

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
STATION WPXM-DT (FACILITY ID 48608)
MIAMI, FLORIDA

September 14, 2002

CHANNEL 26 200 KW (MAX-DA) 282 M

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Technical Statement

This Technical Exhibit was prepared on behalf of digital television broadcast station WPXM-DT, Miami, Florida; in support of an amendment to its pending application for construction permit (See FCC File No. BPCDT-19991020ACC). WPXM-DT is paired with analog NTSC TV station WPXM(TV), Channel 35. The purpose of this amendment is to specify a new transmitter site for WPXM-DT. This amendment is being filed in conjunction with an amendment to the application for WXEL-DT (FCC File No. BPEDT-20000403AAT) to meet the FCC requirements for approval of an agreement resolving the mutually-exclusive conflict between the WPXM-DT and WXEL-DT applications as now pending before the Commission. The proposed WPXM-DT transmission facility complies with the FCC's *de minimis* interference requirements with respect to all facilities with the exception of the WXEL-DT application, as amended.* Details of the allocation situation are included herein.

* See FCC *Public Notice*, "Commission Details Application Filing Procedures Digital Television (DTV)", Released: October 16, 1997; and, FCC *Public Notice*, "Additional Application Processing Guidelines for Digital Television (DTV)", Released: August 10, 1998.

Proposed Facilities

The proposed WPXM-DT facility will employ a Dielectric, model TFU-18DSC P230 transmitting antenna, which will be side-mounted the northwest stack of the candelabra on top of the American Tower tower structure located at Pembroke, Florida. The northwest stack supports the existing WAMI-DT UHF transmitting antenna, which is top-mounted on the pole. The proposed antenna will be mounted with a center of radiation at 281 m above ground level and 284 m above mean sea level.

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

Tower Registration

The proposed antenna structure has been registered with the FCC. The FCC antenna structure registration number is 1224225. There will be no change in the overall height of the antenna structure as a result of the instant proposal.

Allocation Considerations

The proposed WPXM-DT Channel 26 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 interference analyses for the proposed WPXM-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 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 one potentially affected Class A TV station as follows:

- W25BF, Miami, FL, Channel 25, FCC File No. BLTTL-19961223JB.

An analysis of interference with respect to W25BF was conducted according to the procedures of OET Bulletin No. 69. Based on that analysis it has been determined that the proposed WPXM-DT facility will cause less interference to W25BF than now present. Therefore, the proposed facility meets the interference protection requirements with respect to W25BF. Figure 3 includes a summary of the interference analysis with respect to W25BF.

[†] 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 WPXM-DT. This properly reflects the net interference change for determining compliance with the FCC DTV 2%/10% *de minimis* standard.

Environmental Considerations

With respect to the potential for human exposure to radio frequency (RF) radiation pursuant to Section 1.1307(b) of the FCC Rules, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF radiation at ground level in excess of FCC standards. Power density calculations were conducted at 2-m 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/cm ²)	Percentage of Limit
WPXM-DT	26	200	--	0.20	0.361	0.95%

As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 0.95% 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. The applicant, in coordination with the other users of the transmission facility, shall reduce power or cease operation as necessary to protect persons having access to the WPXM-DT tower or antenna from radio frequency radiation in excess of the FCC guidelines.

Louis Robert du Treil, Jr.

September 14, 2002

§ The radiation center height above ground is 281 m.

