TEST REPORT

Verified Code: 054594

Report No.:	E20210426746801-5	**Application No.:**	E20210426746801
Client:	Lumi United Technology Co., Ltd.		
Address:	8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen.China		
Sample Description:	Camera Hub G3		
Model:	CH-H03		
Test Specification:	ETSI EN 300 440 V2.2.1 (2018-07) Short Range Devices (SRD); Radio equipment to be used inthe 1 GHz to 40 GHz frequency range; Harmonised Standard for access to radio spectrum		
ReceiptDate:	2021-06-09		
TestDate:	2021-08-02 to 2021-08-19		
Issue Date:	2021-08-23		
Test Result:	Pass		

Prepared By:	**Reviewed By:**	**Approved By:**
Test Engineer	Technical Manager	Manager
Yu Shanshan.	Wu Haoting	

Other Aspects:

Note:/

Abbreviations: *ok / P = passed; fail / F = failed; n.a. / N = not applicable;*

The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.

DIRECTIONS OF TEST

1. **This station carries out test task according to the national regulation of verifications which can be traced to National Primary Standards and BIPM.**

2. **The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.**

3. **If there is any objection concerning the test, the client should inform the laboratory within 15 days from the date of receiving the test report.**

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1. TEST RESULT SUMMARY

Transmitter Part				
Standard	Item	Standard Clause	Limit	Result
ETSI EN 300 440 V2.2.1 (2018-07)	Equivalent isotropically radiated power (e.i.r.p.)	4.2.2	25 mW e.i.r.p.	PASS
	Permitted range of operating frequencies	4.2.3	5 725 MHz to 5 875 MHz	PASS
	Unwanted emissions in the spurious domain	4.2.4	EN 300 440 Table 3	PASS
	Duty cycle	4.2.5	EN 300 440 Table 4	PASS

Receiver Part				
Standard	Item	Standard Clause	Limit	Result
ETSI EN 300 440 V2.2.1 (2018-07)	Blocking or desensitization	4.3.4	EN 300 440 Table 6	PASS
	Spurious radiations for RX	4.3.5	4.3.5.4	PASS

2. GENERAL DESCRIPTION OF EUT

2.1 APPLICANT

Name:	Lumi United Technology Co., Ltd.
Address:	8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen.China

2.2 MANUFACTURER

Name:	Lumi United Technology Co., Ltd.
Address:	8th Floor, JinQi Wisdom Valley, No.1 Tangling Road, Liuxian Ave, Taoyuan Residential District, Nanshan District, Shenzhen.China

2.3 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment:	Camera Hub G3
Model:	CH-H03
Adding Model:	/
Trade Name:	Aqara
Power Supply:	Adapter 1-EU Plug Model:A70-050200U-EU1 Input:100-240V~ 50/60Hz 0.35A Output:5.0V⎓ 2.0A 10.0W Adapter 2-UK Plug Model:A812-050200U-UK1 Input:100-240V~ 50/60Hz 0.35A Output:5.0V⎓ 2.0A 10.0W
Frequency Range:	5745MHz~5825MHz
Modulation type:	OFDM
Channel space:	20MHzfor 802.11a/n HT20/ac VHT20 mode 40MHz for 802.11n HT40/ac VHT40 mode 80MHz for 802.11ac VHT80 mode
Antenna Specification:	Internal antenna with 2dBi gain (Max)
Temperature Range:	-10~40℃
Hardware Version:	A20-GHC01-MIAN-X4
Software Version:	3.2.8_0003.0004
Sample No:	E20210426746801-0004, E20210426746801-0008
Note:	/

2.4 TEST OPERATION MODES

Mode No.	Description of the modes
1	5G Wi-Fi fixed frequency transmitting
2	5G Wi-Fi receiving
3	5G Wi-Fi work as normally

2.5 LOCAL SUPPORTIVE

Name of Equipment	Manufacturer	Model	Serial Number	Note
Notebook	LENOVO	TianYi 310-14ISK	MP18DLC6	/
/	/	/	/	/

Note :The notebook is just used to produce fixed frequency transmitting.

Test software:

Software version	Test level
QCOM_V1.0	802.11a Mode 5745MHz:54 5785MHz: 54 5825MHz: 54 802.11n20 Mode 5745MHz:54 5785MHz: 54 5825MHz: 54 802.11n40 Mode 5755 MHz:54 5795 MHz: 54 802.11AC20 5745MHz: 54 5785MHz: 54 5825MHz: 54 802.11AC40 5755 MHz: 54 5795 MHz: 54 802.11AC80 5775MHz: 54

3. LABORATORY AND ACCREDITATIONS

3.1 LABORATORY

The tests & measurements refer to this report were performed byShenzhenEMC Laboratory of Guangzhou GRG Metrology & Test Co,. Ltd.

Add	:	Address: No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District Shenzhen, 518110, People's Republic of China
P.C.	:	518000
Tel	:	0755-61180008
Fax	:	0755-61180008

3.2 ACCREDITATIONS

Our laboratoriesare accredited and approved by the following approval agencies according to GB/T 27025(ISO/IEC 17025:2017)

USA	A2LA(Certificate#:2861.01)
China	CNAS(L0446)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	Industry Canada
USA	FCC

Copies of granted accreditation certificates are available for downloading from our web site, http://www.grgtest.com

3.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Uncertainty
RF frequency	6.0×10^{-6}
RF power conducted	0.78 dB
Occupied channel bandwidth	0.4 dB
Unwanted emission, conducted	0.68 dB
Humidity	6 %
Temperature	2℃

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	30MHz～1000MHz	4.3dB
		1GHz～12.75GHz	5.6dB
	Vertical	30MHz～1000MHz	4.3dB
		1GHz～12.75GHz	5.6dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of *k*=2.

3.4 LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Equivalent isotropically radiated power				
Simultaneous sampling	Tonscend	JS0806-2	186060020	2021-10-08
Spectrum Analyzer	Agilent	N9020A	MY50510140	2021-12-15
Temperature& humidity chamber	HOSON	HS01060SDF	1910008401	2021-10-15
BT/Wi-Fi System	tonscend	Js1120-2		
Duty cycle				
Spectrum Analyzer	Agilent	N9020A	MY50510140	2021-12-15
Permitted range of operating frequencies				
Spectrum Analyzer	Agilent	N9020A	MY50510140	2021-12-15
Blocking or desensitization				
Spectrum Analyzer	Agilent	N9020A	MY50510140	2021-12-15
Vector Signal Generator	Agilent	N5182A	MY50142870	2021-10-08
Wideband radio Communication Tester	R&S	CMW500	144611-nC	2022-06-11
Test SW	tonscend	Js1120-3		
Unwanted emissions in the spurious domain &Spurious Emissions for RX				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2022-04-16
Bilog Antenna	Schwarzbeck	VULB9163	01279	2022-02-25
Horn Antenna	Schwarzbeck	BBHA9120D	02143	2021-12-17
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170-497	2021-11-05
Amplifier	tonscend	TAP9E6343	AP20E806065	2022-06-03
Amplifier	tonscend	TAP01018048	AP20E8060075	2022-05-09
Amplifier	tonscend	TAP184050	AP20E806071	2022-05-17
Test SW	tonscend	JS36-RSE/2.5.1.5		

4. TRANSMITTER REQUIREMENTS

4.1 EQUIVALENT ISOTROPICALLY RADIATED POWER

4.1.1. LIMITS

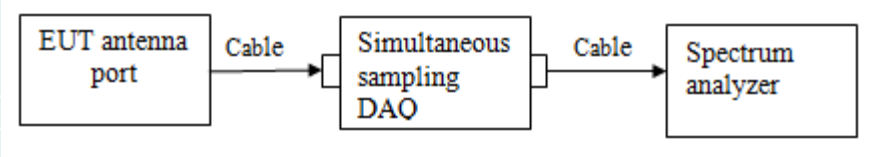
Table 2: Maximum radiated peak power (e.i.r.p.)

Entry	Frequency Bands	Power	Application	Notes
1	2 400 MHz to 2 483,5 MHz	10 mW e.i.r.p.	Non-specific short range devices	
2	2 400 MHz to 2 483,5 MHz	25 mW e.i.r.p.	Radiodetermination devices	
3	(a) 2 446 MHz to 2 454 MHz	500 mW e.i.r.p.	Radio Frequency Identification (RFID) devices	See also table 4 and Annex G
4	(b) 2 446 MHz to 2 454 MHz	4 W e.i.r.p.	Radio Frequency Identification (RFID) devices	See also table 4 and Annex G
5	5 725 MHz to 5 875 MHz	25 mW e.i.r.p.	Non-specific short range devices	
6	9 200 MHz to 9 500 MHz	25 mW e.i.r.p.	Radiodetermination devices	
7	9 500 MHz to 9 975 MHz	25 mW e.i.r.p.	Radiodetermination devices	
8	10,5 GHz to 10,6 GHz	500 mW e.i.r.p.	Radiodetermination devices	
9	13,4 GHz to 14,0 GHz	25 mW e.i.r.p.	Radiodetermination devices	
10	17,1 GHz to 17,3 GHz	400 mW e.i.r.p.	Radiodetermination devices	See Annex H
11	24,00 GHz to 24,25 GHz	100 mW e.i.r.p.	Non-specific short range devices and radiodetermination devices	
NOTE:	The spectrum ranges in some entries are not harmonised throughout all EU territory, specifically entries 4, 9, and 11 have been identified as such. Implementers are cautioned to refer to CEPT/ERC Recommendation 70-03 [i.2] as well as current National Radio plans to verify acceptance within intended regions of use.			

4.1.2. TEST PROCEDURE

Test requirement:	EN 300 440 clause 4.2.2.1
Test Method:	EN 300 440 clause 4.2.2.3
Status:	Keep EUT on transmitting mode by the software provided by manufacturer. Pretest the EUT at different transmission rate and report show the worst case data.
Test channel:	802.11a/n HT20/ac VHT20 mode :5745 MHz, 5785 MHz ,5825 MHz 802.11n HT40/ac VHT40 mode:5755 MHz, 5795 MHz 802.11ac VHT80 mode:5775MHz
Test condition:	These measurements shall be performed under both normal test conditions.
Equipment Used:	Refer to section 5.2

4.1.3. TEST SETUP



4.1.4. TEST RESULTS

Test Date (yy-mm-dd):	2021-08-02	
Test environment:	Normal condition:	Temp: 23.5 Humid:48%
Extreme test conditions:	Minimum Temp:	-10℃
	Maximum Temp:	40℃

Type: 802.11a

Test content		Max. e.i.r.p. Limit(dBm)	Test Data (dBm)			Conclusion
			Conducted Power (dBm)	Gain (dBi)	e.i.r.p. (dBm)	
(1). Measurement Temperature: Minimum						
Test Frequency	5745MHz	14	9.77	2	11.77	PASS
	5785MHz	14	9.75	2	11.75	PASS
	5825MHz	14	9.65	2	11.65	PASS
(2). Measurement Temperature: Normal						
Test Frequency	5745MHz	14	9.69	2	11.69	PASS
	5785MHz	14	9.57	2	11.57	PASS
	5825MHz	14	9.45	2	11.45	PASS
(3). Measurement Temperature: Maximum						
Test Frequency	5745MHz	14	9.61	2	11.61	PASS
	5785MHz	14	9.58	2	11.58	PASS
	5825MHz	14	9.44	2	11.44	PASS

Type: 802.11n HT20

Test content		Max. e.i.r.p. Limit(dBm)	Test Data (dBm)			Conclusion
			Conducted Power (dBm)	Gain (dBi)	Total e.i.r.p. (dBm)	
(1). Measurement Temperature: Minimum						
Test Frequency	5745MHz	14	9.13	2	11.13	PASS
	5785MHz	14	9.14	2	11.14	PASS
	5825MHz	14	9.33	2	11.33	PASS
(2). Measurement Temperature: Normal						
Test Frequency	5745MHz	14	9.03	2	11.03	PASS
	5785MHz	14	9.17	2	11.17	PASS
	5825MHz	14	9.24	2	11.24	PASS
(3). Measurement Temperature: Maximum						
Test Frequency	5745MHz	14	9.08	2	11.08	PASS
	5785MHz	14	9.17	2	11.17	PASS
	5825MHz	14	8.95	2	10.95	PASS

Type: 802.11n HT40

Test content		Max. e.i.r.p. Limit(dBm)	Test Data (dBm)			Conclusion
			Conducted Power (dBm)	Gain (dBi)	Total e.i.r.p. (dBm)	
(1). Measurement Temperature: Minimum						
Test Frequency	5755MHz	14	8.79	2	10.79	PASS
	5795MHz	14	9.17	2	11.17	PASS
(2). Measurement Temperature: Normal						
Test Frequency	5755MHz	14	8.89	2	10.89	PASS
	5795MHz	14	9.11	2	11.11	PASS
(3). Measurement Temperature: Maximum						
Test Frequency	5755MHz	14	8.95	2	10.95	PASS
	5795MHz	14	9.10	2	11.10	PASS

Type: 802.11ac VHT20

Test content		Max. e.i.r.p. Limit(dBm)	Test Data (dBm)			Conclusion
			Conducted Power (dBm)	Gain (dBi)	Total e.i.r.p. (dBm)	
(1). Measurement Temperature: Minimum						
Test Frequency	5745MHz	14	9.05	2	11.05	PASS
	5785MHz	14	9.15	2	11.15	PASS
	5825MHz	14	9.26	2	11.26	PASS
(2). Measurement Temperature: Normal						
Test Frequency	5745MHz	14	8.99	2	10.99	PASS
	5785MHz	14	9.07	2	11.07	PASS
	5825MHz	14	9.21	2	11.21	PASS
(3). Measurement Temperature: Maximum						
Test Frequency	5745MHz	14	8.95	2	10.95	PASS
	5785MHz	14	9.09	2	11.09	PASS
	5825MHz	14	9.14	2	11.14	PASS

Type: 802.11ac VHT40

Test content		Max. e.i.r.p. Limit(dBm)	Test Data (dBm)			Conclusion
			Conducted Power (dBm)	Gain (dBi)	Total e.i.r.p. (dBm)	
(1). Measurement Temperature: Minimum						
Test Frequency	5755MHz	14	9.03	2	11.03	PASS
	5795MHz	14	9.11	2	11.11	PASS
(2). Measurement Temperature: Normal						
Test Frequency	5755MHz	14	8.90	2	10.90	PASS
	5795MHz	14	9.07	2	11.07	PASS
(3). Measurement Temperature: Maximum						
Test Frequency	5755MHz	14	8.92	2	10.92	PASS
	5795MHz	14	9.02	2	11.02	PASS

