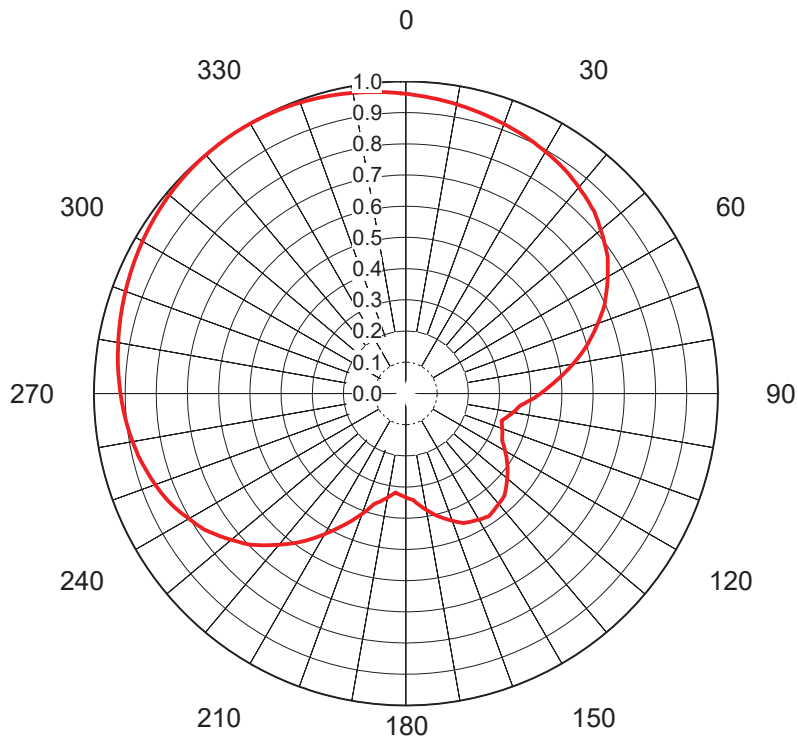


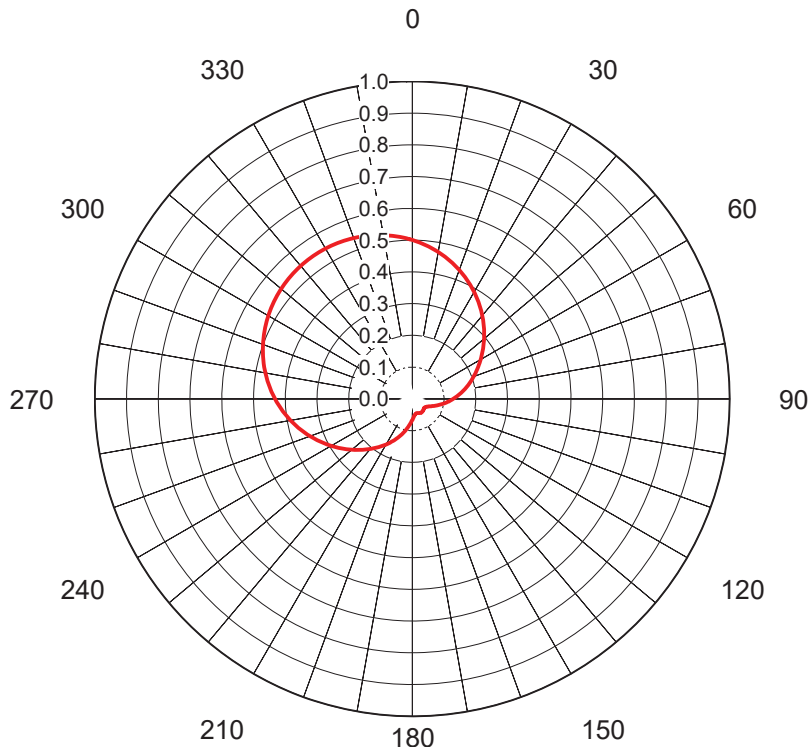
AZIMUTH PATTERN Horizontal Polarization



Proposal No. **C-70803**
 Date **15-May-17**
 Call Letters **KSWB**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-27ETT/VP-R S180**
 Gain **1.81 (2.57dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.960	36	0.878	72	0.633	108	0.324	144	0.471	180	0.333	216	0.591	252	0.862	288	0.953
1	0.959	37	0.874	73	0.623	109	0.326	145	0.473	181	0.331	217	0.602	253	0.866	289	0.955
2	0.957	38	0.870	74	0.612	110	0.329	146	0.475	182	0.329	218	0.612	254	0.870	290	0.957
3	0.955	39	0.866	75	0.602	111	0.331	147	0.473	183	0.326	219	0.623	255	0.874	291	0.959
4	0.953	40	0.862	76	0.591	112	0.333	148	0.471	184	0.324	220	0.633	256	0.878	292	0.960
5	0.951	41	0.859	77	0.579	113	0.336	149	0.469	185	0.321	221	0.644	257	0.881	293	0.962
6	0.949	42	0.855	78	0.568	114	0.338	150	0.467	186	0.319	222	0.655	258	0.884	294	0.964
7	0.947	43	0.851	79	0.556	115	0.341	151	0.465	187	0.324	223	0.665	259	0.886	295	0.966
8	0.945	44	0.847	80	0.544	116	0.343	152	0.463	188	0.329	224	0.676	260	0.889	296	0.968
9	0.943	45	0.843	81	0.533	117	0.349	153	0.461	189	0.334	225	0.686	261	0.892	297	0.970
10	0.941	46	0.839	82	0.521	118	0.355	154	0.459	190	0.339	226	0.697	262	0.895	298	0.971
11	0.938	47	0.833	83	0.509	119	0.361	155	0.457	191	0.344	227	0.705	263	0.898	299	0.973
12	0.936	48	0.827	84	0.497	120	0.367	156	0.455	192	0.349	228	0.714	264	0.900	300	0.975
13	0.934	49	0.821	85	0.486	121	0.373	157	0.450	193	0.354	229	0.722	265	0.903	301	0.976
14	0.932	50	0.815	86	0.474	122	0.379	158	0.445	194	0.359	230	0.730	266	0.906	302	0.978
15	0.930	51	0.809	87	0.463	123	0.385	159	0.439	195	0.364	231	0.738	267	0.908	303	0.980
