FCC 47 CFR PART 15 SUBPART E
INDUSTRY CANADA RSS-210 ISSUE 8

CERTIFICATION TEST REPORT

FOR

GSM/CDMA/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n/ac and NFC

MODEL NUMBER: LG-VS985, VS985, LGVS985, AS985, LG-AS985 & LGAS985

FCC ID: ZNFVS985
IC: 2703C-VS985

REPORT NUMBER: 14U17502-5 REVISION B
ISSUE DATE: MAY 20, 2014

Prepared for
LG ELECTRONICS MOBILECOMM U.S.A., INC
1000 SYLVAN AVENUE
ENGLEWOOD CLIFFS,
NEW JERSEY, 07632, U.S.A.

Prepared by
UL VERIFICATION SERVICES INC.
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888

NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	05/08/14	Initial Issue	P. Zhang
A	5/20/14	Updated KDB reference in section 2	P. Zhang
B	5/20/14	Update EUT description in DFS section to include KDB reference	C. Cheung

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.

EUT DESCRIPTION: GSM/CDMA/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n/ac and NFC.

MODEL: LG-VS985, VS985, LGVS985, AS985, LG-AS985 & LGAS985

SERIAL NUMBER: 14ZMN (Conducted), 14ZK7 (Radiated)

DATE TESTED: APRIL 18 – MAY 8, 2014

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart E	Pass
INDUSTRY CANADA RSS-210 Issue 8 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 3	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, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Verification Services Inc. By:

PENG ZHANG
CONSUMER TECHNOLOGY DIVISION
PROJECT LEAD
UL Verification Services Inc.

Tested By:

CHARLES VERGONIO
CONSUMER TECHNOLOGY DIVISION
LAB ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.4-2009, RSS-GEN Issue 3, RSS-210 Issue 8. KDB 644545 D01 Guidance for IEEE 802.11ac v01r01 and KDB 644545 D02 Alternative Guidance for 802.11ac v01;

3. FACILITIES AND ACCREDITATION

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

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 18000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/CDMA/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n/ac and NFC.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180-5240	802.11a	12.03	15.96
5180-5240	802.11n HT20	10.89	12.27
5190-5230	802.11n HT40	10.56	11.38
5210	802.11ac HT80	10.77	11.94
5260-5320	802.11a	12.06	16.07
5260-5320	802.11n HT20	11.33	13.58
5270-5310	802.11n HT40	12.3	16.98
5290	802.11ac HT80	10.97	12.50
5500-5700	802.11a	11.84	15.28
5500-5700	802.11n HT20	10.53	11.30
5510-5670	802.11n HT40	10.63	11.56
5530	802.11ac HT80	10.92	12.36
5745-5825	802.11a	12.27	16.87
5745-5825	802.11n HT20	11.12	12.94
5755-5795	802.11n HT40	10.65	11.61
5775	802.11ac HT80	10.77	11.94

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 0.44 dBi.

5.4. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z, it was determined that the X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in the X orientation.

Based on the baseline scan, the worst-case data rates were:

802.11a mode: 6 Mbps
802.11n HT20mode: MCS0
802.11n HT40mode: MCS0
802.11ac HT80mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	LG	MCS-04WT2	TA350000050	N/A
Earphone	LG	N/A	N/A	N/A
WPC Cover	LG	N/A	N/A	N/A
WPC Charger	LG	WPC-300	304HYBF00069	BEJWCP300

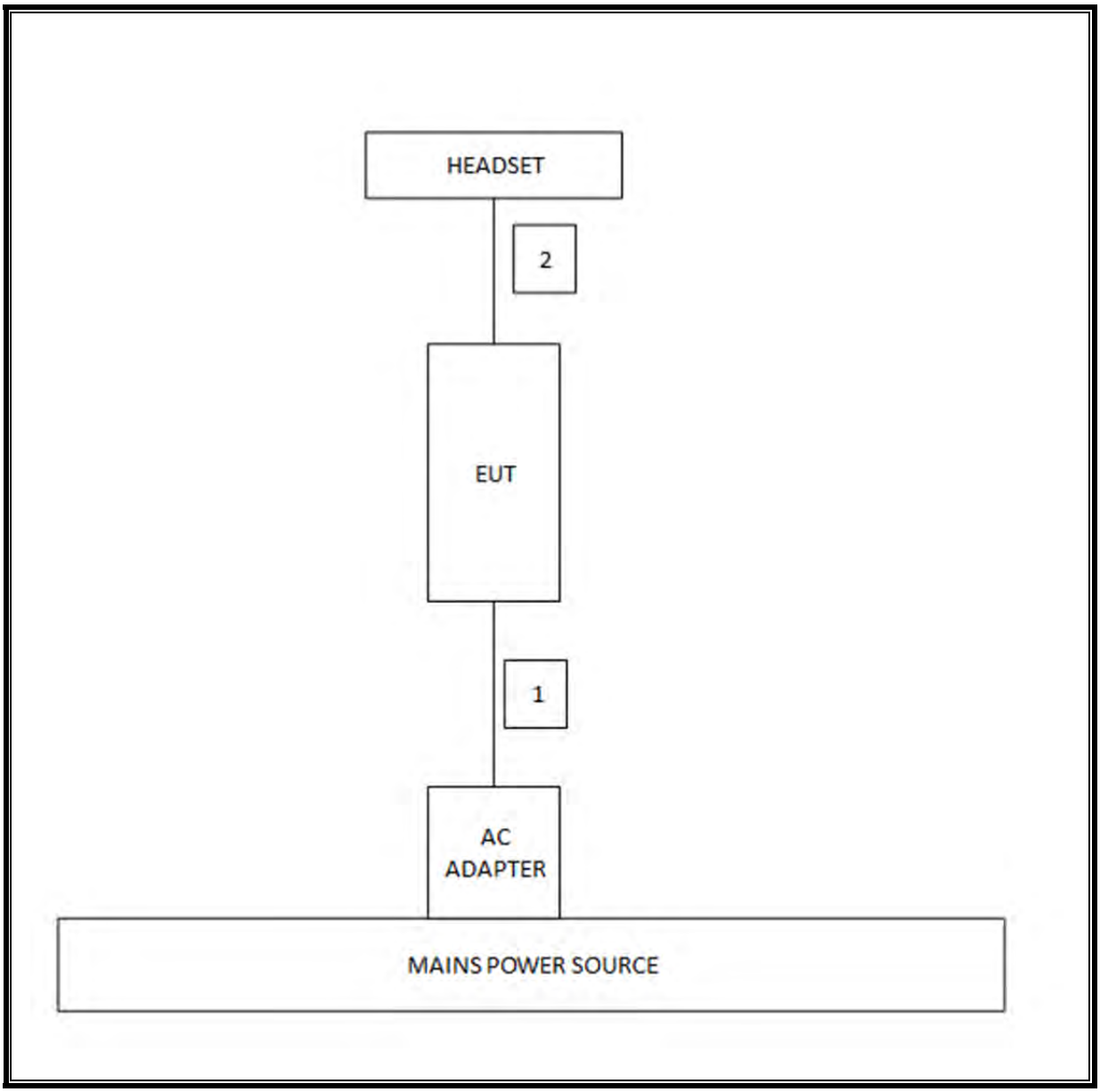
I/O CABLES

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1.0m	N/A

TEST SETUP

The EUT is setup as a stand-alone device.

SETUP DIAGRAM FOR TESTS



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**
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/14
Spectrum Analyzer,9KHz-40GHz	HP	8564E	C00986	04/01/15
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/14
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/14
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/14
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/14
Antenna, Horn, 1-18 GHz	ETS	3117	C01022	02/21/15
Antenna, Horn,18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/14
Antenna, Horn, 26-40 GHz	ARA	MWH-2640	C00891	06/28/14
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	T243	03/06/15
RF Preamplifier, 100KHz -> 1300MHz	HP	TBD	C00825	06/01/14
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	924343	03/23/15
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/14
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	08/20/14
Attenuator / Switch driver	HP	11713A	F00204	CNR
Low Pass Filter 3GHz	Micro-Tronics	LPS17541	F00219	05/23/14
High Pass Filter 5GHz	Micro-Tronics	HPS17542	F00222	05/22/14
High Pass Filter 6GHz	Micro-Tronics	HPM17543	F00224	05/22/14

7. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.247 (a)	Occupied Band width (26dB)	N/A	Conducted	Pass	85.42MHz
15.407 (a)(1)	TX Cond. Power 5.15-2.25	<17dBm or 4+10Log(OBW)		Pass	12.03dBm
15.407 (a)(2)	TX Cond. Power 5.25-5.35 & 5.47-5.725	<24dBm or 11+10Log(OBW)		Pass	12.3dBm
15.407 (a)(3)	TX Cond. Power 5.725-5.825	< 30dBm or 17+10Log(OBW)		Pass	12.27dBm
15.407 (a)(5)	PSD	<4dBm for 5.2 and <11dBm for 5.3,5.5		Pass	1.43dBm
15.407 (a)(6)	Peak Excursion Ratio	13dB		Pass	7.83dB
15.207 (a)	AC Power Line conducted emissions	Section 10	Radiated	Pass	46.94dBuV
15.407 (b) & 15.209	Radiated Spurious Emission	< 54dBuV/m		Pass	48.55dBmV/m
15.407 (h)(2)	Dynamic Frequency Selection	N/A	Radiated / Condcuted	Pass	N/A

8. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

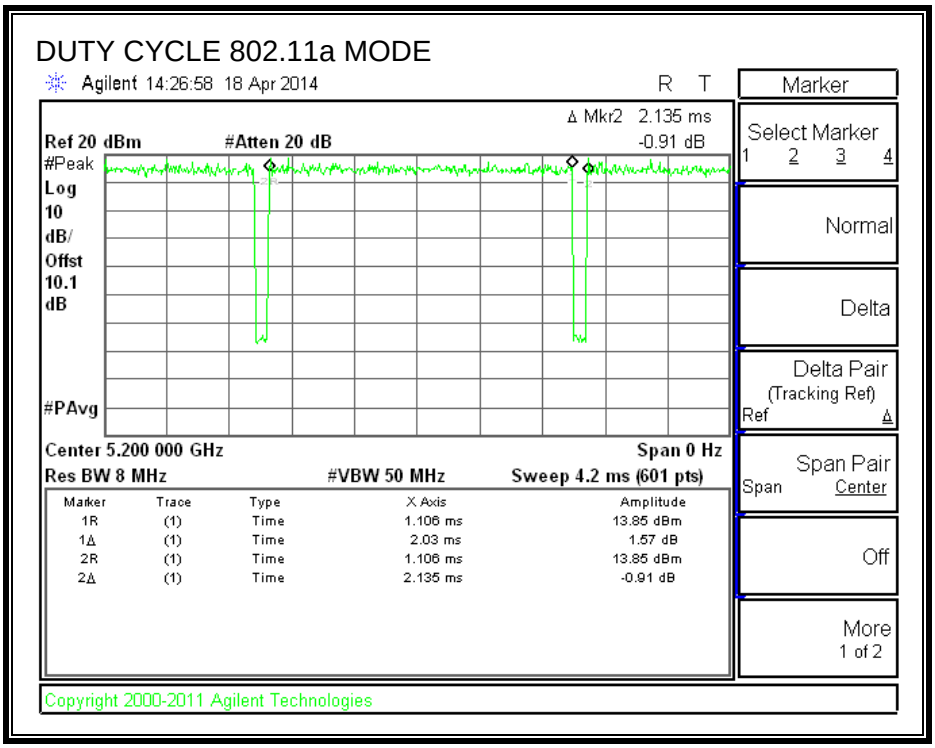
KDB 789033 Zero-Span Spectrum Analyzer Method.

8.1. ON TIME AND DUTY CYCLE RESULTS

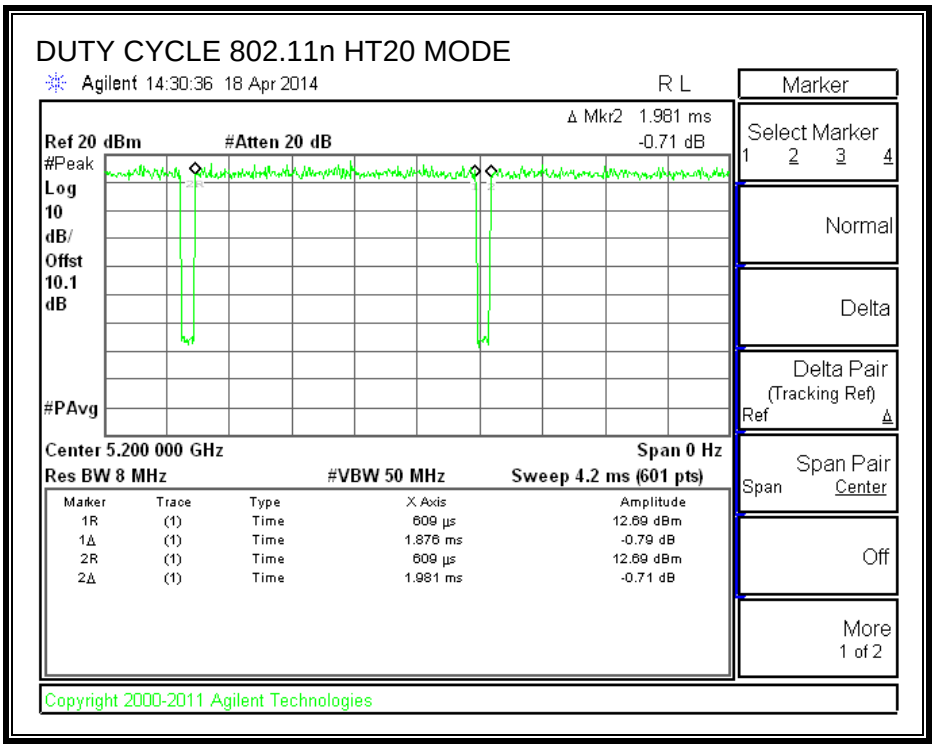
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11a	2.03	2.14	0.951	95.1%	0.22	0.493
802.11ac HT80	0.25	0.35	0.710	71.0%	1.49	4.047
802.11n HT20	1.88	1.98	0.947	94.7%	0.24	0.533
802.11n HT40	0.91	1.02	0.894	89.4%	0.49	1.099

8.2. DUTY CYCLE PLOTS

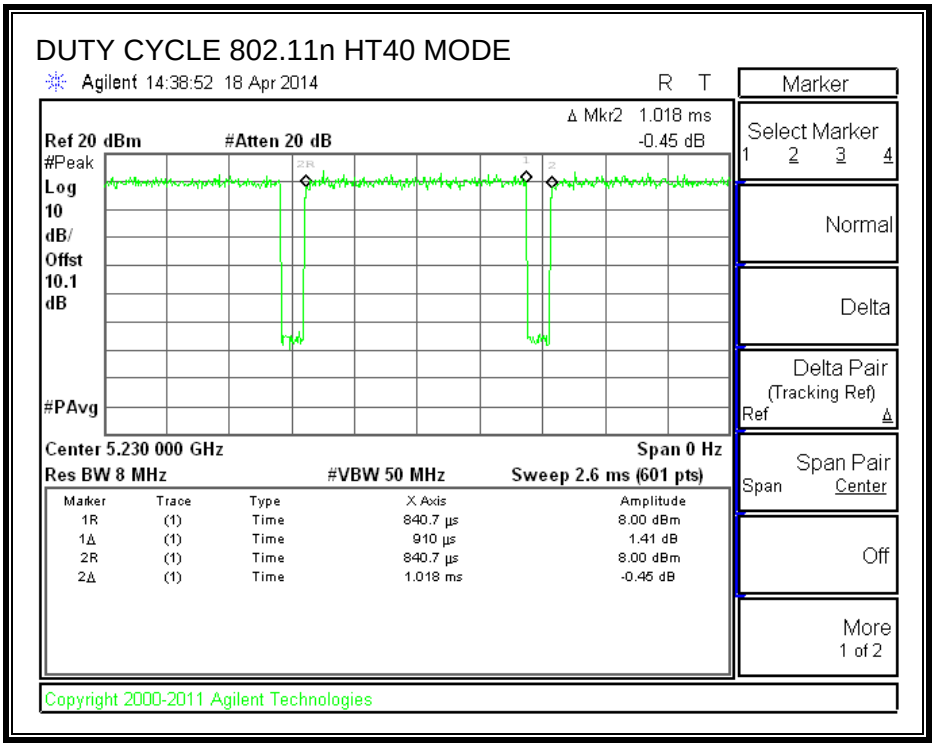
DUTY CYCLE 802.11a MODE



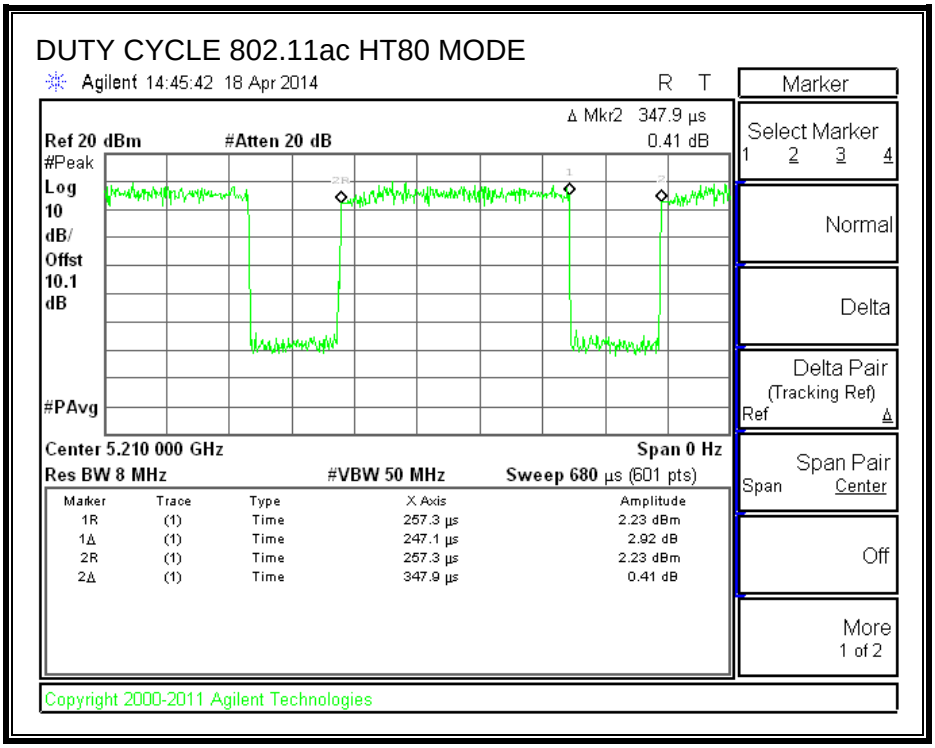
DUTY CYCLE 802.11n HT20 MODE



DUTY CYCLE 802.11n HT40 MODE



DUTY CYCLE 802.11ac HT80 MODE



9. MEASUREMENT METHOD

The Duty Cycle is less than 98% and consistent therefore KDB 789033 Method SA-2 is used for .power and PPSD

The Duty Cycle is less than 98% and consistent, KDB 789033 Method AD with Power RMS Averaging and duty cycle correction is used.

10. ANTENNA PORT TEST RESULTS

10.1. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

10.1.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	22.40
Mid	5200	22.10
High	5240	22.40
Worst		22.40

10.1.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	22.50
Mid	5200	22.55
High	5240	22.70
Worst		22.70

10.1.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	43.50
Mid	5230	43.90
Worst		43.90

10.1.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5210	84.38

10.1.1. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	21.90
Mid	5300	21.90
High	5320	21.95
Worst		21.95

10.1.1. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	22.45
Mid	5300	22.35
High	5320	22.30
Worst		22.45

10.1.2. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	43.8
High	5310	43.7
Worst		43.8

10.1.3. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5290	79.580

10.1.4. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	22.30
Mid	5580	22.25
High	5700	22.20
Worst		22.30

10.1.5. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	21.88
Mid	5580	22.28
High	5700	22.40
Worst		22.40

10.1.6. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	42.9
Mid	5550	42.9
High	5670	43.8
Worst		43.8

10.1.7. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	84.380
High	5690	85.420
Worst		85.4

10.1.8. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	21.25
Mid	5785	21.95
High	5825	22.25
Worst		22.25

10.1.9. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	22.30
Mid	5785	22.50
High	5825	22.65
Worst		22.65

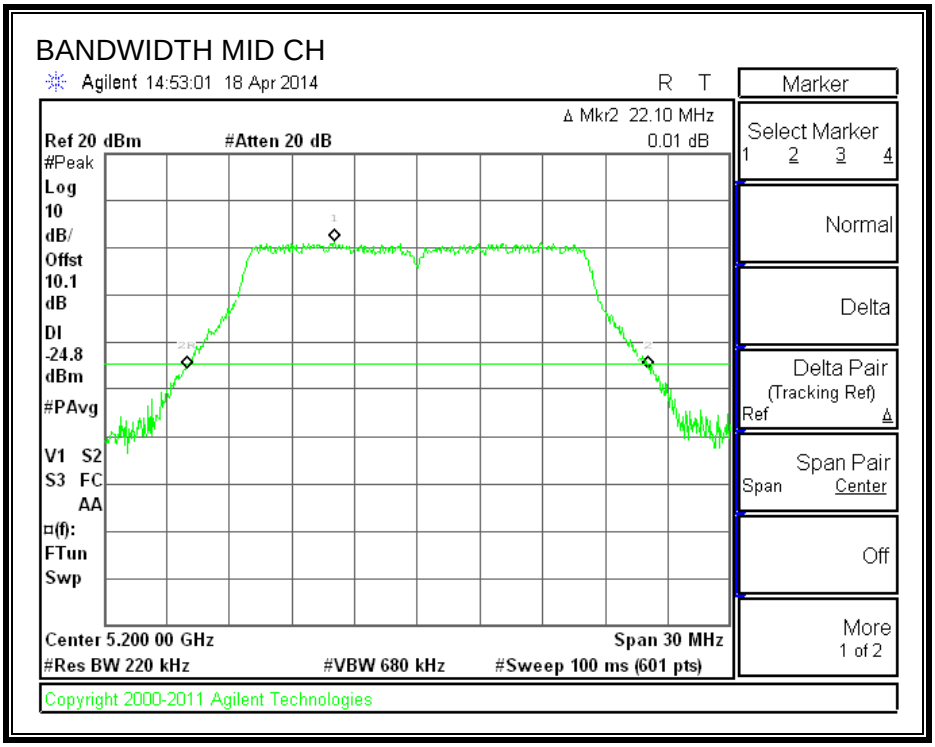
10.1.10. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	43.2
High	5795	43.8
Worst		43.8

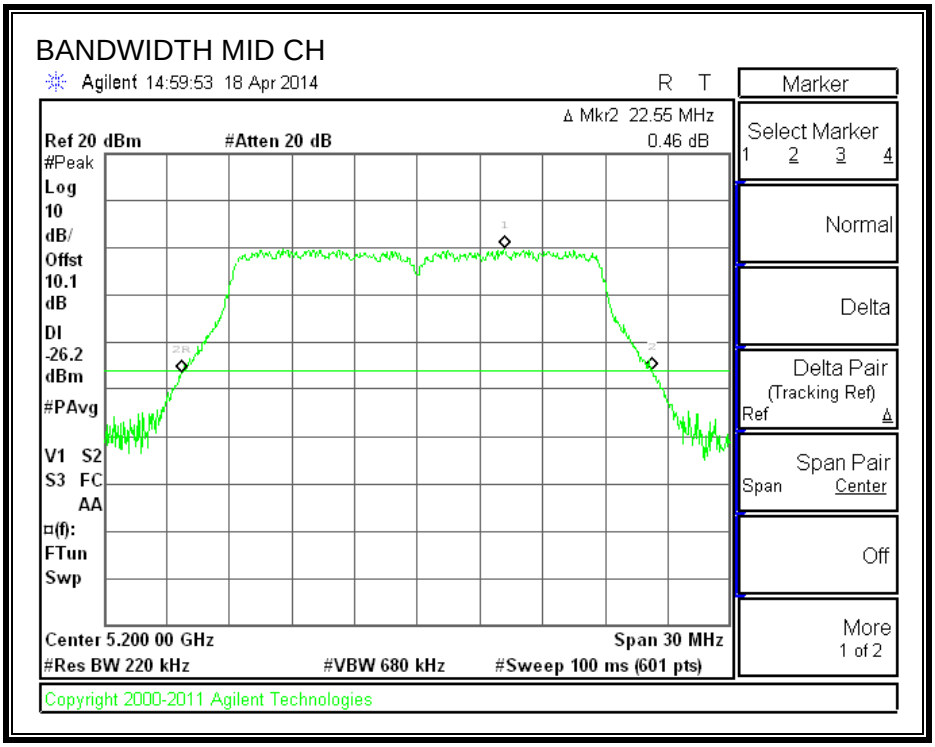
10.1.11. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5775	84.8

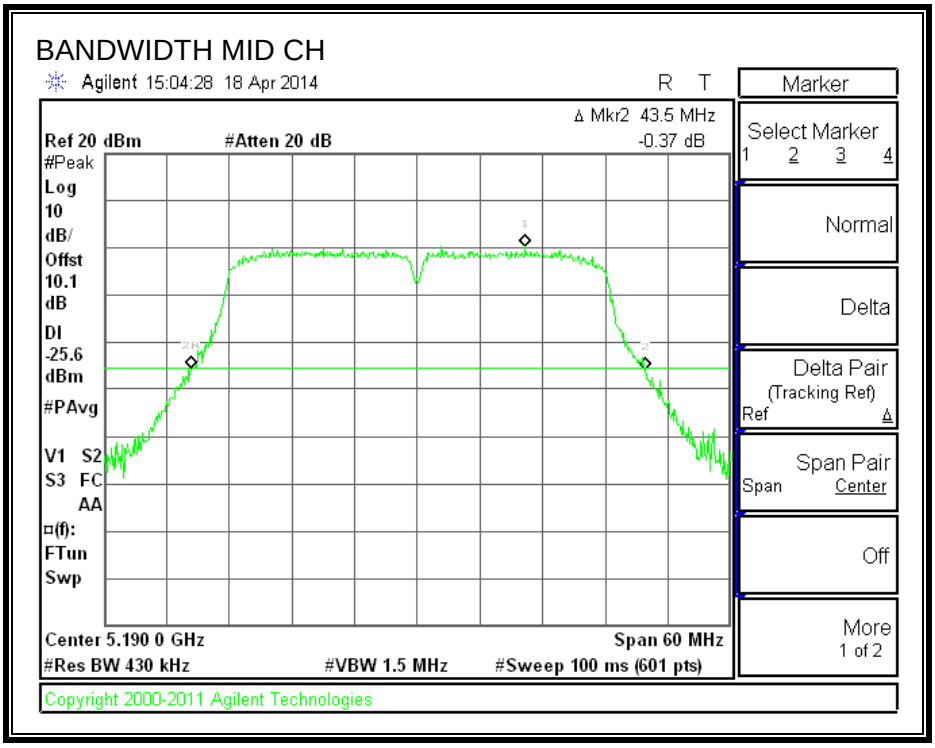
802.11a 5.2G 26 dB BANDWIDTH



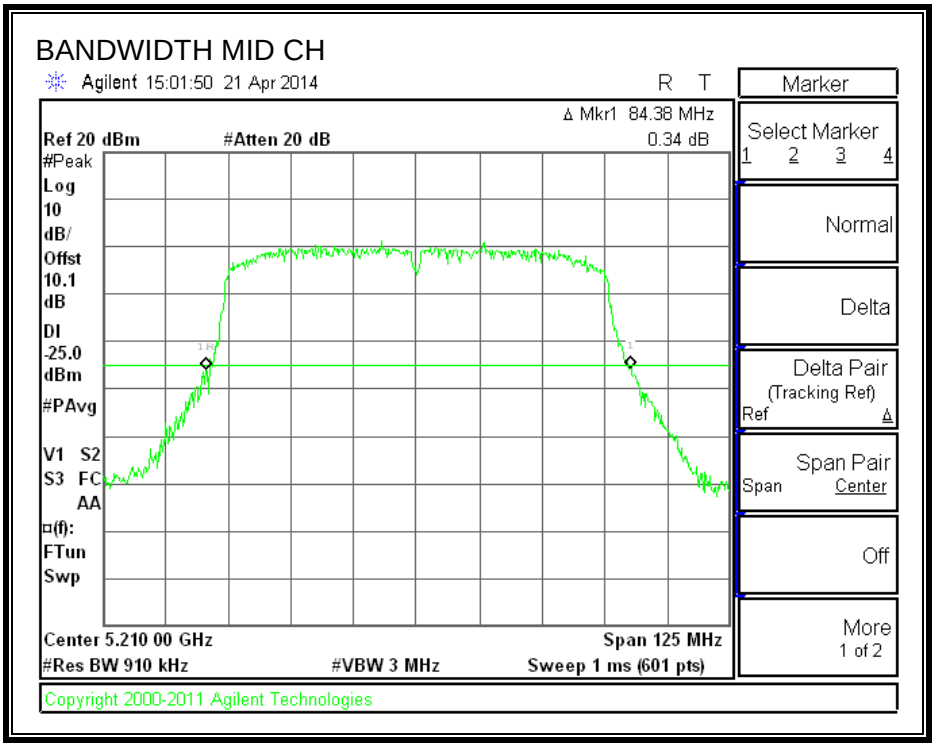
802.11n HT20 5.2G 26 dB BANDWIDTH



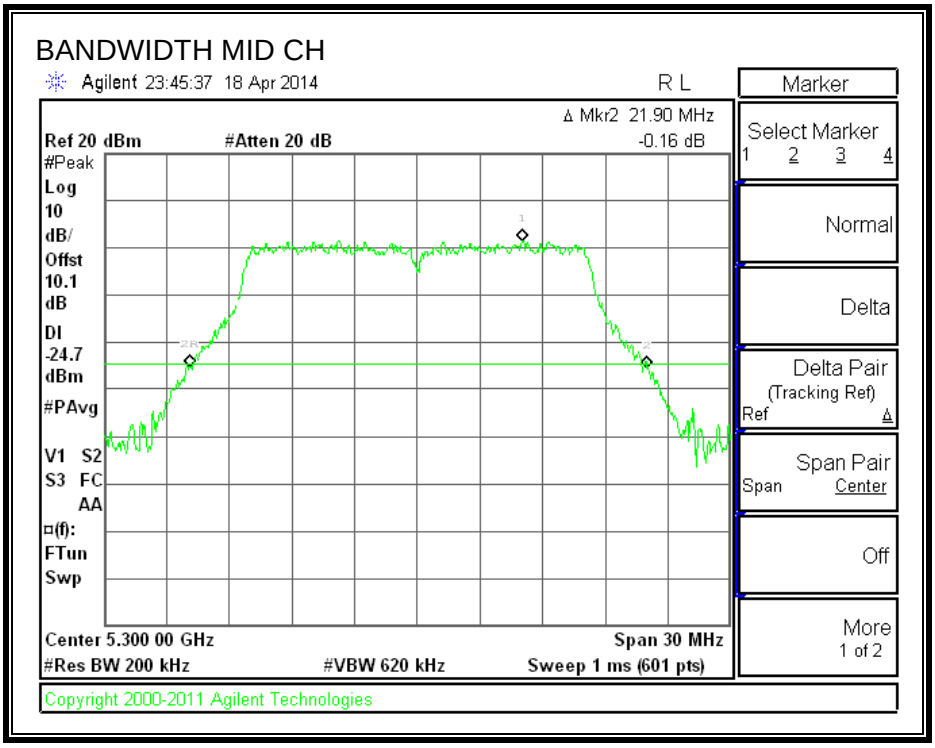
802.11n HT40 5.2G 26 dB BANDWIDTH



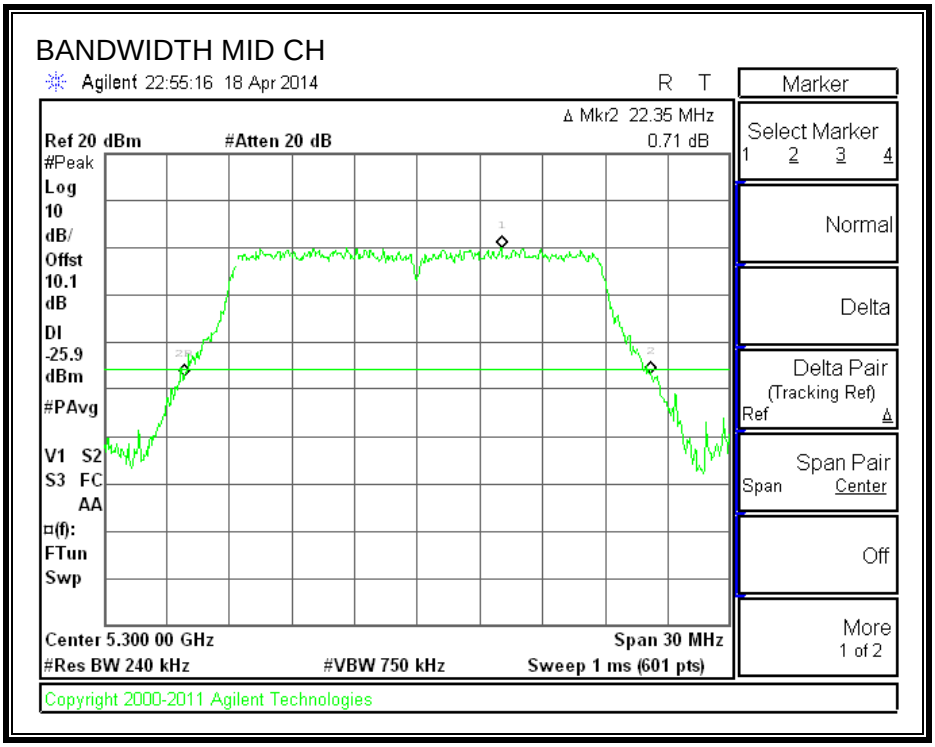
802.11ac HT80 5.2G 26 dB BANDWIDTH



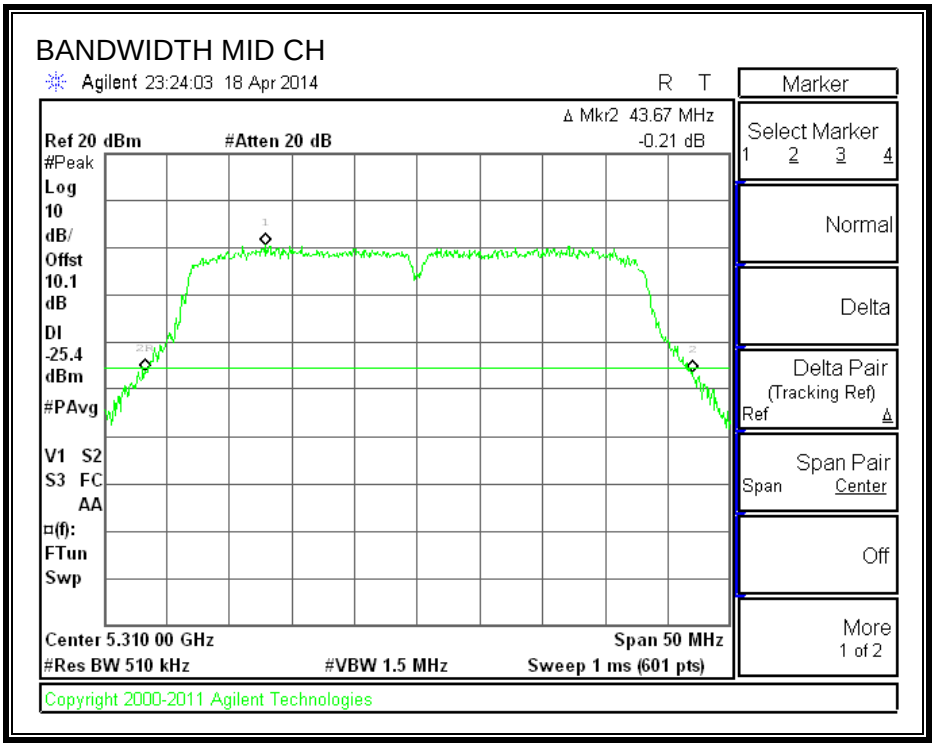
802.11a 5.3G 26 dB BANDWIDTH



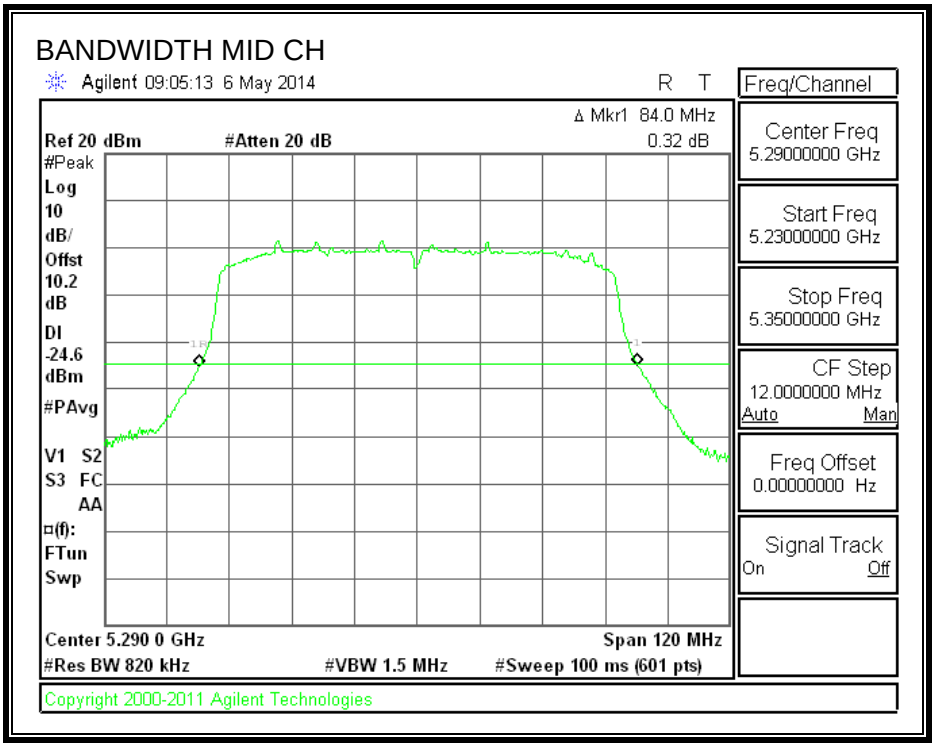
802.11n HT20 5.3G 26 dB BANDWIDTH



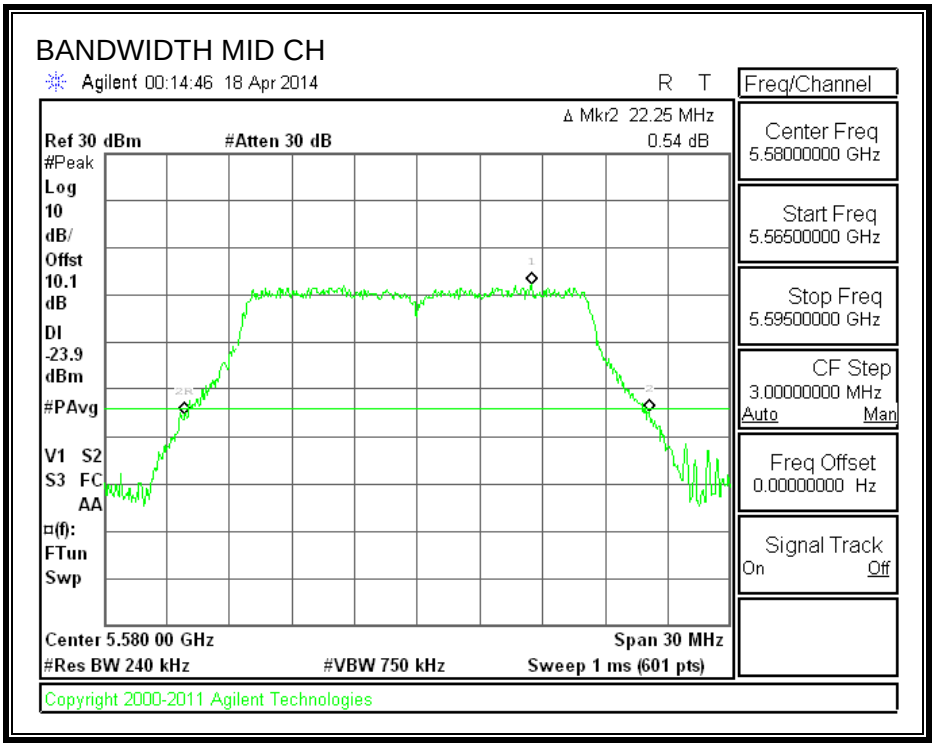
802.11n HT40 5.3G 26 dB BANDWIDTH



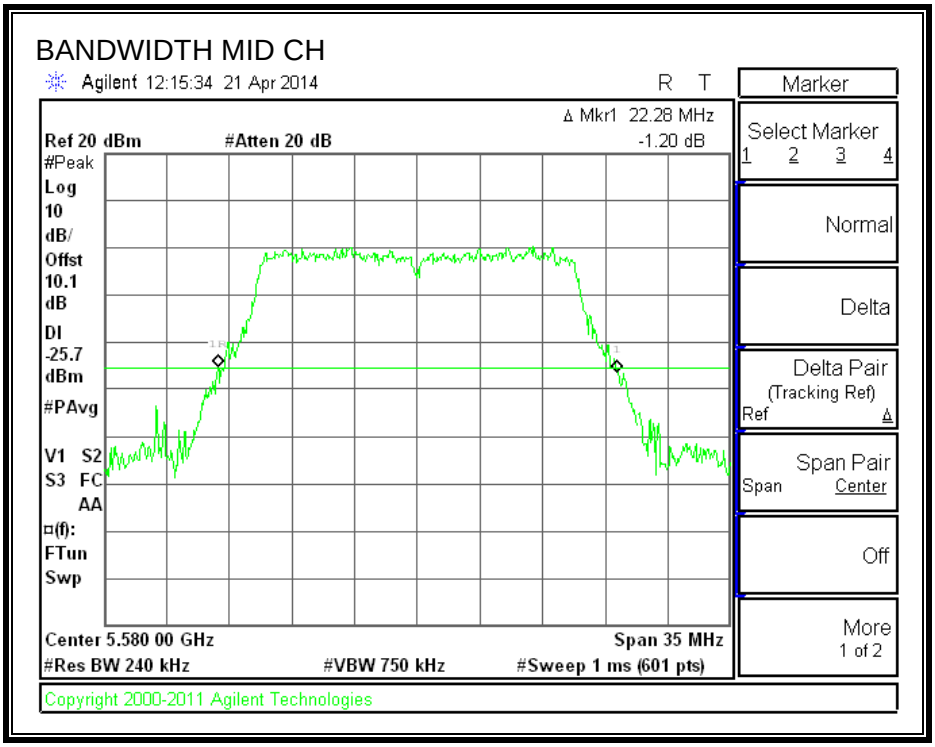
802.11ac HT80 5.3G 26 dB BANDWIDTH



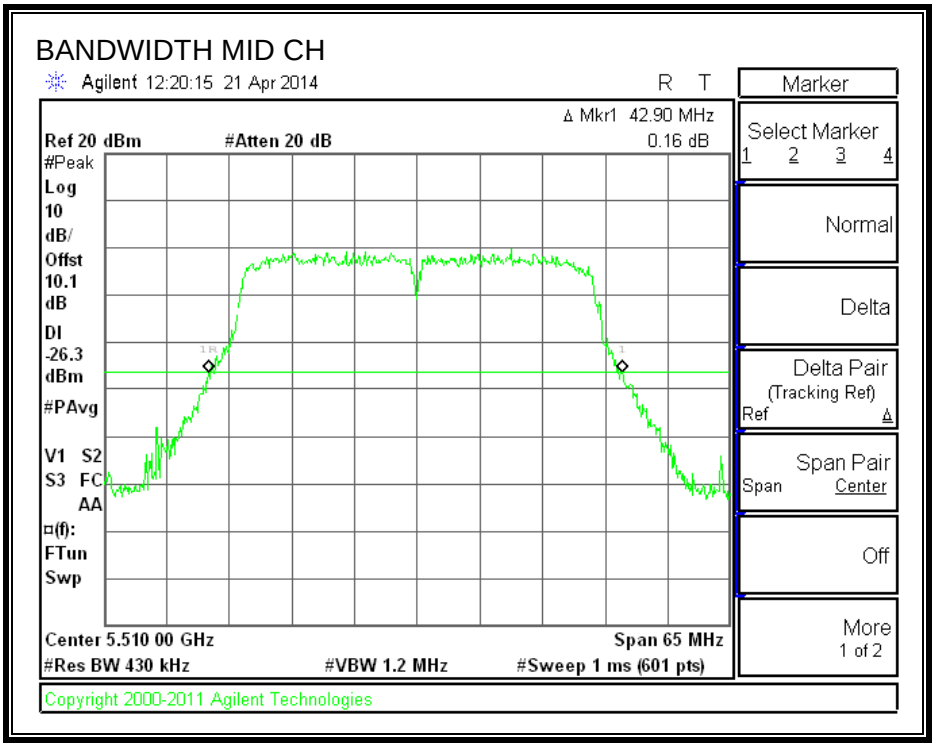
802.11a 5.5G 26 dB BANDWIDTH



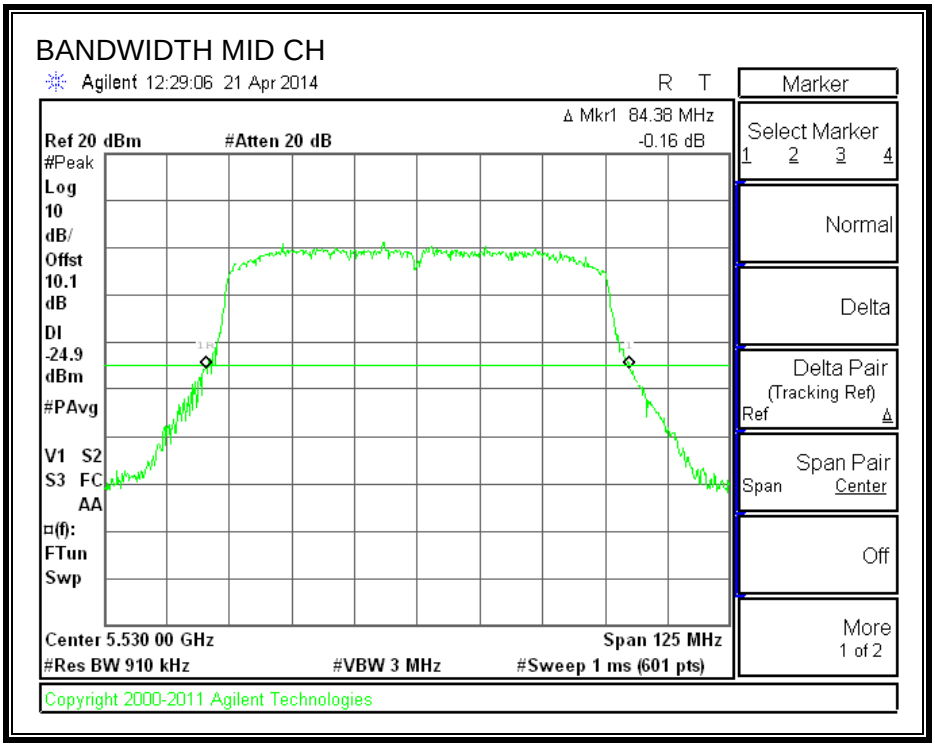
802.11n HT20 5.5G 26 dB BANDWIDTH



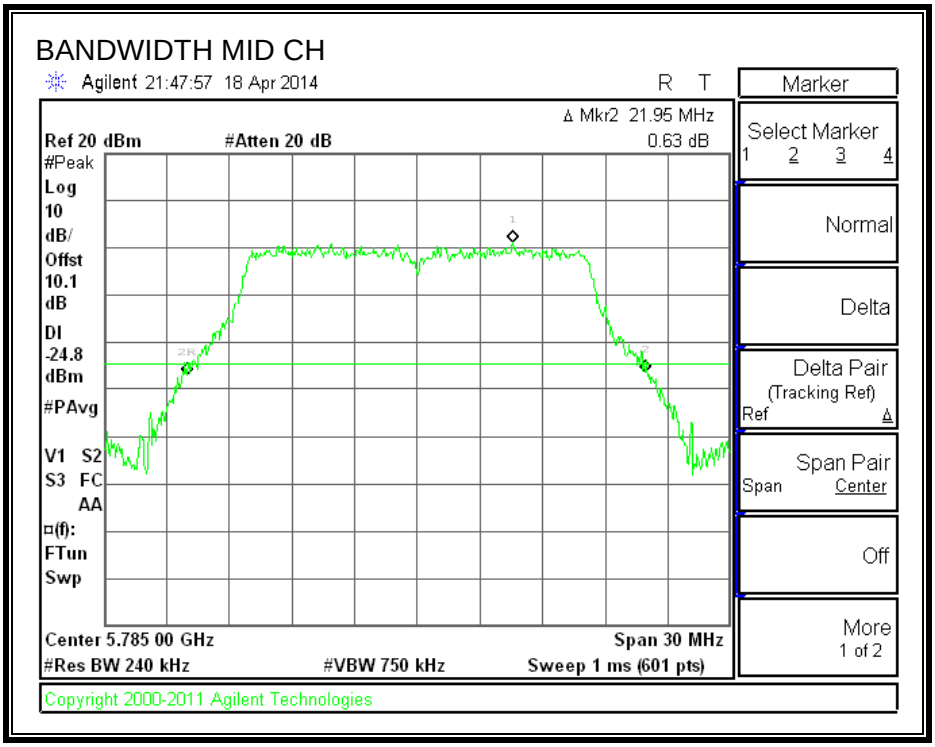
802.11n HT40 5.5G 26 dB BANDWIDTH



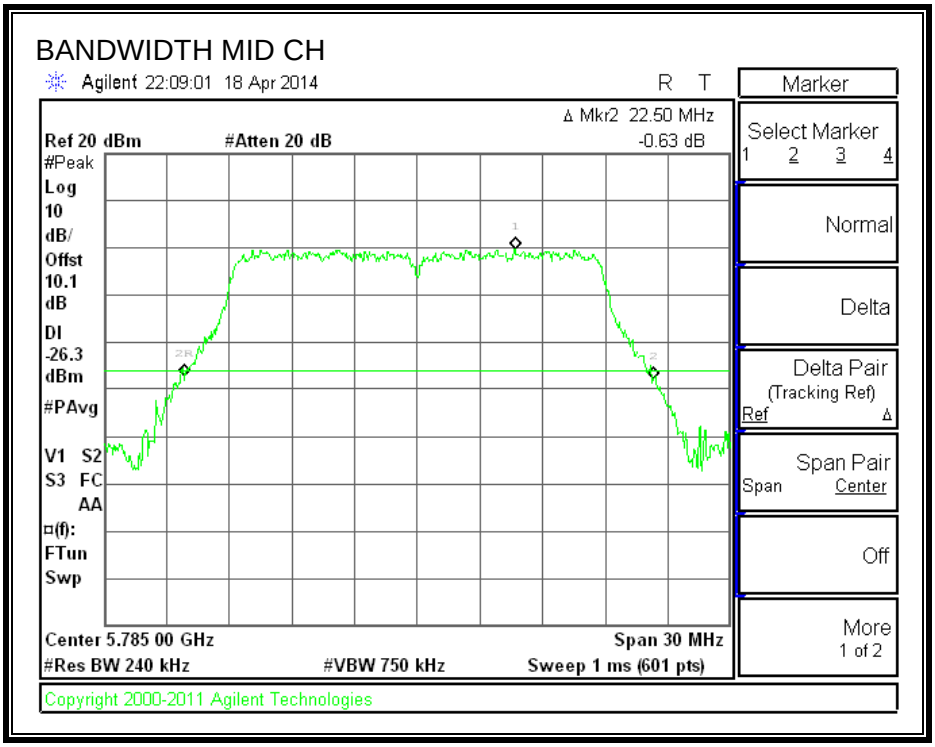
802.11ac HT80 5.5G 26 dB BANDWIDTH



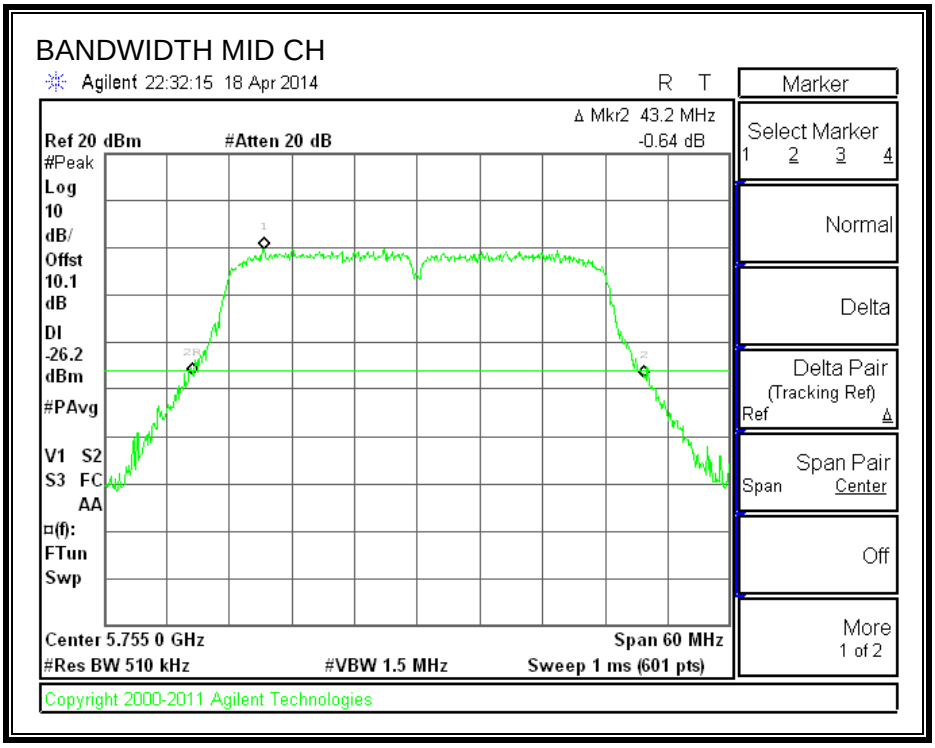
802.11a 5.8G 26 dB BANDWIDTH



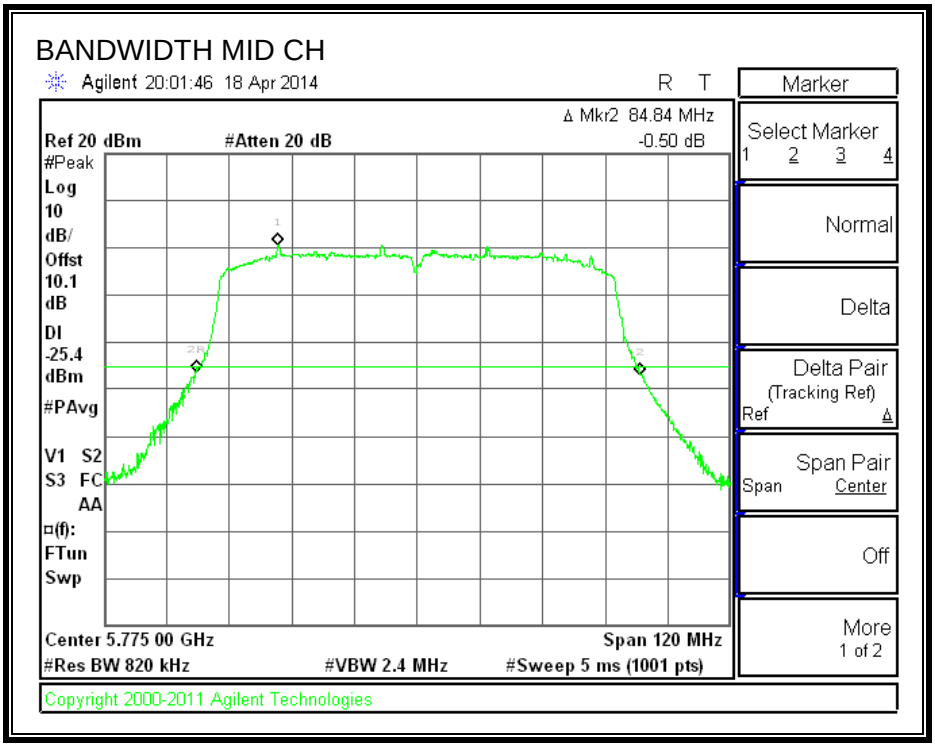
802.11n HT20 5.8G 26 dB BANDWIDTH



802.11n HT40 5.8G 26 dB BANDWIDTH



802.11ac HT80 5.8G 26 dB BANDWIDTH



10.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

10.2.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	16.52
Mid	5200	16.52
High	5240	16.52
Worst		16.52

10.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.71
Mid	5200	17.70
High	5240	17.72
Worst		17.72

10.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	36.11
Mid	5230	36.10
Worst		36.11

10.2.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5210	74.430

10.2.5. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.49
Mid	5300	16.49
High	5320	16.48
Worst		16.49

10.2.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	17.66
Mid	5300	17.66
High	5320	17.66
Worst		17.66

10.2.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	35.91
High	5310	35.89
Worst		35.91

10.2.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5290	74.370

10.2.9. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.49
Mid	5580	16.48
High	5700	16.49
Worst		16.49

10.2.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.660
Mid	5580	17.670
High	5700	17.690
Worst		17.690

10.2.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.06
Mid	5550	36.11
High	5670	36.08
Worst		36.11

10.2.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5530	74.33
High	5690	74.33
Worst		74.33

10.2.13. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.48
Mid	5785	16.49
High	5825	16.48
Worst		16.49

10.2.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.67
Mid	5785	17.67
High	5825	17.65
Worst		17.67

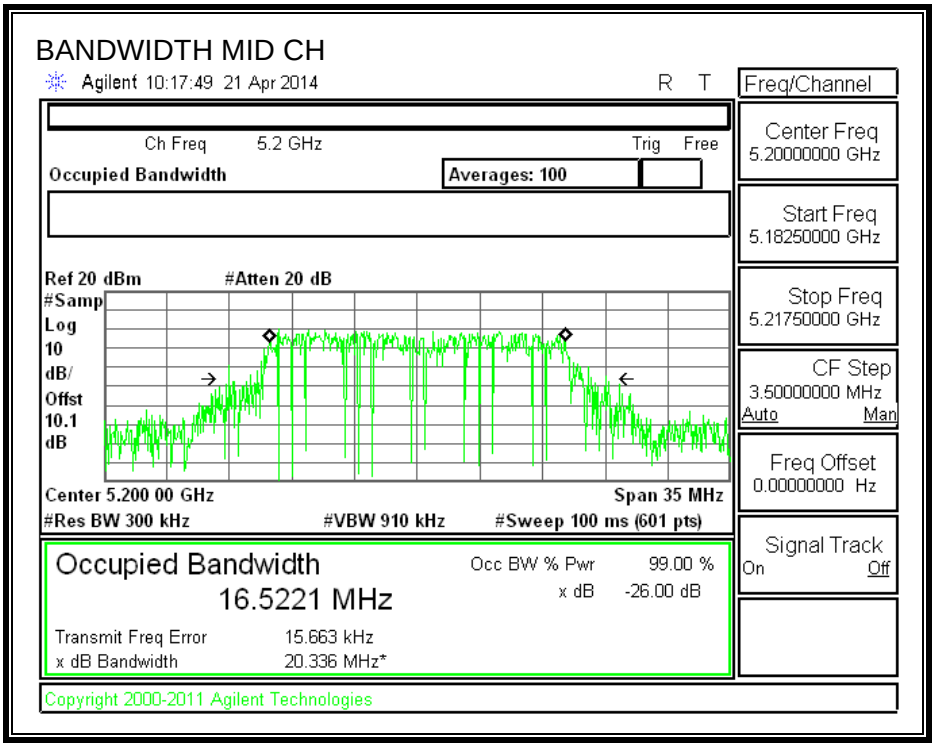
10.2.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	35.89
High	5795	35.88
Worst		35.89

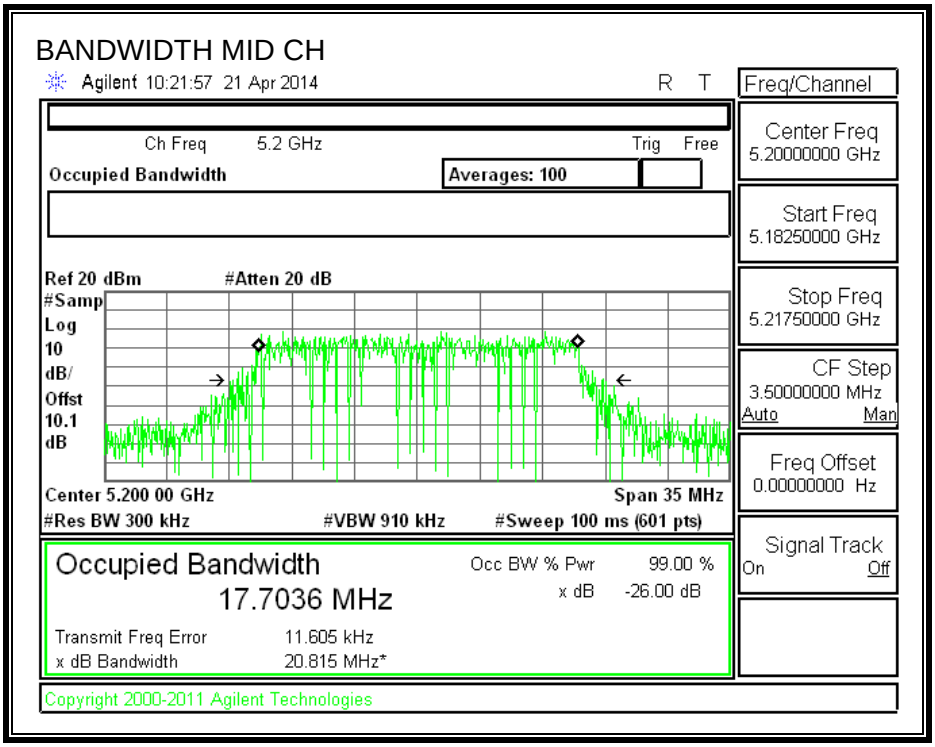
10.2.16. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5775	74.66

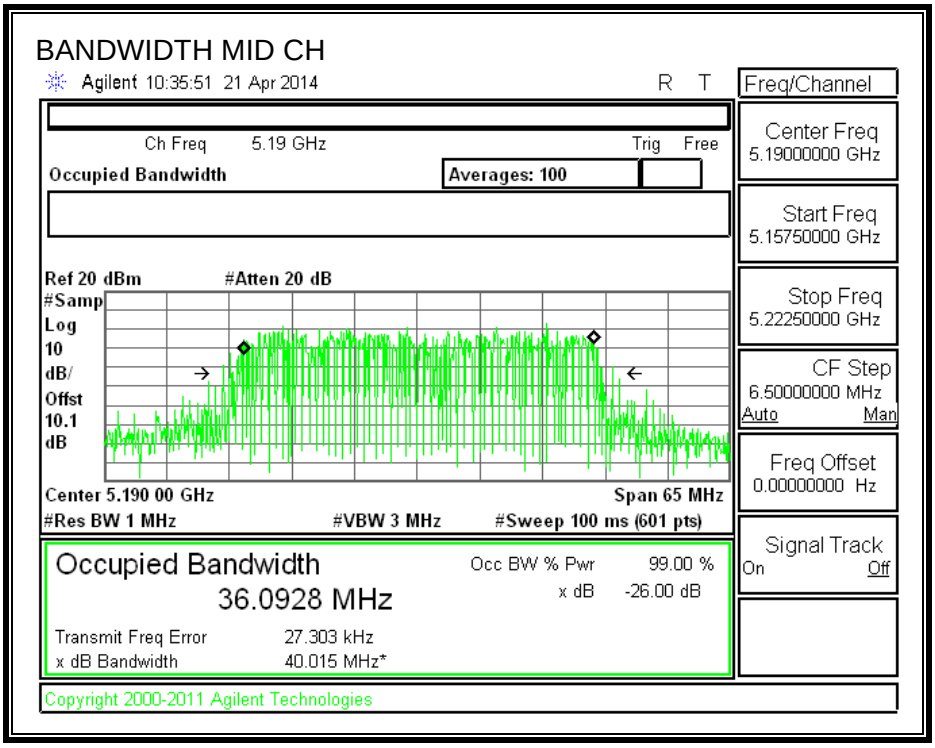
802.11a 5.2G 99% BANDWIDTH



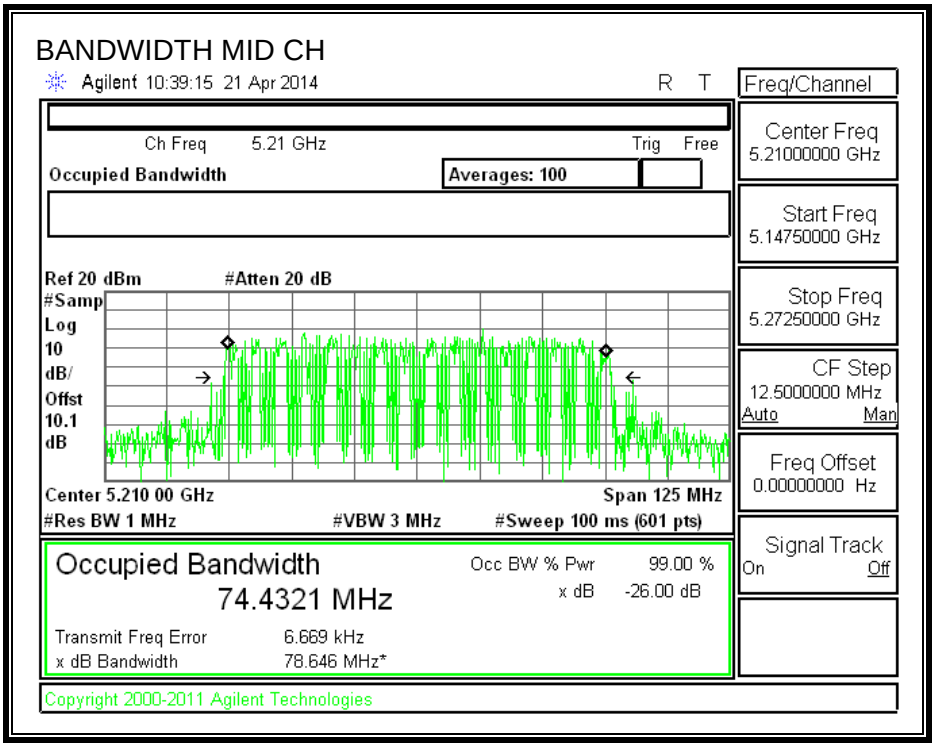
802.11n HT20 5.2G 99% BANDWIDTH



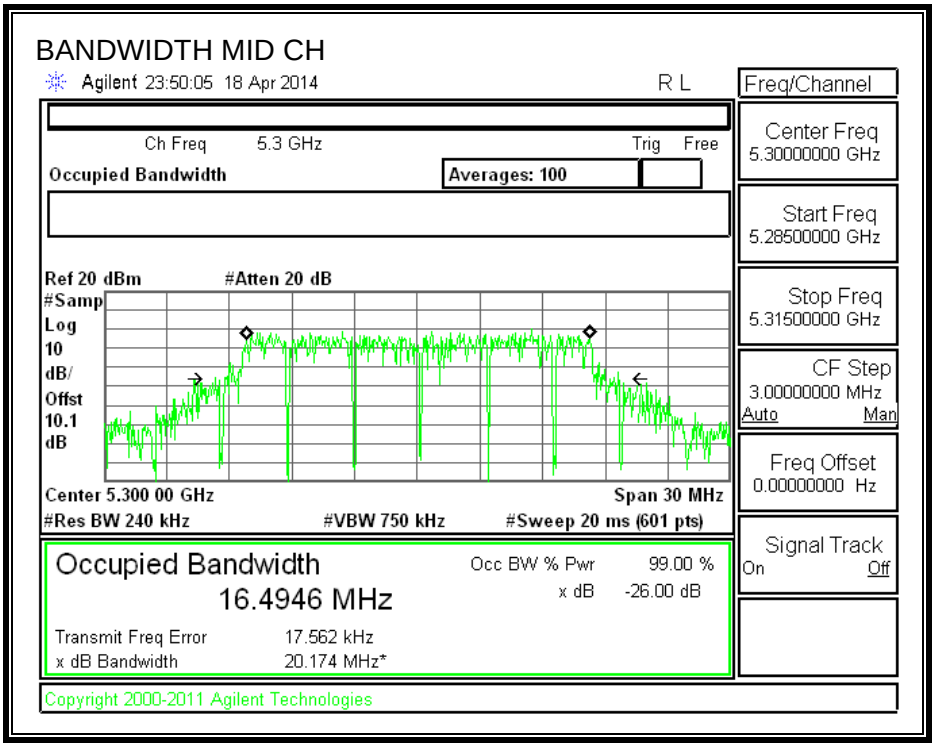
802.11n HT40 5.2G 99% BANDWIDTH



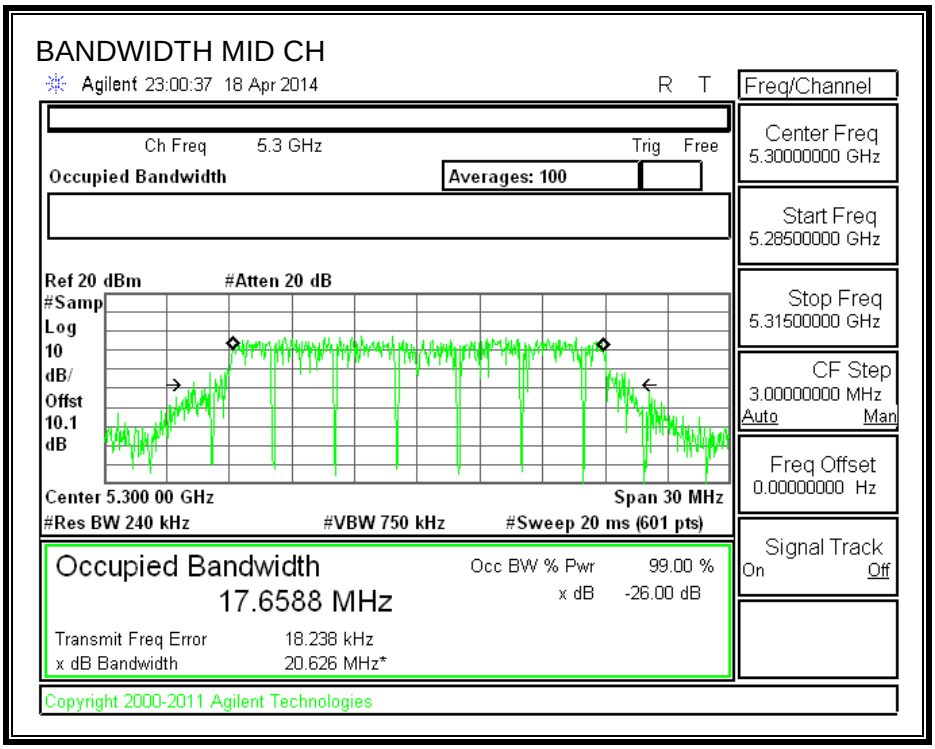
802.11ac HT80 5.2G 99% BANDWIDTH



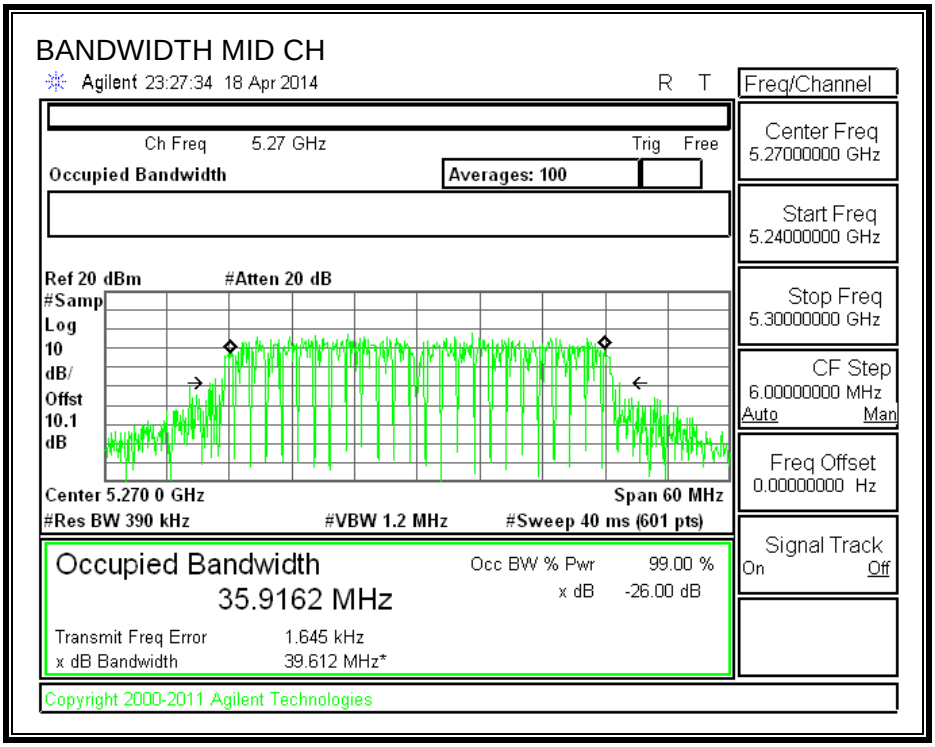
802.11a 5.3G 99% BANDWIDTH



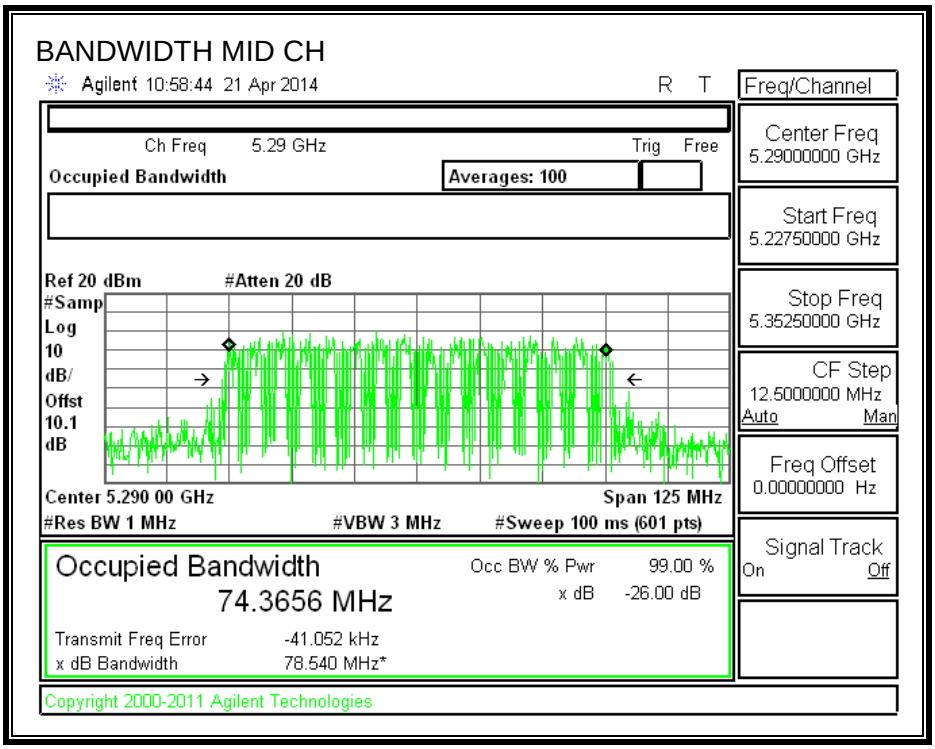
802.11n HT20 5.3G 99% BANDWIDTH



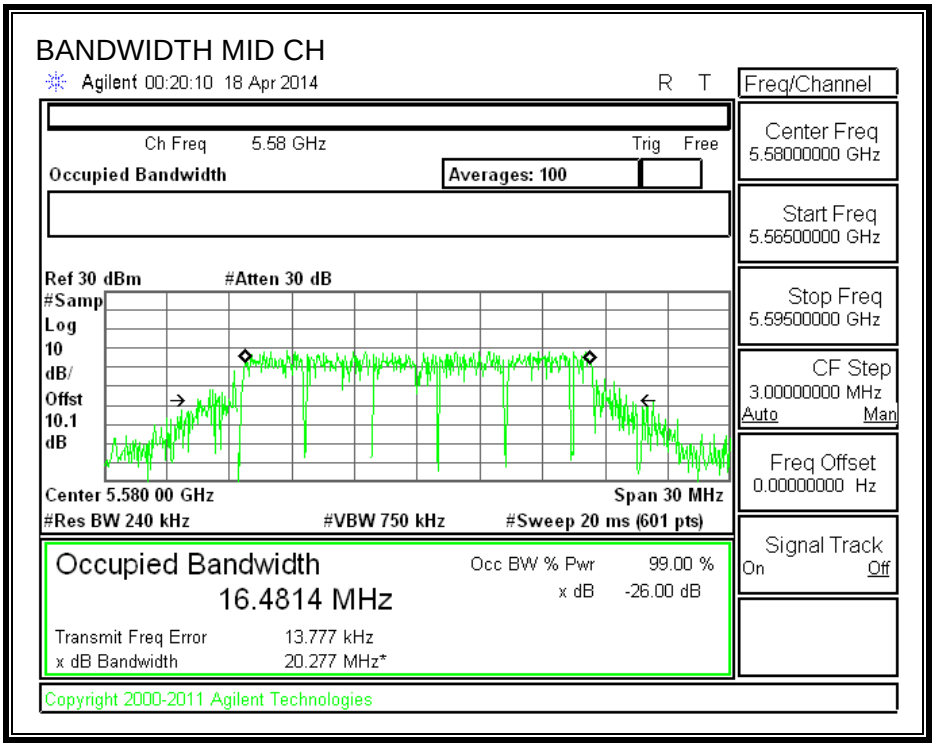
802.11n HT40 5.3G 99% BANDWIDTH



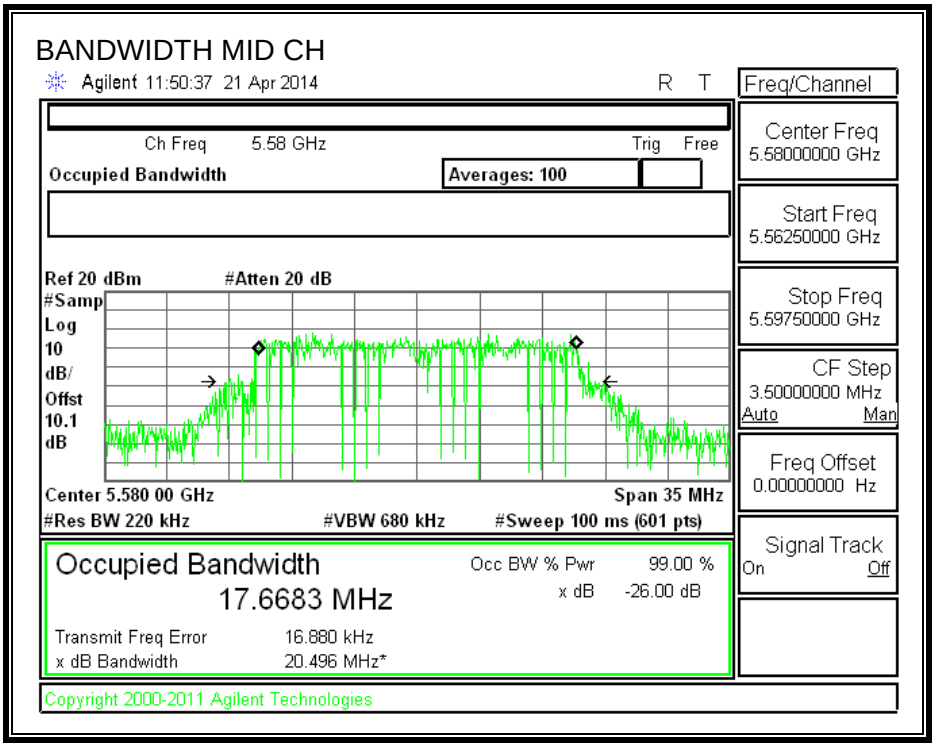
802.11ac HT80 5.3G 99% BANDWIDTH



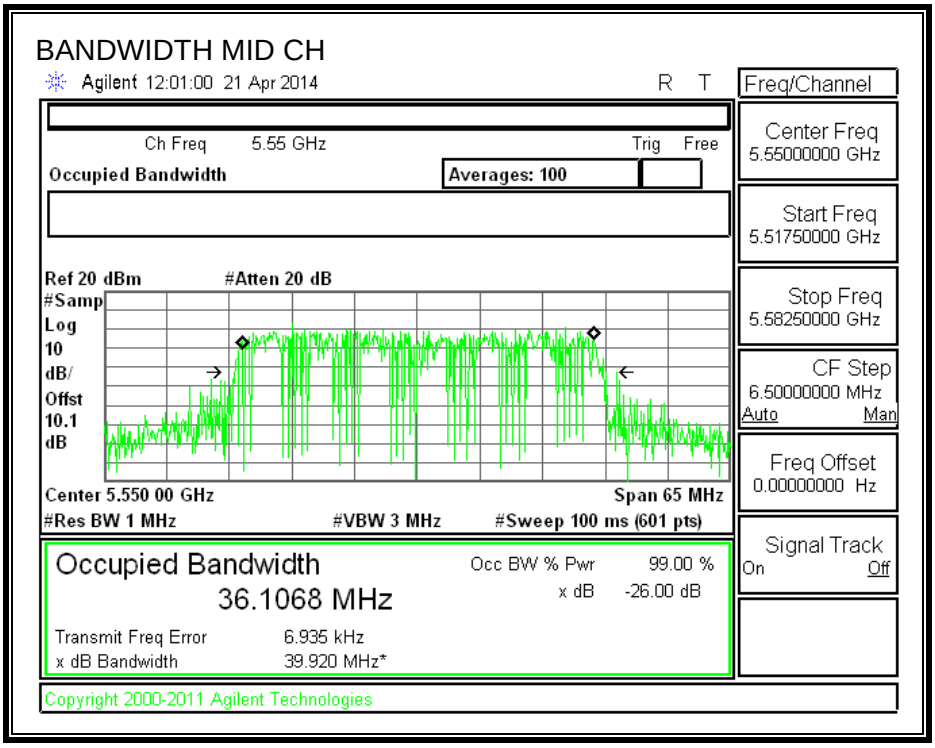
802.11a 5.5G 99% BANDWIDTH



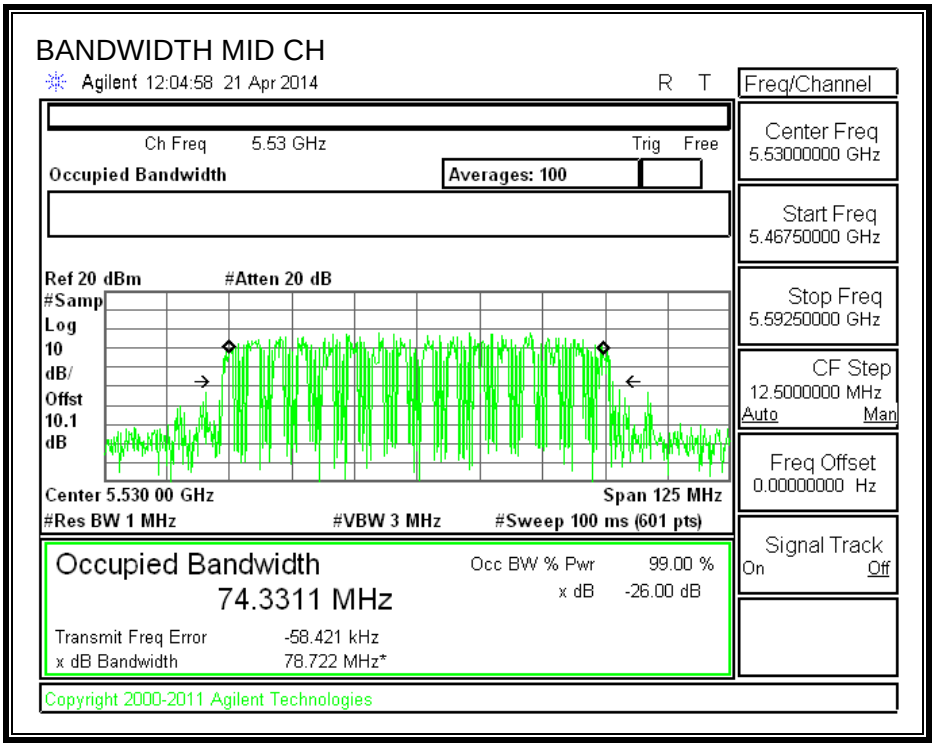
802.11n HT20 5.5G 99% BANDWIDTH



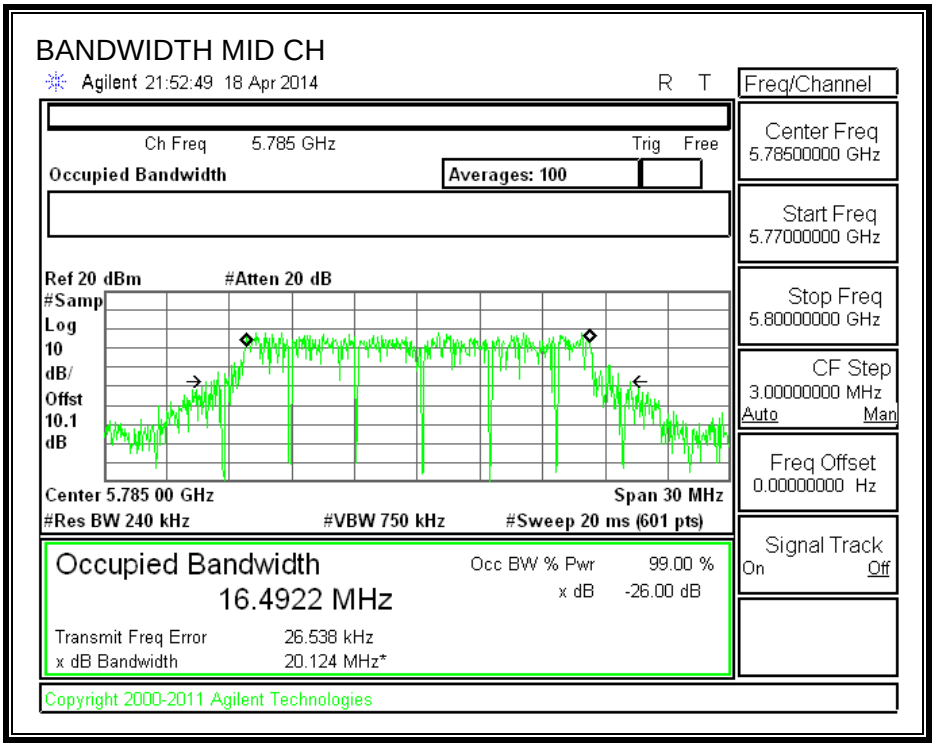
802.11n HT40 5.5G 99% BANDWIDTH



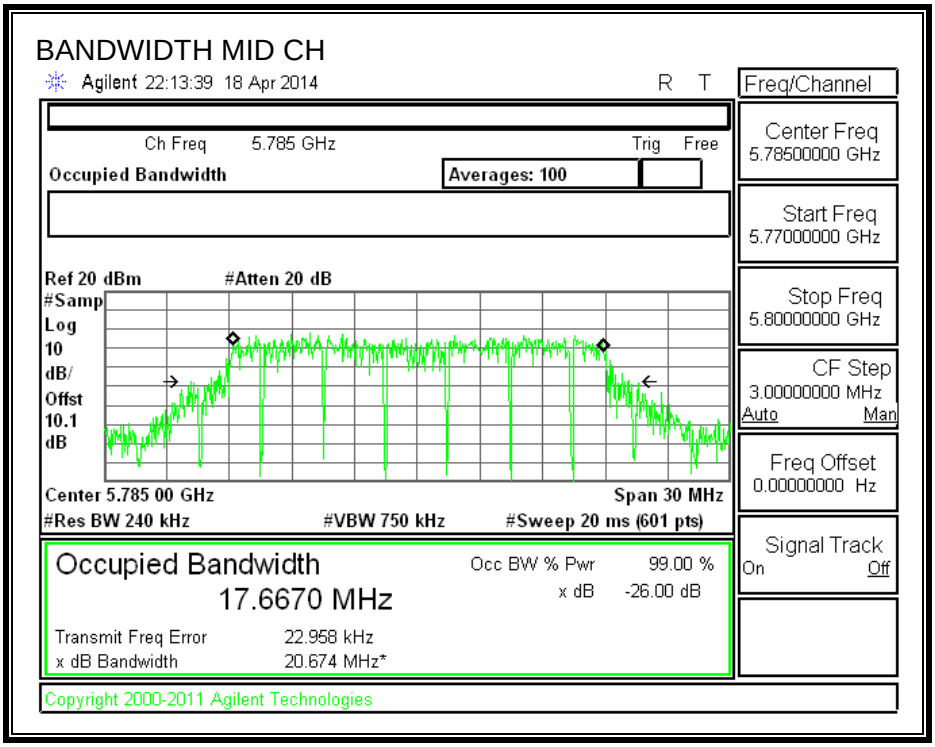
802.11ac HT80 5.5G 99% BANDWIDTH



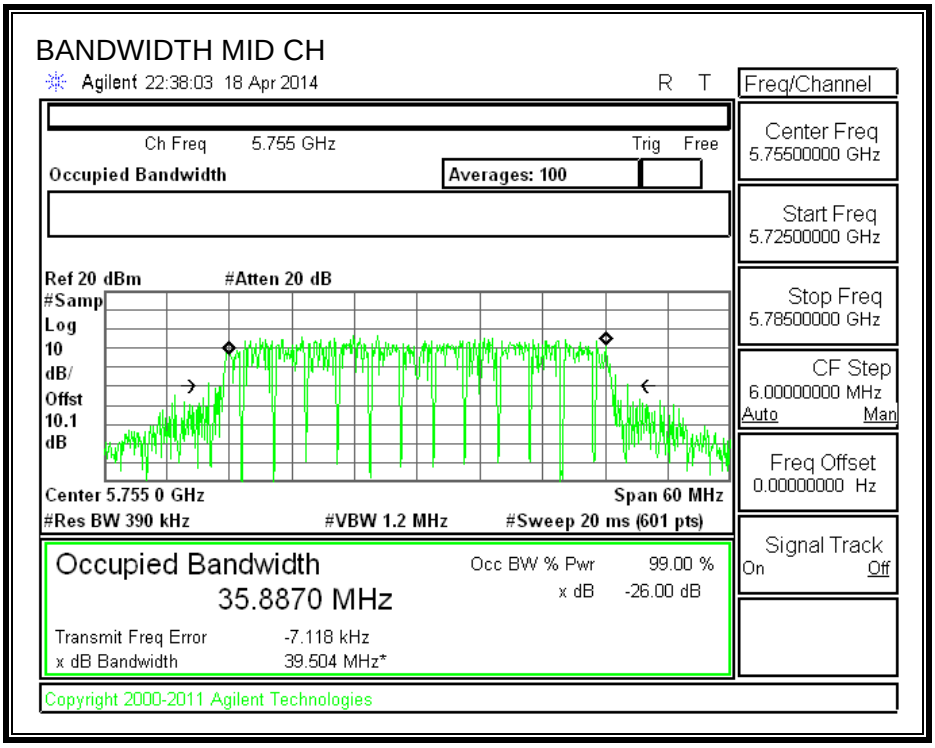
802.11a 5.8G 99% BANDWIDTH



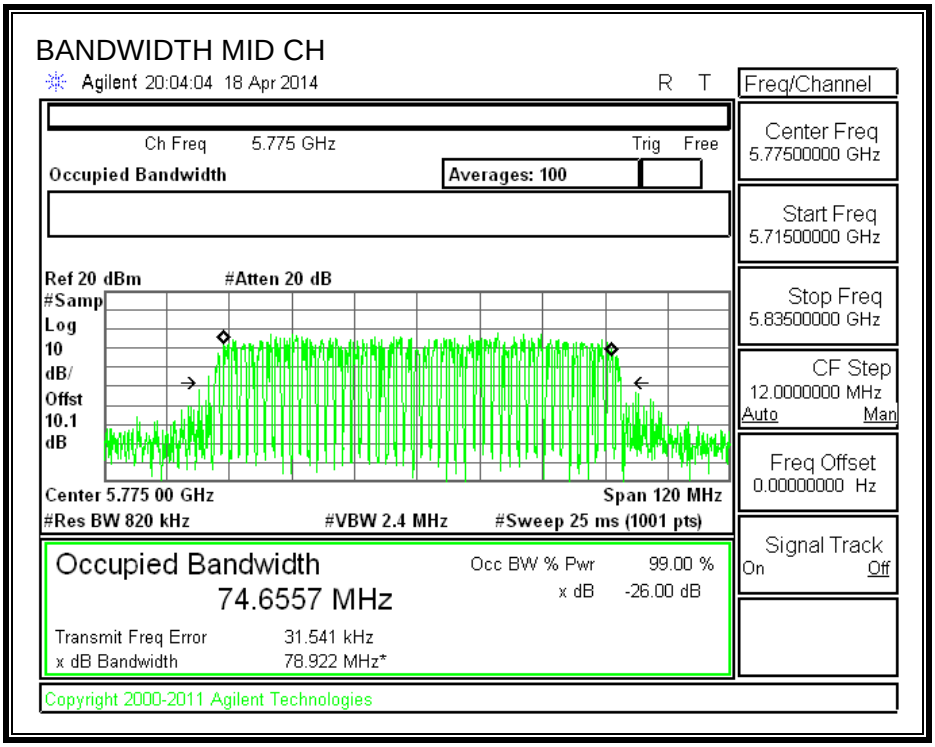
802.11n HT20 5.8G 99% BANDWIDTH



802.11n HT40 5.8G 99% BANDWIDTH



802.11ac HT80 5.8G 99% BANDWIDTH



10.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

10.3.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	12.00
Mid	5200	11.90
High	5240	12.00
Worst		12.00

