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Report No.: SZEM171201302804

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TEST REPORT

Application No.: SZEM1712013028CR (SHEM1210006834CR)
FCC ID XXMMCIMX8M-EVK
Applicant: NXP SEMICONDUCTORS(SHANGHAI) CO., LTD.
Address of Applicant: No. 192 Liangjing Rd., Pudong New Area, Shanghai 201303, P.R. China
Manufacturer: NXP Semiconductor
Address of Manufacturer: No. 192 Liangjing Rd., Pudong New Area, Shanghai 201303, P.R. China
Factory: Trivo (Taicang) Technologies Co., Ltd.
Address of Factory: Building No. 9, YuSheng Industry Park, No. 33 North Changsheng Road, Taicang, Jiangsu, China

Equipment Under Test (EUT):

EUT Name: MCIMX8M-EVK
Model No.: MCIMX8M-EVK
Standard(s) : 47 CFR Part 15, Subpart E 15.407
Date of Receipt: 2017-10-12
Date of Test: 2017-12-08
Date of Issue: 2018-01-24

Test Result:	
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* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu

EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2018-01-24		Original

Authorized for issue by:				
		 <hr/> Foray Chen /Project Engineer		
		 <hr/> Eric Fu /Reviewer		



2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.407 (c)	Pass

N/A: Not applicable

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207 & 15.407 b(6) Class B	Pass
Duty Cycle	47 CFR Part 15, Subpart E 15.407	KDB 789033 II B 1	KDB 789033 D02 II B 1	Pass
99% Bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 II D	N/A	Pass
26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 1	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 2	47 CFR Part 15, Subpart C 15.407 (e)	Pass
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Peak Power spectrum density	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II F	47 CFR Part 15, Subpart C 15.407 (a)	Pass
DFS: Non-occupancy period	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
DFS: Channel Move Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
DFS: Channel Closing Transmission Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Radiated Emissions	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Frequency Stability	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.407 (g)	Pass



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4 General Information

4.1 Details of E.U.T. (MCIMX8M-EVK)

Power supply:	AC Adapter Manufacturer: EDAC POWER ELECTRONICS CO.,LTD Model NO.: EA10682N-120 Input: AC100-240V 2.0A, 50-60Hz Output: DC 12V 5A
Test voltage:	AC 120V/60Hz
Cable:	AC Cable: 180cm DC Cable: 120cm Type C to USB cable: 15cm
DFS Function	Slave without Radar detection
TPC Function	Not Support
Modulation Type	802.11 a/n20/n40/ac20/ac40/ac80
Antenna Type	Ceramic Antenna 3dBi

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Fixed Frequency Software	/	/	QRCT3
Laptop	Lenovo	ThinkPad X100e	
Micro USB Cable	/	/	

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25 x 10-8
2	Timeout	2s
3	Duty cycle	0.37%
4	Occupied Bandwidth	3%
5	RF conducted power	0.75dB
6	RF power density	2.84dB
7	Conducted Spurious emissions	0.75dB
8	RF Radiated power	4.5dB (Below 1GHz) 4.8dB (Above 1GHz)
9	Radiated Spurious emission test	4.2dB (Below 30MHz) 4.4dB (30MHz-1GHz) 4.6dB (1GHz-18GHz) 5.2dB (Above 18GHz)
10	Temperature test	1°C
11	Humidity test	3%
12	Supply voltages	1.5%
13	Time	3%



4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None



5 Equipment List

Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Conducted Emission at AC Power Line					
EMI test receiver	R&S	ESR7	SHEM162-1	2016-12-29	2017-12-28
LISN	Schwarzbeck	NSLK8127	SHEM061-1	2016-12-29	2017-12-28
LISN	EMCO	3816/2	SHEM019-1	2016-12-29	2017-12-28
Pulse limiter	R&S	ESH3-Z2	SHEM029-1	2016-12-29	2017-12-28
CE test Cable	/	CE01	/	2016-12-29	2017-12-28
Conducted Test					
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2016-12-29	2017-12-28
Spectrum Analyzer	Agilent	N9020A	SHEM181-1	2017-09-26	2018-09-25
Power meter	R&S	NRP	SHEM057-1	2016-12-29	2017-12-28
Power Sensor	R&S	NRP-Z22	SHEM136-1	2017-07-22	2018-07-21
Power Sensor	R&S	NRP-Z91	SHEM057-2	2016-12-29	2017-12-28
Signal Generator	R&S	SMR40	SHEM058-1	2017-07-03	2018-07-02
Signal Generator	Agilent	N5182A	SHEM182-1	2017-09-26	2018-09-25
Communication Tester	R&S	CMW270	SHEM183-1	2017-10-22	2018-10-21
Switcher	Tonscend	JS0806	SHEM184-1	2017-09-26	2018-09-25
Splitter	Anritsu	MA1612A	SHEM185-1	/	/
Coupler	e-meca	803-S-1	SHEM186-1	/	/
High-low Temp Cabinet	Suzhou Zhihe	TL-40	SHEM087-1	2017-09-26	2018-09-25
AC Power Stabilizer	WOCEN	6100	SHEM045-1	2016-12-29	2017-12-28
DC Power Supply	QJE	QJ30003SII	SHEM046-1	2016-12-29	2017-12-28
Conducted test Cable	/	RF01, RF 02	/	2016-12-29	2017-12-28
Radiated Test					
EMI test receiver	R&S	ESU40	SHEM051-1	2016-12-29	2017-12-28
Spectrum Analyzer	R&S	FSP-30	SHEM002-1	2016-12-29	2017-12-28
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519	SHEM135-1	2017-04-10	2020-04-09
Antenna (25MHz-2GHz)	Schwarzbeck	VULB9168	SHEM048-1	2017-02-28	2020-02-27
Antenna (25MHz-3GHz)	Schwarzbeck	HL562	SHEM010-1	2017-02-28	2020-02-27
Horn Antenna (1-8GHz)	Schwarzbeck	HF906	SHEM009-1	2017-10-24	2020-10-23
Horn Antenna (1-18GHz)	Schwarzbeck	BBHA9120D	SHEM050-1	2017-01-14	2020-01-13
Horn Antenna (14-40GHz)	Schwarzbeck	BBHA 9170	SHEM049-1	2017-02-13	2018-01-15
Pre-amplifier (9KHz-2GHz)	CLAVIIO	BDLNA-0001-412010	SHEM164-1	2017-08-22	2018-08-21
Pre-amplifier (1-18GHz)	CLAVIIO	BDLNA-0118-352810	SHEM050-2	2017-08-22	2018-08-21
High-amplifier (14-40GHz)	Schwarzbeck	10001	SHEM049-2	2017-02-13	2018-01-15
Band filter	LORCH	9BRX-875/X150-SR	SHEM156-1	/	/
Band filter	LORCH	13BRX-1950/X500-SR	SHEM083-2	/	/
Band filter	LORCH	5BRX-2400/X200-SR	SHEM155-1	/	/
Band filter	LORCH	5BRX-5500/X1000-SR	SHEM157-2	/	/
High pass Filter	Wainwright	WHK3.0/18G-100SS	SHEM157-1	/	/
High pass Filter	Wainwright	WHKS1700-3SS	SHEM157-3	/	/
Semi/Fully Anechoic	ST	11*6*6M	SHEM078-2	2017-07-22	2020-07-21
RE test Cable	/	RE01, RE02, RE06	/	2016-12-29	2017-12-28

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of a so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

6.1.2 Conclusion

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 3dBi.



EUT complies with FCC part 15.203 requirement.



6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.407 (c)

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

6.2.2 Conclusion

EUT Details:

WIFI chip (AR9342) support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

EUT complies with FCC part 15.407 (c) requirement.

7 Radio Spectrum Matter Test Results

7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207 & 15.407 b(6)

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

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

*Decreases with the logarithm of the frequency.

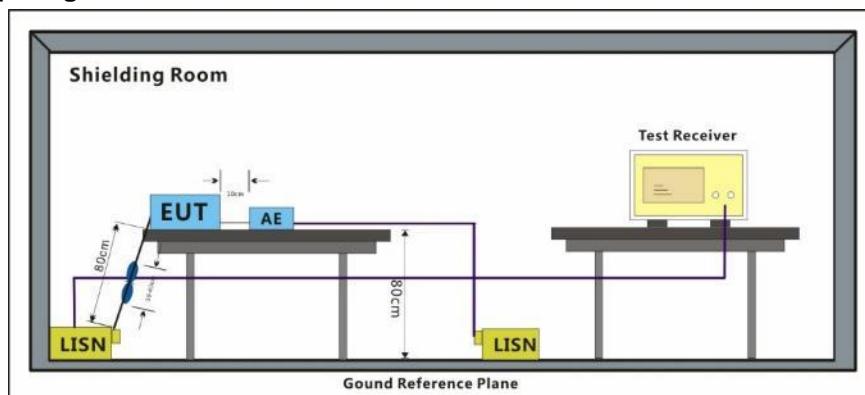
7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.1.2 Test Setup Diagram





7.1.3 Measurement Procedure and Data

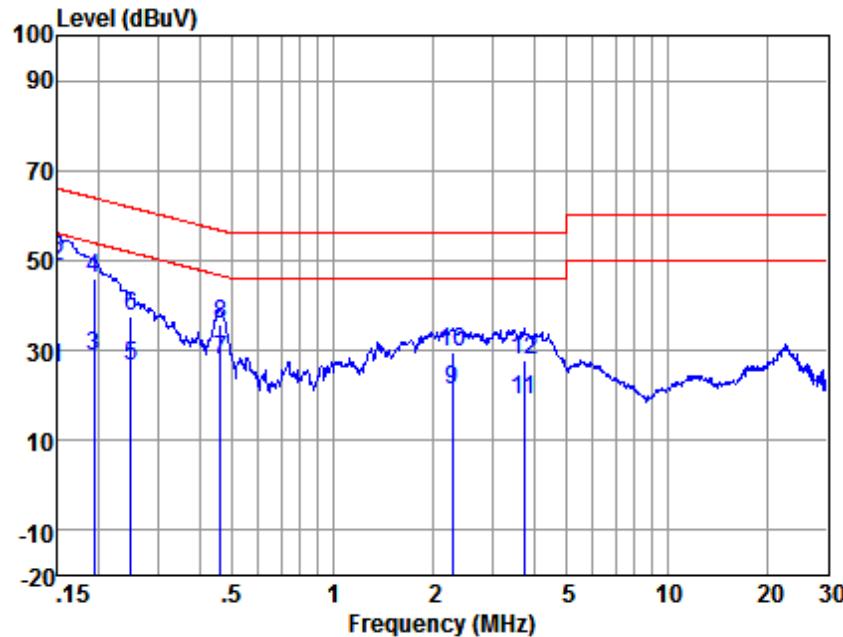
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: LISN=Read Level+ Cable Loss+ LISN Factor

7.1.4 Conclusion

EUT complies with FCC class B limit.

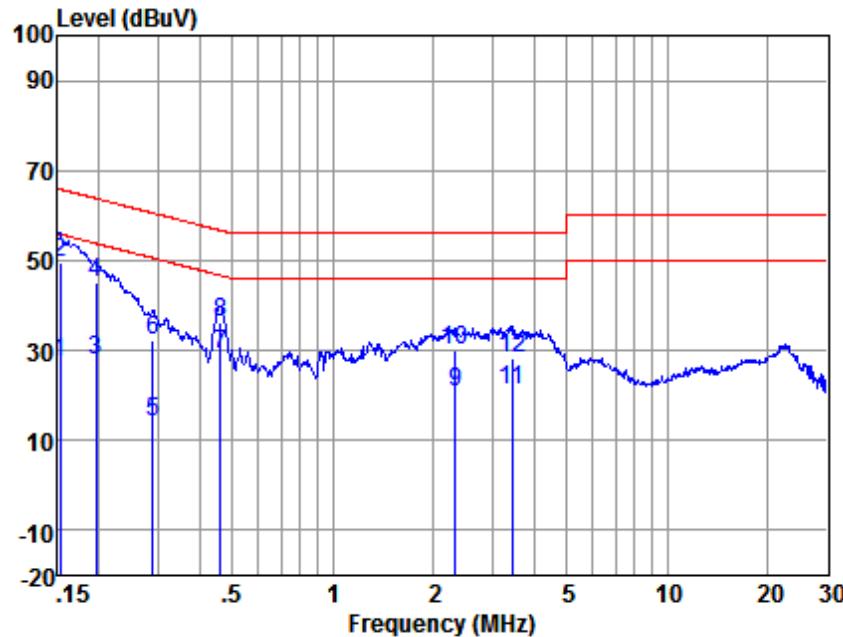
Mode:e; Line:Live Line



Site : chamber
Condition : LISN-L-2017
Project No: 6834CR
Test mode : e

	Read Freq	LISN Level	Cable Loss	Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	16.02	0.11	9.81	25.94	56.00	-30.06 Average
2	0.150	38.79	0.11	9.81	48.71	66.00	-17.29 QP
3	0.192	18.75	0.11	9.81	28.67	53.93	-25.26 Average
4	0.192	35.84	0.11	9.81	45.76	63.93	-18.17 QP
5	0.248	16.61	0.11	9.81	26.53	51.82	-25.29 Average
6	0.248	27.75	0.11	9.81	37.67	61.82	-24.15 QP
7	0.461	17.97	0.11	9.82	27.90	46.67	-18.77 Average
8	0.461	25.87	0.11	9.82	35.80	56.67	-20.87 QP
9	2.273	11.33	0.12	9.85	21.30	46.00	-24.70 Average
10	2.273	19.82	0.12	9.85	29.79	56.00	-26.21 QP
11	3.740	9.21	0.12	9.85	19.18	46.00	-26.82 Average
12	3.740	17.66	0.12	9.85	27.63	56.00	-28.37 QP

Mode:e; Line:Neutral Line



Site : chamber
Condition : LISN-N-2017
Project No: 6834CR
Test mode : e

	Read Freq	LISN Level	Cable Factor	Limit Loss	Line Level	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB
1	0.152	17.64	0.12	9.81	27.57	55.87	-28.30 Average
2	0.152	39.66	0.12	9.81	49.59	65.87	-16.28 QP
3	0.195	17.80	0.12	9.81	27.73	53.80	-26.07 Average
4	0.195	35.32	0.12	9.81	45.25	63.80	-18.55 QP
5	0.289	4.33	0.11	9.81	14.25	50.54	-36.29 Average
6	0.289	22.29	0.11	9.81	32.21	60.54	-28.33 QP
7	0.461	19.32	0.11	9.82	29.25	46.67	-17.42 Average
8	0.461	26.36	0.11	9.82	36.29	56.67	-20.38 QP
9	2.334	10.91	0.13	9.85	20.89	46.00	-25.11 Average
10	2.334	20.00	0.13	9.85	29.98	56.00	-26.02 QP
11	3.436	11.38	0.13	9.85	21.36	46.00	-24.64 Average
12	3.436	18.43	0.13	9.85	28.41	56.00	-27.59 QP

7.2 Duty Cycle

Test Requirement KDB 789033 D02 II B 1

Test Method: KDB 789033 II B 1

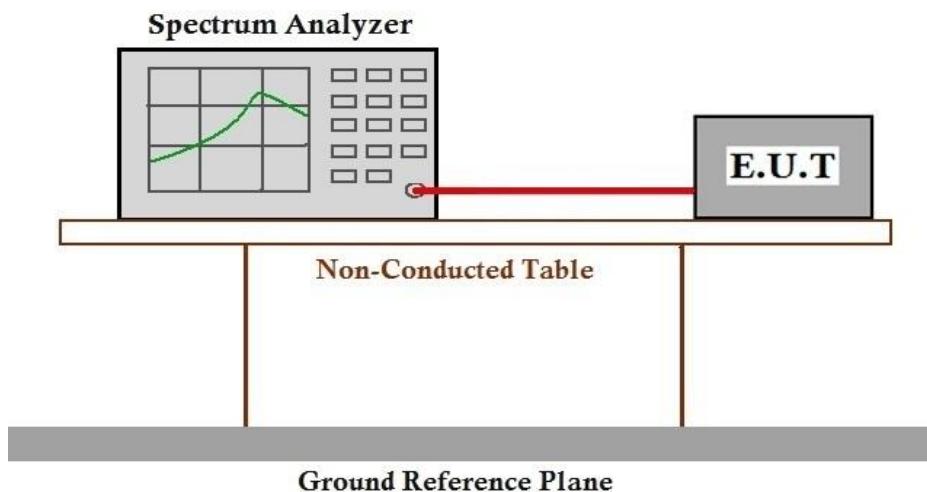
7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.2.2 Test Setup Diagram



7.2.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.2.4 Conclusion

No limit for this item, for reporting purposes only.

7.3 99% Bandwidth

Test Requirement N/A

Test Method: KDB 789033 II D

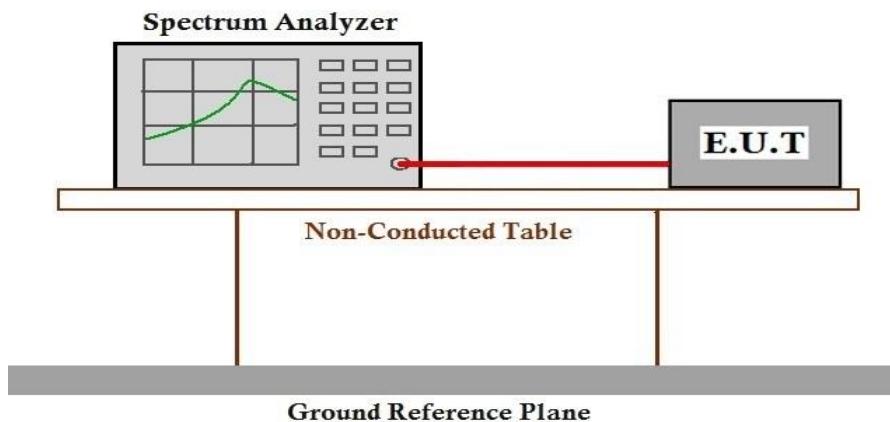
7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.3.2 Test Setup Diagram



7.3.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.3.4 Conclusion

No limit for this item, for reporting purposes only.

7.4 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II C 1

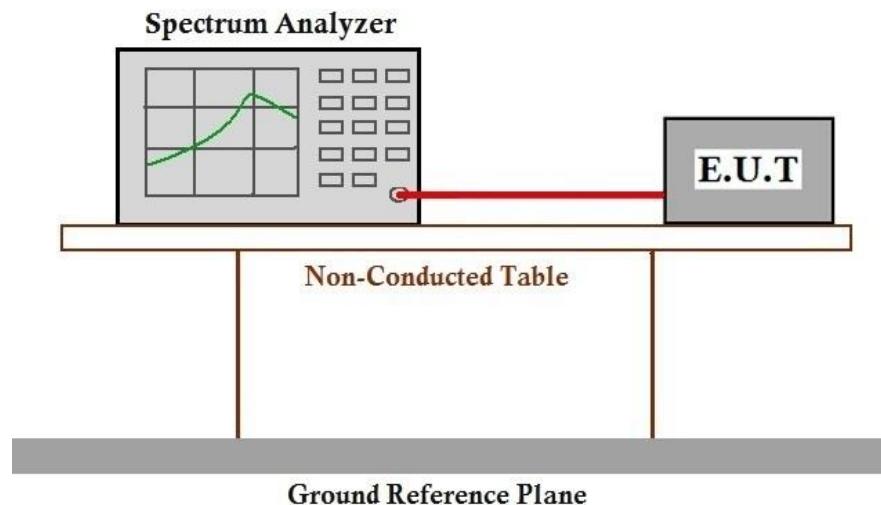
7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.4.2 Test Setup Diagram



7.4.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.4.4 Conclusion

EUT complies with FCC Part 15.407(a) limit.

7.5 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart C 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit: ≥ 500 kHz

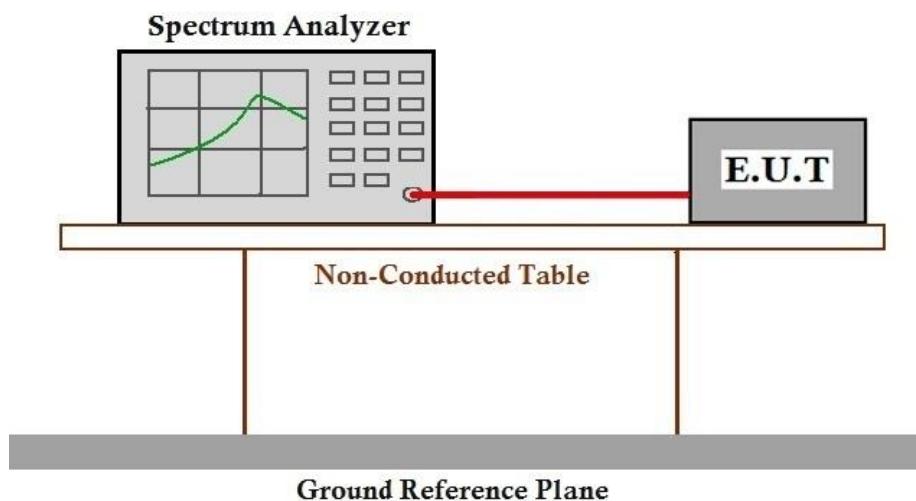
7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.5.2 Test Setup Diagram



7.5.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.5.4 Conclusion

EUT complies with FCC Part 15.407(e) limit.

7.6 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device ≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(24dBm) for client device or 11dBm+10logB*
5725-5850	≤1W(30dBm)

Remark: *Where B is the 26dB emission bandwidth in MHz.

The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

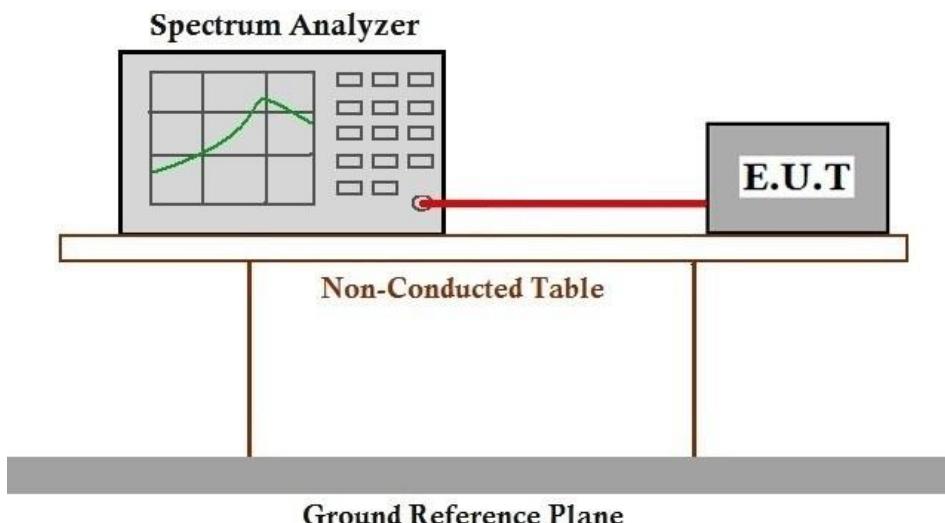
7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.6.2 Test Setup Diagram



7.6.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.6.4 Conclusion

EUT complies with FCC Part 15.407(a) limit.

7.7 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz

Remark: The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

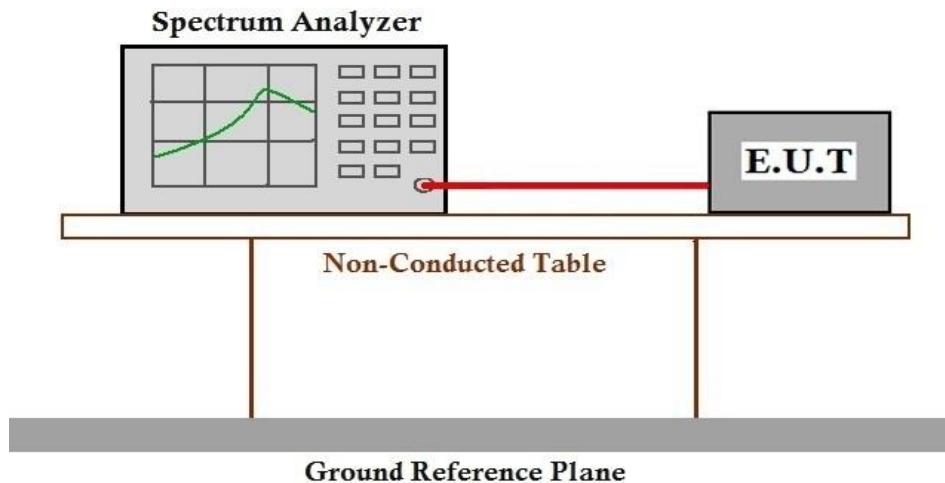
7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.7.2 Test Setup Diagram



7.7.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.7.4 Conclusion

EUT complies with FCC Part 15.407(a) limit.

7.8 DFS: Non-occupancy period

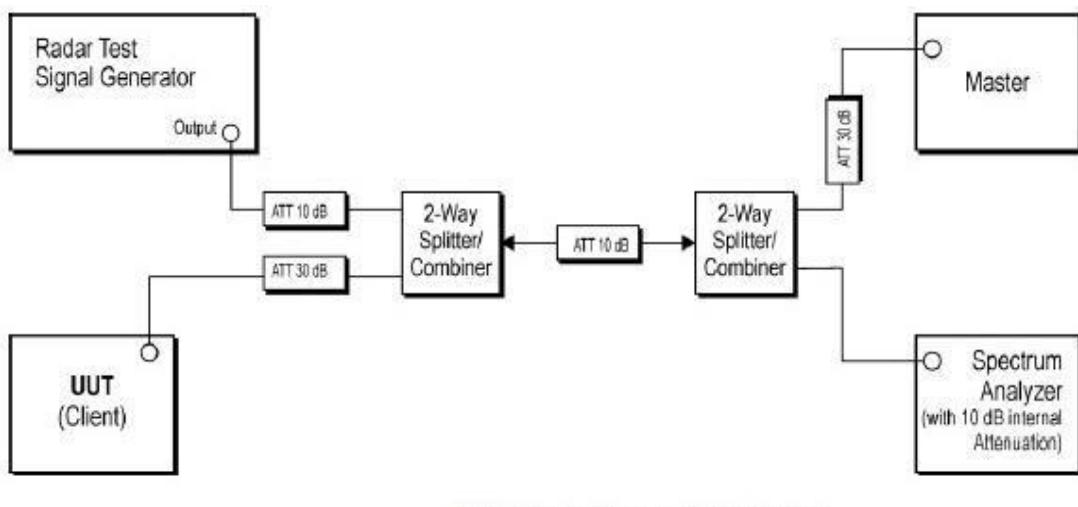
Test Requirement KDB 905462 D02 Section 5.1
 Test Method: KDB 905462 D02 Section 7.8.3
 Limit: Minimum 30 minutes

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

7.8.2 Test Setup Diagram



DFS slave without radar detection

7.8.3 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) = S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is



calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407

7.8.4 Conclusion

EUT complies with KDB 905462 D02 Section 5.1 limit.

7.9 DFS: Channel Move Time

Test Requirement	KDB 905462 D02 Section 5.1
Test Method:	KDB 905462 D02 Section 7.8.3
Limit:	10 seconds(should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst)

7.9.1 E.U.T. Operation

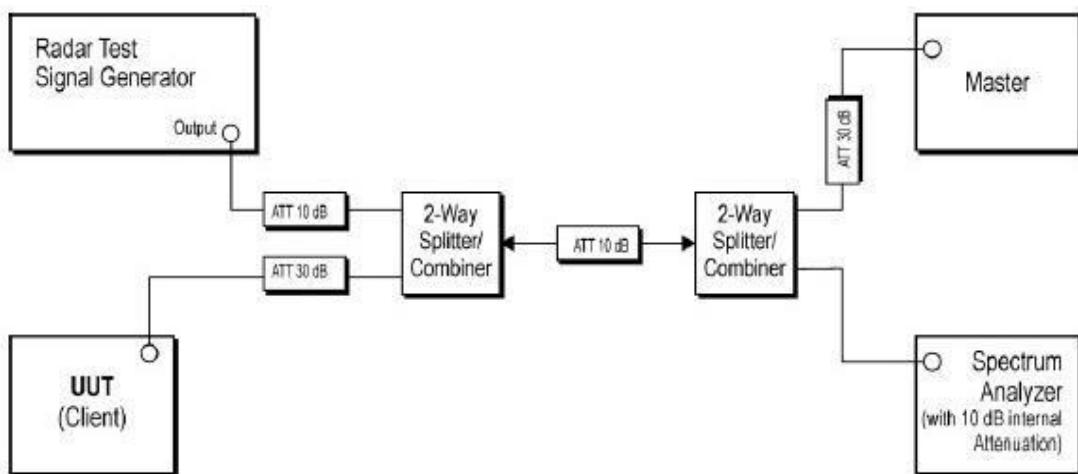
Operating Environment:

Temperature: 22 °C

Humidity: 50 % RH

Atmospheric Pressure: 1001 mbar

7.9.2 Test Setup Diagram



DFS slave without radar detection

7.9.3 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell



(0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407

7.9.4 Conclusion

EUT complies with KDB 905462 D02 Section 5.1 limit.

7.10 DFS: Channel Closing Transmission Time

Test Requirement	KDB 905462 D02 Section 5.1
Test Method:	KDB 905462 D02 Section 7.8.3
Limit:	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period(should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. It is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions)

7.10.1 E.U.T. Operation

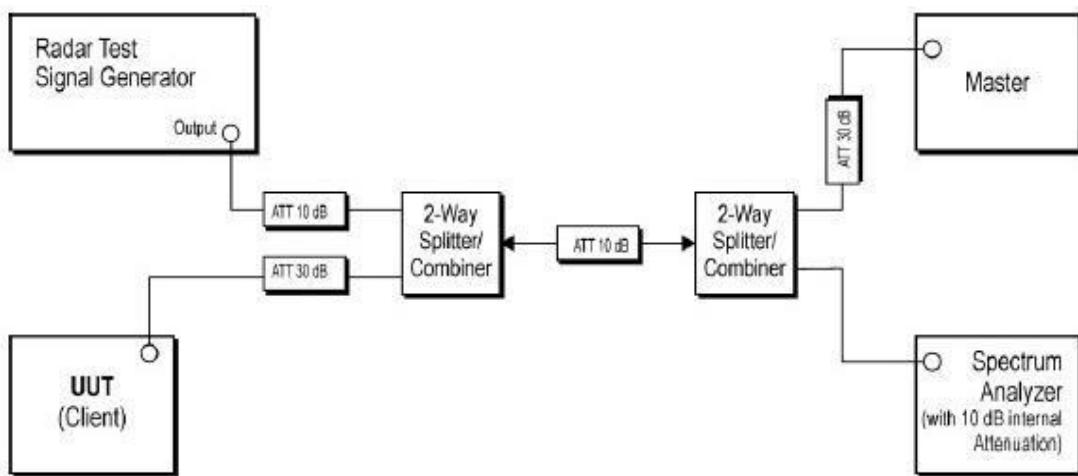
Operating Environment:

Temperature: 22 °C

Humidity: 50 % RH

Atmospheric Pressure: 1001 mbar

7.10.2 Test Setup Diagram



DFS slave without radar detection

7.10.3 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse



Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.

7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) = S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms) = N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407

7.10.4 Conclusion

EUT complies with KDB 905462 D02 Section 5.1 limit.



7.11 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

Remark Pretest all modulation and only record the worst data of SISO mode with all modulation in the report

7.11.2 Test Setup Diagram

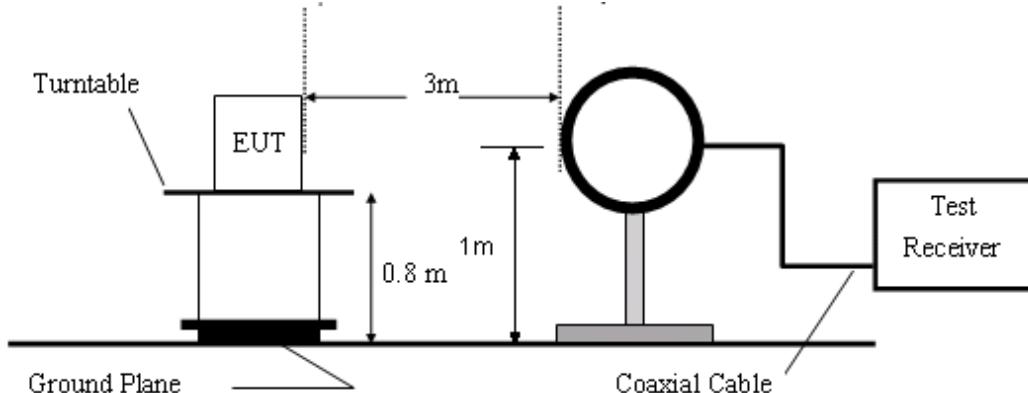


Figure1. Below 30MHz radiated emissions test configuration

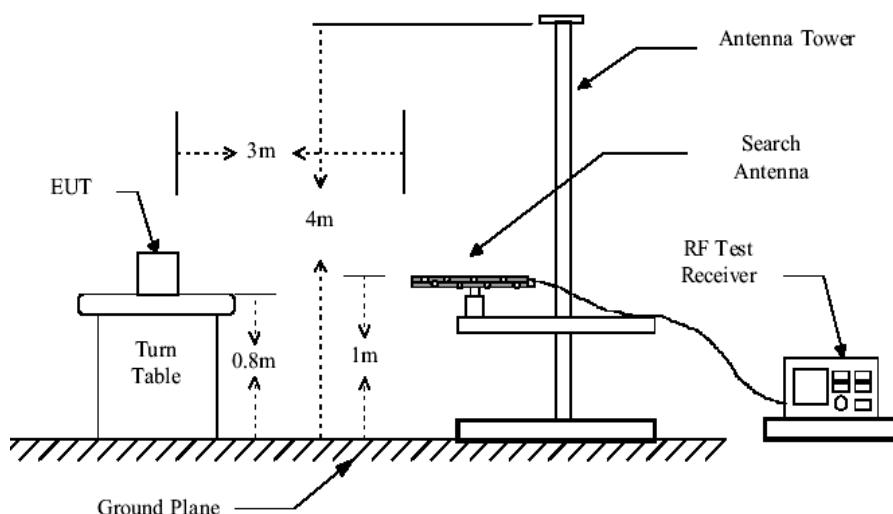


Figure2. 30MHz to 1GHz radiated emissions test configuration

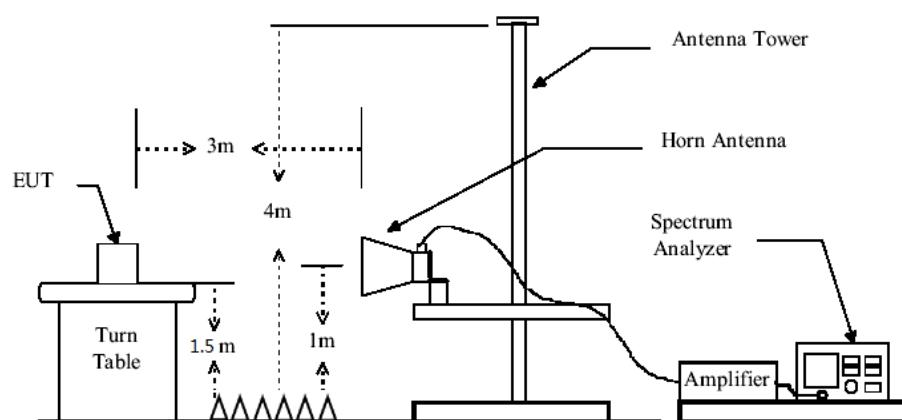


Figure3. Above 1GHz radiated emissions test configuration



7.11.3 Measurement Procedure and Data

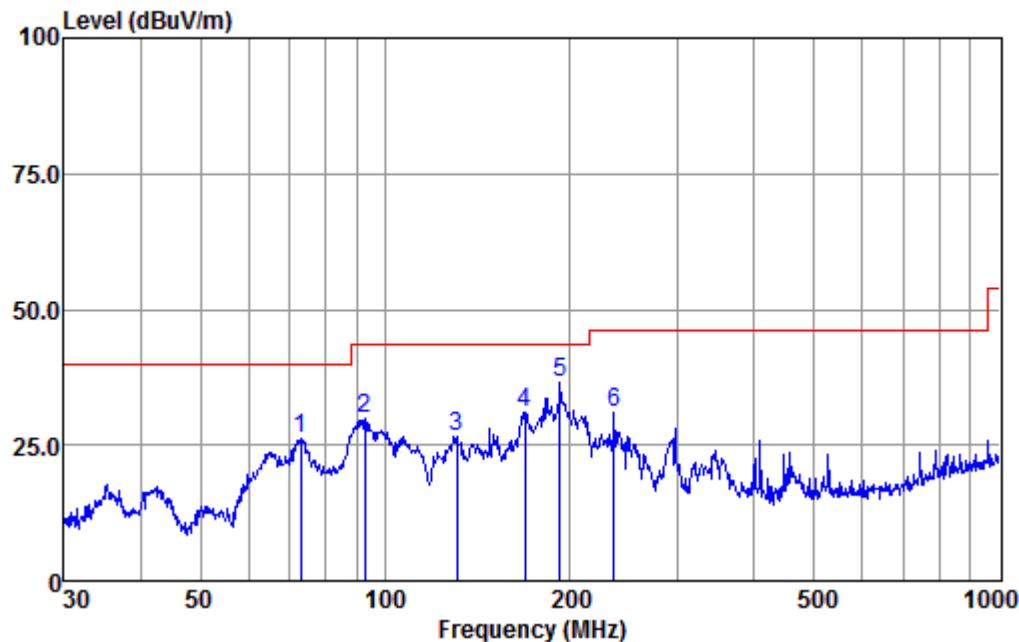
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the ANT 0re set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

7.11.4 Conclusion

EUT complies with FCC Part 15.209 & 15.407(b) limit.

