



# **FCC Radio Test Report**

# FCC ID:KA2IRX1860B1

This report concerns: Original Grant

Project No. 2104H029

Equipment 1) AX1800 Mesh Wi-Fi 6 Router

2) AX1500 Mesh Wi-Fi 6 Router

**Brand Name** : D-Link **Test Model** : DIR-X1860 Series Model : DIR-X1550

Applicant : D-Link Corporation

Address 14420 Myford Road Suite 100 Irvine California United States

Manufacturer : D-Link Corporation

: 14420 Myford Road Suite 100 Irvine California United States Address

Date of Receipt : Apr. 12, 2021

Date of Test : Apr. 12, 2021~May. 26, 2021

Issued Date : Jun. 17, 2021

Report Version R00

Test Sample : Engineering Sample No.: SH20210412101-18 fro radiated;

SH20210412101-19 for conducted; SH20210412101-5 adapter.

: FCC CFR Title 47, Part 15, Subpart C Standard(s)

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

ANSI C63.10-2013

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

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**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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**BTL**'s laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

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.	Jun. 17, 2021



# 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C						
Standard(s) Section	Test Item	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. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210, China

BTL's Test Firm Registration Number for FCC: 476765

BTL's Designation Number for FCC: CN1241

#### 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)
SH-C01	CISPR	150 kHz ~ 30 MHz	2.70

#### B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
		9 KHz~30 MHz	V	3.79
		9 KHz~30 MHz	Н	3.57
		30 MHz~200 MHz	V	4.04
	CISPR	30 MHz~200 MHz	Н	3.76
SH-CB01		200 MHz~1,000 MHz	V	4.24
SH-CBUT		200 MHz~1,000 MHz	Н	3.84
		1 GHz~18 GHz	V	4.46
		1 GHz~18 GHz	Н	4.40
		18 GHz~40 GHz	V	3.95
		18 GHz~40 GHz	Н	3.95

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	23°C	57%	AC 120V/60Hz	Joven Xiong
Radiated Emissions-9kHz to 30 MHz	20°C	40%	AC 120V/60Hz	Vince Zong
Radiated Emissions-30MHz to 1000MHz	24°C	58%	AC 120V/60Hz	Forest Li
Radiated Emissions-Above 1000MHz	24°C	58%	AC 120V/60Hz	Forest Li
Bandwidth	20°C	40%	AC 120V/60Hz	Vince Zong
Maximum Output Power	20°C	40%	AC 120V/60Hz	Vince Zong
Conducted Spurious Emissions	20°C	40%	AC 120V/60Hz	Vince Zong
Power Spectral Density	20°C	40%	AC 120V/60Hz	Vince Zong



# 2. GENERAL INFORMATION

# 2.1 GENERAL DESCRIPTION OF EUT

Equipment	1) AX1800 Mesh Wi-Fi 6 Router
Equipment	2) AX1500 Mesh Wi-Fi 6 Router
Brand Name	D-Link
Test Model	DIR-X1860
Series Model	DIR-X1550
	1) AX1800 Mesh Wi-Fi 6 Router for DIR-X1860
Model Difference(s)	2) AX1500 Mesh Wi-Fi 6 Router for DIR-X1550
	Only different in the model name.
Software Version	1.00 & 2.00
Hardware Version	
Power Source	DC Voltage supplied from AC/DC adapter. #1 Brand/ Model: Gongjin/ S12A12-120A100-CJ #2 Brand/ Model: Gongin/ S12A14-120A100-PT #3 Brand/ Model: Mentech/MAUS-1201001202 #4 Brand/ Model:APD/WB-12G12R
Power Rating	#1 I/P: 100-240V~50/60Hz max 0.5A O/P: 12V —— 1A #2 I/P: 100-240V~50/60Hz 0.4A LPS O/P: 12.0V —— 1.0A 12.0W #3 I/P: 100-240V~50/60Hz 0.35A O/P: 12V —— 1.0A #4 I/P: 100-240V~50/60Hz 0.3A Max O/P: 12.0V —— 1.0A 12.0W
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g: OFDM IEEE 802.11n: OFDM IEEE 802.11ax: OFDMA
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 802.11ax: up to 573.5 Mbps
Maximum Output Power _CDD	IEEE 802.11n20: 23.24 dBm (0.2109 W)
Maximum Output Power _Beamforming	IEEE 802.11n20: 22.73 dBm (0.1875 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 802.11g, IEEE 802.11n(HT20), IEEE 802.11ax(HE20)							
	CH03 - CH09 for IEEE 802.11n(HT40), IEEE 802.11ax(HE40)						
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Dipole	N/A	5
2	N/A	N/A	Dipole	N/A	5

#### Note:

- 1. This EUT supports Beamforming and CDD, all antennas have the same gain, any transmit signals are correlated with each other, so
- 1) Beamforming:

Directional gain =  $10\log[(10^{G1/20}+10^{G2/20+....+}10^{GN/20})^2/N_{ANT}]dBi$ ,

that is Directional gain= $10log[(10^{G1/20}+10^{G2/20+....+}10^{GN/20})^2/N_{ANT}]dBi=8.01;$ 

So output power limit is 30-8.01+6=27.99, the power spectral density limit is 8-8.01+6=5.99.

2) CDD:

For power spectral density measurements, For power spectral density measurements, the Directional gain=G<sub>ANT</sub>+Array Gain, that is Directional gain=5+10log(2/1) =8.01;

So power spectral density limit is 8-8.01+6=5.99.

For power meansurements, Directional gain =G<sub>ANT MAX</sub>.+Array Gain, Array Gain=0dB(N<sub>ANT</sub>≤4), so the Directional gain=5.

2. The antenna gain and beamforming gain are provided by the manufacturer.

4. Table for Antenna Configuration:

Operating Mode TX Mode	Ant. 1	Ant. 2	Ant. 1+2
IEEE 802.11b	✓	✓	×
IEEE 802.11g	✓	✓	×
IEEE 802.11n(HT20)	✓	✓	✓
IEEE 802.11n(HT40)	✓	✓	✓
IEEE 802.11ax(HE20)	✓	✓	✓
IEEE 802.11ax(HE40)	✓	✓	✓



# 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(HT20) Mode Channel 01/06/11
Mode 4	TX N(HT40) Mode Channel 03/06/09
Mode 5	TX AX(HE20) Mode Channel 01/06/11
Mode 6	TX AX(HE40) Mode Channel 03/06/09
Mode 7	TX N(HT20) 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(HT20) Mode Channel 06		

Radiated emissions test - Below 1GHz		
Final Test Mode	Description	
Mode 7	TX N(HT20) 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(HT20) Mode Channel 01/06/11	
Mode 4	TX N(HT40) Mode Channel 03/06/09	
Mode 5	TX AX(HE20) Mode Channel 01/06/11	
Mode 6	TX AX(HE40) Mode Channel 03/06/09	



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(HT20) Mode Channel 01/06/11	
Mode 4	TX N(HT40) Mode Channel 03/06/09	
Mode 5	TX AX(HE20) Mode Channel 01/06/11	
Mode 6	TX AX(HE40) Mode Channel 03/06/09	

#### NOTE:

- (1) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (2) For AC power line conducted emissions and radiated emission below 1 GHz test, the TX N(HT20) Mode Channel 06 is found to be the worst case and recorded.
- (3) For radiated emission above 1 GHz test, the spurious points of 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.
- (4) The measurements for Output Power are tested, the CDD and Beamforming are recorded in the report. The worst case is CDD and only the worst case is documented for other test items.
- (5) All adapters have been pre-tested and only recorded the worst.



# 2.3 PARAMETERS OF TEST SOFTWARE

# CDD

Test Software Version	QA v2.24		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	17.50	21.50	18.00
IEEE 802.11g	16.50	20.50	16.50
IEEE 802.11n(HT20)	16.50	19.50	15.50
IEEE 802.11ax(HE20)	16.00	19.50	17.00
Frequency (MHz)	2422	2437	2452
IEEE 802.11n(HT40)	13.50	16.50	13.00
IEEE 802.11ax(HE40)	16.00	15.50	15.50

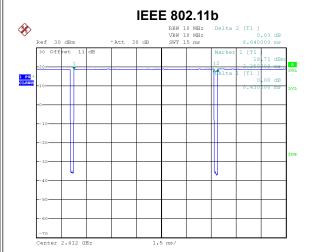
# Beamforming

Test Software Version	QA v2.24		
Frequency (MHz)	2412	2437	2462
IEEE 802.11n(HT20)	16.50	19.50	15.50
IEEE 802.11ax(HE20)	16.00	19.50	17.00
Frequency (MHz)	2422	2437	2452
IEEE 802.11n(HT40)	13.50	16.50	13.00
IEEE 802.11ax(HE40)	16.00	15.50	15.50



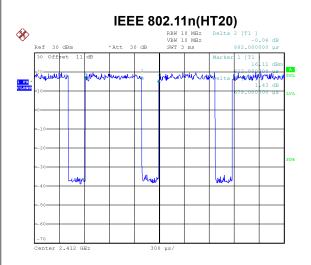
#### 2.4 DUTY CYCLE

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.



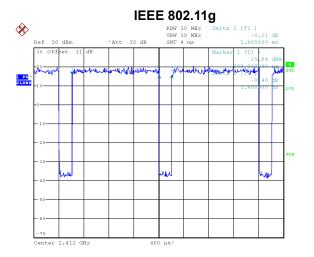
Date: 14.APR.2021 18:03:04

Duty cycle = 8.430 ms / 8.640 ms = 97.57% Duty Factor = 10 log(1/Duty cycle) = 0.11



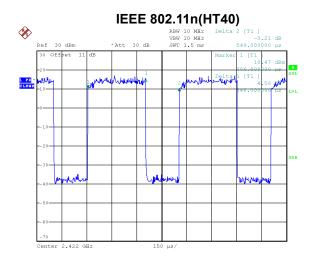
Date: 14.APR.2021 18:05:14

Duty cycle = 0.687 ms / 0.882 ms = 77.89% Duty Factor = 10 log(1/Duty cycle) = 1.09



Date: 14.APR.2021 18:04:02

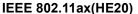
Duty cycle = 1.400 ms / 1.600 ms = 87.50% Duty Factor = 10 log(1/Duty cycle) = 0.58

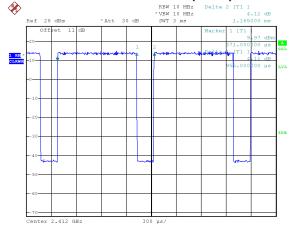


Date: 14.APR.2021 18:06:31

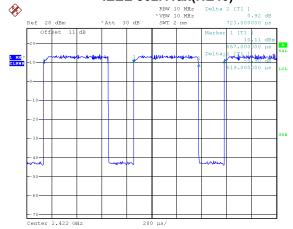
Duty cycle = 0.348 ms / 0.549 ms = 63.39% Duty Factor = 10 log(1/Duty cycle) = 1.98







#### IEEE 802.11ax(HE40)



Date: 30.APR.2021 15:53:19

Duty cycle = 0.955 ms / 1.165 ms = 81.97% Duty Factor = 10 log(1/Duty cycle) = 0.86 Date: 30.APR.2021 15:50:41

Duty cycle = 0.519 ms / 0.723 ms = 71.78% Duty Factor = 10 log(1/Duty cycle) = 1.44

#### NOTE:

#### For IEEE 802.11b:

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.

#### For IEEE 802.11g:

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.

#### For IEEE 802.11n(HT20):

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.

#### For IEEE 802.11n(HT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 kHz.

#### For IEEE 802.11ax(HE20):

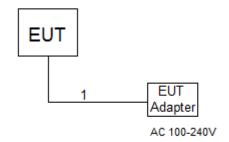
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz.

#### For IEEE 802.11ax(HE40):

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.



# 2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



# 2.6 SUPPORT UNITS

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	N/A	N/A	1m



#### 3. AC POWER LINE CONDUCTED EMISSIONS

#### **3.1 LIMIT**

Fraguency of Emission (MHz)	Limit (dBμV)		
Frequency of Emission (MHz)	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.

#### 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.

The following table is the setting of the receiver:

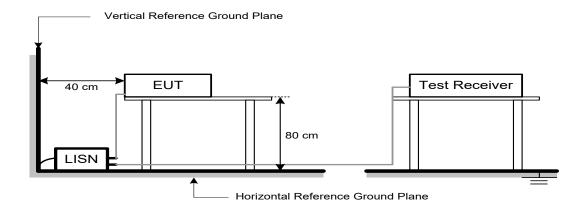
Receiver Parameters	Setting
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

#### 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

#### **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 (MHz)	Field Strength (microvolts/meter)	Measurement Distance (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)

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

# NOTE:

- (1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).



#### **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.

The following table is the setting of the receiver:

Spectrum Parameters	Setting	
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz	
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz	
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz	

Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1 MHz / 3 MHz for PK value
(Emission in restricted band)	1 MHz / 1/T Hz for AVG value

Receiver Parameters	Setting
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
Start ~ Stop Frequency	1 GHz~26.5 GHz for PK/AVG detector

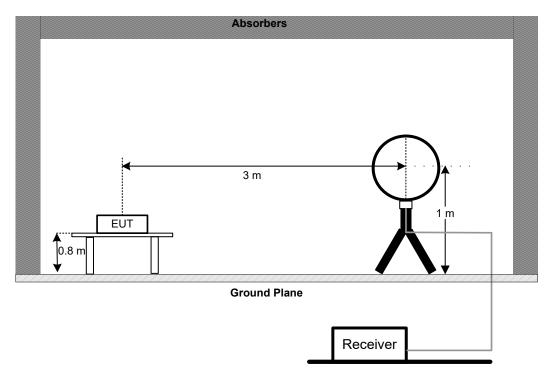


# **4.3 DEVIATION FROM TEST STANDARD**

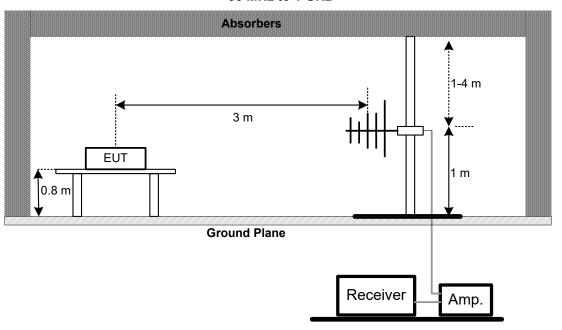
No deviation.