10.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	10.70
Mid	5200	10.80
High	5240	10.70
Worst		10.80

10.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5190	10.200
Mid	5230	10.100
Worst		10.200

10.3.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5210	10.600

10.3.5. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	12.00
Mid	5300	11.80
High	5320	11.90
Worst		12.00

10.3.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	10.70
Mid	5300	10.80
High	5320	10.90
Worst		10.90

10.3.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5270	10.2
High	5310	10.1
Worst		10.2

10.3.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5290	10.700

10.3.9. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	11.400
Mid	5580	11.400
High	5700	11.400
Worst		11.400

10.3.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	10.400
Mid	5580	10.500
High	5700	10.300
Worst		10.500

10.3.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5510	9.9
Mid	5550	9.8
High	5670	9.7
Worst		9.9

10.3.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5530	10.600
High	5690	10.500
Worst		10.6

10.3.13. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5745	11.400
Mid	5785	11.400
High	5825	11.300
Worst		11.400

10.3.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5745	10.400
Mid	5785	10.400
High	5825	10.400
Worst		10.400

10.3.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5755	9.6
High	5795	9.7
Worst		9.7

10.3.16. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5775	10.5

10.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

Test Methodology

RESULTS

10.4.1. 802.11a MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	22.400	16.522	0.44
Mid	5200	22.100	16.522	0.44
High	5240	22.400	16.518	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	17.00	22.18	21.74	17.00	4.00	10.00	4.00
Mid	5200	17.00	22.18	21.74	17.00	4.00	10.00	4.00
High	5240	17.00	22.18	21.74	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	0.22	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.805	12.03	17.00	-4.98
Mid	5200	11.751	11.97	17.00	-5.03
High	5240	11.744	11.96	17.00	-5.04

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	0.620	0.84	4.00	-3.16
Mid	5200	0.420	0.64	4.00	-3.36
High	5240	0.400	0.62	4.00	-3.38

10.4.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	22.500	17.709	0.44
Mid	5200	22.550	17.704	0.44
High	5240	22.700	17.717	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	17.00	22.48	22.04	17.00	4.00	10.00	4.00
Mid	5200	17.00	22.48	22.04	17.00	4.00	10.00	4.00
High	5240	17.00	22.48	22.04	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	0.24	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	10.365	10.61	17.00	-6.40
Mid	5200	10.505	10.75	17.00	-6.26
High	5240	10.651	10.89	17.00	-6.11

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	-1.150	-0.91	4.00	-4.91
Mid	5200	-0.940	-0.70	4.00	-4.70
High	5240	-0.840	-0.60	4.00	-4.60

10.4.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5190	43.5	36.113	0.44
Mid	5230	43.9	36.097	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSD Limit (dBm)
Low	5190	17.00	23.00	22.56	17.00	4.00	10.00	4.00
Mid	5230	17.00	23.00	22.56	17.00	4.00	10.00	4.00
Duty Cycle CF (dB)		0.49	Included in Calculations of Corr'd Power & PPSD					

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	9.913	10.40	17.00	-6.60
Mid	5230	10.065	10.56	17.00	-6.45

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5190	-4.610	-4.12	4.00	-8.12
Mid	5230	-5.510	-5.02	4.00	-9.02

10.4.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5210	84.380	74.432	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSD Limit (dBm)
Low	5210	17.00	23.00	22.56	17.00	4.00	10.00	4.00
Duty Cycle CF (dB)		1.49	Included in Calculations of Corr'd Power & PPSD					

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5210	9.281	10.77	17.00	-6.23

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5210	-7.960	-6.47	4.00	-10.47

10.4.5. 802.11a MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5260	21.90	16.487	0.44
Mid	5300	21.90	16.495	0.44
High	5320	21.95	16.476	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.17	29.17	23.17	11.00	11.00	11.00
Mid	5300	24.00	23.17	29.17	23.17	11.00	11.00	11.00
High	5320	24.00	23.17	29.17	23.17	11.00	11.00	11.00

Duty Cycle CF (dB)	0.22	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.727	11.95	23.17	-11.22
Mid	5300	11.711	11.93	23.17	-11.24
High	5320	11.843	12.06	23.17	-11.11

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	0.520	0.74	11.00	-10.26
Mid	5300	0.330	0.55	11.00	-10.45
High	5320	0.560	0.78	11.00	-10.22

10.4.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5260	22.45	17.662	0.44
Mid	5300	22.35	17.659	0.44
High	5320	22.30	17.661	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.47	29.47	23.47	11.00	11.00	11.00
Mid	5300	24.00	23.47	29.47	23.47	11.00	11.00	11.00
High	5320	24.00	23.47	29.47	23.47	11.00	11.00	11.00

Duty Cycle CF (dB)	0.24	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.091	11.33	23.47	-12.14
Mid	5300	10.743	10.98	23.47	-12.49
High	5320	10.828	11.07	23.47	-12.40

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	1.190	1.43	11.00	-9.57
Mid	5300	-0.900	-0.66	11.00	-11.66
High	5320	-0.860	-0.62	11.00	-11.62

10.4.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5270	43.8	35.9	0.44
High	5310	43.7	35.9	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.49	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.81	12.30	24.00	-11.70
High	5310	10.14	10.63	24.00	-13.37

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	-2.53	-2.04	11.00	-13.04
High	5310	-4.24	-3.75	11.00	-14.75

10.4.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5290	84.0	74.4	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5290	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	1.49	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5290	9.48	10.97	24.00	-13.03

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5290	-7.62	-6.13	11.00	-17.13

10.4.9. 802.11a MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	22.30	16.490	0.44
Mid	5580	22.25	16.481	0.44
High	5700	22.20	16.487	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5500	24.00	23.17	29.17	23.17	11.00	11.00	11.00
Mid	5580	24.00	23.17	29.17	23.17	11.00	11.00	11.00
High	5700	24.00	23.17	29.17	23.17	11.00	11.00	11.00

Duty Cycle CF (dB)	0.22	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	11.383	11.60	23.17	-11.57
Mid	5580	11.619	11.84	23.17	-11.33
High	5700	11.499	11.72	23.17	-11.45

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	0.070	0.29	11.00	-10.71
Mid	5580	0.360	0.58	11.00	-10.42
High	5700	0.200	0.42	11.00	-10.58

10.4.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	21.88	17.662	0.44
Mid	5580	22.28	17.668	0.44
High	5700	22.40	17.669	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5500	24.00	23.47	29.47	23.47	11.00	11.00	11.00
Mid	5580	24.00	23.47	29.47	23.47	11.00	11.00	11.00
High	5700	24.00	23.47	29.47	23.47	11.00	11.00	11.00

Duty Cycle CF (dB)	0.24	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	10.204	10.44	23.47	-13.03
Mid	5580	10.294	10.53	23.47	-12.94
High	5700	10.194	10.43	23.47	-13.04

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	-1.380	-1.14	11.00	-12.14
Mid	5580	-1.250	-1.01	11.00	-12.01
High	5700	-1.410	-1.17	11.00	-12.17

10.4.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	42.9	36.065	0.44
Mid	5550	42.9	36.107	0.44
High	5670	43.8	36.078	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.49	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	9.946	10.44	24.00	-13.56
Mid	5550	9.924	10.41	24.00	-13.59
High	5670	10.144	10.63	24.00	-13.37

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-4.400	-3.91	11.00	-14.91
Mid	5550	-4.470	-3.98	11.00	-14.98
High	5670	-4.330	-3.84	11.00	-14.84

10.4.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5530	84.380	74.331	0.44
Mid	5690	85.420	74.334	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5530	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5690	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	1.49	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	9.360	10.85	24.00	-13.15
Mid	5690	9.431	10.92	24.00	-13.08

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5530	-7.670	-6.18	11.00	-17.18
Mid	5690	-7.950	-6.46	11.00	-17.46

10.4.13. 802.11a MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	21.3	16.5	0.44
Mid	5785	22.0	16.5	0.44
High	5825	22.3	16.5	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	29.17	35.17	29.17	17.00	17.00	17.00
Mid	5785	30.00	29.17	35.17	29.17	17.00	17.00	17.00
High	5825	30.00	29.17	35.17	29.17	17.00	17.00	17.00

Duty Cycle CF (dB)	0.22	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	12.05	12.27	29.17	-16.91
Mid	5785	11.57	11.79	29.17	-17.39
High	5825	11.79	12.01	29.17	-17.16

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	0.86	1.08	17.00	-15.92
Mid	5785	0.38	0.60	17.00	-16.40
High	5825	0.47	0.69	17.00	-16.31

10.4.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	22.3	17.7	0.44
Mid	5785	22.5	17.7	0.44
High	5825	22.7	17.7	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	30.00	29.47	35.47	29.47	17.00	17.00	17.00
Mid	5785	30.00	29.47	35.47	29.47	17.00	17.00	17.00
High	5825	30.00	29.47	35.47	29.47	17.00	17.00	17.00

Duty Cycle CF (dB)	0.24	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	10.88	11.12	29.47	-18.35
Mid	5785	10.68	10.92	29.47	-18.55
High	5825	10.81	11.05	29.47	-18.42

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-0.66	-0.42	17.00	-17.42
Mid	5785	-0.89	-0.65	17.00	-17.65
High	5825	-0.76	-0.52	17.00	-17.52

10.4.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5755	43.2	35.9	0.44
High	5795	43.8	35.9	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	30.00	30.00	36.00	30.00	17.00	17.00	17.00
High	5795	30.00	30.00	36.00	30.00	17.00	17.00	17.00

Duty Cycle CF (dB)	0.49	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	10.16	10.65	30.00	-19.35
High	5795	9.98	10.47	30.00	-19.53

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-4.29	-3.80	17.00	-20.80
High	5795	-4.52	-4.03	17.00	-21.03

10.4.16. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5775	84.8	74.7	0.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5775	30.00	30.00	36.00	30.00	17.00	17.00	17.00

Duty Cycle CF (dB)	1.49	Included in Calculations of Corr'd Power & PPSD

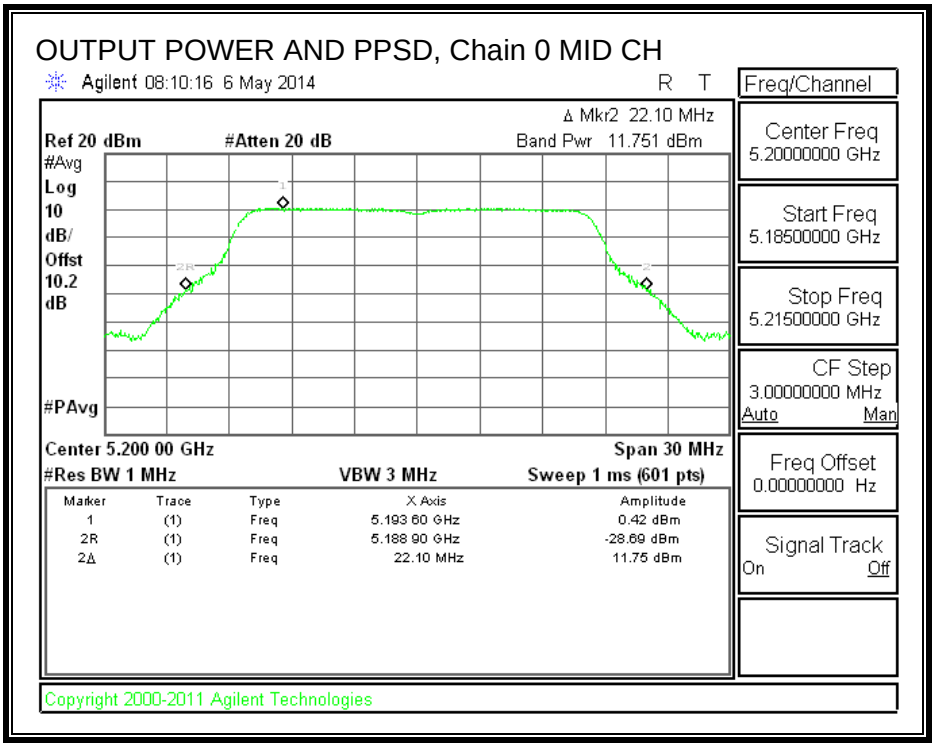
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5775	9.28	10.77	30.00	-19.23

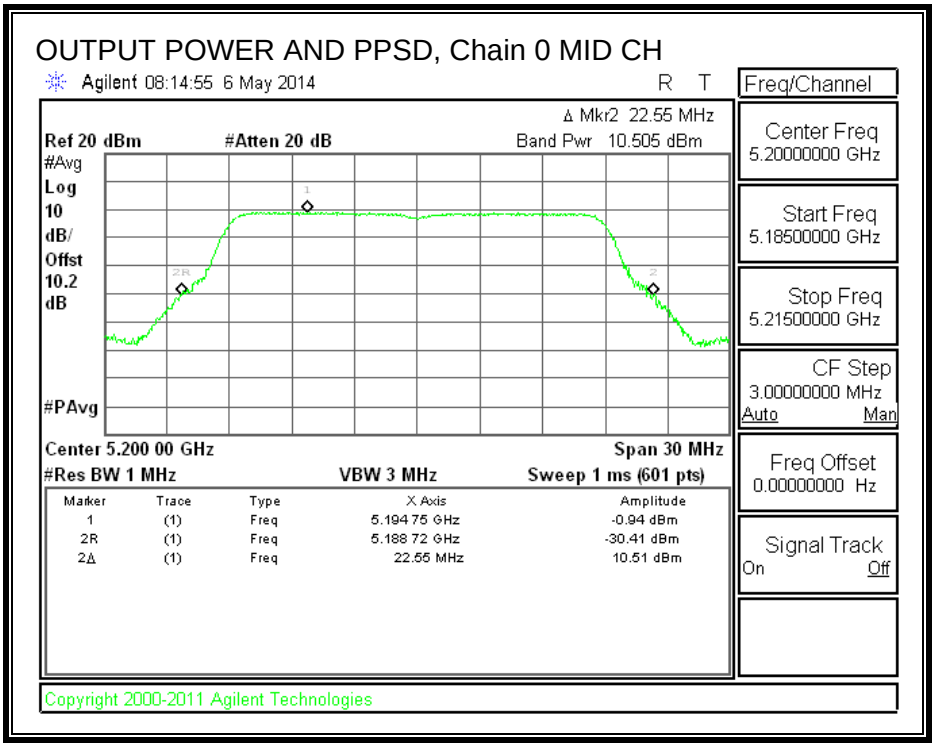
PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5775	-8.02	-6.53	17.00	-23.53

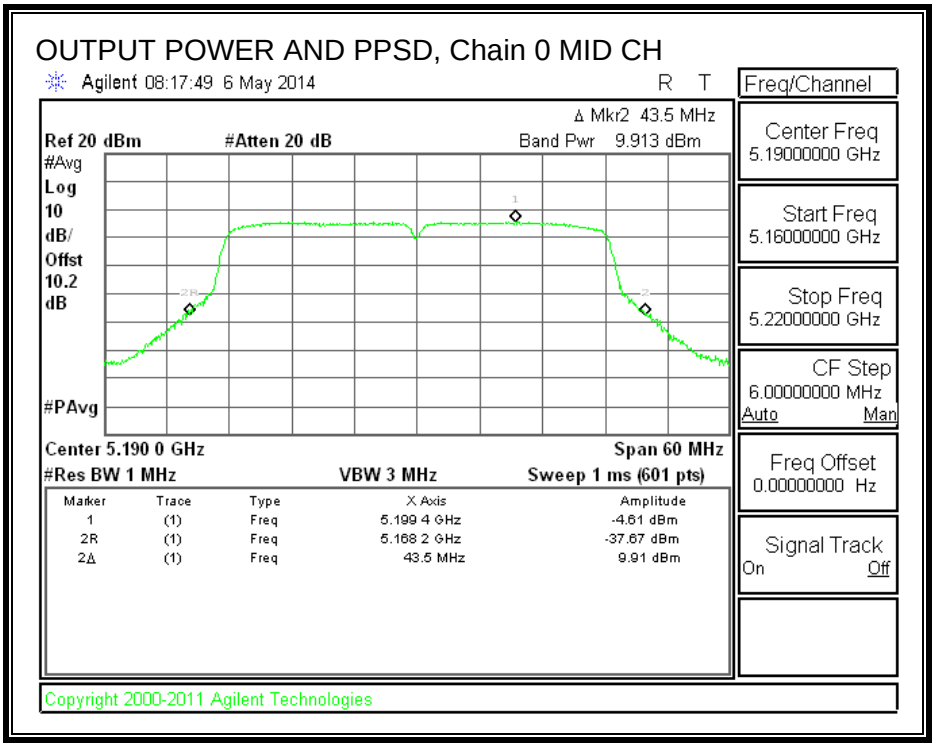
802.11a 5.2G OUTPUT POWER AND PPSD, Chain 0



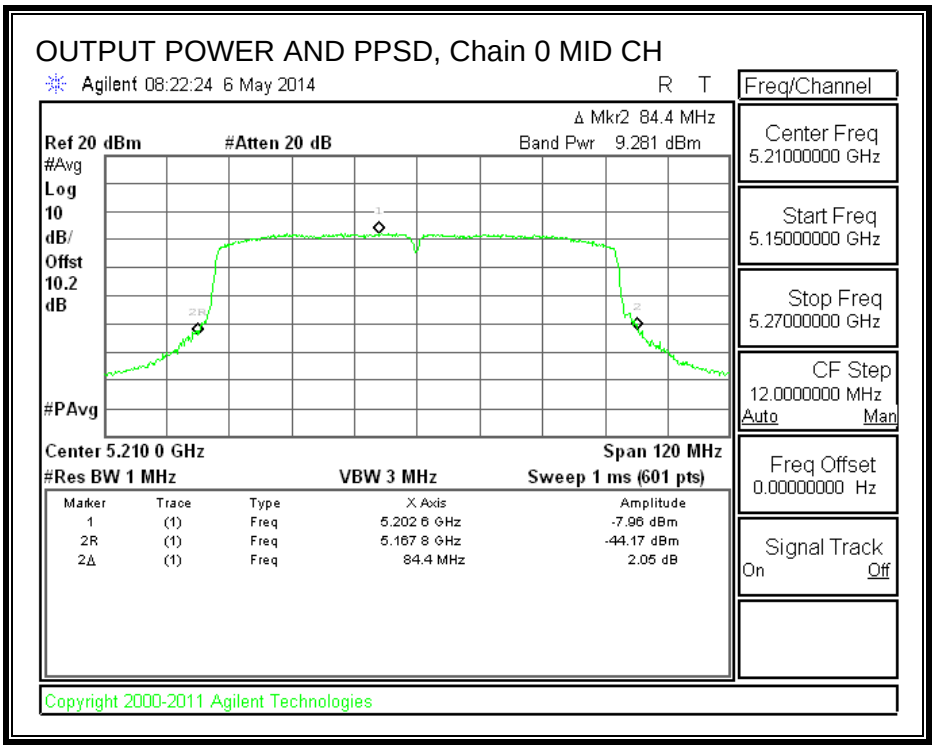
802.11n HT20 5.2G OUTPUT POWER AND PPSD, Chain 0



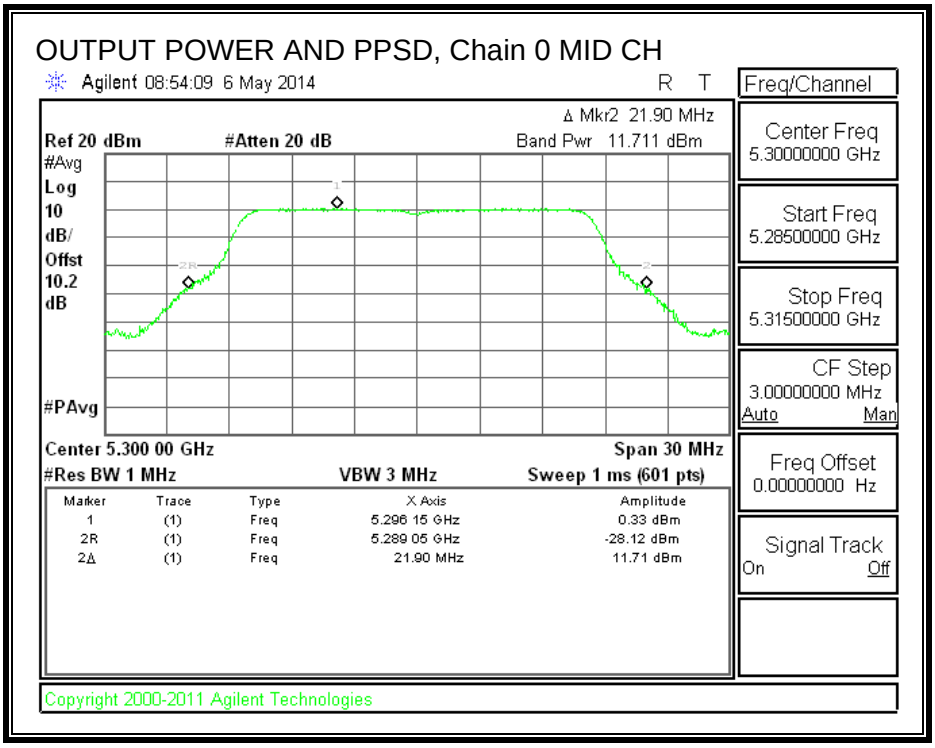
802.11n HT40 5.2G OUTPUT POWER AND PPSD, Chain 0



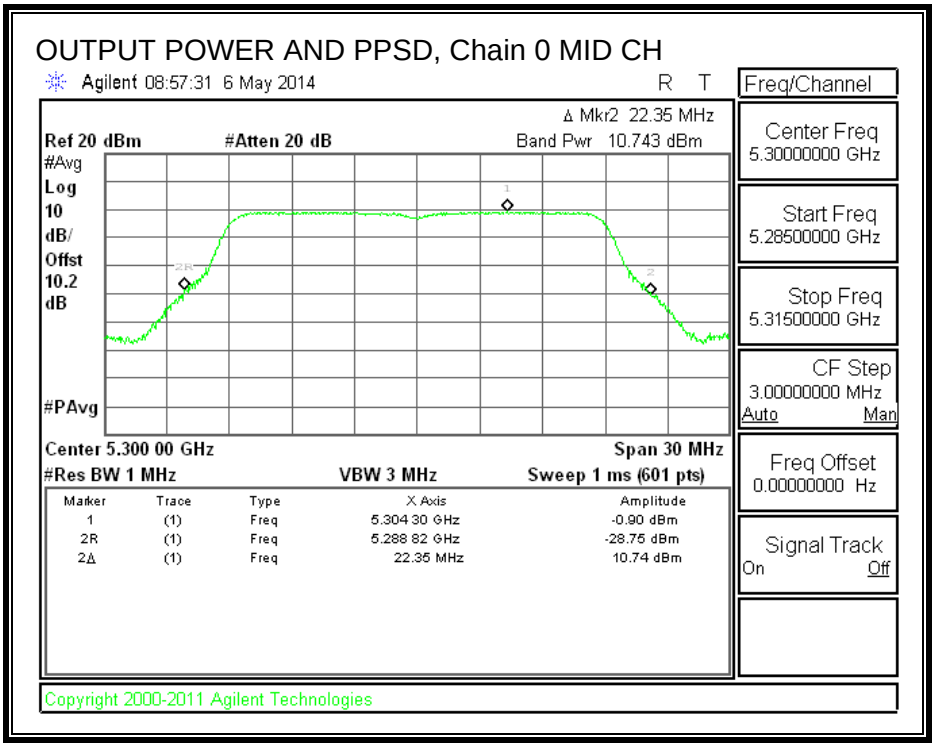
802.11ac HT80 5.2G OUTPUT POWER AND PPSD, Chain 0



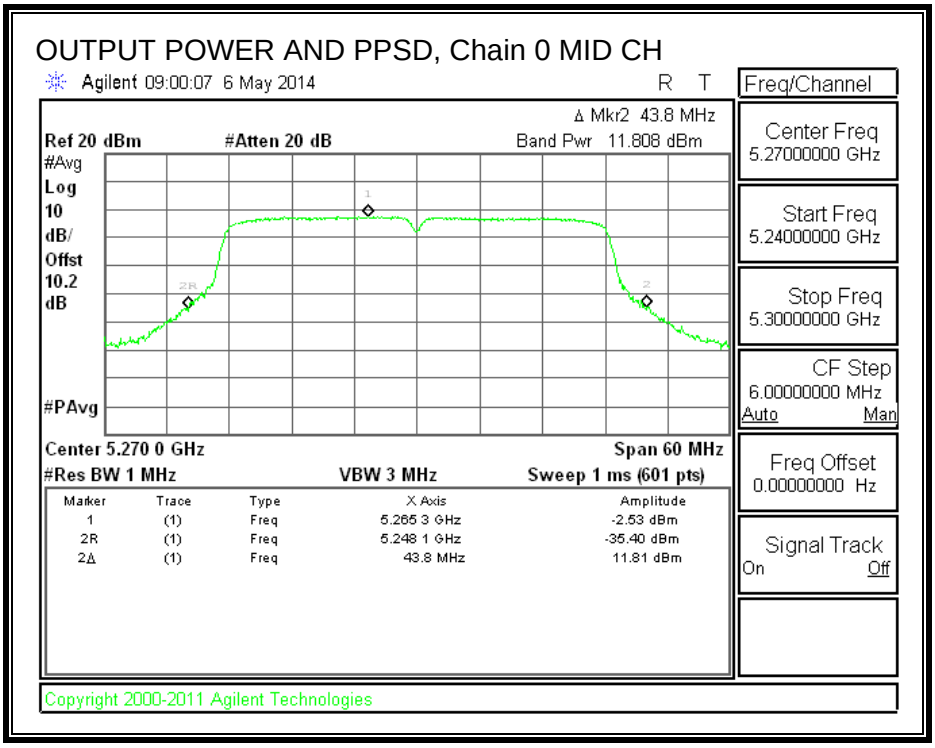
802.11a 5.3G OUTPUT POWER AND PPSD, Chain 0



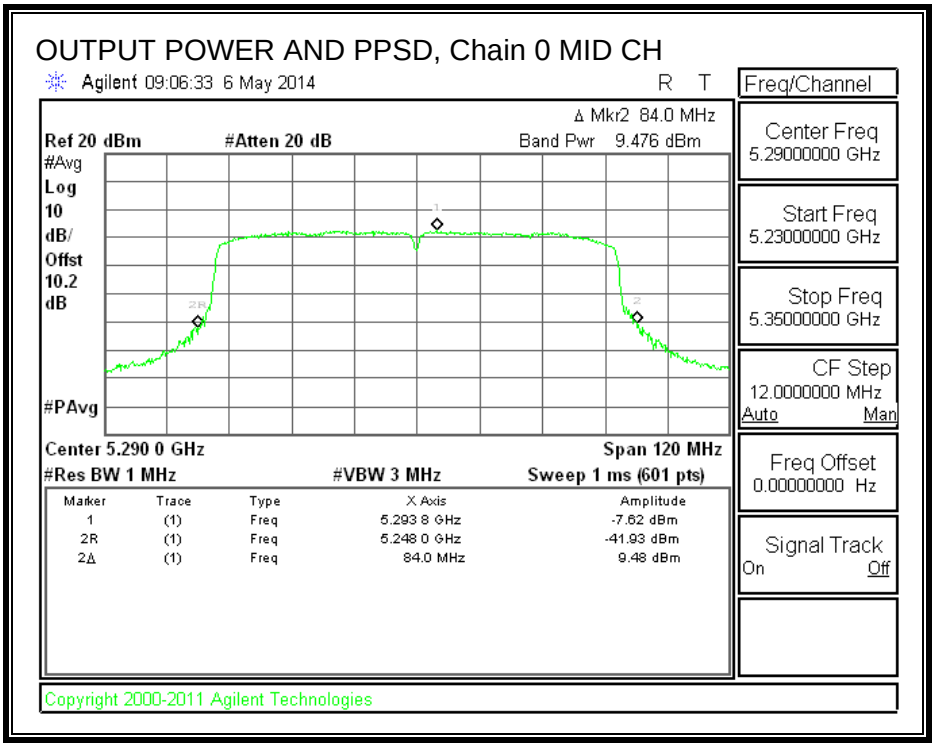
802.11n HT20 5.3G OUTPUT POWER AND PPSD, Chain 0



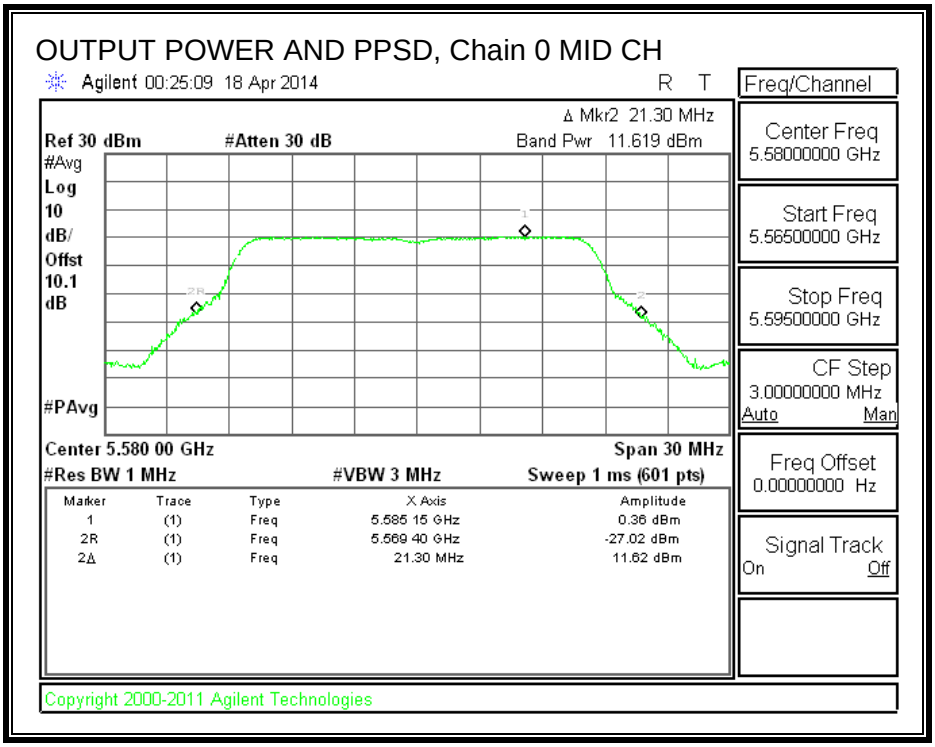
802.11n HT40 5.3G OUTPUT POWER AND PPSD, Chain 0



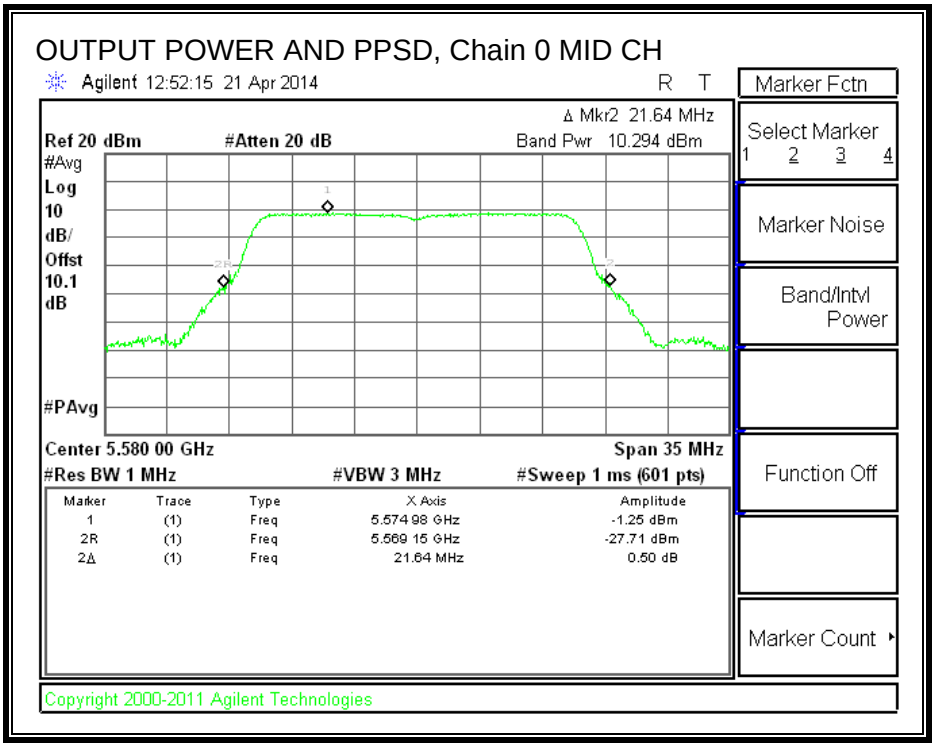
802.11ac HT80 5.3G OUTPUT POWER AND PPSD, Chain 0



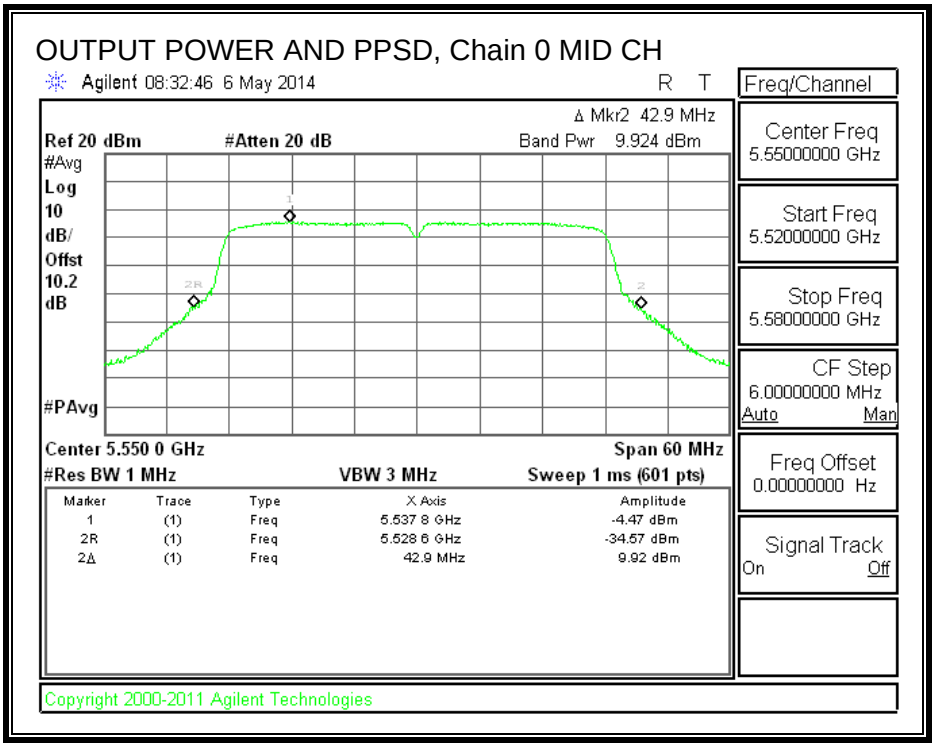
802.11a 5.5G OUTPUT POWER AND PPSD, Chain 0



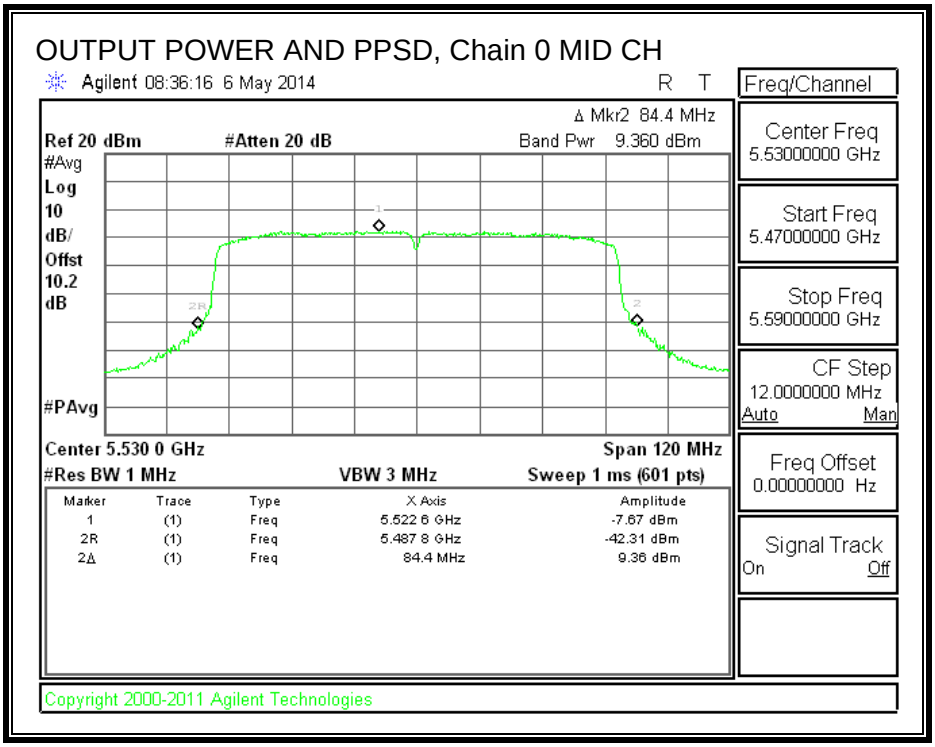
802.11n HT20 5.5G OUTPUT POWER AND PPSD, Chain 0



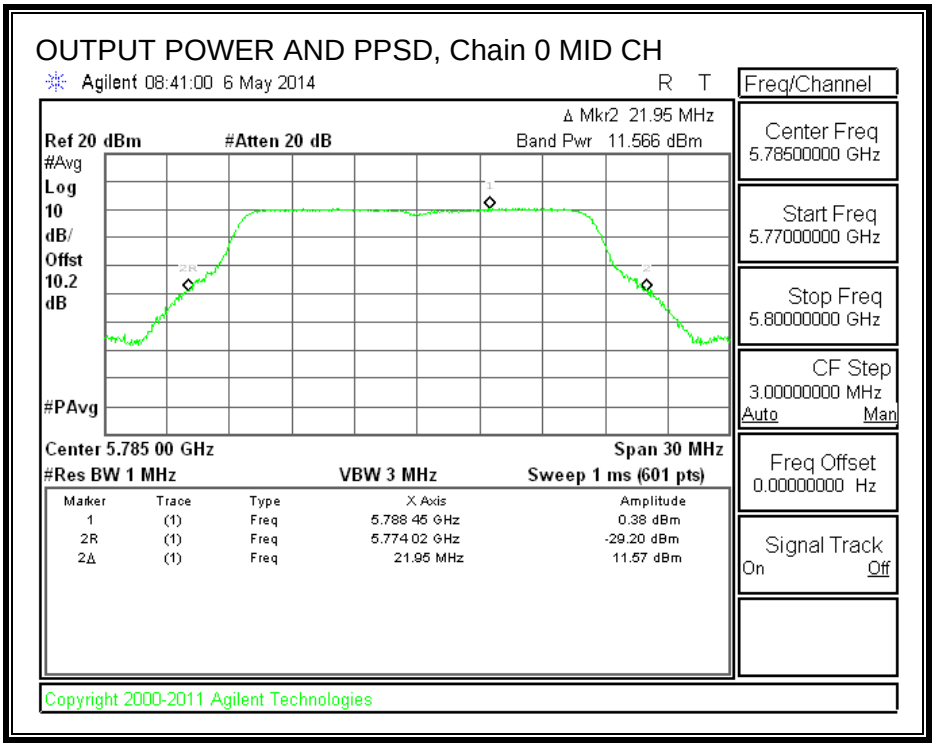
802.11n HT40 5.5G OUTPUT POWER AND PPSD, Chain 0



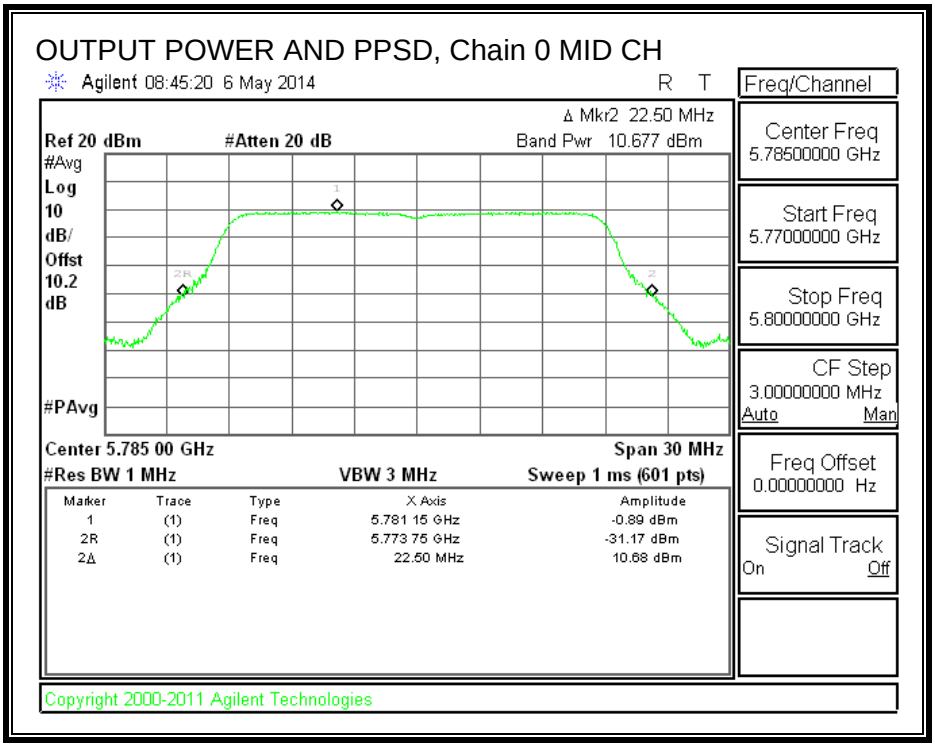
802.11ac HT80 5.5G OUTPUT POWER AND PPSD, Chain 0



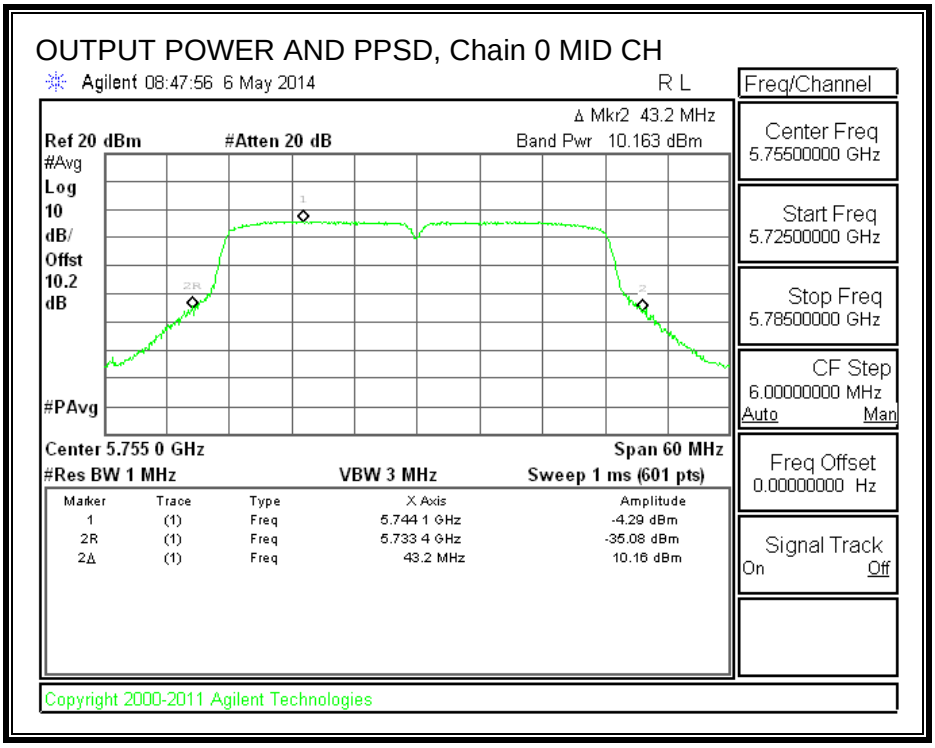
802.11a 5.8G OUTPUT POWER AND PPSD, Chain 0



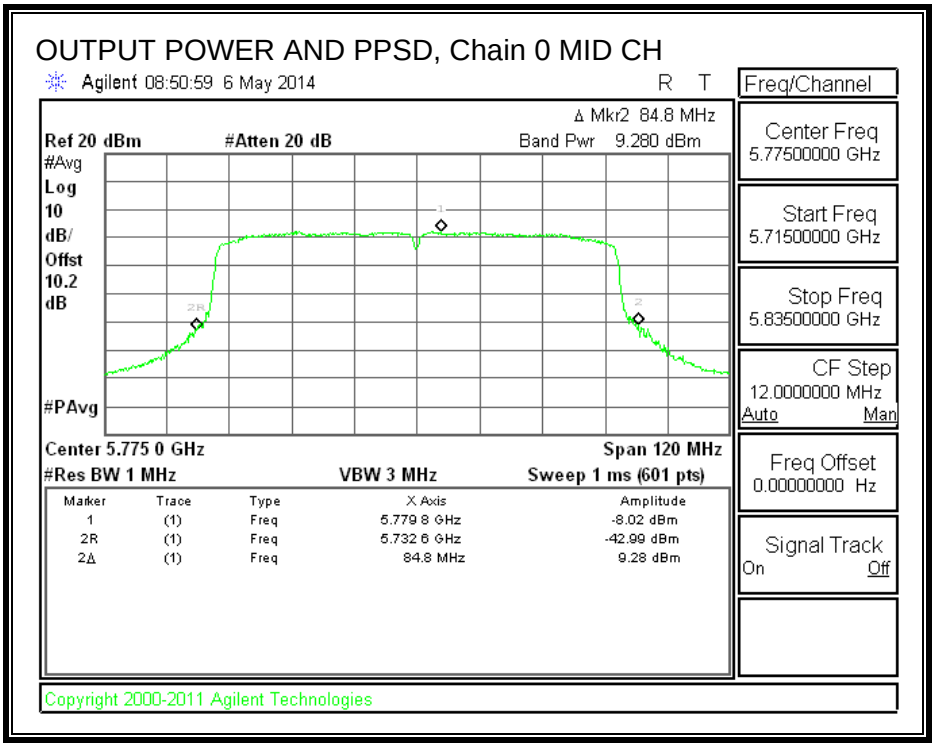
802.11n HT20 5.8G OUTPUT POWER AND PPSD, Chain 0



802.11n HT40 5.8G OUTPUT POWER AND PPSD, Chain 0



802.11ac HT80 5.8G OUTPUT POWER AND PPSD, Chain 0



10.5. PEAK EXCURSION

LIMITS

FCC §15.407 (a) (6)

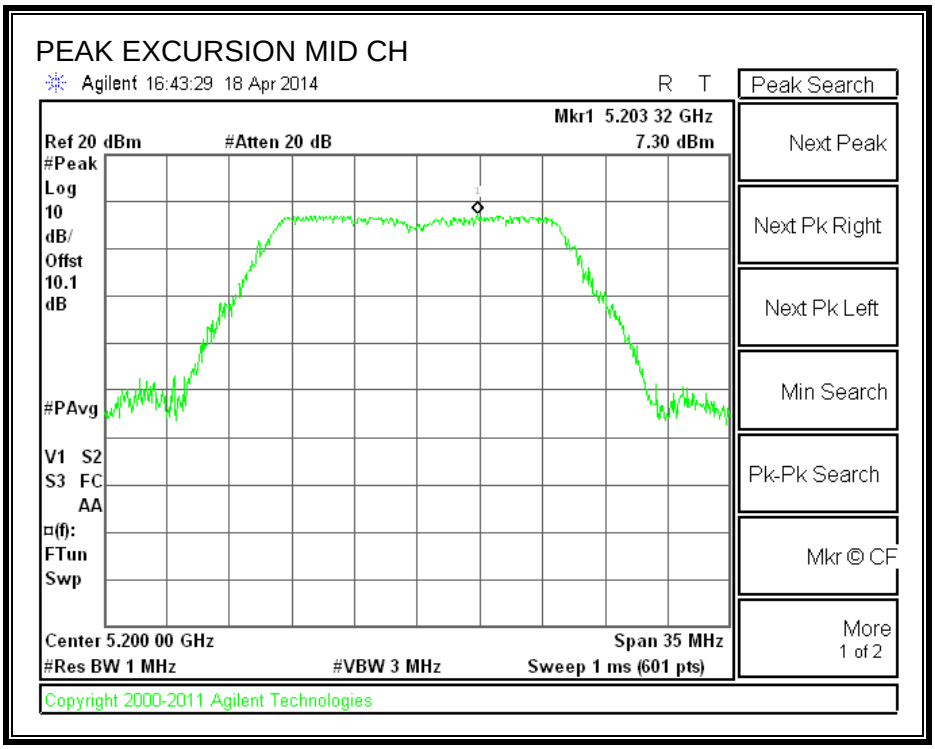
The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

10.5.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5200	7.300	0.42	0.22	6.66	13	-6.34

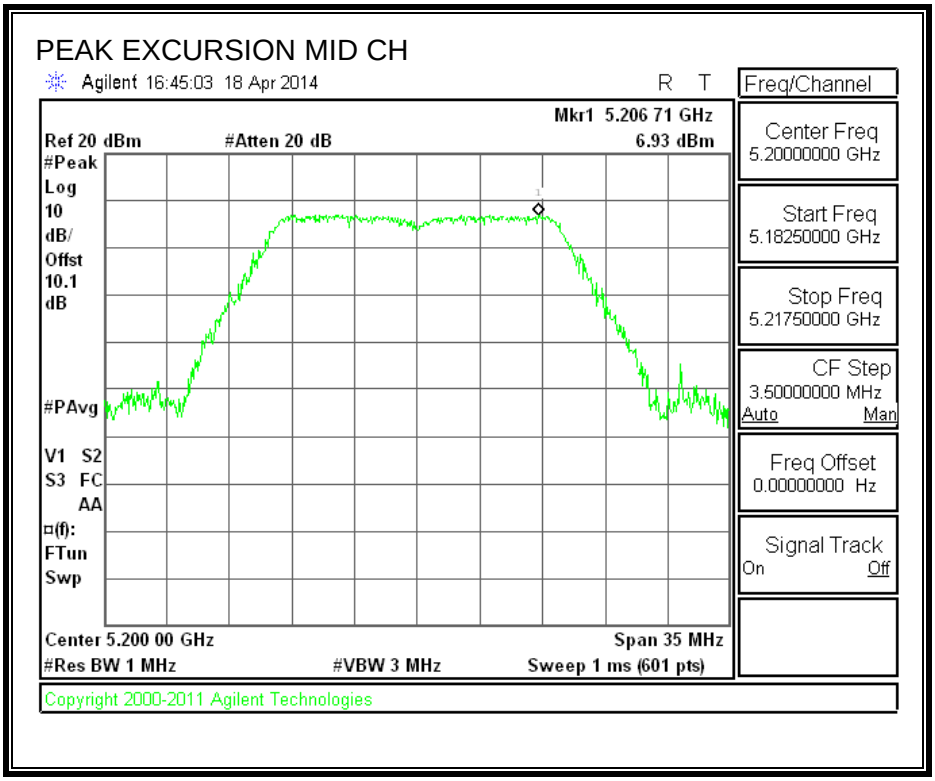
PEAK EXCURSION



10.5.1. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5200	6.930	-0.94	0.24	7.63	13	-5.37

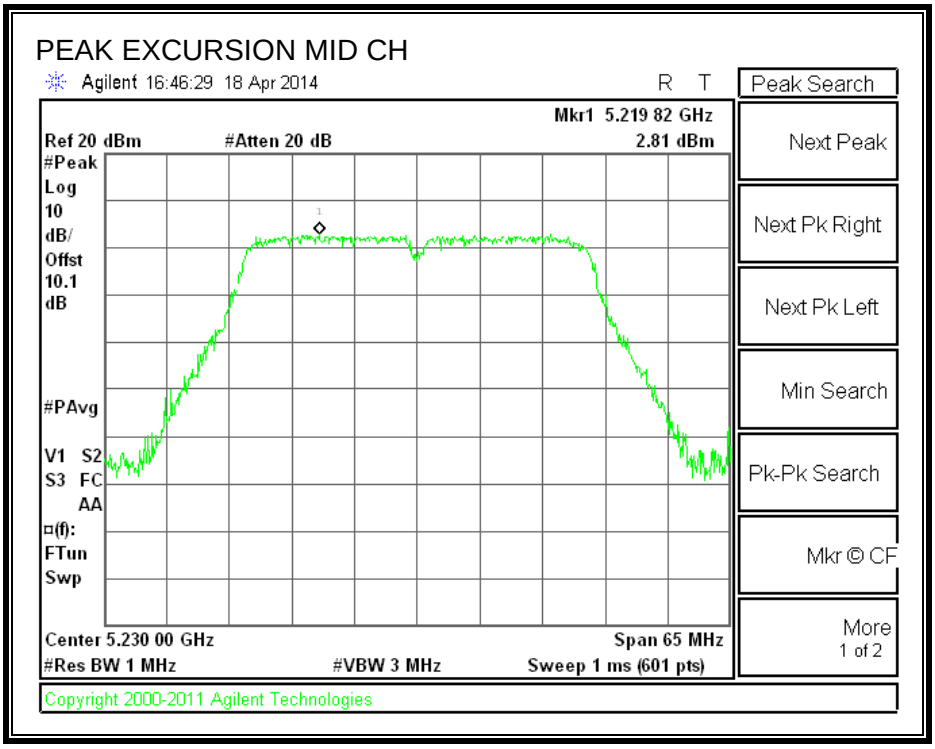
PEAK EXCURSION



10.5.1. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5230	2.810	-5.51	0.49	7.83	13	-5.17

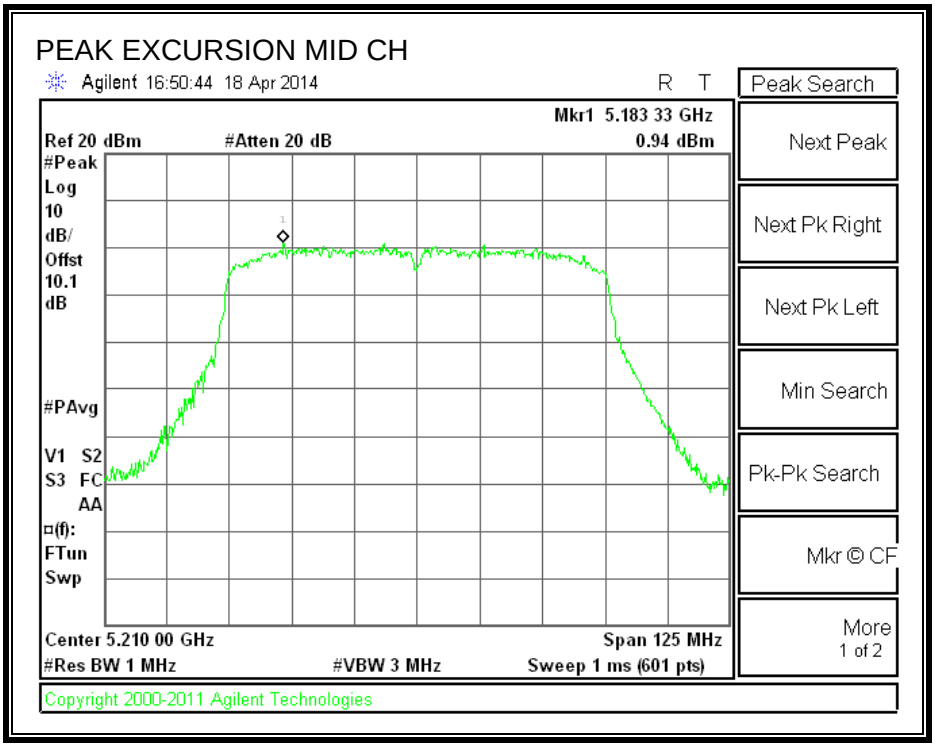
PEAK EXCURSION



10.5.1. 802.11ac HT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5210	0.940	-7.96	1.49	7.41	13	-5.59

PEAK EXCURSION



11. TRANSMITTER ABOVE 1 GHz

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
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. The antenna to EUT distance is 3 meters.

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.

Reference to KDB 789033 UNII part H) 6) d) Method VB:
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

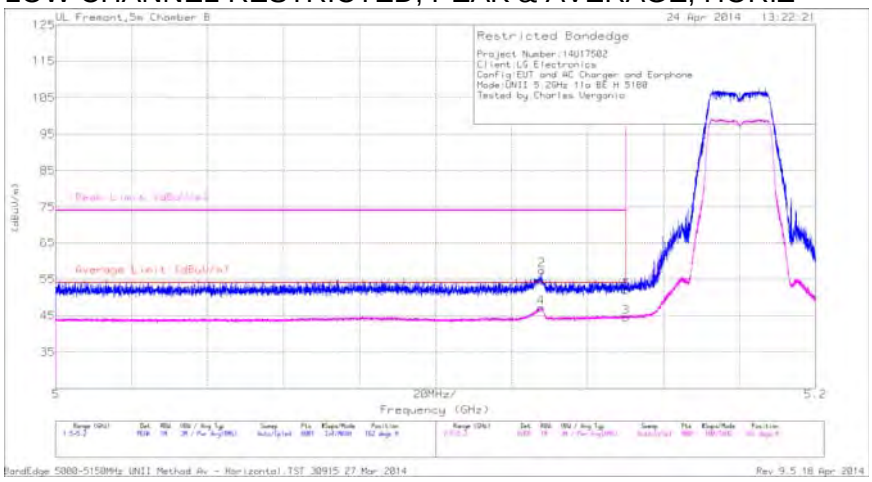
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

11.1. 5.2 GHz

11.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



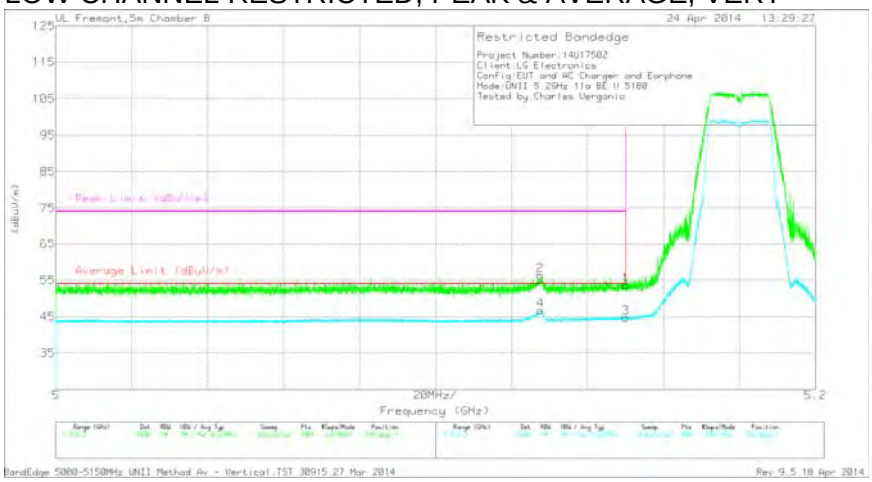
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.97	PK	34.3	-20.2	0	52.07	-	-	74	-21.93	162	193	H
2	* 5.128	43.29	PK	34.3	-20.1	0	57.49	-	-	74	-16.51	162	193	H
3	* 5.15	30.22	RMS	34.3	-20.2	.2	44.52	54	-9.48	-	-	162	193	H
4	* 5.128	32.84	RMS	34.3	-20.1	.2	47.24	54	-6.76	-	-	162	193	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.128	42.23	PK	34.3	-20.1	0	56.43	-	-	74	-17.57	193	264	V
4	* 5.128	32.34	RMS	34.3	-20.1	.2	46.74	54	-7.26	-	-	193	264	V
1	* 5.15	39.56	PK	34.3	-20.2	0	53.66	-	-	74	-20.34	193	264	V
3	* 5.15	30.36	RMS	34.3	-20.2	.2	44.66	54	-9.34	-	-	193	264	V

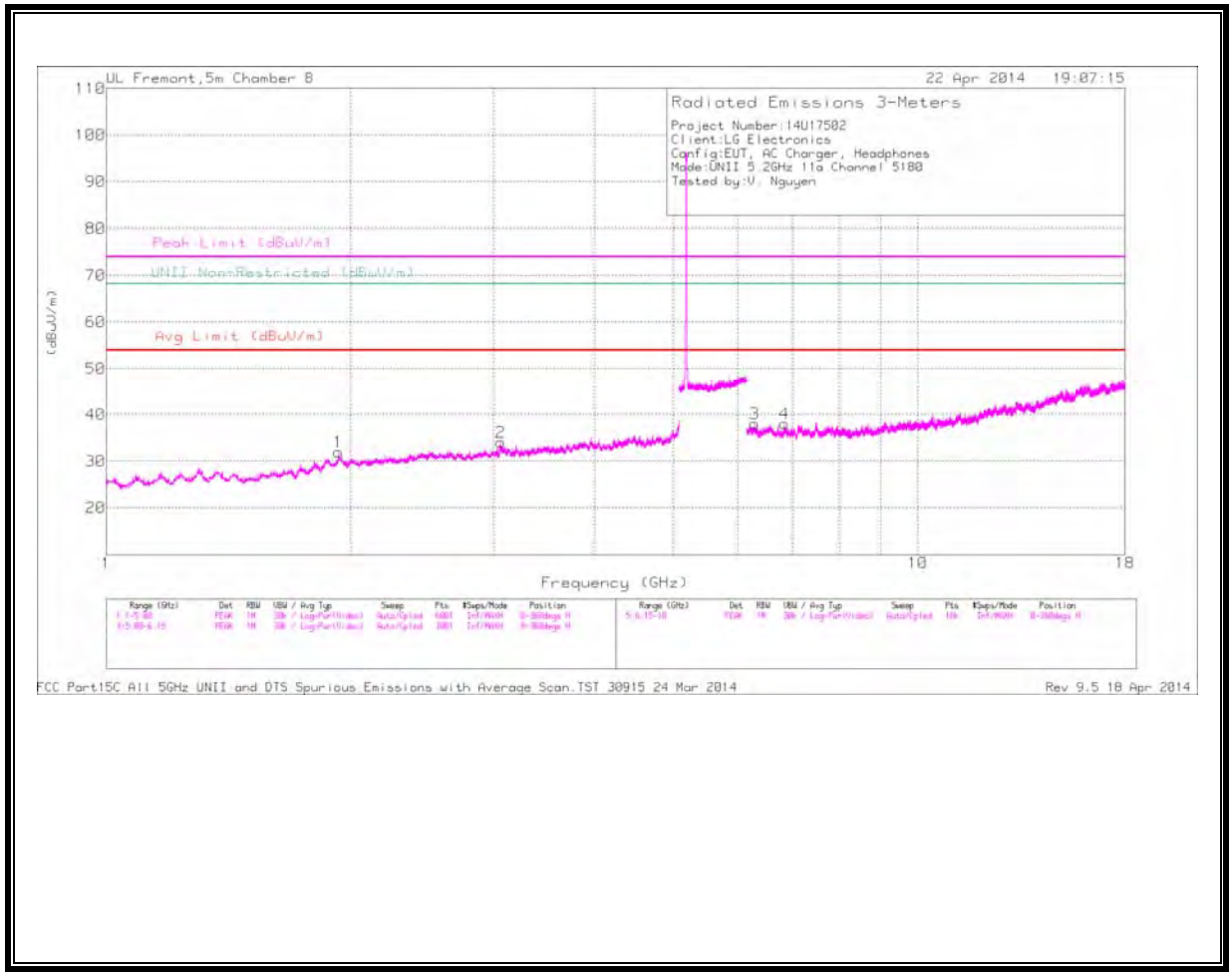
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

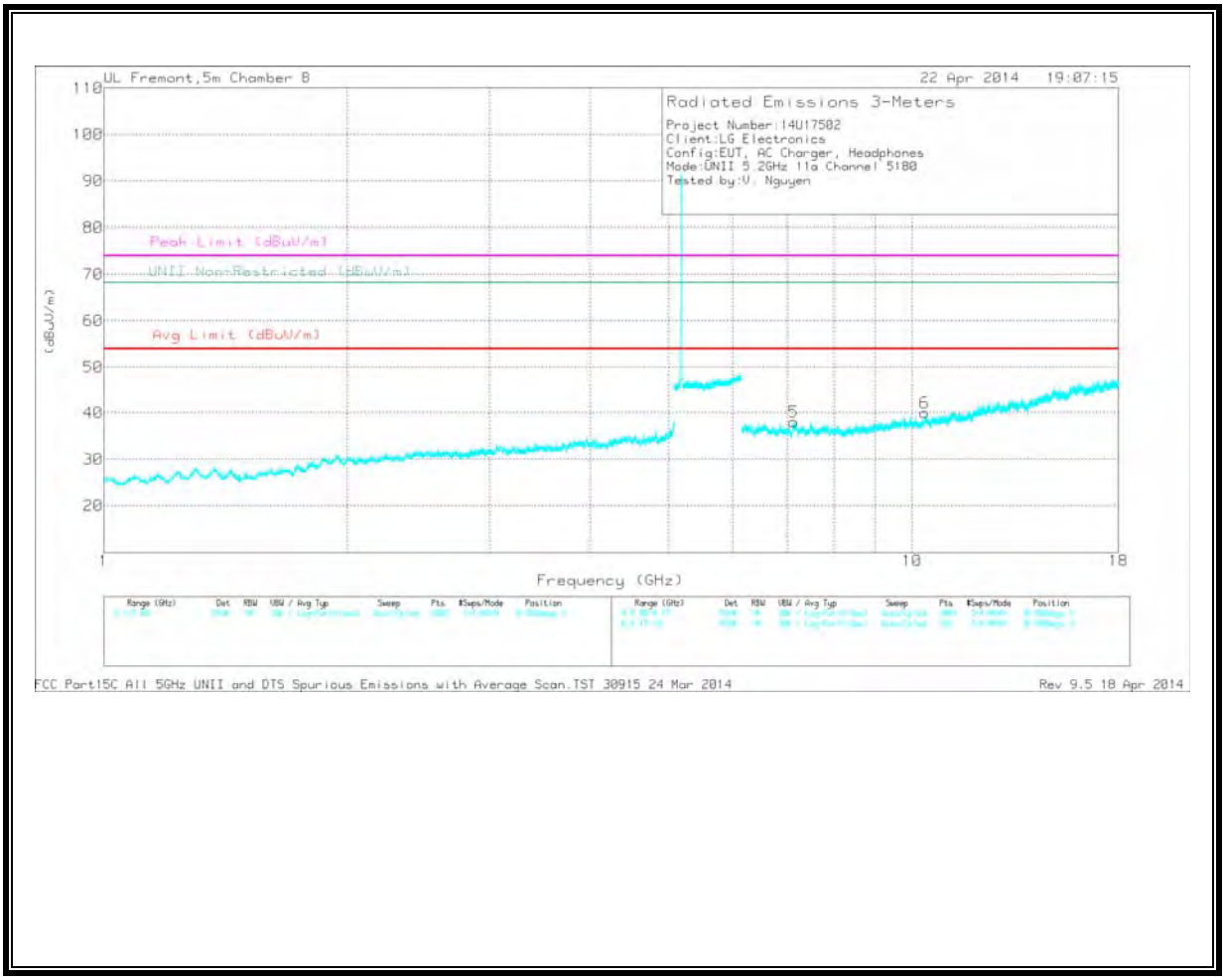
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.932	33.43	PK	31.2	-32.6	32.03	-	-	-	-	68.2	-36.17	0-360	201	H
2	3.064	33.47	PK	32.8	-32.2	34.07	-	-	-	-	68.2	-34.13	0-360	201	H
3	6.293	30.78	PK	35.5	-28.2	38.08	-	-	-	-	68.2	-30.12	0-360	99	H
4	6.845	30.94	PK	35.6	-28.4	38.14	-	-	-	-	68.2	-30.06	0-360	201	H
5	7.141	29.82	PK	35.6	-27.3	38.12	-	-	-	-	68.2	-30.08	0-360	202	V
6	10.359	26.11	PK	37.2	-23.2	40.11	-	-	-	-	68.2	-28.09	0-360	202	V

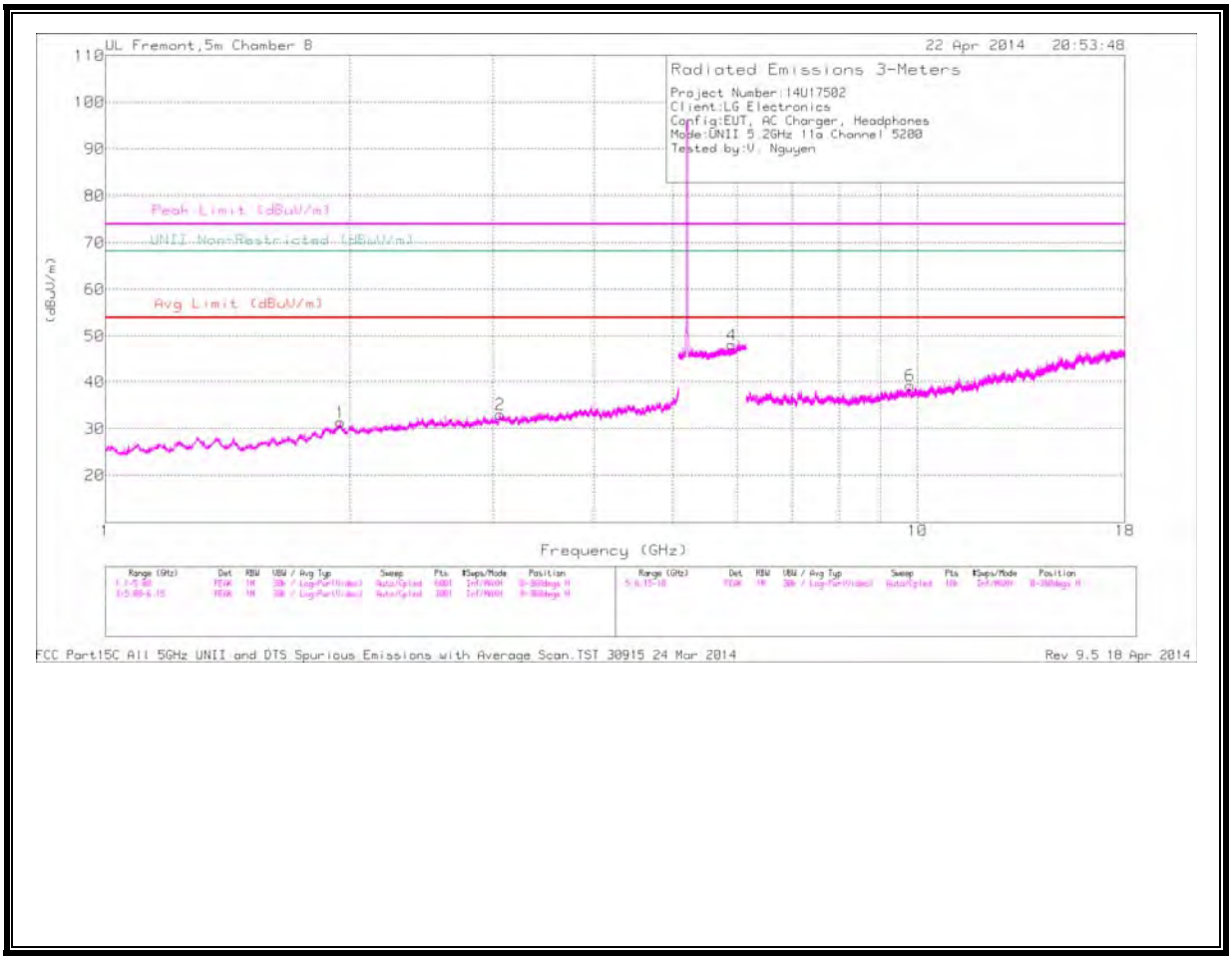
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.36	36.85	PK1	37.2	-23.2	50.85	54	-3.15	74	-23.15	68.2	-17.35	13	217	V
10.36	28.38	AD1	37.2	-23.2	42.38	54	-11.62	74	-31.62	-	-	13	217	V