30MHz-1GHz:

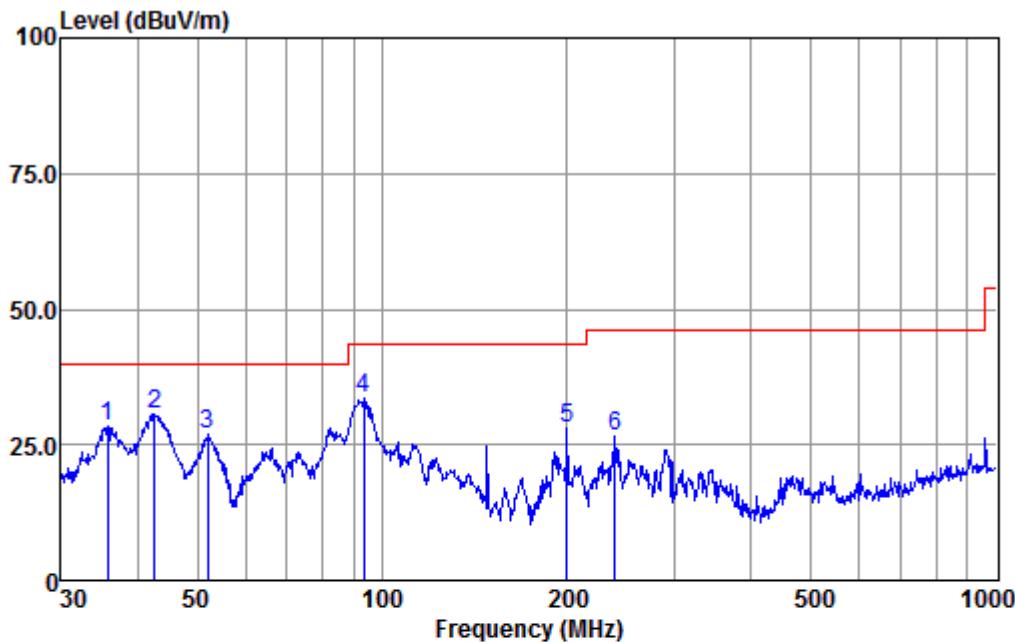


Condition : HORIZONTAL

EUT/Project: 6834CR

Test Mode : k

Freq	ReadAntenna	Cable	Preamp	Limit	Over	Line	Over		
	Freq	Level	Factor					Line	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	72.85	58.17	10.42	0.35	42.67	26.27	40.00	-13.73	QP
2	92.79	63.58	8.52	0.43	42.69	29.84	43.50	-13.66	QP
3	130.84	56.14	12.66	0.58	42.65	26.73	43.50	-16.77	QP
4	169.01	61.27	11.77	0.65	42.58	31.11	43.50	-12.39	QP
5 q	193.09	68.44	10.00	0.68	42.53	36.59	43.50	-6.91	QP
6	235.82	61.81	10.94	0.75	42.47	31.03	46.00	-14.97	QP



Condition : VERTICAL

EUT/Project: 6834CR

Test Mode : k

	Freq	ReadAntenna Level MHz	Antenna Factor	Cable Loss	Preamp Factor	Level dB	Limit Line dBuV/m	Over Line dBuV/m	Over Limit dB	Remark
		MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	35.75	54.89	15.91	0.21	42.61	28.40	40.00	-11.60	QP	
2 q	42.60	58.40	14.70	0.23	42.63	30.70	40.00	-9.30	QP	
3	52.03	58.12	11.02	0.27	42.64	26.77	40.00	-13.23	QP	
4	93.44	67.39	8.61	0.43	42.69	33.74	43.50	-9.76	QP	
5	199.99	60.35	9.40	0.69	42.52	27.92	43.50	-15.58	QP	
6	239.99	57.02	11.10	0.75	42.47	26.40	46.00	-19.60	QP	

Notes: Emission Level=Read Level + Antenna Factor + Cable Loss – Preamp Factor



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Above 1GHz

802.11a

ANT 0

Channel: 36

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10360	33.26	14.28	47.54	68.2	-20.66	peak	Horizontal
2	15540	30.60	21.58	52.18	54	-1.82	peak	Horizontal
3	20720	26.97	23.16	50.13	54	-3.87	peak	Horizontal
4	10360	31.74	14.28	46.02	68.2	-22.18	peak	Vertical
5	15540	26.39	21.58	47.97	54	-6.03	peak	Vertical
6	20720	27.96	23.16	51.12	54	-2.88	peak	Vertical

802.11a

ANT 0

Channel: 40

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10440	34.58	14.14	48.72	68.2	-19.48	peak	Horizontal
2	15660	28.86	21.22	50.08	54	-3.92	peak	Horizontal
3	20880	28.85	23.24	52.09	54	-1.91	peak	Horizontal
4	10440	34.58	14.14	48.72	68.2	-19.48	peak	Vertical
5	15660	26.87	21.22	48.09	54	-5.91	peak	Vertical
6	20880	29.65	23.24	52.89	54	-1.11	peak	Vertical

802.11a

ANT 0

Channel: 48

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	30.30	14.08	44.38	68.2	-23.82	peak	Horizontal
2	15720	28.64	21.10	49.74	54	-4.26	peak	Horizontal
3	20960	28.74	23.64	52.38	54	-1.62	peak	Horizontal
4	10480	32.36	14.08	46.44	68.2	-21.76	peak	Vertical
5	15720	28.20	21.10	49.30	54	-4.70	peak	Vertical
6	20960	26.76	23.64	50.40	54	-3.60	peak	Vertical

802.11a

ANT 0

Channel: 52

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10520	30.67	14.04	44.71	68.2	-23.49	peak	Horizontal
2	15780	30.80	21.10	51.90	54	-2.10	peak	Horizontal
3	21040	28.92	23.08	52.00	54	-2.00	peak	Horizontal
4	10520	30.90	14.04	44.94	68.2	-23.26	peak	Vertical
5	15780	31.17	21.10	52.27	54	-1.73	peak	Vertical
6	21040	28.86	23.08	51.94	54	-2.06	peak	Vertical



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802.11a

ANT 0

Channel: 56

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10560	35.53	14.05	49.58	68.2	-18.62	peak	Horizontal
2	15840	29.33	21.10	50.43	54	-3.57	peak	Horizontal
3	21120	28.16	23.14	51.30	54	-2.70	peak	Horizontal
4	10560	31.53	14.05	45.58	68.2	-22.62	peak	Vertical
5	15840	29.09	21.10	50.19	54	-3.81	peak	Vertical
6	21120	27.51	23.14	50.65	54	-3.35	peak	Vertical

802.11a

ANT 0

Channel: 64

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10640	33.32	14.13	47.45	54	-6.55	peak	Horizontal
2	15960	31.55	21.10	52.65	54	-1.35	peak	Horizontal
3	21280	29.36	23.27	52.63	54	-1.37	peak	Horizontal
4	10640	29.80	14.13	43.93	54	-10.07	peak	Vertical
5	15960	29.53	21.10	50.63	54	-3.37	peak	Vertical
6	21280	28.22	23.27	51.49	54	-2.51	peak	Vertical

802.11a

ANT 0

Channel: 100

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11000	35.40	14.54	49.94	54	-4.06	peak	Horizontal
2	16500	28.09	22.64	50.73	68.2	-17.47	peak	Horizontal
3	22000	30.67	23.83	54.50	68.2	-13.70	peak	Horizontal
4	11000	31.76	14.54	46.30	54	-7.70	peak	Vertical
5	16500	30.86	22.64	53.50	68.2	-14.70	peak	Vertical
6	22000	27.87	23.83	51.70	68.2	-16.50	peak	Vertical

802.11a

ANT 0

Channel: 120

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11200	34.26	14.25	48.51	54	-5.49	peak	Horizontal
2	16800	30.97	22.92	53.89	68.2	-14.31	peak	Horizontal
3	22400	26.76	24.06	50.82	54	-3.18	peak	Horizontal
4	11200	32.43	14.25	46.68	54	-7.32	peak	Vertical
5	16800	31.13	22.92	54.05	68.2	-14.15	peak	Vertical
6	22400	26.91	24.06	50.97	54	-3.03	peak	Vertical



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802.11a

ANT 0

Channel: 140

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11400	30.78	14.37	45.15	54	-8.85	peak	Horizontal
2	17100	31.13	22.87	54.00	68.2	-14.20	peak	Horizontal
3	22800	28.06	24.47	52.53	54	-1.47	peak	Horizontal
4	11400	35.28	14.37	49.65	54	-4.35	peak	Vertical
5	17100	28.42	22.87	51.29	68.2	-16.91	peak	Vertical
6	22800	28.51	24.47	52.98	54	-1.02	peak	Vertical

802.11a

ANT 0

Channel: 149

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11490	34.91	14.41	49.32	54	-4.68	peak	Horizontal
2	17235	30.32	22.57	52.89	68.2	-15.31	peak	Horizontal
3	22980	28.16	24.45	52.61	54	-1.39	peak	Horizontal
4	11490	30.83	14.41	45.24	54	-8.76	peak	Vertical
5	17235	26.80	22.57	49.37	68.2	-18.83	peak	Vertical
6	22980	26.98	24.45	51.43	54	-2.57	peak	Vertical

802.11a

ANT 0

Channel: 157

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11570	34.87	14.25	49.12	54	-4.88	peak	Horizontal
2	17355	26.71	21.86	48.57	68.2	-19.63	peak	Horizontal
3	23140	27.43	24.68	52.11	68.2	-16.09	peak	Horizontal
4	11570	35.56	14.25	49.81	54	-4.19	peak	Vertical
5	17355	27.58	21.86	49.44	68.2	-18.76	peak	Vertical
6	23140	25.31	24.68	49.99	68.2	-18.21	peak	Vertical

802.11a

ANT 0

Channel: 165

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11650	35.29	14.06	49.35	54	-4.65	peak	Horizontal
2	17475	27.37	21.15	48.52	68.2	-19.68	peak	Horizontal
3	23300	26.64	25.11	51.75	68.2	-16.45	peak	Horizontal
4	11650	34.37	14.06	48.43	54	-5.57	peak	Vertical
5	17475	26.42	21.15	47.57	68.2	-20.63	peak	Vertical
6	23300	26.28	25.11	51.39	68.2	-16.81	peak	Vertical



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ANT 0

Channel: 36

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10360	29.64	14.28	43.92	68.2	-24.28	peak	Horizontal
2	15540	25.61	21.58	47.19	54	-6.81	peak	Horizontal
3	20720	29.90	23.16	53.06	54	-0.94	peak	Horizontal
4	10360	30.93	14.28	45.21	68.2	-22.99	peak	Vertical
5	15540	31.17	21.58	52.75	54	-1.25	peak	Vertical
6	20720	25.33	23.16	48.49	54	-5.51	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 40

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10440	27.99	14.14	42.13	68.2	-26.07	peak	Horizontal
2	15660	28.96	21.22	50.18	54	-3.82	peak	Horizontal
3	20880	27.75	23.24	50.99	54	-3.01	peak	Horizontal
4	10440	34.07	14.14	48.21	68.2	-19.99	peak	Vertical
5	15660	29.93	21.22	51.15	54	-2.85	peak	Vertical
6	20880	29.11	23.24	52.35	54	-1.65	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 48

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	30.29	14.08	44.37	68.2	-23.83	peak	Horizontal
2	15720	28.07	21.10	49.17	54	-4.83	peak	Horizontal
3	20960	29.04	23.64	52.68	54	-1.32	peak	Horizontal
4	10480	30.42	14.08	44.50	68.2	-23.70	peak	Vertical
5	15720	30.38	21.10	51.48	54	-2.52	peak	Vertical
6	20960	27.14	23.64	50.78	54	-3.22	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 52

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10520	34.10	14.04	48.14	68.2	-20.06	peak	Horizontal
2	15780	31.20	21.10	52.30	54	-1.70	peak	Horizontal
3	21040	27.60	23.08	50.68	54	-3.32	peak	Horizontal
4	10520	30.48	14.04	44.52	68.2	-23.68	peak	Vertical
5	15780	30.63	21.10	51.73	54	-2.27	peak	Vertical
6	21040	29.56	23.08	52.64	54	-1.36	peak	Vertical



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ANT 0

Channel: 56

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 64

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 100

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 120

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical



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ANT 0

Channel: 140

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 149

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11490	24.38	10.21	34.59	54	-19.41	peak	Horizontal
2	15270	33.52	12.03	45.55	54	-8.45	peak	Horizontal
3	17235	31.78	11.89	43.67	54	-10.33	peak	Horizontal
4	11490	25.26	10.21	35.47	54	-18.53	peak	Vertical
5	14906	32.38	11.67	44.05	54	-9.95	peak	Vertical
6	17235	30.41	11.89	42.30	54	-11.70	AV	Vertical

802.11 n(HT20)

ANT 0

Channel: 157

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11570	25.37	10.31	35.68	54	-18.32	peak	Horizontal
2	13606	34.69	11.22	45.91	54	-8.09	peak	Horizontal
3	17355	31.78	12.08	43.86	54	-10.14	peak	Horizontal
4	11570	27.41	10.31	37.72	54	-16.28	peak	Vertical
5	15283	33.77	12.03	45.80	54	-8.20	peak	Vertical
6	17355	31.14	12.08	43.22	54	-10.78	peak	Vertical

802.11 n(HT20)

ANT 0

Channel: 165

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11645	25.53	10.42	35.95	54	-18.05	peak	Horizontal
2	14308	33.59	11.88	45.47	54	-8.53	peak	Horizontal
3	17470	30.83	12.25	43.08	54	-10.92	peak	Horizontal
4	11650	27.1	10.43	37.53	54	-16.47	peak	Vertical
5	15127	32.77	12.00	44.77	54	-9.23	peak	Vertical
6	17475	29.90	12.26	42.16	54	-11.84	peak	Vertical



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ANT 0

Channel: 38

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 n(HT40)

ANT 0

Channel: 46

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 n(HT40)

ANT 0

Channel: 54

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 n(HT40)

ANT 0

Channel: 62

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical



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ANT 0

Channel: 102

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 n(HT40)

ANT 0

Channel: 118

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 n(HT40)

ANT 0

Channel: 134

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 n(HT40)

ANT 0

Channel: 151

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical



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ANT 0

Channel: 159

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 36

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10360	24.63	10.31	34.94	54	-19.06	peak	Horizontal
2	13827	33.55	11.29	44.84	54	-9.16	peak	Horizontal
3	15540	30.89	12.03	42.92	54	-11.08	peak	Horizontal
4	10360	26.73	10.31	37.04	54	-16.96	peak	Vertical
5	15540	31.71	12.03	43.74	54	-10.26	peak	Vertical
6	17272	33.89	11.95	45.84	54	-8.16	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 40

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.53	10.32	35.85	54	-18.15	peak	Horizontal
2	13879	33.38	11.30	44.68	54	-9.32	peak	Horizontal
3	15630	29.68	12.01	41.69	54	-12.31	peak	Horizontal
4	10420	24.64	10.32	34.96	54	-19.04	peak	Vertical
5	15630	29.94	12.01	41.95	54	-12.05	peak	Vertical
6	14438	31.92	11.83	43.75	54	-10.25	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 48

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	25.9	10.33	36.23	54	-17.77	peak	Horizontal
2	15244	33.75	12.02	45.77	54	-8.23	peak	Horizontal
3	15720	29.37	11.98	41.35	54	-12.65	peak	Horizontal
4	6170	32.46	9.54	42.00	54	-12.00	peak	Vertical
5	10480	25.18	10.33	35.51	54	-18.49	peak	Vertical
6	15720	29.16	11.98	41.14	54	-12.86	peak	Vertical



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Channel: 52

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 56

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 64

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 100

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical



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802.11 ac(VHT20)

ANT 0

Channel: 120

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 140

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 149

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11490	24.38	10.21	34.59	54	-19.41	peak	Horizontal
2	15270	33.52	12.03	45.55	54	-8.45	peak	Horizontal
3	17235	31.78	11.89	43.67	54	-10.33	peak	Horizontal
4	11490	25.26	10.21	35.47	54	-18.53	peak	Vertical
5	14906	32.38	11.67	44.05	54	-9.95	peak	Vertical
6	17235	30.41	11.89	42.30	54	-11.70	AV	Vertical

802.11 ac(VHT20)

ANT 0

Channel: 157

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11570	25.37	10.31	35.68	54	-18.32	peak	Horizontal
2	13606	34.69	11.22	45.91	54	-8.09	peak	Horizontal
3	17355	31.78	12.08	43.86	54	-10.14	peak	Horizontal
4	11570	27.41	10.31	37.72	54	-16.28	peak	Vertical
5	15283	33.77	12.03	45.80	54	-8.20	peak	Vertical
6	17355	31.14	12.08	43.22	54	-10.78	peak	Vertical



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802.11 ac(VHT20)

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Channel: 165

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11645	25.53	10.42	35.95	54	-18.05	peak	Horizontal
2	14308	33.59	11.88	45.47	54	-8.53	peak	Horizontal
3	17470	30.83	12.25	43.08	54	-10.92	peak	Horizontal
4	11650	27.1	10.43	37.53	54	-16.47	peak	Vertical
5	15127	32.77	12.00	44.77	54	-9.23	peak	Vertical
6	17475	29.90	12.26	42.16	54	-11.84	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 38

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 46

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 54

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical



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ANT 0

Channel: 62

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 102

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 118

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 134

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical



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Channel: 151

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT40)

ANT 0

Channel: 159

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT80)

ANT 0

Channel: 42

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT80)

ANT 0

Channel: 58

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical



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Channel: 106

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT80)

ANT 0

Channel: 122

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT80)

ANT 0

Channel: 155

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

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ANT 1

Channel: 36

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical



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Channel: 40

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

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ANT 1

Channel: 48

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

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ANT 1

Channel: 52

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

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ANT 1

Channel: 56

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical



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Channel: 64

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11a

ANT 1

Channel: 100

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

802.11a

ANT 1

Channel: 120

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

802.11a

ANT 1

Channel: 140

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical



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Channel: 149

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11490	27.77	10.21	37.98	54	-16.02	peak	Horizontal
2	15322	34.04	12.04	46.08	54	-7.92	peak	Horizontal
3	17235	32.32	11.89	44.21	54	-9.79	peak	Horizontal
4	11490	25.33	10.21	35.54	54	-18.46	peak	Vertical
5	16687	31.53	12.02	43.55	54	-10.45	peak	Vertical
6	17235	31.88	11.89	43.77	54	-10.23	peak	Vertical

802.11a

ANT 1

Channel: 157

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11570	27.11	10.31	37.42	54	-16.58	peak	Horizontal
2	15465	33.87	12.04	45.91	54	-8.09	peak	Horizontal
3	17355	32.72	12.08	44.80	54	-9.20	peak	Horizontal
4	11570	25.85	10.31	36.16	54	-17.84	peak	Vertical
5	14997	32.37	11.82	44.19	54	-9.81	peak	Vertical
6	17355	30.22	12.08	42.30	54	-11.70	peak	Vertical

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ANT 1

Channel: 165

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11650	26.91	10.43	37.34	54	-16.66	peak	Horizontal
2	15322	34.06	12.04	46.10	54	-7.90	peak	Horizontal
3	17475	31.57	12.26	43.83	54	-10.17	peak	Horizontal
4	11590	27.54	10.34	37.88	54	-16.12	peak	Vertical
5	15257	33.72	12.03	45.75	54	-8.25	peak	Vertical
6	17385	32.3	12.12	44.42	54	-9.58	AV	Vertical

802.11 n(HT20)

ANT 1

Channel: 36

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10360	24.63	10.31	34.94	54	-19.06	peak	Horizontal
2	13827	33.55	11.29	44.84	54	-9.16	peak	Horizontal
3	15540	30.89	12.03	42.92	54	-11.08	peak	Horizontal
4	10360	26.73	10.31	37.04	54	-16.96	peak	Vertical
5	15540	31.71	12.03	43.74	54	-10.26	peak	Vertical
6	17272	33.89	11.95	45.84	54	-8.16	peak	Vertical



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ANT 1

Channel: 40

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.53	10.32	35.85	54	-18.15	peak	Horizontal
2	13879	33.38	11.30	44.68	54	-9.32	peak	Horizontal
3	15630	29.68	12.01	41.69	54	-12.31	peak	Horizontal
4	10420	24.64	10.32	34.96	54	-19.04	peak	Vertical
5	15630	29.94	12.01	41.95	54	-12.05	peak	Vertical
6	14438	31.92	11.83	43.75	54	-10.25	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 48

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	25.9	10.33	36.23	54	-17.77	peak	Horizontal
2	15244	33.75	12.02	45.77	54	-8.23	peak	Horizontal
3	15720	29.37	11.98	41.35	54	-12.65	peak	Horizontal
4	6170	32.46	9.54	42.00	54	-12.00	peak	Vertical
5	10480	25.18	10.33	35.51	54	-18.49	peak	Vertical
6	15720	29.16	11.98	41.14	54	-12.86	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 52

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 56

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical



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802.11 n(HT20)

ANT 1

Channel: 64

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 100

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 120

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 140

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical



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ANT 1

Channel: 149

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11490	24.38	10.21	34.59	54	-19.41	peak	Horizontal
2	15270	33.52	12.03	45.55	54	-8.45	peak	Horizontal
3	17235	31.78	11.89	43.67	54	-10.33	peak	Horizontal
4	11490	25.26	10.21	35.47	54	-18.53	peak	Vertical
5	14906	32.38	11.67	44.05	54	-9.95	peak	Vertical
6	17235	30.41	11.89	42.30	54	-11.70	AV	Vertical

802.11 n(HT20)

ANT 1

Channel: 157

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11570	25.37	10.31	35.68	54	-18.32	peak	Horizontal
2	13606	34.69	11.22	45.91	54	-8.09	peak	Horizontal
3	17355	31.78	12.08	43.86	54	-10.14	peak	Horizontal
4	11570	27.41	10.31	37.72	54	-16.28	peak	Vertical
5	15283	33.77	12.03	45.80	54	-8.20	peak	Vertical
6	17355	31.14	12.08	43.22	54	-10.78	peak	Vertical

802.11 n(HT20)

ANT 1

Channel: 165

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11645	25.53	10.42	35.95	54	-18.05	peak	Horizontal
2	14308	33.59	11.88	45.47	54	-8.53	peak	Horizontal
3	17470	30.83	12.25	43.08	54	-10.92	peak	Horizontal
4	11650	27.1	10.43	37.53	54	-16.47	peak	Vertical
5	15127	32.77	12.00	44.77	54	-9.23	peak	Vertical
6	17475	29.90	12.26	42.16	54	-11.84	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 38

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical



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ANT 1

Channel: 46

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 54

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 62

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 102

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical



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ANT 1

Channel: 118

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 134

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 151

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 n(HT40)

ANT 1

Channel: 159

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical



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ANT 1

Channel: 36

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10360	24.63	10.31	34.94	54	-19.06	peak	Horizontal
2	13827	33.55	11.29	44.84	54	-9.16	peak	Horizontal
3	15540	30.89	12.03	42.92	54	-11.08	peak	Horizontal
4	10360	26.73	10.31	37.04	54	-16.96	peak	Vertical
5	15540	31.71	12.03	43.74	54	-10.26	peak	Vertical
6	17272	33.89	11.95	45.84	54	-8.16	peak	Vertical

802.11 ac(VHT20)

ANT 1

Channel: 40

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.53	10.32	35.85	54	-18.15	peak	Horizontal
2	13879	33.38	11.30	44.68	54	-9.32	peak	Horizontal
3	15630	29.68	12.01	41.69	54	-12.31	peak	Horizontal
4	10420	24.64	10.32	34.96	54	-19.04	peak	Vertical
5	15630	29.94	12.01	41.95	54	-12.05	peak	Vertical
6	14438	31.92	11.83	43.75	54	-10.25	peak	Vertical

802.11 ac(VHT20)

ANT 1

Channel: 48

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	25.9	10.33	36.23	54	-17.77	peak	Horizontal
2	15244	33.75	12.02	45.77	54	-8.23	peak	Horizontal
3	15720	29.37	11.98	41.35	54	-12.65	peak	Horizontal
4	6170	32.46	9.54	42.00	54	-12.00	peak	Vertical
5	10480	25.18	10.33	35.51	54	-18.49	peak	Vertical
6	15720	29.16	11.98	41.14	54	-12.86	peak	Vertical

802.11 ac(VHT20)

ANT 1

Channel: 52

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical



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ANT 1

Channel: 56

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical

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ANT 1

Channel: 64

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

802.11 ac(VHT20)

ANT 1

Channel: 100

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6924	33.50	9.23	42.73	54	-11.27	peak	Horizontal
2	10360	26.29	10.31	36.60	54	-17.40	peak	Horizontal
3	15540	32.56	12.03	44.59	54	-9.41	peak	Horizontal
4	10360	26.32	10.31	36.63	54	-17.37	peak	Vertical
5	15540	31.70	12.03	43.73	54	-10.27	peak	Vertical
6	17896	33.95	12.00	45.95	54	-8.05	peak	Vertical

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ANT 1

Channel: 120

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10420	25.91	10.32	36.23	54	-17.77	peak	Horizontal
2	15630	31.46	12.01	43.47	54	-10.53	peak	Horizontal
3	16726	33.06	12.07	45.13	54	-8.87	peak	Horizontal
4	10420	26.04	10.32	36.36	54	-17.64	peak	Vertical
5	15630	32.16	12.01	44.17	54	-9.83	peak	Vertical
6	17337	33.09	12.05	45.14	54	-8.86	peak	Vertical



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ANT 1

Channel: 140

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10480	26.05	10.33	36.38	54	-17.62	peak	Horizontal
2	15720	30.22	11.98	42.20	54	-11.80	peak	Horizontal
3	17883	34.41	11.98	46.39	54	-7.61	peak	Horizontal
4	10480	26.33	10.33	36.66	54	-17.34	peak	Vertical
5	13853	34.27	11.30	45.57	54	-8.43	peak	Vertical
6	15720	30.6	11.98	42.58	54	-11.42	peak	Vertical

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ANT 1

Channel: 149

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11490	24.38	10.21	34.59	54	-19.41	peak	Horizontal
2	15270	33.52	12.03	45.55	54	-8.45	peak	Horizontal
3	17235	31.78	11.89	43.67	54	-10.33	peak	Horizontal
4	11490	25.26	10.21	35.47	54	-18.53	peak	Vertical
5	14906	32.38	11.67	44.05	54	-9.95	peak	Vertical
6	17235	30.41	11.89	42.30	54	-11.70	AV	Vertical

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ANT 1

Channel: 157

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11570	25.37	10.31	35.68	54	-18.32	peak	Horizontal
2	13606	34.69	11.22	45.91	54	-8.09	peak	Horizontal
3	17355	31.78	12.08	43.86	54	-10.14	peak	Horizontal
4	11570	27.41	10.31	37.72	54	-16.28	peak	Vertical
5	15283	33.77	12.03	45.80	54	-8.20	peak	Vertical
6	17355	31.14	12.08	43.22	54	-10.78	peak	Vertical

802.11 ac(VHT20)

ANT 1

Channel: 165

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	11645	25.53	10.42	35.95	54	-18.05	peak	Horizontal
2	14308	33.59	11.88	45.47	54	-8.53	peak	Horizontal
3	17470	30.83	12.25	43.08	54	-10.92	peak	Horizontal
4	11650	27.1	10.43	37.53	54	-16.47	peak	Vertical
5	15127	32.77	12.00	44.77	54	-9.23	peak	Vertical
6	17475	29.90	12.26	42.16	54	-11.84	peak	Vertical



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802.11 ac(VHT40)

ANT 1

Channel: 38

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT40)

ANT 1

Channel: 46

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT40)

ANT 1

Channel: 54

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT40)

ANT 1

Channel: 62

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical



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802.11 ac(VHT40)

ANT 1

Channel: 102

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT40)

ANT 1

Channel: 118

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT40)

ANT 1

Channel: 134

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT40)

ANT 1

Channel: 151

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical



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802.11 ac(VHT40)

ANT 1

Channel: 159

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT80)

ANT 1

Channel: 42

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

802.11 ac(VHT80)

ANT 1

Channel: 58

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT80)

ANT 1

Channel: 106

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical



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802.11 ac(VHT80)

ANT 1

Channel: 122

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10460	25.60	10.33	35.93	54	-18.07	peak	Horizontal
2	15690	29.13	11.99	41.12	54	-12.88	peak	Horizontal
3	16986	32.05	12.15	44.20	54	-9.80	peak	Horizontal
4	10460	27.73	10.33	38.06	54	-15.94	peak	Vertical
5	14828	33.91	11.54	45.45	54	-8.55	peak	Vertical
6	15690	31.11	11.99	43.10	54	-10.90	peak	Vertical

802.11 ac(VHT80)

ANT 1

Channel: 155

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	10380	25.72	10.31	36.03	54	-17.97	peak	Horizontal
2	15570	32.61	12.02	44.63	54	-9.37	peak	Horizontal
3	17090	33.31	12.00	45.31	54	-8.69	peak	Horizontal
4	10380	24.64	10.31	34.95	54	-19.05	peak	Vertical
5	14373	31.83	11.86	43.69	54	-10.31	peak	Vertical
6	15570	29.80	12.02	41.82	54	-12.18	peak	Vertical

Remark: 1. Test Level =Receiver Reading + Antenna Factor + Cable Loss -Preamplifier Factor.

2. No any other emissions level which are attenuated less than 20dB below the limit. According to 15.31(o), the amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this Part. Hence there no other emissions have been reported.
3. If the Peak value below the AV Limit, the AV test doesn't perform for this submission.