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

†† for general population/uncontrolled environments

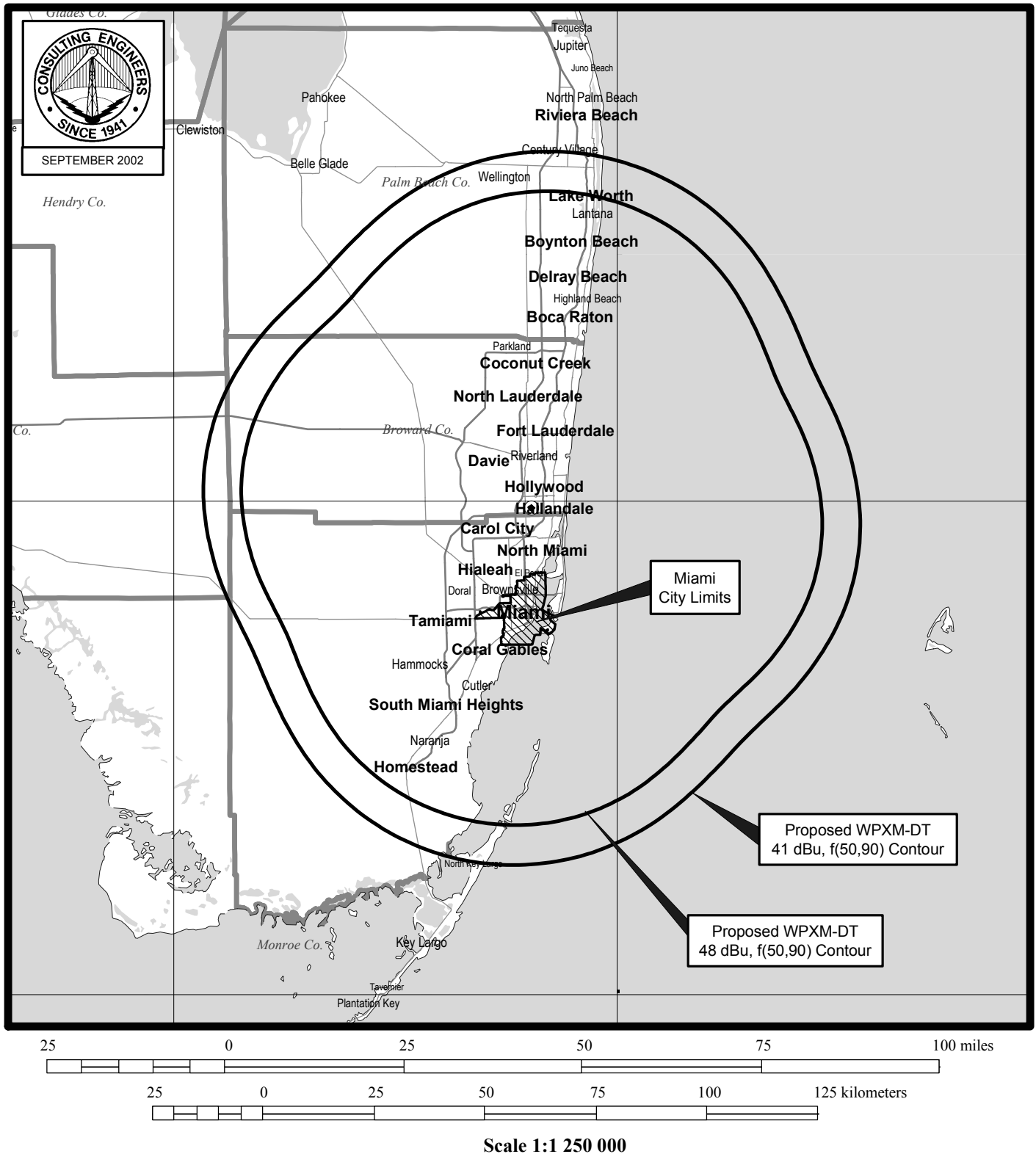
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Tabulation of Average Elevations and
 Distances to Predicted Coverage Contours

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	3	281	183.9	84.3	103.1
45	2	282	72.4	75.8	91.9
90	1	283	58.8	74.3	89.7
135	1	283	34.9	70.4	84.0
180	2	282	183.9	84.4	103.3
225	2	282	72.4	75.8	91.9
270	3	281	58.8	74.1	89.3
315	3	281	34.9	70.2	83.7

Note: The 3-16-km average terrain is 2 m based on the eight conventional radials (0°, 45°, 90°, etc.). The U.S.G.S. linearly interpolated 3-second terrain database was employed in determining the average terrain elevations. The overall antenna radiation center height above average terrain is 282 m based on the eight conventional radials. The 45-, 90- and 135-degree radials were truncated at the Atlantic Ocean coastline in keeping with the requirements of Section 73.313 of the FCC Rules. The 45-degree radial was truncated at 11.9 km, the 90-degree radial at 7.9 km and the 135-degree radial at 10.8 km.

