

TEST REPORT

Report Number: 16062020HKG-003

Application for
Original Grant of 47 CFR Part 15 Certification

AC1600 WiFi Router

FCC ID: EW780-0551-00

This report contains the data of WLAN (WiFi) portion only.

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GENERAL INFORMATION

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FCC Specification Standard:	FCC Part 15, 2014 Edition
FCC ID:	EW780-0551-00
Brand Name:	VTech
Model(s):	VNT846
Type of EUT:	Unlicensed National Information Infrastructure
	Transmitter
Description of EUT:	AC1600 WiFi Router
Serial Number:	N/A
Sample Receipt Date:	June 20, 2016
Date of Test:	Aug 29, 2016 to Sep 12, 2016
Report Date:	November 08, 2016
Environmental Conditions:	Temperature: +10 to 40°C
	Humidity: 10 to 90%

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EXHIBIT 1 TEST RESULTS SUMMARY & STATEMENT OF COMPLIANCE

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1.0 Test Results Summary & Statement of Compliance

1.1 Summary of Test Results

Test Items	FCC Part 15 Section	Results	Details see section
Antenna Requirement	15.407(A1ii,3)	Pass	2.1
Max. Conducted Output Power (peak)	15.407(A1ii,3)	Pass	4.1
Min. 6dB RF Bandwidth	15.407(e)	Pass	4.2
Max. Power Density (average)	15.407(A1ii,3)	Pass	4.3
Out of Band Antenna Conducted Emission	15.407(b)	Pass	4.4
Radiated Emission in Restricted Bands and Spurious Emissions	15.407(b), 15.209 & 15.109	Pass	4.6
AC Power Line Conducted Emission	15.207 & 15.107	Pass	4.7

Note: Pursuant to FCC Part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over expected variations in temperature and supply voltage were considered.

1.2 Statement of Compliance

The equipment under test is found to be complying with the following standard:

FCC Part 15, 2014 Edition

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EXHIBIT 2 GENERAL DESCRIPTION

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2.0 **General Description**

2.1 Product Description

The Equipment Under Test (EUT) is a AC1600 WiFi Router.

For 2.400-2.4835GHz:

The Equipment Under Test (EUT) operates at frequency range of 2412MHz to 2462MHz with 11 channels.

For 802.11b mode, it operates at frequency range of 2412.000MHz to 2462.000MHz with 11 channels. It transmits via Direct-sequence spread spectrum (DSSS) modulation. Maximum bit rate can be up to 11Mbps.

For 802.11g mode, it operates at frequency range of 2412.000MHz to 2462.000MHz with 11 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can be up to 54Mbps.

For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 2412.000MHz to 2462.000MHz with 11 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 65Mbps.

For 802.11n (with 40MHz bandwidth) mode, it operates at frequency range of 2422.000MHz to 2452.000MHz with 7 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 65Mbps.

For 5.15-5.25GHz:

The Equipment Under Test (EUT) operates at frequency range of 5180MHz to 5240MHz with 4 channels.

For 802.11a mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can be up to 54Mbps.

For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 216.6Mbps.

For 802.11n (with 40MHz bandwidth) mode, it operates at frequency range of 5190.00MHz to 5230.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 450Mbps.

For 802.11ac (with 20MHz bandwidth) mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 260Mbps.

For 802.11ac (with 40MHz bandwidth) mode, it operates at frequency range of 5190.00MHz to 5230.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 600Mbps.

For 802.11ac (with 80MHz bandwidth) mode, it operates at frequency 5210MHz. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 1300Mbps.

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2.1 Product Description (Cont'd)

For 5.725-5.850GHz:

The Equipment Under Test (EUT) operates at frequency range of 5745MHz to 5825MHz with 5 channels.

For 802.11a mode, it operates at frequency range of 5745.00MHz to 5825.000MHz with 5 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can be up to 54Mbps.

For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 5745.00MHz to 5825.000MHz with 5 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 216.6Mbps.

For 802.11n (with 40MHz bandwidth) mode, it operates at frequency range of 5755.00MHz to 5795.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 450Mbps.

For 802.11ac (with 20MHz bandwidth) mode, it operates at frequency range of 5180.00MHz to 5250.000MHz with 4 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 260Mbps.

For 802.11ac (with 40MHz bandwidth) mode, it operates at frequency range of 5755.00MHz to 5795.000MHz with 2 channels. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 600Mbps.

For 802.11ac (with 80MHz bandwidth) mode, it operates at frequency 5775MHz. It transmits via Orthogonal Frequency Division Multiplexing (OFDM) modulation. Maximum bit rate can support up to 1300Mbps.

It operates at frequency range of The EUT is power by a 100-240VAC to 12VDC 0.8A adaptor.

The antenna(s) used in the EUT is internal, integral.

The circuit description is saved with filename: descri.pdf.

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2.2 Test Methodology

Both AC power line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2014). Preliminary radiated scans and all radiated measurements were performed in radiated emission test sites. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "Justification Section" of this Application. Antenna port conducted measurements were performed according to ANSI C63.10 (2013), No. 789033D02 v01r02(08-April-2016) and 662911 D01 Multiple Transmitter Output v02r01 (31-October-2013). All other measurements were made in accordance with the procedures in 47 CFR Part 2.

2.3 Test Facility

The radiated emission test site and antenna port conducted measurement facility used to collect the radiated data and conductive data are at Workshop No. 3, G/F., World-Wide Industrial Centre, 43-47 Shan Mei Street, Fo Tan, Sha Tin, N.T., Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC.

2.4 Related Submittal(s) Grants

This is a single application for certification of a transceiver (WiFi portion only).

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EXHIBIT 3 SYSTEM TEST CONFIGURATION

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3.0 **System Test Configuration**

3.1 Justification

For radiated emissions testing, the equipment under test (EUT) was setup to transmit / receive continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions.

The EUT was powered by 12.0VDC.

For the measurements, the EUT was attached to a plastic stand if necessary and placed on the wooden turntable which is four feet in diameter and approximately 0.8m in height above the ground plane for emission measurement at or below 1GHz and 1.5m in height above the ground plane for emission measurement above 1GHz. If the base unit attached to peripherals, they were connected and operational (as typical as possible).

The signal was maximized through rotation and placement in the three orthogonal axes. The antenna height and polarization were varied during the search for maximum signal level. The antenna height was varied from 1 to 4 meters. Radiated emissions were taken at three meters unless the signal level was too low for measurement at that distance. If necessary, a pre-amplifier was used and/or the test was conducted at a closer distance.

For any intentional radiator powered by AC power line, measurements of the radiated signal level of the fundamental frequency component of the emission was performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Radiated emission measurement for transmitter were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

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3.1 Justification - Cont'd

Emission that are directly caused by digital circuits in the transmit path and transmitter portion were measured, and the limit are according to FCC Part 15 Section 15.209. Digital circuitries used to control additional functions other than the operation of the transmitter are subject to FCC Part 15 Section 15.109.

Detector function for radiated emissions was in peak mode. Average readings, when required, were taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings. A detailed description for the calculation of the average factor can be found in section 4.2.3.

Determination of pulse desensitization was made according to *Hewlett Packard Application Note 150-2, Spectrum Analysis... Pulsed RF.* The effective period (Teff) was referred to Exhibit 4.6.3. With the resolution bandwidth 1MHz and spectrum analyzer IF bandwidth 3dB, the pulse desensitization factor was 0dB.

The EUT along with its peripherals were placed on a 1.0m(W)x1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT power cord connected to one LISN (Line impedance stabilization network), which provided 50ohm coupling impedance for measuring instrument. Meanwhile, the peripheral or support equipment power cords connected to a separate LISN. The ac powers for all LISNs were obtained from the same power source. The LISN housing, measuring instrument case, reference ground plane, and vertical ground plane were bounded together. The excess power cable between the EUT and the LISN was bundled. Power cords of non-EUT equipment (peripherals) were not bundled. AC power cords of peripheral equipments draped over the rear edge of the table, and routed them down onto the floor of the ac power line conducted emission test site to the second LISN.

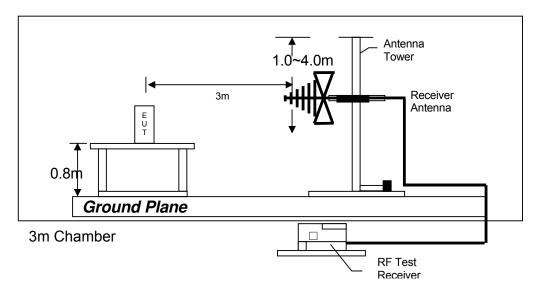
All connecting cables of EUT and peripherals were manipulated to find the maximum emission.

All configuration mode (with and without PC connectivity during charging test) and setting of data rate for 802.11 a/n(HT20/HT40)/ac(HT20/40/80) of WiFi mode had been considered, and worst case test data are shown on this test report.

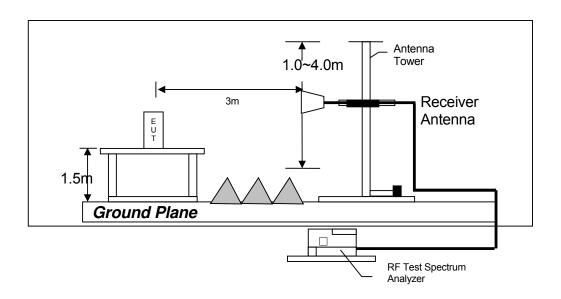
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3.2 Radiated Emission Test Setup

The figure below shows the test setup, which is utilized to make these measurements.



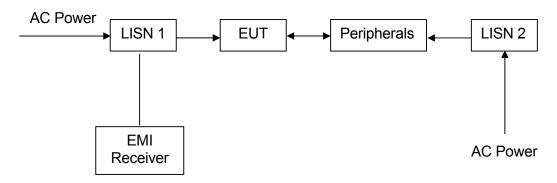
Test setup of radiated emissions up to 1GHz



Test setup of radiated emissions above 1GHz

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3.3 AC Line Conducted Emission Test Setup



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3.4 EUT Exercising Software

The EUT exercise program (if any) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

Details of EUT:

An AC adaptor (provided with the unit) was used to power the device. Their description are listed below.

(1) An AC adaptor (100-240VAC to 12VDC 0.8A, Model: CS24F120200FUF) (Supplied by Client)

Description of Accessories:

- (1) 5 X LAN cable of 1m in length (Supplied by Intertek)
- (2) Notebook (HP Probook 430) (Provided by Intertek)
- (3) 1 X 4GB USB flash drive (Provided by Intertek)

3.5 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test at a level of confidence of 95% has been considered. The values of the Measurement uncertainty for radiated emission test and RF conducted measurement test are \pm 5.3dB and \pm 0.99dB respectively. The value of the Measurement uncertainty for conducted emission test is \pm 4.2dB.

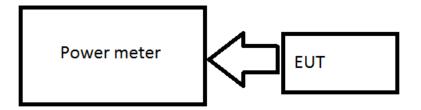
Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

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EXHIBIT 4 TEST RESULTS

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4.0 Test Results



4.1 Measurement using a Power Meter(PM)

The antenna port of the EUT was connected to the input of a power meter.

- (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.
- The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
 - 789033 D02 General UNII Test Procedures New Rules v01r02 Page 9
- At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
- The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section II.B.
- (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- (iv) Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g., 10 log (1/0.25) if the duty cycle is 25%).

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UNII-1: 5150MHz-5250MHz IEEE 802.11A (OFDM, 6Mbps)

	AN	T0	AN	IT1	AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5180.0	19.1	81.3	18.1	64.6	18.2	66.1	211.9	23.3
5200.0	19.0	79.4	17.9	61.7	17.6	57.5	198.6	23.0
5240.0	18.7	74.1	17.9	61.7	17.2	52.5	188.3	22.7

IEEE 802.11N (OFDM, HT20, MCS0)

	AN	TO	AN	IT1	AN	IT2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5180.0	15.7	37.2	15.2	33.1	14.5	28.2	98.5	19.9
5200.0	15.6	36.3	15.1	32.4	14.8	30.2	98.9	20.0
5240.0	15.7	37.2	15.0	31.6	14.0	25.1	93.9	19.7

IEEE 802.11N (OFDM, HT40, MCS0)

	AN	T0	ANT1		ANT2		SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5190.0	15.1	32.4	14.4	27.5	14.3	26.9	86.8	19.4
5230.0	15.2	33.1	14.6	28.8	13.9	24.5	86.5	19.4

IEEE 802.11AC (OFDM, HT20, MCS0)

	AN	TO	AN	IT1	ANT2		SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5180.0	15.7	37.2	15.1	32.4	14.9	30.9	100.4	20.0
5200.0	15.7	37.2	15.1	32.4	14.8	30.2	99.7	20.0
5240.0	15.6	36.3	14.4	27.5	14.7	29.5	93.4	19.7

IEEE 802.11AC (OFDM, HT40, MCS0)

	AN	TO	AN	IT1	AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5190.0	15.1	32.4	14.6	28.8	12.1	16.3	77.5	18.9
5230.0	15.1	32.4	14.9	30.9	11.8	15.1	78.4	18.9

IEEE 802.11AC (OFDM, HT80, MCS0)

		- \ -											
	AN	ITO	AN	IT1	Γ1 ANT2		SUM	SUM					
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2					
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)					
5190.0	14.9	30.9	15.4	34.5	14.9	30.9	96.4	19.8					

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UNII-3: 5725MHz-5850MHz IEEE 802.11A (OFDM, 6Mbps)

	AN	AN	IT1	AN	T2	SUM	SUM	
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5745.0	17.2	52.5	16.7	46.8	14.1	25.7	125.0	21.0
5785.0	17.3	53.7	16.6	45.7	15.6	36.3	135.7	21.3
5825.0	17.5	56.2	17.0	50.1	16.2	41.7	148.0	21.7

IEEE 802.11N (OFDM, HT20, MCS0)