# 4.4 TEST SETUP

#### 9 kHz to 30 MHz

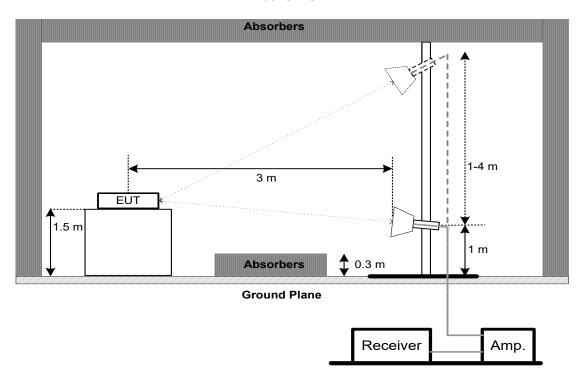


30 MHz to 1 GHz





#### 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

# **5.1 LIMIT**

Section	Test Item	Limit
FCC 4F 247(-\/2\	6 dB Bandwidth	Minimum 500 kHz
FCC 15.247(a)(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. The following table is the setting of the spectrum analyzer:

#### For 6 dB Bandwidth:

TOTO GB Barrawratin	
Spectrum Parameters	Setting
Span Frequency	> Measurement Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### For 99% Emission Bandwidth:

Spectrum Parameters	Setting		
Span Frequency	Between 1.5 times and 5.0 times the OBW		
RBW	300 kHz For 20MHz 1 MHz For 40MHz		
VBW	1 MHz For 20MHz 3 MHz For 40MHz		
Detector	Peak		
Trace	Max Hold		
Sweep Time	Auto		

#### **5.3 DEVIATION FROM STANDARD**

No deviation.

#### **5.4 TEST SETUP**



#### **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**

# **6.1 LIMIT**

Section	Section Test Item	
FCC 15.247(b)(3)	Maximum Output Power	1.0000 Watt or 30.00 dBm

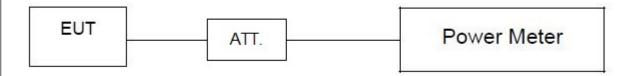
#### **6.2 TEST PROCEDURE**

- 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 (for AVG power) 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. The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Start Frequency	30 MHz
Stop Frequency	26.5 GHz
RBW	100 kHz
VBW	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### 7.3 DEVIATION FROM STANDARD

No deviation.

#### 7.4 TEST SETUP



#### 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

# **8.1 LIMIT**

Section	Test Item	Limit	
FCC 15.247(e)	Power Spectral Density	8 dBm	
FGC 13.247(e)	Power Spectral Density	(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. The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting
Span Frequency	25 MHz (20 MHz) / 60 MHz (40 MHz)
RBW	3 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### 8.3 DEVIATION FROM STANDARD

No deviation.

# 8.4 TEST SETUP



#### 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	Line Impedance Stabilisation Network	Schwarzbeck	NNLK 8121	8121-822	Mar. 20, 2022
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Aug. 23, 2021
3	Test Cable	emci	EMCRG400-BM-NM-10 000	170628	Apr. 11, 2022
4	EMI Test Receiver	R&S	ESCI	100082	Mar. 21, 2022
5	50Ω Terminator	SHX	TF2-1G-A	17051602	Mar. 20, 2022
6	50Ω coaxial switch	Anritsu	MP59B	6201750902	Mar. 20, 2022
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

	Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Loop Antenna	EMCI	EMCI LPA600	275	Apr. 15, 2022	
2	Cable	N/A	EMCRG400-BM-NM-10 000	170628	Apr. 11, 2022	
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 21, 2022	
4	Measurement Software	Farad	EZ-EMC Ver.BTL-2ANT-1	N/A	N/A	

	Radiated Emissions - 30 MHz to 1 GHz						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	TRILOG Broadband Antenna	I Schwarzbeck I VIII B 9168 I		719	Mar. 26, 2022		
2	Pre-Amplifier	Pre-Amplifier emci EMC9135 9804		980400	Mar. 20, 2022		
3	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 21, 2022		
4	Test Cable	emci	EMC104-SM-SM-7000	170330	Apr. 11, 2022		
5	Test Cable	emci	EMC104-SM-SM-1000	170331	Apr. 11, 2022		
6	Test Cable	emci	EMC104-SM-NM-3500	170621	Apr. 11, 2022		
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A		



	Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	9120D	9120D-1786	Mar. 26, 2022	
2	Pre-Amplifier	emci	EMC012645SE	980421	May. 10, 2022	
3	EXA Spectrum Analyzer	Keysight	N9010A	MY56480545	Mar. 20, 2022	
4	Test Cable	emci	EMC104-SM-SM-7 000	170330	Apr. 11, 2022	
5	Test Cable	emci	EMC104-SM-SM-1 000	170331	Apr. 11, 2022	
6	Test Cable	emci	EMC104-SM-NM-3 500	170621	Apr. 11, 2022	
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
8	MXE EMI Receiver	Keysight	N9038A	MY57150106	Mar. 21, 2022	
9	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	3116C	00203919	Mar. 27, 2022	
10	Pre-Amplifier	emci	EMC184045SE	980409	Mar. 20, 2022	
11	Test Cable	emci	EMC102-KM-KM-8 00	170654	Apr. 15, 2022	
12	Test Cable	emci	Super Reliable-40G-SS11- 7000	W0030860001	Apr. 15, 2022	

	Bandwidth							
Item	Kind of Equipment	ent Manufacturer Type No. Serial No.			Calibrated until			
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 07, 2022			
2	Attenuator	Solvang Technology	5.8GHz 0-65dB	STI02-0203-01	Aug. 23, 2021			

	Maximum Output Power							
Item	em Kind of Equipment Manufacturer Type No. Serial No. Calibrated ui							
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 07, 2022			
2	Attenuator	Solvang Technology	5.8GHz 0-65dB	STI02-0203-01	Aug. 23, 2021			

	Antenna Conducted Spurious Emissions							
Item	Item Kind of Equipment Manufacturer Type No. Serial No. Calibra							
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 07, 2022			
2	Attenuator	Solvang Technology	5.8GHz 0-65dB	STI02-0203-01	Aug. 23, 2021			

	Power Spectral Density							
Item         Kind of Equipment         Manufacturer         Type No.         Serial No.         Calibrated								
1	Spectrum Analyzer	R&S	FSP40	100626	Mar. 07, 2022			
2	Attenuator	Solvang Technology	5.8GHz 0-65dB	STI02-0203-01	Aug. 23, 2021			

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

All calibration period of equipment list is one year.



# 10. EUT TEST PHOTO



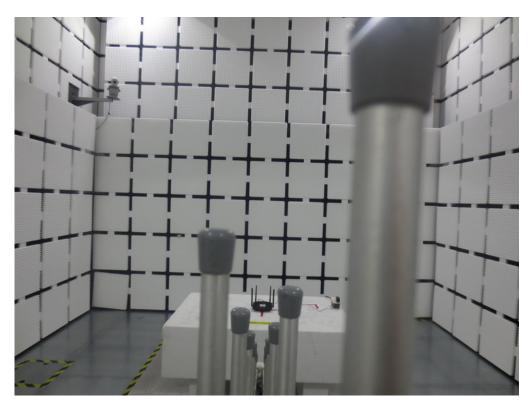


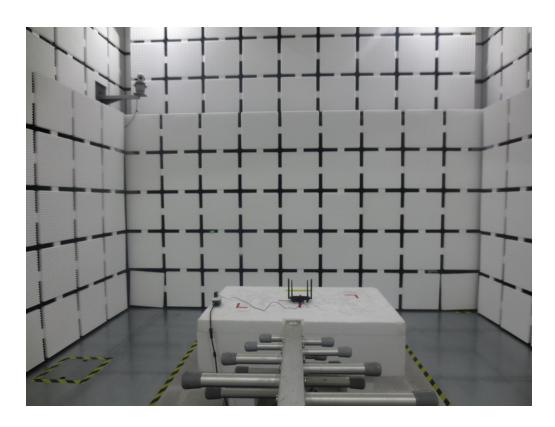




# **Radiated Emissions Test Photos**

# 30 MHz to 1 GHz

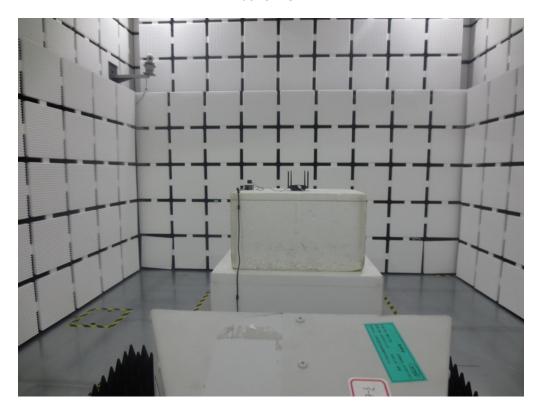






# **Radiated Emissions Test Photos**

# Above 1 GHz



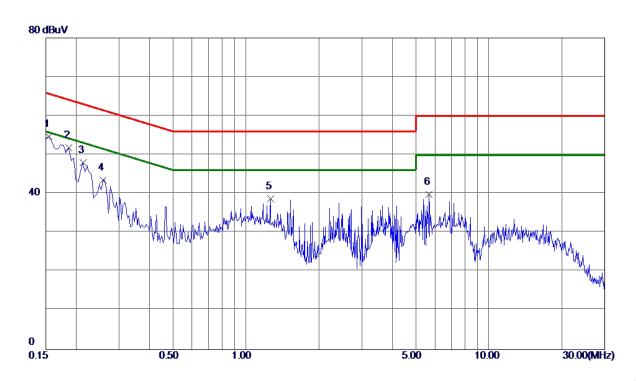




# **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**







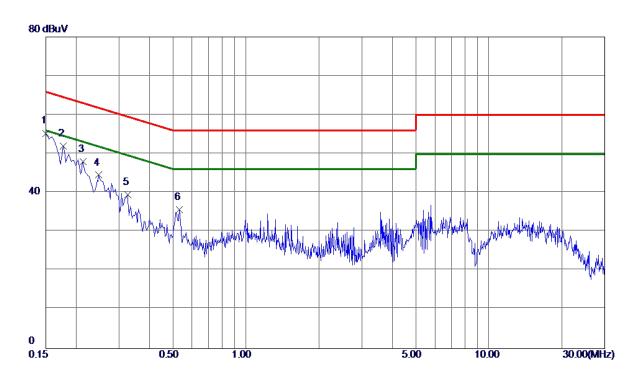
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1545	45.07	9. 72	54.79	65.75	-10.96	Peak	
2	0.1860	42. 13	9. 73	51.86	64.21	-12. 35	Peak	
3	0.2130	38. 27	9.74	48. 01	63.09	-15. 08	Peak	
4	0.2580	33. 76	9. 75	43.51	61.50	-17.99	Peak	
5	1. 2615	28. 87	9.86	38. 73	56.00	-17. 27	Peak	
6	5.6715	29. 78	10.05	39. 83	60.00	-20. 17	Peak	

# **REMARKS**:

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1500	45.60	9. 68	55. 28	66.00	-10.72	Peak	
2	0.1770	42. 36	9. 70	52.06	64.63	-12. 57	Peak	
3	0.2130	38. 32	9.71	48. 03	63.09	-15.06	Peak	
4	0.2468	34.84	9.72	44. 56	61.86	-17. 30	Peak	
5	0. 3255	29.75	9. 74	39. 49	59. 57	-20.08	Peak	
6	0. 5325	25.84	9. 78	35. 62	56.00	-20. 38	Peak	

#### **REMARKS**:

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



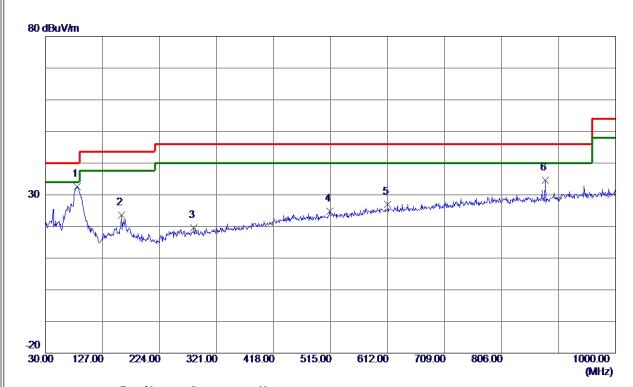
# **APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ** Note: The measured value have enough margin over 20dB than the limit, therefore they are not reported.



APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ





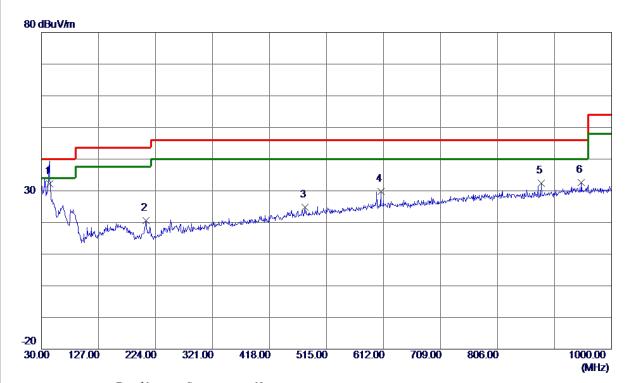


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	83.8350	54. 20	-21.66	32. 54	40.00	-7.46	Peak	
2	159. 4950	39.61	-16. 06	23. 55	43.50	-19.95	Peak	
3	282. 2000	35. 68	-16. 04	19. 64	46.00	-26. 36	Peak	
4	514.0300	35. 75	-11.00	24.75	46.00	-21. 25	Peak	
5	612.0000	35. 95	-9.02	26. 93	46.00	-19.07	Peak	
6	880. 2050	40. 79	-6. 11	34.68	46.00	-11. 32	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	43.5800	49. 25	-17.03	32. 22	40.00	-7.78	QP	
2	207. 5100	39.86	-19. 32	20. 54	43.50	-22. 96	Peak	
3	478. 1400	36. 42	-11. 55	24.87	46.00	-21. 13	Peak	
4	607.6350	38. 84	-9. 08	29.76	46.00	-16. 24	Peak	
5	880. 2050	38. 60	-6. 11	32.49	46.00	-13.51	Peak	
6	948. 5900	37.77	-5. 15	32. 62	46.00	-13. 38	Peak	

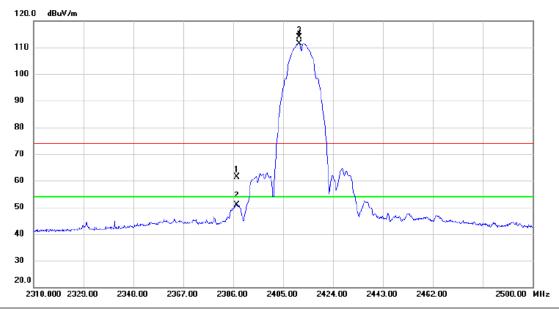
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



# **APPENDIX D - RADIATED EMISSION- ABOVE 1000 MHZ**





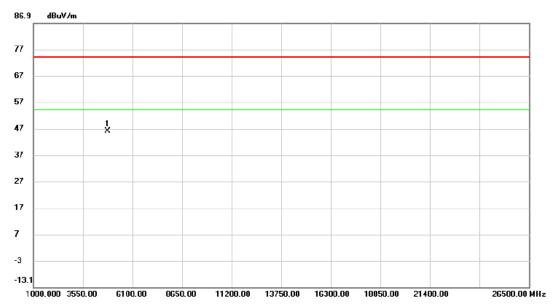


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2387.330	29.56	31.75	61.31	74.00	-12.69	peak	
2		2387.330	19.16	31.75	50.91	54.00	-3.09	AVG	
3	Х	2411.175	82.04	31.72	113.76	74.00	39.76	peak	No limit
4	*	2411.175	79.74	31.72	111.46	54.00	57.46	AVG	No limit

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





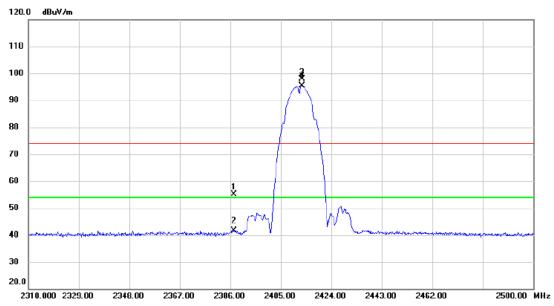


No. Mk	. Freq.	Reading Level		Measure- ment	Limit	Margin		
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823.725	56.88	-10.90	45.98	74.00	-28.02	peak	

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







No.	Mi	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2387.520	23.32	31.75	55.07	74.00	-18.93	peak	
2		2387.520	9.83	31.75	41.58	54.00	-12.42	AVG	
3	X	2412.980	66.12	31.72	97.84	74.00	23.84	peak	No limit
4	*	2412.980	63.67	31.72	95.39	54.00	41.39	AVG	No limit

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



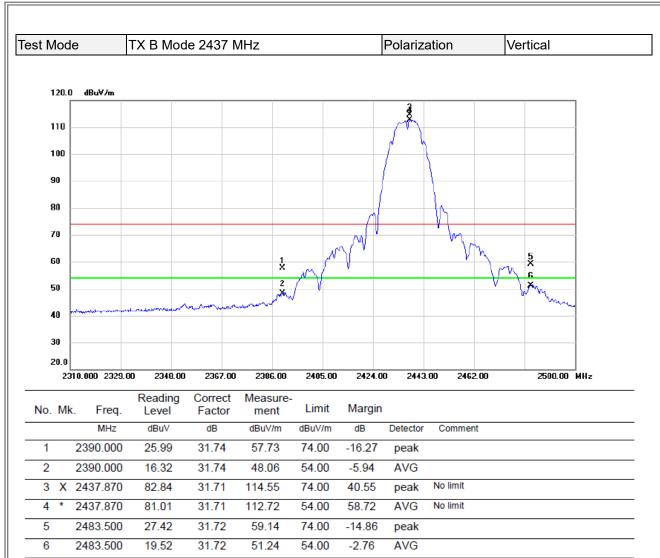




No. MI	k. Freq.		Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4825.000	54.04	-10.90	43.14	74.00	-30.86	peak	

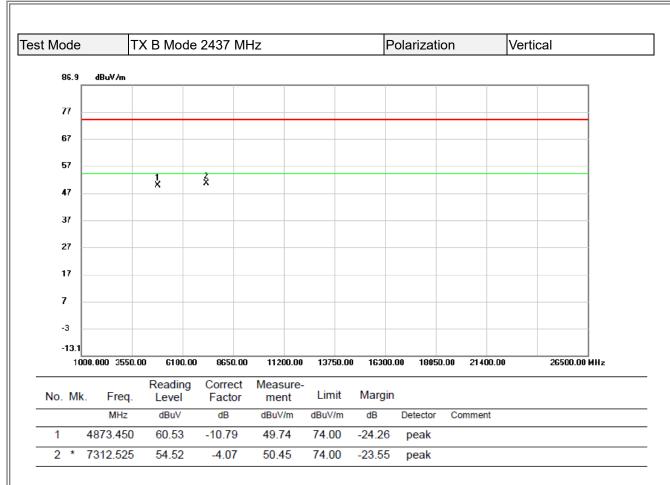
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.





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

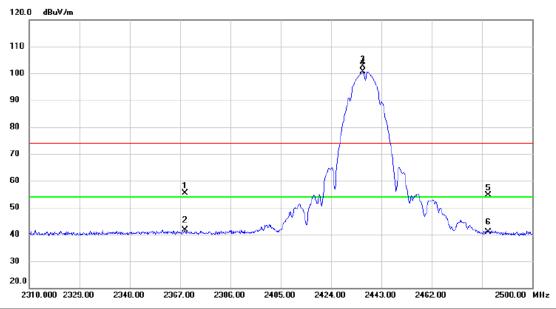




- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



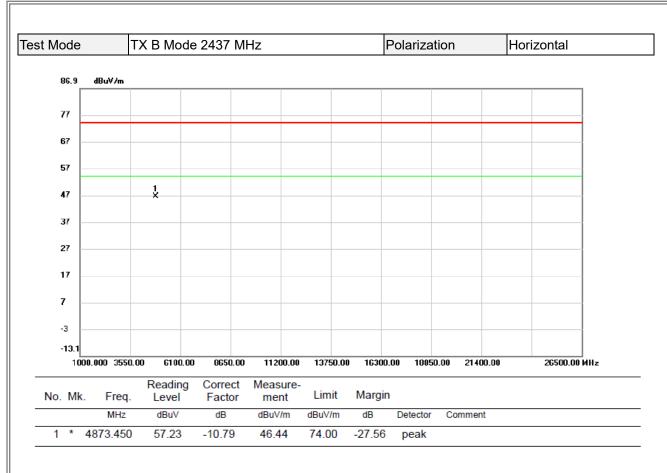




No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2368.995	23.48	31.78	55.26	74.00	-18.74	peak	
2		2368.995	9.77	31.78	41.55	54.00	-12.45	AVG	
3	Χ	2436.160	70.98	31.71	102.69	74.00	28.69	peak	No limit
4	*	2436.160	68.83	31.71	100.54	54.00	46.54	AVG	No limit
5		2483.500	23.02	31.72	54.74	74.00	-19.26	peak	
6		2483.500	9.19	31.72	40.91	54.00	-13.09	AVG	

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

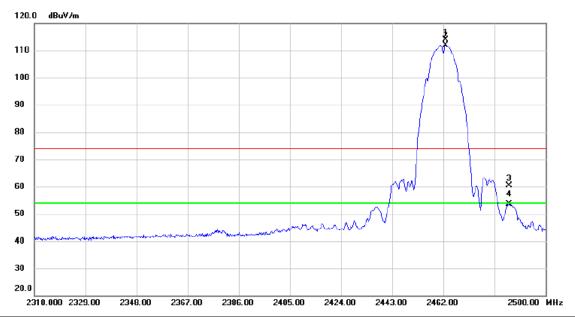




- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





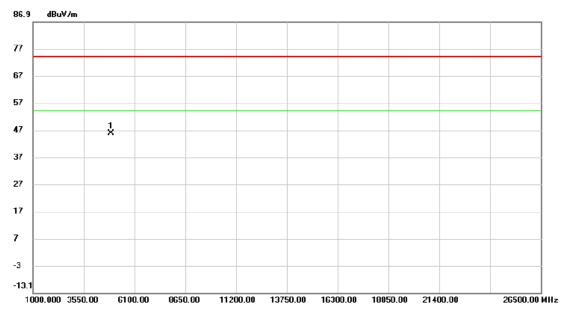


No.	Mŀ	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Χ	2462.950	82.14	31.72	113.86	74.00	39.86	peak	No limit
2	*	2462.950	80.22	31.72	111.94	54.00	57.94	AVG	No limit
3		2486.320	28.60	31.71	60.31	74.00	-13.69	peak	
4		2486.320	21.88	31.71	53.59	54.00	-0.41	AVG	

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





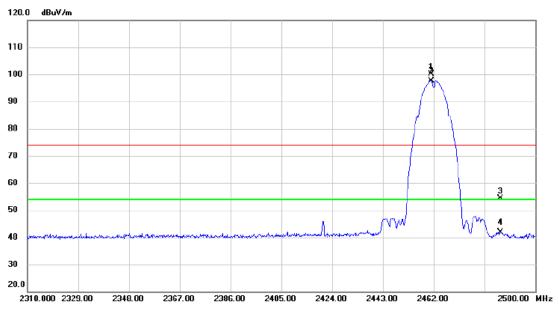


No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.450	56.28	-10.62	45.66	74.00	-28.34	peak	

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



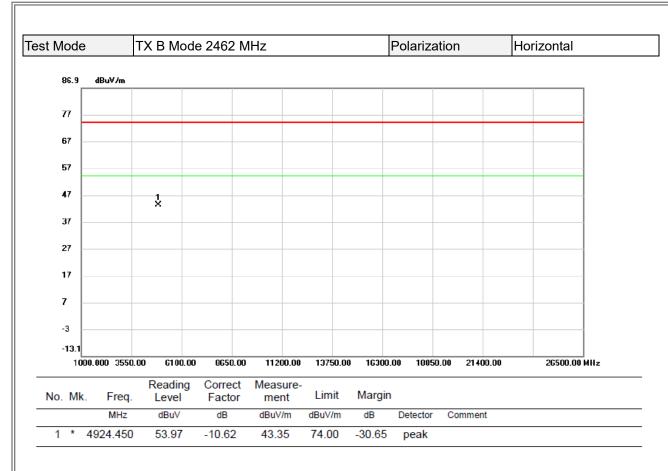




No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2461.240	68.43	31.72	100.15	74.00	26.15	peak	No limit
2	*	2461.240	66.01	31.72	97.73	54.00	43.73	AVG	No limit
3		2486.985	22.64	31.71	54.35	74.00	-19.65	peak	
4		2486.985	10.23	31.71	41.94	54.00	-12.06	AVG	

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

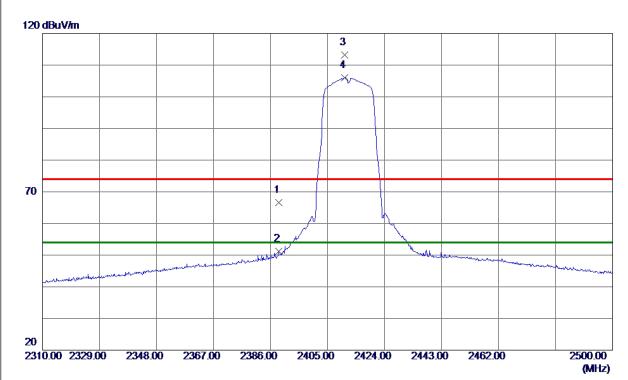




- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



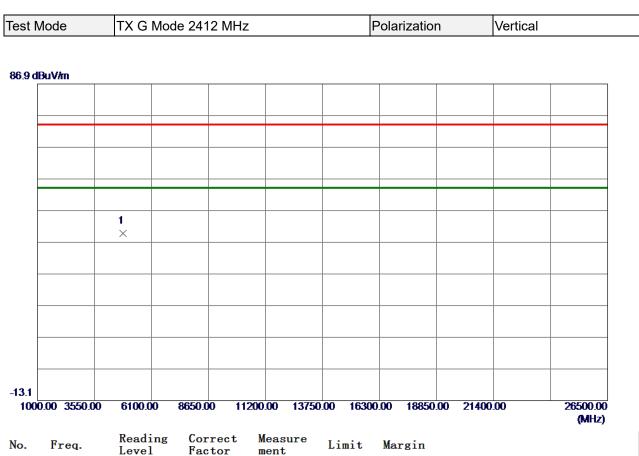




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388. 7549	34. 78	31.74	66. 52	74.00	-7.48	Peak	
2	2388. 7549	19. 44	31.74	51. 18	54.00	-2.82	AVG	
3	2410.6050	81. 50	31. 72	113. 22	74.00	39. 22	Peak	No limit
4 *	2410.6050	74. 28	31. 72	106.00	54.00	52.00	AVG	No limit

