Radiofrequency Radiation Calculation
101.3 mHz – 0.25 KW – 16.8 M AGL
Sabana, PR
Octoberr 2019

This radiofrequency radiation study is compiled for W267DD, Sabana, PR in support of a Form 349 Application to relocate the translator. The proposed antenna is a PSIFMT-2 A-6DB (0.75 wave spacing). The power is 250 Watts and the center of radiation above ground is 16.8 meters.

The FCC's own FM Model was used to determine the impact this proposal would have on nearby humans. Locations as far away as 100 meters were examined. The point with the greatest radiation density was 4.5 microWatts per centimeter squared which was 6 meters from the tower base. See the attached printout.

Based on these findings, it is thought that this proposal is in compliance with the Commission's Rules regarding radiation exposure to humans.

Bromo Communications, Inc.

Federal
Communications
Commission

Home / Engineering & Technology / Electromagnetic Compatibility Division /

FM Model

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data published in 1985 by the EPA (http://nepis.epa.gov/Exe/ZyNET.exe/2000ED2W.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=& SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=& File=D%3A\zyfiles\Index%20Data\81thru85\Txt\00000003\2000ED2W.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h|-& MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p|f&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS& BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL).   ▼ Show More....
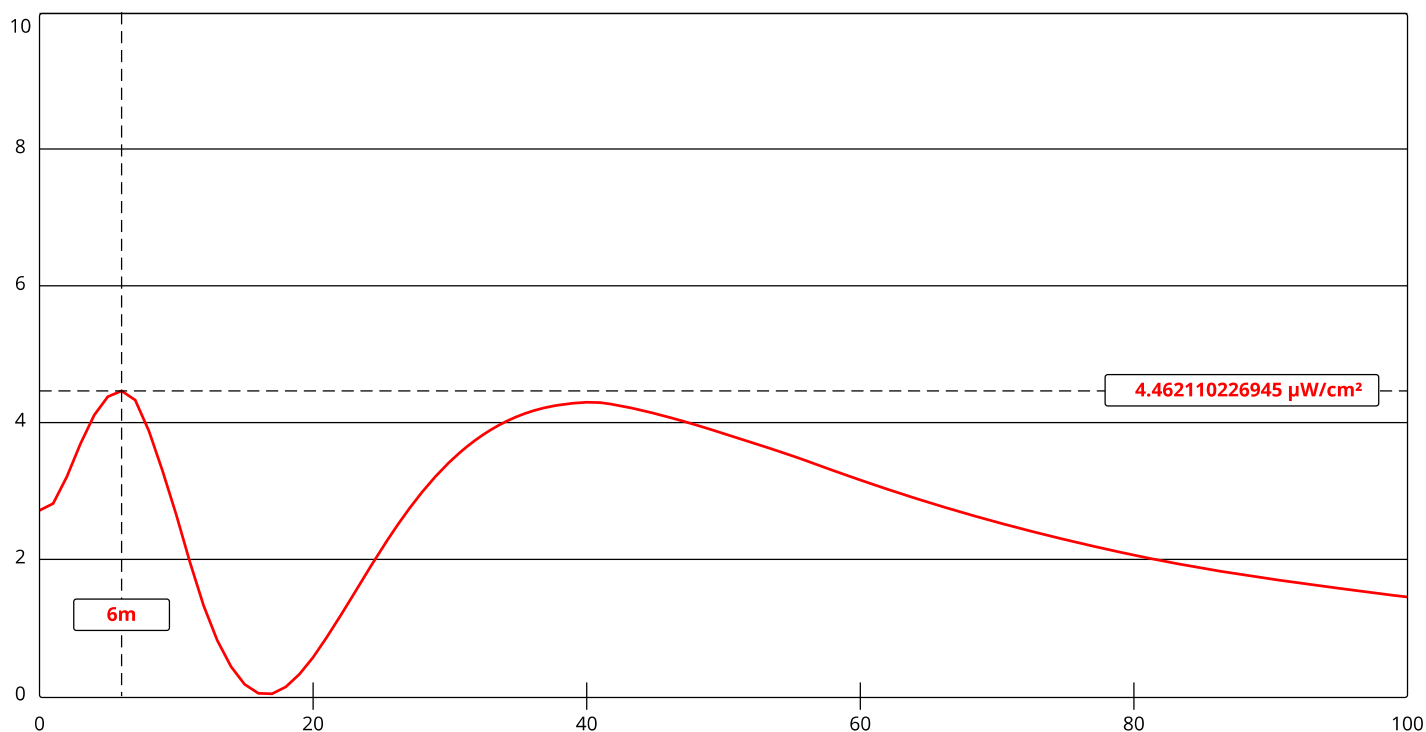
Channel Selection	Channel 267 (101.3 MHz)		
Antenna Type +	EPA Type 2: Opposed V Dipole		
Height (m)	16.8	Distance (m)	100
ERP-H (W)	250	ERP-V (W)	250
Num of Elements	2	Element Spacing (λ)	.75
Num of Points	100	Apply	

* To Print - On your browser, please select Shrink to Fit under the Scale tab from Print Preview

Hide Tabular Results -

Distance (m)	Power Density (μW/cm²)
0	2.7
1	2.8
2	3.2
3	3.7
4	4.1
5	4.4
6	4.5
7	4.3
8	3.9
9	3.3
10	2.7
11	2.0
12	1.3
13	0.8
14	0.4
15	0.2
16	0.0
17	0.0
18	0.1
19	0.3
20	0.6
21	0.9
22	1.2
23	1.5
24	1.8
25	2.1
26	2.4
27	2.7
28	3.0
29	3.2
30	3.4
31	3.6
32	3.8
33	3.9
34	4.0
35	4.1
36	4.2
37	4.2
38	4.3
39	4.3
40	4.3
41	4.3

Distance (m)	Power Density (µW/cm²)
42	4.3
43	4.2
44	4.2
45	4.1
46	4.1
47	4.0
48	4.0
49	3.9
50	3.8
51	3.8
52	3.7
53	3.6
54	3.6
55	3.5
56	3.4
57	3.4
58	3.3
59	3.2
60	3.2
61	3.1
62	3.0
63	3.0
64	2.9
65	2.8
66	2.8
67	2.7
68	2.7
69	2.6
70	2.5
71	2.5
72	2.4
73	2.4
74	2.3
75	2.3
76	2.2
77	2.2
78	2.1
79	2.1
80	2.1
81	2.0
82	2.0
83	1.9
84	1.9

Distance (m)	Power Density (µW/cm²)
85	1.9
86	1.8
87	1.8
88	1.8
89	1.7
90	1.7
91	1.7
92	1.7
93	1.6
94	1.6
95	1.6
96	1.5
97	1.5
98	1.5
99	1.5
100	1.5

Go to the Top of the Page

Bureau/Office:

Engineering & Technology (https://www.fcc.gov/engineering-technology)

Updated:

Friday, June 8, 2018