PK1 - KDB789033 Method: Peak

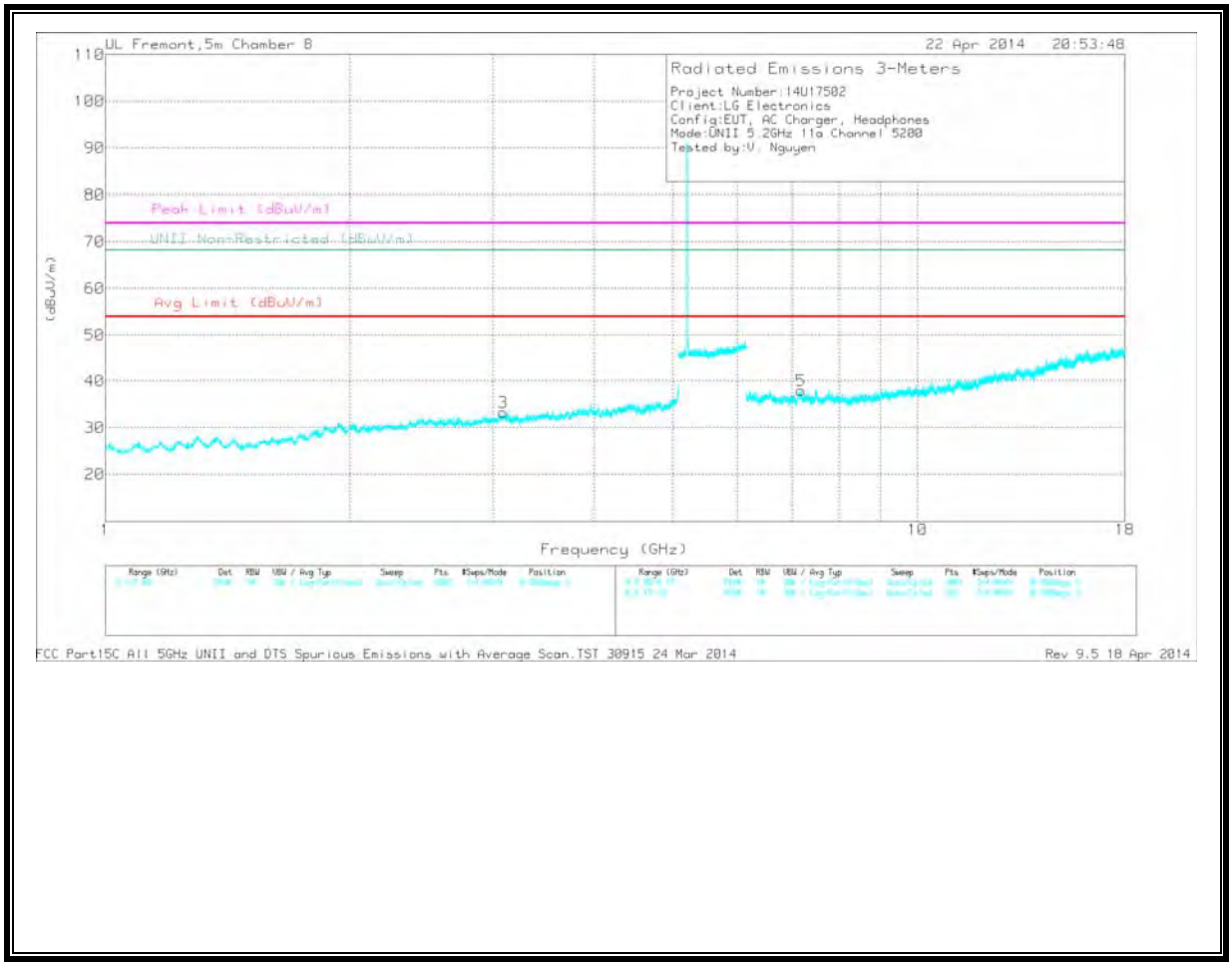
AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

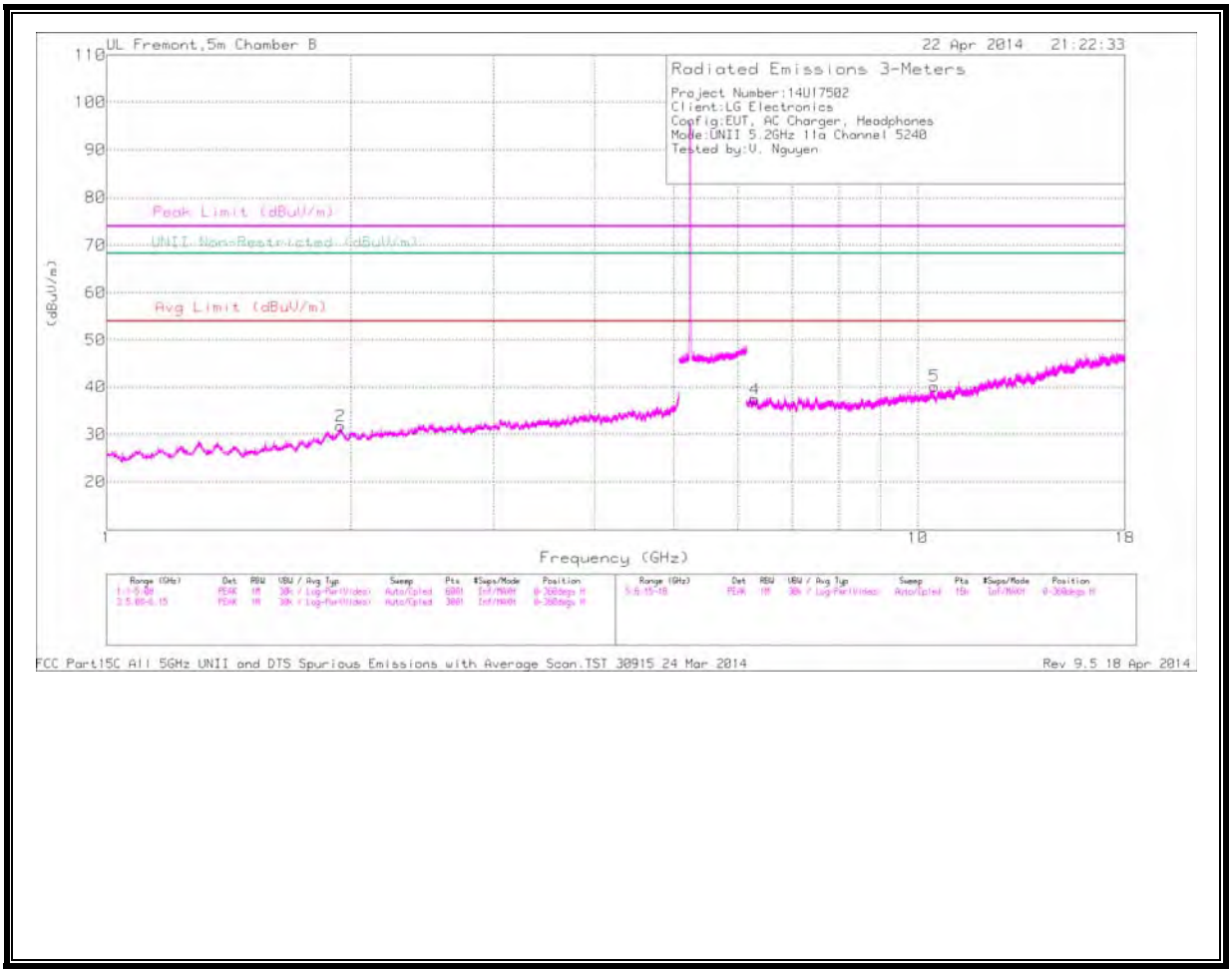
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.947	32.65	PK	31.2	-32.5	31.35	-	-	-	-	68.2	-36.85	0-360	99	H
2	3.061	32.6	PK	32.8	-32.3	33.1	-	-	-	-	68.2	-35.1	0-360	99	H
3	3.086	32.29	PK	32.9	-31.9	33.29	-	-	-	-	68.2	-34.91	0-360	99	V
4	5.91	32.68	PK	35	-19.6	48.08	-	-	-	-	68.2	-20.12	0-360	202	H
5	7.179	29.13	PK	35.6	-26.8	37.93	-	-	-	-	68.2	-30.27	0-360	202	V
6	9.787	25.83	PK	36.9	-23.4	39.33	-	-	-	-	68.2	-28.87	0-360	99	H

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.917	41.7	PK1	35	-19.6	57.1	-	-	-	-	68.2	-11.1	113	203	H
5.9	29.5	AD1	34.9	-19.7	44.7	54	-9.3	74	-29.3	-	-	113	203	H

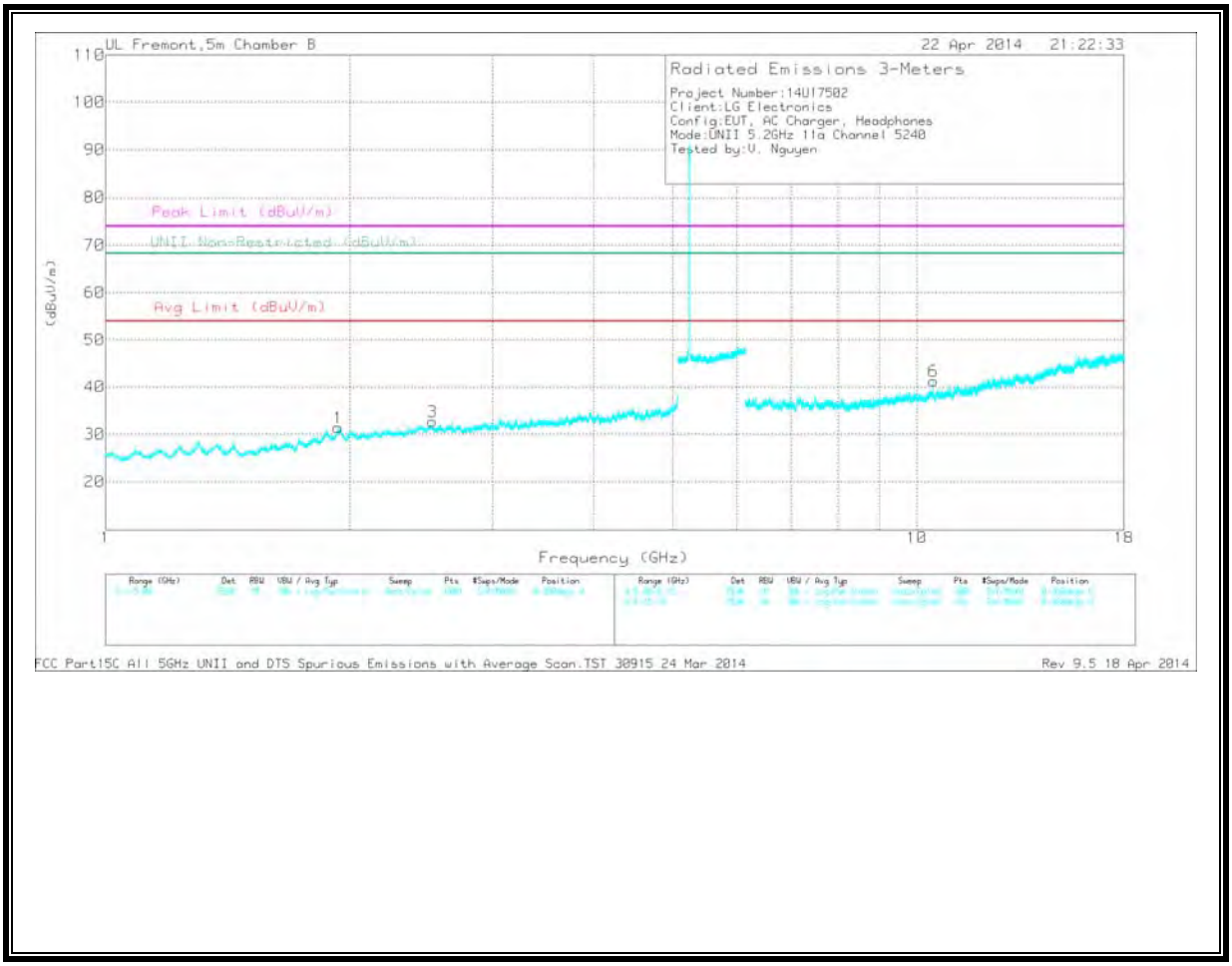
PK1 - KDB789033 Method: Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.936	32.8	PK	31.2	-32.6	31.4	-	-	-	-	68.2	-36.8	0-360	202	V
2	1.945	33.06	PK	31.2	-32.5	31.76	-	-	-	-	68.2	-36.44	0-360	202	H
3	2.528	32.67	PK	32.5	-32.5	32.67	-	-	-	-	68.2	-35.53	0-360	99	V
4	6.3	30.21	PK	35.5	-28.3	37.41	-	-	-	-	68.2	-30.79	0-360	99	H
5	10.479	26.55	PK	37.4	-23.8	40.15	-	-	-	-	68.2	-28.05	0-360	202	H
6	10.48	27.61	PK	37.4	-23.8	41.21	-	-	-	-	68.2	-26.99	0-360	202	V

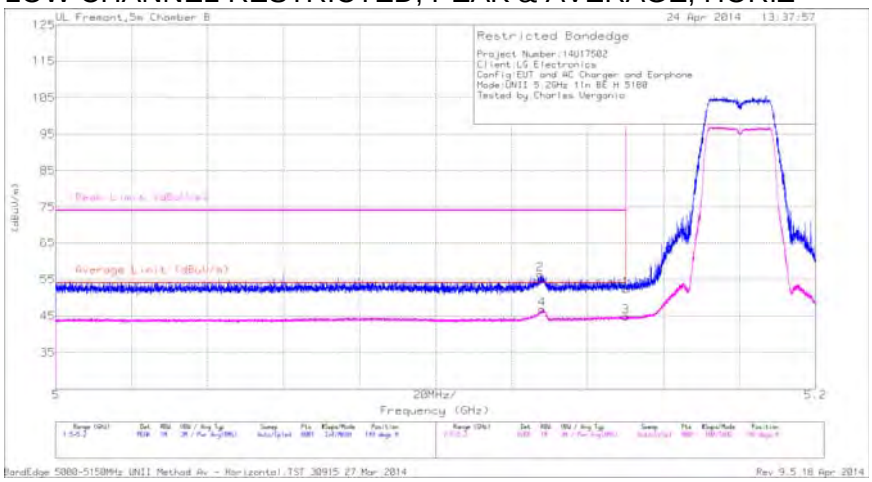
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
10.48	35.33	PK1	37.4	-23.8	48.93	54	-5.07	74	-25.07	68.2	-19.27	351	214	H
10.48	25.52	AD1	37.4	-23.8	39.12	54	-14.88	74	-34.88	-	-	351	214	H
10.48	36.53	PK1	37.4	-23.8	50.13	54	-3.87	74	-23.87	68.2	-18.07	15	236	V
10.48	28.16	AD1	37.4	-23.8	41.76	54	-12.24	74	-32.24	-	-	15	236	V

PK1 - KDB789033 Method: Peak

11.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ

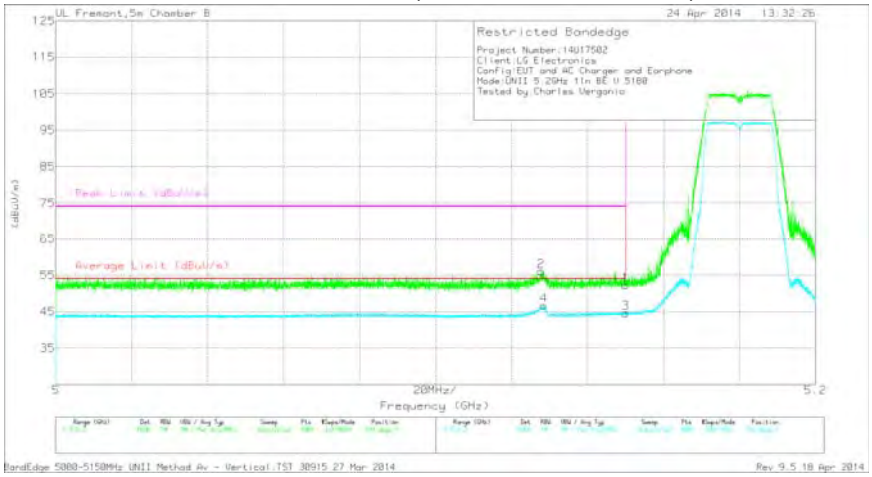


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.128	42.19	PK	34.3	-20.1	0	56.39	-	-	74	-17.61	149	213	H
4	* 5.128	32.4	RMS	34.3	-20.1	.2	46.8	54	-7.2	-	-	149	213	H
1	* 5.15	38.29	PK	34.3	-20.2	0	52.39	-	-	74	-21.61	149	213	H
3	* 5.15	30.58	RMS	34.3	-20.2	.2	44.88	54	-9.12	-	-	149	213	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.128	41.98	PK	34.3	-20.1	0	56.18	-	-	74	-17.82	193	264	V
4	* 5.129	32.24	RMS	34.3	-20.1	.2	46.64	54	-7.36	-	-	193	264	V
1	* 5.15	38.19	PK	34.3	-20.2	0	52.29	-	-	74	-21.71	193	264	V
3	* 5.15	30.34	RMS	34.3	-20.2	.2	44.64	54	-9.36	-	-	193	264	V

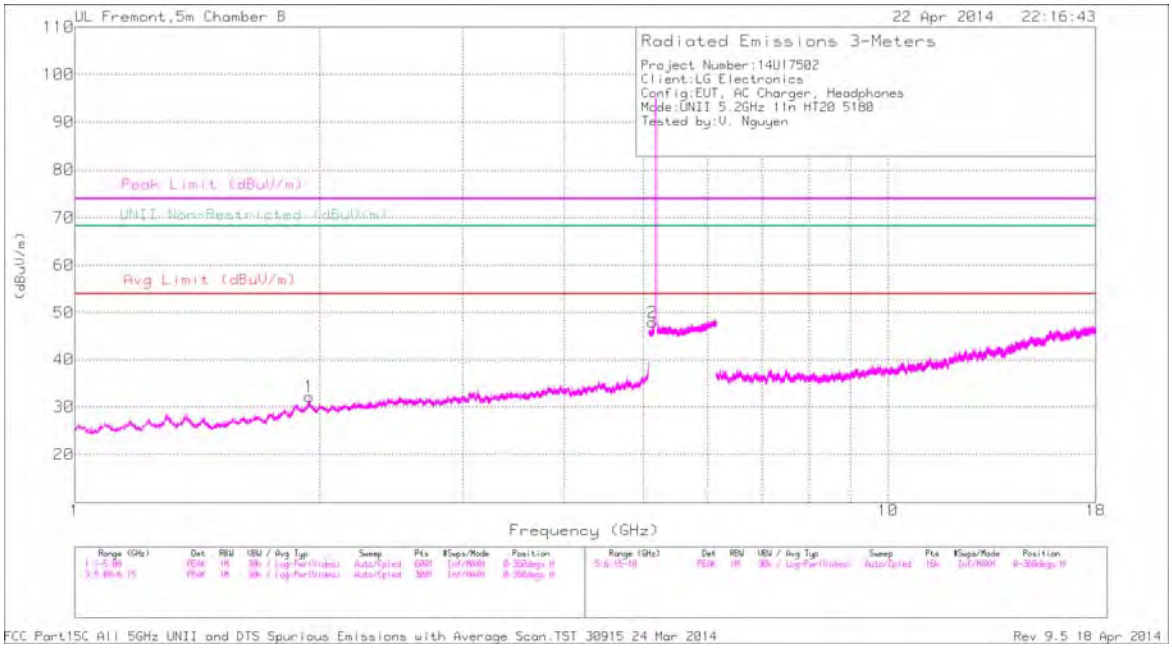
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

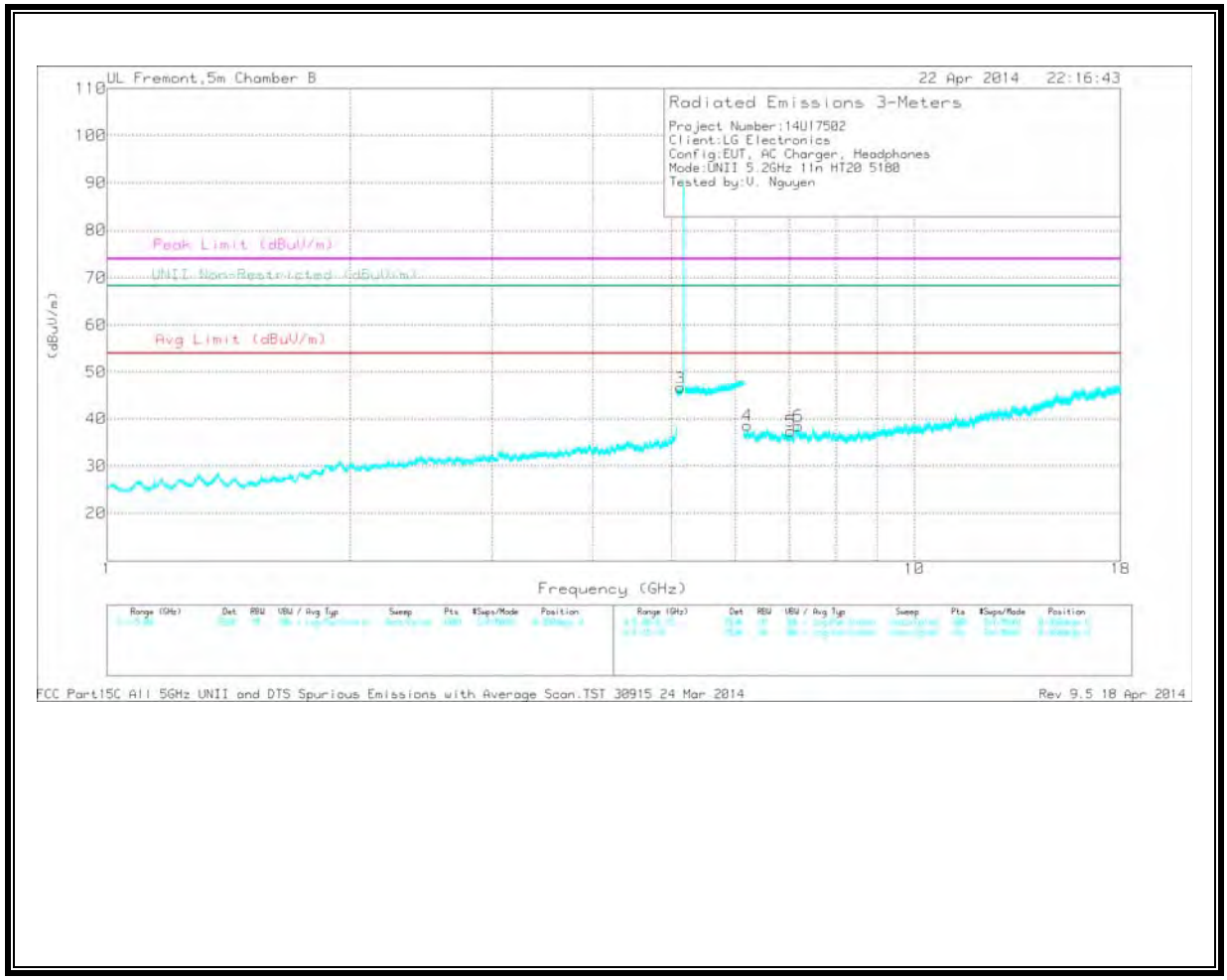
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.129	33.76	PK	34.3	-20.1	47.96	-	-	74	-26.04	-	-	0-360	202	H
3	* 5.129	32.39	PK	34.3	-20.1	46.59	-	-	74	-27.41	-	-	0-360	202	V
1	1.944	33.49	PK	31.2	-32.5	32.19	-	-	-	-	68.2	-36.01	0-360	201	H
4	6.214	30.89	PK	35.4	-27.7	38.59	-	-	-	-	68.2	-29.61	0-360	99	V
5	7.034	29.26	PK	35.6	-27.5	37.36	-	-	-	-	68.2	-30.84	0-360	99	V
6	7.185	29.47	PK	35.5	-26.5	38.47	-	-	-	-	68.2	-29.73	0-360	202	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

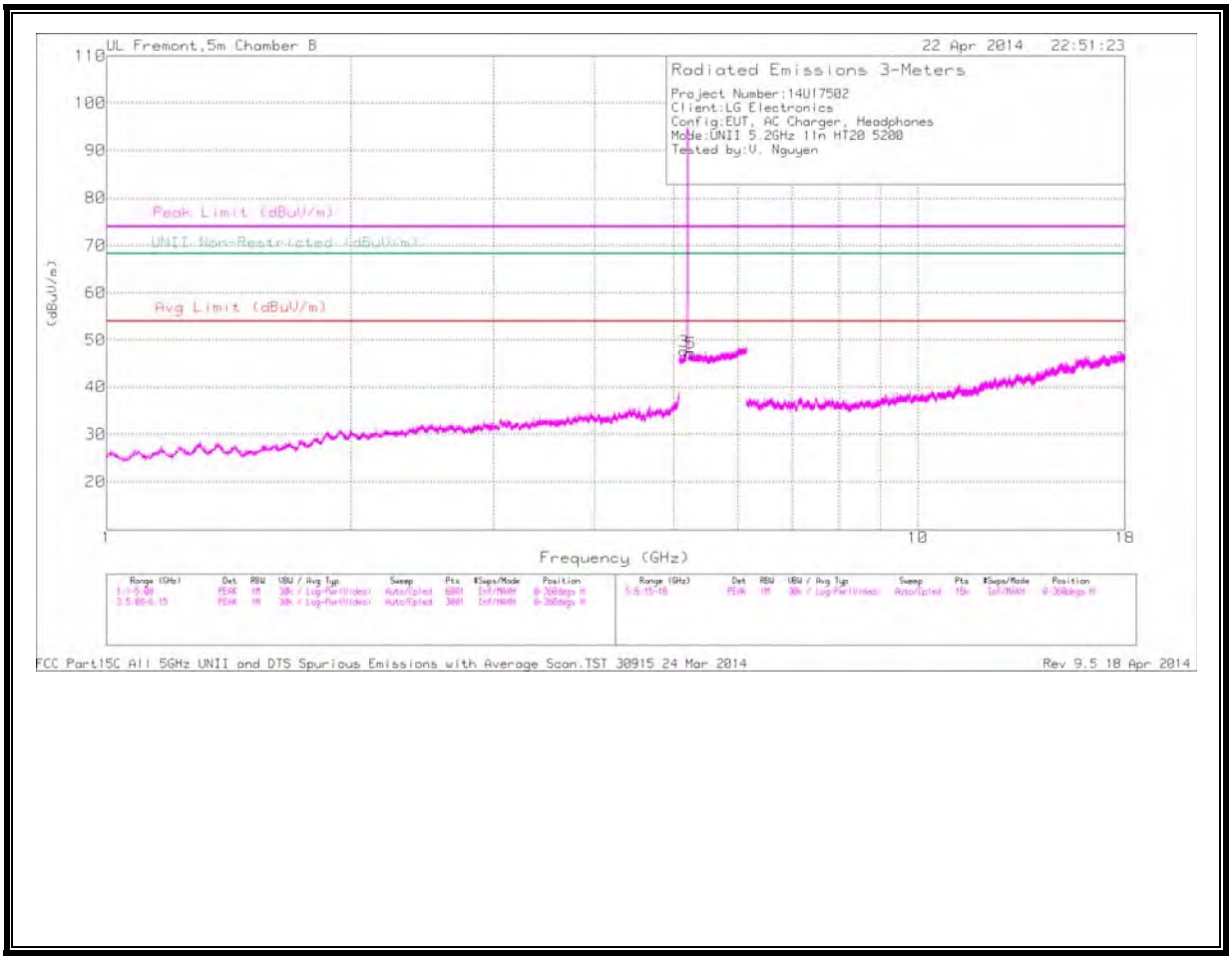
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 5.128	43.61	PK1	34.3	-20.1	57.81	-	-	74	-16.19	-	-	78	245	H
* 5.128	32.79	AD1	34.3	-20.1	46.99	54	-7.01	-	-	-	-	78	245	H
* 5.128	43.41	PK1	34.3	-20.1	57.61	-	-	74	-16.39	-	-	136	273	V
* 5.128	32.82	AD1	34.3	-20.1	47.02	54	-6.98	-	-	-	-	136	273	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

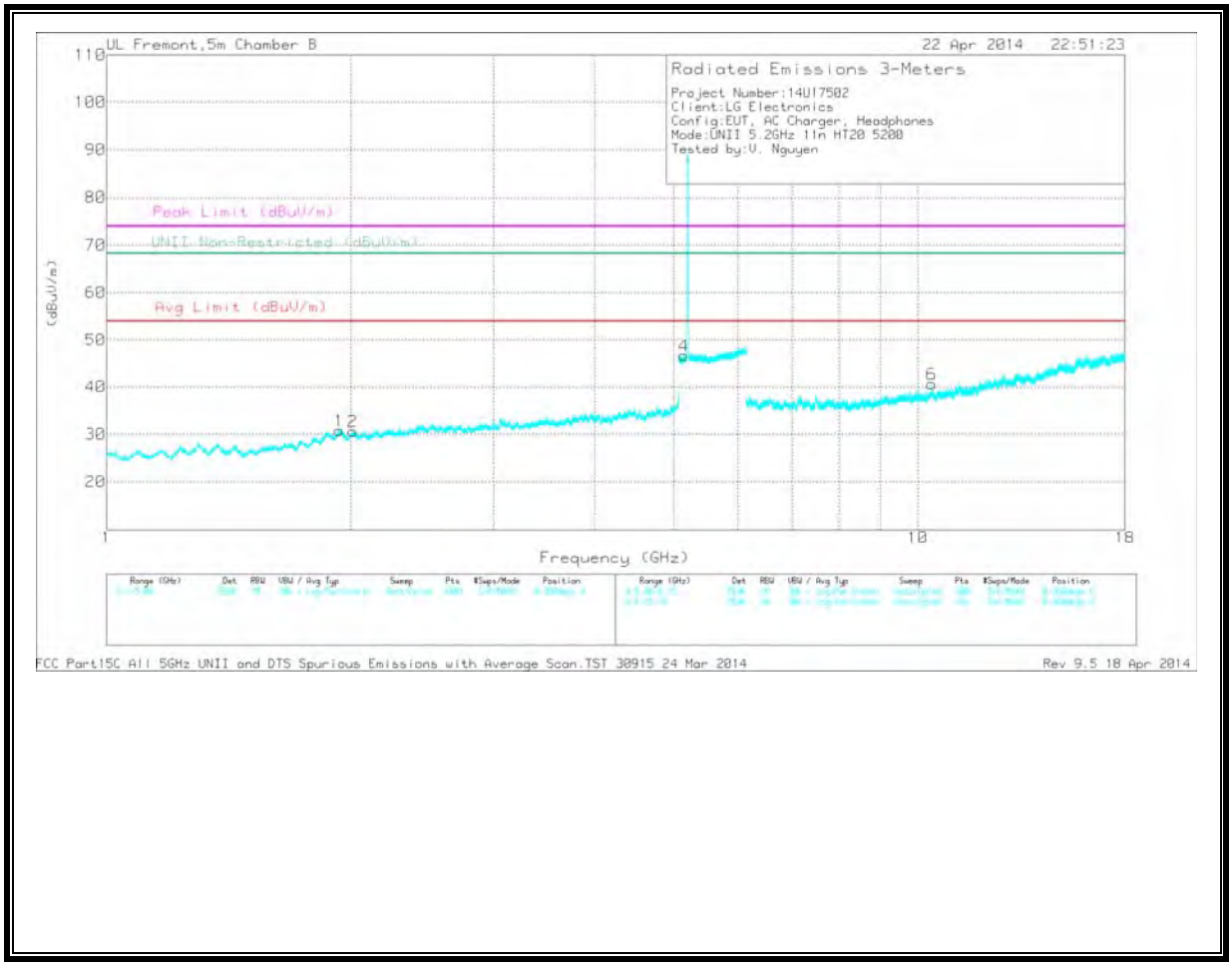
PK1 - KDB789033 Method: Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 5.147	33.51	PK	34.3	-20.2	47.61	-	-	74	-26.39	-	-	0-360	202	H
4	* 5.149	32.54	PK	34.3	-20.2	46.64	-	-	74	-27.36	-	-	0-360	202	V
1	1.938	32.14	PK	31.2	-32.6	30.74	-	-	-	-	68.2	-37.46	0-360	202	V
2	2.013	32.7	PK	31.3	-33.4	30.6	-	-	-	-	68.2	-37.6	0-360	99	V
5	5.252	32.88	PK	34.4	-20.1	47.18	-	-	-	-	68.2	-21.02	0-360	202	H
6	10.4	26.49	PK	37.3	-23.2	40.59	-	-	-	-	68.2	-27.61	0-360	202	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

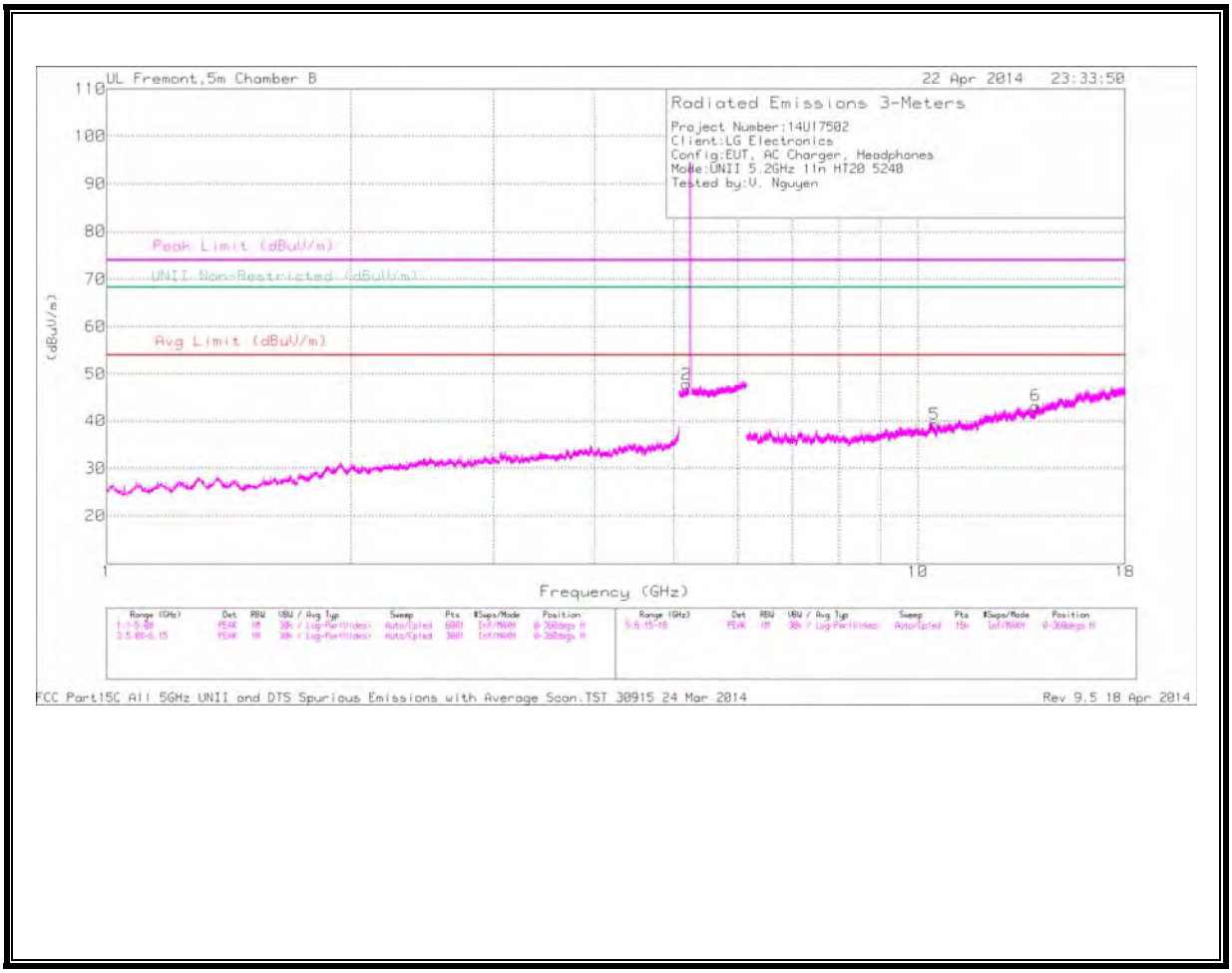
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 5.148	44.04	PK1	34.3	-20.2	58.14	-	-	74	-15.86	-	-	91	245	H
* 5.148	32.86	AD1	34.3	-20.2	46.96	54	-7.04	-	-	-	-	91	245	H
* 5.149	43.87	PK1	34.3	-20.2	57.97	-	-	74	-16.03	-	-	267	267	V
* 5.149	31.49	AD1	34.3	-20.2	45.59	54	-8.41	-	-	-	-	267	267	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

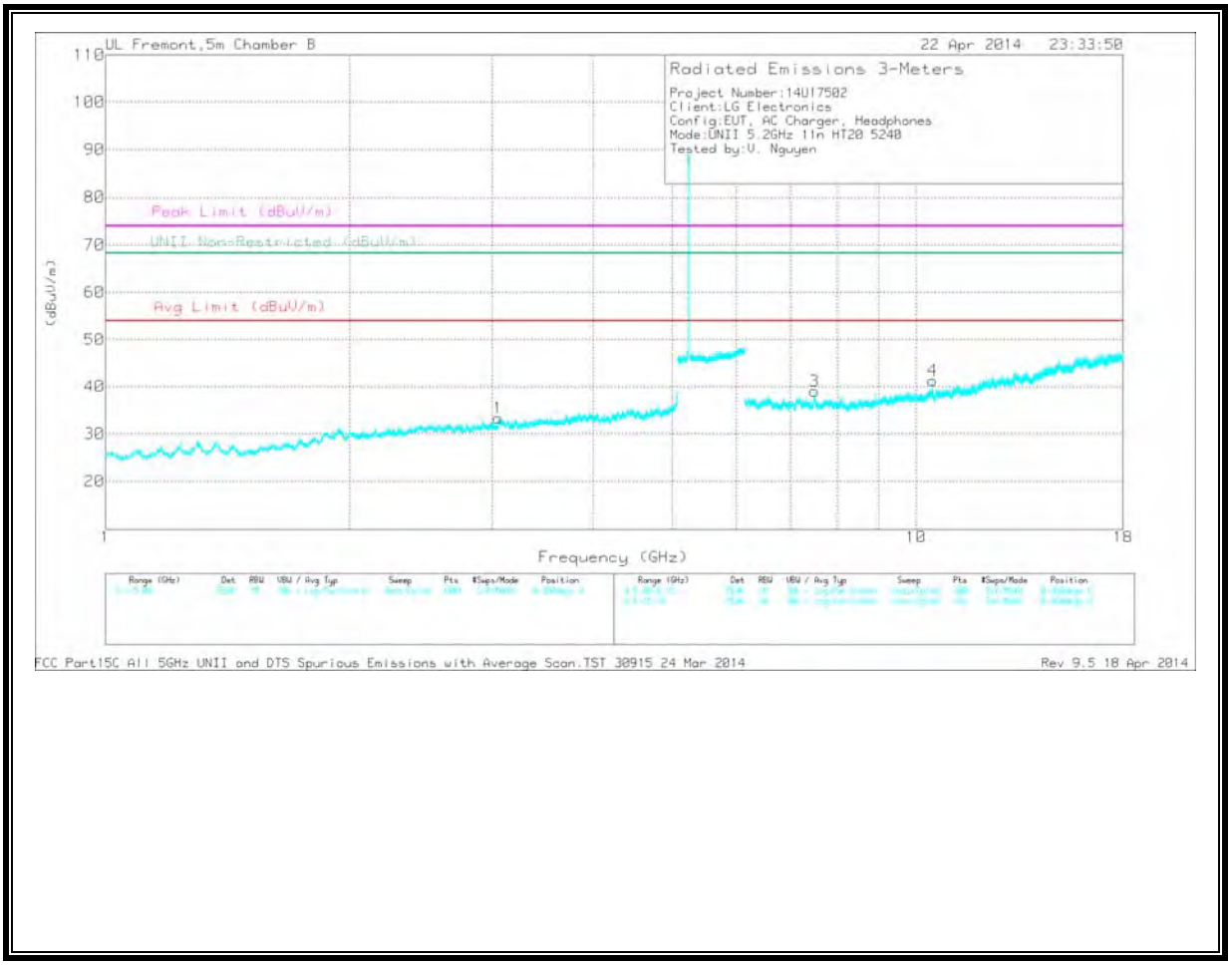
PK1 - KDB789033 Method: Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 7.492	29.12	PK	35.6	-25.7	39.02	-	-	74	-34.98	-	-	0-360	99	V
1	3.05	32.88	PK	32.8	-32.3	33.38	-	-	-	-	68.2	-34.82	0-360	99	V
2	5.188	33.74	PK	34.4	-20.3	47.84	-	-	-	-	68.2	-20.36	0-360	99	H
5	10.479	25.73	PK	37.4	-23.8	39.33	-	-	-	-	68.2	-28.87	0-360	202	H
4	10.479	27.68	PK	37.4	-23.8	41.28	-	-	-	-	68.2	-26.92	0-360	202	V
6	13.973	26.32	PK	38.6	-21.7	43.22	-	-	-	-	68.2	-24.98	0-360	202	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 7.489	37.79	PK1	35.6	-25.8	47.59	-	-	74	-26.41	-	-	288	126	V
* 7.491	26.17	AD1	35.6	-25.7	36.07	54	-17.93	-	-	-	-	288	126	V
5.188	43.11	PK1	34.4	-20.3	57.21	-	-	-	-	68.2	-10.99	89	194	H
5.188	32.8	AD1	34.4	-20.3	46.9	-	-	-	-	-	-	89	194	H
10.48	35.99	PK1	37.4	-23.8	49.59	-	-	-	-	68.2	-18.61	16	202	V
10.48	27.12	AD1	37.4	-23.8	40.72	-	-	-	-	-	-	16	202	V
10.48	35.71	PK1	37.4	-23.8	49.31	-	-	-	-	68.2	-18.89	347	195	H
10.48	26.11	AD1	37.4	-23.8	39.71	-	-	-	-	-	-	347	195	H

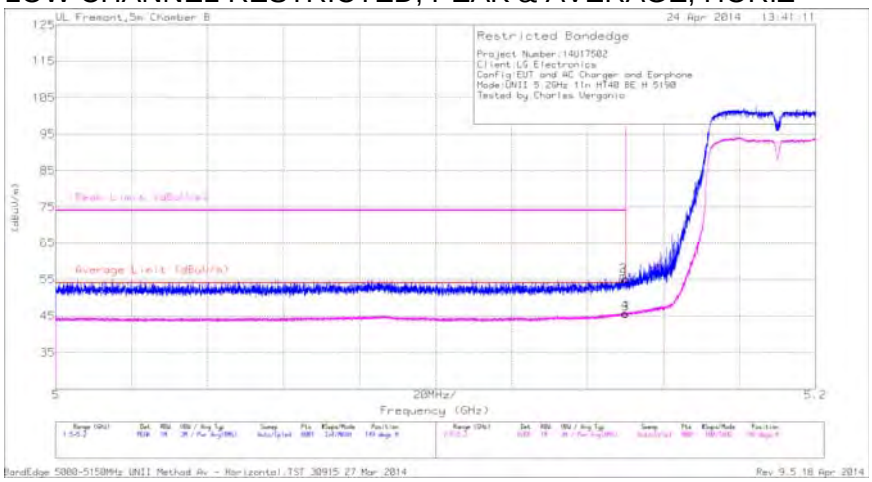
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

11.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



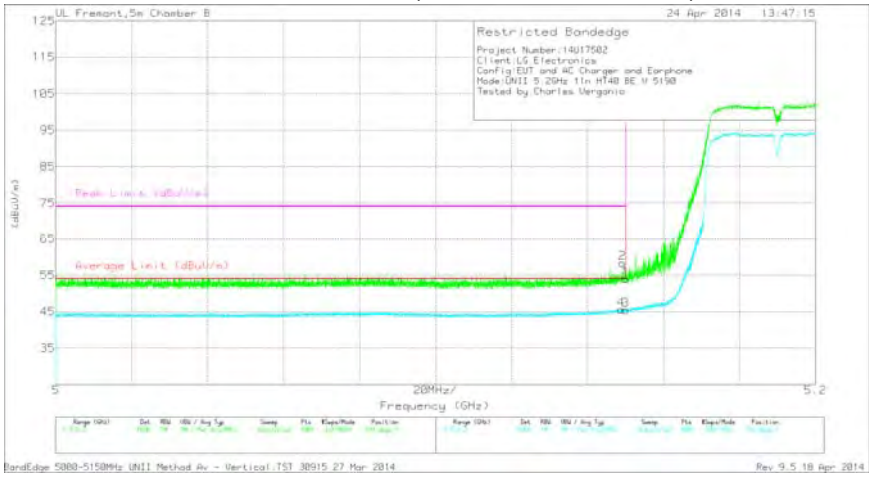
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	41.85	PK	34.3	-20.2	0	55.95	-	-	74	-18.05	149	213	H
1	* 5.15	40.98	PK	34.3	-20.2	0	55.08	-	-	74	-18.92	149	213	H
3	* 5.15	30.93	RMS	34.3	-20.2	.5	45.53	54	-8.47	-	-	149	213	H
4	* 5.15	31.16	RMS	34.3	-20.2	.5	45.76	54	-8.24	-	-	149	213	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	44.22	PK	34.3	-20.2	0	58.32	-	-	74	-15.68	193	262	V
4	* 5.149	31.03	RMS	34.3	-20.2	.5	45.63	54	-8.37	-	-	193	262	V
1	* 5.15	39.88	PK	34.3	-20.2	0	53.98	-	-	74	-20.02	193	262	V
3	* 5.15	30.8	RMS	34.3	-20.2	.5	45.4	54	-8.6	-	-	193	262	V

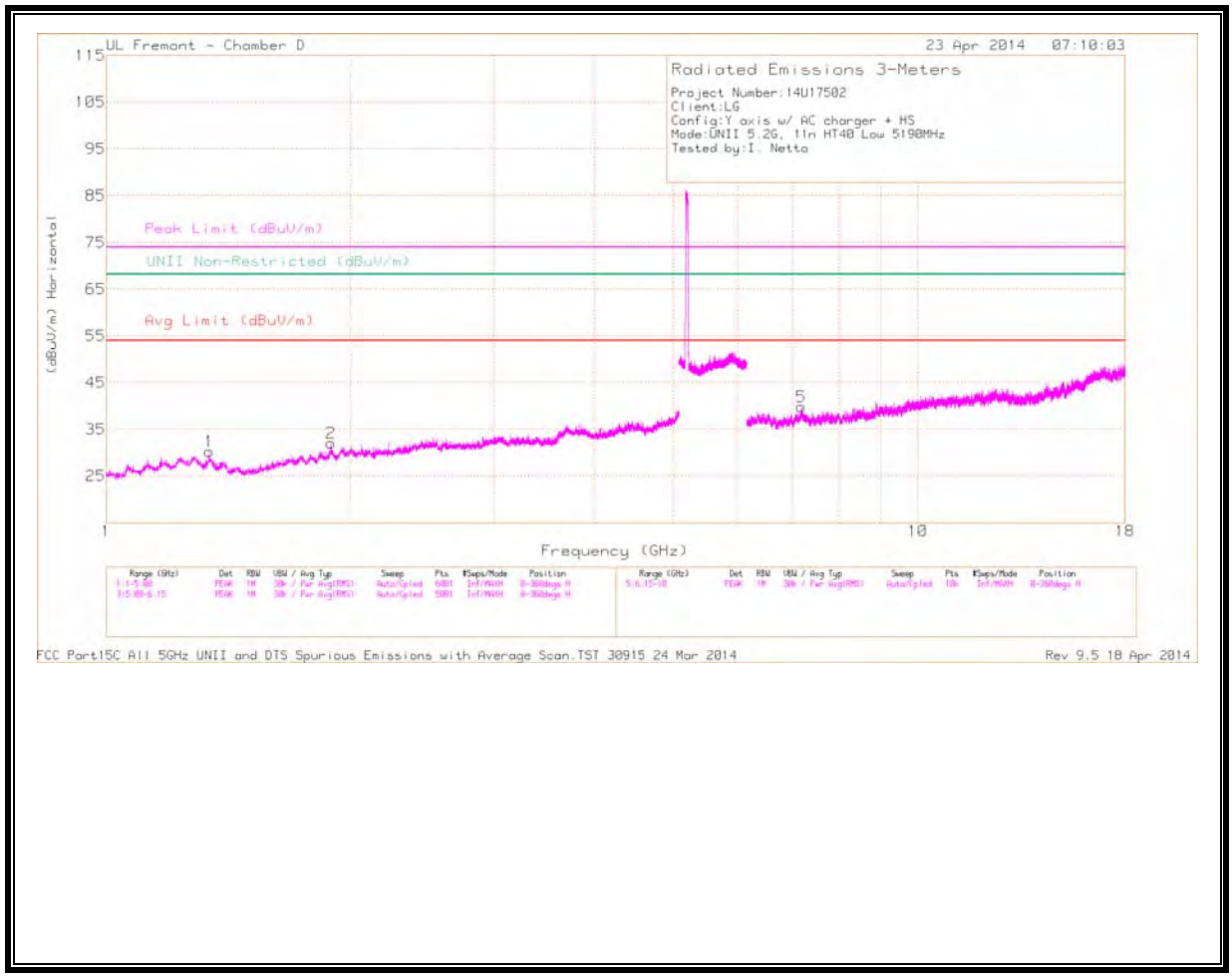
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

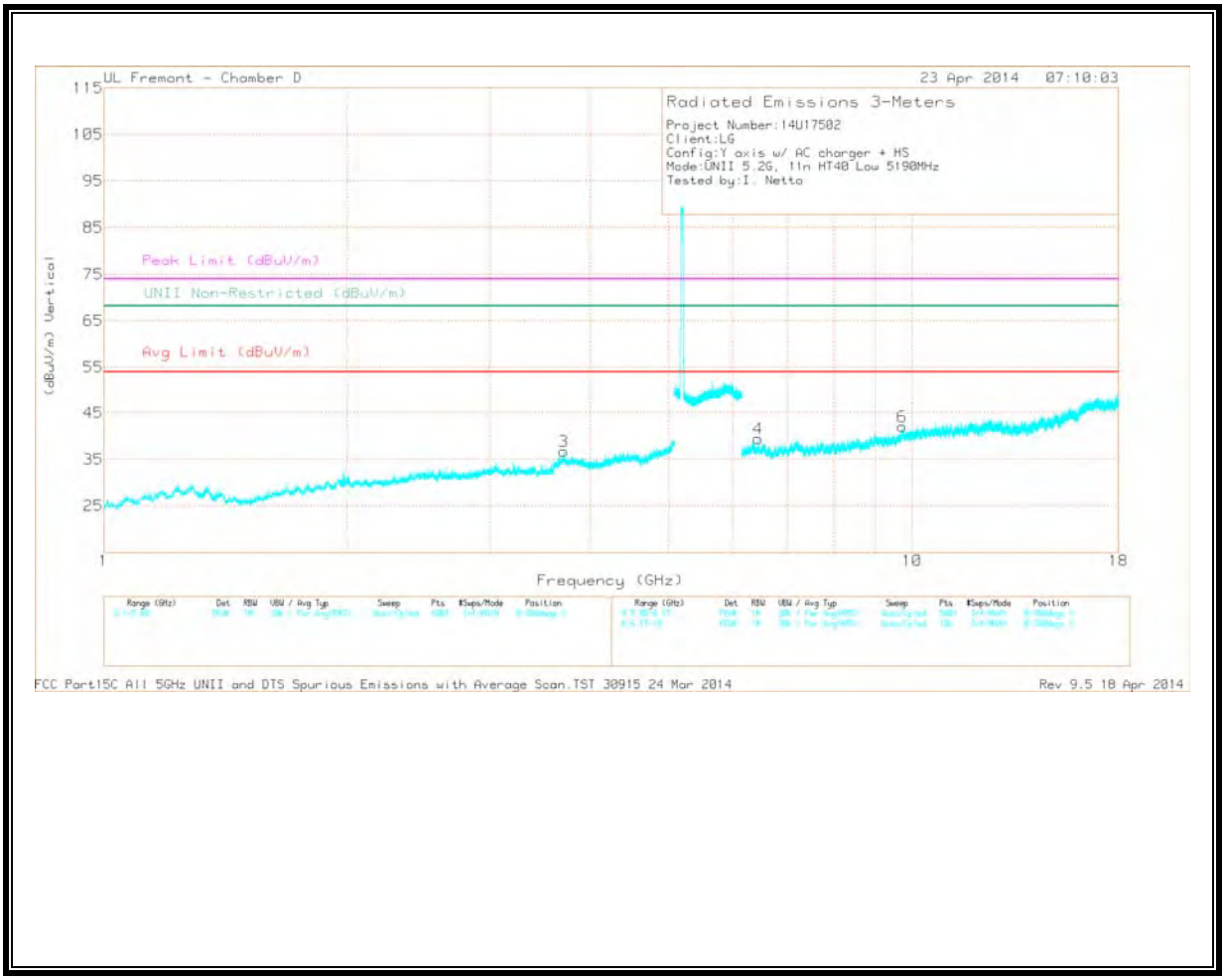
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.339	32.91	PK	28.6	-31.2	0	30.31	-	-	74	-43.69	-	-	0-360	201	H
3	* 3.708	32.6	PK	32.6	-28.4	0	36.8	-	-	74	-37.2	-	-	0-360	100	V
2	1.891	32.21	PK	30.1	-30.3	0	32.01	-	-	-	-	68.2	-36.19	0-360	100	H
4	6.442	30.87	PK	35	-26.4	0	39.47	-	-	-	-	68.2	-28.73	0-360	201	V
5	7.187	28.73	PK	35.1	-24	0	39.83	-	-	-	-	68.2	-28.37	0-360	201	H
6	9.725	27.06	PK	36.4	-21.4	0	42.06	-	-	-	-	68.2	-26.14	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.34	40.5	PK2	28.6	-31.2	0	37.9	-	-	74	-36.1	-	-	1	100	H
* 3.709	38.75	PK2	32.6	-28.4	0	42.95	-	-	74	-31.05	-	-	1	100	V
1.891	39.93	PK2	30.1	-30.3	0	39.73	-	-	-	-	68.2	-28.47	1	100	H
6.442	37.51	PK2	35	-26.4	0	46.11	-	-	-	-	68.2	-22.09	1	100	V
7.186	35.7	PK2	35.1	-24	0	46.8	-	-	-	-	68.2	-21.4	1	100	H
9.726	34.28	PK2	36.4	-21.4	0	49.28	-	-	-	-	68.2	-18.92	1	100	V

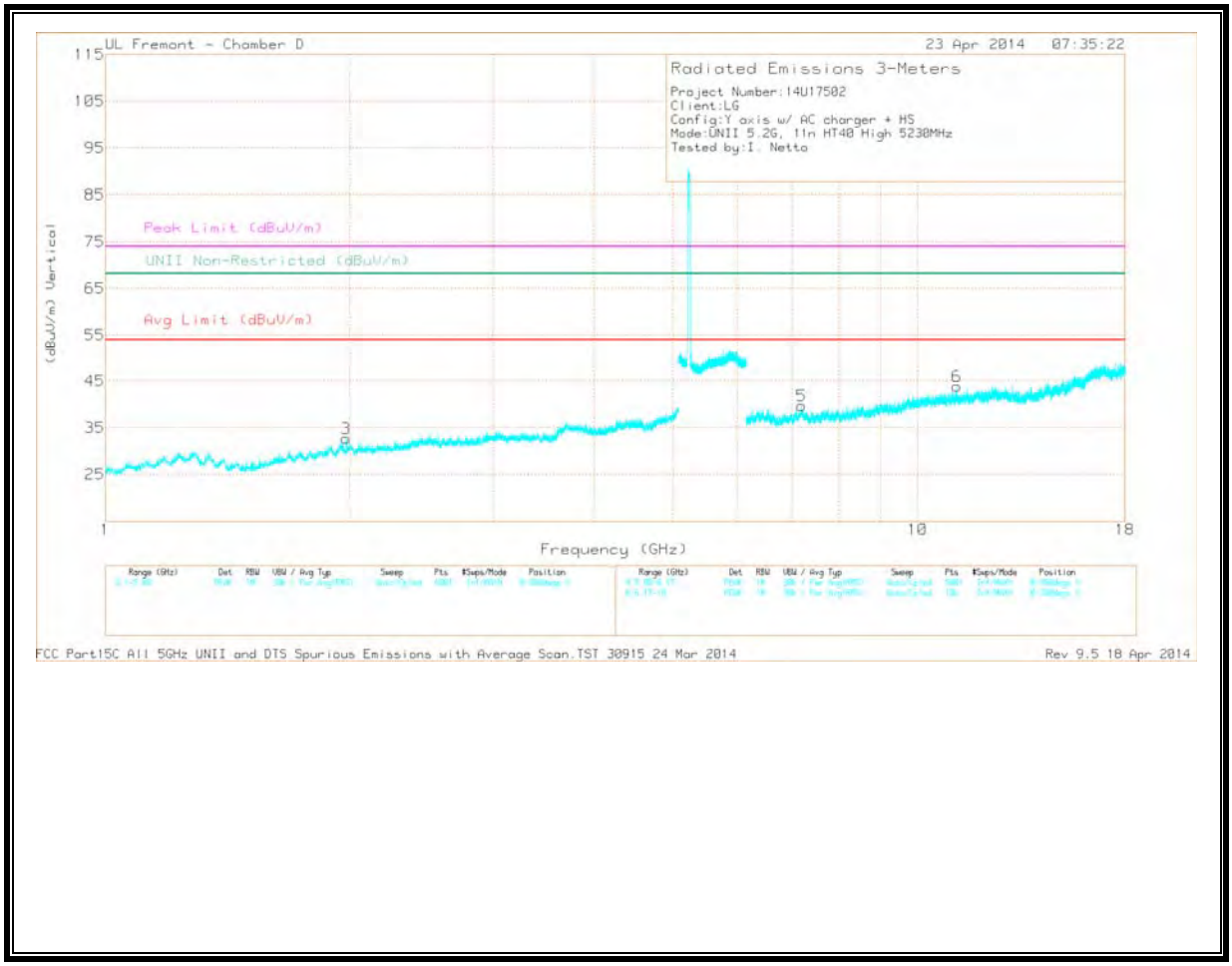
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.287	32.31	PK	29.2	-31.2	0	30.31	-	-	74	-43.69	-	-	0-360	100	H
4	* 4.825	32.67	PK	33.5	-27.2	0	38.97	-	-	74	-35.03	-	-	0-360	100	H
6	* 11.181	27.41	PK	37.5	-21	0	43.91	-	-	74	-30.09	-	-	0-360	201	V
2	1.887	32.35	PK	30.1	-30.4	0	32.05	-	-	-	-	68.2	-36.15	0-360	100	H
3	1.98	32.75	PK	30.6	-30.6	0	32.75	-	-	-	-	68.2	-35.45	0-360	201	V
5	7.199	28.44	PK	35.1	-23.8	0	39.74	-	-	-	-	68.2	-28.46	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.285	40.98	PK2	29.2	-31.3	0	38.88	-	-	74	-35.12	-	-	0	100	H
* 4.826	38.01	PK2	33.5	-27.3	0	44.21	-	-	74	-29.79	-	-	0	100	H
* 11.183	33.9	PK2	37.5	-21	0	50.4	-	-	74	-23.6	-	-	0	100	V
1.888	39.81	PK2	30.1	-30.4	0	39.51	-	-	-	-	68.2	-28.69	0	100	H
1.98	39.89	PK2	30.6	-30.6	0	39.89	-	-	-	-	68.2	-28.31	0	100	V
7.198	36.09	PK2	35.1	-23.8	0	47.39	-	-	-	-	68.2	-20.81	0	100	V

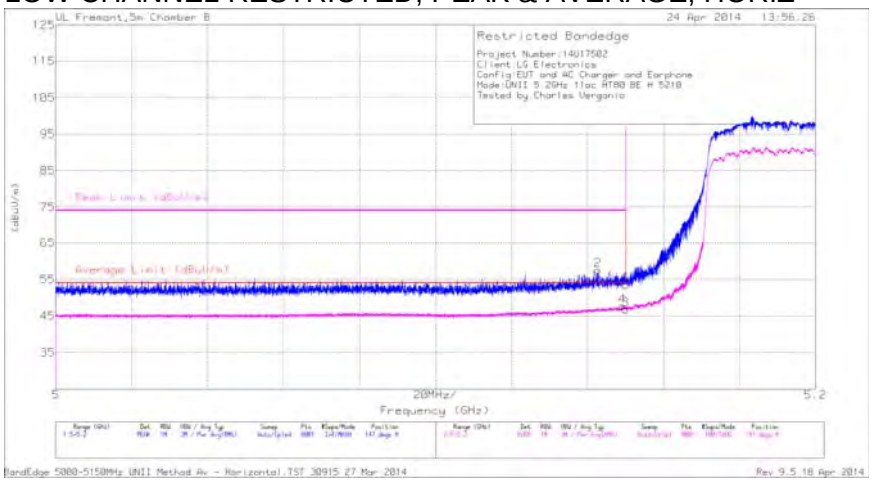
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.1.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ

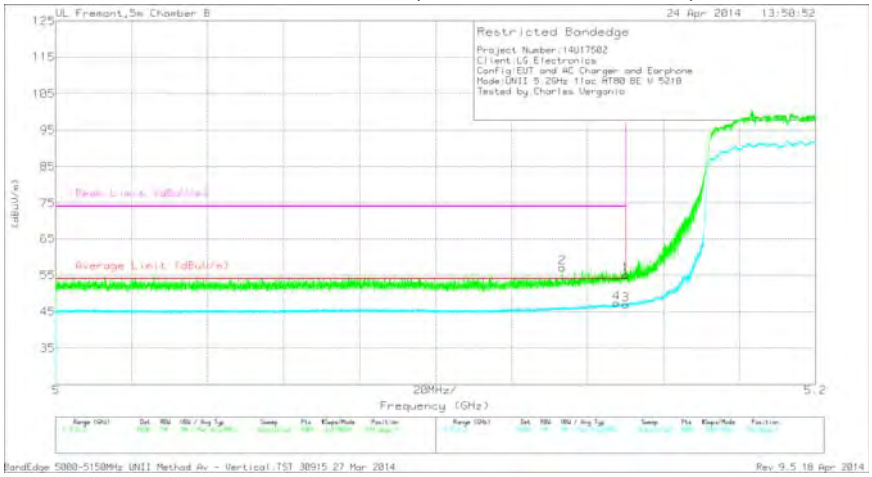


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.143	43.38	PK	34.3	-20.2	0	57.48	-	-	74	-16.52	147	214	H
4	* 5.149	32.05	RMS	34.3	-20.2	1.5	47.65	54	-6.35	-	-	147	214	H
1	* 5.15	39.42	PK	34.3	-20.2	0	53.52	-	-	74	-20.48	147	214	H
3	* 5.15	31.22	RMS	34.3	-20.2	1.5	46.82	54	-7.18	-	-	147	214	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.133	43.03	PK	34.3	-20.2	0	57.13	-	-	74	-16.87	193	262	V
4	* 5.148	31.67	RMS	34.3	-20.2	1.5	47.27	54	-6.73	-	-	193	262	V
1	* 5.15	41.02	PK	34.3	-20.2	0	55.12	-	-	74	-18.88	193	262	V
3	* 5.15	31.32	RMS	34.3	-20.2	1.5	46.92	54	-7.08	-	-	193	262	V

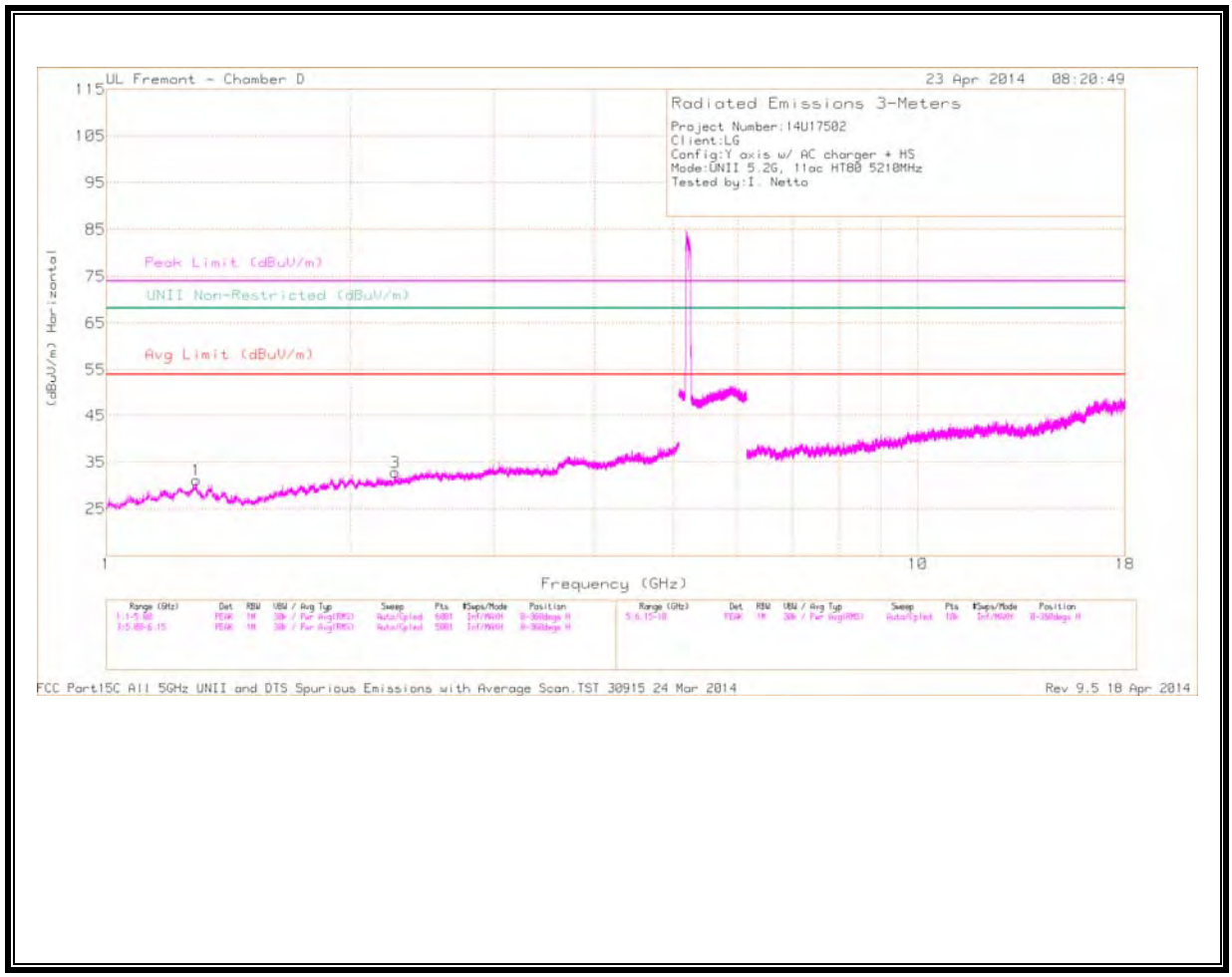
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

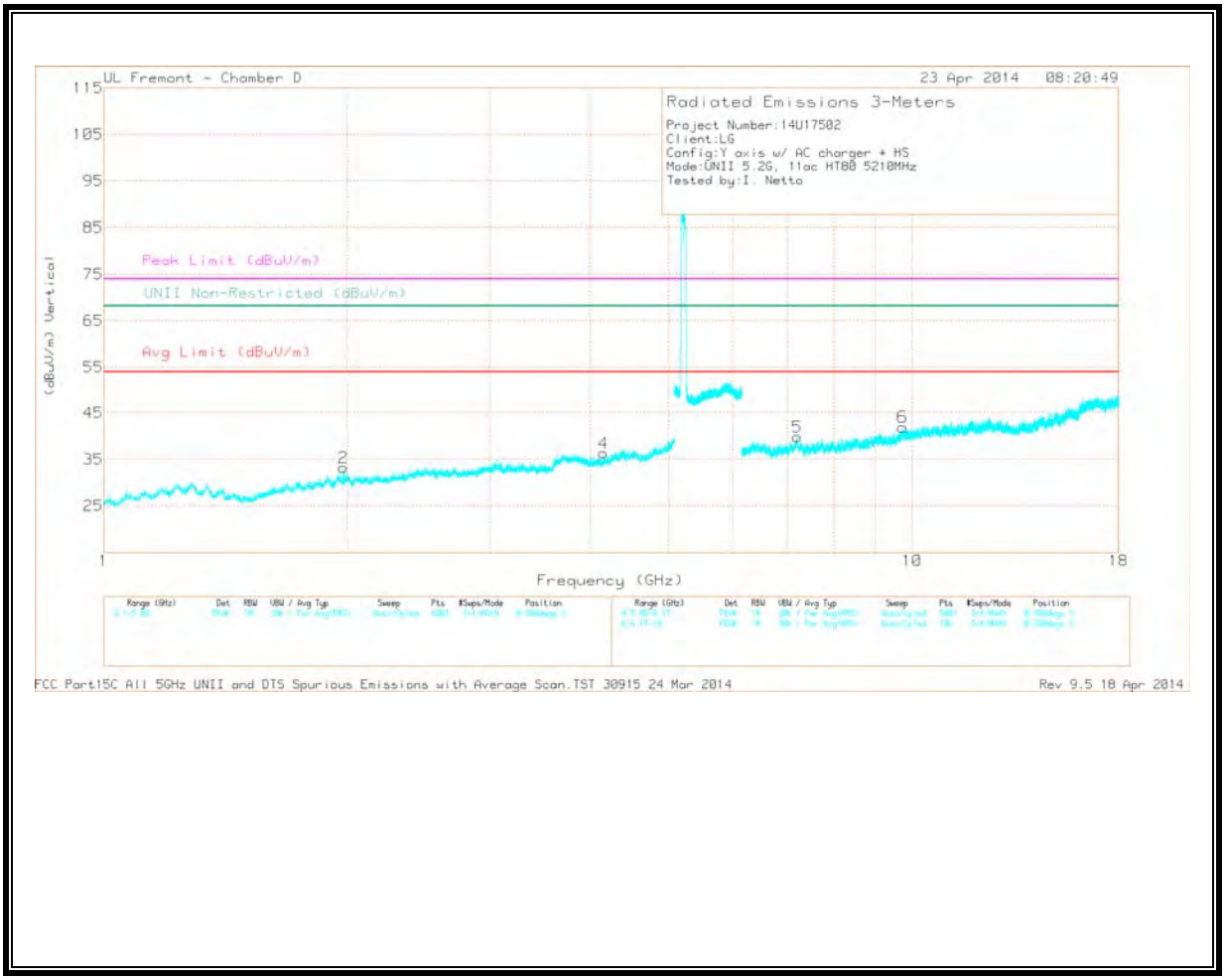
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.291	33.14	PK	29.2	-31.2	0	31.14	-	-	74	-42.86	-	-	0-360	201	H
3	* 2.269	32.43	PK	30.7	-30.3	0	32.83	-	-	74	-41.17	-	-	0-360	201	H
4	* 4.149	31.53	PK	32.9	-28.1	0	36.33	-	-	74	-37.67	-	-	0-360	100	V
2	1.98	33.21	PK	30.6	-30.6	0	33.21	-	-	-	-	68.2	-34.99	0-360	201	V
5	7.207	28.68	PK	35.1	-23.9	0	39.88	-	-	-	-	68.2	-28.32	0-360	201	V
6	9.732	26.9	PK	36.4	-21.3	0	42	-	-	-	-	68.2	-26.2	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.29	40.7	PK2	29.2	-31.2	0	38.7	-	-	74	-35.3	-	-	1	100	H
* 2.269	39.41	PK2	30.7	-30.3	0	39.81	-	-	74	-34.19	-	-	1	100	H
* 4.15	37.79	PK2	32.9	-28.1	0	42.59	-	-	74	-31.41	-	-	1	100	V
1.979	40.77	PK2	30.6	-30.6	0	40.77	-	-	-	-	68.2	-27.43	1	100	V
7.205	35.73	PK2	35.1	-23.9	0	46.93	-	-	-	-	68.2	-21.27	1	100	V
9.732	34.91	PK2	36.4	-21.3	0	50.01	-	-	-	-	68.2	-18.19	1	100	V

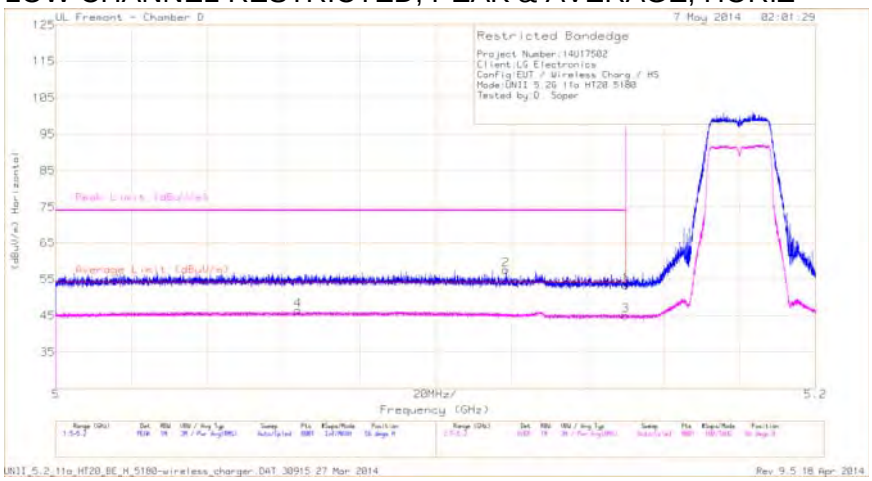
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

WORST CASE HARMONICS AND SPURIOUS EMISSIONS WITH WPC CHARGER AND COVER

RESTRICTED BANDEDGE (LOW CHANNEL)

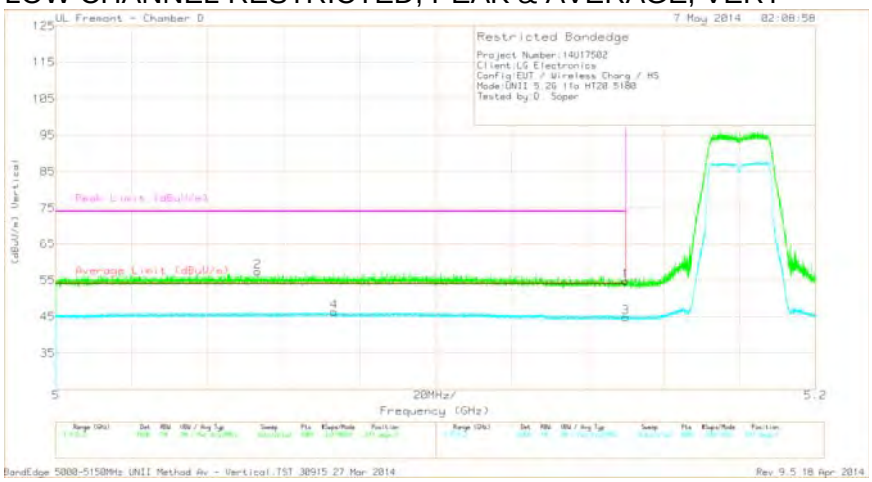
LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.064	30.63	RMS	33.6	-18	.2	46.43	54	-7.57	-	-	56	103	H
2	* 5.119	42.17	PK	33.6	-18.2	0	57.57	-	-	74	-16.43	56	103	H
1	* 5.15	38.05	PK	33.7	-18.3	0	53.45	-	-	74	-20.55	56	103	H
3	* 5.15	29.47	RMS	33.7	-18.3	.2	45.07	54	-8.93	-	-	56	103	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
RMS - RMS detection

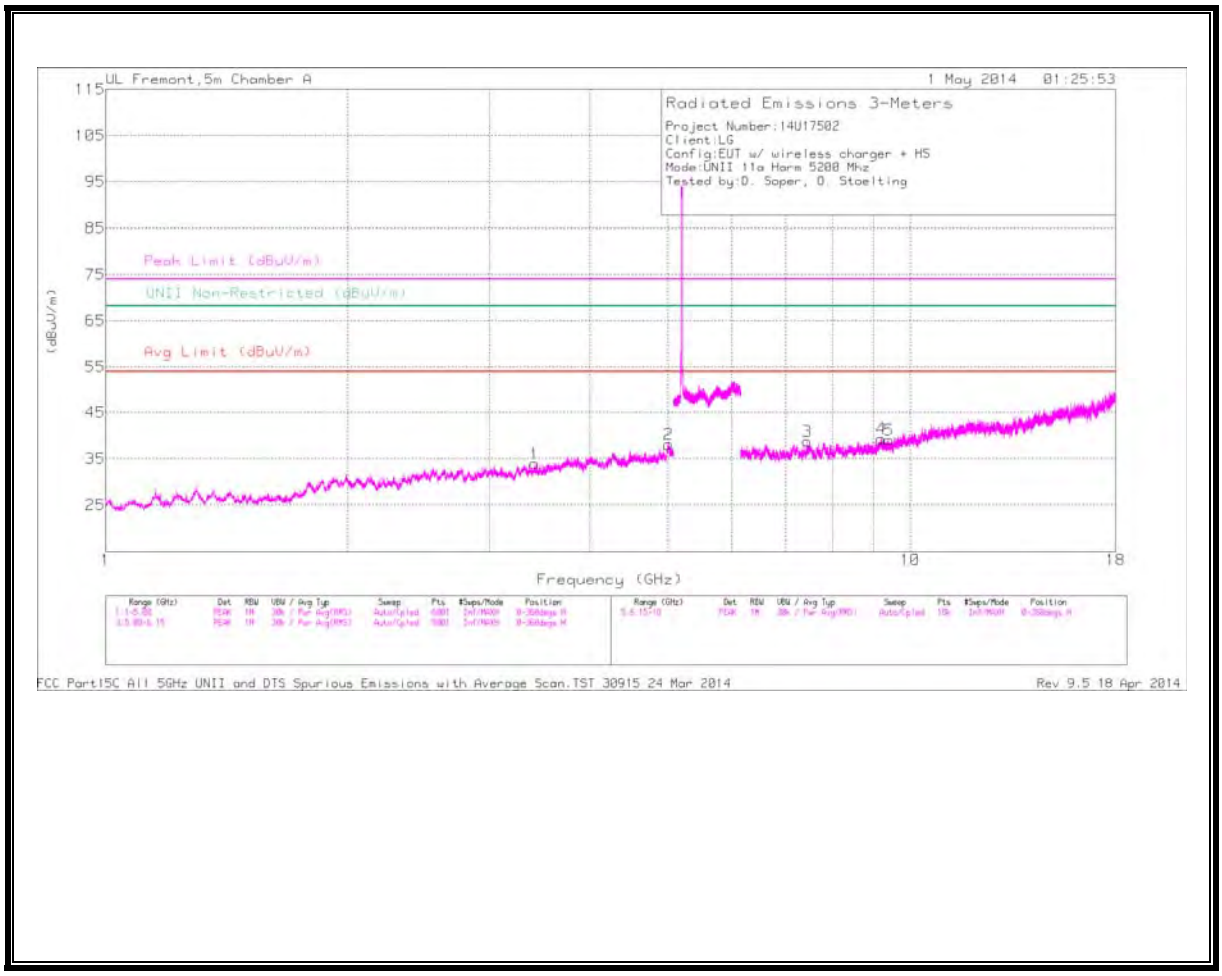
LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



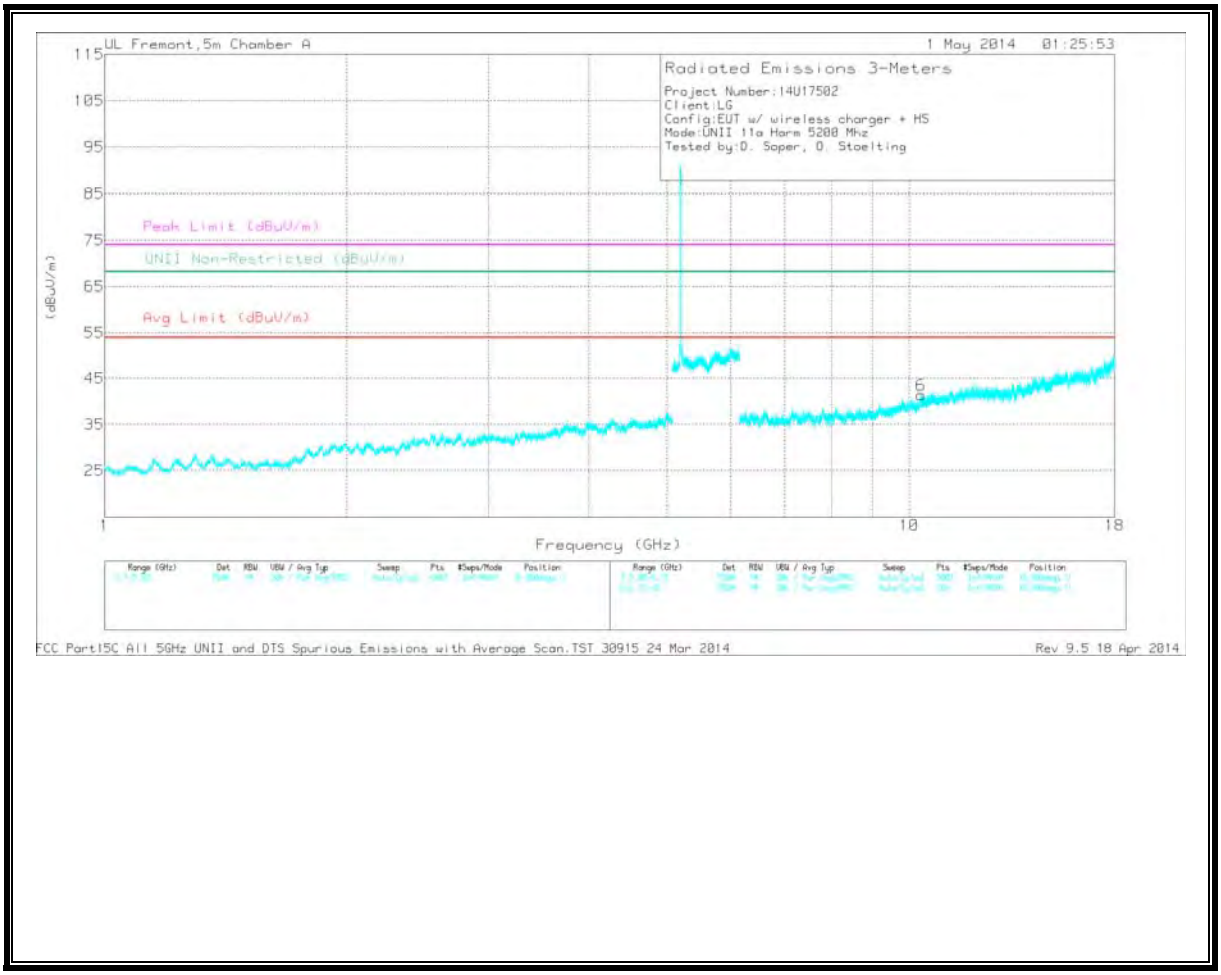
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.053	41.84	PK	33.6	-18.1	0	57.34	-	-	74	-16.66	247	157	V
4	* 5.073	30.52	RMS	33.6	-18	.2	46.32	54	-7.68	-	-	247	157	V
1	* 5.15	39.41	PK	33.7	-18.3	0	54.81	-	-	74	-19.19	247	157	V
3	* 5.15	29.23	RMS	33.7	-18.3	.2	44.83	54	-9.17	-	-	247	157	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
RMS - RMS detection

