

Exhibit 40 - Statement A
NATURE OF THE PROPOSAL
PROPOSED ANTENNA SYSTEM
prepared for
Viacom Television Stations Group of Los Angeles LLC
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Viacom Television Stations Group of Los Angeles LLC is the licensee of KCAL-DT, Channel 43, Los Angeles, California (file number BLCDT-19991119ARO) and licensee of the paired analog KCAL-TV Channel 9 facility (BLCT-19911107KP). KCAL-DT is licensed to operate with a maximum effective radiated power (“ERP”) of 300 kW, a directional antenna system, and an antenna height above average terrain (“HAAT”) of 947 meters. The instant application seeks an increase in KCAL-DT ERP to 495 kW. A recalculated antenna HAAT of 951 meters is supplied herein, as is data regarding the impact of mechanical beamtilt on the antenna’s horizontal plane pattern.

Continued use of the existing antenna is proposed. No changes in site location, antenna height above mean sea level, or the existing antenna structure’s overall height are proposed. The antenna supporting structure is registered with the FCC (ASR number 1007719). No tower or antenna construction work is necessary to carry out this proposal.

The antenna, a horizontally polarized *Harris* model TAD-16UDA-8/64, employs 1.70 degrees of electrical beam tilt, 1.0 degree of mechanical beamtilt, and is directional in the horizontal plane. The antenna’s horizontal plane pattern, expressed in terms of relative field and dBk without consideration of the mechanical beamtilt, is supplied as **Exhibit 40 - Figure 1**, properly oriented relative to True North. **Exhibit 40 - Figure 1A** depicts the horizontal plane relative field pattern with the introduction of the mechanical beamtilt, as determined towards the radio horizon along each azimuth per the Commission’s procedure in §73.625(b).

Exhibit 40 - Table 1 presents a tabulation of the horizontal plane relative field pattern, to supplement the relative field data within the Form 301 Section III-D “Tech Box” (item 10e). The resulting power pattern, considering the mechanical beamtilt, is supplied in terms of dBk and kW

Exhibit 40 - Statement A
NATURE OF THE PROPOSAL
PROPOSED ANTENNA SYSTEM
(page 2 of 2)

in **Exhibit 40 - Table 1**. Pertinent terrain elevation and predicted contour location data are also included in this table. Digitized U.S.G.S. 3 arc-second terrain data was employed. **Exhibit 40 - Figure 2** graphically presents the theoretical vertical plane (elevation) pattern for the antenna system. Along each azimuth (considering the mechanical beamtilt), radiation at any angle above horizontal elevations does not exceed the maximum radiation realized at horizontal or below.

Exhibit 40 - Figure 3 depicts the predicted coverage contours for the proposed KCAL-DT facility. The DTV service contour (41 dB μ) will completely encompass Los Angeles, the principal community. **Exhibit 40 - Figure 3** also demonstrates that the enhanced principal community coverage requirement of 48 dB μ (required by December 31, 2004 for commercial stations) will also be met by the proposed KCAL-DT facility.

