

CHARLES A. HECHT & ASSOCIATES, INC.
BROADCAST ENGINEERING CONSULTANTS

TABLE 1
NIGHTTIME STANDARD RADIATION PATTERN DATA
1440 KILOHERTZ .196 KILOWATT DA
RADIO CANTICO NUEVO, INC.
WNYG MEDFORD, NEW YORK

STANDARD RADIATION
(at One Kilometer)

Azimuth Angle (deg)	-----Elevation Angle in Degrees-----						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
0	104.	103.	99.7	94.1	86.7	78.0	68.3
5	101.	100.0	96.6	91.2	84.0	75.5	66.1
10	96.6	95.5	92.3	87.1	80.2	72.1	63.1
15	91.0	89.9	86.9	81.9	75.4	67.8	59.4
20	84.2	83.2	80.4	75.8	69.8	62.7	55.1
25	76.4	75.5	72.9	68.8	63.4	57.1	50.4
30	67.9	67.2	64.9	61.3	56.7	51.3	45.7
35	59.3	58.6	56.8	53.8	50.1	45.9	41.5
40	51.2	50.7	49.4	47.2	44.5	41.5	38.6
45	45.3	45.0	44.2	42.9	41.3	39.6	37.9
50	43.5	43.4	43.0	42.4	41.7	40.9	40.1
55	47.2	47.2	47.0	46.7	46.4	45.8	45.2
60	55.9	55.8	55.5	55.1	54.5	53.6	52.4
65	67.8	67.6	67.1	66.2	65.0	63.3	61.3
70	81.5	81.2	80.3	78.9	76.8	74.2	71.0
75	96.1	95.7	94.4	92.2	89.3	85.6	81.2
80	111.	110.	109.	106.	102.	97.1	91.6
85	125.	125.	123.	119.	114.	109.	102.
90	139.	138.	136.	132.	126.	119.	112.
95	152.	151.	148.	144.	137.	130.	121.
100	164.	163.	160.	155.	148.	139.	129.
105	175.	174.	170.	165.	157.	148.	137.
110	184.	183.	179.	173.	165.	156.	144.
115	192.	191.	187.	181.	173.	162.	151.
120	199.	197.	194.	187.	179.	168.	156.
125	204.	203.	199.	193.	184.	173.	161.
130	209.	207.	203.	197.	188.	177.	164.
135	212.	211.	207.	200.	191.	180.	168.
140	215.	213.	209.	203.	194.	183.	170.
145	217.	215.	211.	205.	196.	185.	172.
150	218.	217.	213.	206.	197.	186.	174.
155	219.	218.	214.	207.	198.	188.	175.
160	220.	218.	214.	208.	199.	188.	175.
165	220.	219.	215.	208.	200.	189.	176.
170	220.	219.	215.	208.	200.	189.	176.
175	220.	219.	215.	208.	200.	189.	176.

TABLE 1
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NIGHTTIME STANDARD RADIATION PATTERN DATA
WNYG MEDFORD, NEW YORK

STANDARD RADIATION
(at One Kilometer)

Azimuth Angle (deg)	-----Elevation Angle in Degrees-----					
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)
0	58.2	48.2	39.1	31.5	25.7	22.0
5	56.3	46.8	38.1	30.9	25.5	22.0
10	53.8	44.9	36.8	30.1	25.3	22.2
15	50.8	42.5	35.2	29.3	25.1	22.5
20	47.3	40.0	33.6	28.6	25.2	22.9
25	43.7	37.4	32.2	28.2	25.5	23.6
30	40.2	35.2	31.2	28.2	26.2	24.6
35	37.3	33.8	31.0	28.9	27.3	25.8
40	35.9	33.6	31.8	30.4	29.0	27.4
45	36.4	35.1	33.9	32.7	31.2	29.3
50	39.3	38.3	37.2	35.7	33.9	31.4
55	44.2	43.1	41.5	39.5	36.9	33.8
60	50.9	49.0	46.6	43.8	40.4	36.4
65	58.8	55.8	52.4	48.4	44.1	39.2
70	67.3	63.1	58.5	53.4	47.9	42.1
75	76.3	70.8	64.8	58.5	51.9	45.0
80	85.3	78.5	71.3	63.7	55.9	48.0
85	94.2	86.1	77.6	68.8	59.9	51.0
90	103.	93.5	83.8	73.8	63.8	53.9
95	111.	101.	89.7	78.6	67.6	56.7
100	119.	107.	95.3	83.2	71.2	59.4
105	126.	113.	100.	87.5	74.6	62.0
110	132.	119.	105.	91.4	77.7	64.4
115	138.	124.	109.	95.0	80.6	66.6
120	143.	128.	113.	98.2	83.2	68.6
125	147.	132.	117.	101.	85.5	70.4
130	150.	135.	120.	104.	87.6	72.1
135	153.	138.	122.	106.	89.4	73.5
140	156.	140.	124.	107.	90.9	74.7
145	158.	142.	126.	109.	92.2	75.7
150	159.	144.	127.	110.	93.2	76.6
155	160.	145.	128.	111.	94.0	77.2
160	161.	145.	129.	112.	94.5	77.7
165	161.	146.	129.	112.	94.9	77.9
170	162.	146.	129.	112.	95.0	78.0
175	161.	146.	129.	112.	94.9	77.9

