FCC Radio Test Report

FCC ID: TE7X20

This report concerns: Original Grant

Project No.	:	1910C060A
Equipment	:	AX1800 Whole Home Mesh Wi-Fi System
Brand Name	:	tp-link
Test Model	:	Deco X20
Series Model	:	Deco W3600, Deco X25
Applicant	:	TP-Link Technologies Co., Ltd.
Address	:	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer	:	TP-Link Technologies Co., Ltd.
Address	:	Building 24(floors1,3,4,5) and 28(floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Date of Receipt	:	Apr. 07, 2020
Date of Test	:	Apr. 07, 2020 ~ Apr. 24, 2020
Issued Date	:	May 07, 2020
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG2020040788 for conducted, DG2020040789 for radiated.
Standard(s)	:	FCC Part15, Subpart E(15.407) ANSI C63.10-2013 FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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

Vincent. Tan

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Declaration

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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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.

Table of Contents Page

Table of Contents Page

Table of Contents Page

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Compared with the previous report (BTL-FCCP-2-1910C060), added the description and test data of UNII-3. In this report only record the UNII-3 description and test data, the original test data please refer to the previous report.	May 07, 2020
R01	Added a series model and model difference which does not affect the test result.	May 15, 2020

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E(15.407)				
Standard(s) Section	**Test Item**	**Test Result**	**Judgement**	**Remark**
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS	------
15.407(a)	Maximum Output Power	APPENDIX F	PASS	------
15.407(a)	Power Spectral Density	APPENDIX G	PASS	------
15.407(g)	Frequency Stability	APPENDIX H	PASS	------
15.203	Antenna Requirements	------	PASS	**NOTE (2)**
15.407(c)	Automatically Discontinue Transmission	------	PASS	**NOTE (3)**

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.

(3) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.
BTL's Test Firm Registration Number for FCC: 357015
BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

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

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.60

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9kHz ~ 30MHz	V	3.79
		9kHz ~ 30MHz	H	3.57
		30MHz ~ 200MHz	V	4.88
		30MHz ~ 200MHz	H	4.14
		200MHz ~ 1,000MHz	V	4.62
		200MHz ~ 1,000MHz	H	4.80
		1GHz ~ 6GHz	-	4.58
		6GHz ~ 18GHz	-	5.18
		18GHz ~ 26.5GHz	-	3.62
		26.5GHz ~ 40GHz	-	4.00

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

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
AC Power Line Conducted Emissions	25°C	53%	AC120V/60Hz	Kwok Guo
Radiated Emissions-9K-30MHz	25°C	53%	AC120V/60Hz	Kwok Guo
Radiated Emissions-30 MHz to 1GHz	24°C	68%	AC120V/60Hz	Kwok Guo
Radiated Emissions-Above 1000 MHz	25°C	53%	AC120V/60Hz	Kwok Guo
Spectrum Bandwidth	24°C	52%	AC120V/60Hz	Hayden Chen
Maximum Output Power	24°C	52%	AC120V/60Hz	Laughing Zhang
Power Spectral Density	24°C	52%	AC120V/60Hz	Hayden Chen
Frequency Stability	Normal & Extreme	52%	Normal & Extreme	Hayden Chen

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	AX1800 Whole Home Mesh Wi-Fi System
Brand Name	tp-link
Test Model	Deco X20
Series Model	Deco W3600, Deco X25
Model Difference(s)	Only differ in model name and color.
Power Source	DC Voltage supplied from AC adapter. Model: T120150-2B4
Power Rating	I/P: 100-240V~ 50/60Hz 0.6A O/P:12V ⎓ 1.5A
Operation Frequency	UNII-3: 5725 MHz ~ 5850 MHz
Modulation Type	IEEE 802.11a/n/ac: OFDM IEEE 802.11ax: OFDMA
Bit Rate of Transmitter	Up to 1201 Mbps
Maximum Output Power	IEEE 802.11a: 26.19 dBm (0.4159 W) IEEE 802.11ac (VHT20): 26.11 dBm (0.4083 W) IEEE 802.11ac (VHT40): 26.01 dBm (0.3990 W) IEEE 802.11ac (VHT80): 26.01 dBm (0.3990 W) IEEE 802.11ax (HEW20): 26.02 dBm (0.3999 W) IEEE 802.11ax (HEW40): 26.08 dBm (0.4055 W) IEEE 802.11ax (HEW80): 26.10 dBm (0.4074 W)

Note:

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

2. Channel List:

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20) IEEE 802.11ax (HEW20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40) IEEE 802.11ax (HEW40)		IEEE 802.11ac (VHT80) IEEE 802.11ax (HEW80)	
UNII-3		UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3. Antenna Specification:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	TP-LINK	3101502754	PCB	I-PEX	0.81
2	TP-LINK	3101502755	PCB	I-PEX	0.88

Note:

This EUT supports CDD, any transmit signals are correlated with each other, so Directional gain = $10\log[(10^{G1/20}+10^{G2/20}+...10^{GN/20})^2/N]$dBi, that is Directional gain=$10\log[(10^{0.81/20}+10^{0.88/20})^2/2]$dBi =3.86.

4. Table for Antenna Configuration:

Operating Mode / TX Mode	2TX
IEEE 802.11a	V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT20)	V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT40)	V (Ant. 1 + Ant. 2)
IEEE 802.11ac (VHT80)	V (Ant. 1 + Ant. 2)
IEEE 802.11ax (HEW20)	V (Ant. 1 + Ant. 2)
IEEE 802.11ax (HEW40)	V (Ant. 1 + Ant. 2)
IEEE 802.11ax (HEW80)	V (Ant. 1 + Ant. 2)

2.2 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 A Mode / CH149,CH157,CH165
Mode 2	TX AC (VHT20) Mode / CH149,CH157,CH165
Mode 3	TX AC (VHT40) Mode / CH151,CH159
Mode 4	TX AC (VHT80) Mode / CH155
Mode 5	TX AX (HEW20) Mode / CH149,CH157,CH165
Mode 6	TX AX (HEW40) Mode / CH151,CH159
Mode 7	TX AX (HEW80) Mode / CH155
Mode 8	TX A Mode / CH157

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 8	TX A Mode / CH157

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 8	TX A Mode / CH157

Radiated emissions test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX A Mode / CH149,CH157,CH165
Mode 2	TX AC (VHT20) Mode / CH149,CH157,CH165
Mode 3	TX AC (VHT40) Mode / CH151,CH159
Mode 4	TX AC (VHT80) Mode / CH155
Mode 5	TX AX (HEW20) Mode / CH149,CH157,CH165
Mode 6	TX AX (HEW40) Mode / CH151,CH159
Mode 7	TX AX (HEW80) Mode / CH155

Conducted test	
Final Test Mode	Description
Mode 1	TX A Mode / CH149,CH157,CH165
Mode 2	TX AC (VHT20) Mode / CH149,CH157,CH165
Mode 3	TX AC (VHT40) Mode / CH151,CH159
Mode 4	TX AC (VHT80) Mode / CH155
Mode 5	TX AX (HEW20) Mode / CH149,CH157,CH165
Mode 6	TX AX (HEW40) Mode / CH151,CH159
Mode 7	TX AX (HEW80) Mode / CH155

Note:

(1) For radiated emission below 1 GHz test, the IEEE 802.11a Channel 157 is found to be the worst case and recorded.

(2) For radiated emission above 1 GHz test, 1GHz~26.5GHz and 26.5GHz~40GHz 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.

(3) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.

(4) VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

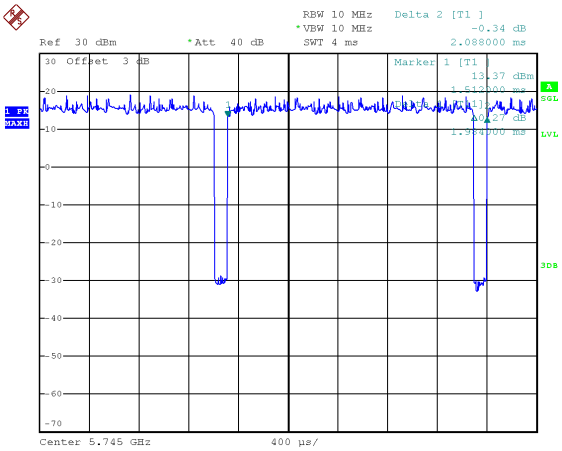
2.3 PARAMETERS OF TEST SOFTWARE

Test Software	QSPR		
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	22.5	22.5	22.5
IEEE 802.11ac (VHT20)	22.5	22.5	22.5
IEEE 802.11ax (HEW20)	22.5	22.5	22.5
Test Frequency (MHz)	5755	5795	
IEEE 802.11ac (VHT40)	22.5	22.5	
IEEE 802.11ax (HEW40)	22.5	22.5	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	23		
IEEE 802.11ax (HEW80)	23		

2.4 DUTY CYCLE

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

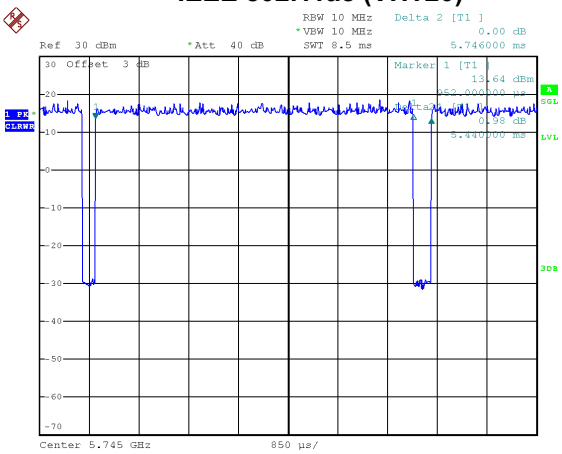
IEEE 802.11a



Date: 14.APR.2020 17:13:34

Duty cycle = 1.984 ms / 2.088 ms = 95.02%
Duty Factor = 10 log(1 / Duty cycle) = 0.22

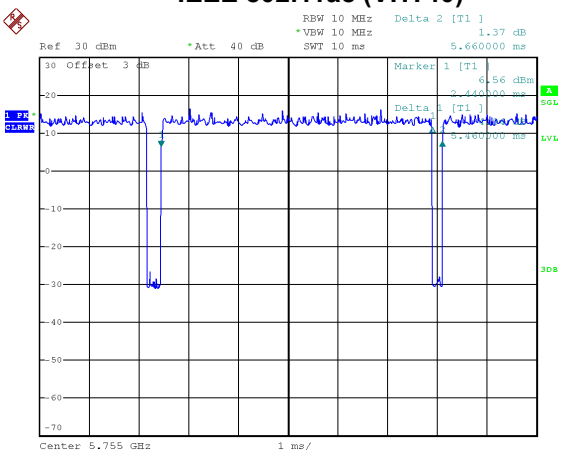
IEEE 802.11ac (VHT20)



Date: 14.APR.2020 17:16:09

Duty cycle = 5.440 ms / 5.746 ms = 94.68%
Duty Factor = 10 log(1 / Duty cycle) = 0.24

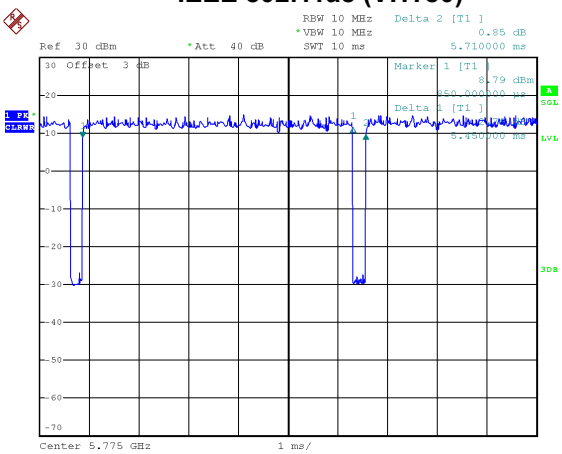
IEEE 802.11ac (VHT40)



Date: 14.APR.2020 17:18:02

Duty cycle = 5.460 ms / 25.660 ms = 96.47%
Duty Factor = 10 log(1 / Duty cycle) = 0.16

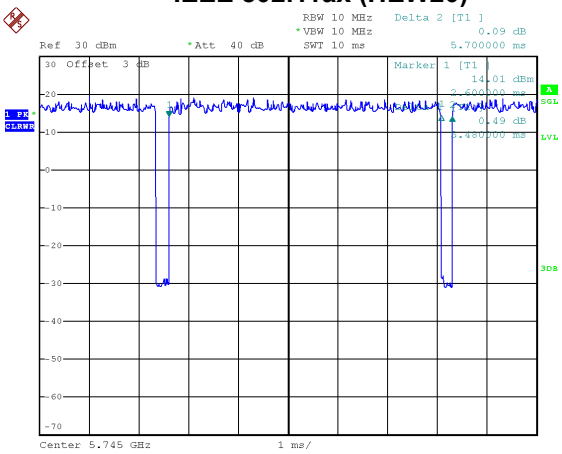
IEEE 802.11ac (VHT80)



Date: 14.APR.2020 17:19:09

Duty cycle = 5.450 ms / 5.710 ms = 95.45%
Duty Factor = 10 log(1 / Duty cycle) = 0.20

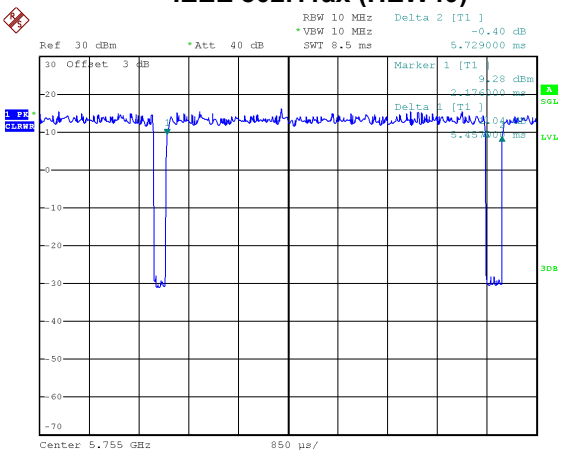
IEEE 802.11ax (HEW20)



Date: 14.APR.2020 17:20:04

Duty cycle = 5.480 ms / 5.700 ms = 96.14%
Duty Factor = 10 log(1/Duty cycle) = 0.17

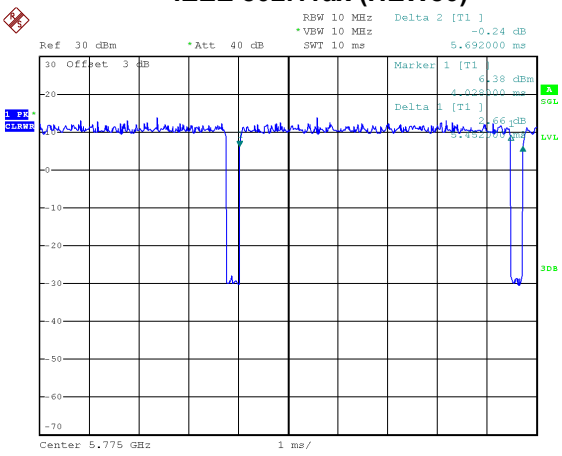
IEEE 802.11ax (HEW40)



Date: 14.APR.2020 17:21:13

Duty cycle = 5.457 ms / 5.729 ms = 95.25%
Duty Factor = 10 log(1/Duty cycle) = 0.21

IEEE 802.11ax (HEW80)



Date: 14.APR.2020 17:22:18

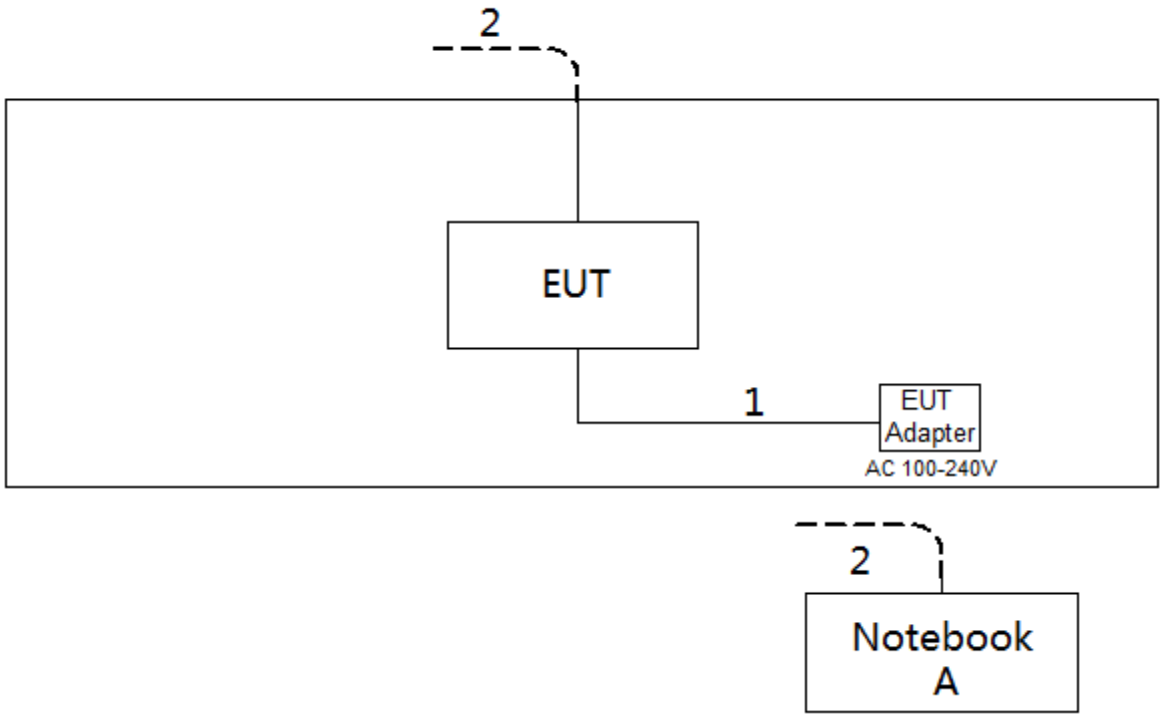
Duty cycle = 5.452 ms / 5.692 ms = 95.78%
Duty Factor = 10 log(1/Duty cycle) = 0.19

NOTE:
For IEEE 802.11a, IEEE 802.11ac (VHT20) and IEEE 802.11ax (HEW20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11ac (VHT40) and IEEE 802.11ax (HEW40):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

For IEEE 802.11ac (VHT80) and IEEE 802.11ax (HEW80):
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 (Duty cycle < 98%).

2.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.6 SUPPORT UNITS

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

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

3. AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

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

The following table is the setting of the receiver

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

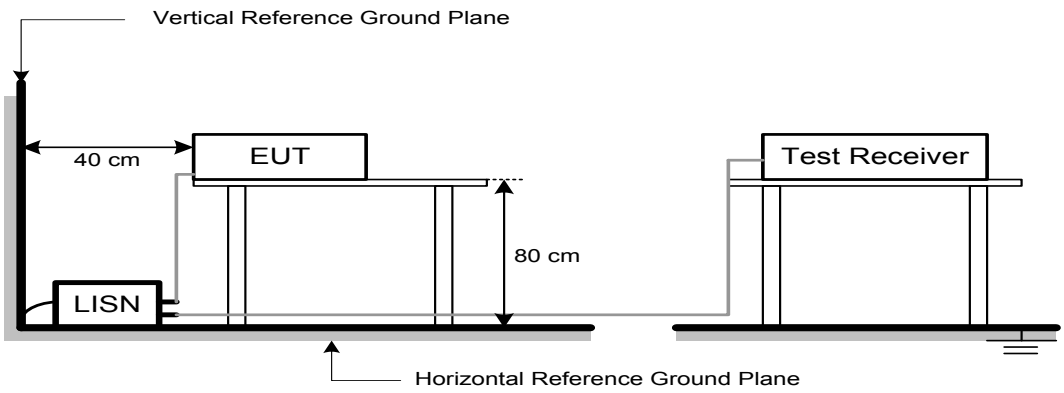
3.2 TEST PROCEDURE

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

3.3 DEVIATION FROM TEST STANDARD

No deviation

3.4 TEST SETUP



3.5 EUT OPERATION CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
The EUT was programmed to be in continuously transmitting/TX mode.

3.6 TEST RESULTS

Please refer to the APPENDIX A.

4. RADIATED EMISSIONS TEST

4.1 LIMIT

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

LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 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 UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength at 3m (dBμV/m)
5725-5850	-27 NOTE (2)	68.3
	10 NOTE (2)	105.3
	15.6 NOTE (2)	110.9
	27 NOTE (2)	122.3

NOTE:

(1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

(2) According to 15.407(b)(4)(i), all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

4.2 TEST PROCEDURE

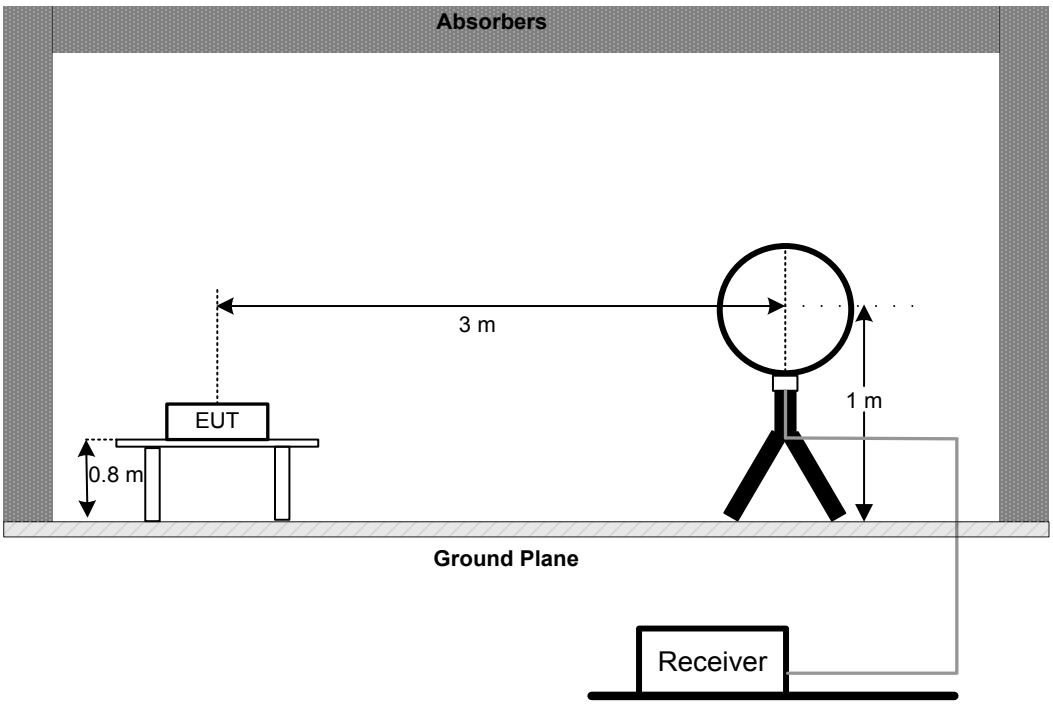
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance 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 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.

