

Honeywell

FCC / ISED Test Report

For

6150RFT4

Report #: 20302

FCC ID: CFS8DL6150RFT4

IC ID: 573F-6150RFT4

Report Completion Date: 2018-03-28

Prepared by and for:

Honeywell International Inc.

2 Corporate Center Dr.

Suite 100 PO Box 9040

Melville, NY 11747



Testing

NVLAP Lab Code: 600110

Document Introduction

Honeywell tested the above equipment in accordance with the requirements set forth in the listed standards. All indications of Pass/Fail in the report are opinions expressed by Honeywell based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

This document is a record of the FCC/ISED Test Report for Honeywell products. It demonstrates the data required to be analyzed to certify a product according to the requirements of the FCC & ISED.

The results in the report reflect only the model of the items under test unless noted otherwise. This document may not be altered or revised in any way unless done so by Honeywell and all revisions are duly noted in the revisions section. Any alterations of this document not carried out by Honeywell will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Test Report Revision History				
Revision	Prepared By	Reviewed By	Revision Detail	Release Date
---	M. Antola	A. Roussin	Original Release	2018-03-28

Report Authorization

Report Prepared By:



Michael Antola
Hardware Engineer
HBT RF & EMC Design
Honeywell International Inc.

Reviewed & Approved By:



Andrew Roussin
Hardware Engineer II
HBT RF & EMC Design
Honeywell International Inc.

Contents

Applicable Test Standards/Limits.....	5
Deviations from Test Methods	5
Facilities and Accreditation	5
Test Item Description	5
Worse-Case Configuration & Mode.....	6
Calibration & Measurement Uncertainty.....	7
Opinions / Interpretations	7
Test Summary.....	8
20dB Emission Bandwidth.....	9
99% Occupied Bandwidth.....	11
Radiated Emissions (Intentional)	13
Conducted Emissions (Mains).....	19
END OF REPORT.....	22

Applicable Test Standards/Limits

Test Standards/Limits	Result	Dates Tested
ANSI C63.10: 2013	Compliant	11/30/17-03/22/18
RSS-210, Issue 9, Annex A	Compliant	11/30/17-03/22/18
RSS-GEN, Issue 4	Compliant	11/30/17-03/22/18
CFR 47 Pt 15 Subpart C, Section 15.207/209	Compliant	11/30/17-03/22/18
CFR 47 Pt 15 Subpart C, Section 15.231	Compliant	11/30/17-03/22/18

Deviations from Test Methods

#	Deviation Description
0	None

Facilities and Accreditation

The test site and measurement facility used to collect data are located at 2 Corporate Center Dr., Melville, NY 11747, USA. Honeywell International is accredited by NVLAP, Laboratory Code 600110-0. The full scope of accreditation can be viewed at the NVLAP website.

Test Item Description

The 6150RF-T4 RF keypad is part of Ademco's wireless 5800 alarm system. The 6150RFT4 Keypad/Transceiver is a combination unit incorporating a normally-open relay output and the functions of:

- 6150 Fixed Addressable Keypad
- 5881M RF Receiver
- 5800TM Transmitter Module

The transmitter operates at 344.94MHz and contains two (2) integral trace antennas.

Worse-Case Configuration & Mode

Radiated emissions was performed with the EUT set to transmit at the channel with the highest output power as worst-case scenario. The EUT is intended to be installed as a wall-mount device, thus all testing was performed with the EUT orientated as such. See setup photos for details.

Test Sample Identification

Sample ID Number	Sample Serial Number	Date Received
MEL-330	Non-serialized production unit	08/17/2017

Calibration & Measurement Uncertainty

- Measuring Instrument Calibration – The measuring equipment utilized to perform the tests documented in this report have been calibrated in accordance with the manufacturer’s recommendations and is traceable to recognized national standards.
- Sample Calculation – Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

[i.e.] 37 dBuV/m = 30 dBuV + 18.5 dB/m + 0.5 dB – 12 dB

- Uncertainty - Figures are valid to a confidence level of 95%.

Test	Standard Uncertainty
Radiated Emissions (30-200MHz Horizontal)	+/- 5.05 dB
Radiated Emissions (30-200MHz Vertical)	+/- 5.28 dB
Radiated Emissions (200-1000MHz Horizontal)	+/- 10.21 dB
Radiated Emissions (200-1000MHz Vertical)	+/- 10.36 dB
Radiated Emissions (Above 1GHz)	+/- 9.70 dB
Conducted Emissions (150KHz-30MHz)	+/- 4.36 dB

Opinions / Interpretations

None

Test Summary

All tests described below are required, unless otherwise noted. Notes should be described in detail in the "Additional notes" section.

#	Test Description	Status
1	20 dB Emission Bandwidth	PASS
2	99% Occupied Bandwidth	PASS
3	Radiated Emissions (Intentional)	PASS
4	Conducted Emissions (Mains)	PASS

20dB Emission Bandwidth

Test Description

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

Test Limit

Reference	Limit
CFR 47 Subpart C 15.231 CFR 47 Subpart C 15.249	< 0.25% of the Center Frequency

For this device's fundamental frequency of 344.94 MHz , the limit is **862 KHz**.

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	03/14/2018	21.6	11.6	997	P

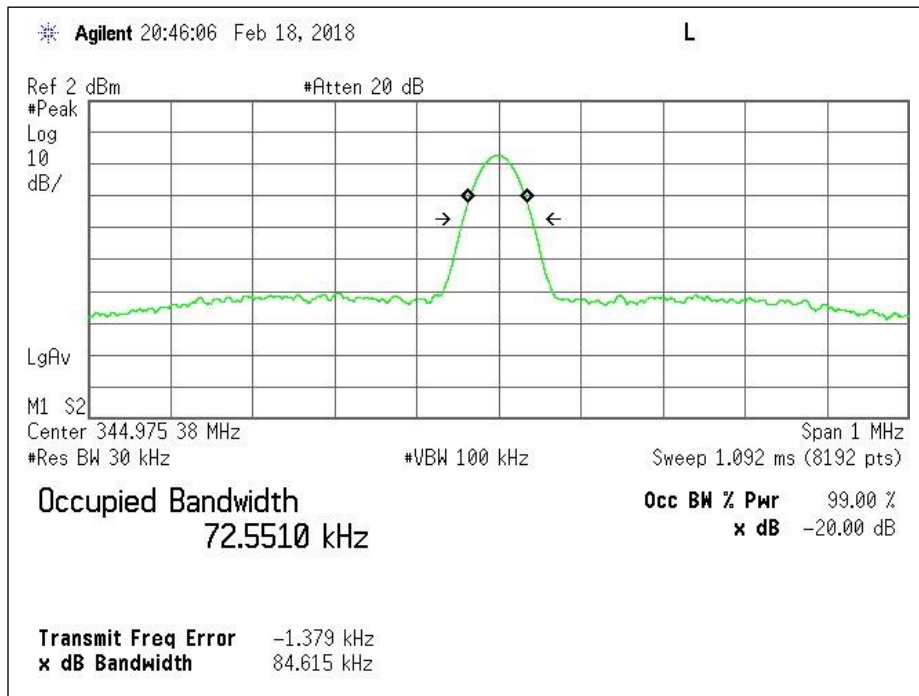
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/2017	06/06/2019
Environmental Meter	11533	A070144	Extech Instruments	SD700	08/21/2017	08/21/2020

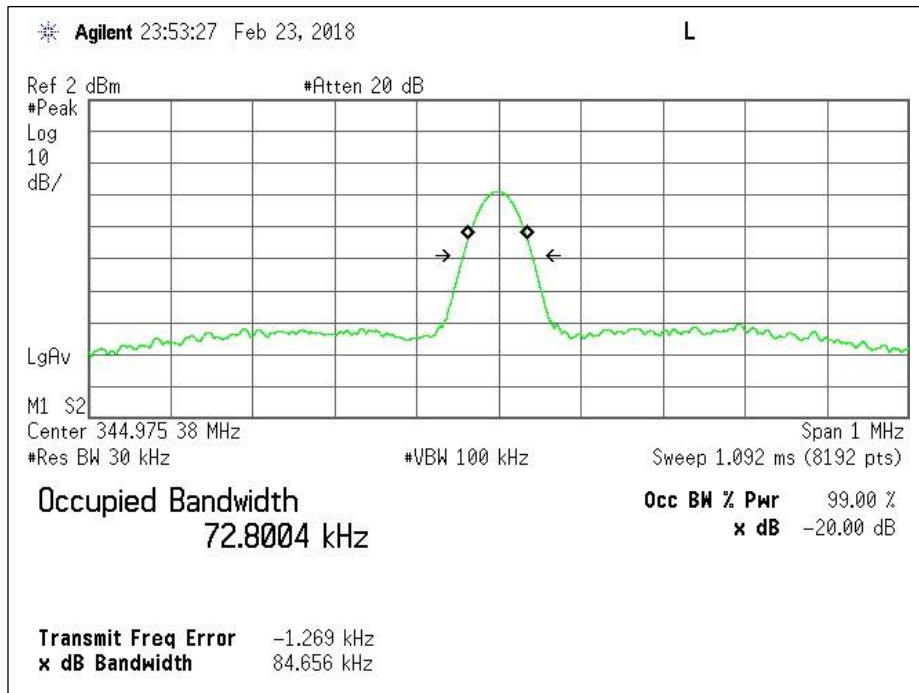
Test Results

Frequency (MHz)	20dB Bandwidth (in kHz)	
	Side Antenna	Bottom Antenna
344.94	84.615	84.656

20dB Bandwidth



Side Antenna: Plot



Bottom Antenna: Plot

99% Occupied Bandwidth

Test Description

The emission bandwidth (x dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated x dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

Test Criteria

Reference	Limit
RSS-GEN, Section 6.6	N/A

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	03/14/2018	21.6	11.6	997	P

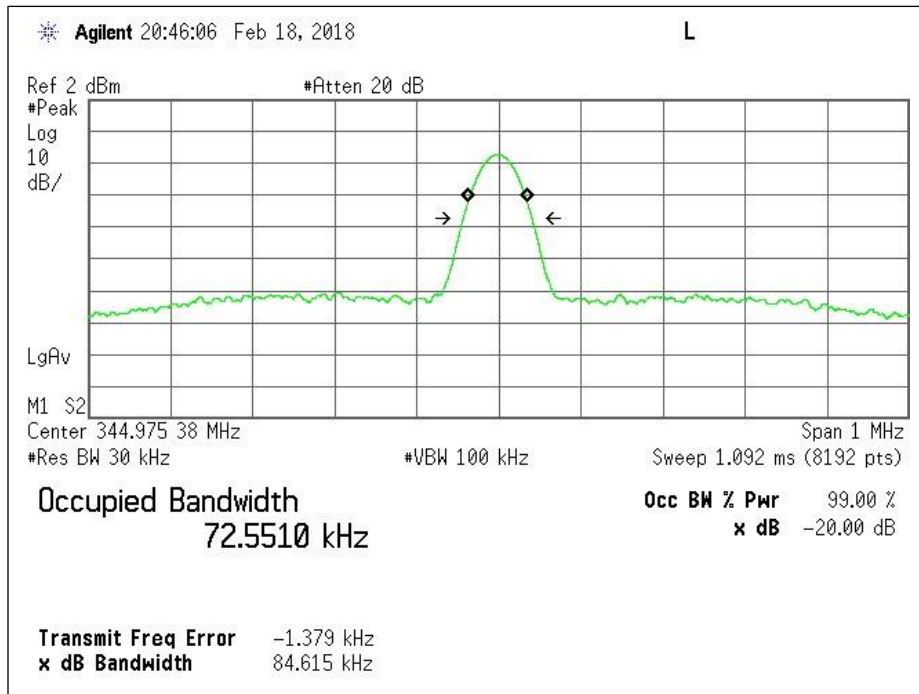
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/2017	06/06/2019
Environmental Meter	11533	A070144	Extech Instruments	SD700	08/21/2017	08/21/2020

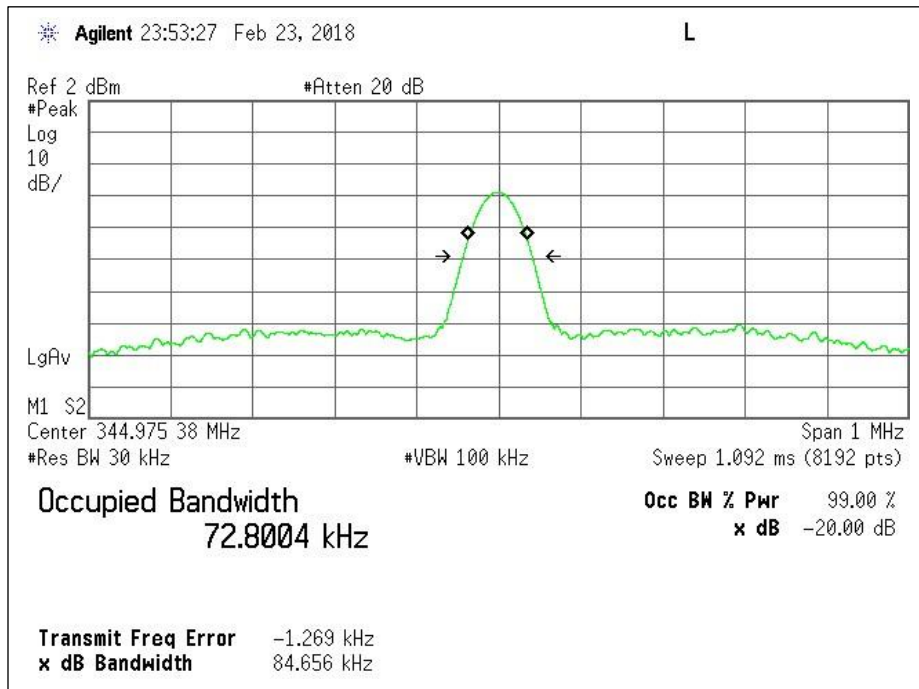
Test Results

Frequency (MHz)	99% Bandwidth (in kHz)	
	Side Antenna	Bottom Antenna
344.94	72.551	72.8004

99% Occupied Bandwidth



Side Antenna: Plot



Bottom Antenna: Plot

Radiated Emissions (Intentional)

Test Description

Intentional Radiator Radiated Emissions are a test of the emissions, and harmonics on the EUT. The EUT is positioned to get the maximum emissions after a series of prescan measurements. The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1 GHz measurements and 1.5 m above the ground plane for above 1 GHz measurements. The antenna to EUT distance is 3 meters. For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 1 MHz for peak measurements and as applicable for average measurements. The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

Test Criteria

Reference	Limit		
	Frequency Range (MHz)	Field Strength Limit (uV/m)	Measurement distance (meters)
CFR 47 Subpart C, 15.205 CFR 47 Subpart C, 15.209 RSS-GEN	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100**	3
	88-216	150**	3
	216-960	200**	3
	Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

Reference	Limit		
	Fundamental Frequency (MHz)	Field strength of fundamental (uV/m) at 3M	Field strength of spurious emissions (uV/m) at 3M
CFR 47 Subpart C, 15.231 RSS-210, Annex A	40.66-40.70	2250	225
	70-130	1250	125
	130-174	¹ 1250 to 3750	¹ 125 to 375
	174-260	3750	375
	260-470	¹ 3750 to 12500	¹ 375 to 1250
	Above 470	12500	1250

¹Linear interpolation

Test Information

Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
JB	RF Chamber/OATS	11/30/17-03/22/18	5	73	1023	P

Equipment List

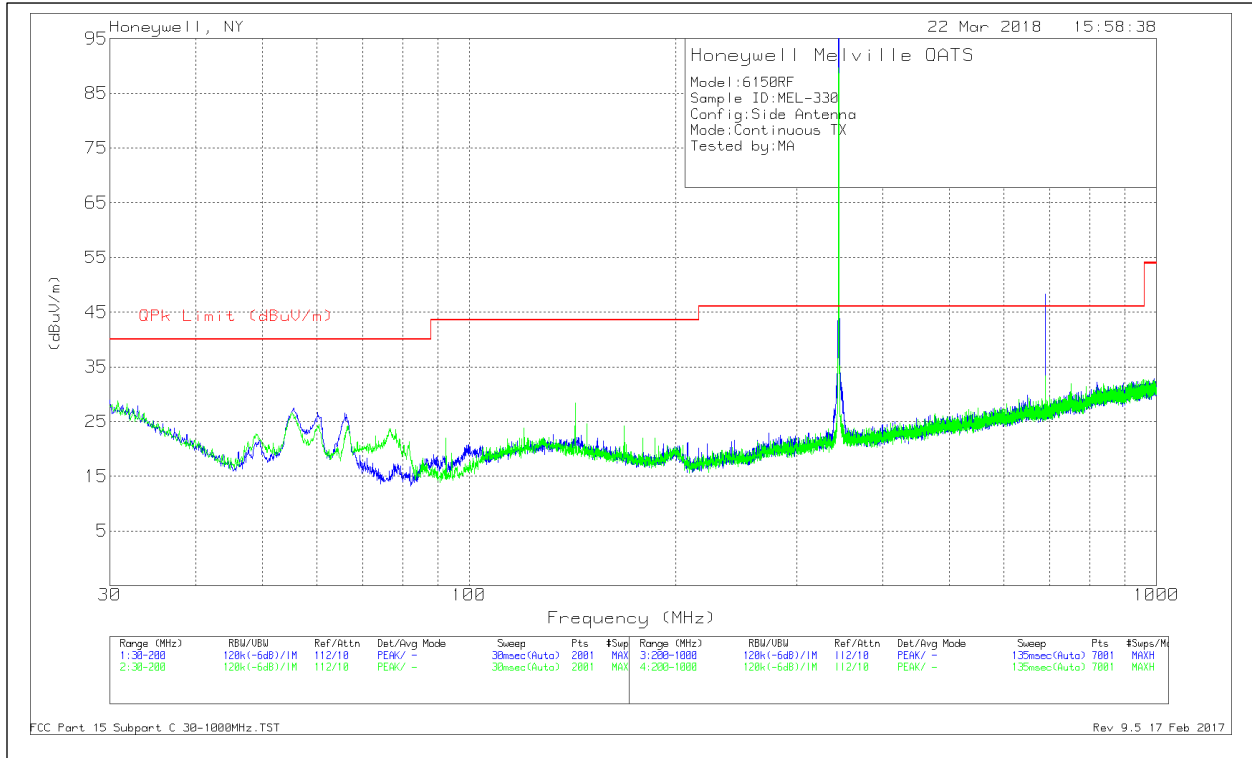
Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
RF Chamber						
Spectrum Analyzer	11496	100303	Rohde & Schwarz	FSU26	04/10/17	04/10/18
Bilog Antenna (30MHz-5GHz)	11311	A022406	Sunol	JB5	02/01/18	02/01/19
Horn Antenna (1-18GHz)	2319	2317	EMCO	3115	01/10/18	01/10/19
Preamp (10-4200MHz)	11537	1603006	Mini Circuits	TVA-11-422	N/A	N/A
Preamp (1-18GHz)	11539	160362	Amplical	AMP1G18-35	N/A	N/A
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11548	A.078188	Extech Instruments	SD700	04/24/17	04/24/18
OATS						
Spectrum Analyzer	11545	103125	Rohde & Schwarz	FSW26	02/14/17	02/14/08
Bilog Antenna (30MHz-6GHz)	11534	A012816	Sunol	JB6	03/09/17	03/09/18
Horn Antenna (1-18GHz)	2973	3127	EMCO	RGA-60	02/03/07	02/03/18
Preamp (800MHz-21GHz)	11538	233701631	Mini Circuits	ZVA-213-S+	N/A	N/A
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11533	A070144	Extech Instruments	SD700	08/21/17	08/21/20

Note: Testing was performed using equipment that was within calibration at the time of test.

Test Results

Fundamental / Harmonics / Spurious Emissions

Below 1GHz



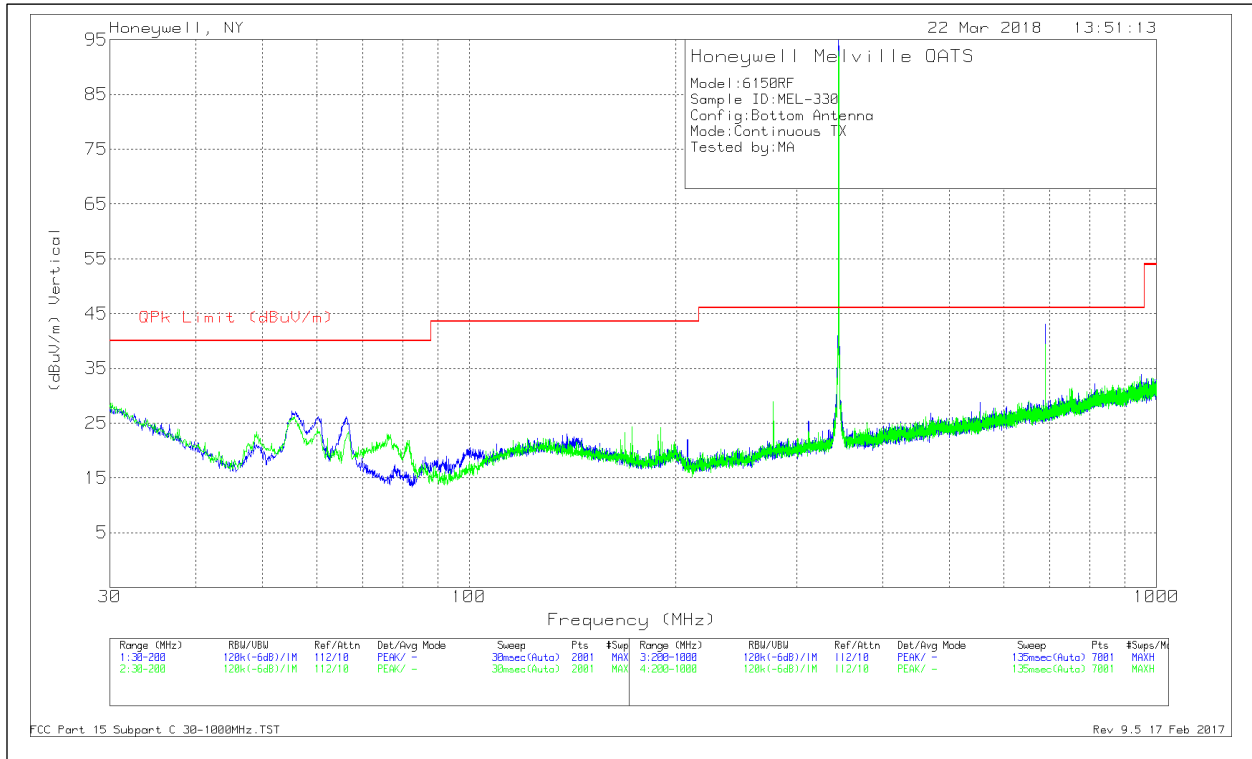
Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB6 [dB/m]	Cable 1 [dB]	Corrected Reading (dBuV/m)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
344.976	66.66	Pk	19.2	3.7	89.56	97.3	-7.74	360	101	H
344.976	66.48	Pk	19.2	3.7	89.38	97.3	-7.92	81	117	V
689.9441	16.1	Pk	25.5	6.7	48.3	77.3	-29.4	157	100	H
689.9441	1.14	Pk	25.5	6.7	33.34	77.3	-43.96	54	136	V

Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB6 [dB/m]	Cable 1 [dB]	DCF [dB]	Corrected Reading (dBuV/m)	Av Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
344.976	66.66	Av	19.2	3.7	-14.52	75.04	77.3	-2.26	360	101	H
344.976	66.48	Av	19.2	3.7	-14.52	74.86	77.3	-2.44	81	117	V
689.9441	16.1	Av	25.5	6.7	-14.52	33.78	57.3	-23.52	157	100	H
689.9441	1.14	Av	25.5	6.7	-14.52	18.82	57.3	-38.48	54	136	V

Pk - Peak detector

Av - Average = Peak + DCF (Duty Cycle Correction Factor); DC = 18.8%

Side Antenna - Plot/Data



Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB6 [dB/m]	Cable 1 [dB]	Corrected Reading (dBuV/m)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
344.976	67.01	Pk	19.2	3.7	89.91	97.3	-7.39	172	104	H
344.976	67.89	Pk	19.2	3.7	90.79	97.3	-6.51	71	137	V
689.9441	10.88	Pk	25.5	6.7	43.08	77.3	-34.22	157	100	H
689.9441	7.15	Pk	25.5	6.7	39.35	77.3	-37.95	54	136	V

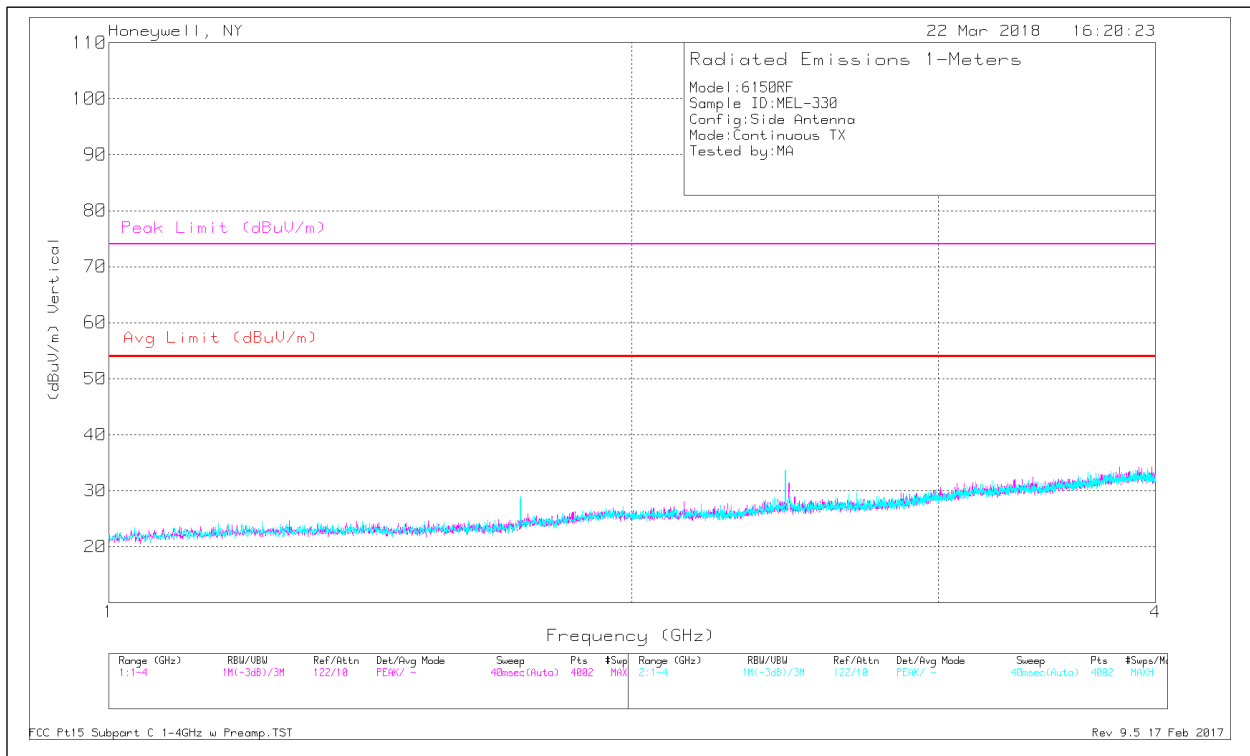
Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB6 [dB/m]	Cable 1 [dB]	DCF [dB]	Corrected Reading (dBuV/m)	Av Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
344.976	67.01	Av	19.2	3.7	-14.52	75.39	77.3	-1.91	157	100	H
344.976	67.89	Av	19.2	3.7	-14.52	76.27	77.3	-1.03	54	136	V
689.9441	10.88	Av	25.5	6.7	-14.52	28.56	57.3	-28.74	157	100	H
689.9441	7.15	Av	25.5	6.7	-14.52	24.83	57.3	-32.47	54	136	V

Pk - Peak detector

Av - Average = Peak + DCF (Duty Cycle Correction Factor); DC = 18.8%

Bottom Antenna - Plot/Data

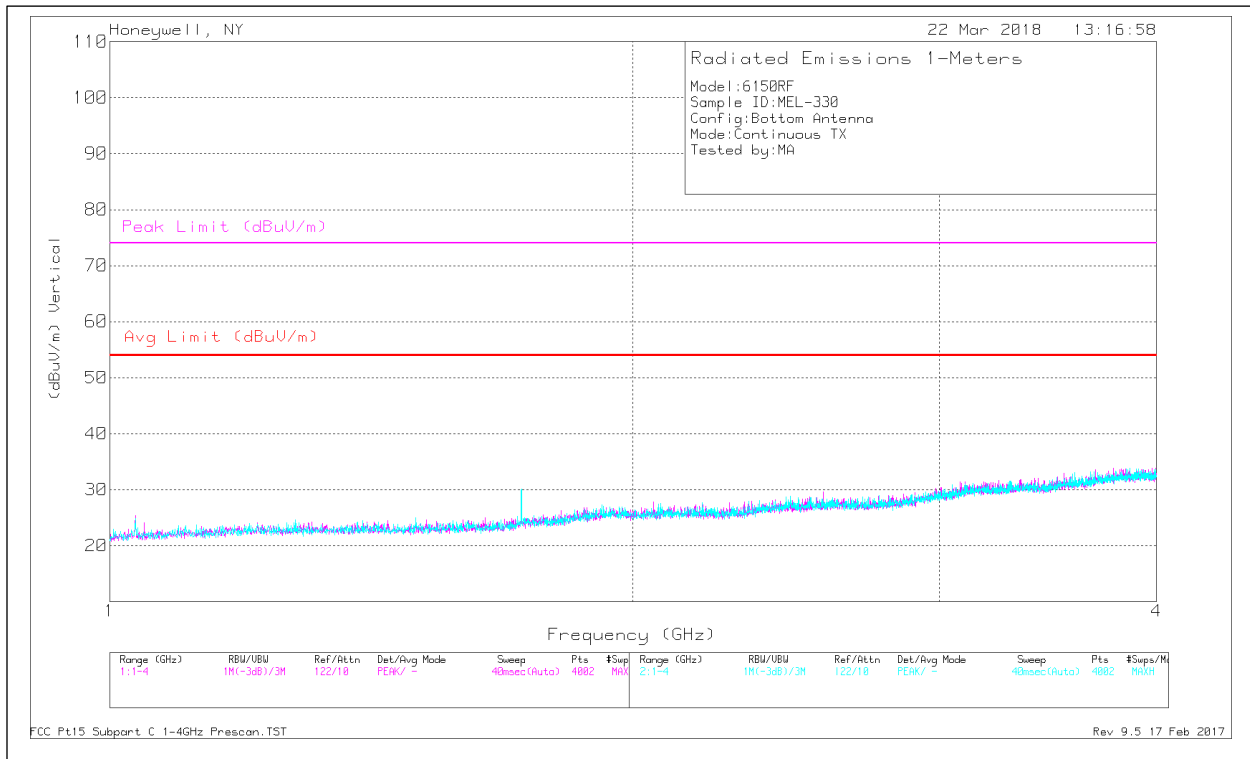
Above 1GHz



Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m] Horn#1	Above 1G Preamp(miniC)	SMA7 CF	SMA6 CF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.033	46.05	Pk	24	-26.7	1.7	.8	45.85	54	-8.15	74	-28.15	5	342	H
* 1.38	41.48	Pk	25.2	-26.7	2	.9	42.88	54	-11.12	74	-31.12	121	187	H
1.723	38.59	Pk	26.5	-26.8	2.2	1	41.49	54	-12.51	74	-32.51	73	164	H
2.07	36.93	Pk	28	-27	2.4	1.1	41.43	54	-12.57	74	-32.57	215	125	H
2.415	46.92	Pk	28.6	-27	2.6	1.1	52.22	54	-1.78	74	-21.78	20	390	H
* 2.76	36.77	Pk	29.4	-27	2.8	1.2	43.17	54	-10.83	74	-30.83	14	263	H
3.105	39.32	Pk	30.8	-27	3	1.3	47.42	54	-6.58	74	-26.58	313	304	H
3.45	34.4	Pk	31.2	-27	3.1	1.4	43.1	54	-10.9	74	-30.9	322	352	H
* 1.035	38.51	Pk	24.1	-26.7	1.7	.8	38.41	54	-15.59	74	-35.59	12	182	V
* 1.38	44.85	Pk	25.2	-26.7	2	.9	46.25	54	-7.75	74	-27.75	180	190	V
1.724	44.03	Pk	26.5	-26.8	2.2	1	46.93	54	-7.07	74	-27.07	140	328	V
2.07	35.67	Pk	28	-27	2.4	1.1	40.17	54	-13.83	74	-33.83	142	115	V
2.414	39.87	Pk	28.6	-27	2.6	1.1	45.17	54	-8.83	74	-28.83	99	119	V
* 2.76	36.55	Pk	29.4	-27	2.8	1.2	42.95	54	-11.05	74	-31.05	275	182	V
3.105	36.6	Pk	30.8	-27	3	1.3	44.7	54	-9.3	74	-29.3	350	362	V
3.449	33.97	Pk	31.2	-27	3.1	1.4	42.67	54	-11.33	74	-31.33	195	331	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector

Side Antenna – Plot/Data



Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m] Horn#1	Above 1G Preamp(miniC)	SMA7 CF	SMA6 CF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.035	43.2	Pk	24.1	-26.7	1.7	.8	43.1	54	-10.9	74	-30.9	305	315	H
* 1.38	38.17	Pk	25.2	-26.7	2	.9	39.57	54	-14.43	74	-34.43	182	261	H
1.725	34.41	Pk	26.5	-26.8	2.2	1	37.31	54	-16.69	74	-36.69	23	182	H
2.07	35.05	Pk	28	-27	2.4	1.1	39.55	54	-14.45	74	-34.45	55	368	H
2.415	40.6	Pk	28.6	-27	2.6	1.1	45.9	54	-8.1	74	-28.1	38	246	H
* 2.76	37.24	Pk	29.4	-27	2.8	1.2	43.64	54	-10.36	74	-30.36	208	133	H
3.105	39.1	Pk	30.8	-27	3	1.3	47.2	54	-6.8	74	-26.8	181	211	H
3.448	33.28	Pk	31.2	-27	3.1	1.4	41.98	54	-12.02	74	-32.02	88	225	H
* 1.035	40.05	Pk	24.1	-26.7	1.7	.8	39.95	54	-14.05	74	-34.05	341	366	V
* 1.38	44.44	Pk	25.2	-26.7	2	.9	45.84	54	-8.16	74	-28.16	201	159	V
1.725	30.56	Pk	26.5	-26.8	2.2	1	33.46	54	-20.54	74	-40.54	46	253	V
2.07	36.19	Pk	28	-27	2.4	1.1	40.69	54	-13.31	74	-33.31	265	115	V
2.414	40.91	Pk	28.6	-27	2.6	1.1	46.21	54	-7.79	74	-27.79	279	290	V
* 2.76	37.22	Pk	29.4	-27	2.8	1.2	43.62	54	-10.38	74	-30.38	200	286	V
3.105	36.27	Pk	30.8	-27	3	1.3	44.37	54	-9.63	74	-29.63	339	173	V
3.451	34.07	Pk	31.2	-27	3.1	1.4	42.77	54	-11.23	74	-31.23	157	192	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector

Bottom Antenna – Plot/Data

Conducted Emissions (Mains)

Test Description

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10 / C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorder for both NEUTRAL and HOT lines.

Test Criteria

Reference	Limit (dBuV)		
	Frequency Range (MHz)	Quasi-Peak	Average
CFR 47 Subpart C, 15.207 RSS-GEN	0.15-0.5	66 to 56	56 to 46
CFR 47 Subpart B, 15.107 ICES-003	0.5-5	56	46
	5-30	60	50

Test Information

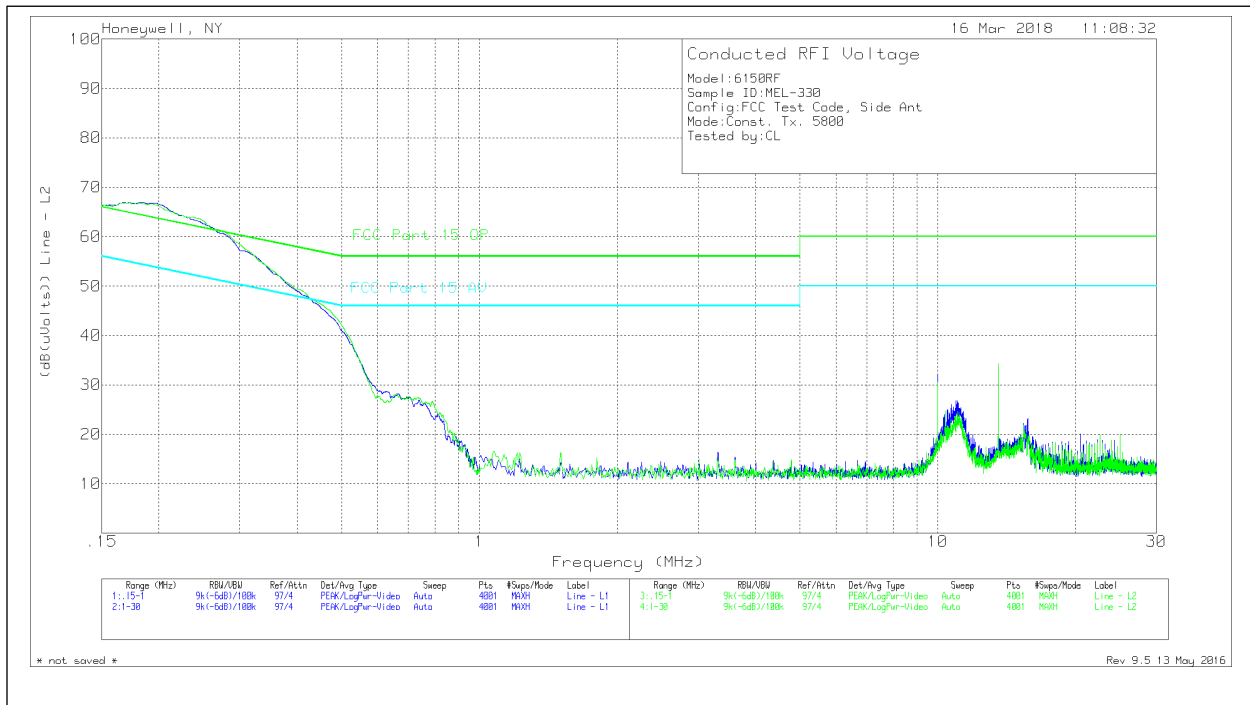
Tester	Test Location	Date	Temperature (°C)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	3/16/18-3/19/18	23	14.6	1010	P

Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11556	MY49430802	Keysight	N9030A (PXA)	12/19/17	12/19/18
LISN	11527	241259	Com-Power	LIN-120A	1/10/18	1/10/19
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11548	A078188	Extech Instruments	SD700	4/24/17	4/24/18

Test Results

Intentional Mode

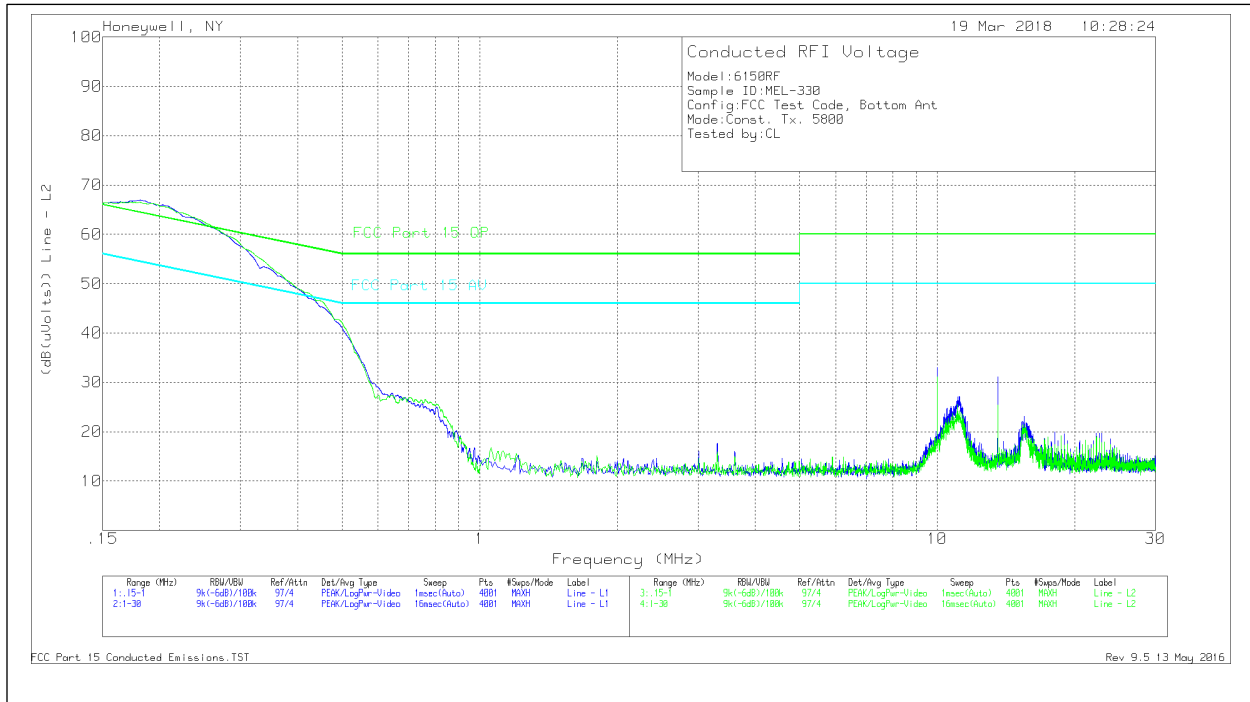


Frequency (MHz)	Meter Reading (dBuV)	Det	Gain/Loss [dB] LISN1	CDE Cable #1	Corrected Reading (dB(uVolts))	FCC Part 15 QP	Margin (dB)	FCC Part 15 AV	Margin (dB)	Line
.81179	14.2	Pk	9.9	0	24.1	56	-31.9	46	-21.9	L1
9.99725	21.99	Pk	10	.2	32.19	60	-27.81	50	-17.81	L1
11.01225	16.65	Pk	10	.2	26.85	60	-33.15	50	-23.15	L1
13.557	23.78	Pk	10.1	.2	34.08	60	-25.92	50	-15.92	L1
.19183	33.26	Qp	10.3	.1	43.66	63.96	-20.3	53.95	-10.29	L1
.3531	19.78	Qp	10.1	0	29.88	58.89	-29.01	48.89	-19.01	L1
.81178	-4.03	Qp	9.9	0	5.87	56	-50.13	46	-40.13	L1

Frequency (MHz)	Meter Reading (dBuV)	Det	Gain/Loss [dB] LISN1	CDE Cable #1	Corrected Reading (dB(uVolts))	FCC Part 15 QP	Margin (dB)	FCC Part 15 AV	Margin (dB)	Line
.7841	16.06	Pk	9.9	0	25.96	56	-30.04	46	-20.04	L2
9.99725	20.24	Pk	10	.2	30.44	60	-29.56	50	-19.56	L2
11.0485	14.46	Pk	10	.2	24.66	60	-35.34	50	-25.34	L2
13.557	23.95	Pk	10.1	.2	34.25	60	-25.75	50	-15.75	L2
.19923	32.8	Qp	10.3	0	43.1	63.64	-20.54	53.95	-10.85	L2
.38074	17.65	Qp	10	0	27.65	58.26	-30.61	48.26	-20.61	L2
.78421	-2.12	Qp	9.9	0	7.78	56	-48.22	46	-38.22	L2

Pk – Peak Detector
 Qp - Quasi-Peak detector

Side Antenna – Plot/Data



Frequency (MHz)	Meter Reading (dBuV)	Det	Gain/Loss [dB] LISN1	CDE Cable #1	Corrected Reading (dB(uVolts))	FCC Part 15 QP	Margin (dB)	FCC Part 15 AV	Margin (dB)	Line
9.99725	22.79	Pk	10	.2	32.99	60	-27.01	50	-17.01	L1
11.09925	16.79	Pk	10	.2	26.99	60	-33.01	50	-23.01	L1
13.557	20.81	Pk	10.1	.2	31.11	60	-28.89	50	-18.89	L1
.17181	32.67	Qp	10.5	.1	43.27	64.87	-21.6	54.88	-11.61	L1
.24324	29.21	Qp	10.2	.1	39.51	61.98	-22.47	51.98	-12.47	L1
.41754	14.47	Qp	10	0	24.47	57.5	-33.03	48.5	-24.03	L1

Frequency (MHz)	Meter Reading (dBuV)	Det	Gain/Loss [dB] LISN1	CDE Cable #1	Corrected Reading (dB(uVolts))	FCC Part 15 QP	Margin (dB)	FCC Part 15 AV	Margin (dB)	Line
9.99725	20.88	Pk	10	.2	31.08	60	-28.92	50	-18.92	L2
11.0485	15.37	Pk	10	.2	25.57	60	-34.43	50	-24.43	L2
13.557	15.16	Pk	10.1	.2	25.46	60	-34.54	50	-24.54	L2
.18139	32.5	Qp	10.4	.1	43	64.42	-21.42	54.42	-11.42	L2
.24856	29.22	Qp	10.2	.1	39.52	61.81	-22.29	51.8	-12.28	L2
.41776	15.02	Qp	10	0	25.02	57.49	-32.47	47.49	-22.47	L2

Pk - Peak detector
 Qp - Quasi-Peak detector

Bottom Antenna – Plot/Data

END OF REPORT