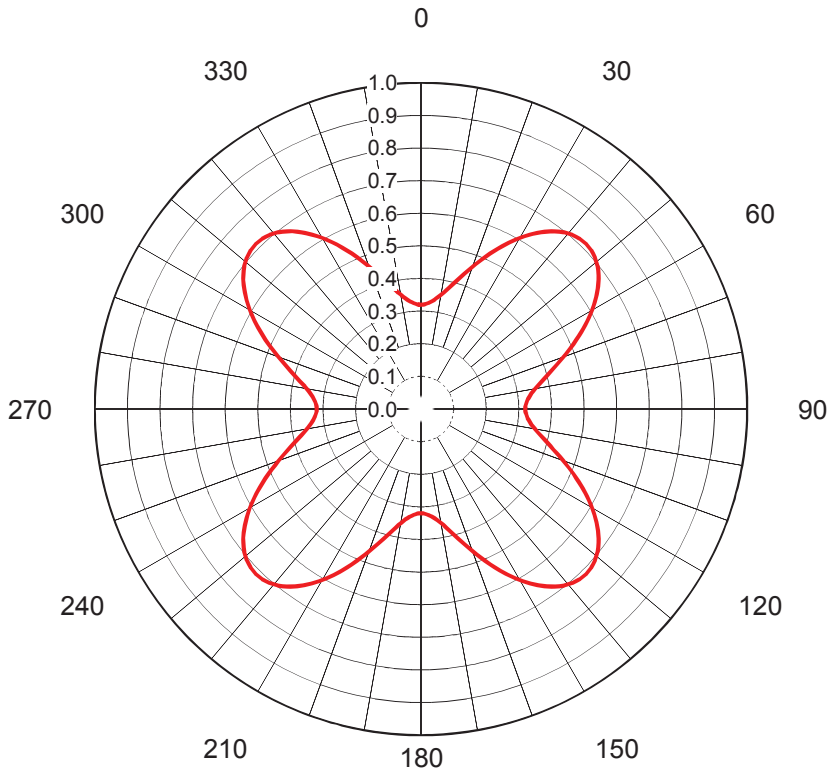


## AZIMUTH PATTERN Vertical Polarization

Proposal No. **C-70161**  
 Date **12-Mar-17**  
 Call Letters **KBTv**  
 Channel **27**  
 Frequency **551 MHz**  
 Antenna Type **TFU-24JTH/VP-R O4**  
 Gain **1.84 (2.65dB)**  
**Calculated**  
 Circularity **+/- 4.0 dB**  
 Drawing # **TFU-04V D27**



Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.320	36	0.673	72	0.438	108	0.438	144	0.673	180	0.320	216	0.673	252	0.438	288	0.438	324	0.673
1	0.320	37	0.682	73	0.425	109	0.451	145	0.664	181	0.320	217	0.682	253	0.425	289	0.451	325	0.664
2	0.321	38	0.690	74	0.413	110	0.465	146	0.654	182	0.321	218	0.690	254	0.413	290	0.465	326	0.654
3	0.323	39	0.696	75	0.402	111	0.478	147	0.643	183	0.323	219	0.696	255	0.402	291	0.478	327	0.643
4	0.325	40	0.702	76	0.391	112	0.493	148	0.631	184	0.325	220	0.702	256	0.391	292	0.493	328	0.631
5	0.329	41	0.707	77	0.381	113	0.507	149	0.619	185	0.329	221	0.707	257	0.381	293	0.507	329	0.619
6	0.332	42	0.711	78	0.372	114	0.521	150	0.606	186	0.332	222	0.711	258	0.372	294	0.521	330	0.606
7	0.337	43	0.713	79	0.363	115	0.536	151	0.592	187	0.337	223	0.713	259	0.363	295	0.536	331	0.592
8	0.342	44	0.715	80	0.355	116	0.550	152	0.579	188	0.342	224	0.715	260	0.355	296	0.550	332	0.579
9	0.349	45	0.716	81	0.349	117	0.565	153	0.565	189	0.349	225	0.716	261	0.349	297	0.565	333	0.565
10	0.355	46	0.715	82	0.342	118	0.579	154	0.550	190	0.355	226	0.715	262	0.342	298	0.579	334	0.550
11	0.363	47	0.713	83	0.337	119	0.592	155	0.536	191	0.363	227	0.713	263	0.337	299	0.592	335	0.536
12	0.372	48	0.711	84	0.332	120	0.606	156	0.521	192	0.372	228	0.711	264	0.332	300	0.606	336	0.521
13	0.381	49	0.707	85	0.329	121	0.619	157	0.507	193	0.381	229	0.707	265	0.329	301	0.619	337	0.507
14	0.391	50	0.702	86	0.325	122	0.631	158	0.493	194	0.391	230	0.702	266	0.325	302	0.631	338	0.493
15	0.402	51	0.696	87	0.323	123	0.643	159	0.478	195	0.402	231	0.696	267	0.323	303	0.643	339	0.478
16	0.413	52	0.690	88	0.321	124	0.654	160	0.465	196	0.413	232	0.690	268	0.321	304	0.654	340	0.465
17	0.425	53	0.682	89	0.320	125	0.664	161	0.451	197	0.425	233	0.682	269	0.320	305	0.664	341	0.451
18	0.438	54	0.673	90	0.320	126	0.673	162	0.438	198	0.438	234	0.673	270	0.320	306	0.673	342	0.438
19	0.451	55	0.664	91	0.320	127	0.682	163	0.425	199	0.451	235	0.664	271	0.320	307	0.682	343	0.425
20	0.465	56	0.654	92	0.321	128	0.690	164	0.413	200	0.465	236	0.654	272	0.321	308	0.690	344	0.413
21	0.478	57	0.643	93	0.323	129	0.696	165	0.402	201	0.478	237	0.643	273	0.323	309	0.696	345	0.402
22	0.493	58	0.631	94	0.325	130	0.702	166	0.391	202	0.493	238	0.631	274	0.325	310	0.702	346	0.391
23	0.507	59	0.619	95	0.329	131	0.707	167	0.381	203	0.507	239	0.619	275	0.329	311	0.707	347	0.381
24	0.521	60	0.606	96	0.332	132	0.711	168	0.372	204	0.521	240	0.606	276	0.332	312	0.711	348	0.372
25	0.536	61	0.592	97	0.337	133	0.713	169	0.363	205	0.536	241	0.592	277	0.337	313	0.713	349	0.363
26	0.550	62	0.579	98	0.342	134	0.715	170	0.355	206	0.550	242	0.579	278	0.342	314	0.715	350	0.355
27	0.565	63	0.565	99	0.349	135	0.716	171	0.349	207	0.565	243	0.565	279	0.349	315	0.716	351	0.349
28	0.579	64	0.550	100	0.355	136	0.715	172	0.342	208	0.579	244	0.550	280	0.355	316	0.715	352	0.342
29	0.592	65	0.536	101	0.363	137	0.713	173	0.337	209	0.592	245	0.536	281	0.363	317	0.713	353	0.337
30	0.606	66	0.521	102	0.372	138	0.711	174	0.332	210	0.606	246	0.521	282	0.372	318	0.711	354	0.332
31	0.619	67	0.507	103	0.381	139	0.707	175	0.329	211	0.619	247	0.507	283	0.381	319	0.707	355	0.329
32	0.631	68	0.493	104	0.391	140	0.702	176	0.325	212	0.631	248	0.493	284	0.391	320	0.702	356	0.325
33	0.643	69	0.478	105	0.402	141	0.696	177	0.323	213	0.643	249	0.478	285	0.402	321	0.696	357	0.323
34	0.654	70	0.465	106	0.413	142	0.690	178	0.321	214	0.654	250	0.465	286	0.413	322	0.690	358	0.321
35	0.664	71	0.451	107	0.425	143	0.682	179	0.320	215	0.664	251	0.451	287	0.425	323	0.682	359	0.320

