Test report No.: 2390776R-RFUSV03S-A

TEST REPORT

Product Name	Handy Skin Sensor 3
Trademark	SHISEIDO
Model and /or type reference	HSS3
FCC ID	2AO35-US565
Applicant´s name / address	MORITEX Corporation 1-3-3, Azamino Minami, Aoba-ku, Yokohama-shi, Kanagawa 225-0012, Japan
Manufacturer´s name	MORITEX Corporation
Test method requested, standard	FCC CFR Title 47 Part 15 Subpart E ANSI C63.4: 2014, ANSI C63.10: 2013 KDB Publication 789033
Verdict Summary	IN COMPLIANCE
Documented By (Senior Project Specialist / Genie Chang)	Genie Chang
Tested By (Senior Engineer / Bill Lin)	Bill Lin
Approved By (Senior Engineer / Alan Chen)	Alan Chen
Date of Receipt	2023/09/26
Date of Issue	2023/12/25
Report Version	V1.0

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Appendix 1: EUT Test Photographs

Appendix 2: Product Photos-Please refer to the file: 2390776R-Product Photos

Competences and Guarantees

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

General conditions

1. The test results relate only to the samples tested.
2. The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.
3. This report must not be used to claim product endorsement by TAF or any agency of the government.
4. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
5. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Revision History

Report No.	Version	Description	Issued Date
2390776R-RFUSV03S-A	V1.0	Initial issue of report.	2023/12/25

1. General Information

1.1. EUT Description

Product Name	Handy Skin Sensor 3
Trademark	SHISEIDO
Model and /or type reference	HSS3
EUT Rated Voltage	AC 100-240 V, 50-60 Hz (by adapter), DC 3.6 V (by battery)
EUT Test Voltage	AC 110 V/60 Hz (by adapter), DC 3.6 V (by battery)
Frequency Range	802.11a/n/ac-20 MHz: 5180-5320 MHz, 5500-5700 MHz 802.11n/ac-40 MHz: 5190-5310 MHz, 5510-5670MHz 802.11ac-80 MHz: 5210-5290 MHz, 5530-5610 MHz
Number of Channels	802.11a/n/ac-20 MHz: 19 CH, 802.11n/ac-40 MHz: 9 CH 802.11ac-80 MHz: 4 CH
Data Rate	802.11a: 6 - 54 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 433.3 Mbps
Type of Modulation	802.11a/n/ac: OFDM, BPSK, QPSK, 16QAM, 64QAM, 256QAM
Channel Control	Auto
RECHARGEABLE Li-ion BATTERY	Moritex Corporation / MMB/3120 DC 3.6 V
Sensor Stand	Moritex Corporation / HSS3 Stand
Type-C cable	Non-shielded, 1.5 m with one ferrite core bonded
AC Adapter	ADAPTER TECH., / ATS018T-W050V Input: AC 100-240 V~50-60 Hz 0.48 A Output: 5.0 V⎓3.0 A, 15.0 W Cable Out: Non-shielded, 1.5 m with one ferrite core bonded.

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Redtop	HD2156	PCB	3.64 dBi for 5150~5250 MHz 3.64 dBi for 5250~5350 MHz 4.08 dBi for 5470~5725 MHz

Note: The antenna of EUT is conforming to FCC 15.203.

The antenna gain as by the manufacturer provided.

802.11a/n/ac-20 MHz Center Working Frequency of Each Channel:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	40	5200	44	5220	48	5240
52	5260	56	5280	60	5300	64	5320
100	5500	104	5520	108	5540	112	5560
116	5580	120	5600	124	5620	128	5640
132	5660	136	5680	140	5700	--	--

802.11n/ac-40 MHz Center Working Frequency of Each Channel:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230	54	5270	62	5310
102	5510	110	5550	118	5590	126	5630
134	5670	--	--	--	--	--	--

802.11ac-80 MHz Center Working Frequency of Each Channel:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	58	5290	106	5530	122	5610

Note:

1. This device is a Handy Skin Sensor 3 with built-in WLAN transceiver, this report for 5 GHz WLAN.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11a is 6Mbps, 802.11n is HT0, 802.11ac is VHT0)
4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
5. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance of transmitter with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

Test Mode	Mode 1	Transmit (802.11a) Transmit (802.11n-20MHz) Transmit (802.11n-40MHz) Transmit (802.11ac-80MHz)
	Mode 2	Charge mode

1.2. Tested System Datails

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	Latitude 5501	9V4JL13	N/A

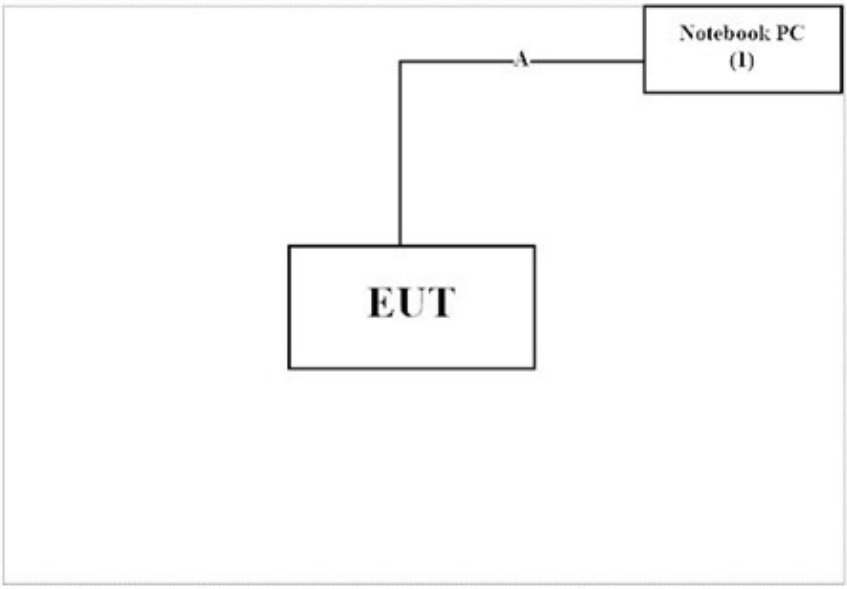
Cable Type		Cable Description
A	Type-C cable	Non-shielded, 1.5m, with one ferrite core bonded.

Charge mode

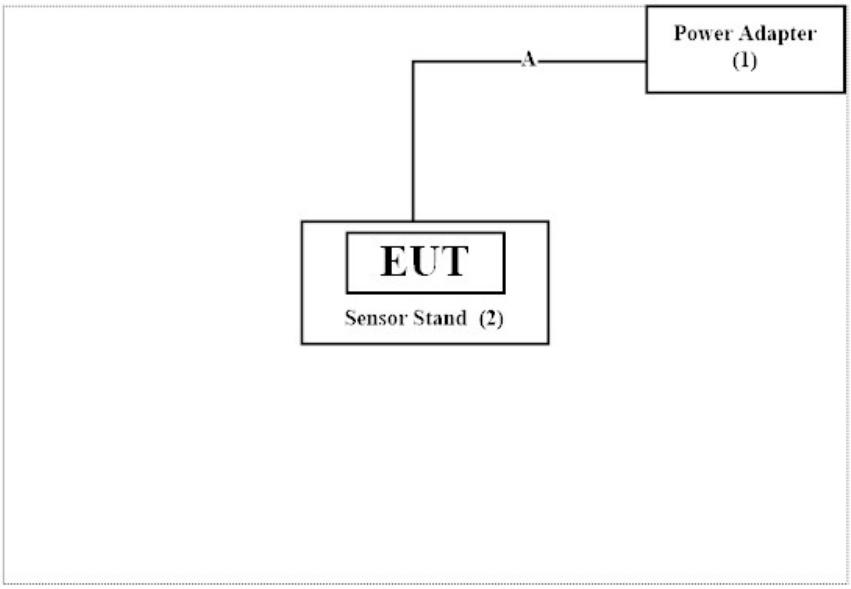
Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Power Adapter	ADAPTER TECH.	ATS018T-W050V	N/A	N/A
2	Sensor Stand	Moritex Corporation	HSS3 Stand	N/A	N/A

Cable Type		Cable Description
A	Power Cable	Non-shielded, 1.5m, with one ferrite core bonded.

1.3. Configuration of tested System



Charge mode



1.4. EUT Exercise Software

1.	Setup the EUT as shown in Section 1.3.
2.	Execute software “wl Version 6.37.32(TOB)(r410874-20210326-1)” on the Notebook PC.
3.	Configure the test mode, the test channel, and the data rate.
4.	Press “OK” to start the continuous Transmit.
5.	Verify that the EUT works properly.

1.5. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Conducted Emission	Temperature (°C)	10~40 °C	17.9 °C
	Humidity (%RH)	10~90 %	59.0 %
Radiated Emission	Temperature (°C)	10~40 °C	21.7 °C
	Humidity (%RH)	10~90 %	67.4 %
Conductive	Temperature (°C)	10~40 °C	26.1 °C
	Humidity (%RH)	10~90 %	51.2 %

USA	FCC Registration Number: TW0033
Canada	CAB Identifier Number: TW3023 / Company Number: 26930

Site Description	Accredited by TAF
	Accredited Number: 3023

Test Laboratory	DEKRA Testing and Certification Co., Ltd.
	Linkou Laboratory
Address	No.5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan, R.O.C.
Performed Location	No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.
Phone Number	+886-3-275-7255
Fax Number	+886-3-327-8031

1.6. List of Test Equipment

For Conduction Measurements / HY-SR01

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	EMI Test Receiver	R&S	ESR7	101601	2023/06/20	2024/06/19
V	Two-Line V-Network	R&S	ENV216	101306	2023/03/16	2024/03/15
V	Two-Line V-Network	R&S	ENV216	101307	2023/08/17	2024/08/16
V	Coaxial Cable	SUHNER	RG400_BNC	RF001	2023/01/10	2024/01/09

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: e3 230303 dekra V9.

For Conducted Measurements / HY-SR02

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	Spectrum Analyzer	R&S	FSV30	103467	2023/05/30	2024/05/29
V	Spectrum Analyzer	KEYSIGHT	N9010A	MY53470892	2023/11/09	2024/11/08
V	Peak Power Analyzer	KEYSIGHT	8990B	MY51000539	2023/05/15	2024/05/14
V	Wideband Power Sensor	KEYSIGHT	N1923A	MY59240002	2023/05/18	2024/05/17
V	Wideband Power Sensor	KEYSIGHT	N1923A	MY59240003	2023/05/18	2024/05/17

Note:
1. All equipments are calibrated every one year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: RF Conducted Test Tools R3 V3.0.0.14.

For Radiated Measurements /HY-CB02

	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
V	Loop Antenna	AMETEK	HLA6121	49611	2023/02/21	2024/02/20
V	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-0675	2023/08/09	2025/08/08
V	Horn Antenna	RF SPIN	DRH18-E	210503A18ES	2023/02/24	2024/02/23
V	Horn Antenna	Com-Power	AH-840	101100	2023/10/02	2025/10/01
V	Pre-Amplifier	SGH	SGH0301-9	20211007-8	2023/01/10	2024/01/09
V	Pre-Amplifier	SGH	SGH118-HS	20211102-2	2023/01/10	2024/01/09
V	Pre-Amplifier	EMCI	EMC05820SE	980285	2023/01/10	2024/01/09
V	Pre-Amplifier	EMCI	EMC184045SE	980369	2023/01/10	2024/01/09
	Coaxial Cable	EMCI	EMC102-KM-KM-600	1160314	2023/01/10	2024/01/09
	Coaxial Cable	EMCI	EMC102-KM-KM-7000	170242		
	Filter	MICRO TRONICS	BRM50702	G249	2023/01/05	2024/01/04
V	Filter	MICRO TRONICS	BRM50716	G067	2023/01/05	2024/01/04
	WIFI 6E Filter	Marvelous Microwave Inc.	MFN-5925.7125.S1	C50002N	2023/01/05	2024/01/04
V	EMI Test Receiver	R&S	ESR3	102793	2023/12/11	2024/12/10
V	Spectrum Analyzer	R&S	FSV3044	101113	2023/02/04	2024/02/03
V	Coaxial Cable	SGH	HA800	GD20110223-2	2023/01/10	2024/01/09
V	Coaxial Cable	SGH	HA800	GD20110222-4		
V	Coaxial Cable	SGH	SGH18	202108-5		
V	Coaxial Cable	SGH	SGH18	202212-2	2023/11/27	2024/11/26

Note:
1. Bi-Log Antenna and Horn Antenna(AH-840) is calibrated every two years, the other equipments are calibrated every one year.
2. The test instruments marked with "V" are used to measure the final test results.
3. Test Software Version: e3 230303 dekra V9.

1.7. Uncertainty

Uncertainties have been calculated according to the DEKRA internal document.

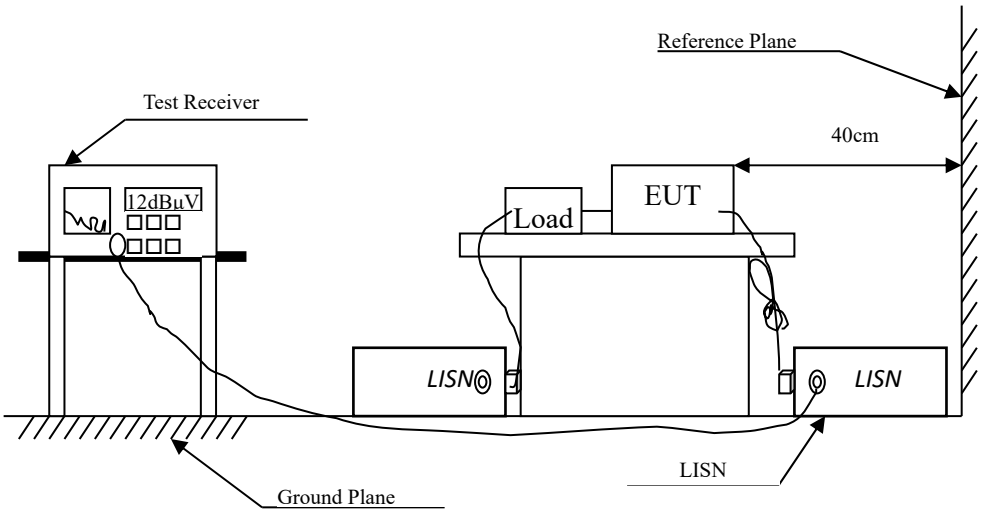
The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Test item	**Uncertainty**
Conducted Emission	±3.50 dB
Maximum conducted output power	Spectrum Analyzer: ±2.14 dB Power Meter: ±1.05 dB
Peak Power Spectral Density	±2.14 dB
Radiated Emission	9 kHz~30 MHz: ±3.88 dB 30 MHz~1 GHz: ±4.42 dB 1 GHz~18 GHz: ±4.28 dB 18 GHz~40 GHz: ±3.90 dB
Band Edge	For Radiated: 9 kHz~30 MHz: ±3.88 dB 30 MHz~1 GHz: ±4.42 dB 1 GHz~18 GHz: ±4.28 dB 18 GHz~40 GHz: ±3.90 dB For Conducted: ±2.14 dB
Occupied Bandwidth	±1580.61 Hz
Duty Cycle	±0.53 %

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

2.3. Test Procedure

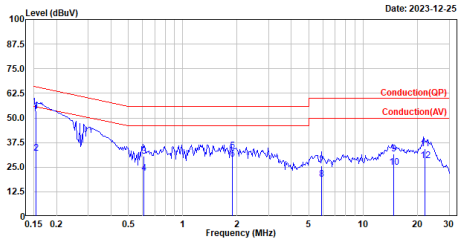
The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4:2014 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15 MHz to 30 MHz using a receiver bandwidth of 9 kHz.

2.4. Test Result of Conducted Emission

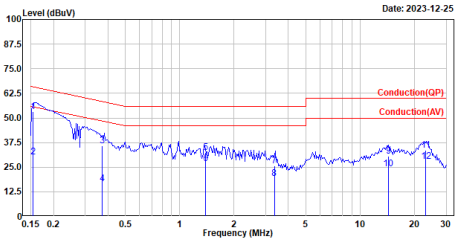
Site :HY-SR01
Condition :Line
Mode :ac80_5530MHz_TX
test by :Neko



No.	Frequency MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	0.154	53.51	65.80	-12.29	43.83	9.68	QP
2	0.154	31.91	55.80	-23.89	22.23	9.68	Average
3	0.611	30.64	56.00	-25.36	20.95	9.69	QP
4	0.611	21.76	46.00	-24.24	12.07	9.69	Average
5	1.876	33.36	56.00	-22.64	23.55	9.81	QP
6	1.876	29.02	46.00	-16.98	19.21	9.81	Average
7	5.855	25.76	60.00	-34.24	14.92	10.84	QP
8	5.855	18.88	50.00	-31.12	8.04	10.84	Average
9	14.816	31.62	60.00	-28.38	20.83	10.79	QP
10	14.816	24.76	50.00	-25.24	13.97	10.79	Average
11	22.005	34.40	60.00	-25.60	23.77	10.63	QP
12	22.005	28.18	50.00	-21.82	17.55	10.63	Average

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

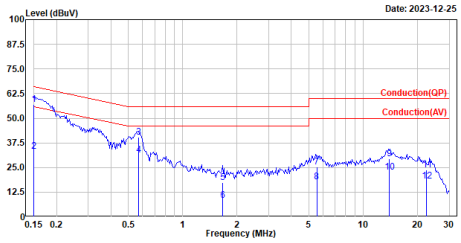
Site :HY-SR01
Condition :Neutral
Mode :ac80_5530MHz_TX
test by :Neko



No.	Frequency MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	0.154	53.10	65.81	-12.71	43.44	9.66	QP
2	0.154	30.04	55.81	-25.77	20.38	9.66	Average
3	0.373	35.85	58.43	-22.58	26.19	9.66	QP
4	0.373	16.56	48.43	-31.87	6.90	9.66	Average
5	1.389	32.51	56.00	-23.49	22.77	9.74	QP
6	1.389	26.73	46.00	-19.27	16.99	9.74	Average
7	3.345	25.76	56.00	-30.24	15.50	10.26	QP
8	3.345	19.38	46.00	-26.62	9.12	10.26	Average
9	14.284	30.68	60.00	-29.32	19.84	10.84	QP
10	14.284	24.15	50.00	-25.85	13.31	10.84	Average
11	22.997	33.65	60.00	-26.35	22.93	10.72	QP
12	22.997	27.86	50.00	-22.14	17.14	10.72	Average

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

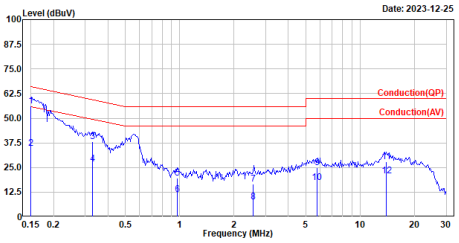
Site :HY-SR01
Condition :Line
Mode :Charge mode
test by :Neko



No.	Frequency MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	0.150	56.93	65.99	-9.06	47.25	9.68	QP
2	0.150	33.19	55.99	-22.80	23.51	9.68	Average
3	0.571	40.29	56.00	-15.71	30.61	9.68	QP
4	0.571	31.33	46.00	-14.67	21.65	9.68	Average
5	1.662	17.24	56.00	-38.76	7.45	9.79	QP
6	1.662	8.12	46.00	-37.88	-1.67	9.79	Average
7	5.530	25.27	60.00	-34.73	14.44	10.83	QP
8	5.530	17.68	50.00	-32.32	6.85	10.83	Average
9	13.911	29.57	60.00	-30.43	18.78	10.79	QP
10	13.911	22.63	50.00	-27.37	11.84	10.79	Average
11	22.474	23.83	60.00	-36.17	13.21	10.62	QP
12	22.474	18.10	50.00	-31.90	7.48	10.62	Average

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

Site :HY-SR01
Condition :Neutral
Mode :Charge mode
test by :Neko



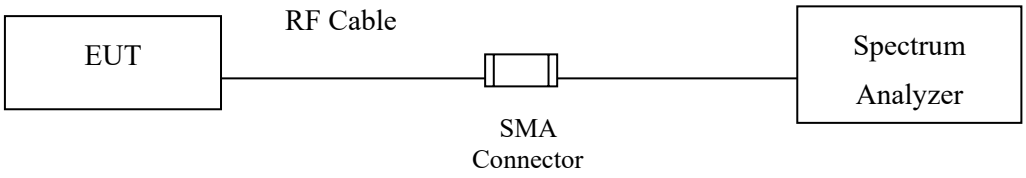
No.	Frequency MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	Factor dB	Remark
1	0.150	56.16	66.00	-9.84	46.50	9.66	QP
2	0.150	34.67	56.00	-21.33	25.01	9.66	Average
3	0.328	38.29	59.50	-21.21	28.63	9.66	QP
4	0.328	26.86	49.50	-22.64	17.20	9.66	Average
5	0.967	19.53	56.00	-36.47	9.83	9.70	QP
6	0.967	11.47	46.00	-34.53	1.77	9.70	Average
7	2.562	16.50	56.00	-39.50	6.51	9.99	QP
8	2.562	7.39	46.00	-38.61	-2.60	9.99	Average
9	5.745	24.76	60.00	-35.24	13.94	10.82	QP
10	5.745	17.54	50.00	-32.46	6.72	10.82	Average
11	13.933	28.09	60.00	-31.91	17.27	10.82	QP
12	13.933	20.81	50.00	-29.19	9.99	10.82	Average

Note:
1. Level = Read Level + Factor
2. Factor = LISN insertion loss + Cable loss
3. Over Limit = Level - Limit Line

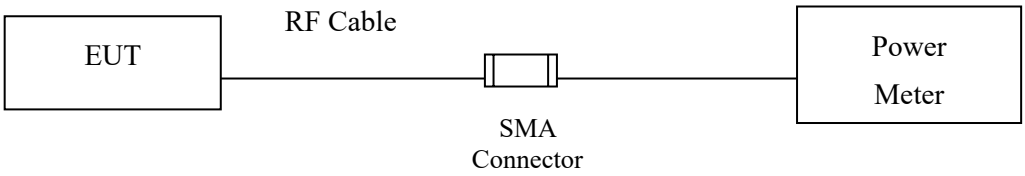
3. Maximun conducted output power

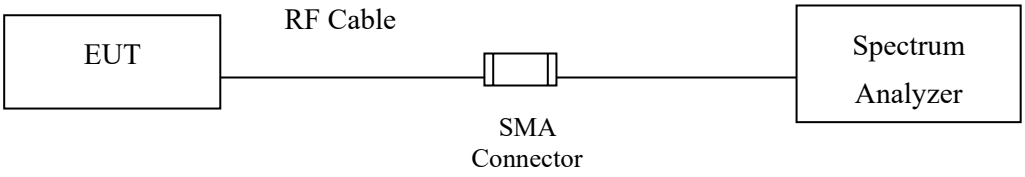
3.1. Test Setup

26dB Occupied Bandwidth



Conduction Power Measurement





3.2. Limits

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.3. Test Procedure

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater the 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11a/n/ac/ax (BW≦160MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter)
Note: the power meter have a video bandwidth that is greater than or equal to the measurement bandwidth, (KEYSIGHT / 8990B video bandwidth: 160MHz)

802.11n/ac/ax (BW≧160MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D03 section D) procedure is used for measurements.

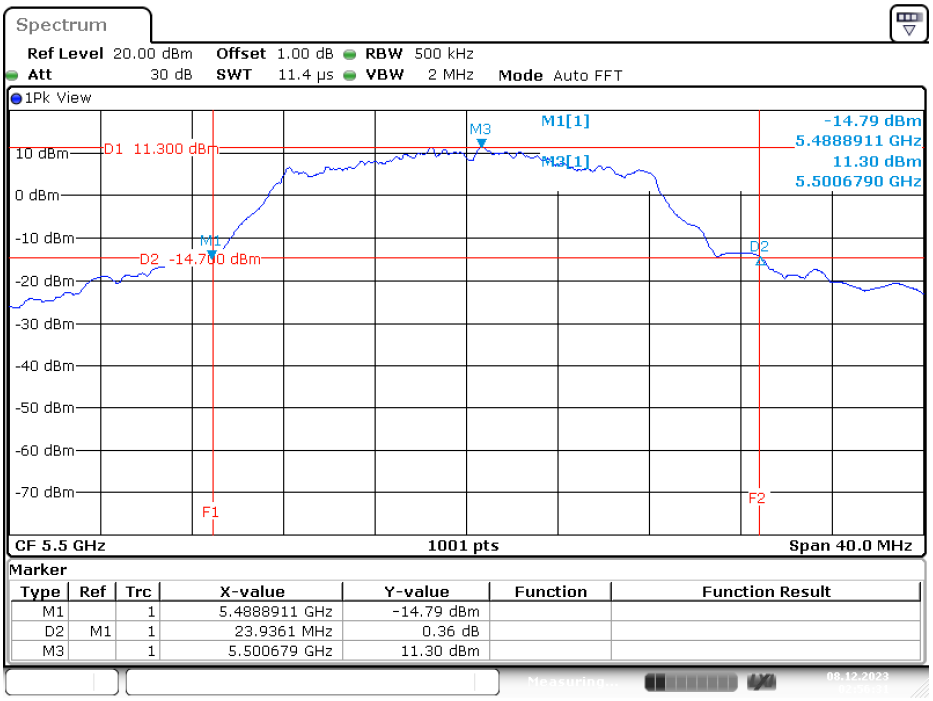
3.4. Test Result of Maximum conducted output power

Product : Handy Skin Sensor 3
Test Item : Maximum conducted output power
Test Mode : Transmit (802.11a)
Test Date : 2023/12/08

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Duty factor (dB)	Total Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
36	5180	--	10.44	--	10.44	24	--
44	5220	--	10.25	--	10.25	24	--
48	5240	--	10.23	--	10.23	24	--
52	5260	31.37	10.26	--	10.26	24	25.96
60	5300	27.97	10.21	--	10.21	24	25.47
64	5320	28.29	10.31	--	10.31	24	25.52
100	5500	23.94	6.37	--	6.37	24	24.79
116	5580	25.89	6.05	--	6.05	24	25.13
140	5700	26.05	6.42	--	6.42	24	25.16

Note: Total Power = Output Power + Duty factor

26 dB Occupied Bandwidth
Channel 100



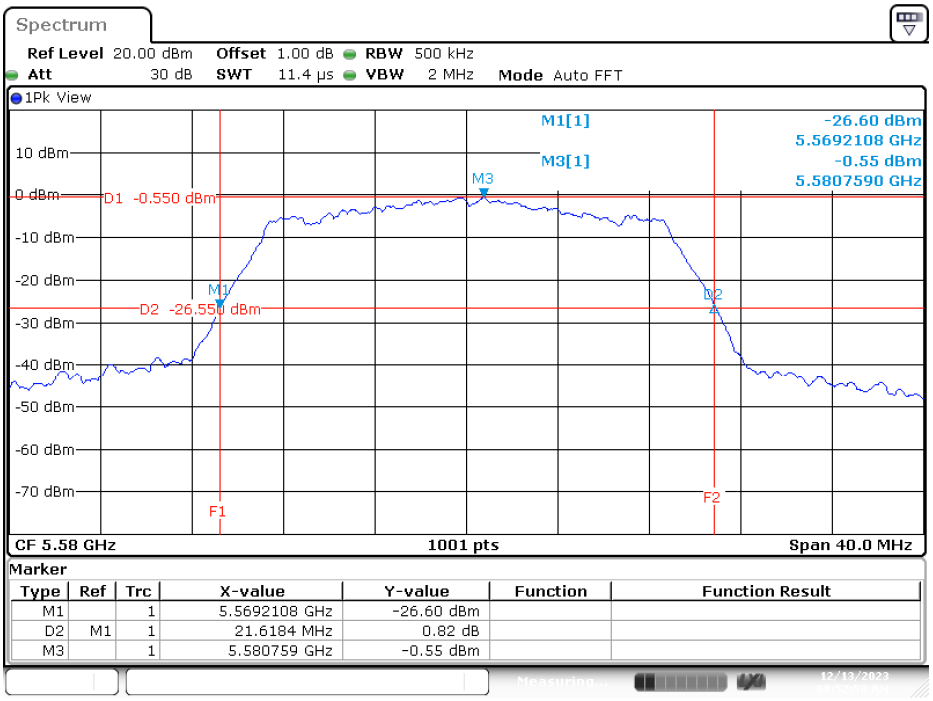
Date: 8.DEC.2023 02:56:31

Product : Handy Skin Sensor 3
Test Item : Maximum conducted output power
Test Mode : Transmit (802.11n-20MHz)
Test Date : 2023/12/13

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Duty factor (dB)	Total Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
36	5180	--	10.10	--	10.10	24	--
44	5220	--	10.01	--	10.01	24	--
48	5240	--	10.01	--	10.01	24	--
52	5260	21.86	10.22	--	10.22	24	24.40
60	5300	21.74	10.02	--	10.02	24	24.37
64	5320	21.98	9.83	--	9.83	24	24.42
100	5500	21.82	6.10	--	6.10	24	24.39
116	5580	21.62	6.00	--	6.00	24	24.35
140	5700	21.62	5.77	--	5.77	24	24.35

Note: Total Power = Output Power + Duty factor

26 dB Occupied Bandwidth
Channel 116



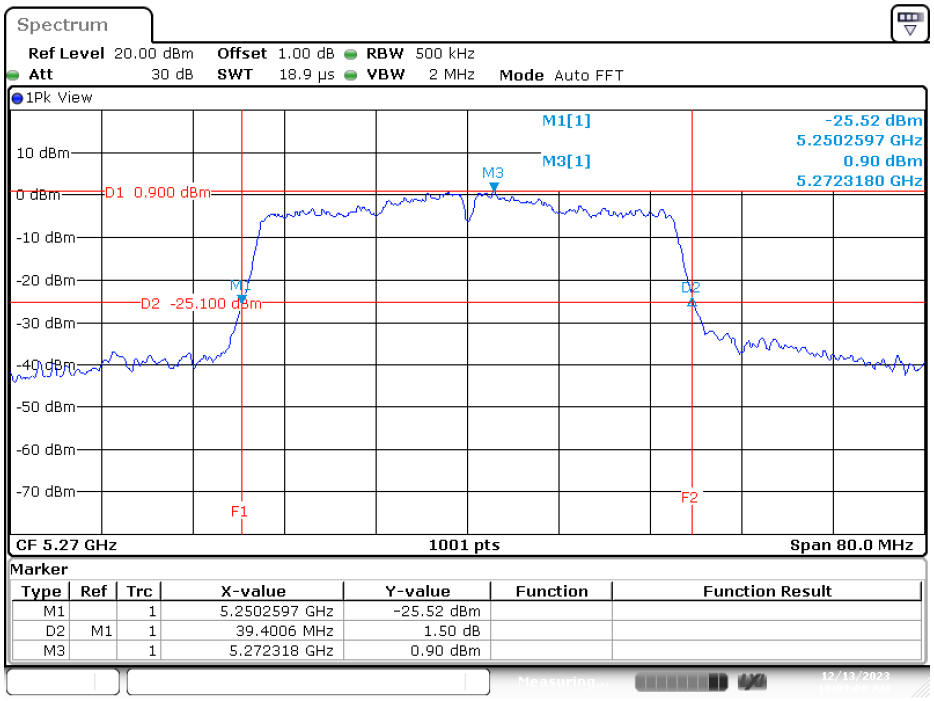
Date: 13.DEC.2023 09:52:58

Product : Handy Skin Sensor 3
Test Item : Maximum conducted output power
Test Mode : Transmit (802.11n-40MHz)
Test Date : 2023/12/13

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Duty factor (dB)	Total Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
38	5190	--	10.20	--	10.20	24	--
46	5230	--	10.06	--	10.06	24	--
54	5270	39.40	10.22	--	10.22	24	26.95
62	5310	39.72	10.04	--	10.04	24	26.99
102	5510	39.96	6.03	--	6.03	24	27.02
110	5550	39.40	6.01	--	6.01	24	26.95
134	5670	39.40	5.74	--	5.74	24	26.95

Note: Total Power = Output Power + Duty factor

26 dB Occupied Bandwidth
Channel 54



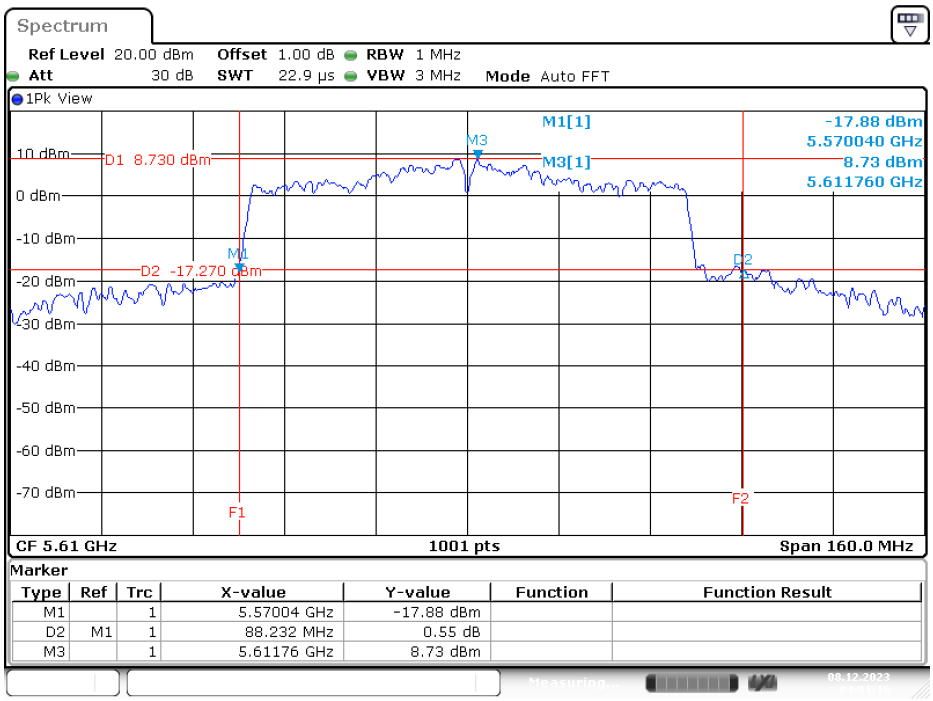
Date: 13.DEC.2023 10:03:00

Product : Handy Skin Sensor 3
Test Item : Maximum conducted output power
Test Mode : Transmit (802.11ac-80MHz)
Test Date : 2023/12/08

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	Output Power (dBm)	Duty factor (dB)	Total Power (dBm)	Output Power Limit	
						(dBm)	dBm+10log(BW)
42	5210	--	10.24	--	10.24	24	--
58	5290	95.43	10.10	--	10.10	24	30.80
106	5530	88.55	6.90	--	6.90	24	30.47
122	5610	88.23	6.54	--	6.54	24	30.46

Note: Total Power = Output Power + Duty factor

26 dB Occupied Bandwidth
Channel 122



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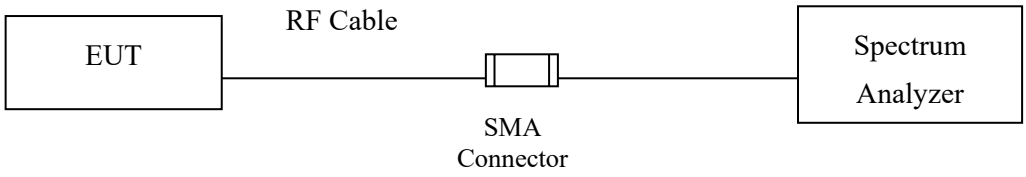
4. Maximun Power Spectral Density

4.1. Test Setup



4.2. Limits

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.+

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.3. Test Procedure

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

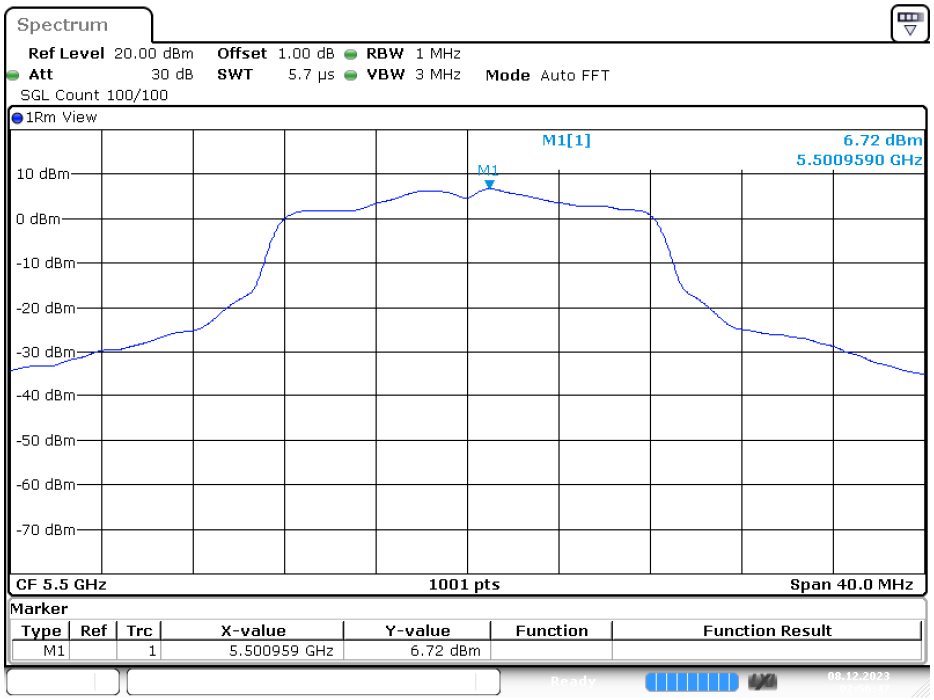
For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (500 kHz/100 kHz) = 6.98 dB.

4.4. Test Result of Maximun Power Spectral Density

Product : Handy Skin Sensor 3
Test Item : Maximun Power Spectral Density
Test Mode : Transmit (802.11a)
Test Date : 2023/12/08

Channel Number	Frequency (MHz)	Data Rate (Mbps)	PSD/MHz (dBm)	Duty factor (dB)	Total PSD/MHz (dBm)	Required Limit (dBm)	Result
36	5180	6	5.77	0.33	6.10	11	Pass
44	5220	6	5.87	0.33	6.20	11	Pass
48	5240	6	5.95	0.33	6.28	11	Pass
52	5260	6	6.24	0.33	6.57	11	Pass
60	5300	6	6.18	0.33	6.51	11	Pass
64	5320	6	5.51	0.33	5.84	11	Pass
100	5500	6	6.72	0.33	7.05	11	Pass
116	5580	6	5.94	0.33	6.27	11	Pass
140	5700	6	6.38	0.33	6.71	11	Pass

Channel 100

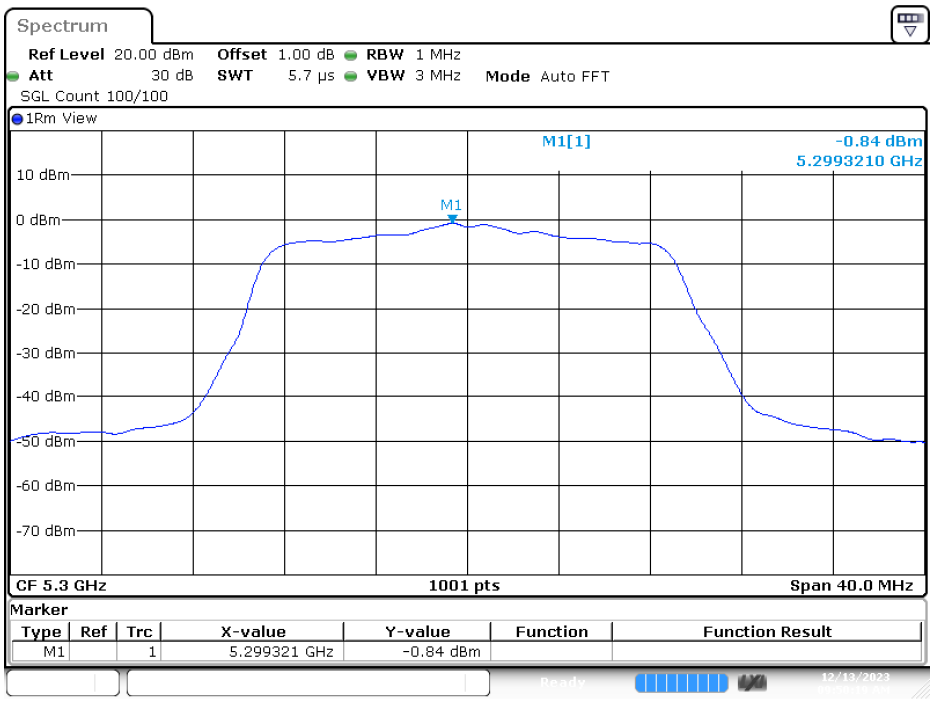


Date: 8.DEC.2023 02:56:47

Product : Handy Skin Sensor 3
Test Item : Peak Power Spectral Density
Test Mode : Transmit (802.11n-20MHz)
Test Date : 2023/12/13

Channel Number	Frequency (MHz)	Data Rate (Mbps)	PSD/MHz (dBm)	Duty factor (dB)	Total PSD/MHz (dBm)	Required Limit (dBm)	Result
36	5180	HT0	-1.45	0.35	-1.10	11	Pass
44	5220	HT0	-1.31	0.35	-0.96	11	Pass
48	5240	HT0	-1.43	0.35	-1.08	11	Pass
52	5260	HT0	-1.70	0.35	-1.35	11	Pass
60	5300	HT0	-0.84	0.35	-0.49	11	Pass
64	5320	HT0	-1.28	0.35	-0.93	11	Pass
100	5500	HT0	-3.94	0.35	-3.59	11	Pass
116	5580	HT0	-5.37	0.35	-5.02	11	Pass
140	5700	HT0	-4.93	0.35	-4.58	11	Pass

Channel 60

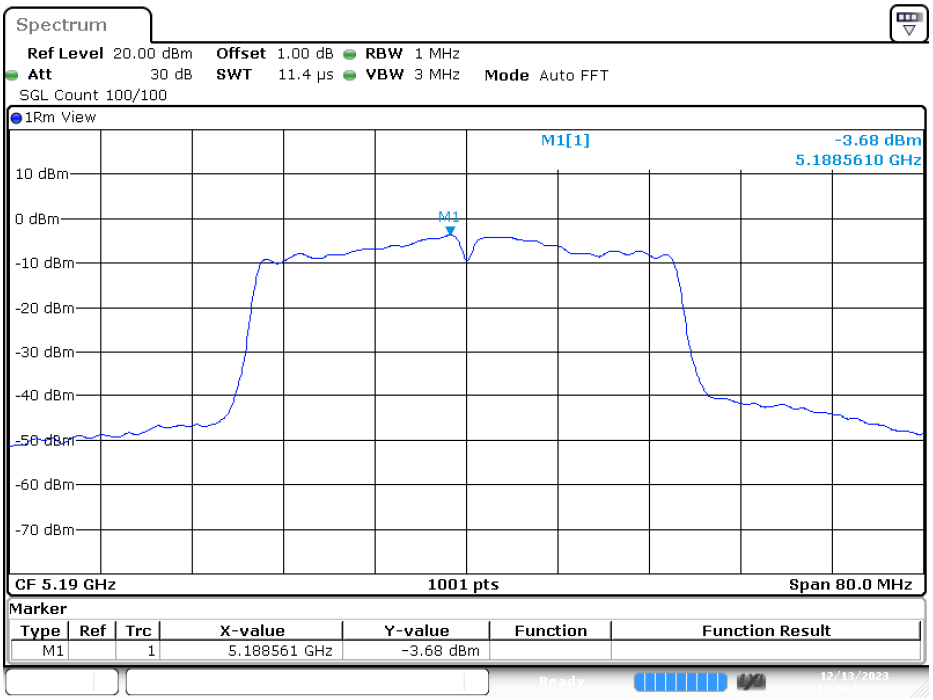


Date: 13.DEC.2023 09:50:19

Product : Handy Skin Sensor 3
Test Item : Maximun Power Spectral Density
Test Mode : Transmit (802.11n-40MHz)
Test Date : 2023/12/13

Channel Number	Frequency (MHz)	Data Rate (Mbps)	PSD/MHz (dBm)	Duty factor (dB)	Total PSD/MHz (dBm)	Required Limit (dBm)	Result
38	5190	HT0	-3.68	0.33	-3.35	11	Pass
46	5230	HT0	-4.22	0.33	-3.89	11	Pass
54	5270	HT0	-3.69	0.33	-3.36	11	Pass
62	5310	HT0	-3.70	0.33	-3.37	11	Pass
102	5510	HT0	-7.32	0.33	-6.99	11	Pass
110	5550	HT0	-6.77	0.33	-6.44	11	Pass
134	5670	HT0	-8.01	0.33	-7.68	11	Pass

Channel 38

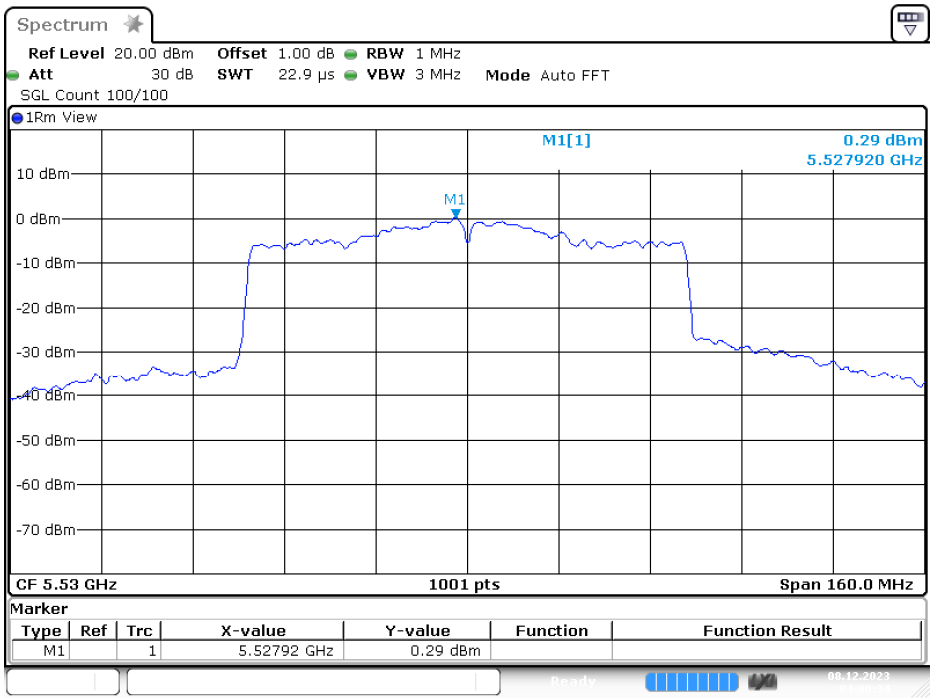


Date: 13.DEC.2023 10:00:58

Product : Handy Skin Sensor 3
Test Item : Maximun Power Spectral Density
Test Mode : Transmit (802.11ac-80MHz)
Test Date : 2023/12/08

Channel Number	Frequency (MHz)	Data Rate (Mbps)	PSD/MHz (dBm)	Duty factor (dB)	Total PSD/MHz (dBm)	Required Limit (dBm)	Result
42	5210	VHT0	-2.28	1.37	-0.91	11	Pass
58	5290	VHT0	-0.67	1.37	0.70	11	Pass
106	5530	VHT0	0.29	1.37	1.66	11	Pass
122	5610	VHT0	0.04	1.37	1.41	11	Pass

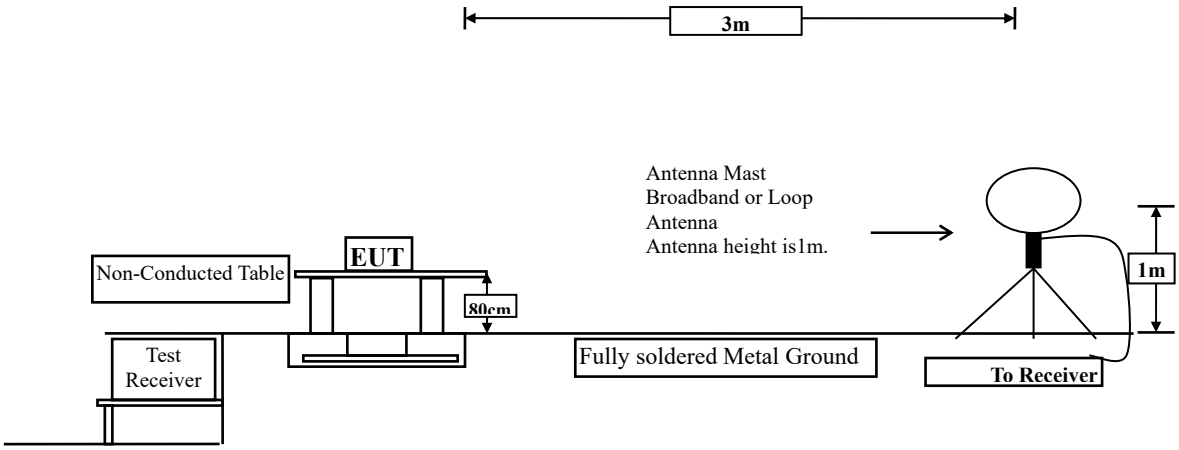
Channel 106



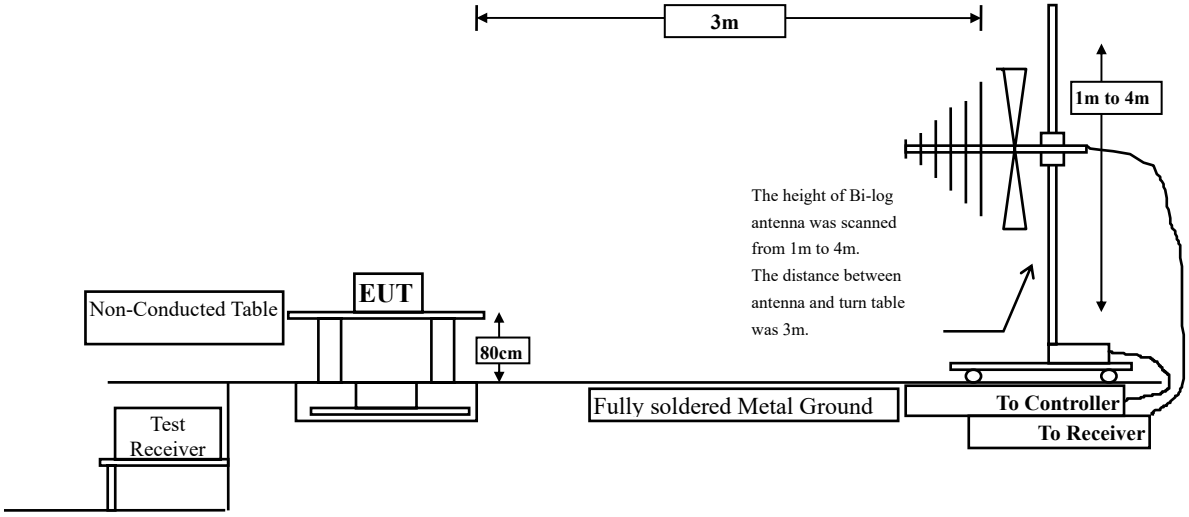
5. Radiated Emission

5.1. Test Setup

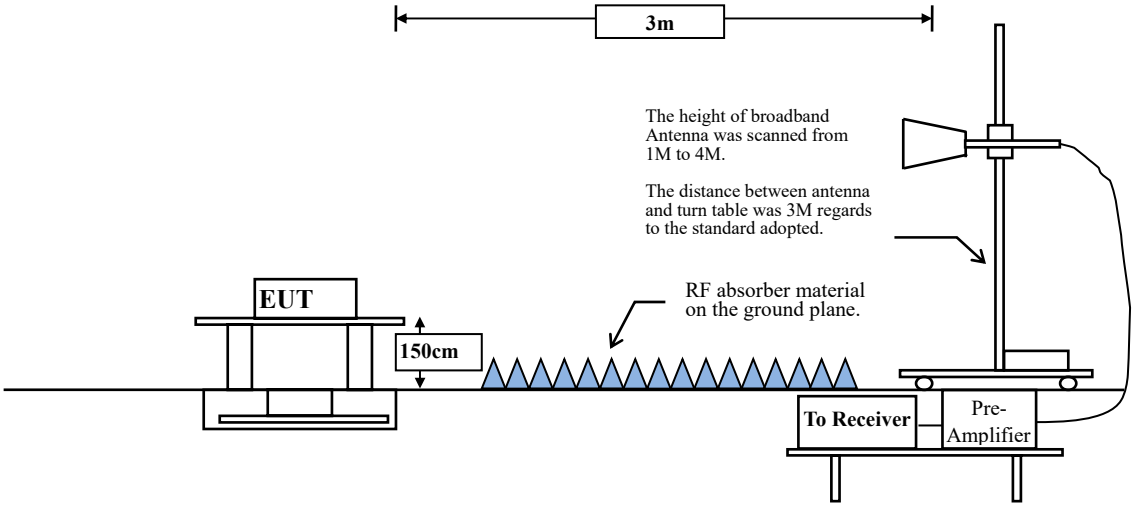
Radiated Emission Under 30 MHz



Radiated Emission Below 1 GHz



Radiated Emission Above 1 GHz



5.2. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	Field strength (microvolts/meter)	*Measurement distance (meter)*
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remarks: E field strength (dBμV/m) = 20 log E field strength (uV/m)

- 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.
- 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.
- 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.
- 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.
- For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of −27 dBm/MHz.

Based on ANSI C63.10-2013 Section 12.7.3 d) provides the conversion formula between field strength and EIRP, if distance is 3m, -27dBm is equivalent to 68.22dBuV/m.

5.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.
Measuring the frequency range below 1 GHz, the EUT is placed on a turn table which is 0.8 meter above ground,when measuring the frequency range above 1 GHz, the EUT is placed on a turn table which is 1.5 meter above ground.
The turn table is rotated 360 degrees to determine the position of the maximum emission level.
The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.
The resolution bandwidth below 30 MHz setting on the field strength meter is 9kHz and
30 MHz~1 GHz is 120 kHz and above 1 GHz is 1 MHz.
Radiated emission measurements below 30 MHz are made using Loop Antenna and 30 MHz~1 GHz are made using broadband Bilog antenna and above 1 GHz are made using Horn Antennas.
The measurement is divided into the Preliminary Measurement and the Final Measurement.
The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.
The measurement frequency range form 9 kHz - 10th Harmonic of fundamental was investigated.

RBW and VBW Parameter setting:
According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.
RBW = 1 MHz.
VBW ≥ 3 MHz.

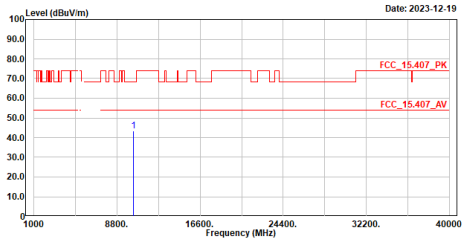
According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.
RBW = 1 MHz.
VBW = 10 Hz, when duty cycle ≥ 98 %
VBW ≥ 1/T, when duty cycle < 98 %
(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5 GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11a	92.67	1.3900	719	1000
802.11n-20 MHz	92.20	1.3000	769	1000
802.11n-40 MHz	92.75	0.6400	1563	2000
802.11ac-80 MHz	72.94	0.3100	3226	5000

Note: Duty Cycle Refer to Section 8.

5.4. Test Result of Radiated Emission

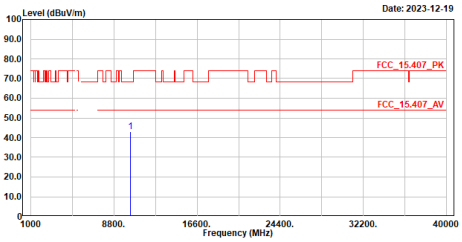
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10360.000	43.26	68.22	-24.96	39.82	3.44	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

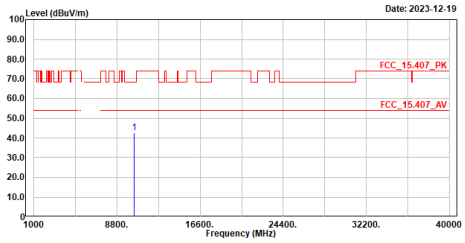
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10360.000	43.17	68.22	-25.05	39.73	3.44	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

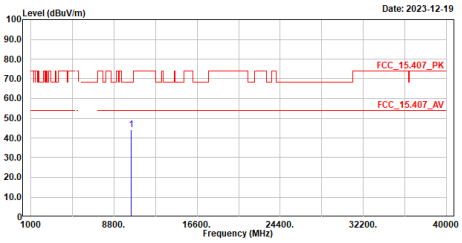
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5220MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10440.000	42.77	68.22	-25.45	38.97	3.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

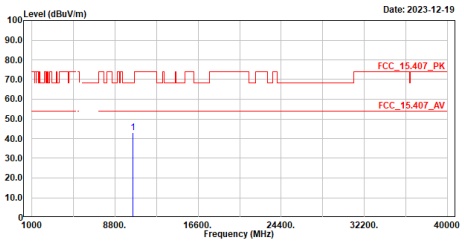
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5220MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10440.000	44.13	68.22	-24.09	40.33	3.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

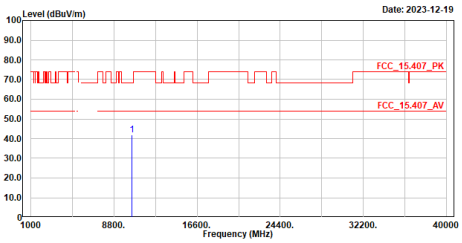
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5240MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10480.000	42.96	68.22	-25.26	39.42	3.54	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

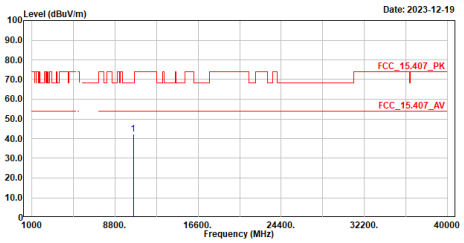
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5240MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10480.000	41.91	68.22	-26.31	38.37	3.54	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

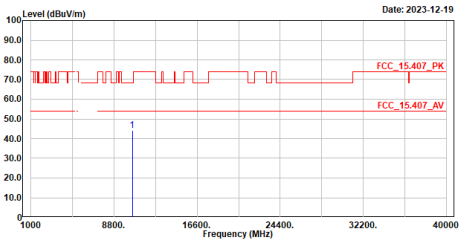
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5260MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10520.000	42.36	68.22	-25.86	39.09	3.27	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

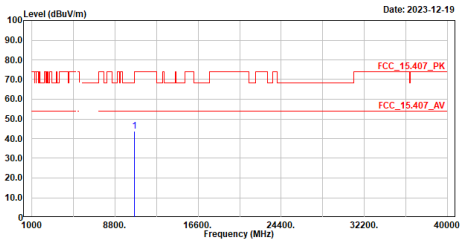
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5260MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10520.000	44.02	68.22	-24.20	40.75	3.27	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

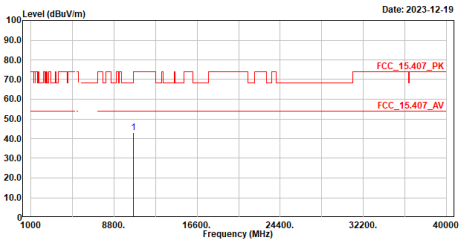
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5300MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10600.000	43.68	74.00	-30.32	39.71	3.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

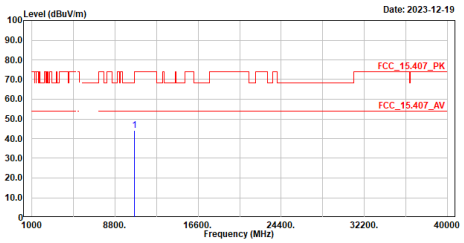
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5300MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10600.000	43.14	74.00	-30.86	39.17	3.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

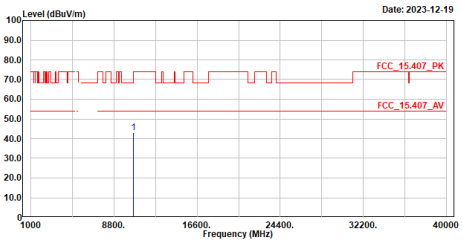
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10640.000	44.08	74.00	-29.92	40.13	3.95	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

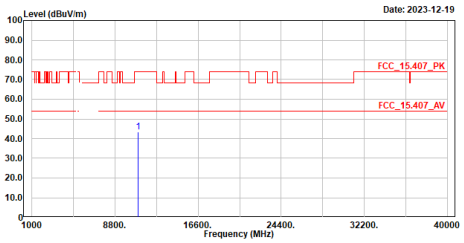
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10640.000	43.06	74.00	-30.94	39.11	3.95	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

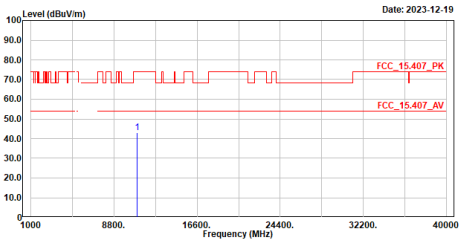
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11000.000	43.25	74.00	-30.75	39.16	4.09	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

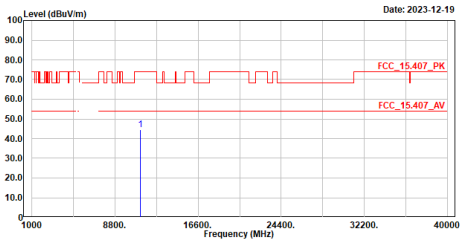
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11000.000	42.96	74.00	-31.04	38.87	4.09	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

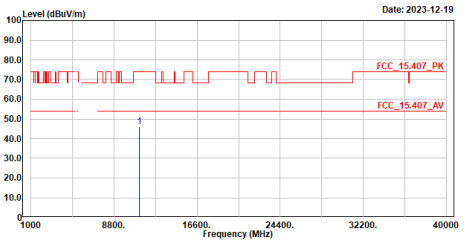
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5580MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11160.000	44.40	74.00	-29.60	40.04	4.36	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

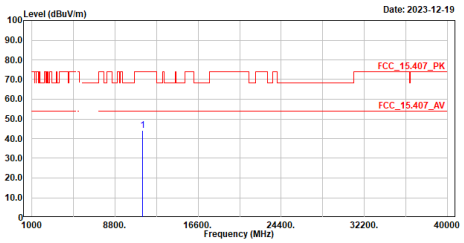
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5580MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11160.000	45.91	74.00	-28.09	41.55	4.36	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

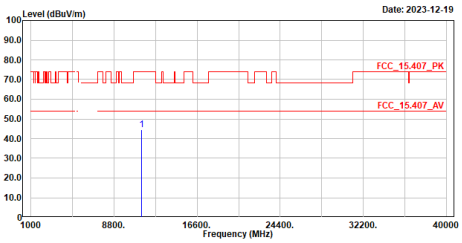
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_a_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11400.000	44.27	74.00	-29.73	39.30	4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

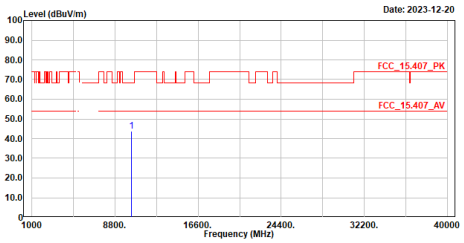
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_a_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11400.000	44.42	74.00	-29.58	39.45	4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

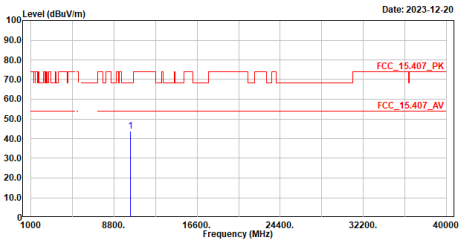
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10360.000	43.64	68.22	-24.58	40.20	3.44	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

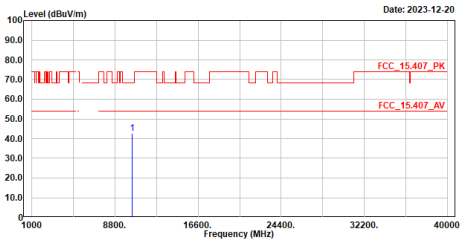
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10360.000	43.61	68.22	-24.61	40.17	3.44	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

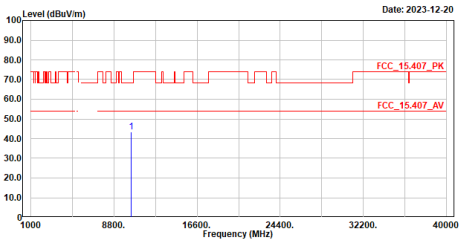
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5220MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10440.000	42.62	68.22	-25.60	38.82	3.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

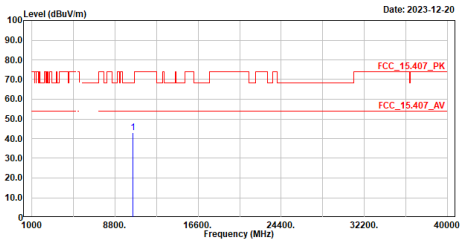
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5220MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10440.000	43.42	68.22	-24.80	39.62	3.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

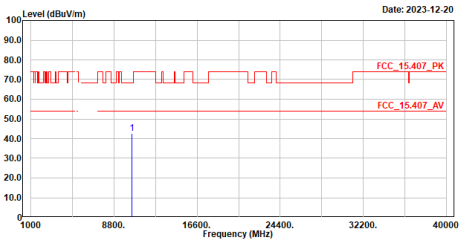
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5240MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10480.000	43.01	68.22	-25.21	39.47	3.54	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

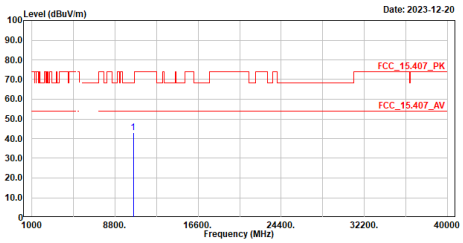
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5240MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10480.000	42.71	68.22	-25.51	39.17	3.54	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

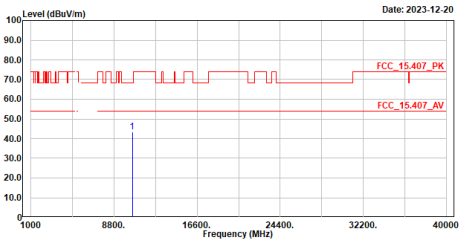
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5260MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10520.000	42.85	68.22	-25.37	39.58	3.27	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

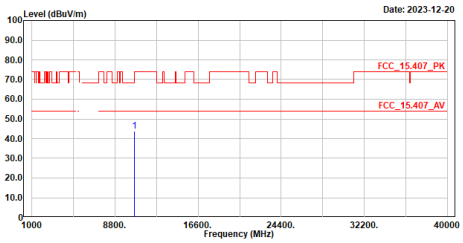
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5260MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10520.000	43.55	68.22	-24.67	40.28	3.27	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

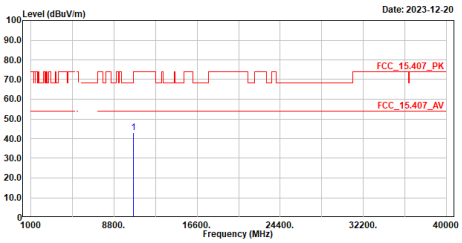
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5300MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10600.000	43.82	74.00	-30.18	39.85	3.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

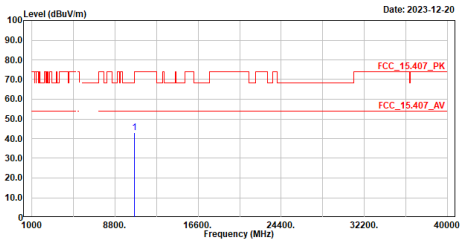
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5300MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10600.000	43.04	74.00	-30.96	39.07	3.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

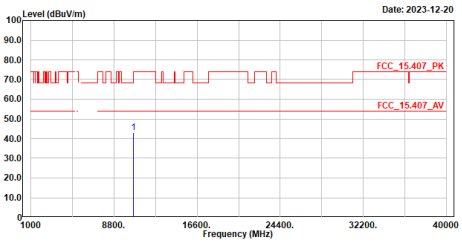
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10640.000	43.18	74.00	-30.82	39.23	3.95	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

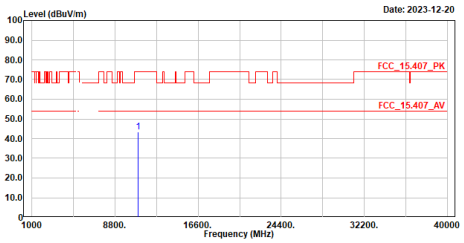
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10640.000	43.16	74.00	-30.84	39.21	3.95	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

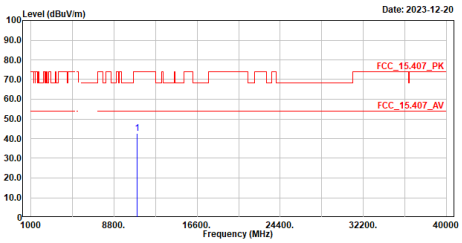
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11000.000	43.31	74.00	-30.69	39.22	4.09	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

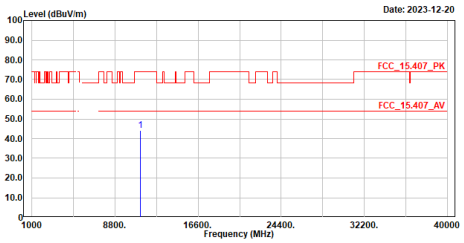
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11000.000	42.75	74.00	-31.25	38.66	4.09	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

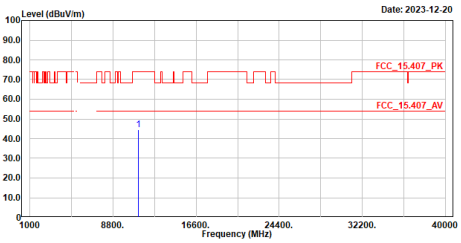
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5580MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11160.000	44.27	74.00	-29.73	39.91	4.36	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

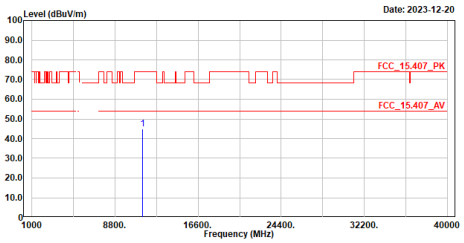
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5580MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11160.000	44.35	74.00	-29.65	39.99	4.36	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

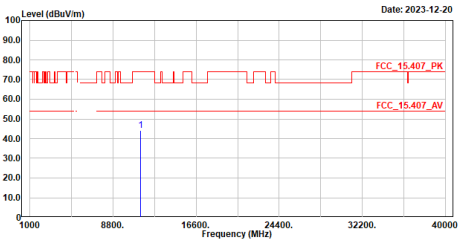
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n20_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11400.000	45.03	74.00	-28.97	40.06	4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

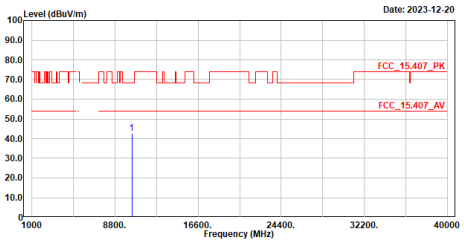
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n20_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11400.000	44.20	74.00	-29.80	39.23	4.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

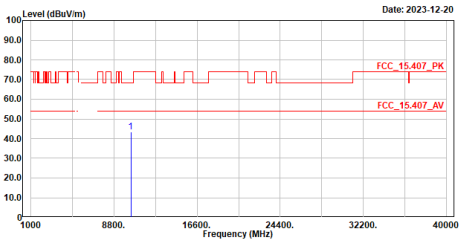
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5190MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10380.000	42.61	68.22	-25.61	39.05	3.56	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

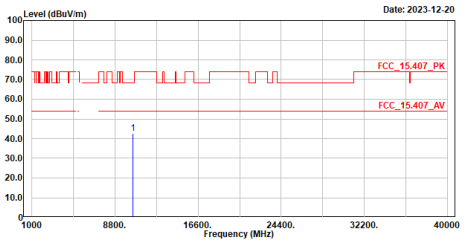
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5190MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10380.000	43.41	68.22	-24.81	39.85	3.56	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

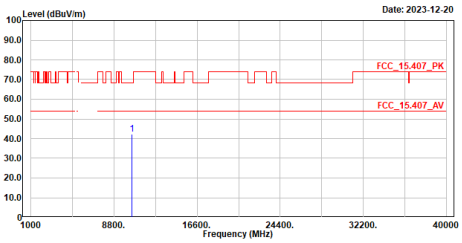
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5230MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10460.000	42.67	68.22	-25.55	39.00	3.67	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

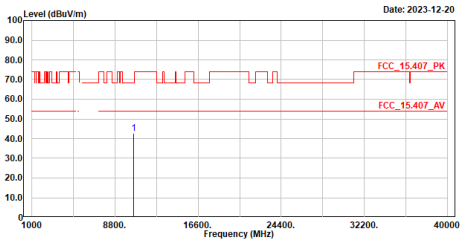
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5230MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10460.000	42.44	68.22	-25.78	38.77	3.67	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

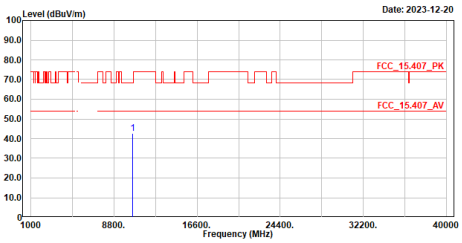
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5270MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10540.000	42.81	68.22	-25.41	39.36	3.45	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

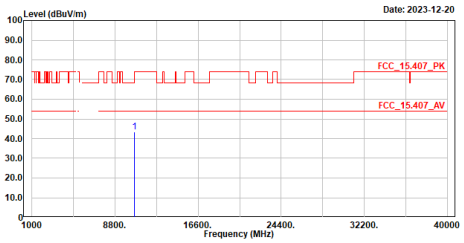
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5270MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10540.000	42.80	68.22	-25.42	39.35	3.45	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

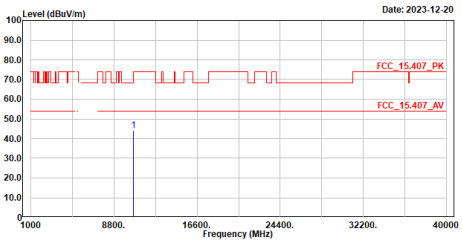
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5310MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10620.000	43.40	74.00	-30.60	39.41	3.99	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

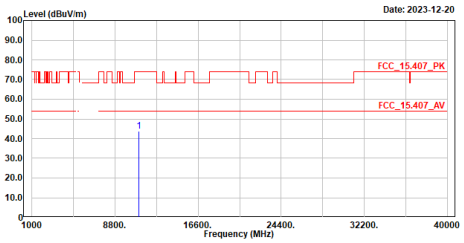
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5310MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10620.000	44.08	74.00	-29.92	40.09	3.99	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

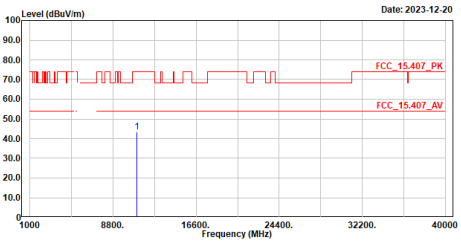
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5510MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11020.000	43.59	74.00	-30.41	39.31	4.28	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

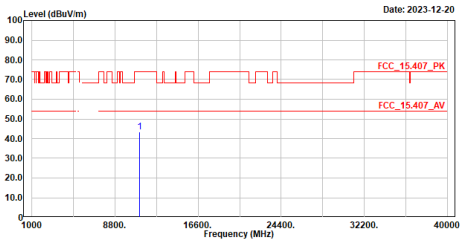
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5510MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11020.000	43.27	74.00	-30.73	38.99	4.28	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

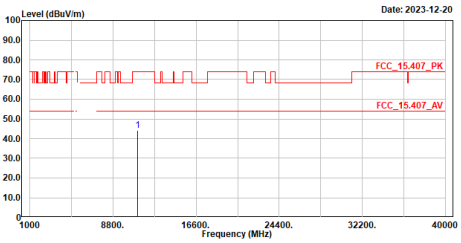
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5550MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11100.000	43.47	74.00	-30.53	39.17	4.30	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

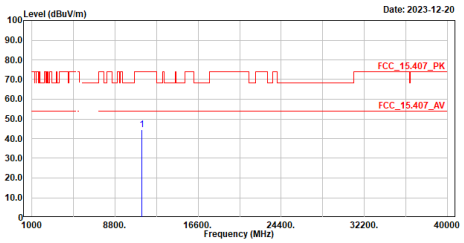
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5550MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11100.000	44.33	74.00	-29.67	40.03	4.30	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

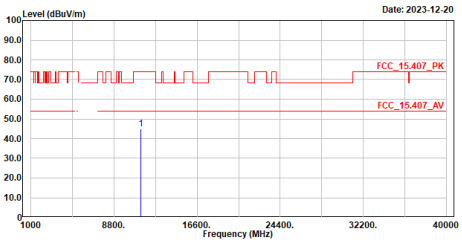
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_n40_5670MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11340.000	44.44	74.00	-29.56	39.69	4.75	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

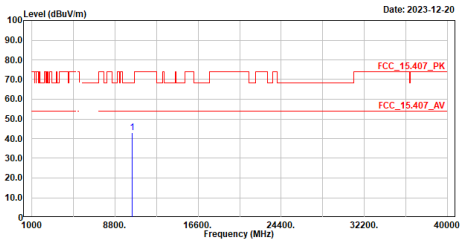
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_n40_5670MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11340.000	44.73	74.00	-29.27	39.98	4.75	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

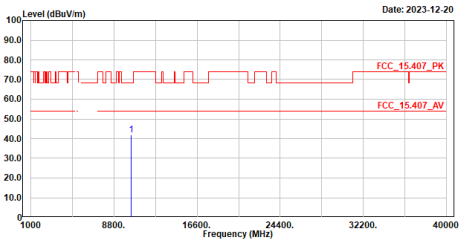
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_ac80_5210MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10420.000	43.19	68.22	-25.03	39.43	3.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

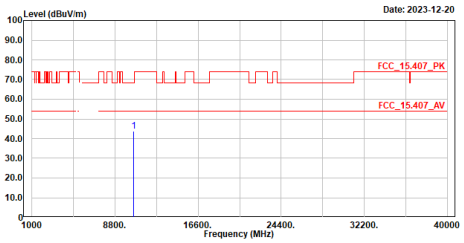
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_ac80_5210MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10420.000	42.02	68.22	-26.20	38.26	3.76	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

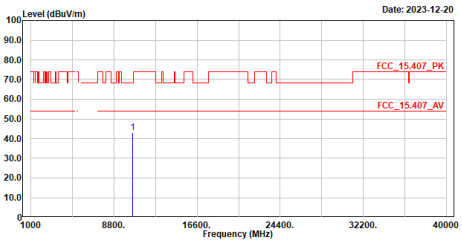
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_ac80_5290MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10580.000	43.67	68.22	-24.55	39.87	3.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

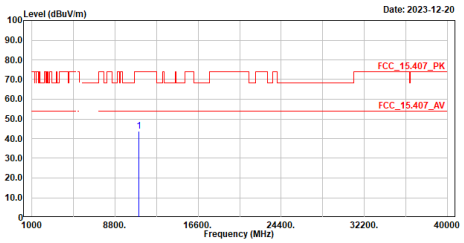
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_ac80_5290MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	10580.000	43.15	68.22	-25.07	39.35	3.80	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

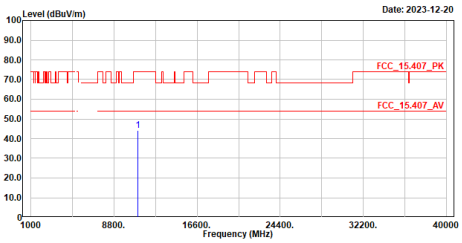
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11060.000	43.80	74.00	-30.20	39.46	4.34	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

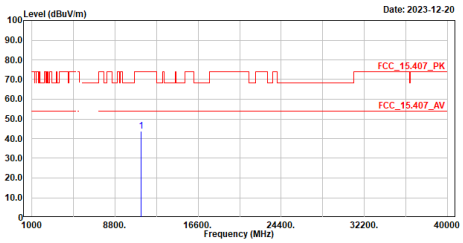
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11060.000	44.04	74.00	-29.96	39.70	4.34	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

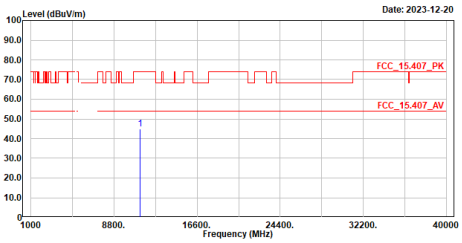
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_ac80_5610MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11220.000	43.76	74.00	-30.24	39.31	4.45	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

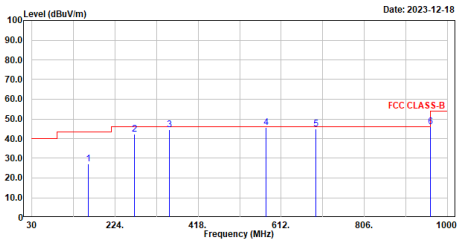
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_ac80_5610MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	11220.000	44.93	74.00	-29.07	40.48	4.45	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

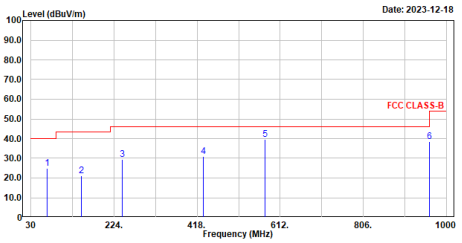
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	161.920	26.99	43.50	-16.51	50.47	-23.48	QP
2	269.978	42.22	46.00	-3.78	66.54	-24.32	QP
3	350.973	44.67	46.00	-1.33	66.75	-22.08	QP
4	575.886	45.75	46.00	-0.25	62.14	-16.39	QP
5	693.092	44.91	46.00	-1.09	59.41	-14.50	QP
6	960.024	46.03	54.00	-7.97	56.78	-10.75	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

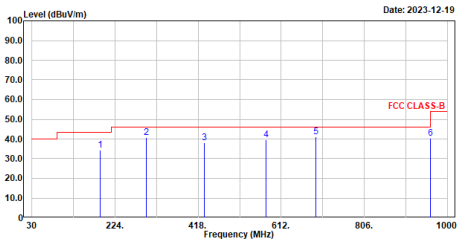
Site :HY-CB02
Condition :3m ,VERTICAL
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	68.024	24.91	40.00	-15.09	50.73	-25.82	QP
2	148.437	21.27	43.50	-22.23	44.94	-23.67	QP
3	243.012	29.55	46.00	-16.45	54.54	-24.99	QP
4	432.065	31.05	46.00	-14.95	50.66	-19.61	QP
5	576.144	39.49	46.00	-6.51	55.87	-16.38	QP
6	960.213	38.67	54.00	-15.33	49.42	-10.75	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

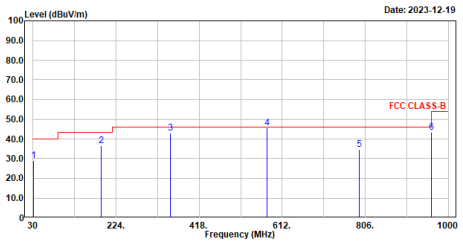
Site :HY-CB02
Condition :3m ,HORIZONTAL
mode :charge mode
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	188.983	34.51	43.50	-8.99	60.83	-26.32	QP
2	297.041	40.88	46.00	-5.12	64.16	-23.28	QP
3	432.065	38.12	46.00	-7.88	57.73	-19.61	QP
4	576.110	39.50	46.00	-6.50	55.89	-16.39	QP
5	693.092	41.22	46.00	-4.78	55.72	-14.50	QP
6	960.133	40.42	54.00	-13.58	51.17	-10.75	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

Site :HY-CB02
Condition :3m ,VERTICAL
mode :charge mode
Test by :Rock



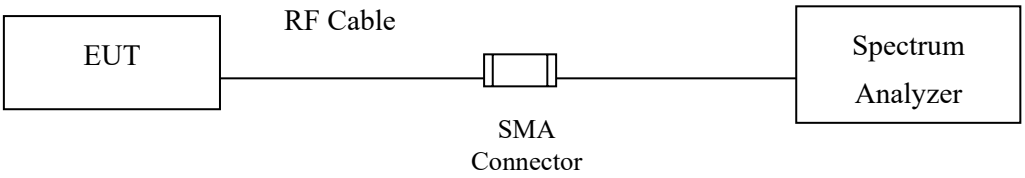
No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	30.873	29.09	40.00	-10.91	54.27	-25.18	QP
2	188.983	36.63	43.50	-6.87	62.95	-26.32	QP
3	350.973	43.17	46.00	-2.83	65.25	-22.08	QP
4	576.207	45.76	46.00	-0.24	62.14	-16.38	QP
5	792.129	34.90	46.00	-11.10	47.51	-12.61	QP
6	960.133	43.23	54.00	-10.77	53.98	-10.75	QP

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission under 30MHz was not included since the emission levels are very low against the limit.

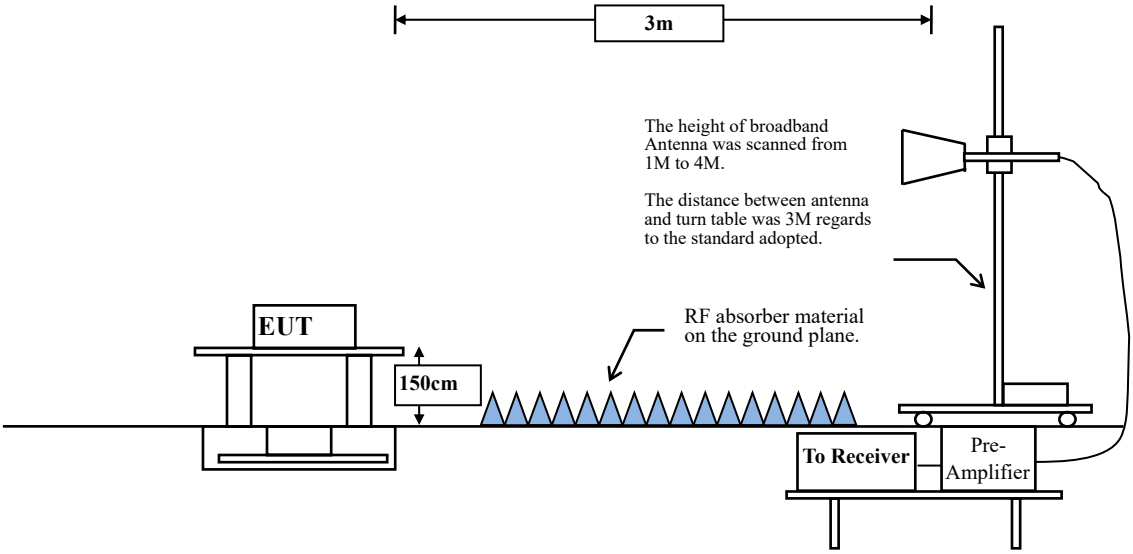
6. Band Edge

6.1. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



6.2. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBμV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBμV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

- 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.
- 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.
- 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.
- 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.
- For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of −27 dBm/MHz.

Based on ANSI C63.10-2013 Section 12.7.3 d) provides the conversion formula between field strength and EIRP, if distance is 3m, -27dBm is equivalent to 68.22dBuV/m.

6.3. Test Procedure

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

The bandwidth below 1 GHz setting on the field strength meter is 120 kHz, above 1 GHz are 1 MHz.

The EUT was setup to ANSI C63.10, 2013; tested to UNII test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

RBW and VBW Parameter setting:

According to KDB 789033 section II.G.5 Procedure for Unwanted Maximum Emissions Measurements above 1000 MHz.

RBW = 1 MHz.

VBW ≥ 3 MHz.

According to KDB 789033 section II.G.6 Procedures for Average Unwanted Emissions Measurements above 1000 MHz.

RBW = 1 MHz.

VBW = 10 Hz, when duty cycle ≥ 98 %

VBW ≥ 1/T, when duty cycle < 98 %

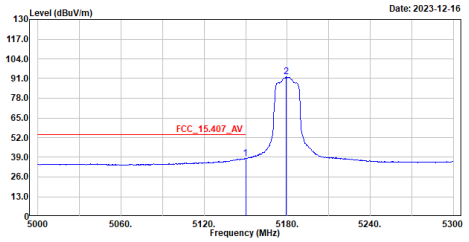
(T refers to the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.)

5 GHz band	Duty Cycle (%)	T (ms)	1/T (Hz)	VBW (Hz)
802.11a	92.67	1.3900	719	1000
802.11n-20 MHz	92.20	1.3000	769	1000
802.11n-40 MHz	92.75	0.6400	1563	2000
802.11ac-80 MHz	72.94	0.3100	3226	5000

Note: Duty Cycle Refer to Section 8.

6.4. Test Result of Band Edge

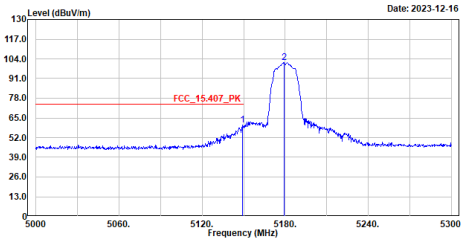
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5180MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5150.000	38.36	54.00	-15.64	22.67	15.69	Average
2	5179.100	92.19	------	------	76.28	15.91	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

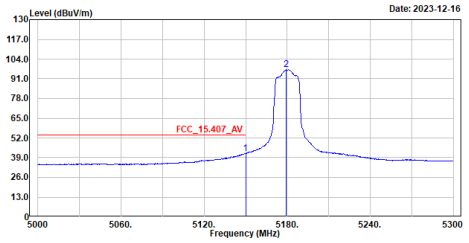
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5180MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5149.400	60.36	74.00	-13.64	44.67	15.69	Peak
2	5179.400	101.48	------	------	85.56	15.92	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

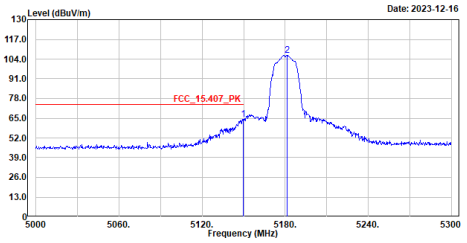
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5180MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5150.000	41.89	54.00	-12.11	26.20	15.69	Average
2	5179.100	97.16	------	------	81.25	15.91	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

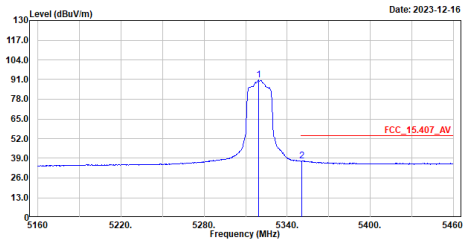
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5180MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5149.700	64.48	74.00	-9.52	48.79	15.69	Peak
2	5181.500	106.51	------	------	90.58	15.93	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

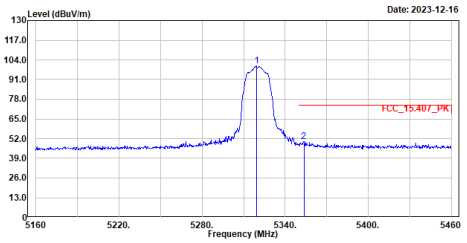
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5319.300	90.56	------	------	74.71	15.85	Average
2	5350.500	37.39	54.00	-16.61	21.75	15.64	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

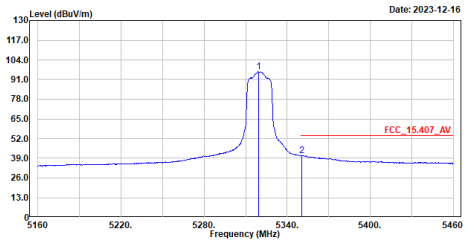
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5319.300	100.01	------	------	84.16	15.85	Peak
2	5353.500	49.99	74.00	-24.01	34.33	15.66	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

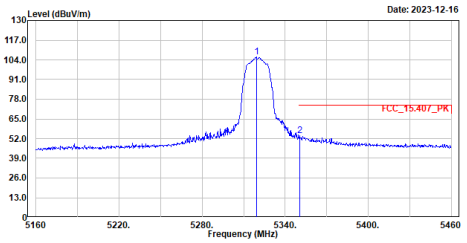
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5319.300	96.29	------	------	80.44	15.85	Average
2	5350.500	40.88	54.00	-13.12	25.24	15.64	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

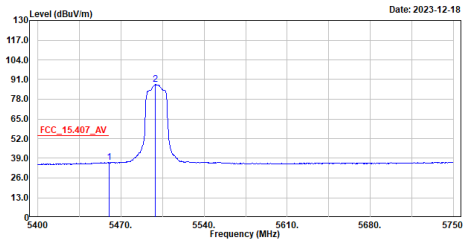
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5319.300	105.72	------	------	89.87	15.85	Peak
2	5350.500	53.76	74.00	-20.24	38.12	15.64	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

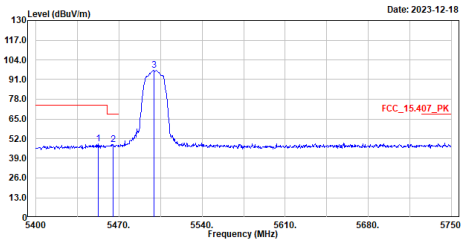
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5459.850	36.16	54.00	-17.84	19.99	16.17	Average
2	5499.050	87.85	------	------	71.63	16.22	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

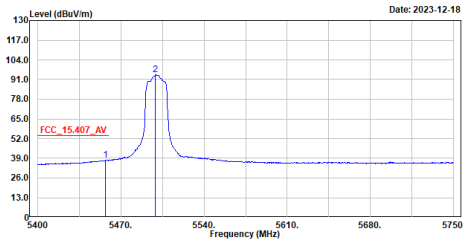
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5452.500	48.77	74.00	-25.23	32.60	16.17	Peak
2	5465.100	48.06	68.22	-20.16	31.88	16.18	Peak
3	5499.400	97.20	------	------	80.98	16.22	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

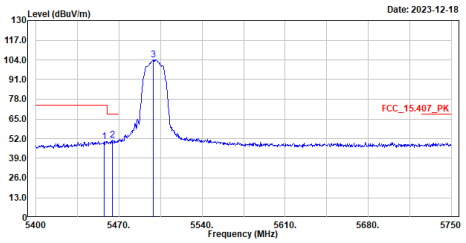
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5457.050	37.68	54.00	-16.32	21.51	16.17	Average
2	5499.050	94.19	------	------	77.97	16.22	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

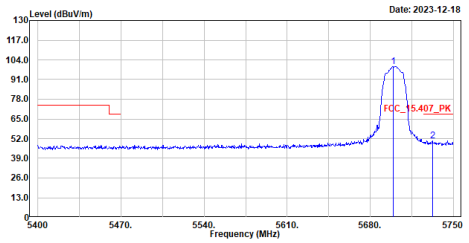
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5457.400	50.13	74.00	-23.87	33.96	16.17	Peak
2	5464.400	50.98	68.22	-17.24	34.80	16.18	Peak
3	5499.050	104.03	------	------	87.81	16.22	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

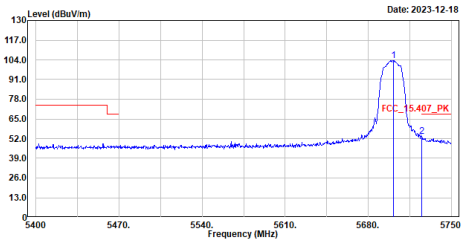
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_a_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5699.250	99.74	------	------	82.30	17.44	Peak
2	5732.500	50.63	68.22	-17.59	32.92	17.71	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

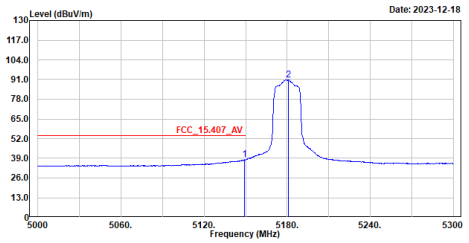
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_a_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5701.350	103.65	------	------	86.20	17.45	Peak
2	5725.000	53.52	68.22	-14.70	35.87	17.65	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

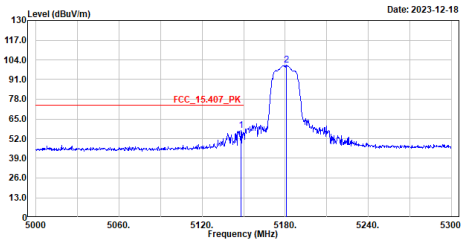
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5149.100	38.10	54.00	-15.90	22.41	15.69	Average
2	5180.900	90.91	------	------	74.98	15.93	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

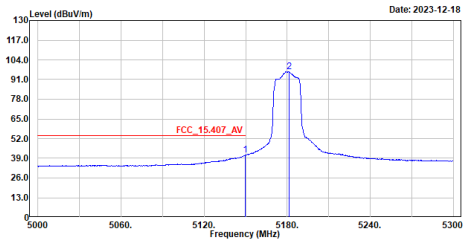
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5148.200	57.15	74.00	-16.85	41.46	15.69	Peak
2	5180.900	100.32	------	------	84.39	15.93	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

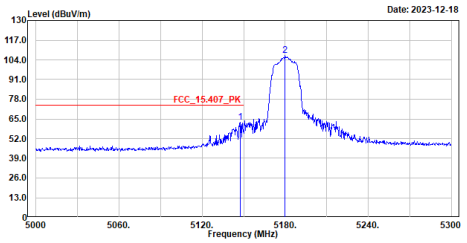
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5149.700	40.98	54.00	-13.02	25.29	15.69	Average
2	5181.500	96.24	------	------	80.31	15.93	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

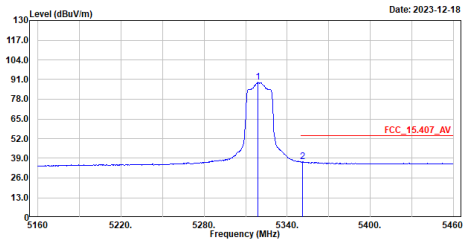
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5180MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5147.600	62.58	74.00	-11.42	46.89	15.69	Peak
2	5180.000	107.00	------	------	91.08	15.92	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

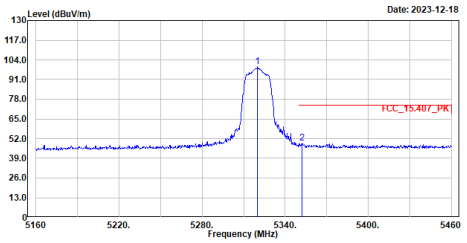
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5319.000	89.05	------	------	73.20	15.85	Average
2	5351.100	36.72	54.00	-17.28	21.07	15.65	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

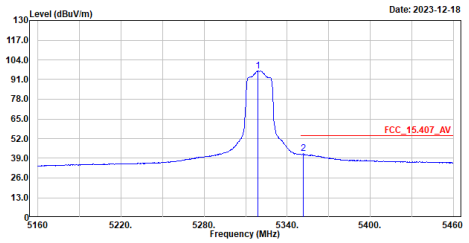
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5320.200	99.49	------	------	83.65	15.84	Peak
2	5352.300	49.14	74.00	-24.86	33.49	15.65	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

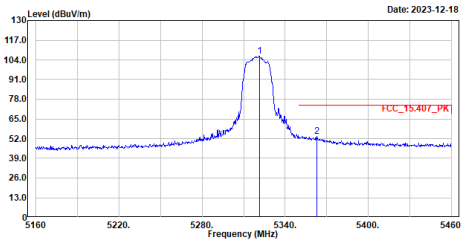
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5319.000	96.76	------	------	80.91	15.85	Average
2	5351.700	41.96	54.00	-12.04	26.31	15.65	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

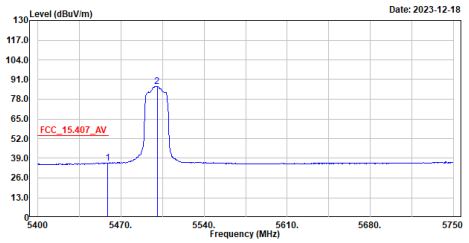
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5320MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5321.400	106.32	------	------	90.49	15.83	Peak
2	5362.800	53.63	74.00	-20.37	37.89	15.74	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

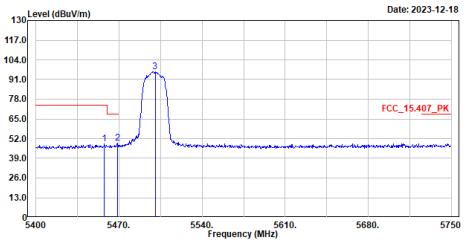
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5458.800	35.90	54.00	-18.10	19.73	16.17	Average
2	5500.450	86.50	------	------	70.28	16.22	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

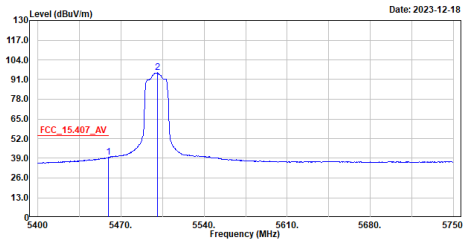
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5457.750	48.60	74.00	-25.40	32.43	16.17	Peak
2	5468.950	48.82	68.22	-19.40	32.64	16.18	Peak
3	5500.450	96.12	------	------	79.90	16.22	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

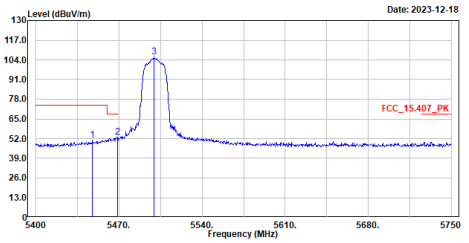
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5459.150	39.59	54.00	-14.41	23.42	16.17	Average
2	5500.800	95.53	------	------	79.30	16.23	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

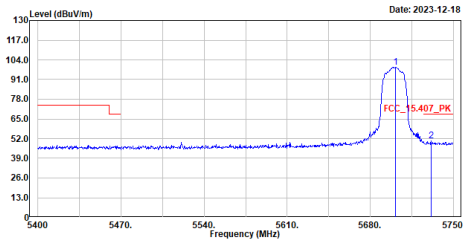
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5500MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5447.600	51.12	74.00	-22.88	34.96	16.16	Peak
2	5468.600	52.76	68.22	-15.46	36.58	16.18	Peak
3	5499.400	105.76	------	------	89.54	16.22	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

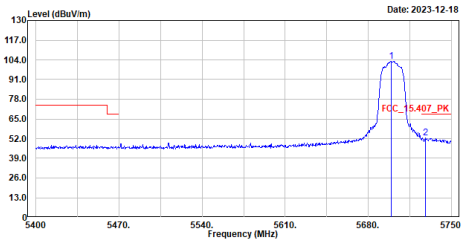
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n20_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5701.350	99.22	------	------	81.77	17.45	Peak
2	5731.100	50.37	68.22	-17.85	32.67	17.70	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

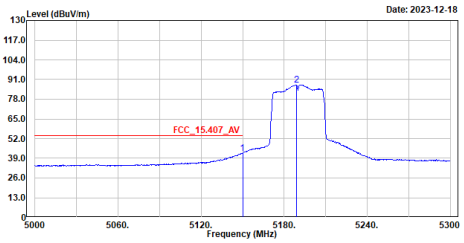
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n20_5700MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5699.250	103.02	------	------	85.58	17.44	Peak
2	5727.950	52.55	68.22	-15.67	34.88	17.67	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

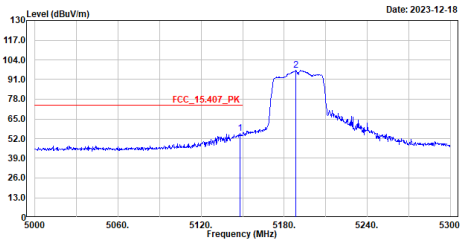
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5190MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5150.000	42.42	54.00	-11.58	26.73	15.69	Average
2	5188.700	87.50	------	------	71.53	15.97	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

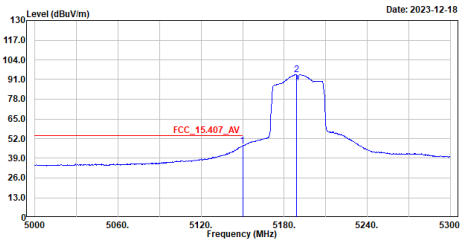
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5190MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5148.200	55.33	74.00	-18.67	39.64	15.69	Peak
2	5188.400	96.99	------	------	81.02	15.97	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

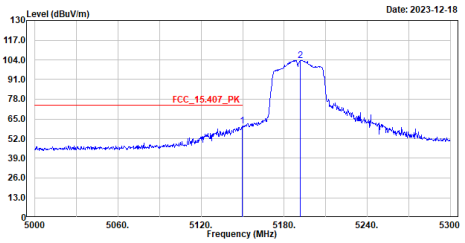
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5190MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5150.000	47.09	54.00	-6.91	31.40	15.69	Average
2	5188.700	94.41	------	------	78.44	15.97	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

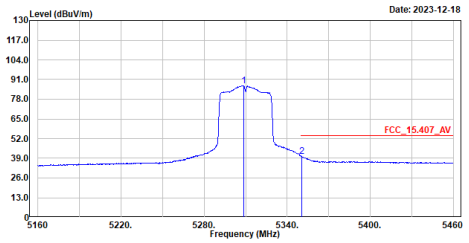
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5190MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5149.700	60.18	74.00	-13.82	44.49	15.69	Peak
2	5191.700	103.73	------	------	87.73	16.00	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

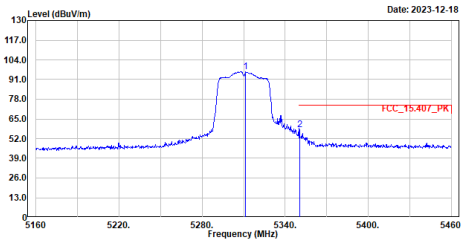
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5310MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5308.800	86.93	------	------	71.02	15.91	Average
2	5350.500	40.33	54.00	-13.67	24.69	15.64	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

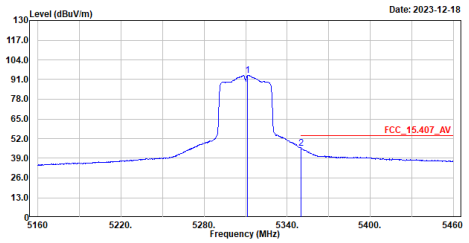
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5310MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5311.500	96.37	------	------	80.47	15.90	Peak
2	5350.500	58.04	74.00	-15.96	42.40	15.64	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

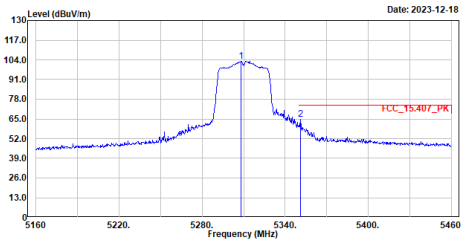
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5310MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5311.500	93.80	------	------	77.90	15.90	Average
2	5350.200	45.84	54.00	-8.16	30.20	15.64	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

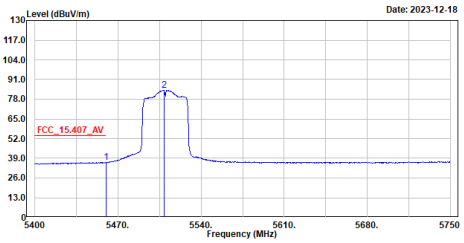
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5310MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5308.200	102.96	------	------	87.05	15.91	Peak
2	5351.100	64.55	74.00	-9.45	48.90	15.65	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

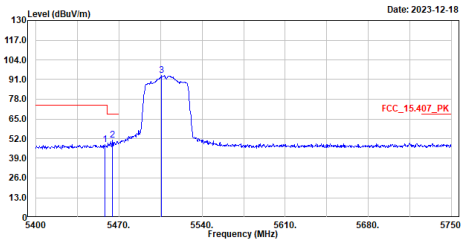
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5510MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5459.850	36.40	54.00	-17.60	20.23	16.17	Average
2	5508.850	84.01	------	------	67.70	16.31	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

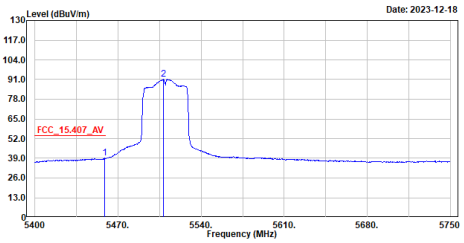
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5510MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5458.100	47.98	74.00	-26.02	31.81	16.17	Peak
2	5464.400	50.78	68.22	-17.44	34.60	16.18	Peak
3	5506.050	93.77	------	------	77.49	16.28	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

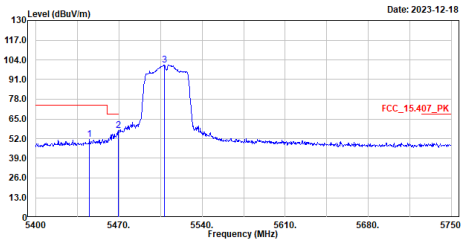
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5510MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5458.800	39.10	54.00	-14.90	22.93	16.17	Average
2	5508.150	91.25	------	------	74.95	16.30	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

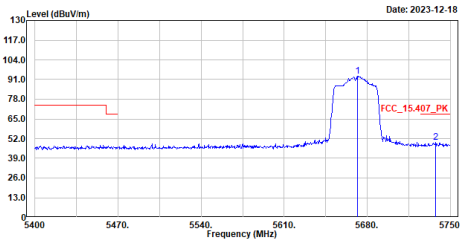
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5510MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5445.150	51.57	74.00	-22.43	35.43	16.14	Peak
2	5469.300	57.25	68.22	-10.97	41.07	16.18	Peak
3	5508.500	100.67	------	------	84.37	16.30	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

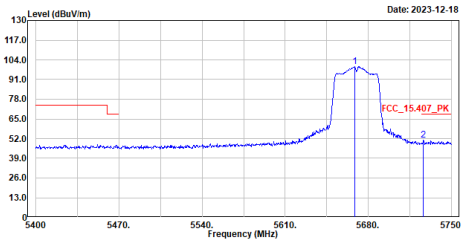
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_n40_5670MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5671.950	93.19	------	------	75.82	17.37	Peak
2	5737.400	49.31	68.22	-18.91	31.56	17.75	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

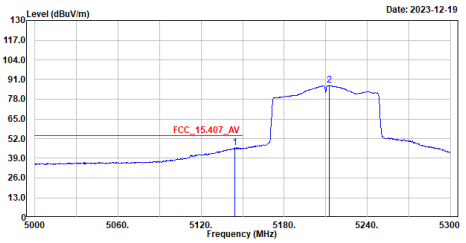
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_n40_5670MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5668.450	99.52	------	------	82.15	17.37	Peak
2	5726.550	50.83	68.22	-17.39	33.17	17.66	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

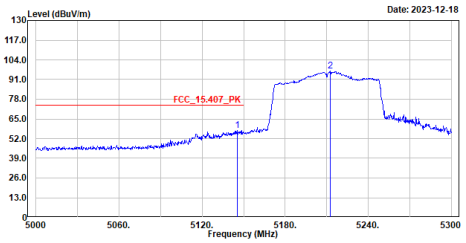
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_ac80_5210MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5144.300	45.91	54.00	-8.09	30.22	15.69	Average
2	5212.700	87.10	------	------	71.16	15.94	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

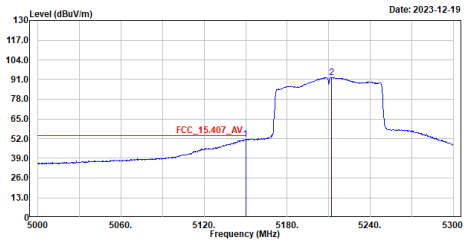
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_ac80_5210MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5145.200	57.46	74.00	-16.54	41.77	15.69	Peak
2	5212.700	96.52	------	------	80.58	15.94	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

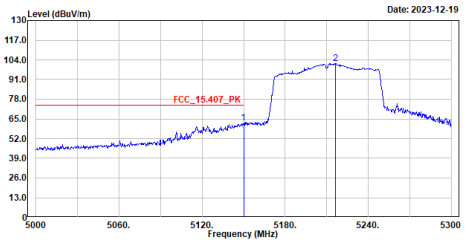
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_ac80_5210MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5150.000	51.32	54.00	-2.68	35.63	15.69	Average
2	5211.800	92.42	------	------	76.47	15.95	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

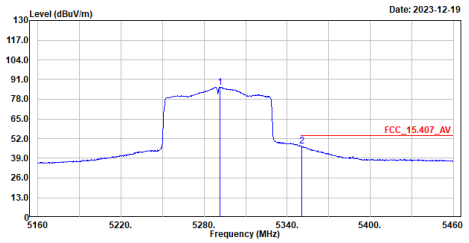
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_ac80_5210MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5150.000	62.46	74.00	-11.54	46.77	15.69	Peak
2	5216.300	101.49	------	------	85.58	15.91	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

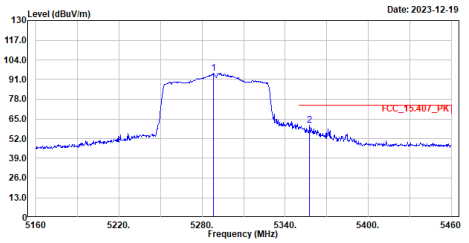
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_ac80_5290MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5291.700	86.03	------	------	70.13	15.90	Average
2	5350.500	46.88	54.00	-7.12	31.24	15.64	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

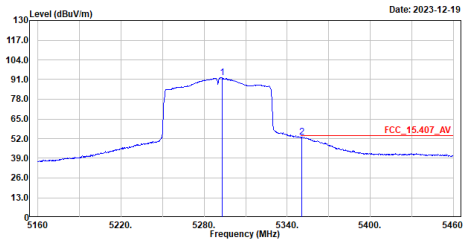
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_ac80_5290MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5288.400	95.39	------	------	79.51	15.88	Peak
2	5357.700	60.67	74.00	-13.33	44.97	15.70	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

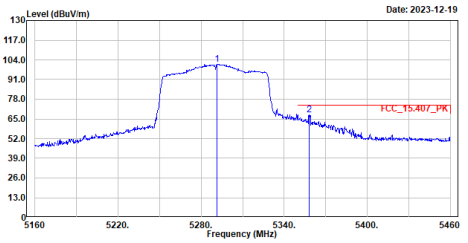
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_ac80_5290MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5292.900	92.06	------	------	76.14	15.92	Average
2	5350.800	53.09	54.00	-0.91	37.45	15.64	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

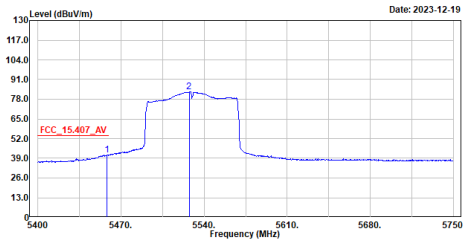
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_ac80_5290MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5291.700	101.06	------	------	85.16	15.90	Peak
2	5358.000	67.68	74.00	-6.32	51.98	15.70	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

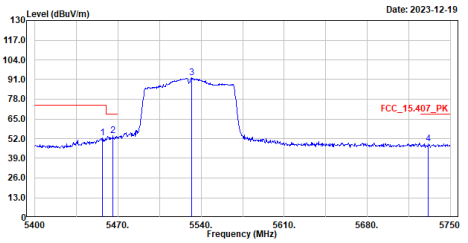
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5458.100	41.32	54.00	-12.68	25.15	16.17	Average
2	5527.400	83.03	------	------	66.52	16.51	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

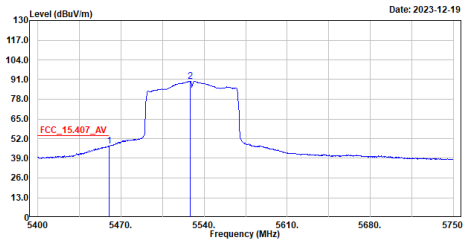
Site :HY-CB02
Condition :3m ,Horizontal
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Factor dB/m	Remark
1	5457.050	52.56	74.00	-21.44	36.39	16.17	Peak
2	5465.800	54.00	68.22	-14.22	37.82	16.18	Peak
3	5531.950	91.98	------	------	75.42	16.56	Peak
4	5731.450	48.71	68.22	-19.51	31.01	17.70	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

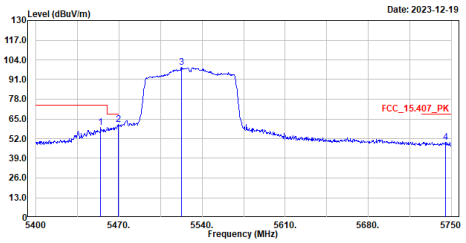
Site :HY-CB02
Condition :3m ,Vertical
mode :TX_ac80_5530MHz
Test by :Rock



No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5459.850	46.91	54.00	-7.09	30.74	16.17	Average
2	5528.450	89.97	------	------	73.45	16.52	Average

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

Site :HY-CB02
Condition :3m ,Vertical
mode :TX_ac80_5530MHz
Test by :Rock

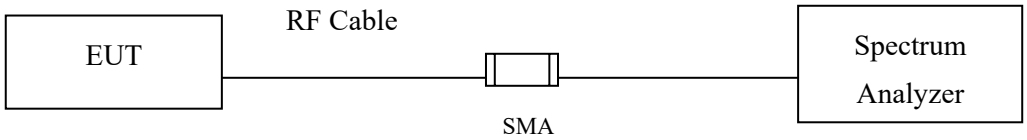


No.	Frequency	Level	Limit Line	Over Limit	Read Level	Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	
1	5454.600	59.20	74.00	-14.80	43.03	16.17	Peak
2	5469.650	61.51	68.22	-6.71	45.33	16.18	Peak
3	5522.500	98.91	------	------	82.45	16.46	Peak
4	5745.100	49.77	68.22	-18.45	31.96	17.81	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor
3. Over Limit = Level - Limit Line
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7. Duty Cycle

7.1. Test Setup



7.2. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to U-NII test procedure of KDB789033 for compliance to FCC 47CFR 15.407 requirements.

7.3. Test Result of Duty Cycle

Product : Handy Skin Sensor 3
Test Item : Duty Cycle
Test Mode : Transmit

Duty Cycle Formula:

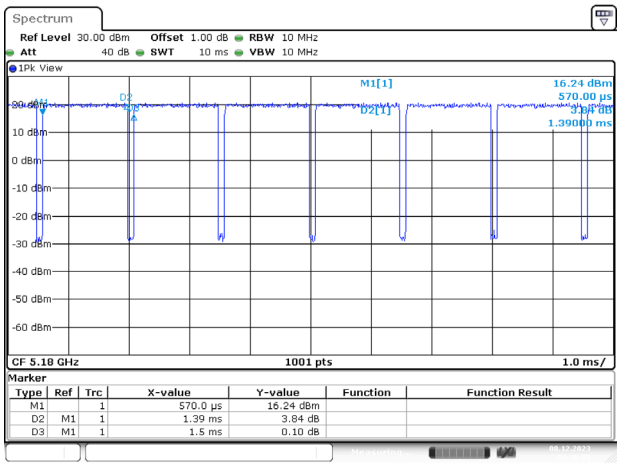
Duty Cycle = Ton / (Ton + Toff)

Duty Factor = 10 Log (1/Duty Cycle)

Results:

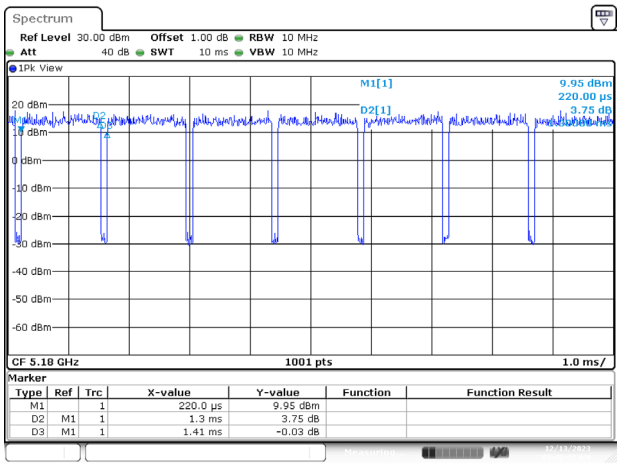
5 GHz band	Ton (ms)	Ton + Toff (ms)	Duty Cycle (%)	Duty Factor (dB)
802.11a	1.3900	1.5000	92.67	0.33
802.11n-20 MHz	1.3000	1.4100	92.20	0.35
802.11n-40 MHz	0.6400	0.6900	92.75	0.33
802.11ac-80 MHz	0.3100	0.4250	72.94	1.37

802.11a



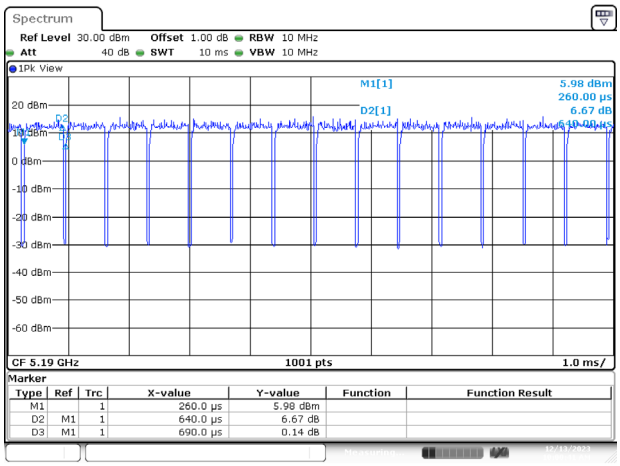
Date: 8.DEC.2023 02:36:08

802.11n-20 MHz



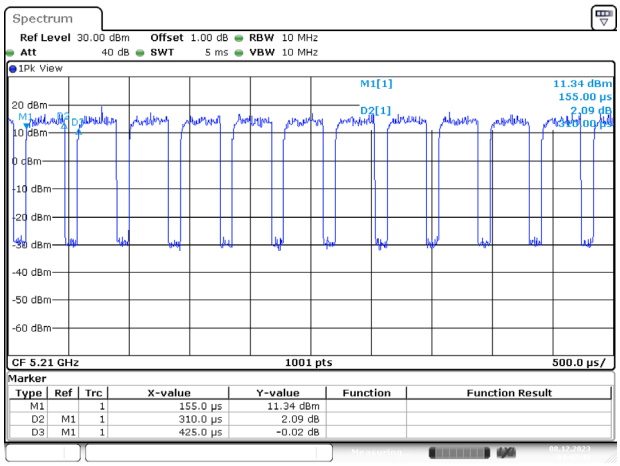
Date: 13.DEC.2023 09:42:42

802.11n-40 MHz



Date: 13.DEC.2023 10:00:41

802.11ac-80 MHz



Date: 8.DEC.2023 04:07:48