MID-STATE **CONSULTANTS**

License Certification

Variance from Authorized Construction Permit Parameters

WFTX-TV

Cape Coral, FL

Scripps Broadcasting Holdings LLC (Scripps), licensee of WFTX-TV, has constructed a new, main digital television facility capable of operating on Ch. 34, its assigned repack channel, with parameters that match all of those listed on the construction permit (LMS File No. 0000026821) with the exception of the antenna.

The construction permit specifies a Dielectric TFU-31JTH/VP-R 3BP230 which is the model number provided by Dielectric for the proposed WFTX-TV antenna. At the time Scripps purchased the antenna (after the Construction Permit had been granted), Dielectric notified Scripps that the antenna model number had been updated to a TFU-29ETT/VP-R 3BP230, but there was no change in the azimuth pattern, gain and overall length of the antenna from the original proposal. As such, the only change between the antenna data authorized in the Construction Permit and the constructed facility is the model number of the antenna. The final antenna data provided by Dielectric is attached hereto, for reference.

Dielectric®

AZIMUTH PATTERN
Horizontal Polarization

|	
Proposal No.	C-70738-4
Date	15-Jan-19
Call Letters	WFTX
Channel	34
Frequency	593 MHz
Antenna Type	TFU-29ETT/VP-R 3BP230
Gain	2.33 (3.67dB)
	Calculated
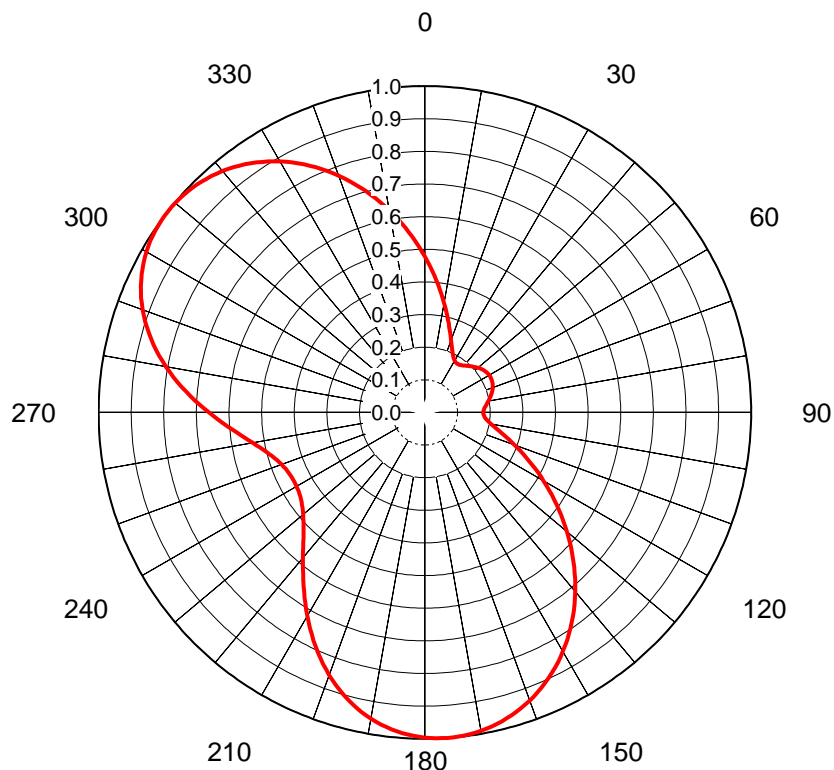
Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.478	36	0.180	72	0.217	108	0.272	144	0.772	180	0.997	216	0.634	252	0.476	288	0.901	324	0.940
1	0.464	37	0.182	73	0.215	109	0.282	145	0.785	181	0.994	217	0.620	253	0.481	289	0.911	325	0.932
2	0.449	38	0.183	74	0.213	110	0.293	146	0.798	182	0.992	218	0.606	254	0.487	290	0.921	326	0.924
3	0.435	39	0.185	75	0.211	111	0.305	147	0.810	183	0.989	219	0.594	255	0.494	291	0.929	327	0.916
4	0.420	40	0.187	76	0.208	112	0.316	148	0.823	184	0.985	220	0.581	256	0.500	292	0.938	328	0.907
5	0.407	41	0.190	77	0.205	113	0.328	149	0.834	185	0.981	221	0.569	257	0.509	293	0.945	329	0.898
6	0.393	42	0.192	78	0.203	114	0.340	150	0.846	186	0.977	222	0.557	258	0.517	294	0.953	330	0.888
7	0.379	43	0.195	79	0.200	115	0.353	151	0.857	187	0.971	223	0.546	259	0.526	295	0.959	331	0.878
8	0.366	44	0.197	80	0.197	116	0.366	152	0.868	188	0.966	224	0.536	260	0.536	296	0.966	332	0.868
9	0.353	45	0.200	81	0.195	117	0.379	153	0.878	189	0.959	225	0.526	261	0.546	297	0.971	333	0.857
10	0.340	46	0.203	82	0.192	118	0.393	154	0.888	190	0.953	226	0.517	262	0.557	298	0.977	334	0.846
11	0.328	47	0.205	83	0.190	119	0.407	155	0.898	191	0.945	227	0.509	263	0.569	299	0.981	335	0.834
12	0.316	48	0.208	84	0.187	120	0.420	156	0.907	192	0.938	228	0.500	264	0.581	300	0.985	336	0.823
