



# **CERTIFICATION TEST REPORT**

**Report Number :** R11963121-E1

**Applicant :** Datecs Ltd  
Datecs Street No. 4  
Sofia, 1592, Bulgaria

**Model :** BLUEPAD-5000 v2

**FCC ID :** YRWBLUEPAD-5000

**EUT Description :** Payment Terminal

**Test Standard(s) :** FCC 47 CFR PART 15 SUBPART C  
ISED CANADA RSS-210 ISSUE 9

**Date Of Issue:**  
2019-12-09

**Prepared by:**  
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## REVISION HISTORY

| Ver. | Issue Date | Revisions                                                                                | Revised By      |
|------|------------|------------------------------------------------------------------------------------------|-----------------|
| 1    | 2019-06-12 | Initial Issue                                                                            | Brian T. Kiewra |
| 1    | 2019-12-09 | Revised OBW Section 7 to include 20dB BW plot.<br>Removed test setup diagram and photos. | Brian T. Kiewra |

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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Datecs Ltd  
Datecs Street No. 4  
Sofia, 1592, Bulgaria

**EUT DESCRIPTION:** Payment Terminal

**MODEL:** BLUEPAD-5000 v2

**SERIAL NUMBER:** 1917900008

**DATE TESTED:** 2019-05-13 to 2019-05-14

| APPLICABLE STANDARDS                                       |              |
|------------------------------------------------------------|--------------|
| STANDARD                                                   | TEST RESULTS |
| FCC PART 15 SUBPART C §15.225 (e) and §15.207 <sup>1</sup> | Compliant    |
| ISED RSS-210 Issue 9, Annex B.6 <sup>1</sup>               | Compliant    |
| ISED RSS-GEN Issue 5 Section 8.8 <sup>1</sup>              | Compliant    |

Note 1: This report covers frequency stability, 99% BW, and AC Mains Line conducted only. All other testing covered in UL Basingstoke report UL-RPT-RP11963121-116A.

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.

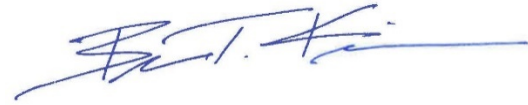
This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. government.

Approved & Released  
For UL LLC By:



Jeffrey Moser  
Operations Leader  
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, FCC CFR 47 Part 15, RSS-GEN Issue 5, and RSS-210 Issue 9.

## 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.                           |
|----------------------------------------|---------------------------------------------------|
| ISED Site Code: 2180C                  |                                                   |
| <input type="checkbox"/> Chamber A RTP | <input checked="" type="checkbox"/> North Chamber |
| <input type="checkbox"/> Chamber C RTP | <input type="checkbox"/> South Chamber            |

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:

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

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + 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)         | $\pm 141.2 \text{ Hz}$   |
| Conducted Emissions (150kHz – 30MHz) – LISN | $\pm 3.65 \text{ dB}$    |
| Occupied Channel Bandwidth                  | $\pm 2.00\%$             |
| Temperature                                 | $\pm 2.26^\circ\text{C}$ |

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

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The BLUEPAD-5000 unit is a handheld PIN pad with an integrated smart, magnetic stripe, RFID card reader, and printer offering advanced security and payment processing capabilities to handle credit and PIN-based debit card transactions.

### 5.2. SOFTWARE AND FIRMWARE

The firmware installed on the EUT for testing was 03.01.19.87  
The test utility software used during testing was RF Test 1.1.

### 5.3. DESCRIPTION OF TEST SETUP

#### SUPPORT EQUIPMENT

| Support Equipment List |              |              |               |        |
|------------------------|--------------|--------------|---------------|--------|
| Description            | Manufacturer | Model        | Serial Number | FCC ID |
| Power Supply           | Datecs       | LTE12WS-SY-T | 184702643     | NA     |

#### I/O CABLES

| I/O Cable List |       |                      |                |            |                  |                    |
|----------------|-------|----------------------|----------------|------------|------------------|--------------------|
| Cable No.      | Port  | # of Identical Ports | Connector Type | Cable Type | Cable Length (m) | Remarks            |
| 1              | Mains | 1                    | Barrel         | Mains      | <3m              | Provides DC power. |

#### SETUP DIAGRAM

Please refer to R11963121-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 (MOR - North Chamber) OBW

| Equipment ID | Description                   | Manufacturer      | Model Number | Last Cal.  | Next Cal.  |
|--------------|-------------------------------|-------------------|--------------|------------|------------|
| AT0079       | Active Loop Antenna           | ETS-Lindgren      | 6502         | 2019-01-24 | 2020-01-31 |
| N-SAC01      | Gain-loss string: 0.009-30MHz | Various           | Various      | 2019-05-02 | 2020-05-02 |
| SA0026       | Spectrum Analyzer             | Agilent           | N9030A       | 2019-03-19 | 2020-03-19 |
| 181474341    | Environmental Meter           | Fisher Scientific | 15-077-963   | 2018-07-27 | 2020-07-27 |

Test Equipment Used - Wireless Conducted Measurement Equipment (MOR- Conducted 2)

| Equipment ID          | Description               | Manufacturer           | Model Number     | Last Cal.  | Next Cal.  |
|-----------------------|---------------------------|------------------------|------------------|------------|------------|
| 72822<br>(PRE0100902) | Spectrum Analyzer         | Agilent Technologies   | E4446A           | 2018-11-19 | 2019-11-19 |
| 76023<br>(EC0225)     | Temp/Humid Chamber        | Cincinnati Sub-Zero    | ZPH-8-3.5-SCT/AC | 2018-06-07 | 2019-06-07 |
| SN 181474341          | Environmental Meter       | Fisher Scientific      | 15-077-963       | 2018-07-27 | 2020-07-27 |
| 76021                 | DC Regulated Power Supply | CircuitSpecialists.Com | CSI3005X5        | N/A        | N/A        |

Test Equipment Used - Line-Conducted Emissions – Voltage (MOR – 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               | 2018-06-19 | 2019-06-19 |
| s/n 181562858         | Environmental Meter                           | Fisher Scientific   | 14-650-118                  | 2018-09-04 | 2020-09-04 |
| LISN003               | LISN, 50-ohm/50-uH, 2-conductor, 25A          | Fischer Custom Com. | FCC-LISN-50-25-2-01-550V    | 2018-08-21 | 2019-08-21 |
| 75141<br>(PRE0101521) | EMI Test Receiver 9kHz-7GHz                   | Rohde & Schwarz     | ESCI 7                      | 2018-08-22 | 2019-08-22 |
| TL001                 | Transient Limiter, 0.009-30MHz                | Com-Power           | LIT-930A                    | 2018-06-13 | 2019-06-13 |
| PS215                 | AC Power Source                               | Elgar               | CW2501M<br>(s/n 1523A02397) | NA         | NA         |
| CDECABLE001           | ANSI C63.4 1m extension cable.                | UL                  | Per Annex B of ANSI C63.4   | 2018-07-16 | 2019-07-16 |

| UL SOFTWARE                 |    |        |                         |
|-----------------------------|----|--------|-------------------------|
| *Conducted Software         | UL | UL EMC | Ver 2.2, March 31, 2015 |
| *AC Line Conducted Software | UL | UL EMC | Ver 9.5, April 3, 2015  |

Note: \* indicates automation software version used in the compliance certification testing

## 7. OCCUPIED BANDWIDTH

### LIMITS

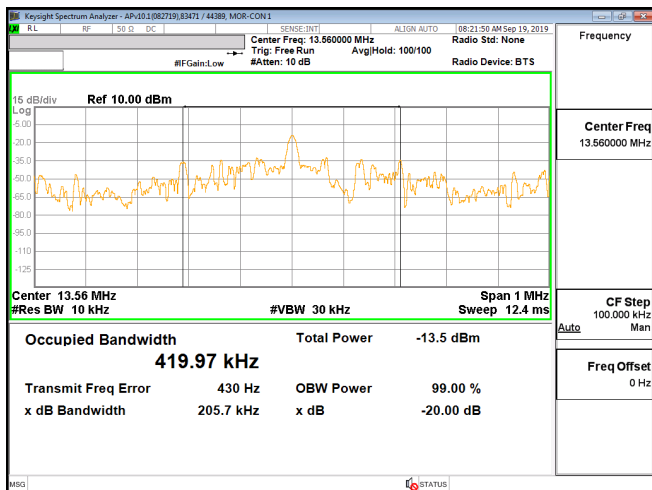
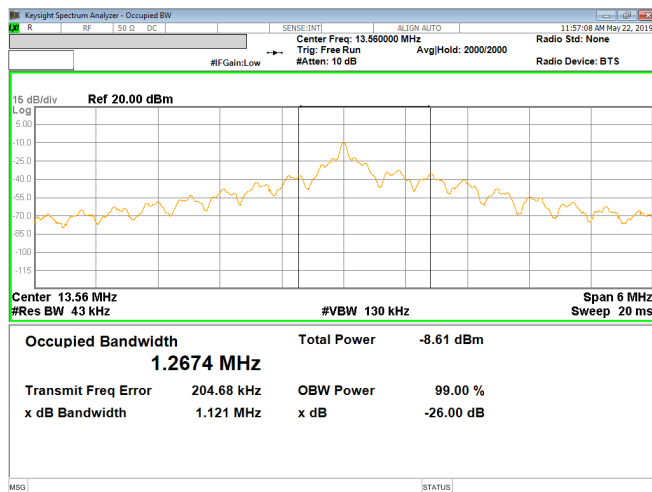
None; for reporting purposes only.

RSS-GEN and ANSI C63.10 Section 6.9.3 were used for the measurement procedure.

### TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1-5% of the OBW. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

### 99% AND 20dB BW



## 8. FREQUENCY STABILITY

### LIMIT

§15.225 (e)

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency, over a temperature variation of  $-20^{\circ}$  to  $+50^{\circ}\text{C}$  at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of  $20^{\circ}\text{C}$ . For battery operated equipment, the equipment tests shall be performed using a new battery.

IC RSS-210, Annex B.6

Carrier frequency stability shall be maintained to  $\pm 0.01\%$  ( $\pm 100$  ppm).

### TEST PROCEDURE

ANSI C63.10-2013 Clause 6.8.1 and 6.8.2

### RESULTS

| Reference Frequency: EUT Channel 13.56 MHz @ $20^{\circ}\text{C}$<br>Limit: $\pm 100$ ppm = 13.560 kHz |                        |                                               |              |                   |              |                   |              |                   |              |                             |
|--------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-----------------------------|
| Power Supply                                                                                           | Envir. Temp            | Frequency Deviation Measured with Time Elapse |              |                   |              |                   |              |                   |              |                             |
| (VAC or VDC)                                                                                           | ( $^{\circ}\text{C}$ ) | Startup (MHz)                                 | Delta (ppm)  | @ 2 mins (MHz)    | Delta (ppm)  | @ 5 mins (MHz)    | Delta (ppm)  | @ 10 mins (MHz)   | Delta (ppm)  | Limit (ppm)                 |
| 9.00                                                                                                   | 50                     | 13.5608200                                    | 0.066        | 13.5608190        | 0.074        | 13.5608190        | 0.074        | 13.5608210        | 0.059        | $\pm 100$                   |
| 9.00                                                                                                   | 40                     | 13.5608260                                    | 0.022        | 13.5608240        | 0.037        | 13.5608220        | 0.052        | 13.5608200        | 0.066        | $\pm 100$                   |
| 9.00                                                                                                   | 30                     | 13.5608640                                    | -0.258       | 13.5608480        | -0.140       | 13.5608420        | -0.096       | 13.5608360        | -0.052       | $\pm 100$                   |
| <b>9.00</b>                                                                                            | <b>20</b>              | <b>13.5608290</b>                             | <b>0.000</b> | <b>13.5608290</b> | <b>0.000</b> | <b>13.5608280</b> | <b>0.007</b> | <b>13.5608280</b> | <b>0.007</b> | <b><math>\pm 100</math></b> |
| 9.00                                                                                                   | 10                     | 13.5608760                                    | -0.347       | 13.5608720        | -0.317       | 13.5608700        | -0.302       | 13.5608660        | -0.273       | $\pm 100$                   |
| 9.00                                                                                                   | 0                      | 13.5608800                                    | -0.376       | 13.5608800        | -0.376       | 13.5608789        | -0.368       | 13.5608770        | -0.354       | $\pm 100$                   |
| 9.00                                                                                                   | -10                    | 13.5608770                                    | -0.354       | 13.5608780        | -0.361       | 13.5608790        | -0.369       | 13.5608800        | -0.376       | $\pm 100$                   |
| 9.00                                                                                                   | -20                    | 13.5608440                                    | -0.111       | 13.5608590        | -0.221       | 13.5608730        | -0.324       | 13.5608780        | -0.361       | $\pm 100$                   |
| 7.35                                                                                                   | 20                     | 13.5608370                                    | -0.059       | 13.5608350        | -0.044       | 13.5608330        | -0.029       | 13.5608330        | -0.029       | $\pm 100$                   |
| 10.35                                                                                                  | 20                     | 13.5608330                                    | -0.029       | 13.5608320        | -0.022       | 13.5608310        | -0.015       | 13.5608310        | -0.015       | $\pm 100$                   |

### TEST INFORMATION

Date: 2019-05-14  
Project No: 11963121  
Tester: 40882

## 9. AC MAINS LINE CONDUCTED EMISSIONS

### LIMITS

§15.207

IC RSS-GEN, Section 8.8

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

| Frequency range<br>(MHz)                                                                                                                                                         | Limits (dB $\mu$ V) |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|
|                                                                                                                                                                                  | Quasi-peak          | Average  |
| 0.15 to 0.50                                                                                                                                                                     | 66 to 56            | 56 to 46 |
| 0.50 to 5                                                                                                                                                                        | 56                  | 46       |
| 5 to 30                                                                                                                                                                          | 60                  | 50       |
| Notes:<br>1. The lower limit shall apply at the transition frequencies<br>2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. |                     |          |

### TEST PROCEDURE

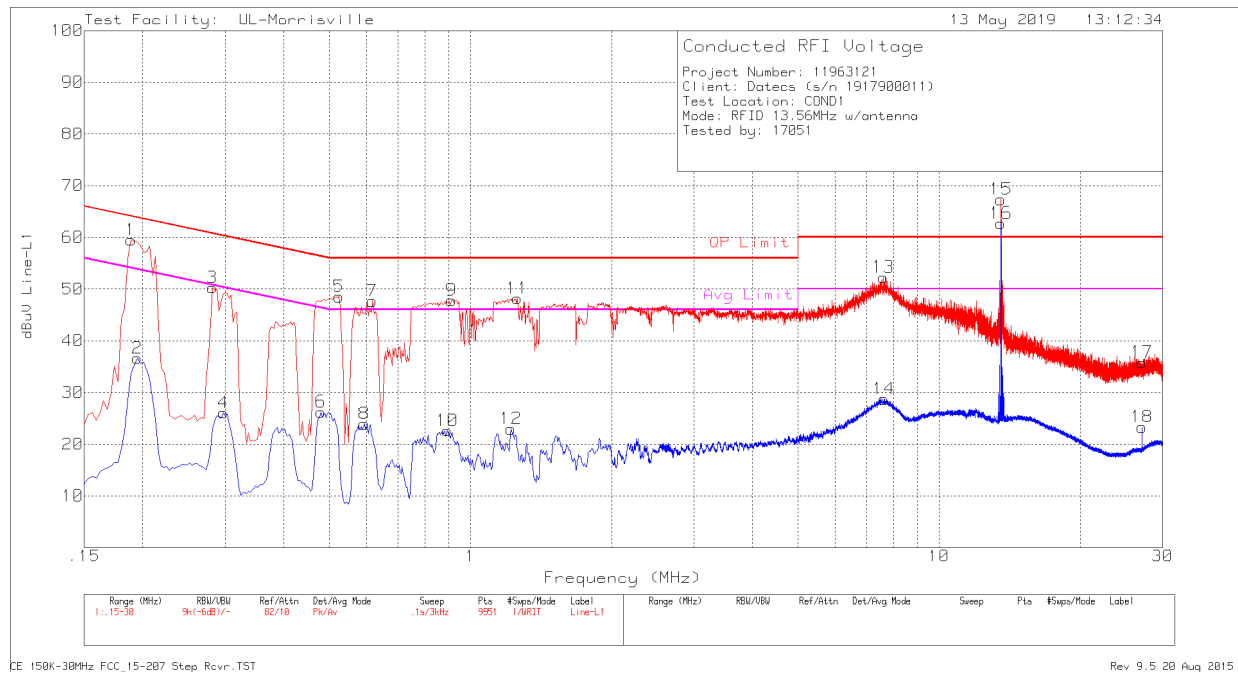
ANSI C63.10:2013

### RESULTS

No non-compliance noted:

## 9.1.1. NORMAL OPERATION

### LINE 1 RESULTS

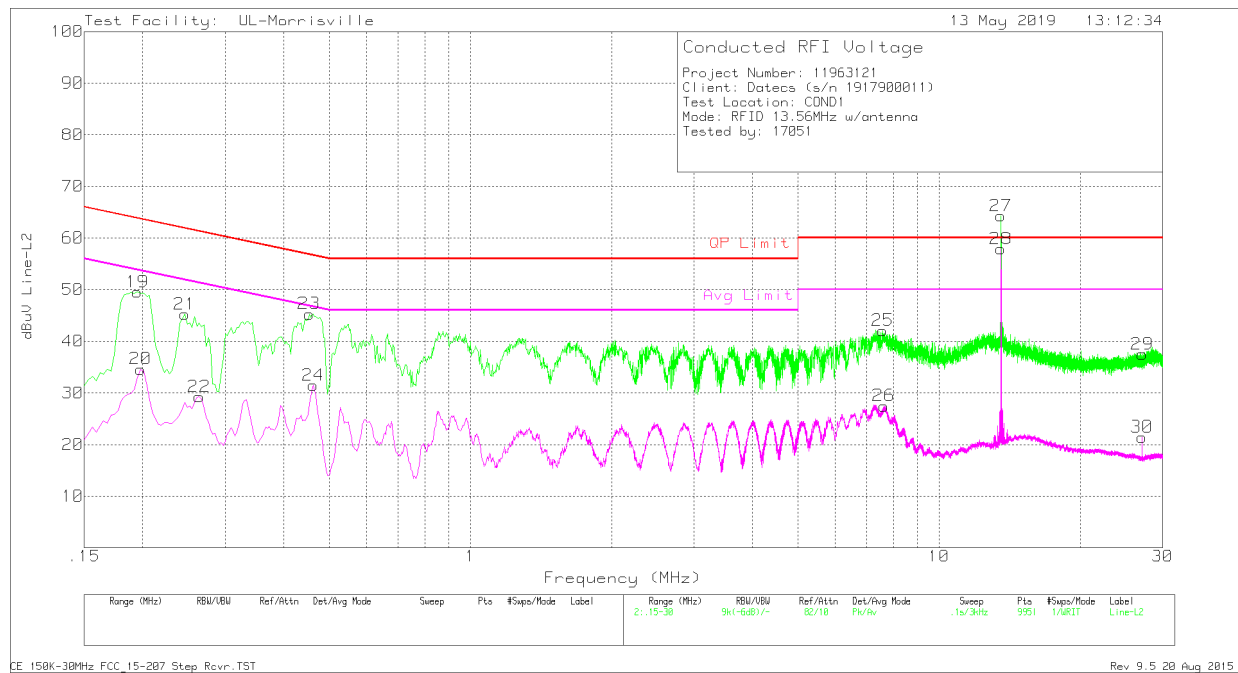


| Line-L1: .15 - 30MHz |                 |                      |     |               |                  |                        |          |             |           |             |
|----------------------|-----------------|----------------------|-----|---------------|------------------|------------------------|----------|-------------|-----------|-------------|
| Marker               | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit | Margin (dB) | Avg Limit | Margin (dB) |
| 1                    | .195            | 23.83                | Qp  | .1            | 10               | 33.93                  | 63.82    | -29.89      | -         | -           |
| 2                    | .195            | 11.11                | Av  | .1            | 10               | 21.21                  | -        | -           | 53.82     | -32.61      |
| 3                    | .282            | 40.21                | Pk  | .1            | 10               | 50.31                  | 60.76    | -10.45      | -         | -           |
| 4                    | .297            | 15.99                | Av  | .1            | 10               | 26.09                  | -        | -           | 50.33     | -24.24      |
| 5                    | .525            | 38.53                | Pk  | 0             | 10               | 48.53                  | 56       | -7.47       | -         | -           |
| 6                    | .48             | 16.26                | Av  | 0             | 10               | 26.26                  | -        | -           | 46.34     | -20.08      |
| 7                    | .618            | 37.67                | Pk  | 0             | 10               | 47.67                  | 56       | -8.33       | -         | -           |
| 8                    | .594            | 13.94                | Av  | 0             | 10               | 23.94                  | -        | -           | 46        | -22.06      |
| 9                    | .912            | 37.83                | Pk  | 0             | 10               | 47.83                  | 56       | -8.17       | -         | -           |
| 10                   | .894            | 12.65                | Av  | 0             | 10               | 22.65                  | -        | -           | 46        | -23.35      |
| 11                   | 1.26            | 38.17                | Pk  | 0             | 10               | 48.17                  | 56       | -7.83       | -         | -           |
| 12                   | 1.221           | 12.96                | Av  | 0             | 10               | 22.96                  | -        | -           | 46        | -23.04      |
| 13                   | 7.608           | 42.01                | Pk  | .1            | 10.2             | 52.31                  | 60       | -7.69       | -         | -           |
| 14                   | 7.635           | 18.43                | Av  | .1            | 10.2             | 28.73                  | -        | -           | 50        | -21.27      |
| 15                   | 13.56           | 56.83                | Pk  | .1            | 10.4             | 67.33                  | -        | -           | -         | -           |
| 16                   | 13.56           | 52.24                | Av  | .1            | 10.4             | 62.74                  | -        | -           | -         | -           |
| 17                   | 27.12           | 24.84                | Pk  | .3            | 10.7             | 35.84                  | 60       | -24.16      | -         | -           |
| 18                   | 27.123          | 12.32                | Av  | .3            | 10.7             | 23.32                  | -        | -           | 50        | -26.68      |

Pk - Peak detector  
Qp - Quasi-Peak detector  
Av - Average detection

Note: 13.56MHz is a fundamental frequency of the EUT. Data under the following section indicate that when the antenna terminal is terminated, the fundamental amplitude is lowered below the limit line.

## LINE 2 RESULTS



| Line-L2: .15 - 30MHz |                 |                      |     |               |                  |                        |          |             |           |             |
|----------------------|-----------------|----------------------|-----|---------------|------------------|------------------------|----------|-------------|-----------|-------------|
| Marker               | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit | Margin (dB) | Avg Limit | Margin (dB) |
| 19                   | .195            | 39.36                | Pk  | .2            | 10               | 49.56                  | 63.82    | -14.26      | -         | -           |
| 20                   | .198            | 24.42                | Av  | .2            | 10               | 34.62                  | -        | -           | 53.69     | -19.07      |
| 21                   | .246            | 35.15                | Pk  | .1            | 10               | 45.25                  | 61.89    | -16.64      | -         | -           |
| 22                   | .264            | 19.2                 | Av  | .1            | 10               | 29.3                   | -        | -           | 51.3      | -22         |
| 23                   | .453            | 35.22                | Pk  | .1            | 10               | 45.32                  | 56.82    | -11.5       | -         | -           |
| 24                   | .462            | 21.41                | Av  | .1            | 10               | 31.51                  | -        | -           | 46.66     | -15.15      |
| 25                   | 7.578           | 31.79                | Pk  | .1            | 10.2             | 42.09                  | 60       | -17.91      | -         | -           |
| 26                   | 7.62            | 17.19                | Av  | .1            | 10.2             | 27.49                  | -        | -           | 50        | -22.51      |
| 27                   | 13.56           | 53.82                | Pk  | .1            | 10.4             | 64.32                  | -        | -           | -         | -           |
| 28                   | 13.56           | 47.42                | Av  | .1            | 10.4             | 57.92                  | -        | -           | -         | -           |
| 29                   | 27.153          | 26.64                | Pk  | .2            | 10.7             | 37.54                  | 60       | -22.46      | -         | -           |
| 30                   | 27.123          | 10.55                | Av  | .2            | 10.7             | 21.45                  | -        | -           | 50        | -28.55      |

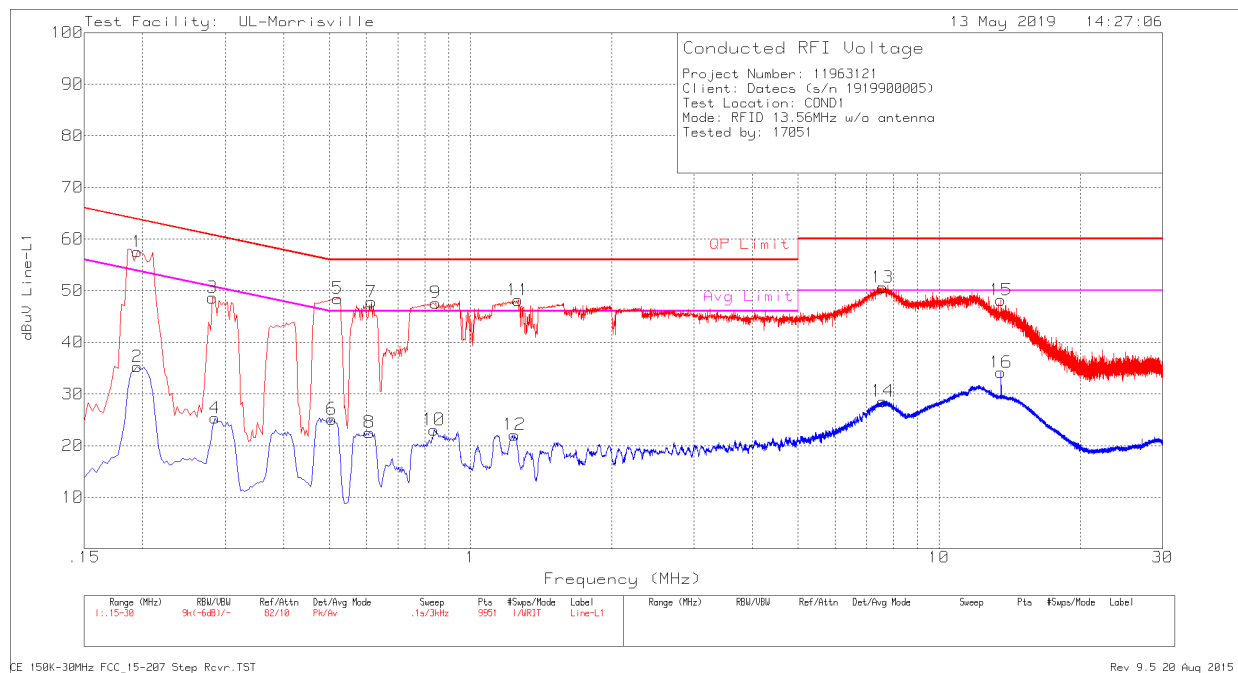
Pk - Peak detector

Av - Average detection

Note: 13.56MHz is a fundamental frequency of the EUT. Data under the following section indicate that when the antenna terminal is terminated, the fundamental amplitude is lowered below the limit line.

## 9.1.2. NORMAL OPERATION WITH ANTENNA PORT TERMINATED

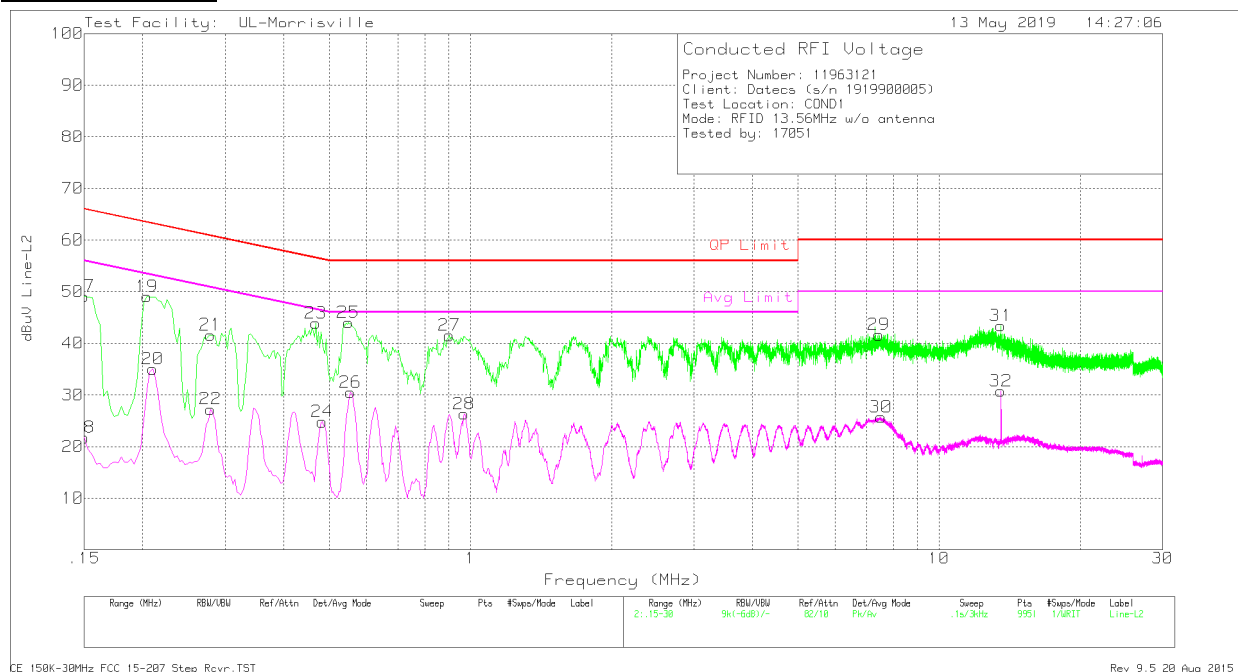
### LINE 1 RESULTS



| Line-L1: .15 - 30MHz |                 |                      |     |               |                  |                        |          |             |           |             |
|----------------------|-----------------|----------------------|-----|---------------|------------------|------------------------|----------|-------------|-----------|-------------|
| Marker               | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit | Margin (dB) | Avg Limit | Margin (dB) |
| 1                    | .195            | 29.57                | Qp  | .1            | 10               | 39.67                  | 63.82    | -24.15      | -         | -           |
| 2                    | .195            | 19.82                | Av  | .1            | 10               | 29.92                  | -        | -           | 53.82     | -23.9       |
| 3                    | .282            | 38.55                | Pk  | .1            | 10               | 48.65                  | 60.76    | -12.11      | -         | -           |
| 4                    | .285            | 15.24                | Av  | .1            | 10               | 25.34                  | -        | -           | 50.67     | -25.33      |
| 5                    | .5205           | 38.5                 | Pk  | 0             | 10               | 48.5                   | 56       | -7.5        | -         | -           |
| 6                    | .507            | 15.13                | Av  | 0             | 10               | 25.13                  | -        | -           | 46        | -20.87      |
| 7                    | .615            | 37.81                | Pk  | 0             | 10               | 47.81                  | 56       | -8.19       | -         | -           |
| 8                    | .609            | 12.57                | Av  | 0             | 10               | 22.57                  | -        | -           | 46        | -23.43      |
| 9                    | .843            | 37.65                | Pk  | 0             | 10               | 47.65                  | 56       | -8.35       | -         | -           |
| 10                   | .837            | 13.05                | Av  | 0             | 10               | 23.05                  | -        | -           | 46        | -22.95      |
| 11                   | 1.2645          | 38.16                | Pk  | 0             | 10               | 48.16                  | 56       | -7.84       | -         | -           |
| 12                   | 1.242           | 12.09                | Av  | 0             | 10               | 22.09                  | -        | -           | 46        | -23.91      |
| 13                   | 7.578           | 40.37                | Pk  | .1            | 10.2             | 50.67                  | 60       | -9.33       | -         | -           |
| 14                   | 7.59            | 18.29                | Av  | .1            | 10.2             | 28.59                  | -        | -           | 50        | -21.41      |
| 15                   | 13.56           | 37.66                | Pk  | .1            | 10.4             | 48.16                  | 60       | -11.84      | -         | -           |
| 16                   | 13.56           | 23.72                | Av  | .1            | 10.4             | 34.22                  | -        | -           | 50        | -15.78      |

Pk - Peak detector  
Av - Average detection

## LINE 2 RESULTS



| Line-L2: .15 - 30MHz |                 |                      |     |               |                  |                        |          |             |           |             |
|----------------------|-----------------|----------------------|-----|---------------|------------------|------------------------|----------|-------------|-----------|-------------|
| Marker               | Frequency (MHz) | Meter Reading (dBuV) | Det | LISN VCF (dB) | Cbl/Limiter (dB) | Corrected Reading dBuV | QP Limit | Margin (dB) | Avg Limit | Margin (dB) |
| 17                   | .15             | 38.91                | Pk  | .2            | 10               | 49.11                  | 66       | -16.89      | -         | -           |
| 18                   | .15             | 11.53                | Av  | .2            | 10               | 21.73                  | -        | -           | 56        | -34.27      |
| 19                   | .204            | 38.94                | Pk  | .1            | 10               | 49.04                  | 63.45    | -14.41      | -         | -           |
| 20                   | .21             | 24.91                | Av  | .1            | 10               | 35.01                  | -        | -           | 53.21     | -18.2       |
| 21                   | .279            | 31.51                | Pk  | .1            | 10               | 41.61                  | 60.85    | -19.24      | -         | -           |
| 22                   | .279            | 17.15                | Av  | .1            | 10               | 27.25                  | -        | -           | 50.85     | -23.6       |
| 23                   | .468            | 33.83                | Pk  | .1            | 10               | 43.93                  | 56.55    | -12.62      | -         | -           |
| 24                   | .483            | 14.7                 | Av  | .1            | 10               | 24.8                   | -        | -           | 46.29     | -21.49      |
| 25                   | .549            | 34.04                | Pk  | 0             | 10               | 44.04                  | 56       | -11.96      | -         | -           |
| 26                   | .555            | 20.52                | Av  | 0             | 10               | 30.52                  | -        | -           | 46        | -15.48      |
| 27                   | .903            | 31.52                | Pk  | 0             | 10               | 41.52                  | 56       | -14.48      | -         | -           |
| 28                   | .969            | 16.32                | Av  | 0             | 10               | 26.32                  | -        | -           | 46        | -19.68      |
| 29                   | 7.446           | 31.34                | Pk  | .1            | 10.2             | 41.64                  | 60       | -18.36      | -         | -           |
| 30                   | 7.521           | 15.38                | Av  | .1            | 10.2             | 25.68                  | -        | -           | 50        | -24.32      |
| 31                   | 13.563          | 32.91                | Pk  | .1            | 10.4             | 43.41                  | 60       | -16.59      | -         | -           |
| 32                   | 13.56           | 20.28                | Av  | .1            | 10.4             | 30.78                  | -        | -           | 50        | -19.22      |

Pk - Peak detector  
Av - Average detection



## **10. SETUP PHOTOS**

Please refer to R11963121-EP1 for setup photos

**END OF TEST REPORT**