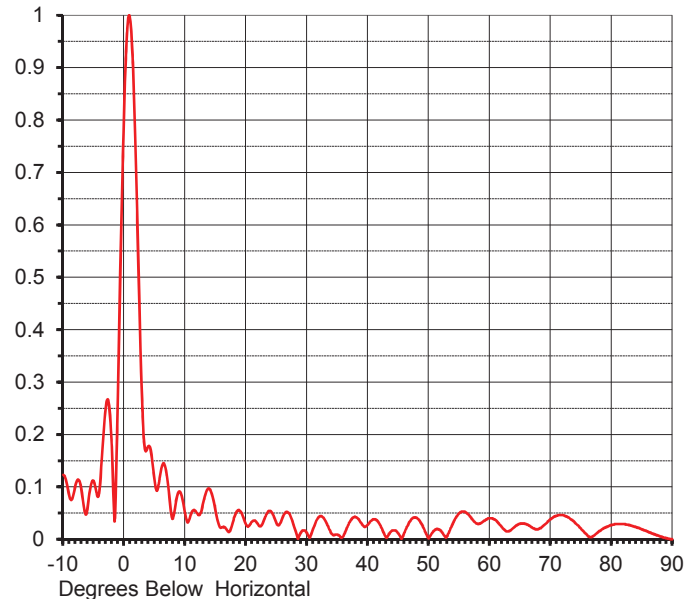
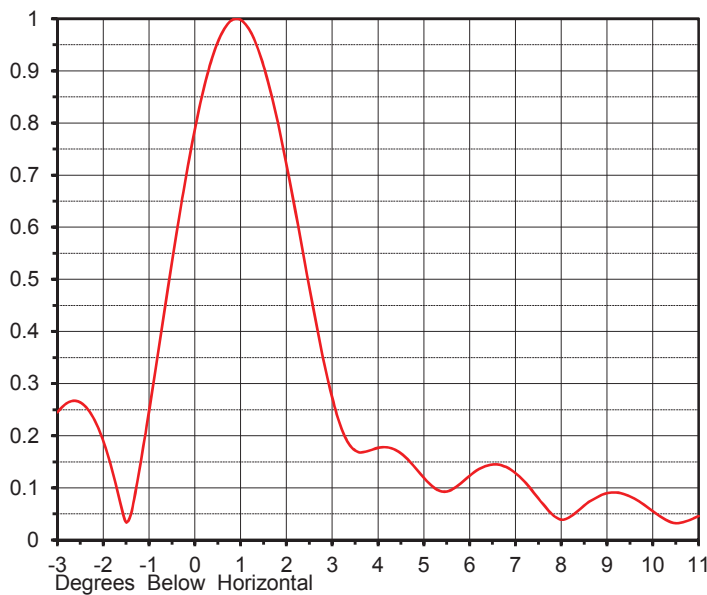
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## ELEVATION PATTERN

Proposal No. **C-70161**  
 Date **12-Mar-17**  
 Call Letters **KBTv**  
 Channel **27**  
 Frequency **551 MHz**  
 Antenna Type **TFU-24JTH/VP-R 04**

RMS Directivity at Main Lobe **24.5 ( 13.89 dB )**  
 RMS Directivity at Horizontal **15.2 ( 11.82 dB )**  
**Calculated**

Beam Tilt **0.75 deg**  
 Drawing Number **24J245075**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.123	10.0	0.049	30.0	0.012	50.0	0.002	70.0	0.039
-9.0	0.082	11.0	0.049	31.0	0.020	51.0	0.018	71.0	0.045
-8.0	0.103	12.0	0.049	32.0	0.043	52.0	0.016	72.0	0.046
-7.0	0.092	13.0	0.071	33.0	0.035	53.0	0.006	73.0	0.041
-6.0	0.062	14.0	0.096	34.0	0.011	54.0	0.032	74.0	0.031
-5.0	0.111	15.0	0.054	35.0	0.009	55.0	0.050	75.0	0.020
-4.0	0.101	16.0	0.023	36.0	0.007	56.0	0.052	76.0	0.008
-3.0	0.255	17.0	0.015	37.0	0.033	57.0	0.040	77.0	0.006
-2.0	0.163	18.0	0.040	38.0	0.042	58.0	0.029	78.0	0.016
-1.0	0.304	19.0	0.054	39.0	0.029	59.0	0.035	79.0	0.023
0.0	0.830	20.0	0.028	40.0	0.028	60.0	0.040	80.0	0.027
1.0	0.990	21.0	0.034	41.0	0.038	61.0	0.036	81.0	0.029
2.0	0.676	22.0	0.028	42.0	0.027	62.0	0.023	82.0	0.029
3.0	0.241	23.0	0.039	43.0	0.003	63.0	0.015	83.0	0.027
4.0	0.178	24.0	0.054	44.0	0.017	64.0	0.023	84.0	0.023
5.0	0.110	25.0	0.030	45.0	0.011	65.0	0.030	85.0	0.019
6.0	0.130	26.0	0.042	46.0	0.013	66.0	0.029	86.0	0.014
7.0	0.121	27.0	0.050	47.0	0.036	67.0	0.022	87.0	0.010
8.0	0.040	28.0	0.020	48.0	0.041	68.0	0.020	88.0	0.005
9.0	0.091	29.0	0.013	49.0	0.024	69.0	0.028	89.0	0.002
								90.0	0.000

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