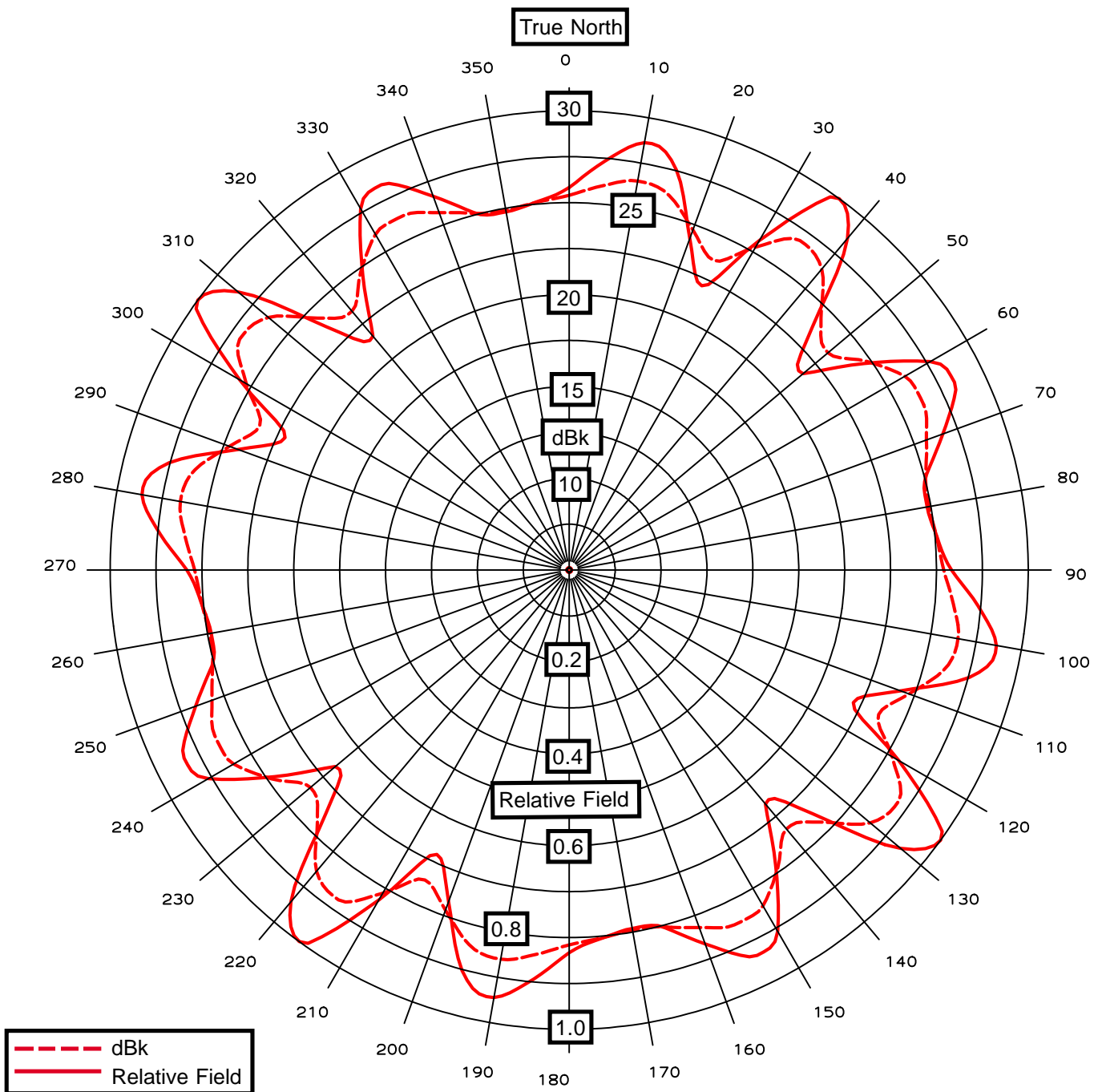
