

ENGINEERING EXHIBIT
AMENDMENT OF APPLICATION FOR
CONSTRUCTION PERMIT
TELEVISION STATION WPMT-DT
YORK, PENNSYLVANIA

July 2, 2001

CHANNEL 47 912 KW (MAX-DA) 387 M

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Engineering Statement

This Engineering Exhibit was prepared on behalf of digital television broadcast station WPMT-DT, York, Pennsylvania, in support of an amendment to its pending application for construction permit (See FCC File No. BPCDT-19990916AAG, as amended). The purpose of this application is to decrease antenna radiation center height by 9 meters and increase the maximum effective radiated power (ERP) to 912 kW (29.6 dBk). The proposed WPMT-DT radiation center height above average terrain is now proposed to be 387 m. There are no other changes proposed. As described in detail herein, the proposal meets the *de minimis* interference protection requirements for the increased DTV facility as outlined FCC's DTV Processing Guidelines,^{*} the FCC's *Second Memorandum Opinion and Order*,[†] and the recent *DTV Report and Order and Further Notice of Proposed Rule Making*.[‡]

^{*} See FCC *Public Notice*, "Additional Application Processing Guidelines for Digital Television (DTV)", Released: August 10, 1998.

[†] See *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, FCC-98-315, Released: December 18, 1998.

[‡] See *Report and Order and Further Notice of Proposed Rule Making* in MM Docket No. 00-39, FCC 01-24, released January 19, 2001.

Proposed Facilities

A Dielectric, model TFU-30DSC-R P210 transmitting antenna will be employed. The antenna will be side-mounted on the existing WPMT(TV) transmission tower with a center of radiation located at 250 m above ground level (524 m AMSL). The antenna will employ a “peanut” type azimuthal pattern shape with major lobes at 120 and 300 degrees true.

The proposed facility meets the maximum permissible ERP requirements for UHF DTV stations as outlined in Section 73.623(f)(8)(i) of the FCC Rules. According to this section, considering a proposed antenna height above average terrain for the proposed WPMT-DT facility of 396 m, the maximum permissible ERP is 912 kW.[§]

The proposed transmitter is located approximately 369 km from the closest point on the border with Canada. The closest FCC Monitoring station is located at Laurel, Maryland at a distance of 98 km at a bearing of 191°True.

Predicted Coverage Contours

The proposed facility provides minimum 48 dBu, f(50,90), coverage of York in compliance with Section 73.625(a)(1) of the FCC Rules, as recently adopted by the FCC in MM Docket No. 00-39. Figure 1 herein is a tabulation of the calculated distances to the predicted WPMT-DT coverage contours. Figure 2 herein is a map depicting the predicted coverage contours of the proposed facility.

[§] using linear interpolation, converted to the nearest 0.1 dBk.

Allocation Considerations

The proposed WPMT-DT Channel 47 facility meets the requirements of Section 73.623 of the FCC Rules concerning predicted interference to other existing U.S. NTSC facilities and U.S. DTV allotments and assignments. Longley-Rice interference analyses were conducted pursuant to the requirements of the FCC Rules; OET Bulletin No. 69; and published FCC guidelines for preparation of such interference analyses. The Longley-Rice interference analyses were conducted using the software developed by du Treil, Lundin & Rackley, Inc. based on the FCC published software routines.^{**} Stations selected for analysis were determined pursuant to the distance requirements outlined in the FCC DTV Processing Guidelines Public Notice. Accordingly, co-channel DTV and NTSC stations within 429 km and 407 km, respectively, were examined for potential interference; and first-adjacent DTV and NTSC stations within 229 km and 207 km, respectively, were examined for potential interference. Analog taboo-related NTSC stations within 142 km were examined for potential interference. The results of the domestic interference analyses for the proposed WPMT-DT facility are summarized herein at Figure 3. As indicated therein, the proposed facility will meet the 2%/10% criterion outlined in the FCC Rules and published guidelines with respect to all considered stations.^{††}

With respect to the Canadian allocation situation, the closest co-channel Canadian allotment is for Toronto-ON (CFMT-TV, Channel 47, Class C), which is

^{**} The duTreil, Lundin & Rackley, Inc. DTV interference analysis program is a precise implementation of the procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed.

^{††} Interference analysis results reflect the net change in interference to a given station considering the interference predicted to occur from all other stations (i.e. “masking”) including the allotment facility for WPMT-DT. This properly reflects the net interference change for determining compliance with the FCC DTV 2%/10% *de minimis* standard.

located 463 km at a bearing of 331 degrees true. This meets the maximum separation requirement of 259 km in compliance with the U.S.-Canada Letter of Understanding (LOU) concerning digital television.^{††} Furthermore, a contour analysis with respect to the Toronto allotment reveals no interfering contour overlap with the protected service area of the Toronto allotment.

With respect to Class A TV station protection, the proposal has been evaluated according to the requirements of Section 73.623(c)(5) of the FCC Rules. The analysis reveals the following potentially affected Class A TV facilities:

WMDO-LP, Washington, DC, Channel 47, BPTTL-20000809ABM
W47AO, Berwick, PA, Channel 47, BLTTL-19940815IF
W47AO, Berwick, PA, Channel 47, BPTTL-19940414QR
WAZW-CA, Winchester, VA, Channel 47, BMJPTTA-20010507ABI

The proposed WPMT-DT facility, as amended, maintains or reduces the predicted interfering contour of the proposed facility in all directions. Therefore, because the pending WPMT-DT application is an eligible “maximization” application, pursuant to Section 73.623(c)(5) of the FCC Rules, no further consideration of the above listed Class A television facilities is required.

