

AZIMUTH PATTERN Horizontal Polarization

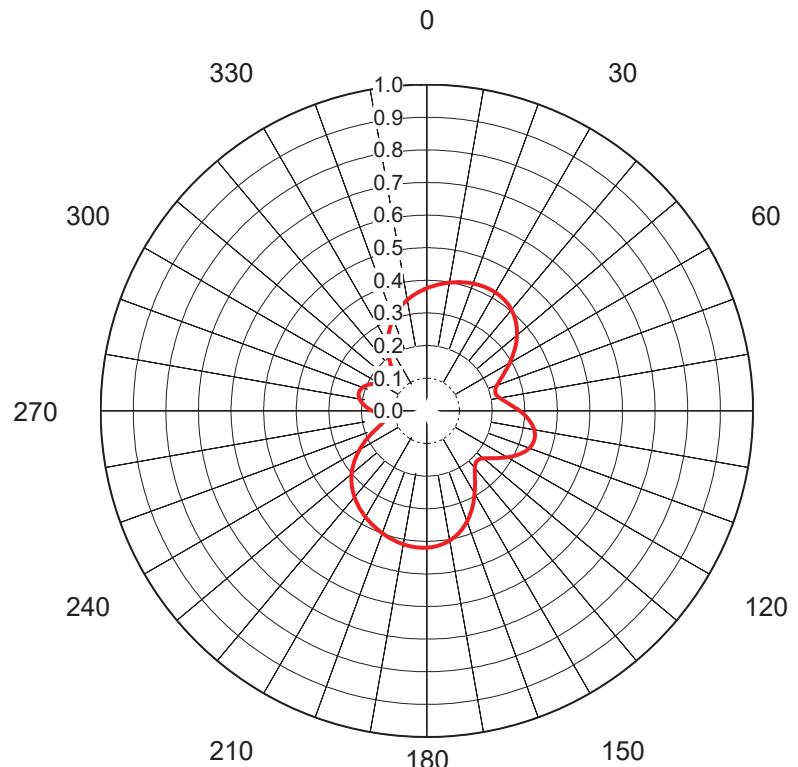
Proposal No. C-70262
 Date 23-Feb-17
 Call Letters WPBT 29
 Frequency 563 MHz
 Antenna Type TFU-18GTH/VP-R P250BNT