7.12 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar

Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

Remark Pretest all modulation and only record the worst data of SISO mode with all modulation in the report

7.12.2 Test Setup Diagram

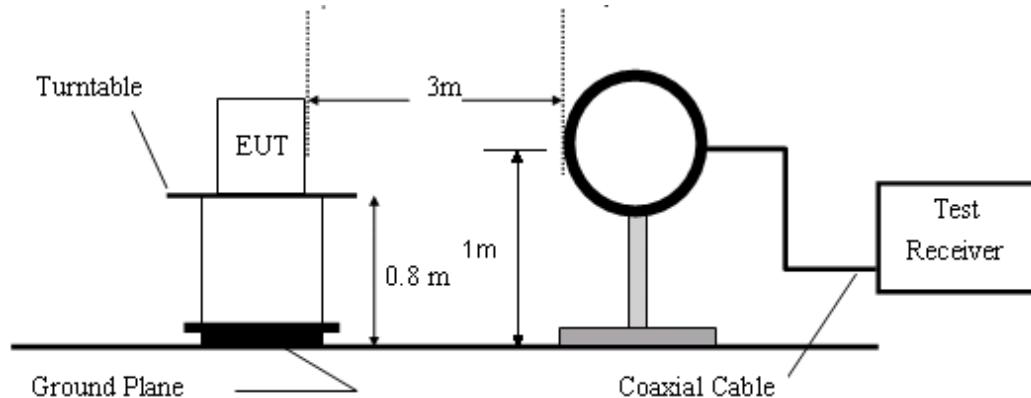
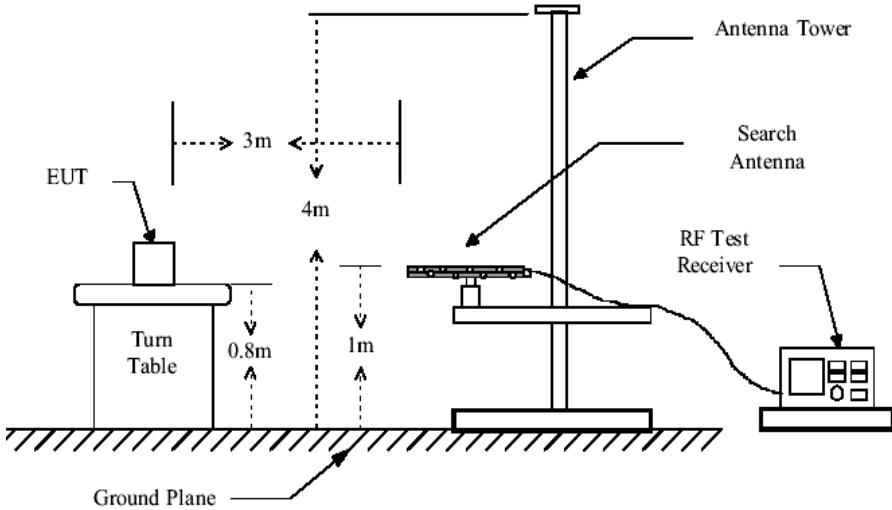
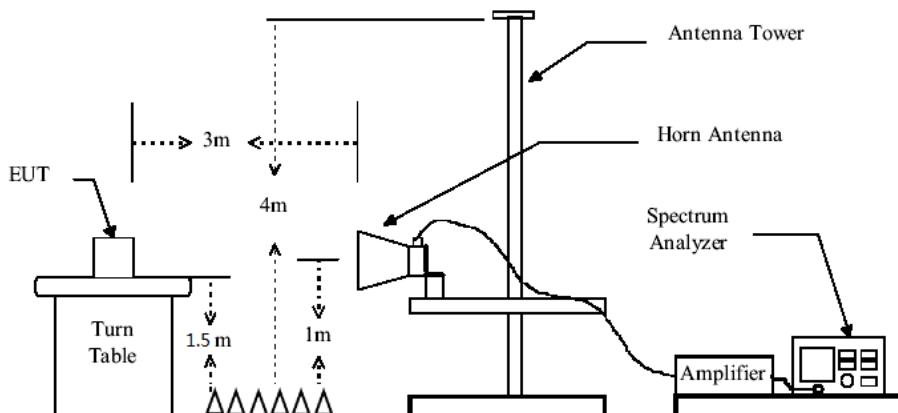


Figure1. Below 30MHz radiated emissions test configuration

**Figure2. 30MHz to 1GHz radiated emissions test configuration****Figure3. Above 1GHz radiated emissions test configuration**

7.12.3 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the ANT 0re set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum



Hold Mode.

g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

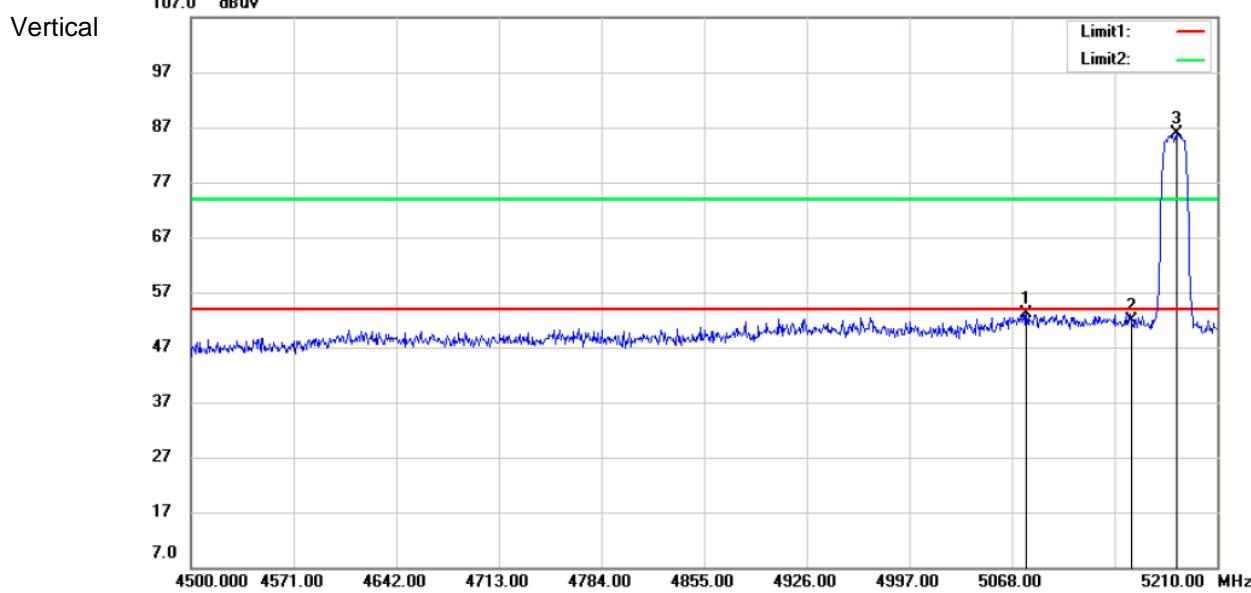
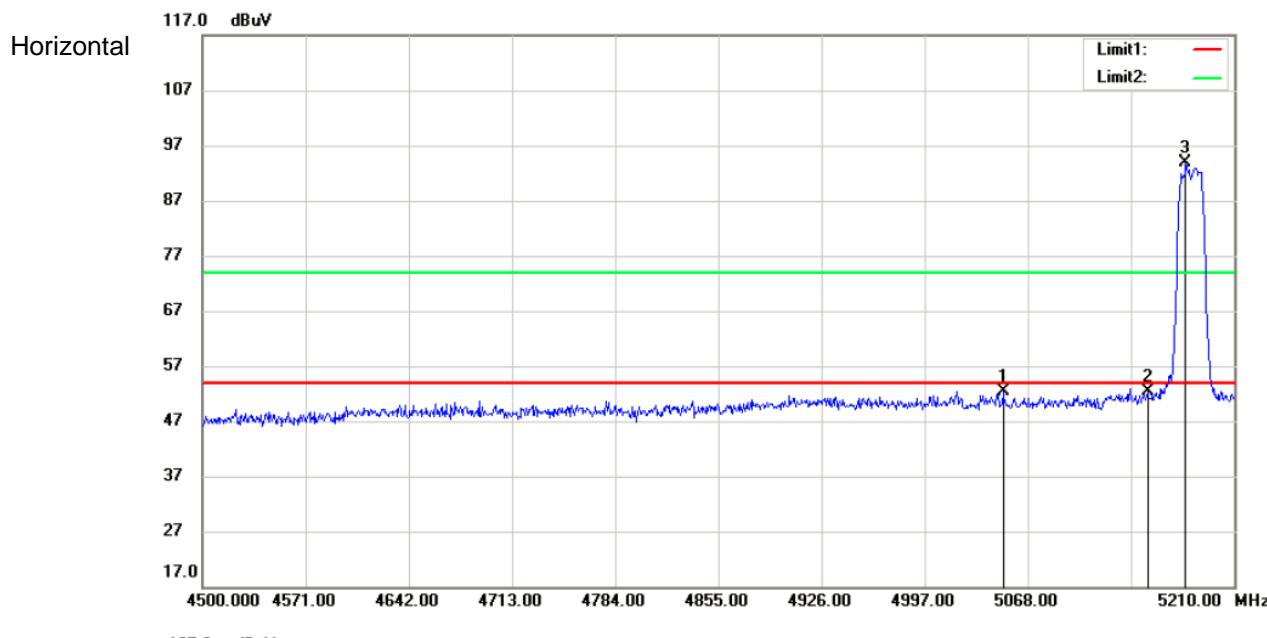
Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

7.12.4 Conclusion

EUT complies with FCC Part 15.209 & 15.407(b) limit.

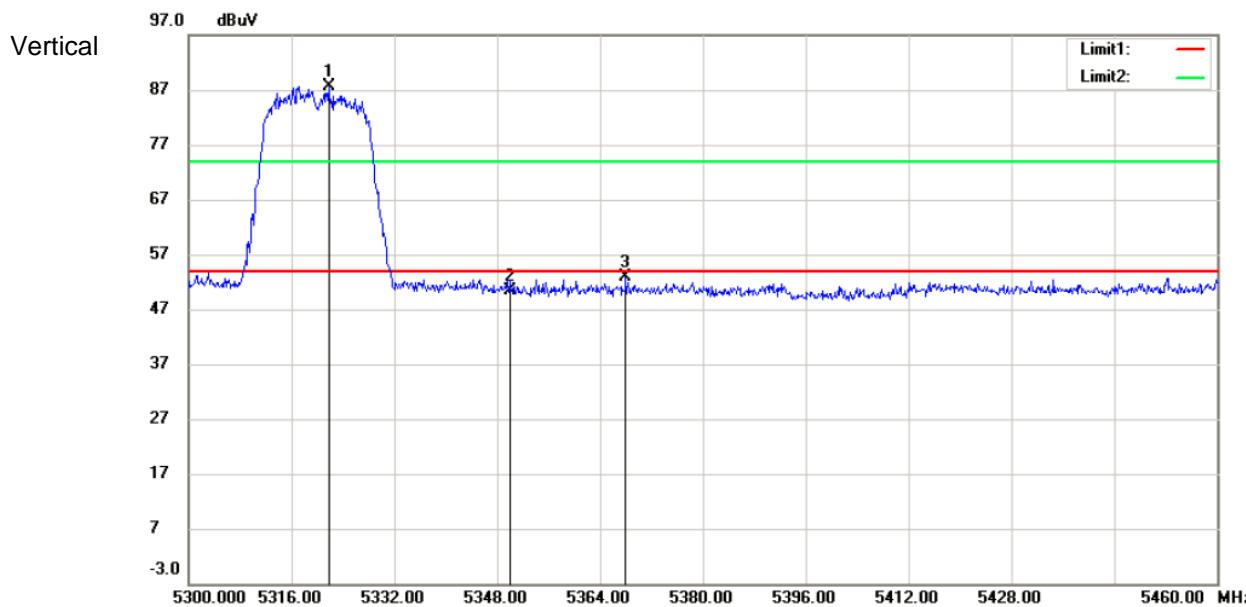
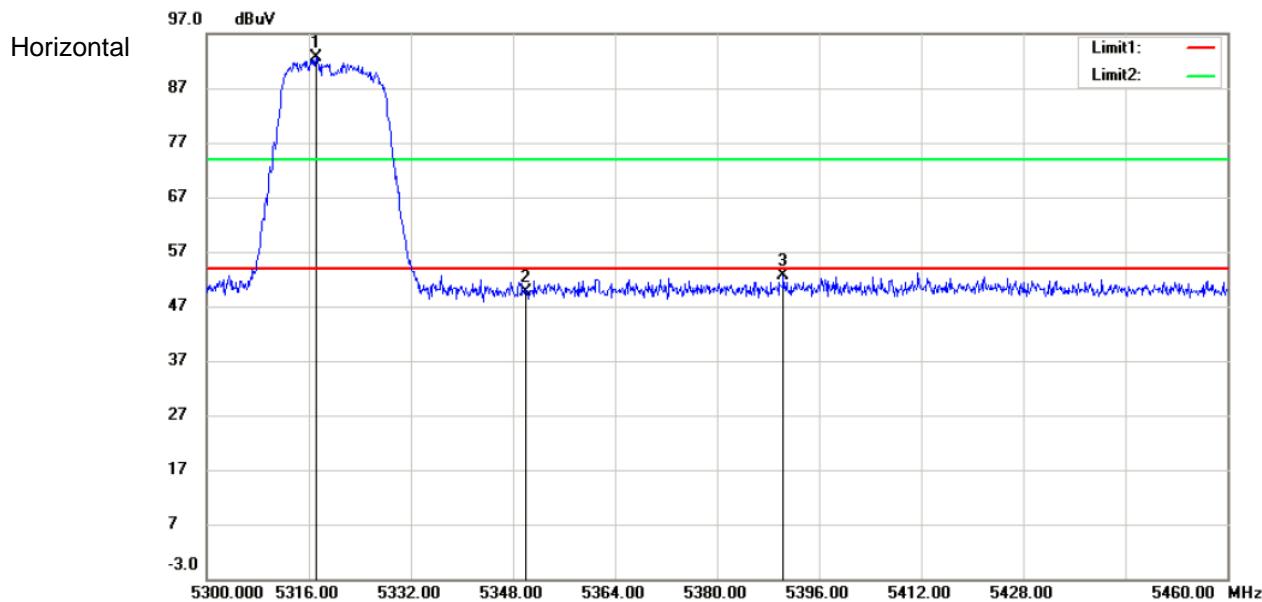
802.11 a
ANT 0
Channel: 36

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5050.96	44.92	7.44	52.36	54	-1.64	Peak	Horizontal
2	5150	45.43	6.92	52.35	54	-1.65	Peak	Horizontal
3	5176.63	87.12	6.78	93.9	54	39.9	Peak	Horizontal
1	5077.94	45.77	7.3	53.07	54	-0.93	Peak	Vertical
2	5150	44.92	6.92	51.84	54	-2.16	Peak	Vertical
3	5181.6	79.1	6.75	85.85	54	31.85	Peak	Vertical



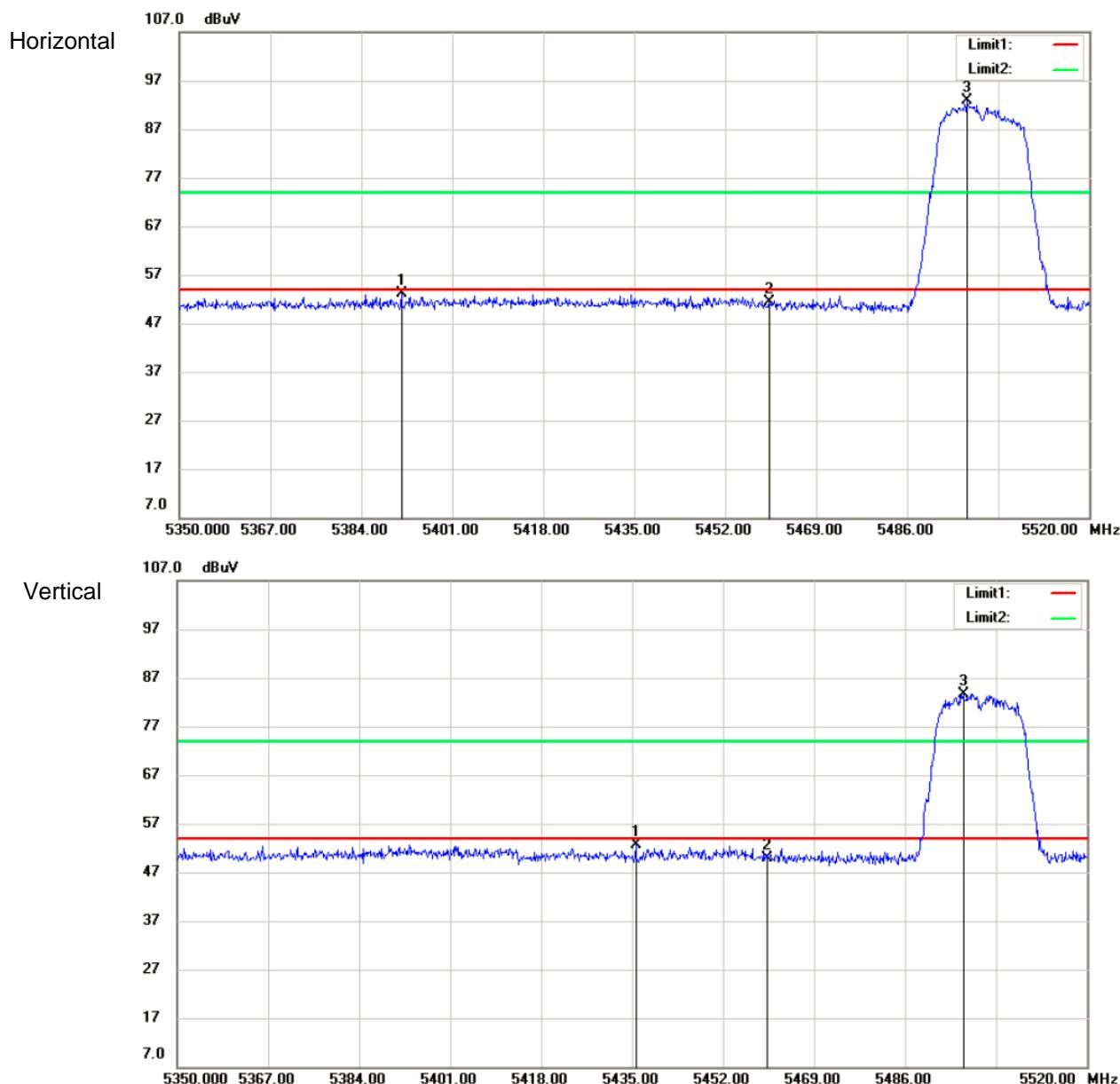
802.11 a**ANT 0****Channel: 64**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5317.12	85.9	6.76	92.66	54	38.66	Peak	Horizontal
2	5350	42.73	6.98	49.71	54	-4.29	Peak	Horizontal
3	5390.4	45.47	7.25	52.72	54	-1.28	Peak	Horizontal
1	5321.76	80.75	6.79	87.54	54	33.54	Peak	Vertical
2	5350	43.44	6.98	50.42	54	-3.58	Peak	Vertical
3	5368	45.66	7.11	52.77	54	-1.23	Peak	Vertical



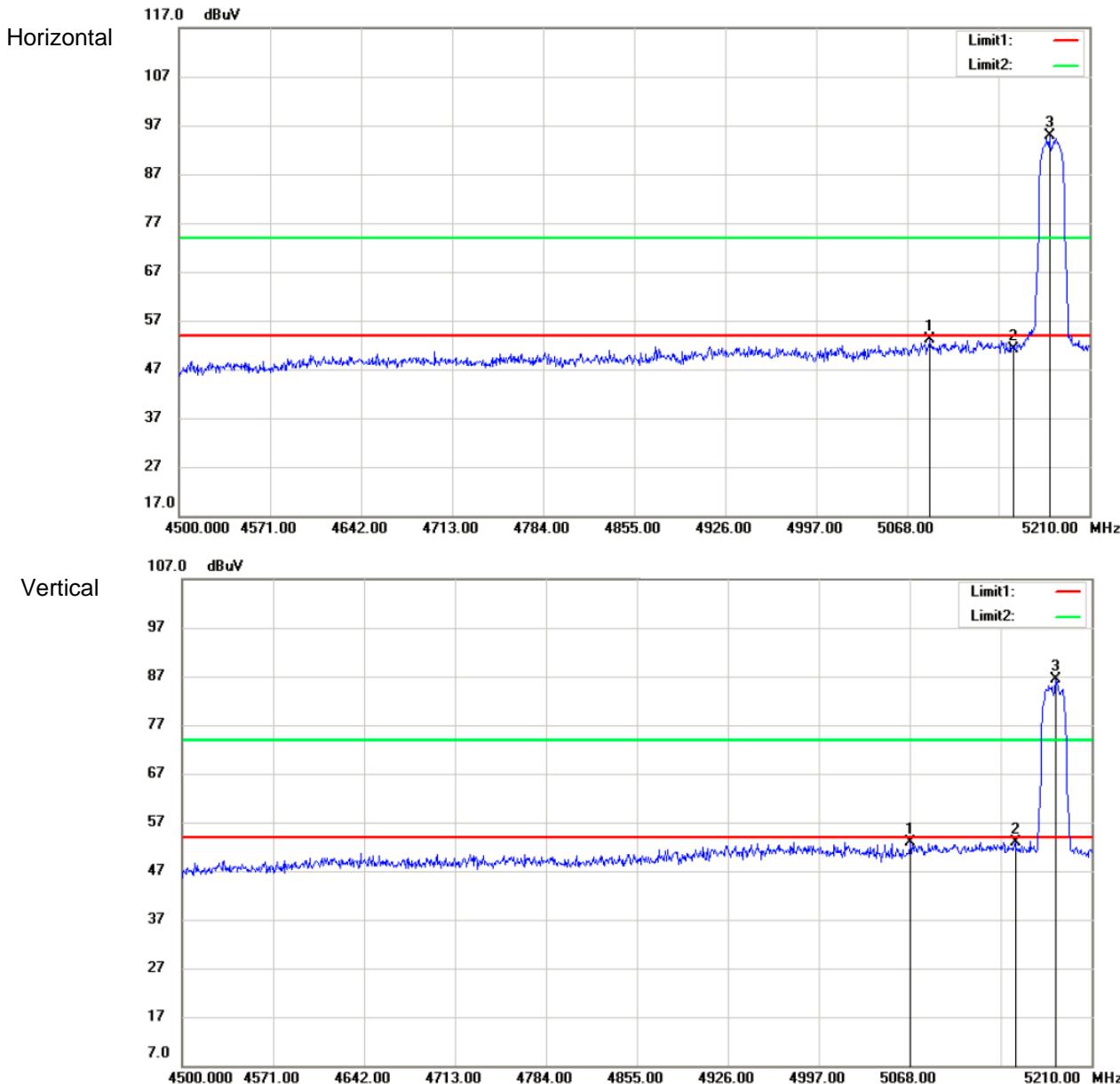
802.11 a
ANT 0
Channel: 100

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5391.48	45.8	7.27	53.07	54	-0.93	Peak	Horizontal
2	5460	44.32	7.11	51.43	54	-2.57	Peak	Horizontal
3	5497.22	85.95	6.98	92.93	54	38.93	Peak	Horizontal
1	5435.68	45.39	7.2	52.59	54	-1.41	Peak	Vertical
2	5460	42.73	7.11	49.84	54	-4.16	Peak	Vertical
3	5496.88	76.71	6.98	83.69	54	29.69	Peak	Vertical



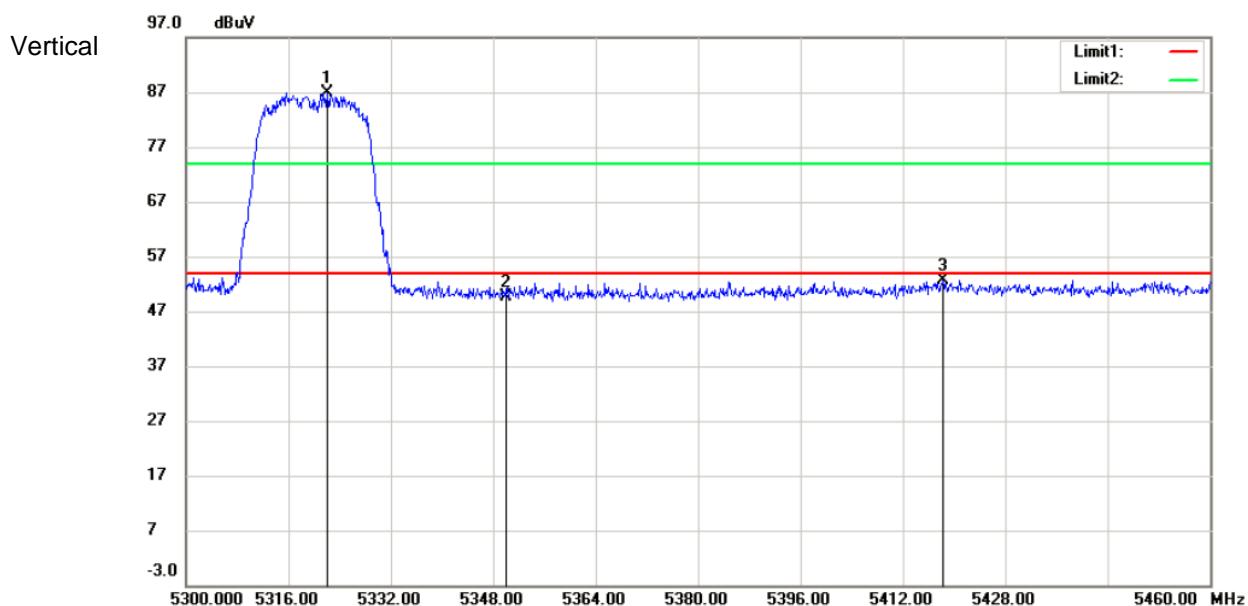
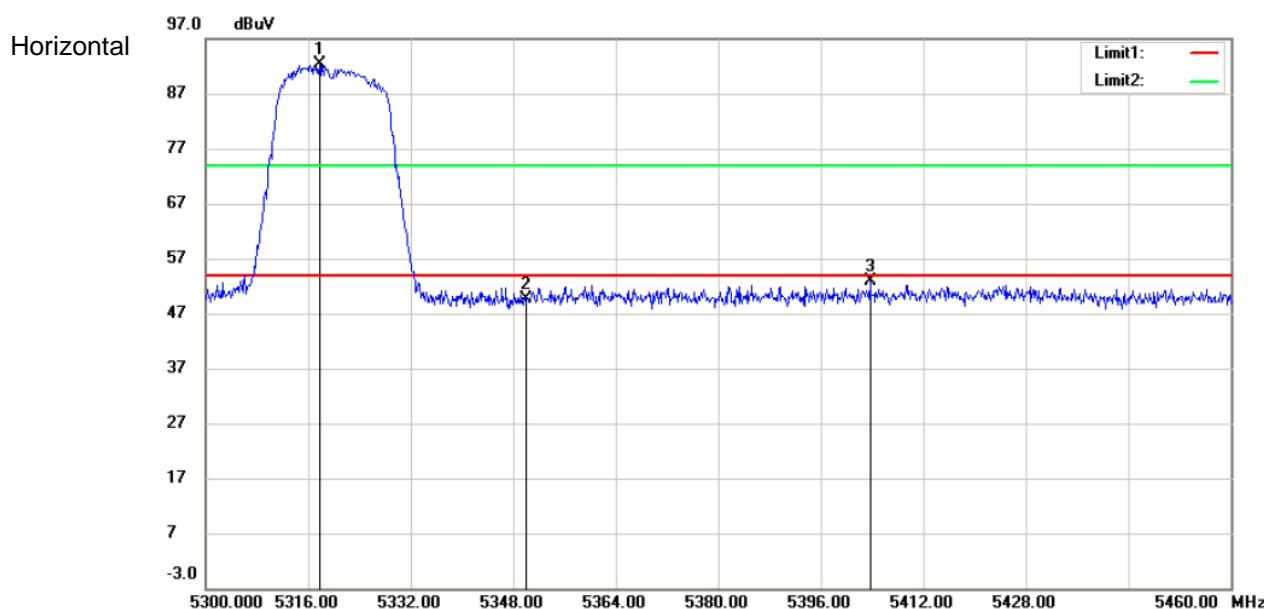
802.11 n(HT20)**ANT 0****Channel: 36**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5085.75	45.82	7.28	53.1	54	-0.9	Peak	Horizontal
2	5150	44.13	6.92	51.05	54	-2.95	Peak	Horizontal
3	5178.76	88.05	6.77	94.82	54	40.82	Peak	Horizontal
1	5068.71	45.62	7.35	52.97	54	-1.03	Peak	Vertical
2	5150	45.9	6.92	52.82	54	-1.18	Peak	Vertical
3	5181.6	79.55	6.75	86.3	54	32.3	Peak	Vertical



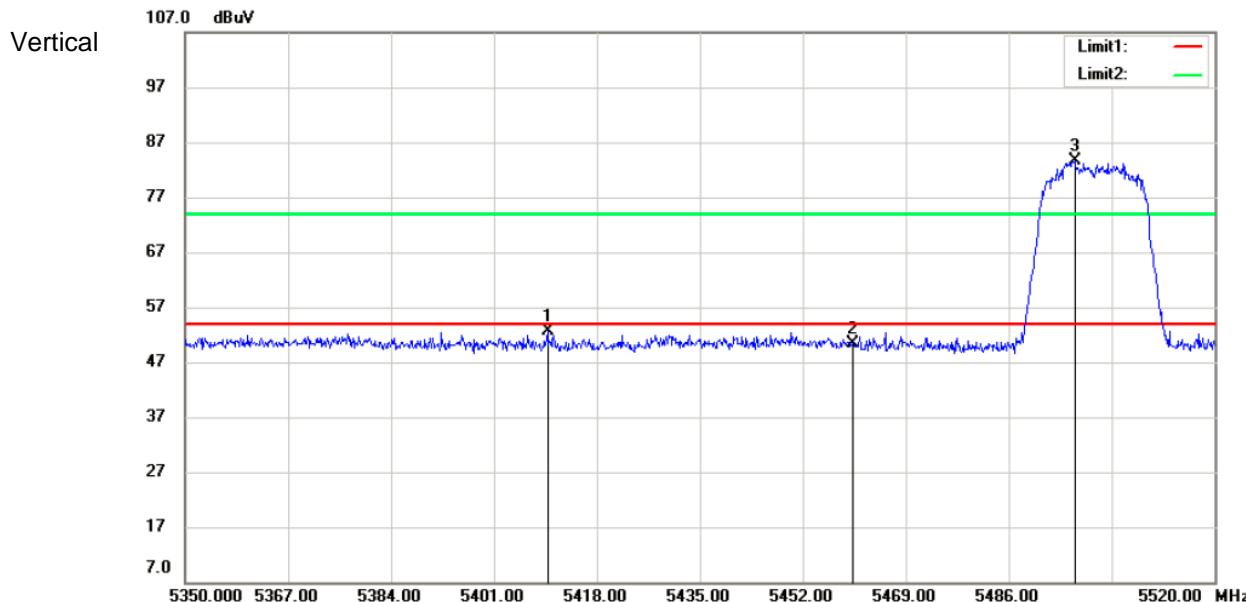
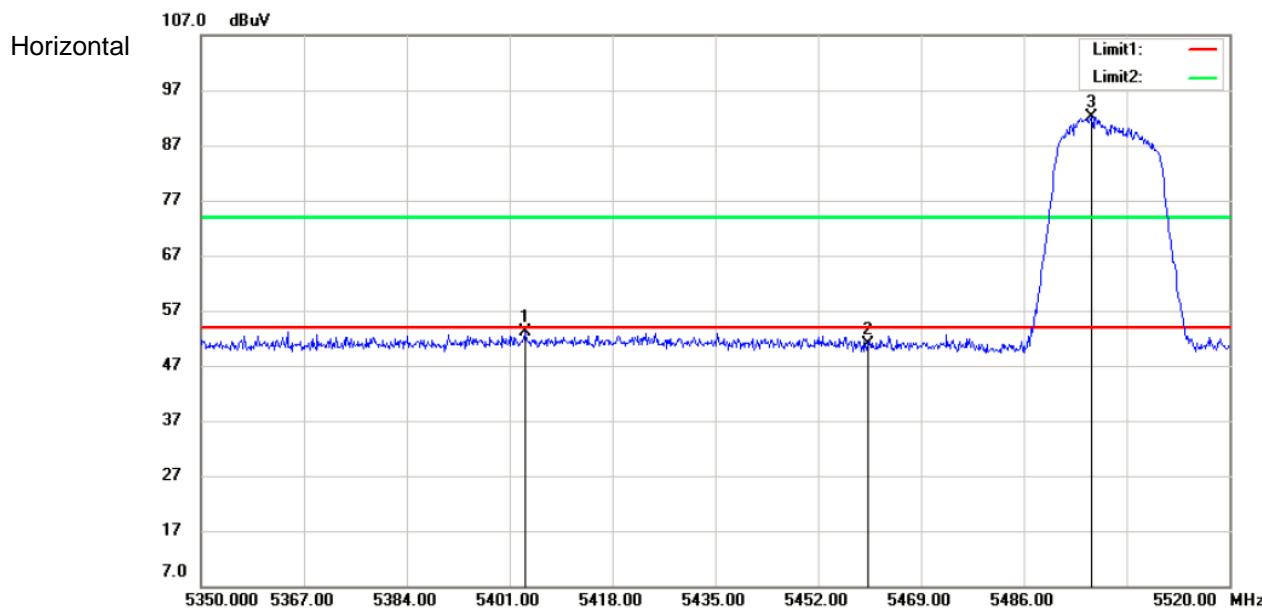
802.11 n(HT20)
ANT 0
Channel: 64

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5317.76	85.61	6.77	92.38	54	38.38	Peak	Horizontal
2	5350	42.54	6.98	49.52	54	-4.48	Peak	Horizontal
3	5403.68	45.66	7.32	52.98	54	-1.02	Peak	Horizontal
1	5322.08	80.04	6.8	86.84	54	32.84	Peak	Vertical
2	5350	42.65	6.98	49.63	54	-4.37	Peak	Vertical
3	5418.24	45.35	7.25	52.6	54	-1.4	Peak	Vertical



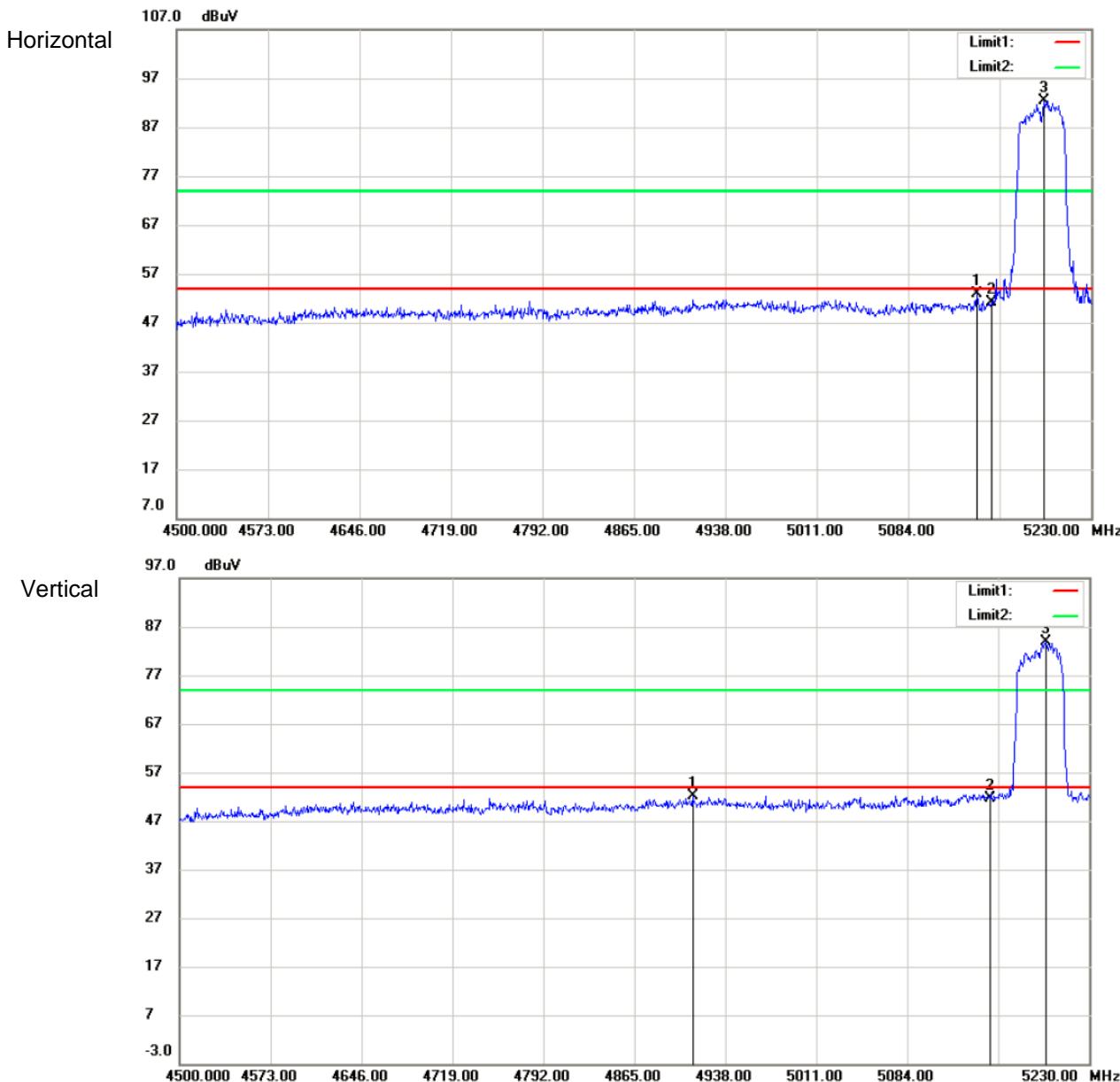
802.11 n(HT20)
ANT 0
Channel: 100

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5403.55	45.71	7.32	53.03	54	-0.97	Peak	Horizontal
2	5460	43.89	7.11	51	54	-3	Peak	Horizontal
3	5497.22	85.16	6.98	92.14	54	38.14	Peak	Horizontal
1	5409.84	45.34	7.29	52.63	54	-1.37	Peak	Vertical
2	5460	43.21	7.11	50.32	54	-3.68	Peak	Vertical
3	5496.88	76.59	6.98	83.57	54	29.57	Peak	Vertical



