





# **FCC Radio Test Report**

FCC ID: 2BH7FC615F

This report concerns: Original Grant

**Project No.** : 2508C331

**Equipment**: Battery-Powered Floodlight Pan/Tilt Security Camera

Brand Name : tp-link
Model Name : Tapo C615F

**Applicant**: TP-Link Systems Inc.

Address : 10 Mauchly, Irvine, CA 92618

**Manufacturer**: TP-Link Systems Inc.

Address : 10 Mauchly, Irvine, CA 92618

Date of Receipt : Aug. 21, 2025

**Date of Test** : Aug. 21, 2025 ~ Sep. 04, 2025

**Issued Date** : Sep. 16, 2025

**Test Sample** : Engineering Sample No.: DG9202508213 for conducted,

DG9202508212 others

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

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

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Report Version: R00

#### **Declaration**

**B**TL 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 assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

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**BTL**'s laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 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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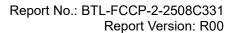




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# **REVISION HISTORY**

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2508C331	R00	Original Report.	Sep. 16, 2025	Valid



Report Version: R00

#### 1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standard:

ANSI C63.10-2020

The following reference test guidance is not within the scope of accreditation of A2LA: KDB 558074 D01 15.247 Meas Guidance v05r02

# 2. 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.



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#### 2.1 TEST FACILITY

1# For Radiated Emissions – Above 30 MHz test items:

The test facilities used to collect the test data in this report is at the location of Room 102 & 702, Building A3, No.9, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

#### 2# For other test items:

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

#### 2.2 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 95.45% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

#### A. AC power line conducted emissions Measurement:

Test Site	Method	Measurement Frequency Range	<i>U</i> ,(dB)
DGDLC02	CISPR	150kHz ~ 30MHz	1.82

#### B. Radiated emissions Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)
DGDLCB03	CISPR	9kHz ~ 30MHz	2.26

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
		30MHz ~ 200MHz	V	4.40
DGGDCB01	30MHz ~ 200MHz	Н	3.10	
(3m)	CISPR	200MHz ~ 1,000MHz	V	5.20
		200MHz ~ 1,000MHz	Н	4.68

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB19	1GHz ~ 6GHz	4.48	
(3m)	CISPR	6GHz ~ 18GHz	3.88

Test Site	Method	Measurement Frequency Range	U,(dB)
DGGDCB01 (1m)	CISPR	18 ~ 26.5 GHz	3.56





C. Other Measurement:

Test Item	Uncertainty
Bandwidth	0.90 %
Maximum Output Power	1.3 dB
Conducted Spurious Emission	1.9 dB
Power Spectral Density	1.4 dB
Temperature	0.8 °C
Humidity	2.2 %

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

# 2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
AC Power Line Conducted Emissions	23°C	53%	AC 120V/60Hz	Hayden Chen	Sep. 02, 2025
Radiated Emissions -9kHz to 30 MHz	24°C	52%	AC 120V/60Hz	Hayden Chen	Sep. 03, 2025
Radiated Emissions -30MHz to 1000MHz	21°C	44%	AC 120V/60Hz	Lafu Li	Sep. 01, 2025
Radiated Emissions	21°C	44%	AC 120V/60Hz	Lafu Li	Aug. 28, 2025
-Above 1000MHz	21°C	44%	AC 120V/60Hz	Lafu Li	Sep. 04, 2025
Bandwidth	26°C	49%	AC 120V/60Hz	Jensen Zhou	Aug. 25, 2025
Maximum Output Power	22-24°C	52-54%	AC 120V/60Hz	Corey Liang	Aug. 22, 2025~ Aug. 29, 2025
Conducted Spurious Emissions	26°C	49%	AC 120V/60Hz	Jensen Zhou	Aug. 25, 2025
Power Spectral Density	26°C	49%	AC 120V/60Hz	Jensen Zhou	Aug. 25, 2025





3. GENERAL INFORMATION

# 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Battery-Powered Floodlight Pan/Tilt Security Camera
Brand Name	tp-link
Test Model	Tapo C615F
Model Name	Tapo C615F
Model Difference(s)	N/A
Hardware Version	1.0
Software Version	1.X
Power Source	1# DC Voltage supplied from AC adapter (support unit). 2# Supplied from battery. Model: CMICR18650F8 3# Supplied from solar panels.
Power Rating	1# 5V===2A, 10W 2# DC 3.7V 10400mAh 3# Max Voltage: 5.2V
Operation Frequency	2412 MHz ~ 2462 MHz
Modulation Type	IEEE 802.11b: DSSS IEEE 802.11g/n: OFDM
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 72.2 Mbps
Maximum Output Power	IEEE 802.11n(HT20): 21.57 dBm (0.1435 W)

#### Note:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

#### 2. Channel List:

	CH01 - CH11 for IEEE 802.11b, IEEE 802.11g, IEEE 802.11n(HT20)						
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. Table for Filed Antenna:

Ant.	Manufacturer	P/N	Antenna Type	Connector	Gain (dBi)
1	TP-Link Systems Inc.	Tapo C615F+ANT1	Dipole	N/A	1.90
2	TP-Link Systems Inc.	6035500079	PIFA	N/A	1.42

#### Note:

1) Smart antenna system with two transmit/receive chains, but operating in a mode where only one transmit/receive chain is used.





# 3.2 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(HT20) Mode Channel 06
Mode 5	TX B Mode Channel 01/02/06/10/11
Mode 6	TX G Mode Channel 01/02/06/10/11
Mode 7	TX N(HT20) Mode Channel 01/02/06/10/11

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 4 TX N(HT20) Mode Channel 06			

Radiated emissions test - Below 1GHz & Above 18 GHz		
Final Test Mode	Description	
Mode 4	TX N(HT20) Mode Channel 06	

Radiated emissions test - 1 GHz - 18 GHz		
Mode 5	TX B Mode Channel 01/02/06/10/11	
Mode 6	TX G Mode Channel 01/02/06/10/11	
Mode 7	TX N(HT20) Mode Channel 01/02/06/10/11	

Conducted test		
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	



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#### 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 IEEE 802.11n(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) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.
- (5) Both Ant. 1 and Ant. 2 have been evaluated and tested. the worst case is Ant.1 and recorded in this report.
- (6) For radiated emission 1 GHz 18GHz test, the polarization of Vertical and Horizontal are evaluated, the worst case is Vertical and recorded.

#### 3.3 PARAMETERS OF TEST SOFTWARE

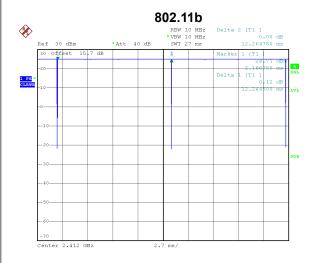
Test Software Version	Д	AmebaDPlus_MP_tool_1V	6
Frequency (MHz)	2412	2437	2462
IEEE 802.11b	114	121	117
IEEE 802.11g	101	120	116
IEEE 802.11n(HT20)	99	124	107





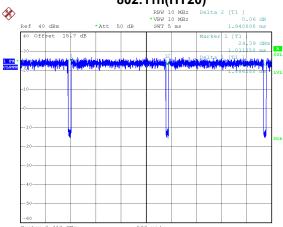
3.4 DUTY CYCLE

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.



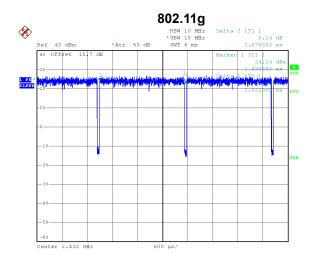
Date: 25.AUG.2025 17:25:03

Duty cycle = 12.245 ms / 12.265 ms = 99.84% Duty Factor = 10 log(1/Duty cycle) = 0.00 dB **802.11n(HT20)** 



Date: 25.AUG.2025 17:26:55

Duty cycle = 1.886 ms / 1.940 ms = 97.22% Duty Factor = 10 log(1/Duty cycle) = 0.12 dB



Date: 25.AUG.2025 17:26:36

Duty cycle = 2.022 ms / 2.076 ms = 97.40% Duty Factor = 10 log(1/Duty cycle) = 0.11 dB



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#### 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 495 Hz.

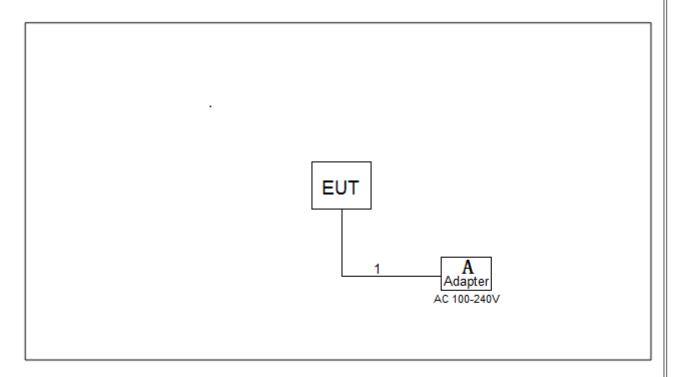
For IEEE 802.11n(HT20):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 530 Hz.

(Remark: The video bandwidth of the spectrum analyzer was set to 1kHz during the test.)



#### 3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



#### 3.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
Α	Adapter	DVE	DSA-10PF06-05FUS 050200	-

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.2m

#### 3.7 CUSTOMER INFORMATION DESCRIPTION

- 1) The antenna gain is provided by the manufacturer.
- 2) Except for AC power line conducted emissions and radiated emissions, the results of all test items include cable losses. Part of the cable losses (0.5dB) are provided by the manufacturer, while the other parts of the cable losses are provided by the testing laboratory.



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#### 4. AC POWER LINE CONDUCTED EMISSIONS

#### **4.1 LIMIT**

Frequency 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) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)

Margin Level = Measurement Value - Limit Value

#### **4.2 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:

The fellewing table is the cetting of the receiver.	
Receiver Parameters	Setting
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

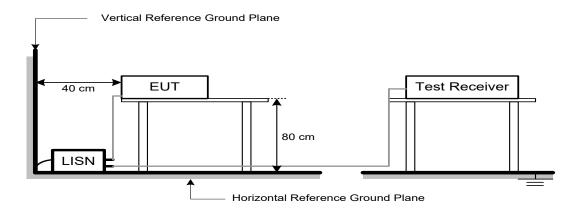
#### 4.3 DEVIATION FROM TEST STANDARD

No deviation.





4.4 TEST SETUP



# **4.5 EUT OPERATION CONDITIONS**

EUT was programmed to be in continuously transmitting mode.

# **4.6 TEST RESULTS**

Please refer to the APPENDIX A.

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#### 5. RADIATED EMISSIONS

#### **5.1 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)

Frequency (MHz)	Band edge/ Harmonic at 3m (dBµV/m)		Harmonic at	1m (dBμV/m)
1 3 ( )	Peak	Average	Peak	Average
Above 1000	74	54	83.5 (Note 5)	63.5 (Note 5)

#### 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) The test result calculated as following:

  Measurement Value = Reading Level + Correct Factor

  Correct Factor = Antenna Factor + Cable Loss Amplifier Gain(if use)

  Margin Level = Measurement Value Limit Value

$$FS_{\text{limit}} = FS_{\text{max}} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

20log ( $d_{limit}/d_{measure}$ )=20log (3/1)=9.5 dB.

