

KTAZ Maximization application**EXHIBIT 42**
27 July, 2008**TABULATION OF AZIMUTH RADIATION PATTERN: DIELECTRIC TFU-16JSC C165 SP****Major lobe axis of symmetry: 50 degrees true****Electrical Beam Tilt: 1.25 degrees****Mechanical Beam Tilt: None****Calculated Maximum Horizontal Plane Azimuth Pattern Gain:****1.65 (2.17 dB)****Maximum Horizontal Plane Effective Radiated Power:****550 kW (27.40 dBk)**

Angle	Field	Peak of Beam	
		ERP (dBk)	ERP (kW)
0	0.980	27.23	528.2
10	0.960	27.05	506.9
20	0.940	26.87	486.0
30	0.940	26.87	486.0
40	0.930	26.77	475.7
50	0.930	26.77	475.7
60	0.930	26.77	475.7
70	0.940	26.87	486.0
80	0.940	26.87	486.0
90	0.960	27.05	506.9
100	0.980	27.23	528.2
110	1.000	27.40	550.0
120	1.000	27.40	550.0
130	0.980	27.23	528.2
140	0.920	26.68	465.5
150	0.840	25.89	388.1
160	0.740	24.79	301.2
170	0.620	23.25	211.4
180	0.490	21.21	132.1
190	0.380	19.00	79.4
200	0.300	16.95	49.5
210	0.260	15.70	37.2
220	0.260	15.70	37.2
230	0.260	15.70	37.2
240	0.260	15.70	37.2
250	0.260	15.70	37.2
260	0.300	16.95	49.5
270	0.380	19.00	79.4
280	0.490	21.21	132.1
290	0.620	23.25	211.4
300	0.740	24.79	301.2
310	0.840	25.89	388.1
320	0.920	26.68	465.5
330	0.980	27.23	528.2
340	1.000	27.40	550.0
350	1.000	27.40	550.0