Figure 2



PREDICTED COVERAGE CONTOURS

STATION WPXM-DT (FACILITY ID 48608)
MIAMI, FLORIDA
CHANNEL 26 200 KW (MAX-DA) 282 M

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

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Summary of Allocation Analysis

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
1	23	WLTW	MIAMI FL	3.4	LIC	BLCT	19950710KF
2	25	W25BF	MIAMI FL	23.7	LIC	BLTTL	19961223JB
3	25	WPBF	TEQUESTA FL	127.8	LIC	BLCT	19990817LC
4	26	WNTD	DAYTONA BEACH FL	388.5	CP	BPCT	19960709KS
5	26	WNTD	DAYTONA BEACH FL	388.5	LIC	BLCT	19881026KF
6	26	WZVN-TV	NAPLES FL	151.3	LIC	BLCT	19890711KI
7	27	WXEL-DT	WEST PALM BEACH FL	65.9	PLN	DTVPLN	DTVP0668
8	29	WFLX	WEST PALM BEACH FL	65.9	CP	BPCT	19990910AAA
9	29	WFLX	WEST PALM BEACH FL	65.9	LIC	BLCT	19860514KH

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
10	33	WBFS-TV	MIAMI FL	2.7	LIC	BLCT	19850125KE
11	34	WTVX	FORT PIERCE FL	127.8	LIC	BLCT	19800624KF
12	27	WXEL-DT	WEST PALM BEACH FL	65.9	APP	BPEDT	20000403AAT*

*As amended in conjunction with WPXM-DT.

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	--	--	--	*	0.0	--	pass
2	210948	198024	858313	-12924	-1.506	0.5	pass
3	--	--	--	*	0.0	--	pass
4	--	--	--	*	0.0	--	pass
5	--	--	--	*	0.0	--	pass
6	0	630	624539	630	0.101	2.0	pass
7	35553	53137	2451799	17584	0.717	2.0	pass
8	--	--	--	**	0.0	--	pass
9	--	--	--	**	0.0	--	pass
10	--	--	--	**	0.0	--	pass
11	--	--	--	**	0.0	--	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
12	98392	326492	2451799	228100	9.303	2.0	fail***

**Proposal causes no interference.

***Permissible interference pursuant to agreement between WXEL-DT and WPXM-DT.

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Transmitting Antenna Manufacturer's Pattern Data

(five pages follows)



Exhibit No.

