

**KQTP, St. Marys, Kansas
Application for License**

**Comparison of the Construction Permit Pattern, the New Modified Composite
Antenna Pattern, and the Constructed Antenna Composite Pattern**

87.9 % of the New Modified Composite Envelope is Filled by the Constructed Composite Envelope

AZ	Construction Permit	New Modified Pattern			Construction Pattern		
	Field	Field	dBk	kW	Field	dBk	kW
0	1.000	0.750	12.272	16.875	0.580	10.040	10.092
10	1.000	0.700	11.673	14.700	0.633	10.799	12.021
20	1.000	0.700	11.673	14.700	0.687	11.510	14.159
30	1.000	0.650	11.029	12.675	0.621	10.633	11.569
40	1.000	0.600	10.334	10.800	0.517	9.041	8.019
50	1.000	0.650	11.029	12.675	0.623	10.661	11.644
60	0.842	0.700	11.673	14.700	0.692	11.573	14.366
70	0.707	0.700	11.673	14.700	0.651	11.043	12.714
80	0.707	0.700	11.673	14.700	0.608	10.449	11.090
90	0.707	0.700	11.673	14.700	0.646	10.976	12.519
100	0.842	0.750	12.272	16.875	0.722	11.942	15.639
110	1.000	0.810	12.941	19.683	0.797	12.800	19.056
120	1.000	0.910	13.952	24.843	0.902	13.875	24.408
130	1.000	1.000	14.771	30.000	0.988	14.666	29.284
140	1.000	1.000	14.771	30.000	0.997	14.745	29.820
150	1.000	1.000	14.771	30.000	0.990	14.684	29.403
160	1.000	1.000	14.771	30.000	0.988	14.666	29.284
170	1.000	0.980	14.596	28.812	0.947	14.298	26.904
180	1.000	0.960	14.417	27.648	0.914	13.990	25.062
190	1.000	0.940	14.234	26.508	0.896	13.817	24.084
200	1.000	0.920	14.047	25.392	0.853	13.390	21.828
210	1.000	0.900	13.856	24.300	0.896	13.817	24.084
220	1.000	0.880	13.661	23.232	0.865	13.512	22.447
230	1.000	0.880	13.661	23.232	0.840	13.257	21.168
240	1.000	0.900	13.856	24.300	0.842	13.277	21.269
250	1.000	0.920	14.047	25.392	0.584	10.099	10.232
260	1.000	0.940	14.234	26.508	0.693	11.586	14.407
270	1.000	0.960	14.417	27.648	0.650	11.029	12.675
280	1.000	0.980	14.596	28.812	0.673	11.332	13.588
290	1.000	1.000	14.771	30.000	0.653	11.069	12.792
300	1.000	1.000	14.771	30.000	0.727	12.002	15.856
310	1.000	0.980	14.596	28.812	0.764	12.433	17.511
320	1.000	0.950	14.326	27.075	0.689	11.536	14.242
330	1.000	0.900	13.856	24.300	0.667	11.254	13.347
340	1.000	0.850	13.360	21.675	0.640	10.895	12.288
350	1.000	0.800	12.833	19.200	0.609	10.464	11.126