Environmental Considerations

With respect to the potential for human exposure to radio frequency (RF) radiation, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF energy at ground level in excess of FCC standards. Power density calculations were conducted at 2-m

^{††}See Letter Of Understanding Between The Federal Communications Commission Of The United States Of America And Industry Canada Related To The Use Of The 54-72 MHz, 76-88 MHz, 174-216 MHz And 470-806 MHz Bands For The Digital Television Broadcasting Service Along The Common Border, September 22, 2000.

above ground^{§§} based on the following conservative assumptions, with the following results:

Call Sign	Channel	Peak Visual ERP or Average ERP (kW)	Aural ERP (kW)	Relative Field Factor^{***}	FCC Limit^{†††} (mW/cm²)	Percentage of Limit
WPMT-DT	47	912	--	0.10	0.445	1.1%

As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 1.1% of the FCC limit for general population / uncontrolled exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF radiation and it is categorically excluded from environmental processing.

Louis Robert du Treil, Jr.

July 2, 2001

§§ The radiation center is located 250 m above ground level.

*** This is a conservative estimate of the relative field factor in the downward direction.

††† for general population/uncontrolled environments

Figure 1

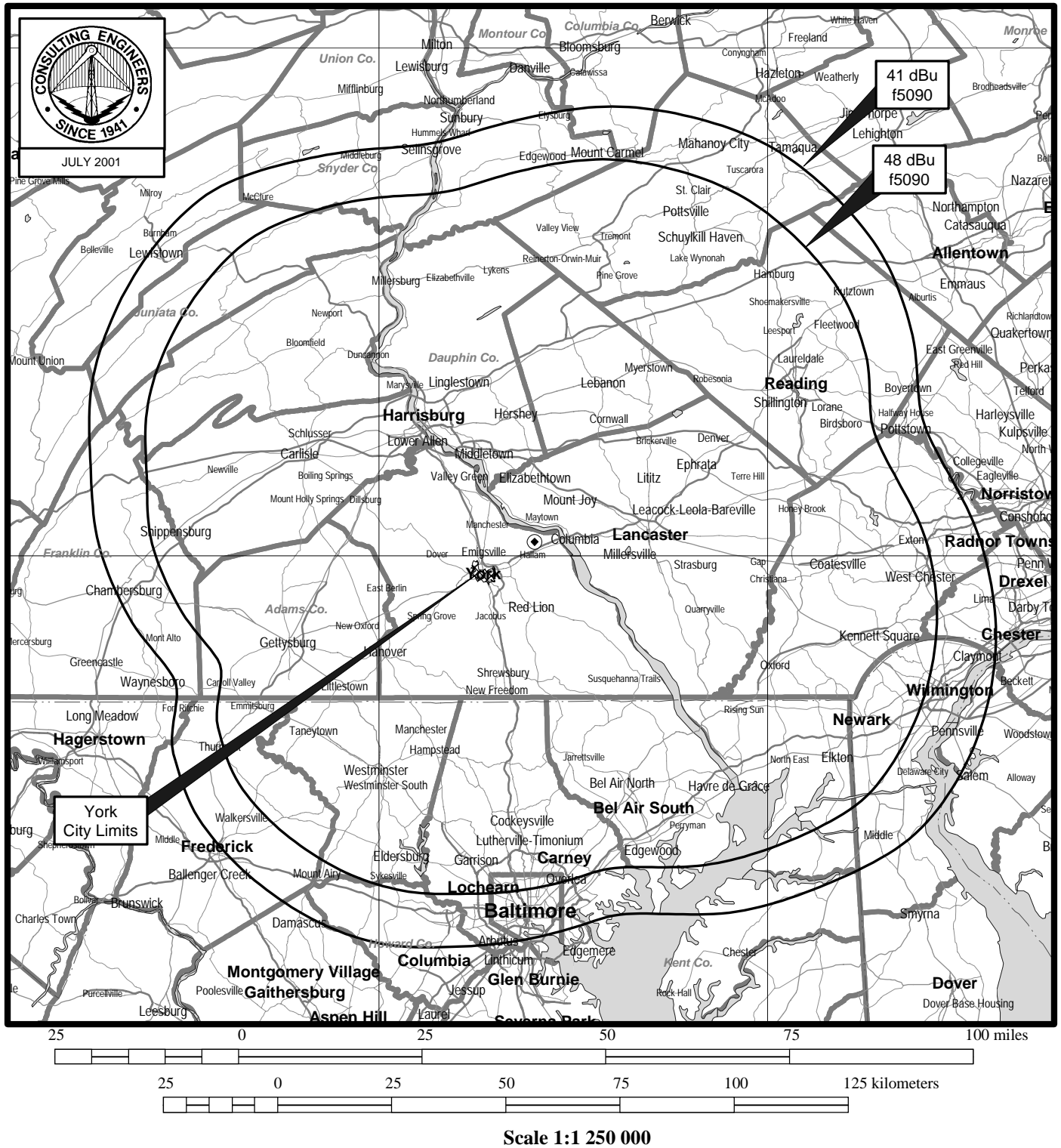
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Tabulation of Average Elevations and
 Distances to Predicted Coverage Contours