FS<sub>limit</sub>: Harmonic at 3m Peak and Average limit.

FS<sub>max</sub>: Harmonic at 1m Peak and Average Maximum value.

d<sub>limit</sub>: Harmonic at 3m test distance. d<sub>measure</sub>: Harmonic Actual test distance.



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#### **5.2 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 or 1m 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 1GHz)
- 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

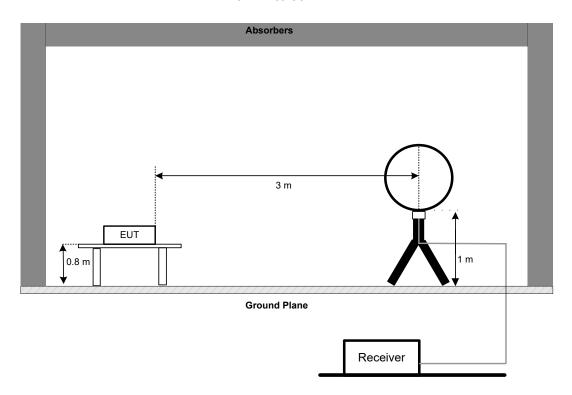


**5.3 DEVIATION FROM TEST STANDARD** 

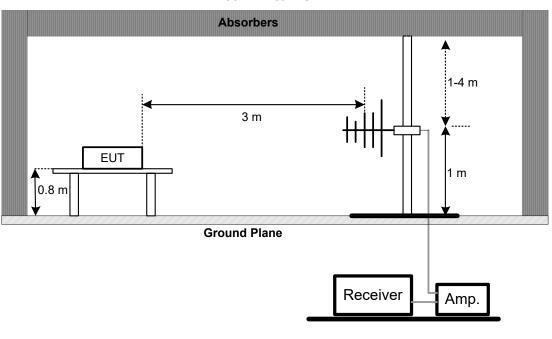
No deviation.

# **5.4 TEST SETUP**

9 kHz to 30 MHz

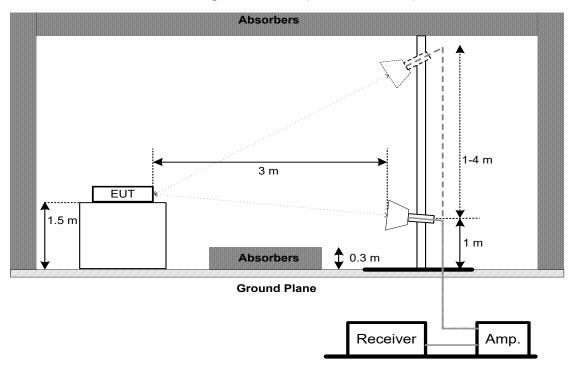


30 MHz to 1 GHz

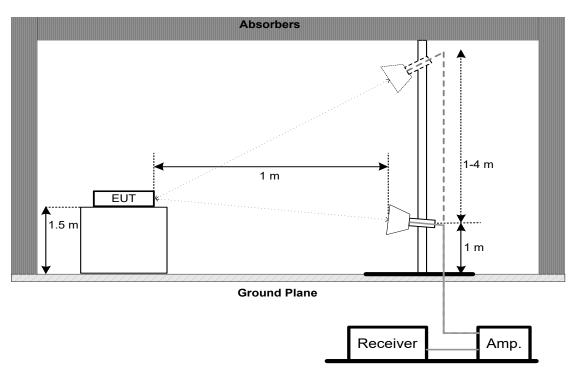




Above 1 GHz Band edge & Harmonic(1 GHz to 18 GHz)



# Harmonic(18 GHz to 26.5 GHz)





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#### 5.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 5.6 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.

#### 5.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

#### 5.8 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.



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#### 6. BANDWIDTH

#### **6.1 LIMIT**

Section	Test Item	Limit
FCC 15.247(a)(2)	6 dB Bandwidth	Minimum 500 kHz
	99% Emission Bandwidth	-

#### **6.2 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 GO DATIGWIGHT.	
Spectrum Parameters	Setting
Span	> Measurement Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### For 99% Emission Bandwidth:

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

#### **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 E.



Report Version: R00

#### 7. MAXIMUM OUTPUT POWER

#### **7.1 LIMIT**

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

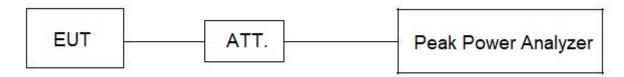
#### 7.2 TEST PROCEDURE

- a. The EUT was directly connected to the peak power analyzer 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 C63.10-2020 & ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024.

#### 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 F.



Report Version: R00

#### 8. CONDUCTED SPURIOUS EMISSIONS

#### **8.1 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.

#### **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:

For Reference Level:

Spectrum Parameters	Setting
Span	≥ 1.5 times the bandwidth.
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

For Emission Level - Band edge:

Spectrum Parameters	Setting
Start Frequency	2300 MHz
Stop Frequency	2690 MHz
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

### For Emission Level - Harmonic:

Spectrum Parameters	Setting
Start Frequency	30 MHz
Stop Frequency	26.5 GHz
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto





Report Version: R00

# 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 G.



Report Version: R00

# 9. POWER SPECTRAL DENSITY

#### **9.1 LIMIT**

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

#### 9.2 TEST PROCEDURE

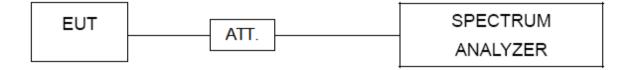
- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. The following table is the setting of the spectrum analyzer:

Spectrum Parameters	Setting		
Span	1.5 times the DTS bandwidth		
RBW	3 kHz		
VBW	10 kHz		
Detector	Peak		
Trace	Max Hold		
Sweep Time	Auto		

# 9.3 DEVIATION FROM STANDARD

No deviation.

#### 9.4 TEST SETUP



#### 9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 9.6 TEST RESULTS

Please refer to the APPENDIX H.





10. 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	Dec. 06, 2025		
2	TWO-LINE V-NETWORK	R&S	ENV216	101447	Dec. 06, 2025		
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A		
4	Cable	N/A	SFT205-NMNM-9M -001	9M	Nov. 11, 2025		
5	643 Shield Room	ETS	6*4*3	N/A	N/A		

	Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Active Loop Antenna	Schwarzbeck	FMZB 1513-60	00025	Mar. 01, 2026	
2	Receiver	Agilent	N9038A	MY52130039	Jan. 10, 2026	
3	Cable	RegalWay	LMR400-NMNM-6 m	N/A	Apr. 26, 2026	
4	Cable	RegalWay	LMR400-NMRANM -3.5m	N/A	Apr. 26, 2026	
5	966 Chamber room	CM	9*6*6	N/A	May 09, 2026	

	Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01381	Sep. 26, 2025	
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Sep. 26, 2025	
3	Preamplifier	EMC INSTRUMENT	EMC001330	980863	May 28, 2026	
4	Cable	EMC INSTRUMENT	EMCCFD400-NM-N M-2500	N/A	Jun. 12, 2026	
5	Cable	RegalWay	LMR400-NMNM-7 m	N/A	Jun. 12, 2026	
6	Cable	EMC INSTRUMENT	EMCCFD400-NM-N M-3000	N/A	Jun. 12, 2026	
7	Positioning Controller	MF	MF-7802	N/A	N/A	
8	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A	
9	MXE EMI Receiver	KEYSIGHT	N9038B	MY62210123	Oct. 29, 2025	
10	966 Chamber room	Tai He	9*6*6 (NSA&VSWR)	N/A	May 18, 2026	





Radiated Emissions - 1 GHz - 18 GHz Manufacturer Serial No. Calibrated until Item Kind of Equipment Type No. Positioning Controller MF-7802 MF N/A N/A EZ-EMC Measurement 2 Farad N/A N/A Software Ver.NB-03A1-01 3 **KEYSIGHT** MY63430227 Oct. 29, 2025 MXA Signal Analyzer N9020B EMC104-SM-SM-1 **EMC** 4 N/A Cable Jun. 12, 2026 INSTRUMENT 0000 EMC104-SM-SM-3 **EMC** 5 Cable N/A Jun. 12, 2026 INSTRUMENT 000 EMC104-SM-SM-1 **EMC** 6 Cable N/A Jun. 12, 2026 **INSTRUMENT** 000 7 966 Chamber room Tai He 9\*6\*6(NSA&VSWR) N/A May 18, 2026 Double Ridged **RF SPIN** 8 **Broadband Horn** DRH18-E 210106A18E Jul. 15, 2026 Antenna **EMC** 9 Preamplifier EMC118A45SE 981001 May 28, 2026 **INSTRUMENT** 10 Attenuator Talent Microwave TA10A2-S-18 N/A N/A ZHPF6-M3000-180 N/A 11 Filter COM-MW Oct. 29, 2025 00-174

	Radiated Emissions - Above 18 GHz						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Cable	RegalWay	RWLP50-2.6A-2.92 M2.92M-2M	N/A	Jan. 07, 2026		
2	Cable	RegalWay	RWLP50-2.6A-3.5 M2.92MMRA-6M	N/A	Jan. 07, 2026		
3	Preamplifier	EMC INSTRUMENT	EMC184045SE	980793	Jan. 10, 2026		
4	Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	0 1046	Jul. 18, 2026		
5	Positioning Controller	MF	MF-7802	N/A	N/A		
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A		
7	MXA Signal Analyzer	KEYSIGHT	N9020B	MY63430227	Oct.29,2025		
8	966 Chamber room	Tai He	9*6*6(NSA&VSWR)	N/A	May 18, 2026		

Bandwidth & Conducted Spurious Emissions & Power Spectral Density							
Item	Item Kind of Equipment Manufacturer Type No. Serial No. Calibrated un						
1	Spectrum Analyzer	R&S	FSP40	100185	May 17, 2026		
2	EXA Spectrum Analyzer	Keysight	N9010A	MY55150209	May 17, 2026		
3	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A		

	Maximum Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Peak Power Analyzer	Keysight	8990B	MY51000506	May 17, 2026		
2	Wideband power sensor	Keysight	N1923A	MY58310004	May 17, 2026		
3	Isolation attenuator	Z-Link	ASMA-10-18-2W	N/A	N/A		

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

All calibration period of equipment list is one year.



