

Global United Technology Services Co., Ltd.

Report No.: GTSL202107000249F02

TEST REPORT

Applicant: Shenzhen Golden Vision Technology Development Co., Ltd

Address of Applicant: No.6 Bao Fu Road, Bao Lai industrial Park, Shang Mu Gu

Villiage, Pinghu Street, Longgang District, Shenzhen City,

Guangdong Province, 518000, China

Shenzhen Golden Vision Technology Development Co., Ltd Manufacturer:

Address of No.6 Bao Fu Road, Bao Lai industrial Park, Shang Mu Gu Villiage, Pinghu Street, Longgang District, Shenzhen City, Manufacturer:

Guangdong Province, 518000, China

Equipment Under Test (EUT)

Product Name: Smart Pet Feeder

Model No.: **BL6-WIFI**

BL5-WIFI, BL4-WIFI, BL3-WIFI, BL7-WIFI Add. Model No.:

Trade Mark: N/A

2APD7-BL6-WIFI FCC ID:

FCC CFR Title 47 Part 15 Subpart C Section 15.247 **Applicable standards:**

Date of sample receipt: July 26, 2021

Date of Test: July 26, 2021 to September 10

Date of report issued: September 13, 2021

Test Result: PASS *

Authorized Signature:

Robinson Luo **Laboratory Manager**

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver. Page 1 of 58

^{*} In the configuration tested, the EUT complied with the standards specified above.



2 Version

Version No.	Date	Description
V1.0	September 13, 2021	Original

Prepared By:	Joseph Dy	Date:	September 13, 2021
	Project Engineer	- 2 4	8 8 8 8
Check By:	Lotsing org lund	Date:	September 13, 2021
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4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

Remark: Test according to ANSI C63.10:2013 and RSS-Gen

Pass: The EUT complies with the essential requirements in the standard.

Measurement Uncertainty

No.	ltem .	Measurement Uncertainty
1.0	Radio Frequency	1 x 10 ⁻⁷
2	Duty cycle	0.37%
3	Occupied Bandwidth	2.8dB
4	RF conducted power	0.75dB
5	RF power density	2 2 3dB
6	Conducted Spurious emissions	2.58dB
7	AC Power Line Conducted Emission	3.44dB (0.15MHz ~ 30MHz)
		3.1dB (9kHz-30MHz)
		3.8039dB (30MHz-200MHz)
8	Radiated Spurious emission test	3.9679dB (200MHz-1GHz)
	19 19 19 19 19	4.29dB (1GHz-18GHz)
		3.30dB (18GHz-40GHz)
9	Temperature test	1°C
10	Humidity test	3%
11	Time	3%



5 General Information

5.1 General Description of EUT

Product Name:	Smart Pet Feeder
Model No.:	BL6-WIFI
Add. Model No.:	BL5-WIFI, BL4-WIFI, BL3-WIFI, BL7-WIFI
Serial No.:	N/A
Hardware Version:	V1.0
Software Version:	V1.0
Test sample(s) ID:	GTSL202107000249-1
Sample(s) Status:	Engineer sample
Channel numbers:	802.11b/802.11g /802.11n(HT20):11
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n(H20):11 Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	PCB Antenna
Antenna gain:	2.5dBi (declare by applicant)
Power supply:	XED-UL050100CU

Note: The product (Smart Pet Feeder) models (BL6-WIFI) and models (BL5-WIFI, BL4-WIFI, BL3-WIFI, BL7-WIFI) the difference is only to distinguish different sales areas of different customers, the model name is different, and the products are exactly the same.



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	5 8	2432MHz	9	2452MHz	7 6	50
2	2417MHz	6	2437MHz	10	2457MHz	2 - 32 -	8 8
3	2422MHz	7 8	2442MHz	11	2462MHz	2 6	2 - 8
4	2427MHz	8	2447MHz	8 8	g .	2 8	8 8

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

2 S Tark shamed & &	Frequency (MHz)		
Test channel	802.11b/802.11g/802.11n(HT20):11		
Lowest channel	2412MHz		
Middle channel	2437MHz		
Highest channel	2462MHz		



5.2 Test mode

Transmitting mode Keep the EUT in continuously transmitting mode

Remark: During the test, the dutycycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

	Mode	802.11b	802.11g	802.11n(HT20)	
3	Data rate	1Mbps	6Mbps	6.5Mbps	

5.3 Description of Support Units

None.

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• FCC—Registration No.: 381383

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files.

• IC —Registration No.: 9079A

CAB identifier: CN0091

The 3m Semi-

anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

• NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.7 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960

5.8 Additional Instructions

Test Software	AmebaZ2_mptool_1V3.
Power level setup	Default

Global United Technology Services Co., Ltd.

No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone,

Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102



6 Test Instruments list

Rad	iated Emission:			-		A 2
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 02 2021	July. 01 2022
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 24 2021	June. 23 2022
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 24 2021	June. 23 2022
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 24 2021	June. 23 2022
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 24 2021	June. 23 2022
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 24 2021	June. 23 2022
9	Coaxial Cable	GTS	N/A	GTS211	June. 24 2021	June. 23 2022
10	Coaxial cable	GTS	N/A	GTS210	June. 24 2021	June. 23 2022
11	Coaxial Cable	GTS	N/A	GTS212	June. 24 2021	June. 23 2022
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 24 2021	June. 23 2022
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 24 2021	June. 23 2022
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 24 2021	June. 23 2022
15	Band filter	Amindeon	82346	GTS219	June. 24 2021	June. 23 2022
16	Power Meter	Anritsu	ML2495A	GTS540	June. 24 2021	June. 23 2022
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 24 2021	June. 23 2022
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 24 2021	June. 23 2022
19	Splitter	Agilent	11636B	GTS237	June. 24 2021	June. 23 2022
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 24 2021	June. 23 2022
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 18 2020	Oct. 17 2021
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 18 2020	Oct. 17 2021
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 18 2020	Oct. 17 2021
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 24 2021	June. 23 2022



Cond	Conducted Emission							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2021	May.14 2022		
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 24 2021	June. 23 2022		
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 24 2021	June. 23 2022		
4	ENV216 2-L-V- NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	June. 24 2021	June. 23 2022		
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A		
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
7	Thermo meter	KTJ	TA328	GTS233	June. 24 2021	June. 23 2022		
8	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	June. 24 2021	June. 23 2022		
9	ISN	SCHWARZBECK	NTFM 8158	GTS565	June. 24 2021	June. 23 2022		
10	High voltage probe	SCHWARZBECK	TK9420	GTS537	July. 09 2021	July. 08 2022		

RF Conducted Test:								
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 24 2021	June. 23 2022		
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 24 2021	June. 23 2022		
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 24 2021	June. 23 2022		
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 24 2021	June. 23 2022		
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 24 2021	June. 23 2022		
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 24 2021	June. 23 2022		
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 24 2021	June. 23 2022		
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 24 2021	June. 23 2022		

Gene	General used equipment:								
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)			
_1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 24 2021	June. 23 2022			
2	Barometer	ChangChun	DYM3	GTS255	June. 24 2021	June. 23 2022			



7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement: FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

EUT Antenna:

The antennas are PCB antenna, the best case gain of the antennas are 2.5dBi, reference to the appendix II for details