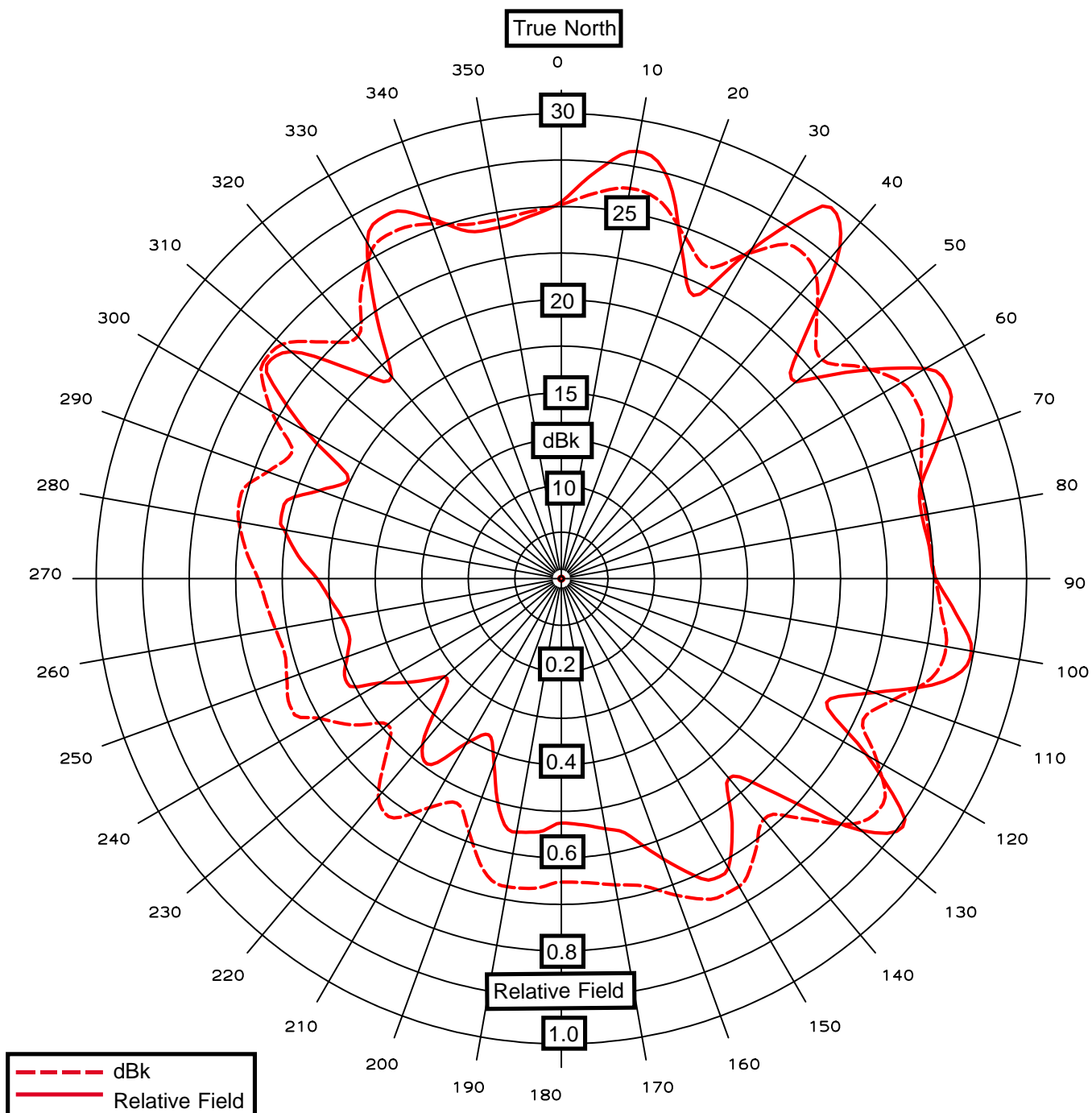


