

## AZIMUTH PATTERN Horizontal Polarization

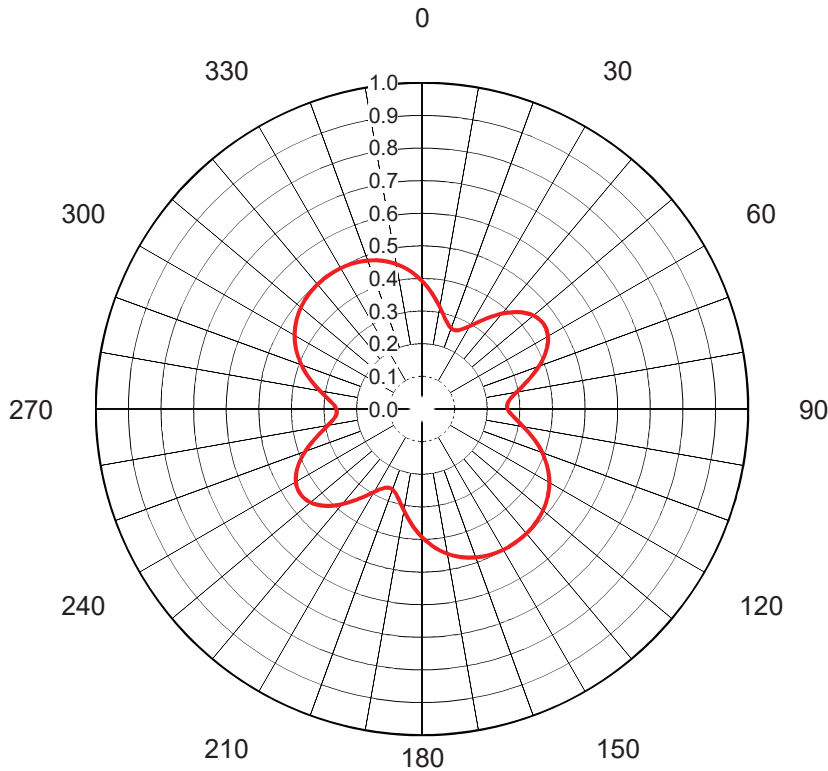
Proposal No. **C-70335**  
 Date **24-Feb-17**  
 Call Letters **KFPX 36**  
 Frequency **605 MHz**  
 Antenna Type **TFU-20JTH/VP-R P220**  
  
