

Horizontal Polarization AZIMUTH PATTERN

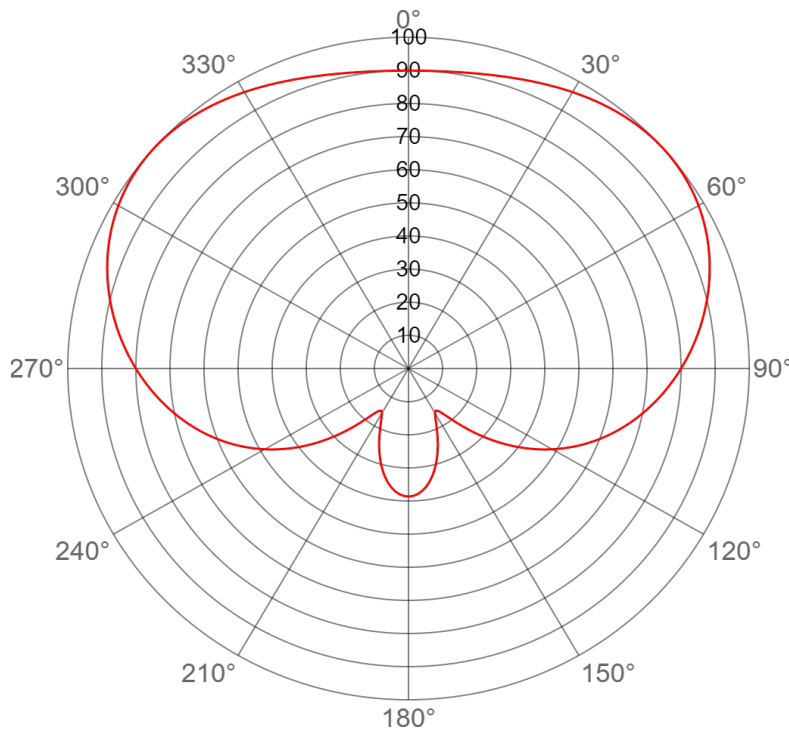


Exhibit No.

Date

29 Mar 2018

Call Letters

KJHP-LD

Channel

22

Antenna Type

DLP-8M

Location

Morongo Valley, CA

Customer

SBCCD

Gain

1.8 (2.55 dB)