Azimuth (deg.T)	3-16 km Average Terrain (m)	Antenna HAAT (m)	ERP (kW)	48 dBu f(50,90) Contour (km)	41 dBu f(50,90) Contour (km)
0	130	394	235.4	81.9	93.2
15	123	401	420.5	86.2	98.2
30	113	411	508.9	88.1	100.6
45	104	420	420.5	87.3	99.6
60	106	418	235.4	83.3	94.6
75	141	383	157.8	78.4	89.5
90	105	419	352.8	86.0	98.0
105	108	416	720.8	90.8	104.3
120	110	414	912.0	92.4	106.5
135	156	368	720.8	87.7	100.4
150	174	350	352.8	81.0	93.0
165	200	324	157.8	73.6	83.9
180	203	321	235.4	75.8	86.6
195	198	326	420.5	79.8	92.0
210	175	349	508.9	83.4	95.9
225	157	367	420.5	83.8	95.8
240	149	375	235.4	80.5	91.9
255	171	353	157.8	76.0	87.0
270	142	382	352.8	83.8	95.5
285	150	374	720.8	88.2	100.8
300	131	393	912.0	91.2	104.6
315	101	423	720.8	91.2	104.9
330	117	407	352.8	85.4	97.2
345	127	397	157.8	79.4	90.4

Note: The 3-16-km average terrain is 137 m based on the eight conventional radials (0°, 45°, 90°, etc.). The overall antenna radiation center height above average terrain is 387 m based on the eight conventional radials.

Figure 2



PREDICTED COVERAGE CONTOURS

TELEVISION STATION WPMT-DT
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

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Summary of Domestic Allocation Analysis

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
1	32	WHUT-TV	WASHINGTON DC	126.6	CP	BPET	20000501AIH
2	32	WHUT-TV	WASHINGTON DC	125.9	LIC	BLET	19801107KE
3	33	WITF-TV	HARRISBURG PA	42.1	LIC	BMLET	19820217KH
4	39	WLVT-TV	ALLENTOWN PA	115.5	LIC	BLET	429
5	43	WPMT	YORK PA	0	CP	BPCT	19960724KK
6	43	WPMT	YORK PA	0	LIC	BLCT	19840905KI
7	45	WBFF	BALTIMORE MD	76.9	LIC	BLCT	19890526KF
8	46	WBFF-DT	BALTIMORE MD	76.9	APP	BPCDT	19980803KR
9	46	WBFF-DT	BALTIMORE MD	76.9	PLN	DTVPLN	DTVP1263

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
10	46	WFMZ-DT	ALLENTOWN PA	115	CP MOD	BMPCDT	19990401KH
11	46	WFMZ-DT	ALLENTOWN PA	115	PLN	DTVPLN	DTVP1273
12	46	WKBS-DT	ALTOONA PA	167.3	APP	BMPCDT	20010615AEW
13	46	WKBS-DT	ALTOONA PA	167.3	PLN	DTVPLN	DTVP1274
14	46	WKBS-DT	ALTOONA PA	167.3	CP	BPCDT	19991026ACS
15	47	WMDT	SALISBURY MD	185.2	APP	BPCT	20001101AAI
16	47	WMDT	SALISBURY MD	185.2	LIC	BLCT	19910607KF
17	47	WNJU	LINDEN NJ	231.9	CP	BPCT	19991028AAN
18	47	WNJU	LINDEN NJ	235.3	APP	BMPCT	20001121AHZ
19	47	WNJU	LINDEN NJ	231.9	LIC	BLCT	19800423KE
20	47	WTVH-DT	SYRACUSE NY	326.7	APP	BPCDT	19991027ACR
21	47	WTVH-DT	SYRACUSE NY	328	PLN	DTVPLN	DTVP1301
22	47	WOAC-DT	CANTON OH	417.5	APP	BPCDT	19991101AEX
23	47	WOAC-DT	CANTON OH	417.5	PLN	DTVPLN	DTVP1302
24	47	WKBS-TV	ALTOONA PA	167.3	LIC	BLCT	19850925KE
25	47	WUPV-DT	ASHLAND VA	260.2	CP	BPCDT	19990928AAL

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
26	47	WAWB-DT	ASHLAND VA	260.2	PLN	DTVPLN	DTVP1311
27	48	WRC-DT	WASHINGTON DC	127.7	PLN	DTVPLN	DTVP1318
28	48	WRC-DT	WASHINGTON DC	127.7	LIC	BLCDT	20000216AAT
29	48	WGTW	BURLINGTON NJ	115.5	LIC	BLCT	19920821KF
30	49	WGCB-TV	RED LION PA	13.7	LIC	BLCT	19790419KG
31	49	WGCB-TV	RED LION PA	13.7	CP	BPCT	20000105AAM
32	50	WBDC-TV	WASHINGTON DC	123.9	LIC	BLCT	19880519KI
33	50	WBDC-TV	WASHINGTON DC	126.6	CP	BPCT	20000619AEP
34	51	WTVE	READING PA	69.7	APP	BMPCT	20010430AAL
35	51	WTVE	READING PA	83	CP MOD	BMPCT	19940811KL
36	51	WTVE	READING PA	69.7	LIC	BLCT	19800521KW
37	51	940630KG	READING PA	66.4	APP	BPCT	19940630KG
38	54	WNUV	BALTIMORE MD	83.4	LIC	BLCT	19890914KF
39	55	960723KY	LEBANON PA	29	APP	BPCT	19960723KY