MAXIMA - Peak of Beam

Angle	Field	ERP (dBk)	ERP (kW)
115	1.000	27.4	550.00
345	1.000	27.4	550.00

MINIMA - Peak of Beam

Angle	Field	ERP (dBk)	ERP (kW)
50	0.930	26.77	475.7
230	0.260	15.70	37.2

Prepared by Doug Lung, July 27, 2008



Date
Call Letters
Location
Customer
Antenna Type

25 Jul 2008
KTAZ
Phoenix, AZ
KTAZ
Slotted coaxial

Channel

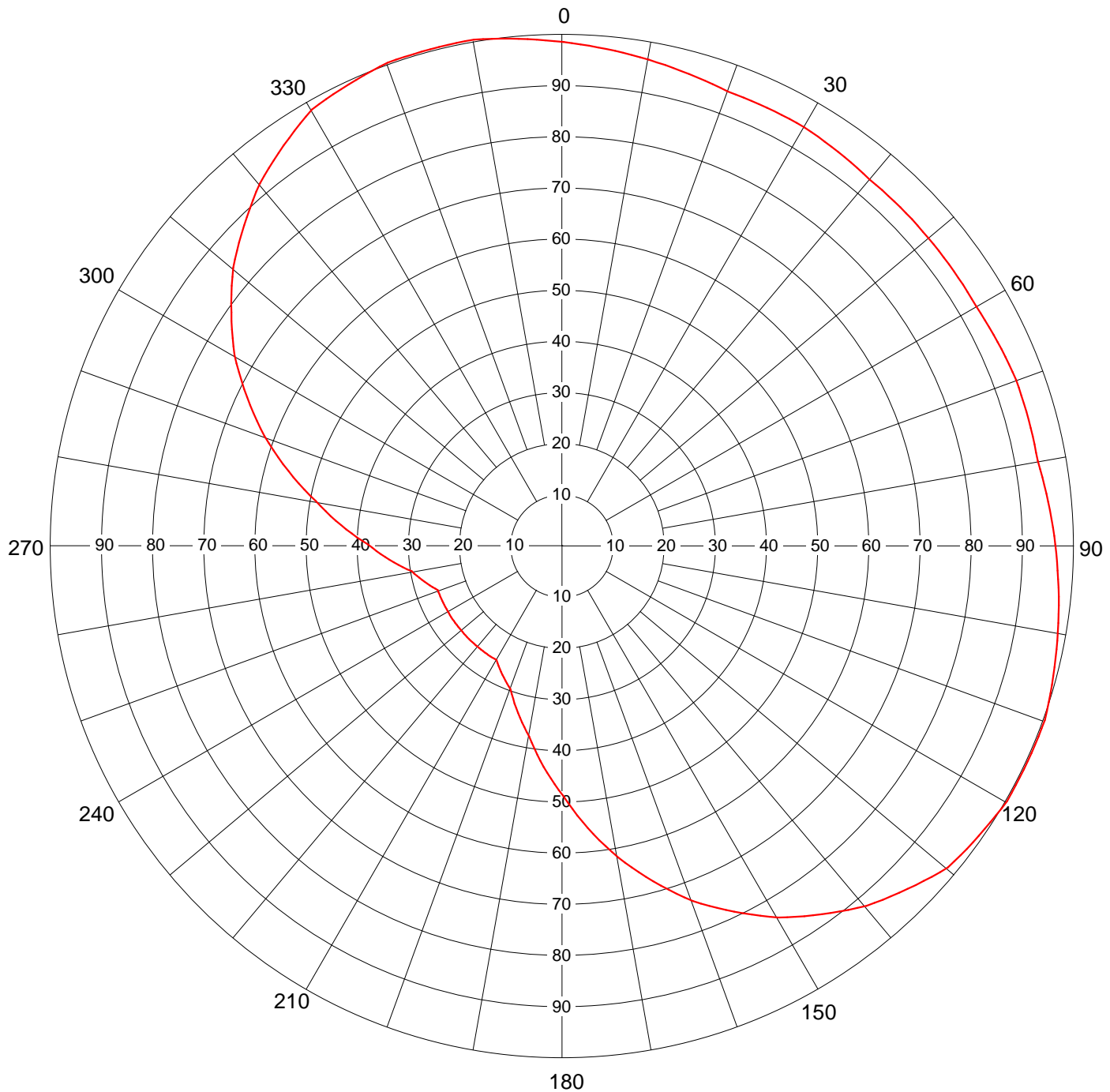
AZIMUTH PATTERN

Gain
Calculated / Measured

