

## Horizontal Polarization AZIMUTH PATTERN

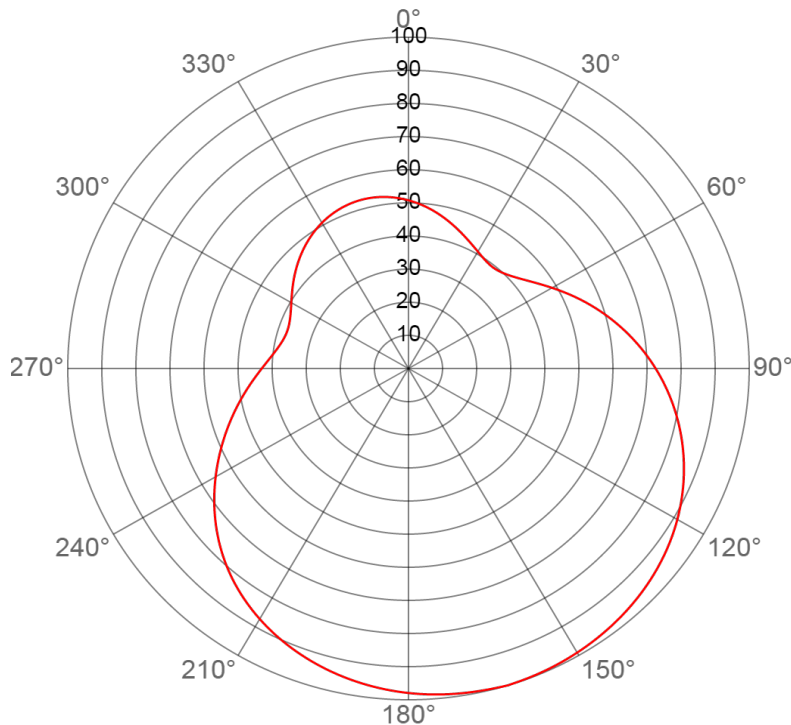


Exhibit No.

