FCC RF Test Report

APPLICANT	:	Ring LLC
EQUIPMENT	:	Spotlight Cam Pro
BRAND NAME	:	Ring
MODEL NAME	:	5E62E9
FCC ID	:	2AEUPBHASP001
STANDARD	:	FCC Part 15 Subpart C §15.247
CLASSIFICATION	:	(DTS) Digital Transmission System
TEST DATE(S)	:	Jul. 07, 2022 ~ Jul. 23, 2022

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR1D0812-01B	Rev. 01	Initial issue of report	Oct. 12, 2022

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(b)	Power Output Measurement	≤ 30dBm	Pass	-
3.2	15.247(d)	Conducted Band Edges	≤ 20dBc	Pass	-
		Conducted Spurious Emission		Pass	-
3.3	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 4.44 dB at 2389.95 MHz
3.4	15.203 & 15.247(b)	Antenna Requirement	15.203 & 15.247(b)	Pass	-

Note:

This is a variant report for 5E62E9. The change note could be referred to 5E62E9_Operational Description of Product Equality Declaration which is exhibit separately. Based on the similarity between current and previous project, only the related test cases of Conducted Power/Band Edge/RSE from original test report (Sporton Report Number FR1D0812B) were verified for the difference.

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Applicant

Ring LLC
12515 Cerise Ave, Hawthorne, CA 90250 USA

1.2 Manufacturer

Goertek Inc.
No.268 Dongfang Road High-Tech Industrial Development District, Weifang Shandong, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Spotlight Cam Pro
Brand Name	Ring
Model Name	5E62E9
FCC ID	2AEUPBHASP001
HW Version	DVT2
SW Version	1.5.17
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	2412 MHz ~ 2462 MHz
Maximum (Peak) Output Power to antenna	802.11b : 20.46 dBm (0.1112 W) 802.11g : 23.34 dBm (0.2158 W) 802.11n HT20 : 23.34 dBm (0.2158 W)
Antenna Type / Gain	Stamping antenna with gain 1.36 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-KS TH01-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-KS	AUDIX	E3	6.2009-8-24a

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart C §15.247
- FCC KDB 558074 D01 15.247 Meas Guidance v05r02
- ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

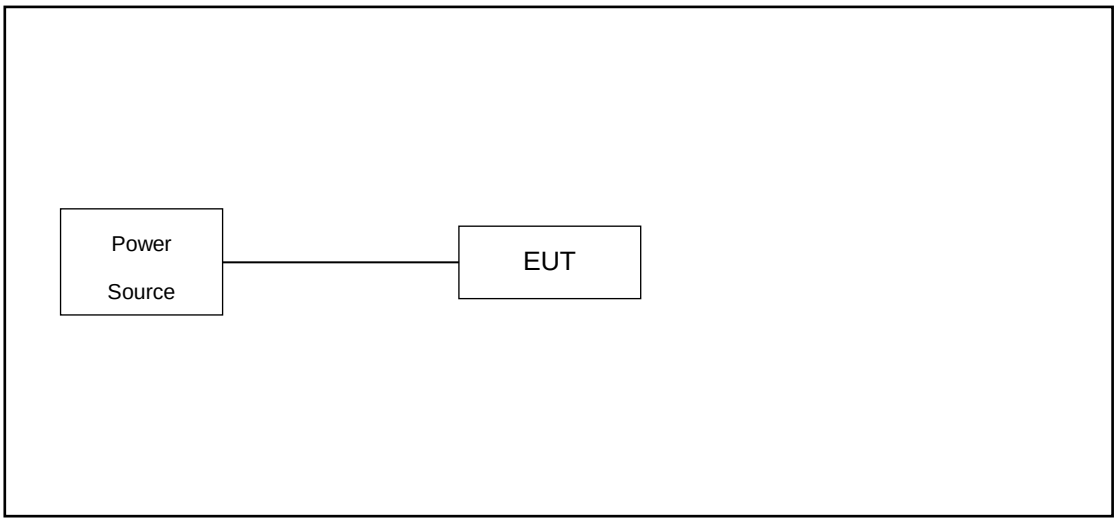
2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

Modulation	Data Rate
802.11n HT20	**MCS0**

2.3 Connection Diagram of Test System

For Radiated Emission:



2.4 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuous transmit.

2.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 5.6 dB

Offset(dB) = RF cable loss(dB).

=5.6 (dB)

3 Test Result

3.1 Output Power Measurement

3.1.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

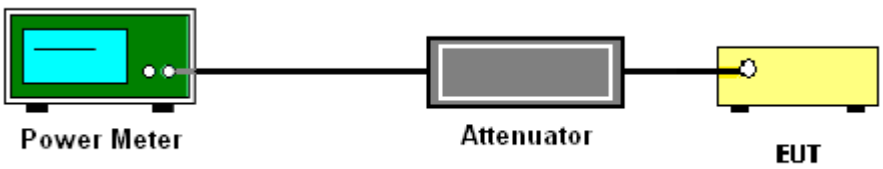
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows the Measurement Procedure of ANSI C63.10-2013 clause 11.9.1.3 PKPM1 Peak power meter or ANSI C63.10-2013 clause 11.9.2.3.1 Method AVGPM method.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of Peak Output Power

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)	Conducted Power Limit (dBm)	DG (dBi)	EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
11b	1Mbps	1	1	2412	20.46	30.00	1.36	21.82	36.00	Pass
11g	6Mbps	1	6	2437	23.34	30.00	1.36	24.70	36.00	Pass
HT20	MCS0	1	6	2437	23.34	30.00	1.36	24.70	36.00	Pass

3.1.6 Test Result of Average Output Power (Reporting Only)

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)
11b	1Mbps	1	1	2412	0.00	18.43
11g	6Mbps	1	6	2437	0.12	18.06
HT20	MCS0	1	6	2437	0.11	17.54

3.2 Conducted Band Edges and Spurious Emission Measurement

3.2.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB relative to the maximum PSD level in 100 kHz by RF conducted measurement.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 11.13
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used.
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

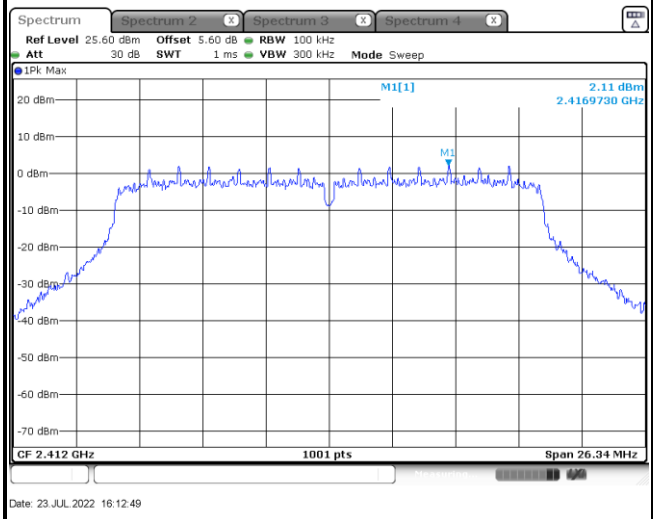
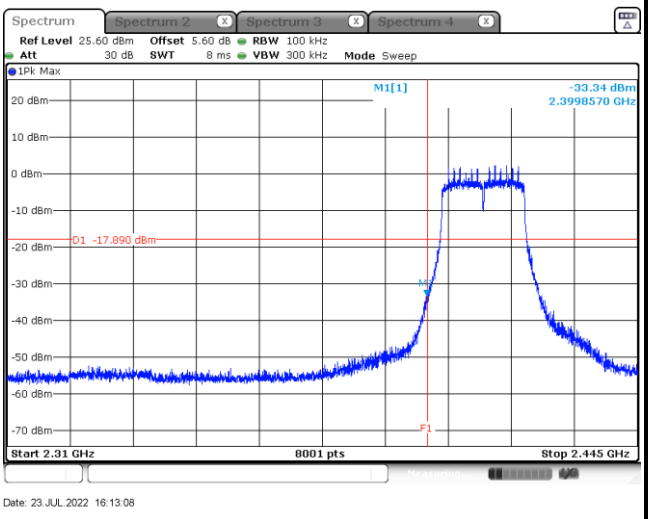
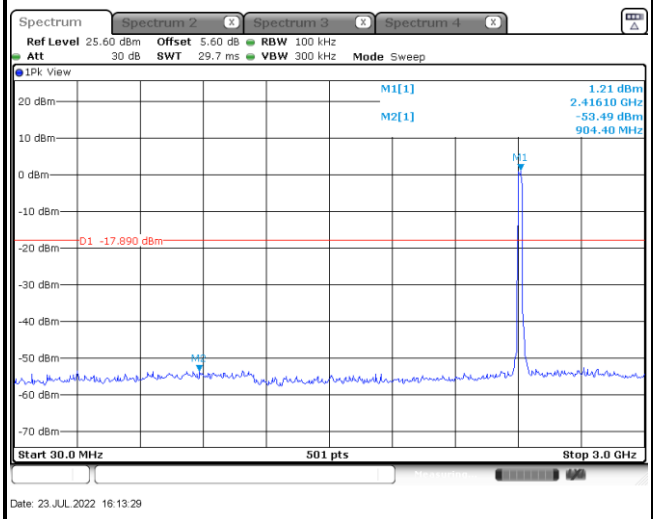
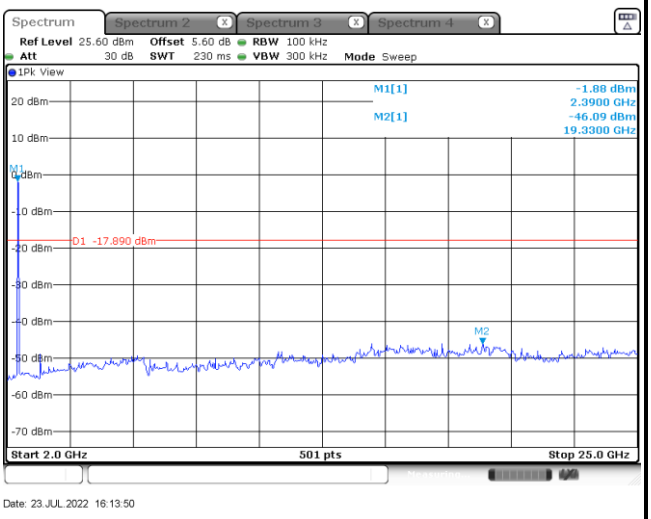
3.2.4 Test Setup

3.2.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Kib Shi	**Temperature :**	21~25℃
		Relative Humidity :	51~54%

Number of TX = 1, Ant. 1 (Measured)

Test Mode :	802.11g	**Test Channel :**	01

100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

3.3 Radiated Band Edges and Spurious Emission Measurement

3.3.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.3.2 Measuring Instruments

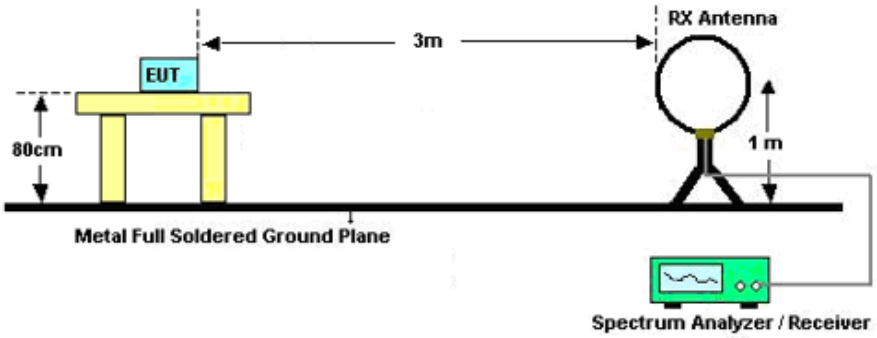
The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

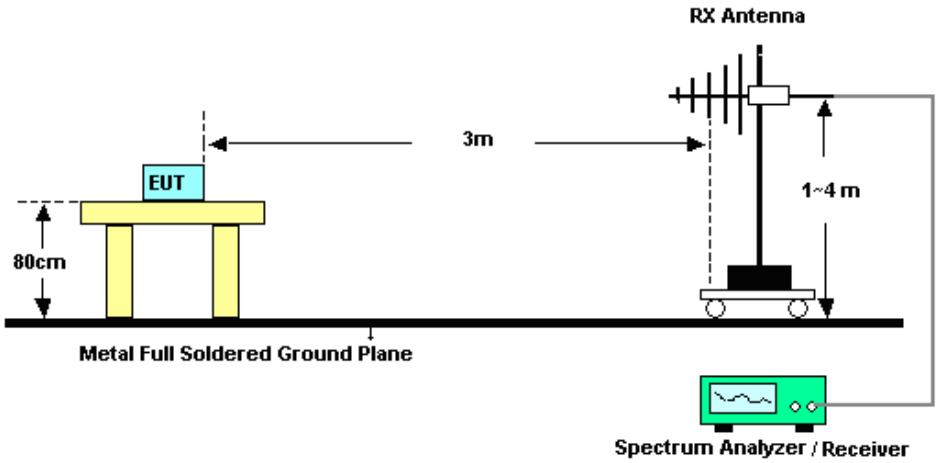
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is 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.

3.3.4 Test Setup

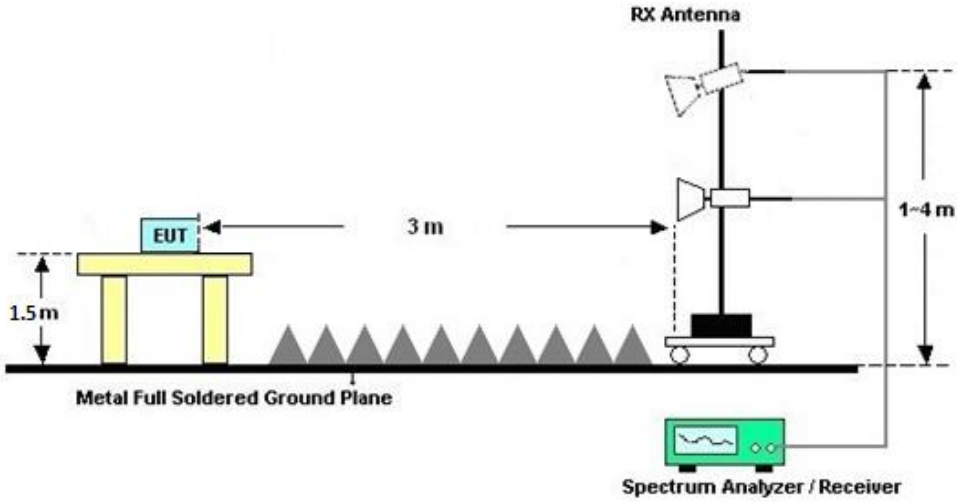
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.3.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.3.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A.

3.3.7 Duty Cycle

Please refer to Appendix B.

3.3.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix A.

3.4 Antenna Requirements

3.4.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 14, 2021	Jul. 23, 2022	Oct. 13, 2022	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 05, 2021	Jul. 23, 2022	Jan. 04, 2023	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 05, 2021	Jul. 23, 2022	Jan. 04, 2023	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400023	3Hz~8.5GHz;Max 30dBm	Oct. 14, 2021	Jul. 07, 2022	Oct. 13, 2022	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44GHz	Oct. 14, 2021	Jul. 07, 2022	Oct. 13, 2022	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 23, 2021	Jul. 07, 2022	Oct. 22, 2022	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz-1GHz	Dec. 22, 2021	Jul. 07, 2022	Dec. 21, 2022	Radiation (03CH03-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75959	1GHz~18GHz	Dec. 24, 2021	Jul. 07, 2022	Dec. 23, 2022	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101115	18GHz~40GHz	Dec. 23, 2021	Jul. 07, 2022	Dec. 22, 2022	Radiation (03CH03-KS)
Amplifier	Burgeon	BPA-530	102220	30MHz ~1000MHz	Oct. 14, 2021	Jul. 07, 2022	Oct. 13, 2022	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2082394	1Ghz-18Ghz	Jan. 05, 2022	Jul. 07, 2022	Jan. 04, 2023	Radiation (03CH03-KS)
Amplifier	Keysight	83017A	MY53270319	1GHz~26.5GHz	Oct. 14, 2021	Jul. 07, 2022	Oct. 13, 2022	Radiation (03CH03-KS)
Amplifier	EM	EM18G40GA	060851	18~40GHz	Jan. 05, 2022	Jul. 07, 2022	Jan. 04, 2023	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 07, 2022	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 07, 2022	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 07, 2022	NCR	Radiation (03CH03-KS)

NCR: No Calibration Required.

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±0.56 dB
Conducted Emissions	±0.92 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB

---------- THE END ----------

Appendix A. Radiated Spurious Emission

Radiated Spurious Emission Test Modes

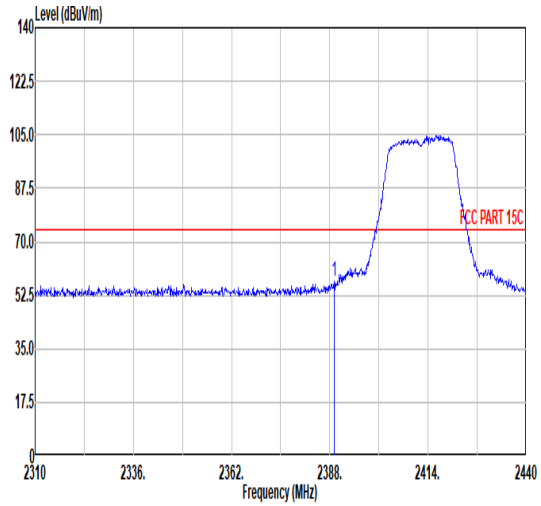
Mode	Band (MHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	SISO	802.11n HT20	01	2412	MCS0	-	-

Summary of each worse mode

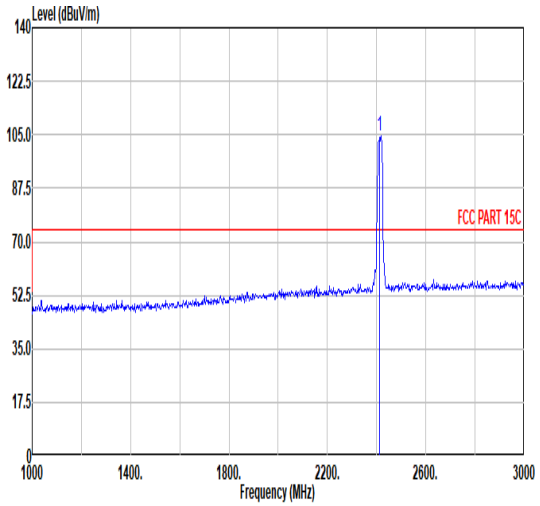
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
1	802.11n HT20	01	2389.95	49.56	54.00	-4.44	H	AVERAGE	Pass	Band Edge

Mode	1	
	Band Edge	
	2400-2483.5_802.11n HT20_CH01_2412MHz	
ANT	SISO	
Pol.	Horizontal	Fundamental

Peak

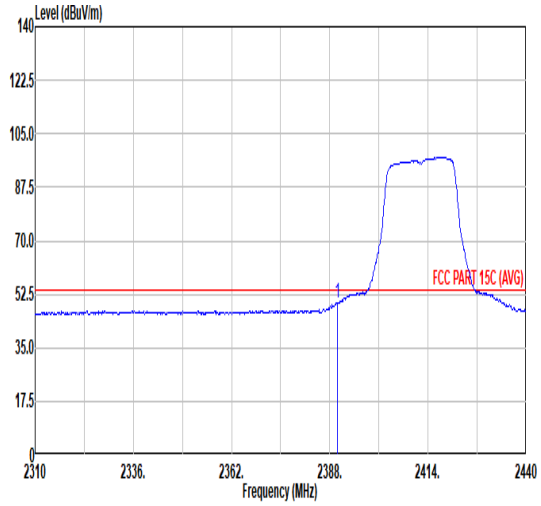


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2389.17	56.96	74.00	-17.04	44.68	31.97	7.16	32.85	6.00	185	193	PEAK

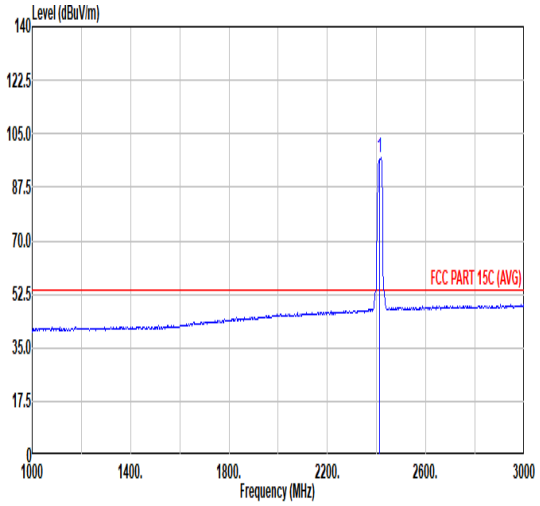


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2412.00	104.37	74.00	30.37	91.96	32.03	7.21	32.83	6.00	185	193	PEAK

Avg



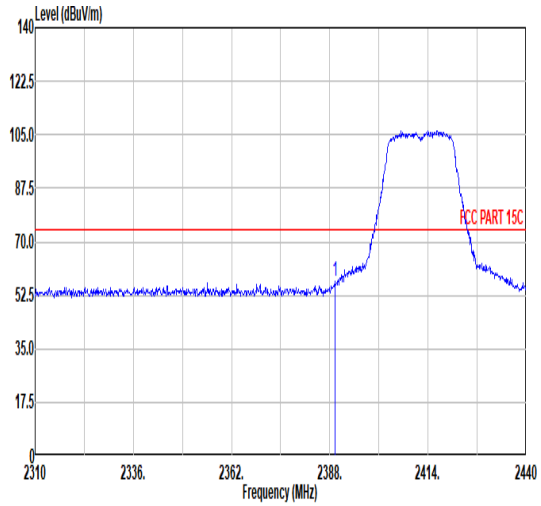
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2389.95	49.56	54.00	-4.44	37.28	31.97	7.16	32.85	6.00	185	193	AVERAGE



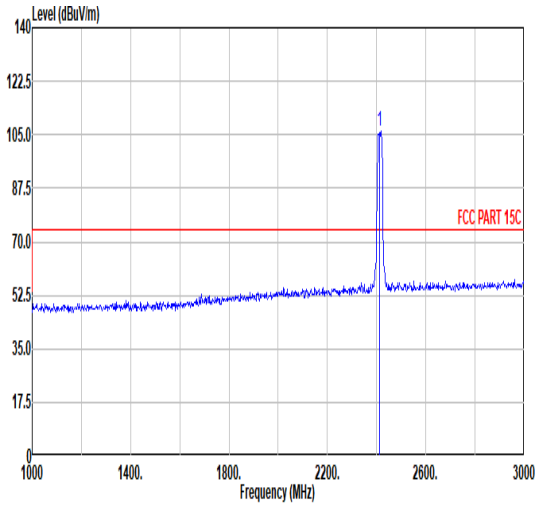
	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2412.00	97.33	54.00	43.33	84.92	32.03	7.21	32.83	6.00	185	193	AVERAGE

Mode	1	
	Band Edge	
	2400-2483.5_802.11n HT20_CH01_2412MHz	
ANT	SISO	
Pol.	Vertical	Fundamental

Peak

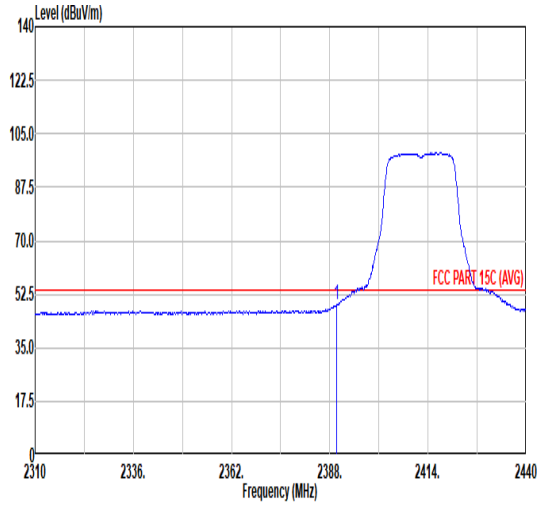


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2389.30	57.00	74.00	-17.00	44.72	31.97	7.16	32.85	6.00	301	144	PEAK

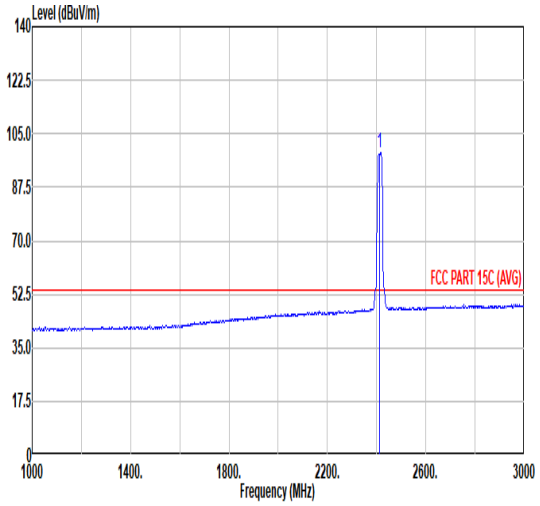


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2412.00	106.03	74.00	32.03	93.62	32.03	7.21	32.83	6.00	301	144	PEAK

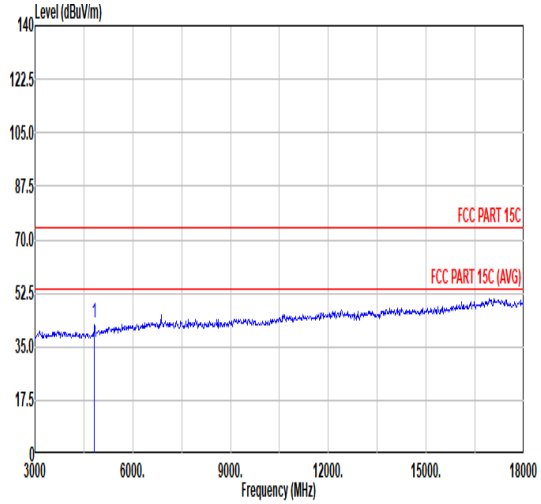
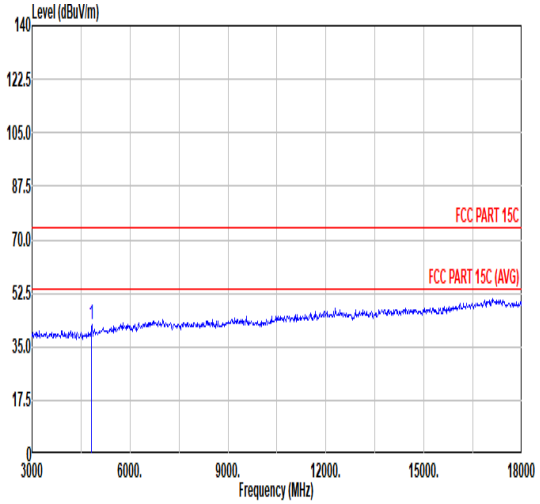
Avg



	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2389.82	49.16	54.00	-4.84	36.88	31.97	7.16	32.85	6.00	301	144	AVERAGE

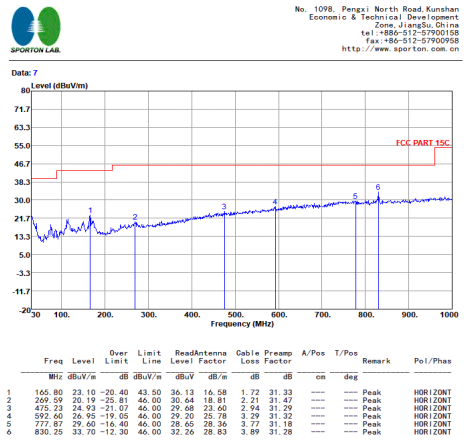
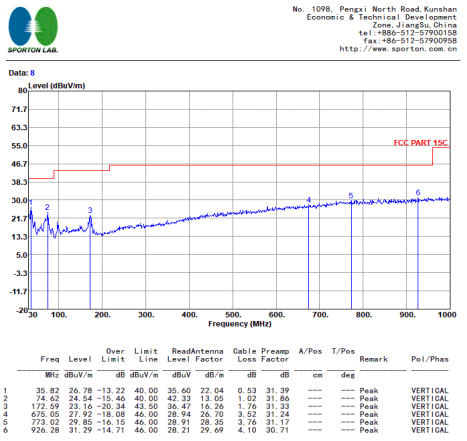


	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	2412.00	98.71	54.00	44.71	86.31	32.02	7.21	32.83	6.00	301	144	AVERAGE

Mode	1	
	Harmonic	
	2400-2483.5_802.11n HT20_CH01_2412MHz	
ANT	SISO	
Pol.	Horizontal	Vertical
Peak		

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4824.00	42.72	74.00	-31.28	63.77	34.09	10.29	65.43	0.00	100	216	PEAK

	Freq	Level	Limit Line	Margin	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	4824.00	42.09	74.00	-31.91	63.14	34.09	10.29	65.43	0.00	100	78	PEAK

Mode	1	
	LF	
	2400-2483.5_802.11n HT20_CH01_2412MHz	
ANT	SISO	
Pol.	Horizontal	Vertical
Peak QP		

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phas
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1	165.80	23.10	-20.40	43.50	36.13	16.58	1.72	31.33	---	---	Peak	HORIZONT
2	269.59	20.19	-25.81	46.00	30.64	18.81	2.21	31.47	---	---	Peak	HORIZONT
3	475.23	24.93	-21.07	46.00	29.68	23.60	2.94	31.29	---	---	Peak	HORIZONT
4	592.60	26.95	-19.05	46.00	29.20	25.78	3.29	31.32	---	---	Peak	HORIZONT
5	777.87	29.60	-16.40	46.00	28.65	28.36	3.77	31.18	---	---	Peak	HORIZONT
6	830.25	33.70	-12.30	46.00	32.26	28.83	3.89	31.28	---	---	Peak	HORIZONT

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phas
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		
1	35.82	26.78	-13.22	40.00	35.60	22.04	0.53	31.39	---	---	Peak	VERTICAL
2	74.62	24.54	-15.46	40.00	42.33	13.05	1.02	31.86	---	---	Peak	VERTICAL
3	172.59	23.16	-20.34	43.50	36.47	16.26	1.76	31.33	---	---	Peak	VERTICAL
4	675.05	27.92	-18.08	46.00	28.94	26.70	3.52	31.24	---	---	Peak	VERTICAL
5	773.02	29.85	-16.15	46.00	28.91	28.35	3.76	31.17	---	---	Peak	VERTICAL
6	926.28	31.29	-14.71	46.00	28.21	29.69	4.10	30.71	---	---	Peak	VERTICAL

Appendix B. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11n HT20	97.39	1.891	0.529	0.56kHz

802.11n HT20