-5.5,0.2013
-5.6,0.2582	-5.6,0.3015	-5.6,0.2431	-5.6,0.1926
-5.7,0.251	-5.7,0.294	-5.7,0.2293	-5.7,0.1818
-5.8,0.2428	-5.8,0.2846	-5.8,0.2182	-5.8,0.171
-5.9,0.2326	-5.9,0.2772	-5.9,0.2099	-5.9,0.1602
-6,0.2234	-6,0.2678	-6,0.2017	-6,0.1472
-6.1,0.2121	-6.1,0.2584	-6.1,0.1934	-6.1,0.1342
-6.2,0.2018	-6.2,0.2509	-6.2,0.1878	-6.2,0.1212
-6.3,0.1916	-6.3,0.2416	-6.3,0.1851	-6.3,0.1104
-6.4,0.1814	-6.4,0.2341	-6.4,0.1851	-6.4,0.1017
-6.5,0.1732	-6.5,0.2285	-6.5,0.1851	-6.5,0.0952
-6.6,0.166	-6.6,0.2228	-6.6,0.1878	-6.6,0.0931
-6.7,0.1598	-6.7,0.2172	-6.7,0.1878	-6.7,0.0909
-6.8,0.1557	-6.8,0.2135	-6.8,0.1906	-6.8,0.0931
-6.9,0.1537	-6.9,0.2097	-6.9,0.1934	-6.9,0.0974
-7,0.1527	-7,0.2079	-7,0.1961	-7,0.1017
-7.1,0.1537	-7.1,0.206	-7.1,0.1989	-7.1,0.1082
-7.2,0.1547	-7.2,0.206	-7.2,0.1989	-7.2,0.1126
-7.3,0.1568	-7.3,0.206	-7.3,0.1989	-7.3,0.119
-7.4,0.1588	-7.4,0.2041	-7.4,0.1961	-7.4,0.1212
-7.5,0.1619	-7.5,0.2041	-7.5,0.1934	-7.5,0.1255
-7.6,0.1629	-7.6,0.2041	-7.6,0.1906	-7.6,0.1277
-7.7,0.1639	-7.7,0.2022	-7.7,0.1878	-7.7,0.1277
-7.8,0.165	-7.8,0.2004	-7.8,0.1823	-7.8,0.1277
-7.9,0.1639	-7.9,0.1985	-7.9,0.1768	-7.9,0.1255
-8,0.1629	-8,0.1966	-8,0.1685	-8,0.1234
-8.1,0.1609	-8.1,0.1929	-8.1,0.163	-8.1,0.119
-8.2,0.1578	-8.2,0.191	-8.2,0.1575	-8.2,0.1126
-8.3,0.1537	-8.3,0.1873	-8.3,0.1519	-8.3,0.1082

FIGURE 4



**COMPOSITE AZIMUTH PATTERN AT  
DEPRESSION ANGLES TO THE RADIO HORIZON**

GOLDEN ORANGE BROADCASTING CO., INC.  
STATION KDOC-DT ANAHEIM, CALIFORNIA  
CH. 32 1000 KW (MAX-DA) 949 METERS

Bernard R. Segal, P. E. Consulting Engineer



BERNARD R. SUGAL, P. E.  
CONSULTING ENGINEER  
KENSINGTON, MARYLAND

FIGURE 5  
Sheet 1 of 2

TABULATION OF DATA AND DISTANCES TO  
THE KDOC-DT F(50,90) CONTOURS

Azimuth (Deg. T)	Rad. Center Above 3.2-16.1 km Terrain Avg. (meters)	Depr. Angle To Radio Horizon (Deg.)	Normalized V. P. Rel. Field At Depression Angle To Radio Horizon	ERP Employed (kW)	Distance To	
					48 dBu Contour (km)	41 dBu Contour (km)
0	436	0.6	0.774	2.38	55.1	64.8
10	504	0.6	0.798	7.57	64.7	75.2
15	409	0.6	0.812	7.13	60.5	70.0
20	360	0.5	0.792	4.53	56.1	64.7
30	324	0.5	0.984	0.169	35.8	44.9
40	382	0.5	0.776	1.69	51.6	60.6
45	414	0.6	0.865	10.2	62.8	72.8
50	435	0.6	0.828	26.9	69.9	80.4
60	697	0.7	0.886	83.9	88.6	102.5
70	810	0.8	0.897	168	97.9	112.9
75	939	0.8	0.895	276	106.2	121.5
80	1010	0.9	0.921	375	111.0	126.8
90	671	0.7	0.862	491	102.7	117.4
100	778	0.8	0.893	708	109.9	125.4
105	912	0.8	0.895	951	117.3	134.2
110	936	0.8	0.897	990	118.3	135.7
112	945	0.9	0.923	1000	118.6	136.2
120	1132	0.9	0.918	949	123.4	143.4
130	1356	1.0	0.926	945	130.7	150.9
135	1415	1.0	0.916	910	132.1	152.2
140	1452	1.1	0.934	870	132.6	152.7
150	1502	1.1	0.927	711	131.7	156.2
160	1557	1.1	0.896	353	124.4	142.4
165	1535	1.1	0.886	410	126.1	144.2
170	1531	1.1	0.886	536	129.1	147.7
180	1531	1.1	0.891	749	132.7	152.4
190	1546	1.1	0.890	650	131.3	150.4
195	1541	1.1	0.895	575	129.9	148.7
200	1528	1.1	0.928	686	131.9	151.3
210	1514	1.1	0.938	806	133.4	153.4
220	1501	1.1	0.947	901	134.3	154.7
225	1491	1.1	0.931	834	133.2	153.2
230	1451	1.1	0.966	629	128.9	148.2
240	1344	1.0	0.971	626	125.5	145.1
250	1289	1.0	0.969	826	126.8	147.0

FIGURE 5  
Sheet 2 of 2

Azimuth	Rad. Center Above 3.2-16.1 km Terrain Avg.	Depr. Angle To Radio Horizon	Normalized V. P. Rel. Field At Depression Angle To Radio Horizon	ERP Employed	Distance To	
					48 dBu Contour	41 dBu Contour
(Deg. T)	(meters)	(Deg.)		(kW)	(km)	(km)
255	1259	1.0	0.967	899	126.8	147.1
260	1199	1.0	0.965	935	125.3	145.6
270	1018	0.9	0.945	778	118.2	136.2
280	750	0.8	0.923	521	106.2	121.4
285	765	0.8	0.924	397	104.3	119.3
290	798	0.8	0.926	296	102.8	117.8
300	698	0.7	0.902	128	92.0	106.0
310	576	0.7	0.922	24.6	74.7	87.0
315	618	0.7	0.935	8.10	68.4	80.0
320	518	0.6	0.867	7.07	64.6	75.2
330	609	0.7	0.835	12.5	71.0	83.0
340	642	0.7	0.776	5.78	66.7	78.1
345	601	0.7	0.766	1.65	57.5	67.9
350	574	0.7	0.934	1.30	55.6	65.6
Average	949					
(Standard eight radials)						

FIGURE 6

