



CERTIFICATION TEST REPORT

Report Number: R13172472-E1

Applicant : Humanscale Corporation
1114 6th Ave, 15th Floor
New York, NY 10036, USA

Model : N

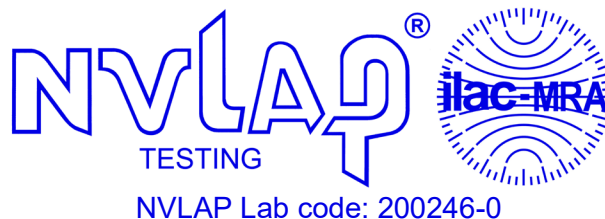
FCC ID : 2AMDTWCDB

EUT Description : Nova Series Model N with Wireless Charging Desktop Base

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C

Date Of Issue:
2020-06-10

Prepared by:
UL LLC
12 Laboratory Dr.
Research Triangle Park, NC 27709 U.S.A.
TEL: (919) 549-1400



REVISION HISTORY

<u>Ver.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
1	2020-06-10	Initial Issue	Brian T. Kiewra

TABLE OF CONTENTS

REVISION HISTORY	2
1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. CALIBRATION AND UNCERTAINTY	6
4.1. <i>MEASURING INSTRUMENT CALIBRATION</i>	<i>6</i>
4.2. <i>SAMPLE CALCULATION</i>	<i>6</i>
4.3. <i>MEASUREMENT UNCERTAINTY.....</i>	<i>6</i>
5. EQUIPMENT UNDER TEST.....	7
5.1. <i>DESCRIPTION OF EUT</i>	<i>7</i>
5.2. <i>MAXIMUM ELECTRIC FIELD.....</i>	<i>7</i>
5.3. <i>SOFTWARE AND FIRMWARE.....</i>	<i>7</i>
5.4. <i>WORST-CASE CONFIGURATION AND MODE.....</i>	<i>7</i>
5.5. <i>DESCRIPTION OF TEST SETUP.....</i>	<i>8</i>
6. TEST AND MEASUREMENT EQUIPMENT	9
7. RADIATED EMISSION TEST RESULTS.....	10
7.1. <i>LIMITS AND PROCEDURE.....</i>	<i>10</i>
7.2. <i>FCC TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz...11</i>	<i>11</i>
7.2.1. <i>NO LOAD</i>	<i>11</i>
7.2.2. <i>MAX OFFSET</i>	<i>12</i>
7.3. <i>FCC TX SPURIOUS EMISSION 30 TO 1000 MHz</i>	<i>13</i>
7.3.1. <i>NO LOAD</i>	<i>13</i>
7.3.1. <i>MAX OFFSET.....</i>	<i>15</i>
8. AC MAINS LINE CONDUCTED EMISSIONS.....	17
8.1.1. <i>NO LOAD</i>	<i>18</i>
8.1.2. <i>MAX OFFSET.....</i>	<i>20</i>
9. SETUP PHOTOS.....	22
END OF TEST REPORT	22

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Humanscale Corporation
1114 6th Ave, 15th Floor
New York, NY 10036, USA

EUT DESCRIPTION: Nova Series Model N with Wireless Charging Desktop Base

MODEL: N

SERIAL NUMBER: Non-Serialized

DATE TESTED: 2020-01-17

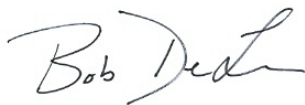
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Compliant

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.


This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC 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, or any agency of the U.S. government.

Approved & Released
For UL LLC By:



Bob Delisi
Principal Engineer
UL – Consumer Technology Division

Prepared By:



Brian T. Kiewra
Project Engineer
UL – Consumer Technology Division

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, and FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 12 Laboratory Drive, Research Triangle Park, NC 27709, USA and 2800 Perimeter Park Dr., Suite B, Morrisville, NC 27560, USA. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

12 Laboratory Dr.	2800 Perimeter Park Dr.
<input type="checkbox"/> Chamber A RTP	<input type="checkbox"/> North Chamber
<input type="checkbox"/> Chamber C RTP	<input checked="" type="checkbox"/> South Chamber

The above test sites and facilities are covered under FCC Test Firm Registration # 703469.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\text{Final Voltage (dBuV)} = \text{Measured Voltage (dBuV)} + \text{Cable Loss (dB)} + \text{Limiter Factor (dB)} + \text{LISN Insertion Loss.}$$

$$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radio Frequency (Spectrum Analyzer)	141.2 Hz
Occupied Channel Bandwidth	2.00%
RF output power, conducted	1.3 dB (PK) 0.45 dB (AV)
RF output power, radiated (SAC)	4.52 dB
Power Spectral Density, conducted	2.47 dB
Unwanted Emissions, conducted	2.50 dB
All emissions, radiated	4.88 dB
Conducted Emissions (0.150-30MHz) - LISN	3.07 dB
Temperature	2.26°C
Humidity	6.79%
DC Supply voltages	1.70%
Time	3.39%

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a portable LED luminaire with WPC compatible wireless inductive charging (111-205kHz) and 2 USB ports for external device power in its base. This report covers the WPT radio only, additional functions of EUT covered in other reports.

5.2. MAXIMUM ELECTRIC FIELD

The transmitter has maximum peak radiated electric strength as follows:

Fundamental Frequency (KHz)	Mode	E field (300m distance) FCC (dBuV/m)
122.14	Load at Max Offset	12.79
141.42	No Load	3.43

5.3. SOFTWARE AND FIRMWARE

The firmware version installed in the EUT during testing was v3.49.

