

Radiation Hazard Measurement

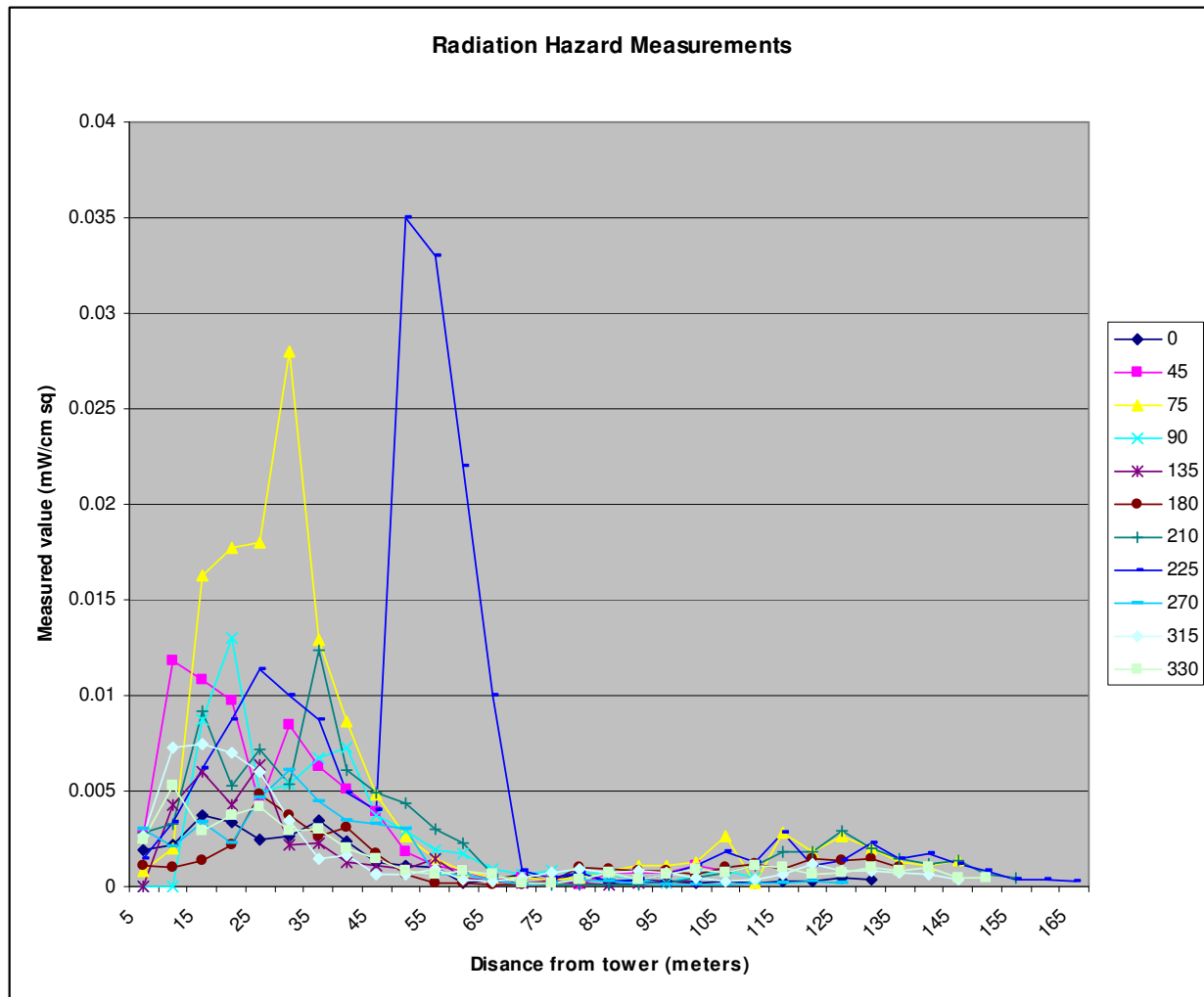
East Falmouth, MA WYZZ

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5/22/2014

Measurements were taken with a Nidek BF520 with an EF-0391 probe on 5/22/2014 in the vicinity of the WYZZ tower and in the transmitter enclosure. These are presented in graphical form, where the vertical axis is $\mu\text{W}/\text{cm}^2$ and the horizontal axis is meters from the tower.



The maximum allowed value for radiation in the FM band for an unfenced (general population) area is 0.2 mW/cm^2 (OET 65 pg 67 (Table 1 B)). The maximum value reported was 0.035 mW/cm^2 , found at 50 meters from the tower and 55 degrees from True north, is only 17% of the maximum of 0.2 mW/cm^2 . It appears that even those values are anomalous, with a leading 0 being lost, and the true values are 1/10 that large (ie 0.0035), bringing those few values into line with the other radials.

Robert Moore

Tabular report:

Azimuth (degrees from True North)											
	0	45	75	90	135	180	210	225	270	315	330
Distance											
(meters)											
5	0.0019	0.0026	0.0008	no reading	no reading	0.0011	0.0028	0.0015	0.003	0.0026	0.0025
10	0.0022	0.0118	0.002	no reading	0.0043	0.001	0.0033	0.0034	0.0021	0.0073	0.0053
15	0.0037	0.0108	0.0163	0.0087	0.006	0.0014	0.0092	0.0062	0.0034	0.0075	0.0029
20	0.0034	0.0097	0.0177	0.013	0.0043	0.0022	0.0053	0.0087	0.0023	0.007	0.0037
25	0.0025	0.0043	0.018	0.0049	0.0064	0.0048	0.0072	0.0114	0.0046	0.006	0.0042
30	0.0026	0.0085	0.028	0.0054	0.0022	0.0037	0.0054	0.01	0.0061	0.0035	0.0029
35	0.0035	0.0063	0.0129	0.0067	0.0023	0.0026	0.0124	0.0087	0.0045	0.0015	0.003
40	0.0024	0.0051	0.0086	0.0073	0.0013	0.0031	0.0061	0.0049	0.0035	0.0016	0.002
45	0.0013	0.0039	0.0048	0.0037	0.0011	0.0017	0.0049	0.004	0.0033	0.0006	0.0015
50	0.0011	0.0018	0.0026	0.0029	0.0009	0.0006	0.0044	0.035	0.003	0.0006	0.0008
55	0.001	0.0011	0.0015	0.0019	0.0015	0.0002	0.003	0.033	0.0006	0.0009	0.0006
60	0.0002	0.0008	0.0008	0.0017	0.0005	0.0002	0.0023	0.022	0.0006	0.0004	0.0008
65	0.0004	0.0004	0.0005	0.0009	0.0003	0.0001	0.0006	0.01	0.0004	0.0003	0.0006
70	0.0006	0.0005	0.0005	0.0006	0.0002	0.0001	0.0002	0.0008	0.0001	0.0005	0.0002
75	0.0003	0.0004	0.0004	0.0008	0.0003	0.0003	0.0001	0.0005	0.0002	0.0007	0.0002
80	0.0007	0.0001	0.0005	0.0007	0.0002	0.001	0.0001	0.0007	0.0004	0.0009	0.0004
85	0.0002	0.0007	0.0008	0.0006	0.0001	0.0009	0.0001	0.0003	0.0003	0.0007	0.0007
90	0.0004	0.0007	0.0011	0.0004	0.0002	0.0008	0.0001	0.0004	0.0002	0.0008	0.0004
95	0.0003	0.0007	0.0011	0.0002	0.0003	0.0008	0.0002	0.0006	0.0001	0.0007	0.0006
100	0.0002	0.0011	0.0013	0.0006	0.0003	0.0006	0.0005	0.0011	0.0001	0.0005	0.0009
105	0.0003	0.0008	0.0026	0.0008		0.001	0.0007	0.0018	0.0001	0.0003	0.0007
110	0.0002		0.0002	0.0005		0.0012	0.0011	0.0013	0.0002	0.0004	0.0011
115	0.0003		0.0028			0.0009	0.0018	0.0028	0.0002	0.0006	0.001
120	0.0003		0.0018			0.0015	0.0018	0.0011	0.0003	0.0012	0.0006
125	0.0005		0.0026			0.0014	0.0029	0.0014	0.0002	0.0008	0.0007
130	0.0004		0.002			0.0015	0.002	0.0023		0.0008	0.001
135			0.0013			0.001	0.0015	0.0015		0.0007	0.0008
140			0.0011				0.0012	0.0017		0.0006	0.001
145			0.0014				0.0014	0.0012		0.0004	0.0005
150							0.0006	0.0008			0.0005
155							0.0005	0.0004			
160								0.0004			
165								0.0003			