1.65 (2.17 dB)
Calculated

Frequency
Drawing #

623 MHz
TFU-C165



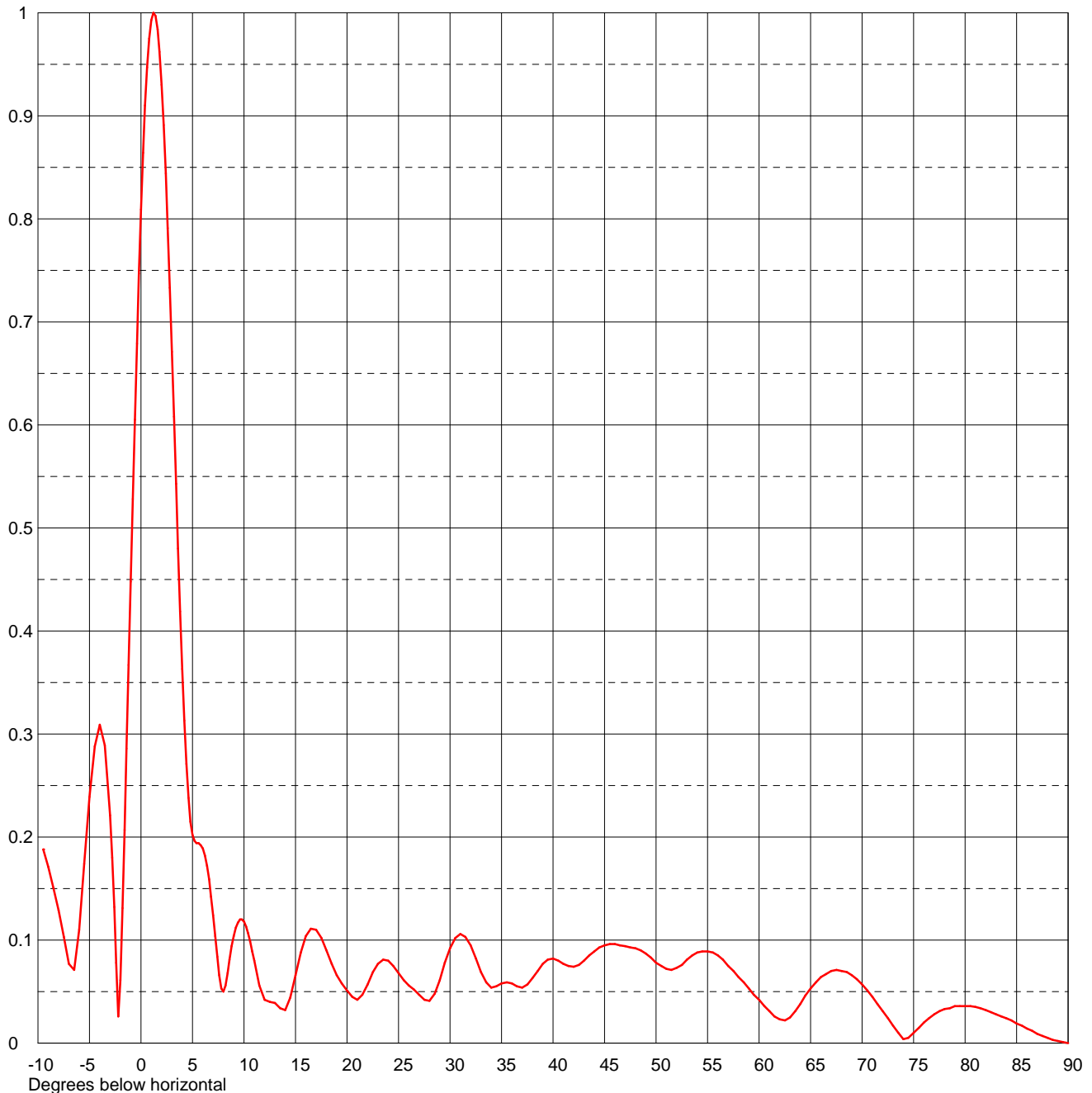
Remarks:



Date	25 Jul 2008	
Call Letters	KTAZ	Channel
Location	Phoenix, AZ	
Customer		
Antenna Type	Slotted coaxial	

ELEVATION PATTERN

RMS Gain at Main Lobe	15.0 (11.76 dB)	Beam Tilt	1.25 Degrees
RMS Gain at Horizontal	9.8 (9.91 dB)	Frequency	MHz
Calculated / Measured	Calculated	Drawing #	16Z150125-90



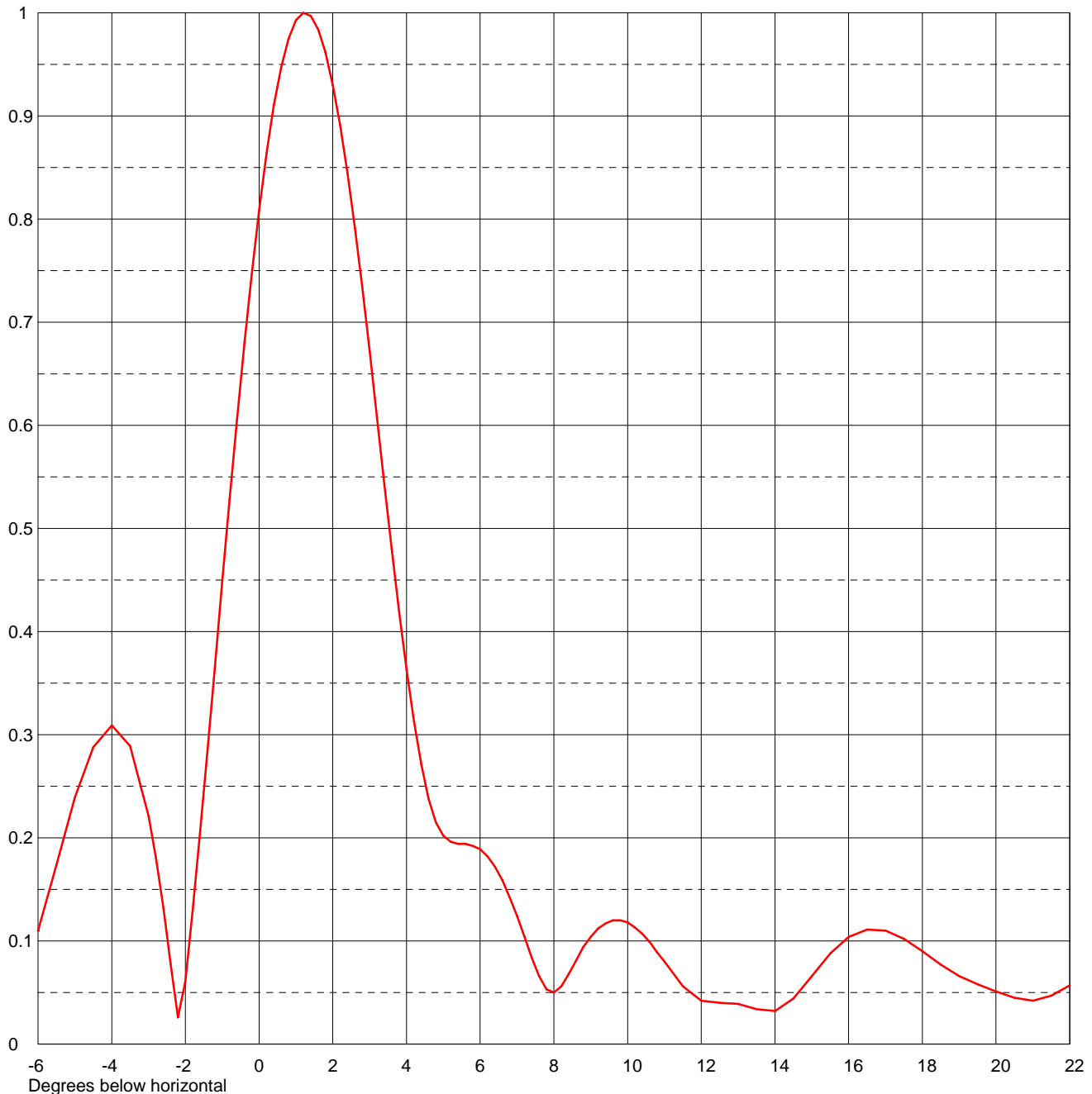
Remarks:



Date	25 Jul 2008	
Call Letters	KTAZ	Channel
Location	Phoenix, AZ	
Customer		
Antenna Type	Slotted coaxial	

ELEVATION PATTERN

RMS Gain at Main Lobe	15.0 (11.76 dB)	Beam Tilt	1.25 Degrees
RMS Gain at Horizontal	9.8 (9.91 dB)	Frequency	MHz
Calculated / Measured	Calculated	Drawing #	16Z150125



Remarks:



Date **25 Jul 2008**
Call Letters **KTAZ** Channel
Location **Phoenix, AZ**
Customer
Antenna Type **Slotted coaxial**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # **16Z150125**

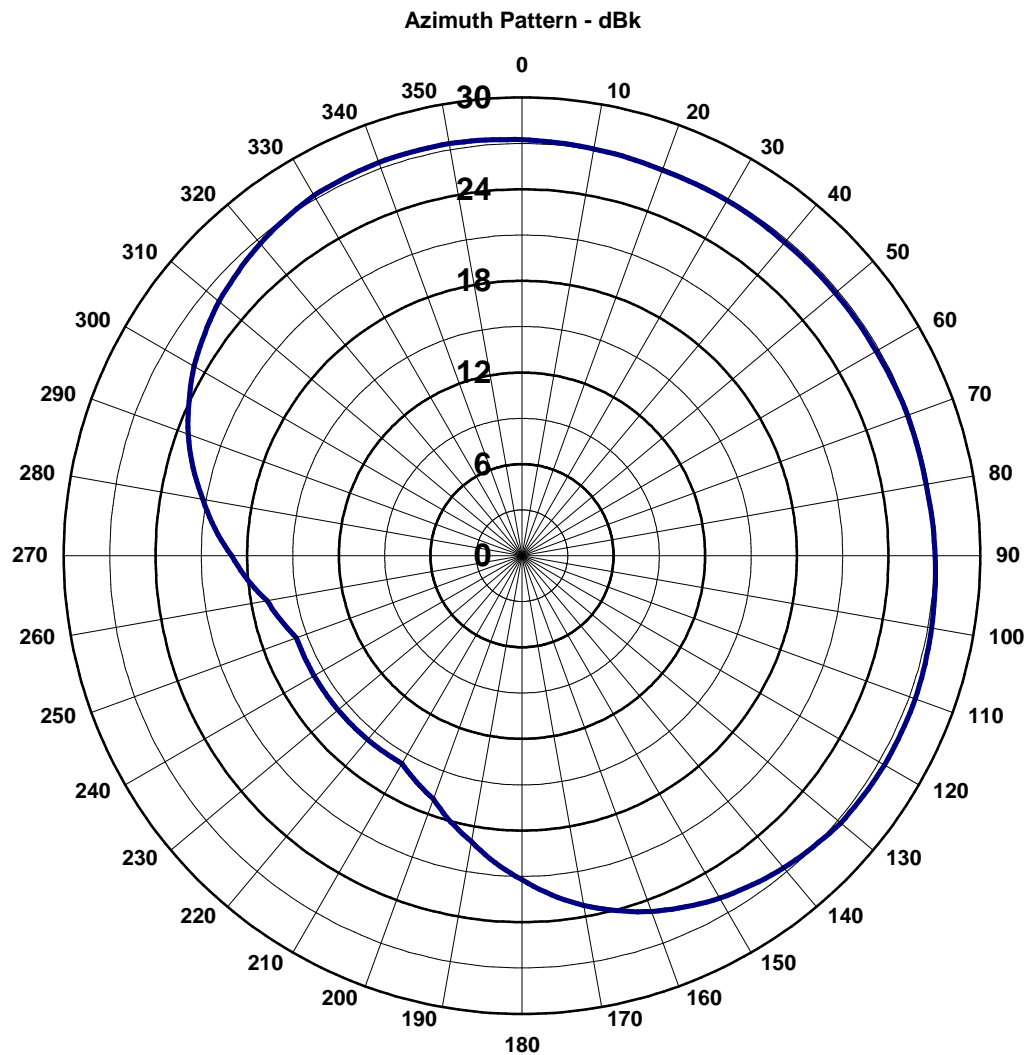
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.199	2.4	0.844	10.6	0.099	30.5	0.102	51.0	0.072	71.5	0.038
-9.5	0.188	2.6	0.791	10.8	0.089	31.0	0.106	51.5	0.071	72.0	0.031
-9.0	0.171	2.8	0.733	11.0	0.080	31.5	0.103	52.0	0.073	72.5	0.024
-8.5	0.151	3.0	0.671	11.5	0.056	32.0	0.095	52.5	0.076	73.0	0.017
-8.0	0.129	3.2	0.608	12.0	0.042	32.5	0.082	53.0	0.081	73.5	0.010
-7.5	0.103	3.4	0.543	12.5	0.040	33.0	0.069	53.5	0.085	74.0	0.004
-7.0	0.077	3.6	0.480	13.0	0.039	33.5	0.059	54.0	0.088	74.5	0.005
-6.5	0.071	3.8	0.419	13.5	0.034	34.0	0.054	54.5	0.089	75.0	0.010
-6.0	0.110	4.0	0.363	14.0	0.032	34.5	0.055	55.0	0.089	75.5	0.015
-5.5	0.174	4.2	0.313	14.5	0.044	35.0	0.058	55.5	0.088	76.0	0.020
-5.0	0.239	4.4	0.271	15.0	0.066	35.5	0.059	56.0	0.085	76.5	0.024
-4.5	0.288	4.6	0.238	15.5	0.088	36.0	0.058	56.5	0.081	77.0	0.028
-4.0	0.309	4.8	0.215	16.0	0.104	36.5	0.055	57.0	0.075	77.5	0.031
-3.5	0.289	5.0	0.202	16.5	0.111	37.0	0.054	57.5	0.070	78.0	0.033
-3.0	0.221	5.2	0.196	17.0	0.110	37.5	0.057	58.0	0.064	78.5	0.034
-2.8	0.180	5.4	0.194	17.5	0.102	38.0	0.063	58.5	0.059	79.0	0.036
-2.6	0.132	5.6	0.194	18.0	0.090	38.5	0.070	59.0	0.053	79.5	0.036
-2.4	0.078	5.8	0.192	18.5	0.077	39.0	0.077	59.5	0.047	80.0	0.036
-2.2	0.026	6.0	0.189	19.0	0.066	39.5	0.081	60.0	0.042	80.5	0.036
-2.0	0.061	6.2	0.182	19.5	0.058	40.0	0.082	60.5	0.036	81.0	0.035
