Applicant requests a waiver for a location which is short-spaced on a second-adjacent channel with BLH-19870928KA, callsign WZID, class B, MANCHESTER, NH, channel 239, facility ID 58550[3]

Undesired-to-Desired Ratio Method	
BLH-19870928KA f(50,50) signal	74.090 dBu [1][2]
Second-adjacent protection	+ 40 dB
Interference-zone boundary	114.09 dBu
Distance to 114.09 dBu	135 m (ERP <= 0.095 kW) [1]

Applicant proposes operation at 95 watts ERP. The worst-case interference zone is a sphere of radius 135 meters, shown projected on the ground in the following satellite map. The 114dBu contour remains entirely on property owned by the Concord (NH) Water Authority, and does not reach any roads or populated structures. Thus no population will be subject to interference from the proposed station according to the undesired-to-desired ratio method.

[1] tvfmfs() Fortran subroutine as distributed by the FCC. At distances less than or equal to 1.5 km, tvfmfs() uses the free-space method.
[2] FCC HAAT Calculator web page, http://transition.fcc.gov/mb/audio/bickel/haat_calculator.html
[3] CDBS download 2021-08-14 12:44:00, LMS download 2021-08-16 02:37

43 12 49.7 N	158.6 m RCAMSL		WNHN-LP	Concord, NH
71 33 12.83 W	0.095 kW	CH 237	L1	19 m HAAT

Call	Ch	Location	State	Azimuth	Dist km	FCC	Margin
W240CS	240D	BRISTOL	NH	334	52.46	8.5	44.5
WPEI	240A	SACO	ME	65	92.89	29.5	63.9
WZID	239B	MANCHESTER	NH	186	25.69	67.5	-41.3*
WXLF	237A	HARTFORD	VT	310	77.43	67.5	10.4
WTBU	237A	YORK CENTER	ME	89	69.93	67.5	2.9
W237FA	237D	NASHUA	NH	173	50.86	26.5	24.9
WMNH-LP	237L1	MANCHESTER	NH	163	25.61	24.5	1.6
W236CU	236D	LOWELL	MA	156	68.01	28.5	40
WEVX-LP	236L1	DERRY	NH	153	41.24	14.5	27.2
WHOM	235B	MT WASHINGTON	NH	10	119.07	67.5	52.1
WHOM	235C	MT WASHINGTON	NH	10	119.04	93.5	26
WQNH-LP	234L1	DEERFIELD	NH	98	28.44	6.8	22.1
W234BN	234D	CLAREMONT	NH	288	64.01	21.5	43