

TECHNICAL EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
RADIO STATION WCFB(FM)
DAYTONA BEACH, FLORIDA

FEBRUARY 9, 2007

CH 233C0 97 KW 453 M

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Technical Narrative

The technical exhibit of which this narrative is part was prepared to support an application for construction permit for WCFB(FM) on Channel 233C assigned to Daytona Beach, Florida. This application seeks to operate on Channel 233C0 from a transmitter site located 14.8 kilometers (9 miles) from its presently licensed site with an effective radiated power of 97 kilowatts and an antenna height above average terrain of 453 meters. This is a maximum equivalent Class C0 facility.

The proposal would not be subject to environmental processing in accordance with Section 1.1306. It is believed that this proposal conforms with all applicable rules and regulations of the FCC.

The proposed transmitting antenna will employ 0.75° electrical beamtilt pursuant to the specifications provided by the antenna manufacturer contained within the Appendix. There will be 93.5 kilowatts radiated in the horizontal plane and a maximum of 97 kilowatts radiated at a horizontal depression angle of 0.75°.

Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially less than 4 kilometers from the transmitting site. The applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference as required by Sections 73.315(b), 73.316(e) and 73.318.

Proposed Coverage Analysis

Figure 2 is a map showing the predicted coverage contours for the proposed operation. The FCC proposed 70 dBu contour does entirely encompass the principal community of Daytona Beach, Florida pursuant to Section 73.315(a) of the Commission's Rules.

The average terrain elevations from 3 to 16 kilometers along eight radials evenly spaced at 45 degree intervals were obtained from the co-located WMGF(FM) Channel 299C application for construction permit.

Proposed Site Allocation Study

Channel 233C0 at the proposed site will satisfy the Commission's minimum separation distance requirements, specified in Section 73.207(b) of the Rules, to all assignments and stations as shown by the tabulation provided in Figure 3.

Radiofrequency Electromagnetic Field Exposure

The proposed facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, *Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*.¹ The power density at the base of the tower was calculated using the appropriate procedure contained in Section 2, Supplement A, *Additional Information for Radio and Television Broadcast Stations*, of the Bulletin.

For the calculation, a combined horizontal and vertical polarized effective radiated power of 200 kilowatts is employed with a radiation center of 446 meters above ground level. Using an assumed "worst-case" downward relative field value of 0.5, it is calculated that the maximum power density at ground level resulting from this facility is less than 0.008 mW/cm². This is less than five percent of the maximum Commission guideline value in an uncontrolled environment for a FM radio station.²

¹ OET Bulletin 65, Second Edition 97-01, August, 1997.

² The FCC maximum guideline for a FM broadcast station in an uncontrolled environment is 0.2 mW/cm².

It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis are the reasonability of the applicant.

