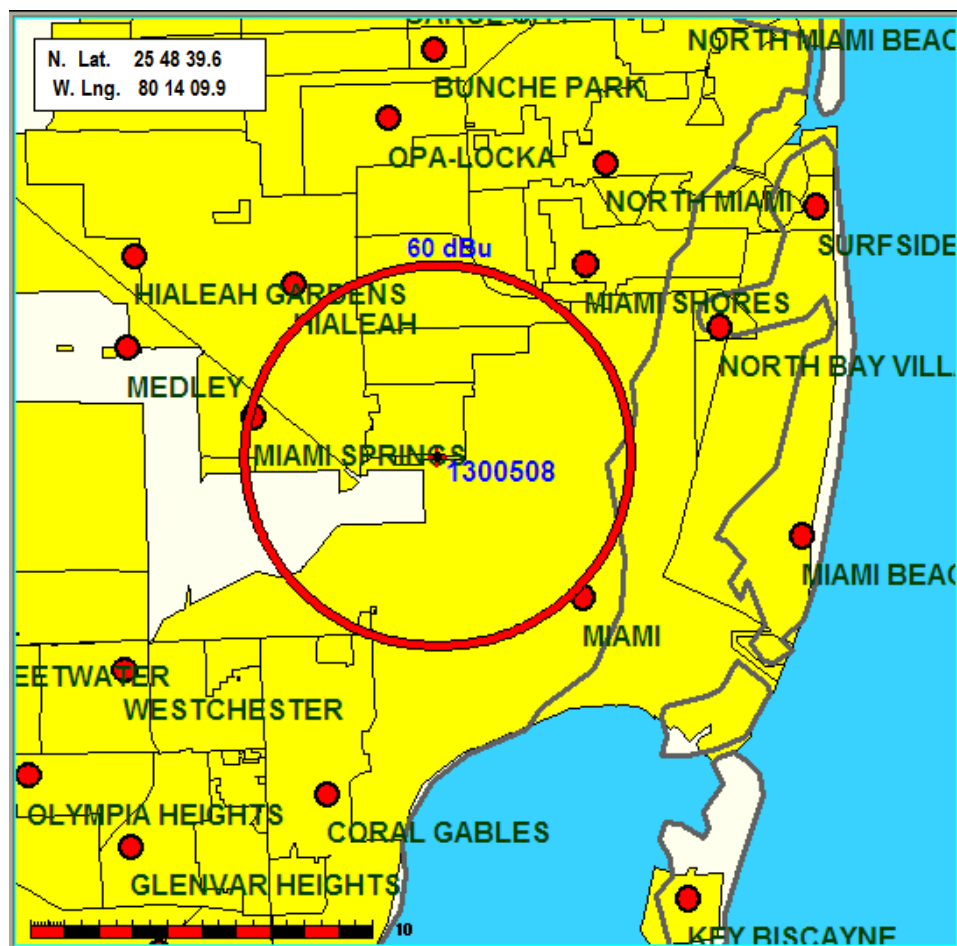


LPFM FACILITY ID# 195408 - MIAMI, FL

FCC F(50,50) – 60dBu



SPACING

1Miami, Inc. - Miami, Florida

REFERENCE

25 48 39.6 N.

80 14 09.9 W.

CLASS = L1

Current Spacings to 2nd Adj.

DISPLAY DATES

DATA 05-01-17

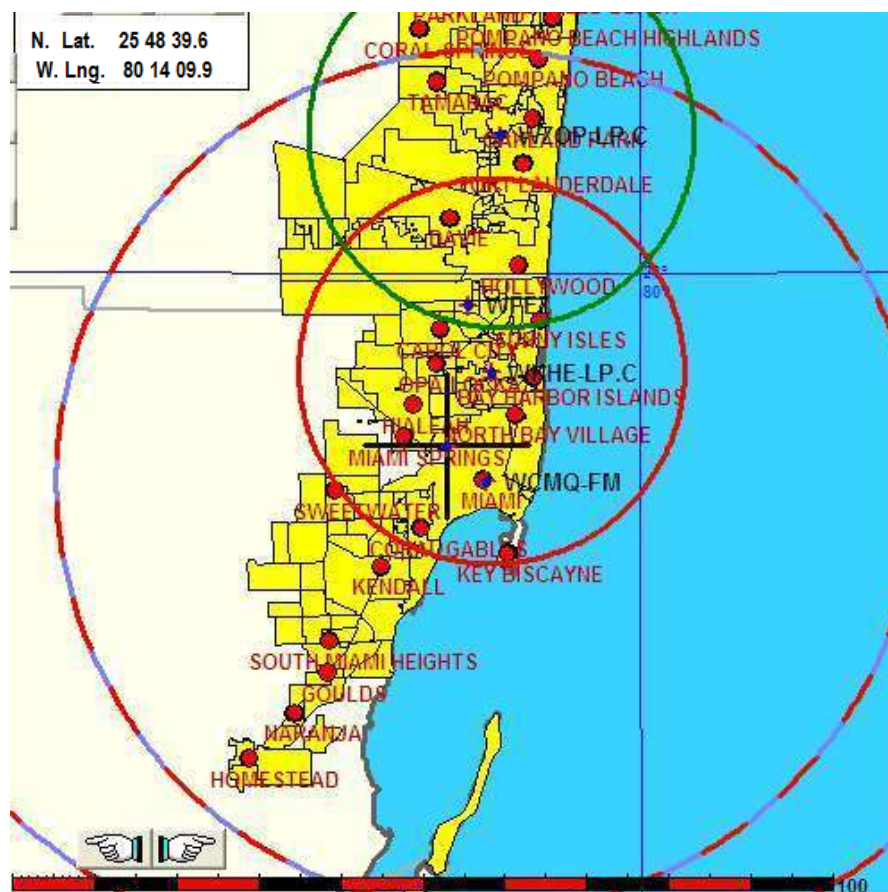
SEARCH 05-01-17

Channel 224 - 92.7 MHz

Call	Channel	Location	Azi	Dist	FCC	Margin		
WFEZ	LIC-D	226C0	Miami	FL	8.7	17.51	84.5	-66.5
WCMQ-FM	LIC	222C2	Hialeah	FL	131.0	6.35	53.5	-46.6
WKHE-LP	CP	224L1	North Miami	FL	30	10.61	24.5	-13.4
WZOP-LP	CP	224L1	Fort Lauderdale	FL	10	38.50	24.5	14.5
WEOW	LIC	224C1	Key West	FL	226	179.67	111.5	68.67
WRLX	LIC	221C3	West Palm Beach	FL	8	110.67	40.5	70.67
WAVW	LIC	224C2	Stuart	FL	358	162.25	91.5	71.25
WFSX-FM	LIC	223C2	Estero	FL	290	164.99	80.5	84.97
WFSX-FM	LIC	223C2	Estero	FL	290	165.00	80.5	84.99
WAFZ-FM	LIC	221A	Immokalee	FL	305	125.32	29.5	96.32
WIKX	LIC	225C1	Charlotte Harbor	FL	302	233.46	100.5	133.46
WFLZ-FM	LIC	227C	Tampa	FL	318	300.05	93.5	207.05

All separation margins include rounding

SPACING MAP



Second Adjacent Exhibit & Waiver Request

- Application requests a waiver for a location short-spaced on second-adjacent channel to WCMQ-FM, BLH-20100420AIB, Ch.222, with an estimated signal strength of 98.7 dBu.
- Application requests a waiver for a location short-spaced on second-adjacent channel to WFEZ, BLH-20050224ABN, Ch.226, with an estimated signal strength of 90.7 dBu.

Using the U/D ratio method with 40 db, the 'worst-case' corresponding interfering contour of the proposed facility to WFEZ is 130.7 dBu at 100 watts.

Specifying a Shively 6812b Single bay full-wave antenna, interference produces worst-case 10.4 m radius at 16.6 meters above ground level. Building and surrounding structures are single-story occupancies. No population will be subject to interference according to the undesired-to-desired ratio method. Data is published below.

Second Adjacent 50-50(f) contours at proposed location on Channel 224:



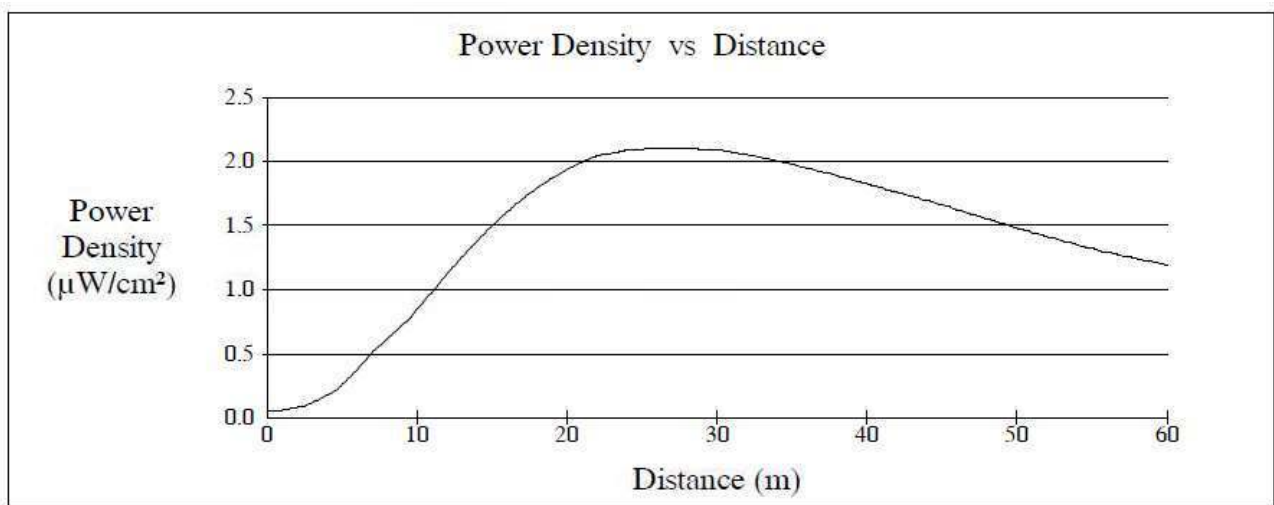
Shively 6812b Single Bay full-wave antenna

depression angle below horizon	relative field	db from relative	ERP	angular distance to contour	vertical distance	horizontal distance	clearance above ground	height above ground	interfering V/m	interfering dbu
0	1	0.00	100.00	20.451	0.000	20.451	27.000	27	3.428	130.7
5	0.996	-0.03	99.20	20.369	1.775	20.292	25.225	27	3.428	130.7
10	0.985	-0.13	97.02	20.144	3.498	19.838	23.502	27	3.428	130.7
15	0.967	-0.29	93.51	19.776	5.118	19.102	21.882	27	3.428	130.7
20	0.942	-0.52	88.74	19.265	6.589	18.103	20.411	27	3.428	130.7
25	0.91	-0.82	82.81	18.611	7.865	16.867	19.135	27	3.428	130.7
30	0.871	-1.20	75.86	17.813	8.906	15.426	18.094	27	3.428	130.7
35	0.826	-1.66	68.23	16.893	9.689	13.838	17.311	27	3.428	130.7
40	0.774	-2.23	59.91	15.829	10.175	12.126	16.825	27	3.428	130.7
45	0.717	-2.89	51.41	14.663	10.369	10.369	16.631	27	3.428	130.7
50	0.654	-3.69	42.77	13.375	10.246	8.597	16.754	27	3.428	130.7
55	0.586	-4.64	34.34	11.984	9.817	6.874	17.183	27	3.428	130.7
60	0.514	-5.78	26.42	10.512	9.104	5.256	17.896	27	3.428	130.7
65	0.437	-7.19	19.10	8.937	8.100	3.777	18.900	27	3.428	130.7
70	0.357	-8.95	12.74	7.301	6.861	2.497	20.139	27	3.428	130.7
75	0.273	-11.28	7.45	5.583	5.393	1.445	21.607	27	3.428	130.7
80	0.186	-14.61	3.46	3.804	3.746	0.661	23.254	27	3.428	130.7
85	0.096	-20.35	0.92	1.963	1.956	0.171	25.044	27	3.428	130.7
90	0.001	-60.00	0.00	0.020	0.020	0.000	26.980	27	3.428	130.7

NON-IONIZING ELECTROMAGNETIC RADIATION (NEIR) ANALYSIS

The Effective Radiated Power for proposed will be 100 w, mounted on a mast 27 meters above the ground. The OET program FM Model for Windows, Version 2.10 Beta was used to determine the maximum predicted RF exposure. The settings used were:

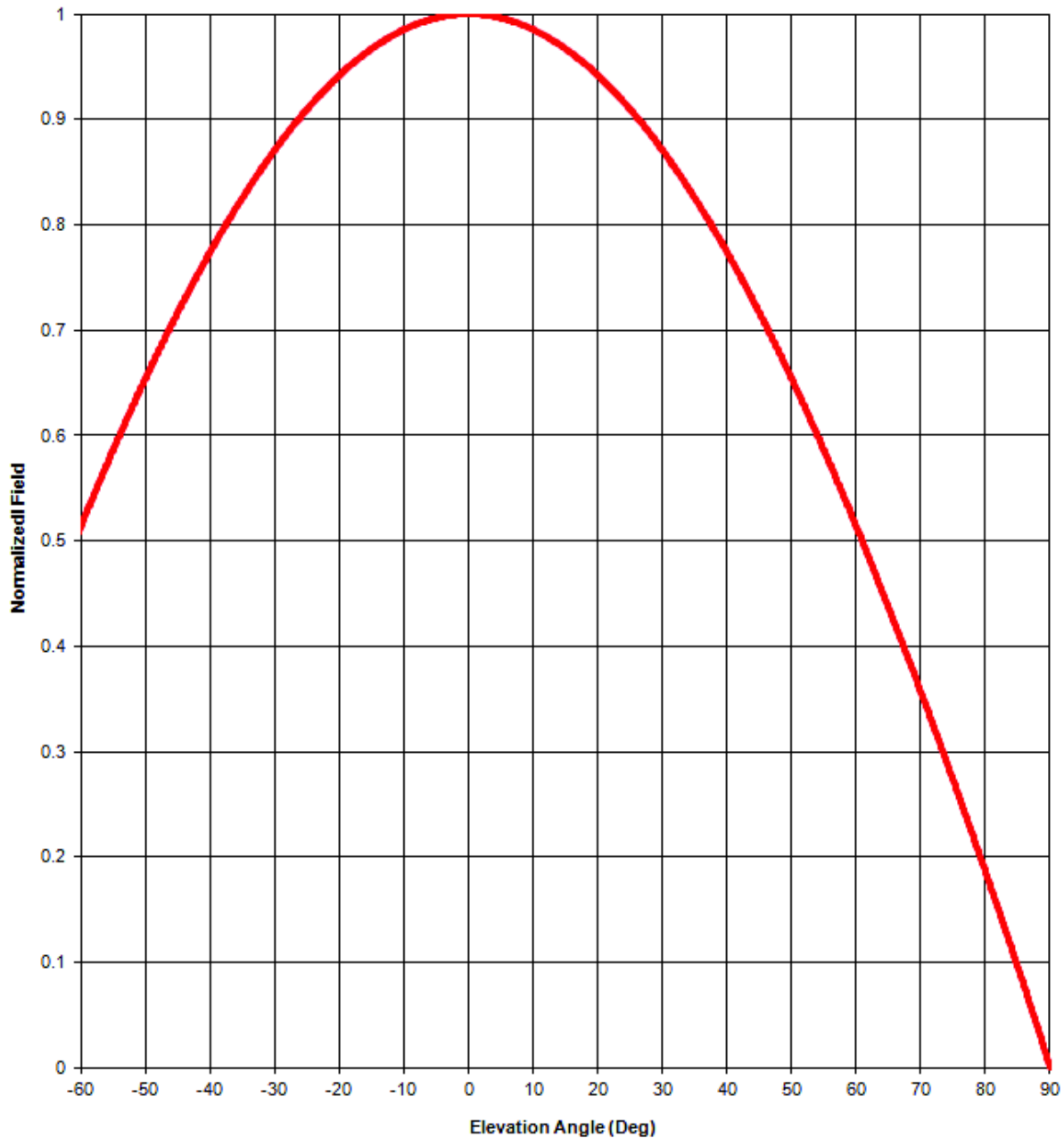
Antenna: Shively 6810
Horizontal ERP (W): 100 watts
Vertical ERP (W): 100 watts
Antenna Height (m): 27
Number of Elements: 1
Spacing: 1.00



The maximum predicted RF exposure for a human standing on the ground would be less than 2.2 $\mu\text{W}/\text{cm}^2$ at 28 meters. This represents less than 1.5 % of the FCC Maximum Permissible Exposure (MPE) of 200 $\mu\text{W}/\text{cm}^2$ for uncontrolled environments. 47 CFR 1.1307(b)(3) exempts applicants from preparing an Environmental Assessment when the predicted exposure levels would be less than 5% of the FCC limits.

The mast will be inaccessible by the public and will have a no climbing with a warning sign to potential climbers. Facility is on private property. If work on tower is required facility will be temporarily powered down.

Elevation pattern



Antenna model: 6812b, single bay

Test frequency: 98.1 MHz

Gain (maximum):

Power	dB
0.46	-3.39 dB

Document No. 6812b 1-bay fw (130701)

A Division of Howell Laboratories, Inc., P. O. Box 389, Bridgton, Maine 04009 USA

(207) 647-3327

1-888-SHIVELY

Fax: (207)647-8273

An Employee-Owned Company

www.shively.com

sales@shively.com

Certified to ISO-9001

Degrees	Rel. Field
1	1.000
2	0.999
3	0.999
4	0.998
5	0.996
6	0.995
7	0.993
8	0.991
9	0.988
10	0.985
11	0.982
12	0.979
13	0.975
14	0.971
15	0.967
16	0.963
17	0.958
18	0.953

Degrees	Rel. Field
19	0.948
20	0.942
21	0.936
22	0.930
23	0.924
24	0.917
25	0.910
26	0.903
27	0.895
28	0.887
29	0.879
30	0.871
31	0.862
32	0.854
33	0.845
34	0.835
35	0.826
36	0.816

Degrees	Rel. Field
37	0.806
38	0.796
39	0.785
40	0.774
41	0.763
42	0.752
43	0.741
44	0.729
45	0.717
46	0.705
47	0.693
48	0.680
49	0.667
50	0.654
51	0.641
52	0.628
53	0.614
54	0.600

Degrees	Rel. Field
55	0.586
56	0.572
57	0.558
58	0.544
59	0.529
60	0.514
61	0.499
62	0.484
63	0.469
64	0.453
65	0.437
66	0.422
67	0.406
68	0.390
69	0.373
70	0.357
71	0.341
72	0.324

Degrees	Rel. Field
73	0.307
74	0.290
75	0.273
76	0.256
77	0.239
78	0.221
79	0.204
80	0.186
81	0.168
82	0.151
83	0.133
84	0.114
85	0.096
86	0.078
87	0.059
88	0.040
89	0.021
90	0.000

Elevation Pattern Tabulation

Antenna model: 6812b, single bay

Relative Field at 0° Depression = 1.000

TOWAIR RESULTS



Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > TOWAIR

TOWAIR Determination Results

[? HELP](#)[New Search](#) [Printable Page](#)

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration. |

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

PASS SLOPE: No FAA REQ-Unmarked Seaplane base

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
SEAP		00-00-00.0N	000-00-00.0W	MIAMI	DADE MIAMI, FL	1.8	4267.1999999999998

PASS SLOPE: No FAA REQ-Unmarked Seaplane base

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
SEAP		00-00-00.0N	000-00-00.0W	MIAMI	DADE MIAMI, FL	1.8	4267.1999999999998

PASS SLOPE(100:1)NO FAA REQ - 4065.0 Meters (13336.4 Feet)away & below slope by 5.0 Meters (16.3999 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-48-14.00N	080-16-32.00W	MIAMI INTL	DADE MIAMI, FL	2.3	3967.3000000000002

PASS SLOPE(100:1)NO FAA REQ - 3525.0 Meters (11564.8 Feet)away & below slope by 0.0 Meters (0.0 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-48-7.00N	080-16-10.00W	MIAMI INTL	DADE MIAMI, FL	2.3	3967.3000000000002

PASS SLOPE(100:1)NO FAA REQ - 4755.0 Meters (15600.2 Feet)away & below slope by 12.0 Meters (39.3699 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-47-15.00N	080-16-31.00W	MIAMI INTL	DADE MIAMI, FL	2.3	3967.3000000000002

PASS SLOPE(100:1)NO FAA REQ - 5009.0 Meters (16433.5 Feet)away & below slope by 15.0 Meters (49.2100 Feet)

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	25-47-11.00N	080-16-39.00W	MIAMI INTL	DADE MIAMI, FL	2.3	3967.3000000000002

Your Specifications

NAD83 Coordinates

Latitude	25-48-40.9 north
Longitude	080-14-09.1 west

Measurements (Meters)

Overall Structure Height (AGL)	34
Support Structure Height (AGL)	0
Site Elevation (AMSL)	3.3

1MIAMI – MINOR MODIFICATION

MIAMI, FL