7.2 Conducted Emissions

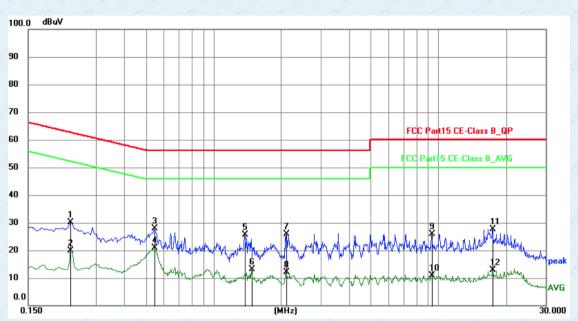
Test Requirement:	FCC Part15 C Section 15.207	,	4 6				
Test Method:	ANSI C63.10:2013						
Test Frequency Range:	150KHz to 30MHz	150KHz to 30MHz					
Receiver setup:	RBW=9KHz, VBW=30KHz, S	weep time=auto	9 - 1,89 - 1	2 2			
Limit:	Francisco (MILE)	l lo lo Li	mit (dBuV)	20 2			
	Frequency range (MHz)	Quasi-peak	Ave	erage			
	0.15-0.5	66 to 56*	56 t	to 46*			
	0.5-5	56		46			
	5-30	60		50			
Test setup:	* Decreases with the logarithm						
Test procedure:	Remark E.U.T Test table/Insulation plane Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m 1. The E.U.T and simulators a line impedance stabilization 50ohm/50uH coupling imper 2. The peripheral devices are LISN that provides a 50ohr termination. (Please refer to photographs). 3. Both sides of A.C. line are	Reference Plane LISN 40cm 80cm Filter Ac power Equipment Test table/Insulation plane Receiver Test table height=0.8m 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative					
Toot Instruments:			a medearemen	nt.			
Test Instruments:	Refer to section 6.0 for details	50 00	6	nt.			
Test mode:	Refer to section 6.0 for details Refer to section 5.2 for details	6					
Test mode: Test environment:	Refer to section 6.0 for details Refer to section 5.2 for details Temp.: 25 °C Hur	50 00	Press.:	1012mbar			
Test mode:	Refer to section 6.0 for details Refer to section 5.2 for details	6					

Remark: Both high and low voltages have been tested to show only the worst low voltage test data.



Measurement data

Line:

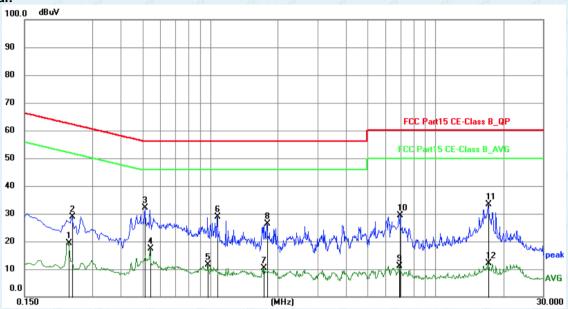


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2310	20.46	9.75	30.21	62.41	-32.20	QP	Р
2	0.2310	10.14	9.75	19.89	52.41	-32.52	AVG	Р
3	0.5460	18.23	9.71	27.94	56.00	-28.06	QP	Р
4	0.5460	11.14	9.71	20.85	46.00	-25.15	AVG	Р
5	1.3785	15.88	9.67	25.55	56.00	-30.45	QP	Р
6	1.4775	3.57	9.67	13.24	46.00	-32.76	AVG	Р
7	2.1075	16.13	9.72	25.85	56.00	-30.15	QP	Р
8	2.1075	2.47	9.72	12.19	46.00	-33.81	AVG	Р
9	9.3390	15.96	9.81	25.77	60.00	-34.23	QP	Р
10	9.3390	1.13	9.81	10.94	50.00	-39.06	AVG	Р
11	17.4075	17.77	9.93	27.70	60.00	-32.30	QP	Р
12	17.4075	3.03	9.93	12.96	50.00	-37.04	AVG	Р

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Neutral:



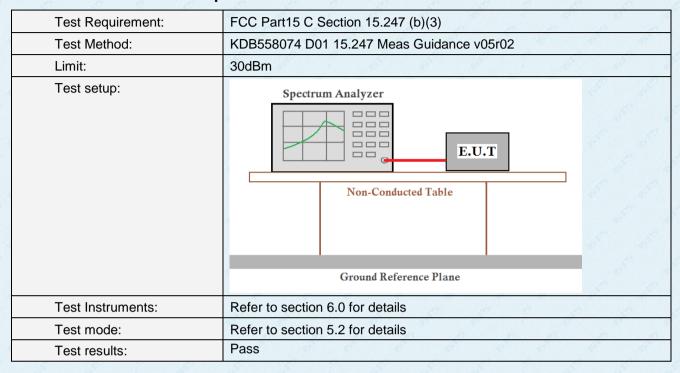
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2355	9.70	9.76	19.46	52.25	-32.79	AVG	Р
2	0.2445	19.05	9.75	28.80	61.94	-33.14	QP	Р
3	0.5144	22.54	9.71	32.25	56.00	-23.75	QP	Р
4	0.5415	7.69	9.71	17.40	46.00	-28.60	AVG	Р
5	0.9780	1.96	9.64	11.60	46.00	-34.40	AVG	Р
6	1.0725	19.24	9.65	28.89	56.00	-27.11	QP	Р
7	1.7340	0.59	9.70	10.29	46.00	-35.71	AVG	Р
8	1.7835	16.76	9.70	26.46	56.00	-29.54	QP	Р
9	6.8865	1.30	9.75	11.05	50.00	-38.95	AVG	Р
10	6.9810	19.75	9.75	29.50	60.00	-30.50	QP	Р
11	17.1240	23.55	9.94	33.49	60.00	-26.51	QP	Р
12	17.1240	2.16	9.94	12.10	50.00	-37.90	AVG	Р

Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Receiver Read level + LISN Factor + Cable Loss.
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



7.3 Conducted Peak Output Power



Measurement Data

Test CH	Р	Limit(dBm)	Result		
Test Off	802.11b	802.11g	802.11n(HT20)	Limit(ubin)	Result
Lowest	4.05	5.28	5.15	9	
Middle	3.95	5.60	5.33	30.00	Pass
Highest	4.04	4.97	5.28		8 8

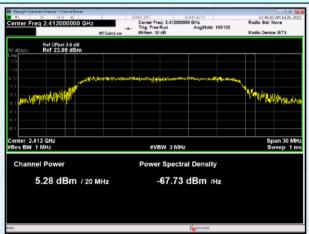


Test plot as follows:

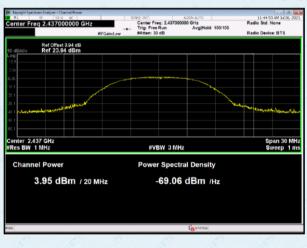
Report No.: GTSL202107000249F02

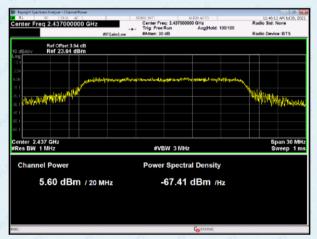




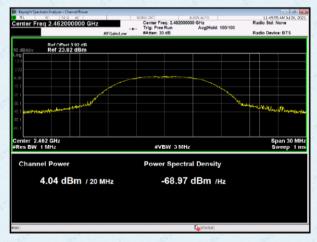


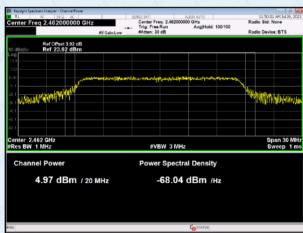
Lowest channel





Middle channel

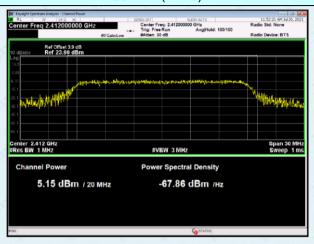




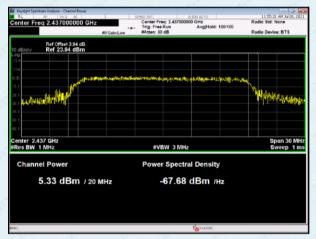
Highest channel



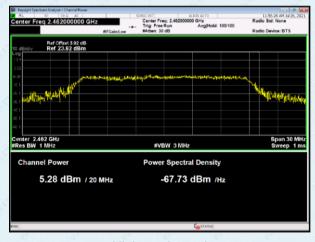
802.11n(HT20)



Lowest channel



Middle channel



Highest channel



7.4 Channel Bandwidth & 99% Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)				
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02				
Limit:	>500KHz				
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.2 for details				
Test results:	Pass				



Measurement Data

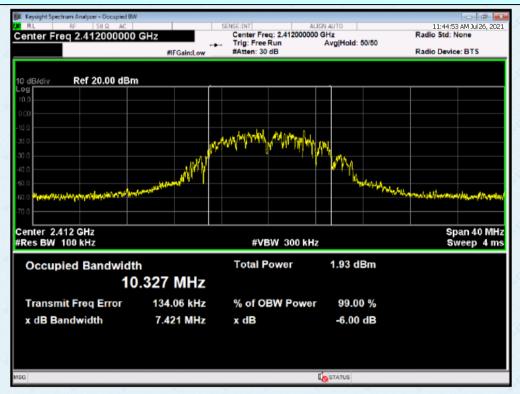
Test CH -	Channel Bandwidth (MHz)			Limit(KHz)	Result	
1621011	802.11b	802.11g	802.11n(HT20)	Limit(Kriz)	Result	
Lowest	7.421	16.34	16.84		Pass	
Middle	6.286	16.05	16.37	>500		
Highest	6.425	15.62	17.01			



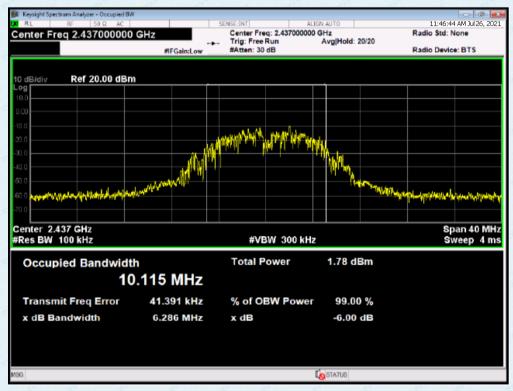
Test plot as follows:

Test plot as follows

802.11b



Lowest channel



Middle channel

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Highest channel

802.11g

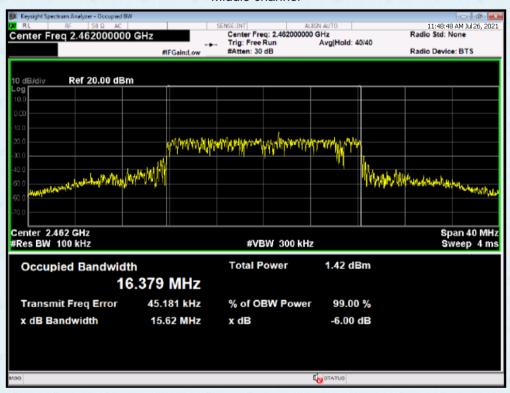


Lowest channel





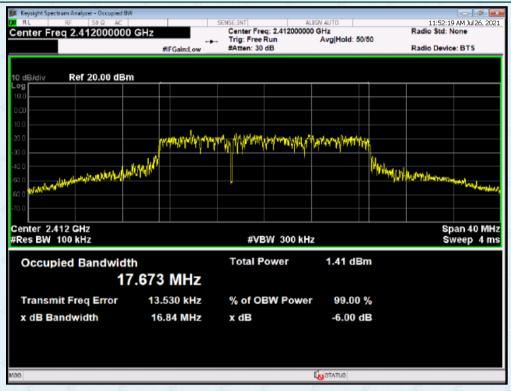
Middle channel



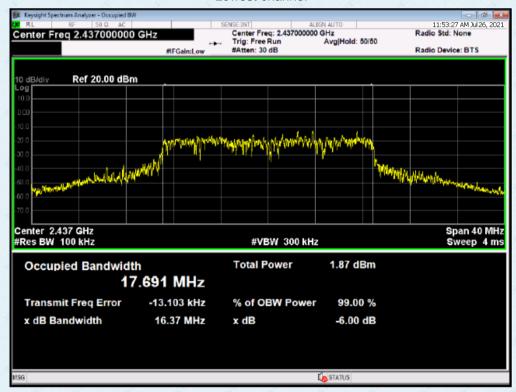
Highest channel



802.11n(HT20)



Lowest channel



Middle channel





Highest channel



7.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)				
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02				
Limit:	8dBm/3kHz				
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.2 for details				
Test results:	Pass				

Measurement Data

Test CH	Powe	Limit	Result			
Test Of t	802.11b	802.11g	802.11n(HT20)	(dBm/3kHz)	Nesuit	
Lowest	-16.132	-16.923	-16.431			
Middle	-16.774	-16.699	-17.001	8.00	Pass	
Highest	-16.472	-16.684	-16.558			



Test plot as follows:

802.11b

Report No.: GTSL202107000249F02



Lowest channel



Middle channel

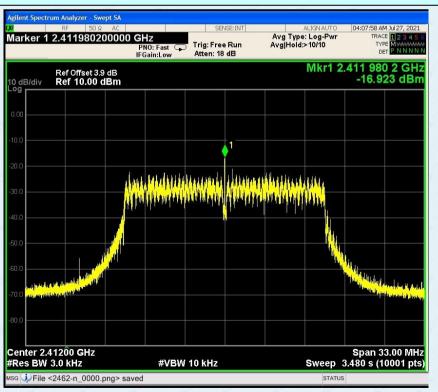
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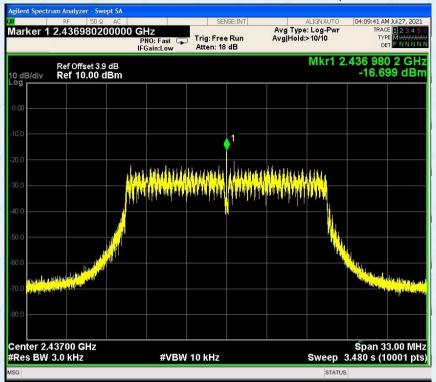
Highest channel

802.11g

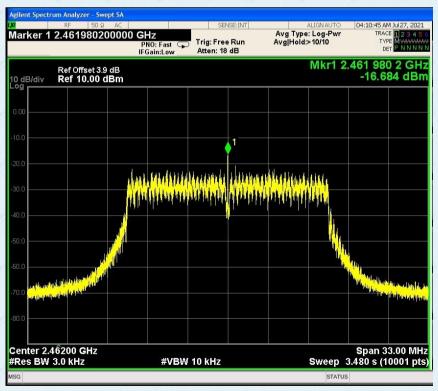


Lowest channel





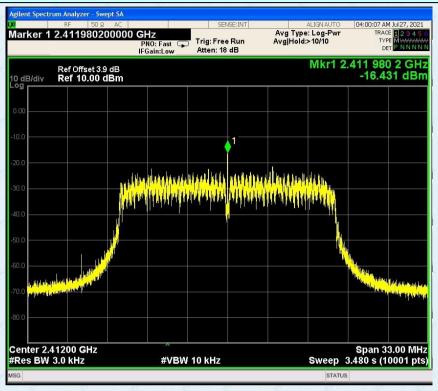
Middle channel



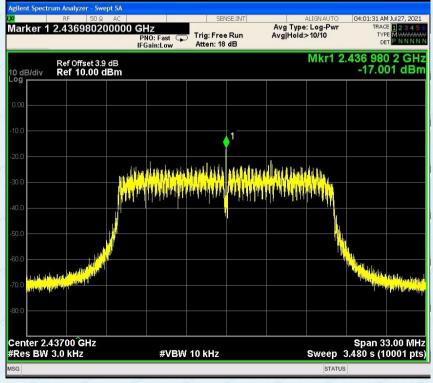
Highest channel



802.11n(HT20)



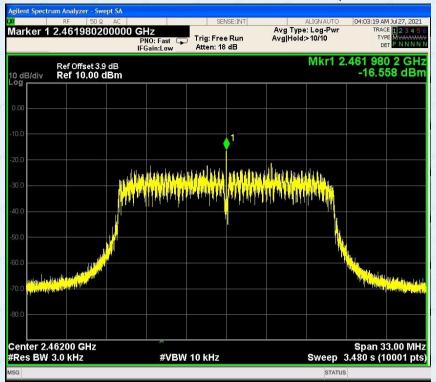
Lowest channel



Middle channel

GTS

Report No.: GTSL202107000249F02



Highest channel



7.6 Band edges

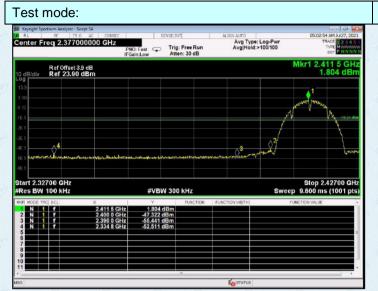
7.6.1 Conducted Emission Method

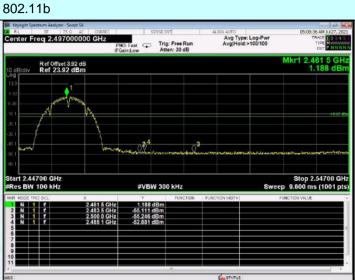
Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test results:	Pass // / / / / / / / / / / / / / / / / /					



Test plot as follows:

Report No.: GTSL202107000249F02





Highest channel

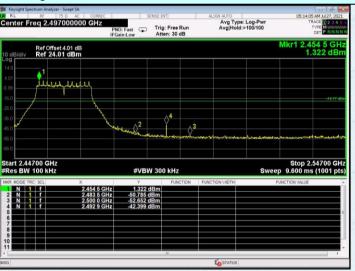
Lowest channel

802.11g





Lowest channel



Highest channel





Lowest channel



Highest channel



7.6.2 Radiated Emission Method

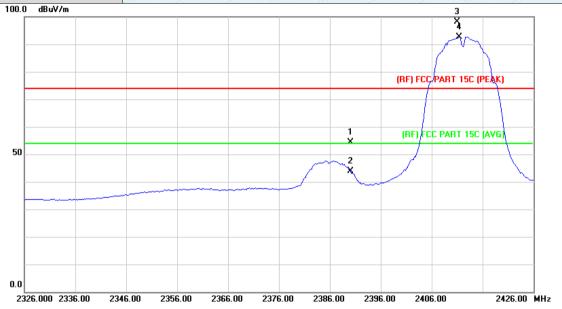
Test Requirement:	FCC Part15 C Se	ection 15.209	and 15.205		g g			
Test Method:	ANSI C63.10: 2013							
Test Frequency Range:	All of the restrict	All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.						
Test site:	Measurement Dis							
Receiver setup:	Frequency	Detector	RBW	VBW	Value			
•		Peak	1MHz	3MHz	Peak			
	Above 1GHz	Average	1MHz	3MHz	Average			
Limit:	Frequer	20X	Limit (dBuV/		Value			
	Name of the State		54.0		Average			
	Above 10	HZ	74.0		Peak			
	Turn Table	< 3n	Test Antenna-	amplifier.				
Test Procedure:	 The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test 							
	worst case mo	ode is recorde	ed in the repo	11 L. 200				
Test Instruments:	worst case mo			nt. 23 23				
Test Instruments: Test mode:		6.0 for details	4	nt. 23				



Measurement data:

Report No.: GTSL202107000249F02

Temperature:	24.3 ℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60 Hz	p p	2 2 2
Ant. Pol.	Horizontal	2 2 2	9 9 9
Test Mode:	TX B Mode 2412MHz	6 6	
Remark:	N/A		
100.0 dBuV/m			3 X
			*



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	53.06	1.28	54.34	74.00	-19.66	peak
2		2390.000	42.59	1.28	43.87	54.00	-10.13	AVG
3	X	2411.000	96.77	1.38	98.15	74.00	24.15	peak
4	*	2411.400	91.34	1.39	92.73	54.00	38.73	AVG

Emission Level= Read Level+ Correct Factor



mpe	erature	:	į.	24.3	3 ℃				2	Rela	tive	Hun	nidity:	42%			
Test Voltage:				AC 120V/60 Hz Vertical													
Ant. Pol. Test Mode:																	
				TX B Mode 2412MHz													
Remark:			N/A														
100.0	dBuV/m																1
														3 X1			
														ا بخسر			
													(RF) FC	C PART 15	C (PEAK	ij	
														1		1	
-													(DE) E	L nint .	EC HVC		-
50												1	(RF) F	C PART 1	SC [AV6	1	-
												×	Λl				
												2 K	Jv			CA.	1
												Marie .					-
0.0 232	25.000 233	5.00	2345	.00	2355.	00	2365.	.00	2375.00	238	5.00	239!	5.00 240	05.00	2	425.00	∐ MHz
_						eadir			rrect		asu						
N	lo. Mi	ί.	Fred	4-	L	eve	l	Fa	actor	n	nent		Limit	O	ver		
			MHz		0	lBuV		dE	3/m	d	BuV/	m	dBuV/	m d	iΒ	Dete	ctor
1		23	90.0	00	4	5.91	ı	1.28		47.19		9	74.00 -2		6.81	pe	ak
2		23	90.0	00	35.49)	1.28		36.77		54.00		7.23	A۱	/G	
3	Х	24	11.0	00	89.58		3	1.38		90.96		6	74.0) 16	16.96		ak
4	*	24	11.4	00	8	4.51	1	1.	39	8	5.9	0	54.0	3	1.90	A۱	/G
_																	



mperature:	24.3	3°C	9	Relative Hun	nidity:	42%	£ .					
st Voltage:	AC	120V/60 Hz		9	20	2 2	B					
t. Pol.	Hor	izontal	9	2 2	0	9	10					
st Mode:	TX	TX B Mode 2462MHz										
mark:	N/A		6 6	6	8 2	8 6	4					
100.0 dBuV/m	1 *2 *	3 X 4				PART 15C (PEAK						
2448.000 2458	3.00 2468.00	2478.00 2488	.00 2498.00	2508.00 251	8.00 2528.	00 2	2548.00 MHz					
No. Mk	s. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over						
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector					
1 X	2460.800	97.07	1.72	98.79	74.00	24.79	peak					
2 *	2462.600	91.85	1.74	93.59	54.00	39.59	AVG					
3	2483.500	50.92	1.88	52.80	74.00	-21.20	peak					
4	2483.500	38.00	1.88	39.88	54.00	-14.12	AVG					



emperature:	24.3	3 ℃	2 2	Relative Hun	nidity:	42%	
est Voltage:	AC	120V/60 Hz	19 18	9 - 19	2	2 2	18
nt. Pol.	Ver	tical	9 9	0 0	0	9	2
est Mode:	TX	B Mode 246	2MHz	20	.00	0 0	10
Remark:	N/A	S S	9 9		8	6 6	100
100.0 dBuV/m							
1 X ₂	M				(RF) FCC I	PART 15C (PEAK]
50					(RF) FCC	PART 15C (AVG)
, J		3 ×					
		w (x					
0.0 2451.000 2461	.00 2471.00	2481.00 2491	.00 2501.00	2511.00 252	1.00 2531.	00 2	551.00 MHz
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1 X	2460.600	88.71	1.72	90.43	74.00	16.43	peak
2 *	2461.200	83.52	1.73	85.25	54.00	31.25	AVG
3	2483.500	41.91	1.88	43.79	74.00	-30.21	peak
	2483.500	30.99	1.88	32.87	54.00	-21.13	AVG

Emission Level= Read Level+ Correct Factor



mpei	rature:	24	.3 ℃	9 9	Relative Hu	midity:	42%	
st Vo	ltage:	AC	2 120V/60 Hz	100	9 8	100	go g	2
t. Po	I.	Н	orizontal	9 9	j. j.	9 10	9	2
st Mo	ode:	T	G Mode 24	12MHz	9 10			10
mark	(:	N/	Ά	- 6 · 6	- C		6 6	60
120.0	dBuV/m							
							4 ×	
						X		
						(RF) FCC	PART 15C (PEA	AK)
70					1 X			
<u> </u>					2	(RF) FC	C PART 15CTAN	(G)
					×			
20.0								
2335	.000 2345	5.00 2355.00	2365.00 237	5.00 2385.00	2395.00 24	05.00 2415	.00	2435.00 MHz
			Reading	Correct	Measure-			
No	o. Mk	. Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	66.88	1.28	68.16	74.00	-5.84	peak
2		2390.000	46.67	1.28	47.95	54.00	-6.05	AVG
3	*	2410.400	90.40	1.38	91.78	54.00	37.78	AVG
4	Х	2417.600	103.64	1.44	105.08	74.00	31.08	peak



emperature:	24.3	3°C		Relati	ve Humidit	y: 42%	8
est Voltage:	AC	120V/60	Hz	2	2 2	1	g g
nt. Pol.	Vert	tical	10		(A)	2 9	2
est Mode:	TX	G Mode	2412MHz	20	20 10	0	2 2
lemark:	N/A		19	9 9		- S - S	
100.0 dBuV/m						4 ×	
						3 X	
					(R	F) FCC PART 15C	(PEAK)
				1			
				×		RF) FCC PART 150	(A)(C)
50						nr) rec rant 130	, [AWG]
				2 X			

0.0							
2331.000 2341.00	2351.00	2361.00	2371.00 23	81.00 2391.	00 2401.00	2411.00	2431.00 MHz
	_	Readi			sure-		_
No. Mk.	Freq.	Leve	l Fac	tor me	ent Lin	nit Ove	· F
	MHz	dBuV	dB/i	m dBu	ıV/m dB∈	uV/m dB	Detector
1 2	390.000	60.23	3 1.2	8 61	.51 74	1.00 -12.4	49 peak
2 2	390.000	40.80	0 1.2	8 42	.08 54	1.00 -11.9	92 AVG
3 * 2	406.800	82.2	1 1.3	5 83	.56 54	1.00 29.5	6 AVG
4 X 2	417.600	95.44	4 1.4	4 96	.88 74	1.00 22.8	88 peak
							-



ature:		24.3 °	C	1	9	Relati	ve Hun	nidity:	42%	
Itage:		AC 12	20V/60 I	Hz	6	0	B	19		2
l.		Horiz	ontal	20	9		. S	0	9	
de:		TX G	Mode 2	2462MH	Ηz	9	20	20	0 1	. 10
(:		N/A								
dBuV/m		2								
		*	S							
		1 X								
			+		_			(RF) FCC	PART 15C (PE	AK)
,										
/										
\mathcal{I}				+				(RF) FC	C PART 15C (A	VG)
					* \					
						- Ju		l.,	~~~~~	
000 2448	3.00 245	i8.00 2	468.00	2478.00	2488.00	2498.0	00 250	8.00 2518	3.00	2538.00 MHz
			Doadir	on C	orroct	Mea	euro			
o. Mk	. Fre							Limit	Over	
	МН	z	dBuV		iB/m	dBu	iV/m	dBuV/m	dB	Detector
*	2464.	400	89.65	5 1	.75	91	.40	54.00	37.40	AVG
Х	2465.4	400	103.8	8 1	.76	105	5.64	74.00	31.64	peak
	2483.	500	68.23	3 1	.88	70	.11	74.00	-3.89	peak
	2483.	ENN	44.14	1 1	1.88	46	.02	54.00	-7.98	AVG
	Itage: I. ode: :: dBuV/m 000 2448 D. Mk	Itage: I. ode: I. ode: II. ode: III.	Itage: AC 12 I. Horiz Ode: TX G III. Horiz Ode: TX	Itage: AC 120V/60 II. Horizontal TX G Mode : TX G Mode : N/A dBuV/m 2 1 1 1 1 1 1 1 1 1 1 1 1	Itage: AC 120V/60 Hz II. Horizontal TX G Mode 2462MF N/A dBuV/m 2 1 1 Reading Co D. Mk. Freq. Level F MHz dBuV * 2464.400 89.65 1 X 2465.400 103.88 1	Itage: AC 120V/60 Hz II. Horizontal Dide: TX G Mode 2462MHz III. N/A III. Horizontal III. Horizontal III. Horizontal III. ABUV/m III. Horizontal III. ABUV/m III. ABUV/m III. Horizontal III. ABUV/m III. Horizontal III. ABUV/m III. Horizontal III. ABUV/m III. Horizontal III. ABUV/m III. AB	Itage: AC 120V/60 Hz I. Horizontal Dide: TX G Mode 2462MHz II. N/A III. Horizontal III. H	Itage: AC 120V/60 Hz I. Horizontal TX G Mode 2462MHz N/A dBuV/m 2 X Reading Correct Measure- D. Mk. Freq. Level Factor ment MHz dBuV dB/m dBuV/m * 2464.400 89.65 1.75 91.40 X 2465.400 103.88 1.76 105.64	AC 120V/60 Hz	AC 120V/60 Hz

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emperatur	e:	24.3 ℃	J. 9	Relative H	lumidity:	42%	
est Voltag	e:	AC 120V/6) Hz	g g	100	le le	je.
nt. Pol.		Vertical	8 9	3	0 0		3
est Mode:		TX G Mode	e 2462MHz	2 20		0 0	20
emark:		N/A		6 6		6 6	6
100.0 dBuV/i	n 2						
	1				(RF) FCC	PART 15C (PEA	K)
50			3 X		(RF) FC	C PART 15C (AV	G)
			*				
0.0 2442.000 2	452.00 246 2	2.00 2472.00	2482.00 2492	2.00 2502.00	2512.00 252	2.00	2542.00 MHz
No. M	k. Fred	Read			e- Limit	Over	
	MHz			dBuV/m	dBuV/n	n dB	Detector
	2455.6	00 82.4		84.12	54.00	30.12	AVG
1 *		00 95.9	1.69	97.60	74.00	23.60	peak
1 * 2 X	2455.8	00 95.3	1.09				
	2455.8 2483.5			59.99	74.00	-14.01	peak



empera	ture		24.3 °			Relativ	e Humidity	: 42%			
est Vol	tage:		AC 12	0V/60 H	z	9	9 0	2	g g		
nt. Pol.	ı		Horizo	ontal	9	2	4	9	3		
est Mo	de:		TX N	TX N(HT20) Mode 2412MHz							
emark:			N/A	6	6 6		6	* · · · · · · · · · · · · · · · · · · ·			
110.0 d	BuV/m										
							4 ×				
							3				
							**************************************	www			
							(BF)	FCC PART 15C (PEAK)		
						1	()	100111111111111111111111111111111111111	,		
60						×					
00							√√ (BF) FCC PART 150	'YAVG)		
						2					
		_			~ / /						
10.0											
10.0 2335.0	00 234	5.00 2355	.00 2	365.00 2	375.00 2385.0	0 2395.00	2405.00	2415.00	2435.00 MHz		
No	Mk	. Fred		Reading Level	g Correct Facto			it Ove	or.		
140.	. IVIIN		·								
		MHz		dBuV	dB/m	dBu\					
1		2390.0	00	66.18	1.28	67.	46 74.	.00 -6.5	54 peak		
2		2390.0	00	45.99	1.28	47.	27 54.	00 -6.7	73 AVG		
3	*	2403.8	00	88.94	1.34	90.	28 54.	00 36.2	28 AVG		
4	Х	2405.6	nn	102.61	1.35	103	.96 74.	00 29.9	96 peak		

Emission Level= Read Level+ Correct Factor



emperature:	24.3	$^{\circ}$ C	2	Relative Hur	nidity:	42%	S.
est Voltage:	AC	120V/60 Hz		9 - 8	2	0 0	100
nt. Pol.	Vert	ical	9 9	2 4		9	de la
est Mode:	1XT	N(HT20) Mo	de 2412MH	-lz	99	10 10	10
lemark:	N/A	8	9 9		8	9	-61 PM
100.0 dBuV/m						4	
						×	
					3 X		
					(RF) FCC P	ART 15C (REAK)
				2	1		
				X	(BE) ECC	PART 15C (AVG	1
50				لسر	()		, n
				1			74
0.0							
2331.000 2341.00	2351.00	2361.00 2371	.00 2381.00	2391.00 240	1.00 2411.0	0 2	431.00 MHz
		Dandina	C	Massuma			
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV		dBuV/m	dBuV/m	dB	Detector
			dB/m				
	2390.000	40.12	1.28	41.40	54.00	-12.60	AVG
2 2	390.200	59.60	1.28	60.88	74.00	-13.12	peak
3 * 2	409.400	80.37	1.38	81.75	54.00	27.75	AVG
4 X 2	418.400	93.92	1.44	95.36	74.00	21.36	peak

Emission Level= Read Level+ Correct Factor

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mperatu	e:	24.3 ℃			Relative Hu	umidity:	42%	A.
st Voltag	e:	AC 120	0V/60 Hz		g g	go.	g g	g.
t. Pol.		Horizo	ntal	9 9	2	9 9	9	
st Mode:		TX N(I	HT20) Mc	de 2462N	ИHz		0 0	20
mark:		N/A				8	6 6	20
110.0 dBuV/								
	1 X							
	2							
	×							
			+			(RF) FCC	PART 15C (PEA	ıK)
				3 X				
60								
						(RF) FC	C PART 15C (AV	(G)
				* \				
						~~~~~		
10.0								
2439.000 2	449.00 245	59.00 24	69.00 247	9.00 2489.0	00 2499.00 2	509.00 251	9.00	2539.00 MHz
No. N	lk Ero		leading	Correct		Limit	Over	
INO. IV		<u> </u>	Level	Factor				
	MH		dBuV	dB/m	dBuV/m	dBuV/m	n dB	Detector
1 X	2457.4	400 1	102.82	1.70	104.52	74.00	30.52	peak
2 *	2457.0	600	88.98	1.70	90.68	54.00	36.68	AVG
3	2483.	500	67.47	1.88	69.35	74.00	-4.65	peak
	2402	500	44.73	1.88	46.61	54.00	-7.39	AVG
4	2483.	500						



emperatur	e:	24.3 °	C		Relative H	lumidity:	42%	
est Voltag	е:	AC 12	20V/60 Hz		g g	J.C.	B B	19
nt. Pol.		Vertic	al	2 2	4	0 0	9	ġ.
est Mode:		TX N	(HT20) Mo	ode 2462N	1Hz		10 10	20
emark:		N/A	9	9	20	9 9	6 6	40
110.0 dBuV	/m							
		2						
		×						
		1 X						
						(RF) FCC	PART 15C (PEAK)	
60	$+ \mathcal{L}$		+	3 X		(DE) FC	C DADT 150 (AVC)	
						(HF) FC	C PART 15C (AVG)	
	$\mathcal{M}$			W .				
				×	\			
10.0								
2436.000	2446.00 24	56.00 2	2466.00 247	6.00 2486.0	0 2496.00	2506.00 2516	5.00 25	36.00 MHz
			Reading	Correc	t Measure	e-		
No. M	lk. Fre		Level	Facto		Limit	Over	
	МН	z	dBuV	dB/m	dBuV/m	dBuV/r	n dB	Detector
1 *	2457.	400	81.84	1.70	83.54	54.00	29.54	AVG
2 X	2459.	000	94.65	1.70	96.35	74.00	22.35	peak
3	2483.	500	57.17	1.88	59.05	74.00	-14.95	peak
4	2483.	500	35.24	1.88	37.12	54.00	-16.88	AVG

**Emission Level= Read Level+ Correct Factor** 

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# 7.7 Spurious Emission

# 7.7.1 Conducted Emission Method

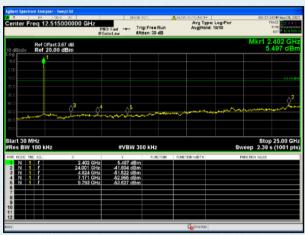
T . D	F00 P 445 0 0 41 45 047 (1)								
Test Requirement:	FCC Part15 C Section 15.247 (d)								
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02								
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.								
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane								
Test Instruments:	Refer to section 6.0 for details								
Test mode:	Refer to section 5.2 for details								
Test results:	Pass								



## Test plot as follows:

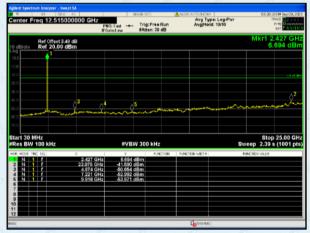
802.11b(Only worse case is reported)

Lowest channel



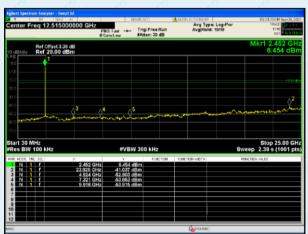
30MHz~25GHz

Middle channel



30MHz~25GHz

Highest channel



30MHz~25GHz

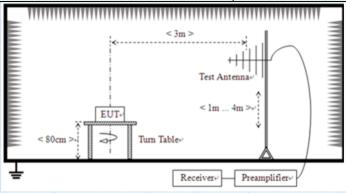


# 7.7.2 Radiated Emission Method

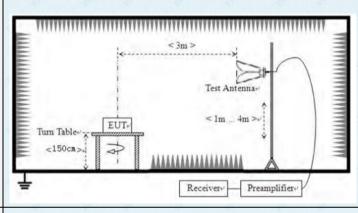
Report No.: GTSL202107000249F02

Test Requirement:	FCC Part15 C Section	on 15	5.209	687	7	6			
Test Method:	ANSI C63.10: 2013								
Test Frequency Range:	9kHz to 25GHz	9kHz to 25GHz							
Test site:	Measurement Distar	nce: 3	3m		<i>a</i>	9	.0 0		
Receiver setup:	Frequency		Detector	RBW	VBV	٧	Value		
	9KHz-150KHz		asi-peak	200H	z 600H	-Iz	Quasi-peak		
	150KHz-30MHz	Qı	ıasi-peak	9KHz	30KI	Ηz	Quasi-peak		
	30MHz-1GHz		ıasi-peak	100KF	lz 300K	Hz	Quasi-peak		
	Ab 4011-	Ø.	Peak	1MHz	z 3MH	łz	Peak		
	Above 1GHz		Peak	1MHz	z 10H	z	Average		
Limit:	Frequency	50	Limit (u\	//m)	Value	9	Measurement Distance		
	0.009MHz-0.490M	lHz	2400/F(k	(Hz)	QP	6	300m		
	0.490MHz-1.705M	24000/F(KHz)		QP		300m			
	1.705MHz-30MH	lz	30		QP		30m		
	30MHz-88MHz	100		QP					
	88MHz-216MHz	<u>z</u>	150	65	QP				
	216MHz-960MH	Z	200	<i>3</i>	QP	ď	3m		
	960MHz-1GHz	5"	500	2	QP	9	SIII		
	Above 1GHz		500		Average	. 6			
	Above IGI12		5000	)	Peak	9			
Test setup:	For radiated emiss		<3m> Test Ar  m Table	······································	WHZ				
	For radiated emiss	sions	from 30M		GHz				





#### For radiated emissions above 1GHz



#### Test Procedure:

- 1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Test Instruments:

Refer to section 6.0 for details

Global United Technology Services Co., Ltd.

No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102



			A	Report No.: 6	3TSL202107	7000249F02
Test mode:	Refer to s	ection 5.2 for	details	8 - 8	e ^c	
Test voltage:	AC120V 6	60Hz	8 8	8		
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V,	60Hz	e e		9 9	. O
Test results:	Pass		6			

#### Remarks:

- 1. Only the worst case Main Antenna test data.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

#### Measurement data:

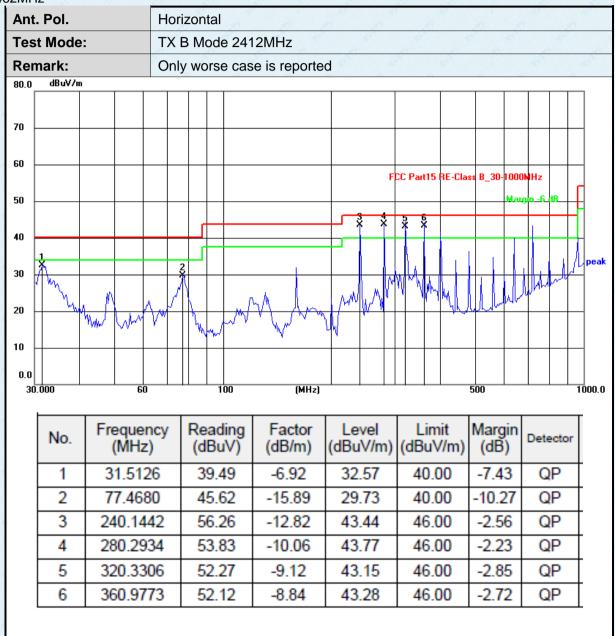
#### ■ 9kHz~30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.



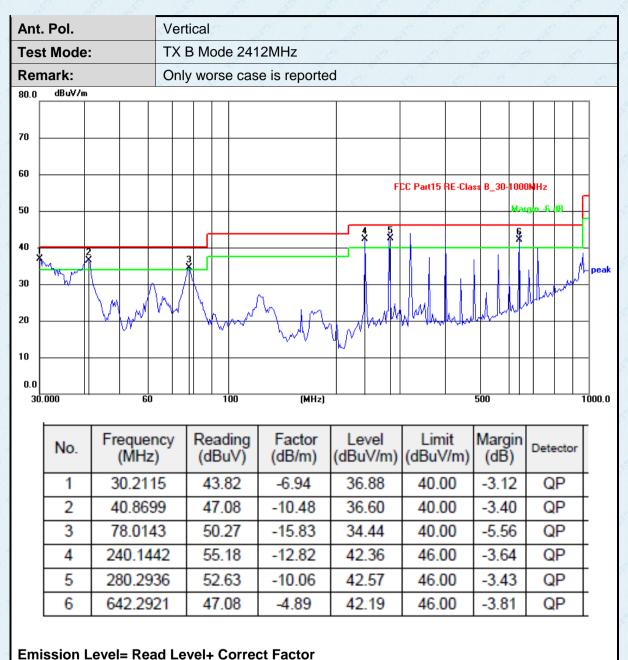
#### ■ 30MHz~1GHz

Pre-scan all test modes, found worst case at 802.11b 2462MHz, and so only show the test result of 802.11b 2462MHz



**Emission Level= Read Level+ Correct Factor** 







## **Above 1GHz**

Report No.: GTSL202107000249F02

Ant.	Pol.		Horiz	ontal						
Test	Mode:		TX B	Mode 2412	MHz	59 ×	9 49	9 9	<i>3</i>	
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1		4823.940	52.46	13.16	65.62	74.00	-8.38	peak	
	2	*	4823.970	39.08	13.16	52.24	54.00	-1.76	AVG	

Ant.	Pol.		Verti	cal					
Test	Mode	<b>ə</b> :	TX B	Mode 2412	MHz	8 8		1	8 6
	No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1		4823.904	51.30	13.16	64.46	74.00	-9.54	peak
	2	*	4823.922	37.26	13.16	50.42	54.00	-3.58	AVG

Ant.	Pol.			Horiz	zontal	9					10
Tes	t Mod	e:		TX E	3 Mode 243	7MHz	7 10	2	9 9	8	87
	No	Mk	. Fre	eq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MH	z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1		4873.	928	53.08	13.53	66.61	74.00	-7.39	peak	
	2	*	4873.	970	39.48	13.53	53.01	54.00	-0.99	AVG	



Ant. Pol.	•		Vertical						
Test Mo	de:		TX B Mo	de 2437MH:	z 🤌	0 0		0	19
	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	•
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	
	1		4823.904	51.30	13.16	64.46	74.00	-9.54	
	2	*	4823.922	37.26	13.16	50.42	54.00	-3.58	,

Ant.	Pol.		Horiz	zontal					
Test	Mode	<b>)</b> :	TX E	Mode 2462	2MHz	2			8
	No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1		4923.928	52.52	13.89	66.41	74.00	-7.59	peak
	2	*	4924.030	39.10	13.89	52.99	54.00	-1.01	AVG

Ant	Pol.			Vert	ical					6	65
Tes	t Mod	e:		TXE	3 Mode 246	2MHz		<i>&amp;</i>	8 8	6	
	No.	Mk	. Fre	q.	Reading Level	Correct Factor	Measure- ment	Limit	Over		-
			MH	z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	-
	1	*	4923.	922	38.61	13.89	52.50	54.00	-1.50	AVG	-
	2		4923.	964	53.28	13.89	67.17	74.00	-6.83	peak	-
											-

Ant.	Pol.		Hori	zontal					
Test	Mode	<b>e:</b>	TX	3 Mode 241:	2MHz			8 - 8	26
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1		4823.610	36.16	13.16	49.32	54.00	-4.68	AVG
	2	*	4824.030	59.89	13.16	73.05	74.00	-0.95	peak

# **GTS**

Report No.: GTSL202107000249F02 Ant. Pol. Vertical **Test Mode:** TX G Mode 2412MHz Reading Correct Measure-Limit Over No. Mk. Freq. Level Factor ment MHz dBuV dBuV/m dBuV/m dΒ Detector dB/m 4823,448 34.58 13.16 47.74 54.00 -6.26 AVG 70.11 -3.89 4824.018 56.95 13.16 74.00 peak

	Ant.	Pol.	Hori	zontal						
Test	st Mode:	TX	G Mode 243	7MHz				8	63	
•	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		•
-			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	•
	1		4873.274	36.05	13.53	49.58	54.00	-4.42	AVG	•
-	2	*	4875.386	59.79	13.54	73.33	74.00	-0.67	peak	•

Ant.	Pol.		Verti	cal					
Test	Mode	<b>):</b>	TX C	Mode 2437	7MHz	e e	4	69 1	
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1	*	4873.496	59.49	13.53	73.02	74.00	-0.98	peak
	2		4873.496	35.83	13.53	49.36	54.00	-4.64	AVG

Ant.	Pol.		Hori	zontal					
Test	Mod	e:	TX	G Mode 2462	2MHz	7 29	£.	9 9	10
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1	*	4923.478	59.34	13.89	73.23	74.00	-0.77	peak
	2		4923.478	36.42	13.89	50.31	54.00	-3.69	AVG



Ant.	Pol.		Vert	ical	68 68	S.	E	<i>6</i> 5′ <i>6</i> 5′	6
Test	Mode	<b>)</b> :	TX	G Mode 2462	2MHz	6 6	687		
	No	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	140.	IVIN.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1	*	4923.592	59.17	13.89	73.06	74.00	-0.94	peak
	2		4923.592	35.84	13.89	49.73	54.00	-4.27	AVG

Ant.	Pol.		Hor	izontal						
Tes	t Mod	e:	TX	N(HT20) Mo	de 2412MH	łz 🧳	de la	2 2		
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1		4822.938	34.07	13.16	47.23	54.00	-6.77	AVG	
	2	*	4823.472	56.20	13.16	69.36	74.00	-4.64	peak	

nt. Pol.			Vertic	Vertical							
est N	lode:		TX N	(HT20) Mod	de 2412MF	Ø	6 6	6			
	No. Mk.		. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
	1	*	4823.406	56.61	13.16	69.77	74.00	-4.23	peak		
	2		4823.406	33.77	13.16	46.93	54.00	-7.07	AVG		

Ant. Pol.			H	orizontal					
Tes	Test Mode:			TX N(HT20) Mode 2437MHz					
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	1	*	4873.364	56.75	13.53	70.28	74.00	-3.72	peak
	2		4873.364	4 34.38	13.53	47.91	54.00	-6.09	AVG



			47				8	Report N	lo.: GTSI	_20210700	00249
Ant. l	Pol.			Verti	cal						
Test Mode:				TX N	(HT20) Mod	de 2437MH					
	No	. Mk	. Fre	eq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MH	z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1		4872.	656	35.29	13.52	48.81	54.00	-5.19	AVG	
	2	*	4873.	496	58.80	13.53	72.33	74.00	-1.67	peak	

Ant	t. Pol.			Hor	izontal	8 3	9 6	E .	S S	£	
Tes	st Mo	TX N(HT20) Mode 2462MHz   Reading   Correct   Measure-	B.	500							
	No.	Mk	. Fred	<b>q</b> .				Limit	Over		
			MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	-
	1	*	4923.3	16	58.91	13.89	72.80	74.00	-1.20	peak	-
	2		4923.3	16	35.72	13.89	49.61	54.00	-4.39	AVG	-
											-

Ant. Pol.			Ver	tical							
Tes	Test Mode:			TX	TX N(HT20) Mode 2462MHz				A A		
	No. Mk. Fr				Reading Level	Correct Me Factor n	Measure- ment	Limit	Over		
			MH	z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1	*	4923.	406	58.48	13.89	72.37	74.00	-1.63	peak	
	2		4923.	406	35.22	13.89	49.11	54.00	-4.89	AVG	

#### Remark:

- 1.No report for the emission which more than 20 dB below the prescribed limit.
- 2.Emission Level= Read Level+ Correct Factor



# 8 Test Setup Photo

Reference to the appendix I for details.

# 9 EUT Constructional Details

Reference to the appendix II & III for details.

-----End-----