Date **28 Dec 2018**

Call Letters **WYKE**

Channel **24**

Antenna Type **TLP-16C/VP**

Location **INGLIS, FL**

Customer

Gain **2.1 (3.22 dB)**
**Calculated**

Drawing # **TLP-C**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.508	36	0.395	72	0.581	108	0.849	144	0.982	180	0.980	216	0.839	252	0.555	288	0.373	324	0.490
1	0.505	37	0.394	73	0.590	109	0.855	145	0.983	181	0.978	217	0.833	253	0.547	289	0.373	325	0.493
2	0.503	38	0.393	74	0.598	110	0.860	146	0.985	182	0.976	218	0.826	254	0.539	290	0.374	326	0.497
3	0.500	39	0.393	75	0.606	111	0.866	147	0.986	183	0.973	219	0.820	255	0.532	291	0.375	327	0.500
4	0.497	40	0.394	76	0.614	112	0.872	148	0.988	184	0.971	220	0.813	256	0.524	292	0.376	328	0.502
5	0.494	41	0.395	77	0.622	113	0.877	149	0.989	185	0.969	221	0.806	257	0.517	293	0.378	329	0.505
6	0.491	42	0.396	78	0.630	114	0.882	150	0.990	186	0.966	222	0.799	258	0.510	294	0.380	330	0.508
7	0.488	43	0.398	79	0.638	115	0.887	151	0.991	187	0.964	223	0.792	259	0.502	295	0.382	331	0.510
8	0.484	44	0.400	80	0.646	116	0.892	152	0.993	188	0.961	224	0.784	260	0.495	296	0.385	332	0.513
9	0.481	45	0.403	81	0.654	117	0.897	153	0.994	189	0.958	225	0.777	261	0.488	297	0.387	333	0.515
10	0.477	46	0.406	82	0.663	118	0.902	154	0.995	190	0.955	226	0.769	262	0.481	298	0.390	334	0.517
11	0.474	47	0.410	83	0.671	119	0.907	155	0.995	191	0.952	227	0.761	263	0.474	299	0.394	335	0.519
12	0.470	48	0.414	84	0.679	120	0.911	156	0.996	192	0.949	228	0.754	264	0.468	300	0.397	336	0.520
13	0.467	49	0.419	85	0.686	121	0.916	157	0.997	193	0.946	229	0.746	265	0.461	301	0.401	337	0.522
14	0.463	50	0.423	86	0.694	122	0.920	158	0.998	194	0.942	230	0.737	266	0.455	302	0.404	338	0.523
15	0.459	51	0.429	87	0.702	123	0.924	159	0.998	195	0.939	231	0.729	267	0.448	303	0.408	339	0.524
16	0.455	52	0.434	88	0.710	124	0.928	160	0.999	196	0.935	232	0.721	268	0.442	304	0.412	340	0.525
17	0.452	53	0.440	89	0.718	125	0.932	161	0.999	197	0.932	233	0.713	269	0.436	305	0.416	341	0.526
18	0.448	54	0.446	90	0.725	126	0.935	162	0.999	198	0.928	234	0.704	270	0.430	306	0.420	342	0.527
19	0.444	55	0.452	91	0.733	127	0.939	163	1.000	199	0.924	235	0.696	271	0.425	307	0.424	343	0.527
20	0.440	56	0.459	92	0.741	128	0.942	164	0.999	200	0.920	236	0.687	272	0.420	308	0.428	344	0.528
21	0.437	57	0.465	93	0.748	129	0.946	165	0.998	201	0.916	237	0.679	273	0.414	309	0.432	345	0.528
22	0.433	58	0.472	94	0.755	130	0.949	166	0.997	202	0.912	238	0.670	274	0.410	310	0.437	346	0.528
23	0.430	59	0.479	95	0.763	131	0.952	167	0.996	203	0.907	239	0.662	275	0.405	311	0.441	347	0.527
24	0.426	60	0.487	96	0.770	132	0.955	168	0.995	204	0.903	240	0.653	276	0.401	312	0.445	348	0.527
25	0.423	61	0.494	97	0.777	133	0.958	169	0.995	205	0.898	241	0.645	277	0.396	313	0.449	349	0.526
26	0.419	62	0.502	98	0.784	134	0.960	170	0.994	206	0.893	242	0.637	278	0.393	314	0.453	350	0.525
27	0.416	63	0.510	99	0.791	135	0.963	171	0.993	207	0.889	243	0.628	279	0.389	315	0.457	351	0.524
28	0.413	64	0.517	100	0.798	136	0.965	172	0.992	208	0.884	244	0.620	280	0.386	316	0.461	352	0.523
29	0.410	65	0.525	101	0.804	137	0.968	173	0.990	209	0.878	245	0.611	281	0.383	317	0.465	353	0.522
30	0.407	66	0.533	102	0.811	138	0.970	174	0.989	210	0.873	246	0.603	282	0.381	318	0.469	354	0.520
31	0.405	67	0.541	103	0.818	139	0.972	175	0.988	211	0.868	247	0.595	283	0.378	319	0.472	355	0.518
32	0.402	68	0.549	104	0.824	140	0.974	176	0.986	212	0.862	248	0.587	284	0.377	320	0.476	356	0.517
33	0.400	69	0.557	105	0.830	141	0.976	177	0.985	213	0.857	249	0.579	285	0.375	321	0.480	357	0.515
34	0.398	70	0.565	106	0.837	142	0.978	178	0.983	214	0.851	250	0.571	286	0.374	322	0.483	358	0.512
35	0.396	71	0.573	107	0.843	143	0.980	179	0.981	215	0.845	251	0.563	287	0.373	323	0.487	359	0.510

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## Vertical Polarization AZIMUTH PATTERN