16	0.928	52	0.804	88	0.453	124	0.391	160	0.434	196	0.369	232	0.747	268	0.910	304	0.982
17	0.926	53	0.798	89	0.442	125	0.397	161	0.429	197	0.380	233	0.755	269	0.913	305	0.983
18	0.924	54	0.792	90	0.432	126	0.403	162	0.424	198	0.390	234	0.763	270	0.915	306	0.985
19	0.921	55	0.786	91	0.421	127	0.408	163	0.419	199	0.400	235	0.772	271	0.917	307	0.986
20	0.919	56	0.780	92	0.411	128	0.413	164	0.413	200	0.411	236	0.780	272	0.919	308	0.987
21	0.917	57	0.772	93	0.400	129	0.419	165	0.408	201	0.421	237	0.786	273	0.921	309	0.988
22	0.915	58	0.763	94	0.390	130	0.424	166	0.403	202	0.432	238	0.792	274	0.924	310	0.989
23	0.913	59	0.755	95	0.380	131	0.429	167	0.397	203	0.442	239	0.798	275	0.926	311	0.990
24	0.910	60	0.747	96	0.369	132	0.434	168	0.391	204	0.453	240	0.804	276	0.928	312	0.992
25	0.908	61	0.738	97	0.364	133	0.439	169	0.385	205	0.463	241	0.809	277	0.930	313	0.993
26	0.906	62	0.730	98	0.359	134	0.445	170	0.379	206	0.474	242	0.815	278	0.932	314	0.994
27	0.903	63	0.722	99	0.354	135	0.450	171	0.373	207	0.486	243	0.821	279	0.934	315	0.995
28	0.900	64	0.714	100	0.349	136	0.455	172	0.367	208	0.497	244	0.827	280	0.936	316	0.996
29	0.898	65	0.705	101	0.344	137	0.457	173	0.361	209	0.509	245	0.833	281	0.938	317	0.996
30	0.895	66	0.697	102	0.339	138	0.459	174	0.355	210	0.521	246	0.839	282	0.941	318	0.997
31	0.892	67	0.686	103	0.334	139	0.461	175	0.349	211	0.533	247	0.843	283	0.943	319	0.997
32	0.889	68	0.676	104	0.329	140	0.463	176	0.343	212	0.544	248	0.847	284	0.945	320	0.998
33	0.886	69	0.665	105	0.324	141	0.465	177	0.341	213	0.556	249	0.851	285	0.947	321	0.998
34	0.884	70	0.655	106	0.319	142	0.467	178	0.338	214	0.568	250	0.855	286	0.949	322	0.998
35	0.881	71	0.644	107	0.321	143	0.469	179	0.336	215	0.579	251	0.859	287	0.951	323	0.999