4.3 DEVIATION FROM TEST STANDARD

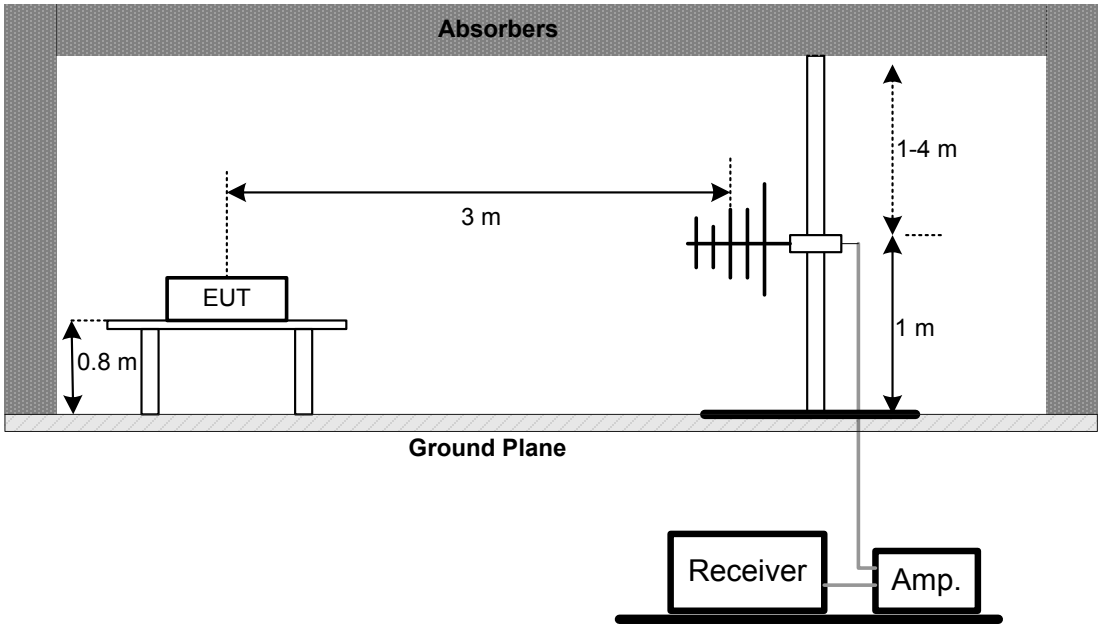
No deviation

4.4 TEST SETUP

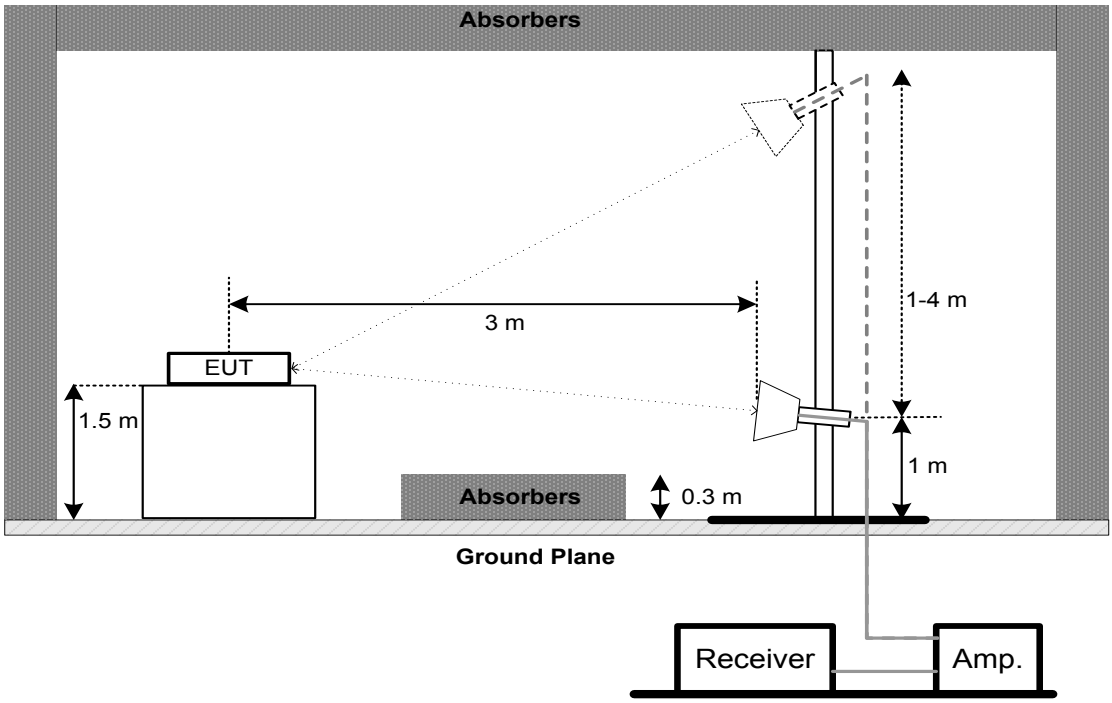
9 kHz to 30 MHz



30 MHz to 1 GHz



Above 1 GHz



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS - 9 KHZ to 30 MHZ

Please refer to the APPENDIX B

Remark:

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

4.7 TEST RESULTS - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C.

4.8 TEST RESULTS - ABOVE 1000 MHz

Please refer to the APPENDIX D.

Remark:

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

5. BANDWIDTH TEST

5.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a) 15.407(e)	6 dB Bandwidth	Minimum 500 kHz	5725-5850

5.2 TEST PROCEDURE

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

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26 dB / 6dB below carrier

5.3 TEST PROCEDURE

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 TEST

6.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Maximum Output Power	1 Watt (30dBm)	5725-5850

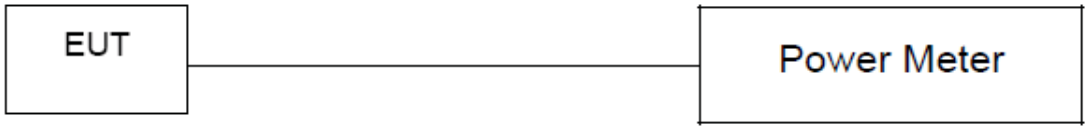
6.2 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
b. Test test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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. POWER SPECTRAL DENSITY TEST

7.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	30 dBm/500 kHz	5725-5850

7.2 TEST PROCEDURE

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

b. Spectrum Setting

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz.
VBW	≥ 3 MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

Note:

1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.
2. The value measured with RBW=1 MHz is to be added with 10log(500 kHz/1 MHz) which is -3 dB. For example, if the measured value is +10dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7dBm/500kHz.

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. FREQUENCY STABILITY MEASUREMENT

8.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(g)	Frequency Stability	An emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.	5725-5850

8.2 TEST PROCEDURE

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

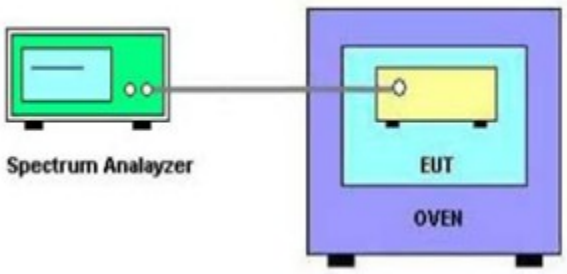
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
d. User manual temperature is 0°C~40°C.

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	EMI Test Receiver	R&S	ESCI	100382	Feb. 28, 2021
2	LISN	EMCO	3816/2	52765	Mar. 01, 2021
3	TWO-LINE V-NETWORK	R&S	ENV216	101447	May 19, 2020
4	50Ω Terminator	SHX	TF5-3	15041305	Mar. 01, 2021
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 10, 2021

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1*	Antenna	EM	EM-6876-1	230	Apr. 16, 2021
2	Cable	N/A	RG400 (C-101(3m)+C-70(6m)	N/A	May 31, 2020
3	EMI Test Receiver	R&S	ESCI	100895	Feb. 28, 2021
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2021
2*	Amplifier	HP	8447D	2944A08742	Mar. 01, 2021
3	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
4	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	May 25, 2020
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double Ridged Guide Antenna	ETS	3115	75846	Mar. 19, 2021
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 23, 2020
3	Amplifier	Agilent	8449B	3008A02584	Aug. 03, 2020
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 07, 2021
5	Receiver	Agilent	N9038A	MY52130039	Aug. 03, 2020
6	Controller	CT	SC100	N/A	N/A
7	Controller	MF	MF-7802	MF780208416	N/A
8	Cable	mitron	RWLP50-4.0A-KJ-SM SM-12M	N/A	Nov. 25, 2020
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth & Maximum Output Power & Power Spectral Density					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 03, 2020

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 03, 2020
2	Precision Oven Tester	CEPREI	CEEC-M64T-40	15-008	Feb. 28, 2021

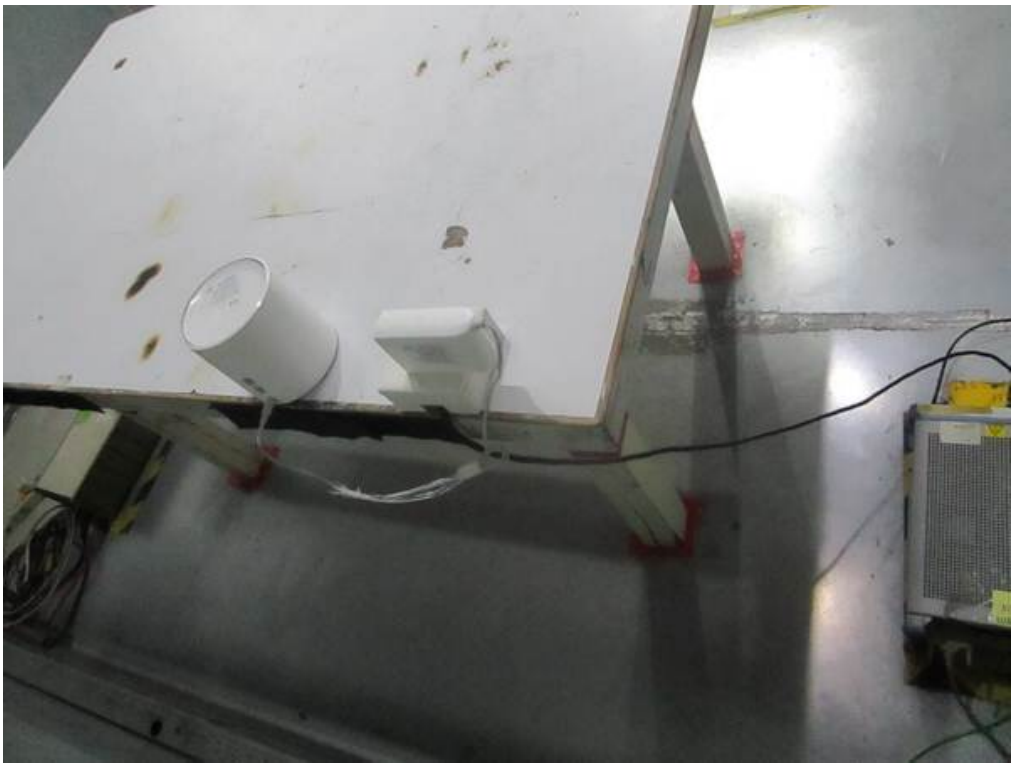
Remark: “N/A” denotes no model name, serial no. or calibration specified.

“*” calibration period of equipment list is three year.

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

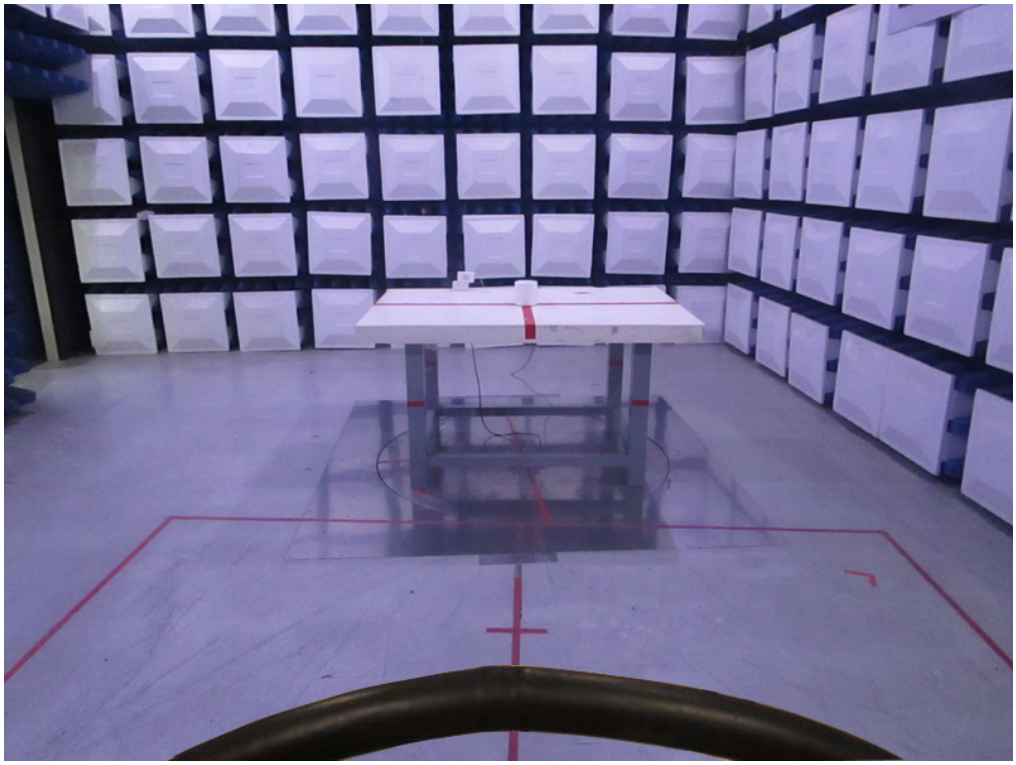
10. EUT TEST PHOTOS

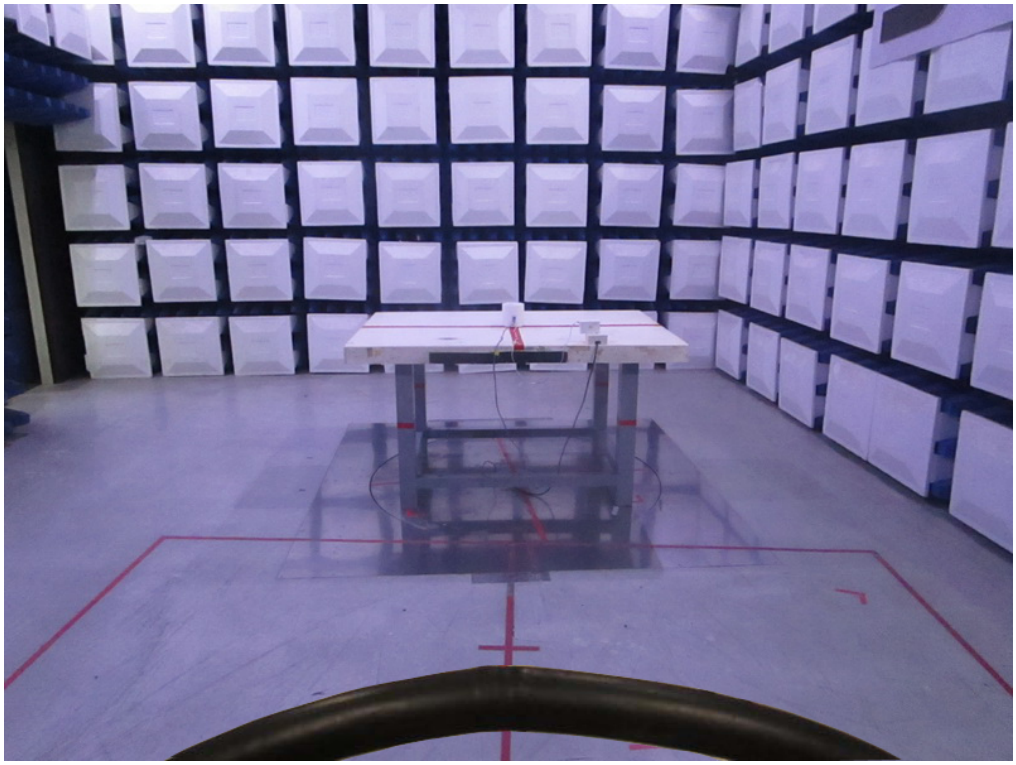
AC Power Line Conducted Emissions Test Photos



