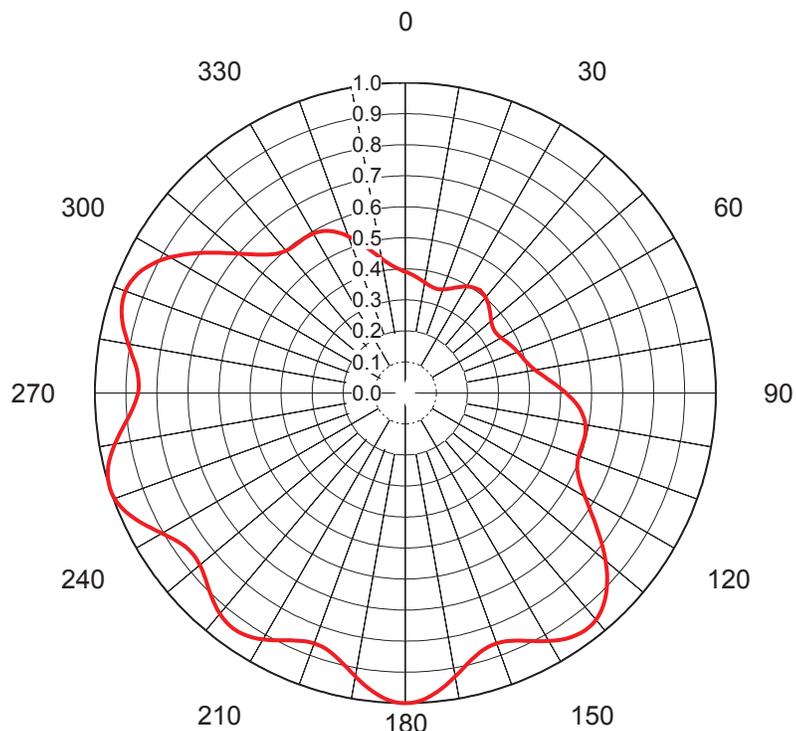


AZIMUTH PATTERN Horizontal Polarization



Proposal No. **C-70043**
 Date **24-Mar-17**
 Call Letters **WBFF**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TUD-C5SP-10/36SPH-1-B**
 Gain **1.85 (2.66dB)**
 Calculated

