WLEY-2 Cicero South

AMENDED NARRATIVE DESCRIPTION OF REQUEST FOR BOOSTER

By this application, WLEY Licensing, Inc. ("WLEY"), licensee of WLEY-FM Channel 300B, Aurora, IL respectfully requests an on-channel booster pursuant to FCC 47C.F.R. §74.1232 to better serve the Chicago coverage area within WLEY-FM's 54dBu contour. This application amends the pending application BNPFTB-20151216AEN in response to an informal objection (the "Objection") filed by AMFM Broadcasting Licenses, LLC ("AMFM") licensee of station WGCI-FM, Channel 298B, Chicago, IL. Facility ID No. 51165. In the Objection, AMFM complains of potential second adjacent interference to WGCI-FM. While on-channel boosters are not specifically required to prevent interference to second adjacent stations, WLEY recognizes the concern of AMFM and hereby is amending its application to limit the power of all four boosters to 99 watts and mount the antennas in a way that completely protects WGCI-FM from any ground-level second adjacent interference. The protection of WGCI-FM is demonstrated in Exhibit F.

Based upon the instant amended application, the concerns raised by AMFM are moot and WLEY respectfully requests that the amended applications for boosters be granted. A draft copy of the engineering for proposed revised booster applications were sent to Mr. Jeff Littlejohn of AMFM. In an email response, Mr. Littlejohn expressed his approval of the revised boosters and agreed that AMFM would not oppose the amended application.

FACILITIES REQUESTED

The requested facility will operate within the 54dBu contour of WLEY-FM. A map showing the coverage of this booster in relationship to the WLEY-FM signal is shown in Exhibit A. The proposed booster will meet contour overlap and distance requirements to other stations, (terrain from FCC 30 second terrain database). The antenna being used is a Jampro 1-1-(2) dual element, single level log-periodic antenna. The two antennas are rotated 30 degrees from vertical to achieve slant H+V polarization and pointed 45

degrees from each other to achieve a wider beam width. The Azimuth Pattern is attached as Exhibit D and the vertical elevation pattern is attached as Exhibit E.

Booster Location:	"Cicero South" (WLEY-2)
ASR	NONE
Geographic Coordinates (NAD27):	41˚51' 19" N, 87˚ 45' 32" W
Channel:	300 (107.9 MHz)
Effective Radiated Power:	99 W (H+V)
Antenna Type, Pattern:	Jampro JAVA 1-1-(2), log-periodic
Antenna Orientation:	118˚ True
Site Height AMSL	180 m
Tower OAGL	38 m
Antenna Height :	
Above ground:	35.0m
Above mean sea level:	215 m

ALLOCATION

As shown in the allocation chart below, WLEY-FM2 (Cicero), is fully compliant with all rules:

ComStudy 2.2 search of channel 300 (107.9 MHz Class D) at 41-51-19.0 N, 87-45-32.0 W.

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE	
WGCI-FM	CHICAGO	IL	298	B	10.57	0.00	75.5	-35.51 dB	Exhibit F
WLEY-FM	AURORA	IL	300	B	16.24	0.00	271.3	-27.54 dB	PRIMARY Sta
WDRV	CHICAGO	IL	246	B	11.94	15.00	73.5	-3.1	IF LIMIT
WNBI-LP	NEW BUFFALO	MI	300	LP100	85.63	24.00	94.3	20.55 dB	
WVCY-FM	MILWAUKEE	WI	299	B	125.71	0.00	348.3	24.22 dB	
WVCY-FM	MILWAUKEE	WI	299	B	125.86	0.00	348.3	24.54 dB	
WLEY-FM	AURORA	IL	300	B	41.55	0.00	256.8	26.34 dB	
WSJY	FORT ATKINSON	WI	297	B	149.76	0.00	315.1	28.57 dB	
W300AL	MISHAWAKA	IN	300	D	132.74	0.00	101.1	28.98 dB	
WRSW-FM	WARSAW	IN	297	B	175.02	0.00	113.1	32.58 dB	
WRKR	PORTAGE	MI	299	B	202.77	0.00	80.5	33.64 dB	
WWQC	CLIFTON	IL	297	A	106.39	0.00	199.5	34.48 dB	
WIBL-FM1	BLOOMINGTON	IL	299	D	179.79	0.00	214.2	37.46 dB	
WIBL	FAIRBURY	IL	299	B1	160.81	0.00	212.4	37.06 dB	
WNTR	INDIANAPOLIS	IN	300	B	254.20	0.00	148.5	39.85 dB	