EXHIBIT 40 - FIGURE 1
HORIZONTAL PLANE MAIN BEAM RADIATION PATTERN
(NO CONSIDERATION OF MECHANICAL BEAM TILT)

prepared July 2004 for
Viacom Television Stations Group
of Los Angeles LLC
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

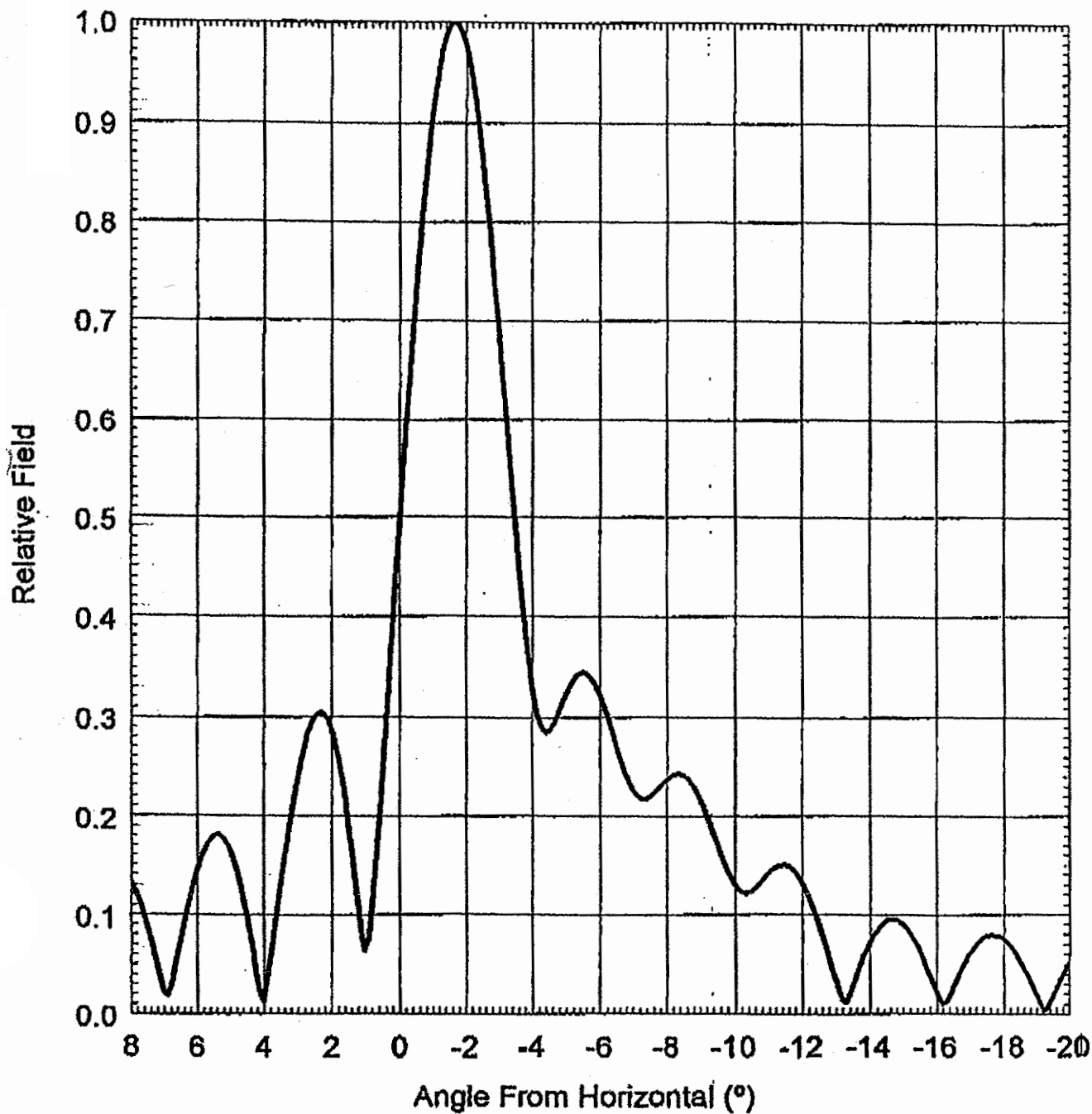


**EXHIBIT 40 - FIGURE 1A
HORIZONTAL PLANE RADIATION PATTERN
TOWARDS RADIO HORIZON
CONSIDERING MECHANICAL BEAMTILT
(1.0 DEGREES AT 217 DEGREES TRUE)**

prepared July 2004 for
**Viacom Television Stations Group
of Los Angeles LLC**
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

Calculated Elevation Pattern



Harris Model No.: TAD-16UDA-8/64

Harris Pattern No.: KCALRE02

EXHIBIT 40 - FIGURE 2 ANTENNA VERTICAL (ELEVATION) PLANE PATTERN

prepared July 2004 for
**Viacom Television Stations Group
of Los Angeles LLC**
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

EXHIBIT 40 - FIGURE 3
PROPOSED COVERAGE CONTOURS

prepared July 2004 for
**Viacom Television Stations Group
of Los Angeles LLC**
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

EXHIBIT 40 - FIGURE 3
PROPOSED COVERAGE CONTOURS

prepared July 2004 for
**Viacom Television Stations Group
of Los Angeles LLC**
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

EXHIBIT 40 - FIGURE 3
PROPOSED COVERAGE CONTOURS

prepared July 2004 for
**Viacom Television Stations Group
of Los Angeles LLC**
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

EXHIBIT 40 - FIGURE 3
PROPOSED COVERAGE CONTOURS

prepared July 2004 for
**Viacom Television Stations Group
of Los Angeles LLC**
KCAL-DT Los Angeles, California
Facility ID 21422
Ch. 43 495 kW 951 m