5.4. WORST-CASE CONFIGURATION AND MODE

The EUT is a portable LED luminaire with WPC compatible wireless inductive charging (111-205kHz) and 2 USB ports for external device power in its base. The following modes were investigated:

Mode	Descriptions
Load at min. distance	EUT in charging mode with load on pad at min. distance.
Load at max. distance	EUT in charging mode with load on pad at max. distance and still maintain charging mode.
Load at max. offset	EUT in charging mode with load at min. distance and max. offset and still maintain charging mode.
No Load	EUT in charging mode without a load

The EUT was connected to a Nova XL luminaire with the luminaire set to maximum brightness. Both of the USB ports were connected to resistor loads.

The EUT was tested as no load and worst-case operation modes. For worst-case operational mode, load at max. offset for the inductive charger was found to be worst-case.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
USB Resistive load	Humanscale	NA (for testing purposes only)	NA	NA
Qi Resistive Load	Richtek	NA (for testing purposes only)	NA	NA
Power Supply	Xing Yuan Elec. Co.	XY36S-2401500Q-UD	NA	NA

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	1	1	Barrel	2 conductor wire	<3	Powers charger
2	1	1	Barrel	2 conductor wire	<1	Powers light

SETUP DIAGRAM

Please refer to R13172472-EP1 for setup diagrams

6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - South Chamber)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
0.009-30MHz (Loop Ant.)					
AT0079	Active Loop Antenna	ETS-Lindgren	6502	2019-08-08	2020-08-08
30-1000 MHz					
AT0074	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2019-07-16	2020-07-16
Gain-Loss Chains					
S-SAC01	Gain-loss string: 0.009-30MHz	Various	Various	2019-05-02	2020-05-02
S-SAC02	Gain-loss string: 25-1000MHz	Various	Various	2019-05-02	2020-05-02
Receiver & Software					
SA0025	Spectrum Analyzer	Agilent	N9030A	2019-02-28	2020-02-28
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
Additional Equipment used					
s/n 181474409	Environmental Meter	Fisher Scientific	15-077-963	2018-07-27	2020-07-27

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL087	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3W06143-240	2019-05-29	2020-05-29
s/n 161016511	Environmental Meter	Fisher Scientific	15-077-963	2019-06-17	2020-06-17
LISN001	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50/250-25-2-01	2019-08-19	2020-08-19
75141 (PRE0101521)	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2019-08-20	2020-08-20
TL001	Transient Limiter, 0.009-30MHz	Com-Power	LIT-930A	2019-05-29	2020-05-29
PS215	AC Power Source	Elgar	CW2501M (s/n 1523A02397)	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA

7. RADIATED EMISSION TEST RESULTS

7.1. LIMITS AND PROCEDURE

LIMIT

FCC §15.209 (a)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (m)
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 to 216	150	3
216 to 960	200	3
Above 960 MHz	500	3

Note: The lower limit shall apply at the transition frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurements below 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak and/or quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak, average and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak, average and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average.

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

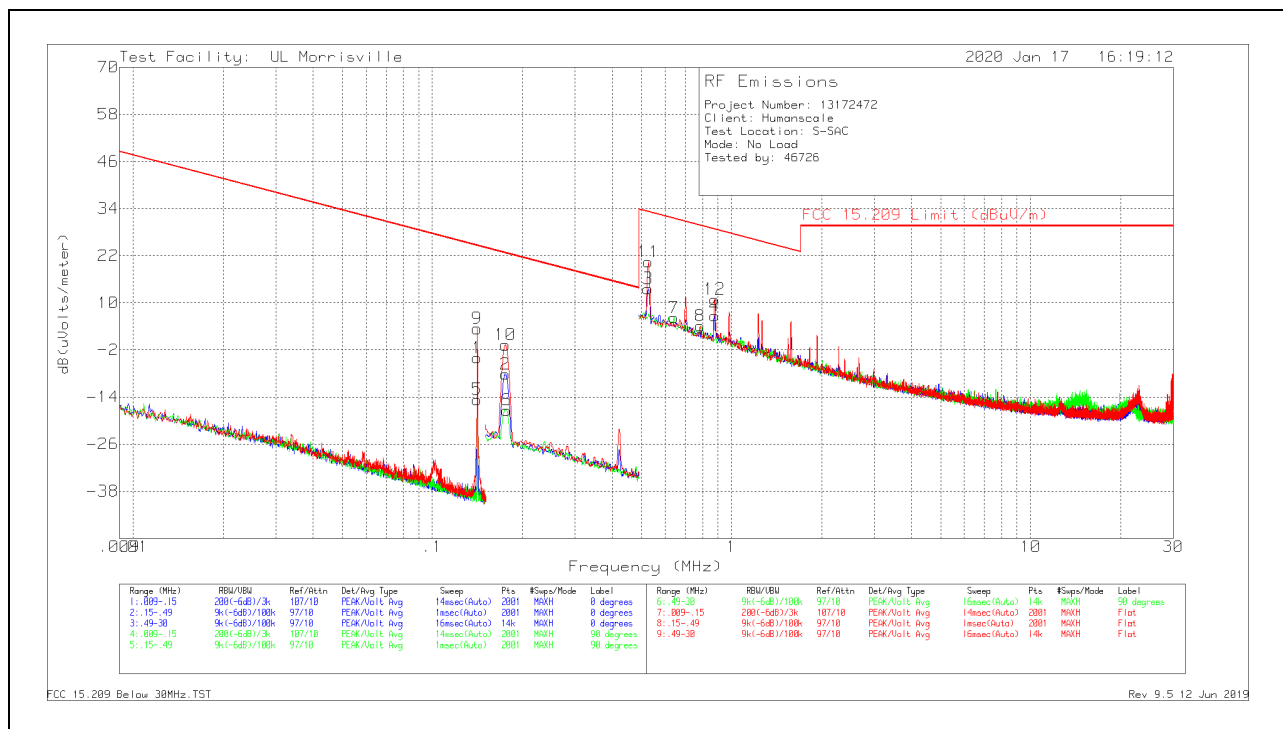
KDB 414788 OATS and Chamber Correlation Justification

OATs and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

7.2. FCC TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz

Note: All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40*Log (test distance / specification distance).

