McNees
Wallace & Nurick LLC

100 Pine Street • PO Box 1166 • Harrisburg, PA 17108-1166
Tel: 717.232.8000 • Fax: 717.237.5300

James M. Strong
Direct Dial: 717.237.5200
Direct Fax: 717.260.1662
jstrong@mcneeslaw.com

September 28, 2017

Christopher S. Adams, Ed.D.
Superintendent of Schools
Hempfield School District
200 Church Street
Landisville, PA 17538-1332

RE: Hempfield School District - Verizon Wireless Sites

Dear Dr. Adams:

It is our understanding that members of the community have suggested that the existing Verizon Wireless tower facility located at the Landisville Middle School is operating at "four times the maximum transmission rate." Accordingly, Verizon Wireless retained Millennium Engineering, P.C. ("Millennium") to perform radio frequency electromagnetic field measurements at the Landisville Middle School. Millennium performed the field measurements yesterday and a copy of Millennium's report is enclosed. As you can see from the report, measurements were taken outside the building, inside the building and on the roof of the building. At all locations, the average measurements were well below one (1%) percent of the Federal Communications Commission exposure limits and guidelines to human exposure to radiofrequency electromagnetic fields.

Please note that Verizon Wireless retained Millennium to perform the measurements in response to the specific concern that was raised and this testing is in addition to, and not in lieu of, the testing that Verizon Wireless previously agreed to reimburse the School District for.

Please let us know if the School Board has any questions regarding the enclosed report.

Sincerely,

McNEES WALLACE & NURICK LLC

By
James M. Strong

A5990968:1

c: Mark Fitzgerald, Esq., HSD Solicitor
William H. Otto, HSD School Board President
Adam Aloisi, HSD School Board Vice President
Daniel Forry, HSD Chief Operating Officer
Deborah Baker, Site Acquisition Consultant

ELECTROMAGNETIC FIELD (EMF) STRENGTH MEASUREMENTS
SITE: EAST LANDISVILLE
SEPTEMBER 27, 2017

Landisville Middle School
340 Mumma Drive
Landisville, PA 17538

Millennium Engineering, P.C.
132 Jaffrey Road
Malvern, PA 19355

Cell: 610.220.3820
Fax: 610.644.4355
E-mail: pauldugan@comcast.net
www.millenniumeng.com

ELECTROMAGNETIC FIELD (EMF) STRENGTH MEASUREMENTS
SITE: EAST LANDISVILLE
SEPTEMBER 27, 2017

TABLE OF CONTENTS

MILLENNIUM ENGINEERING, P.C.
132 Jaffrey Road
Malvern, Pennsylvania 19355
Cell: 610-220-3820 Fax: 610-644-4355
www.millenniumeng.com Email: pauldugan@comcast.net

September 27, 2017

Attn: Duncan J. Masemore, Engineer IV – Specialist Network Real Estate
Verizon Wireless
4642 Jonestown Road
Harrisburg, PA 17109

Re: Electromagnetic Field (EMF) Measurements at Landisville Middle School
Site Name: East Landisville, Existing 130' Monopole (139' Overall)
340 Mumma Drive, Landisville, PA 17538 (East Hempfield Township, Lancaster County)

Dear Mr. Masemore,

Our firm, Millennium Engineering, P.C., routinely provides independent determinations and certifications that communications facilities (existing and proposed) comply with Federal Communications Commission (FCC) exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields (Code of Federal Regulation 47 CFR 1.1307 and 1.1310). As a registered professional engineer I am under the jurisdiction of the State Registration Boards in which I am licensed to hold paramount the safety, health, and welfare of the public and to issue all public statements in an objective and truthful manner.

Verizon Wireless has constructed a wireless communications facility on Hempfield School District property behind Landisville Middle School. It was requested that electromagnetic field (EMF) measurements be performed on the roof of the middle school, inside the middle school, and on the grounds surrounding the middle school to certify compliance with FCC standards.

The existing Verizon Wireless antenna configuration from the information furnished to me consists of (2) 700 MHz (LTE) antennas (Swedcom SWCP 2x5516 or equivalent) and (2) 2100 MHz (LTE) antennas (Swedcom SACP 4x5515 or equivalent) on each of three faces (total of 12 antennas) spaced with azimuths of 30/150/250 degrees on the horizontal plane with a centerline of approximately 130' above ground level and mechanical downtilt of 0-3 degrees on each face. Transmitting from these antennas currently is (1) 700 MHz LTE wideband channel (2x60 watt remote radio head) and up to (2) 2100 MHz LTE wideband channels (2x60 watt remote radio head) per face.