	AN	TO	AN	IT1	AN	IT2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5745.0	14.9	30.9	13.7	23.4	13.1	20.4	74.8	18.7
5785.0	14.9	30.9	14.0	25.1	12.8	19.1	75.1	18.8
5825.0	15.1	32.4	14.1	25.7	12.8	19.1	77.1	18.9

IEEE 802.11N (OFDM, HT40, MCS0)

	AN	T0	AN	ANT1		T2	MUS	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5755.0	14.6	28.8	12.2	16.6	13.0	19.8	65.2	18.1
5795.0	14.7	29.5	13.5	22.2	12.8	19.0	70.7	18.5

IEEE 802.11AC (OFDM, HT20, MCS0)

	AN	TO	AN	IT1	AN	IT2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5745.0	14.9	30.9	13.5	22.2	12.9	19.5	72.6	18.6
5785.0	15.0	31.6	13.2	21.0	13.0	20.0	72.6	18.6
5825.0	15.1	32.4	13.9	24.5	12.6	18.2	75.1	18.8

IEEE 802.11AC (OFDM, HT40, MCS0)

	AN	T0	AN	IT1	AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5755.0	14.5	28.2	11.9	15.5	11.1	12.8	56.5	17.5
5795.0	14.7	29.5	13.8	24.0	12.5	18.0	71.5	18.5

IEEE 802.11AC (OFDM, HT80, MCS0)

	,		,	, ,				
	AN	ITO	AN	IT1	ANT2		SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5775.0	14.2	26.3	14.5	28.2	13.3	21.4	75.9	18.8

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4.1 Maximum Conducted Output Power at Antenna Terminals – Cont'd

Cable loss: 2.1 dB External Attenuation: 0 dB

UNII-1:

IEEE 802.11A (OFDM, 6Mbps)

max. conducted (average) output level = $\underline{23.3}$ dBm

IEEE 802.11N (OFDM, HT20, MCS0)

max. conducted (average) output level = $\underline{20.0}$ dBm

IEEE 802.11N (OFDM, HT40, MCS0)

max. conducted (average) output level = 19.4 dBm

IEEE 802.11AC (OFDM. HT20. MCS0)

max. conducted (average) output level = 20.0 dBm

IEEE 802.11AC (OFDM, HT40, MCS0)

max. conducted (average) output level = 18.9 dBm

IEEE 802.11AC (OFDM, HT80, MCS0)

max. conducted (average) output level = 19.8 dBm

UNII-3:

IEEE 802.11A (OFDM, 6Mbps)

max. conducted (average) output level = 21.7 dBm

IEEE 802.11N (OFDM, HT20, MCS0)

max. conducted (average) output level = 18.9 dBm

IEEE 802.11N (OFDM, HT40, MCS0)

max. conducted (average) output level = 18.5 dBm

IEEE 802.11AC (OFDM, HT20, MCS0)

max. conducted (average) output level = 18.8 dBm

IEEE 802.11AC (OFDM, HT40, MCS0)

max. conducted (average) output level = 18.5 dBm

IEEE 802.11AC (OFDM, HT80, MCS0)

max. conducted (average) output level = 18.8 dBm

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4.1 Maximum Conducted Output Power at Antenna Terminals – Cont'd
Cable loss, external attenuation: included in OFFSET function added to SA raw reading
The transmit signals are correlated with each other, Directional gain =G ant+10log(Nant)dBi=6.77dBi
Limits: 1W (30dBm) for antennas with gains of 6dBi or less.(Master device)
□ 0.8W (29.23dBm) for antennas with gains more than 6dBi (Master device).

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4.2 Minimum 6dB RF Bandwidth

The antenna port of the EUT was connected to the input of a spectrum analyzer. The EBW measurement procedure was used. A PEAK output reading was taken, a DISPLAY line was drawn 6dB lower than PEAK level. The 6dB bandwidth was determined from where the channel output spectrum intersected the display line.

	IEEE802.11N (OFDM, HT20, MCS0)									
	ANTO ANT1 ANT2									
	6dB	6dB	6dB							
Frequency	Bandwidth	Bandwidth	Bandwidth							
(MHz)	(MHz)	(MHz)	(MHz)							
5745	17.8	17.8	17.8							
5785	17.6	17.8	17.8							
5825	17.6	17.8	17.8							

IEEE802.11N (OFDM, HT40, MCS0)											
	ANTO ANT1 ANT2										
	6dB 6dB 6dB										
Frequency	Frequency Bandwidth Bandwidth Bandwidth										
(MHz)	(MHz) (MHz) (MHz)										
5755 36.5 36.5 36.2											
5795											

II	IEEE802.11AC (OFDM, HT20, MCS0)									
	ANTO ANT1 ANT2									
	6dB	6dB	6dB							
Frequency	Bandwidth	Bandwidth	Bandwidth							
(MHz)	(MHz)	(MHz)	(MHz)							
5745	17.8	17.8	17.8							
5785	17.8	17.8	17.8							
5825	17.7	17.8	17.8							

IEEE802.11AC (OFDM, HT40, MCS0)										
	ANTO ANT1 ANT2									
	6dB 6dB 6dB									
Frequency	Frequency Bandwidth Bandwidth Bandwidth									
(MHz)	(MHz)	(MHz)	(MHz)							
5755	36.5	36.5	36.4							
5795	36.5	36.5	36.2							

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II	IEEE802.11AC (OFDM, HT80, MCS0)										
	ANTO ANT1 ANT2										
	6dB 6dB 6dB										
Frequency	Frequency Bandwidth Bandwidth Bandwidth										
(MHz)	(MHz) (MHz) (MHz)										
5775	76.3	76.5	73.3								

Limits:

6 dB bandwidth shall be at least 500kHz

The plots of 6dB RF bandwidth and occupied bandwidth are saved with filename :UNII-3.pdf

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4.3 Maximum Power Spectral Density

Antenna output of the EUT was coupled directly to spectrum analyzer. The measurement procedure method SA-1 was used. If an external attenuator and/or cable was used, these losses are compensated for using the OFFSET function of the analyser.

U-NII-1: IEEE 802.11A (OFDM, 6Mbps)

		ANT	0	AN	ANT1 ANT2		SUM	SUM	
Frequency								ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	n	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5180.0	7.3		5.4	6.6	4.6	6.0	4.0	13.9	11.4
5200.0	7.0		5.0	6.5	4.5	5.8	3.8	13.3	11.2
5240.0	6.9		4.9	6.5	4.5	5.8	3.8	13.2	11.2

IEEE 802.11N (OFDM,HT20, MCS0)

	AN	T0	AN	T1	AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5180.0	3.5	2.2	3.0	2.0	2.5	1.8	6.0	7.8
5200.0	3.3	2.1	2.8	1.9	2.4	1.7	5.8	7.6
5240.0	3.6	2.3	3.0	2.0	1.9	1.5	5.8	7.7

IEEE 802.11N (OFDM.HT40, MCS0)

	ΑN	T0	AN	T1	AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5190.0	-0.2	1.0	-1.6	0.7	-1.9	0.6	2.3	3.6
5230.0	-0.2	1.0	-1.1	0.8	-2.0	0.6	2.4	3.7

IEEE 802.11AC (OFDM,HT20, MCS0)

			,	•,•				
	AN	T0	ANT1		AN	T2	MUS	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5180.0	3.2	2.1	2.8	1.9	2.0	1.6	5.6	7.5
5200.0	3.4	2.2	2.6	1.8	2.3	1.7	5.7	7.6
5240.0	3.5	2.2	2.9	2.0	1.6	1.5	5.7	7.5

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IEEE 802.11AC (OFDM,HT40, MCS0)

	AN	T0	ANT1		AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5190.0	-0.2	1.0	-1.7	0.7	-3.2	0.5	2.1	3.3
5230.0	-0.5	0.9	-1.4	0.7	-2.8	0.5	2.1	3.3

IEEE 802.11AC (OFDM,HT80, MCS0)

	AN	T0	AN	ANT1		T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5190.0	-3.2	0.5	-2.4	0.6	-2.5	0.6	1.6	2.1

Cable Loss: 2.1dBi

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U-NII-3

IEEE 802.11A (OFDM, 6Mbps)

	AN ⁻	ANT0		ANT1		T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	dBm mW dBm mW		(mW)	(dBm)	
5745.0	4.9	3.1	4.9	3.1	3.8	2.4	8.6	9.3
5785.0	4.8	3.0	4.2	2.7	3.5	2.2	7.9	9.0
5825.0	5.0	3.2	4.2	2.7	3.7	2.3	8.2	9.1

IEEE 802.11N (OFDM.HT20, MCS0)

<u> 002.1</u>	EE 302.1111 (C1 DW,11120, WO30)												
	AN	ANTO ANT1		AN	T2	SUM	SUM						
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2					
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)					
5745.0	1.8	1.5	0.9	1.2	0.4	1.1	3.8	5.8					
5785.0	1.8	1.5	0.6	1.1	0.2	1.0	3.7	5.7					
5825.0	2.0	1.6	1.3	1.4	0.3	1.1	4.0	6.0					

IEEE 802.11N (OFDM,HT40, MCS0)

	AN	T0	ANT1		AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5755.0	-0.8	0.8	-2.7	0.5	-2.6	0.6	1.9	2.8
5795.0	-0.8	0.8	-2.7	0.5	-2.7	0.5	1.9	2.8

IEEE 802.11AC (OFDM,HT20, MCS0)

	AN	T0	ANT1		AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5745.0	1.8	1.5	1.1	1.3	0.5	1.1	3.9	5.9
5785.0	1.2	1.3	0.7	1.2	0.3	1.1	3.6	5.5
5825.0	1.7	1.5	1.4	1.4	0.4	1.1	4.0	6.0

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IEEE 802.11AC (OFDM,HT40, MCS0)

	AN	T0	ANT1		ANT2		SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5755.0	-0.9	0.8	-2.2	0.6	-2.7	0.5	2.0	2.9
5795.0	-0.9	0.8	-2.4	0.6	-2.7	0.5	1.9	2.8

IEEE 802.11AC (OFDM,HT80, MCS0)

	AN	T0	O ANT1		AN	T2	SUM	SUM
Frequency							ANT0+ANT1+ANT2	ANT0+ANT1+ANT2
(MHz)	dBm	mW	dBm	mW	dBm	mW	(mW)	(dBm)
5775.0	-4.0	0.4	-3.6	0.4	-3.8	0.4	1.2	1.0

Limit:

For U-NII-1:

☐ 16.23/MHz for antennas with gains more than 6dBi (Master device).

For U-NII-3:

29.23/MHz for antennas with gains more than 6dBi (Master device).

The test data are saved with filename: UNII-1.pdf and UNII-3.pdf.

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4.4 Out of Band Conducted Emissions

The measurement procedures under sections 2G of 789033 D02 General UNII Test Procedures New Rules v01r02 were used.

Furthermore, Integration Method for measuring bandedge emissions was incorporated in the test of the edge at MHz.

Limits:

For UNII-1:

All spurious emission should be less then -27dBm/MHz for master device.

For UNII-3:

All spurious in 5175-5725MHz and 5850-5860MHz should be less then -17dBm/MHz All spurious other then 5175-5725MHz and 5850-5860MHz should be less then -27dBm/MHz

The test data is saved with filename: UNII-1.pdf and UNII-3.pdf.

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4.5 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD + AV

Where FS = Field Strength in $dB\mu V/m$

RA = Receiver Amplitude (including preamplifier) in dBμV

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB AG = Amplifier Gain in dB

PD = Pulse Desensitization in dB

AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

Example

Assume a receiver reading of 62.0 dB $_{\mu}V$ is obtained. The 0antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29.0 dB is subtracted. The pulse desensitization factor of the spectrum analyzer is 0.0 dB, and the resultant average factor is -10.0 dB. The net field strength for comparison to the appropriate emission limit is 32.0 dB $_{\mu}V/m$. This value in dB $_{\mu}V/m$ is converted to its corresponding level in $_{\mu}V/m$.

 $RA = 62.0 dB\mu V$

AF = 7.4 dB

CF = 1.6 dB

 $AG = 29.0 \, dB$

PD = 0.0 dB

AV = -10 dB

 $FS = 62.0 + 7.4 + 1.6 - 29.0 + 0.0 + (-10.0) = 32.0 dB\mu V/m$

Level in μ V/m = Common Antilogarithm [(32.0 dB μ V/m)/20] = 39.8 μ V/m

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4.6 Transmitter Radiated Emissions in Restricted Bands and Spurious Emissions

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

4.6.1 Radiated Emission Configuration Photograph

Worst Case Restricted Band Radiated Emission at

36470.000 MHz

The worst case radiated emission configuration photographs are saved with filename: config photos.pdf

4.6.2 Radiated Emission Data

The data in tables 1-10 list the significant emission frequencies, the limit and the margin of compliance.