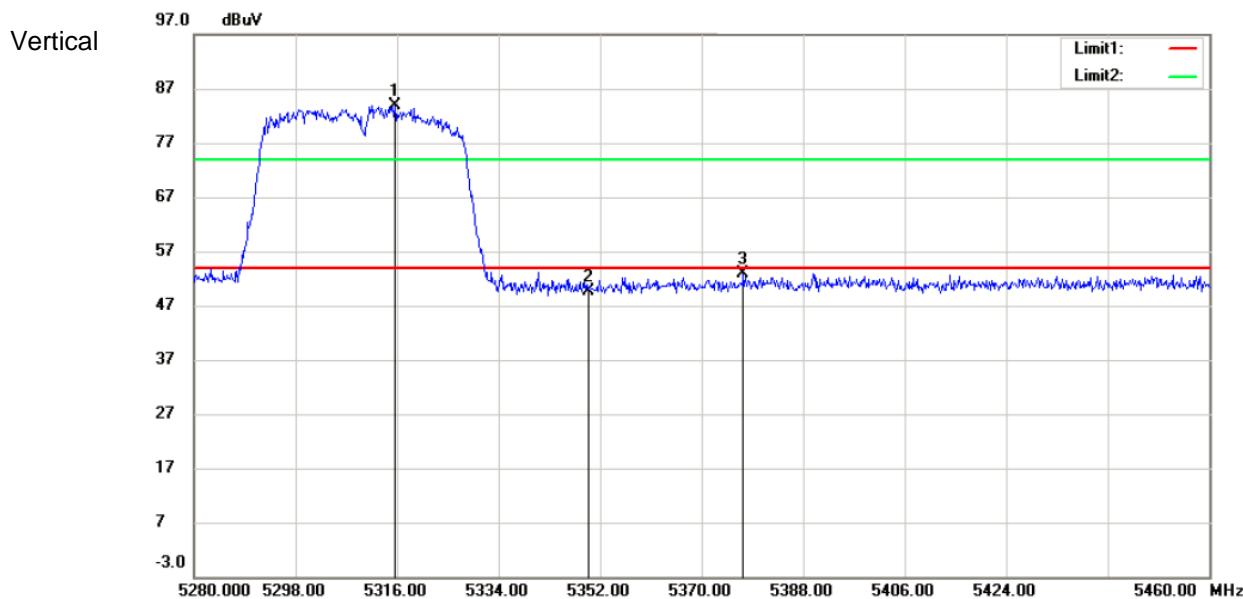
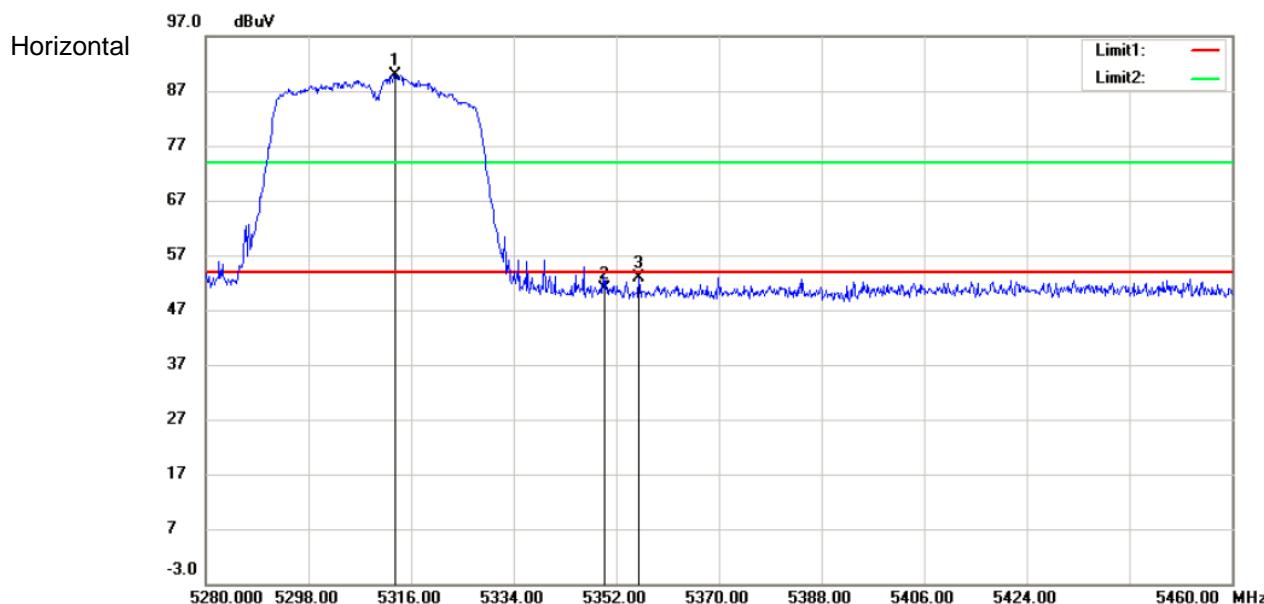
802.11 n(HT40)**ANT 0****Channel: 38**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5138.75	45.97	6.99	52.96	54	-1.04	Peak	Horizontal
2	5150	44.13	6.92	51.05	54	-2.95	Peak	Horizontal
3	5192.77	85.71	6.69	92.4	54	38.4	Peak	Horizontal
1	4911.72	44.94	7.26	52.2	54	-1.8	Peak	Vertical
2	5150	44.62	6.92	51.54	54	-2.46	Peak	Vertical
3	5194.96	77.17	6.68	83.85	54	29.85	Peak	Vertical



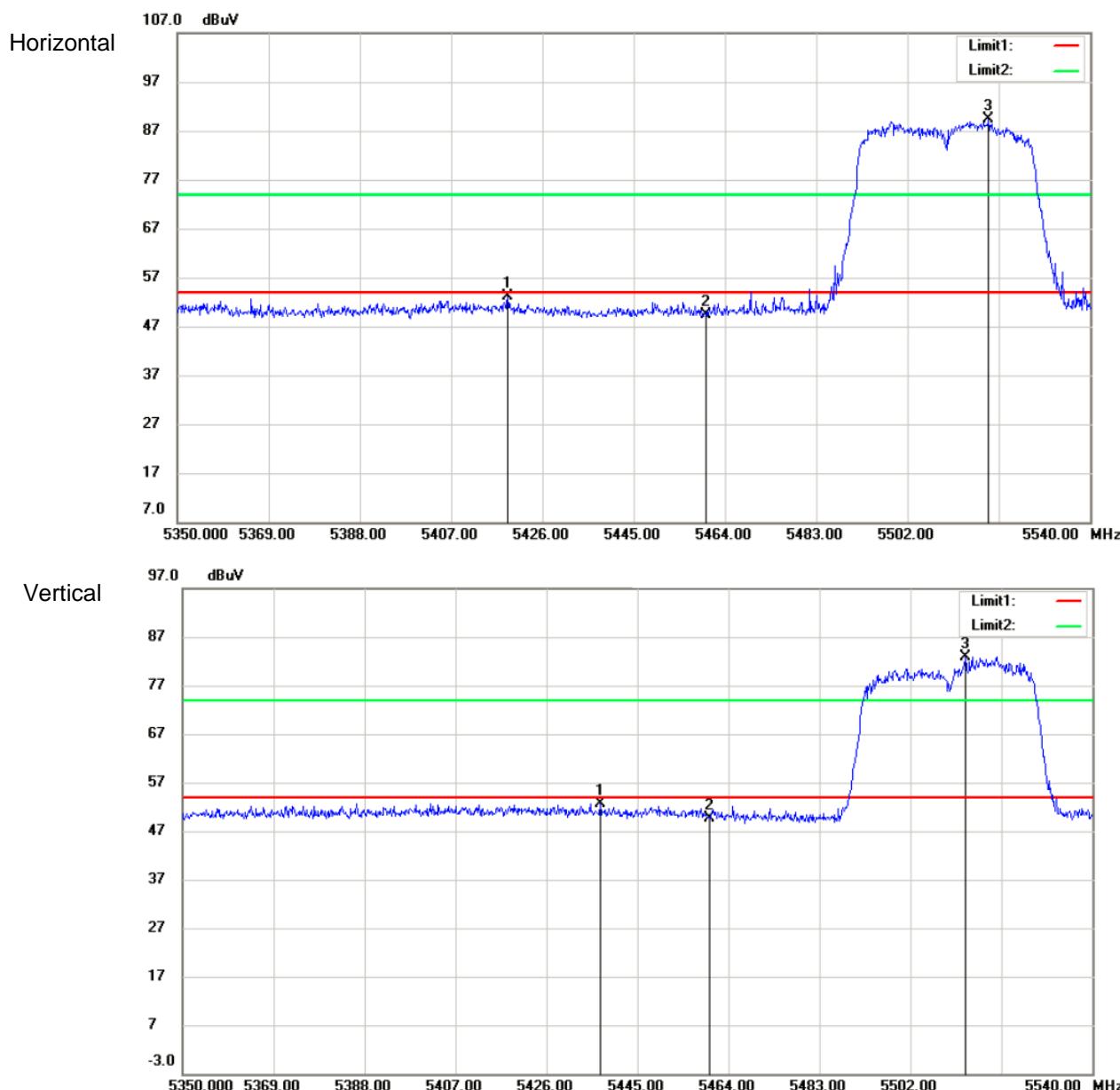
802.11 n(HT40)
ANT 0
Channel: 62

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5313.12	83.24	6.74	89.98	54	35.98	Peak	Horizontal
2	5350	44.01	6.98	50.99	54	-3.01	Peak	Horizontal
3	5355.96	45.94	7.03	52.97	54	-1.03	Peak	Horizontal
1	5315.64	77.16	6.75	83.91	54	29.91	Peak	Vertical
2	5350	42.72	6.98	49.7	54	-4.3	Peak	Vertical
3	5377.38	45.74	7.16	52.9	54	-1.1	Peak	Vertical



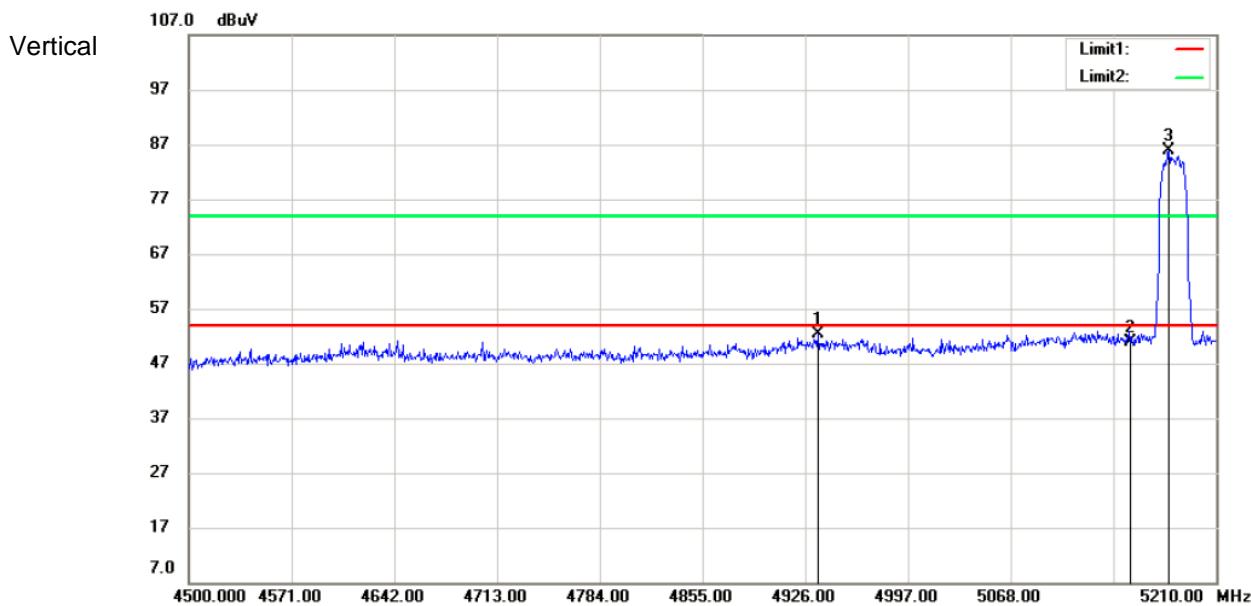
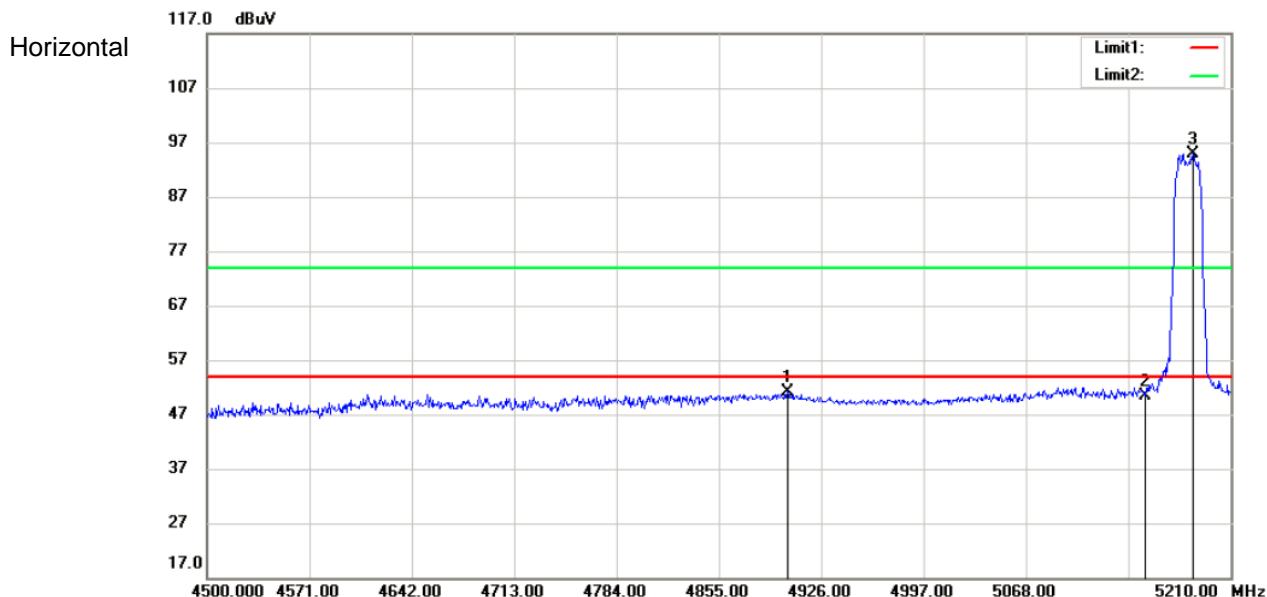
802.11 n(HT40)
ANT 0
Channel: 102

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5418.78	45.76	7.25	53.01	54	-0.99	Peak	Horizontal
2	5460	42.33	7.11	49.44	54	-4.56	Peak	Horizontal
3	5518.91	82.39	6.92	89.31	54	35.31	Peak	Horizontal
1	5437.21	45.45	7.18	52.63	54	-1.37	Peak	Vertical
2	5460	42.46	7.11	49.57	54	-4.43	Peak	Vertical
3	5513.59	75.93	6.94	82.87	54	28.87	Peak	Vertical



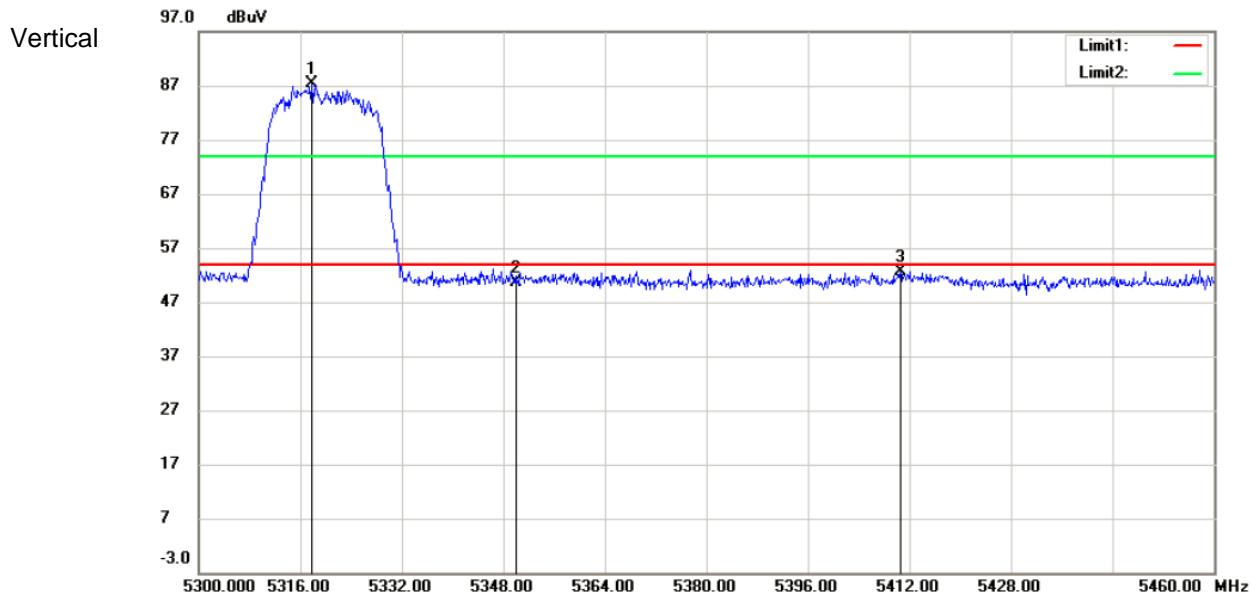
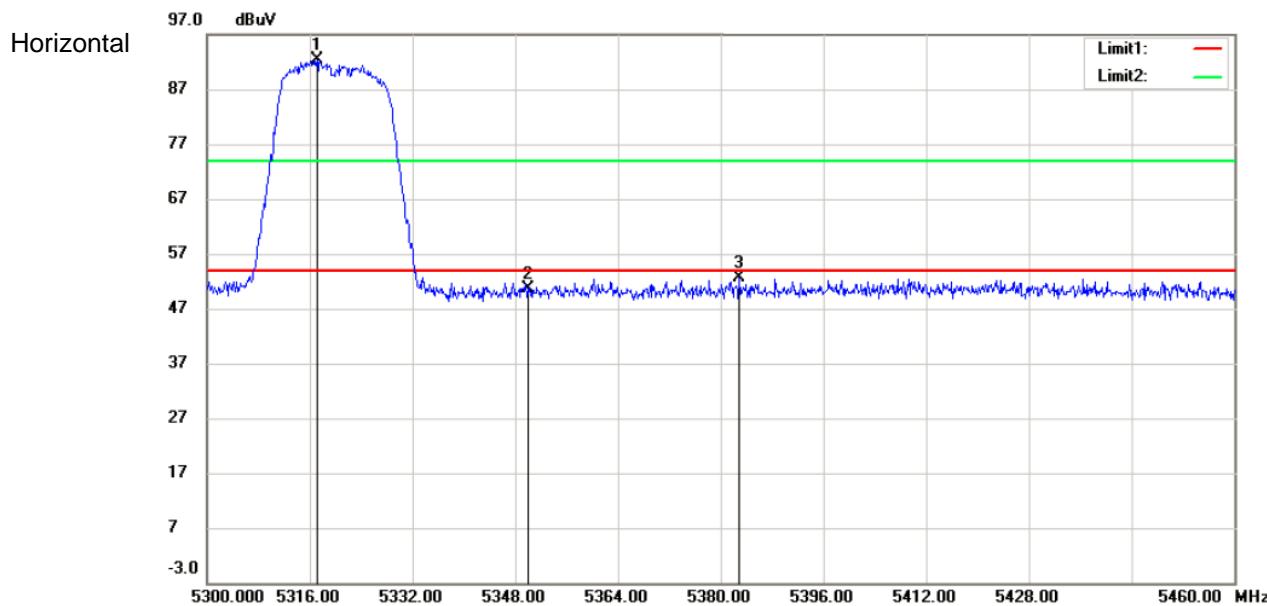
802.11 ac(VHT20)
ANT 0
Channel: 36

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4902.57	44.05	7.2	51.25	54	-2.75	Peak	Horizontal
2	5150	43.49	6.92	50.41	54	-3.59	Peak	Horizontal
3	5183.73	88.08	6.74	94.82	54	40.82	Peak	Horizontal
1	4934.52	44.91	7.37	52.28	54	-1.72	Peak	Vertical
2	5150	43.95	6.92	50.87	54	-3.13	Peak	Vertical
3	5177.34	79.03	6.77	85.8	54	31.8	Peak	Vertical



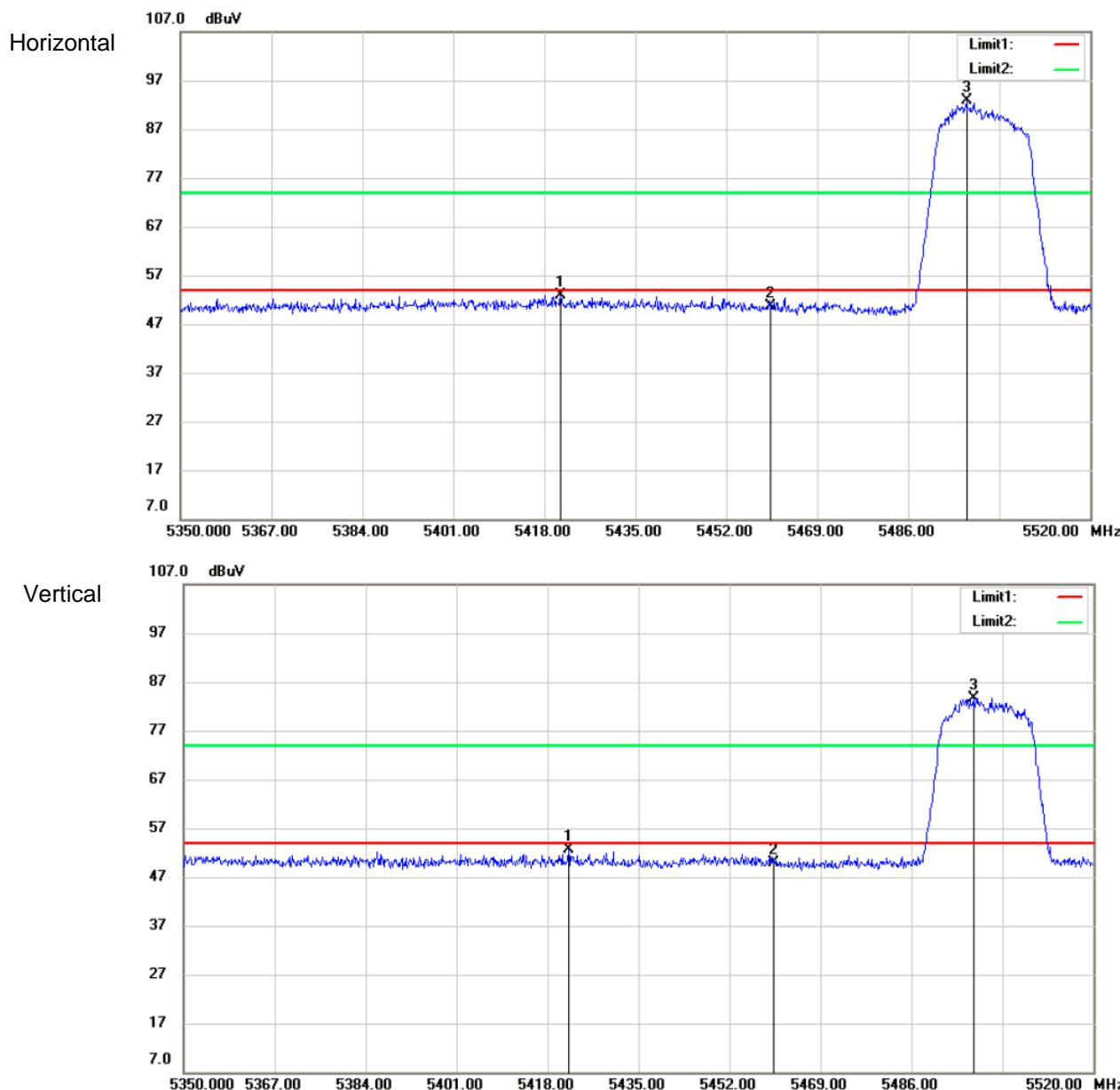
802.11 ac(VHT20)
ANT 0
Channel: 64

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5317.12	85.6	6.76	92.36	54	38.36	Peak	Horizontal
2	5350	43.53	6.98	50.51	54	-3.49	Peak	Horizontal
3	5382.88	45.51	7.21	52.72	54	-1.28	Peak	Horizontal
1	5317.76	80.68	6.77	87.45	54	33.45	Peak	Vertical
2	5350	43.63	6.98	50.61	54	-3.39	Peak	Vertical
3	5410.56	45.33	7.29	52.62	54	-1.38	Peak	Vertical



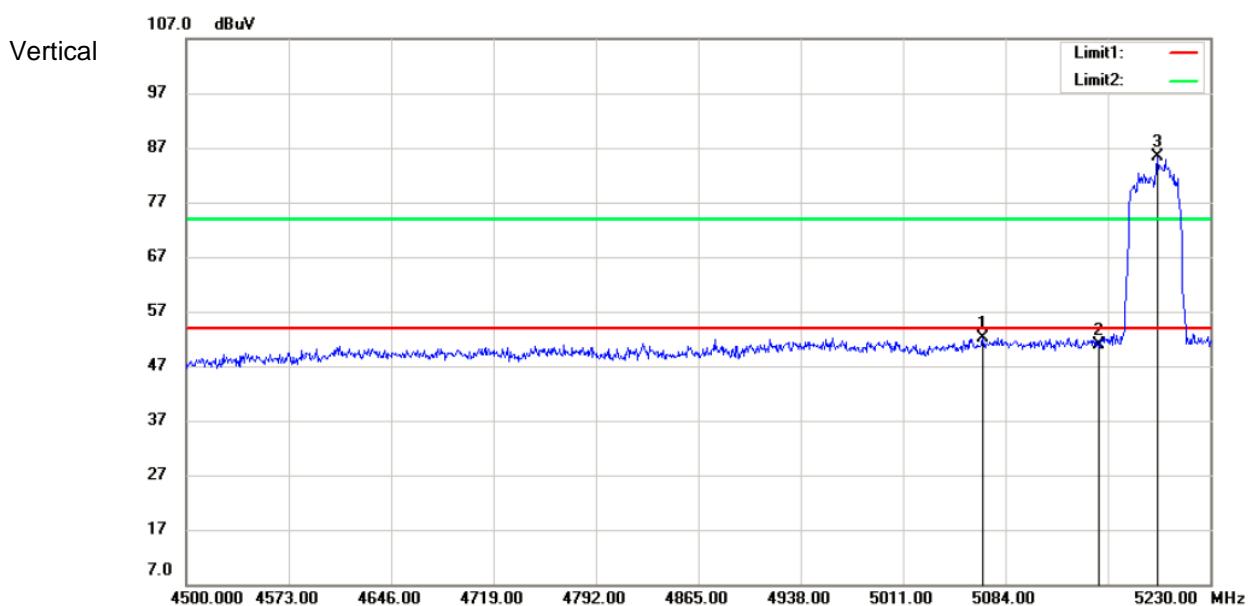
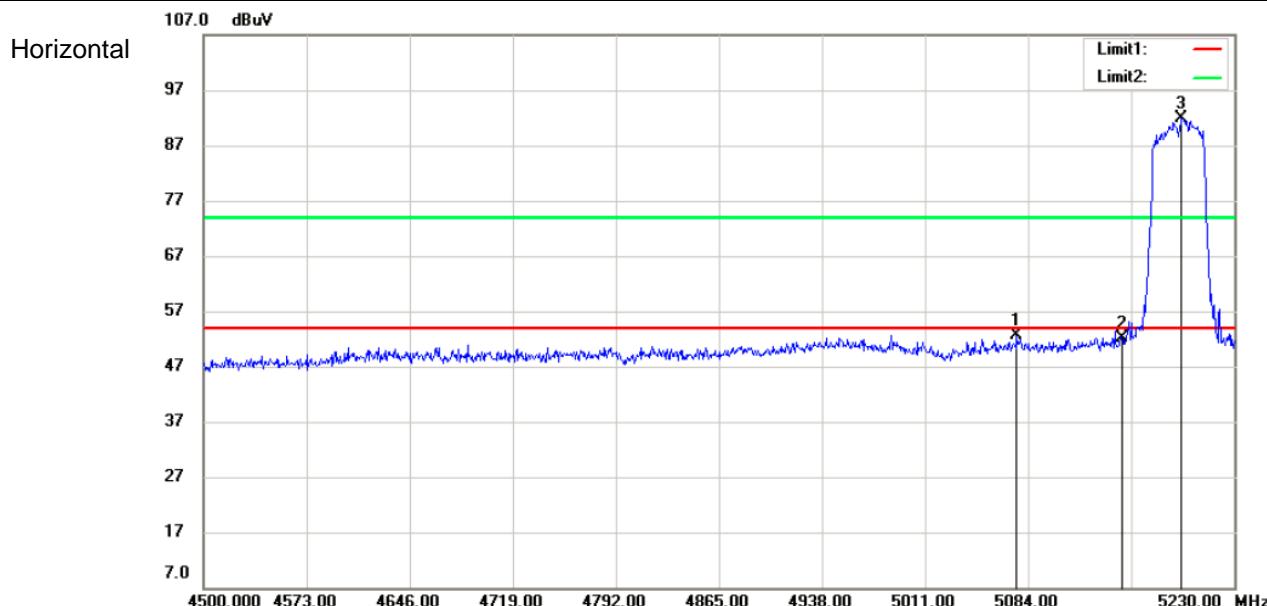
802.11 ac(VHT20)
ANT 0
Channel: 100

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5421.06	45.65	7.24	52.89	54	-1.11	Peak	Horizontal
2	5460	43.45	7.11	50.56	54	-3.44	Peak	Horizontal
3	5496.88	85.91	6.98	92.89	54	38.89	Peak	Horizontal
1	5421.91	45.4	7.25	52.65	54	-1.35	Peak	Vertical
2	5460	42.8	7.11	49.91	54	-4.09	Peak	Vertical
3	5497.56	76.73	6.98	83.71	54	29.71	Peak	Vertical



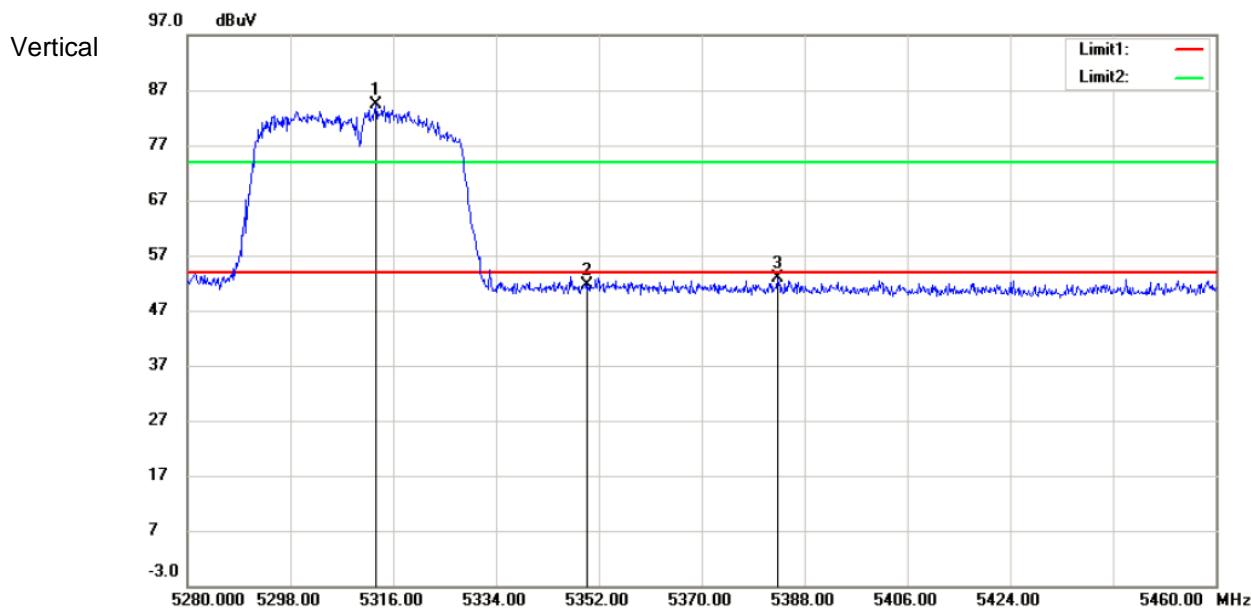
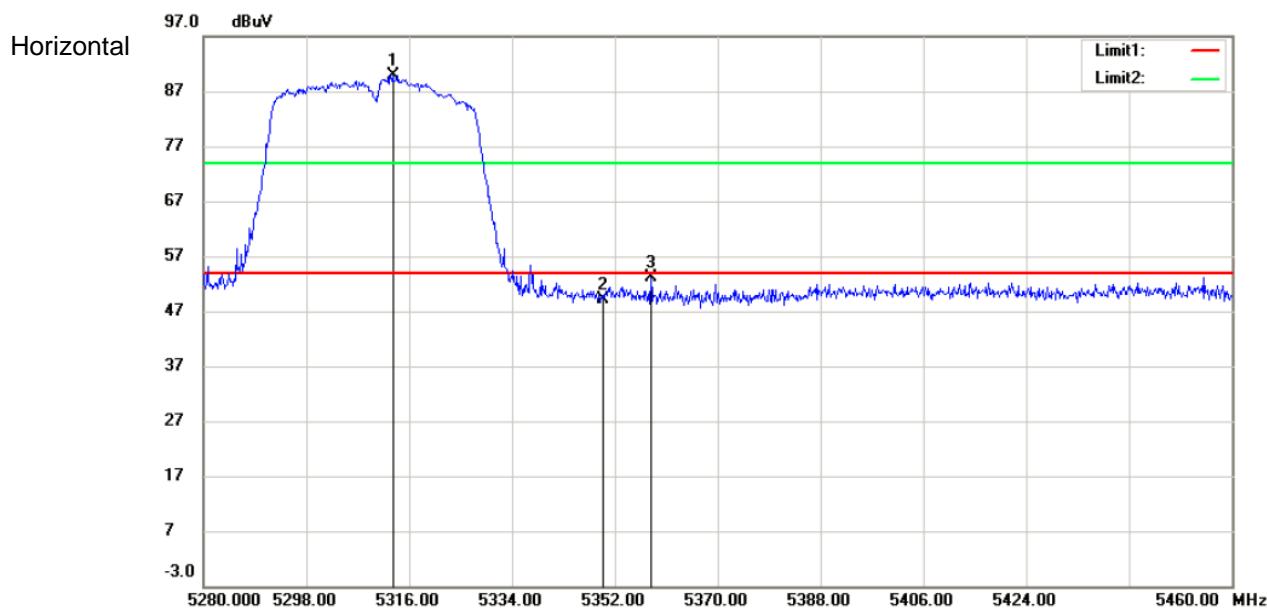
802.11 ac(VHT40)
ANT 0
Channel: 38

