

Radio Frequency Safety Survey Report

Prepared For: Fairfax County Public Schools



Site Name: Westfield High School
Site ID: N/A
Address: 4700 Stonecroft Boulevard
Chantilly, VA 20151
County: Fairfax
Latitude: N38-53-7.20
Longitude: W77-27-49.80

Site Structure Type: Monopole
Report Writer: John Lee
Generation Date: June 26, 2023

Compliance Statement

Based on the information provided by the client, measured radiofrequency power density values during the time of the survey at ground and within adjacent buildings were found to be below the FCC limits set forth at 47 C.F.R. §1.1310.





Table of Contents

1 General Summary	3
2 Site Survey Information	3
3 Site Photographs	5
4 Emission Measurements and Discussion	136
5 Recommendations for Compliance	141
6 Reviewer Certification	141
7 Appendix A: Technical Framework	142
8 Appendix B: Qualifications of Waterford Consultants, LLC	145
9 Appendix C: RoofMaster™	146
10 Appendix D: Statement of Limiting Conditions	147



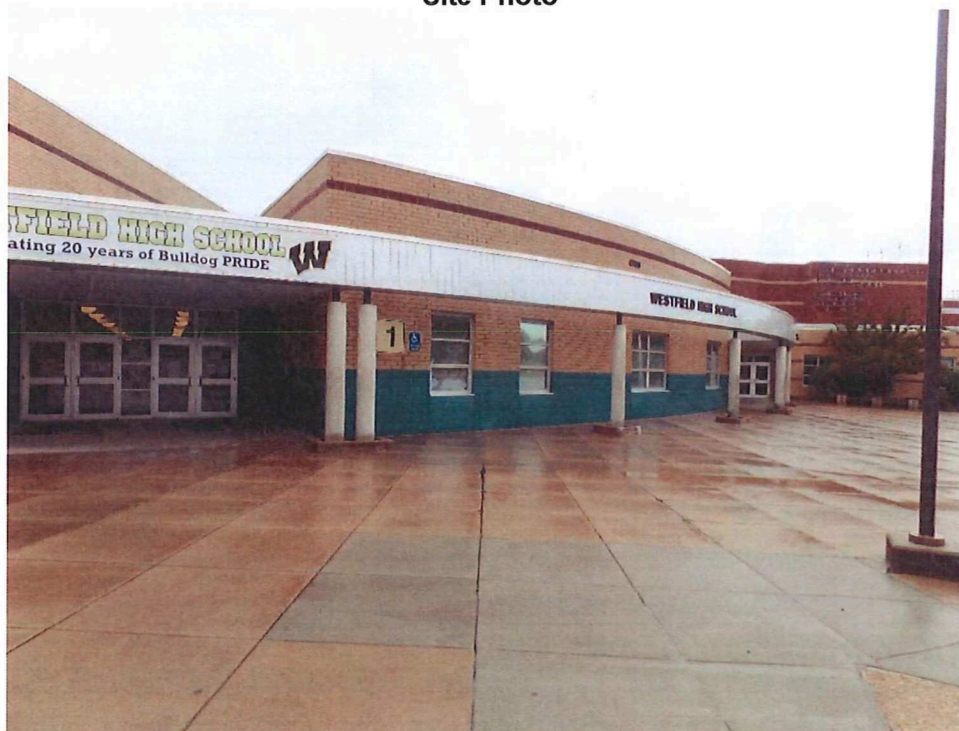
1 General Summary

Fairfax County Public Schools has contracted Waterford Consultants, LLC to conduct a Radiofrequency (RF) Electromagnetic Compliance assessment of the Westfield High School site located at 4700 Stonecroft Boulevard, Chantilly, VA 20151. The compliance framework is derived from the FCC Rules and Regulations for preventing human exposure in excess of the applicable MPE (Maximum Permissible Exposure) limits. An overview of the applicable FCC Rules and analysis guidelines is presented in Appendix A. The subsequent sections contain information regarding the radio telecommunications equipment installed at this site and the surrounding environment with regard to RF Hazard compliance.

2 Site Survey Information

Access Restriction:	Locked fence gate.
Access Control:	Coordinate access with FCPS. Check in at the main office.
Survey Technician:	John Lee
Site Survey Date:	June 21, 2023
Meter Model/Serial:	Wave Control - SMP2Dual Field Meter / SN21-SN1517
Calibration Date:	May 12, 2023
Probe Model/Serial:	Wave Control - WSN0001 / SN21-WP220008
Calibration Date:	May 12, 2023

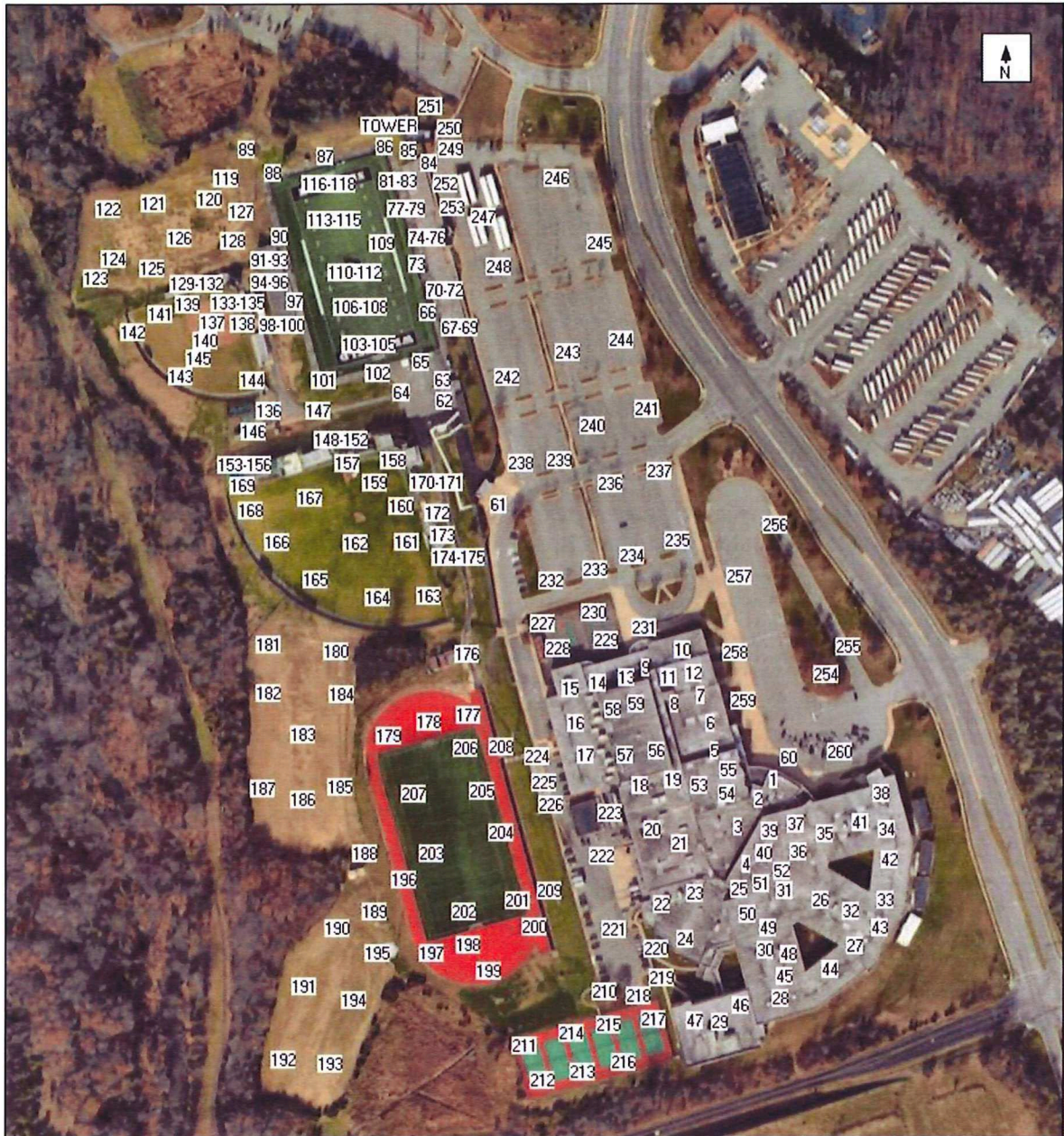
Site Photo





4 Emission Measurements and Discussion

The site was surveyed at approximately 9:00 AM on June 21, 2023. The temperature at the time of visit was 62 degrees F with Cloudy skies and rainy. All accessible areas of the site were inspected. Measurement collection was performed using a Wave Control SMP2 Survey meter and broadband probe Wave Control (1MHz to 60 GHz) and was consistent with FCC and equipment manufacturer procedures, regarding the location of the probe to the RF source and making slow sweeping motions over the area that a person would occupy. In using this broadband instrument, the results represent the cumulative contributions of all RF sources at the measurement locations. Examples of these sources include antennas supporting TV and FM broadcast, cellular and WIFI router operations as well as RF-enabled mobile devices such as cellular phones that may be in the vicinity of the measurement location. Power density values were recorded as a percentage of the FCC General Population limits.



The above site map shows the measurement locations.

**Measurement Readings are Spatial Average as MPE % of the General Population Limits**

Loc#	Site Reading		Loc#	Site Reading	
	Avg	Max		Avg	Max
1 (Inside)	0.0243%	0.0302%	2 (Inside)	0.0373%	0.0767%
3 (Inside)	0.0203%	0.0269%	4 (Inside)	0.0221%	0.0321%
5 (Inside)	0.0789%	0.2158%	6 (Inside)	0.0661%	0.1580%
7 (Inside)	0.0373%	0.0552%	8 (Inside)	0.0977%	0.2448%
9 (Inside)	0.0248%	0.0520%	10 (Inside)	0.0402%	0.2234%
11 (Inside)	0.0123%	0.0162%	12 (Inside)	0.0169%	0.0240%
13 (Inside)	0.0603%	0.1318%	14 (Inside)	0.0894%	0.2624%
15 (Inside)	0.0127%	0.0209%	16 (Inside)	0.1061%	0.2806%
17 (Inside)	0.0925%	0.2436%	18 (Inside)	0.0078%	0.0109%
19 (Inside)	0.0859%	0.1310%	20 (Inside)	0.1259%	0.2786%
21 (Inside)	0.2025%	0.2629%	22 (Inside)	0.0178%	0.0228%
23 (Inside)	0.0225%	0.0280%	24 (Inside)	0.0178%	0.0311%
25 (Inside)	0.0416%	0.0902%	26 (Inside)	0.0433%	0.1539%
27 (Inside)	0.0387%	0.2021%	28 (Inside)	0.0830%	0.2430%
29 (Inside)	0.1738%	0.2810%	30 (Inside)	0.0157%	0.0312%
31 (Inside)	0.1251%	0.3219%	32 (Inside)	0.0188%	0.0773%
33 (Inside)	0.1649%	0.2885%	34 (Inside)	0.1743%	0.3579%
35 (Inside)	0.1834%	0.5056%	36 (Inside)	0.0919%	0.2147%
37 (Inside)	0.2361%	0.4335%	38 (Inside)	0.2793%	0.5001%
39 (Inside)	0.2281%	0.3818%	40 (Inside)	0.1579%	0.1850%
41 (Inside)	0.1767%	0.3436%	42 (Inside)	0.0664%	0.1708%
43 (Inside)	0.0598%	0.2363%	44 (Inside)	0.0629%	0.1747%
45 (Inside)	0.1311%	0.2256%	46 (Inside)	0.0135%	0.0604%
47 (Inside)	0.0261%	0.0993%	48 (Inside)	0.0537%	0.2350%
49 (Inside)	0.0510%	0.2132%	50 (Inside)	0.3454%	0.8810%
51 (Inside)	0.0457%	0.1817%	52 (Inside)	0.1814%	0.4021%
53 (Inside)	0.0176%	0.0570%	54 (Inside)	0.0133%	0.0250%
55 (Inside)	0.0249%	0.0475%	56 (Inside)	0.0048%	0.0073%
57 (Inside)	0.0310%	0.0530%	58 (Inside)	0.0220%	0.0446%
59 (Inside)	0.0249%	0.0432%	60	0.0539%	0.1194%
61	0.0233%	0.0604%	62	0.0254%	0.0503%
63	0.0203%	0.0455%	64	0.0226%	0.0278%
65	0.0148%	0.0326%	66	0.0186%	0.0285%
67	0.0229%	0.0416%	68	0.0212%	0.0312%
69	0.0251%	0.0388%	70	0.0298%	0.0409%
71	0.0249%	0.0344%	72	0.0183%	0.0264%
73	0.0446%	0.1147%	74	0.0766%	0.1254%
75	0.0597%	0.0903%	76	0.0839%	0.1543%
77	0.0554%	0.0970%	78	0.0240%	0.0290%
79	0.0264%	0.0365%	80	0.0186%	0.0248%
81	0.0204%	0.0298%	82	0.0356%	0.0690%
83	0.0295%	0.0521%	84	0.0430%	0.1020%
85	0.0195%	0.0483%	86	0.0209%	0.0336%
87	0.0149%	0.0393%	88	0.0224%	0.0421%
89	0.0153%	0.0203%	90	0.0262%	0.0687%
91	0.0171%	0.0299%	92	0.0198%	0.0362%
93	0.0189%	0.0304%	94	0.0183%	0.0411%
95	0.0177%	0.0384%	96	0.0125%	0.0172%
97	0.0243%	0.0791%	98	0.0194%	0.0279%
99	0.0160%	0.0398%	100	0.0314%	0.0567%
101	0.0257%	0.0460%	102	0.0322%	0.0560%
103	0.0415%	0.0950%	104	0.0355%	0.0927%
105	0.0248%	0.0678%	106	0.0315%	0.0901%
107	0.0369%	0.1309%	108	0.0251%	0.0468%
109	0.0935%	0.2286%	110	0.0353%	0.0884%
111	0.0273%	0.0622%	112	0.0423%	0.0939%



Loc#	Site Reading		Loc#	Site Reading	
	Avg	Max		Avg	Max
113	0.0264%	0.0757%	114	0.0357%	0.0567%
115	0.0354%	0.0725%	116	0.0339%	0.0870%
117	0.0229%	0.0423%	118	0.0165%	0.0236%
119	0.0174%	0.0394%	120	0.0185%	0.0342%
121	0.0213%	0.0830%	122	0.0277%	0.0523%
123	0.0149%	0.0210%	124	0.0111%	0.0149%
125	0.0136%	0.0182%	126	0.0146%	0.0229%
127	0.0148%	0.0636%	128	0.0138%	0.0227%
129	0.0186%	0.0467%	130	0.0156%	0.0194%
131	0.0191%	0.0345%	132	0.0171%	0.0423%
133	0.0160%	0.0290%	134	0.0242%	0.0428%
135	0.0215%	0.0283%	136	0.0203%	0.0284%
137	0.0173%	0.0231%	138	0.0158%	0.0221%
139	0.0131%	0.0202%	140	0.0162%	0.0219%
141	0.0130%	0.0184%	142	0.0146%	0.0222%
143	0.0160%	0.0228%	144	0.0157%	0.0202%
145	0.0163%	0.0196%	147	0.0289%	0.0606%
146	0.0168%	0.0499%	148	0.0145%	0.0191%
149	0.0200%	0.0291%	150	0.0265%	0.0735%
151	0.0169%	0.0439%	152	0.0338%	0.0708%
153	0.0244%	0.1140%	154	0.0163%	0.0266%
155	0.0151%	0.0197%	156	0.0221%	0.0411%
157	0.0196%	0.0292%	158	0.0168%	0.0221%
159	0.0136%	0.0198%	160	0.0140%	0.0234%
161	0.0286%	0.0647%	162	0.0334%	0.0638%
163	0.0445%	0.0636%	164	0.0595%	0.1117%
165	0.0561%	0.0947%	166	0.0276%	0.0514%
167	0.0867%	0.1620%	168	0.0232%	0.0347%
169	0.0146%	0.0189%	170	0.0249%	0.0467%
171	0.0354%	0.0599%	172	0.0269%	0.0351%
173	0.0325%	0.0486%	174	0.0393%	0.0549%
175	0.1110%	0.4402%	176	0.0389%	0.1018%
177	0.0241%	0.0356%	178	0.0238%	0.0388%
179	0.0196%	0.0268%	180	0.0198%	0.0283%
181	0.0183%	0.0276%	182	0.0160%	0.0193%
183	0.0253%	0.0362%	184	0.0184%	0.0243%
185	0.0290%	0.0421%	186	0.0318%	0.0530%
187	0.0136%	0.0163%	188	0.0118%	0.0161%
189	0.0125%	0.0169%	190	0.0157%	0.0227%
191	0.0194%	0.0261%	192	0.0181%	0.0237%
193	0.0160%	0.0237%	194	0.0166%	0.0228%
195	0.0238%	0.0347%	196	0.0740%	0.1316%
197	0.0725%	0.1306%	198	0.0778%	0.1009%
199	0.0845%	0.1390%	200	0.0521%	0.0898%
201	0.0833%	0.1911%	202	0.0432%	0.0583%
203	0.0754%	0.0973%	204	0.0798%	0.1648%
205	0.0401%	0.0587%	206	0.0357%	0.0526%
207	0.0255%	0.0512%	208	0.0544%	0.0934%
209	0.0169%	0.0279%	210	0.0204%	0.0299%
211	0.0238%	0.0442%	212	0.0304%	0.0542%
213	0.0251%	0.0369%	214	0.0207%	0.0262%
215	0.0156%	0.0214%	216	0.0433%	0.0858%
217	0.0149%	0.0200%	218	0.0167%	0.0219%
219	0.0274%	0.0401%	220	0.0150%	0.0208%
221	0.0126%	0.0184%	222	0.0132%	0.0213%
223	0.0161%	0.0209%	224	0.0192%	0.0267%
235	0.0249%	0.0407%	226	0.0192%	0.0371%
227	0.0225%	0.0390%	228	0.0577%	0.1171%



Loc#	Site Reading		Loc#	Site Reading	
	Avg	Max		Avg	Max
229	0.0482%	0.0931%	230	0.0529%	0.1062%
231	0.0609%	0.1521%	232	0.0131%	0.0196%
233	0.0173%	0.0369%	234	0.0142%	0.0221%
235	0.0200%	0.0282%	236	0.0148%	0.0279%
237	0.0223%	0.0466%	238	0.0175%	0.0238%
239	0.0172%	0.0209%	240	0.0150%	0.0208%
241	0.0158%	0.0218%	242	0.0130%	0.0172%
243	0.0163%	0.0216%	244	0.0128%	0.0187%
245	0.0153%	0.0242%	246	0.0384%	0.1218%
247	0.0164%	0.0240%	248	0.0178%	0.0252%
249	0.0188%	0.0248%	250	0.0212%	0.0292%
251	0.0178%	0.0218%	252	0.0166%	0.0217%
253	0.0173%	0.0196%	254	0.0236%	0.0597%
255	0.0156%	0.0219%	256	0.0128%	0.0185%
257	0.0229%	0.0302%	258	0.0219%	0.0269%
259	0.0278%	0.0437%	260	0.0213%	0.0380%

Summary: The maximum spatially averaged power density reading was 0.3454% of the FCC General Population limits



5 Recommendations for Compliance

RF power density measurements at interior and ground locations at the site were found to be below Radiofrequency Emissions Maximum Permissible Exposure (MPE) General Population limits.

No actions are required at this time.

6 Reviewer Certification

I have reviewed this RF Emissions assessment report and believe it to be both true and accurate to the best of my knowledge.



David Hamilton Kiser
Registered Professional Engineer (Electrical)
Commonwealth of Virginia
Number 0402048906, 12/31/2023
Date: 2023-June-29