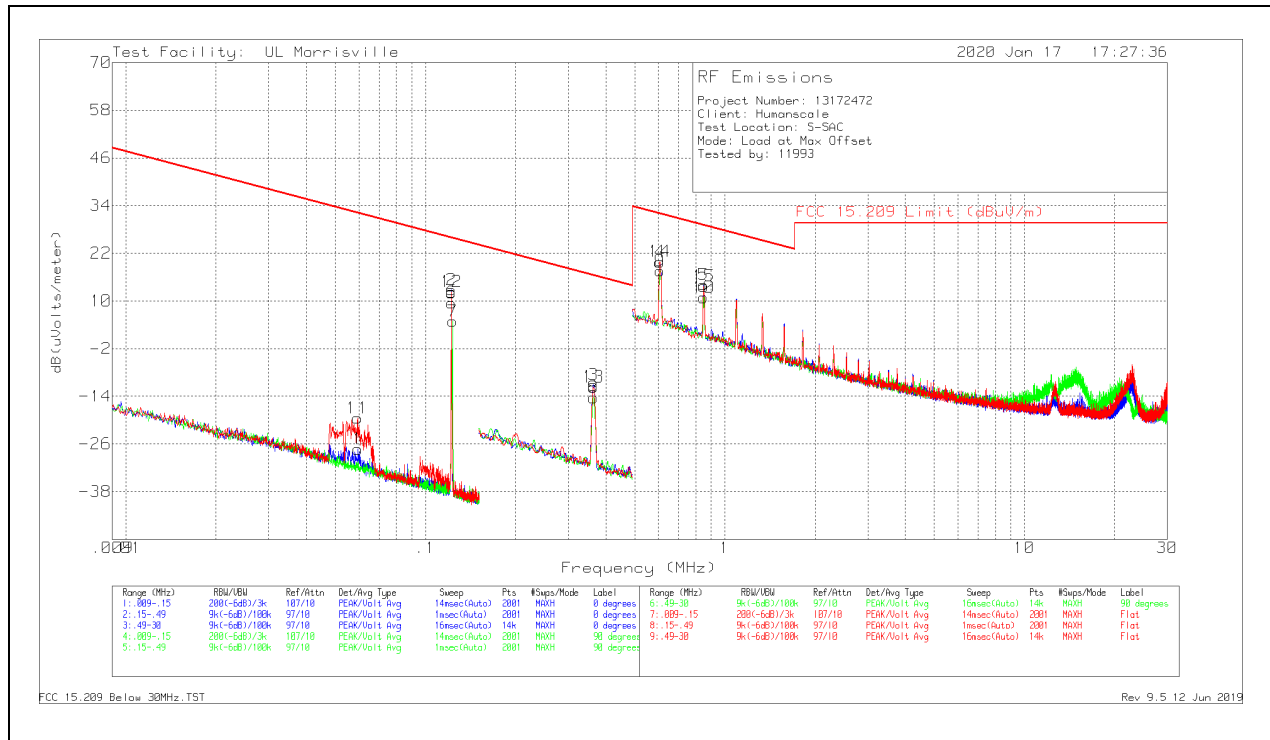
7.2.1. NO LOAD



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0079 AF (dB/m)	Cbl (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	FCC 15.209 AV/QP Limit (dBuV/m)	FCC 15.209 PK Limit (dBuV/m)	Worst-Case Margin (dB)	Azimuth (Degs)	Antenna Face
1	.14134	64.85	Pk	11	.1	-80	-4.05	24.6	44.6	-28.65	0-360	On
5	.14134	54.25	Pk	11	.1	-80	-14.65	24.6	44.6	-39.25	0-360	Off
9	.14142	72.33	Pk	11	.1	-80	3.43	24.59	44.59	-21.16	0-360	Flat
2	.17542	60.75	Pk	11	.1	-80	-8.15	22.72	42.72	-30.87	0-360	On
10	.17542	68.18	Pk	11	.1	-80	-.72	22.72	42.72	-23.44	0-360	Flat
6	.17737	51.55	Pk	11	.1	-80	-17.35	22.63	42.63	-39.98	0-360	Off
3	.52584	42.5	Pk	11	.1	-40	13.6	33.19	-	-19.59	0-360	On
11	.52794	49.3	Pk	11	.1	-40	20.4	33.15	-	-12.75	0-360	Flat
7	.64178	35.14	Pk	11	.1	-40	6.24	31.46	-	-25.22	0-360	Off
8	.78512	32.99	Pk	11	.1	-40	4.09	29.71	-	-25.62	0-360	Off
4	.87787	35.57	Pk	11	.1	-40	6.67	28.74	-	-22.07	0-360	On
12	.87787	39.78	Pk	11	.1	-40	10.88	28.74	-	-17.86	0-360	Flat