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



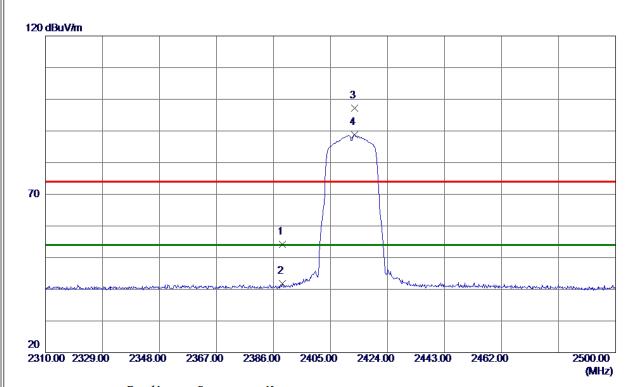


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4824.0000	50.64	-10. 91	39. 73	74.00	-34.27	Peak		

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



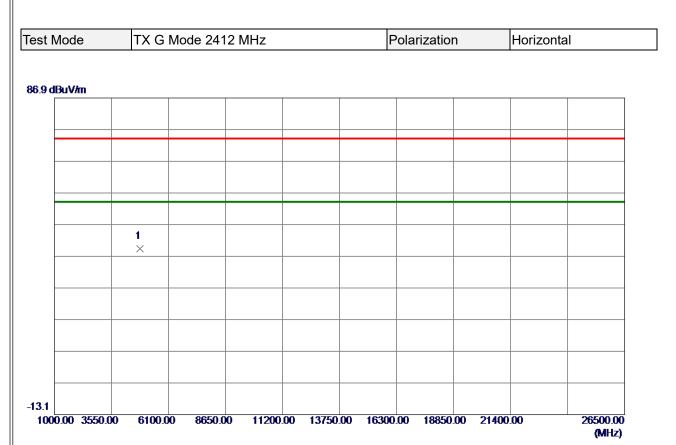




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388. 9450	22.42	31.74	54. 16	74.00	-19.84	Peak	
2	2388.9450	10.02	31.74	41.76	54.00	-12.24	AVG	
3	2412. 9800	65. 39	31.72	97.11	74.00	23. 11	Peak	No limit
4 *	2412. 9800	57. 05	31.72	88. 77	54.00	34.77	AVG	No limit

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

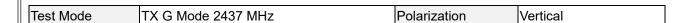


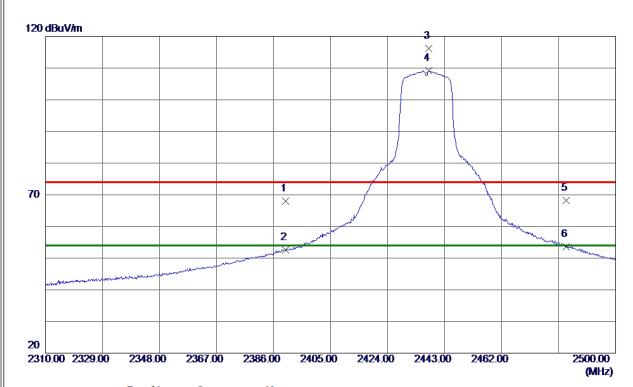


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4824 000	0 50 30	-10. 91	39 39	74 00	-34 61	Peak		

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



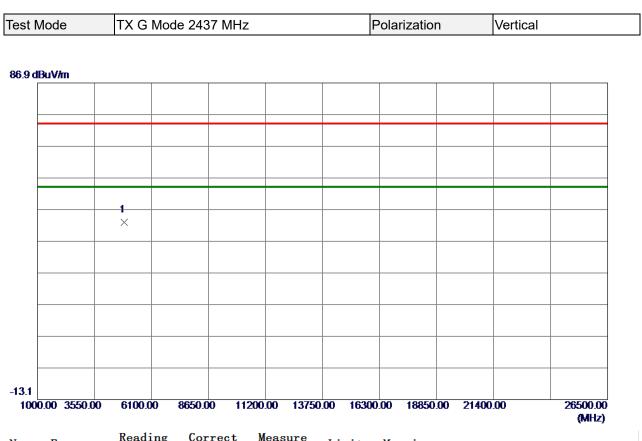




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	36. 20	31.74	67.94	74.00	-6. 06	Peak	
2	2390.0000	20.94	31.74	52. 68	54.00	-1. 32	AVG	
3	2437.7750	84. 43	31. 72	116. 15	74.00	42. 15	Peak	No limit
4 *	2437.7750	77.47	31. 72	109. 19	54.00	55. 19	AVG	No limit
5	2483. 5000	36. 54	31.71	68. 25	74.00	-5. 75	Peak	
6	2483. 5000	21. 95	31.71	53. 66	54.00	-0.34	AVG	

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



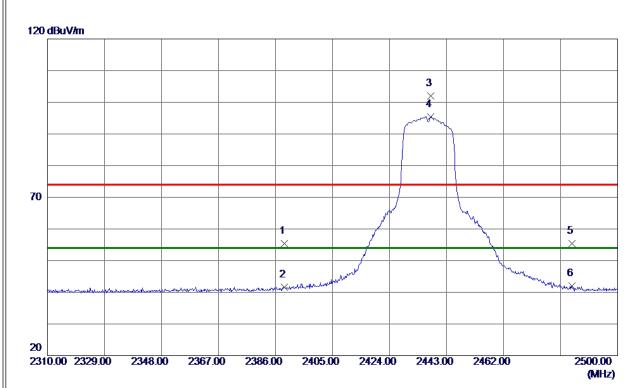


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4874 7250	53 68	-10 79	42.89	74 00	-31 11	Peak		

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



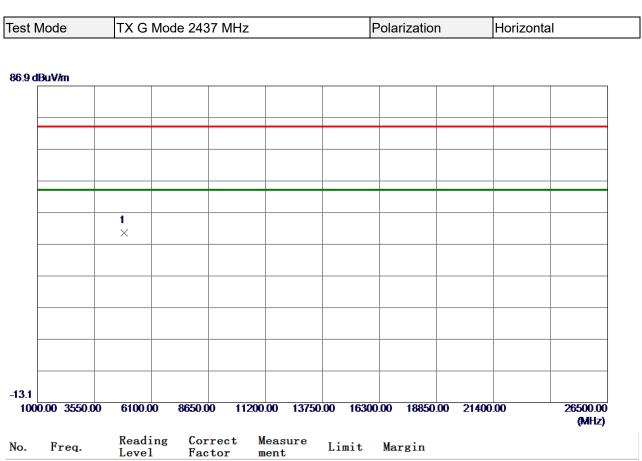




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389. 0400	23.74	31.74	55. 48	74.00	-18. 52	Peak	
2	2389.0400	9. 91	31.74	41.65	54.00	-12. 35	AVG	
3	2437.7750	70. 22	31.72	101.94	74.00	27.94	Peak	No limit
4 *	2437.7750	63.77	31.72	95. 49	54.00	41.49	AVG	No limit
5	2484.8000	23. 60	31.71	55. 31	74.00	-18.69	Peak	
6	2484.8000	10. 29	31.71	42.00	54.00	-12.00	AVG	

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



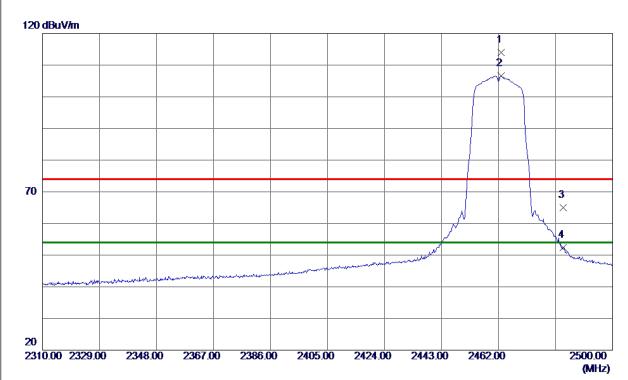


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4874 000	0 51 34	-10.79	40 55	74 00	-33 45	Peak		

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



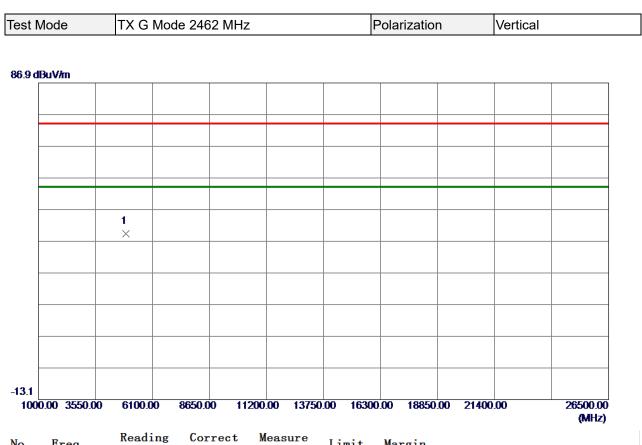




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2462.8550	82. 39	31.71	114. 10	74.00	40.10	Peak	No limit
2 *	2462.8550	74.85	31.71	106. 56	54.00	52. 56	AVG	No limit
3	2483. 5000	33. 22	31.71	64. 93	74.00	-9. 07	Peak	
4	2483. 5000	20. 67	31.71	52. 38	54.00	-1.62	AVG	

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



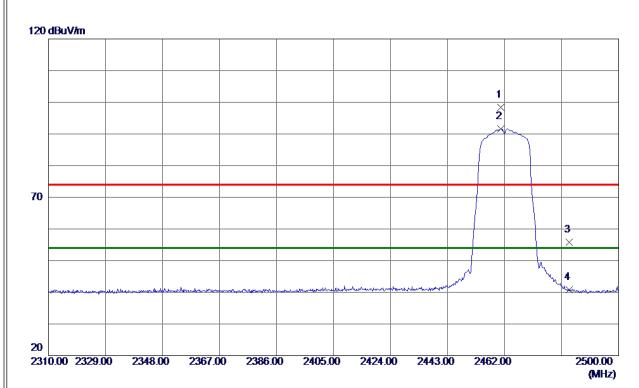


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4924 000	0 49 98	-10.63	39, 35	74 00	-34 65	Peak		

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



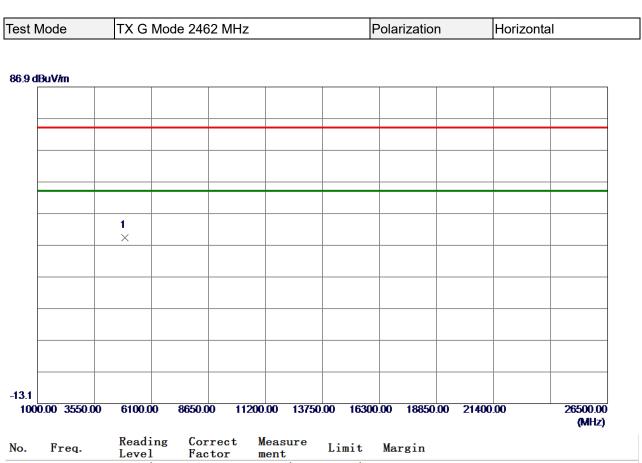




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460.6700	66. 68	31.71	98. 39	74.00	24.39	Peak	No limit
2 *	2460.6700	59. 90	31.71	91.61	54.00	37.61	AVG	No limit
3	2483. 5000	24.04	31.71	55. 75	74.00	-18. 25	Peak	
4	2483. 5000	9. 13	31.71	40.84	54.00	-13. 16	AVG	

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



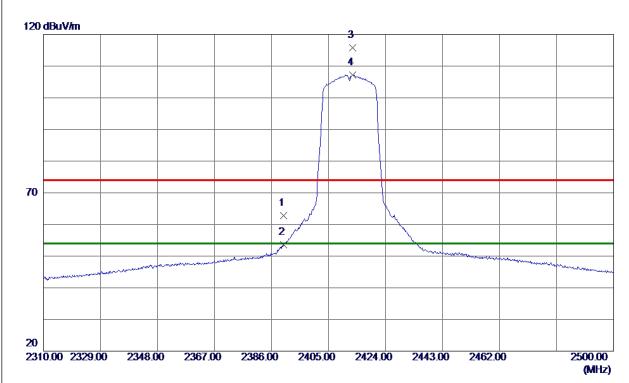


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924. 0000	49. 96	-10.63	39. 33	74.00	-34.67	Peak	