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-70803**
 Date **15-May-17**
 Call Letters **KSWB**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-27ETT/VP-R S180**
 Gain **2.64 (4.21dB)**
 Calculated

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.501	36	0.362	72	0.198	108	0.072	144	0.052	180	0.067	216	0.190	252	0.352	288	0.495
1	0.498	37	0.357	73	0.194	109	0.069	145	0.052	181	0.069	217	0.194	253	0.357	289	0.498
2	0.495	38	0.352	74	0.190	110	0.067	146	0.052	182	0.072	218	0.198	254	0.362	290	0.501
3	0.492	39	0.348	75	0.186	111	0.064	147	0.052	183	0.074	219	0.202	255	0.367	291	0.503
4	0.489	40	0.343	76	0.182	112	0.062	148	0.051	184	0.077	220	0.206	256	0.371	292	0.506
5	0.486	41	0.338	77	0.178	113	0.060	149	0.051	185	0.080	221	0.210	257	0.376	293	0.508
6	0.483	42	0.334	78	0.174	114	0.058	150	0.051	186	0.083	222	0.215	258	0.380	294	0.511
7	0.480	43	0.329	79	0.170	115	0.057	151	0.051	187	0.086	223	0.219	259	0.385	295	0.513
8	0.477	44	0.324	80	0.166	116	0.055	152	0.051	188	0.089	224	0.223	260	0.390	296	0.515
9	0.473	45	0.319	81	0.162	117	0.053	153	0.050	189	0.092	225	0.227	261	0.394	297	0.518
10	0.470	46	0.314	82	0.159	118	0.052	154	0.050	190	0.095	226	0.232	262	0.398	298	0.520
11	0.466	47	0.310	83	0.155	119	0.051	155	0.049	191	0.098	227	0.236	263	0.403	299	0.522
12	0.463	48	0.305	84	0.151	120	0.050	156	0.049	192	0.102	228	0.240	264	0.407	300	0.524
13	0.459	49	0.300	85	0.147	121	0.049	157	0.049	193	0.105	229	0.245	265	0.412	301	0.526
14	0.456	50	0.295	86	0.144	122	0.049	158	0.048	194	0.108	230	0.249	266	0.416	302	0.527
15	0.452	51	0.291	87	0.140	123	0.048	159	0.048	195	0.112	231	0.254	267	0.420	303	0.529
16	0.448	52	0.286	88	0.136	124	0.048	160	0.048	196	0.115	232	0.258	268	0.424	304	0.531
17	0.444	53	0.281	89	0.133	125	0.047	161	0.048	197	0.119	233	0.263	269	0.428	305	0.532
18	0.440	54	0.277	90	0.129	126	0.047	162	0.047	198	0.122	234	0.268	270	0.432	306	0.534
19	0.436	55	0.272	91	0.126	127	0.047	163	0.047	199	0.126	235	0.272	271	0.436	307	0.535
20	0.432	56	0.268	92	0.122	128	0.047	164	0.047	200	0.129	236	0.277	272	0.440	308	0.537
21	0.428	57	0.263	93	0.119	129	0.048	165	0.047	201	0.133	237	0.281	273	0.444	309	0.538
22	0.424	58	0.258	94	0.115	130	0.048	166	0.048	202	0.136	238	0.286	274	0.448	310	0.539
23	0.420	59	0.254	95	0.112	131	0.048	167	0.048	203	0.140	239	0.291	275	0.452	311	0.540
24	0.416	60	0.249	96	0.108	132	0.048	168	0.049	204	0.144	240	0.295	276	0.456	312	0.541
25	0.412	61	0.245	97	0.105	133	0.049	169	0.049	205	0.147	241	0.300	277	0.459	313	0.542
26	0.407	62	0.240	98	0.102	134	0.049	170	0.050	206	0.151	242	0.305	278	0.463	314	0.543
27	0.403	63	0.236	99	0.098	135	0.049	171	0.051	207	0.155	243	0.310	279	0.466	315	0.544
28	0.398	64	0.232	100	0.095	136	0.050	172	0.052	208	0.159	244	0.314	280	0.470	316	0.545
29	0.394	65	0.227	101	0.092	137	0.050	173	0.053	209	0.162	245	0.319	281	0.473	317	0.545
30	0.390	66	0.223	102	0.089	138	0.051	174	0.055	210	0.166	246	0.324	282	0.477	318	0.546
31	0.385	67	0.219	103	0.086	139	0.051	175	0.057	211	0.170	247	0.329	283	0.480	319	0.546
32	0.380	68	0.215	104	0.083	140	0.051	176	0.058	212	0.174	248	0.334	284	0.483	320	0.547
33	0.376	69	0.210	105	0.080	141	0.051	177	0.060	213	0.178	249	0.338	285	0.486	321	0.547
34	0.371	70	0.206	106	0.077	142	0.051	178	0.062	214	0.182	250	0.343	286	0.489	322	0.547
35	0.367	71	0.202	107	0.074	143	0.052	179	0.064	215	0.186	251	0.348	287	0.492	323	0.548

