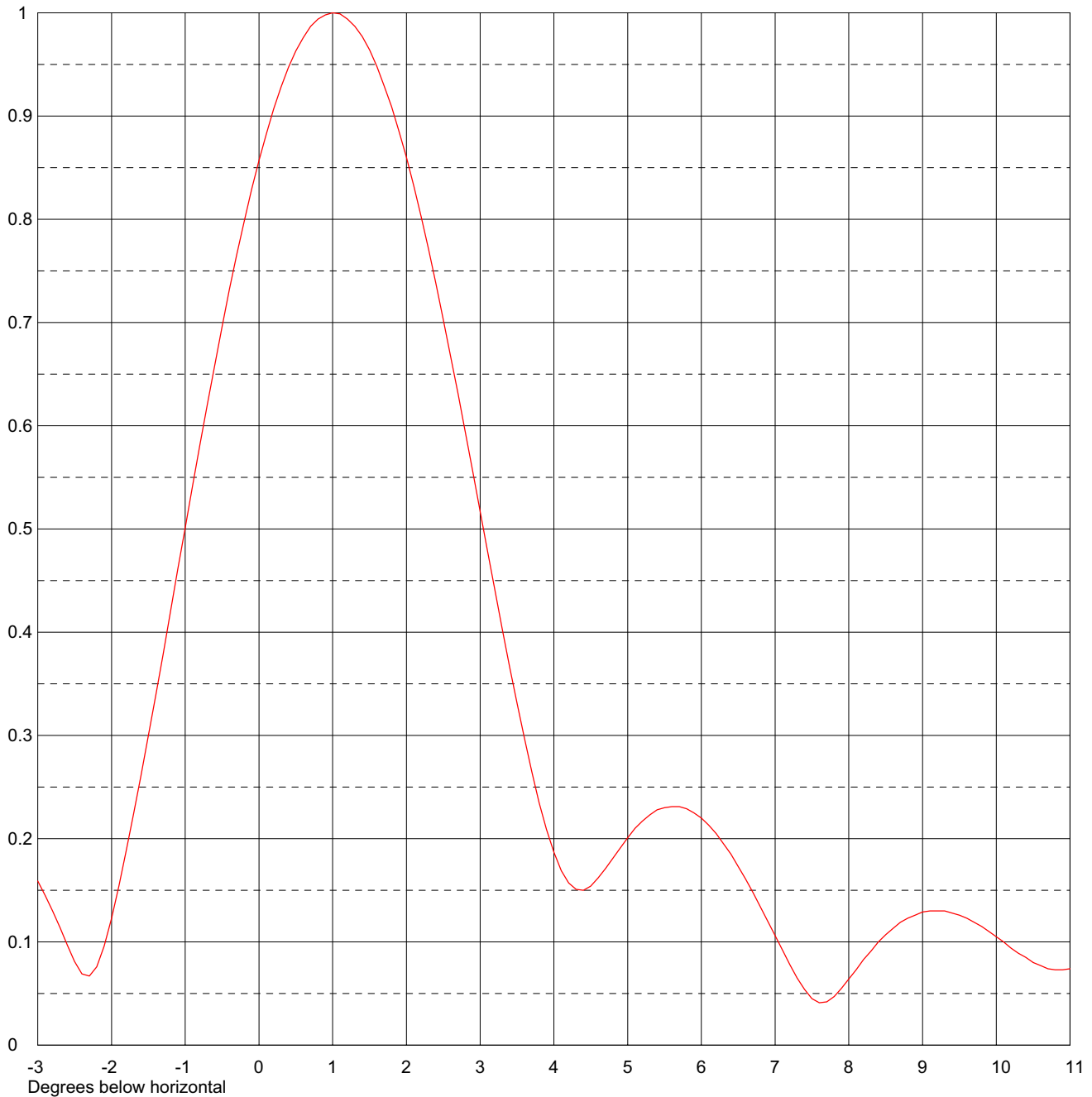




Proposal Number	<b>eSP-1096</b>	Revision	
Date	<b>03 Feb 2003</b>		
Call Letters	<b>WHTJ-DT</b>	Channel	<b>46</b>
Location	<b>Charlottesville, VA</b>		
Customer	<b>Commonwealth Public</b>		
Antenna Type	<b>TFU-16DSB-B (C)</b>		