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



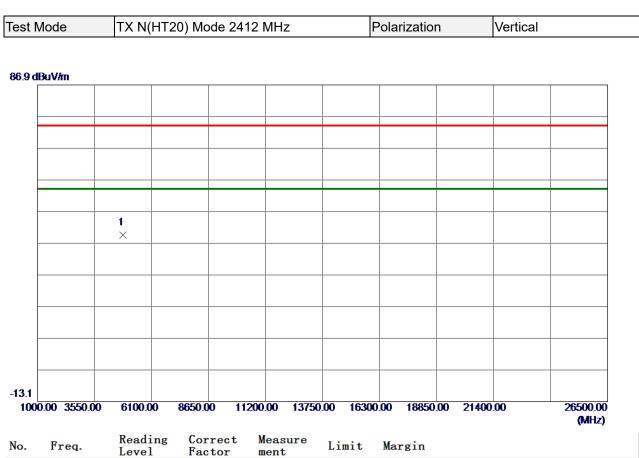




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	31. 12	31. 74	62.86	74.00	-11. 14	Peak	
2	2390.0000	21. 95	31.74	53. 69	54.00	-0.31	AVG	
3	2413. 0750	83. 98	31.72	115. 70	74.00	41.70	Peak	No limit
4 *	2413.0750	75. 54	31. 72	107. 26	54.00	53. 26	AVG	No limit

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

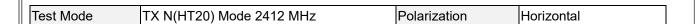


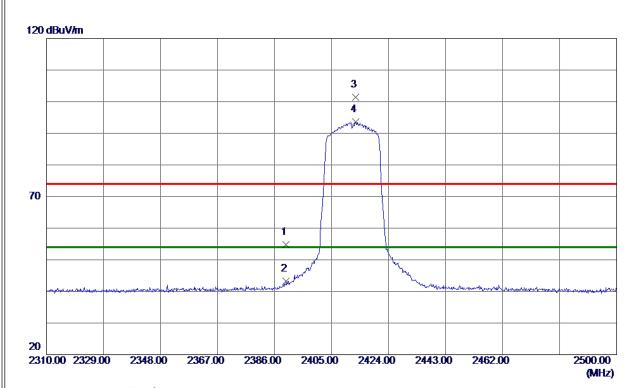


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824 000	0 50 47	-10. 91	39 56	74. 00	-34 44	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389.8000	23. 09	31.74	54.83	74.00	-19. 17	Peak	
2	2389.8000	11.42	31.74	43. 16	54.00	-10.84	AVG	
3	2412.9800	69. 69	31.72	101.41	74.00	27.41	Peak	No limit
4 *	2412. 9800	61.82	31.72	93. 54	54.00	39. 54	AVG	No limit

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



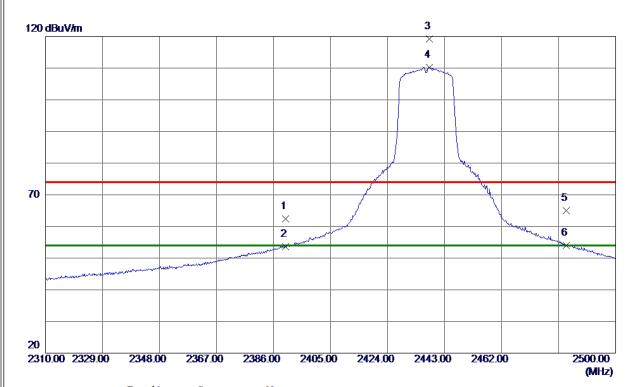
Test Mode TX N(HT20) Mo				12 MHz	Polarization Horizontal				
6.9 dB	uV/m								
L									
		1							
$\vdash$		X							
L									
3.1									
1000.	.00 3550.00	6100.00	8650.00 11	200.00 1375	0.00 1630	0.00 18850	0.00 21400.00	26500.00 (MHz)	
0.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	

No.	Freq.	Level	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824.0000	48. 58	-10. 91	37.67	74.00	-36. 33	Peak	

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



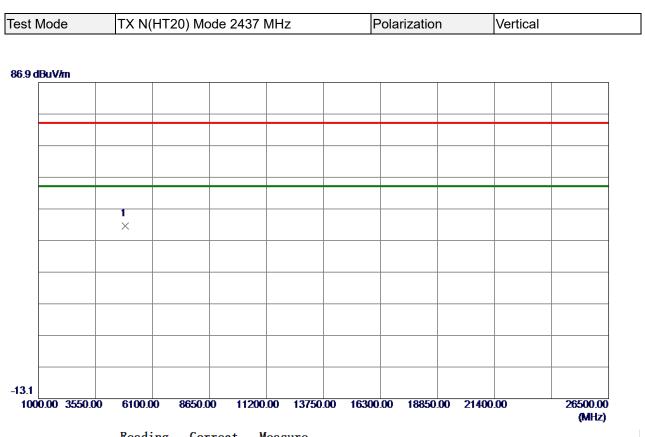




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390.0000	30.65	31.74	62. 39	74.00	-11.61	Peak	
2	2390.0000	21.83	31.74	53. 57	54.00	-0.43	AVG	
3	2437.8700	87.47	31.72	119. 19	74.00	45. 19	Peak	No limit
4 *	2437.8700	78. 57	31.72	110. 29	54.00	56. 29	AVG	No limit
5	2483. 5000	33. 21	31.71	64. 92	74.00	-9.08	Peak	
6	2483. 5000	22. 24	31.71	53. 95	54.00	-0.05	AVG	

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

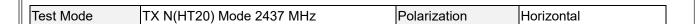


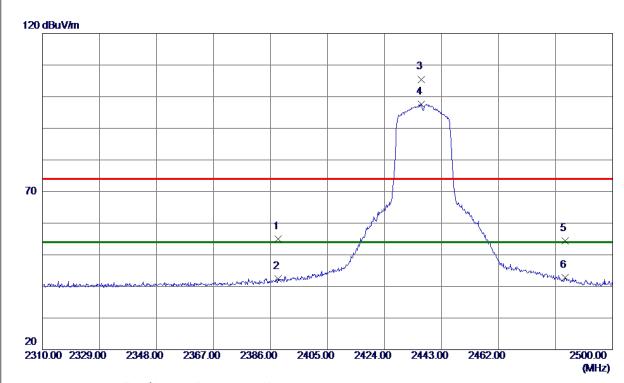


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0000	52. 21	-10.79	41.42	74.00	-32. 58	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388. 5650	23. 29	31.74	<b>55.03</b>	74.00	-18. 97	Peak	
2	2388. 5650	10.68	31.74	42.42	54.00	-11.58	AVG	
3	2436. 2549	73. 78	31.72	105. 50	74.00	31. 50	Peak	No limit
4 *	2436. 2549	65. 91	31.72	97.63	54.00	43.63	AVG	No limit
5	2484. 2300	22.72	31.71	54.43	74.00	-19. 57	Peak	
6	2484. 2300	11. 17	31.71	42.88	54.00	-11. 12	AVG	

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

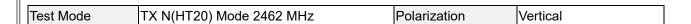


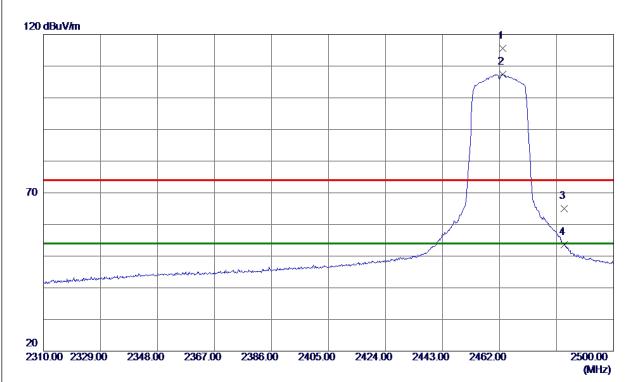
t Mode	TX N(H	T20) Mode	2437 MH	Z	Pola	Polarization Horiz		izontal	
dBuV/m									
	1 ×								
	^								
1									
000.00 3550.00	6100.00	8650.00	11200.00	13750.00	16300.00	18850.00	21400.00	26500.00 (MHz)	

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4874, 000	0 51, 35	-10.79	40. 56	74. 00	-33, 44	Peak		

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



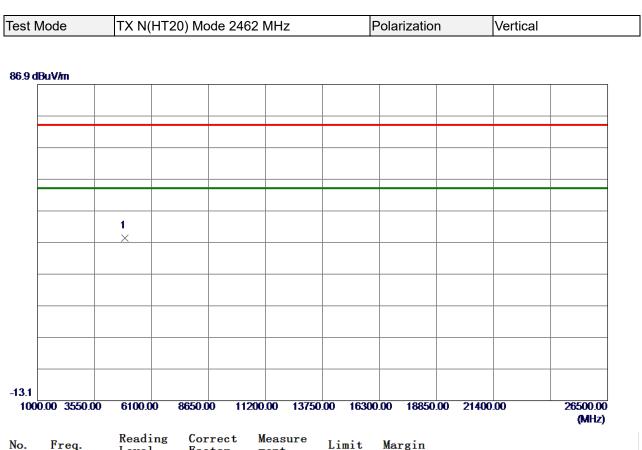




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2463.0450	83. 95	31.71	115.66	74.00	41.66	Peak	No limit
2 *	2463. 0450	75. 75	31.71	107.46	54.00	53.46	AVG	No limit
3	2483. 5000	33. 34	31.71	65. 05	74.00	-8. 95	Peak	
4	2483. 5000	21. 89	31. 71	53. 60	54. 00	-0.40	AVG	

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



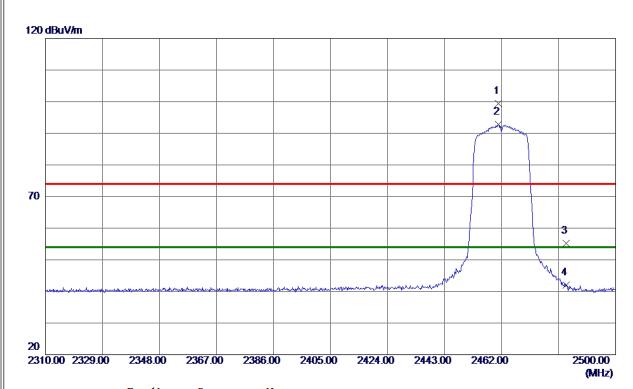


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	4924, 0000	48. 92	-10.63	38, 29	74.00	-35, 71	Peak		

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2460.9550	67.69	31.71	99. 40	74.00	25. 40	Peak	No limit
2 *	2460.9550	61.07	31.71	92. 78	54.00	38. 78	AVG	No limit
3	2483.5000	23. 51	31.71	55. 22	74.00	-18.78	Peak	
4	2483. 5000	10. 34	31.71	42.05	54.00	-11. 95	AVG	

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

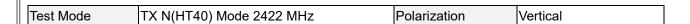


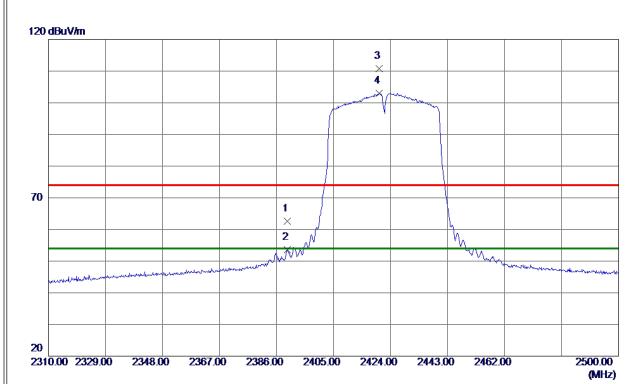
t Mode	TX N(HT	20) Mode 24		Polarizatio	n	Horizon	tal	
dBuV/m								
	1 ×							
1								
000.00 3550.0	00 6100.00	8650.00 1	1200.00 1375	0.00 1630	0.00 18850	0.00 2140	0.00	26500.00 (MHz)
Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			

No.	Freq.	Keading Level	Correct Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924. 0000	49. 24	-10.63	38. 61	74.00	-35. 39	Peak	

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



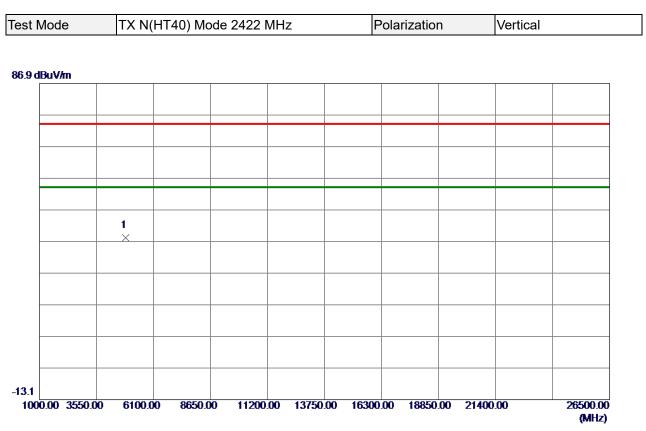




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389. 6100	30.86	31.74	62.60	74.00	-11.40	Peak	
2	2389. 6100	21.87	31.74	53. 61	54.00	-0.39	AVG	
3	2420. 2950	79. 09	31.72	110.81	74.00	36.81	Peak	No limit
4 *	2420. 2950	71. 31	31. 72	103. 03	54.00	49. 03	AVG	No limit

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



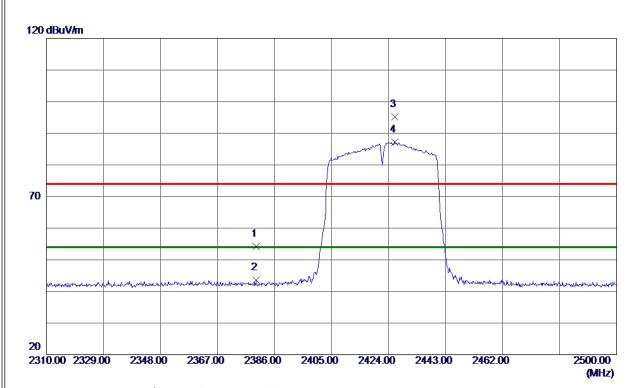


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4844, 0000	48. 92	-10, 86	38, 06	74. 00	-35, 94	Peak	

