

**PRESENT & PROPOSED NIGHTTIME 10.17 mV/m
CITY GRADE / NIGHTTIME INTERFERENCE FREE CONTOUR**

GRAHAM BROCK, INC.
BROADCAST TECHNICAL CONSULTANTS

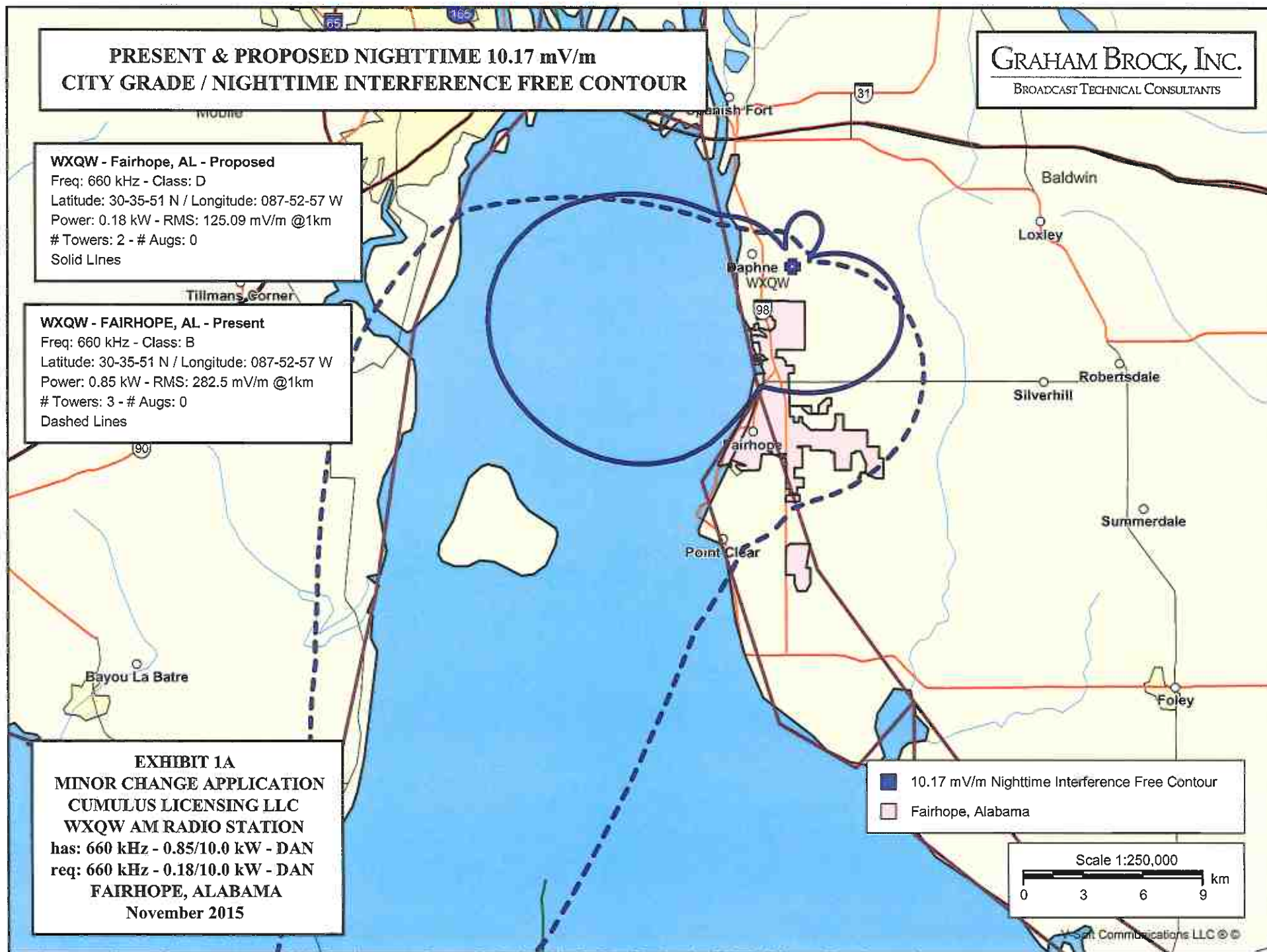
WXQW - Fairhope, AL - Proposed
Freq: 660 kHz - Class: D
Latitude: 30-35-51 N / Longitude: 087-52-57 W
Power: 0.18 kW - RMS: 125.09 mV/m @1km
Towers: 2 - # Augs: 0
Solid Lines

WXQW - FAIRHOPE, AL - Present
Freq: 660 kHz - Class: B
Latitude: 30-35-51 N / Longitude: 087-52-57 W
Power: 0.85 kW - RMS: 282.5 mV/m @1km
Towers: 3 - # Augs: 0
Dashed Lines

**EXHIBIT 1A
MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION**
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

■ 10.17 mV/m Nighttime Interference Free Contour
■ Fairhope, Alabama

Scale 1:250,000
0 3 6 9 km



WXQW - Fairhope, AL - Proposed
Freq: 660 kHz - Class: D
Latitude: 30-35-51 N / Longitude: 087-52-57 W
Power: 0.18 kW - RMS: 125.09 mV/m @1km
Towers: 2 - # AUs: 0
Solid Lines

WXQW - FAIRHOPE, AL - Present
Freq: 660 kHz - Class: B
Latitude: 30-35-51 N / Longitude: 087-52-57 W
Power: 0.85 kW - RMS: 282.5 mV/m @1km
Towers: 3 - # AUs: 0
Dashed Lines

PRESENT & PROPOSED NIGHTTIME 1000 mV/m

GRAHAM BROCK, INC.
BROADCAST TECHNICAL CONSULTANTS

EXHIBIT 1B
MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

Within the Proposed 1000 mV/m Contour :
0 Persons - 2010 Census

1000 mV/m

Scale 1:24,000

0 0.33 0.67 1.0 km

V-Soft Communications LLC ©

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1C1

Present Nighttime Service Contours

North Latitude: 30° 35' 51"
West Longitude: 87° 52' 57"

Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:		Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:	
		1000.000	* 10.168			1000.000	* 10.168
0.0	41.81	0.10	2.43	180.0	170.03	0.15	6.31
5.0	46.64	0.10	2.64	185.0	167.90	0.15	6.27
10.0	50.01	0.10	2.78	190.0	166.34	0.15	6.23
15.0	51.89	0.10	2.85	195.0	165.45	0.15	6.21
20.0	52.26	0.10	2.87	200.0	165.27	0.15	8.02
25.0	51.12	0.10	2.82	205.0	165.82	0.15	9.86
30.0	48.47	0.10	2.71	210.0	167.06	0.15	11.15
35.0	44.35	0.10	2.54	215.0	168.92	0.15	12.13
40.0	38.81	0.10	2.30	220.0	171.29	0.16	12.94
45.0	31.99	0.10	1.98	225.0	174.00	0.16	13.62
50.0	24.24	0.10	1.60	230.0	176.86	0.16	14.20
55.0	16.75	0.10	1.18	235.0	179.64	0.16	14.70
60.0	13.81	0.10	1.00	240.0	182.10	0.16	15.10
65.0	20.20	0.10	1.38	245.0	183.98	0.17	15.40
70.0	31.89	0.10	1.98	250.0	185.00	0.17	15.57
75.0	45.66	0.10	2.60	255.0	184.92	0.17	15.60
80.0	60.45	0.10	3.18	260.0	183.50	0.17	15.47
85.0	75.73	0.10	3.73	265.0	180.54	0.16	15.15
90.0	91.08	0.10	4.23	270.0	175.91	0.16	14.64
95.0	106.12	0.10	4.68	275.0	169.53	0.15	13.91
100.0	120.51	0.11	5.08	280.0	161.37	0.15	12.96
105.0	133.92	0.12	5.44	285.0	151.49	0.14	11.79
110.0	146.07	0.13	5.75	290.0	140.05	0.13	10.38
115.0	156.74	0.14	6.00	295.0	127.22	0.12	8.74
120.0	165.75	0.15	6.22	300.0	113.27	0.10	6.83
125.0	173.01	0.16	6.38	305.0	98.51	0.10	4.62
130.0	178.49	0.16	6.50	310.0	83.26	0.10	3.98
135.0	182.25	0.16	6.59	315.0	67.90	0.10	3.46
140.0	184.40	0.17	6.63	320.0	52.82	0.10	2.89
145.0	185.11	0.17	6.65	325.0	38.46	0.10	2.28
150.0	184.60	0.17	6.64	330.0	25.55	0.10	1.66
155.0	183.11	0.17	6.61	335.0	15.92	0.10	1.13
160.0	180.90	0.16	6.56	340.0	14.27	0.10	1.03
165.0	178.25	0.16	6.50	345.0	20.39	0.10	1.39
170.0	175.39	0.16	6.44	350.0	28.27	0.10	1.80
175.0	172.59	0.16	6.37	355.0	35.62	0.10	2.15

* - Nighttime Interference Free Contour

Ground Conductivity - FCC M-3

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1C2

Proposed Nighttime Service Contours

North Latitude: 30° 35' 51"
West Longitude: 87° 52' 57"

Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:		Azimuth	Radiation (mV/m at one km)	Dist to Contours - km:	
		1000.000	Contour levels in mV/m. * 10.168			1000.000	Contour levels in mV/m. * 10.168
0.0	41.57	0.10	2.42	180.0	169.99	0.15	6.31
5.0	46.41	0.10	2.63	185.0	167.87	0.15	6.26
10.0	49.78	0.10	2.77	190.0	166.31	0.15	6.23
15.0	51.66	0.10	2.84	195.0	165.42	0.15	6.21
20.0	52.02	0.10	2.86	200.0	165.24	0.15	8.02
25.0	50.87	0.10	2.81	205.0	165.79	0.15	9.85
30.0	48.21	0.10	2.70	210.0	167.04	0.15	11.14
35.0	44.07	0.10	2.53	215.0	168.91	0.15	12.13
40.0	38.50	0.10	2.29	220.0	171.27	0.16	12.94
45.0	31.63	0.10	1.97	225.0	173.98	0.16	13.62
50.0	23.79	0.10	1.57	230.0	176.84	0.16	14.20
55.0	16.16	0.10	1.15	235.0	179.62	0.16	14.70
60.0	13.19	0.10	0.97	240.0	182.07	0.16	15.10
65.0	19.86	0.10	1.36	245.0	183.94	0.17	15.40
70.0	31.72	0.10	1.97	250.0	184.95	0.17	15.57
75.0	45.58	0.10	2.59	255.0	184.86	0.17	15.60
80.0	60.41	0.10	3.18	260.0	183.43	0.17	15.46
85.0	75.72	0.10	3.73	265.0	180.47	0.16	15.14
90.0	91.07	0.10	4.23	270.0	175.83	0.16	14.63
95.0	106.12	0.10	4.68	275.0	169.43	0.15	13.90
100.0	120.51	0.11	5.08	280.0	161.26	0.15	12.95
105.0	133.92	0.12	5.44	285.0	151.38	0.14	11.78
110.0	146.06	0.13	5.75	290.0	139.92	0.13	10.37
115.0	156.72	0.14	6.00	295.0	127.08	0.12	8.72
120.0	165.72	0.15	6.21	300.0	113.13	0.10	6.82
125.0	172.98	0.16	6.38	305.0	98.36	0.10	4.61
130.0	178.45	0.16	6.50	310.0	83.10	0.10	3.97
135.0	182.21	0.16	6.59	315.0	67.73	0.10	3.45
140.0	184.36	0.17	6.63	320.0	52.61	0.10	2.88
145.0	185.06	0.17	6.65	325.0	38.21	0.10	2.27
150.0	184.55	0.17	6.64	330.0	25.19	0.10	1.65
155.0	183.06	0.17	6.61	335.0	15.36	0.10	1.10
160.0	180.85	0.16	6.56	340.0	13.66	0.10	1.00
165.0	178.19	0.16	6.50	345.0	19.96	0.10	1.36
170.0	175.35	0.16	6.43	350.0	27.95	0.10	1.79
175.0	172.54	0.16	6.37	355.0	35.35	0.10	2.14

