TESTING LABORATORY
CERTIFICATE #4820.01

FCC PART 15.407

TEST REPORT

For

Kyocera Corporation

2-1-1 Kagahara, Tsuzuki-ku, Yokohama-shi, Kanagawa, Japan, 224-8502

FCC ID: JOYCB64

Report Type:	**Product Name:**
Original Report	GSM/WCDMA/LTE Mobile Telephone

Report Number: RDG190709011-00C

Report Date: 2019-07-29

Reviewed By: Jerry Zhang
EMC Manager

Test Laboratory: Bay Area Compliance Laboratories Corp. (Dongguan)
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:		GSM/WCDMA/LTE Mobile Telephone
EUT Model:		CB64
Rated Input Voltage:		DC 3.85V from battery or DC 5V from adapter
Hardware Version:		CB64
Software Version:		msm8937_64-userdebug 9
Adapter Information	**Model:**	KYCAV1
	Input:	AC 100-240V 50/60 0.3A
	Output:	DC 5.0V 1.2A
External Dimension:		156mm(L)*76mm(W)*9mm(H)
Serial Number:		190709011
IMEI Number:		356283100010182
EUT Received Date:		2019-07-11

Objective

This type approval report is prepared on behalf of ***Kyocera Corporation*** in accordance with Part 2-Subpart J, Part 15-Subparts A, and E of the Federal Communications Commission's rules.

The tests were performed in order to determine compliance with radiation spurious emission of FCC Rules Part 15, Subpart E, section 15.407 rules and subpart C, 15.205, 15.207, 15.209.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

Measurement Uncertainty

Parameter	Measurement Uncertainty
Unwanted Emissions, radiated	30M~200MHz: 4.55 dB,200M~1GHz: 5.92 dB,1G~6GHz: 4.98 dB, 6G~18GHz: 5.89 dB,18G~26.5G:5.47 dB,26.5G~40G:5.63 dB
Temperature	±1℃
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliance
FCC§15.407(H)	Dynamic Frequency Selection (DFS)	Compliance*

Note:
Compliance*: please refer to the DFS test report: RDG190709011-00D.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The EUT was configured for testing in an engineering mode which was provided by the manufacturer.

The system supports 802.11a/n ht20/n ht40/ac vht 20/40/80 modes.

For 5150~5250 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a, 802.11n ht20, 802.11ac vht20 Channel 36, 40 and 48 were tested, for 802.11n ht40, 802.11ac vht40 Channel 38, 46 were tested, for 802.11ac vht 80, channel 42 was tested.

For 5250~5350 MHz band, 7 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a, 802.11n ht20, 802.11ac vht20 Channel 52, 56 and 64 were tested, for 802.11n ht40, 802.11ac vht40 Channel 54, 62 were tested. For 802.11ac vht80, channel 58 was tested.

For 5470~5725 MHz band, 18 channels are provided:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	116	5580	132	5660
102	5510	118	5590	134	5670
104	5520	120	5600	136	5680
106	5530	122	5610	140	5700
108	5540	124	5620	/	/
110	5550	126	5630	/	/
112	5560	128	5640	/	/

For 802.11a, 802.11n ht20, 802.11ac vht20 Channel 100, 116 and 140 were tested, for 802.11n ht40, 802.11ac vht40 Channel 102, 110 and 134 were tested, for 802.11ac vht80 channel 106, 122 were tested.

EUT Exercise Software

The software ‘QRCT’ was used for testing, the ‘QRCT’ command was provided by manufacturer. The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations. The maximum power was configured as below table, that provided by the manufacturer:

Band	Mode	Channel	Frequency (MHz)	Data rate	Power level Setting
5150-5250 MHz	802.11a	Low	5180	6Mbps	12
		Middle	5200	6Mbps	12
		High	5240	6Mbps	13
	802.11n ht20	Low	5180	MCS0	12
		Middle	5200	MCS0	12
		High	5240	MCS0	13
	802.11n ht40	Low	5190	MCS0	10
		High	5230	MCS0	11.5
	802.11ac vht20	Low	5180	MCS0	12
		Middle	5200	MCS0	12
		High	5240	MCS0	13
	802.11ac vht40	Low	5190	MCS0	11
		High	5230	MCS0	11.5
	802.11ac vht80	Middle	5210	MCS0	12.5
5250-5350 MHz	802.11a	Low	5260	6Mbps	13
		Middle	5280	6Mbps	13
		High	5320	6Mbps	13
	802.11n ht20	Low	5260	MCS0	13
		Middle	5280	MCS0	13
		High	5320	MCS0	13
	802.11n ht40	Low	5270	MCS0	12
		High	5310	MCS0	12
	802.11ac vht20	Low	5260	MCS0	13
		Middle	5280	MCS0	12
		High	5320	MCS0	12
	802.11ac vht40	Low	5270	MCS0	12
		High	5310	MCS0	12
	802.11ac vht80	Middle	5290	MCS0	13
5470-5725 MHz	802.11a	Low	5500	6Mbps	13
		Middle	5580	6Mbps	13
		High	5700	6Mbps	13.5
	802.11n ht20	Low	5500	MCS0	13
		Middle	5580	MCS0	13
		High	5700	MCS0	13.5
	802.11n ht40	Low	5510	MCS0	12
		Middle	5590	MCS0	12
		High	5670	MCS0	12.5
	802.11ac vht20	Low	5500	MCS0	13
		Middle	5580	MCS0	13
		High	5700	MCS0	13.5
	802.11ac vht40	Low	5510	MCS0	12
		Middle	5590	MCS0	12.5
		High	5670	MCS0	12.5
	802.11ac vht80	Low	5530	MCS0	13
		High	5610	MCS0	13.5

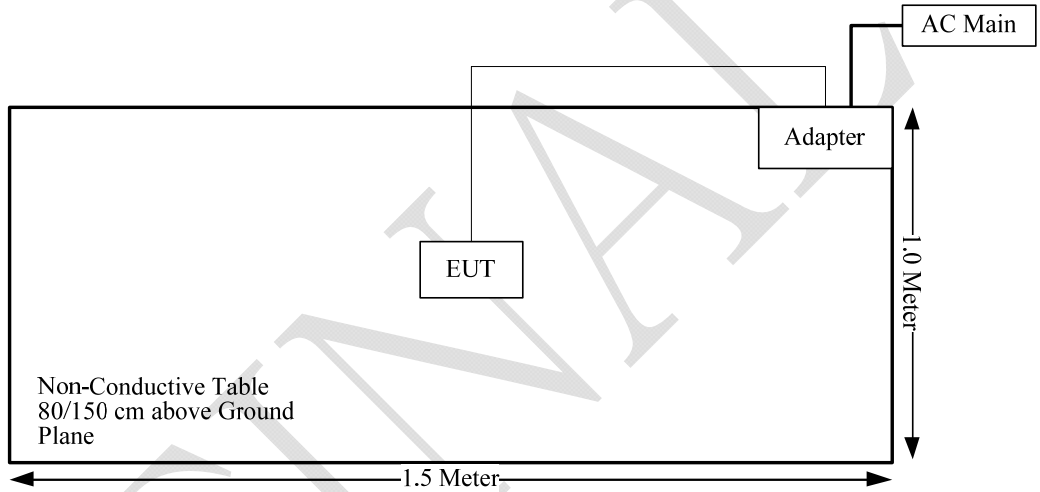
Equipment Modifications

No modification was made to the EUT.

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From	To
USB Cable	Yes	No	1.2	Adapter	EUT

Block Diagram of Test Setup



FCC §15.209, §15.205 & §15.407(b) –UNWANTED EMISSION

Applicable Standard

FCC §15.407; §15.209; §15.205;

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

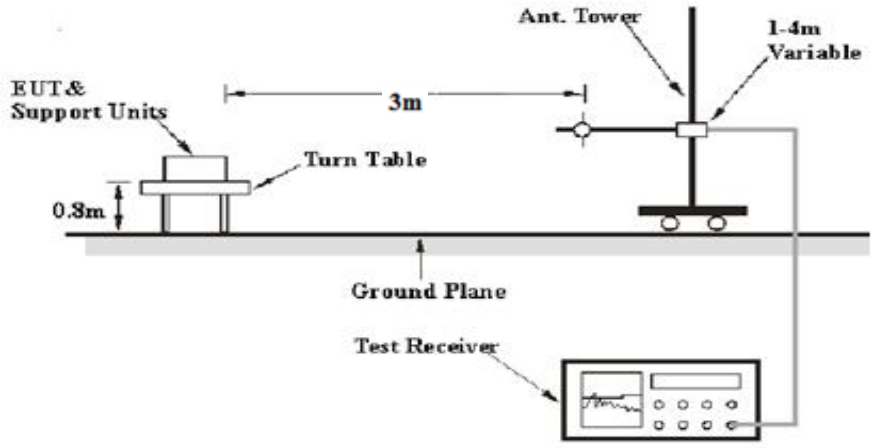
(5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

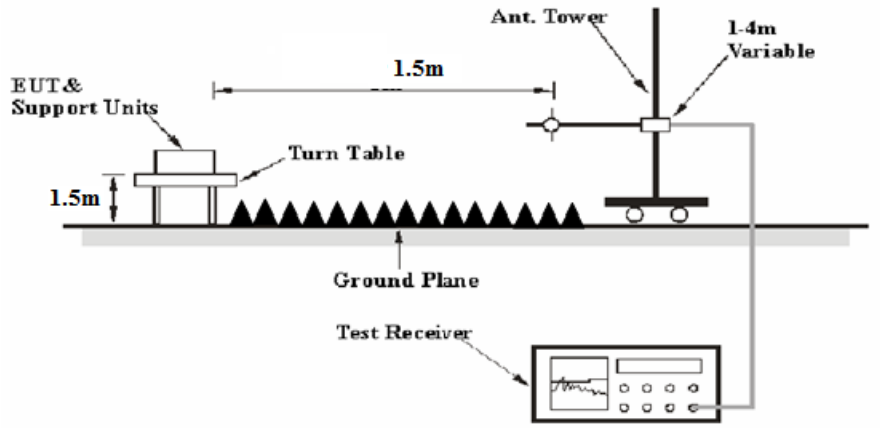
(7) The provisions of §15.205 apply to intentional radiators operating under this section.

