

Horizontal Polarization AZIMUTH PATTERN

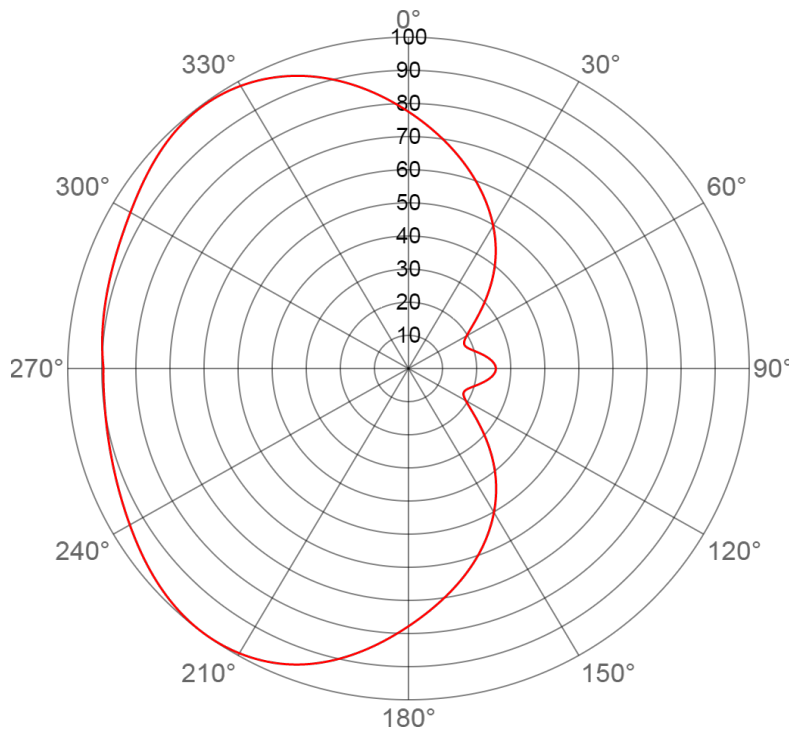


Exhibit No.