Judgement -

Passed by 0.1 dB margin compare with average limit

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Mode: A Mode 5180MHz Ant 0

Table 1 IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	47.1	33	35.7	49.8	68.2	-18.4
V	15540.000	40.5	33	37.7	45.2	68.2	-23.0
V	19375.000	45.8	33	37.7	50.5	68.2	-17.7
V	20720.000	45.2	33	37.7	49.9	68.2	-18.3

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	47.1	33	35.7	49.8	54.0	-4.2
V	15540.000	40.5	33	37.7	45.2	54.0	-8.8
V	19375.000	45.8	33	37.7	50.5	54.0	-3.5
V	20720.000	45.2	33	37.7	49.9	54.0	-4.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5200MHz Ant 0

Table 2 IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.6	33	37.7	45.3	68.2	-22.9
V	19395.000	45.9	33	37.7	50.6	68.2	-17.6
V	20800.000	45.1	33	37.7	49.8	68.2	-18.4
V	31200.000	43.3	33	42.1	52.4	68.2	-15.8

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.6	33	37.7	45.3	54.0	-8.7
V	19395.000	45.9	33	37.7	50.6	54.0	-3.4
V	20800.000	45.1	33	37.7	49.8	54.0	-4.2
V	31200.000	43.3	33	42.1	52.4	54.0	-1.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5240MHz Ant 0

Table 3 IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.5	33	35.7	48.2	68.2	-20.0
V	15720.000	40.7	33	37.7	45.4	68.2	-22.8
V	19435.000	45.5	33	37.7	50.2	68.2	-18.0
V	20960.000	44.9	33	37.7	49.6	68.2	-18.6
Н	31140.000	43.1	33	42.1	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.5	33	35.7	48.2	54.0	-5.8
V	15720.000	40.7	33	37.7	45.4	54.0	-8.6
V	19435.000	45.5	33	37.7	50.2	54.0	-3.8
V	20960.000	44.9	33	37.7	49.6	54.0	-4.4
Н	31140.000	43.1	33	42.1	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5180MHz Ant 1

Table 4
IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.0	33	35.7	48.7	68.2	-19.5
V	15540.000	40.4	33	37.7	45.1	68.2	-23.1
V	19375.000	46.1	33	37.7	50.8	68.2	-17.4
V	20720.000	44.7	33	37.7	49.4	68.2	-18.8

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.0	33	35.7	48.7	54.0	-5.3
V	15540.000	40.4	33	37.7	45.1	54.0	-8.9
V	19375.000	46.1	33	37.7	50.8	54.0	-3.2
V	20720.000	44.7	33	37.7	49.4	54.0	-4.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5200MHz Ant 1

Table 5
IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.6	33	37.7	45.3	68.2	-22.9
V	19395.000	46.1	33	37.7	50.8	68.2	-17.4
V	20800.000	45.2	33	37.7	49.9	68.2	-18.3
V	31200.000	43.6	33	42.1	52.7	68.2	<i>-15.5</i>

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.6	33	37.7	45.3	54.0	-8.7
V	19395.000	46.1	33	37.7	50.8	54.0	-3.2
V	20800.000	45.2	33	37.7	49.9	54.0	-4.1
V	31200.000	43.6	33	42.1	52.7	54.0	-1.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5240MHz Ant 1

Table 6
IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.4	33	35.7	48.1	68.2	-20.1
V	15720.000	41.1	33	37.7	45.8	68.2	-22.4
V	19435.000	45.4	33	37.7	50.1	68.2	-18.1
V	20960.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31440.000	43.5	33	42.1	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.4	33	35.7	48.1	54.0	-5.9
V	15720.000	41.1	33	37.7	45.8	54.0	-8.2
V	19435.000	45.4	33	37.7	50.1	54.0	-3.9
V	20960.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31440.000	43.5	33	42.1	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5180MHz Ant 2

Table 7
IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.0	33	35.7	48.7	68.2	-19.5
V	15540.000	40.8	33	37.7	45.5	68.2	-22.7
V	19375.000	45.9	33	37.7	50.6	68.2	-17.6
V	20720.000	45.0	33	37.7	49.7	68.2	-18.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.0	33	35.7	48.7	54.0	-5.3
V	15540.000	40.8	33	37.7	45.5	54.0	-8.5
V	19375.000	45.9	33	37.7	50.6	54.0	-3.4
V	20720.000	45.0	33	37.7	49.7	54.0	-4.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5200MHz Ant 2

Table 8 IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.8	33	37.7	45.5	68.2	-22.7
V	19395.000	46.1	33	37.7	50.8	68.2	-17.4
V	20800.000	45.0	33	37.7	49.7	68.2	-18.5
V	31200.000	43.8	33	42.1	52.9	68.2	-15.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.8	33	37.7	45.5	54.0	<i>-8.5</i>
V	19395.000	46.1	33	37.7	50.8	54.0	-3.2
V	20800.000	45.0	33	37.7	49.7	54.0	-4.3
V	31200.000	43.8	33	42.1	52.9	54.0	-1.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5240MHz Ant 2

Table 9
IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.2	33	35.7	47.9	68.2	-20.3
V	15720.000	40.5	33	37.7	45.2	68.2	-23.0
V	19435.000	46.1	33	37.7	50.8	68.2	-17.4
V	20960.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31440.000	43.7	33	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.2	33	35.7	47.9	54.0	-6.1
V	15720.000	40.5	33	37.7	45.2	54.0	-8.8
V	19435.000	46.1	33	37.7	50.8	54.0	-3.2
V	20960.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31440.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5180MHz Ant 0+1+2

Table 10 IEEE 802.11a (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.4	33	35.7	49.1	68.2	-19.1
V	15540.000	41.0	33	37.7	45.7	68.2	-22.5
V	19375.000	45.7	33	37.7	50.4	68.2	-17.8
V	20720.000	45.1	33	37.7	49.8	68.2	-18.4

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.4	33	35.7	49.1	54.0	-4.9
V	15540.000	41.0	33	37.7	45.7	54.0	-8.3
V	19375.000	45.7	33	37.7	50.4	54.0	-3.6
V	20720.000	45.1	33	37.7	49.8	54.0	-4.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5200MHz Ant 0+1+2

Table 11 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.1	33	37.7	45.8	68.2	-22.4
V	19395.000	45.9	33	37.7	50.6	68.2	-17.6
V	20800.000	44.8	33	37.7	49.5	68.2	-18.7
V	31200.000	43.1	33	42.1	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.1	33	37.7	45.8	54.0	-8.2
V	19395.000	45.9	33	37.7	50.6	54.0	-3.4
V	20800.000	44.8	33	37.7	49.5	54.0	-4.5
V	31200.000	43.1	33	42.1	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5240MHz Ant 0+1+2

Table 12 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	47.4	33	35.7	50.1	68.2	-18.1
V	15720.000	40.6	33	37.7	45.3	68.2	-22.9
V	19435.000	45.9	33	37.7	50.6	68.2	-17.6
V	20960.000	44.7	33	37.7	49.4	68.2	-18.8
Н	31440.000	43.3	33	42.1	52.4	68.2	-15.8

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	47.4	33	35.7	50.1	54.0	-3.9
V	15720.000	40.6	33	37.7	45.3	54.0	-8.7
V	19435.000	45.9	33	37.7	50.6	54.0	-3.4
V	20960.000	44.7	33	37.7	49.4	54.0	-4.6
Н	31440.000	43.3	33	42.1	52.4	54.0	-1.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5180MHz Ant 0

Table 13 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.7	33	35.7	48.4	68.2	-19.8
V	15540.000	40.5	33	37.7	45.2	68.2	-23.0
V	19375.000	46.0	33	37.7	50.7	68.2	-17.5
V	20720.000	44.3	<i>33</i>	37.7	49.0	68.2	-19.2

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.7	33	35.7	48.4	54.0	-5.6
V	15540.000	40.5	33	37.7	45.2	54.0	-8.8
V	19375.000	46.0	33	37.7	50.7	54.0	-3.3
V	20720.000	44.3	33	37.7	49.0	54.0	-5.0

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5200MHz Ant 0

Table 14 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.1	33	37.7	45.8	68.2	-22.4
V	19395.000	45.7	33	37.7	50.4	68.2	-17.8
V	20800.000	44.9	33	37.7	49.6	68.2	-18.6
V	31200.000	43.2	<i>33</i>	42.1	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.1	33	37.7	45.8	54.0	-8.2
V	19395.000	45.7	33	37.7	50.4	54.0	-3.6
V	20800.000	44.9	33	37.7	49.6	54.0	-4.4
V	31200.000	43.2	33	42.1	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5240MHz Ant 0

Table 15 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.4	33	35.7	47.1	68.2	-21.1
V	15720.000	40.7	33	37.7	45.4	68.2	-22.8
V	19435.000	46.1	33	37.7	50.8	68.2	-17.4
V	20960.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31440.000	43.6	<i>33</i>	42.1	52.7	68.2	-15.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.4	33	35.7	47.1	54.0	-6.9
V	15720.000	40.7	33	37.7	45.4	54.0	-8.6
V	19435.000	46.1	33	37.7	50.8	54.0	-3.2
V	20960.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31440.000	43.6	33	42.1	52.7	54.0	-1.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5180MHz Ant 1

Table 16 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.0	33	35.7	47.7	68.2	-20.5
V	15540.000	40.6	33	37.7	45.3	68.2	-22.9
V	19375.000	45.9	33	37.7	50.6	68.2	-17.6
V	20720.000	45.1	33	37.7	49.8	68.2	-18.4

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.0	33	35.7	47.7	54.0	-6.3
V	15540.000	40.6	33	37.7	45.3	54.0	-8.7
V	19375.000	45.9	33	37.7	50.6	54.0	-3.4
V	20720.000	45.1	33	37.7	49.8	54.0	-4.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5200MHz Ant 1

Table 17 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.0	33	37.7	45.7	68.2	-22.5
V	19395.000	45.4	33	37.7	50.1	68.2	-18.1
V	20800.000	44.9	33	37.7	49.6	68.2	-18.6
V	31200.000	43.3	33	42.1	52.4	68.2	-15.8

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.0	33	37.7	45.7	54.0	-8.3
V	19395.000	45.4	33	37.7	50.1	54.0	-3.9
V	20800.000	44.9	33	37.7	49.6	54.0	-4.4
V	31200.000	43.3	33	42.1	52.4	54.0	-1.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5240MHz Ant 1

Table 18 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.1	33	35.7	46.8	68.2	-21.4
V	15720.000	40.8	33	37.7	45.5	68.2	-22.7
V	19435.000	45.5	33	37.7	50.2	68.2	-18.0
V	20960.000	44.9	33	37.7	49.6	68.2	-18.6
Н	31440.000	43.7	33	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.1	33	35.7	46.8	54.0	-7.2
V	15720.000	40.8	33	37.7	45.5	54.0	-8.5
V	19435.000	45.5	33	37.7	50.2	54.0	-3.8
V	20960.000	44.9	33	37.7	49.6	54.0	-4.4
Н	31440.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5180MHz Ant 2

Table 19 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.4	33	35.7	48.1	68.2	-20.1
V	15540.000	41.1	33	37.7	45.8	68.2	-22.4
V	19375.000	45.8	33	37.7	50.5	68.2	-17.7
V	20720.000	45.0	<i>33</i>	37.7	49.7	68.2	-18.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.4	33	35.7	48.1	54.0	-5.9
V	15540.000	41.1	33	37.7	45.8	54.0	-8.2
V	19375.000	45.8	33	37.7	50.5	54.0	-3.5
V	20720.000	45.0	33	37.7	49.7	54.0	-4.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5200MHz Ant 2

Table 20 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.6	33	37.7	45.3	68.2	-22.9
V	19395.000	46.1	33	37.7	50.8	68.2	-17.4
V	20800.000	44.9	33	37.7	49.6	68.2	-18.6
V	31200.000	43.3	33	42.1	52.4	68.2	-15.8

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.6	33	37.7	45.3	54.0	-8.7
V	19395.000	46.1	33	37.7	50.8	54.0	-3.2
V	20800.000	44.9	33	37.7	49.6	54.0	-4.4
V	31200.000	43.3	33	42.1	52.4	54.0	-1.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5240MHz Ant 2

Table 21 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.4	33	35.7	47.1	68.2	-21.1
V	15720.000	40.6	33	37.7	45.3	68.2	-22.9
V	19435.000	46.0	33	37.7	50.7	68.2	-17.5
V	20960.000	44.7	33	37.7	49.4	68.2	-18.8
Н	31440.000	43.8	33	42.1	52.9	68.2	-15.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.4	33	35.7	47.1	54.0	-6.9
V	15720.000	40.6	33	37.7	45.3	54.0	-8.7
V	19435.000	46.0	33	37.7	50.7	54.0	-3.3
V	20960.000	44.7	33	37.7	49.4	54.0	-4.6
Н	31440.000	43.8	33	42.1	52.9	54.0	-1.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5180MHz Ant 0+1+2

Table 22 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.1	33	35.7	48.8	68.2	-19.4
V	15540.000	41.2	33	37.7	45.9	68.2	-22.3
V	19375.000	45.6	33	37.7	50.3	68.2	-17.9
V	20720.000	44.9	<i>33</i>	37.7	49.6	68.2	-18.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.1	33	35.7	48.8	54.0	-5.2
V	15540.000	41.2	33	37.7	45.9	54.0	-8.1
V	19375.000	45.6	33	37.7	50.3	54.0	-3.7
V	20720.000	44.9	33	37.7	49.6	54.0	-4.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5200MHz Ant 0+1+2

Table 23 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.9	33	37.7	45.6	68.2	-22.6
V	19395.000	46.2	33	37.7	50.9	68.2	-17.3
V	20800.000	44.7	33	37.7	49.4	68.2	-18.8
V	31200.000	43.5	33	42.1	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	40.9	33	37.7	45.6	54.0	-8.4
V	19395.000	46.2	33	37.7	50.9	54.0	-3.1
V	20800.000	44.7	33	37.7	49.4	54.0	-4.6
V	31200.000	43.5	33	42.1	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5240MHz Ant 0+1+2

Table 24 IEEE 802.11n (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.7	33	35.7	47.4	68.2	-20.8
V	15720.000	40.8	33	37.7	45.5	68.2	-22.7
V	19435.000	45.7	33	37.7	50.4	68.2	-17.8
V	20960.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31440.000	43.7	<i>33</i>	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.7	33	35.7	47.4	54.0	-6.6
V	15720.000	40.8	33	37.7	45.5	54.0	-8.5
V	19435.000	45.7	33	37.7	50.4	54.0	-3.6
V	20960.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31440.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5190MHz Ant 0

Table 25 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	44.4	33	35.7	47.1	68.2	-21.1
V	15570.000	40.9	33	37.7	45.6	68.2	-22.6
V	19385.000	45.6	33	37.7	50.3	68.2	-17.9
V	20760.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31140.000	43.1	33	42.1	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	44.4	33	35.7	47.1	54.0	-6.9
V	15570.000	40.9	33	37.7	45.6	54.0	-8.4
V	19385.000	45.6	33	37.7	50.3	54.0	-3.7
V	20760.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31140.000	43.1	33	42.1	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5230MHz Ant 0