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>16.0 (12.04 dB)</b>	Beam Tilt	<b>1.00 Degrees</b>
RMS Gain at Horizontal	<b>11.8 (10.72 dB)</b>	Frequency	<b>665.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>16B160100</b>



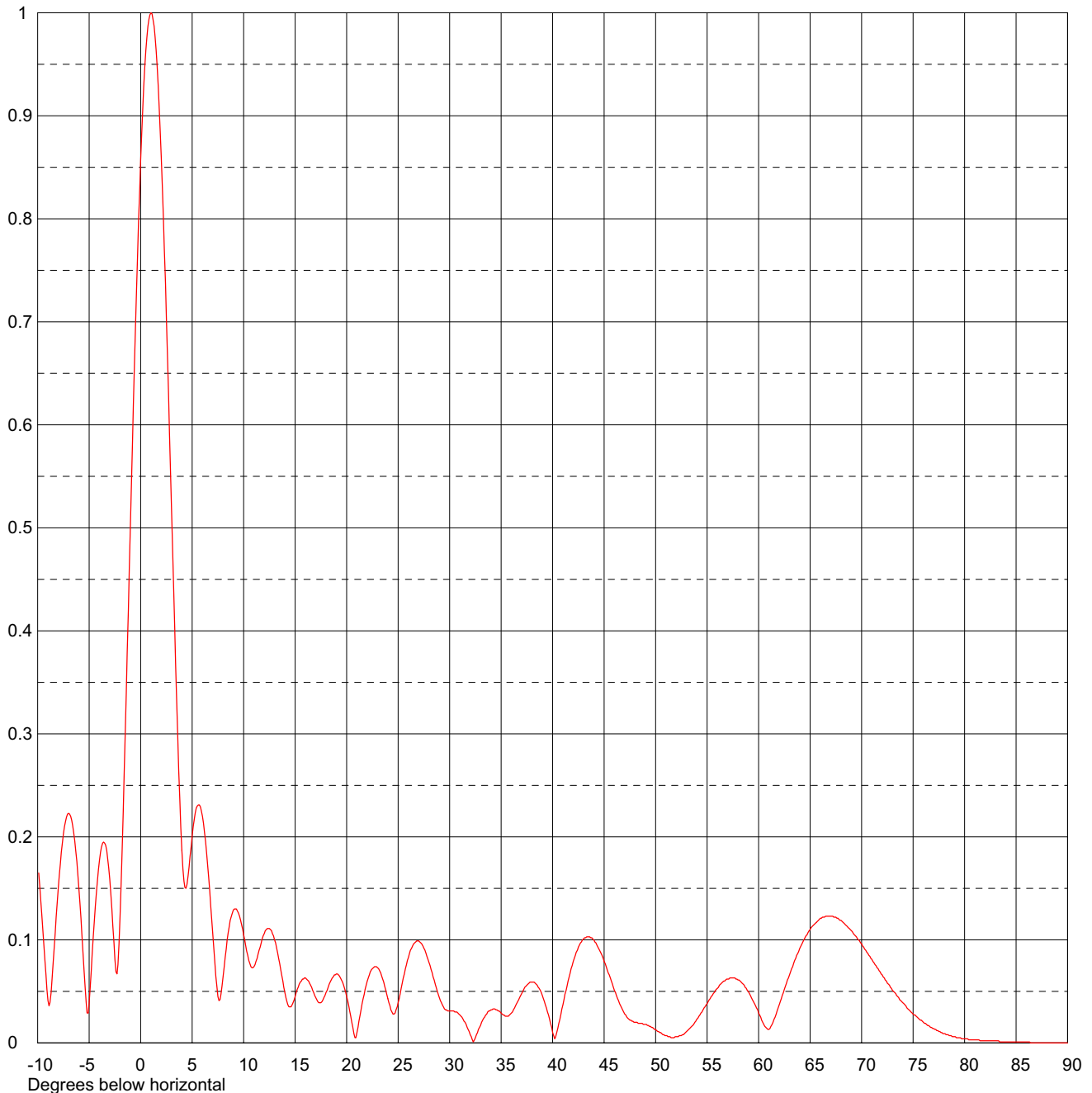
Remarks:



Proposal Number	<b>eSP-1096</b>	Revision	
Date	<b>03 Feb 2003</b>		
Call Letters	<b>WHTJ-DT</b>	Channel	<b>46</b>
Location	<b>Charlottesville, VA</b>		
Customer	<b>Commonwealth Public</b>		
Antenna Type	<b>TFU-16DSB-B (C)</b>		

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>16.0 (12.04 dB)</b>	Beam Tilt	<b>1.00 Degrees</b>
RMS Gain at Horizontal	<b>11.8 (10.72 dB)</b>	Frequency	<b>665.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>16B160100-90</b>



Remarks:



Proposal Number **eSP-1096**      Revision  
 Date **03 Feb 2003**  
 Call Letters **WHTJ-DT**      Channel **46**  
 Location **Charlottesville, VA**  
 Customer **Commonwealth Public**  
 Antenna Type **TFU-16DSB-B (C)**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **16B160100**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.177	2.4	0.738	10.6	0.077	30.5	0.030	51.0	0.007	71.5	0.073
-9.5	0.110	2.6	0.667	10.8	0.073	31.0	0.027	51.5	0.005	72.0	0.066
-9.0	0.041	2.8	0.593	11.0	0.074	31.5	0.020	52.0	0.006	72.5	0.058
-8.5	0.077	3.0	0.517	11.5	0.090	32.0	0.008	52.5	0.007	73.0	0.051
-8.0	0.150	3.2	0.441	12.0	0.106	32.5	0.005	53.0	0.011	73.5	0.045
-7.5	0.203	3.4	0.366	12.5	0.111	33.0	0.017	53.5	0.016	74.0	0.039
-7.0	0.223	3.6	0.297	13.0	0.100	33.5	0.027	54.0	0.023	74.5	0.033
-6.5	0.204	3.8	0.235	13.5	0.077	34.0	0.032	54.5	0.030	75.0	0.028
-6.0	0.150	4.0	0.187	14.0	0.049	34.5	0.032	55.0	0.038	75.5	0.024
-5.5	0.071	4.2	0.157	14.5	0.035	35.0	0.029	55.5	0.046	76.0	0.020
-5.0	0.039	4.4	0.150	15.0	0.045	35.5	0.026	56.0	0.053	76.5	0.017
-4.5	0.118	4.6	0.162	15.5	0.059	36.0	0.029	56.5	0.059	77.0	0.014
-4.0	0.177	4.8	0.181	16.0	0.063	36.5	0.038	57.0	0.062	77.5	0.011
-3.5	0.194	5.0	0.201	16.5	0.056	37.0	0.048	57.5	0.063	78.0	0.009