Summary of Interference Analysis for Worst-Case Scenarios							
Facility Number	Interference Population Before Analysis	Interference Population After Analysis	Baseline Population	Net Change in Interference	Percent of Baseline	Permissible Percent of Baseline	Result
1	--	--	--	--	0.00	--	pass
2	--	--	--	--	0.00	--	pass
3	88623	96516	2086437	7893	0.378	2.0	pass
4	--	--	--	--	0.00	--	pass
5	--	--	--	--	0.00	--	pass
6	--	--	--	--	0.00	--	pass
7	284910	284910	5986630	0	0	2.0	pass
8	194984	215001	5772580	20017	0.347	2.0	pass
9	144788	148356	5772580	3568	0.062	2.0	pass
10	229947	234861	2771851	4914	0.177	2.0	pass
11	59138	59283	2771851	145	0.005	2.0	pass
12	6770	6770	576349	0	0	2.0	pass
13	--	--	--	--	0.00	--	pass
14	--	--	--	--	0.00	--	pass
15	1557	3569	417338	2012	0.482	2.0	pass
16	947	3619	417212	2672	0.64	2.0	pass
17	435659	452970	17622974	17311	0.098	2.0	pass
18	339852	348721	17108503	8869	0.052	2.0	pass
19	264793	288507	17049621	23714	0.139	2.0	pass

Summary of Interference Analysis for Worst-Case Scenarios							
Facility Number	Interference Population Before Analysis	Interference Population After Analysis	Baseline Population	Net Change in Interference	Percent of Baseline	Permissible Percent of Baseline	Result
20	5605	5627	1439117	22	0.002	2.0	pass
21	7281	7329	1439117	48	0.003	2.0	pass
22	--	--	--	--	0.00	--	pass
23	--	--	--	--	0.00	--	pass
24	3073	9448	727029	6375	0.877	2.0	pass
25	5542	5559	925047	17	0.002	2.0	pass
26	155	155	925047	0	0	2.0	pass
27	86195	86769	6541255	574	0.009	2.0	pass
28	16804	16804	6541255	0	0	2.0	pass
29	300062	300659	7010431	597	0.009	2.0	pass
30	139464	169318	1547221	29854	1.93	2.0	pass
31	131352	158481	1569657	27129	1.728	2.0	pass
32	--	--	--	--	0.00	--	pass
33	--	--	--	--	0.00	--	pass
34	1070771	1070771	3781201	0	0	2.0	pass
35	2134725	2135018	7220973	293	0.004	2.0	pass
36	612885	612885	2844479	0	0	2.0	pass
37	814340	814340	3598754	0	0	2.0	pass
38	822489	822489	6539700	0	0	2.0	pass
39	1033888	1033974	3928825	86	0.002	2.0	pass

Figure 4

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Engineering Specifications

Channel / Frequency Band	47 / 668-674 MHz
Site Coordinates (NAD 27)	40°01'38" North Latitude 76°36'00" West Longitude
Site elevation	274.3 m AMSL
Average elevation of standard eight radials, 3 to 16 km	137 m AMSL
Overall height of existing structure	288.6 m AGL / 562.9 m AMSL
Height of antenna radiation center	250 m AGL / 524 m AMSL
Antenna radiation center HAAT	387 m

Proposed Operation	
Parameter	DTV
Transmitter power output	13.5 dBk (22.4 kW)
Transmission line loss	1.2 dB
Antenna input power	12.3 dBk
Antenna gain	17.3 dB
Effective radiated power (ERP) (dBk)	29.6 dBk
Maximum ERP (kW)	912 kW

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Transmitting Antenna Manufacturer's
Azimuthal Plane and Vertical Plane Pattern Data

(five pages follow)



