

*FCC PART 15, SUBPART B and C
TEST REPORT*

for

REFRIGERATION MONITORING/ALARM TRANSMITTER

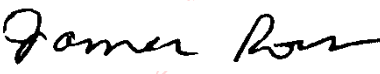
Model: VFCNEXGEN-GTX

Prepared for

VERILERT CORPORATION
121 EAST DIVISON STREET, UNIT F
CLERMONT, FLORIDA 34711

Prepared by: 

KYLE FUJIMOTO

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DATE: DECEMBER 14, 2015

	REPORT	APPENDICES					TOTAL
	BODY	A	B	C	D	E	
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GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested: Refrigeration Monitoring/Alarm Transmitter
Model: VFCNEXGEN-GTX
S/N: N/A

Product Description: See Expository Statement.

Modifications: The EUT was not modified in during the testing.

Customer: Verilert Corporation
121 East Division Street, Unit F
Clermont, Florida 34711

Test Date: December 11, 2015

Test Specifications: Emissions requirements
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231

Test Procedure: ANSI C63.10

Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Spurious Radiated RF Emissions, 10 kHz – 4.18 GHz (Transmitter and Digital portion)	The EUT complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.231
2	Conducted RF Emissions, 150 kHz to 30 MHz	This test was not performed because the EUT operates on battery power and does not connect to the AC mains.
3	-20 dB Bandwidth of the Fundamental	The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231 [c].

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the Refrigeration Monitoring/Alarm Transmitter, Model: VFCNEXGEN-GTX. The emissions measurements were performed according to the measurement procedure described in ANSI C63.10. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.



2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Verilert Corporation

Guido Dalmolin CTO

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer
James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received on December 11, 2015.

2.5 Disposition of the Test Sample

The test sample has not been returned to Verilert Corporation as of the date of this test report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
ANSI C63.4 2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices

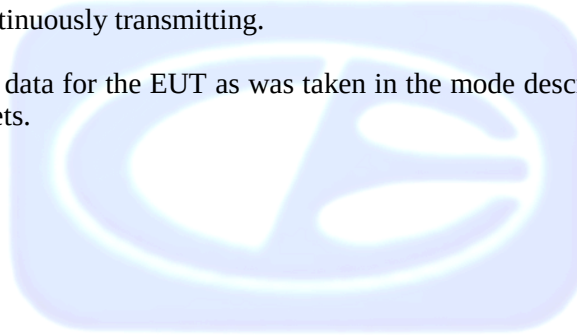
4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - Emissions

The Refrigeration Monitoring/Alarm Transmitter, Model: VFCNEXGEN-GTX (EUT) was mounted on top of a jar of glycol.

The EUT was continuously transmitting.

The final radiated data for the EUT as was taken in the mode described above. Please see Appendix E for the data sheets.



5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT**5.1 EUT and Accessory List**

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
REFRIGERATION MONITORING/ALARM TRANSMITTER	VERILERT CORPORATION	VFCNEXGEN-GTX	N/A	2AGOHGTX
JAR OF GLYCOL	VERILERT CORPORATION	N/A	N/A	N/A

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED IN LAB D					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Agilent Technologies	N9038A	MY51100115	April 3, 2015	1 Year
RF RADIATED EMISSIONS TEST EQUIPMENT					
CombiLog Antenna	Com-Power	AC-220	61060	September 3, 2015	1 Year
Preamplifier	Com-Power	PA-118	551024	March 6, 2015	1 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Horn Antenna	Com-Power	AH-118	071175	February 26, 2014	2 Year
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A

6. TEST SITE DESCRIPTION**6.1 Test Facility Description**

Please refer to section 2.1 and 7.1 of this report for emissions test location.

6.2 EUT Mounting, Bonding and Grounding

For frequencies below 1 GHz, the EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane. For frequencies above 1 GHz, the EUT was mounted 1.5 meters above the ground plane.

The EUT was not grounded.

7. TEST PROCEDURES

7.1.1 Radiated Emissions Test

The EMI Receiver was used as the measuring meter. A built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets.

For frequencies above 1 GHz, the readings were averaged by a “duty cycle correction factor”, derived from $20 \log (\text{dwell time} / 100 \text{ ms})$. This duty cycle correction factor was then subtracted from the peak reading.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	Combilog Antenna
1 GHz to 4.18 GHz	1 MHz	Horn Antenna

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

Radiated Emissions Test (Continued)

The EUT was tested at a 3-meter test distance from 10 kHz to 4.18 GHz.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.231 for radiated emissions. Please see Appendix E for the data sheets.



7.1.2 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
Refrigeration Monitoring/Alarm Transmitter, Model: VFCNEXGEN-GTX

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
40.00 (H)	33.22 (QP)	40.00	-6.78
37.50 (H)	32.76 (QP)	40.00	-7.24
2926 (H)	52.74 (Average)	60.28	-7.54
34.30 (V)	32.17 (QP)	40.00	-7.83
893.40 (H)	37.69 (QP)	46.00	-8.31
916.90 (H)	37.54 (QP)	46.00	-8.46

Notes:

(H) Horizontal

(V) Vertical

(QP) Quasi-Peak

* The complete emissions data is given in Appendix E of this report.

7.1.3 Bandwidth of the Fundamental

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. A plot of the -20 dB bandwidth are located in Appendix E.

Test Results:

The EUT complies with the limits CFR Title 47, Part 15, Subpart C, section 15.231[c].