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

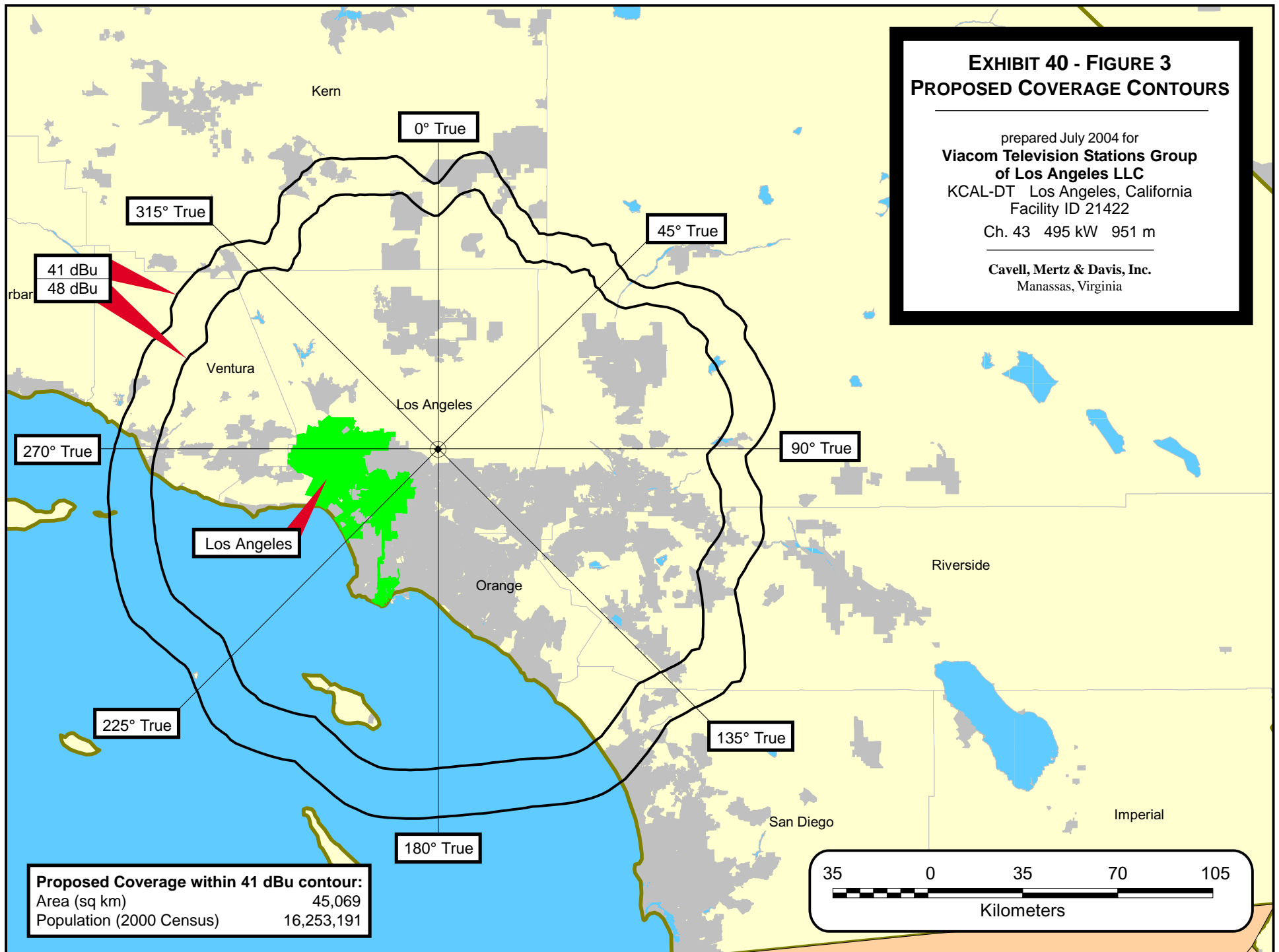


Exhibit 40 - Table 1
ANTENNA, ELEVATION, AND CONTOUR DATA
 prepared for
Viacom Television Stations Group of Los Angeles LLC
 KCAL-DT Los Angeles, California
 Facility ID 21422
 Ch. 43 495 kW 952 m