 Gain **2.24 (3.51dB)**  
**Calculated**  
  
 Drawing # **KFPX P230 H-POL**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.413	36	0.839	72	0.869	108	0.403	144	0.661	180	0.413	216	0.839	252	0.869	288	0.403	324	0.661
1	0.407	37	0.854	73	0.854	109	0.407	145	0.662	181	0.407	217	0.854	253	0.854	289	0.407	325	0.662
2	0.403	38	0.869	74	0.839	110	0.413	146	0.661	182	0.403	218	0.869	254	0.839	290	0.413	326	0.661
3	0.400	39	0.883	75	0.823	111	0.419	147	0.661	183	0.400	219	0.883	255	0.823	291	0.419	327	0.661
4	0.399	40	0.896	76	0.806	112	0.427	148	0.659	184	0.399	220	0.896	256	0.806	292	0.427	328	0.659
5	0.397	41	0.910	77	0.789	113	0.435	149	0.657	185	0.397	221	0.910	257	0.789	293	0.435	329	0.657
6	0.399	42	0.921	78	0.772	114	0.444	150	0.654	186	0.399	222	0.921	258	0.772	294	0.444	330	0.654
7	0.401	43	0.933	79	0.754	115	0.450	151	0.652	187	0.401	223	0.933	259	0.754	295	0.453	331	0.652
8	0.406	44	0.943	80	0.736	116	0.463	152	0.648	188	0.406	224	0.943	260	0.736	296	0.463	332	0.648
9	0.410	45	0.953	81	0.718	117	0.472	153	0.644	189	0.410	225	0.953	261	0.718	297	0.472	333	0.644
10	0.418	46	0.961	82	0.699	118	0.483	154	0.638	190	0.418	226	0.961	262	0.699	298	0.483	334	0.639
11	0.426	47	0.970	83	0.681	119	0.493	155	0.633	191	0.426	227	0.970	263	0.681	299	0.493	335	0.633
12	0.436	48	0.976	84	0.662	120	0.504	156	0.627	192	0.436	228	0.976	264	0.662	300	0.504	336	0.627
13	0.447	49	0.983	85	0.643	121	0.514	157	0.621	193	0.447	229	0.983	265	0.643	301	0.514	337	0.621
14	0.460	50	0.988	86	0.624	122	0.524	158	0.614	194	0.460	230	0.988	266	0.624	302	0.524	338	0.614
15	0.472	51	0.992	87	0.606	123	0.535	159	0.607	195	0.472	231	0.992	267	0.606	303	0.535	339	0.607
16	0.487	52	0.995	88	0.588	124	0.545	160	0.599	196	0.487	232	0.995	268	0.588	304	0.545	340	0.599
17	0.502	53	0.998	89	0.569	125	0.555	161	0.591	197	0.502	233	0.998	269	0.569	305	0.555	341	0.591
18	0.518	54	0.999	90	0.552	126	0.564	162	0.582	198	0.518	234	0.999	270	0.552	306	0.564	342	0.582
19	0.534	55	1.000	91	0.534	127	0.574	163	0.574	199	0.534	235	1.000	271	0.534	307	0.574	343	0.574
20	0.552	56	0.999	92	0.518	128	0.582	164	0.564	200	0.552	236	0.999	272	0.518	308	0.582	344	0.564
21	0.569	57	0.998	93	0.502	129	0.591	165	0.555	201	0.569	237	0.998	273	0.502	309	0.591	345	0.555
22	0.588	58	0.995	94	0.487	130	0.599	166	0.545	202	0.588	238	0.995	274	0.487	310	0.599	346	0.545
23	0.606	59	0.992	95	0.472	131	0.607	167	0.535	203	0.606	239	0.992	275	0.472	311	0.607	347	0.535
24	0.624	60	0.988	96	0.460	132	0.614	168	0.524	204	0.624	240	0.988	276	0.460	312	0.614	348	0.524
25	0.643	61	0.983	97	0.447	133	0.621	169	0.514	205	0.643	241	0.983	277	0.447	313	0.621	349	0.514
26	0.662	62	0.976	98	0.436	134	0.627	170	0.504	206	0.662	242	0.976	278	0.436	314	0.627	350	0.504
27	0.681	63	0.970	99	0.426	135	0.633	171	0.493	207	0.681	243	0.970	279	0.426	315	0.633	351	0.493
28	0.699	64	0.961	100	0.418	136	0.639	172	0.483	208	0.699	244	0.961	280	0.418	316	0.639	352	0.483
29	0.718	65	0.953	101	0.410	137	0.644	173	0.472	209	0.718	245	0.953	281	0.410	317	0.644	353	0.472
30	0.736	66	0.943	102	0.406	138	0.648	174	0.463	210	0.736	246	0.943	282	0.406	318	0.648	354	0.463
31	0.754	67	0.933	103	0.401	139	0.652	175	0.453	211	0.754	247	0.933	283	0.401	319	0.652	355	0.453
32	0.772	68	0.921	104	0.399	140	0.654	176	0.444	212	0.772	248	0.921	284	0.399	320	0.654	356	0.444
33	0.789	69	0.910	105	0.397	141	0.657	177	0.435	213	0.789	249	0.910	285	0.397	321	0.657	357	0.435
34	0.806	70	0.896	106	0.399	142	0.659	178	0.427	214	0.806	250	0.896	286	0.399	322	0.659	358	0.427
35	0.823	71	0.883	107	0.400	143	0.661	179	0.419	215	0.823	251	0.883	287	0.400	323	0.661	359	0.419

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## AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-70335**  
 Date **24-Feb-17**  
 Call Letters **KFPX 36**  
 Frequency **605 MHz**  
 Antenna Type **TFU-20JTH/VP-R P220**  
 Gain **1.56 (1.94dB)**  
 Calculated  
 Drawing # **KFPX P230 V-POL**