Verizon Wireless is licensed by the FCC to transmit in the 700 MHz "Upper C Block" (746-757 MHz) and the 2100 MHz (AWS) "A Block", "B Block" and "J Block" (2110-2120, 2120-2130, 2170-2180 MHz).

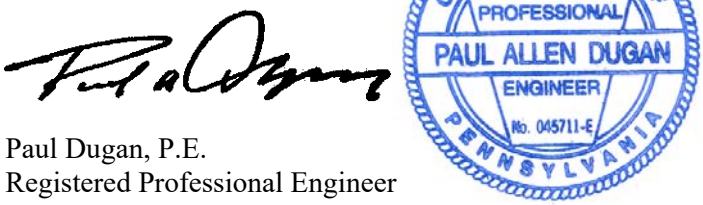
On 9/27/2017, during normal operation of the existing Verizon Wireless facility (i.e. the Verizon Wireless antennas were active), Hempfield School District personnel provided access for us to perform EMF strength measurements at locations on the roof of the middle school, throughout the inside of the building and on the grounds surrounding the building. **The attached measurement data log shows that all whole body spatial average measurements were well below 1 % of the FCC general population exposure limits at all measured locations.** See the attached measurement location map and data log (*pages 5-16*) for the field strength measurement locations and corresponding readings.

All field strength measurements were performed with a calibrated Narda meter (Model #8718B – Serial #7019) and probe (Model #A8722D – Serial #11008) last calibrated on 10/25/2016 (expires 10/25/2017). This particular meter measures all transmitting frequencies in the environment in the 300 kHz to 50 GHz frequency range (which includes all licensed operating frequencies of Verizon Wireless).

The actual exposure for those that occupy the building and those at ground level surrounding the building are hundreds of times below the levels directly in front of the transmit antennas (i.e. within a few feet of the antennas) due to the highly directional characteristic of the wireless antennas. As one moves away from a transmit antenna, exposure is reduced substantially due to path loss of the radiofrequency signal, reduction due to moving away from the main beam, and the shielding effects of building materials. **As shown from our field measurements, with the Verizon Wireless antenna system in service, the actual exposure levels at all locations on the roof of the building, inside the building and at ground level anywhere around the building are well below 1 % of the FCC general population exposure limits.** Keep in mind that continuous exposure at 100 % of standard is considered by the scientific community as just as safe as 1 % of standard since the exposure limits themselves contain a large margin of safety.

In summary, electromagnetic field strength measurements were taken throughout the Landisville Middle School property. All measurements were well below 1 % of the FCC general population exposure limits. These field measurements confirm that the existing Verizon Wireless communications facility is in compliance with all applicable standards by a substantial margin and that the installation and operation of the existing Verizon Wireless facility has not had any consequential impact on the radiofrequency exposure levels on the roof of, inside of, or around the Landisville Middle School building.

