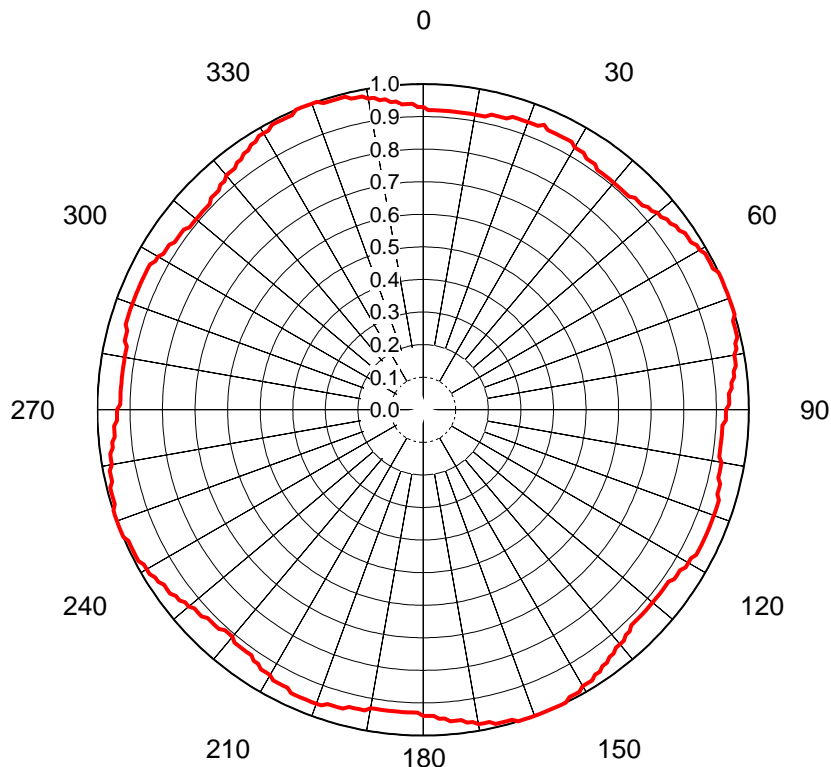


AZIMUTH PATTERN Horizontal Polarization

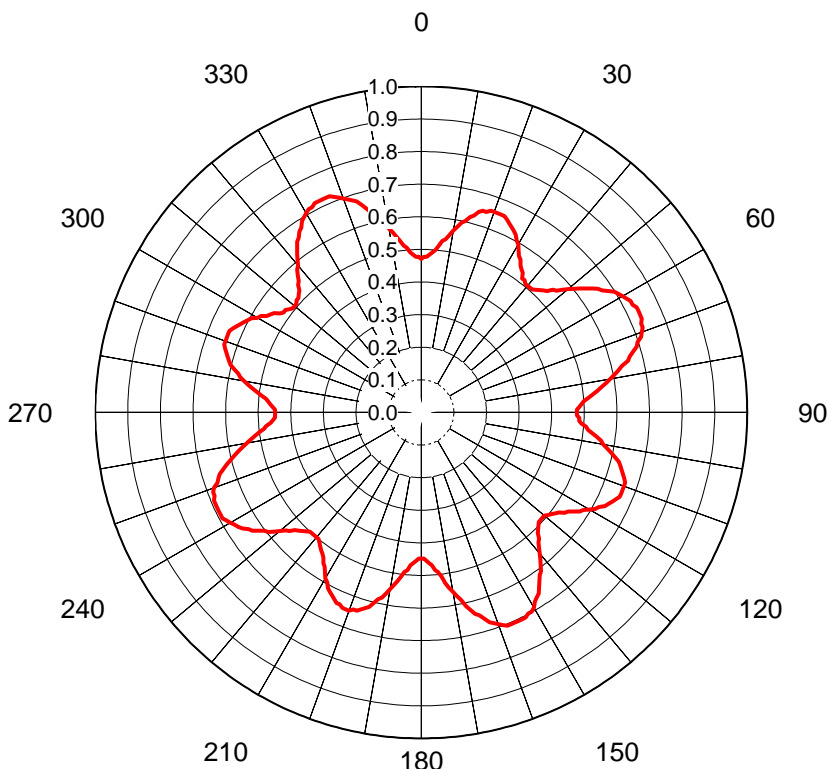


Proposal No. **C-71768-2**
 Date **7-Sep-21**
 Call Letters **KXVO**
 Channel **29**
 Frequency **563 MHz**
 Antenna Type **TFU-32GTH/VP-R O8 SP**
 Gain **1.11 (0.44dB)**
 Calculated
 Circularity **+/- 1.0 dB**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.930	36	0.910	72	1.000	108	0.950	144	0.960	180	0.940	216	0.920	252	1.000	288	0.950	324	0.950
1	0.920	37	0.910	73	1.000	109	0.950	145	0.960	181	0.930	217	0.920	253	0.990	289	0.950	325	0.960
2	0.920	38	0.910	74	0.990	110	0.950	146	0.970	182	0.930	218	0.920	254	0.990	290	0.950	326	0.960
3	0.920	39	0.910	75	0.990	111	0.950	147	0.970	183	0.930	219	0.920	255	0.990	291	0.950	327	0.970
4	0.920	40	0.910	76	0.990	112	0.950	148	0.980	184	0.930	220	0.910	256	0.990	292	0.950	328	0.970
5	0.920	41	0.910	77	0.990	113	0.950	149	0.980	185	0.930	221	0.910	257	0.980	293	0.950	329	0.980
6	0.920	42	0.910	78	0.980	114	0.950	150	0.980	186	0.930	222	0.910	258	0.980	294	0.950	330	0.980
7	0.920	43	0.910	79	0.980	115	0.950	151	0.990	187	0.930	223	0.920	259	0.980	295	0.950	331	0.980
8	0.920	44	0.910	80	0.970	116	0.950	152	0.990	188	0.930	224	0.920	260	0.970	296	0.950	332	0.990