# 11. EUT TEST PHOTO

# **AC Power Line Conducted Emissions Test Photos**



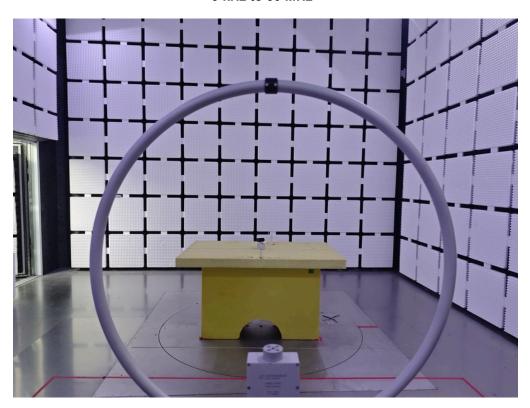


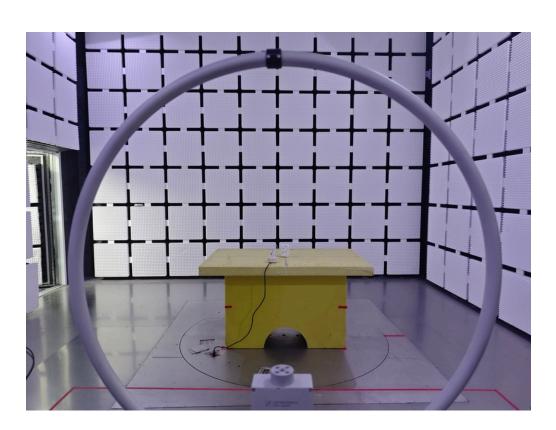




# **Radiated Emissions Test Photos**

# 9 kHz to 30 MHz



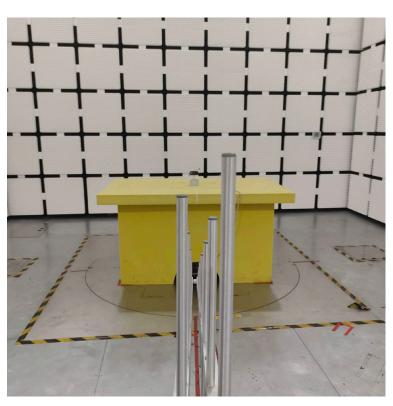






# **Radiated Emissions Test Photos**

# 30 MHz to 1 GHz



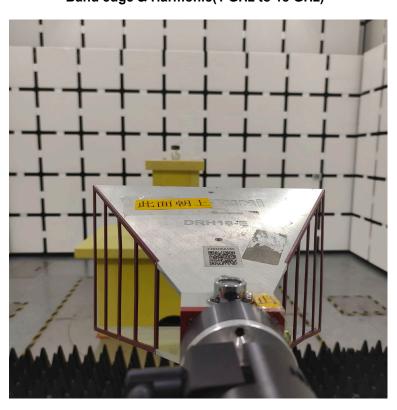


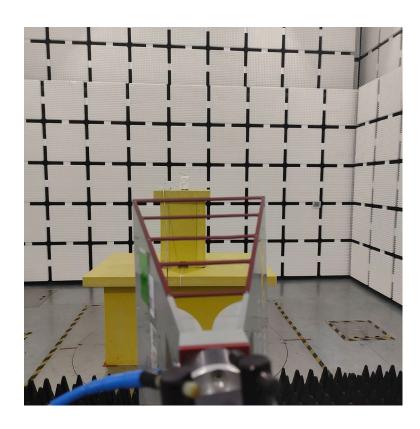




Radiated Emissions Test Photos

Band edge & Harmonic(1 GHz to 18 GHz)



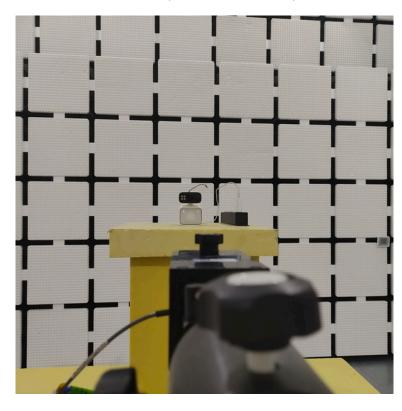


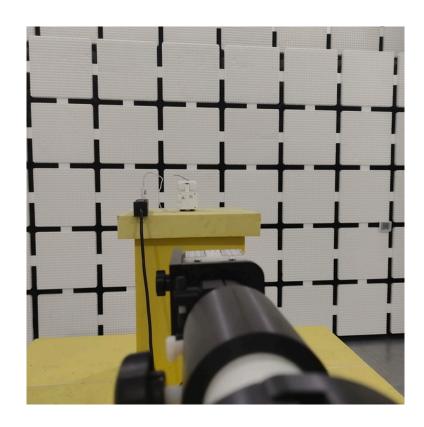




**Radiated Emissions Test Photos** 

# Harmonic(18 GHz to 26.5 GHz)

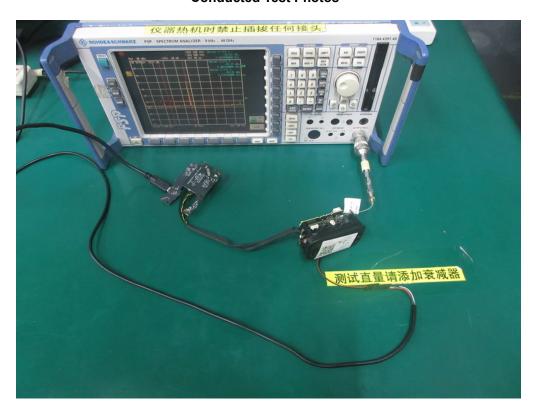


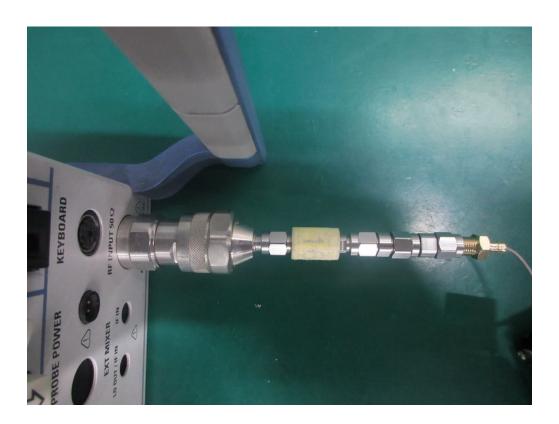






# **Conducted Test Photos**



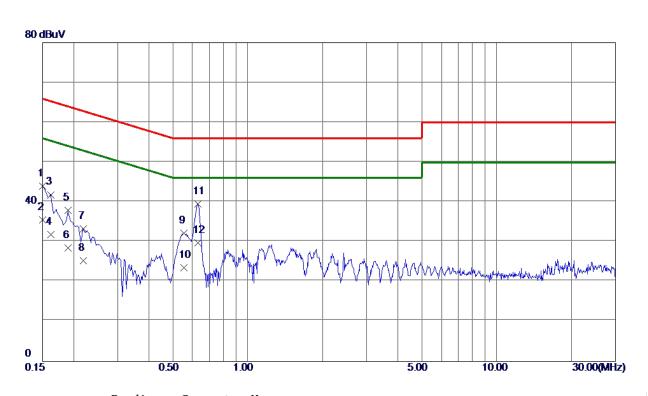




# **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**



TX N(HT20) Mode Channel 06 Phase Test Mode Line

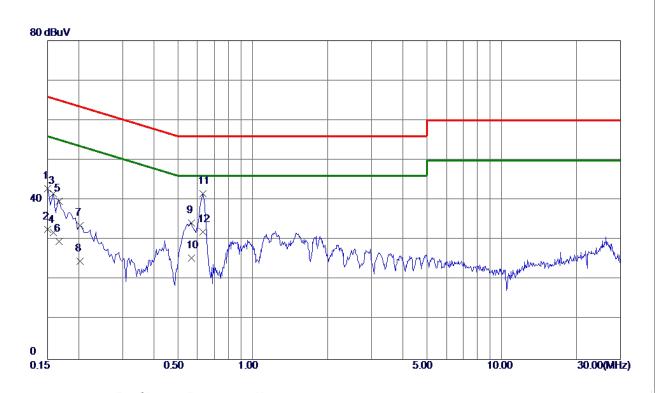


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1500	34. 11	9. 90	44. 01	66.00	-21. 99	QP	
2	0. 1500	25. 59	9. 90	35. 49	56.00	-20. 51	AVG	
3	0. 1620	31. 93	9. 91	41.84	65. 36	-23. 52	QP	
4	0. 1620	21. 91	9. 91	31. 82	55. 36	-23. 54	AVG	
5	0. 1900	27. 99	9. 91	37. 90	64. 04	-26. 14	QP	
6	0. 1900	18. 60	9. 91	28. 51	<b>54. 04</b>	-25. 53	AVG	
7	0. 2180	23. 32	9. 90	33. 22	62.89	-29. 67	QP	
8	0. 2180	15. 40	9. 90	25. 30	52.89	-27. 59	AVG	
9	0. 5540	22. 12	9. 97	32. 09	56.00	-23. 91	QP	
10	0. 5540	13. 51	9. 97	23. 48	46.00	-22. 52	AVG	
11	0.6300	29. 59	9. 98	39. 57	56.00	-16. 43	QP	
12 *	0.6300	19. 80	9. 98	29. 78	46.00	-16. 22	AVG	

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



TX N(HT20) Mode Channel 06 Phase Test Mode Neutral



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1500	32. 98	9. 97	42. 95	66.00	-23.05	QP	
2	0. 1500	22. 60	9. 97	32. 57	56.00	-23. 43	AVG	
3	0. 1580	31.62	9. 97	41. 59	65. 57	-23. 98	QP	
4	0. 1580	21.81	9. 97	31. 78	55. 57	-23. 79	AVG	
5	0. 1668	29. 75	9. 97	39. 72	<b>65</b> . 12	-25. 40	QP	
6	0. 1668	19. 60	9. 97	29. 57	55. 12	-25.55	AVG	
7	0. 2020	23.67	9. 97	33. 64	63. 53	-29. 89	QP	
8	0. 2020	14. 60	9. 97	24. 57	53. 53	-28. 96	AVG	
9	0. 5660	24. 25	10. 03	34. 28	56.00	-21. 72	QP	
10	0. 5660	15. 41	10. 03	25. 44	46.00	-20. 56	AVG	
11	0.6300	31.60	10. 04	41.64	56.00	-14. 36	QP	
12 *	0.6300	21. 89	10. 04	31. 93	46. 00	-14. 07	AVG	

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

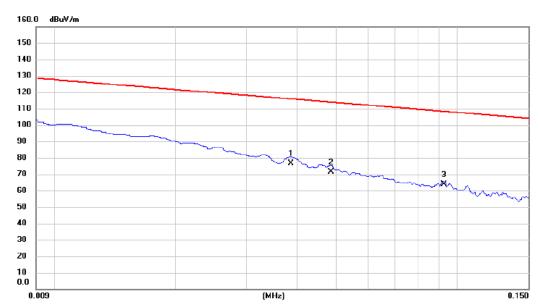


# **APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ**





Test Mode TX N(HT20) Mode Channel 06 Polarization Ant 0°



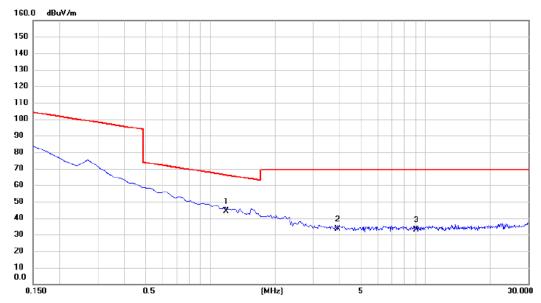
No. Mk.	Freq.			Measure- ment		Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	0.039	56.55	20.14	76.69	115.87	-39.18	AVG	
2	0.049	51.45	20.14	71.59	113.89	-42.30	AVG	
3	0.092	43.78	20.14	63.92	108.28	-44.36	QP	