Azimuth (°T)	Average Elevation (meters)	Effective Height (meters)	Antenna Horizontal Plane Relative Field Before Beamtilt ¹	FCC Depression Angle (Δ) (degrees)	Mechanical Tilt (degrees)	Effective Tilt (degrees)	Vertical Plane Relative Field at Δ°	Composite Relative Field ²	Effective Radiated Power (kw) ³	Effective Radiated Power (dBk)	---Distance to Contours--- City Grade 48 dBμ (km)	DTV Service 41 dBμ (km)
000	1425.4	418.6	0.833	0.57	-0.80	0.90	0.972	0.810	343.5	25.4	85.8	97.7
005	1311.6	532.4	0.894	0.64	-0.85	0.85	0.985	0.880	395.6	26.0	93.9	108.1
010	1313.4	530.6	0.945	0.64	-0.89	0.81	0.987	0.933	442.0	26.5	94.7	109.0
011	1343.5	500.5	0.946	0.62	-0.90	0.80	0.987	0.933	443.0	26.5	92.5	106.7
015	1419.7	424.3	0.902	0.57	-0.93	0.77	0.985	0.889	402.7	26.1	87.2	99.5
020	1480.5	363.5	0.768	0.53	-0.96	0.74	0.985	0.756	292.0	24.7	81.0	92.6
025	1517.2	326.8	0.683	0.50	-0.98	0.72	0.984	0.672	230.9	23.6	76.2	87.1
030	1508.0	336.0	0.829	0.51	-0.99	0.71	0.986	0.817	340.2	25.3	79.5	91.3
035	1510.1	333.9	0.992	0.51	-1.00	0.70	0.986	0.978	487.1	26.9	81.6	94.1
036 <i>maxima</i>	1513.2	330.8	1.000	0.50	-1.00	0.70	0.986	0.986	495.0	26.9	81.4	93.9
040	1455.2	388.8	0.943	0.55	-1.00	0.70	0.989	0.932	440.2	26.4	85.8	97.7
045	1444.8	399.2	0.750	0.55	-0.99	0.71	0.989	0.742	278.4	24.4	83.3	94.8
049	1418.0	426.0	0.662	0.57	-0.98	0.72	0.989	0.655	216.9	23.4	83.1	94.4
050	1407.8	436.2	0.665	0.58	-0.97	0.73	0.989	0.658	218.9	23.4	83.7	95.1
055	1289.8	554.2	0.784	0.65	-0.95	0.75	0.993	0.779	304.3	24.8	93.2	107.1
060	1156.3	687.7	0.908	0.73	-0.92	0.78	0.996	0.904	408.1	26.1	101.7	116.2
063	1136.4	707.6	0.933	0.74	-0.90	0.80	0.995	0.928	430.9	26.3	102.9	117.7
065	1078.3	765.7	0.929	0.77	-0.88	0.82	0.996	0.925	427.2	26.3	105.0	120.1
070	1046.1	797.9	0.866	0.78	-0.84	0.86	0.994	0.861	371.2	25.7	104.8	120.0
075	915.6	928.4	0.806	0.84	-0.79	0.91	0.995	0.802	321.6	25.1	107.4	122.9
080	831.1	1012.9	0.792	0.88	-0.73	0.97	0.994	0.787	310.5	24.9	109.3	125.1
085	913.1	930.9	0.805	0.85	-0.67	1.03	0.987	0.794	320.8	25.1	107.5	123.0
090	1147.0	697.0	0.833	0.73	-0.60	1.10	0.966	0.805	343.5	25.4	100.5	115.0
095	1151.3	692.7	0.894	0.73	-0.53	1.17	0.952	0.851	395.6	26.0	101.6	116.2
100	1060.9	783.1	0.945	0.78	-0.45	1.25	0.947	0.895	442.0	26.5	105.9	121.2

¹Depicted in **Figure 1**.

²Depicted in **Figure 1A**.

³Per §73.625(b), for radials where vertical plane relative field is 90 percent or higher, the maximum radiation is used.

Exhibit 40 - Table 1
ANTENNA, ELEVATION, AND CONTOUR DATA
(page 2 of 3)

