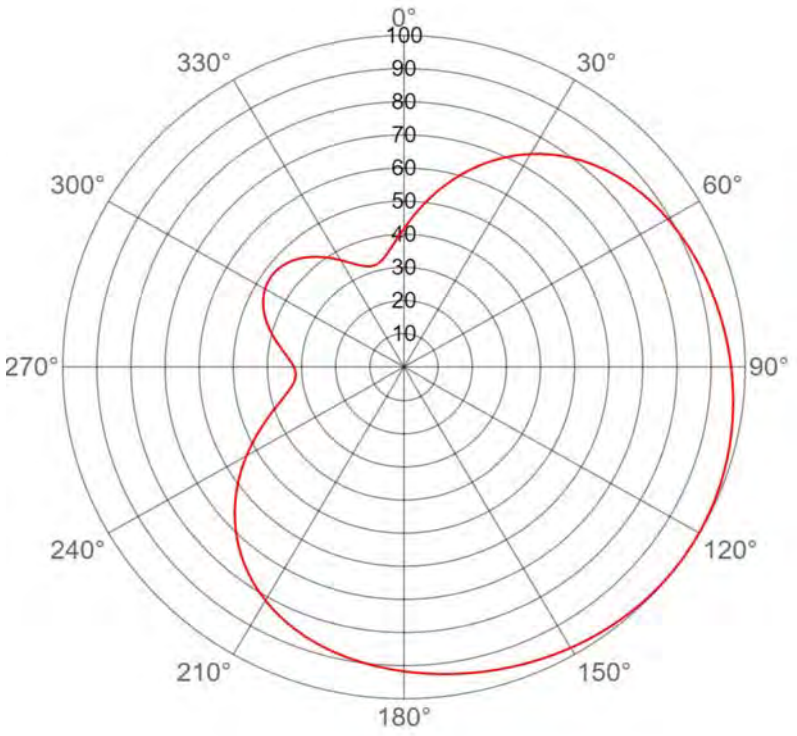


Horizontal Polarization
AZIMUTH PATTERN

Exhibit No.	
Date	**25 Nov 2020**
Call Letters	**WJFB**
Channel	**25**
Antenna Type	**TFU-18DSC S180**
Location	**Lebanon, TN**
Customer	
Gain	**1.8 (2.55 dB)**
	Calculated
Drawing #	**TFU-S180**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.417	36	0.787	72	0.922	108	0.989	144	0.986	180	0.917	216	0.773	252	0.397	288	0.421	324	0.410
1	0.428	37	0.793	73	0.924	109	0.990	145	0.985	181	0.915	217	0.765	253	0.387	289	0.427	325	0.403
2	0.439	38	0.800	74	0.926	110	0.991	146	0.983	182	0.913	218	0.758	254	0.378	290	0.432	326	0.397
3	0.450	39	0.806	75	0.928	111	0.992	147	0.982	183	0.910	219	0.750	255	0.369	291	0.438	327	0.391
4	0.462	40	0.812	76	0.930	112	0.993	148	0.980	184	0.908	220	0.741	256	0.361	292	0.442	328	0.384
5	0.474	41	0.818	77	0.932	113	0.994	149	0.979	185	0.906	221	0.733	257	0.353	293	0.447	329	0.378
6	0.485	42	0.823	78	0.934	114	0.995	150	0.977	186	0.903	222	0.724	258	0.346	294	0.451	330	0.372
7	0.497	43	0.829	79	0.937	115	0.996	151	0.976	187	0.901	223	0.715	259	0.340	295	0.455	331	0.366
8	0.509	44	0.834	80	0.939	116	0.997	152	0.974	188	0.898	224	0.706	260	0.335	296	0.459	332	0.359
9	0.521	45	0.839	81	0.941	117	0.997	153	0.972	189	0.896	225	0.697	261	0.330	297	0.462	333	0.354
10	0.533	46	0.843	82	0.943	118	0.998	154	0.970	190	0.893	226	0.687	262	0.326	298	0.465	334	0.348
11	0.545	47	0.848	83	0.945	119	0.999	155	0.968	191	0.890	227	0.677	263	0.323	299	0.468	335	0.343
12	0.556	48	0.852	84	0.947	120	0.999	156	0.967	192	0.887	228	0.667	264	0.320	300	0.470	336	0.338
13	0.568	49	0.856	85	0.949	121	0.999	157	0.965	193	0.884	229	0.657	265	0.319	301	0.472	337	0.333
14	0.580	50	0.860	86	0.951	122	1.000	158	0.963	194	0.881	230	0.647	266	0.318	302	0.473	338	0.329
15	0.591	51	0.864	87	0.953	123	1.000	159	0.961	195	0.878	231	0.636	267	0.318	303	0.474	339	0.326