-3.0	0.159	5.2	0.217	17.0	0.044	37.5	0.056	58.0	0.061	78.5	0.007
-2.8	0.130	5.4	0.228	17.5	0.039	38.0	0.059	58.5	0.057	79.0	0.006
-2.6	0.097	5.6	0.231	18.0	0.049	38.5	0.056	59.0	0.050	79.5	0.005
-2.4	0.069	5.8	0.229	18.5	0.061	39.0	0.046	59.5	0.040	80.0	0.004
-2.2	0.076	6.0	0.220	19.0	0.067	39.5	0.030	60.0	0.029	80.5	0.003
-2.0	0.123	6.2	0.205	19.5	0.061	40.0	0.010	60.5	0.018	81.0	0.003
-1.8	0.188	6.4	0.185	20.0	0.045	40.5	0.014	61.0	0.013	81.5	0.002
-1.6	0.261	6.6	0.161	20.5	0.020	41.0	0.037	61.5	0.023	82.0	0.002
-1.4	0.339	6.8	0.134	21.0	0.010	41.5	0.060	62.0	0.037	82.5	0.002
-1.2	0.420	7.0	0.106	21.5	0.038	42.0	0.079	62.5	0.052	83.0	0.002
-1.0	0.501	7.2	0.078	22.0	0.060	42.5	0.093	63.0	0.066	83.5	0.001
-0.8	0.582	7.4	0.054	22.5	0.072	43.0	0.101	63.5	0.080	84.0	0.001
-0.6	0.659	7.6	0.041	23.0	0.073	43.5	0.103	64.0	0.092	84.5	0.001
-0.4	0.732	7.8	0.047	23.5	0.062	44.0	0.100	64.5	0.102	85.0	0.001
-0.2	0.798	8.0	0.064	24.0	0.043	44.5	0.091	65.0	0.110	85.5	0.001
0.0	0.857	8.2	0.083	24.5	0.028	45.0	0.079	65.5	0.116	86.0	0.001
0.2	0.907	8.4	0.100	25.0	0.039	45.5	0.066	66.0	0.121	86.5	0.000
0.4	0.947	8.6	0.113	25.5	0.063	46.0	0.051	66.5	0.123	87.0	0.000
0.6	0.976	8.8	0.123	26.0	0.083	46.5	0.038	67.0	0.123	87.5	0.000
0.8	0.994	9.0	0.129	26.5	0.096	47.0	0.028	67.5	0.122	88.0	0.000
1.0	1.000	9.2	0.130	27.0	0.099	47.5	0.022	68.0	0.119	88.5	0.000
1.2	0.994	9.4	0.128	27.5	0.092	48.0	0.020	68.5	0.114	89.0	0.000
1.4	0.977	9.6	0.123	28.0	0.078	48.5	0.019	69.0	0.109	89.5	0.000
1.6	0.948	9.8	0.115	28.5	0.061	49.0	0.018	69.5	0.103	90.0	0.000
1.8	0.909	10.0	0.105	29.0	0.044	49.5	0.016	70.0	0.096		
2.0	0.860	10.2	0.094	29.5	0.033	50.0	0.013	70.5	0.088		
2.2	0.802	10.4	0.085	30.0	0.031	50.5	0.010	71.0	0.081		