EUT Setup

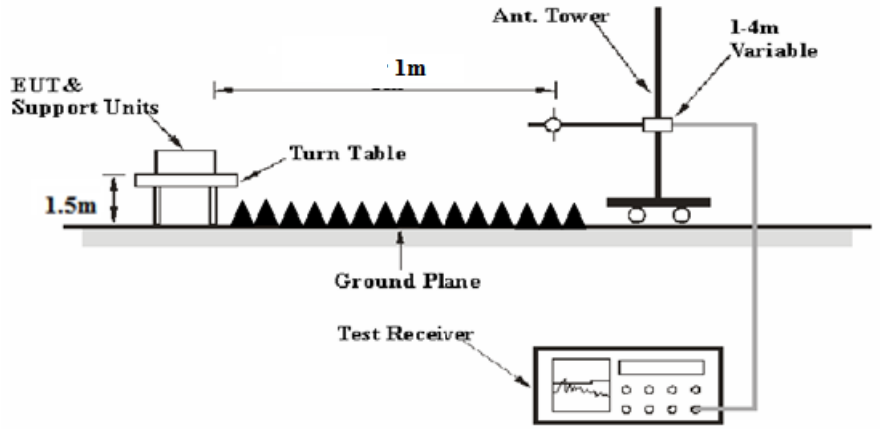
Below 1 GHz:



1-26.5 GHz:



26.5-40 GHz:



The radiated emission Below 1GHz tests were performed in the 3 meters chamber test site A, above 1GHz tests were performed in the 3 meters chamber test site B, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.407 limits

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

30-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

1GHz- 40GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
Ave.	>98%	1MHz	10 Hz
	<98%	1MHz	1/T

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: E [dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade from 3m to 1.5m or 1m
Distance extrapolation factor =20 log (specific distance [3m]/test distance [1.5m]) dB= 6.02 dB
or
Distance extrapolation factor =20 log (specific distance [3m]/test distance [1m]) dB= 9.54 dB

All emissions under the average limit and under the noise floor have not recorded in the report.

Corrected Amplitude & Margin Calculation

For the range 30MHz-1GHz, the Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit - Corrected Amplitude

For the range 1GHz-40GHz, Test performed at 1.5m or 1m, the Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading and the Distance extrapolation factor. The basic equation is as follows:

Corrected Amplitude
= Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain-Distance extrapolation factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit- Corrected Amplitude

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated emissions below 1GHz					
R&S	EMI Test Receiver	ESR3	102453	2019-06-26	2020-06-26
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2020-11-10
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2019-05-06	2020-05-06
HP	Amplifier	8447D	2727A05902	2018-09-05	2019-09-05
Radiated emissions above 1GHz					
Agilent	Spectrum Analyzer	E4440A	SG43360054	2019-01-04	2020-01-04
ETS-Lindgren	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12
MITEQ	Amplifier	AFS42-00101800-25-S-42	2001271	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-SJSJ-50	C-0800-01	2018-09-05	2019-09-05
Unknown	Coaxial Cable	C-2.4J2.4J-50	C-0700-02	2019-06-27	2020-06-27
Ducommun Technolagies	Horn Antenna	ARH-4223-02	1007726-01 1304	2016-11-18	2019-11-18
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2019-06-27	2020-06-27
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A
R&S	Spectrum Analyzer	FSP 38	100478	2019-05-09	2020-05-09
Ducommun Technolagies	Horn Antenna	ARH-2823-02	1007726-01 1302	2016-11-18	2019-11-18
Sinoscite	Bandstop Filters	BSF5150-5850MN-0899-003	0899003	2019-05-06	2020-05-06
Mini Circuits	High Pass Filter	VHF-6010+	31118	2019-06-16	2020-06-16

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

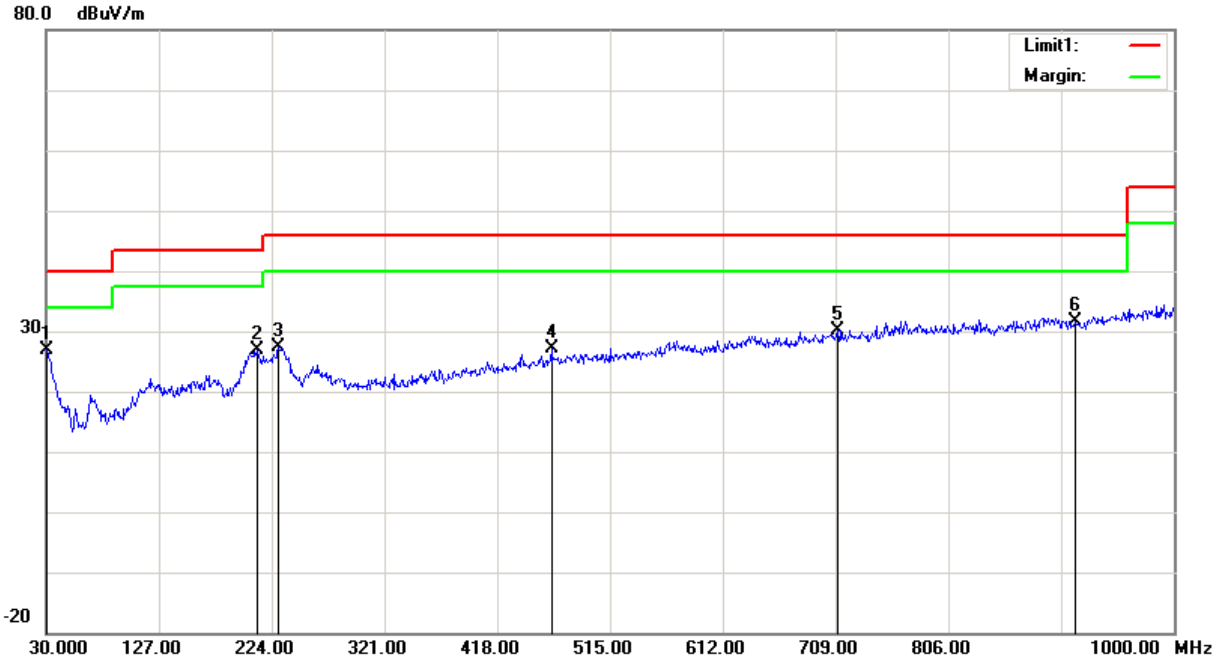
Environmental Conditions

Test Items:	Radiated emissions below 1GHz	Radiated emissions above 1GHz
Temperature:	27.2°C	27.6°C
Relative Humidity:	50%	52%
ATM Pressure:	100.1kPa	100.2kPa
Test by:	Tyler Pan	Lucy Lu
Test Date:	2019-07-24	2019-07-26

Test Mode: Transmitting

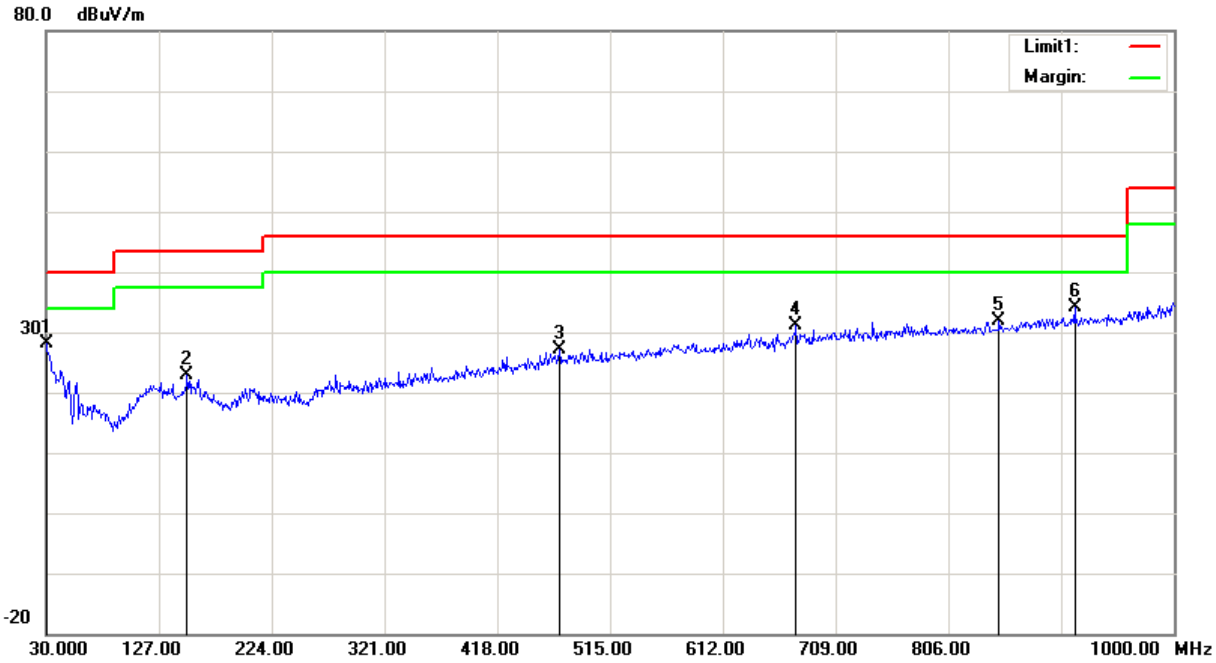
Below 1GHz (802.11ac vht80, 5210 MHz was the worst):