Date

14 Sep 2002

Call Letters

Channel 26

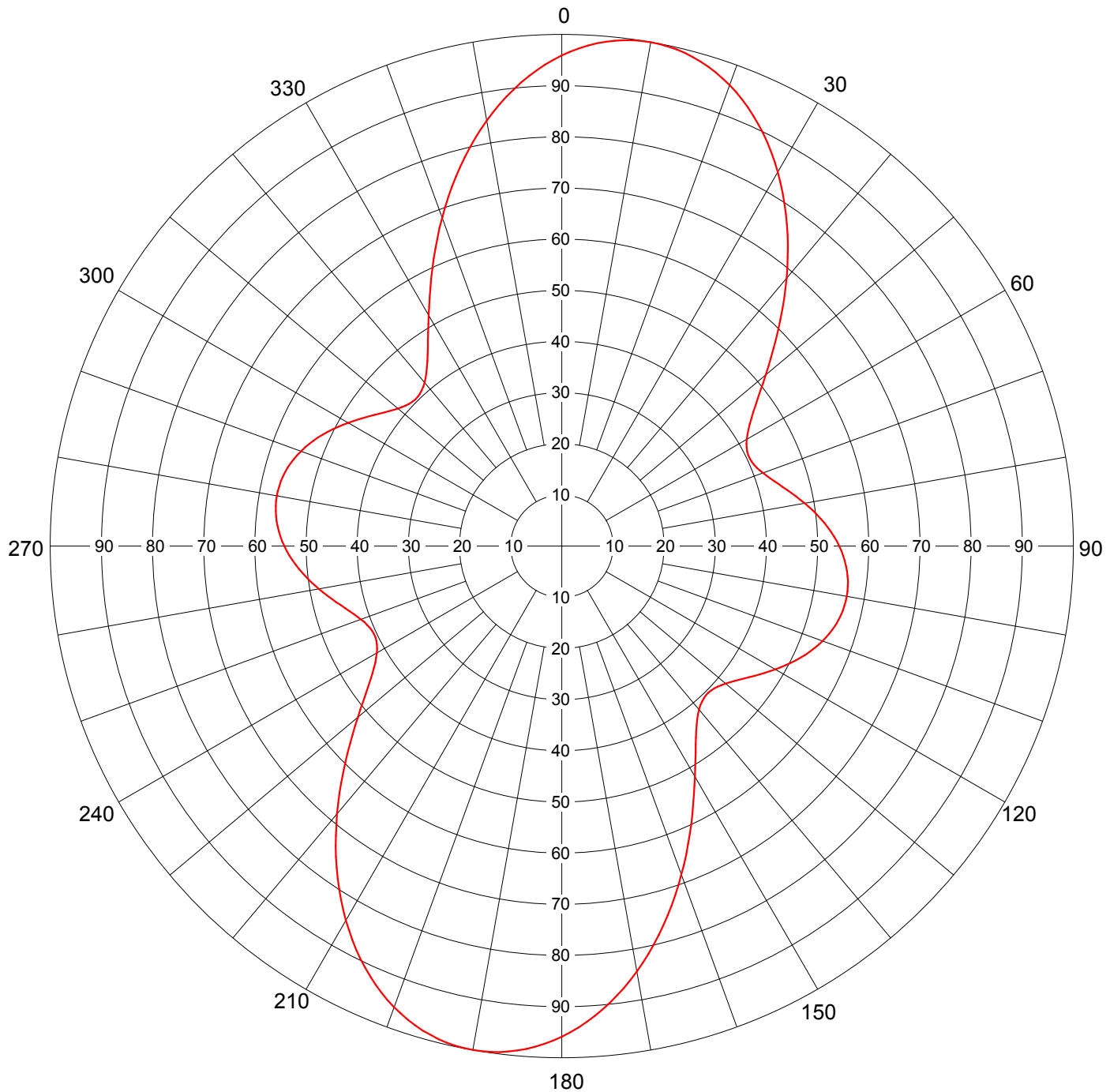
Location

MIAMI FL

Customer

Antenna Type

TFU-18DSC P230

AZIMUTH PATTERNRMS Gain at Main Lobe
Calculated / Measured**2.30 (3.62 dB)**
CalculatedFrequency
Drawing #**545 MHz**
TFU-P230

Remarks:



Date

14 Sep 2002

Call Letters

Channel 26

Location

MIAMI FL

Customer

Antenna Type

TFU-18DSC P230

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #

TFU-P230

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	0.959	45	0.599	90	0.542	135	0.405	180	0.959	225	0.599	270	0.542	315	0.405
1	0.966	46	0.582	91	0.547	136	0.406	181	0.966	226	0.582	271	0.547	316	0.406
2	0.973	47	0.566	92	0.551	137	0.407	182	0.973	227	0.566	272	0.551	317	0.407
3	0.980	48	0.550	93	0.554	138	0.409	183	0.980	228	0.550	273	0.554	318	0.409
4	0.985	49	0.535	94	0.557	139	0.413	184	0.985	229	0.535	274	0.557	319	0.413
5	0.990	50	0.520	95	0.560	140	0.417	185	0.990	230	0.520	275	0.560	320	0.417
6	0.993	51	0.506	96	0.562	141	0.423	186	0.993	231	0.506	276	0.562	321	0.423
7	0.996	52	0.493	97	0.563	142	0.430	187	0.996	232	0.493	277	0.563	322	0.430
8	0.998	53	0.480	98	0.565	143	0.438	188	0.998	233	0.480	278	0.565	323	0.438
9	1.000	54	0.468	99	0.565	144	0.447	189	1.000	234	0.468	279	0.565	324	0.447
10	1.000	55	0.457	100	0.566	145	0.457	190	1.000	235	0.457	280	0.566	325	0.457
11	1.000	56	0.447	101	0.565	146	0.468	191	1.000	236	0.447	281	0.565	326	0.468
12	0.998	57	0.438	102	0.565	147	0.480	192	0.998	237	0.438	282	0.565	327	0.480
13	0.996	58	0.430	103	0.563	148	0.493	193	0.996	238	0.430	283	0.563	328	0.493
14	0.993	59	0.423	104	0.562	149	0.506	194	0.993	239	0.423	284	0.562	329	0.506
15	0.990	60	0.417	105	0.560	150	0.520	195	0.990	240	0.417	285	0.560	330	0.520
16	0.985	61	0.413	106	0.557	151	0.535	196	0.985	241	0.413	286	0.557	331	0.535
17	0.980	62	0.409	107	0.554	152	0.550	197	0.980	242	0.409	287	0.554	332	0.550
18	0.973	63	0.407	108	0.551	153	0.566	198	0.973	243	0.407	288	0.551	333	0.566
19	0.966	64	0.406	109	0.547	154	0.582	199	0.966	244	0.406	289	0.547	334	0.582
20	0.959	65	0.405	110	0.542	155	0.599	200	0.959	245	0.405	290	0.542	335	0.599
21	0.950	66	0.406	111	0.538	156	0.615	201	0.950	246	0.406	291	0.538	336	0.615
22	0.941	67	0.408	112	0.533	157	0.632	202	0.941	247	0.408	292	0.533	337	0.632
23	0.931	68	0.411	113	0.527	158	0.649	203	0.931	248	0.411	293	0.527	338	0.649
24	0.921	69	0.414	114	0.522	159	0.666	204	0.921	249	0.414	294	0.522	339	0.666
25	0.909	70	0.418	115	0.515	160	0.683	205	0.909	250	0.418	295	0.515	340	0.683
26	0.898	71	0.423	116	0.509	161	0.700	206	0.898	251	0.423	296	0.509	341	0.700
27	0.885	72	0.428	117	0.503	162	0.717	207	0.885	252	0.428	297	0.503	342	0.717
28	0.872	73	0.434	118	0.496	163	0.734	208	0.872	253	0.434	298	0.496	343	0.734
29	0.858	74	0.440	119	0.489	164	0.751	209	0.858	254	0.440	299	0.489	344	0.751
30	0.844	75	0.447	120	0.482	165	0.767	210	0.844	255	0.447	300	0.482	345	0.767
31	0.830	76	0.454	121	0.475	166	0.783	211	0.830	256	0.454	301	0.475	346	0.783
32	0.815	77	0.461	122	0.468	167	0.799	212	0.815	257	0.461	302	0.468	347	0.799
33	0.799	78	0.468	123	0.461	168	0.815	213	0.799	258	0.468	303	0.461	348	0.815
34	0.783	79	0.475	124	0.454	169	0.830	214	0.783	259	0.475	304	0.454	349	0.830
35	0.767	80	0.482	125	0.447	170	0.844	215	0.767	260	0.482	305	0.447	350	0.844
36	0.751	81	0.489	126	0.440	171	0.858	216	0.751	261	0.489	306	0.440	351	0.858
37	0.734	82	0.496	127	0.434	172	0.872	217	0.734	262	0.496	307	0.434	352	0.872
38	0.717	83	0.503	128	0.428	173	0.885	218	0.717	263	0.503	308	0.428	353	0.885
39	0.700	84	0.509	129	0.423	174	0.898	219	0.700	264	0.509	309	0.423	354	0.898
40	0.683	85	0.515	130	0.418	175	0.909	220	0.683	265	0.515	310	0.418	355	0.909
41	0.666	86	0.522	131	0.414	176	0.921	221	0.666	266	0.522	311	0.414	356	0.921
42	0.649	87	0.527	132	0.411	177	0.931	222	0.649	267	0.527	312	0.411	357	0.931
43	0.632	88	0.533	133	0.408	178	0.941	223	0.632	268	0.533	313	0.408	358	0.941
44	0.615	89	0.538	134	0.406	179	0.950	224	0.615	269	0.538	314	0.406	359	0.950

Remarks:



Date

14 Sep 2002

Call Letters

Channel 26

Location

MIAMI FL

Customer

Antenna Type

TFU-18DSC P230

ELEVATION PATTERN

RMS Gain at Main Lobe

15.0 (11.76 dB)

Beam Tilt

0.75 Degrees

RMS Gain at Horizontal

13.0 (11.14 dB)