HORIZONTAL



VERTICAL



CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.011	33.31	PK	33.9	-29.1	38.11	-	-	74	-35.89	-	-	0-360	100	H
3	* 7.454	29.87	PK	35.3	-26.4	38.77	-	-	74	-35.23	-	-	0-360	100	H
4	* 9.197	27.7	PK	36.1	-24.4	39.4	-	-	74	-34.6	-	-	0-360	100	H
5	* 9.418	27.93	PK	36.4	-25.2	39.13	-	-	74	-34.87	-	-	0-360	200	H
1	3.411	32.07	PK	33	-31	34.07	-	-	-	-	68.2	-34.13	0-360	200	H
6	10.339	26.26	PK	37.3	-22.1	41.46	-	-	-	-	68.2	-26.74	0-360	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.034	40.49	PK1	32.8	-31.8	41.49	54	-12.51	74	-32.51	68.2	-26.71	359	100	H
3.061	29.02	AD1	32.8	-32.4	29.42	54	-24.58	74	-44.58	-	-	359	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

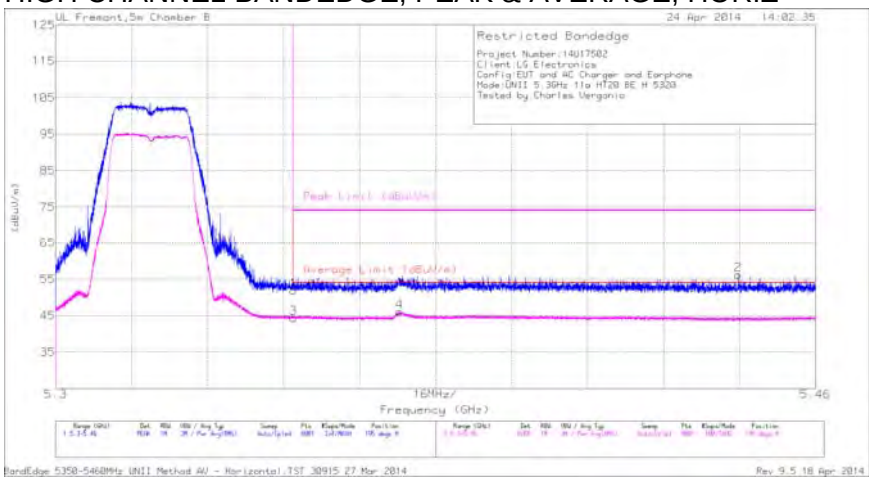
PK1 - KDB789033 Method: Peak

11.2. 5.3 GHz

11.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, HORIZ



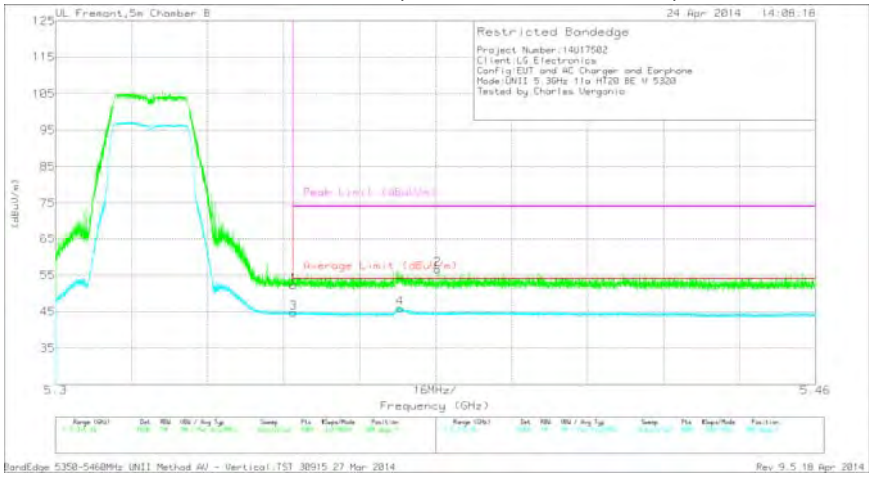
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.27	PK	34.5	-19.9	0	51.87	-	-	74	-22.13	195	191	H
3	* 5.35	29.49	RMS	34.5	-19.9	.2	44.29	54	-9.71	-	-	195	191	H
4	* 5.372	31.23	RMS	34.5	-19.9	.2	46.03	54	-7.97	-	-	195	191	H
2	* 5.444	41.83	PK	34.5	-20.1	0	56.23	-	-	74	-17.77	195	191	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.7	PK	34.5	-19.9	0	52.3	-	-	74	-21.7	208	257	V
3	* 5.35	29.85	RMS	34.5	-19.9	.2	44.65	54	-9.35	-	-	208	257	V
4	* 5.373	31.18	RMS	34.5	-19.9	.2	45.98	54	-8.02	-	-	208	257	V
2	* 5.38	41.77	PK	34.5	-19.7	0	56.57	-	-	74	-17.43	208	257	V

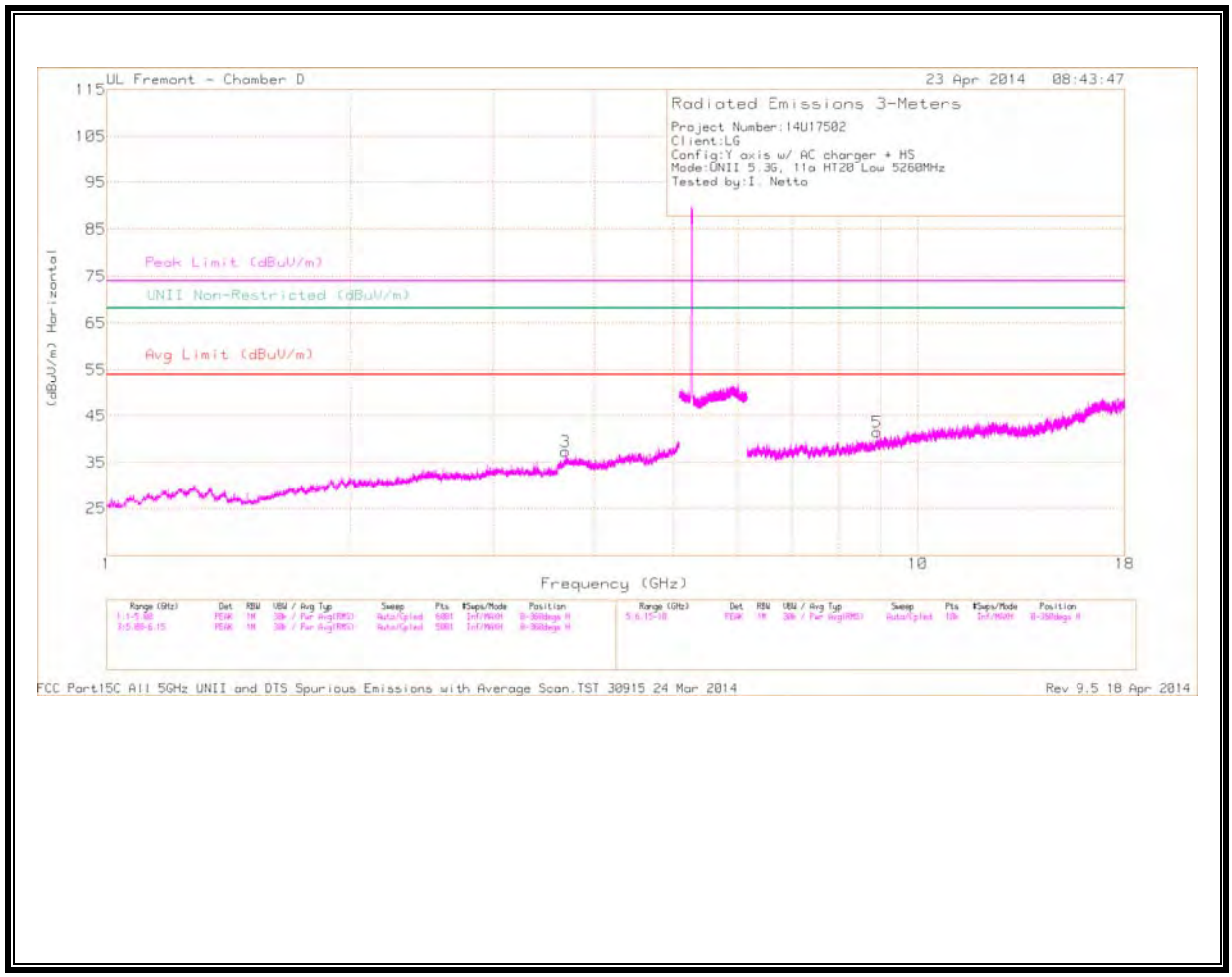
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

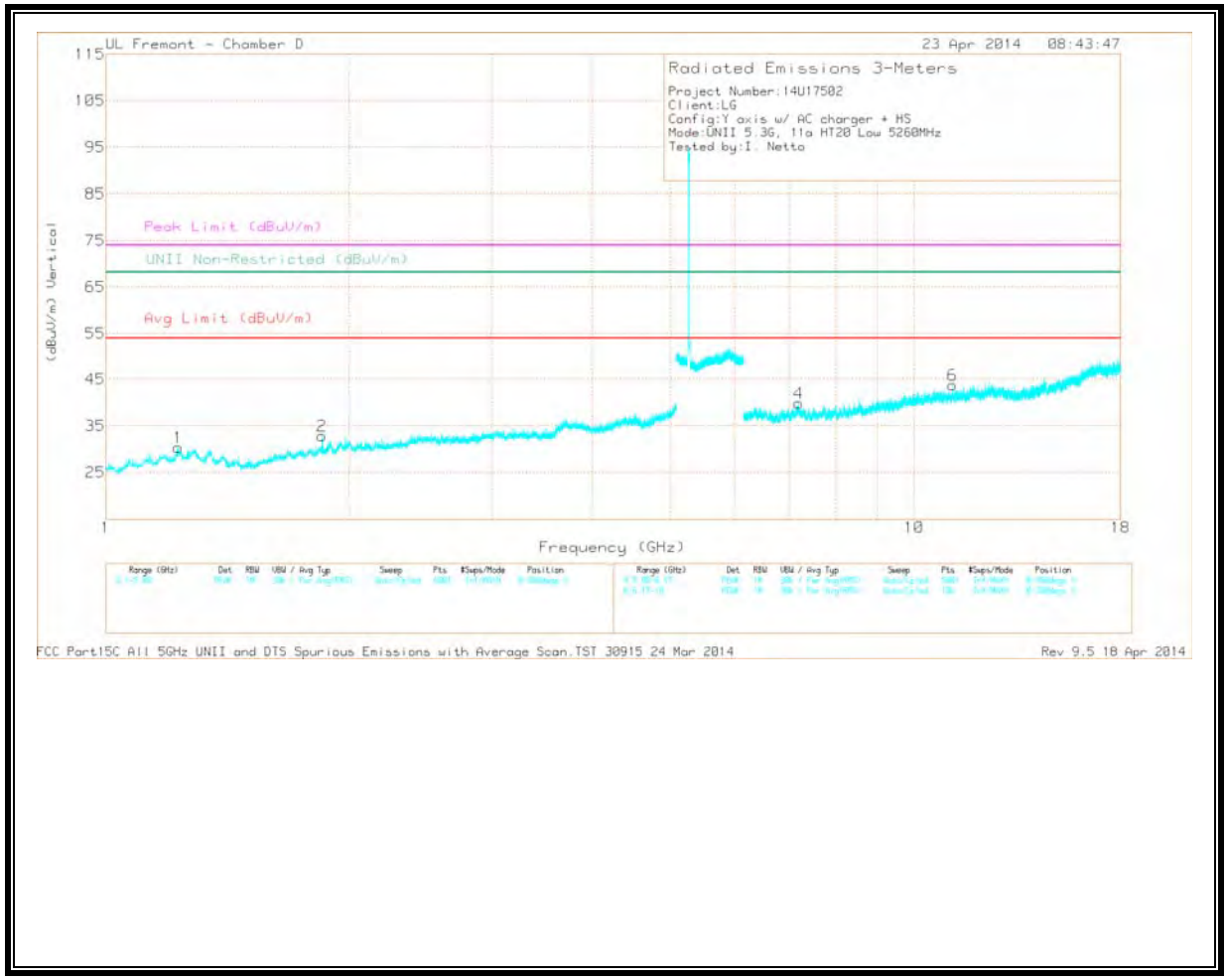
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.683	33.31	PK	32.6	-28.5	0	37.41	-	-	74	-36.59	-	-	0-360	100	H
1	* 1.229	32.9	PK	29.3	-31.8	0	30.4	-	-	74	-43.6	-	-	0-360	201	V
6	* 11.16	27.48	PK	37.5	-21.2	0	43.78	-	-	74	-30.22	-	-	0-360	201	V
2	1.851	33.83	PK	29.9	-30.9	0	32.83	-	-	-	-	68.2	-35.37	0-360	100	V
4	7.198	28.59	PK	35.1	-23.8	0	39.89	-	-	-	-	68.2	-28.31	0-360	201	V
5	8.91	29.46	PK	35.7	-23.6	0	41.56	-	-	-	-	68.2	-26.64	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

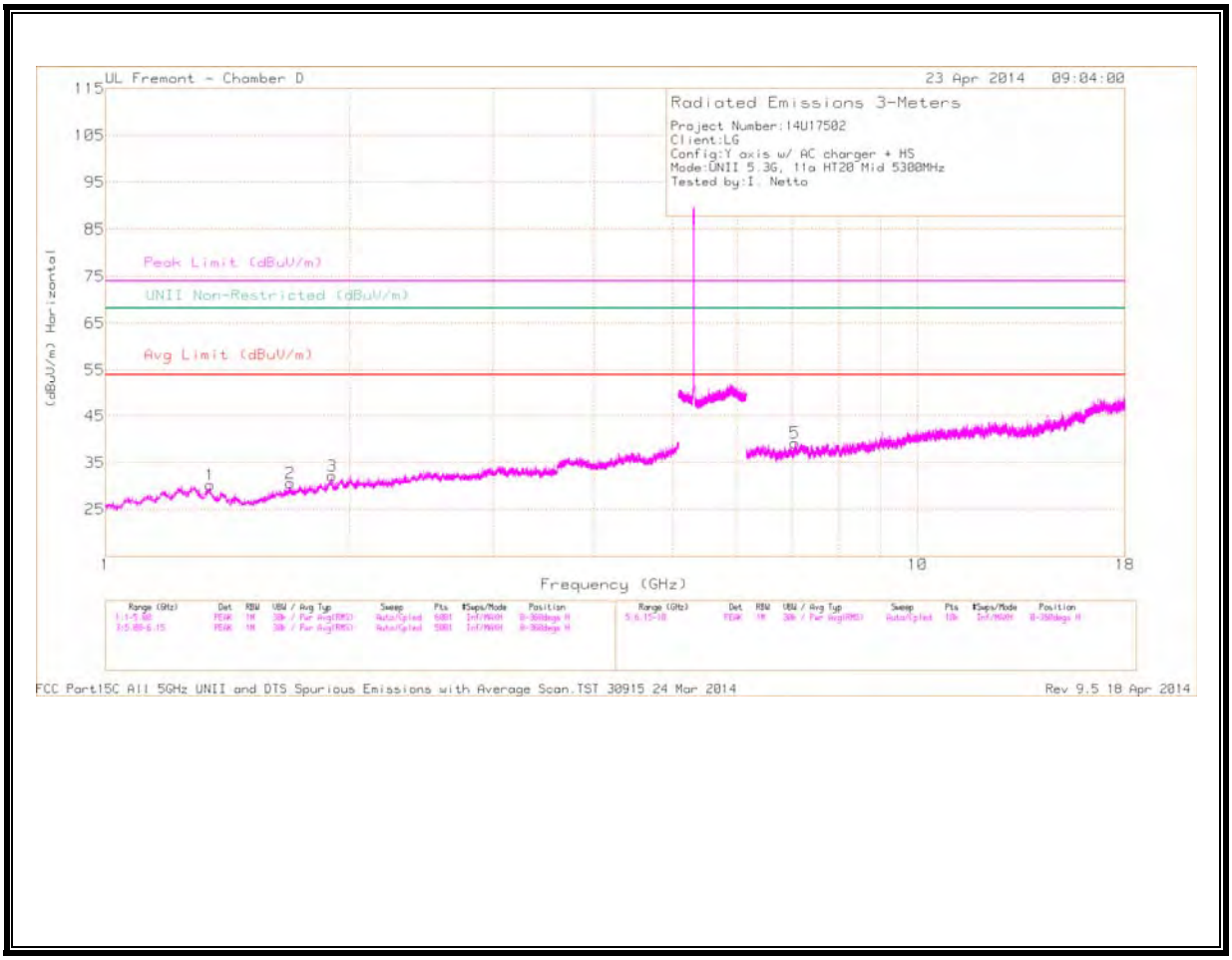
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.684	39.05	PK2	32.6	-28.6	0	43.05	-	-	74	-30.95	-	-	0	100	H
* 1.227	41.35	PK2	29.3	-31.8	0	38.85	-	-	74	-35.15	-	-	0	100	V
* 11.159	33.92	PK2	37.5	-21.3	0	50.12	-	-	74	-23.88	-	-	0	100	V
1.85	39.64	PK2	29.9	-30.9	0	38.64	-	-	-	-	68.2	-29.56	0	100	V
7.2	36.16	PK2	35.1	-23.8	0	47.46	-	-	-	-	68.2	-20.74	0	100	V
8.909	35.24	PK2	35.7	-23.6	0	47.34	-	-	-	-	68.2	-20.86	0	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

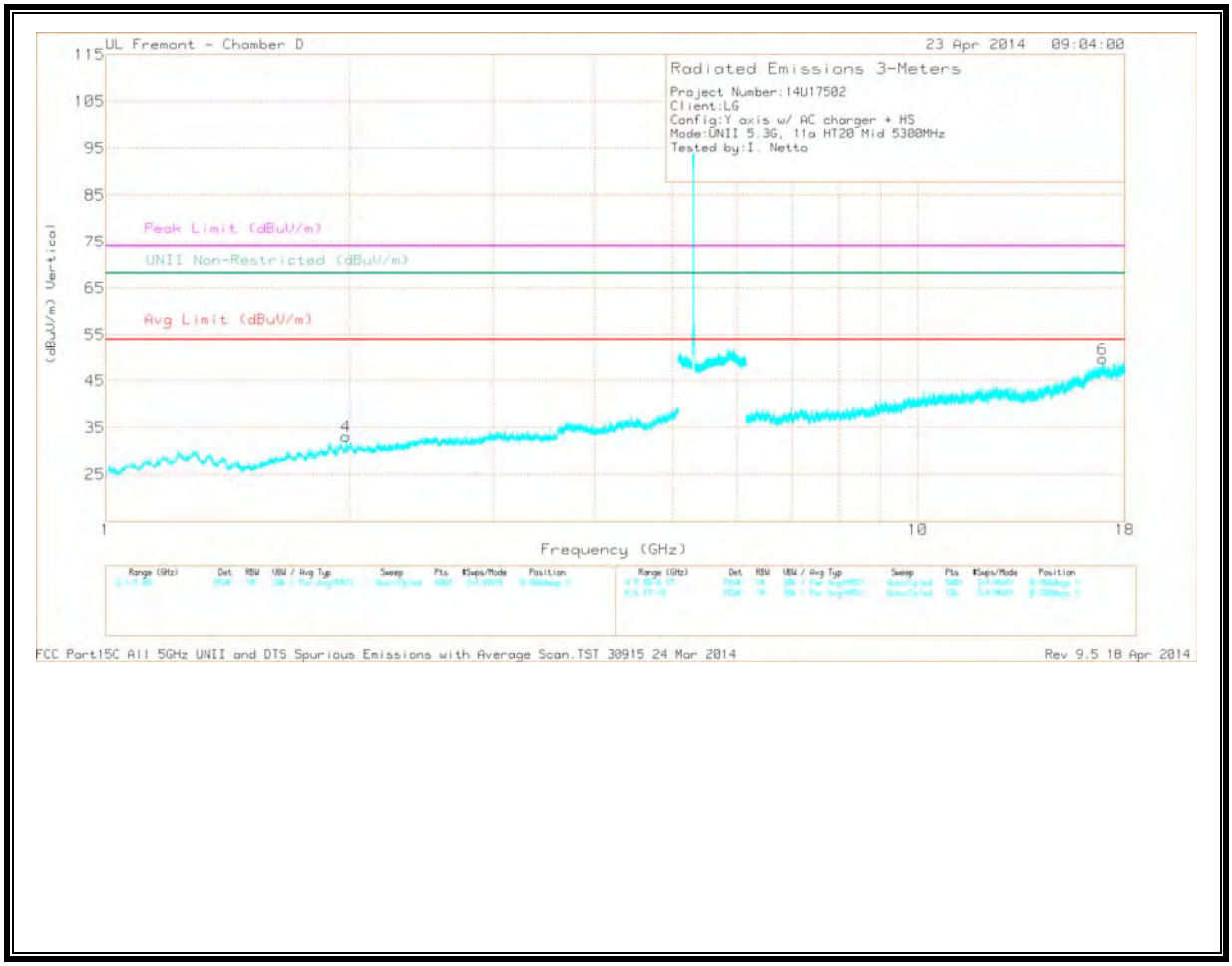
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.345	32.79	PK	28.6	-31.2	0	30.19	-	-	74	-43.81	-	-	0-360	100	H
2	* 1.689	32.56	PK	28.8	-30.7	0	30.66	-	-	74	-43.34	-	-	0-360	100	H
3	1.903	32.49	PK	30.2	-30.5	0	32.19	-	-	-	-	68.2	-36.01	0-360	201	H
4	1.98	33.16	PK	30.6	-30.6	0	33.16	-	-	-	-	68.2	-35.04	0-360	201	V
5	7.059	30.07	PK	35.1	-25.9	0	39.27	-	-	-	-	68.2	-28.93	0-360	100	H
6	16.904	27.2	PK	41.6	-19.1	0	49.7	-	-	-	-	68.2	-18.5	0-360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

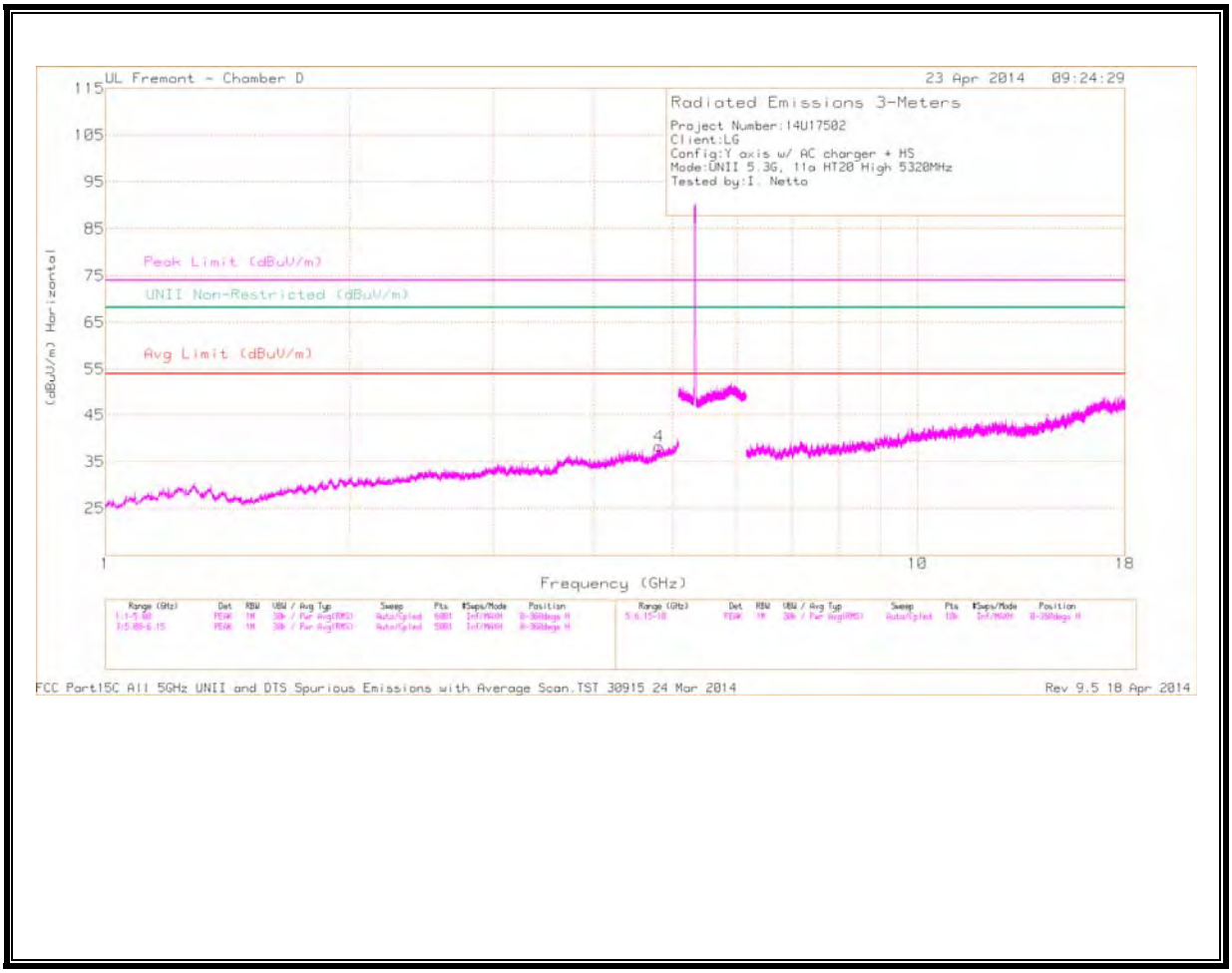
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.344	40.7	PK2	28.6	-31.2	0	38.1	-	-	74	-35.9	-	-	0	100	H
* 1.689	39.85	PK2	28.8	-30.7	0	37.95	-	-	74	-36.05	-	-	0	100	H
1.902	39.79	PK2	30.2	-30.4	0	39.59	-	-	-	-	68.2	-28.61	0	100	H
1.981	39.99	PK2	30.6	-30.6	0	39.99	-	-	-	-	68.2	-28.21	0	100	V
7.06	37.16	PK2	35.1	-25.8	0	46.46	-	-	-	-	68.2	-21.74	0	100	H
16.905	34.06	PK2	41.6	-19	0	56.66	-	-	-	-	68.2	-11.54	0	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

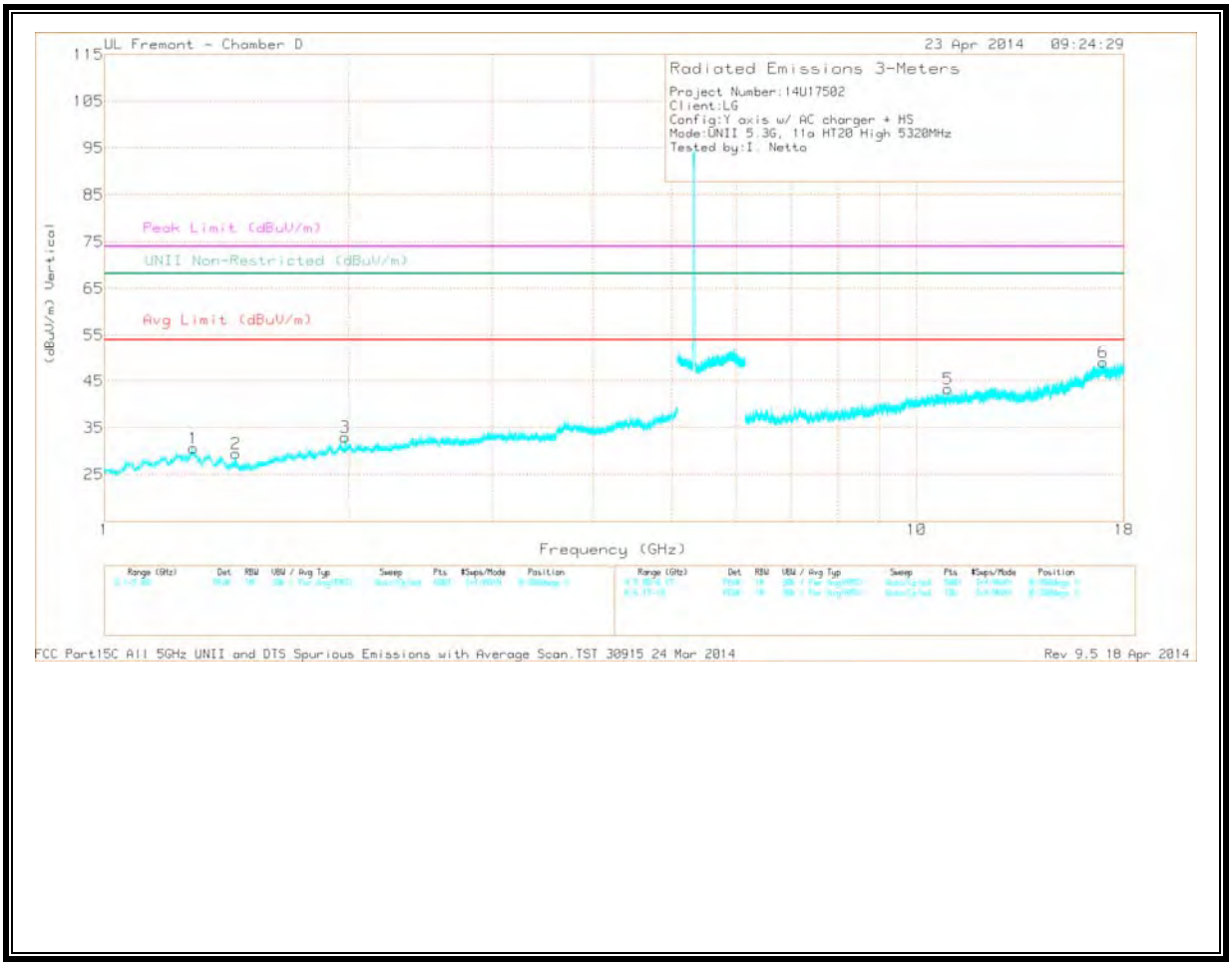
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.803	31.85	PK	33.5	-27	0	38.35	-	-	74	-35.65	-	-	0-360	201	H
1	* 1.287	32.67	PK	29.2	-31.2	0	30.67	-	-	74	-43.33	-	-	0-360	100	V
2	* 1.451	33.65	PK	27.4	-31.6	0	29.45	-	-	74	-44.55	-	-	0-360	100	V
5	* 10.937	27.57	PK	37.4	-21.6	0	43.37	-	-	74	-30.63	-	-	0-360	201	V
3	1.98	33.04	PK	30.6	-30.6	0	33.04	-	-	-	-	68.2	-35.16	0-360	201	V
6	16.967	26.36	PK	41.7	-19	0	49.06	-	-	-	-	68.2	-19.14	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

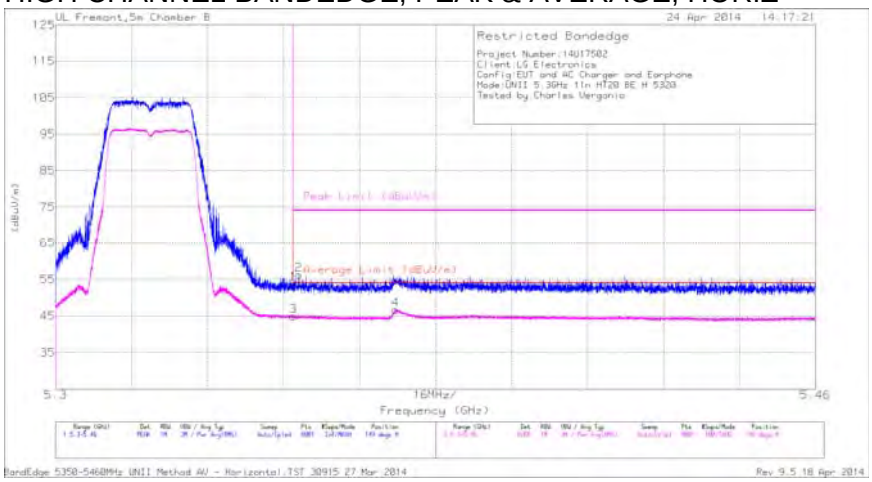
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.801	38.66	PK2	33.5	-27	0	45.16	-	-	74	-28.84	-	-	0	100	H
* 1.288	40.59	PK2	29.2	-31.2	0	38.59	-	-	74	-35.41	-	-	0	100	V
* 1.449	40.52	PK2	27.4	-31.6	0	36.32	-	-	74	-37.68	-	-	0	100	V
* 10.935	34.32	PK2	37.4	-21.7	0	50.02	-	-	74	-23.98	-	-	0	100	V
1.98	40.35	PK2	30.6	-30.6	0	40.35	-	-	-	-	68.2	-27.85	0	100	V
16.968	33.95	PK2	41.7	-18.9	0	56.75	-	-	-	-	68.2	-11.45	0	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, HORIZ



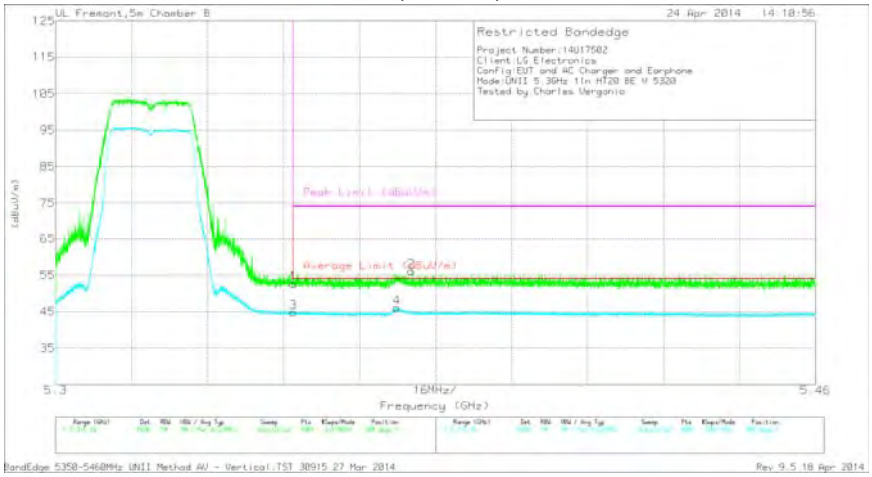
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.12	PK	34.5	-19.9	0	53.72	-	-	74	-20.28	149	226	H
3	* 5.35	30.11	RMS	34.5	-19.9	.2	44.91	54	-9.09	-	-	149	226	H
2	* 5.351	41.62	PK	34.5	-19.9	0	56.22	-	-	74	-17.78	149	226	H
4	* 5.372	31.93	RMS	34.5	-19.9	.2	46.73	54	-7.27	-	-	149	226	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, PEAK, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.11	PK	34.5	-19.9	0	52.71	-	-	74	-21.29	208	257	V
3	* 5.35	30	RMS	34.5	-19.9	.2	44.8	54	-9.2	-	-	208	257	V
4	* 5.372	31.29	RMS	34.5	-19.9	.2	46.09	54	-7.91	-	-	208	257	V
2	* 5.375	41.37	PK	34.5	-19.8	0	56.07	-	-	74	-17.93	208	257	V

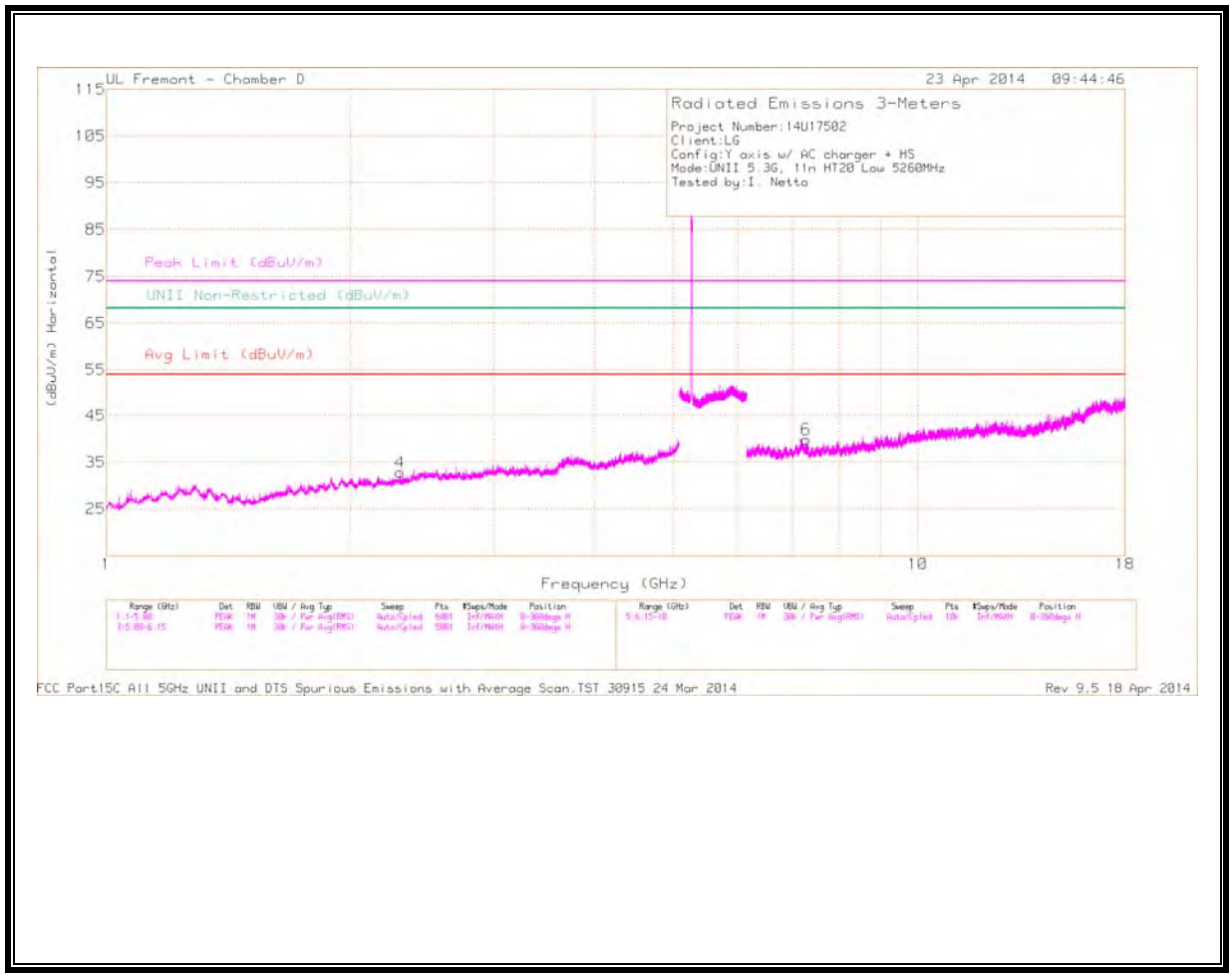
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

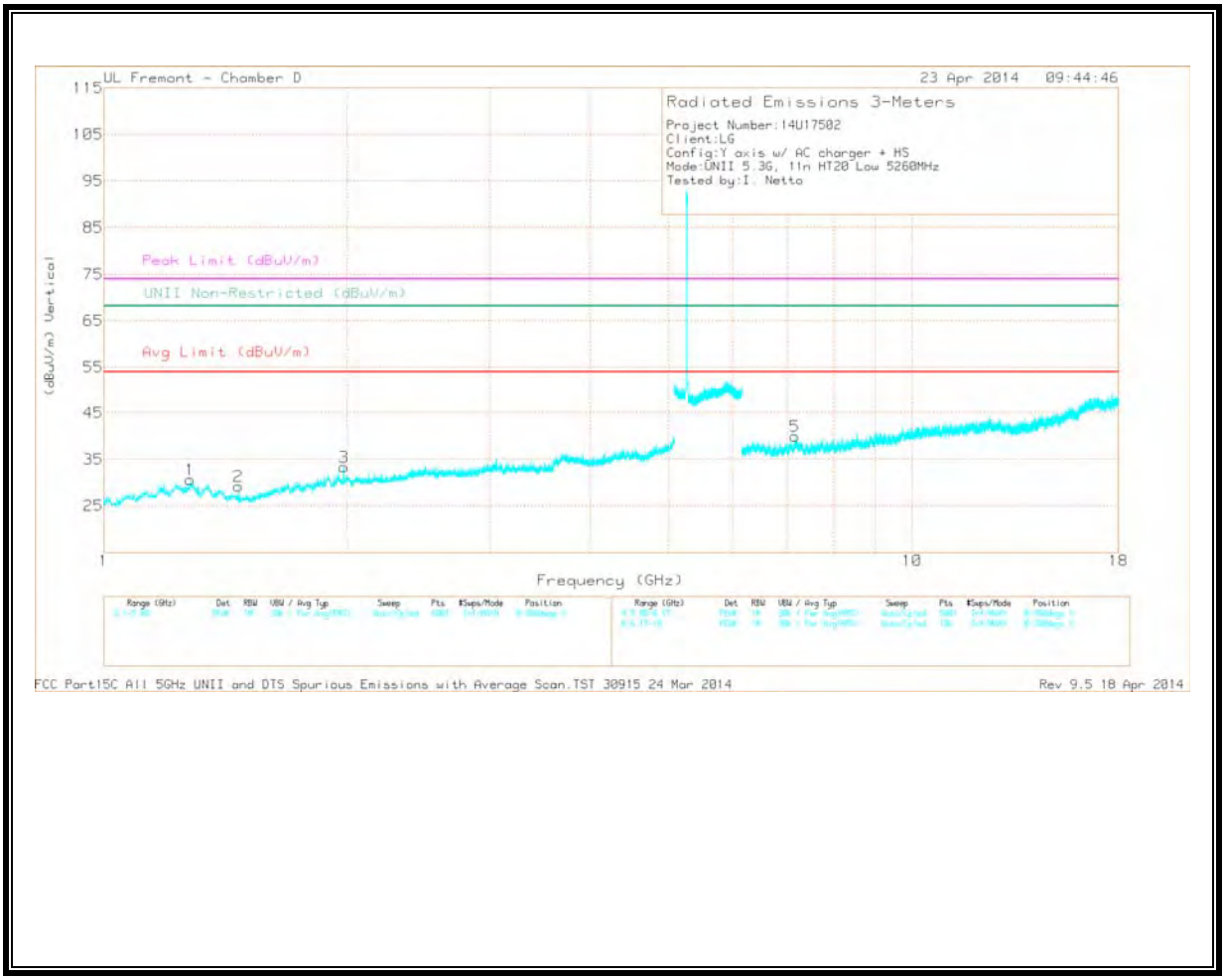
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.279	32.78	PK	29.3	-31.5	0	30.58	-	-	74	-43.42	-	-	0-360	201	V
2	* 1.466	33.45	PK	27.3	-31.5	0	29.25	-	-	74	-44.75	-	-	0-360	201	V
6	* 7.278	29.82	PK	35.1	-25	0	39.92	-	-	74	-34.08	-	-	0-360	100	H
3	1.981	33.31	PK	30.6	-30.6	0	33.31	-	-	-	-	68.2	-34.89	0-360	201	V
4	2.3	32.41	PK	30.9	-30.5	0	32.81	-	-	-	-	68.2	-35.39	0-360	100	H
5	7.162	29.23	PK	35.1	-24.3	0	40.03	-	-	-	-	68.2	-28.17	0-360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

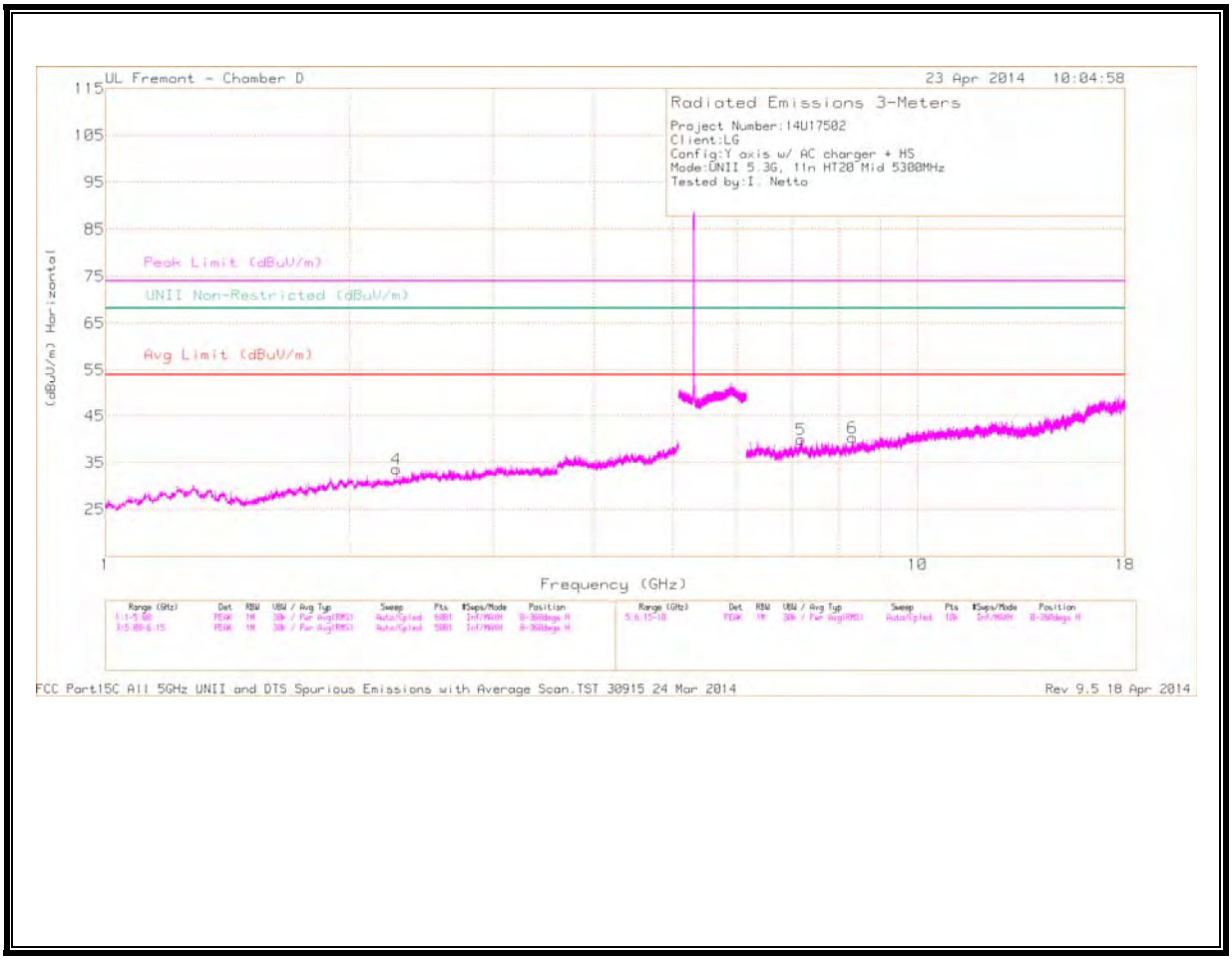
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.278	41.3	PK2	29.3	-31.5	0	39.1	-	-	74	-34.9	-	-	0	100	V
* 1.468	40.37	PK2	27.2	-31.5	0	36.07	-	-	74	-37.93	-	-	0	100	V
* 7.277	37.05	PK2	35.1	-25	0	47.15	-	-	74	-26.85	-	-	0	100	H
1.982	40.53	PK2	30.6	-30.6	0	40.53	-	-	-	-	68.2	-27.67	0	100	V
2.3	39.89	PK2	30.9	-30.5	0	40.29	-	-	-	-	68.2	-27.91	0	100	H
7.161	35.68	PK2	35.1	-24.3	0	46.48	-	-	-	-	68.2	-21.72	0	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

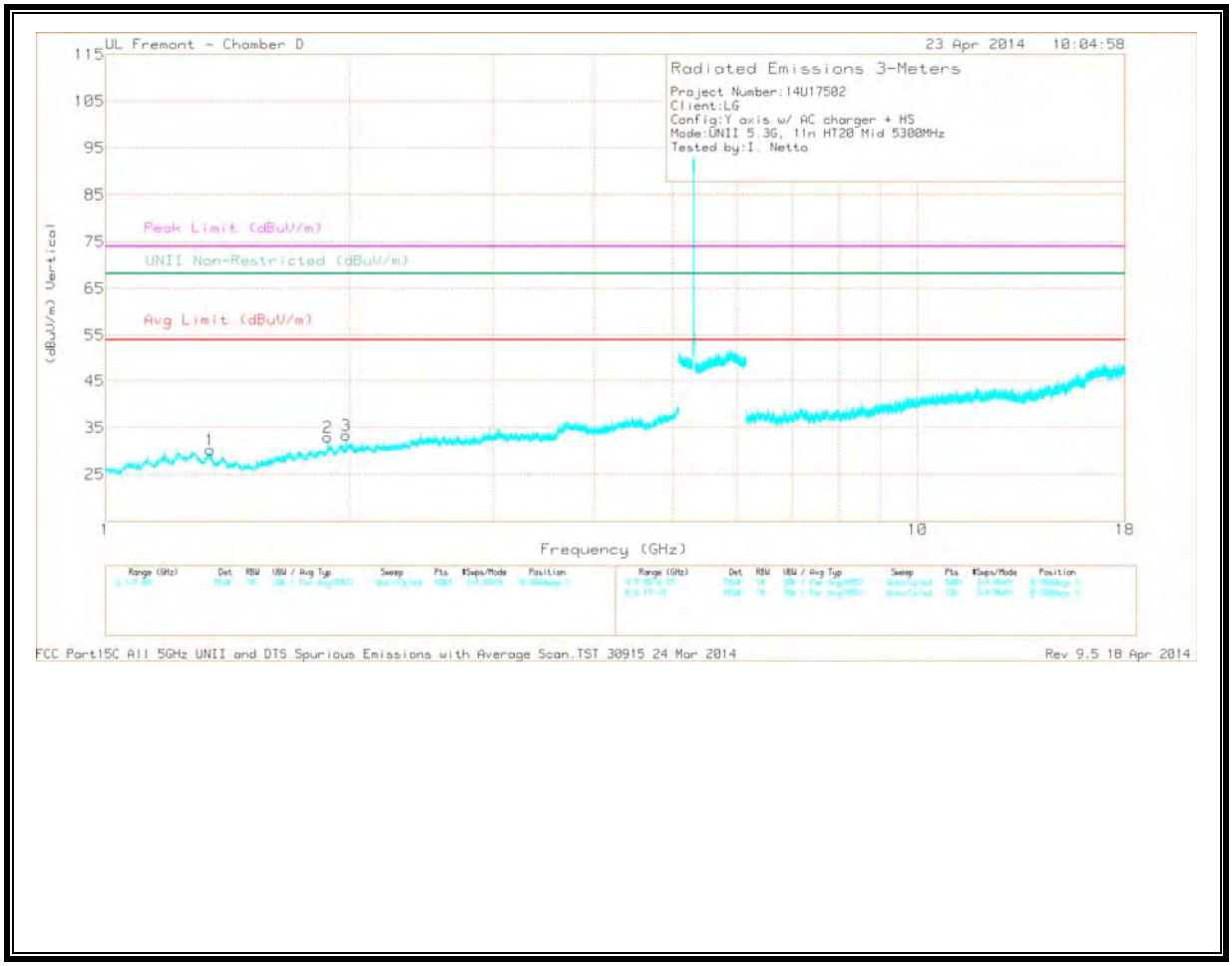
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.282	33.18	PK	30.8	-30.4	0	33.58	-	-	74	-40.42	-	-	0-360	100	H
1	* 1.346	32.76	PK	28.6	-31.1	0	30.26	-	-	74	-43.74	-	-	0-360	100	V
6	* 8.314	29.2	PK	35.3	-24.1	0	40.4	-	-	74	-33.6	-	-	0-360	201	H
2	1.879	33.47	PK	30.1	-30.6	0	32.97	-	-	-	-	68.2	-35.23	0-360	201	V
3	1.98	33.34	PK	30.6	-30.6	0	33.34	-	-	-	-	68.2	-34.86	0-360	201	V
5	7.187	28.92	PK	35.1	-24	0	40.02	-	-	-	-	68.2	-28.18	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

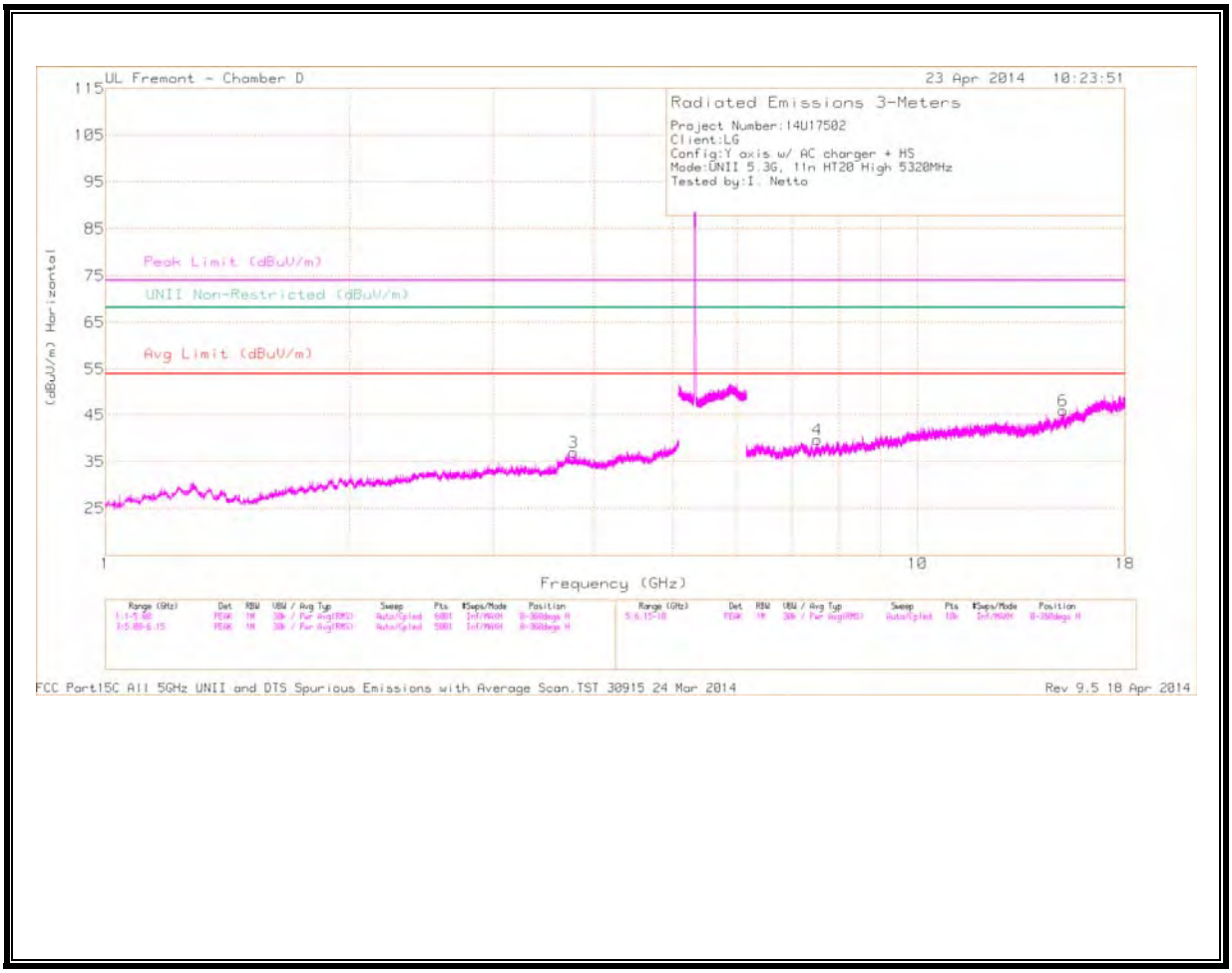
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.284	40.08	PK2	30.8	-30.4	0	40.48	-	-	74	-33.52	-	-	1	100	H
* 1.349	40.33	PK2	28.5	-31.1	0	37.73	-	-	74	-36.27	-	-	1	100	V
* 8.313	36.28	PK2	35.3	-24.1	0	47.48	-	-	74	-26.52	-	-	1	100	H
1.88	40.65	PK2	30.1	-30.6	0	40.15	-	-	-	-	68.2	-28.05	1	100	V
1.98	40.33	PK2	30.6	-30.6	0	40.33	-	-	-	-	68.2	-27.87	1	100	V
7.185	36.48	PK2	35.1	-24	0	47.58	-	-	-	-	68.2	-20.62	1	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

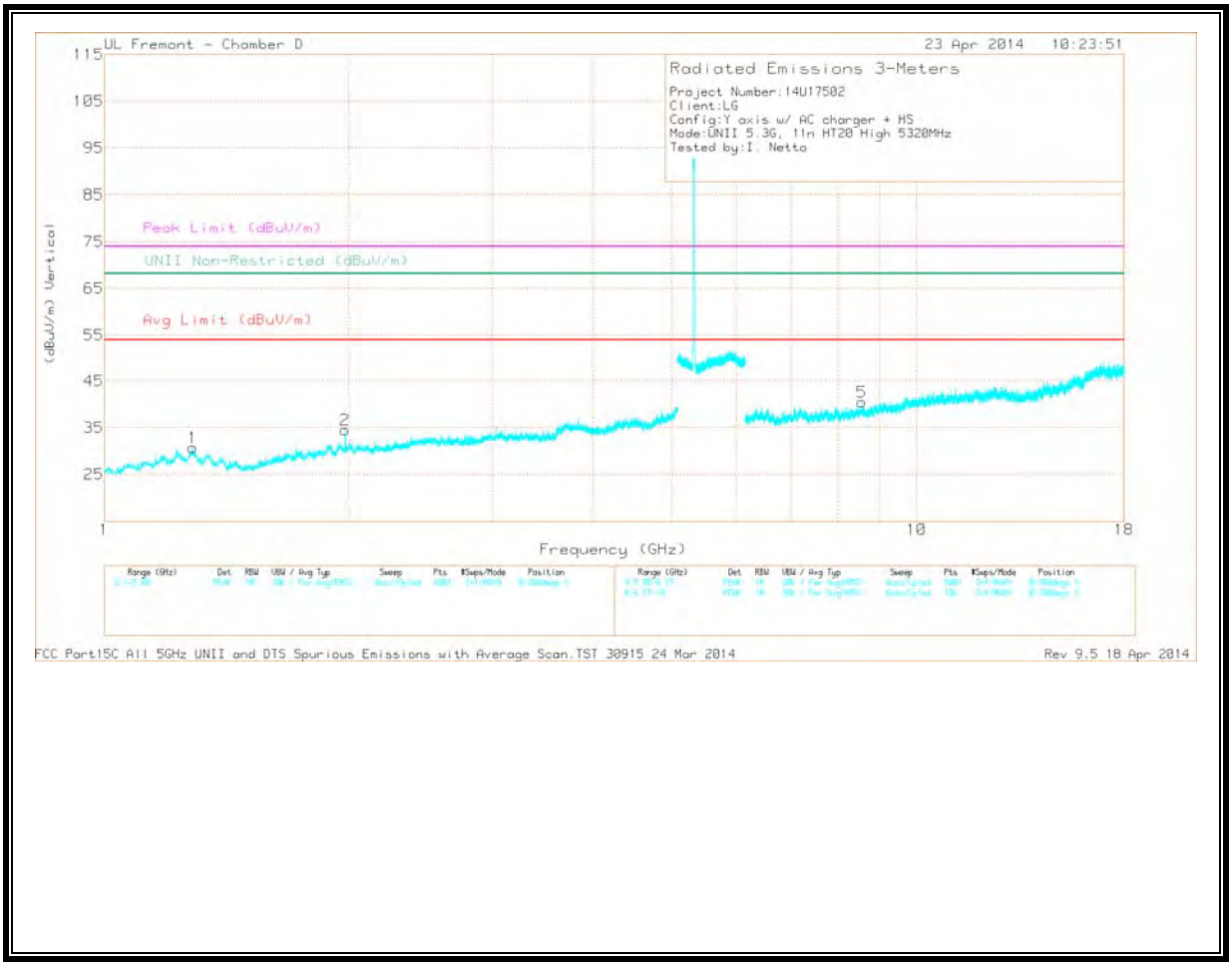
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.77	33.01	PK	32.7	-28.7	0	37.01	-	-	74	-36.99	-	-	0-360	201	H
1	* 1.286	32.86	PK	29.2	-31.3	0	30.76	-	-	74	-43.24	-	-	0-360	201	V
4	* 7.522	29.66	PK	35.2	-25.1	0	39.76	-	-	74	-34.24	-	-	0-360	100	H
2	1.98	34.52	PK	30.6	-30.6	0	34.52	-	-	-	-	68.2	-33.68	0-360	201	V
5	8.557	28.26	PK	35.4	-23.1	0	40.56	-	-	-	-	68.2	-27.64	0-360	201	V
6	15.107	28.22	PK	39	-21.3	0	45.92	-	-	-	-	68.2	-22.28	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

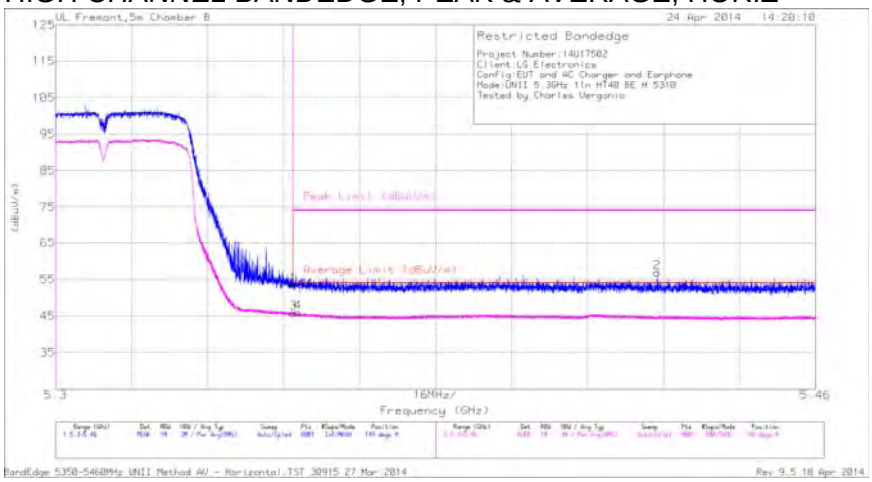
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.769	38.34	PK2	32.7	-28.7	0	42.34	-	-	74	-31.66	-	-	0	100	H
* 1.283	40.69	PK2	29.2	-31.3	0	38.59	-	-	74	-35.41	-	-	0	100	V
* 7.524	36.84	PK2	35.2	-25.1	0	46.94	-	-	74	-27.06	-	-	315	308	H
1.98	41.73	PK2	30.6	-30.6	0	41.73	-	-	-	-	68.2	-26.47	315	308	V
1.98	33.18	AD1	30.6	-30.6	.2	33.38	54	-20.62	74	-40.62	-	-	315	308	V
8.559	35.44	PK2	35.4	-23.1	0	47.74	-	-	-	-	68.2	-20.46	315	308	V
15.105	35.5	PK2	39	-21.4	0	53.1	-	-	-	-	68.2	-15.1	315	308	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.2.5. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, HORIZ



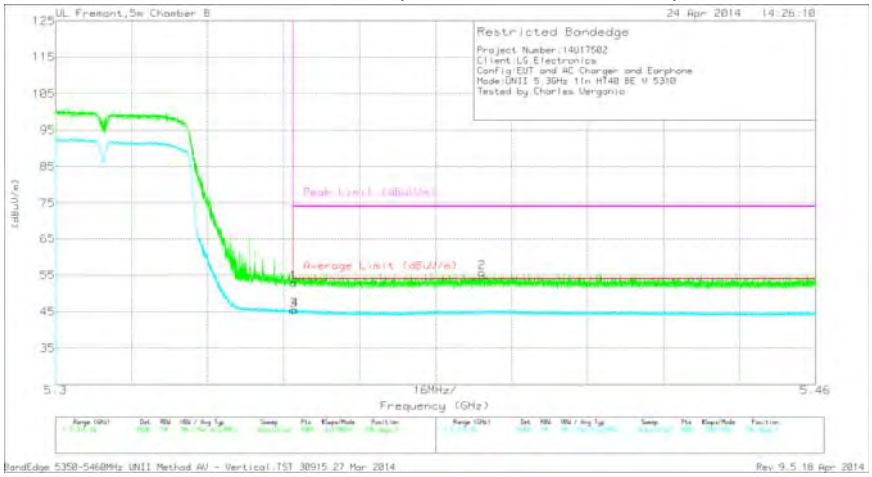
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.88	PK	34.5	-19.9	0	53.48	-	-	74	-20.52	149	226	H
3	* 5.35	30.74	RMS	34.5	-19.9	.5	45.84	54	-8.16	-	-	149	226	H
4	* 5.351	30.79	RMS	34.5	-19.9	.5	45.89	54	-8.11	-	-	149	226	H
2	* 5.427	42.41	PK	34.5	-20	0	56.91	-	-	74	-17.09	149	226	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.34	PK	34.5	-19.9	0	52.94	-	-	74	-21.06	196	257	V
3	* 5.35	30.32	RMS	34.5	-19.9	.5	45.42	54	-8.58	-	-	196	257	V
4	* 5.35	30.38	RMS	34.5	-19.9	.5	45.48	54	-8.52	-	-	196	257	V
2	* 5.39	40.94	PK	34.5	-19.7	0	55.74	-	-	74	-18.26	196	257	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

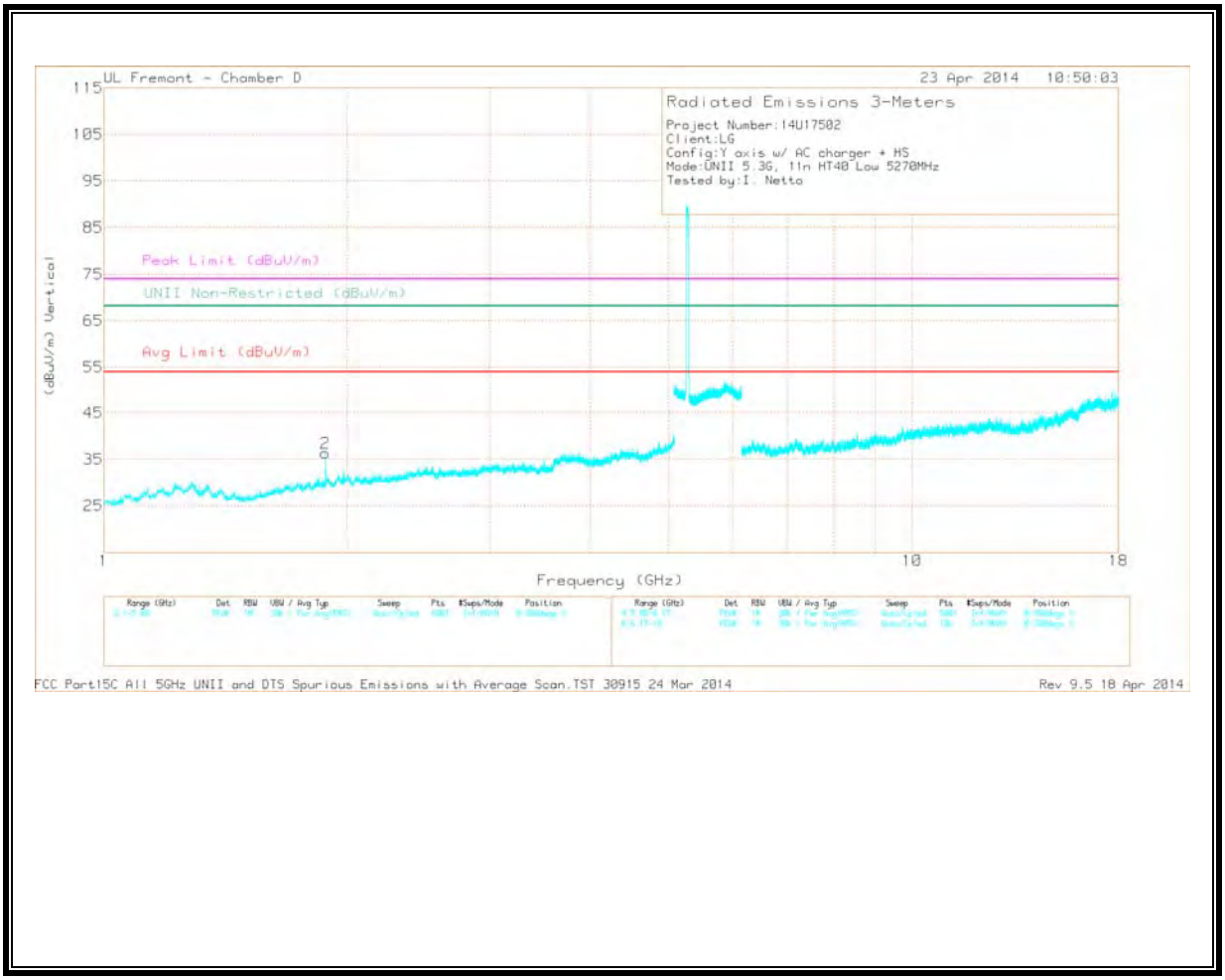
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL

Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.18	33.26	PK	28.6	-32	0	29.86	-	-	74	-44.14	-	-	0-360	201	H
4	* 3.844	33.53	PK	32.8	-28.7	0	37.63	-	-	74	-36.37	-	-	0-360	201	H
5	* 10.892	27.4	PK	37.4	-21.6	0	43.2	-	-	74	-30.8	-	-	0-360	201	H
6	* 15.622	28.28	PK	39.9	-20.9	0	47.28	-	-	74	-26.72	-	-	0-360	201	H
2	1.88	36.89	PK	30.1	-30.6	0	36.39	-	-	-	-	68.2	-31.81	0-360	100	V
3	2	32.43	PK	30.7	-30.5	0	32.63	-	-	-	-	68.2	-35.57	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

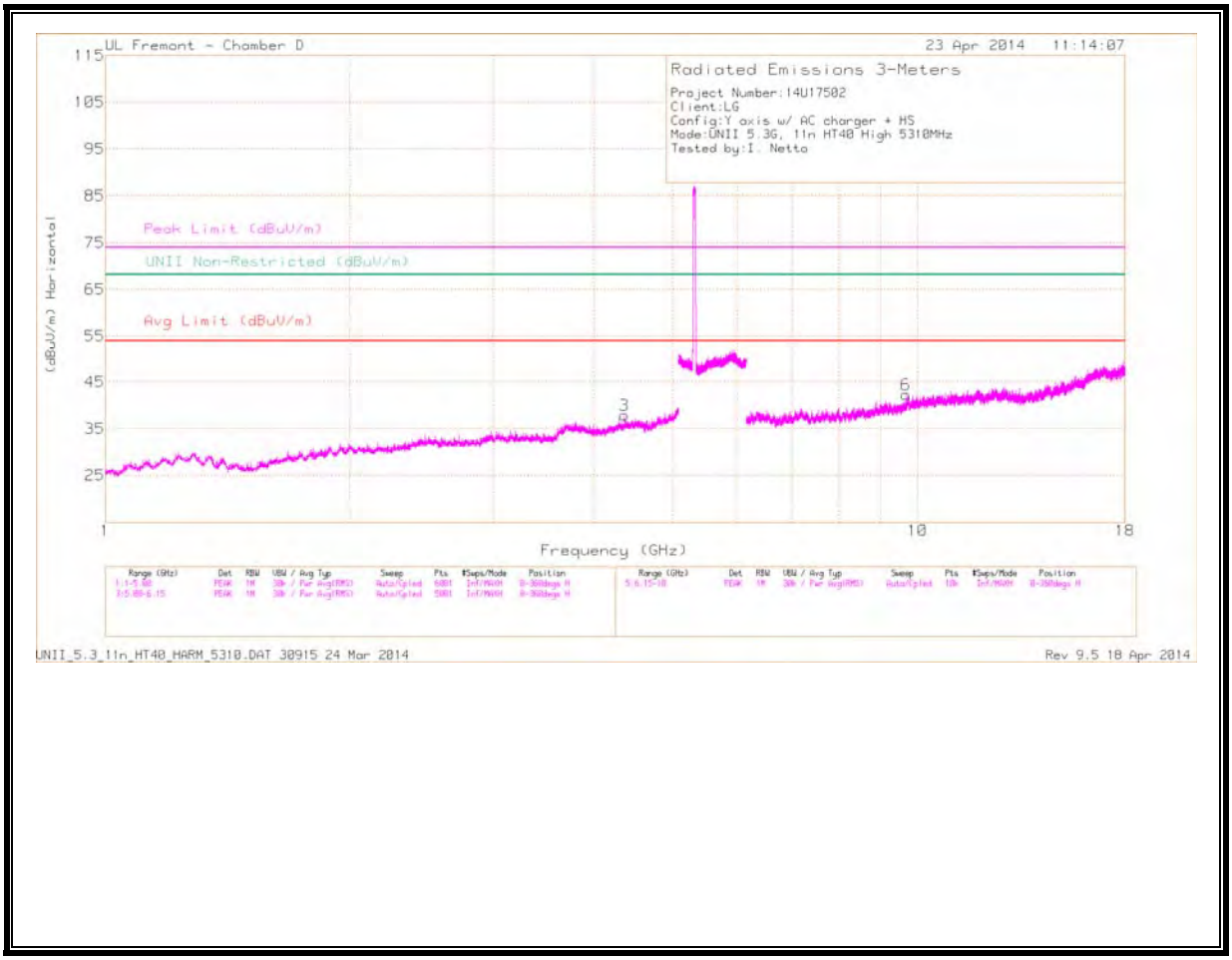
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.181	41.12	PK2	28.6	-32	0	37.72	-	-	74	-36.28	-	-	360	100	H
* 3.847	39.04	PK2	32.8	-28.7	0	43.14	-	-	74	-30.86	-	-	360	100	H
* 10.892	34.44	PK2	37.4	-21.6	0	50.24	-	-	74	-23.76	-	-	360	100	H
* 15.623	34.99	PK2	39.9	-20.9	0	53.99	-	-	74	-20.01	-	-	360	100	H
1.88	44.17	PK2	30.1	-30.6	0	43.67	-	-	-	-	68.2	-24.53	87	118	V
1.88	33.98	AD1	30.1	-30.6	.5	33.98	-	-	-	-	-	-	87	118	V
2.002	40.44	PK2	30.7	-30.5	0	40.64	-	-	-	-	68.2	-27.56	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

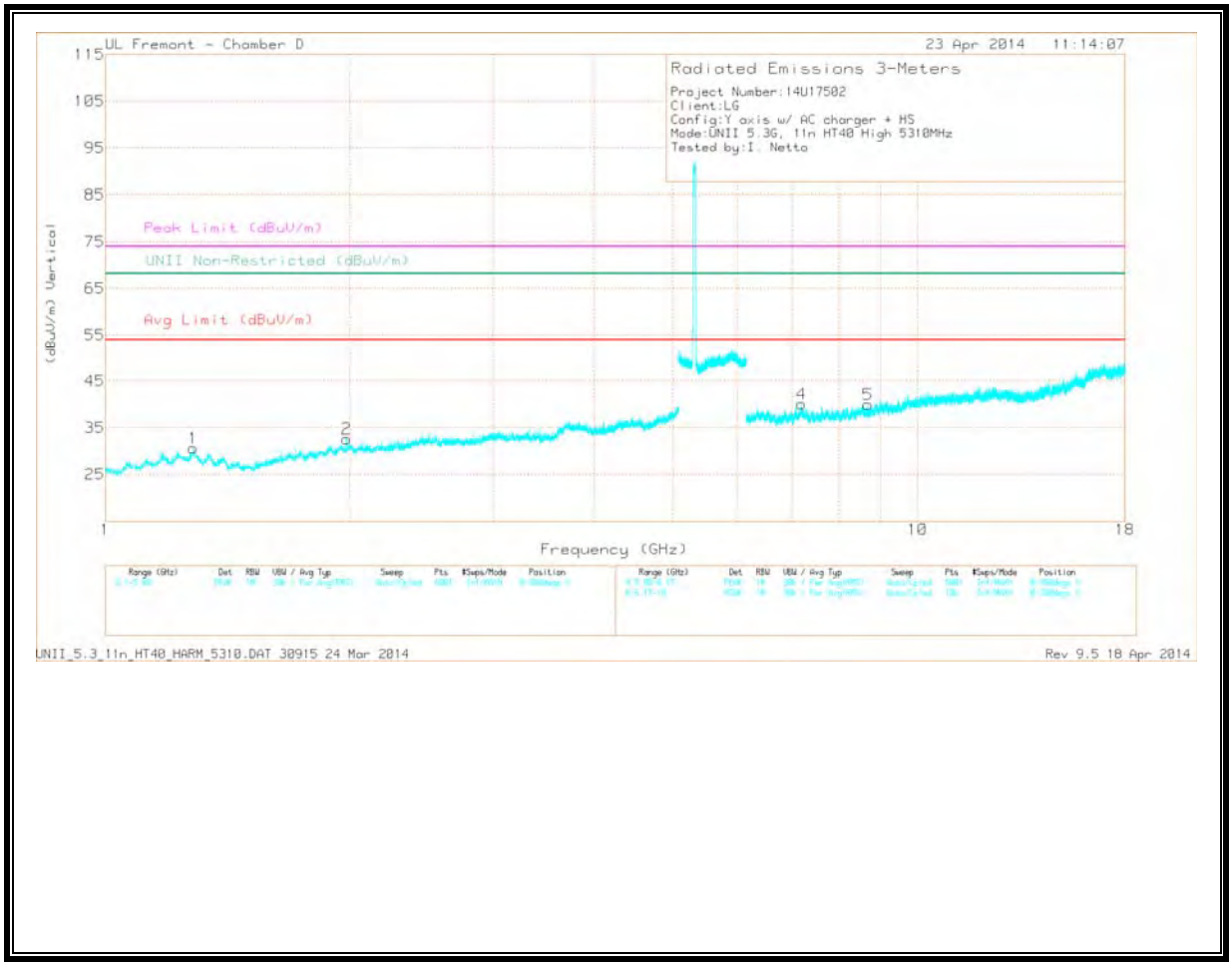
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 4.359	32.66	PK	33.2	-28	0	37.86	-	-	74	-36.14	-	-	0-360	100	H
1	* 1.284	32.68	PK	29.2	-31.3	0	30.58	-	-	74	-43.42	-	-	0-360	201	V
2	1.981	32.65	PK	30.6	-30.6	0	32.65	-	-	-	-	68.2	-35.55	0-360	201	V
4	7.196	28.79	PK	35.1	-23.8	0	40.09	-	-	-	-	68.2	-28.11	0-360	100	V
5	8.688	28.4	PK	35.6	-24	0	40	-	-	-	-	68.2	-28.2	0-360	100	V
6	9.679	27.62	PK	36.3	-21.6	0	42.32	-	-	-	-	68.2	-25.88	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

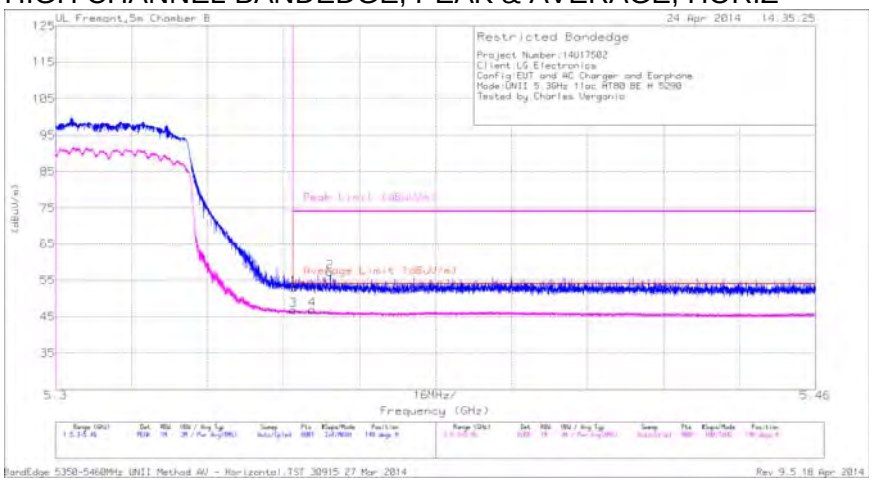
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.363	38.64	PK2	33.2	-28	0	43.84	-	-	74	-30.16	-	-	0	100	H
* 1.286	40.87	PK2	29.2	-31.2	0	38.87	-	-	74	-35.13	-	-	0	100	V
1.981	40.32	PK2	30.6	-30.6	0	40.32	-	-	-	-	68.2	-27.88	0	100	V
7.194	35.98	PK2	35.1	-23.8	0	47.28	-	-	-	-	68.2	-20.92	0	100	V
8.689	35.59	PK2	35.6	-24	0	47.19	-	-	-	-	68.2	-21.01	0	100	V
9.68	34.79	PK2	36.3	-21.6	0	49.49	-	-	-	-	68.2	-18.71	0	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.2.7. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, HORIZ