Deg	Value																		
0	0.391	36	0.410	72	0.391	108	0.594	144	0.958	180	1.000	216	0.940	252	1.000	288	0.958	324	0.594
1	0.388	37	0.408	73	0.394	109	0.594	145	0.955	181	0.999	217	0.939	253	0.999	289	0.960	325	0.594
2	0.385	38	0.407	74	0.397	110	0.594	146	0.951	182	0.996	218	0.937	254	0.996	290	0.960	326	0.594
3	0.383	39	0.405	75	0.400	111	0.596	147	0.945	183	0.992	219	0.934	255	0.992	291	0.958	327	0.595
4	0.380	40	0.402	76	0.404	112	0.598	148	0.939	184	0.986	220	0.929	256	0.986	292	0.955	328	0.595
5	0.377	41	0.399	77	0.408	113	0.602	149	0.932	185	0.979	221	0.924	257	0.979	293	0.950	329	0.594
6	0.374	42	0.396	78	0.413	114	0.607	150	0.923	186	0.970	222	0.917	258	0.970	294	0.944	330	0.593
7	0.371	43	0.392	79	0.419	115	0.613	151	0.915	187	0.961	223	0.910	259	0.961	295	0.936	331	0.591
8	0.368	44	0.388	80	0.425	116	0.621	152	0.906	188	0.950	224	0.903	260	0.950	296	0.926	332	0.589
9	0.365	45	0.383	81	0.432	117	0.630	153	0.897	189	0.939	225	0.895	261	0.939	297	0.915	333	0.585
10	0.362	46	0.379	82	0.440	118	0.641	154	0.890	190	0.928	226	0.887	262	0.928	298	0.903	334	0.581
11	0.359	47	0.374	83	0.448	119	0.654	155	0.881	191	0.916	227	0.880	263	0.916	299	0.889	335	0.576
12	0.356	48	0.369	84	0.457	120	0.667	156	0.874	192	0.905	228	0.874	264	0.905	300	0.874	336	0.570
13	0.354	49	0.365	85	0.466	121	0.683	157	0.868	193	0.895	229	0.868	265	0.895	301	0.858	337	0.563
14	0.352	50	0.361	86	0.476	122	0.699	158	0.864	194	0.886	230	0.863	266	0.886	302	0.842	338	0.555
15	0.351	51	0.358	87	0.486	123	0.716	159	0.860	195	0.877	231	0.860	267	0.877	303	0.824	339	0.546
16	0.350	52	0.355	88	0.497	124	0.733	160	0.859	196	0.870	232	0.859	268	0.870	304	0.806	340	0.537
17	0.351	53	0.353	89	0.507	125	0.751	161	0.859	197	0.865	233	0.859	269	0.865	305	0.788	341	0.527
18	0.351	54	0.351	90	0.517	126	0.770	162	0.861	198	0.861	234	0.861	270	0.861	306	0.770	342	0.517
19	0.353	55	0.351	91	0.527	127	0.788	163	0.865	199	0.859	235	0.865	271	0.859	307	0.751	343	0.507
20	0.355	56	0.350	92	0.537	128	0.806	164	0.870	200	0.859	236	0.870	272	0.859	308	0.733	344	0.497
21	0.358	57	0.351	93	0.546	129	0.824	165	0.877	201	0.860	237	0.877	273	0.860	309	0.716	345	0.486
22	0.361	58	0.352	94	0.555	130	0.842	166	0.886	202	0.863	238	0.886	274	0.864	310	0.699	346	0.476
23	0.365	59	0.354	95	0.563	131	0.858	167	0.895	203	0.868	239	0.895	275	0.868	311	0.683	347	0.466
24	0.369	60	0.356	96	0.570	132	0.874	168	0.905	204	0.874	240	0.905	276	0.874	312	0.667	348	0.457
25	0.374	61	0.359	97	0.576	133	0.889	169	0.916	205	0.880	241	0.916	277	0.881	313	0.654	349	0.448
26	0.379	62	0.362	98	0.581	134	0.903	170	0.928	206	0.887	242	0.928	278	0.890	314	0.641	350	0.440
27	0.383	63	0.365	99	0.585	135	0.915	171	0.939	207	0.895	243	0.939	279	0.897	315	0.630	351	0.432
28	0.388	64	0.368	100	0.589	136	0.926	172	0.950	208	0.903	244	0.950	280	0.906	316	0.621	352	0.425
29	0.392	65	0.371	101	0.591	137	0.936	173	0.961	209	0.910	245	0.961	281	0.915	317	0.613	353	0.419
30	0.396	66	0.374	102	0.593	138	0.944	174	0.970	210	0.917	246	0.970	282	0.923	318	0.607	354	0.413
31	0.399	67	0.377	103	0.594	139	0.950	175	0.979	211	0.924	247	0.979	283	0.932	319	0.602	355	0.408
32	0.402	68	0.380	104	0.595	140	0.955	176	0.986	212	0.929	248	0.986	284	0.939	320	0.598	356	0.404
33	0.405	69	0.383	105	0.595	141	0.958	177	0.992	213	0.934	249	0.992	285	0.945	321	0.596	357	0.400
34	0.407	70	0.385	106	0.594	142	0.960	178	0.996	214	0.937	250	0.996	286	0.951	322	0.594	358	0.397
35	0.408	71	0.388	107	0.594	143	0.960	179	0.999	215	0.939	251	0.999	287	0.955	323	0.594	359	0.394

