

# Global United Technology Services Co., Ltd.

Report No.: GTS202003000219F01

# **TEST REPORT**

Applicant: Shenzhen Hysiry Technology Co., Ltd.

**Address of Applicant:** 2403D, 24th floor, coast huanging building, no.24 futian road,

xu town community, futian street, futian district, shenzhen

Manufacturer: Shenzhen Hysiry Technology Co., Ltd.

2403D, 24th floor, coast huanging building, no.24 futian road, Address of xu town community, futian street, futian district, shenzhen Manufacturer:

**Equipment Under Test (EUT)** 

**Product Name: Smart Light Bulb** 

Model No.: Q3CWM

Trade Mark: **HUSIRU** 

汇思锐

FCC ID: 2AKBP-Q3CWM

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

Date of sample receipt: 2019-12-23

Date of Test: 2019-12-25 to 2020-03-25

Date of report issued: 2020-03-25

Test Result: PASS \*

Authorized Signature:

**Robinson Lo 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 55

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



# 2 Version

Version No.	Date	Description
00	2020-03-25	Original

Prepared By:	Spantly	Date:	2020-03-25
	Project Engineer	_	
Check By:	Reviewer	Date:	2020-03-25

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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**

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz-200MHz	3.8039dB	(1)
Radiated Emission	200MHz-1GHz	3.9679dB	(1)
Radiated Emission	1GHz-18GHz	4.29dB	(1)
Radiated Emission	18GHz-40GHz	3.30dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)
Note (1): The measurement uncer	tainty is for coverage factor of k	=2 and a level of confidence of 9	95%.



# **5** General Information

# 5.1 General Description of EUT

Product Name:	Smart Light Bulb
Model No.:	Q3CWM
Hardware Version:	V1.0
Software Version:	V1.0
Test sample(s) ID:	GTS202003000219-1
Sample(s) Status:	Engineer sample
Sample(s) Status:	Engineer sample
Channel numbers:	802.11b/802.11g /802.11n(HT20): 11 802.11n(HT40):7
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n(H20)/802.11n(HT40): Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	Line-polarized Antenna
Antenna gain:	1.7dBi
Power supply:	Input: AC 120V/60Hz

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

#### 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:

Test channel	Frequency (MHz)			
rest channel	802.11b/802.11g/802.11n(HT20)	802.11n(HT40)		
Lowest channel	2412MHz	2422MHz		
Middle channel	2437MHz	2437MHz		
Highest channel	2462MHz	2452MHz		



#### 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)	802.11n(HT40)
Data rate	1Mbps	6Mbps	6.5Mbps	13Mbps

#### 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

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. Registration 381383.

#### • IC —Registration No.: 9079A

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 with Registration No.: 9079A

#### • NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

#### 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 Version	SecureCRT.exe
Power Setting	Power Setting: not applicable, test used software default power
	level.

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

Radiated Emission:							
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. 03 2015	July. 02 2020	
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. 26 2019	June. 25 2020	
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 26 2019	June. 25 2020	
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 26 2019	June. 25 2020	
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 26 2019	June. 25 2020	
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
8	Coaxial Cable	GTS	N/A	GTS213	June. 26 2019	June. 25 2020	
9	Coaxial Cable	GTS	N/A	GTS211	June. 26 2019	June. 25 2020	
10	Coaxial cable	GTS	N/A	GTS210	June. 26 2019	June. 25 2020	
11	Coaxial Cable	GTS	N/A	GTS212	June. 26 2019	June. 25 2020	
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 26 2019	June. 25 2020	
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 26 2019	June. 25 2020	
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 26 2019	June. 25 2020	
15	Band filter	Amindeon	82346	GTS219	June. 26 2019	June. 25 2020	
16	Power Meter	Anritsu	ML2495A	GTS540	June. 26 2019	June. 25 2020	
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 26 2019	June. 25 2020	
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 26 2019	June. 25 2020	
19	Splitter	Agilent	11636B	GTS237	June. 26 2019	June. 25 2020	
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 26 2019	June. 25 2020	
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 19 2019	Oct. 18 2020	
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 19 2019	Oct. 18 2020	
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 19 2019	Oct. 18 2020	
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 26 2019	June. 25 2020	



Con	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 2019	May.14 2022		
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020		
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 26 2019	June. 25 2020		
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 26 2019	June. 25 2020		
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. 26 2019	June. 25 2020		
8	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	June. 26 2019	June. 25 2020		
9	ISN	SCHWARZBECK	NTFM 8158	GTD565	June. 26 2019	June. 25 2020		

RF C	onducted 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. 26 2019	June. 25 2020
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 26 2019	June. 25 2020
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 26 2019	June. 25 2020
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 26 2019	June. 25 2020
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 26 2019	June. 25 2020
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 26 2019	June. 25 2020
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 26 2019	June. 25 2020

General used equipment:									
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date Cal.Due of (mm-dd-yy)				
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 26 2019	June. 25 2020			
2	Barometer	ChangChun	DYM3	GTS255	June. 26 2019	June. 25 2020			



#### 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 Line-polarized Antenna, the best case gain of the antennas are 1.7dBi, reference to the appendix II for details

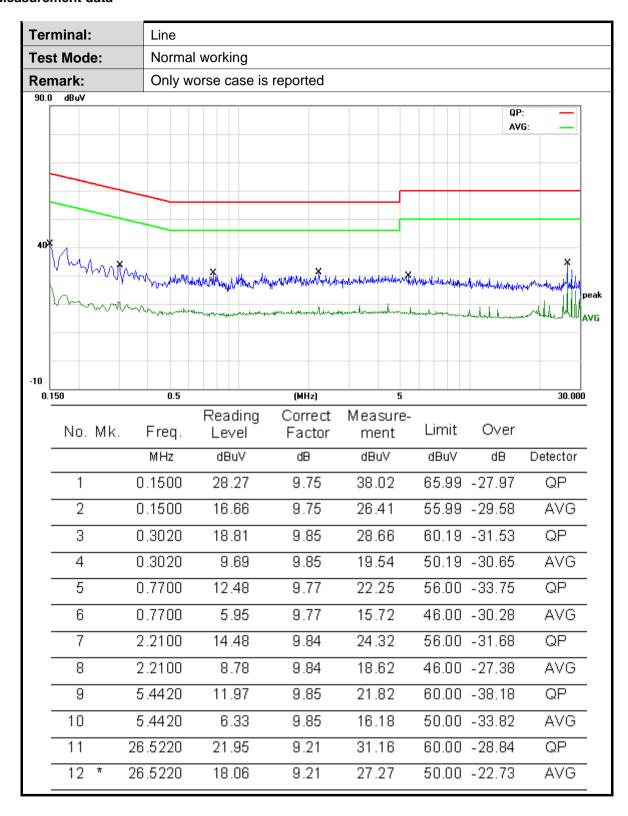


#### 7.2 Conducted Emissions

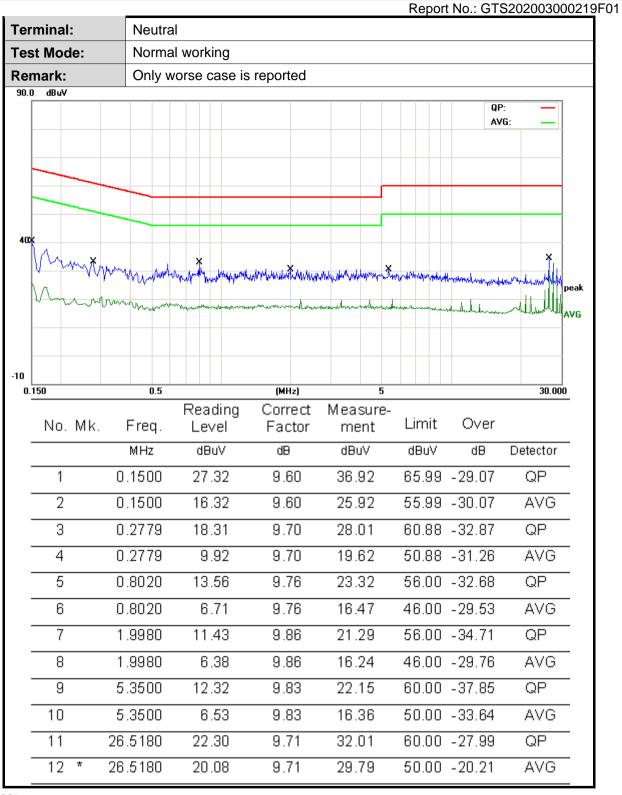
Test Requirement:	FCC Part15 C Section 15.207	,					
Test Method:	ANSI C63.10:2013						
Test Frequency Range:	150KHz to 30MHz						
Receiver setup:	RBW=9KHz, VBW=30KHz, S	RBW=9KHz, VBW=30KHz, Sweep time=auto					
Limit:	Fraguency range (MHz)	Limi	t (dBuV)				
	Frequency range (MHz)	Quasi-peak		erage			
	0.15-0.5	66 to 56*		to 46*			
	0.5-5	56		46			
	5-30	60		50			
Test setup:	* Decreases with the logarithm	•					
Test procedure:	Remark EUT: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m  1. The E.U.T and simulators a line impedance stabilization 500hm/50uH coupling imped 2. The peripheral devices are LISN that provides a 500hr termination. (Please refer to photographs). 3. Both sides of A.C. line are interference. In order to fine positions of equipment and	Remark E.U.T  Test table/Insulation plane  Receiver  Test table /Insulation plane  Receiver  Test table /Insulation plane  Receiver  Test table impedence Stabilization Network 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					
Test Instruments:	according to ANSI C63.10:  Refer to section 6.0 for details		measureme	rit.			
Test mode:	Refer to section 5.2 for details						
Test mode.  Test environment:		nid.: 47%	Press.:	1010mbar			
	· · · · · · · · · · · · · · · · · · ·	111U 41 70	F1699	TOTOTIDAL			
Test voltage:	AC 120V, 60Hz						
Test results:	Pass						



#### Measurement data





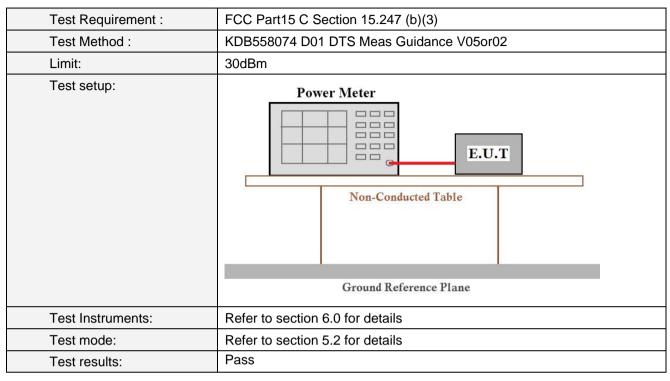


#### Notes:

- 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. Emission Level= Read Level+ Correct Factor
- 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

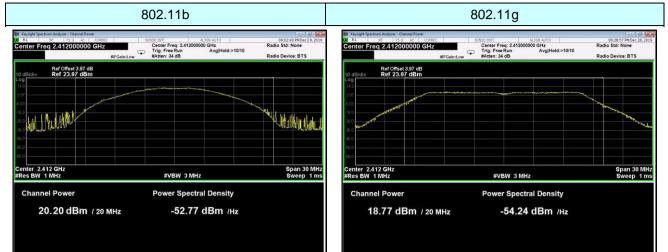


#### **Measurement Data**

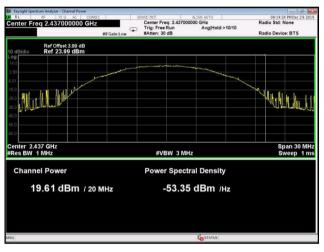
Test CH		Limit(dBm)	Result				
1631 011	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	Limit(abin)	Nesult	
Lowest	20.20	18.77	19.15	18.63			
Middle	19.61	18.33	18.38 18.18 30.00		30.00	Pass	
Highest	18.31	16.96	17.15	17.42			

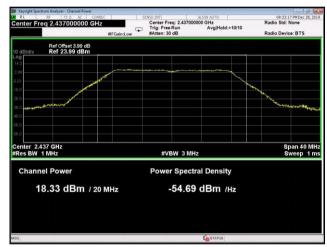


#### Test plot as follows:

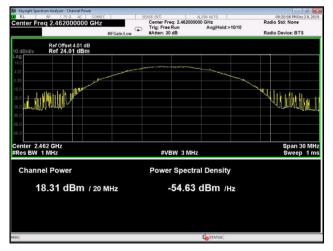


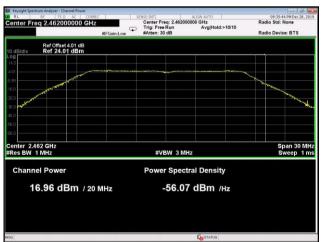
#### Lowest channel





#### Middle channel



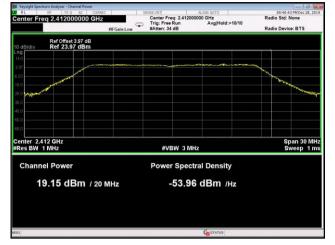


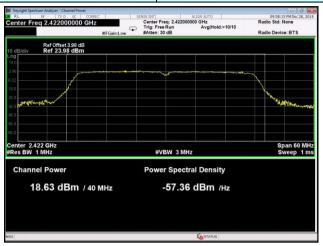
Highest channel



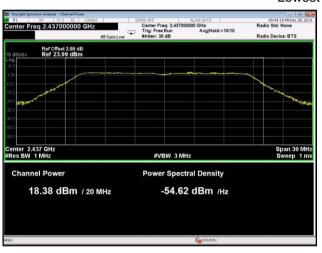
#### 802.11n(HT20)

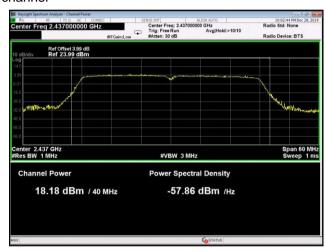
#### 802.11n(HT40)



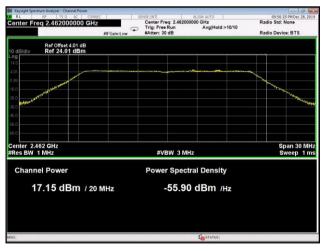


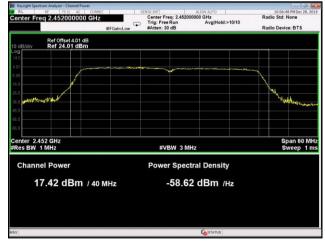
#### Lowest channel





#### Middle channel





Highest channel



# 7.4 Channel Bandwidth & 99% Occupy Bandwidth

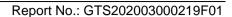
Test Requirement :	FCC Part15 C Section 15.247 (a)(2)		
Test Method :	KDB558074 D01 DTS Meas Guidance V05or02		
Limit:	>500KHz		
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane		
Test Instruments:	Refer to section 6.0 for details		
Test mode:	Refer to section 5.2 for details		
Test results:	Pass		



#### **Measurement Data**

Test CH		Channel E	Limit(KHz)	Result		
rest Cri	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	Liiiii(Ki iZ)	Nesuit
Lowest	9.059	16.33	17.33	35.03		
Middle	8.597	16.18	17.31	35.13	>500	Pass
Highest	8.595	16.37	17.31	35.11		

Toot CU		Result			
Test CH	802.11b				
Lowest	13.661	16.561	17.691	35.877	
Middle	13.595	16.591	17.697	35.823	Pass
Highest	13.555	16.583	17.693	35.863	





#### Test plot as follows:

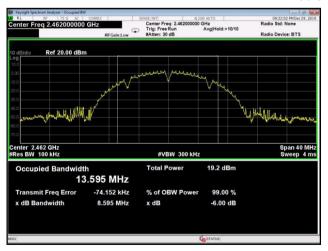


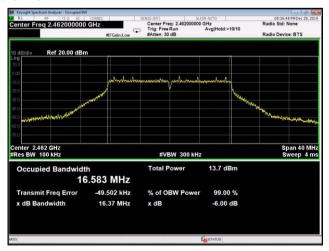
#### Lowest channel





#### Middle channel



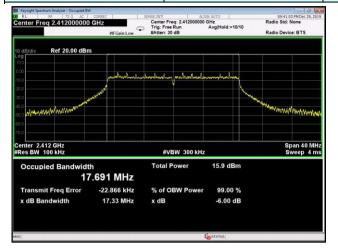


Highest channel



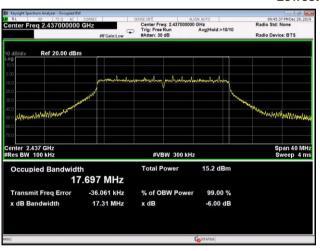
#### 802.11n(HT20)

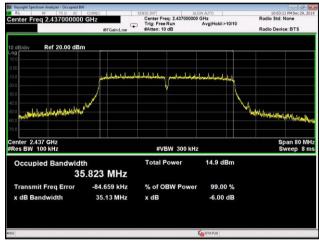
#### 802.11n(HT40)



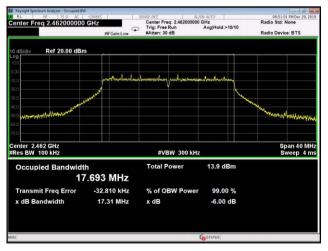


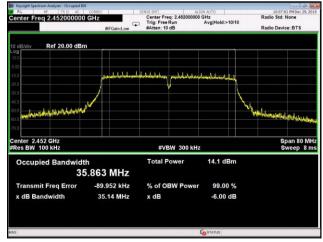
#### Lowest channel





#### Middle channel





Highest channel



# 7.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)			
Test Method:	KDB558074 D01 DTS Meas Guidance V05or02			
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**

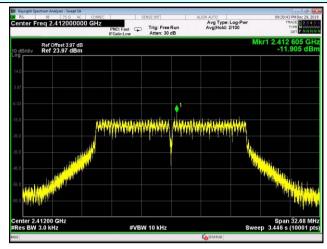
Test CH		Power Spectra	Limit	Result		
1631 011	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	(dBm/3kHz)	Nesuit
Lowest	-0.742	-11.905	-13.432	-16.903		
Middle	-7.979	-13.962	-14.332	-17.084	8.00	Pass
Highest	-6.695	-14.346	-14.797	-17.952		



#### Test plot as follows:

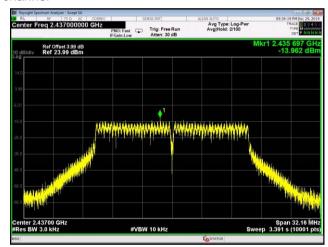






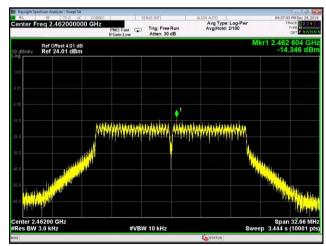
#### Lowest channel





#### Middle channel





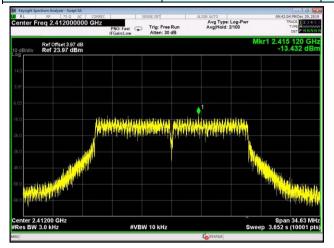
Highest channel

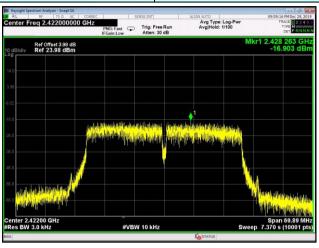
Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



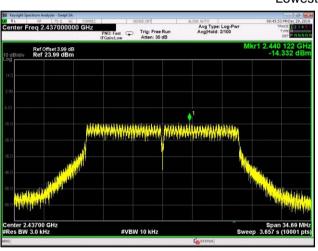
#### 802.11n(HT20)

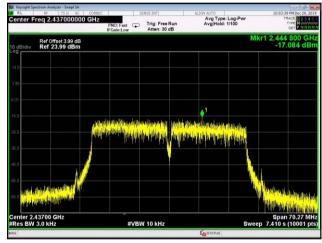
#### 802.11n(HT40)



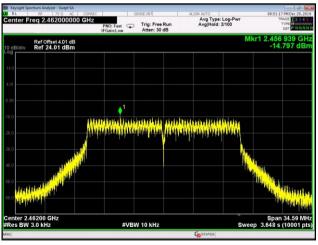


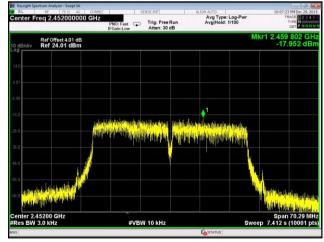
#### Lowest channel





#### Middle channel





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 DTS Meas Guidance V05or02				
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:

# ## Ref Office 3.37 of GHz | Ref Office 3.37 o

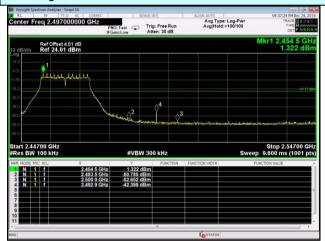
Lowest channel

Highest channel

#### Test mode:



802.11g



Lowest channel

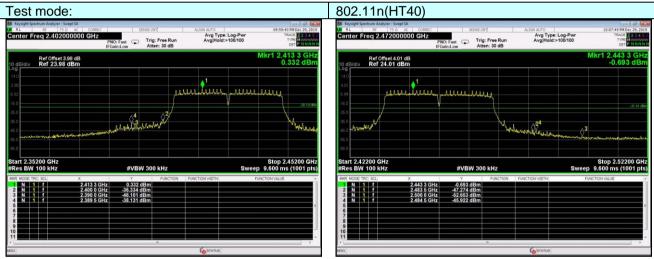
Highest channel





Lowest channel

Highest channel



Lowest channel Highest channel

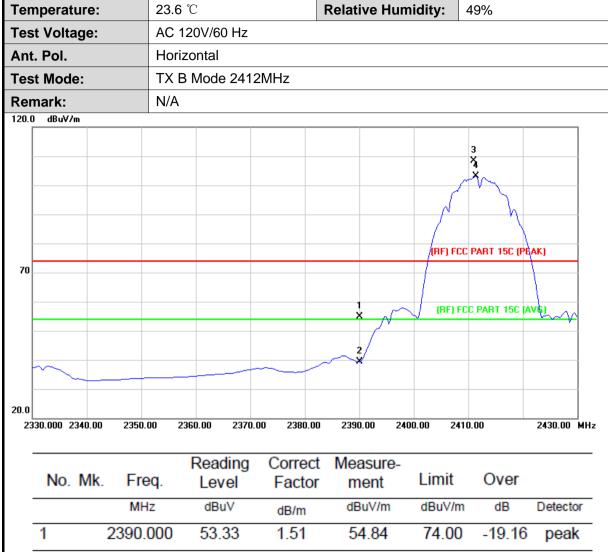


#### 7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.20						
Test Method:	ANSI C63.10: 2013						
Test Frequency Range:		All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.					
Test site:	Measurement Distance: 3m						
Receiver setup:	Frequency	Detector	RBW	VBW	Value		
·		Peak	1MHz	3MHz	Peak		
	Above 1GHz	Average	1MHz	3MHz	Average		
Limit:	Freque		Limit (dBuV	/m @3m)	Value		
			54.0		Average		
	Above 1	GHZ	74.0	0	Peak		
Test Procedure:	Tum Table (150cm > 4)  Receiver Preamplifier						
rest Flocedure.	<ol> <li>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.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>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.</li> <li>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.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>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, quasipeak or average method as specified and then reported in a data sheet.</li> <li>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</li> </ol>						
Test Instruments:	Refer to section						
Test mode:	Refer to section	5.2 for details					
Test results:	Pass						



#### **Radiation Test:**



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	53.33	1.51	54.84	74.00	-19.16	peak
2		2390.000	37.85	1.51	39.36	54.00	-14.64	AVG
3	Χ	2411.000	106.66	1.61	108.27	74.00	34.27	peak
4	*	2411.400	101.50	1.62	103.12	54.00	49.12	AVG

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

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960 Page 27 of 55



Temperature:			23.6 ℃ Relative Humidity: 49%									
Test Voltage:			AC 120V/60 Hz									
nt. Po	I.	Ve	ertical									
Test Mode:			KB Mode 24	12MHz								
Remark:			Ά									
10.0 dBu	uV/m											
							4					
							3° X					
							*					
						/(RF) F(	C PART 15C (PE	EAK)				
60												
						(HF)	CC PART 15C (A	WGJ				
					1 ~~~	J		m				
					X ,			$\overline{}$				
					~*							
0.0												
2333.000	2343.0	00 2353.00	2363.00 237	'3.00 2383.00	2393.00 2	403.00 24	13.00	2433.00 M				
			Reading	Correct	Measure-							
No	o. Mk	. Freq.	Level	Factor	ment	Limit	Over					
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	n dB	Detector				
1		2390.000	38.06	1.51	39.57	74.00	-34.43	peak				
2		2390.000	31.22	1.51	32.73	54.00	-21.27	AVG				
2		0440 000	91.60	1.62	93.22	54.00	39.22	AVG				
3	*	2412.800	91.00									

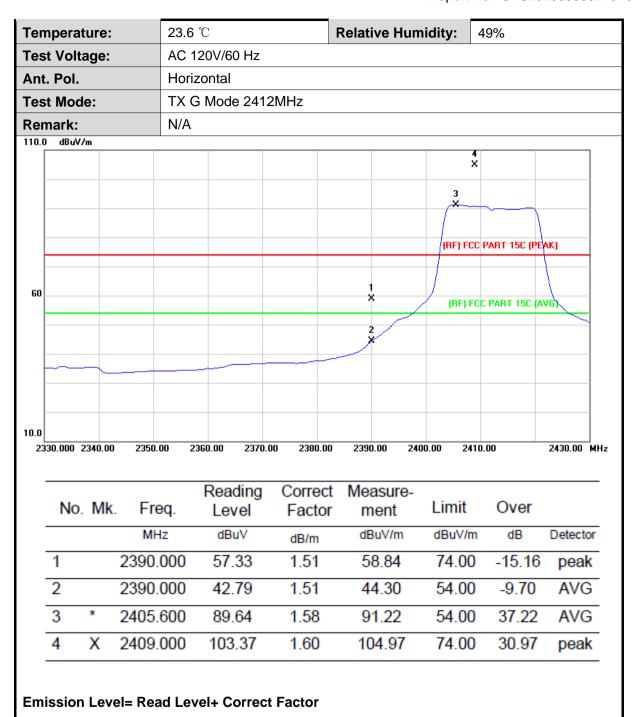


emperature:			23.6 °C									
est Volt	age:		AC 12	0V/60 Hz								
nt. Pol.			Horizo	ontal								
est Mod	e:		ТХВ	Mode 24	62MHz							
emark:			N/A									
10.0 dBuV	/m	1	2 X									
60		*\ \[ \langle  \text{ \			3 X				CC PART 15C (PI			
0.0 2441.000 <i>i</i>	2451.00	2461.0	00 247	1.00 248	1.00 2491.	00 2501	.00 25	11.00 25	21.00	2541.00 MF		
	Mk.	Fre		Reading Level	Correc		sure- ent	Limit	Over			
No.			-									
No.		MH	Z	dBuV	dB/m	dB	uV/m	dBuV/m	n dB	Detector		
No.				dBu√ 102.78	dB/m 1.95		u∨/m 4.73	dBuV/m 54.00		AVG		
	*	MH	200			10-			50.73			
1	* X	мн: 2461.2	200	102.78	1.95	10- 10:	4.73	54.00	50.73 35.89	AVG peak		



emper	ature	:	23.6 °	C			Relativ	ve Hu	midity:	49%	6		
est Vo	tage		AC 12	20V/60 H	Ηz								
nt. Po	•		Vertic	cal									
est Mo	de:		TX B	Mode 2	2462M	Hz							
emark			N/A										
00.0 dBu	V/m		×										٦
			~X~	1					(RF)	FCC PAR	IT 15C (PI	FAK)	
									()	TCCTAI	11 130 (11	-AK)	
				+					(RF	) FCC PA	RT 15C (/	AVG)	
50						3							1
	<b>√~</b>				$\mathcal{N}$ ,	×							
						4 ×	_						
													-
0.0													
2439.000	2449.0	0 2459	.00 24	69.00 2	2479.00	2489.00	2499.	.00 2	509.00	2519.00		2539.00	MH
				D		) t							
No	. Mk	. Fre		Readin Level		Correct Factor	me	sure- ent	Limit		Over		
		MH	lz	dBuV		dB/m	dBu	ıV/m	dBuV	/m	dB	Detecto	or
1	*	2462.	800	94.64		1.95	96	.59	54.0	0 4	12.59	AVG	;
2	Χ	2463.	000	99.80	)	1.95	101	1.75	74.0	0 2	27.75	peak	(
3		2483.	500	42.77		2.10	44	.87	74.0	0 -2	29.13	peak	(
4		2483.	500	32.44		2.10	34	.54	54.0	0 -	19.46	AVG	;
4													







impera	ature:	23.6	23.6 °C Relative Humidity: 49%											
est Vol	tage:	AC 1	AC 120V/60 Hz											
nt. Pol.		Verti	cal											
est Mo	de:	TX C	Mode 241	2MHz										
emark:		N/A	N/A											
D.O dBu\	//m													
								4						
								×						
								3 X						
							(RF) F	CC PART 15	C (PEAK)					
60							(BE)	FCC PART 1	SC (AVG)					
					1 X		(,							
				'	^ _				$\downarrow$					
					2 X									
.0 2337.000	2247.00	) 2357.00 2	367.00 2377.	00 2387.00	220	7.00 24	07.00 24	417.00	2437.00 N					
2337.000	2347.00	2337.00 2	367.00 2377.	00 2367.00	233	7.00 24	U7.UU 24	417.00	2437.00 F					
			Reading	Correct	Me	asure-								
No. Mk.		. Freq.	Level	Factor				Ove	er					
		MHz	dBuV	dB/m	dl	BuV/m	dBuV/i	m dE	B Detector					
1		MHz 2390.000	dBu√ 46.40	dB/m 1.51		BuV/m 17.91	74.00							
1 2					4			0 -26	.09 peak					
	*	2390.000	46.40	1.51	3	7.91	74.00	0 -26	.09 peak .51 AVG					

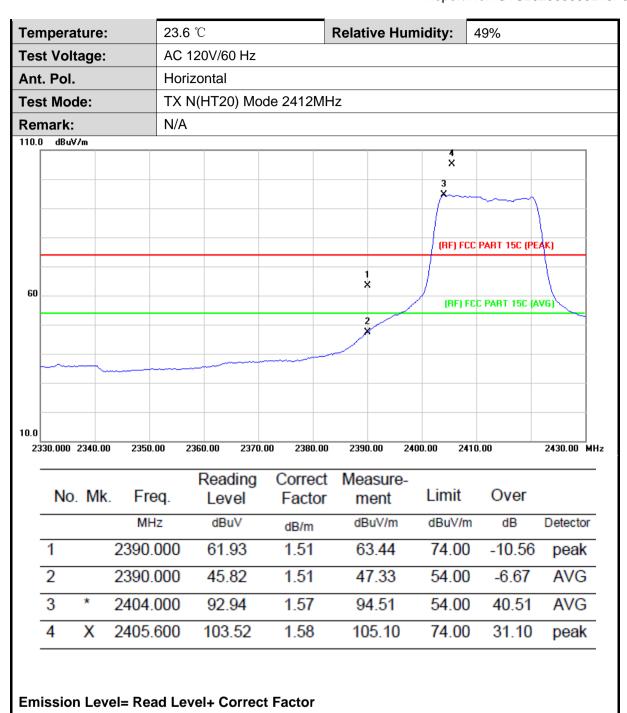


emper	rature: 23.6			2		Relat	ive Hun	nidity:	49%			
est Vo	Itage		AC 12	0V/60 Hz								
nt. Po	I.	Horizontal										
est Mo	ode:		TX G	Mode 24	2462MHz							
emark			N/A									
10.0 dB	uV/m		1 X									
			^									
			2 X									
		1										
								(RF) FCC	PART 15C (PE	AK)		
60					3 X							
	$\mathcal{A}$							(RF) FC	C PART 15C (A	(VG)		
					4 X							
0.0												
2440.000	2450.0	00 2460.	00 247	D.00 248	0.00 2490.	00 2500	0.00 25	10.00 252	0.00	2540.00 M		
No	o. Mi	c. Fre		Reading Level	Correct Facto		asure- ient	Limit	Over			
		MHz		dBuV	dB/m	dB	BuV/m	dBuV/m	dB	Detector		
1	Χ	2468.	200	104.60	2.00	10	06.60	74.00	32.60	peak		
	*	2468.	200	90.15	2.00	9:	2.15	54.00	38.15	AVG		
2		2402	500	58.30	2.10	6	0.40	74.00	-13.60	peak		
3		2483.	500	500 41.81								

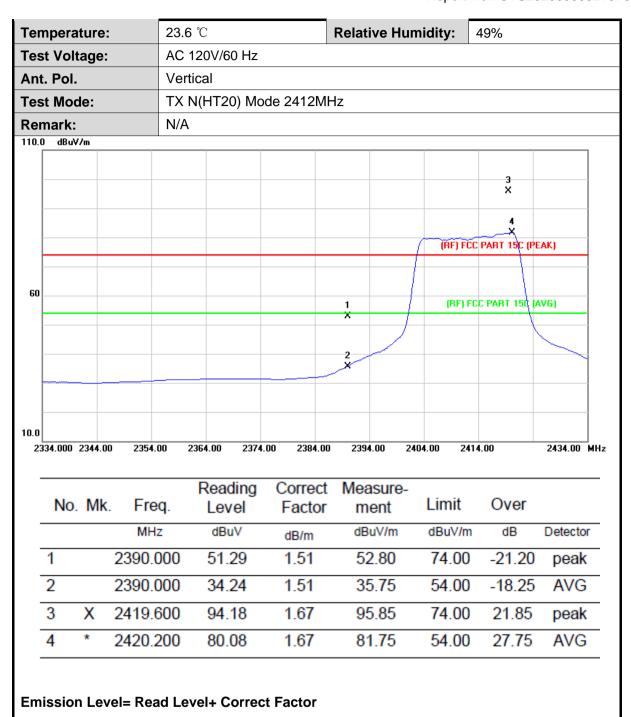


mper	ature	):	23.6	23.6 ℃ Relative Humidity: 49%									
st Vo	ltage	:	AC 1	AC 120V/60 Hz									
nt. Pol			Verti	cal									
st Mo	de:		TX C	Mod	e 246	2MHz							
mark	•		N/A										
.O dBu	V/m			2 X									
				1 -X						(RF	) FCC	PART 15C (P	EAKJ
						3				(R	F) FC	C PART 15C (	AVG)
0					$\overline{}$	×							
						4 X							
							_						
-													
0 2436.000	2446.	00 2456	.00 2	466.00	2476	.00 248	6.00	2496.0	DO :	2506.00	2516	6.00	2536.00 N
				Read		Corre		Meas					
No	. Mi	k. Fre	eq.	Lev	rel	Fact	or	ment		Limit	t	Over	
		MHz		dBu	ı۷	dB/m		dBu'	V/m	dBuV	//m	dB	Detector
1	*	2468.	200	83.	80	2.00		85.	.80	54.0	00	31.80	AVG
2	Х	2469.	000	97.	88	2.00		99.	88	74.0	00	25.88	peak
3		2483.	500	49.	37	2.10		51.	47	74.0	00	-22.53	peak
		2483.	500	35.	26	2.10		37.	36	54.0	00	-16.64	AVG
4													









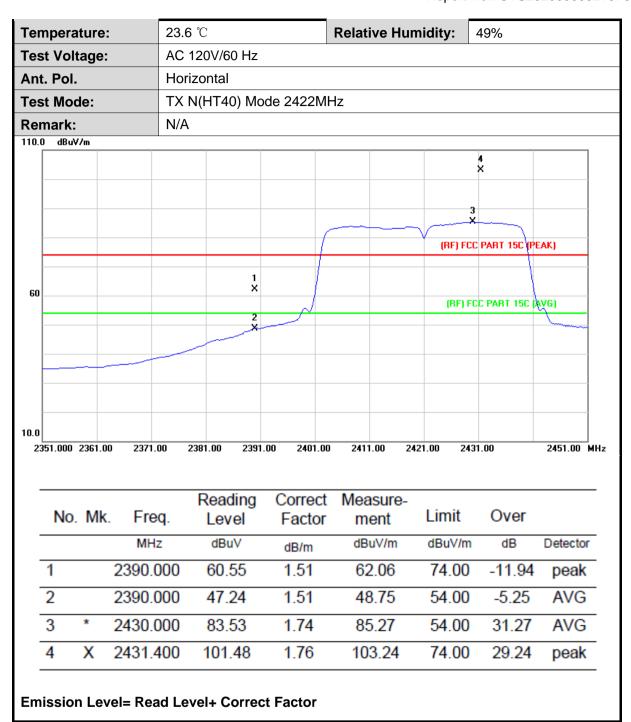


Гem	perat	ure:		23.6 ℃	2		Relative I	Humidity:	49%	
es	t Volta	age:		AC 12	0V/60 Hz					
۱nt.	Pol.			Horizo	ntal					
Test	t Mod	e:		TX N(	HT20) M	ode 2462N	lHz			
Rem	nark:			N/A						
10.0	dBuV/	m		2 X						
				1 X						
-		$\dashv$						(RF) I	FCC PART 15C (P	EAK)
						3 X				
60		$\bot$								
-		4						(RF)	FCC PART 15C	AVG)
r						× ×				
-										
-										
0.0										
244	40.000 2	450.00	2460.	00 247	0.00 248	0.00 2490.0	0 2500.00	2510.00 2	2520.00	2540.00 MF
-					Reading	Correc	t Measu	re-		
	No.	Mk	. Fre		Level	Facto		1	Over	
-			MH	lz	dBuV	dB/m	dBuV/	m dBuV	/m dB	Detector
-	1	*	2467.	200	93.62	2.00	95.62	2 54.0	0 41.62	AVG
		v	2468.	400	104.45	2.00	106.4	5 74.0	00 32.45	peak
-	2	X					CO E	4 740	0 5 40	
-	3	^	2483.	500	66.44	2.10	68.5	4 74.0	0 -5.46	peak



mperature:	23.6	$^{\circ}\mathbb{C}$		Relative Hun	nidity:	49%	
st Voltage:	AC <sup>2</sup>	120V/60 Hz			·		
t. Pol.	Vert	ical					
st Mode:	1 XT	N(HT20) Mc	de 2462MF	łz			
mark:	N/A						
.O dBuV/m		2 X			1		
	1						
					(RF) FCC	PART 15C (PE	AK)
					(447,444		,
			3 X		(RF) FC	C PART 15C (A	VG)
			4				
			×				
)							
2440.000 2450.00	2460.00 2	2470.00 2480	.00 2490.00	2500.00 25	10.00 252	0.00	2540.00 N
	_	Reading	Correct	Measure-		_	
No. Mk.	Freq.	Level	Factor	ment	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1 *	2467.400	81.96	2.00	83.96	54.00	29.96	AVG
2 X	2468.600	96.00	2.00	98.00	74.00	24.00	peak
3	2483.500	52.61	2.10	54.71	74.00	-19.29	peak
4	2483.500	34.93	2.10	37.03	54.00	-16.97	AVG
4							







emp	erature		23.6 °	С		Relat	ive Hun	nidity:	49%	
est \	/oltage:		AC 12	20V/60 Hz						
Ant. P	ol.		Vertic	al						
est N	/lode:		TX N	(HT40) M	ode 2422N	/lHz				
Rema			N/A							
00.0	dBuV/m								4	1
									>	<
									3	
								(RF) FC(	PART 15C (PE	AK)
						-		· ·		
								(DE) E(	CC PART 15C (A	We)
50					1 X			(111)11	JETAITI 13C (A	170)
					2	$\mathcal{A}$				V
					×					
-										
0.0										
	000 2356.0	0 2366.0	00 237	76.00 238	6.00 2396.	00 240	6.00 <b>24</b>	16.00 242	6.00	2446.00 M
-	No. Mk	. Fre		Reading Level	Correct Facto		asure- ient	Limit	Over	
_		MH	Z	dBuV	dB/m	dB	BuV/m	dBuV/m	dB	Detector
		2200.0	000	48.46	1.51	4	9.97	74.00	-24.03	peak
1		2390.0	,00							
1 2		2390.0		36.41	1.51	3	7.92	74.00	-36.08	peak
	X		000	36.41 75.29	1.51 1.78		7.92 7.07	74.00	-36.08 3.07	peak



mpera	ture	:	23.6	$^{\circ}$ C			F	Relati	ve H	umidi	ty:	49%	
st Vol	age		AC	120V/6	0 Hz								
t. Pol.			Hori	zontal									
st Mod	de:		1 XT	N(HT4	0) Mo	de 2452	МН	Z					
mark:			N/A										
.0 dBuV	7m												
					2 ×								
		_			1 X								
											(DE) ECC	PART 15C (PI	EAVI
											(NF) FCC	PANT 19C (FI	-AKJ
									3 X				
)	$ \sqrt{} $						7		•		(RF) FC	C PART 15C (/	AVG)
	7							-	4 X				
									*		_		
)	2421.0	10 2441	00 1	14E1 00	2401	00 247	1.00	2401	00	2401 00	JEN.	1.00	2E21.00 L
421.000	2 <b>4</b> 31.U	00 2441	.00 2	2451.00	2461.	.00 247	1.00	2481.	.00	2491.00	250	1.00	2521.00 I
				Rea	dina	Corre	ct	Mea	SUITE	<u>-</u>			
No	MŁ	c. Fre	eq.	Lev		Fact			ent		mit	Over	
		MH	łz	dB	uV	dB/m	1	dBı	uV/m	dE	3uV/m	dB	Detector
1	*	2459.	400	83.	42	1.93	,	85	5.35	5	4.00	31.35	AVG
2	Χ	2461.	000	101	.16	1.94		103	3.10	7	4.00	29.10	peak
3		2483.	500	59.	.77	2.10	)	61	.87	7	4.00	-12.13	peak
4		2483.	500	43.	74	2.10	)	45	.84	5	4.00	-8.16	AVG



empera	ture:		23.6 °C	<u> </u>		R	elative	Humi	dity:	49%	
est Volt	age:		AC 12	0V/60 H	łz						
nt. Pol.			Vertic	al							
est Mod	le:		TX N(	HT40) I	Mode 245	2MHz					
emark:			N/A								
00.0 dBuV	/m	[1,									
		×									
			2								
		~	~X~		~~~				(RF) FC	C PART 15C (P	EAK)
					+						
					+		3		(BE) E	CC PART 15C (	AVG1
50							X		,		,
							4				
							×				
0.0											
2426.000	2436.00	2446.0	00 245	6.00 2	466.00 24	<b>476.00</b>	2486.00	2496.	00 25	06.00	2526.00 M
2720.000											
				Doodin	Cor	root	Magai	uro.			
	Mk	Fre		Readir			Meası mer		Limit	Over	
	. Mk		eq.	Level	Fa <sub>0</sub>	ctor	mer	nt			Detector
		МН	eq. Iz	Level dBuV	Fac	ctor /m	mer dBuV	nt //m	dBuV/n	n dB	Detector
No.	X	мн 2446.	eq. Iz 600	dBuV 94.02	dB/ 2 1.8	ctor m 35	mer dBuV 95.8	nt //m 3 <b>7</b>	dBuV/n 74.00	n dB 21.87	peak
		МН	eq. Iz 600	Level dBuV	dB/ 2 1.8	ctor m 35	mer dBuV	nt //m 3 <b>7</b>	dBuV/n	n dB 21.87	peak
No.	X	мн 2446.	eq. Iz 600 200	dBuV 94.02	dB/ 2 1.8 2 1.8	ctor /m 35	mer dBuV 95.8	nt 7/m 87	dBuV/n 74.00	dB 21.87 25.09	peak AVG



# 7.7 Spurious Emission

## 7.7.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	KDB558074 D01 DTS Meas Guidance V05or02					
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					

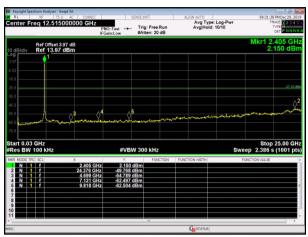


Test plot as follows:

Report No.: GTS202003000219F01

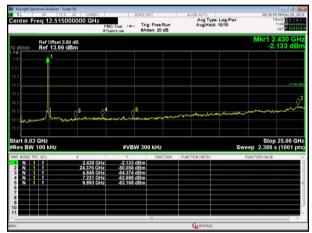
## 802.11g(Only worse case is reported)

Lowest channel



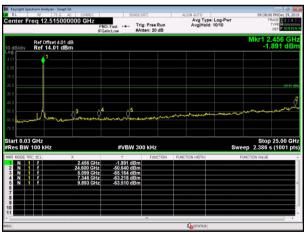
30MHz~25GHz

Middle channel



30MHz~25GHz

Highest channel



30MHz~25GHz

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#### 7.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section	on 15	5.209				
Test Method:	ANSI C63.10: 2013						
Test Frequency Range:	9kHz to 25GHz						
Test site:	Measurement Distar	nce: (	3m				
Receiver setup:	Frequency		Detector	RBV	W VBW		Value
	9KHz-150KHz	Qι	ıasi-peak	200Hz		600Hz	z Quasi-peak
	150KHz-30MHz	Qι	ıasi-peak	9KHz		30KHz	z Quasi-peak
	30MHz-1GHz	Qι	ıasi-peak	100K	Hz	300KH	z Quasi-peak
	Above 1GHz		Peak 1N		lz	3MHz	Peak
	710070 10112		Peak	1MH	łz	10Hz	Average
Limit:	Frequency		Limit (u\	//m)	Va	alue	Measurement Distance
	0.009MHz-0.490M	lHz	2400/F(k	(Hz)	(	QΡ	300m
	0.490MHz-1.705M	lHz	24000/F(I	KHz)	(	QΡ	300m
	1.705MHz-30MH	lz	30		(	QΡ	30m
	30MHz-88MHz		100		(	QΡ	
	88MHz-216MHz	<u>z</u>	150		(	QP	
	216MHz-960MH	Z	200		QP		3m
	960MHz-1GHz		500		QP		OIII
	Above 1GHz		500		Average		
	7.5575 15112		5000		Р	eak	
	E ************************************	111111	*************	******	777777	*****	
	Turn Table EUT-		n Table-	enna Im			
	E tum table	Tur	Test Ant i n Table-'	lm Receiver-	GH-	,	



	Report No.: GTS202003000219F01
	For radiated emissions above 1GHz
	Test Antenna - < lm 4m > - /
Test Procedure:	<ol> <li>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.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>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.</li> <li>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.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>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.</li> </ol>
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test voltage:	AC120V 60Hz
Test environment:	Temp.: 23.6 °C Humid.: 49% Press.: 1012mbar
Test voltage:	AC 120V, 60Hz
Test results:	Pass



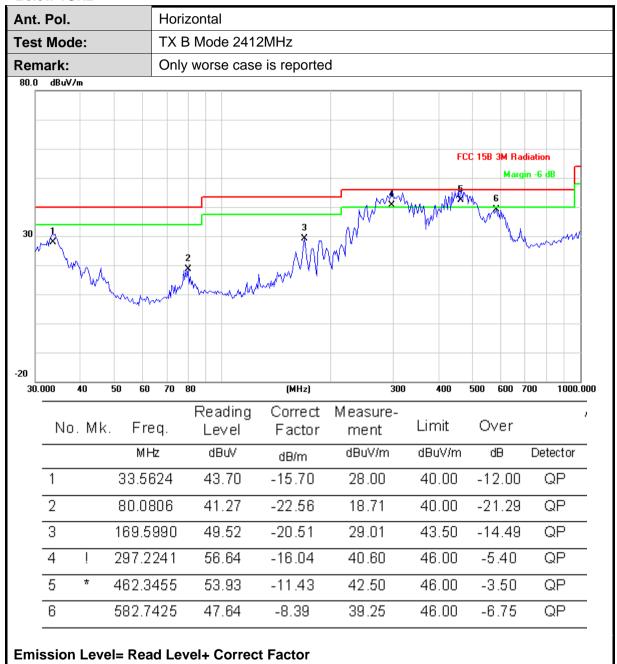
#### Measurement data:

Report No.: GTS202003000219F01

#### ■ 9kHz~30MHz

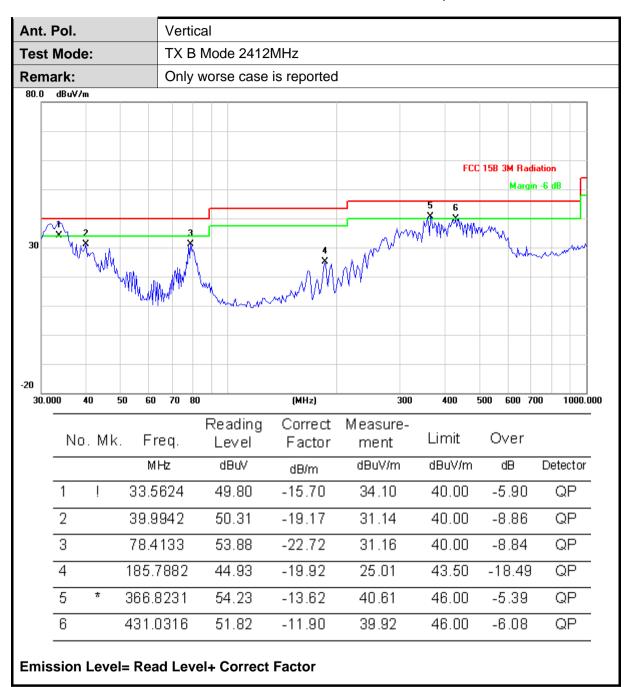
The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

#### ■ Below 1GHz



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#### ■ Above 1GHz

Ant	. Pol.			Hori	zontal								
Tes	t Mod	le:		TX E	TX B Mode 2412MHz								
-	No. Mk. Fre		q.	Reading Level	Correct Factor	Measure- ment	Limit	Over					
			MH	Z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector			
	1	*	4903.	136	28.48	13.03	41.51	54.00	-12.49	AVG			
	2		4903.	562	42.50	13.03	55.53	74.00	-18.47	peak			

Ant	. Pol.			V	/ertica	al							
Tes	Test Mode:				TX B Mode 2412MHz								
	No. Mk. Fr		Freq.	_		Correct Factor	Measure- ment	Limit	Over				
•				MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
•	1 4822.		822.89	90	42.70	12.54	55.24	74.00	-18.76	peak			
•	2	*	4	823.92	22	29.32	12.54	41.86	54.00	-12.14	AVG		
-													

An	Ant. Pol.					zontal							
Tes	Test Mode:			•	TX B Mode 2437MHz								
	No	. M	k.	Freq	<b>]</b> .	Reading Level	Correct Factor	Measure- ment	Limit	Over			
				MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
	1		4	874.7	50	43.45	12.85	56.30	74.00	-17.70	peak		
	2	*	48	874.8	70	28.55	12.85	41.40	54.00	-12.60	AVG		

Ant	. Pol.			Vert	ical									
Tes	t Mod	le:		TX	TX B Mode 2437MHz									
	No. Mk. Fre		q.	Reading Level	Correct Factor	Measure- ment	Limit	Over						
			МН	Z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector				
	1		4874.	000	42.88	12.85	55.73	74.00	-18.27	peak				
	2 * 4875.		026	28.63	12.86	41.49	54.00	-12.51	AVG					



An	ant. Pol.			Но	rizontal					
Tes	st Mo	de:		TX	B Mode 2462					
			Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1	*		4923.292	28.52	13.15	41.67	54.00	-12.33	AVG
	2			4925.362	42.67	13.17	55.84	74.00	-18.16	peak

An	nt. Pol.				Vert	ical							
Tes	st Mo	de:			TX	X B Mode 2462MHz							
	No. Mk.		Fred	<b>q</b> .	Reading Level	Correct Factor	Measure- ment	Limit	Over				
			MHz	:	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector			
			4923.0	1923.010	43.08	13.15	56.23	74.00	-17.77	peak			
	2	*	4	4923.0	10	28.54	13.15	41.69	54.00	-12.31	AVG		

Ant	nt. Pol.			Horizo	ntal					
Tes	st Mod	de:		TX G N	Mode 241					
-	No. Mk.		k. Fre			Correct Factor	Measure- ment	Limit	Over	
•			MH	Z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
•	1		4822.7	728 43.	43.37	12.54	55.91	74.00	-18.09	peak
•	2	*	4823.9	922	29.43	12.54	41.97	54.00	-12.03	AVG

Ant	. Pol.		Ve	Vertical									
Tes	t Moc	le:	T	TX G Mode 2412MHz									
-	No. Mk.		. Freq.	Reading Level	Correct Factor		Limit	Over					
-			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector				
-	1		4823.622	42.87	12.54	55.41	74.00	-18.59	peak				
-	2	*	4823.922	29.38	12.54	41.92	54.00	-12.08	AVG				



	An	Ant. Pol.			Horiz	zontal					
Te	st Mo	de:		T	TX G	6 Mode 243					
	No. Mk.		lk.	Freq.		Reading Level	Correct Factor	Measure- ment	Limit	Over	
			N		z dBuV	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
			4	872.50	0	28.61	12.84	41.45	54.00	-12.55	AVG
	2		4	874.32	4	42.46	12.85	55.31	74.00	-18.69	peak

Limit	Over	
dBuV/m	dB	Detector
74.00	-18.64	peak
54.00	-12.55	AVG
_	74.00	74.00 -18.64

Ant	. Pol.		Hor	izontal					
Tes	t Mod	le:	TX	G Mode 2462	2MHz				
			. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
•	1		4923.730	42.87	13.15	56.02	74.00	-17.98	peak
	2	*	4925.344	28.53	13.17	41.70	54.00	-12.30	AVG

An	. Pol.			Ver	tical						
Tes	st Mod	le:		TX	TX G Mode 2462MHz						
	No. Mk.	. Fre	Mile down ractor more and	Limit	Over						
			MH	lz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1		4943.	1943.676	42.15	13.28	55.43	74.00	-18.57	peak	
	2	*	4944.	234	28.14	13.28	41.42	54.00	-12.58	AVG	



nt. Pol.			Hor	izontal							
st Moc	le:		TX	TX N(HT20) Mode 2412MHz							
No. Mk.		Mile deal ractor mont =	Limit	Over							
		MHz	Iz	dBu\	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
1	*	4823.9	22	29.42	12.54	41.96	54.00	-12.04	AVG		
2		4823.9	46	42.85	12.54	55.39	74.00	-18.61	peak		
	No.	No. Mk	No. Mk. Free MHz	No. Mk. Freq.  MHz  1 * 4823.922	No. Mk. Freq. Reading Level  MHz dBuV  1 * 4823.922 29.42	No. Mk. Freq. Reading Correct Level Factor  MHz dBuV dB/m  1 * 4823.922 29.42 12.54	No. Mk.         Freq.         Reading Level         Correct Factor Measure-Factor Measure-MHz         MHz         dBuV         dBuV/m           1         * 4823.922         29.42         12.54         41.96	No. Mk.         Freq.         Level Level MBuV         Factor Measure- ment MBuV/m         Limit MBuV/m           1         * 4823.922         29.42         12.54         41.96         54.00	TX N(HT20) Mode 2412MHz		

Ant	Ant. Pol.			Vert	ical							
Tes	st Mo	de:		1 XT	TX N(HT20) Mode 2412MHz							
	No. Mk. Fre		k. Fre	eq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
			lz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector			
			4823.	922	29.24	12.54	41.78	54.00	-12.22	AVG		
	2 4823.9		928	42.49	12.54	55.03	74.00	-18.97	peak			

nt. Pol.			Hori	zontal					
t Mo	de:		TXI	N(HT20) Mod	de 2437MH	lz			
		_		Measure- ment	Limit	Over			
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
		73.700	42.82	12.85	55.67	74.00	-18.33	peak	
2	*	48	74.708	28.62	12.85	41.47	54.00	-12.53	AVG
	No.	No. M	No. Mk.	No. Mk. Freq.  MHz  1 4873.700	No. Mk. Freq. Reading  No. Mk. Freq. Level  MHz dBuV  1 4873.700 42.82	TX N(HT20) Mode 2437MH  Reading Correct  No. Mk. Freq. Level Factor  MHz dBuV dB/m  1 4873.700 42.82 12.85	No. Mk. Freq. Reading Correct Measure-Factor ment  MHz dBuV dB/m dBuV/m  1 4873.700 42.82 12.85 55.67	TX N(HT20) Mode 2437MHz	No. Mk.         Freq.         Level Level Level Factor Measure-Factor

An	t. Pol			Ver	tical							
Te	st Mo	de:		TX	X N(HT20) Mode 2437MHz							
	No	. Mk	. Fre	q.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
			MH	Z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
	1		4872.7	794	42.81	12.84	55.65	74.00	-18.35	peak		
	2	*	4875.5	500	28.46	12.86	41.32	54.00	-12.68	AVG		



. Pol.		Но	rizontal							
t Mod	e:	TX	TX N(HT20) Mode 2462MHz							
No. M		. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
1	*	4922.812	28.56	13.15	41.71	54.00	-12.29	AVG		
2 4		4923.316	42.73	13.15	55.88	74.00	-18.12	peak		
	No.	No. Mk	No. Mk. Freq.  MHz  1 * 4922.812	No. Mk. Freq. Reading MHz dBuV  1 * 4922.812 28.56	TX N(HT20) Mode 2462MH  Reading Correct No. Mk. Freq. Level Factor  MHz dBuV dB/m  1 * 4922.812 28.56 13.15	No. Mk.         Freq.         Reading Level         Correct Factor Factor Measure-           MHz         dBuV         dBuV/m           1         * 4922.812         28.56         13.15         41.71	TX N(HT20) Mode 2462MHz	TX N(HT20) Mode 2462MHz		

Ant	. Pol.			Vert	ical							
Tes	t Mod	le:		1 XT	TX N(HT20) Mode 2462MHz							
	No. Mk.		=		Measure- ment	Limit	Over					
			MH	lz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
	1	*	4922.	656	28.45	13.15	41.60	54.00	-12.40	AVG		
	2 49		4925.386		43.10	13.17	56.27	74.00	-17.73	peak		

Ant	. Pol			Hor	izontal							
Tes	t Mo	de:		TX	TX N(HT40) Mode 2422MHz							
-	No. Mk. Fre		Freq.	Reading Level	Correct Measure- Factor ment		Limit	Over				
-				MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
-	1		4	843.130	42.71	12.66	55.37	74.00	-18.63	peak		
-	2 * 4843.2		843.292	28.45	12.66	41.11	54.00	-12.89	AVG			

An	t. Pol			Ver	tical						
Tes	st Mo	de:		TX	TX N(HT40) Mode 2422MHz						
	No	No. Mk. Fre		req.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
				MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1		484	4.102	42.47	12.67	55.14	74.00	-18.86	peak	
	2 * 4844.7		4.714	28.33	12.67	41.00	54.00	-13.00	AVG		



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Ant. P	ol.		Но	rizontal						
Γest N	lod	e:	TX	TX N(HT40) Mode 2437MHz						
N	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
1		*	4874.558	28.61	12.85	41.46	54.00	-12.54	AVG	
2			4875.044	43.04	12.86	55.90	74.00	-18.10	peak	

Ant.	Pol.			Verti	cal						
Tes	Mod	e:		TX N	TX N(HT40) Mode 2437MHz						
,	No. Mk. Fre		eq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
'			M		dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
,	1	*	4873.	.058	28.54	12.84	41.38	54.00	-12.62	AVG	
	2 4875.		.038	42.74	12.86	55.60	74.00	-18.40	peak		

Ant	Ant. Pol. Horizontal											
Tes	t Mod	e:		1XT	TX N(HT40) Mode 2452MHz							
	No. Mk.		. Fre	eq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		М		z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector		
	1	*	4902.	656	28.56	13.03	41.59	54.00	-12.41	AVG		
	2		4903.	274	42.85	13.03	55.88	74.00	-18.12	peak		

An	Ant. Pol.					ical						
Tes	Test Mode:					TX N(HT40) Mode 2452MHz						
	No. Mk. Fre		Free	<b>]</b> .	Reading Level	Correct Factor	Measure- ment	Limit Over				
				MHz		dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
	1	*	49	902.5	00	28.60	13.02	41.62	54.00	-12.38	AVG	
	2 4904.3		904.3	48	42.61	13.03	55.64	74.00	-18.36	peak		

### Remark:

- 1.No report for the emission which more than 10 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 for details.

-----End-----