Date **29 May 2017**

Call Letters **WACY**

Channel **36**

Antenna Type **TLP-24M (C)**

Location **APPLETON WI**

Customer

Gain **1.9 (2.79 dB)**
Calculated

Drawing # **TLP-M**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.775	36	0.436	72	0.190	108	0.190	144	0.438	180	0.778	216	1.000	252	0.914	288	0.918	324	0.996
1	0.766	37	0.425	73	0.194	109	0.186	145	0.449	181	0.788	217	1.000	253	0.912	289	0.920	325	0.995
2	0.757	38	0.414	74	0.198	110	0.183	146	0.460	182	0.797	218	1.000	254	0.910	290	0.921	326	0.993
3	0.748	39	0.403	75	0.202	111	0.181	147	0.470	183	0.807	219	0.999	255	0.908	291	0.923	327	0.992
4	0.739	40	0.392	76	0.207	112	0.179	148	0.481	184	0.816	220	0.998	256	0.907	292	0.925	328	0.990
5	0.730	41	0.381	77	0.211	113	0.178	149	0.491	185	0.826	221	0.997	257	0.905	293	0.926	329	0.988
6	0.720	42	0.370	78	0.216	114	0.178	150	0.502	186	0.835	222	0.996	258	0.904	294	0.928	330	0.985
7	0.711	43	0.358	79	0.221	115	0.178	151	0.512	187	0.845	223	0.994	259	0.903	295	0.930	331	0.982
8	0.702	44	0.347	80	0.226	116	0.180	152	0.522	188	0.854	224	0.992	260	0.901	296	0.932	332	0.979
9	0.693	45	0.335	81	0.231	117	0.182	153	0.532	189	0.863	225	0.990	261	0.900	297	0.935	333	0.975
10	0.684	46	0.324	82	0.235	118	0.185	154	0.542	190	0.873	226	0.987	262	0.899	298	0.937	334	0.971
11	0.675	47	0.313	83	0.240	119	0.189	155	0.552	191	0.882	227	0.985	263	0.899	299	0.940	335	0.967
12	0.666	48	0.302	84	0.244	120	0.194	156	0.561	192	0.890	228	0.982	264	0.898	300	0.942	336	0.962
13	0.657	49	0.291	85	0.247	121	0.200	157	0.571	193	0.899	229	0.979	265	0.897	301	0.945	337	0.957
14	0.648	50	0.280	86	0.250	122	0.206	158	0.580	194	0.907	230	0.976	266	0.897	302	0.948	338	0.952
15	0.639	51	0.270	87	0.253	123	0.214	159	0.590	195	0.916	231	0.973	267	0.896	303	0.951	339	0.946
16	0.630	52	0.260	88	0.255	124	0.221	160	0.599	196	0.923	232	0.970	268	0.896	304	0.954	340	0.940
17	0.620	53	0.250	89	0.256	125	0.229	161	0.608	197	0.931	233	0.967	269	0.896	305	0.958	341	0.934
18	0.611	54	0.241	90	0.257	126	0.238	162	0.617	198	0.938	234	0.964	270	0.895	306	0.961	342	0.927
19	0.602	55	0.232	91	0.256	127	0.248	163	0.626	199	0.945	235	0.960	271	0.897	307	0.964	343	0.920
20	0.593	56	0.224	92	0.255	128	0.257	164	0.635	200	0.951	236	0.957	272	0.898	308	0.967	344	0.913
21	0.583	57	0.216	93	0.253	129	0.267	165	0.644	201	0.957	237	0.954	273	0.900	309	0.971	345	0.906
22	0.574	58	0.209	94	0.251	130	0.278	166	0.653	202	0.963	238	0.951	274	0.901	310	0.974	346	0.898
23	0.565	59	0.203	95	0.248	131	0.289	167	0.662	203	0.968	239	0.947	275	0.902	311	0.977	347	0.890
24	0.555	60	0.197	96	0.245	132	0.300	168	0.671	204	0.972	240	0.944	276	0.904	312	0.980	348	0.882
25	0.546	61	0.192	97	0.241	133	0.311	169	0.680	205	0.977	241	0.941	277	0.905	313	0.983	349	0.874
26	0.536	62	0.188	98	0.236	134	0.322	170	0.688	206	0.981	242	0.938	278	0.906	314	0.985	350	0.865
27	0.527	63	0.184	99	0.232	135	0.334	171	0.697	207	0.984	243	0.935	279	0.907	315	0.988	351	0.857
28	0.517	64	0.182	100	0.227	136	0.346	172	0.706	208	0.987	244	0.933	280	0.908	316	0.990	352	0.848
29	0.507	65	0.180	101	0.222	137	0.357	173	0.715	209	0.990	245	0.930	281	0.910	317	0.992	353	0.839
30	0.497	66	0.179	102	0.217	138	0.369	174	0.724	210	0.993	246	0.927	282	0.911	318	0.993	354	0.830
31	0.487	67	0.179	103	0.212	139	0.381	175	0.733	211	0.995	247	0.925	283	0.912	319	0.994	355	0.821
32	0.477	68	0.180	104	0.207	140	0.393	176	0.742	212	0.996	248	0.922	284	0.913	320	0.995	356	0.812
33	0.467	69	0.182	105	0.202	141	0.404	177	0.751	213	0.998	249	0.920	285	0.914	321	0.996	357	0.803
34	0.457	70	0.184	106	0.198	142	0.415	178	0.760	214	0.999	250	0.918	286	0.916	322	0.996	358	0.794
35	0.446	71	0.187	107	0.194	143	0.427	179	0.769	215	1.000	251	0.916	287	0.917	323	0.996	359	0.784

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

ELEVATION PATTERN

Exhibit No.

