TESTING LABORATORY
CERTIFICATE#4323.01

FCC PART 15.407

TEST REPORT

For

Spectramesh, Inc.

400 N. St Paul Street Suite 505 Dallas, Texas, 75201 United States

FCC ID: 2AQA3AMR65N-A

Report Type: Original Report	**Product Type:** Ammbr router	
Test Engineer:	Stone Zhang	Stone Zhang
Report Number:	RSHA200217005-00B	
Report Date:	2020-04-05	
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Test Laboratory:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road,Kunshan,Jiangsu province,China Tel: +86-0512-86175000 Fax: +86-0512-88934268 www.baclcorp.com.cn	

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant	Spectramesh, Inc.
Tested Model	AMR65N-A
Product Type	Ammbr router
Power Supply	DC 24V
RF Function	5G Wi-Fi
Operating Band/Frequency:	Band 1:5150~5250MHz, Band 4: 5725~5850MHz
Channel Number:	Band 1: 7, Band 4: 8
Channel Separation:	802.11a/802.11ac20/n20: 20MHz; 802.11n40/802.11ac40:40 MHz, 802.11ac80: 80 MHz
Modulation Type	DSSS,OFDM
Antenna Type:	Directional Antenna
Maximum Antenna Gain:	15.0 dBi

**All measurement and test data in this report was gathered from production sample serial number: 20200217005. (Assigned by the BACL. The EUT supplied by the applicant was received on 2020-02-17)*

Objective

This type approval report is prepared on behalf of *Spectramesh, Inc.* in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Related Submittal(s)/Grant(s)

FCC Part 15.247 DTS submissions with FCC ID: 2AQA3AMR65N-A.

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.

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

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19 dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0℃
Humidity		6%

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01), the FCC designation No. CN1185 under the FCC KDB 974614 D01 and CAB identifier CN0004 under the ISED requirement. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

In **5150~5250 MHz** band, test channel list is as below,

802.11a/802.11ac20/n20 mode Channel 36, 40, 48 were tested.
802.11n40/802.11ac40 mode Channel 38, 46 were tested.
802.11ac80 mode Channel 42 was tested

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

For **5725~5850** MHz band,

802.11a/802.11ac20/n20 mode Channel 149, 157, 165 were tested.
802.11n40/802.11ac40 mode Channel 151, 159 were tested.
802.11ac80 mode Channel 155 was tested.

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	159	5795
151	5755	161	5805
153	5765	165	5825
155	5775	/	/
157	5785	/	/

Note:

1. 802.11a supports SISO, 802.11ac20/n20 and 802.11n40/802.11ac40/80 support SISO and MIMO mode. For Radiated Emission, according to pretest, the worst case is 802.11ac20/n20 and 802.11n40/802.11ac40/80 MIMO mode. 802.11n20/40 MIMO mode test data were recorded in the report.

2. There are two 5G Wi-Fi Chips(SKY85728 and DR882), and each chip has two chains. The EUT cannot support 4*4 MIMO, Only support two 2*2 MIMO.

For Conducted Test:

802.11a: each transmit Chains were tested
802.11ac: each transmit Chains were tested
802.11n: each transmit Chains were tested

For Radiated Test:

For 802.11a: SISO for each transmit Chain
For 802.11ac: MIMO for two transmit Chains
For 802.11n: MIMO for two transmit Chains

EUT Exercise Software

RF test tool: QRCT

The worst case was performed under:

5150MHz-5250MHz Band:

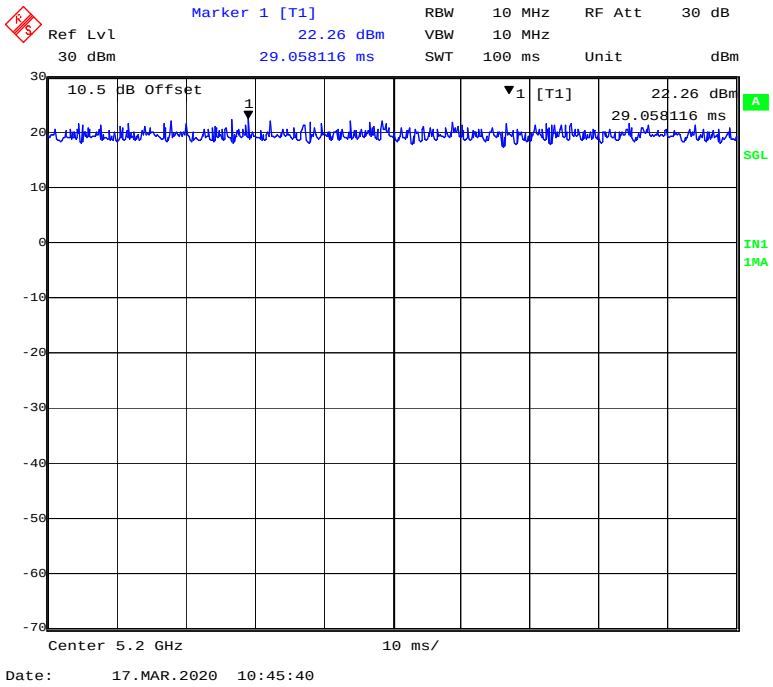
Mode	Data rate	Channel	Power Setting			
			Chain 0	Chain 1	Chain 2	Chain 3
802.11a	6 Mbps	5180	17	17	17	17
		5200				
		5240				
802.11ac20	MCS0	5180	14	14	14	14
		5200				
		5240				
802.11n-HT20	MCS0	5180	14	14	14	14
		5200				
		5240				
802.11ac40	MCS0	5190	12	12	12	12
		5230				
802.11n-HT40	MCS0	5190	14	14	14	14
		5230				
802.11ac80	MCS0	5210	13	13	13	13

5725MHz-5850MHz Band:

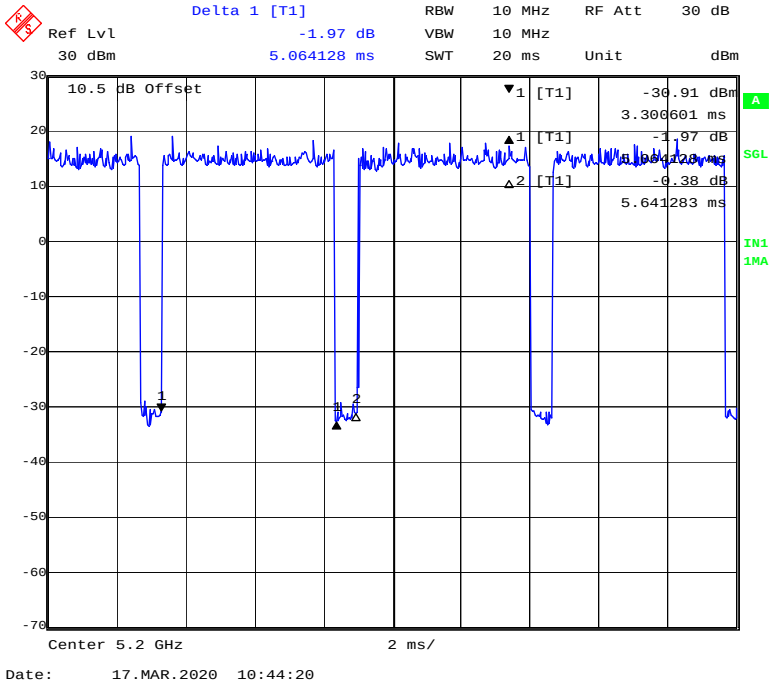
Mode	Data rate	Channel	Power Setting			
			Chain 0	Chain 1	Chain 2	Chain 3
802.11a	6 Mbps	5745	18	18	18	18
		5785				
		5825				
802.11ac20	MCS0	5745	15	15	15	15
		5785				
		5825				
802.11n-HT20	MCS0	5745	15	15	15	15
		5785				
		5825				
802.11ac40	MCS0	5755	16	16	16	16
		5795				
802.11n-HT40	MCS0	5755	15	15	15	15
		5795				
802.11ac80	MCS0	5775	15	15	15	15

Duty Cycle
5150MHz-5250MHz Band-Chain0:

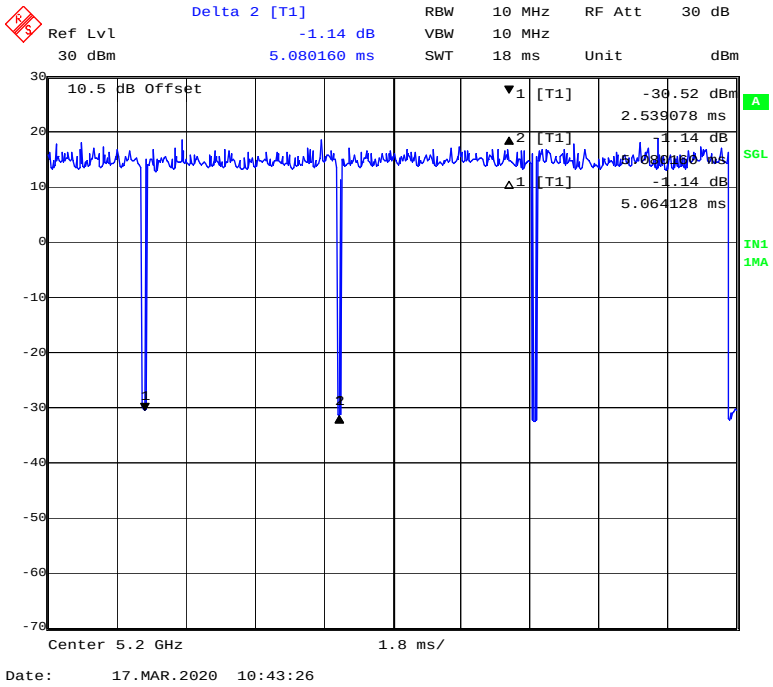
802.11a mode



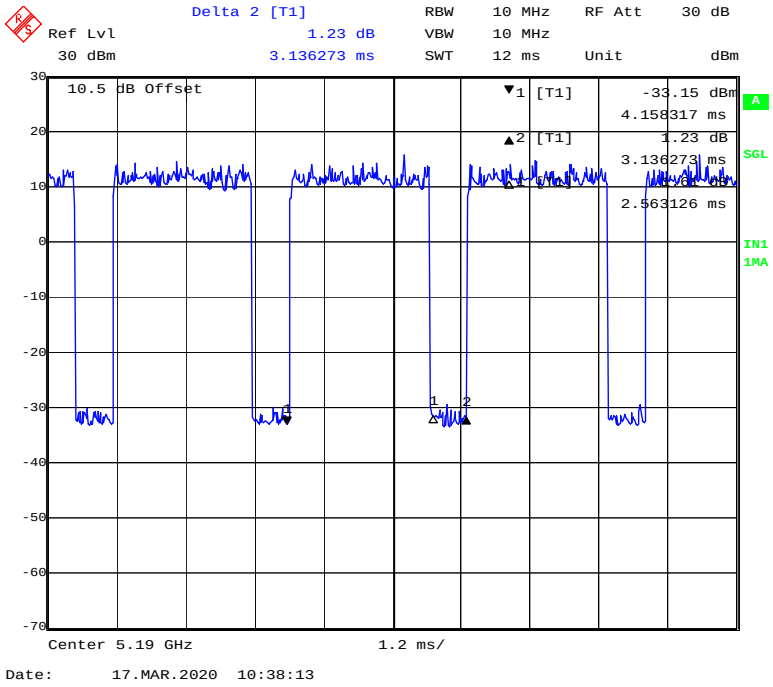
802.11ac20 mode



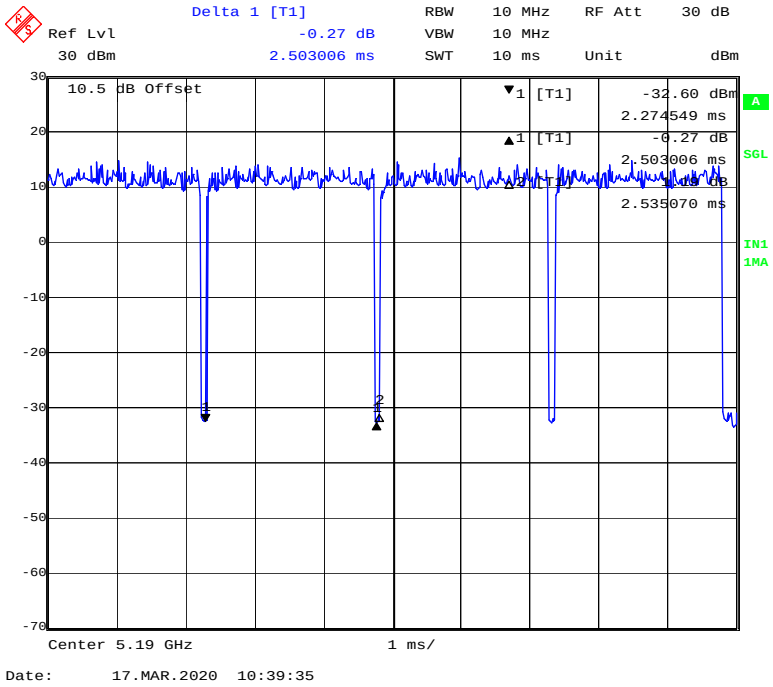
802.11n-HT20 mode



802.11 ac40 mode



802.11n-HT40 mode



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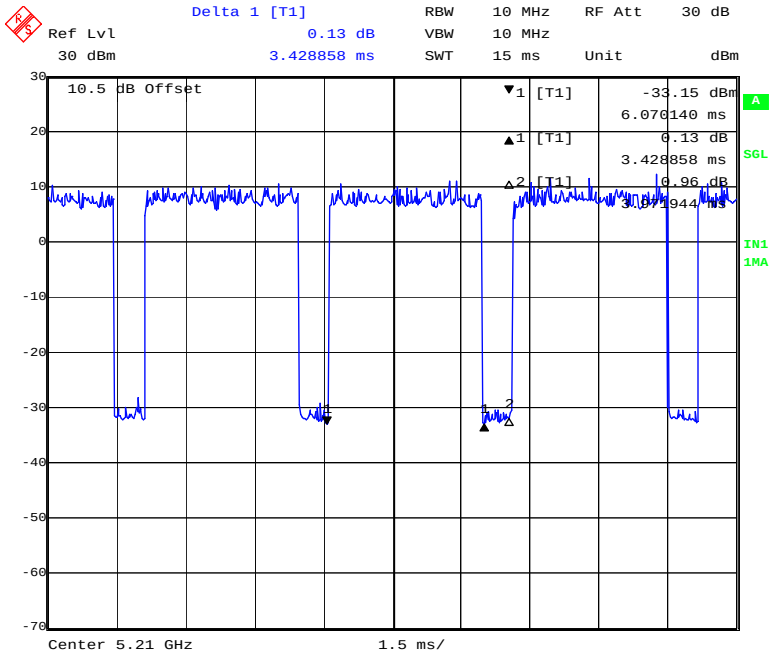
802.11 ac80 mode



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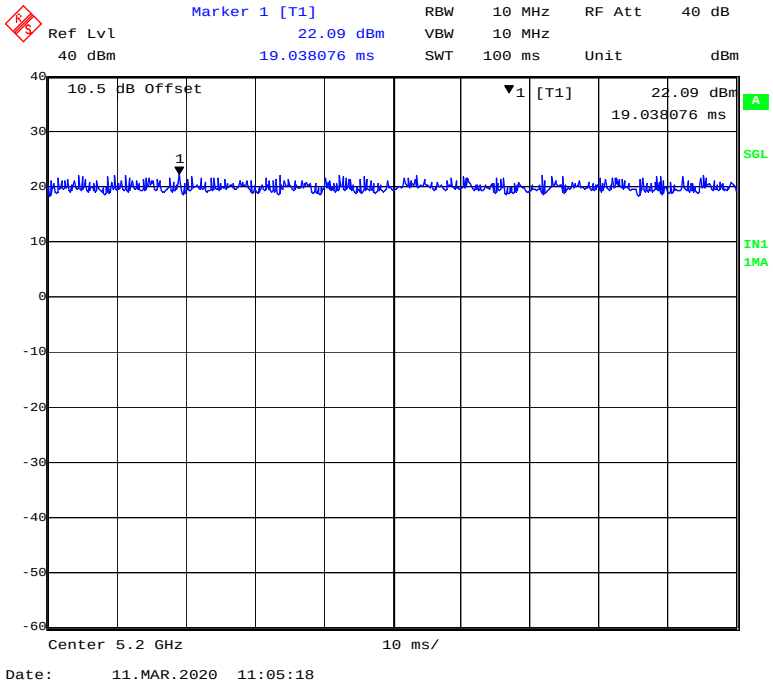
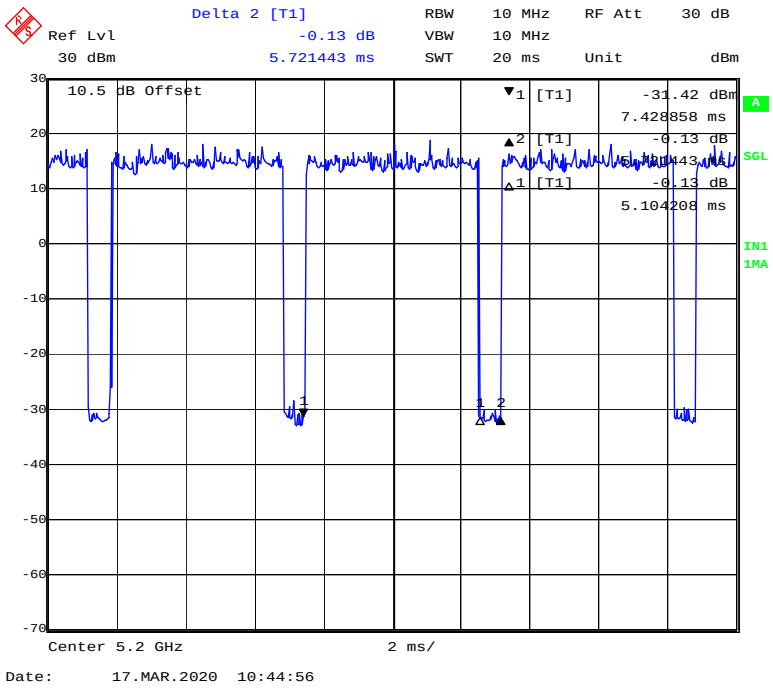
5150MHz-5250MHz Band-Chain1:

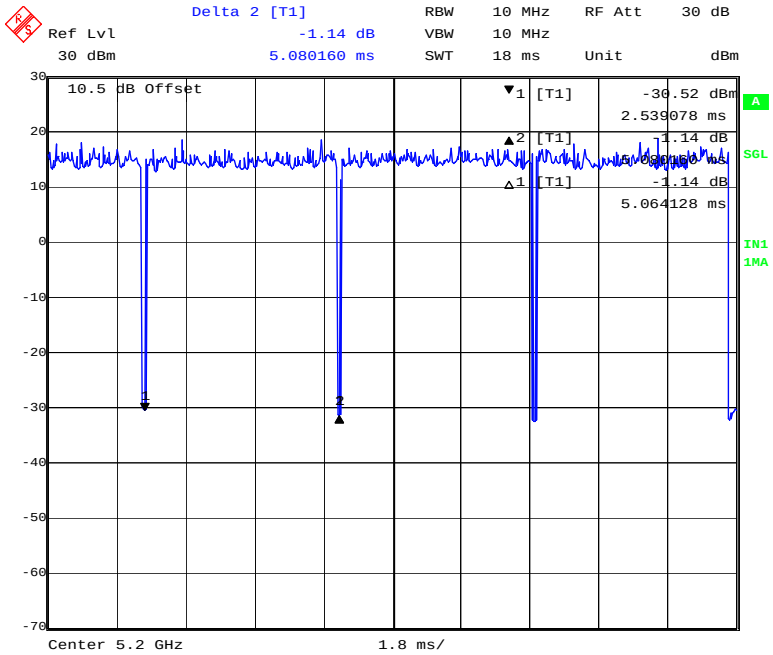
802.11a mode



802.11ac20 mode



802.11n-HT20 mode



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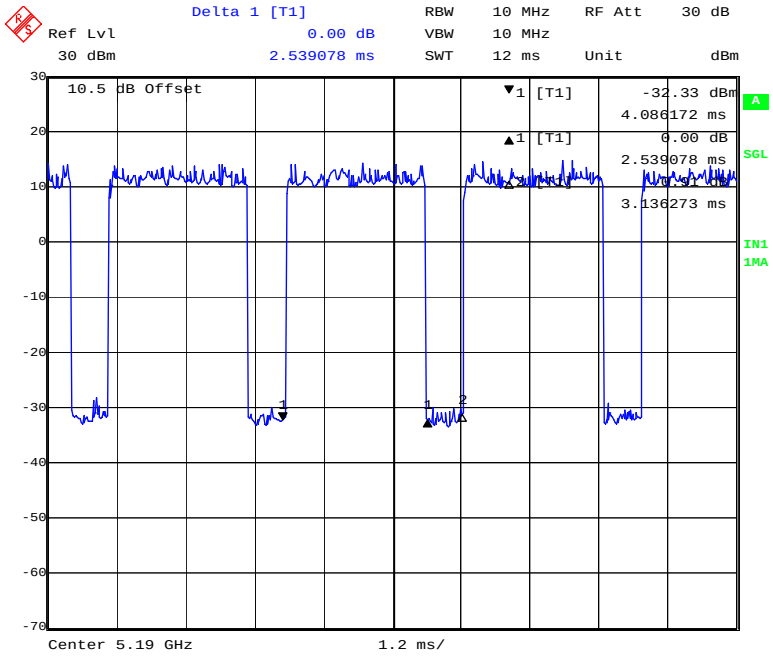
802.11 ac40 mode



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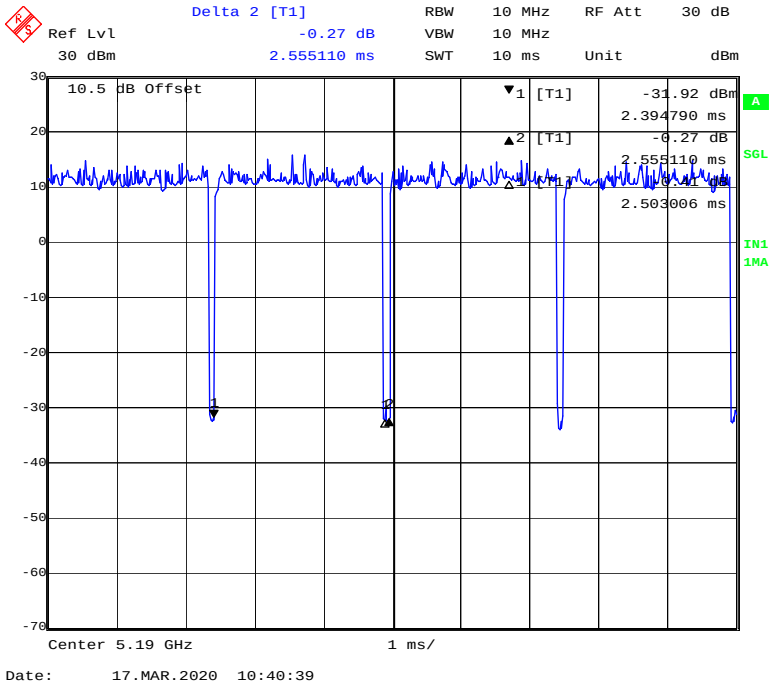
802.11n-HT40 mode



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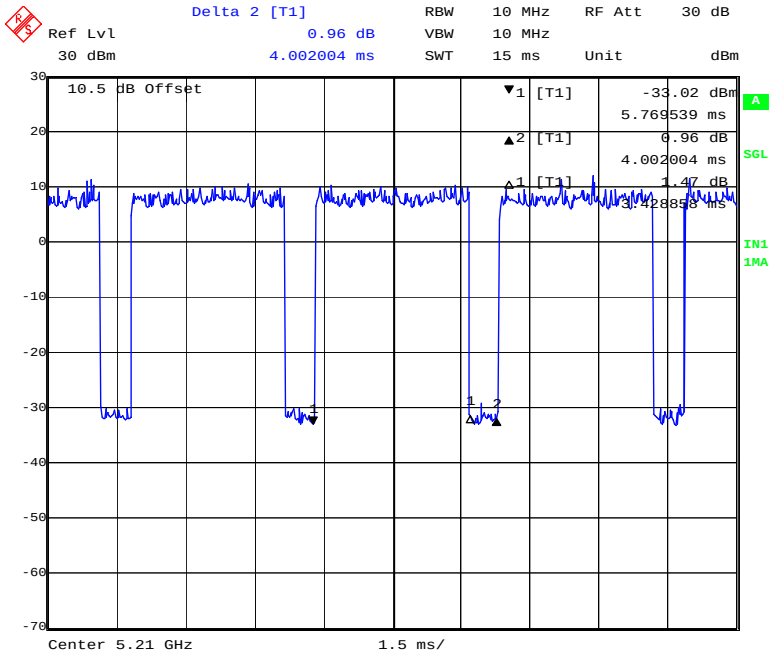
802.11 ac80 mode



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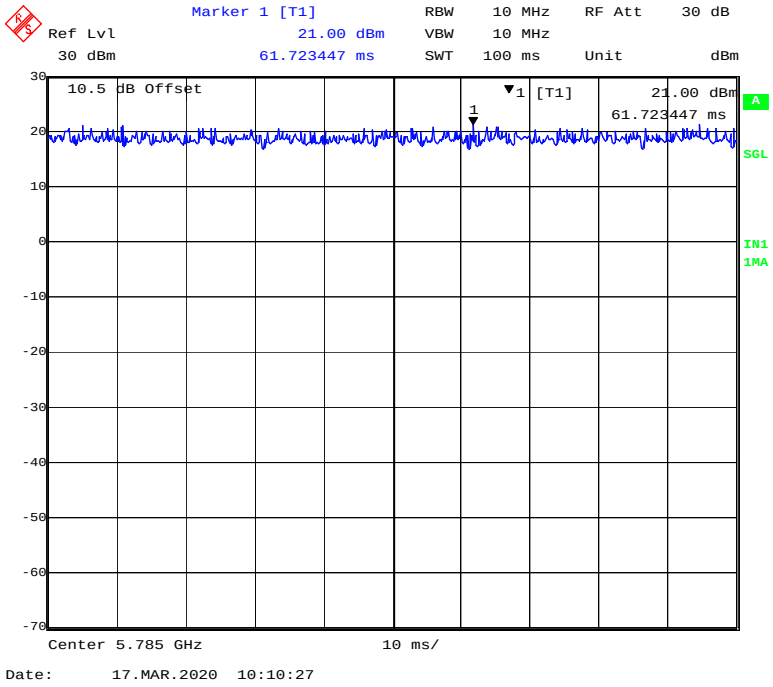
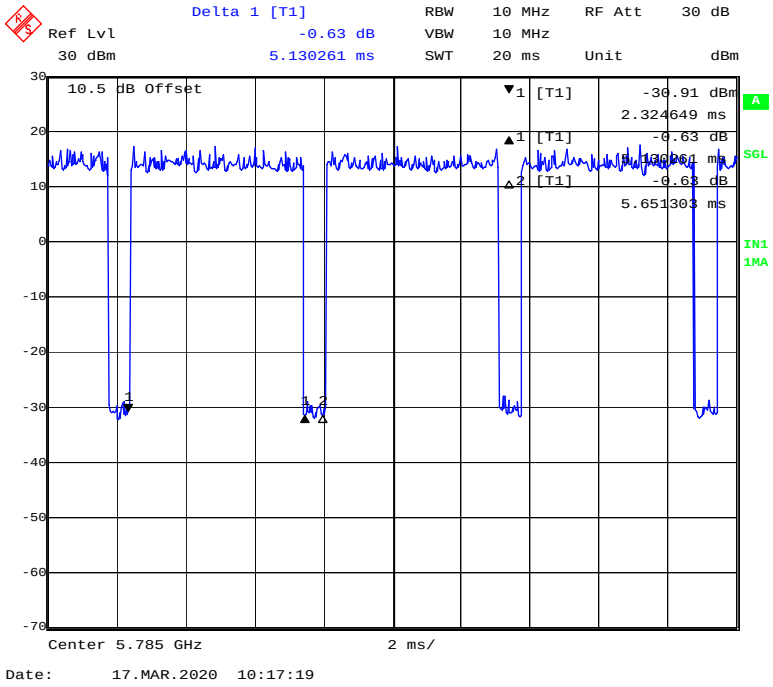
5725MHz-5850MHz Band-Chain0:

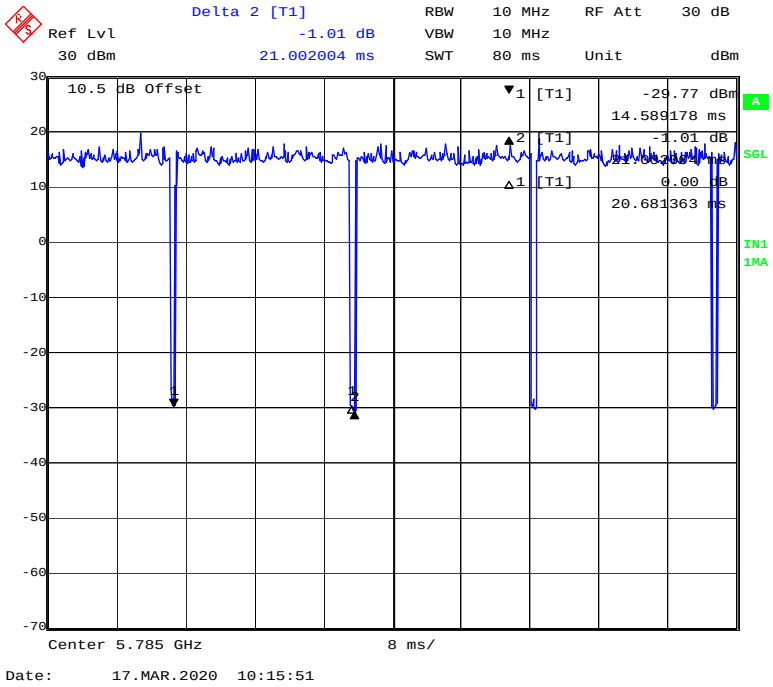
802.11a mode



802.11ac20 mode



802.11n-HT20 mode



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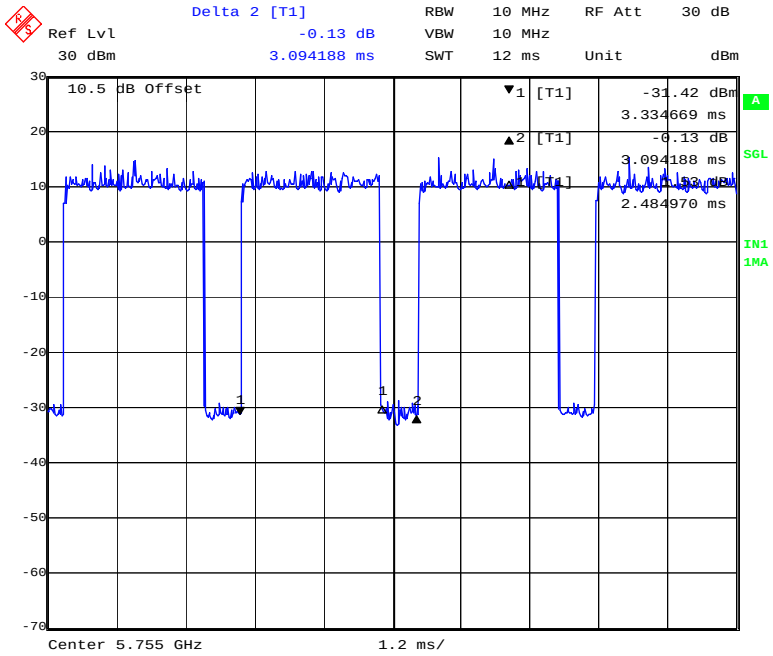
802.11 ac40 mode



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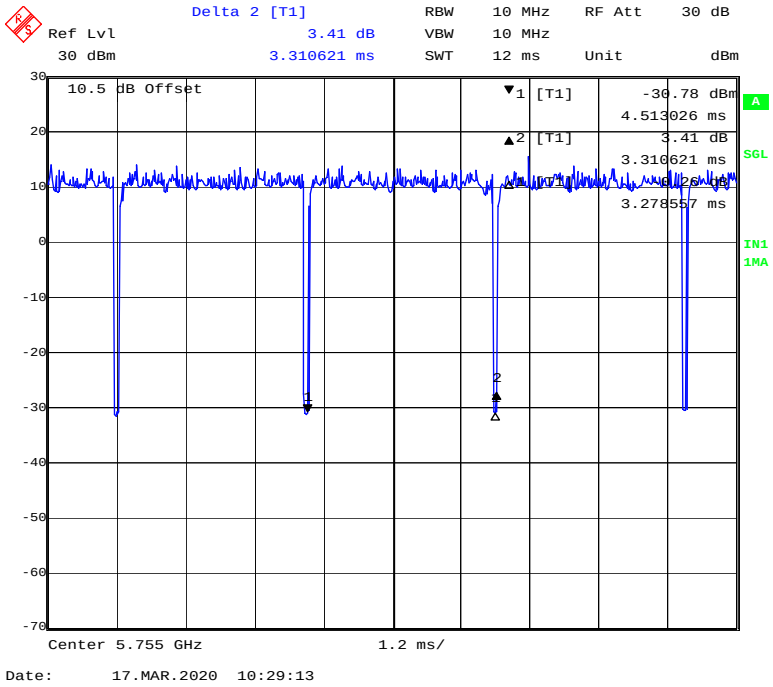
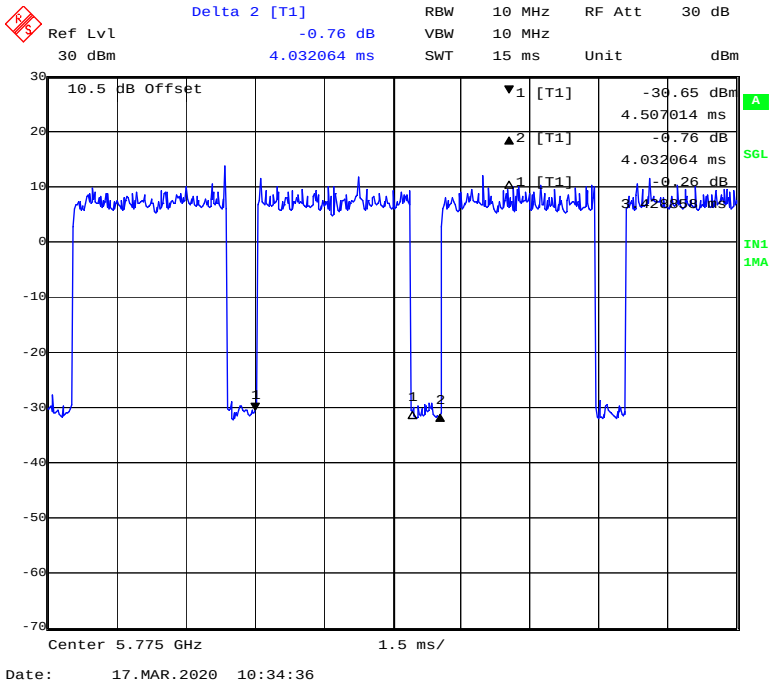
802.11n-HT40 mode

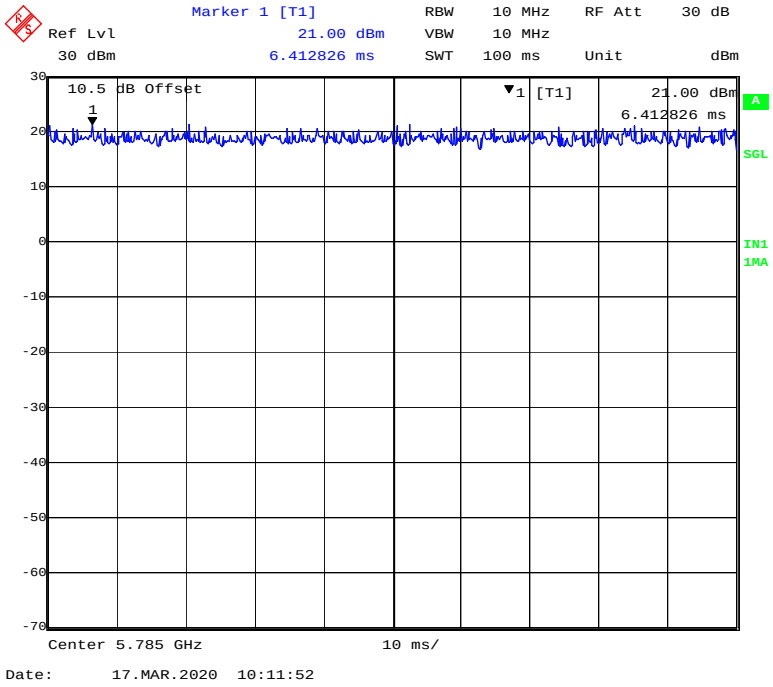


802.11n- ac80 mode

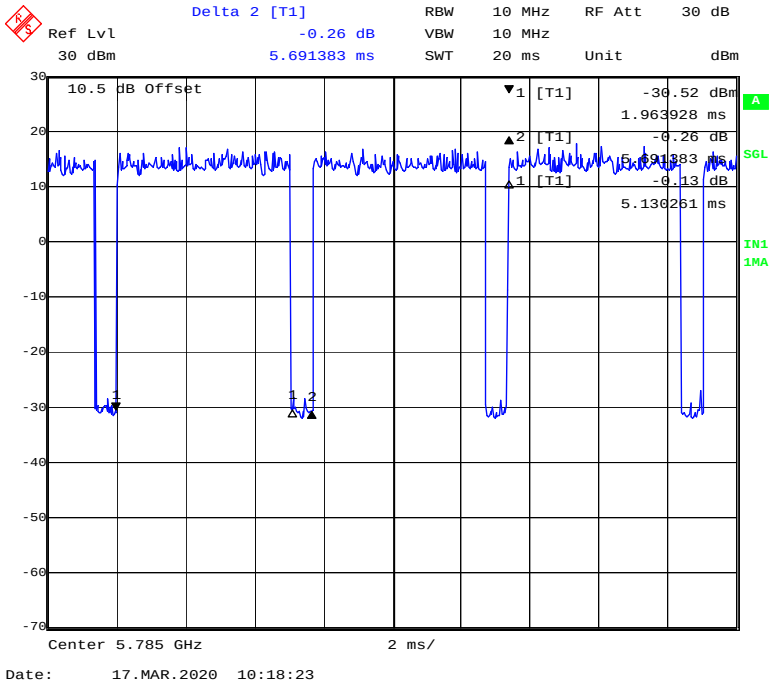


5725MHz-5850MHz Band-Chain1:

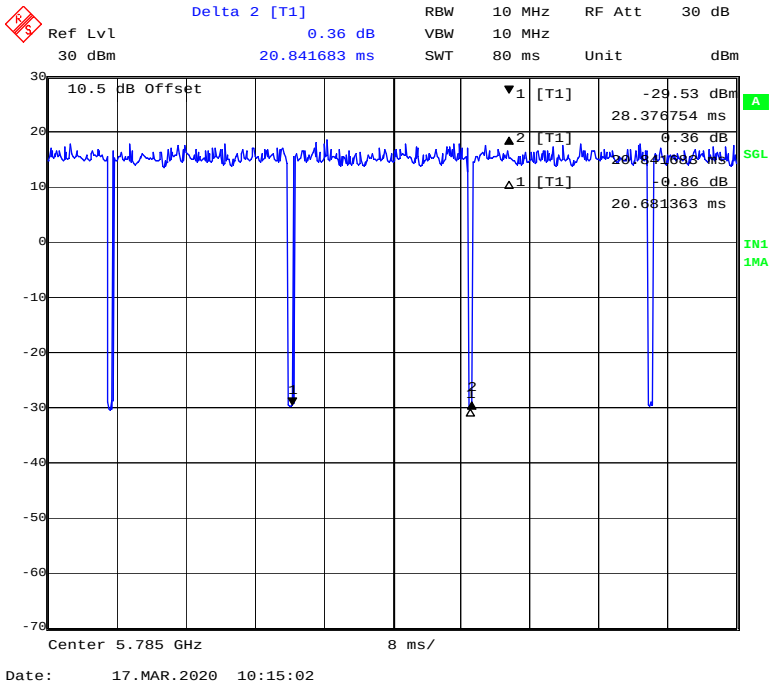
802.11a mode



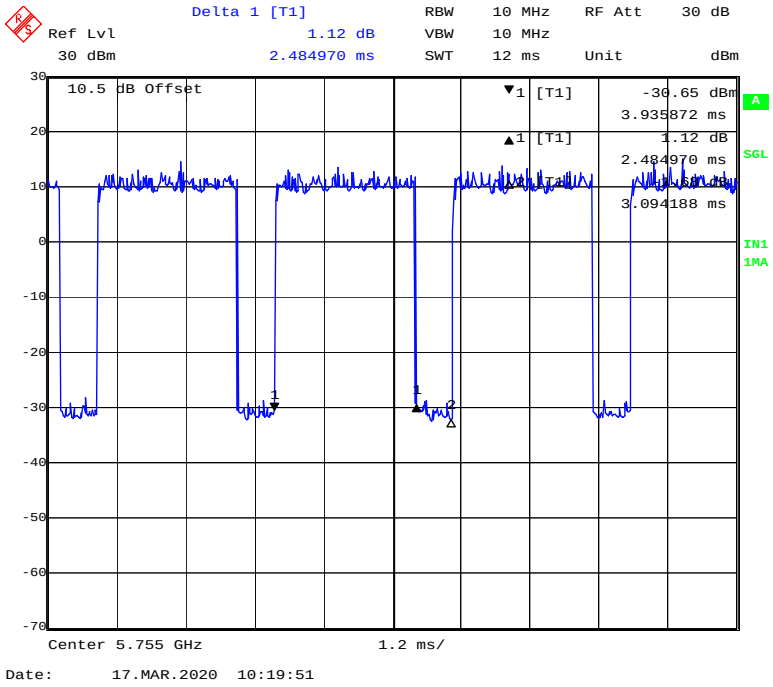
802.11ac20 mode



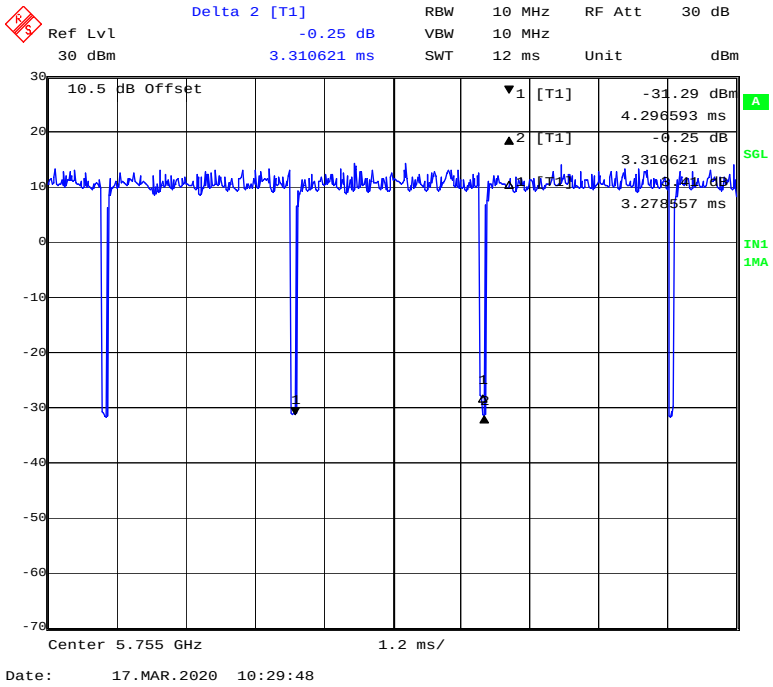
802.11n-HT20 mode



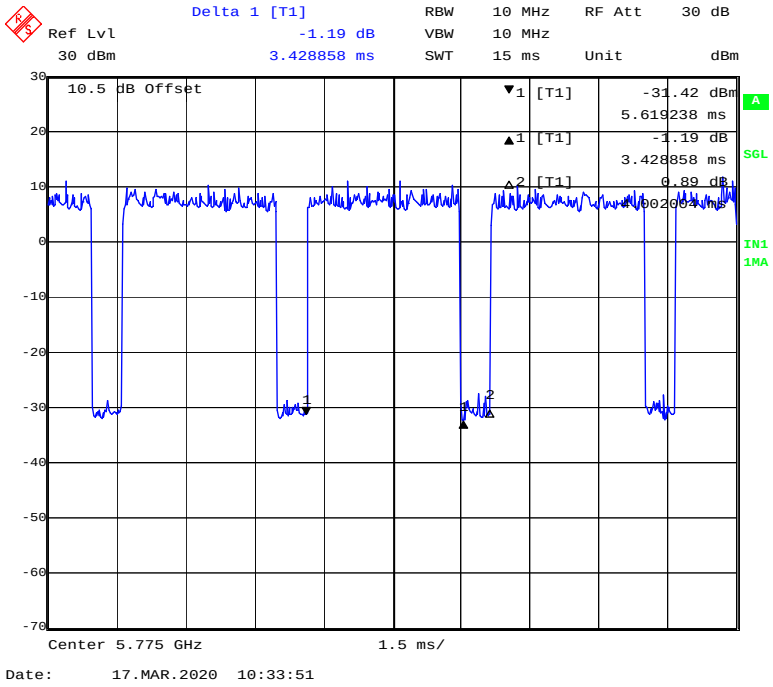
802.11 ac40 mode



802.11n-HT40 mode



802.11n- ac80 mode



Chain 0

Mode	Frequency Range (MHz)	Duty Cycle (%)	T (ms)	1/T (kHz)	10log(1/x)
802.11a	5150-5250	100	/	/	0
802.11ac20		58.51	3.301	0.303	2.328
802.11n-HT20		50.14	2.539	0.394	2.998
802.11ac40		81.73	2.563	0.390	0.876
802.11n-HT40		98.74	2.503	0.400	0.055
802.11ac80		86.33	3.429	0.292	0.639
802.11a	5725-5850	100	/	/	0
802.11ac20		90.78	5.130	0.195	0.420
802.11n-HT20		98.47	20.681	0.048	0.067
802.11ac40		80.31	2.485	0.402	0.952
802.11n-HT40		99.03	3.279	0.305	0.042
802.11ac80		85.04	3.429	0.292	0.704

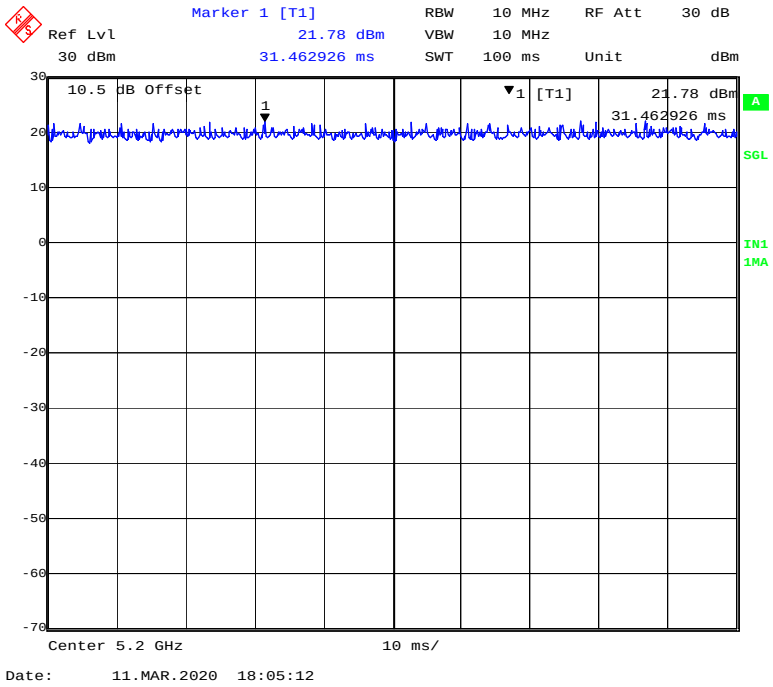
Chain 1

Mode	Frequency Range (MHz)	Duty Cycle (%)	T (ms)	1/T (kHz)	10log(1/x)
802.11a	5150-5250	100	/	/	0
802.11ac20		89.21	5.104	0.196	0.496
802.11n-HT20		99.68	5.064	0.197	0.014
802.11ac40		80.96	2.539	0.394	0.917
802.11n-HT40		97.96	2.503	0.400	0.089
802.11ac80		85.68	3.429	0.292	0.671
802.11a	5725-5850	100	/	/	0
802.11ac20		90.14	5.130	0.195	0.451
802.11n-HT20		99.23	20.681	0.048	0.034
802.11ac40		80.31	2.485	0.402	0.952
802.11n-HT40		99.03	3.279	0.305	0.042
802.11ac80		85.68	3.429	0.292	0.671

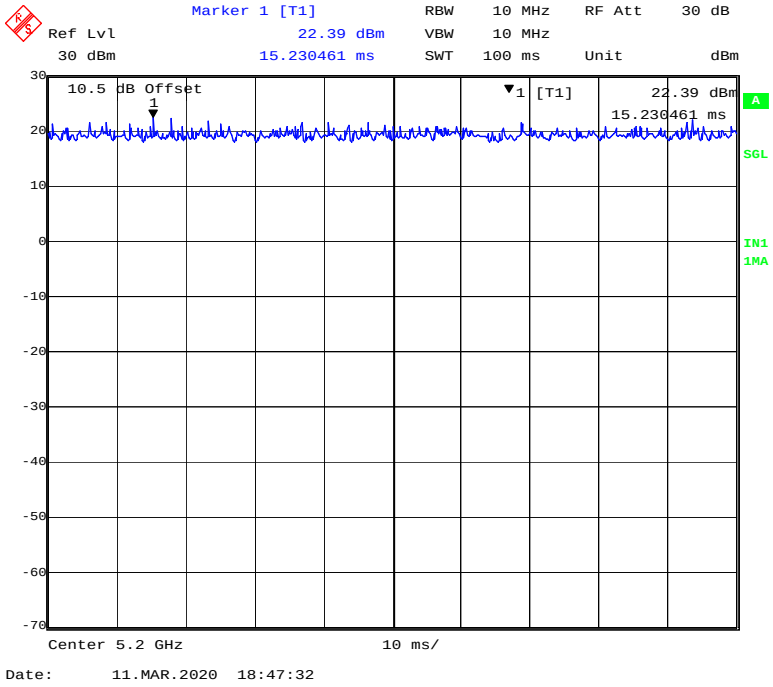
Note: “x” means duty cycle.

Duty Cycle
5150MHz-5250MHz Band-Chain2:

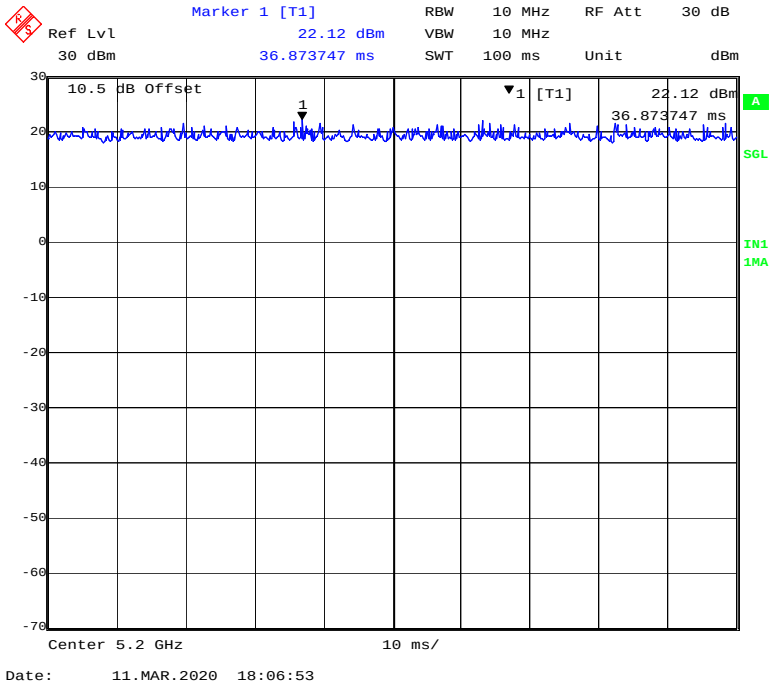
802.11a mode



802.11ac20 mode



802.11n-HT20 mode



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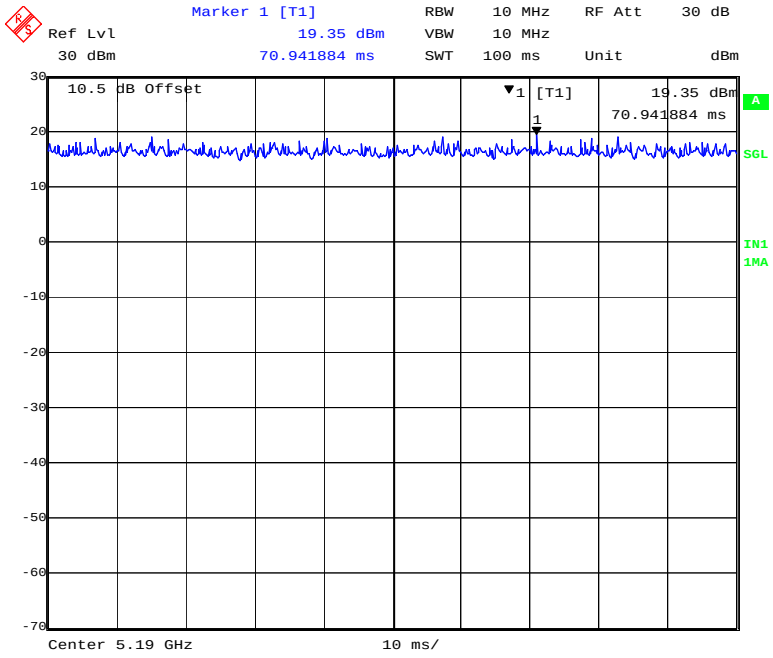
802.11 ac40 mode



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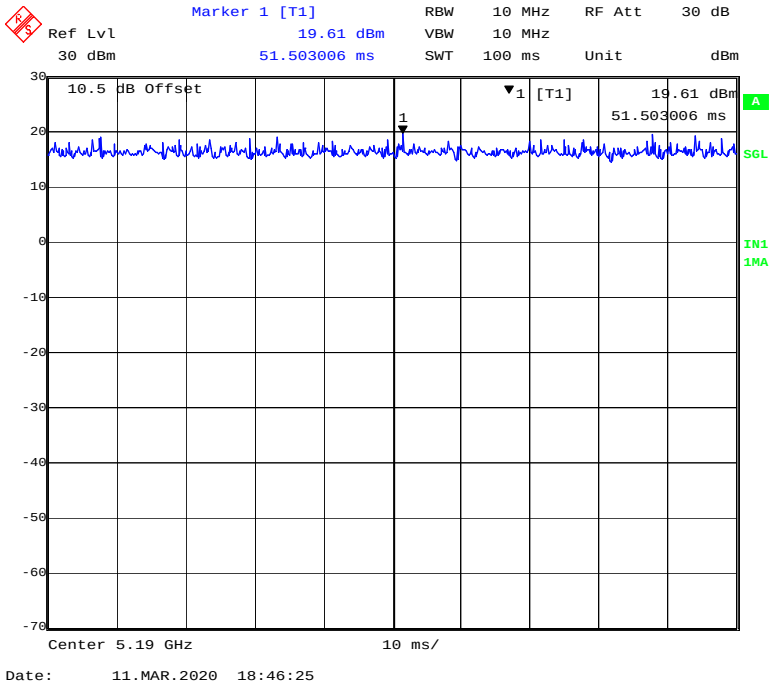
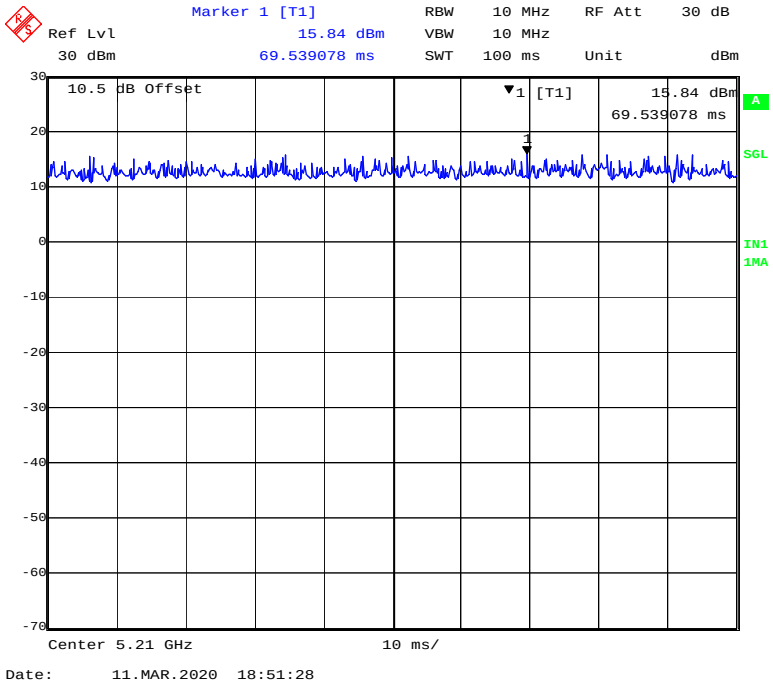
802.11n-HT40 mode

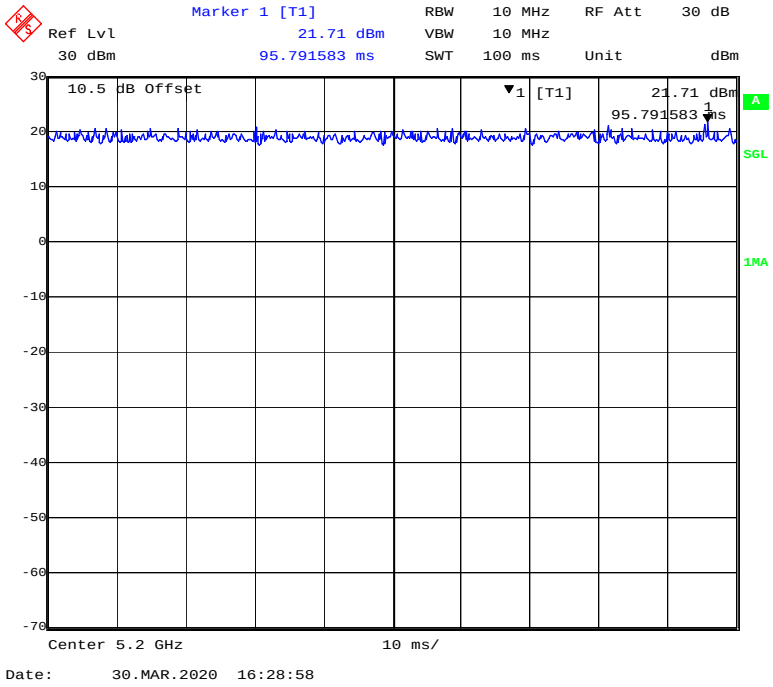


802.11 ac80 mode

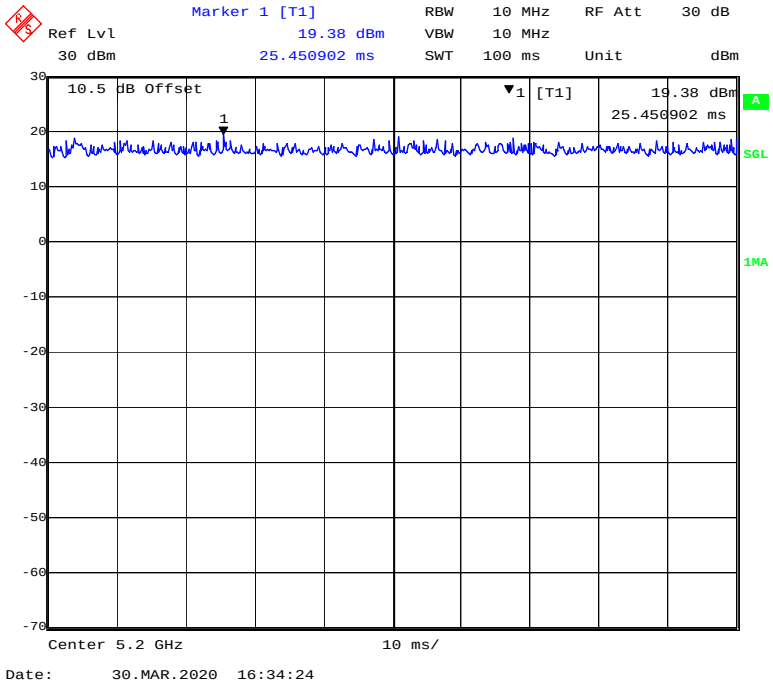


5150MHz-5250MHz Band-Chain3:

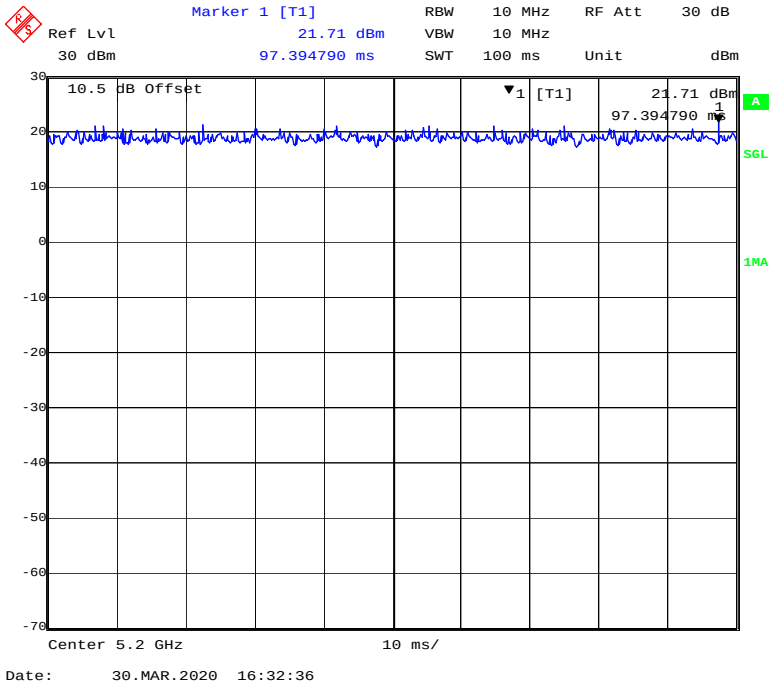
802.11a mode



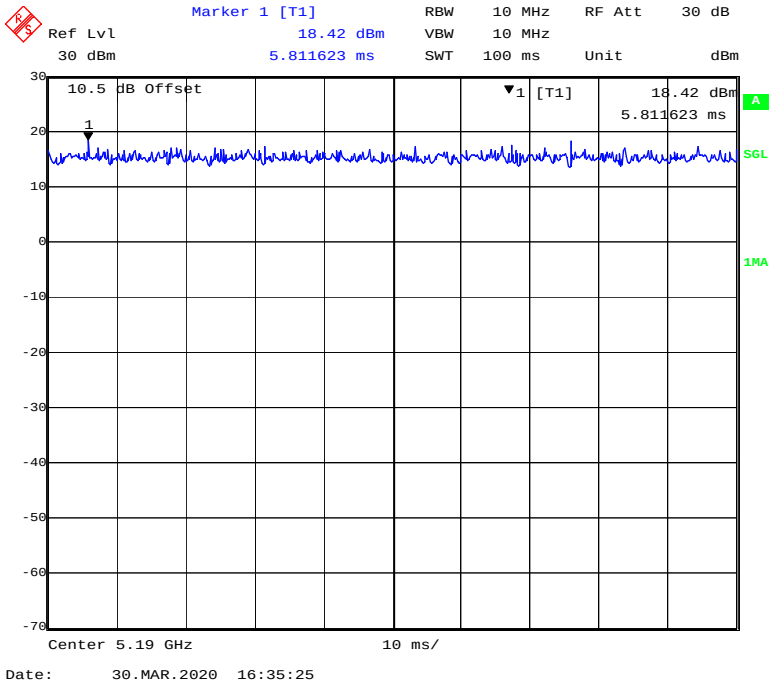
802.11ac20 mode



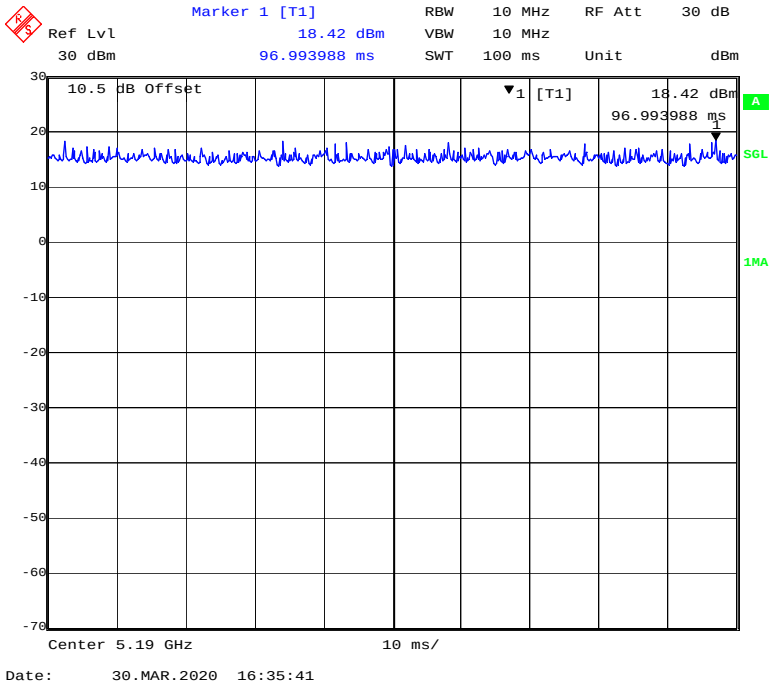
802.11n-HT20 mode



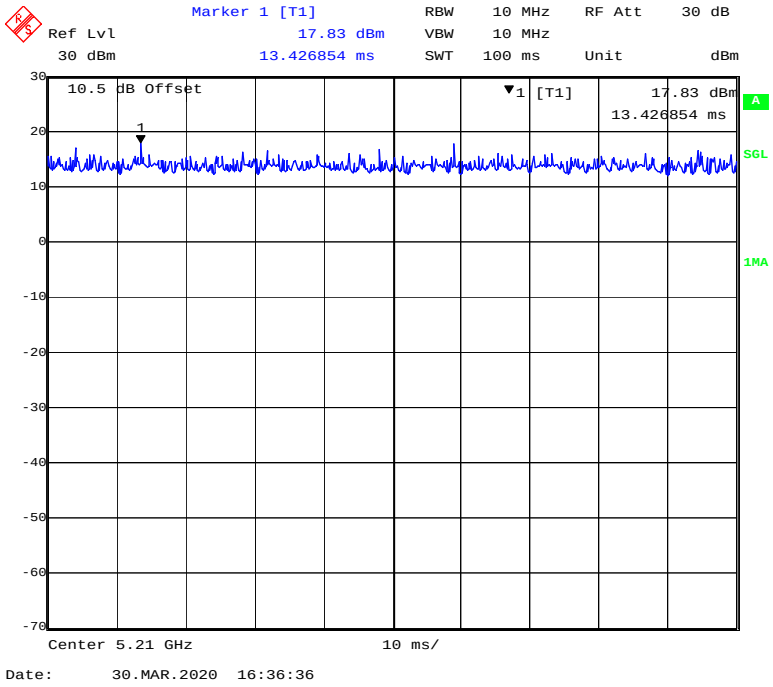
802.11 ac40 mode



802.11n-HT40 mode

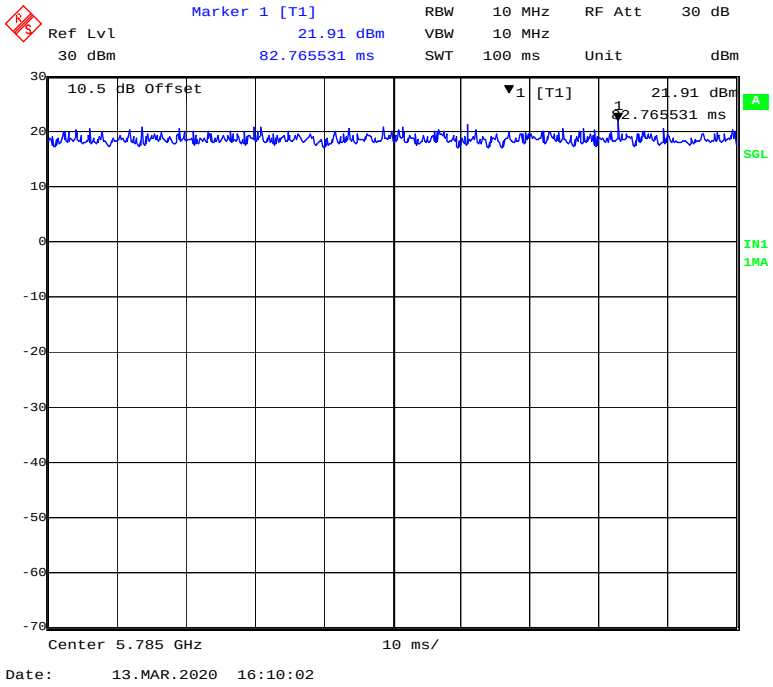


802.11 ac80 mode

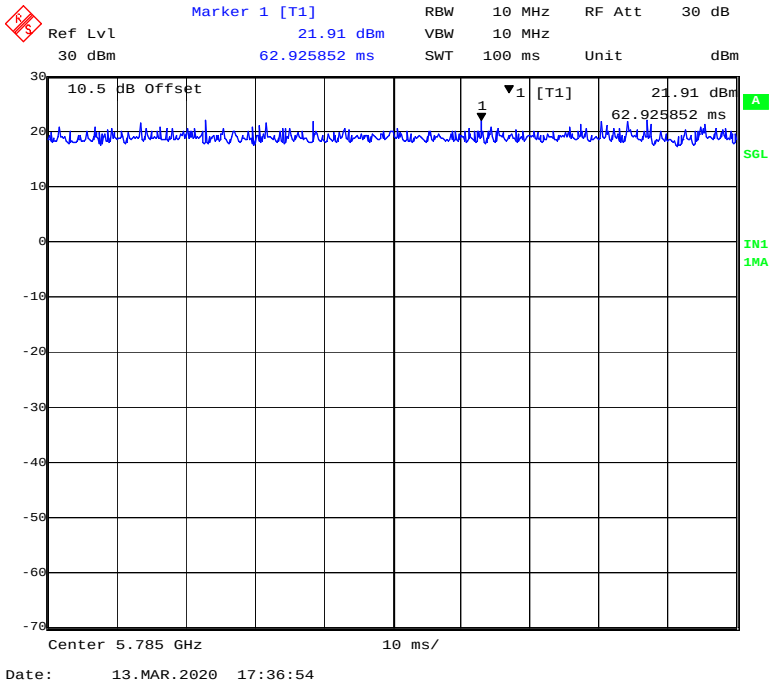


5725MHz-5850MHz Band-Chain2:

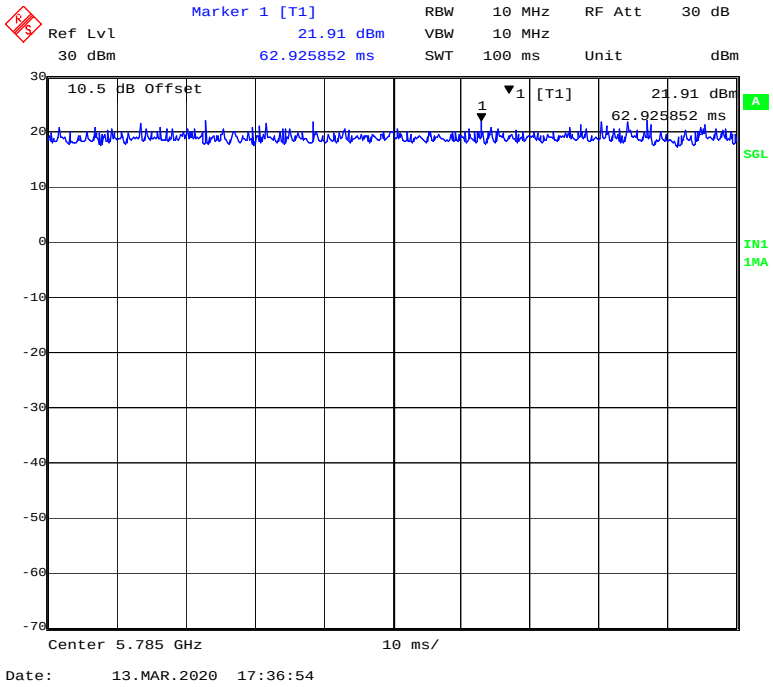
802.11a mode



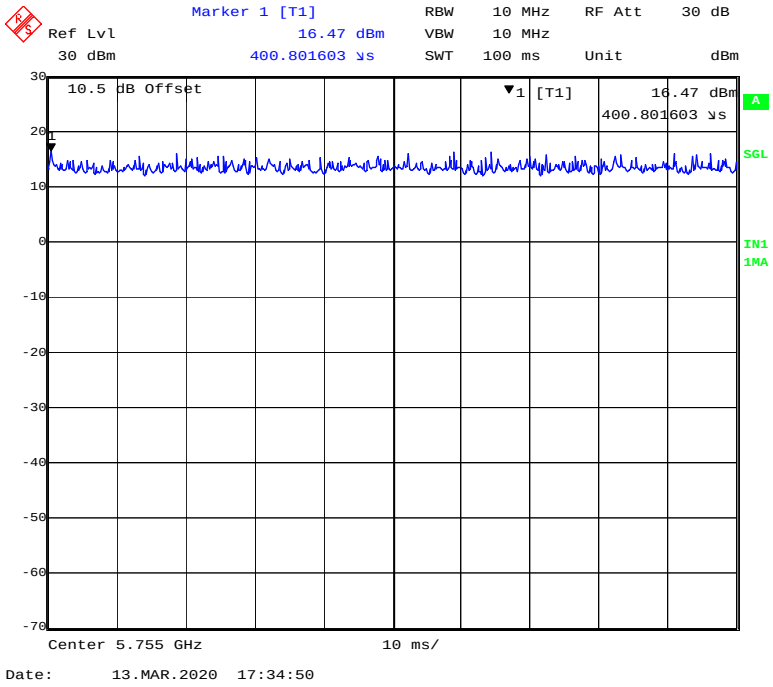
802.11ac20 mode



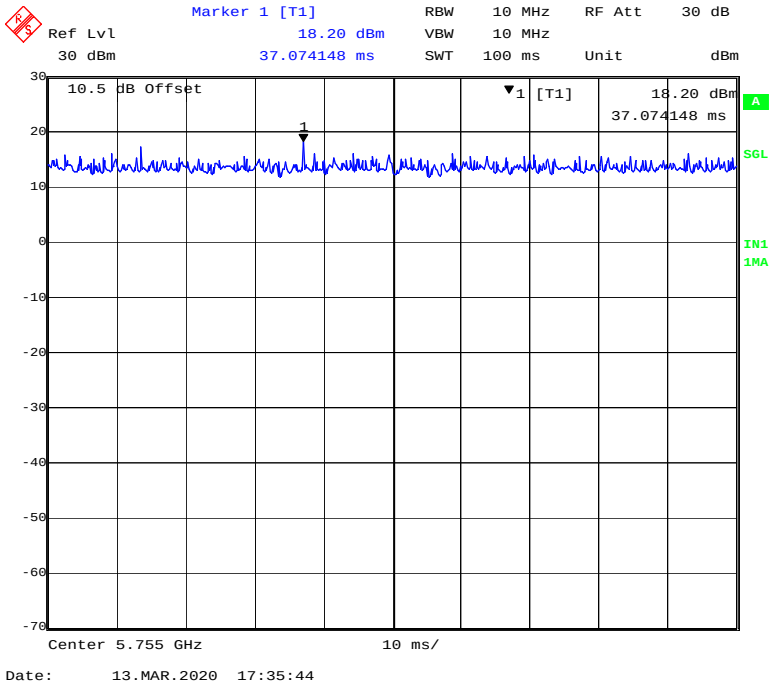
802.11n-HT20 mode



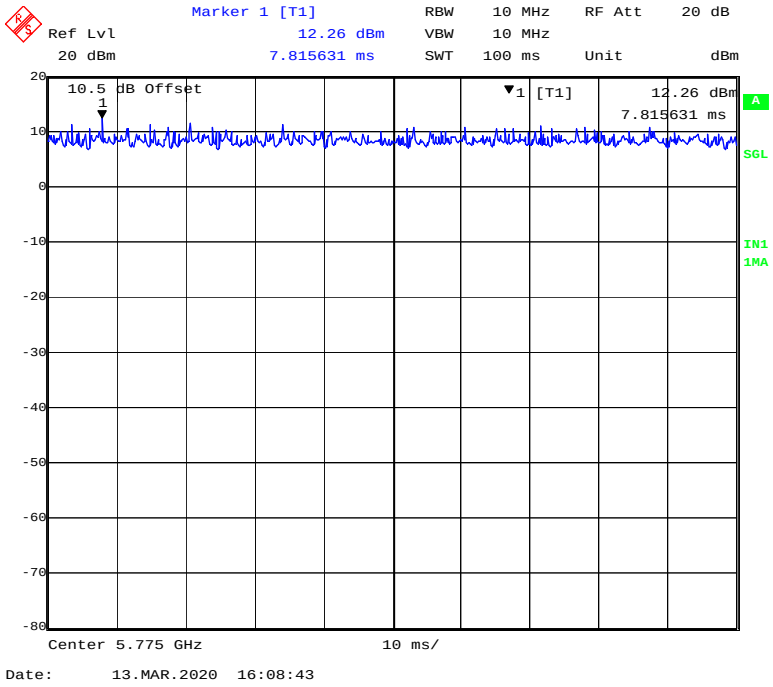
802.11 ac40 mode



802.11n-HT40 mode

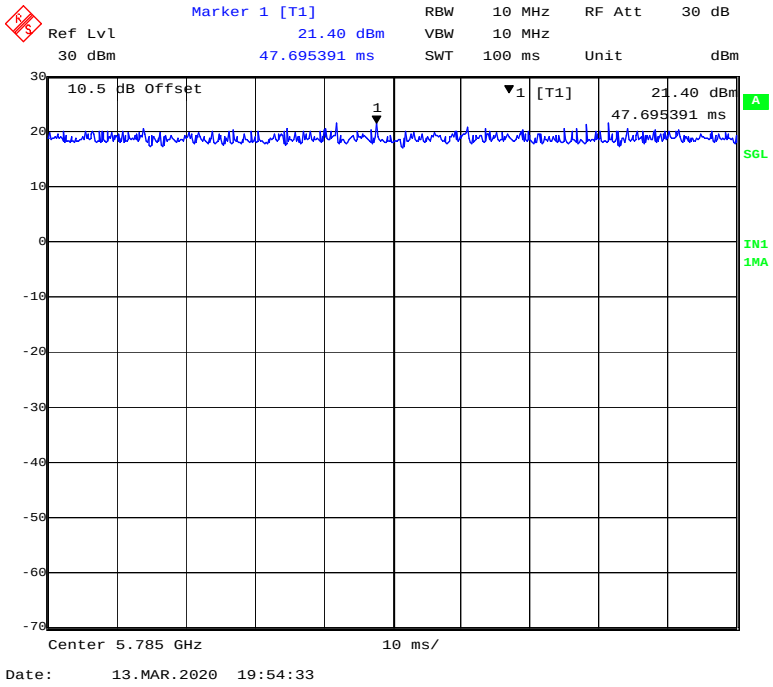


802.11n- ac80 mode

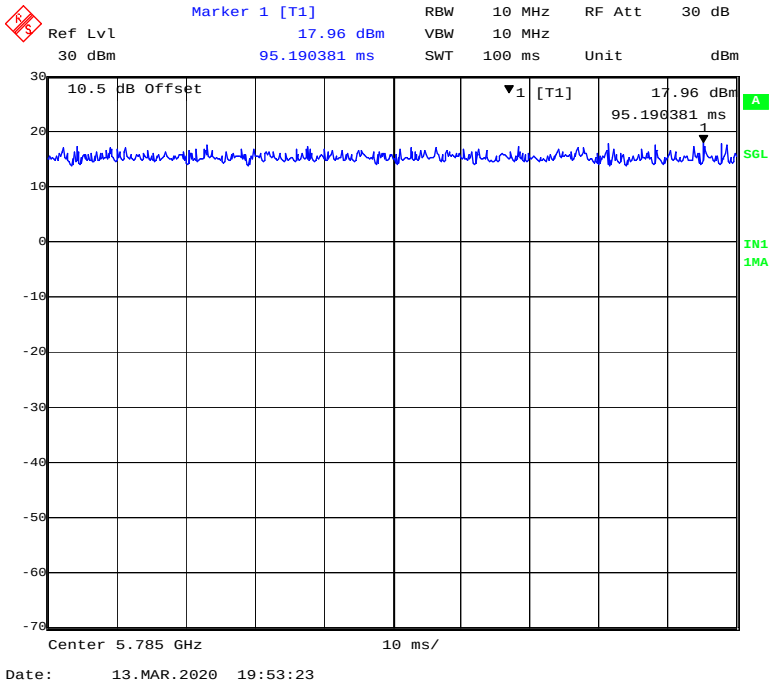


5725MHz-5850MHz Band-Chain3:

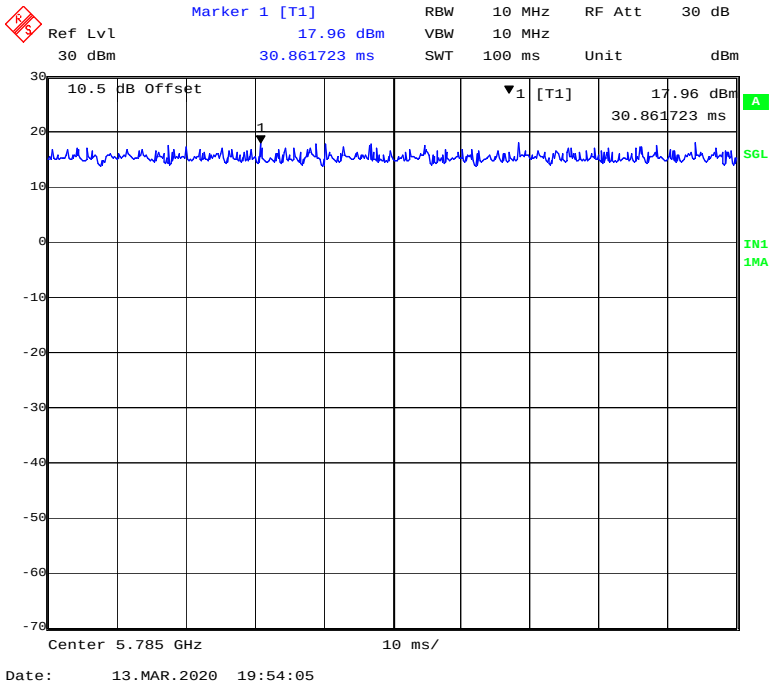
802.11a mode



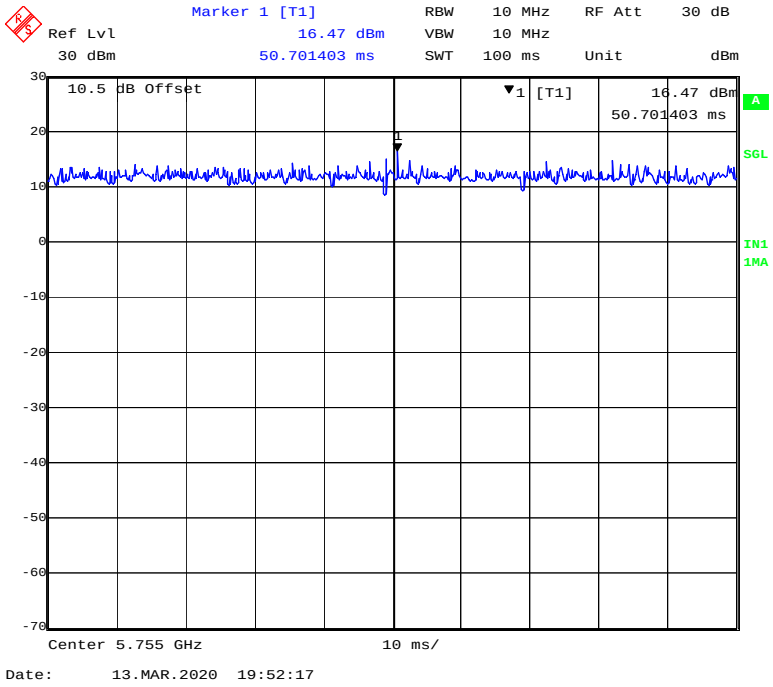
802.11ac20 mode



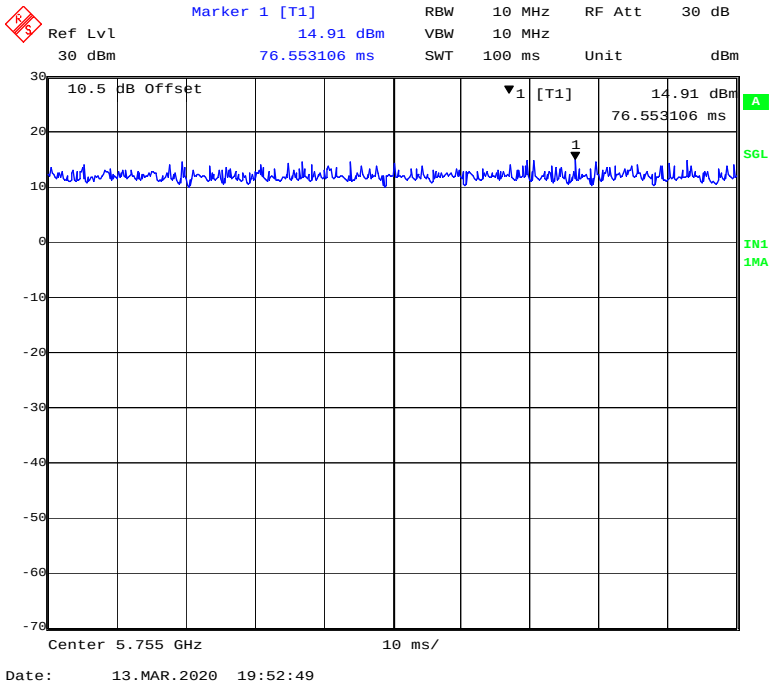
802.11n-HT20 mode



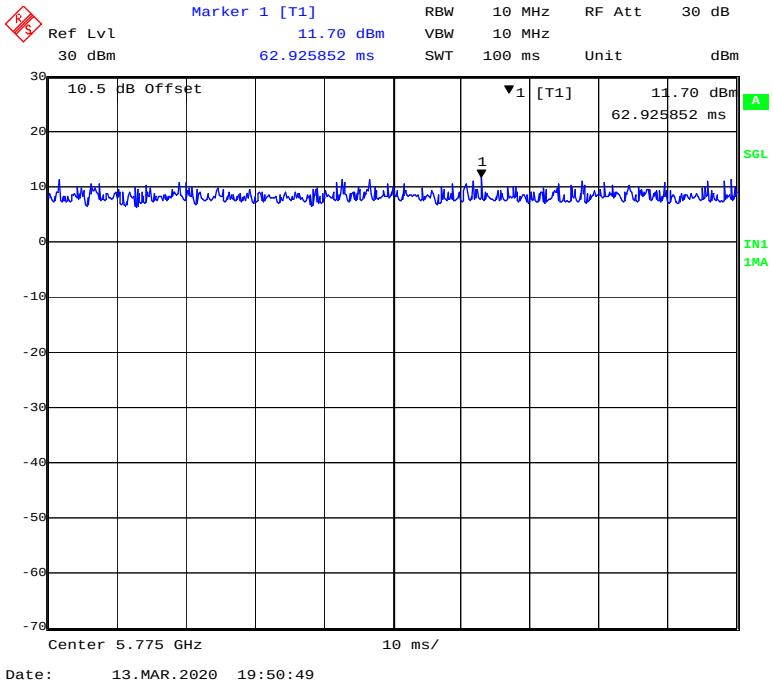
802.11 ac40 mode



802.11n-HT40 mode



802.11n- ac80 mode



Chain 2

Mode	Frequency Range (MHz)	Duty Cycle (%)	T (ms)	1/T (kHz)	10log(1/x)
802.11a	5150-5250	100	/	/	0
802.11ac20		100	/	/	0
802.11n-HT20		100	/	/	0
802.11ac40		100	/	/	0
802.11n-HT40		100	/	/	0
802.11ac80		100	/	/	0
802.11a	5725-5850	100	/	/	0
802.11ac20		100	/	/	0
802.11n-HT20		100	/	/	0
802.11ac40		100	/	/	0
802.11n-HT40		100	/	/	0
802.11ac80		100	/	/	0

Chain 3

Mode	Frequency Range (MHz)	Duty Cycle (%)	T (ms)	1/T (kHz)	10log(1/x)
802.11a	5150-5250	100	/	/	0
802.11ac20		100	/	/	0
802.11n-HT20		100	/	/	0
802.11ac40		100	/	/	0
802.11n-HT40		100	/	/	0
802.11ac80		100	/	/	0
802.11a	5725-5850	100	/	/	0
802.11ac20		100	/	/	0
802.11n-HT20		100	/	/	0
802.11ac40		100	/	/	0
802.11n-HT40		100	/	/	0
802.11ac80		100	/	/	0

Note: “x” means duty cycle.