Pk - Peak detector

7.2.2. MAX OFFSET

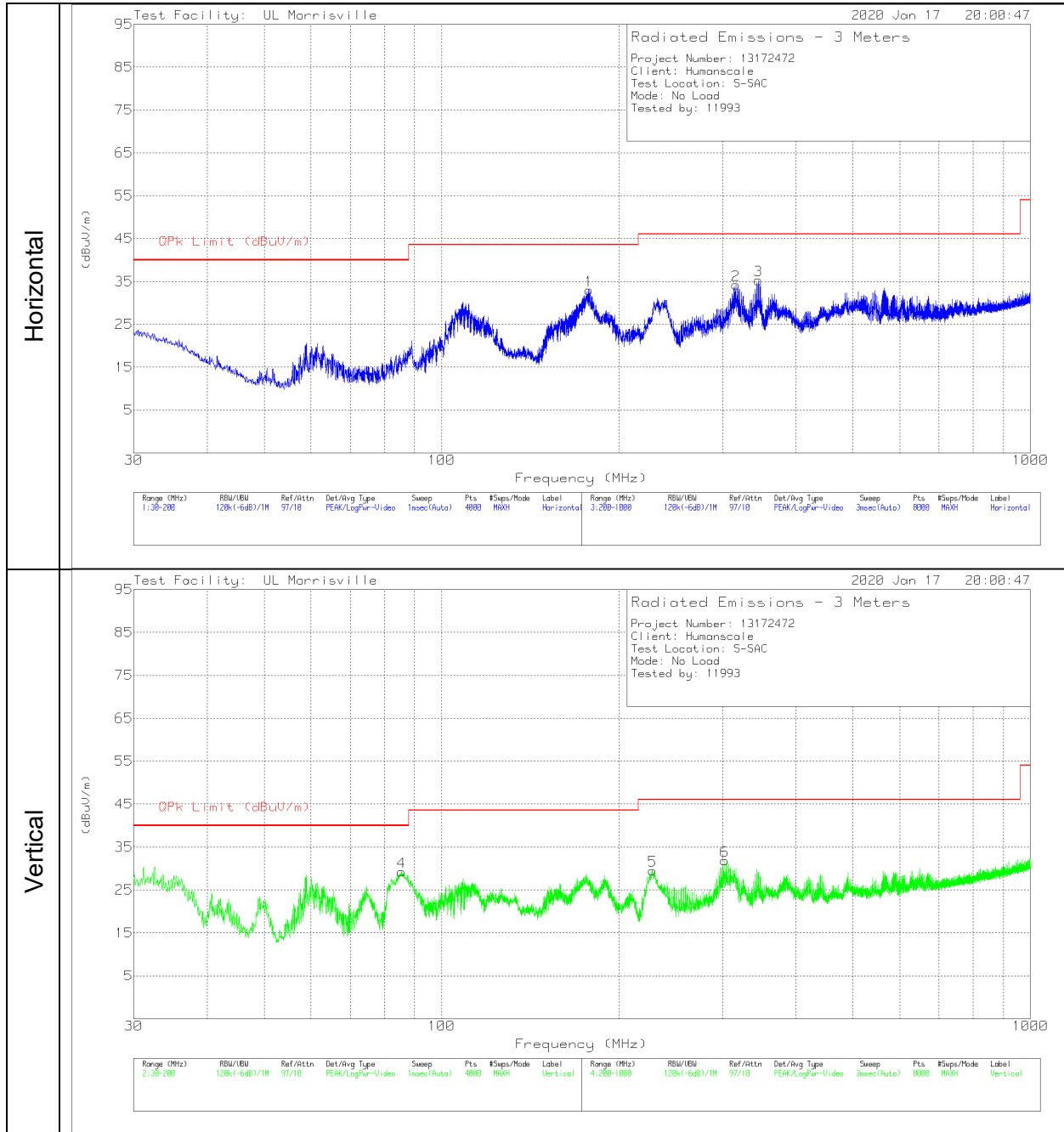


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0079 AF (dB/m)	Cbl (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	FCC 15.209 AV/QP Limit (dBuV/m)	FCC 15.209 PK Limit (dBuV/m)	Worst-Case Margin (dB)	Azimuth (Degs)	Antenna Face
11	.05934	48.97	Pk	11.4	.1	-80	-19.53	32.14	52.14	-51.67	0-360	Flat
1	.05941	41.19	Pk	11.4	.1	-80	-27.31	32.13	52.13	-59.44	0-360	On
6	.1221	78.34	Pk	11.1	.1	-80	9.54	25.87	45.87	-16.33	0-360	Off
12	.1221	81.07	Pk	11.1	.1	-80	12.27	25.87	45.87	-13.6	0-360	Flat
2	.12214	81.59	Pk	11.1	.1	-80	12.79	25.87	45.87	-13.08	0-360	On
7	.1232	73.7	Pk	11.1	.1	-80	4.9	25.79	45.79	-20.89	0-360	Off
3	.36369	57.75	Pk	11	.1	-80	-11.15	16.39	36.39	-27.54	0-360	On
13	.36378	57.23	Pk	11	.1	-80	-11.67	16.39	36.39	-28.06	0-360	Flat
8	.36395	54.58	Pk	11	.1	-80	-14.32	16.38	36.38	-30.7	0-360	Off
14	.60594	48.75	Pk	11	.1	-40	19.85	31.96	-	-12.11	0-360	Flat
4	.60805	48.72	Pk	11	.1	-40	19.82	31.93	-	-12.11	0-360	On
9	.60805	46.44	Pk	11	.1	-40	17.54	31.93	-	-14.39	0-360	Off
5	.84941	42.95	Pk	11	.1	-40	14.05	29.02	-	-14.97	0-360	On
10	.84941	39.77	Pk	11	.1	-40	10.87	29.02	-	-18.15	0-360	Off
15	.85047	42.61	Pk	11	.1	-40	13.71	29.01	-	-15.3	0-360	Flat

Pk - Peak detector

7.3. FCC TX SPURIOUS EMISSION 30 TO 1000 MHz

7.3.1. NO LOAD

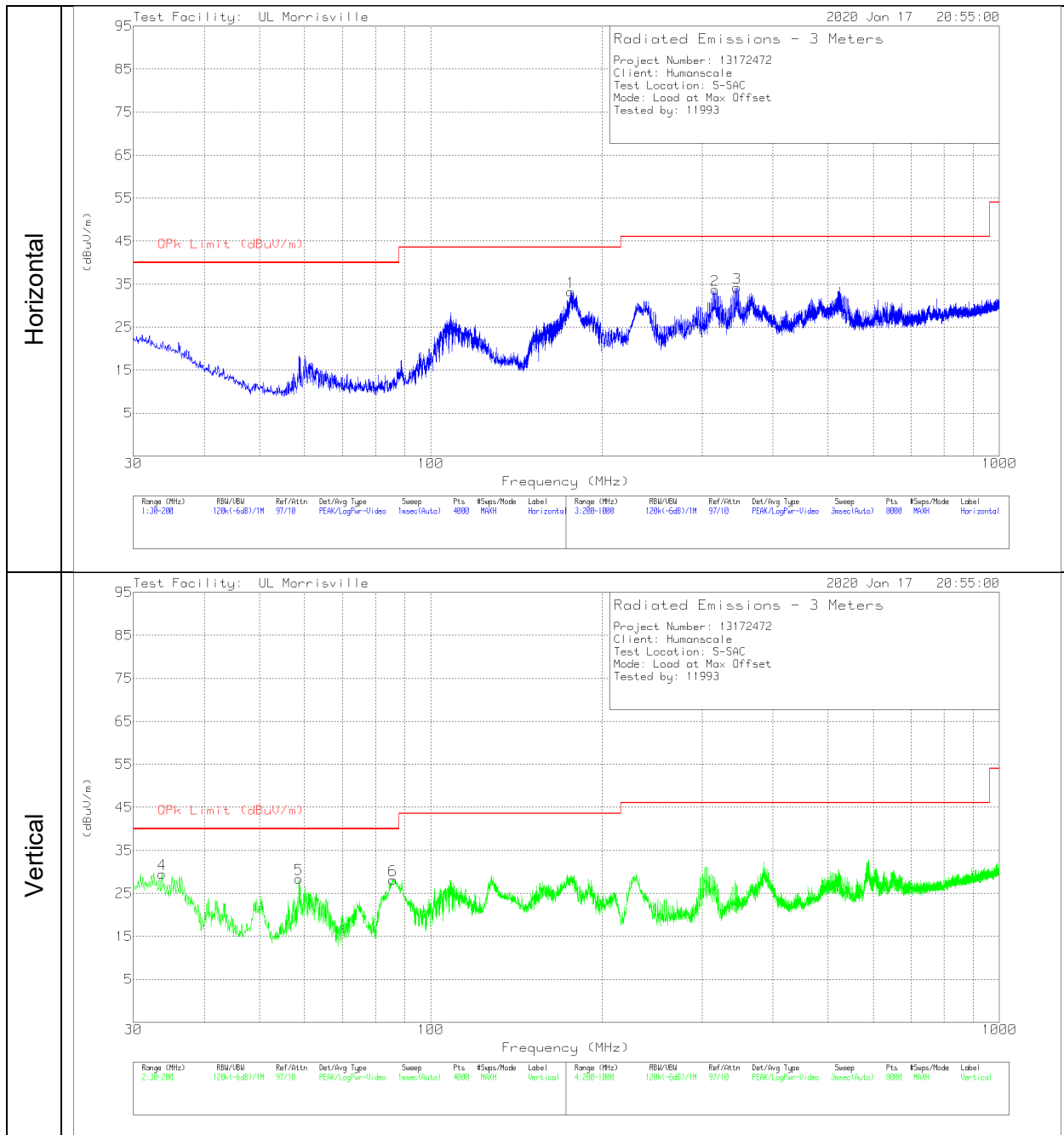


DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 AF (dB/m)	Cbl/Amp	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	85.5194	47.01	Pk	13.3	-31.1	29.21	40	-10.79	0-360	102	V
1	178.1508	45.86	Pk	17.5	-30.4	32.96	43.52	-10.56	0-360	100	H
5	228.2037	42.51	Pk	17	-30	29.51	46.02	-16.51	0-360	102	V
6	302.8134	41.92	Pk	19.5	-29.6	31.82	46.02	-14.2	0-360	199	V
2	316.3151	43.9	Pk	19.9	-29.6	34.2	46.02	-11.82	0-360	102	H
3	345.5189	44.58	Pk	20.2	-29.5	35.28	46.02	-10.74	0-360	102	H

Pk - Peak detector

7.3.1. MAX OFFSET



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 AF (dB/m)	Cbl/Amp	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	33.6985	36.89	Pk	24.3	-31.7	29.49	40	-10.51	0-360	100	V
5	58.6524	46.29	Pk	13.5	-31.4	28.39	40	-11.61	0-360	100	V
6	85.8169	45.94	Pk	13.3	-31.1	28.14	40	-11.86	0-360	100	V
1	176.4504	46.04	Pk	17.6	-30.4	33.24	43.52	-10.28	0-360	100	H
2	316.2151	43.41	Pk	19.9	-29.6	33.71	46.02	-12.31	0-360	100	H
3	345.7189	43.48	Pk	20.2	-29.5	34.18	46.02	-11.84	0-360	100	H

Pk - Peak detector

8. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

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.

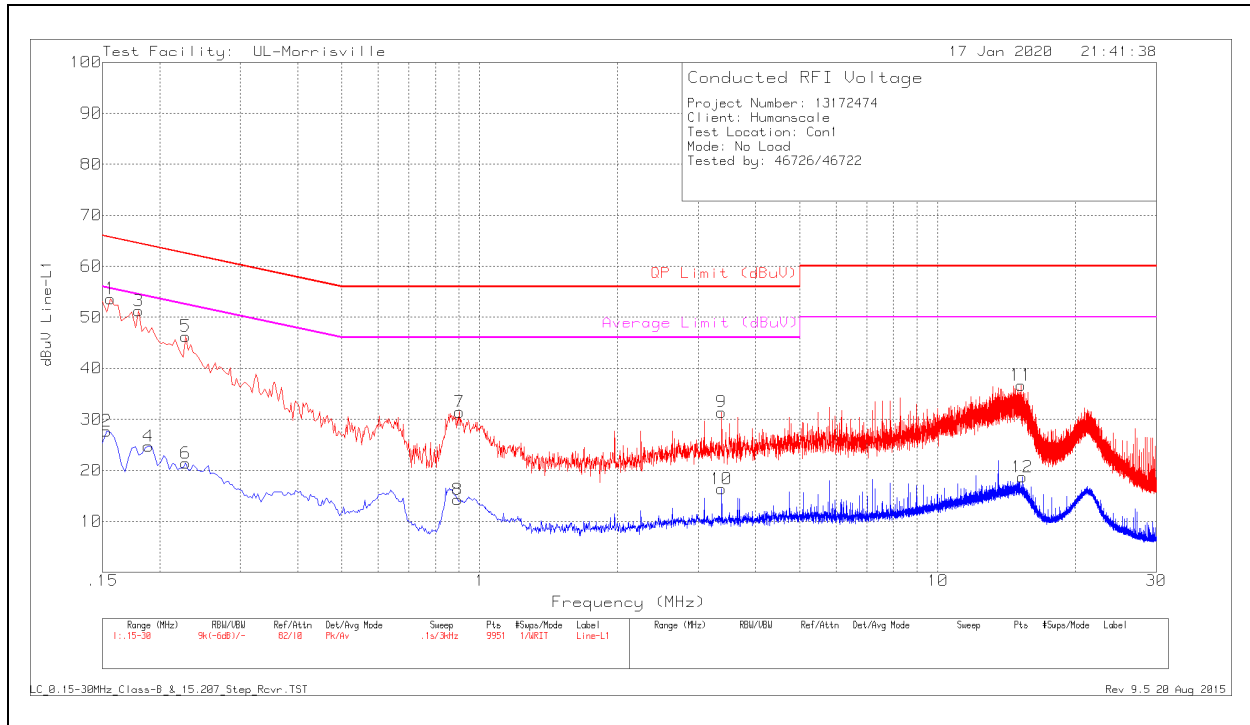
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

8.1.1. NO LOAD

LINE 1 RESULTS

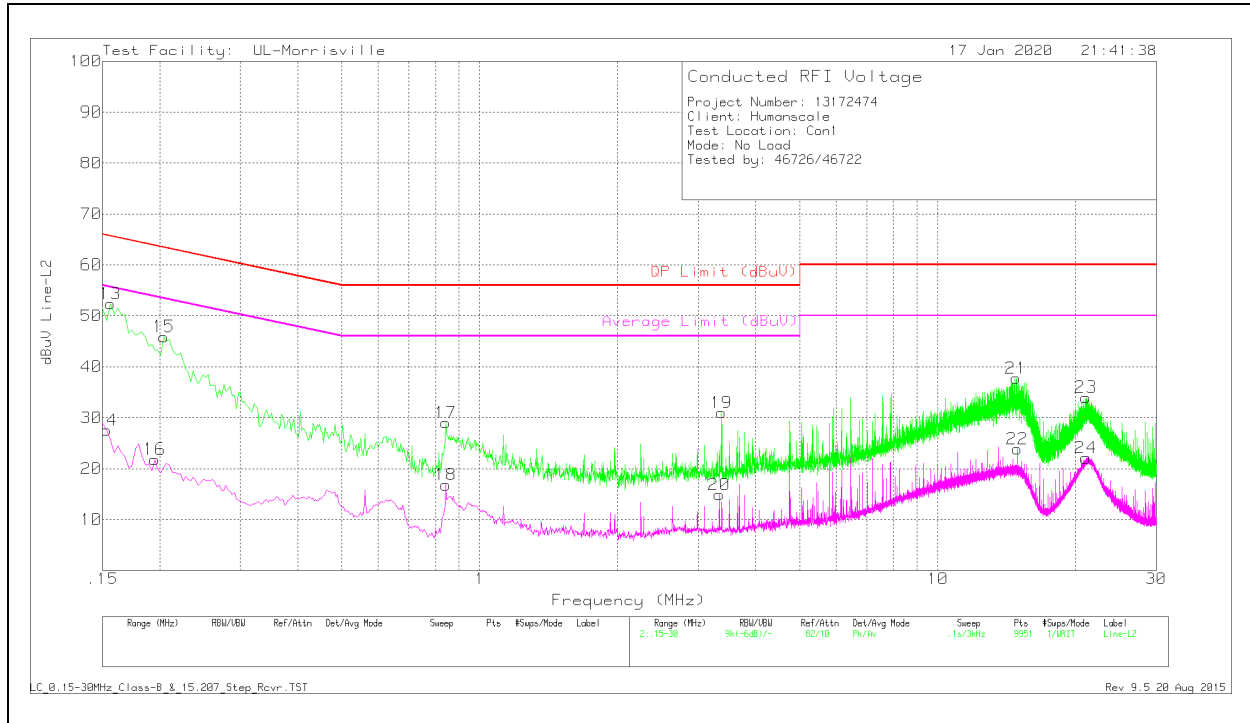


WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl/Limiter (dB)	LISN VCF (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.156	43.66	Pk	10	0	53.66	65.67	-12.01	-	-
2	.153	17.71	Av	10	0	27.71	-	-	55.84	-28.13
3	.18	41.29	Pk	10	0	51.29	64.49	-13.2	-	-
4	.189	14.74	Av	10	0	24.74	-	-	54.08	-29.34
5	.228	36.29	Pk	10	0	46.29	62.52	-16.23	-	-
6	.228	11.37	Av	10	0	21.37	-	-	52.52	-31.15
7	.903	21.44	Pk	10	0	31.44	56	-24.56	-	-
8	.894	4.24	Av	10	0	14.24	-	-	46	-31.76
9	3.372	21.33	Pk	10.1	0	31.43	56	-24.57	-	-
10	3.372	6.26	Av	10.1	0	16.36	-	-	46	-29.64
11	15.207	26.09	Pk	10.5	.1	36.69	60	-23.31	-	-
12	15.27	8.08	Av	10.5	.1	18.68	-	-	50	-31.32

Pk - Peak detector
 Av - Average detection

LINE 2 RESULTS



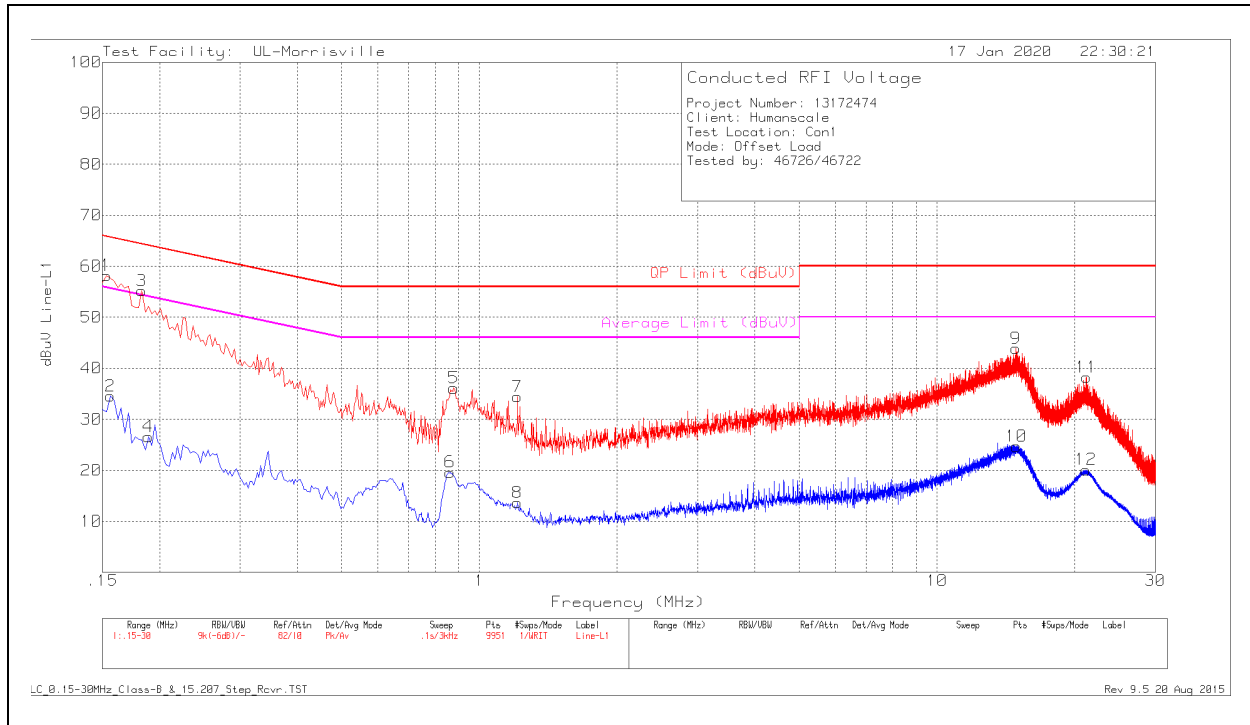
WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl/Limiter (dB)	LISN001 VCF (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
13	.156	42.35	Pk	10	0	52.35	65.67	-13.32	-	-
14	.153	17.55	Av	10	0	27.55	-	-	55.84	-28.29
15	.204	35.92	Pk	10	0	45.92	63.45	-17.53	-	-
16	.195	11.82	Av	10	0	21.82	-	-	53.82	-32
17	.843	19.06	Pk	10	0	29.06	56	-26.94	-	-
18	.843	6.81	Av	10	0	16.81	-	-	46	-29.19
19	3.372	20.87	Pk	10.1	0	30.97	56	-25.03	-	-
20	3.333	4.77	Av	10.1	0	14.87	-	-	46	-31.13
21	14.826	27.15	Pk	10.5	.1	37.75	60	-22.25	-	-
22	14.919	13.29	Av	10.5	.1	23.89	-	-	50	-26.11
23	21.048	23.39	Pk	10.6	0	33.99	60	-26.01	-	-
24	21.048	11.5	Av	10.6	0	22.1	-	-	50	-27.9

Pk - Peak detector
 Av - Average detection

8.1.2. MAX OFFSET

LINE 1 RESULTS

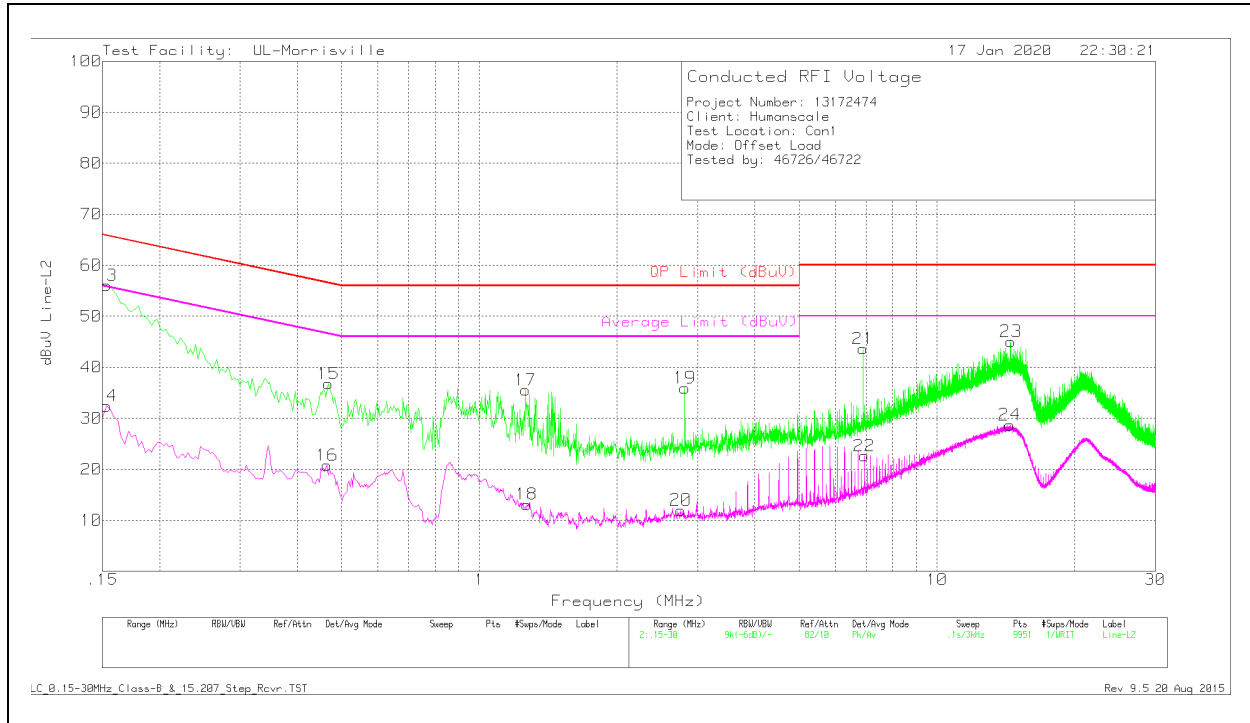


WORST EMISSIONS

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl/Limiter (dB)	LISN VCF (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.153	48.21	Pk	10	0	58.21	65.84	-7.63	-	-
2	.156	24.55	Av	10	0	34.55	-	-	55.67	-21.12
3	.183	45.24	Pk	10	0	55.24	64.35	-9.11	-	-
4	.189	16.62	Av	10	0	26.62	-	-	54.08	-27.46
5	.879	26.11	Pk	10	0	36.11	56	-19.89	-	-
6	.8625	9.63	Av	10	0	19.63	-	-	46	-26.37
7	1.212	24.4	Pk	10	0	34.4	56	-21.6	-	-
8	1.212	3.69	Av	10	0	13.69	-	-	46	-32.31
9	14.865	33.28	Pk	10.5	.1	43.88	60	-16.12	-	-
10	14.898	14.08	Av	10.5	.1	24.68	-	-	50	-25.32
11	21.225	27.66	Pk	10.6	0	38.26	60	-21.74	-	-
12	21.147	9.52	Av	10.6	0	20.12	-	-	50	-29.88

Pk - Peak detector
 Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl/Limiter (dB)	LISN001 VCF (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)	
13	.153	46.03	Pk	10	0	56.03	65.84	-9.81	-	-	
14	.153	22.42	Av	10	0	32.42	-	-	55.84	-23.42	
15	.468	26.78	Pk	10	0	36.78	56.55	-19.77	-	-	
16	.465	10.8	Av	10	0	20.8	-	-	46.6	-25.8	
17	1.26	25.55	Pk	10	0	35.55	56	-20.45	-	-	
18	1.269	3.11	Av	10	0	13.11	-	-	46	-32.89	
19	2.811	25.85	Pk	10.1	0	35.95	56	-20.05	-	-	
20	2.754	1.9	Av	10.1	0	12	-	-	46	-34	
21	6.894	33.48	Pk	10.2	0	43.68	60	-16.32	-	-	
22	6.936	12.41	Av	10.2	0	22.61	-	-	50	-27.39	
23	14.508	34.55	Pk	10.4	.1	45.05	60	-14.95	-	-	
24	14.421	18.21	Av	10.4	.1	28.71	-	-	50	-21.29	

Pk - Peak detector
 Av - Average detection

9. SETUP PHOTOS

Please refer to R13172472-EP1 for setup photos.

END OF TEST REPORT