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





Polarization Test Mode TX N(HT20) Mode Channel 06 Ant 0°



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	1.184	24.12	20.00	44.12	66.13	-22.01	QP	
2	3.911	13.22	20.12	33.34	69.54	-36.20	QP	
3	9.075	12.55	20.42	32.97	69.54	-36.57	QP	

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





Test Mode TX N(HT20) Mode Channel 06 Polarization Ant 90° 160.0 dBuV/m 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 (MHz) 0.150 0.009

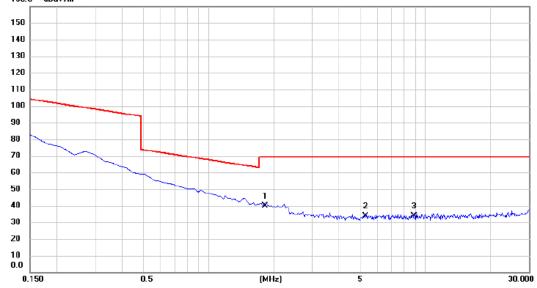
No. Mk.	Freq.		Correct Factor	Measure ment	- Limit	Margin		
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	0.038	53.15	20.14	73.29	116.06	-42.77	AVG	
2	0.062	46.82	20.14	66.96	111.80	-44.84	AVG	
3	0.121	39.64	20.10	59.74	105.94	-46.20	AVG	

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





Test Mode TX N(HT20) Mode Channel 06 Polarization Ant 90° 160.0 dBuV/m 150 140



No. Mk.	Freq.	Reading Level		Measure- ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	1.822	19.62	20.01	39.63	69.54	-29.91	QP	
2	5.284	13.58	20.22	33.80	69.54	-35.74	QP	
3	8.896	13.40	20.41	33.81	69.54	-35.73	QP	

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

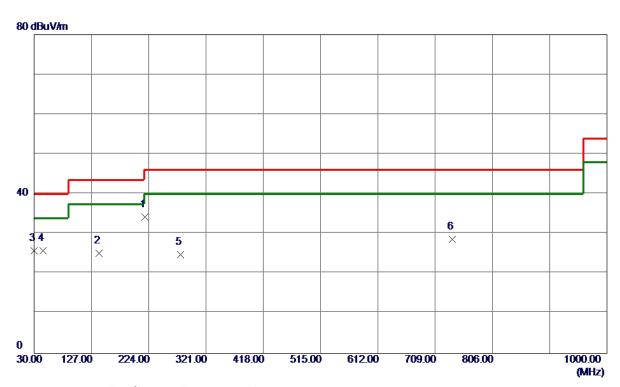


# **APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ**





Test Mode TX N(HT20) Mode Channel 06 Polarization Vertical



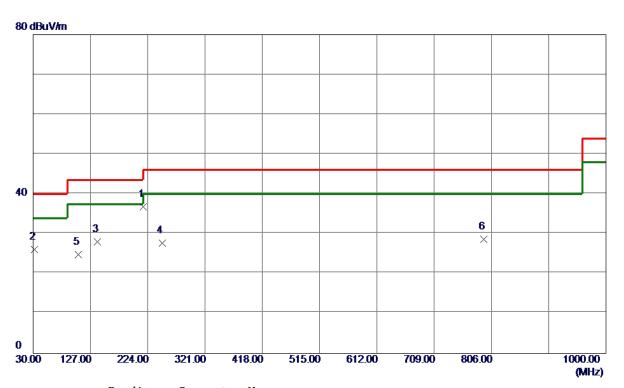
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	217. 2100	52. 38	-18. 17	34. 21	46.02	-11.81	Peak	
2	139. 6100	40. 53	-15. 36	25. 17	43. 52	-18. 35	Peak	
3	30.0000	42. 28	-16. 49	25. 79	40.00	-14. 21	Peak	
4	45. 5200	40. 46	-14. 69	25. 77	40.00	-14. 23	Peak	
5	278. 3200	39. 75	-14. 89	24. 86	46. 02	-21. 16	Peak	
6	738. 1000	32. 60	-4. 00	28. 60	46. 02	-17. 42	Peak	

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





Test Mode TX N(HT20) Mode Channel 06 Polarization Horizontal



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	216. 2400	<b>55. 0</b> 2	-18. 18	36. 84	46.02	<b>−9.</b> 18	Peak	
2	31. 9400	42. 24	-16. 14	26. 10	40.00	-13. 90	Peak	
3	138. 6400	43. 41	-15. 44	27. 97	43. 52	-15. 55	Peak	
4	248. 2500	43. 90	-16. 19	27. 71	46.02	-18. 31	Peak	
5	106. 6300	43. 39	-18. 59	24. 80	43. 52	-18. 72	Peak	
6	793. 3900	31. 77	-3. 09	28. 68	46. 02	-17. 34	Peak	

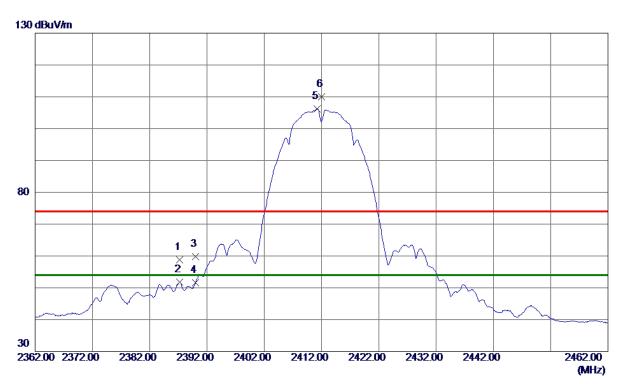
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



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

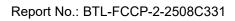


Test Mode TX B Mode 2412 MHz Polarization Vertical



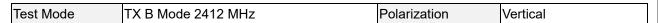
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2387. 2000	50. 09	8. 80	58. 89	74.00	-15. 11	Peak	
2	2387. 2000	42. 94	8. 80	51. 74	54.00	-2. 26	AVG	
3	2390. 0000	50. 91	8. 81	59. 72	74.00	-14. 28	Peak	
4	2390. 0000	42.77	8. 81	51. 58	54.00	-2. 42	AVG	
5 *	2411. 2000	97. 25	8. 90	106. 15	54.00	52. 15	AVG	No Limit
6	2412. 0000	101. 10	8. 90	110.00	74.00	36. 00	Peak	No Limit

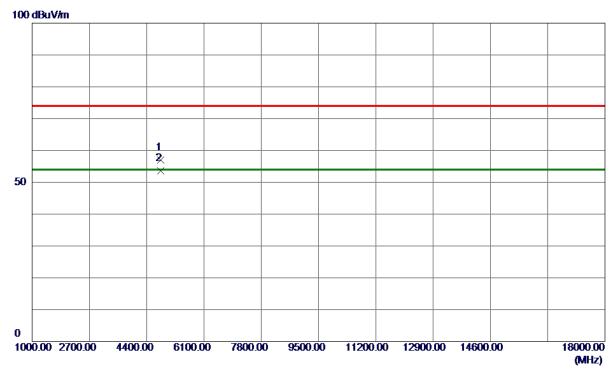
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





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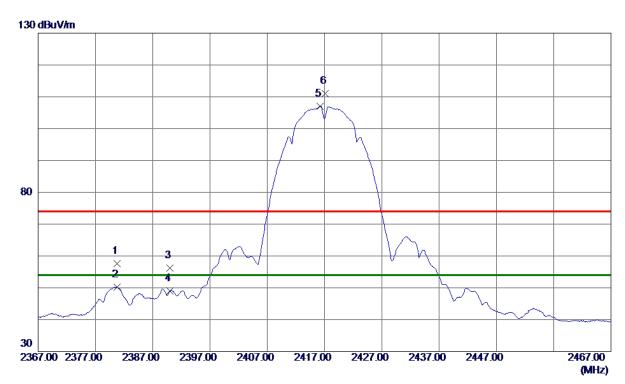


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4823. 9000	51. 44	5. 54	56. 98	74.00	<b>-17.02</b>	Peak	
2 *	4823, 9500	48. 02	5. 54	53. 56	54. 00	-0. 44	AVG	

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



Test Mode TX B Mode 2417 MHz Polarization Vertical



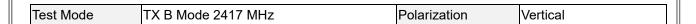
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2380. 8000	48. 74	8. 77	57. 51	74.00	-16. 49	Peak	
2	2380. 8000	41. 43	8. 77	50. 20	54.00	-3. 80	AVG	
3	2390. 0000	47. 44	8. 81	56. 25	74.00	-17. 75	Peak	
4	2390. 0000	40. 17	8. 81	48. 98	54.00	<b>-5.02</b>	AVG	
5 *	2416. 2000	98. 16	8. 92	107. 08	54.00	53. 08	AVG	No Limit
6	2417. 1000	102. 03	8. 92	110. 95	74. 00	36. 95	Peak	No Limit

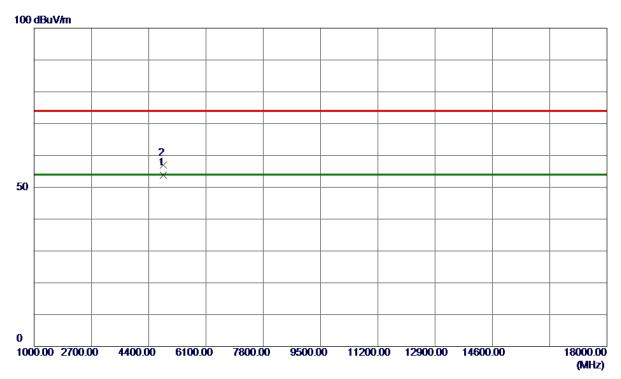
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





Report Version: R00



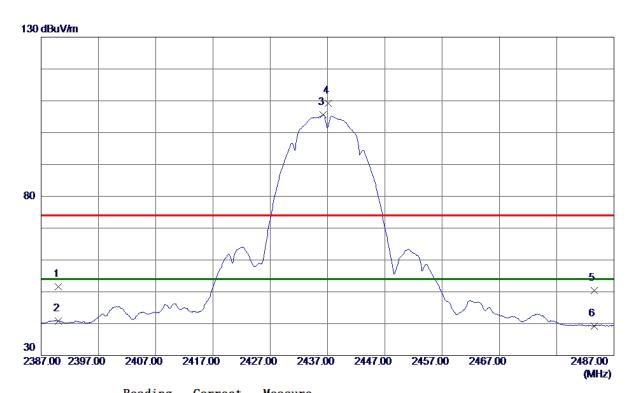


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4833. 9500	48. 29	5. 55	53. 84	54.00	-0. 16	AVG	
2	4834, 1500	51, 35	5. 55	56. 90	74. 00	-17, 10	Peak	