Radiated Emissions Test Photos

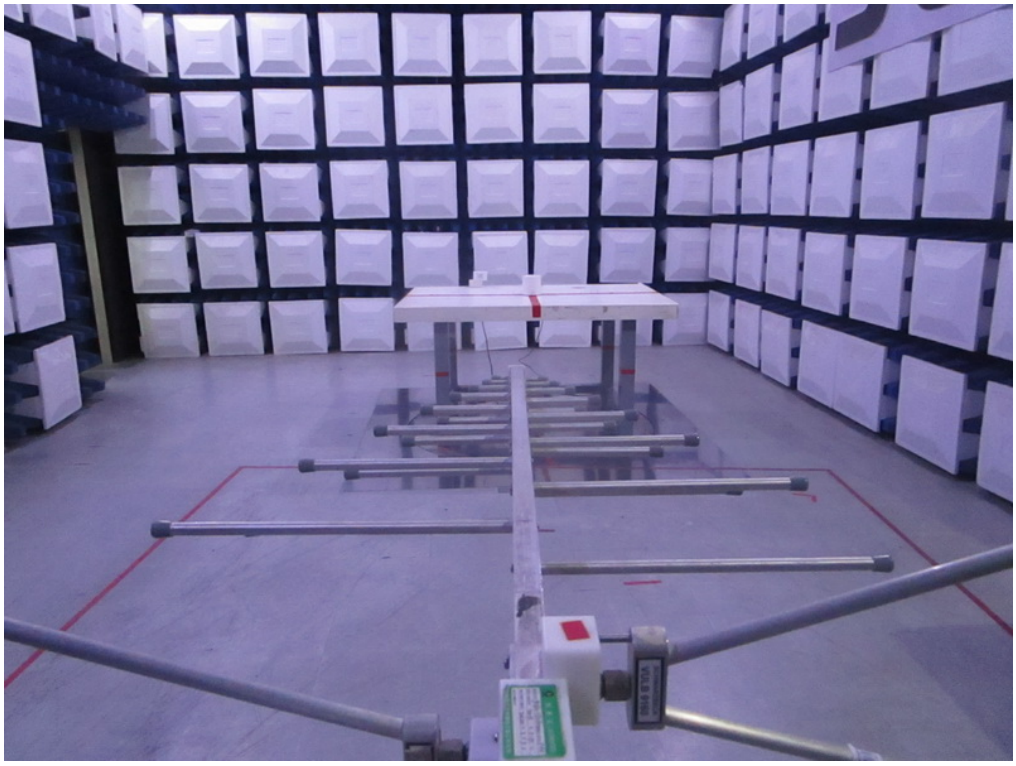
9 kHz to 30 MHz

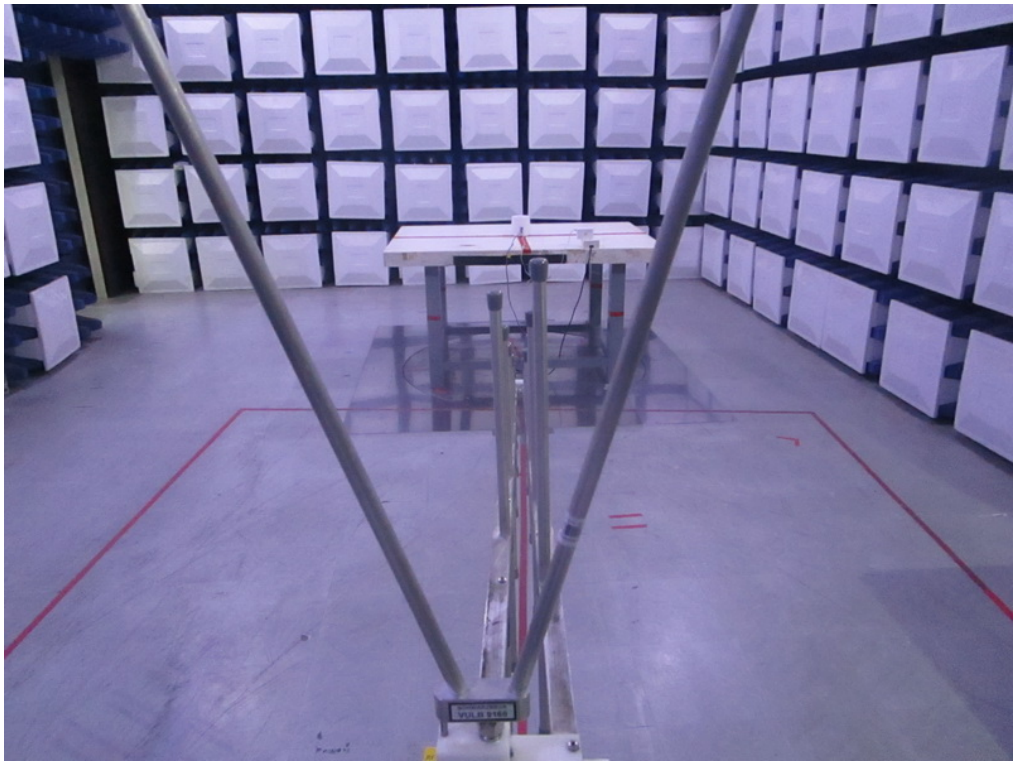




Radiated Emissions Test Photos

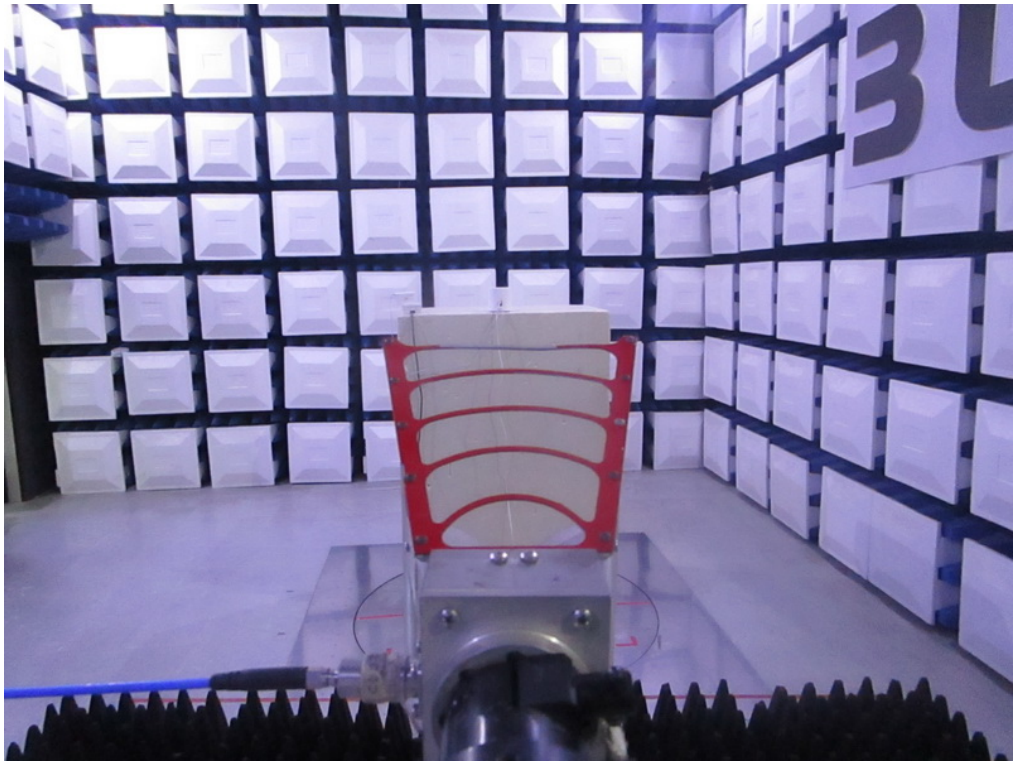
30 MHz to 1 GHz





Radiated Emissions Test Photos

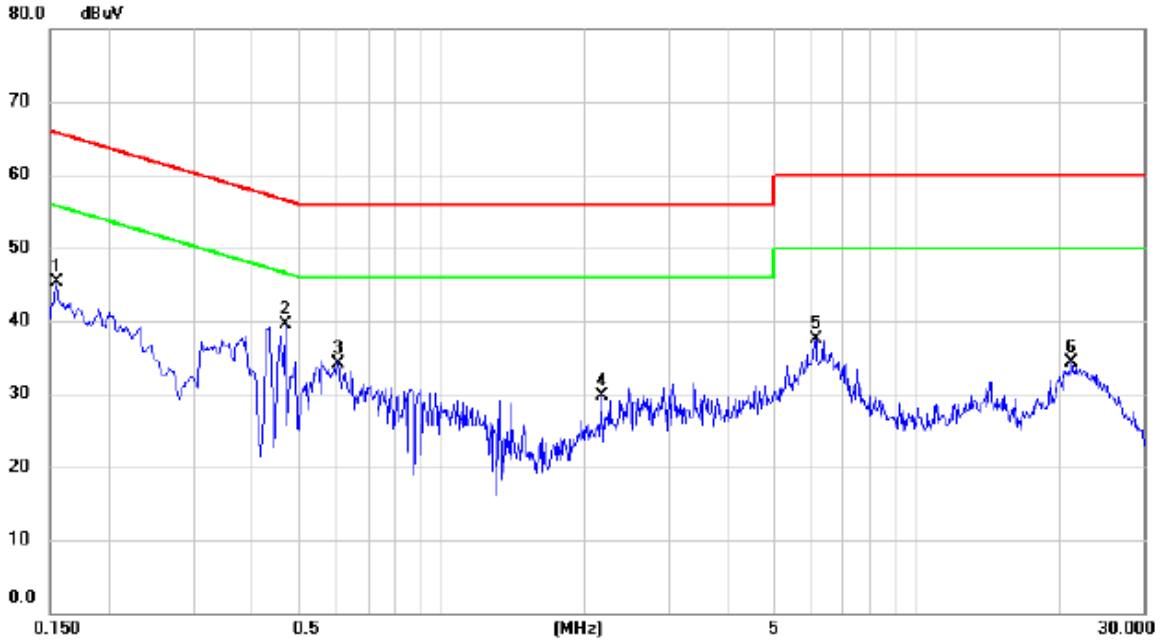
Above 1 GHz



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode:	TX A Mode Channel 157

Line

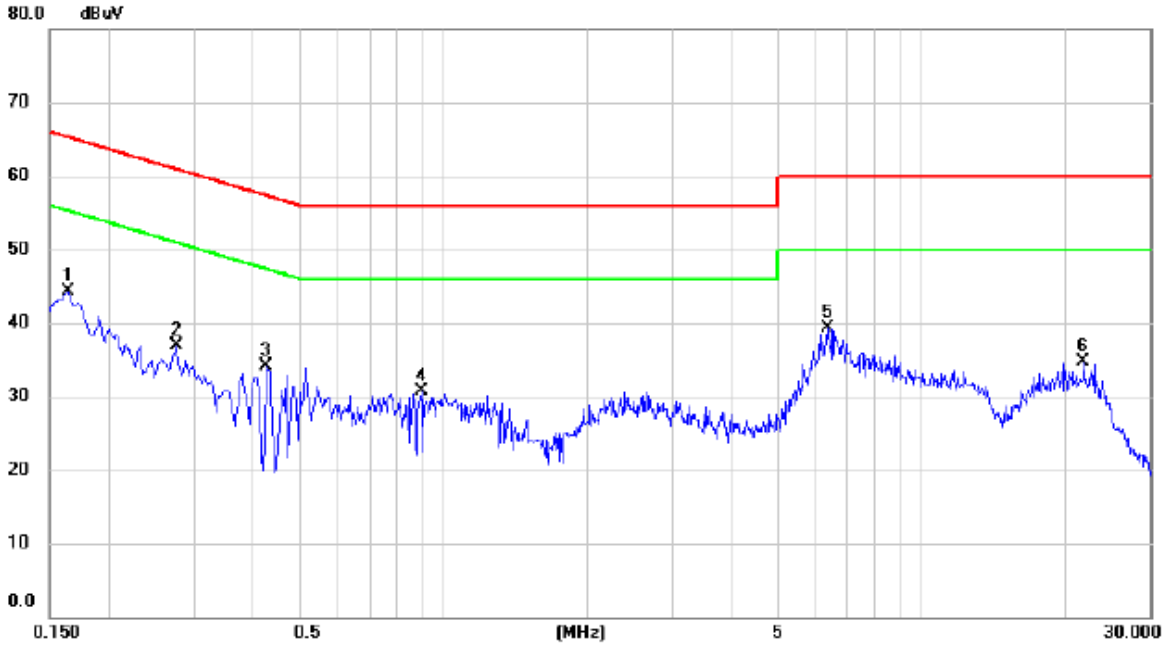


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1544	35.39	9.82	45.21	65.76	-20.55	peak	
2	*	0.4693	29.60	9.88	39.48	56.53	-17.05	peak	
3		0.6044	24.31	9.89	34.20	56.00	-21.80	peak	
4		2.1750	19.77	10.01	29.78	56.00	-26.22	peak	
5		6.1350	27.20	10.27	37.47	60.00	-22.53	peak	
6		21.1110	23.04	11.18	34.22	60.00	-25.78	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.
(3) The test result has included the cable loss.

Test Mode:	TX A Mode Channel 157

Neutral



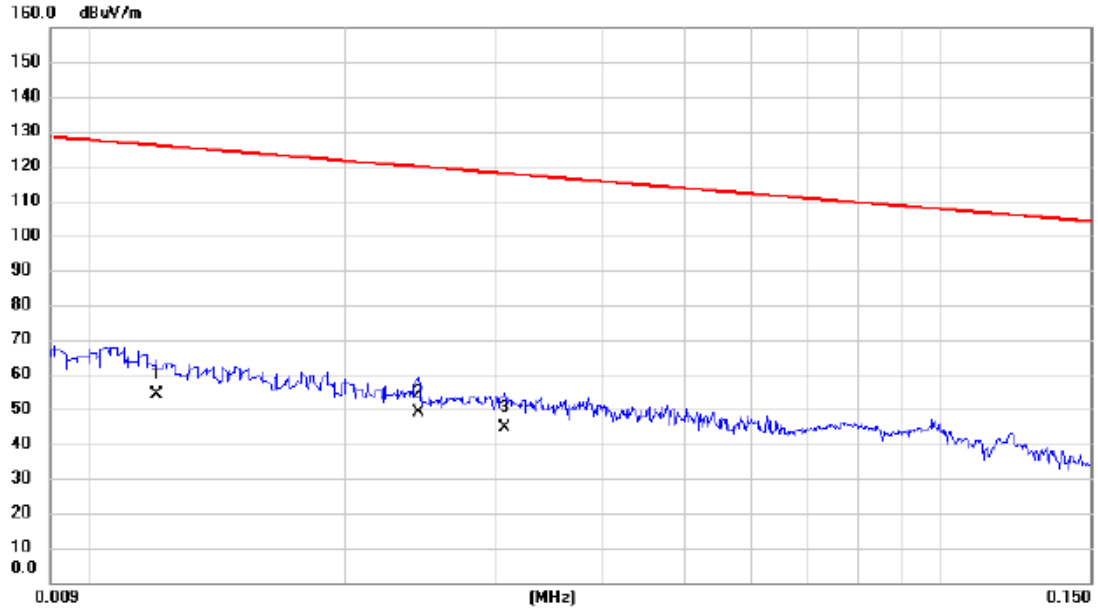
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1635	34.39	9.91	44.30	65.28	-20.98	peak	
2		0.2760	27.01	9.94	36.95	60.94	-23.99	peak	
3		0.4244	24.11	10.01	34.12	57.36	-23.24	peak	
4		0.8970	20.66	10.09	30.75	56.00	-25.25	peak	
5	*	6.3600	28.84	10.53	39.37	60.00	-20.63	peak	
6		21.8084	23.18	11.48	34.66	60.00	-25.34	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.
(3) The test result has included the cable loss.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

Test Mode:	TX A Mode Channel 157

Ant 0°

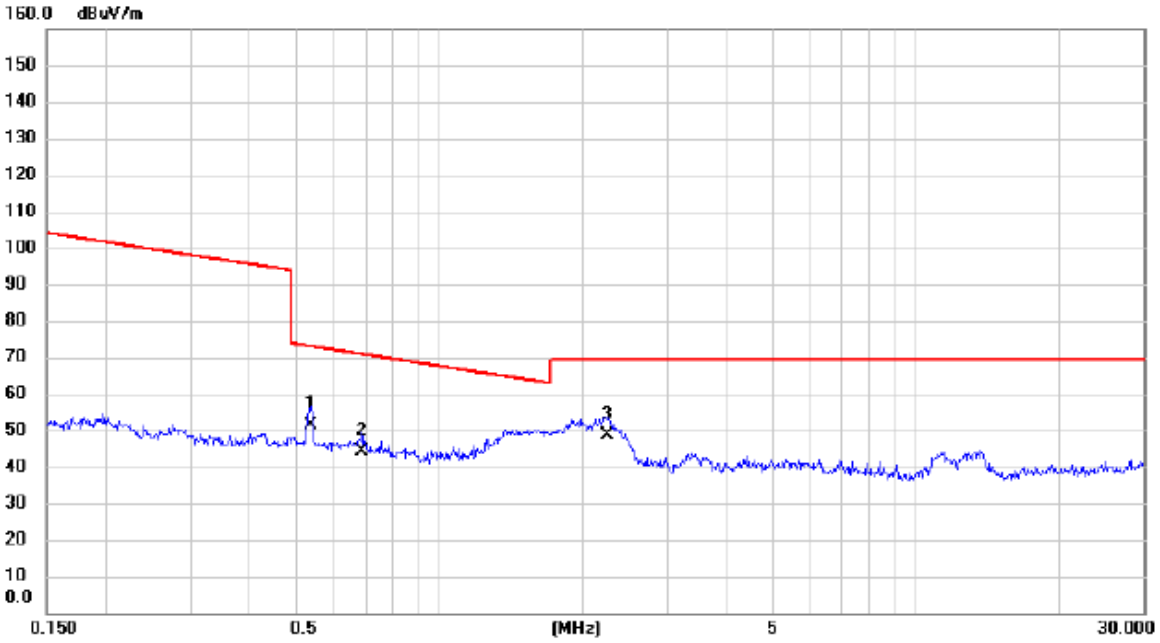


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0120	37.81	16.22	54.03	126.02	-71.99	AVG	
2	*	0.0244	35.04	13.83	48.87	119.86	-70.99	AVG	
3		0.0308	30.84	13.86	44.70	117.83	-73.13	AVG	

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

Test Mode:	TX A Mode Channel 157

Ant 0°

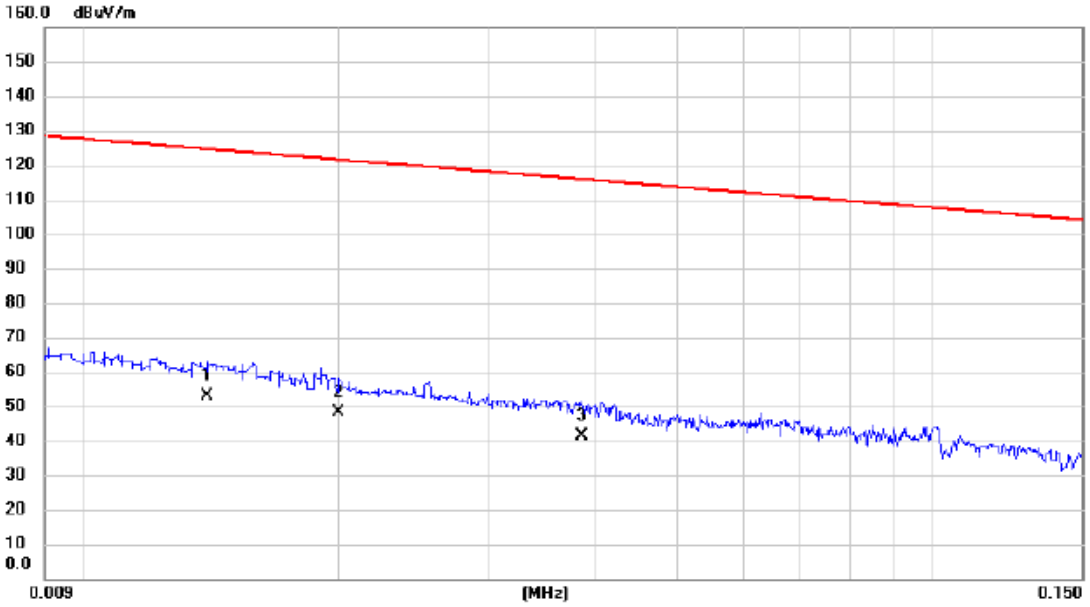


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.5350	38.42	12.99	51.41	73.04	-21.63	QP	
2		0.6862	31.69	12.70	44.39	70.88	-26.49	QP	
3	*	2.2486	36.83	11.67	48.50	69.54	-21.04	QP	

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

Test Mode:	TX A Mode Channel 157

Ant 90°

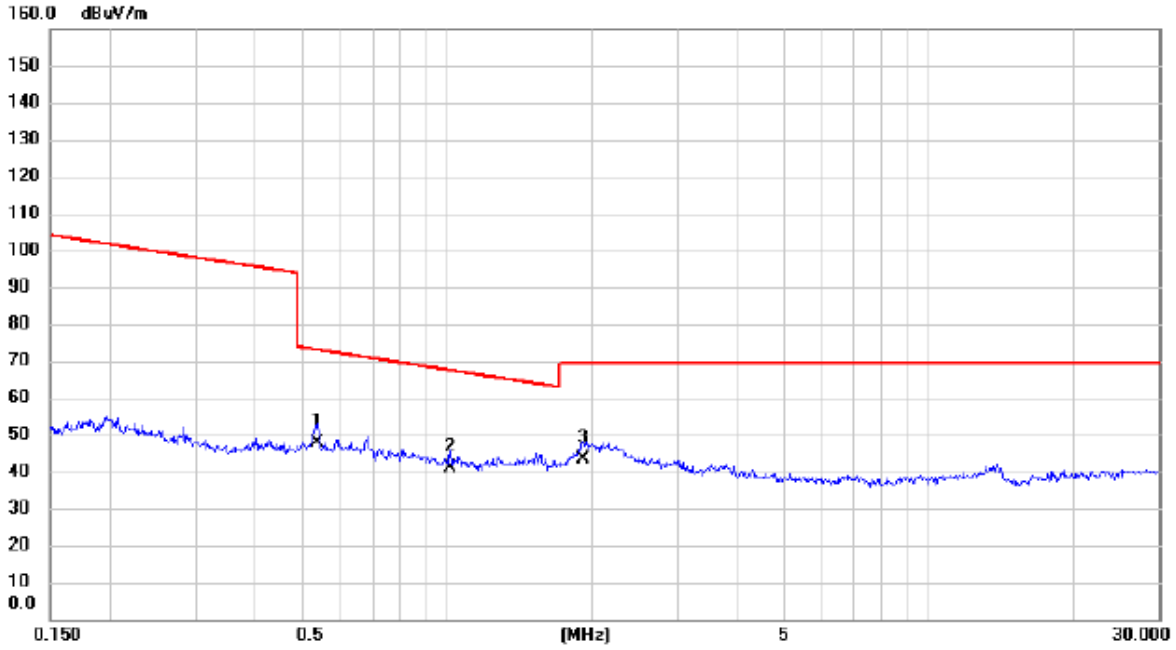


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0140	37.24	15.62	52.86	124.68	-71.82	AVG	
2		0.0200	34.46	13.82	48.28	121.58	-73.30	AVG	
3		0.0386	27.64	13.89	41.53	115.87	-74.34	AVG	

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

Test Mode:	TX A Mode Channel 157

Ant 90°



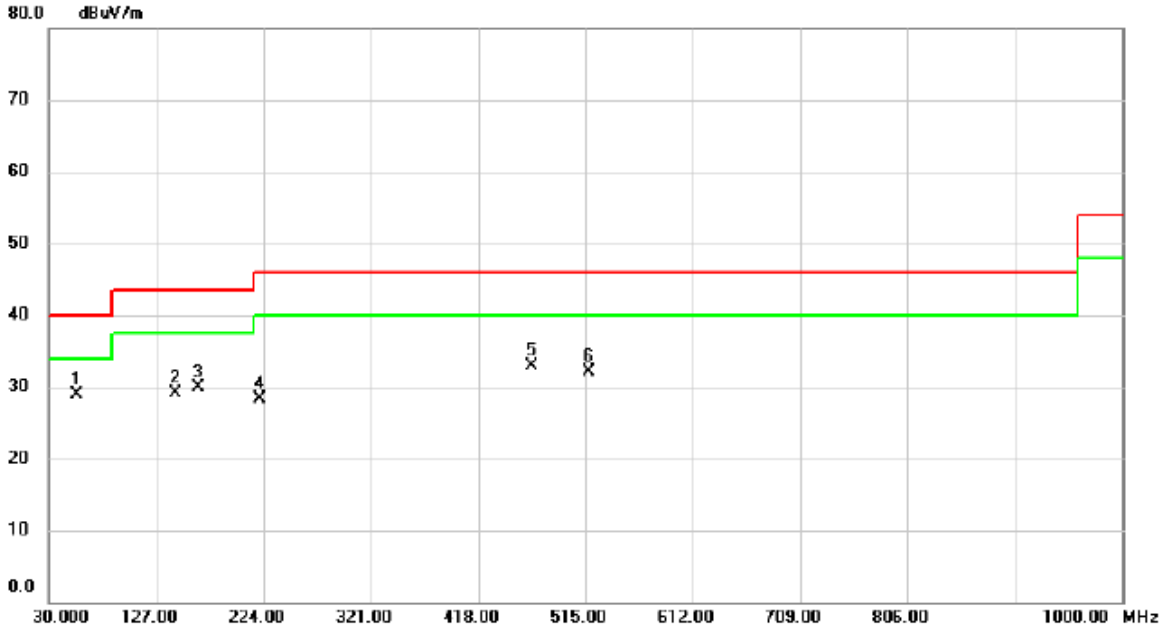
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.5350	35.00	12.99	47.99	73.04	-25.05	QP	
2		1.0156	28.42	12.49	40.91	67.47	-26.56	QP	
3		1.9180	31.38	11.87	43.25	69.54	-26.29	QP	

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ

Test Mode:	TX AC80 Mode Channel 157

Vertical

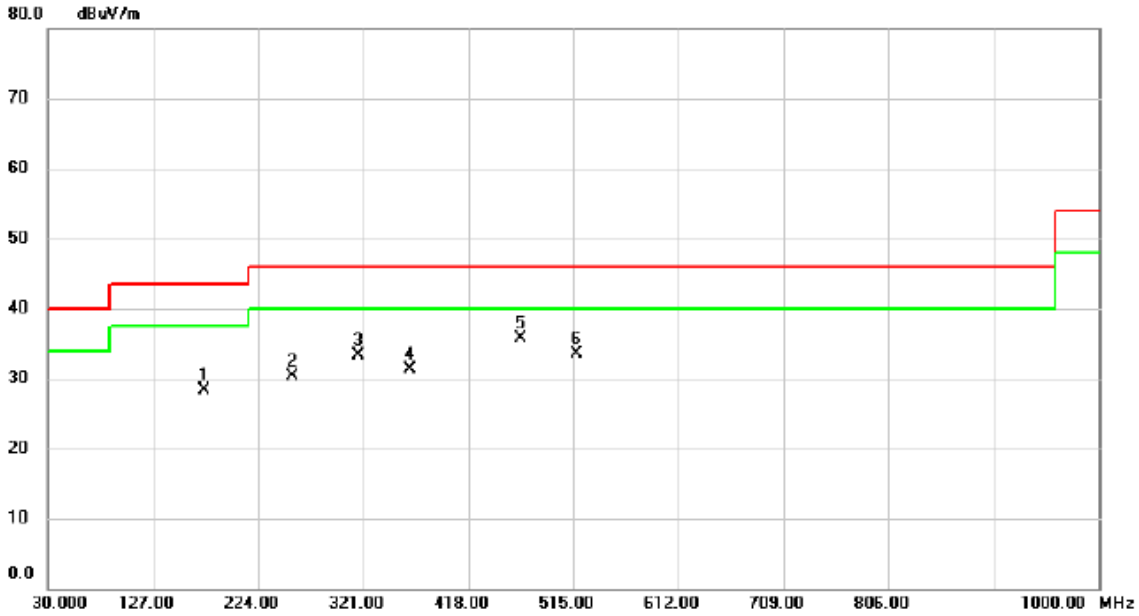


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	55.2200	43.01	-14.02	28.99	40.00	-11.01	peak	
2		143.9750	41.72	-12.70	29.02	43.50	-14.48	peak	
3		165.3150	41.71	-11.82	29.89	43.50	-13.61	peak	
4		220.1200	43.02	-14.70	28.32	46.00	-17.68	peak	
5		466.5000	40.91	-8.02	32.89	46.00	-13.11	peak	
6		518.3950	39.73	-7.58	32.15	46.00	-13.85	peak	