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5075.97	45.37	7.32	52.69	54	-1.31	Peak	Horizontal
2	5150	45.22	6.92	52.14	54	-1.86	Peak	Horizontal
3	5192.77	85.27	6.69	91.96	54	37.96	Peak	Horizontal
1	5067.94	44.87	7.37	52.24	54	-1.76	Peak	Vertical
2	5150	44.07	6.92	50.99	54	-3.01	Peak	Vertical
3	5192.04	78.67	6.7	85.37	54	31.37	Peak	Vertical



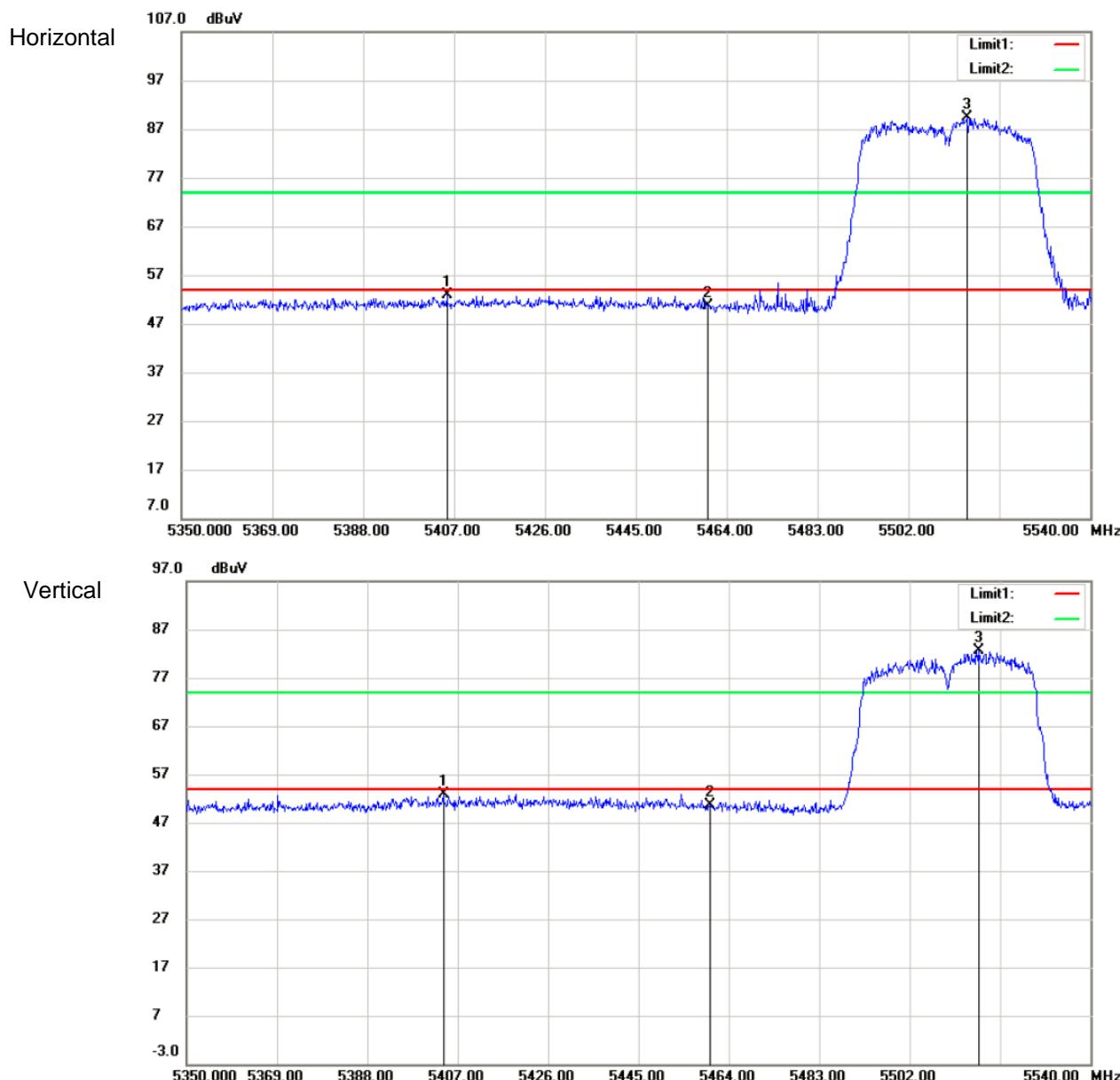
802.11 ac(VHT40)
ANT 0
Channel: 62

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5313.12	83.25	6.74	89.99	54	35.99	Peak	Horizontal
2	5350	42.22	6.98	49.2	54	-4.8	Peak	Horizontal
3	5358.3	46.01	7.04	53.05	54	-0.95	Peak	Horizontal
1	5312.94	77.61	6.73	84.34	54	30.34	Peak	Vertical
2	5350	44.58	6.98	51.56	54	-2.44	Peak	Vertical
3	5383.32	45.61	7.21	52.82	54	-1.18	Peak	Vertical



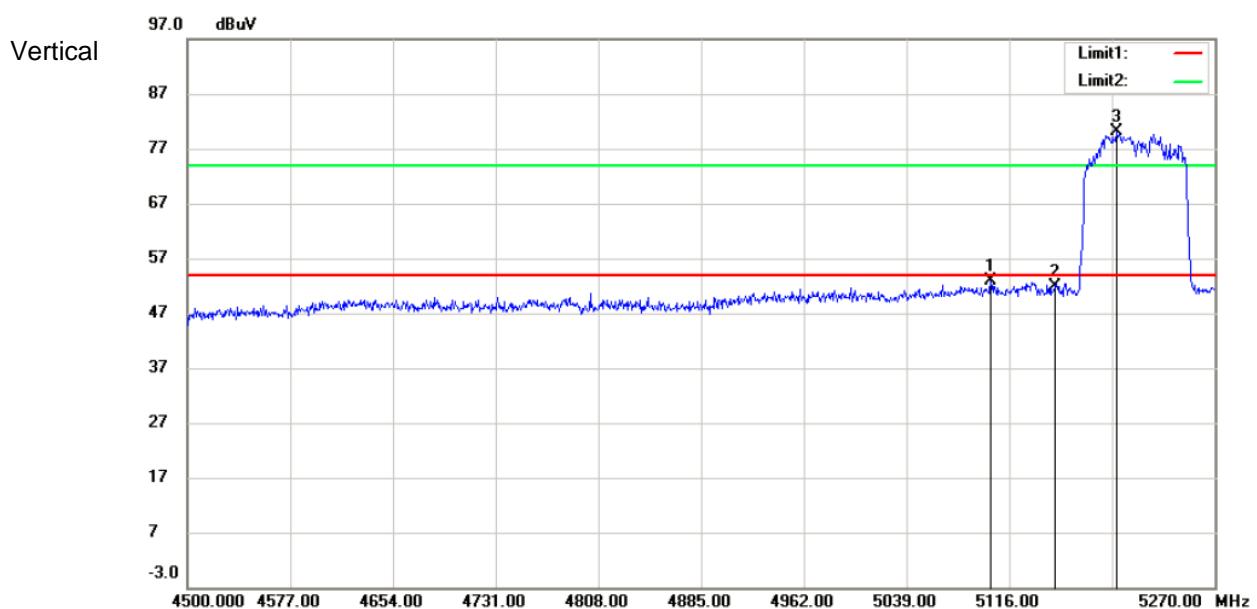
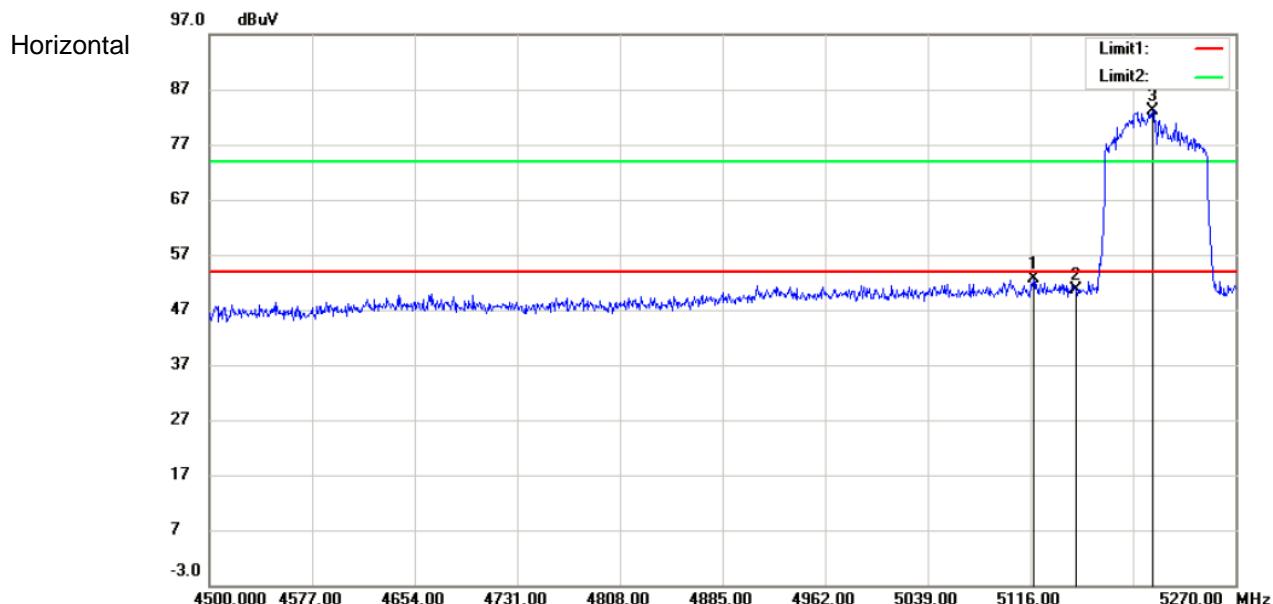
802.11 ac(VHT40)
ANT 0
Channel: 102

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5405.48	45.47	7.3	52.77	54	-1.23	Peak	Horizontal
2	5460	43.55	7.11	50.66	54	-3.34	Peak	Horizontal
3	5514.16	82.4	6.93	89.33	54	35.33	Peak	Horizontal
1	5403.96	45.45	7.31	52.76	54	-1.24	Peak	Vertical
2	5460	43.58	7.11	50.69	54	-3.31	Peak	Vertical
3	5516.63	75.69	6.93	82.62	54	28.62	Peak	Vertical



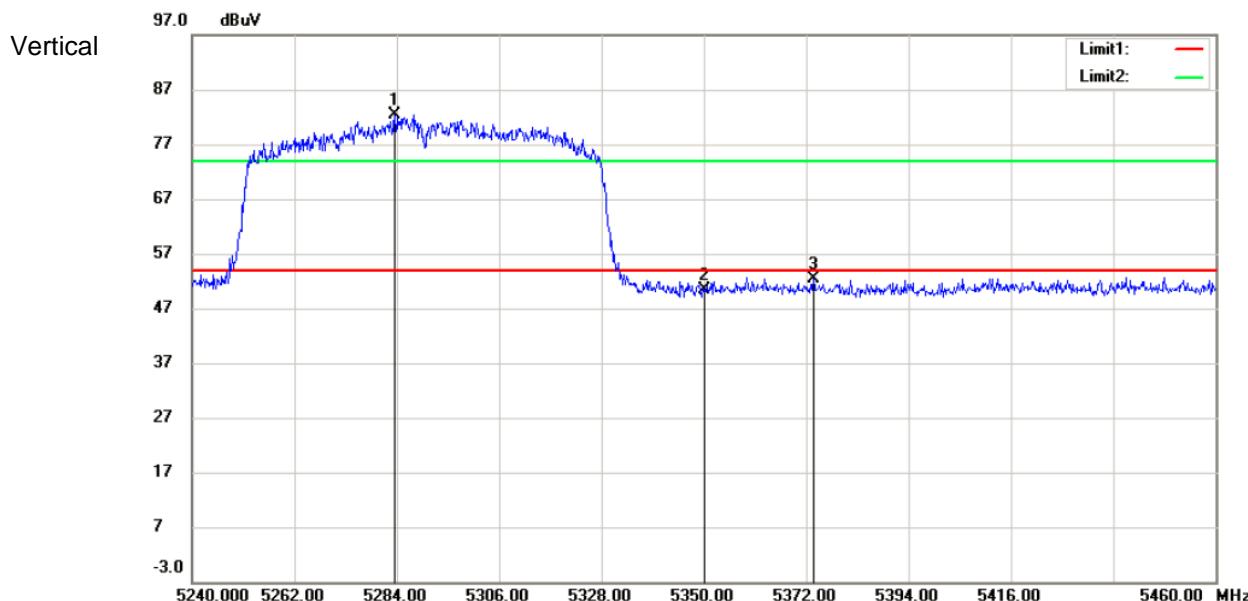
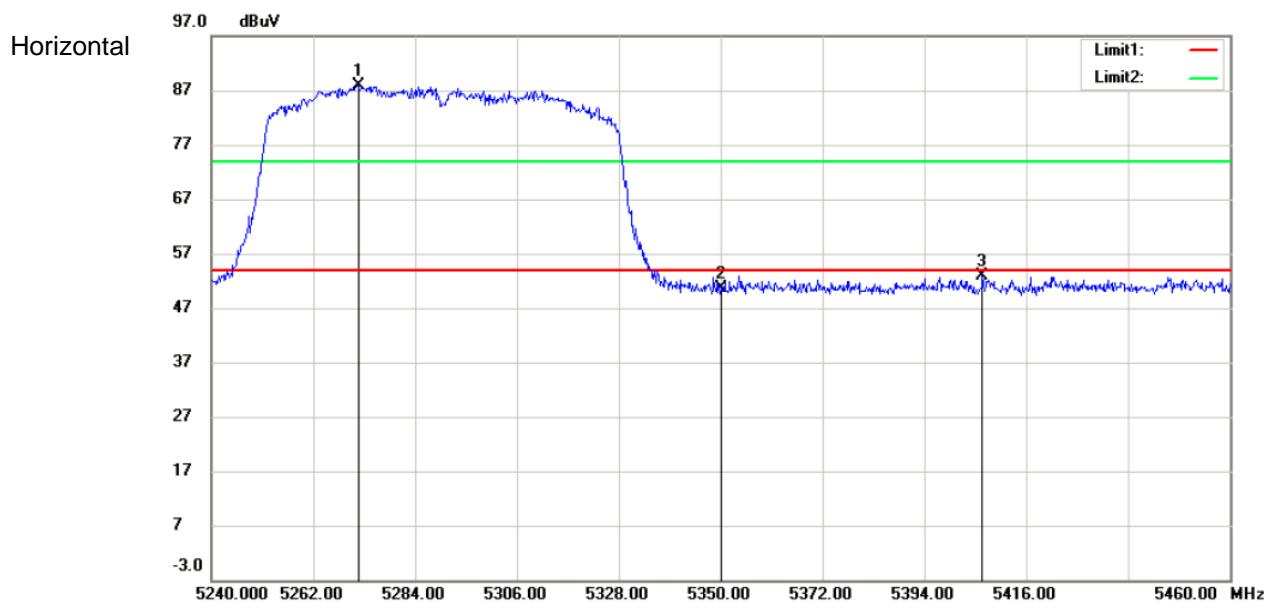
802.11 ac(VHT80)
ANT 0
Channel: 42

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5118.31	45.63	7.1	52.73	54	-1.27	Peak	Horizontal
2	5150	43.63	6.92	50.55	54	-3.45	Peak	Horizontal
3	5207.63	76.41	6.64	83.05	54	29.05	Peak	Horizontal
1	5102.14	45.61	7.19	52.8	54	-1.2	Peak	Vertical
2	5150	44.95	6.92	51.87	54	-2.13	Peak	Vertical
3	5196.08	73.44	6.66	80.1	54	26.1	Peak	Vertical



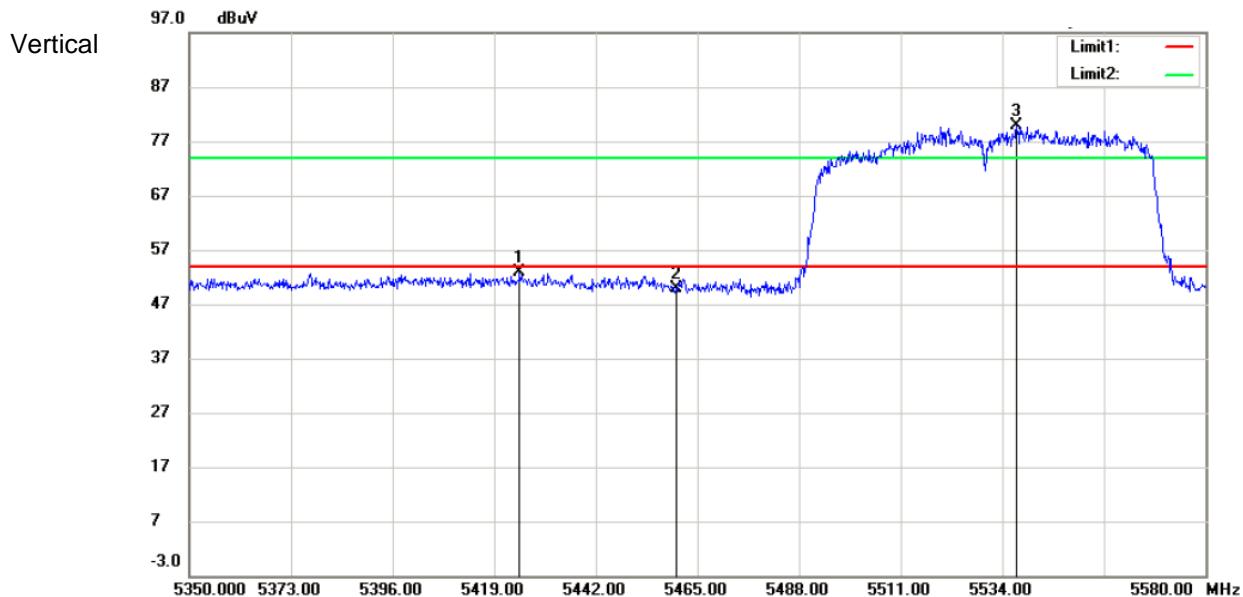
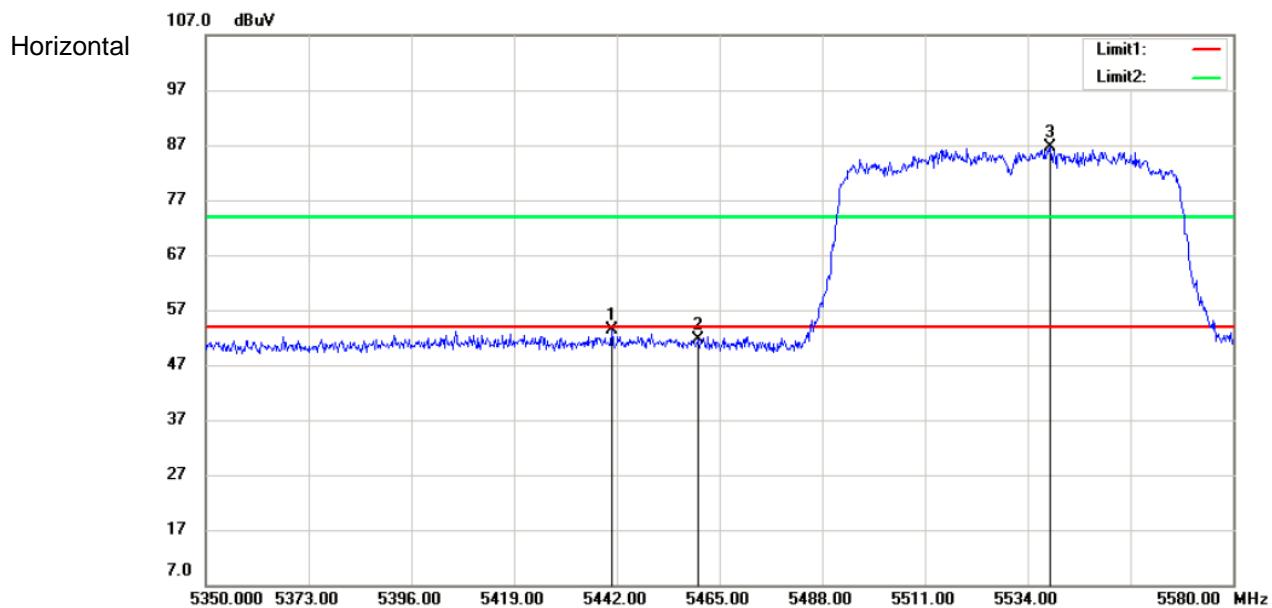
802.11 ac(VHT80)
ANT 0
Channel: 58

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5271.68	81.32	6.65	87.97	54	33.97	Peak	Horizontal
2	5350	43.53	6.98	50.51	54	-3.49	Peak	Horizontal
3	5406.54	45.53	7.3	52.83	54	-1.17	Peak	Horizontal
1	5283.56	75.84	6.64	82.48	54	28.48	Peak	Vertical
2	5350	43.3	6.98	50.28	54	-3.72	Peak	Vertical
3	5373.54	45.19	7.15	52.34	54	-1.66	Peak	Vertical



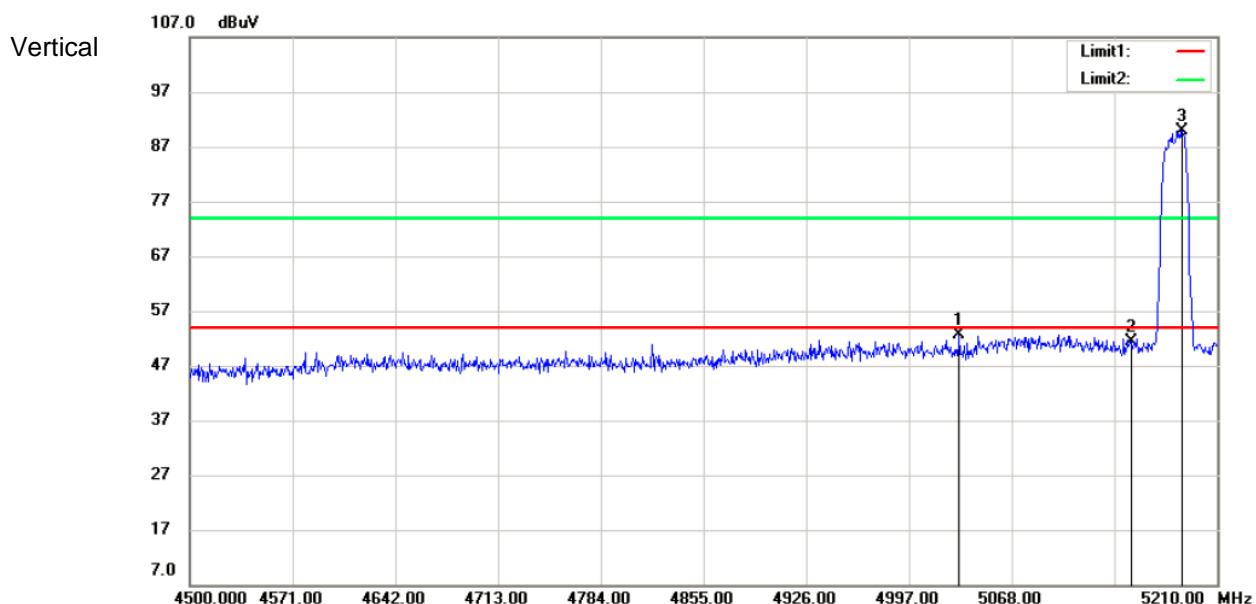
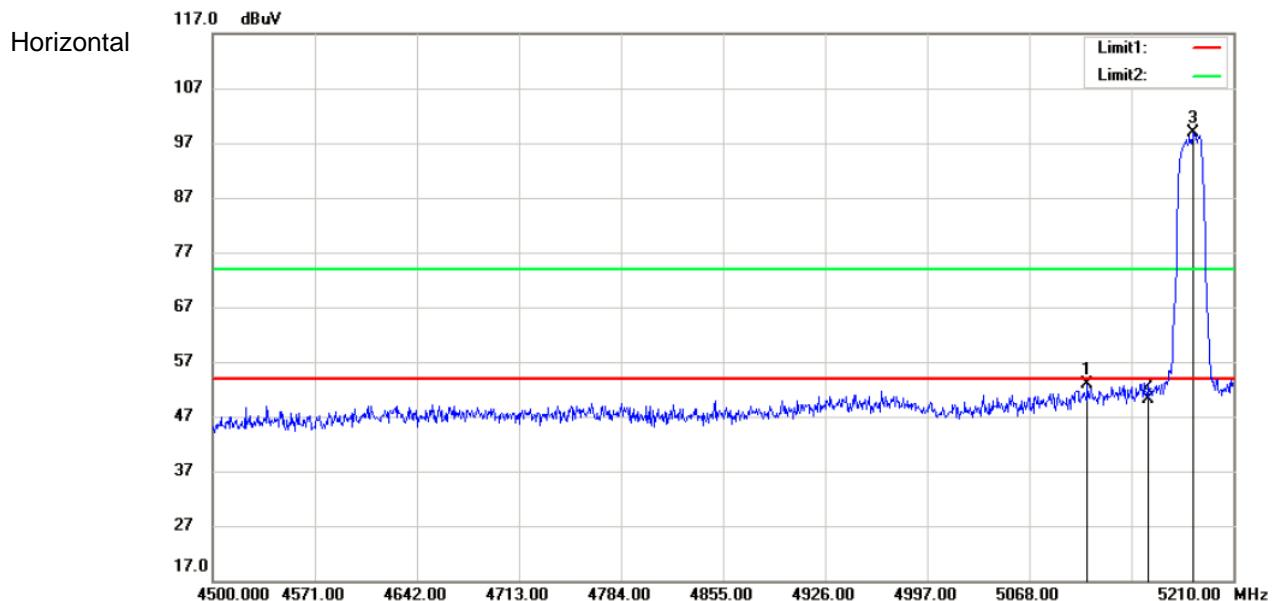
802.11 ac(VHT80)
ANT 0
Channel: 106

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5440.85	46.3	7.18	53.48	54	-0.52	Peak	Horizontal
2	5460	44.57	7.11	51.68	54	-2.32	Peak	Horizontal
3	5539.06	79.68	6.89	86.57	54	32.57	Peak	Horizontal
1	5424.75	45.57	7.23	52.8	54	-1.2	Peak	Vertical
2	5460	42.88	7.11	49.99	54	-4.01	Peak	Vertical
3	5537.22	73.07	6.89	79.96	54	25.96	Peak	Vertical



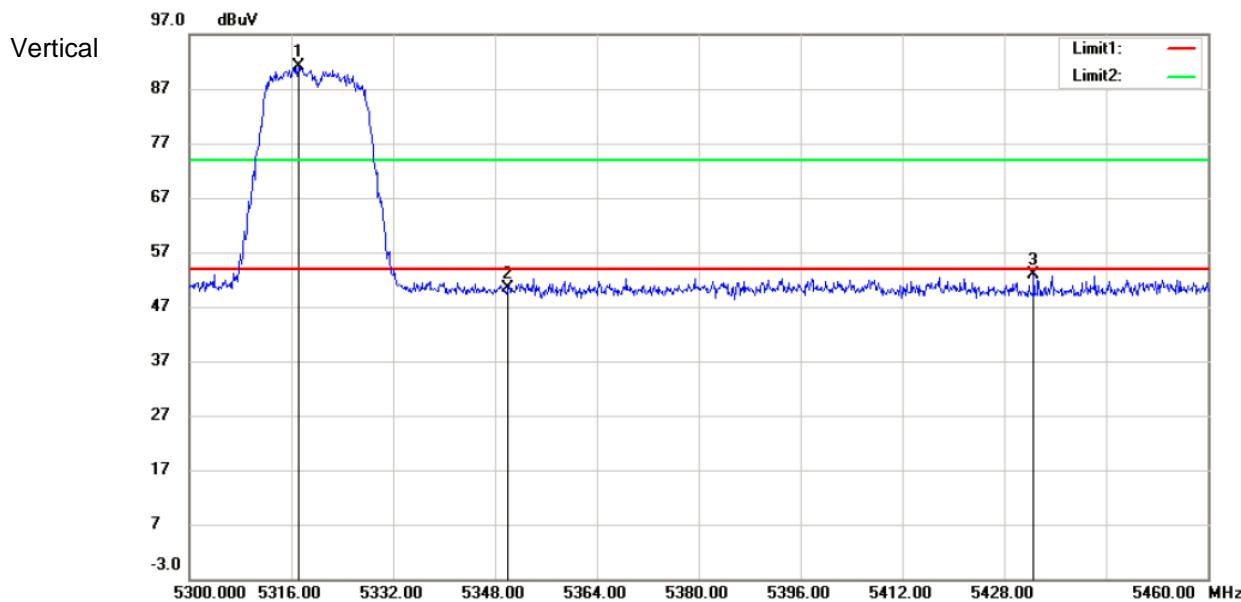
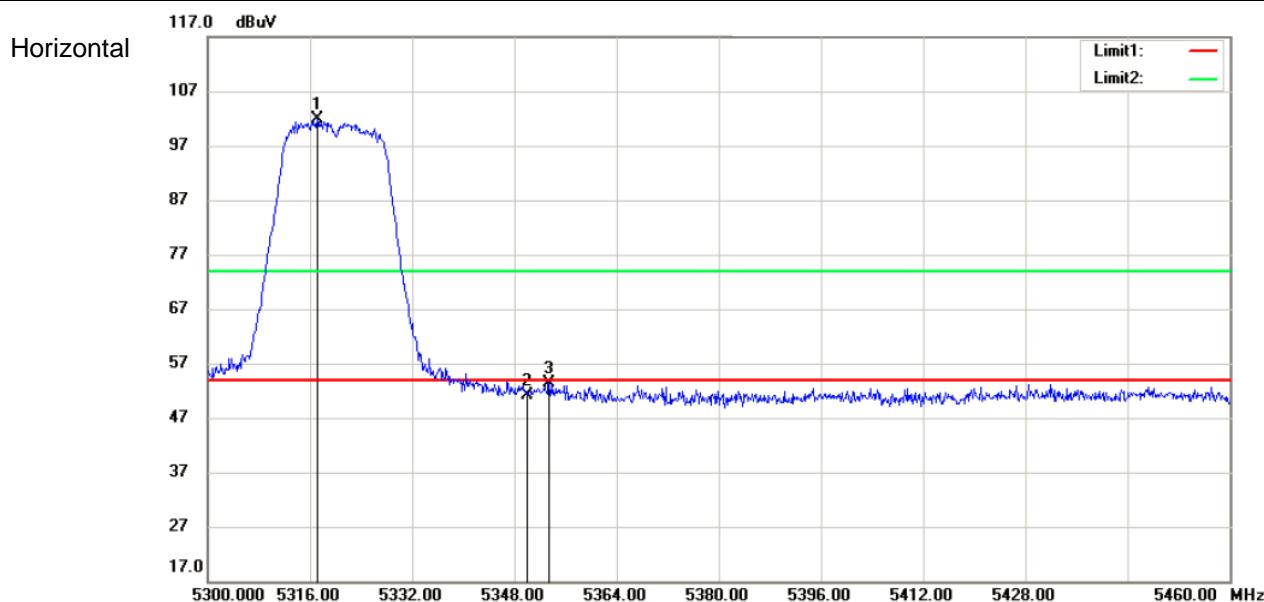
802.11 a**ANT 1****Channel: 36**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5108.47	45.72	7.15	52.87	54	-1.13	Peak	Horizontal
2	5150	43.24	6.92	50.16	54	-3.84	Peak	Horizontal
3	5182.31	92.15	6.75	98.9	54	44.9	Peak	Horizontal
1	5031.79	45.16	7.55	52.71	54	-1.29	Peak	Vertical
2	5150	44.51	6.92	51.43	54	-2.57	Peak	Vertical
3	5185.86	83.11	6.73	89.84	54	35.84	Peak	Vertical