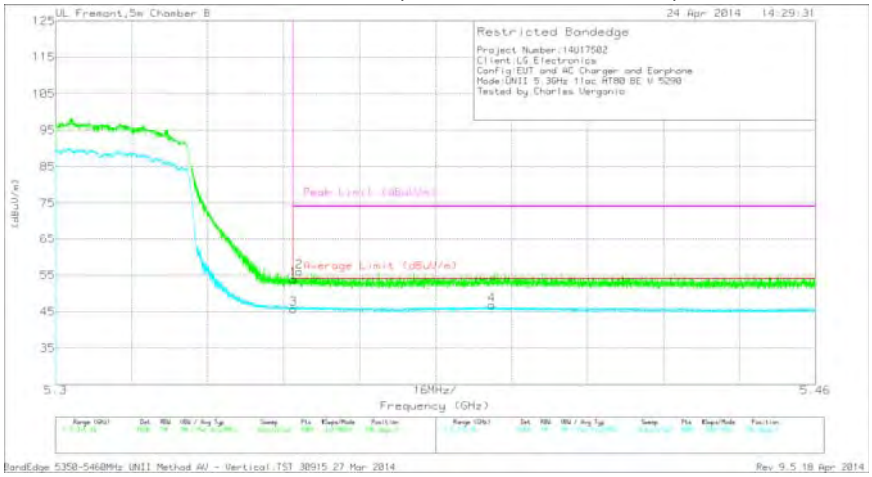
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.33	PK	34.5	-19.9	0	52.93	-	-	74	-21.07	148	205	H
3	* 5.35	30.72	RMS	34.5	-19.9	1.5	46.82	54	-7.18	-	-	148	205	H
4	* 5.354	30.78	RMS	34.5	-19.9	1.5	46.88	54	-7.12	-	-	148	205	H
2	* 5.358	42.67	PK	34.5	-19.9	0	57.27	-	-	74	-16.73	148	205	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.24	PK	34.5	-19.9	0	53.84	-	-	74	-20.16	196	257	V
3	* 5.35	29.66	RMS	34.5	-19.9	1.5	45.76	54	-8.24	-	-	196	257	V
2	* 5.351	41.36	PK	34.5	-19.9	0	55.96	-	-	74	-18.04	196	257	V
4	* 5.392	30.49	RMS	34.5	-19.7	1.5	46.79	54	-7.21	-	-	196	257	V

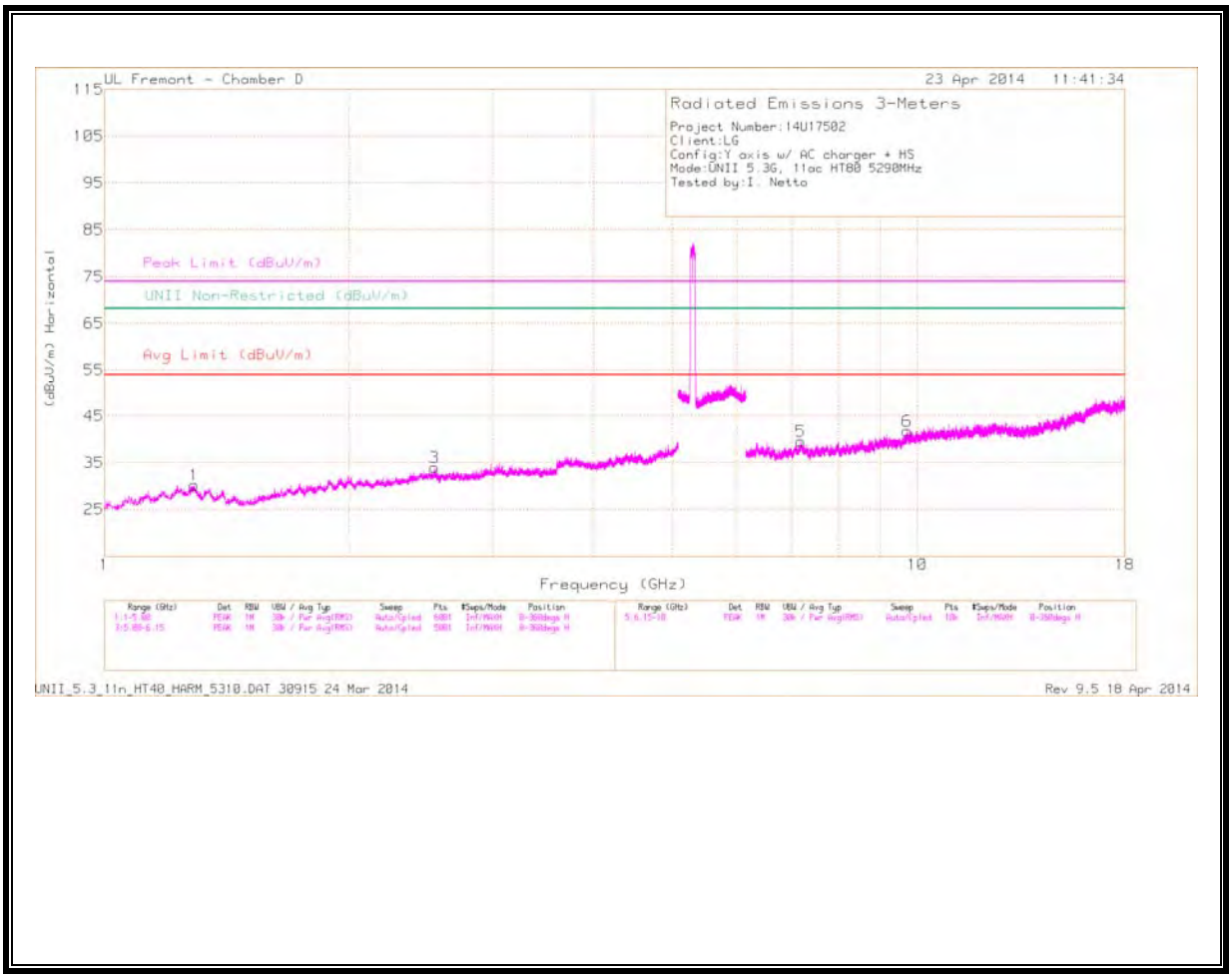
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

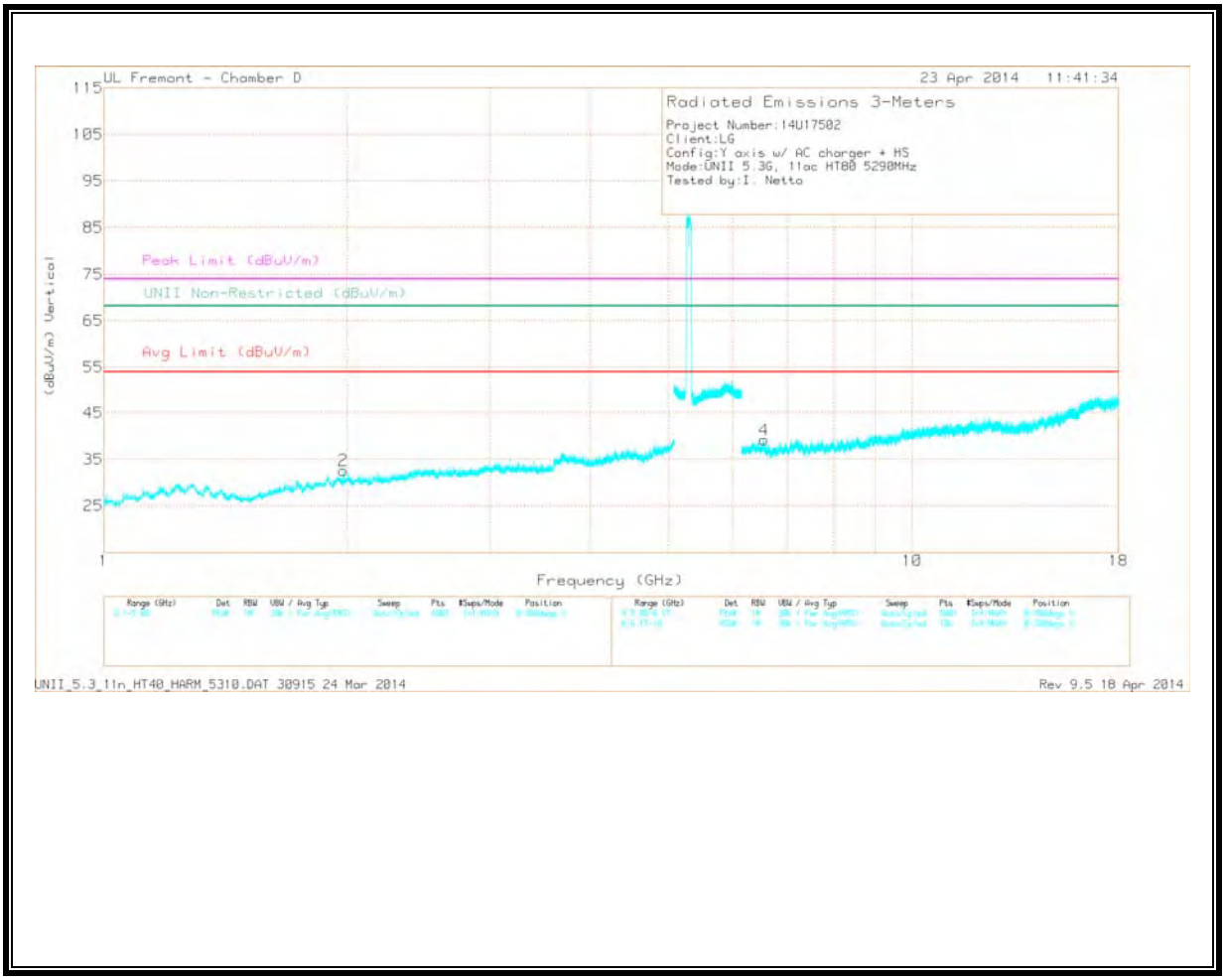
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.29	32.26	PK	29.2	-31.2	0	30.26	-	-	74	-43.74	-	-	0-360	100	H
2	1.98	32.65	PK	30.6	-30.6	0	32.65	-	-	-	-	68.2	-35.55	0-360	201	V
3	2.546	32.11	PK	32.1	-30.2	0	34.01	-	-	-	-	68.2	-34.19	0-360	201	H
4	6.556	29.42	PK	35	-25.2	0	39.22	-	-	-	-	68.2	-28.98	0-360	201	V
5	7.18	28.64	PK	35.1	-24.1	0	39.64	-	-	-	-	68.2	-28.56	0-360	100	H
6	9.715	26.93	PK	36.4	-21.5	0	41.83	-	-	-	-	68.2	-26.37	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

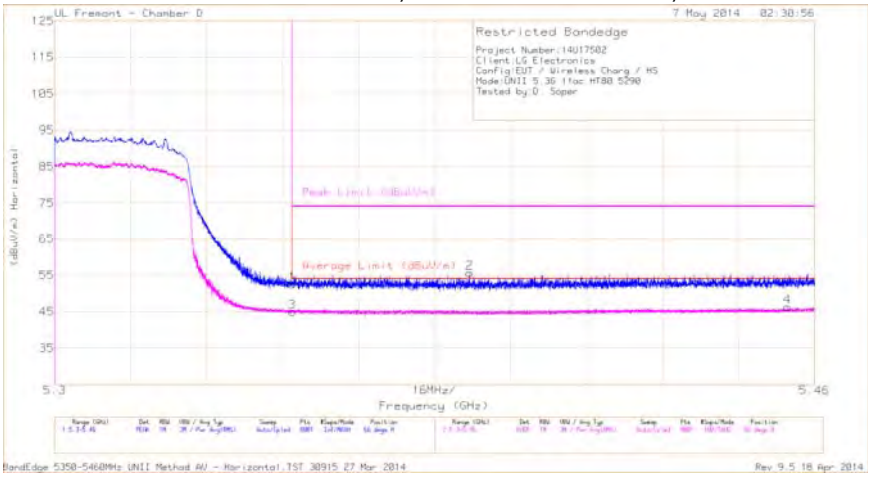
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.288	40.94	PK2	29.2	-31.2	0	38.94	-	-	74	-35.06	-	-	0	100	H
1.98	40.59	PK2	30.6	-30.6	0	40.59	-	-	-	-	68.2	-27.61	0	100	V
2.544	39.48	PK2	32.1	-30.2	0	41.38	-	-	-	-	68.2	-26.82	0	100	H
6.555	36.96	PK2	35	-25.2	0	46.76	-	-	-	-	68.2	-21.44	0	100	V
7.181	36.08	PK2	35.1	-24.1	0	47.08	-	-	-	-	68.2	-21.12	0	100	H
9.715	34.47	PK2	36.4	-21.5	0	49.37	-	-	-	-	68.2	-18.83	0	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

WORST CASE HARMONICS AND SPURIOUS EMISSIONS WITH WPC CHARGER AND COVER

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, HORIZ



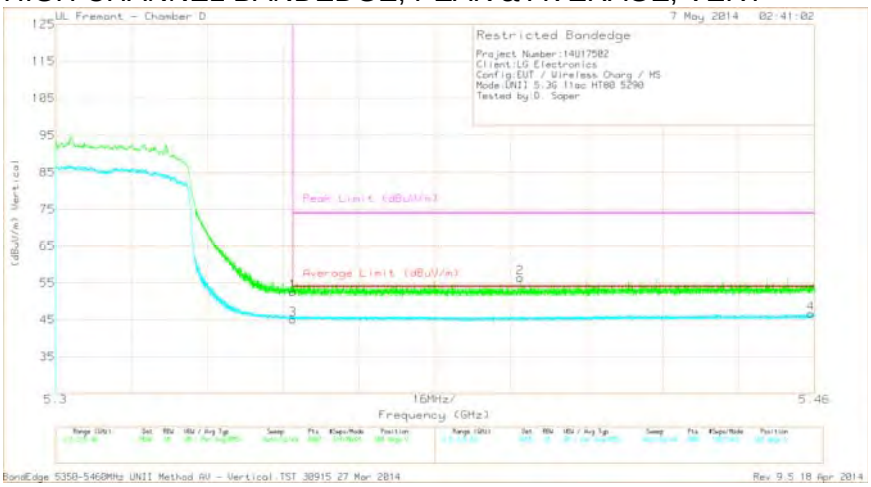
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.81	PK	33.8	-18.1	0	52.51	-	-	74	-21.49	66	282	H
3	* 5.35	27.71	RMS	33.8	-18.1	1.5	44.91	54	-9.09	-	-	66	282	H
2	* 5.387	40.04	PK	33.9	-18.3	0	55.64	-	-	74	-18.36	66	282	H
4	* 5.454	28.8	RMS	33.9	-17.9	1.5	46.3	54	-7.7	-	-	66	282	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, PEAK & AVERAGE, VERT



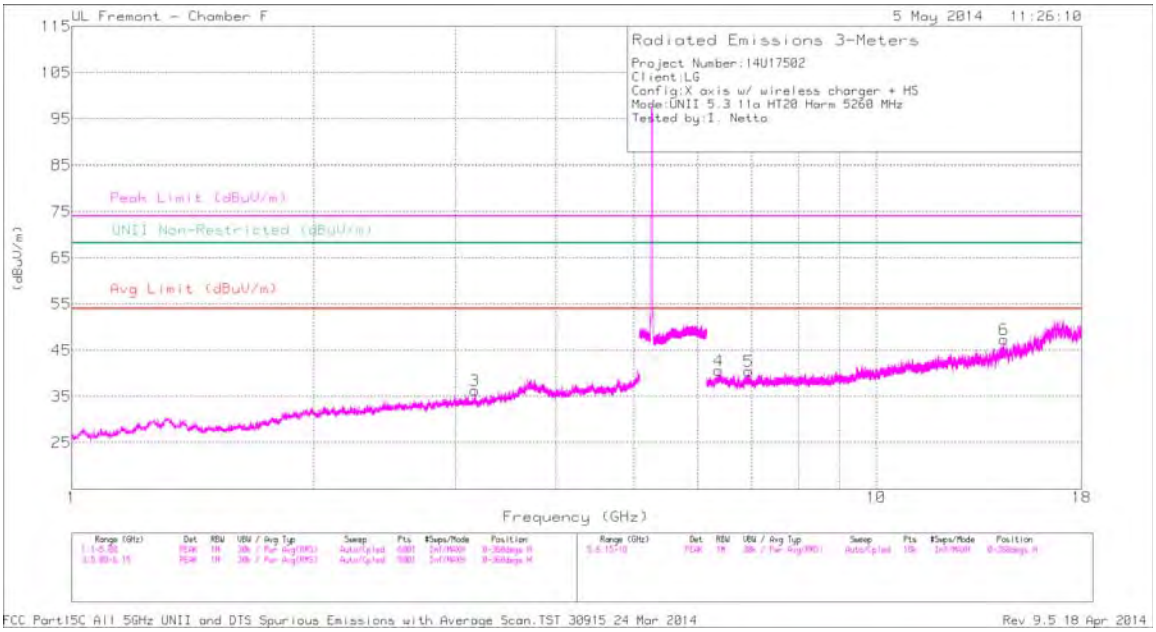
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.89	PK	33.8	-18.1	0	52.59	-	-	74	-21.41	108	311	V
3	* 5.35	27.4	RMS	33.8	-18.1	2	45.1	54	-8.9	-	-	108	311	V
2	* 5.398	40.68	PK	33.9	-18.2	0	56.38	-	-	74	-17.62	108	311	V
4	* 5.459	28.57	RMS	33.9	-17.8	2	46.67	54	-7.33	-	-	108	311	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

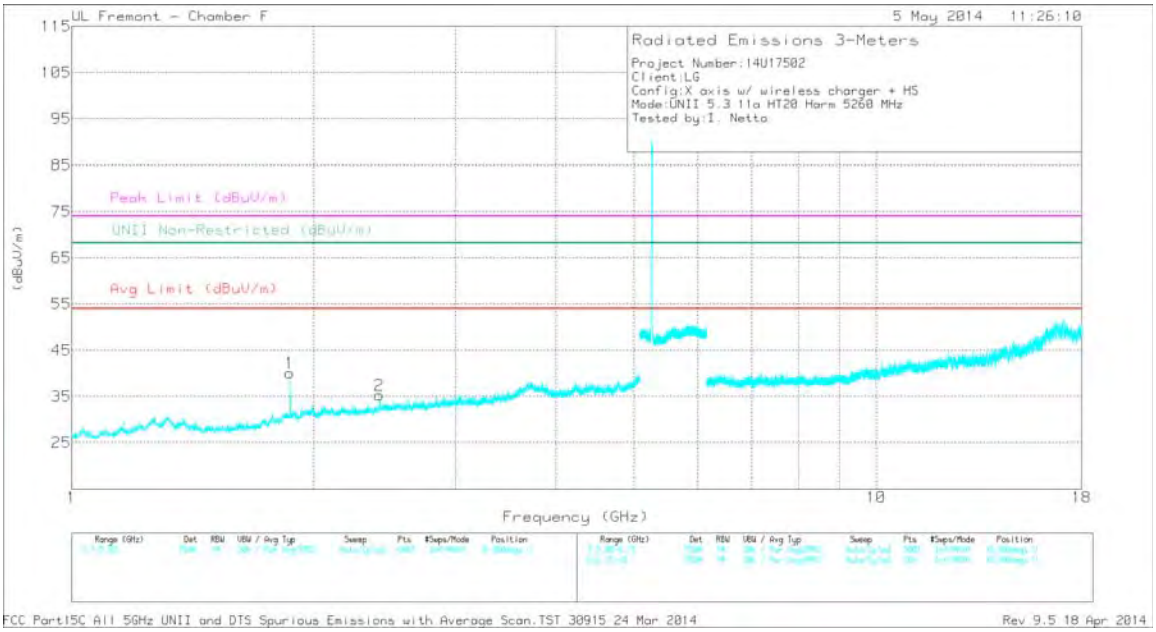
PK - Peak detector

RMS - RMS detection

HORIZONTAL



VERTICAL



CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	3.167	33.18	PK	33.3	-30.1	0	36.38	-	-	-	-	68.2	-31.82	0-360	101	H
1	1.866	40.59	PK	31	-31.5	0	40.09	-	-	-	-	68.2	-28.11	0-360	201	V
2	2.411	33.85	PK	32.3	-30.8	0	35.35	-	-	-	-	68.2	-32.85	0-360	201	V
4	6.374	31.43	PK	35.6	-26.4	0	40.63	-	-	-	-	68.2	-27.57	0-360	101	H
5	6.937	30.67	PK	35.5	-25.7	0	40.47	-	-	-	-	68.2	-27.73	0-360	101	H
6	14.418	30.05	PK	39.7	-22.4	0	47.35	-	-	-	-	68.2	-20.85	0-360	101	H

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.167	40.4	PK1	33.3	-30.1	0	43.6	54	-10.4	74	-30.4	68.2	-24.6	360	101	H
2.41	42.27	PK1	32.3	-30.8	0	43.77	54	-10.23	74	-30.23	68.2	-24.43	360	101	V
1.866	41.03	PK1	31	-31.5	0	40.53	54	-13.47	74	-33.47	68.2	-27.67	160	383	V
1.868	28.86	AD1	31	-31.6	.2	28.46	54	-25.54	74	-45.54	-	-	160	383	V
6.373	37.32	PK1	35.6	-26.4	0	46.52	54	-7.48	74	-27.48	68.2	-21.68	360	101	H
6.938	37.33	PK1	35.5	-25.7	0	47.13	54	-6.87	74	-26.87	68.2	-21.07	360	101	H
14.416	37.07	PK1	39.7	-22.4	0	54.37	54	0.37	74	-19.63	68.2	-13.83	360	101	H

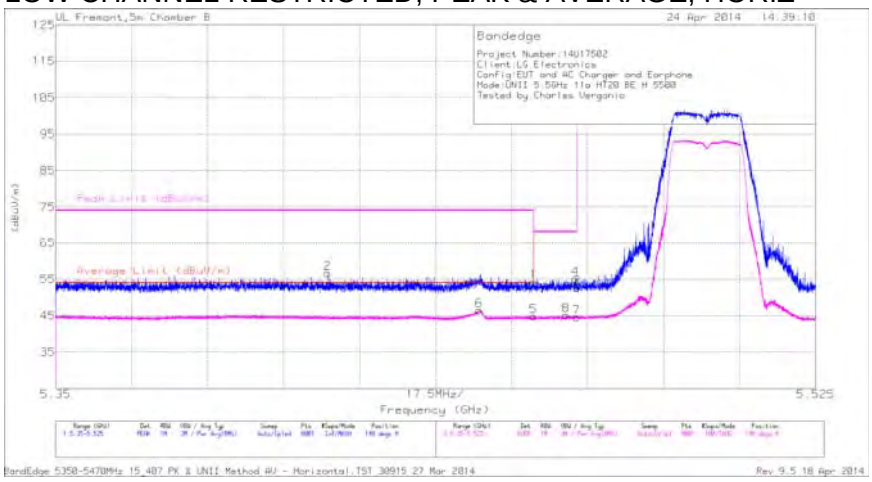
PK1 - KDB789033 Method: Peak

11.3. 5.5-5.6 GHz

11.3.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.5 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



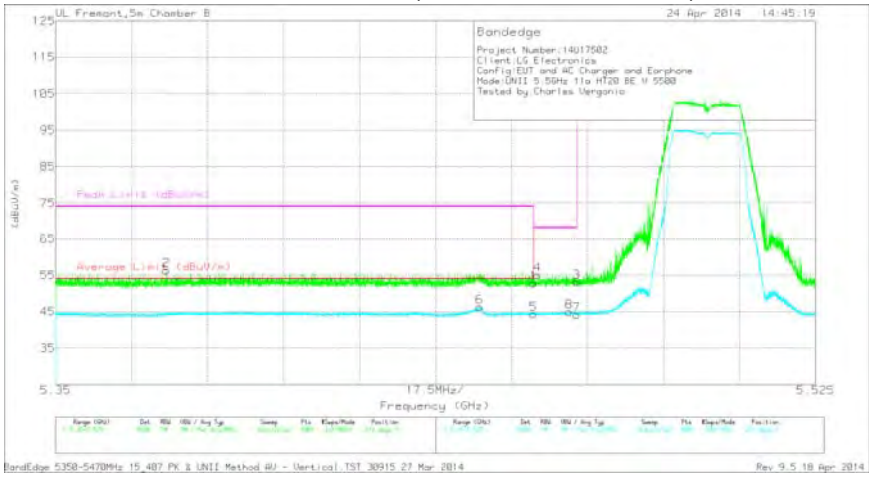
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.413	42.26	PK	34.5	-20.1	0	56.66	-	-	74	-17.34	148	205	H
6	* 5.448	31.88	RMS	34.5	-20.1	.2	46.48	54	-7.52	-	-	148	205	H
1	* 5.46	39.79	PK	34.5	-20	0	54.29	-	-	74	-19.71	148	205	H
5	* 5.46	30.14	RMS	34.5	-20	.2	44.84	54	-9.16	-	-	148	205	H
8	5.468	30.37	RMS	34.5	-20	.2	45.07	-	-	-	-	148	205	H
3	5.47	38.04	PK	34.5	-19.9	0	52.64	-	-	68.2	-15.56	148	205	H
4	5.47	40.54	PK	34.5	-19.9	0	55.14	-	-	68.2	-13.06	148	205	H
7	5.47	29.75	RMS	34.5	-19.9	.2	44.55	-	-	-	-	148	205	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.375	41.67	PK	34.5	-19.8	0	56.37	-	-	74	-17.63	212	265	V
6	* 5.448	31.68	RMS	34.5	-20.1	.2	46.28	54	-7.72	-	-	212	265	V
1	* 5.46	38.22	PK	34.5	-20	0	52.72	-	-	74	-21.28	212	265	V
5	* 5.46	29.66	RMS	34.5	-20	.2	44.36	54	-9.64	-	-	212	265	V
4	5.461	40.66	PK	34.5	-20	0	55.16	-	-	68.2	-13.04	212	265	V
8	5.468	30.31	RMS	34.5	-20	.2	45.01	-	-	-	-	212	265	V
3	5.47	38.59	PK	34.5	-19.9	0	53.19	-	-	68.2	-15.01	212	265	V
7	5.47	29.38	RMS	34.5	-19.9	.2	44.18	-	-	-	-	212	265	V

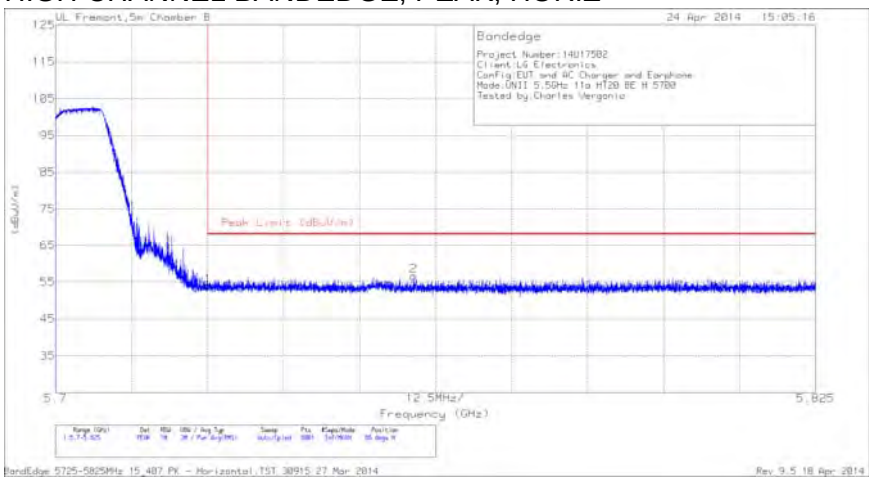
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

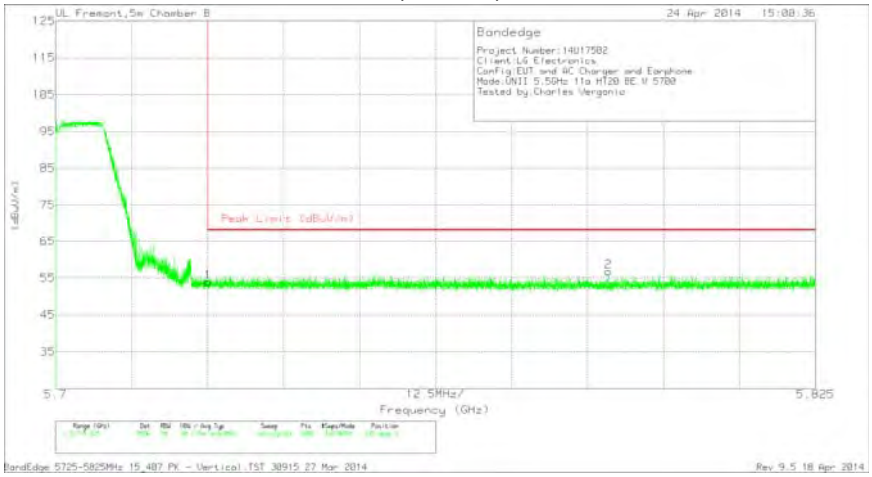
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.96	PK	34.6	-19.6	0	53.96	68.2	-14.24	86	244	H
2	5.759	41.56	PK	34.6	-19.5	0	56.66	68.2	-11.54	86	244	H

PK - Peak detector

HIGH CHANNEL BANDEDGE, PEAK, VERT

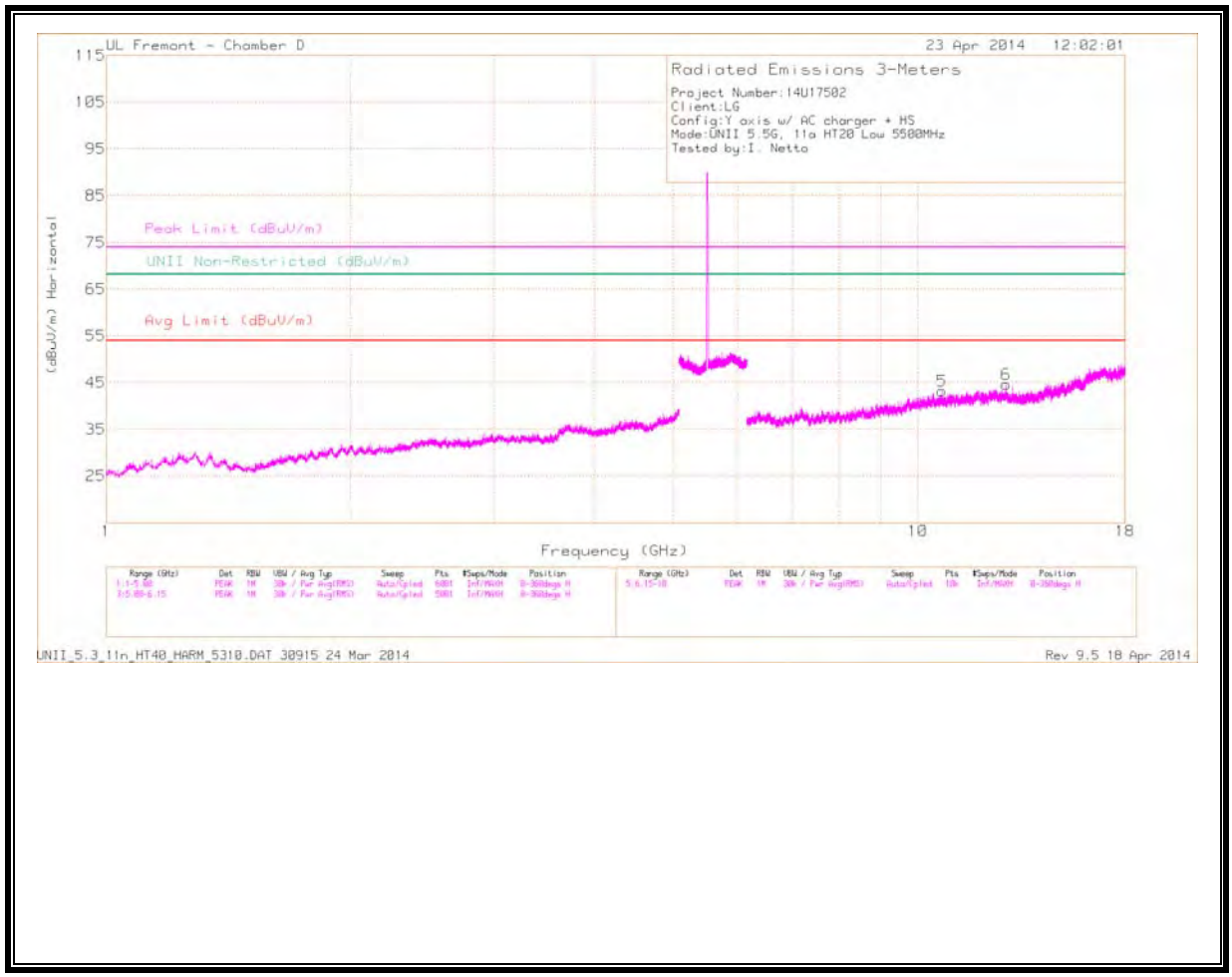


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.97	PK	34.6	-19.6	0	53.97	68.2	-14.23	245	239	V
2	5.791	41.79	PK	34.7	-19.7	0	56.79	68.2	-11.41	245	239	V

PK - Peak detector

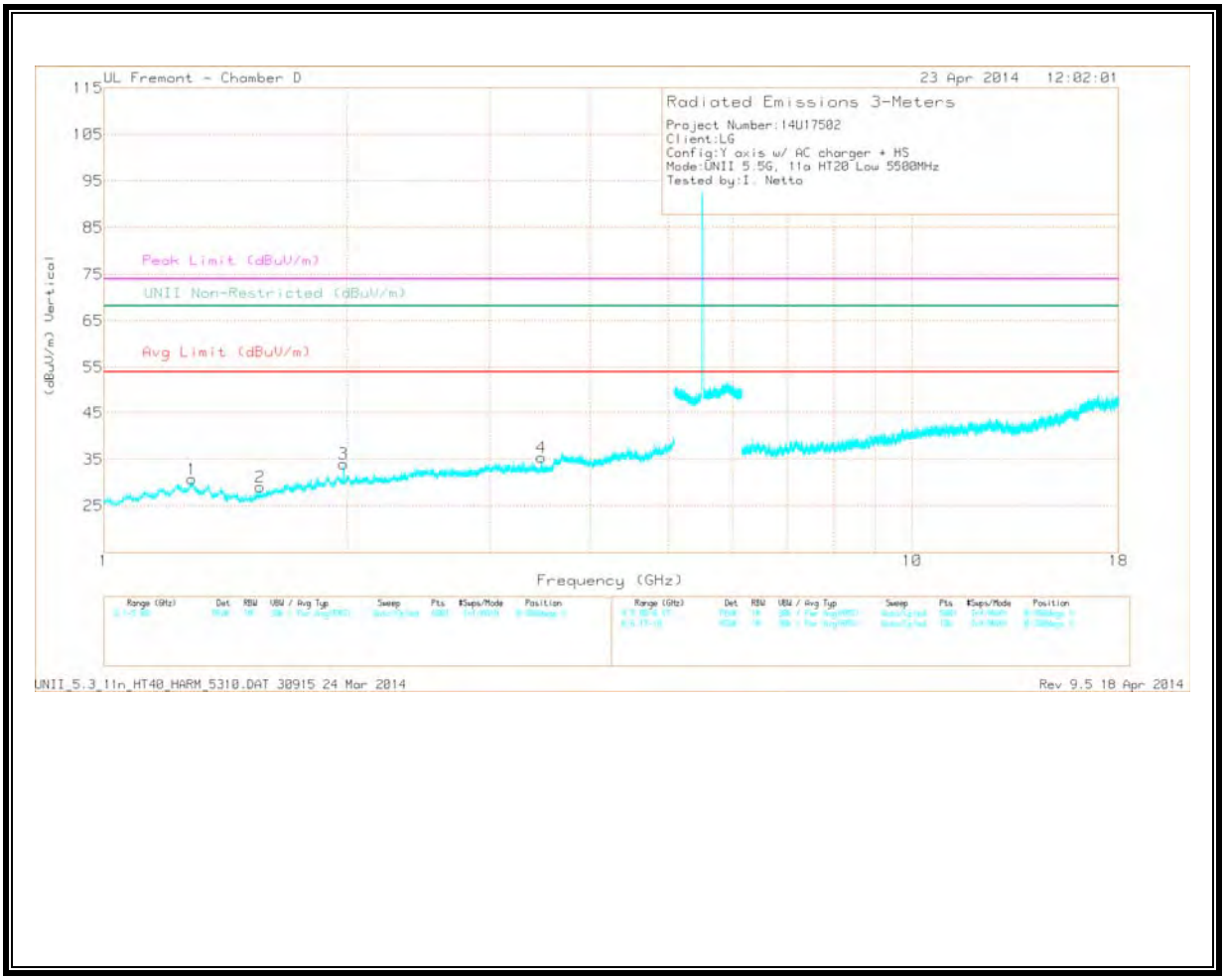
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.286	32.85	PK	29.2	-31.3	0	30.75	-	-	74	-43.25	-	-	0-360	201	V
2	* 1.562	32.92	PK	27.5	-31.3	0	29.12	-	-	74	-44.88	-	-	0-360	100	V
5	* 10.703	27.01	PK	37.3	-21.1	0	43.21	-	-	74	-30.79	-	-	0-360	100	H
3	1.98	34.08	PK	30.6	-30.6	0	34.08	-	-	-	-	68.2	-34.12	0-360	201	V
4	3.475	32.29	PK	32.3	-29.1	0	35.49	-	-	-	-	68.2	-32.71	0-360	201	V
6	12.84	28.23	PK	38.6	-22.2	0	44.63	-	-	-	-	68.2	-23.57	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

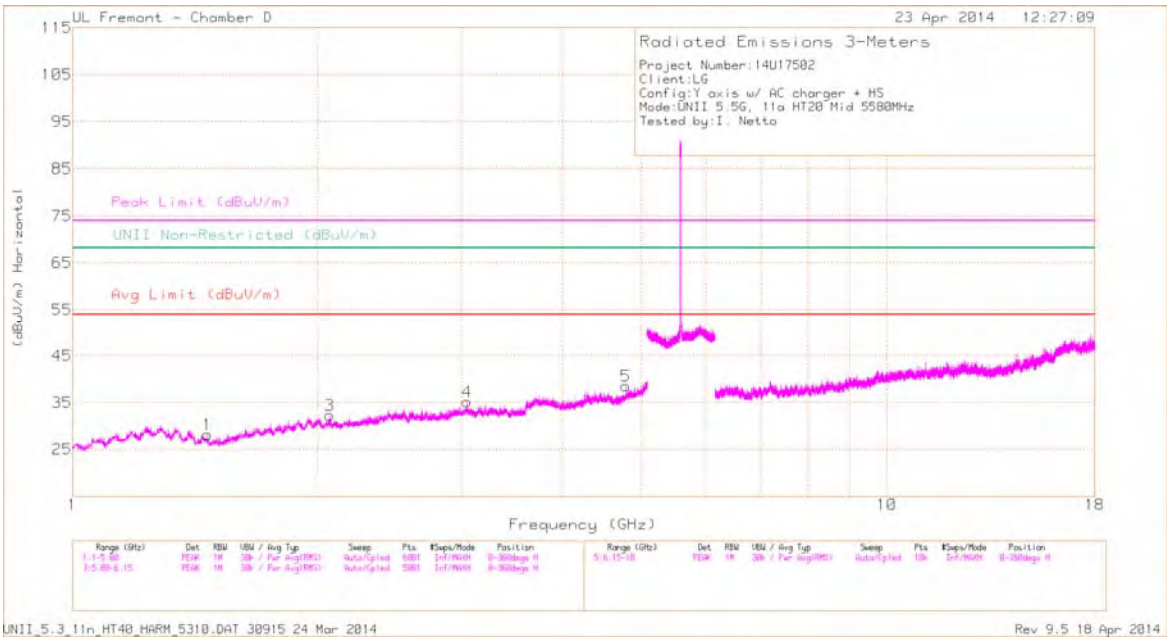
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.286	41.78	PK2	29.2	-31.2	0	39.78	54	-14.22	74	-34.22	-	-	0	100	V
* 1.559	40.34	PK2	27.5	-31.4	0	36.44	54	-17.56	74	-37.56	-	-	0	100	V
* 10.704	34.4	PK2	37.3	-21.1	0	50.6	54	-3.4	74	-23.4	-	-	0	100	H
1.98	42.04	PK2	30.6	-30.6	0	42.04	54	-11.96	74	-31.96	68.2	-26.16	255	313	V
1.98	33.07	AD1	30.6	-30.6	.2	33.27	54	-20.73	74	-40.73	-	-	255	313	V
3.477	39.15	PK2	32.3	-29.1	0	42.35	54	-11.65	74	-31.65	68.2	-25.85	0	100	V
12.839	35.02	PK2	38.6	-22.2	0	51.42	54	-2.58	74	-22.58	68.2	-16.78	0	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

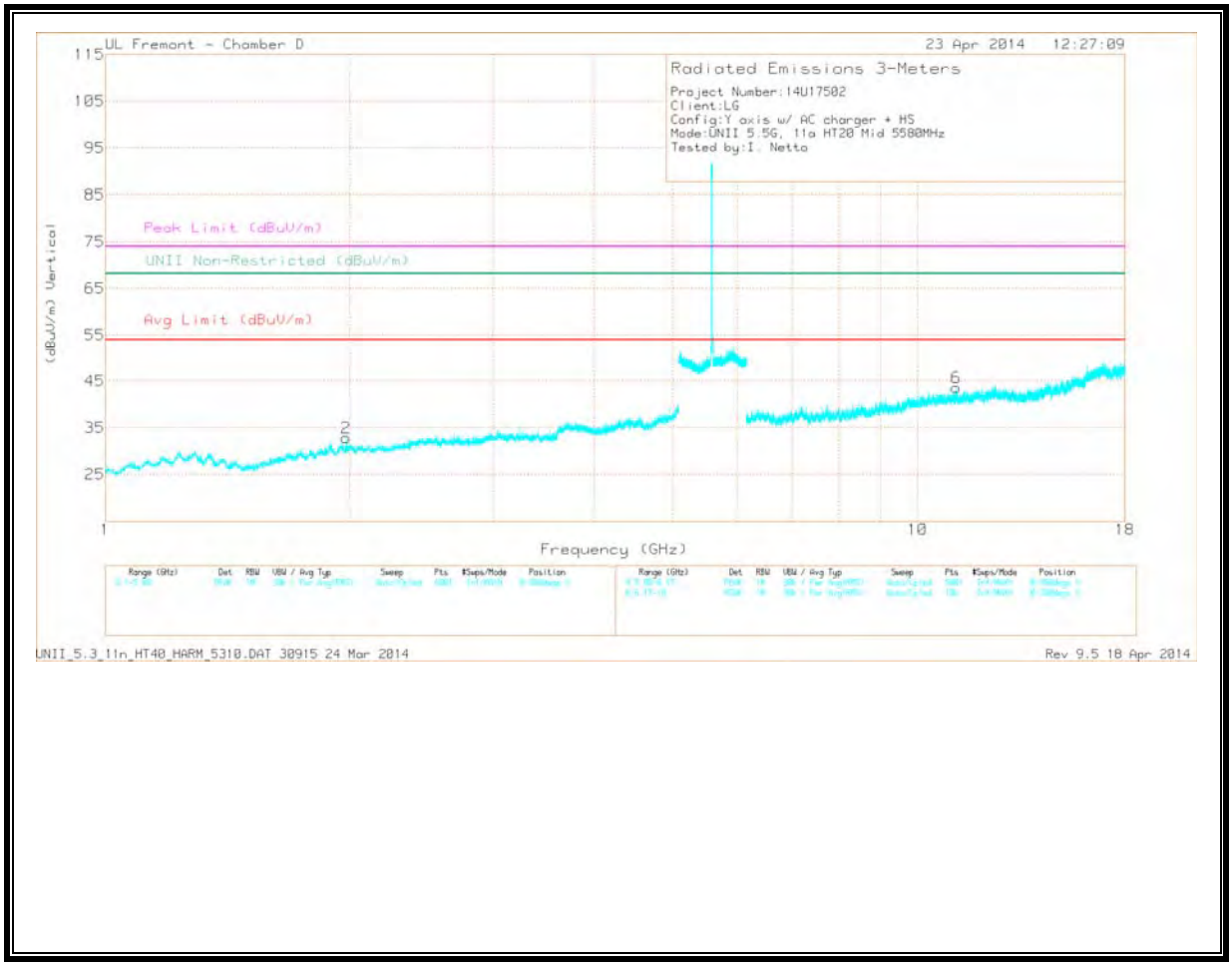
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.464	32.37	PK	27.3	-31.5	0	28.17	-	-	74	-45.83	-	-	0-360	100	H
5	* 4.781	32.08	PK	33.5	-27	0	38.58	-	-	74	-35.42	-	-	0-360	201	H
6	* 11.16	27.47	PK	37.5	-21.3	0	43.67	-	-	74	-30.33	-	-	0-360	100	V
2	1.98	32.88	PK	30.6	-30.6	0	32.88	-	-	-	-	68.2	-35.32	0-360	201	V
3	2.07	32.33	PK	30.7	-30.7	0	32.33	-	-	-	-	68.2	-35.87	0-360	100	H
4	3.052	31.43	PK	32.5	-28.8	0	35.13	-	-	-	-	68.2	-33.07	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

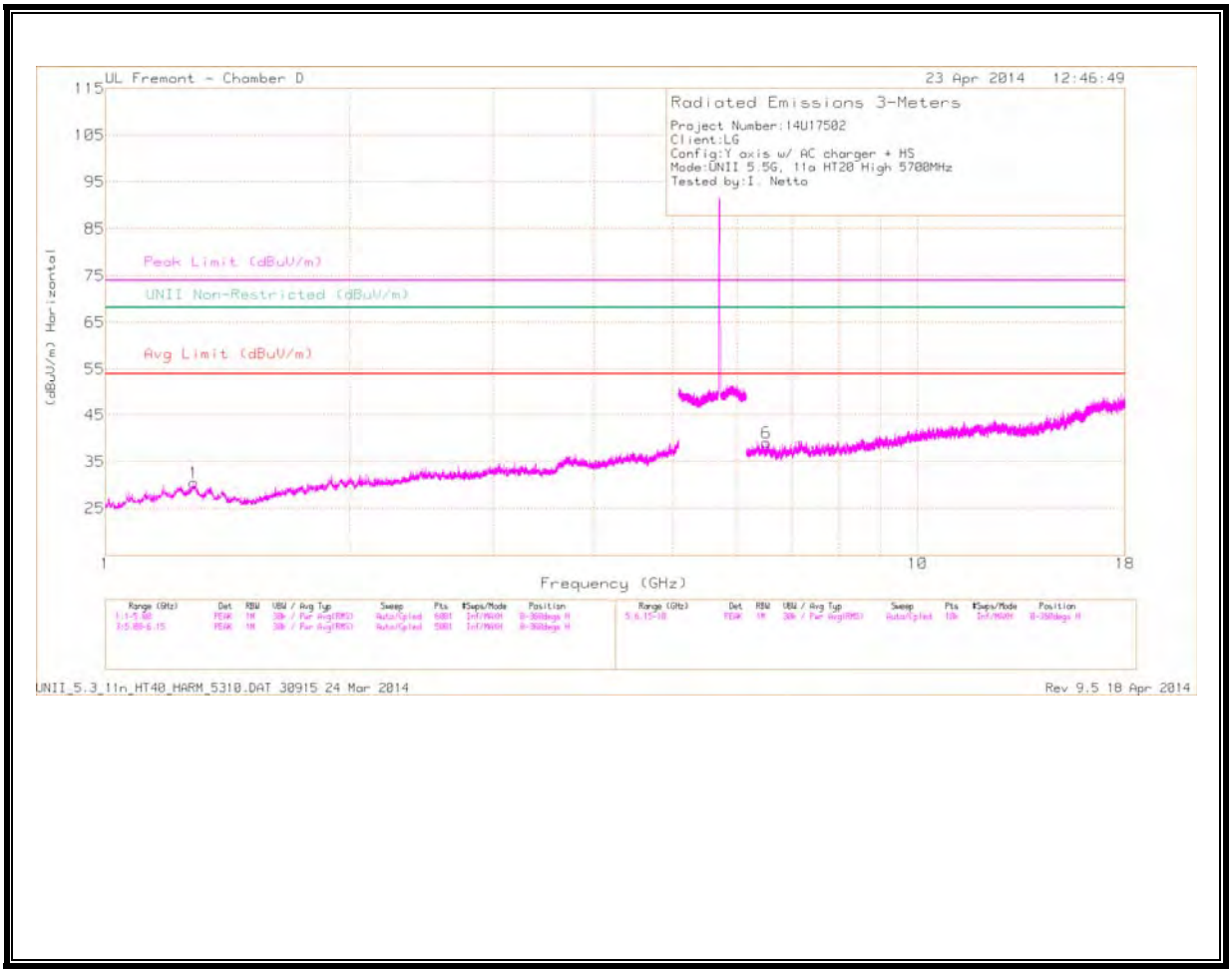
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.465	40.69	PK2	27.3	-31.5	0	36.49	54	-17.51	74	-37.51	-	-	360	100	H
* 4.781	38.48	PK2	33.5	-27	0	44.98	54	-9.02	74	-29.02	-	-	360	100	H
* 11.159	34.5	PK2	37.5	-21.3	0	50.7	54	-3.3	74	-23.3	-	-	360	100	V
1.98	39.82	PK2	30.6	-30.6	0	39.82	54	-14.18	74	-34.18	68.2	-28.38	360	100	V
2.07	39.34	PK2	30.7	-30.7	0	39.34	54	-14.66	74	-34.66	68.2	-28.86	360	100	H
3.051	38.99	PK2	32.5	-28.8	0	42.69	54	-11.31	74	-31.31	68.2	-25.51	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

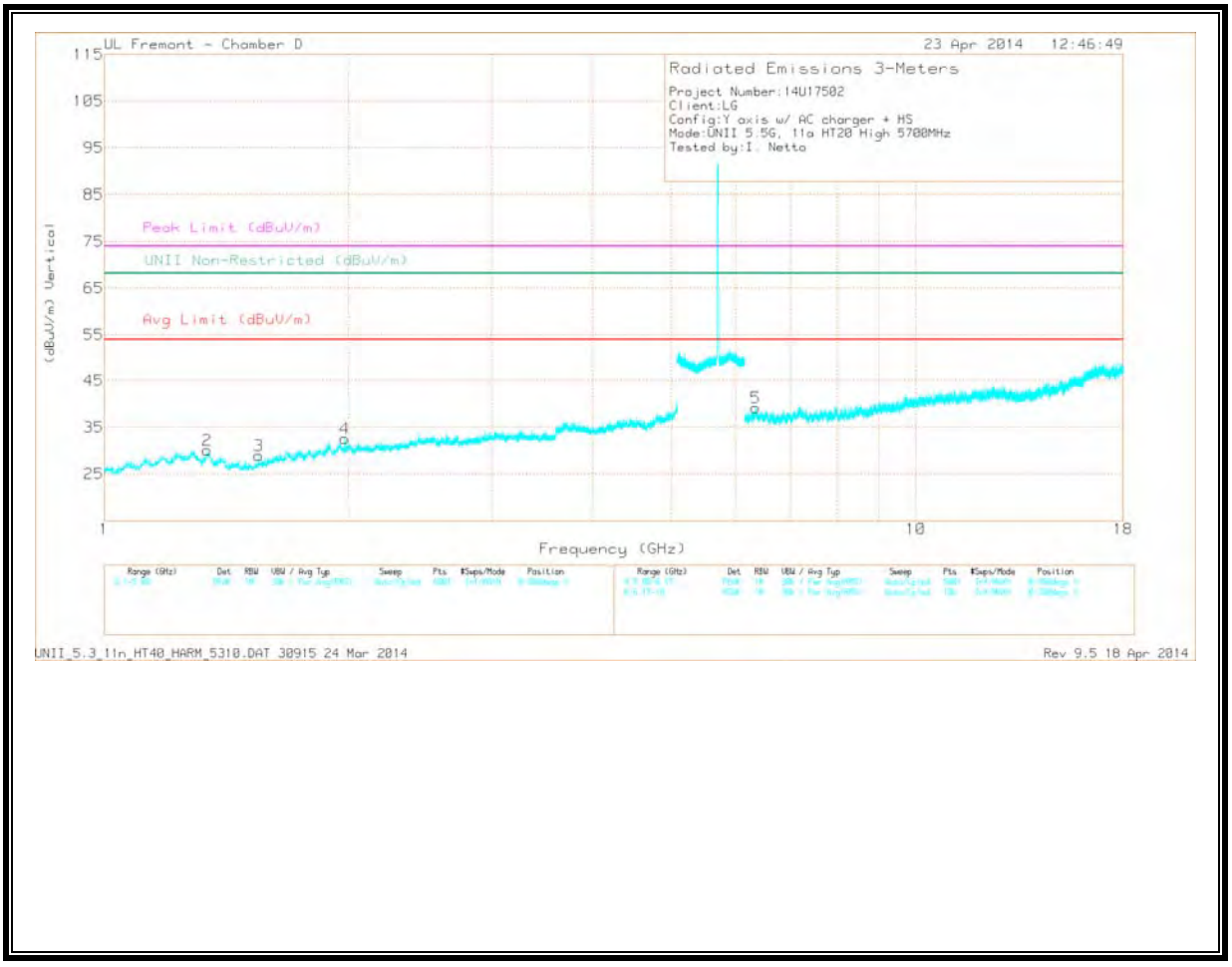
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.286	32.6	PK	29.2	-31.3	0	30.5	-	-	74	-43.5	-	-	0-360	201	H
2	* 1.339	32.68	PK	28.6	-31.2	0	30.08	-	-	74	-43.92	-	-	0-360	201	V
3	* 1.55	32.9	PK	27.4	-31.4	0	28.9	-	-	74	-45.1	-	-	0-360	100	V
4	1.98	32.54	PK	30.6	-30.6	0	32.54	-	-	-	-	68.2	-35.66	0-360	201	V
5	6.346	30.13	PK	34.9	-25.8	0	39.23	-	-	-	-	68.2	-28.97	0-360	201	V
6	6.511	29.26	PK	35	-25.2	0	39.06	-	-	-	-	68.2	-29.14	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

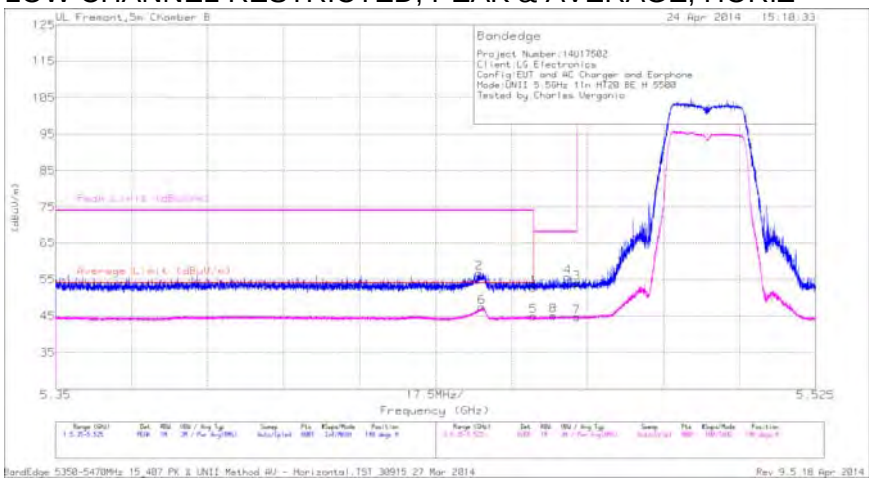
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.286	40.53	PK2	29.2	-31.3	0	38.43	-	-	74	-35.57	-	-	360	100	H
* 1.337	40.81	PK2	28.7	-31.2	0	38.31	-	-	74	-35.69	-	-	360	100	V
* 1.55	40.55	PK2	27.4	-31.4	0	36.55	-	-	74	-37.45	-	-	360	100	V
1.98	39.73	PK2	30.6	-30.6	0	39.73	-	-	-	-	68.2	-28.47	360	100	V
6.345	37.44	PK2	34.9	-25.8	0	46.54	-	-	-	-	68.2	-21.66	360	100	V
6.514	37.99	PK2	35	-25.1	0	47.89	-	-	-	-	68.2	-20.31	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.3.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



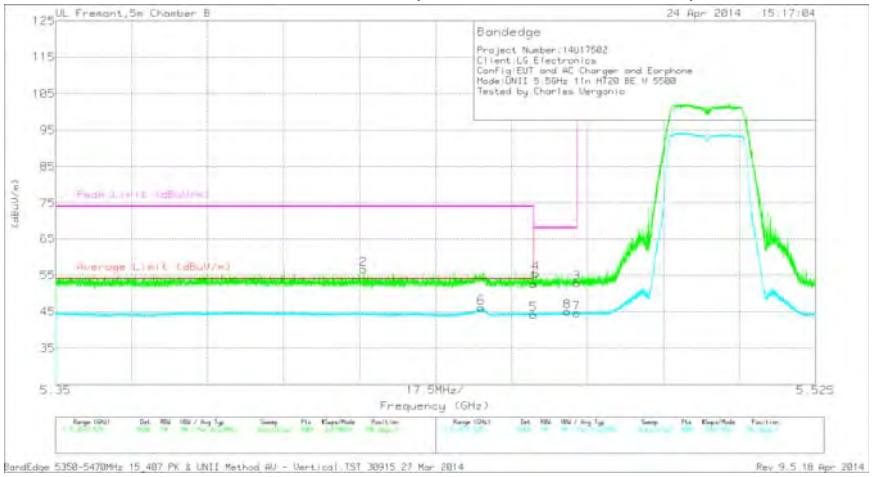
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.448	42.35	PK	34.5	-20.1	0	56.75	-	-	74	-17.25	148	217	H
6	* 5.448	32.83	RMS	34.5	-20.1	.2	47.43	54	-6.57	-	-	148	217	H
1	* 5.46	38.27	PK	34.5	-20	0	52.77	-	-	74	-21.23	148	217	H
5	* 5.46	30.2	RMS	34.5	-20	.2	44.9	54	-9.1	-	-	148	217	H
8	5.465	30.39	RMS	34.5	-20	.2	45.09	-	-	-	-	148	217	H
4	5.468	41.16	PK	34.5	-20	0	55.66	-	-	68.2	-12.54	148	217	H
3	5.47	39.39	PK	34.5	-19.9	0	53.99	-	-	68.2	-14.21	148	217	H
7	5.47	29.95	RMS	34.5	-19.9	.2	44.75	-	-	-	-	148	217	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.421	42.08	PK	34.5	-20	0	56.58	-	-	74	-17.42	196	263	V
6	* 5.448	31.46	RMS	34.5	-20.1	.2	46.06	54	-7.94	-	-	196	263	V
1	* 5.46	38.21	PK	34.5	-20	0	52.71	-	-	74	-21.29	196	263	V
5	* 5.46	29.57	RMS	34.5	-20	.2	44.27	54	-9.73	-	-	196	263	V
4	5.461	40.99	PK	34.5	-20	0	55.49	-	-	68.2	-12.71	196	263	V
8	5.468	30.34	RMS	34.5	-20	.2	45.04	-	-	-	-	196	263	V
3	5.47	38.32	PK	34.5	-19.9	0	52.92	-	-	68.2	-15.28	196	263	V
7	5.47	29.83	RMS	34.5	-19.9	.2	44.63	-	-	-	-	196	263	V

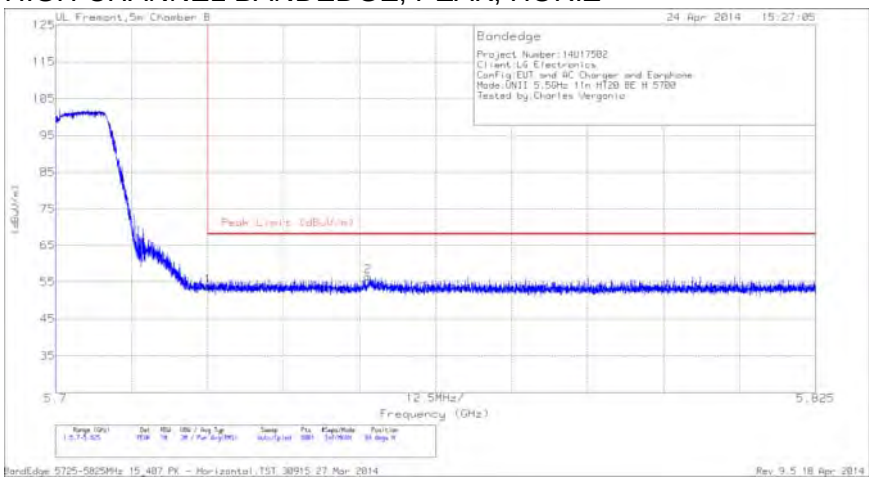
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL)

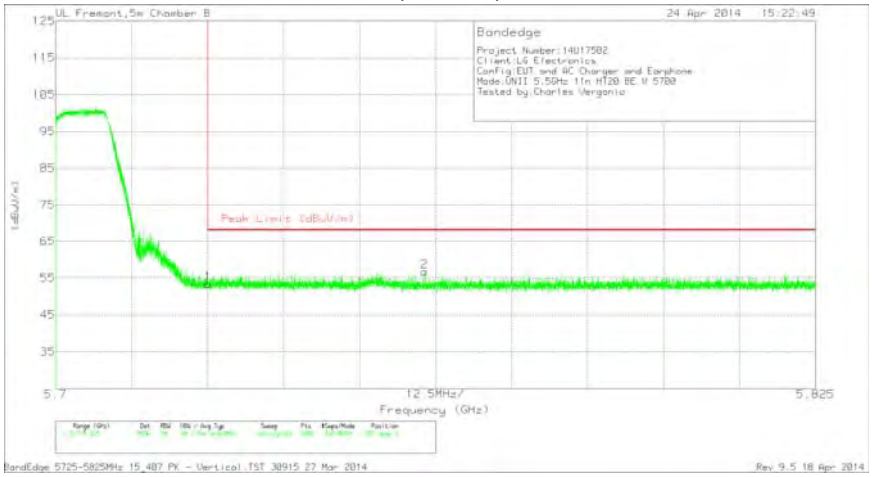
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.77	PK	34.6	-19.6	53.77	68.2	-14.43	84	243	H
2	5.751	41.44	PK	34.6	-19.5	56.54	68.2	-11.66	84	243	H

PK - Peak detector

HIGH CHANNEL BANDEDGE, PEAK, VERT

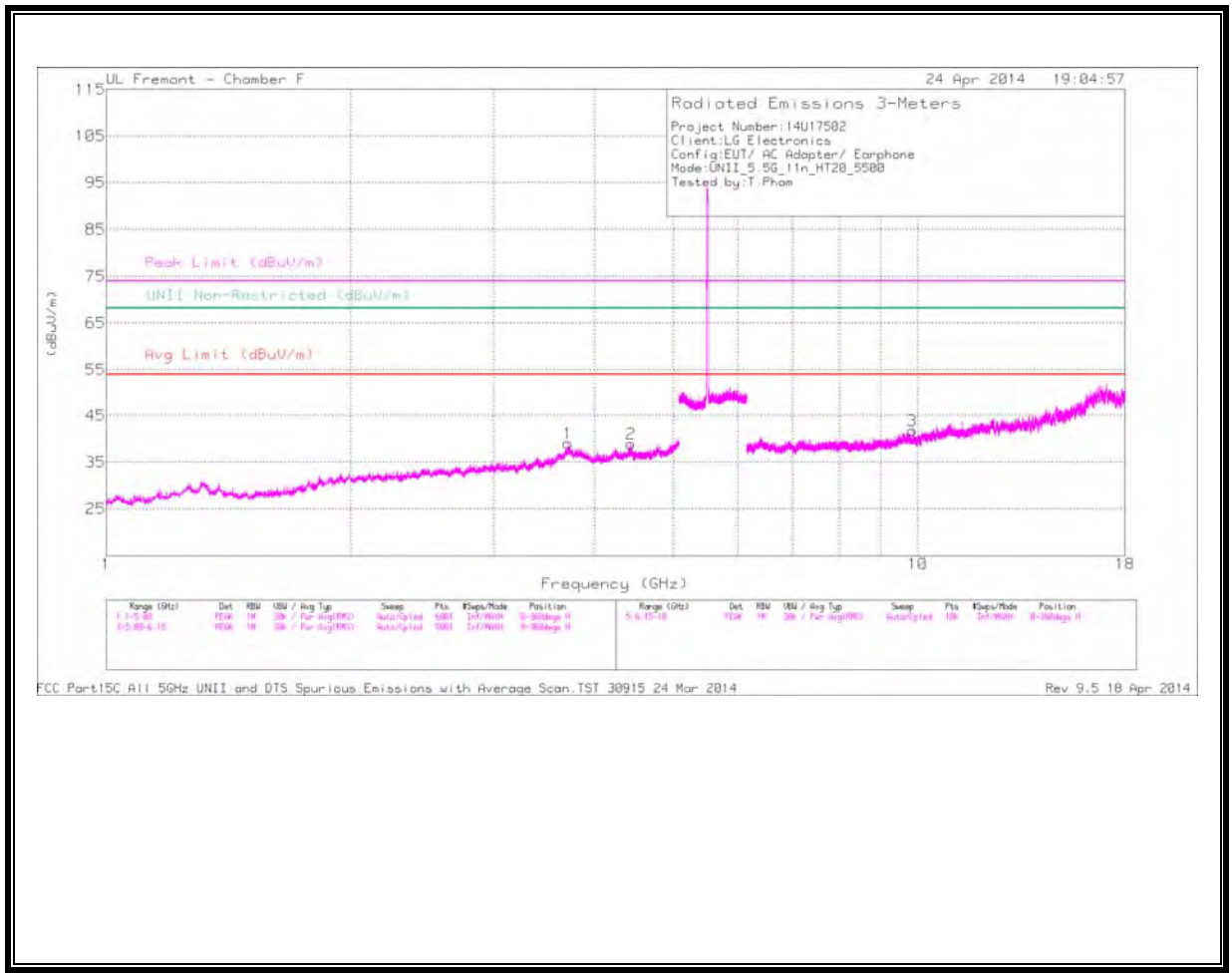


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.41	PK	34.6	-19.6	53.41	68.2	-14.79	287	261	V
2	5.761	41.66	PK	34.6	-19.5	56.76	68.2	-11.44	287	261	V

PK - Peak detector

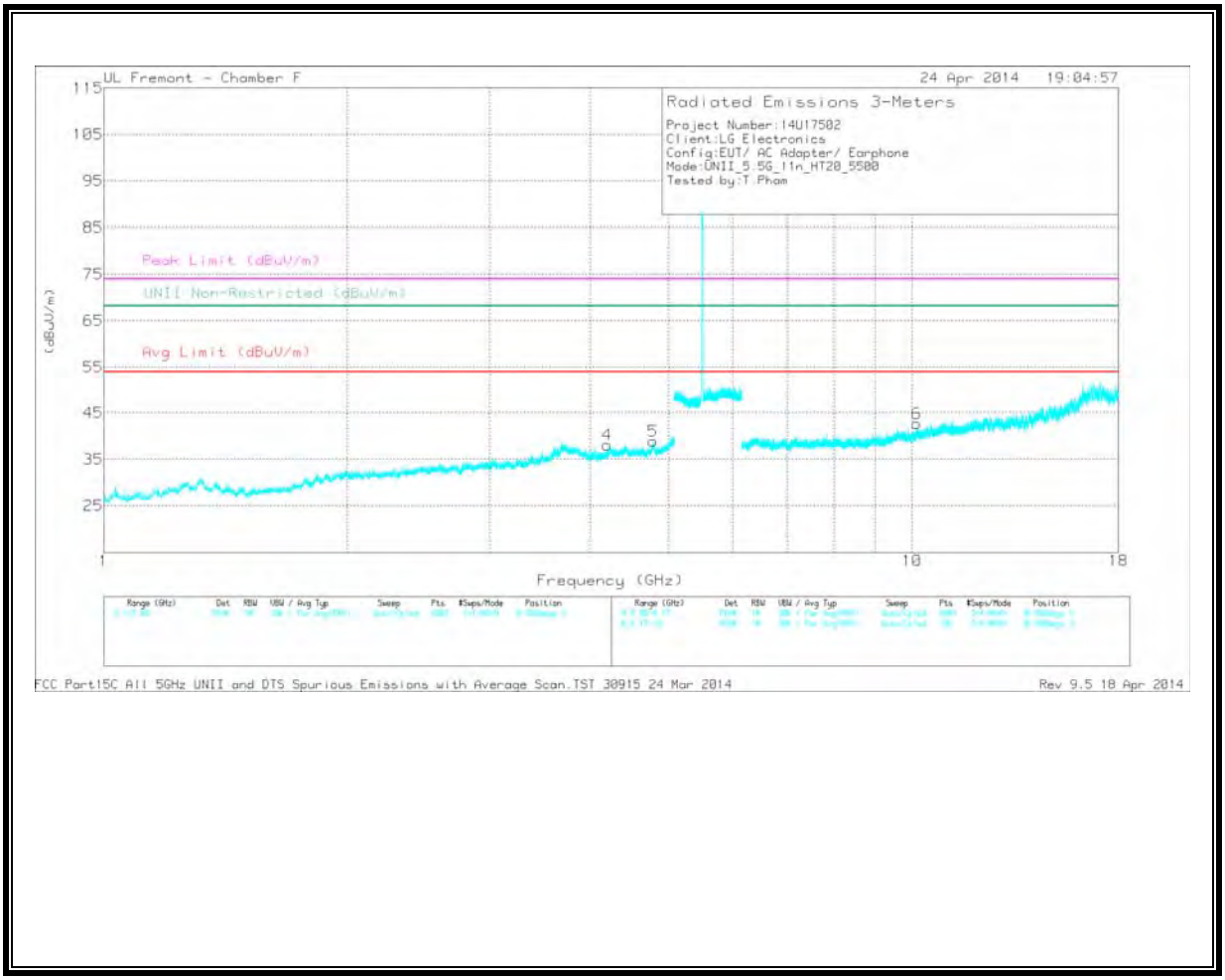
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.704	33.43	PK	34.8	-29.2	39.03	-	-	74	-34.97	-	-	0-360	101	H
2	4.435	32.36	PK	33.9	-27.3	38.96	-	-	-	-	68.2	-29.24	0-360	200	H
4	* 4.195	32.91	PK	33.6	-28.4	38.11	-	-	74	-35.89	-	-	0-360	101	V
5	* 4.777	32.17	PK	34.1	-27.3	38.97	-	-	74	-35.03	-	-	0-360	101	V
3	9.838	27.76	PK	37.2	-23.2	41.76	-	-	-	-	68.2	-26.44	0-360	101	H
6	10.131	27.09	PK	37.2	-21.6	42.69	-	-	-	-	68.2	-25.51	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

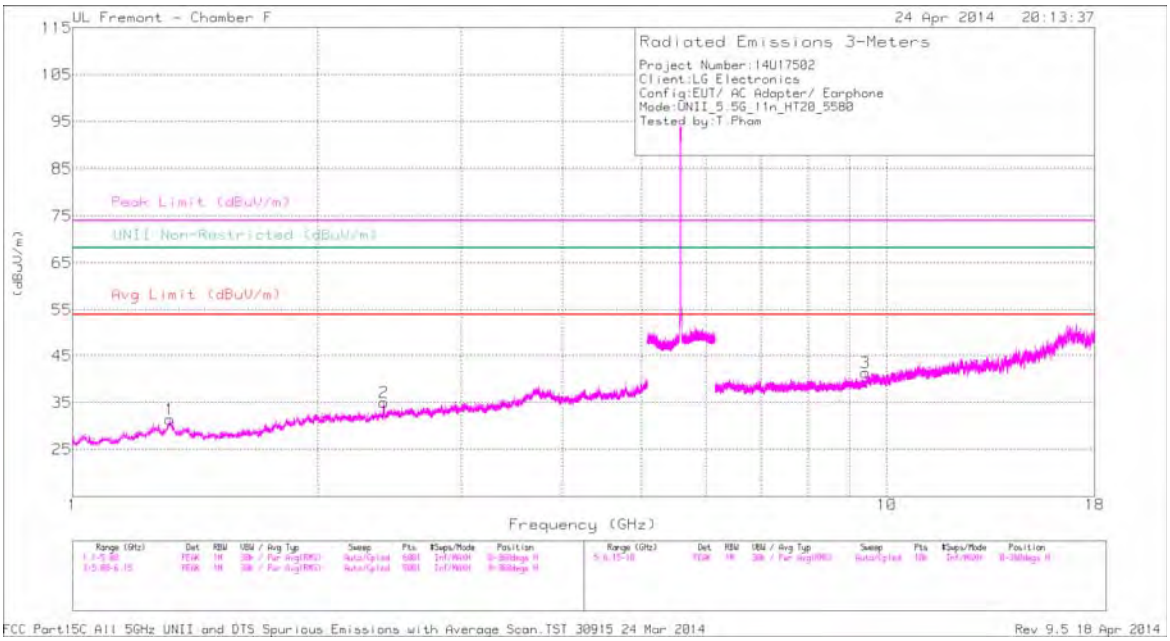
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.704	39.58	PK1	34.8	-29.2	45.18	-	-	74	-28.82	-	-	360	101	H
4.436	38.21	PK1	33.9	-27.3	44.81	-	-	-	-	68.2	-23.39	360	101	H
* 4.195	39.19	PK1	33.6	-28.4	44.39	-	-	74	-29.61	-	-	360	101	V
* 4.777	39.59	PK1	34.1	-27.3	46.39	-	-	74	-27.61	-	-	360	101	V
9.838	34.69	PK1	37.2	-23.2	48.69	-	-	-	-	68.2	-19.51	360	101	H
10.131	34.69	PK1	37.2	-21.6	50.29	-	-	-	-	68.2	-17.91	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

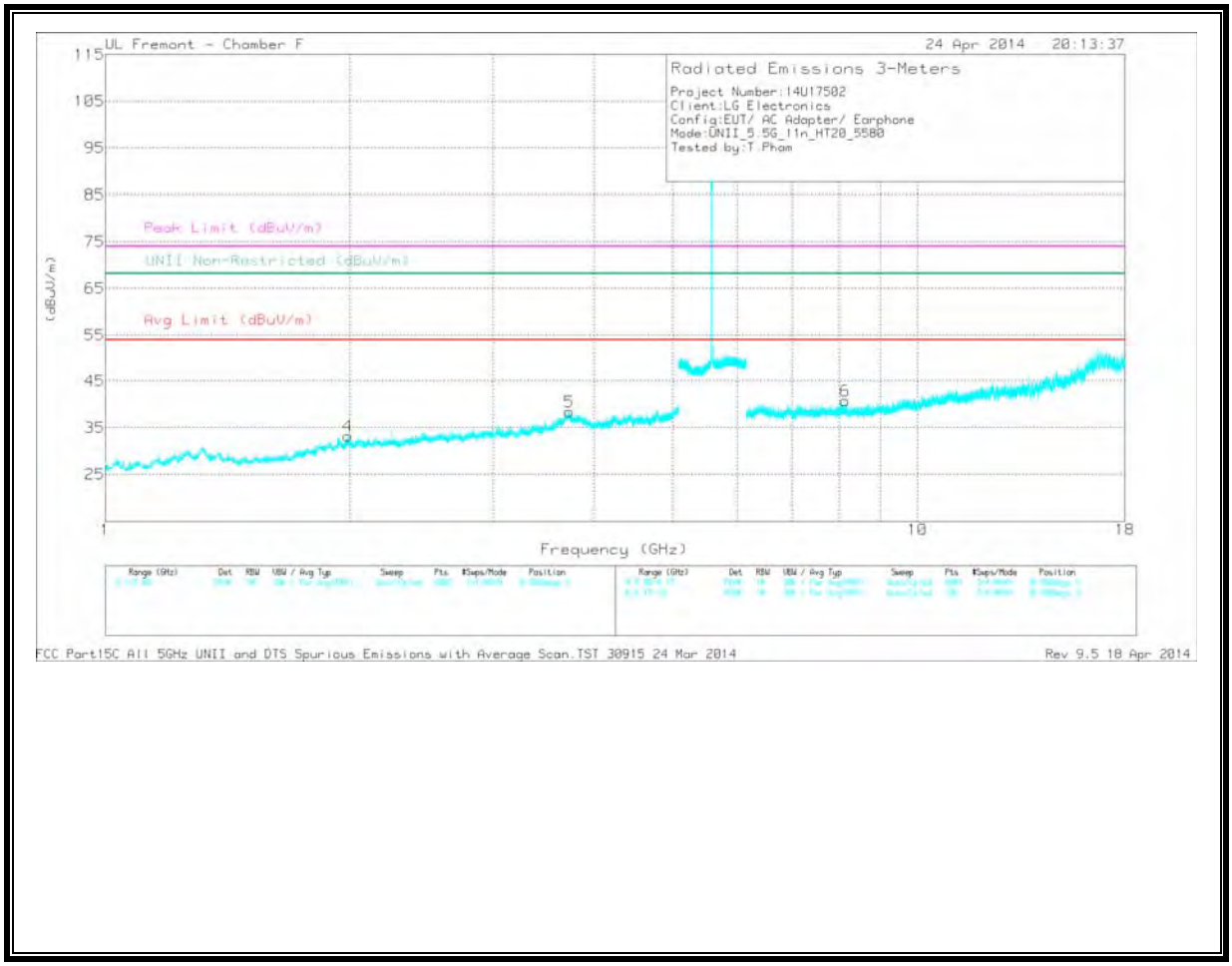
PK1 - KDB789033 Method: Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.316	32.95	PK	29.9	-31.4	31.45	-	-	74	-42.55	-	-	0-360	101	H
2	2.413	33.53	PK	32.3	-30.8	35.03	-	-	-	-	68.2	-33.17	0-360	199	H
4	1.989	32.78	PK	31.7	-31.3	33.18	-	-	-	-	68.2	-35.02	0-360	201	V
5	* 3.726	32.98	PK	34.7	-29.3	38.38	-	-	74	-35.62	-	-	0-360	201	V
3	* 9.412	28.39	PK	36.6	-23.6	41.39	-	-	74	-32.61	-	-	0-360	101	H
6	* 8.146	30.09	PK	35.7	-25	40.79	-	-	74	-33.21	-	-	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

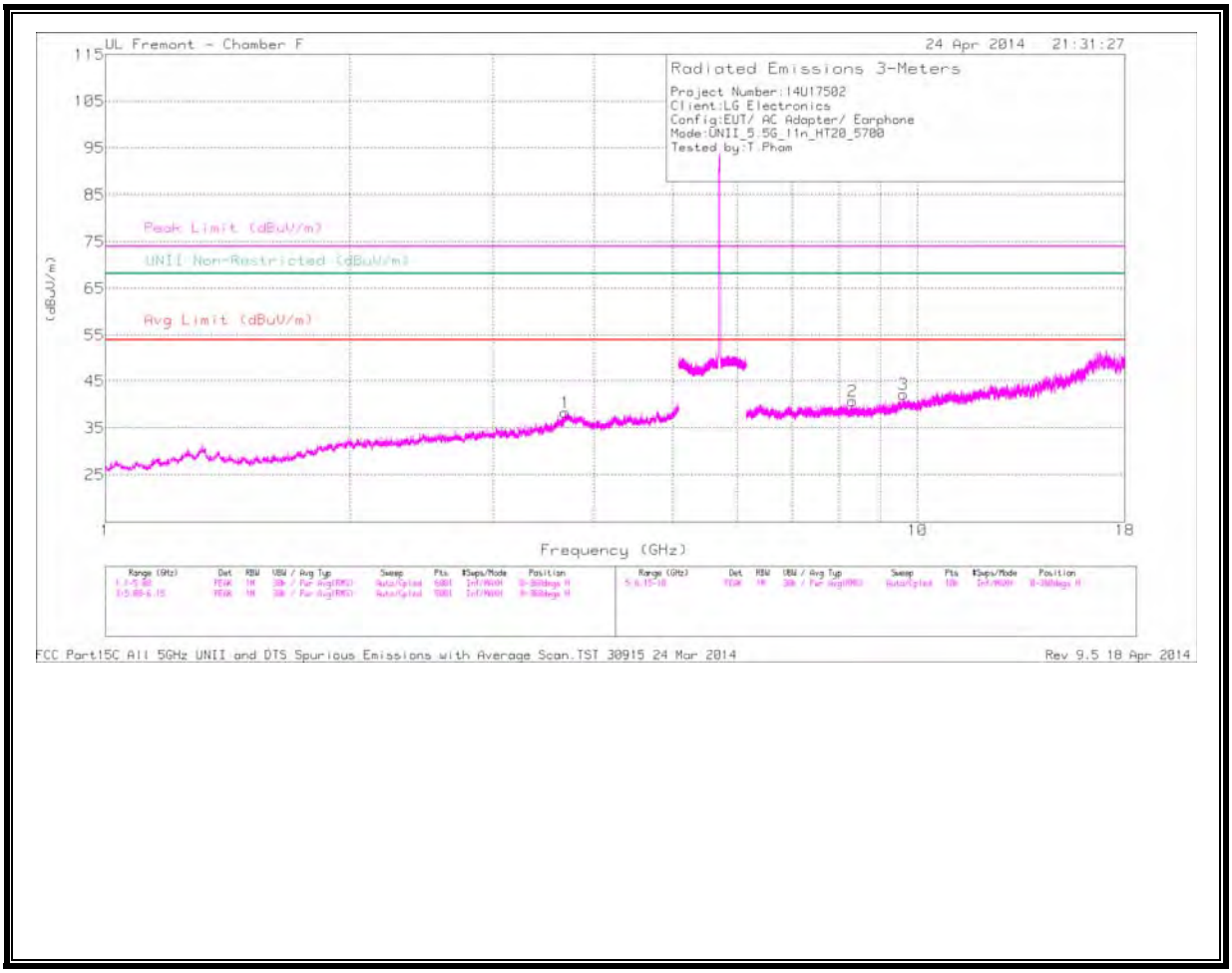
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.317	41.26	PK1	29.9	-31.4	39.76	-	-	74	-34.24	-	-	360	101	H
2.413	40.4	PK1	32.3	-30.8	41.9	-	-	-	-	68.2	-26.3	360	101	H
1.988	41.57	PK1	31.7	-31.3	41.97	-	-	-	-	68.2	-26.23	360	101	V
* 3.727	39.92	PK1	34.7	-29.3	45.32	-	-	74	-28.68	-	-	360	101	V
* 9.413	34.87	PK1	36.6	-23.6	47.87	-	-	74	-26.13	-	-	360	101	H
* 8.146	37.14	PK1	35.7	-25	47.84	-	-	74	-26.16	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