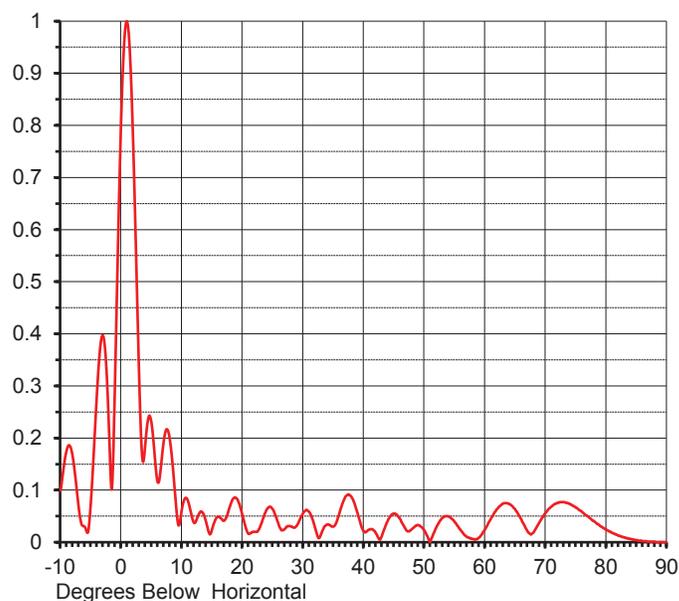
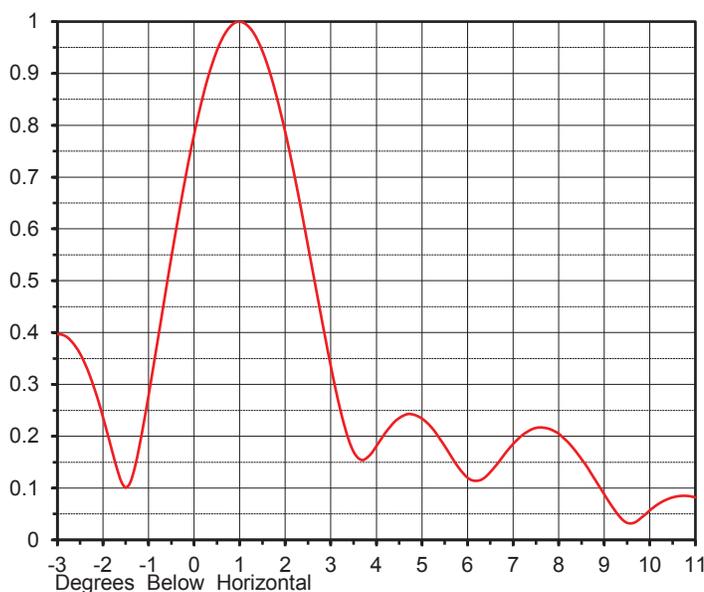
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ELEVATION PATTERN

Proposal No. **C-70043**
 Date **24-Mar-17**
 Call Letters **WBFF**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TUD-C5SP-10/36SPH-1-B**

RMS Directivity at Main Lobe **20.3 (13.07 dB)**
 RMS Directivity at Horizontal **13.7 (11.37 dB)**
Calculated

Beam Tilt **0.90 deg**
 Pattern Number **10U203090**



Angle	Field								
-10.0	0.099	10.0	0.064	30.0	0.056	50.0	0.022	70.0	0.057
-9.0	0.177	11.0	0.079	31.0	0.058	51.0	0.003	71.0	0.069
-8.0	0.163	12.0	0.037	32.0	0.026	52.0	0.030	72.0	0.076
-7.0	0.064	13.0	0.058	33.0	0.017	53.0	0.047	73.0	0.077
-6.0	0.029	14.0	0.038	34.0	0.034	54.0	0.049	74.0	0.073
-5.0	0.081	15.0	0.026	35.0	0.030	55.0	0.039	75.0	0.066
-4.0	0.290	16.0	0.049	36.0	0.057	56.0	0.023	76.0	0.058
-3.0	0.396	17.0	0.042	37.0	0.088	57.0	0.010	77.0	0.049
-2.0	0.205	18.0	0.072	38.0	0.086	58.0	0.006	78.0	0.040
-1.0	0.331	19.0	0.084	39.0	0.054	59.0	0.009	79.0	0.031
0.0	0.822	20.0	0.051	40.0	0.021	60.0	0.025	80.0	0.024
1.0	0.997	21.0	0.016	41.0	0.025	61.0	0.046	81.0	0.018
2.0	0.747	22.0	0.020	42.0	0.017	62.0	0.064	82.0	0.013
3.0	0.293	23.0	0.033	43.0	0.013	63.0	0.074	83.0	0.009
4.0	0.194	24.0	0.063	44.0	0.043	64.0	0.073	84.0	0.006
5.0	0.227	25.0	0.063	45.0	0.055	65.0	0.062	85.0	0.004
6.0	0.115	26.0	0.032	46.0	0.044	66.0	0.043	86.0	0.002
7.0	0.194	27.0	0.026	47.0	0.023	67.0	0.021	87.0	0.001
8.0	0.197	28.0	0.030	48.0	0.026	68.0	0.019	88.0	0.001
9.0	0.074	29.0	0.033	49.0	0.033	69.0	0.039	89.0	0.000
								90.0	0.000

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