

## Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202305-0132-132

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# **RF Test Report**

FCC ID: MSQ-DV6068Y

Report No. TBR-C-202305-0132-132 **Applicant** ASUSTeK Computer Inc

**Equipment Under Test (EUT)** 

**EUT Name Network Media Players** 

Model No. DV6068Y

Series Model No.

**Brand Name** HAKO

202305-0132-12-#1 & 202305-0132-12-#2 Sample ID

2023-05-24 **Receipt Date** 

**Test Date** 2023-05-24 to 2023-07-11

**Issue Date** 2023-07-11

**Standards** FCC Part 15 Subpart C 15.247

**Test Method** ANSI C63.10: 2013

> KDB 558074 D01 15.247 Meas Guidance v05r02 KDB 662911 D01 Multiple Transmitter Output v02r01

**Conclusions PASS** 

In the configuration tested, the EUT complied with the standards specified above.

: Warle W Witness Engineer

LUAN SU fuy Lai. **Engineer Supervisor** 

**Engineer Manager** 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0



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# **Revision History**

Report No.	Version	Description	<b>Issued Date</b>
TBR-C-202305-0132-132	Rev.01	Initial issue of report	2023-07-11
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## 1. General Information about EUT

## 1.1 Client Information

Applicant	ė.	ASUSTeK Computer Inc
Address		1F, No. 15, Lide Rd. Beitou, Taipei, Taiwan 112
Manufacturer : Shenzhen SDMC Technology Co., LTD.		Shenzhen SDMC Technology Co., LTD.
33	1	Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an
Address	:	3rd Road, Dalang Community, Xin'an Street, Bao'an District,
A RIVE		Shenzhen, China.

## 1.2 General Description of EUT (Equipment Under Test)

EUT Name	ŀ	Network Media Players	Network Media Players			
Models No.		DV6068Y	DV6068Y			
Model Different						
4000		Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz-2452MHz			
		Number of Channel:	802.11b/g/n(HT20): 11 channels 802.11n(HT40): 7 channels			
Product		Antenna Gain:	PCB Antenna1, Maximum Gain: 2.04dBi PCB Antenna2, Maximum Gain: 2.03dBi			
Description	3	Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64 QAM)			
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n: up to 150Mbps			
Power Rating		USB Input: 5V, 1.5A	TULL TO THE			
Software Version	6	V10.2.14	The state of the s			
Hardware Version	ŀ	V2.1	WORTH WATER			
- 1 1 1 1 1 mm						

#### Remark:

- (1) The antenna gain provided by the applicant, adapter and the verified for the RF conduction test provided by TOBY test lab.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Antenna information provided by the applicant.





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## (4) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

Note: CH 01~CH 11 for 802.11b/g/n(HT20)

CH 03~CH 09 for 802.11n(HT40)

### (5) Antenna information

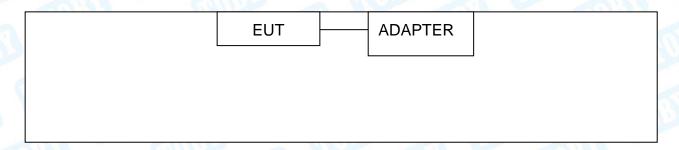
Antenna	Brand	Model Name	Туре	Antenna Gain (dBi)
ANT. 1	N/A	N/A	PCB	2.04
ANT. 2	N/A	N/A	PCB	2.03

#### Note:

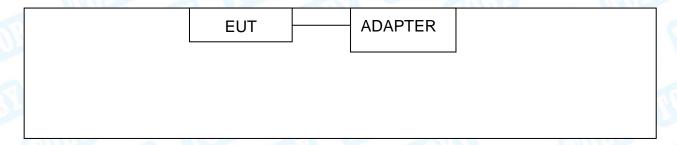
For MIMO mode: Directional Gain=10 log[(10^G1/20 + 10^G2/20 + ... + 10^GN/20)^2/NANT] =5.02dBi 2.4G working with 802.11b/g/n has MIMO mode.

## 1.3 Block Diagram Showing the Configuration of System Tested

#### **Conducted Test**



#### **Radiated Test**







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## 1.4 Description of Support Units

Equipment Information						
Name Model FCC ID/SDOC Manufacturer Used "√"						
Adapter		W (17) 73	11110	1		
		Cable Information				
Number	Shielded Type	Ferrite Core	Length	Note		
2.7		MAN S	1 12	BR		
Remark: The ac	dapter is provided by	Applicant.	D O			

## 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Con	ducted Emission Test
Final Test Mode	Description
Mode 1	TX b Mode Channel 01
For Radiated	d and RF Conducted Test
Final Test Mode	Description
Mode 2	TX Mode b Mode Channel 01/06/11
Mode 3	TX Mode g Mode Channel 01/06/11
Mode 4	TX Mode n(HT20) Mode Channel 01/06/11
Mode 5	TX Mode n(HT40) Mode Channel 03/06/09





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#### Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK 802.11g Mode: OFDM

802.11n (HT20) Mode: MCS 0 802.11n (HT40) Mode: MCS 0

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a Mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.





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## 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

	Test	Software: CMD			
	Test N	Mode: Continue	ously transmittii	ng	
Mode		S. CONT.	Parameters		
Mode	Data Rate	Channel	Ant.1	Ant.2	
	CCK/ 1Mbps	01	90	90	
802.11b	CCK/ 1Mbps	06	90	90	
U.S.	CCK/ 1Mbps	11	85	90	
THUE	OFDM/ 6Mbps	01	65	70	
802.11g	OFDM/ 6Mbps	06	75	80	
	OFDM/ 6Mbps	11	75	80	
MARCH	MCS 0	01	76	81	
302.11n(HT20)	MCS 0	06	76	81	
	MCS 0	11	76	81	
The same of the sa	MCS 0	03	70	75	
302.11n(HT40)	MCS 0	06	70	75	
Will a	MCS 0	09	75	80	

## 1.7 Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	$\pm 3.50~\mathrm{dB}$ $\pm 3.10~\mathrm{dB}$
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	$\pm 4.20~\mathrm{dB}$





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### 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

#### **CNAS (L5813)**

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

#### IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.





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## 2. Test Summary

Standard Section	Tool Home	Ta a ( Campula (a)	landama and		
FCC	Test Item	Test Sample(s)	Judgment	Rema	
FCC 15.207(a)	Conducted Emission	202305-0132-12-#1	PASS	N/A	
FCC 15.209 & 15.247(d)	Radiated Unwanted Emissions	202305-0132-12-#1	PASS	N/A	
FCC 15.203	Antenna Requirement	202305-0132-12-#2	PASS	N/A	
FCC 15.247(a)(2)	6dB Bandwidth	202305-0132-12-#2	PASS	N/A	
	99% Occupied bandwidth	202305-0132-12-#2	PASS	N/A	
FCC 15.247(b)(3)	Peak Output Power and E.I.R.P	202305-0132-12-#2	PASS	N/A	
FCC 15.247(e)	Power Spectral Density	202305-0132-12-#2	PASS	N/A	
FCC 15.247(d)	Band Edge Measurements	202305-0132-12-#2	PASS	N/A	
FCC 15.207	Conducted Unwanted Emissions	202305-0132-12-#2	PASS	N/A	
FCC 15.247(d)	Emissions in Restricted Bands	202305-0132-12-#2	PASS	N/A	
781	On Time and Duty Cycle	202305-0132-12-#2	/	N/A	

## 3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
RF Conducted  Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120-3	Tonscend	V3.2.22





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# 4. Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 23, 2022	Jun. 22, 2023
The same	Compliance	1000	M	7	(C)
RF Switching Unit	Direction Systems	RSU-A4	34403	Jun. 23, 2022	Jun. 22, 2023
	Inc	a lu	DY A	WUB!	
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 22, 2022	Jun. 21, 2023
LISN	Rohde & Schwarz	ENV216	101131	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	NTFM 8131	8131-193	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	CAT3 8158	cat3 5158-0094	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	NTFM5158	NTFM5158 0145	Jun. 22, 2022	Jun. 21, 2023
ISN	SCHWARZBECK	CAT 8158	cat5 8158-179	Jun. 22, 2022	Jun. 21, 2023
Radiation Emissi	on Test (B Site)				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep.01.2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 22, 2022	Jun. 21, 2023
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2023	Feb. 22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep.01.2022	Aug. 31, 2023
Highpass Filter	CD	HPM-6.4/18G	1	N/A	N/A
Highpass Filter	CD	HPM-2.8/18G		N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conduct	ted Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jun. 22, 2022	Jun. 21, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 22, 2022	Jun. 21, 2023
MXA Signal Analyzer	KEYSIGHT	N9020B	MY60110172	Sep.01.2022	Aug. 31, 2023





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MXA Signal Analyzer	Agilent	N9020A	MY47380425	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	Agilent	N5181A	MY48180463	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	KEYSIGHT	N5182B	MY59101429	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep.01.2022	Aug. 31, 2023
DE Davis Care a	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep.01.2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep.01.2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep.01.2022	Aug. 31, 2023
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jun. 22, 2022	Jun. 21, 2023
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep.01.2022	Aug. 31, 2023
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	168796	Feb. 23, 2023	Feb.22, 2024
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 22, 2022	Jun. 21, 2023





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Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 20, 2023	Jun. 19, 2024
	Compliance			100	
RF Switching Unit	Direction Systems	RSU-A4	34403	Jun. 20, 2023	Jun. 19, 2024
	Inc	11:33	HULL	3 100	
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 20, 2023	Jun. 19, 2024
LISN	Rohde & Schwarz	ENV216	101131	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	NTFM 8131	8131-193	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	CAT3 8158	cat3 5158-0094	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	NTFM5158	NTFM5158 0145	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	CAT 8158	cat5 8158-179	Jun. 20, 2023	Jun. 19, 2024
Radiation Emissio	n Test (B Site)				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep.01.2022	Aug. 31, 2023
Spectrum	Dahda 9 Cahwara	FC)/40 N	400407	Jun. 20, 2023	lum 40 2024
Analyzer	Rohde & Schwarz	FSV40-N	102197	Juli. 20, 2023	Jun. 19, 2024
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2023	Feb. 22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep.01.2022	Aug. 31, 2023
Highpass Filter	CD	HPM-6.4/18G		N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	(1817)	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducte	ed Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jun. 20, 2023	Jun. 19, 2024
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
MXA Signal Analyzer	KEYSIGHT	N9020B	MY60110172	Sep.01.2022	Aug. 31, 2023
MXA Signal Analyzer	Agilent	N9020A	MY47380425	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep.01.2022	Aug. 31, 2023





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			The state of the s		
Analog Signal Generator	Agilent	N5181A	MY48180463	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	KEYSIGHT	N5182B	MY59101429	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep.01.2022	Aug. 31, 2023
DE D 103	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep.01.2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep.01.2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep.01.2022	Aug. 31, 2023
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jun. 20, 2023	Jun. 19, 2024
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep.01.2022	Aug. 31, 2023
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	168796	Feb. 23, 2023	Feb.22, 2024
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 20, 2023	Jun. 19, 2024





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## 5. Conducted Emission Test

#### 5.1 Test Standard and Limit

5.1.1 Test Standard

FCC Part 15.207

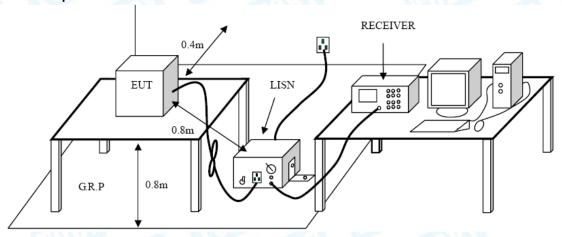
#### 5.1.2 Test Limit

F	Maximum RF Line Voltage (dBμV)		
Frequency	Quasi-peak Level	Average Level	
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *	
500kHz~5MHz	56	46	
5MHz~30MHz	60	50	

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 5.2 Test Setup



#### 5.3 Test Procedure

- ●The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- ●I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- ●LISN at least 80 cm from nearest part of EUT chassis.





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● The bandwidth of EMI test receiver is set at 9 kHz, and the test frequency band is from 0.15MHz to 30MHz.

## 5.4 Deviation From Test Standard

No deviation

## 5.5 EUT Operating Mode

Please refer to the description of test mode.

#### 5.6 Test Data

Please refer to the Attachment A inside test report.



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## 6. Radiated and Conducted Unwanted Emissions

#### 6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.209 & FCC Part 15.247(d)

#### 6.1.2 Test Limit

Gener	General field strength limits at frequencies Below 30MHz				
Frequency	Field Strength	Field Strength	Measurement		
(MHz)	(μA/m)*	(microvolt/meter)**	Distance (meters)		
0.009~0.490	6.37/F (F in kHz)	2400/F(KHz)	300		
0.490~1.705	63.7/F (F in kHz)	24000/F(KHz)	30		
1.705~30.0	0.08	30	30		

**Note:** 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

2, \*is for RSS Standard, \*\*is for FCC Standard.

General field	General field strength limits at frequencies above 30 MHz				
Frequency	Field strength	Measurement Distance			
(MHz)	(µV/m at 3 m)	(meters)			
30~88	100	3			
88~216	150	3			
216~960	200	3			
Above 960	500	3			

General field strength limits at frequencies Above 1000MHz					
Frequency	Distance of 3m (dBuV/m)				
(MHz)	Peak	Average			
Above 1000	74	54			

#### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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, provided



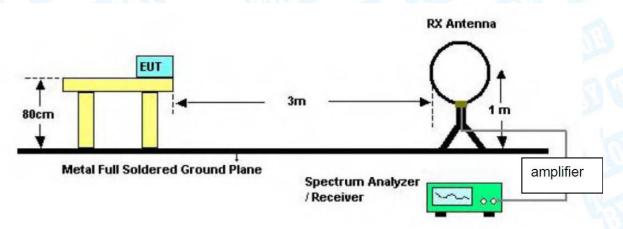


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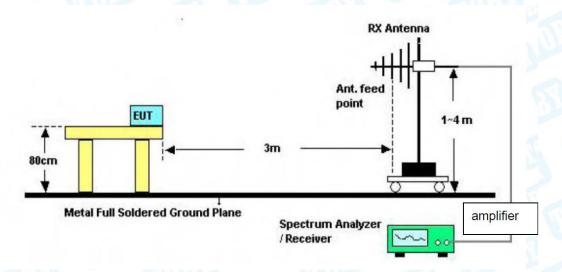
that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

## 6.2 Test Setup

#### Radiated measurement



#### **Below 30MHz Test Setup**

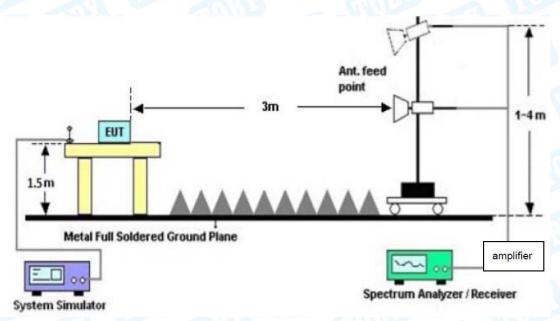


**Below 1000MHz Test Setup** 

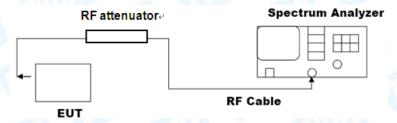




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# Above 1GHz Test Setup Conducted measurement



#### 6.3 Test Procedure

#### ---Radiated measurement

- The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode





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measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

- Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.
- ●Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.

#### --- Conducted measurement

#### Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to≥1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW≥[3\*RBW].
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

#### Emission level measurement

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW≥[3\*RBW].
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum





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requirements specified in 11.11. Report the three highest emissions relative to the limit.

### 6.4 Deviation From Test Standard

No deviation

## 6.5 EUT Operating Mode

Please refer to the description of test mode.

#### 6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report.

Conducted measurement please refer to the Appendix C.



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## 7. Restricted Bands Requirement

### 7.1 Test Standard and Limit

7.1.1 Test Standard

FCC Part 15.205 & FCC Part 15.247(d)

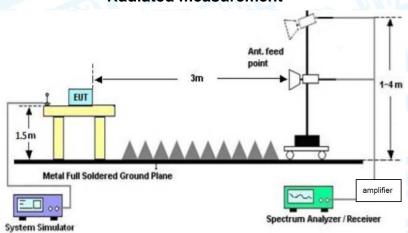
#### 7.1.2 Test Limit

Restricted Frequency	Distance Meters(at 3m)		
Band (MHz)	Peak (dBuV/m)	Average (dBuV/m)	
2310 ~2390	74	54	
2483.5 ~2500	74	54	
	Peak (dBm)see 7.3 e)	Average (dBm) see 7.3 e)	
2310 ~2390	-21.20	-41.20	
2483.5 ~2500	-21.20	-41.20	

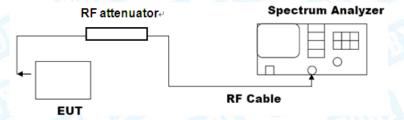
Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test forcabinet/case emissions is required.

## 7.2 Test Setup

#### Radiated measurement



#### **Conducted measurement**







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### 7.3 Test Procedure

#### ---Radiated measurement

- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- ●The Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.

#### --- Conducted measurement

- a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).
- c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies  $\leq$ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).
- d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).
- e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

 $E = EIRP-20 \log d + 104.8$ 

where

E is the electric field strength in dBuV/m





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EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

- f) Compare the resultant electric field strength level with the applicable regulatory limit.
- g) Perform the radiated spurious emission test.

### 7.4 Deviation From Test Standard

No deviation

## 7.5 EUT Operating Mode

Please refer to the description of test mode.

#### 7.6 Test Data

Radiated measurement please refer to the Attachment C inside test report.

Conducted measurement please refer to the Appendix C.





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## 8. Bandwidth Test

#### 8.1 Test Standard and Limit

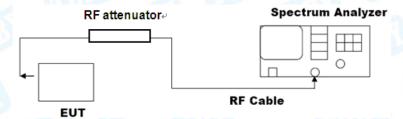
8.1.1 Test Standard

#### FCC Part 15.205 & FCC Part 15.247(d)

#### 8.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
-6dB bandwidth	>=500 KHz	2400~2483.5
(DTS bandwidth )	>=500 KHZ	2400~2463.3
99% occupied bandwidth		2400~2483.5

#### 8.2 Test Setup



#### 8.3 Test Procedure

#### --- DTS bandwidth

- The steps for the first option are as follows:
- a) Set RBW = 100 kHz.
- b) Set the VBW≥[3\*RBW].
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### ---occupied bandwidth

- The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:
- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.





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b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).
- 8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Mode

Please refer to the description of test mode.

8.6 Test Data

Please refer to the Appendix C.





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## 9. Peak Output Power

#### 9.1 Test Standard and Limit

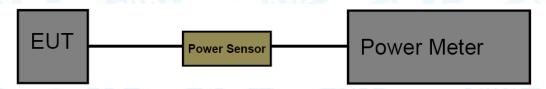
9.1.1 Test Standard

FCC Part 15.247(b)(3)

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	not exceed 1 W or 30dBm	2400~2483.5
E.I.R.P	not exceed 4 W or 36dBm	2400~2463.5

## 9.2 Test Setup



#### 9.3 Test Procedure

- The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.
- 9.4 Deviation From Test Standard
  No deviation
- 9.5 EUT Operating Mode

Please refer to the description of test mode.

9.6 Test Data

Please refer to the Appendix C.





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## 10. Power Spectral Density

#### 10.1 Test Standard and Limit

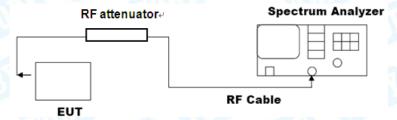
10.1.1 Test Standard

FCC Part 15.247(e)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)	
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5	

### 10.2 Test Setup



#### 10.3 Test Procedure

- The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:
- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to 3 kHz≤RBW≤100 kHz.
- d) Set the VBW ≥[3\*RBW].
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

#### 10.4 Deviation From Test Standard

No deviation

#### 10.5 Antenna Connected Construction

Please refer to the description of test mode.

#### 10.6 Test Data

Please refer to the Appendix C.





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## 11. Antenna Requirement

#### 11.1 Test Standard and Limit

11.1.1 Test Standard

#### FCC Part 15.203

#### 11.1.2 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 shall be considered sufficient to comply with the provisions of this Section. 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.

### 11.2 Deviation From Test Standard

No deviation

#### 11.3 Antenna Connected Construction

The gains of the antenna used for transmitting is please refer to page 5, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 11.4 Test Data

The EUT antenna is a PCB Antenna. It complies with the standard requirement.

Antenna Type						
⊠Permanent attached antenna	1					
Unique connector antenna						
☐Professional installation antenna	les					

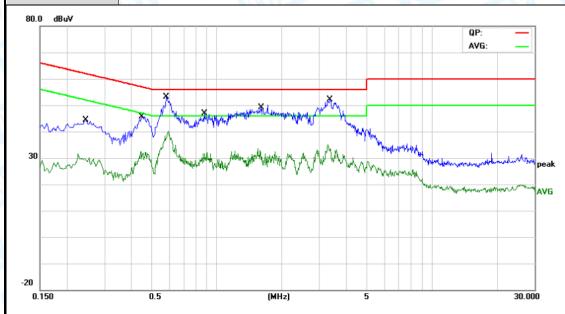




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## **Attachment A-- Conducted Emission Test Data**

	The state of the s		
Temperature:	<b>24.5</b> ℃	Relative Humidity:	45%
Test Voltage:	AC 120V/60Hz		1000
Terminal:	Line		
Test Mode:	Mode 1	N. O. V.	
Remark:	Only worse case is reported	ed.	



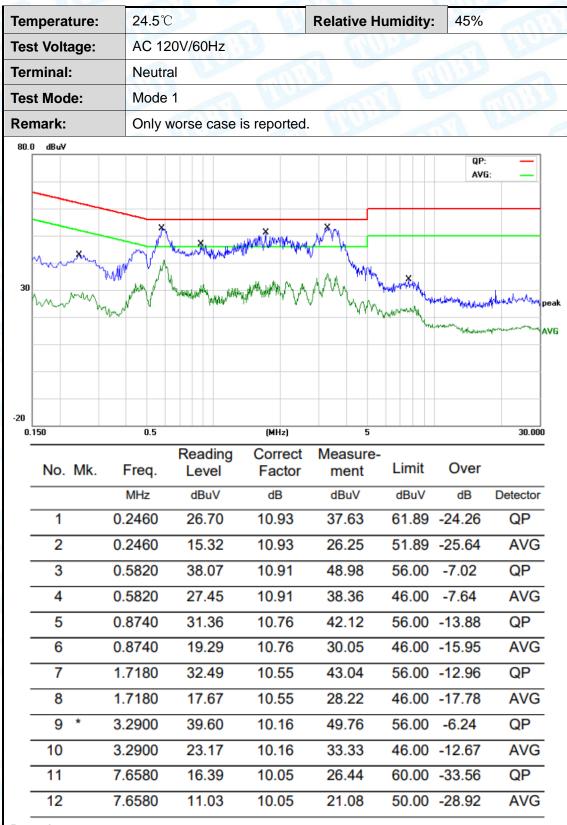
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2460	27.15	10.93	38.08	61.89	-23.81	QP
2		0.2460	15.49	10.93	26.42	51.89	-25.47	AVG
3		0.4468	28.96	10.92	39.88	56.93	-17.05	QP
4		0.4468	18.12	10.92	29.04	46.93	-17.89	AVG
5	*	0.5820	38.17	10.91	49.08	56.00	-6.92	QP
6		0.5820	27.53	10.91	38.44	46.00	-7.56	AVG
7		0.8740	31.42	10.76	42.18	56.00	-13.82	QP
8		0.8740	19.30	10.76	30.06	46.00	-15.94	AVG
9		1.6019	34.60	10.57	45.17	56.00	-10.83	QP
10		1.6019	20.71	10.57	31.28	46.00	-14.72	AVG
11		3.3620	38.08	10.15	48.23	56.00	-7.77	QP
12		3.3620	21.18	10.15	31.33	46.00	-14.67	AVG

#### Remark

- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



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#### Remark

- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)





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## **Attachment B--Unwanted Emissions Data**

#### --- Radiated Unwanted Emissions

#### 9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB Below the permissible value has no need to be reported.

#### 30MHz~1GHz

Tempera	ature:	24.3°	2		Relative H	umidity:	45%		
Test Vol	tage:	AC 12	AC 120V/60Hz						
Ant. Pol		Horiz	ontal		Chine		100		
Test Mo	de:	Mode	Mode 2 TX Mode b Mode Channel 01						
Remark	•	Only	worse ca	se is reported			ANY		
80.0 dBu	V/m								
70									
70									
60						(RF)FCC 15	iC 3M Radiatio	on _	
50						Margin -6 d	IB.		
40			-		<del>                                     </del>	×	4 -		
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30				<del>\</del>		VYW.		peal	
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20	diamental professional and the second	ahang / Marker 31 May ra	where the same of the same	iolethoopingenerally have had	My house	Mymm	Jana Maria	peal Miles	
20 Mariheta	decentrative constants	ahaa ahaa ahaa ahaa ahaa ahaa ahaa aha	idea de la companya d	ingeller en	my hour	Myseument of the second	ilinh.M	difficient peal	
20	ideach of the decision of the second of the		Art Jangar			May	Land M		
20 10 0 -10	standard on the same	60.00	And har later and the safe of	1 Makelihari kangaran di Ministra di Minis		.00		1000.00	
20	Freque (MH	60.00 ency	Readin (dBuV)	(MHz)	300 Level	Limit (dBuV/m)	Margin (dB)		
20 10 0 -10 -20 30.000	Freque	ency łz)	Readin	(MHz)	300 Level	Limit	Margin	1000.00	
20 10 0 -10 -20 30.000	Freque (MH	60.00 ency Hz)	Readin (dBuV)	(MHz) Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	1000.00 Detector	
20 10 0 -10 -20 30.000 No.	Freque (MH	60.00 ency lz) 5592	Readin (dBuV) 53.81	(MHz) Factor (dB/m) -24.01	Level (dBuV/m) 29.80	Limit (dBuV/m) 43.50	Margin (dB)	Detector peak	
20 10 0 -10 -20 30.000 No.	Freque (MH 182.5 239.9	60.00 ency dz) 5592 874	Readin (dBuV) 53.81 64.94	(MHz)  G Factor (dB/m)  -24.01  -22.91	Level (dBuV/m) 29.80 42.03	Limit (dBuV/m) 43.50 46.00	Margin (dB) -13.70 -3.97	Detector peak peak	
20 10 0 -10 -20 30.000 No.	Freque (MH 182.5 239.9 319.9	ency 4z) 5592 874 370	Readin (dBuV) 53.81 64.94 62.26	(MHz)  G Factor (dB/m)  -24.01  -22.91  -20.42	Level (dBuV/m) 29.80 42.03 41.84	Limit (dBuV/m) 43.50 46.00 46.00	Margin (dB) -13.70 -3.97 -4.16	Detector peak peak peak	

<sup>\*:</sup>Maximum data x:Over limit !:over margin

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)





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	ature:	24.3°	C	R	elative Hur	nidity:	45%		
Test Vo	Itage:	AC 1	20V/60Hz						
Ant. Po	l.	Vertic	Vertical						
est Mo	ode:	Mode	2 TX Mode	e b Mode Ch	annel 01			MH .	
Remark	<b>C:</b>	Only	worse case	is reported.	CHI.		3 F		
30.0 dBu	υV/m								
0									
0						(RF)FCC 15	C 3M Radiatio	in _	
0						Margin -6-d	В		
o								+	
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30									
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0		60.00	which we proportion the second	(MHz)	300.				
0	Frequ		Reading (dBuV)	<i>)</i>	Level (dBuV/m)	Limit	Margin (dB)	1000.0	
0 WWW 10 20 20 30.000	Frequ (M	60.00 uency		(MHz)	Level	Limit	Margin	1000.0	
No.	Frequency (Miles)	60.00 uency Hz)	(dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	1000.0	
0 WWW 10 20 30.000 No.	Frequ (M 164.	60.00 uency Hz) 3301	(dBuV) 50.00	Factor (dB/m)	Level (dBuV/m) 27.49	Limit (dBuV/m) 43.50	Margin (dB) -16.01	Detector peak	
No.	Frequ (M 164. 199. 234.	uency Hz) 3301 2855	(dBuV) 50.00 57.70	(MHz) Factor (dB/m) -22.51 -24.87	Level (dBuV/m) 27.49 32.83	Limit (dBuV/m) 43.50 43.50	Margin (dB) -16.01 -10.67	Detector peak peak	
No. 1 2 * 3	Frequ (M 164. 199. 234. 373.	uency Hz) 3301 2855 1684	50.00 57.70 50.77	(MHz) Factor (dB/m) -22.51 -24.87 -23.21	Level (dBuV/m) 27.49 32.83 27.56	Limit (dBuV/m) 43.50 43.50 46.00	Margin (dB) -16.01 -10.67 -18.44	Detector peak peak peak	

\*:Maximum data

- Remark: 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

x:Over limit !:over margin

3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)





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#### Above 1GHz

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal	CO DE	Min.
Test Mode:	TX B Mode 2412MHz (	(ANT.1+ANT.2)	The state of the s

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10945.000	44.51	-1.80	42.71	74.00	-31.29	peak
2	13546.000	42.45	0.02	42.47	74.00	-31.53	peak

#### Remark

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value<average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V	COLUMN TO THE REAL PROPERTY OF THE PERTY OF	
Ant. Pol.	Vertical	WUR.	THU:
Test Mode:	TX B Mode 2412MHz (A	ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10894.000	44.67	-1.80	42.87	74.00	-31.13	peak
2	14387.500	41.35	0.91	42.26	74.00	-31.74	peak

#### Remark

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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The second secon			
Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		1000
Test Mode:	TX B Mode 2437M	Hz (ANT.1+ANT.2)	((1)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	I
1	11276.500	43.43	-1.37	42.06	74.00	-31.94	peak	
2 *	13520.500	42.87	0.07	42.94	74.00	-31.06	peak	Ī

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%			
Test Voltage:	DC 5V		WOR			
Ant. Pol.	Vertical	The same of the sa				
Test Mode:	TX B Mode 2437MHz (ANT.1+ANT.2)					

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10919.500	43.74	-1.79	41.95	74.00	-32.05	peak
2 *	14821.000	41.48	0.72	42.20	74.00	-31.80	peak

#### Remark

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	<b>26</b> ℃	C Relative Humidity:					
Test Voltage:	DC 5V	DC 5V					
Ant. Pol.	Horizontal		1000				
Test Mode:	TX B Mode 2462MHz (	ANT.1+ANT.2)	COUNTY OF THE PARTY OF THE PART				

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	I
1	10970.500	43.64	-1.82	41.82	74.00	-32.18	peak	
2 *	13469.500	42.64	0.13	42.77	74.00	-31.23	peak	

# Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%					
Test Voltage:	DC 5V		4000					
Ant. Pol.	Vertical	Vertical						
Test Mode:	TX B Mode 2462MHz (A	ANT.1+ANT.2)						

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10894.000	44.28	-1.80	42.48	74.00	-31.52	peak
2 *	13546.000	42.56	0.02	42.58	74.00	-31.42	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V	THE PARTY OF THE P	A FILL
Ant. Pol.	Horizontal		1000
Test Mode:	TX G Mode 2412MHz (A	ANT.1+ANT.2)	COURS !

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10919.500	44.47	-1.79	42.68	74.00	-31.32	peak
2	14591.500	41.13	0.85	41.98	74.00	-32.02	peak

# Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		6000
Ant. Pol.	Vertical	The same of the sa	
Test Mode:	TX G Mode 2412MHz (A	NT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11404.000	43.84	-1.02	42.82	74.00	-31.18	peak
2	14387.500	40.80	0.91	41.71	74.00	-32.29	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 243	7MHz (ANT.1+ANT.2)	COMP.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10894.000	44.77	-1.80	42.97	74.00	-31.03	peak
2	13418.500	42.67	0.17	42.84	74.00	-31.16	peak

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		4000
Ant. Pol.	Vertical	The same	
Test Mode:	TX G Mode 2437MHz (	ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10817.500	44.42	-2.17	42.25	74.00	-31.75	peak
2 *	14362.000	41.66	0.73	42.39	74.00	-31.61	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		73 100
Ant. Pol.	Horizontal		000
Test Mode:	TX G Mode 2462	2MHz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10792.000	44.60	-2.31	42.29	74.00	-31.71	peak
2 *	14132.500	42.68	0.19	42.87	74.00	-31.13	peak

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		W000
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MI	Hz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10792.000	45.06	-2.31	42.75	74.00	-31.25	peak
2	14693.500	41.48	0.89	42.37	74.00	-31.63	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal	as a	
Test Mode:	TX n(HT20) Mode 2412M	Hz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10970.500	44.55	-1.82	42.73	74.00	-31.27	peak
2	14413.000	41.28	0.94	42.22	74.00	-31.78	peak

# Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%			
Test Voltage:	DC 5V	1011	6000			
Ant. Pol.	Vertical					
Test Mode:	TX n(HT20) Mode 2412MHz (ANT.1+ANT.2)					

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10919.500	44.62	-1.79	42.83	74.00	-31.17	peak
2	14362.000	41.45	0.73	42.18	74.00	-31.82	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Control Control Control			
Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		000
Test Mode:	TX n(HT20) Mod	de 2437MHz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11302.000	43.95	-1.15	42.80	74.00	-31.20	peak
2	14387.500	41.48	0.91	42.39	74.00	-31.61	peak

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%			
Test Voltage:	DC 5V		4000			
Ant. Pol.	Vertical					
Test Mode:	TX n(HT20) Mode 2437MHz (ANT.1+ANT.2)					

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	11327.500	44.00	-1.11	42.89	74.00	-31.11	peak
2	14362.000	42.12	0.73	42.85	74.00	-31.15	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		7
Ant. Pol.	Horizontal		WOOD -
Test Mode:	TX n(HT20) Mode 2462	MHz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10970.500	44.36	-1.82	42.54	74.00	-31.46	peak
2 *	13520.500	42.80	0.07	42.87	74.00	-31.13	peak

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V	1011	6000
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2462MF	Hz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10868.500	44.34	-1.93	42.41	74.00	-31.59	peak
2 *	14923.000	41.33	1.36	42.69	74.00	-31.31	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mod	de 2422MHz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10945.000	44.33	-1.80	42.53	74.00	-31.47	peak
2	13571.500	42.25	-0.02	42.23	74.00	-31.77	peak

# Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		4000
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 24	22MHz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	10919.500	45.40	-1.79	43.61	74.00	-30.39	peak
2	14362.000	41.46	0.73	42.19	74.00	-31.81	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Control Control Control			MILLS IN THE SECOND
Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		000
Test Mode:	TX n(HT40) Mod	de 2437MHz (ANT.1+ANT.2)	Comm

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11404.000	43.79	-1.02	42.77	74.00	-31.23	peak
2	14515.000	41.67	0.69	42.36	74.00	-31.64	peak

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the hi ghest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		4000
Ant. Pol.	Vertical	The state of the s	
Test Mode:	TX n(HT40) Mode 243	7MHz (ANT.1+ANT.2)	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	12194.500	42.85	-0.88	41.97	74.00	-32.03	peak
2 *	14591.500	41.90	0.85	42.75	74.00	-31.25	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	26℃	26°C Relative Humidity:					
Test Voltage:	DC 5V	THE PARTY OF THE P	73 100				
Ant. Pol.	Horizontal	may 6	1000				
Test Mode:	TX n(HT40) Mode 2452	TX n(HT40) Mode 2452MHz (ANT.1+ANT.2)					

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10919.500	44.23	-1.79	42.44	74.00	-31.56	peak
2 *	14362.000	41.78	0.73	42.51	74.00	-31.49	peak

#### Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

Temperature:	26℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		THURS
Test Mode:	TX n(HT40) Mode 2452N	//Hz (ANT.1+ANT.2)	(10)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11276.500	43.86	-1.37	42.49	74.00	-31.51	peak
2	14923.000	40.89	1.36	42.25	74.00	-31.75	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.



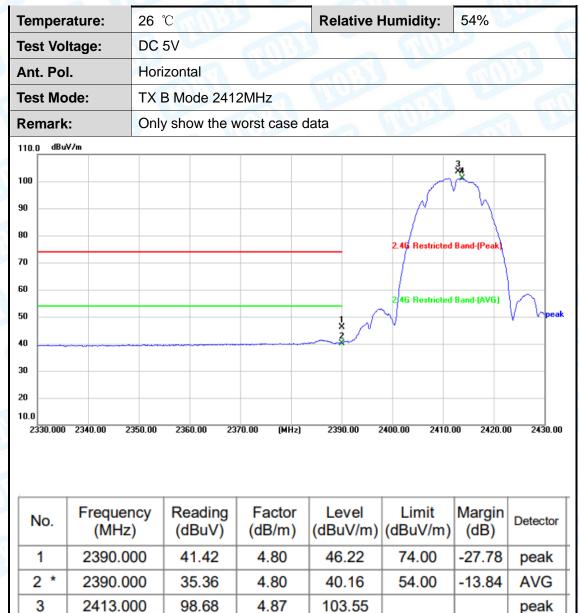


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# **Attachment C-- Restricted Bands Requirement and**

# **Band-edge Test Data**

# (1) Radiation Test



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

96.27

4.87

101.14

2413.800



4

AVG



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Temperature:	26 ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		UP.
Test Mode:	TX B Mode 2412MH	z	ani's
Remark:	Only show the worst	case data	
110.0 dBuV/m			
90			**
70		2.46 Restri	cted Band-(Peak)
60		△ 246 Bestri	cted Band-(AVG)
50		* \( \sqrt{10.103.11}	pea
40		3	
30			
20			
10.0	2350.00 2360.00 2370.00	(MHz) 2390.00 2400.00 2	410.00 2420.00 2430.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	45.09	4.80	49.89	74.00	-24.11	peak
2 *	2390.000	35.09	4.80	39.89	54.00	-14.11	AVG
3	2411.200	94.81	4.86	99.67			peak
4	2413.800	92.92	4.87	97.79			AVG





10.0 2448.000 2458.00

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2538.00

2528.00

2548.00

Temperature:	26 ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal	and a	100
Test Mode:	TX B Mode 2462MHz		can 32
Remark:	Only show the worst ca	se data	7
110.0 dBuV/m			
100	<u> </u>	2.4G Restrict	ed Band-{Peak)
70 60	√ √ 3	2.4G Restrict	ed Band-(AVG)
40	Ž.		pea
30			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2463.900	97.14	5.06	102.20			AVG
2	2464.900	99.13	5.07	104.20			peak
3	2483.500	45.67	5.15	50.82	74.00	-23.18	peak
4 *	2483.500	37.53	5.15	42.68	54.00	-11.32	AVG

(MHz)

2508.00

2518.00

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

2468.00

2478.00

2488.00





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Temperature:	26 ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		(1)
est Mode:	TX B Mode 2462MHz		
Remark:	Only show the worst	case data	
10.0 dBuV/m			
30 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		2.4G Restr	icted Band-{Peak}
io	3	2.4G Restr	icted Band-(AVG)
10	V \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		pea
80			
.			
20			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2461.300	89.38	5.06	94.44			AVG
2	2464.900	91.03	5.07	96.10			peak
3	2483.500	43.25	5.15	48.40	74.00	-25.60	peak
4 *	2483.500	35.34	5.15	40.49	54.00	-13.51	AVG





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V	MUDDE	
Ant. Pol.	Horizontal		Will a
Test Mode:	TX G Mode 2412MHz		
Remark:	Only show the worst ca	se data	
110.0 dBuV/m			
100			******
90			
80		2.4G Restric	ted Band-(Peak)
70		1 ×	The same of the sa
50		2.4G Restric	eted Band-(AVG)
		and the same of th	
40			
30			
10.0			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	56.36	4.80	61.16	74.00	-12.84	peak
2 *	2390.000	46.71	4.80	51.51	54.00	-2.49	AVG
3	2412.800	94.72	4.87	99.59			AVG
4	2413.200	99.08	4.87	103.95			peak





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Temperature:	26 ℃	<b>Relative Humidity:</b> 54%
Test Voltage:	DC 5V	
Ant. Pol.	Vertical	
Test Mode:	TX G Mode 2412MHz	
Remark:	Only show the worst of	ase data
110.0 dBuV/m		
100		3 4
90		man
80		2.4G Restricted Band-(Peak)
70		Z. da nestricteu barru-(reak)
60		
50		2.46 Restricted Band-(AVG)
40		
30		
20		
10.0		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	2390.000	48.30	4.80	53.10	74.00	-20.90	peak
2 *	2390.000	41.65	4.80	46.45	54.00	-7.55	AVG
3	2411.200	91.96	4.86	96.82			peak
4	2415.100	88.81	4.88	93.69			AVG





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Temperature:	26 ℃	Relative Humidity:	54%
Гest Voltage:	DC 5V		
Ant. Pol.	Horizontal		UP.
Test Mode:	TX G Mode 2462MHz		and the
Remark:	Only show the worst ca	se data	1
110.0 dBuV/m			
90 80		2.4G Restri	cted Band-(Peak)
60	3 ×	2.4G Restri	cted Band-(AVG)
40	The state of the s		peal
30			
10.0			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2458.700	99.57	5.05	104.62			peak
2	2465.400	94.95	5.07	100.02			AVG
3	2483.500	59.54	5.15	64.69	74.00	-9.31	peak
4 *	2483.500	46.61	5.15	51.76	54.00	-2.24	AVG





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Temperature:	26 ℃	Relative H	umidity: 54%	
Test Voltage:	DC 5V		100	
Ant. Pol.	Vertical		CUDD?	
Test Mode:	TX G Mode 24	62MHz		
Remark:	Only show the	worst case data	10	
110.0 dBuV/m				
100			2.46 Restricted Band-(Peak)	
70	3 X		2.4G Restricted Band-(AVG)	
50	*		2.4G Restricted Band-(AVG)	
40				ре
30				
20				
10.0				

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.300	91.30	5.05	96.35			peak
2	2464.100	89.40	5.06	94.46			AVG
3	2483.500	60.43	5.15	65.58	74.00	-8.42	peak
4 *	2483.500	46.55	5.15	51.70	54.00	-2.30	AVG





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Temperature:	26 ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Horizontal		100
Test Mode:	TX N(HT20) Mode 2412N	1Hz	mn!
Remark:	Only show the worst case	e data	7
110.0 dBuV/m			
100		3×	
30		2.4G Restricte	d Band-(Peak)
70		1 ×	
50	ر	2.46 Restricte	d Band-(AVG)
30			
20			

N	lo.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	ı
	1	2390.000	57.30	4.80	62.10	74.00	-11.90	peak	
2	2 *	2390.000	46.81	4.80	51.61	54.00	-2.39	AVG	
	3	2410.600	100.28	4.86	105.14			peak	
-	4	2411.100	94.67	4.86	99.53			AVG	





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V		
Ant. Pol.	Vertical		MINE TO THE
Test Mode:	TX N(HT20) Mode	e 2412MHz	and 32
Remark:	Only show the wo	rst case data	M W
110.0 dBuV/m			
100		3 4	
90			
70		2.4G Restri	cted Band-(Peak)
60		1 2.4G Restri	icted Band-(AVG)
50		3	peak
40			
30			
20			
2333.000 2343.00	2353.00 2363.00 2373.	.00 (MHz) 2393.00 2403.00 2	413.00 2423.00 2433.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	48.56	4.80	53.36	74.00	-20.64	peak
2 *	2390.000	42.40	4.80	47.20	54.00	-6.80	AVG
3	2405.500	91.27	4.84	96.11			peak
4	2410.200	88.73	4.85	93.58			AVG





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Temperature:	26 ℃	Relat	ive Humidity:	54%
Гest Voltage:	DC 5V	333	MILLER	a the
Ant. Pol.	Horizontal		OID	
Test Mode:	TX N(HT20) Mo	de 2462MHz		ant's
Remark:	Only show the v	vorst case data		1 63
110.0 dBuV/m 100	\$ X			
70		3×	2.4G Restricted Ba	and-{Peak}
50	home		2.4G Restricted B	and-(AVG)
40			····	pea
30				
20				

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.100	93.28	5.05	98.33			AVG
2	2466.200	100.61	5.08	105.69			peak
3	2483.500	61.63	5.15	66.78	74.00	-7.22	peak
4 *	2483.500	46.74	5.15	51.89	54.00	-2.11	AVG





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Temperature:	<b>26</b> ℃	Relative Humidity:	54%
Test Voltage:	DC 5V	MUDE	
Ant. Pol.	Vertical		Will a
Test Mode:	TX N(HT20) Mode 246	62MHz	
Remark:	Only show the worst co	ase data	
110.0 dBuV/m			
100 90 80 70		2.4G Restri	cted Band-(Peak)
50	3,4	2.4G Restri	cted Band-(AVG)
30			peal
20 10.0			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2463.700	89.77	5.06	94.83			peak
2	2465.000	85.89	5.07	90.96			AVG
3	2483.500	47.99	5.15	53.14	74.00	-20.86	peak
4 *	2483.500	38.45	5.15	43.60	54.00	-10.40	AVG

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





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Tem <sub> </sub>	perat	ure:	26 °C		1197		Relative	Humidity:	54%	Billing
Гest	Volta	ge:	DC 5	ίV						
Ant.	Pol.		Horiz	zontal		The same			6	Mill I
Test	Mode	<b>ə</b> :	TXN	X N(HT40) Mode 2422MHz						
Rem	ark:		Only	show th	e worst	case da	ita	CILL		
110.0	dBuV/n	n								
100									4 ×	
90									Jun garman	
80								2.4G Restrict	ted Band-(Peak	)
70  - 60  -							×			1
50							3		ted Band-(AVG)	Two pe
40	····									
30										
20										
10.0 226	0.000 2	280.00	2300.00	2320.00	2340.00	(MHz)	2380.00	2400.00 242	20.00 2440	).00 2 <b>4</b> 60.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	61.00	4.80	65.80	74.00	-8.20	peak
2 *	2390.000	46.94	4.80	51.74	54.00	-2.26	AVG
3	2426.200	90.81	4.92	95.73			AVG
4	2427.800	96.06	4.94	101.00			peak





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_	00 %0			E 40/
Temperature:	26 ℃		Relative Humidity:	54%
Test Voltage:	DC 5V	M. D.		
Ant. Pol.	Vertical			
Test Mode:	TX N(HT40	) Mode 2422N	ИНz	ani)
Remark:	Only show	the worst case	e data	1
110.0 dBuV/m				
100				*
90			June	my strang
80			2.46 Restri	cted Band-(Peak)
70				
60			X 2/4G Restri	cted Band-(AVG)
50			3	peak
40				
30				
20				
10.0				

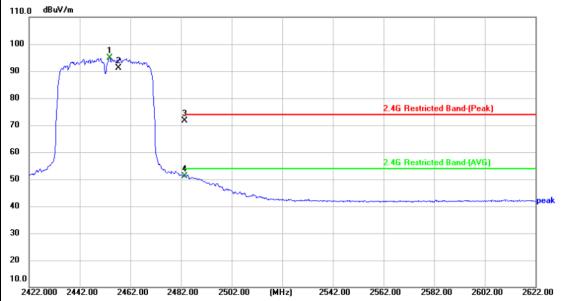
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	52.63	4.80	57.43	74.00	-16.57	peak
2 *	2390.000	42.70	4.80	47.50	54.00	-6.50	AVG
3	2426.600	85.22	4.92	90.14			AVG
4	2431.400	94.03	4.95	98.98			peak





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		14 14 14 14 14 14 14 14 14 14 14 14 14 1					
Temperature:	26 ℃	Relative Humidity:	54%				
Test Voltage:	DC 5V		77				
Ant. Pol.	Horizontal						
Test Mode:	TX N(HT40) Mode 2	TX N(HT40) Mode 2452MHz					
Remark:	Only show the wors	t case data	7				
110.0 dBuV/m							
100							
1							



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2453.800	89.77	5.03	94.80			AVG
2	2457.400	86.21	5.04	91.25			peak
3 *	2483.500	66.45	5.15	71.60	74.00	-2.40	peak
4	2483.500	45.86	5.15	51.01	54.00	-2.99	AVG





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Temperature:	26 ℃	A W	Relative Hu	ımidity:	54%			
Test Voltage:	DC 5V							
Ant. Pol.	Vertical	ertical						
Test Mode:	TX N(HT40) Mo	de 2452MH	z			es:m		
Remark:	Only show the w	vorst case d	ata		1			
110.0 dBuV/m								
90 1	3							
70				2.4G Restricted	Band-(Peak)			
50	3			2.4G Restricted	Band-(AVG)	peak		
30								
20 10.0 2422.000 2442.00	2462.00 2482.00 25	02.00 (MHz)	2542.00 2	2562.00 2582.	00 2602.0	0 2622.00		
No. Freque		Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector		
1 2448.4	400 83.07	5.01	88.08			AVG		

91.20 5.04 2 2457.400 96.24 peak 3 2483.500 48.94 5.15 54.09 74.00 -19.91 peak 4 \* 40.03 5.15 45.18 -8.82 AVG 2483.500 54.00

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

----END OF THE REPORT-----