* - Nighttime Interference Free Contour

Ground Conductivity - FCC M3

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D1

Proposed Standard Pattern Tabulation

AM Radiation Report

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swch	TL Swch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

 Standard Horizontal Plane Pattern

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	41.57	5.0	46.41	10.0	49.78
15.0	51.66	20.0	52.02	25.0	50.87
30.0	48.21	35.0	44.07	40.0	38.50
45.0	31.63	50.0	23.79	55.0	16.16
60.0	13.19	65.0	19.86	70.0	31.72
75.0	45.58	80.0	60.41	85.0	75.72
90.0	91.07	95.0	106.12	100.0	120.51
105.0	133.92	110.0	146.06	115.0	156.72
120.0	165.72	125.0	172.98	130.0	178.45
135.0	182.21	140.0	184.36	145.0	185.06
150.0	184.55	155.0	183.06	160.0	180.85
165.0	178.19	170.0	175.35	175.0	172.54
180.0	169.99	185.0	167.87	190.0	166.31
195.0	165.42	200.0	165.24	205.0	165.79
210.0	167.04	215.0	168.91	220.0	171.27
225.0	173.98	230.0	176.84	235.0	179.62
240.0	182.07	245.0	183.94	250.0	184.95
255.0	184.86	260.0	183.43	265.0	180.47
270.0	175.83	275.0	169.43	280.0	161.26
285.0	151.38	290.0	139.92	295.0	127.08
300.0	113.13	305.0	98.36	310.0	83.10
315.0	67.73	320.0	52.61	325.0	38.21
330.0	25.19	335.0	15.36	340.0	13.66
345.0	19.96	350.0	27.95	355.0	35.35

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D2

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 5.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	40.67	5.0	45.46	10.0	48.81
15.0	50.67	20.0	51.03	25.0	49.89
30.0	47.25	35.0	43.14	40.0	37.63
45.0	30.83	50.0	23.12	55.0	15.73
60.0	13.26	65.0	20.20	70.0	32.04
75.0	45.79	80.0	60.49	85.0	75.65
90.0	90.87	95.0	105.78	100.0	120.03
105.0	133.32	110.0	145.36	115.0	155.94
120.0	164.87	125.0	172.08	130.0	177.54
135.0	181.29	140.0	183.45	145.0	184.19
150.0	183.72	155.0	182.28	160.0	180.13
165.0	177.54	170.0	174.75	175.0	171.99
180.0	169.49	185.0	167.41	190.0	165.88
195.0	165.00	200.0	164.83	205.0	165.37
210.0	166.60	215.0	168.43	220.0	170.75
225.0	173.41	230.0	176.21	235.0	178.93
240.0	181.32	245.0	183.13	250.0	184.10
255.0	183.97	260.0	182.51	265.0	179.54
270.0	174.92	275.0	168.55	280.0	160.44
285.0	150.63	290.0	139.27	295.0	126.55
300.0	112.72	305.0	98.09	310.0	82.97
315.0	67.74	320.0	52.76	325.0	38.48
330.0	25.54	335.0	15.63	340.0	13.44
345.0	19.37	350.0	27.21	355.0	34.51

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D3

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 10.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	38.02	5.0	42.68	10.0	45.93
15.0	47.75	20.0	48.10	25.0	46.99
30.0	44.42	35.0	40.43	40.0	35.07
45.0	28.52	50.0	21.18	55.0	14.56
60.0	13.61	65.0	21.24	70.0	32.96
75.0	46.39	80.0	60.71	85.0	75.46
90.0	90.26	95.0	104.75	100.0	118.62
105.0	131.55	110.0	143.28	115.0	153.60
120.0	162.34	125.0	169.41	130.0	174.80
135.0	178.54	140.0	180.75	145.0	181.58
150.0	181.23	155.0	179.95	160.0	177.97
165.0	175.55	170.0	172.93	175.0	170.34
180.0	167.97	185.0	166.00	190.0	164.55
195.0	163.72	200.0	163.55	205.0	164.07
210.0	165.23	215.0	166.97	220.0	169.16
225.0	171.67	230.0	174.30	235.0	176.85
240.0	179.07	245.0	180.72	250.0	181.54
255.0	181.31	260.0	179.78	265.0	176.80
270.0	172.21	275.0	165.95	280.0	158.00
285.0	148.42	290.0	137.35	295.0	124.96
300.0	111.51	305.0	97.27	310.0	82.58
315.0	67.76	320.0	53.19	325.0	39.26
330.0	26.57	335.0	16.48	340.0	12.95
345.0	17.72	350.0	25.05	355.0	32.06

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D4

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
Calculated at 15.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	33.80	5.0	38.22	10.0	41.33
15.0	43.06	20.0	43.40	25.0	42.33
30.0	39.88	35.0	36.08	40.0	31.01
45.0	24.88	50.0	18.25	55.0	13.15
60.0	14.59	65.0	22.97	70.0	34.43
75.0	47.33	80.0	61.02	85.0	75.10
90.0	89.21	95.0	103.04	100.0	116.28
105.0	128.64	110.0	139.87	115.0	149.77
120.0	158.19	125.0	165.04	130.0	170.31
135.0	174.02	140.0	176.29	145.0	177.26
150.0	177.12	155.0	176.07	160.0	174.36
165.0	172.22	170.0	169.87	175.0	167.53
180.0	165.38	185.0	163.59	190.0	162.26
195.0	161.50	200.0	161.35	205.0	161.82
210.0	162.89	215.0	164.47	220.0	166.47
225.0	168.74	230.0	171.11	235.0	173.37
240.0	175.32	245.0	176.71	250.0	177.32
255.0	176.91	260.0	175.29	265.0	172.28
270.0	167.76	275.0	161.67	280.0	154.00
285.0	144.79	290.0	134.18	295.0	122.34
300.0	109.49	305.0	95.91	310.0	81.89
315.0	67.75	320.0	53.83	325.0	40.49
330.0	28.23	335.0	18.04	340.0	12.75
345.0	15.36	350.0	21.69	355.0	28.18

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D5

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 20.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	28.30	5.0	32.38	10.0	35.26
15.0	36.88	20.0	37.19	25.0	36.20
30.0	33.92	35.0	30.40	40.0	25.76
45.0	20.29	50.0	14.89	55.0	12.40
60.0	16.50	65.0	25.33	70.0	36.32
75.0	48.48	80.0	61.32	85.0	74.50
90.0	87.71	95.0	100.65	100.0	113.04
105.0	124.63	110.0	135.18	115.0	144.52
120.0	152.51	125.0	159.06	130.0	164.15
135.0	167.83	140.0	170.17	145.0	171.30
150.0	171.41	155.0	170.67	160.0	169.30
165.0	167.52	170.0	165.52	175.0	163.50
180.0	161.64	185.0	160.07	190.0	158.91
195.0	158.25	200.0	158.11	205.0	158.53
210.0	159.46	215.0	160.84	220.0	162.58
225.0	164.54	230.0	166.57	235.0	168.48
240.0	170.08	245.0	171.15	250.0	171.47
255.0	170.85	260.0	169.11	265.0	166.09
270.0	161.68	275.0	155.83	280.0	148.53
285.0	139.83	290.0	129.84	295.0	118.72
300.0	106.68	305.0	93.97	310.0	80.86
315.0	67.63	320.0	54.58	325.0	42.05
330.0	30.42	335.0	20.36	340.0	13.54
345.0	13.03	350.0	17.58	355.0	23.20

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D6

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 25.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	21.99	5.0	25.56	10.0	28.14
15.0	29.59	20.0	29.87	25.0	28.98
30.0	26.93	35.0	23.82	40.0	19.82
45.0	15.46	50.0	12.27	55.0	13.34
60.0	19.36	65.0	28.17	70.0	38.48
75.0	49.71	80.0	61.51	85.0	73.60
90.0	85.71	95.0	97.57	100.0	108.94
105.0	119.60	110.0	129.33	115.0	137.99
120.0	145.43	125.0	151.60	130.0	156.47
135.0	160.07	140.0	162.47	145.0	163.78
150.0	164.16	155.0	163.77	160.0	162.79
165.0	161.41	170.0	159.82	175.0	158.18
180.0	156.64	185.0	155.34	190.0	154.37
195.0	153.82	200.0	153.71	205.0	154.05
210.0	154.83	215.0	155.98	220.0	157.42
225.0	159.03	230.0	160.66	235.0	162.17
240.0	163.36	245.0	164.06	250.0	164.07
255.0	163.23	260.0	161.36	265.0	158.35
270.0	154.10	275.0	148.56	280.0	141.72
285.0	133.63	290.0	124.40	295.0	114.16
300.0	103.11	305.0	91.45	310.0	79.43
315.0	67.30	320.0	55.32	325.0	43.78
330.0	32.98	335.0	23.35	340.0	15.75
345.0	12.08	350.0	13.61	355.0	17.71

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D7

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 30.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	15.70	5.0	18.46	10.0	20.57
15.0	21.79	20.0	22.03	25.0	21.28
30.0	19.58	35.0	17.08	40.0	14.18
45.0	11.88	50.0	12.16	55.0	16.19
60.0	22.92	65.0	31.28	70.0	40.70
75.0	50.85	80.0	61.46	85.0	72.31
90.0	83.17	95.0	93.81	100.0	104.03
105.0	113.63	110.0	122.43	115.0	130.30
120.0	137.12	125.0	142.83	130.0	147.42
135.0	150.90	140.0	153.33	145.0	154.81
150.0	155.46	155.0	155.42	160.0	154.85
165.0	153.90	170.0	152.73	175.0	151.49
180.0	150.30	185.0	149.28	190.0	148.52
195.0	148.08	200.0	148.00	205.0	148.27
210.0	148.88	215.0	149.79	220.0	150.90
225.0	152.13	230.0	153.36	235.0	154.43
240.0	155.20	245.0	155.52	250.0	155.22
255.0	154.16	260.0	152.19	265.0	149.23
270.0	145.17	275.0	140.00	280.0	133.71
285.0	126.33	290.0	117.96	295.0	108.73
300.0	98.79	305.0	88.32	310.0	77.54
315.0	66.65	320.0	55.90	325.0	45.50
330.0	35.69	335.0	26.77	340.0	19.16
345.0	13.67	350.0	11.56	355.0	12.90