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.393	36	0.345	72	0.363	108	0.378	144	0.500	180	0.393	216	0.345	252	0.363	288	0.378
1	0.386	37	0.354	73	0.354	109	0.386	145	0.500	181	0.386	217	0.354	253	0.354	289	0.386
2	0.378	38	0.363	74	0.345	110	0.393	146	0.500	182	0.378	218	0.363	254	0.345	290	0.393
3	0.371	39	0.372	75	0.336	111	0.400	147	0.500	183	0.371	219	0.372	255	0.336	291	0.400
4	0.363	40	0.381	76	0.327	112	0.406	148	0.499	184	0.363	220	0.381	256	0.327	292	0.406
5	0.356	41	0.390	77	0.318	113	0.413	149	0.499	185	0.356	221	0.390	257	0.318	293	0.413
6	0.348	42	0.398	78	0.310	114	0.419	150	0.498	186	0.348	222	0.398	258	0.310	294	0.419
7	0.340	43	0.406	79	0.302	115	0.425	151	0.498	187	0.340	223	0.406	259	0.302	295	0.425
8	0.332	44	0.413	80	0.294	116	0.431	152	0.497	188	0.332	224	0.413	260	0.294	296	0.431
9	0.324	45	0.420	81	0.287	117	0.436	153	0.496	189	0.324	225	0.420	261	0.287	297	0.436
10	0.317	46	0.426	82	0.281	118	0.441	154	0.495	190	0.317	226	0.426	262	0.281	298	0.441
11	0.309	47	0.432	83	0.275	119	0.446	155	0.493	191	0.309	227	0.432	263	0.275	299	0.446
12	0.302	48	0.437	84	0.270	120	0.451	156	0.492	192	0.302	228	0.437	264	0.270	300	0.451
13	0.295	49	0.442	85	0.267	121	0.455	157	0.490	193	0.295	229	0.442	265	0.267	301	0.455
14	0.289	50	0.446	86	0.264	122	0.459	158	0.488	194	0.289	230	0.446	266	0.264	302	0.459
15	0.283	51	0.449	87	0.262	123	0.463	159	0.486	195	0.283	231	0.449	267	0.262	303	0.463
16	0.277	52	0.452	88	0.261	124	0.467	160	0.484	196	0.277	232	0.452	268	0.261	304	0.467
17	0.272	53	0.454	89	0.262	125	0.470	161	0.482	197	0.272	233	0.454	269	0.262	305	0.470
18	0.268	54	0.455	90	0.263	126	0.474	162	0.479	198	0.268	234	0.455	270	0.263	306	0.474
19	0.265	55	0.455	91	0.265	127	0.477	163	0.477	199	0.265	235	0.455	271	0.265	307	0.477
20	0.263	56	0.455	92	0.268	128	0.479	164	0.474	200	0.263	236	0.455	272	0.268	308	0.479
21	0.262	57	0.454	93	0.272	129	0.482	165	0.470	201	0.262	237	0.454	273	0.272	309	0.482
22	0.261	58	0.452	94	0.277	130	0.484	166	0.467	202	0.261	238	0.452	274	0.277	310	0.484
23	0.262	59	0.449	95	0.283	131	0.486	167	0.463	203	0.262	239	0.449	275	0.283	311	0.486
24	0.264	60	0.446	96	0.289	132	0.488	168	0.459	204	0.264	240	0.446	276	0.289	312	0.488
25	0.267	61	0.442	97	0.295	133	0.490	169	0.455	205	0.267	241	0.442	277	0.295	313	0.490
26	0.270	62	0.437	98	0.302	134	0.492	170	0.451	206	0.270	242	0.437	278	0.302	314	0.492
27	0.275	63	0.432	99	0.309	135	0.493	171	0.446	207	0.275	243	0.432	279	0.309	315	0.493
28	0.281	64	0.426	100	0.317	136	0.495	172	0.441	208	0.281	244	0.426	280	0.317	316	0.495
29	0.287	65	0.420	101	0.324	137	0.496	173	0.436	209	0.287	245	0.420	281	0.324	317	0.496
30	0.294	66	0.413	102	0.332	138	0.497	174	0.431	210	0.294	246	0.413	282	0.332	318	0.497
31	0.302	67	0.406	103	0.340	139	0.498	175	0.425	211	0.302	247	0.406	283	0.340	319	0.498
32	0.310	68	0.398	104	0.348	140	0.498	176	0.419	212	0.310	248	0.398	284	0.348	320	0.498
33	0.318	69	0.390	105	0.356	141	0.499	177	0.413	213	0.318	249	0.390	285	0.356	321	0.499
34	0.327	70	0.381	106	0.363	142	0.499	178	0.406	214	0.327	250	0.381	286	0.363	322	0.499
35	0.336	71	0.372	107	0.371	143	0.500	179	0.400	215	0.336	251	0.372	287	0.371	323	0.500