TABLE 1
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NIGHTTIME STANDARD RADIATION PATTERN DATA
WNYG MEDFORD, NEW YORK

Azimuth Angle (deg)	-----Elevation Angle in Degrees-----						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
180	220.	218.	214.	208.	199.	188.	175.
185	219.	218.	214.	207.	198.	188.	175.
190	218.	217.	213.	206.	197.	186.	174.
195	217.	215.	211.	205.	196.	185.	172.
200	215.	213.	209.	203.	194.	183.	170.
205	212.	211.	207.	200.	191.	180.	168.
210	209.	207.	203.	197.	188.	177.	164.
215	204.	203.	199.	193.	184.	173.	161.
220	199.	197.	194.	187.	179.	168.	156.
225	192.	191.	187.	181.	173.	162.	151.
230	184.	183.	179.	173.	165.	156.	144.
235	175.	174.	170.	165.	157.	148.	137.
240	164.	163.	160.	155.	148.	139.	129.
245	152.	151.	148.	144.	137.	130.	121.
250	139.	138.	136.	132.	126.	119.	112.
255	125.	125.	123.	119.	114.	109.	102.
260	111.	110.	109.	106.	102.	97.1	91.6
265	96.1	95.7	94.4	92.2	89.3	85.6	81.2
270	81.5	81.2	80.3	78.9	76.8	74.2	71.0
275	67.8	67.6	67.1	66.2	65.0	63.3	61.3
280	55.9	55.8	55.5	55.1	54.5	53.6	52.4
285	47.2	47.2	47.0	46.7	46.4	45.8	45.2
290	43.5	43.4	43.0	42.4	41.7	40.9	40.1
295	45.3	45.0	44.2	42.9	41.3	39.6	37.9
300	51.2	50.7	49.4	47.2	44.5	41.5	38.6
305	59.3	58.6	56.8	53.8	50.1	45.9	41.5
310	67.9	67.2	64.9	61.3	56.7	51.3	45.7
315	76.4	75.5	72.9	68.8	63.4	57.1	50.4
320	84.2	83.2	80.4	75.8	69.8	62.7	55.1
325	91.0	89.9	86.9	81.9	75.4	67.8	59.4
330	96.6	95.5	92.3	87.1	80.2	72.1	63.1
335	101.	100.0	96.6	91.2	84.0	75.5	66.1
340	104.	103.	99.7	94.1	86.7	78.0	68.3
345	106.	105.	102.	95.9	88.4	79.5	69.6
350	107.	106.	102.	96.5	88.9	80.0	70.0
355	106.	105.	102.	95.9	88.4	79.5	69.6

TABLE 1
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NIGHTTIME STANDARD RADIATION PATTERN DATA
WNYG MEDFORD, NEW YORK

STANDARD RADIATION
(at One Kilometer)

Azimuth Angle (deg)	-----Elevation Angle in Degrees-----					
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)
180	161.	145.	129.	112.	94.5	77.7
185	160.	145.	128.	111.	94.0	77.2
190	159.	144.	127.	110.	93.2	76.6
195	158.	142.	126.	109.	92.2	75.7
200	156.	140.	124.	107.	90.9	74.7
205	153.	138.	122.	106.	89.4	73.5
210	150.	135.	120.	104.	87.6	72.1
215	147.	132.	117.	101.	85.5	70.4
220	143.	128.	113.	98.2	83.2	68.6
225	138.	124.	109.	95.0	80.6	66.6
230	132.	119.	105.	91.4	77.7	64.4
235	126.	113.	100.	87.5	74.6	62.0
240	119.	107.	95.3	83.2	71.2	59.4
245	111.	101.	89.7	78.6	67.6	56.7
250	103.	93.5	83.8	73.8	63.8	53.9
255	94.2	86.1	77.6	68.8	59.9	51.0
260	85.3	78.5	71.3	63.7	55.9	48.0
265	76.3	70.8	64.8	58.5	51.9	45.0
270	67.3	63.1	58.5	53.4	47.9	42.1
275	58.8	55.8	52.4	48.4	44.1	39.2
280	50.9	49.0	46.6	43.8	40.4	36.4
285	44.2	43.1	41.5	39.5	36.9	33.8
290	39.3	38.3	37.2	35.7	33.9	31.4
295	36.4	35.1	33.9	32.7	31.2	29.3
300	35.9	33.6	31.8	30.4	29.0	27.4
305	37.3	33.8	31.0	28.9	27.3	25.8
310	40.2	35.2	31.2	28.2	26.2	24.6
315	43.7	37.4	32.2	28.2	25.5	23.6
320	47.3	40.0	33.6	28.6	25.2	22.9
325	50.8	42.5	35.2	29.3	25.1	22.5
330	53.8	44.9	36.8	30.1	25.3	22.2
335	56.3	46.8	38.1	30.9	25.5	22.0
340	58.2	48.2	39.1	31.5	25.7	22.0
345	59.3	49.1	39.8	31.8	25.8	21.9
350	59.6	49.4	40.0	32.0	25.9	21.9
355	59.3	49.1	39.8	31.8	25.8	21.9