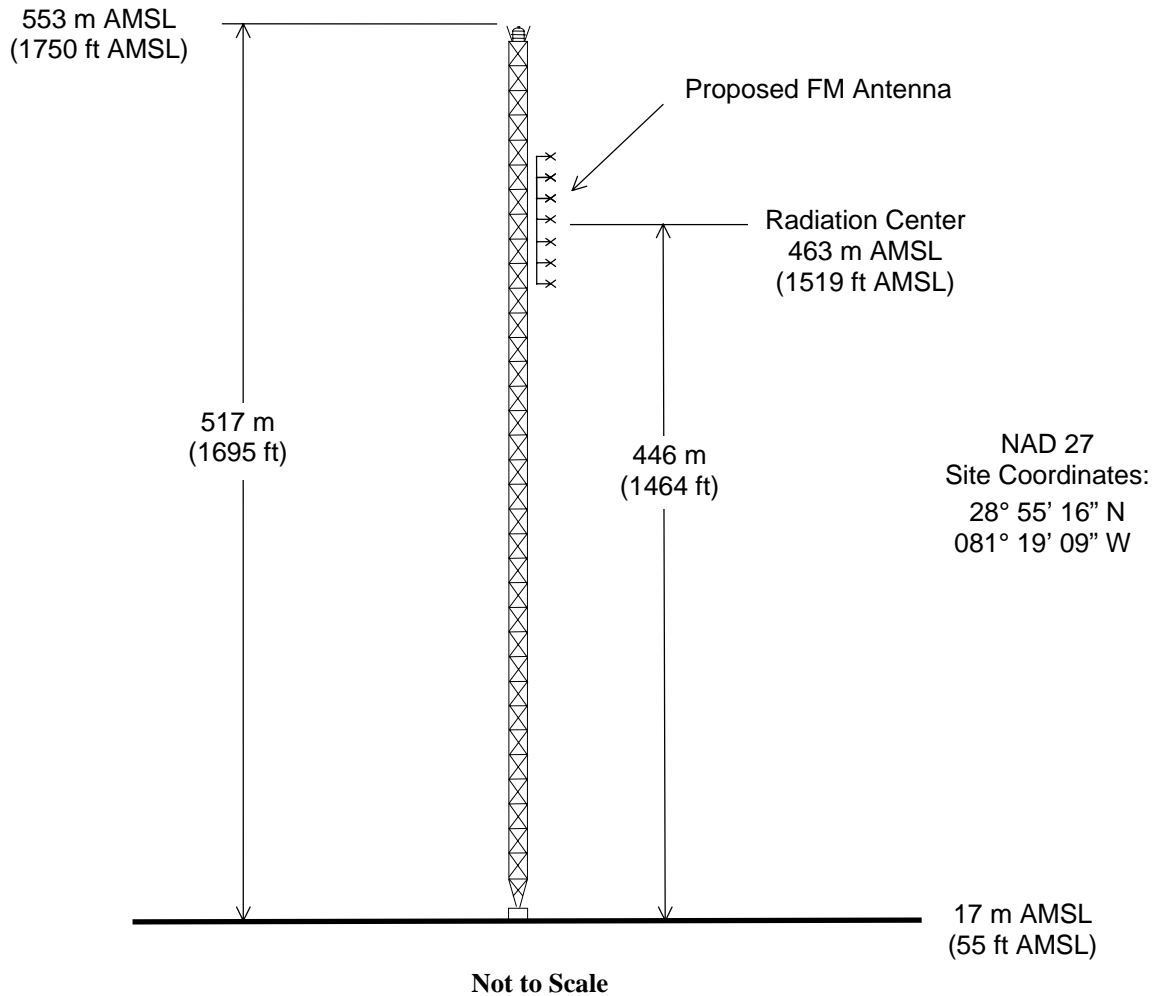
Charles A. Cooper

February 9, 2007

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000



FCC Tower Registration Number
1020781



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

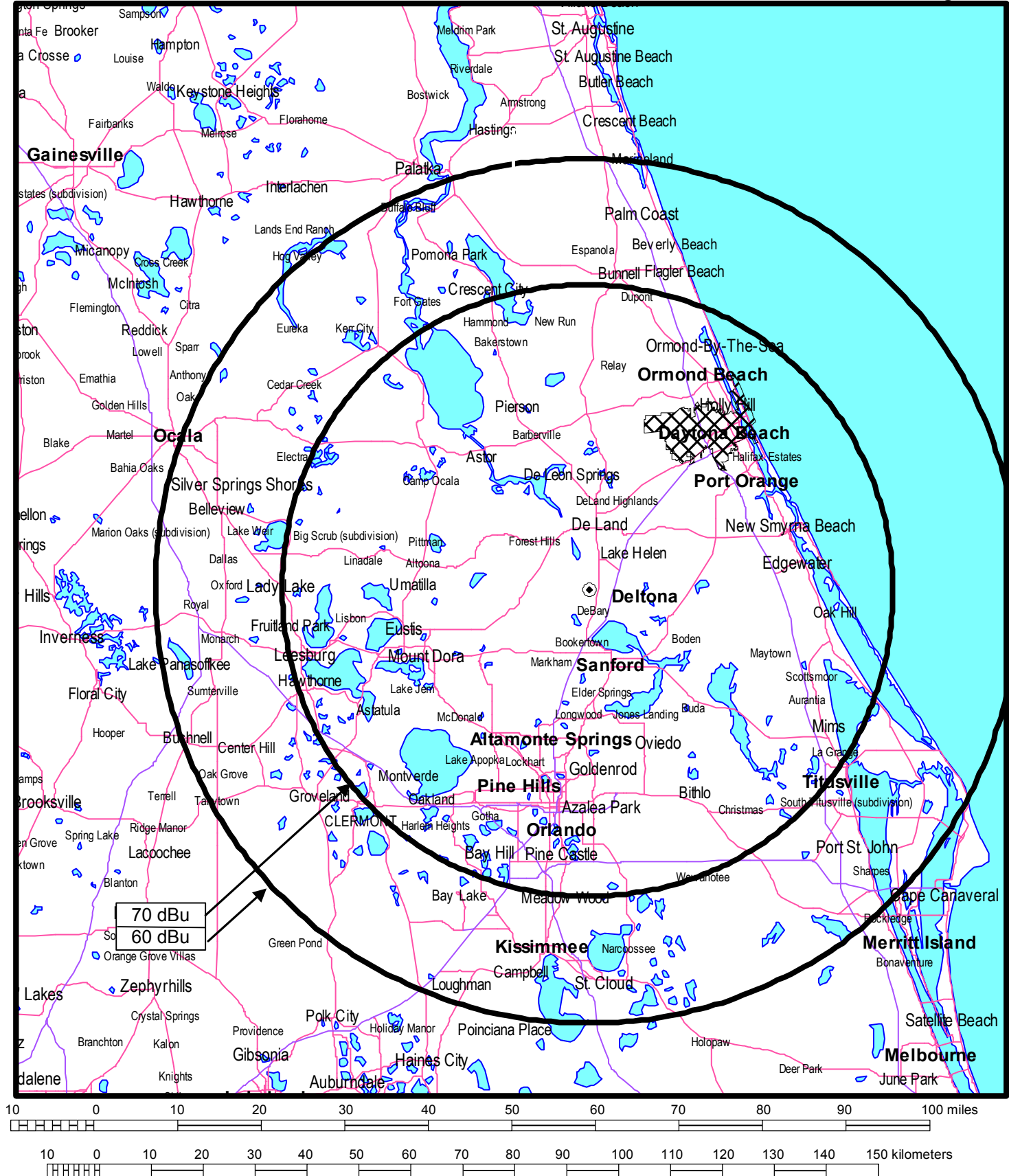
RADIO STATION WCFB(FM)

