EXHIBIT # 16

THE CEDARVILLE UNIVERSITY
CEDARVILLE, OHIO
SEPTEMBER 7, 2007

PREPARED BY: Paul Gathany

RE: Contour Overlap- 47 C.F.R.73.509

The Cedarville University, licensee of WCDR-FM, Channel 212 (90.3 mHz.), Cedarville, Ohio, is requesting a minor change in the duly authorized licensed station: Facility Id 65515.

The changes being proposed for an increase in maximum ERP and a new vertical component pattern will provide compliance with 47 C.F.R. 73.509.

3.0 kW CP was employed by WCDR-FM since first operating from the present site. Included in the Cedarville application for a Construction Permit (BPED-1439, Form 340, 7/13/72) was a terrain analysis along the applicant entire 72 degree radial to WCBE, Channel 213, 90.5 mHz., Columbus. The study resulted in the Commission taking into account the terrain variant between the two facilities. In doing so, granted that given the proposed antenna height and 3.0 kW ERP, WCDR-FM is in compliance with 47 C.F.R.73.509. The present authorization and the minor modification proposal maintains the same protection to WCBE.

The Horizontal Non-directional Polarization remains the same, at the authorized 3.0 kilowatts.This will continue to provide 54 dBu protection to WCBE, Columbus, Ohio. The Vertical component will change the H/V ratio of the antenna. However, the protection to WCBE (3.0 kW) and other co channel or adjacent stations will be protected to 47 C.F.R.73.509 standards.

The transmitter site and radiation center above mean sea level remain the same. All other operational requirements remain the same as under the present authorization.
The following contour data provided is for the increase of the vertical component, ONLY.

The study indicates the following stations are the closest and valuable for evaluation in relation to the applicant's proposal. All other stations have greater distance of clearance.

Radial	Protected Cont.(dBu)		Dist. To	Dist Fr. Prop	Site-Site	Clear
Deg. T	*50/50*	*50/10*	*km*	*km*	*km*	*km*
Co-Channel 212, 90.3						
WBCL, Fort Wayne, IN						
	60		53.0	42.0	185.96	12.2
		40	131.7	117.9		
WMKY, Morehead, KY						
346.9.0	60		59.2	36.0	180.83	2.03
		40	142.8	105.3		
1st Adjacent Channel						
Ch. 211, 90.1 mHz.						
WORI, New Delhi Hills, OH						
49.9	60		23.3	46.3	93.21	0.2
		54	27.9	69.7		
Ch. 213, 90.5 mHz.						Existing
WCBE, Columbus, OH						Authorization
253	60		37.0	22.5	78.38	0.48
		54	55.4	32.1		
2nd Adjacent Channel						
Ch. 210, 89.9 mHz.						
None	60	100				
Ch. 214, 90.7 mHz.						
None	60	100				
3rd Adjacent Channel						
Ch. 209, 89.7 mHz.						
None	60	100				
Ch. 215, 90.9 mHz						
None	60	100				
Separated Channel 53 & 54						
None	11 km					

.NOTE: Dist. To = To contour of each station studied
Dist. Fr Prop = To contour of Proposed-WCDR-FM

The above averaging data was obtained from the FCC Terrain , NGDC 30" database, 1 to 16 kilometers and in accordance with 47 C.F.R. 73.333, 50/50 and 50/10 curves.

Included in this exhibit is:

Exhibit 16(a)—Directional Pattern Table for the proposed anten

Exhibit 16(b)- Polar Pattern for the proposed antenna

Exhibit 16(c)-WORI & Proposed map plot

Exhibit 16(d)-WMKY & Proposed map plot

Exhibit 16(e)-WBCL & Proposed map plot

Exhibit 16(a)

Radiosoft directional pattern utility table for C:WCDR47E.PAT:

Brng.	Field	Atten.	ERP dBk	ERP kW	Bearing	Field	Atten.	ERP dBk	ERP kW
0°	0.6470	3.78	12.94	19.67	5°	0.5880	4.61	12.11	16.25
10°	0.5290	5.53	11.19	13.15	15°	0.4895	6.20	10.52	11.26
20°	0.4500	6.94	9.79	9.52	25°	0.4060	7.83	8.89	7.75
30°	0.3620	8.83	7.90	6.16	35°	0.3310	9.60	7.12	5.15
40°	0.3000	10.46	6.26	4.23	45°	0.2875	10.83	5.89	3.88
50°	0.2750	11.21	5.51	3.55	55°	0.2665	11.49	5.23	3.34
60°	0.2580	11.77	4.95	3.13	65°	0.2553	11.86	4.86	3.06
70°	0.2526	11.95	4.77	3.00	75°	0.2526	11.95	4.77	3.00
80°	0.2526	11.95	4.77	3.00	85°	0.2553	11.86	4.86	3.06
90°	0.2580	11.77	4.95	3.13	95°	0.2665	11.49	5.23	3.34
100°	0.2750	11.21	5.51	3.55	105°	0.2875	10.83	5.89	3.88
110°	0.3000	10.46	6.26	4.23	115°	0.3250	9.76	6.96	4.96
120°	0.3500	9.12	7.60	5.76	125°	0.3860	8.27	8.45	7.00
130°	0.4220	7.49	9.23	8.37	135°	0.4600	6.74	9.98	9.95
140°	0.4980	6.06	10.67	11.66	145°	0.5360	5.42	11.30	13.50
150°	0.5740	4.82	11.90	15.49	155°	0.5870	4.63	12.09	16.19
160°	0.6000	4.44	12.28	16.92	165°	0.5870	4.63	12.09	16.19
170°	0.5740	4.82	11.90	15.49	175°	0.6350	3.94	12.78	18.95
180°	0.6960	3.15	13.57	22.77	185°	0.7565	2.42	14.30	26.90
190°	0.8170	1.76	14.97	31.37	195°	0.8780	1.13	15.59	36.23
200°	0.9390	0.55	16.17	41.44	205°	0.9695	0.27	16.45	44.18
210°	1.0000	-0.00	16.72	47.00	215°	1.0000	-0.00	16.72	47.00
220°	1.0000	-0.00	16.72	47.00	225°	0.9500	0.45	16.28	42.42
230°	0.9000	0.92	15.81	38.07	235°	0.8500	1.41	15.31	33.96
240°	0.8000	1.94	14.78	30.08	245°	0.8500	1.41	15.31	33.96
250°	0.9000	0.92	15.81	38.07	255°	0.9500	0.45	16.28	42.42
260°	1.0000	-0.00	16.72	47.00	265°	1.0000	-0.00	16.72	47.00

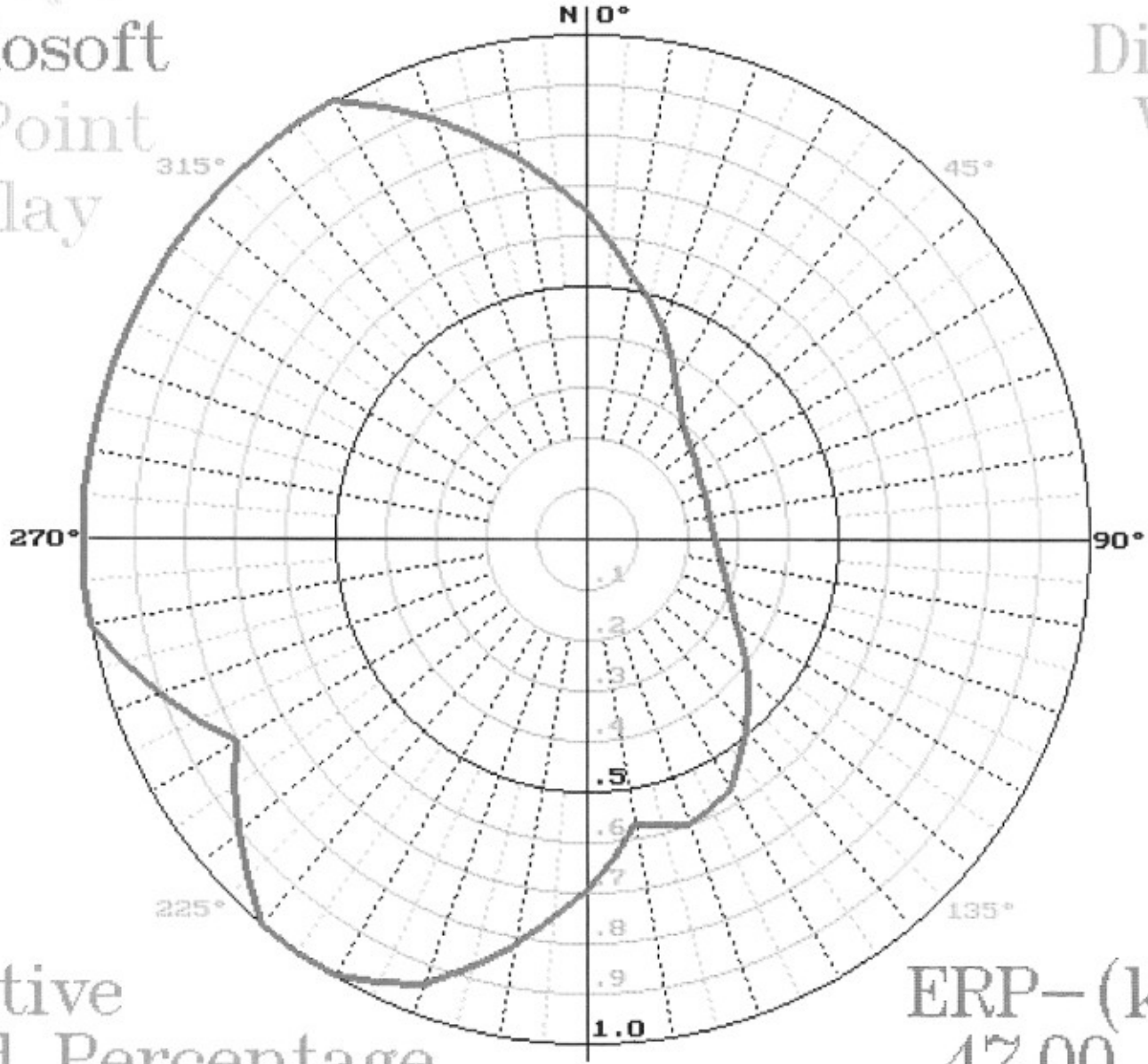
280°	1.0000	-0.00	16.72	47.00	285°	1.0000	-0.00	16.72	47.0
290°	1.0000	-0.00	16.72	47.00	295°	1.0000	-0.00	16.72	47.0
300°	1.0000	-0.00	16.72	47.00	305°	1.0000	-0.00	16.72	47.0
310°	1.0000	-0.00	16.72	47.00	315°	1.0000	-0.00	16.72	47.0
320°	1.0000	-0.00	16.72	47.00	325°	1.0000	-0.00	16.72	47.0
330°	1.0000	-0.00	16.72	47.00	335°	0.9410	0.53	16.19	41.6
340°	0.8820	1.09	15.63	36.56	345°	0.8230	1.69	15.03	31.8
350°	0.7640	2.34	14.38	27.43	355°	0.7055	3.03	13.69	23.3

Exhibit 16(a) end

Exhibit 16.(B)

Radiosoft
72 Point
Display

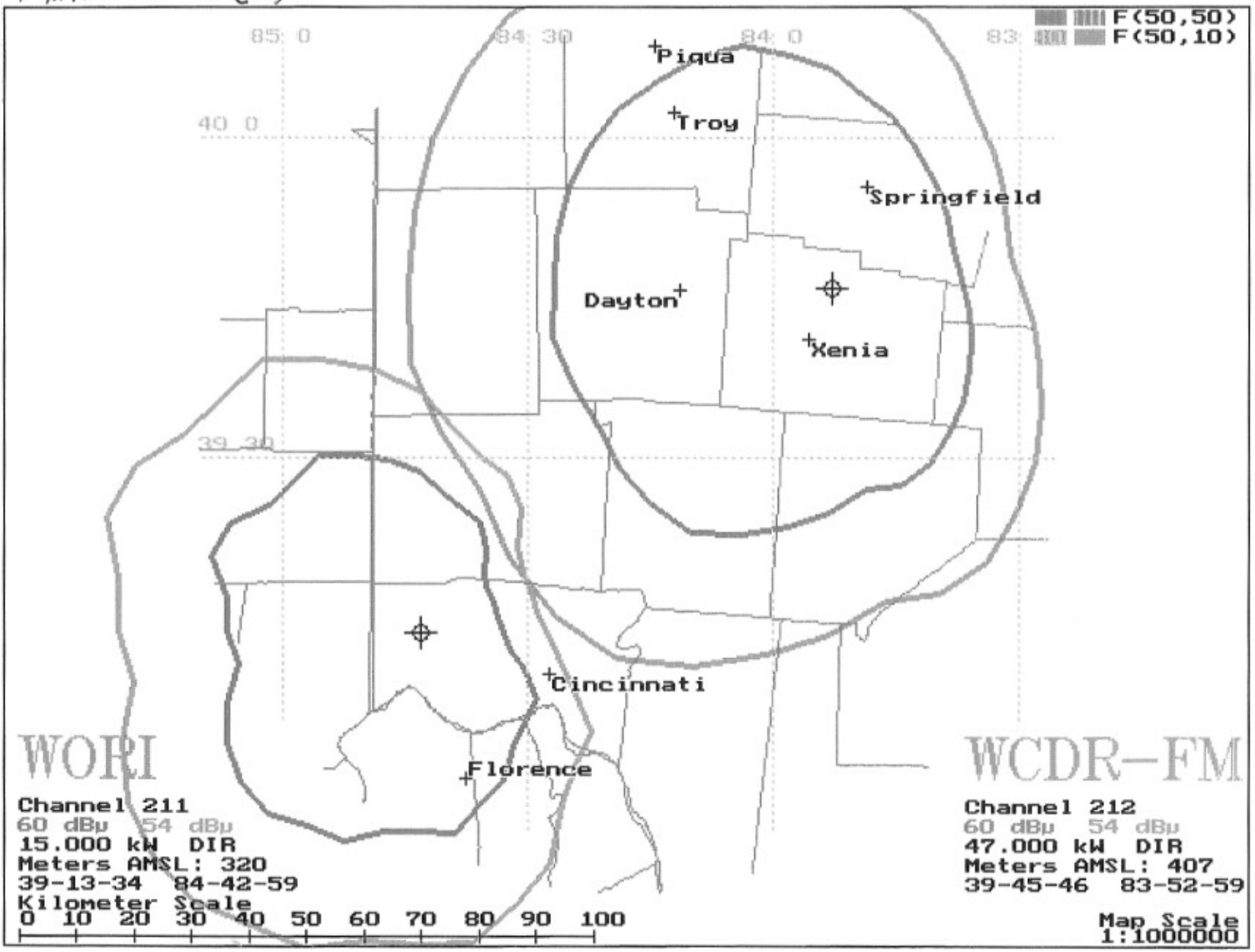
Dirpat
V 2.3



Relative
Field Percentage

ERP–(kW)
47.00

EXHIBIT 16(c)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F(50,10)
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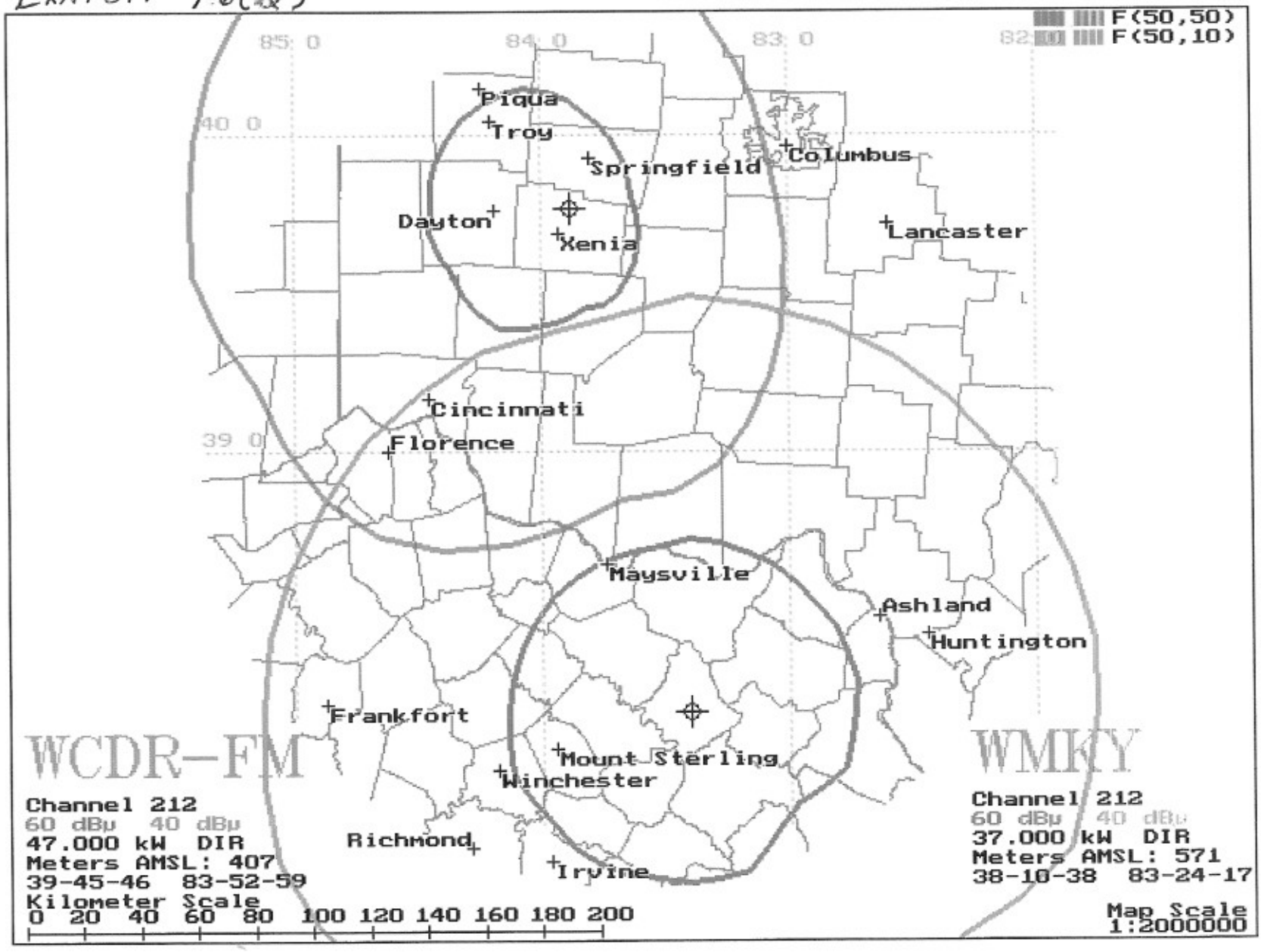
84 30
84 0
83
40 0
39 30
Piqua
Troy
Springfield
Dayton
Xenia
Cincinnati
Florence
WORI
Channel 211
60 dBµ 54 dBµ
15.000 kW DIR
Meters AMSL: 320
39-13-34 84-42-59
Kilometer Scale
0 10 20 30 40 50 60 70 80 90 100
WCDR-FM
Channel 212
60 dBµ 54 dBµ
47.000 kW DIR
Meters AMSL: 407
39-45-46 83-52-59
Map Scale
1:1000000

EXHIBIT 16(Q)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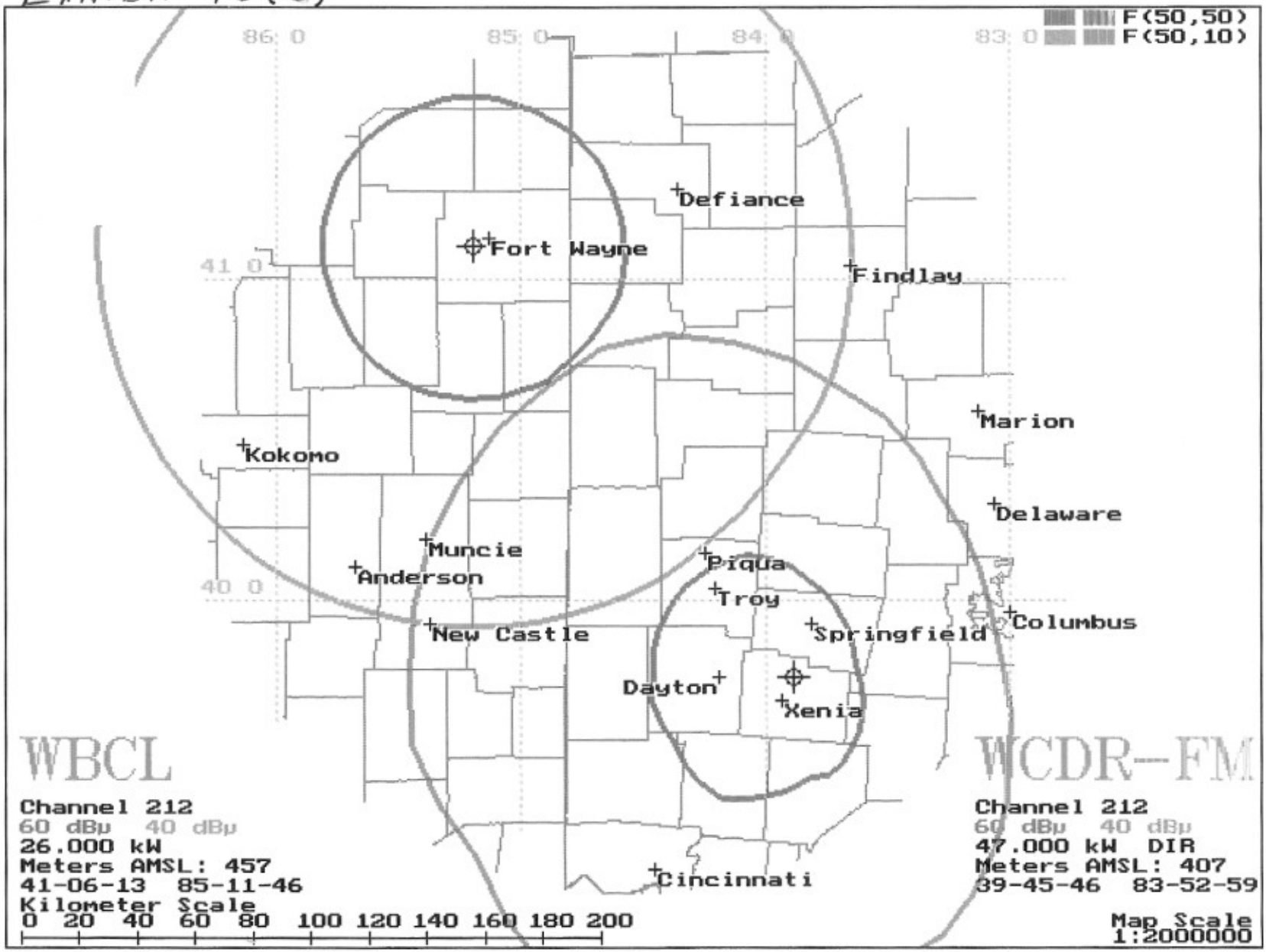
83 0
82
40 0
39 0
Piqua
Troy
Springfield
Columbus
Dayton
Xenia
Lancaster
Cincinnati
Florence
Maysville
Ashland
Huntington
Frankfort
Mount Sterling
Winchester
Richmond
Irvine
WCDR-FM
Channel 212
60 dBµ 40 dBµ
47.000 kW DIR
Meters AMSL: 407
39-45-46 83-52-59
WMKY
Channel 212
60 dBµ 40 dBµ
37.000 kW DIR
Meters AMSL: 571
38-10-38 83-24-17
Kilometer Scale
0 20 40 60 80 100 120 140 160 180 200
Map Scale
1:2000000

EXHIBIT 16(e)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F(50,10)
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85 0
84 0
83 0
41 0
40 0
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Fort Wayne
Findlay
Marion
Kokomo
Delaware
Muncie
Anderson
Piqua
Troy
Springfield
Columbus
New Castle
Dayton
Xenia
Cincinnati
WBCL
Channel 212
60 dBµ 40 dBµ
26.000 kW
Meters AMSL: 457
41-06-13 85-11-46
WCDR-FM
Channel 212
60 dBµ 40 dBµ
47.000 kW DIR
Meters AMSL: 407
39-45-46 83-52-59
Kilometer Scale
0 20 40 60 80 100 120 140 160 180 200
Map Scale
1:2000000