Date

08 May 2001

Call Letters

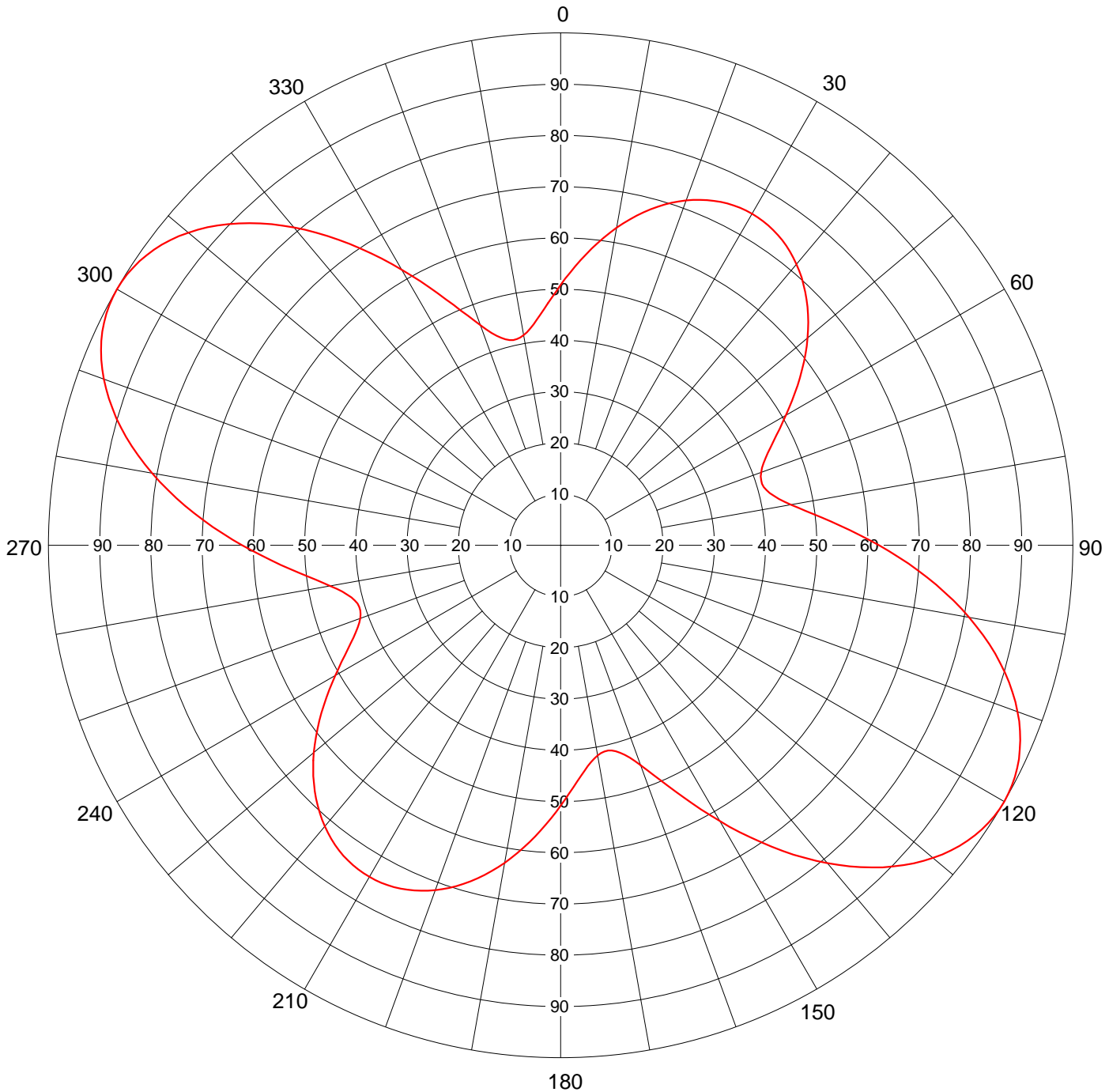
Channel 47

Location

Customer

Antenna Type

TFU-30DSC-R P210

AZIMUTH PATTERNRMS Gain at Main Lobe
Calculated / Measured**2.10**
CalculatedFrequency
Drawing #**671 MHz**
TFU-P210

Remarks:



Date **08 May 2001**
Call Letters
Location
Customer
Antenna Type **TFU-30DSC-R P210**
Channel **47**

TABULATION OF AZIMUTH PATTERNAzimuth Pattern Drawing # **TFU-P210**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.508	45	0.679	90	0.622	135	0.889	180	0.508	225	0.679	270	0.622	315	0.889
1	0.520	46	0.670	91	0.641	136	0.874	181	0.520	226	0.670	271	0.641	316	0.874
2	0.533	47	0.660	92	0.660	137	0.859	182	0.533	227	0.660	272	0.660	317	0.859
3	0.545	48	0.650	93	0.680	138	0.843	183	0.545	228	0.650	273	0.680	318	0.843
4	0.558	49	0.640	94	0.699	139	0.827	184	0.558	229	0.640	274	0.699	319	0.827
5	0.570	50	0.629	95	0.718	140	0.810	185	0.570	230	0.629	275	0.718	320	0.810
6	0.582	51	0.618	96	0.737	141	0.792	186	0.582	231	0.618	276	0.737	321	0.792
7	0.595	52	0.606	97	0.756	142	0.774	187	0.595	232	0.606	277	0.756	322	0.774
8	0.606	53	0.595	98	0.774	143	0.756	188	0.606	233	0.595	278	0.774	323	0.756
9	0.618	54	0.582	99	0.792	144	0.737	189	0.618	234	0.582	279	0.792	324	0.737
10	0.629	55	0.570	100	0.810	145	0.718	190	0.629	235	0.570	280	0.810	325	0.718
11	0.640	56	0.558	101	0.827	146	0.699	191	0.640	236	0.558	281	0.827	326	0.699
12	0.650	57	0.545	102	0.843	147	0.680	192	0.650	237	0.545	282	0.843	327	0.680
13	0.660	58	0.533	103	0.859	148	0.660	193	0.660	238	0.533	283	0.859	328	0.660
14	0.670	59	0.520	104	0.874	149	0.641	194	0.670	239	0.520	284	0.874	329	0.641
15	0.679	60	0.508	105	0.889	150	0.622	195	0.679	240	0.508	285	0.889	330	0.622
16	0.687	61	0.496	106	0.902	151	0.602	196	0.687	241	0.496	286	0.902	331	0.602
17	0.695	62	0.484	107	0.915	152	0.584	197	0.695	242	0.484	287	0.915	332	0.584
18	0.703	63	0.473	108	0.927	153	0.565	198	0.703	243	0.473	288	0.927	333	0.565
19	0.710	64	0.462	109	0.939	154	0.547	199	0.710	244	0.462	289	0.939	334	0.547