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

Test Mode:	TX AC80 Mode Channel 157

Horizontal



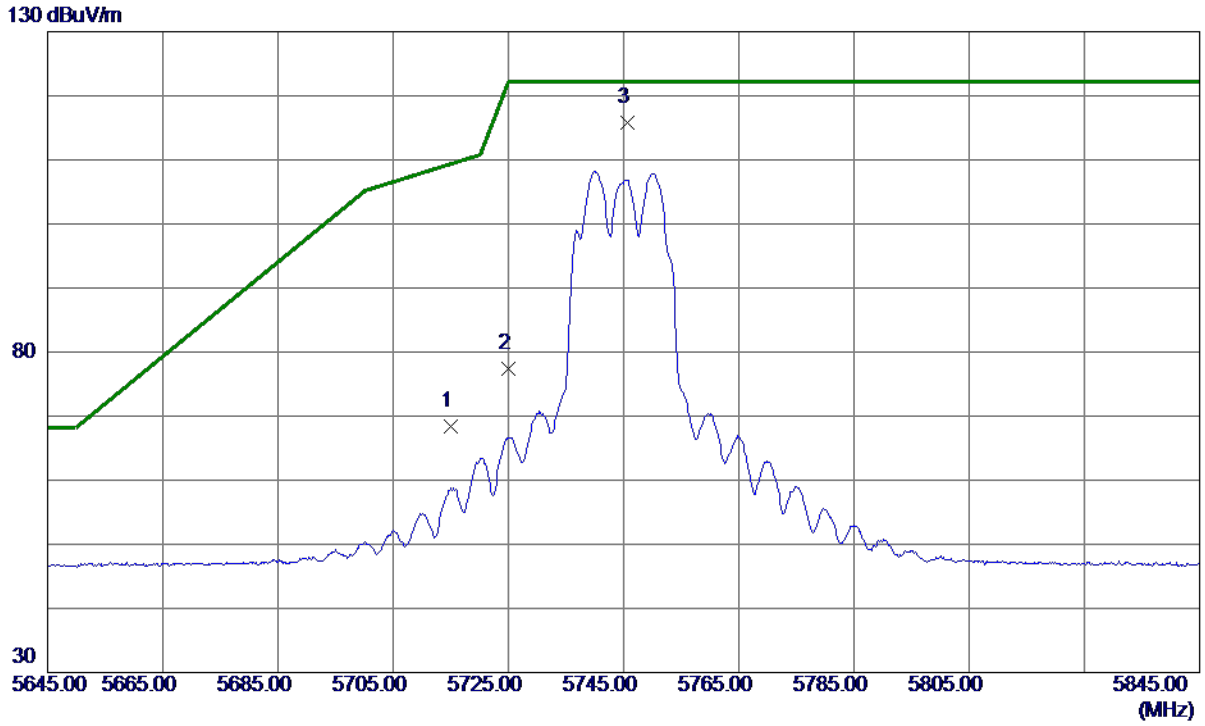
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		174.5300	41.10	-12.81	28.29	43.50	-15.21	peak	
2		256.0100	43.38	-13.16	30.22	46.00	-15.78	peak	
3		316.6350	44.61	-11.28	33.33	46.00	-12.67	peak	
4		364.6500	41.73	-10.39	31.34	46.00	-14.66	peak	
5	*	466.5000	43.77	-8.02	35.75	46.00	-10.25	peak	
6		518.3950	41.00	-7.58	33.42	46.00	-12.58	peak	

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

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Vertical

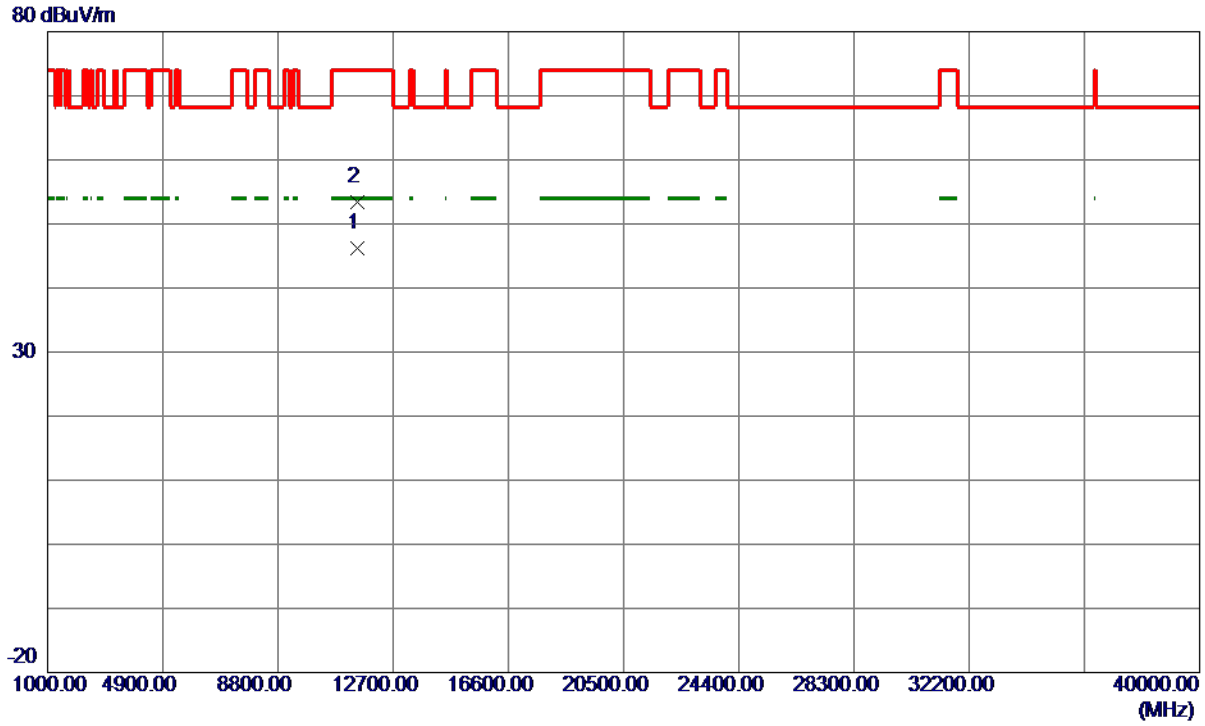


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	49.71	18.65	68.36	109.40	-41.04	Peak	
2	5725.0000	58.73	18.69	77.42	122.20	-44.78	Peak	
3 *	5745.7000	97.00	18.75	115.75	122.20	-6.45	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Vertical

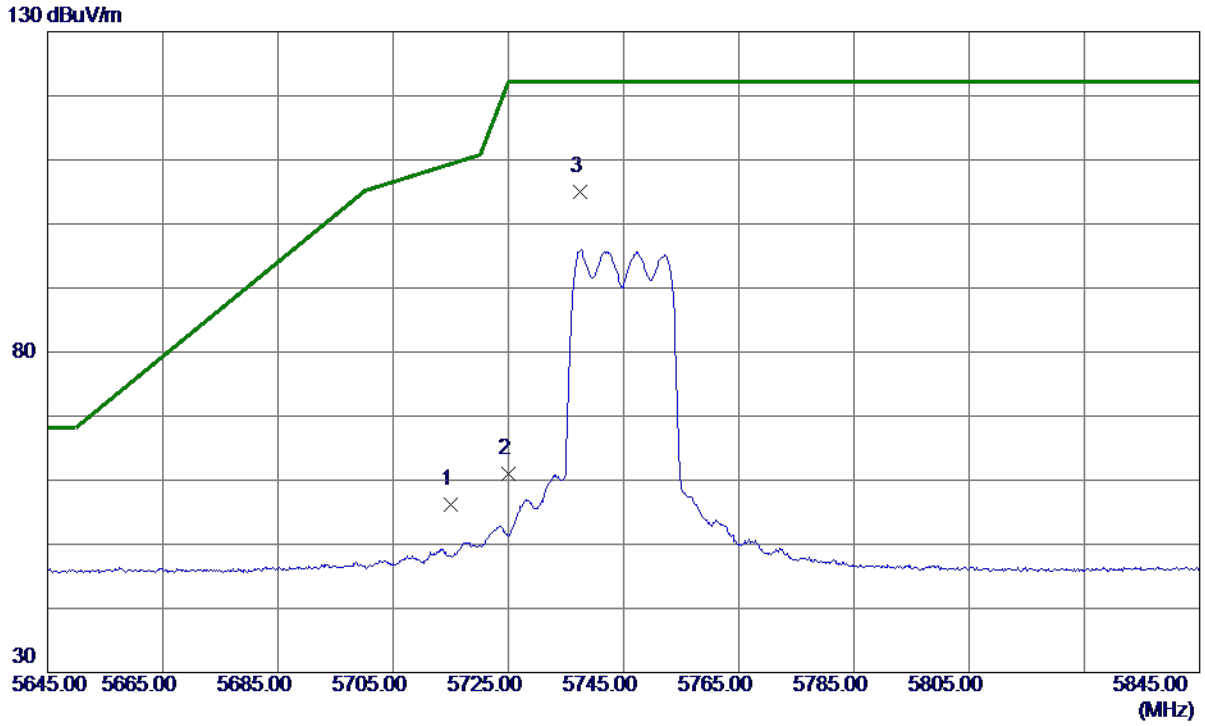


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11489.7600	28.98	17.16	46.14	54.00	-7.86	AVG	
2	11489.8080	36.29	17.16	53.45	74.00	-20.55	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Horizontal

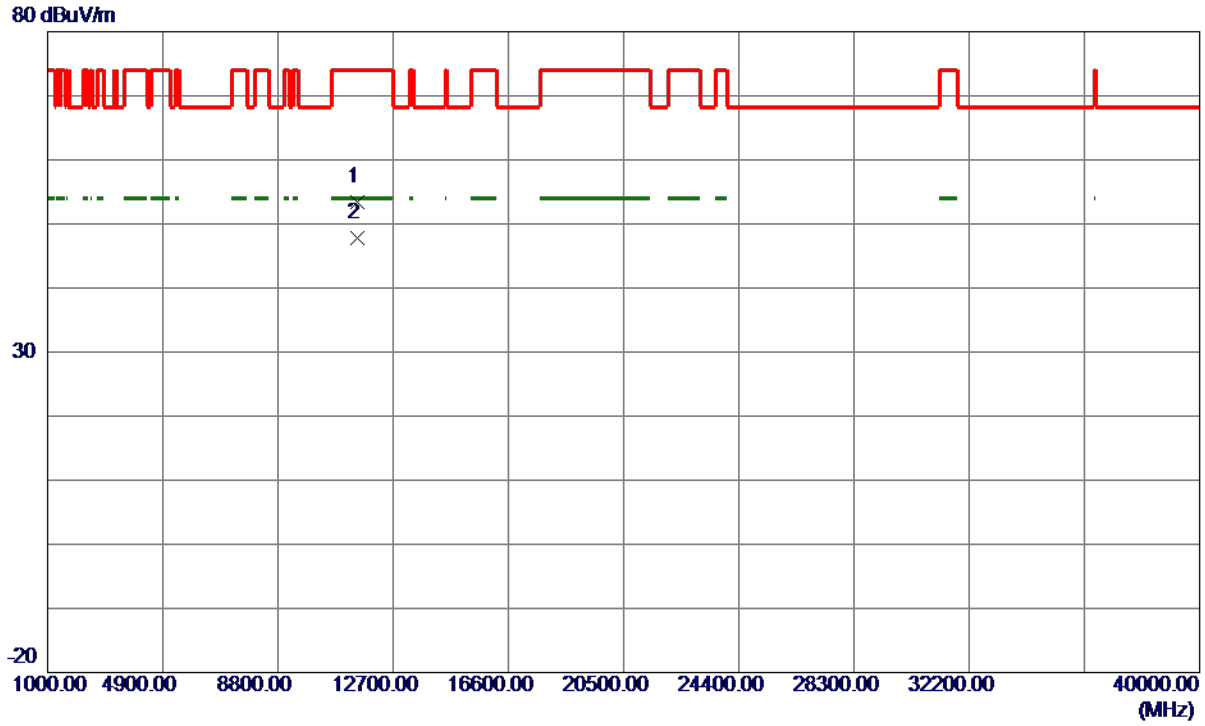


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	37.50	18.65	56.15	109.40	-53.25	Peak	
2	5725.0000	42.26	18.69	60.95	122.20	-61.25	Peak	
3 *	5737.5000	86.29	18.73	105.02	122.20	-17.18	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5745 MHz

Horizontal

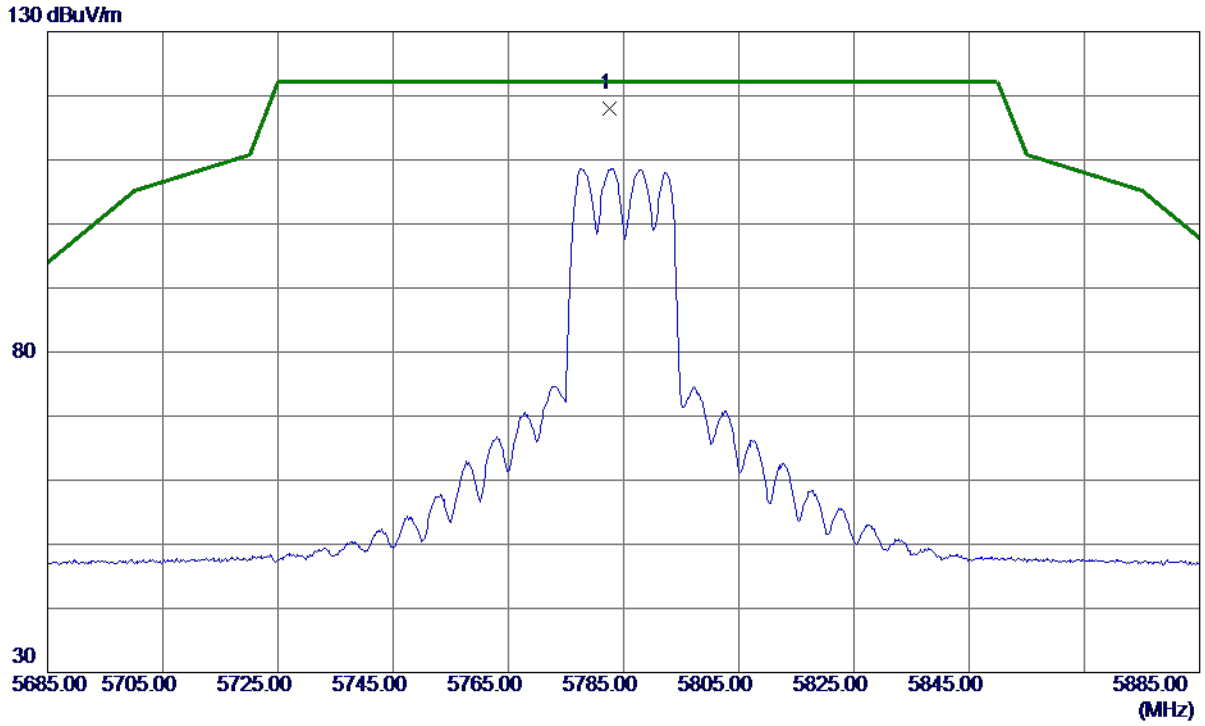


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11489.6550	36.25	17.16	53.41	74.00	-20.59	Peak	
2 *	11489.7500	30.62	17.16	47.78	54.00	-6.22	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Vertical

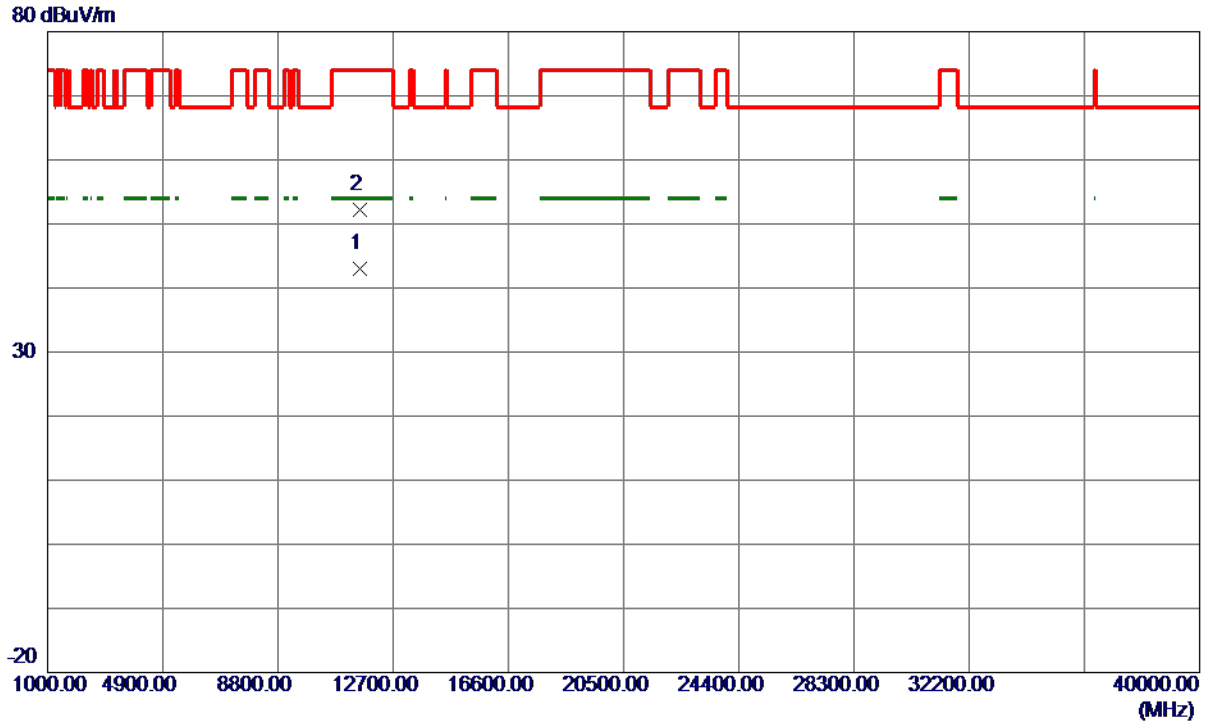


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5782.6000	99.15	18.87	118.02	122.20	-4.18	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Vertical

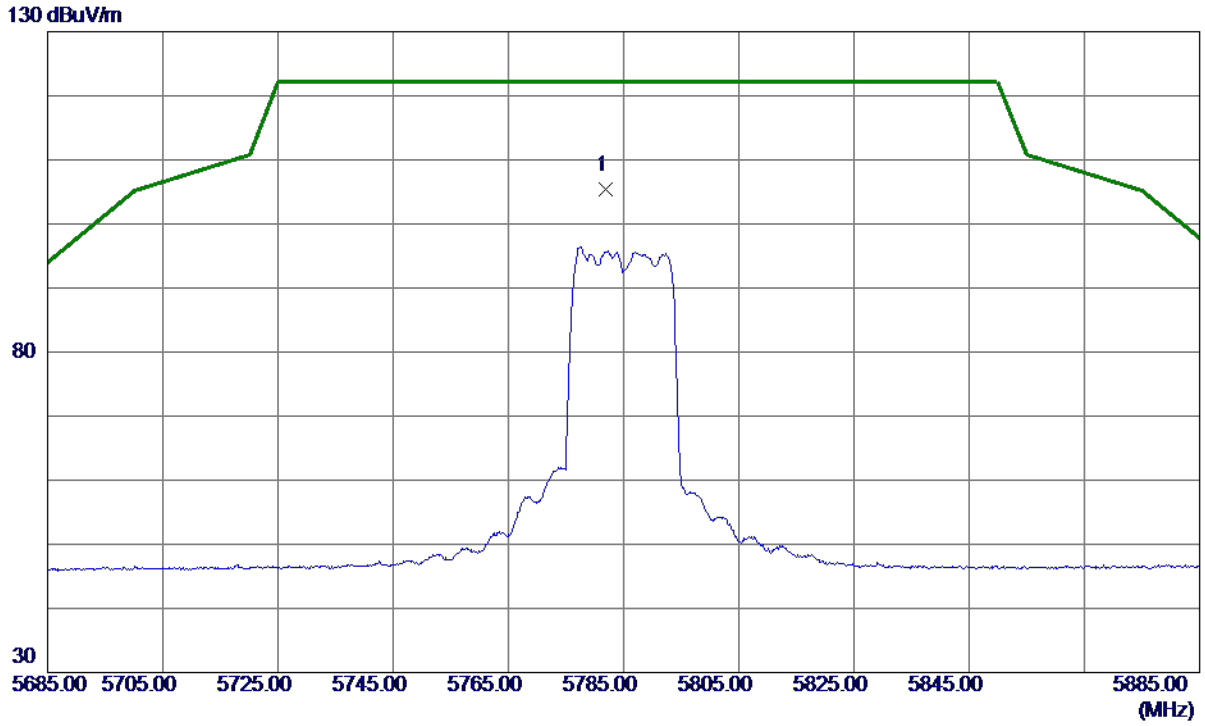


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11569.7699	25.76	17.20	42.96	54.00	-11.04	AVG	
2	11570.0400	34.97	17.20	52.17	74.00	-21.83	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Horizontal