13	0.305	49	0.211	85	0.185	121	0.435	157	0.916	193	0.929	229	0.494	265	0.594	301	0.989	337	0.810
14	0.293	50	0.213	86	0.183	122	0.449	158	0.924	194	0.921	230	0.487	266	0.606	302	0.992	338	0.798
15	0.282	51	0.215	87	0.182	123	0.464	159	0.932	195	0.911	231	0.481	267	0.620	303	0.994	339	0.785
16	0.272	52	0.217	88	0.180	124	0.478	160	0.940	196	0.901	232	0.476	268	0.634	304	0.997	340	0.772
17	0.262	53	0.219	89	0.180	125	0.493	161	0.947	197	0.891	233	0.471	269	0.648	305	0.998	341	0.758
18	0.252	54	0.221	90	0.179	126	0.508	162	0.953	198	0.880	234	0.467	270	0.662	306	0.999	342	0.745
19	0.244	55	0.223	91	0.179	127	0.523	163	0.959	199	0.868	235	0.464	271	0.677	307	1.000	343	0.731
20	0.235	56	0.224	92	0.180	128	0.538	164	0.965	200	0.857	236	0.461	272	0.691	308	1.000	344	0.717
21	0.227	57	0.226	93	0.181	129	0.553	165	0.971	201	0.844	237	0.458	273	0.706	309	0.999	345	0.703
22	0.219	58	0.227	94	0.183	130	0.568	166	0.976	202	0.832	238	0.456	274	0.720	310	0.999	346	0.688
23	0.213	59	0.227	95	0.185	131	0.584	167	0.980	203	0.819	239	0.455	275	0.735	311	0.997	347	0.674
24	0.206	60	0.228	96	0.188	132	0.599	168	0.984	204	0.806	240	0.454	276	0.750	312	0.996	348	0.659
25	0.201	61	0.228	97	0.192	133	0.614	169	0.988	205	0.792	241	0.453	277	0.764	313	0.993	349	0.644
26	0.196	62	0.228	98	0.196	134	0.629	170	0.991	206	0.778	242	0.453	278	0.778	314	0.991	350	0.629
27	0.192	63	0.228	99	0.201	135	0.644	171	0.993	207	0.764	243	0.453	279	0.792	315	0.988	351	0.614
28	0.188	64	0.228	100	0.206	136	0.659	172	0.996	208	0.750	244	0.454	280	0.806	316	0.984	352	0.599
29	0.185	65	0.227	101	0.213	137	0.674	173	0.997	209	0.735	245	0.455	281	0.819	317	0.980	353	0.584
30	0.183	66	0.227	102	0.219	138	0.688	174	0.999	210	0.720	246	0.456	282	0.832	318	0.976	354	0.568
31	0.181	67	0.226	103	0.227	139	0.703	175	0.999	211	0.706	247	0.459	283	0.844	319	0.971	355	0.553
32	0.180	68	0.224	104	0.235	140	0.717	176	1.000	212	0.691	248	0.461	284	0.857	320	0.965	356	0.538
33	0.179	69	0.223	105	0.243	141	0.731	177	1.000	213	0.677	249	0.464	285	0.868	321	0.959	357	0.523
34	0.179	70	0.221	106	0.252	142	0.745	178	0.999	214	0.662	250	0.467	286	0.880	322	0.953	358	0.508
35	0.180	71	0.219	107	0.262	143	0.758	179	0.998	215	0.648	251	0.471	287	0.891	323	0.947	359	0.493

Trusted for Decades. Ready for Tomorrow.

ELEVATION PATTERN

Proposal No.	**C-70738-4**
Date	**15-Jan-19**
Call Letters	**WFTX**
Channel	**34**
Frequency	**593 MHz**
Antenna Type	**TFU-29ETT/VP-R 3BP230**

RMS Directivity at Main Lobe	**26.9 (14.30 dB)**	Beam Tilt	**0.75 deg**
RMS Directivity at Horizontal	**16.3 (12.12 dB)**	Pattern Number	**29E269075**
	Calculated		