9	0.920	45	0.920	81	0.970	117	0.950	153	0.990	189	0.930	225	0.920	261	0.970	297	0.950	333	0.990
10	0.920	46	0.920	82	0.970	118	0.950	154	1.000	190	0.930	226	0.920	262	0.970	298	0.950	334	0.990
11	0.920	47	0.920	83	0.960	119	0.940	155	1.000	191	0.940	227	0.930	263	0.960	299	0.940	335	0.990
12	0.920	48	0.930	84	0.960	120	0.940	156	1.000	192	0.940	228	0.930	264	0.960	300	0.940	336	0.990
13	0.930	49	0.930	85	0.950	121	0.940	157	1.000	193	0.940	229	0.930	265	0.950	301	0.930	337	1.000
14	0.930	50	0.940	86	0.950	122	0.930	158	1.000	194	0.940	230	0.940	266	0.950	302	0.930	338	1.000
15	0.930	51	0.940	87	0.940	123	0.930	159	1.000	195	0.950	231	0.940	267	0.950	303	0.930	339	1.000
16	0.930	52	0.950	88	0.940	124	0.930	160	1.000	196	0.950	232	0.950	268	0.940	304	0.920	340	1.000
17	0.940	53	0.950	89	0.940	125	0.920	161	1.000	197	0.950	233	0.950	269	0.940	305	0.920	341	1.000
18	0.940	54	0.960	90	0.930	126	0.920	162	1.000	198	0.950	234	0.960	270	0.940	306	0.920	342	0.990
19	0.940	55	0.960	91	0.930	127	0.920	163	1.000	199	0.960	235	0.960	271	0.930	307	0.920	343	0.990
20	0.940	56	0.970	92	0.930	128	0.920	164	0.990	200	0.960	236	0.960	272	0.930	308	0.910	344	0.990
21	0.940	57	0.970	93	0.920	129	0.920	165	0.990	201	0.960	237	0.970	273	0.930	309	0.910	345	0.990
22	0.940	58	0.970	94	0.920	130	0.920	166	0.990	202	0.960	238	0.970	274	0.930	310	0.910	346	0.990
