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LP0002-2018

TEST REPORT
FOR
Cisco Systems Inc.

125 West Tasman Drive,
San Jose, CA 95134 USA

FCC ID: LDKSLTSP1905
IC:2461N-SLTSP1905

Report Type: Permissive II Change Report		Product Type: Cisco 802.11ax Access Point	
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Note: This test report was prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. This test report **shall not** be used by the customer to claim product certification, approval, or endorsement by A2LA or any agency of the United States Government or any foreign government.

* This test report may contain data and test methods that are not covered by BACL's scope of accreditation as of the test report date shown above. These items are marked within the test report text with an asterisk "*"

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	R1907017-407	Permissive II Change Report	2019-08-23

1 General Description

1.1 Product Description for Equipment Under Test (EUT)

This test and measurement report was prepared on behalf of *Cisco Systems Inc.*, and their product model: *C9115AXI-B (USA)*, *C9115AXI-A V03 (Canada)*, *C9115AXI-T (Taiwan)* as referred to as EUT in this report. The product is an 802.11ax Dual Band Access Point.

1.2 Mechanical Description of EUT

Length (cm)	Width (cm)	Height (cm)	Weight (g)
20	20	4	1700

1.3 Objective

This report is prepared on behalf of *Cisco Systems Inc.* in accordance with FCC CFR47 §15.407, RSS-247 Issue 2, February 2017 and NCC LP0002-2018.

The objective is to determine compliance with FCC Part 15.407, ISED RSS-247 and NCC LP0002-2018 rules for Radiated Spurious Emissions.

1.4 Related Submittal(s)/Grant(s)

R1907017-247
FCC ID: LDKSLTSP2905 DTS
IC: 2461N-SLTSP1905

1.5 Test Methodology

All measurements contained in this report were conducted in accordance with ANSI C63.10-2013, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz, and FCC KDB 789033 D02 General UNII Test Procedure New Rules v02r01.

1.6 Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in the field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Parameter	Measurement uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.57 dB
Power Spectral Density, conducted	±1.48dB
Unwanted Emissions, conducted	±1.57dB
All emissions, radiated	±4.0 dB
AC power line Conducted Emission	±2.0 dB
Temperature	±2 ° C
Humidity	±5 %
DC and low frequency voltages	±1.0 %
Time	±2 %
Duty Cycle	±3 %

1.7 Test Facility Registrations

BACLs test facilities that are used to perform Radiated and Conducted Emissions tests are currently recognized by the Federal Communications Commission as Accredited with NIST Designation Number US1129.

BACL's test facilities that are used to perform Radiated and Conducted Emissions tests are currently registered with Industry Canada under Registration Numbers: 3062A-1, 3062A-2, and 3062A-3.

BACL is a Chinese Taipei Bureau of Standards Metrology and Inspection (BSMI) validated Conformity Assessment Body (CAB), under Appendix B, Phase I Procedures of the APEC Mutual Recognition Arrangement (MRA). BACL's BSMI Lab Code Number is: SL2-IN-E-1002R

BACL's test facilities that are used to perform AC Line Conducted Emissions, Telecommunications Line Conducted Emissions, Radiated Emissions from 30 MHz to 1 GHz, and Radiated Emissions from 1 GHz to 6 GHz are currently recognized as Accredited in accordance with the Voluntary Control Council for Interference [VCCI] Article 15 procedures under Registration Number A-0027.

1.8 Test Facility Accreditations

Bay Area Compliance Laboratories Corp. (BACL) is:

A- An independent, 3rd-Party, Commercial Test Laboratory accredited to ISO/IEC 17025:2005 by A2LA (Test Laboratory Accreditation Certificate Number 3279.02), in the fields of: Electromagnetic Compatibility and Telecommunications. Unless noted by an Asterisk (*) in the Compliance Matrix (See Section 3 of this Test Report), BACL's ISO/IEC 17025:2005 Scope of Accreditation includes all of the Test Method Standards and/or the Product Family Standards detailed in this Test Report..

BACL's ISO/IEC 17025:2005 Scope of Accreditation includes a comprehensive suite of EMC Emissions, EMC Immunity, Radio, RF Exposure, Safety and wireline Telecommunications test methods applicable to a wide range of product categories. These product categories include Central Office Telecommunications Equipment [including NEBS - Network Equipment Building Systems], Unlicensed and Licensed Wireless and RF devices,

Information Technology Equipment (ITE); Telecommunications Terminal Equipment (TTE); Medical Electrical Equipment; Industrial, Scientific and Medical Test Equipment; Professional Audio and Video Equipment; Industrial and Scientific Instruments and Laboratory Apparatus; Cable Distribution Systems, and Energy Efficient Lighting.

B- A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3279.03) to certify

- For the USA (Federal Communications Commission):
 - 1- All Unlicensed radio frequency devices within FCC Scopes A1, A2, A3, and A4;
 - 2- All Licensed radio frequency devices within FCC Scopes B1, B2, B3, and B4;
 - 3- All Telephone Terminal Equipment within FCC Scope C.
- For the Canada (Industry Canada):
 - 1 All Scope 1-Licence-Exempt Radio Frequency Devices;
 - 2 All Scope 2-Licensed Personal Mobile Radio Services;
 - 3 All Scope 3-Licensed General Mobile & Fixed Radio Services;
 - 4 All Scope 4-Licensed Maritime & Aviation Radio Services;
 - 5 All Scope 5-Licensed Fixed Microwave Radio Services
 - 6 All Broadcasting Technical Standards (BETS) in the Category I Equipment Standards List.
- For Singapore (Info-Communications Development Authority (IDA)):
 - 1 All Line Terminal Equipment: All Technical Specifications for Line Terminal Equipment – Table 1 of IDA MRA Recognition Scheme: 2011, Annex 2
 - 2. All Radio-Communication Equipment: All Technical Specifications for Radio-Communication Equipment – Table 2 of IDA MRA Recognition Scheme: 2011, Annex 2
- For the Hong Kong Special Administrative Region:
 - 1 All Radio Equipment, per KHCA 10XX-series Specifications;
 - 2 All GMDSS Marine Radio Equipment, per HKCA 12XX-series Specifications;
 - 3 All Fixed Network Equipment, per HKCA 20XX-series Specifications.
- For Japan:
 - 1 MIC Telecommunication Business Law (Terminal Equipment):
 - All Scope A1 - Terminal Equipment for the Purpose of Calls;
 - All Scope A2 - Other Terminal Equipment
 - 2 Radio Law (Radio Equipment):
 - All Scope B1 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 1 of the Radio Law
 - All Scope B2 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 2 of the Radio Law
 - All Scope B3 - Specified Radio Equipment specified in Article 38-2-2, paragraph 1, item 3 of the Radio Law

C- A Product Certification Body accredited to ISO/IEC 17065:2012 by A2LA (Product Certification Body Accreditation Certificate Number 3279.01) to certify Products to USA's Environmental Protection Agency (EPA) ENERGY STAR Product Specifications for:

- 1 Electronics and Office Equipment:
 - for Telephony (ver. 3.0)
 - for Audio/Video (ver. 3.0)
 - for Battery Charging Systems (ver. 1.1)
 - for Set-top Boxes & Cable Boxes (ver. 4.1)
 - for Televisions (ver. 6.1)
 - for Computers (ver. 6.0)
 - for Displays (ver. 6.0)
 - for Imaging Equipment (ver. 2.0)

- for Computer Servers (ver. 2.0)
- 2 Commercial Food Service Equipment
 - for Commercial Dishwashers (ver. 2.0)
 - for Commercial Ice Machines (ver. 2.0)
 - for Commercial Ovens (ver. 2.1)
 - for Commercial Refrigerators and Freezers
- 3 Lighting Products
 - For Decorative Light Strings (ver. 1.5)
 - For Luminaires (including sub-components) and Lamps (ver. 1.2)
 - For Compact Fluorescent Lamps (CFLs) (ver. 4.3)
 - For Integral LED Lamps (ver. 1.4)
- 4 Heating, Ventilation, and AC Products
 - for Residential Ceiling Fans (ver. 3.0)
 - for Residential Ventilating Fans (ver. 3.2)
- 5 Other
 - For Water Coolers (ver. 3.0)

D- A NIST Designated Phase-I and Phase-II Conformity Assessment Body (CAB) for the following economies and regulatory authorities under the terms of the stated MRAs/Treaties:

- Australia: ACMA (Australian Communication and Media Authority) – APEC Tel MRA -Phase I;
- Canada: (Innovation, Science and Economic development Canada - ISED) Foreign Certification Body – FCB – APEC Tel MRA -Phase I & Phase II;
- Chinese Taipei (Republic of China – Taiwan):
 - o BSMI (Bureau of Standards, Metrology and Inspection) APEC Tel MRA -Phase I;
 - o NCC (National Communications Commission) APEC Tel MRA -Phase I;
- European Union:
 - o EMC Directive 2014/30/EU US-EU EMC & Telecom MRA CAB (NB)
 - o Radio Equipment (RE) Directive 2014/53/EU US-EU EMC & Telecom MRA CAB (NB)
 - o Low Voltage Directive (LVD) 2014/35/EU
- Hong Kong Special Administrative Region: (Office of the Telecommunications Authority – OFTA) APEC Tel MRA -Phase I & Phase II
- Israel – US-Israel MRA Phase I
- Republic of Korea (Ministry of Communications - Radio Research Laboratory) APEC Tel MRA -Phase I
- Singapore: (Infocomm Media Development Authority - IMDA) APEC Tel MRA -Phase I & Phase II;
- Japan: VCCI - Voluntary Control Council for Interference US-Japan Telecom Treaty VCCI Side Letter-
- USA:
 - o ENERGY STAR Recognized Test Laboratory – US EPA
 - o Telecommunications Certification Body (TCB) – US FCC;
 - o Nationally Recognized Test Laboratory (NRTL) – US OSHA
- Vietnam: APEC Tel MRA -Phase I;

2 System Test Configuration

2.1 Justification

The EUT was configured for testing according to ANSI C63.10-2013 and FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

The EUT was tested in a testing mode to represent worst-case results during the final qualification test.

The worst-case data rates are determined by measuring the average power, peak power and PPSD across all data rates bandwidths, and modulations.

2.2 EUT Exercise Software

The test software used was Tera Term and the software is compliant with the standard requirements being tested against. Following are the test channels.

Modulation	Frequency (MHz)	Power Setting
802.11a/n/ac/ax	5180	17
	5190	17
	5210	17
	5220	17
	5230	17
	5240	17
	5250	17
	5260	17
	5270	17
	5290	17
	5300	17
	5310	17
	5320	17
	5500	17
	5510	17
	5530	17
	5570	17
	5580	17
	5590	17
	5610	17
	5670	17
	5690	17
	5700	17
	5710	17
	5720	17
	5745	17
	5755	17
	5775	17
	5785	17
	5795	17
	5825	17

Data Rates Tested:

802.11a Non HT mode: 6Mbps

802.11n/ac HT/VHT mode: m0/m0x1

802.11ac VHT mode: m0x1

802.11ax HE mode: m0h1

Note: Channel 5720, 5710, 5610, 5690 and 5570MHz are only for FCC and NCC.

2.3 Equipment Modifications

No equipment modifications are made to the EUT

2.4 Local Support Equipment

Manufacturer	Description	Model	Serial Number
Dell	Laptop	Latitude E6410	3CKRAQ1

2.5 Support Equipment

Manufacturer	Description	Model
Cisco	Power Supply	AIR-PWRINJ6 V01

2.6 Interface Ports and Cabling

Cable Description	Length (m)	To	From
Ethernet cable	2 m	PoE	EUT
Ethernet-serial-USB cable	2 m	EUT	Laptop

3 Summary of Test Results

FCC, ISED, and LP0002 Rules	Description of Test	Result
FCC §15.207, ISED RSS GEN §8.8 and LP0002-2018 §2.3	AC Power Line Conducted Emissions	Compliant
FCC §2.1053, §15.205, §15.209, 15.407(b) ISED RSS-247 §6.2 LP0002-2018 §2.8, §2.11, §4.7.4	Radiated Spurious Emissions	Compliant

4 FCC §15.207 & ISEDC RSS-Gen §8.8 and LP0002-2018 § 2.3 - AC Power Line Conducted Emissions

4.1 Applicable Standards

As per FCC §15.207, ISEDC RSS GEN §8.8 and LP0002-2018 §2.3

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequencies ranges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56 ¹	56 to 46 ²
0.5-5	56	46
5-30	60	50

Note¹: Decreases with the logarithm of the frequency.

Note²: A linear average detector is required.

4.2 Test Setup

The measurement was performed at shield room, using the setup per ANSI C63.10-2013 measurement procedure. The specification used was FCC §15.207 limits and ISEDC RSS GEN §8.8.

External I/O cables were draped along the edge of the test table and bundled when necessary.

The AC/DC power adapter of the EUT was connected with LISN-1 which provided 120 V / 60 Hz AC power.

4.3 Test Procedure

During the conducted emissions test, the power cord of the EUT host system was connected to the main outlet of the LISN-1 and the power cords of support equipment were connected to LISN-2.

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

All data was recorded in the peak, quasi-peak, and average detection mode. Quasi-Peak readings are distinguished with "QP." Average readings are distinguished with "Ave".

4.4 Corrected Amplitude and Margin Calculation

The Corrected Amplitude (CA) is calculated by adding the Cable Loss (CL), the Attenuator Factor (Atten) to indicated Amplitude (Ai) reading. The basic equation is as follows:

$$CA = Ai + CL + Atten$$

For example, a corrected amplitude of 46.2 dBuV = Indicated Reading (32.5 dBuV) + Cable Loss (3.7 dB) + Attenuator (10 dB)

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

$$\text{Margin} = \text{Corrected Amplitude} - \text{Limit}$$

4.5 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Rohde and Schwarz	Receiver, EMI Test	ESCI 1166.5950.03	100338	2018-07-05	2 years
Rohde and Schwarz	Impulse Limiter	ESH3-Z2	101964	2019-07-31	1 year
Solar Electronics Company	High Pass Filter	Type 7930-100	7930150204	2019-02-25	1 year
Suirong	30 ft conductive emission cable	LMR 400	-	N/R	N/A
FCC	LISN	FCC-LISN-50-25-2-10-CISPR16	160129	2019-04-11	1 year
Vasona	Test software	V6.0 build 11	10400213	N/R	N/R

Statement of Traceability: *BACL Corp.* attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with A2LA Policy P102 (dated 09 June 2016) “A2LA Policy on Metrological Traceability”.

4.6 Test Environmental Conditions

Temperature:	23° C
Relative Humidity:	44 %
ATM Pressure:	101.31 kPa

The testing was performed by Alexandrae Duran on 2019-08-20 in 5m chamber 3.

4.7 Summary of Test Results

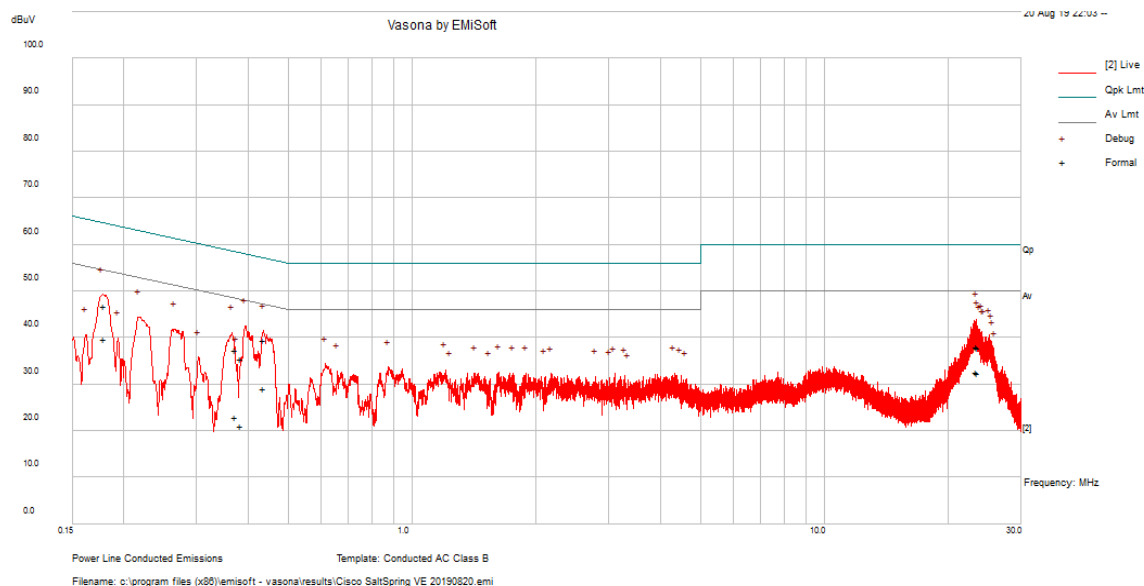
According to the recorded data in following table, the EUT complied with the FCC Part 15 and RSS-Gen standards’ conducted emissions limits, with the margin reading of:

Connection: AC/DC adapter connected to 120 V/60 Hz, AC			
Margin (dB)	Frequency (MHz)	Conductor Mode (Live/Neutral)	Range (MHz)
-14.86	0.179144	Line	0.15-30

4.8 Conducted Emissions Test Plots and Data

Worst Case Colocation: BLE 2480 MHz, 2.4 GHz Wi-Fi HT/VHT mode 2412 MHz, and 5 GHz Wi-Fi VHT160 mode 5250 MHz

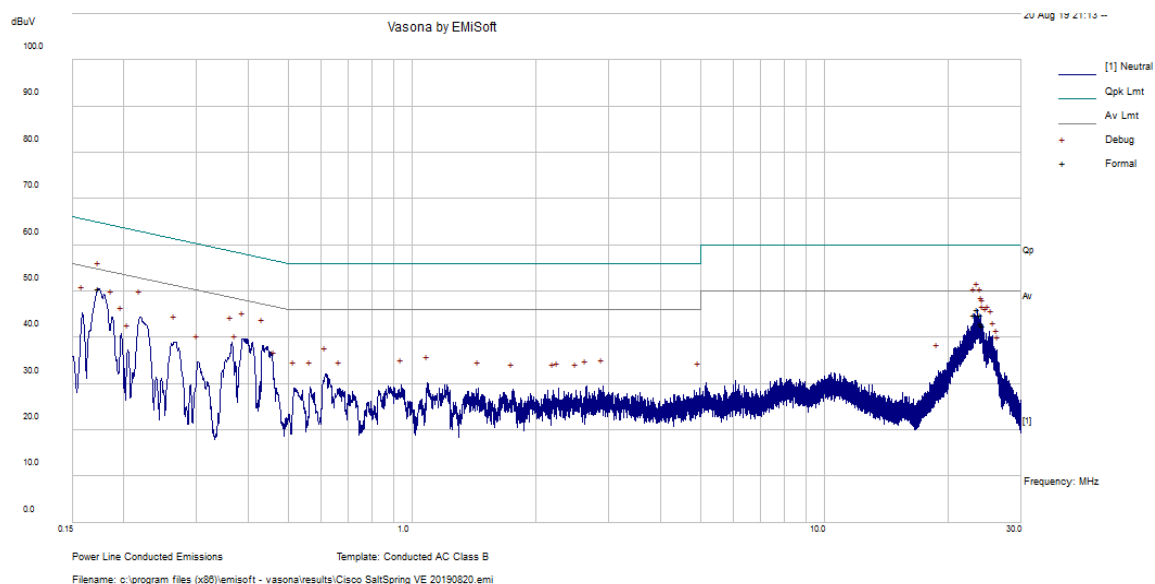
120 V, 60 Hz – Line



Frequency (MHz)	Corrected Amplitude (dBuV)	Conductor (Line/Neutral)	Limit (dBuV)	Margin (dB)	Detector (QP/Ave.)
0.179144	46.68	Line	64.53	-17.84	QP
0.385538	35.36	Line	58.16	-22.8	QP
0.436073	39.39	Line	57.14	-17.75	QP
23.370756	38.08	Line	60	-21.92	QP
0.374109	37.31	Line	58.41	-21.1	QP
23.488507	37.85	Line	60	-22.15	QP

Frequency (MHz)	Corrected Amplitude (dBuV)	Conductor (Line/Neutral)	Limit (dBuV)	Margin (dB)	Detector (QP/Ave.)
0.179144	39.67	Line	54.53	-14.86	Ave.
0.385538	21.08	Line	48.16	-27.08	Ave.
0.436073	29.01	Line	47.14	-18.13	Ave.
23.370756	32.7	Line	50	-17.3	Ave.
0.374109	23.02	Line	48.41	-25.39	Ave.
23.488507	32.32	Line	50	-17.68	Ave.

120 V, 60 Hz – Neutral



Frequency (MHz)	Corrected Amplitude (dBuV)	Conductor (Line/Neutral)	Limit (dBuV)	Margin (dB)	Detector (QP/Ave.)
23.524009	39.79	Neutral	60	-20.21	QP
0.17381	45.81	Neutral	64.78	-18.96	QP
23.129896	39.94	Neutral	60	-20.06	QP
23.939311	37.82	Neutral	60	-22.18	QP
24.057196	36.98	Neutral	60	-23.02	QP
24.26157	36.24	Neutral	60	-23.76	QP

Frequency (MHz)	Corrected Amplitude (dBuV)	Conductor (Line/Neutral)	Limit (dBuV)	Margin (dB)	Detector (QP/Ave.)
23.524009	34.46	Neutral	50	-15.54	Ave.
0.17381	35.28	Neutral	54.78	-19.5	Ave.
23.129896	34.59	Neutral	50	-15.41	Ave.
23.939311	32.3	Neutral	50	-17.7	Ave.
24.057196	31.6	Neutral	50	-18.4	Ave.
24.26157	30.91	Neutral	50	-19.09	Ave.

5 FCC §15.209, §15.407(b) & ISEDC RSS-247 §6.2 and LP0002-2018 §2.8, §2.11, §4.7.4 - Spurious Radiated Emissions

5.1 Applicable Standard

As Per FCC §15.205(a) except as show in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	960 – 1240	4.5 – 5.15
0.495 – 0.505	16.69475 – 16.69525	1300 – 1427	5.35 – 5.46
2.1735 – 2.1905	25.5 – 25.67	1435 – 1626.5	7.25 – 7.75
4.125 – 4.128	37.5 – 38.25	1645.5 – 1646.5	8.025 – 8.5
4.17725 – 4.17775	73 – 74.6	1660 – 1710	9.0 – 9.2
4.20725 – 4.20775	74.8 – 75.2	1718.8 – 1722.2	9.3 – 9.5
6.215 – 6.218	108 – 121.94	2200 – 2300	10.6 – 12.7
6.26775 – 6.26825	123 – 138	2310 – 2390	13.25 – 13.4
6.31175 – 6.31225	149.9 – 150.05	2483.5 – 2500	14.47 – 14.5
8.291 – 8.294	156.52475 – 156.52525	2690 – 2900	15.35 – 16.2
8.362 – 8.366	156.7 – 156.9	3260 – 3267	17.7 – 21.4
8.37625 – 8.38675	162.0125 – 167.17	3.332 – 3.339	22.01 – 23.12
8.41425 – 8.41475	167.72 – 173.2	3.3458 – 3.358	23.6 – 24.0
12.29 – 12.293	240 – 285	3.600 – 4.400	31.2 – 31.8
12.51975 – 12.52025	322 – 335.4		36.43 – 36.5
12.57675 – 12.57725	399.9 – 410		Above 38.6
13.36 – 13.41	608 – 614		

As per FCC §15.209: The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table

Frequency (MHz)	Field Strength (micro volts/meter)	Measurement Distance (meters)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100 Note 1	3
88 - 216	150 Note 1	3
216 - 960	200 Note 1	3
Above 960	500	3

Note 1: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

As per FCC Part 15.407 (b)

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

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

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

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

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

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

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

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

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

(8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

As per ISERC RSS-247 §6.2

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250- 5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

For devices with both operating frequencies and channel bandwidths contained within the band 5250-5350 MHz, the device shall comply with the following:

1. All emissions outside the band 5250-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. if the equipment is intended for outdoor use; or
2. All emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. and any emissions within the band 5150-5250 MHz shall meet the power spectral density limits of Section 6.2.1. The device shall be labelled "for indoor use only."

For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices' unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled "for indoor use only."

For transmitters operating in the band 5470-5725 MHz, emissions outside the band shall not exceed -27 dBm/MHz e.i.r.p.

For the band 5725-5850 MHz, emissions at frequencies from the band edges to 10 MHz above or below the band edges shall not exceed -17 dBm/MHz e.i.r.p. For emissions at frequencies more than 10 MHz above or below the band edges, the emissions power shall not exceed -27 dBm/MHz.

5.2 Test Setup

The radiated emissions tests were performed in the 5-meter Chamber, using the setup in accordance with ANSI C63.10-2013. The specification used was the FCC 15.407 limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

5.3 Test Procedure

For the radiated emissions test, the EUT host, and all support equipment power cords were connected to the AC floor outlet.

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

The EUT is set 3 meter away from the testing antenna, which is varied from 1-4 meter, and the EUT is placed on a turntable, which is 0.8 meter or 1.5 meter above ground plane, the table shall be rotated for 360 degrees to find out the highest emission. The receiving antenna should be changed the polarization both of horizontal and vertical.

The spectrum analyzer or receiver is set as:

Below 1000 MHz:

RBW = 100 kHz / VBW = 300 kHz / Sweep = Auto

Above 1000 MHz:

- (1) Peak: RBW = 1MHz / VBW = 3MHz / Sweep = 100 ms
- (2) Average: RBW = 1MHz / VBW = 1 / T or 10 Hz / Sweep = Auto

5.4 Corrected Amplitude and Margin Calculation

The Corrected Amplitude (CA) is calculated by adding the Antenna Factor (AF), the Cable Loss (CL), the Attenuator Factor (Atten) and subtracting the Amplifier Gain (Ga) to indicated Amplitude (Ai) reading. The basic equation is as follows:

$$CA = Ai + AF + CL + Atten - Ga$$

For example, a corrected amplitude of 40.3 dBuV/m = Indicated Reading (32.5 dBuV) + Antenna Factor (+23.5dB) + Cable Loss (3.7 dB) + Attenuator (10 dB) - Amplifier Gain (29.4 dB)

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of -7 dB means the emission is 7 dB below the maximum limit for Class A. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corrected Amplitude} - \text{Limit}$$

5.5 Test Equipment List and Details

Manufacturer	Description	Model No.	Serial No.	Calibration Date	Calibration Interval
Rohde and Schwarz	Receiver, EMI Test	ESCI 1166.5950K03	100044	2018-10-26	2 years
Agilent	Analyzer, Spectrum	E4440A	US45303156	2019-03-19	1 year
Sunol Sciences	System Controller	SC99V	011003-1	N/R	N/A
Sunol Sciences	Antenna, Biconi-Log	JB1	A013105-3	2018-02-26	2 years
EMCO	Antenna, Horn	3115	9511-4627	2018-03-28	2 years
Agilent	Amplifier, Pre	8449B	3147A00400	2019-05-20	1 year
Insulated Wire INC	157 Series 2.92 SM (x2) Armored 33 ft. Cable	KPS-1501AN- 3960-KPS	DC 1807	2018-03-13	2 years
-	SMA cable	-	C0002	Each time ¹	N/A
A.H. Systems	Pre-Amplifier	PAM 1840V	170	2018-09-10	1 Year
HP/Agilent	Pre-Amplifier	8449B	3008A01978	2018-09-18	1 year
Wisewave	Antenna, Horn	ARH-4223-02	10555-01	2018-02-14	2 years
Wisewave	Antenna, Horn	ARH-4223-02	10555-02	2018-02-14	2 years
Sunol Sciences	Antenna, Horn	DRH-118	A052704	2019-04-02	2 years

Note¹: cables included in the test set-up will be checked each time before testing.

Statement of Traceability: BACL Corp. attests that all of the calibrations on the equipment items listed above were traceable to NIST or to another internationally recognized National Metrology Institute (NMI), and were compliant with A2LA Policy P102 (dated 09 June 2016) “A2LA Policy on Metrological Traceability”.

5.6 Test Environmental Conditions

Temperature:	22-25 °C
Relative Humidity:	42-48 %
ATM Pressure:	102.1 kPa

The testing was performed by Christian McCaig from 2019-08-14 to 2019-08-19 in 5m chamber 3.

5.7 Summary of Test Results

According to the data hereinafter, the EUT complied with the FCC Part 15.407 and RSS-247 standards' radiated emissions limits, and had the worst margin of:

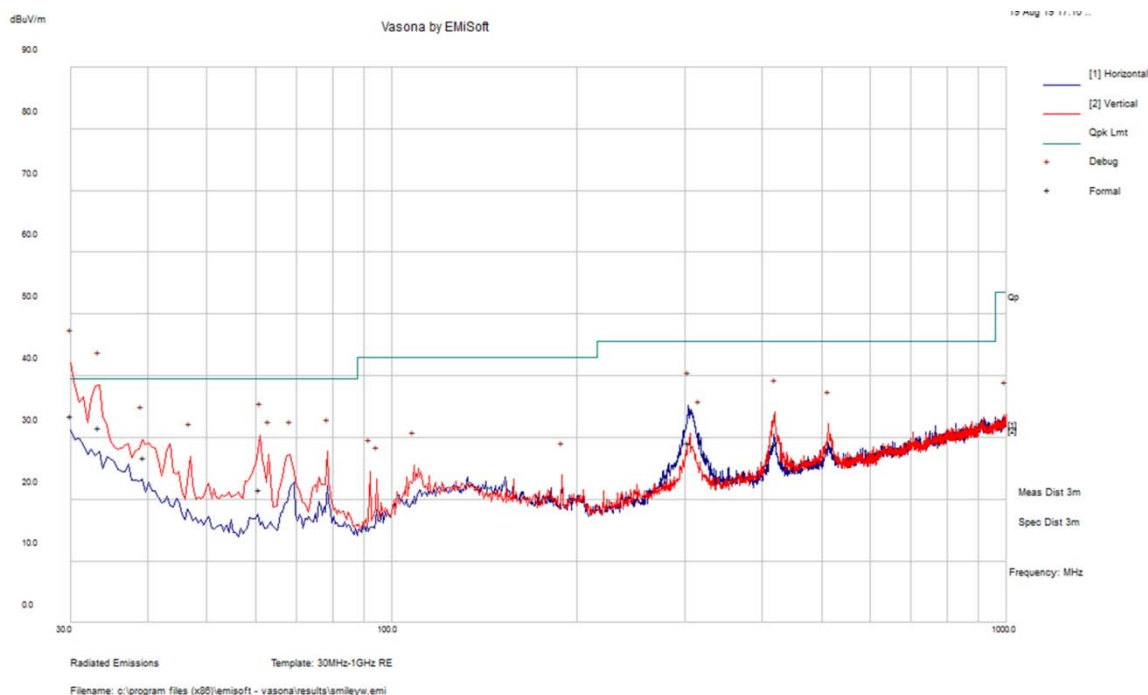
Mode: Transmitting			
Margin (dB)	Frequency (MHz)	Polarization (Horizontal/Vertical)	Mode, Channel
-6	30.00889	Vertical	VHT160 mode, 5250 MHz

Please refer to the following table and plots for specific test result details (4.8).

5.8 Radiated Emissions Test Result

1) 30 MHz – 1 GHz Worst Case, Measured at 3 meters

Worst Case Colocation: BLE 2480 MHz, 2.4 GHz Wi-Fi HT/VHT mode 2412 MHz, and 5 GHz Wi-Fi VHT160 mode 5250 MHz



Frequency (MHz)	Corrected Amplitude (dBμV/m)	Antenna Height (cm)	Antenna Polarity (H/V)	Turntable Azimuth (degrees)	Limit (dBμV/m)	Margin (dB)	Comment
30.00889	33.5	117	V	123	39.5	-6	Pass
33.355	31.62	296	V	293	39.5	-7.88	Pass
60.84375	21.59	167	V	121	39.5	-17.91	Pass
39.442	26.81	151	V	16	39.5	-12.69	Pass
303.6775	29.21	132	H	88	45.5	-16.29	Pass
419.821	28.88	111	V	162	45.5	-16.62	Pass

2) Above 1 GHz, Measured at 1 meter

5150 - 5250 MHz

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5180 MHz Non HT20 mode power setting: 17											
10360	43.41	0	100	H	38.17	13.71	34.63	60.66	84	-23.34	PK
10360	29.99	0	100	H	38.17	13.71	34.63	47.24	64	-16.76	AV
10360	44.22	0	100	V	38.13	13.71	34.63	61.43	84	-22.57	PK
10360	30.10	0	100	V	38.13	13.71	34.63	47.31	64	-16.69	AV
Mid Channel 5220 MHz Non HT20 mode power setting: 17											
10440	43.23	0	100	H	38.23	13.71	34.63	60.54	84	-23.46	PK
10440	29.79	0	100	H	38.23	13.71	34.63	47.10	64	-16.90	AV
10440	44.16	0	100	V	38.15	13.71	34.63	61.40	84	-22.61	PK
10440	29.76	0	100	V	38.15	13.71	34.63	47.00	64	-17.01	AV
High Channel 5240 MHz Non HT20 mode power setting: 17											
10480	42.91	0	100	H	38.26	13.92	34.51	60.58	84	-23.42	PK
10480	29.63	0	100	H	38.26	13.92	34.51	47.30	64	-16.70	AV
10480	42.75	0	100	V	38.21	13.92	34.51	60.37	84	-23.63	PK
10480	29.35	0	100	V	38.21	13.92	34.51	46.97	64	-17.03	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5180 MHz HT/VHT20 mode power setting: 17											
10360	43.71	0	100	H	38.17	13.71	34.63	60.96	84	-23.04	PK
10360	29.69	0	100	H	38.17	13.71	34.63	46.94	64	-17.06	AV
10360	43.39	0	100	V	38.13	13.71	34.63	60.60	84	-23.40	PK
10360	29.88	0	100	V	38.13	13.71	34.63	47.09	64	-16.91	AV
Mid Channel 5220 MHz HT/VHT20 mode power setting: 17											
10440	43.70	0	100	H	38.23	13.71	34.63	61.01	84	-22.99	PK
10440	29.83	0	100	H	38.23	13.71	34.63	47.14	64	-16.86	AV
10440	43.60	0	100	V	38.15	13.71	34.63	60.84	84	-23.17	PK
10440	29.78	0	100	V	38.15	13.71	34.63	47.02	64	-16.99	AV
High Channel 5240 MHz HT/VHT20 mode power setting: 17											
10480	43.18	0	100	H	38.26	13.92	34.51	60.85	84	-23.15	PK
10480	29.28	0	100	H	38.26	13.92	34.51	46.95	64	-17.05	AV
10480	43.10	0	100	V	38.21	13.92	34.51	60.72	84	-23.28	PK
10480	29.29	0	100	V	38.21	13.92	34.51	46.91	64	-17.09	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISDC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5180 MHz HE20 mode power setting: 17											
10360	43.45	0	100	H	38.17	13.71	34.63	60.70	84	-23.30	PK
10360	30.05	0	100	H	38.17	13.71	34.63	47.30	64	-16.70	AV
10360	43.21	0	100	V	38.13	13.71	34.63	60.42	84	-23.58	PK
10360	30.21	0	100	V	38.13	13.71	34.63	47.42	64	-16.58	AV
Mid Channel 5220 MHz HE20 mode power setting: 17											
10440	43.12	0	100	H	38.23	13.71	34.63	60.43	84	-23.57	PK
10440	30.15	0	100	H	38.23	13.71	34.63	47.46	64	-16.54	AV
10440	43.04	0	100	V	38.15	13.71	34.63	60.28	84	-23.73	PK
10440	30.35	0	100	V	38.15	13.71	34.63	47.59	64	-16.42	AV
High Channel 5240 MHz HE20 mode power setting: 17											
10480	42.67	0	100	H	38.26	13.92	34.51	60.34	84	-23.66	PK
10480	30.00	0	100	H	38.26	13.92	34.51	47.67	64	-16.33	AV
10480	42.90	0	100	V	38.21	13.92	34.51	60.52	84	-23.48	PK
10480	30.03	0	100	V	38.21	13.92	34.51	47.65	64	-16.35	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5190 MHz Non HT40 mode power setting: 17											
10380	43.80	0	100	H	38.20	13.71	34.63	61.08	84	-22.92	PK
10380	29.71	0	100	H	38.20	13.71	34.63	46.99	64	-17.01	AV
10380	44.24	0	100	V	38.15	13.71	34.63	61.47	84	-22.53	PK
10380	29.73	0	100	V	38.15	13.71	34.63	46.96	64	-17.04	AV
High Channel 5230 MHz Non HT40 mode power setting: 17											
10460	43.30	0	100	H	38.23	13.92	34.51	60.94	84	-23.06	PK
10460	29.57	0	100	H	38.23	13.92	34.51	47.21	64	-16.79	AV
10460	42.98	0	100	V	38.15	13.92	34.51	60.54	84	-23.46	PK
10460	29.55	0	100	V	38.15	13.92	34.51	47.11	64	-16.89	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5190 MHz HT/VHT40 mode power setting: 17											
10380	43.34	0	100	H	38.20	13.71	34.63	60.62	84	-23.38	PK
10380	29.75	0	100	H	38.20	13.71	34.63	47.03	64	-16.97	AV
10380	42.96	0	100	V	38.15	13.71	34.63	60.19	84	-23.81	PK
10380	29.90	0	100	V	38.15	13.71	34.63	47.13	64	-16.87	AV
High Channel 5230 MHz HT/VHT40 mode power setting: 17											
10460	44.03	0	100	H	38.23	13.92	34.51	61.67	84	-22.33	PK
10460	29.48	0	100	H	38.23	13.92	34.51	47.12	64	-16.88	AV
10460	43.66	0	100	V	38.15	13.92	34.51	61.22	84	-22.78	PK
10460	29.59	0	100	V	38.15	13.92	34.51	47.15	64	-16.85	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5190 MHz HE40 mode power setting: 17											
10380	43.08	0	100	H	38.20	13.71	34.63	60.36	84	-23.64	PK
10380	30.50	0	100	H	38.20	13.71	34.63	47.78	64	-16.22	AV
10380	42.70	0	100	V	38.15	13.71	34.63	59.93	84	-24.07	PK
10380	30.45	0	100	V	38.15	13.71	34.63	47.68	64	-16.32	AV
High Channel 5230 MHz HE40 mode power setting: 17											
10460	43.14	0	100	H	38.23	13.92	34.51	60.78	84	-23.22	PK
10460	30.61	0	100	H	38.23	13.92	34.51	48.25	64	-15.75	AV
10460	43.47	0	100	V	38.15	13.92	34.51	61.03	84	-22.97	PK
10460	30.71	0	100	V	38.15	13.92	34.51	48.27	64	-15.73	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Channel 5210 MHz Non HT80 mode power setting: 17											
10420	43.39	0	100	H	38.20	13.71	34.63	60.67	84	-23.33	PK
10420	29.61	0	100	H	38.20	13.71	34.63	46.89	64	-17.11	AV
10420	43.39	0	100	V	38.15	13.71	34.63	60.62	84	-23.38	PK
10420	29.62	0	100	V	38.15	13.71	34.63	46.85	64	-17.15	AV
Channel 5210 MHz VHT80 mode power setting: 17											
10420	43.63	0	100	H	38.20	13.71	34.63	60.91	84	-23.09	PK
10420	31.62	0	100	H	38.20	13.71	34.63	48.90	64	-15.10	AV
10420	43.57	0	100	V	38.15	13.71	34.63	60.80	84	-23.20	PK
10420	31.44	0	100	V	38.15	13.71	34.63	48.67	64	-15.33	AV
Channel 5210 MHz HE80 mode power setting: 17											
10420	44.17	0	100	H	38.20	13.71	34.63	61.45	84	-22.55	PK
10420	31.96	0	100	H	38.20	13.71	34.63	49.24	64	-14.76	AV
10420	44.47	0	100	V	38.15	13.71	34.63	61.70	84	-22.30	PK
10420	31.91	0	100	V	38.15	13.71	34.63	49.14	64	-14.86	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Channel 5250 MHz Non HT160 mode power setting: 17											
10500	43.99	0	100	H	38.26	13.92	34.51	61.66	84	-22.34	PK
10500	31.97	0	100	H	38.26	13.92	34.51	49.64	64	-14.36	AV
10500	43.17	0	100	V	38.21	13.92	34.51	60.79	84	-23.21	PK
10500	31.94	0	100	V	38.21	13.92	34.51	49.56	64	-14.44	AV
Channel 5250 MHz VHT160 mode power setting: 17											
10500	43.73	0	100	H	38.26	13.92	34.51	61.40	84	-22.60	PK
10500	31.79	0	100	H	38.26	13.92	34.51	49.46	64	-14.54	AV
10500	43.07	0	100	V	38.21	13.92	34.51	60.69	84	-23.31	PK
10500	31.76	0	100	V	38.21	13.92	34.51	49.38	64	-14.62	AV
Channel 5250 MHz HE160 mode power setting: 17											
10500	43.61	0	100	H	38.26	13.92	34.51	61.28	84	-22.72	PK
10500	32.17	0	100	H	38.26	13.92	34.51	49.84	64	-14.16	AV
10500	43.32	0	100	V	38.21	13.92	34.51	60.94	84	-23.06	PK
10500	32.53	0	100	V	38.21	13.92	34.51	50.15	64	-13.85	AV

5250 - 5350 MHz

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5260 MHz Non HT20 mode power setting: 17											
10520	43.26	0	100	H	38.26	13.92	34.51	60.93	84	-23.07	PK
10520	29.65	0	100	H	38.26	13.92	34.51	47.32	64	-16.68	AV
10520	44.53	0	100	V	38.21	13.92	34.51	62.15	84	-21.85	PK
10520	30.79	0	100	V	38.21	13.92	34.51	48.41	64	-15.59	AV
Mid Channel 5300 MHz Non HT20 mode power setting: 17											
10600	43.27	0	100	H	38.26	14.11	34.46	61.18	84	-22.82	PK
10600	29.57	0	100	H	38.26	14.11	34.46	47.48	64	-16.52	AV
10600	44.08	0	100	V	38.23	14.11	34.46	61.95	84	-22.05	PK
10600	30.42	0	100	V	38.23	14.11	34.46	48.29	64	-15.71	AV
High Channel 5320MHz Non HT20 mode power setting: 17											
10640	43.21	0	100	H	38.22	14.11	34.46	61.08	84	-22.92	PK
10640	29.55	0	100	H	38.22	14.11	34.46	47.42	64	-16.58	AV
10640	43.92	0	100	V	38.18	14.11	34.46	61.74	84	-22.26	PK
10640	30.26	0	100	V	38.18	14.11	34.46	48.08	64	-15.92	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISDC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5260 MHz HT/VHT20 mode power setting: 17											
10520	43.38	0	100	H	38.26	13.92	34.51	61.05	84	-22.95	PK
10520	29.70	0	100	H	38.26	13.92	34.51	47.37	64	-16.63	AV
10520	43.95	0	100	V	38.21	13.92	34.51	61.57	84	-22.43	PK
10520	30.01	0	100	V	38.21	13.92	34.51	47.63	64	-16.37	AV
Mid Channel 5300 MHz HT/VHT20 mode power setting: 17											
10600	43.37	0	100	H	38.26	14.11	34.46	61.28	84	-22.72	PK
10600	29.51	0	100	H	38.26	14.11	34.46	47.42	64	-16.58	AV
10600	44.40	0	100	V	38.23	14.11	34.46	62.27	84	-21.73	PK
10600	29.96	0	100	V	38.23	14.11	34.46	47.83	64	-16.17	AV
High Channel 5320 MHz HT/VHT20 mode power setting: 17											
10640	43.29	0	100	H	38.22	14.11	34.46	61.16	84	-22.84	PK
10640	29.58	0	100	H	38.22	14.11	34.46	47.45	64	-16.55	AV
10640	44.37	0	100	V	38.18	14.11	34.46	62.19	84	-21.81	PK
10640	29.98	0	100	V	38.18	14.11	34.46	47.80	64	-16.20	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5260 MHz HE20 mode power setting: 17											
10520	43.47	0	100	H	38.26	13.92	34.51	61.14	84	-22.86	PK
10520	30.07	0	100	H	38.26	13.92	34.51	47.74	64	-16.26	AV
10520	42.94	0	100	V	38.21	13.92	34.51	60.56	84	-23.44	PK
10520	30.19	0	100	V	38.21	13.92	34.51	47.81	64	-16.19	AV
Mid Channel 5300 MHz HE20 mode power setting: 17											
10600	42.58	0	100	H	38.26	14.11	34.46	60.49	84	-23.51	PK
10600	30.01	0	100	H	38.26	14.11	34.46	47.92	64	-16.08	AV
10600	43.11	0	100	V	38.23	14.11	34.46	60.98	84	-23.02	PK
10600	30.21	0	100	V	38.23	14.11	34.46	48.08	64	-15.92	AV
High Channel 5320 MHz HE20 mode power setting: 17											
10640	42.82	0	100	H	38.22	14.11	34.46	60.69	84	-23.31	PK
10640	30.19	0	100	H	38.22	14.11	34.46	48.06	64	-15.94	AV
10640	42.67	0	100	V	38.18	14.11	34.46	60.49	84	-23.51	PK
10640	30.19	0	100	V	38.18	14.11	34.46	48.01	64	-15.99	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5270 MHz Non HT40 mode power setting: 17											
10540	44.09	0	100	H	38.27	13.92	34.51	61.77	84	-22.23	PK
10540	30.20	0	100	H	38.27	13.92	34.51	47.88	64	-16.12	AV
10540	44.35	0	100	V	38.23	13.92	34.51	61.99	84	-22.01	PK
10540	31.16	0	100	V	38.23	13.92	34.51	48.80	64	-15.20	AV
High Channel 5310 MHz Non HT40 mode power setting: 17											
10620	44.03	0	100	H	38.26	14.11	34.46	61.94	84	-22.06	PK
10620	29.96	0	100	H	38.26	14.11	34.46	47.87	64	-16.13	AV
10620	44.45	0	100	V	38.23	14.11	34.46	62.32	84	-21.68	PK
10620	30.27	0	100	V	38.23	14.11	34.46	48.14	64	-15.86	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5270 MHz HT/VHT40 mode power setting: 17											
10540	43.39	0	100	H	38.27	13.92	34.51	61.07	84	-22.93	PK
10540	29.77	0	100	H	38.27	13.92	34.51	47.45	64	-16.55	AV
10540	44.07	0	100	V	38.23	13.92	34.51	61.71	84	-22.29	PK
10540	29.97	0	100	V	38.23	13.92	34.51	47.61	64	-16.39	AV
High Channel 5310 MHz HT/VHT40 mode power setting: 17											
10620	44.21	0	100	H	38.26	14.11	34.46	62.12	84	-21.88	PK
10620	29.54	0	100	H	38.26	14.11	34.46	47.45	64	-16.55	AV
10620	43.24	0	100	V	38.23	14.11	34.46	61.11	84	-22.89	PK
10620	29.98	0	100	V	38.23	14.11	34.46	47.85	64	-16.15	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5270 MHz HE40 mode power setting: 17											
10540	42.85	0	100	H	38.27	13.92	34.51	60.53	84	-23.47	PK
10540	30.33	0	100	H	38.27	13.92	34.51	48.01	64	-15.99	AV
10540	42.92	0	100	V	38.23	13.92	34.51	60.56	84	-23.44	PK
10540	30.20	0	100	V	38.23	13.92	34.51	47.84	64	-16.16	AV
High Channel 5310 MHz HE40 mode power setting: 17											
10620	42.24	0	100	H	38.26	14.11	34.46	60.15	84	-23.85	PK
10620	30.55	0	100	H	38.26	14.11	34.46	48.46	64	-15.54	AV
10620	43.03	0	100	V	38.23	14.11	34.46	60.90	84	-23.10	PK
10620	30.38	0	100	V	38.23	14.11	34.46	48.25	64	-15.75	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
High Channel 5290 MHz Non HT 80 mode power setting: 17											
10580	43.94	0	100	H	38.26	14.11	34.46	61.85	84	-22.15	PK
10580	29.70	0	100	H	38.26	14.11	34.46	47.61	64	-16.39	AV
10580	43.88	0	100	V	38.23	14.11	34.46	61.75	84	-22.25	PK
10580	29.76	0	100	V	38.23	14.11	34.46	47.63	64	-16.37	AV
High Channel 5290 MHz VHT80 mode power setting: 17											
10580	43.17	0	100	H	38.26	14.11	34.46	61.08	84	-22.92	PK
10580	31.13	0	100	H	38.26	14.11	34.46	49.04	64	-14.96	AV
10580	43.47	0	100	V	38.23	14.11	34.46	61.34	84	-22.66	PK
10580	31.50	0	100	V	38.23	14.11	34.46	49.37	64	-14.63	AV
High Channel 5290 MHz HE80 mode power setting: 17											
10580	43.76	0	100	H	38.26	14.11	34.46	61.67	84	-22.33	PK
10580	31.35	0	100	H	38.26	14.11	34.46	49.26	64	-14.74	AV
10580	43.44	0	100	V	38.23	14.11	34.46	61.31	84	-22.69	PK
10580	30.87	0	100	V	38.23	14.11	34.46	48.74	64	-15.26	AV

5490 - 5730 MHz

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5500 MHz Non HT20 mode power setting: 17											
11000	43.03	262	193	H	38.45	14.26	34.40	61.33	84	-22.67	PK
11000	29.81	262	193	H	38.45	14.26	34.40	48.11	64	-15.89	AV
11000	43.60	170	193	V	38.42	14.26	34.40	61.87	84	-22.13	PK
11000	30.11	170	193	V	38.42	14.26	34.40	48.38	64	-15.62	AV
Mid Channel 5580 MHz Non HT20 mode power setting: 17											
11160	43.80	262	193	H	38.55	14.78	34.09	63.04	84	-20.96	PK
11160	29.94	262	193	H	38.55	14.78	34.09	49.18	64	-14.82	AV
11160	44.22	170	193	V	38.47	14.78	34.09	63.38	84	-20.62	PK
11160	30.00	170	193	V	38.47	14.78	34.09	49.16	64	-14.84	AV
High Channel 5700 MHz Non HT20 mode power setting: 17											
11400	42.59	262	193	H	38.47	15.21	33.78	62.49	84	-21.51	PK
11400	28.71	262	193	H	38.47	15.21	33.78	48.61	64	-15.39	AV
11400	42.68	170	193	V	38.39	15.21	33.78	62.50	84	-21.50	PK
11400	29.08	170	193	V	38.39	15.21	33.78	48.90	64	-15.10	AV
High Channel 5720 MHz Non HT20 mode power setting: 17											
11440	42.48	262	193	H	38.47	15.39	33.83	62.51	84	-21.49	PK
11440	28.41	262	193	H	38.47	15.39	33.83	48.44	64	-15.56	AV
11440	42.53	170	193	V	38.43	15.39	33.83	62.52	84	-21.48	PK
11440	28.40	170	193	V	38.43	15.39	33.83	48.39	64	-15.61	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5500 MHz HT/VHT20 mode power setting: 17											
11000	43.85	0	100	H	38.45	14.26	34.40	62.15	84	-21.85	PK
11000	29.52	0	100	H	38.45	14.26	34.40	47.82	64	-16.18	AV
11000	43.47	0	100	V	38.42	14.26	34.40	61.74	84	-22.26	PK
11000	29.57	0	100	V	38.42	14.26	34.40	47.84	64	-16.16	AV
Mid Channel 5580 MHz HT/VHT20 mode power setting: 17											
11160	43.05	0	100	H	38.55	14.78	34.09	62.29	84	-21.71	PK
11160	29.68	0	100	H	38.55	14.78	34.09	48.92	64	-15.08	AV
11160	44.27	0	100	V	38.47	14.78	34.09	63.43	84	-20.57	PK
11160	29.69	0	100	V	38.47	14.78	34.09	48.85	64	-15.15	AV
High Channel 5700 MHz HT/VHT20 mode power setting: 17											
11400	42.35	0	100	H	38.47	15.21	33.78	62.25	84	-21.75	PK
11400	28.43	0	100	H	38.47	15.21	33.78	48.33	64	-15.67	AV
11400	42.07	0	100	V	38.39	15.21	33.78	61.89	84	-22.11	PK
11400	28.64	0	100	V	38.39	15.21	33.78	48.46	64	-15.54	AV
High Channel 5720 MHz HT/VHT20 mode power setting: 17											
11440	42.00	0	100	H	38.47	15.39	33.83	62.03	84	-21.97	PK
11440	28.06	0	100	H	38.47	15.39	33.83	48.09	64	-15.91	AV
11440	42.42	0	100	V	38.43	15.39	33.83	62.41	84	-21.59	PK
11440	28.31	0	100	V	38.43	15.39	33.83	48.30	64	-15.70	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5500 MHz HE20 mode power setting: 17											
11000	42.84	0	100	H	38.45	14.26	34.40	61.14	84	-22.86	PK
11000	29.29	0	100	H	38.45	14.26	34.40	47.59	64	-16.41	AV
11000	42.17	0	100	V	38.42	14.26	34.40	60.44	84	-23.56	PK
11000	29.84	0	100	V	38.42	14.26	34.40	48.11	64	-15.89	AV
Mid Channel 5580 MHz HE20 mode power setting: 17											
11160	42.91	0	100	H	38.55	14.78	34.09	62.15	84	-21.85	PK
11160	29.41	0	100	H	38.55	14.78	34.09	48.65	64	-15.35	AV
11160	42.77	0	100	V	38.47	14.78	34.09	61.93	84	-22.07	PK
11160	29.97	0	100	V	38.47	14.78	34.09	49.13	64	-14.87	AV
High Channel 5700 MHz HE20 mode power setting: 17											
11400	41.77	0	100	H	38.47	15.21	33.78	61.67	84	-22.33	PK
11400	28.92	0	100	H	38.47	15.21	33.78	48.82	64	-15.18	AV
11400	41.94	0	100	V	38.39	15.21	33.78	61.76	84	-22.24	PK
11400	29.06	0	100	V	38.39	15.21	33.78	48.88	64	-15.12	AV
High Channel 5720 MHz HE20 mode power setting: 17											
11440	42.29	0	100	H	38.47	15.39	33.83	62.32	84	-21.68	PK
11440	28.33	0	100	H	38.47	15.39	33.83	48.36	64	-15.64	AV
11440	42.70	0	100	V	38.43	15.39	33.83	62.69	84	-21.31	PK
11440	28.35	0	100	V	38.43	15.39	33.83	48.34	64	-15.66	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5510 MHz Non HT40 mode power setting: 17											
11020	43.87	0	100	H	38.45	14.63	34.40	62.55	84	-21.45	PK
11020	29.38	0	100	H	38.45	14.63	34.40	48.06	64	-15.94	AV
11020	43.23	0	100	V	38.42	14.63	34.40	61.88	84	-22.12	PK
11020	29.54	0	100	V	38.42	14.63	34.40	48.19	64	-15.81	AV
Mid Channel 5550 MHz Non HT40 mode power setting: 17											
11100	43.24	0	100	H	38.53	14.66	34.27	62.16	84	-21.84	PK
11100	29.74	0	100	H	38.53	14.66	34.27	48.66	64	-15.34	AV
11100	43.24	0	100	V	38.49	14.66	34.27	62.11	84	-21.89	PK
11100	29.75	0	100	V	38.49	14.66	34.27	48.62	64	-15.38	AV
High Channel 5670 MHz Non HT40 mode power setting: 17											
11340	43.31	0	100	H	38.43	15.21	33.89	63.06	84	-20.94	PK
11340	28.64	0	100	H	38.43	15.21	33.89	48.39	64	-15.61	AV
11340	42.73	0	100	V	38.42	15.21	33.89	62.46	84	-21.54	PK
11340	28.91	0	100	V	38.42	15.21	33.89	48.64	64	-15.36	AV
High Channel 5710 MHz Non HT40 mode power setting: 17											
11420	42.29	0	100	H	38.47	15.21	33.78	62.19	84	-21.81	PK
11420	28.23	0	100	H	38.47	15.21	33.78	48.13	64	-15.87	AV
11420	42.65	0	100	V	38.39	15.21	33.78	62.47	84	-21.53	PK
11420	28.29	0	100	V	38.39	15.21	33.78	48.11	64	-15.89	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5510 MHz HT/VHT40 mode power setting: 17											
11020	42.64	0	100	H	38.45	14.63	34.40	61.32	84	-22.68	PK
11020	29.47	0	100	H	38.45	14.63	34.40	48.15	64	-15.85	AV
11020	43.71	0	100	V	38.42	14.63	34.40	62.36	84	-21.64	PK
11020	29.53	0	100	V	38.42	14.63	34.40	48.18	64	-15.82	AV
Mid Channel 5550 MHz HT/VHT40 mode power setting: 17											
11100	43.69	0	100	H	38.53	14.66	34.27	62.61	84	-21.39	PK
11100	29.89	0	100	H	38.53	14.66	34.27	48.81	64	-15.19	AV
11100	43.12	0	100	V	38.49	14.66	34.27	61.99	84	-22.01	PK
11100	29.89	0	100	V	38.49	14.66	34.27	48.76	64	-15.24	AV
High Channel 5670 MHz HT/VHT40 mode power setting: 17											
11340	42.58	0	100	H	38.43	15.21	33.89	62.33	84	-21.67	PK
11340	28.94	0	100	H	38.43	15.21	33.89	48.69	64	-15.31	AV
11340	42.51	0	100	V	38.42	15.21	33.89	62.24	84	-21.76	PK
11340	29.28	0	100	V	38.42	15.21	33.89	49.01	64	-14.99	AV
High Channel 5710 MHz HT/VHT40 mode power setting: 17											
11420	42.95	0	100	H	38.47	15.21	33.78	62.85	84	-21.15	PK
11420	28.65	0	100	H	38.47	15.21	33.78	48.55	64	-15.45	AV
11420	41.98	0	100	V	38.39	15.21	33.78	61.80	84	-22.20	PK
11420	28.71	0	100	V	38.39	15.21	33.78	48.53	64	-15.47	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5510 MHz HE40 mode power setting: 17											
11020	42.76	0	100	H	38.45	14.63	34.40	61.44	84	-22.56	PK
11020	29.73	0	100	H	38.45	14.63	34.40	48.41	64	-15.59	AV
11020	42.61	0	100	V	38.42	14.63	34.40	61.26	84	-22.74	PK
11020	29.97	0	100	V	38.42	14.63	34.40	48.62	64	-15.38	AV
Mid Channel 5550 MHz HE40 mode power setting: 17											
11100	42.23	0	100	H	38.53	14.66	34.27	61.15	84	-22.85	PK
11100	29.99	0	100	H	38.53	14.66	34.27	48.91	64	-15.09	AV
11100	42.55	0	100	V	38.49	14.66	34.27	61.42	84	-22.58	PK
11100	30.03	0	100	V	38.49	14.66	34.27	48.90	64	-15.10	AV
High Channel 5670 MHz HE40 mode power setting: 17											
11340	41.29	0	100	H	38.43	15.21	33.89	61.04	84	-22.96	PK
11340	29.44	0	100	H	38.43	15.21	33.89	49.19	64	-14.81	AV
11340	42.02	0	100	V	38.42	15.21	33.89	61.75	84	-22.25	PK
11340	29.32	0	100	V	38.42	15.21	33.89	49.05	64	-14.95	AV
High Channel 5710 MHz HE40 mode power setting: 17											
11420	41.56	0	100	H	38.47	15.21	33.78	61.46	84	-22.54	PK
11420	29.01	0	100	H	38.47	15.21	33.78	48.91	64	-15.09	AV
11420	41.63	0	100	V	38.39	15.21	33.78	61.45	84	-22.55	PK
11420	29.02	0	100	V	38.39	15.21	33.78	48.84	64	-15.16	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5530 MHz Non HT 80 mode power setting: 17											
11060	43.65	0	100	H	38.53	14.66	34.27	62.57	84	-21.43	PK
11060	29.57	0	100	H	38.53	14.66	34.27	48.49	64	-15.51	AV
11060	43.32	0	100	V	38.48	14.66	34.27	62.19	84	-21.81	PK
11060	29.70	0	100	V	38.48	14.66	34.27	48.57	64	-15.43	AV
Mid Channel 5610 MHz Non HT 80 mode power setting: 17											
11220	43.74	0	100	H	38.53	14.78	34.09	62.96	84	-21.04	PK
11220	29.42	0	100	H	38.53	14.78	34.09	48.64	64	-15.36	AV
11220	43.61	0	100	V	38.44	14.78	34.09	62.74	84	-21.26	PK
11220	29.44	0	100	V	38.44	14.78	34.09	48.57	64	-15.43	AV
High Channel 5690 MHz Non HT 80 mode power setting: 17											
11380	41.91	0	100	H	38.47	15.21	33.78	61.81	84	-22.19	PK
11380	28.71	0	100	H	38.47	15.21	33.78	48.61	64	-15.39	AV
11380	42.48	0	100	V	38.39	15.21	33.78	62.30	84	-21.70	PK
11380	28.71	0	100	V	38.39	15.21	33.78	48.53	64	-15.47	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5530 MHz VHT 80 mode power setting: 17											
11060	43.72	0	100	H	38.50	14.66	34.27	62.60	84	-21.40	PK
11060	30.88	0	100	H	38.50	14.66	34.27	49.76	64	-14.24	AV
11060	43.14	0	100	V	38.48	14.66	34.27	62.01	84	-21.99	PK
11060	30.80	0	100	V	38.48	14.66	34.27	49.67	64	-14.33	AV
Mid Channel 5610 MHz VHT 80 mode power setting: 17											
11220	43.01	0	100	H	38.53	14.78	34.09	62.23	84	-21.77	PK
11220	30.34	0	100	H	38.53	14.78	34.09	49.56	64	-14.44	AV
11220	43.16	0	100	V	38.44	14.78	34.09	62.29	84	-21.71	PK
11220	30.58	0	100	V	38.44	14.78	34.09	49.71	64	-14.29	AV
High Channel 5690 MHz VHT 80 mode power setting: 17											
11380	42.92	0	100	H	38.47	15.21	33.78	62.82	84	-21.18	PK
11380	30.72	0	100	H	38.47	15.21	33.78	50.62	64	-13.38	AV
11380	42.47	0	100	V	38.39	15.21	33.78	62.29	84	-21.71	PK
11380	30.40	0	100	V	38.39	15.21	33.78	50.22	64	-13.78	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5530 MHz HE 80 mode power setting: 17											
11060	42.38	0	100	H	38.53	14.66	34.27	61.30	84	-22.70	PK
11060	30.84	0	100	H	38.53	14.66	34.27	49.76	64	-14.24	AV
11060	42.83	0	100	V	38.48	14.66	34.27	61.70	84	-22.30	PK
11060	30.67	0	100	V	38.48	14.66	34.27	49.54	64	-14.46	AV
Mid Channel 5610 MHz HE 80 mode power setting: 17											
11220	42.78	0	100	H	38.53	14.78	34.09	62.00	84	-22.00	PK
11220	30.68	0	100	H	38.53	14.78	34.09	49.90	64	-14.10	AV
11220	43.00	0	100	V	38.44	14.78	34.09	62.13	84	-21.87	PK
11220	30.60	0	100	V	38.44	14.78	34.09	49.73	64	-14.27	AV
High Channel 5690 MHz HE 80 mode power setting: 17											
11380	42.26	0	100	H	38.47	15.21	33.78	62.16	84	-21.84	PK
11380	30.14	0	100	H	38.47	15.21	33.78	50.04	64	-13.96	AV
11380	41.85	0	100	V	38.39	15.21	33.78	61.67	84	-22.33	PK
11380	30.13	0	100	V	38.39	15.21	33.78	49.95	64	-14.05	AV

Frequency (MHz)	S.A. Reading (dBµV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBµV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBµV/m)	Margin (dB)	
Channel 5570 MHz Non HT160 mode power setting: 17											
11140	43.15	0	100	H	38.55	14.66	34.27	62.08	84	-21.92	PK
11140	29.66	0	100	H	38.55	14.66	34.27	48.59	64	-15.41	AV
11140	43.31	0	100	V	38.47	14.66	34.27	62.16	84	-21.84	PK
11140	29.80	0	100	V	38.47	14.66	34.27	48.65	64	-15.35	AV
Channel 5570 MHz VHT160 mode power setting: 17											
11140	43.21	0	100	H	38.55	14.66	34.27	62.14	84	-21.86	PK
11140	31.95	0	100	H	38.55	14.66	34.27	50.88	64	-13.12	AV
11140	42.97	0	100	V	38.47	14.66	34.27	61.82	84	-22.18	PK
11140	32.05	0	100	V	38.47	14.66	34.27	50.90	64	-13.10	AV
Channel 5570 MHz HE160 mode power setting: 17											
11140	43.10	0	100	H	38.55	14.66	34.27	62.03	84	-21.97	PK
11140	31.23	0	100	H	38.55	14.66	34.27	50.16	64	-13.84	AV
11140	43.17	0	100	V	38.47	14.66	34.27	62.02	84	-21.98	PK
11140	31.39	0	100	V	38.47	14.66	34.27	50.24	64	-13.76	AV

5735 - 5835 MHz

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5745 MHz Non HT20 mode power setting: 17											
11490	42.71	322	175	H	39.13	15.39	33.83	63.40	84	-20.60	PK
11490	29.34	322	175	H	39.13	15.39	33.83	50.03	64	-13.97	AV
11490	44.31	115	200	V	39.09	15.39	33.83	64.96	84	-19.04	PK
11490	30.44	115	200	V	39.09	15.39	33.83	51.09	64	-12.91	AV
Mid Channel 5785 MHz Non HT20 mode power setting: 17											
11570	43.55	322	175	H	39.13	15.48	34.01	64.15	84	-19.85	PK
11570	30.20	322	175	H	39.13	15.48	34.01	50.80	64	-13.20	AV
11570	45.36	115	200	V	39.09	15.48	34.01	65.92	84	-18.08	PK
11570	31.46	115	200	V	39.09	15.48	34.01	52.02	64	-11.98	AV
High Channel 5825 MHz Non HT20 mode power setting: 17											
11650	44.21	322	175	H	39.13	15.48	34.01	64.81	84	-19.19	PK
11650	30.55	322	175	H	39.13	15.48	34.01	51.15	64	-12.85	AV
11650	45.33	115	200	V	39.09	15.48	34.01	65.89	84	-18.11	PK
11650	31.14	115	200	V	39.09	15.48	34.01	51.70	64	-12.30	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5745 MHz HT/VHT20 mode power setting: 17											
11490	43.36	322	175	H	39.13	15.39	33.83	64.05	84	-19.95	PK
11490	28.92	322	175	H	39.13	15.39	33.83	49.61	64	-14.39	AV
11490	44.03	115	200	V	39.09	15.39	33.83	64.68	84	-19.32	PK
11490	30.28	115	200	V	39.09	15.39	33.83	50.93	64	-13.07	AV
Mid Channel 5785 MHz HT/VHT20 mode power setting: 17											
11570	42.88	322	175	H	39.13	15.48	34.01	63.48	84	-20.52	PK
11570	29.42	322	175	H	39.13	15.48	34.01	50.02	64	-13.98	AV
11570	44.77	115	200	V	39.09	15.48	34.01	65.33	84	-18.67	PK
11570	30.83	115	200	V	39.09	15.48	34.01	51.39	64	-12.61	AV
High Channel 5825 MHz HT/VHT20 mode power setting: 17											
11650	43.30	322	175	H	39.13	15.48	34.01	63.90	84	-20.10	PK
11650	30.02	322	175	H	39.13	15.48	34.01	50.62	64	-13.38	AV
11650	45.79	115	200	V	39.09	15.48	34.01	66.35	84	-17.65	PK
11650	43.30	322	175	H	39.13	15.48	34.01	63.90	84	-20.10	PK

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5745 MHz HE20 mode power setting: 17											
11490	42.94	322	175	H	39.13	15.39	33.83	63.63	84	-20.37	PK
11490	29.23	322	175	H	39.13	15.39	33.83	49.92	64	-14.08	AV
11490	43.20	115	200	V	39.09	15.39	33.83	63.85	84	-20.15	PK
11490	30.24	115	200	V	39.09	15.39	33.83	50.89	64	-13.11	AV
Mid Channel 5785 MHz HE20 mode power setting: 17											
11570	42.99	322	175	H	39.13	15.48	34.01	63.59	84	-20.41	PK
11570	29.60	322	175	H	39.13	15.48	34.01	50.20	64	-13.80	AV
11570	43.39	115	200	V	39.09	15.48	34.01	63.95	84	-20.05	PK
11570	30.70	115	200	V	39.09	15.48	34.01	51.26	64	-12.74	AV
High Channel 5825 MHz HE20 mode power setting: 17											
11650	43.27	322	175	H	39.13	15.48	34.01	63.87	84	-20.13	PK
11650	30.40	322	175	H	39.13	15.48	34.01	51.00	64	-13.00	AV
11650	43.88	115	200	V	39.09	15.48	34.01	64.44	84	-19.56	PK
11650	31.50	115	200	V	39.09	15.48	34.01	52.06	64	-11.94	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5755 MHz Non HT40 mode power setting: 17											
11510	41.91	322	175	H	39.13	15.39	33.83	62.60	84	-21.40	PK
11510	28.80	322	175	H	39.13	15.39	33.83	49.49	64	-14.51	AV
11510	43.42	116	193	V	39.09	15.39	33.83	64.07	84	-19.93	PK
11510	29.98	116	193	V	39.09	15.39	33.83	50.63	64	-13.37	AV
High Channel 5795 MHz Non HT40 mode power setting: 17											
11590	43.35	322	175	H	39.13	15.48	34.01	63.95	84	-20.05	PK
11590	29.46	322	175	H	39.13	15.48	34.01	50.06	64	-13.94	AV
11590	44.06	116	193	V	39.09	15.48	34.01	64.62	84	-19.38	PK
11590	30.32	116	193	V	39.09	15.48	34.01	50.88	64	-13.12	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5755 MHz HT/VHT40 mode power setting: 17											
11510	42.49	322	175	H	39.13	15.39	33.83	63.18	84	-20.82	PK
11510	28.60	322	175	H	39.13	15.39	33.83	49.29	64	-14.71	AV
11510	42.98	116	193	V	39.09	15.39	33.83	63.63	84	-20.37	PK
11510	29.66	116	193	V	39.09	15.39	33.83	50.31	64	-13.69	AV
High Channel 5795 MHz HT/VHT40 mode power setting: 17											
11590	42.61	322	175	H	39.13	15.48	34.01	63.21	84	-20.79	PK
11590	29.22	322	175	H	39.13	15.48	34.01	49.82	64	-14.18	AV
11590	43.84	116	193	V	39.09	15.48	34.01	64.40	84	-19.60	PK
11590	30.27	116	193	V	39.09	15.48	34.01	50.83	64	-13.17	AV

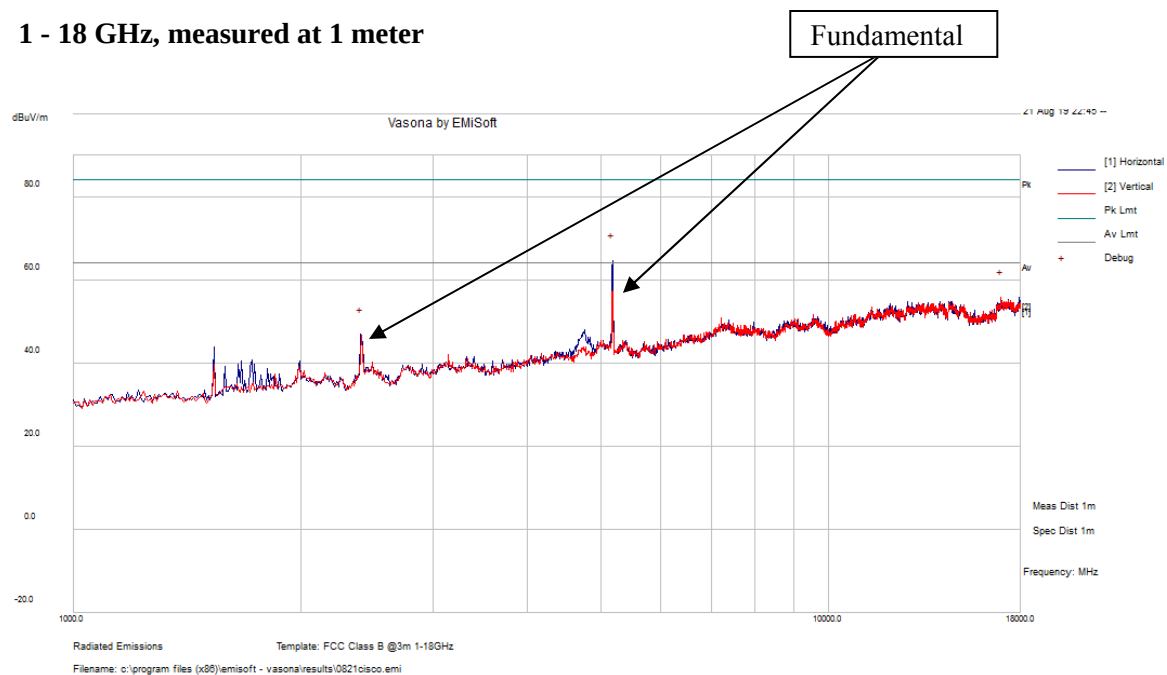
Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISED		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
Low Channel 5755 MHz HE40 mode power setting: 17											
11510	42.65	322	175	H	39.13	15.39	33.83	63.34	84	-20.66	PK
11510	29.41	322	175	H	39.13	15.39	33.83	50.10	64	-13.90	AV
11510	44.15	116	193	V	39.09	15.39	33.83	64.80	84	-19.20	PK
11510	30.07	116	193	V	39.09	15.39	33.83	50.72	64	-13.28	AV
High Channel 5795 MHz HE40 mode power setting: 17											
11590	43.30	322	175	H	39.13	15.48	34.01	63.90	84	-20.10	PK
11590	30.08	322	175	H	39.13	15.48	34.01	50.68	64	-13.32	AV
11590	44.85	116	193	V	39.09	15.48	34.01	65.41	84	-18.59	PK
11590	31.18	116	193	V	39.09	15.48	34.01	51.74	64	-12.26	AV

Frequency (MHz)	S.A. Reading (dBμV)	Turntable Azimuth (degrees)	Test Antenna			Cable Loss (dB)	Pre- Amp. (dB)	Cord. Reading (dBμV/m)	FCC/ISEDC		Comments
			Height (cm)	Polarity (H/V)	Factor (dB/m)				Limit (dBμV/m)	Margin (dB)	
High Channel 5775 MHz Non HT 80 mode power setting: 17											
11550	42.17	322	175	H	39.13	15.39	34.01	62.68	84	-21.32	PK
11550	29.01	322	175	H	39.13	15.39	34.01	49.52	64	-14.48	AV
11550	43.75	116	193	V	39.09	15.39	34.01	64.22	84	-19.78	PK
11550	29.78	116	193	V	39.09	15.39	34.01	50.25	64	-13.75	AV
High Channel 5775 MHz VHT80 mode power setting: 17											
11550	42.35	322	175	H	39.13	15.39	34.01	62.86	84	-21.14	PK
11550	30.04	322	175	H	39.13	15.39	34.01	50.55	64	-13.45	AV
11550	42.37	116	193	V	39.09	15.39	34.01	62.84	84	-21.16	PK
11550	30.30	116	193	V	39.09	15.39	34.01	50.77	64	-13.23	AV
High Channel 5775 MHz HE80 mode power setting: 17											
11550	43.11	322	175	H	39.13	15.39	34.01	63.62	84	-20.38	PK
11550	30.06	322	175	H	39.13	15.39	34.01	50.57	64	-13.43	AV
11550	42.24	116	193	V	39.09	15.39	34.01	62.71	84	-21.29	PK
11550	30.58	116	193	V	39.09	15.39	34.01	51.05	64	-12.95	AV

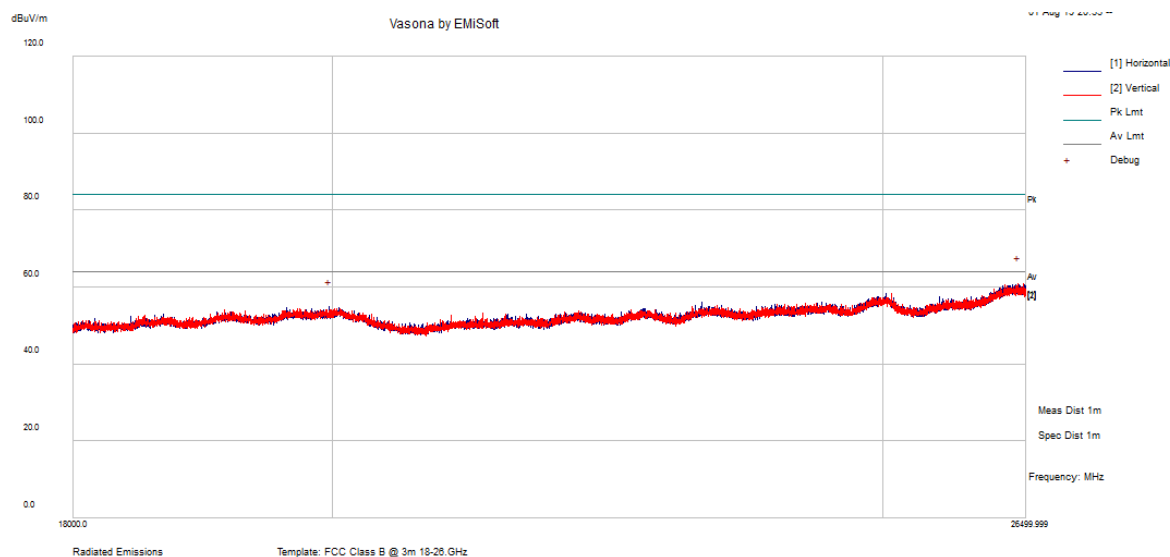
1) Co-location

Worst Case Colocation: BLE 2480 MHz, 2.4 GHz Wi-Fi HT/VHT mode 2412 MHz, and 5 GHz Wi-Fi VHT160 mode 5250 MHz

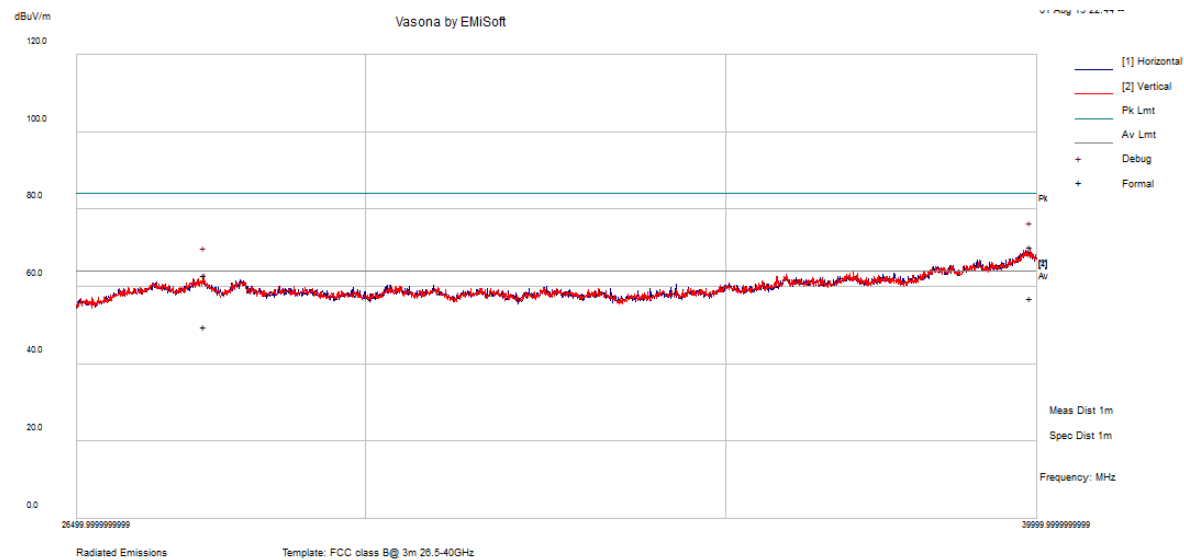
1 - 18 GHz, measured at 1 meter



18 GHz-26.5 GHz, measured at 1 meter



26.5 GHz-40 GHz, measured at 1 meter



Note: The emission measurement was performed with notch filter

6 Annex A- EUT Test Setup Photographs

Please refer to the attachment

7 Annex B- EUT External Photographs

Please refer to the attachment

8 Annex C- EUT Internal Photographs

Please refer to the attachment

9 Annex D (Normative) - A2LA Electrical Testing Certificate



Please follow the web link below for a full ISO 17025 scope

<https://www.a2la.org/scopepdf/3297-02.pdf>

--- END OF REPORT ---