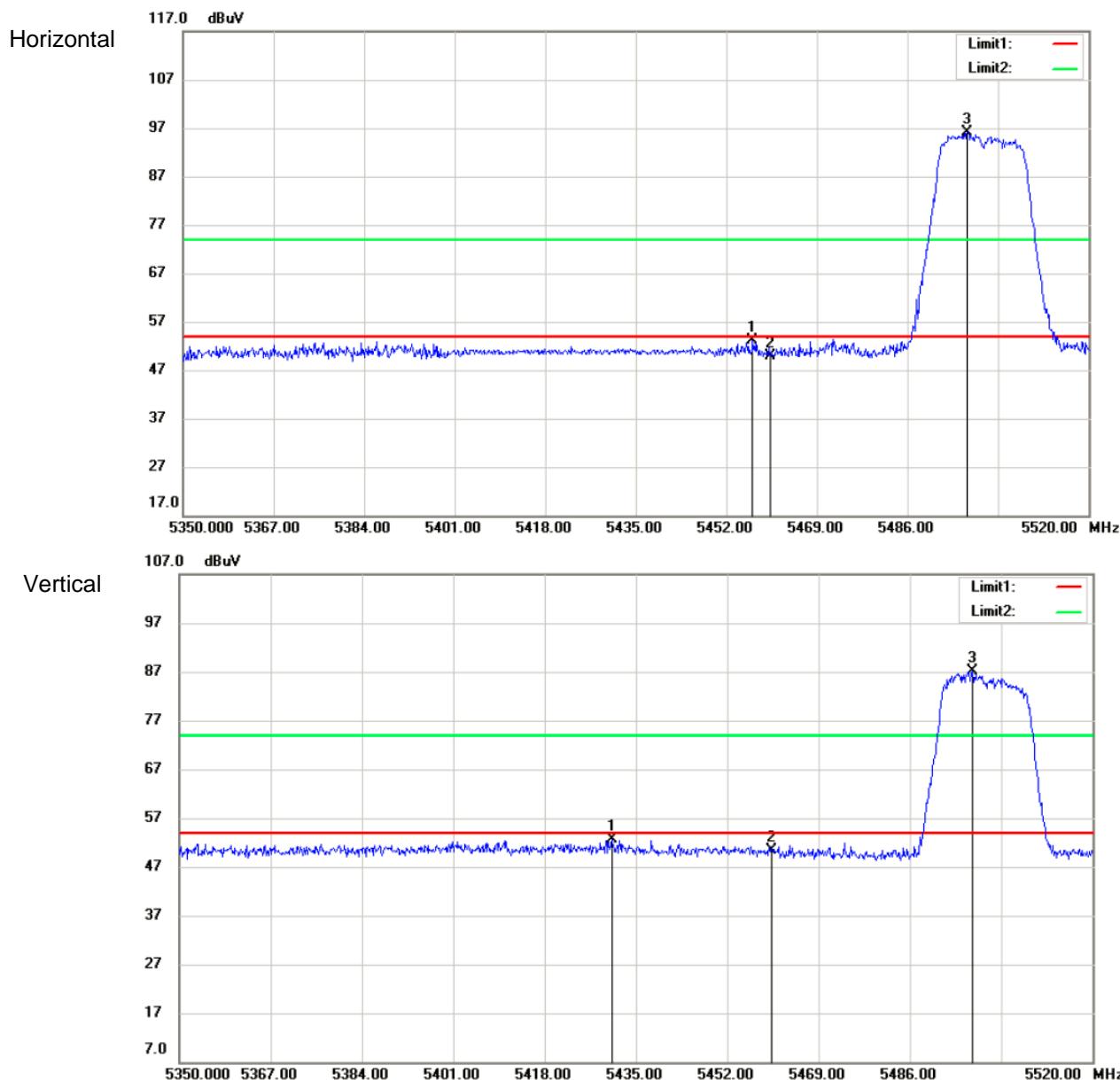
802.11 a
ANT 1
Channel: 64

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5317.12	95.17	6.76	101.93	54	47.93	Peak	Horizontal
2	5350	44.11	6.98	51.09	54	-2.91	Peak	Horizontal
3	5353.44	46.44	7.01	53.45	54	-0.55	Peak	Horizontal
1	5317.12	84.26	6.76	91.02	54	37.02	Peak	Vertical
2	5350	43.39	6.98	50.37	54	-3.63	Peak	Vertical
3	5432.64	45.68	7.2	52.88	54	-1.12	Peak	Vertical



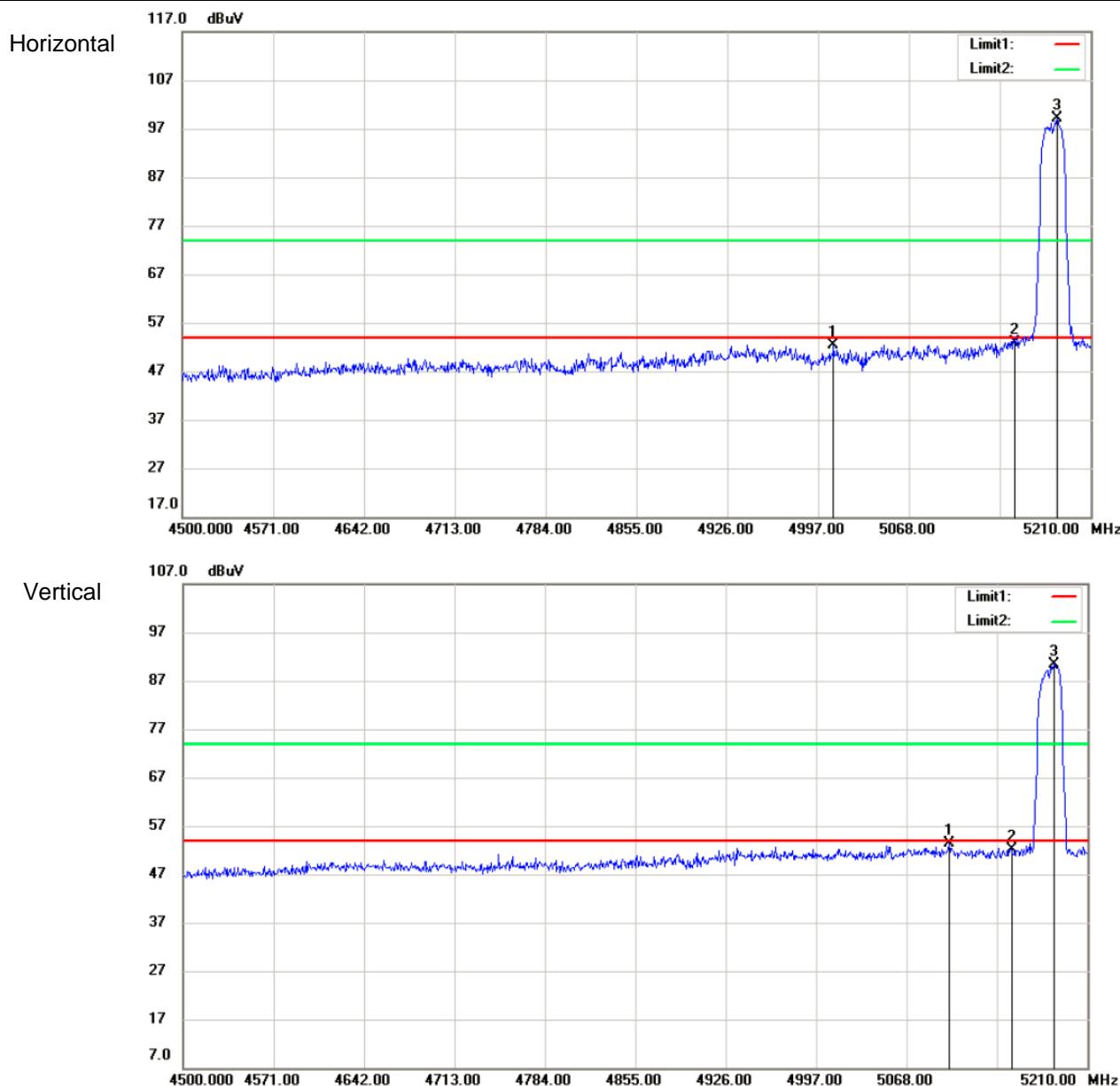
802.11 a
ANT 1
Channel: 100

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5456.93	46.03	7.11	53.14	54	-0.86	Peak	Horizontal
2	5460	42.85	7.11	49.96	54	-4.04	Peak	Horizontal
3	5497.22	89.2	6.98	96.18	54	42.18	Peak	Horizontal
1	5430.58	45.47	7.22	52.69	54	-1.31	Peak	Vertical
2	5460	43.15	7.11	50.26	54	-3.74	Peak	Vertical
3	5497.73	80.19	6.97	87.16	54	33.16	Peak	Vertical



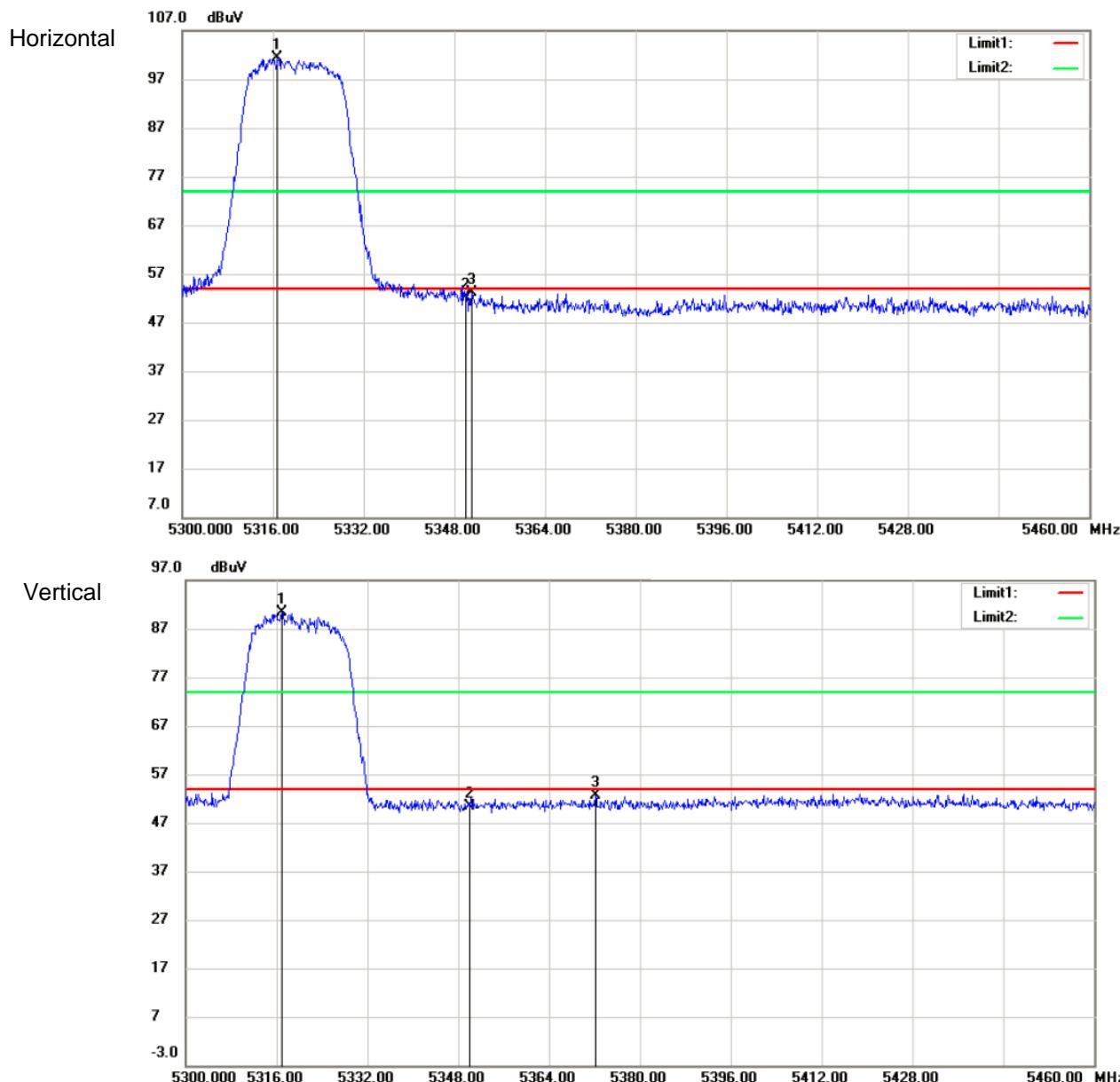
802.11 n(HT20)**ANT 1****Channel: 36**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5009.07	44.66	7.65	52.31	54	-1.69	Peak	Horizontal
2	5150	45.97	6.92	52.89	54	-1.11	Peak	Horizontal
3	5183.73	92.4	6.74	99.14	54	45.14	Peak	Horizontal
1	5101.37	46.23	7.19	53.42	54	-0.58	Peak	Vertical
2	5150	45.1	6.92	52.02	54	-1.98	Peak	Vertical
3	5183.73	83.66	6.74	90.4	54	36.4	Peak	Vertical



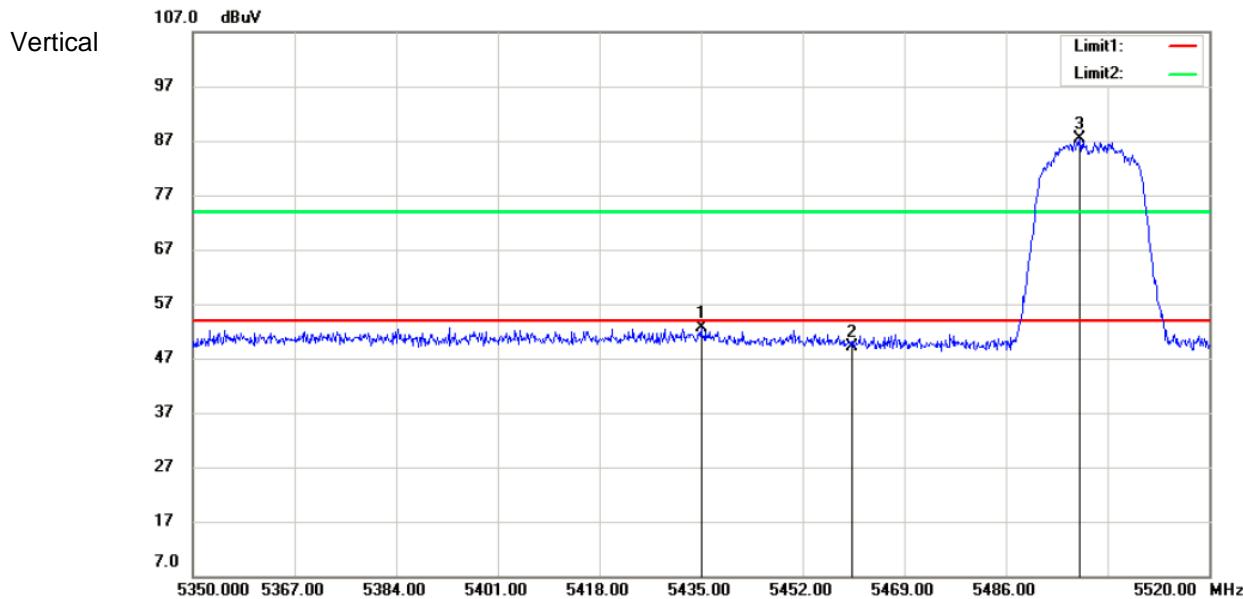
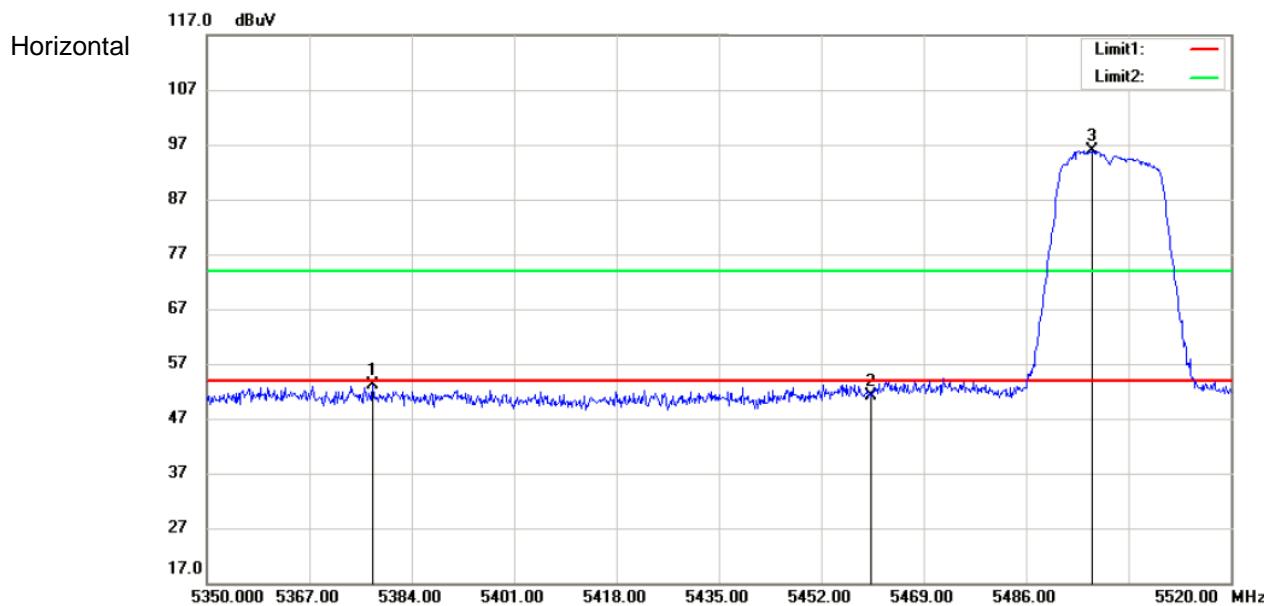
802.11 n(HT20)
ANT 1
Channel: 64

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5316.8	94.69	6.76	101.45	54	47.45	Peak	Horizontal
2	5350	45.1	6.98	52.08	54	-1.92	Peak	Horizontal
3	5351.04	46.23	6.99	53.22	54	-0.78	Peak	Horizontal
1	5316.96	83.67	6.76	90.43	54	36.43	Peak	Vertical
2	5350	43.37	6.98	50.35	54	-3.65	Peak	Vertical
3	5372.16	45.59	7.14	52.73	54	-1.27	Peak	Vertical



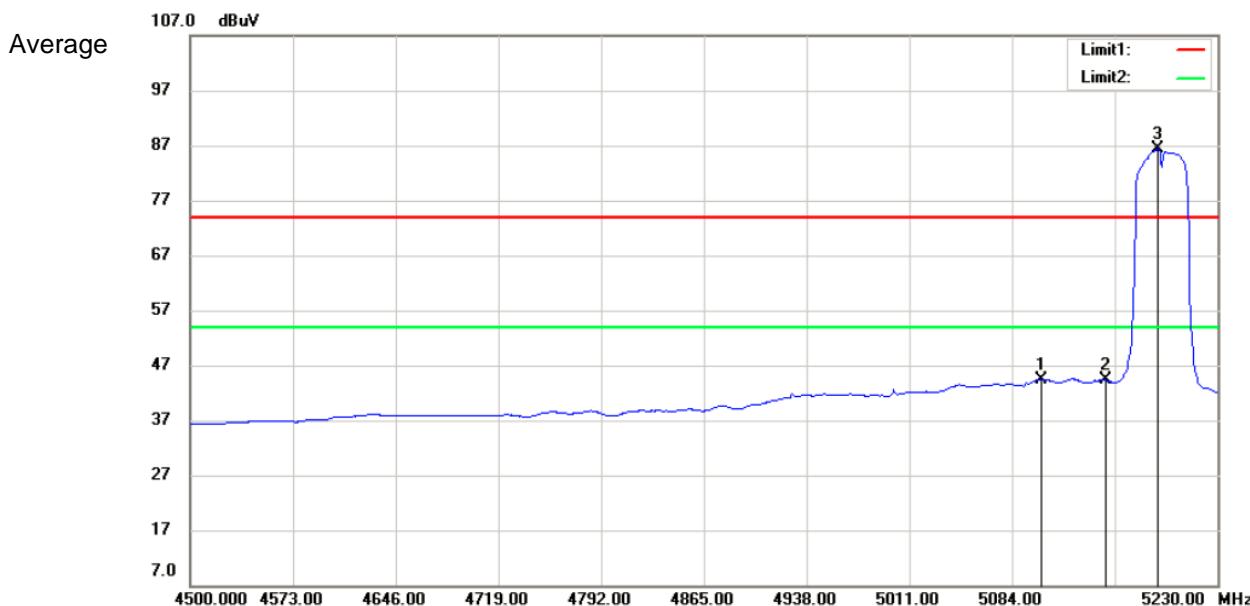
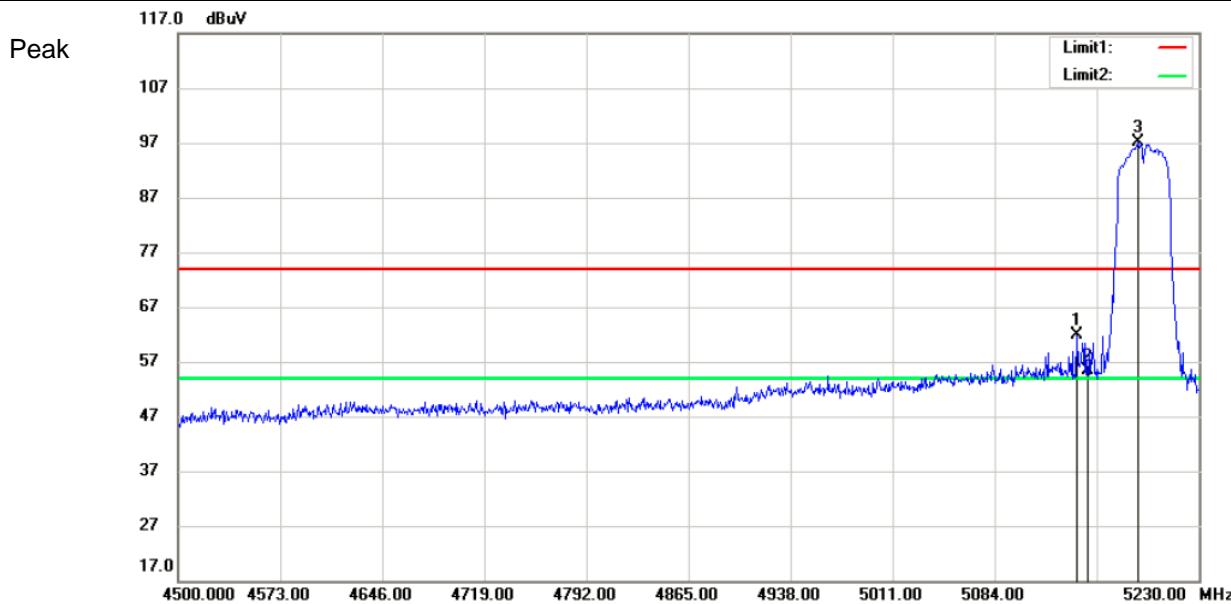
802.11 n(HT20)
ANT 1
Channel: 100

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5377.54	45.92	7.17	53.09	54	-0.91	Peak	Horizontal
2	5460	44.11	7.11	51.22	54	-2.78	Peak	Horizontal
3	5496.88	88.88	6.98	95.86	54	41.86	Peak	Horizontal
1	5435	45.55	7.2	52.75	54	-1.25	Peak	Vertical
2	5460	42.05	7.11	49.16	54	-4.84	Peak	Vertical
3	5498.41	80.3	6.96	87.26	54	33.26	Peak	Vertical



802.11 n(HT40)
ANT 1
Channel: 38

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5143.13	54.93	6.96	61.89	74	-12.11	Peak	Horizontal
2	5150	48.51	6.92	55.43	74	-18.57	Peak	Horizontal
3	5186.2	90.36	6.73	97.09	74	23.09	Peak	Horizontal
1	5104.44	37.28	7.18	44.46	54	-9.54	Average	Horizontal
2	5150	37.42	6.92	44.34	54	-9.66	Average	Horizontal
3	5187.66	79.64	6.71	86.35	54	32.35	Average	Horizontal





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Report No.: SZEM171201302804

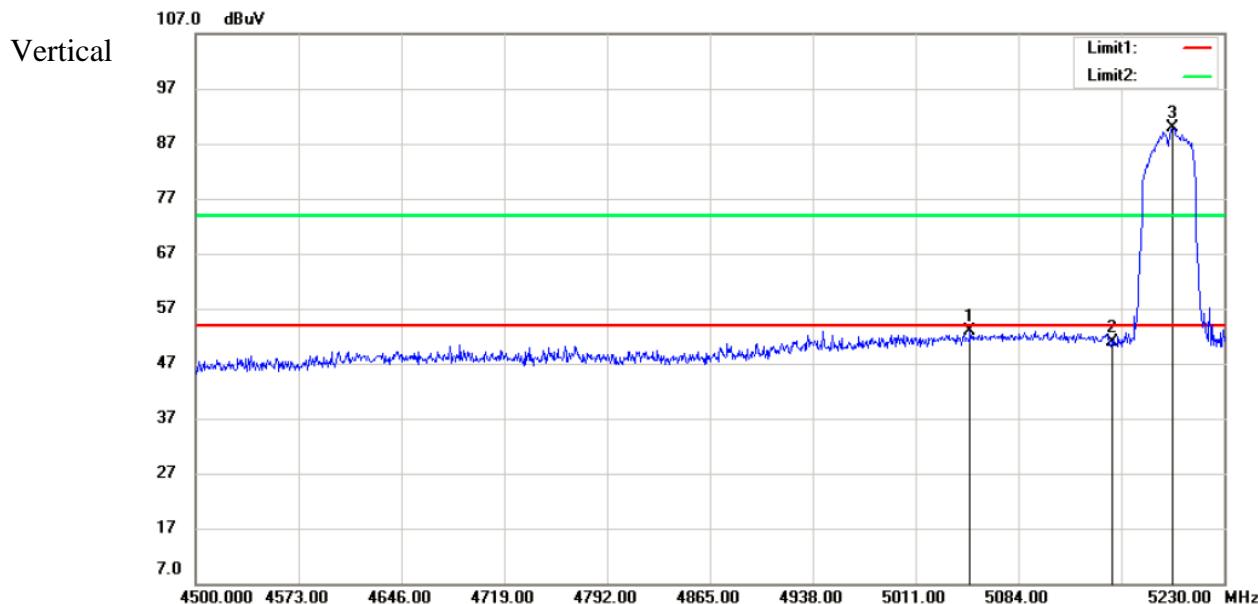
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802.11 n(HT40)

ANT 1

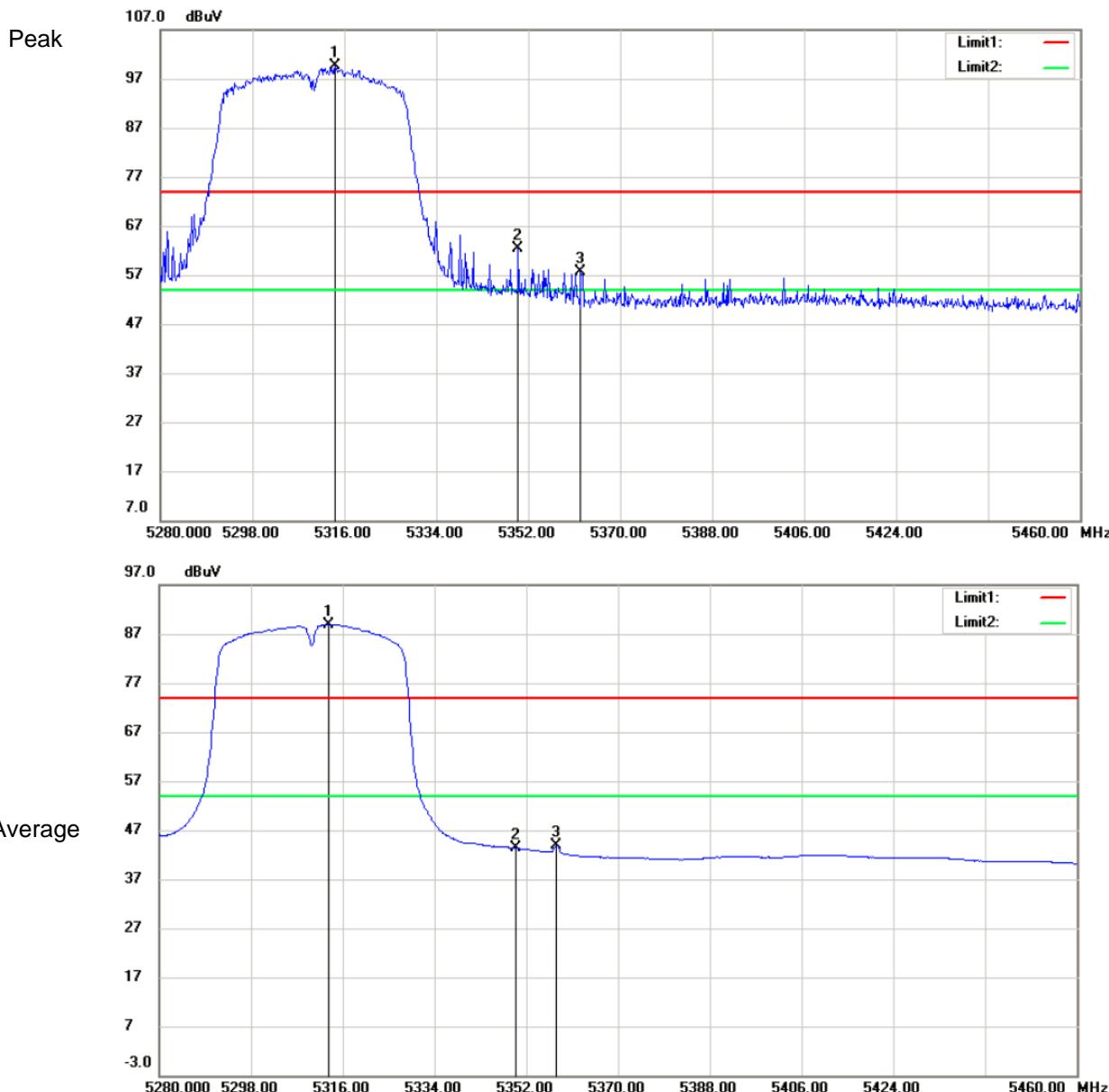
Channel: 38

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5049.69	45.37	7.46	52.83	54	-1.17	Peak	Vertical
2	5150	43.93	6.92	50.85	54	-3.15	Peak	Vertical
3	5193.5	83.21	6.69	89.9	54	35.9	Peak	Vertical



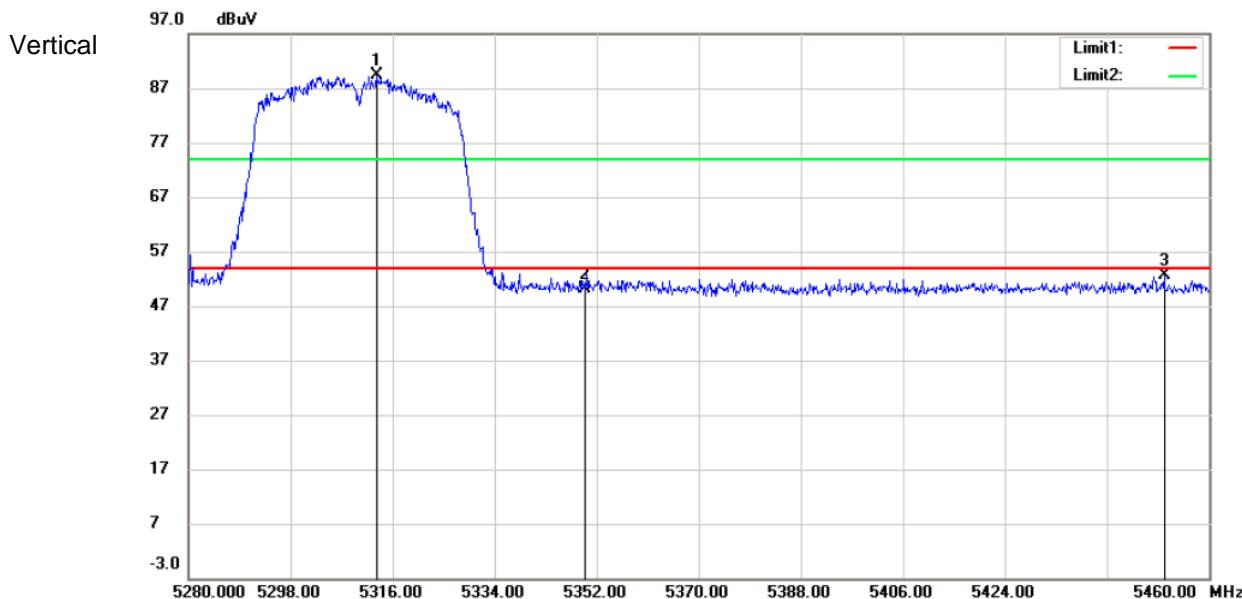
802.11 n(HT40)
ANT 1
Channel: 62

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5314.2	92.93	6.74	99.67	74	25.67	Peak	Horizontal
2	5350	55.34	6.98	62.32	74	-11.68	Peak	Horizontal
3	5362.26	50.69	7.06	57.75	74	-16.25	Peak	Horizontal
1	5313.3	82.26	6.74	89	54	35	Average	Horizontal
2	5350	36.33	6.98	43.31	54	-10.69	Average	Horizontal
3	5357.94	36.88	7.03	43.91	54	-10.09	Average	Horizontal