23	0.950	59	0.980	95	0.920	131	0.920	167	0.990	203	0.960	239	0.980	275	0.930	311	0.910	347	0.980
24	0.940	60	0.980	96	0.920	132	0.920	168	0.980	204	0.960	240	0.980	276	0.930	312	0.910	348	0.980
25	0.940	61	0.990	97	0.920	133	0.920	169	0.980	205	0.960	241	0.980	277	0.930	313	0.910	349	0.980
26	0.940	62	0.990	98	0.920	134	0.920	170	0.980	206	0.950	242	0.990	278	0.930	314	0.910	350	0.970
27	0.940	63	0.990	99	0.920	135	0.920	171	0.970	207	0.950	243	0.990	279	0.930	315	0.920	351	0.970
28	0.940	64	0.990	100	0.930	136	0.920	172	0.970	208	0.950	244	0.990	280	0.930	316	0.920	352	0.960
29	0.940	65	1.000	101	0.930	137	0.930	173	0.960	209	0.950	245	0.990	281	0.930	317	0.920	353	0.960
30	0.930	66	1.000	102	0.930	138	0.930	174	0.960	210	0.940	246	0.990	282	0.930	318	0.930	354	0.950
31	0.930	67	1.000	103	0.930	139	0.940	175	0.960	211	0.940	247	1.000	283	0.940	319	0.930	355	0.950
32	0.930	68	1.000	104	0.940	140	0.940	176	0.950	212	0.940	248	1.000	284	0.940	320	0.940	356	0.940
33	0.920	69	1.000	105	0.940	141	0.940	177	0.950	213	0.930	249	1.000	285	0.940	321	0.940	357	0.940
34	0.920	70	1.000	106	0.940	142	0.950	178	0.940	214	0.930	250	1.000	286	0.950	322	0.940	358	0.940
35	0.920	71	1.000	107	0.950	143	0.950	179	0.940	215	0.920	251	1.000	287	0.950	323	0.950	359	0.930