Calculated

Drawing #

m-pattern_ch30

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.899	36	0.981	72	0.929	108	0.631	144	0.165	180	0.387	216	0.165	252	0.631	288	0.929	324	0.981
1	0.899	37	0.984	73	0.923	109	0.620	145	0.159	181	0.386	217	0.174	253	0.641	289	0.935	325	0.978
2	0.899	38	0.986	74	0.917	110	0.609	146	0.154	182	0.385	218	0.183	254	0.652	290	0.941	326	0.976
3	0.900	39	0.988	75	0.911	111	0.597	147	0.152	183	0.383	219	0.194	255	0.662	291	0.946	327	0.973
4	0.900	40	0.991	76	0.905	112	0.586	148	0.151	184	0.380	220	0.206	256	0.672	292	0.951	328	0.970
5	0.901	41	0.992	77	0.898	113	0.574	149	0.153	185	0.377	221	0.219	257	0.682	293	0.956	329	0.966
6	0.902	42	0.994	78	0.891	114	0.563	150	0.156	186	0.373	222	0.231	258	0.692	294	0.960	330	0.963
7	0.903	43	0.996	79	0.884	115	0.551	151	0.162	187	0.368	223	0.245	259	0.702	295	0.965	331	0.960
8	0.905	44	0.997	80	0.878	116	0.539	152	0.168	188	0.362	224	0.259	260	0.711	296	0.969	332	0.957
9	0.906	45	0.998	81	0.870	117	0.526	153	0.177	189	0.356	225	0.274	261	0.721	297	0.973	333	0.954
10	0.908	46	0.999	82	0.863	118	0.514	154	0.185	190	0.349	226	0.288	262	0.730	298	0.977	334	0.950
11	0.909	47	1.000	83	0.856	119	0.501	155	0.196	191	0.341	227	0.303	263	0.739	299	0.980	335	0.947
12	0.911	48	1.000	84	0.848	120	0.488	156	0.206	192	0.333	228	0.318	264	0.748	300	0.983	336	0.944
13	0.913	49	1.000	85	0.840	121	0.474	157	0.217	193	0.324	229	0.332	265	0.757	301	0.986	337	0.941
14	0.916	50	1.000	86	0.833	122	0.461	158	0.229	194	0.315	230	0.347	266	0.766	302	0.989	338	0.937
15	0.918	51	0.999	87	0.825	123	0.447	159	0.240	195	0.305	231	0.362	267	0.775	303	0.991	339	0.934
16	0.920	52	0.999	88	0.817	124	0.433	160	0.251	196	0.295	232	0.376	268	0.783	304	0.993	340	0.931
17	0.923	53	0.998	89	0.808	125	0.419	161	0.263	197	0.285	233	0.391	269	0.792	305	0.995	341	0.929
18	0.926	54	0.997	90	0.800	126	0.405	162	0.274	198	0.274	234	0.405	270	0.800	306	0.997	342	0.926
19	0.929	55	0.995	91	0.792	127	0.391	163	0.285	199	0.263	235	0.419	271	0.808	307	0.998	343	0.923
20	0.931	56	0.993	92	0.783	128	0.376	164	0.295	200	0.251	236	0.433	272	0.817	308	0.999	344	0.920
21	0.934	57	0.991	93	0.775	129	0.362	165	0.305	201	0.240	237	0.447	273	0.825	309	0.999	345	0.918
22	0.937	58	0.989	94	0.766	130	0.347	166	0.315	202	0.229	238	0.461	274	0.833	310	1.000	346	0.916
23	0.941	59	0.986	95	0.757	131	0.332	167	0.324	203	0.217	239	0.474	275	0.840	311	1.000	347	0.913
24	0.944	60	0.983	96	0.748	132	0.318	168	0.333	204	0.206	240	0.488	276	0.848	312	1.000	348	0.911
25	0.947	61	0.980	97	0.739	133	0.303	169	0.341	205	0.196	241	0.501	277	0.856	313	1.000	349	0.909
26	0.950	62	0.977	98	0.730	134	0.288	170	0.349	206	0.185	242	0.514	278	0.863	314	0.999	350	0.908
27	0.954	63	0.973	99	0.721	135	0.274	171	0.356	207	0.177	243	0.526	279	0.870	315	0.998	351	0.906
28	0.957	64	0.969	100	0.711	136	0.259	172	0.362	208	0.168	244	0.539	280	0.878	316	0.997	352	0.905
29	0.960	65	0.965	101	0.702	137	0.245	173	0.368	209	0.162	245	0.551	281	0.885	317	0.996	353	0.903
30	0.963	66	0.960	102	0.692	138	0.231	174	0.373	210	0.156	246	0.563	282	0.891	318	0.994	354	0.902
31	0.966	67	0.956	103	0.682	139	0.219	175	0.377	211	0.153	247	0.574	283	0.898	319	0.992	355	0.901
32	0.970	68	0.951	104	0.672	140	0.206	176	0.380	212	0.151	248	0.586	284	0.905	320	0.991	356	0.900
33	0.973	69	0.946	105	0.662	141	0.194	177	0.383	213	0.152	249	0.597	285	0.911	321	0.988	357	0.900
34	0.976	70	0.941	106	0.652	142	0.183	178	0.385	214	0.154	250	0.609	286	0.917	322	0.986	358	0.899
35	0.978	71	0.935	107	0.641	143	0.174	179	0.386	215	0.159	251	0.620	287	0.923	323	0.984	359	0.899