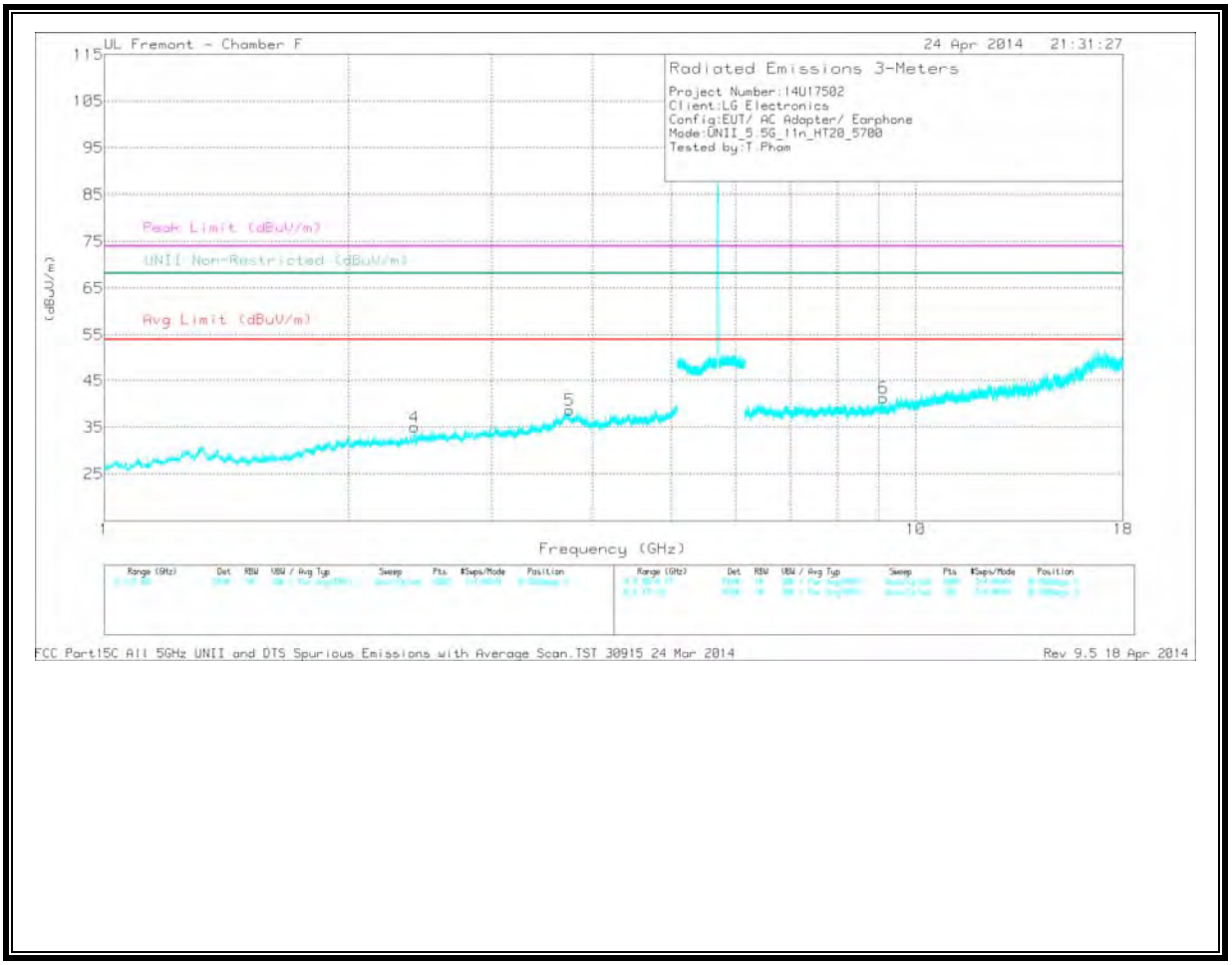
PK1 - KDB789033 Method: Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.684	32.61	PK	34.9	-29.2	38.31	-	-	74	-35.69	-	-	0-360	199	H
4	2.41	33.59	PK	32.3	-30.8	35.09	-	-	-	-	68.2	-33.11	0-360	201	V
5	* 3.746	33.85	PK	34.6	-29.7	38.75	-	-	74	-35.25	-	-	0-360	101	V
2	* 8.31	30.06	PK	35.7	-25	40.76	-	-	74	-33.24	-	-	0-360	101	H
3	9.609	27.63	PK	36.9	-22.3	42.23	-	-	-	-	68.2	-25.97	0-360	101	H
6	* 9.125	28.75	PK	36.2	-23.6	41.35	-	-	74	-32.65	-	-	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

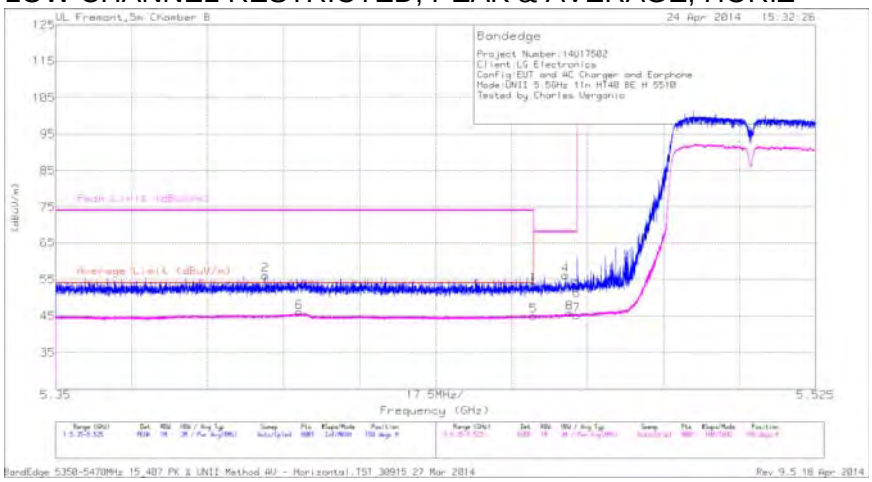
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.685	39.81	PK1	34.9	-29.2	45.51	-	-	74	-28.49	-	-	360	101	H
2.409	40.66	PK1	32.2	-30.8	42.06	-	-	-	-	68.2	-26.14	360	101	V
* 3.746	39.25	PK1	34.6	-29.7	44.15	-	-	74	-29.85	-	-	360	101	V
9.609	26.54	PK1	36.9	-22.3	41.14	-	-	-	-	68.2	-27.06	360	101	H
* 8.311	36.59	PK1	35.7	-25	47.29	-	-	74	-26.71	-	-	360	101	H
* 9.125	35.59	PK1	36.2	-23.6	48.19	-	-	74	-25.81	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

11.3.5. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



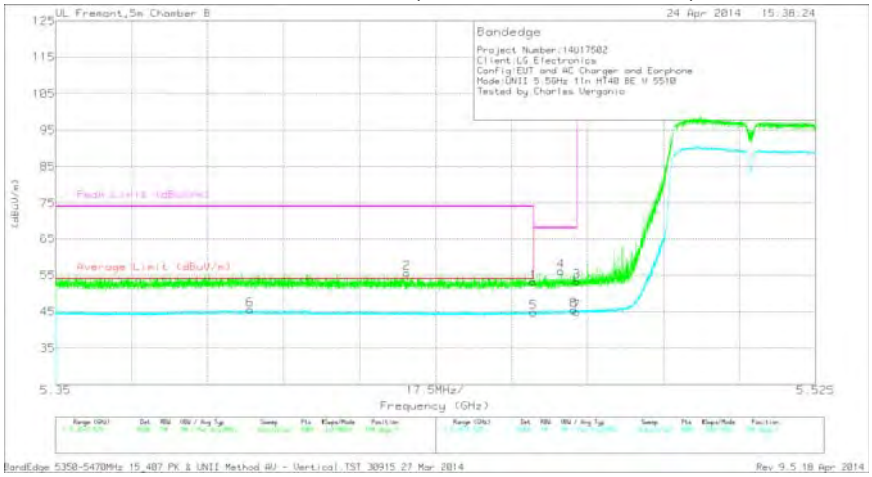
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.398	41.59	PK	34.5	-19.9	0	56.19	-	-	74	-17.81	150	216	H
6	* 5.406	31.11	RMS	34.5	-20	.5	46.11	54	-7.89	-	-	150	216	H
1	* 5.46	39.03	PK	34.5	-20	0	53.53	-	-	74	-20.47	150	216	H
5	* 5.46	30.05	RMS	34.5	-20	.5	45.05	54	-8.95	-	-	150	216	H
4	5.467	41.66	PK	34.5	-20	0	56.16	-	-	68.2	-12.04	150	216	H
8	5.468	30.77	RMS	34.5	-20	.5	45.77	-	-	-	-	150	216	H
3	5.47	36.75	PK	34.5	-19.9	0	51.35	-	-	68.2	-16.85	150	216	H
7	5.47	30.11	RMS	34.5	-19.9	.5	45.21	-	-	-	-	150	216	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 5.395	30.39	RMS	34.5	-19.8	.5	45.59	54	-8.41	-	-	184	288	V
2	* 5.431	41.17	PK	34.5	-20	0	55.67	-	-	74	-18.33	184	288	V
1	* 5.46	38.7	PK	34.5	-20	0	53.2	-	-	74	-20.8	184	288	V
5	* 5.46	29.77	RMS	34.5	-20	.5	44.77	54	-9.23	-	-	184	288	V
4	5.466	41.67	PK	34.5	-20	0	56.17	-	-	68.2	-12.03	184	288	V
8	5.469	30.46	RMS	34.5	-20	.5	45.46	-	-	-	-	184	288	V
3	5.47	38.73	PK	34.5	-19.9	0	53.33	-	-	68.2	-14.87	184	288	V
7	5.47	29.85	RMS	34.5	-19.9	.5	44.95	-	-	-	-	184	288	V

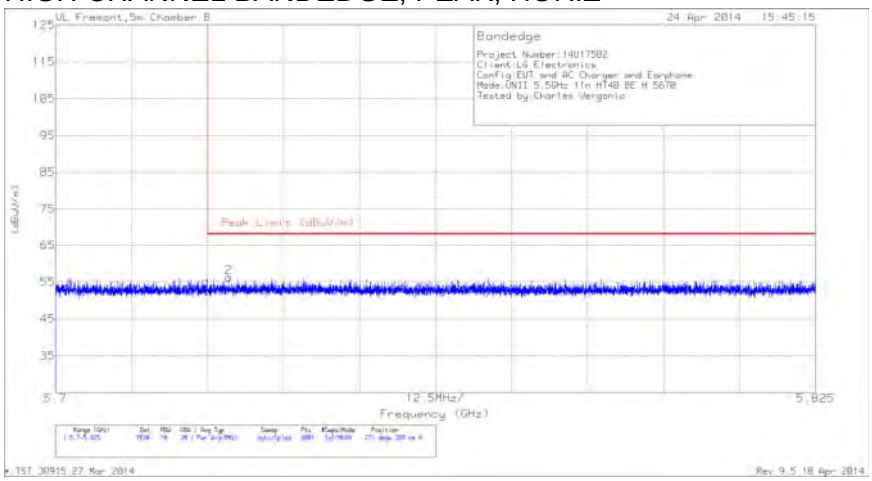
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

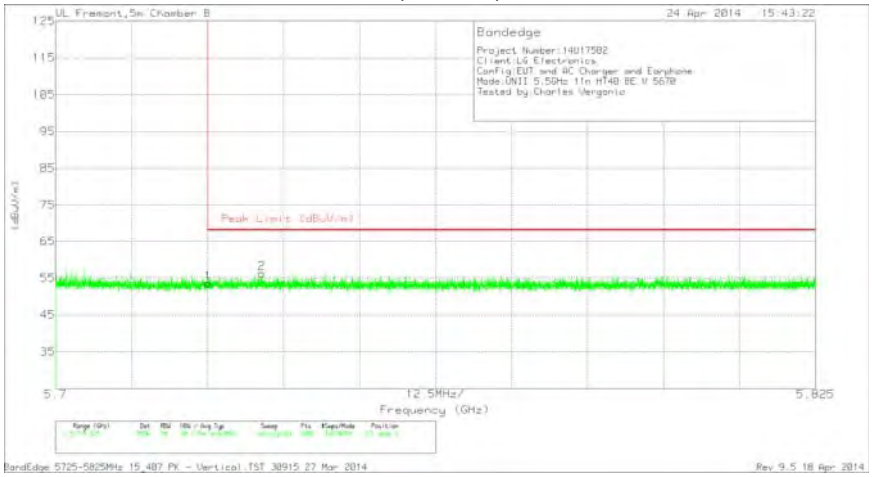
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.56	PK	34.6	-19.6	52.56	68.2	-15.64	271	288	H
2	5.728	41.23	PK	34.6	-19.6	56.23	68.2	-11.97	271	288	H

HIGH CHANNEL BANDEDGE, PEAK, VERT

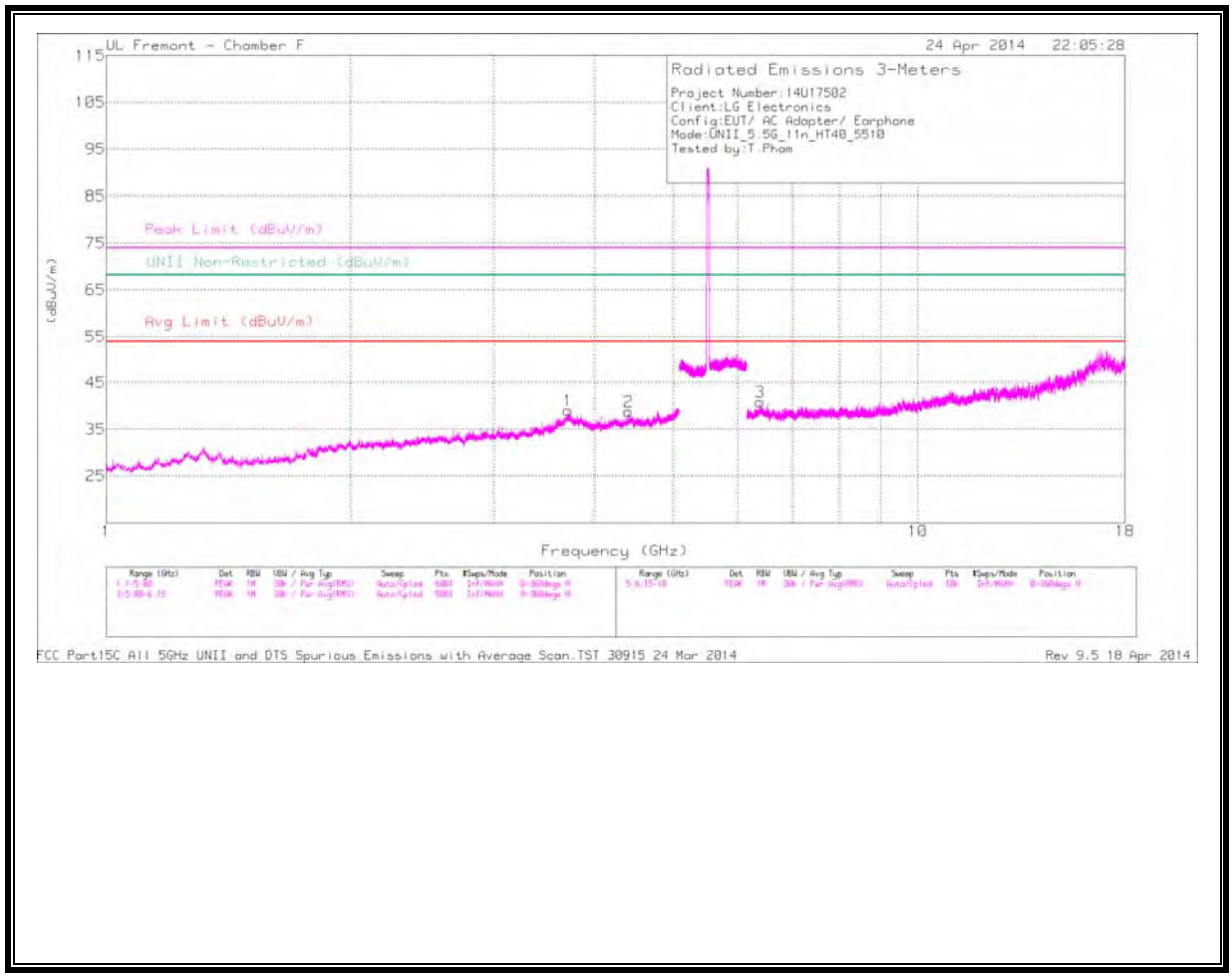


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.53	PK	34.6	-19.6	53.53	68.2	-14.67	271	288	V
2	5.734	41.12	PK	34.6	-19.5	56.22	68.2	-11.98	271	288	V

PK - Peak detector

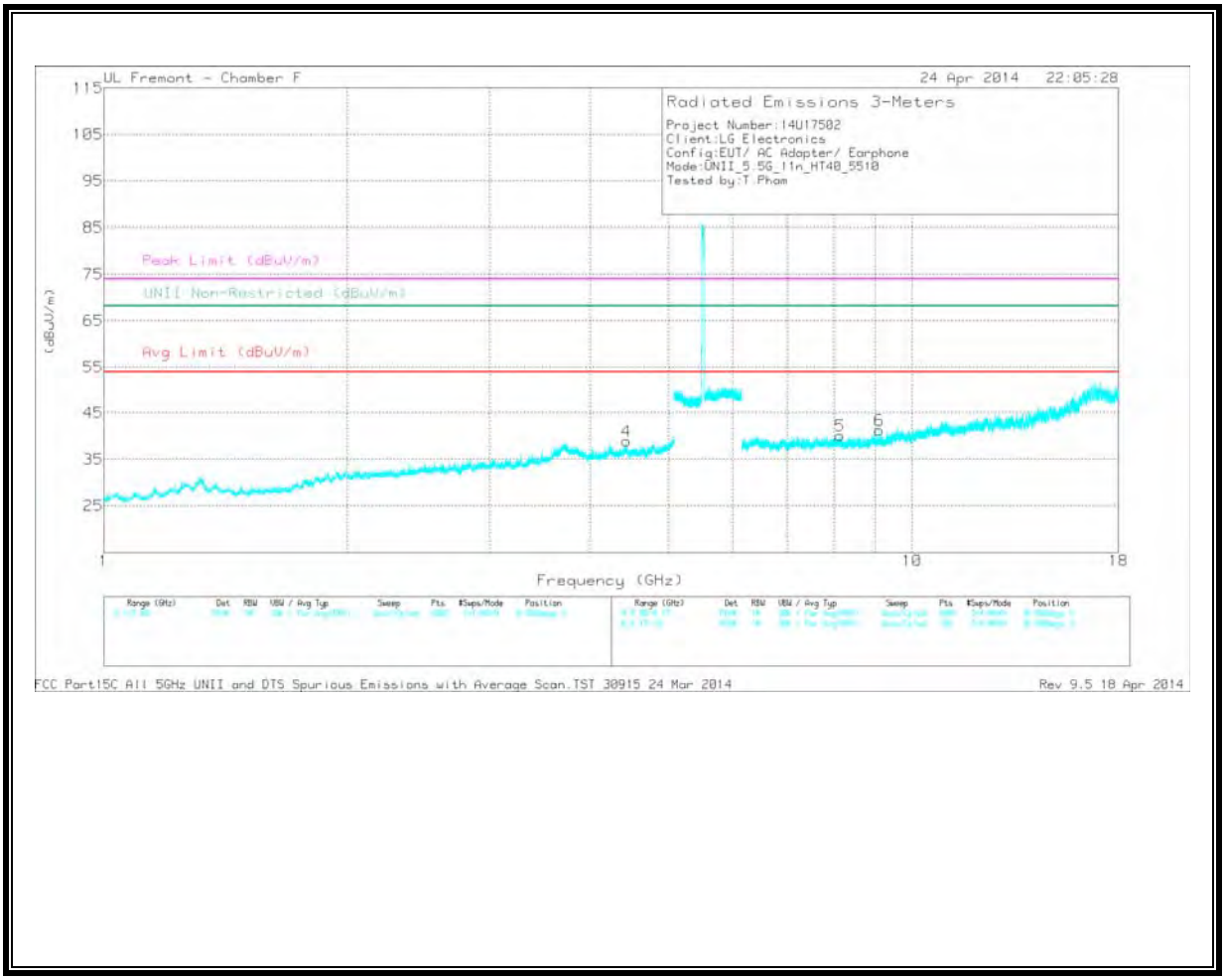
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.706	33.35	PK	34.8	-29.1	39.05	-	-	74	-34.95	-	-	0-360	101	H
2	4.401	33.22	PK	33.8	-28.2	38.82	-	-	-	-	68.2	-29.38	0-360	200	H
4	4.435	32.36	PK	33.9	-27.3	38.96	-	-	-	-	68.2	-29.24	0-360	201	V
3	6.396	31.64	PK	35.6	-26.4	40.84	-	-	-	-	68.2	-27.36	0-360	200	H
5	* 8.143	29.4	PK	35.7	-25	40.1	-	-	74	-33.9	-	-	0-360	201	V
6	* 9.114	28.88	PK	36.2	-23.8	41.28	-	-	74	-32.72	-	-	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

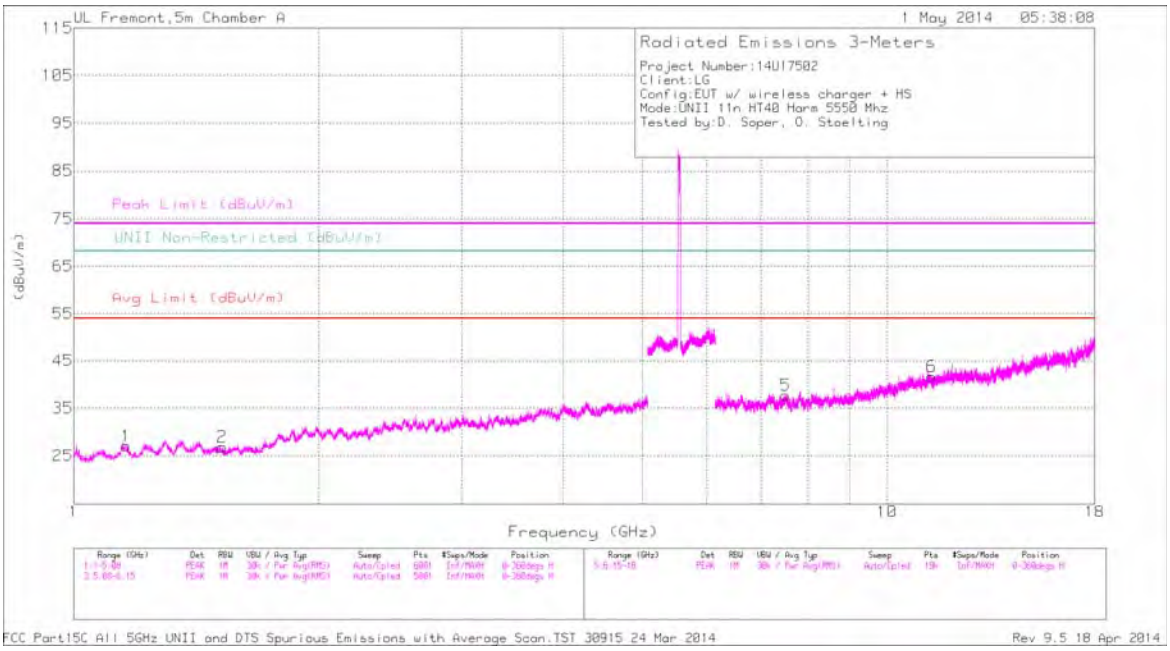
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.706	39.6	PK1	34.8	-29.1	45.3	-	-	74	-28.7	-	-	360	101	H
4.401	39.41	PK1	33.8	-28.3	44.91	-	-	-	-	68.2	-23.29	360	101	H
4.434	38.33	PK1	33.9	-27.2	45.03	-	-	-	-	68.2	-23.17	360	101	V
6.396	38.1	PK1	35.6	-26.4	47.3	-	-	-	-	68.2	-20.9	360	101	H
* 8.143	37.25	PK1	35.7	-25	47.95	-	-	74	-26.05	-	-	360	101	V
* 9.113	36.34	PK1	36.2	-23.9	48.64	-	-	74	-25.36	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

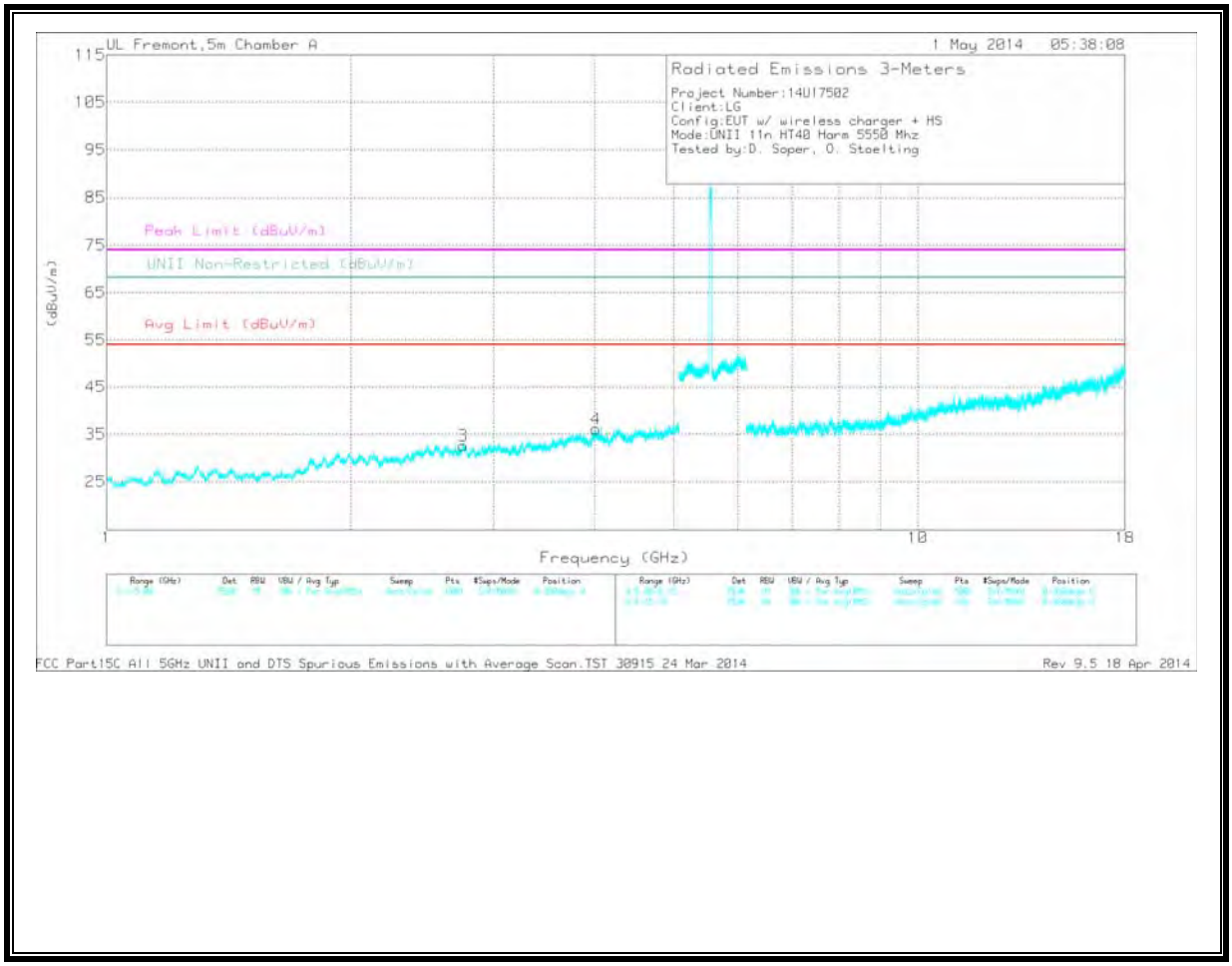
PK1 - KDB789033 Method: Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.159	34.98	PK	28.9	-36.8	0	27.08	-	-	74	-46.92	-	-	0-360	200	H
2	* 1.523	33.77	PK	28.7	-35.6	0	26.87	-	-	74	-47.13	-	-	0-360	100	H
3	* 2.753	31.51	PK	32.7	-31.6	0	32.61	-	-	74	-41.39	-	-	0-360	100	V
4	* 4.014	32.09	PK	33.7	-29.7	0	36.09	-	-	74	-37.91	-	-	0-360	201	V
5	* 7.511	27.13	PK	35.3	-24.7	0	37.73	-	-	74	-36.27	-	-	0-360	100	H
6	* 11.339	26.39	PK	38	-22.7	0	41.69	-	-	74	-32.31	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

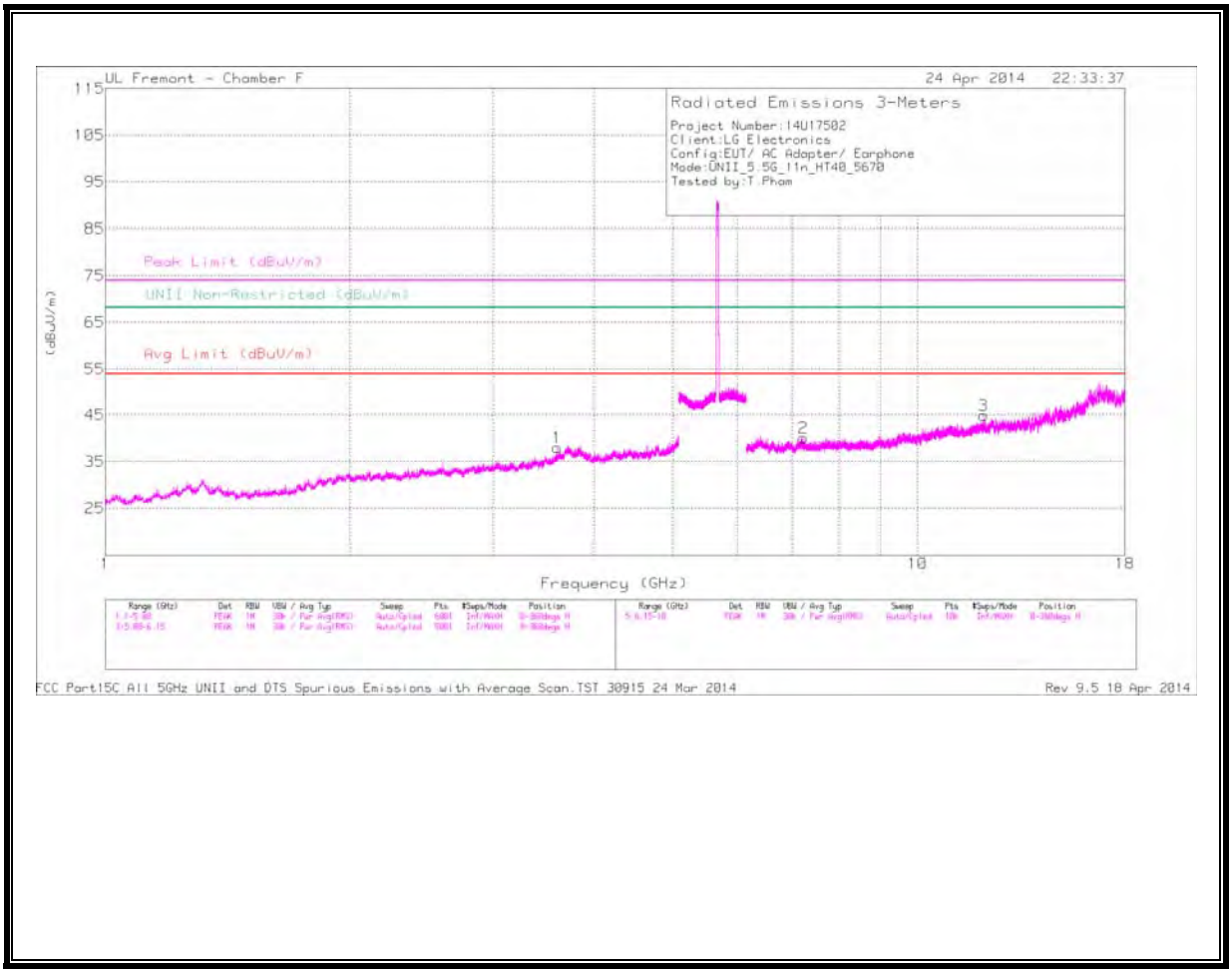
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.493	43.04	PK1	28.8	-36.2	0	35.64	-	-	74	-38.36	-	-	1	100	H
* 1.5	31.45	AD1	28.7	-36.6	.5	24.05	54	-29.95	-	-	-	-	1	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

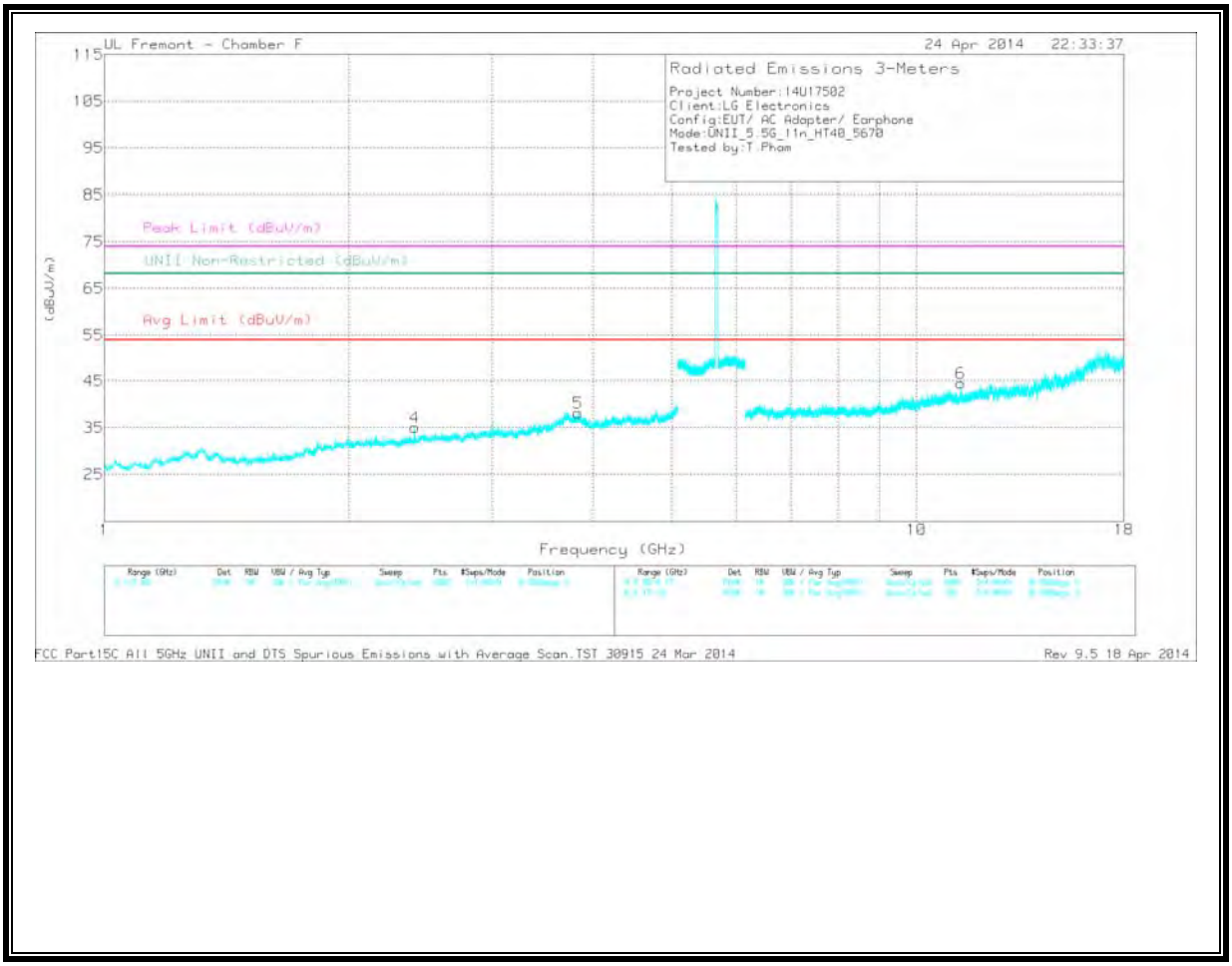
PK1 - KDB789033 Method: Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.6	32.59	PK	34.9	-29.5	37.99	-	-	74	-36.01	-	-	0-360	200	H
4	2.41	33.6	PK	32.2	-30.8	35	-	-	-	-	68.2	-33.2	0-360	101	V
5	* 3.827	33.06	PK	34.3	-29.2	38.16	-	-	74	-35.84	-	-	0-360	101	V
2	7.239	30.27	PK	35.5	-25.6	40.17	-	-	-	-	68.2	-28.03	0-360	200	H
3	* 12.057	28.95	PK	39	-23	44.95	-	-	74	-29.05	-	-	0-360	200	H
6	* 11.34	28.48	PK	38.2	-22.2	44.48	-	-	74	-29.52	-	-	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

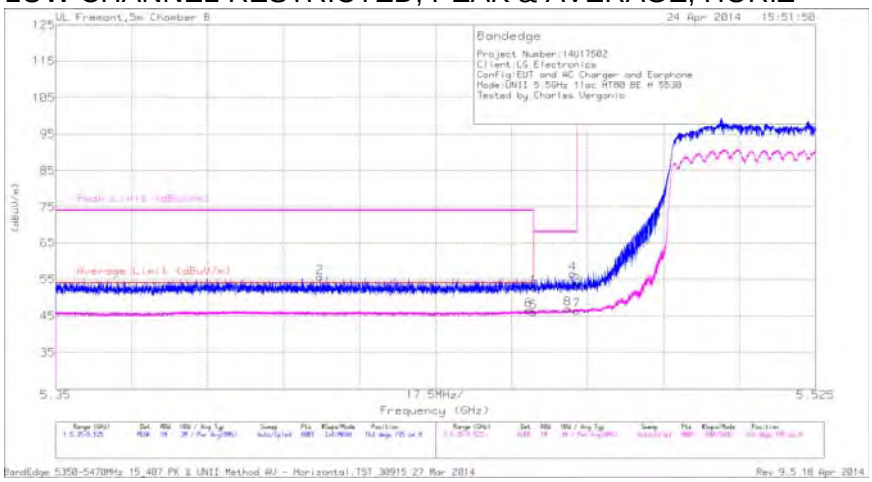
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.604	40.02	PK1	33.3	-29.8	43.52	-	-	-	-	68.2	-24.68	360	101	H
2.409	40.81	PK1	32.2	-30.8	42.21	-	-	-	-	68.2	-25.99	360	101	V
* 3.826	39.18	PK1	34.3	-29.2	44.28	-	-	74	-29.72	-	-	360	101	V
7.24	37.85	PK1	35.5	-25.7	47.65	-	-	-	-	68.2	-20.55	360	101	H
* 12.057	26.81	PK1	39	-23	42.81	-	-	74	-31.19	-	-	360	101	H
* 11.34	36.24	PK1	38.2	-22.2	52.24	-	-	74	-21.76	-	-	360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

11.3.7. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



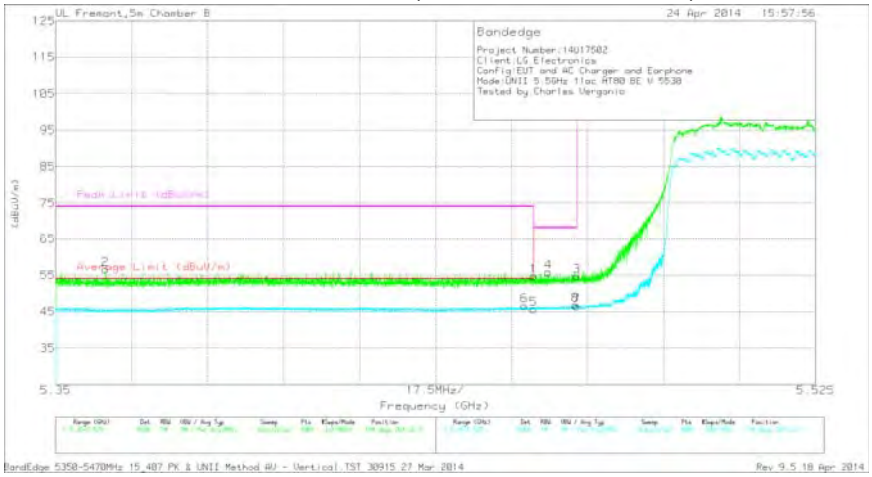
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.411	41.24	PK	34.5	-20.1	0	55.64	-	-	74	-18.36	163	195	H
6	* 5.459	30.52	RMS	34.5	-20	1.5	46.52	54	-7.48	-	-	163	195	H
1	* 5.46	38.29	PK	34.5	-20	0	52.79	-	-	74	-21.21	163	195	H
5	* 5.46	30.08	RMS	34.5	-20	1.5	46.08	54	-7.92	-	-	163	195	H
8	5.468	30.98	RMS	34.5	-20	1.5	46.98	-	-	-	-	163	195	H
4	5.469	42.05	PK	34.5	-20	0	56.55	-	-	68.2	-11.65	163	195	H
3	5.47	38.55	PK	34.5	-19.9	0	53.15	-	-	68.2	-15.05	163	195	H
7	5.47	30.38	RMS	34.5	-19.9	1.5	46.48	-	-	-	-	163	195	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.361	42.04	PK	34.5	-19.9	0	56.64	-	-	74	-17.36	194	264	V
6	* 5.458	30.63	RMS	34.5	-20	1.5	46.63	54	-7.37	-	-	194	264	V
1	* 5.46	40.27	PK	34.5	-20	0	54.77	-	-	74	-19.23	194	264	V
5	* 5.46	29.69	RMS	34.5	-20	1.5	45.69	54	-8.31	-	-	194	264	V
4	5.463	41.34	PK	34.5	-20	0	55.84	-	-	68.2	-12.36	194	264	V
3	5.47	40.14	PK	34.5	-19.9	0	54.74	-	-	68.2	-13.46	194	264	V
7	5.47	30.29	RMS	34.5	-19.9	1.5	46.39	-	-	-	-	194	264	V
8	5.47	30.68	RMS	34.5	-19.9	1.5	46.78	-	-	-	-	194	264	V

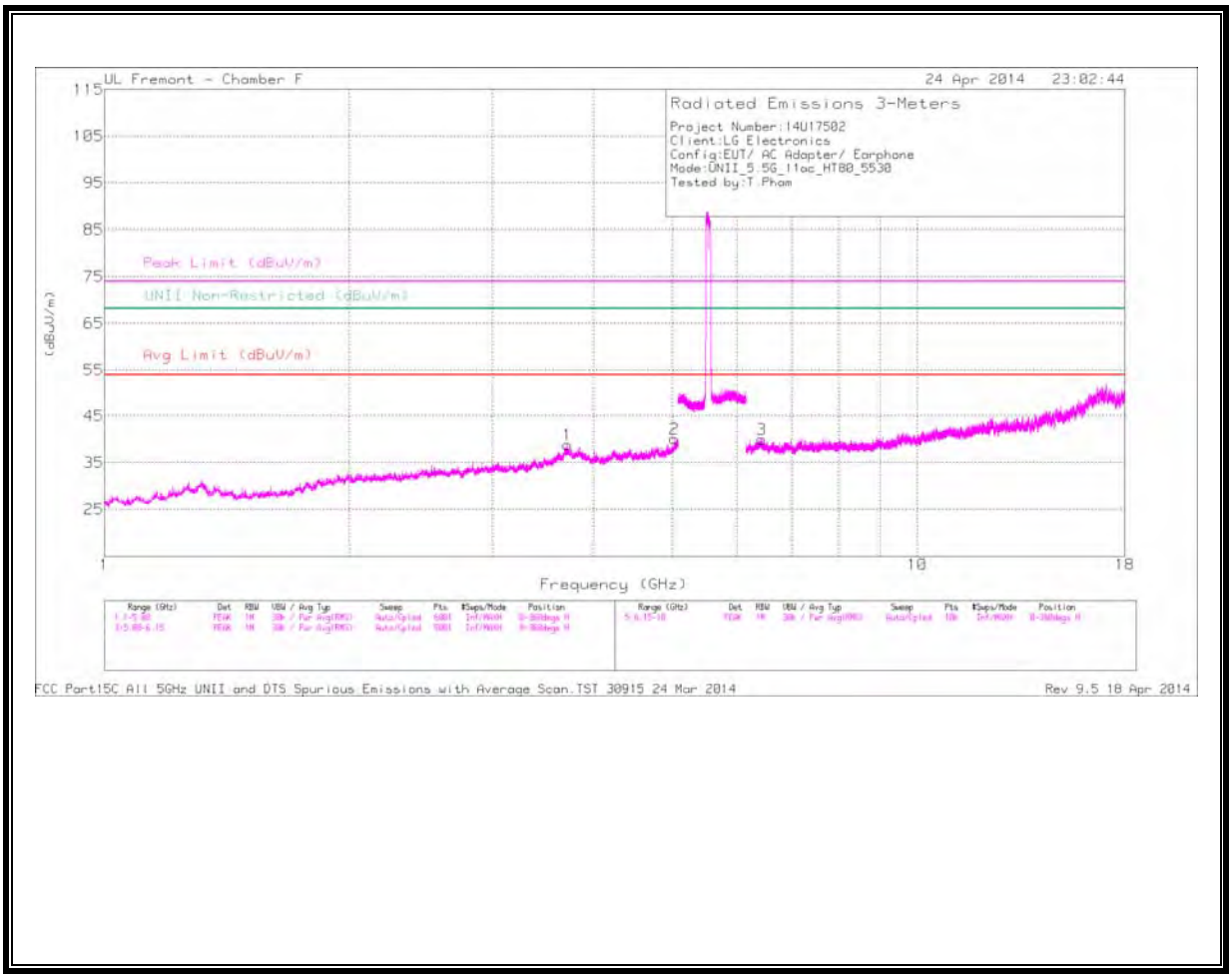
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

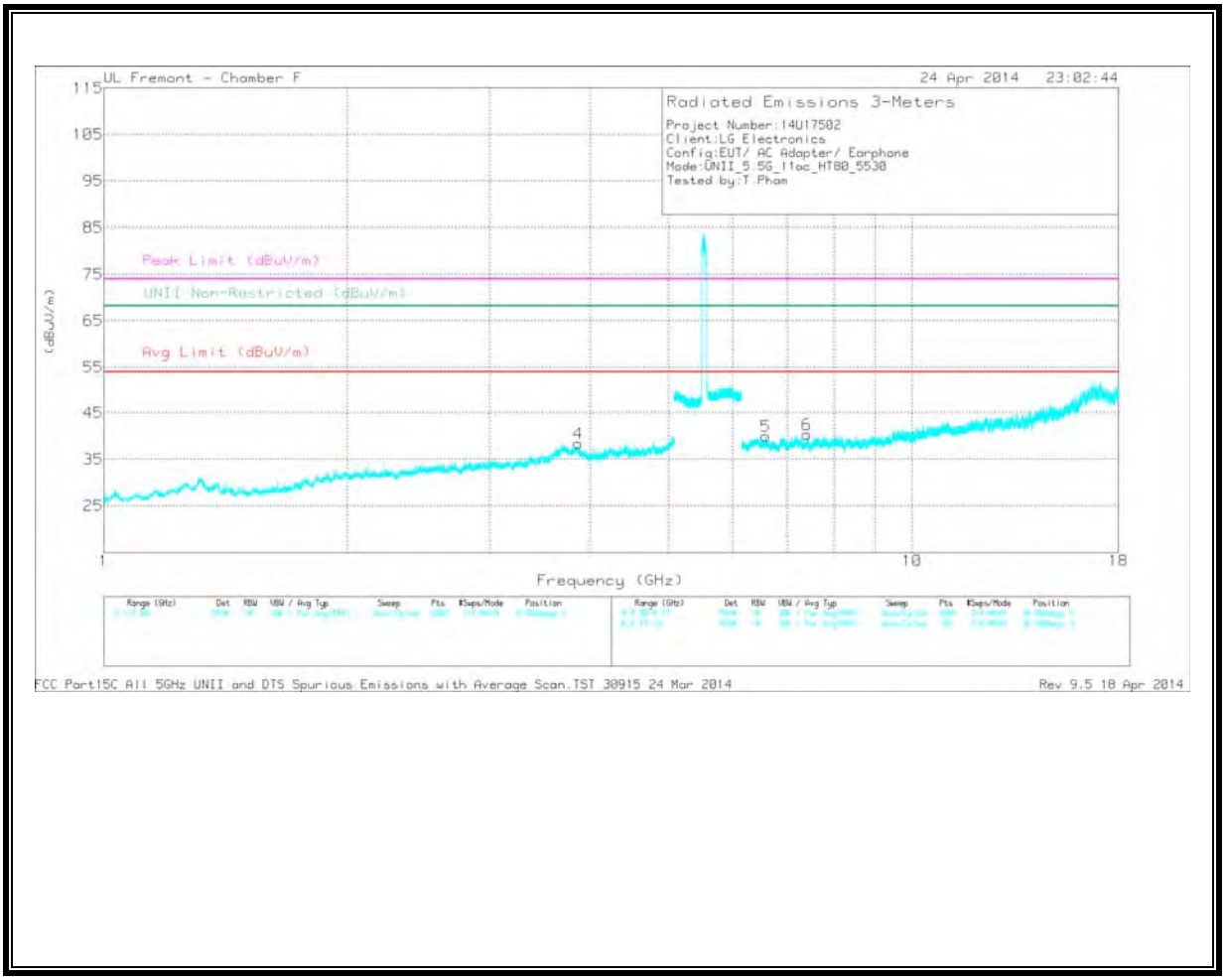
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.715	33.06	PK	34.8	-29.1	38.76	-	-	74	-35.24	-	-	0-360	101	H
2	* 5.026	32.56	PK	34.3	-26.7	40.16	-	-	74	-33.84	-	-	0-360	200	H
4	* 3.863	33.87	PK	34.1	-29.5	38.47	-	-	74	-35.53	-	-	0-360	101	V
3	6.431	31.44	PK	35.6	-27	40.04	-	-	-	-	68.2	-28.16	0-360	101	H
5	6.596	29.94	PK	35.7	-25.7	39.94	-	-	-	-	68.2	-28.26	0-360	201	V
6	* 7.405	30.82	PK	35.6	-26	40.42	-	-	74	-33.58	-	-	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

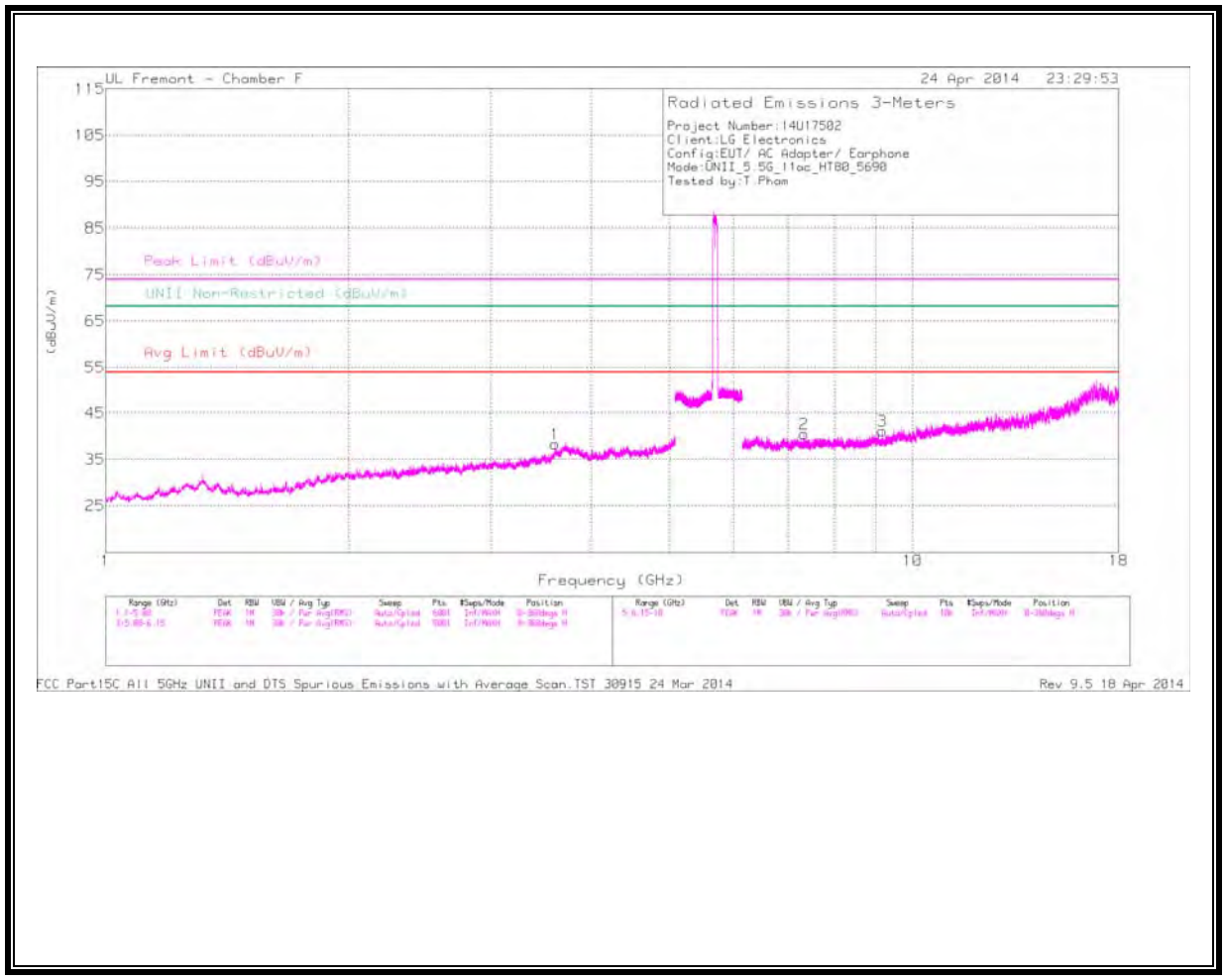
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.716	39.5	PK1	34.8	-29.2	45.1	-	-	74	-28.9	-	-	360	101	H
* 5.026	39.22	PK1	34.3	-26.7	46.82	-	-	74	-27.18	-	-	360	101	H
* 3.863	40.02	PK1	34.1	-29.5	44.62	-	-	74	-29.38	-	-	360	101	V
6.43	38.9	PK1	35.6	-27	47.5	-	-	-	-	68.2	-20.7	360	101	H
6.596	29.09	PK1	35.7	-25.7	39.09	-	-	-	-	68.2	-29.11	360	101	V
* 7.405	38.16	PK1	35.6	-26	47.76	-	-	74	-26.24	-	-	360	101	V

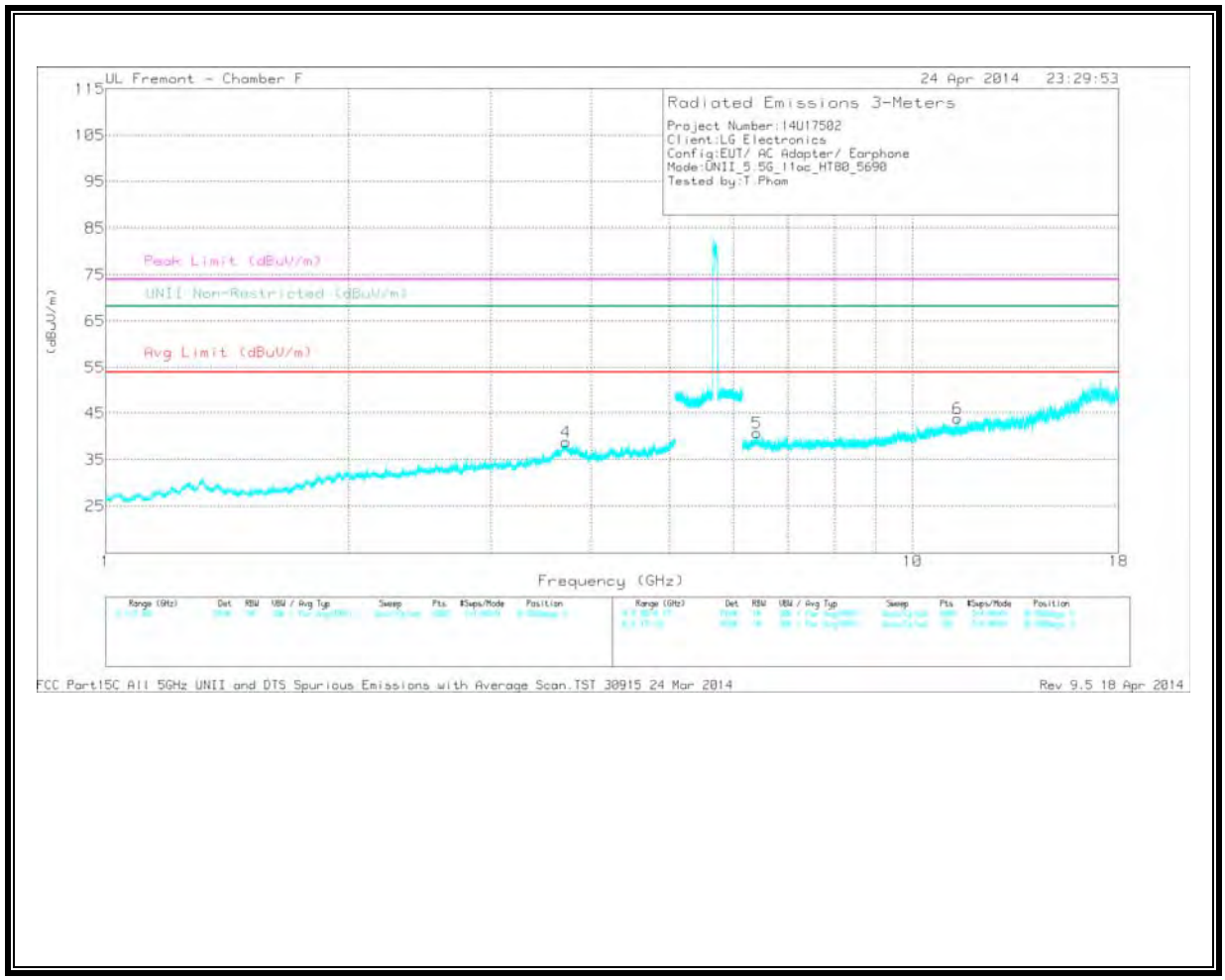
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

HIGH CHANNEL
HORIZONTAL



VERTICAL



HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.607	32.95	PK	34.9	-29.6	38.25	-	-	74	-35.75	-	-	0-360	101	H
4	* 3.719	33.18	PK	34.8	-29.2	38.78	-	-	74	-35.22	-	-	0-360	201	V
2	* 7.339	30.22	PK	35.6	-25.3	40.52	-	-	74	-33.48	-	-	0-360	101	H
3	* 9.174	28.16	PK	36.2	-23.2	41.16	-	-	74	-32.84	-	-	0-360	199	H
5	6.413	31.79	PK	35.6	-26.6	40.79	-	-	-	-	68.2	-27.41	0-360	201	V
6	* 11.38	28.25	PK	38.2	-22.6	43.85	-	-	74	-30.15	-	-	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.607	39.5	PK1	34.9	-29.6	44.8	-	-	74	-29.2	-	-	360	101	H
* 3.719	39.62	PK1	34.8	-29.2	45.22	-	-	74	-28.78	-	-	360	101	V
* 7.339	37.18	PK1	35.6	-25.3	47.48	-	-	74	-26.52	-	-	360	101	H
* 9.175	35.43	PK1	36.2	-23.2	48.43	-	-	74	-25.57	-	-	360	101	H
6.413	38.7	PK1	35.6	-26.6	47.7	-	-	-	-	68.2	-20.5	360	101	V
* 11.38	29.59	PK1	38.2	-22.6	45.19	-	-	74	-28.81	-	-	360	101	V

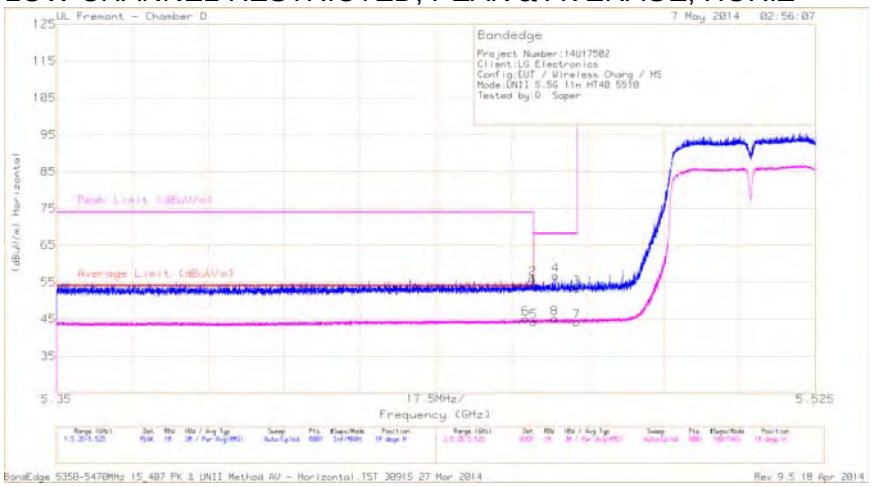
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

WORST CASE HARMONICS AND SPURIOUS EMISSIONS WITH WPC CHARGER AND COVER

RESTRICTED BANDEDGE WITH WPC CHARGER AND COVER (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, HORIZ



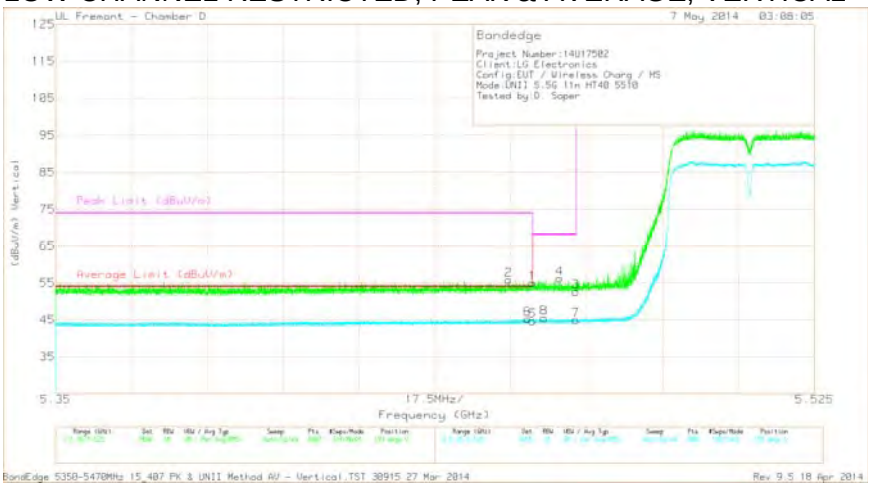
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 5.458	28.61	RMS	33.9	-17.8	.5	45.11	54	-8.89	-	-	18	256	H
1	* 5.46	37.64	PK	33.9	-17.8	0	53.74	-	-	74	-20.26	18	256	H
2	* 5.46	39.83	PK	33.9	-17.8	0	55.93	-	-	74	-18.07	18	256	H
5	* 5.46	27.76	RMS	33.9	-17.8	.5	44.26	54	-9.74	-	-	18	256	H
4	5.465	40.64	PK	33.9	-17.8	0	56.74	-	-	68.2	-11.46	18	256	H
8	5.465	28.64	RMS	33.9	-17.8	.5	45.14	-	-	-	-	18	256	H
3	5.47	37.3	PK	33.9	-17.9	0	53.3	-	-	68.2	-14.9	18	256	H
7	5.47	27.88	RMS	33.9	-17.9	.5	44.28	-	-	-	-	18	256	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK & AVERAGE, VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.454	39.83	PK	33.9	-17.9	0	55.83	-	-	74	-18.17	199	255	V
6	* 5.459	28.72	RMS	33.9	-17.8	.5	45.22	54	-8.78	-	-	199	255	V
1	* 5.46	38.87	PK	33.9	-17.8	0	54.97	-	-	74	-19.03	199	255	V
5	* 5.46	28.17	RMS	33.9	-17.8	.5	44.67	54	-9.33	-	-	199	255	V
8	5.463	28.9	RMS	33.9	-17.7	.5	45.5	-	-	-	-	199	255	V
4	5.466	40.1	PK	33.9	-17.8	0	56.2	-	-	68.2	-12	199	255	V
3	5.47	36.61	PK	33.9	-17.9	0	52.61	-	-	68.2	-15.59	199	255	V
7	5.47	28.55	RMS	33.9	-17.9	.5	44.95	-	-	-	-	199	255	V

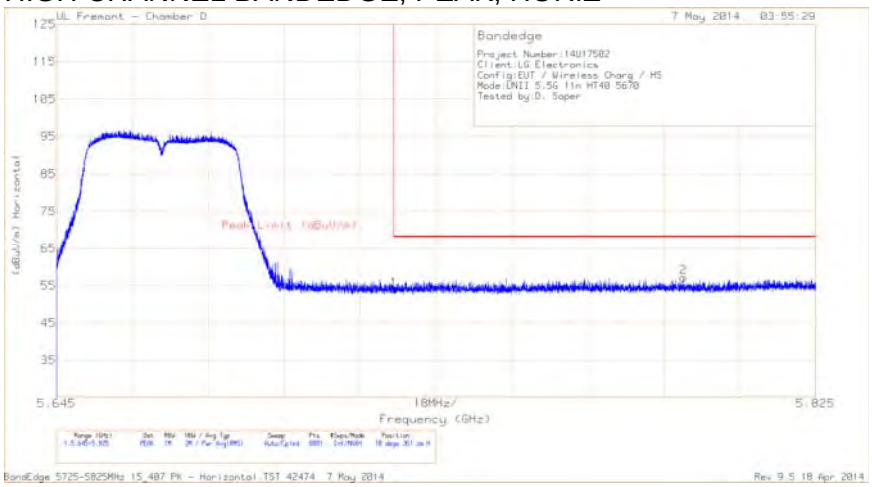
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

(HIGH CHANNEL)

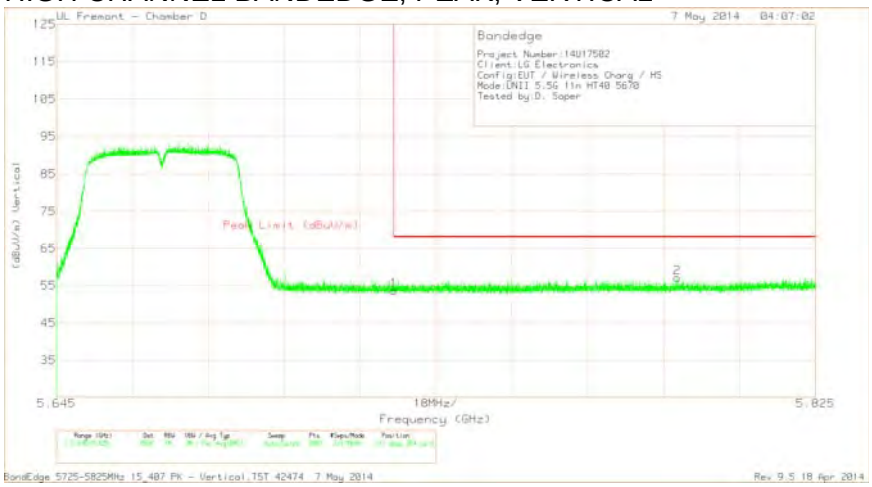
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.33	PK	34.2	-17.6	53.93	68.2	-14.27	10	361	H
2	5.794	40.54	PK	34.3	-17.6	57.24	68.2	-10.96	10	361	H

PK - Peak detector

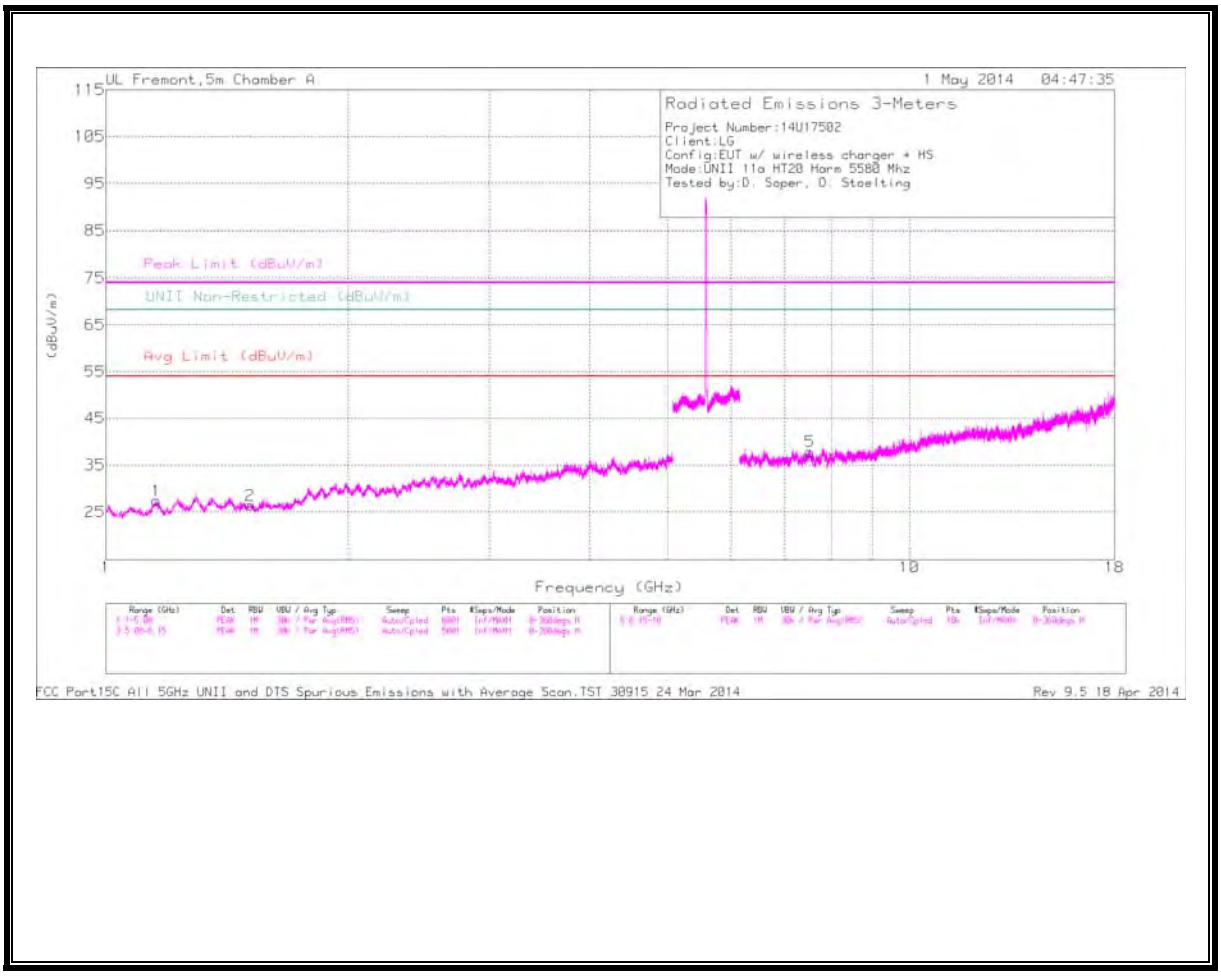
HIGH CHANNEL BANDEDGE, PEAK, VERTICAL



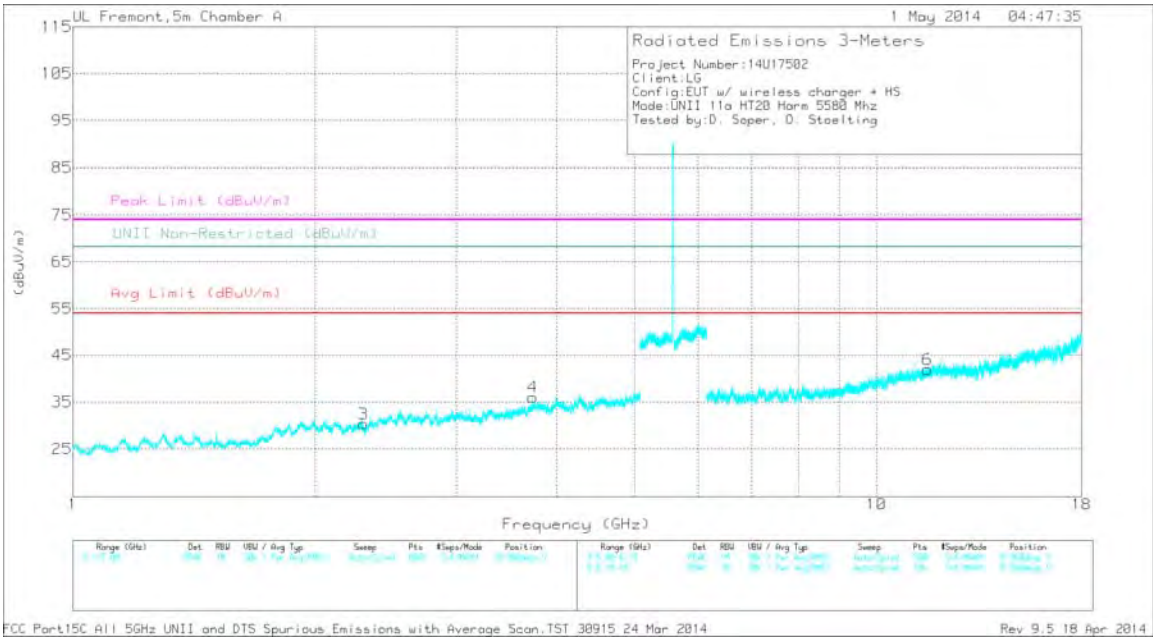
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	37.12	PK	34.2	-17.6	0	53.72	68.2	-14.48	311	354	V
2	5.792	40.47	PK	34.3	-17.6	0	57.17	68.2	-11.03	311	354	V

PK - Peak detector

HORIZONTAL



VERTICAL



CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.156	35.23	PK	28.9	-36.7	0	27.43	-	-	74	-46.57	-	-	0-360	100	H
2	* 1.511	33.31	PK	28.7	-35.6	0	26.41	-	-	74	-47.59	-	-	0-360	200	H
3	* 2.299	33.26	PK	31.5	-34.4	0	30.36	-	-	74	-43.64	-	-	0-360	100	V
4	* 3.735	32.48	PK	33.5	-29.9	0	36.08	-	-	74	-37.92	-	-	0-360	100	V
5	* 7.525	27.77	PK	35.3	-25.2	0	37.87	-	-	74	-36.13	-	-	0-360	200	H
6	* 11.574	25.88	PK	38.4	-22.3	0	41.98	-	-	74	-32.02	-	-	0-360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.499	42.96	PK1	28.7	-36.6	0	35.06	-	-	74	-38.94	-	-	360	100	H
* 1.501	31.46	AD1	28.7	-36.6	.2	23.76	54	-30.24	-	-	-	-	360	100	H

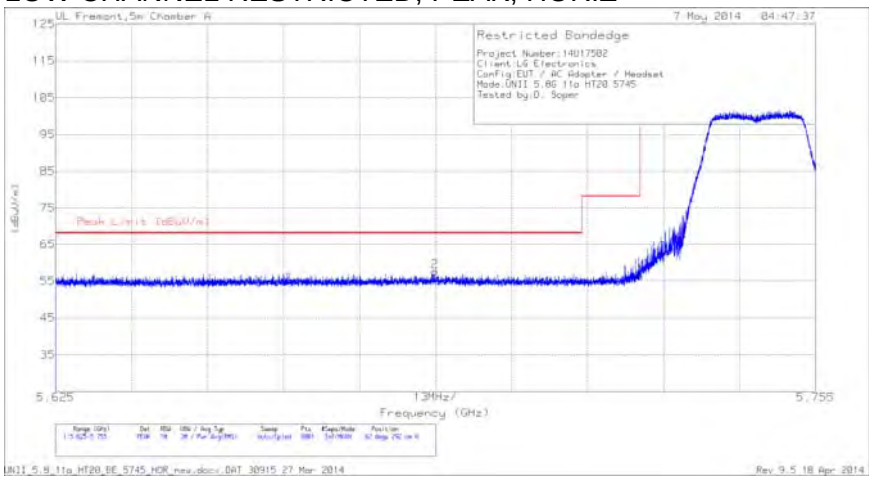
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

11.4. 5.8 GHz

11.4.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

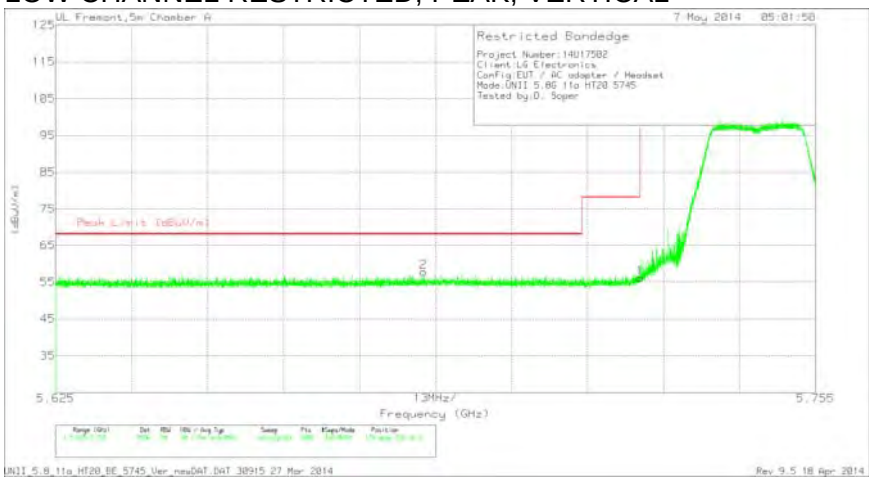
LOW CHANNEL RESTRICTED, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.69	40.67	PK	34.1	-17.2	57.57	68.2	-10.63	62	292	H
1	5.725	39.81	PK	34.2	-17.6	56.41	78.2	-21.79	62	292	H

PK - Peak detector

LOW CHANNEL RESTRICTED, PEAK, VERTICAL

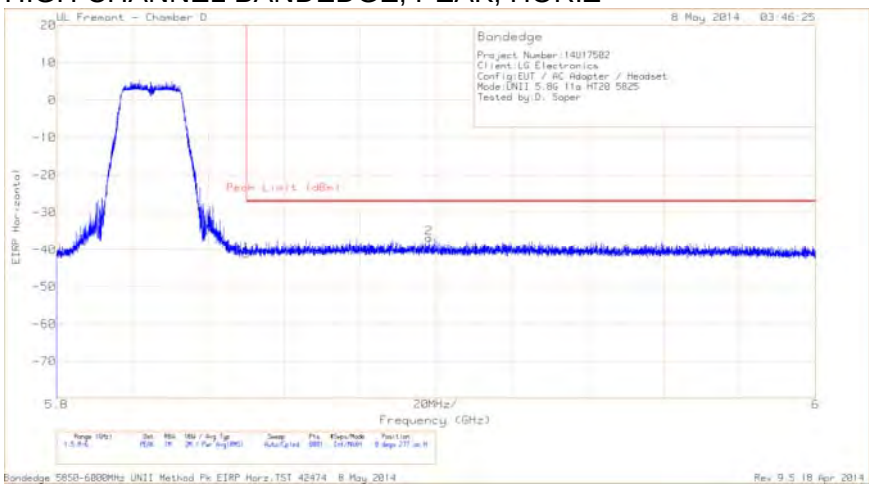


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.688	40.83	PK	34.1	-17.2	0	57.73	68.2	-10.47	179	236	V
1	5.725	39.53	PK	34.2	-17.6	0	56.13	78.2	-22.07	179	236	V

PK - Peak detector

RESTRICTED BANDEDGE (HIGH CHANNEL)

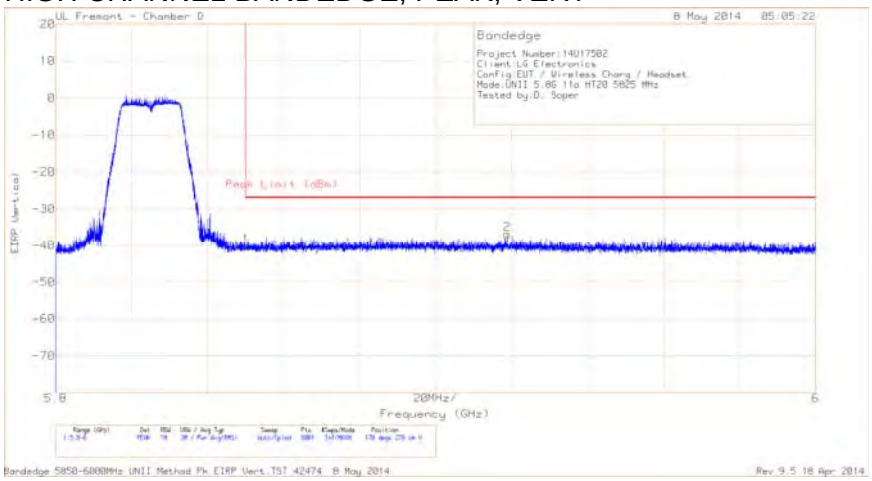
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-69.99	PK	34.4	-17.4	11.8	-41.19	-27	-14.19	0	277	H
2	5.898	-66.22	PK	34.4	-16.8	11.8	-36.82	-27	-9.82	0	277	H