-1.8	0.131	6.4	0.172	20.0	0.051	40.5	0.080	61.0	0.031	81.5	0.034
-1.6	0.207	6.6	0.159	20.5	0.045	41.0	0.077	61.5	0.026	82.0	0.032
-1.4	0.286	6.8	0.142	21.0	0.042	41.5	0.075	62.0	0.023	82.5	0.030
-1.2	0.367	7.0	0.124	21.5	0.047	42.0	0.074	62.5	0.022	83.0	0.028
-1.0	0.448	7.2	0.104	22.0	0.057	42.5	0.076	63.0	0.025	83.5	0.026
-0.8	0.528	7.4	0.084	22.5	0.069	43.0	0.080	63.5	0.031	84.0	0.024
-0.6	0.605	7.6	0.066	23.0	0.077	43.5	0.085	64.0	0.038	84.5	0.022
-0.4	0.679	7.8	0.053	23.5	0.081	44.0	0.089	64.5	0.046	85.0	0.019
-0.2	0.747	8.0	0.050	24.0	0.080	44.5	0.093	65.0	0.053	85.5	0.017
0.0	0.809	8.2	0.056	24.5	0.075	45.0	0.095	65.5	0.059	86.0	0.014
0.2	0.864	8.4	0.068	25.0	0.068	45.5	0.096	66.0	0.064	86.5	0.012
0.4	0.910	8.6	0.081	25.5	0.061	46.0	0.096	66.5	0.067	87.0	0.009
0.6	0.947	8.8	0.094	26.0	0.056	46.5	0.095	67.0	0.070	87.5	0.007
0.8	0.975	9.0	0.104	26.5	0.052	47.0	0.094	67.5	0.071	88.0	0.005
1.0	0.993	9.2	0.112	27.0	0.047	47.5	0.093	68.0	0.070	88.5	0.003
1.2	1.000	9.4	0.117	27.5	0.042	48.0	0.092	68.5	0.069	89.0	0.002
1.4	0.997	9.6	0.120	28.0	0.041	48.5	0.090	69.0	0.066	89.5	0.001
1.6	0.984	9.8	0.120	28.5	0.048	49.0	0.087	69.5	0.062	90.0	0.000
1.8	0.962	10.0	0.118	29.0	0.061	49.5	0.083	70.0	0.057		
2.0	0.930	10.2	0.113	29.5	0.078	50.0	0.078	70.5	0.051		
2.2	0.891	10.4	0.107	30.0	0.092	50.5	0.075	71.0	0.045		