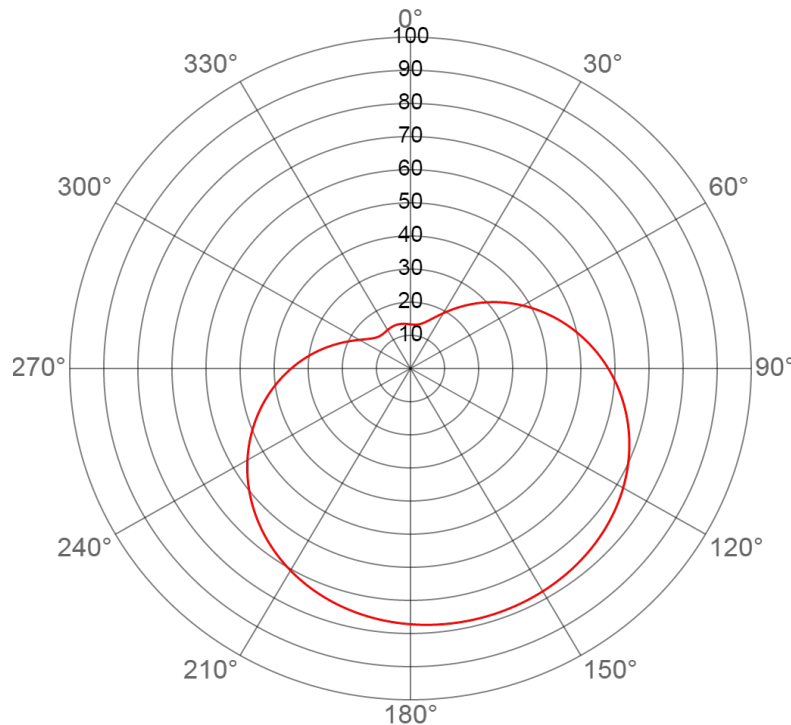


Exhibit No.  
Date  
Call Letters  
Channel  
Antenna Type  
Location  
Customer

28 Dec 2018

WYKE

24

TLP-16C/VP

INGLIS, FL

Gain  
Drawing #

2.1 (3.22 dB)

