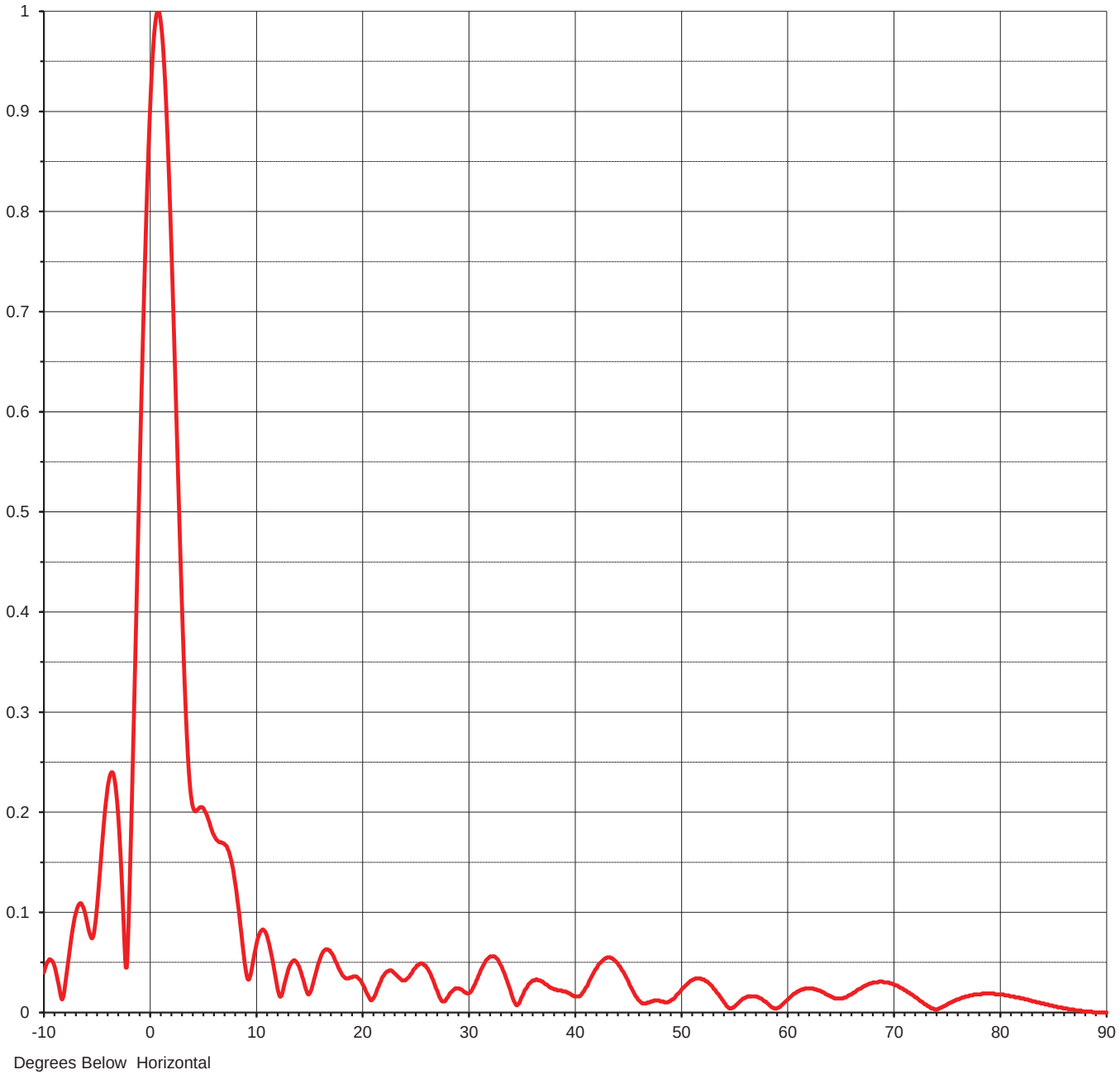
Dielectric

Proposal Number			
Date	**20-May-14**		
Call Letters	**KPXE**	Channel	**30**
Location	**Kansas City, MO**		
Customer	**ION**		
Antenna Type	**TFU-20JTH-R O4 (SP)**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**20.00**	**(13.01 dB)**	
RMS Gain at Horizontal	**16.40**	**(12.15 dB)**	
Calculated / Measured	**Calculated**		
Beam Tilt	**0.75 deg**		
Frequency	**569.00 MHz**		
Drawing #	**20Z200075-90**		



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Dielectric

Proposal Number			
Date	**20-May-14**		
Call Letters	**KPXE**	Channel	**30**
Location	**Kansas City, MO**		
Customer	**ION**		
Antenna Type	**TFU-20JTH-R O4 (SP)**		

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **20Z200075-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.040	2.4	0.619	10.6	0.082	30.5	0.025	51.0	0.032	71.5	0.019
-9.5	0.053	2.6	0.545	10.8	0.082	31.0	0.037	51.5	0.034	72.0	0.015
-9.0	0.046	2.8	0.472	11.0	0.079	31.5	0.048	52.0	0.033	72.5	0.011
-8.5	0.021	3.0	0.403	11.5	0.058	32.0	0.055	52.5	0.031	73.0	0.008
-8.0	0.028	3.2	0.341	12.0	0.029	32.5	0.056	53.0	0.026	73.5	0.004
-7.5	0.068	3.4	0.288	12.5	0.018	33.0	0.049	53.5	0.019	74.0	0.003
-7.0	0.099	3.6	0.247	13.0	0.039	33.5	0.037	54.0	0.012	74.5	0.005
-6.5	0.109	3.8	0.220	13.5	0.051	34.0	0.022	54.5	0.005	75.0	0.008
-6.0	0.093	4.0	0.206	14.0	0.048	34.5	0.008	55.0	0.005	75.5	0.011
-5.5	0.074	4.2	0.201	14.5	0.033	35.0	0.014	55.5	0.010	76.0	0.013
-5.0	0.106	4.4	0.202	15.0	0.018	35.5	0.024	56.0	0.014	76.5	0.015
-4.5	0.171	4.6	0.204	15.5	0.032	36.0	0.031	56.5	0.016	77.0	0.016
-4.0	0.225	4.8	0.205	16.0	0.051	36.5	0.033	57.0	0.016	77.5	0.018
-3.5	0.239	5.0	0.204	16.5	0.062	37.0	0.031	57.5	0.014	78.0	0.018
-3.0	0.195	5.2	0.200	17.0	0.062	37.5	0.027	58.0	0.011	78.5	0.019
-2.8	0.159	5.4	0.195	17.5	0.052	38.0	0.024	58.5	0.006	79.0	0.019
-2.6	0.114	5.6	0.189	18.0	0.041	38.5	0.022	59.0	0.004	79.5	0.018
-2.4	0.064	5.8	0.182	18.5	0.034	39.0	0.021	59.5	0.007	80.0	0.018
-2.2	0.045	6.0	0.177	19.0	0.035	39.5	0.019	60.0	0.012	80.5	0.017
-2.0	0.102	6.2	0.173	19.5	0.036	40.0	0.016	60.5	0.017	81.0	0.016
-1.8	0.180	6.4	0.171	20.0	0.030	40.5	0.016	61.0	0.021	81.5	0.015
-1.6	0.266	6.6	0.170	20.5	0.019	41.0	0.023	61.5	0.023	82.0	0.014
-1.4	0.356	6.8	0.169	21.0	0.013	41.5	0.033	62.0	0.024	82.5	0.013
-1.2	0.447	7.0	0.168	21.5	0.024	42.0	0.043	62.5	0.024	83.0	0.011
-1.0	0.538	7.2	0.166	22.0	0.036	42.5	0.050	63.0	0.022	83.5	0.010
-0.8	0.625	7.4	0.161	22.5	0.041	43.0	0.054	63.5	0.020	84.0	0.009
-0.6	0.708	7.6	0.153	23.0	0.040	43.5	0.054	64.0	0.017	84.5	0.008
-0.4	0.783	7.8	0.143	23.5	0.035	44.0	0.050	64.5	0.014	85.0	0.006
-0.2	0.850	8.0	0.129	24.0	0.032	44.5	0.042	65.0	0.014	85.5	0.005
0.0	0.905	8.2	0.113	24.5	0.036	45.0	0.033	65.5	0.015	86.0	0.004
0.2	0.949	8.4	0.096	25.0	0.044	45.5	0.022	66.0	0.018	86.5	0.003
0.4	0.980	8.6	0.077	25.5	0.049	46.0	0.013	66.5	0.022	87.0	0.002
0.6	0.997	8.8	0.058	26.0	0.047	46.5	0.009	67.0	0.025	87.5	0.002
0.8	1.000	9.0	0.042	26.5	0.038	47.0	0.010	67.5	0.028	88.0	0.001
1.0	0.989	9.2	0.033	27.0	0.024	47.5	0.012	68.0	0.030	88.5	0.001
1.2	0.966	9.4	0.036	27.5	0.012	48.0	0.012	68.5	0.030	89.0	0.000
1.4	0.930	9.6	0.046	28.0	0.014	48.5	0.010	69.0	0.030	89.5	0.000
1.6	0.883	9.8	0.052	28.5	0.021	49.0	0.011	69.5	0.030	90.0	0.000
1.8	0.826	10.0	0.063	29.0	0.024	49.5	0.015	70.0	0.028		
2.0	0.762	10.2	0.073	29.5	0.022	50.0	0.021	70.5	0.025		
2.2	0.692	10.4	0.079	30.0	0.019	50.5	0.027	71.0	0.022		

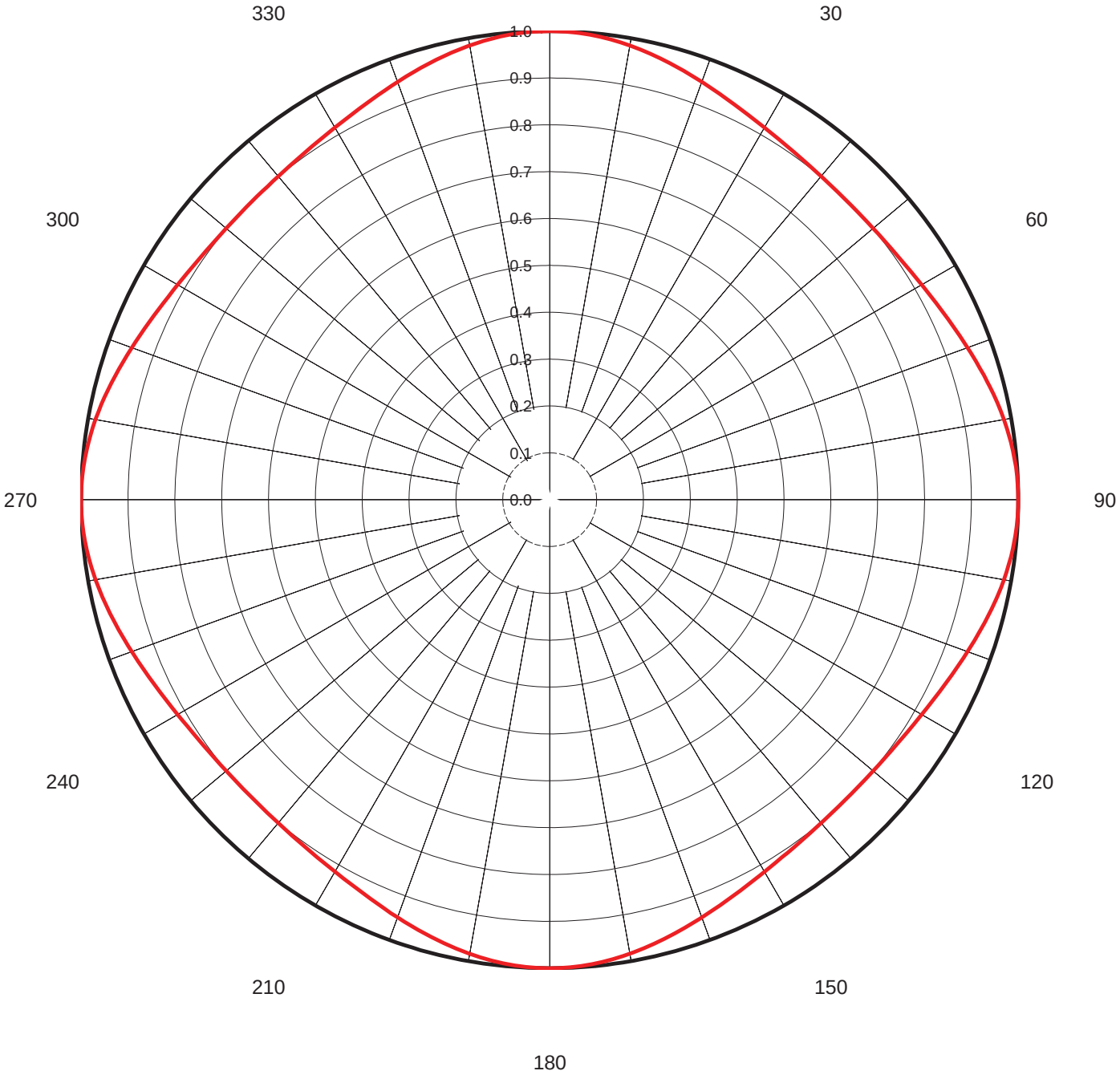
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Dielectric

Proposal Number			
Date	**20-May-14**		
Call Letters	**KPXE**	Channel	**30**
Location	**Kansas City, MO**		
Customer	**ION**		
Antenna Type	**TFU-20JTH-R O4 (SP)**		

AZIMUTH PATTERN

Gain	**1.13**	**(0.53 dB)**	0	Frequency	**569.00 MHz**
Calculated / Measured	**Calculated**			Drawing #	**TFU-O4-D30**



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Dielectric

Proposal Number
Date **20-May-14**
Call Letters **KPXE** Channel **30**
Location **Kansas City, MO**
Customer **ION**
Antenna Type **TFU-20JTH-R O4 (SP)**

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing #: **TFU-O4-D30**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
0	1.000	45	0.899	90	1.000	135	0.899	180	1.000	225	0.899	270	1.000	315	0.899
1	1.000	46	0.899	91	1.000	136	0.899	181	1.000	226	0.899	271	1.000	316	0.899
2	0.999	47	0.899	92	0.999	137	0.899	182	0.999	227	0.899	272	0.999	317	0.899
3	0.998	48	0.900	93	0.998	138	0.900	183	0.998	228	0.900	273	0.998	318	0.900
4	0.997	49	0.900	94	0.997	139	0.900	184	0.997	229	0.900	274	0.997	319	0.900
5	0.996	50	0.901	95	0.996	140	0.901	185	0.996	230	0.901	275	0.996	320	0.901
6	0.994	51	0.902	96	0.994	141	0.902	186	0.994	231	0.902	276	0.994	321	0.902
7	0.992	52	0.903	97	0.992	142	0.903	187	0.992	232	0.903	277	0.992	322	0.903
8	0.990	53	0.904	98	0.990	143	0.904	188	0.990	233	0.904	278	0.990	323	0.904
9	0.987	54	0.905	99	0.987	144	0.905	189	0.987	234	0.905	279	0.987	324	0.905
10	0.984	55	0.907	100	0.984	145	0.907	190	0.984	235	0.907	280	0.984	325	0.907
11	0.981	56	0.908	101	0.981	146	0.908	191	0.981	236	0.908	281	0.981	326	0.908
12	0.978	57	0.910	102	0.978	147	0.910	192	0.978	237	0.910	282	0.978	327	0.910
13	0.975	58	0.912	103	0.975	148	0.912	193	0.975	238	0.912	283	0.975	328	0.912
14	0.971	59	0.914	104	0.971	149	0.914	194	0.971	239	0.914	284	0.971	329	0.914
15	0.968	60	0.917	105	0.968	150	0.917	195	0.968	240	0.917	285	0.968	330	0.917
16	0.964	61	0.919	106	0.964	151	0.919	196	0.964	241	0.919	286	0.964	331	0.919
17	0.960	62	0.922	107	0.960	152	0.922	197	0.960	242	0.922	287	0.960	332	0.922
18	0.956	63	0.925	108	0.956	153	0.925	198	0.956	243	0.925	288	0.956	333	0.925