 Gain 2.5 (3.98dB)
 Calculated

 Drawing # P250 D18

Deg	Value																						
0	0.994	36	0.664	72	0.377	108	0.341	144	0.386	180	0.758	216	0.957	252	0.284	288	0.677	324	0.368				
1	0.997	37	0.649	73	0.376	109	0.341	145	0.388	181	0.773	217	0.948	253	0.279	289	0.673	325	0.389				
2	0.998	38	0.633	74	0.375	110	0.342	146	0.390	182	0.788	218	0.937	254	0.281	290	0.666	326	0.412				
3	1.000	39	0.618	75	0.374	111	0.343	147	0.393	183	0.803	219	0.926	255	0.283	291	0.659	327	0.435				
4	1.000	40	0.603	76	0.373	112	0.344	148	0.396	184	0.817	220	0.913	256	0.292	292	0.650	328	0.459				
5	1.000	41	0.588	77	0.372	113	0.344	149	0.400	185	0.831	221	0.900	257	0.301	293	0.640	329	0.483				
6	0.998	42	0.574	78	0.370	114	0.346	150	0.404	186	0.845	222	0.886	258	0.315	294	0.628	330	0.508				
7	0.996	43	0.560	79	0.369	115	0.347	151	0.408	187	0.859	223	0.871	259	0.329	295	0.616	331	0.533				
8	0.992	44	0.546	80	0.368	116	0.348	152	0.413	188	0.872	224	0.855	260	0.346	296	0.602	332	0.558				
9	0.988	45	0.533	81	0.367	117	0.349	153	0.419	189	0.884	225	0.839	261	0.363	297	0.588	333	0.582				
10	0.983	46	0.521	82	0.365	118	0.351	154	0.425	190	0.896	226	0.821	262	0.383	298	0.572	334	0.606				
11	0.978	47	0.508	83	0.364	119	0.352	155	0.432	191	0.908	227	0.803	263	0.402	299	0.556	335	0.631				
12	0.971	48	0.497	84	0.363	120	0.354	156	0.439	192	0.919	228	0.783	264	0.422	300	0.538	336	0.654				
13	0.965	49	0.485	85	0.361	121	0.355	157	0.447	193	0.929	229	0.764	265	0.442	301	0.520	337	0.677				
14	0.956	50	0.475	86	0.360	122	0.357	158	0.456	194	0.939	230	0.743	266	0.462	302	0.501	338	0.700				
15	0.948	51	0.465	87	0.358	123	0.358	159	0.465	195	0.948	231	0.722	267	0.482	303	0.482	339	0.722				
16	0.939	52	0.456	88	0.357	124	0.360	160	0.475	196	0.956	232	0.700	268	0.501	304	0.462	340	0.743				
17	0.929	53	0.447	89	0.355	125	0.361	161	0.485	197	0.965	233	0.677	269	0.520	305	0.442	341	0.764				
18	0.919	54	0.439	90	0.354	126	0.363	162	0.497	198	0.971	234	0.654	270	0.538	306	0.422	342	0.783				
19	0.908	55	0.432	91	0.352	127	0.364	163	0.508	199	0.978	235	0.631	271	0.556	307	0.402	343	0.803				
20	0.896	56	0.425	92	0.351	128	0.365	164	0.521	200	0.983	236	0.606	272	0.572	308	0.383	344	0.821				
21	0.884	57	0.419	93	0.349	129	0.367	165	0.533	201	0.988	237	0.582	273	0.588	309	0.363	345	0.839				
22	0.872	58	0.413	94	0.348	130	0.368	166	0.546	202	0.992	238	0.558	274	0.602	310	0.346	346	0.855				
23	0.859	59	0.408	95	0.347	131	0.369	167	0.560	203	0.996	239	0.533	275	0.616	311	0.329	347	0.871				
24	0.845	60	0.404	96	0.346	132	0.370	168	0.574	204	0.998	240	0.508	276	0.628	312	0.315	348	0.886				
25	0.831	61	0.400	97	0.344	133	0.372	169	0.588	205	1.000	241	0.483	277	0.640	313	0.301	349	0.900				
26	0.817	62	0.396	98	0.344	134	0.373	170	0.603	206	1.000	242	0.459	278	0.650	314	0.292	350	0.913				
27	0.803	63	0.393	99	0.343	135	0.374	171	0.618	207	1.000	243	0.435	279	0.659	315	0.283	351	0.926				
28	0.788	64	0.390	100	0.342	136	0.375	172	0.633	208	0.998	244	0.412	280	0.666	316	0.281	352	0.937				
29	0.773	65	0.388	101	0.341	137	0.376	173	0.649	209	0.997	245	0.389	281	0.673	317	0.279	353	0.948				
30	0.758	66	0.386	102	0.341	138	0.377	174	0.664	210	0.994	246	0.368	282	0.677	318	0.284	354	0.957				
31	0.742	67	0.384	103	0.340	139	0.378	175	0.680	211	0.990	247	0.347	283	0.681	319	0.289	355	0.965				
32	0.727	68	0.382	104	0.340	140	0.379	176	0.695	212	0.985	248	0.330	284	0.682	320	0.301	356	0.973				
33	0.711	69	0.381	105	0.340	141	0.381	177	0.711	213	0.980	249	0.313	285	0.684	321	0.313	357	0.980				
34	0.695	70	0.379	106	0.340	142	0.382	178	0.727	214	0.973	250	0.301	286	0.682	322	0.330	358	0.985				
35	0.680	71	0.378	107	0.340	143	0.384	179	0.742	215	0.965	251	0.289	287	0.681	323	0.347	359	0.990				

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AZIMUTH PATTERN Vertical Polarization

Proposal No. C-70262
 Date 23-Feb-17
 Call Letters WPBT 29
 Frequency 563 MHz
 Antenna Type TFU-18GTH/VP-R P250BNT