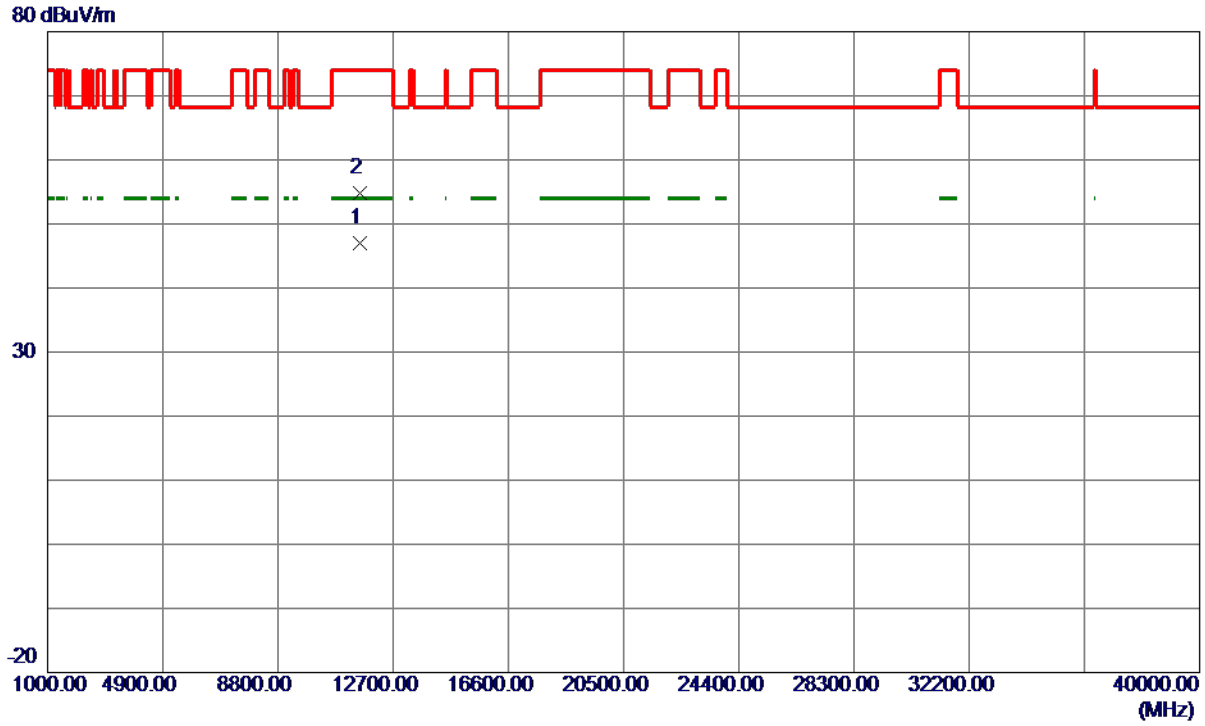


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5781.8000	86.43	18.87	105.30	122.20	-16.90	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5785 MHz

Horizontal

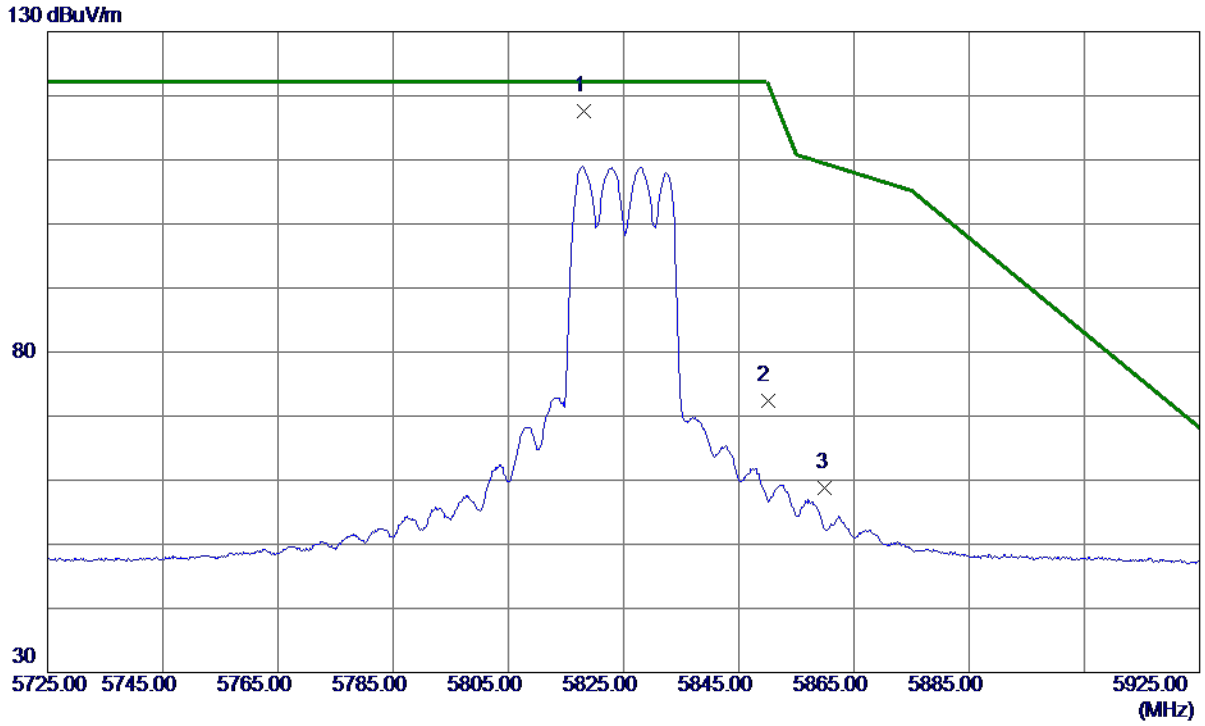


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11569.7280	29.79	17.20	46.99	54.00	-7.01	AVG	
2	11569.9100	37.61	17.20	54.81	74.00	-19.19	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Vertical

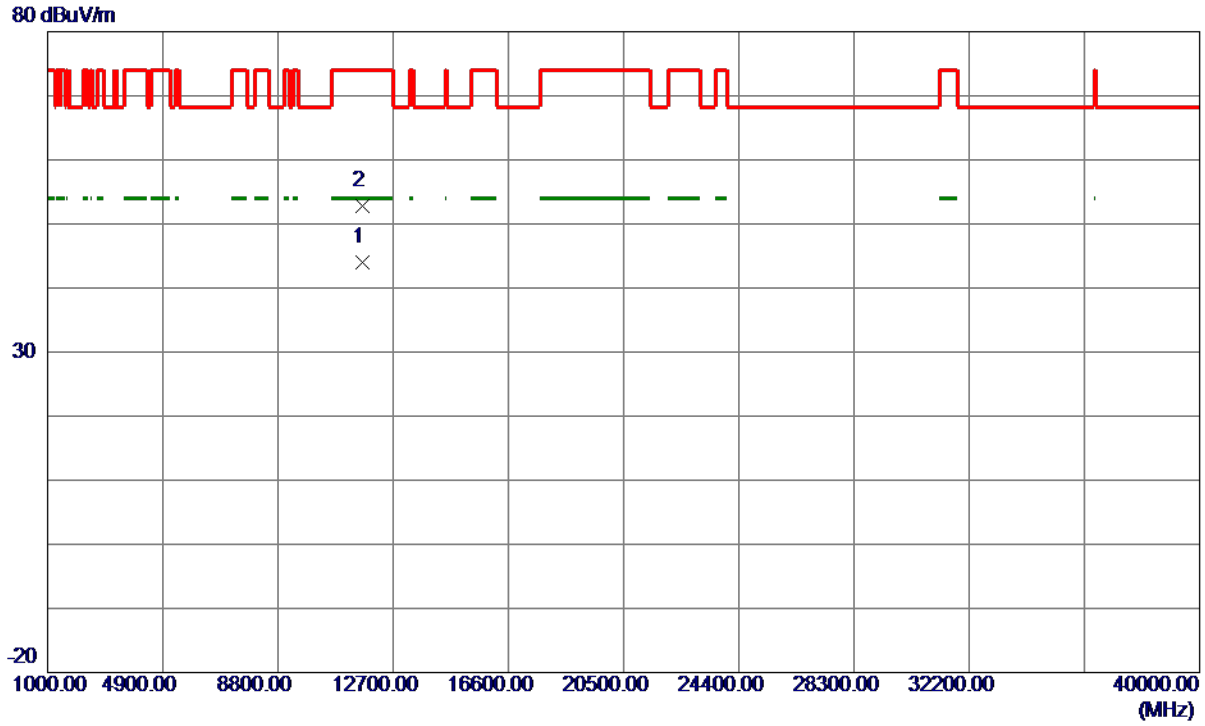


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5818.1000	98.64	18.99	117.63	122.20	-4.57	Peak	No Limit
2	5850.0000	53.26	19.09	72.35	122.20	-49.85	Peak	
3	5860.0000	39.71	19.13	58.84	109.40	-50.56	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Vertical

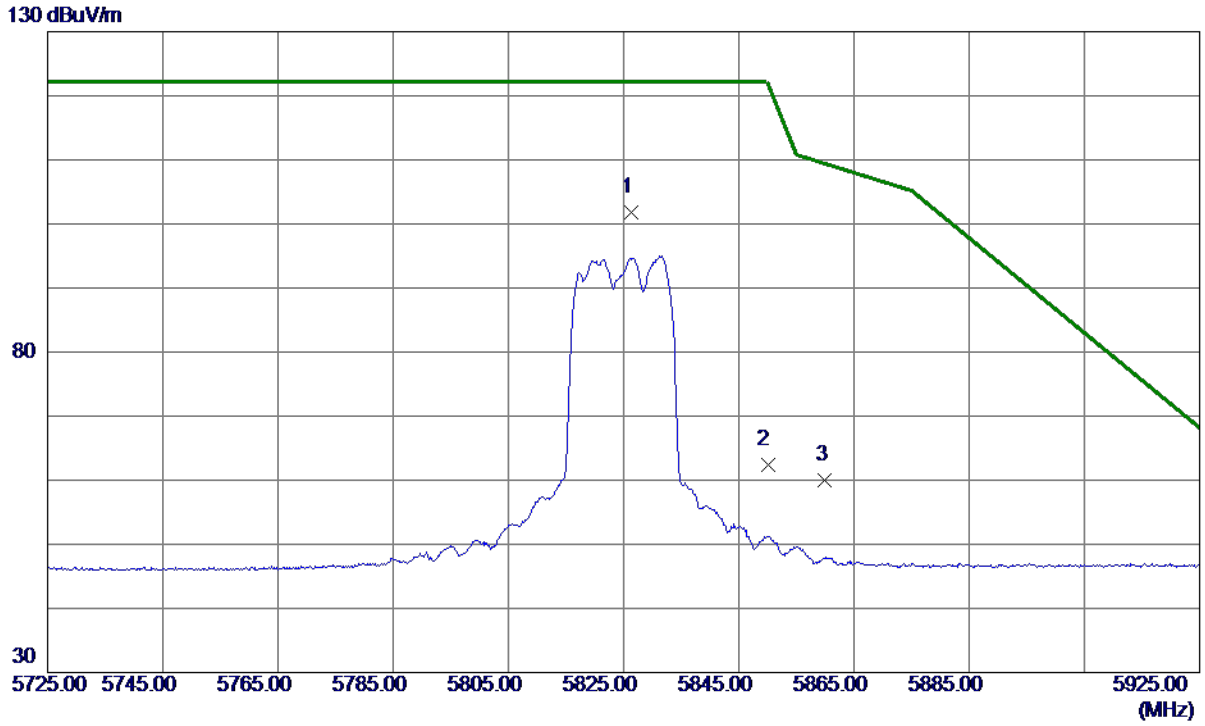


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11649.7699	26.68	17.23	43.91	54.00	-10.09	AVG	
2	11649.9269	35.51	17.23	52.74	74.00	-21.26	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Horizontal

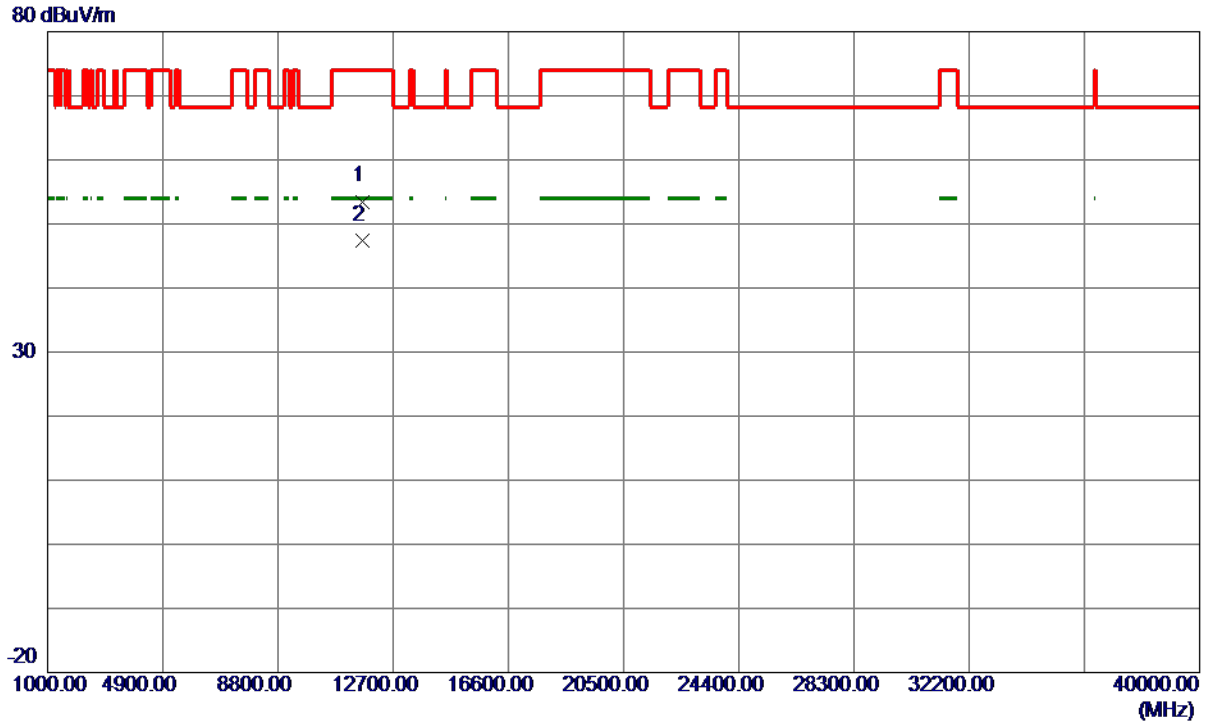


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5826.4000	82.84	19.02	101.86	122.20	-20.34	Peak	No Limit
2	5850.0000	43.26	19.09	62.35	122.20	-59.85	Peak	
3	5860.0000	40.81	19.13	59.94	109.40	-49.46	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX A Mode 5825 MHz

Horizontal

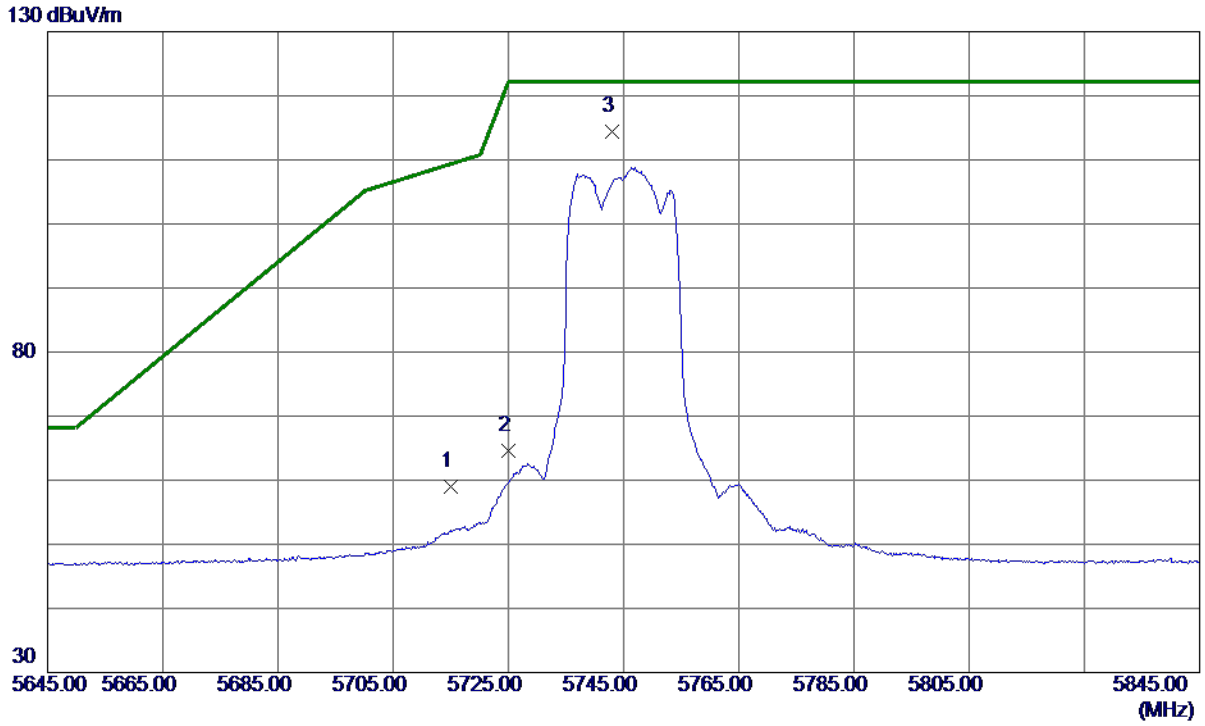


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11649.7530	36.27	17.23	53.50	74.00	-20.50	Peak	
2 *	11649.7600	30.24	17.23	47.47	54.00	-6.53	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

Vertical

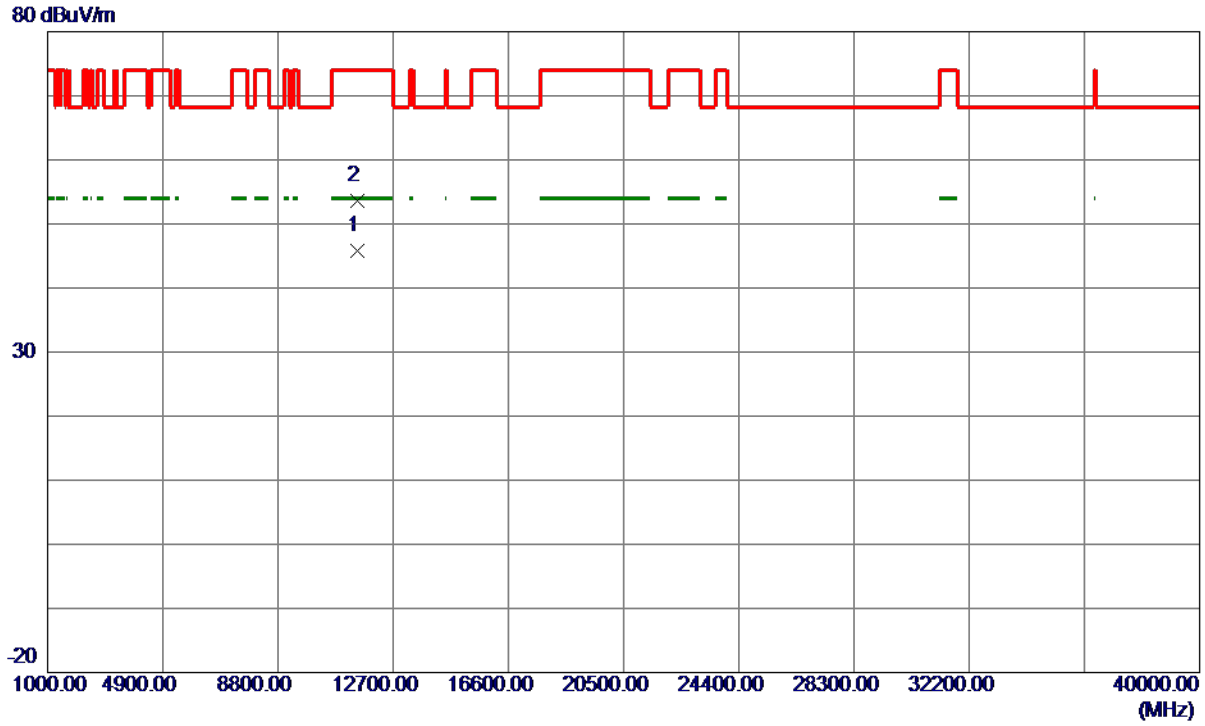


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	40.41	18.65	59.06	109.40	-50.34	Peak	
2	5725.0000	45.85	18.69	64.54	122.20	-57.66	Peak	
3 *	5743.0000	95.66	18.74	114.40	122.20	-7.80	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

Vertical

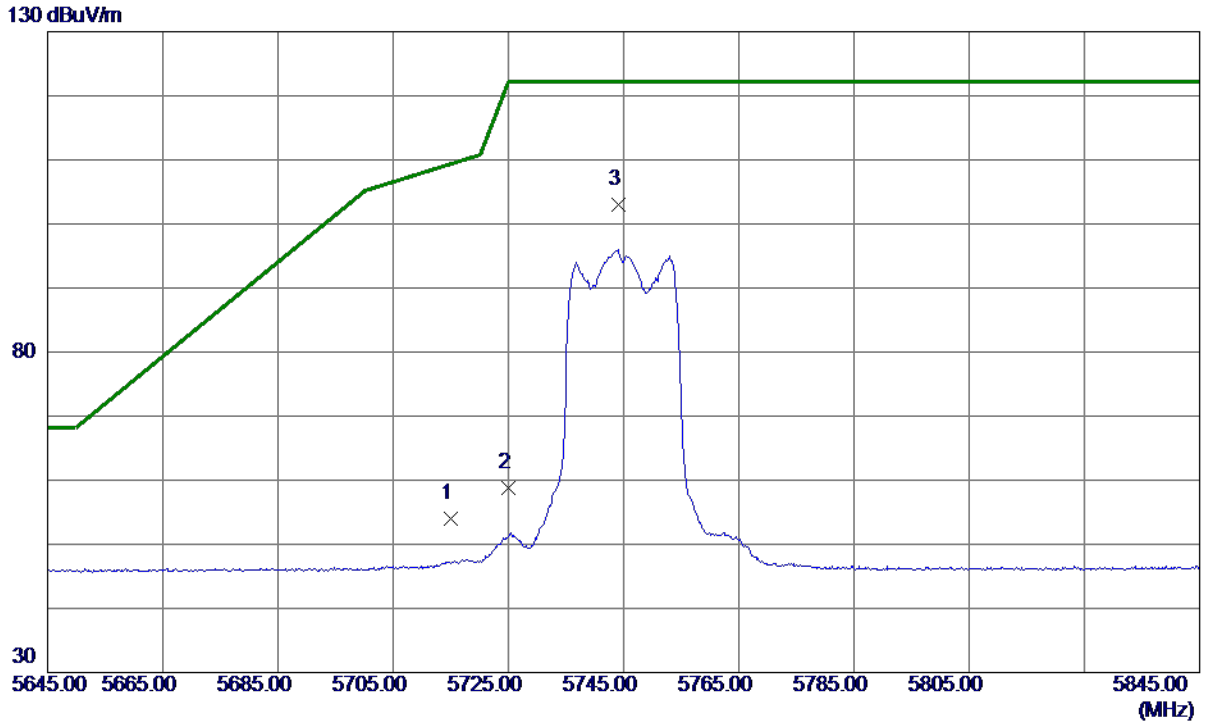


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11489.7180	28.57	17.16	45.73	54.00	-8.27	AVG	
2	11489.8620	36.43	17.16	53.59	74.00	-20.41	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