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 Mar 2018**

Call Letters **KJHP-LD**

Channel **22**

Antenna Type **DLP-8M**

Location **Morongo Valley, CA**

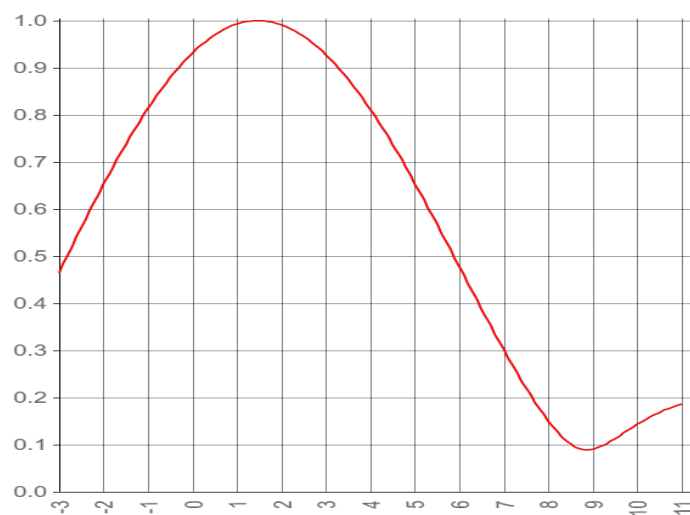
Customer **SBCCD**

RMS Gain at Main Lobe **8.0 (9.03 dB)**

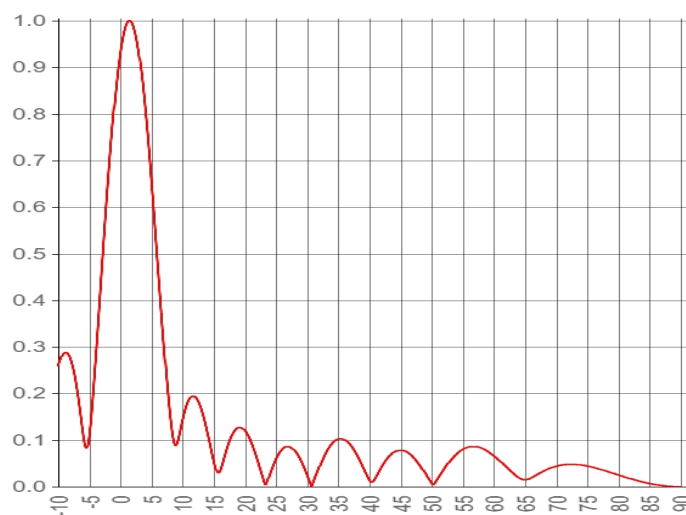
Beam Tilt **1.5 Degrees**

RMS Gain at Horizontal **6.9 (8.42 dB)**

Drawing #

Calculated


Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.258	10	0.143	30	0.025	50	0.007	70	0.044
-9	0.287	11	0.186	31	0.010	51	0.018	71	0.047
-8	0.273	12	0.193	32	0.044	52	0.038	72	0.048
-7	0.213	13	0.166	33	0.073	53	0.056	73	0.048
-6	0.117	14	0.115	34	0.093	54	0.070	74	0.047
-5	0.111	15	0.056	35	0.102	55	0.080	75	0.044
-4	0.271	16	0.034	36	0.101	56	0.085	76	0.041
-3	0.464	17	0.078	37	0.088	57	0.086	77	0.038
-2	0.652	18	0.112	38	0.068	58	0.083	78	0.034
-1	0.814	19	0.127	39	0.041	59	0.076	79	0.029
0	0.932	20	0.120	40	0.015	60	0.066	80	0.025
1	0.993	21	0.095	41	0.020	61	0.055	81	0.021
2	0.991	22	0.058	42	0.044	62	0.042	82	0.017
3	0.928	23	0.015	43	0.063	63	0.030	83	0.013
4	0.811	24	0.027	44	0.074	64	0.019	84	0.010
5	0.655	25	0.060	45	0.078	65	0.015	85	0.007
6	0.478	26	0.080	46	0.075	66	0.019	86	0.004
7	0.301	27	0.086	47	0.064	67	0.027	87	0.003
8	0.150	28	0.077	48	0.048	68	0.034	88	0.001
9	0.090	29	0.055	49	0.028	69	0.040	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.

System Summary

Exhibit No.	
Date	29 Mar 2018
Call Letters	KJHP-LD
Channel	22
Antenna Type	DLP-8M
Location	Morongo Valley, CA
Customer	SBCCD

Antenna

ERP:	15.0 kW (11.76 dBk)
Peak Gain*:	14.4 (11.58 dB)

Antenna Input Power:	1.0 kW
----------------------	--------

Transmission Line

Type:	Flexline Foam		
Size:	1-5/8"		
Impedance:	50 ohm		
Length:	125 ft (38.1 m)	Attenuation:	0.7 dB
		Efficiency:	86.09 %

Transmitter Output

1.2 kW (0.83 dBk)

* Gain is with respect to half wave dipole.

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.

Mechanicals

Exhibit No.

Date **29 Mar 2018**Call Letters **KJHP-LD**Channel **22**Antenna Type **DLP-8M**Location **Morongo Valley, CA**Customer **SBCCD**

Preliminary Specifications

Side Mounted

Mechanical Specification without ice TIA-222-G

Basic Wind Speed 90 mph

Mechanical Specification with ice TIA-222-G

Ice Design: 0.5 in.

Basic Wind Speed 40 mph

Structure Class II

Exposure Category C

Topography Category 1

Mechanical Specifications		without ice	with ice
Height less Lightning Protector	(H2)	17.3 ft (5.3 m)	
Center of Radiation	(H3)	9.6 ft (2.9 m)	
Effective Projected Area	(EPA)s	33.9 ft ² (10.3 m ²)	41.0 ft ² (12.5 m ²)
Weight	W	91.8 lbs	435.8 lbs