7.1.4 Supervision Transmission Time

The transmission was checked to see that the total supervisory transmission time is less than 2 seconds per hour. Plots of the time of transmission are located in Appendix E.

Test Results:

The EUT complies with the limits CFR Title 47, Part 15, Subpart C, section 15.231(a)(3).

8. CONCLUSIONS

The Refrigeration Monitoring/Alarm Transmitter, Model: VFCNEXGEN-GTX, as tested, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.



APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

LABORATORY ACCREDITATIONS AND RECOGNITIONS

NVLAP LAB CODES 200063-0,
200528-0, 200527-0

For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025. Please follow the link to the NIST/NVLAP site for each of our facilities' NVLAP certificate and scope of accreditation

NVLAP listing links[Agoura Division](#) / [Brea Division](#) / [Silverado/Lake Forest Division](#)

.Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."

**ANSI listing** [CETCB](#)

Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).

US/EU MRA list [NIST MRA site](#)

Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA).

APEC MRA list [NIST MRA site](#)

We are also listed for IT products by the following country/agency:

**VCCI Support member:** Please visit http://www.vcci.jp/vcci_e/**FCC Listing, from FCC OET site**[FCC test lab search](http://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) [https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm](http://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm)

Compatible Electronics IC listing can be found at:

<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home>

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
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Agoura, CA 91301
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Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.231 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.





APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Refrigeration Monitoring/Alarm Transmitter
Model: VFCNEXGEN-GTX
S/N: N/A

There were no additional models covered under this report.