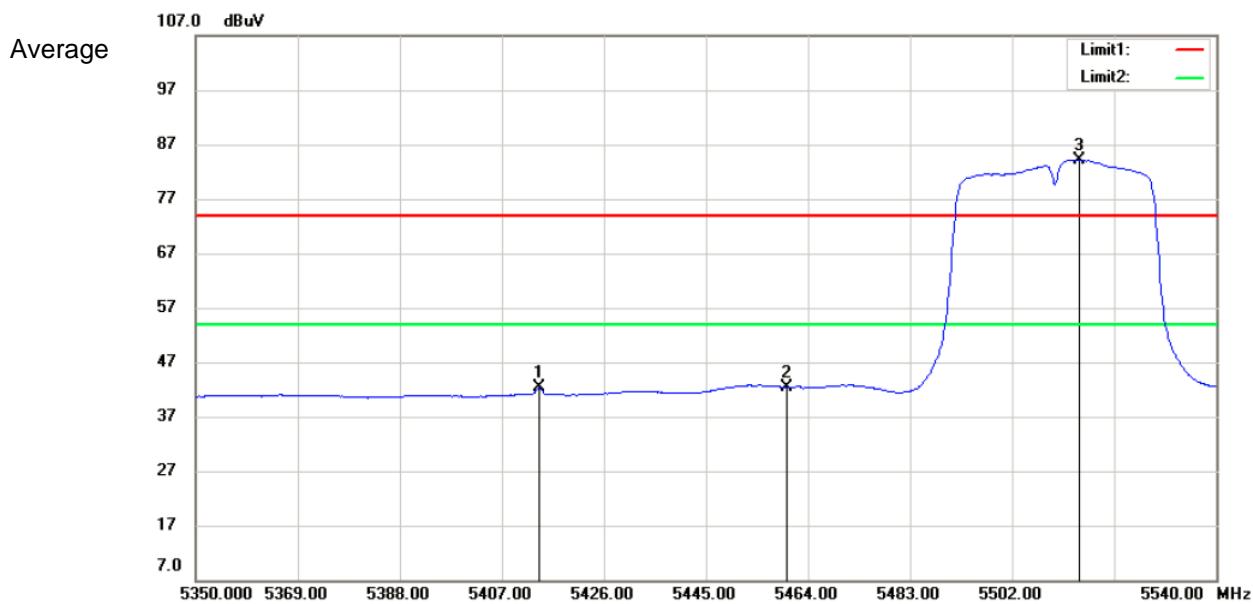
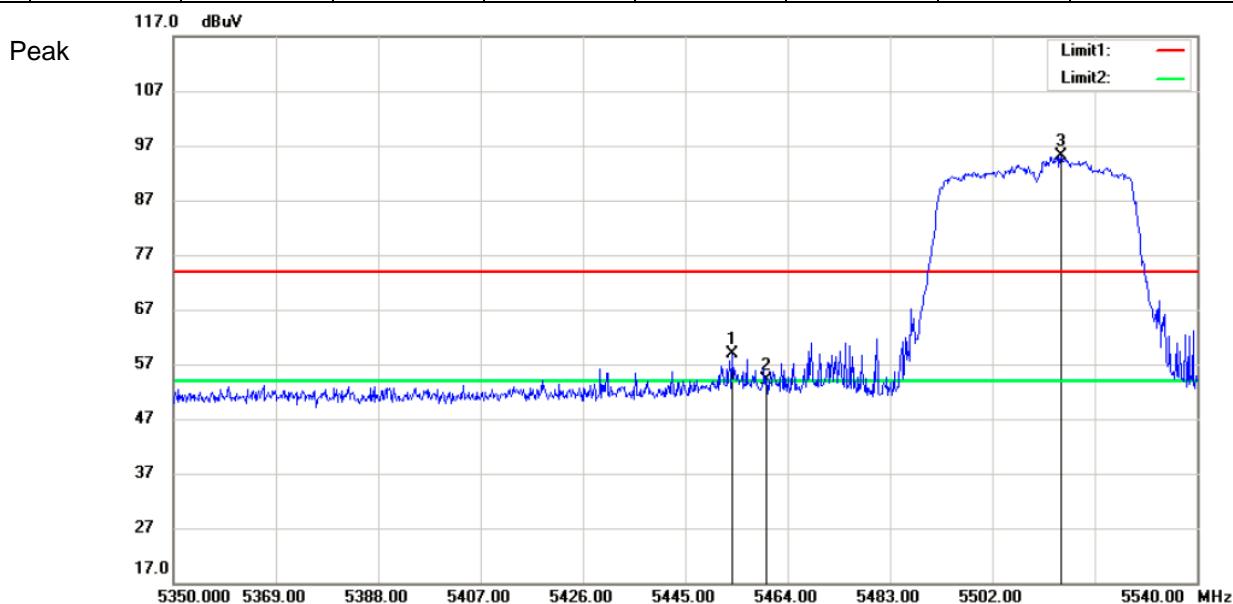
802.11 n(HT40)
ANT 1
Channel: 62

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5313.12	82.65	6.74	89.39	54	35.39	Peak	Vertical
2	5350	43.05	6.98	50.03	54	-3.97	Peak	Vertical
3	5452.08	45.54	7.13	52.67	54	-1.33	Peak	Vertical



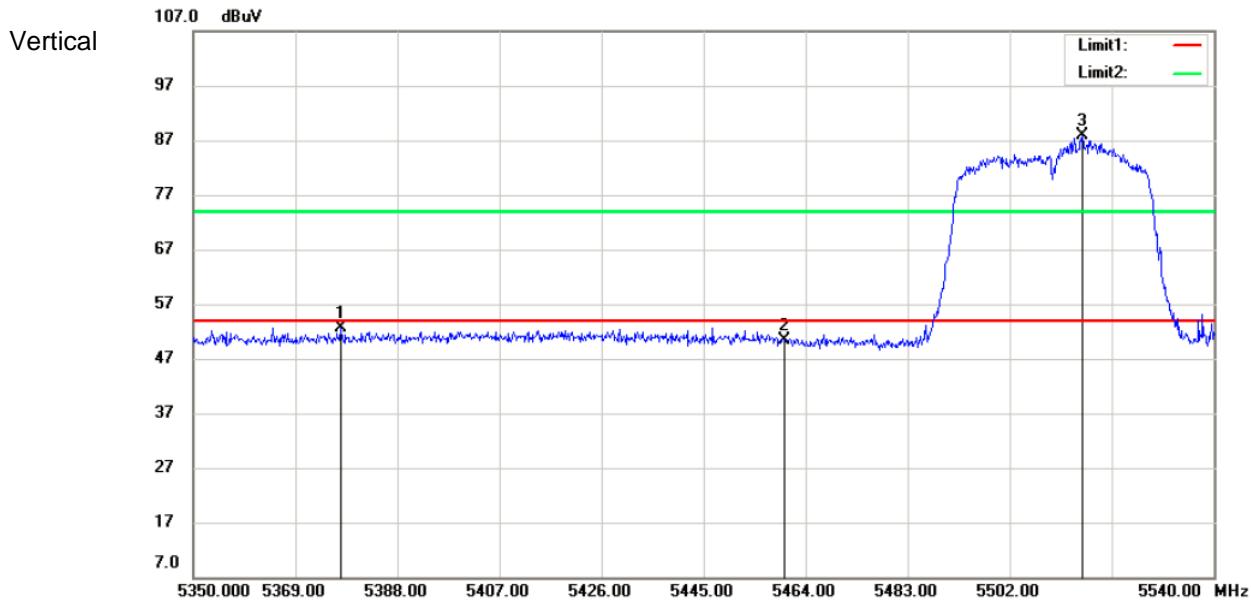
802.11 n(HT40)
ANT 1
Channel: 102

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5453.74	51.66	7.13	58.79	74	-15.21	Peak	Horizontal
2	5460	47	7.11	54.11	74	-19.89	Peak	Horizontal
3	5514.73	88.1	6.93	95.03	74	21.03	Peak	Horizontal
1	5413.84	35.03	7.27	42.3	54	-11.7	Average	Horizontal
2	5460	35.24	7.11	42.35	54	-11.65	Average	Horizontal
3	5514.54	77.24	6.93	84.17	54	30.17	Average	Horizontal



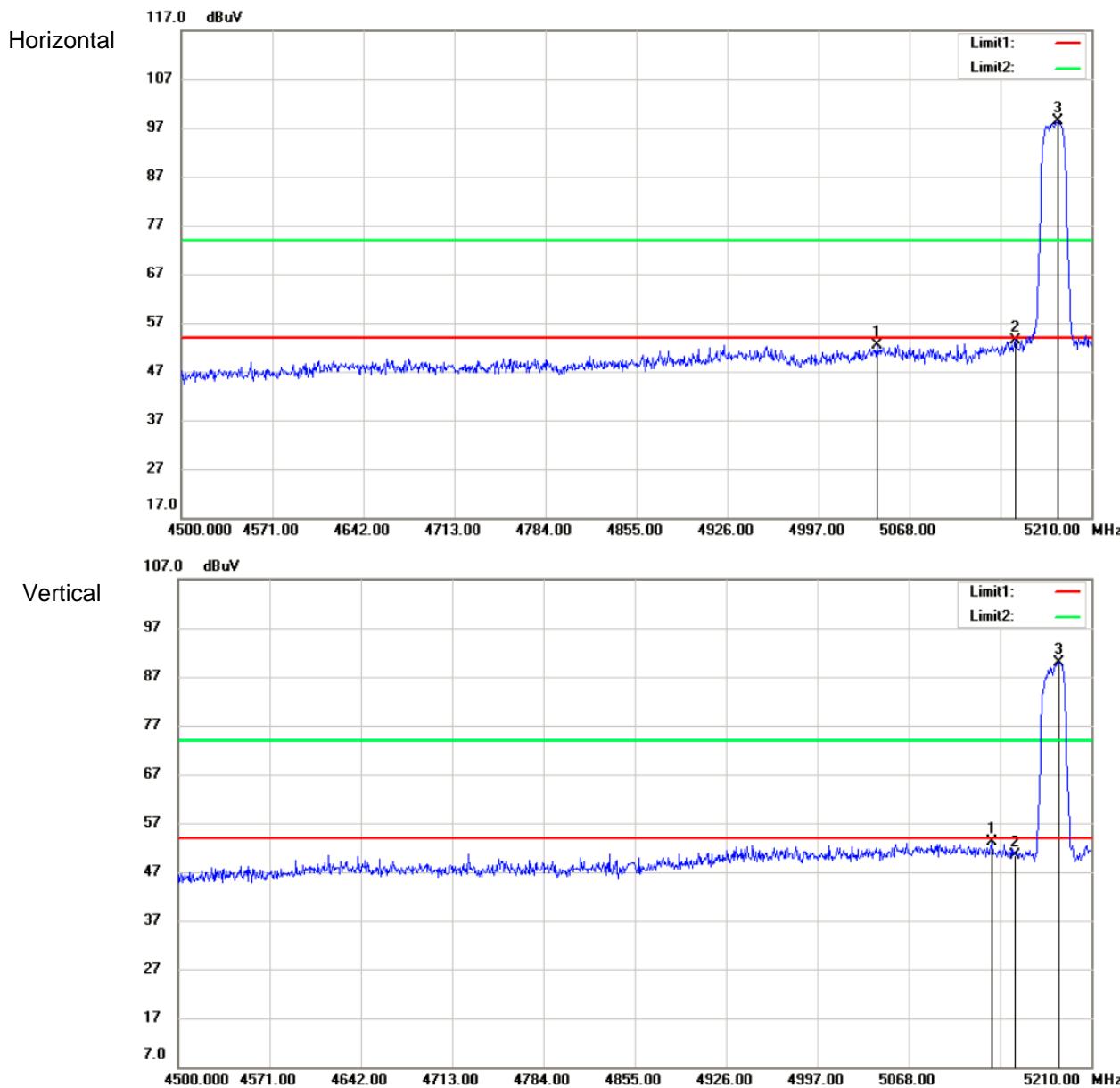
802.11 n(HT40)
ANT 1
Channel: 102

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5377.36	45.4	7.16	52.56	54	-1.44	Peak	Vertical
2	5460	43.36	7.11	50.47	54	-3.53	Peak	Vertical
3	5515.49	80.93	6.93	87.86	54	33.86	Peak	Vertical



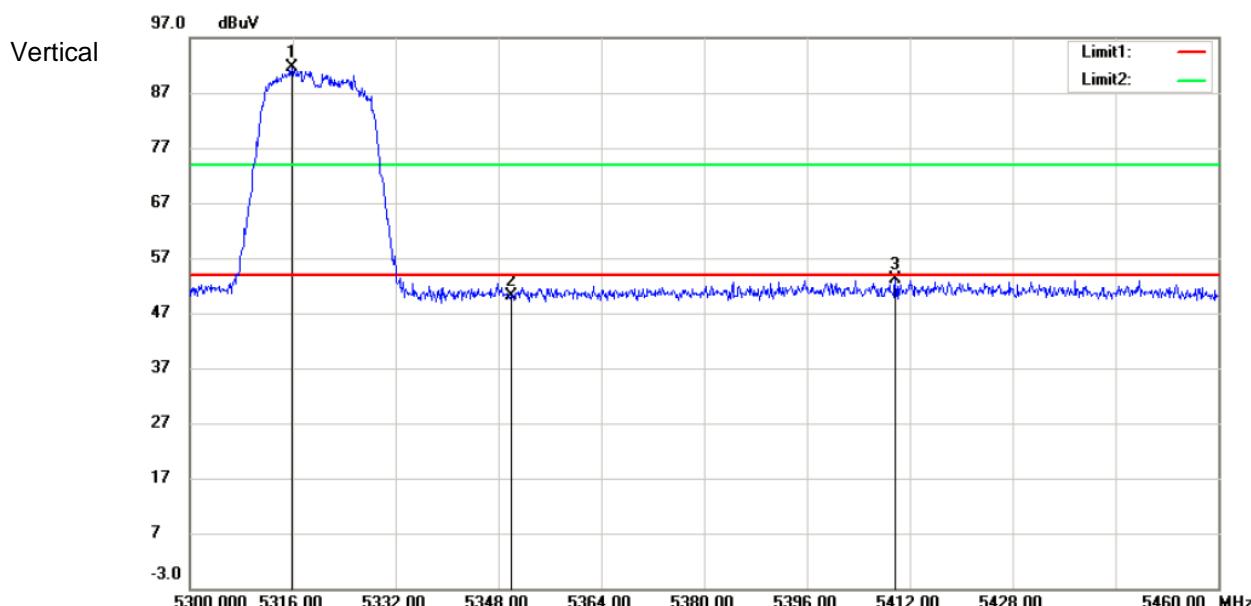
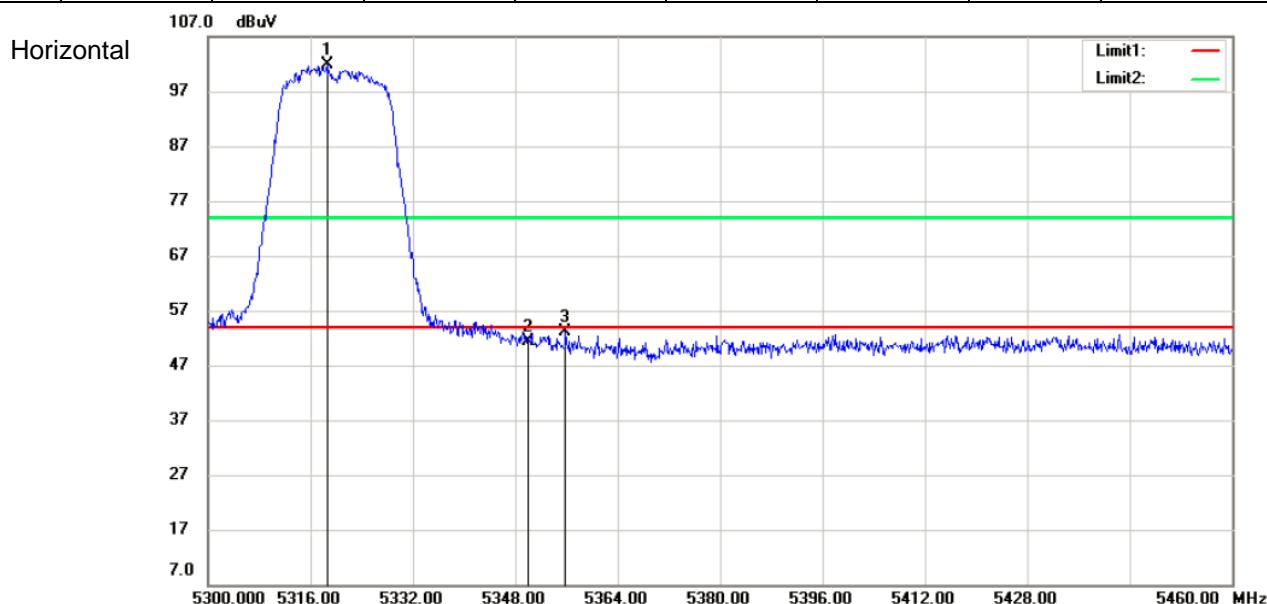
802.11 ac(VHT20)
ANT 1
Channel: 36

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5042.44	45	7.49	52.49	54	-1.51	Peak	Horizontal
2	5150	46.5	6.92	53.42	54	-0.58	Peak	Horizontal
3	5183.73	91.55	6.74	98.29	54	44.29	Peak	Horizontal
1	5132.61	46.12	7.01	53.13	54	-0.87	Peak	Vertical
2	5150	43.58	6.92	50.5	54	-3.5	Peak	Vertical
3	5184.44	83.13	6.74	89.87	54	35.87	Peak	Vertical



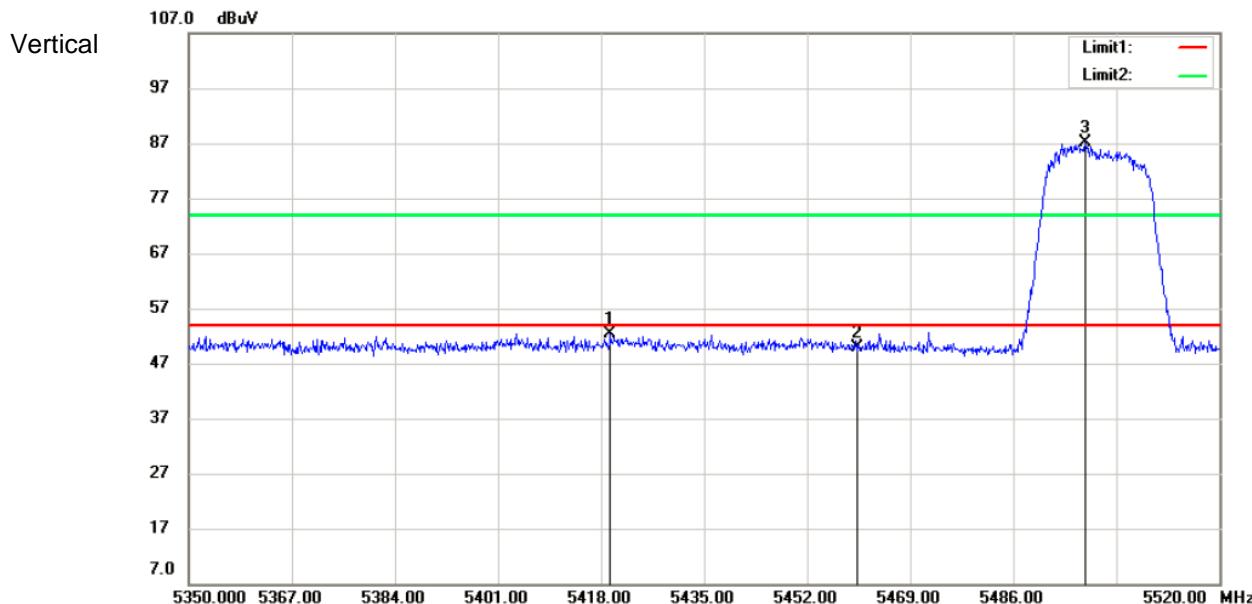
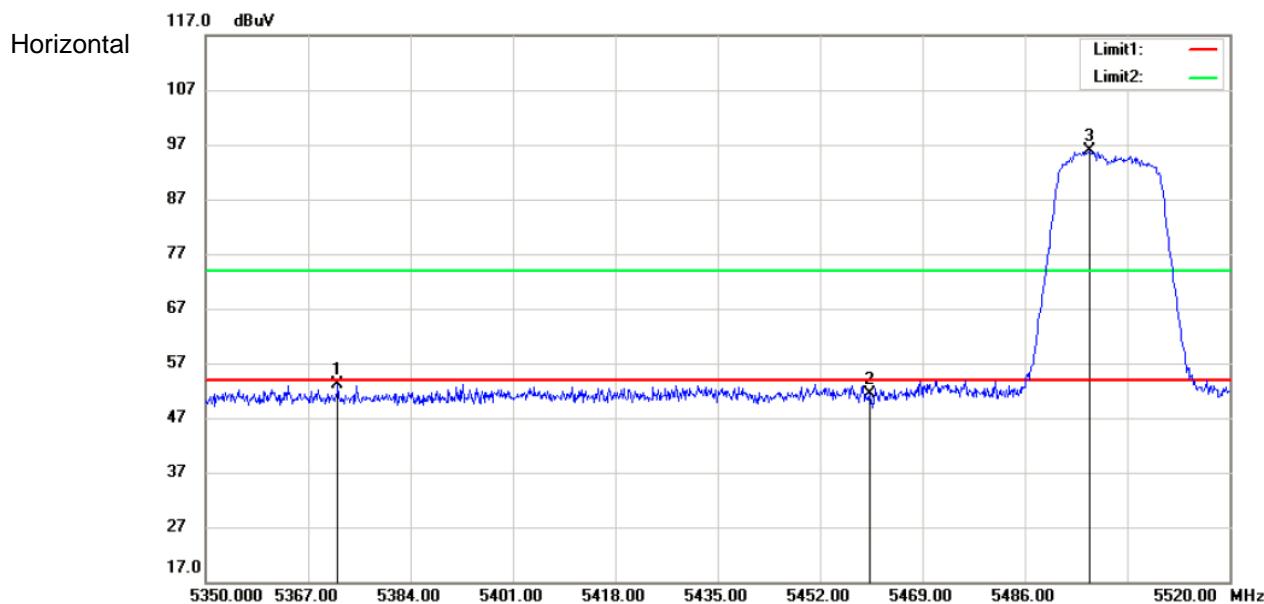
802.11 ac(VHT20)
ANT 1
Channel: 64

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5318.56	95.04	6.78	101.82	54	47.82	Peak	Horizontal
2	5350	44.41	6.98	51.39	54	-2.61	Peak	Horizontal
3	5355.84	45.99	7.03	53.02	54	-0.98	Peak	Horizontal
1	5315.84	84.85	6.76	91.61	54	37.61	Peak	Vertical
2	5350	43.14	6.98	50.12	54	-3.88	Peak	Vertical
3	5409.76	45.92	7.29	53.21	54	-0.79	Peak	Vertical



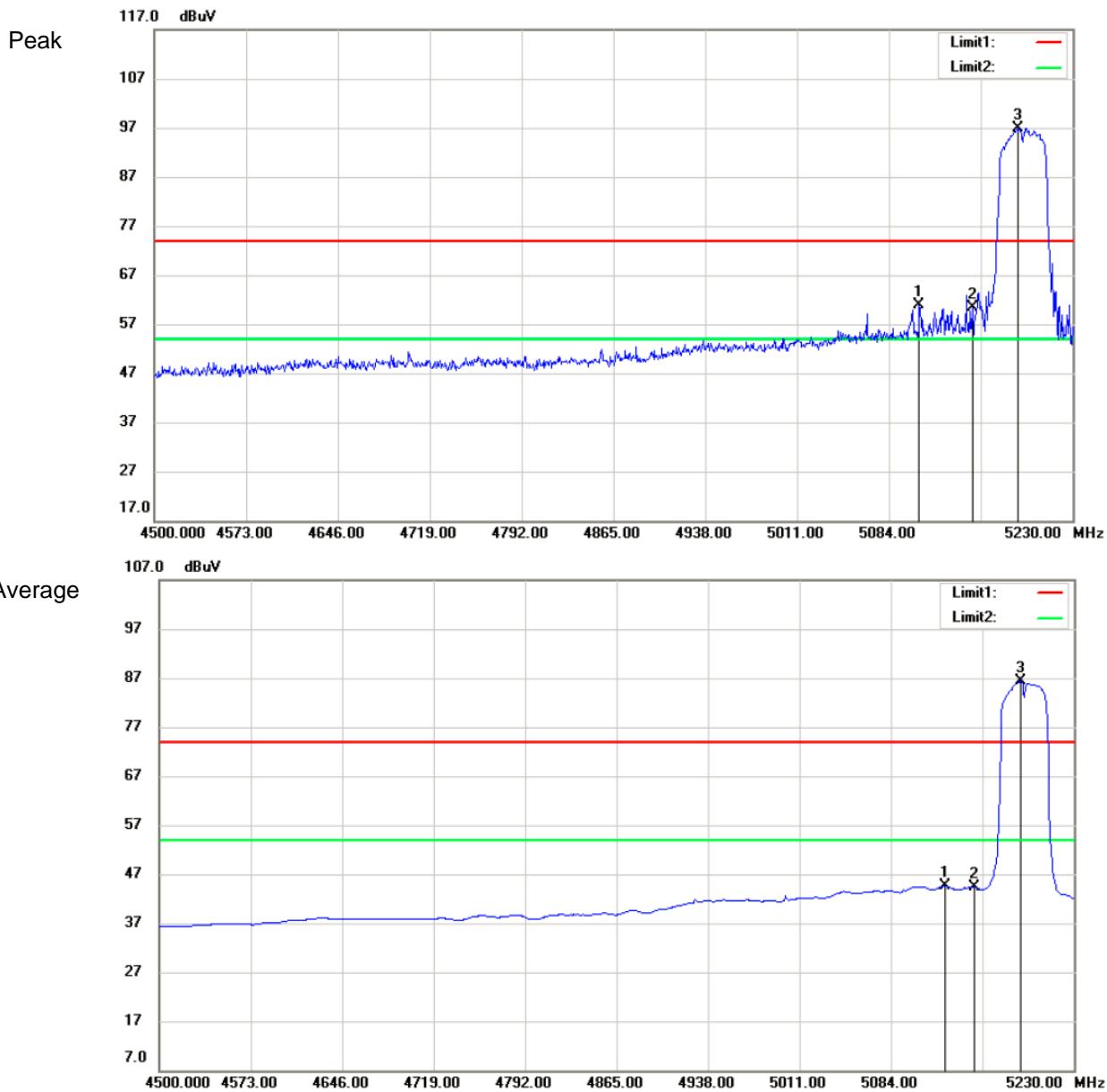
802.11 ac(VHT20)
ANT 1
Channel: 100

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5371.93	45.98	7.14	53.12	54	-0.88	Peak	Horizontal
2	5460	44.38	7.11	51.49	54	-2.51	Peak	Horizontal
3	5496.71	88.95	6.97	95.92	54	41.92	Peak	Horizontal
1	5419.53	45.16	7.25	52.41	54	-1.59	Peak	Vertical
2	5460	42.83	7.11	49.94	54	-4.06	Peak	Vertical
3	5497.9	80.22	6.97	87.19	54	33.19	Peak	Vertical



802.11 ac(VHT40)**ANT 1****Channel: 38**

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5127.07	37.53	7.05	44.58	54	-9.42	Peak	Horizontal
2	5150	37.49	6.92	44.41	54	-9.59	Peak	Horizontal
3	5187.66	79.74	6.71	86.45	54	32.45	Peak	Horizontal
1	5108.09	53.63	7.15	60.78	74	-13.22	Average	Horizontal
2	5150	53.56	6.92	60.48	74	-13.52	Average	Horizontal
3	5186.93	90.26	6.72	96.98	74	22.98	Average	Horizontal





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Report No.: SZEM171201302804

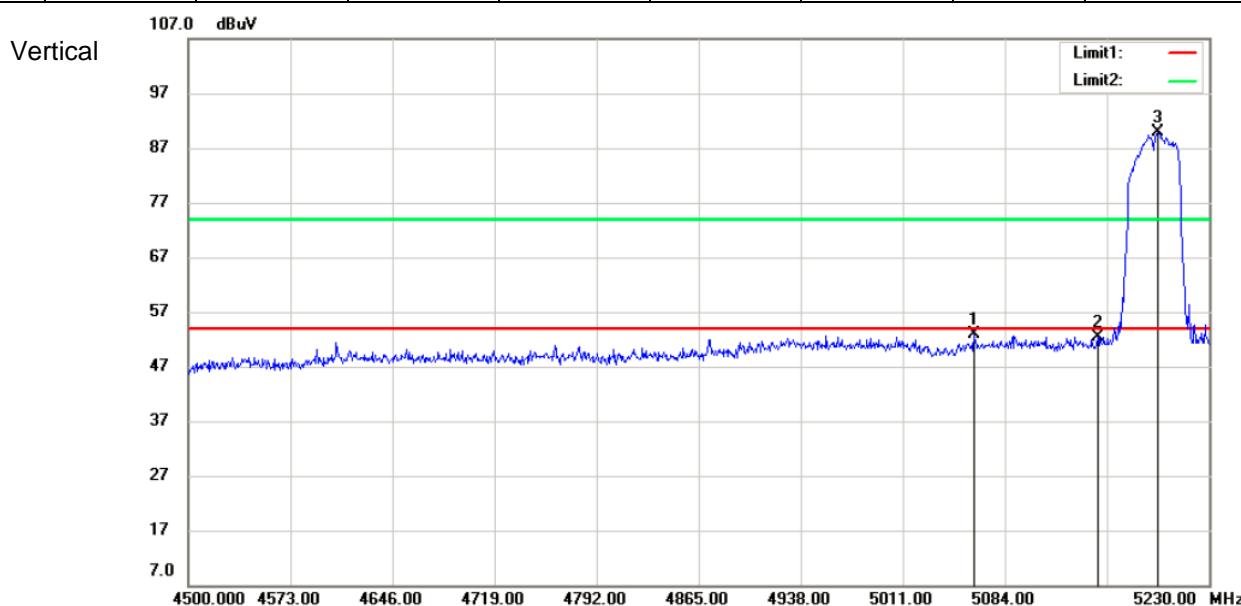
Page: 99 of 112

802.11 ac(VHT40)

ANT 1

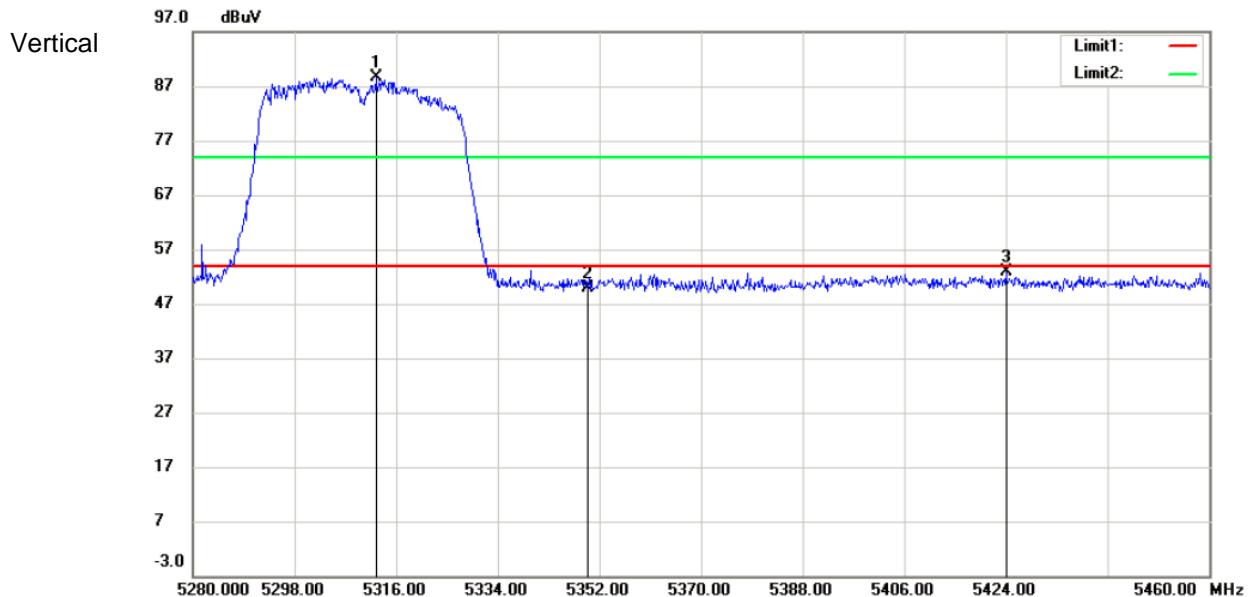
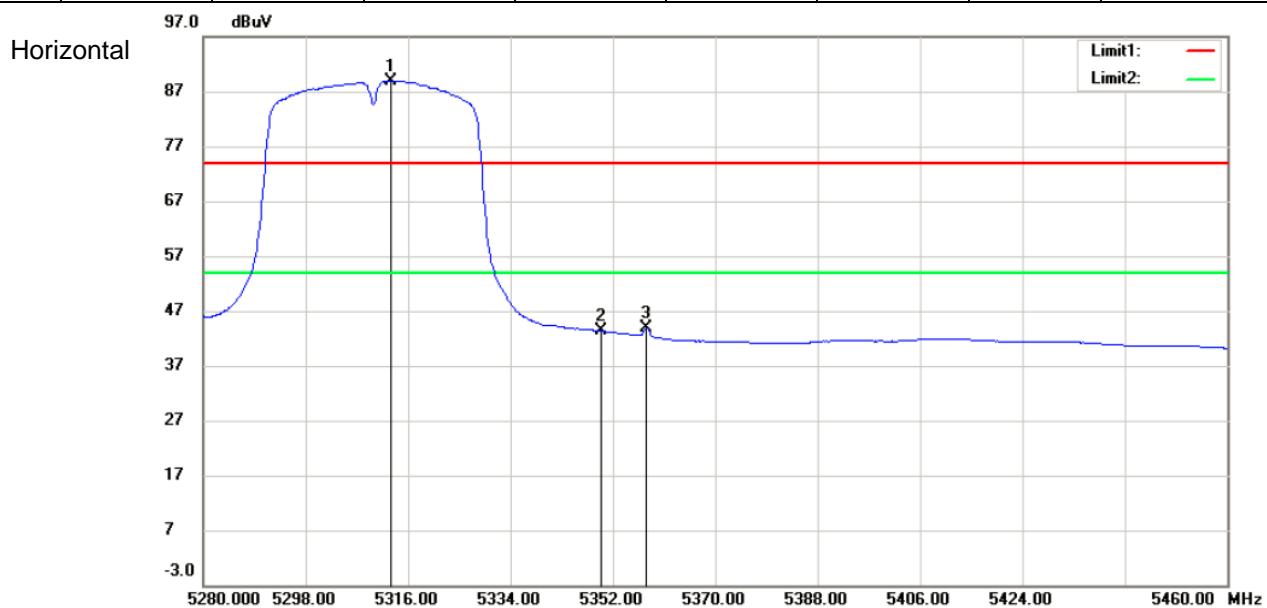
Channel: 38

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5062.1	45.37	7.39	52.76	54	-1.24	Peak	Vertical
2	5150	45.46	6.92	52.38	54	-1.62	Peak	Vertical
3	5193.5	83.07	6.69	89.76	54	35.76	Peak	Vertical