Horizontal

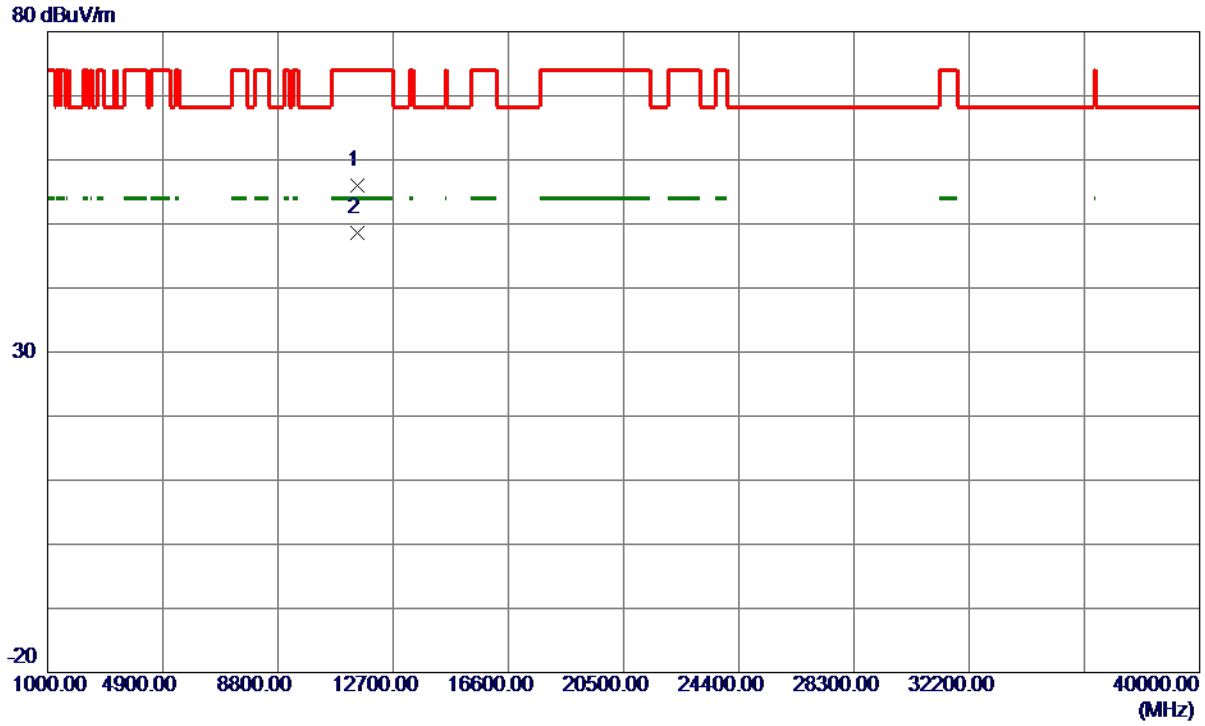


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	35.37	18.65	54.02	109.40	-55.38	Peak	
2	5725.0000	40.19	18.69	58.88	122.20	-63.32	Peak	
3 *	5744.2000	84.34	18.75	103.09	122.20	-19.11	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

Horizontal

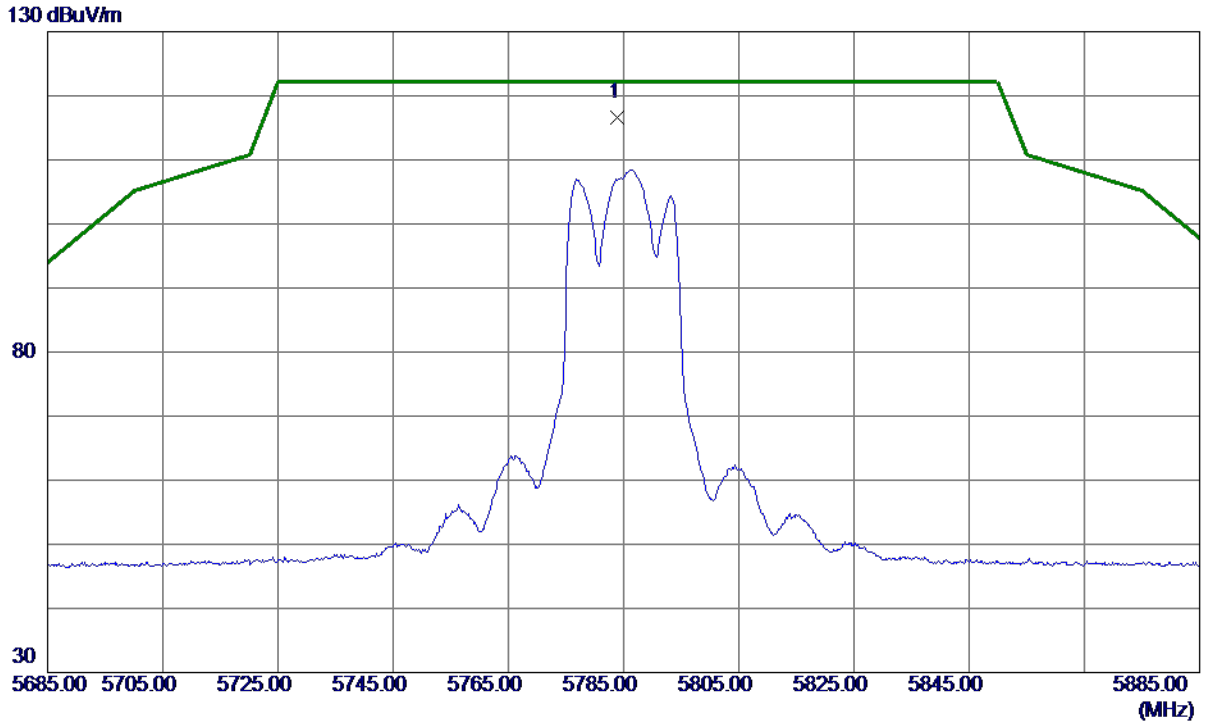


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11489.8430	38.90	17.16	56.06	74.00	-17.94	Peak	
2 *	11489.8580	31.48	17.16	48.64	54.00	-5.36	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

Vertical

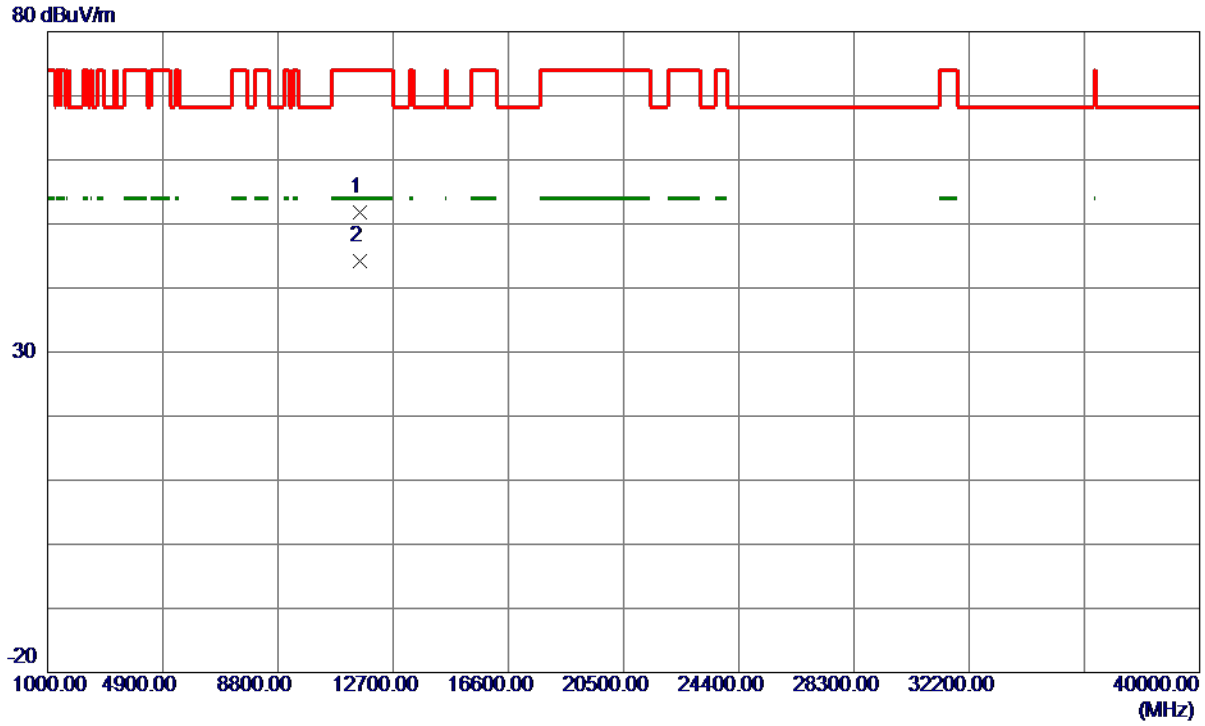


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5784.0000	97.71	18.88	116.59	122.20	-5.61	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

Vertical

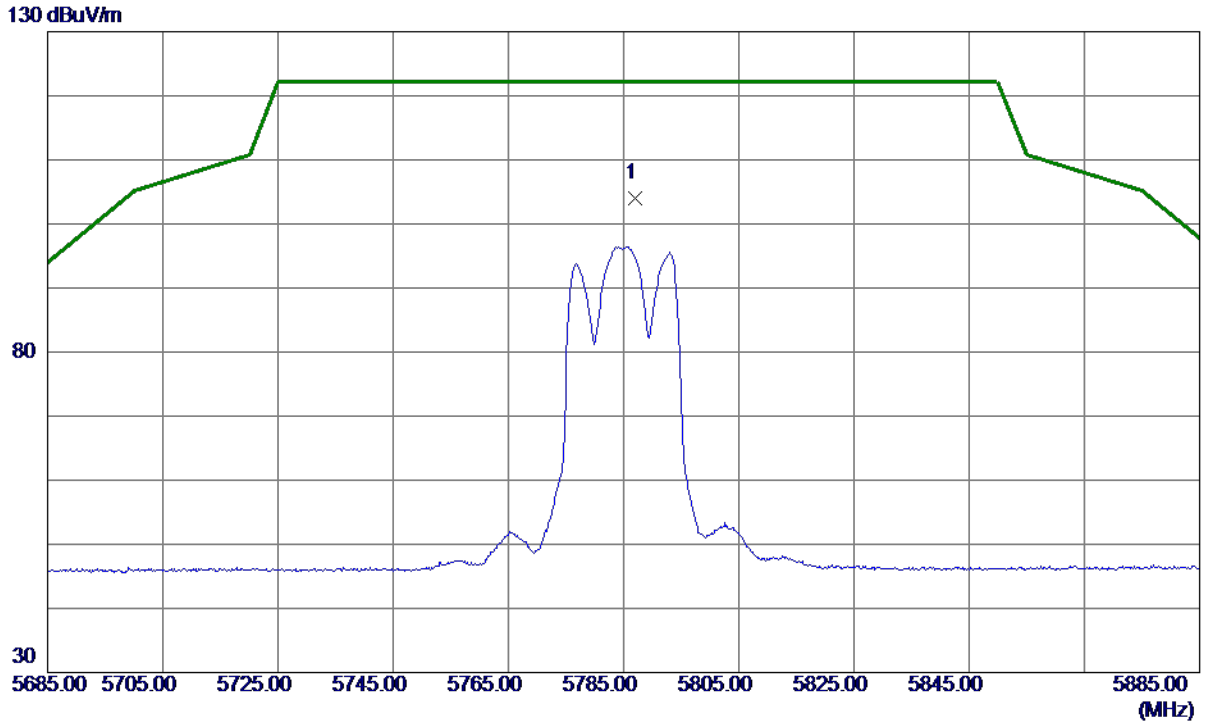


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11569.5850	34.62	17.20	51.82	74.00	-22.18	Peak	
2 *	11569.7779	27.02	17.20	44.22	54.00	-9.78	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

Horizontal

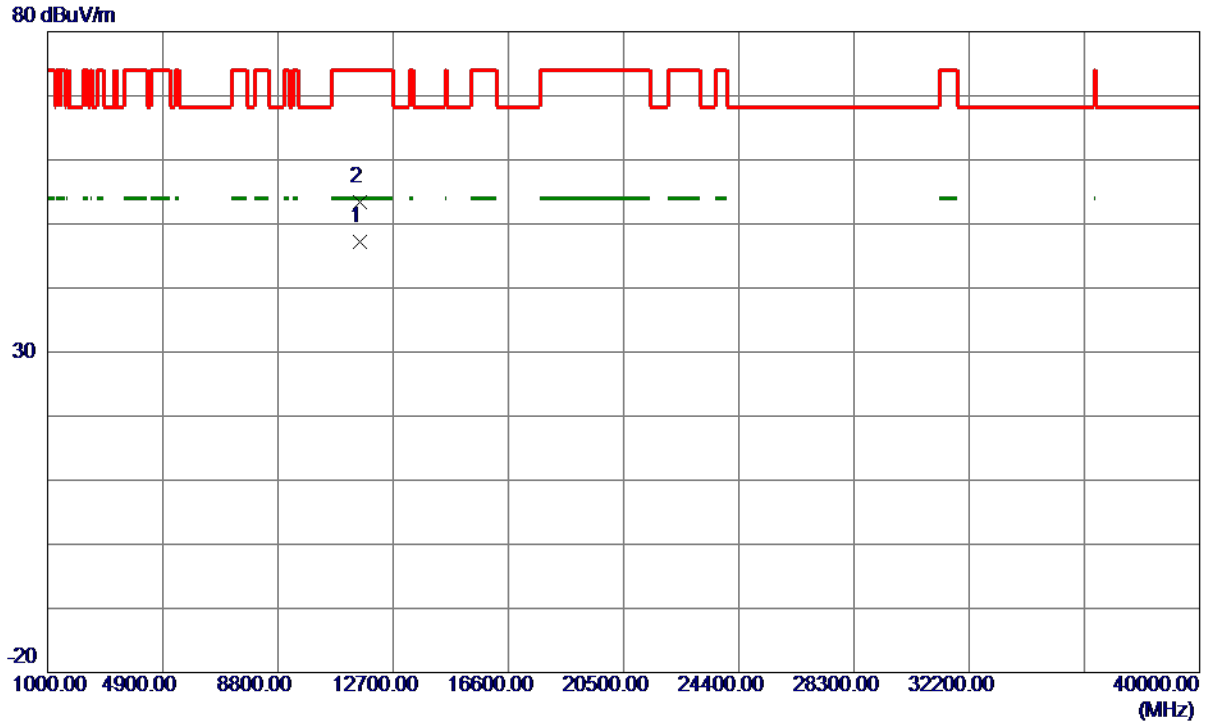


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5787.0000	85.20	18.89	104.09	122.20	-18.11	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

Horizontal

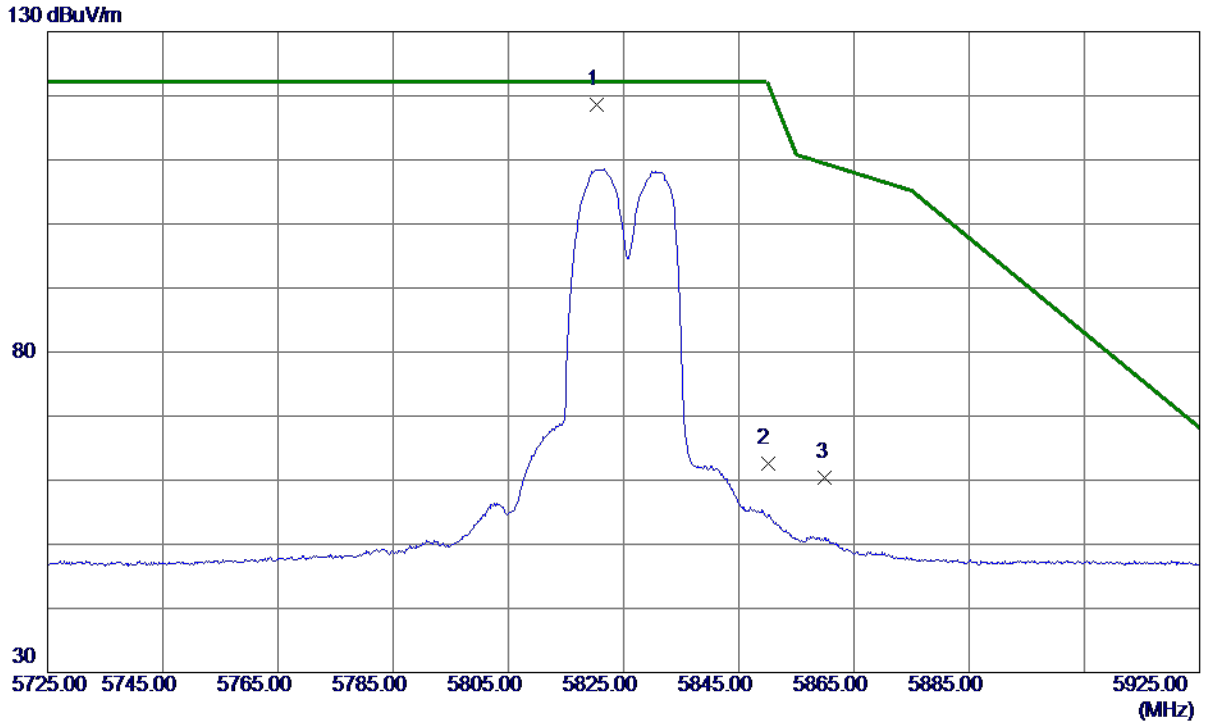


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11569.8330	30.05	17.20	47.25	54.00	-6.75	AVG	
2	11570.0870	36.20	17.20	53.40	74.00	-20.60	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

Vertical

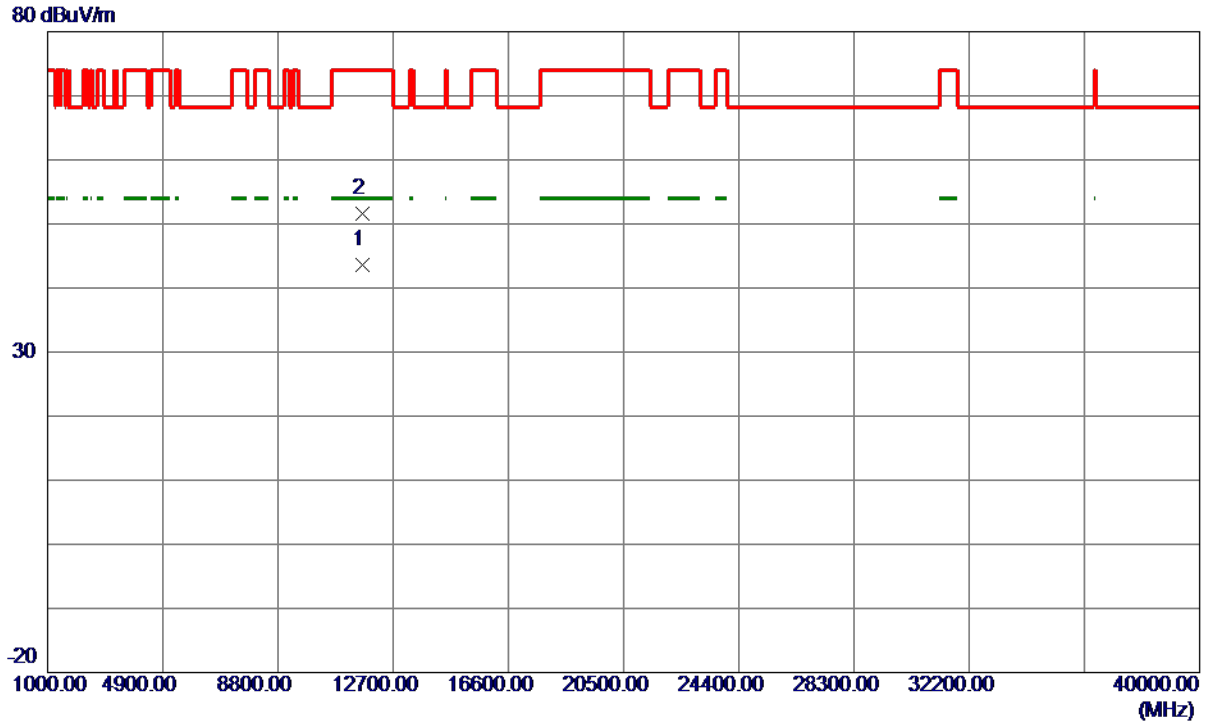


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5820.4000	99.61	19.00	118.61	122.20	-3.59	Peak	No Limit
2	5850.0000	43.55	19.09	62.64	122.20	-59.56	Peak	
3	5860.0000	41.32	19.13	60.45	109.40	-48.95	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

Vertical

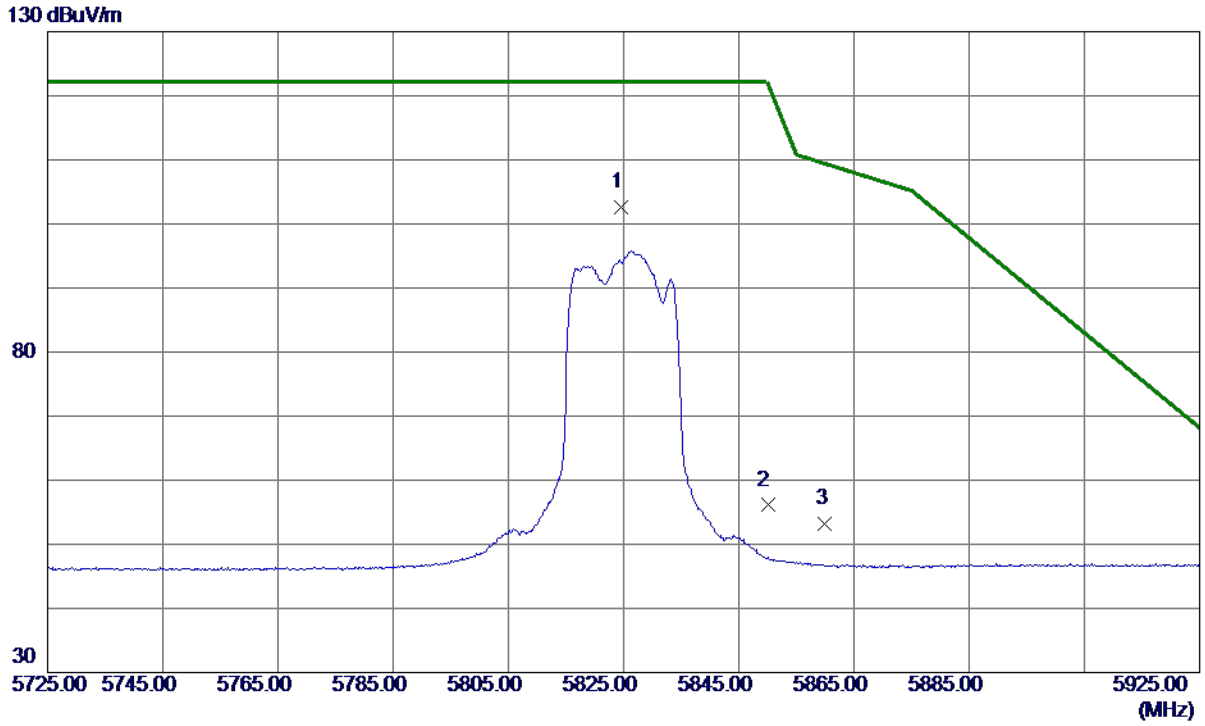


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11649.8050	26.30	17.23	43.53	54.00	-10.47	AVG	
2	11650.0279	34.30	17.23	51.53	74.00	-22.47	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