Remarks:

KTAZ-DT Maximization Application

EXHIBIT 42
July 27, 2008

MAIN BEAM AZIMUTH PATTERN (dBk) :	Dielectric TFU-16JSC C165 SP
Electrical Beam Tilt: 1.25 degrees	Mechanical beam tilt: None
Calculated Maximum Azimuth Pattern Gain (peak):	1.65 (2.17 dBd)
Maximum Horizontal Peak of Beam Effective Radiated Power (ERP):	550 kW
Maximum Horizontal Peak of Beam Effective Radiated Power (ERP):	27.40 dBk



Prepared by Doug Lung

KTAZ-DT Maximization Application

EXHIBIT 42
July 27, 2008

ELEVATION PATTERN (dBk) :

Dielectric TFU-16JSC C165 SP

Electrical Beam Tilt: 1.25 degrees

Mechanical beam tilt: None

Calculated Maximum Elevation Gain: 15.0

11.76 dBd

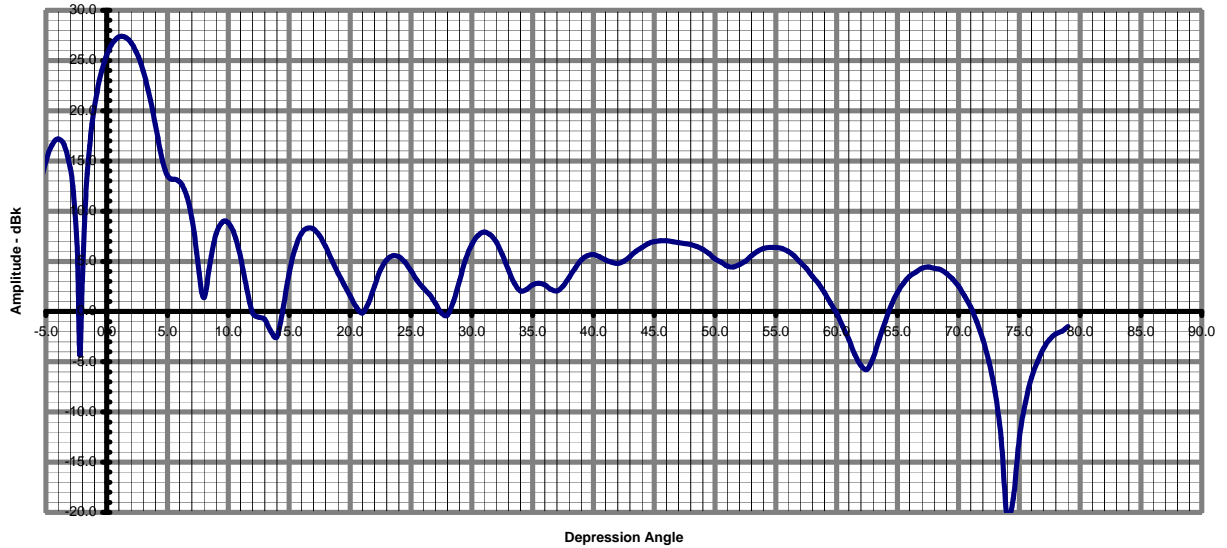
Calculated Horizontal Plane Elevation Gain: 9.8

9.91 dBd

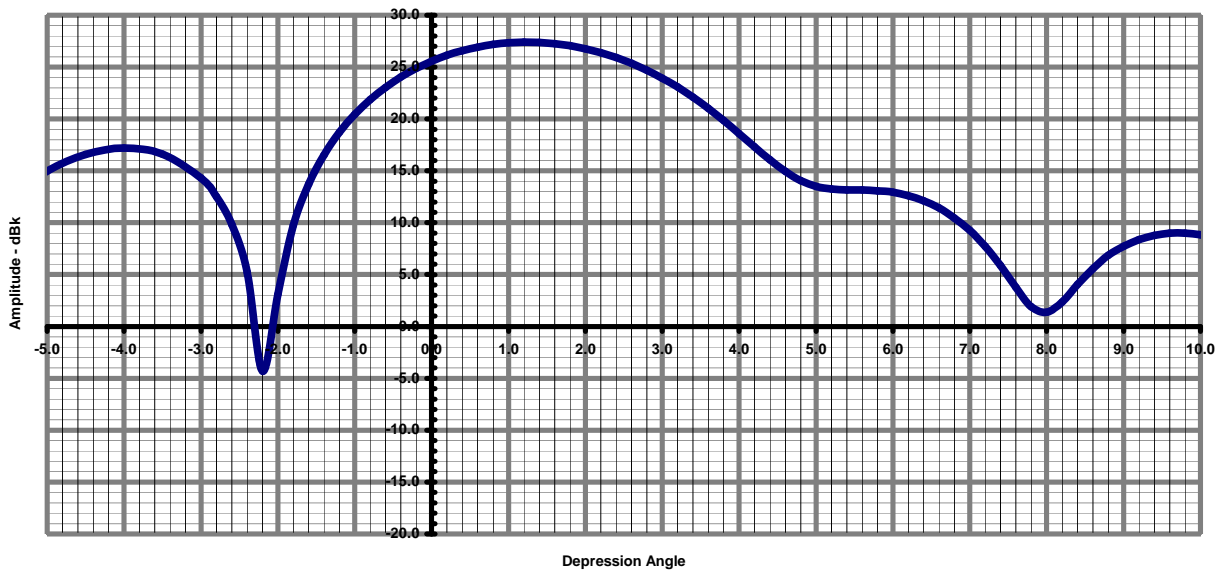
Maximum Effective Radiated Power (ERP): 550 kW

27.40 dBk

Elevation Pattern - dBk



Elevation Pattern - dBk



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