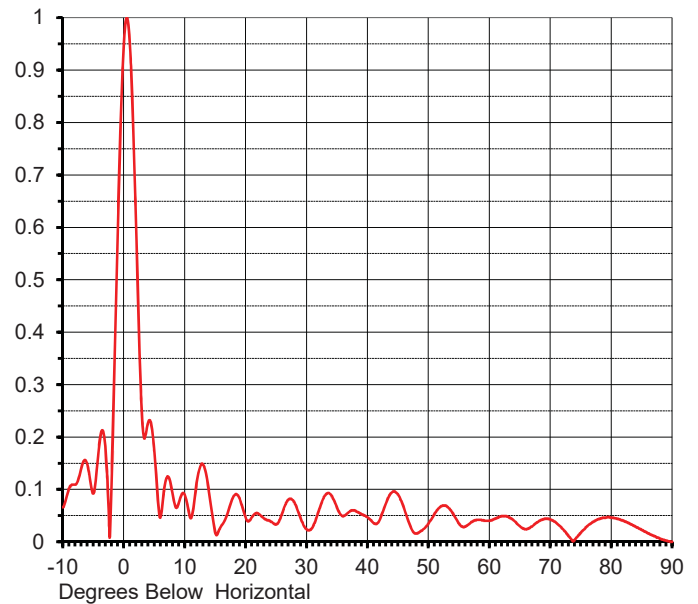
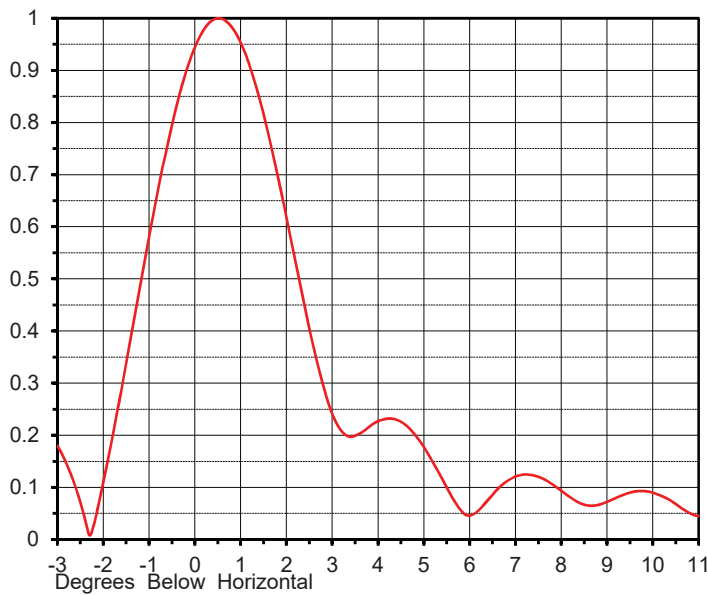
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## ELEVATION PATTERN

Proposal No. **C-70335**  
 Date **24-Feb-17**  
 Call Letters **KFPX 36**  
 Frequency **605 MHz**  
 Antenna Type **TFU-20JTH/VP-R P220**

RMS Directivity at Main Lobe **20.40 ( 13.10 dB )**  
 RMS Directivity at Horizontal **18.20 ( 12.60 dB )**  
**Calculated**

Beam Tilt **0.50 deg**  
 Drawing Number **20J204050**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.066	10.0	0.090	30.0	0.024	50.0	0.034	70.0	0.043
-9.0	0.101	11.0	0.045	31.0	0.028	51.0	0.053	71.0	0.036
-8.0	0.109	12.0	0.113	32.0	0.058	52.0	0.067	72.0	0.025
-7.0	0.138	13.0	0.148	33.0	0.088	53.0	0.068	73.0	0.011
-6.0	0.149	14.0	0.096	34.0	0.090	54.0	0.055	74.0	0.003
-5.0	0.092	15.0	0.019	35.0	0.066	55.0	0.035	75.0	0.017
-4.0	0.186	16.0	0.030	36.0	0.049	56.0	0.029	76.0	0.029
-3.0	0.180	17.0	0.052	37.0	0.057	57.0	0.037	77.0	0.038
-2.0	0.109	18.0	0.086	38.0	0.059	58.0	0.042	78.0	0.043
-1.0	0.580	19.0	0.083	39.0	0.053	59.0	0.041	79.0	0.046
0.0	0.944	20.0	0.047	40.0	0.047	60.0	0.040	80.0	0.046
1.0	0.953	21.0	0.046	41.0	0.036	61.0	0.044	81.0	0.044
2.0	0.618	22.0	0.054	42.0	0.041	62.0	0.049	82.0	0.040
3.0	0.241	23.0	0.045	43.0	0.072	63.0	0.048	83.0	0.035
4.0	0.227	24.0	0.040	44.0	0.094	64.0	0.041	84.0	0.029
5.0	0.178	25.0	0.033	45.0	0.091	65.0	0.030	85.0	0.023
6.0	0.046	26.0	0.054	46.0	0.064	66.0	0.024	86.0	0.017
7.0	0.121	27.0	0.080	47.0	0.031	67.0	0.029	87.0	0.011
8.0	0.094	28.0	0.076	48.0	0.016	68.0	0.038	88.0	0.006
9.0	0.072	29.0	0.047	49.0	0.022	69.0	0.043	89.0	0.002
								90.0	0.000

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