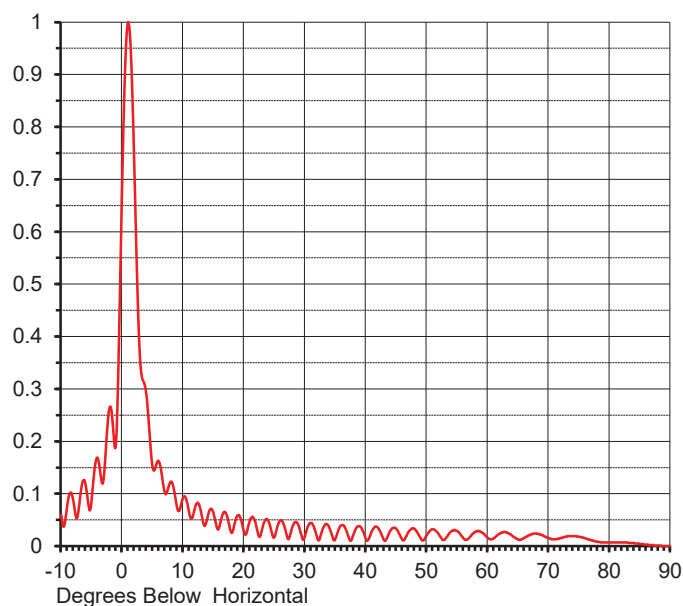
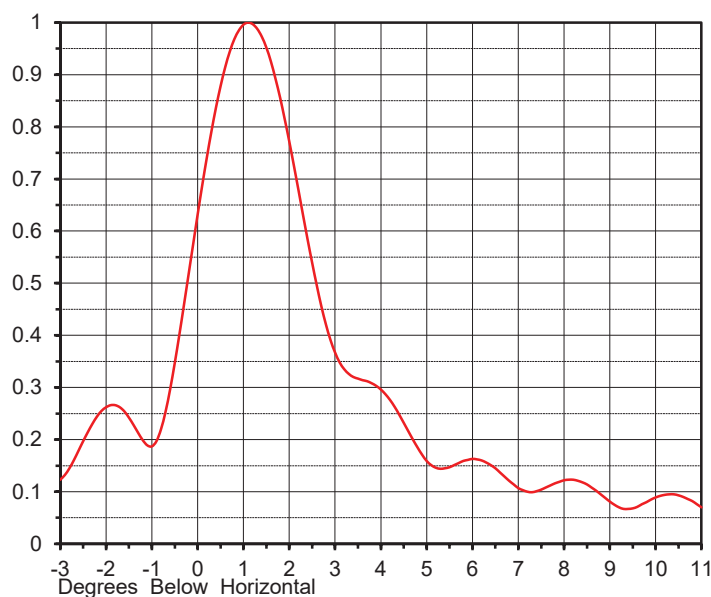
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ELEVATION PATTERN