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D8

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 35.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	11.30	5.0	12.47	10.0	13.72
15.0	14.53	20.0	14.70	25.0	14.18
30.0	13.10	35.0	11.80	40.0	11.03
45.0	11.90	50.0	15.07	55.0	20.21
60.0	26.77	65.0	34.37	70.0	42.75
75.0	51.70	80.0	61.02	85.0	70.53
90.0	80.05	95.0	89.38	100.0	98.36
105.0	106.81	110.0	114.60	115.0	121.60
120.0	127.73	125.0	132.93	130.0	137.18
135.0	140.49	140.0	142.91	145.0	144.52
150.0	145.41	155.0	145.70	160.0	145.52
165.0	144.98	170.0	144.23	175.0	143.38
180.0	142.55	185.0	141.82	190.0	141.26
195.0	140.94	200.0	140.87	205.0	141.08
210.0	141.52	215.0	142.18	220.0	142.98
225.0	143.83	230.0	144.64	235.0	145.30
240.0	145.66	245.0	145.62	250.0	145.03
255.0	143.78	260.0	141.76	265.0	138.88
270.0	135.09	275.0	130.34	280.0	124.66
285.0	118.07	290.0	110.64	295.0	102.49
300.0	93.75	305.0	84.56	310.0	75.11
315.0	65.57	320.0	56.14	325.0	46.99
330.0	38.31	335.0	30.31	340.0	23.21
345.0	17.33	350.0	13.14	355.0	11.18

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D9

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 40.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	11.78	5.0	10.72	10.0	10.41
15.0	10.41	20.0	10.42	25.0	10.40
30.0	10.51	35.0	11.15	40.0	12.75
45.0	15.55	50.0	19.55	55.0	24.59
60.0	30.51	65.0	37.16	70.0	44.39
75.0	52.07	80.0	60.05	85.0	68.18
90.0	76.30	95.0	84.29	100.0	91.98
105.0	99.24	110.0	105.97	115.0	112.07
120.0	117.45	125.0	122.08	130.0	125.94
135.0	129.03	140.0	131.39	145.0	133.07
150.0	134.15	155.0	134.72	160.0	134.87
165.0	134.71	170.0	134.35	175.0	133.86
180.0	133.35	185.0	132.88	190.0	132.52
195.0	132.31	200.0	132.27	205.0	132.40
210.0	132.70	215.0	133.12	220.0	133.62
225.0	134.12	230.0	134.56	235.0	134.83
240.0	134.84	245.0	134.48	250.0	133.66
255.0	132.27	260.0	130.25	265.0	127.52
270.0	124.03	275.0	119.77	280.0	114.74
285.0	108.98	290.0	102.55	295.0	95.52
300.0	88.02	305.0	80.16	310.0	72.09
315.0	63.94	320.0	55.87	325.0	48.03
330.0	40.57	335.0	33.62	340.0	27.33
345.0	21.85	350.0	17.33	355.0	13.94

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D10

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo-RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 45.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	16.18	5.0	14.31	10.0	13.11
15.0	12.49	20.0	12.37	25.0	12.74
30.0	13.65	35.0	15.19	40.0	17.45
45.0	20.46	50.0	24.21	55.0	28.66
60.0	33.73	65.0	39.34	70.0	45.39
75.0	51.78	80.0	58.41	85.0	65.15
90.0	71.90	95.0	78.53	100.0	84.94
105.0	91.02	110.0	96.68	115.0	101.85
120.0	106.47	125.0	110.49	130.0	113.91
135.0	116.72	140.0	118.95	145.0	120.63
150.0	121.83	155.0	122.61	160.0	123.03
165.0	123.18	170.0	123.14	175.0	122.97
180.0	122.73	185.0	122.50	190.0	122.31
195.0	122.19	200.0	122.17	205.0	122.24
210.0	122.40	215.0	122.62	220.0	122.86
225.0	123.07	230.0	123.18	235.0	123.14
240.0	122.85	245.0	122.25	250.0	121.27
255.0	119.82	260.0	117.86	265.0	115.33
270.0	112.21	275.0	108.47	280.0	104.14
285.0	99.23	290.0	93.79	295.0	87.90
300.0	81.64	305.0	75.10	310.0	68.40
315.0	61.64	320.0	54.94	325.0	48.42
330.0	42.19	335.0	36.36	340.0	31.02
345.0	26.27	350.0	22.17	355.0	18.80

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D11

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 50.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	21.31	5.0	19.54	10.0	18.32
15.0	17.66	20.0	17.53	25.0	17.93
30.0	18.88	35.0	20.39	40.0	22.46
45.0	25.09	50.0	28.26	55.0	31.94
60.0	36.08	65.0	40.63	70.0	45.51
75.0	50.65	80.0	55.96	85.0	61.38
90.0	66.79	95.0	72.13	100.0	77.30
105.0	82.23	110.0	86.85	115.0	91.11
120.0	94.95	125.0	98.34	130.0	101.28
135.0	103.76	140.0	105.80	145.0	107.42
150.0	108.65	155.0	109.55	160.0	110.16
165.0	110.53	170.0	110.73	175.0	110.80
180.0	110.79	185.0	110.74	190.0	110.68
195.0	110.65	200.0	110.64	205.0	110.66
210.0	110.71	215.0	110.77	220.0	110.80
225.0	110.78	230.0	110.65	235.0	110.36
240.0	109.87	245.0	109.12	250.0	108.05
255.0	106.63	260.0	104.79	265.0	102.53
270.0	99.81	275.0	96.63	280.0	93.00
285.0	88.94	290.0	84.49	295.0	79.70
300.0	74.64	305.0	69.37	310.0	63.98
315.0	58.56	320.0	53.18	325.0	47.95
330.0	42.93	335.0	38.22	340.0	33.87
345.0	29.97	350.0	26.55	355.0	23.65

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D12

Proposed Standard Pattern Tabulation

WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo. RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 55.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	25.62	5.0	24.17	10.0	23.17
15.0	22.61	20.0	22.50	25.0	22.84
30.0	23.63	35.0	24.87	40.0	26.55
45.0	28.65	50.0	31.15	55.0	34.04
60.0	37.26	65.0	40.78	70.0	44.56
75.0	48.52	80.0	52.62	85.0	56.79
90.0	60.97	95.0	65.10	100.0	69.12
105.0	72.97	110.0	76.60	115.0	79.98
120.0	83.06	125.0	85.83	130.0	88.27
135.0	90.37	140.0	92.16	145.0	93.63
150.0	94.81	155.0	95.74	160.0	96.44
165.0	96.95	170.0	97.31	175.0	97.54
180.0	97.68	185.0	97.77	190.0	97.81
195.0	97.83	200.0	97.83	205.0	97.82
210.0	97.79	215.0	97.73	220.0	97.62
225.0	97.43	230.0	97.14	235.0	96.71
240.0	96.10	245.0	95.29	250.0	94.23
255.0	92.90	260.0	91.27	265.0	89.32
270.0	87.04	275.0	84.43	280.0	81.49
285.0	78.26	290.0	74.74	295.0	70.99
300.0	67.05	305.0	62.97	310.0	58.80
315.0	54.62	320.0	50.47	325.0	46.44
330.0	42.57	335.0	38.92	340.0	35.55
345.0	32.49	350.0	29.80	355.0	27.50

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1D13

Proposed Standard Pattern Tabulation

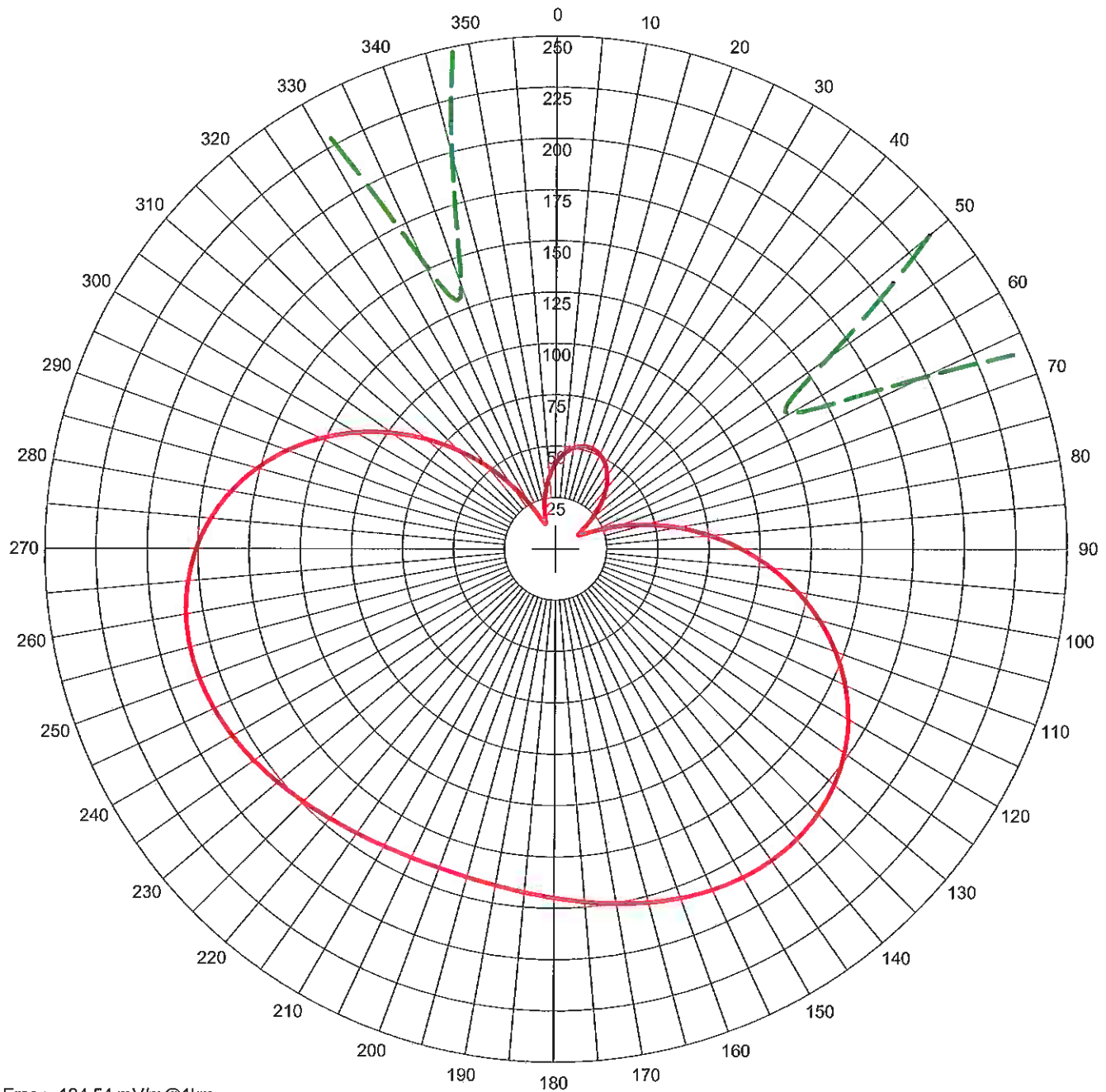
WXQW 660 kHz Fairhope, AL, US Hours: U
 North Latitude: 30° 35' 51" West Longitude: 87° 52' 57"
 Power: 0.18 kW Theo RMS: 125.09 mV/m @ 1km @ 0.18 kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Standard Pattern
 Calculated at 60.0 Degrees Elevation

Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)	Azimuth (Deg)	Field (mV/m @1km)
0.0	28.40	5.0	27.31	10.0	26.55
15.0	26.13	20.0	26.05	25.0	26.31
30.0	26.91	35.0	27.84	40.0	29.09
45.0	30.66	50.0	32.52	55.0	34.65
60.0	37.02	65.0	39.61	70.0	42.37
75.0	45.28	80.0	48.28	85.0	51.35
90.0	54.42	95.0	57.47	100.0	60.44
105.0	63.31	110.0	66.04	115.0	68.59
120.0	70.96	125.0	73.11	130.0	75.04
135.0	76.75	140.0	78.23	145.0	79.50
150.0	80.56	155.0	81.43	160.0	82.13
165.0	82.68	170.0	83.11	175.0	83.42
180.0	83.65	185.0	83.81	190.0	83.91
195.0	83.96	200.0	83.97	205.0	83.94
210.0	83.86	215.0	83.74	220.0	83.54
225.0	83.27	230.0	82.90	235.0	82.41
240.0	81.78	245.0	81.00	250.0	80.03
255.0	78.86	260.0	77.49	265.0	75.89
270.0	74.07	275.0	72.02	280.0	69.75
285.0	67.29	290.0	64.64	295.0	61.83
300.0	58.90	305.0	55.89	310.0	52.82
315.0	49.75	320.0	46.71	325.0	43.75
330.0	40.92	335.0	38.24	340.0	35.76
345.0	33.51	350.0	31.51	355.0	29.81

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Horizontal Plane Pattern

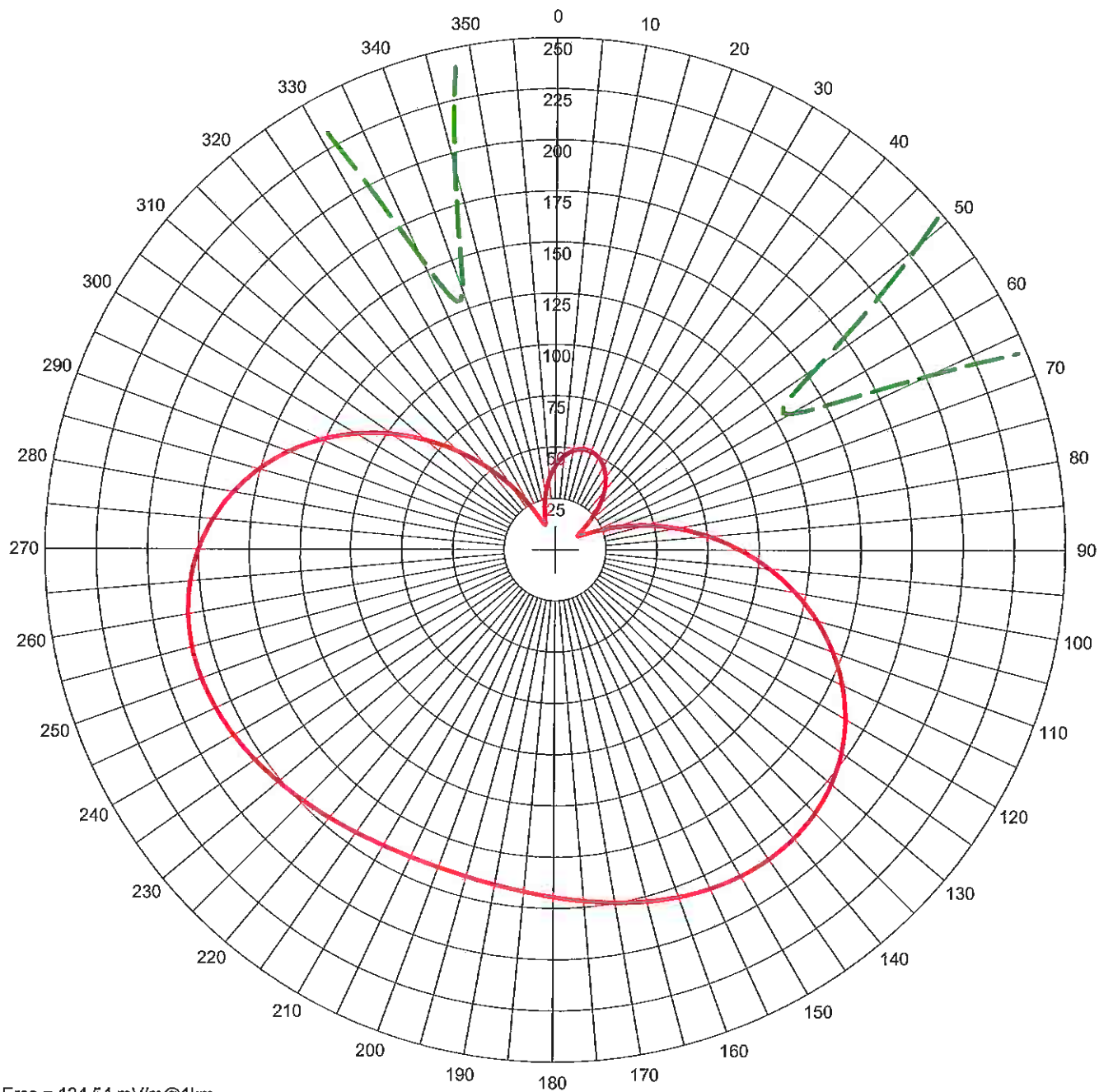
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E1

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
Theo RMS: 125.09 mV/m@1km
Std RMS: 131.764 mV/m@1km
Q: 10.0 mV/m@1km

Standard Pattern at Theta = 5.00 Degrees

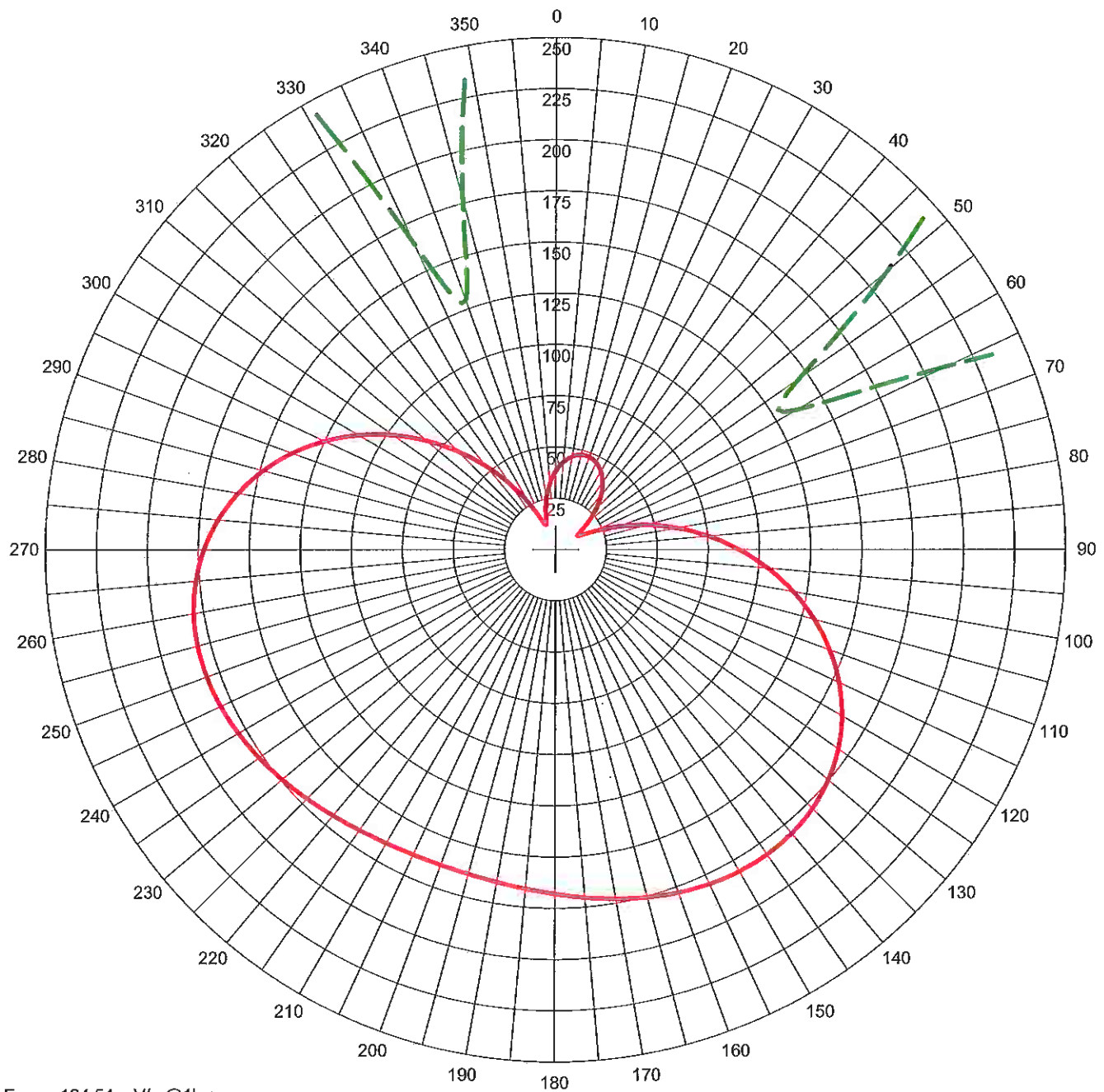
— Pattern (mV/m @ 1km)
- - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
Freq: 660 kHz
Fairhope, AL, US
Hours: U
Lat: 30-35-51 N
Lng: 087-52-57 W
Power: 0.18 kW
Theo RMS: 125.09 mV/m@1km
@ 0.18 kW