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



Test Mode TX B Mode 2437 MHz Polarization Vertical



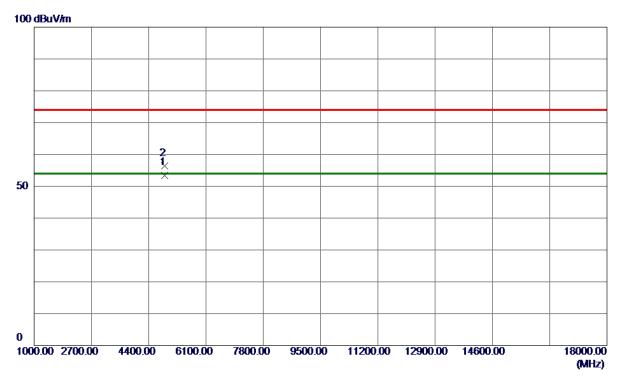
No.	Freq.	keading Level	Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	42. 79	8. 81	51. 60	74.00	-22. 40	Peak	
2	2390. 0000	32. 07	8. 81	40.88	54.00	-13. 12	AVG	
3 *	2436. 2000	96. 55	9. 00	105. 55	54.00	51. 55	AVG	No Limit
4	2437. 1000	100. 25	9. 01	109. 26	74.00	35. 26	Peak	No Limit
5	2483. 5000	41. 26	9. 20	50. 46	74.00	-23. 54	Peak	
6	2483. 5000	30. 09	9. 20	39. 29	54.00	-14. 71	AVG	

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





Test Mode TX B Mode 2437 MHz Polarization Vertical

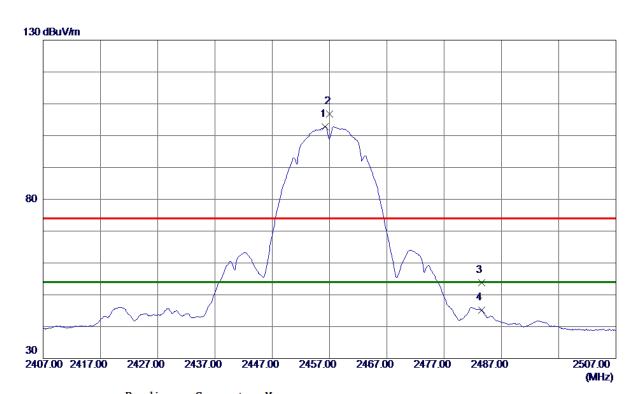


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873. 9500	47. 90	5. 60	53. 50	54.00	-0. 50	AVG	
2	4873, 9000	50. 80	5. 60	56, 40	74. 00	-17, 60	Peak	

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

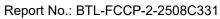


Test Mode TX B Mode 2457 MHz Polarization Vertical



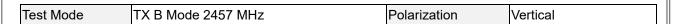
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2456. 2000	93. 74	9. 08	102.82	54.00	48.82	AVG	No Limit
2	2457. 0000	97. 72	9. 09	106. 81	74.00	32. 81	Peak	No Limit
3	2483. 5000	44. 60	9. 20	53. 80	74.00	-20. 20	Peak	
4	2483. 5000	35. 91	9. 20	45. 11	54.00	-8. 89	AVG	

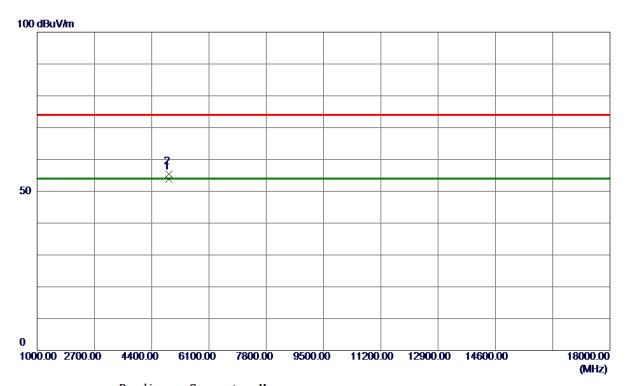
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





Report Version: R00



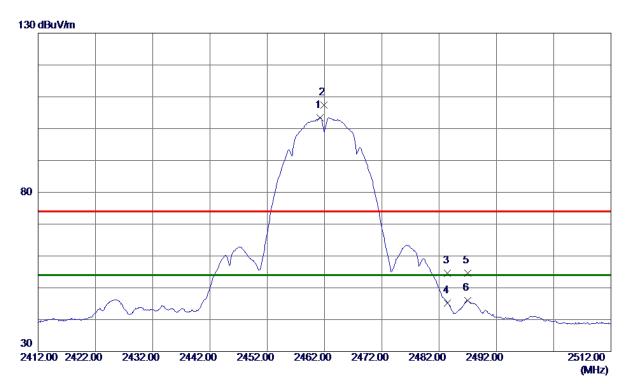


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4914. 0000	48. 14	5. 66	53. 80	54.00	-0. 20	AVG	
2	4913. 9400	49. 75	5. 66	55. 41	74. 00	-18. 59	Peak	

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



Test Mode TX B Mode 2462 MHz Polarization Vertical



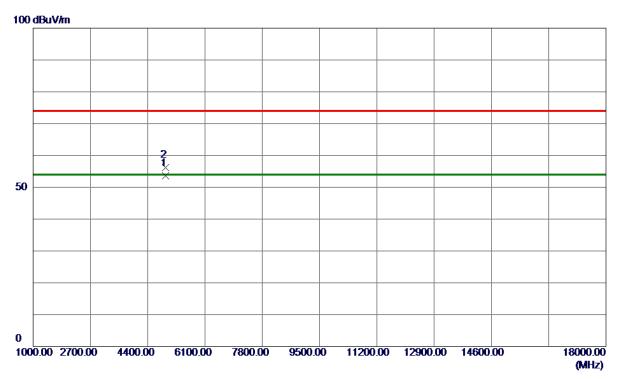
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	2461. 2000	94. 32	9. 10	103. 42	54.00	49. 42	AVG	No Limit
2	2461. 9000	98. 28	9. 11	107. 39	74.00	33. 39	Peak	No Limit
3	2483. 5000	45. 46	9. 20	54. 66	74.00	-19. 34	Peak	
4	2483. 5000	35. 91	9. 20	45. 11	54.00	-8. 89	AVG	
5	2487. 0000	45. 38	9. 21	54. 59	74.00	-19. 41	Peak	
6	2487. 0000	36. 85	9. 21	46.06	54.00	<b>-7.94</b>	AVG	

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





Test Mode TX B Mode 2462 MHz Polarization Vertical

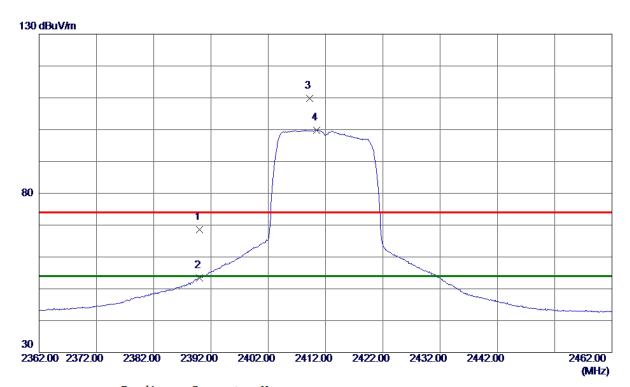


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 9500	47. 92	5. 67	53. 59	54.00	-0. 41	AVG	
2	4924, 1500	50. 57	5. 67	56, 24	74. 00	-17. 76	Peak	

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

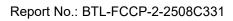


Test Mode TX G Mode 2412 MHz Polarization Vertical



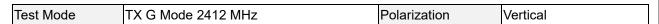
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	59. 81	8. 81	68. 62	74.00	-5. 38	Peak	
2	2390. 0000	44. 67	8. 81	53. 48	<b>54.00</b>	-0. 52	AVG	
3	2409. 2000	100.87	8. 89	109. 76	74.00	35. 76	Peak	No Limit
4 *	2410. 4000	90. 92	8. 89	99. 81	<b>54.00</b>	45.81	AVG	No Limit

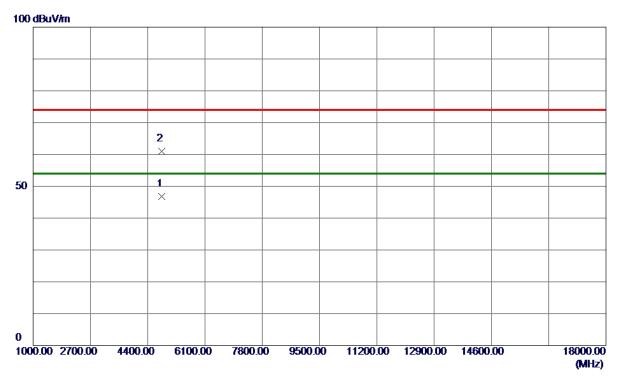
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





Report Version: R00



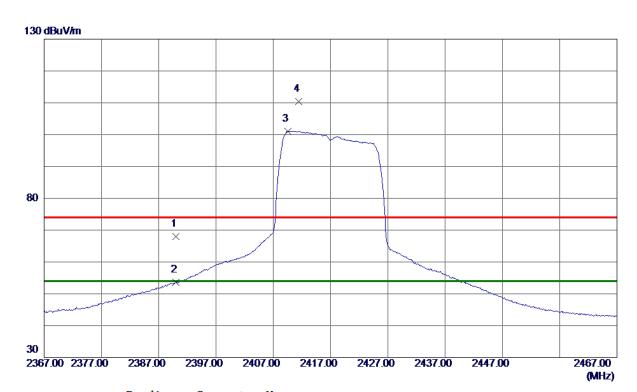


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823. 8000	41. 27	5. 54	46. 81	54.00	-7. 19	AVG	
2	4822, 1500	55, 40	5. 54	60. 94	74.00	-13. 06	Peak	

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



Test Mode TX G Mode 2417 MHz Polarization 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	59. 13	8. 81	67. 94	74.00	-6. 06	Peak	
2	2390. 0000	44. 73	8. 81	53. 54	54.00	-0. 46	AVG	
3 *	2409. 5000	92. 21	8. 89	101. 10	54.00	47. 10	AVG	No Limit
4	2411. 4000	101. 58	8. 90	110. 48	74.00	36. 48	Peak	No Limit

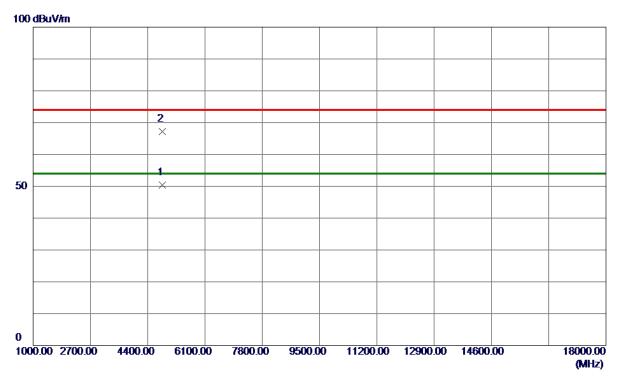
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





Report Version: R00

Test Mode	TX G Mode 2417 MHz	Polarization	Vertical

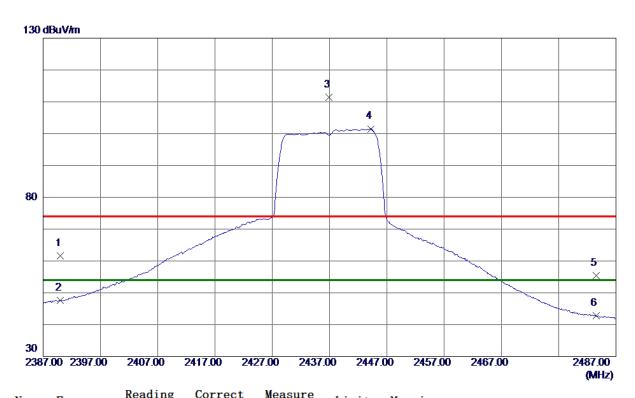


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4833. 6000	44. 80	5. 55	50. 35	54.00	-3. 65	AVG	
2	4833, 2500	61. 62	5. 55	67. 17	74. 00	-6. 83	Peak	

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

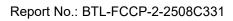


Test Mode TX G Mode 2437 MHz Polarization Vertical



No.	Freq.	Level	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	52. 71	8. 81	61. 52	74.00	-12. 48	Peak	
2	2390. 0000	38. 88	8. 81	47. 69	54.00	-6. 31	AVG	
3	2436. 9000	102. 34	9. 00	111. 34	74.00	37. 34	Peak	No Limit
4 *	2444. 2000	92. 47	9. 03	101. 50	54.00	47. 50	AVG	No Limit
5	2483. 5000	46. 21	9. 20	55. 41	74.00	-18. 59	Peak	
6	2483. 5000	33. 67	9. 20	42.87	54. 00	-11. 13	AVG	

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



Vertical

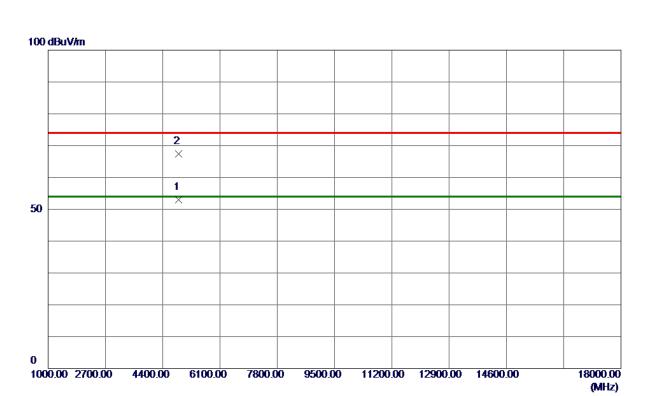


Test Mode

TX G Mode 2437 MHz

Report Version: R00

Polarization

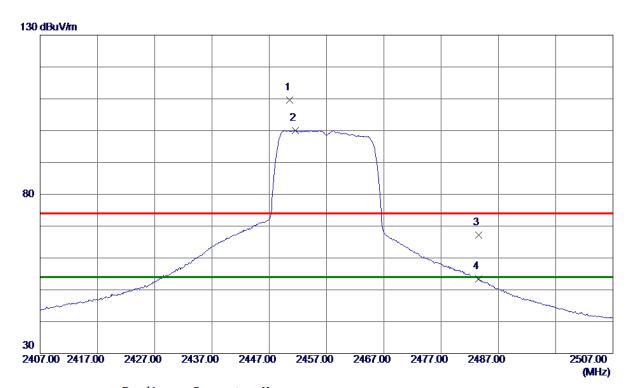


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873. 9500	47. 47	5. 60	53. 07	54.00	-0. 93	AVG	
2	4875, 5500	61. 72	5. 61	67. 33	74.00	-6. 67	Peak	

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



Test Mode TX G Mode 2457 MHz Polarization Vertical



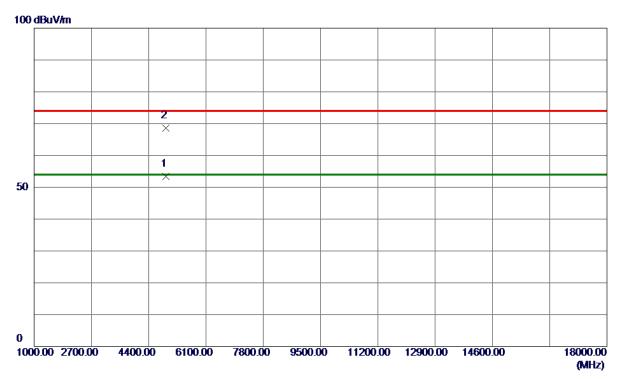
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2450. 6000	100. 54	9. 06	109. 60	74.00	35. 60	Peak	No Limit
2 *	2451. 5000	91. 02	9. 06	100.08	54.00	46. 08	AVG	No Limit
3	2483. 5000	58. 09	9. 20	67. 29	74.00	-6. 71	Peak	
4	2483. 5000	44. 18	9. 20	53. 38	54.00	<b>-0.62</b>	AVG	

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





Test Mode TX G Mode 2457 MHz Polarization Vertical



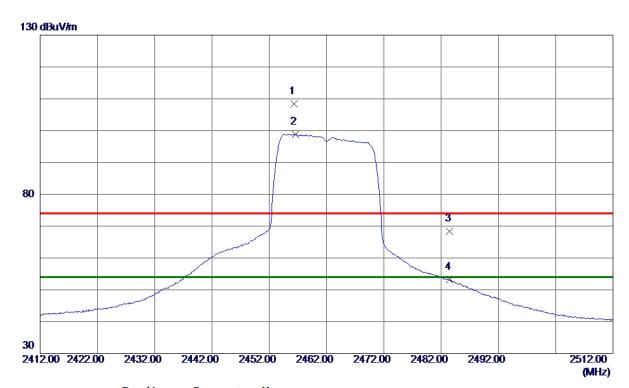
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4913. 8000	47. 82	5. 66	53. 48	54.00	<b>-0.</b> 52	AVG	
2	4911 9500	62 99	5 65	68 64	74 00	-5. 36	Peak	

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





Test Mode TX G Mode 2462 MHz Polarization Vertical



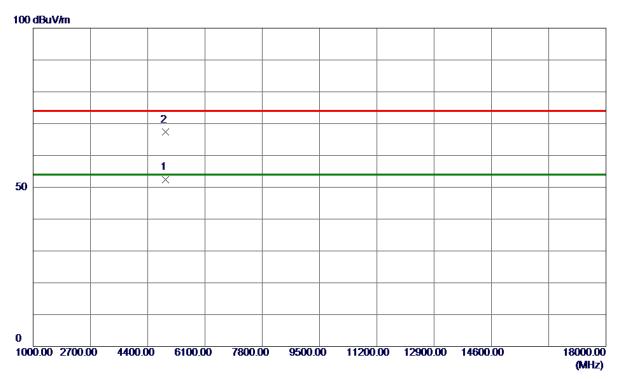
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2456. 3000	99. 30	9. 08	108. 38	74.00	34. 38	Peak	No Limit
2 *	2456. 6000	89. 76	9. 09	98. 85	54.00	44. 85	AVG	No Limit
3	2483. 5000	59. 23	9. 20	68. 43	74.00	-5. 57	Peak	
4	2483. 5000	43. 94	9. 20	53. 14	54.00	-0.86	AVG	

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





Test Mode TX G Mode 2462 MHz Polarization Vertical

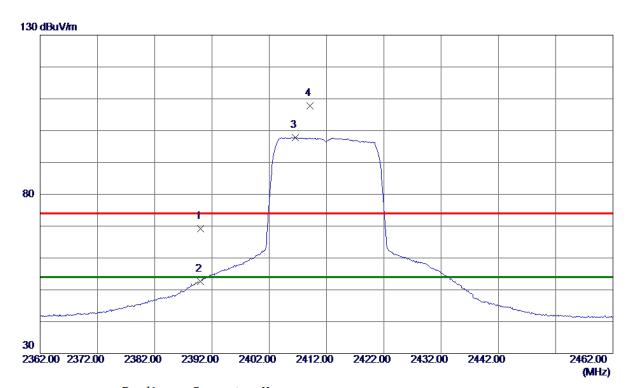


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 8000	46. 76	5. 67	52. 43	54.00	-1. 57	AVG	
2	4922, 3500	61. 63	5. 67	67. 30	74. 00	-6. 70	Peak	

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



Test Mode TX N(HT20) Mode 2412 MHz Polarization Vertical



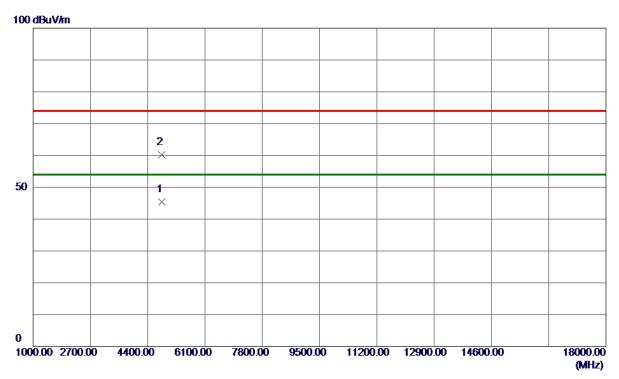
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	60. 31	8. 81	69. 12	74.00	<b>-4.</b> 88	Peak	
2	2390. 0000	43. 83	8. 81	52. 64	54.00	-1. 36	AVG	
3 *	2406. 6000	88. 99	8. 88	97. 87	54.00	43.87	AVG	No Limit
4	2409. 1000	98. 91	8. 89	107. 80	74.00	33. 80	Peak	No Limit

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





Test Mode TX N(HT20) Mode 2412 MHz Polarization Vertical

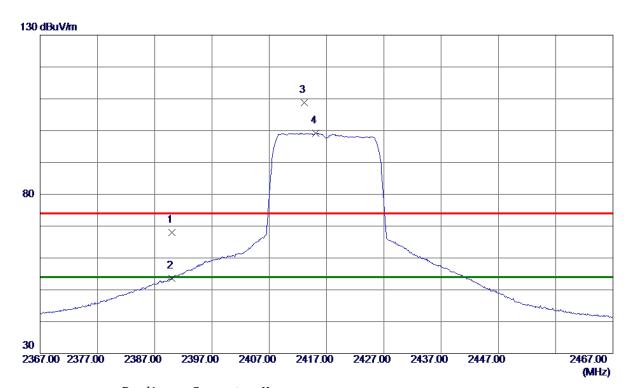


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4823. 3500	39. 85	5. 54	45. 39	<b>54.00</b>	-8. 61	AVG	
2	4814, 8000	54. 64	5. 53	60. 17	74. 00	-13, 83	Peak	

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



Test Mode TX N(HT20) Mode 2417 MHz Polarization Vertical



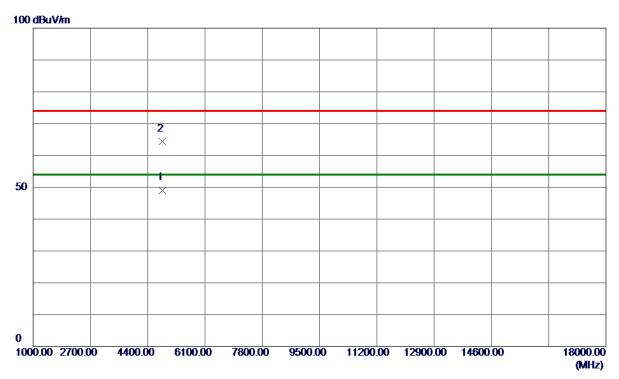
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	59. 11	8. 81	67. 92	74.00	-6. 08	Peak	
2	2390. 0000	44. 70	8. 81	53. 51	54.00	-0. 49	AVG	
3	2413. 1000	99. 95	8. 91	108. 86	74.00	34. 86	Peak	No Limit
4 *	2415. 1000	90. 25	8. 91	99. 16	54.00	45. 16	AVG	No Limit