Calculated

TLP-C

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.133	36	0.224	72	0.464	108	0.675	144	0.771	180	0.772	216	0.680	252	0.474	288	0.233	324	0.132
1	0.133	37	0.230	73	0.471	109	0.679	145	0.772	181	0.771	217	0.676	253	0.467	289	0.228	325	0.132
2	0.133	38	0.236	74	0.477	110	0.684	146	0.773	182	0.770	218	0.672	254	0.460	290	0.222	326	0.133
3	0.133	39	0.242	75	0.484	111	0.688	147	0.774	183	0.769	219	0.667	255	0.454	291	0.216	327	0.133
4	0.133	40	0.248	76	0.491	112	0.692	148	0.775	184	0.767	220	0.663	256	0.447	292	0.211	328	0.133
5	0.133	41	0.254	77	0.498	113	0.696	149	0.776	185	0.766	221	0.658	257	0.440	293	0.206	329	0.134
6	0.133	42	0.260	78	0.504	114	0.700	150	0.777	186	0.764	222	0.653	258	0.433	294	0.201	330	0.134
7	0.133	43	0.266	79	0.511	115	0.704	151	0.777	187	0.763	223	0.648	259	0.426	295	0.196	331	0.135
8	0.134	44	0.272	80	0.517	116	0.707	152	0.778	188	0.761	224	0.643	260	0.419	296	0.191	332	0.135
9	0.134	45	0.279	81	0.524	117	0.711	153	0.779	189	0.760	225	0.638	261	0.412	297	0.186	333	0.135
10	0.135	46	0.285	82	0.531	118	0.714	154	0.779	190	0.758	226	0.633	262	0.405	298	0.182	334	0.136
11	0.136	47	0.292	83	0.537	119	0.718	155	0.780	191	0.756	227	0.628	263	0.398	299	0.177	335	0.136
12	0.137	48	0.298	84	0.543	120	0.721	156	0.780	192	0.754	228	0.622	264	0.391	300	0.173	336	0.137
13	0.139	49	0.305	85	0.550	121	0.724	157	0.780	193	0.752	229	0.617	265	0.384	301	0.169	337	0.137
14	0.140	50	0.312	86	0.556	122	0.727	158	0.781	194	0.750	230	0.612	266	0.377	302	0.165	338	0.137
15	0.142	51	0.318	87	0.562	123	0.730	159	0.781	195	0.748	231	0.606	267	0.371	303	0.162	339	0.138
16	0.144	52	0.325	88	0.568	124	0.733	160	0.781	196	0.746	232	0.600	268	0.364	304	0.158	340	0.138
17	0.146	53	0.332	89	0.574	125	0.736	161	0.781	197	0.743	233	0.595	269	0.357	305	0.155	341	0.138
18	0.148	54	0.339	90	0.581	126	0.738	162	0.781	198	0.741	234	0.589	270	0.350	306	0.152	342	0.138
19	0.151	55	0.346	91	0.586	127	0.741	163	0.781	199	0.738	235	0.583	271	0.343	307	0.149	343	0.138
20	0.154	56	0.353	92	0.592	128	0.743	164	0.781	200	0.736	236	0.577	272	0.336	308	0.147	344	0.138
21	0.157	57	0.360	93	0.598	129	0.746	165	0.781	201	0.733	237	0.571	273	0.329	309	0.144	345	0.138
22	0.160	58	0.366	94	0.604	130	0.748	166	0.781	202	0.730	238	0.565	274	0.323	310	0.142	346	0.138
23	0.163	59	0.373	95	0.610	131	0.750	167	0.780	203	0.727	239	0.559	275	0.316	311	0.140	347	0.138
24	0.167	60	0.380	96	0.615	132	0.752	168	0.780	204	0.724	240	0.552	276	0.309	312	0.139	348	0.138
25	0.171	61	0.387	97	0.621	133	0.754	169	0.780	205	0.721	241	0.546	277	0.303	313	0.137	349	0.137
26	0.175	62	0.394	98	0.626	134	0.756	170	0.779	206	0.718	242	0.540	278	0.296	314	0.136	350	0.137
27	0.179	63	0.401	99	0.631	135	0.758	171	0.779	207	0.715	243	0.533	279	0.289	315	0.135	351	0.137
28	0.183	64	0.408	100	0.637	136	0.760	172	0.778	208	0.711	244	0.527	280	0.283	316	0.134	352	0.136
29	0.188	65	0.415	101	0.642	137	0.762	173	0.778	209	0.708	245	0.521	281	0.276	317	0.133	353	0.136
30	0.193	66	0.422	102	0.647	138	0.763	174	0.777	210	0.704	246	0.514	282	0.270	318	0.133	354	0.136
31	0.198	67	0.429	103	0.652	139	0.765	175	0.776	211	0.700	247	0.507	283	0.264	319	0.132	355	0.135
32	0.203	68	0.436	104	0.657	140	0.766	176	0.776	212	0.697	248	0.501	284	0.258	320	0.132	356	0.135
33	0.208	69	0.443	105	0.661	141	0.768	177	0.775	213	0.693	249	0.494	285	0.251	321	0.132	357	0.134
34	0.213	70	0.450	106	0.666	142	0.769	178	0.774	214	0.689	250	0.487	286	0.245	322	0.132	358	0.134
35	0.219	71	0.457	107	0.671	143	0.770	179	0.773	215	0.685	251	0.481	287	0.239	323	0.132	359	0.134

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## ELEVATION PATTERN

Exhibit No.