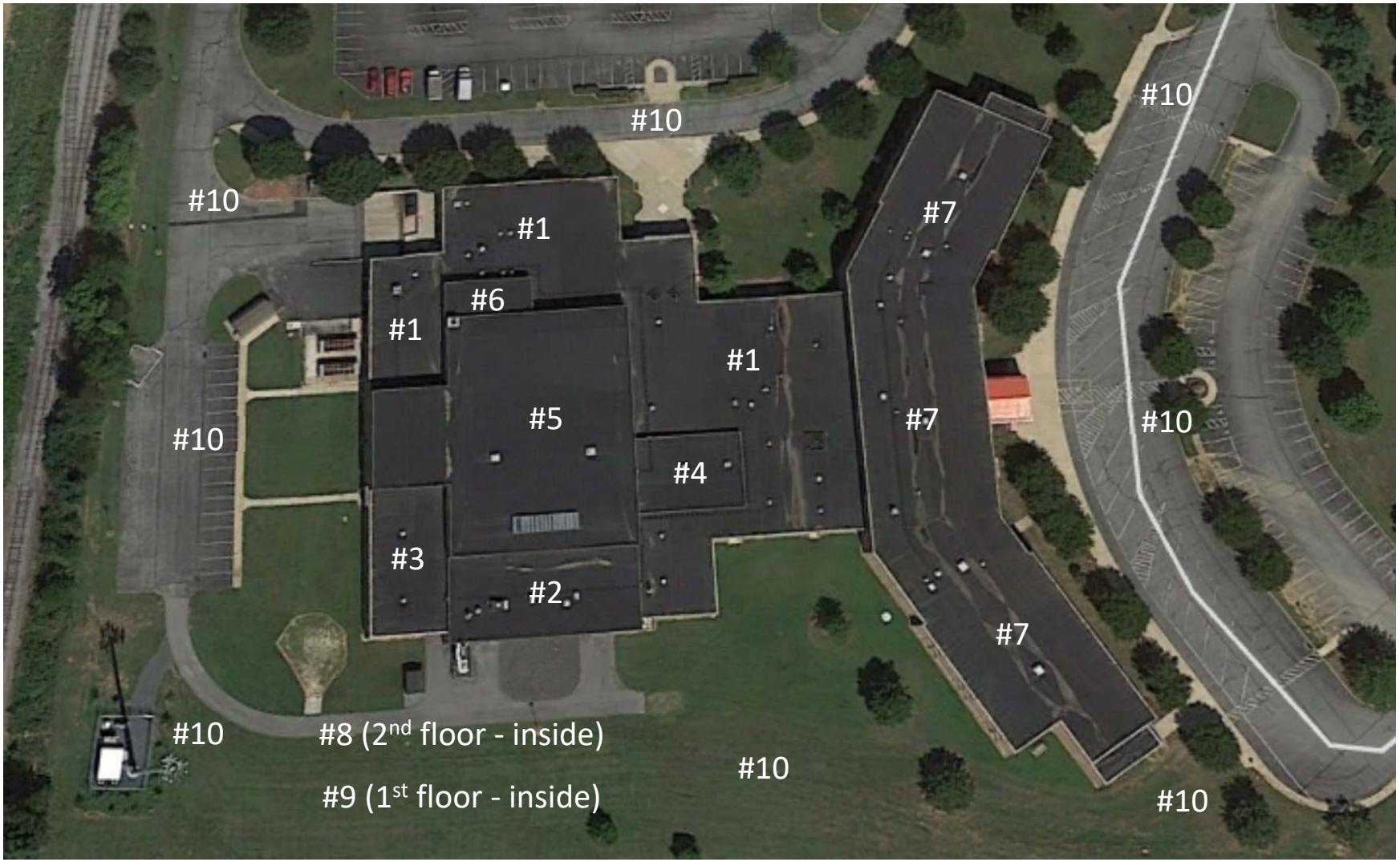
Respectfully,



Paul Dugan, P.E.
Registered Professional Engineer
Pennsylvania License Number PE-045711-E

MEASUREMENT LOCATION MAP

Landisville Middle School Property



Locations #1-7: Various Roof Levels

Location #8: Inside Landisville Middle School Throughout 2nd Floor

Location #9: Inside Landisville Middle School Throughout 1st Floor

Location #10: Ground Level Outside Surrounding Building/Monopole

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #1: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
1	0.01
2	0.01
3	0.08
4	0.08
5	0.06
6	0.06
7	0.10
8	0.08
9	0.08
10	0.03
11	0.04
12	0.03
13	0.04
14	0.08
15	0.11
16	0.12
17	0.13
18	0.11
19	0.10
20	0.10
21	0.06
22	0.11
23	0.04
24	0.04
25	0.09
26	0.09
27	0.11
28	0.09
29	0.06
30	0.09
31	0.11
32	0.11
33	0.01
34	0.11
35	0.01
36	0.06
37	0.08
38	0.13
39	0.04
40	0.06

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #2: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
41	0.06
42	0.13
43	0.14
44	0.14
45	0.14
46	0.17
47	0.10
48	0.12
49	0.08
50	0.06
51	0.10
52	0.06
53	0.01
54	0.06
55	0.06
56	0.06
57	0.04
58	0.11
59	0.11
60	0.11

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #3: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
61	0.01
62	0.01
63	0.02
64	0.01
65	0.02
66	0.02
67	0.01
68	0.01
69	0.02
70	0.03
71	0.02
72	0.04
73	0.08
74	0.06
75	0.04
76	0.12
77	0.08
78	0.11
79	0.06
80	0.06

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #4: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
81	0.01
82	0.02
83	0.04
84	0.01
85	0.03
86	0.08
87	0.02
88	0.02
89	0.04
90	0.03

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #5: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
91	0.01
92	0.08
93	0.08
94	0.04
95	0.08
96	0.04
97	0.14
98	0.09
99	0.10
100	0.08
101	0.01
102	0.01
103	0.06
104	0.01
105	0.04
106	0.09
107	0.10
108	0.06
109	0.08
110	0.08
111	0.06
112	0.08
113	0.04
114	0.02
115	0.01

Ref#	% General Population MPE
116	0.01
117	0.09
118	0.08
119	0.08
120	0.08
121	0.09
122	0.04
123	0.09
124	0.09
125	0.08
126	0.08
127	0.02
128	0.04
129	0.08
130	0.06
131	0.12
132	0.11
133	0.08
134	0.10
135	0.06
136	0.02
137	0.06
138	0.06
139	0.08
140	0.10

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #6: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
141	0.13
142	0.14
143	0.02
144	0.08
145	0.08
146	0.02
147	0.13
148	0.11
149	0.11
150	0.06

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #7: Roof

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
151	0.02
152	0.02
153	0.08
154	0.08
155	0.06
156	0.12
157	0.12
158	0.10
159	0.09
160	0.10
161	0.02
162	0.14
163	0.04
164	0.21
165	0.11
166	0.24
167	0.08
168	0.04
169	0.04
170	0.08
171	0.12
172	0.08
173	0.03
174	0.06
175	0.28
176	0.04
177	0.02
178	0.06
179	0.27
180	0.06
181	0.10
182	0.08
183	0.04
184	0.06

Ref#	% General Population MPE
185	0.04
186	0.06
187	0.03
188	0.02
189	0.08
190	0.01
191	0.16
192	0.03
193	0.04
194	0.01
195	0.06
196	0.03
197	0.21
198	0.23
199	0.29
200	0.21
201	0.33
202	0.04
203	0.18
204	0.06
205	0.04
206	0.06
207	0.23
208	0.14
209	0.14
210	0.06
211	0.16
212	0.15
213	0.21
214	0.08
215	0.19
216	0.03
217	0.03

Ref#	% General Population MPE
218	0.19
219	0.06
220	0.25
221	0.29
222	0.04
223	0.21
224	0.04
225	0.09
226	0.04
227	0.09
228	0.03
229	0.06
230	0.23
231	0.27
232	0.03
233	0.19
234	0.18
235	0.25
236	0.21
237	0.19
238	0.06
239	0.08
240	0.06
241	0.13
242	0.14
243	0.02
244	0.04
245	0.23
246	0.15
247	0.09
248	0.16
249	0.21
250	0.08

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #8: Inside Landisville Middle School Throughout 2nd Floor

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
251	0.04
252	0.26
253	0.01
254	0.08
255	0.06
256	0.21
257	0.02
258	0.32
259	0.23
260	0.04
261	0.01
262	0.13
263	0.34
264	0.25
265	0.11
266	0.02
267	0.23
268	0.18
269	0.15
270	0.11
271	0.21
272	0.06
273	0.14
274	0.08
275	0.11

Ref#	% General Population MPE
276	0.09
277	0.08
278	0.12
279	0.09
280	0.01
281	0.08
282	0.16
283	0.14
284	0.19
285	0.23
286	0.19
287	0.28
288	0.29
289	0.18
290	0.27
291	0.26
292	0.28
293	0.32
294	0.28
295	0.18
296	0.17
297	0.10
298	0.19
299	0.03
300	0.06

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #9: Inside Landisville Middle School Throughout 1st Floor

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
301	0.34
302	0.29
303	0.16
304	0.13
305	0.12
306	0.19
307	0.10
308	0.02
309	0.21
310	0.13
311	0.21
312	0.09
313	0.10
314	0.13
315	0.13
316	0.19
317	0.12
318	0.08
319	0.17
320	0.18
321	0.23
322	0.18
323	0.42
324	0.09
325	0.12

Ref#	% General Population MPE
326	0.14
327	0.10
328	0.25
329	0.06
330	0.18
331	0.48
332	0.32
333	0.13
334	0.02
335	0.44
336	0.14
337	0.21
338	0.17
339	0.17
340	0.34
341	0.36
342	0.15
343	0.08
344	0.25
345	0.08
346	0.10
347	0.09
348	0.09
349	0.11
350	0.18

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #10: Ground Level Outside Surrounding Building/Monopole

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
351	0.12
352	0.21
353	0.26
354	0.08
355	0.19
356	0.21
357	0.28
358	0.28
359	0.19
360	0.15
361	0.23
362	0.13
363	0.16
364	0.18
365	0.04
366	0.18
367	0.01
368	0.40
369	0.10
370	0.23
371	0.39
372	0.16
373	0.46
374	0.40
375	0.23
376	0.24
377	0.38
378	0.26
379	0.08
380	0.12
381	0.16
382	0.30
383	0.19
384	0.08
385	0.12
386	0.11
387	0.09
388	0.02
389	0.10

Ref#	% General Population MPE
390	0.12
391	0.01
392	0.01
393	0.04
394	0.08
395	0.10
396	0.20
397	0.12
398	0.14
399	0.10
400	0.22
401	0.24
402	0.20
403	0.10
404	0.11
405	0.01
406	0.01
407	0.01
408	0.06
409	0.02
410	0.08
411	0.18
412	0.28
413	0.22
414	0.10
415	0.16
416	0.01
417	0.04
418	0.03
419	0.04
420	0.01
421	0.18
422	0.13
423	0.17
424	0.24
425	0.21
426	0.28
427	0.04
428	0.30

East Landisville Electromagnetic (EMF) Field Strength Measurements
% FCC General Population/Uncontrolled Maximum Permissible Exposure (MPE)
Location #10: Ground Level Outside Surrounding Building/Monopole

Date: 09/27/17 Start Time: 10:11

Model: 8718 S/N: 7019 Cal Date: 10/25/16 Due: 10/25/17

Probe: A8722D S/N: 11008 Cal Date: 10/25/16 Due: 10/25/17

Ref#	% General Population MPE
429	0.12
430	0.10
431	0.16
432	0.20
433	0.22
434	0.27
435	0.10
436	0.16
437	0.14
438	0.01
439	0.01
440	0.42
441	0.16
442	0.04
443	0.08
444	0.14
445	0.15
446	0.11
447	0.10
448	0.04
449	0.06
450	0.12
451	0.24
452	0.26
453	0.05
454	0.06
455	0.14
456	0.14
457	0.01
458	0.10
459	0.01
460	0.01
461	0.01
462	0.21
463	0.22
464	0.20

Ref#	% General Population MPE
465	0.10
466	0.13
467	0.01
468	0.02
469	0.02
470	0.01
471	0.18
472	0.22
473	0.26
474	0.24
475	0.20
476	0.01
477	0.04
478	0.08
479	0.02
480	0.30
481	0.32
482	0.15
483	0.17
484	0.01
485	0.04
486	0.01
487	0.04
488	0.13
489	0.14
490	0.18
491	0.06
492	0.07
493	0.08
494	0.18
495	0.14
496	0.12
497	0.18
498	0.01
499	0.02
500	0.01

Certificate of Calibration

L-3 Communications, Narda Microwave-East, hereby certifies that the referenced instrument has been calibrated by qualified personnel to Narda's approved test procedures.

Furthermore, the instrument meets, or exceeds, all published specifications and the calibration has been performed with test instrumentation that, where applicable, is traceable to the National Institute of Standards and Technology.

Narda's calibration measurements are traceable to the National Institute of Standards and Technology to the extent allowed by the bureau's calibration facilities.

Customer: MILLENNIUM ENGINEERING, P.C.
MALVERN, PA 19355

Certificate #: 160041 1

Model #: 8718B

Serial #: 7019

Description: METER

PO #: 10172016

Date Calibrated: 25/Oct/2016

R.O. #: 160041

Hugh Saunders
Hugh Saunders
Test

Ralph Curcio
Ralph Curcio
Quality Assurance

L-3 COMMUNICATIONS, NARDA MICROWAVE-EAST, 435 MORELAND ROAD, HAUPPAUGE, NEW YORK 11788, TEL: 631-231-1700, FAX: 631-231-1711

Certificate of Calibration

L-3 Communications, Narda Microwave-East, hereby certifies that the referenced instrument has been calibrated by qualified personnel to Narda's approved test procedures.

Furthermore, the instrument meets, or exceeds, all published specifications and the calibration has been performed with test instrumentation that, where applicable, is traceable to the National Institute of Standards and Technology.

Narda's calibration measurements are traceable to the National Institute of Standards and Technology to the extent allowed by the bureau's calibration facilities.

Customer: MILLENNIUM ENGINEERING, P.C.
MALVERN, PA 19355

Certificate #: 160041 2

Model #: A8722D

Serial #: 11008

Description: PROBE

PO #: 10172016

Date Calibrated: 25/Oct/2016

R.O. #: 160041

Hugh Saunders
Hugh Saunders
Test

Ralph Curcio
Ralph Curcio
Quality Assurance

L-3 COMMUNICATIONS, NARDA MICROWAVE-EAST, 435 MORELAND ROAD, HAUPPAUGE, NEW YORK 11788, TEL: 631-231-1700, FAX: 631-231-1711

DECLARATION OF ENGINEER

Paul Dugan, P.E., declares and states that he is a graduate telecommunications consulting engineer (BSE/ME Widener University 1984/1988), whose qualifications are a matter of record with the Federal Communications Commission (FCC). His firm, Millennium Engineering, P.C., has been retained by Verizon Wireless to perform power density measurements or calculations for an existing or proposed communications facility and analyze the data for compliance with FCC exposure limits and guidelines for human exposure to radiofrequency electromagnetic fields.

Mr. Dugan also states that the calculations or measurements made in the evaluation were made by himself or his technical associates under his direct supervision, and the summary letter certification of FCC compliance associated with the foregoing document was made or prepared by him personally. Mr. Dugan is a registered professional engineer in the Jurisdictions of Pennsylvania, New Jersey, Delaware, Maryland, Virginia, New York, Connecticut, District of Columbia, West Virginia and Puerto Rico with over 30 years of engineering experience. Mr. Dugan is also an active member of the Association of Federal Communications Consulting Engineers, the National Council of Examiners for Engineering, the National Society of Professionals Engineers, the Pennsylvania Society of Professional Engineers, and the Radio Club of America. Mr. Dugan further states that all facts and statements contained herein are true and accurate to the best of his own knowledge, except where stated to be in information or belief, and, as to those facts, he believes them to be true. He believes under penalty of perjury the foregoing is true and correct.

Paul Dugan, P.E.

Executed this the 27th day of September, 2017.

PAUL DUGAN, P.E.
132 Jaffrey Road
Malvern, Pennsylvania 19355

Cell: 610-220-3820
Fax: 610-644-4355
Email: pauldugan@comcast.net
Web Page: www.millenniumeng.com

EDUCATION:

Widener University, Chester, Pennsylvania
Master of Business Administration, July 1991
Master of Science, Electrical Engineering, December 1988
Bachelor of Science, Electrical Engineering, May 1984

PROFESSIONAL ASSOCIATIONS:

Registered Professional Engineer in the following jurisdictions:

Pennsylvania, License Number PE-045711-E
New Jersey, License Number GE41731
Maryland, License Number 24211
Delaware, License Number 11797
Virginia, License Number 36239
Connecticut, License Number 22566
New York, License Number 079144
District of Columbia, License Number PE-900355
West Virginia, License Number 20258
Puerto Rico, License Number 18946

Full member of **The Association of Federal Communications Consulting Engineers** (www.afcce.org) January 1999 to Present
Elected to serve on the Board of Directors for 2006-2007

Full member of **The National Society of Professional Engineers** (www.nspe.org) and the **Pennsylvania Society of Professional Engineers** (www.pspe.org) June 2003 to Present
Currently serving on the Board of Directors of the Valley Forge Chapter and as South East Region Vice-Chair for the "Professional Engineers in Private Practice" Executive Committee

Actively participate in **Chester County ARES/RACES** (CCAR www.w3eoc.org) which prepares and provides emergency backup communications for Chester County Department of Emergency Services, March 2005 to Present

Full member of **The National Council of Examiners for Engineering** (www.ncees.org) May 2001 to Present

Full Member of **The Radio Club of America** (www.radio-club-of-america.org) December 2003 to present

PROFESSIONAL EXPERIENCE:

Millennium Engineering, P.C., Malvern, Pennsylvania
Position: **President**, August 1999 to Present (www.millenniumeng.com)

Verizon Wireless, Plymouth Meeting, Pennsylvania
Position: **Cellular RF System Design/Performance Engineer**, April 1990 to August 1999

Communications Test Design, Inc., West Chester, Pennsylvania
Position: **Electrical Engineer,** May 1984 to April 1990