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.

AZIMUTH PATTERN Vertical Polarization



Proposal No. **C-71768-2**
 Date **7-Sep-21**
 Call Letters **KXVO**
 Channel **29**
 Frequency **563 MHz**
 Antenna Type **TFU-32GTH/VP-R 08 SP**
 Gain **1.53 (1.86dB)**
 Calculated
 Circularity **+/- 3.0 dB**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.470	36	0.529	72	0.698	108	0.654	144	0.617	180	0.448	216	0.522	252	0.654	288	0.632
1	0.478	37	0.515	73	0.691	109	0.662	145	0.632	181	0.448	217	0.515	253	0.647	289	0.640
2	0.478	38	0.515	74	0.676	110	0.662	146	0.647	182	0.456	218	0.507	254	0.632	290	0.640
3	0.485	39	0.507	75	0.662	111	0.662	147	0.662	183	0.463	219	0.500	255	0.617	291	0.640
4	0.493	40	0.507	76	0.654	112	0.662	148	0.669	184	0.470	220	0.500	256	0.603	292	0.640
5	0.500	41	0.507	77	0.632	113	0.662	149	0.676	185	0.485	221	0.500	257	0.588	293	0.640
6	0.515	42	0.507	78	0.617	114	0.654	150	0.691	186	0.493	222	0.500	258	0.573	294	0.632
7	0.529	43	0.515	79	0.603	115	0.647	151	0.698	187	0.507	223	0.500	259	0.559	295	0.625
8	0.537	44	0.522	80	0.588	116	0.640	152	0.698	188	0.522	224	0.507	260	0.544	296	0.617
9	0.551	45	0.529	81	0.573	117	0.632	153	0.706	189	0.537	225	0.515	261	0.529	297	0.610
10	0.566	46	0.537	82	0.559	118	0.617	154	0.706	190	0.551	226	0.522	262	0.515	298	0.603
11	0.581	47	0.551	83	0.544	119	0.610	155	0.706	191	0.566	227	0.529	263	0.500	299	0.595
12	0.595	48	0.559	84	0.529	120	0.595	156	0.706	192	0.581	228	0.544	264	0.485	300	0.581
13	0.603	49	0.573	85	0.515	121	0.581	157	0.706	193	0.588	229	0.551	265	0.478	301	0.573
14	0.617	50	0.588	86	0.500	122	0.573	158	0.706	194	0.603	230	0.566	266	0.463	302	0.559
15	0.625	51	0.603	87	0.493	123	0.559	159	0.698	195	0.617	231	0.581	267	0.456	303	0.551
16	0.640	52	0.617	88	0.485	124	0.544	160	0.691	196	0.625	232	0.595	268	0.448	304	0.544
17	0.647	53	0.632	89	0.478	125	0.537	161	0.684	197	0.632	233	0.603	269	0.448	305	0.529
18	0.647	54	0.647	90	0.478	126	0.522	162	0.676	198	0.640	234	0.617	270	0.448	306	0.522
19	0.654	55	0.662	91	0.478	127	0.515	163	0.662	199	0.640	235	0.632	271	0.448	307	0.522
20	0.654	56	0.669	92	0.485	128	0.507	164	0.647	200	0.647	236	0.640	272	0.456	308	0.515
21	0.654	57	0.684	93	0.485	129	0.500	165	0.640	201	0.647	237	0.654	273	0.463	309	0.507
22	0.654	58	0.698	94	0.493	130	0.493	166	0.625	202	0.647	238	0.662	274	0.470	310	0.507
23	0.654	59	0.706	95	0.507	131	0.493	167	0.610	203	0.640	239	0.669	275	0.478	311	0.507
24	0.647	60	0.713	96	0.515	132	0.493	168	0.588	204	0.640	240	0.676	276	0.493	312	0.515
25	0.640	61	0.720	97	0.529	133	0.493	169	0.573	205	0.632	241	0.684	277	0.507	313	0.515
26	0.632	62	0.728	98	0.544	134	0.500	170	0.559	206	0.625	242	0.691	278	0.522	314	0.522
27	0.625	63	0.728	99	0.559	135	0.507	171	0.544	207	0.617	243	0.691	279	0.537	315	0.529
28	0.617	64	0.735	100	0.566	136	0.515	172	0.529	208	0.610	244	0.691	280	0.551	316	0.544
29	0.603	65	0.735	101	0.581	137	0.529	173	0.507	209	0.595	245	0.691	281	0.566	317	0.551
30	0.595	66	0.735	102	0.595	138	0.537	174	0.493	210	0.588	246	0.691	282	0.573	318	0.566
31	0.581	67	0.735	103	0.610	139	0.551	175	0.485	211	0.573	247	0.691	283	0.588	319	0.581
32	0.566	68	0.728	104	0.625	140	0.566	176	0.470	212	0.559	248	0.684	284	0.603	320	0.588
33	0.559	69	0.728	105	0.632	141	0.581	177	0.463	213	0.551	249	0.684	285	0.610	321	0.603
34	0.544	70	0.720	106	0.640	142	0.595	178	0.456	214	0.537	250	0.676	286	0.617	322	0.617
35	0.537	71	0.713	107	0.647	143	0.610	179	0.448	215	0.529	251	0.662	287	0.625	323	0.632