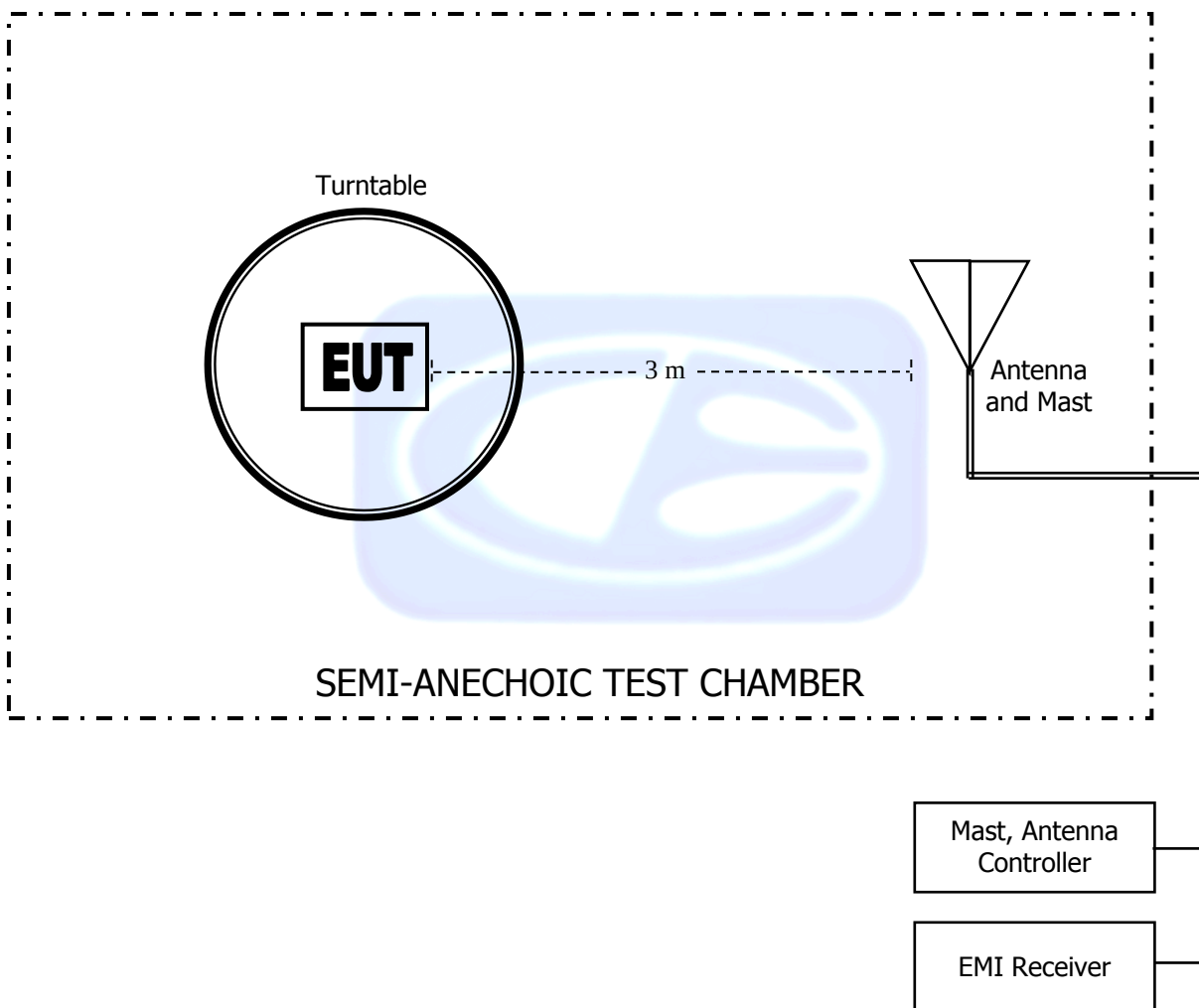




APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER



COM-POWER AL-130**LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-33.18	18.32
0.01	-34.10	17.40
0.02	-38.65	12.85
0.03	-39.28	12.22
0.04	-40.09	11.41
0.05	-40.85	10.65
0.06	-40.88	10.62
0.07	-41.07	10.43
0.08	-41.04	10.46
0.09	-41.19	10.31
0.1	-41.20	10.30
0.2	-41.52	9.98
0.3	-41.53	9.97
0.4	-41.42	10.08
0.5	-41.53	9.97
0.6	-41.53	9.97
0.7	-41.43	10.07
0.8	-41.23	10.27
0.9	-41.13	10.37
1	-41.14	10.36
2	-40.80	10.70
3	-40.66	10.84
4	-40.61	10.89
5	-40.33	11.17
6	-40.53	10.97
7	-40.47	11.03
8	-40.48	11.02
9	-39.93	11.57
10	-39.81	11.69
15	-43.35	8.15
20	-39.16	12.34
25	-40.24	11.26
30	-43.18	8.32

COM-POWER AC-220**COMBILOG ANTENNA****S/N: 61060****CALIBRATION DATE: SEPTEMBER 3, 2015**

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	24.00	200	13.00
35	24.30	250	15.30
40	25.40	300	18.20
45	21.50	350	17.90
50	22.50	400	18.60
60	15.40	450	19.80
70	12.70	500	21.60
80	11.10	550	22.40
90	13.40	600	23.70
100	13.80	650	24.30
120	15.40	700	24.00
125	15.40	750	24.50
140	13.10	800	24.30
150	17.20	850	26.30
160	13.20	900	26.90
175	14.20	950	26.00
180	14.30	1000	25.60

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: FEBRUARY 26, 2014

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.23	10.0	38.43
1.5	25.84	10.5	40.19
2.0	28.14	11.0	40.49
2.5	29.51	11.5	41.39
3.0	31.20	12.0	42.02
3.5	32.17	12.5	43.30
4.0	31.40	13.0	42.77
4.5	31.86	13.5	40.18
5.0	34.82	14.0	42.59
5.5	34.38	14.5	41.74
6.0	36.31	15.0	41.84
6.5	34.81	15.5	38.48
7.0	37.48	16.0	39.52
7.5	36.98	16.5	37.85
8.0	36.66	17.0	41.33
8.5	38.47	17.5	44.96
9.0	37.22	18.0	48.50
9.5	37.86		

COM-POWER PA-118**PREAMPLIFIER**

S/N: 551024

CALIBRATION DATE: MARCH 6, 2015

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	39.76	6.0	38.77
1.1	40.46	6.5	38.46
1.2	40.05	7.0	38.27
1.3	40.58	7.5	38.77
1.4	39.50	8.0	39.25
1.5	39.92	8.5	38.63
1.6	40.40	9.0	39.58
1.7	40.10	9.5	42.12
1.8	40.49	10.0	38.53
1.9	38.86	11.0	40.21
2.0	41.53	12.0	41.15
2.5	41.05	13.0	40.51
3.0	40.29	14.0	40.32
3.5	40.82	15.0	39.47
4.0	40.88	16.0	39.88
4.5	41.37	17.0	39.79
5.0	40.73	18.0	40.61
5.5	39.05		



FRONT VIEW

VERILERT CORPORATION
REFRIGERATION MONITORING/ALARM TRANSMITTER
Model: VFCNEXGEN-GTX
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

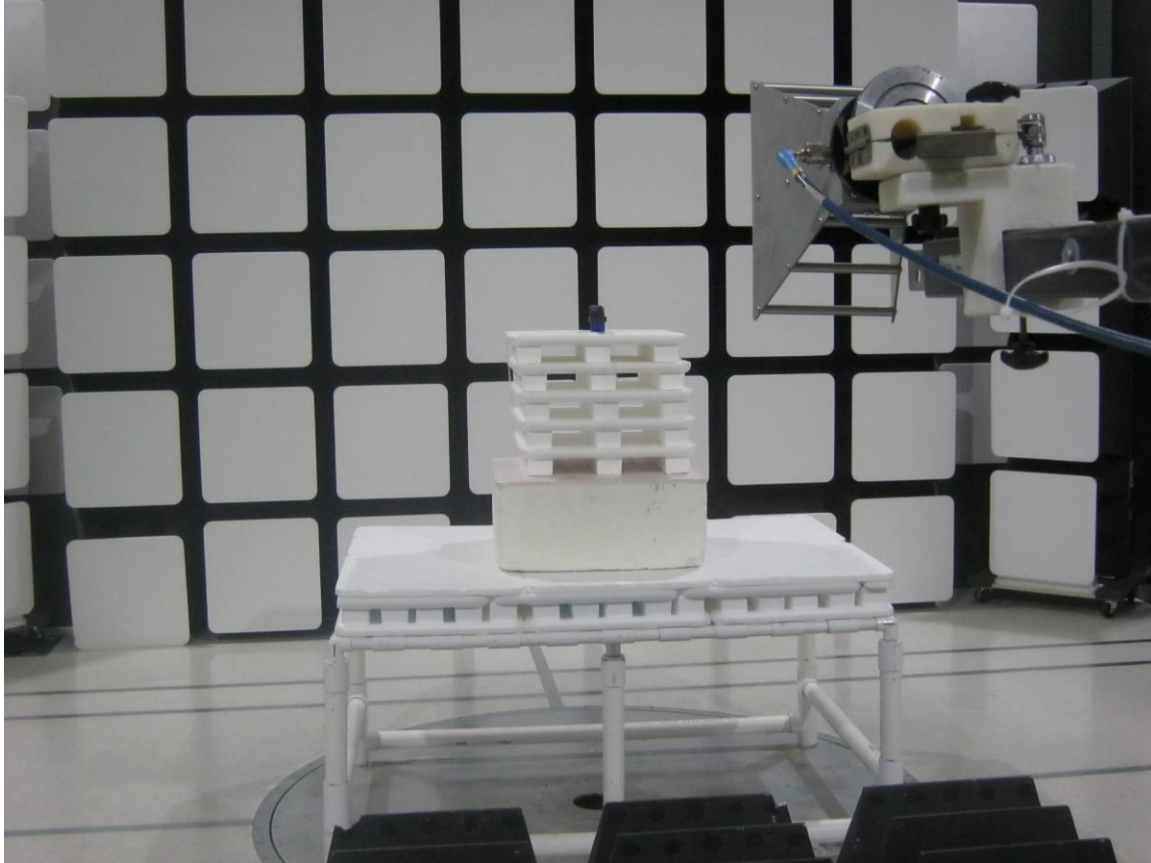
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

VERILERT CORPORATION
REFRIGERATION MONITORING/ALARM TRANSMITTER
Model: VFCNEXGEN-GTX
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

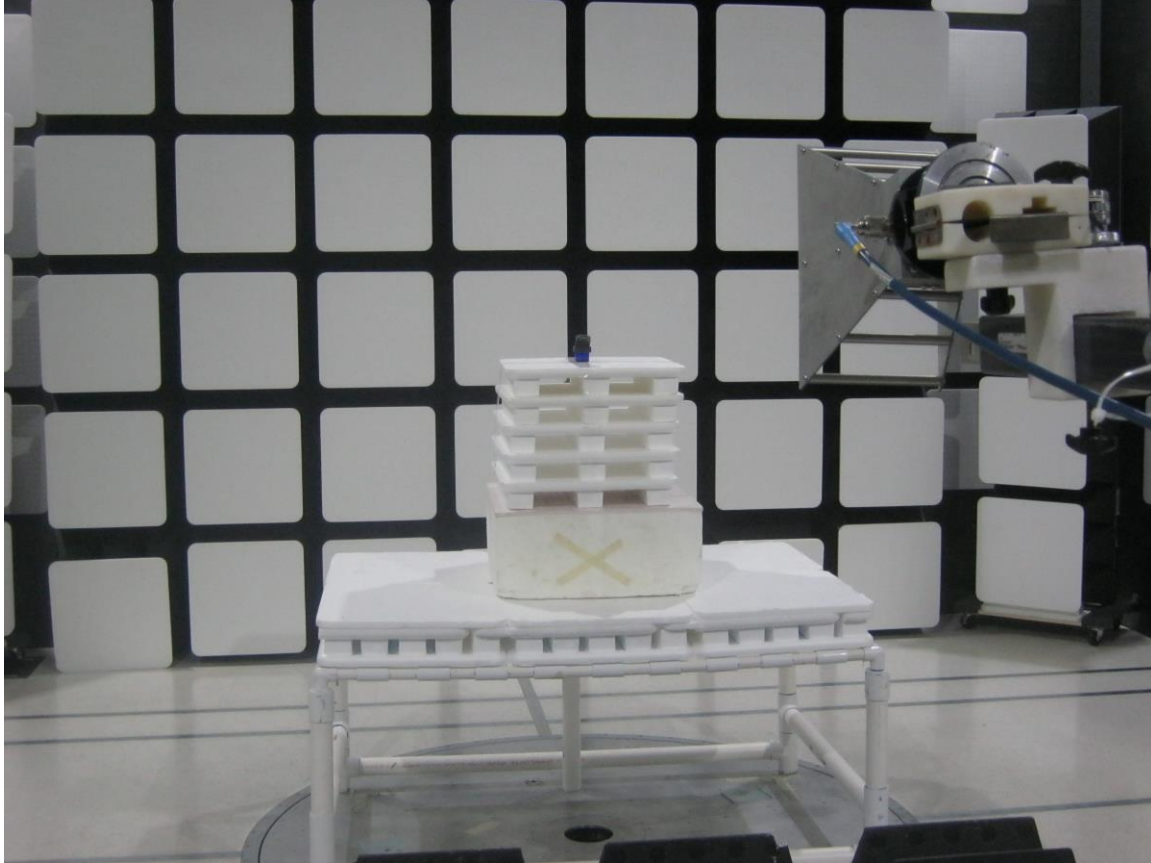
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

VERILERT CORPORATION
REFRIGERATION MONITORING/ALARM TRANSMITTER
Model: VFCNEXGEN-GTX
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

VERILERT CORPORATION
REFRIGERATION MONITORING/ALARM TRANSMITTER
Model: VFCNEXGEN-GTX
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.231Verilert Corporation
Refrigeration Monitoring/Alarm Transmitter
Model: VFCNEXGEN-
GTX

Date: 12/11/2015

Lab: D

Tested By: Kyle Fujimoto

12.19% Duty Cycle

Y-Axis -

Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (cm)	Table Angle (deg)	Comments
418	80.81	V	100.28	-19.47	Peak	159.28	102.00	
418	62.54	V	80.28	-17.74	Avg	159.28	102.00	
836	43.61	V	80.28	-36.67	Peak	205.91	281.00	
836	25.34	V	60.28	-34.94	Avg	250.91	281.00	
1254	41.50	V	80.28	-38.78	Peak	225.85	210.75	
1254	23.23	V	60.28	-37.05	Avg	225.85	210.75	
1672	46.26	V	74.00	-27.74	Peak	175.28	39.50	
1672	27.99	V	54.00	-26.01	Avg	175.28	39.50	
2090	53.99	V	80.28	-26.29	Peak	132.00	81.25	
2090	35.72	V	60.28	-24.56	Avg	132.00	81.25	
2508	55.35	V	80.28	-24.93	Peak	103.40	214.00	
2508	37.08	V	60.28	-23.20	Avg	103.40	214.00	
2926	63.97	V	80.28	-16.31	Peak	175.04	240.00	
2926	45.70	V	60.28	-14.58	Avg	175.04	240.00	
3344	55.58	V	80.28	-24.70	Peak	239.88	73.25	
3344	37.31	V	60.28	-22.97	Avg	239.88	73.25	
3762	45.65	V	74.00	-28.35	Peak	190.38	22.75	
3762	27.38	V	54.00	-26.62	Avg	190.38	22.75	
4180	49.28	V	74.00	-24.72	Peak	101.97	355.25	
4180	31.01	V	54.00	-22.99	Avg	101.97	355.25	

FCC 15.231Verilert Corporation
Refrigeration Monitoring/Alarm Transmitter
Model: VFCNEXGEN-
GTX

Date: 12/11/2015

Lab: D

Tested By: Kyle Fujimoto

12.19% Duty Cycle
Y-Axis - Horizontal

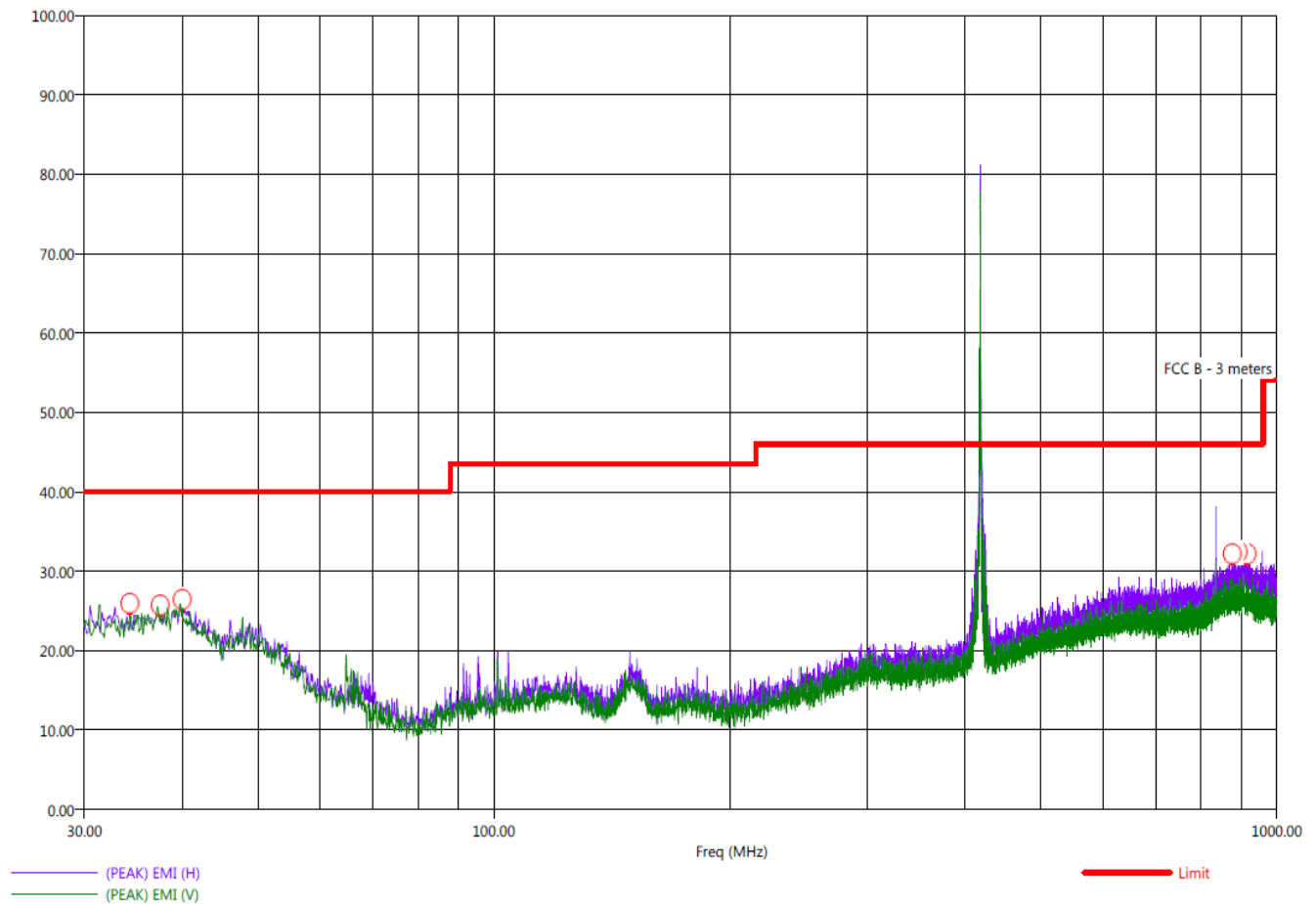
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (cm)	Table Angle (deg)	Comments
418	80.93	H	100.28	-19.35	Peak	208.17	194.00	
418	62.66	H	80.28	-17.62	Avg	208.17	194.00	
836	42.88	H	80.28	-37.40	Peak	143.40	28.50	
836	24.61	H	60.28	-35.67	Avg	143.40	28.50	
1254	37.89	H	80.28	-42.39	Peak	300.00	158.00	
1254	19.62	H	60.28	-40.66	Avg	300.00	158.00	
1672	43.89	H	74.00	-30.11	Peak	126.98	155.00	
1672	25.62	H	54.00	-28.38	Avg	126.98	155.00	
2090	57.57	H	80.28	-22.72	Peak	222.50	331.00	
2090	39.30	H	60.28	-20.99	Avg	222.50	331.00	
2508	59.94	H	80.28	-20.34	Peak	223.04	327.00	
2508	41.67	H	60.28	-18.61	Avg	223.04	327.00	
2926	71.01	H	80.28	-9.27	Peak	239.82	292.00	
2926	52.74	H	60.28	-7.54	Avg	239.82	292.00	
3344	65.76	H	80.28	-14.52	Peak	159.75	155.82	
3344	47.49	H	60.28	-12.79	Avg	159.70	155.82	
3762	49.39	H	74.00	-24.61	Peak	47.75	173.37	
3762	31.12	H	54.00	-22.88	Avg	47.75	173.37	
4180	49.96	H	74.00	-24.05	Peak	176.25	176.47	
4180	31.69	H	54.00	-22.32	Avg	176.25	176.47	

Title: Pre-Scan, 30-1000 MHz, FCC Class B
File: Agilent - Radiated Pre-Scan - 30-1000 MHz - FCC Class B - 12-11-2015.set Operator: Kyle Fujimoto
EUT Type: Refrigeration Monitoring/Alarm Transmitter
EUT Condition: The EUT was continuously transmitting
Comments: Customer: Verilert Corporation
Model: VFCNEXGEN-GTX
Note #1: Frequency above limit line is 418 MHz, which is the Transmit Frequency and is subject to FCC 15.231 limits
Note #2: No Additional frequencies were detected from 10 kHz to 1 GHz and 1 GHz to 4.18 GHz
Note #3: No Emissions were detected at the Bandedge of 410 MHz

12/11/2015 12:15:47 PM
Sequence: Preliminary Scan

FCC Class B

Electric Field Strength (dB μ V/m)



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

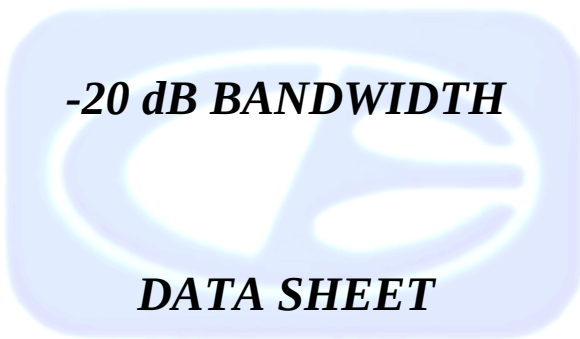
Title: Radiated Final, 30-1000 MHz, FCC Class B
File: Agilent - Radiated Final Scan - 30-1000 MHz - FCC 15.231 - 12-11-2015.set
Operator: Kyle Fujimoto
EUT Type: Refrigeration Monitoring/Alarm Transmitter
EUT Condition: The EUT was continuously transmitting
Comments: Customer: Verilert Corporation
Model: VFCNEXGEN-GTX

12/11/2015 12:46:14 PM
Sequence: Final Measurements

FCC Class B

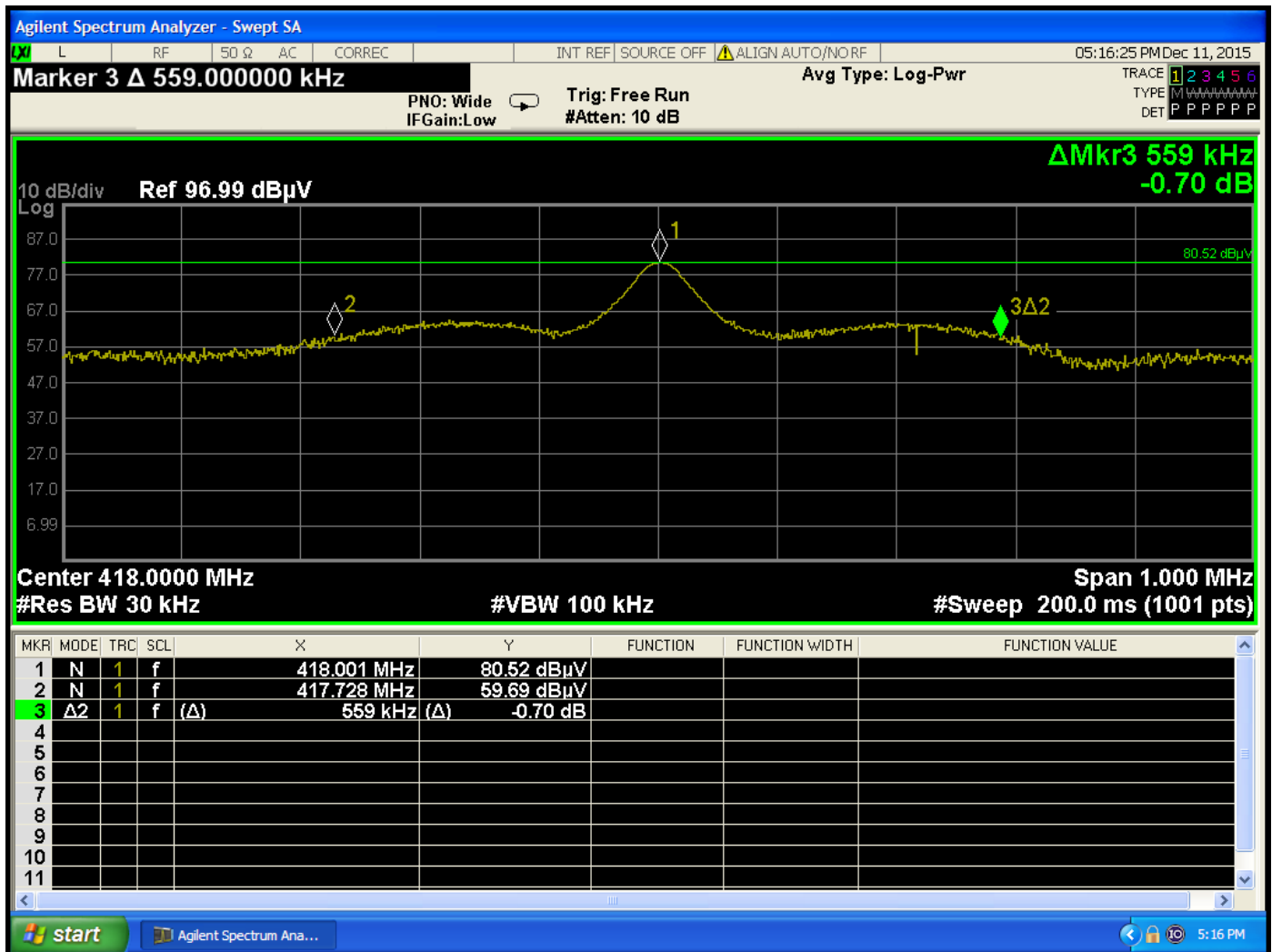
Freq (MHz)	Pol	(PEAK) EMI (dBμV/m)	(OP) EMI (dBμV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBμV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (deq)	Twr Ht (cm)
34.30	V	36.26	32.17	-3.74	-7.83	40.00	24.27	0.39	161.50	239.58
37.50	H	36.70	32.76	-3.30	-7.24	40.00	24.90	0.41	271.00	368.00
40.00	H	38.41	33.22	-1.59	-6.78	40.00	25.36	0.43	175.50	205.61
877.40	H	41.99	37.40	-4.01	-8.60	46.00	26.63	2.59	94.50	223.64
893.40	H	41.75	37.69	-4.25	-8.31	46.00	26.82	2.62	258.75	224.41
916.90	H	41.52	37.54	-4.48	-8.46	46.00	26.59	2.66	311.75	384.59





-20 dB BANDWIDTH

DATA SHEET

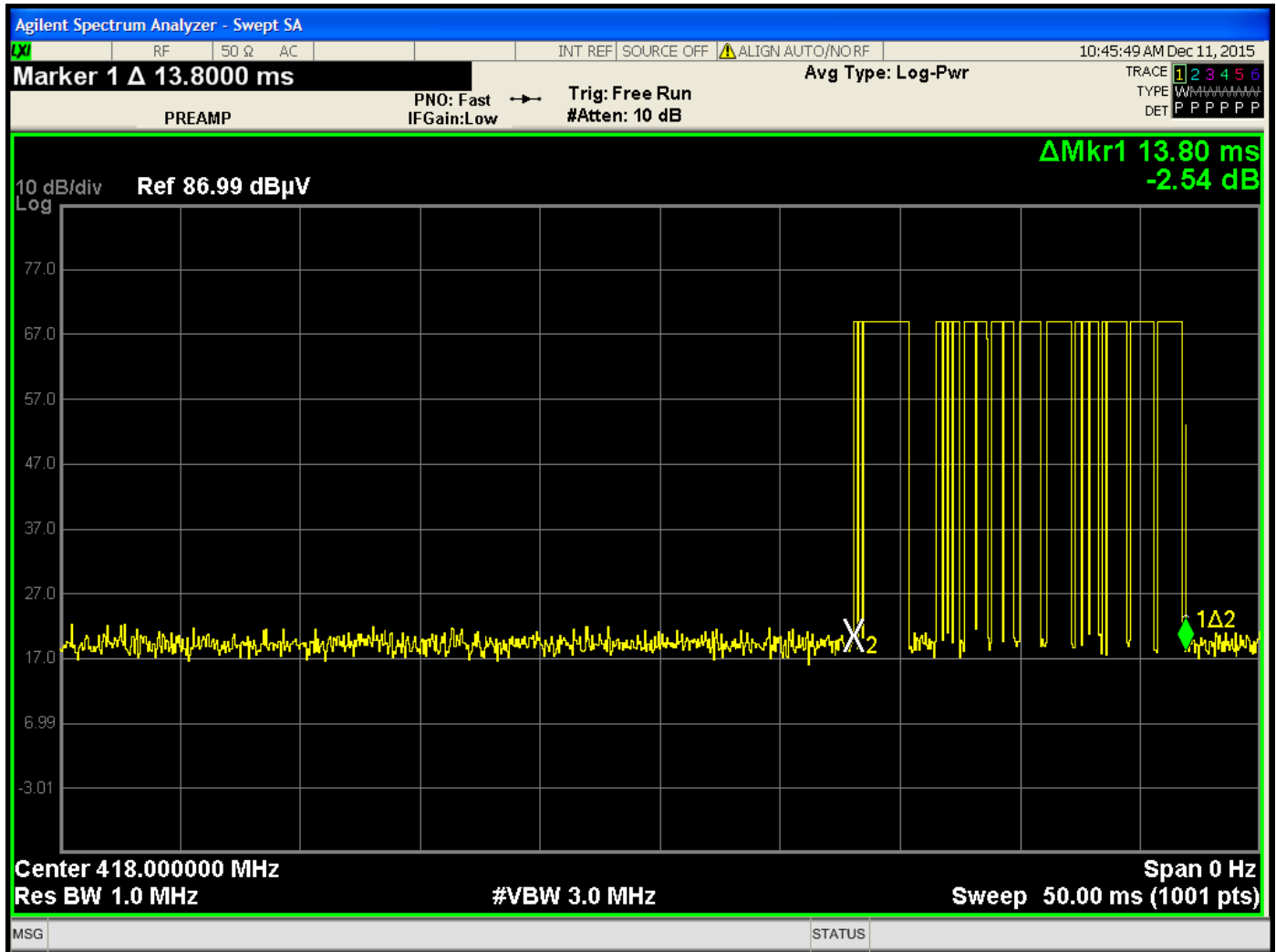


-20 dB of the Fundamental – 418 MHz

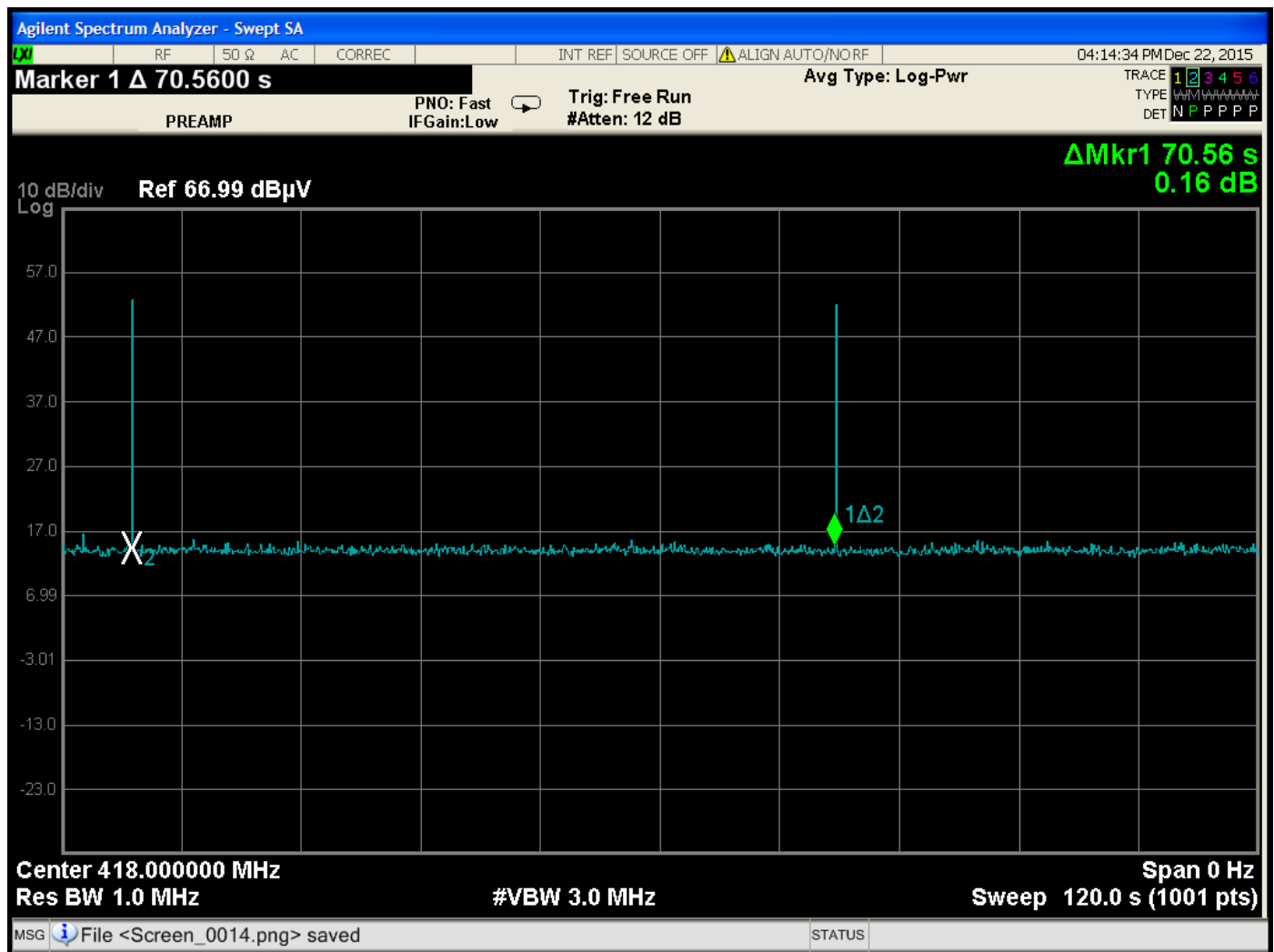
SUPERVISION TRANSMISSION TIME



DATA SHEETS



Time of One Pulse is 13.8 mS



The time between pulses is 70.56 seconds

Total transmissions in 1 hour = 3600 seconds / 70.56 seconds = 51

Total transmission time in 1 hour = 51 * 13.8 mS = 703.8 mS