EXHIBIT #1E2

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 10.00 Degrees

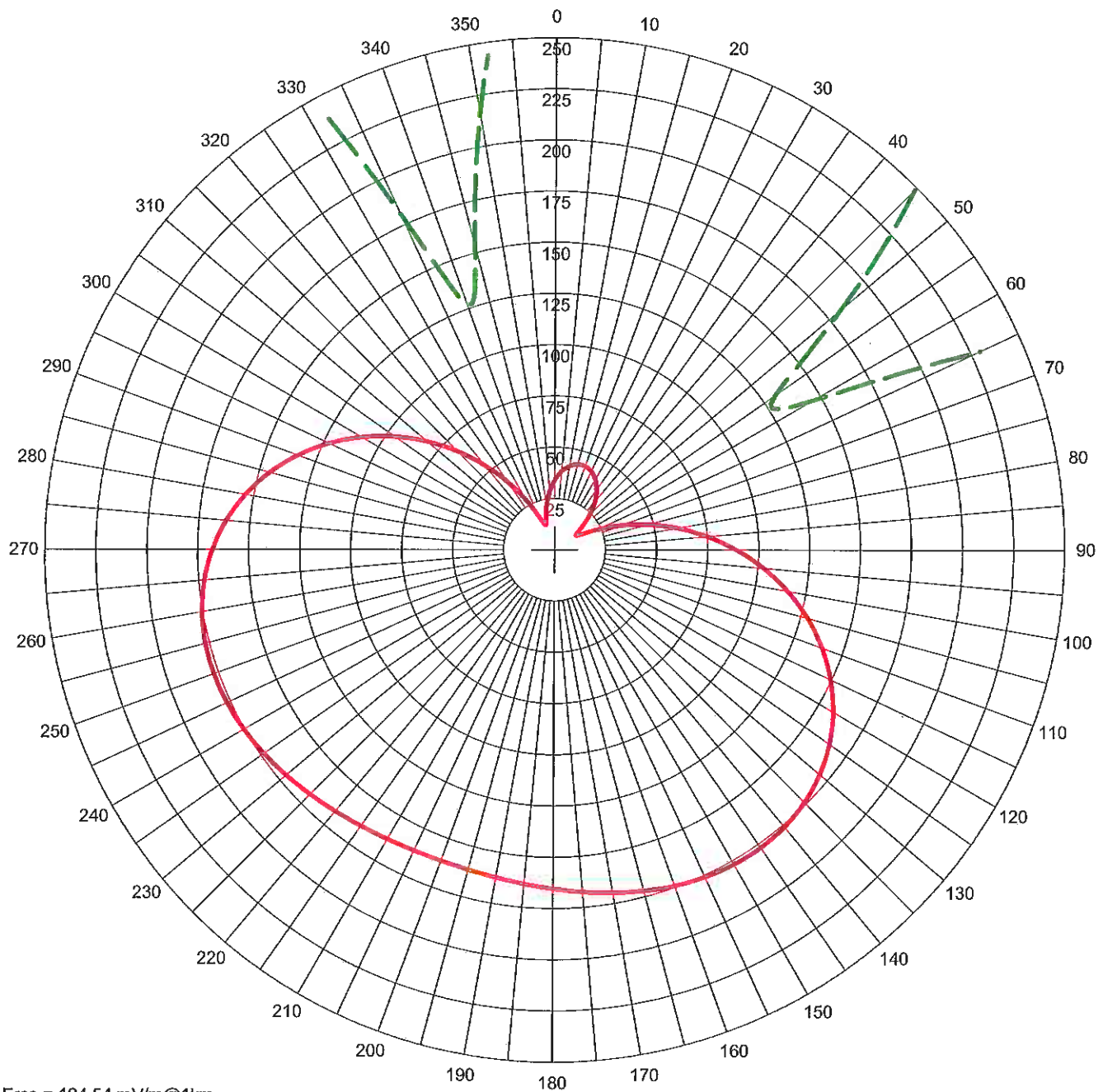
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E3

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 15.00 Degrees

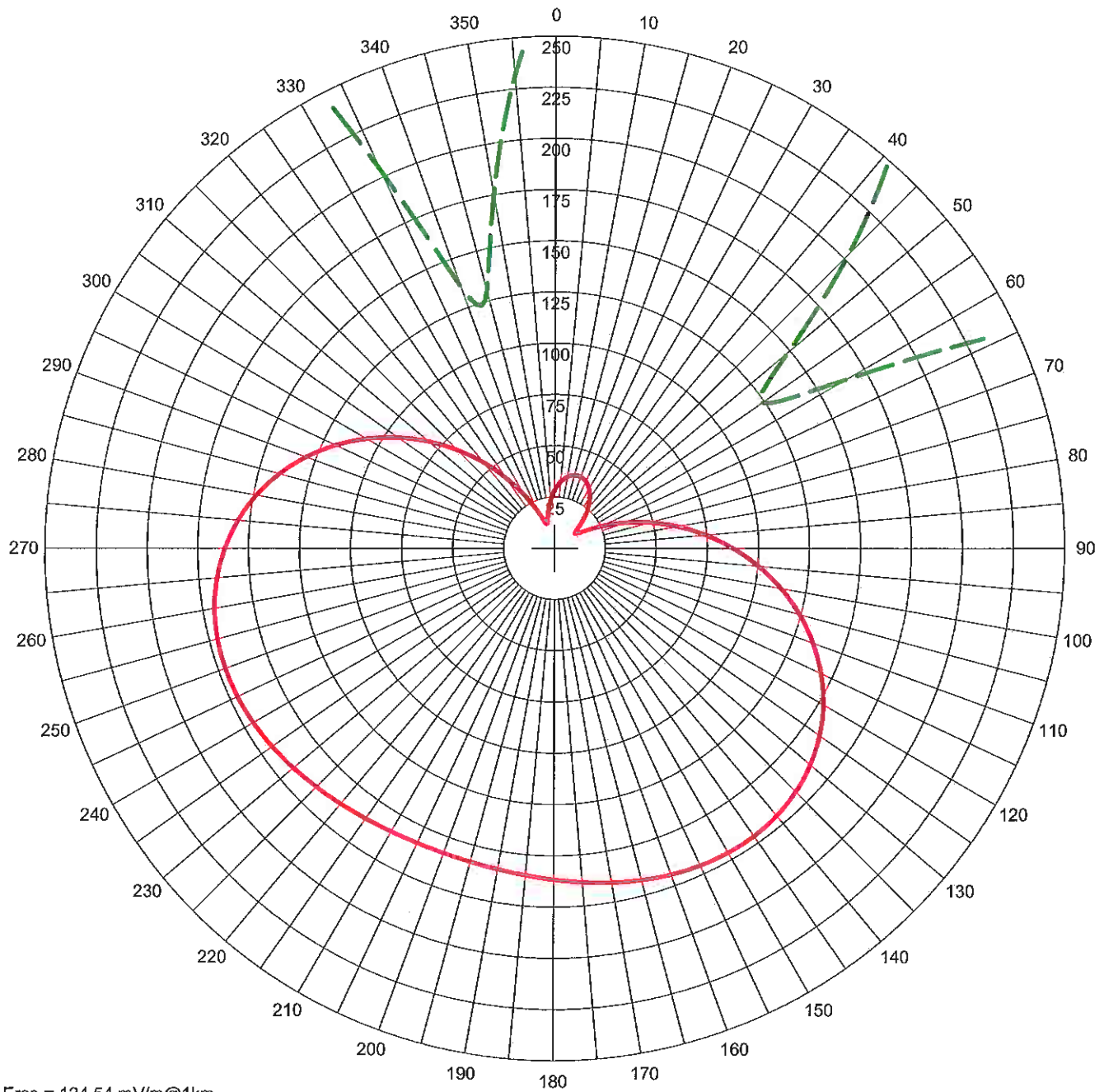
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E4

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 20.00 Degrees

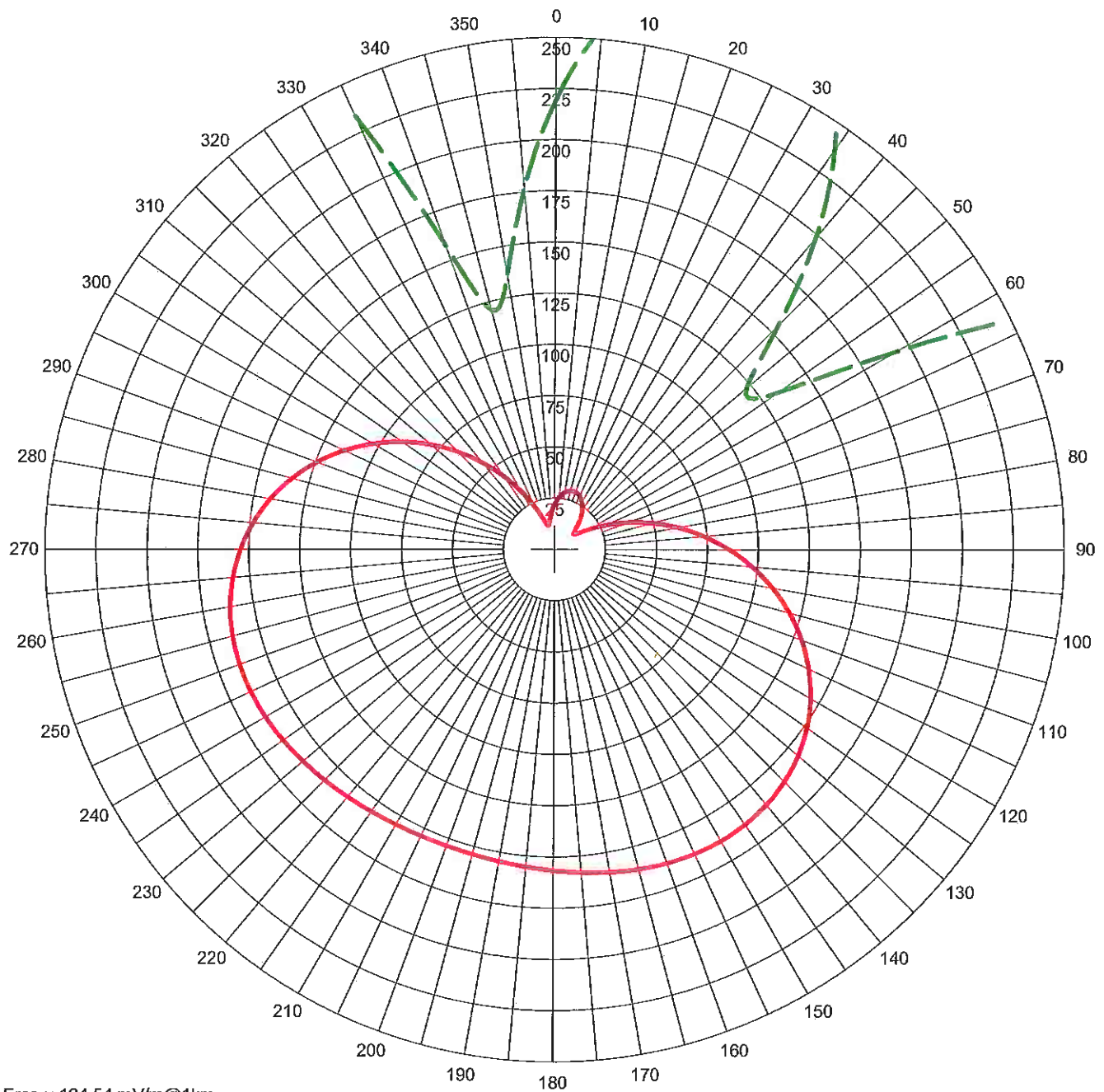
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Long: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E5