Type: 802.11ac VHT80

Test content		Max. e.i.r.p. Limit(dBm)	Test Data (dBm)			Conclusion
			Conducted Power (dBm)	Gain (dBi)	Total e.i.r.p. (dBm)	
(1). Measurement Temperature: Minimum						
Test Frequency	5775MHz	14	8.68	2	10.68	PASS
(2). Measurement Temperature: Normal						
Test Frequency	5775MHz	14	8.59	2	10.59	PASS
(3). Measurement Temperature: Maximum						
Test Frequency	5775MHz	14	8.52	2	10.52	PASS

4.2 PERMITTED RANGE OF OPERATING FREQUENCIES

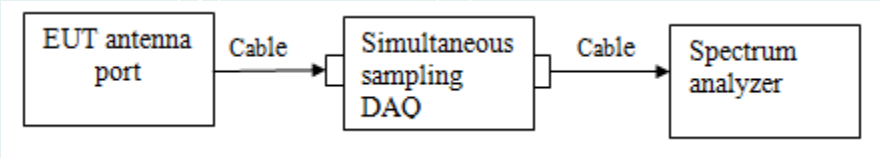
4.2.1. LIMITS

EN300 440 clause 4.2.3.5
fL > 5725MHz and fH < 5875MHz

4.2.2. TEST PROCEDURE

Test requirement:	EN 300 440 clause 4.2.3
Test Method:	EN 300 440 clause 4.2.3.3
Status:	Keep EUT on transmitting mode by the software provided by manufacturer. Pretest the EUT at different transmission rate and report show the worst case data.
Test channel:	802.11a/n HT20/ac VHT20 mode :5745 MHz,5825 MHz 802.11n HT40/ac VHT40 mode:5755 MHz, 5795 MHz 802.11ac VHT80 mode:5775MHz
Test condition:	These measurements shall be performed under both normal test conditions.
Equipment Used:	Refer to section 5.2

4.2.3. TEST SETUP



4.2.4. TEST RESULTS

Test Date (yy-mm-dd):	2021-08-02	
Test environment:	Normal condition:	Temp: 23.5 Humid:48%
Extreme test conditions:	Minimum Temp:	-10℃
	Maximum Temp:	40℃

Type: 802.11a

Test Conditions						Fequency range (MHz)			
						f_L	5745MHz	f_H	5825MHz
T nom	(℃)	23.5	V nom	(V)	5.0	5735.8000		5834.6800	
T min	(℃)	-10	V max	(V)	5.5	5735.7400		5835.6400	
			V min	(V)	4.5	5735.7600		5835.5800	
T max	(℃)	40	V max	(V)	5.5	5735.6800		5835.4900	
			V min	(V)	4.5	5735.8200		5835.7200	
Min. fL / Max. fH Band Edges						5735.6800		5835.7200	
Limits						f_L > 5725 MHz		f_H < 5875 MHz	
Result						Complies			

Type: 802.11n HT20

Test Conditions						Fequency range (MHz)			
						f_L	5745MHz	f_H	5825MHz
T nom	(℃)	23.5	V nom	(V)	5.0	5735.5200		5834.9600	
T min	(℃)	-10	V max	(V)	5.5	5735.4200		5834.8360	
			V min	(V)	4.5	5735.4140		5834.9210	
T max	(℃)	40	V max	(V)	5.5	5735.4280		5834.8180	
			V min	(V)	4.5	5735.4250		5834.8380	
Min. fL / Max. fH Band Edges						5735.4140		5834.9600	
Limits						f_L > 5725 MHz		f_H < 5875 MHz	
Result						Complies			

Type: 802.11n HT40

Test Conditions						Fequency range (MHz)			
						f_L	5755MHz	f_H	5795MHz
T nom	(℃)	23.5	V nom	(V)	5.0	5736.3600		5813.8800	
T min	(℃)	-10	V max	(V)	5.5	5736.3250		5813.8560	
			V min	(V)	4.5	5736.3260		5813.7610	
T max	(℃)	40	V max	(V)	5.5	5736.3370		5813.6580	
			V min	(V)	4.5	5736.3210		5813.6630	
Min. fL / Max. fH Band Edges						5736.3210		5813.8800	
Limits						f_L > 5725 MHz		f_H < 5875 MHz	
Result						Complies			

Type: 802.11ac VHT20

Test Conditions						Fequency range (MHz)			
						f_L	5745MHz	f_H	5825MHz
T nom	(℃)	23.5	V nom	(V)	5.0	5735.6000		5834.8000	
T min	(℃)	-10	V max	(V)	5.5	5735.4250		5834.6560	
			V min	(V)	4.5	5735.5340		5834.7610	
T max	(℃)	40	V max	(V)	5.5	5735.4570		5834.7410	
			V min	(V)	4.5	5735.5510		5834.8580	
Min. fL / Max. fH Band Edges						5735.4250		5834.8580	
Limits						f_L ＞ 5725 MHz		f_H＜ 5875 MHz	
Result						Complies			

Type: 802.11ac VHT40

Test Conditions						Fequency range (MHz)			
						f_L	5755MHz	f_H	5795MHz
T nom	(℃)	23.5	V nom	(V)	5.0	5736.4400		5813.9600	
T min	(℃)	-10	V max	(V)	5.5	5736.3380		5813.8560	
			V min	(V)	4.5	5736.3280		5813.8610	
T max	(℃)	40	V max	(V)	5.5	5736.4370		5813.7560	
			V min	(V)	4.5	5736.5450		5813.8630	
Min. fL / Max. fH Band Edges						5736.3280		5813.9600	
Limits						f_L ＞ 5725 MHz		f_H＜ 5875 MHz	
Result						Complies			

Type: 802.11ac VHT80

Test Conditions						Fequency range (MHz)			
						f_L	5775MHz	f_H	5775MHz
T nom	(℃)	23.5	V nom	(V)	5.0	5736.6000		5813.5600	
T min	(℃)	-10	V max	(V)	5.5	5736.4250		5813.4280	
			V min	(V)	4.5	5736.5140		5813.4350	
T max	(℃)	40	V max	(V)	5.5	5736.5230		5813.5210	
			V min	(V)	4.5	5736.6240		5813.5380	
Min. fL / Max. fH Band Edges						5736.4250		5813.5600	
Limits						f_L ＞ 5725 MHz		f_H＜ 5875 MHz	
Result						Complies			

4.3 DUTY CYCLE

4.3.1. LIMITS

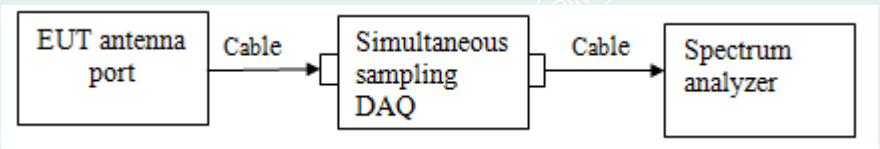
Table 4: Duty cycle limits

Frequency Band	Duty cycle	Application	Notes
2 400 MHz to 2 483,5 MHz	No Restriction	Generic use	
2 400 MHz to 2 483,5 MHz	No Restriction	Radiodetermination	
(a) 2 446 MHz to 2 454 MHz	No Restriction	RFID	Limits shown in Annex G shall apply
(b) 2 446 MHz to 2 454 MHz	≤ 15 %	RFID	Limits shown in Annex G shall apply
5 725 MHz to 5 875 MHz	No Restriction	Generic use	
9 200 MHz to 9 500 MHz	No Restriction	Radiodetermination	
9 500 MHz to 9 975 MHz	No Restriction	Radiodetermination	
10,5 GHz to 10,6 GHz	No Restriction	Radiodetermination	
13,4 GHz to 14,0 GHz	No Restriction	Radiodetermination	
17,1 GHz to 17,3 GHz	DAA or equivalent techniques	Radiodetermination, limited to GBSAR detecting and movement and alert applications	Limits shown in Annex I shall apply
24,00 GHz to 24,25 GHz	No Restriction	Generic use and for radiodetermination	
NOTE: The spectrum ranges in some entries are not harmonised throughout all EU territory, specifically entries 4, 9, and 11 have been identified as such. Implementers are cautioned to refer to CEPT/ERC Recommendation 70-03 [i.2] as well as current National Radio plans to verify acceptance within intended regions of use.			

4.3.2. TEST PROCEDURE

Test requirement:	EN 300 440 clause 4.2.5
Test Method:	EN 300 440 clause 4.2.5.3
Status:	Keep EUT on transmitting mode by the software provided by manufacturer. Pretest the EUT at different transmission rate and report show the worst case data.
Test channel:	802.11a/n HT20/ac VHT20 mode :5745 MHz, 5785 MHz ,5825 MHz 802.11n HT40/ac VHT40 mode:5755 MHz, 5795 MHz 802.11ac VHT80 mode:5775MHz
Test condition:	These measurements shall be performed under both normal test conditions.
Test equipment used:	Refer to section 5.2

4.3.3. TEST SETUP



4.3.4. TEST RESULTS

TestMode	Channel	Duty Cycle [%]
802.11a	5745	95.35
	5785	94.04
	5825	94.47
802.11n HT20	5745	93.17
	5785	95.02
	5825	94.09
802.11n HT40	5755	86.24
	5795	84.68
802.11ac VHT20	5745	92.87
	5785	92.31
	5825	91.87
802.11ac VHT40	5755	84.82
	5795	83.93
802.11ac VHT80	5775	76.70

4.4 UNWANTED EMISSIONS IN THE SPURIOUS DOMAIN

4.4.1. LIMITS

Transmitter limits for radiated spurious emissions						
Frequency ranges / State	47MHz to 74MHz 87.5MHz to 108MHz 174MHz to 230MHz 470MHz to 862MHz		Other frequencies ≤1000MHz		frequencies ＞1000MHz	
Operating	-54 dBm	4 nW	-36 dBm	250 nW	-30 dBm	1 uW
Standby	-57 dBm	2 nW	-57 dBm	2 nW	-47 dBm	20 nW

4.4.2. TEST PROCEDURE

Test channel: 802.11a/n HT20 mode :5745 MHz, 5825 MHz
802.11n HT40 mode:5755 MHz, 5795 MHz
802.11ac VHT80 mode:5775MHz

Test condition: Normal test conditions.

Test equipment used: Refer to section 5.2

Test procedure:

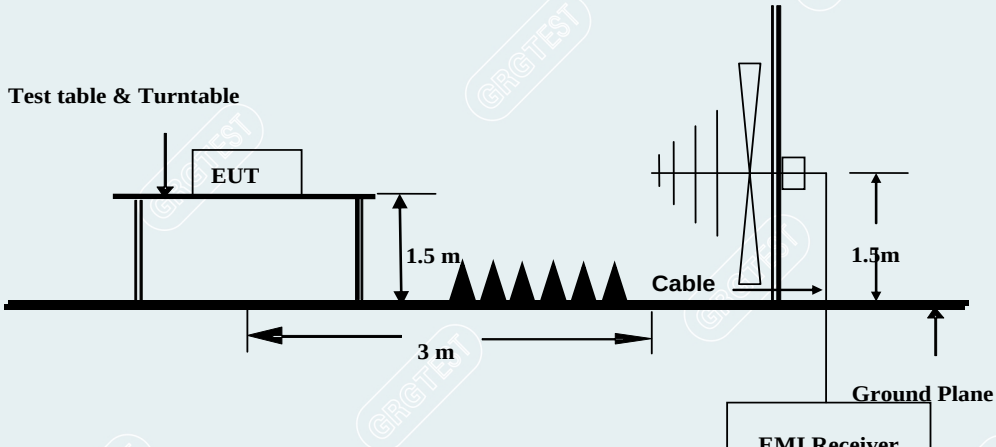
1. The EUT shall be performed at the highest power level at which the transmitter is intended to operate.and Interface cables, loads, and devices should be connected to at least one of each type of the interface ports of the EUT and, where practical, each cable shall be terminated in a device typical for its actual use. EUT shall be placed at the 1.5m support on the turntable.
2. The test antenna at a horizontal distance of 3 m .It shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360 °in the horizontal plane, until the maximum signal level is detected by the measuring receiver. In both the vertical and the horizontal polarization. Record the reading level, antenna position, polarization and turntable position.
3. Remove the transmitter and replace it with a substitution antenna.
4. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by a cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum

reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.

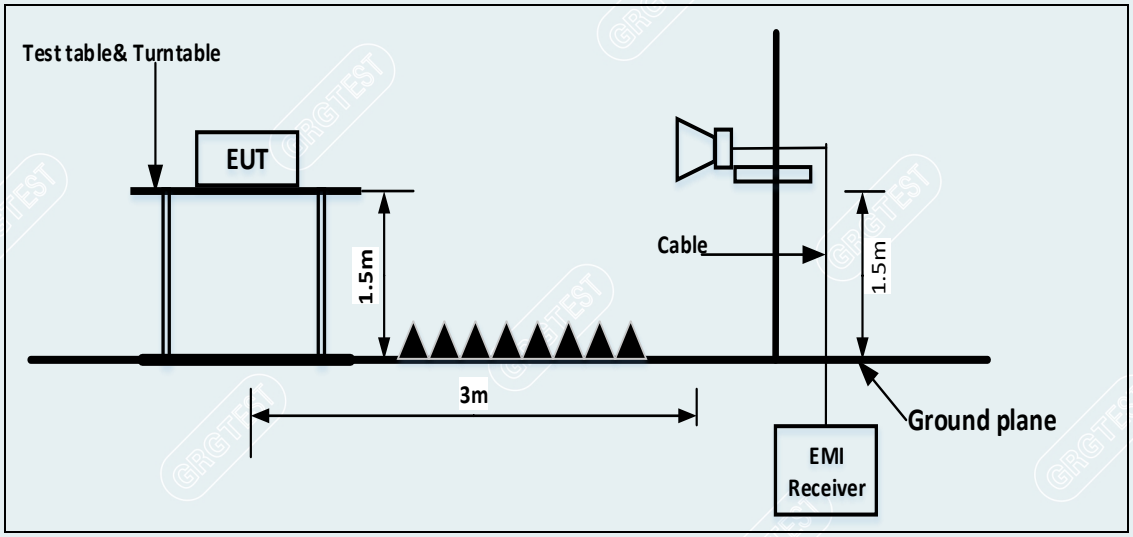
5. ERP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBd)/ EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi)
   Where: Pg is the generator output power into the substitution antenna

4.4.3. TEST SETUP

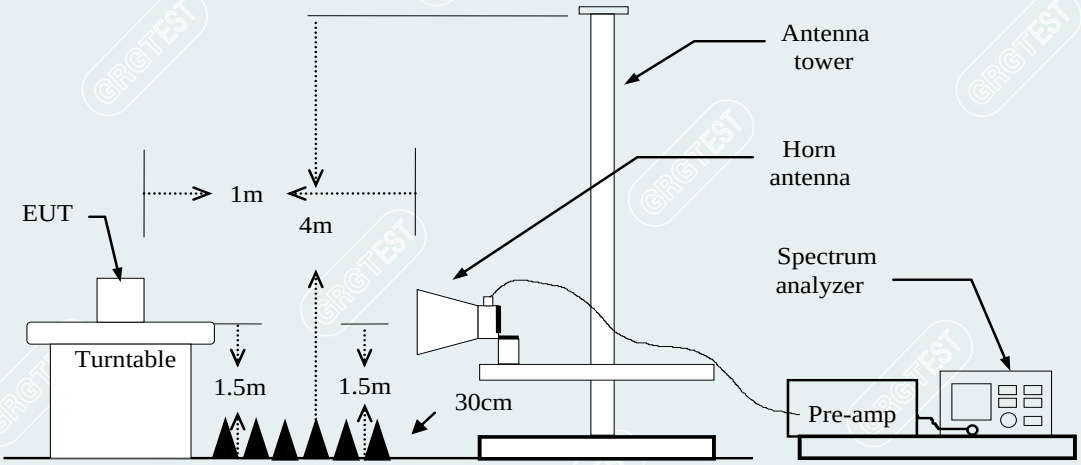
Below 1GHz



Above 1GHz



Above 18GHz


Antenna tower
Horn antenna
Spectrum analyzer
EUT
1m
4m
Turntable
1.5m
1.5m
30cm
Pre-amp

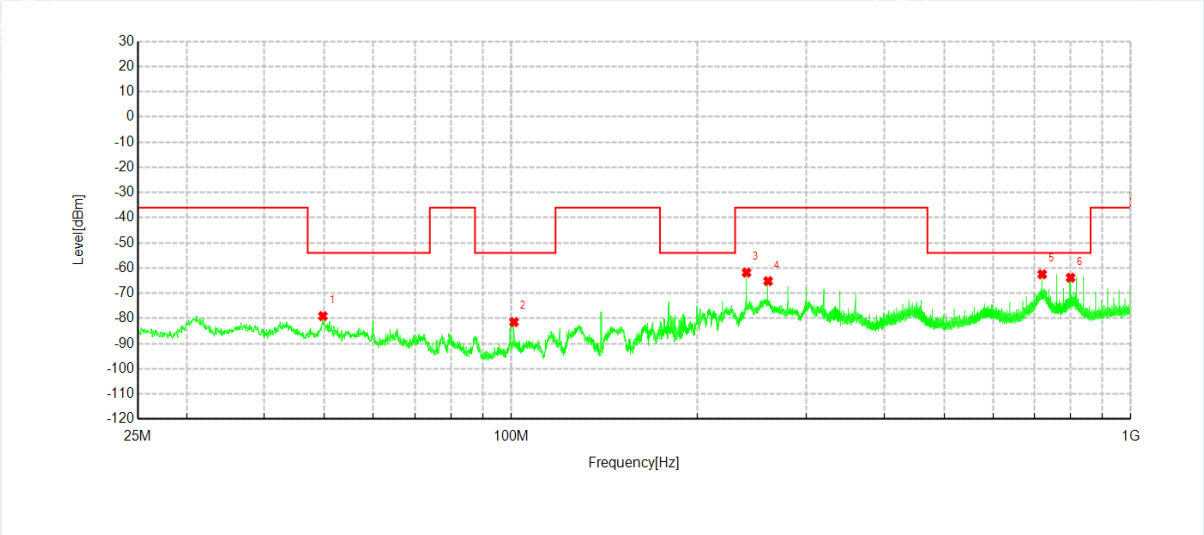
4.4.4. TEST RESULTS

Below 1GHz

Recorded the worst case results in this report (IEEE 802.11a)

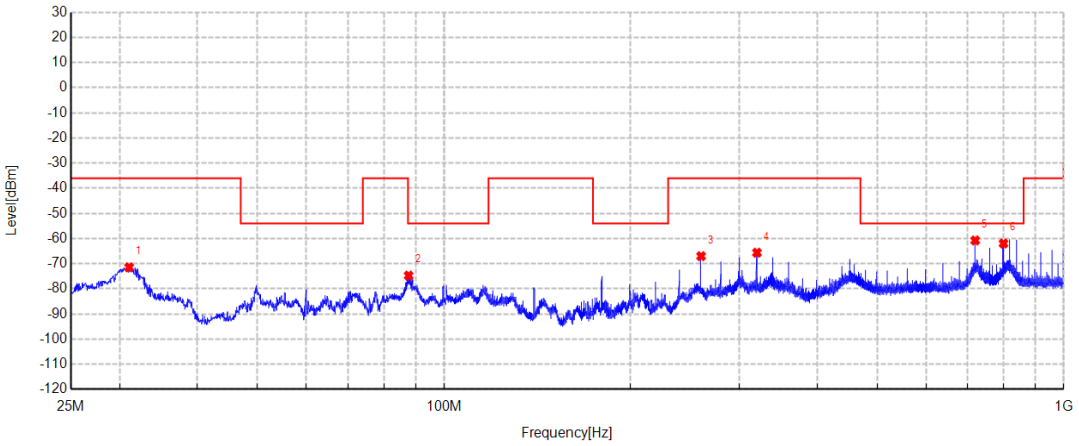
Antenna 1:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



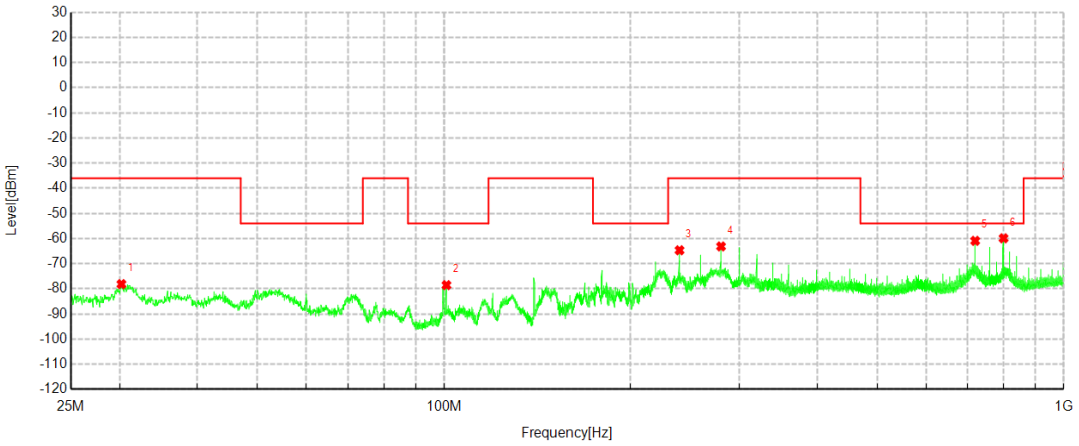
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	49.7175	-65.10	-79.06	-54.00	25.06	-13.96	PK	Horizontal
2	101.1513	-58.68	-81.46	-54.00	27.46	-22.78	PK	Horizontal
3	239.9983	-47.85	-61.81	-36.00	25.81	-13.96	PK	Horizontal
4	259.9867	-48.88	-65.19	-36.00	29.19	-16.31	PK	Horizontal
5	720.0148	-54.52	-62.48	-54.00	8.48	-7.96	PK	Horizontal
6	799.9687	-58.19	-63.84	-54.00	9.84	-5.65	PK	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



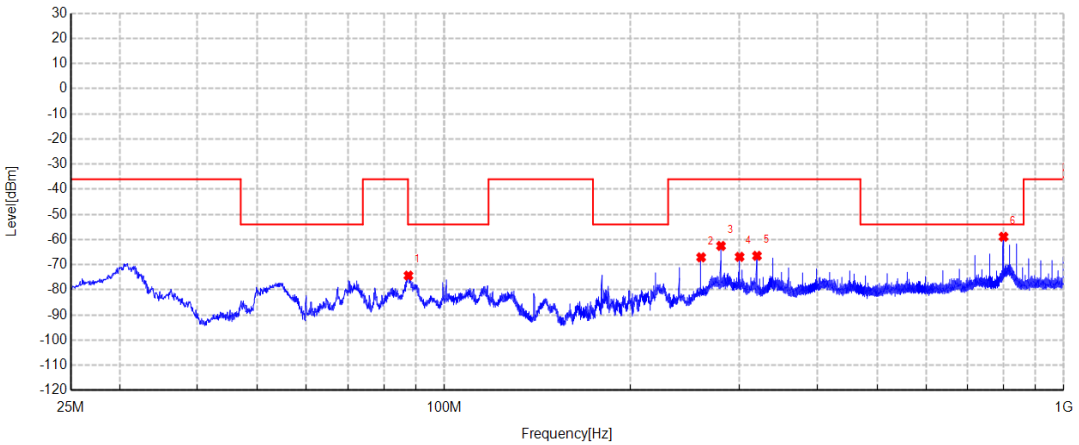
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	31.0453	-47.62	-71.44	-36.00	35.44	-23.82	PK	Vertical
2	87.6956	-56.05	-74.73	-54.00	20.73	-18.68	PK	Vertical
3	260.0355	-49.32	-67.00	-36.00	31.00	-17.68	PK	Vertical
4	320.0010	-50.83	-65.62	-36.00	29.62	-14.79	PK	Vertical
5	720.0148	-53.42	-60.75	-54.00	6.75	-7.33	PK	Vertical
6	799.9687	-55.61	-61.96	-54.00	7.96	-6.35	PK	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	30.1678	-63.25	-78.13	-36.00	42.13	-14.88	PK	Horizontal
2	100.9563	-55.78	-78.53	-54.00	24.53	-22.75	PK	Horizontal
3	239.9983	-50.69	-64.65	-36.00	28.65	-13.96	PK	Horizontal
4	280.0240	-47.39	-63.14	-36.00	27.14	-15.75	PK	Horizontal
5	720.0148	-52.95	-60.91	-54.00	6.91	-7.96	PK	Horizontal
6	800.0175	-54.24	-59.89	-54.00	5.89	-5.65	PK	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

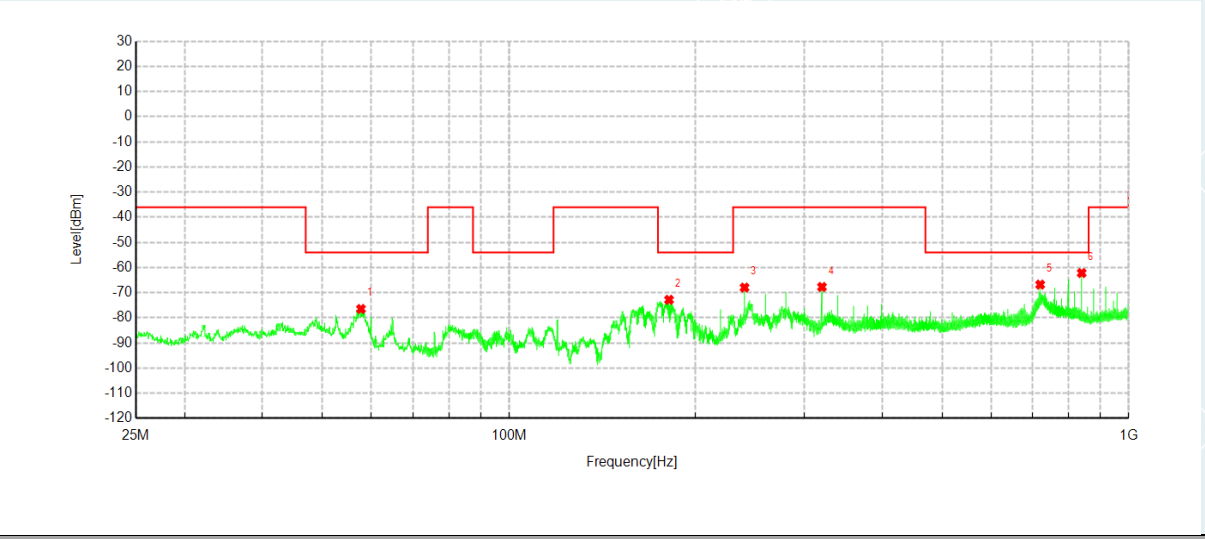


Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	87.6469	-55.61	-74.33	-54.00	20.33	-18.72	PK	Vertical
2	260.0355	-49.39	-67.07	-36.00	31.07	-17.68	PK	Vertical
3	279.9752	-46.26	-62.54	-36.00	26.54	-16.28	PK	Vertical
4	300.0125	-51.37	-66.89	-36.00	30.89	-15.52	PK	Vertical
5	320.0010	-51.68	-66.47	-36.00	30.47	-14.79	PK	Vertical
6	800.0175	-52.54	-58.89	-54.00	4.89	-6.35	PK	Vertical

Note:1. Calculation of result is: Result (dBm) = Reading (dBm) + Correction Factor (dB)

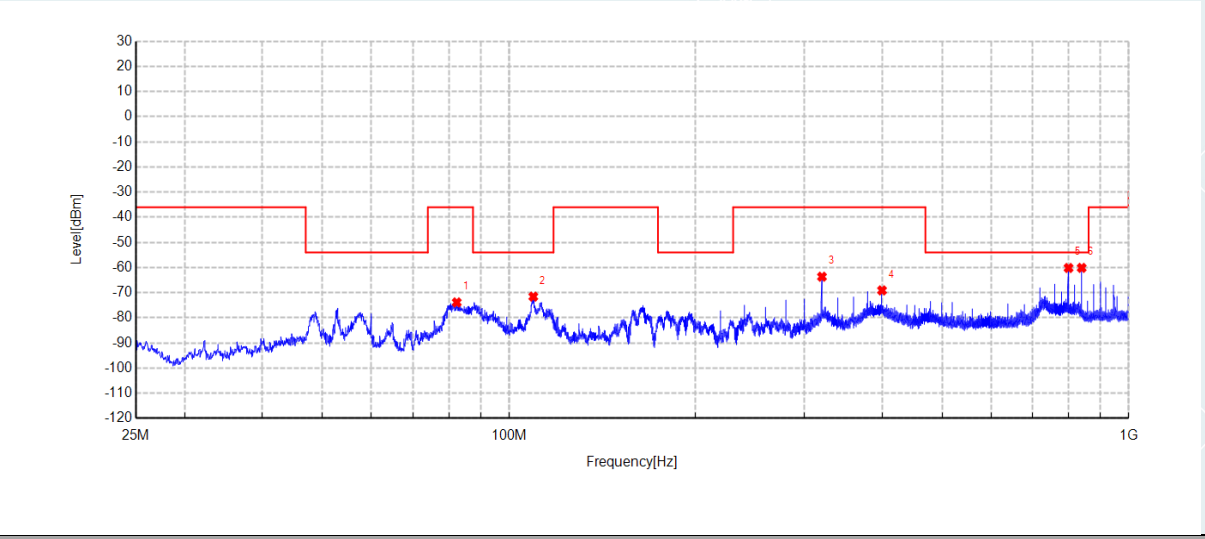
Antenna 2:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



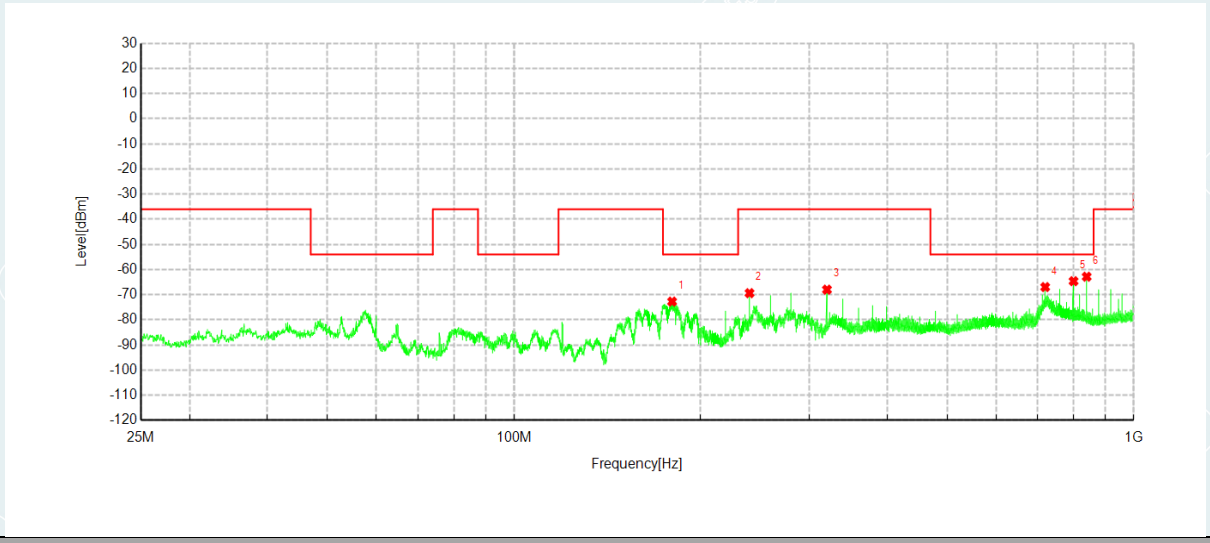
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	57.7129	-61.01	-76.47	-54.00	22.47	-15.46	PK	Horizontal
2	181.3003	-51.16	-72.82	-54.00	18.82	-21.66	PK	Horizontal
3	239.9983	-54.00	-67.96	-36.00	31.96	-13.96	PK	Horizontal
4	320.0010	-51.32	-67.71	-36.00	31.71	-16.39	PK	Horizontal
5	720.0148	-58.83	-66.79	-54.00	12.79	-7.96	PK	Horizontal
6	839.9945	-56.05	-62.18	-54.00	8.18	-6.13	PK	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



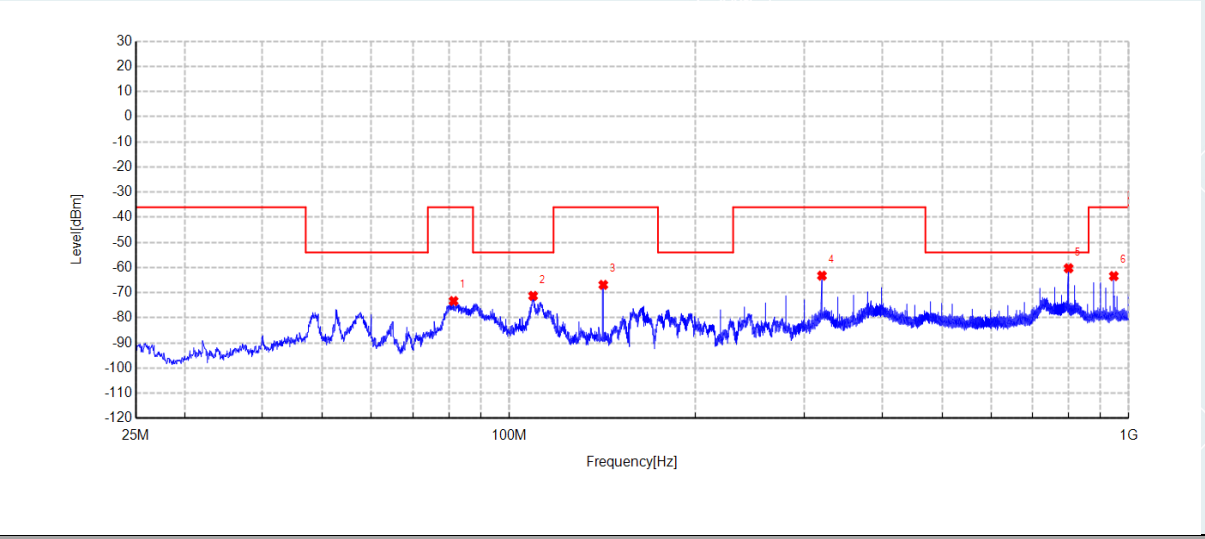
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	82.3816	-51.43	-73.86	-36.00	37.86	-22.43	PK	Vertical
2	109.4880	-59.93	-71.56	-54.00	17.56	-11.63	PK	Vertical
3	320.0010	-48.85	-63.64	-36.00	27.64	-14.79	PK	Vertical
4	400.0038	-55.96	-69.08	-36.00	33.08	-13.12	PK	Vertical
5	800.0175	-53.82	-60.17	-54.00	6.17	-6.35	PK	Vertical
6	839.9945	-53.93	-60.13	-54.00	6.13	-6.20	PK	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	179.9840	-50.71	-72.74	-54.00	18.74	-22.03	PK	Horizontal
2	239.9983	-55.42	-69.38	-36.00	33.38	-13.96	PK	Horizontal
3	320.0010	-51.60	-67.99	-36.00	31.99	-16.39	PK	Horizontal
4	720.0148	-59.00	-66.96	-54.00	12.96	-7.96	PK	Horizontal
5	800.0175	-58.97	-64.62	-54.00	10.62	-5.65	PK	Horizontal
6	839.9945	-56.72	-62.85	-54.00	8.85	-6.13	PK	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	81.4066	-50.19	-73.31	-36.00	37.31	-23.12	PK	Vertical
2	109.3905	-59.60	-71.27	-54.00	17.27	-11.67	PK	Vertical
3	142.0059	-46.14	-66.89	-36.00	30.89	-20.75	PK	Vertical
4	320.0010	-48.44	-63.23	-36.00	27.23	-14.79	PK	Vertical
5	800.0175	-53.93	-60.28	-54.00	6.28	-6.35	PK	Vertical
6	946.5186	-58.77	-63.40	-36.00	27.40	-4.63	PK	Vertical

Note:1. Calculation of result is: Result (dBm) = Reading (dBm) + Correction Factor (dB)

Above 1GHz
Antenna 1:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1595.4569	-46.47	-60.13	-30.00	30.13	-13.66	PK	Horizontal
2	1968.0461	-55.46	-62.60	-30.00	32.60	-7.14	PK	Horizontal
3	2391.4948	-54.20	-62.88	-30.00	32.88	-8.68	PK	Horizontal
4	4806.7527	-53.18	-49.79	-30.00	19.79	3.39	PK	Horizontal
5	5738.7971	-53.93	-47.03	-30.00	17.03	6.90	PK	Horizontal
6	14649.5547	-72.56	-45.38	-30.00	15.38	27.18	PK	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1430.8777	-44.88	-58.03	-30.00	28.03	-13.15	PK	Vertical
2	1597.7428	-45.56	-58.97	-30.00	28.97	-13.41	PK	Vertical
3	2390.9234	-51.44	-59.81	-30.00	29.81	-8.37	PK	Vertical
4	2987.5232	-50.94	-58.05	-30.00	28.05	-7.11	PK	Vertical
5	4806.7527	-50.78	-47.32	-30.00	17.32	3.46	PK	Vertical
6	5739.0828	-49.39	-42.25	-30.00	12.25	7.14	PK	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.0000	-39.22	-53.10	-36.00	17.10	-13.88	PK	Horizontal
2	1597.7428	-44.83	-58.46	-30.00	28.46	-13.63	PK	Horizontal
3	2397.2094	-52.22	-60.97	-30.00	30.97	-8.75	PK	Horizontal
4	4806.7527	-53.30	-49.91	-30.00	19.91	3.39	PK	Horizontal
5	5831.9444	-51.33	-43.76	-30.00	13.76	7.57	PK	Horizontal
6	14651.6501	-72.44	-45.32	-30.00	15.32	27.12	PK	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.0000	-37.10	-50.07	-36.00	14.07	-12.97	PK	Vertical
2	1594.5997	-47.64	-61.12	-30.00	31.12	-13.48	PK	Vertical
3	2193.4854	-50.71	-58.60	-30.00	28.60	-7.89	PK	Vertical
4	2995.5236	-50.45	-57.55	-30.00	27.55	-7.10	PK	Vertical
5	4806.7527	-50.51	-47.05	-30.00	17.05	3.46	PK	Vertical
6	5832.2301	-51.18	-43.71	-30.00	13.71	7.47	PK	Vertical

MIMO

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11n HT20 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.23	-53.11	-36.00	17.11	-13.88	RMS	Horizontal
2	1598.028	-45.46	-59.08	-30.00	29.08	-13.62	RMS	Horizontal
3	2390.066	-54.13	-62.79	-30.00	32.79	-8.66	RMS	Horizontal
4	4806.752	-53.52	-50.13	-30.00	20.13	3.39	RMS	Horizontal
5	5740.225	-55.34	-48.41	-30.00	18.41	6.93	RMS	Horizontal
6	14646.41	-71.98	-45.05	-30.00	15.05	26.93	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-37.36	-50.33	-36.00	14.33	-12.97	RMS	Vertical
2	1599.171	-46.20	-59.58	-30.00	29.58	-13.38	RMS	Vertical
3	2393.209	-51.39	-59.77	-30.00	29.77	-8.38	RMS	Vertical
4	4806.752	-50.88	-47.42	-30.00	17.42	3.46	RMS	Vertical
5	5739.082	-49.08	-41.94	-30.00	11.94	7.14	RMS	Vertical
6	14746.46	-72.60	-48.11	-30.00	18.11	24.49	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11n HT20 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.73	-53.61	-36.00	17.61	-13.88	RMS	Horizontal
2	1597.457	-39.67	-53.30	-30.00	23.30	-13.63	RMS	Horizontal
3	4806.752	-53.39	-50.00	-30.00	20.00	3.39	RMS	Horizontal
4	5832.230	-51.54	-43.97	-30.00	13.97	7.57	RMS	Horizontal
5	10800.41	-69.13	-51.84	-30.00	21.84	17.29	RMS	Horizontal
6	14653.22	-72.23	-45.21	-30.00	15.21	27.02	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-37.74	-50.71	-36.00	14.71	-12.97	RMS	Vertical
2	1597.457	-38.32	-51.74	-30.00	21.74	-13.42	RMS	Vertical
3	2995.237	-51.07	-58.17	-30.00	28.17	-7.10	RMS	Vertical
4	4806.752	-50.77	-47.31	-30.00	17.31	3.46	RMS	Vertical
5	5832.230	-51.69	-44.22	-30.00	14.22	7.47	RMS	Vertical
6	14741.74	-72.62	-48.20	-30.00	18.20	24.42	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11n HT40 5755MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.19	-53.07	-36.00	17.07	-13.88	RMS	Horizontal
2	1593.742	-44.57	-58.26	-30.00	28.26	-13.69	RMS	Horizontal
3	2196.628	-53.50	-61.61	-30.00	31.61	-8.11	RMS	Horizontal
4	4806.752	-53.17	-49.78	-30.00	19.78	3.39	RMS	Horizontal
5	5757.655	-57.13	-49.99	-30.00	19.99	7.14	RMS	Horizontal
6	14652.69	-72.27	-45.22	-30.00	15.22	27.05	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-36.98	-49.95	-36.00	13.95	-12.97	RMS	Vertical
2	1599.742	-46.80	-60.17	-30.00	30.17	-13.37	RMS	Vertical
3	2393.494	-51.72	-60.10	-30.00	30.10	-8.38	RMS	Vertical
4	2991.523	-50.35	-57.46	-30.00	27.46	-7.11	RMS	Vertical
5	4806.752	-50.63	-47.17	-30.00	17.17	3.46	RMS	Vertical
6	5770.512	-52.43	-45.32	-30.00	15.32	7.11	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11n HT40 5795MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.51	-53.39	-36.00	17.39	-13.88	RMS	Horizontal
2	1324.015	-49.34	-62.31	-30.00	32.31	-12.97	RMS	Horizontal
3	1597.742	-45.72	-59.35	-30.00	29.35	-13.63	RMS	Horizontal
4	4806.752	-53.31	-49.92	-30.00	19.92	3.39	RMS	Horizontal
5	5791.085	-54.40	-47.20	-30.00	17.20	7.20	RMS	Horizontal
6	14650.60	-72.24	-45.06	-30.00	15.06	27.18	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-37.18	-50.15	-36.00	14.15	-12.97	RMS	Vertical
2	1595.171	-39.30	-52.77	-30.00	22.77	-13.47	RMS	Vertical
3	2389.780	-51.24	-59.61	-30.00	29.61	-8.37	RMS	Vertical
4	4806.752	-50.79	-47.33	-30.00	17.33	3.46	RMS	Vertical
5	5791.371	-52.71	-45.75	-30.00	15.75	6.96	RMS	Vertical
6	14708.74	-71.83	-47.92	-30.00	17.92	23.91	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11ac HT20 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.64	-53.52	-36.00	17.52	-13.88	RMS	Horizontal
2	1599.742	-43.36	-56.95	-30.00	26.95	-13.59	RMS	Horizontal
3	2986.951	-53.98	-61.00	-30.00	31.00	-7.02	RMS	Horizontal
4	4806.752	-53.22	-49.83	-30.00	19.83	3.39	RMS	Horizontal
5	5739.940	-54.82	-47.90	-30.00	17.90	6.92	RMS	Horizontal
6	14650.07	-72.15	-44.94	-30.00	14.94	27.21	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1594.028	-46.37	-59.87	-30.00	29.87	-13.50	RMS	Vertical
2	2395.209	-52.11	-60.50	-30.00	30.50	-8.39	RMS	Vertical
3	2987.237	-51.91	-59.02	-30.00	29.02	-7.11	RMS	Vertical
4	3197.818	-59.09	-63.96	-30.00	33.96	-4.87	RMS	Vertical
5	4806.752	-50.64	-47.18	-30.00	17.18	3.46	RMS	Vertical
6	5739.368	-49.52	-42.38	-30.00	12.38	7.14	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11ac HT20 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.52	-53.40	-36.00	17.40	-13.88	RMS	Horizontal
2	1599.742	-46.83	-60.42	-30.00	30.42	-13.59	RMS	Horizontal
3	4806.752	-53.33	-49.94	-30.00	19.94	3.39	RMS	Horizontal
4	5831.944	-51.50	-43.93	-30.00	13.93	7.57	RMS	Horizontal
5	8792.561	-65.77	-52.41	-30.00	22.41	13.36	RMS	Horizontal
6	14650.07	-72.39	-45.18	-30.00	15.18	27.21	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-37.25	-50.22	-36.00	14.22	-12.97	RMS	Vertical
2	1594.599	-36.51	-49.99	-30.00	19.99	-13.48	RMS	Vertical
3	2991.809	-50.16	-57.27	-30.00	27.27	-7.11	RMS	Vertical
4	4806.752	-50.90	-47.44	-30.00	17.44	3.46	RMS	Vertical
5	5832.801	-51.30	-43.82	-30.00	13.82	7.48	RMS	Vertical
6	14693.55	-71.50	-47.84	-30.00	17.84	23.66	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11ac HT40 5755MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.46	-53.34	-36.00	17.34	-13.88	RMS	Horizontal
2	1599.171	-46.38	-59.98	-30.00	29.98	-13.60	RMS	Horizontal
3	4806.752	-53.52	-50.13	-30.00	20.13	3.39	RMS	Horizontal
4	5758.226	-57.97	-50.83	-30.00	20.83	7.14	RMS	Horizontal
5	14652.17	-72.33	-45.24	-30.00	15.24	27.09	RMS	Horizontal
6	17999.47	-73.28	-47.91	-30.00	17.91	25.37	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-37.18	-50.15	-36.00	14.15	-12.97	RMS	Vertical
2	1597.457	-44.72	-58.14	-30.00	28.14	-13.42	RMS	Vertical
3	2390.637	-50.11	-58.48	-30.00	28.48	-8.37	RMS	Vertical
4	4806.752	-50.78	-47.32	-30.00	17.32	3.46	RMS	Vertical
5	5768.512	-49.54	-42.42	-30.00	12.42	7.12	RMS	Vertical
6	17820.84	-72.43	-45.91	-30.00	15.91	26.52	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11ac HT40 5795MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.64	-53.52	-36.00	17.52	-13.88	RMS	Horizontal
2	1595.742	-45.64	-59.30	-30.00	29.30	-13.66	RMS	Horizontal
3	2199.200	-53.19	-61.29	-30.00	31.29	-8.10	RMS	Horizontal
4	4806.752	-53.55	-50.16	-30.00	20.16	3.39	RMS	Horizontal
5	5791.371	-54.57	-47.37	-30.00	17.37	7.20	RMS	Horizontal
6	14651.65	-72.06	-44.94	-30.00	14.94	27.12	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-37.26	-50.23	-36.00	14.23	-12.97	RMS	Vertical
2	1592.885	-40.60	-54.12	-30.00	24.12	-13.52	RMS	Vertical
3	2391.780	-51.29	-59.67	-30.00	29.67	-8.38	RMS	Vertical
4	2994.666	-50.66	-57.76	-30.00	27.76	-7.10	RMS	Vertical
5	4806.752	-50.61	-47.15	-30.00	17.15	3.46	RMS	Vertical
6	5792.228	-52.59	-45.64	-30.00	15.64	6.95	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11ac VHT80 5775MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-39.73	-53.61	-36.00	17.61	-13.88	RMS	Horizontal
2	1598.885	-48.03	-61.64	-30.00	31.64	-13.61	RMS	Horizontal
3	2280.061	-55.57	-63.35	-30.00	33.35	-7.78	RMS	Horizontal
4	4806.752	-53.65	-50.26	-30.00	20.26	3.39	RMS	Horizontal
5	5792.513	-56.37	-49.17	-30.00	19.17	7.20	RMS	Horizontal
6	14649.55	-72.19	-45.01	-30.00	15.01	27.18	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-36.58	-49.55	-36.00	13.55	-12.97	RMS	Vertical
2	1592.885	-39.69	-53.21	-30.00	23.21	-13.52	RMS	Vertical
3	2196.342	-51.59	-59.39	-30.00	29.39	-7.80	RMS	Vertical
4	2998.666	-51.06	-58.16	-30.00	28.16	-7.10	RMS	Vertical
5	4806.752	-50.61	-47.15	-30.00	17.15	3.46	RMS	Vertical
6	5766.512	-54.42	-47.28	-30.00	17.28	7.14	RMS	Vertical

Above 18 GHz -40 GHz
Antenna 1

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	20528.24	-59.51	-69.84	-30.00	39.84	-10.33	RMS	Horizontal
2	22980.80	-55.82	-64.76	-30.00	34.76	-8.94	RMS	Horizontal
3	26704.08	-60.35	-64.71	-30.00	34.71	-4.36	RMS	Horizontal
4	30258.40	-57.01	-66.80	-30.00	36.80	-9.79	RMS	Horizontal
5	37345.92	-58.56	-65.33	-30.00	35.33	-6.77	RMS	Horizontal
6	39795.84	-59.68	-62.91	-30.00	32.91	-3.23	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	22980.80	-58.22	-67.85	-30.00	37.85	-9.63	RMS	Vertical
2	26688.24	-60.15	-66.08	-30.00	36.08	-5.93	RMS	Vertical
3	28898.80	-58.30	-67.62	-30.00	37.62	-9.32	RMS	Vertical
4	34533.44	-55.80	-67.61	-30.00	37.61	-11.81	RMS	Vertical
5	39112.96	-59.85	-61.84	-30.00	31.84	-1.99	RMS	Vertical
6	39982.40	-60.25	-60.74	-30.00	30.74	-0.49	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	TX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	21095.84	-59.92	-69.82	-30.00	39.82	-9.90	RMS	Horizontal
2	23301.12	-55.76	-64.41	-30.00	34.41	-8.65	RMS	Horizontal
3	26650.40	-59.70	-64.13	-30.00	34.13	-4.43	RMS	Horizontal
4	28978.00	-58.18	-66.37	-30.00	36.37	-8.19	RMS	Horizontal
5	37345.04	-58.71	-65.47	-30.00	35.47	-6.76	RMS	Horizontal
6	39108.56	-59.93	-63.21	-30.00	33.21	-3.28	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	18887.04	-58.50	-71.48	-30.00	41.48	-12.98	RMS	Vertical
2	23301.12	-58.41	-67.68	-30.00	37.68	-9.27	RMS	Vertical
3	26696.16	-60.37	-66.29	-30.00	36.29	-5.92	RMS	Vertical
4	33108.72	-56.07	-68.07	-30.00	38.07	-12.00	RMS	Vertical
5	39168.40	-60.34	-62.21	-30.00	32.21	-1.87	RMS	Vertical
6	39756.24	-60.13	-61.30	-30.00	31.30	-1.17	RMS	Vertical

5. RECEIVER REQUIREMENTS

5.1 BLOCKING OR DESENSITIZATION

5.1.1. LIMITS

The blocking level, for any frequency within the specified ranges, shall not be less than the values given in table 6, except at frequencies on which spurious responses are found.

Table 6: Limits for blocking or desensitization

Receiver category	Limit
1	-30 dBm + k
2	-45 dBm + k
3	-60 dBm + k

The correction factor, k, is as follows:

$$k = -20\log f - 10\log BW$$

Where:

- f is the frequency in GHz;
- BW is the occupied bandwidth in MHz.

The factor k is limited within the following:

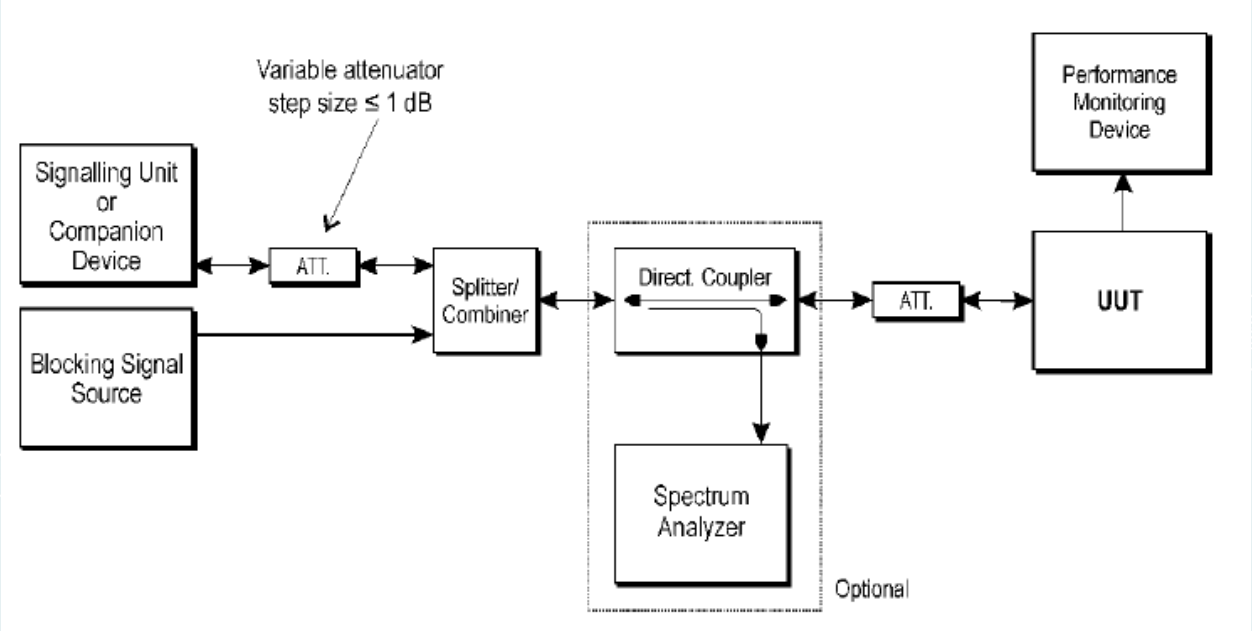
- -40 dB < k < 0 dB.

The measured blocking level shall be stated in the test report.

5.1.2. TEST PROCEDURE

Test requirement:	EN 300 440 clause 4.3.4
Test Method:	EN 300 440 clause 4.3.4.3
Status:	Keep EUT on transmitting mode by the software provided by manufacturer. Pretest the EUT at different transmission rate and report show the worst case data.
Test channel:	802.11a mode :5745 MHz, 5825 MHz
Test condition:	Normal test conditions.
Equipment Used:	Refer to section 5.2

5.1.3. TEST SETUP



5.1.4. TEST RESULTS

Test Date (yy-mm-dd): 2021-08-02

Test environment: Normal condition:

Temp: 23.5℃, Humid:48%

Type: 802.11a 5745MHz

Receiver Category 1							
99% OBW (MHz)	16.42	99% OBW_F_l (MHz)		5736.66	99% OBW_F_h (MHz)		5753.18
Times of Occupied Bandwidth	Unwanted Signal Frequency (MHz)	Unwanted Signal Level (dBm)	Correction Factor K (dBm)			Limit (dBm)	Result
			Value	Min Limit	Max Limit		
-10	5572.76	-33.00	-27.08	-40.00	0.00	-57.08	Pass
10	5917.14	-36.00	-27.54			-57.54	Pass
-20	5408.75	-39.00	-26.82			-56.82	Pass
20	6081.09	-35.00	-27.86			-57.86	Pass
-50	4916.96	-34.00	-25.92			-55.92	Pass
50	6572.94	-36.00	-28.53			-58.53	Pass

Type: 802.11a 5825MHz

Receiver Category 1							
99% OBW (MHz)	16.42	99% OBW_F_l (MHz)		5716.68	99% OBW_F_h (MHz)		5833.18
Times of Occupied Bandwidth	Unwanted Signal Frequency (MHz)	Unwanted Signal Level (dBm)	Correction Factor K (dBm)			Limit (dBm)	Result
			Value	Min Limit	Max Limit		
-10	5552.73	-37.00	-27.03	-40.00	0.00	-57.03	Pass
10	5997.12	-35.00	-27.73			-57.73	Pass
-20	5388.78	-36.00	-26.75			-56.75	Pass
20	6161.08	-38.00	-27.96			-57.96	Pass
-50	4896.95	-35.00	-25.97			-55.97	Pass
50	6652.93	-39.00	-28.63			-58.63	Pass

5.2 SPURIONS EMISSIONS FOR RX

5.2.1. LIMITS

Frequency range	Limit
30 MHz to 1 GHz	-57 dBm
above 1 GHz	-47 dBm

5.2.2. TEST PROCEDURE

Test channel: 802.11a/n HT20 mode :5745 MHz, 5825 MHz
802.11n HT40 mode:5755 MHz, 5795 MHz
802.11ac VHT80 mode:5775MHz

Test condition: Normal test conditions.

Test equipment used: Refer to section 5.2

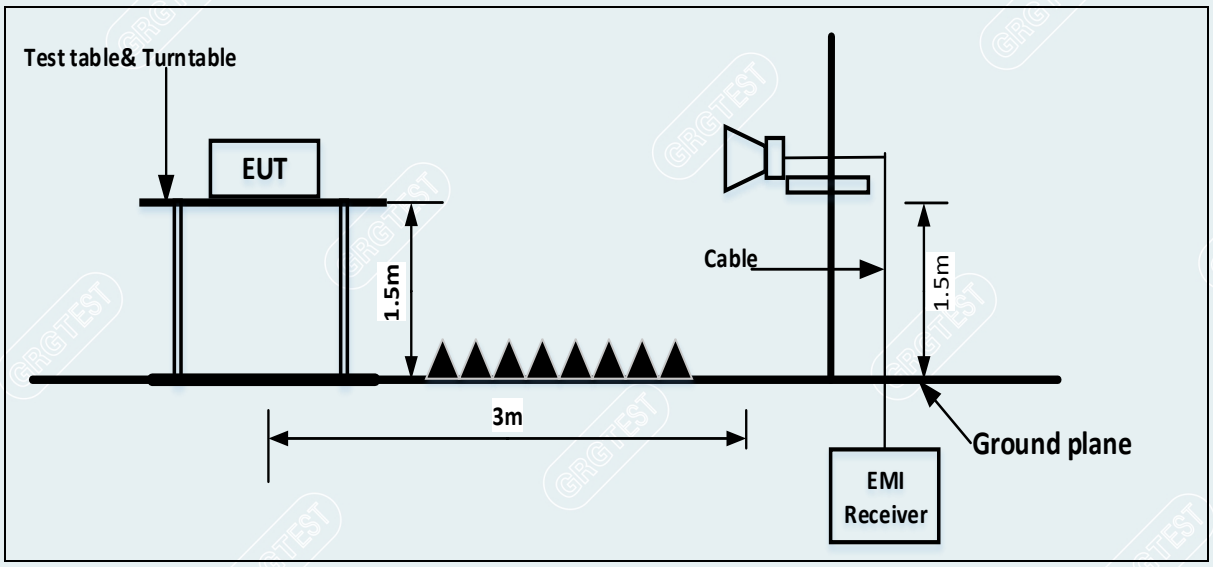
Test procedure:

6. The EUT shall be performed at the highest power level at which the transmitter is intended to operate.and Interface cables, loads, and devices should be connected to at least one of each type of the interface ports of the EUT and, where practical, each cable shall be terminated in a device typical for its actual use. EUT shall be placed at the 1.5m support on the turntable.
7. The test antenna at a horizontal distance of 3 m .It shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360 °in the horizontal plane, until the maximum signal level is detected by the measuring receiver. In both the vertical and the horizontal polarization. Record the reading level, antenna position, polarization and turntable position.
8. Remove the transmitter and replace it with a substitution antenna.
9. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by a cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output.
10. ERP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain

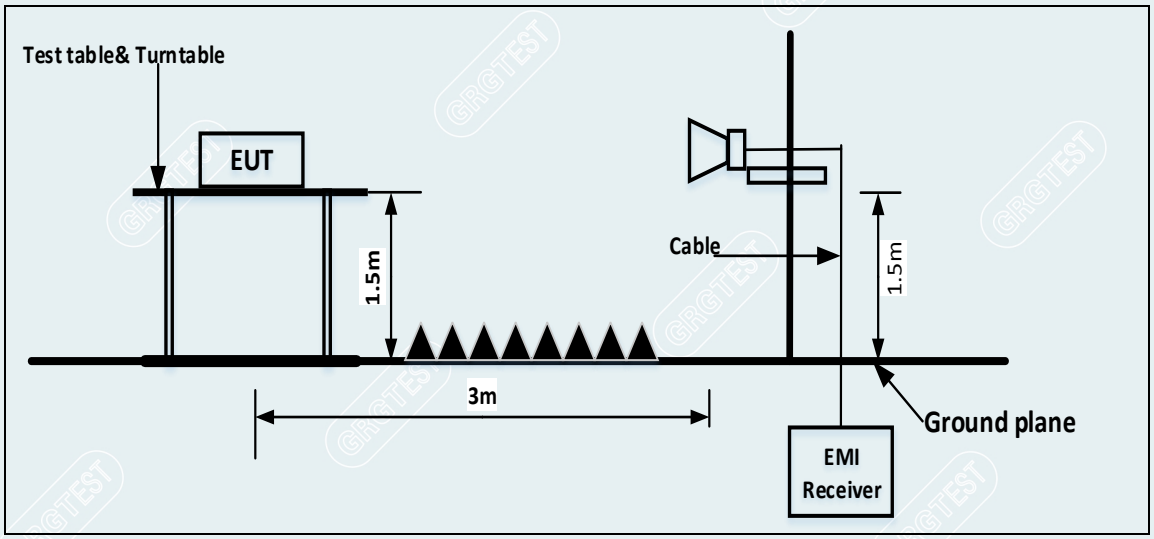
(dBd)/ EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi)
Where: Pg is the generator output power into the substitution antenna

5.2.3. TEST SETUP

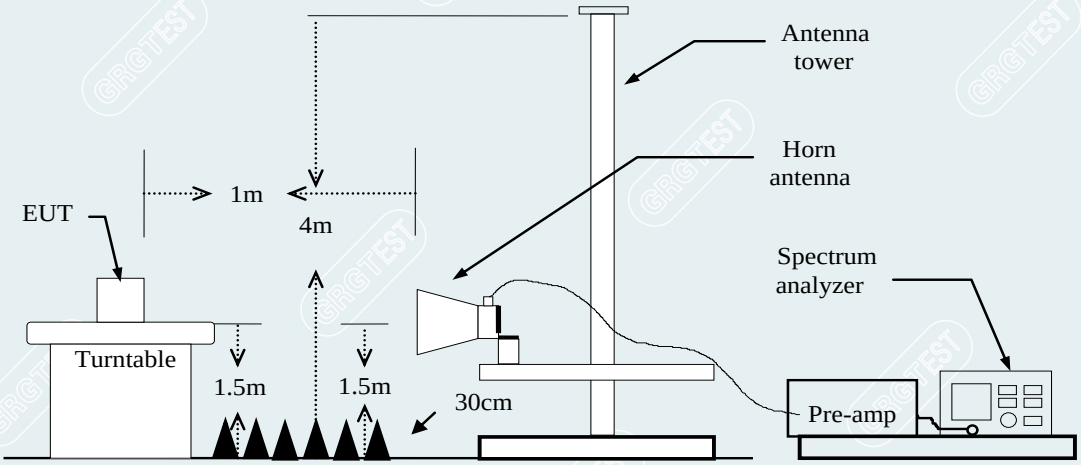
Below 1GHz



Above 1GHz



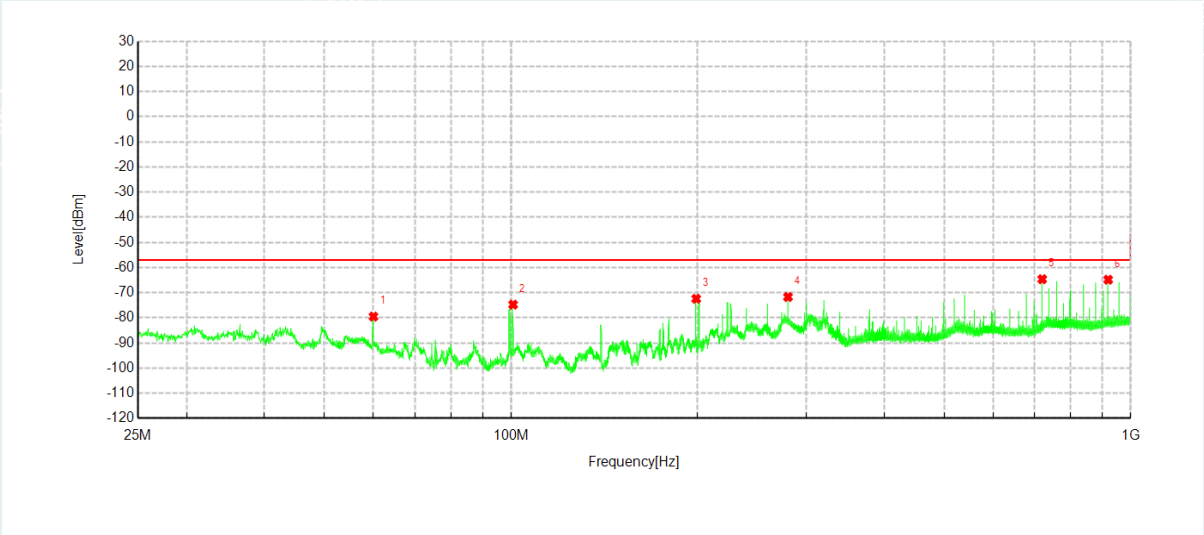
Above 18GHz


Antenna tower
Horn antenna
Spectrum analyzer
EUT
1m
4m
Turntable
1.5m
1.5m
30cm
Pre-amp

5.2.4. TEST RESULTS

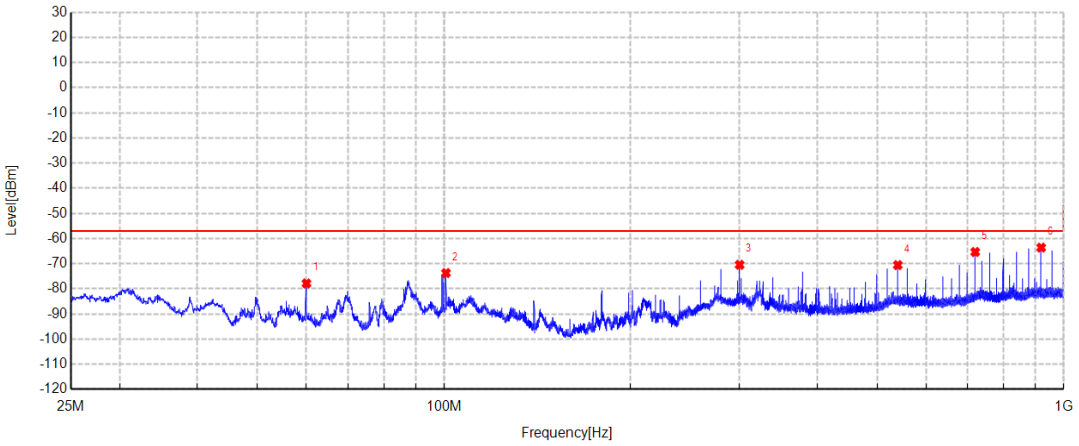
Below 1GHz
Antenna 1:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



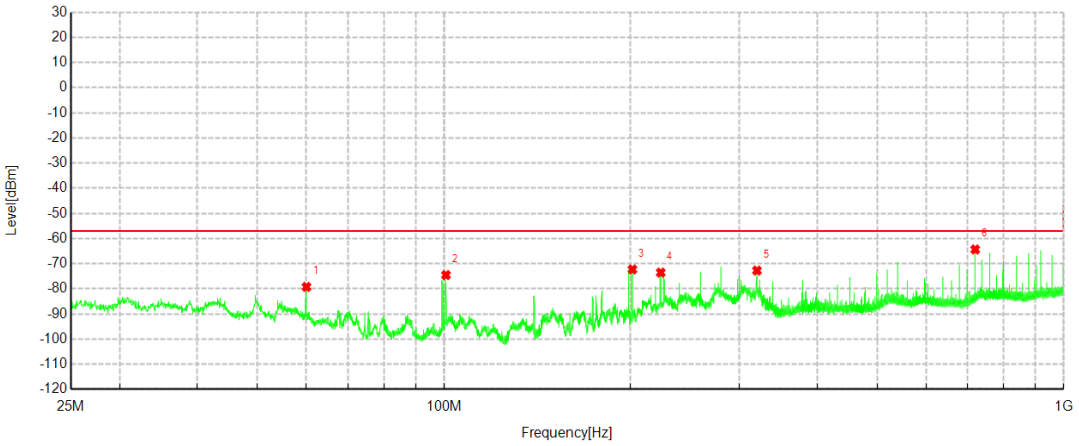
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	60.0043	-63.61	-79.50	-57.00	22.50	-15.89	RMS	Horizontal
2	100.8100	-52.02	-74.74	-57.00	17.74	-22.72	RMS	Horizontal
3	199.0462	-52.91	-72.41	-57.00	15.41	-19.50	RMS	Horizontal
4	279.9752	-55.96	-71.71	-57.00	14.71	-15.75	RMS	Horizontal
5	720.0148	-56.67	-64.63	-57.00	7.63	-7.96	RMS	Horizontal
6	919.9973	-59.92	-64.83	-57.00	7.83	-4.91	RMS	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



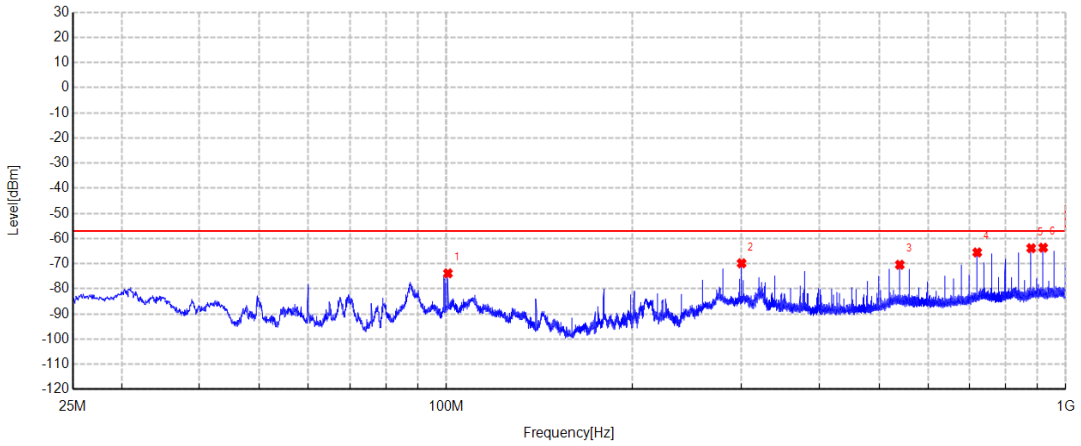
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	60.0043	-58.02	-77.86	-57.00	20.86	-19.84	RMS	Vertical
2	100.7613	-59.11	-73.71	-57.00	16.71	-14.60	RMS	Vertical
3	300.0125	-54.92	-70.44	-57.00	13.44	-15.52	RMS	Vertical
4	540.0208	-60.10	-70.55	-57.00	13.55	-10.45	RMS	Vertical
5	720.0148	-58.01	-65.34	-57.00	8.34	-7.33	RMS	Vertical
6	919.9973	-58.70	-63.60	-57.00	6.60	-4.90	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	60.0043	-63.34	-79.23	-57.00	22.23	-15.89	RMS	Horizontal
2	100.7613	-51.81	-74.52	-57.00	17.52	-22.71	RMS	Horizontal
3	201.4351	-52.91	-72.29	-57.00	15.29	-19.38	RMS	Horizontal
4	223.8124	-58.42	-73.53	-57.00	16.53	-15.11	RMS	Horizontal
5	320.0010	-56.35	-72.74	-57.00	15.74	-16.39	RMS	Horizontal
6	720.0148	-56.37	-64.33	-57.00	7.33	-7.96	RMS	Horizontal

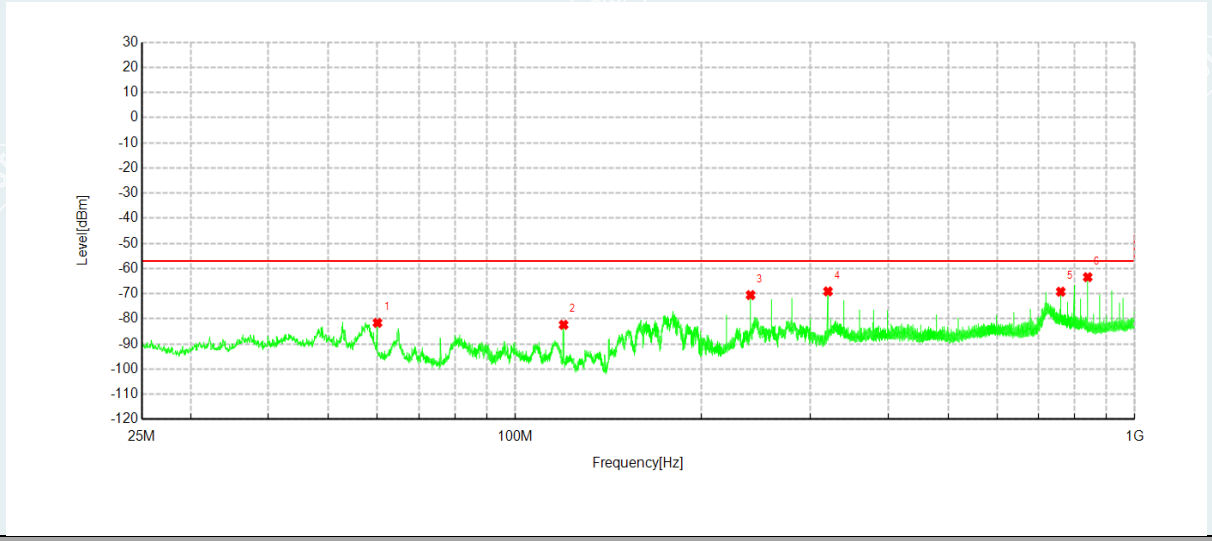
Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	100.7613	-59.24	-73.84	-57.00	16.84	-14.60	RMS	Vertical
2	300.0125	-54.33	-69.85	-57.00	12.85	-15.52	RMS	Vertical
3	540.0208	-59.97	-70.42	-57.00	13.42	-10.45	RMS	Vertical
4	720.0148	-58.19	-65.52	-57.00	8.52	-7.33	RMS	Vertical
5	880.0203	-58.64	-63.83	-57.00	6.83	-5.19	RMS	Vertical
6	919.9973	-58.73	-63.63	-57.00	6.63	-4.90	RMS	Vertical

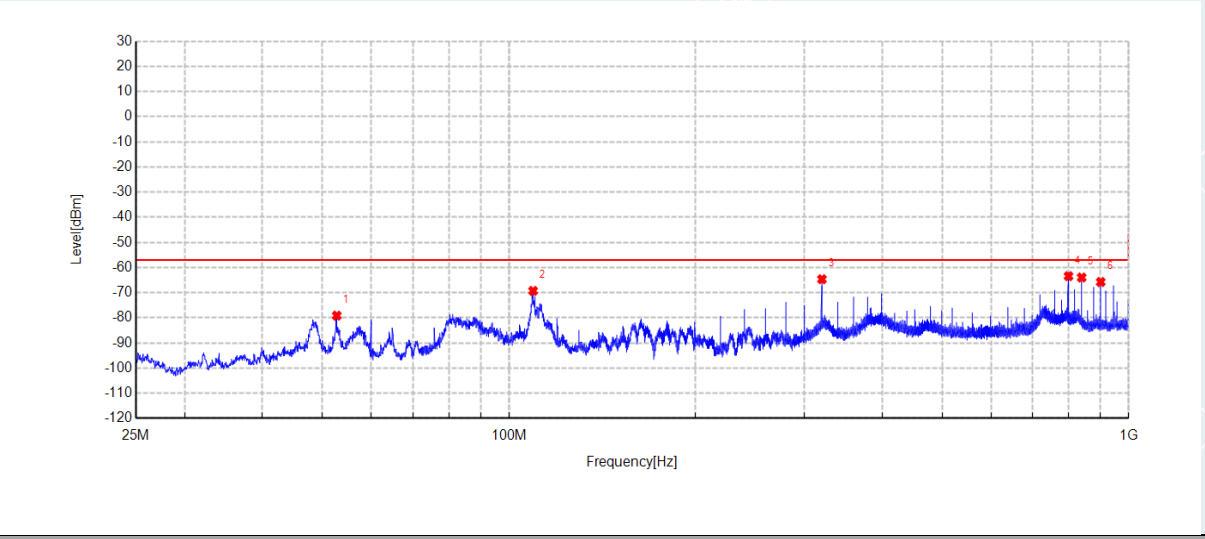
Antenna 2:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



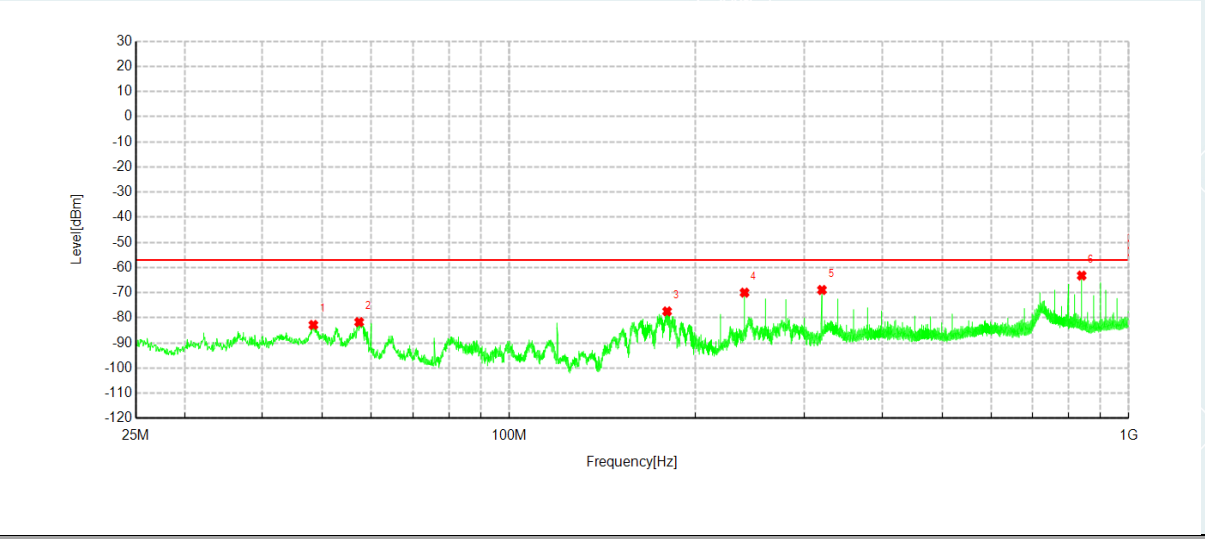
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	60.0043	-65.71	-81.60	-57.00	24.60	-15.89	RMS	Horizontal
2	119.8235	-57.46	-82.37	-57.00	25.37	-24.91	RMS	Horizontal
3	239.9983	-56.58	-70.54	-57.00	13.54	-13.96	RMS	Horizontal
4	320.0010	-52.69	-69.08	-57.00	12.08	-16.39	RMS	Horizontal
5	759.9918	-63.38	-69.21	-57.00	12.21	-5.83	RMS	Horizontal
6	839.9945	-57.29	-63.42	-57.00	6.42	-6.13	RMS	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



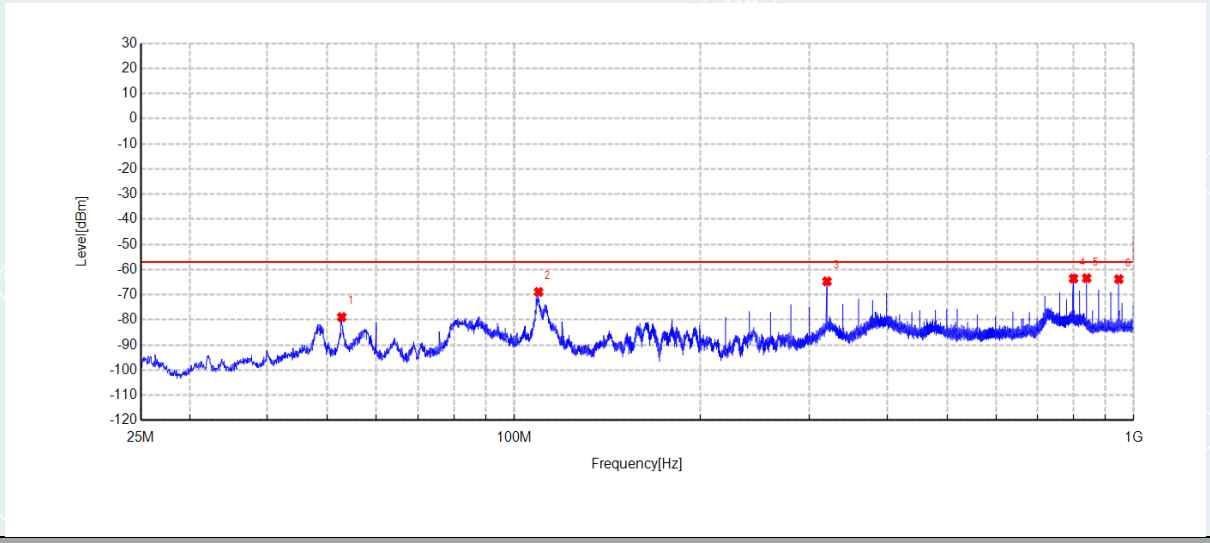
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	52.7401	-57.96	-79.12	-57.00	22.12	-21.16	RMS	Vertical
2	109.3905	-57.60	-69.27	-57.00	12.27	-11.67	RMS	Vertical
3	320.0010	-49.85	-64.64	-57.00	7.64	-14.79	RMS	Vertical
4	799.9687	-57.07	-63.42	-57.00	6.42	-6.35	RMS	Vertical
5	839.9945	-57.75	-63.95	-57.00	6.95	-6.20	RMS	Vertical
6	901.6176	-60.87	-65.74	-57.00	8.74	-4.87	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	48.3524	-69.21	-82.83	-57.00	25.83	-13.62	RMS	Horizontal
2	57.3229	-66.31	-81.70	-57.00	24.70	-15.39	RMS	Horizontal
3	179.9840	-55.41	-77.44	-57.00	20.44	-22.03	RMS	Horizontal
4	239.9983	-56.02	-69.98	-57.00	12.98	-13.96	RMS	Horizontal
5	320.0010	-52.53	-68.92	-57.00	11.92	-16.39	RMS	Horizontal
6	839.9945	-57.07	-63.20	-57.00	6.20	-6.13	RMS	Horizontal

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:25.1℃; Humi:54%	Engineer:	Chen Xiaocong



Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	52.7401	-57.76	-78.92	-57.00	21.92	-21.16	RMS	Vertical
2	109.5855	-57.30	-68.90	-57.00	11.90	-11.60	RMS	Vertical
3	320.0010	-49.90	-64.69	-57.00	7.69	-14.79	RMS	Vertical
4	800.0175	-57.22	-63.57	-57.00	6.57	-6.35	RMS	Vertical
5	839.9945	-57.22	-63.42	-57.00	6.42	-6.20	RMS	Vertical
6	946.5186	-59.17	-63.80	-57.00	6.80	-4.63	RMS	Vertical

Above 1GHz
Antenna 1:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-48.47	-63.18	-47.00	16.18	-14.71	PK	Horizontal
2	1809.200	-51.88	-64.82	-47.00	17.82	-12.94	PK	Horizontal
3	2139.850	-57.21	-66.72	-47.00	19.72	-9.51	PK	Horizontal
4	3618.850	-58.97	-62.37	-47.00	15.37	-3.40	PK	Horizontal
5	5146.300	-63.95	-62.01	-47.00	15.01	1.94	PK	Horizontal
6	7659.750	-59.14	-52.12	-47.00	5.12	7.02	PK	Horizontal

Final Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7660.020	-59.79	-52.77	-47.00	5.77	7.02	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-50.87	-66.65	-47.00	19.65	-15.78	PK	Vertical
2	1499.800	-52.07	-65.07	-47.00	18.07	-13.00	PK	Vertical
3	1809.200	-54.78	-65.86	-47.00	18.86	-11.08	PK	Vertical
4	2224.850	-58.86	-67.33	-47.00	20.33	-8.47	PK	Vertical
5	4853.050	-65.20	-63.11	-47.00	16.11	2.09	PK	Vertical
6	7659.750	-59.35	-52.45	-47.00	5.45	6.90	PK	Vertical

Final Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7660.020	-59.49	-52.59	-47.00	5.59	6.90	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-50.18	-64.89	-47.00	17.89	-14.71	PK	Horizontal
2	1319.600	-52.34	-65.85	-47.00	18.85	-13.51	PK	Horizontal
3	1700.400	-52.38	-67.27	-47.00	20.27	-14.89	PK	Horizontal
4	1809.200	-52.55	-65.49	-47.00	18.49	-12.94	PK	Horizontal
5	3618.850	-55.86	-59.26	-47.00	12.26	-3.40	PK	Horizontal
6	7766.850	-59.35	-52.54	-47.00	5.54	6.81	PK	Horizontal

Final Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7766.699	-58.39	-51.58	-47.00	4.58	6.81	RMS	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-52.34	-65.82	-57.00	8.82	-13.48	PK	Vertical
2	1499.800	-51.96	-64.96	-47.00	17.96	-13.00	PK	Vertical
3	1809.200	-54.91	-65.99	-47.00	18.99	-11.08	PK	Vertical
4	3618.850	-57.07	-60.24	-47.00	13.24	-3.17	PK	Vertical
5	4523.250	-61.32	-62.19	-47.00	15.19	-0.87	PK	Vertical
6	7766.850	-60.25	-52.96	-47.00	5.96	7.29	PK	Vertical

Final Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7766.699	-60.62	-53.33	-47.00	6.33	7.29	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11n HT40 5755MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-48.05	-62.76	-47.00	15.76	-14.71	PK	Horizontal
2	1360.400	-52.05	-65.70	-47.00	18.70	-13.65	PK	Horizontal
3	1809.200	-49.96	-62.90	-47.00	15.90	-12.94	PK	Horizontal
4	3618.850	-58.44	-61.84	-47.00	14.84	-3.40	PK	Horizontal
5	5438.700	-62.04	-61.10	-47.00	14.10	0.94	PK	Horizontal
6	7673.350	-59.85	-53.26	-47.00	6.26	6.59	PK	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-49.73	-65.51	-47.00	18.51	-15.78	PK	Vertical
2	1199.750	-55.15	-69.07	-47.00	22.07	-13.92	PK	Vertical
3	1499.800	-52.19	-65.19	-47.00	18.19	-13.00	PK	Vertical
4	1809.200	-52.35	-63.43	-47.00	16.43	-11.08	PK	Vertical
5	3618.850	-56.85	-60.02	-47.00	13.02	-3.17	PK	Vertical
6	7673.350	-59.69	-53.22	-47.00	6.22	6.47	PK	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11n HT40 5795MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-49.10	-63.81	-47.00	16.81	-14.71	PK	Horizontal
2	1279.650	-52.29	-66.46	-47.00	19.46	-14.17	PK	Horizontal
3	1809.200	-51.16	-64.10	-47.00	17.10	-12.94	PK	Horizontal
4	2240.150	-59.26	-67.72	-47.00	20.72	-8.46	PK	Horizontal
5	3618.850	-58.33	-61.73	-47.00	14.73	-3.40	PK	Horizontal
6	7726.900	-58.06	-51.61	-47.00	4.61	6.45	PK	Horizontal

Final Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7726.689	-57.38	-50.93	-47.00	3.93	6.45	RMS	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1000.000	-52.63	-66.11	-57.00	9.11	-13.48	PK	Vertical
2	1279.650	-51.69	-65.83	-47.00	18.83	-14.14	PK	Vertical
3	1499.800	-51.64	-64.64	-47.00	17.64	-13.00	PK	Vertical
4	1809.200	-54.31	-65.39	-47.00	18.39	-11.08	PK	Vertical
5	3618.850	-58.04	-61.21	-47.00	14.21	-3.17	PK	Vertical
6	7726.900	-57.00	-50.20	-47.00	3.20	6.80	PK	Vertical

Final Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7726.709	-58.48	-51.69	-47.00	4.69	6.79	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11ac VHT80 5775MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-47.61	-62.32	-47.00	15.32	-14.71	PK	Horizontal
2	1199.750	-52.24	-66.78	-47.00	19.78	-14.54	PK	Horizontal
3	1809.200	-50.26	-63.20	-47.00	16.20	-12.94	PK	Horizontal
4	2457.750	-56.35	-66.51	-47.00	19.51	-10.16	PK	Horizontal
5	3618.850	-59.83	-63.23	-47.00	16.23	-3.40	PK	Horizontal
6	7699.700	-58.60	-52.86	-47.00	5.86	5.74	PK	Horizontal

Final Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7700.030	-58.39	-52.66	-47.00	5.66	5.73	RMS	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	1079.900	-49.45	-65.23	-47.00	18.23	-15.78	PK	Vertical
2	1279.650	-53.62	-67.76	-47.00	20.76	-14.14	PK	Vertical
3	1499.800	-52.31	-65.31	-47.00	18.31	-13.00	PK	Vertical
4	1809.200	-53.13	-64.21	-47.00	17.21	-11.08	PK	Vertical
5	3618.850	-59.57	-62.74	-47.00	15.74	-3.17	PK	Vertical
6	7699.700	-58.50	-52.88	-47.00	5.88	5.62	PK	Vertical

Final Data List

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	7700.030	-59.07	-53.46	-47.00	6.46	5.61	RMS	Vertical

Above 18GHz-40GHz
Antenna 1:

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5745MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	21036.88	-59.83	-69.68	-47.00	22.68	-9.85	RMS	Horizontal
2	22979.92	-57.34	-66.28	-47.00	19.28	-8.94	RMS	Horizontal
3	26704.08	-59.73	-64.09	-47.00	17.09	-4.36	RMS	Horizontal
4	30640.32	-55.55	-65.85	-47.00	18.85	-10.30	RMS	Horizontal
5	37259.68	-58.48	-65.09	-47.00	18.09	-6.61	RMS	Horizontal
6	39602.24	-59.55	-63.14	-47.00	16.14	-3.59	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	20622.40	-59.91	-70.64	-47.00	23.64	-10.73	RMS	Vertical
2	22979.92	-57.83	-67.46	-47.00	20.46	-9.63	RMS	Vertical
3	26704.96	-60.30	-66.22	-47.00	19.22	-5.92	RMS	Vertical
4	33100.80	-56.22	-68.23	-47.00	21.23	-12.01	RMS	Vertical
5	39153.44	-60.29	-62.19	-47.00	15.19	-1.90	RMS	Vertical
6	39758.88	-60.25	-61.41	-47.00	14.41	-1.16	RMS	Vertical

Project No	E20210426746801	EUT:	Camera Hub G3
Model:	CH-H03	Sample No:	E20210426746801-0008
Mode:	RX 802.11a 5825MHz	Voltage:	AC230V/50Hz
Environment:	Temp:23.8℃; Humi:54%	Engineer:	Chen Xiaocong

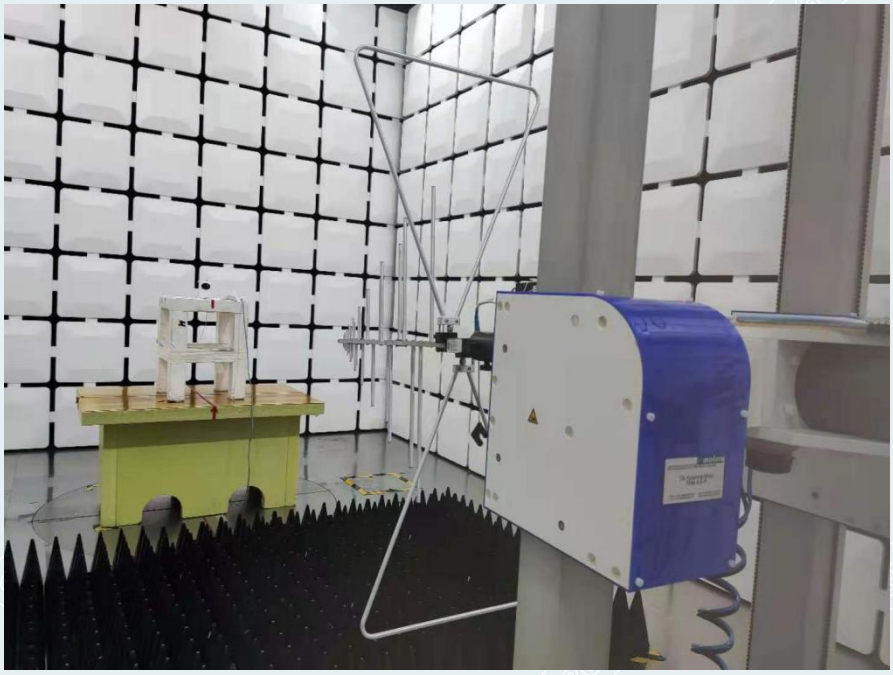
Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	20598.64	-59.72	-69.87	-47.00	22.87	-10.15	RMS	Horizontal
2	23300.24	-56.41	-65.06	-47.00	18.06	-8.65	RMS	Horizontal
3	26681.20	-60.25	-64.64	-47.00	17.64	-4.39	RMS	Horizontal
4	36873.36	-57.52	-65.09	-47.00	18.09	-7.57	RMS	Horizontal
5	39128.80	-60.23	-63.47	-47.00	16.47	-3.24	RMS	Horizontal
6	39780.00	-59.91	-63.17	-47.00	16.17	-3.26	RMS	Horizontal

Suspected Data List								
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Detector	Polarity
1	18957.44	-58.23	-71.20	-47.00	24.20	-12.97	RMS	Vertical
2	23300.24	-56.48	-65.75	-47.00	18.75	-9.27	RMS	Vertical
3	26674.16	-60.14	-66.08	-47.00	19.08	-5.94	RMS	Vertical
4	29328.24	-57.83	-67.26	-47.00	20.26	-9.43	RMS	Vertical
5	35376.48	-55.13	-66.99	-47.00	19.99	-11.86	RMS	Vertical
6	39866.24	-60.73	-61.57	-47.00	14.57	-0.84	RMS	Vertical

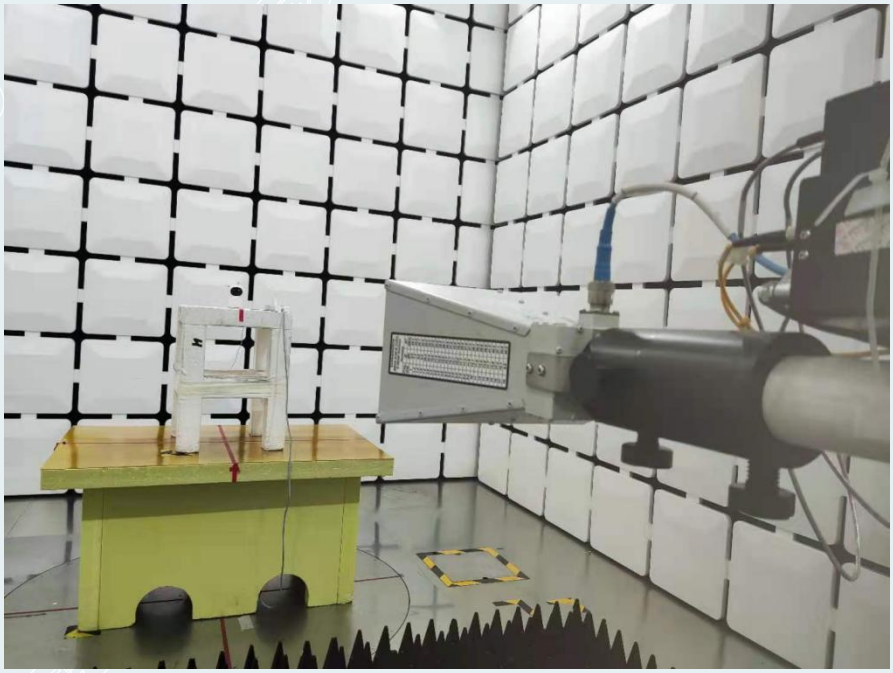
TEST RESULTS: The unit does meet the requirements.

APPENDIX A: PHOTOGRAPH OF THE TEST ARRANGEMENT

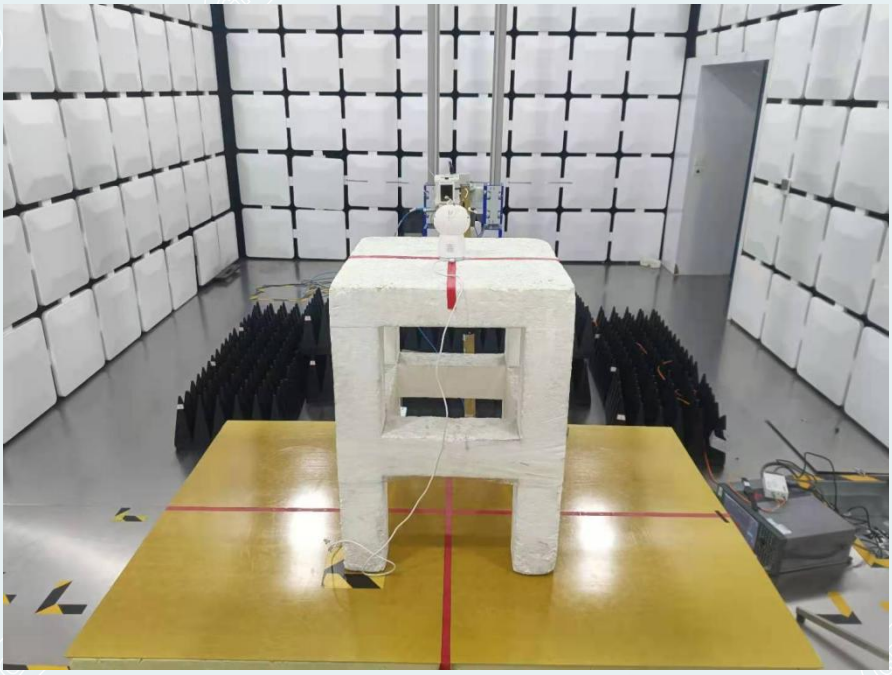
Below 1GHz:



Above 1GHz:



Above 18GHz:



APPENDIX B: PHOTOGRAPH OF THE EUT

Please refer to the attached document E20210426746801-1-EUT Photo.

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