Horizontal



Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
30.9700	25.93	peak	0.91	26.84	40.00	13.16
211.3900	34.20	peak	-7.38	26.82	43.50	16.68
229.8200	33.69	peak	-6.42	27.27	46.00	18.73
464.5600	27.65	peak	-0.53	27.12	46.00	18.88
710.9400	27.01	peak	3.16	30.17	46.00	15.83
915.6100	31.53	peak	0.21	31.74	46.00	14.26

Vertical



Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
30.0000	26.42	peak	1.72	28.14	40.00	11.86
151.2500	28.74	peak	-5.98	22.76	43.50	20.74
471.3500	27.66	peak	-0.42	27.24	46.00	18.76
675.0500	28.58	peak	2.50	31.08	46.00	14.92
849.6500	26.71	peak	5.17	31.88	46.00	14.12
914.6400	34.00	peak	0.19	34.19	46.00	11.81

1GHz-40GHz:

5150-5250MHz

802.11a

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5180 MHz										
5180.00	71.28	PK	H	33.59	3.58	0.00	108.45	102.43	N/A	N/A
5180.00	61.68	AV	H	33.59	3.58	0.00	98.85	92.83	N/A	N/A
5180.00	74.14	PK	V	33.59	3.58	0.00	111.31	105.29	N/A	N/A
5180.00	64.11	AV	V	33.59	3.58	0.00	101.28	95.26	N/A	N/A
5150.00	29.58	PK	V	33.54	3.56	0.00	66.68	60.66	74.00	13.34
5150.00	14.99	AV	V	33.54	3.56	0.00	52.09	46.07	54.00	7.93
10360.00	45.59	PK	V	38.17	6.29	36.85	53.20	47.18	68.20	21.02
15540.00	49.10	PK	V	38.06	8.85	39.04	56.97	50.95	74.00	23.05
15540.00	36.96	AV	V	38.06	8.85	39.04	44.83	38.81	54.00	15.19
Middle Channel: 5200 MHz										
5200.00	70.25	PK	H	33.62	3.60	0.00	107.47	101.45	N/A	N/A
5200.00	60.04	AV	H	33.62	3.60	0.00	97.26	91.24	N/A	N/A
5200.00	73.54	PK	V	33.62	3.60	0.00	110.76	104.74	N/A	N/A
5200.00	63.50	AV	V	33.62	3.60	0.00	100.72	94.7	N/A	N/A
10400.00	45.79	PK	V	38.18	6.32	36.86	53.43	47.407	68.20	20.79
15600.00	48.58	PK	V	38.00	8.83	39.09	56.32	50.304	74.00	23.70
15600.00	36.10	AV	V	38.00	8.83	39.09	43.84	37.82	54.00	16.18
High Channel: 5240 MHz										
5240.00	69.82	PK	H	33.68	3.52	0.00	107.02	101.004	N/A	N/A
5240.00	59.44	AV	H	33.68	3.52	0.00	96.64	90.618	N/A	N/A
5240.00	72.40	PK	V	33.68	3.52	0.00	109.60	103.58	N/A	N/A
5240.00	62.35	AV	V	33.68	3.52	0.00	99.55	93.53	N/A	N/A
5350.00	26.96	PK	V	33.86	3.52	0.00	64.34	58.32	74.00	15.68
5350.00	13.48	AV	V	33.86	3.52	0.00	50.86	44.84	54.00	9.16
10480.00	45.48	PK	V	38.20	6.37	36.88	53.17	47.15	68.20	21.05
15720.00	48.54	PK	V	37.88	8.79	39.18	56.03	50.01	74.00	23.99
15720.00	35.87	AV	V	37.88	8.79	39.18	43.36	37.34	54.00	16.66

802.11n ht20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5180 MHz										
5180.00	67.56	PK	H	33.59	3.58	0.00	104.73	98.71	N/A	N/A
5180.00	57.15	AV	H	33.59	3.58	0.00	94.32	88.3	N/A	N/A
5180.00	70.18	PK	V	33.59	3.58	0.00	107.35	101.33	N/A	N/A
5180.00	59.82	AV	V	33.59	3.58	0.00	96.99	90.97	N/A	N/A
5150.00	27.54	PK	V	33.54	3.56	0.00	64.64	58.62	74.00	15.38
5150.00	14.88	AV	V	33.54	3.56	0.00	51.98	45.96	54.00	8.04
10360.00	45.87	PK	V	38.17	6.29	36.85	53.48	47.46	68.20	20.74
15540.00	48.55	PK	V	38.06	8.85	39.04	56.42	50.4	74.00	23.60
15540.00	35.45	AV	V	38.06	8.85	39.04	43.32	37.298	54.00	16.70
Middle Channel: 5200 MHz										
5200.00	67.10	PK	H	33.62	3.60	0.00	104.32	98.3	N/A	N/A
5200.00	56.87	AV	H	33.62	3.60	0.00	94.09	88.07	N/A	N/A
5200.00	70.34	PK	V	33.62	3.60	0.00	107.56	101.54	N/A	N/A
5200.00	60.04	AV	V	33.62	3.60	0.00	97.26	91.24	N/A	N/A
10400.00	45.78	PK	V	38.18	6.32	36.86	53.42	47.402	68.20	20.80
15600.00	48.35	PK	V	38.00	8.83	39.09	56.09	50.07	74.00	23.93
15600.00	35.48	AV	V	38.00	8.83	39.09	43.22	37.198	54.00	16.80
High Channel: 5240 MHz										
5240.00	67.85	PK	H	33.68	3.52	0.00	105.05	99.027	N/A	N/A
5240.00	57.54	AV	H	33.68	3.52	0.00	94.74	88.72	N/A	N/A
5240.00	70.50	PK	V	33.68	3.52	0.00	107.70	101.68	N/A	N/A
5240.00	60.14	AV	V	33.68	3.52	0.00	97.34	91.32	N/A	N/A
5350.00	27.26	PK	V	33.86	3.52	0.00	64.64	58.62	74.00	15.38
5350.00	13.54	AV	V	33.86	3.52	0.00	50.92	44.9	54.00	9.10
10480.00	45.87	PK	V	38.20	6.37	36.88	53.56	47.54	68.20	20.66
15720.00	48.52	PK	V	37.88	8.79	39.18	56.01	49.985	74.00	24.02
15720.00	35.15	AV	V	37.88	8.79	39.18	42.64	36.62	54.00	17.38

802.11n ht40

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5190 MHz										
5190.00	63.39	PK	H	33.60	3.59	0.00	100.58	94.56	N/A	N/A
5190.00	53.09	AV	H	33.60	3.59	0.00	90.28	84.26	N/A	N/A
5190.00	67.37	PK	V	33.60	3.59	0.00	104.56	98.54	N/A	N/A
5190.00	57.32	AV	V	33.60	3.59	0.00	94.51	88.49	N/A	N/A
5150.00	28.04	PK	V	33.54	3.56	0.00	65.14	59.12	74.00	14.88
5150.00	14.90	AV	V	33.54	3.56	0.00	52.00	45.98	54.00	8.02
10380.00	45.15	PK	V	38.18	6.31	36.85	52.79	46.77	68.20	21.43
15570.00	47.52	PK	V	38.03	8.84	39.06	55.33	49.31	74.00	24.69
15570.00	35.94	AV	V	38.03	8.84	39.06	43.75	37.73	54.00	16.27
High Channel: 5230 MHz										
5230.00	62.69	PK	H	33.67	3.54	0.00	99.90	93.88	N/A	N/A
5230.00	52.63	AV	H	33.67	3.54	0.00	89.84	83.82	N/A	N/A
5230.00	66.76	PK	V	33.67	3.54	0.00	103.97	97.95	N/A	N/A
5230.00	56.62	AV	V	33.67	3.54	0.00	93.83	87.81	N/A	N/A
5350.00	26.78	PK	V	33.86	3.52	0.00	64.16	58.14	74.00	15.86
5350.00	13.78	AV	V	33.86	3.52	0.00	51.16	45.14	54.00	8.86
10460.00	45.87	PK	V	38.19	6.36	36.87	53.55	47.53	68.20	20.67
15690.00	47.54	PK	V	37.91	8.80	39.15	55.10	49.08	74.00	24.92
15690.00	35.35	AV	V	37.91	8.80	39.15	42.91	36.89	54.00	17.11

802.11ac vht20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5180 MHz										
5180.00	66.97	PK	H	33.59	3.58	0.00	104.14	98.12	N/A	N/A
5180.00	56.74	AV	H	33.59	3.58	0.00	93.91	87.89	N/A	N/A
5180.00	69.15	PK	V	33.59	3.58	0.00	106.32	100.3	N/A	N/A
5180.00	59.31	AV	V	33.59	3.58	0.00	96.48	90.464	N/A	N/A
5150.00	27.15	PK	V	33.54	3.56	0.00	64.25	58.23	74.00	15.77
5150.00	14.97	AV	V	33.54	3.56	0.00	52.07	46.05	54.00	7.95
10360.00	45.72	PK	V	38.17	6.29	36.85	53.33	47.31	68.20	20.89
15540.00	47.78	PK	V	38.06	8.85	39.04	55.65	49.63	74.00	24.37
15540.00	35.18	AV	V	38.06	8.85	39.04	43.05	37.028	54.00	16.97
Middle Channel: 5200 MHz										
5200.00	67.73	PK	H	33.62	3.60	0.00	104.95	98.93	N/A	N/A
5200.00	57.48	AV	H	33.62	3.60	0.00	94.70	88.68	N/A	N/A
5200.00	69.67	PK	V	33.62	3.60	0.00	106.89	100.87	N/A	N/A
5200.00	58.88	AV	V	33.62	3.60	0.00	96.10	90.08	N/A	N/A
10400.00	46.45	PK	V	38.18	6.32	36.86	54.09	48.07	68.20	20.13
15600.00	47.58	PK	V	38.00	8.83	39.09	55.32	49.3	74.00	24.70
15600.00	35.44	AV	V	38.00	8.83	39.09	43.18	37.16	54.00	16.84
High Channel: 5240 MHz										
5240.00	68.18	PK	H	33.68	3.52	0.00	105.38	99.36	N/A	N/A
5240.00	58.38	AV	H	33.68	3.52	0.00	95.58	89.558	N/A	N/A
5240.00	70.14	PK	V	33.68	3.52	0.00	107.34	101.32	N/A	N/A
5240.00	60.54	AV	V	33.68	3.52	0.00	97.74	91.72	N/A	N/A
5350.00	26.84	PK	V	33.86	3.52	0.00	64.22	58.2	74.00	15.80
5350.00	13.48	AV	V	33.86	3.52	0.00	50.86	44.84	54.00	9.16
10480.00	45.87	PK	V	38.20	6.37	36.88	53.56	47.54	68.20	20.66
15720.00	47.65	PK	V	37.88	8.79	39.18	55.14	49.12	74.00	24.88
15720.00	35.14	AV	V	37.88	8.79	39.18	42.63	36.61	54.00	17.39

802.11ac vht40

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5190 MHz										
5190.00	63.64	PK	H	33.60	3.59	0.00	100.83	94.81	N/A	N/A
5190.00	54.72	AV	H	33.60	3.59	0.00	91.91	85.89	N/A	N/A
5190.00	67.32	PK	V	33.60	3.59	0.00	104.51	98.49	N/A	N/A
5190.00	58.43	AV	V	33.60	3.59	0.00	95.62	89.6	N/A	N/A
5150.00	28.08	PK	V	33.54	3.56	0.00	65.18	59.16	74.00	14.84
5150.00	15.04	AV	V	33.54	3.56	0.00	52.14	46.12	54.00	7.88
10380.00	46.12	PK	V	38.18	6.31	36.85	53.76	47.74	68.20	20.46
15570.00	47.29	PK	V	38.03	8.84	39.06	55.10	49.08	74.00	24.92
15570.00	35.57	AV	V	38.03	8.84	39.06	43.38	37.36	54.00	16.64
High Channel: 5230 MHz										
5230.00	64.93	PK	H	33.67	3.54	0.00	102.14	96.12	N/A	N/A
5230.00	55.37	AV	H	33.67	3.54	0.00	92.58	86.56	N/A	N/A
5230.00	66.80	PK	V	33.67	3.54	0.00	104.01	97.99	N/A	N/A
5230.00	57.38	AV	V	33.67	3.54	0.00	94.59	88.57	N/A	N/A
5350.00	27.35	PK	V	33.86	3.52	0.00	64.73	58.71	74.00	15.29
5350.00	13.84	AV	V	33.86	3.52	0.00	51.22	45.2	54.00	8.80
10460.00	45.88	PK	V	38.19	6.36	36.87	53.56	47.538	68.20	20.66
15690.00	47.78	PK	V	37.91	8.80	39.15	55.34	49.322	74.00	24.68
15690.00	35.48	AV	V	37.91	8.80	39.15	43.04	37.02	54.00	16.98

802.11ac vht80

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5210 MHz										
5210.00	62.36	PK	H	33.64	3.58	0.00	99.58	93.56	N/A	N/A
5210.00	53.10	AV	H	33.64	3.58	0.00	90.32	84.3	N/A	N/A
5210.00	63.92	PK	V	33.64	3.58	0.00	101.14	95.12	N/A	N/A
5210.00	54.21	AV	V	33.64	3.58	0.00	91.43	85.41	N/A	N/A
5150.00	27.33	PK	V	33.54	3.56	0.00	64.43	58.41	74.00	15.59
5150.00	15.07	AV	V	33.54	3.56	0.00	52.17	46.15	54.00	7.85
5350.00	26.83	PK	V	33.86	3.52	0.00	64.21	58.19	74.00	15.81
5350.00	14.73	AV	V	33.86	3.52	0.00	52.11	46.09	54.00	7.91
10420.00	45.87	PK	V	38.18	6.33	36.86	53.52	47.5	68.20	20.70
15630.00	49.58	PK	V	37.97	8.82	39.11	57.26	51.24	74.00	22.76
15630.00	37.25	AV	V	37.97	8.82	39.11	44.93	38.91	54.00	15.09

5250-5350MHz
802.11a

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5260 MHz										
5260.00	69.23	PK	H	33.72	3.49	0.00	106.44	100.42	N/A	N/A
5260.00	59.65	AV	H	33.72	3.49	0.00	96.86	90.844	N/A	N/A
5260.00	70.09	PK	V	33.72	3.49	0.00	107.30	101.28	N/A	N/A
5260.00	60.90	AV	V	33.72	3.49	0.00	98.11	92.09	N/A	N/A
5150.00	27.47	PK	V	33.54	3.56	0.00	64.57	58.55	74.00	15.45
5150.00	14.54	AV	V	33.54	3.56	0.00	51.64	45.62	54.00	8.38
10520.00	45.58	PK	V	38.21	6.39	36.89	53.29	47.27	68.20	20.93
15780.00	48.99	PK	V	37.82	8.76	39.22	56.35	50.33	74.00	23.67
15780.00	36.48	AV	V	37.82	8.76	39.22	43.84	37.82	54.00	16.18
Middle Channel: 5280 MHz										
5280.00	68.94	PK	H	33.75	3.45	0.00	106.14	100.12	N/A	N/A
5280.00	59.02	AV	H	33.75	3.45	0.00	96.22	90.2	N/A	N/A
5280.00	70.45	PK	V	33.75	3.45	0.00	107.65	101.63	N/A	N/A
5280.00	60.87	AV	V	33.75	3.45	0.00	98.07	92.05	N/A	N/A
10560.00	45.79	PK	V	38.24	6.40	36.90	53.53	47.507	68.20	20.69
15840.00	48.57	PK	V	37.76	8.74	39.27	55.80	49.78	74.00	24.22
15840.00	36.37	AV	V	37.76	8.74	39.27	43.60	37.58	54.00	16.42
High Channel: 5320 MHz										
5320.00	68.54	PK	H	33.81	3.45	0.00	105.80	99.78	N/A	N/A
5320.00	58.97	AV	H	33.81	3.45	0.00	96.23	90.21	N/A	N/A
5320.00	70.13	PK	V	33.81	3.45	0.00	107.39	101.37	N/A	N/A
5320.00	60.86	AV	V	33.81	3.45	0.00	98.12	92.1	N/A	N/A
5350.00	27.25	PK	V	33.86	3.52	0.00	64.63	58.61	74.00	15.39
5350.00	13.75	AV	V	33.86	3.52	0.00	51.13	45.11	54.00	8.89
10640.00	45.78	PK	V	38.28	6.43	36.93	53.56	47.54	68.20	20.66
15960.00	48.50	PK	V	37.64	8.70	39.36	55.48	49.46	74.00	24.54
15960.00	36.15	AV	V	37.64	8.70	39.36	43.13	37.105	54.00	16.90

802.11n ht20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5260 MHz										
5260.00	66.97	PK	H	33.72	3.49	0.00	104.18	98.16	N/A	N/A
5260.00	57.35	AV	H	33.72	3.49	0.00	94.56	88.54	N/A	N/A
5260.00	70.09	PK	V	33.72	3.49	0.00	107.30	101.28	N/A	N/A
5260.00	60.11	AV	V	33.72	3.49	0.00	97.32	91.3	N/A	N/A
5150.00	26.87	PK	V	33.54	3.56	0.00	63.97	57.95	74.00	16.05
5150.00	14.52	AV	V	33.54	3.56	0.00	51.62	45.6	54.00	8.40
10520.00	45.67	PK	V	38.21	6.39	36.89	53.38	47.36	68.20	20.84
15780.00	48.94	PK	V	37.82	8.76	39.22	56.30	50.28	74.00	23.72
15780.00	36.80	AV	V	37.82	8.76	39.22	44.16	38.14	54.00	15.86
Middle Channel: 5280 MHz										
5280.00	67.64	PK	H	33.75	3.45	0.00	104.84	98.82	N/A	N/A
5280.00	57.87	AV	H	33.75	3.45	0.00	95.07	89.05	N/A	N/A
5280.00	70.25	PK	V	33.75	3.45	0.00	107.45	101.43	N/A	N/A
5280.00	60.33	AV	V	33.75	3.45	0.00	97.53	91.51	N/A	N/A
10560.00	45.87	PK	V	38.24	6.40	36.90	53.61	47.59	68.20	20.61
15840.00	48.89	PK	V	37.76	8.74	39.27	56.12	50.1	74.00	23.90
15840.00	36.55	AV	V	37.76	8.74	39.27	43.78	37.757	54.00	16.24
High Channel: 5320 MHz										
5320.00	67.15	PK	H	33.81	3.45	0.00	104.41	98.39	N/A	N/A
5320.00	57.24	AV	H	33.81	3.45	0.00	94.50	88.48	N/A	N/A
5320.00	70.45	PK	V	33.81	3.45	0.00	107.71	101.69	N/A	N/A
5320.00	60.42	AV	V	33.81	3.45	0.00	97.68	91.66	N/A	N/A
5350.00	27.41	PK	V	33.86	3.52	0.00	64.79	58.77	74.00	15.23
5350.00	15.25	AV	V	33.86	3.52	0.00	52.63	46.61	54.00	7.39
10640.00	45.87	PK	V	38.28	6.43	36.93	53.65	47.63	68.20	20.57
15960.00	48.25	PK	V	37.64	8.70	39.36	55.23	49.214	74.00	24.79
15960.00	36.15	AV	V	37.64	8.70	39.36	43.13	37.11	54.00	16.89

802.11n ht40

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5270 MHz										
5270.00	64.51	PK	H	33.73	3.47	0.00	101.71	95.69	N/A	N/A
5270.00	56.13	AV	H	33.73	3.47	0.00	93.33	87.31	N/A	N/A
5270.00	67.62	PK	V	33.73	3.47	0.00	104.82	98.8	N/A	N/A
5270.00	59.04	AV	V	33.73	3.47	0.00	96.24	90.22	N/A	N/A
5150.00	27.62	PK	V	33.54	3.56	0.00	64.72	58.7	74.00	15.30
5150.00	13.89	AV	V	33.54	3.56	0.00	50.99	44.97	54.00	9.03
10540.00	45.35	PK	V	38.22	6.40	36.89	53.08	47.06	68.20	21.14
15810.00	48.65	PK	V	37.79	8.75	39.25	55.94	49.92	74.00	24.08
15810.00	36.54	AV	V	37.79	8.75	39.25	43.83	37.81	54.00	16.19
High Channel: 5310 MHz										
5310.00	64.22	PK	H	33.80	3.43	0.00	101.45	95.43	N/A	N/A
5310.00	55.97	AV	H	33.80	3.43	0.00	93.20	87.18	N/A	N/A
5310.00	67.21	PK	V	33.80	3.43	0.00	104.44	98.42	N/A	N/A
5310.00	58.34	AV	V	33.80	3.43	0.00	95.57	89.55	N/A	N/A
5350.00	27.02	PK	V	33.86	3.52	0.00	64.40	58.38	74.00	15.62
5350.00	13.85	AV	V	33.86	3.52	0.00	51.23	45.207	54.00	8.79
10620.00	45.58	PK	V	38.27	6.43	36.92	53.36	47.34	68.20	20.86
15930.00	48.55	PK	V	37.67	8.71	39.34	55.59	49.57	74.00	24.43
15930.00	36.40	AV	V	37.67	8.71	39.34	43.44	37.42	54.00	16.58

802.11ac vht20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5260 MHz										
5260.00	67.61	PK	H	33.72	3.49	0.00	104.82	98.8	N/A	N/A
5260.00	59.05	AV	H	33.72	3.49	0.00	96.26	90.244	N/A	N/A
5260.00	70.19	PK	V	33.72	3.49	0.00	107.40	101.38	N/A	N/A
5260.00	61.87	AV	V	33.72	3.49	0.00	99.08	93.06	N/A	N/A
5150.00	27.56	PK	V	33.54	3.56	0.00	64.66	58.64	74.00	15.36
5150.00	15.35	AV	V	33.54	3.56	0.00	52.45	46.43	54.00	7.57
10520.00	45.87	PK	V	38.21	6.39	36.89	53.58	47.56	68.20	20.64
15780.00	48.85	PK	V	37.82	8.76	39.22	56.21	50.19	74.00	23.81
15780.00	36.84	AV	V	37.82	8.76	39.22	44.20	38.18	54.00	15.82
Middle Channel: 5280 MHz										
5280.00	67.80	PK	H	33.75	3.45	0.00	105.00	98.98	N/A	N/A
5280.00	59.36	AV	H	33.75	3.45	0.00	96.56	90.54	N/A	N/A
5280.00	70.06	PK	V	33.75	3.45	0.00	107.26	101.24	N/A	N/A
5280.00	61.29	AV	V	33.75	3.45	0.00	98.49	92.47	N/A	N/A
10560.00	45.87	PK	V	38.24	6.40	36.90	53.61	47.59	68.20	20.61
15840.00	48.55	PK	V	37.76	8.74	39.27	55.78	49.76	74.00	24.24
15840.00	36.57	AV	V	37.76	8.74	39.27	43.80	37.78	54.00	16.22
High Channel: 5320 MHz										
5320.00	66.87	PK	H	33.81	3.45	0.00	104.13	98.11	N/A	N/A
5320.00	58.26	AV	H	33.81	3.45	0.00	95.52	89.5	N/A	N/A
5320.00	69.96	PK	V	33.81	3.45	0.00	107.22	101.2	N/A	N/A
5320.00	60.85	AV	V	33.81	3.45	0.00	98.11	92.09	N/A	N/A
5350.00	26.87	PK	V	33.86	3.52	0.00	64.25	58.234	74.00	15.77
5350.00	13.85	AV	V	33.86	3.52	0.00	51.23	45.21	54.00	8.79
10640.00	45.45	PK	V	38.28	6.43	36.93	53.23	47.21	68.20	20.99
15960.00	48.45	PK	V	37.64	8.70	39.36	55.43	49.41	74.00	24.59
15960.00	36.15	AV	V	37.64	8.70	39.36	43.13	37.11	54.00	16.89

802.11ac vht40

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5270 MHz										
5270.00	64.59	PK	H	33.73	3.47	0.00	101.79	95.77	N/A	N/A
5270.00	55.83	AV	H	33.73	3.47	0.00	93.03	87.01	N/A	N/A
5270.00	67.57	PK	V	33.73	3.47	0.00	104.77	98.75	N/A	N/A
5270.00	57.77	AV	V	33.73	3.47	0.00	94.97	88.95	N/A	N/A
5150.00	27.26	PK	V	33.54	3.56	0.00	64.36	58.34	74.00	15.66
5150.00	15.70	AV	V	33.54	3.56	0.00	52.80	46.78	54.00	7.22
10540.00	45.87	PK	V	38.22	6.40	36.89	53.60	47.58	68.20	20.62
15810.00	48.55	PK	V	37.79	8.75	39.25	55.84	49.824	74.00	24.18
15810.00	36.25	AV	V	37.79	8.75	39.25	43.54	37.52	54.00	16.48
High Channel: 5310 MHz										
5310.00	64.32	PK	H	33.80	3.43	0.00	101.55	95.53	N/A	N/A
5310.00	55.73	AV	H	33.80	3.43	0.00	92.96	86.94	N/A	N/A
5310.00	67.12	PK	V	33.80	3.43	0.00	104.35	98.33	N/A	N/A
5310.00	58.94	AV	V	33.80	3.43	0.00	96.17	90.15	N/A	N/A
5350.00	26.58	PK	V	33.86	3.52	0.00	63.96	57.938	74.00	16.06
5350.00	13.82	AV	V	33.86	3.52	0.00	51.20	45.18	54.00	8.82
10620.00	45.58	PK	V	38.27	6.43	36.92	53.36	47.34	68.20	20.86
15930.00	48.48	PK	V	37.67	8.71	39.34	55.52	49.504	74.00	24.50
15930.00	36.16	AV	V	37.67	8.71	39.34	43.20	37.18	54.00	16.82

802.11ac vht80

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5290 MHz										
5290.00	63.28	PK	H	33.76	3.43	0.00	100.47	94.45	N/A	N/A
5290.00	59.00	AV	H	33.76	3.43	0.00	96.19	90.17	N/A	N/A
5290.00	65.74	PK	V	33.76	3.43	0.00	102.93	96.91	N/A	N/A
5290.00	61.26	AV	V	33.76	3.43	0.00	98.45	92.43	N/A	N/A
5150.00	27.62	PK	V	33.54	3.56	0.00	64.72	58.7	74.00	15.30
5150.00	14.88	AV	V	33.54	3.56	0.00	51.98	45.96	54.00	8.04
5350.00	27.46	PK	V	33.86	3.52	0.00	64.84	58.82	74.00	15.18
5350.00	15.26	AV	V	33.86	3.52	0.00	52.64	46.62	54.00	7.38
10580.00	45.28	PK	V	38.25	6.41	36.91	53.03	47.01	68.20	21.19
15870.00	49.46	PK	V	37.73	8.73	39.29	56.63	50.61	74.00	23.39
15870.00	37.26	AV	V	37.73	8.73	39.29	44.43	38.41	54.00	15.59

5470-5725MHz
802.11a

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5500 MHz										
5500.00	69.70	PK	H	34.10	3.54	0.00	107.34	101.32	N/A	N/A
5500.00	58.32	AV	H	34.10	3.54	0.00	95.96	89.94	N/A	N/A
5500.00	73.04	PK	V	34.10	3.54	0.00	110.68	104.66	N/A	N/A
5500.00	62.51	AV	V	34.10	3.54	0.00	100.15	94.13	N/A	N/A
5470.00	31.66	PK	V	34.05	3.56	0.00	69.27	63.25	74.00	10.75
5470.00	17.03	AV	V	34.05	3.56	0.00	54.64	48.62	54.00	5.38
11000.00	45.74	PK	V	38.50	6.57	37.06	53.75	47.73	74.00	26.27
11000.00	33.25	AV	V	38.50	6.57	37.06	41.26	35.24	54.00	18.76
16500.00	47.32	PK	V	38.20	8.63	39.30	54.85	48.83	68.20	19.37
Middle Channel: 5580 MHz										
5580.00	70.03	PK	H	34.13	3.56	0.00	107.72	101.7	N/A	N/A
5580.00	59.78	AV	H	34.13	3.56	0.00	97.47	91.45	N/A	N/A
5580.00	73.31	PK	V	34.13	3.56	0.00	111.00	104.98	N/A	N/A
5580.00	62.69	AV	V	34.13	3.56	0.00	100.38	94.36	N/A	N/A
11160.00	45.36	PK	V	38.66	6.58	37.16	53.44	47.42	74.00	26.58
11160.00	33.25	AV	V	38.66	6.58	37.16	41.33	35.31	54.00	18.69
16740.00	47.36	PK	V	39.16	8.67	39.05	56.14	50.12	68.20	18.08
High Channel: 5700 MHz										
5700.00	69.32	PK	H	34.18	3.68	0.00	107.18	101.16	N/A	N/A
5700.00	58.97	AV	H	34.18	3.68	0.00	96.83	90.81	N/A	N/A
5700.00	72.88	PK	V	34.18	3.68	0.00	110.74	104.72	N/A	N/A
5700.00	61.44	AV	V	34.18	3.68	0.00	99.30	93.28	N/A	N/A
5725.00	30.97	PK	V	34.19	3.69	0.00	68.85	62.83	74.00	11.17
5725.00	17.16	AV	V	34.19	3.69	0.00	55.04	49.02	54.00	4.98
11400.00	45.75	PK	V	38.90	6.59	37.30	53.94	47.92	74.00	26.08
11400.00	33.04	AV	V	38.90	6.59	37.30	41.23	35.21	54.00	18.79
17100.00	47.35	PK	V	40.78	8.75	38.70	58.18	52.16	68.20	16.04

802.11n ht20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5500 MHz										
5500.00	68.97	PK	H	34.10	3.54	0.00	106.61	100.59	N/A	N/A
5500.00	58.10	AV	H	34.10	3.54	0.00	95.74	89.72	N/A	N/A
5500.00	72.84	PK	V	34.10	3.54	0.00	110.48	104.46	N/A	N/A
5500.00	61.55	AV	V	34.10	3.54	0.00	99.19	93.17	N/A	N/A
5470.00	31.25	PK	V	34.05	3.56	0.00	68.86	62.84	74.00	11.16
5470.00	17.14	AV	V	34.05	3.56	0.00	54.75	48.73	54.00	5.27
11000.00	45.25	PK	V	38.50	6.57	37.06	53.26	47.24	74.00	26.76
11000.00	32.67	AV	V	38.50	6.57	37.06	40.68	34.66	54.00	19.34
16500.00	46.66	PK	V	38.20	8.63	39.30	54.19	48.17	68.20	20.03
Middle Channel: 5580 MHz										
5580.00	69.14	PK	H	34.13	3.56	0.00	106.83	100.81	N/A	N/A
5580.00	58.47	AV	H	34.13	3.56	0.00	96.16	90.14	N/A	N/A
5580.00	72.56	PK	V	34.13	3.56	0.00	110.25	104.23	N/A	N/A
5580.00	61.36	AV	V	34.13	3.56	0.00	99.05	93.03	N/A	N/A
11160.00	45.69	PK	V	38.66	6.58	37.16	53.77	47.75	74.00	26.25
11160.00	33.45	AV	V	38.66	6.58	37.16	41.53	35.51	54.00	18.49
16740.00	46.59	PK	V	39.16	8.67	39.05	55.37	49.35	68.20	18.85
High Channel: 5700 MHz										
5700.00	69.14	PK	H	34.18	3.68	0.00	107.00	100.98	N/A	N/A
5700.00	58.06	AV	H	34.18	3.68	0.00	95.92	89.9	N/A	N/A
5700.00	72.88	PK	V	34.18	3.68	0.00	110.74	104.72	N/A	N/A
5700.00	61.11	AV	V	34.18	3.68	0.00	98.97	92.95	N/A	N/A
5725.00	30.90	PK	V	34.19	3.69	0.00	68.78	62.76	74.00	11.24
5725.00	17.24	PK	V	34.19	3.69	0.00	55.12	49.1	74.00	24.90
11400.00	45.36	PK	V	38.90	6.59	37.30	53.55	47.53	74.00	26.47
11400.00	32.19	AV	V	38.90	6.59	37.30	40.38	34.36	54.00	19.64
17100.00	46.58	PK	V	40.78	8.75	38.70	57.41	51.39	68.20	16.81

802.11n ht40

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5510 MHz										
5510.00	66.87	PK	H	34.10	3.54	0.00	104.51	98.49	N/A	N/A
5510.00	54.36	AV	H	34.10	3.54	0.00	92.00	85.98	N/A	N/A
5510.00	69.52	PK	V	34.10	3.54	0.00	107.16	101.14	N/A	N/A
5510.00	57.72	AV	V	34.10	3.54	0.00	95.36	89.34	N/A	N/A
5470.00	31.90	PK	V	34.05	3.56	0.00	69.51	63.49	74.00	10.51
5470.00	18.30	AV	V	34.05	3.56	0.00	55.91	49.89	54.00	4.11
11020.00	46.25	PK	V	38.52	6.57	37.07	54.27	48.25	74.00	25.75
11020.00	33.61	AV	V	38.52	6.57	37.07	41.63	35.61	54.00	18.39
16530.00	46.75	PK	V	38.32	8.64	39.27	54.44	48.42	68.20	19.78
Middle Channel: 5550 MHz										
5550.00	65.12	PK	H	34.12	3.56	0.00	102.80	96.78	N/A	N/A
5550.00	53.99	AV	H	34.12	3.56	0.00	91.67	85.65	N/A	N/A
5550.00	68.75	PK	V	34.12	3.56	0.00	106.43	100.41	N/A	N/A
5550.00	56.74	AV	V	34.12	3.56	0.00	94.42	88.4	N/A	N/A
11100.00	46.33	PK	V	38.60	6.57	37.12	54.38	48.36	74.00	25.64
11100.00	33.58	AV	V	38.60	6.57	37.12	41.63	35.61	54.00	18.39
16650.00	46.78	PK	V	38.80	8.66	39.14	55.10	49.08	68.20	19.12
High Channel: 5670 MHz										
5670.00	65.74	PK	H	34.17	3.65	0.00	103.56	97.54	N/A	N/A
5670.00	55.98	AV	H	34.17	3.65	0.00	93.80	87.78	N/A	N/A
5670.00	68.86	PK	V	34.17	3.65	0.00	106.68	100.66	N/A	N/A
5670.00	56.90	AV	V	34.17	3.65	0.00	94.72	88.7	N/A	N/A
5725.00	30.52	PK	V	34.19	3.69	0.00	68.40	62.38	74.00	11.62
5725.00	17.84	AV	V	34.19	3.69	0.00	55.72	49.7	54.00	4.30
11340.00	46.18	PK	V	38.84	6.58	37.26	54.34	48.32	74.00	25.68
11340.00	33.01	AV	V	38.84	6.58	37.26	41.17	35.15	54.00	18.85
17010.00	45.87	PK	V	40.26	8.72	38.76	56.09	50.07	68.20	18.13

802.11ac vht20

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5500 MHz										
5500.00	68.97	PK	H	34.10	3.54	0.00	106.61	100.59	N/A	N/A
5500.00	57.36	AV	H	34.10	3.54	0.00	95.00	88.98	N/A	N/A
5500.00	72.12	PK	V	34.10	3.54	0.00	109.76	103.74	N/A	N/A
5500.00	61.24	AV	V	34.10	3.54	0.00	98.88	92.86	N/A	N/A
5470.00	30.25	PK	V	34.05	3.56	0.00	67.86	61.84	74.00	12.16
5470.00	17.56	AV	V	34.05	3.56	0.00	55.17	49.15	54.00	4.85
11000.00	45.87	PK	V	38.50	6.57	37.06	53.88	47.86	74.00	26.14
11000.00	33.05	AV	V	38.50	6.57	37.06	41.06	35.04	54.00	18.96
16500.00	46.98	PK	V	38.20	8.63	39.30	54.51	48.49	68.20	19.71
Middle Channel: 5580 MHz										
5580.00	68.21	PK	H	34.13	3.56	0.00	105.90	99.88	N/A	N/A
5580.00	57.02	AV	H	34.13	3.56	0.00	94.71	88.69	N/A	N/A
5580.00	71.88	PK	V	34.13	3.56	0.00	109.57	103.55	N/A	N/A
5580.00	60.23	AV	V	34.13	3.56	0.00	97.92	91.9	N/A	N/A
11160.00	46.25	PK	V	38.66	6.58	37.16	54.33	48.31	74.00	25.69
11160.00	33.17	AV	V	38.66	6.58	37.16	41.25	35.23	54.00	18.77
16740.00	46.84	PK	V	39.16	8.67	39.05	55.62	49.6	68.20	18.60
High Channel: 5700 MHz										
5700.00	69.21	PK	H	34.18	3.68	0.00	107.07	101.05	N/A	N/A
5700.00	58.14	AV	H	34.18	3.68	0.00	96.00	89.98	N/A	N/A
5700.00	72.36	PK	V	34.18	3.68	0.00	110.22	104.2	N/A	N/A
5700.00	61.54	AV	V	34.18	3.68	0.00	99.40	93.38	N/A	N/A
5725.00	30.67	PK	V	34.19	3.69	0.00	68.55	62.53	74.00	11.47
5725.00	17.03	AV	V	34.19	3.69	0.00	54.91	48.89	54.00	5.11
11400.00	45.66	PK	V	38.90	6.59	37.30	53.85	47.83	74.00	26.17
11400.00	32.74	AV	V	38.90	6.59	37.30	40.93	34.91	54.00	19.09
17100.00	47.21	PK	V	40.78	8.75	38.70	58.04	52.02	68.20	16.18

802.11ac vht40

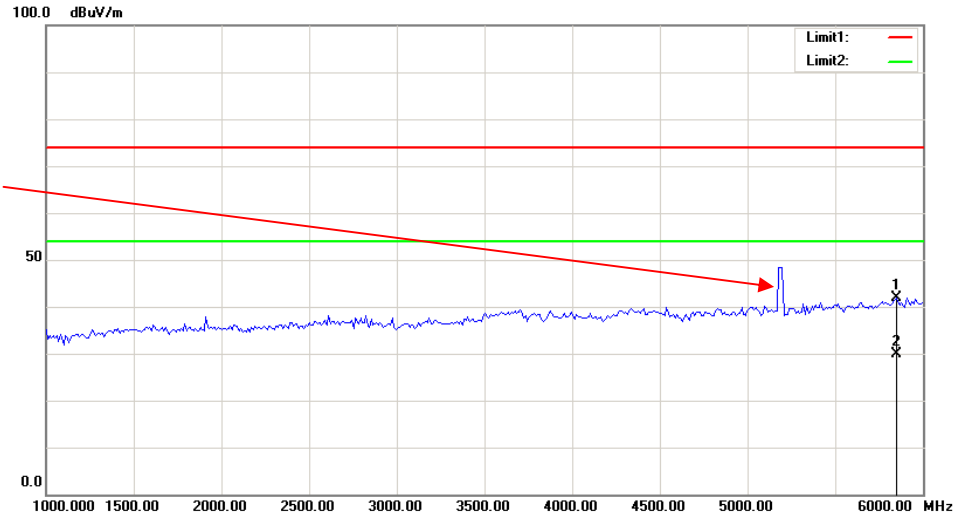
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBμV/m)	Extrapolation result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5510 MHz										
5510.00	65.22	PK	H	34.10	3.54	0.00	102.86	96.84	N/A	N/A
5510.00	54.67	AV	H	34.10	3.54	0.00	92.31	86.29	N/A	N/A
5510.00	68.34	PK	V	34.10	3.54	0.00	105.98	99.96	N/A	N/A
5510.00	57.41	AV	V	34.10	3.54	0.00	95.05	89.03	N/A	N/A
5470.00	30.21	PK	V	34.05	3.56	0.00	67.82	61.8	74.00	12.20
5470.00	17.25	AV	V	34.05	3.56	0.00	54.86	48.84	54.00	5.16
11020.00	45.78	PK	V	38.52	6.57	37.07	53.80	47.78	74.00	26.22
11020.00	33.65	AV	V	38.52	6.57	37.07	41.67	35.65	54.00	18.35
16530.00	46.87	PK	V	38.32	8.64	39.27	54.56	48.54	68.20	19.66
Middle Channel: 5550 MHz										
5550.00	64.58	PK	H	34.12	3.56	0.00	102.26	96.24	N/A	N/A
5550.00	53.21	AV	H	34.12	3.56	0.00	90.89	84.87	N/A	N/A
5550.00	68.45	PK	V	34.12	3.56	0.00	106.13	100.11	N/A	N/A
5550.00	57.02	AV	V	34.12	3.56	0.00	94.70	88.68	N/A	N/A
11100.00	45.77	PK	V	38.60	6.57	37.12	53.82	47.8	74.00	26.20
11100.00	33.21	AV	V	38.60	6.57	37.12	41.26	35.24	54.00	18.76
16650.00	46.80	PK	V	38.80	8.66	39.14	55.12	49.1	68.20	19.10
High Channel: 5670 MHz										
5670.00	64.87	PK	H	34.17	3.65	0.00	102.69	96.67	N/A	N/A
5670.00	53.69	AV	H	34.17	3.65	0.00	91.51	85.49	N/A	N/A
5670.00	68.03	PK	V	34.17	3.65	0.00	105.85	99.83	N/A	N/A
5670.00	57.22	AV	V	34.17	3.65	0.00	95.04	89.02	N/A	N/A
5725.00	30.31	PK	V	34.19	3.69	0.00	68.19	62.17	74.00	11.83
5725.00	17.13	AV	V	34.19	3.69	0.00	55.01	48.99	54.00	5.01
11340.00	45.55	PK	V	38.84	6.58	37.26	53.71	47.69	74.00	26.31
11340.00	32.41	AV	V	38.84	6.58	37.26	40.57	34.55	54.00	19.45
17010.00	46.97	PK	V	40.26	8.72	38.76	57.19	51.17	68.20	17.03

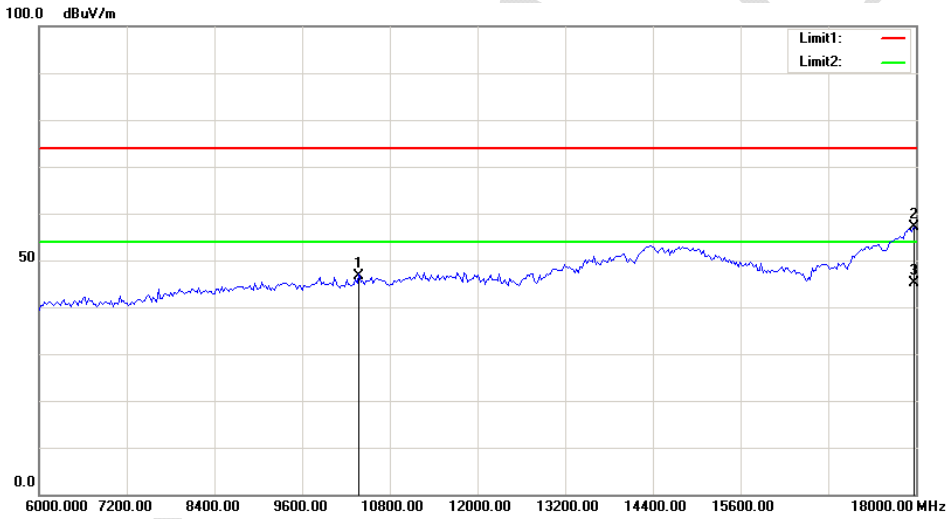
802.11ac vht80

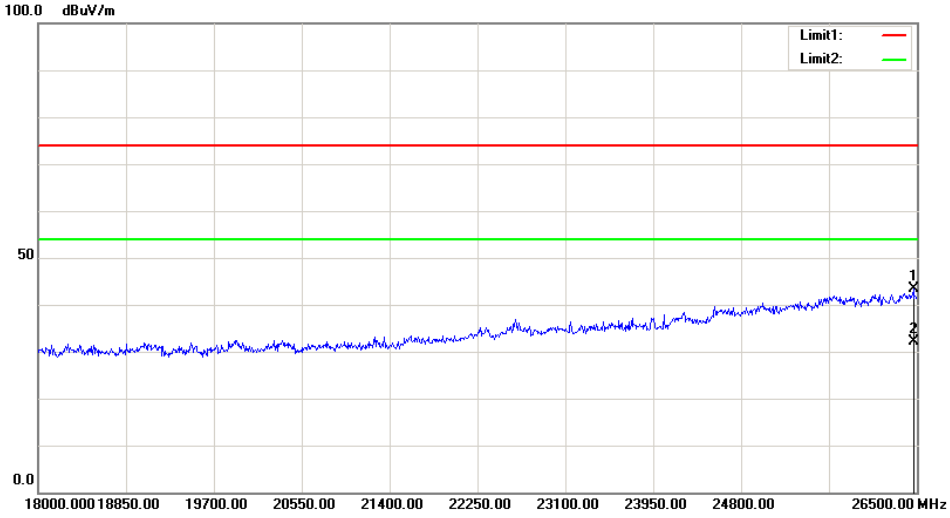
Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Extrapolation result (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Detector	Polar (H/V)	Factor (dB/m)						
Low Channel: 5530 MHz										
5530.00	62.03	PK	H	34.11	3.55	0.00	99.69	93.67	N/A	N/A
5530.00	56.32	AV	H	34.11	3.55	0.00	93.98	87.96	N/A	N/A
5530.00	65.16	PK	V	34.11	3.55	0.00	102.82	96.8	N/A	N/A
5530.00	59.01	AV	V	34.11	3.55	0.00	96.67	90.65	N/A	N/A
5470.00	31.65	PK	V	34.05	3.56	0.00	69.26	63.24	74.00	10.76
5470.00	18.45	AV	V	34.05	3.56	0.00	56.06	50.04	54.00	3.96
11060.00	45.66	PK	V	38.56	6.57	37.10	53.69	47.67	74.00	26.33
11060.00	33.74	AV	V	38.56	6.57	37.10	41.77	35.75	54.00	18.25
16590.00	46.83	PK	V	38.56	8.65	39.20	54.84	48.82	68.20	19.38
High Channel: 5610 MHz										
5610.00	61.25	PK	H	34.14	3.58	0.00	98.97	92.95	N/A	N/A
5610.00	55.02	AV	H	34.14	3.58	0.00	92.74	86.72	N/A	N/A
5610.00	64.58	PK	V	34.14	3.58	0.00	102.30	96.28	N/A	N/A
5610.00	58.15	AV	V	34.14	3.58	0.00	95.87	89.85	N/A	N/A
5725.00	30.24	PK	V	34.19	3.69	0.00	68.12	62.1	74.00	11.90
5725.00	17.21	AV	V	34.19	3.69	0.00	55.09	49.07	54.00	4.93
11220.00	45.87	PK	V	38.72	6.58	37.19	53.98	47.96	74.00	26.04
11220.00	33.08	AV	V	38.72	6.58	37.19	41.19	35.17	54.00	18.83
16830.00	46.52	PK	V	39.52	8.69	38.95	55.78	49.76	68.20	18.44

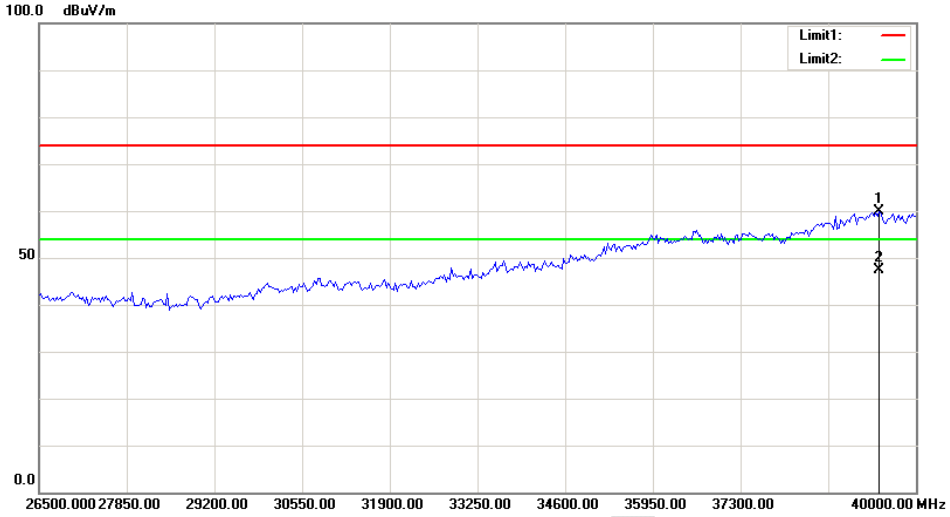
Test Plots(For worst mode 802.11ac 5210MHz)
Horizontal

Fundamental Test with Band Rejection Filter



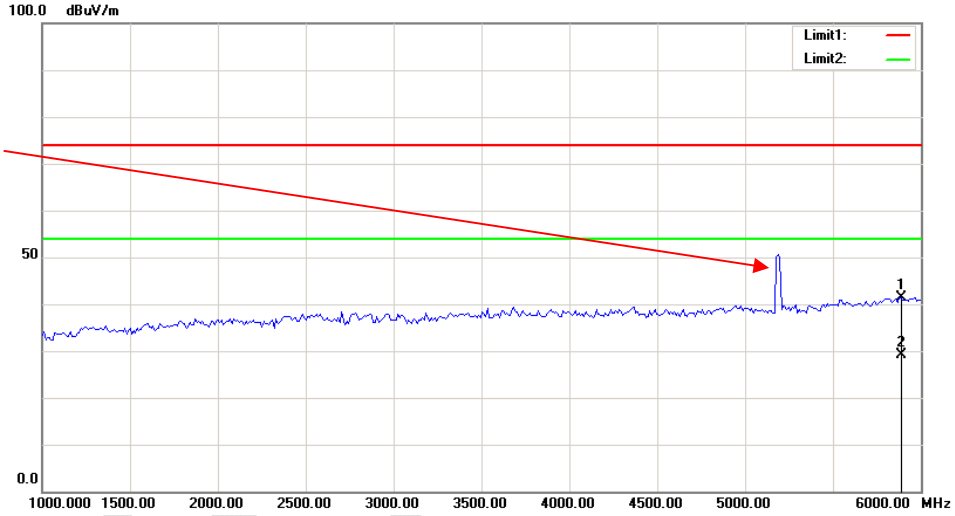


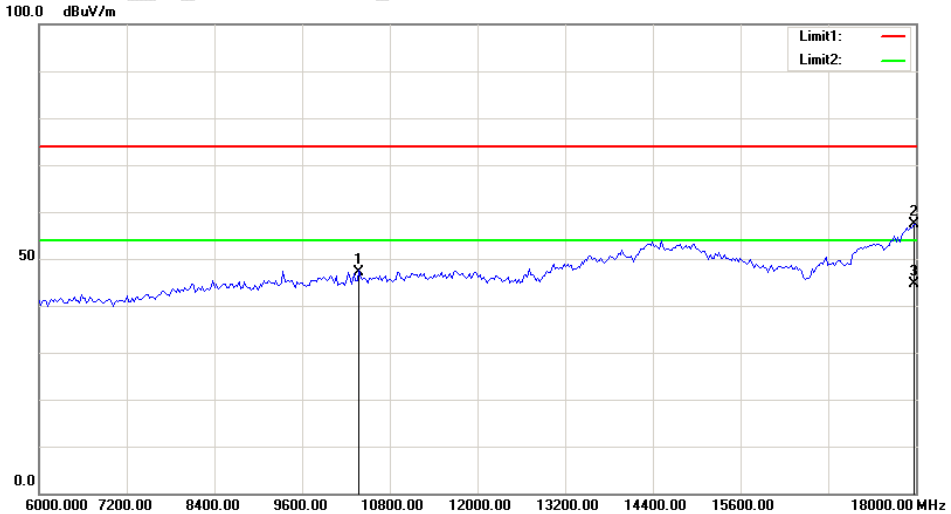


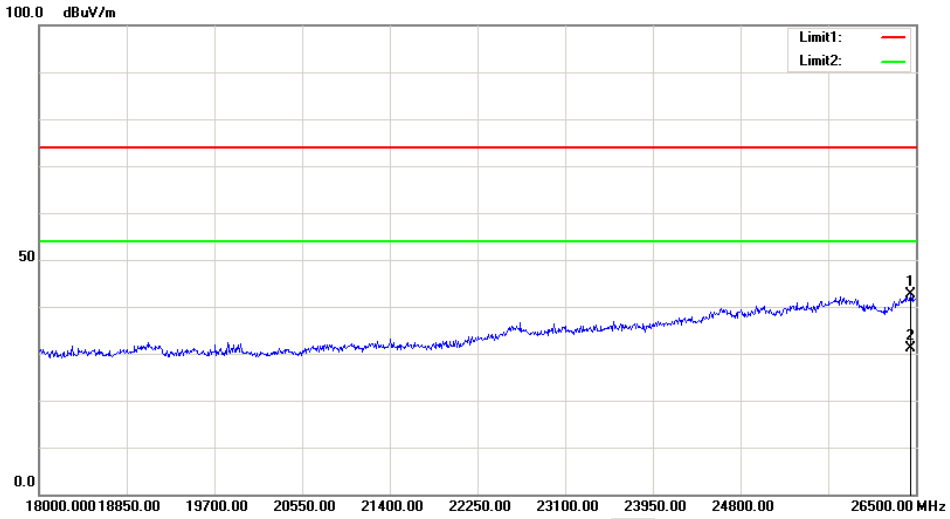


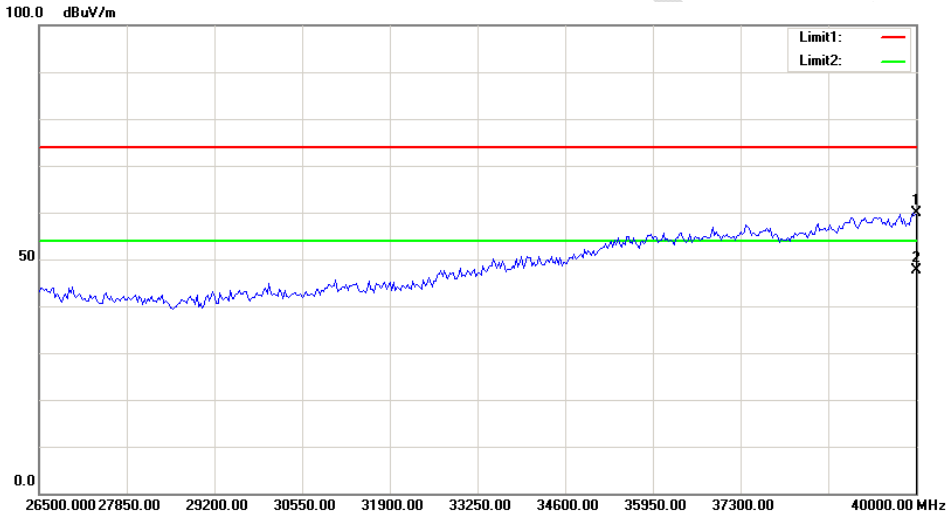
Vertical

Fundamental Test with Band Rejection Filter






100.0 dBuV/m
Limit1:
Limit2:
50
0.0
1
2
18000.000 18850.00 19700.00 20550.00 21400.00 22250.00 23100.00 23950.00 24800.00 26500.00 MHz


100.0 dBuV/m
Limit1:
Limit2:
50
0.0
1
2
26500.000 27850.00 29200.00 30550.00 31900.00 33250.00 34600.00 35950.00 37300.00 40000.00 MHz

Simultaneous Transmitting(802.11ac mode 5210 MHz+PCS 1900 Middle channel was the worst):

Frequency (MHz)	Receiver		Rx Antenna		Cable loss (dB)	Amplifier Gain (dB)	Corrected Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	Remark	Polar (H/V)	Factor (dB/m)					
368.98	38.98	QP	H	14.70	2.42	25.91	30.19	46.00	15.81
767.99	37.51	QP	H	21.06	3.78	26.75	35.60	46.00	10.40
224.56	38.61	QP	V	10.83	1.83	25.49	25.78	46.00	20.22
446.13	40.22	QP	V	16.62	2.70	26.63	32.91	46.00	13.09
10420	43.63	PK	V	38.18	6.33	36.86	51.28	68.20	16.92
15630	50.21	AV	V	37.97	8.82	39.11	57.89	74.00	16.11
15630	39.87	PK	V	37.97	8.82	39.11	47.55	54.00	6.45
3760	58.11	PK	V	31.87	2.52	37.01	55.49	82.20	26.71
3760	56.33	PK	H	31.87	2.52	37.01	53.71	82.20	28.49

Note: 3760 MHz is the harmonics of PCS 1900 Middle channel, it is limited by -13dBm(=82.2 dBµV/m)

***** END OF REPORT *****