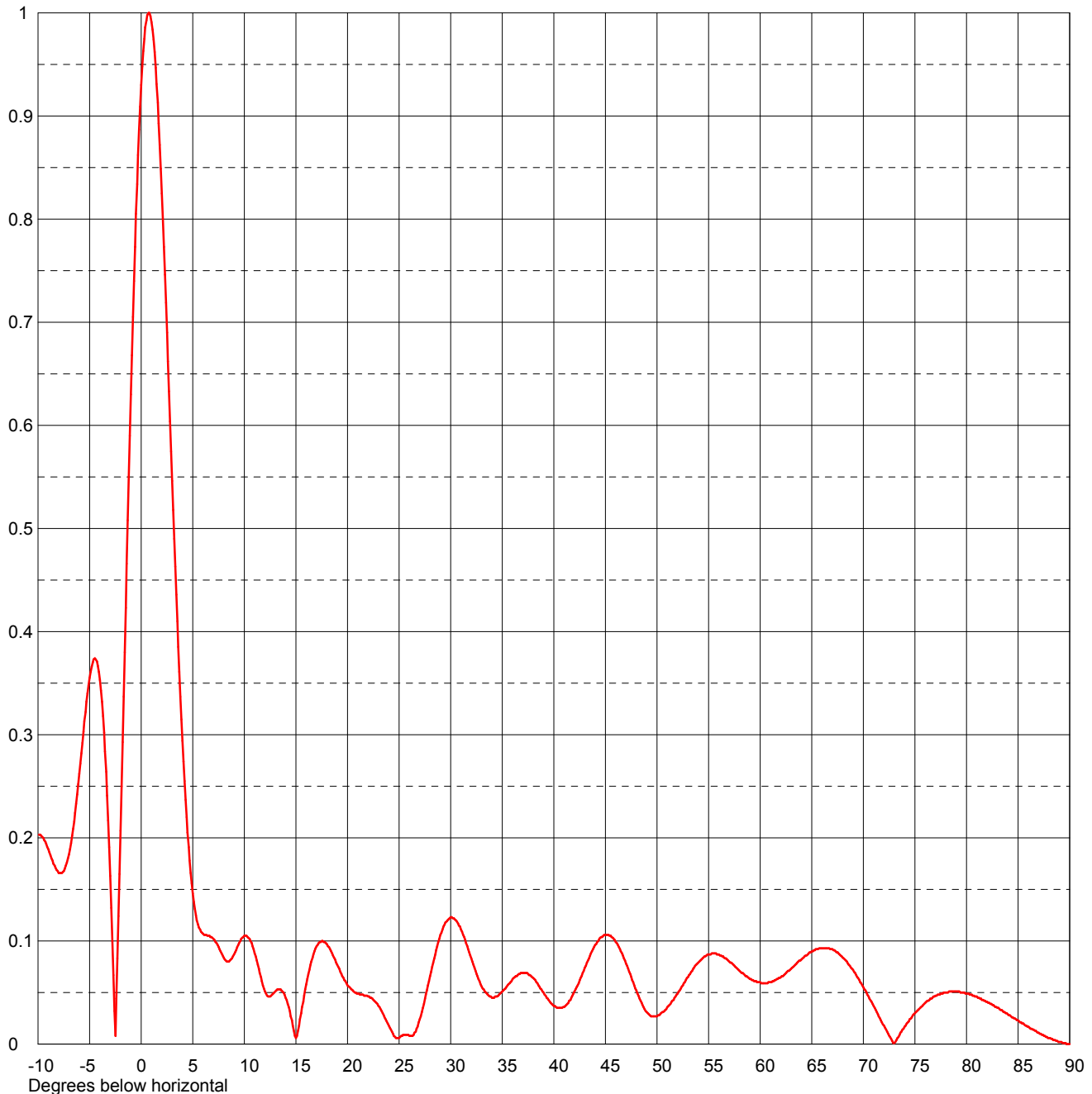
Frequency

545.00 MHz

Calculated / Measured

Calculated

Drawing #

18Q150075-90

Remarks:



Date

14 Sep 2002

Call Letters

Channel 26

Location

MIAMI FL

Customer

Antenna Type

TFU-18DSC P230

ELEVATION PATTERN

RMS Gain at Main Lobe

15.0 (11.76 dB)

Beam Tilt

0.75 Degrees

RMS Gain at Horizontal

13.0 (11.14 dB)