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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



FCC PREDICTED COVERAGE CONTOURS

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du Treil, Lundin & Rackley, Inc., Sarasota, Florida

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Channel 233C0 Allocation Study at Actual Transmitter Site

28° 55' 16" North Latitude
081° 19' 09" West Longitude

Call Id	City St	File Status Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. min
WSOS-FMST. 74071	AUGUSTI FL LIC C	BLH 20050204AAS	231C3 94.1	25.0 92	N	29-57-57 081-28-36	N	352.6	116.80	87.0
WSOS-FMFRUIT 74071	COVE FL CP C	BPH 20060901ACH	231C3 94.1	25.0 92	N	29-57-57 081-28-36	N	352.6	116.80	87.0
WNFB 2877	LAKE CITY FL LIC C	BLH 19891212KC	232C2 94.3	50.0 150	N	30-07-44 082-52-49	N	312.0	202.05	176.0
WCFB 10343	DAYTONA BEA FL LIC C	BLH 20030509ABQ	233C 94.5	100.0 451	N	28-58-47 081-27-20	N	296.2	14.80	
<i>(Applicant's existing facility.)</i>										
WARO 66224	NAPLES FL LIC C	BLH 19881007KA	233C0 94.5	100.0 309	N	26-20-26 081-42-48	N	187.8	288.58	270.0
WSYR-FMGIFFORD 40988	 FL LIC C	BLH 20031015ACY	234C2 94.7	50.0 101	N	27-33-18 080-22-07	N	148.3	177.83	176.0
WBVD 11409	MELBOURNE FL LIC C	BLH 20050920AEK	236A 95.1	4.3 118	Y	28-08-12 080-42-13	Y	145.3	105.77	86.0
WOMX-FMORLANDO 47746	 FL LIC C	BMLH 20030924ABI	286C 105.1	100.0 487	N	28-34-51 081-04-32	N	147.8	44.59	45.0
<i>(Separation distance rounds to 45 kilometer, therefore, no short-spacing.)</i>										