Horizontal

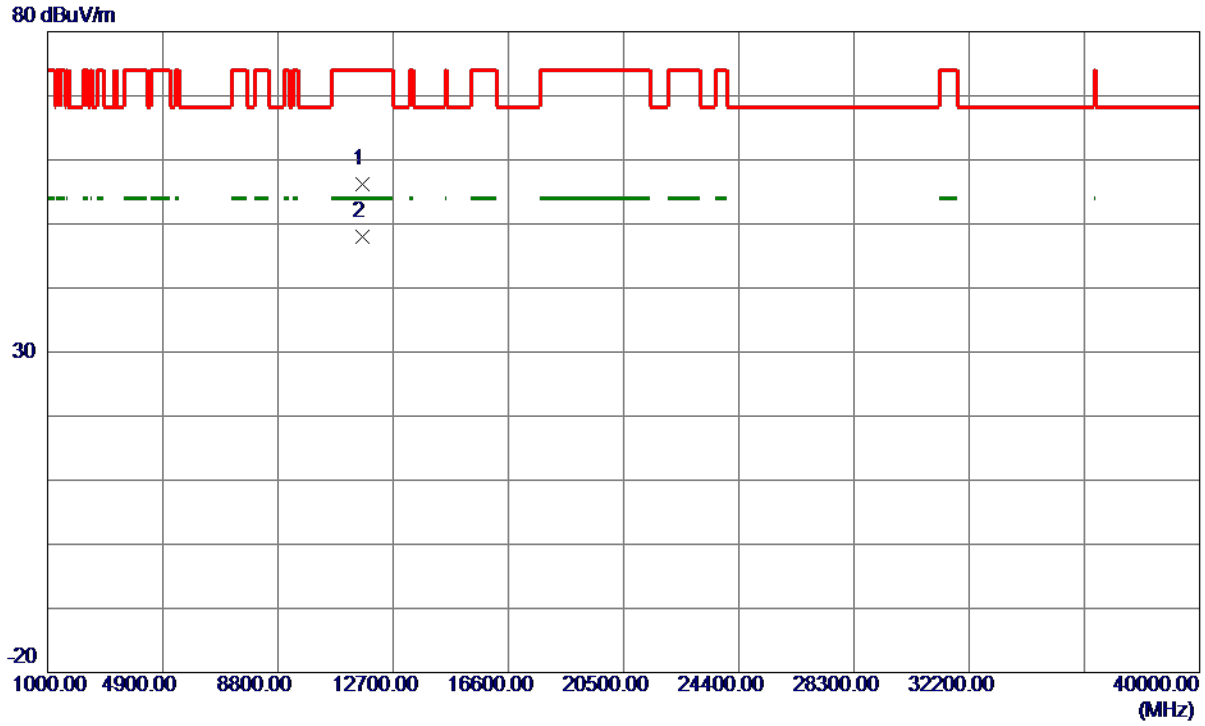


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5824.5000	83.57	19.01	102.58	122.20	-19.62	Peak	No Limit
2	5850.0000	37.01	19.09	56.10	122.20	-66.10	Peak	
3	5860.0000	34.06	19.13	53.19	109.40	-56.21	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

Horizontal

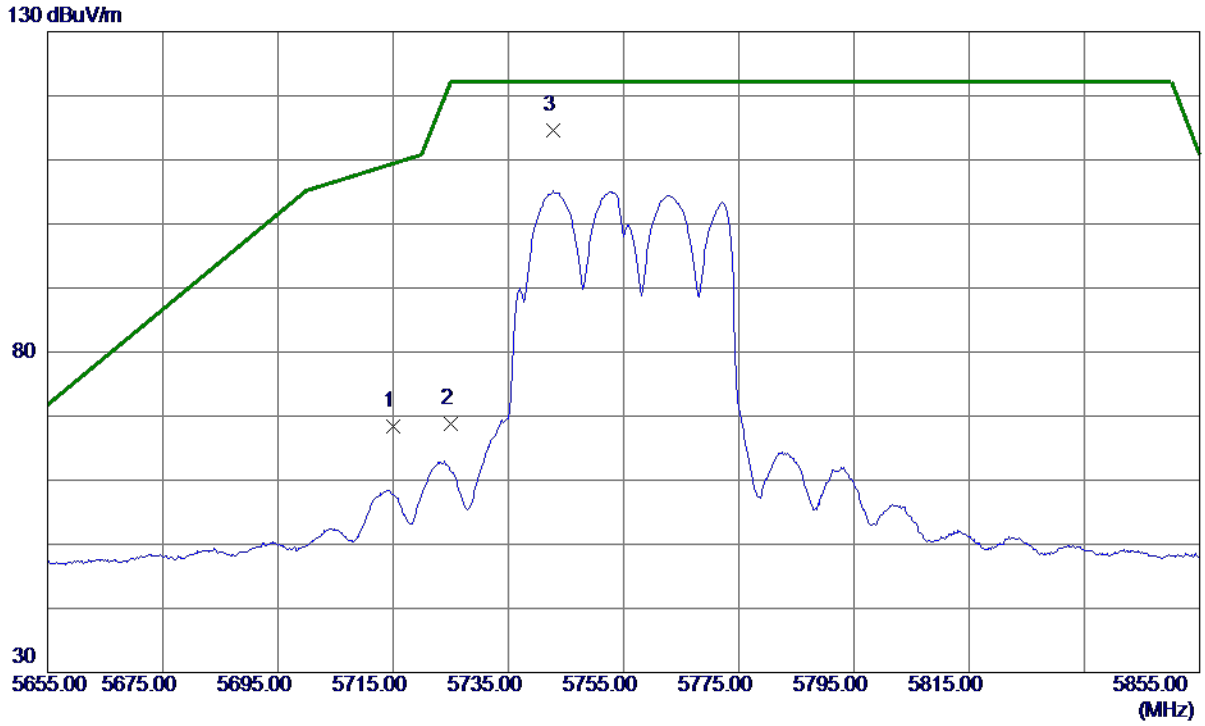


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11647.9100	38.89	17.23	56.12	74.00	-17.88	Peak	
2 *	11649.8270	30.81	17.23	48.04	54.00	-5.96	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

Vertical

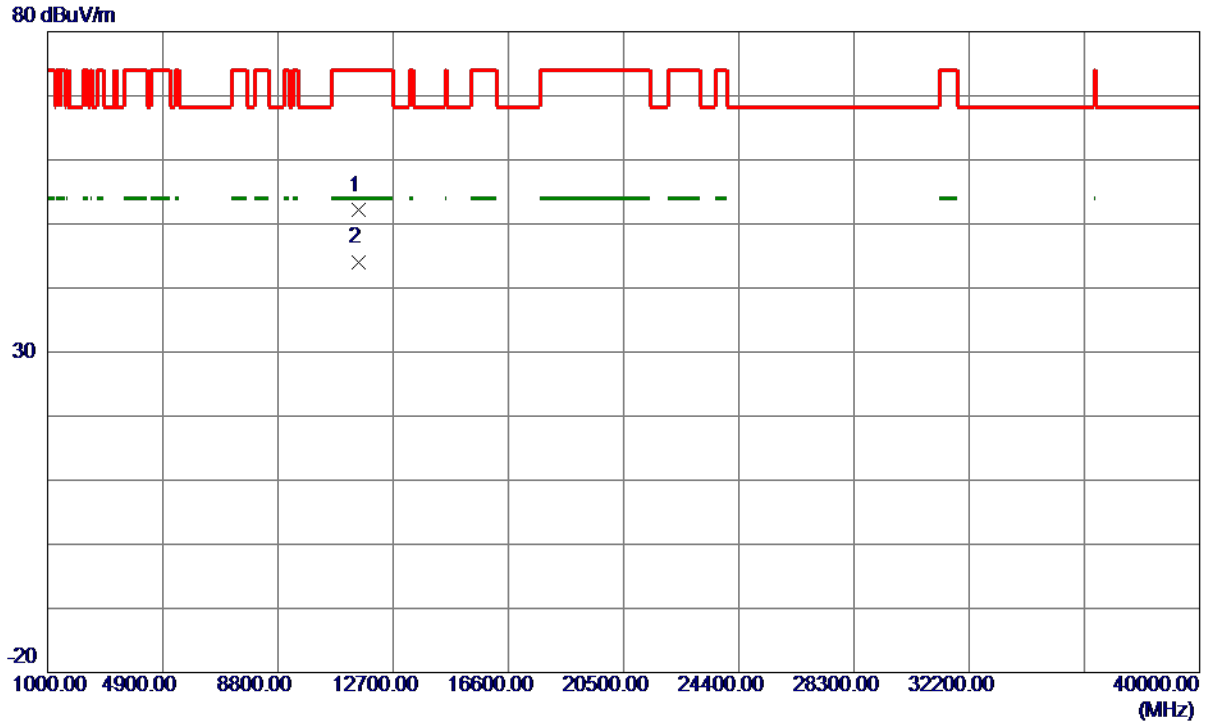


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	49.81	18.65	68.46	109.40	-40.94	Peak	
2	5725.0000	50.16	18.69	68.85	122.20	-53.35	Peak	
3 *	5742.7000	95.94	18.74	114.68	122.20	-7.52	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

Vertical

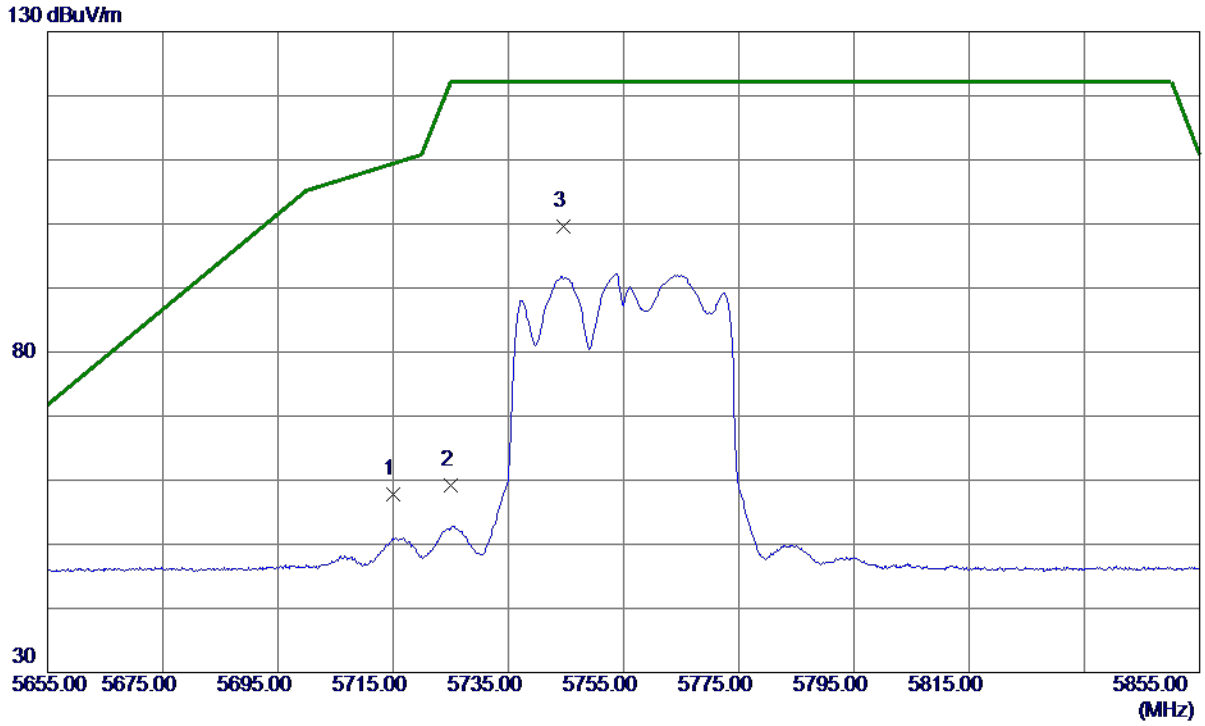


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11509.5050	34.92	17.18	52.10	74.00	-21.90	Peak	
2 *	11509.7699	26.87	17.18	44.05	54.00	-9.95	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

Horizontal

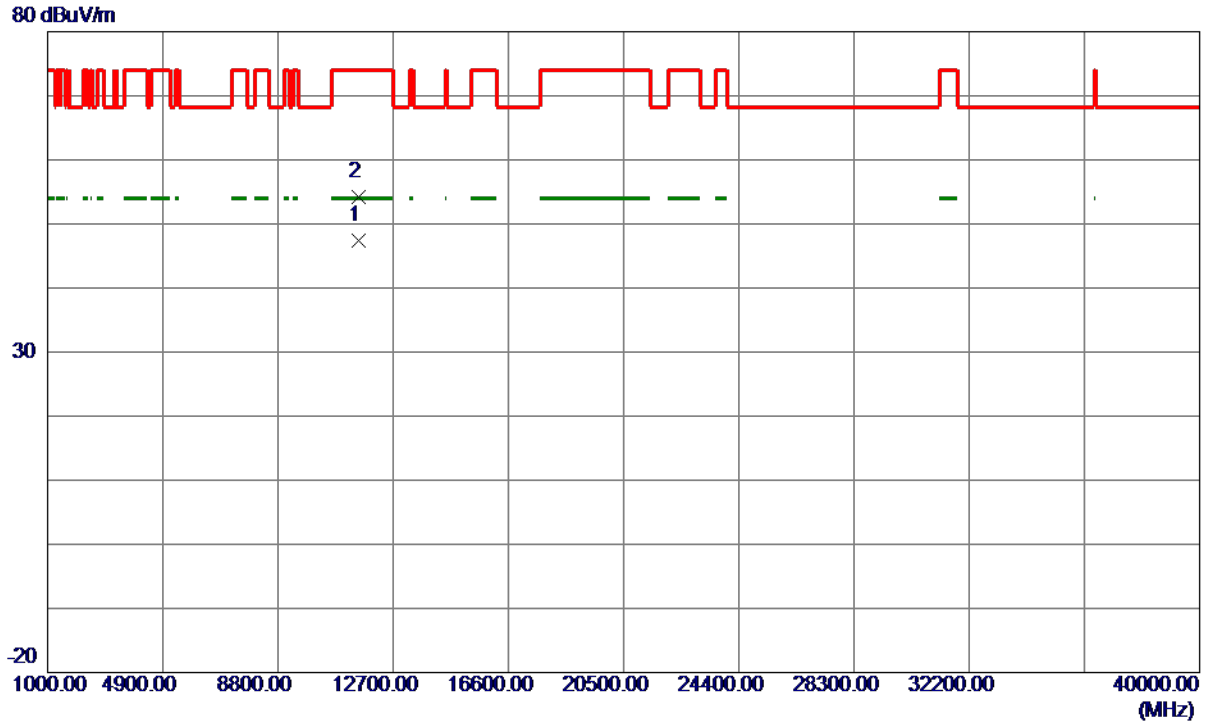


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715.0000	39.08	18.65	57.73	109.40	-51.67	Peak	
2	5725.0000	40.51	18.69	59.20	122.20	-63.00	Peak	
3 *	5744.6000	80.82	18.75	99.57	122.20	-22.63	Peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

Horizontal

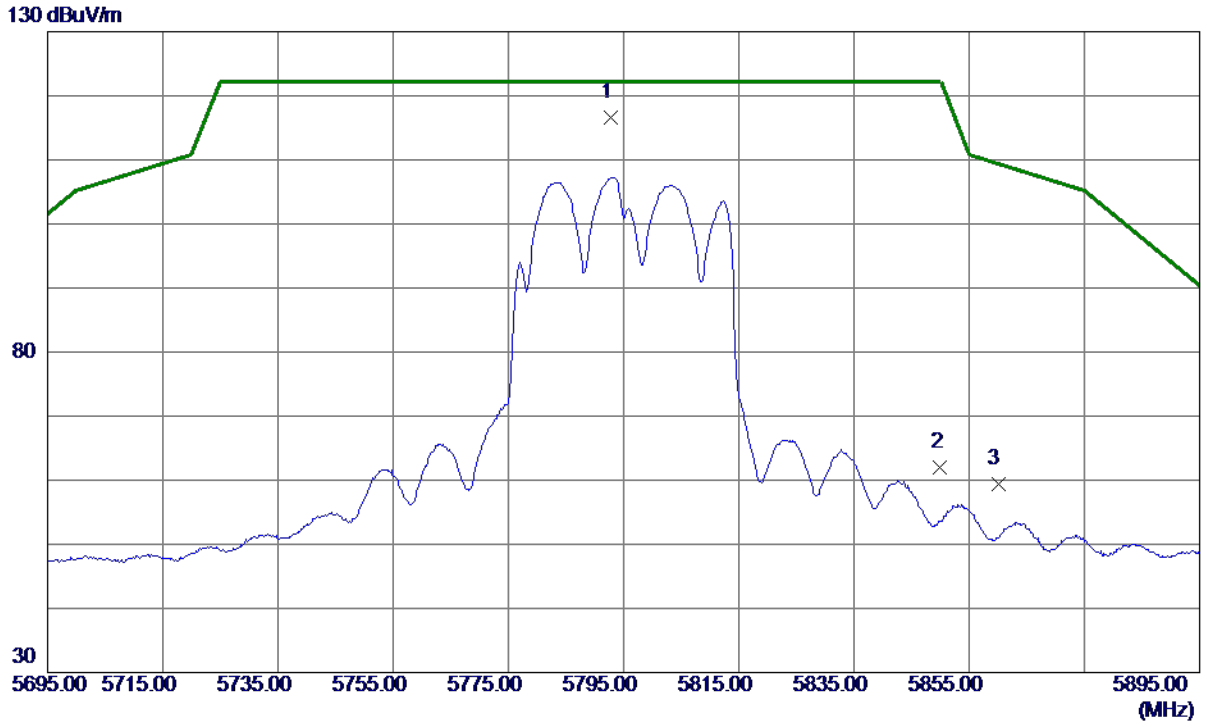


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11509.7670	30.30	17.18	47.48	54.00	-6.52	AVG	
2	11510.1470	37.09	17.18	54.27	74.00	-19.73	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

Vertical

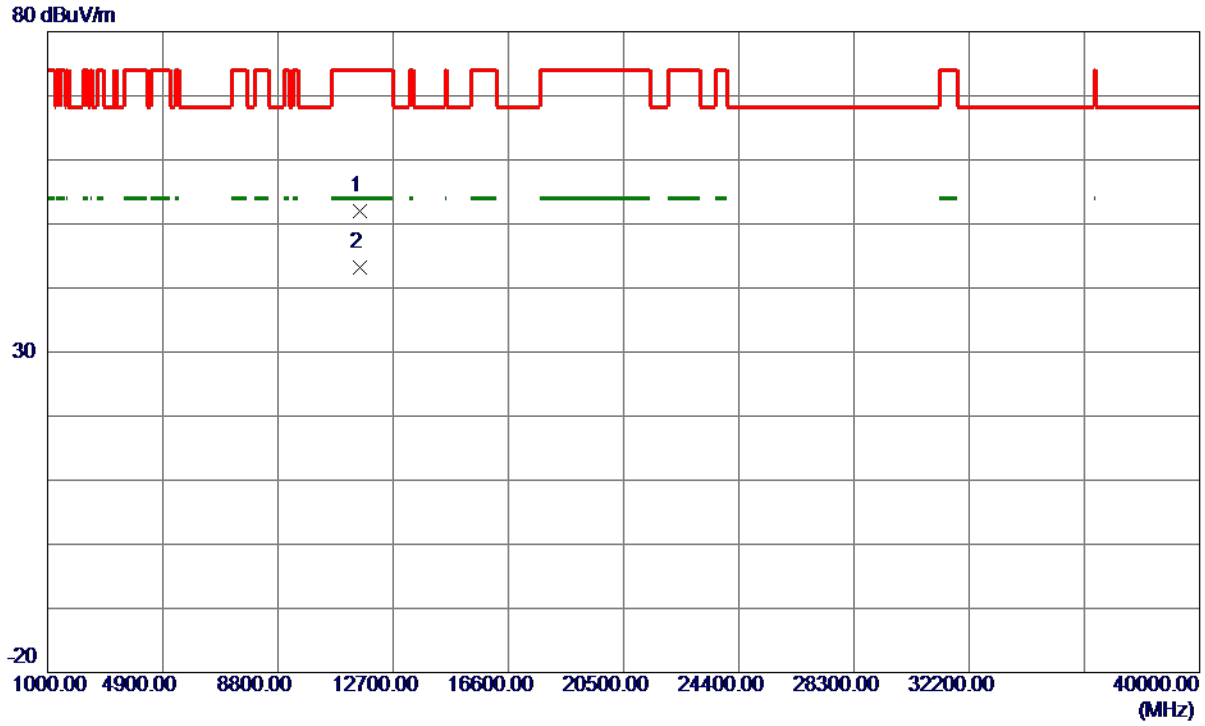


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5792.7000	97.63	18.91	116.54	122.20	-5.66	Peak	No Limit
2	5850.0000	42.88	19.09	61.97	122.20	-60.23	Peak	
3	5860.0000	40.22	19.13	59.35	109.40	-50.05	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