Azimuth (°T)	Average Elevation (meters)	Effective Height (meters)	Antenna Horizontal Plane Relative Field Before Beamtilt	FCC Depression Angle (Δ) (degrees)	Mechanical Tilt (degrees)	Effective Tilt (degrees)	Vertical Plane Relative Field at Δ °	Composite Relative Field	Effective Radiated Power (kw)	Effective Radiated Power (dBk)	---Distance to Contours --- City Grade 48 dBμ (km)	DTV Service 41 dBμ (km)
101	1046.8	797.2	0.946	0.78	-0.44	1.26	0.947	0.895	443.0	26.5	106.5	121.7
105	932.5	911.5	0.902	0.84	-0.37	1.33	0.945	0.852	402.7	26.1	109.1	124.6
110	908.9	935.1	0.768	0.85	-0.29	1.41	0.930	0.715	292.0	24.7	106.7	122.2
115	849.0	995.0	0.683	0.87	-0.21	1.49	0.921	0.629	230.9	23.6	106.0	121.6
120	711.7	1132.3	0.829	0.93	-0.12	1.58	0.916	0.759	340.2	25.3	113.3	130.2
125	589.0	1255.0	0.992	0.98	-0.03	1.67	0.909	0.902	487.1	26.9	120.0	139.2
126 <i>maxima</i>	566.6	1277.4	1.000	0.99	-0.02	1.68	0.907	0.907	495.0	26.9	120.9	140.2
130	486.3	1357.7	0.943	1.02	0.05	1.75	0.892	0.842	350.6	25.4	119.6	138.4
135	431.8	1412.2	0.750	1.04	0.14	1.84	0.871	0.653	211.1	23.2	115.6	133.8
139	400.7	1443.3	0.662	1.05	0.21	1.91	0.849	0.562	156.3	21.9	113.2	131.2
140	394.9	1449.1	0.665	1.05	0.22	1.92	0.842	0.560	155.0	21.9	113.3	131.3
145	373.6	1470.4	0.784	1.06	0.31	2.01	0.816	0.640	202.7	23.1	116.8	135.0
150	337.7	1506.3	0.908	1.08	0.39	2.09	0.791	0.718	255.2	24.1	120.4	138.6
153	313.9	1530.1	0.933	1.08	0.44	2.14	0.776	0.724	259.6	24.1	121.2	139.4
155	299.0	1545.0	0.929	1.09	0.47	2.17	0.765	0.711	250.2	24.0	121.2	139.3
160	295.4	1548.6	0.866	1.09	0.54	2.24	0.740	0.641	203.2	23.1	119.0	137.1
165	312.6	1531.4	0.806	1.08	0.62	2.32	0.711	0.573	162.5	22.1	116.0	134.2
170	313.6	1530.4	0.792	1.08	0.68	2.38	0.689	0.546	147.4	21.7	114.9	133.0
175	314.5	1529.5	0.805	1.08	0.74	2.44	0.659	0.531	139.5	21.4	114.2	132.4
180	302.6	1541.4	0.833	1.09	0.80	2.50	0.630	0.525	136.3	21.3	114.3	132.5
185	297.4	1546.6	0.894	1.09	0.85	2.55	0.610	0.546	147.3	21.7	115.3	133.5
190	294.8	1549.2	0.945	1.09	0.89	2.59	0.586	0.553	151.6	21.8	115.7	133.8
191	295.5	1548.5	0.946	1.09	0.90	2.60	0.586	0.554	151.9	21.8	115.7	133.8
195	302.1	1541.9	0.902	1.09	0.93	2.63	0.571	0.515	131.2	21.2	113.8	132.0
200	309.6	1534.4	0.768	1.09	0.96	2.66	0.551	0.423	88.7	19.5	109.4	127.4
205	311.7	1532.3	0.683	1.08	0.98	2.68	0.541	0.370	67.6	18.3	106.5	124.3
210	325.2	1518.8	0.829	1.08	0.99	2.69	0.492	0.408	82.3	19.2	108.2	126.1
215	340.7	1503.3	0.992	1.07	1.00	2.70	0.492	0.488	117.9	20.7	111.7	129.8
216 <i>maxima</i>	340.0	1504.0	1.000	1.07	1.00	2.70	0.492	0.492	119.8	20.8	111.8	130.0
220	331.2	1512.8	0.943	1.08	1.00	2.70	0.492	0.464	106.6	20.3	110.8	128.9
225	352.2	1491.8	0.750	1.07	0.99	2.69	0.492	0.369	67.4	18.3	105.6	123.1
229	389.2	1454.8	0.662	1.06	0.98	2.68	0.492	0.326	52.5	17.2	102.4	119.3
230	398.6	1445.4	0.665	1.05	0.97	2.67	0.492	0.327	53.0	17.2	102.3	119.1
235	458.7	1385.3	0.784	1.03	0.95	2.65	0.492	0.386	73.6	18.7	104.2	120.9
240	487.3	1356.7	0.908	1.02	0.92	2.62	0.492	0.447	98.8	19.9	106.4	123.3
243	500.3	1343.7	0.933	1.02	0.90	2.60	0.546	0.510	128.5	21.1	108.7	125.8
245	519.1	1324.9	0.929	1.01	0.88	2.58	0.551	0.512	129.7	21.1	108.3	125.3
250	548.5	1295.5	0.866	1.00	0.84	2.54	0.566	0.490	118.9	20.8	106.8	123.4
255	579.1	1264.9	0.806	0.99	0.79	2.49	0.586	0.472	110.3	20.4	105.4	121.7
260	638.1	1205.9	0.792	0.96	0.73	2.43	0.605	0.479	113.8	20.6	104.3	120.3