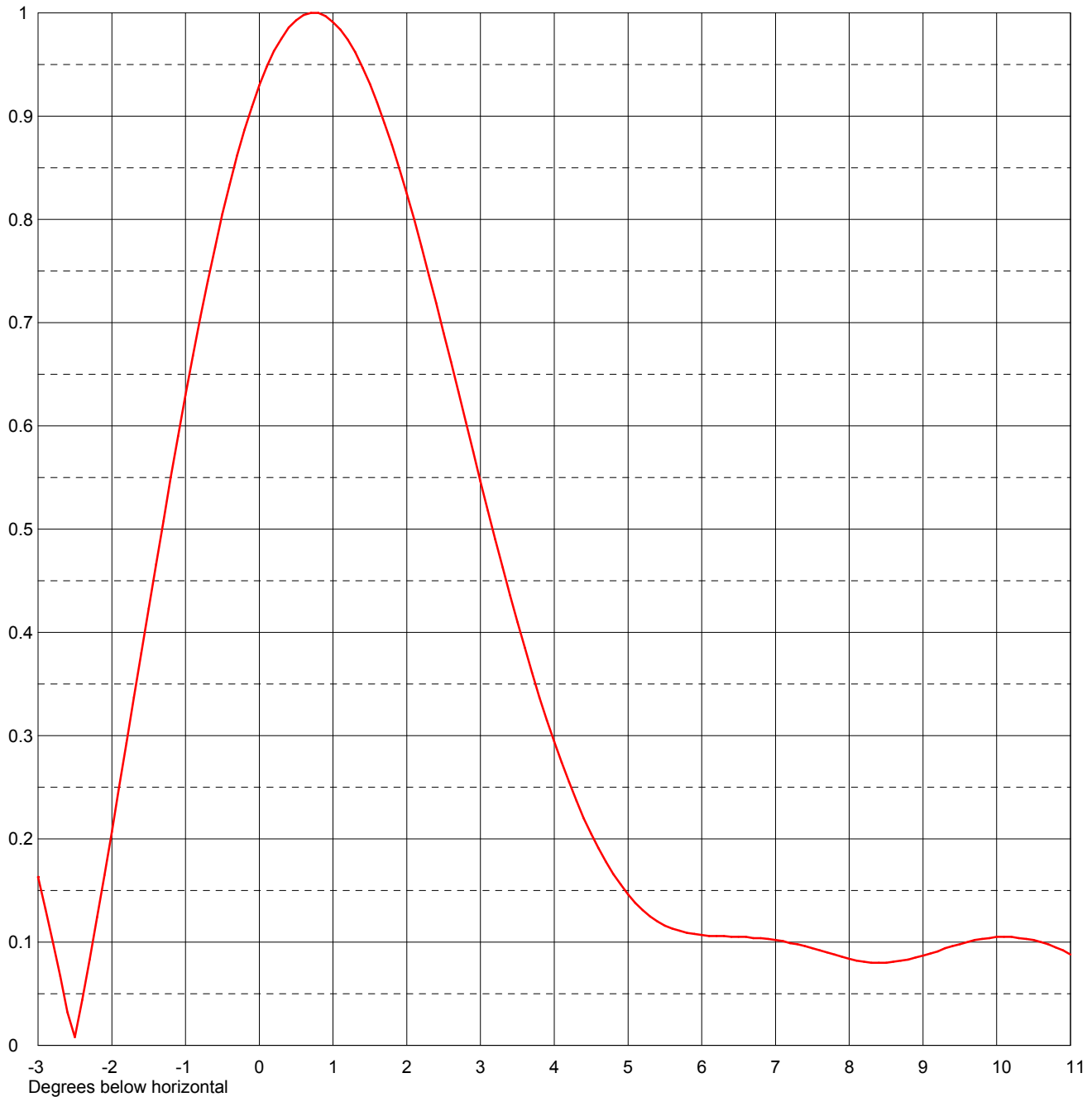
Frequency

545.00 MHz

Calculated / Measured

Calculated

Drawing #

18Q150075

Remarks:



Date **14 Sep 2002**
 Call Letters
 Location **MIAMI FL**
 Customer
 Antenna Type **TFU-18DSC P230**