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 25.00 Degrees

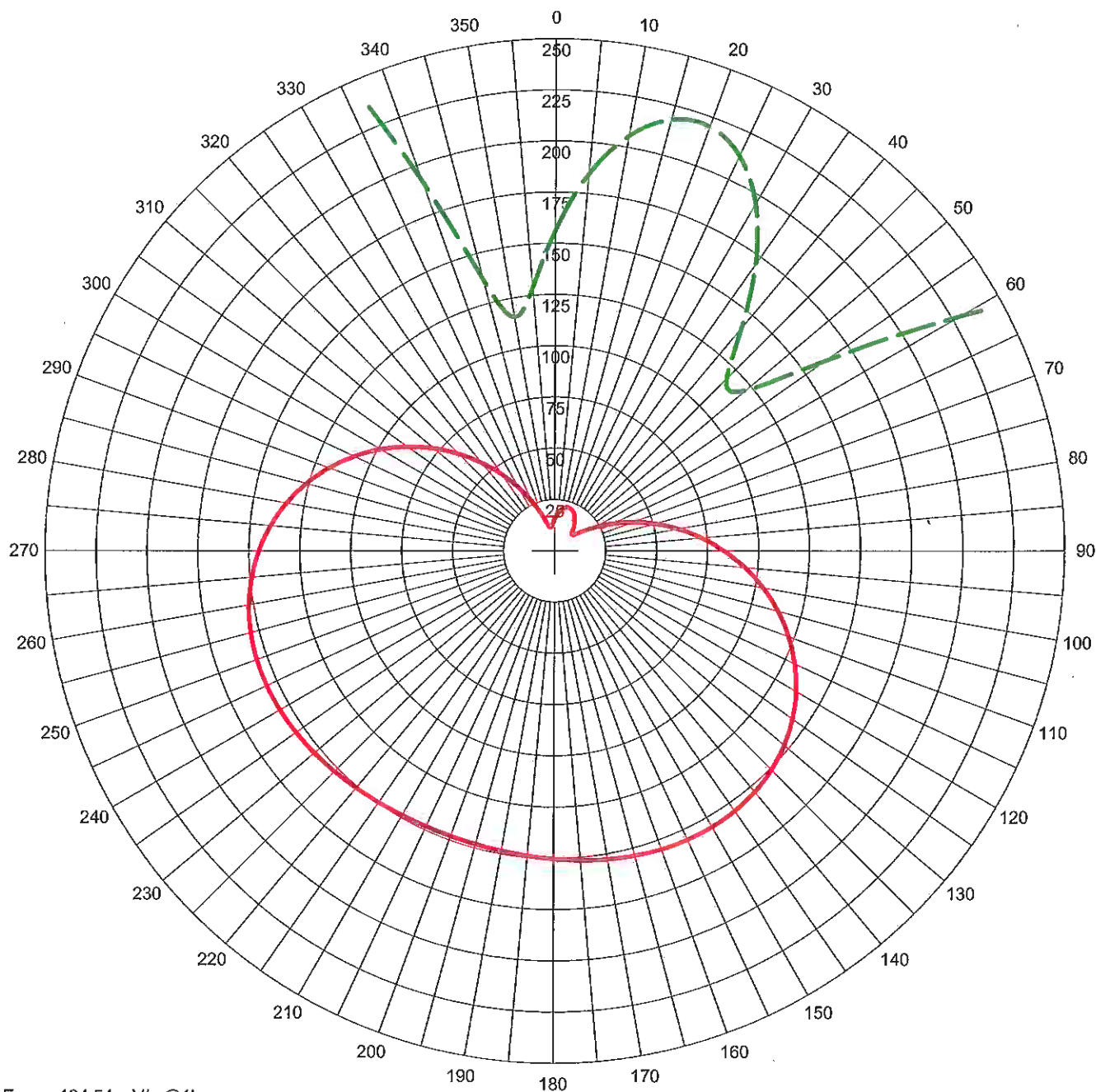
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E6

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 30.00 Degrees

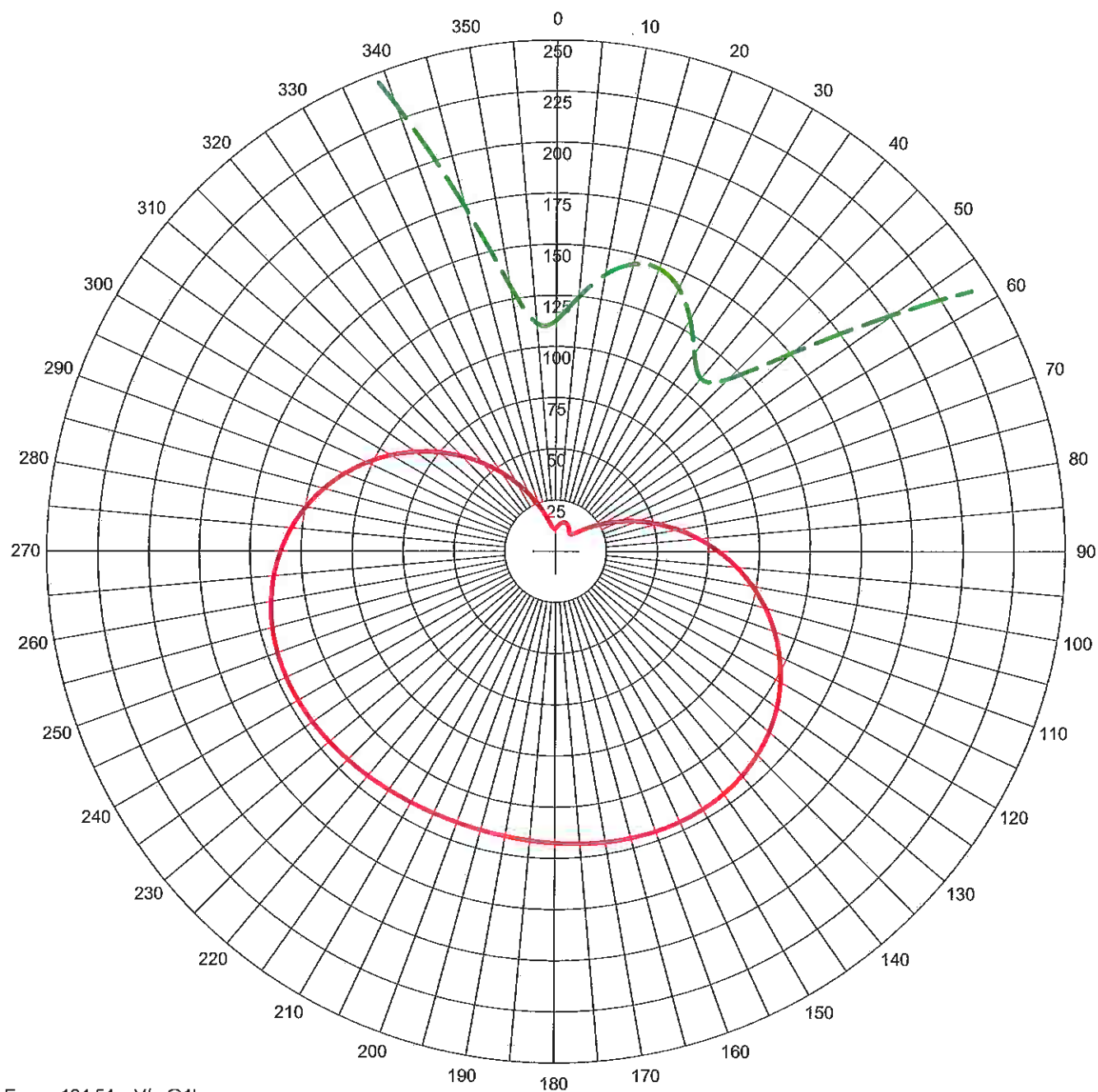
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E7

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 35.00 Degrees

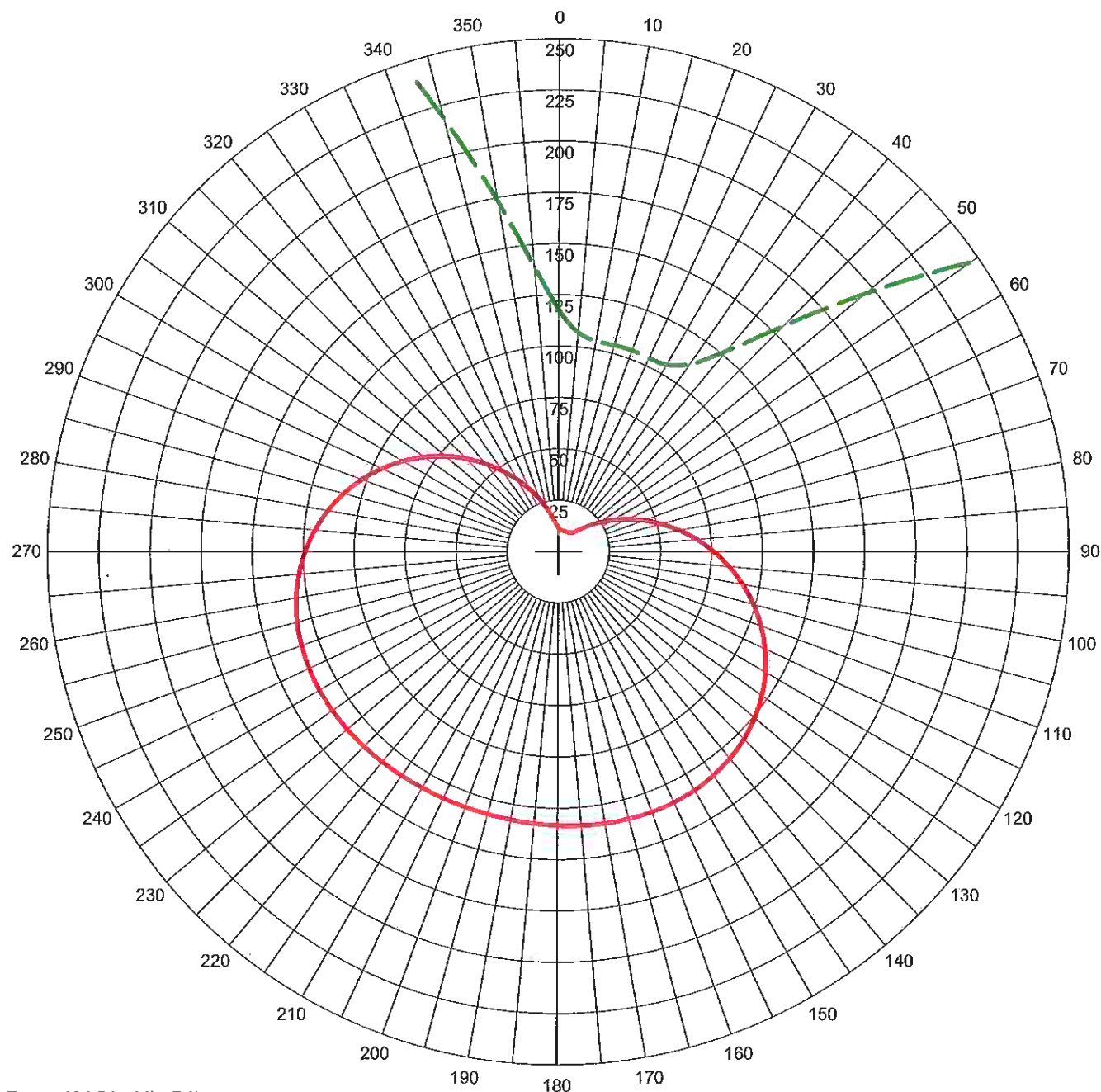
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E8