 Gain 1.86 (2.69dB)
 Calculated

 Drawing # P250V D29

Deg	Value																
0	0.376	36	0.413	72	0.222	108	0.339	144	0.251	180	0.420	216	0.359	252	0.154	288	0.213
1	0.379	37	0.411	73	0.220	109	0.337	145	0.257	181	0.420	217	0.355	253	0.148	289	0.212
2	0.381	38	0.409	74	0.218	110	0.334	146	0.264	182	0.420	218	0.352	254	0.143	290	0.209
3	0.384	39	0.407	75	0.217	111	0.331	147	0.271	183	0.420	219	0.349	255	0.139	291	0.207
4	0.386	40	0.404	76	0.218	112	0.328	148	0.279	184	0.420	220	0.345	256	0.136	292	0.204
5	0.388	41	0.401	77	0.219	113	0.324	149	0.286	185	0.419	221	0.341	257	0.133	293	0.200
6	0.391	42	0.398	78	0.221	114	0.319	150	0.293	186	0.419	222	0.338	258	0.131	294	0.196
7	0.393	43	0.394	79	0.223	115	0.314	151	0.301	187	0.418	223	0.334	259	0.130	295	0.192
8	0.395	44	0.390	80	0.227	116	0.309	152	0.308	188	0.417	224	0.329	260	0.130	296	0.187
9	0.397	45	0.386	81	0.231	117	0.303	153	0.315	189	0.416	225	0.325	261	0.131	297	0.183
10	0.399	46	0.381	82	0.236	118	0.297	154	0.322	190	0.415	226	0.321	262	0.133	298	0.178
11	0.401	47	0.377	83	0.241	119	0.291	155	0.329	191	0.414	227	0.316	263	0.136	299	0.173
12	0.403	48	0.372	84	0.247	120	0.285	156	0.336	192	0.413	228	0.311	264	0.139	300	0.167
13	0.405	49	0.366	85	0.253	121	0.278	157	0.343	193	0.411	229	0.306	265	0.143	301	0.162
14	0.407	50	0.361	86	0.259	122	0.272	158	0.349	194	0.410	230	0.301	266	0.147	302	0.157
15	0.408	51	0.355	87	0.265	123	0.265	159	0.355	195	0.408	231	0.295	267	0.152	303	0.152
16	0.410	52	0.349	88	0.272	124	0.259	160	0.361	196	0.407	232	0.290	268	0.157	304	0.147
17	0.411	53	0.343	89	0.278	125	0.253	161	0.366	197	0.405	233	0.284	269	0.162	305	0.143
18	0.413	54	0.336	90	0.285	126	0.247	162	0.372	198	0.403	234	0.278	270	0.167	306	0.139
19	0.414	55	0.329	91	0.291	127	0.241	163	0.377	199	0.401	235	0.272	271	0.173	307	0.136
20	0.415	56	0.322	92	0.297	128	0.236	164	0.381	200	0.399	236	0.266	272	0.178	308	0.133
21	0.416	57	0.315	93	0.303	129	0.231	165	0.386	201	0.397	237	0.259	273	0.183	309	0.131
22	0.417	58	0.308	94	0.309	130	0.227	166	0.390	202	0.395	238	0.252	274	0.187	310	0.130
23	0.418	59	0.301	95	0.314	131	0.223	167	0.394	203	0.393	239	0.245	275	0.192	311	0.130
24	0.419	60	0.293	96	0.319	132	0.221	168	0.398	204	0.391	240	0.238	276	0.196	312	0.131
25	0.419	61	0.286	97	0.324	133	0.219	169	0.401	205	0.388	241	0.231	277	0.200	313	0.133
26	0.420	62	0.279	98	0.328	134	0.218	170	0.404	206	0.386	242	0.224	278	0.204	314	0.136
27	0.420	63	0.271	99	0.331	135	0.217	171	0.407	207	0.384	243	0.217	279	0.207	315	0.139
28	0.420	64	0.264	100	0.334	136	0.218	172	0.409	208	0.381	244	0.209	280	0.209	316	0.143
29	0.420	65	0.257	101	0.337	137	0.220	173	0.411	209	0.379	245	0.202	281	0.212	317	0.148
30	0.420	66	0.251	102	0.339	138	0.222	174	0.413	210	0.376	246	0.194	282	0.213	318	0.154
31	0.419	67	0.245	103	0.340	139	0.225	175	0.415	211	0.373	247	0.187	283	0.215	319	0.160
32	0.418	68	0.239	104	0.341	140	0.229	176	0.416	212	0.371	248	0.180	284	0.215	320	0.166
33	0.417	69	0.234	105	0.342	141	0.234	177	0.417	213	0.368	249	0.173	285	0.216	321	0.173
34	0.416	70	0.229	106	0.341	142	0.239	178	0.418	214	0.365	250	0.166	286	0.215	322	0.180
35	0.415	71	0.225	107	0.340	143	0.245	179	0.419	215	0.362	251	0.160	287	0.215	323	0.187