Date **29 May 2017**

Call Letters **WACY**

Channel **36**

Antenna Type **TLP-24M (C)**

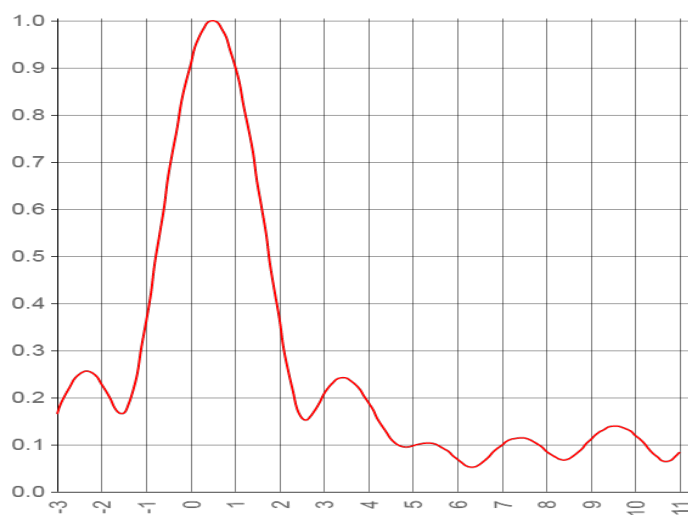
Location **APPLETON WI**

Customer

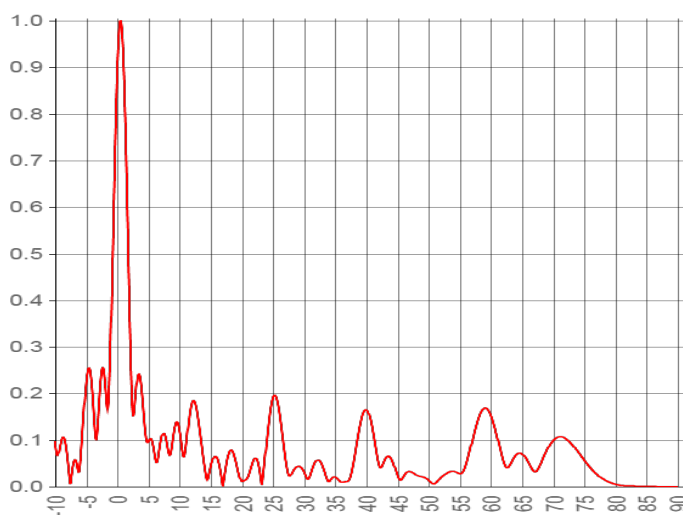
RMS Gain at Main Lobe **23.0 (13.62 dB)**

RMS Gain at Horizontal **19.0 (12.79 dB)**
Calculated

Beam Tilt **0.5 Degrees**

Drawing # **24L230050**


Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.098	10	0.120	30	0.031	50	0.013	70	0.100
-9	0.100	11	0.084	31	0.025	51	0.007	71	0.107
-8	0.057	12	0.182	32	0.056	52	0.020	72	0.103
-7	0.053	13	0.142	33	0.041	53	0.030	73	0.091
-6	0.043	14	0.044	34	0.011	54	0.033	74	0.074
-5	0.227	15	0.043	35	0.021	55	0.028	75	0.056
-4	0.196	16	0.061	36	0.010	56	0.048	76	0.040
-3	0.165	17	0.007	37	0.012	57	0.099	77	0.027
-2	0.230	18	0.075	38	0.058	58	0.148	78	0.017
-1	0.359	19	0.056	39	0.133	59	0.169	79	0.010
0	0.909	20	0.011	40	0.165	60	0.153	80	0.005
1	0.906	21	0.022	41	0.120	61	0.107	81	0.003
2	0.363	22	0.060	42	0.047	62	0.054	82	0.002
3	0.206	23	0.023	43	0.059	63	0.046	83	0.002
4	0.189	24	0.101	44	0.060	64	0.068	84	0.001
5	0.097	25	0.193	45	0.023	65	0.070	85	0.001
6	0.069	26	0.162	46	0.023	66	0.052	86	0.001
7	0.099	27	0.061	47	0.032	67	0.032	87	0.000
8	0.086	28	0.029	48	0.025	68	0.049	88	0.000
9	0.111	29	0.044	49	0.021	69	0.079	89	0.000

This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.