As shown in Exhibit A the 54dBu contour of the booster will fall inside the 54dBu contour of WLEY-FM, Channel 300B. The proposed booster is within the 15km distance required for IF protection to WDRV, 246B, therefore, the power of the booster is limited to 99 watts. As shown in exhibit B, both the f50/10 34dBu and f50/10 40dBu interfering contours of the booster will be well contained within the f50/10 34dBu and f50/10 40dBu contours of WLEY-FM.

ENVIRONMENTAL CONSIDERATIONS

The Booster will be attached at the 40m height on an existing 76m registered tower. Because there will be no modifications to this tower it is exempt from environmental processing under CFR Section 1.1306.

The booster is proposed to operate at 99 watts at 35m AGL. Using the FCC program "FM Model for Windows" for a worst-case dipole antenna, the predicted RF power density at 2m AGL with a 35m center of radiation is 3.7$\mu W/cm^2$ which is 1.9% of the maximum allowable public exposure (MPE) of 200$\mu W/cm^2$. The vertical elevation pattern is shown as Exhibit E.

There are no other non-excluded RF sources on the tower.

The permittee agrees to reduce power or cease operations when it becomes necessary if workers are near the antenna in order to ensure that they will not be exposed to levels of radio frequency electromagnetic radiation that exceed FCC guidelines.

CERTIFICATION

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direct supervision, and that they are true and correct to the best of his knowledge and belief.