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



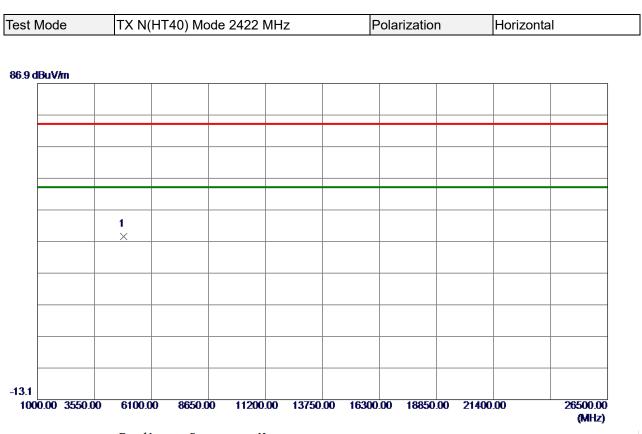




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2379.8250	22.43	31.76	54. 19	74.00	-19.81	Peak	
2	2379.8250	11. 79	31.76	43. 55	54.00	-10.45	AVG	
3	2426. 0900	63. 45	31.72	95. 17	74.00	21. 17	Peak	No limit
4 *	2426. 0900	55. 47	31. 72	87. 19	54.00	33. 19	AVG	No limit

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

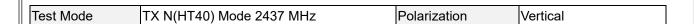


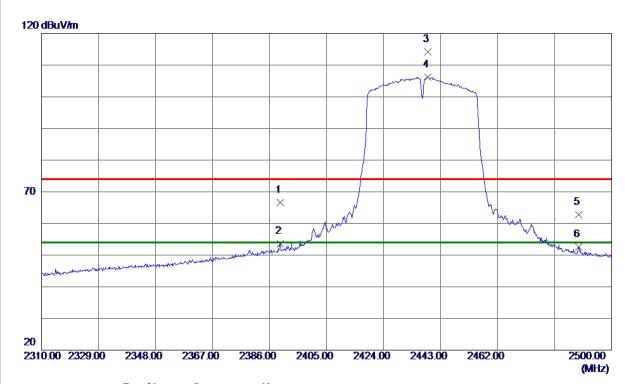


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4844, 0000	49.45	-10, 86	38, 59	74.00	-35, 41	Peak	

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



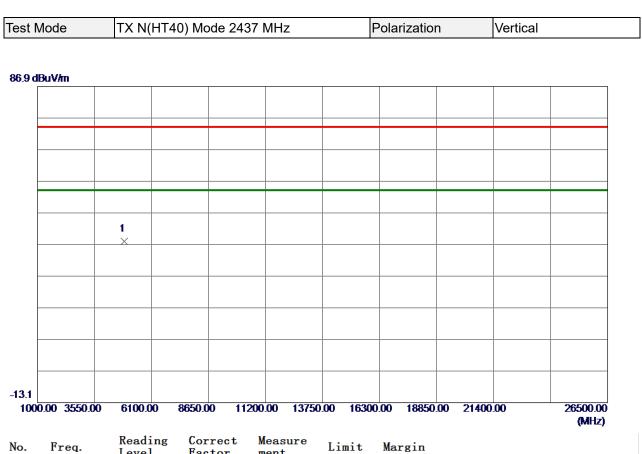




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389.6100	34.80	31. 74	66. 54	74.00	-7.46	Peak	
2	2389.6100	21.87	31.74	53. 61	54.00	-0.39	AVG	
3	2438.8200	82. 39	31. 72	114. 11	74.00	40. 11	Peak	No limit
4 *	2438.8200	74. 50	31.72	106. 22	54.00	52. 22	AVG	No limit
5	2489.0750	31. 09	31.71	62.80	74.00	-11. 20	Peak	
6	2489.0750	20. 90	31.71	52. 61	54.00	-1. 39	AVG	

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

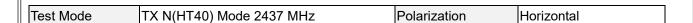


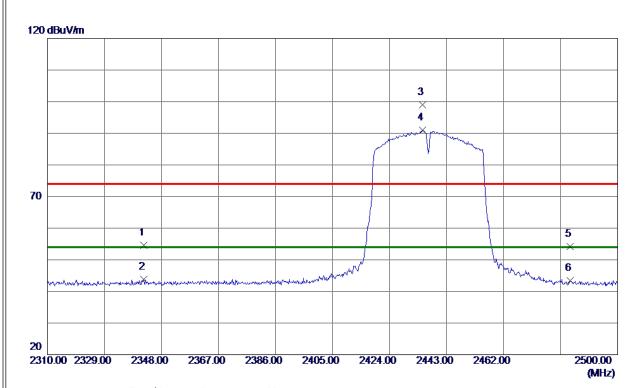


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0000	48.72	-10.79	37. 93	74.00	-36. 07	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2342. 1100	22.82	31.83	54.65	74.00	-19. 35	Peak	
2	2342. 1100	11.91	31.83	43.74	54.00	-10. 26	AVG	
3	2435. 0200	67. 19	31.72	98. 91	74.00	24.91	Peak	No limit
4 *	2435. 0200	59. 20	31.72	90. 92	54.00	36. 92	AVG	No limit
5	2484. 1350	22.41	31.71	54. 12	74.00	-19.88	Peak	
6	2484. 1350	11.73	31.71	43.44	54.00	-10. 56	AVG	

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

26500.00 (MHz)

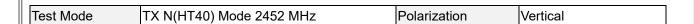


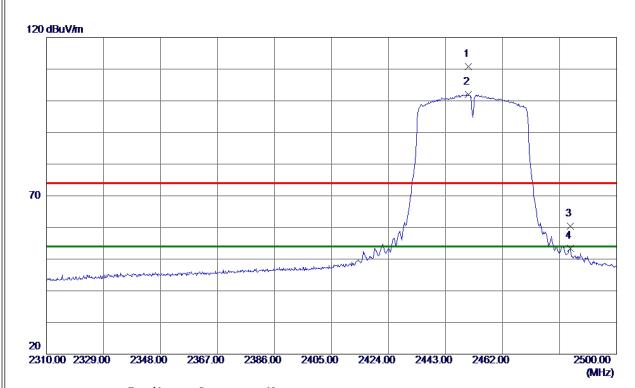
est Mode	TX N(HT	40) Mode	2437 MF	lz	F	olarizatio	n	Horizonta	ıl
86.9 dBuV <i>l</i> m									
	1								
	×								
3.1   1000.00   3550.	00 6100.00	8650.00	11200.00	13750.	00 16300	.00 18850	.00 21400		26500.00

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0000	49.83	-10.79	39. 04	74.00	-34.96	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2450. 5049	79. 18	31.71	110.89	74.00	36. 89	Peak	No limit
2 *	2450. 5049	70. 25	31.71	101.96	54.00	47.96	AVG	No limit
3	2484. 5149	28. 62	31.71	60. 33	74.00	-13.67	Peak	
4	2484. 5149	21.60	31.71	53. 31	54.00	-0. 69	AVG	

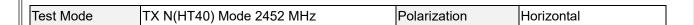
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

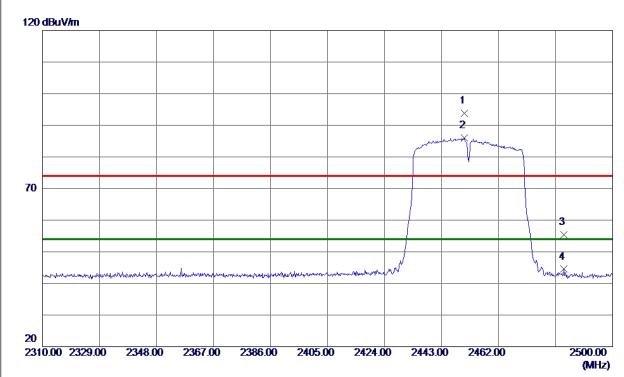


st M	lode	TX N(HT	40) Mode 2	452 MHz		Polariz	Verti	cal		
Q dE	∃uV/m									
Jul	жит									
H										
Г										
$\vdash$										
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t										
-										
		1								
-		×								
1										
000	0.00 3550.00	6100.00	8650.00	11200.00 1	3750.00 1630	0.00 1	8850.00	21400	.00	26500.00
										(MHz)
	Freq.	Reading Level	Correct Factor	Measur ment	e Limit	Marg	in			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	I	Detecto	r	Comment
ķ	4904. 000		-10. 72	38. 35	74. 00	-35.		Peak		Comment

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2450. 5049	62.02	31.71	93.73	74.00	19.73	Peak	No limit
2 *	2450. 5049	54. 27	31.71	85. 98	54.00	31. 98	AVG	No limit
3	2483. 6600	23. 77	31.71	55. 48	74.00	-18. 52	Peak	
4	2483. 6600	12. 79	31.71	44. 50	54.00	-9. 50	AVG	

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

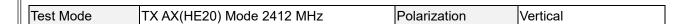


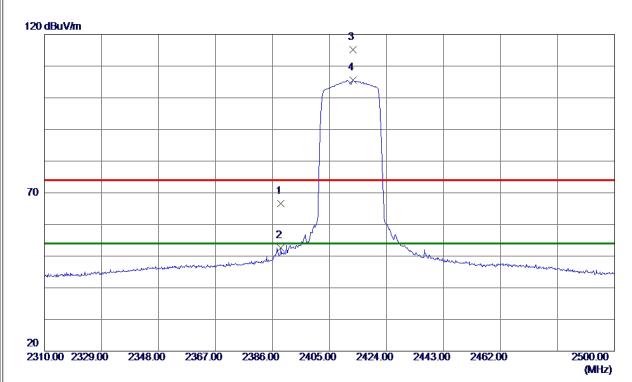
st M	1ode	TX N(HT4	10) Mode 24	52 MHz		Polarizatio	on	Horizo	ntal
9 dE	3uV/m								
-									
		1							
		×							
-									
F									
.1	0.00 3550.00	6100.00	8650.00 11	200.00 1375	0.00 1630	0.00 1005	0.00 2440	10.00	26500.00
JUU	00.0006 00.0	0100.00	0000.00 11	200.00 1373	0.00 1030	0.00 1885	U.UU 214U	00.00	20300.00 (MHz)
	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detect	or C	omment

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4904.0000	49. 37	-10.72	38. 65	74.00	-35. 35	Peak	

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



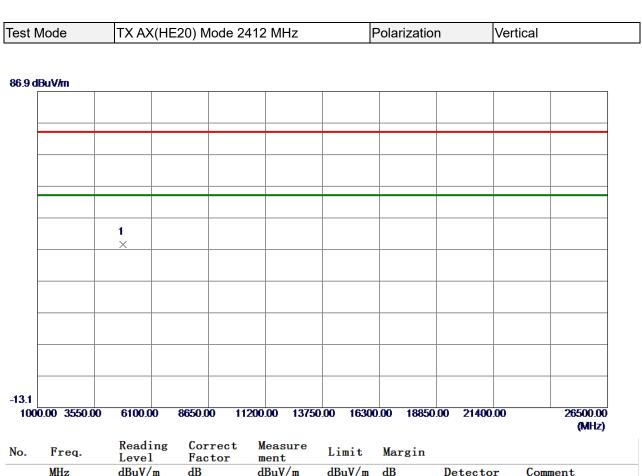




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2388.8500	34.89	31. 74	66. 63	74.00	-7. 37	Peak	
2	2388.8500	20.89	31.74	52.63	54.00	-1. 37	AVG	
3	2412. 8850	83.44	31.72	115. 16	74.00	41. 16	Peak	No limit
4 *	2412.8850	73. 80	31. 72	105. 52	54.00	51. 52	AVG	No limit

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

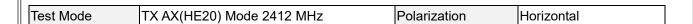


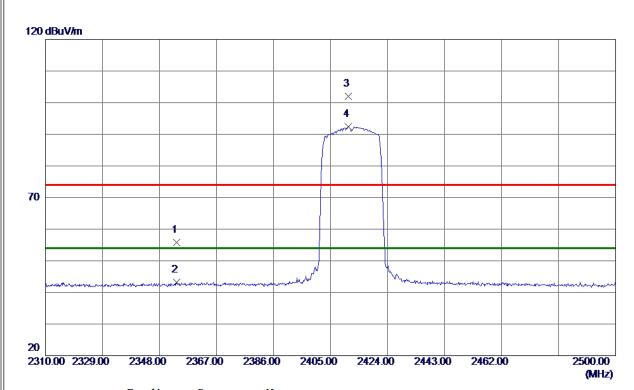


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4824.0000	49. 47	-10. 91	38. 56	74.00	-35.44	Peak	