20	0.716	65	0.452	110	0.949	155	0.530	200	0.716	245	0.452	290	0.949	335	0.530
21	0.722	66	0.443	111	0.959	156	0.513	201	0.722	246	0.443	291	0.959	336	0.513
22	0.727	67	0.435	112	0.967	157	0.498	202	0.727	247	0.435	292	0.967	337	0.498
23	0.732	68	0.427	113	0.975	158	0.483	203	0.732	248	0.427	293	0.975	338	0.483
24	0.736	69	0.421	114	0.981	159	0.469	204	0.736	249	0.421	294	0.981	339	0.469
25	0.739	70	0.416	115	0.987	160	0.457	205	0.739	250	0.416	295	0.987	340	0.457
26	0.742	71	0.413	116	0.992	161	0.446	206	0.742	251	0.413	296	0.992	341	0.446
27	0.744	72	0.411	117	0.995	162	0.436	207	0.744	252	0.411	297	0.995	342	0.436
28	0.746	73	0.411	118	0.998	163	0.428	208	0.746	253	0.411	298	0.998	343	0.428
29	0.747	74	0.413	119	0.999	164	0.421	209	0.747	254	0.413	299	0.999	344	0.421
30	0.747	75	0.416	120	1.000	165	0.416	210	0.747	255	0.416	300	1.000	345	0.416
31	0.747	76	0.421	121	0.999	166	0.413	211	0.747	256	0.421	301	0.999	346	0.413
32	0.746	77	0.428	122	0.998	167	0.411	212	0.746	257	0.428	302	0.998	347	0.411
33	0.744	78	0.436	123	0.995	168	0.411	213	0.744	258	0.436	303	0.995	348	0.411
34	0.742	79	0.446	124	0.992	169	0.413	214	0.742	259	0.446	304	0.992	349	0.413
35	0.739	80	0.457	125	0.987	170	0.416	215	0.739	260	0.457	305	0.987	350	0.416
36	0.736	81	0.469	126	0.981	171	0.421	216	0.736	261	0.469	306	0.981	351	0.421
37	0.732	82	0.483	127	0.975	172	0.427	217	0.732	262	0.483	307	0.975	352	0.427
38	0.727	83	0.498	128	0.967	173	0.435	218	0.727	263	0.498	308	0.967	353	0.435
39	0.722	84	0.513	129	0.959	174	0.443	219	0.722	264	0.513	309	0.959	354	0.443
40	0.716	85	0.530	130	0.949	175	0.452	220	0.716	265	0.530	310	0.949	355	0.452
41	0.710	86	0.547	131	0.939	176	0.462	221	0.710	266	0.547	311	0.939	356	0.462
42	0.703	87	0.565	132	0.927	177	0.473	222	0.703	267	0.565	312	0.927	357	0.473
43	0.695	88	0.584	133	0.915	178	0.484	223	0.695	268	0.584	313	0.915	358	0.484
44	0.687	89	0.602	134	0.902	179	0.496	224	0.687	269	0.602	314	0.902	359	0.496