PK - Peak detector

HIGH CHANNEL BANDEDGE, PEAK, VERT

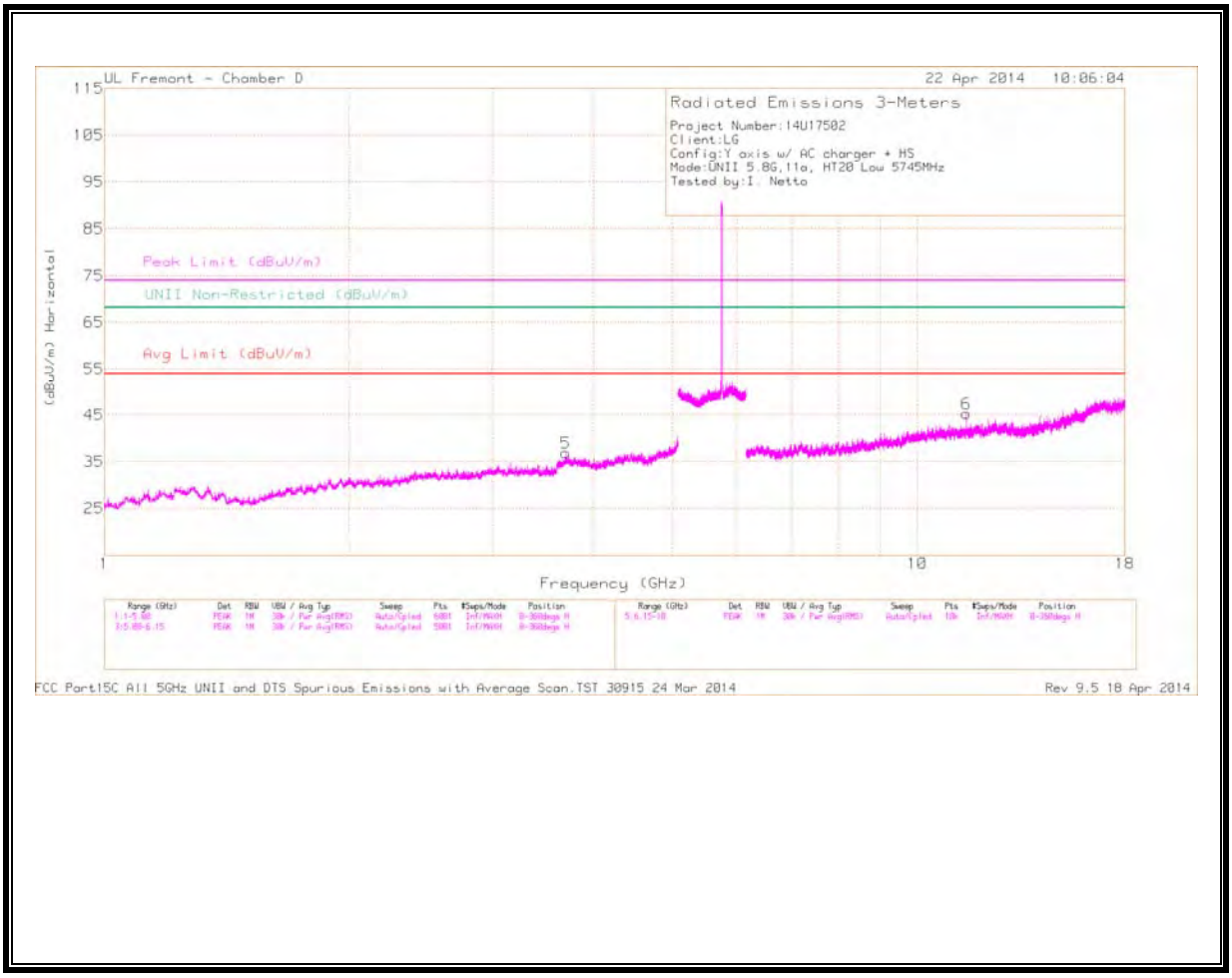


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.96	PK	34.4	-17.4	11.8	-40.16	-27	-13.16	170	276	V
2	5.919	-66.33	PK	34.5	-16.8	11.8	-36.83	-27	-9.83	170	276	V

PK - Peak detector

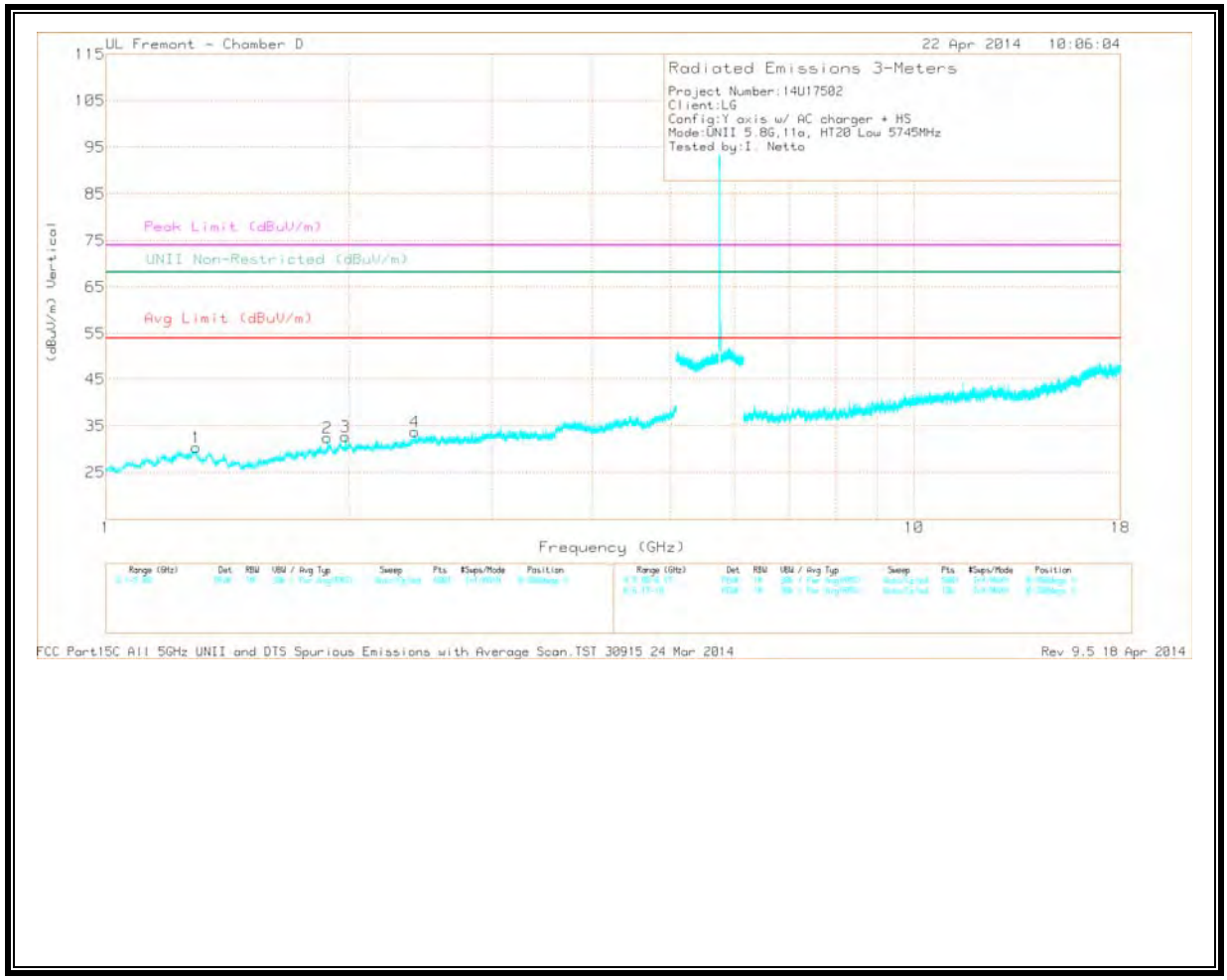
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 3.696	32.87	PK	32.6	-28.6	0	36.87	-	-	74	-37.13	-	-	0-360	100	H
1	* 1.294	32.37	PK	29.1	-31.1	0	30.37	-	-	74	-43.63	-	-	0-360	201	V
6	* 11.489	29.56	PK	37.7	-21.9	0	45.36	-	-	74	-28.64	-	-	0-360	100	H
2	1.88	32.93	PK	30.1	-30.6	0	32.43	-	-	-	-	68.2	-35.77	0-360	201	V
3	1.98	32.71	PK	30.6	-30.6	0	32.71	-	-	-	-	68.2	-35.49	0-360	201	V
4	2.41	32.45	PK	31.6	-30.3	0	33.75	-	-	-	-	68.2	-34.45	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

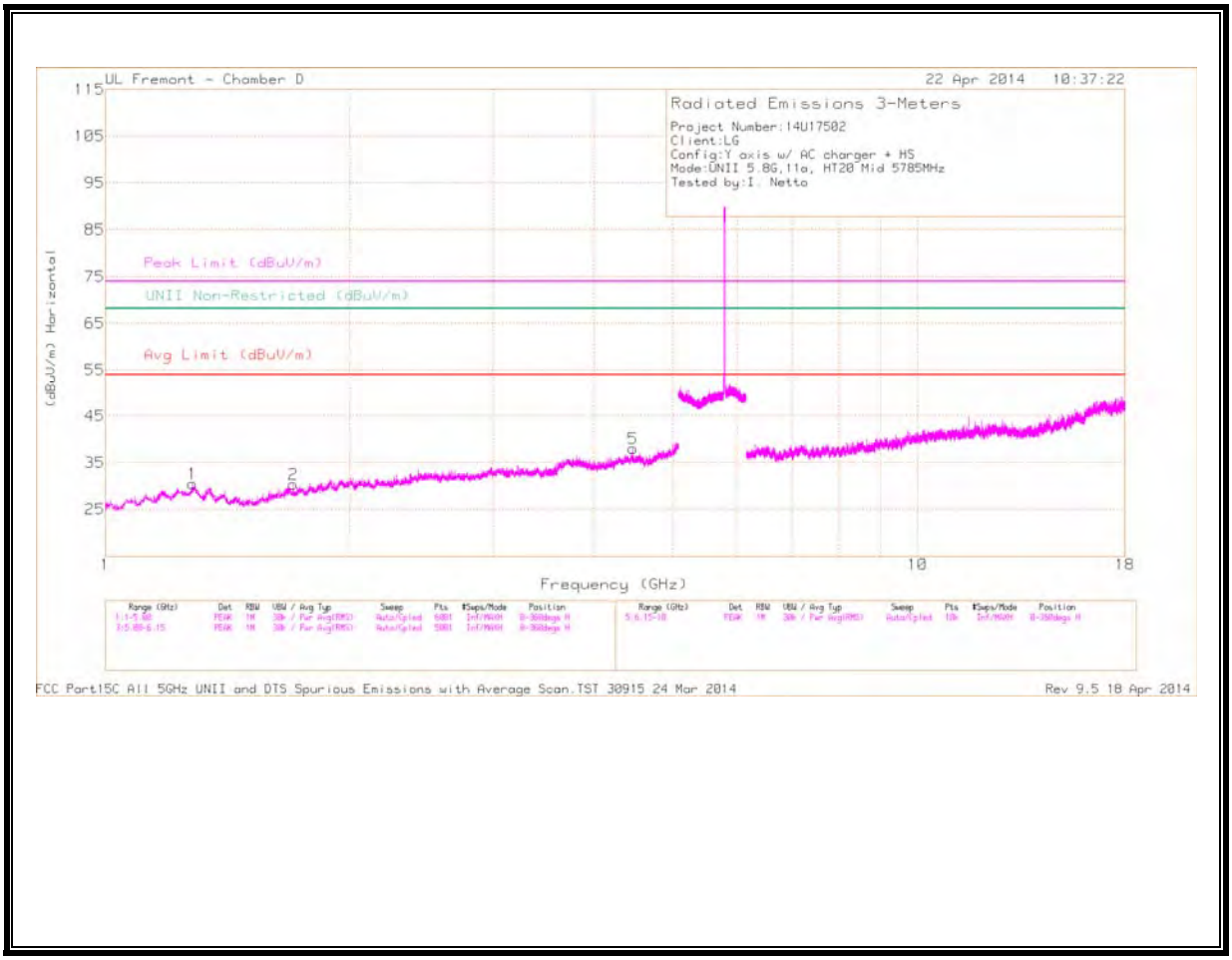
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.694	38.83	PK2	32.6	-28.6	0	42.83	-	-	74	-31.17	-	-	360	100	H
* 1.293	39.96	PK2	29.1	-31.2	0	37.86	-	-	74	-36.14	-	-	360	100	V
* 11.49	37.59	PK2	37.7	-21.9	0	53.39	-	-	74	-20.61	-	-	360	108	H
* 11.49	27.93	AD1	37.7	-21.9	.2	43.93	54	-10.07	-	-	-	-	360	108	H
1.881	39.6	PK2	30.1	-30.6	0	39.1	-	-	-	-	68.2	-29.1	360	100	V
1.98	39.52	PK2	30.6	-30.6	0	39.52	-	-	-	-	68.2	-28.68	360	100	V
2.408	41.13	PK2	31.6	-30.3	0	42.43	-	-	-	-	68.2	-25.77	360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

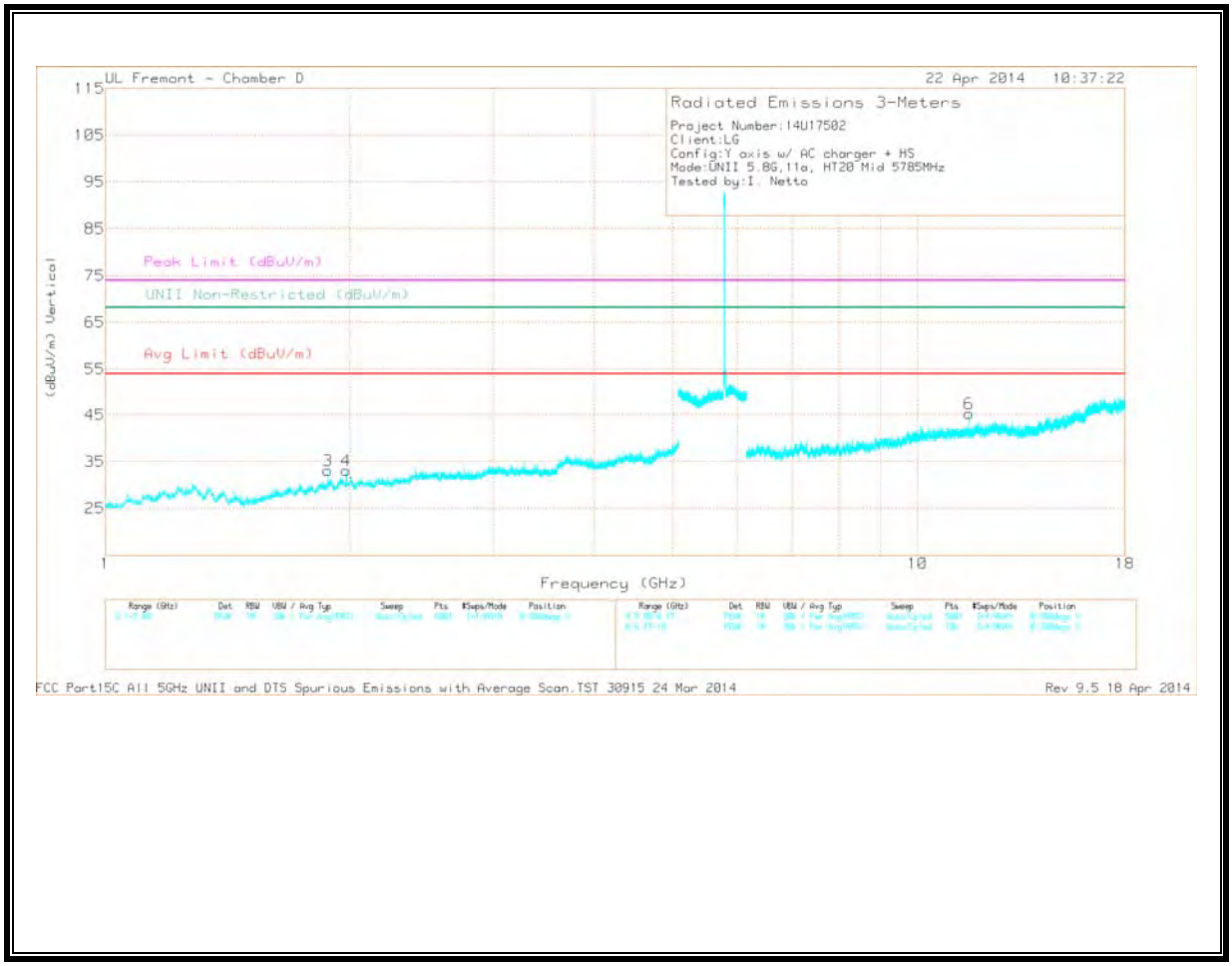
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.28	32.62	PK	29.3	-31.4	0	30.52	-	-	74	-43.48	-	-	0-360	100	H
2	* 1.704	32.48	PK	28.9	-31	0	30.38	-	-	74	-43.62	-	-	0-360	100	H
6	* 11.57	29.56	PK	37.8	-22	0	45.36	-	-	74	-28.64	-	-	0-360	201	V
3	1.88	33.56	PK	30.1	-30.6	0	33.06	-	-	-	-	68.2	-35.14	0-360	100	V
4	1.98	33.13	PK	30.6	-30.6	0	33.13	-	-	-	-	68.2	-35.07	0-360	201	V
5	4.463	32.25	PK	33.4	-27.6	0	38.05	-	-	-	-	68.2	-30.15	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

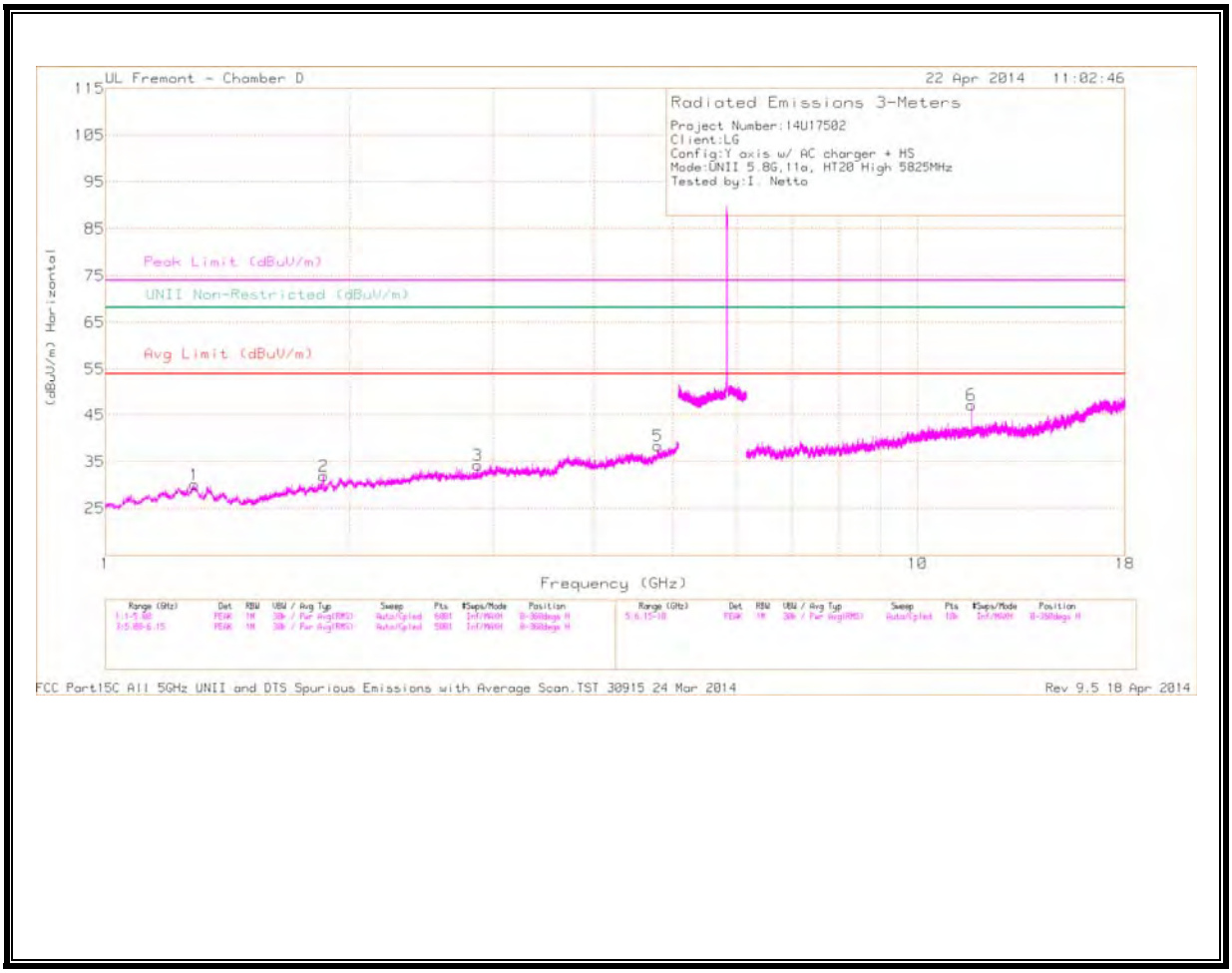
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.28	40.85	PK2	29.3	-31.4	0	38.75	-	-	74	-35.25	-	-	360	100	H
* 1.707	39.72	PK2	29	-31	0	37.72	-	-	74	-36.28	-	-	360	100	H
* 11.57	37.08	PK2	37.8	-22	0	52.88	-	-	74	-21.12	-	-	266	168	V
* 11.57	27.81	AD1	37.8	-22	.2	43.81	54	-10.19	-	-	-	-	266	168	V
1.879	39.87	PK2	30.1	-30.6	0	39.37	-	-	-	-	68.2	-28.83	360	100	V
1.98	39.81	PK2	30.6	-30.6	0	39.81	-	-	-	-	68.2	-28.39	360	100	V
4.464	38.08	PK2	33.4	-27.6	0	43.88	-	-	-	-	68.2	-24.32	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

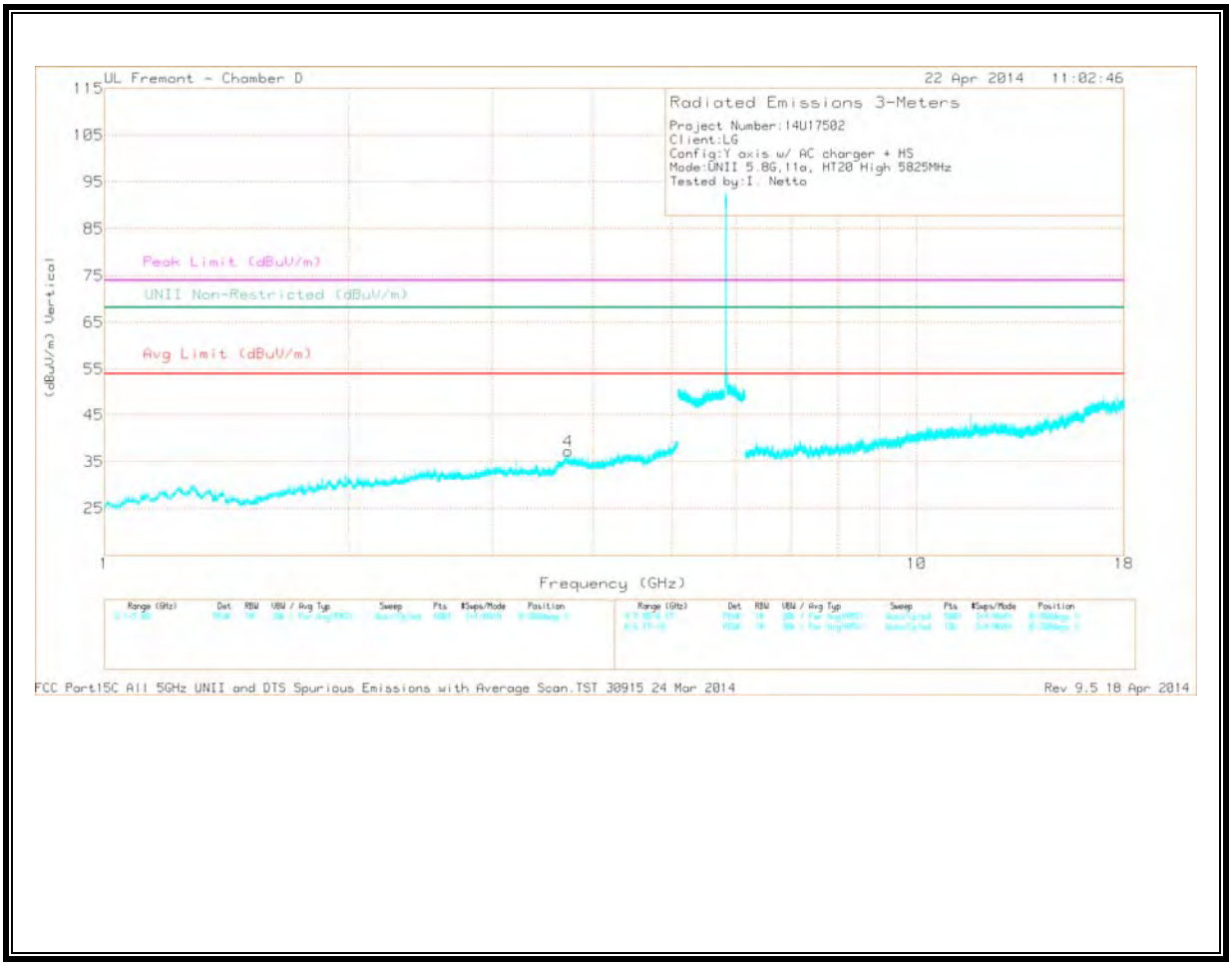
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.287	32.12	PK	29.2	-31.2	0	30.12	-	-	74	-43.88	-	-	0-360	201	H
3	* 2.871	32.43	PK	32	-30.2	0	34.23	-	-	74	-39.77	-	-	0-360	201	H
5	* 4.792	31.87	PK	33.5	-26.9	0	38.47	-	-	74	-35.53	-	-	0-360	201	H
4	* 3.723	33.23	PK	32.7	-28.7	0	37.23	-	-	74	-36.77	-	-	0-360	201	V
6	* 11.649	31.39	PK	37.8	-22	0	47.19	-	-	74	-26.81	-	-	0-360	100	H
2	1.855	32.89	PK	29.9	-30.8	0	31.99	-	-	-	-	68.2	-36.21	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

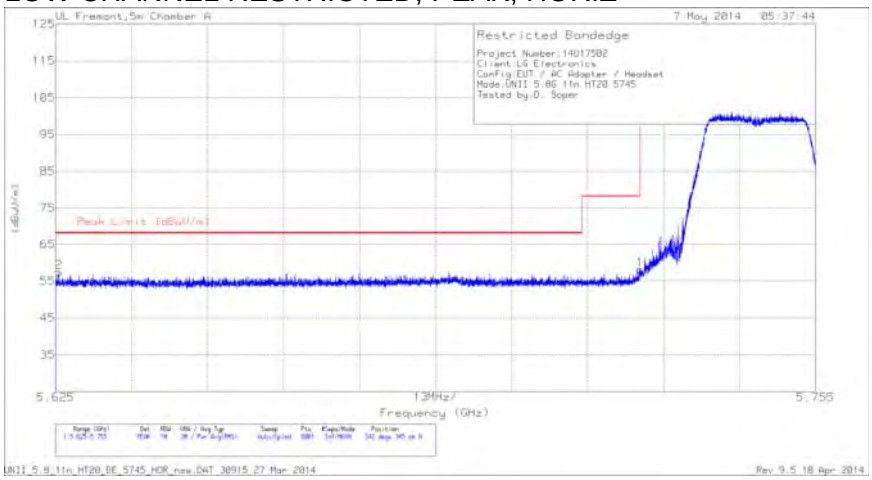
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.286	40.51	PK2	29.2	-31.2	0	38.51	-	-	74	-35.49	-	-	360	100	H
* 2.869	39.92	PK2	32	-30.2	0	41.72	-	-	74	-32.28	-	-	360	100	H
* 4.791	38.65	PK2	33.5	-26.9	0	45.25	-	-	74	-28.75	-	-	360	100	H
* 3.723	38.28	PK2	32.7	-28.7	0	42.28	-	-	74	-31.72	-	-	360	100	V
* 11.65	37.91	PK2	37.8	-22	0	53.71	-	-	74	-20.29	-	-	355	122	H
* 11.65	30.02	AD1	37.8	-22	.2	46.02	54	-7.98	-	-	-	-	355	122	H
1.855	39.53	PK2	29.9	-30.8	0	38.63	-	-	-	-	68.2	-29.57	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

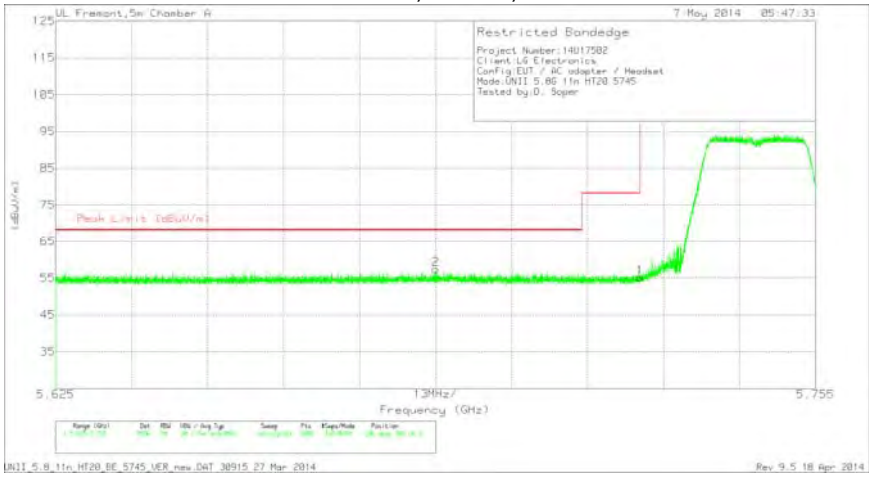
LOW CHANNEL RESTRICTED, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.626	40.92	PK	34.1	-17.6	57.42	68.2	-10.78	342	345	H
1	5.725	41.53	PK	34.2	-17.6	58.13	78.2	-20.07	342	345	H

PK - Peak detector

LOW CHANNEL RESTRICTED, PEAK, VERTICAL

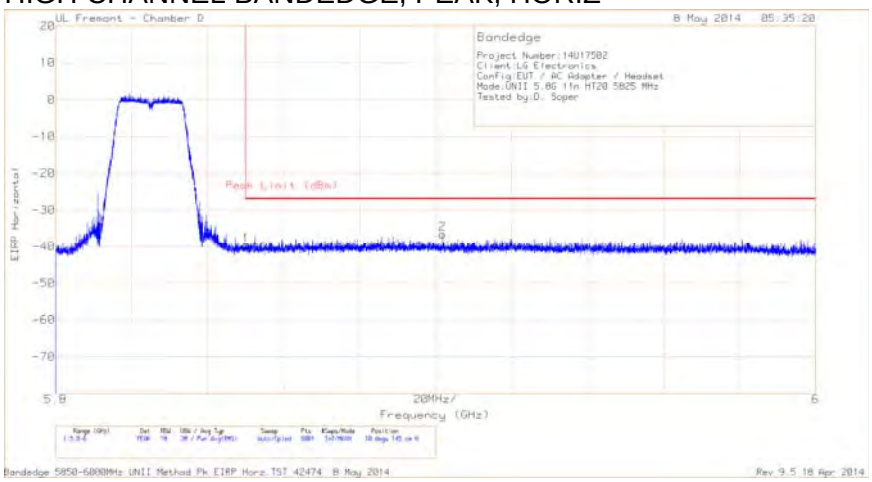


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.69	40.5	PK	34.1	-17.2	57.4	68.2	-10.8	296	386	V
1	5.725	38.61	PK	34.2	-17.6	55.21	78.2	-22.99	296	386	V

PK - Peak detector

RESTRICTED BANDEDGE (HIGH CHANNEL)

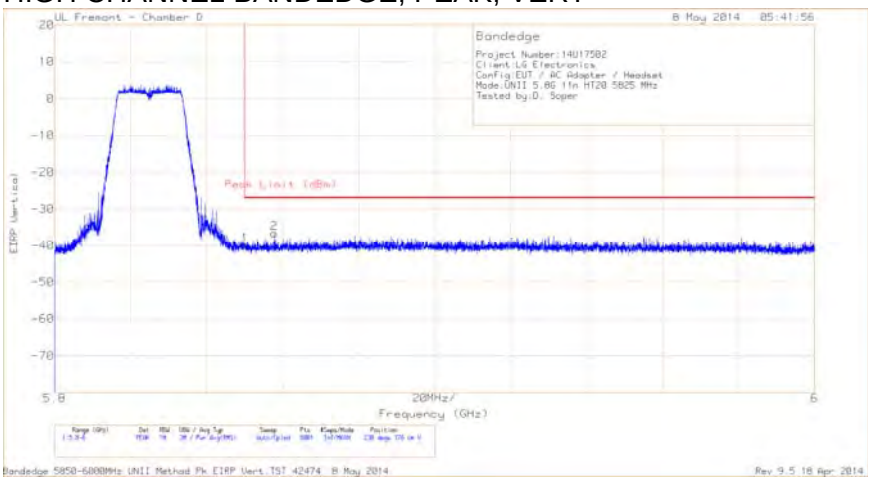
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.45	PK	34.4	-17.4	11.8	-39.65	-27	-12.65	10	145	H
2	5.902	-65.72	PK	34.4	-17	11.8	-36.52	-27	-9.52	10	145	H

PK - Peak detector

HIGH CHANNEL BANDEDGE, PEAK, VERT

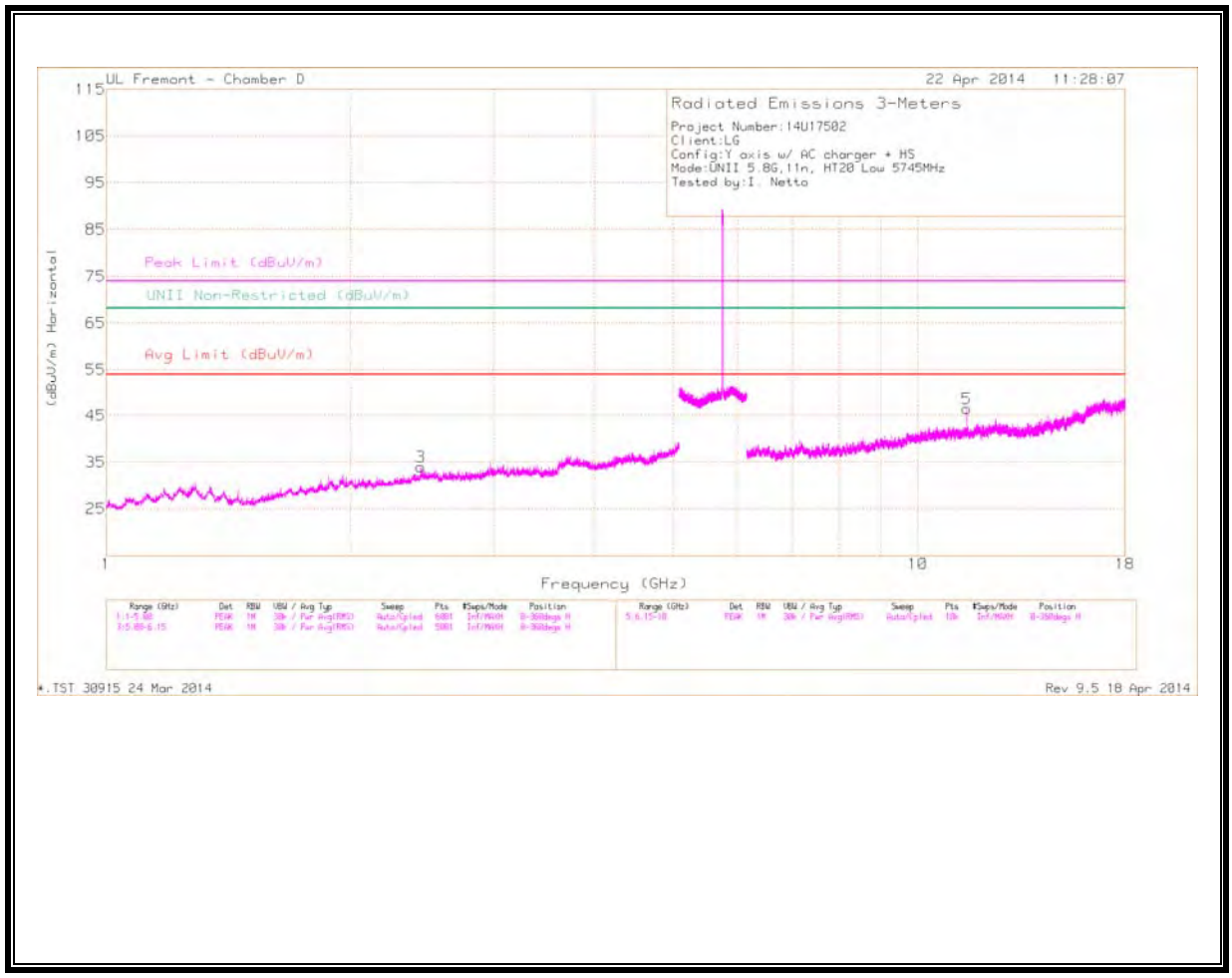


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.6	PK	34.4	-17.4	11.8	-39.8	-27	-12.8	230	376	V
2	5.858	-65.53	PK	34.4	-17.3	11.8	-36.63	-27	-9.63	230	376	V

PK - Peak detector

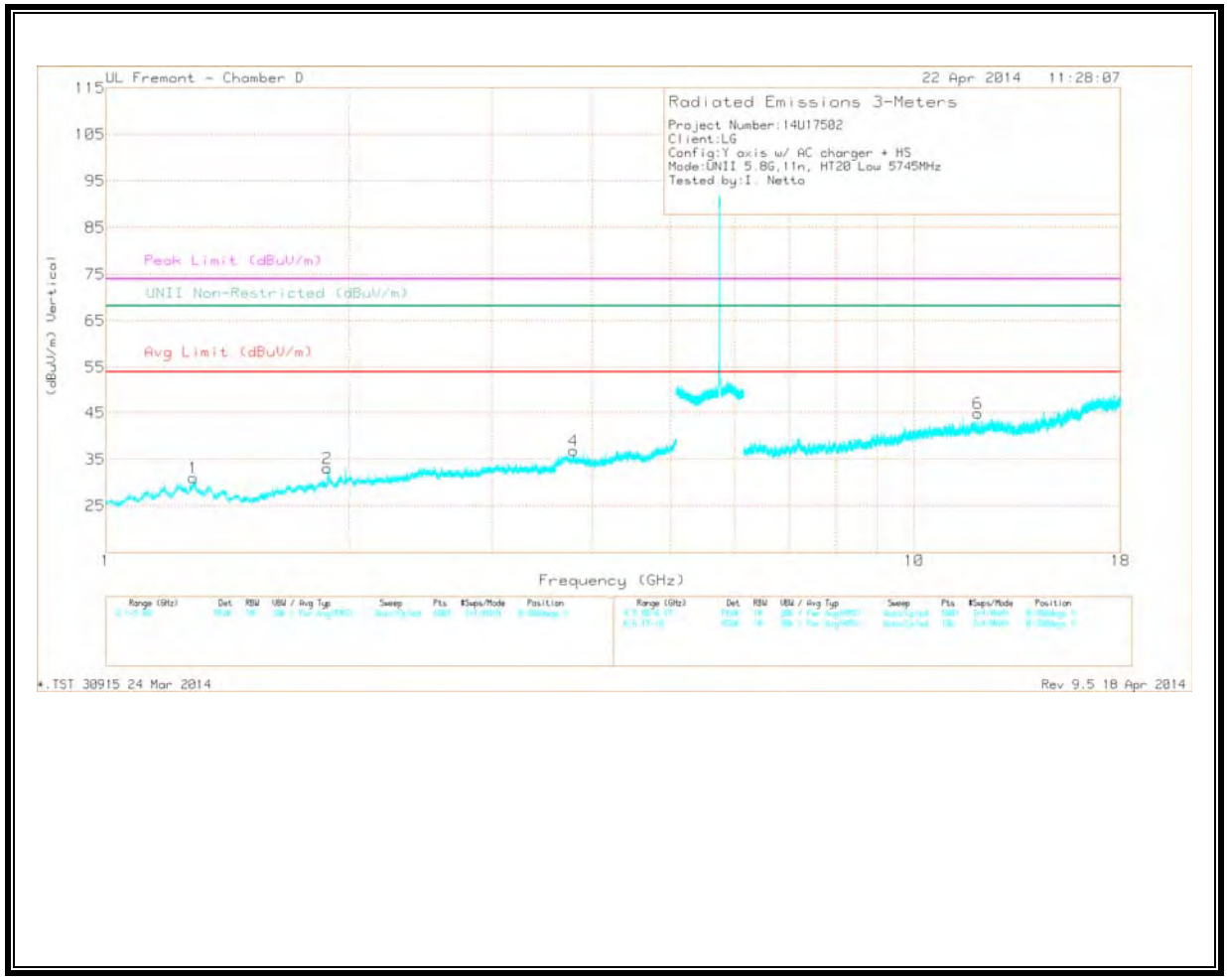
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.284	33.1	PK	29.2	-31.3	0	31	-	-	74	-43	-	-	0-360	100	V
4	* 3.79	33.03	PK	32.7	-28.9	0	36.83	-	-	74	-37.17	-	-	0-360	100	V
5	* 11.49	30.65	PK	37.7	-21.9	0	46.45	-	-	74	-27.55	-	-	0-360	100	H
6	* 11.997	28.57	PK	38.2	-21.8	0	44.97	-	-	74	-29.03	-	-	0-360	201	V
2	1.88	33.64	PK	30.1	-30.6	0	33.14	-	-	-	-	68.2	-35.06	0-360	201	V
3	2.441	32.18	PK	31.8	-30	0	33.98	-	-	-	-	68.2	-34.22	0-360	201	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

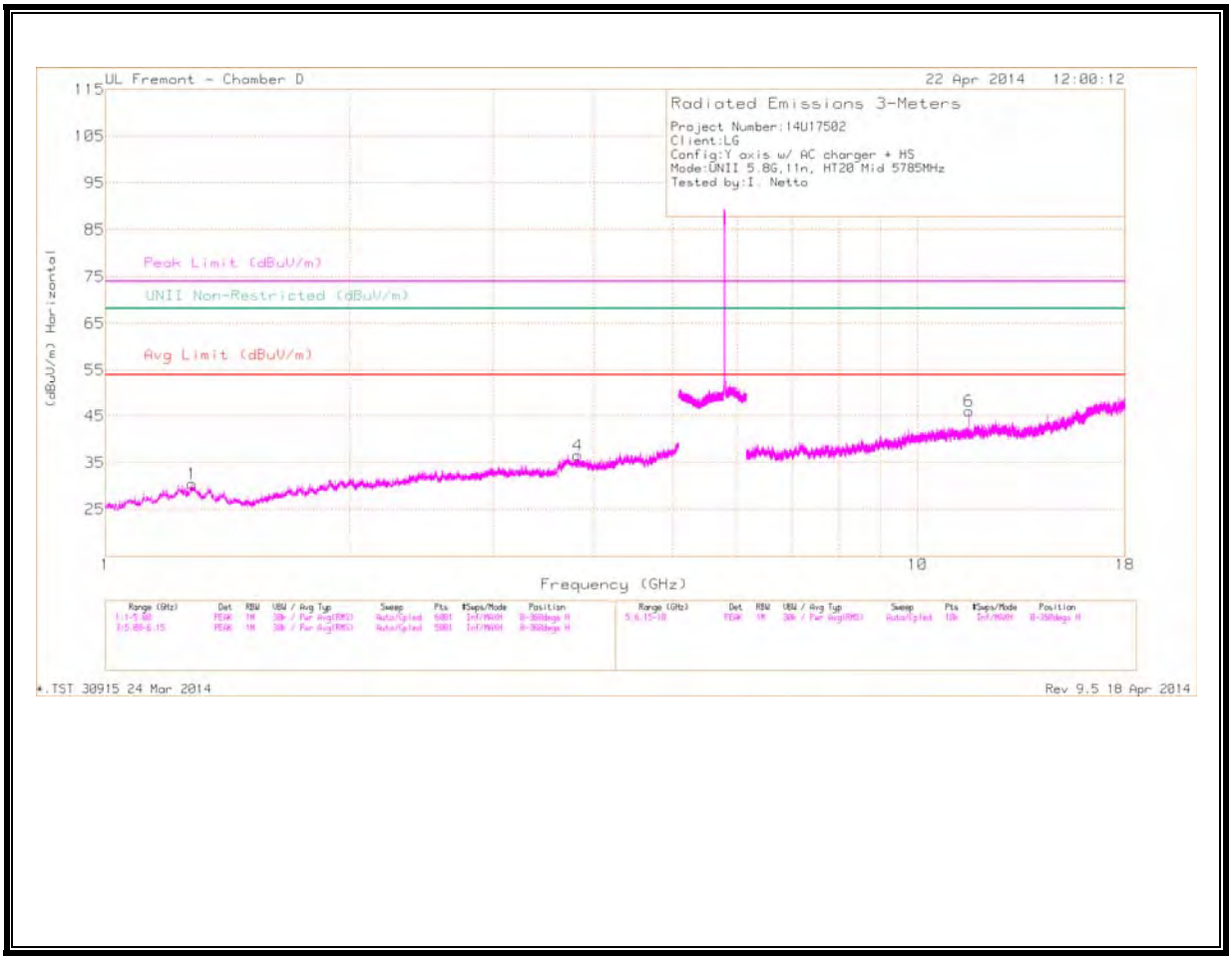
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.285	40.9	PK2	29.2	-31.3	0	38.8	-	-	74	-35.2	-	-	360	100	V
* 11.49	38.09	PK2	37.7	-21.9	0	53.89	-	-	74	-20.11	-	-	351	133	H
* 11.49	29.58	AD1	37.7	-21.9	.2	45.58	54	-8.42	-	-	-	-	351	133	H
* 11.998	34.76	PK2	38.2	-21.8	0	51.16	-	-	74	-22.84	-	-	277	348	V
* 11.998	23.48	AD1	38.2	-21.8	.2	40.08	54	-13.92	-	-	-	-	277	348	V
1.88	40.27	PK2	30.1	-30.6	0	39.77	-	-	-	-	68.2	-28.43	360	100	V
2.44	39.81	PK2	31.8	-30	0	41.61	-	-	-	-	68.2	-26.59	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

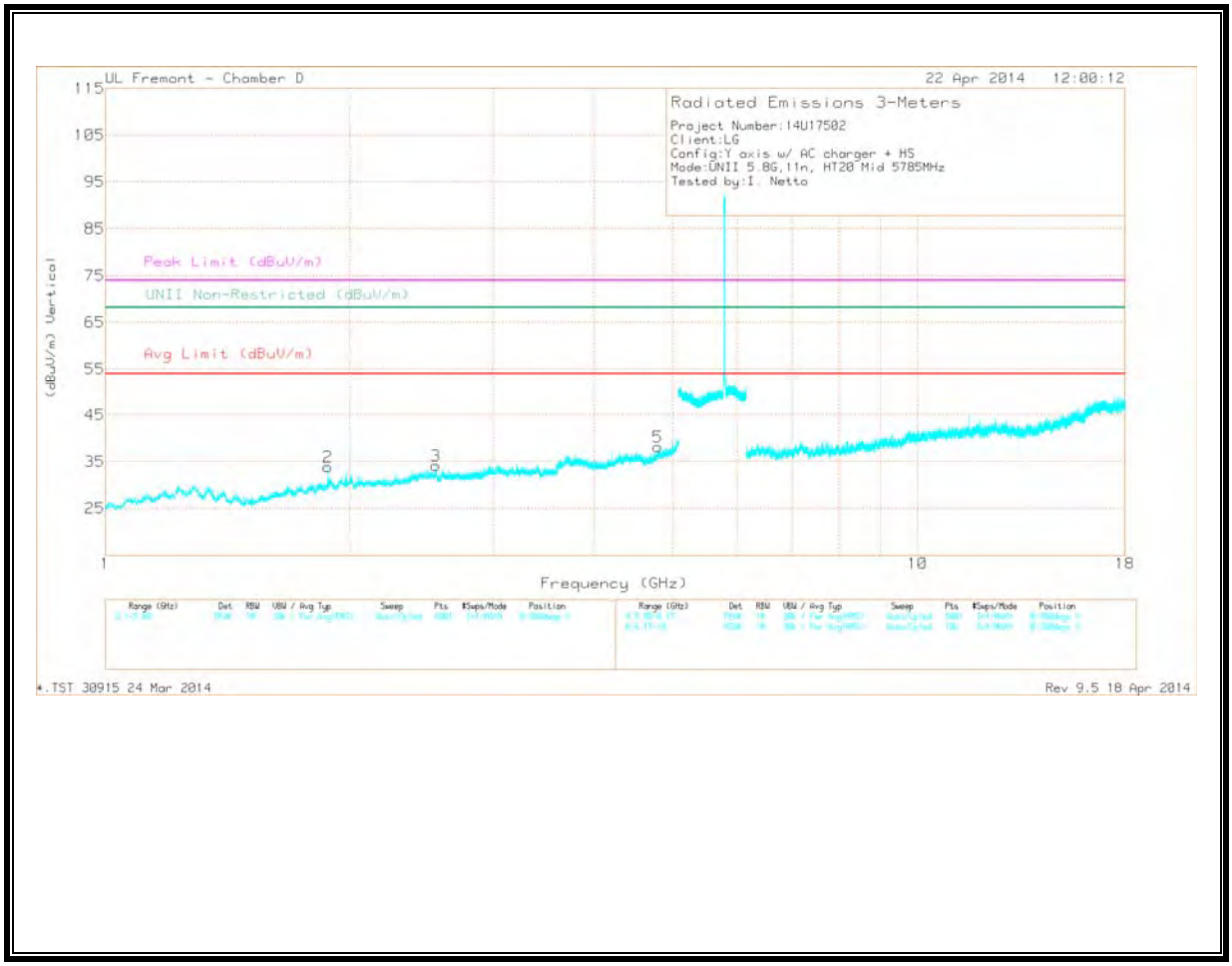
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.277	32.69	PK	29.3	-31.5	0	30.49	-	-	74	-43.51	-	-	0-360	201	H
4	* 3.814	32.73	PK	32.8	-28.9	0	36.63	-	-	74	-37.37	-	-	0-360	100	H
5	* 4.791	31.54	PK	33.5	-26.9	0	38.14	-	-	74	-35.86	-	-	0-360	201	V
6	* 11.57	30.3	PK	37.8	-22	0	46.1	-	-	74	-27.9	-	-	0-360	100	H
2	1.881	34.36	PK	30.1	-30.6	0	33.86	-	-	-	-	68.2	-34.34	0-360	201	V
3	2.554	32.18	PK	32	-30	0	34.18	-	-	-	-	68.2	-34.02	0-360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

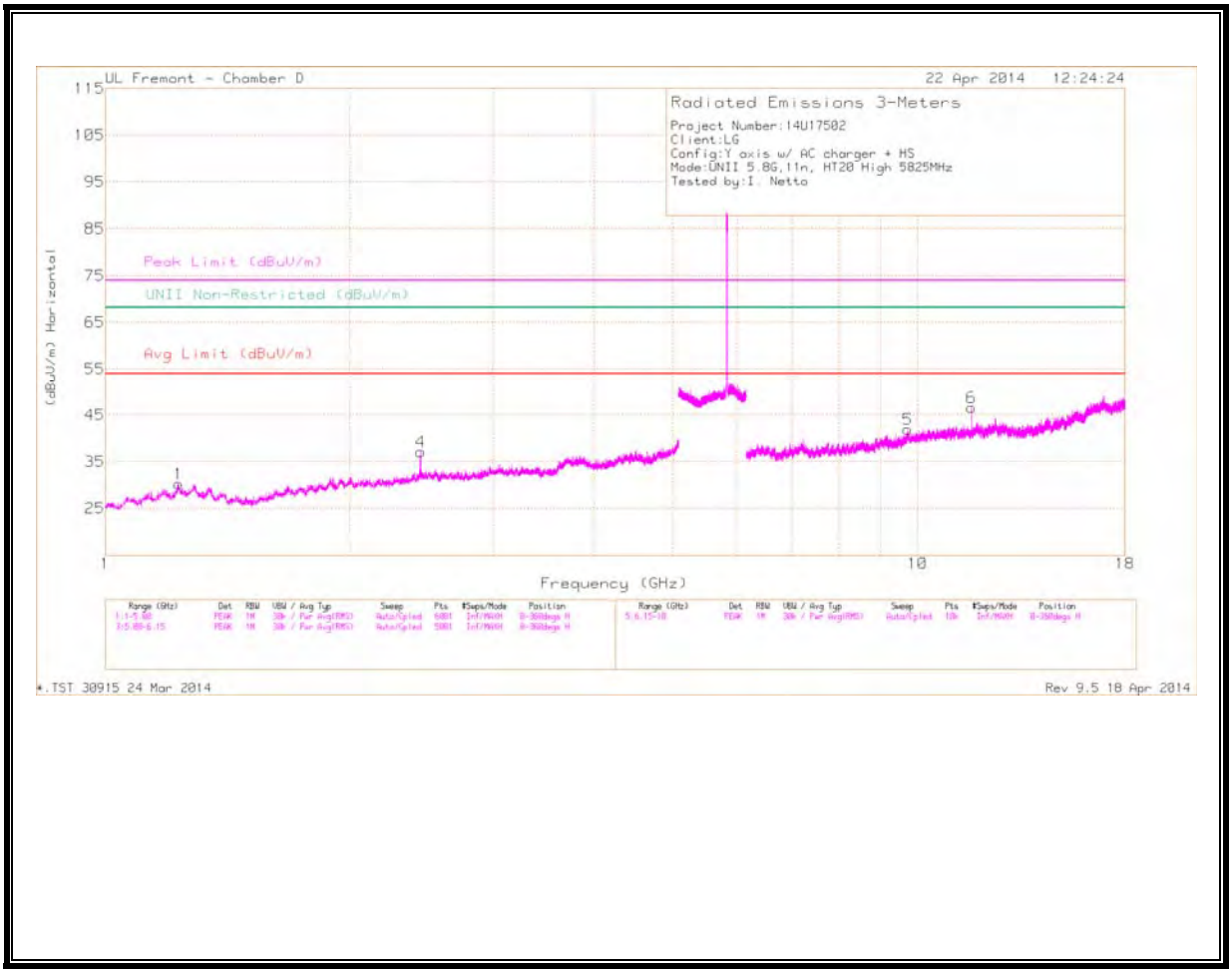
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.278	40.61	PK2	29.3	-31.5	0	38.41	-	-	74	-35.59	-	-	360	100	H
* 3.813	39.15	PK2	32.8	-28.9	0	43.05	-	-	74	-30.95	-	-	360	100	H
* 4.79	38.95	PK2	33.5	-26.9	0	45.55	-	-	74	-28.45	-	-	360	100	V
* 11.57	36.06	PK2	37.8	-22	0	51.86	-	-	74	-22.14	-	-	264	358	H
* 11.57	25.18	AD1	37.8	-22	.2	41.18	54	-12.82	-	-	-	-	264	358	H
2.555	39.6	PK2	32	-30.1	0	41.5	-	-	-	-	68.2	-26.7	360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

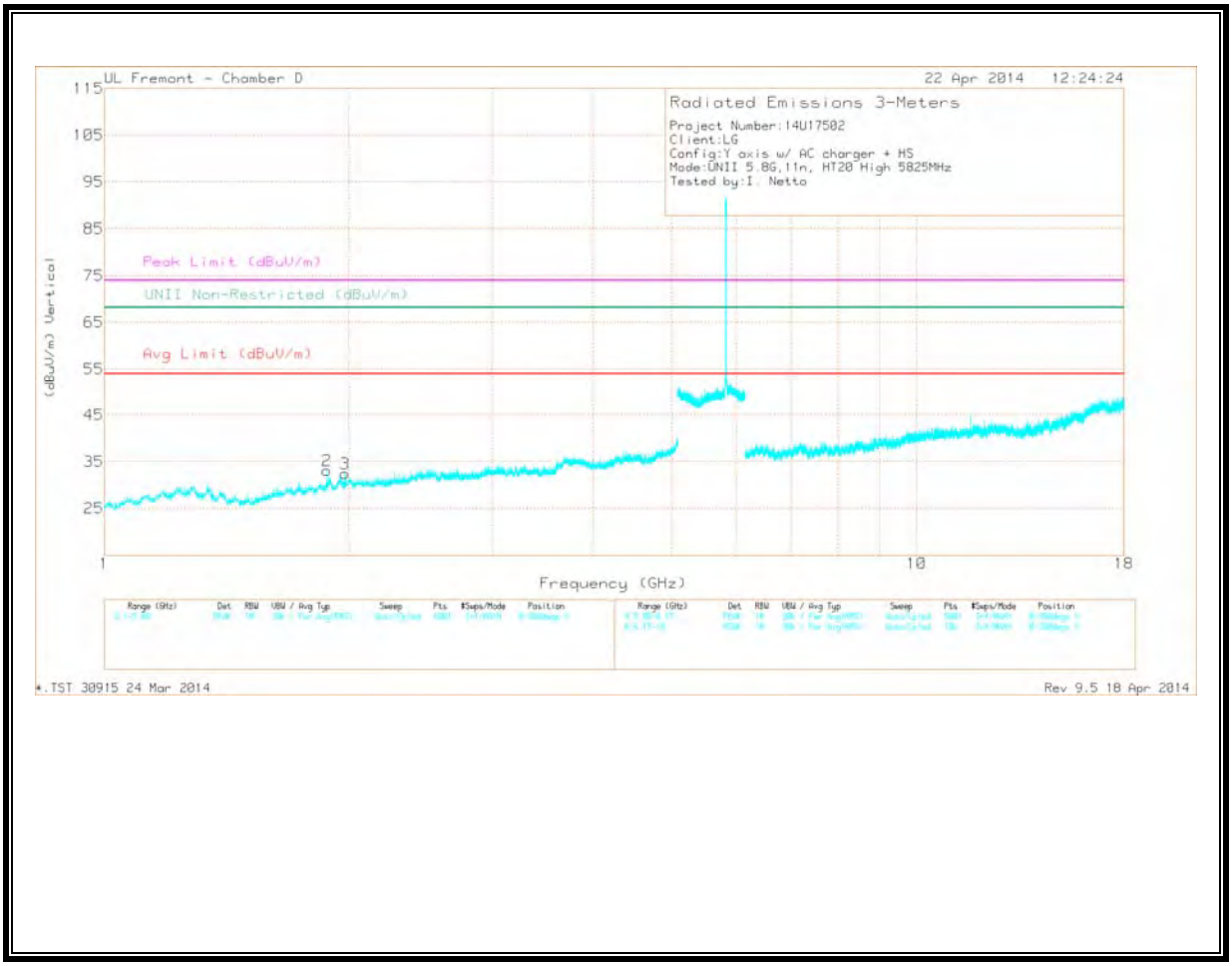
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.232	32.75	PK	29.3	-31.8	0	30.25	-	-	74	-43.75	-	-	0-360	201	H
6	* 11.65	30.78	PK	37.8	-22	0	46.58	-	-	74	-27.42	-	-	0-360	100	H
2	1.88	33.55	PK	30.1	-30.6	0	33.05	-	-	-	-	68.2	-35.15	0-360	201	V
3	1.98	32.46	PK	30.6	-30.6	0	32.46	-	-	-	-	68.2	-35.74	0-360	201	V
4	2.444	35.24	PK	31.8	-29.9	0	37.14	-	-	-	-	68.2	-31.06	0-360	201	H
5	9.73	26.87	PK	36.4	-21.3	0	41.97	-	-	-	-	68.2	-26.23	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

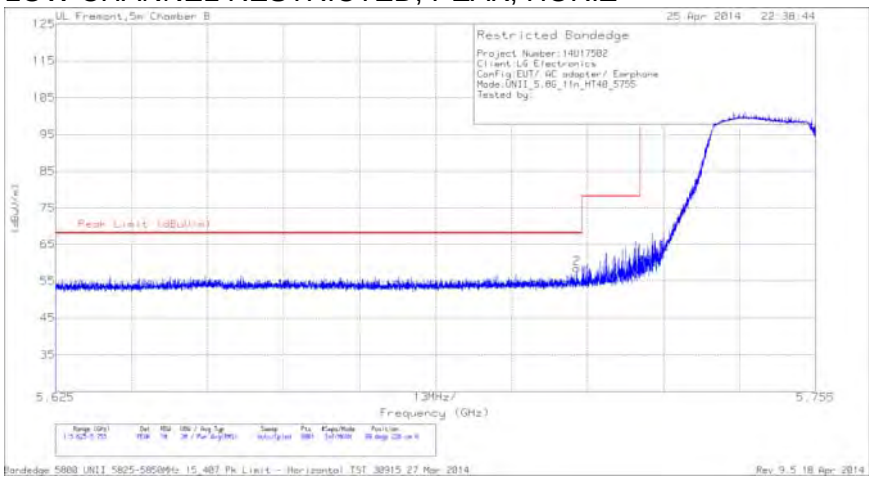
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.231	40.9	PK2	29.3	-31.8	0	38.4	-	-	74	-35.6	-	-	360	100	H
* 11.65	36.55	PK2	37.8	-22	0	52.35	-	-	74	-21.65	-	-	0	119	H
* 11.65	29.12	AD1	37.8	-22	.2	45.12	54	-8.88	-	-	-	-	0	119	H
1.882	39.66	PK2	30.1	-30.6	0	39.16	-	-	-	-	68.2	-29.04	360	100	V
1.98	39.56	PK2	30.6	-30.6	0	39.56	-	-	-	-	68.2	-28.64	360	100	V
2.444	39.95	PK2	31.8	-29.9	0	41.85	-	-	-	-	68.2	-26.35	88	365	H
2.444	27.66	AD1	31.8	-29.9	.2	29.76	-	-	-	-	-	-	88	365	H
9.73	34.9	PK2	36.4	-21.3	0	50	-	-	-	-	68.2	-18.2	360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

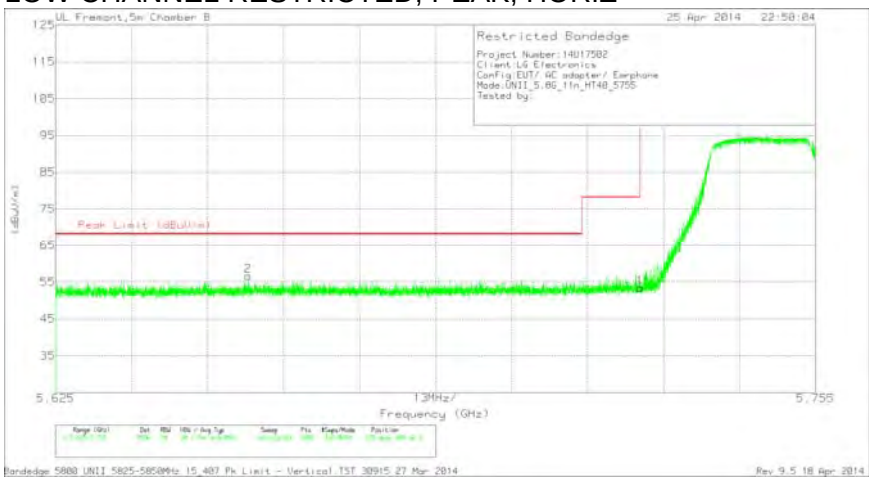
LOW CHANNEL RESTRICTED, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.714	43.73	PK	34.5	-19.8	58.43	68.2	-9.77	99	226	H
1	5.725	46.67	PK	34.6	-19.6	61.67	78.2	-16.53	99	226	H

PK - Peak detector

LOW CHANNEL RESTRICTED, PEAK, HORIZ

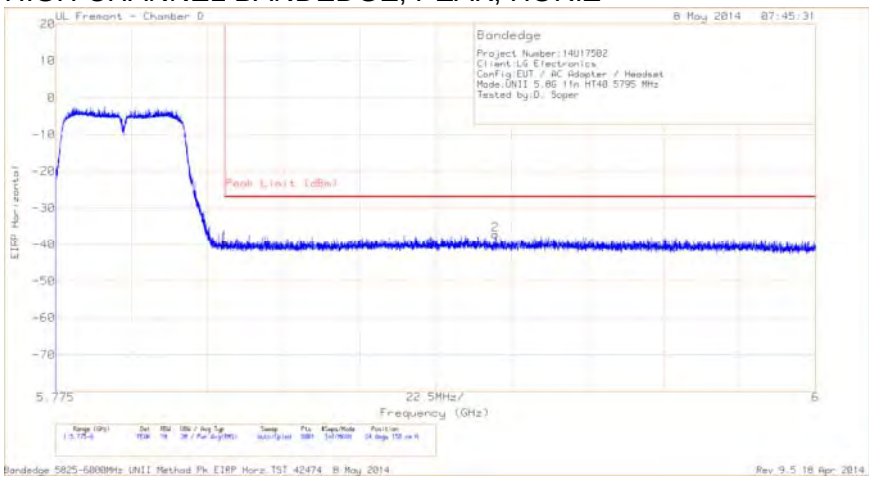


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.658	41.89	PK	34.5	-19.8	56.59	68.2	-11.61	128	400	V
1	5.725	38.47	PK	34.6	-19.6	53.47	78.2	-24.73	128	400	V

PK - Peak detector

RESTRICTED BANDEDGE (HIGH CHANNEL)

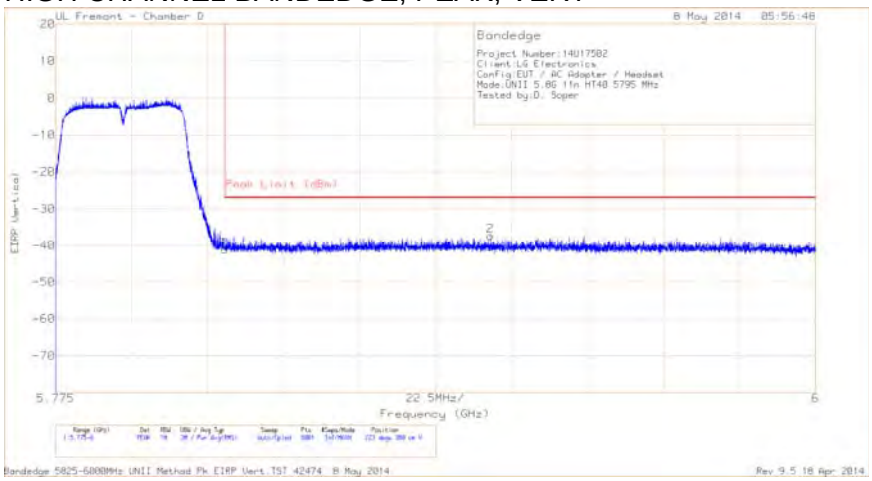
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.825	-68.09	PK	34.3	-17.5	11.8	-39.49	-27	-12.49	34	158	H
2	5.905	-66.26	PK	34.4	-17.1	11.8	-37.16	-27	-10.16	34	158	H

PK - Peak detector

HIGH CHANNEL BANDEDGE, PEAK, VERT

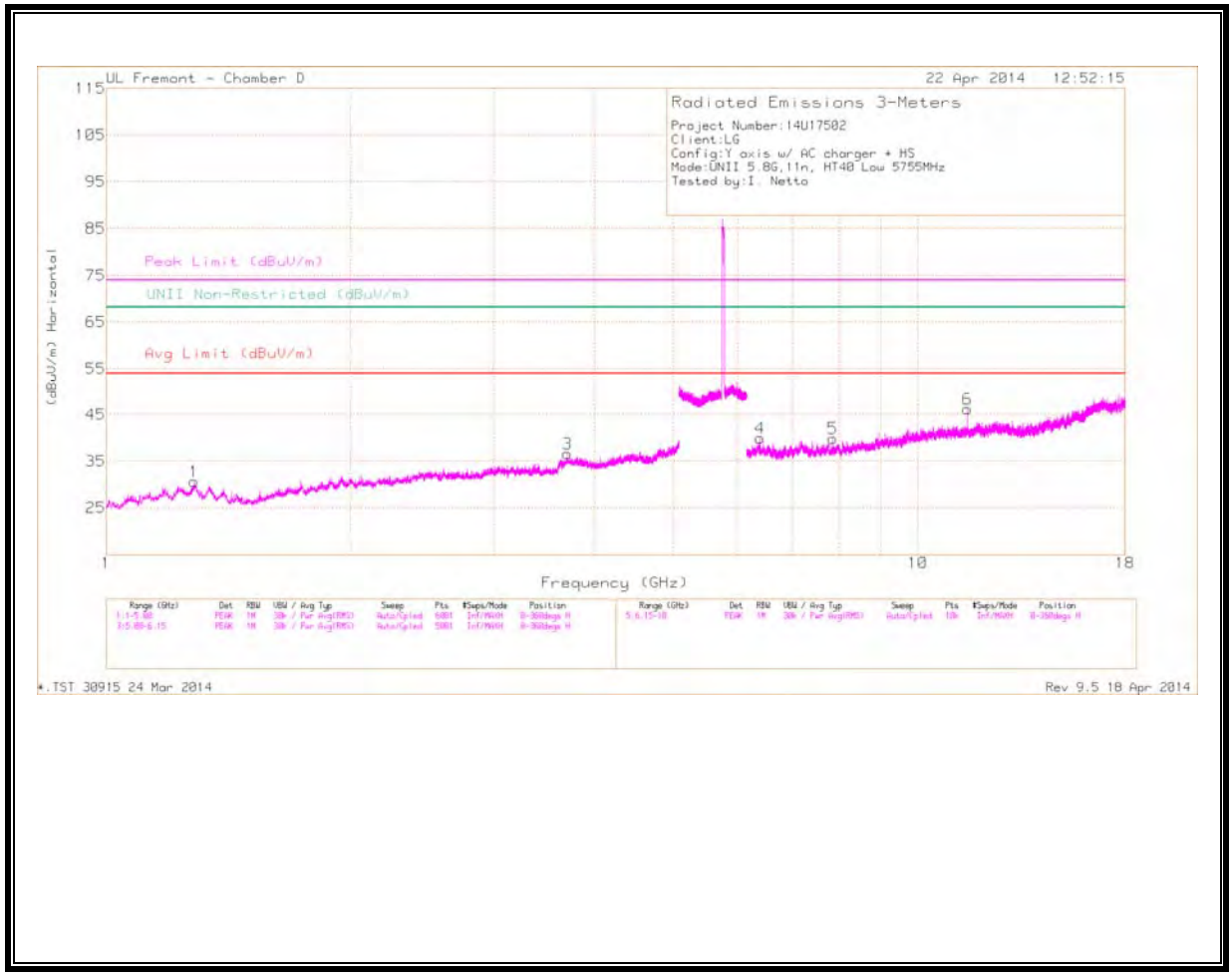


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.825	-69.7	PK	34.3	-17.5	11.8	-41.1	-27	-14.1	223	380	V
2	5.904	-66.5	PK	34.4	-17	11.8	-37.3	-27	-10.3	223	380	V

PK - Peak detector

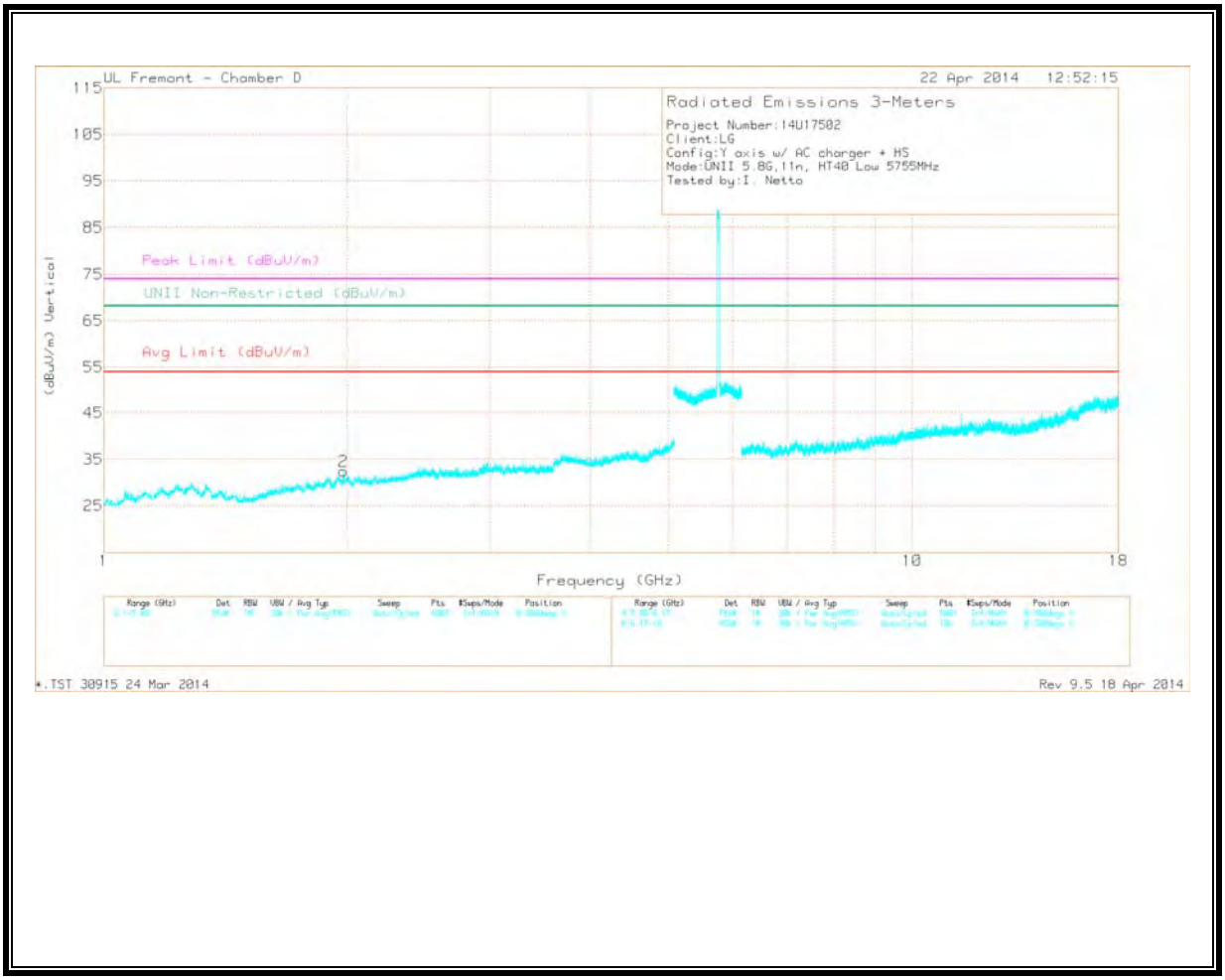
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.284	32.74	PK	29.2	-31.3	0	30.64	-	-	74	-43.36	-	-	0-360	201	H
3	* 3.702	32.54	PK	32.6	-28.5	0	36.64	-	-	74	-37.36	-	-	0-360	100	H
6	* 11.51	30.39	PK	37.7	-21.9	0	46.19	-	-	74	-27.81	-	-	0-360	100	H
2	1.98	32.42	PK	30.6	-30.6	0	32.42	-	-	-	-	68.2	-35.78	0-360	201	V
4	6.396	30.89	PK	35	-25.9	0	39.99	-	-	-	-	68.2	-28.21	0-360	201	H
5	7.862	29.82	PK	35.2	-25.1	0	39.92	-	-	-	-	68.2	-28.28	0-360	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

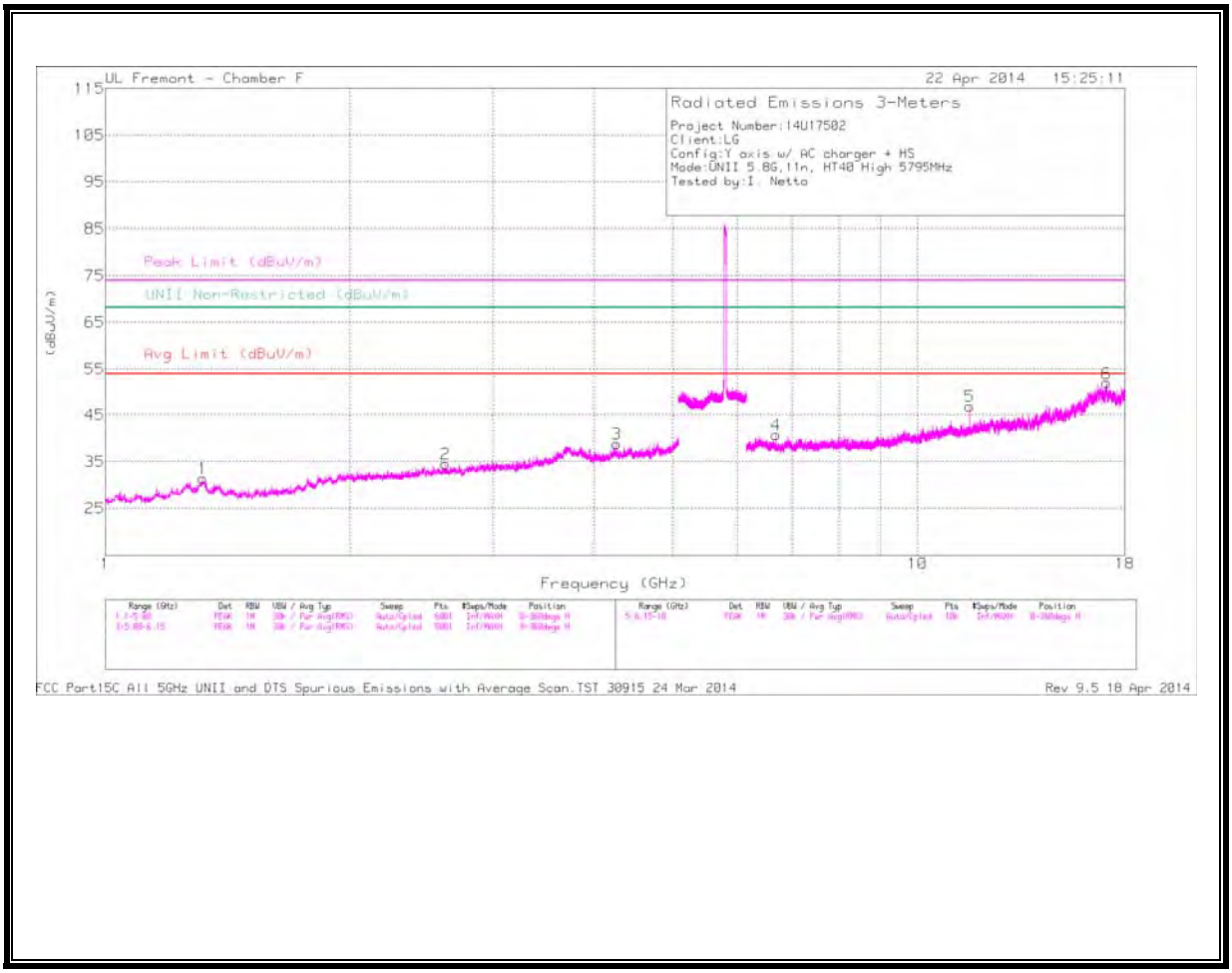
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.283	40.79	PK2	29.2	-31.3	0	38.69	-	-	74	-35.31	-	-	0	100	H
* 3.702	38.93	PK2	32.6	-28.5	0	43.03	-	-	74	-30.97	-	-	0	100	H
* 11.51	34.37	PK2	37.7	-21.9	0	50.17	-	-	74	-23.83	-	-	2	109	H
* 11.51	33.87	PK2	37.7	-21.9	0	49.67	-	-	74	-24.33	-	-	2	109	H
* 11.51	36.99	PK2	37.7	-21.9	0	52.79	-	-	74	-21.21	-	-	2	109	H
* 11.51	28.66	AD1	37.7	-21.9	.5	44.96	54	-9.04	-	-	-	-	2	109	H
1.98	40.24	PK2	30.6	-30.6	0	40.24	-	-	-	-	68.2	-27.96	0	100	V
6.395	37.16	PK2	35	-25.9	0	46.26	-	-	-	-	68.2	-21.94	0	100	H
7.86	36.16	PK2	35.2	-25.2	0	46.16	-	-	-	-	68.2	-22.04	0	100	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

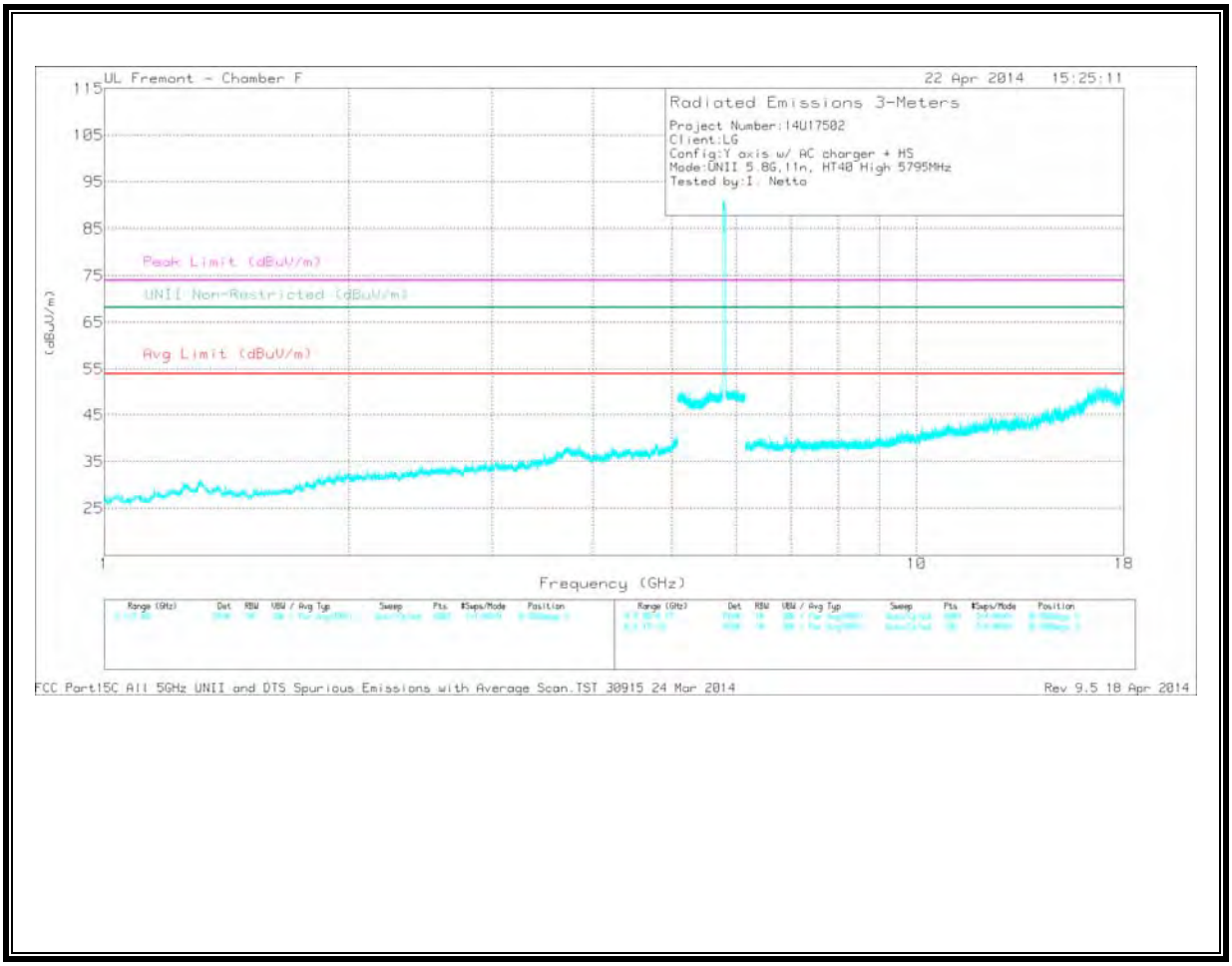
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.32	32.92	PK	29.9	-31.4	0	31.42	-	-	74	-42.58	-	-	0-360	101	H
2	2.622	32.16	PK	32.7	-30.3	0	34.56	-	-	-	-	68.2	-33.64	0-360	101	H
3	* 4.26	32.67	PK	33.7	-27.6	0	38.77	-	-	74	-35.23	-	-	0-360	199	H
4	6.698	32.27	PK	35.6	-27.1	0	40.77	-	-	-	-	68.2	-27.43	0-360	101	H
5	* 11.59	31.51	PK	38.5	-23.2	0	46.81	-	-	74	-27.19	-	-	0-360	199	H
6	17.076	27.03	PK	41.2	-16.3	0	51.93	-	-	-	-	68.2	-16.27	0-360	101	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