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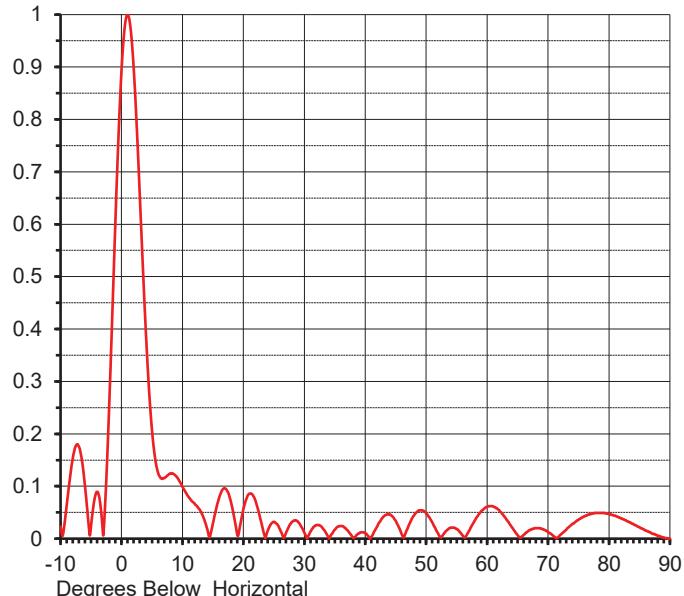
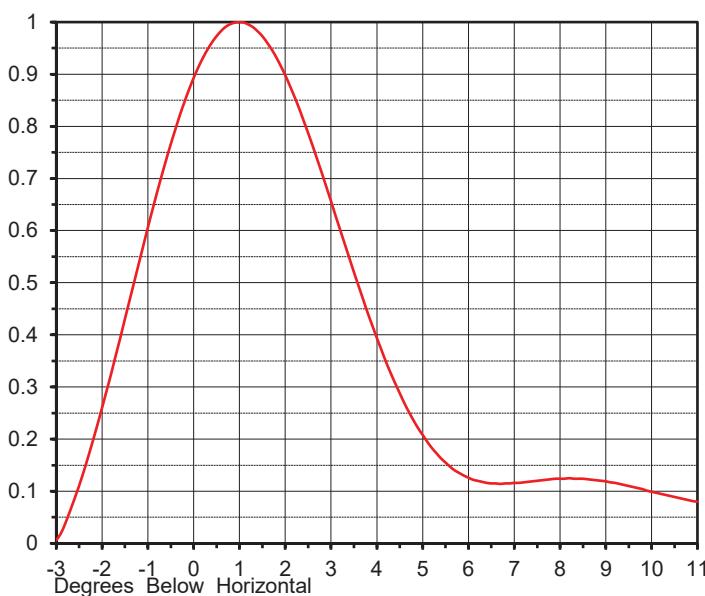
ELEVATION PATTERN

Proposal No. C-70262
 Date 23-Feb-17
 Call Letters WPBT 29
 Frequency 63 MHz
 Antenna Type 'FU-18GTH/VP-R P250BNT

RMS Directivity at Main Lobe
 RMS Directivity at Horizontal

16.50 (12.17 dB)
13.20 (11.21 dB)
 Calculated

Beam Tilt 1.00 deg
 Drawing Number 18G165100



Angle	Field								
-10.0	0.023	10.0	0.099	30.0	0.012	50.0	0.048	70.0	0.013
-9.0	0.063	11.0	0.080	31.0	0.013	51.0	0.031	71.0	0.004
-8.0	0.153	12.0	0.067	32.0	0.026	52.0	0.009	72.0	0.007
-7.0	0.176	13.0	0.052	33.0	0.020	53.0	0.011	73.0	0.017
-6.0	0.101	14.0	0.021	34.0	0.002	54.0	0.021	74.0	0.028
-5.0	0.024	15.0	0.029	35.0	0.017	55.0	0.018	75.0	0.036
-4.0	0.089	16.0	0.077	36.0	0.024	56.0	0.006	76.0	0.043
-3.0	0.006	17.0	0.096	37.0	0.017	57.0	0.014	77.0	0.047
-2.0	0.260	18.0	0.068	38.0	0.002	58.0	0.035	78.0	0.049
-1.0	0.606	19.0	0.008	39.0	0.010	59.0	0.052	79.0	0.049
0.0	0.893	20.0	0.056	40.0	0.010	60.0	0.061	80.0	0.047
1.0	1.000	21.0	0.086	41.0	0.003	61.0	0.061	81.0	0.044
2.0	0.898	22.0	0.072	42.0	0.024	62.0	0.054	82.0	0.039
3.0	0.656	23.0	0.028	43.0	0.042	63.0	0.040	83.0	0.033
4.0	0.394	24.0	0.015	44.0	0.046	64.0	0.023	84.0	0.028
5.0	0.208	25.0	0.032	45.0	0.034	65.0	0.007	85.0	0.022
6.0	0.126	26.0	0.018	46.0	0.008	66.0	0.007	86.0	0.016
7.0	0.116	27.0	0.011	47.0	0.021	67.0	0.016	87.0	0.010
8.0	0.124	28.0	0.032	48.0	0.044	68.0	0.020	88.0	0.006
9.0	0.119	29.0	0.032	49.0	0.054	69.0	0.019	89.0	0.002
									90.0 0.000

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