Table 26 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.3	33	35.7	47.0	68.2	-21.2
V	15960.000	41.0	33	37.7	45.7	68.2	-22.5
V	19425.000	45.9	33	37.7	50.6	68.2	-17.6
V	20920.000	44.6	33	37.7	49.3	68.2	-18.9
Н	31380.000	43.6	33	42.1	52.7	68.2	-15.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.3	33	35.7	47.0	54.0	-7.0
V	15960.000	41.0	33	37.7	45.7	54.0	-8.3
V	19425.000	45.9	33	37.7	50.6	54.0	-3.4
V	20920.000	44.6	33	37.7	49.3	54.0	-4.7
Н	31380.000	43.6	33	42.1	52.7	54.0	-1.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5190MHz Ant 1

Table 27 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	44.5	33	35.7	47.2	68.2	-21.0
V	15570.000	40.8	33	37.7	45.5	68.2	-22.7
V	19385.000	45.6	33	37.7	50.3	68.2	-17.9
V	20760.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31140.000	43.4	33	42.1	52.5	68.2	-15.7

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	44.5	33	35.7	47.2	54.0	-6.8
V	15570.000	40.8	33	37.7	45.5	54.0	-8.5
V	19385.000	45.6	33	37.7	50.3	54.0	-3.7
V	20760.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31140.000	43.4	33	42.1	52.5	54.0	-1.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5230MHz Ant 1

Table 28 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.1	33	35.7	46.8	68.2	-21.4
V	15960.000	40.6	33	37.7	45.3	68.2	-22.9
V	19425.000	46.1	33	37.7	50.8	68.2	-17.4
V	20920.000	44.9	33	37.7	49.6	68.2	-18.6
Н	31380.000	43.4	<i>33</i>	42.1	52.5	68.2	-15.7

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.1	33	35.7	46.8	54.0	-7.2
V	15960.000	40.6	33	37.7	45.3	54.0	-8.7
V	19425.000	46.1	33	37.7	50.8	54.0	-3.2
V	20920.000	44.9	33	37.7	49.6	54.0	-4.4
Н	31380.000	43.4	33	42.1	52.5	54.0	-1.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5190MHz Ant 2

Table 29 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	44.5	33	35.7	47.2	68.2	-21.0
V	15570.000	41.1	33	37.7	45.8	68.2	-22.4
V	19385.000	46.0	33	37.7	50.7	68.2	-17.5
V	20760.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31140.000	43.7	33	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	44.5	33	35.7	47.2	54.0	-6.8
V	15570.000	41.1	33	37.7	45.8	54.0	-8.2
V	19385.000	46.0	33	37.7	50.7	54.0	-3.3
V	20760.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31140.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5230MHz Ant 2

Table 30 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.4	33	35.7	47.1	68.2	-21.1
V	15960.000	41.2	33	37.7	45.9	68.2	-22.3
V	19425.000	45.9	33	37.7	50.6	68.2	-17.6
V	20920.000	44.7	33	37.7	49.4	68.2	-18.8
Н	31380.000	43.2	<i>33</i>	42.1	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.4	33	35.7	47.1	54.0	-6.9
V	15960.000	41.2	33	37.7	45.9	54.0	-8.1
V	19425.000	45.9	33	37.7	50.6	54.0	-3.4
V	20920.000	44.7	33	37.7	49.4	54.0	-4.6
Н	31380.000	43.2	33	42.1	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5190MHz Ant 0+1+2

Table 31 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.5	33	35.7	49.2	68.2	-19.0
V	15570.000	40.7	33	37.7	45.4	68.2	-22.8
V	19385.000	46.1	33	37.7	50.8	68.2	-17.4
V	20760.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31140.000	43.7	33	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.5	33	35.7	49.2	54.0	-4.8
V	15570.000	40.7	33	37.7	45.4	54.0	-8.6
V	19385.000	46.1	33	37.7	50.8	54.0	-3.2
V	20760.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31140.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5230MHz Ant 0+1+2

Table 32 IEEE 802.11n (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.7	33	35.7	48.4	68.2	-19.8
V	15960.000	40.7	33	37.7	45.4	68.2	-22.8
V	19425.000	46.0	33	37.7	50.7	68.2	-17.5
V	20920.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31380.000	43.5	<i>33</i>	42.1	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	45.7	33	35.7	48.4	54.0	-5.6
V	15960.000	40.7	33	37.7	45.4	54.0	-8.6
V	19425.000	46.0	33	37.7	50.7	54.0	-3.3
V	20920.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31380.000	43.5	33	42.1	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5180MHz Ant 0

Table 33 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.3	33	35.7	48.0	68.2	-20.2
V	15540.000	40.8	33	37.7	45.5	68.2	-22.7
V	19375.000	46.1	33	37.7	50.8	68.2	-17.4
V	20720.000	44.6	<i>33</i>	37.7	49.3	68.2	-18.9

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.3	33	35.7	48.0	54.0	-6.0
V	15540.000	40.8	33	37.7	45.5	54.0	-8.5
V	19375.000	46.1	33	37.7	50.8	54.0	-3.2
V	20720.000	44.6	33	37.7	49.3	54.0	-4.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5200MHz Ant 0

Table 34 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.0	33	37.7	45.7	68.2	-22.5
V	19395.000	45.7	33	37.7	50.4	68.2	-17.8
V	20800.000	45.2	33	37.7	49.9	68.2	-18.3
V	31200.000	43.2	33	42.1	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.0	33	37.7	45.7	54.0	-8.3
V	19395.000	45.7	33	37.7	50.4	54.0	-3.6
V	20800.000	45.2	33	37.7	49.9	54.0	-4.1
V	31200.000	43.2	33	42.1	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5240MHz Ant 0

Table 35 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.9	33	35.7	46.6	68.2	-21.6
V	15720.000	40.6	33	37.7	45.3	68.2	-22.9
V	19435.000	46.0	33	37.7	50.7	68.2	-17.5
V	20960.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31440.000	43.5	<i>33</i>	42.1	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.9	33	35.7	46.6	54.0	-7.4
V	15720.000	40.6	33	37.7	45.3	54.0	-8.7
V	19435.000	46.0	33	37.7	50.7	54.0	-3.3
V	20960.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31440.000	43.5	33	42.1	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5180MHz Ant 1

Table 36 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.4	33	35.7	48.1	68.2	-20.1
V	15540.000	40.8	33	37.7	45.5	68.2	-22.7
V	19375.000	45.5	33	37.7	50.2	68.2	-18.0
V	20720.000	44.9	<i>33</i>	37.7	49.6	68.2	-18.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.4	33	35.7	48.1	54.0	-5.9
V	15540.000	40.8	33	37.7	45.5	54.0	-8.5
V	19375.000	45.5	33	37.7	50.2	54.0	-3.8
V	20720.000	44.9	33	37.7	49.6	54.0	-4.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5200MHz Ant 1

Table 37 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.2	33	37.7	45.9	68.2	-22.3
V	19395.000	45.8	33	37.7	50.5	68.2	-17.7
V	20800.000	44.9	33	37.7	49.6	68.2	-18.6
V	31200.000	43.1	<i>33</i>	42.1	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.2	33	37.7	45.9	54.0	-8.1
V	19395.000	45.8	33	37.7	50.5	54.0	-3.5
V	20800.000	44.9	33	37.7	49.6	54.0	-4.4
V	31200.000	43.1	33	42.1	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5240MHz Ant 1

Table 38 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.4	33	35.7	46.1	68.2	-22.1
V	15720.000	40.8	33	37.7	45.5	68.2	-22.7
V	19435.000	46.2	33	37.7	50.9	68.2	-17.3
V	20960.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31440.000	43.7	33	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.4	33	35.7	46.1	54.0	-7.9
V	15720.000	40.8	33	37.7	45.5	54.0	-8.5
V	19435.000	46.2	33	37.7	50.9	54.0	-3.1
V	20960.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31440.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5180MHz Ant 2

Table 39 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.8	33	35.7	48.5	68.2	-19.7
V	15540.000	40.8	33	37.7	45.5	68.2	-22.7
V	19375.000	45.7	33	37.7	50.4	68.2	-17.8
V	20720.000	45.0	33	37.7	49.7	68.2	-18.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.8	33	35.7	48.5	54.0	-5.5
V	15540.000	40.8	33	37.7	45.5	54.0	-8.5
V	19375.000	45.7	33	37.7	50.4	54.0	-3.6
V	20720.000	45.0	33	37.7	49.7	54.0	-4.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5200MHz Ant 2

Table 40 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	10400.000	37.3	33	40.5	44.8	68.2	-23.4
V	19395.000	45.8	33	37.7	50.5	68.2	-17.7
V	20800.000	45.0	33	37.7	49.7	68.2	-18.5
V	31200.000	43.8	<i>33</i>	42.1	52.9	68.2	-15.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	10400.000	37.3	33	40.5	44.8	54.0	-9.2
V	19395.000	45.8	33	37.7	50.5	54.0	-3.5
V	20800.000	45.0	33	37.7	49.7	54.0	-4.3
V	31200.000	43.8	33	42.1	52.9	54.0	-1.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5240MHz Ant 2

Table 41 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.7	33	35.7	46.4	68.2	-21.8
V	15720.000	40.6	33	37.7	45.3	68.2	-22.9
V	19435.000	46.1	33	37.7	50.8	68.2	-17.4
V	20960.000	45.2	33	37.7	49.9	68.2	-18.3
Н	31440.000	43.5	<i>33</i>	42.1	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.7	33	35.7	46.4	54.0	-7.6
V	15720.000	40.6	33	37.7	45.3	54.0	-8.7
V	19435.000	46.1	33	37.7	50.8	54.0	-3.2
V	20960.000	45.2	33	37.7	49.9	54.0	-4.1
Н	31440.000	43.5	33	42.1	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5180MHz Ant 0+1+2

Table 42 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.5	33	35.7	49.2	68.2	-19.0
V	15540.000	40.5	33	37.7	45.2	68.2	-23.0
V	19375.000	46.1	33	37.7	50.8	68.2	-17.4
V	20720.000	44.7	33	37.7	49.4	68.2	-18.8

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.5	33	35.7	49.2	54.0	-4.8
V	15540.000	40.5	33	37.7	45.2	54.0	-8.8
V	19375.000	46.1	33	37.7	50.8	54.0	-3.2
V	20720.000	44.7	33	37.7	49.4	54.0	-4.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5200MHz Ant 0+1+2

Table 43 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.1	33	37.7	45.8	68.2	-22.4
V	19395.000	45.7	33	37.7	50.4	68.2	-17.8
V	20800.000	45.0	33	37.7	49.7	68.2	-18.5
V	31200.000	43.6	33	42.1	52.7	68.2	-15.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	15600.000	41.1	33	37.7	45.8	54.0	-8.2
V	19395.000	45.7	33	37.7	50.4	54.0	-3.6
V	20800.000	45.0	33	37.7	49.7	54.0	-4.3
V	31200.000	43.6	33	42.1	52.7	54.0	-1.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5240MHz Ant 0+1+2

Table 44 IEEE 802.11ac (HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.1	33	35.7	46.8	68.2	-21.4
V	10480.000	36.7	33	40.5	44.2	68.2	-24.0
V	19435.000	46.1	33	37.7	50.8	68.2	-17.4
V	20960.000	44.9	33	37.7	49.6	68.2	-18.6
Н	31440.000	43.4	33	42.1	52.5	68.2	-15.7

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.1	33	35.7	46.8	54.0	-7.2
V	10480.000	36.7	33	40.5	44.2	54.0	-9.8
V	19435.000	46.1	33	37.7	50.8	54.0	-3.2
V	20960.000	44.9	33	37.7	49.6	54.0	-4.4
Н	31440.000	43.4	33	42.1	52.5	54.0	-1.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5190MHz Ant 0

Table 45 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.1	33	35.7	48.8	68.2	-19.4
V	15570.000	40.9	33	37.7	45.6	68.2	-22.6
V	19385.000	46.0	33	37.7	50.7	68.2	-17.5
V	20760.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31140.000	43.1	33	42.1	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.1	33	35.7	48.8	54.0	-5.2
V	15570.000	40.9	33	37.7	45.6	54.0	-8.4
V	19385.000	46.0	33	37.7	50.7	54.0	-3.3
V	20760.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31140.000	43.1	33	42.1	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5230MHz Ant 0

Table 46 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.5	33	35.7	46.2	68.2	-22.0
V	15690.000	40.8	33	37.7	45.5	68.2	-22.7
V	19425.000	45.6	33	37.7	50.3	68.2	-17.9
V	20920.000	44.8	33	37.7	49.5	68.2	-18.7
Н	31380.000	43.1	<i>33</i>	42.1	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.5	33	35.7	46.2	54.0	-7.8
V	15690.000	40.8	33	37.7	45.5	54.0	-8.5
V	19425.000	45.6	33	37.7	50.3	54.0	-3.7
V	20920.000	44.8	33	37.7	49.5	54.0	-4.5
Н	31380.000	43.1	33	42.1	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5190MHz Ant 1

Table 47 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.1	33	35.7	48.8	68.2	-19.4
V	15570.000	40.7	33	37.7	45.4	68.2	-22.8
V	19385.000	45.8	33	37.7	50.5	68.2	-17.7
V	20760.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31140.000	43.8	33	42.1	52.9	68.2	-15.3

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.1	33	35.7	48.8	54.0	-5.2
V	15570.000	40.7	33	37.7	45.4	54.0	-8.6
V	19385.000	45.8	33	37.7	50.5	54.0	-3.5
V	20760.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31140.000	43.8	33	42.1	52.9	54.0	-1.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5230MHz Ant 1

Table 48 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.4	33	35.7	46.1	68.2	-22.1
V	15690.000	40.4	33	37.7	45.1	68.2	-23.1
V	19425.000	45.9	33	37.7	50.6	68.2	-17.6
V	20920.000	44.6	33	37.7	49.3	68.2	-18.9
Н	31380.000	43.2	<i>33</i>	42.1	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	43.4	33	35.7	46.1	54.0	-7.9
V	15690.000	40.4	33	37.7	45.1	54.0	-8.9
V	19425.000	45.9	33	37.7	50.6	54.0	-3.4
V	20920.000	44.6	33	37.7	49.3	54.0	-4.7
Н	31380.000	43.2	33	42.1	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5190MHz Ant 2