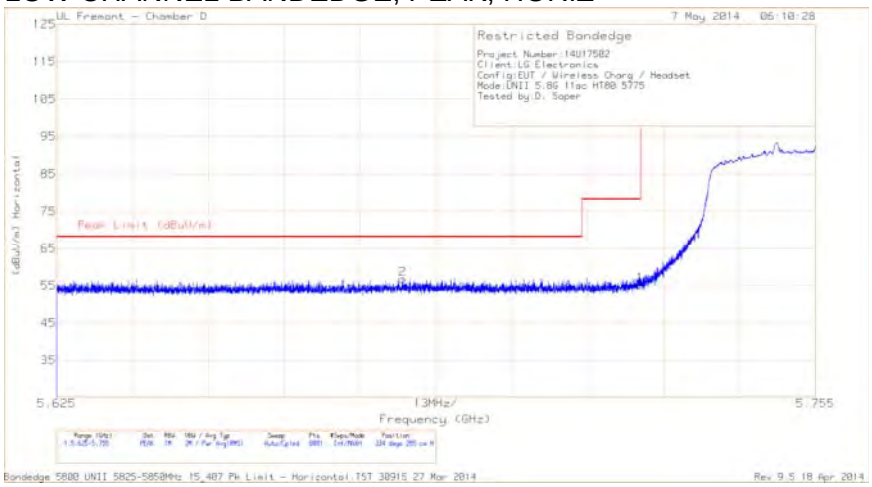
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.318	40.99	PK2	29.9	-31.4	0	39.49	-	-	74	-34.51	-	-	0	101	H
2.621	39.72	PK2	32.7	-30.3	0	42.12	-	-	-	-	68.2	-26.08	0	101	H
* 4.261	38.61	PK2	33.7	-27.6	0	44.71	-	-	74	-29.29	-	-	0	101	H
6.696	38.22	PK2	35.6	-27.1	0	46.72	-	-	-	-	68.2	-21.48	0	101	H
6.7	38.83	PK2	35.6	-27.1	0	47.33	-	-	-	-	68.2	-20.87	0	101	H
* 11.59	39.66	PK2	38.5	-23.2	0	54.96	-	-	74	-19.04	-	-	139	128	H
* 11.59	32.75	MAv1	38.5	-23.2	.5	48.55	54	-5.45	-	-	-	-	139	128	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

11.4.4. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

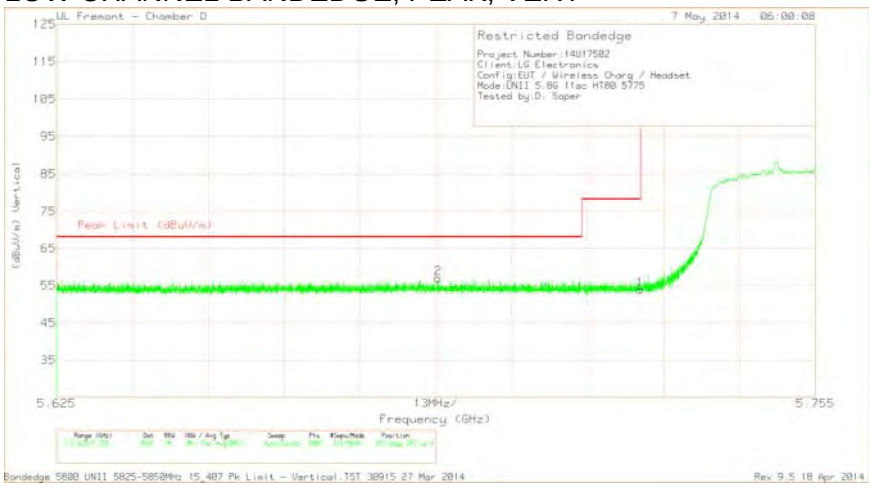
LOW CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.684	39.92	PK	34.1	-17.2	56.82	68.2	-11.38	334	285	H
1	5.725	38.59	PK	34.2	-17.6	55.19	78.2	-23.01	334	285	H

PK - Peak detector

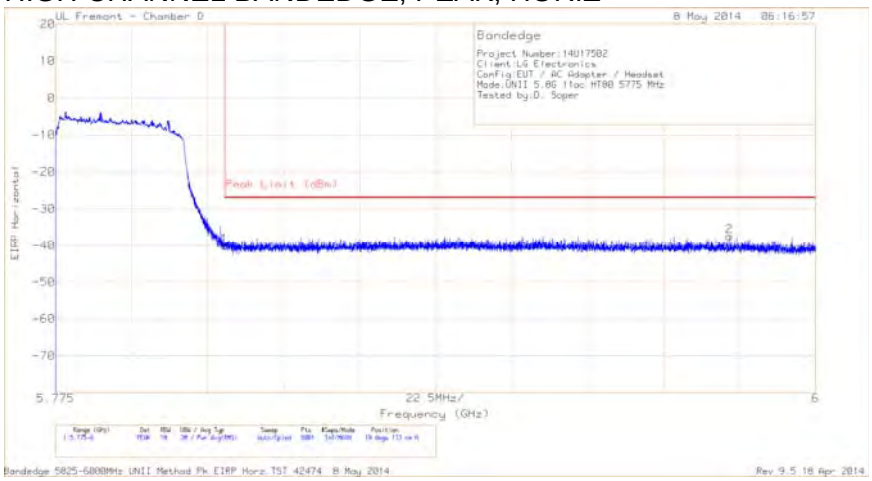
LOW CHANNEL BANDEDGE, PEAK, VERT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.69	40.12	PK	34.1	-17.2	57.02	68.2	-11.18	297	347	V
1	5.725	37.35	PK	34.2	-17.6	53.95	78.2	-24.25	297	347	V

PK - Peak detector

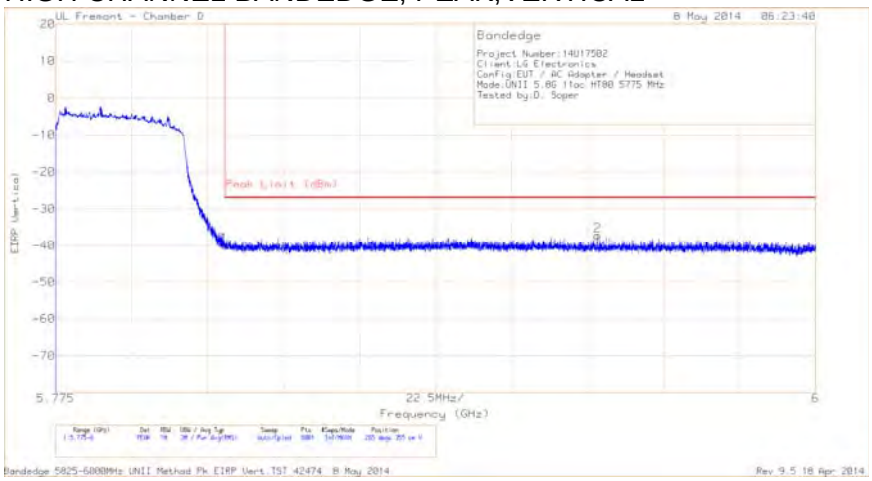
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.825	-68.6	PK	34.3	-17.5	11.8	-40	-27	-13	19	173	H
2	5.975	-66.82	PK	34.6	-17	11.8	-37.42	-27	-10.42	19	173	H

PK - Peak detector

HIGH CHANNEL BANDEDGE, PEAK,VERTICAL

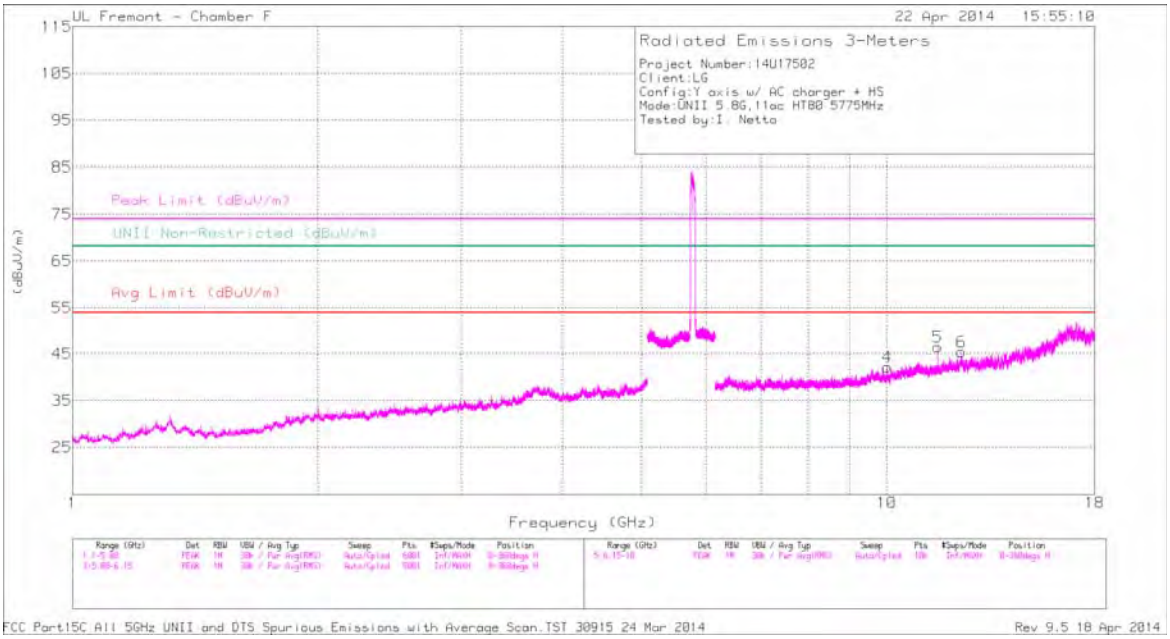


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.825	-68.44	PK	34.3	-17.5	11.8	-39.84	-27	-12.84	265	355	V
2	5.935	-66.34	PK	34.5	-17.1	11.8	-37.14	-27	-10.14	265	355	V

PK - Peak detector

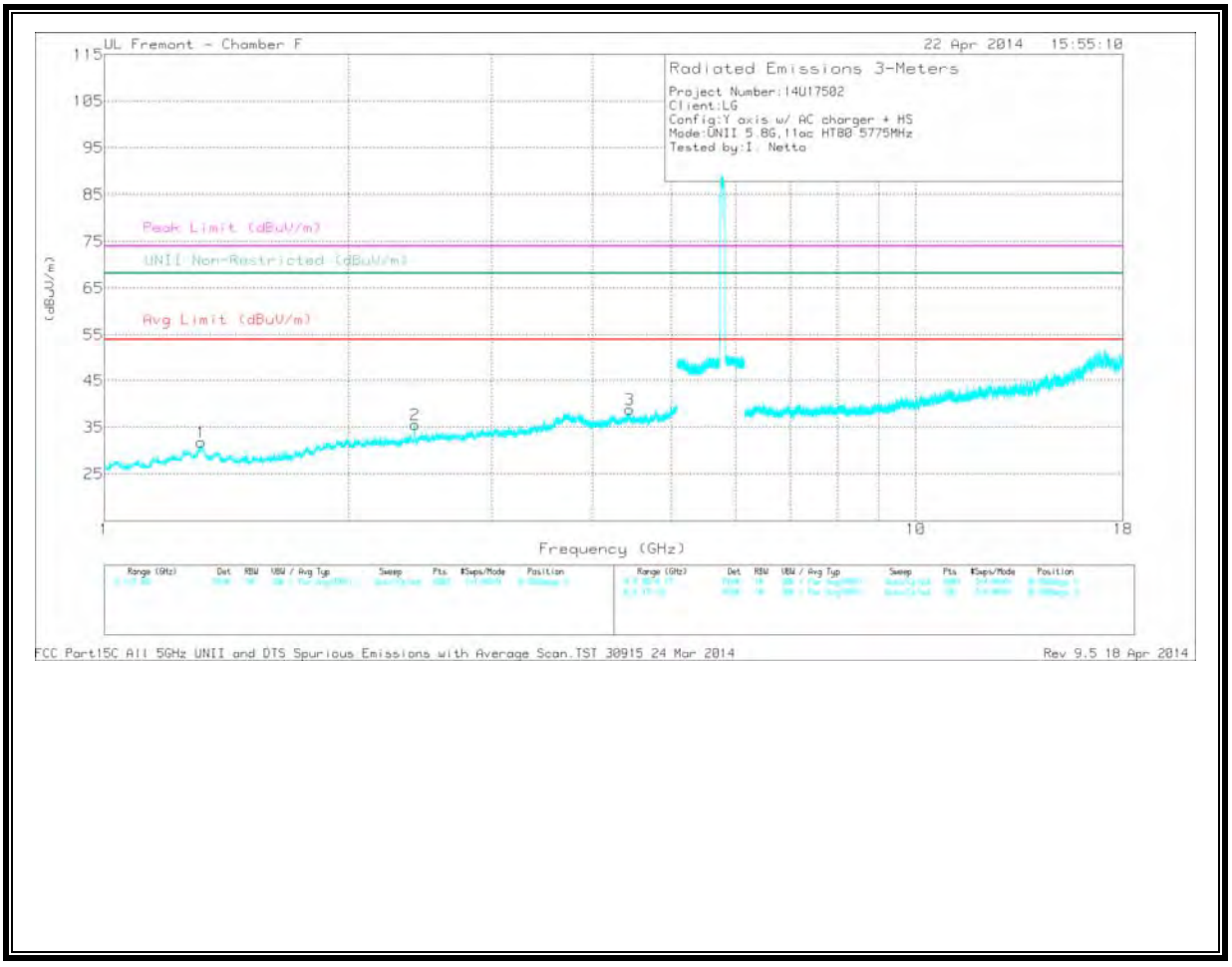
HARMONICS AND SPURIOUS EMISSIONS

HIGH CHANNEL
HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.317	33.28	PK	29.9	-31.4	0	31.78	-	-	74	-42.22	-	-	0-360	101	V
2	2.414	34.1	PK	32.3	-30.8	0	35.6	-	-	-	-	68.2	-32.6	0-360	101	V
3	4.437	32.18	PK	33.9	-27.3	0	38.78	-	-	-	-	68.2	-29.42	0-360	101	V
4	10.01	27.44	PK	37.2	-22.4	0	42.24	-	-	-	-	68.2	-25.96	0-360	101	H
5	* 11.55	31.24	PK	38.4	-23.2	0	46.44	-	-	74	-27.56	-	-	0-360	101	H
6	* 12.349	28.76	PK	38.9	-22.2	0	45.46	-	-	74	-28.54	-	-	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.316	41.3	PK2	29.9	-31.4	0	39.8	-	-	74	-34.2	-	-	0	101	V
2.416	40.38	PK2	32.3	-30.8	0	41.88	-	-	-	-	68.2	-26.32	0	101	V
4.44	38.15	PK2	33.9	-27.3	0	44.75	-	-	-	-	68.2	-23.45	0	101	V
10.008	35.12	PK2	37.2	-22.4	0	49.92	-	-	-	-	68.2	-18.28	0	101	H
* 12.349	35.7	PK2	38.9	-22.2	0	52.4	-	-	74	-21.6	-	-	0	101	H
* 11.55	38.46	PK2	38.4	-23.2	0	53.66	-	-	74	-20.34	-	-	136	128	H
* 11.55	31.81	MAv1	38.4	-23.2	1.5	48.51	54	-5.49	-	-	-	-	136	128	H

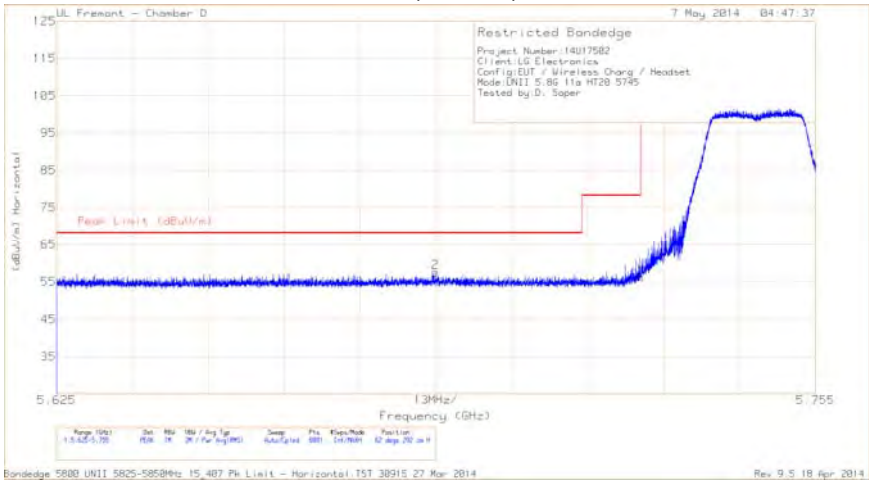
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

WORST CASE HARMONICS AND SPURIOUS EMISSIONS WITH WPC CHARGER AND COVER

RESTRICTED BANDEDGE WITH WPC CHARGER AND COVER (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.69	40.57	PK	34.1	-17.2	57.47	68.2	-10.63	62	292	H
1	5.725	39.71	PK	34.2	-17.6	56.31	78.2	-21.79	62	292	H

PK - Peak detector

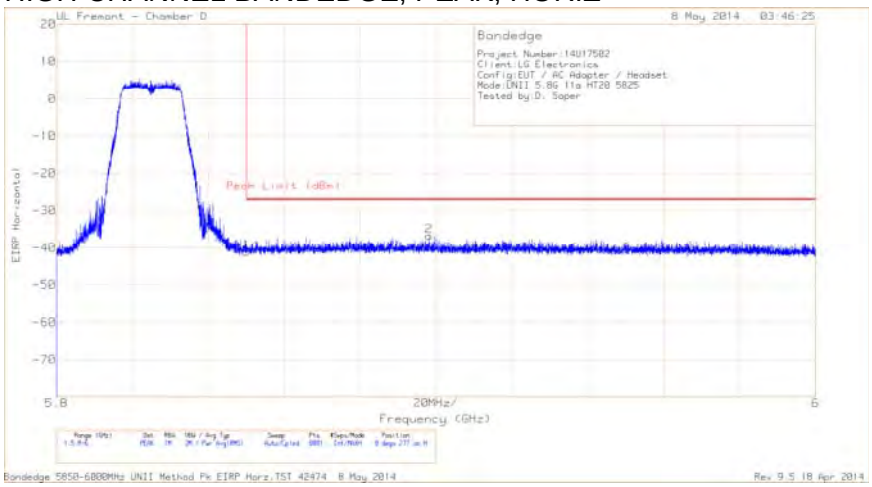
LOW CHANNEL RESTRICTED, PEAK, VERTICAL

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.688	40.63	PK	34.1	-17.2	0	57.53	68.2	-10.47	179	236	V
1	5.725	39.33	PK	34.2	-17.6	0	55.93	78.2	-22.07	179	236	V

PK - Peak detector

RESTRICTED BANDEDGE (HIGH CHANNEL)

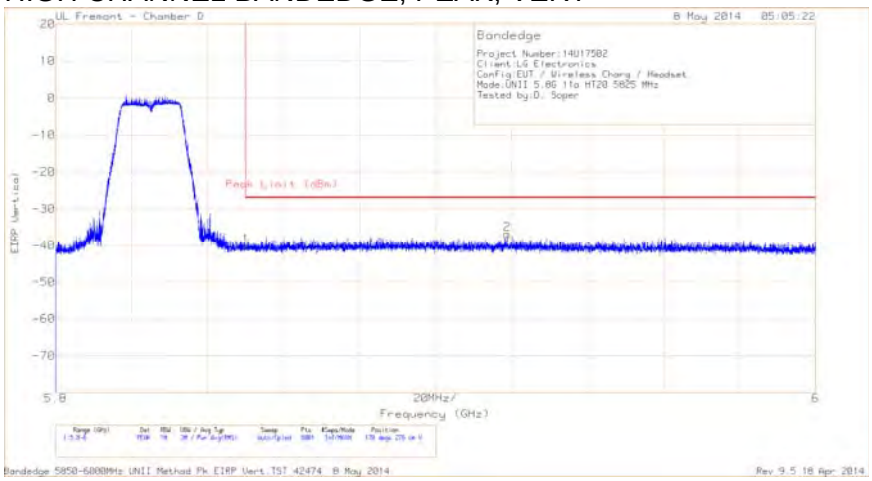
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-69.99	PK	34.4	-17.4	11.8	-41.19	-27	-14.19	0	277	H
2	5.898	-66.22	PK	34.4	-16.8	11.8	-36.82	-27	-9.82	0	277	H

PK - Peak detector

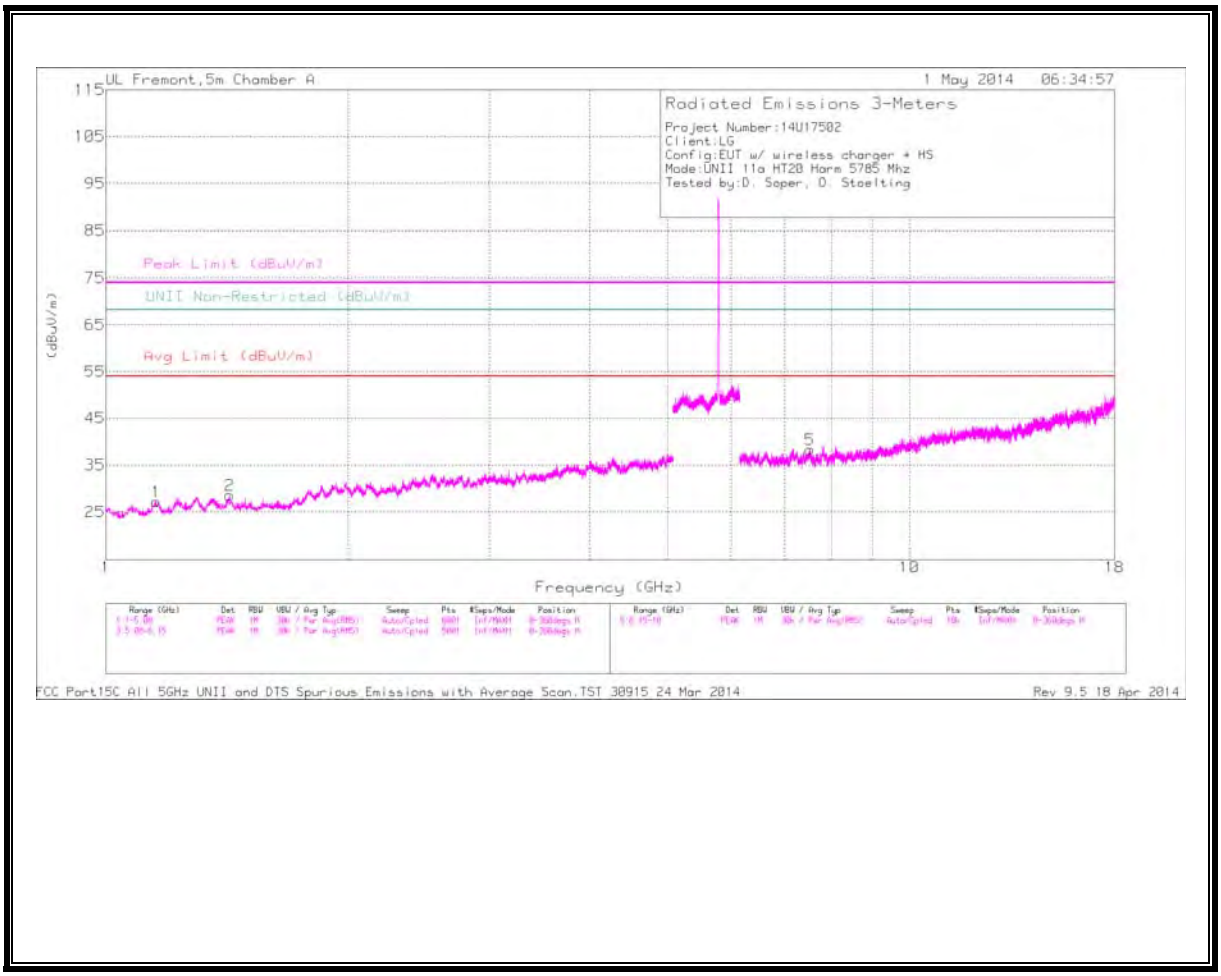
HIGH CHANNEL BANDEDGE, PEAK, VERT



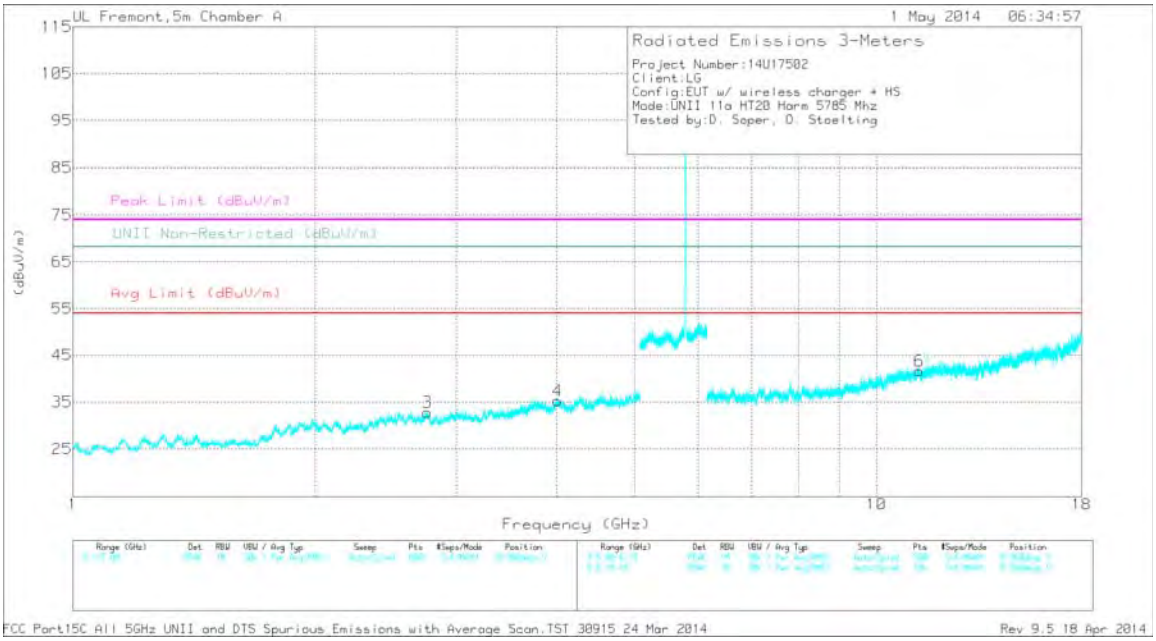
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.96	PK	34.4	-17.4	11.8	-40.16	-27	-13.16	170	276	V
2	5.919	-66.33	PK	34.5	-16.8	11.8	-36.83	-27	-9.83	170	276	V

PK - Peak detector

HORIZONTAL



VERTICAL



CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.156	34.98	PK	28.9	-36.7	0	27.18	-	-	74	-46.82	-	-	0-360	200	H
2	* 1.426	35.41	PK	29.5	-36.3	0	28.61	-	-	74	-45.39	-	-	0-360	200	H
3	* 2.762	32.36	PK	32.7	-32.2	0	32.86	-	-	74	-41.14	-	-	0-360	201	V
4	* 4.014	31.27	PK	33.7	-29.7	0	35.27	-	-	74	-38.73	-	-	0-360	100	V
5	* 7.518	27.91	PK	35.3	-24.9	0	38.31	-	-	74	-35.69	-	-	0-360	200	H
6	* 11.31	25.57	PK	38	-21.9	0	41.67	-	-	74	-32.33	-	-	0-360	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.152	43.66	PK1	28.8	-36.6	0	35.86	-	-	74	-38.14	-	-	360	100	H
* 1.155	32.28	AD1	28.9	-36.7	.2	24.68	54	-29.32	-	-	-	-	360	100	H

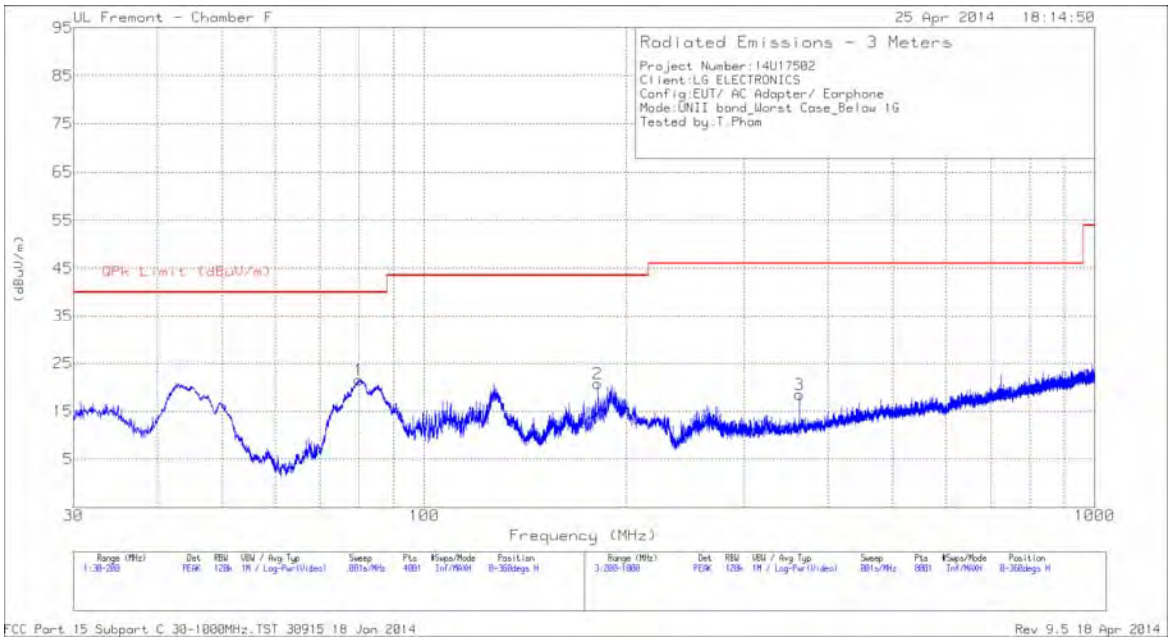
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

12. WORST-CASE BELOW 1 GHz (in the 5.32 GHz Band)

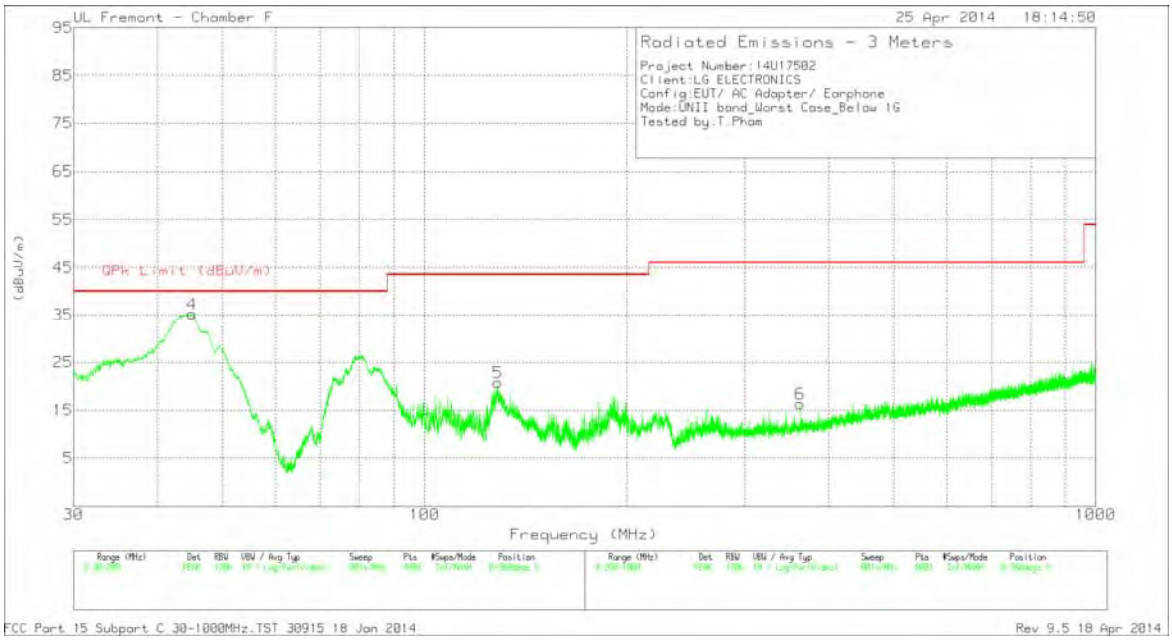
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



Worst Case Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Hybrid	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	80.0225	45.38	PK	7.6	-31.4	21.58	40	-18.42	0-360	301	H
2	181.385	40.87	PK	11.2	-31.3	20.77	43.52	-22.75	0-360	201	H
4	45.045	56.04	PK	10.5	-31.3	35.24	40	-4.76	0-360	100	V
5	* 128.515	38.26	PK	13.7	-31.2	20.76	43.52	-22.76	0-360	100	V
3	362.8	34.07	PK	14.7	-30.3	18.47	46.02	-27.55	0-360	200	H
6	362.8	31.89	PK	14.7	-30.3	16.29	46.02	-29.73	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

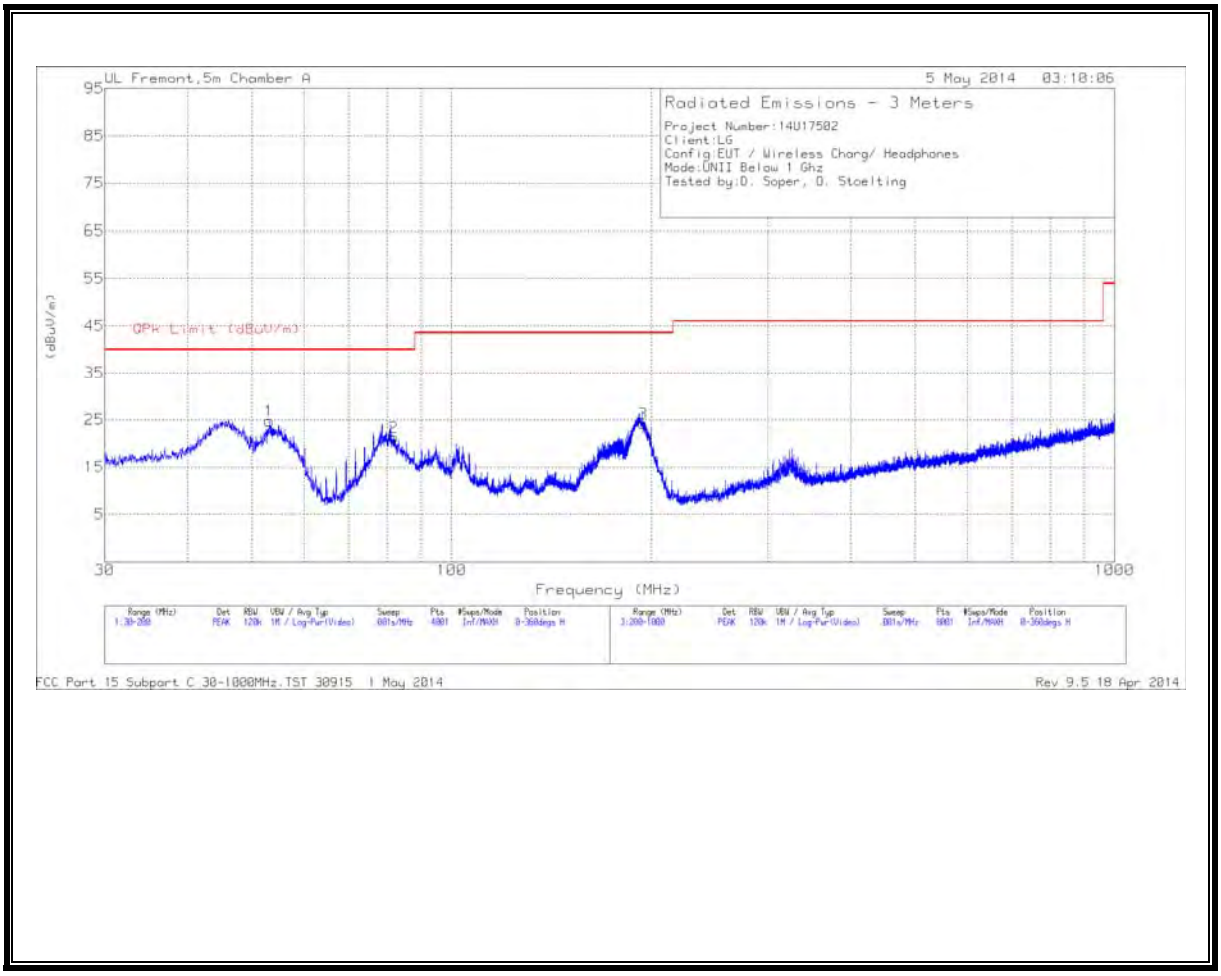
Frequency (MHz)	Meter Reading (dBuV)	Det	Hybrid	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
44.9953	52.88	QP	10.5	-31.3	32.08	40	-7.92	152	102	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

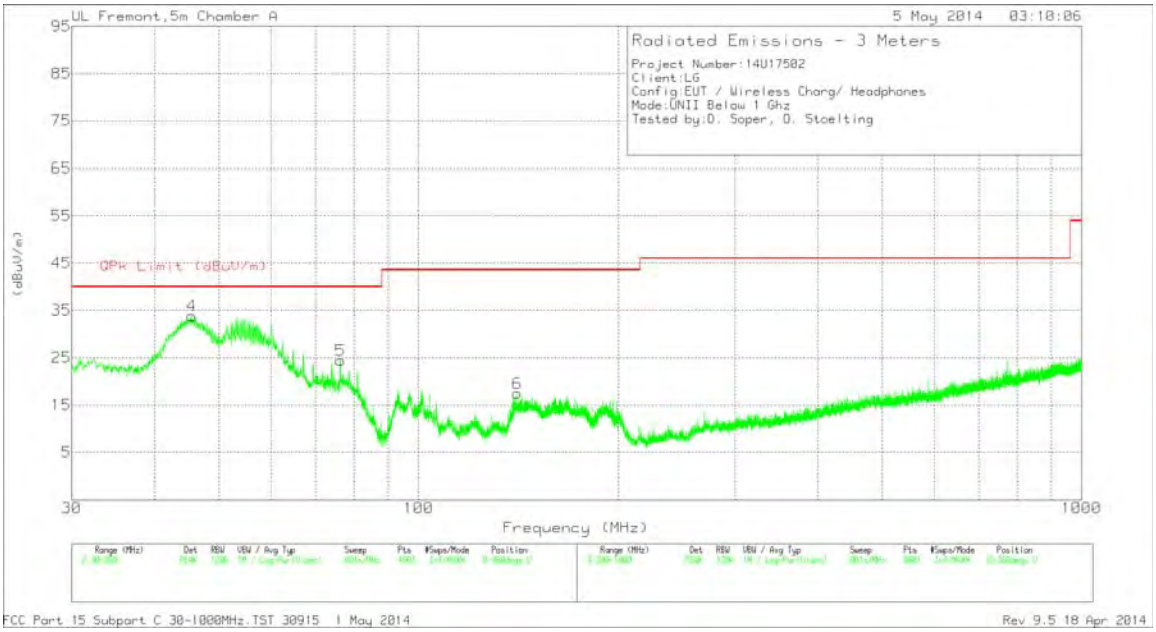
QP - Quasi-Peak detector

WORST CASE HARMONICS AND SPURIOUS EMISSIONS WITH WPC CHARGER AND COVER

HORIZONTAL



VERTICAL



CHANNEL DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	45.555	54.48	PK	10.2	-30.8	0	33.88	40	-6.12	0-360	101	V
1	53.12	48.38	PK	7.3	-30.9	0	24.78	40	-15.22	0-360	300	H
5	76.2825	47.13	PK	8	-30.7	0	24.43	40	-15.57	0-360	101	V
2	81.8075	44.35	PK	7.4	-30.5	0	21.25	40	-18.75	0-360	200	H
6	140.9675	34.48	PK	13.2	-30.2	0	17.48	43.52	-26.04	0-360	101	V
3	194.22	42.32	PK	11.8	-29.9	0	24.22	43.52	-19.3	0-360	100	H

PK - Peak detector

13. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	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 C63.4.

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 recorded for both NEUTRAL and HOT lines.

RESULTS

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

Trace Markers

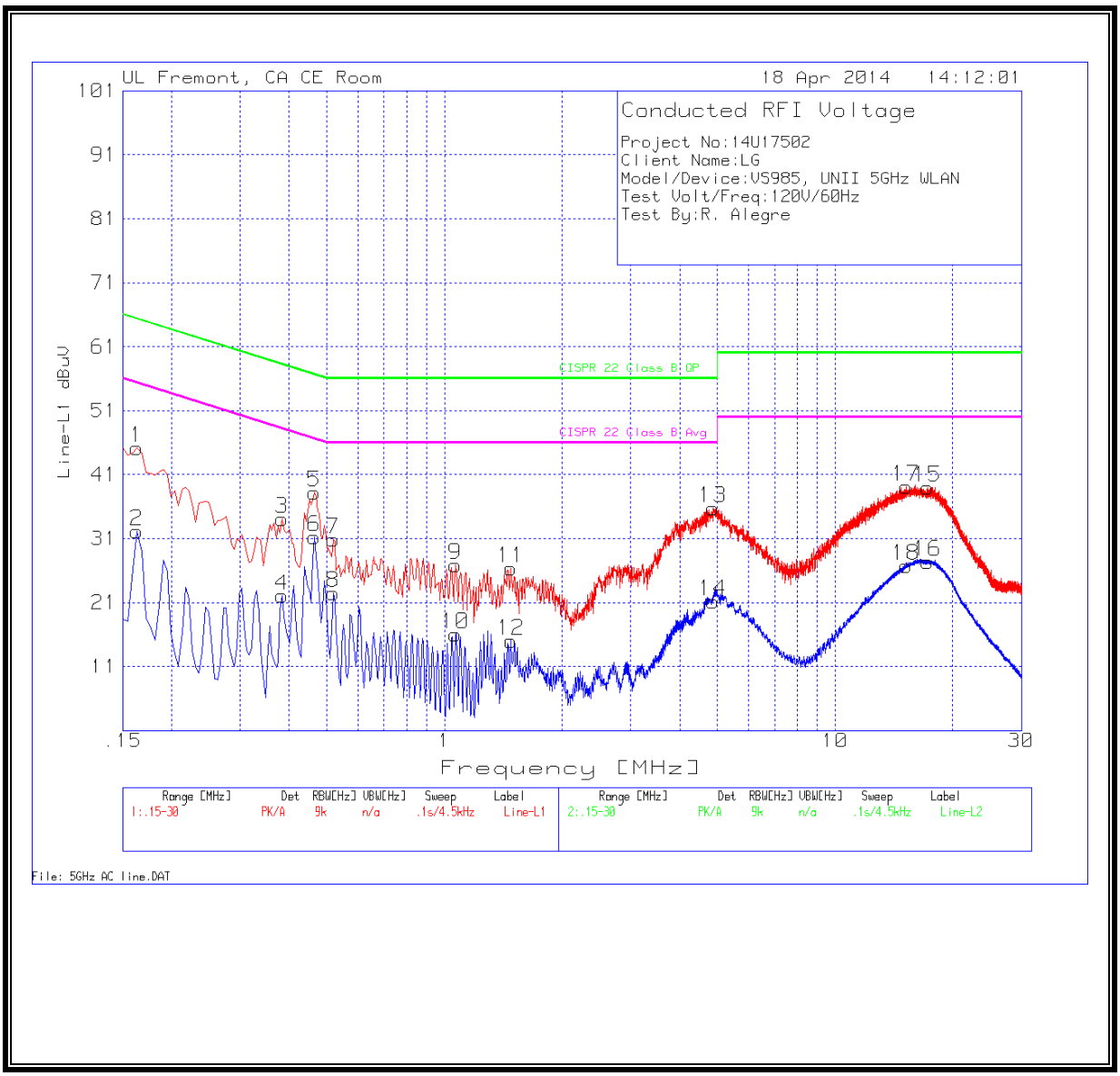
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
1	.1635	43.93	PK	1.2	0	45.13	65.3	-20.17	-	-
2	.1635	30.99	Av	1.2	0	32.19	-	-	55.3	-23.11
3	.384	33.71	PK	.4	0	34.11	58.2	-24.09	-	-
4	.384	21.64	Av	.4	0	22.04	-	-	48.2	-26.16
5	.465	37.84	PK	.4	0	38.24	56.6	-18.36	-	-
6	.465	30.89	Av	.4	0	31.29	-	-	46.6	-15.31
7	.519	30.62	PK	.3	0	30.92	56	-25.08	-	-
8	.519	22.22	Av	.3	0	22.52	-	-	46	-23.48
9	1.068	26.62	PK	.2	0	26.82	56	-29.18	-	-
10	1.068	15.89	Av	.2	0	16.09	-	-	46	-29.91
11	1.482	26.1	PK	.2	.1	26.4	56	-29.6	-	-
12	1.482	14.66	Av	.2	.1	14.96	-	-	46	-31.04
13	4.875	35.48	PK	.2	.1	35.78	56	-20.22	-	-
14	4.875	20.89	Av	.2	.1	21.19	-	-	46	-24.81
17	15.216	38.59	PK	.3	.2	39.09	60	-20.91	-	-
18	15.216	26.26	Av	.3	.2	26.76	-	-	50	-23.24
15	17.2365	38.54	PK	.3	.2	39.04	60	-20.96	-	-
16	17.2365	26.85	Av	.3	.2	27.35	-	-	50	-22.65

Line-L2 .15 - 30MHz

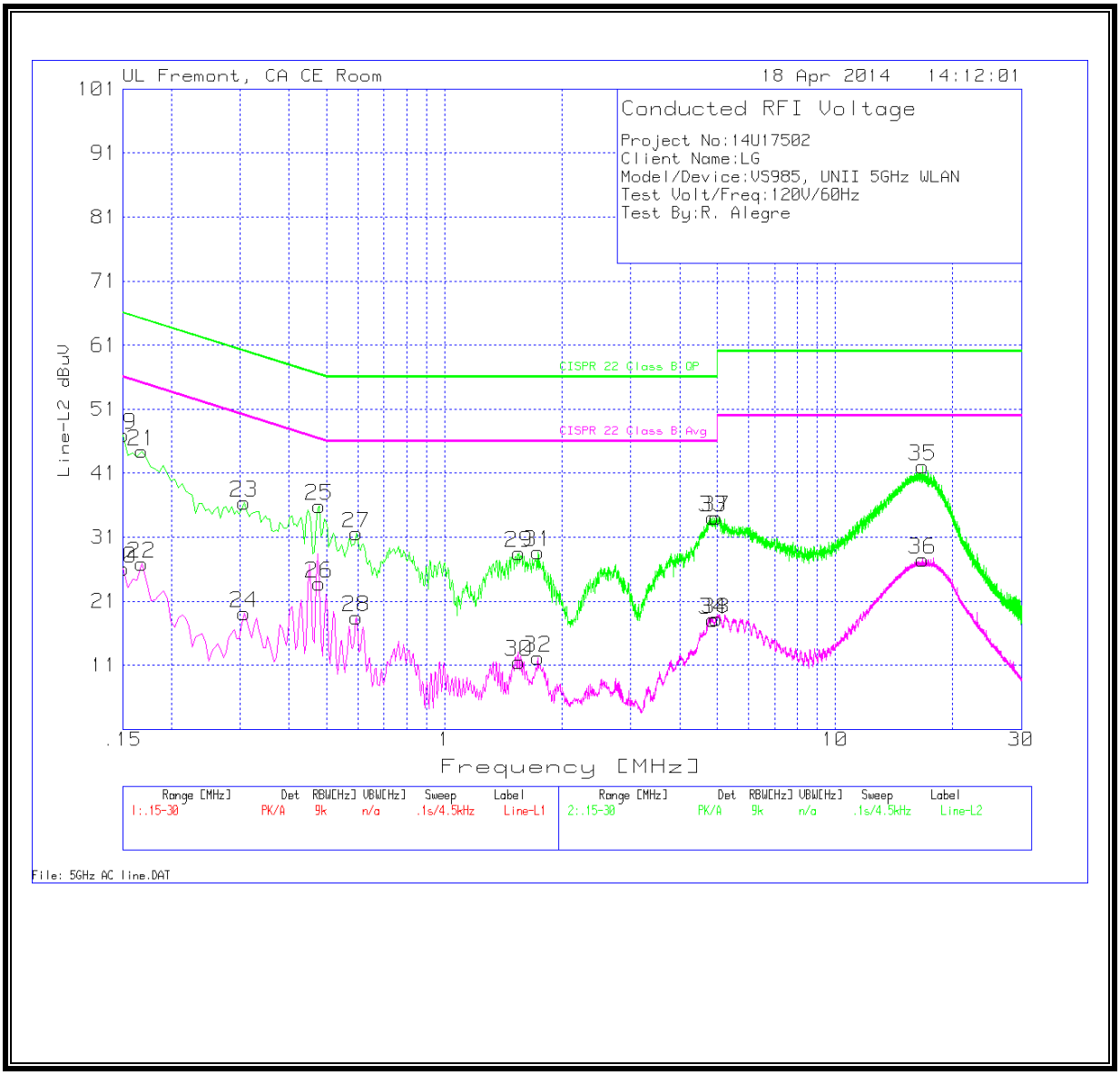
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
19	.15	45.44	PK	1.5	0	46.94	66	-19.06	-	-
20	.15	24.6	Av	1.5	0	26.1	-	-	56	-29.9
21	.168	43.16	PK	1.3	0	44.46	65.1	-20.64	-	-
22	.168	25.58	Av	1.3	0	26.88	-	-	55.1	-28.22
23	.3075	35.79	PK	.6	0	36.39	60	-23.61	-	-
24	.3075	18.59	Av	.6	0	19.19	-	-	50	-30.81
25	.4785	35.51	PK	.4	0	35.91	56.4	-20.49	-	-
26	.4785	23.43	Av	.4	0	23.83	-	-	46.4	-22.57
27	.5955	31.28	PK	.3	0	31.58	56	-24.42	-	-
28	.5955	18.19	Av	.3	0	18.49	-	-	46	-27.51
29	1.5495	28.25	PK	.2	.1	28.55	56	-27.45	-	-
30	1.5495	11.19	Av	.2	.1	11.49	-	-	46	-34.51
31	1.734	28.35	PK	.2	.1	28.65	56	-27.35	-	-
32	1.734	11.86	Av	.2	.1	12.16	-	-	46	-33.84
33	4.875	33.78	PK	.2	.1	34.08	56	-21.92	-	-
34	4.875	17.76	Av	.2	.1	18.06	-	-	46	-27.94
37	4.956	33.78	PK	.2	.1	34.08	56	-21.92	-	-
38	4.956	17.87	Av	.2	.1	18.17	-	-	46	-27.83
35	16.7775	41.59	PK	.3	.2	42.09	60	-17.91	-	-
36	16.7775	26.96	Av	.3	.2	27.46	-	-	50	-22.54

LINE 1 RESULTS



LINE 2 RESULTS



14. DYNAMIC FREQUENCY SELECTION

14.1. OVERVIEW

14.1.1. LIMITS

INDUSTRY CANADA

IC RSS-210 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-210 Issue 7 A9.4 (b) (ii) **Channel Availability Check Time:** …

Additional requirements for the band 5600-5650 MHz: Until further notice, devices subject to this Section shall not be capable of transmitting in the band 5600-5650 MHz, so that Environment Canada weather radars operating in this band are protected.

FCC

§15.407 (h) and FCC 06-96 APPENDIX "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVCIES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION".

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client **(without DFS)**	Client **(with DFS)**
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.		

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period
The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows: For the Short pulse radar Test Signals this instant is the end of the *Burst*. For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated. For the Long Pulse radar Test Signal this instant is the end of the 12-second period defining the radar transmission. The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10-second period. The aggregate duration of control signals will not count quiet periods in between transmissions.	

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Table 6 – Long Pulse Radar Test Signal

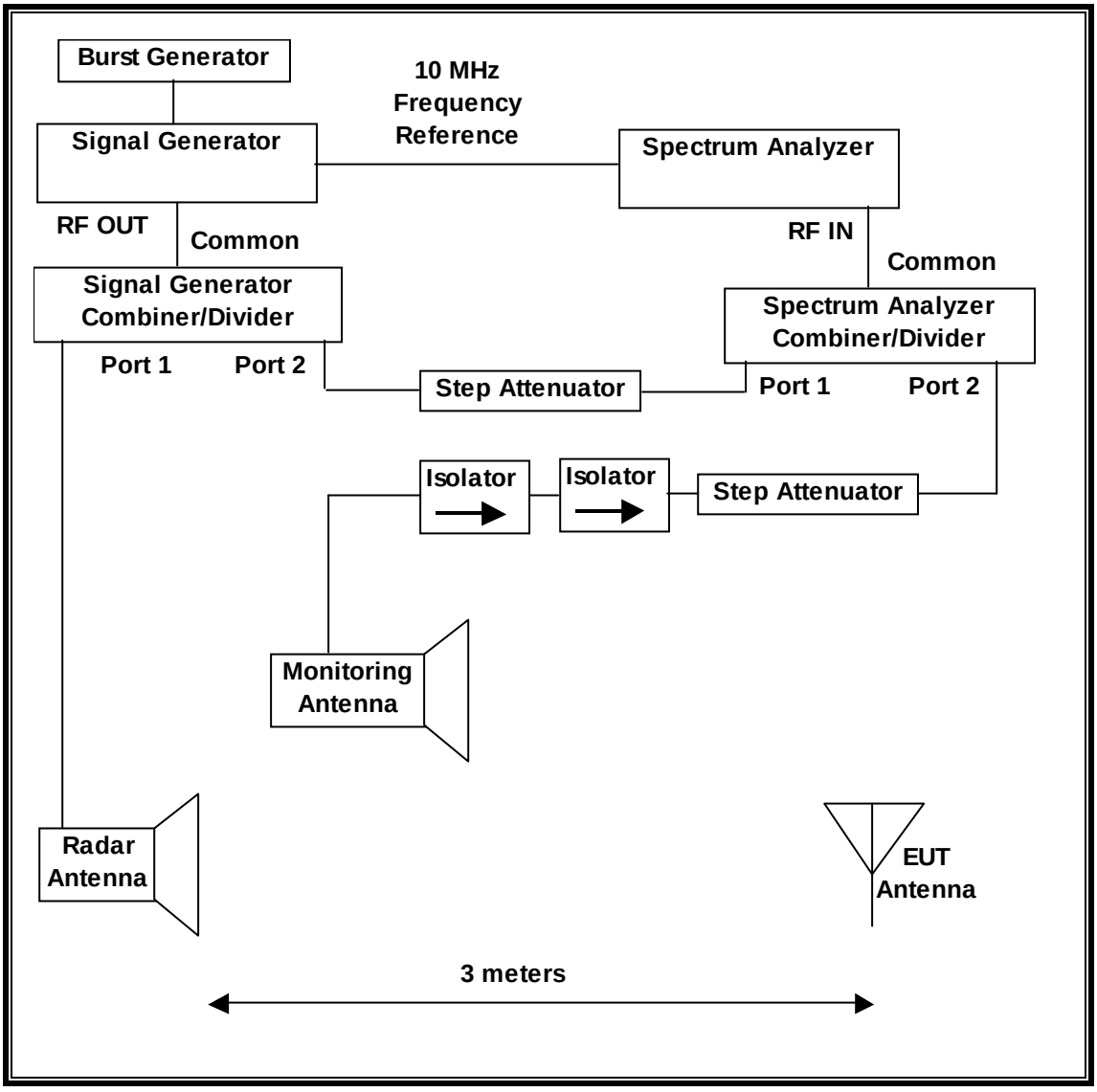
Radar Waveform	Bursts	Pulses per Burst	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform	Pulse Width (µsec)	PRI (µsec)	Burst Length (ms)	Pulses per Hop	Hopping Rate (kHz)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	300	9	.333	70%	30

14.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

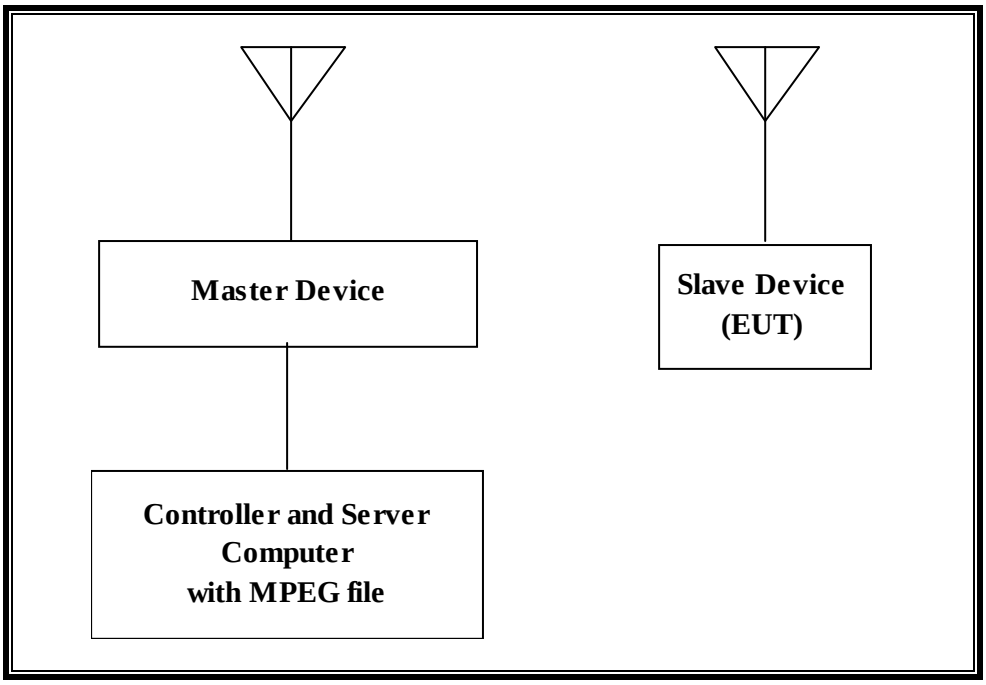
TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset Number**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	09/10/14
Vector Signal Generator, 20GHz	Agilent / HP	E8267C	C01066	09/12/14

14.1.3. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Wireless Access Point	Cisco	AIR-AP1252AG-A-K9	FTX120690N2	LDK102061
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH112490BD	DoC
Notebook PC (Controller/Server)	Dell	PP18L	10657517725	DoC
AC Adapter (Controller/Server PC)	Dell	LA65SN0-00	CN-ODF263-71615-6AU-1019	DoC

14.1.4. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges excluding the 5600-5650 MHz range.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 12.06 dBm EIRP in the 5250-5350 MHz band and 11.84 dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly utilized with the EUT has a gain of 0.44 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.

WLAN traffic exceeding the transmitter minimum activity ratio of 30% is generated by streaming the compressed video file “6 ½ Magic Hours” from the Master to the Slave in full motion video using MX Player version 1.7.22 media player.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11ac architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz. However, pursuant to FCC KDB Publication 848637, “Client devices with 80 MHz BW mode can be tested with an approved master operating in 40 MHz BW mode”. Therefore, 80MHz BW DFS testing was not performed and has been excluded from this report.

The software installed in the access point is revision 12.4(25d)JA1.

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, FCC ID: LDK102061. The minimum antenna gain for the Master Device is 3.5 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

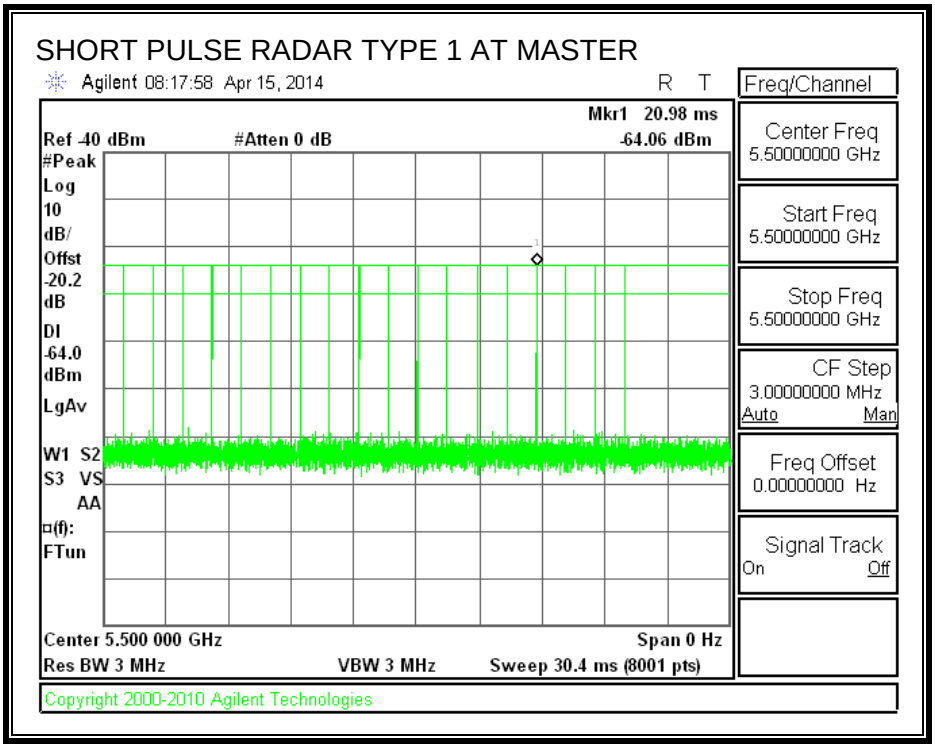
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

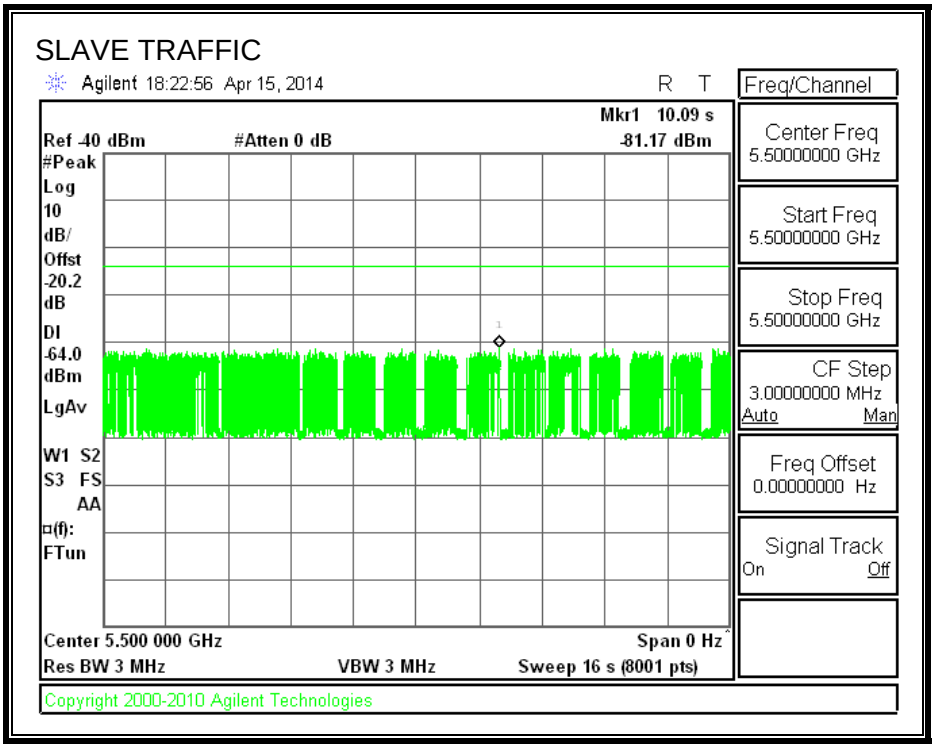
All tests were performed at a channel center frequency of 5500 MHz.

14.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

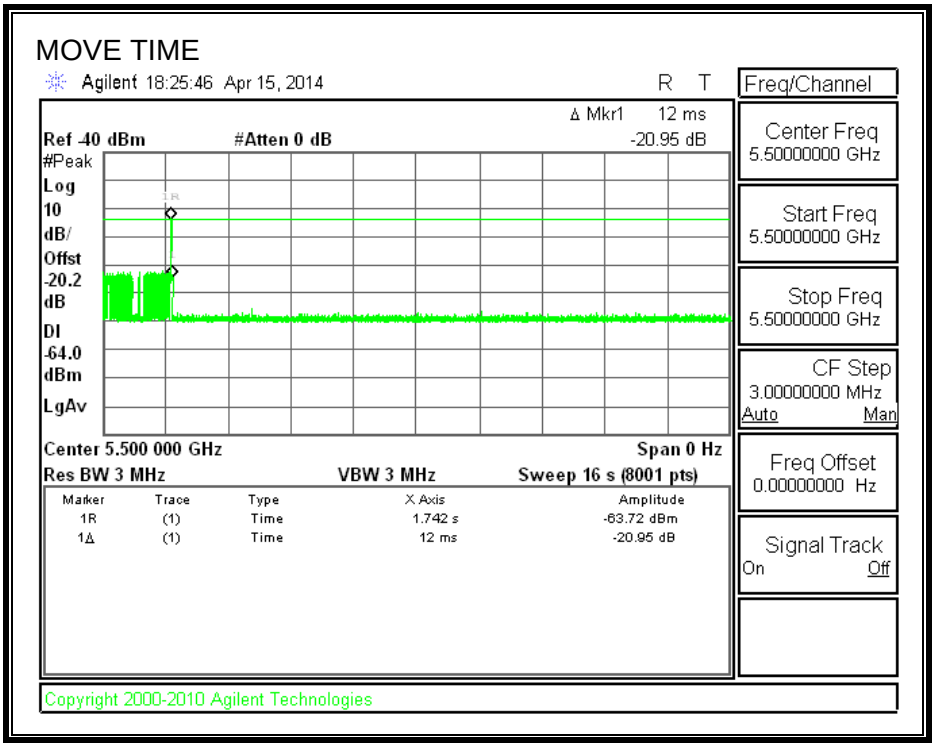
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

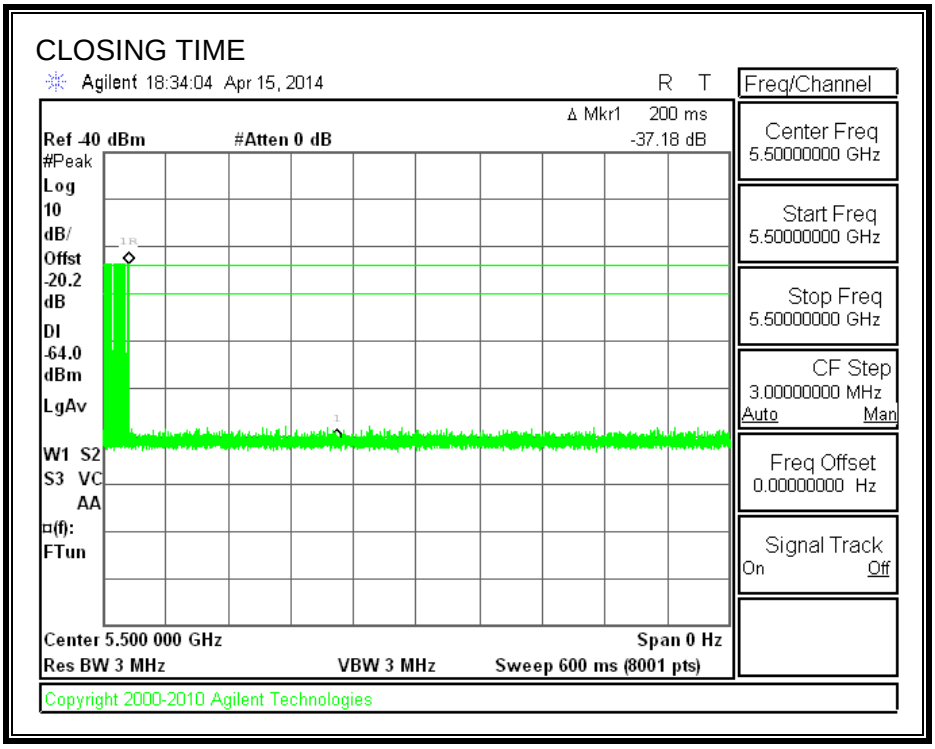
Channel Move Time (sec)	Limit (sec)
0.012	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

MOVE TIME



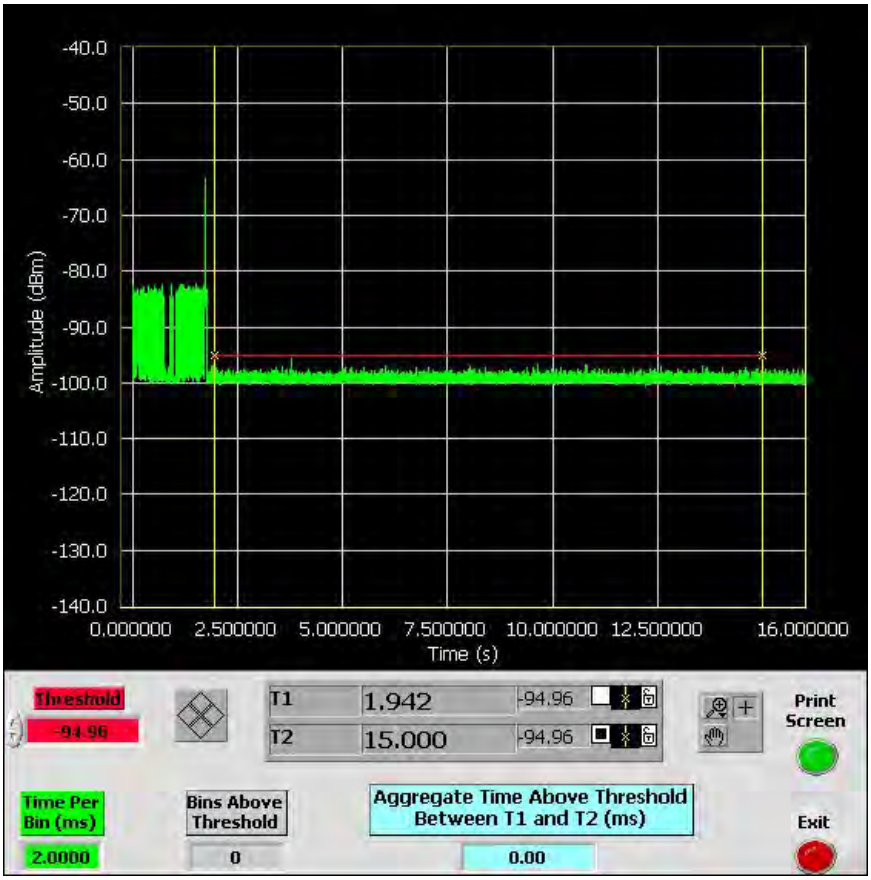
CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



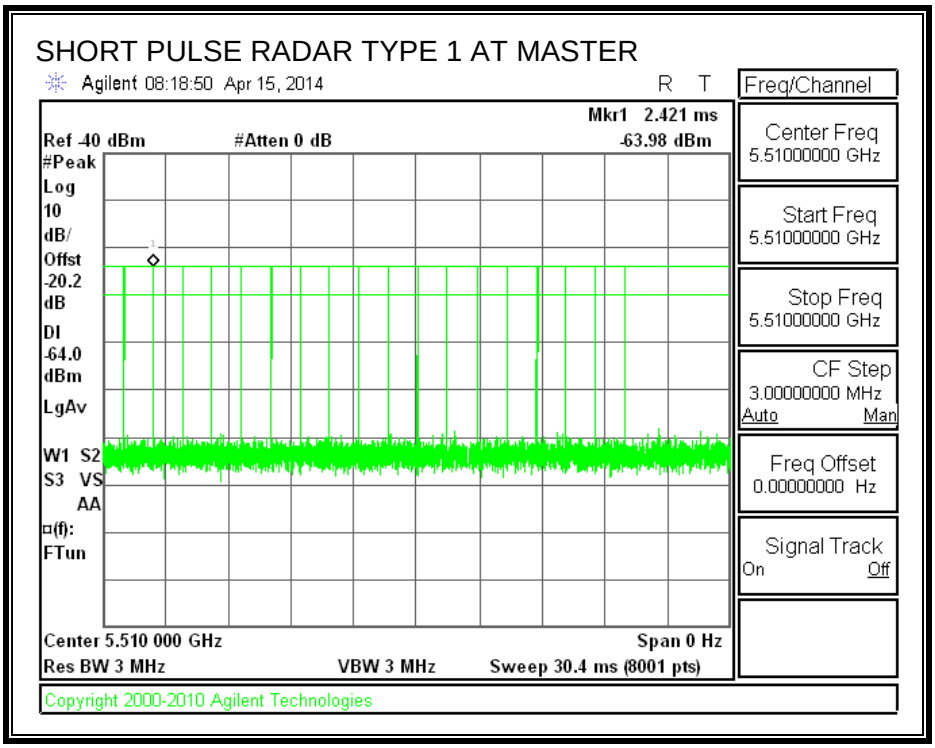
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

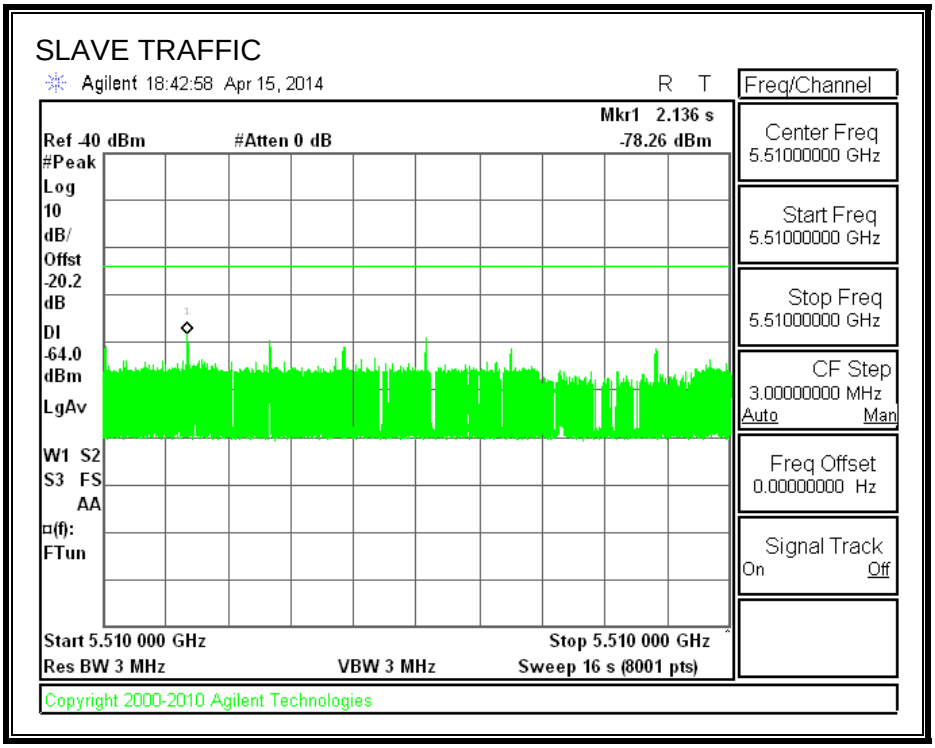
All tests were performed at a channel center frequency of 5510 MHz.

14.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

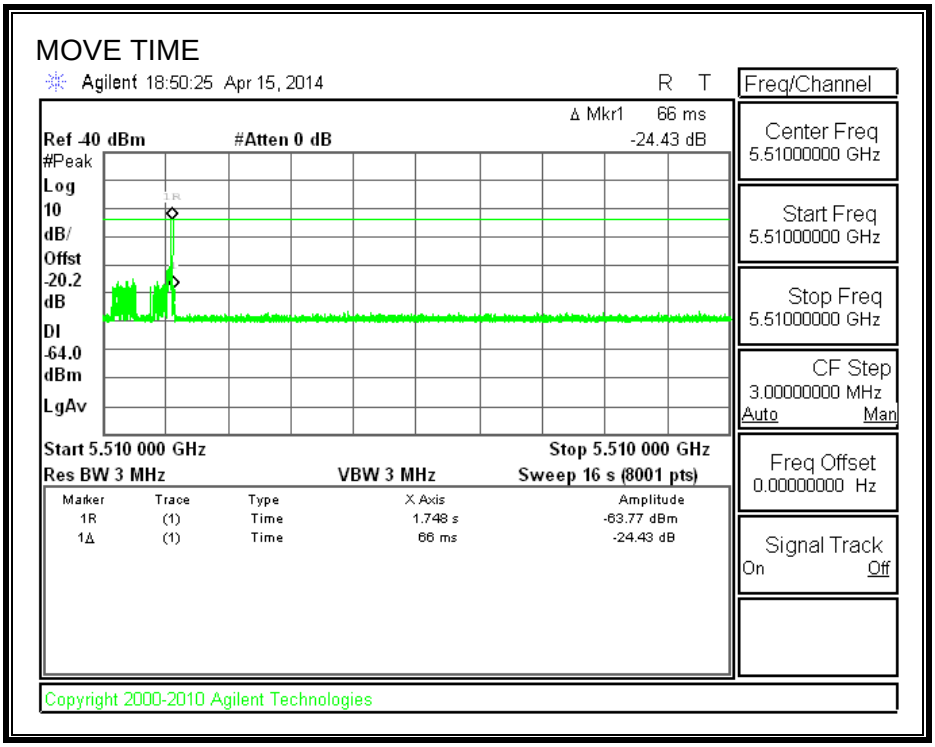
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

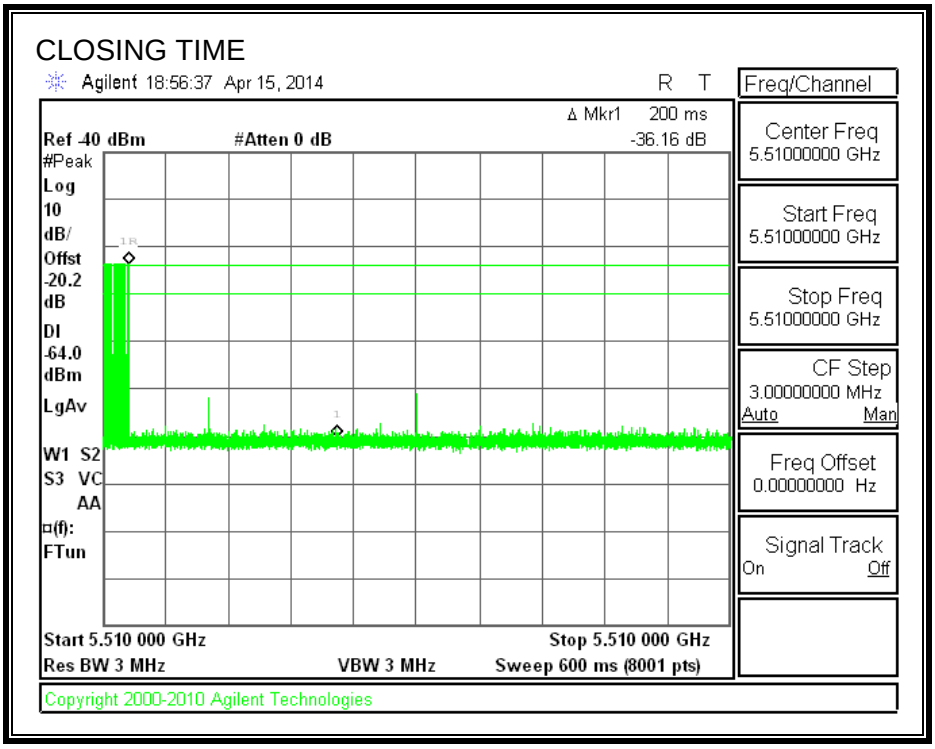
Channel Move Time (sec)	Limit (sec)
0.066	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

MOVE TIME



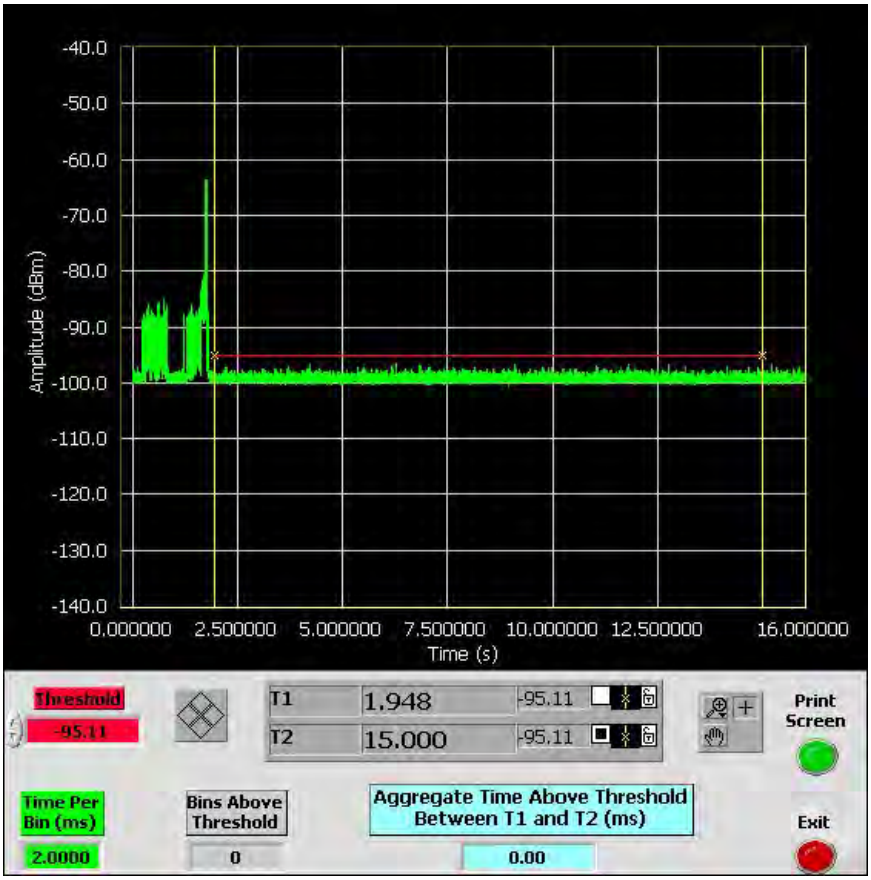
CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



14.3.5. NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.