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



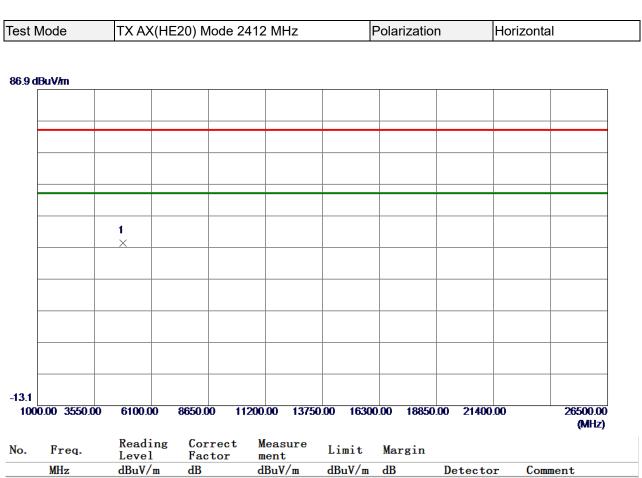




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2353.6050	24.02	31.81	55.83	74.00	-18. 17	Peak	
2	2353.6050	11.48	31.81	43. 29	54.00	-10.71	AVG	
3	2410. 9850	70. 23	31.72	101.95	74.00	27.95	Peak	No limit
4 *	2410. 9850	60. 69	31.72	92.41	54.00	38. 41	AVG	No limit

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



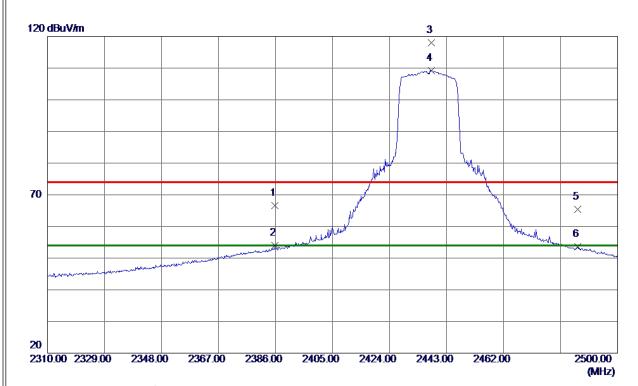


No.	Freq.	Level	Factor	measure ment	Limit	Margin			
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
1 *	<b>4824.00</b>	00 49. 18	-10. 91	38. 27	74.00	-35. 73	Peak		

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2385.8100	34.81	31.75	66. 56	74.00	<b>-7.44</b>	Peak	
2	2385.8100	22. 20	31.75	53. 95	54.00	-0.05	AVG	
3	2437.9650	86. 20	31.72	117.92	74.00	43.92	Peak	No limit
4 *	2437.9650	77. 56	31.72	109. 28	54.00	55. 28	AVG	No limit
5	2486.7000	33.77	31.71	65. 48	74.00	-8. 52	Peak	
6	2486. 7000	21.86	31.71	53. 57	54.00	-0.43	AVG	

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

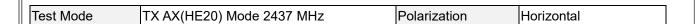


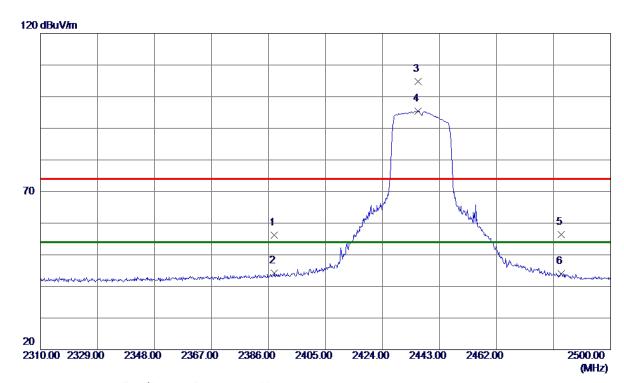
st Mode	!	TX AX(HE20) Mode 2437 MHz						Polari	ization		Vertical	
6.9 dBuV/m	1											
		_										
		1 ×										
3.1 1000.00 :	3550 00	6100.0	0 8650	00 1	1200.00	13750.	00 1630	0.00	18850.0	0 21400	0.00	26500.00
		2.25.0		<b>-</b> •							<del>-</del>	(MHz)
o. Fr	ea.	Readi	ng Co	rrect	Meas		Limit	Mar	gin			
107		Level		ctor	ment		in II/			<b>D</b>		

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874. 0000	50. 22	-10. 79	39. 43	74.00	-34. 57	Peak	

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



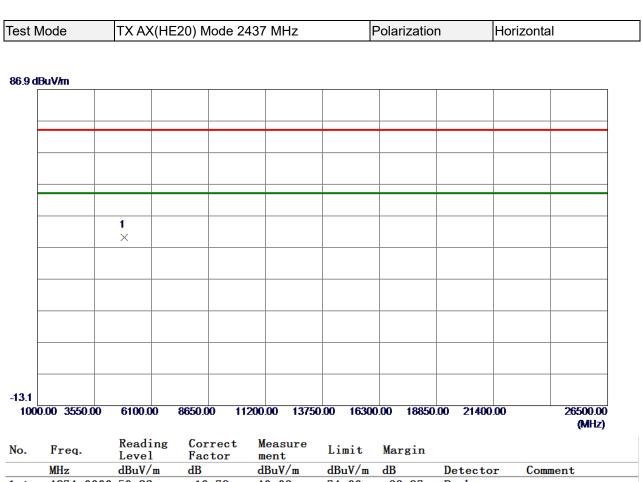




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2387.9000	24. 52	31.74	56. 26	74.00	-17.74	Peak	
2	2387.9000	12.40	31.74	44.14	54.00	-9.86	AVG	
3	2435.8750	73. 13	31.72	104.85	74.00	30.85	Peak	No limit
4 *	2435.8750	63.76	31.72	95. 48	54.00	41.48	AVG	No limit
5	2483. 5000	24.63	31.71	56. 34	74.00	-17.66	Peak	
6	2483. 5000	12. 24	31.71	43. 95	54.00	-10.05	AVG	

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



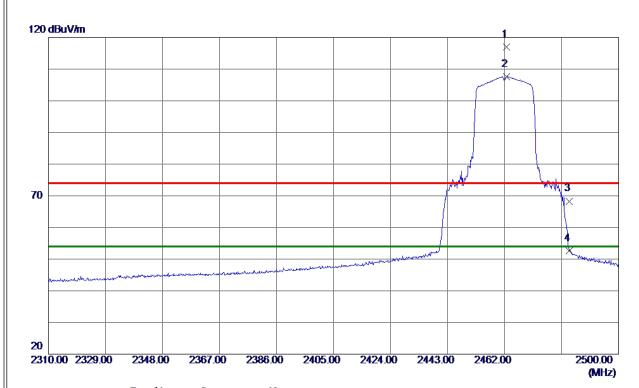


		revei	ractor	ment		_		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0000	50.82	-10.79	40.03	74.00	-33. 97	Peak	

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



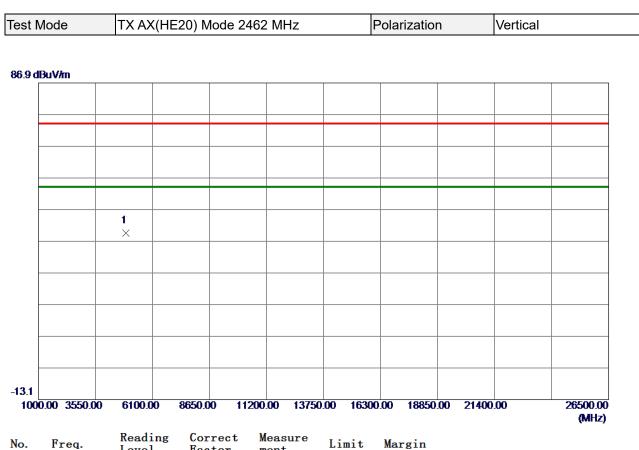




Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2462.6650	85. 22	31.71	116. 93	74.00	42.93	Peak	No limit
2462.6650	75. 93	31.71	107.64	54.00	53.64	AVG	No limit
2483.5000	36. 59	31.71	68. 30	74.00	-5. 70	Peak	
2483. 5000	20. 92	31.71	52.63	54.00	-1. 37	AVG	
	MHz 2462. 6650 2462. 6650 2483. 5000	Freq. Level	Hreq. Level Factor MHz dBuV/m dB 2462.6650 85.22 31.71 2462.6650 75.93 31.71 2483.5000 36.59 31.71	MHz         dBuV/m         dB         dBuV/m           2462.6650 85.22         31.71         116.93           2462.6650 75.93         31.71         107.64           2483.5000 36.59         31.71         68.30	MHz         dBuV/m         dB         dBuV/m         dBuV/m           2462.6650 85.22         31.71         116.93         74.00           2462.6650 75.93         31.71         107.64         54.00           2483.5000 36.59         31.71         68.30         74.00	MHz         dBuV/m         dB         dBuV/m         dB         dBuV/m         dB           2462.6650         85.22         31.71         116.93         74.00         42.93           2462.6650         75.93         31.71         107.64         54.00         53.64           2483.5000         36.59         31.71         68.30         74.00         -5.70	MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector           2462.6650 85.22         31.71         116.93         74.00         42.93         Peak           2462.6650 75.93         31.71         107.64         54.00         53.64         AVG           2483.5000 36.59         31.71         68.30         74.00         -5.70         Peak

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



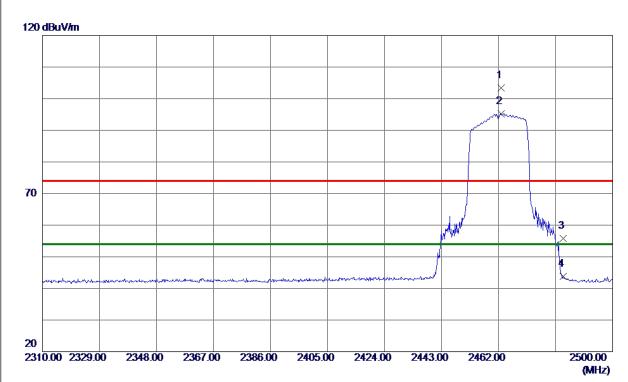


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924 0000	50 18	-10 63	39, 55	74. 00	-34 45	Peak	

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



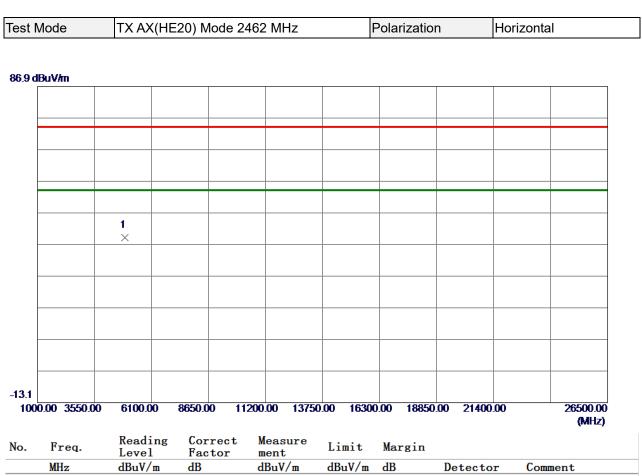




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2462.8550	71.66	31.71	103. 37	74.00	29. 37	Peak	No limit
2 *	2462. 8550	63. 57	31.71	95. 28	54.00	41.28	AVG	No limit
3	2483. 5000	24. 03	31.71	55. 74	74.00	-18. 26	Peak	
4	2483. 5000	12. 09	31. 71	43. 80	54.00	-10. 20	AVG	

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



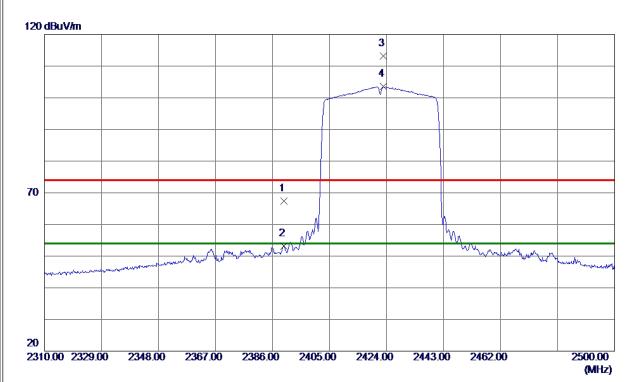


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4924.0000	49.65	-10.63	39. 02	74.00	-34.98	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2389. 7050	35. 65	31.74	67. 39	74.00	-6. 61	Peak	
2	2389. 7050	21.49	31.74	53. 23	54.00	-0.77	AVG	
3	2422. 9550	81.45	31.72	113. 17	74.00	39. 17	Peak	No limit
4 *	2422. 9550	71.81	31. 72	103. 53	54. 00	49. 53	AVG	No limit

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



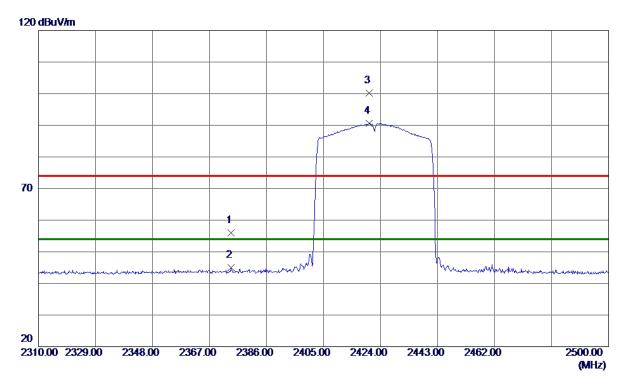
est N	Mode	TX AX(H	IE40) Mode	2422 MHz		Polarizat	ion	n Vertical		
6 O 4	BuV/m									
9.8 U	DUVIII									
ŀ										
-										
		1								
ŀ		X								
Ì										
-										
13.1										
	0.00 3550.0	0 6100.00	8650.00	11200.00 1	3750.00 163	00.00 188	50.00 21	400.00	26500.00 (MHz)	
lo.	Freq.	Reading Level	Correc Factor	t Measument	re Limit	Margin	1			
	MHz	dBuV/m	dB	dBuV/n	ı dBuV/n	n dB	Detec	tor	Comment	