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
Theo RMS: 125.09 mV/m@1km
Std RMS: 131.764 mV/m@1km
Q: 10.0 mV/m@1km

Standard Pattern at Theta = 40.00 Degrees

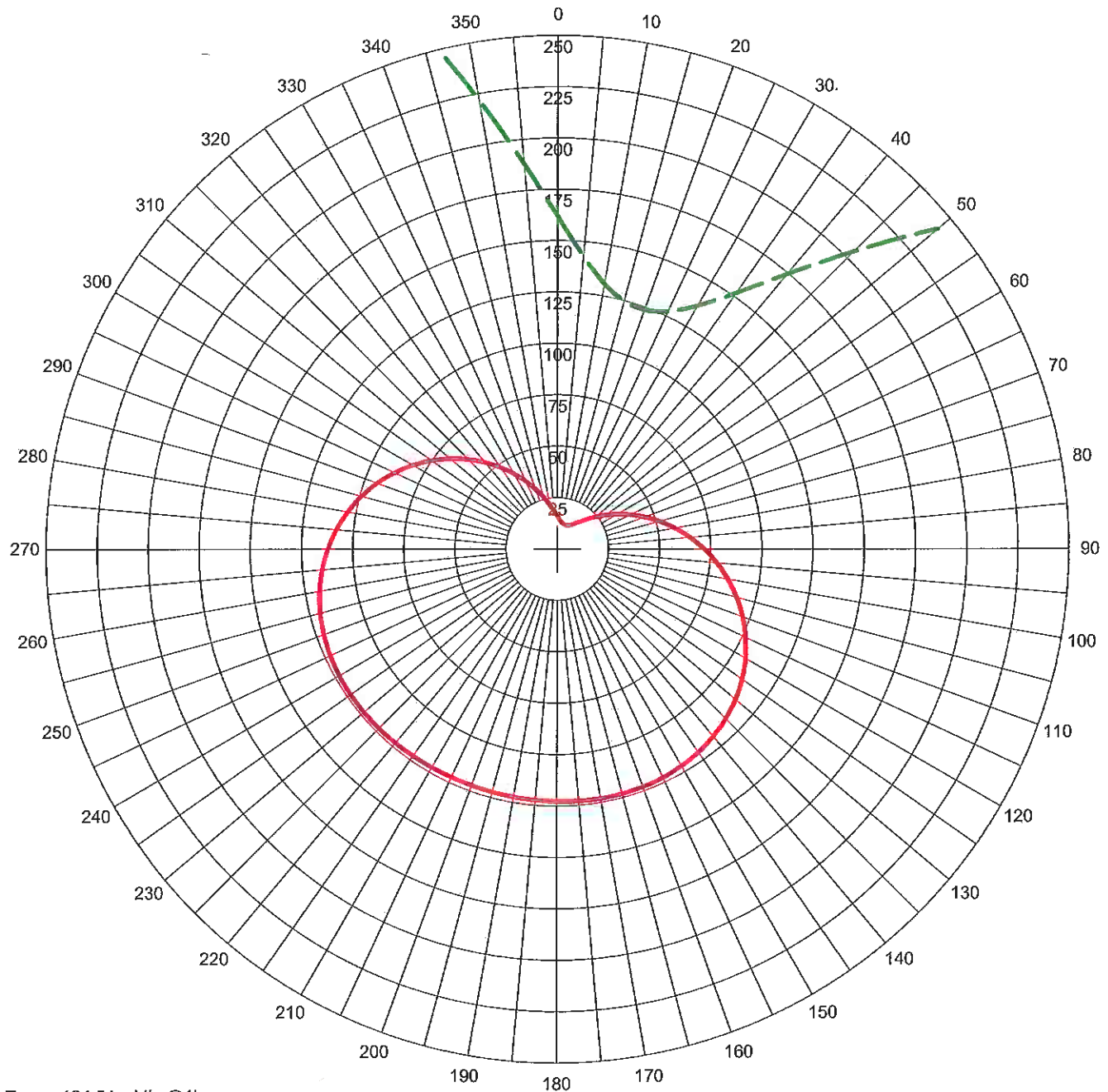
— Pattern (mV/m @ 1km)
- - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
Freq: 660 kHz
Fairhope, AL, US
Hours: U
Lat: 30-35-51 N
Lng: 087-52-57 W
Power: 0.18 kW
Theo RMS: 125.09 mV/m@1km
@ 0.18 kW

EXHIBIT #1E9

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 45.00 Degrees

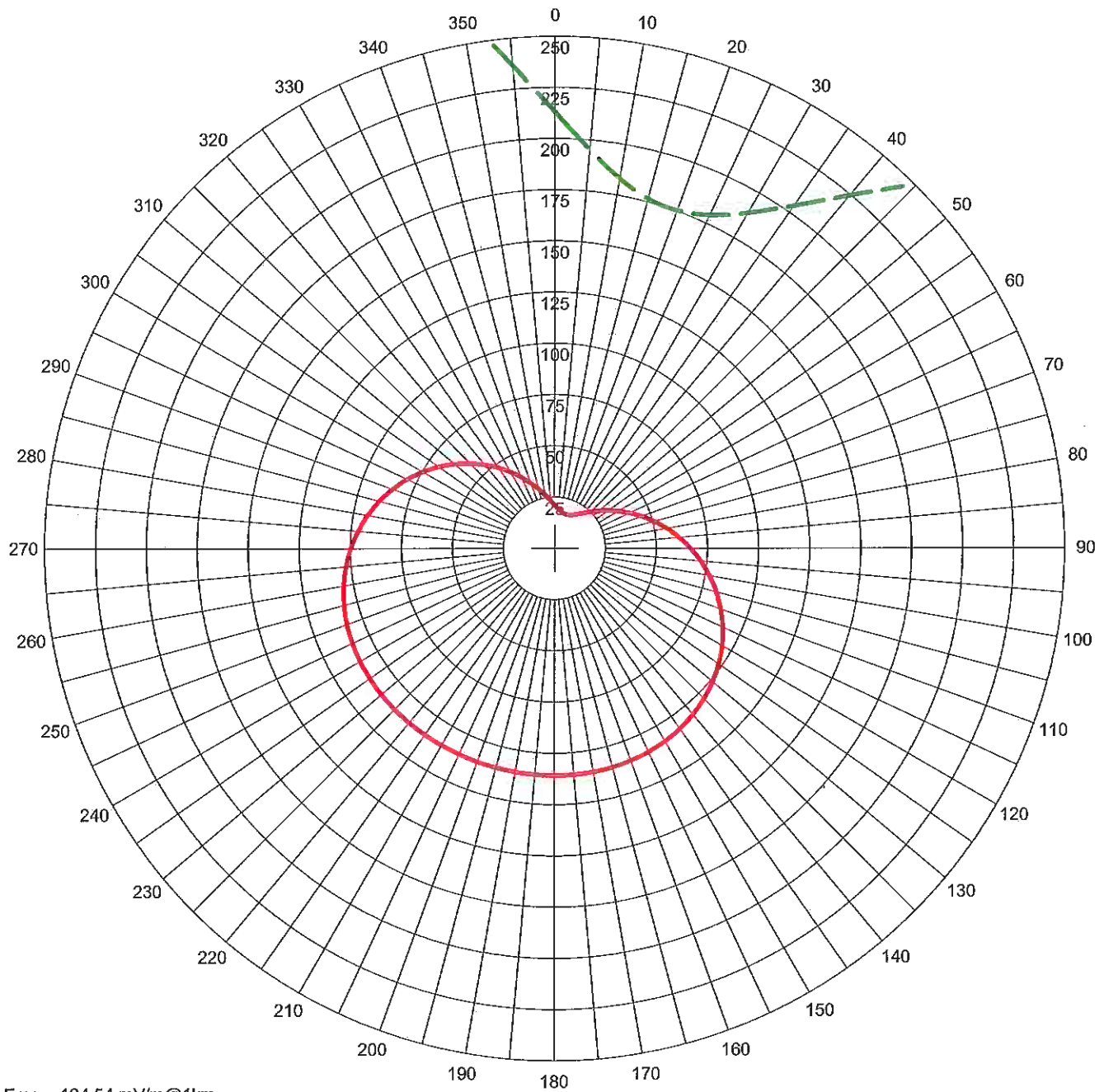
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E10

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 50.00 Degrees

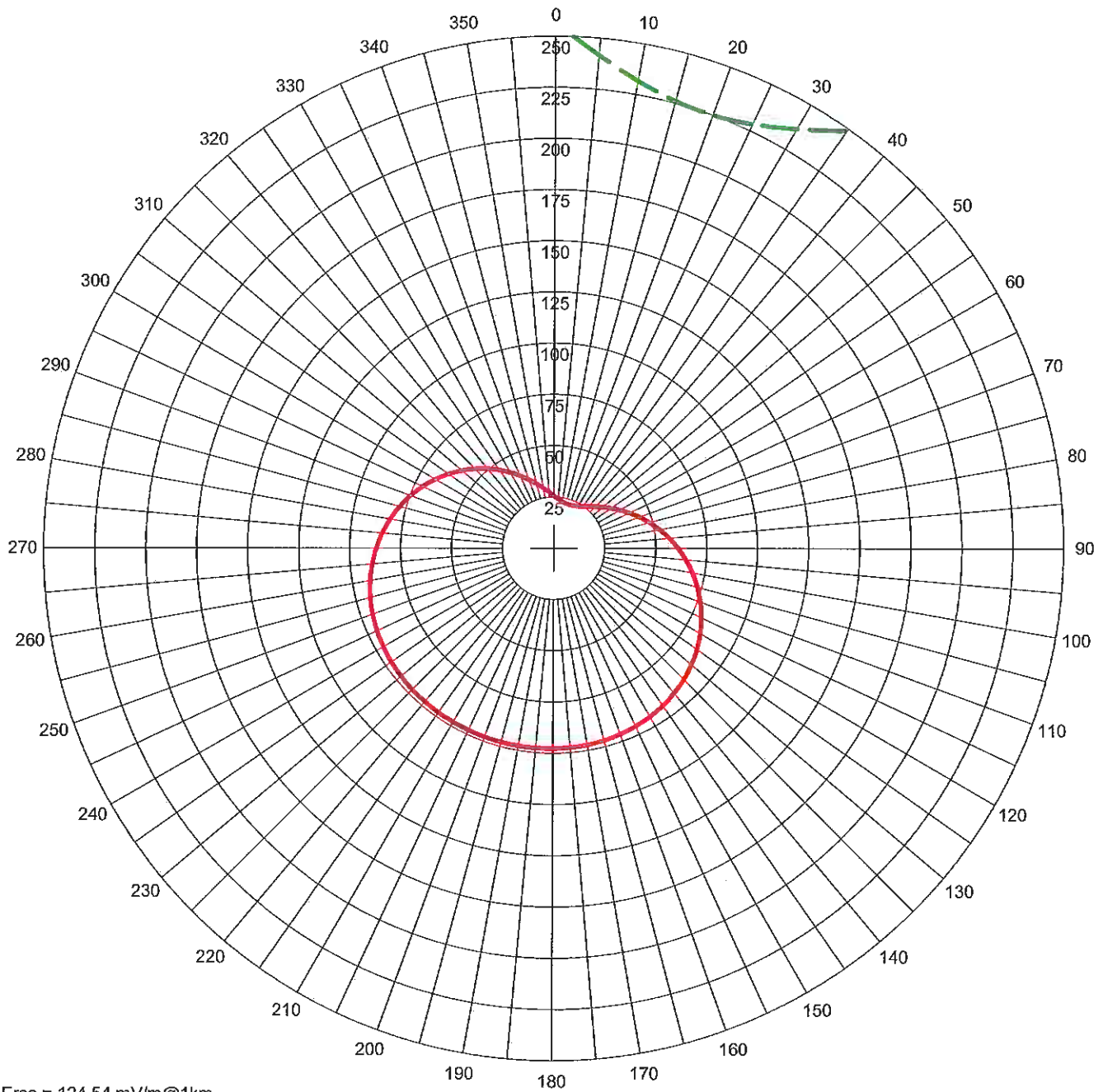
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E11