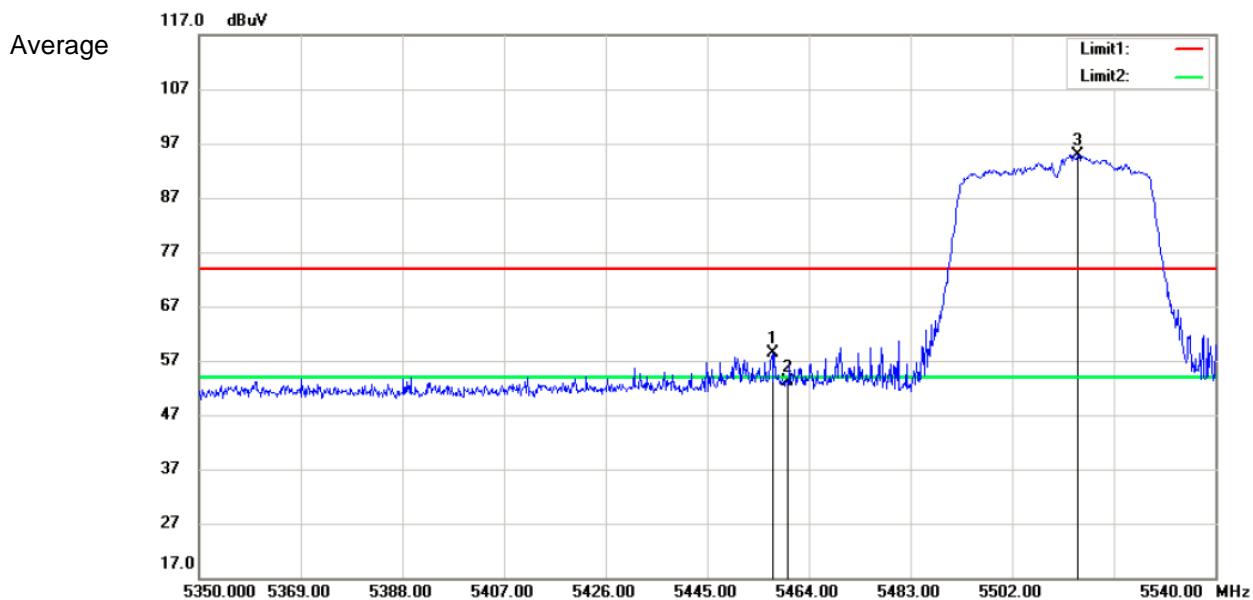
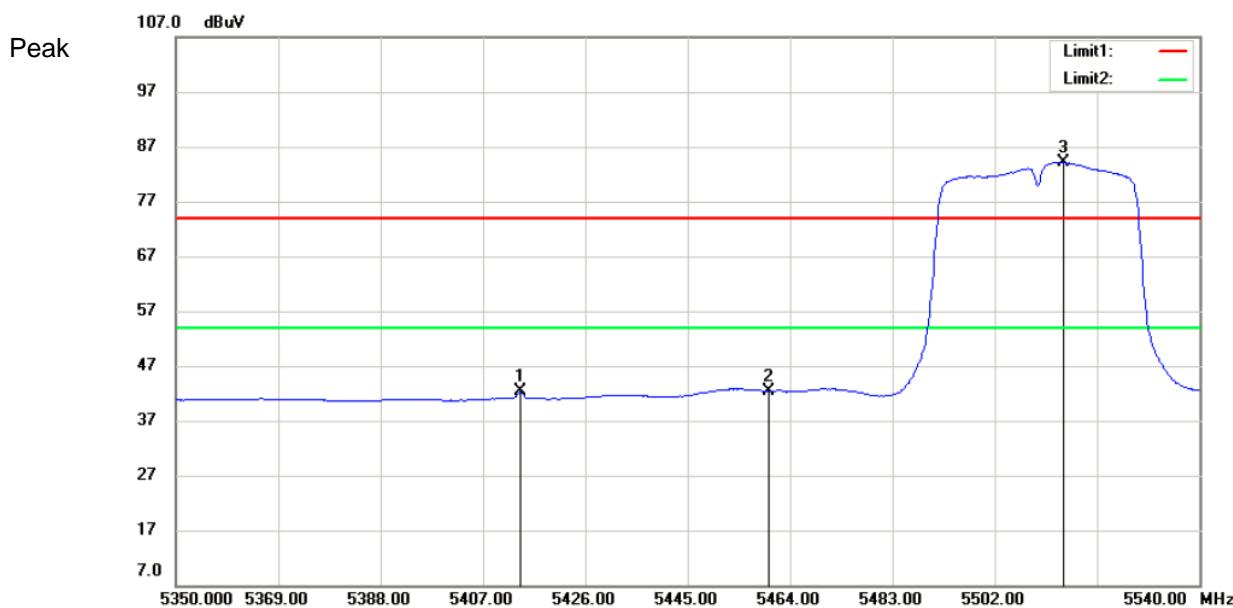
802.11 ac(VHT40)
ANT 1
Channel: 62

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5312.94	82.24	6.73	88.97	54	34.97	Peak	Horizontal
2	5350	36.35	6.98	43.33	54	-10.67	Peak	Horizontal
3	5357.94	36.92	7.03	43.95	54	-10.05	Peak	Horizontal
1	5312.4	81.78	6.73	88.51	54	34.51	Peak	Vertical
2	5350	42.85	6.98	49.83	54	-4.17	Peak	Vertical
3	5424	45.67	7.24	52.91	54	-1.09	Peak	Vertical



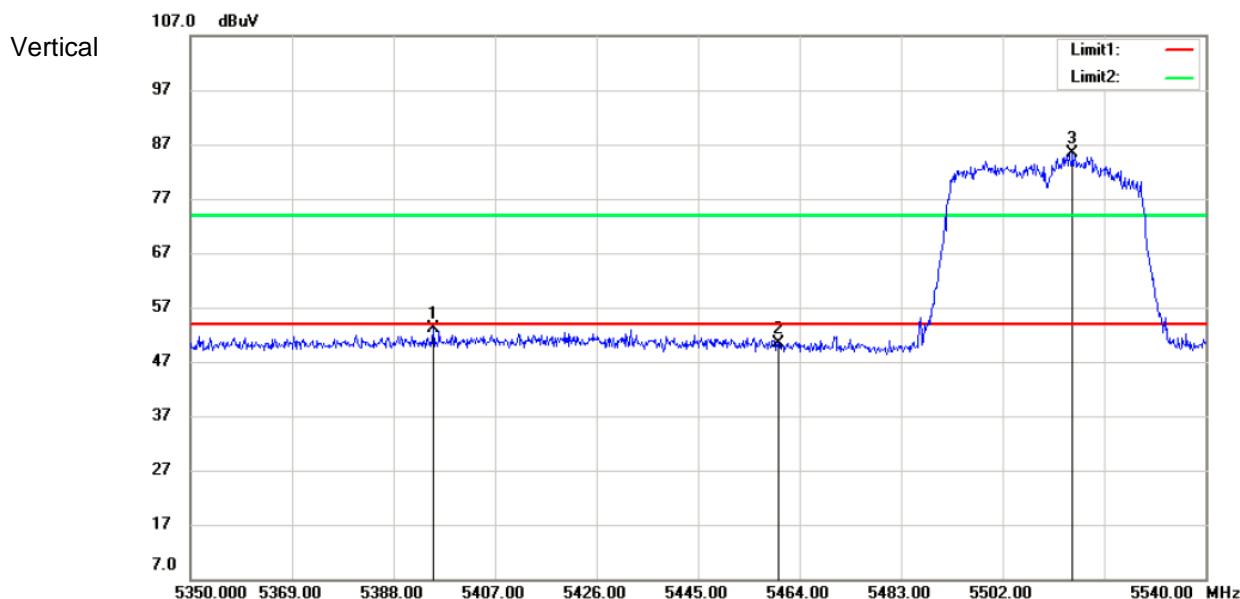
802.11 ac(VHT40)
ANT 1
Channel: 102

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5413.84	35.01	7.27	42.28	54	-11.72	Peak	Horizontal
2	5460	35.25	7.11	42.36	54	-11.64	Peak	Horizontal
3	5514.73	77.3	6.93	84.23	54	30.23	Peak	Horizontal
1	5457.16	51.23	7.11	58.34	74	-15.66	Average	Horizontal
2	5460	45.9	7.11	53.01	74	-20.99	Average	Horizontal
3	5514.35	88.01	6.93	94.94	74	20.94	Average	Horizontal



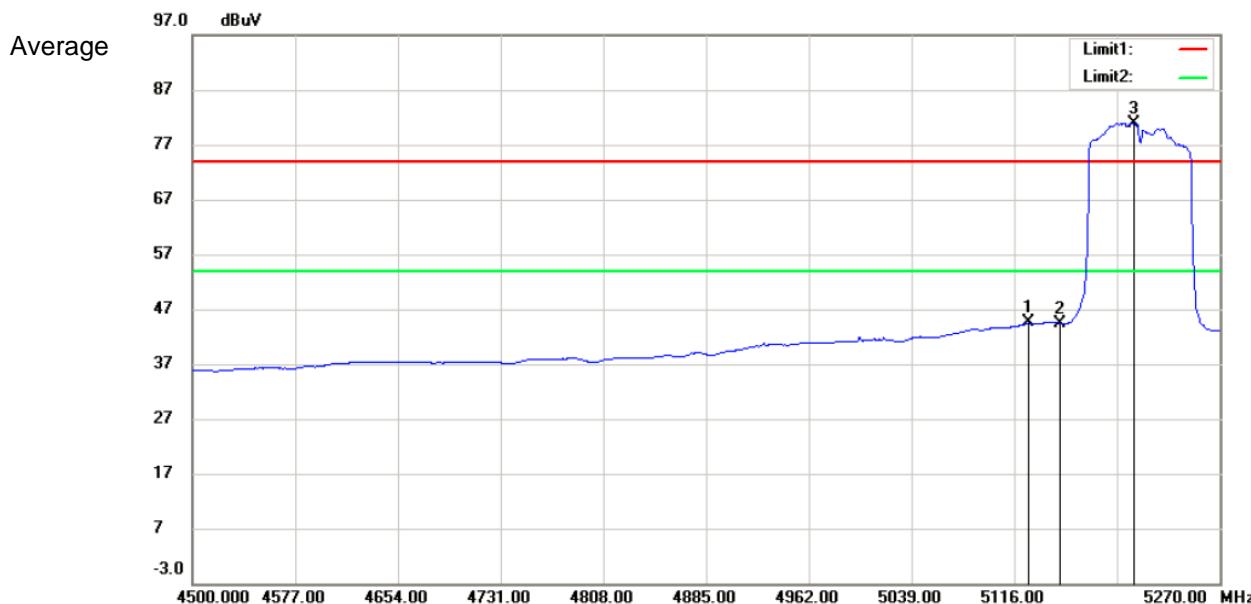
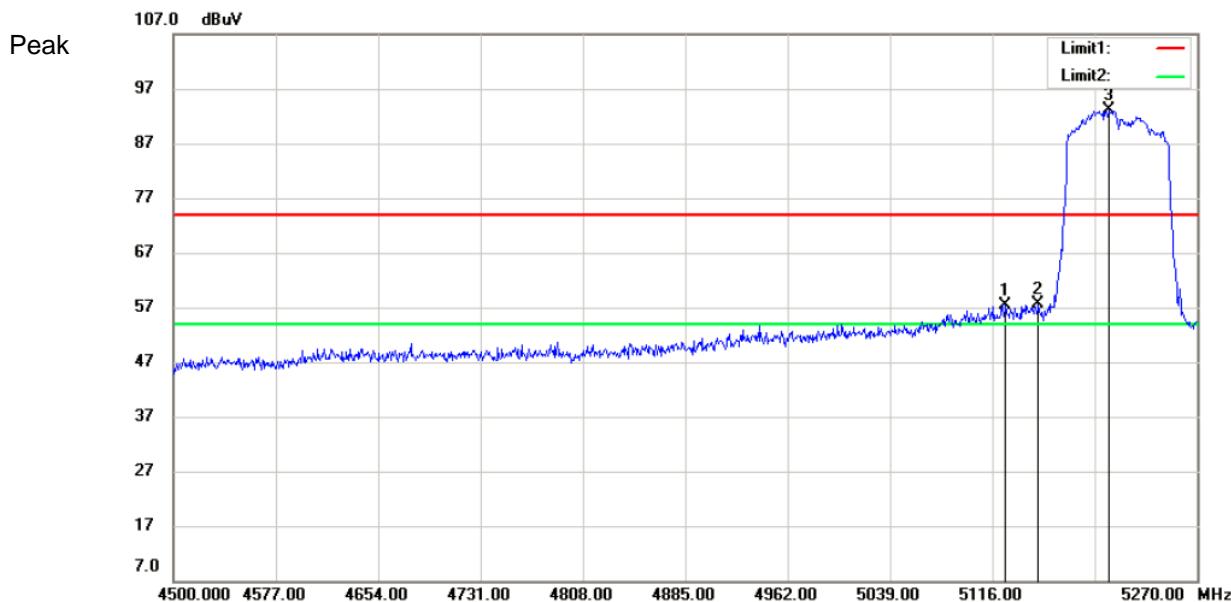
802.11 ac(VHT40)
ANT 1
Channel: 102

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5395.41	45.88	7.29	53.17	54	-0.83	Peak	Vertical
2	5460	43.34	7.11	50.45	54	-3.55	Peak	Vertical
3	5515.11	78.55	6.93	85.48	54	31.48	Peak	Vertical



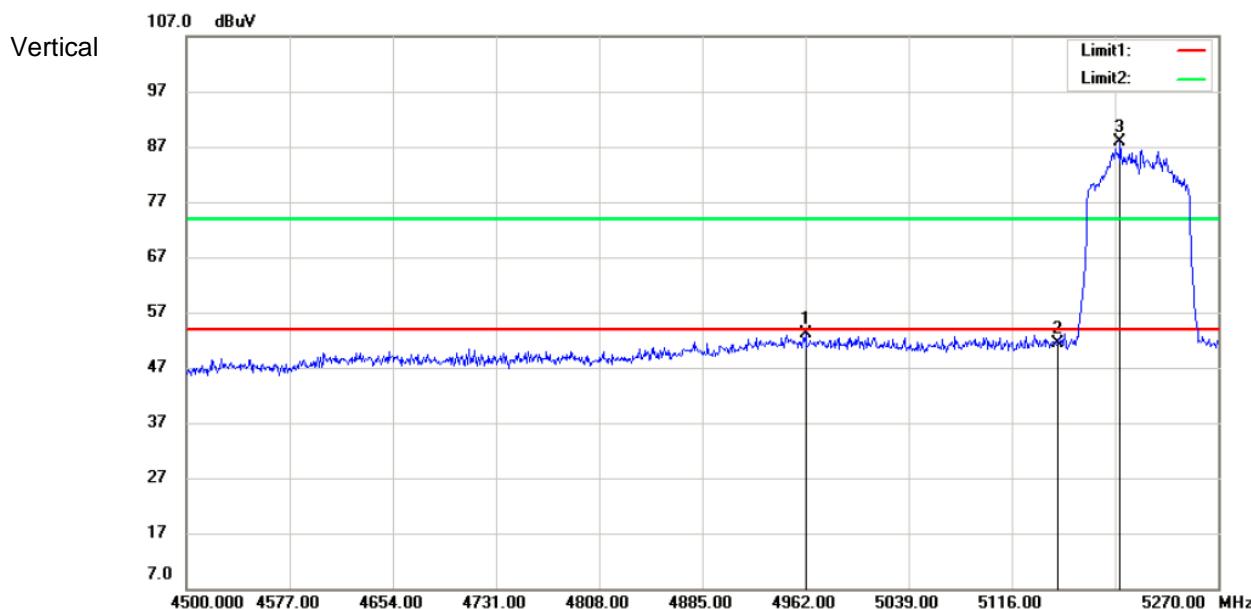
802.11 ac(VHT80)
ANT 1
Channel: 42

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5126.01	50.28	7.05	57.33	74	-16.67	Peak	Horizontal
2	5150	50.76	6.92	57.68	74	-16.32	Peak	Horizontal
3	5203.78	86.45	6.65	93.1	74	19.1	Peak	Horizontal
1	5126.78	37.48	7.05	44.53	54	-9.47	Average	Horizontal
2	5150	37.5	6.92	44.42	54	-9.58	Average	Horizontal
3	5205.32	74.32	6.65	80.97	54	26.97	Average	Horizontal



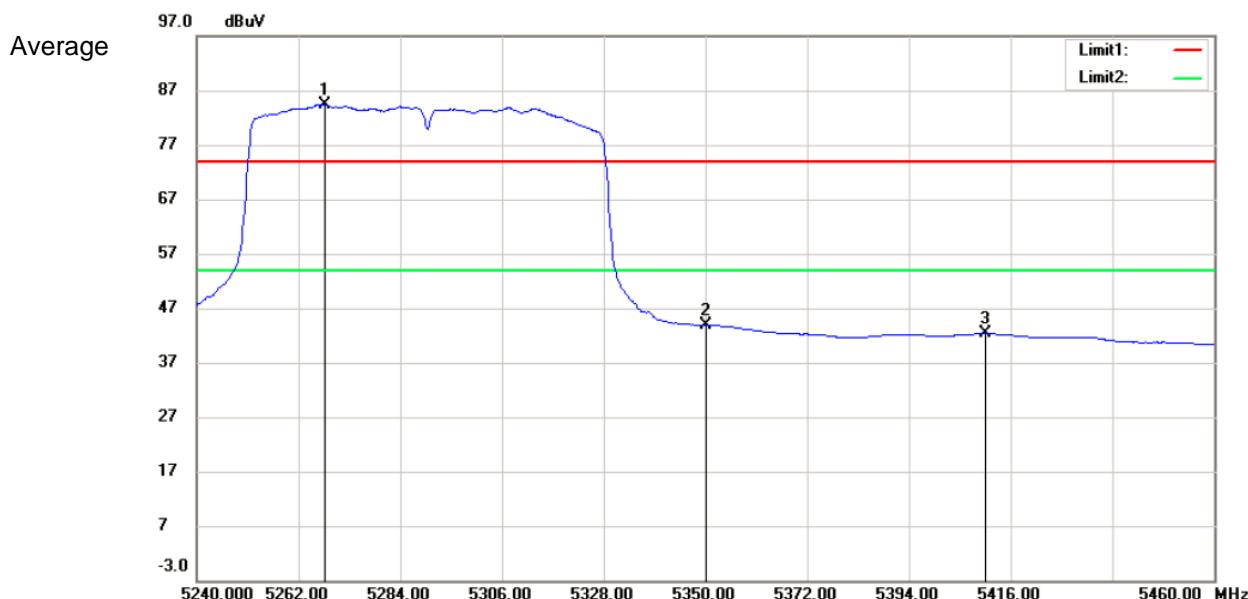
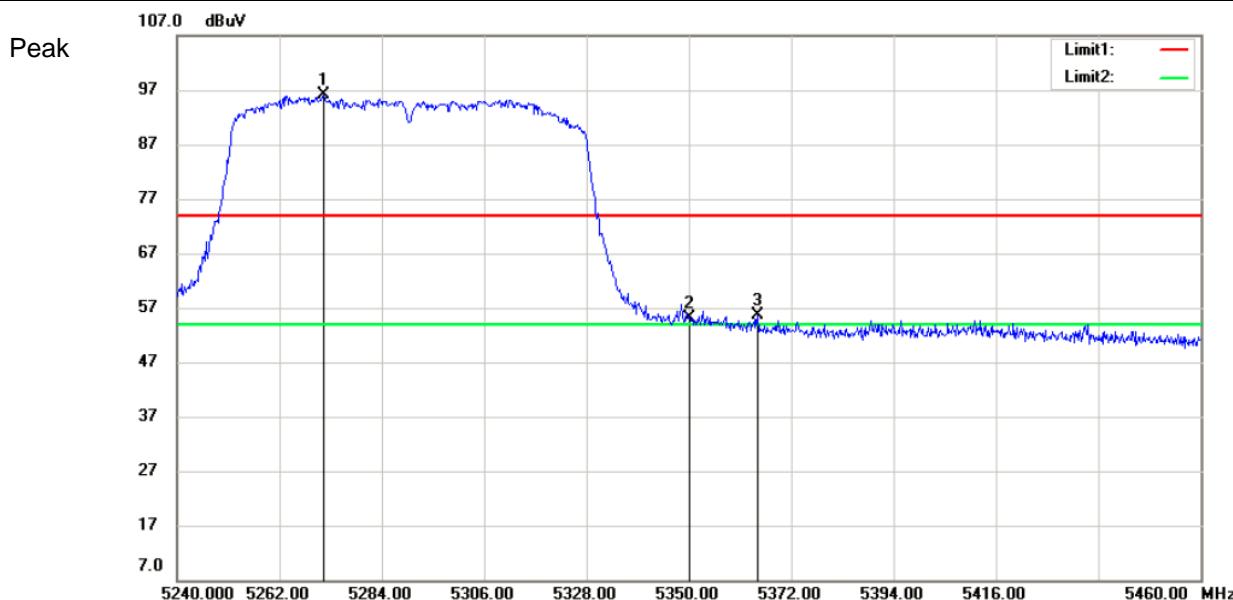
802.11 ac(VHT80)
ANT 1
Channel: 42

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4962	45.52	7.51	53.03	54	-0.97	Peak	Vertical
2	5150	44.58	6.92	51.5	54	-2.5	Peak	Vertical
3	5196.85	81.28	6.66	87.94	54	33.94	Peak	Vertical



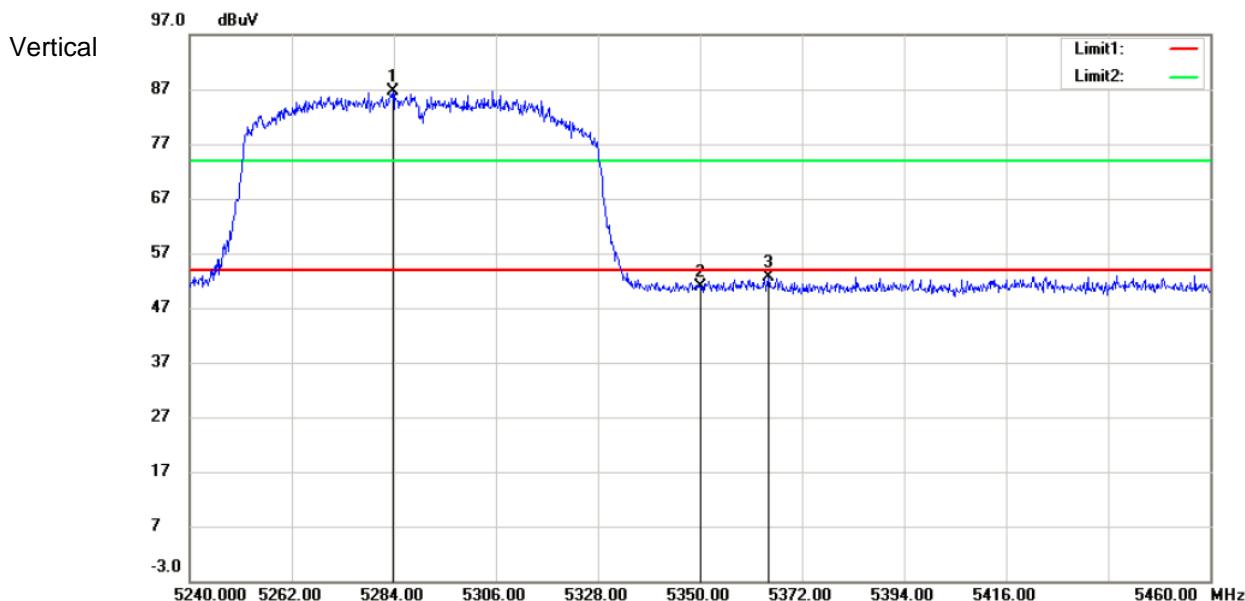
802.11 ac(VHT80)
ANT 1
Channel: 58

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5271.46	89.43	6.65	96.08	74	22.08	Peak	Horizontal
2	5350	48.22	6.98	55.2	74	-18.8	Peak	Horizontal
3	5364.74	48.48	7.08	55.56	74	-18.44	Peak	Horizontal
1	5267.72	77.82	6.65	84.47	54	30.47	Average	Horizontal
2	5350	36.99	6.98	43.97	54	-10.03	Average	Horizontal
3	5410.5	35.05	7.29	42.34	54	-11.66	Average	Horizontal



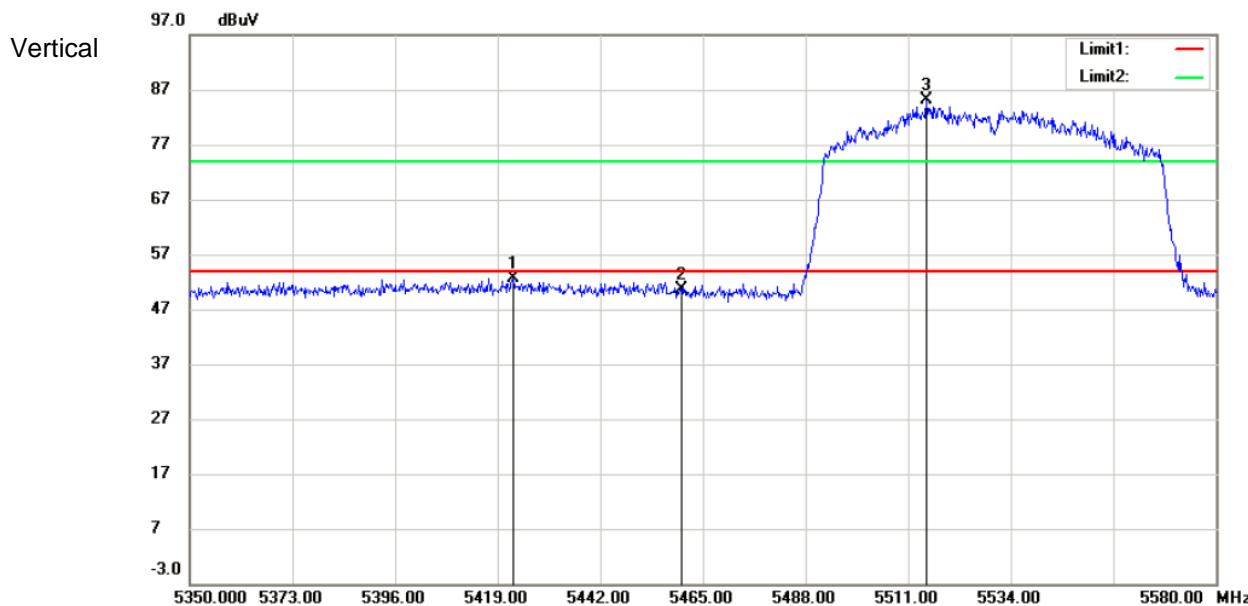
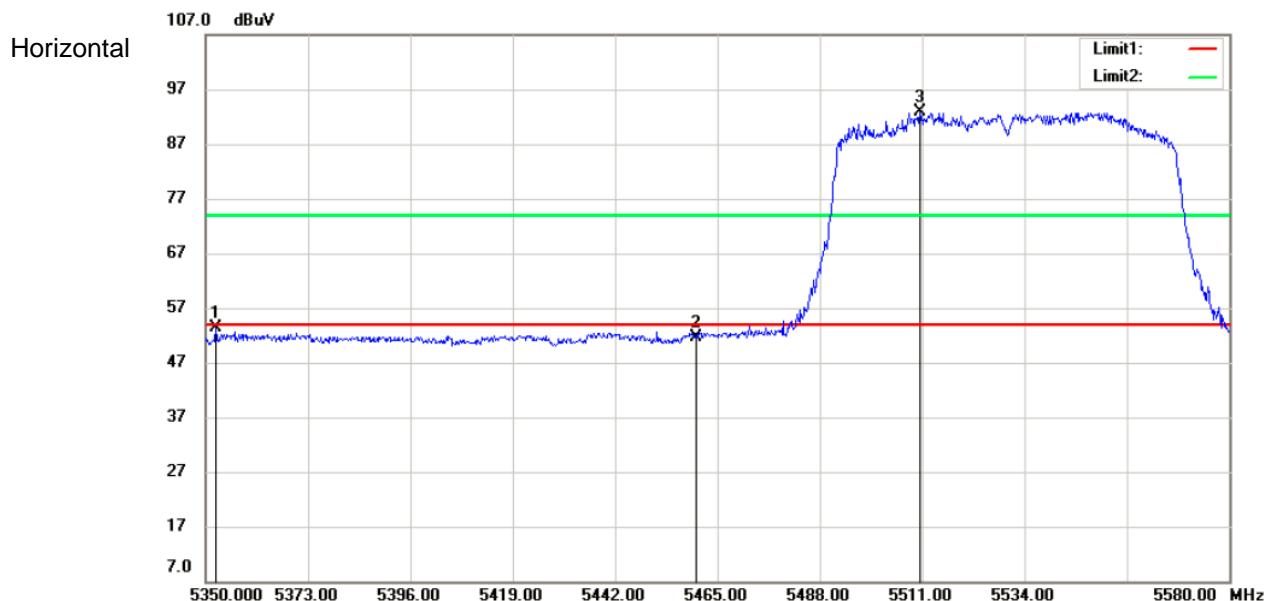
802.11 ac(VHT80)
ANT 1
Channel: 58

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5283.78	80.07	6.64	86.71	54	32.71	Peak	Vertical
2	5350	43.96	6.98	50.94	54	-3.06	Peak	Vertical
3	5364.74	45.64	7.08	52.72	54	-1.28	Peak	Vertical



802.11 ac(VHT80)
ANT 1
Channel: 106

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5352.3	46.41	7	53.41	54	-0.59	Peak	Horizontal
2	5460	44.51	7.11	51.62	54	-2.38	Peak	Horizontal
3	5510.54	85.95	6.94	92.89	54	38.89	Peak	Horizontal
1	5422.45	45.47	7.25	52.72	54	-1.28	Peak	Vertical
2	5460	43.48	7.11	50.59	54	-3.41	Peak	Vertical
3	5515.14	78.1	6.93	85.03	54	31.03	Peak	Vertical



7.13 Frequency Stability

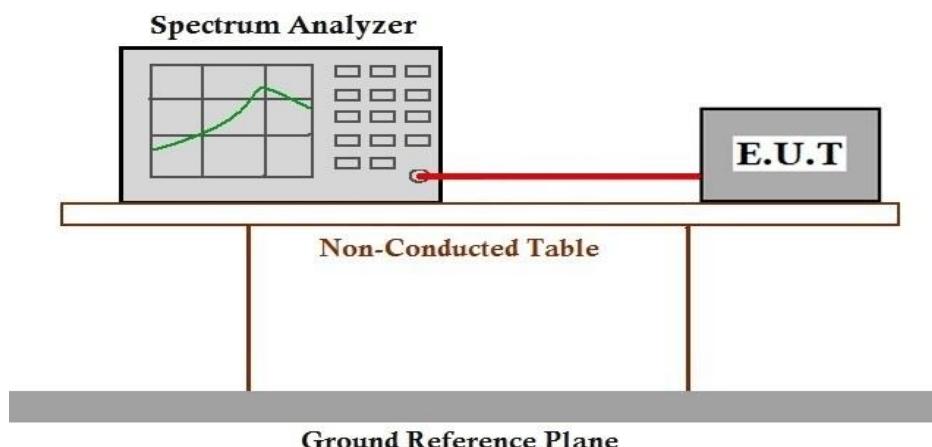
Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)
Test Method: ANSI C63.10 (2013) Section 6.8
Limit: The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

7.13.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 50 % RH Atmospheric Pressure: 1001 mbar
Test mode: Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n; data rate @ MCS0 is the worst case of IEEE 802.11ac.

7.13.2 Test Setup Diagram



7.13.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.13.4 Conclusion

EUT complies with FCC Part 15.407(g) limit.

8 Test Setup Photographs

8.1 Radiated Emission Test Setup

Below 30MHz



30MHz to 1GHz



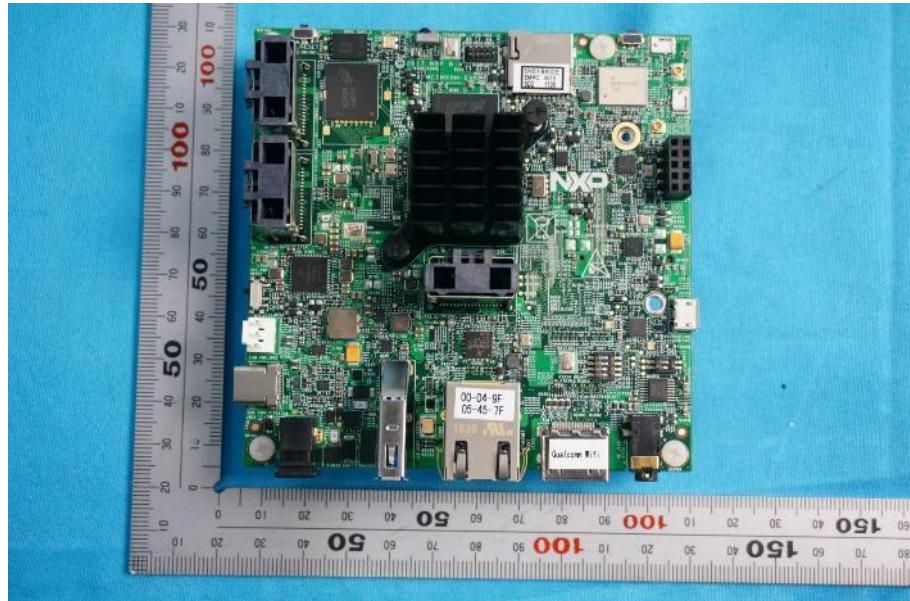
Above 1GHz

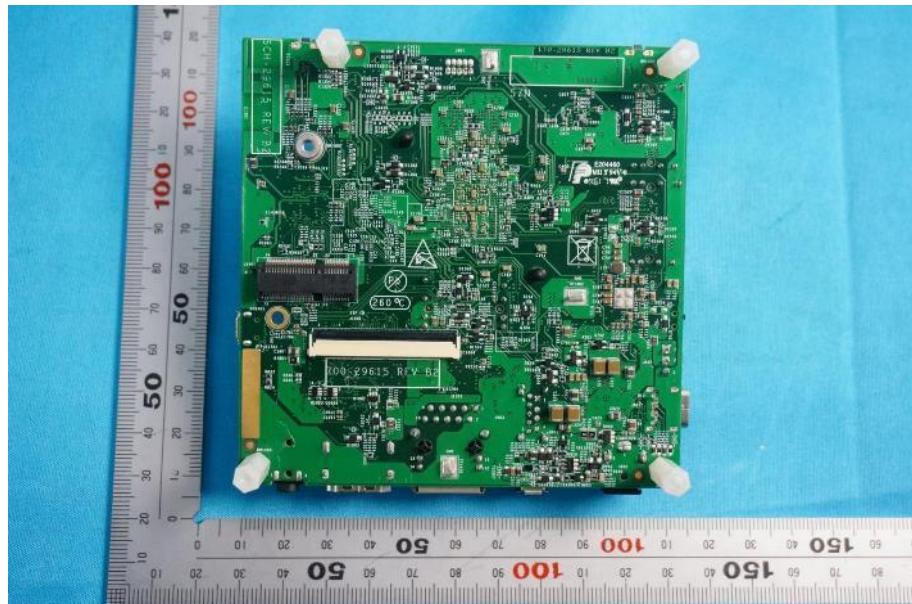


8.2 Conducted Emission Test Setup



9 EUT Constructional Details





- End of the Report -