No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4844.0000	49.63	-10.86	38.77	74.00	-35. 23	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2374. 1250	24. 15	31.77	55. 92	74.00	-18.08	Peak	
2	2374. 1250	13. 20	31.77	44.97	54.00	-9.03	AVG	
3	2420. 2000	68. 42	31.72	100. 14	74.00	26. 14	Peak	No limit
4 *	2420. 2000	58. 92	31. 72	90. 64	54.00	36. 64	AVG	No limit

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

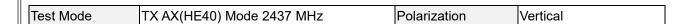


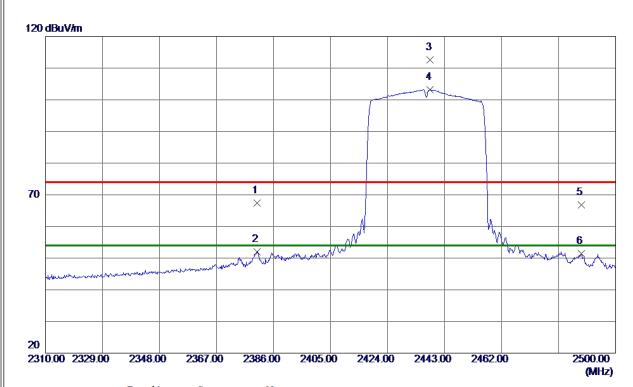
Test Mode TX		TX AX(HE	40) Mode 2	422 MHz		Polarization Horizontal				
36.9 dE	BuV/m									
L										
Γ										
F										
L										
		1 ×								
-		×								
-										
-13.1										
	0.00 3550.00	6100.00	8650.00 11	200.00 13750	0.00 1630	0.00 18850	.00 21400.00	26500.00 (MHz)		
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin				
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment		

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4844.0000	50. 78	-10.86	39. 92	74.00	-34. 08	Peak	

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



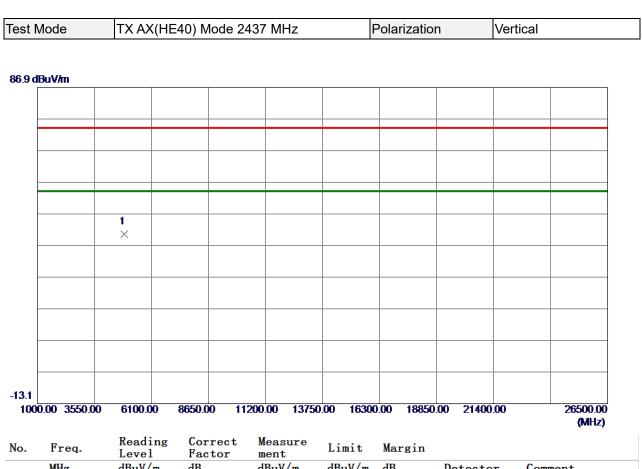




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2380. 4900	35. 73	31. 76	67.49	74.00	-6. 51	Peak	
2	2380. 4900	20. 25	31. 76	52. 01	54.00	-1.99	AVG	
3	2438. 2500	80. 96	31.72	112.68	74.00	38. 68	Peak	No limit
4 *	2438. 2500	71. 52	31.72	103. 24	54.00	49. 24	AVG	No limit
5	2488.6000	35. 13	31.71	66.84	74.00	-7. 16	Peak	
6	2488. 6000	19. 67	31.71	51. 38	54.00	-2.62	AVG	

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



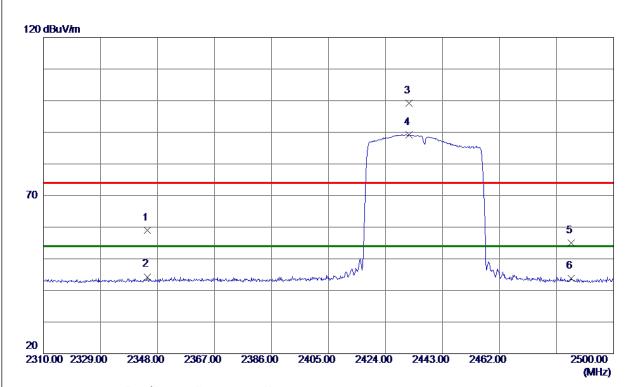


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0000	51. 38	-10.79	40. 59	74.00	-33. 41	Peak	

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







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2344. 5800	27. 26	31.83	59. 09	74.00	-14.91	Peak	
2	2344. 5800	12. 47	31.83	44. 30	54.00	-9.70	AVG	
3	2431.7900	67. 51	31.72	99. 23	74.00	25. 23	Peak	No limit
4 *	2431.7900	57. 53	31.72	89. 25	54.00	35. 25	AVG	No limit
5	2485.8450	23. 34	31.71	<b>55. 0</b> 5	74.00	-18.95	Peak	
6	2485. 8450	12. 04	31.71	43. 75	54.00	-10. 25	AVG	

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



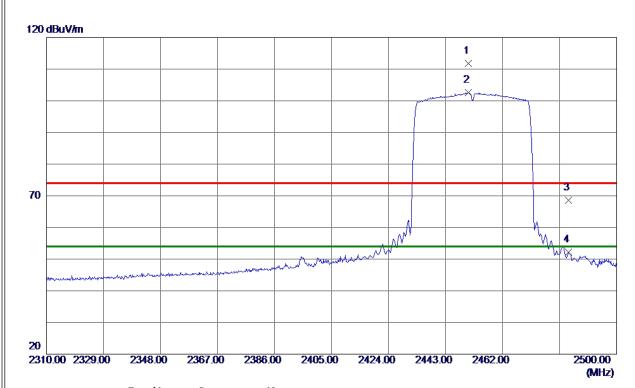
t Mode		TX AX(F	IE40) Mode 2	2437 MHz		Polarizatio	n Hoi	rizontal
9 d <u>B</u> uV/m	1							
		1 ×						
.1								
000.00	3550.00	6100.00	8650.00 1	1200.00 13750	0.00 1630	0.00 18850	.00 21400.00	26500.00 (MHz)
Fre	eq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
MH2		dBuV/m	dB -10 79	dBuV/m	dBuV/m	dB -35, 28	Detector	Comment

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4874.0000	49. 51	-10.79	38. 72	74.00	-35. 28	Peak	

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



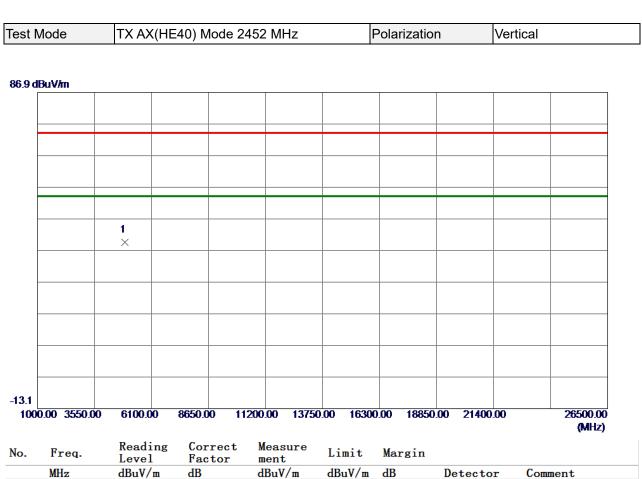




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2450.6950	80.09	31.71	111.80	74.00	37.80	Peak	No limit
2 *	2450.6950	70.87	31.71	102. 58	54.00	48. 58	AVG	No limit
3	2484.0400	36. 97	31.71	68. 68	74.00	-5. 32	Peak	
4	2484.0400	20. 55	31.71	52. 26	54.00	-1.74	AVG	

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



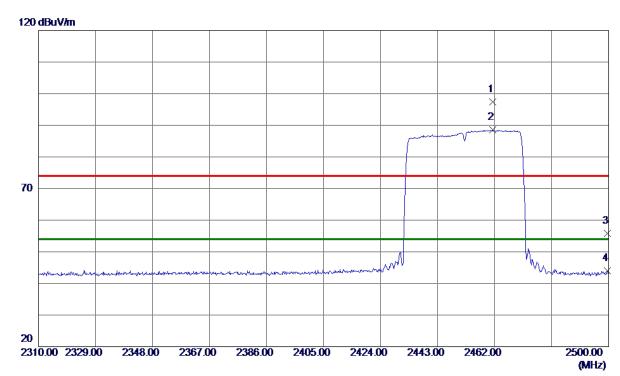


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4904.0000	50. 13	-10.72	39.41	74.00	-34. 59	Peak	

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



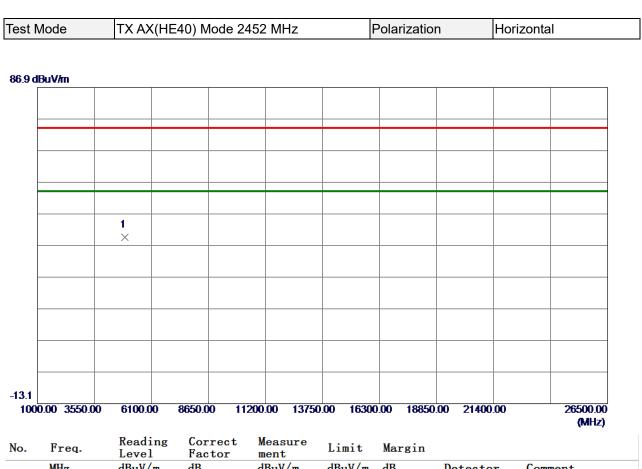




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2461. 4300	65. 77	31.71	97.48	74.00	23.48	Peak	No limit
2 *	2461. 4300	56.86	31.71	88. 57	54.00	34. 57	AVG	No limit
3	2499. 5250	24. 15	31.71	55. 86	74.00	-18. 14	Peak	
4	2499. 5250	12. 38	31.71	44. 09	54.00	-9. 91	AVG	

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





No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4904.0000	50 24	-10.72	39, 52	74 00	-34, 48	Peak	

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

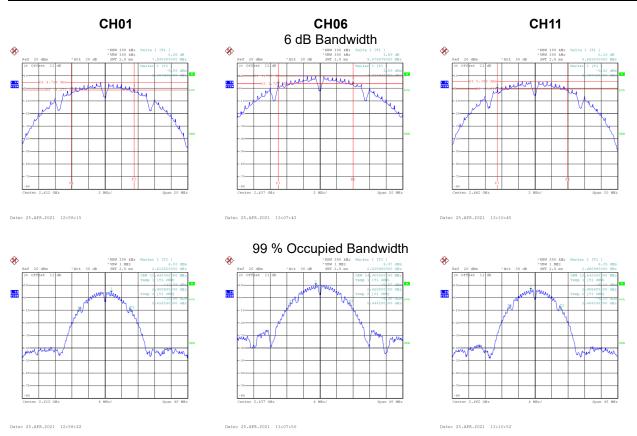


APPENDIX E - BANDWIDTH



Test Mode	TX B Mode
TOST IVIOUS	I A D MOGC

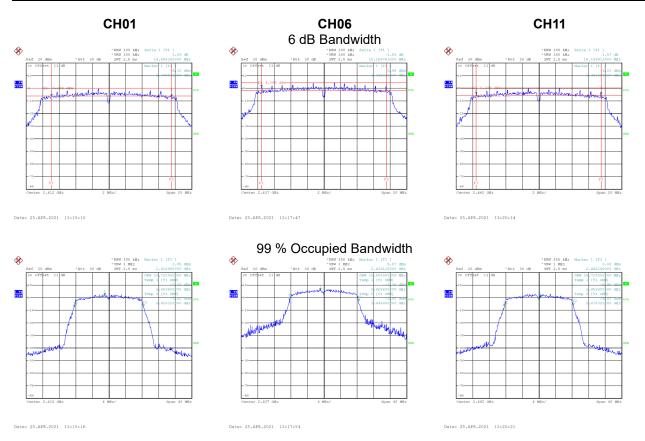
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	7.59	12.64	0.5	Complies
06	2437	9.08	14.40	0.5	Complies
11	2462	8.56	12.64	0.5	Complies





Test Mode	TX G Mode
163t Mode	

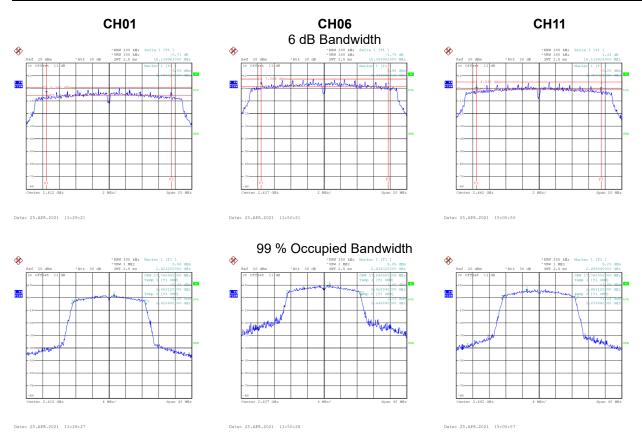
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	14.558	16.720	0.5	Complies
06	2437	15.160	16.800	0.5	Complies
11	2462	15.160	16.720	0.5	Complies





Test Mode	TX N(HT20)	) Mode
100t Wodo	177 14(11120	, iviouc

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	15.140	17.760	0.5	Complies
06	2437	15.390	17.840	0.5	Complies
11	2462	15.120	17.760	0.5	Complies





Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
03	2422	35.240	36.320	0.5	Complies
06	2437	35.200	36.480	0.5	Complies
09	2452	35.190	36.160	0.5	Complies