Remarks:



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Call Letters **WHTJ-DT** Channel **46**  
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Antenna Type **TFU-16DSB-B (C)**

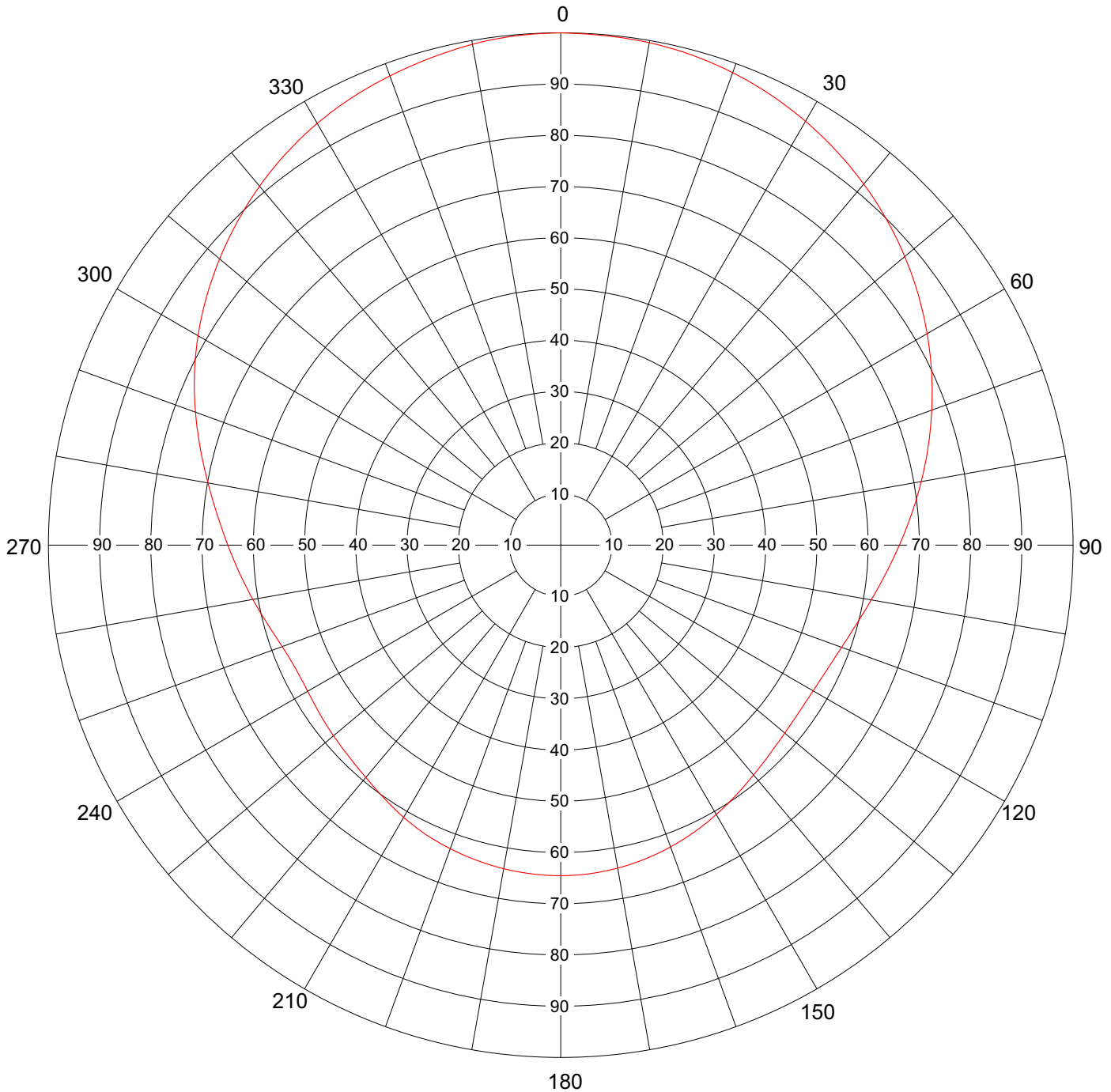
### AZIMUTH PATTERN

Gain  
Calculated / Measured

**1.70 (2.30 dB)**  
**Calculated**

Frequency  
Drawing #

**665 MHz**  
**DSB-B**



Remarks:



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 Antenna Type **TFU-16DSB-B (C)**

## TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # **DSB-B**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	1.000	45	0.899	90	0.661	135	0.577	180	0.645	225	0.584	270	0.650	315	0.893
1	1.000	46	0.895	91	0.656	136	0.578	181	0.645	226	0.583	271	0.654	316	0.897
2	0.999	47	0.890	92	0.651	137	0.580	182	0.645	227	0.582	272	0.659	317	0.902
3	0.999	48	0.886	93	0.646	138	0.582	183	0.645	228	0.581	273	0.663	318	0.906
4	0.999	49	0.881	94	0.641	139	0.584	184	0.645	229	0.580	274	0.668	319	0.910
5	0.998	50	0.876	95	0.637	140	0.586	185	0.644	230	0.579	275	0.673	320	0.914
6	0.998	51	0.872	96	0.632	141	0.588	186	0.644	231	0.578	276	0.678	321	0.919
7	0.998	52	0.867	97	0.628	142	0.590	187	0.643	232	0.577	277	0.683	322	0.923
8	0.997	53	0.862	98	0.624	143	0.592	188	0.643	233	0.576	278	0.688	323	0.927
9	0.996	54	0.857	99	0.619	144	0.594	189	0.642	234	0.575	279	0.694	324	0.930
10	0.996	55	0.852	100	0.615	145	0.596	190	0.641	235	0.574	280	0.699	325	0.934
11	0.995	56	0.847	101	0.612	146	0.598	191	0.640	236	0.573	281	0.705	326	0.938
12	0.994	57	0.842	102	0.608	147	0.600	192	0.640	237	0.572	282	0.711	327	0.941
13	0.993	58	0.836	103	0.604	148	0.603	193	0.639	238	0.572	283	0.716	328	0.944
14	0.992	59	0.831	104	0.601	149	0.605	194	0.638	239	0.571	284	0.722	329	0.948
15	0.990	60	0.826	105	0.597	150	0.607	195	0.637	240	0.570	285	0.728	330	0.951
16	0.989	61	0.820	106	0.594	151	0.609	196	0.636	241	0.570	286	0.734	331	0.954
17	0.987	62	0.815	107	0.591	152	0.611	197	0.634	242	0.570	287	0.740	332	0.956
18	0.985	63	0.810	108	0.589	153	0.614	198	0.633	243	0.570	288	0.747	333	0.959
19	0.983	64	0.804	109	0.586	154	0.616	199	0.632	244	0.570	289	0.753	334	0.962
20	0.981	65	0.799	110	0.583	155	0.618	200	0.631	245	0.571	290	0.759	335	0.964
21	0.979	66	0.793	111	0.581	156	0.619	201	0.629	246	0.572	291	0.765	336	0.966
22	0.977	67	0.787	112	0.579	157	0.621	202	0.628	247	0.573	292	0.771	337	0.968
23	0.975	68	0.782	113	0.577	158	0.623	203	0.626	248	0.575	293	0.777	338	0.971
24	0.972	69	0.776	114	0.575	159	0.625	204	0.625	249	0.577	294	0.783	339	0.973
25	0.970	70	0.771	115	0.574	160	0.627	205	0.623	250	0.579	295	0.789	340	0.975
26	0.967	71	0.765	116	0.573	161	0.628	206	0.621	251	0.581	296	0.795	341	0.977
27	0.964	72	0.759	117	0.571	162	0.630	207	0.619	252	0.584	297	0.801	342	0.979
28	0.961	73	0.754	118	0.570	163	0.632	208	0.618	253	0.587	298	0.806	343	0.980
29	0.958	74	0.748	119	0.569	164	0.633	209	0.616	254	0.590	299	0.812	344	0.982
30	0.955	75	0.742	120	0.569	165	0.634	210	0.613	255	0.593	300	0.817	345	0.984
31	0.952	76	0.737	121	0.568	166	0.636	211	0.611	256	0.596	301	0.823	346	0.986
32	0.949	77	0.731	122	0.568	167	0.637	212	0.609	257	0.600	302	0.828	347	0.988
33	0.946	78	0.726	123	0.568	168	0.638	213	0.607	258	0.603	303	0.834	348	0.990
34	0.942	79	0.720	124	0.568	169	0.639	214	0.605	259	0.607	304	0.839	349	0.991
35	0.939	80	0.714	125	0.568	170	0.640	215	0.602	260	0.610	305	0.844	350	0.993
36	0.935	81	0.709	126	0.568	171	0.641	216	0.600	261	0.614	306	0.849	351	0.994
37	0.932	82	0.703	127	0.569	172	0.642	217	0.598	262	0.618	307	0.854	352	0.995
38	0.928	83	0.698	128	0.569	173	0.643	218	0.596	263	0.622	308	0.859	353	0.996
39	0.924	84	0.692	129	0.570	174	0.643	219	0.594	264	0.625	309	0.864	354	0.997
40	0.920	85	0.687	130	0.571	175	0.644	220	0.592	265	0.629	310	0.869	355	0.998
41	0.916	86	0.682	131	0.572	176	0.644	221	0.590	266	0.633	311	0.874	356	0.999
42	0.912	87	0.676	132	0.573	177	0.645	222	0.589	267	0.637	312	0.879	357	0.999
43	0.908	88	0.671	133	0.574	178	0.645	223	0.587	268	0.641	313	0.883	358	0.999
44	0.904	89	0.666	134	0.575	179	0.645	224	0.586	269	0.646	314	0.888	359	1.000

Remarks: