FCC 47 CFR PART 15 SUBPART C

CLASS II PERMISSIVE CHANGE

FOR

BLUETOOTH MODULE

MODEL NUMBER: BT301

FCC ID: YRWDATECSBT301

REPORT NUMBER: 11718294-E2V3

ISSUE DATE: 03/15/2018

Prepared for
DATECS Ltd.
DEPARTMENT OF INNOVATIVE TECHNOLOGIES
4 “Datecs” Str.
1592 SOFIA, BULGARIA

Prepared by
UL VERIFICATION SERVICES INC.
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NVLAP TESTING
NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	10/05/17	Initial Issue	B. Bayani
V2	03/12/18	Revised based on reviewer's comments: 1. Sec. 3: Updated Note. 2. Sec. 5.3: Updated Description. 3. Sec. 6: Updated Table. 4. Sec. 8.2: Updated Table.	B. Bayani
V3	03/15/18	Revised based on reviewer's comments: 1. Sec. 8.1: Updated Test Procedure.	B. Bayani

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: DATECS Ltd.
DEPARTMENT OF INNOVATIVE TECHNOLOGIES
4 “Datecs” Str.
1592 SOFIA, BULGARIA

EUT DESCRIPTION: Bluetooth Module

MODEL: BT301

SERIAL NUMBER: IX7030000080317

DATE TESTED: May 10, 2017 to May 12, 2017

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 15 SUBPART C	Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. 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.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. 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.

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UL Verification Services Inc. By:

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Prepared By:

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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.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. 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.

47173 Benicia Street	47266 Benicia Street
☐ Chamber A	☐ Chamber D
☒ Chamber B	☐ Chamber E
☐ Chamber C	☐ Chamber F
	☐ Chamber G
	☐ Chamber H

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://ts.nist.gov/standards/scopes/2000650.htm.

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

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 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

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4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Radiated Disturbance,1000 to 18000 MHz	4.32 dB
Radiated Disturbance,18000 to 26000 MHz	4.45 dB
Radiated Disturbance,26000 to 40000 MHz	5.24 dB

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

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Bluetooth module.

5.2. MAXIMUM OUTPUT POWER

Please refer to report no.: *JQA Report no. 400-140056 FCCID YRWDATECSBT301* for output power results.

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a chip antenna, with a maximum gain of 2.0 dBi.

5.4. SOFTWARE AND FIRMWARE

The EUT driver software installed during testing was FTDI, rev. 2.12.16.0.

The test utility software used during testing was RF Test Tool, rev. 1.2.2.

5.5. DESCRIPTION OF CLASS II PERMISSIVE CHANGE

Original Filing was for Limited Modular Approval. Only worst-case mode was tested based on original *Report no. 400-140056* installed in new host sleeve (INFINEAX7).

The GFSK mode was considered as worst-case mode and only radiated emission was performed. Please see section 8 for Radiated Test Results.

5.6. WORST-CASE CONFIGURATION AND MODE

The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z. It was determined that the X-orientation was the worst-case orientation, therefore, all final radiated testing was performed with the EUT in the X-orientation while generating continuous emissions.

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5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC/DC charger	Apple	A1265	1X1132QX28QZ	-
Charging Cradle	Infinite Peripherals	-	-	-
Laptop	Lenovo	T420	PB-FBKHK 12/07	-
AC/DC Adapter	Lenovo	ADLX65NCC2A	-	-

I/O CABLES

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	USB	1	USB	Unshielded	1	EUT to Laptop
2	AC Power	1	AC	Unshielded	1	
3	DC Power	1	DC	Unshielded	1	
4	USB	1	USB	Unshielded	1	Charging Cradle to AC/DC charger

TEST SETUP

The EUT is placed inside the charging cradle and is connected to the AC/DC Charger via USB cable. The EUT is connected to the laptop via USB cable. Test software exercised the EUT.

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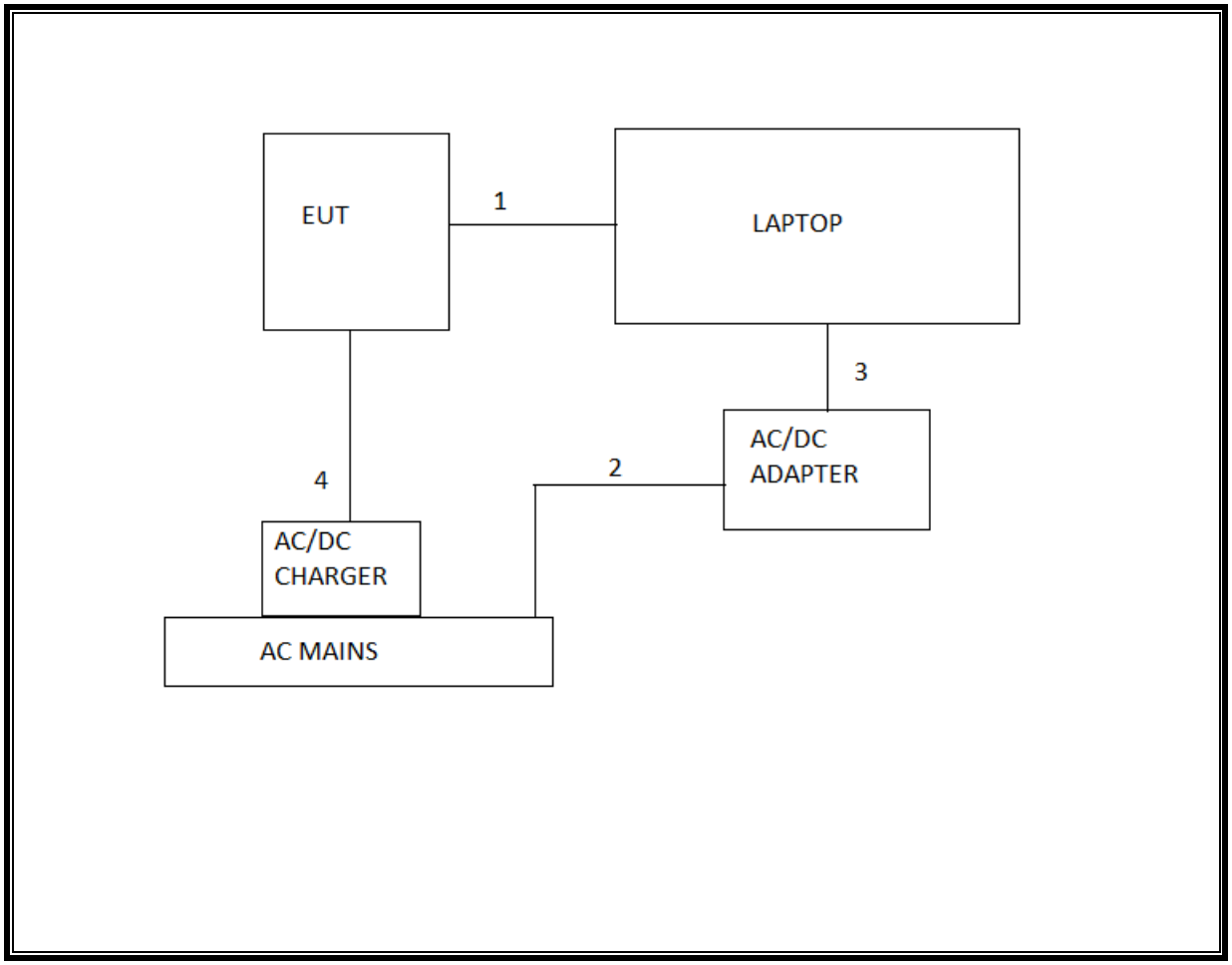
SETUP DIAGRAM FOR TESTS



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6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Antenna, Broadband Hybrid, 30MHz to 2000MHz w/4dB Pad	Sunol Sciences Corp.	JB3	T477	06/22/2017
Antenna, Active Loop 9kHz-30MHz	ETS-Lindgren	6502	T1683	02/17/2018
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T345	03/07/2018
Antenna, Horn 18-26.5GHz	ARA	MWH-1826/B	T449	06/12/2017
Amplifier, 1-26.5GHz	Agilent (Keysight) Technologies	8449B	T404	07/05/2017
Amplifier, 10kHz-1GHz	Agilent (Keysight) Technologies	8447D	T15	08/26/2017
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T907	01/23/2018
EMI Test Receiver	Rohde & Schwarz	ESR	T1436	01/18/2018
LISN	FISCHER	FCC-LISN-50/250-25-2-01	T1310	06/08/2017
Transient Limiter	COM-POWER	LIT-930	T1457	02/24/18

Test Software List			
Description	**Manufacturer**	**Model**	**Version**
Radiated Software	UL	UL EMC	Ver 9.5, Apr 26, 2016

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7. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
GFSK	2.910	12.520	0.232	23.24%	6.34	0.344

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DUTY CYCLE PLOTS

DUTY CYCLE GFSK

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8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300m	2400/F(kHz) @ 300m
0.490-1.705	24000/F(kHz) @ 30m	24000/F(kHz) @ 30m
1.705-30.0	30 @ 30m	30 @ 30m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 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 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 30MHz, below 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. 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.

RESULTS

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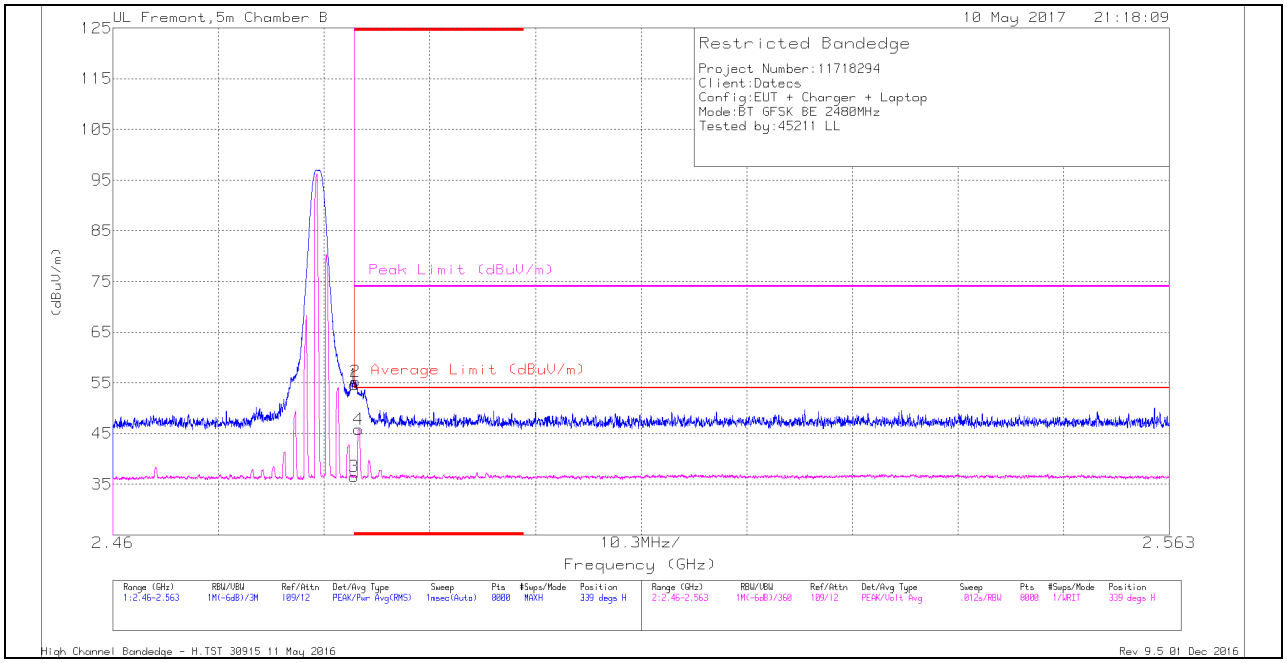
8.2. TRANSMITTER ABOVE 1 GHz

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	43.74	Pk	32.1	-21.2	54.64	-	-	74	-19.36	339	134	H
2	* 2.484	44.32	Pk	32.1	-21.2	55.22	-	-	74	-18.78	339	134	H
3	* 2.484	25.61	VA1T	32.1	-21.2	36.51	54	-17.49	-	-	339	134	H
4	* 2.484	34.94	VA1T	32.1	-21.2	45.84	54	-8.16	-	-	339	134	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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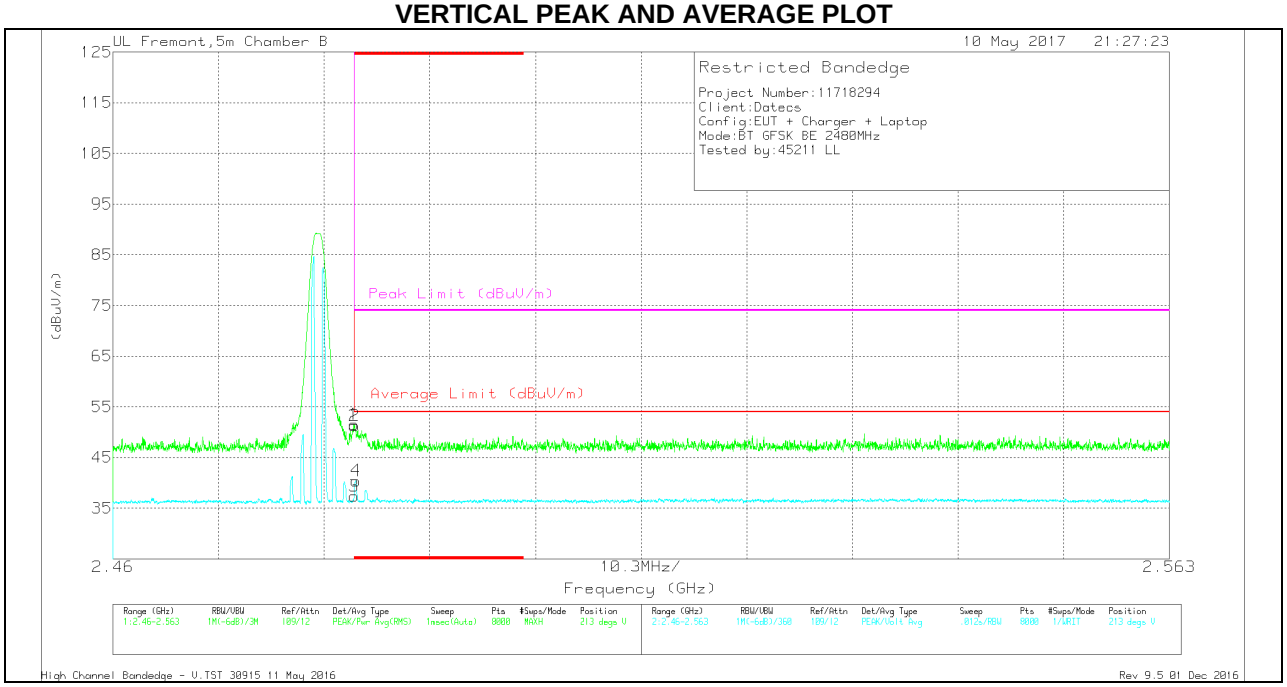
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.59	Pk	32.1	-21.2	51.49	-	-	74	-22.51	213	284	V
2	* 2.484	40.4	Pk	32.1	-21.2	51.3	-	-	74	-22.7	213	284	V
3	* 2.484	26.52	VA1T	32.1	-21.2	37.42	54	-16.58	-	-	213	284	V
4	* 2.484	29.52	VA1T	32.1	-21.2	40.42	54	-13.58	-	-	213	284	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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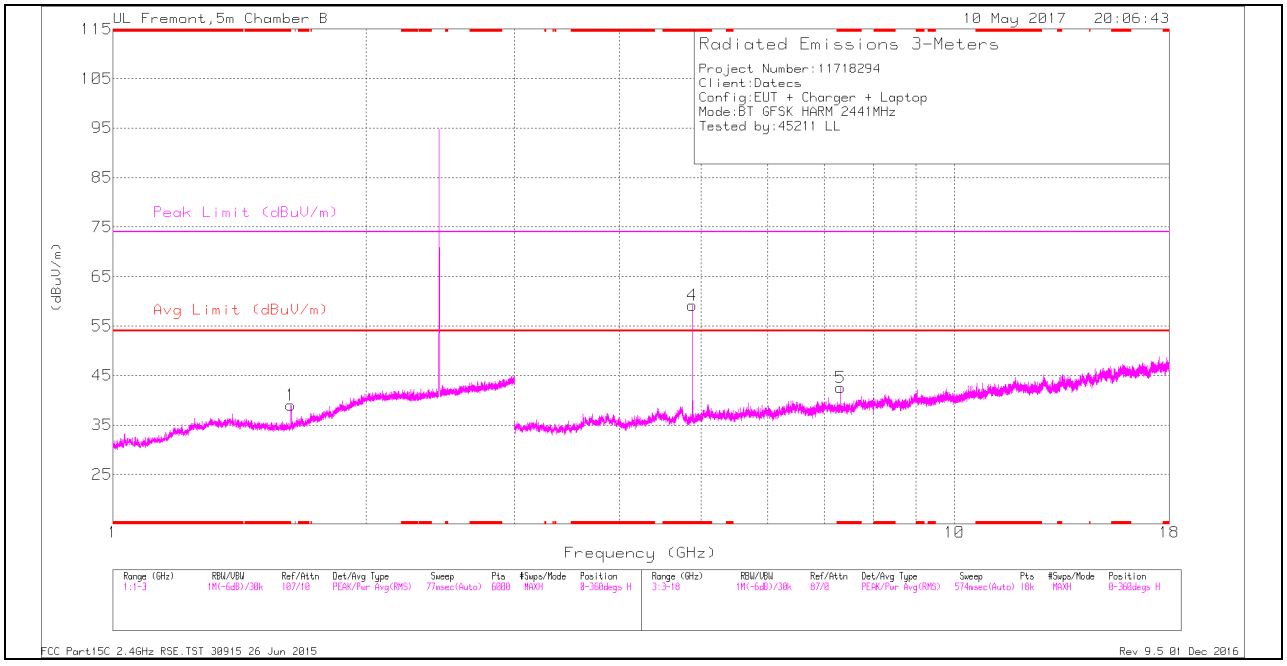
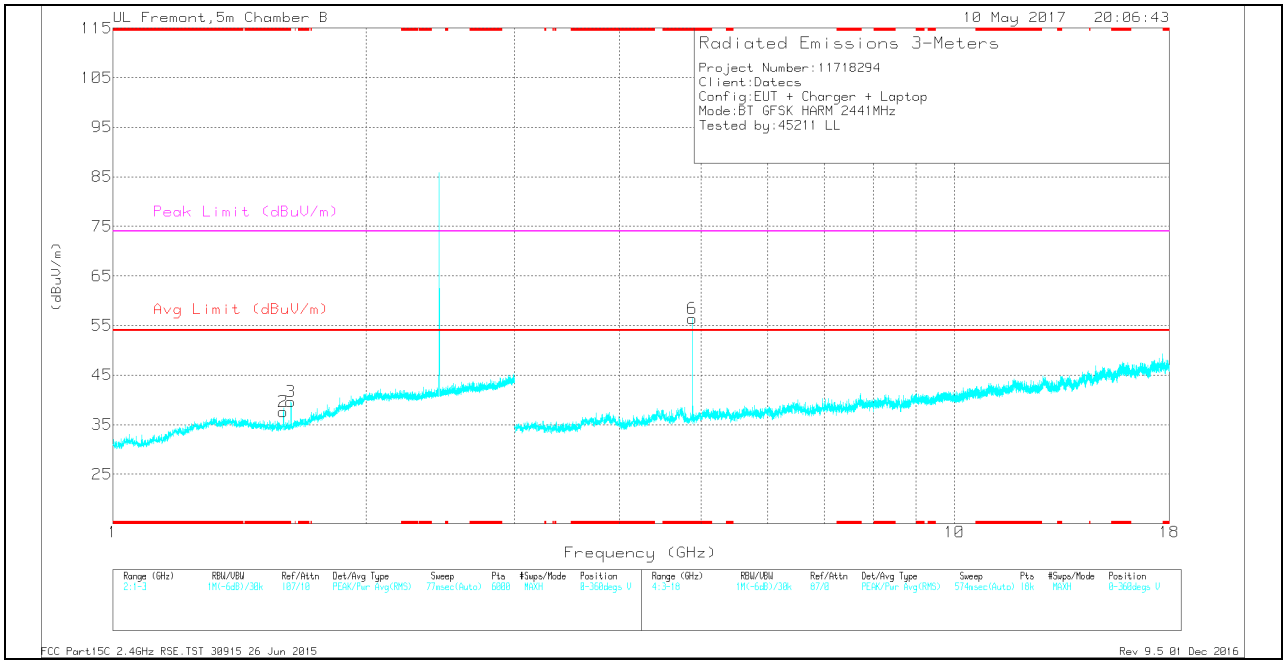
HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



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MID CHANNEL DATA

Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 1.595	40.88	PK2	27.2	-21.2	46.88	-	-	74	-27.12	165	278	V
	* 1.595	22.32	VA1T	27.2	-21.3	28.22	54	-25.78	-	-	165	278	V
4	* 4.882	56.68	PK2	34.5	-30.5	60.68	-	-	74	-13.32	4	102	H
	* 4.882	44.74	VA1T	34.5	-30.5	48.74	54	-5.26	-	-	4	102	H
5	* 7.322	40.81	PK2	36	-27.8	49.01	-	-	74	-24.99	18	127	H
	* 7.323	27.15	VA1T	36	-27.8	35.35	54	-18.65	-	-	18	127	H
6	* 4.882	55.1	PK2	34.5	-30.5	59.1	-	-	74	-14.9	26	102	V
	* 4.882	43.06	VA1T	34.5	-30.5	47.06	54	-6.94	-	-	26	102	V
1	1.628	39.05	PK2	27.5	-21.4	45.15	-	-	-	-	209	189	H
	1.628	31.88	VA1T	27.5	-21.4	37.98	-	-	-	-	209	189	H
3	1.628	38.75	PK2	27.5	-21.4	44.85	-	-	-	-	129	222	V
	1.628	31.76	VA1T	27.5	-21.4	37.86	-	-	-	-	129	222	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration
Note: All other emissions up to 26GHz were at noise floor level.

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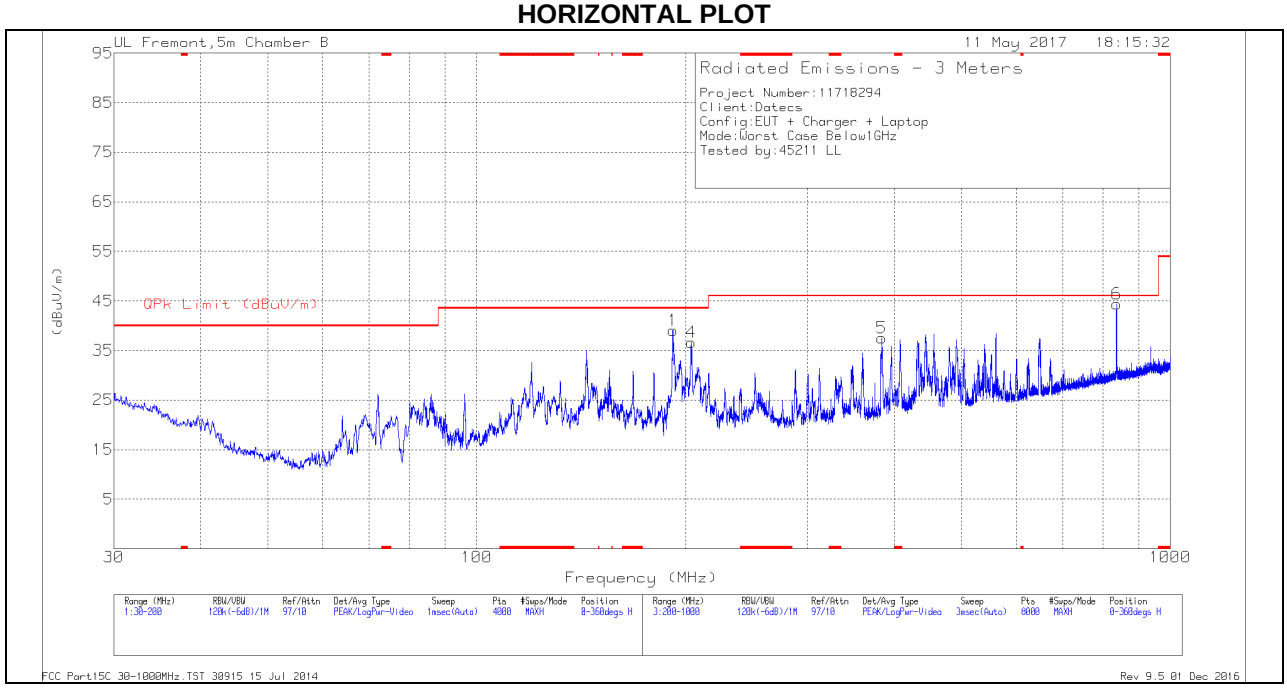
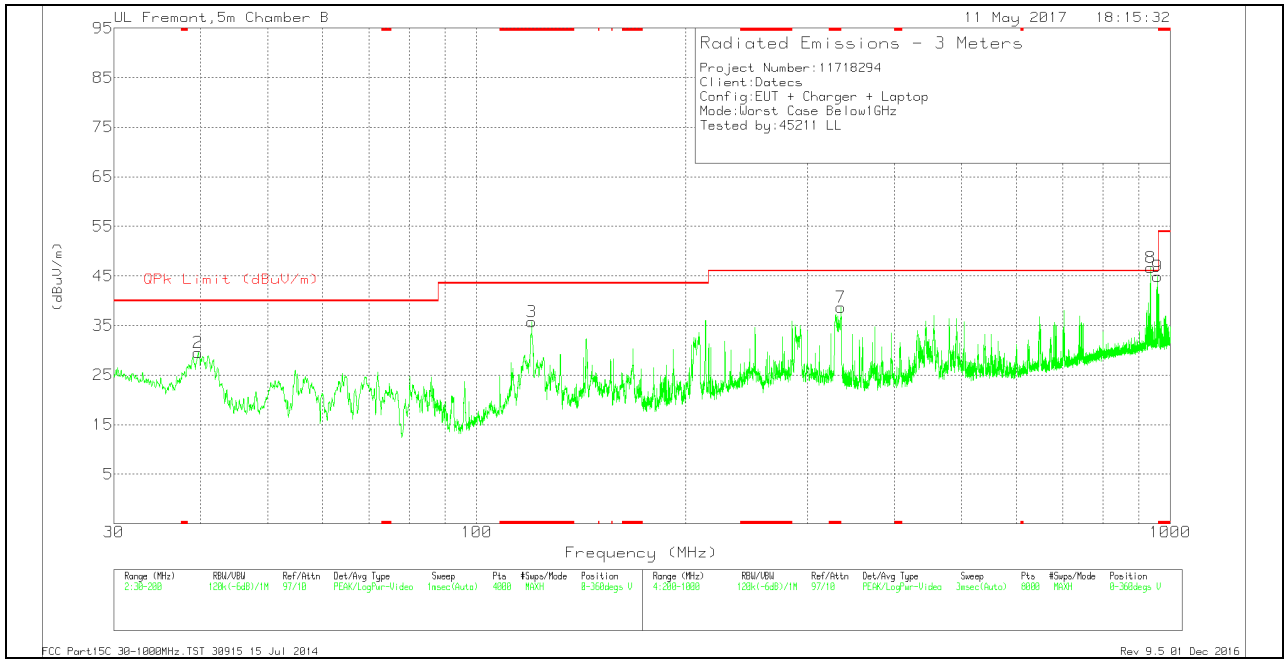
8.3. WORST-CASE BELOW 1 GHz

GFSK SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



VERTICAL PLOT



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BELOW 1 GHz TABLE

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 120.0383	45.72	Pk	17.7	-27.7	35.72	43.52	-7.8	0-360	100	V
7	* 335.3176	46.44	Pk	17.9	-25.7	38.64	46.02	-7.38	0-360	100	V
2	39.6925	40.05	Pk	18.2	-28.7	29.55	40	-10.45	0-360	100	V
1	191.7969	50.52	Pk	15.4	-26.9	39.02	43.52	-4.5	0-360	200	H
4	204.0005	48.2	Pk	15.2	-26.8	36.6	43.52	-6.92	0-360	100	H
5	384.0239	44.39	Pk	19	-25.9	37.49	46.02	-8.53	0-360	100	H
6	836.7828	42.54	Pk	25.7	-23.9	44.34	46.02	-1.68	0-360	400	H
8	936.4957	43.02	Pk	26.8	-23.2	46.62	46.02	.6	0-360	100	V
9	959.1987	41.4	Pk	26.7	-23.2	44.9	46.02	-1.12	0-360	100	V

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

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
192.0244	44.66	Qp	15.4	-26.9	33.16	43.52	-10.36	145	167	H
836.8692	22.82	Qp	25.7	-23.9	24.62	46.02	-21.4	269	394	H
936.7136	22.75	Qp	26.8	-23.2	26.35	46.02	-19.67	227	181	V
959.2433	22.61	Qp	26.7	-23.2	26.11	46.02	-19.91	159	100	V

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

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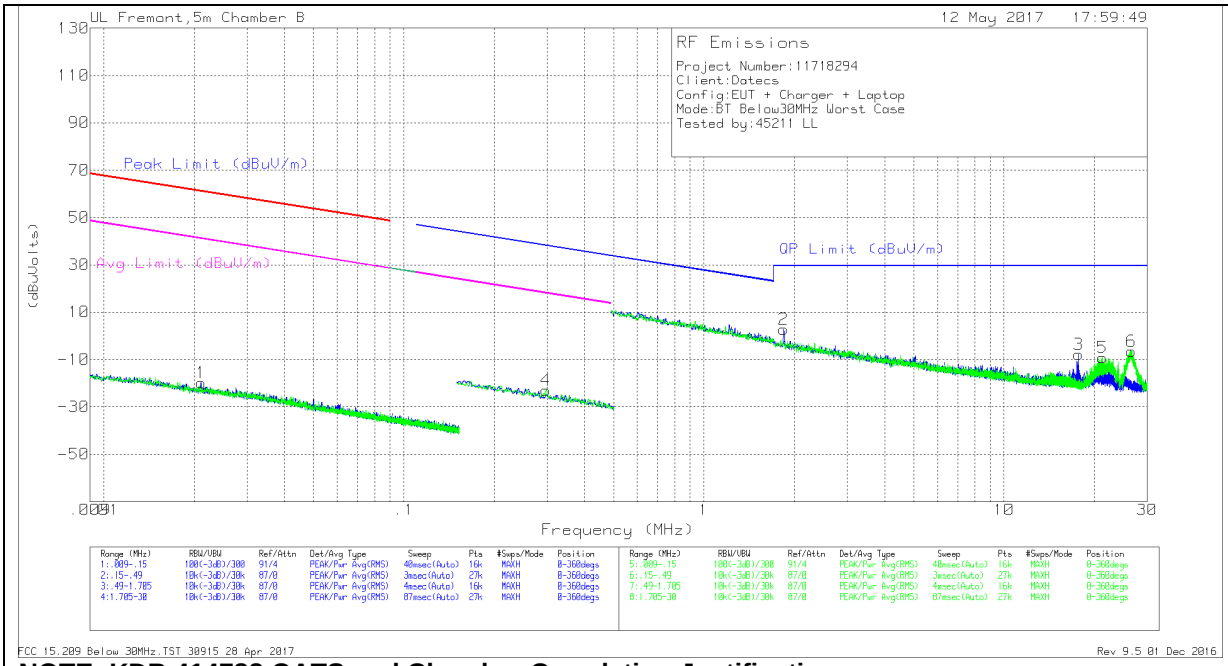
8.4. WORST-CASE BELOW 30 MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



NOTE: KDB 414788 OATS and Chamber Correlation Justification

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

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.02109	43.61	Pk	15.2	1.4	-80	-19.79	61.1	-80.89	41.1	-60.89	-	-	-	-	0-360
4	.29769	44.08	Pk	11.5	1.5	-80	-22.92	-	-	-	-	38.14	-61.06	18.14	-41.06	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
2	1.84491	29.56	Pk	11.6	1.5	-40	2.66	29.5	-26.84	-	-	-	-	0-360
3	17.70586	20.76	Pk	9.9	1.6	-40	-7.74	29.5	-37.24	-	-	-	-	0-360
5	21.24077	19.53	Pk	9.5	1.7	-40	-9.27	29.5	-38.77	-	-	-	-	0-360
6	26.55622	23.29	Pk	8.6	1.7	-40	-6.41	29.5	-35.91	-	-	-	-	0-360

Pk - Peak detector

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8.5. SPURIOUS RADIATED EMISSION OF COMPOSITE SYSTEM

LIMITS

FCC: §15.209

Section CFR 47 15.31 (h)

RESULTS

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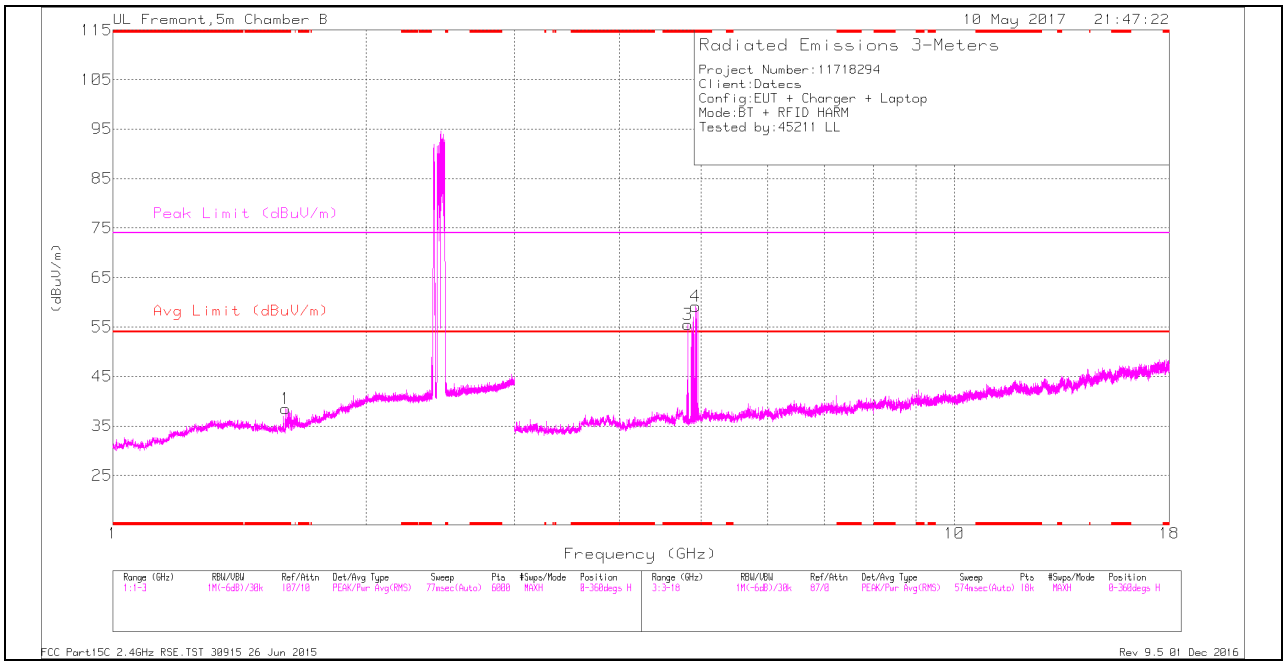
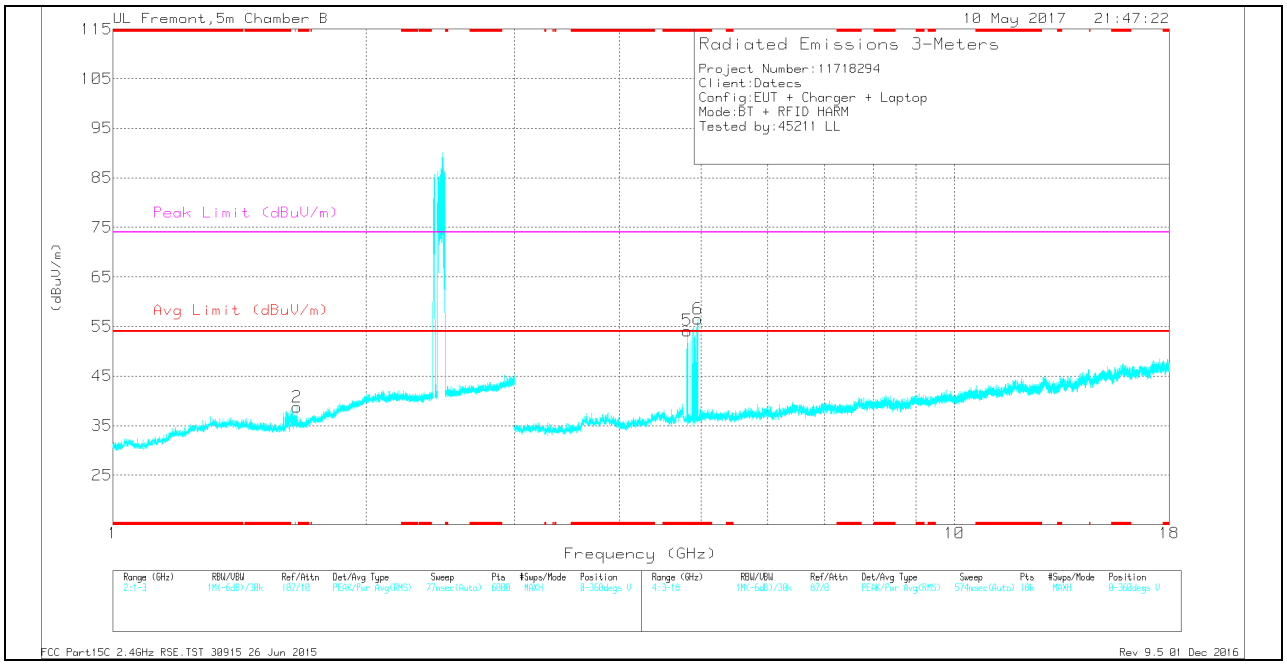
HARMONICS AND SPURIOUS EMISSIONS

RFID + BT HOPPING HORIZONTAL



RFID + BT HOPPING VERTICAL



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RFID + BT HOPPING DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.605	32.64	Pk	27.2	-21.3	38.54	-	-	74	-35.46	0-360	199	H
3	* 4.824	50.61	Pk	34.4	-29.5	55.51	-	-	74	-18.49	0-360	199	H
4	* 4.926	54.94	Pk	34.5	-30.2	59.24	-	-	74	-14.76	0-360	102	H
5	* 4.812	48.97	Pk	34.4	-29.2	54.17	-	-	74	-19.83	0-360	102	V
6	* 4.954	52	Pk	34.5	-30	56.5	-	-	74	-17.5	0-360	102	V
2	1.653	32.21	Pk	27.8	-21.3	38.71	-	-	-	-	0-360	200	V

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

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.604	37.66	PK2	27.2	-21.4	43.46	-	-	74	-30.54	311	337	H
* 1.607	27.31	VA1T	27.2	-21.2	33.31	54	-20.69	-	-	311	337	H
* 4.824	53.25	PK2	34.4	-29.5	58.15	-	-	74	-15.85	0	137	H
* 4.817	28.97	VA1T	34.4	-29.3	34.07	54	-19.93	-	-	0	137	H
* 4.926	57.8	PK2	34.5	-30.2	62.1	-	-	74	-11.9	7	102	H
* 4.926	43.18	VA1T	34.5	-30.2	47.48	54	-6.52	-	-	7	102	H
* 4.804	53.81	PK2	34.4	-29	59.21	-	-	74	-14.79	19	102	V
* 4.812	38.9	VA1T	34.4	-29.2	44.1	54	-9.9	-	-	19	102	V
* 4.95	57.69	PK2	34.5	-30.1	62.09	-	-	74	-11.91	109	399	V
* 4.953	26.65	VA1T	34.5	-30.1	31.05	54	-22.95	-	-	109	399	V
1.653	37.66	PK2	27.8	-21.3	44.16	-	-	-	-	350	393	V
1.653	28.43	VA1T	27.8	-21.3	34.93	-	-	-	-	350	393	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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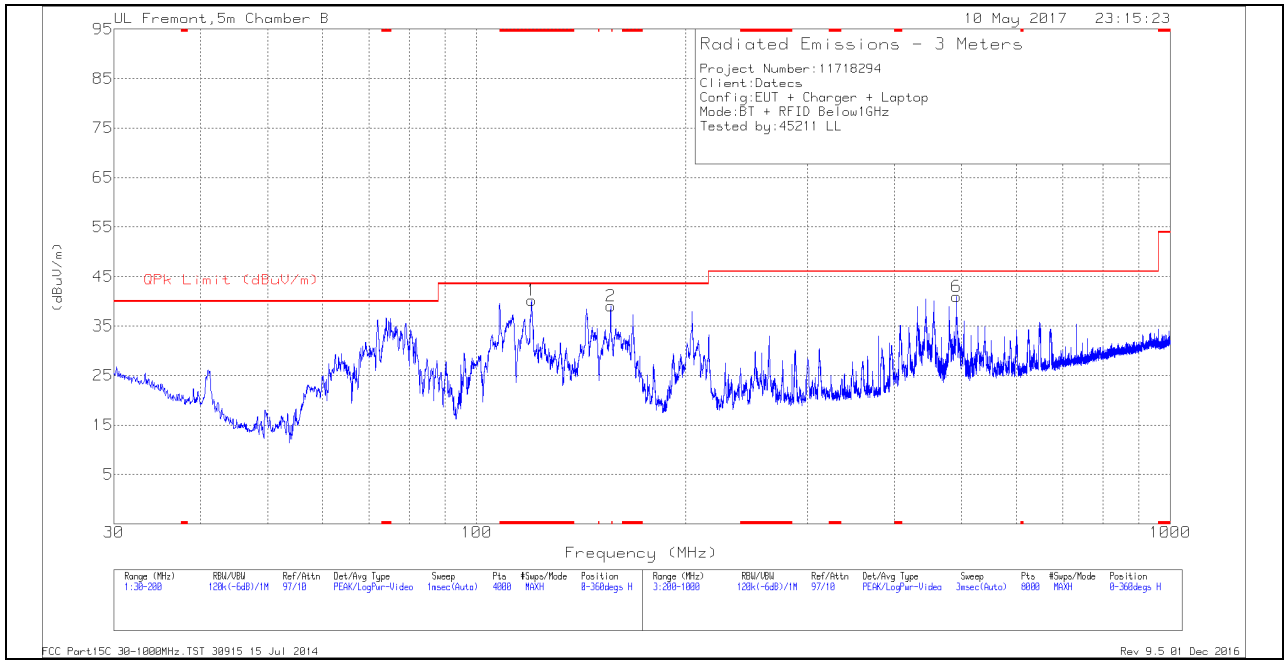
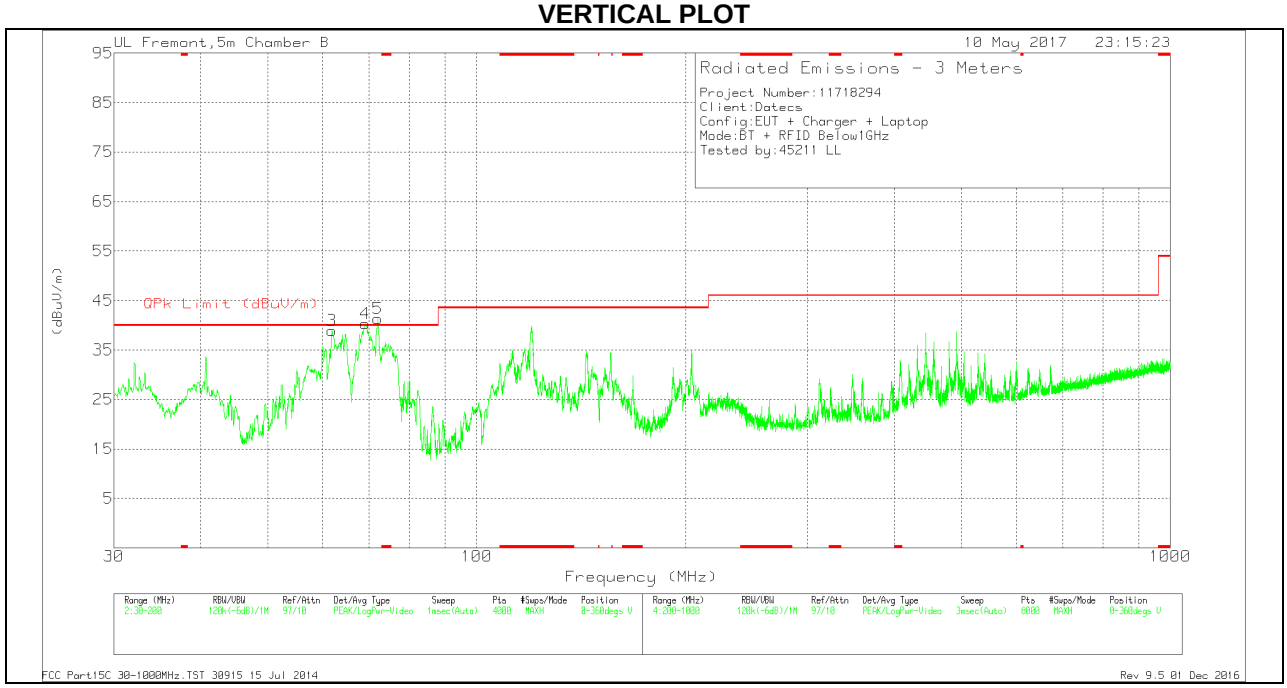
RFID + BT HOPPING SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



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BELOW 1 GHz TABLE

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 119.9958	50.19	Pk	17.7	-27.7	40.19	43.52	-3.33	0-360	200	H
3	61.8407	55.71	Pk	11.6	-28.4	38.91	40	-1.09	0-360	100	V
4	69.0676	56.62	Pk	12	-28.3	40.32	40	.32	0-360	100	V
5	72.0434	57.57	Pk	12	-28.2	41.37	40	1.37	0-360	100	V
2	156.0876	50.05	Pk	16.3	-27.3	39.05	43.52	-4.47	0-360	100	H
6	492.038	45.19	Pk	21.7	-25.9	40.99	46.02	-5.03	0-360	200	H

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

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T477 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 120.0217	47.03	Qp	17.7	-27.7	37.03	43.52	-6.49	101	334	H
61.761	48.59	Qp	11.6	-28.4	31.79	40	-8.21	194	176	V
69.1271	54.24	Qp	12	-28.3	37.94	40	-2.06	265	178	V
72.0463	55.24	Qp	12	-28.2	39.04	40	-.96	238	113	V
155.9441	45.38	Qp	16.3	-27.3	34.38	43.52	-9.14	134	176	H
491.991	44.03	Qp	21.7	-25.9	39.83	46.02	-6.19	241	201	H

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

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