Exhibit 40 - Table 1
ANTENNA, ELEVATION, AND CONTOUR DATA
 (page 3 of 3)

Azimuth (°T)	Average Elevation (meters)	Effective Height (meters)	Antenna Horizontal Plane Relative Field Before Beamtilt	FCC Depression Angle (Δ) (degrees)	Mechanical Tilt (degrees)	Effective Tilt (degrees)	Vertical Plane Relative Field at Δ °	Composite Relative Field	Effective Radiated Power (kw)	Effective Radiated Power (dBk)	---Distance to Contours --- City Grade 48 dBμ (km)	DTV Service 41 dBμ (km)
265	712.6	1131.4	0.805	0.93	0.67	2.37	0.620	0.499	123.3	20.9	103.3	119.1
270	823.0	1021.0	0.833	0.89	0.60	2.30	0.630	0.525	136.3	21.3	101.6	117.2
275	961.2	882.8	0.894	0.82	0.53	2.23	0.635	0.568	159.4	22.0	99.5	114.9
280	1083.3	760.7	0.945	0.76	0.45	2.15	0.640	0.605	180.9	22.6	97.0	111.8
281	1086.7	757.3	0.946	0.76	0.44	2.14	0.650	0.615	186.9	22.7	97.1	111.9
285	1068.6	775.4	0.902	0.77	0.37	2.07	0.684	0.617	188.5	22.8	98.7	112.7
290	1036.7	807.3	0.768	0.79	0.29	1.99	0.722	0.554	152.1	21.8	96.8	111.9
295	1108.2	735.8	0.683	0.75	0.21	1.91	0.740	0.505	126.4	21.0	93.0	107.5
300	1127.7	716.3	0.829	0.74	0.12	1.82	0.765	0.634	199.2	23.0	96.4	110.9
305	1222.9	621.1	0.992	0.69	0.03	1.73	0.780	0.774	296.2	24.7	96.4	110.3
306 <i>maxima</i>	1232.0	612.0	1.000	0.69	0.02	1.72	0.783	0.783	303.8	24.8	96.3	110.2
310	1258.1	585.9	0.943	0.67	-0.05	1.65	0.805	0.759	285.4	24.6	94.6	108.4
315	1217.8	626.2	0.750	0.69	-0.14	1.56	0.845	0.634	198.9	23.0	93.3	107.1
319	1291.7	552.3	0.662	0.65	-0.21	1.49	0.852	0.564	157.7	22.0	87.8	101.3
320	1320.0	524.0	0.665	0.63	-0.22	1.48	0.852	0.567	159.1	22.0	86.2	99.3
325	1319.8	524.2	0.784	0.63	-0.31	1.39	0.885	0.694	238.4	23.8	89.3	102.9
330	1232.8	611.2	0.908	0.68	-0.39	1.31	0.920	0.835	408.1	26.1	98.8	112.7
333	1228.0	616.0	0.933	0.69	-0.44	1.26	0.929	0.866	430.9	26.3	99.4	113.4
335	1232.2	611.8	0.929	0.69	-0.47	1.23	0.934	0.868	427.2	26.3	99.3	113.2
340	1194.8	649.2	0.866	0.71	-0.54	1.16	0.952	0.824	371.2	25.7	99.4	113.6
345	1234.6	609.4	0.806	0.68	-0.62	1.08	0.959	0.773	321.6	25.1	96.7	110.5
350	1271.4	572.6	0.792	0.66	-0.68	1.02	0.968	0.767	310.5	24.9	94.6	108.4
355	1345.2	498.8	0.805	0.62	-0.74	0.96	0.972	0.782	320.8	25.1	89.9	103.5

Radiation Center Height AMSL	1844.0	m
Cardinal Radial Average Terrain AMSL	893.1	m
Radiation Center Height AAT	950.9	m
Effective Radiated Power (AVG)	495	kW
	26.95	dBk

Beamtilt details

1.7 degrees electrical tilt and 1.0 degree mechanical tilt at 217° True

Effective Tilt = (Electrical Tilt)° + [(Maximum Mechanical Tilt)Cosφ]° = (1.7)° + (1.0*Cos(270-Azimuth))°

Where φ = 0° at azimuth towards mechanical tilt

Maximum radiation of 495 kW occurs at 36, 126, 216, and 306 degrees True (horizontal plane relative field = 1.000)