Proposal No. **C-70803**
 Date **15-May-17**
 Call Letters **KSWB**
 Channel **26**
 Frequency **545 MHz**
 Antenna Type **TFU-27ETT/VP-R S180**

RMS Directivity at Main Lobe **25.0 (13.98 dB)**
 RMS Directivity at Horizontal **11.8 (10.72 dB)**
Calculated

Beam Tilt **1.00 deg**
 Pattern Number **27E250100**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.060	10.0	0.092	30.0	0.019	50.0	0.021	70.0	0.015
-9.0	0.078	11.0	0.064	31.0	0.044	51.0	0.032	71.0	0.013
-8.0	0.086	12.0	0.075	32.0	0.017	52.0	0.022	72.0	0.015
-7.0	0.082	13.0	0.062	33.0	0.035	53.0	0.013	73.0	0.018
-6.0	0.118	14.0	0.054	34.0	0.035	54.0	0.028	74.0	0.019
-5.0	0.089	15.0	0.063	35.0	0.014	55.0	0.029	75.0	0.018
-4.0	0.168	16.0	0.038	36.0	0.040	56.0	0.015	76.0	0.015
-3.0	0.132	17.0	0.064	37.0	0.023	57.0	0.016	77.0	0.011
-2.0	0.266	18.0	0.025	38.0	0.023	58.0	0.027	78.0	0.008
-1.0	0.197	19.0	0.059	39.0	0.038	59.0	0.026	79.0	0.007
0.0	0.688	20.0	0.028	40.0	0.014	60.0	0.016	80.0	0.007
1.0	1.000	21.0	0.050	41.0	0.029	61.0	0.015	81.0	0.007
2.0	0.726	22.0	0.039	42.0	0.035	62.0	0.024	82.0	0.007
3.0	0.348	23.0	0.033	43.0	0.011	63.0	0.026	83.0	0.007
4.0	0.287	24.0	0.048	44.0	0.029	64.0	0.020	84.0	0.006
5.0	0.151	25.0	0.017	45.0	0.033	65.0	0.013	85.0	0.004
6.0	0.162	26.0	0.049	46.0	0.012	66.0	0.016	86.0	0.003
7.0	0.103	27.0	0.022	47.0	0.027	67.0	0.022	87.0	0.002
8.0	0.123	28.0	0.038	48.0	0.033	68.0	0.024	88.0	0.001
9.0	0.075	29.0	0.038	49.0	0.015	69.0	0.021	89.0	0.000
								90.0	0.000

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