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

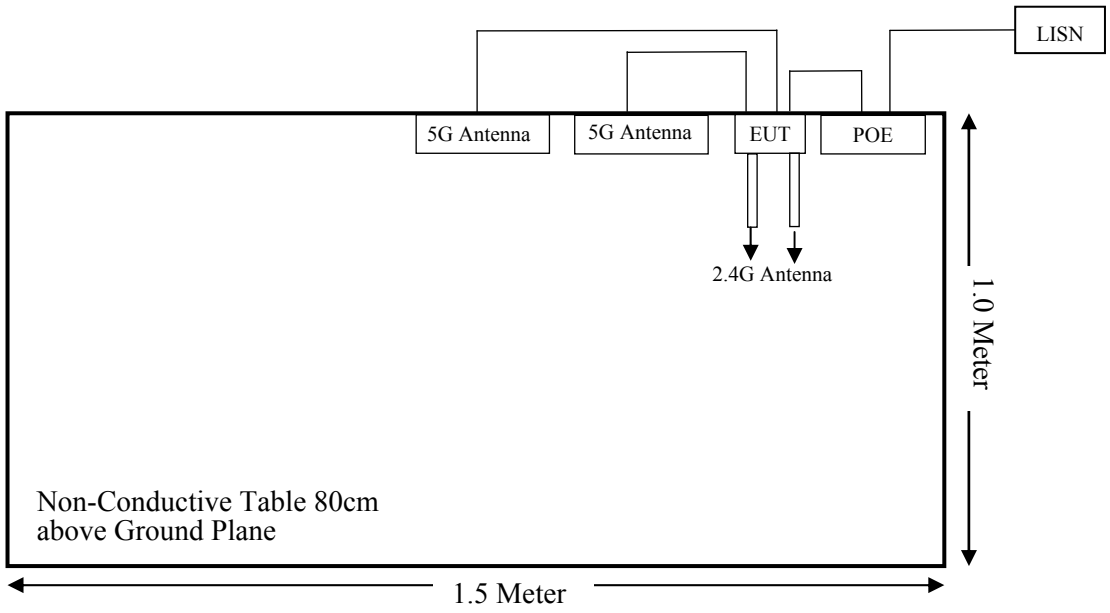
Manufacturer	Description	Model	Serial Number
Spectramesh, Inc.	POE	PSE801G	/

External I/O Cable

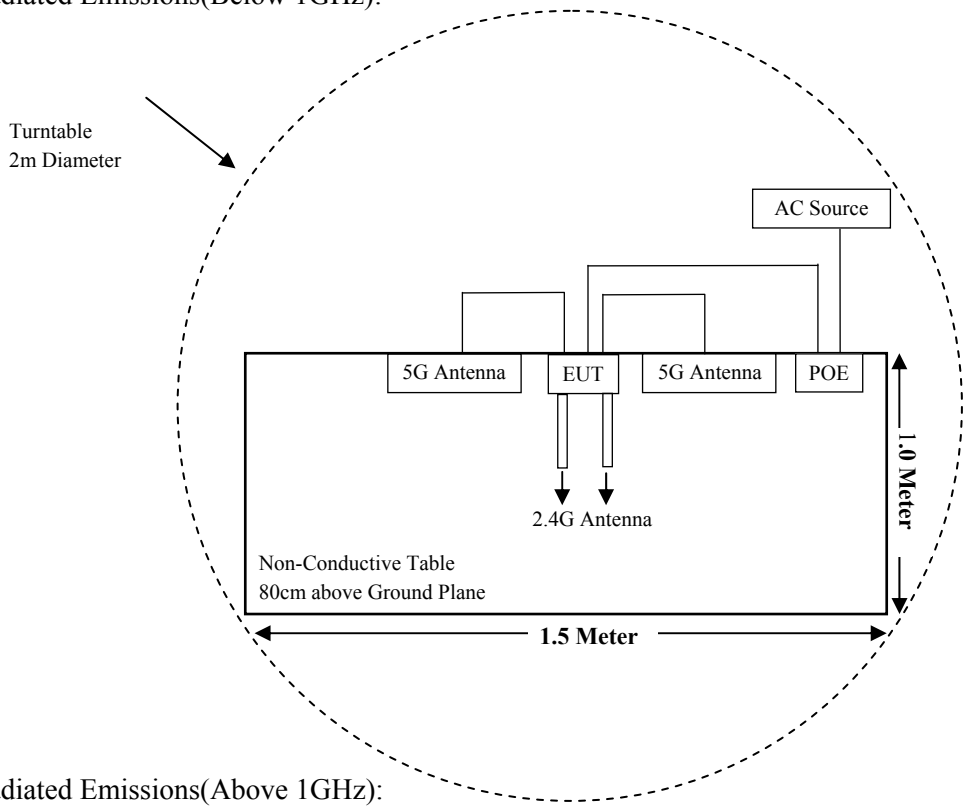
Cable Description	Length (m)	From Port	To
Power Cable	1.0	EUT	POE
Power Cable	1.0	POE	AC Source

Block Diagram of Test Setup

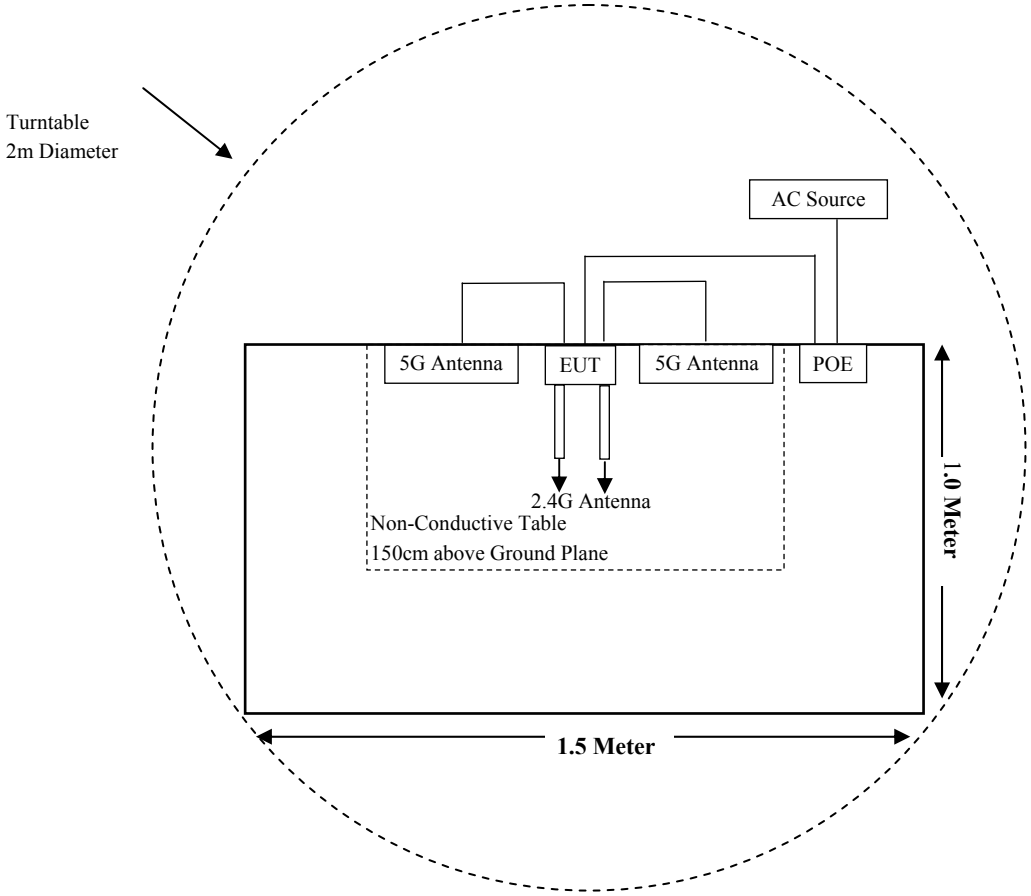
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1310& §2.1091	MAXIMUM PERMISSIBLE EXPOSURE (MPE)	Compliant
§15.203	Antenna Requirement	Compliant
FCC §15.207 & §15.407(b) (6)	AC Power Line Conducted Emissions	Compliant
§15.205 & §15.209 & §15.407(b) (1) ,(6) ,(7)	Undesirable Emission & Restricted Bands	Compliant
§15.407(a)(1) (5) & §15.407 (e)	Emission Bandwidth	Compliant
§15.407 (a)(1) (3)	Conducted Transmitter Output Power	Compliant
§15.407 (a)(1) (3)	Power Spectral Density	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test（Chamber 1#）					
Rohde & Schwarz	EMI Test receiver	ESR	1316.3003K03-102454-Qd	2019-06-25	2020-06-24
Sunol Sciences	Broadband Antenna	JB3	A090413-1	2017-12-26	2020-12-25
Sonoma Instrunent	Pre-amplifier	310N	171205	2019-08-14	2020-08-13
Audix	Test Software	e3	V9	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2019-08-15	2020-08-14
MICRO-COAX	Coaxial Cable	Cable-9	009	2019-08-15	2020-08-14
MICRO-COAX	Coaxial Cable	Cable-10	010	2019-08-15	2020-08-14
Radiated Emission Test（Chamber 2#）					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207	2019-05-30	2020-05-29
ETS-LINDGREN	Horn Antenna	3115	9207-3900	2017-07-15	2020-07-14
ETS-LINDGREN	Horn Antenna	3116	00084159	2020-01-17	2023-01-16
A.H.Systems, inc	Amplifier	PAM-0118P	512	2019-05-1	2020-05-10
SELECTOR	Amplifier	EM18G40G	060726	2019-03-22	2020-03-21
MICRO-TRONICS	Band Reject Filter	BRC50703	G094	2019-08-05	2020-08-04
MICRO-TRONICS	Band Reject Filter	BRC50705	G085	2019-08-05	2020-08-04
Rohde & Schwarz	Auto test Software	EMC32	100361	/	/
MICRO-COAX	Coaxial Cable	Cable-6	006	2019-08-15	2020-08-14
MICRO-COAX	Coaxial Cable	Cable-11	011	2019-08-15	2020-08-14
MICRO-COAX	Coaxial Cable	Cable-12	012	2019-08-15	2020-08-14
MICRO-COAX	Coaxial Cable	Cable-13	013	2019-08-15	2020-08-14
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSIQ26	836131/009	2019-12-14	2020-12-13
Agilent	Power Meter	N1912A	MY5000492	2019-11-18	2020-11-17
Agilent	Power Sensor	N1921A	MY54210024	2019-11-18	2020-11-17
Rohde & Schwarz	Pulse limiter	ESH3-Z2	0357.8810.54	2019-08-10	2020-08-09
BACL	Temperature & Humidity Chamber	BTH-150	30023	2019-12-20	2020-12-19
Spectramesh, Inc.	RF Cable	Spectramesh, Inc. C01	C01	Each Time	N/A

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emission Test					
ROHDE&SCHWARZ	EMI Test receiver	ESR	1316.3003K03-101746-zn	2019-07-11	2020-07-10
Rohde & Schwarz	LISN	ENV216	3560655016	2019-12-14	2020-12-13
Audix	Test Software	e3	V9	---	---
Rohde & Schwarz	Pulse limiter	ESH3-Z2	0357.8810.54	2019-08-10	2020-08-09
MICRO-COAX	Coaxial Cable	Cable-15	015	2019-08-15	2020-08-14

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

§1.1310& §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart 15.247(i) and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm²)**	**Averaging Time (minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f²)	30
30-300	27.5	0.073	0.2	30
300-1500	/		f/1500	30
1500-100,000	/		1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

2.4G Wi-Fi

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)	MPE Ratio
		(dBi)	(numeric)	(dBm)	(mW)				
802.11b	2412~2462	9.0	7.94	27.00	501.19	40	0.1979	1.0	**0.1979**
802.11g		9.0	7.94	26.50	446.68	40	0.1764	1.0	0.1764
802.11n-HT20		9.0	7.94	27.00	501.19	40	0.1979	1.0	0.1979
802.11n-HT40	2422~2452	9.0	7.94	25.00	316.23	40	0.1249	1.0	0.1249

5G Wi-Fi (Chain0& Chain1)

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)	MPE Ratio
802.11a	5150~5250	15.0	31.62	21.00	125.89	40	0.1980	1.0	0.1980
	5725~5850	15.0	31.62	20.50	112.20	40	0.1764	1.0	0.1764
802.11ac20	5150~5250	15.0	31.62	19.50	89.13	40	0.1402	1.0	0.1402
	5725~5850	15.0	31.62	19.50	89.13	40	0.1402	1.0	0.1402
802.11n20	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	19.50	89.13	40	0.1402	1.0	0.1402
802.11ac40	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
802.11n40	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
802.11ac80	5210	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5775	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572

5G Wi-Fi (Chain2& Chain3)

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)	MPE Ratio
802.11a	5150~5250	15.0	31.62	21.50	141.25	40	0.2221	1.0	0.2221
	5725~5850	15.0	31.62	21.00	125.89	40	0.1980	1.0	0.1980
802.11ac20	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
802.11n20	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
802.11ac40	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
802.11n40	5150~5250	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5725~5850	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
802.11ac80	5210	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572
	5775	15.0	31.62	20.00	100.00	40	0.1572	1.0	0.1572

Note:
(1) The Tune-up output power was declared by the Manufacturer.
(2) 2.4GWi-Fi and 5G Wi-Fi can transmit simultaneously, The worst condition is 2.4GWi-Fi Wi-Fi & 5G Wi-Fi (Chain0&Chain1) & 5G Wi-Fi (Chain2&Chain3), as below:

$$\sum_i \frac{S_i}{S_{Limit,i}} = 0.1979/1.00+0.1980/1.00+0.2221/1.00=0.1979+0.1980+0.2221 = 0.6180 < 1.0$$

Conclusion: The device meets MPE at distance 40cm.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407, if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has two directional antennas for 5G Wi-Fi. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

Function	Chain	Antenna Type	Max. Antenna Gain
5G Wi-Fi (Radio 1)	0	Directional Antenna	15.0 dBi
	1		
5G Wi-Fi (Radio 2)	2		
	3		

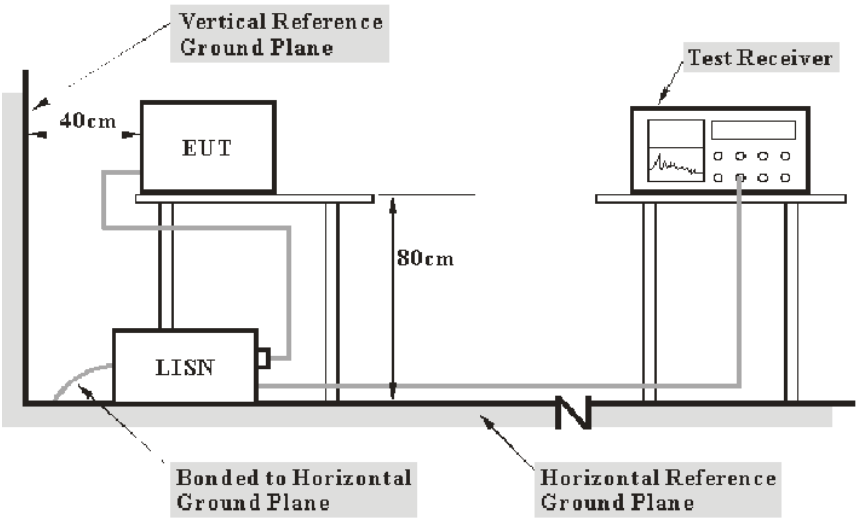
Result: Compliant.

FCC §15.407 (b) (6) §15.207 (a) – AC POWER LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a), §15.407(b) (6)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the first LISN and the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Corrected Factor & Over Limit Calculation

The Corrected factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Corrected Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

The "**Over Limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

Over Limit (dB) = Read level (dBμV) + Factor (dB) - Limit (dBμV)

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data

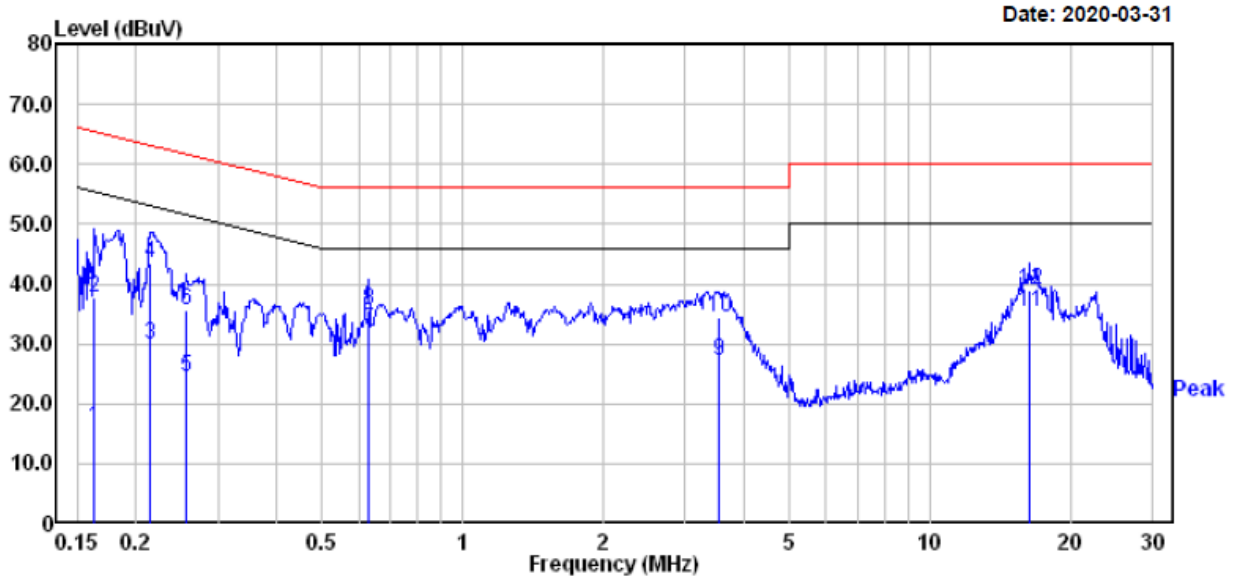
Environmental Conditions

Temperature:	20.2 ℃
Relative Humidity:	51 %
ATM Pressure:	101.3 kPa

The testing was performed by Stone Zhang on 2020-03-31.

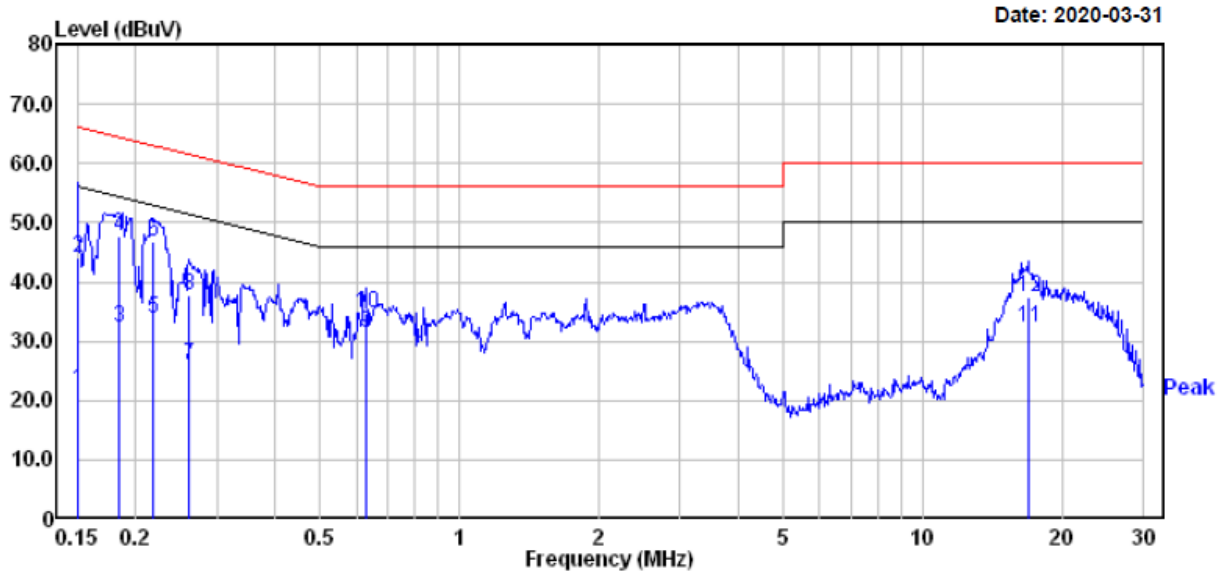
EUT operation mode: Transmitting in 802.11n-HT20 mode middle channel of 5150~5250MHz (worst case)

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.163	-3.70	19.83	16.13	55.30	-39.17	Average
2	0.163	18.00	19.83	37.83	65.30	-27.47	QP
3	0.215	10.00	19.82	29.82	53.01	-23.19	Average
4	0.215	23.80	19.82	43.62	63.01	-19.39	QP
5	0.256	4.70	19.82	24.52	51.56	-27.04	Average
6	0.256	15.90	19.82	35.72	61.56	-25.84	QP
7	0.627	12.70	19.75	32.45	46.00	-13.55	Average
8	0.627	15.90	19.75	35.65	56.00	-20.35	QP
9	3.528	7.80	19.47	27.27	46.00	-18.73	Average
10	3.528	14.80	19.47	34.27	56.00	-21.73	QP
11	16.312	15.50	19.72	35.22	50.00	-14.78	Average
12	16.312	19.20	19.72	38.92	60.00	-21.08	QP

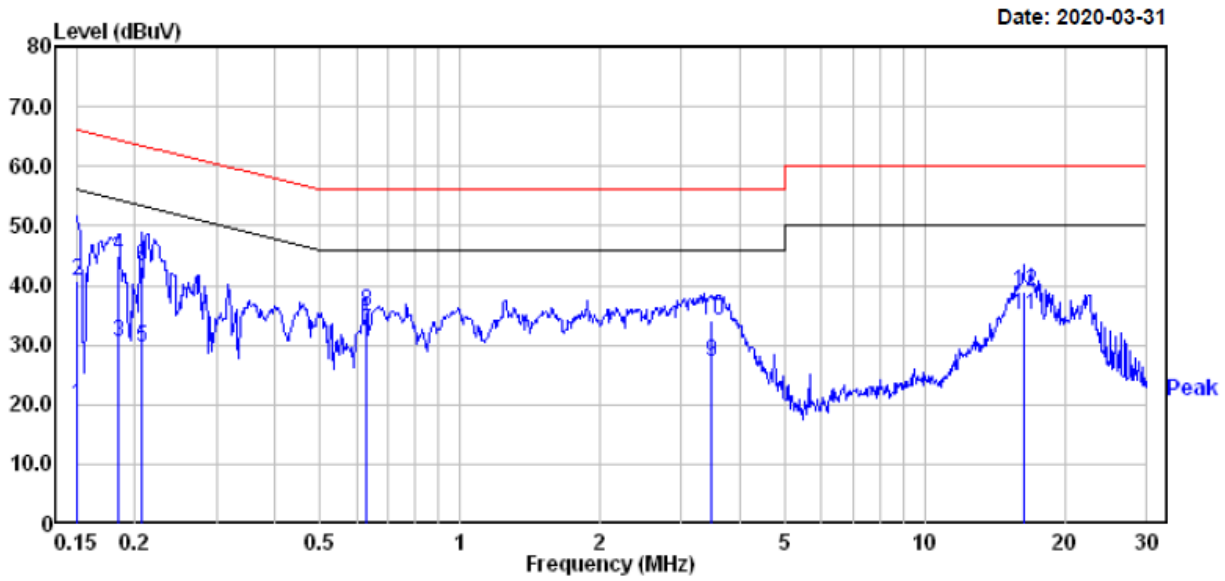
AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	1.90	19.82	21.72	56.00	-34.28	Average
2	0.150	24.30	19.82	44.12	66.00	-21.88	QP
3	0.184	12.51	19.82	32.33	54.28	-21.95	Average
4	0.184	28.01	19.82	47.83	64.28	-16.45	QP
5	0.217	13.90	19.82	33.72	52.92	-19.20	Average
6	0.217	26.90	19.82	46.72	62.92	-16.20	QP
7	0.260	6.20	19.82	26.02	51.42	-25.40	Average
8	0.260	17.90	19.82	37.72	61.42	-23.70	QP
9	0.627	11.60	19.75	31.35	46.00	-14.65	Average
10	0.627	15.00	19.75	34.75	56.00	-21.25	QP
11	16.928	12.60	19.77	32.37	50.00	-17.63	Average
12	16.928	17.70	19.77	37.47	60.00	-22.53	QP

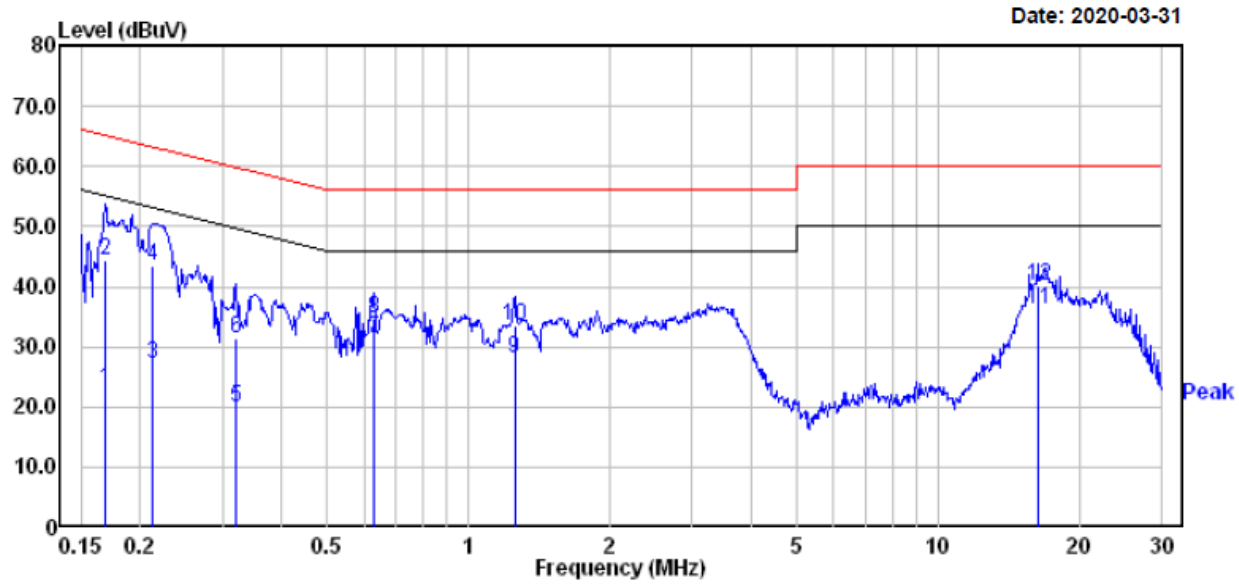
EUT operation mode: Transmitting in 802.11n-HT20 mode middle channel of 5725-5850MHz (worst case)

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	0.10	19.82	19.92	56.00	-36.08	Average
2	0.150	20.80	19.82	40.62	66.00	-25.38	QP
3	0.184	10.71	19.82	30.53	54.28	-23.75	Average
4	0.184	25.31	19.82	45.13	64.28	-19.15	QP
5	0.207	9.80	19.82	29.62	53.32	-23.70	Average
6	0.207	23.40	19.82	43.22	63.32	-20.10	QP
7	0.627	12.60	19.75	32.35	46.00	-13.65	Average
8	0.627	15.90	19.75	35.65	56.00	-20.35	QP
9	3.491	7.80	19.46	27.26	46.00	-18.74	Average
10	3.491	14.60	19.46	34.06	56.00	-21.94	QP
11	16.312	15.40	19.72	35.12	50.00	-14.88	Average
12	16.312	19.30	19.72	39.02	60.00	-20.98	QP

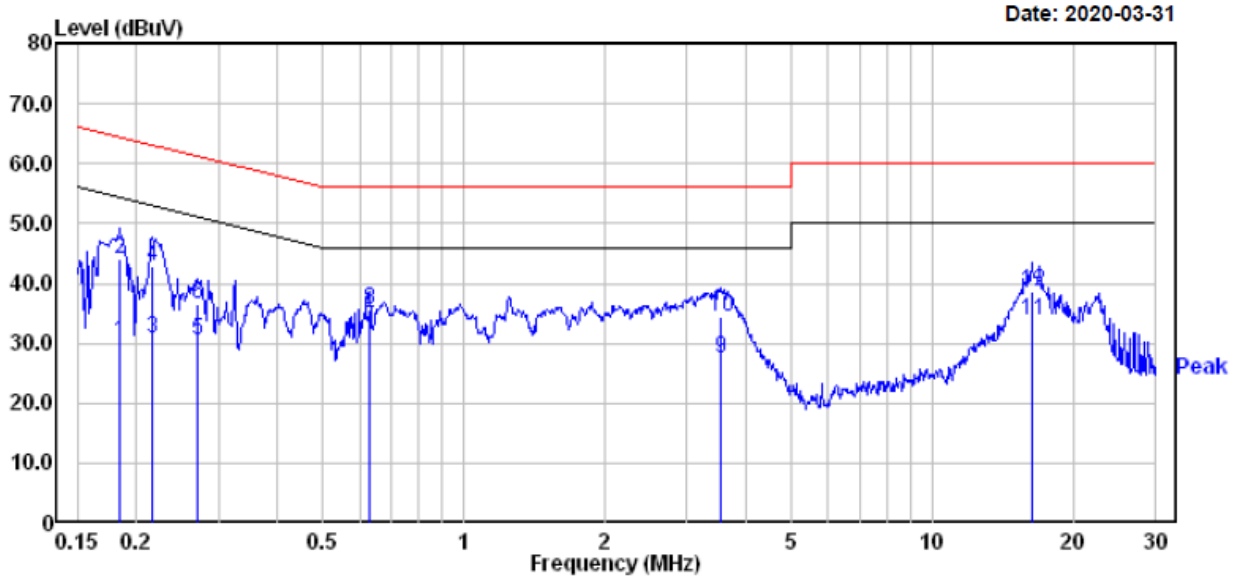
AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.169	3.00	19.83	22.83	55.03	-32.20	Average
2	0.169	24.40	19.83	44.23	65.03	-20.80	QP
3	0.213	7.40	19.82	27.22	53.10	-25.88	Average
4	0.213	23.70	19.82	43.52	63.10	-19.58	QP
5	0.320	0.20	19.82	20.02	49.71	-29.69	Average
6	0.320	11.70	19.82	31.52	59.71	-28.19	QP
7	0.627	11.50	19.75	31.25	46.00	-14.75	Average
8	0.627	15.10	19.75	34.85	56.00	-21.15	QP
9	1.255	8.20	19.82	28.02	46.00	-17.98	Average
10	1.255	13.80	19.82	33.62	56.00	-22.38	QP
11	16.312	16.40	19.72	36.12	50.00	-13.88	Average
12	16.312	20.40	19.72	40.12	60.00	-19.88	QP

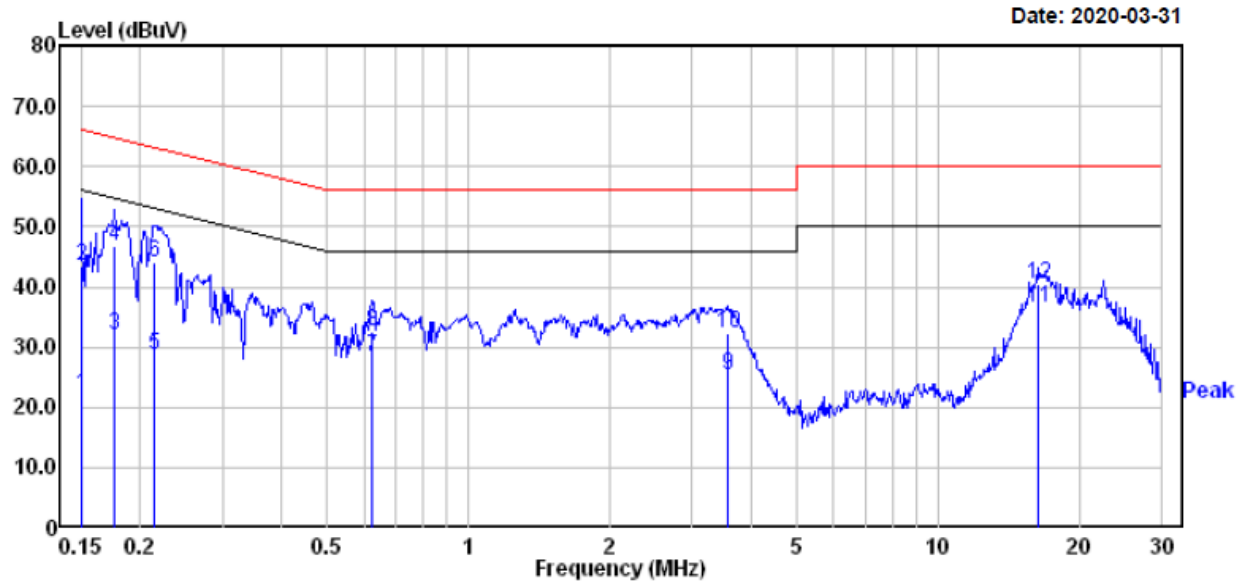
EUT operation mode: ***Transmitting in 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1)Middle Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1)and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 2&Chain 3)***

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.184	10.31	19.82	30.13	54.28	-24.15	Average
2	0.184	24.31	19.82	44.13	64.28	-20.15	QP
3	0.216	11.10	19.82	30.92	52.96	-22.04	Average
4	0.216	23.10	19.82	42.92	62.96	-20.04	QP
5	0.270	10.80	19.82	30.62	51.12	-20.50	Average
6	0.270	16.60	19.82	36.42	61.12	-24.70	QP
7	0.627	12.90	19.75	32.65	46.00	-13.35	Average
8	0.627	15.90	19.75	35.65	56.00	-20.35	QP
9	3.528	7.90	19.47	27.37	46.00	-18.63	Average
10	3.528	14.80	19.47	34.27	56.00	-21.73	QP
11	16.312	14.20	19.72	33.92	50.00	-16.08	Average
12	16.312	19.00	19.72	38.72	60.00	-21.28	QP

AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	2.30	19.82	22.12	56.00	-33.88	Average
2	0.150	23.70	19.82	43.52	66.00	-22.48	QP
3	0.177	12.20	19.83	32.03	54.64	-22.61	Average
4	0.177	26.90	19.83	46.73	64.64	-17.91	QP
5	0.214	8.80	19.82	28.62	53.05	-24.43	Average
6	0.214	24.30	19.82	44.12	63.05	-18.93	QP
7	0.624	8.50	19.75	28.25	46.00	-17.75	Average
8	0.624	12.90	19.75	32.65	56.00	-23.35	QP
9	3.584	5.80	19.47	25.27	46.00	-20.73	Average
10	3.584	12.70	19.47	32.17	56.00	-23.83	QP
11	16.312	16.80	19.72	36.52	50.00	-13.48	Average
12	16.312	20.60	19.72	40.32	60.00	-19.68	QP

Note:

1) Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)
2) Over Limit (dB) = Read level (dBµV) + Factor (dB) - Limit (dBµV)

§15.205 & §15.209 & §15.407(B) (1),(6),(7) – UNDESIRABLE EMISSION & RESTRICTED BANDS

Applicable Standard

FCC §15.407 (b) (1), (6), (7); §15.209; §15.205;

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 EIRP of –27dBm/MHz

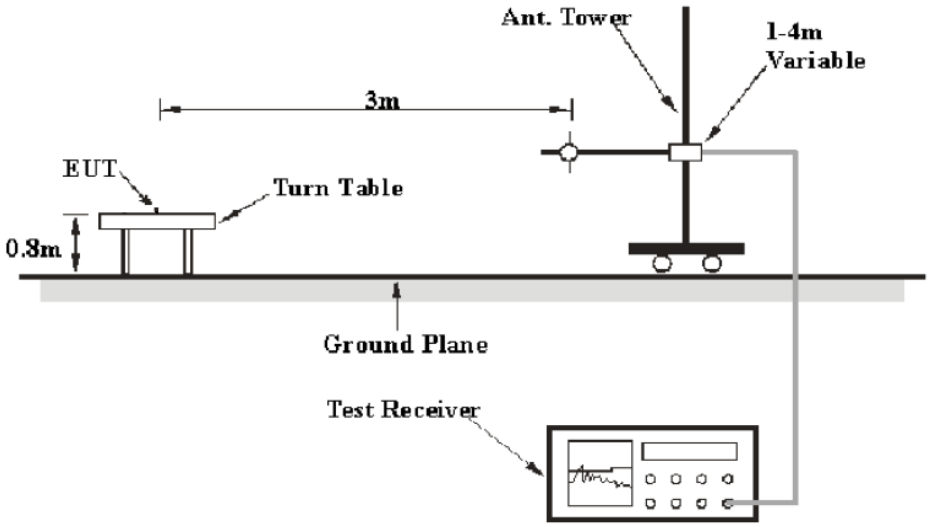
For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to 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.

As per FCC §15.35(d):Unless otherwise specified, on any frenquency or frequencies above 1000MHz,the radiated emission limits are based on the use of measurement instrunmentation employing an average detector function. Unless otherwise specified, measurements above 1000MHz shall be performed using a minimum resolution bandwidth of 1MHz.

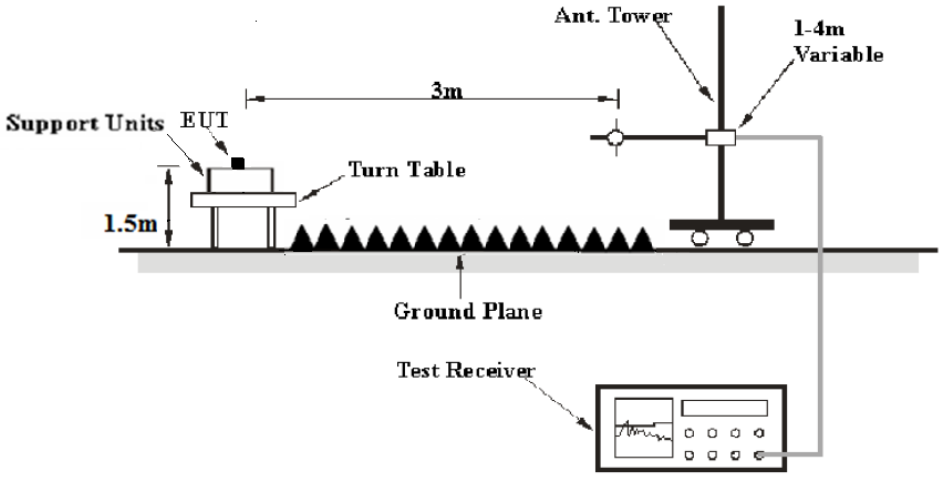
According to 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as: E [dBμV/m] = EIRP [dBm] + 95.2, for d = 3 meters.

EUT Setup

Below 1 GHz:



1 GHz-40GHz:



The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with 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 Setup was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1GHz	1MHz	3 MHz	/	PK
	1MHz	3 MHz	/	Ave.

Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

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

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Loss 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 –Extrapolation result

Test Data

Environmental Conditions

Temperature:	24.8 ℃
Relative Humidity:	51 %
ATM Pressure:	101.3 kPa

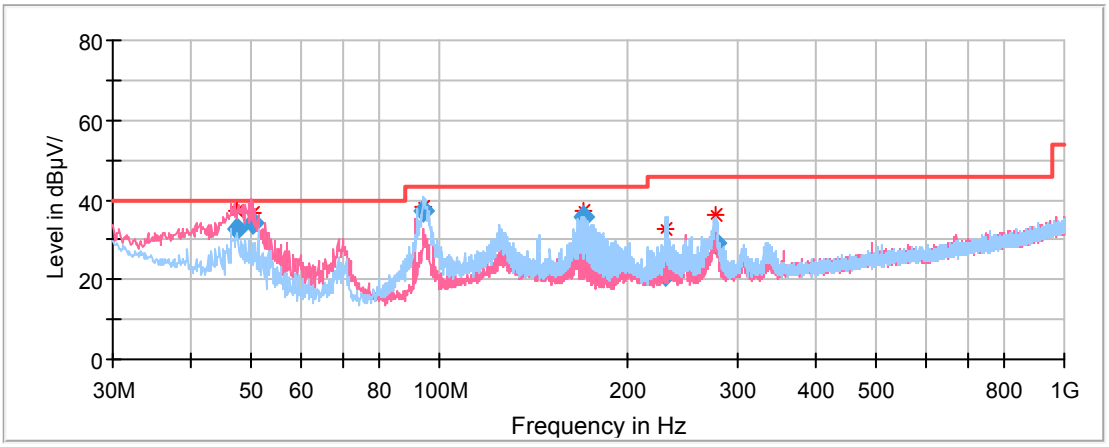
The testing was performed by Stone Zhang on 2020-03-16.

Test Mode: Transmitting

Spurious Emission Test

30MHz-1GHz(5150-5250MHz Band):

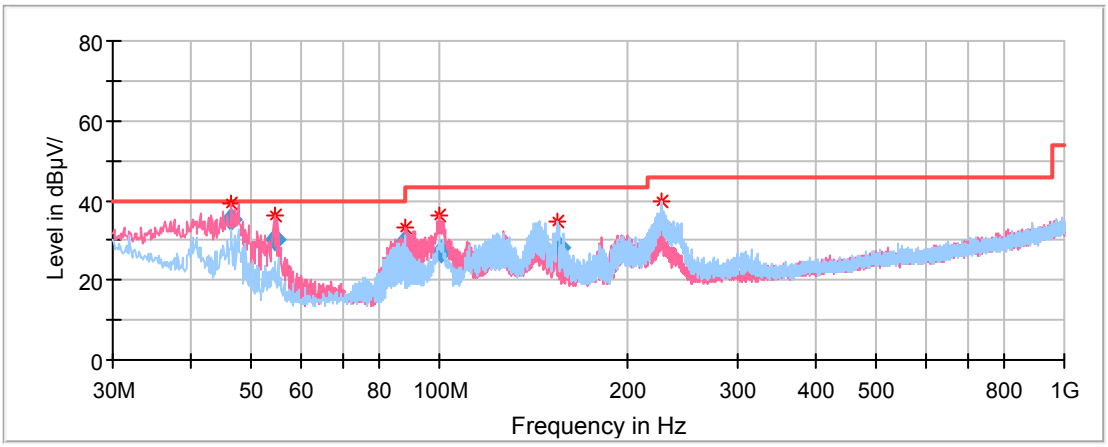
Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5240MHz(Chain0) in Z-axis of orientation was recorded.



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
47.29	32.58	100	V	84	-15.7	40.00	7.42
50.16	34.30	100	V	347	-17.5	40.00	5.70
94.08	37.32	200	H	46	-16.4	43.50	6.18
169.92	35.49	200	H	108	-13.2	43.50	8.01
230.36	21.30	200	H	304	-12.2	46.00	24.70
275.84	29.14	100	H	8	-11.2	46.00	16.86

30MHz-1GHz(5725-5850MHz Band):

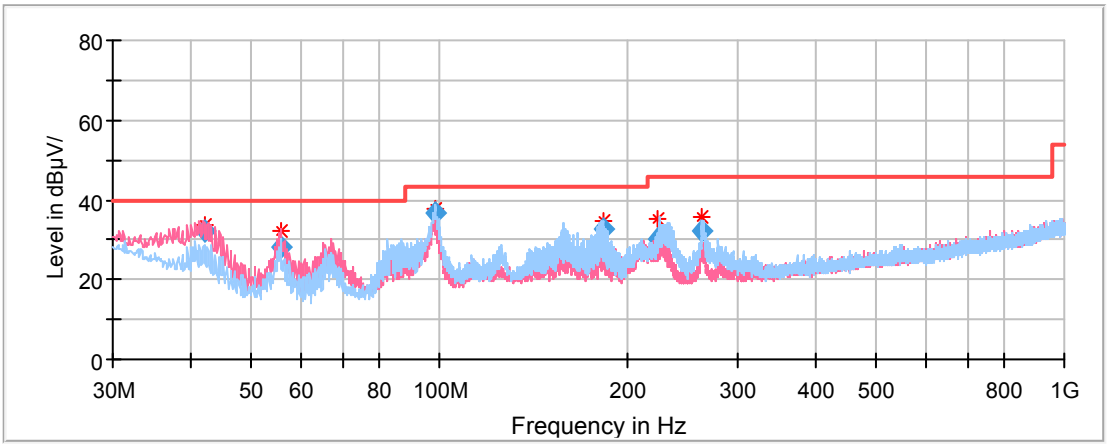
Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5825MHz(Chain0) in Z-axis of orientation was recorded



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
46.53	34.98	100	V	117	-14.7	40.00	5.02
54.56	30.21	100	V	138	-17.7	40.00	9.79
88.26	29.79	100	V	127	-17.6	40.00	10.21
100.51	27.27	100	V	112	-14.8	43.50	16.23
155.08	28.05	200	H	141	-12.5	43.50	15.45
226.11	33.65	100	H	152	-12.2	46.00	12.35

30MHz-1GHz:

*(The worst case **2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1)Middle Channel and 5G Wi-Fi (Radio 2) Band 1 802.11n-HT40 low channel (Chain 2&Chain 3)** can transmit simultaneously in Z-axis of orientation was recorded)*



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
42.03	32.12	100	V	122	-12.1	40.00	7.88
55.76	28.09	100	V	65	-17.8	40.00	11.91
98.44	36.78	200	H	358	-15.3	43.50	6.72
182.40	32.73	200	H	291	-13.5	43.50	10.77
224.01	30.25	200	H	228	-12.2	46.00	15.75
263.40	32.00	100	H	212	-11.6	46.00	14.00

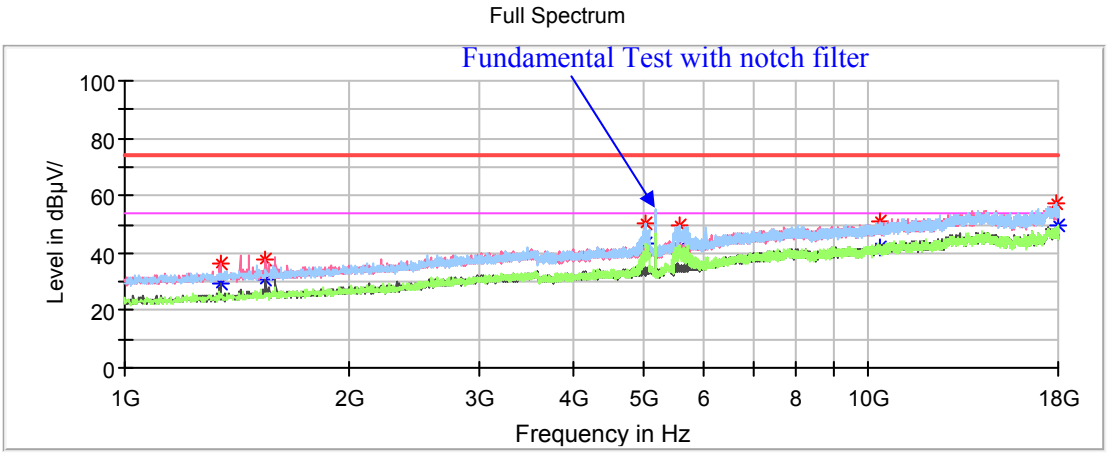
1GHz-18GHz (5150-5250MHz Band):

802.11a Mode(Chain0):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

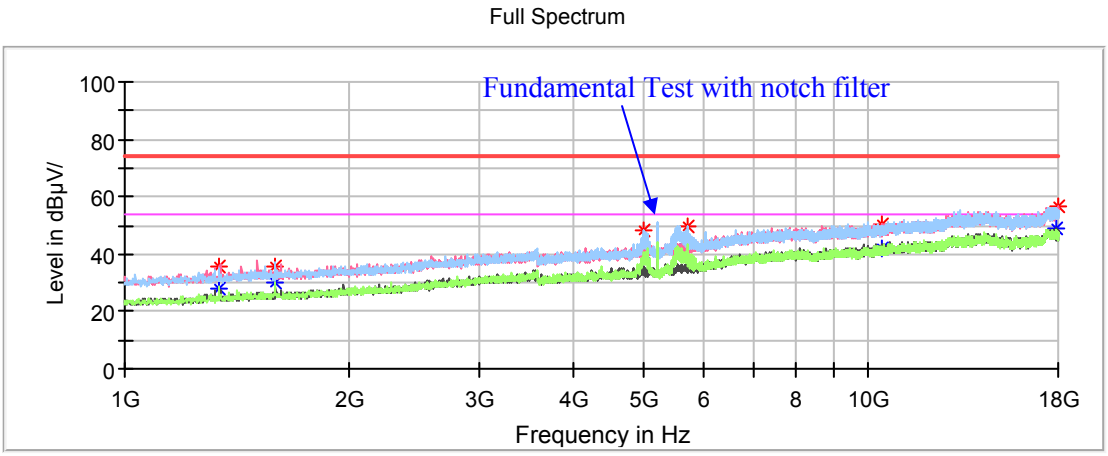
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



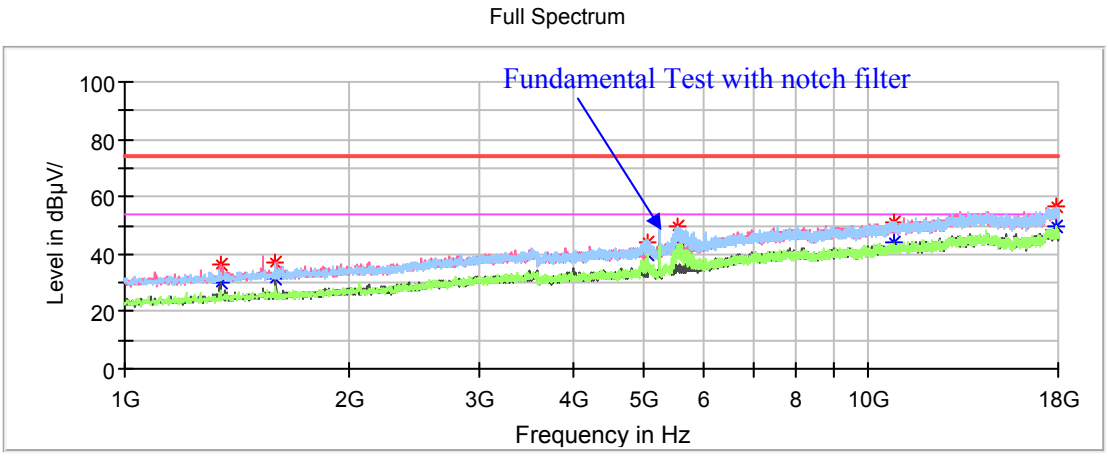
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1343.40	---	29.55	200	V	7	-10.8	54.00	24.45
1343.40	36.55	---	200	V	7	-10.8	74.00	37.45
1547.40	---	30.95	150	V	233	-9.8	54.00	23.05
1547.40	37.52	---	150	V	233	-9.8	74.00	36.48
5029.00	---	43.19	200	H	79	-0.2	54.00	10.81
5029.00	50.38	---	200	H	79	-0.2	74.00	23.62
5584.90	49.35	---	200	H	79	1.6	68.20	18.85
10338.10	50.94	---	150	V	247	8.7	68.20	17.26
17928.60	---	49.38	200	H	140	13.6	54.00	4.62
17928.60	57.18	---	200	H	140	13.6	74.00	16.82

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1341.70	---	27.84	150	V	1	-10.8	54.00	26.16
1341.70	35.97	---	150	V	1	-10.8	74.00	38.03
1591.60	---	30.4	150	H	307	-9.6	54.00	23.60
1591.60	35.9	---	150	H	307	-9.6	74.00	38.10
4998.40	---	40.76	150	H	80	-0.3	54.00	13.24
4998.40	48.2	---	150	H	80	-0.3	74.00	25.80
5710.70	49.36	---	150	H	80	1.8	68.20	18.84
10407.80	50.61	---	200	V	348	8.8	68.20	17.59
17916.70	---	49.48	200	V	2	13.6	54.00	4.52
17916.70	56.36	---	200	V	2	13.6	74.00	17.64

High Channel: 5240MHz



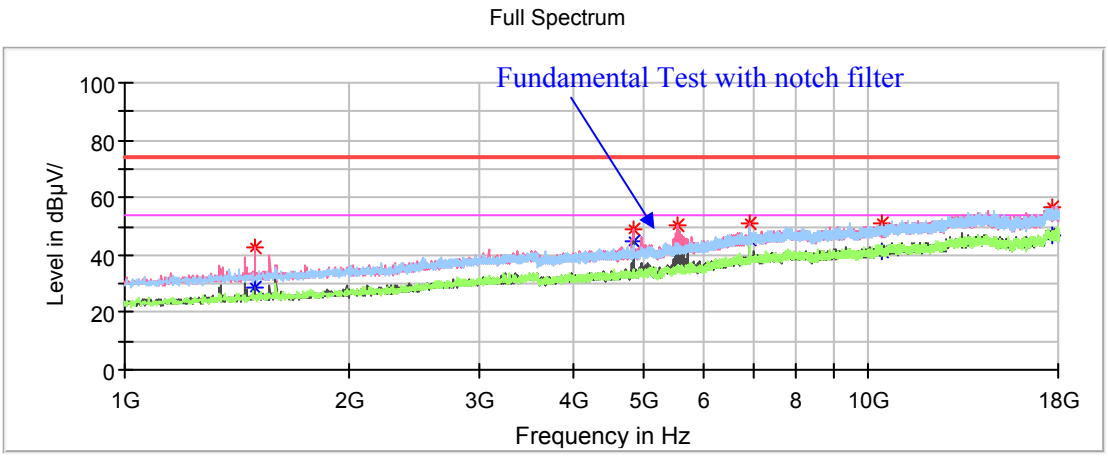
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1343.40	---	29.77	150	V	0	-10.8	54.00	24.23
1343.40	36.11	---	150	V	0	-10.8	74.00	37.89
1596.70	---	31.43	200	V	244	-9.6	54.00	22.57
1596.70	37.05	---	200	V	244	-9.6	74.00	36.95
5039.20	---	39.76	150	H	96	-0.1	54.00	14.24
5039.20	44.17	---	150	H	96	-0.1	74.00	29.83
5556.00	49.93	---	150	H	80	1.5	68.20	18.27
10820.90	---	43.77	200	V	359	9.5	54.00	10.23
10820.90	51.37	---	200	V	359	9.5	74.00	22.63
17937.10	---	49.63	150	H	359	13.6	54.00	4.37
17937.10	56.74	---	150	H	359	13.6	74.00	17.26

802.11a Mode(Chain1):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

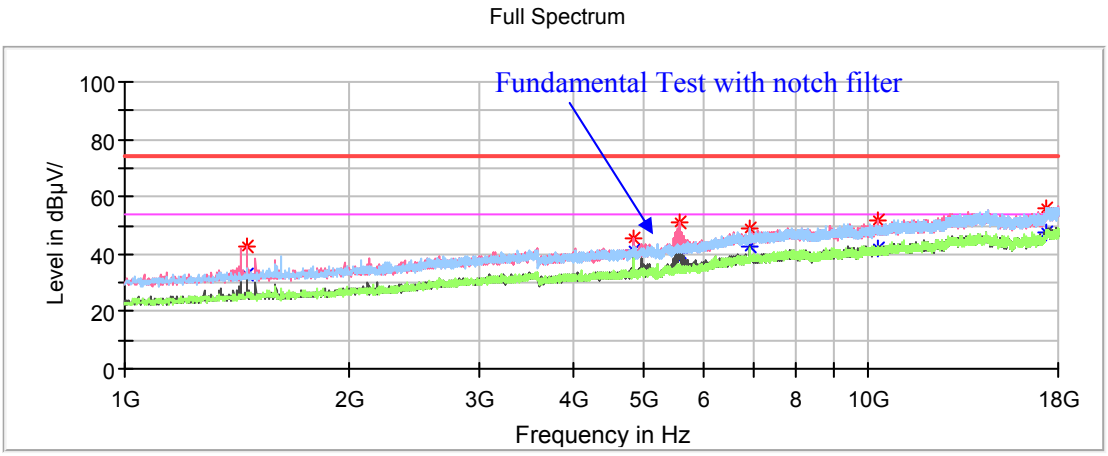
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



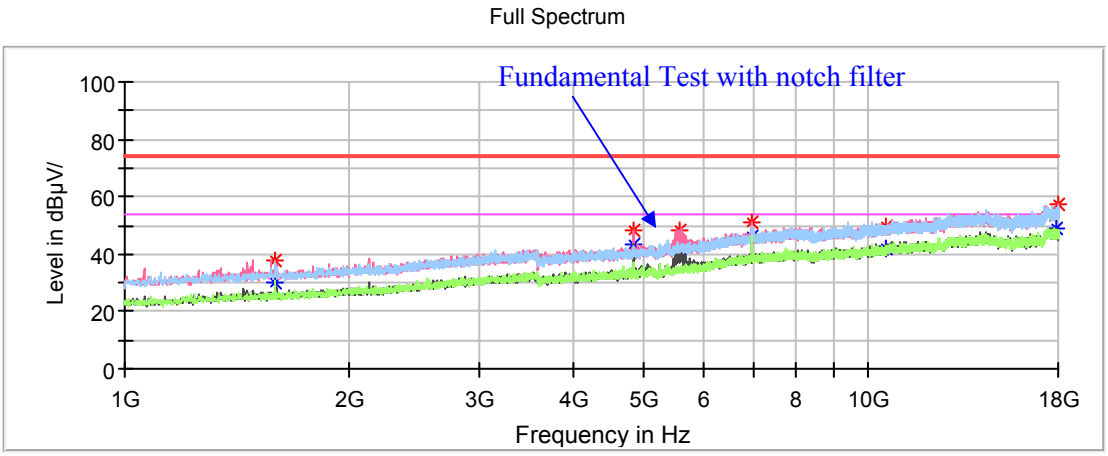
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1494.70	---	28.73	150	V	244	-10.0	54.00	25.27
1494.70	42.68	---	150	V	244	-10.0	74.00	31.32
4823.30	---	45.03	150	V	80	-0.5	54.00	8.97
4823.30	48.83	---	150	V	80	-0.5	74.00	25.17
5554.30	50.38	---	150	V	80	1.5	68.20	17.82
6905.80	51.38	---	150	V	9	5.2	68.20	16.82
10414.60	50.75	---	150	V	156	8.9	68.20	17.45
17649.80	56.67	---	200	V	3	14.0	68.20	11.53

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1459.00	---	32.6	200	V	295	-10.2	54.00	21.40
1459.00	42.39	---	200	V	295	-10.2	74.00	31.61
4823.30	---	41.11	150	V	24	-0.5	54.00	12.89
4823.30	45.62	---	150	V	24	-0.5	74.00	28.38
5586.60	51.17	---	150	V	71	1.6	68.20	17.03
6933.00	48.72	---	150	H	11	5.2	68.20	19.48
10275.20	51.58	---	150	V	343	8.6	68.20	16.62
17372.70	56.17	---	150	V	211	13.6	68.20	12.03

High Channel: 5240MHz



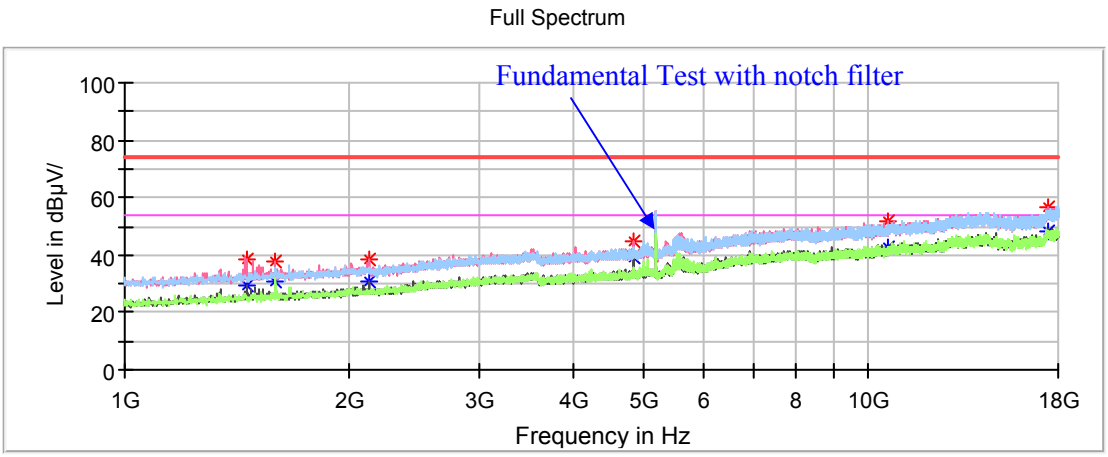
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.30	---	30.09	200	V	201	-9.6	54.00	23.91
1593.30	37.63	---	200	V	201	-9.6	74.00	36.37
4823.30	---	43.49	200	V	82	-0.5	54.00	10.51
4823.30	48.04	---	200	V	82	-0.5	74.00	25.96
5569.60	48.34	---	200	V	82	1.5	68.20	19.86
6985.70	50.85	---	150	V	2	5.3	68.20	17.35
10560.80	49.97	---	200	V	96	9.1	68.20	18.23
17916.70	---	49.11	150	V	234	13.6	54.00	4.89
17916.70	57.3	---	150	V	234	13.6	74.00	16.70

802.11ac20 Mode(Chain0+Chain1):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

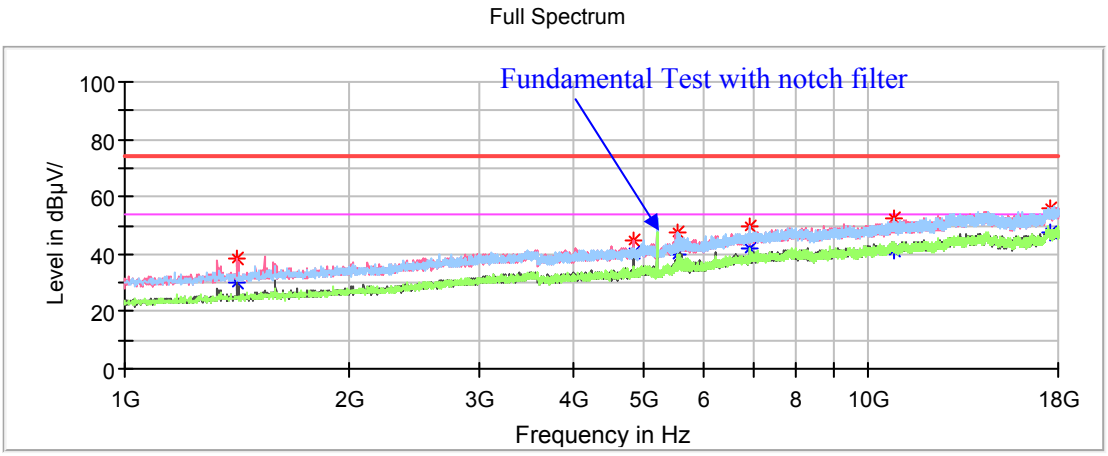
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



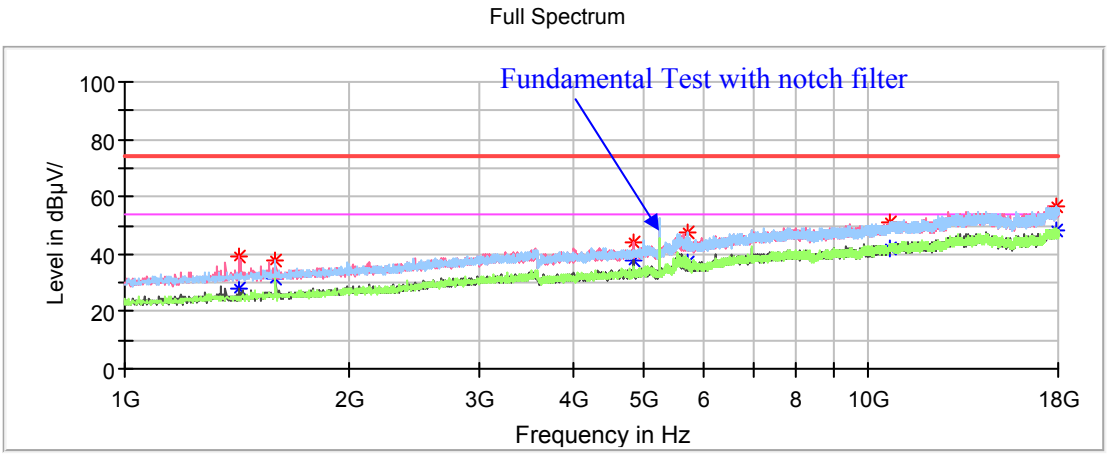
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1462.40	---	29.23	200	V	280	-10.1	54.00	24.77
1462.40	38.77	---	200	V	280	-10.1	74.00	35.23
1593.30	---	30.68	200	H	312	-9.6	54.00	23.32
1593.30	37.5	---	200	H	312	-9.6	74.00	36.50
2128.80	38.27	---	150	V	259	-7.9	68.20	29.93
4819.90	---	39.49	200	V	85	-0.5	54.00	14.51
4819.90	44.83	---	200	V	85	-0.5	74.00	29.17
10647.50	---	42.66	150	V	288	9.2	54.00	11.34
10647.50	51.44	---	150	V	288	9.2	74.00	22.56
17479.80	56.55	---	150	V	0	14.2	68.20	11.65

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1418.20	---	29.98	200	V	307	-10.4	54.00	24.02
1418.20	38.32	---	200	V	307	-10.4	74.00	35.68
4819.90	44.47	---	200	V	81	-0.5	74.00	29.53
4819.90	---	40.83	200	V	81	-0.5	54.00	13.17
5554.30	47.41	---	150	H	79	1.5	68.20	20.79
6933.00	49.35	---	150	H	153	5.2	68.20	18.85
10792.00	---	41.6	200	H	201	9.4	54.00	12.40
10792.00	52.24	---	200	H	201	9.4	74.00	21.76
17517.20	56.29	---	150	V	64	14.3	68.20	11.91

High Channel: 5240MHz

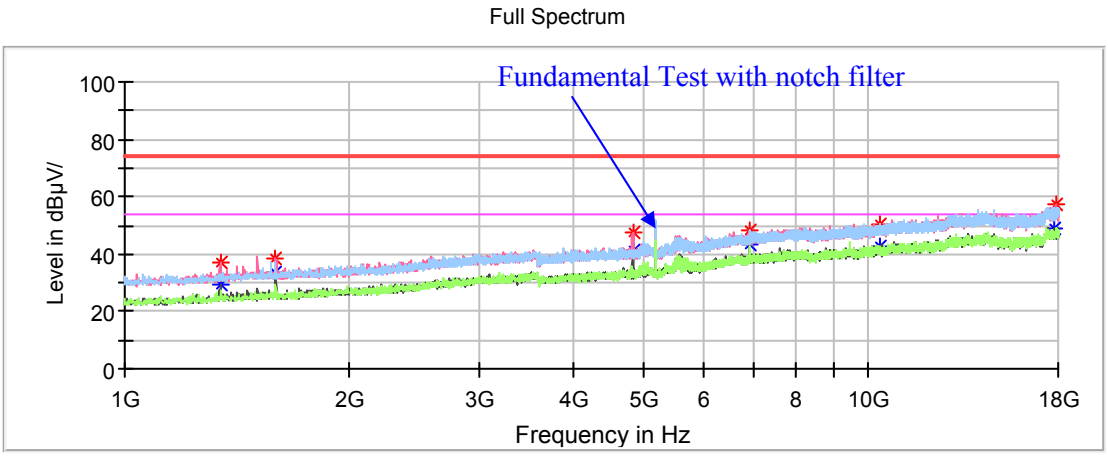


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1423.30	---	28.24	150	V	245	-10.3	54.00	25.76
1423.30	38.85	---	150	V	245	-10.3	74.00	35.15
1595.00	---	31.42	200	H	313	-9.6	54.00	22.58
1595.00	37.71	---	200	H	313	-9.6	74.00	36.29
4819.90	---	38.03	150	V	80	-0.5	54.00	15.97
4819.90	43.85	---	150	V	80	-0.5	74.00	30.15
5700.50	47.26	---	150	H	79	1.8	68.20	20.94
10662.80	---	42.22	150	H	182	9.2	54.00	11.78
10662.80	51.1	---	150	H	182	9.2	74.00	22.90
17836.80	---	48.02	200	H	264	13.7	54.00	5.98
17836.80	56.68	---	200	H	264	13.7	74.00	17.32

802.11n-HT20 Mode*(Chain0+Chain1):*
*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

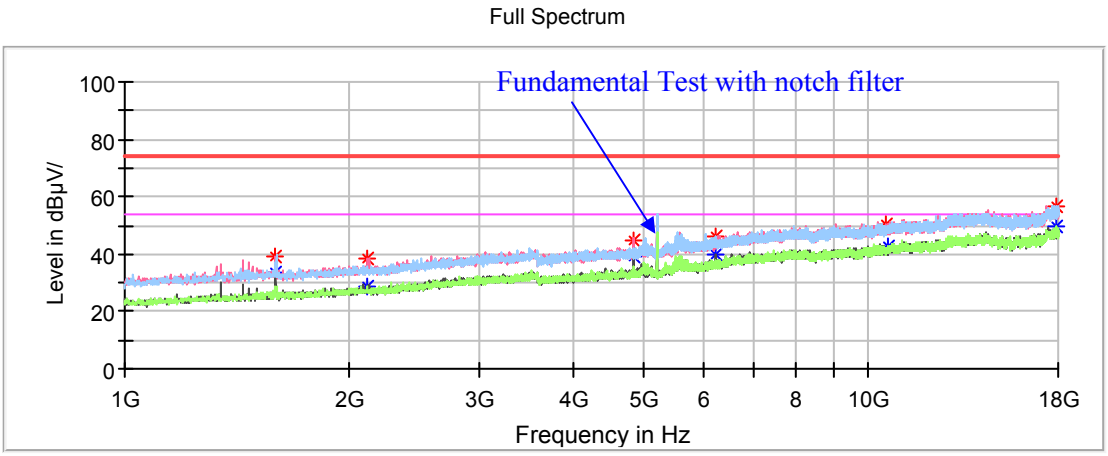
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



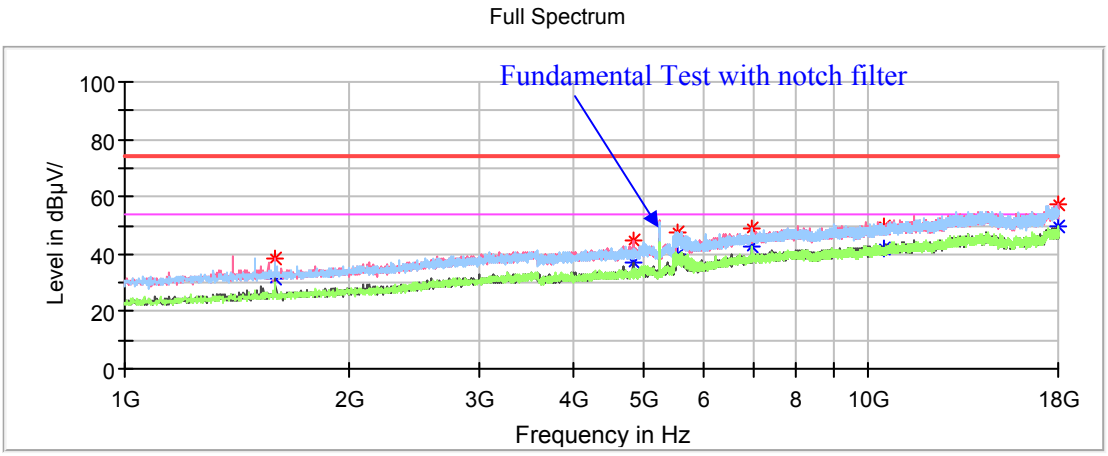
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1345.10	---	29.64	150	V	2	-10.8	54.00	24.36
1345.10	37.13	---	150	V	2	-10.8	74.00	36.87
1596.70	---	33.26	200	V	306	-9.6	54.00	20.74
1596.70	38.29	---	200	V	306	-9.6	74.00	35.71
4818.20	---	41.33	150	V	88	-0.5	54.00	12.67
4818.20	47.37	---	150	V	88	-0.5	74.00	26.63
6905.80	48.41	---	200	H	145	5.2	68.20	19.79
10385.70	50.32	---	150	H	348	8.8	68.20	17.88
17833.40	---	48.87	150	V	320	13.8	54.00	5.13
17833.40	57.00	---	150	V	320	13.8	74.00	17.00

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1596.70	---	33.66	150	V	129	-9.6	54.00	20.34
1596.70	38.84	---	150	V	129	-9.6	74.00	35.16
2123.70	38.44	---	200	V	295	-7.9	68.20	29.76
4819.90	---	39.2	200	V	92	-0.5	54.00	14.80
4819.90	44.89	---	200	V	92	-0.5	74.00	29.11
6249.60	45.85	---	150	H	311	3.3	68.20	22.35
10586.30	50.19	---	200	V	211	9.1	68.20	18.01
17933.70	---	49.92	150	H	349	13.6	54.00	4.08
17933.70	56.84	---	150	H	349	13.6	74.00	17.16

High Channel: 5240MHz



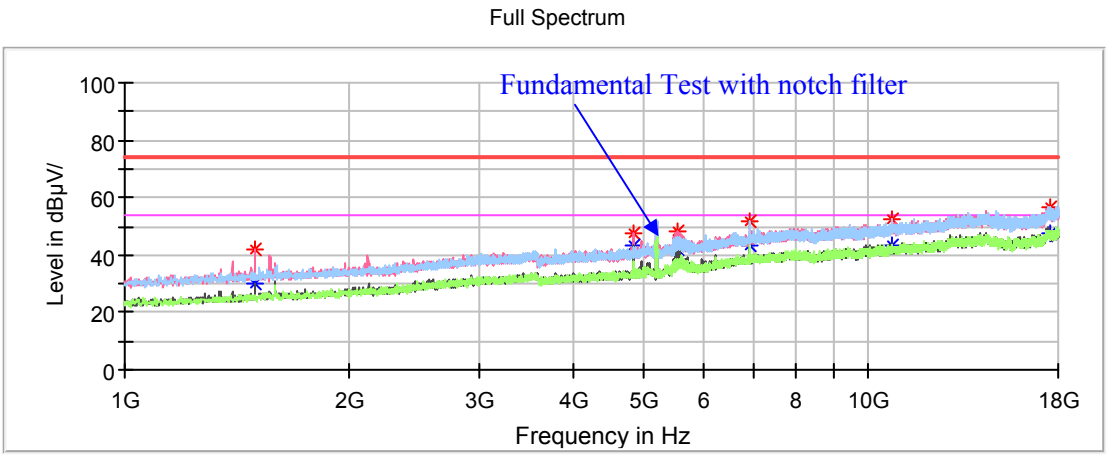
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.30	---	31.59	200	V	312	-9.6	54.00	22.41
1593.30	38.57	---	200	V	312	-9.6	74.00	35.43
4818.20	---	37.13	200	V	86	-0.5	54.00	16.87
4818.20	44.51	---	200	V	86	-0.5	74.00	29.49
5535.60	47.49	---	200	V	86	1.5	68.20	20.71
6985.70	48.89	---	150	V	48	5.3	68.20	19.31
10487.70	49.61	---	150	V	355	9	68.20	18.59
17962.60	---	49.32	200	H	174	13.5	54.00	4.68
17962.60	57.09	---	200	H	174	13.5	74.00	16.91

802.11ac40 Mode(Chain0+Chain1):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

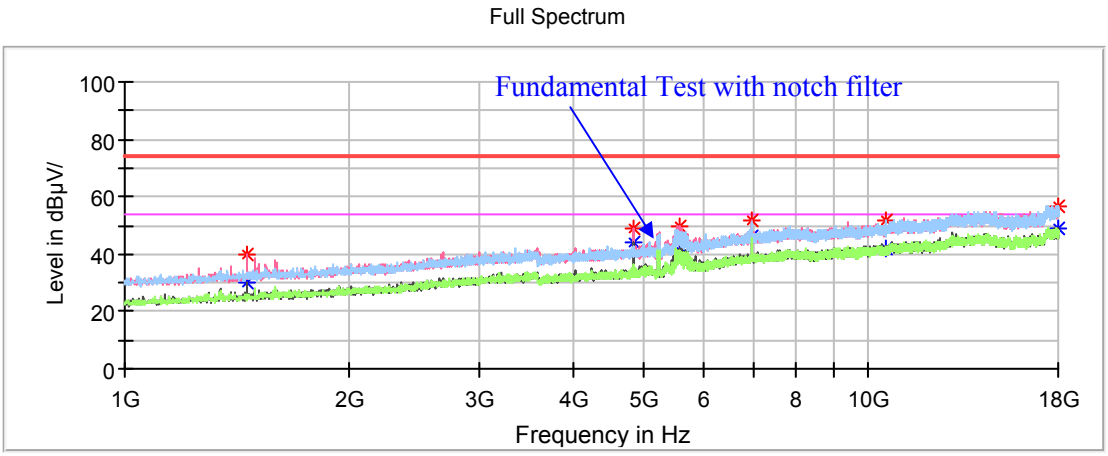
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5190MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1496.40	---	30.25	200	V	340	-9.9	54.00	23.75
1496.40	41.65	---	200	V	340	-9.9	74.00	32.35
4819.90	---	43.48	200	V	79	-0.5	54.00	10.52
4819.90	47.32	---	200	V	79	-0.5	74.00	26.68
5532.20	48.59	---	150	V	80	1.5	68.20	19.61
6919.40	51.89	---	150	H	154	5.2	68.20	16.31
10734.20	---	43.47	200	H	230	9.3	54.00	10.53
10734.20	52.26	---	200	H	230	9.3	74.00	21.74
17535.90	56.85	---	150	H	351	14.2	68.20	11.35

High Channel: 5230MHz

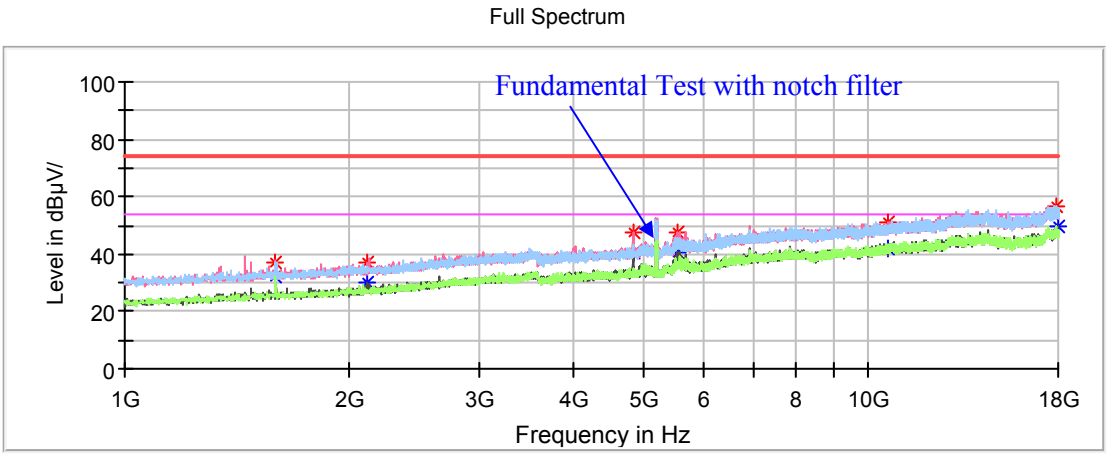


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1460.70	---	30.14	200	V	279	-10.1	54.00	23.86
1460.70	39.82	---	200	V	279	-10.1	74.00	34.18
4819.90	---	44.4	150	V	70	-0.5	54.00	9.60
4819.90	48.98	---	150	V	70	-0.5	74.00	25.02
5573.00	49.79	---	200	V	85	1.5	68.20	18.41
6972.10	51.81	---	150	V	12	5.3	68.20	16.39
10571.00	51.65	---	200	H	281	9.1	68.20	16.55
17959.20	---	49	150	H	13	13.5	54.00	5.00
17959.20	56.95	---	150	H	13	13.5	74.00	17.05

802.11n-HT40 Mode*(Chain0+Chain1)*:
*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

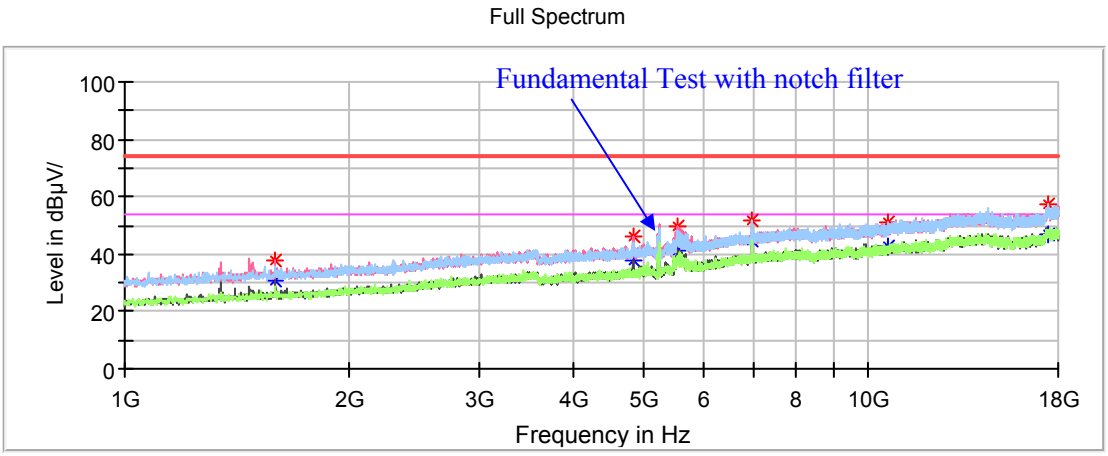
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5190MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1596.70	---	32.24	200	H	310	-9.6	54.00	21.76
1596.70	37.08	---	200	H	310	-9.6	74.00	36.92
2123.70	37.2	---	150	V	265	-7.9	68.20	31.00
4819.90	---	40.35	150	V	80	-0.5	54.00	13.65
4819.90	47.46	---	150	V	80	-0.5	74.00	26.54
5556.00	47.89	---	150	V	80	1.5	68.20	20.31
10647.50	---	42.04	200	H	186	9.2	54.00	11.96
10647.50	50.91	---	200	H	186	9.2	74.00	23.09
17938.80	---	49.42	150	H	309	13.5	54.00	4.58
17938.80	56.73	---	150	H	309	13.5	74.00	17.27

High Channel: 5230MHz

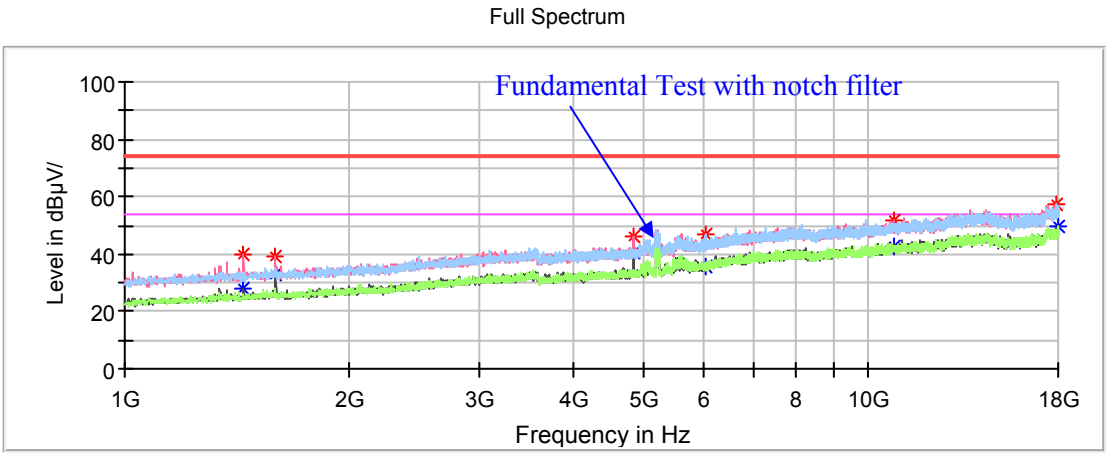


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1591.60	37.52	---	200	V	243	-9.6	74.00	36.48
1591.60	---	30.60	200	V	243	-9.6	54.00	23.40
4818.20	45.87	---	150	V	80	-0.5	74.00	28.13
4818.20	---	37.82	150	V	80	-0.5	54.00	16.18
5537.30	49.36	---	150	V	80	1.5	68.20	18.84
6972.10	51.44	---	150	H	23	5.3	68.20	16.76
10639.00	---	42.34	150	H	11	9.2	54.00	11.66
10639.00	51.03	---	150	H	11	9.2	74.00	22.97
17456.00	57.10	---	200	H	185	14.1	68.20	11.10

802.11ac80 Mode*(Chain0+Chain1)*:
*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5210MHz



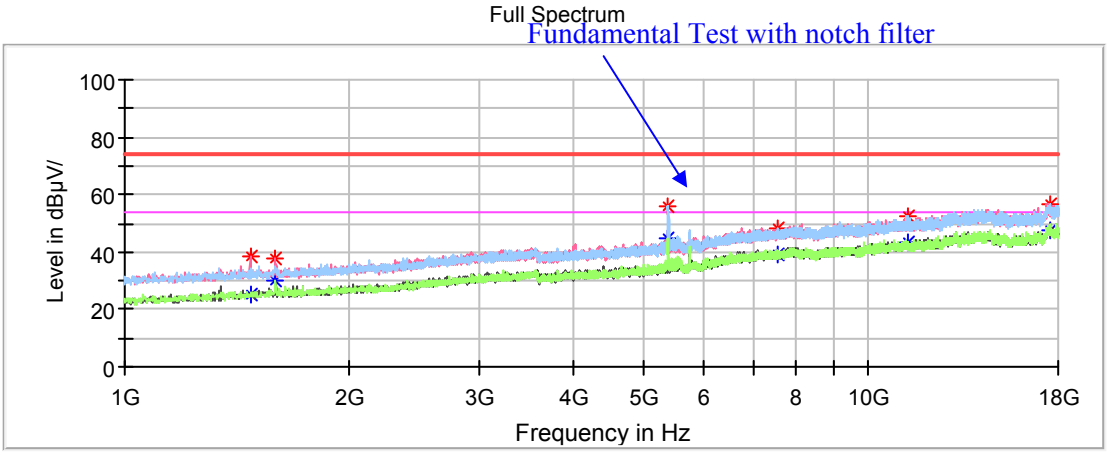
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1445.40	---	28.02	150	V	242	-10.2	54.00	25.98
1445.40	40.19	---	150	V	242	-10.2	74.00	33.81
1593.30	---	32.76	200	V	259	-9.6	54.00	21.24
1593.30	39.28	---	200	V	259	-9.6	74.00	34.72
4819.90	---	40.40	200	V	80	-0.5	54.00	13.60
4819.90	46.38	---	200	V	80	-0.5	74.00	27.62
6043.90	47.08	---	150	H	91	2.5	68.20	21.12
10819.20	---	42.97	200	V	274	9.5	54.00	11.03
10819.20	51.56	---	200	V	274	9.5	74.00	22.44
17964.30	---	49.73	150	H	347	13.5	54.00	4.27
17964.30	57.16	---	150	H	347	13.5	74.00	16.84

5725-5850MHz Band:
1GHz-18GHz:

802.11a Mode(Chain0):
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

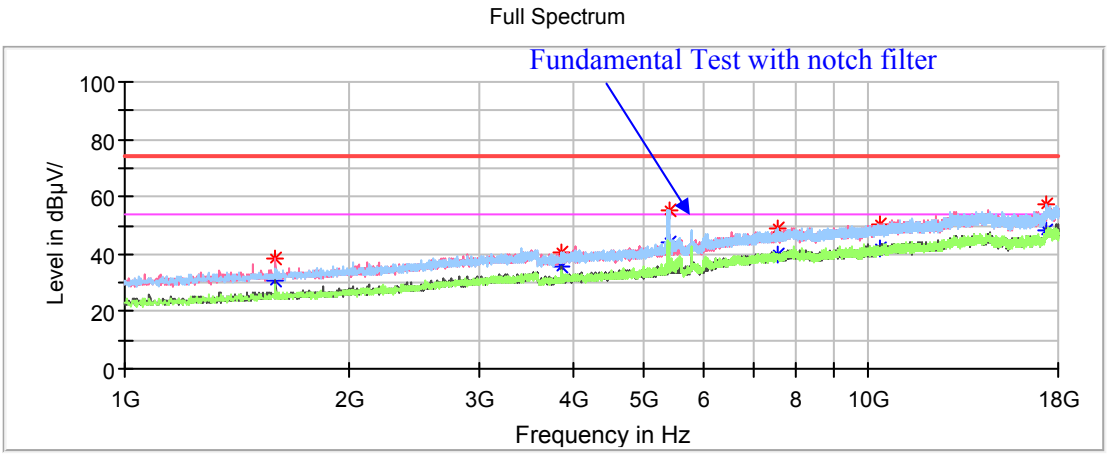
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



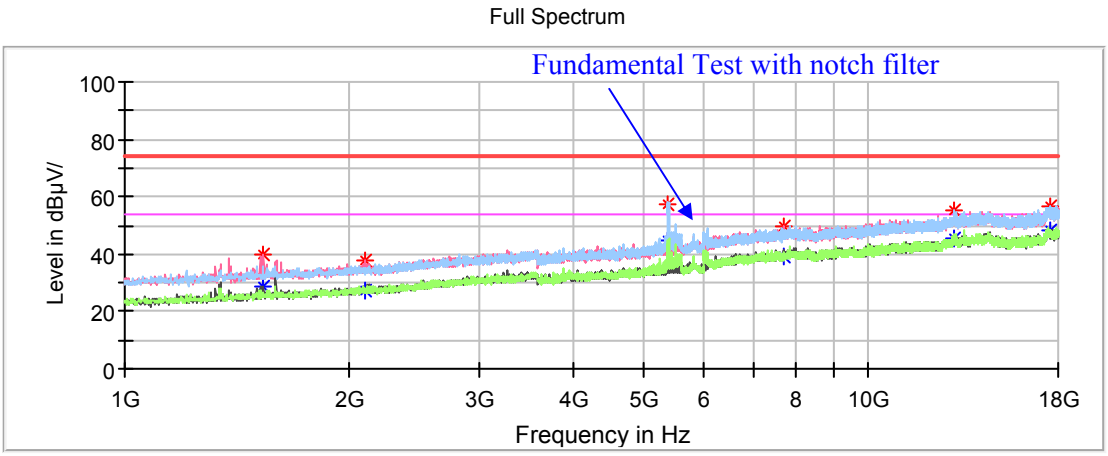
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1474.30	---	25.48	150	V	14	-10.1	54.00	28.52
1474.30	38.33	---	150	V	14	-10.1	74.00	35.67
1595.00	---	29.79	200	V	252	-9.6	54.00	24.21
1595.00	37.43	---	200	V	252	-9.6	74.00	36.57
5365.60	---	44.65	150	H	66	1.0	54.00	9.35
5365.60	55.66	---	150	H	66	1.0	74.00	18.34
7551.80	---	38.96	150	H	0	6.2	54.00	15.04
7551.80	48.46	---	150	H	0	6.2	74.00	25.54
11271.40	---	43.02	150	H	0	9.8	54.00	10.98
11271.40	52.41	---	150	H	0	9.8	74.00	21.59
17522.30	56.89	---	200	H	22	14.2	68.20	11.31

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1595.00	---	30.44	200	V	142	-9.6	54.00	23.56
1595.00	38.74	---	200	V	142	-9.6	74.00	35.26
3856.00	---	35.36	200	V	78	-2.3	54.00	18.64
3856.00	40.65	---	200	H	78	-2.3	74.00	33.35
5387.70	---	43.97	150	H	81	1.0	54.00	10.03
5387.70	55.52	---	150	H	81	1.0	74.00	18.48
7553.50	---	40.13	200	H	137	6.2	54.00	13.87
7555.20	49.08	---	200	H	137	6.2	74.00	24.92
10365.30	50.34	---	150	V	206	8.8	68.20	17.86
17394.80	57.17	---	150	H	278	13.7	68.20	11.03

High Channel: 5825MHz



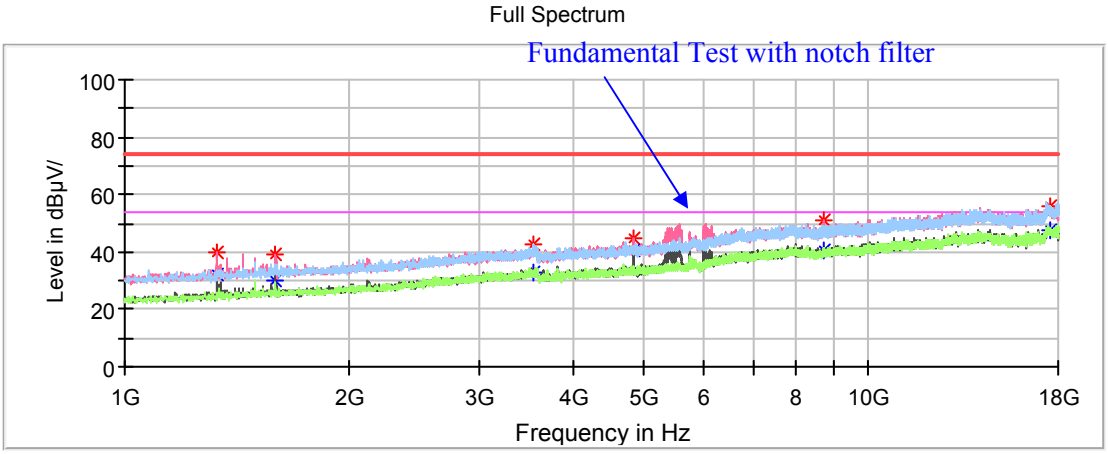
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1538.90	---	29	200	V	230	-9.8	54.00	25.00
1538.90	39.59	---	200	V	230	-9.8	74.00	34.41
2108.40	37.57	---	150	V	318	-8.0	68.20	30.63
5365.60	---	44.55	200	H	80	1.0	54.00	9.45
5365.60	57.52	---	200	H	80	1.0	74.00	16.48
7704.80	---	39.23	200	V	346	6.5	54.00	14.77
7704.80	49.43	---	200	V	346	6.5	74.00	24.57
13053.00	55.11	---	150	H	317	12	68.20	13.09
17563.10	56.33	---	150	H	259	14.2	68.20	11.87

802.11a Mode(Chain1):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

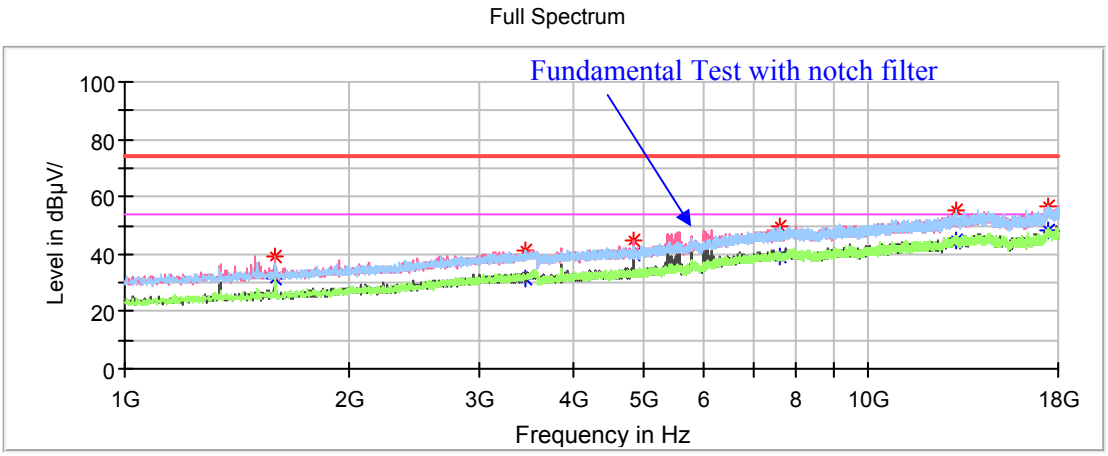
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



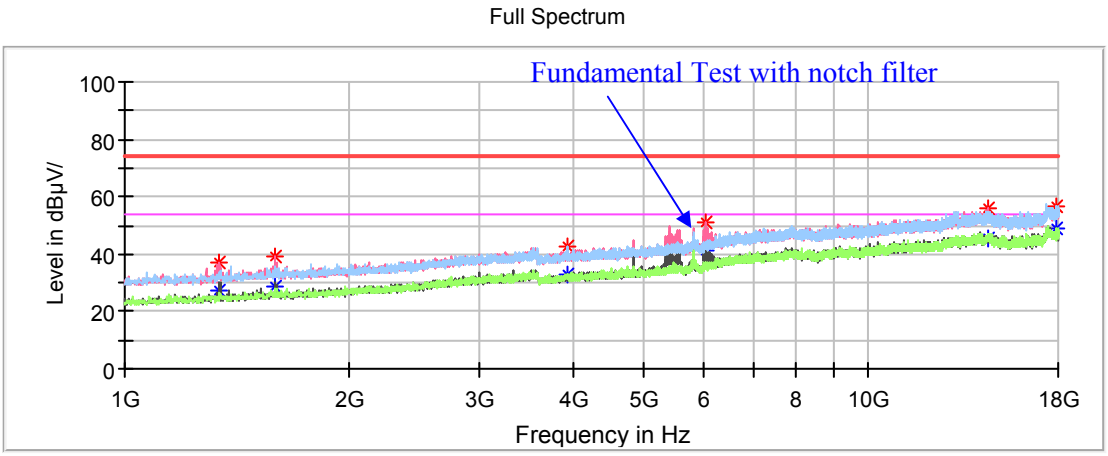
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1328.10	---	32.52	150	V	264	-10.9	54.00	21.48
1328.10	40.15	---	150	V	264	-10.9	74.00	33.85
1596.70	---	30.1	200	V	259	-9.6	54.00	23.90
1596.70	39.28	---	200	V	259	-9.6	74.00	34.72
3536.40	42.67	---	200	H	123	-3.4	68.20	25.53
4823.30	---	40.36	150	V	91	-0.5	54.00	13.64
4823.30	44.41	---	150	V	91	-0.5	74.00	29.59
8719.70	51.27	---	200	V	289	6.9	68.20	16.93
17581.80	56.19	---	150	H	0	14.1	68.20	12.01

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1595.00	---	31.62	150	V	249	-9.6	54.00	22.38
1595.00	39.39	---	150	V	249	-9.6	74.00	34.61
3451.40	41.58	---	150	H	0	-3.6	68.20	26.62
4823.30	---	39.99	150	V	94	-0.5	54.00	14.01
4823.30	45.04	---	150	V	94	-0.5	74.00	28.96
7596.00	---	39.39	200	H	233	6.3	54.00	14.61
7596.00	49.53	---	200	H	233	6.3	74.00	24.47
13107.40	55.07	---	150	H	339	12	68.20	13.13
17481.50	56.92	---	150	H	358	14.2	68.20	11.28

High Channel: 5825MHz



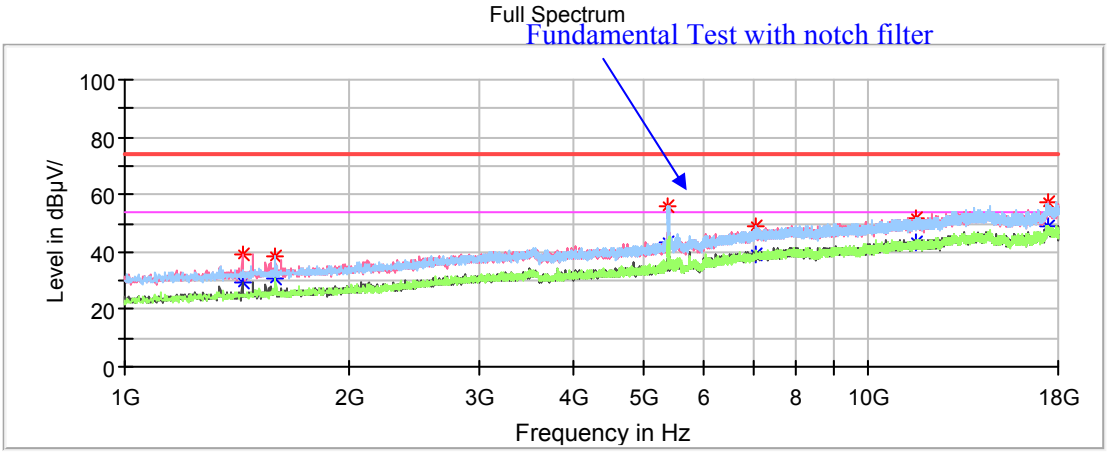
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1341.70	---	27.60	150	V	358	-10.8	54.00	26.40
1341.70	37.14	---	150	V	358	-10.8	74.00	36.86
1595.00	---	28.37	200	V	245	-9.6	54.00	25.63
1595.00	39.38	---	200	V	245	-9.6	74.00	34.62
3941.00	42.63	---	150	H	10	-2.1	74.00	31.37
3941.00	---	32.77	150	H	10	-2.1	54.00	21.23
6038.80	51.20	---	200	V	80	2.5	68.20	17.00
14453.80	55.79	---	200	V	142	12.7	68.20	12.41
17932.00	---	48.87	150	V	201	13.6	54.00	5.13
17932.00	56.82	---	150	V	201	13.6	74.00	17.18

802.11ac20 Mode(Chain0+Chain1):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

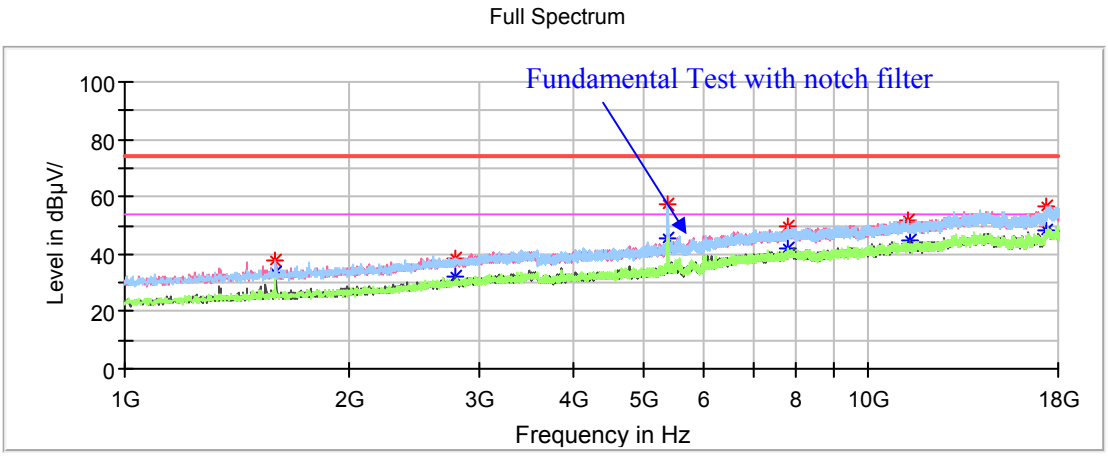
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



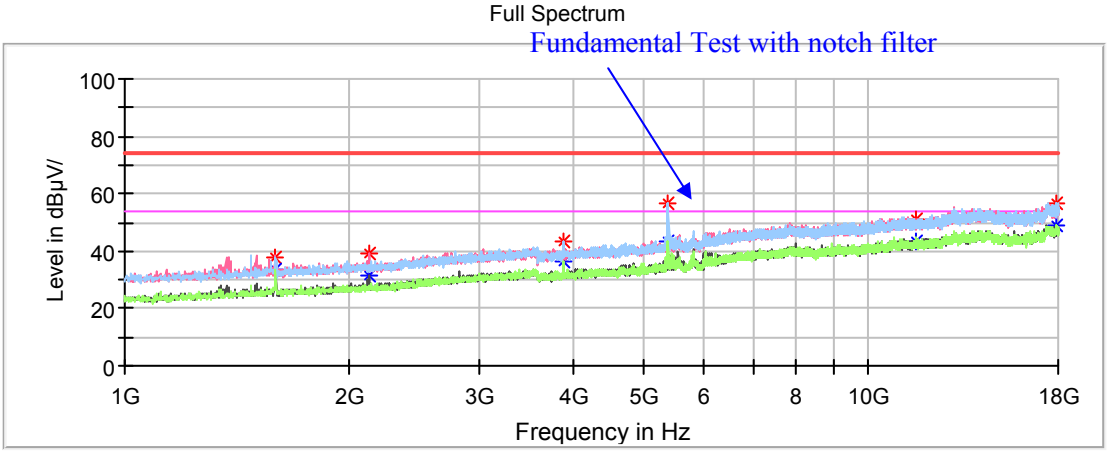
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1438.60	---	29.45	150	V	266	-10.3	54.00	24.55
1438.60	39.1	---	150	V	266	-10.3	74.00	34.90
1593.30	38.71	---	200	V	236	-9.6	74.00	35.29
1593.30	---	31.04	200	H	236	-9.6	54.00	22.96
5363.90	55.85	---	150	H	86	0.9	74.00	18.15
5363.90	---	43.35	150	H	86	0.9	54.00	10.65
7052.00	49.16	---	200	H	0	5.4	68.20	19.04
11587.60	---	43.63	150	V	53	9.8	54.00	10.37
11587.60	52.06	---	150	V	53	9.8	74.00	21.94
17501.90	57.03	---	150	V	297	14.3	68.20	11.17

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1596.70	---	33.64	200	V	230	-9.6	54.00	20.36
1596.70	37.73	---	200	V	230	-9.6	74.00	36.27
2774.80	---	32.23	200	V	20	-5.5	54.00	21.77
2774.80	38.46	---	200	V	20	-5.5	74.00	35.54
5386.00	---	45.33	150	H	80	1	54.00	8.67
5386.00	57.28	---	150	H	80	1	74.00	16.72
7801.70	49.39	---	200	H	312	6.7	68.20	18.81
11324.10	---	44.89	150	V	48	9.8	54.00	9.11
11324.10	51.72	---	150	V	48	9.8	74.00	22.28
17372.70	56.38	---	150	V	111	13.6	68.20	11.82

High Channel: 5825MHz

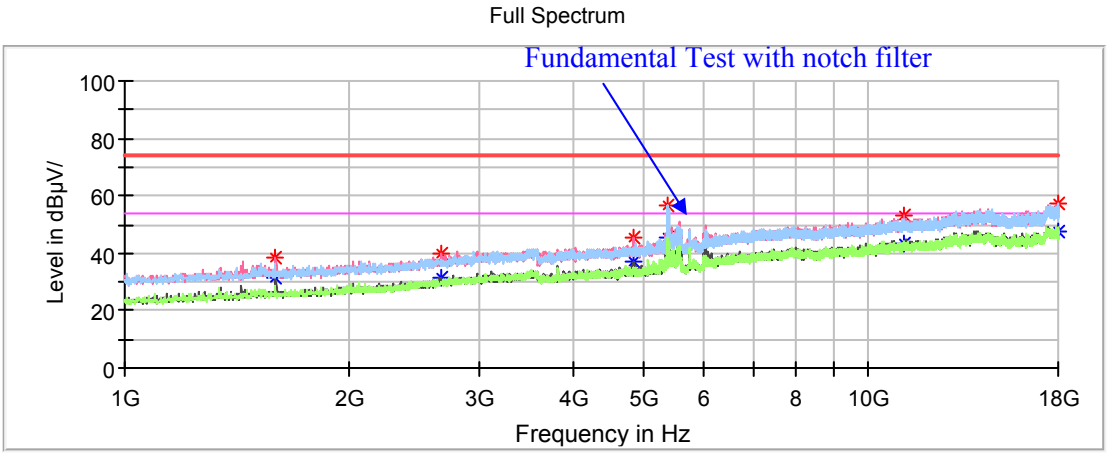


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1596.70	---	33.23	200	H	174	-9.6	54.00	20.77
1596.70	38.03	---	200	H	174	-9.6	74.00	35.97
2130.50	39.15	---	150	V	265	-7.9	68.20	29.05
3883.20	---	36.6	150	H	80	-2.3	54.00	17.40
3883.20	43.48	---	150	H	80	-2.3	74.00	30.52
5362.20	---	43.5	200	H	86	0.9	54.00	10.50
5362.20	56.72	---	200	H	86	0.9	74.00	17.28
11599.50	---	43.33	150	V	161	9.8	54.00	10.67
11599.50	51.03	---	150	V	161	9.8	74.00	22.97
17935.40	---	48.73	200	H	293	13.6	54.00	5.27
17935.40	56.65	---	200	H	293	13.6	74.00	17.35

802.11n-HT20 Mode*(Chain0+Chain1):*
*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

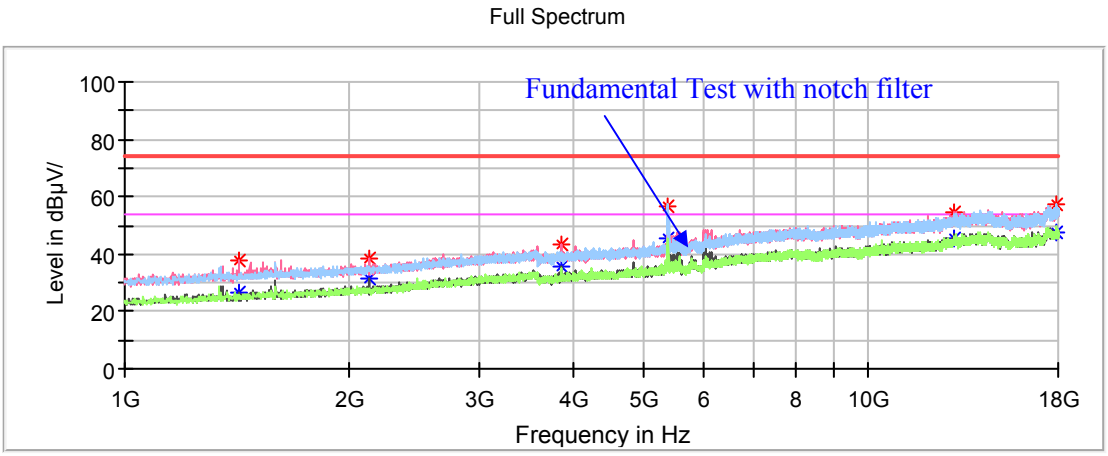
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



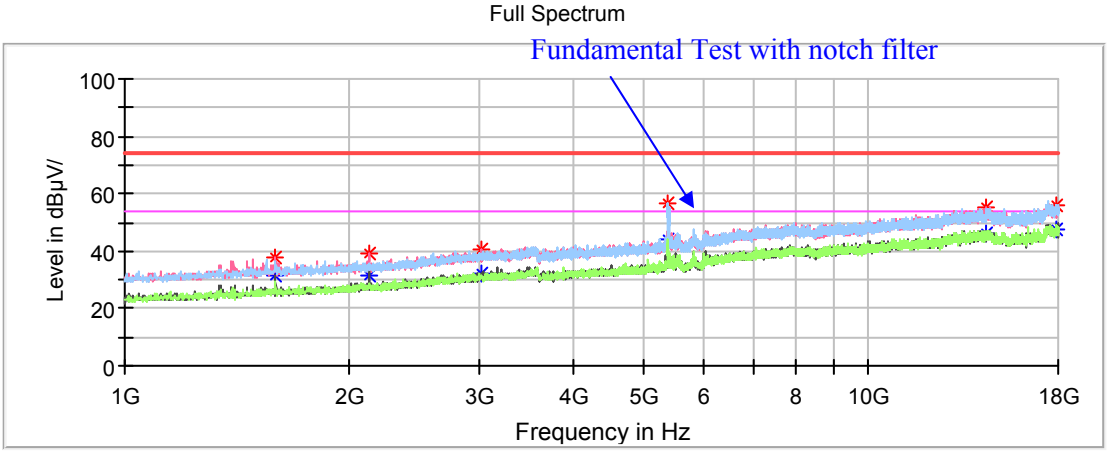
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1596.70	---	31.74	150	V	242	-9.6	54.00	22.26
1596.70	38.39	---	150	V	242	-9.6	74.00	35.61
2662.60	39.69	---	150	V	273	-6.1	68.20	28.51
4821.60	---	37.32	200	V	81	-0.5	54.00	16.68
4821.60	45.38	---	200	V	81	-0.5	74.00	28.62
5362.20	---	45.55	200	H	86	0.9	54.00	8.45
5362.20	56.85	---	200	H	86	0.9	74.00	17.15
11157.50	---	43.14	150	V	227	9.8	54.00	10.86
11157.50	52.93	---	150	V	227	9.8	74.00	21.07
17969.40	---	47.31	200	H	162	13.5	54.00	6.69
17969.40	57.11	---	200	H	162	13.5	74.00	16.89

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1421.60	---	26.42	150	V	263	-10.4	54.00	27.58
1421.60	37.58	---	150	V	263	-10.4	74.00	36.42
2130.50	38.56	---	200	V	282	-7.9	68.20	29.64
3856.00	---	35.97	200	V	130	-2.3	54.00	18.03
3856.00	43.23	---	200	V	130	-2.3	74.00	30.77
5386.00	---	45.27	150	H	82	1.0	54.00	8.73
5386.00	56.84	---	150	H	82	1.0	74.00	17.16
13049.60	54.69	---	150	V	119	12.0	68.20	13.51
17942.20	---	47.57	200	H	350	13.6	54.00	6.43
17942.20	57.59	---	200	H	350	13.6	74.00	16.41

High Channel: 5825MHz



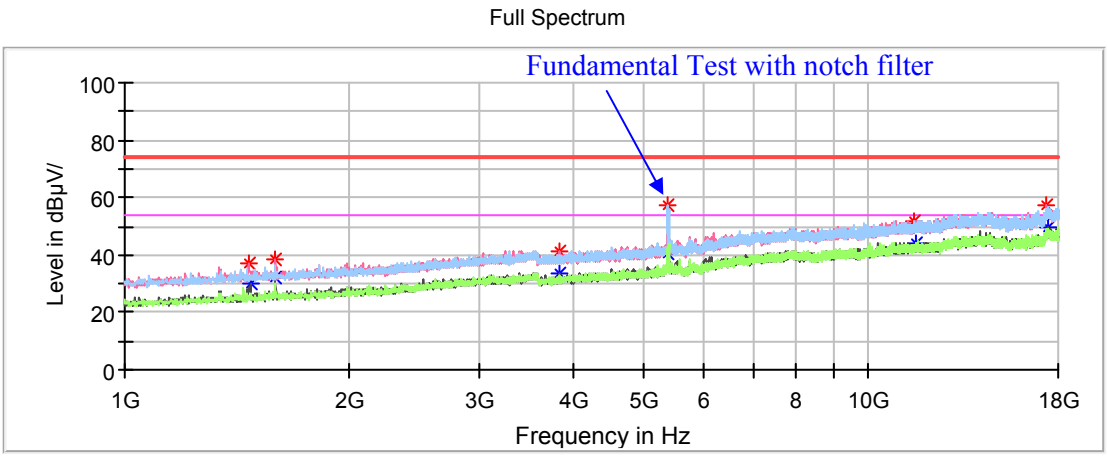
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.30	---	31.18	200	V	273	-9.6	54.00	22.82
1593.30	37.54	---	200	V	273	-9.6	74.00	36.46
2128.80	39.2	---	150	V	273	-7.9	68.20	29.00
3016.20	40.86	---	200	V	260	-4.4	74.00	33.14
5363.90	---	44.21	150	H	80	0.9	54.00	9.79
5363.90	56.32	---	150	H	80	0.9	74.00	17.68
14402.80	55.42	---	150	V	182	12.7	68.20	12.78
17908.20	---	47.53	150	V	22	13.6	54.00	6.47
17908.20	55.98	---	150	V	22	13.6	74.00	18.02

802.11ac40 Mode(Chain0+Chain1):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

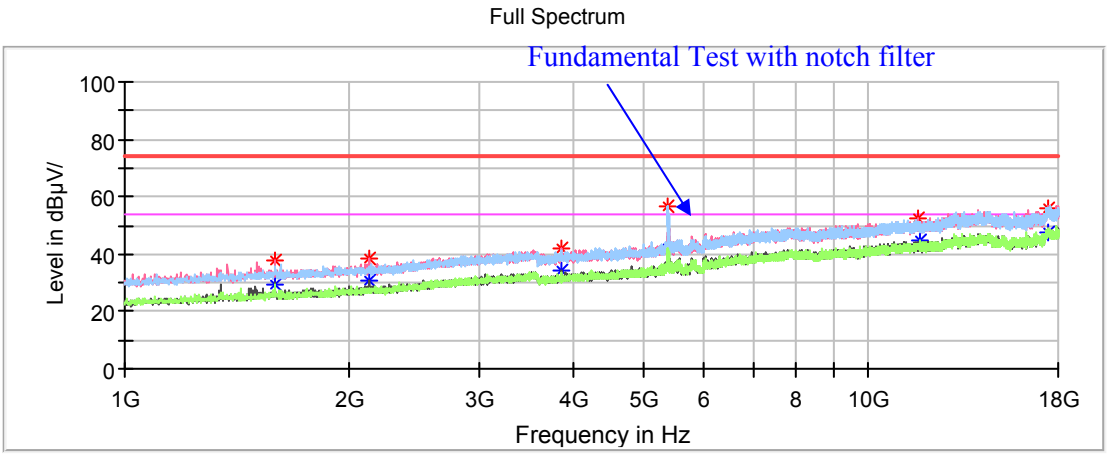
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1474.30	---	30.33	150	V	245	-10.1	54.00	23.67
1474.30	37.36	---	150	V	245	-10.1	74.00	36.64
1593.30	---	31.96	150	V	260	-9.6	54.00	22.04
1593.30	38.38	---	150	V	260	-9.6	74.00	35.62
3835.60	---	33.67	200	V	127	-2.4	54.00	20.33
3835.60	41.56	---	200	V	127	-2.4	68.20	26.64
5362.20	---	40.83	150	H	80	0.9	54.00	13.17
5362.20	57.23	---	150	H	80	0.9	74.00	16.77
11548.50	51.71	---	200	H	38	9.8	74.00	22.29
11548.50	---	44.06	150	H	316	9.8	54.00	9.94
17389.70	57.16	---	150	V	214	13.7	68.20	11.01

High Channel: 5795MHz

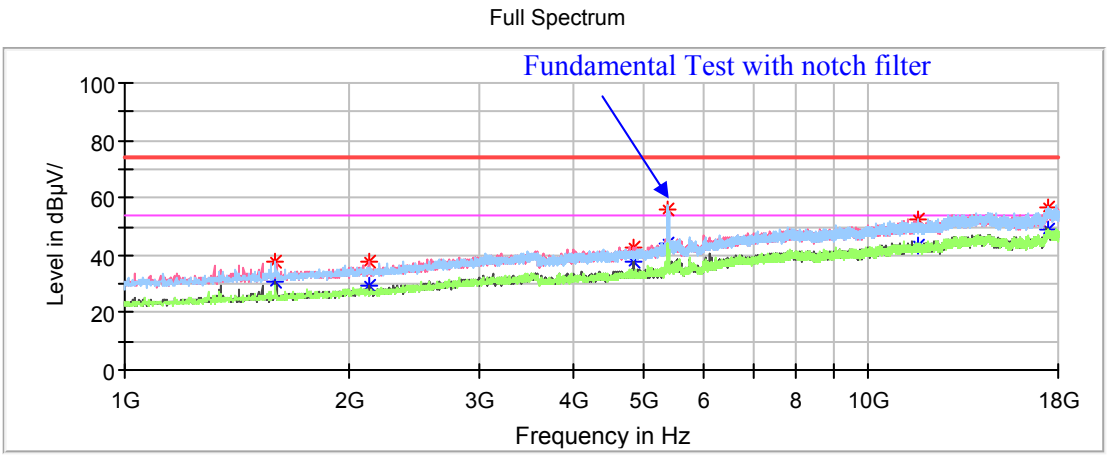


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.30	---	29.43	200	H	156	-9.6	54.00	24.57
1593.30	37.82	---	200	H	156	-9.6	74.00	36.18
2128.80	38.40	---	150	V	265	-7.9	68.20	29.80
3862.80	---	33.98	200	V	229	-2.3	54.00	20.02
3862.80	42.13	---	200	V	229	-2.3	74.00	31.87
5386.00	---	41.69	150	H	80	1.0	54.00	12.31
5386.00	56.31	---	150	H	80	1.0	74.00	17.69
11713.40	---	45.03	150	H	145	9.9	54.00	8.97
11713.40	52.44	---	150	H	145	9.9	74.00	21.56
17423.70	55.95	---	150	V	116	13.9	68.20	12.25

802.11n-HT40 Mode*(Chain0+Chain1)*:
*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

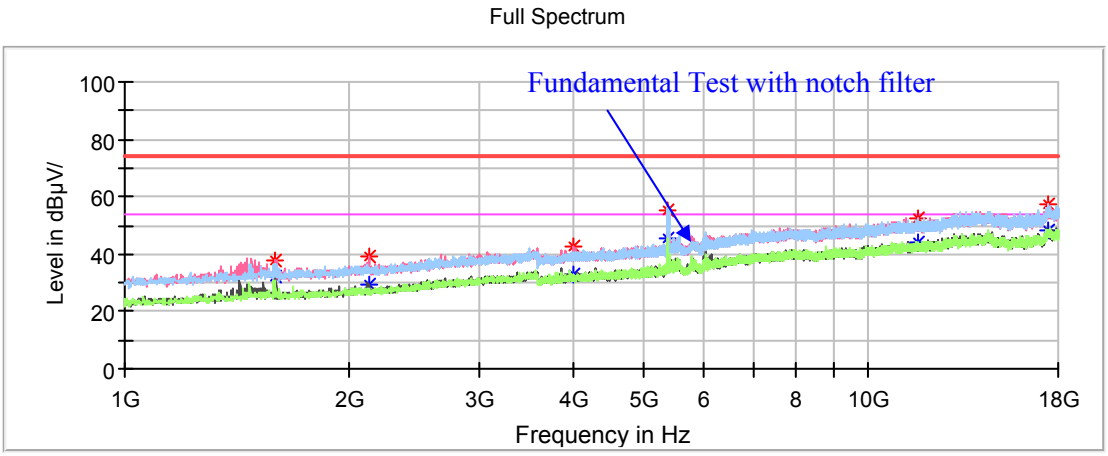
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1591.60	37.62	---	200	V	174	-9.6	74.00	36.38
1591.60	---	30.63	200	V	174	-9.6	54.00	23.37
2128.80	37.89	---	200	V	266	-7.9	68.20	30.31
4823.30	---	37.93	150	V	87	-0.5	54.00	16.07
4823.30	42.59	---	150	V	87	-0.5	74.00	31.41
5362.20	---	44.34	150	H	80	0.9	54.00	9.66
5362.20	55.78	---	150	H	80	0.9	74.00	18.22
11645.40	---	43.51	150	V	132	9.9	54.00	10.49
11645.40	52.62	---	150	H	316	9.9	74.00	21.38
17433.90	56.49	---	200	V	9	13.9	68.20	11.71

High Channel: 5795MHz



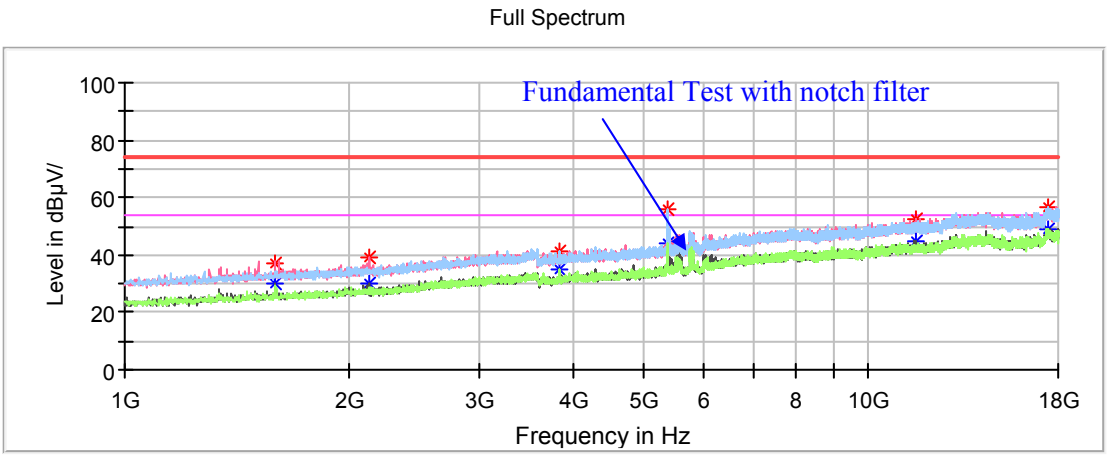
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1596.70	---	32.26	150	V	252	-9.6	54.00	21.74
1596.70	37.54	---	150	V	252	-9.6	74.00	36.46
2128.80	39	---	200	V	265	-7.9	68.20	29.20
4022.60	---	32.77	200	V	357	-1.8	54.00	21.23
4022.60	42.53	---	200	V	357	-1.8	74.00	31.47
5365.60	55.49	---	200	H	88	1.0	74.00	18.51
5365.60	---	45.53	200	H	88	1.0	54.00	8.47
11638.60	---	44.32	150	H	219	9.9	54.00	9.68
11638.60	52.31	---	150	H	219	9.9	74.00	21.69
17418.60	57.23	---	150	H	322	13.9	68.20	10.97

802.11ac80 Mode(Chain0+Chain1):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5775MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1591.60	---	30.18	200	V	229	-9.6	54.00	23.82
1591.60	37.29	---	200	V	229	-9.6	74.00	36.71
2128.80	38.99	---	150	V	275	-7.9	68.20	29.21
3849.20	---	34.86	200	V	332	-2.4	54.00	19.14
3849.20	41.3	---	200	V	332	-2.4	74.00	32.70
5363.90	---	44.15	150	H	80	0.9	54.00	9.85
5363.90	56.27	---	150	H	80	0.9	74.00	17.73
11572.30	---	44.99	200	V	201	9.8	54.00	9.01
11572.30	52.78	---	200	V	66	9.8	74.00	21.22
17450.90	56.3	---	200	H	36	14	68.20	11.90

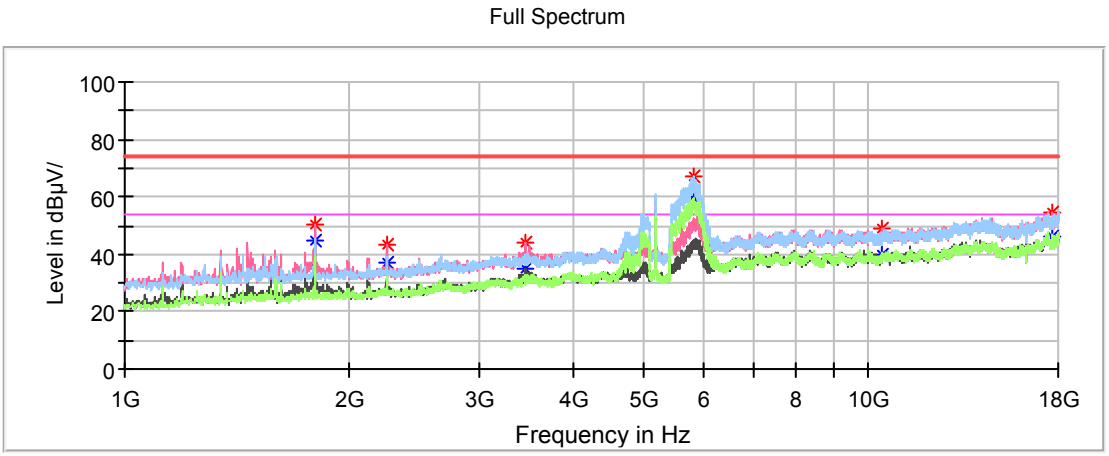
1GHz-18GHz (5150-5250MHz Band):

802.11a Mode(Chain2):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

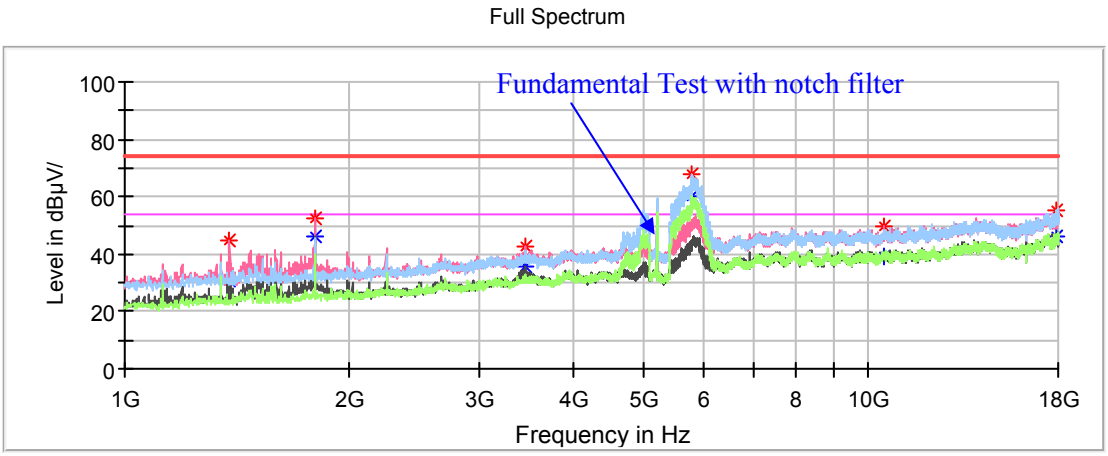
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



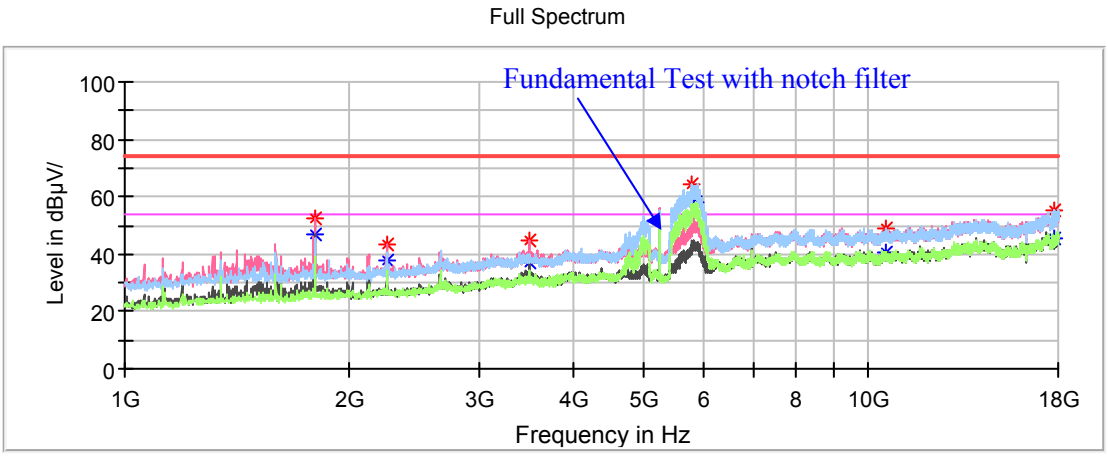
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	50.56	---	200	V	214	-15.2	68.20	17.64
2249.50	---	37.19	200	V	315	-13.4	54.00	16.81
2249.50	43.55	---	200	V	315	-13.4	74.00	30.45
3453.10	43.73	---	200	V	353	-8.9	68.20	24.47
5828.00	66.91	---	150	H	81	-3.3	68.20	1.29
10448.60	48.73	---	150	V	127	2.3	68.20	19.47
17656.60	54.72	---	200	V	214	8.9	68.20	13.48

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1384.20	44.69	---	150	V	282	-17.0	54.00	9.31
1384.20	---	30.63	150	V	282	-17.0	74.00	74.00
1799.00	52.59	---	150	V	222	-15.2	68.20	15.61
3465.00	42.61	---	200	V	218	-8.9	68.20	25.59
5802.50	67.55	---	200	H	97	-3.4	68.20	0.65
10518.30	49.36	---	200	V	0	2.3	68.20	18.84
17908.20	---	46.39	150	V	68	8.8	54.00	7.61
17908.20	55.30	---	150	V	68	8.8	74.00	18.70

High Channel: 5240MHz



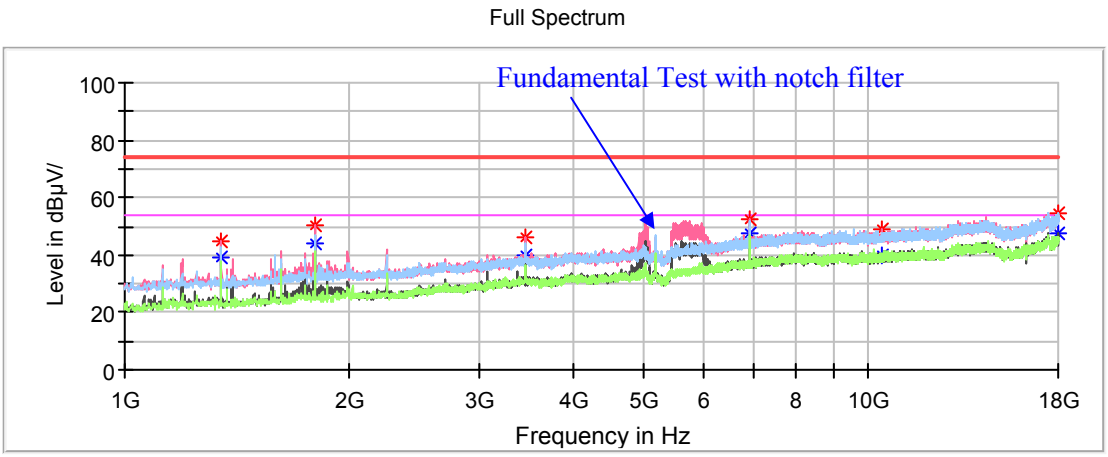
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	52.35	---	150	V	221	-15.2	68.20	15.85
2249.50	---	37.76	200	V	306	-13.4	54.00	16.24
2249.50	43.57	---	200	V	306	-13.4	74.00	30.43
3492.20	---	37.01	200	V	219	-8.8	54.00	16.99
3492.20	44.55	---	200	V	219	-8.8	74.00	29.45
5800.80	64.53	---	150	H	86	-3.4	68.20	3.67
10537.00	49.25	---	200	H	162	2.4	68.20	18.95
17824.90	---	45.76	200	V	356	8.8	54.00	8.24
17824.90	55.59	---	200	V	356	8.8	74.00	18.41

802.11a Mode(Chain3):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

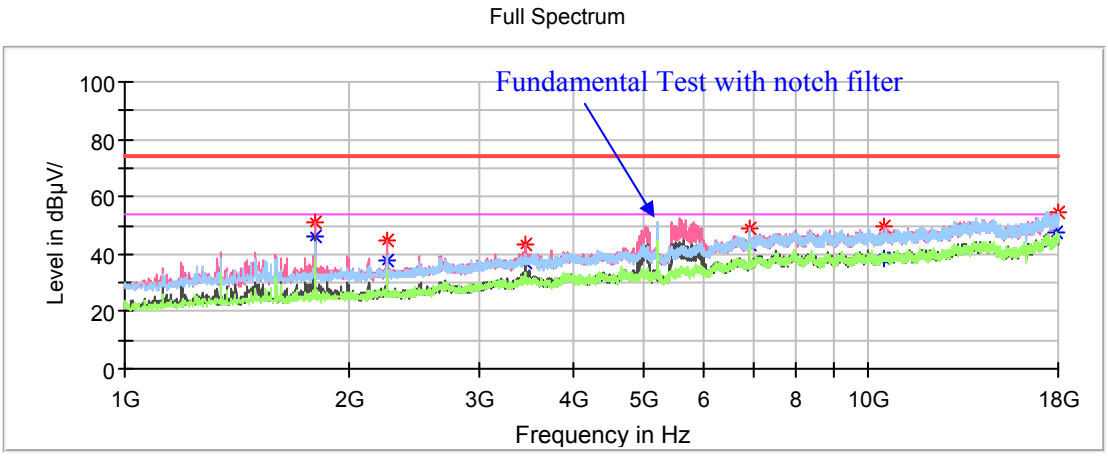
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



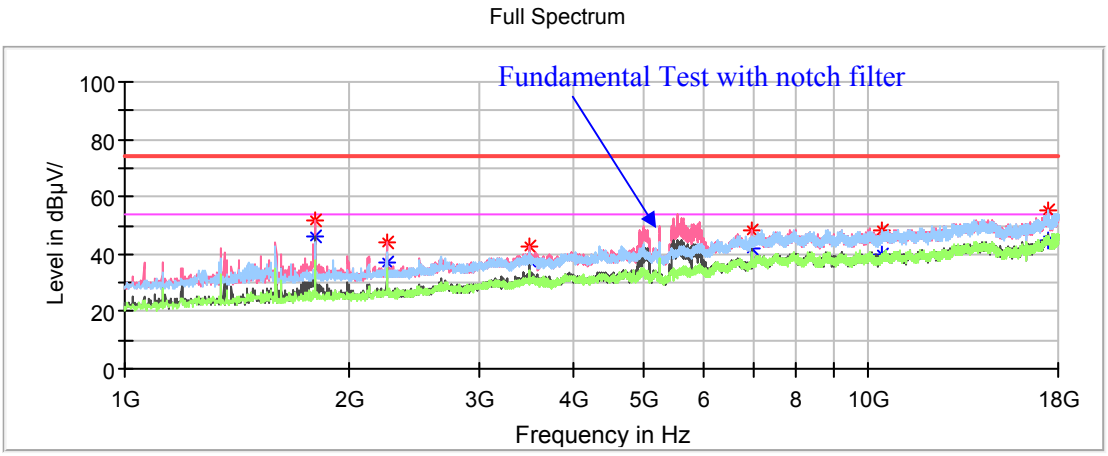
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	39.45	150	V	244	-17.2	54.00	14.55
1348.50	44.5	---	150	V	244	-17.2	74.00	29.50
1799.00	50	---	200	V	186	-15.2	68.20	18.20
3453.10	46.24	---	150	V	66	-8.9	68.20	21.96
6905.80	52.52	---	150	V	83	-0.3	68.20	15.68
10431.60	49.03	---	150	V	303	2.3	68.20	19.17
17969.40	---	47.73	200	H	249	8.8	54.00	6.27
17969.40	54.77	---	200	H	249	8.8	74.00	19.23

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	51.34	---	150	V	219	-15.2	68.20	16.86
2249.50	---	37.9	200	V	309	-13.4	54.00	16.10
2249.50	44.69	---	200	V	309	-13.4	74.00	29.31
3465.00	43.66	---	150	V	96	-8.9	68.20	24.54
6933.00	48.75	---	150	V	155	-0.2	68.20	19.45
10509.80	49.35	---	200	V	357	2.3	68.20	18.85
17940.50	---	47.59	150	H	130	8.8	54.00	6.41
17940.50	54.5	---	150	H	130	8.8	74.00	19.50

High Channel: 5240MHz



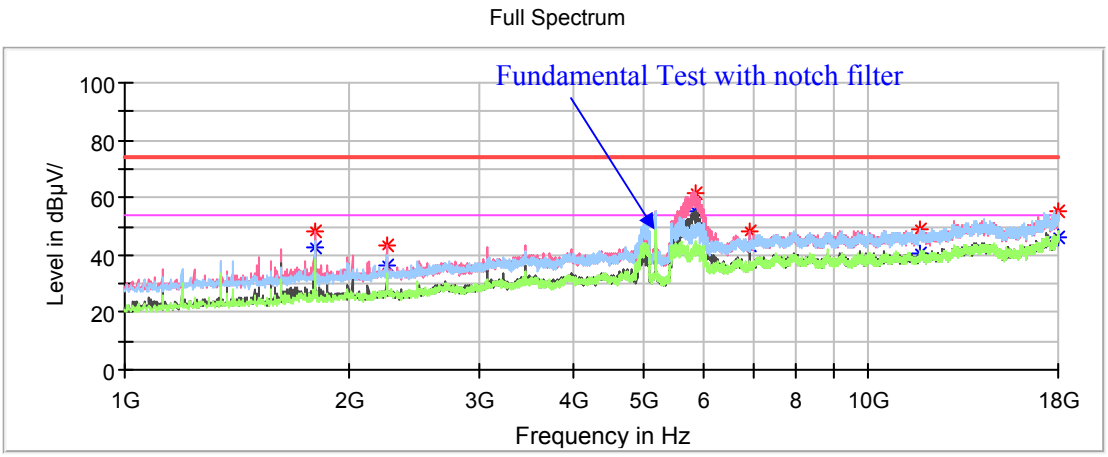
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	51.53	---	150	V	219	-15.2	54.00	2.47
2249.50	43.83	---	200	V	309	-13.4	74.00	30.17
2249.50	---	36.97	200	V	309	-13.4	54.00	17.03
3492.20	42.77	---	200	V	357	-8.8	68.20	25.43
6985.70	47.97	---	150	V	160	-0.1	68.20	20.23
10457.10	48.06	---	150	H	206	2.3	68.20	20.14
17452.60	55.23	---	150	H	142	8.7	68.20	12.97

802.11ac20 Mode(Chain2+Chain3):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

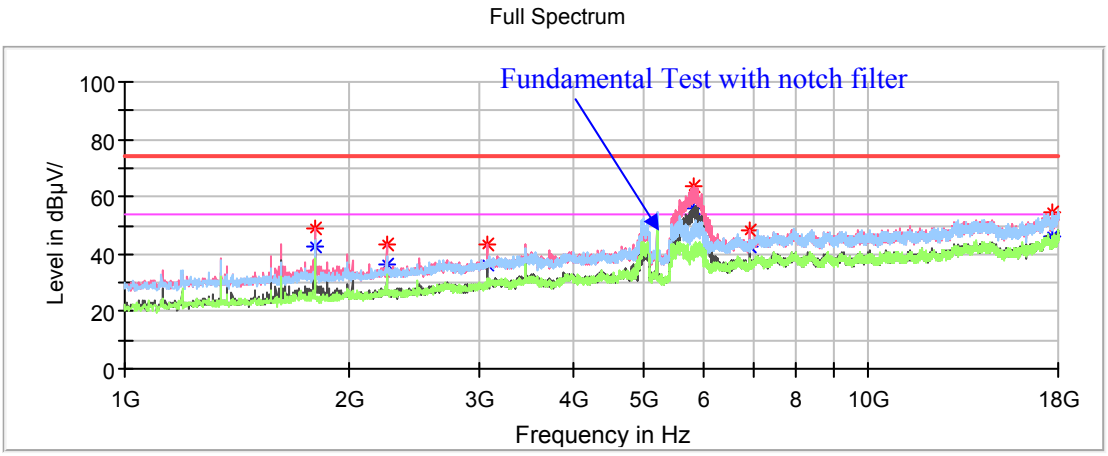
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



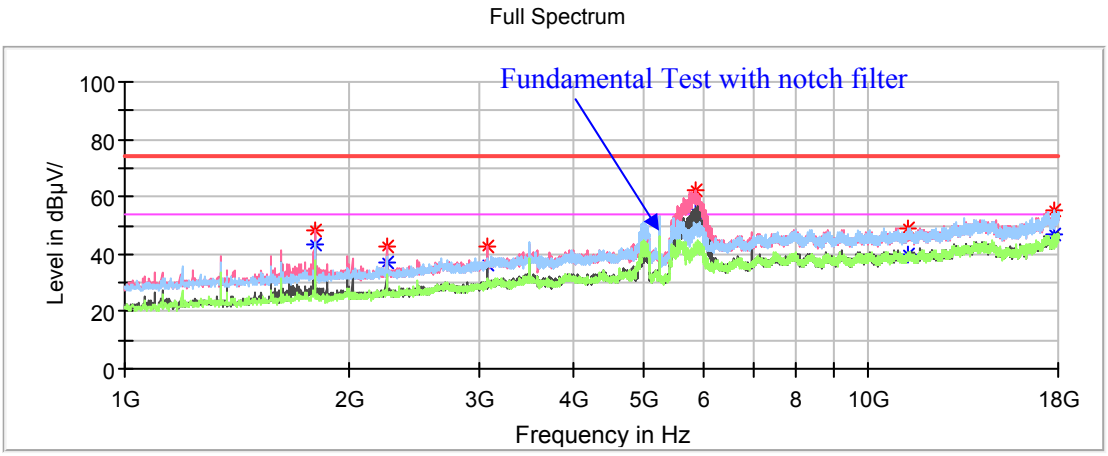
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	48.58	---	150	V	350	-15.2	68.20	19.62
2249.50	---	36.64	200	V	2	-13.4	54.00	17.36
2249.50	43.03	---	200	V	2	-13.4	74.00	30.97
5860.30	61.86	---	150	V	178	-3.2	68.20	6.34
6905.80	48.12	---	150	V	101	-0.3	68.20	20.08
11754.20	---	40.25	200	H	280	3.3	54.00	13.75
11754.20	49.03	---	200	H	280	3.3	74.00	24.97
17993.20	---	45.87	150	V	63	8.8	54.00	8.13
17993.20	55.11	---	150	V	63	8.8	74.00	18.89

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	49.24	---	150	V	358	-15.2	68.20	18.96
2249.50	---	36.67	150	V	20	-13.4	54.00	17.33
2249.50	43.12	---	150	V	20	-13.4	74.00	30.88
3070.60	43.11	---	150	V	2	-9.9	68.20	25.09
5811.00	63.92	---	150	V	172	-3.3	68.20	4.28
6933.00	48.03	---	150	V	96	-0.2	68.20	20.17
17646.40	54.38	---	200	H	188	8.9	68.20	13.82

High Channel: 5240MHz

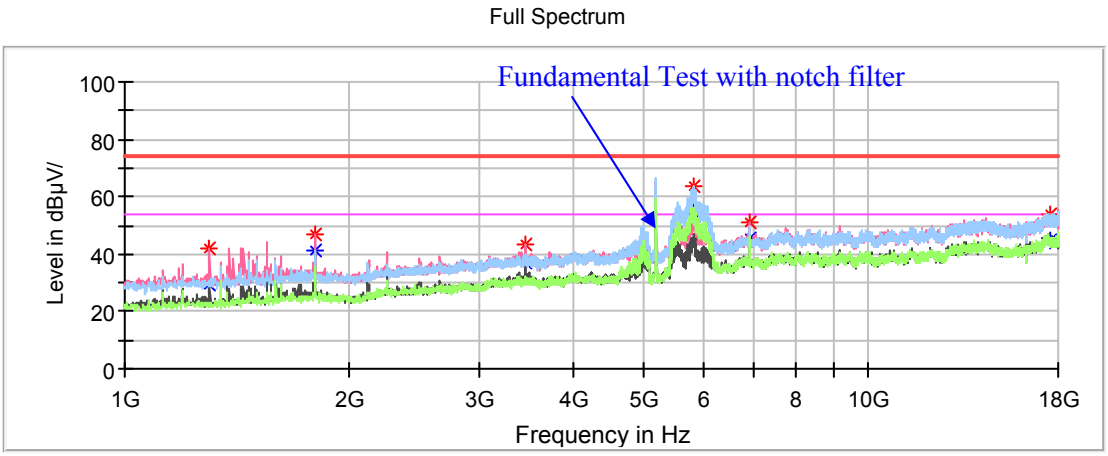


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	48.46	---	200	V	337	-15.2	68.20	19.74
2249.50	---	37.36	150	V	2	-13.4	54.00	16.64
2249.50	42.91	---	150	V	2	-13.4	74.00	31.09
3070.60	42.82	---	150	V	2	-9.9	68.20	25.38
5839.90	62.42	---	200	V	182	-3.3	68.20	5.78
11300.30	---	39.58	150	H	9	2.8	54.00	14.42
11300.30	48.73	---	150	H	9	2.8	74.00	25.27
17824.90	---	47.04	150	H	182	8.8	54.00	6.96
17824.90	55.15	---	150	H	182	8.8	74.00	18.85

802.11n-HT20 Mode*(Chain2+Chain3):*
*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

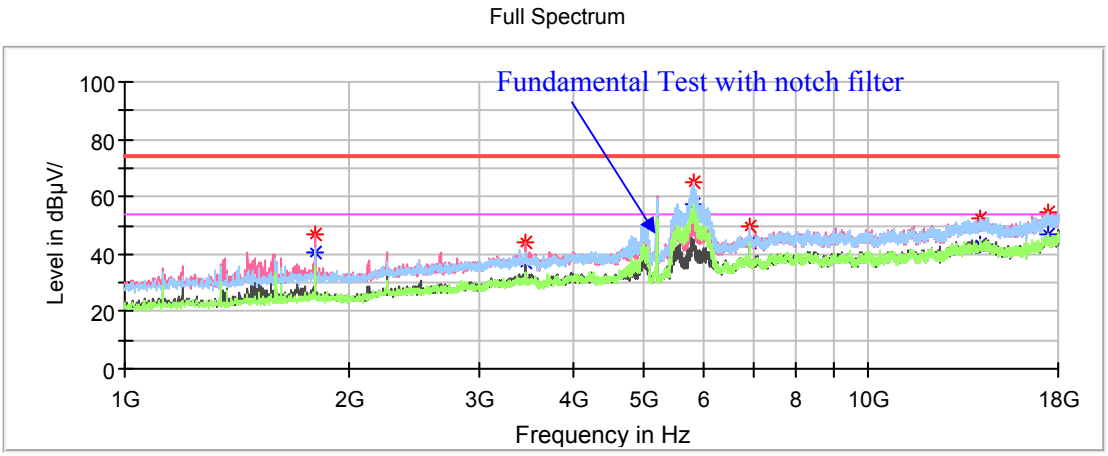
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz



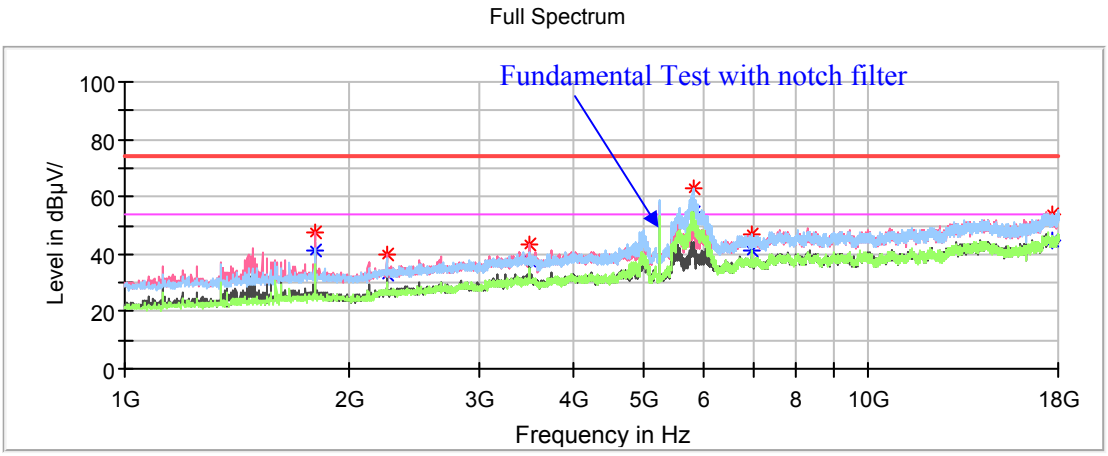
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1300.90	---	29.14	200	V	277	-17.4	54.00	24.86
1300.90	41.66	---	200	V	277	-17.4	74.00	32.34
1799.00	46.97	---	150	V	172	-15.2	68.20	21.23
3453.10	43.66	---	150	V	172	-8.9	68.20	24.54
5822.90	63.78	---	150	H	159	-3.3	68.20	4.42
6905.80	51.05	---	200	V	97	-0.3	68.20	17.15
17610.70	54.19	---	150	V	12	8.9	68.20	14.01

Middle Channel: 5200MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	47.20	---	200	V	174	-15.2	68.20	21.00
3465.00	44.20	---	150	V	166	-8.9	68.20	24.00
5822.90	64.89	---	150	H	158	-3.3	68.20	3.31
6933.00	49.70	---	150	H	96	-0.2	68.20	18.50
14115.50	52.36	---	200	H	182	6.2	68.20	15.84
17469.60	54.80	---	200	V	174	8.8	68.20	13.40

High Channel: 5240MHz



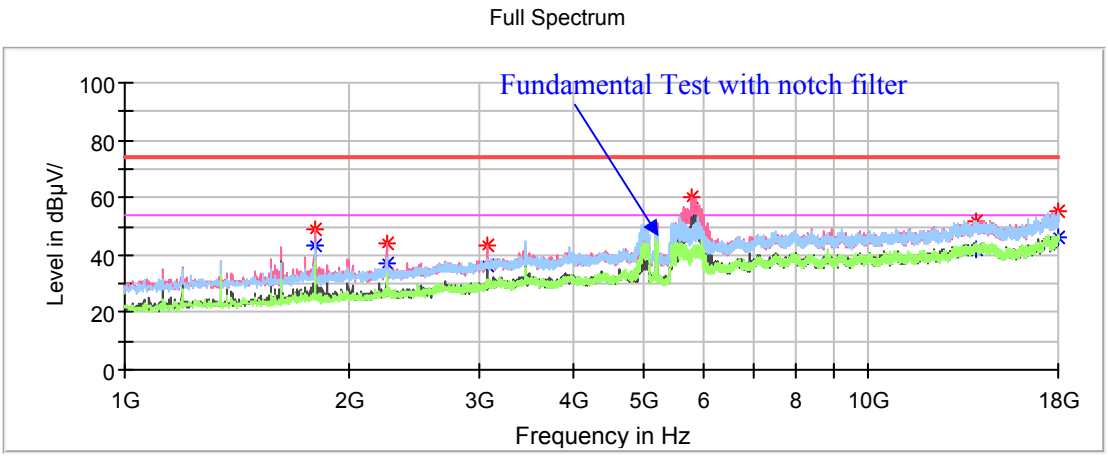
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	47.84	---	200	V	164	-15.2	68.20	20.36
2249.50	40.01	---	200	V	180	-13.4	74.00	33.99
2249.50	---	33.15	200	V	180	-13.4	54.00	20.85
3492.20	43.02	---	200	V	210	-8.8	68.20	25.18
5804.20	63.1	---	150	H	163	-3.4	68.20	5.10
6985.70	47.09	---	150	H	224	-0.1	68.20	21.11
17721.20	---	44.93	150	V	152	8.9	54.00	9.07
17721.20	53.87	---	150	V	152	8.9	74.00	20.13

802.11ac40 Mode(Chain2+Chain3):

*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

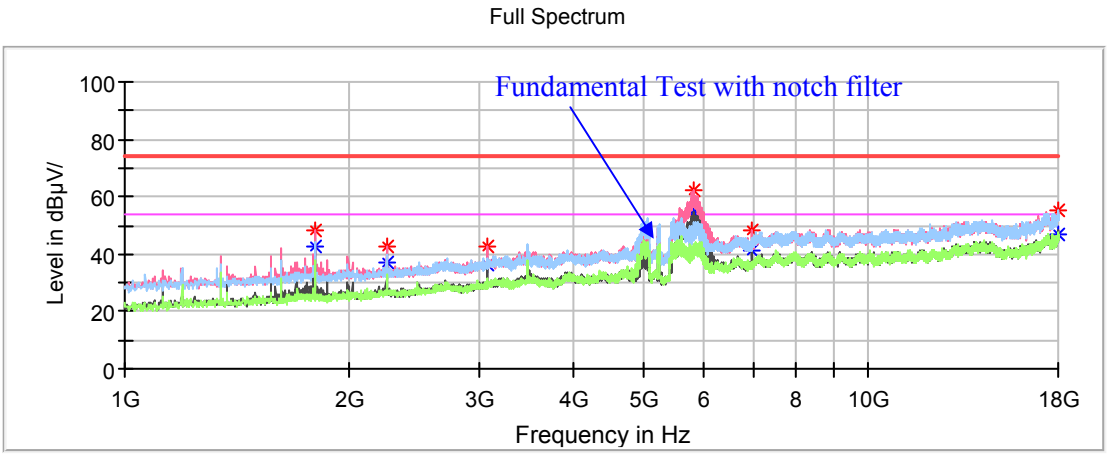
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5190MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	48.66	---	200	V	341	-15.2	68.20	19.54
2249.50	---	36.82	200	V	2	-13.4	54.00	17.18
2249.50	43.83	---	200	V	2	-13.4	74.00	30.17
3070.60	43.69	---	150	V	0	-9.9	68.20	24.51
5800.80	60.38	---	200	V	187	-3.4	68.20	7.82
13940.40	52.06	---	200	H	179	6.1	68.20	16.14
17957.50	---	46.28	150	V	0	8.8	54.00	7.72
17957.50	55.12	---	200	V	84	8.8	74.00	18.88

High Channel: 5230MHz

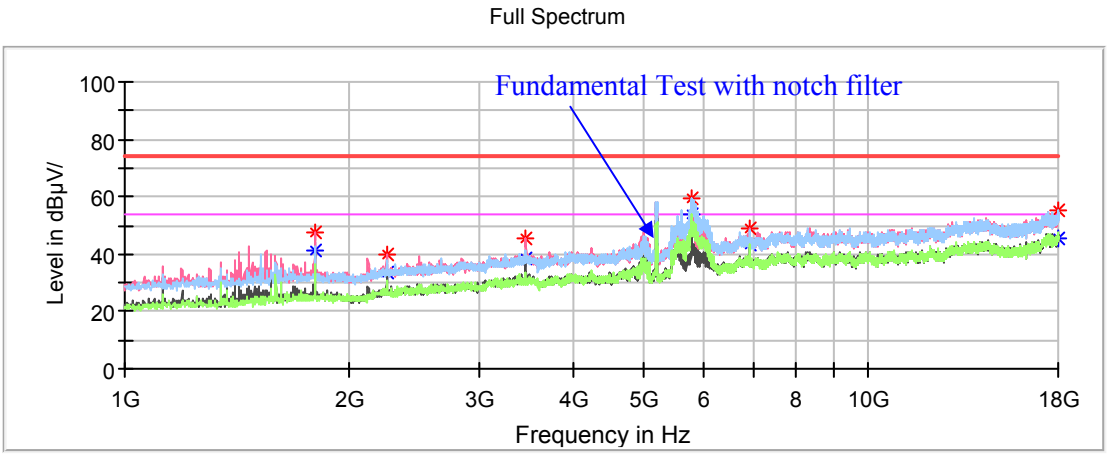


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	48.48	---	200	V	337	-15.2	68.20	19.72
2249.50	---	36.72	200	V	357	-13.4	54.00	17.28
2249.50	42.92	---	200	V	357	-13.4	74.00	31.08
3070.60	42.43	---	150	V	0	-9.9	68.20	25.77
5821.20	62.16	---	150	V	173	-3.3	68.20	6.04
6972.10	48.48	---	150	V	112	-0.1	68.20	19.72
17983.00	---	46.96	200	H	279	8.8	54.00	7.04
17983.00	55.1	---	200	H	279	8.8	74.00	18.90

802.11n-HT40 Mode*(Chain2+Chain3)*:
*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

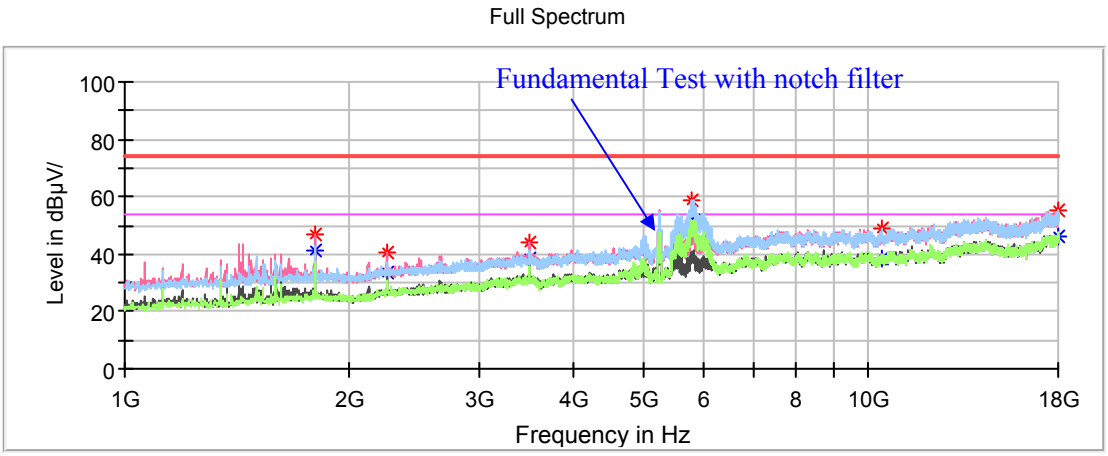
Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5190MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	47.62	---	150	V	172	-15.2	68.20	20.58
2249.50	---	33.77	200	V	20	-13.4	54.00	20.23
2249.50	40.08	---	200	V	20	-13.4	74.00	33.92
3465.00	45.67	---	200	V	163	-8.9	68.20	22.53
5797.40	59.39	---	150	H	163	-3.4	68.20	8.81
6933.00	49.04	---	150	V	107	-0.2	68.20	19.16
17959.20	---	45.33	200	H	238	8.8	54.00	8.67
17959.20	54.93	---	200	H	238	8.8	74.00	19.07

High Channel: 5230MHz

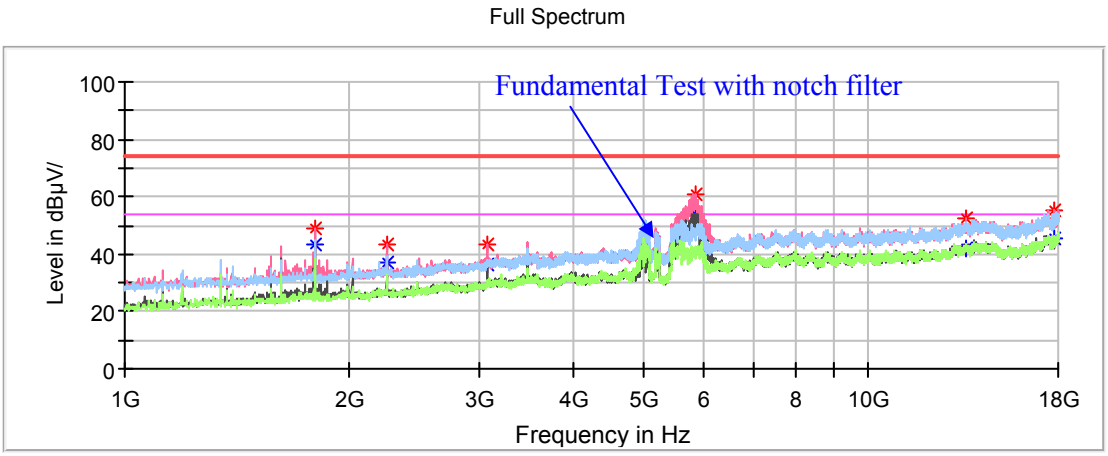


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	47.08	---	200	V	163	-15.2	68.20	21.12
2249.50	---	33.39	150	V	341	-13.4	54.00	20.61
2249.50	40.47	---	150	V	341	-13.4	74.00	33.53
3492.20	44.17	---	200	V	132	-8.8	68.20	24.03
5799.10	58.76	---	150	H	164	-3.4	68.20	9.44
10445.20	48.62	---	200	H	248	2.3	68.20	19.58
17981.30	---	46.17	200	H	11	8.8	54.00	7.83
17981.30	55.44	---	200	H	11	8.8	74.00	18.56

802.11ac80 Mode*(Chain2+Chain3)*:
*Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded*

Note:
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5210MHz



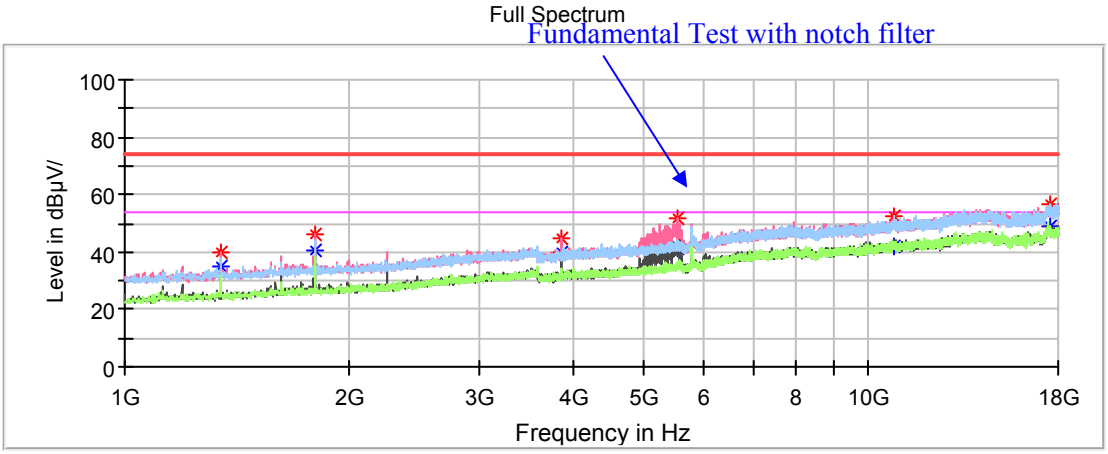
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	48.81	---	150	V	350	-15.2	68.20	19.39
2249.50	---	37.11	200	V	0	-13.4	54.00	16.89
2249.50	43.39	---	200	V	0	-13.4	74.00	30.61
3070.60	43.45	---	150	H	0	-9.9	68.20	24.75
5841.60	61.03	---	150	V	181	-3.3	68.20	7.17
13549.40	52.10	---	200	V	212	5.7	68.20	16.10
17818.10	---	45.21	150	V	227	8.8	54.00	8.79
17818.10	55.30	---	150	V	227	8.8	74.00	18.70

5725-5850MHz Band:
1GHz-18GHz:

802.11a Mode(Chain2):
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

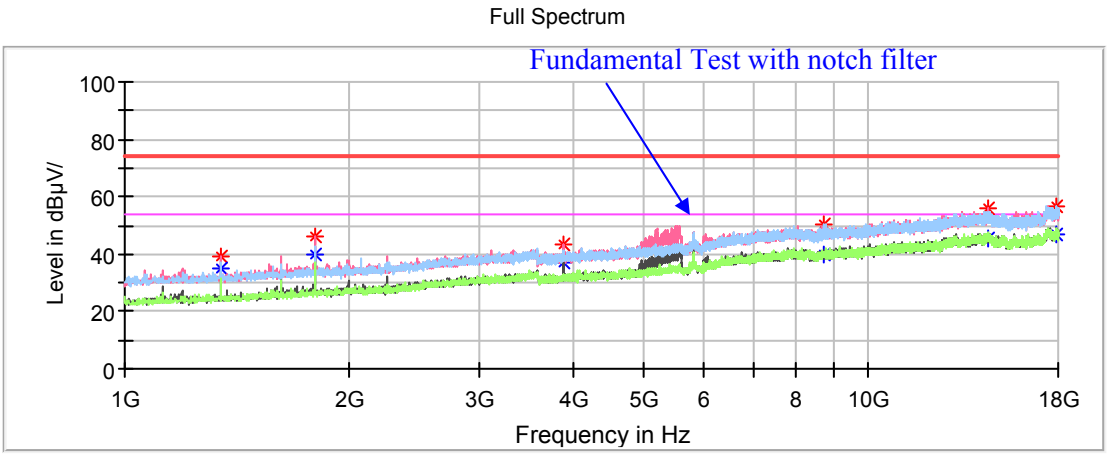
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



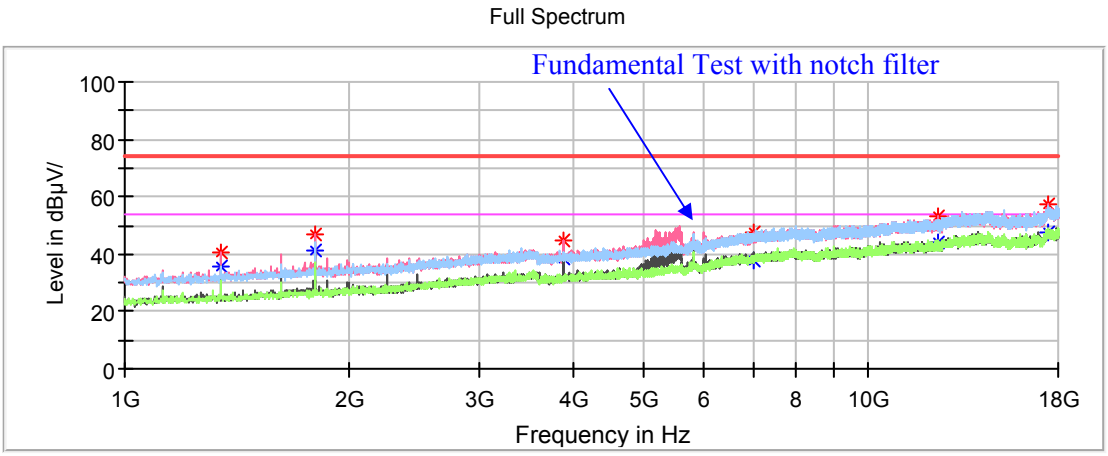
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	34.65	200	V	312	-10.8	54.00	19.35
1348.50	40.1	---	200	V	312	-10.8	74.00	33.90
1799.00	46.3	---	150	V	71	-8.9	68.20	21.90
3856.00	---	39.59	200	V	279	-2.3	54.00	14.41
3856.00	44.64	---	200	V	279	-2.3	74.00	29.36
5545.80	51.52	---	150	V	86	1.5	68.20	16.68
10805.60	---	41.64	150	H	126	9.5	54.00	12.36
10805.60	52.15	---	150	H	126	9.5	74.00	21.85
17588.60	56.78	---	200	H	72	14.1	68.20	11.42

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.1	150	V	311	-10.8	54.00	18.90
1348.50	39.36	---	150	V	311	-10.8	74.00	34.64
1799.00	46.01	---	200	V	281	-8.9	68.20	22.19
3883.20	---	37.06	200	V	267	-2.3	54.00	16.94
3883.20	43.28	---	200	V	267	-2.3	74.00	30.72
8695.90	50.15	---	150	H	172	6.8	68.20	18.05
14494.60	---	45.7	200	V	208	12.7	54.00	8.30
14494.60	55.8	---	200	V	208	12.7	74.00	18.20
17906.50	---	47.17	150	H	81	13.6	54.00	6.83
17906.50	56.47	---	150	H	81	13.6	74.00	17.53

High Channel: 5825MHz



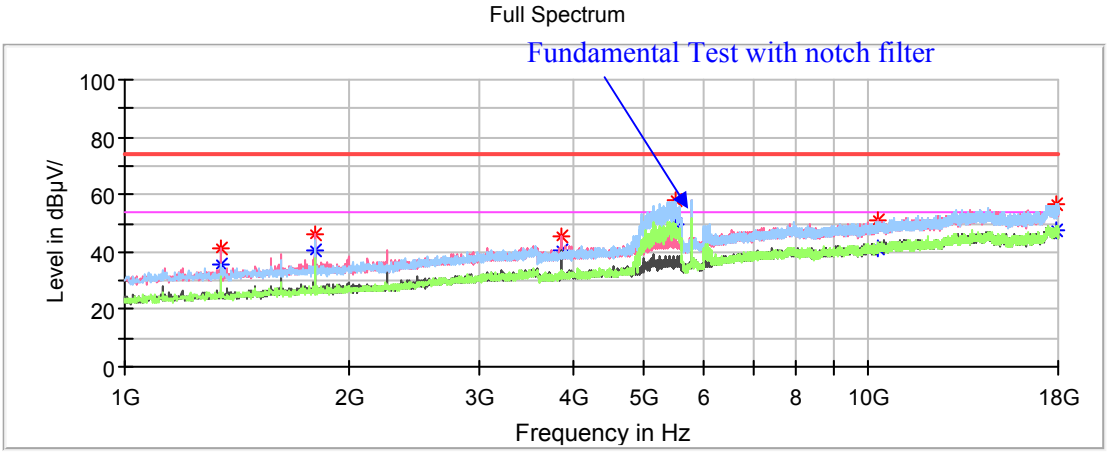
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.58	200	V	304	-10.8	54.00	18.42
1348.50	40.66	---	200	V	304	-10.8	74.00	33.34
1799.00	46.89	---	200	V	275	-8.9	68.20	21.31
3883.20	---	38.7	200	V	275	-2.3	54.00	15.30
3883.20	45.06	---	200	V	275	-2.3	74.00	28.94
7018.00	47.71	---	200	V	9	5.4	68.20	20.49
12374.70	---	43.76	150	H	111	10.3	54.00	10.24
12374.70	52.90	---	150	H	111	10.3	74.00	21.10
17406.70	57.23	---	200	V	359	13.8	68.20	10.97

802.11a Mode(Chain3):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

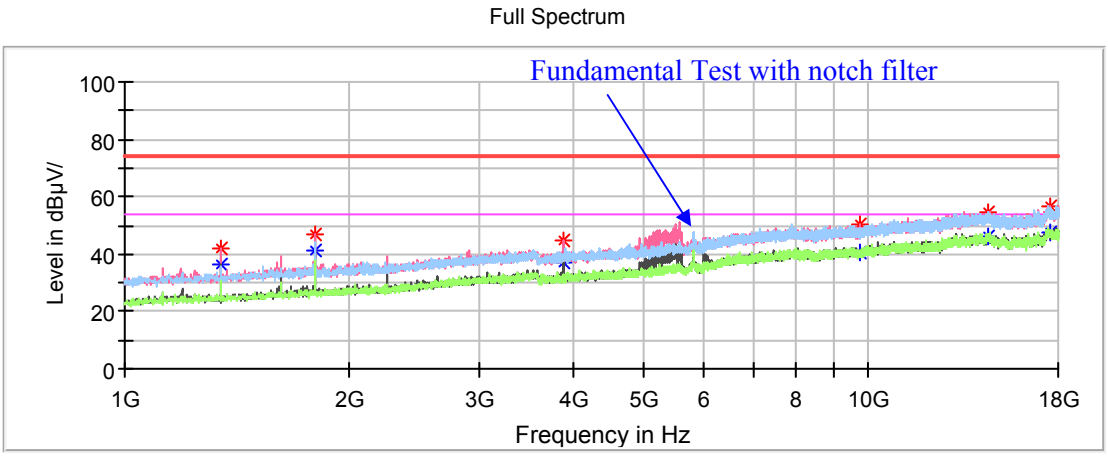
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



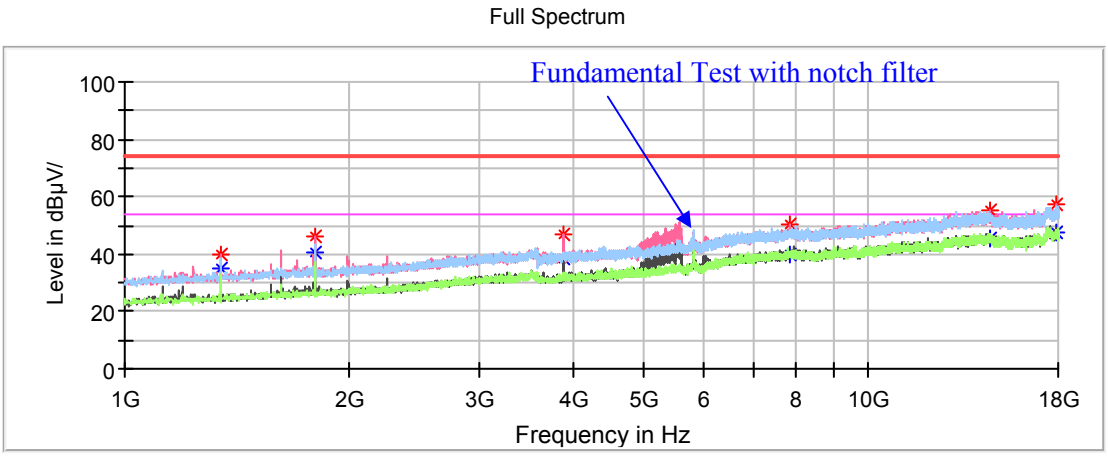
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.87	150	V	296	-10.8	54.00	18.13
1348.50	41.03	---	150	V	296	-10.8	74.00	32.97
1799.00	46.25	---	200	V	54	-8.9	68.20	21.95
3856.00	---	40.75	200	V	266	-2.3	54.00	13.25
3856.00	45.16	---	200	V	266	-2.3	74.00	28.84
5516.90	58.11	---	200	H	87	1.4	68.20	10.09
10282.00	51.13	---	200	V	338	8.6	68.20	17.07
17921.80	---	47.6	200	H	175	13.6	54.00	6.40
17921.80	56.61	---	200	H	175	13.6	74.00	17.39

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	36.28	200	V	304	-10.8	54.00	17.72
1348.50	42.21	---	200	V	304	-10.8	74.00	31.79
1799.00	47.06	---	200	V	275	-8.9	68.20	21.14
3883.20	---	37.25	200	V	275	-2.3	54.00	16.75
3883.20	44.85	---	200	V	275	-2.3	74.00	29.15
9753.30	50.44	---	200	V	33	7.9	68.20	17.76
14481.00	---	46.46	150	V	101	12.7	54.00	7.54
14481.00	54.82	---	150	V	101	12.7	74.00	19.18
17505.30	56.51	---	200	V	289	14.3	68.20	11.69

High Channel: 5825MHz



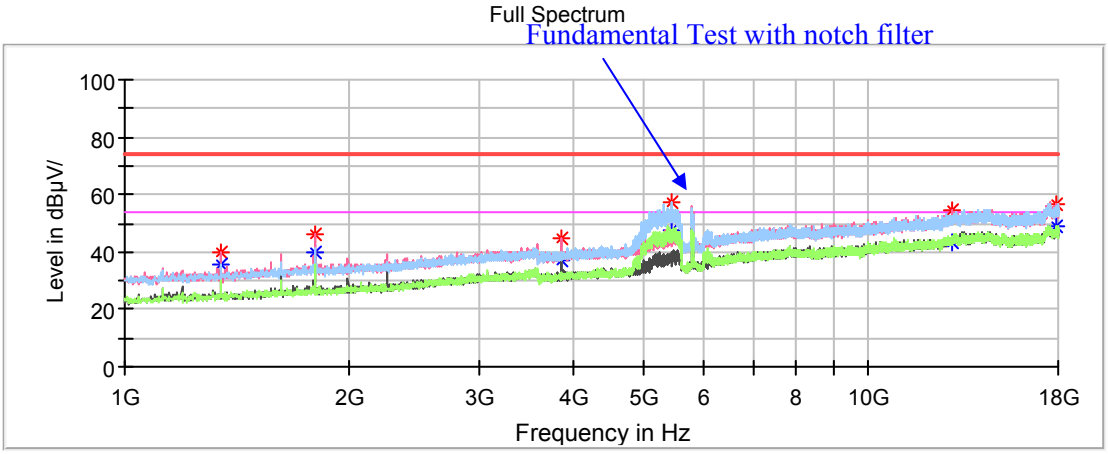
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.13	150	V	313	-10.8	54.00	18.87
1348.50	39.69	---	150	V	313	-10.8	74.00	34.31
1799.00	46.2	---	200	V	275	-8.9	68.20	22.00
3883.20	---	38.32	200	V	275	-2.3	54.00	15.68
3883.20	46.56	---	200	V	275	-2.3	74.00	27.44
7839.10	50.33	---	150	V	313	6.8	68.20	17.87
14606.80	55.11	---	150	V	190	12.5	68.20	13.09
17921.80	---	47.7	150	V	116	13.6	54.00	6.30
17921.80	57.14	---	150	V	116	13.6	74.00	16.86

802.11ac20 Mode(Chain2+Chain3):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

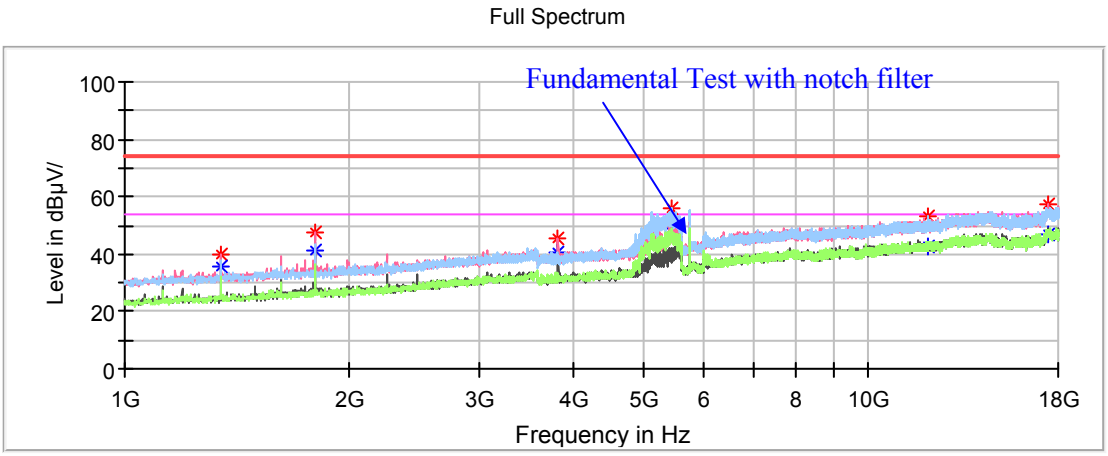
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



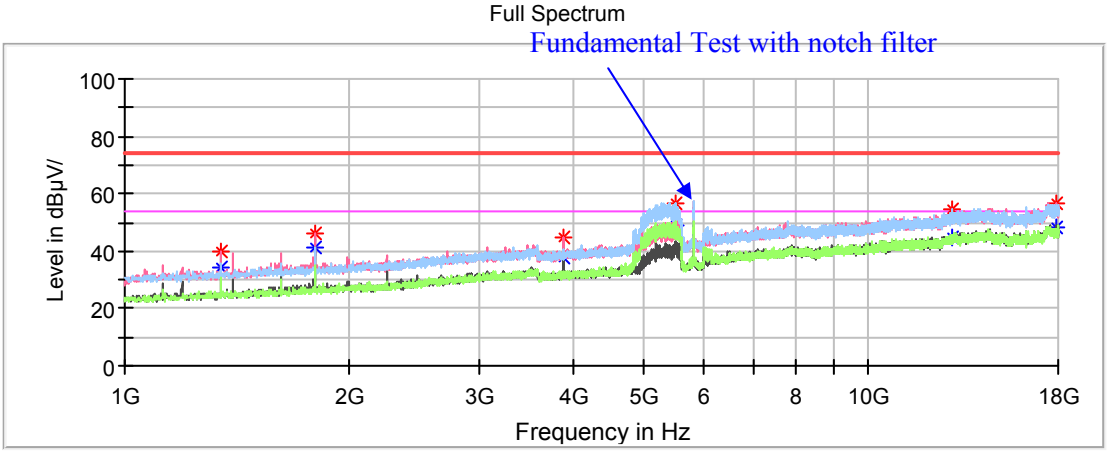
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.34	200	V	306	-10.8	54.00	18.66
1348.50	39.88	---	200	V	306	-10.8	74.00	34.12
1799.00	45.81	---	200	V	65	-8.9	68.20	22.39
3862.80	---	37.09	200	V	290	-2.3	54.00	16.91
3862.80	44.91	---	200	V	290	-2.3	74.00	29.09
5428.50	---	47.41	150	H	80	1.2	54.00	6.59
5428.50	57.66	---	150	H	80	1.2	74.00	16.34
12925.50	54.3	---	200	V	228	11.8	68.20	13.90
17925.20	---	48.8	200	V	80	13.6	54.00	5.20
17925.20	56.97	---	200	V	80	13.6	74.00	17.03

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.4	200	V	312	-10.8	54.00	18.60
1348.50	40.13	---	200	V	312	-10.8	74.00	33.87
1799.00	47.43	---	200	V	280	-8.9	68.20	20.77
3828.80	---	40.51	200	V	280	-2.4	54.00	13.49
3828.80	45.7	---	200	V	280	-2.4	74.00	28.30
5423.40	---	49.13	150	H	86	1.2	54.00	4.87
5423.40	55.83	---	150	H	86	1.2	74.00	18.17
12058.50	---	42.41	200	H	64	10.1	54.00	11.59
12058.50	53.3	---	200	H	64	10.1	74.00	20.70
17432.20	57.01	---	150	V	295	13.9	68.20	11.19

High Channel: 5825MHz

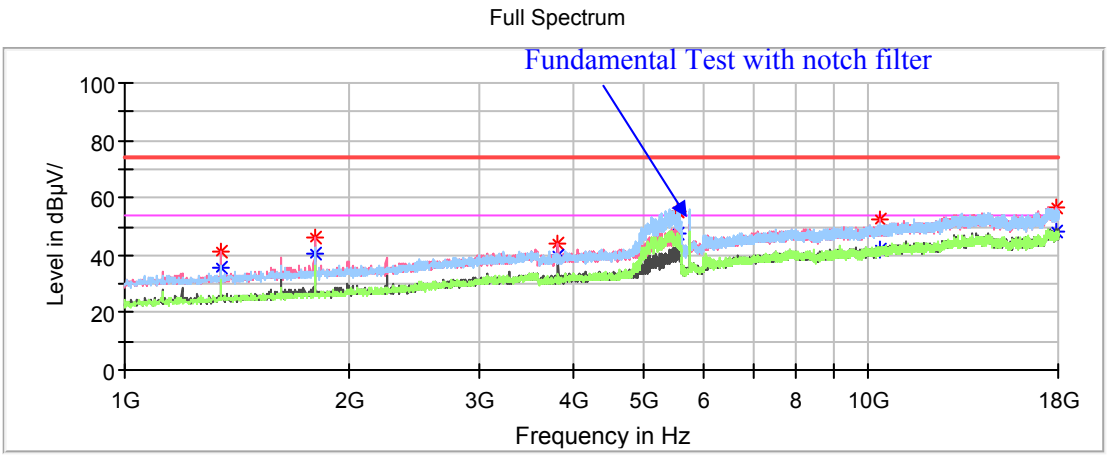


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	34.38	150	V	302	-10.8	54.00	19.62
1348.50	39.8	---	150	V	302	-10.8	74.00	34.20
1799.00	46.29	---	200	V	280	-8.9	68.20	21.91
3883.20	---	37.74	200	V	280	-2.3	54.00	16.26
3883.20	44.41	---	200	V	280	-2.3	74.00	29.59
5496.50	56.91	---	150	H	80	1.4	68.20	11.29
12942.50	54.37	---	200	H	260	11.9	68.20	13.83
17940.50	---	48.11	150	V	273	13.6	54.00	5.89
17940.50	56.78	---	150	V	273	13.6	74.00	17.22

802.11n-HT20 Mode*(Chain2+Chain3):*
*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

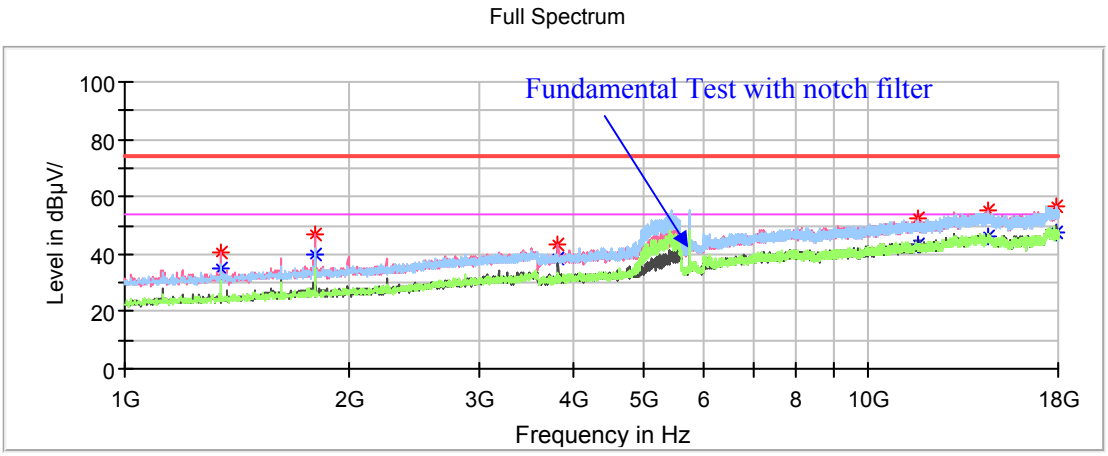
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz



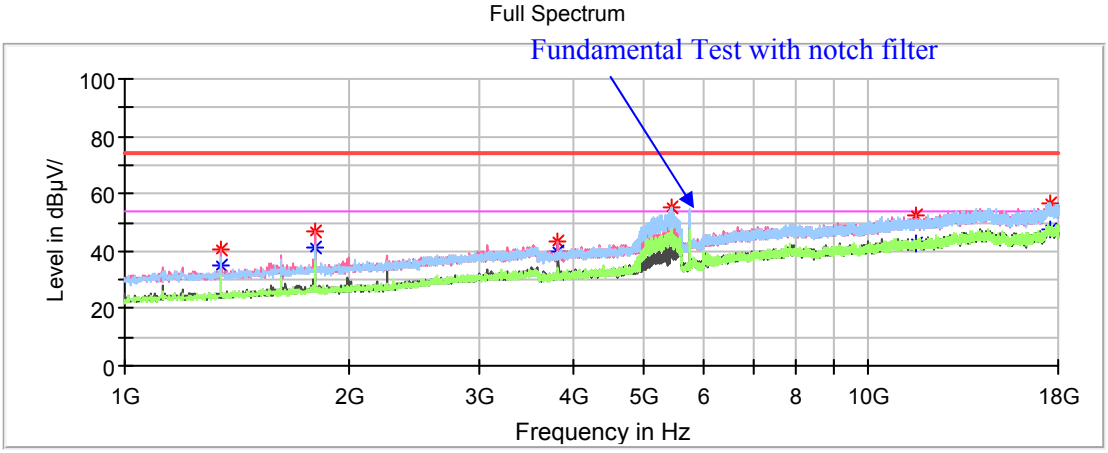
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.38	200	V	309	-10.8	54.00	18.62
1348.50	41.48	---	200	V	309	-10.8	74.00	32.52
1799.00	46.44	---	200	V	68	-8.9	68.20	21.76
3828.80	---	40	200	V	276	-2.4	54.00	14.00
3828.80	44.21	---	200	V	276	-2.4	74.00	29.79
5552.60	54.99	---	200	H	69	1.5	68.20	13.21
10377.20	52.38	---	150	V	130	8.8	68.20	15.82
17937.10	---	48.03	150	V	20	13.6	54.00	5.97
17937.10	56.55	---	150	V	20	13.6	74.00	17.45

Middle Channel: 5785MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.22	200	V	311	-10.8	54.00	18.78
1348.50	40.48	---	200	V	311	-10.8	74.00	33.52
1799.00	46.61	---	200	V	63	-8.9	68.20	21.59
3828.80	---	38.35	200	V	278	-2.4	54.00	15.65
3828.80	43.14	---	200	V	278	-2.4	74.00	30.86
11665.80	---	43.27	150	V	20	9.9	54.00	10.73
11665.80	52.36	---	150	V	20	9.9	74.00	21.64
14496.30	---	45.88	150	H	276	12.7	54.00	8.12
14496.30	55.52	---	150	H	276	12.7	74.00	18.48
17932.00	---	47.24	150	V	232	13.6	54.00	6.76
17932.00	56.42	---	150	V	232	13.6	74.00	17.58

High Channel: 5825MHz



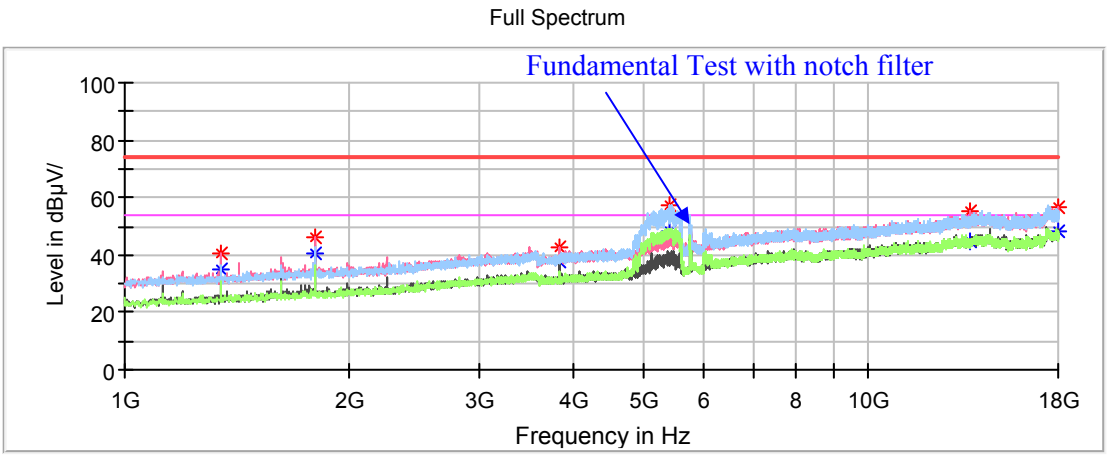
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	34.83	200	V	313	-10.8	54.00	19.17
1348.50	40.83	---	200	V	313	-10.8	74.00	33.17
1799.00	46.6	---	200	V	67	-8.9	68.20	21.60
3828.80	---	39.73	200	V	281	-2.4	54.00	14.27
3828.80	43.57	---	200	V	281	-2.4	74.00	30.43
5425.10	---	46.51	200	H	81	1.2	54.00	7.49
5425.10	55.32	---	200	H	81	1.2	74.00	18.68
11601.20	---	42.82	150	V	186	9.8	54.00	11.18
11601.20	52.44	---	150	V	186	9.8	74.00	21.56
17578.40	56.48	---	200	H	355	14.2	68.20	11.72

802.11ac40 Mode(Chain2+Chain3):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

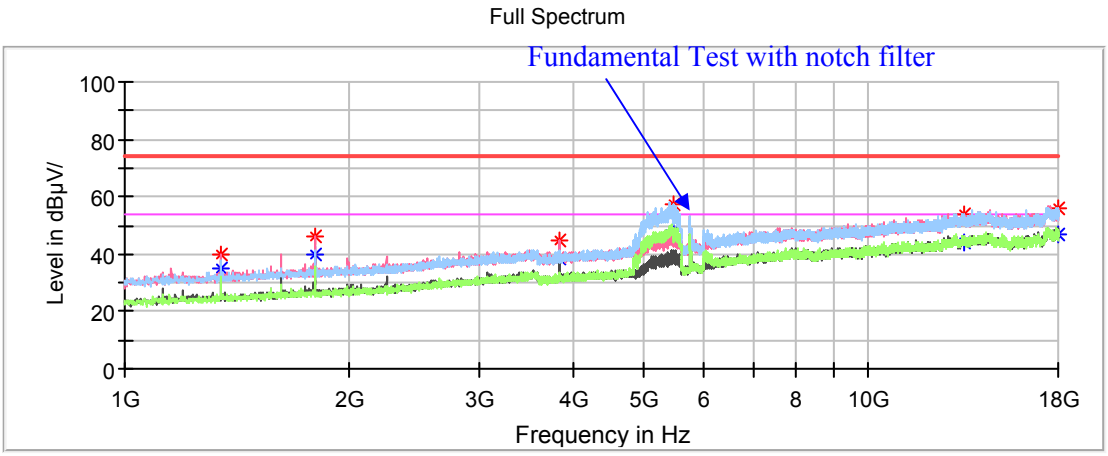
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.29	200	V	305	-10.8	54.00	18.71
1348.50	40.67	---	200	V	305	-10.8	74.00	33.33
1799.00	45.81	---	200	V	64	-8.9	68.20	22.39
3835.60	---	38.09	200	V	289	-2.4	54.00	15.91
3835.60	42.49	---	200	V	289	-2.4	74.00	31.51
5413.20	---	48.43	150	H	79	1.1	54.00	5.57
5413.20	57.64	---	150	H	79	1.1	74.00	16.36
13702.40	55.46	---	200	V	79	12.2	68.20	12.74
17959.20	---	48.12	150	V	82	13.5	54.00	5.88
17959.20	56.71	---	150	V	82	13.5	74.00	17.29

High Channel: 5795MHz

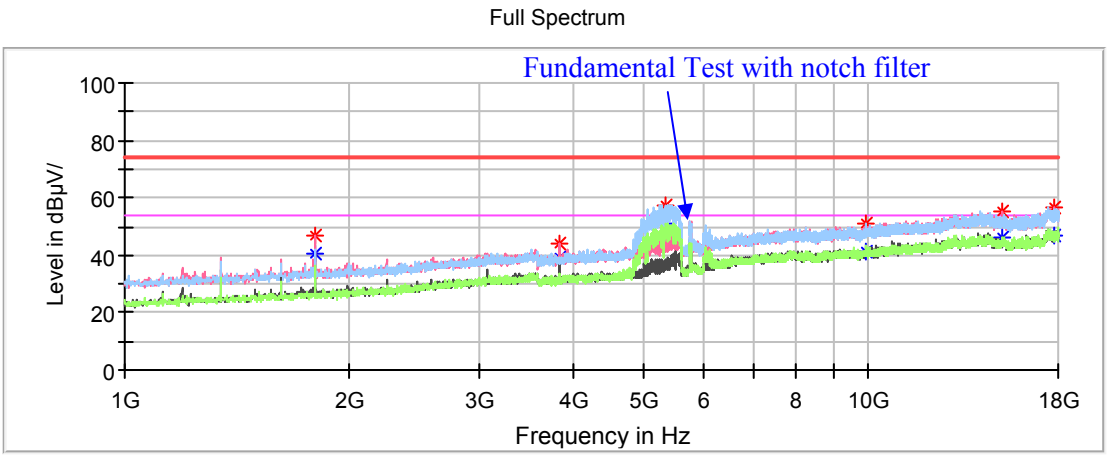


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.28	150	V	311	-10.8	54.00	18.72
1348.50	39.97	---	150	V	311	-10.8	74.00	34.03
1799.00	46.12	---	200	V	289	-8.9	68.20	22.08
3835.60	---	38.16	200	V	289	-2.4	54.00	15.84
3835.60	44.5	---	200	V	289	-2.4	74.00	29.50
5464.20	---	47.96	150	H	78	1.3	54.00	6.04
5464.20	57.25	---	150	H	78	1.3	74.00	16.75
13444.00	53.87	---	200	V	63	11.9	68.20	14.33
17957.50	---	46.59	150	V	310	13.5	54.00	7.41
17957.50	56	---	150	V	310	13.5	74.00	18.00

802.11n-HT40 Mode*(Chain2+Chain3)*:
*(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)*

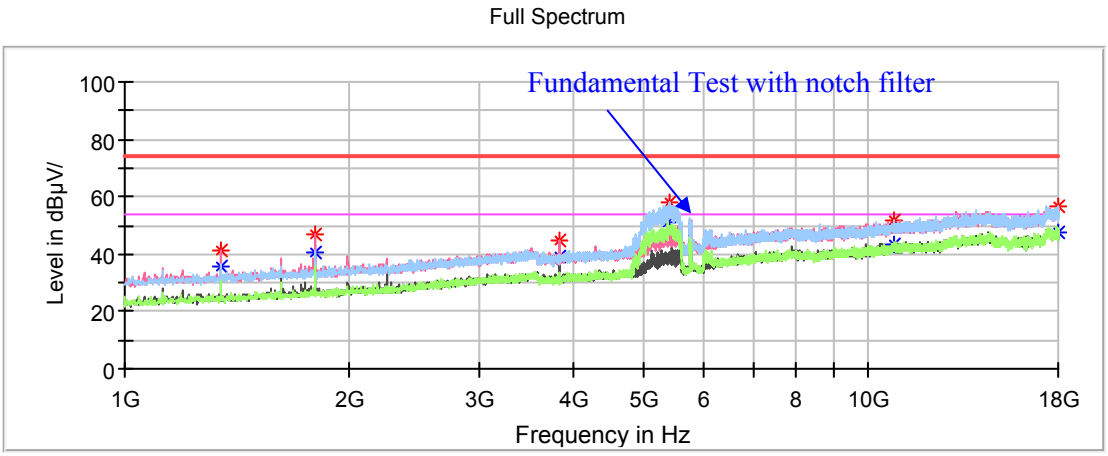
Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	46.6	---	200	V	279	-8.9	68.20	21.60
3835.60	---	39.44	200	V	279	-2.4	54.00	14.56
3835.60	44.17	---	200	V	279	-2.4	74.00	29.83
5352.00	---	51.01	150	H	86	0.9	54.00	2.99
5352.00	57.24	---	150	H	86	0.9	74.00	16.76
9948.80	51.06	---	150	H	204	8.2	68.20	17.14
15176.30	55.27	---	150	V	344	11.4	68.20	12.93
17733.10	---	47.19	150.0	V	141	13.9	54.00	6.81
17733.10	56.44	---	150.0	V	141	13.9	74.00	17.56

High Channel: 5795MHz



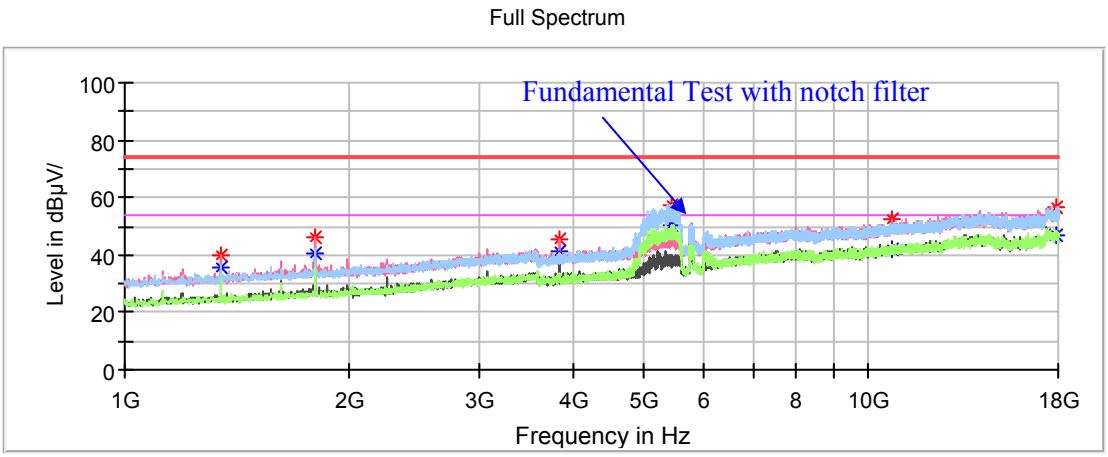
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.34	200	V	313	-10.8	54.00	18.66
1348.50	41.14	---	200	V	313	-10.8	74.00	32.86
1799.00	46.91	---	200	V	281	-8.9	68.20	21.29
3835.60	---	38.82	200	V	281	-2.4	54.00	15.18
3835.60	44.62	---	200	V	281	-2.4	74.00	29.38
5397.90	---	51.01	150	H	81	1.1	54.00	2.99
5397.90	58.04	---	150	H	81	1.1	74.00	15.96
10807.30	---	43.26	200	H	304	9.5	54.00	10.74
10807.30	51.79	---	200	H	304	9.5	74.00	22.21
17949.00	---	47.48	150	V	186	13.6	54.00	6.52
17949.00	56.97	---	150	V	186	13.6	74.00	17.03

802.11ac80 Mode(Chain2+Chain3):

*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)*

Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

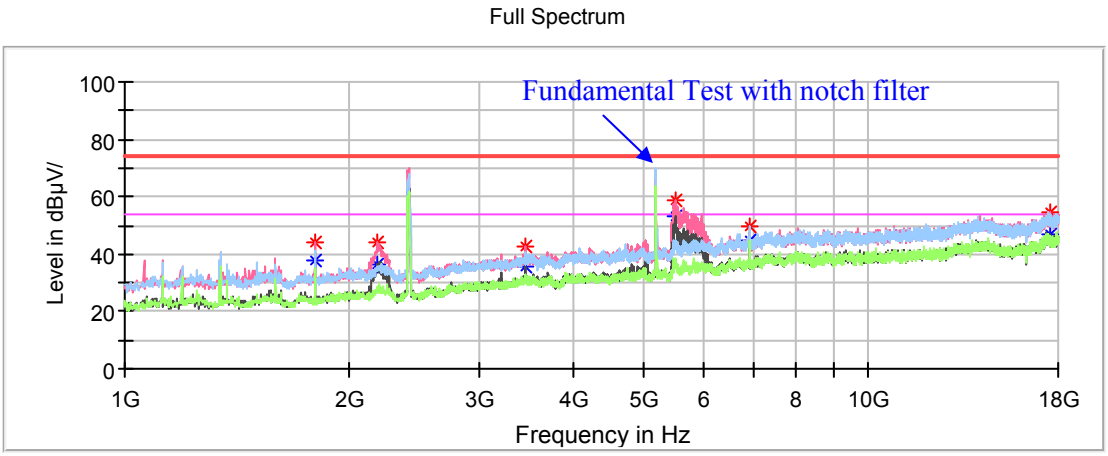
Low Channel: 5775MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1348.50	---	35.37	150	V	312	-10.8	54.00	18.63
1348.50	39.86	---	150	V	312	-10.8	74.00	34.14
1799.00	46.22	---	200	V	65	-8.9	68.20	21.98
3849.20	---	40.92	200	V	280	-2.4	54.00	13.08
3849.20	45.15	---	200	V	280	-2.4	74.00	28.85
5430.20	---	50.25	200	H	80	1.2	54.00	3.75
5430.20	57.39	---	200	H	80	1.2	74.00	16.61
10732.50	---	41.92	200	V	0	9.3	54.00	12.08
10732.50	52.52	---	200	V	0	9.3	74.00	21.48
17899.70	---	46.6	150	H	335	13.6	54.00	7.40
17899.70	56.49	---	150	H	335	13.6	74.00	17.51

*(The worst case **2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1)Middle Channel and 5G Wi-Fi(Radio2) Band 1 802.11n-HT40 low channel (Chain 2&Chain 3)** can transmit simultaneously in Z-axis of orientation was recorded)*

Note:
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
   Corrected Amplitude = Corrected Factor + Reading
   Margin = Limit - Corrected. Amplitude

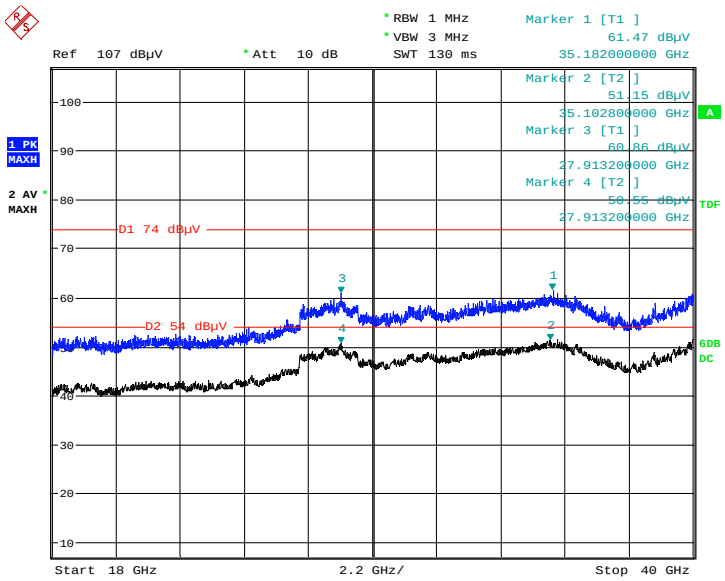


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1799.00	43.76	---	150	V	285	-15.2	68.20	24.44
2181.50	44.39	---	150	V	75	-13.7	68.20	23.81
3453.10	42.57	---	200	V	0	-8.9	68.20	25.63
5520.30	58.92	---	150	V	75	-3.9	68.20	9.28
6905.80	49.46	---	150	H	35	-0.3	68.20	18.74
17549.50	54.76	---	150	V	352	8.9	68.20	13.44

18GHz-40GHz (5150-5250MHz Band):

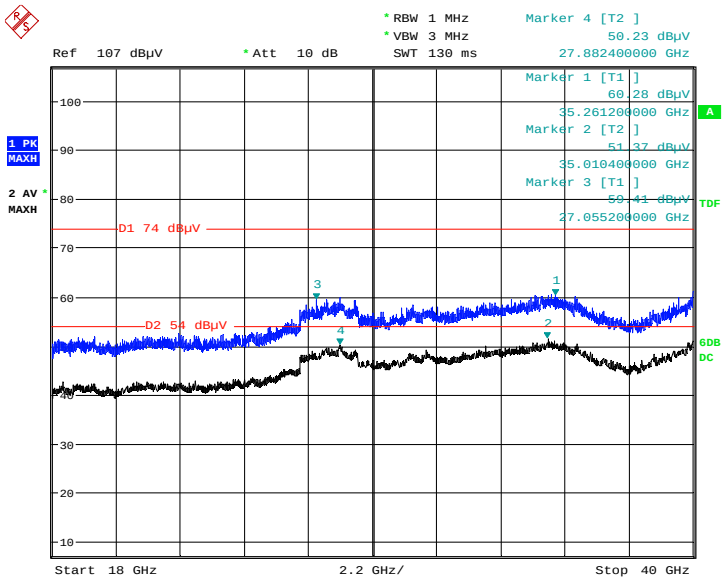
Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5240 in Z-axis of orientation was recorded.

Horizontal



Date: 16.MAR.2020 09:53:54

Vertical

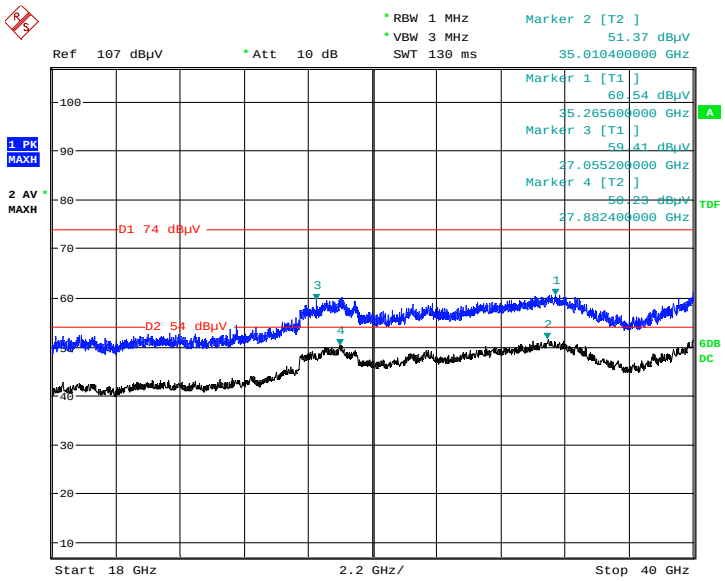


Date: 16.MAR.2020 09:41:52

18GHz-40GHz (5725-5850 Band):

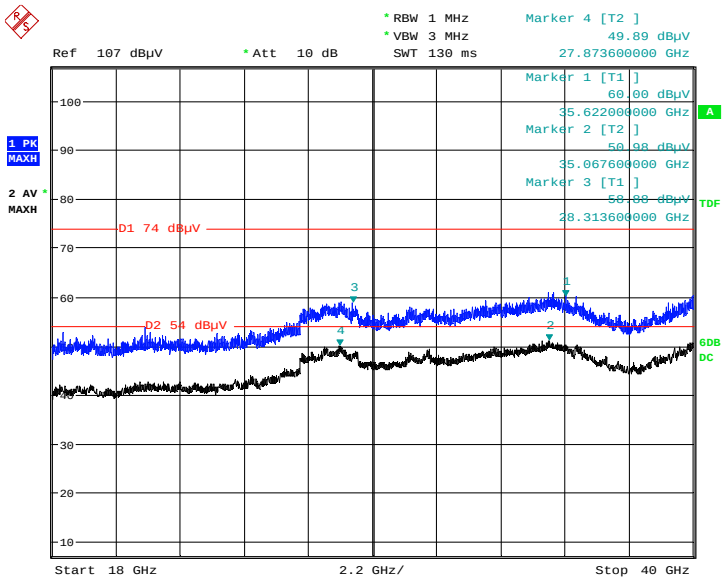
Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5825 in Z-axis of orientation was recorded.

Horizontal



Date: 16.MAR.2020 09:26:33

Vertical

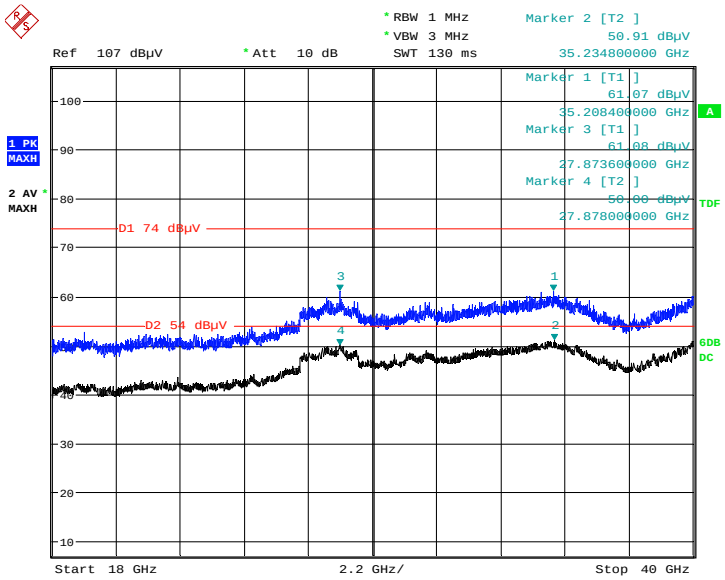


Date: 16.MAR.2020 09:03:20

18GHz-40GHz:

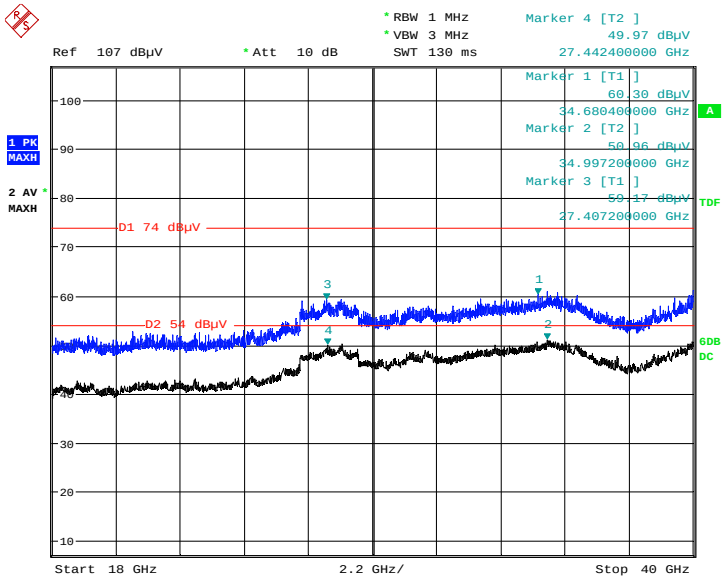
*(The worst case **2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1)Middle Channel and 5G Wi-Fi(Radio2) Band 1 802.11n-HT40 low channel (Chain 2&Chain3)** can transmit simultaneously in Z-axis of orientation was recorded)*

Horizontal



Date: 16.MAR.2020 08:08:49

Vertical



Date: 16.MAR.2020 08:22:53

Restricted Bands Emissions Test (5150-5250MHz Band):

1: These emissions were tested without amplifier and the test distance is 1.5m.
2. The test distance is 1.5m instead of 3m, Extrapolation Factor=20*log(3m /1.5m)=6.0 dB
The PK limit 80 dBuv/m @1.5m instead of 74 dBuv/m @3.0m
The AV limit 60 dBuv/m @1.5m instead of 54 dBuv/m @3.0m
3. Corrected Factor = Antenna factor (RX) + Cable Loss
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain0: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	55.84	200	H	358	16.2	60	4.16
5150.00	64.97	---	200	H	358	16.2	80	15.03
High Channel: 5240MHz								
5350.00	53.86	---	100	H	94	16.9	60	6.14
5350.00	---	64.2	100	H	94	16.9	80	15.8

802.11a Mode-Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	54.38	150	H	1	16.2	60	5.62
5150.00	63.88	---	150	H	1	16.2	80	16.12
High Channel: 5240MHz								
5350.00	65.46	---	200	H	308	16.9	80	14.54
5350.00	---	53.79	200	H	308	16.9	60	6.21

802.11ac20 Mode (Chain0+ Chain1): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	55.12	200	V	358	16.2	60	4.88
5150.00	62.77	---	200	V	358	16.2	80	17.23
High Channel: 5240MHz								
5350.00	64.49	---	150	V	340	16.9	80	15.51
5350.00	---	54.37	150	V	340	16.9	60	5.63

802.11n-HT20 Mode (Chain0+ Chain1): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	54.98	200	V	245	16.2	60	5.02
5150.00	63.69	---	200	V	245	16.2	80	16.31
High Channel: 5240MHz								
5350.00	64.08	---	150	V	16.9	16.9	80	15.92
5350.00	---	53.27	150	V	16.9	16.9	60	6.73

802.11ac40 Mode (Chain0+ Chain1): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5190MHz								
5150.00	---	53.92	150	V	302	16.2	60	6.08
5150.00	64.55	---	150	V	302	16.2	80	15.45
High Channel: 5230MHz								
5350.00	64.42	---	200	V	340	16.9	80	15.58
5350.00	---	54.81	200	V	340	16.9	60	5.19

802.11n-HT40 Mode (Chain0+ Chain1): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5190MHz								
5150.00	---	54.18	150	V	166	16.2	60	5.82
5150.00	63	---	200	V	166	16.2	80	17.00
High Channel: 5230MHz								
5350.00	64.37	---	150	V	92	16.9	80	15.63
5350.00	---	54.66	200	V	134	16.9	60	5.34

802.11ac80 Mode (Chain0+ Chain1): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5210MHz								
5150.00	---	55.7	150	V	30	16.2	60	4.3
5150.00	64.08	---	150	V	248	16.2	80	15.92
5350.00	64.65	---	200	V	126	16.9	80	15.35
5350.00	---	55.29	150	V	126	16.9	60	4.71

Band Edge Emissions Test (5725-5850MHz band):

Note:
1: These emissions were tested without amplifier and the test distance is 1.5m.
2. The test distance is 1.5m instead of 3m, Extrapolation Factor=20*log(3m /1.5m)=6.0dB
3. Corrected Factor = Antenna factor (RX) + Cable Loss
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain0: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	64.28	---	200	V	125	17.7	68.2	74.2	9.92
5700.00	65.58	---	150	V	187	17.8	105.2	111.2	45.62
5720.00	64.51	---	150	V	30	17.8	110.8	116.8	52.29
5725.00	65.66	---	150	V	228	17.8	122.2	128.2	62.54
High Channel: 5825MHz									
5850.00	64.24	---	200	V	181	18	122.2	128.2	63.96
5855.00	64.14	---	150	V	165	18	110.8	116.8	52.66
5875.00	64.42	---	200	V	0	18.1	105.2	111.2	46.78
5925.00	65.41	---	200	V	286	18.2	68.2	74.2	8.79

802.11a Mode-Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.65	---	200	V	125	17.7	68.2	74.2	10.55
5700.00	64.96	---	150	V	187	17.8	105.2	111.2	46.24
5720.00	64.57	---	150	V	30	17.8	110.8	116.8	52.23
5725.00	64.30	---	150	V	228	17.8	122.2	128.2	63.90
High Channel: 5825MHz									
5850.00	64.66	---	200	V	181	18	122.2	128.2	63.54
5855.00	64.28	---	150	V	165	18	110.8	116.8	52.52
5875.00	64.68	---	200	V	0	18.1	105.2	111.2	46.52
5925.00	64.12	---	200	V	286	18.2	68.2	74.2	10.08

802.11ac20 Mode-Chain0+ Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.06	---	200	V	125	17.7	68.2	74.2	9.14
5700.00	64.54	---	150	V	187	17.8	105.2	111.2	46.66
5720.00	64.13	---	150	V	30	17.8	110.8	116.8	52.67
5725.00	64.66	---	150	V	228	17.8	122.2	128.2	63.54
High Channel: 5825MHz									
5850.00	65.21	---	200	V	181	18	122.2	128.2	62.99
5855.00	64.99	---	150	V	165	18	110.8	116.8	51.81
5875.00	64.28	---	200	V	0	18.1	105.2	111.2	46.92
5925.00	65.52	---	200	V	286	18.2	68.2	74.2	8.68

802.11n-HT20 Mode- Chain0+ Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	64.28	---	200	V	125	17.7	68.2	74.2	9.92
5700.00	64.76	---	150	V	187	17.8	105.2	111.2	46.44
5720.00	64.12	---	150	V	30	17.8	110.8	116.8	52.68
5725.00	64.03	---	150	V	228	17.8	122.2	128.2	64.17
High Channel: 5825MHz									
5850.00	63.89	---	200	V	181	18	122.2	128.2	62.99
5855.00	64.57	---	150	V	165	18	110.8	116.8	51.81
5875.00	64.28	---	200	V	0	18.1	105.2	111.2	46.92
5925.00	65.75	---	200	V	286	18.2	68.2	74.2	8.68

802.11ac40 Mode- Chain0+ Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.02	---	200	V	125	17.7	68.2	74.2	9.18
5700.00	65.12	---	150	V	187	17.8	105.2	111.2	46.08
5720.00	65.00	---	150	V	30	17.8	110.8	116.8	51.80
5725.00	65.45	---	150	V	228	17.8	122.2	128.2	62.75
High Channel: 5825MHz									
5850.00	64.74	---	200	V	181	18	122.2	128.2	63.46
5855.00	64.75	---	150	V	165	18	110.8	116.8	52.05
5875.00	64.03	---	200	V	0	18.1	105.2	111.2	47.17
5925.00	65.31	---	200	V	286	18.2	68.2	74.2	8.89

802.11n-HT40 Mode- Chain0+ Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	64.50	---	200	V	125	17.7	68.2	74.2	9.70
5700.00	64.49	---	150	V	187	17.8	105.2	111.2	46.71
5720.00	64.58	---	150	V	30	17.8	110.8	116.8	52.22
5725.00	64.49	---	150	V	228	17.8	122.2	128.2	63.71
High Channel: 5825MHz									
5850.00	64.56	---	200	V	181	18	122.2	128.2	63.64
5855.00	66.3	---	150	V	165	18	110.8	116.8	50.50
5875.00	65.07	---	200	V	0	18.1	105.2	111.2	46.13
5925.00	65.17	---	200	V	286	18.2	68.2	74.2	9.03

802.11ac80 Mode- Chain0+ Chain1: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5775MHz									
5650.00	64.50	---	200	V	125	17.7	68.2	74.2	9.70
5700.00	64.49	---	150	V	187	17.8	105.2	111.2	46.71
5720.00	64.58	---	150	V	30	17.8	110.8	116.8	52.22
5725.00	64.49	---	150	V	228	17.8	122.2	128.2	63.71
5850.00	64.56	---	200	V	181	18	122.2	128.2	63.64
5855.00	66.30	---	150	V	165	18	110.8	116.8	50.5
5875.00	65.07	---	200	V	0	18.1	105.2	111.2	46.13
5925.00	65.17	---	200	V	286	18.2	68.2	74.2	9.03

Restricted Bands Emissions Test (5150-5250MHz Band):

1: These emissions were tested without amplifier and the test distance is 1.5m.
2. The test distance is 1.5m instead of 3m, Extrapolation Factor=20*log(3m /1.5m)=6.0 dB
The PK limit 80 dBuv/m @1.5m instead of 74 dBuv/m @3.0m
The AV limit 60 dBuv/m @1.5m instead of 54 dBuv/m @3.0m
3. Corrected Factor = Antenna factor (RX) + Cable Loss
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain2: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	54.66	150	V	207	16.2	60	5.34
5150.00	63.87	---	200	V	270	16.2	80	16.13
High Channel: 5240MHz								
5350.00	55.26	---	200	V	101	16.9	60	4.74
5350.00	---	65.58	200	V	338	16.9	80	14.42

802.11a Mode-Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	56.71	200	V	70	16.2	60	3.29
5150.00	63.53	---	200	V	169	16.2	80	16.47
High Channel: 5240MHz								
5350.00	64.46	---	200	V	143	16.9	80	15.54
5350.00	---	55.52	200	V	143	16.9	60	4.48

802.11ac20 Mode (Chain2+ Chain3): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	57.74	200	V	94	16.2	60	2.26
5150.00	64.03	---	200	V	94	16.2	80	15.97
High Channel: 5240MHz								
5350.00	64.17	---	150	V	341	16.9	80	15.83
5350.00	---	55.42	150	V	70	16.9	60	4.58

802.11n-HT20 Mode (Chain2+ Chain3): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5180MHz								
5150.00	---	55.11	150	V	94	16.2	60	4.89
5150.00	63.77	---	200	V	56	16.2	80	16.23
High Channel: 5240MHz								
5350.00	64.76	---	200	V	154	16.9	80	15.24
5350.00	---	55.61	200	V	154	16.9	60	4.39

802.11ac40 Mode (Chain2+ Chain3): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5190MHz								
5150.00	---	57.91	200	V	302	16.2	60	2.09
5150.00	66.52	---	200	V	302	16.2	80	13.48
High Channel: 5230MHz								
5350.00	65.64	---	200	V	0	16.9	80	14.36
5350.00	---	55.48	200	V	0	16.9	60	4.52

802.11n-HT40 Mode (Chain2+ Chain3): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5190MHz								
5150.00	---	55.51	150	V	154	16.2	60	4.49
5150.00	64.73	---	150	V	52	16.2	80	15.27
High Channel: 5230MHz								
5350.00	64.87	---	150	V	299	16.9	80	15.13
5350.00	---	55.54	200	V	1	16.9	60	4.46

802.11ac80 Mode (Chain2+ Chain3): *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5210MHz								
5150.00	---	58.23	200	V	70	16.2	60	1.77
5150.00	64.93	---	150	V	87	16.2	80	15.07
5350.00	65.24	---	200	V	280	16.9	80	14.76
5350.00	---	56.87	150	V	221	16.9	60	3.13

Band Edge Emissions Test (5725-5850MHz band):

1: These emissions were tested without amplifier and the test distance is 1.5m.
2. The test distance is 1.5m instead of 3m, Extrapolation Factor=20*log(3m /1.5m)=6.0dB
3. Corrected Factor = Antenna factor (RX) + Cable Loss
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain2: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	64.54	---	200	V	125	17.7	68.2	74.2	9.66
5700.00	65.47	---	150	V	187	17.8	105.2	111.2	45.73
5720.00	63.09	---	150	V	30	17.8	110.8	116.8	53.71
5725.00	63.7	---	150	V	228	17.8	122.2	128.2	64.5
High Channel: 5825MHz									
5850.00	64.24	---	200	V	181	18	122.2	128.2	63.96
5855.00	65.27	---	150	V	165	18	110.8	116.8	51.53
5875.00	64.15	---	200	V	0	18.1	105.2	111.2	47.05
5925.00	64.42	---	200	V	286	18.2	68.2	74.2	9.78

802.11a Mode-Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.52	---	200	V	125	17.7	68.2	74.2	10.68
5700.00	64.16	---	150	V	187	17.8	105.2	111.2	47.04
5720.00	63.02	---	150	V	30	17.8	110.8	116.8	53.78
5725.00	64.59	---	150	V	228	17.8	122.2	128.2	63.61
High Channel: 5825MHz									
5850.00	62.84	---	200	V	181	18	122.2	128.2	65.36
5855.00	64.44	---	150	V	165	18	110.8	116.8	52.36
5875.00	64.06	---	200	V	0	18.1	105.2	111.2	47.14
5925.00	64.34	---	200	V	286	18.2	68.2	74.2	9.86

802.11ac20 Mode- Chain2+ Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.20	---	200	V	125	17.7	68.2	74.2	11.00
5700.00	63.51	---	150	V	187	17.8	105.2	111.2	47.69
5720.00	63.96	---	150	V	30	17.8	110.8	116.8	52.84
5725.00	64.30	---	150	V	228	17.8	122.2	128.2	63.9
High Channel: 5825MHz									
5850.00	63.34	---	200	V	181	18	122.2	128.2	64.86
5855.00	63.88	---	150	V	165	18	110.8	116.8	52.92
5875.00	63.59	---	200	V	0	18.1	105.2	111.2	47.61
5925.00	63.74	---	200	V	286	18.2	68.2	74.2	10.46

802.11n-HT20 Mode- Chain2+ Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.61	---	200	V	125	17.7	68.2	74.2	10.59
5700.00	62.5	---	150	V	187	17.8	105.2	111.2	48.70
5720.00	62.83	---	150	V	30	17.8	110.8	116.8	53.97
5725.00	62.17	---	150	V	228	17.8	122.2	128.2	66.03
High Channel: 5825MHz									
5850.00	64.03	---	200	V	181	18	122.2	128.2	64.17
5855.00	64.25	---	150	V	165	18	110.8	116.8	52.55
5875.00	62.95	---	200	V	0	18.1	105.2	111.2	48.25
5925.00	63.89	---	200	V	286	18.2	68.2	74.2	10.31

802.11ac40 Mode- Chain2+ Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	62.01	---	200	V	125	17.7	68.2	74.2	12.19
5700.00	63.07	---	150	V	187	17.8	105.2	111.2	48.13
5720.00	62.76	---	150	V	30	17.8	110.8	116.8	54.04
5725.00	63.25	---	150	V	228	17.8	122.2	128.2	64.95
High Channel: 5825MHz									
5850.00	64.59	---	200	V	181	18	122.2	128.2	63.61
5855.00	65.72	---	150	V	165	18	110.8	116.8	51.08
5875.00	63.62	---	200	V	0	18.1	105.2	111.2	47.58
5925.00	63.96	---	200	V	286	18.2	68.2	74.2	10.24

802.11n-HT40 Mode- Chain2+ Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.12	---	200	V	125	17.7	68.2	74.2	11.08
5700.00	65.61	---	150	V	187	17.8	105.2	111.2	45.59
5720.00	64.39	---	150	V	30	17.8	110.8	116.8	52.41
5725.00	64.88	---	150	V	228	17.8	122.2	128.2	63.32
High Channel: 5825MHz									
5850.00	65.23	---	200	V	181	18	122.2	128.2	62.97
5855.00	64.43	---	150	V	165	18	110.8	116.8	52.37
5875.00	62.74	---	200	V	0	18.1	105.2	111.2	48.46
5925.00	62.50	---	200	V	286	18.2	68.2	74.2	11.70

802.11ac80 Mode- Chain2+ Chain3: *(Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 5775MHz								
5650.00	63.96	---	200	V	4	17.7	68.20	10.24
5700.00	63.85	---	150	V	1	17.8	105.20	47.35
5720.00	64.46	---	150	V	6	17.8	110.80	52.34
5725.00	68.03	---	150	V	88	17.8	122.20	60.17
5850.00	64.45	---	200	V	247	18	122.2	63.75
5855.00	63.94	---	200	V	181	18	110.8	52.86
5875.00	63.15	---	200	V	300	18.1	105.2	48.05
5925.00	63.91	---	200	V	15	18.2	68.2	10.29

FCC §15.407(a) &§15.407(e)–EMISSION BANDWIDTH

Applicable Standard

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The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

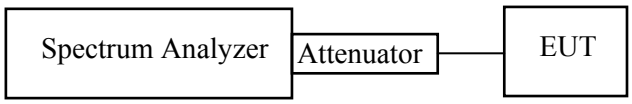
Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. **Minimum Emission Bandwidth for the band 5.725-5.85 GHz**
Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data

Environmental Conditions

Temperature:	23.4~24.5 °C
Relative Humidity:	48~50 %
ATM Pressure:	101.1~101.2 kPa

The testing was performed by Stone Zhang from 2020-03-11 to 2020-04-01.

Test Result: Pass.

5150-5250 MHz:

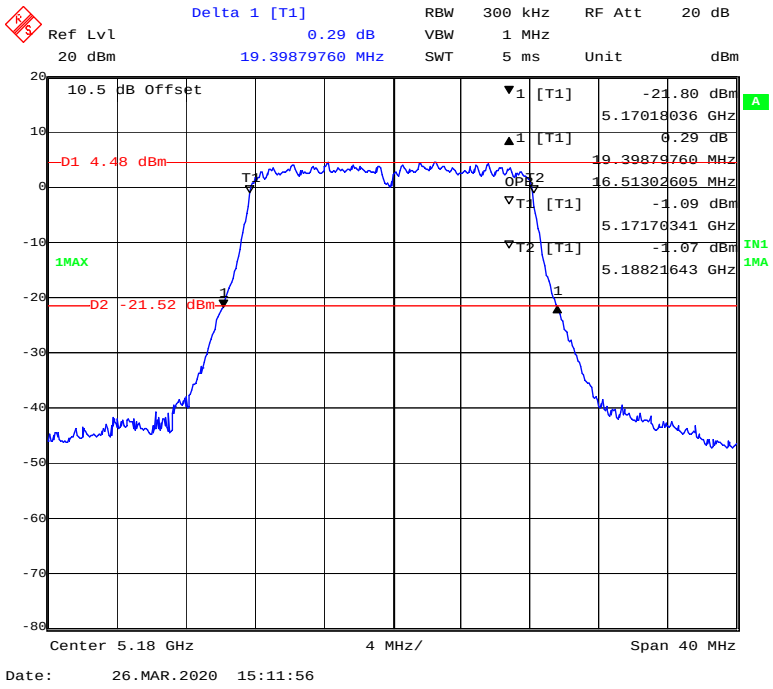
Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)		99% Bandwidth (MHz)	
			Chain0	Chain1	Chain0	Chain1
802.11a	Low	5180	19.399	19.639	16.513	16.513
	Middle	5200	19.559	19.559	16.513	16.513
	High	5240	19.399	19.479	16.513	16.513
802.11ac20	Low	5180	19.479	19.479	16.513	16.513
	Middle	5200	19.559	19.479	16.513	16.513
	High	5240	19.559	19.559	16.513	16.513
802.11n-HT20	Low	5180	19.559	19.479	16.513	16.513
	Middle	5200	19.399	19.399	16.513	16.513
	High	5240	19.479	19.559	16.513	16.513
802.11ac40	Low	5190	38.998	38.958	35.431	35.431
	High	5230	38.958	38.918	35.431	35.271
802.11n-HT40	Low	5190	38.958	39.118	35.431	35.431
	High	5230	38.798	38.958	35.431	35.271
802.11ac80	Low	5210	83.687	83.687	75.992	75.671

5725-5850MHz:

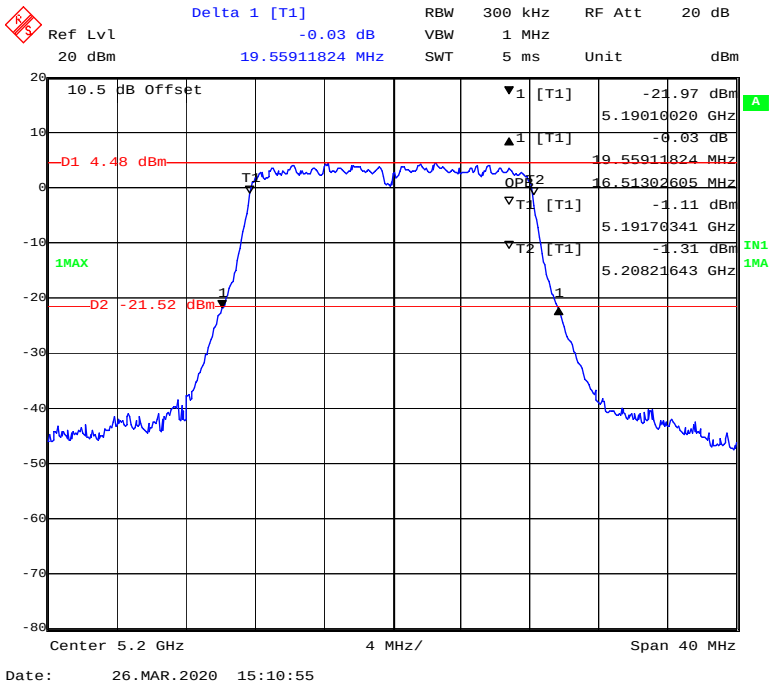
Test mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		99% Bandwidth (MHz)		Limit (MHz)
			Chain0	Chain1	Chain0	Chain1	
802.11a	Low	5745	16.433	16.433	16.593	16.513	≥0.5
	Middle	5785	16.433	16.433	16.593	16.513	≥0.5
	High	5825	16.433	16.433	16.593	16.513	≥0.5
802.11ac20	Low	5745	16.433	16.433	16.513	16.593	≥0.5
	Middle	5785	16.433	16.433	16.513	16.593	≥0.5
	High	5825	16.433	16.433	16.593	16.593	≥0.5
802.11n-HT20	Low	5745	16.433	16.433	16.513	16.593	≥0.5
	Middle	5785	16.433	16.433	16.593	16.513	≥0.5
	High	5825	16.433	16.433	16.513	16.593	≥0.5
802.11ac40	Low	5755	34.148	35.110	35.431	35.431	≥0.5
	High	5795	34.148	34.148	35.431	35.431	≥0.5
802.11n-HT40	Low	5755	34.148	35.110	35.431	35.431	≥0.5
	High	5795	35.110	33.988	35.431	35.431	≥0.5
802.11ac80	Low	5775	75.992	75.992	75.671	75.992	≥0.5

5150-5250 MHz Band:
Chain0:
26 Bandwidth&99% Occupied Bandwidth

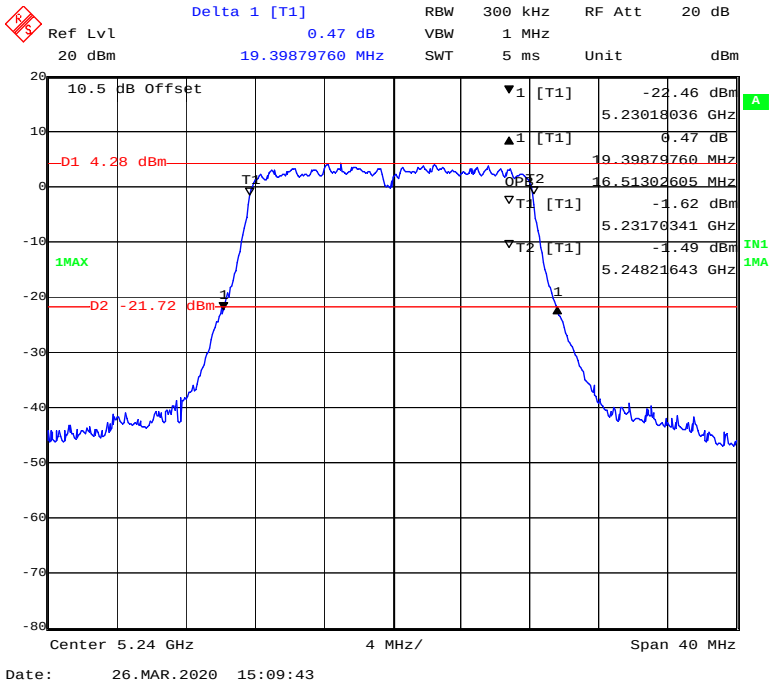
802.11a mode, 5180MHz



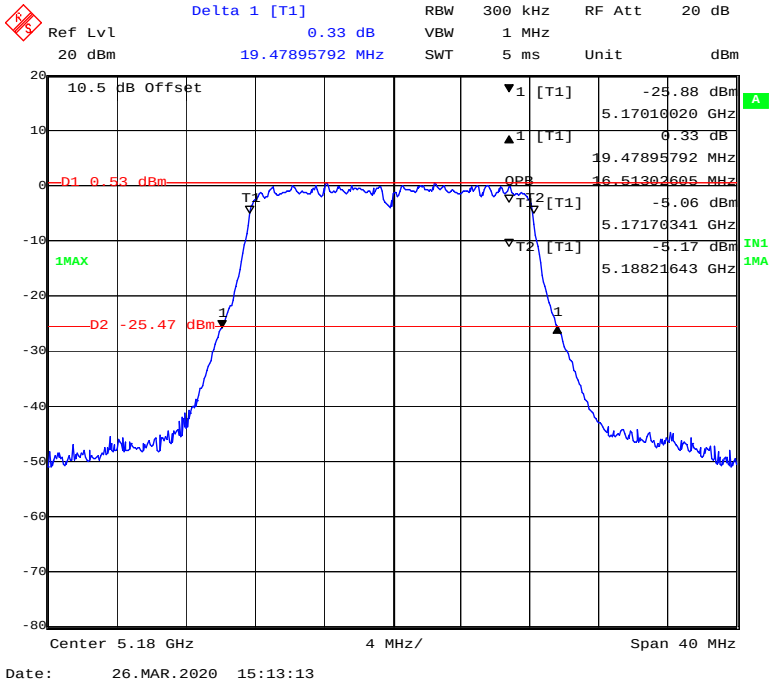
802.11a mode, 5200MHz



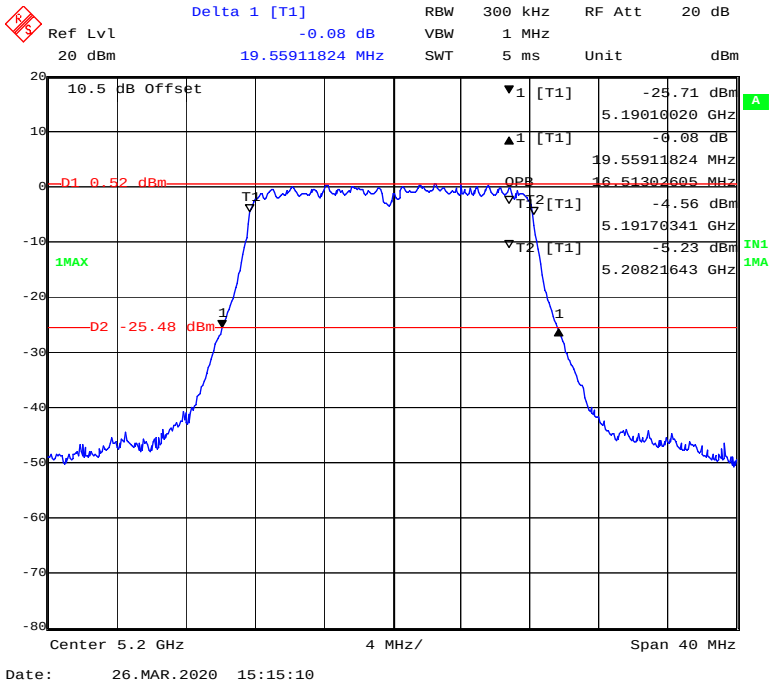
802.11a mode, 5240MHz



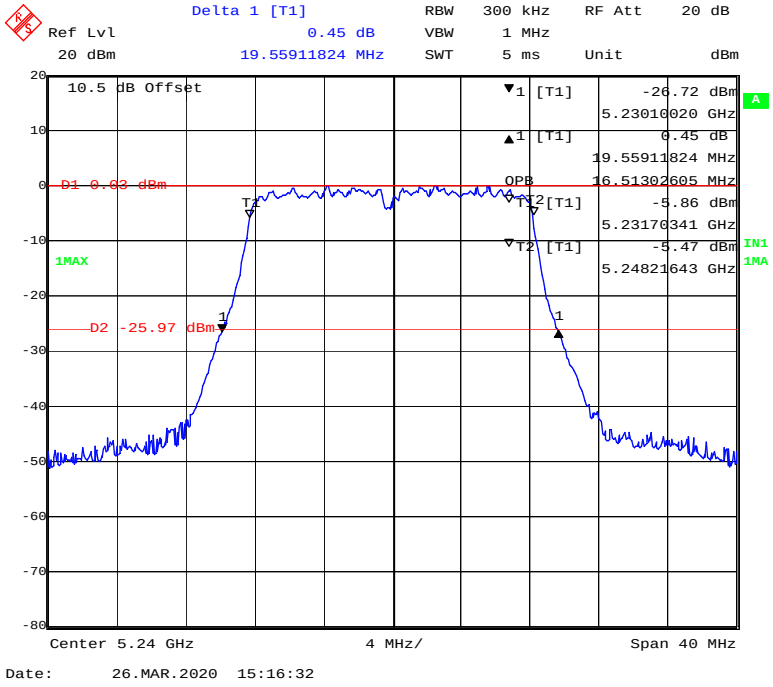
802.11ac20 mode, 5180MHz



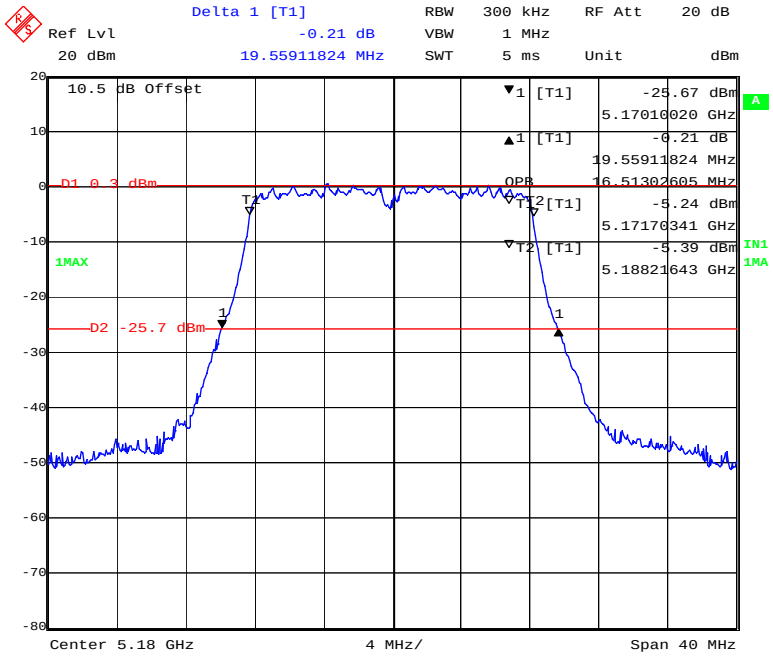
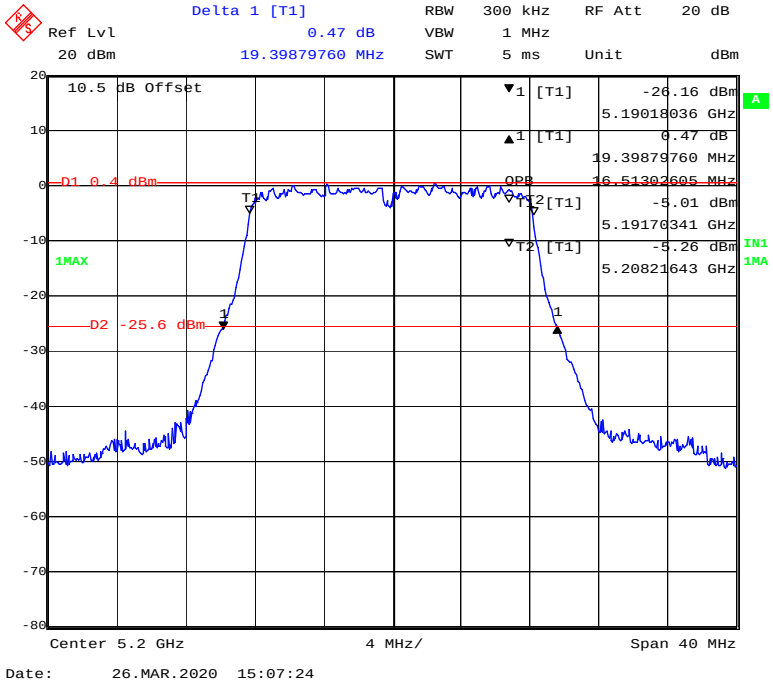
802.11 ac20 mode, 5200MHz



802.11 ac20 mode, 5240MHz



802.11n-HT20 mode, 5180MHz



802.11n-HT20 mode, 5200MHz