Channel **26**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **18Q150075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.202	2.4	0.719	10.6	0.100	30.5	0.120	51.0	0.036	71.5	0.027
-9.5	0.200	2.6	0.662	10.8	0.095	31.0	0.111	51.5	0.042	72.0	0.018
-9.0	0.189	2.8	0.604	11.0	0.088	31.5	0.098	52.0	0.049	72.5	0.008
-8.5	0.175	3.0	0.546	11.5	0.069	32.0	0.083	52.5	0.057	73.0	0.001
-8.0	0.166	3.2	0.490	12.0	0.051	32.5	0.068	53.0	0.065	73.5	0.009
-7.5	0.168	3.4	0.436	12.5	0.046	33.0	0.056	53.5	0.073	74.0	0.017
-7.0	0.184	3.6	0.385	13.0	0.051	33.5	0.049	54.0	0.079	74.5	0.024
-6.5	0.216	3.8	0.337	13.5	0.053	34.0	0.045	54.5	0.084	75.0	0.030
-6.0	0.262	4.0	0.294	14.0	0.045	34.5	0.046	55.0	0.087	75.5	0.035
-5.5	0.313	4.2	0.255	14.5	0.027	35.0	0.051	55.5	0.088	76.0	0.040
-5.0	0.355	4.4	0.220	15.0	0.006	35.5	0.057	56.0	0.087	76.5	0.044
-4.5	0.374	4.6	0.191	15.5	0.030	36.0	0.063	56.5	0.084	77.0	0.047
-4.0	0.353	4.8	0.166	16.0	0.058	36.5	0.067	57.0	0.080	77.5	0.049
-3.5	0.284	5.0	0.146	16.5	0.080	37.0	0.069	57.5	0.076	78.0	0.050
-3.0	0.163	5.2	0.131	17.0	0.095	37.5	0.068	58.0	0.071	78.5	0.051
-2.8	0.100	5.4	0.120	17.5	0.100	38.0	0.064	58.5	0.067	79.0	0.051
-2.6	0.032	5.6	0.113	18.0	0.097	38.5	0.057	59.0	0.063	79.5	0.050
-2.4	0.044	5.8	0.109	18.5	0.088	39.0	0.050	59.5	0.061	80.0	0.049
-2.2	0.124	6.0	0.107	19.0	0.077	39.5	0.043	60.0	0.060	80.5	0.048
-2.0	0.207	6.2	0.106	19.5	0.066	40.0	0.037	60.5	0.059	81.0	0.046
-1.8	0.293	6.4	0.105	20.0	0.057	40.5	0.035	61.0	0.060	81.5	0.043
-1.6	0.380	6.6	0.105	20.5	0.052	41.0	0.036	61.5	0.062	82.0	0.041
-1.4	0.466	6.8	0.104	21.0	0.049	41.5	0.042	62.0	0.065	82.5	0.038
-1.2	0.550	7.0	0.102	21.5	0.048	42.0	0.051	62.5	0.069	83.0	0.035
-1.0	0.630	7.2	0.099	22.0	0.046	42.5	0.062	63.0	0.073	83.5	0.032
-0.8	0.705	7.4	0.096	22.5	0.043	43.0	0.074	63.5	0.078	84.0	0.029
-0.6	0.773	7.6	0.092	23.0	0.037	43.5	0.086	64.0	0.082	84.5	0.026
-0.4	0.834	7.8	0.088	23.5	0.028	44.0	0.096	64.5	0.086	85.0	0.023
-0.2	0.887	8.0	0.084	24.0	0.018	44.5	0.103	65.0	0.090	85.5	0.020
0.0	0.930	8.2	0.081	24.5	0.008	45.0	0.106	65.5	0.092	86.0	0.017
0.2	0.963	8.4	0.080	25.0	0.006	45.5	0.105	66.0	0.093	86.5	0.014
0.4	0.986	8.6	0.081	25.5	0.009	46.0	0.099	66.5	0.093	87.0	0.011
0.6	0.998	8.8	0.083	26.0	0.008	46.5	0.090	67.0	0.092	87.5	0.008
0.8	1.000	9.0	0.087	26.5	0.011	47.0	0.078	67.5	0.089	88.0	0.006
1.0	0.991	9.2	0.091	27.0	0.024	47.5	0.065	68.0	0.084	88.5	0.004
1.2	0.974	9.4	0.096	27.5	0.044	48.0	0.052	68.5	0.078	89.0	0.002
1.4	0.947	9.6	0.100	28.0	0.066	48.5	0.040	69.0	0.072	89.5	0.001
1.6	0.913	9.8	0.103	28.5	0.087	49.0	0.031	69.5	0.064	90.0	0.000
1.8	0.872	10.0	0.105	29.0	0.106	49.5	0.027	70.0	0.055		
2.0	0.825	10.2	0.105	29.5	0.118	50.0	0.027	70.5	0.046		
2.2	0.773	10.4	0.103	30.0	0.123	50.5	0.031	71.0	0.037		

Remarks: