



FCC Radio Test Report

FCC ID: 2AX5JHR56G01

This report concerns: Original Grant

Project No. : 2006C205A

Equipment: 1300M Dual Band Gigabit Wireless Router

Brand Name :

Ruijie

Test Model : RG-EW1200G PRO

Series Model : N/A

Applicant: Ruijie Networks Co., Ltd.

Address : Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road,

Cangshan District, Fuzhou, Fujian, China

Manufacturer : Ruijie Networks Co., Ltd.

Address : Building 19, Juyuanzhou Industrial Park, No. 618 Jinshan Road,

Cangshan District, Fuzhou, Fujian, China

Date of Receipt : Jun. 29, 2020

Aug. 07, 2019

Date of Test : Jun. 30, 2020 ~ Aug. 07, 2020

Aug. 08, 2019 ~ Oct. 22, 2020

Issued Date : Dec. 17, 2020

Report Version : R01

Test Sample: Engineering Sample No.:DG2020063020 for conducted,

DG2020063021 for radiated.

Standard(s) : FCC Part15, Subpart C (15.247)

ANSI C63.10-2013

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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IC MRA ACCREDITED

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The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.



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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Nov. 13, 2020
R01	Changed the applicant and manufacturer information.	Dec. 17, 2020



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart C (15.247)							
Standard(s) Section Test Item T		Test Result	Judgment	Remark			
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS				
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS				
15.247(a)(2)	Bandwidth	APPENDIX E	PASS				
15.247(b)(3)	Maximum Output Power	APPENDIX F	PASS				
15.247(d)	Conducted Spurious Emissions	APPENDIX G	PASS				
15.247(e)	Power Spectral Density	APPENDIX H	PASS				
15.203	Antenna Requirement		PASS	Note(2)			

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.



1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

A. AC Power Line Conducted Emissions test:

	Test Site	Method	Measurement Frequency Range	U, (dB)
ĺ	DG-C02	CISPR	150kHz ~ 30MHz	2.68

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
		9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	Η	3.57
		30MHz ~ 200MHz	V	4.26
		30MHz ~ 200MHz	Η	3.38
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.98
DG-CB03		200MHz ~ 1,000MHz	Τ	3.94
		1GHz ~ 6GHz	ı	4.58
		6GHz ~ 18GHz	ı	5.18
		18GHz ~ 26.5GHz	ı	3.62
		26.5GHz ~ 40GHz	-	4.00

C. Other Measurement:

Test Item	Uncertainty
Bandwidth	±3.8 %
Maximum Output Power	±0.95 dB
Conducted Spurious Emission	±2.71 dB
Power Spectral Density	±0.86 dB
Temperature	±0.08 °C
Time	±0.58 %
Supply voltages	±0.3 %

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.



1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	25°C	53%	AC 120V/60Hz AC 240V/50Hz	Kwok Guo
Radiated Emissions-9K-30MHz	25°C	60%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	26°C	52%	AC 120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	26°C	52%	AC 120V/60Hz	Kwok Guo
Bandwidth	25°C	57%	DC 12V	Hayden Chen
Maximum output power	25°C	57%	DC 12V	Evan Yang
Conducted Spurious Emissions	25°C	57%	DC 12V	Hayden Chen
Power Spectral Density	25°C	57%	DC 12V	Hayden Chen



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	1300M Dual Band Gigabit Wireless Router				
Brand Name	Ruijie				
Test Model	RG-EW1200G PRO				
Series Model	N/A				
Model Difference(s)	N/A				
Power Source	DC voltage supplied from AC adapter. Model: S18822-120A150-C4				
Power Rating	I/P: 100-240V~ 50/60Hz 0.6A O/P: 12.0V === 1.5A				
Operation Frequency	2412 MHz ~ 2462 MHz				
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM IEEE vht: 256QAM				
Bit Rate of Transmitter	IEEE 802.11b: 11/5.5/2/1 Mbps IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps IEEE vht: up to 400 Mbps				
Maximum Output Power	IEEE 802.11b: 18.35 dBm (0.0684 W) IEEE 802.11g: 24.05 dBm (0.2541 W) IEEE 802.11n (HT20): 24.14 dBm (0.2594 W) IEEE 802.11n (HT40): 20.12 dBm (0.1028 W) IEEE vht20: 24.08 dBm (0.2559 W) IEEE vht40: 20.13 dBm (0.1030 W)				

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n (HT20), IEEE vht20 CH03 - CH09 for IEEE 802.11n (HT40), IEEE vht40							
Channel Frequency (MHz) Channel Frequency (MHz) Channel Frequency (MHz) Channel Frequency (MHz)							
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	80	2447	11	2462
03	2422	06	2437	09	2452		

3. Antenna Specification:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	RFlink	RF21C05165A	Dipole	N/A	5.27
2	RFlink	RF21C05164A	Dipole	N/A	4.97

Note:

This EUT supports CDD, and antenna gains are not equal, so Directional gain= $10\log[(10^{G1/20}+10^{G2/20}+...10^{GN/20})^2/N]dBi$, that is Directional gain= $10\log[(10^{5.27/20}+10^{4.97/20})^2/2]dBi$ =8.13. So, the output power limit is 30-(8.13-6)=27.87, the power spectral density limit is 8-(8.13-6)=5.87.



4. Table for Antenna Configuration:

Operating Mode TX Mode	2TX
IEEE 802.11b	V (Ant. 1 + Ant. 2)
IEEE 802.11g	V (Ant. 1 + Ant. 2)
IEEE 802.11n (HT40)	V (Ant. 1 + Ant. 2)
IEEE 802.11n (HT40)	V (Ant. 1 + Ant. 2)
IEEE vht20	V (Ant. 1 + Ant. 2)
IEEE vht40	V (Ant. 1 + Ant. 2)



2.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX B Mode Channel 01/06/11
Mode 2	TX G Mode Channel 01/06/11
Mode 3	TX N-20 MHz Mode Channel 01/06/11
Mode 4	TX N-40 MHz Mode Channel 03/06/09
Mode 5	TX vht-20 MHz Mode Channel 01/06/11
Mode 6	TX vht-40 MHz Mode Channel 03/06/09
Mode 7	TX N-20 MHz Mode Channel 06

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

	AC power line conducted emissions test		
	Final Test Mode	Description	
Mode 7 TX N-20 MHz Mode Channel 06			

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 7	TX N-20 MHz Mode Channel 06

Radiated emissions test- Above 1GHz		
Final Test Mode	Description	
Mode 1	TX B Mode Channel 01/06/11	
Mode 2	TX G Mode Channel 01/06/11	
Mode 3	TX N-20 MHz Mode Channel 01/06/11	
Mode 4	TX N-40 MHz Mode Channel 03/06/09	



Maximum Output Power test		
Final Test Mode	Description	
Mode 1	TX B Mode Channel 01/06/11	
Mode 2	TX G Mode Channel 01/06/11	
Mode 3	TX N-20 MHz Mode Channel 01/06/11	
Mode 4	TX N-40 MHz Mode Channel 03/06/09	
Mode 5	TX vht-20 MHz Mode Channel 01/06/11	
Mode 6	TX vht-40 MHz Mode Channel 03/06/09	

Other Conducted test		
Final Test Mode	Description	
Mode 1	TX B Mode Channel 01/06/11	
Mode 2	TX G Mode Channel 01/06/11	
Mode 3	TX N-20 MHz Mode Channel 01/06/11	
Mode 4	TX N-40 MHz Mode Channel 03/06/09	

NOTE:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (3) For radiated emission below 1 GHz test, the IEEE 802.11n20 Channel 06 is found to be the worst case and recorded.
- (4) For radiated emission above 1 GHz test, 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
- (5) The measurements for Power were tested, the worst case were IEEE 802.11b mode, IEEE 802.11g mode, IEEE 802.11n (HT20) mode and IEEE 802.11n (HT40) mode, only the worst case were documented for other test items.
- (6) For radiated emissions, the TX WLAN 2.4G B Mode 2437MHz + WLAN 5G A Mode 5180MHz was found the worst case of simultaneous transmission and recorded.



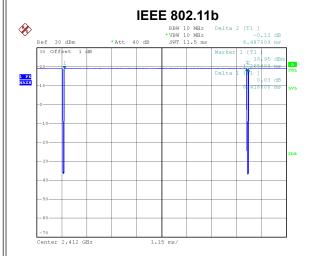
2.3 PARAMETERS OF TEST SOFTWARE

Test Software	QATool		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	18	15	14
IEEE 802.11g	20	28	1E
IEEE 802.11n (HT20)	22	32	1E
IEEE vht20	22	32	1E
Frequency (MHz)	2422	2437	2452
IEEE 802.11n (HT40)	1F	1C	1A
IEEE vht40	1F	1C	1A



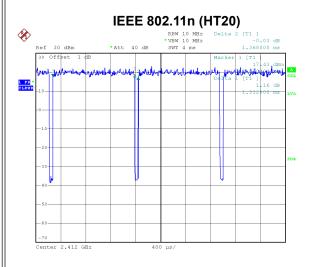
2.4 DUTY CYCLE

If duty cycle is \geq 98 %, duty factor is not required. If duty cycle is < 98 %, duty factor shall be considered. The output power = measured power + duty factor.



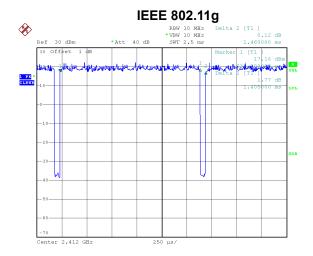
Date: 13.JUL.2020 11:59:08

Duty cycle = 8.418 ms / 8.487 ms = 99.19% Duty Factor = 10 log(1/Duty cycle) = 0.00



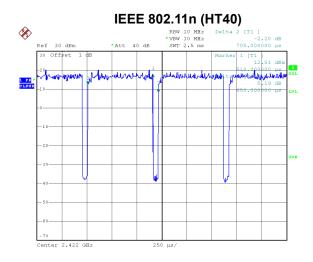
Date: 13.JUL.2020 11:59:42

Duty cycle = 1.312 ms / 1.368 ms = 95.91% Duty Factor = 10 log(1/Duty cycle) = 0.18



Date: 13.JUL.2020 11:59:25

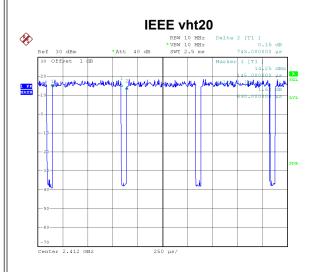
Duty cycle = 1.405 ms / 1.460 ms = 96.23% Duty Factor = 10 log(1/Duty cycle) = 0.17

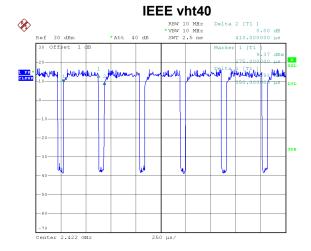


Date: 13.JUL.2020 12:00:04

Duty cycle = 0.650 ms / 0.705 ms = 92.20% Duty Factor = 10 log(1/Duty cycle) = 0.35







Date: 22.JUL.2020 16:33:52

Duty cycle = 0.690 ms / 0.745 ms = 92.62% Duty Factor = 10 log(1/Duty cycle) = 0.33 Date: 22.JUL.2020 16:34:44

Duty cycle = 0.350 ms / 0.410 ms = 85.37% Duty Factor = 10 log(1/Duty cycle) = 0.69

NOTE:

For IEEE 802.11b, IEEE 802.11g, IEEE 802.11n (HT20) and IEEE vht20:

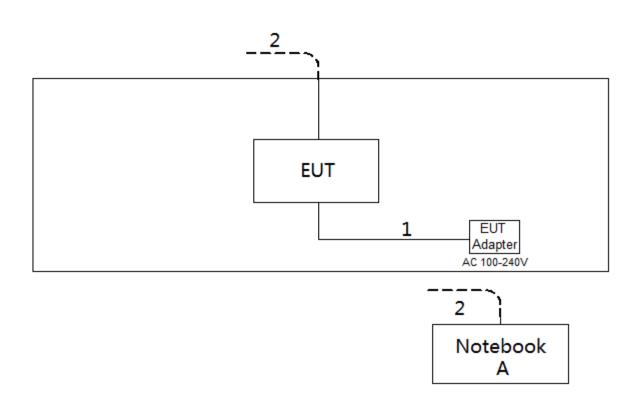
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40) and IEEE vht40:

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).



2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
Α	Notebook	Dell	Inspiron 15-7559	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.5m
2	RJ45 Cable	NO	NO	10m



3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)		
	Quasi-peak	Average	
0.15 - 0.5	66 to 56*	56 to 46*	
0.5 - 5.0	56	46	
5.0 - 30.0	60	50	

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

I	The fellowing table is the county of the receiver		
Receiver Parameters		Setting	
	Attenuation	10 dB	
$\ \ $	Start Frequency	0.15 MHz	
	Stop Frequency	30 MHz	
II.	IF Bandwidth	9 kHz	

3.2 TEST PROCEDURE

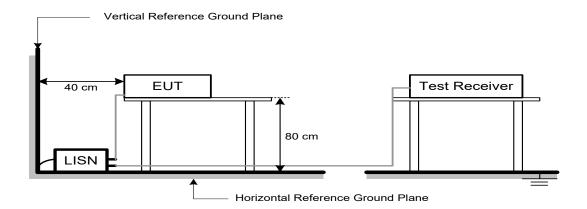
- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.3 DEVIATION FROM TEST STANDARD

No deviation



3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULTS

Please refer to the APPENDIX A.



4. RADIATED EMISSIONS TEST

4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000 MHz)

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Fraguency (MHz)	(dBuV/n	n at 3 m)
Frequency (MHz)	Peak	Average
Above 1000	74	54

NOTE:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).



Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1 MHz / 3 MHz for Peak,
(Emission in restricted band)	1 MHz / 1/T for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector

4.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1 GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i. For the actual test configuration, please refer to the related Item -EUT Test Photos.

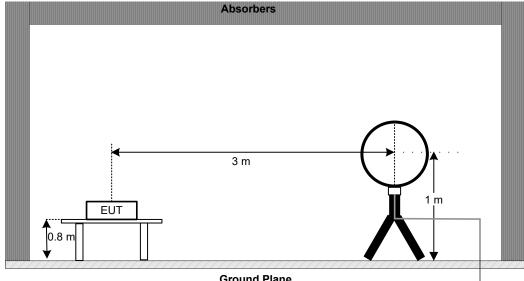
4.3 DEVIATION FROM TEST STANDARD

No deviation

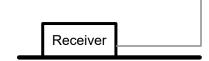


4.4 TEST SETUP

9 kHz-30 MHz



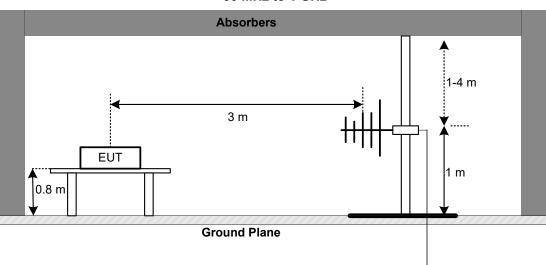
Ground Plane



Receiver

Amp.

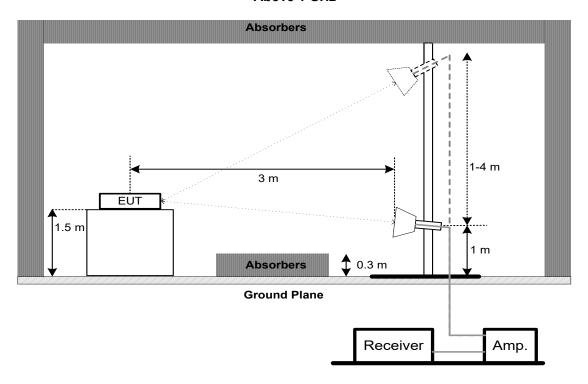
30 MHz to 1 GHz



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Above 1 GHz



4.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B

Remark:

- (1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.

4.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



5. BANDWIDTH TEST

5.1 LIMIT

FCC Part15, Subpart C (15.247)				
Section Test Item Limit				
15.247(a)(2)	6 dB Bandwidth	Minimum 500 kHz		
13.247(d)(2)	99% Emission Bandwidth	-		

5.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting:

For 6 dB Bandwidth: RBW=100kHz, VBW=300kHz, Sweep time = auto.
For 99% Emission Bandwidth B/G/N-20/vht-20 Mode: RBW=300kHz, VBW=1MHz, Sweep time = 2.5ms.
For 99% Emission Bandwidth N-40/vht-40 Mode: RBW=1MHz, VBW=3MHz, Sweep time = 2.5ms.

c. The bandwidth was performed in accordance with method 11.8.1 of ANSI C63.10-2013.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP

EUT	SPECTRUM	
	ANALYZER	

5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULTS

Please refer to the APPENDIX E.



6. MAXIMUM OUTPUT POWER TEST

6.1 LIMIT

FCC Part15, Subpart C (15.247)					
Section Test Item Limit					
15.247(b)(3) Maximum Output Power 1 Watt or 30dBm					

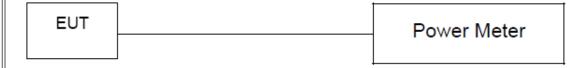
6.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. The maximum conducted output power was performed in accordance with method 11.9.2.3.1 of ANSI C63.10-2013 and FCC KDB 662911 D01 v02r01 Multiple Transmitter Output.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX F.



7. CONDUCTED SPURIOUS EMISSIONS

7.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required.

7.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100 kHz, VBW=300 kHz, Sweep time = Auto.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP

EUT		SPECTRUM	
		ANALYZER	

7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX G.



8. POWER SPECTRAL DENSITY TEST

8.1 LIMIT

FCC Part15, Subpart C (15.247)				
Section Test Item Limit				
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)		

8.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW=3 kHz, VBW=10 kHz, Sweep time = Auto.
- c. The Power Spectral Density was performed in accordance with method 11.10.2 of ANSI C63.10-2013.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP

EUT	SPECTRUM	
	ANALYZER	

8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX H.



9. MEASUREMENT INSTRUMENTS LIST

	AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	EMI Test Receiver	R&S	ESCI	100382	Feb. 28, 2021	
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021	
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	Feb. 28, 2021	
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 01, 2021	
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
6	Cable	N/A	RG223	12m	Mar. 10, 2021	
7	643 Shield Room	ETS	6*4*3m	N/A	N/A	

	Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Antenna	EM	EM-6876-1	230	Apr. 16, 2021	
2	Cable	N/A	RG 213/U	N/A	May 29, 2021	
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021	
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
5	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021	

	Radiated Emissions - 30 MHz to 1 GHz								
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until				
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2021				
2*	Amplifier	HP	8447D	2944A09673	Aug. 11, 2021				
3	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021				
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 22, 2021				
5	Controller	CT	SC100	N/A N/A					
6	Controller	MF	MF-7802	MF780208416	N/A				
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A				
8	966 Chambe Room	RM	9*6*6m	N/A Jul. 25, 2021					

	Radiated Emissions - Above 1 GHz								
Item	Kind of Equipment	Manufacturer	Manufacturer Type No.		Calibrated until				
1	Double Ridged Guide Antenna	ETS	3115	75789	May 12, 2021				
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jul. 07, 2021				
3	Amplifier	Agilent	8449B	3008A02333	Mar. 01, 2021				
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021				
5	Receiver	Agilent	N9038A	MY52130039	Jul. 25, 2021				
6	Controller	CT	SC100	N/A	N/A				
7	Controller	MF	MF-7802	MF780208416	N/A				
8	Cable	N/A EMC104-SM-SM-6		N/A	May 09, 2021				
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A				
10	Filter	STI	STI15-9912	N/A	Jul. 25, 2021				
11	966 Chambe Room	RM	9*6*6m	N/A	Jul. 25, 2021				



Bandwidth & Antenna Conducted Spurious Emissions & Power Spectral Density							
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Spectrum Analyzer	R&S	FSP40	100185	Jul. 25, 2021		
2	RF Cable	Tongkaichuan	N/A	N/A	N/A		
3	DC Block	Mini	N/A	N/A	N/A		

	Maximum Output Power								
Item	Item Kind of Equipment Manufacturer Type No. Serial No. Calibr								
1	Peak Power Analyzer	Keysight	8990B	MY51000506	Aug. 07, 2021				
2	Wideband power sensor	Keysight	N1923A	MY58310004	Jul. 25, 2021				
3	Attenuator	WOKEN	6SM3502	VAS1214NL	Feb. 11, 2021				
4	RF Cable	Tongkaichuan	N/A	N/A	N/A				

Remark: "N/A" denotes no model name, serial no. or calibration specified.

Except * item, all calibration period of equipment list is one year.

[&]quot;*" calibration period of equipment list is three year.



10. EUT TEST PHOTO



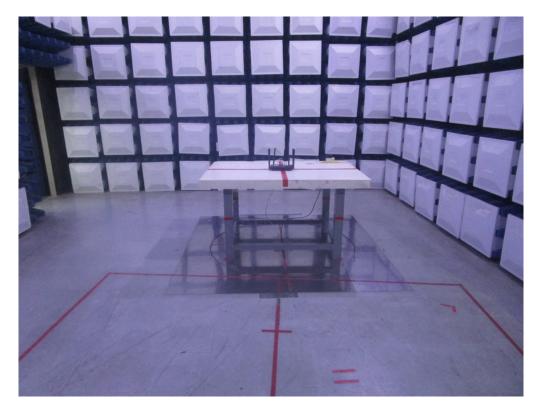


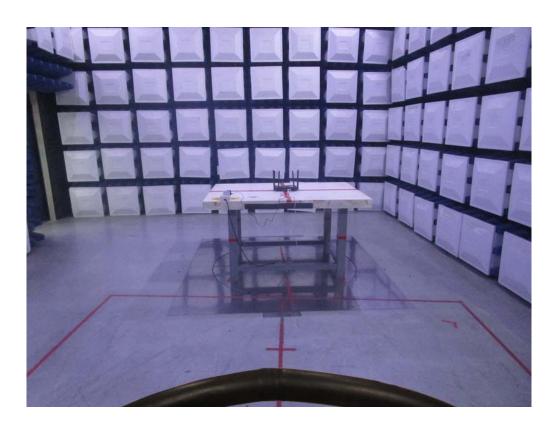




Radiated Emissions Test Photos

9 kHz to 30 MHz

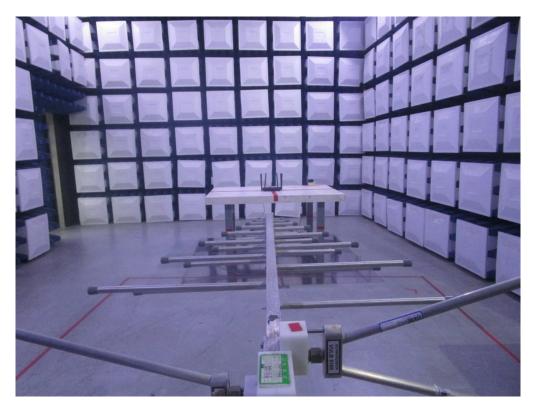






Radiated Emissions Test Photos

30 MHz to 1 GHz

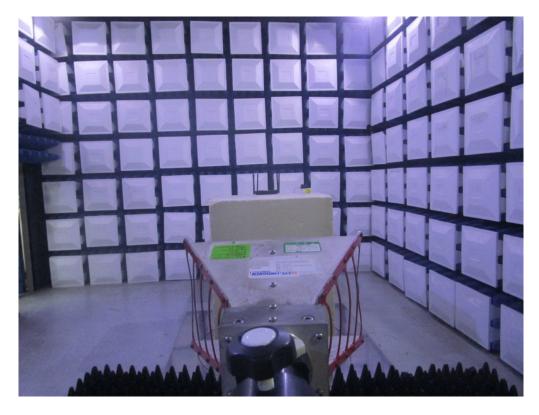






Radiated Emissions Test Photos

Above 1 GHz







APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS



Test Voltage	AC 120V/60Hz
Test Mode:	TX N-20 MHz Mode Channel 06



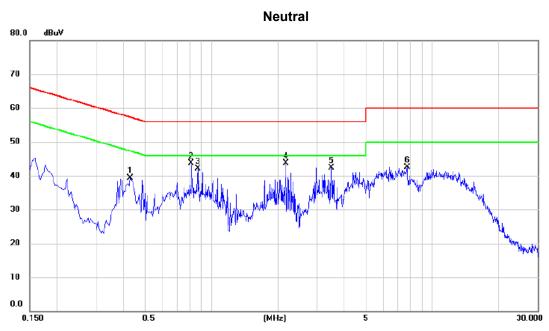
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBu∨	dB	dBuV	dBu∀	dB	Detector	Comment
1	0.1545	36.09	9.70	45.79	65.75	-19.96	peak	
2 *	0.4245	30.88	9.92	40.80	57.36	-16.56	peak	
3	0.8115	28.45	9.98	38.43	56.00	-17.57	peak	
4	2.0805	24.96	10.10	35.06	56.00	-20.94	peak	
5	7.8450	30.65	10.55	41.20	60.00	-18.80	peak	
6	11.7330	29.75	10.77	40.52	60.00	-19.48	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



<u> </u>	
Test Voltage	AC 120V/60Hz
Test Mode:	TX N-20 MHz Mode Channel 06



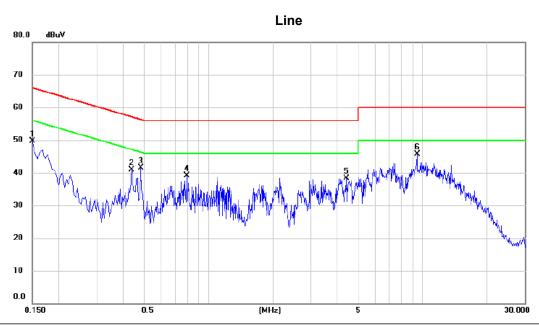
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.4290	29.16	10.10	39.26	57.27	-18.01	peak	
2	0.8115	33.41	10.24	43.65	56.00	-12.35	peak	
3	0.8655	31.80	10.26	42.06	56.00	-13.94	peak	
4 *	2.1795	33.30	10.43	43.73	56.00	-12.27	peak	
5	3.4845	31.83	10.55	42.38	56.00	-13.62	peak	
6	7.6830	31.55	10.88	42.43	60.00	-17.57	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Voltage	AC 240V/50Hz
Test Mode:	TX N-20 MHz Mode Channel 06

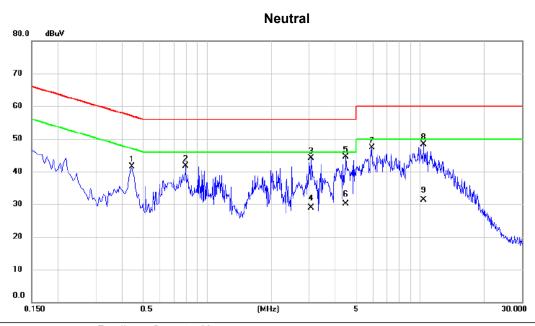


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1500	40.00	9.67	49.67	66.00	-16.33	peak	
2	0.4380	31.01	9.93	40.94	57.10	-16.16	peak	
3	0.4830	31.63	9.95	41.58	56.29	-14.71	peak	
4	0.7935	29.08	9.97	39.05	56.00	-16.95	peak	
5	4.4070	27.97	10.29	38.26	56.00	-17.74	peak	
6 *	9.4200	35.09	10.65	45.74	60.00	-14.26	peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



<u> </u>	
Test Voltage	AC 240V/50Hz
Test Mode:	TX N-20 MHz Mode Channel 06



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4425	31.36	10.11	41.47	57.01	-15.54	peak	
2		0.7935	31.50	10.23	41.73	56.00	-14.27	peak	
3		3.0705	33.65	10.52	44.17	56.00	-11.83	peak	
4		3.0705	18.30	10.52	28.82	46.00	-17.18	AVG	
5	*	4.4790	33.80	10.63	44.43	56.00	-11.57	peak	
6		4.4790	19.50	10.63	30.13	46.00	-15.87	AVG	
7		5.9325	36.66	10.74	47.40	60.00	-12.60	peak	
8		10.3740	37.29	11.07	48.36	60.00	-11.64	peak	
9		10.3740	20.30	11.07	31.37	50.00	-18.63	AVG	

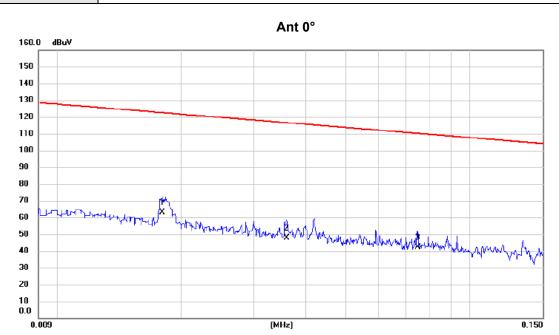
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ



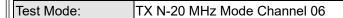
Test Mode: TX N-20 MHz Mode Channel 06

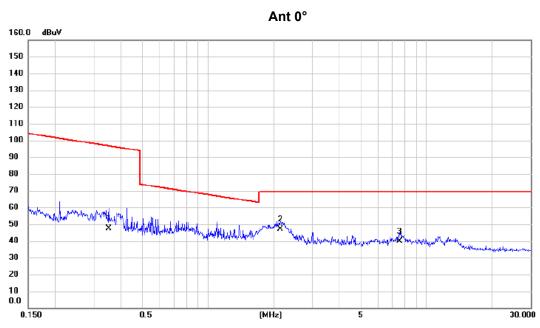


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	Comment
1 *	0.0180	48.99	13.84	62.83	122.50	-59.67	AVG	
2	0.0360	34.86	12.79	47.65	116.48	-68.83	AVG	
3	0.0747	29.67	12.57	42.24	110.14	-67.90	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.







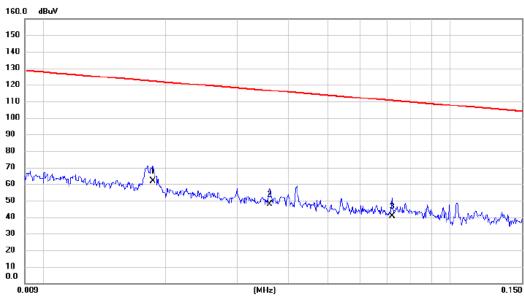
No. Mk.	Freq.			Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.3520	35.19	12.38	47.57	96.67	-49.10	AVG	
2 *	2.1440	35.66	11.23	46.89	69.54	-22.65	QP	
3	7.5258	28.49	11.29	39.78	69.54	-29.76	QP	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-20 MHz Mode Channel 06

Ant 90°



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector	Comment
1 *	0.0186	48.01	13.65	61.66	122.21	-60.55	AVG	
2	0.0360	35.18	12.79	47.97	116.48	-68.51	AVG	
3	0.0720	27.99	12.55	40.54	110.46	-69.92	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

30.000



0.150

Test Mode: TX N-20 MHz Mode Channel 06

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	ı	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.3871	34.18	12.30	46.48	95.85	-49.37	AVG	
2	0.8757	29.78	11.85	41.63	68.76	-27.13	QP	
3 *	3.1397	32.11	10.83	42.94	69.54	-26.60	QP	

(MHz)

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

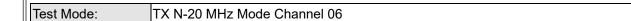
0.5

(2) Margin Level = Measurement Value - Limit Value.

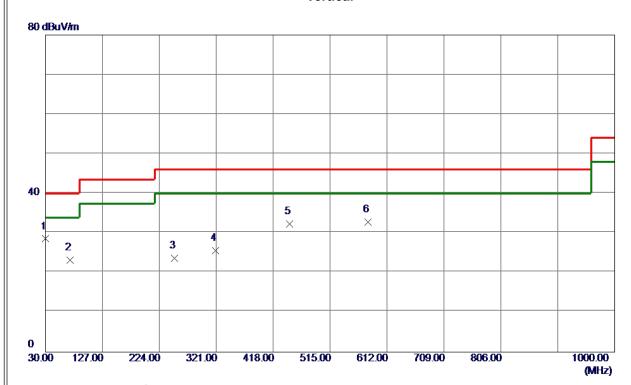


APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ





Vertical



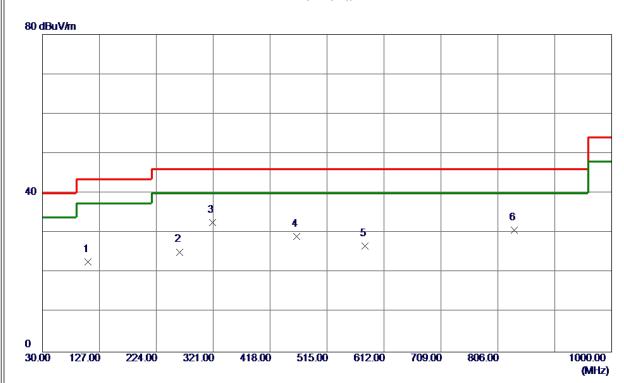
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	30.0000	43. 22	-14. 66	28. 56	40.00	-11. 44	Peak	
2	71. 7100	39. 49	-16. 23	23. 26	40.00	-16. 74	Peak	
3	250. 1900	36. 94	-13. 28	23. 66	46. 00	-22. 34	Peak	
4	320. 0300	36. 24	-10. 68	25. 56	46.00	-20.44	Peak	
5	446. 1300	40.02	-7. 74	32. 28	46.00	-13. 72	Peak	
6	579. 9900	38. 70	-5. 93	32. 77	46. 00	-13. 23	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-20 MHz Mode Channel 06

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	107. 6000	37. 13	-14. 39	22. 74	43. 50	-20. 76	Peak	
2	263. 7700	37. 58	-12. 38	25. 20	46.00	-20.80	Peak	
3 *	320. 0300	43. 37	-10. 68	32. 69	46.00	-13. 31	Peak	
4	463. 5900	36. 67	-7. 53	29. 14	46.00	-16. 86	Peak	
5	579. 9900	32. 59	-5. 93	26. 66	46.00	-19. 34	Peak	
6	834. 1300	32. 68	-1. 99	30. 69	46.00	-15. 31	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

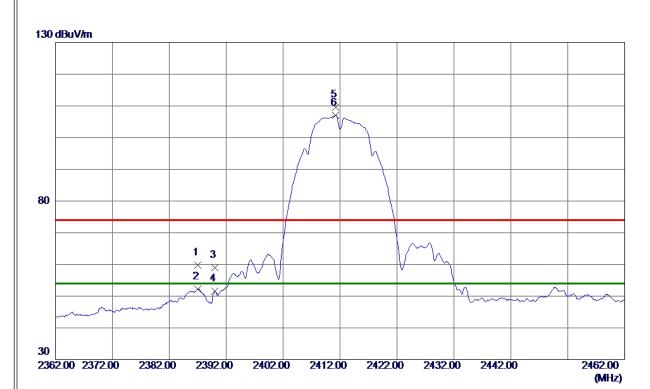


APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ



Test Mode: TX B Mode 2412 MHz

Vertical



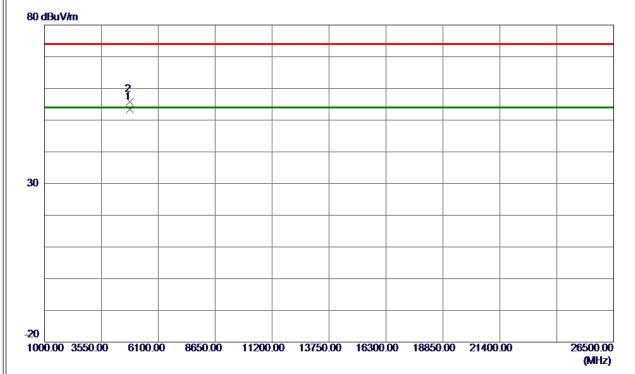
Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2387. 0000	51. 47	8. 28	59. 75	74.00	-14. 25	Peak	
2387. 0000	43. 97	8. 28	52. 25	54.00	-1. 75	AVG	
2390. 0000	50. 67	8. 29	58. 96	74.00	-15. 04	Peak	
2390.0000	43. 26	8. 29	51. 55	54.00	-2. 45	AVG	
2411. 2000	101. 29	8. 31	109. 60	74.00	35. 60	Peak	No Limit
2411. 2000	98. 67	8. 31	106. 98	54.00	52. 98	AVG	No Limit
	MHz 2387. 0000 2387. 0000 2390. 0000 2390. 0000 2411. 2000	Freq. Level	Hreq. Level Factor MHz dBuV/m dB 2387.0000 51.47 8.28 2387.0000 43.97 8.28 2390.0000 50.67 8.29 2390.0000 43.26 8.29 2411.2000 101.29 8.31	Hreq. Level Factor ment MHz dBuV/m dB dBuV/m 2387. 0000 51. 47 8. 28 59. 75 2387. 0000 43. 97 8. 28 52. 25 2390. 0000 50. 67 8. 29 58. 96 2390. 0000 43. 26 8. 29 51. 55 2411. 2000 101. 29 8. 31 109. 60	Hreq. Level Factor ment Limit MHz dBuV/m dB dBuV/m dBuV/m 2387. 0000 51. 47 8. 28 59. 75 74. 00 2387. 0000 43. 97 8. 28 52. 25 54. 00 2390. 0000 50. 67 8. 29 58. 96 74. 00 2390. 0000 43. 26 8. 29 51. 55 54. 00 2411. 2000 101. 29 8. 31 109. 60 74. 00	MHz dBuV/m dB dBuV/m dB uV/m dB 2387.0000 51.47 8.28 59.75 74.00 -14.25 2387.0000 43.97 8.28 52.25 54.00 -1.75 2390.0000 50.67 8.29 58.96 74.00 -15.04 2390.0000 43.26 8.29 51.55 54.00 -2.45 2411.2000 101.29 8.31 109.60 74.00 35.60	MHz dBuV/m dB dBuV/m dB uV/m dB uV/m </td

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2412 MHz

Vertical



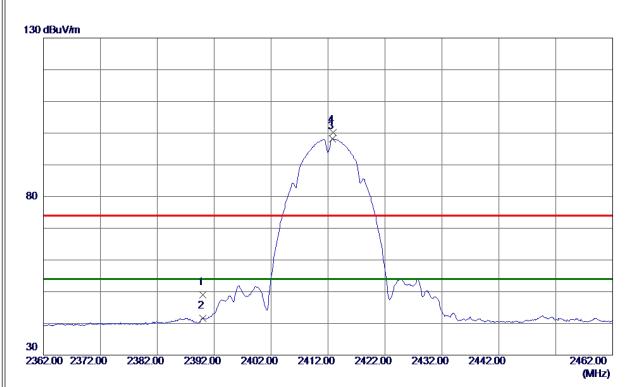
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824. 0050	48. 14	5. 32	53. 46	54.00	−0. 54	AVG	
2	4824. 0400	50. 41	5. 32	55. 73	74.00	-18. 27	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2412 MHz

Horizontal



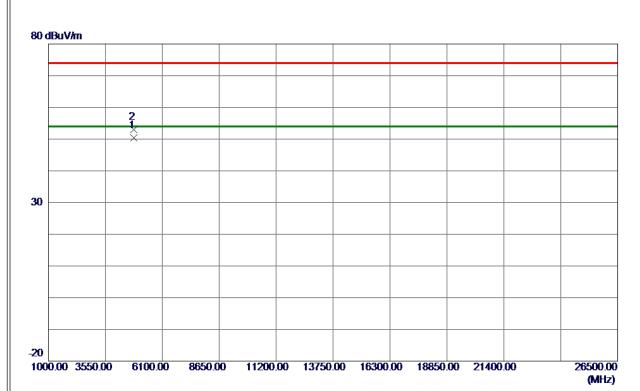
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	40. 68	8. 29	48. 97	74.00	-25. 03	Peak	
2	2390. 0000	33. 35	8. 29	41.64	54.00	-12. 36	AVG	
3 *	2412. 8000	89. 88	8. 31	98. 19	54.00	44. 19	AVG	No Limit
4	2412. 9000	91. 86	8. 31	100. 17	74.00	26. 17	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2412 MHz

Horizontal



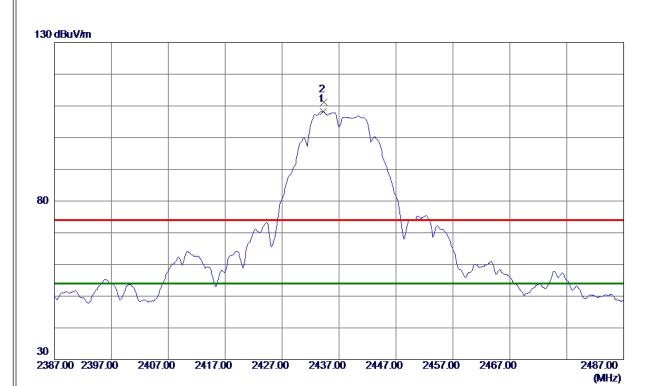
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824. 0250	45. 04	5. 32	50. 36	54.00	-3. 64	AVG	
2	4824. 1900	47. 60	5. 32	52. 92	74.00	-21. 0 8	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2437 MHz

Vertical



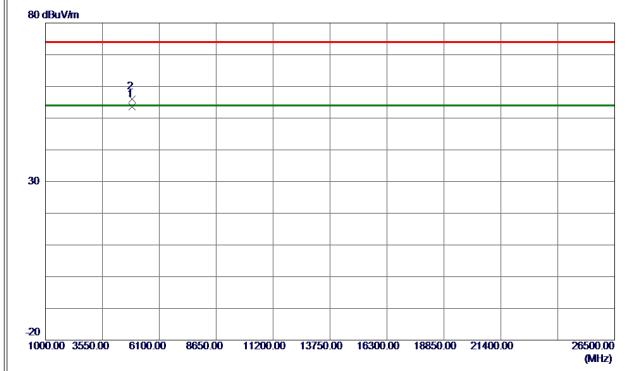
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2434. 2000	99. 88	8. 33	108. 21	54.00	54. 21	AVG	No Limit
2	2434. 3000	102. 95	8. 33	111. 28	74.00	37. 28	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2437 MHz

Vertical



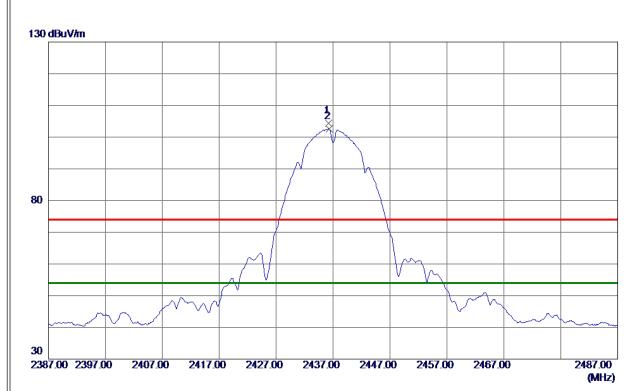
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874. 0000	48. 16	5. 46	53. 62	54.00	−0. 38	AVG	
2	4874. 0400	50. 46	5. 46	55. 92	74.00	-18. 08	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2437 MHz

Horizontal



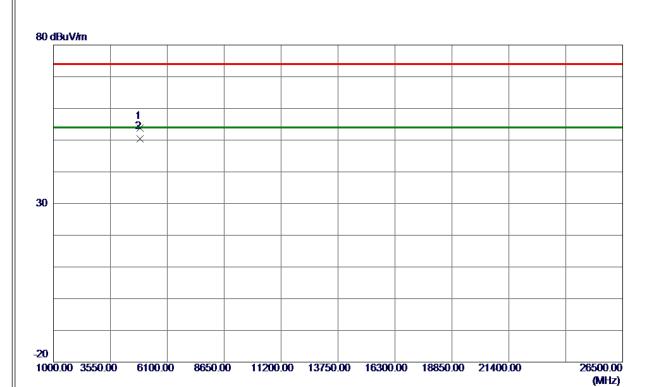
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2436. 2000	95. 98	8. 34	104. 32	74.00	30. 32	Peak	No Limit
2 *	2436. 3000	94. 32	8. 34	102.66	54.00	48. 66	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2437 MHz

Horizontal



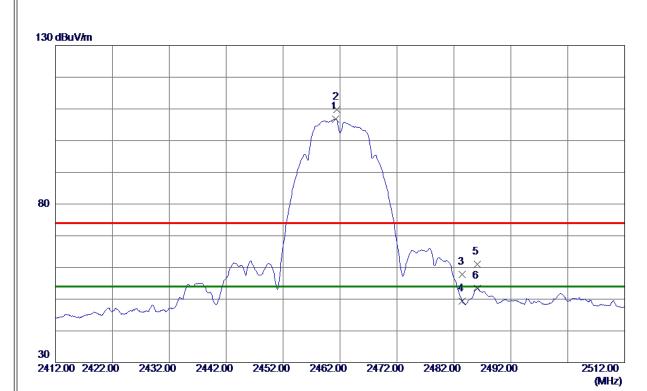
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 9600	48. 24	5. 46	53. 70	74.00	-20. 30	Peak	
2 *	4874. 0200	45. 02	5. 46	50. 48	54.00	-3. 52	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2462 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2461. 2000	98. 42	8. 36	106. 78	54.00	52. 78	AVG	No Limit
2	2461. 5000	101. 42	8. 36	109. 78	74.00	35. 78	Peak	No Limit
3	2483. 5000	49. 36	8. 39	57. 75	74.00	-16. 25	Peak	
4	2483. 5000	40. 95	8. 39	49. 34	54.00	-4.66	AVG	
5	2486. 1000	52. 58	8. 39	60. 97	74.00	-13. 03	Peak	
6	2486. 1000	44. 96	8. 39	53. 35	54.00	-0. 65	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2462 MHz

Vertical





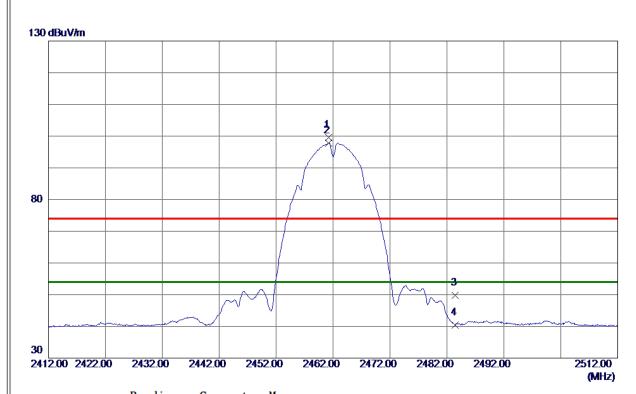
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4924. 0200	49. 97	5. 59	55. 56	74.00	-18. 44	Peak	
2 *	4924. 0400	47. 66	5. 59	53. 25	54.00	-0. 75	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2462 MHz

Horizontal



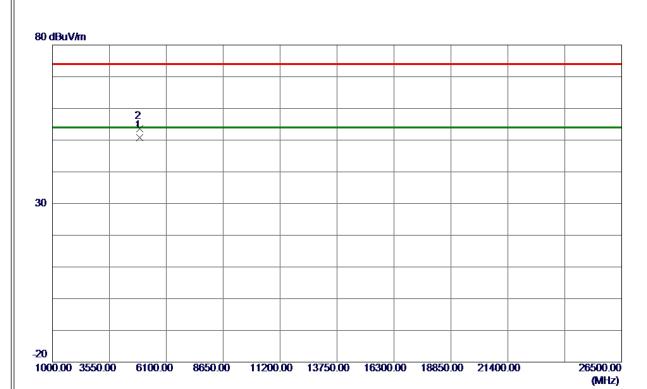
No.	Freq.	Reading Level	Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2461. 2000	91. 21	8. 36	99. 57	74.00	25. 57	Peak	No Limit
2 *	2461. 2000	89. 40	8. 36	97. 76	54.00	43. 76	AVG	No Limit
3	2483. 5000	41. 43	8. 39	49.82	74.00	-24. 18	Peak	
4	2483. 5000	32. 08	8. 39	40. 47	54.00	-13. 53	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX B Mode 2462 MHz

Horizontal



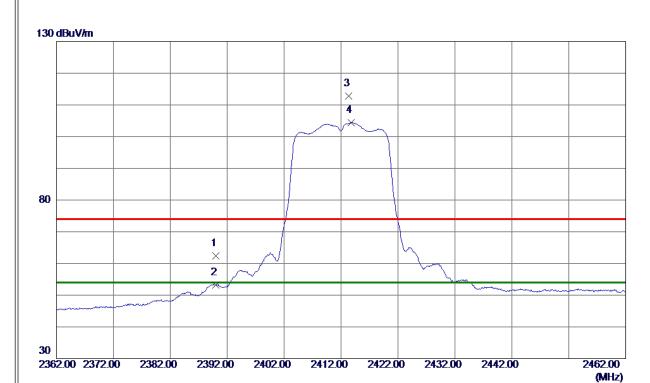
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 9850	45. 19	5. 59	50 . 78	54.00	-3. 22	AVG	
2	4924. 0200	48. 07	5. 59	53. 66	74.00	-20. 34	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2412 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	54. 09	8. 29	62. 38	74.00	-11.62	Peak	
2	2390. 0000	45. 00	8. 29	53. 29	54.00	-0.71	AVG	
3	2413. 3000	104. 52	8. 31	112.83	74.00	38. 83	Peak	No Limit
4 *	2413. 8000	96. 06	8. 31	104. 37	54. 00	50. 37	AVG	No Limit

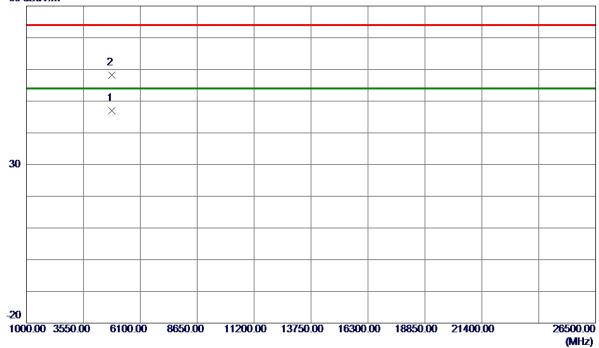
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2412 MHz

Vertical

80 dBuV/m



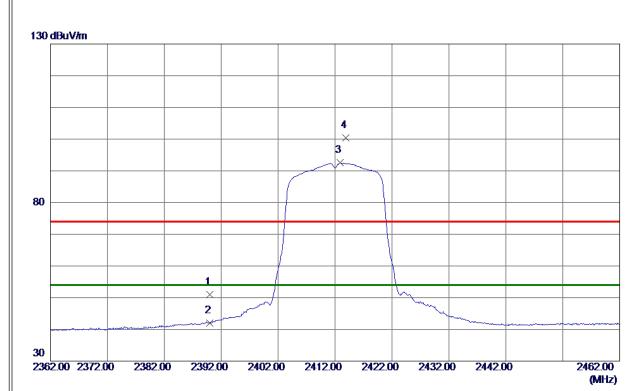
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824. 1500	41.74	5. 32	47. 06	54.00	-6.94	AVG	
2	4829. 9000	52. 83	5. 34	58. 17	74.00	-15. 83	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2412 MHz

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	42. 79	8. 29	51. 08	74.00	-22. 92	Peak	
2	2390. 0000	33. 69	8. 29	41. 98	54.00	-12. 02	AVG	
3 *	2412. 9000	84. 20	8. 31	92. 51	54.00	38. 51	AVG	No Limit
4	2413. 9000	92. 09	8. 31	100. 40	74.00	26. 40	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2412 MHz

Horizontal





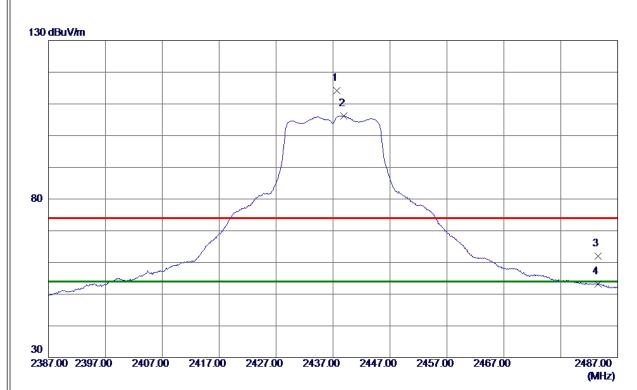
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4819.6000	49. 33	5. 31	54. 64	74.00	-19. 36	Peak	
2 *	4824. 1000	36. 91	5. 32	42. 23	54.00	-11. 77	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2437 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2437. 7000	105.88	8. 34	114. 22	74.00	40. 22	Peak	No Limit
2 *	2438. 9000	97. 84	8. 34	106. 18	54.00	52. 18	AVG	No Limit
3	2483. 5000	53. 57	8. 39	61. 96	74.00	-12. 04	Peak	
4	2483. 5000	44. 73	8. 39	53. 12	54.00	−0. 88	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2437 MHz

Vertical

80 dBuV/m



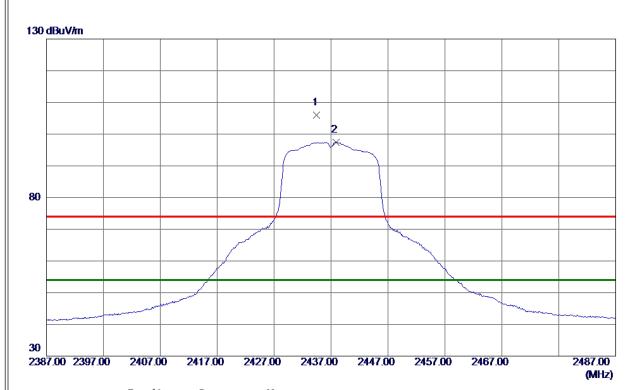
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873. 9000	47. 90	5. 46	53. 36	54.00	-0. 64	AVG	
2	4874. 6000	58. 60	5. 46	64. 06	74.00	-9. 94	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2437 MHz

Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434. 5000	97. 60	8. 33	105. 93	74.00	31. 93	Peak	No Limit
2 *	2437. 9000	89. 14	8. 34	97. 48	54.00	43. 48	AVG	No Limit

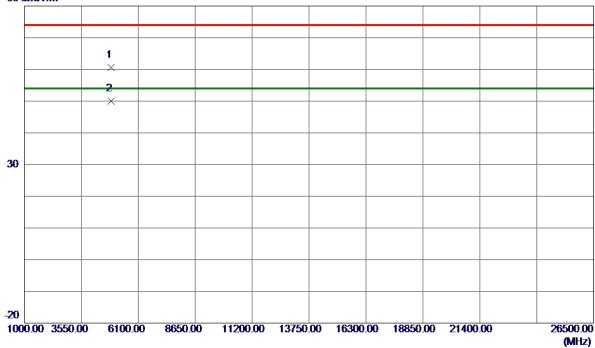
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2437 MHz

Horizontal

80 dBuV/m



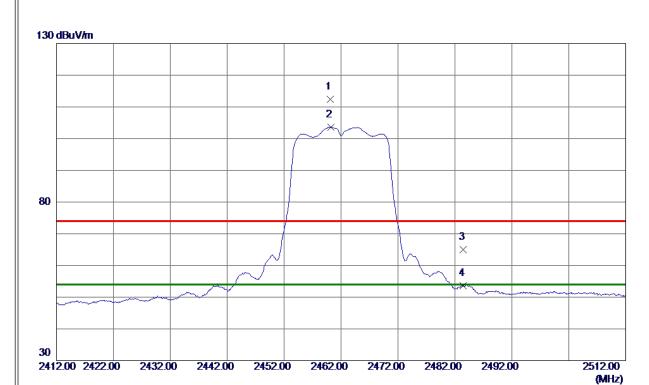
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 9000	55. 12	5. 46	60. 58	74.00	-13. 42	Peak	
2 *	4874. 0000	44. 45	5. 46	49. 91	54.00	-4. 09	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2462 MHz

Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460. 1000	104. 09	8. 36	112. 45	74.00	38. 45	Peak	No Limit
2 *	2460. 2000	95. 22	8. 36	103. 58	54.00	49. 58	AVG	No Limit
3	2483. 5000	56. 52	8. 39	64. 91	74.00	-9. 09	Peak	
4	2483. 5000	45. 14	8. 39	53. 53	54.00	-0.47	AVG	

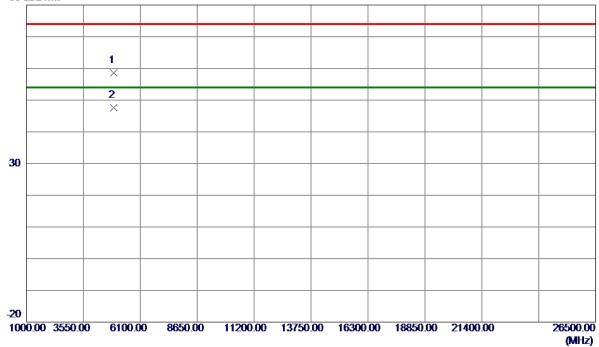
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2462 MHz

Vertical

80 dBuV/m



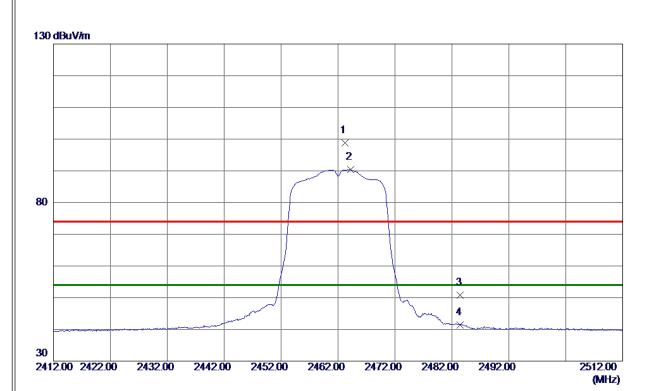
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4924. 0000	53. 10	5. 59	58. 69	74.00	-15. 31	Peak	
2 *	4924. 0000	41. 92	5. 59	47. 51	54.00	-6. 49	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2462 MHz

Horizontal



No.	Freq.	Reading Level	Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2463. 2000	90. 36	8. 37	98. 73	74.00	24. 73	Peak	No Limit
2 *	2464. 2000	82. 03	8. 37	90. 40	54.00	36. 40	AVG	No Limit
3	2483. 5000	42. 37	8. 39	50. 76	74.00	-23. 24	Peak	
4	2483. 5000	33. 06	8. 39	41. 45	54.00	-12. 55	AVG	
1								

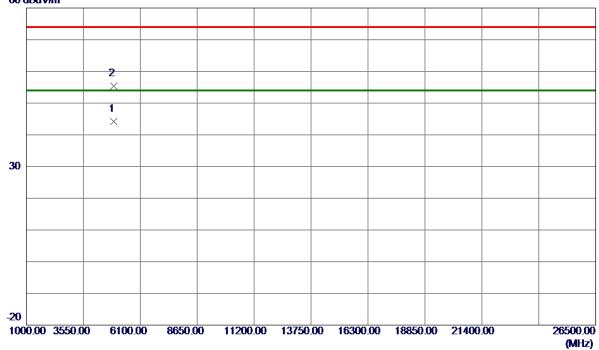
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX G Mode 2462 MHz

Horizontal





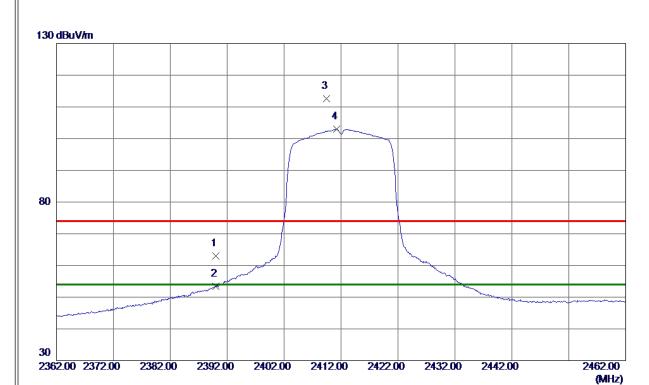
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 4000	38. 52	5. 59	44. 11	54.00	-9.89	AVG	
2	4923. 5000	49. 74	5. 59	55. 33	74.00	-18.67	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Test Mode: TX N-20M Mode 2412 MHz

Vertical



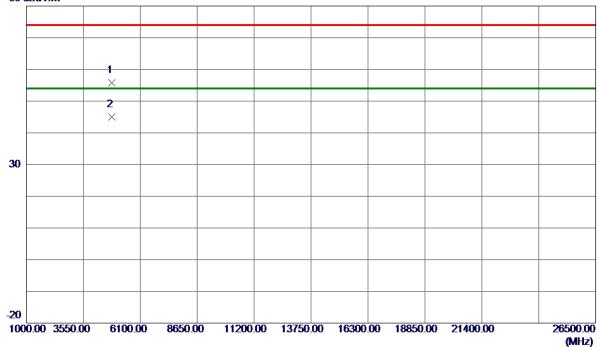
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	54. 78	8. 29	63. 07	74.00	-10. 93	Peak	
2	2390. 0000	45. 20	8. 29	53. 49	54.00	-0. 51	AVG	
3	2409. 4000	104. 24	8. 31	112. 55	74.00	38. 55	Peak	No Limit
4 *	2411. 2000	94. 75	8. 31	103. 06	54.00	49.06	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical



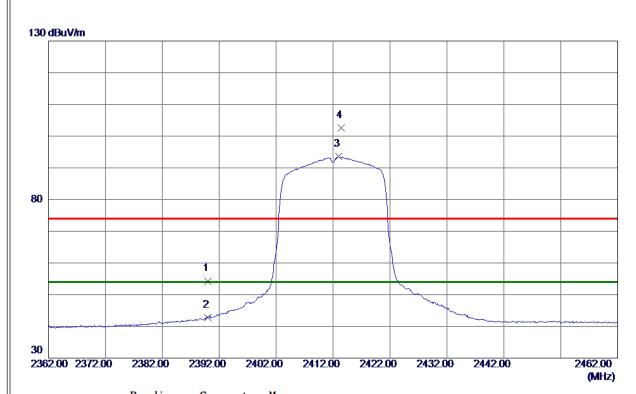


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4824. 6000	50. 39	5. 32	55. 71	74.00	-18. 29	Peak	
2 *	4824. 9000	39. 63	5. 33	44. 96	54.00	-9. 04	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal



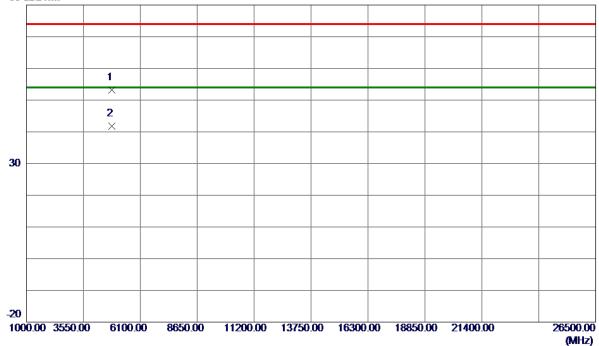
No.	Freq.	Reading Level	Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	46. 01	8. 29	54. 30	74.00	-19. 70	Peak	
2	2390. 0000	34. 43	8. 29	42. 72	54.00	-11. 28	AVG	
3 *	2413. 0000	85. 23	8. 31	93. 54	54.00	39. 54	AVG	No Limit
4	2413. 4000	94. 22	8. 31	102. 53	74.00	28. 53	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal

80 dBuV/m

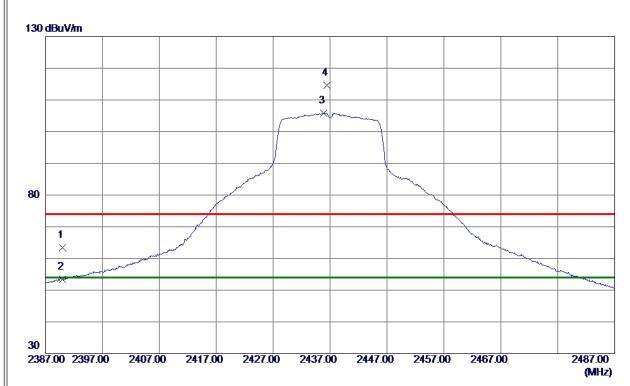


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4824. 5000	47.84	5. 32	53. 16	74.00	-20. 84	Peak	
2 *	4824. 9500	36. 47	5. 33	41.80	54.00	-12. 20	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical



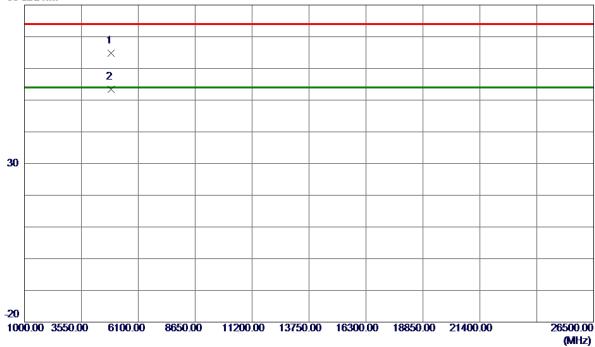
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	55. 03	8. 29	63. 32	74.00	-10.68	Peak	
2	2390. 0000	45. 05	8. 29	53. 34	54.00	-0.66	AVG	
3 *	2435. 9000	97. 52	8. 34	105. 86	54.00	51.86	AVG	No Limit
4	2436. 4000	106. 35	8. 34	114. 69	74. 00	40. 69	Peak	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical

80 dBuV/m

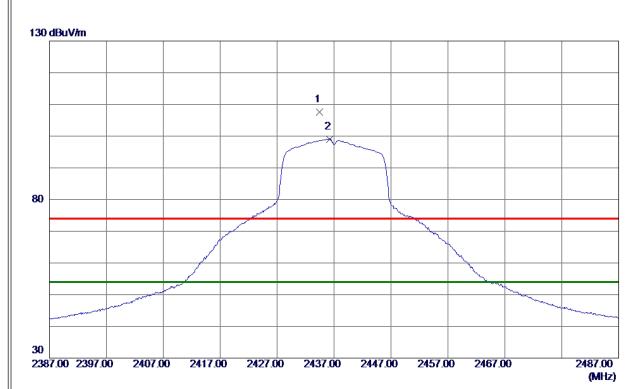


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4868. 9000	59. 28	5. 44	64. 72	74.00	−9. 28	Peak	
2 *	4872. 4500	48. 01	5. 45	53. 46	54.00	-0. 54	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal



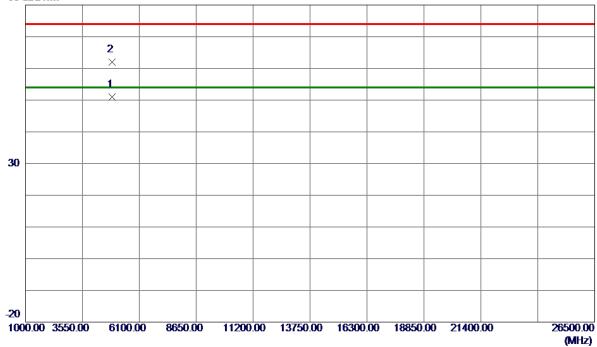
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2434. 4000	99. 31	8. 33	107. 64	74.00	33. 64	Peak	No Limit
2 *	2436. 2000	90. 76	8. 34	99. 10	54.00	45. 10	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4875. 0000	45. 51	5. 46	50. 97	54.00	-3. 03	AVG	
2	4875. 3500	56. 47	5. 46	61. 93	74.00	-12.07	Peak	

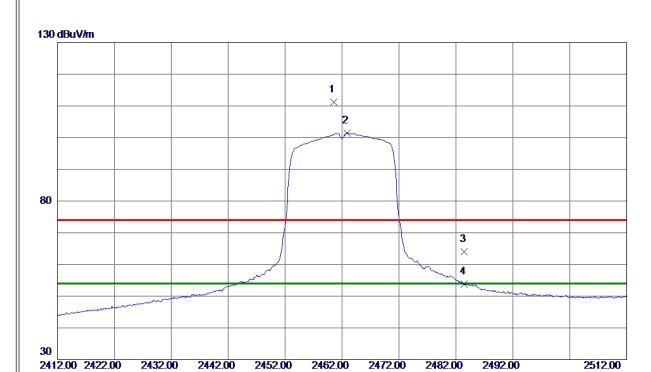
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

(MHz)



Test Mode: TX N-20M Mode 2462 MHz

Vertical



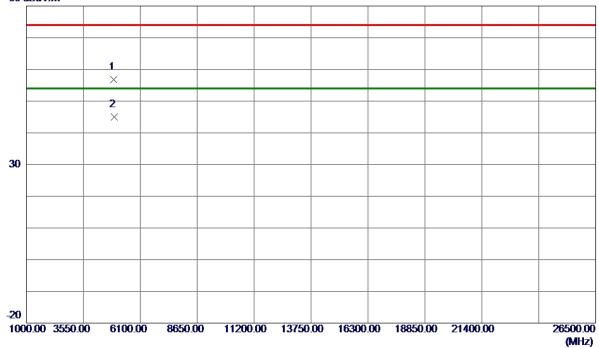
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460. 6000	102. 92	8. 36	111. 28	74.00	37. 28	Peak	No Limit
2 *	2462. 9000	93. 12	8. 37	101. 49	54.00	47. 49	AVG	No Limit
3	2483. 5000	55. 66	8. 39	64. 05	74.00	-9. 95	Peak	
4	2483. 5000	45. 35	8. 39	53. 74	54.00	-0. 26	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical

80 dBuV/m

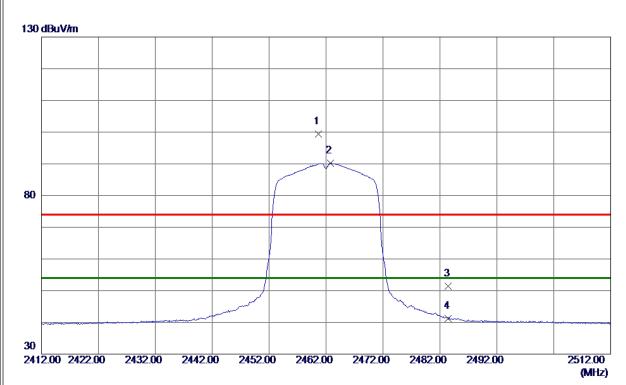


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4919. 0000	51. 18	5. 58	56. 76	74.00	-17. 24	Peak	
2 *	4925. 0500	39. 36	5. 60	44. 96	54.00	-9. 04	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460. 7000	91. 13	8. 36	99. 49	74.00	25. 49	Peak	No Limit
2 *	2462. 8000	81. 81	8. 37	90. 18	54. 00	36. 18	AVG	No Limit
3	2483. 5000	43. 02	8. 39	51. 41	74.00	-22. 59	Peak	
4	2483. 5000	32. 86	8. 39	41. 25	54.00	-12.75	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal

80 dBuV/m

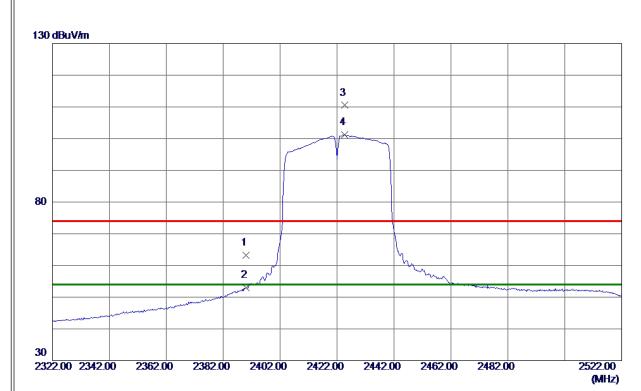


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4925. 0500	36. 09	5. 60	41.69	54.00	-12. 31	AVG	
2	4925. 8500	47. 35	5. 60	52. 95	74.00	-21.05	Peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	54. 83	8. 29	63. 12	74.00	-10.88	Peak	
2	2390. 0000	44. 70	8. 29	52. 99	54.00	-1.01	AVG	
3	2424. 6000	102. 18	8. 32	110. 50	74.00	36. 50	Peak	No Limit
4 *	2424. 6000	92. 84	8. 32	101. 16	54.00	47. 16	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical

80 dBuV/m

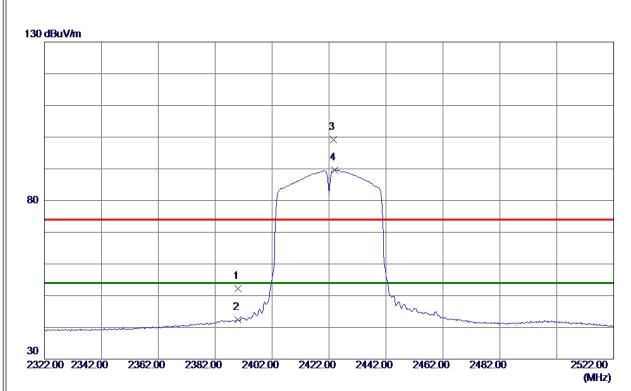


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4844. 3500	47. 81	5. 38	53. 19	74.00	-20.81	Peak	
2 *	4849. 0500	35. 92	5. 39	41. 31	54.00	-12. 69	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal

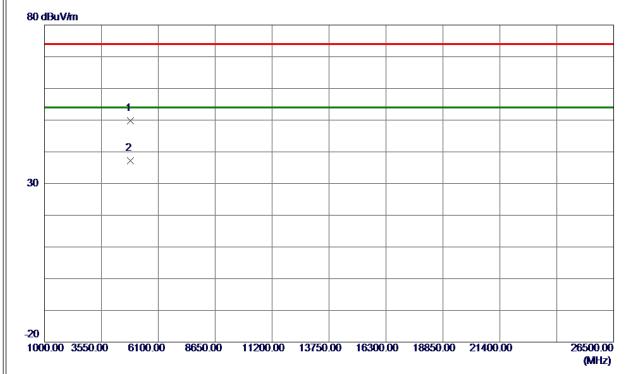


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	43. 91	8. 29	52. 20	74.00	-21. 80	Peak	
2	2390. 0000	34. 08	8. 29	42. 37	54.00	-11. 63	AVG	
3	2423. 6000	90. 94	8. 32	99. 26	74.00	25. 26	Peak	No Limit
4 *	2424. 0000	81. 36	8. 32	89. 68	54.00	35. 68	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal

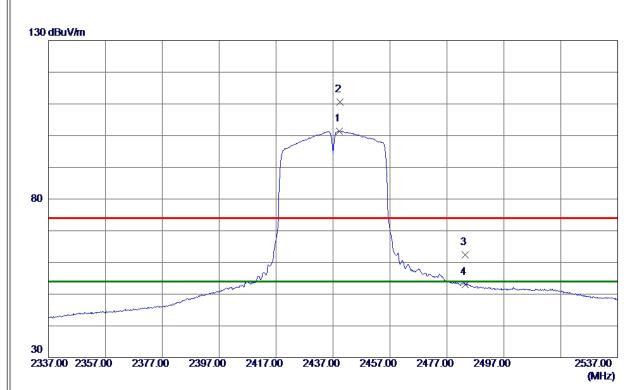


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4840. 5000	44. 50	5. 37	49.87	74.00	-24. 13	Peak	
2 *	4845. 0500	31. 90	5. 38	37. 28	54.00	-16. 72	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical



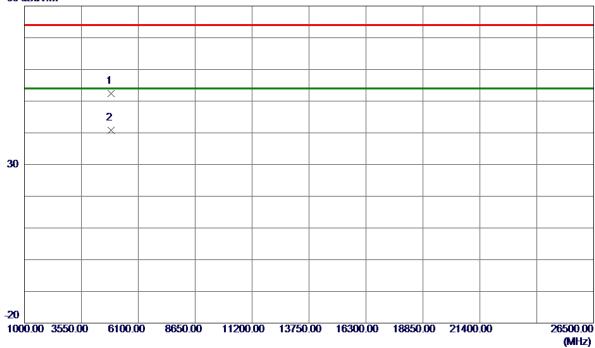
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2439. 2000	93. 11	8. 34	101. 45	54.00	47. 45	AVG	No Limit
2	2439. 4000	102. 27	8. 34	110. 61	74.00	36. 61	Peak	No Limit
3	2483. 5000	54. 09	8. 39	62. 48	74.00	-11. 52	Peak	
4	2483. 5000	44. 69	8. 39	53. 08	54. 00	-0. 92	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical

80 dBuV/m

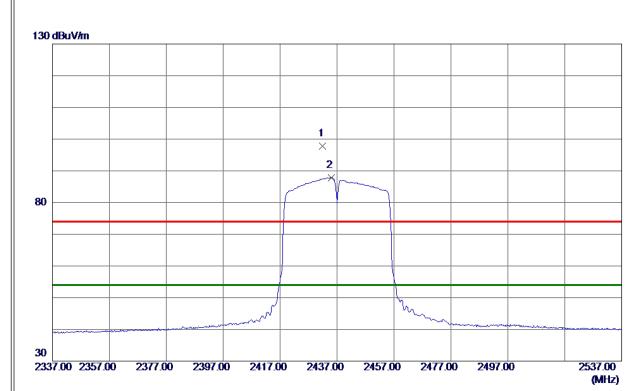


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4878. 7500	46. 91	5. 47	52. 38	74.00	-21.62	Peak	
2 *	4879. 2500	35. 37	5. 47	40.84	54.00	-13. 16	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal



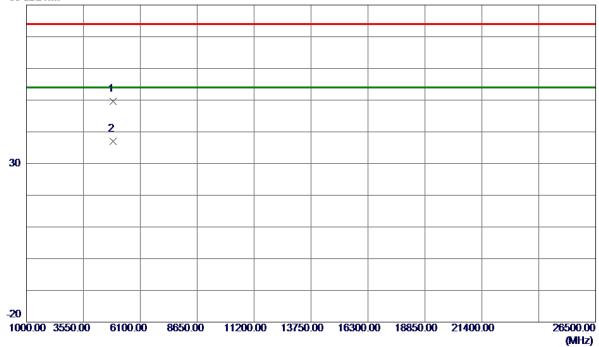
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2432. 0000	89. 48	8. 33	97. 81	74.00	23. 81	Peak	No Limit
2 *	2435. 0000	79. 51	8. 34	87. 85	54.00	33. 85	AVG	No Limit

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal

80 dBuV/m

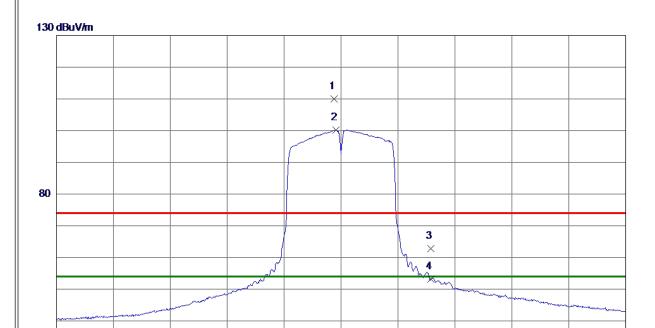


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4873. 8000	44. 09	5. 46	49. 55	74.00	-24. 45	Peak	
2 *	4875. 2000	31. 62	5. 46	37. 08	54.00	-16. 92	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2449. 6000	101. 75	8. 35	110. 10	74.00	36. 10	Peak	No Limit
2 *	2450. 2000	91. 79	8. 35	100. 14	54.00	46. 14	AVG	No Limit
3	2483. 5000	54. 36	8. 39	62. 75	74.00	-11. 25	Peak	
4	2483. 5000	44. 82	8. 39	53. 21	54. 00	-0. 79	AVG	

2452.00

2472.00

2492.00

2512.00

2552.00 (MHz)

REMARKS:

30

2352.00 2372.00

2392.00

2412.00

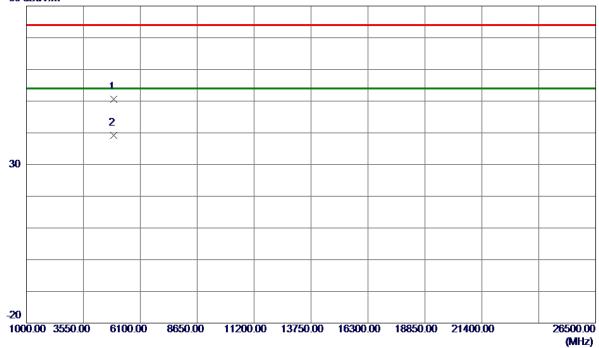
2432.00

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Vertical



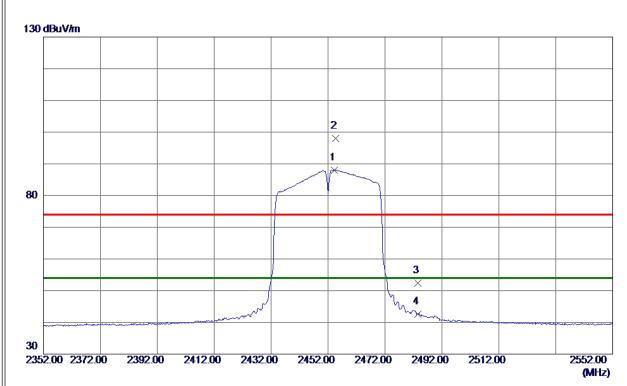


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4905. 6500	45 . 12	5. 54	50. 66	74.00	-23. 34	Peak	
2 *	4908. 7500	33. 69	5. 55	39. 24	54.00	-14. 76	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



Horizontal



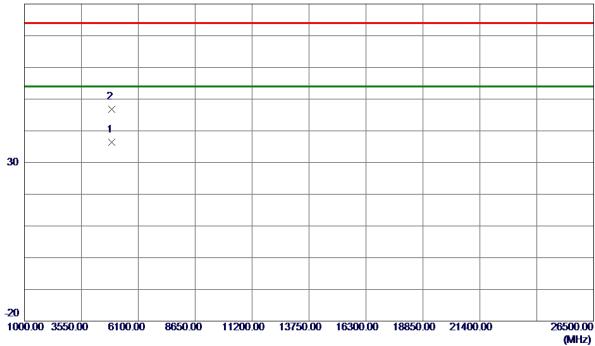
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2454. 2000	79. 71	8. 36	88. 07	54.00	34. 07	AVG	No Limit
2	2454. 6000	89. 74	8. 36	98. 10	74.00	24. 10	Peak	No Limit
3	2483. 5000	43. 97	8. 39	52. 36	74.00	-21. 64	Peak	
4	2483. 5000	34. 16	8. 39	42. 55	54. 00	-11. 45	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Horizontal

80 dBuV/m



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4913. 1000	30. 89	5. 56	36. 45	54.00	-17. 55	AVG	
2	4915. 1500	41. 23	5. 57	46. 80	74.00	-27. 2 0	Peak	

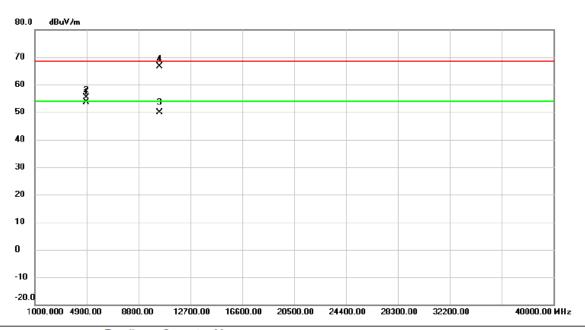
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



The worst case of simultaneous transmission:

Test Mode: TX WLAN 2.4G B Mode 2437MHz + WLAN 5G A Mode 5180MHz

Vertical



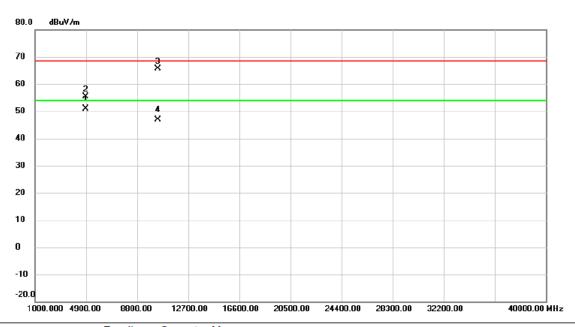
	No. N	Лk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
-			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
-	1 *	4	874.320	48.09	5.46	53.55	54.00	-0.45	AVG	
-	2	4	874.886	49.93	5.46	55.39	68.30	-12.91	peak	
-	3	10	360.518	36.36	13.51	49.87	54.00	-4.13	AVG	
-	4	10	360.520	53.19	13.51	66.70	68.30	-1.60	peak	

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



Test Mode: TX WLAN 2.4G B Mode 2437MHz + WLAN 5G A Mode 5180MHz

Horizontal



	No. N	Иk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
-			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
Ī	1	487	4.162	45.35	5.46	50.81	54.00	-3.19	AVG	
Ī	2	487	5.025	49.94	5.47	55.41	68.30	-12.89	peak	
Ī	3 *	1036	8.650	52.05	13.53	65.58	68.30	-2.72	peak	
-	4	1036	8.852	33.27	13.53	46.80	54.00	-7.20	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



APPENDIX E - BANDWIDTH	



11		
ш	Toot Modo	ITX B Mode
ш	l lest Mode	

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	8.60	500	Complies
06	2437	8.60	500	Complies
11	2462	8.64	500	Complies



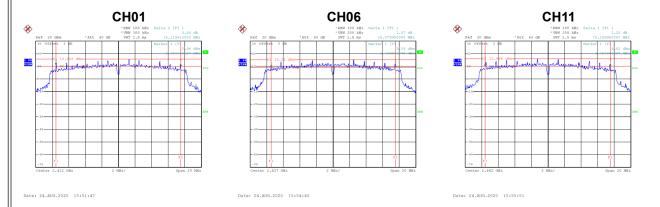
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	13.28	Complies
06	2437	13.28	Complies
11	2462	13.52	Complies





Test Mode	TX G Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.12	500	Complies
06	2437	15.08	500	Complies
11	2462	15.16	500	Complies



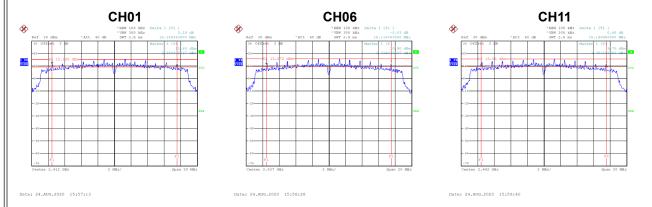
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	17.68	Complies
06	2437	17.92	Complies
11	2462	18.96	Complies





Test Mode	TX N-20M Mode
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Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
01	2412	15.16	500	Complies
06	2437	15.12	500	Complies
11	2462	15.20	500	Complies



Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
01	2412	18.16	Complies
06	2437	18.16	Complies
11	2462	18.40	Complies





Test Mo	de	TX N-40M	Mode
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Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
03	2422	35.16	500	Complies
06	2437	35.16	500	Complies
09	2452	32.72	500	Complies



Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
03	2422	37.44	Complies
06	2437	37.44	Complies
09	2452	37.76	Complies





APPENDIX F - MAXIMUM OUTPUT POWER



	Test Mode	TX B Mode	Ant.	1
ı	1000 1110 40	1710 111040	,	•

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.08	0.00	15.08	30.00	1.0000	Complies
06	2437	13.97	0.00	13.97	30.00	1.0000	Complies
11	2462	12.68	0.00	12.68	30.00	1.0000	Complies

Test Mode TX B Mode_Ant. 2

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	15.58	0.00	15.58	30.00	1.0000	Complies
06	2437	14.83	0.00	14.83	30.00	1.0000	Complies
11	2462	12.27	0.00	12.27	30.00	1.0000	Complies

Test Mode TX B Mode_Total

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	18.35	27.87	0.6124	Complies
06	2437	17.43	27.87	0.6124	Complies
11	2462	15.49	27.87	0.6124	Complies



Test Mode	TX G Mode	Ant.	1
100t Wiodo	I A O IVIOGO	/ \III.	•

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	16.56	0.17	16.73	30.00	1.0000	Complies
06	2437	20.66	0.17	20.83	30.00	1.0000	Complies
11	2462	16.36	0.17	16.53	30.00	1.0000	Complies

Test Mode TX G Mode_Ant. 2

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.16	0.17	17.33	30.00	1.0000	Complies
06	2437	21.07	0.17	21.24	30.00	1.0000	Complies
11	2462	16.21	0.17	16.38	30.00	1.0000	Complies

Test Mode TX G Mode_Total

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	20.05	27.87	0.6124	Complies
06	2437	24.05	27.87	0.6124	Complies
11	2462	19.46	27.87	0.6124	Complies



Test Mode	TX N-20M Mode	Ant.	1

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.79	0.18	17.97	30.00	1.0000	Complies
06	2437	21.05	0.18	21.23	30.00	1.0000	Complies
11	2462	16.18	0.18	16.36	30.00	1.0000	Complies

Test Mode TX N-20M Mode_Ant. 2

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	17.82	0.18	18.00	30.00	1.0000	Complies
06	2437	20.84	0.18	21.02	30.00	1.0000	Complies
11	2462	15.74	0.18	15.92	30.00	1.0000	Complies

Test Mode TX N-20M Mode_Total

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	21.00	27.87	0.6124	Complies
06	2437	24.14	27.87	0.6124	Complies
11	2462	19.16	27.87	0.6124	Complies



Test Mode	TX N-40M Mode	Ant. 1
1001111040	17 (1 (1011) 1110 40	,

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	16.82	0.35	17.17	30.00	1.0000	Complies
06	2437	15.28	0.35	15.63	30.00	1.0000	Complies
09	2452	14.28	0.35	14.63	30.00	1.0000	Complies

Test Mode TX N-40M Mode_Ant. 2

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	16.69	0.35	17.04	30.00	1.0000	Complies
06	2437	15.34	0.35	15.69	30.00	1.0000	Complies
09	2452	14.33	0.35	14.68	30.00	1.0000	Complies

Test Mode TX N-40M Mode_Total

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	20.12	27.87	0.6124	Complies
06	2437	18.67	27.87	0.6124	Complies
09	2452	17.67	27.87	0.6124	Complies



Test Mode	TX vht-20M Mode A	۱nt.	1
100t Wiodo	17 VIII ZOIVI IVIOGO_7	VI I C.	•

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)		Max. Limit (W)	Result
01	2412	17.53	0.33	17.86	30.00	1.0000	Complies
06	2437	20.82	0.33	21.15	30.00	1.0000	Complies
11	2462	16.01	0.33	16.34	30.00	1.0000	Complies

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)		Max. Limit (W)	Result
01	2412	17.58	0.33	17.91	30.00	1.0000	Complies
06	2437	20.65	0.33	20.98	30.00	1.0000	Complies
11	2462	15.52	0.33	15.85	30.00	1.0000	Complies

Test Mode TX vht-20M Mode_Total

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	20.90	27.87	0.6124	Complies
06	2437	24.08	27.87	0.6124	Complies
11	2462	19.12	27.87	0.6124	Complies



40M Mode	Ant.	1
	40M Mode	40M Mode Ant.

Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)		Max. Limit (W)	Result
03	2422	16.51	0.69	17.20	30.00	1.0000	Complies
06	2437	14.91	0.69	15.60	30.00	1.0000	Complies
09	2452	13.92	0.69	14.61	30.00	1.0000	Complies

Test Mode	TX vht-40M Mode	Ant. 2
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Channel	Frequency (MHz)	Average Output Power (dBm)	Duty Factor	Average Output Power + Duty Factor (dBm)		Max. Limit (W)	Result
03	2422	16.35	0.69	17.04	30.00	1.0000	Complies
06	2437	15.01	0.69	15.70	30.00	1.0000	Complies
09	2452	14.01	0.69	14.70	30.00	1.0000	Complies

Test Mode TX vht-40M Mode_Total

Channel	Frequency (MHz)	Average Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
03	2422	20.13	27.87	0.6124	Complies
06	2437	18.66	27.87	0.6124	Complies
09	2452	17.66	27.87	0.6124	Complies



APPENDIX G - CONDUCTED SPURIOUS EMISSIONS