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





Test Mode TX N(HT20) Mode 2417 MHz Polarization Vertical

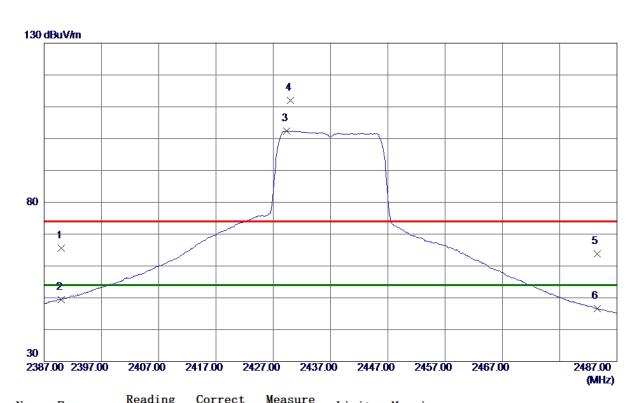


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4833. 2000	43. 55	5. 55	49. 10	54.00	<b>−4. 90</b>	AVG	
2	4832, 4500	58. 91	5. 55	64. 46	74. 00	-9. 54	Peak	

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



Test Mode TX N(HT20) Mode 2437 MHz Polarization Vertical



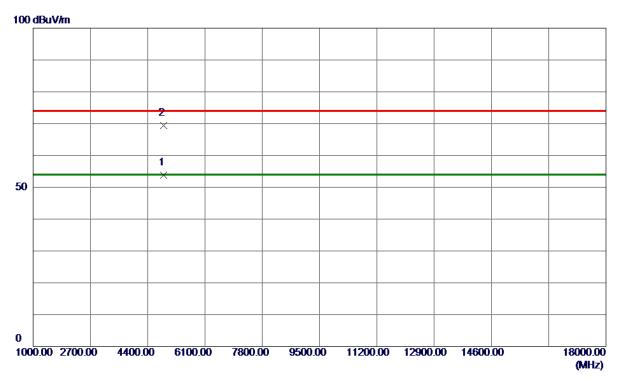
No.	Freq.	Level	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2390. 0000	56. 76	8. 81	65. 57	74.00	-8. 43	Peak	
2	2390. 0000	40. 67	8. 81	49. 48	54.00	<b>-4.</b> 52	AVG	
3 *	2429. 3000	93. 44	8. 97	102. 41	54.00	48. 41	AVG	No Limit
4	2430.0000	103. 09	8. 98	112. 07	74.00	38. 07	Peak	No Limit
5	2483. 5000	54. 66	9. 20	63. 86	74.00	-10. 14	Peak	
6	2483. 5000	37. 46	9. 20	46. 66	54.00	<b>-7. 34</b>	AVG	

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





Test Mode TX N(HT20) Mode 2437 MHz Polarization Vertical

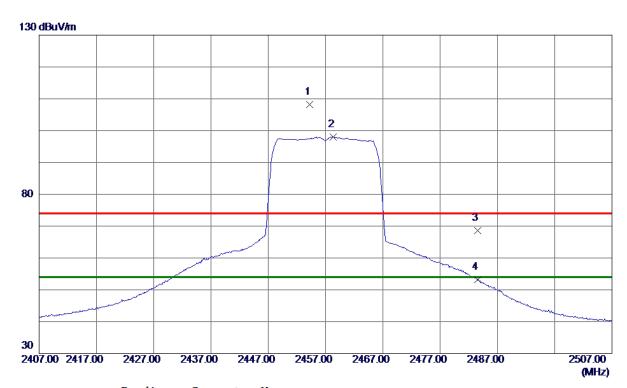


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4873. 4000	48. 18	5. 60	53. 78	54.00	<b>-0.</b> 22	AVG	
2	4866, 5000	63, 77	5. 59	69. 36	74. 00	-4. 64	Peak	

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



Test Mode TX N(HT20) Mode 2457 MHz Polarization Vertical



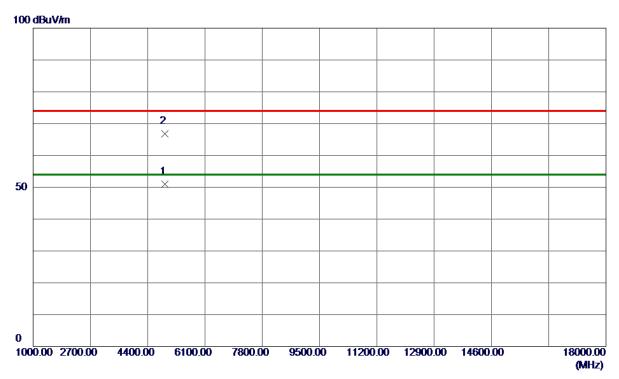
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2454. 2000	99. 10	9. 08	108. 18	74.00	34. 18	Peak	No Limit
2 *	2458. 3000	88. 95	9. 09	98. 04	<b>54.00</b>	44. 04	AVG	No Limit
3	2483. 5000	59. 46	9. 20	68. 66	74.00	-5. 34	Peak	
4	2483. 5000	44. 06	9. 20	53. 26	<b>54.00</b>	-0. 74	AVG	

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





Test Mode TX N(HT20) Mode 2457 MHz Polarization Vertical

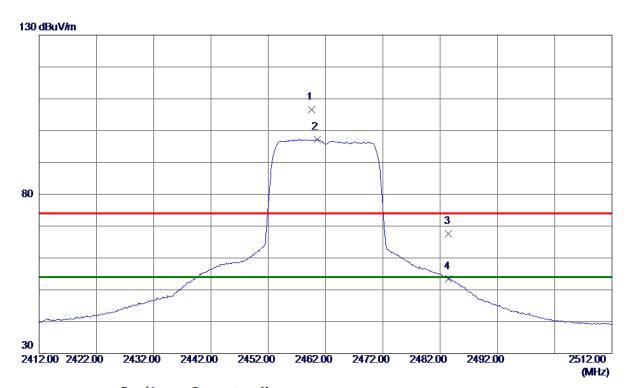


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4913. 1000	45. 28	5. 66	50. 94	54.00	-3. 06	AVG	
2	4914, 7500	61. 05	5. 66	66. 71	74. 00	-7. 29	Peak	

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



Test Mode TX N(HT20) Mode 2462 MHz Polarization Vertical



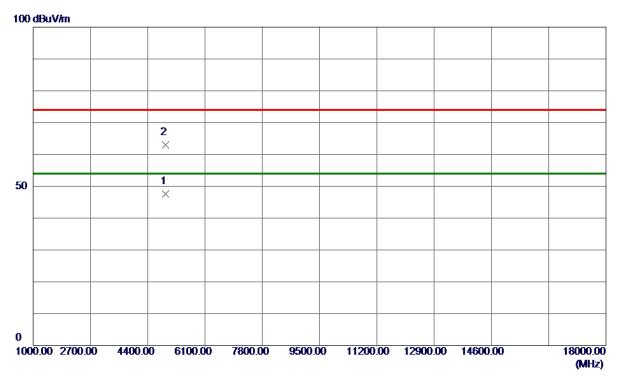
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	2459. 6000	97. 54	9. 10	106. 64	74.00	32.64	Peak	No Limit
2 *	2460. 5000	88. 16	9. 10	97. 26	<b>54.00</b>	43. 26	AVG	No Limit
3	2483. 5000	58. 43	9. 20	67. 63	74.00	-6. 37	Peak	
4	2483. 5000	44. 29	9. 20	53. 49	<b>54.00</b>	-0. 51	AVG	

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





Test Mode TX N(HT20) Mode 2462 MHz Polarization Vertical



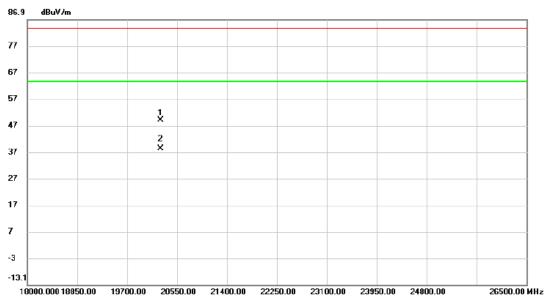
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	4923. 4500	41. 90	5. 67	47. 57	54.00	-6. 43	AVG	
2	4921, 9500	57. 27	5. 67	62. 94	74. 00	-11.06	Peak	

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









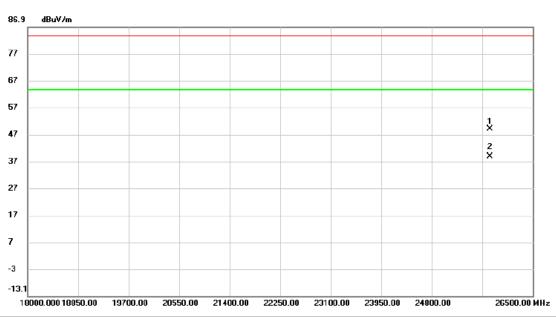
No.	Mk.	Freq.			Measure- ment		Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	20	269.500	47.92	1.23	49.15	83.50	-34.35	peak	
2	* 20	269.500	37.17	1.23	38.40	63.50	-25.10	AVG	

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





Test Mode TX N(HT20) Mode 2437 MHz Polarization Horizontal



No.	Mk.	Freq.			Measure- ment		Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	25	777.500	42.36	6.65	49.01	83.50	-34.49	peak	
2	* 25	777.500	32.11	6.65	38.76	63.50	-24.74	AVG	

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





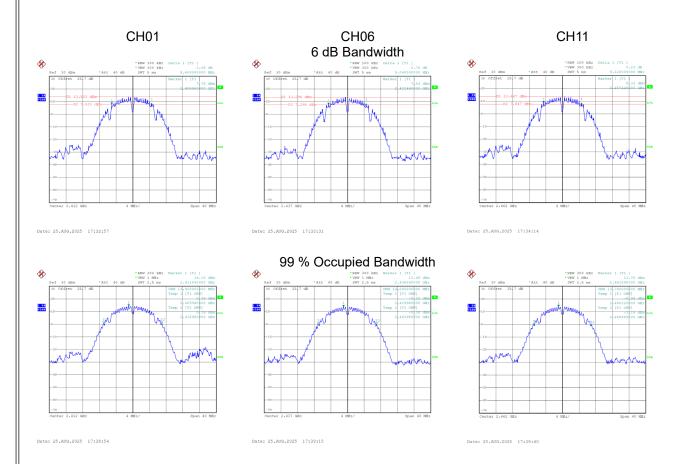
Report Version: R00 **APPENDIX E - BANDWIDTH** 





Test Mode TX B Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	9.600	13.920	0.5	Pass
06	2437	9.040	14.000	0.5	Pass
11	2462	9.120	13.760	0.5	Pass

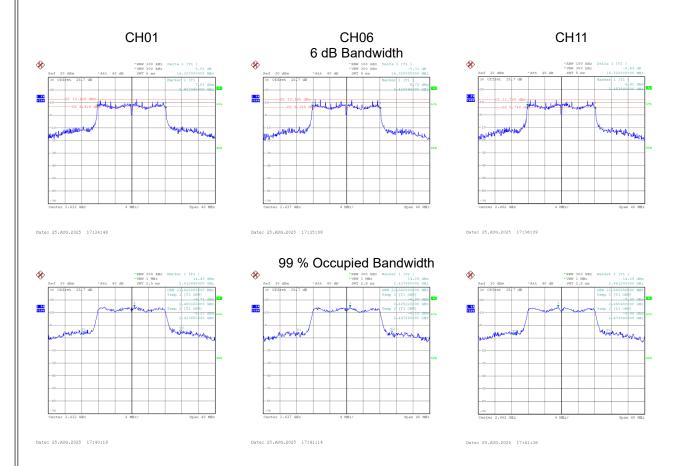






Test Mode TX G Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.320	23.520	0.5	Pass
06	2437	16.320	22.560	0.5	Pass
11	2462	16.320	22.560	0.5	Pass

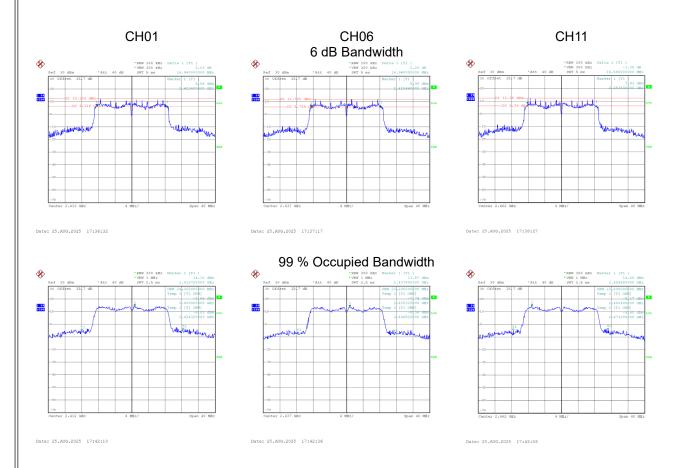






Test Mode TX N(HT20) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
01	2412	16.960	24.320	0.5	Pass
06	2437	16.960	23.200	0.5	Pass
11	2462	16.560	22.800	0.5	Pass







Report Version: R00

APPENDIX F - MAXIMUM OUTPUT POWER



Report No.: BTL-FCCP-2-2508C331 Report Version: R00

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	19.23	0.00	19.23	30.00	1.0000	Pass
06	2437	20.16	0.00	20.16	30.00	1.0000	Pass
11	2462	19.45	0.00	19.45	30.00	1.0000	Pass

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Test Mode	TX G Mode Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	16.84	0.11	16.95	30.00	1.0000	Pass
06	2437	20.80	0.11	20.91	30.00	1.0000	Pass
11	2462	20.12	0.11	20.23	30.00	1.0000	Pass

Test Mode	TX N(HT20) Mode_Ant 1
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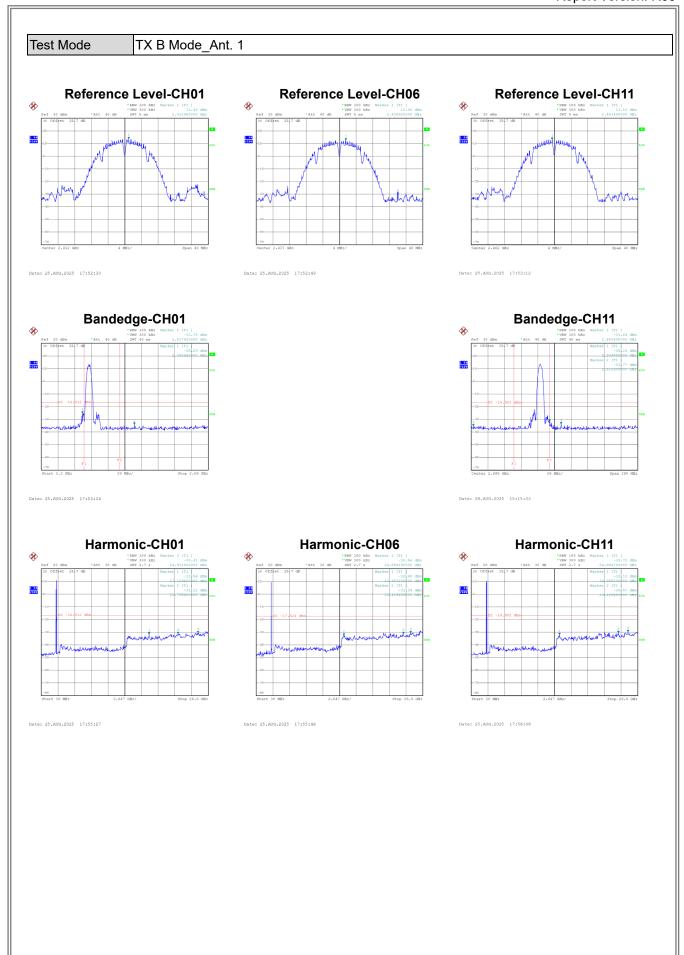
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
01	2412	16.37	0.12	16.49	30.00	1.0000	Pass
06	2437	21.45	0.12	21.57	30.00	1.0000	Pass
11	2462	18.06	0.12	18.18	30.00	1.0000	Pass

Note: Output power = Measure result + Cable loss

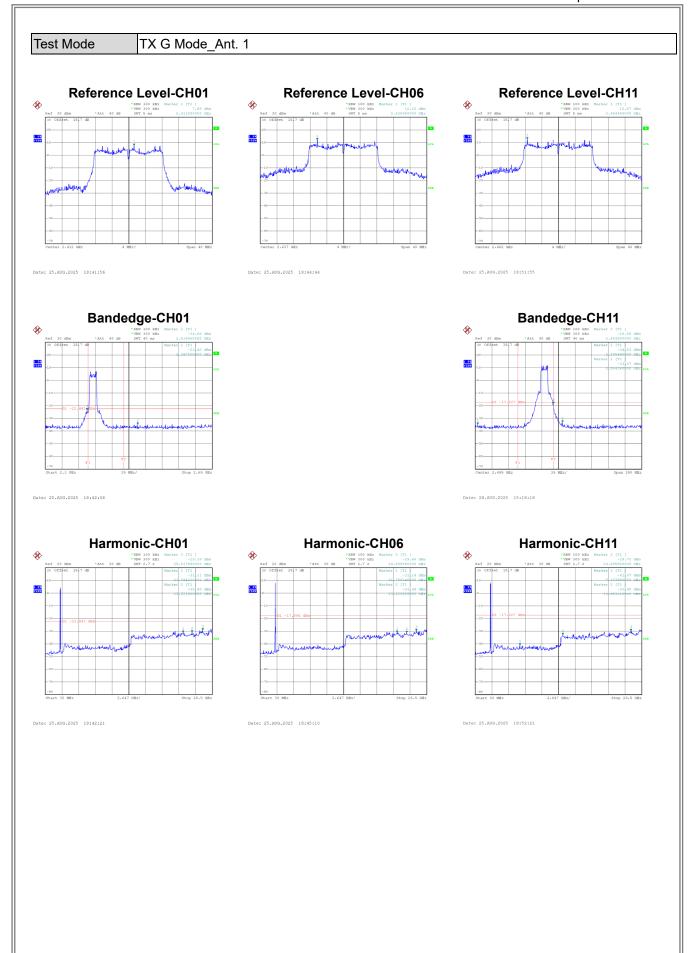


**APPENDIX G - CONDUCTED SPURIOUS EMISSIONS** 

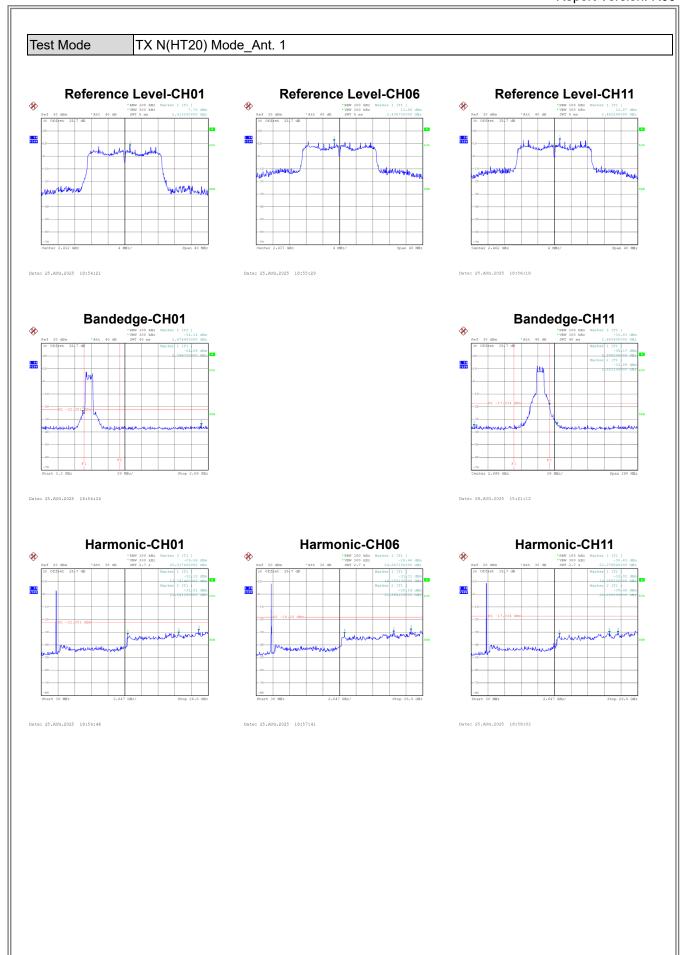
















Report No.: BTL-FCCP-2-2508C331 Report Version: R00

APPENDIX H - POWER SPECTRAL DENSITY



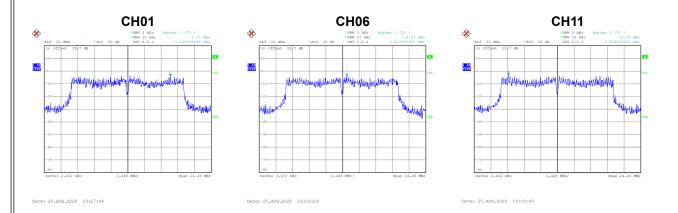
Test Mode TX B Mode\_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-1.42	8.00	Pass
06	2437	-1.84	8.00	Pass
11	2462	-2.08	8.00	Pass



Test Mode	TX G Mode Ant. 1
103t Wode	TX & Mode_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-3.77	8.00	Pass
06	2437	-4.04	8.00	Pass
11	2462	-3.08	8.00	Pass







Test Mode TX N(HT20) Mode\_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Max. Limit (dBm/3kHz)	Result
01	2412	-1.95	8.00	Pass
06	2437	-3.93	8.00	Pass
11	2462	-2.34	8.00	Pass