Table 49 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.9	33	35.7	48.6	68.2	-19.6
V	15570.000	40.6	33	37.7	45.3	68.2	-22.9
V	19385.000	45.5	33	37.7	50.2	68.2	-18.0
V	20760.000	44.9	33	37.7	49.6	68.2	-18.6
Н	31140.000	43.7	33	42.1	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.9	33	35.7	48.6	54.0	-5.4
V	15570.000	40.6	33	37.7	45.3	54.0	-8.7
V	19385.000	45.5	33	37.7	50.2	54.0	-3.8
V	20760.000	44.9	33	37.7	49.6	54.0	-4.4
Н	31140.000	43.7	33	42.1	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5230MHz Ant 2

Table 50 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.0	33	35.7	46.7	68.2	-21.5
V	15690.000	40.8	33	37.7	45.5	68.2	-22.7
V	19425.000	46.1	33	37.7	50.8	68.2	-17.4
V	20920.000	44.9	33	37.7	49.6	68.2	-18.6
Н	31380.000	43.8	33	42.1	52.9	68.2	-15.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.0	33	35.7	46.7	54.0	-7.3
V	15690.000	40.8	33	37.7	45.5	54.0	-8.5
V	19425.000	46.1	33	37.7	50.8	54.0	-3.2
V	20920.000	44.9	33	37.7	49.6	54.0	-4.4
Н	31380.000	43.8	33	42.1	52.9	54.0	-1.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5190MHz Ant 0+1+2

Table 51 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.8	33	35.7	49.5	68.2	-18.7
V	15570.000	40.9	33	37.7	45.6	68.2	-22.6
V	19385.000	45.5	33	37.7	50.2	68.2	-18.0
V	20760.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31140.000	43.3	33	42.1	52.4	68.2	-15.8

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.8	33	35.7	49.5	54.0	-4.5
V	15570.000	40.9	33	37.7	45.6	54.0	-8.4
V	19385.000	45.5	33	37.7	50.2	54.0	-3.8
V	20760.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31140.000	43.3	33	42.1	52.4	54.0	-1.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5230MHz Ant 0+1+2

Table 52 IEEE 802.11ac (HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.8	33	<i>35.7</i>	47.5	68.2	-20.7
V	15690.000	40.7	33	37.7	45.4	68.2	-22.8
V	19425.000	45.8	33	37.7	50.5	68.2	-17.7
V	20920.000	45.1	33	37.7	49.8	68.2	-18.4
Н	31380.000	43.0	33	42.1	52.1	68.2	-16.1

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5350.000	44.8	33	35.7	47.5	54.0	-6.5
V	15690.000	40.7	33	37.7	45.4	54.0	-8.6
V	19425.000	45.8	33	37.7	50.5	54.0	-3.5
V	20920.000	45.1	33	37.7	49.8	54.0	-4.2
Н	31380.000	43.0	33	42.1	52.1	54.0	-1.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5210MHz Ant 0

Table 53 IEEE 802.11ac (HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.3	33	35.7	48.0	68.2	-20.2
V	5350.000	44.1	33	35.7	46.8	68.2	-21.4
V	15630.000	41.0	33	37.7	45.7	68.2	-22.5
V	19405.000	45.8	33	37.7	50.5	68.2	-17.7
V	20840.000	44.6	33	37.7	49.3	68.2	-18.9
V	31260.000	43.5	33	42.1	52.6	68.2	-15.6
V	36470.000	45.0	<i>33</i>	41.7	<i>53.7</i>	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.3	33	35.7	48.0	54.0	-6.0
V	5350.000	44.1	33	35.7	46.8	54.0	-7.2
V	15630.000	41.0	33	37.7	45.7	54.0	-8.3
V	19405.000	45.8	33	37.7	50.5	54.0	-3.5
V	20840.000	44.6	33	37.7	49.3	54.0	-4.7
V	31260.000	43.5	33	42.1	52.6	54.0	-1.4
V	36470.000	45.0	33	41.7	53.7	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5210MHz Ant 1

Table 54 IEEE 802.11ac (HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.4	33	35.7	48.1	68.2	-20.1
V	5350.000	43.4	33	35.7	46.1	68.2	-22.1
V	15630.000	40.8	33	37.7	45.5	68.2	-22.7
V	19405.000	45.5	33	37.7	50.2	68.2	-18.0
V	20840.000	45.1	33	37.7	49.8	68.2	-18.4
V	31260.000	43.4	33	42.1	52.5	68.2	-15.7
V	36470.000	45.1	<i>33</i>	41.7	<i>53.8</i>	68.2	-14.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.4	33	35.7	48.1	54.0	-5.9
V	5350.000	43.4	33	35.7	46.1	54.0	-7.9
V	15630.000	40.8	33	37.7	45.5	54.0	-8.5
V	19405.000	45.5	33	37.7	50.2	54.0	-3.8
V	20840.000	45.1	33	37.7	49.8	54.0	-4.2
V	31260.000	43.4	33	42.1	52.5	54.0	-1.5
V	36470.000	45.1	33	41.7	<i>53.8</i>	54.0	-0.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by bold italic) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = \dot{E}IRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5210MHz Ant 2

Table 55 IEEE 802.11ac (HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.7	33	35.7	48.4	68.2	-19.8
V	5350.000	44.1	33	35.7	46.8	68.2	-21.4
V	15630.000	41.2	33	37.7	45.9	68.2	-22.3
V	19405.000	45.6	33	37.7	50.3	68.2	-17.9
V	20840.000	45.0	33	37.7	49.7	68.2	-18.5
V	31260.000	43.7	33	42.1	52.8	68.2	-15.4
V	36470.000	44.7	33	41.7	53.4	68.2	-14.8

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	45.7	33	35.7	48.4	54.0	-5.6
V	5350.000	44.1	33	35.7	46.8	54.0	-7.2
V	15630.000	41.2	33	37.7	45.9	54.0	-8.1
V	19405.000	45.6	33	37.7	50.3	54.0	-3.7
V	20840.000	45.0	33	37.7	49.7	54.0	-4.3
V	31260.000	43.7	33	42.1	52.8	54.0	-1.2
V	36470.000	44.7	33	41.7	53.4	54.0	-0.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by bold italic) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = \dot{E}IRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5210MHz Ant 0+1+2

Table 56 IEEE 802.11ac (HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.5	33	35.7	49.2	68.2	-19.0
V	5350.000	45.1	33	35.7	47.8	68.2	-20.4
V	15630.000	41.1	33	37.7	45.8	68.2	-22.4
V	19405.000	45.6	33	37.7	50.3	68.2	-17.9
V	20840.000	45.1	33	37.7	49.8	68.2	-18.4
V	31260.000	43.5	33	42.1	52.6	68.2	-15.6
V	36470.000	45.2	33	41.7	53.9	68.2	-14.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5150.000	46.5	33	35.7	49.2	54.0	-4.8
V	5350.000	45.1	33	35.7	47.8	54.0	-6.2
V	15630.000	41.1	33	37.7	45.8	54.0	-8.2
V	19405.000	45.6	33	37.7	50.3	54.0	-3.7
V	20840.000	45.1	33	37.7	49.8	54.0	-4.2
V	31260.000	43.5	33	42.1	52.6	54.0	-1.4
V	36470.000	45.2	33	41.7	53.9	54.0	-0.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5745MHz Ant 0

Table 57 IEEE 802.11A (OFDM, 6Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.3	33	37.6	46.9	68.2	-21.3
V	22980.000	45.4	33	38.3	50.7	68.2	-17.5
V	28725.000	45.5	33	40.1	<i>52.6</i>	68.2	-15.6
Н	34470.000	45.4	33	41.1	53.5	68.2	-14.7

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.3	33	37.6	46.9	54.0	-7.1
V	22980.000	45.4	33	38.3	50.7	54.0	-3.3
V	28725.000	45.5	33	40.1	52.6	54.0	-1.4
Н	34470.000	45.4	33	41.1	<i>53.5</i>	54.0	-0.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5785MHz Ant 0

Table 58 IEEE 802.11A (OFDM, 6Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	68.2	-22.9
V	17355.000	41.5	33	37.6	46.1	68.2	-22.1
V	23140.000	44.6	33	38.6	50.2	68.2	-18.0
V	28925.000	45.7	33	40.1	<i>52.8</i>	68.2	-15.4
V	34710.000	45.3	<i>33</i>	41.3	53.6	68.2	-14.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	54.0	-8.7
V	17355.000	41.5	33	37.6	46.1	54.0	-7.9
V	23140.000	44.6	33	38.6	50.2	54.0	-3.8
V	28925.000	45.7	33	40.1	52.8	54.0	-1.2
V	34710.000	45.3	33	41.3	53.6	54.0	-0.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5825MHz Ant 0

Table 59 IEEE 802.11A (OFDM, 6Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	38.3	33	40.5	45.8	68.2	-22.4
V	17475.000	41.6	33	37.6	46.2	68.2	-22.0
V	23300.000	44.7	33	38.6	50.3	68.2	-17.9
V	29125.000	45.8	33	40.0	52.8	68.2	-15.4
Н	34950.000	45.5	33	41.3	53.8	68.2	-14.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	38.3	33	40.5	45.8	54.0	-8.2
V	17475.000	41.6	33	37.6	46.2	54.0	-7.8
V	23300.000	44.7	33	38.6	50.3	54.0	-3.7
V	29125.000	45.8	33	40.0	52.8	54.0	-1.2
Н	34950.000	45.5	33	41.3	53.8	54.0	-0.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5745MHz Ant 1

Table 60 IEEE 802.11A (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.8	33	37.6	46.4	68.2	-21.8
V	22980.000	45.1	33	38.3	50.4	68.2	-17.8
V	28725.000	45.0	33	40.1	52.1	68.2	-16.1
Н	34470.000	45.1	33	41.1	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.8	33	37.6	46.4	54.0	-7.6
V	22980.000	45.1	33	38.3	50.4	54.0	-3.6
V	28725.000	45.0	33	40.1	52.1	54.0	-1.9
Н	34470.000	45.1	33	41.1	<i>53.2</i>	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5785MHz Ant 1

Table 61 IEEE 802.11A (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	68.2	-22.9
V	17355.000	41.4	33	37.6	46.0	68.2	-22.2
V	23140.000	44.6	33	38.6	50.2	68.2	-18.0
V	28925.000	45.4	33	40.1	52.5	68.2	-15.7
V	34710.000	44.8	33	41.3	53.1	68.2	-15.1

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	54.0	-8.7
V	17355.000	41.4	33	37.6	46.0	54.0	-8.0
V	23140.000	44.6	33	38.6	50.2	54.0	-3.8
V	28925.000	45.4	33	40.1	52.5	54.0	-1.5
V	34710.000	44.8	33	41.3	53.1	54.0	-0.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5825MHz Ant 1

Table 62 IEEE 802.11A (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17475.000	41.6	33	37.6	46.2	68.2	-22.0
V	23300.000	45.0	33	38.6	50.6	68.2	-17.6
V	29125.000	45.9	33	40.0	52.9	68.2	-15.3
Н	34950.000	45.3	33	41.3	53.6	68.2	-14.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17475.000	41.6	33	37.6	46.2	54.0	<i>-7.8</i>
V	23300.000	45.0	33	38.6	50.6	54.0	-3.4
V	29125.000	45.9	33	40.0	52.9	54.0	-1.1
Н	34950.000	45.3	33	41.3	<i>53.6</i>	54.0	-0.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5745MHz Ant 2

Table 63 IEEE 802.11A (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.5	33	37.6	46.1	68.2	-22.1
V	22980.000	45.1	33	38.3	50.4	68.2	-17.8
V	28725.000	45.8	33	40.1	52.9	68.2	-15.3
Н	34470.000	45.3	33	41.1	53.4	68.2	-14.8

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.5	33	37.6	46.1	54.0	-7.9
V	22980.000	45.1	33	38.3	50.4	54.0	-3.6
V	28725.000	45.8	33	40.1	52.9	54.0	-1.1
Н	34470.000	45.3	33	41.1	53.4	54.0	-0.6

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5785MHz Ant 2

Table 64 IEEE 802.11A (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.7	33	40.5	45.2	68.2	-23.0
V	17355.000	42.0	33	37.6	46.6	68.2	-21.6
V	23140.000	44.8	33	38.6	50.4	68.2	-17.8
V	28925.000	45.4	33	40.1	52.5	68.2	-15.7
V	34710.000	45.0	33	41.3	53.3	68.2	-14.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.7	33	40.5	45.2	54.0	-8.8
V	17355.000	42.0	33	37.6	46.6	54.0	-7.4
V	23140.000	44.8	33	38.6	50.4	54.0	-3.6
V	28925.000	45.4	33	40.1	52.5	54.0	-1.5
V	34710.000	45.0	33	41.3	53.3	54.0	-0.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5825MHz Ant 2

Table 65 IEEE 802.11A (OFDM, 6 Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.6	33	40.5	45.1	68.2	-23.1
V	17475.000	41.7	33	37.6	46.3	68.2	-21.9
V	23300.000	45.1	33	38.6	50.7	68.2	-17.5
V	29125.000	45.3	33	40.0	52.3	68.2	-15.9
Н	34950.000	45.3	<i>33</i>	41.3	<i>53.6</i>	68.2	-14.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.6	33	40.5	45.1	54.0	-8.9
V	17475.000	41.7	33	37.6	46.3	54.0	-7.7
V	23300.000	45.1	33	38.6	50.7	54.0	-3.3
V	29125.000	45.3	33	40.0	52.3	54.0	-1.7
Н	34950.000	45.3	33	41.3	53.6	54.0	-0.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5745MHz Ant 0+1+2