APPENDIX

TRANSMITTING ANTENNA VERTICAL PLANE PATTERN & TABULATION



Proposal Number

Date

12-Feb-07

Call Letters

WCFB

Channel **233**

Location

Orange City, FL

Customer

COX

Antenna Type

DCRM8CT75

ELEVATION PATTERN

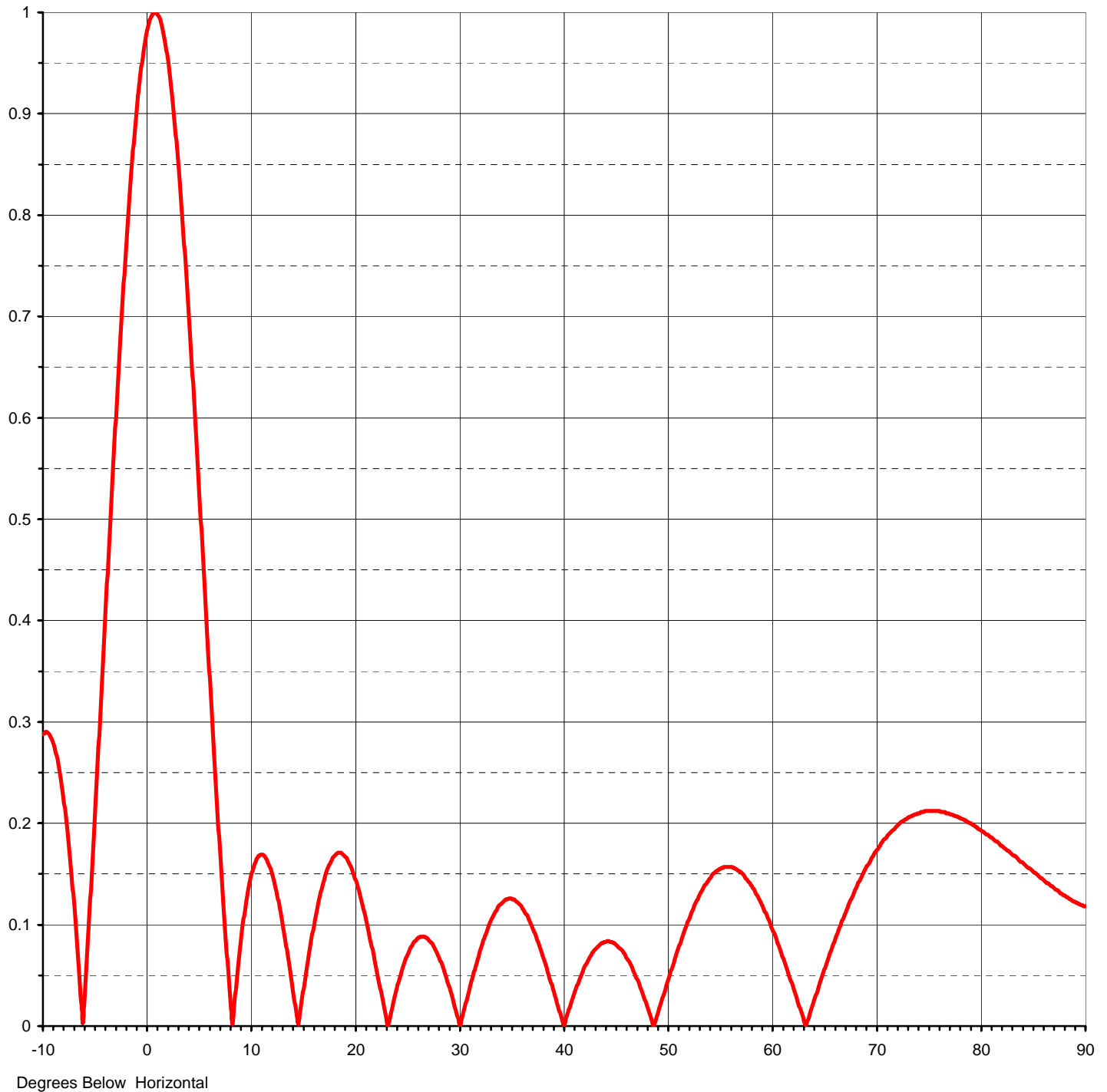
RMS Gain at Main Lobe **4.20 (6.24 dB)**