Degrees Below Horizontal

Degrees Below Horizontal
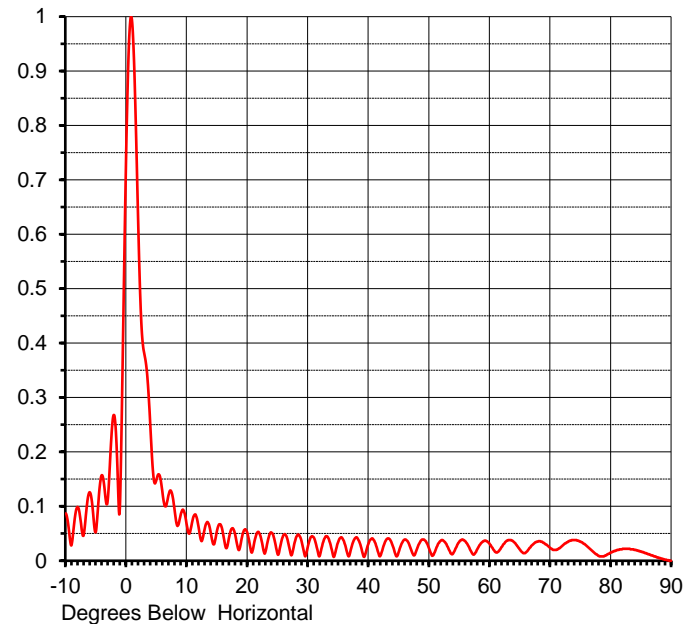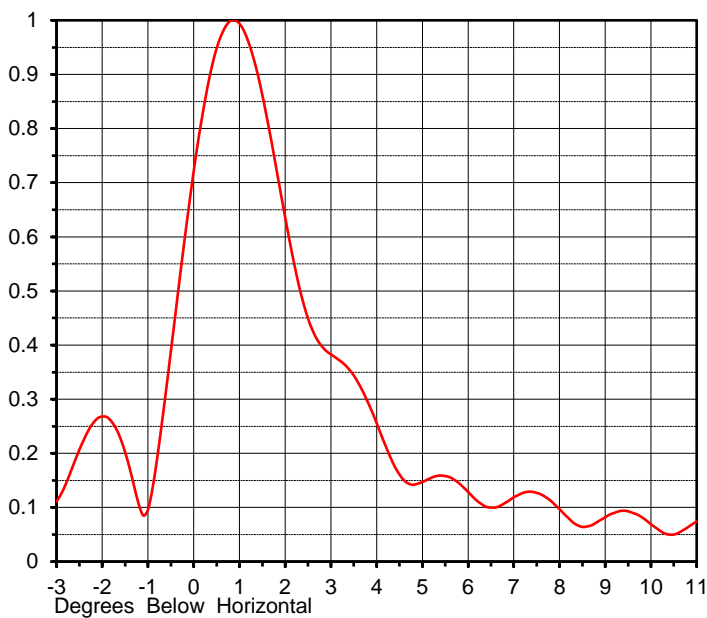
Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.087	10.0	0.063	30.0	0.029	50.0	0.021	70.0	0.023
-9.0	0.033	11.0	0.079	31.0	0.041	51.0	0.019	71.0	0.020
-8.0	0.098	12.0	0.055	32.0	0.013	52.0	0.038	72.0	0.028
-7.0	0.052	13.0	0.063	33.0	0.045	53.0	0.026	73.0	0.036
-6.0	0.125	14.0	0.046	34.0	0.015	54.0	0.015	74.0	0.038
-5.0	0.057	15.0	0.058	35.0	0.036	55.0	0.036	75.0	0.035
-4.0	0.157	16.0	0.046	36.0	0.032	56.0	0.035	76.0	0.027
-3.0	0.125	17.0	0.046	37.0	0.019	57.0	0.015	77.0	0.017
-2.0	0.267	18.0	0.045	38.0	0.043	58.0	0.023	78.0	0.009
-1.0	0.136	19.0	0.040	39.0	0.013	59.0	0.036	79.0	0.009
0.0	0.779	20.0	0.049	40.0	0.033	60.0	0.030	80.0	0.015
1.0	0.980	21.0	0.028	41.0	0.034	61.0	0.016	81.0	0.020
2.0	0.591	22.0	0.049	42.0	0.011	62.0	0.026	82.0	0.022
3.0	0.377	23.0	0.019	43.0	0.040	63.0	0.038	83.0	0.022
4.0	0.234	24.0	0.051	44.0	0.026	64.0	0.034	84.0	0.020
5.0	0.151	25.0	0.011	45.0	0.018	65.0	0.020	85.0	0.017
6.0	0.120	26.0	0.048	46.0	0.039	66.0	0.016	86.0	0.013
7.0	0.123	27.0	0.018	47.0	0.020	67.0	0.029	87.0	0.009
8.0	0.088	28.0	0.043	48.0	0.023	68.0	0.036	88.0	0.005
9.0	0.087	29.0	0.031	49.0	0.039	69.0	0.032	89.0	0.002
								90.0	0.000