Remarks:



Date

08 May 2001

Call Letters

Channel 47

Location

Customer

Antenna Type

TFU-30DSC-R P210

ELEVATION PATTERN

RMS Gain at Main Lobe

25.5 (14.07 dB)

Beam Tilt

0.75 Degrees

RMS Gain at Horizontal

16.6 (12.20 dB)

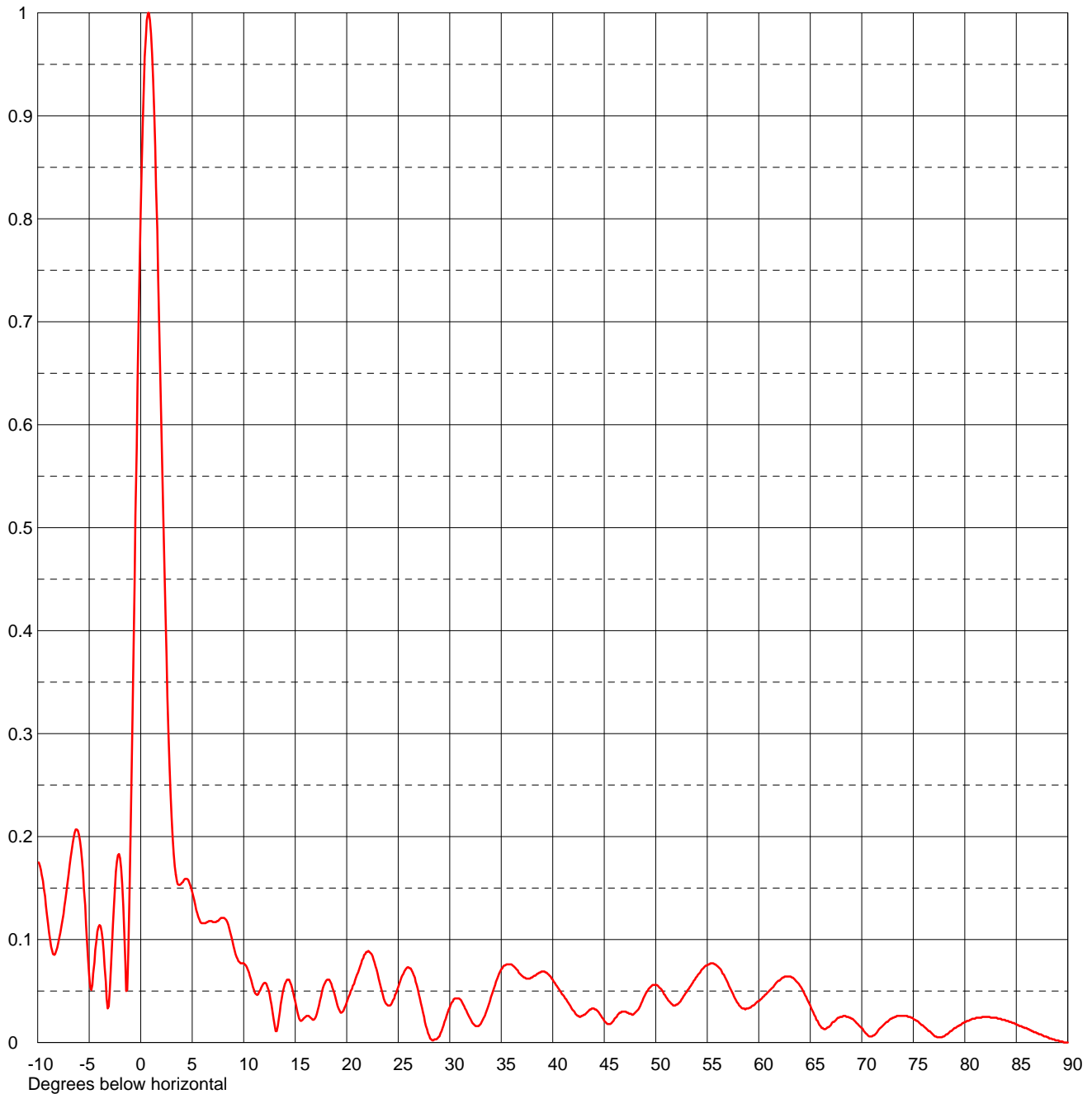
Frequency

671.00 MHz

Calculated / Measured

Calculated

Drawing #

30Q255075-90

Remarks:



Date

08 May 2001

Call Letters

Channel 47

Location

Customer

Antenna Type

TFU-30DSC-R P210

ELEVATION PATTERN

RMS Gain at Main Lobe

25.5 (14.07 dB)

Beam Tilt

0.75 Degrees

RMS Gain at Horizontal

16.6 (12.20 dB)

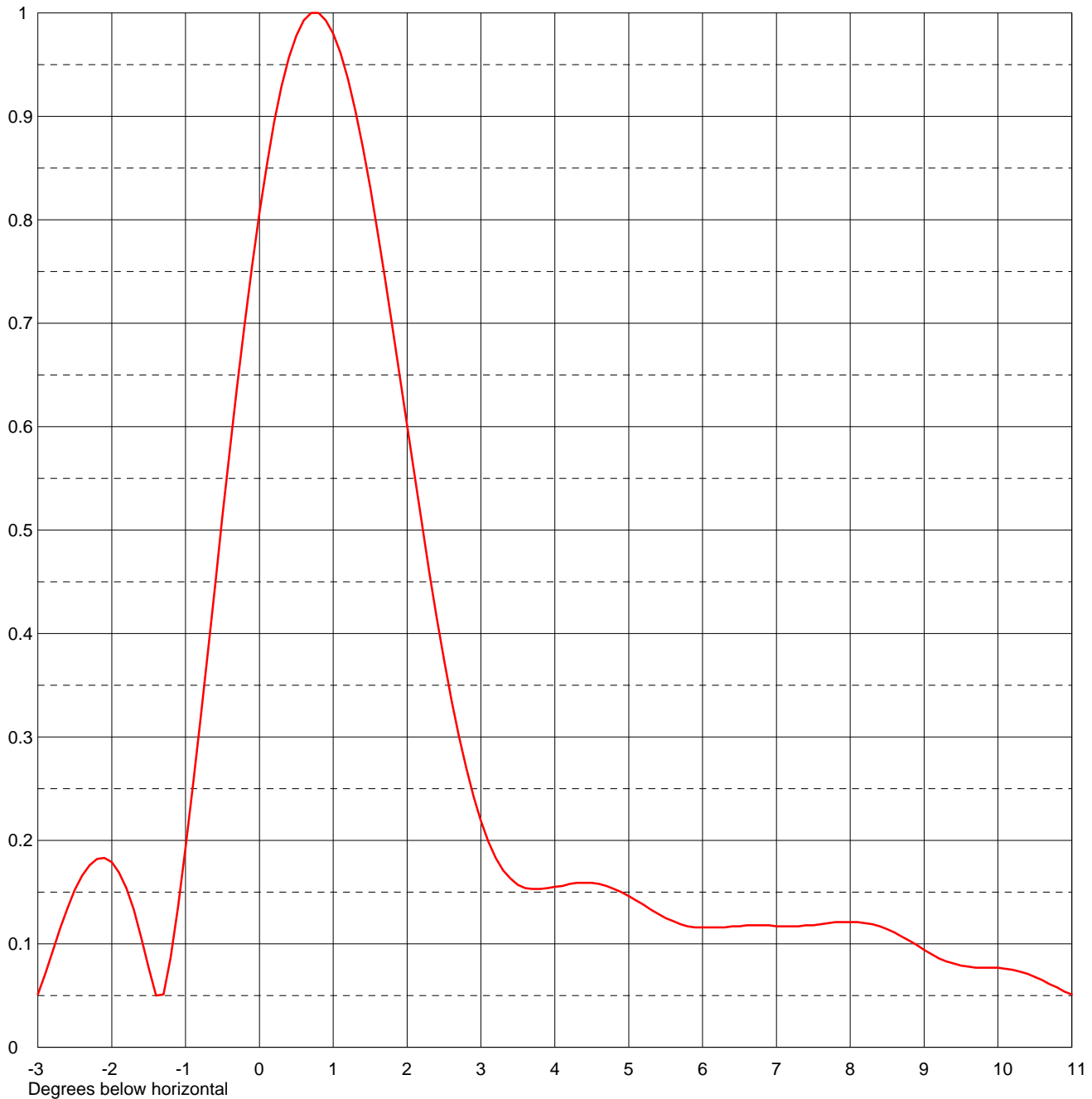
Frequency

671.00 MHz

Calculated / Measured

Calculated

Drawing #

30Q255075

Remarks:



Date

08 May 2001

Call Letters

Channel 47

Location

Customer

Antenna Type

TFU-30DSC-R P210

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # 30Q255075-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.176	2.4	0.416	10.6	0.065	30.5	0.043	51.0	0.044	71.5	0.010
-9.5	0.157	2.6	0.336	10.8	0.058	31.0	0.042	51.5	0.038	72.0	0.016
-9.0	0.116	2.8	0.270	11.0	0.051	31.5	0.033	52.0	0.037	72.5	0.020
-8.5	0.086	3.0	0.219	11.5	0.049	32.0	0.023	52.5	0.042	73.0	0.024
-8.0	0.097	3.2	0.183	12.0	0.058	32.5	0.016	53.0	0.049	73.5	0.026
-7.5	0.125	3.4	0.163	12.5	0.047	33.0	0.018	53.5	0.057	74.0	0.026
-7.0	0.163	3.6	0.154	13.0	0.017	33.5	0.029	54.0	0.064	74.5	0.025
-6.5	0.200	3.8	0.153	13.5	0.030	34.0	0.044	54.5	0.071	75.0	0.023
-6.0	0.202	4.0	0.155	14.0	0.057	34.5	0.059	55.0	0.075	75.5	0.020
-5.5	0.149	4.2	0.158	14.5	0.059	35.0	0.071	55.5	0.077	76.0	0.016
-5.0	0.065	4.4	0.159	15.0	0.040	35.5	0.076	56.0	0.074	76.5	0.011
-4.5	0.078	4.6	0.158	15.5	0.021	36.0	0.076	56.5	0.067	77.0	0.007
-4.0	0.114	4.8	0.153	16.0	0.025	36.5	0.071	57.0	0.058	77.5	0.005
-3.5	0.075	5.0	0.146	16.5	0.024	37.0	0.065	57.5	0.047	78.0	0.006
-3.0	0.051	5.2	0.138	17.0	0.025	37.5	0.062	58.0	0.038	78.5	0.010
-2.8	0.093	5.4	0.129	17.5	0.045	38.0	0.063	58.5	0.033	79.0	0.014
-2.6	0.134	5.6	0.122	18.0	0.060	38.5	0.067	59.0	0.033	79.5	0.017
-2.4	0.166	5.8	0.117	18.5	0.057	39.0	0.069	59.5	0.036	80.0	0.020
-2.2	0.182	6.0	0.116	19.0	0.040	39.5	0.067	60.0	0.040	80.5	0.022
-2.0	0.179	6.2	0.116	19.5	0.029	40.0	0.061	60.5	0.045	81.0	0.023
-1.8	0.154	6.4	0.117	20.0	0.039	40.5	0.053	61.0	0.050	81.5	0.024
-1.6	0.106	6.6	0.118	20.5	0.052	41.0	0.046	61.5	0.055	82.0	0.025
-1.4	0.050	6.8	0.118	21.0	0.066	41.5	0.039	62.0	0.060	82.5	0.024
-1.2	0.087	7.0	0.117	21.5	0.080	42.0	0.031	62.5	0.064	83.0	0.024
-1.0	0.193	7.2	0.117	22.0	0.088	42.5	0.026	63.0	0.064	83.5	0.023
-0.8	0.316	7.4	0.118	22.5	0.084	43.0	0.027	63.5	0.061	84.0	0.021
-0.6	0.447	7.6	0.119	23.0	0.067	43.5	0.031	64.0	0.055	84.5	0.020
-0.4	0.577	7.8	0.121	23.5	0.046	44.0	0.033	64.5	0.046	85.0	0.018
-0.2	0.699	8.0	0.121	24.0	0.036	44.5	0.029	65.0	0.036	85.5	0.016
0.0	0.807	8.2	0.120	24.5	0.041	45.0	0.021	65.5	0.025	86.0	0.014
0.2	0.894	8.4	0.117	25.0	0.054	45.5	0.018	66.0	0.016	86.5	0.011
0.4	0.957	8.6	0.111	25.5	0.067	46.0	0.023	66.5	0.013	87.0	0.009
0.6	0.993	8.8	0.103	26.0	0.073	46.5	0.029	67.0	0.017	87.5	0.007
0.8	1.000	9.0	0.094	26.5	0.066	47.0	0.030	67.5	0.022	88.0	0.005
1.0	0.980	9.2	0.086	27.0	0.047	47.5	0.028	68.0	0.025	88.5	0.003
1.2	0.936	9.4	0.081	27.5	0.025	48.0	0.029	68.5	0.025	89.0	0.002
1.4	0.870	9.6	0.078	28.0	0.007	48.5	0.036	69.0	0.023	89.5	0.001
1.6	0.789	9.8	0.077	28.5	0.003	49.0	0.047	69.5	0.019	90.0	0.000
1.8	0.697	10.0	0.077	29.0	0.006	49.5	0.054	70.0	0.014		
2.0	0.601	10.2	0.075	29.5	0.020	50.0	0.056	70.5	0.008		
2.2	0.506	10.4	0.071	30.0	0.034	50.5	0.052	71.0	0.006		

Remarks: