

Portuguese Radio Foundation Corp

Report:

Protected zones report for proposed on channel 235L1 09-19-2023

Lat. 42 59 19.96 Lng. 71 27 08.06, ERP= 0.1 kw, HAAT= -18.3 m

International:

Facility is okay with Canada. Between Canada Border and Facility there is a Full Power co-channel WHOM. Facility Distance to border = 225.8 km.

Facility is okay with respect to AM station towers.

Closest AM Facility is WGIR, MANCHESTER, NH, L, DA2 at 323.0° at a distance of 3.8 km

Facility is okay with respect to FCC monitoring stations.

Closest FCC Monitoring Station is 250.3 km= Belfast, ME

Facility is okay toward West Virginia Quiet Zone. Distance to center = 851.7 km

Facility is okay toward Table Mountain. Distance to Center = 2836.2 km,

Azimuth = 275.1 Degrees True

New Low Power FM Portuguese Radio Foundation Corp

REFERENCE						DISPLAY DATES		
42 59 19.96 N.			CLASS = L1			DATA 09-19-23		
71 27 08.06 W.			Current Spacings to 2nd Adj.			SEARCH 09-19-23		
----- Channel 235 - 94.9 MHz -----								
Call	Channel		Location		Azi	Dist	FCC	Margin

WEVX-LP	LIC	236L1	Derry	NH	139.4	15.67	13.5	2.2
WJMN	LIC	233B	Boston	MA	166.1	77.96	66.5	11.5
WNHN-LP	LIC	234L1	Concord	NH	339.3	26.45	13.5	13.0
WHOM	LIC	235C	Mount Washington	NH	4.7	142.81	129.5	13.3
W236CU	LIC-D	236D	Lowell	MA	152.6	41.90	27.5	14.4
WQNH-LP	LIC	234L1	Deerfield	NH	43.6	28.78	13.5	15.3
W237FA	STA-D	237D	Nashua	NH	182.3	25.43	7.5	17.9
W237FA	LIC-D	237D	Nashua	NH	184.4	25.55	7.5	18.1
WAEM-LP	LIC	235L1	Acton	MA	180.2	57.81	23.5	34.3
WTBU	LIC-Z	237A	York Center	ME	66.8	67.07	28.5	38.6
WMAS-FM	LIC-D	234B	Enfield	CT	224.5	136.38	96.5	39.9
WLPZ-LP	LIC	236L1	Leominster	MA	204.1	54.86	13.5	41.4
PROPOSED2Ref-D		235D	Dedham	MA	154.3	68.80	25.5	43.3
W235AV	LIC-D	235D	Tatnuck	MA	206.2	84.03	38.5	45.5
WHRB	LIC-N	237A	Cambridge	MA	155.3	77.79	28.5	49.3

RF Worksheet #1 – FM (including translators & boosters)

PLEASE COPY BEFORE USING. THE DETERMINATION OF COMPLIANCE MAY INVOLVE REPEATED CALCULATIONS. IF LOCATED ON A MULTIPLE FM USER TOWER, PLEASE COMPLETE RF WORKSHEET 1A BEFORE PROCEEDING.

EFFECTIVE RADIATION CENTER HEIGHT

Enter proposed "height of radiation center above ground" OR as listed in Line 1 30m m (1)
of Worksheet 1A.

Is antenna supporting structure located on the roof of a building? (check one) ☐ Yes ☒ No (2)

If Line 2 is "Yes" enter the building height measured at the base of the antenna supporting structure in Line 3

If Line 2 is "No" enter "0" in Line 3..... 0 m (3)

Subtract Line (3) from Line (1)..... 30 m (4)

Subtract the value 2.0 from Line (4)..... 28 m (5)

TOTAL EFFECTIVE RADIATED POWER

(If "beam tilt" is utilized, list maximum values)

List Effective Radiated Power in the Horizontal Plane..... 0.1 kW (6)

List Effective Radiated Power in the Vertical Plane..... 0.1 kW (7)

Add Lines (6) and (7) OR list value from Line 2 in Worksheet 1A..... 0.2 kW (8)

PERCENTAGE OF FCC RF LIMIT(S) FOR MAXIMUM PERMISSIBLE EXPOSURE

Multiply Line (8) by 33.41 6.682 (9)

Multiply the value listed in Line (5) by itself..... 784 (10)

Divide Line (9) by Line (10) 0.0085 (11)

Multiply Line (11) by (100) 0.85% (12)