Bertram S. Goldman
Goldman Engineering Management

EXHIBIT A

WLEY-FM2 Amended Booster, 300D, 35m AGL, 99w ERP

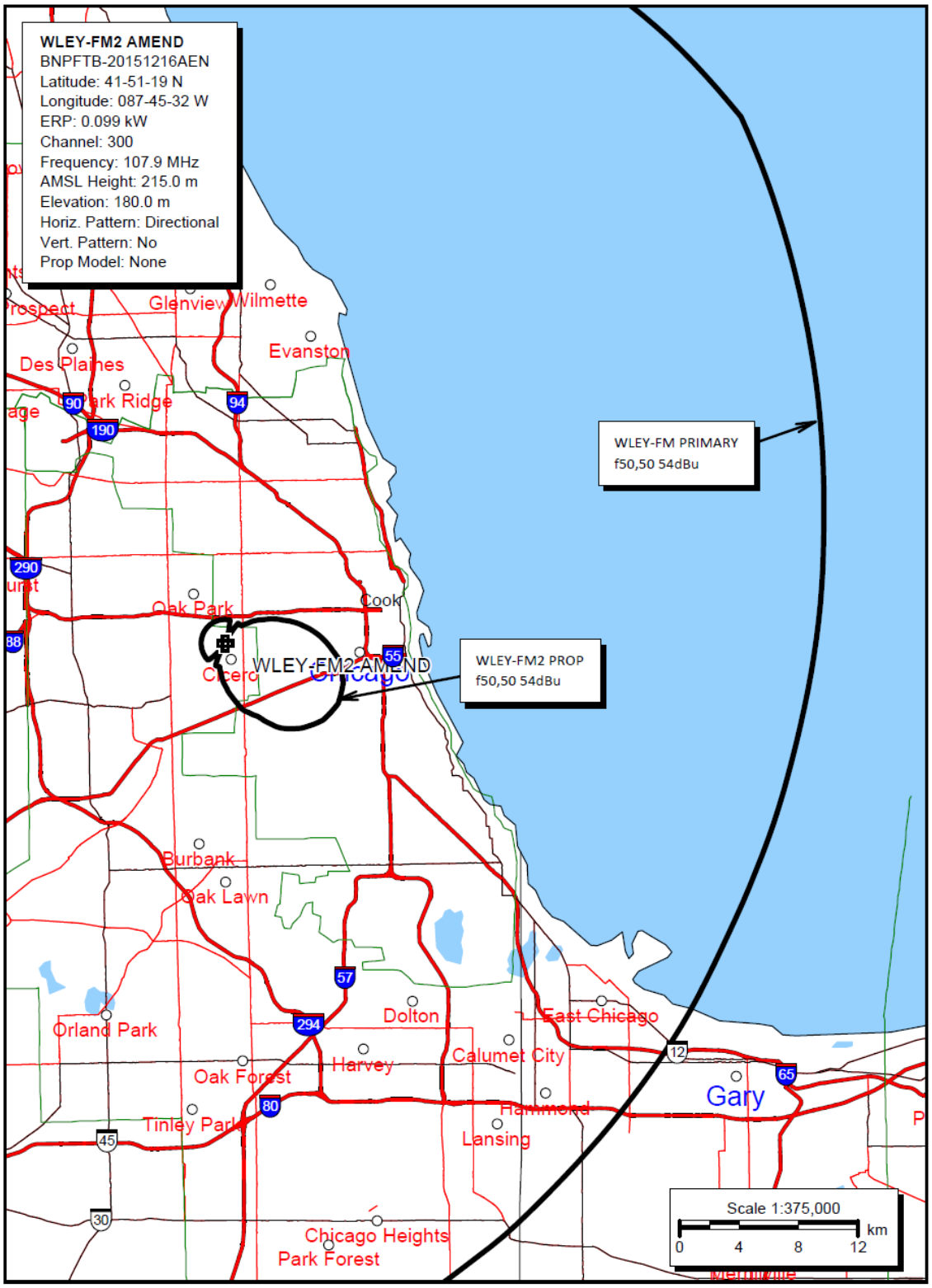


EXHIBIT B

Proposed Booster Contours Compared with Main WLEY Contours

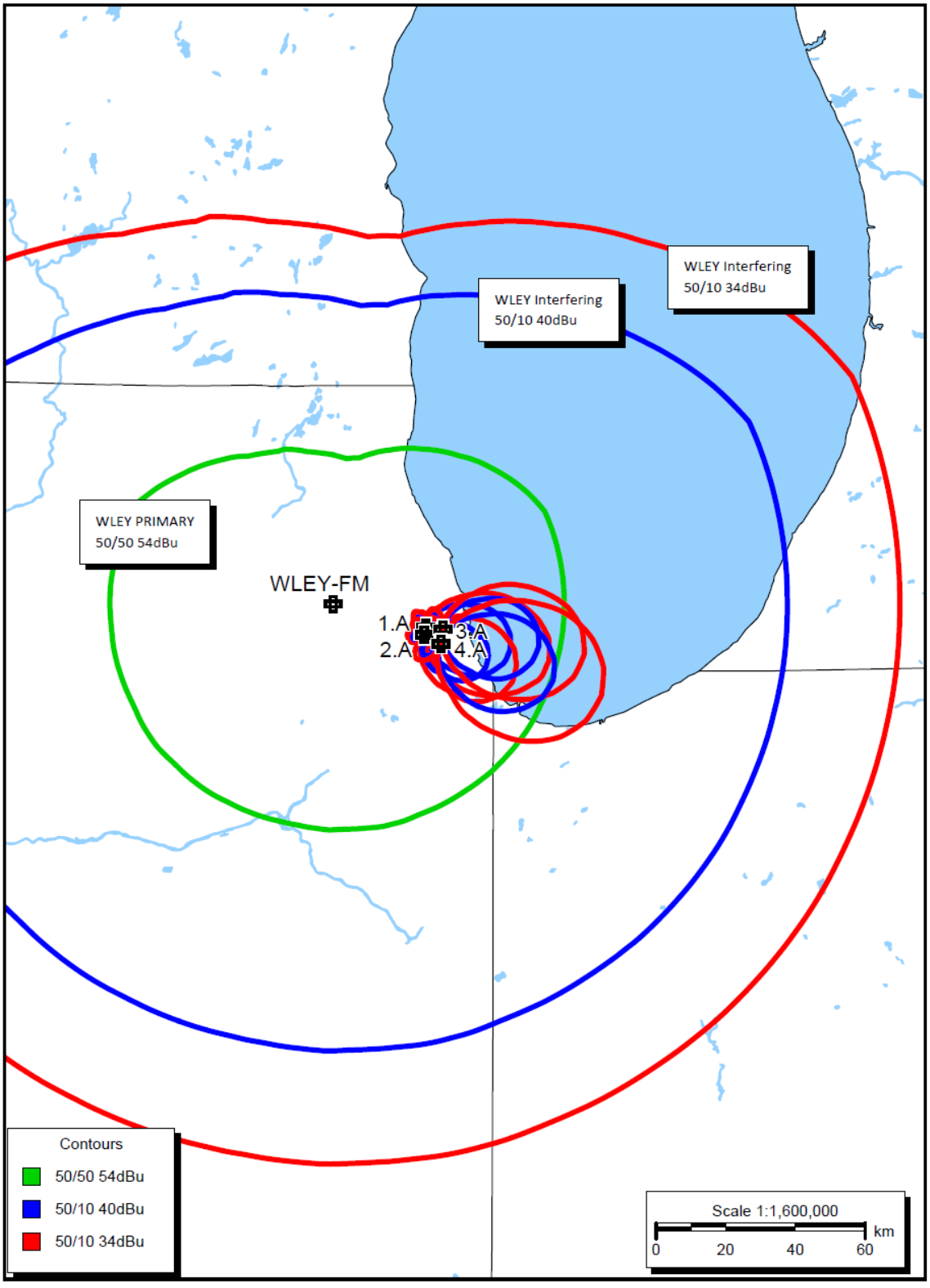
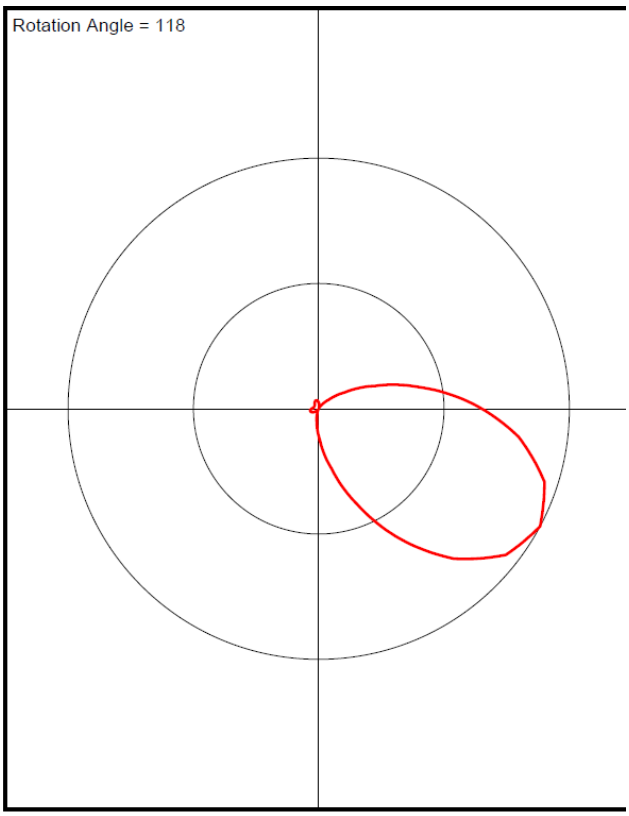


EXHIBIT D

WLEY Cicero Antenna Pattern

Pre-Rotation Antenna Pattern....

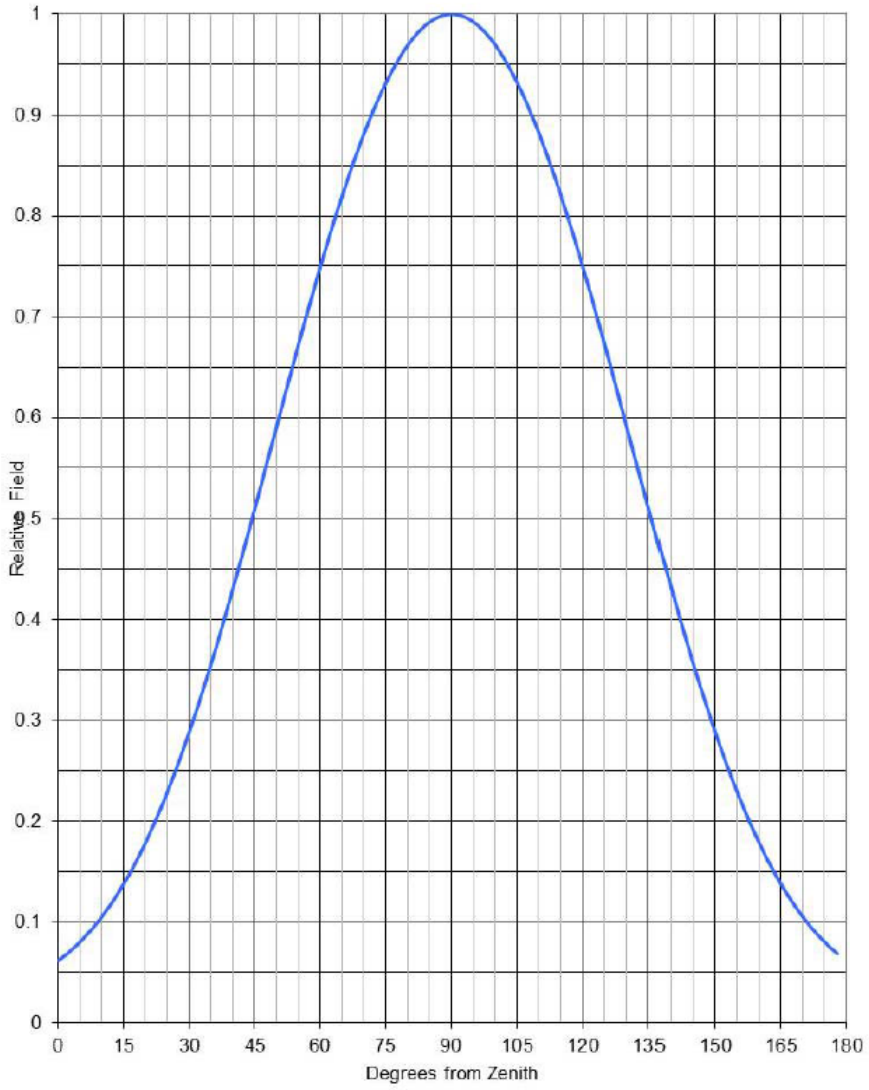
Azimuth (deg)	Relative Field
0.0	1.0
5.0	0.9735
10.0	0.947
15.0	0.876
20.0	0.805
25.0	0.7085
30.0	0.612
35.0	0.512
40.0	0.412
45.0	0.3275
50.0	0.243
55.0	0.1835
60.0	0.124
65.0	0.089
70.0	0.054
75.0	0.0365
80.0	0.019
85.0	0.012
90.0	0.005
95.0	0.0045
100.0	0.004
105.0	0.0095
110.0	0.015
115.0	0.021
120.0	0.027
125.0	0.0305
130.0	0.034
135.0	0.0345
140.0	0.035
145.0	0.0325
150.0	0.03
155.0	0.0265
160.0	0.023
165.0	0.0215
170.0	0.02
175.0	0.02
180.0	0.02
185.0	0.02
190.0	0.02
195.0	0.0215
200.0	0.023
205.0	0.0265
210.0	0.03
215.0	0.0325
220.0	0.035
225.0	0.0345
230.0	0.034
235.0	0.0305
240.0	0.027
245.0	0.021
250.0	0.015
255.0	0.0095
260.0	0.004
265.0	0.0045
270.0	0.005
275.0	0.012
280.0	0.019
285.0	0.0365
290.0	0.054
295.0	0.089
300.0	0.124
305.0	0.1835
310.0	0.243
315.0	0.3275



320.0	0.412
325.0	0.512
330.0	0.612
335.0	0.7085
340.0	0.805
345.0	0.876
350.0	0.947
355.0	0.9735

EXHIBIT E

Elevation Pattern



Model: JAVA-1-1(2)
Description: Dual Log Periodic Antenna
30° Roll

Elevation Pattern Tabulation

COMPUTED ELEVATION PATTERN

Elevation Angle	Relative Field	Relative Field, dB	Elevation Angle	Relative Field	Relative Field, dB
90	0.062	-24.16	0	1.000	0.00
88	0.069	-23.28	-2	0.999	-0.01
86	0.076	-22.36	-4	0.995	-0.04
84	0.085	-21.43	-6	0.989	-0.10
82	0.095	-20.49	-8	0.980	-0.17
80	0.105	-19.54	-10	0.969	-0.27
78	0.117	-18.60	-12	0.956	-0.39
76	0.131	-17.67	-14	0.941	-0.53
74	0.146	-16.74	-16	0.923	-0.69
72	0.162	-15.83	-18	0.903	-0.88
70	0.179	-14.94	-20	0.882	-1.09
68	0.198	-14.06	-22	0.859	-1.32
66	0.219	-13.21	-24	0.834	-1.58
64	0.240	-12.38	-26	0.807	-1.86
62	0.264	-11.57	-28	0.779	-2.17
60	0.289	-10.79	-30	0.750	-2.50
58	0.315	-10.04	-32	0.720	-2.86
56	0.342	-9.32	-34	0.689	-3.24
54	0.371	-8.62	-36	0.657	-3.65
52	0.400	-7.95	-38	0.625	-4.09
50	0.431	-7.31	-40	0.592	-4.55
48	0.462	-6.70	-42	0.559	-5.05
46	0.494	-6.12	-44	0.527	-5.57
44	0.527	-5.57	-46	0.494	-6.12
42	0.559	-5.05	-48	0.462	-6.70
40	0.592	-4.55	-50	0.431	-7.31
38	0.625	-4.09	-52	0.400	-7.95
36	0.657	-3.65	-54	0.371	-8.62
34	0.689	-3.24	-56	0.342	-9.32
32	0.720	-2.86	-58	0.315	-10.04
30	0.750	-2.50	-60	0.289	-10.79
28	0.779	-2.17	-62	0.264	-11.57
26	0.807	-1.86	-64	0.240	-12.38
24	0.834	-1.58	-66	0.219	-13.21
22	0.859	-1.32	-68	0.198	-14.06
20	0.882	-1.09	-70	0.179	-14.94
18	0.903	-0.88	-72	0.162	-15.83
16	0.923	-0.70	-74	0.146	-16.74
14	0.941	-0.53	-76	0.131	-17.66
12	0.956	-0.39	-78	0.117	-18.60
10	0.969	-0.27	-80	0.105	-19.54
8	0.980	-0.17	-82	0.095	-20.49
6	0.989	-0.10	-84	0.085	-21.43
4	0.995	-0.04	-86	0.076	-22.37
2	0.999	-0.01	-88	0.069	-23.28

Model: JAVA-1-1(2)
Description: Dual Log Periodic Antenna
30° Roll

Exhibit F 2nd Adjacent Protection, WGCI-FM

WLEY-2

41° 51’ 19” N
87° 45’ 32” W

35m AGL, 99w

```
WLEY-2 Cicero South, IL
74.1204(d) Showing
Translator or LPFM Maximum Licensed ERP = 0.099
Translator or LPFM Antenna Height AG = 35 Meters
WLEY-2 Antenna Model = CA5-FM-CP-RM_0098-MHZ_CPOL_000DT

Protected Station's Contour =  88.10069 dBu
Translator's or LPFM's full Interference contour 128.10069

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 1.000
Translator/LPFM ERP on the horizon at Review Azimuth = 0.099 kW
Distance between stations = 10.5 km
Protected Station= WGCI-F, 3.7 kW, 653 M Meters COR AMSL
```

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.0990	027.4652	027.4652	035.000
01.00	0.997	1.0	0.0983	027.3691	027.3649	034.522
02.00	0.993	1.0	0.0976	027.2702	027.2536	034.048
03.00	0.989	1.0	0.0969	027.1741	027.1368	033.578
04.00	0.986	1.0	0.0962	027.0780	027.0120	033.111
05.00	0.982	1.0	0.0955	026.9791	026.8764	032.649
06.00	0.976	1.0	0.0944	026.8143	026.6674	032.197
07.00	0.97	1.0	0.0932	026.6495	026.4509	031.752
08.00	0.964	1.0	0.0921	026.4847	026.2270	031.314
09.00	0.958	1.0	0.0909	026.3199	025.9959	030.883
10.00	0.952	1.0	0.0898	026.1551	025.7578	030.458
11.00	0.945	1.0	0.0884	025.9491	025.4724	030.049
12.00	0.937	1.0	0.0870	025.7432	025.1806	029.648
13.00	0.93	1.0	0.0856	025.5344	024.8800	029.256
14.00	0.922	1.0	0.0842	025.3284	024.5761	028.872
15.00	0.915	1.0	0.0828	025.1224	024.2664	028.498
16.00	0.905	1.0	0.0811	024.8533	023.8905	028.150
17.00	0.895	1.0	0.0793	024.5869	023.5125	027.811
18.00	0.886	1.0	0.0776	024.3205	023.1301	027.485
19.00	0.876	1.0	0.0759	024.0513	022.7409	027.170
20.00	0.866	1.0	0.0742	023.7849	022.3505	026.865
21.00	0.852	1.0	0.0719	023.4004	021.8461	026.614
22.00	0.838	1.0	0.0695	023.0159	021.3399	026.378
23.00	0.824	1.0	0.0672	022.6313	020.8323	026.157
24.00	0.81	1.0	0.0650	022.2468	020.3235	025.951
25.00	0.796	1.0	0.0627	021.8623	019.8140	025.761
26.00	0.781	1.0	0.0603	021.4366	019.2671	025.603
27.00	0.765	1.0	0.0579	021.0081	018.7184	025.463
28.00	0.749	1.0	0.0556	020.5824	018.1732	025.337
29.00	0.734	1.0	0.0533	020.1567	017.6295	025.228