19	0.953	64	0.928	109	0.953	154	0.928	199	0.953	244	0.928	289	0.953	334	0.928
20	0.949	65	0.931	110	0.949	155	0.931	200	0.949	245	0.931	290	0.949	335	0.931
21	0.945	66	0.934	111	0.945	156	0.934	201	0.945	246	0.935	291	0.945	336	0.934
22	0.942	67	0.938	112	0.942	157	0.938	202	0.942	247	0.938	292	0.942	337	0.938
23	0.938	68	0.942	113	0.938	158	0.942	203	0.938	248	0.942	293	0.938	338	0.942
24	0.934	69	0.945	114	0.935	159	0.945	204	0.934	249	0.945	294	0.934	339	0.945
25	0.931	70	0.949	115	0.931	160	0.949	205	0.931	250	0.949	295	0.931	340	0.949
26	0.928	71	0.953	116	0.928	161	0.953	206	0.928	251	0.953	296	0.928	341	0.953
27	0.925	72	0.956	117	0.925	162	0.956	207	0.925	252	0.956	297	0.925	342	0.956
28	0.922	73	0.960	118	0.922	163	0.960	208	0.922	253	0.960	298	0.922	343	0.960
29	0.919	74	0.964	119	0.919	164	0.964	209	0.919	254	0.964	299	0.919	344	0.964
30	0.917	75	0.968	120	0.917	165	0.968	210	0.917	255	0.968	300	0.917	345	0.968
31	0.914	76	0.971	121	0.914	166	0.971	211	0.914	256	0.971	301	0.914	346	0.971
32	0.912	77	0.975	122	0.912	167	0.975	212	0.912	257	0.975	302	0.912	347	0.975
33	0.910	78	0.978	123	0.910	168	0.978	213	0.910	258	0.978	303	0.910	348	0.978
34	0.908	79	0.981	124	0.908	169	0.981	214	0.908	259	0.981	304	0.908	349	0.981
35	0.907	80	0.984	125	0.907	170	0.984	215	0.907	260	0.984	305	0.907	350	0.984
36	0.905	81	0.987	126	0.905	171	0.987	216	0.905	261	0.987	306	0.905	351	0.987
37	0.904	82	0.990	127	0.904	172	0.990	217	0.904	262	0.990	307	0.904	352	0.990
38	0.903	83	0.992	128	0.903	173	0.992	218	0.903	263	0.992	308	0.903	353	0.992
39	0.902	84	0.994	129	0.902	174	0.994	219	0.902	264	0.994	309	0.902	354	0.994
40	0.901	85	0.996	130	0.901	175	0.996	220	0.901	265	0.996	310	0.901	355	0.996
41	0.900	86	0.997	131	0.900	176	0.997	221	0.900	266	0.997	311	0.900	356	0.997
42	0.900	87	0.998	132	0.900	177	0.998	222	0.900	267	0.998	312	0.900	357	0.998
43	0.899	88	0.999	133	0.899	178	0.999	223	0.899	268	0.999	313	0.899	358	0.999
44	0.899	89	1.000	134	0.899	179	1.000	224	0.899	269	1.000	314	0.899	359	1.000

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