16	0.603	52	0.868	88	0.955	124	1.000	160	0.959	196	0.875	232	0.625	268	0.319	304	0.475	340	0.323
17	0.614	53	0.871	89	0.957	125	1.000	161	0.957	197	0.871	233	0.614	269	0.320	305	0.475	341	0.320
18	0.625	54	0.875	90	0.959	126	1.000	162	0.955	198	0.868	234	0.603	270	0.323	306	0.475	342	0.319
19	0.636	55	0.878	91	0.961	127	1.000	163	0.953	199	0.864	235	0.591	271	0.326	307	0.474	343	0.318
20	0.647	56	0.881	92	0.963	128	1.000	164	0.951	200	0.860	236	0.580	272	0.329	308	0.473	344	0.318
21	0.657	57	0.884	93	0.965	129	0.999	165	0.949	201	0.856	237	0.568	273	0.333	309	0.472	345	0.319
22	0.667	58	0.887	94	0.967	130	0.999	166	0.947	202	0.852	238	0.556	274	0.338	310	0.470	346	0.320
23	0.677	59	0.890	95	0.968	131	0.999	167	0.945	203	0.848	239	0.545	275	0.343	311	0.468	347	0.323
24	0.687	60	0.893	96	0.970	132	0.998	168	0.943	204	0.843	240	0.533	276	0.348	312	0.465	348	0.326
25	0.697	61	0.896	97	0.972	133	0.997	169	0.941	205	0.839	241	0.521	277	0.354	313	0.462	349	0.330
26	0.706	62	0.898	98	0.974	134	0.997	170	0.939	206	0.834	242	0.509	278	0.359	314	0.459	350	0.335
27	0.715	63	0.901	99	0.976	135	0.996	171	0.937	207	0.829	243	0.497	279	0.366	315	0.455	351	0.340
28	0.724	64	0.903	100	0.977	136	0.995	172	0.934	208	0.823	244	0.485	280	0.372	316	0.451	352	0.346
29	0.733	65	0.906	101	0.979	137	0.994	173	0.932	209	0.818	245	0.474	281	0.378	317	0.447	353	0.353
30	0.741	66	0.908	102	0.980	138	0.993	174	0.930	210	0.812	246	0.462	282	0.384	318	0.442	354	0.361
31	0.750	67	0.910	103	0.982	139	0.992	175	0.928	211	0.806	247	0.450	283	0.391	319	0.438	355	0.369
32	0.758	68	0.913	104	0.983	140	0.991	176	0.926	212	0.800	248	0.439	284	0.397	320	0.432	356	0.378
33	0.765	69	0.915	105	0.985	141	0.990	177	0.924	213	0.793	249	0.428	285	0.403	321	0.427	357	0.387
34	0.773	70	0.917	106	0.986	142	0.989	178	0.922	214	0.787	250	0.417	286	0.410	322	0.421	358	0.397
35	0.780	71	0.920	107	0.988	143	0.988	179	0.920	215	0.780	251	0.407	287	0.416	323	0.416	359	0.407