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
 Theo RMS: 125.09 mV/m@1km
 Std RMS: 131.764 mV/m@1km
 Q: 10.0 mV/m@1km

Standard Pattern at Theta = 55.00 Degrees

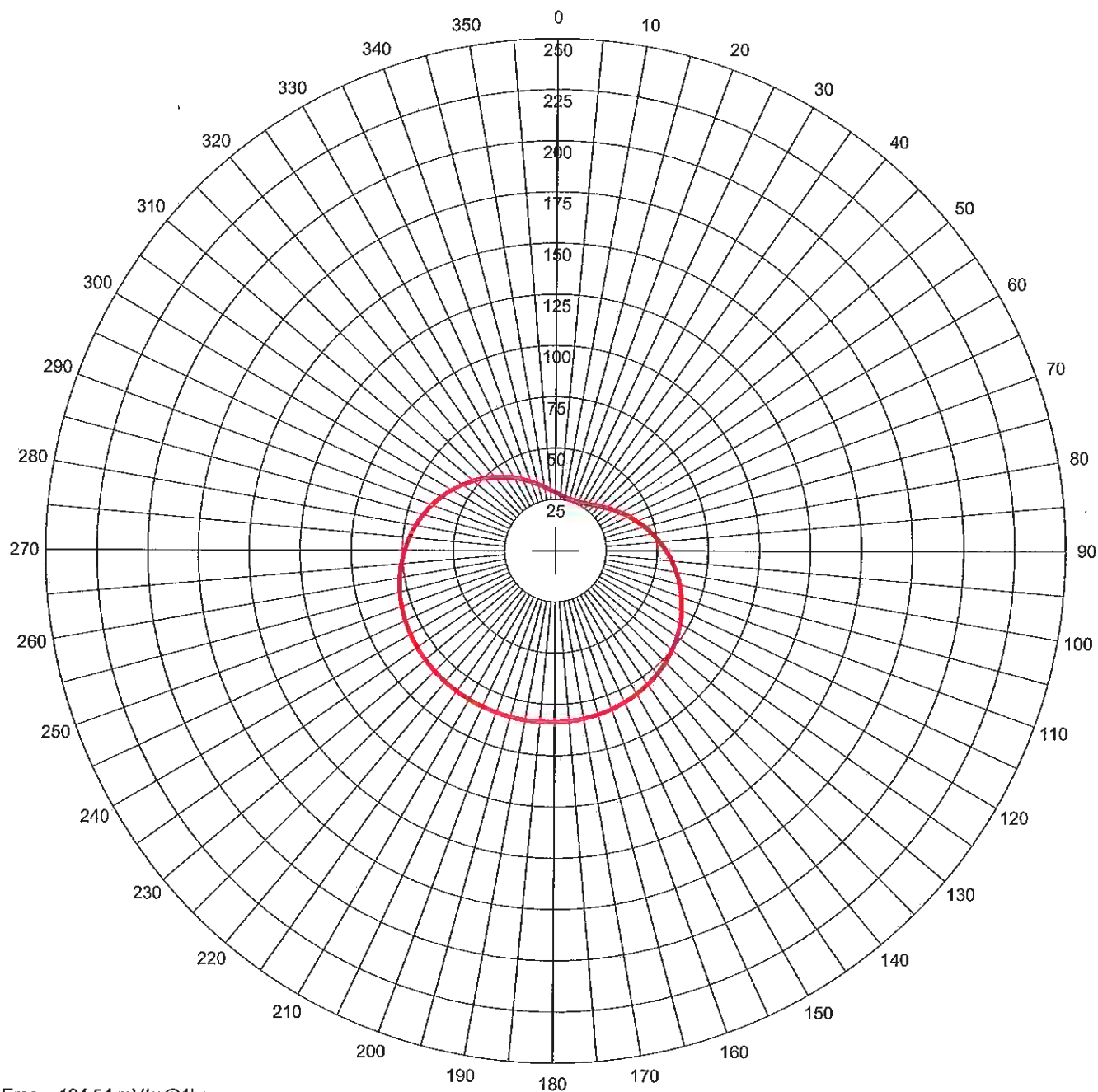
— Pattern (mV/m @ 1km)
 - - - Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
 Freq: 660 kHz
 Fairhope, AL, US
 Hours: U
 Lat: 30-35-51 N
 Lng: 087-52-57 W
 Power: 0.18 kW
 Theo RMS: 125.09 mV/m@1km
 @ 0.18 kW

EXHIBIT #1E12

WXQW Proposed Night Directional Pattern



Erss = 124.54 mV/m@1km
Theo RMS: 125.09 mV/m@1km
Std RMS: 131.764 mV/m@1km
Q: 10.0 mV/m@1km

Standard Pattern at Theta = 60.00 Degrees

— Pattern (mV/m @ 1km)
— Pattern X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	51.2	15.0	0.0	0.0
2	0.920	79.0	132.7	18.7	0.0	0	1	62.8	15.0	0.0	0.0

Call: WXQW
Freq: 660 kHz
Fairhope, AL, US
Hours: U
Lat: 30-35-51 N
Lng: 087-52-57 W
Power: 0.18 kW
Theo RMS: 125.09 mV/m@1km
@ 0.18 kW

EXHIBIT #1E13

MINOR CHANGE APPLICATION
CUMULUS LICENSING LLC
WXQW AM RADIO STATION
has: 660 kHz - 0.85/10.0 kW - DAN
req: 660 kHz - 0.18/10.0 kW - DAN
FAIRHOPE, ALABAMA
November 2015

EXHIBIT #1F

Stations Within 16 km

ID Stations Study at 30 35 51 N, 87 52 57 W, Search Distance = 16 km

Call	Service	City	State	Chan.	Power	Coordinates	Dist-km	Azimuth	File Number
AM									
WXQW	D	FAIRHOPE	AL	660	0010.000kW	303551N 875257W	000.0	000.0	BL19961216AF
WXQW-N	N	FAIRHOPE	AL	660	0000.850kW	303551N 875257W	000.0	000.0	BL19880817AE
WABF-N	N	FAIRHOPE	AL	1220	0000.030kW	303039N 875413W	009.8	191.9	BL20020114ABF
WABF	D	FAIRHOPE	AL	1220	0001.000kW	303039N 875413W	009.8	191.9	BL20020114ABF
WMOB	D	MOBILE	AL	1360	0009.000kW	304054N 880002W	014.7	309.7	BMML20140328ALF
WMOB-N	N	MOBILE	AL	1360	0000.200kW	304054N 880002W	014.7	309.7	BMML20140328ALF
FM									
WYFR-L	L	Fairhope	AL	210L1	0000.100kW	303335N 875333W	004.3	192.8	BNPL20131106AGP
WHEX-L	L	Mobile	AL	284L1	0000.020kW	303933N 875333W	006.9	352.1	BNPL20131021ABQ
W214BN	X	Malbis	AL	214D	0000.013kW	303944N 875008W	008.5	032.0	BLFT20010320ABY
W245BY	X	Daphne	AL	245D	0000.034kW	304036N 875418W	009.0	346.3	BNPFT20130318AGI
W214BN	X	Malbis	AL	214D	0000.019kW	304036N 875418W	009.0	346.3	BPFT20130712AAX
W295BB	X	Fairhope	AL	295D	0000.099kW	303039N 875413W	009.8	191.9	BLFT20130528AAB
W277CS	X	Spanish Fort	AL	277D	0000.250kW	304045N 875024W	009.9	024.1	BLFT20150504AAH
WNFG-L	L	Fairhope	AL	244L1	0000.100kW	303112N 874908W	010.5	144.7	BMPL20150202AFX
WBHYFM	M	Mobile	AL	203C1	0033.000kW	304055N 874941W	010.7	029.0	BLD19920401KB
WABD	M	Mobile	AL	248C	0100.000kW	304120N 874949W	011.3	026.2	BLH19890412KB
WMXC	M	Mobile	AL	260C	0100.000kW	304120N 874949W	011.3	026.2	BMLH20130123AEM
WHILFM	M	Mobile	AL	217C	0100.000kW	304120N 874949W	011.3	026.2	BLD19950728KE
WRKH	M	Mobile	AL	241C	0077.000kW	304120N 874949W	011.3	026.2	BMLH20130123AEQ
TV									
WEIQ-D	T	Mobile	AL	41 3E	0464.000kW	303933N 875333W	006.9	352.1	BDSTA20100909ABK
WEIQ-D	T	Mobile	AL	41 3E	0464.000kW	303933N 875333W	006.9	352.1	BLEDT20101119AFA
AP347	G	Mobile	AL	44 D	0003.000kW	304037N 875418W	009.1	346.3	BDCCDTL20120209A
WWBH-L	G	Mobile	AL	44 T	0010.000kW	304046N 875023W	010.0	024.2	BDISDTL20130311A
AP922	G	Mobile	AL	44 D	0010.000kW	303001N 875420W	011.0	191.5	BDCCDTL20121026A
WKRQ-D	T	Mobile	AL	27 3C	1000.000kW	304120N 874949W	011.3	026.2	BLCDT20100125ADI
WFNA-D	T	Gulf Shores	AL	25 3C	1000.000kW	304116N 874754W	012.9	038.7	BLCDT20100614AQJ
WALA-D	T	Mobile	AL	09 3C	0029.000kW	304117N 874754W	012.9	038.6	BLCDT20050316ADI