Beam Tilt **0.75 deg**

RMS Gain at Horizontal **4.05 (6.08 dB)**

Frequency **94.50 MHz**

Calculated / Measured **Calculated**





Proposal Number

Date

Call Letters

Location

Customer

Antenna Type

12-Feb-07

WCFB

Orange City, FL

COX

DCRM8CT75

TABULATION OF ELEVATION PATTERN

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.288	2.4	0.917	10.6	0.165	30.5	0.016	51.0	0.075	71.5	0.193
-9.5	0.289	2.6	0.896	10.8	0.168	31.0	0.036	51.5	0.090	72.0	0.198
-9.0	0.279	2.8	0.873	11.0	0.169	31.5	0.055	52.0	0.104	72.5	0.202
-8.5	0.257	3.0	0.849	11.5	0.165	32.0	0.073	52.5	0.116	73.0	0.206
-8.0	0.223	3.2	0.822	12.0	0.153	32.5	0.089	53.0	0.128	73.5	0.208
-7.5	0.177	3.4	0.794	12.5	0.133	33.0	0.102	53.5	0.137	74.0	0.210
-7.0	0.119	3.6	0.764	13.0	0.106	33.5	0.113	54.0	0.145	74.5	0.211
-6.5	0.050	3.8	0.733	13.5	0.075	34.0	0.120	54.5	0.151	75.0	0.212
-6.0	0.029	4.0	0.701	14.0	0.041	34.5	0.125	55.0	0.155	75.5	0.212
-5.5	0.116	4.2	0.668	14.5	0.006	35.0	0.126	55.5	0.157	76.0	0.212
-5.0	0.210	4.4	0.634	15.0	0.030	35.5	0.123	56.0	0.157	76.5	0.211
-4.5	0.307	4.6	0.598	15.5	0.063	36.0	0.118	56.5	0.155	77.0	0.209
-4.0	0.406	4.8	0.563	16.0	0.094	36.5	0.110	57.0	0.152	77.5	0.207
-3.5	0.505	5.0	0.526	16.5	0.120	37.0	0.099	57.5	0.146	78.0	0.205
-3.0	0.600	5.2	0.490	17.0	0.142	37.5	0.085	58.0	0.139	78.5	0.203
-2.8	0.637	5.4	0.453	17.5	0.157	38.0	0.071	58.5	0.131	79.0	0.200
-2.6	0.673	5.6	0.416	18.0	0.167	38.5	0.054	59.0	0.121	79.5	0.196
-2.4	0.707	5.8	0.379	18.5	0.171	39.0	0.037	59.5	0.110	80.0	0.193
-2.2	0.741	6.0	0.343	19.0	0.168	39.5	0.020	60.0	0.097	80.5	0.189
-2.0	0.772	6.2	0.307	19.5	0.160	40.0	0.002	60.5	0.084	81.0	0.186
-1.8	0.802	6.4	0.271	20.0	0.147	40.5	0.014	61.0	0.070	81.5	0.182
-1.6	0.831	6.6	0.237	20.5	0.130	41.0	0.030	61.5	0.055	82.0	0.178
-1.4	0.857	6.8	0.203	21.0	0.109	41.5	0.044	62.0	0.040	82.5	0.173
-1.2	0.882	7.0	0.170	21.5	0.085	42.0	0.057	62.5	0.024	83.0	0.169
-1.0	0.904	7.2	0.138	22.0	0.060	42.5	0.067	63.0	0.009	83.5	0.165
-0.8	0.924	7.4	0.107	22.5	0.035	43.0	0.075	63.5	0.007	84.0	0.161
-0.6	0.942	7.6	0.078	23.0	0.010	43.5	0.080	64.0	0.023	84.5	0.156
-0.4	0.958	7.8	0.050	23.5	0.014	44.0	0.083	64.5	0.042	85.0	0.152
-0.2	0.971	8.0	0.023	24.0	0.035	44.5	0.083	65.0	0.057	85.5	0.148
0.0	0.982	8.2	0.002	24.5	0.054	45.0	0.081	65.5	0.072	86.0	0.144
0.2	0.990	8.4	0.025	25.0	0.069	45.5	0.076	66.0	0.086	86.5	0.140
0.4	0.996	8.6	0.047	25.5	0.079	46.0	0.069	66.5	0.099	87.0	0.136
0.6	0.999	8.8	0.067	26.0	0.086	46.5	0.060	67.0	0.112	87.5	0.132
0.8	1.000	9.0	0.085	26.5	0.088	47.0	0.048	67.5	0.125	88.0	0.129
1.0	0.998	9.2	0.102	27.0	0.086	47.5	0.036	68.0	0.136	88.5	0.125
1.2	0.994	9.4	0.116	27.5	0.080	48.0	0.021	68.5	0.147	89.0	0.122
1.4	0.987	9.6	0.129	28.0	0.070	48.5	0.006	69.0	0.157	89.5	0.120
1.6	0.977	9.8	0.135	28.5	0.057	49.0	0.010	69.5	0.166	90.0	0.118
1.8	0.966	10.0	0.145	29.0	0.041	49.5	0.026	70.0	0.174		
2.0	0.952	10.2	0.153	29.5	0.023	50.0	0.043	70.5	0.181		
2.2	0.935	10.4	0.160	30.0	0.004	50.5	0.059	71.0	0.188		