Date **28 Dec 2018**

Call Letters **WYKE**

Channel **24**

Antenna Type **TLP-16C/VP**

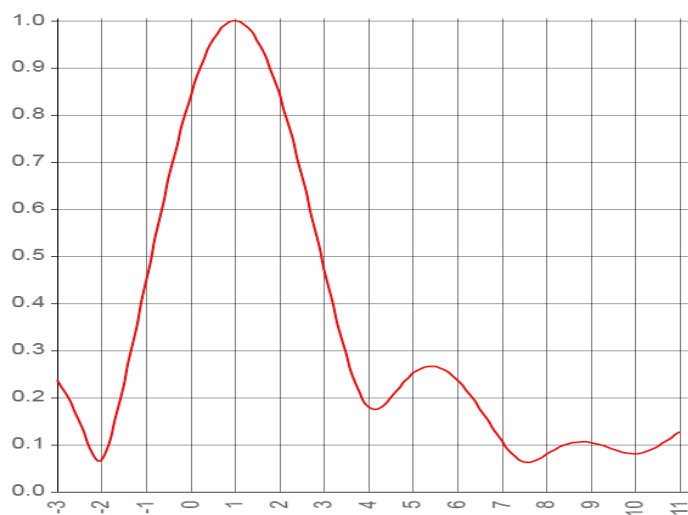
Location **INGLIS, FL**

Customer

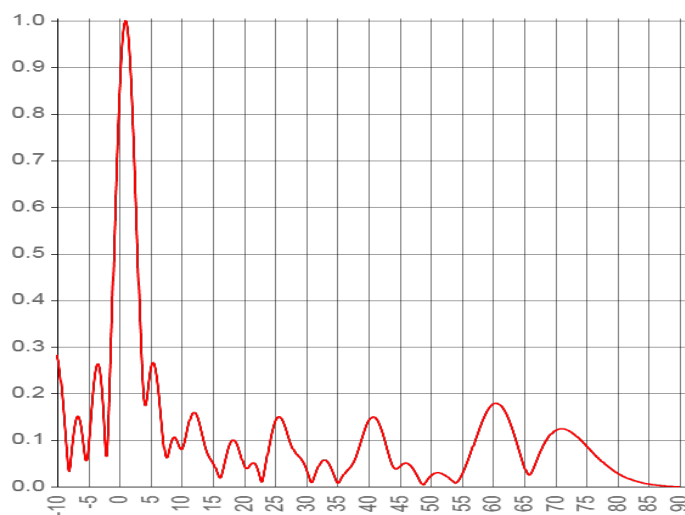
RMS Gain at Main Lobe **16.0 (12.04 dB)**

RMS Gain at Horizontal **11.3 (10.53 dB)**
**Calculated**

Beam Tilt **1 Degrees**

Drawing # **16L160100**


Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.283	10	0.080	30	0.039	50	0.023	70	0.120
-9	0.167	11	0.127	31	0.010	51	0.030	71	0.124
-8	0.036	12	0.159	32	0.044	52	0.027	72	0.121
-7	0.141	13	0.128	33	0.057	53	0.017	73	0.113
-6	0.119	14	0.077	34	0.040	54	0.008	74	0.101
-5	0.081	15	0.052	35	0.009	55	0.026	75	0.087
-4	0.233	16	0.021	36	0.025	56	0.057	76	0.074
-3	0.237	17	0.057	37	0.041	57	0.094	77	0.060
-2	0.066	18	0.098	38	0.064	58	0.131	78	0.048
-1	0.446	19	0.088	39	0.105	59	0.161	79	0.038
0	0.840	20	0.046	40	0.140	60	0.177	80	0.029
1	1.000	21	0.047	41	0.149	61	0.177	81	0.022
2	0.844	22	0.045	42	0.125	62	0.159	82	0.016
3	0.476	23	0.012	43	0.081	63	0.128	83	0.012
4	0.180	24	0.084	44	0.043	64	0.087	84	0.008
5	0.251	25	0.140	45	0.043	65	0.044	85	0.006
6	0.237	26	0.147	46	0.051	66	0.027	86	0.004
7	0.107	27	0.113	47	0.042	67	0.056	87	0.002
8	0.079	28	0.078	48	0.020	68	0.086	88	0.001
9	0.104	29	0.062	49	0.007	69	0.108	89	0.000

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## Mechanicals

Exhibit No.

Date **28 Dec 2018**

Call Letters **WYKE**

Channel **24**

Antenna Type **TLP-16C/VP**

Location **INGLIS, FL**

Customer

## Preliminary Specifications

### Side Mounted

#### Mechanical Specification without ice TIA-222-G

Basic Wind Speed 90 mph

Structure Class II

Exposure Category C

Topography Category 1

### Mechanical Specifications

Height less Lightning Protector	(H2)	34.3 ft (10.4 m)
Center of Radiation	(H3)	17.1 ft (5.2 m)
Effective Projected Area	(EPA)s	45.0 ft <sup>2</sup> (13.7 m <sup>2</sup> )
Weight	W	256.6 lbs