30.00	0.718	1.0	0.0511	019.7283	017.0852	025.136
31.00	0.7	1.0	0.0486	019.2339	016.4867	025.094
32.00	0.682	1.0	0.0461	018.7395	015.8920	025.070
33.00	0.664	1.0	0.0437	018.2451	015.3017	025.063
34.00	0.646	1.0	0.0414	017.7508	014.7161	025.074
35.00	0.628	1.0	0.0391	017.2564	014.1356	025.102
36.00	0.608	1.0	0.0366	016.7071	013.5163	025.180
37.00	0.588	1.0	0.0343	016.1578	012.9042	025.276
38.00	0.568	1.0	0.0320	015.6085	012.2997	025.390
39.00	0.548	1.0	0.0298	015.0592	011.7032	025.523
40.00	0.528	1.0	0.0276	014.5099	011.1152	025.673
41.00	0.507	1.0	0.0255	013.9331	010.5154	025.859
42.00	0.486	1.0	0.0234	013.3563	009.9257	026.063
43.00	0.465	1.0	0.0214	012.7796	009.3464	026.284
44.00	0.444	1.0	0.0195	012.2028	008.7780	026.523
45.00	0.423	1.0	0.0177	011.6260	008.2208	026.779
46.00	0.405	1.0	0.0162	011.1097	007.7174	027.008
47.00	0.386	1.0	0.0147	010.5933	007.2246	027.253
48.00	0.367	1.0	0.0133	010.0770	006.7428	027.511
49.00	0.348	1.0	0.0120	009.5606	006.2723	027.784
50.00	0.329	1.0	0.0107	009.0443	005.8136	028.072
51.00	0.313	1.0	0.0097	008.5911	005.4066	028.323
52.00	0.296	1.0	0.0087	008.1379	005.0102	028.587
53.00	0.28	1.0	0.0077	007.6820	004.6232	028.865
54.00	0.263	1.0	0.0069	007.2288	004.2490	029.152
55.00	0.247	1.0	0.0060	006.7757	003.8864	029.450
56.00	0.235	1.0	0.0055	006.4626	003.6138	029.642
57.00	0.224	1.0	0.0050	006.1522	003.3507	029.840
58.00	0.213	1.0	0.0045	005.8419	003.0957	030.046
59.00	0.201	1.0	0.0040	005.5287	002.8475	030.261
60.00	0.19	1.0	0.0036	005.2184	002.6092	030.481
61.00	0.18	1.0	0.0032	004.9520	002.4008	030.669
62.00	0.171	1.0	0.0029	004.6883	002.2010	030.860
63.00	0.161	1.0	0.0026	004.4219	002.0075	031.060
64.00	0.151	1.0	0.0023	004.1555	001.8216	031.265
65.00	0.142	1.0	0.0020	003.8918	001.6448	031.473
66.00	0.14	1.0	0.0019	003.8479	001.5651	031.485
67.00	0.139	1.0	0.0019	003.8067	001.4874	031.496
68.00	0.137	1.0	0.0019	003.7655	001.4106	031.509
69.00	0.136	1.0	0.0018	003.7215	001.3337	031.526
70.00	0.134	1.0	0.0018	003.6803	001.2588	031.542
71.00	0.134	1.0	0.0018	003.6858	001.2000	031.515
72.00	0.134	1.0	0.0018	003.6913	001.1407	031.489
73.00	0.135	1.0	0.0018	003.6968	001.0808	031.465
74.00	0.135	1.0	0.0018	003.7023	001.0205	031.441
75.00	0.135	1.0	0.0018	003.7078	000.9597	031.419
76.00	0.136	1.0	0.0018	003.7435	000.9056	031.368
77.00	0.138	1.0	0.0019	003.7820	000.8508	031.315
78.00	0.139	1.0	0.0019	003.8177	000.7937	031.266
79.00	0.14	1.0	0.0019	003.8534	000.7353	031.217
80.00	0.142	1.0	0.0020	003.8918	000.6758	031.167
81.00	0.143	1.0	0.0020	003.9358	000.6157	031.113
82.00	0.145	1.0	0.0021	003.9825	000.5543	031.056
83.00	0.147	1.0	0.0021	004.0291	000.4910	031.001
84.00	0.148	1.0	0.0022	004.0731	000.4258	030.949
85.00	0.15	1.0	0.0022	004.1198	000.3591	030.896
86.00	0.152	1.0	0.0023	004.1610	000.2903	030.849
87.00	0.153	1.0	0.0023	004.1994	000.2198	030.806
88.00	0.154	1.0	0.0024	004.2406	000.1480	030.762
89.00	0.156	1.0	0.0024	004.2818	000.0747	030.719
90.00	0.157	1.0	0.0024	004.3203	000.0000	030.680