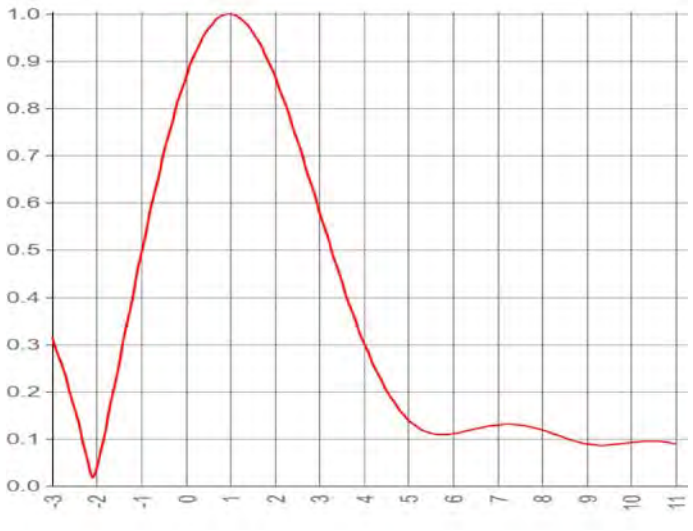
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ELEVATION PATTERN

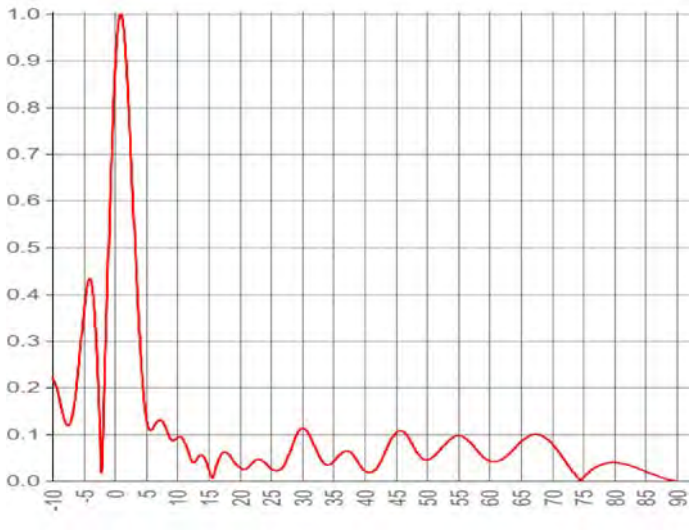
Exhibit No.	
Date	**25 Nov 2020**
Call Letters	**WJFB**
Channel	**25**
Antenna Type	**TFU-18DSC S180**
Location	**Lebanon, TN**
Customer	

Future fill is available!

RMS Gain at Main Lobe	**15.0 (11.76 dB)**	Beam Tilt	**1 Degrees**
RMS Gain at Horizontal	**11.2 (10.51 dB)**	Drawing #	**18Q150100**
	Calculated		



Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.221	10	0.092	30	0.113	50	0.045	70	0.080
-9	0.183	11	0.089	31	0.103	51	0.052	71	0.064
-8	0.128	12	0.053	32	0.075	52	0.065	72	0.046
-7	0.128	13	0.044	33	0.046	53	0.080	73	0.027
-6	0.212	14	0.055	34	0.034	54	0.092	74	0.009
-5	0.355	15	0.029	35	0.041	55	0.098	75	0.007
-4	0.434	16	0.021	36	0.056	56	0.093	76	0.020
-3	0.315	17	0.056	37	0.064	57	0.081	77	0.029
-2	0.033	18	0.060	38	0.059	58	0.066	78	0.035
-1	0.490	19	0.044	39	0.040	59	0.051	79	0.039
0	0.866	20	0.029	40	0.023	60	0.043	80	0.040
1	1.000	21	0.026	41	0.019	61	0.042	81	0.038
2	0.868	22	0.038	42	0.028	62	0.046	82	0.035
3	0.582	23	0.046	43	0.052	63	0.056	83	0.031
4	0.303	24	0.040	44	0.082	64	0.069	84	0.026
5	0.140	25	0.026	45	0.103	65	0.083	85	0.021
6	0.111	26	0.022	46	0.107	66	0.094	86	0.015
7	0.129	27	0.030	47	0.094	67	0.100	87	0.010
8	0.119	28	0.061	48	0.071	68	0.099	88	0.006
9	0.089	29	0.096	49	0.051	69	0.092	89	0.002

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