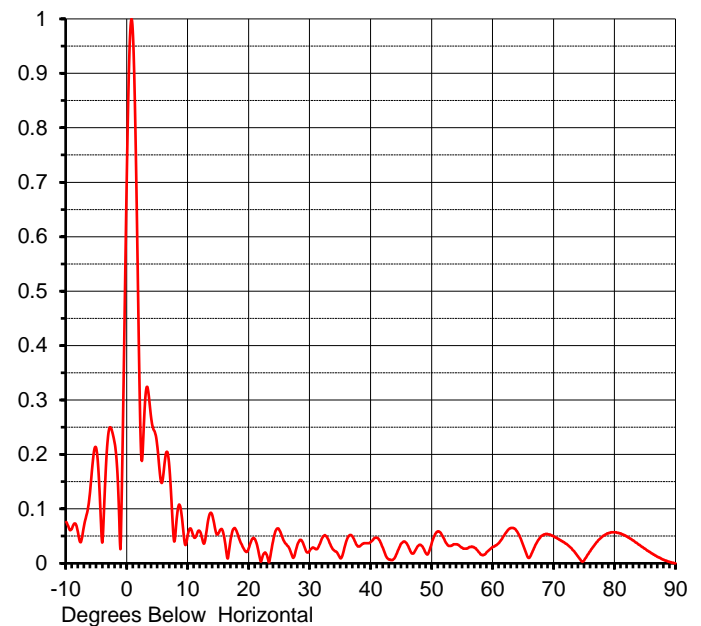
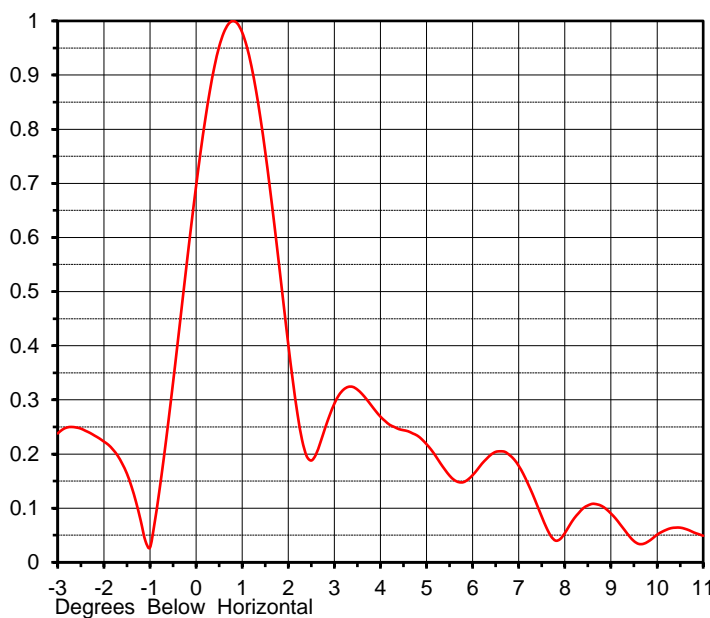
This document contains proprietary and confidential information of Dielectric. It is to be used solely for the purpose for which it is provided. No disclosure, reproduction, or use of this document or any part of it may be made without the written permission of Dielectric.

ELEVATION PATTERN

Proposal No. **C-71768-2**
 Date **7-Sep-21**
 Call Letters **KXVO**
 Channel **29**
 Frequency **563 MHz**
 Antenna Type **TFU-32GTH/VP-R 08 SP**

RMS Directivity at Main Lobe **29.4 (14.68 dB)**
 RMS Directivity at Horizontal **16.9 (12.28 dB)**
Calculated

Beam Tilt **0.70 deg**
 Pattern Number **32G294070**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.076	10.0	0.056	30.0	0.025	50.0	0.040	70.0	0.049
-9.0	0.066	11.0	0.047	31.0	0.026	51.0	0.059	71.0	0.043
-8.0	0.052	12.0	0.057	32.0	0.047	52.0	0.044	72.0	0.036
-7.0	0.074	13.0	0.059	33.0	0.043	53.0	0.032	73.0	0.025
-6.0	0.144	14.0	0.086	34.0	0.023	54.0	0.035	74.0	0.011
-5.0	0.206	15.0	0.056	35.0	0.009	55.0	0.028	75.0	0.007
-4.0	0.049	16.0	0.041	36.0	0.043	56.0	0.029	76.0	0.024
-3.0	0.245	17.0	0.047	37.0	0.048	57.0	0.028	77.0	0.039
-2.0	0.217	18.0	0.057	38.0	0.031	58.0	0.016	78.0	0.050
-1.0	0.072	19.0	0.029	39.0	0.037	59.0	0.021	79.0	0.056
0.0	0.759	20.0	0.030	40.0	0.040	60.0	0.030	80.0	0.057
1.0	0.953	21.0	0.043	41.0	0.047	61.0	0.038	81.0	0.054
2.0	0.335	22.0	0.005	42.0	0.026	62.0	0.055	82.0	0.049
3.0	0.309	23.0	0.011	43.0	0.007	63.0	0.065	83.0	0.042
4.0	0.261	24.0	0.046	44.0	0.013	64.0	0.057	84.0	0.034
5.0	0.208	25.0	0.060	45.0	0.037	65.0	0.031	85.0	0.026
6.0	0.171	26.0	0.036	46.0	0.033	66.0	0.011	86.0	0.018
7.0	0.163	27.0	0.015	47.0	0.019	67.0	0.035	87.0	0.012
8.0	0.068	28.0	0.037	48.0	0.034	68.0	0.051	88.0	0.006
9.0	0.081	29.0	0.032	49.0	0.018	69.0	0.053	89.0	0.002
								90.0	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.