

Engineering Statement
In Support of an Application to
Increase Daytime Power
KLVZ, Brighton, Colorado
810 kHz, 10 kW-D/0.430 kW-N, DA-2

The Corporate Engineering Department of the Crawford Broadcasting Company, on behalf of its subsidiary, KLZ Radio, Inc., has prepared this Engineering Statement and associated exhibits to accompany an Application for Construction Permit to increase the daytime power of KLVZ, Brighton, Colorado.

KLVZ is currently authorized as a class B AM station operating on 810 kHz with 2.2 kW directional daytime and 0.43 kW directional nighttime. The day and night facilities are at separate sites. No changes are proposed herein to the nighttime facilities. The instant application proposes in a minor change to increase the daytime power to 10 kW directional with a three-tower array.

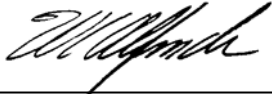
The existing daytime towers are all vertical, uniform cross-section, steel, guyed radiators 81.7 meters in overall height and 79.3 meters above base insulator (77.0 electrical degrees at 810 kHz). All three of the towers will employ 15 degrees of top loading. The physical heights of the existing towers will not be changed. As such, no FAA notification or change in the Antenna Structure Registrations is required. All towers are series fed. The daytime ground system consists of 120 equally-spaced, buried copper radials about the base of each tower, 93.9 meters in length except where intersecting radials are shortened and bonded to a transverse strap. In addition, 120 15.2-meter copper radials are interspersed with the longer radials. No changes are proposed to the existing ground system.

The entire technical operation will be in compliance with all applicable FCC Rules and will be constructed in accordance with the standards of good engineering practice. All elements of the proposed daytime antenna system are well in excess of the minimum physical vertical heights specified by 47 C.F.R. §73.189.

There are no population centroids within the daytime 1 V/m contour. The total population within the daytime 25 mV/m contour has been determined to be 1,583,129 (2000 Census). The area within the 1 V/m contour is largely rural in nature with a low population density. There are approximately 40 houses within the 1 V/m contour. As such, the total population within the 1 V/m contour can be presumed to be well below the threshold of 1% of the population within the 25 mV/m specified in 47 C.F.R. §73.24(g).

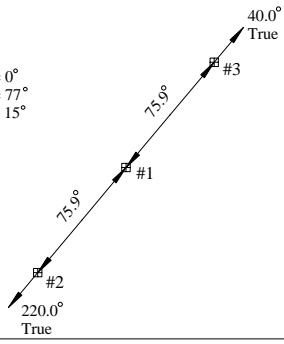
The proposed facility is in compliance with all the engineering standards of allocation specified in the Commission's Rules.