Table 66 IEEE 802.11A (OFDM, 6Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.8	33	37.6	46.4	68.2	-21.8
V	22980.000	45.5	33	38.3	50.8	68.2	-17.4
V	28725.000	45.1	33	40.1	52.2	68.2	-16.0
Н	34470.000	45.5	33	41.1	53.6	68.2	-14.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.8	33	37.6	46.4	54.0	-7.6
V	22980.000	45.5	33	38.3	50.8	54.0	-3.2
V	28725.000	45.1	33	40.1	52.2	54.0	-1.8
Н	34470.000	45.5	33	41.1	<i>53.6</i>	54.0	-0.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5785MHz Ant 0+1+2

Table 67 IEEE 802.11A (OFDM, 6Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	38.0	33	40.5	45.5	68.2	-22.7
V	17355.000	41.7	33	37.6	46.3	68.2	-21.9
V	23140.000	44.9	33	38.6	50.5	68.2	-17.7
V	28925.000	45.5	33	40.1	52.6	68.2	-15.6
V	34710.000	45.4	33	41.3	<i>53.7</i>	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	38.0	33	40.5	45.5	54.0	<i>-8.5</i>
V	17355.000	41.7	33	37.6	46.3	54.0	-7.7
V	23140.000	44.9	33	38.6	50.5	54.0	-3.5
V	28925.000	45.5	33	40.1	52.6	54.0	-1.4
V	34710.000	45.4	33	41.3	53.7	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: A Mode 5825MHz Ant 0+1+2

Table 68 IEEE 802.11A (OFDM, 6Mbps)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	68.2	-22.9
V	17475.000	42.1	33	37.6	46.7	68.2	-21.5
V	23300.000	44.8	33	38.6	50.4	68.2	-17.8
V	29125.000	45.5	33	40.0	52.5	68.2	-15.7
Н	34950.000	45.5	<i>33</i>	41.3	53.8	68.2	-14.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	54.0	-8.7
V	17475.000	42.1	33	37.6	46.7	54.0	-7.3
V	23300.000	44.8	33	38.6	50.4	54.0	-3.6
V	29125.000	45.5	33	40.0	52.5	54.0	-1.5
Н	34950.000	45.5	33	41.3	<i>53.8</i>	54.0	-0.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5745MHz Ant 0

Table 69 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.0	33	37.6	46.6	68.2	-21.6
V	22980.000	45.5	33	38.3	50.8	68.2	-17.4
V	28725.000	45.2	33	40.1	52.3	68.2	-15.9
Н	34470.000	45.5	33	41.1	53.6	68.2	-14.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.0	33	37.6	46.6	54.0	-7.4
V	22980.000	45.5	33	38.3	50.8	54.0	-3.2
V	28725.000	45.2	33	40.1	52.3	54.0	-1.7
Н	34470.000	45.5	33	41.1	53.6	54.0	-0.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5785MHz Ant 0

Table 70 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	68.2	-23.1
V	17355.000	41.6	33	37.6	46.2	68.2	-22.0
V	23140.000	44.8	33	38.6	50.4	68.2	-17.8
V	28925.000	45.4	33	40.1	52.5	68.2	-15.7
V	34710.000	44.9	33	41.3	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	54.0	-8.9
V	17355.000	41.6	33	37.6	46.2	54.0	-7.8
V	23140.000	44.8	33	38.6	50.4	54.0	-3.6
V	28925.000	45.4	33	40.1	52.5	54.0	-1.5
V	34710.000	44.9	33	41.3	<i>53.2</i>	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5825MHz Ant 0

Table 71 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	68.2	-22.9
V	17475.000	42.0	33	37.6	46.6	68.2	-21.6
V	23300.000	44.6	33	38.6	50.2	68.2	-18.0
V	29125.000	45.1	33	40.0	52.1	68.2	-16.1
Н	34950.000	45.6	33	41.3	53.9	68.2	-14.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	54.0	-8.7
V	17475.000	42.0	33	37.6	46.6	54.0	-7.4
V	23300.000	44.6	33	38.6	50.2	54.0	-3.8
V	29125.000	45.1	33	40.0	52.1	54.0	-1.9
Н	34950.000	45.6	33	41.3	53.9	54.0	-0.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5745MHz Ant 1

Table 72 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.0	33	37.6	46.6	68.2	-21.6
V	22980.000	45.5	33	38.3	50.8	68.2	-17.4
V	28725.000	45.4	33	40.1	52.5	68.2	-15.7
Н	34470.000	45.4	33	41.1	53.5	68.2	-14.7

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.0	33	37.6	46.6	54.0	-7.4
V	22980.000	45.5	33	38.3	50.8	54.0	-3.2
V	28725.000	45.4	33	40.1	52.5	54.0	-1.5
Н	34470.000	45.4	33	41.1	<i>53.5</i>	54.0	-0.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. E[dB μ V/m] = EIRP[dBm] + 95.2, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5785MHz Ant 1

Table 73 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	68.2	-23.1
V	17355.000	42.0	33	37.6	46.6	68.2	-21.6
V	23140.000	45.2	33	38.6	50.8	68.2	-17.4
V	28925.000	45.3	33	40.1	52.4	68.2	-15.8
V	34710.000	45.0	33	41.3	53.3	68.2	-14.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	54.0	-8.9
V	17355.000	42.0	33	37.6	46.6	54.0	-7.4
V	23140.000	45.2	33	38.6	50.8	54.0	-3.2
V	28925.000	45.3	33	40.1	52.4	54.0	-1.6
V	34710.000	45.0	33	41.3	53.3	54.0	-0.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5825MHz Ant 1

Table 74 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	68.2	-22.9
V	17475.000	42.1	33	37.6	46.7	68.2	-21.5
V	23300.000	45.3	33	38.6	50.9	68.2	-17.3
V	29125.000	45.4	33	40.0	52.4	68.2	-15.8
Н	34950.000	44.9	33	41.3	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	54.0	-8.7
V	17475.000	42.1	33	37.6	46.7	54.0	-7.3
V	23300.000	45.3	33	38.6	50.9	54.0	-3.1
V	29125.000	45.4	33	40.0	52.4	54.0	-1.6
Н	34950.000	44.9	33	41.3	53.2	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5745MHz Ant 2

Table 75 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.9	33	37.6	46.5	68.2	-21.7
V	22980.000	45.5	33	38.3	50.8	68.2	-17.4
V	28725.000	45.4	33	40.1	52.5	68.2	-15.7
Н	34470.000	45.6	<i>33</i>	41.1	53.7	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.9	33	37.6	46.5	54.0	-7.5
V	22980.000	45.5	33	38.3	50.8	54.0	-3.2
V	28725.000	45.4	33	40.1	52.5	54.0	-1.5
Н	34470.000	45.6	33	41.1	<i>53.7</i>	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5785MHz Ant 2

Table 76 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	68.2	-22.9
V	17355.000	41.9	33	37.6	46.5	68.2	-21.7
V	23140.000	44.5	33	38.6	50.1	68.2	-18.1
V	28925.000	45.2	33	40.1	52.3	68.2	-15.9
V	34710.000	44.9	33	41.3	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	54.0	-8.7
V	17355.000	41.9	33	37.6	46.5	54.0	-7.5
V	23140.000	44.5	33	38.6	50.1	54.0	-3.9
V	28925.000	45.2	33	40.1	52.3	54.0	-1.7
V	34710.000	44.9	33	41.3	<i>53.2</i>	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5825MHz Ant 2

Table 77 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.6	33	40.5	45.1	68.2	-23.1
V	17475.000	42.1	33	37.6	46.7	68.2	-21.5
V	23300.000	45.1	33	38.6	50.7	68.2	-17.5
V	29125.000	45.4	33	40.0	52.4	68.2	-15.8
Н	34950.000	44.8	33	41.3	53.1	68.2	-15.1

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.6	33	40.5	45.1	54.0	-8.9
V	17475.000	42.1	33	37.6	46.7	54.0	-7.3
V	23300.000	45.1	33	38.6	50.7	54.0	-3.3
V	29125.000	45.4	33	40.0	52.4	54.0	-1.6
Н	34950.000	44.8	33	41.3	53.1	54.0	-0.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 6. Horn antenna is used for the emission over 1000MHz.
- 7. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5745MHz Ant 0+1+2

Table 78 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.1	33	37.6	46.7	68.2	-21.5
V	22980.000	45.5	33	38.3	50.8	68.2	-17.4
V	28725.000	45.3	33	40.1	52.4	68.2	-15.8
Н	34470.000	45.1	33	41.1	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.1	33	37.6	46.7	54.0	-7.3
V	22980.000	45.5	33	38.3	50.8	54.0	-3.2
V	28725.000	45.3	33	40.1	52.4	54.0	-1.6
Н	34470.000	45.1	33	41.1	<i>53.2</i>	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5785MHz Ant 0+1+2

Table 79 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	68.2	-23.1
V	17355.000	42.0	33	37.6	46.6	68.2	-21.6
V	23140.000	45.3	33	38.6	50.9	68.2	-17.3
V	28925.000	45.7	33	40.1	52.8	68.2	-15.4
V	34710.000	45.4	33	41.3	53.7	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	54.0	-8.9
V	17355.000	42.0	33	37.6	46.6	54.0	-7.4
V	23140.000	45.3	33	38.6	50.9	54.0	-3.1
V	28925.000	45.7	33	40.1	52.8	54.0	-1.2
V	34710.000	45.4	33	41.3	<i>53.7</i>	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 20MHz 5825MHz Ant 0+1+2

Table 80 IEEE 802.11N (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	68.2	-22.9
V	17475.000	41.8	33	37.6	46.4	68.2	-21.8
V	23300.000	44.8	33	38.6	50.4	68.2	-17.8
V	29125.000	45.2	33	40.0	52.2	68.2	-16.0
Н	34950.000	44.8	<i>33</i>	41.3	53.1	68.2	-15.1

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	54.0	-8.7
V	17475.000	41.8	33	37.6	46.4	54.0	-7.6
V	23300.000	44.8	33	38.6	50.4	54.0	-3.6
V	29125.000	45.2	33	40.0	52.2	54.0	-1.8
Н	34950.000	44.8	33	41.3	53.1	54.0	-0.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5755MHz Ant 0

Table 81 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.3	33	37.5	45.8	68.2	-22.4
V	23020.000	43.7	33	38.6	49.3	68.2	-18.9
V	28775.000	40.9	33	40.1	48.0	68.2	-20.2
Н	34530.000	43.8	33	41.3	52.1	68.2	-16.1

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.3	33	37.5	45.8	54.0	-8.2
V	23020.000	43.7	33	38.6	49.3	54.0	-4.7
V	28775.000	40.9	33	40.1	48.0	54.0	-6.0
Н	34530.000	43.8	33	41.3	52.1	54.0	-1.9

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5795MHz Ant 0

Table 82 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.7	33	40.5	44.2	68.2	-24.0
V	17385.000	40.5	33	37.6	45.1	68.2	-23.1
V	23180.000	44.0	33	38.6	49.6	68.2	-18.6
V	28975.000	41.7	33	40.1	48.8	68.2	-19.4
Н	34770.000	44.0	33	41.3	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.7	33	40.5	44.2	54.0	-9.8
V	17385.000	40.5	33	37.6	45.1	54.0	-8.9
V	23180.000	44.0	33	38.6	49.6	54.0	-4.4
V	28975.000	41.7	33	40.1	48.8	54.0	-5.2
Н	34770.000	44.0	33	41.3	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5755MHz Ant 1

Table 83 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.2	33	37.5	45.7	68.2	-22.5
V	23020.000	44.2	33	38.6	49.8	68.2	-18.4
V	28775.000	41.2	33	40.1	48.3	68.2	-19.9
Н	34530.000	44.3	33	41.3	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.2	33	37.5	45.7	54.0	-8.3
V	23020.000	44.2	33	38.6	49.8	54.0	-4.2
V	28775.000	41.2	33	40.1	48.3	54.0	<i>-5.7</i>
Н	34530.000	44.3	33	41.3	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5795MHz Ant 1

Table 84 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.8	33	40.5	44.3	68.2	-23.9
V	17385.000	41.0	33	37.6	45.6	68.2	-22.6
V	23180.000	44.2	33	38.6	49.8	68.2	-18.4
V	28975.000	41.0	33	40.1	48.1	68.2	-20.1
Н	34770.000	44.0	<i>33</i>	41.3	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.8	33	40.5	44.3	54.0	- 9.7
V	17385.000	41.0	33	37.6	45.6	54.0	-8.4
V	23180.000	44.2	33	38.6	49.8	54.0	-4.2
V	28975.000	41.0	33	40.1	48.1	54.0	-5.9
Н	34770.000	44.0	33	41.3	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5755MHz Ant 2

Table 85 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.2	33	37.5	45.7	68.2	-22.5
V	23020.000	44.0	33	38.6	49.6	68.2	-18.6
V	28775.000	41.2	33	40.1	48.3	68.2	-19.9
Н	34530.000	43.9	33	41.3	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.2	33	37.5	45.7	54.0	-8.3
V	23020.000	44.0	33	38.6	49.6	54.0	-4.4
V	28775.000	41.2	33	40.1	48.3	54.0	<i>-5.7</i>
Н	34530.000	43.9	33	41.3	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5795MHz Ant 2

Table 86 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.8	33	40.5	44.3	68.2	-23.9
V	17385.000	40.9	33	37.6	45.5	68.2	-22.7
V	23180.000	43.7	33	38.6	49.3	68.2	-18.9
V	28975.000	41.1	33	40.1	48.2	68.2	-20.0
Н	34770.000	44.3	33	41.3	52.6	68.2	-15.6

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.8	33	40.5	44.3	54.0	-9.7
V	17385.000	40.9	33	37.6	45.5	54.0	<i>-8.5</i>
V	23180.000	43.7	33	38.6	49.3	54.0	-4.7
V	28975.000	41.1	33	40.1	48.2	54.0	-5.8
Н	34770.000	44.3	33	41.3	52.6	54.0	-1.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5755MHz Ant 0+1+2

Table 87 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	40.9	33	37.5	45.4	68.2	-22.8
V	23020.000	44.0	33	38.6	49.6	68.2	-18.6
V	28775.000	41.1	33	40.1	48.2	68.2	-20.0
Н	34530.000	44.4	33	41.3	52.7	68.2	-15.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	40.9	33	37.5	45.4	54.0	-8.6
V	23020.000	44.0	33	38.6	49.6	54.0	-4.4
V	28775.000	41.1	33	40.1	48.2	54.0	-5.8
Н	34530.000	44.4	33	41.3	52.7	54.0	-1.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: N Mode 40MHz 5795MHz Ant 0+1+2

Table 88 IEEE 802.11N (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.7	33	40.5	44.2	68.2	-24.0
V	17385.000	40.8	33	37.6	45.4	68.2	-22.8
V	23180.000	43.5	33	38.6	49.1	68.2	-19.1
V	28975.000	41.1	33	40.1	48.2	68.2	-20.0
Н	34770.000	44.5	33	41.3	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.7	33	40.5	44.2	54.0	-9.8
V	17385.000	40.8	33	37.6	45.4	54.0	-8.6
V	23180.000	43.5	33	38.6	49.1	54.0	-4.9
V	28975.000	41.1	33	40.1	48.2	54.0	-5.8
Н	34770.000	44.5	33	41.3	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5745MHz Ant 0

Table 89 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.6	33	37.6	46.2	68.2	-22.0
V	22980.000	45.4	33	38.3	50.7	68.2	-17.5
V	28725.000	45.2	33	40.1	52.3	68.2	-15.9
Н	34470.000	45.1	<i>33</i>	41.1	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.6	33	37.6	46.2	54.0	-7.8
V	22980.000	45.4	33	38.3	50.7	54.0	-3.3
V	28725.000	45.2	33	40.1	52.3	54.0	-1.7
Н	34470.000	45.1	33	41.1	53.2	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5785MHz Ant 0

Table 90 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	68.2	-23.1
V	17355.000	41.8	33	37.6	46.4	68.2	-21.8
V	23140.000	45.2	33	38.6	50.8	68.2	-17.4
V	28925.000	45.2	33	40.1	52.3	68.2	-15.9
V	34710.000	45.6	33	41.3	53.9	68.2	-14.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	54.0	-8.9
V	17355.000	41.8	33	37.6	46.4	54.0	-7.6
V	23140.000	45.2	33	38.6	50.8	54.0	-3.2
V	28925.000	45.2	33	40.1	52.3	54.0	-1.7
V	34710.000	45.6	33	41.3	53.9	54.0	-0.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5825MHz Ant 0

Table 91 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.7	33	40.5	45.2	68.2	-23.0
V	17475.000	41.8	33	37.6	46.4	68.2	-21.8
V	23300.000	45.0	33	38.6	50.6	68.2	-17.6
V	29125.000	45.4	33	40.0	52.4	68.2	-15.8
Н	34950.000	45.4	<i>33</i>	41.3	<i>53.7</i>	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.7	33	40.5	45.2	54.0	-8.8
V	17475.000	41.8	33	37.6	46.4	54.0	-7.6
V	23300.000	45.0	33	38.6	50.6	54.0	-3.4
V	29125.000	45.4	33	40.0	52.4	54.0	-1.6
Н	34950.000	45.4	33	41.3	53.7	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5745MHz Ant 1

Table 92 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.6	33	37.6	46.2	68.2	-22.0
V	22980.000	45.4	33	38.3	50.7	68.2	-17.5
V	28725.000	45.2	33	40.1	52.3	68.2	-15.9
Н	34470.000	45.1	<i>33</i>	41.1	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.6	33	37.6	46.2	54.0	-7.8
V	22980.000	45.4	33	38.3	50.7	54.0	-3.3
V	28725.000	45.2	33	40.1	52.3	54.0	-1.7
Н	34470.000	45.1	33	41.1	53.2	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5785MHz Ant 1

Table 93 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	68.2	-23.1
V	17355.000	41.6	33	37.6	46.2	68.2	-22.0
V	23140.000	45.1	33	38.6	50.7	68.2	-17.5
V	28925.000	45.2	33	40.1	52.3	68.2	-15.9
V	34710.000	45.6	33	41.3	53.9	68.2	-14.3

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.6	33	40.5	45.1	54.0	-8.9
V	17355.000	41.6	33	37.6	46.2	54.0	-7.8
V	23140.000	45.1	33	38.6	50.7	54.0	-3.3
V	28925.000	45.2	33	40.1	52.3	54.0	-1.7
V	34710.000	45.6	33	41.3	53.9	54.0	-0.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5825MHz Ant 1

Table 94
IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.7	33	40.5	45.2	68.2	-23.0
V	17475.000	41.8	33	37.6	46.4	68.2	-21.8
V	23300.000	45.0	33	38.6	50.6	68.2	-17.6
V	29125.000	45.4	33	40.0	52.4	68.2	-15.8
Н	34950.000	45.4	<i>33</i>	41.3	<i>53.7</i>	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.7	33	40.5	45.2	54.0	-8.8
V	17475.000	41.8	33	37.6	46.4	54.0	-7.6
V	23300.000	45.0	33	38.6	50.6	54.0	-3.4
V	29125.000	45.4	33	40.0	52.4	54.0	-1.6
Н	34950.000	45.4	33	41.3	53.7	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5745MHz Ant 2

Table 95 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.9	33	37.6	46.5	68.2	-21.7
V	22980.000	45.5	33	38.3	50.8	68.2	-17.4
V	28725.000	45.1	33	40.1	52.2	68.2	-16.0
Н	34470.000	45.6	<i>33</i>	41.1	53.7	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	41.9	33	37.6	46.5	54.0	-7.5
V	22980.000	45.5	33	38.3	50.8	54.0	-3.2
V	28725.000	45.1	33	40.1	52.2	54.0	-1.8
Н	34470.000	45.6	33	41.1	<i>53.7</i>	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5785MHz Ant 2

Table 96 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	68.2	-22.9
V	17355.000	41.6	33	37.6	46.2	68.2	-22.0
V	23140.000	44.8	33	38.6	50.4	68.2	-17.8
V	28925.000	45.1	33	40.1	52.2	68.2	-16.0
V	34710.000	45.4	33	41.3	53.7	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	37.8	33	40.5	45.3	54.0	<i>-8.7</i>
V	17355.000	41.6	33	37.6	46.2	54.0	-7.8
V	23140.000	44.8	33	38.6	50.4	54.0	-3.6
V	28925.000	45.1	33	40.1	52.2	54.0	-1.8
V	34710.000	45.4	33	41.3	<i>53.7</i>	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5825MHz Ant 2

Table 97
IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	68.2	-22.9
V	17475.000	41.8	33	37.6	46.4	68.2	-21.8
V	23300.000	45.0	33	38.6	50.6	68.2	-17.6
V	29125.000	45.7	33	40.0	52.7	68.2	-15.5
Н	34950.000	45.0	33	41.3	53.3	68.2	-14.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	54.0	-8.7
V	17475.000	41.8	33	37.6	46.4	54.0	-7.6
V	23300.000	45.0	33	38.6	50.6	54.0	-3.4
V	29125.000	45.7	33	40.0	52.7	54.0	-1.3
Н	34950.000	45.0	<i>33</i>	41.3	53.3	54.0	-0.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5745MHz Ant 0+1+2

Table 98 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.1	33	37.6	46.7	68.2	-21.5
V	22980.000	45.1	33	38.3	50.4	68.2	-17.8
V	28725.000	45.0	33	40.1	52.1	68.2	-16.1
Н	34470.000	45.6	<i>33</i>	41.1	53.7	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17235.000	42.1	33	37.6	46.7	54.0	-7.3
V	22980.000	45.1	33	38.3	50.4	54.0	-3.6
V	28725.000	45.0	33	40.1	52.1	54.0	-1.9
Н	34470.000	45.6	33	41.1	<i>53.7</i>	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5785MHz Ant 0+1+2

Table 99 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	38.1	33	40.5	45.6	68.2	-22.6
V	17355.000	41.7	33	37.6	46.3	68.2	-21.9
V	23140.000	45.3	33	38.6	50.9	68.2	-17.3
V	28925.000	45.3	33	40.1	52.4	68.2	-15.8
V	34710.000	45.0	<i>33</i>	41.3	53.3	68.2	-14.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11570.000	38.1	33	40.5	45.6	54.0	-8.4
V	17355.000	41.7	33	37.6	46.3	54.0	-7.7
V	23140.000	45.3	33	38.6	50.9	54.0	-3.1
V	28925.000	45.3	33	40.1	52.4	54.0	-1.6
V	34710.000	45.0	33	41.3	53.3	54.0	-0.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 20MHz 5825MHz Ant 0+1+2

Table 100 IEEE 802.11AC (OFDM, HT20, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	68.2	-22.9
V	17475.000	41.9	33	37.6	46.5	68.2	-21.7
V	23300.000	45.1	33	38.6	50.7	68.2	-17.5
V	29125.000	45.6	33	40.0	52.6	68.2	-15.6
Н	34950.000	44.9	33	41.3	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11650.000	37.8	33	40.5	45.3	54.0	-8.7
V	17475.000	41.9	33	37.6	46.5	54.0	-7.5
V	23300.000	45.1	33	38.6	50.7	54.0	-3.3
V	29125.000	45.6	33	40.0	52.6	54.0	-1.4
Н	34950.000	44.9	33	41.3	53.2	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5755MHz Ant 0

Table 101 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.1	33	37.5	45.6	68.2	-22.6
V	23020.000	44.2	33	38.6	49.8	68.2	-18.4
V	28775.000	41.5	33	40.1	48.6	68.2	-19.6
Н	34530.000	44.5	<i>33</i>	41.3	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.1	33	37.5	45.6	54.0	-8.4
V	23020.000	44.2	33	38.6	49.8	54.0	-4.2
V	28775.000	41.5	33	40.1	48.6	54.0	-5.4
Н	34530.000	44.5	33	41.3	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5795MHz Ant 0

Table 102 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	68.2	-24.1
V	17385.000	40.9	33	37.6	45.5	68.2	-22.7
V	23180.000	44.1	33	38.6	49.7	68.2	-18.5
V	28975.000	41.3	33	40.1	48.4	68.2	-19.8
Н	34770.000	43.9	33	41.3	52.2	68.2	-16.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	54.0	-9.9
V	17385.000	40.9	33	37.6	45.5	54.0	<i>-8.5</i>
V	23180.000	44.1	33	38.6	49.7	54.0	-4.3
V	28975.000	41.3	33	40.1	48.4	54.0	-5.6
Н	34770.000	43.9	33	41.3	52.2	54.0	-1.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5755MHz Ant 1

Table 103 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.3	33	37.5	45.8	68.2	-22.4
V	23020.000	43.6	33	38.6	49.2	68.2	-19.0
V	28775.000	41.6	33	40.1	48.7	68.2	-19.5
Н	34530.000	44.2	<i>33</i>	41.3	52.5	68.2	-15.7

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.3	33	37.5	45.8	54.0	-8.2
V	23020.000	43.6	33	38.6	49.2	54.0	-4.8
V	28775.000	41.6	33	40.1	48.7	54.0	-5.3
Н	34530.000	44.2	33	41.3	52.5	54.0	-1.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5795MHz Ant 1

Table 104 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	68.2	-24.1
V	17385.000	41.1	33	37.6	45.7	68.2	-22.5
V	23180.000	43.9	33	38.6	49.5	68.2	-18.7
V	28975.000	41.2	33	40.1	48.3	68.2	-19.9
Н	34770.000	44.5	33	41.3	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	54.0	-9.9
V	17385.000	41.1	33	37.6	45.7	54.0	-8.3
V	23180.000	43.9	33	38.6	49.5	54.0	-4.5
V	28975.000	41.2	33	40.1	48.3	54.0	<i>-5.7</i>
Н	34770.000	44.5	33	41.3	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5755MHz Ant 2

Table 105 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	40.7	33	37.5	45.2	68.2	-23.0
V	23020.000	43.9	33	38.6	49.5	68.2	-18.7
V	28775.000	41.7	33	40.1	48.8	68.2	-19.4
Н	34530.000	44.6	<i>33</i>	41.3	52.9	68.2	-15.3

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	40.7	33	37.5	45.2	54.0	-8.8
V	23020.000	43.9	33	38.6	49.5	54.0	-4.5
V	28775.000	41.7	33	40.1	48.8	54.0	-5.2
Н	34530.000	44.6	33	41.3	52.9	54.0	-1.1

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5795MHz Ant 2

Table 106 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	68.2	-24.1
V	17385.000	41.1	33	37.6	45.7	68.2	-22.5
V	23180.000	44.0	33	38.6	49.6	68.2	-18.6
V	28975.000	41.5	33	40.1	48.6	68.2	-19.6
Н	34770.000	44.0	33	41.3	52.3	68.2	-15.9

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	54.0	-9.9
V	17385.000	41.1	33	37.6	45.7	54.0	-8.3
V	23180.000	44.0	33	38.6	49.6	54.0	-4.4
V	28975.000	41.5	33	40.1	48.6	54.0	-5.4
Н	34770.000	44.0	33	41.3	52.3	54.0	-1.7

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5755MHz Ant 0+1+2

Table 107 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-	Frequency	Reading	Gain	Factor	3m	at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.4	33	37.5	45.9	68.2	-22.3
V	23020.000	43.9	33	38.6	49.5	68.2	-18.7
V	28775.000	41.0	33	40.1	48.1	68.2	-20.1
Н	34530.000	44.2	<i>33</i>	41.3	52.5	68.2	-15.7

			Pre-Amp	Antenna	Net at	Average	
Polari-	Frequency	Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	(MHz)	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	17625.000	41.4	33	37.5	45.9	54.0	-8.1
V	23020.000	43.9	33	38.6	49.5	54.0	-4.5
V	28775.000	41.0	33	40.1	48.1	54.0	-5.9
Н	34530.000	44.2	33	41.3	52.5	54.0	-1.5

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 40MHz 5795MHz Ant 0+1+2

Table 108 IEEE 802.11AC (OFDM, HT40, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	68.2	-24.1
V	17385.000	40.7	33	37.6	45.3	68.2	-22.9
V	23180.000	44.1	33	38.6	49.7	68.2	-18.5
V	28975.000	41.2	33	40.1	48.3	68.2	-19.9
Н	34770.000	44.5	33	41.3	52.8	68.2	-15.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	11590.000	36.6	33	40.5	44.1	54.0	-9.9
V	17385.000	40.7	33	37.6	45.3	54.0	-8.7
V	23180.000	44.1	33	38.6	49.7	54.0	-4.3
V	28975.000	41.2	33	40.1	48.3	54.0	<i>-5.7</i>
Н	34770.000	44.5	33	41.3	52.8	54.0	-1.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus. the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5775MHz Ant 0

Table 109 IEEE 802.11AC (OFDM, HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	68.2	-24.1
V	11550.000	37.8	33	40.5	45.3	68.2	-22.9
V	17325.000	41.9	33	37.6	46.5	68.2	-21.7
V	23100.000	44.5	33	38.6	50.1	68.2	-18.1
Н	28875.000	45.5	33	40.1	52.6	68.2	-15.6
0	34650.000	45.4	33	41.3	53.7	68.2	-14.5

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	54.0	-9.9
V	11550.000	37.8	33	40.5	45.3	54.0	-8.7
V	17325.000	41.9	33	37.6	46.5	54.0	<i>-7.5</i>
V	23100.000	44.5	33	38.6	50.1	54.0	-3.9
Н	28875.000	45.5	33	40.1	52.6	54.0	-1.4
0	34650.000	45.4	33	41.3	53.7	54.0	-0.3

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 .
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5775MHz Ant 1

Table 110 IEEE 802.11AC (OFDM, HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	68.2	-24.1
V	11550.000	37.7	33	40.5	45.2	68.2	-23.0
V	17325.000	41.9	33	37.6	46.5	68.2	-21.7
V	23100.000	44.7	33	38.6	50.3	68.2	-17.9
Н	28875.000	45.4	33	40.1	52.5	68.2	-15.7
0	34650.000	44.9	<i>33</i>	41.3	53.2	68.2	-15.0

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	54.0	-9.9
V	11550.000	37.7	33	40.5	45.2	54.0	-8.8
V	17325.000	41.9	33	37.6	46.5	54.0	<i>-7.5</i>
V	23100.000	44.7	33	38.6	50.3	54.0	-3.7
Н	28875.000	45.4	33	40.1	52.5	54.0	-1.5
0	34650.000	44.9	33	41.3	53.2	54.0	-0.8

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- 8. Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters. Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5775MHz Ant 2

Table 111 IEEE 802.11AC (OFDM, HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	68.2	-24.1
V	11550.000	38.1	33	40.5	45.6	68.2	-22.6
V	17325.000	42.2	33	37.6	46.8	68.2	-21.4
V	23100.000	45.0	33	38.6	50.6	68.2	-17.6
Н	28875.000	45.2	33	40.1	52.3	68.2	-15.9
0	34650.000	45.5	33	41.3	53.8	68.2	-14.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	54.0	-9.9
V	11550.000	38.1	33	40.5	45.6	54.0	-8.4
V	17325.000	42.2	33	37.6	46.8	54.0	-7.2
V	23100.000	45.0	33	38.6	50.6	54.0	-3.4
Н	28875.000	45.2	33	40.1	52.3	54.0	-1.7
0	34650.000	45.5	33	41.3	<i>53.8</i>	54.0	-0.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Mode: AC Mode 80MHz 5775MHz Ant 0+1+2

Table 112 IEEE 802.11AC (OFDM, HT80, MCS0)

Radiated Emission Data

			Pre-Amp	Antenna	Net at	Peak Limit	
Polari-		Reading	Gain	Factor	3m	at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	68.2	-24.1
V	11550.000	37.7	33	40.5	45.2	68.2	-23.0
V	17325.000	42.1	33	37.6	46.7	68.2	-21.5
V	23100.000	44.7	33	38.6	50.3	68.2	-17.9
Н	28875.000	45.7	33	40.1	52.8	68.2	-15.4
0	34650.000	45.5	33	41.3	53.8	68.2	-14.4

			Pre-Amp	Antenna	Net at	Average	
Polari-		Reading	Gain	Factor	3m	Limit at 3m	Margin
zation	Frequency	(dBuV)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	5775.000	40.5	33	36.6	44.1	54.0	-9.9
V	11550.000	37.7	33	40.5	45.2	54.0	-8.8
V	17325.000	42.1	33	37.6	46.7	54.0	-7.3
V	23100.000	44.7	33	38.6	50.3	54.0	-3.7
Н	28875.000	45.7	33	40.1	52.8	54.0	-1.2
0	34650.000	45.5	33	41.3	53.8	54.0	-0.2

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Horn antenna is used for the emission over 1000MHz.
- 5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15.
- 6. For the measurement of radiated emission, summation method was used which numerical integrating (in terms of linear power) over the transmitter occupied bandwidth.
- 7. For the linear power measurement, data in 1MHz spacing was collected by spectrum analyzer with 1MHz resolution bandwidth.
- Regarding to 15.407(b)(1)-(3) specifies that emissions outside of the respective U-NII bands are subject to a maximum emission limit (Peak) of -27 dBm/MHz.
 Ε[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.
 Thus, the Peak limit for U-NII should be -27+95.2=68.2 dBuV/m.

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Worst Case: EUT Transmitting

Table 113

Radiated Emission Data

			Pre-	Antenna	Net	Limit	
	Frequency	Reading	amp	Factor	at 3m	at 3m	Margin
Polarization	(MHz)	(dBµV)	(dB)	(dB)	(dBµV/m)	(dBµV/m)	(dB)
Н	31.668	41.6	16	10.0	35.6	40.0	-4.4
Н	191.952	30.9	16	16.0	30.9	43.5	-12.6
Н	216.074	30.4	16	17.0	31.4	46.0	-14.6
Н	288.068	32.6	16	22.0	38.6	46.0	-7.4

NOTES: 1. Peak detector is used for the emission measurement.

- 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
- 3. Negative value in the margin column shows emission below limit.
- 4. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205.

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4.6.3 Transmitter Duty Cycle Calculation
Not applicable – No average factor is required.
4.7 AC Power Line Conducted Emission
☐ Not applicable – EUT is only powered by battery for operation.
Base Unit connects to AC power line and has transmission. Handset connects to AC power line but has no transmission. Emission Data of Base Unit is listed in following pages.
4.7.1 AC Power Line Conducted Emission Configuration Photograph
Worst Case Line-Conducted Configuration at

0.164 MHz

The worst case line conducted configuration photographs are attached in the Appendix and saved with filename: config photos.pdf

4.7.2 AC Power Line Conducted Emission Data

The plot(s) and data in the following pages list the significant emission frequencies, the limit and the margin of compliance

Passed by 6.0 dB margin compare with average limit

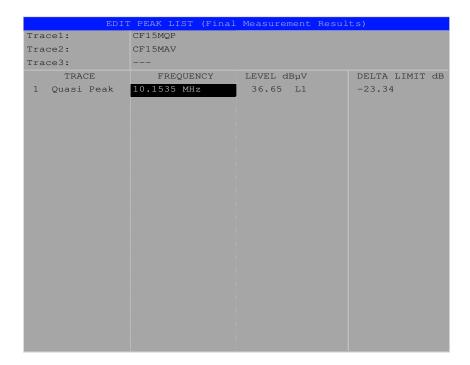
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Worst Case: EUT Charging

	EDIT	PEAK LIST (Final	Measurement	Results)
Trac	el:	CF15MQP		
Trac	:e2:	CF15MAV		
Trac	:e3:			
	TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1	Quasi Peak	163.5 kHz	59.28 L1	-5.99
2	CISPR Average	163.5 kHz	46.33 L1	-8.95
1	Quasi Peak	213 kHz	51.86 L1	-11.22
2	CISPR Average	217.5 kHz	40.89 N	-12.01
1	Quasi Peak	325.5 kHz	41.17 N	-18.38
2	CISPR Average	325.5 kHz	35.35 L1	-14.21
2	CISPR Average	487.5 kHz	31.90 N	-14.30
1	Quasi Peak		39.01 L1	-16.98
1	Quasi Peak	591 kHz	40.15 L1	-15.84
2	CISPR Average		31.89 N	-14.11
1	Quasi Peak	789 kHz	36.62 L1	-19.37
2	CISPR Average	807 kHz	30.25 N	-15.74
1	Quasi Peak	1.113 MHz	36.15 L1	-19.84
2	CISPR Average		28.68 L1	-17.31
1	Quasi Peak	1.644 MHz	30.50 N	-25.49
1	Quasi Peak	2.886 MHz	31.33 L1	-24.66
2	CISPR Average	2.886 MHz	26.30 N	-19.69
1	Quasi Peak	3.021 MHz	31.36 N	-24.63
2	CISPR Average	3.498 MHz	25.74 L1	-20.25
2	CISPR Average	10.131 MHz	31.30 N	-18.69

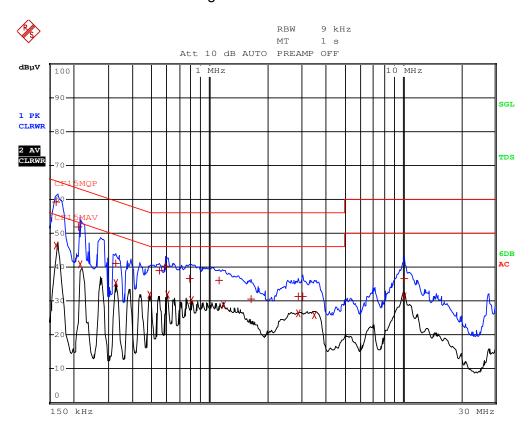
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Worst Case: EUT Charging



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Worst Case: EUT Transmitting



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4.8 Frequency Stability requirement

Frequency	Mode	Measured Value					
		(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
(MHz)		(0°C)	(10°C)	(20°C)	(30°C)	(40°C)	(50°C)
5180	А	0.804	0.952	4.054	4.102	3.840	3.700
5745	^	0.725	0.854	4.090	4.894	3.842	4.418
5180	NHT20	0.836	0.941	4.150	4.210	3.158	4.343
5745	NH120	0.870	0.942	3.887	4.841	3.415	4.148
5180	ACHT20	0.611	0.744	3.925	4.561	4.321	2.123
5745	ACHTZU	0.899	0.815	3.713	4.123	4.897	1.886
5190	NHT40	0.257	0.325	4.110	3.846	3.841	2.505
5775	111140	0.522	0.632	4.293	3.841	3.948	2.495
5190	ACHT40	0.257	0.325	4.303	3.987	3.158	1.862
5775	ACITI40	0.116	0.218	4.583	3.657	3.154	1.973
5210	ACHT80	1.280	1.382	3.071	2.948	2.978	2.047
5775	ACTIOU	0.346	0.680	4.155	3.951	3.101	1.154

Temperature	Frequency	Mode	Measured Value	Measured Value	Measured Value
			(ppm)	(ppm)	(ppm)
(°C)	(MHz)		120VAC	132VAC	108VAC
	5180	А	4.054	4.601	3.893
	5745		4.09	3.568	4.496
	5180	NHT20	4.15	4.427	4.15
20	5745		3.887	4.206	3.771
	5180	ACHT20	3.925	4.118	4.311
	5745		3.713	4.322	3.278
	5190	NHT40	4.11	4.688	4.303
	5775		4.293	4.873	4.177
	5190	ACHT40	4.303	4.174	4.174
	5775		4.583	4.119	4.409
	5210	ACHT80	3.071	0.256	2.559
	5775		4.155	2.309	3.809

The Maximum value is +4.897ppm.

It is proved that the frequency stability such that an emission is maintained within the band of operation under all condition.

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4.9 U-NII1 99% bandwidth requirement

For the case if a channel operating in U-NII 1 band has a 26-dB bandwidth that straddles into U-NII 2A band but its 99% occupied power bandwidth does not. For this rare case, DFS requirement does not apply.

The plots of U-NII1 99% bandwidth is saved with filename: UNII-1_99%.pdf proved that no further test for DFS.

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EXHIBIT 5 EQUIPMENT LIST

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5.0 Equipment List

1) Radiated Emissions Test

Equipment	EMI Test Receiver	Spectrum Analyzer	Biconical Antenna
Registration No.	EW-3156	EW-2188	EW-2512
Manufacturer	R&S	AGILENTTECH	EMCO
Model No.	ESR26	E4407B	3104C
Calibration Date	Nov. 03, 2015	Apr. 25, 2016	Jan 22, 2015
Calibration Due Date	Nov. 03, 2016	Apr. 25, 2017	Jul 22, 2016

Equipment	Log Periodic	Pyramidal Horn	Double Ridged
	Antenna	Antenna	Guide Antenna
Registration No.	EW-1042	EW-0905	EW-1133
Manufacturer	EMCO	EMCO	EMCO
Model No.	3148	3160-09	3115
Calibration Date	May 21, 2015	Feb. 12, 2016	Nov. 05, 2015
Calibration Due Date	Nov 21, 2016	Aug. 12, 2017	May 05, 2017

Conductive Measurement Test

=/			
Equipment	RF Power Meter with Power	Spectrum Analyzer	
	Sensor (N1921A)		
Registration No.	EW-2270	EW-2249	
Manufacturer	AGILENTTECH	R&S	
Model No.	N1911A	FSP30	
Calibration Date	Jan. 19, 2016	Nov. 27, 2015	
Calibration Due Date	Jan. 19, 2017	Nov. 27, 2016	

Conducted Emissions Test

Equipment	EMI Test Receiver	LISN
Registration No.	EW-2500	EW-2501
Manufacturer	R&S	R&S
Model No.	ESCI	ENV-216
Calibration Date	Jan. 28, 2016	Jan. 28, 2016
Calibration Due Date	Jan. 28, 2017	Jan. 28, 2017

END OF TEST REPORT

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