Respectfully submitted,

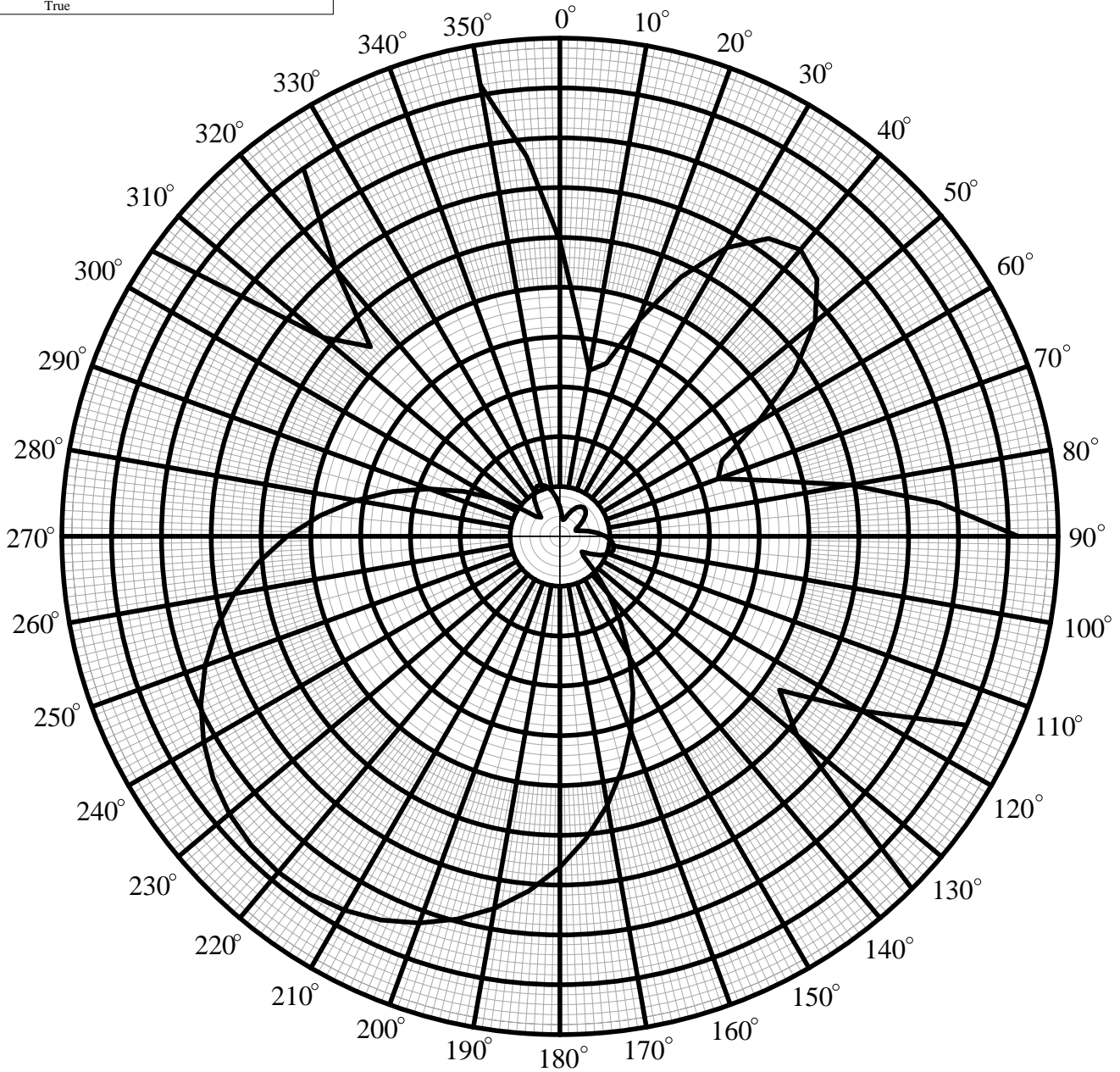
A handwritten signature in black ink, appearing to read 'W.C. Alexander', written over a horizontal line.

W.C. Alexander
Director of Engineering
Crawford Broadcasting Company

All Gs = 0°
All As = 77°
All Bs = 15°



Max Scale
2,500 mV/m
(Expanded Scale 250 mV/m)



Twr.	Field	Phasing
1	1.000	0.0
2	0.565	-148.0
3	0.600	+141.0

RMS(TH) = 1,043.36
RMS(STD) = 1,096.67
RSS(TH) = 1,902.95
Q = 47.574

SUBJECT	Proposed Daytime Standard Horizontal Pattern	DATE
		07/17/2007
	PROJECT	KLTV - Brighton, Colorado 810 kHz, 10 kW-D/0.43 kW-N, DA-2
		REVISION
Crawford Broadcasting Company Corporate Engineering 2150 W. 29th Ave., Suite 300, Denver, Co 80211 (303) 433-0104		1 OF 1 SHEETS

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KLVZ-M1 40-01-41 N 104-49-21 W 10.000 kW
 Crawford Broadcasting
 Twr. No. Field Phasing Spacing Azimuth Height A B
 1 1.000 0.0 0.0 0.0 0.0 77.0 15.0
 2 0.565 -148.0 75.9 220.0 0.0 77.0 15.0
 3 0.600 141.0 75.9 40.0 0.0 77.0 15.0
 RMS 1,043.36 mV/m (kilometer) Q 47.57 mV/m

Standard Horizontal Plane Radiation Pattern

Azi.	mV/m	Azi.	mV/m
0	148.3	180	1660.5
5	108.4	185	1785.7
10	84.5	190	1895.3
15	89.8	195	1988.4
20	115.0	200	2064.7
25	143.5	205	2123.9
30	167.2	210	2166.1
35	182.5	215	2191.4
40	187.8	220	2199.8
45	182.5	225	2191.4
50	167.2	230	2166.1
55	143.5	235	2123.9
60	115.0	240	2064.7
65	89.8	245	1988.4
70	84.5	250	1895.3
75	108.4	255	1785.7
80	148.3	260	1660.5
85	191.3	265	1521.1
90	230.1	270	1369.2
95	259.7	275	1207.4
100	276.2	280	1038.9
105	276.6	285	867.3
110	259.1	290	697.1
115	223.7	295	533.1
120	175.2	300	381.1
125	134.5	305	249.3
130	155.3	310	155.3
135	249.3	315	134.5
140	381.1	320	175.2
145	533.1	325	223.7
150	697.1	330	259.1
155	867.3	335	276.6
160	1038.9	340	276.2
165	1207.4	345	259.7
170	1369.2	350	230.1
175	1521.1	355	191.3