Vertical

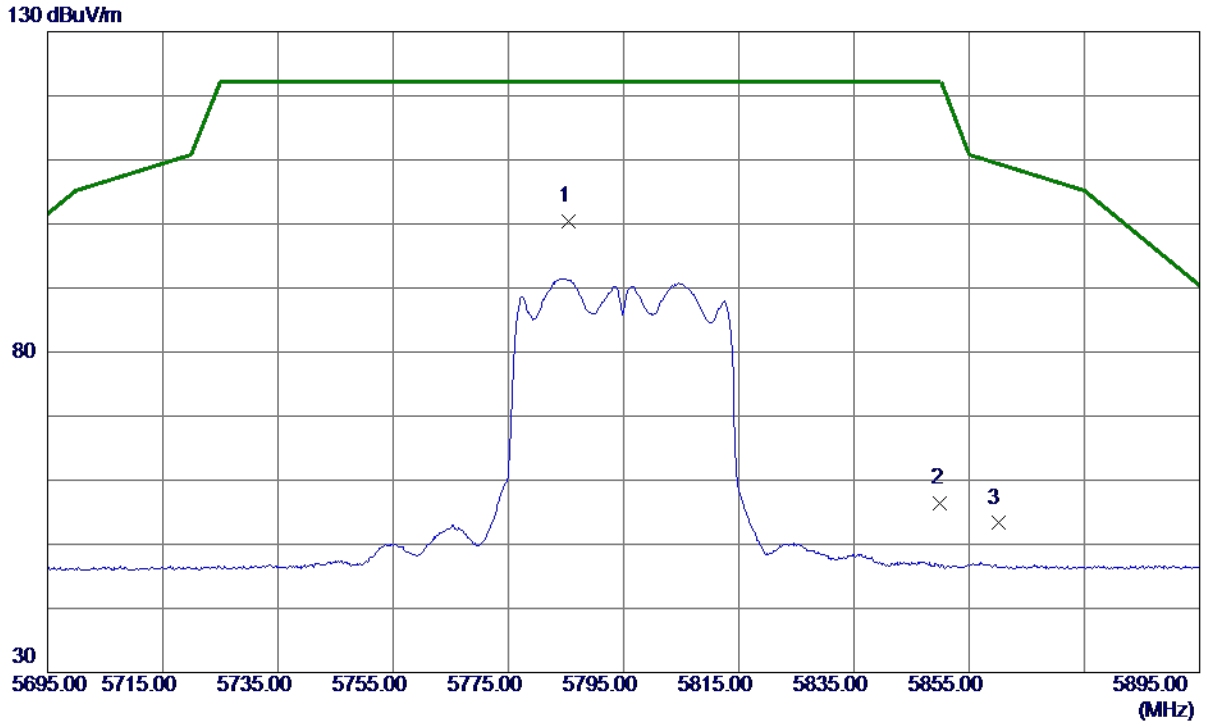


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11589.5550	34.71	17.21	51.92	74.00	-22.08	Peak	
2 *	11589.8019	25.91	17.21	43.12	54.00	-10.88	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

Horizontal

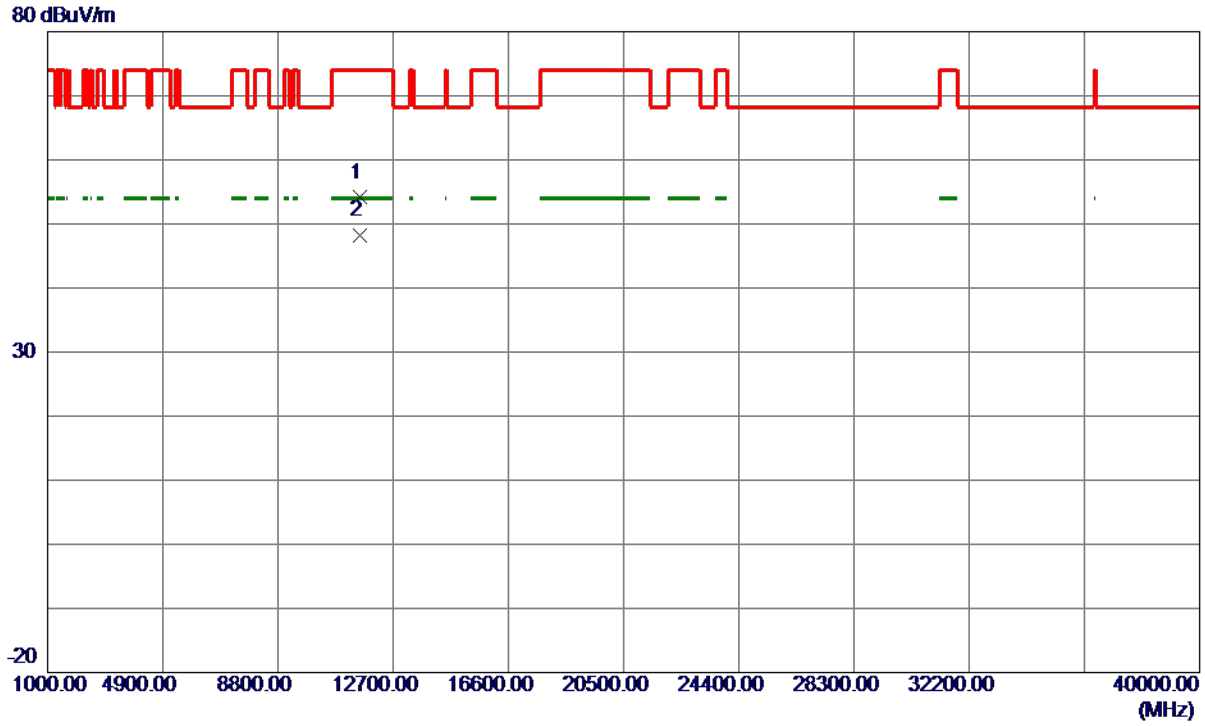


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5785.4000	81.56	18.88	100.44	122.20	-21.76	Peak	No Limit
2	5850.0000	37.35	19.09	56.44	122.20	-65.76	Peak	
3	5860.0000	34.17	19.13	53.30	109.40	-56.10	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

Horizontal

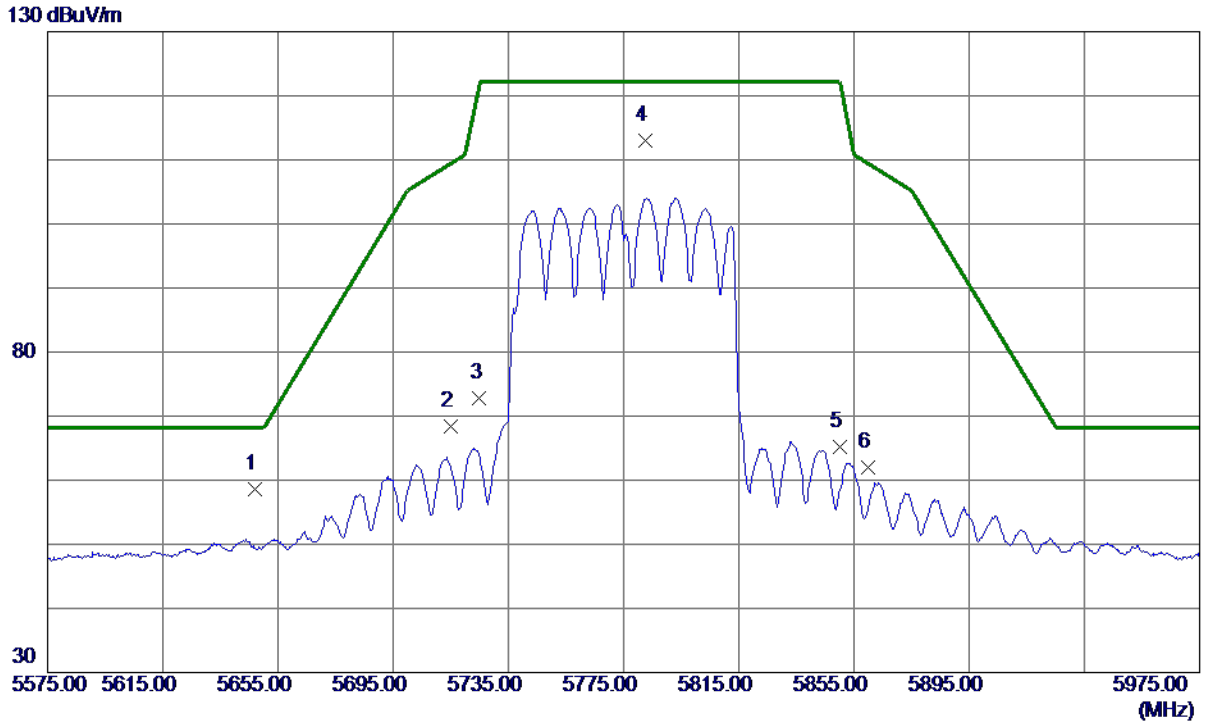


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11589.6769	36.89	17.21	54.10	74.00	-19.90	Peak	
2 *	11589.7370	31.07	17.21	48.28	54.00	-5.72	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Vertical

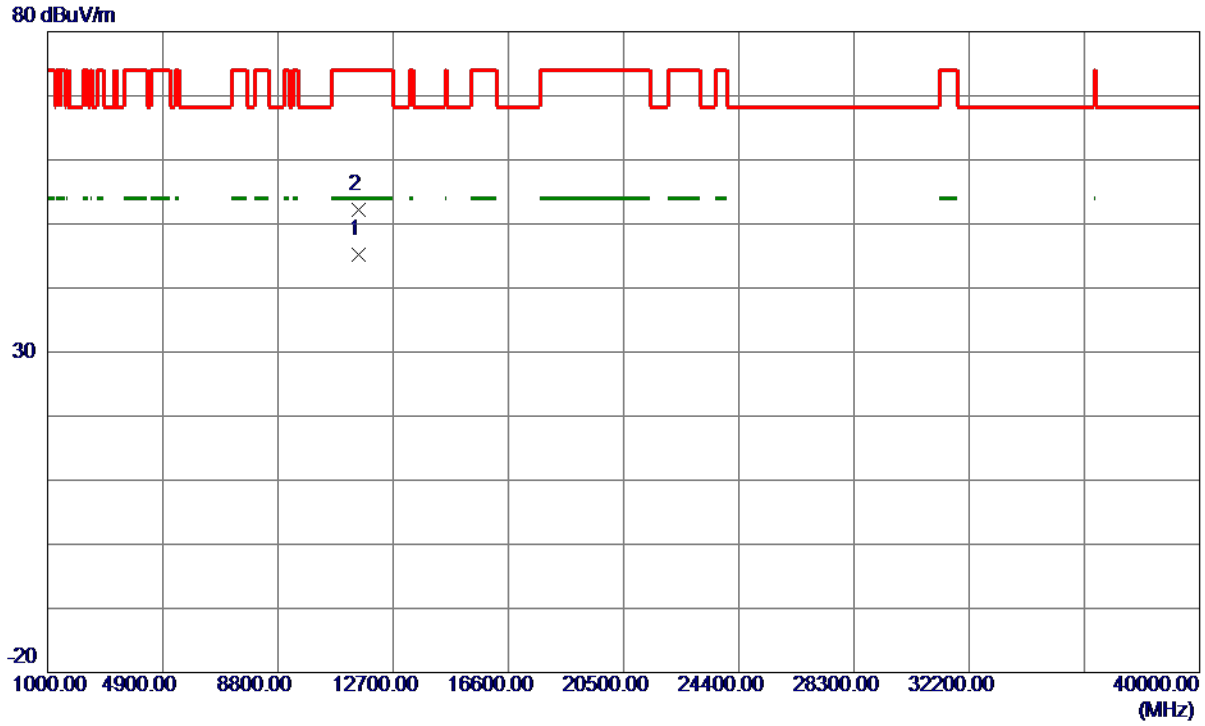


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5647.0000	40.16	18.43	58.59	68.20	-9.61	Peak	
2	5715.0000	49.74	18.65	68.39	109.40	-41.01	Peak	
3	5725.0000	54.04	18.69	72.73	122.20	-49.47	Peak	
4 *	5782.4000	94.11	18.87	112.98	122.20	-9.22	Peak	No Limit
5	5850.0000	46.17	19.09	65.26	122.20	-56.94	Peak	
6	5860.0000	42.79	19.13	61.92	109.40	-47.48	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Vertical

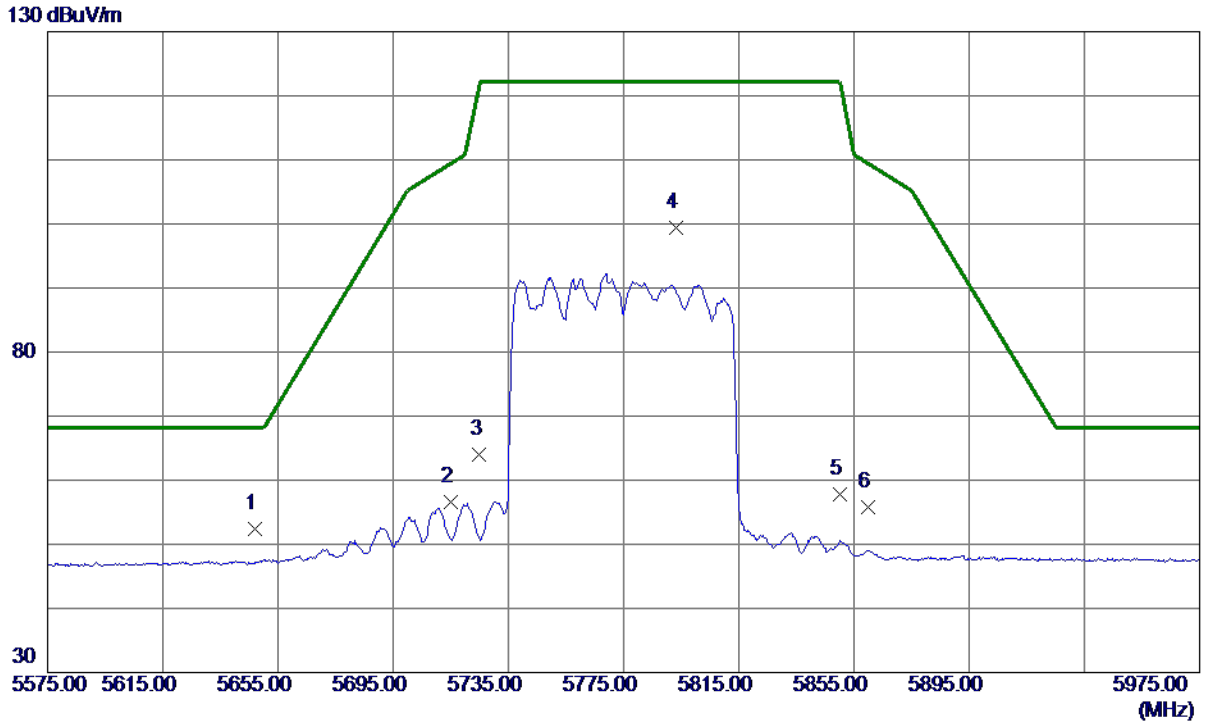


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11549.7800	28.06	17.20	45.26	54.00	-8.74	AVG	
2	11549.8370	34.97	17.20	52.17	74.00	-21.83	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Horizontal

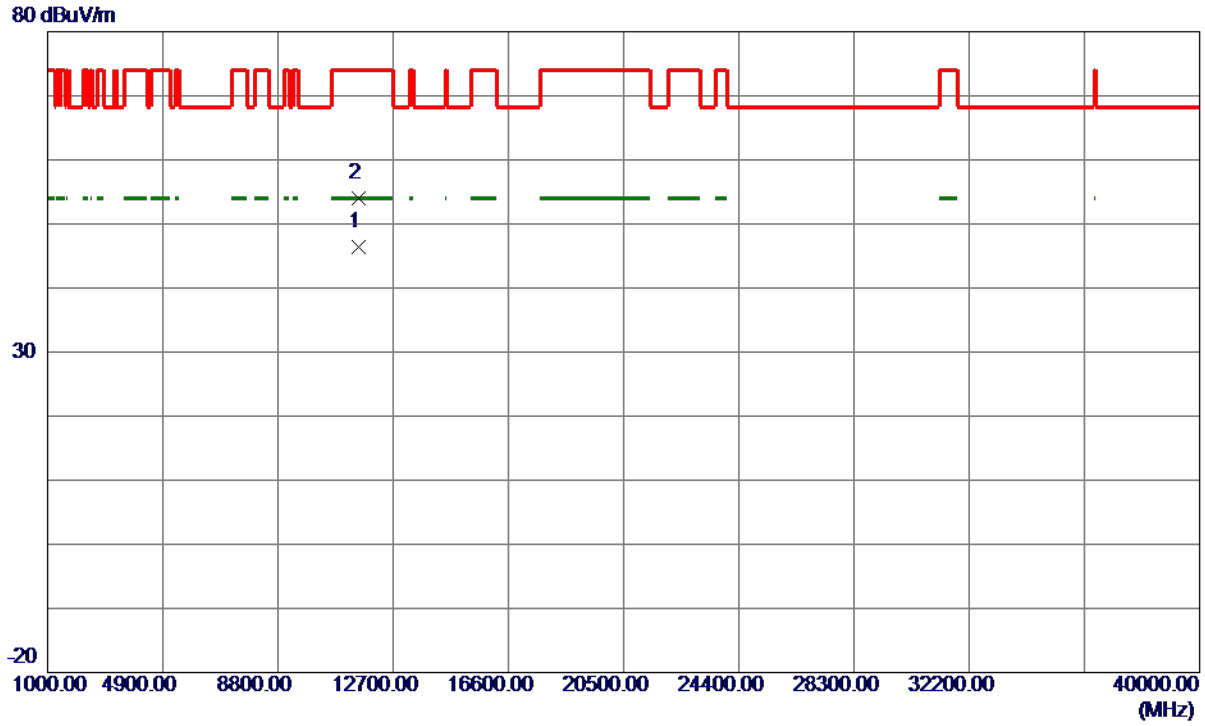


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5647.0000	34.04	18.43	52.47	68.20	-15.73	Peak	
2	5715.0000	37.93	18.65	56.58	109.40	-52.82	Peak	
3	5725.0000	45.24	18.69	63.93	122.20	-58.27	Peak	
4	5793.2000	80.44	18.91	99.35	122.20	-22.85	Peak	No Limit
5	5850.0000	38.71	19.09	57.80	122.20	-64.40	Peak	
6	5860.0000	36.70	19.13	55.83	109.40	-53.57	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Horizontal

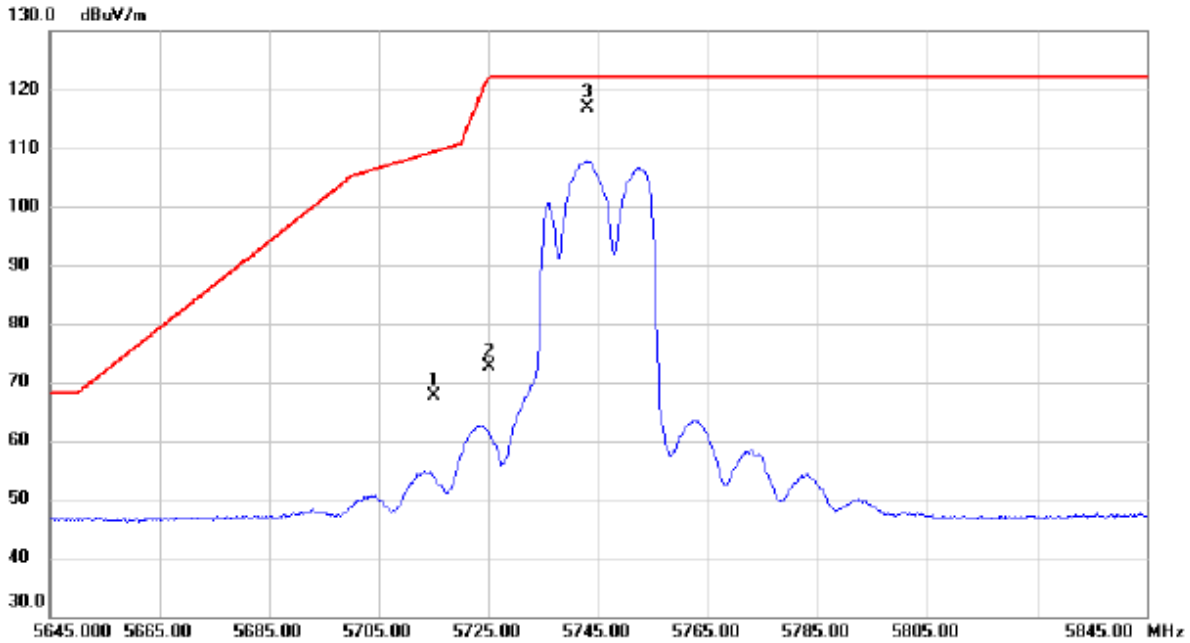


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	11549.7820	29.14	17.20	46.34	54.00	-7.66	AVG	
2	11549.8949	36.73	17.20	53.93	74.00	-20.07	Peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5745 MHz

Vertical

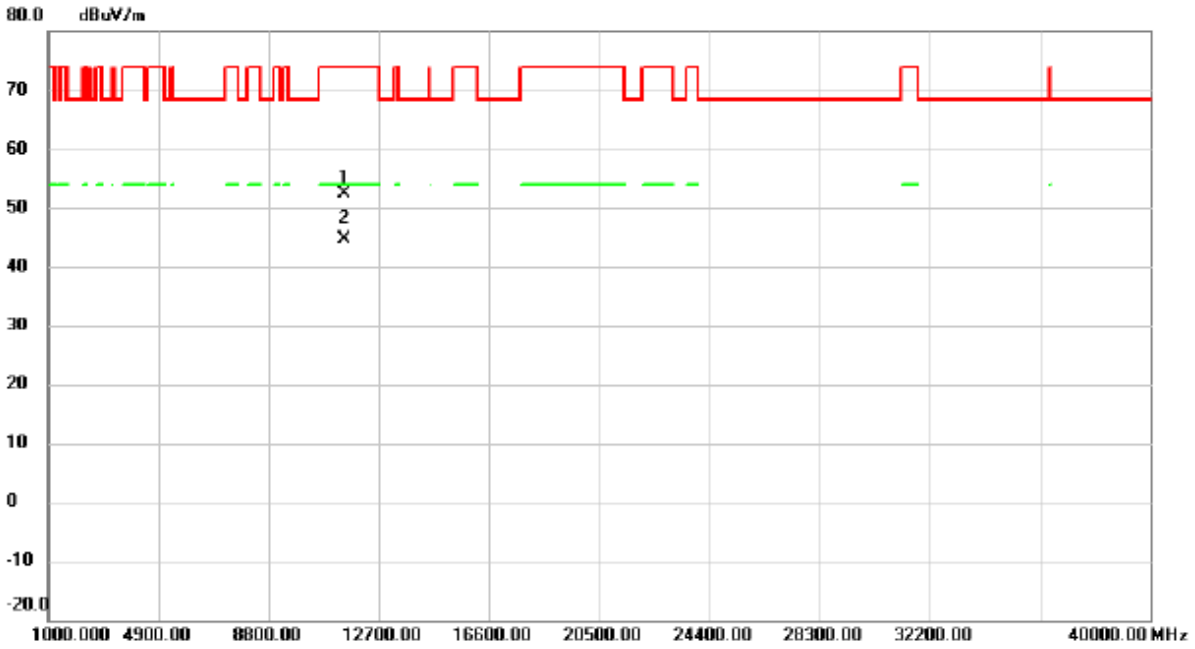


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	49.05	18.66	67.71	109.40	-41.69	peak	
2		5725.000	53.96	18.69	72.65	122.20	-49.55	peak	
3	*	5743.000	98.14	18.74	116.88	122.20	-5.32	peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5745 MHz

Vertical

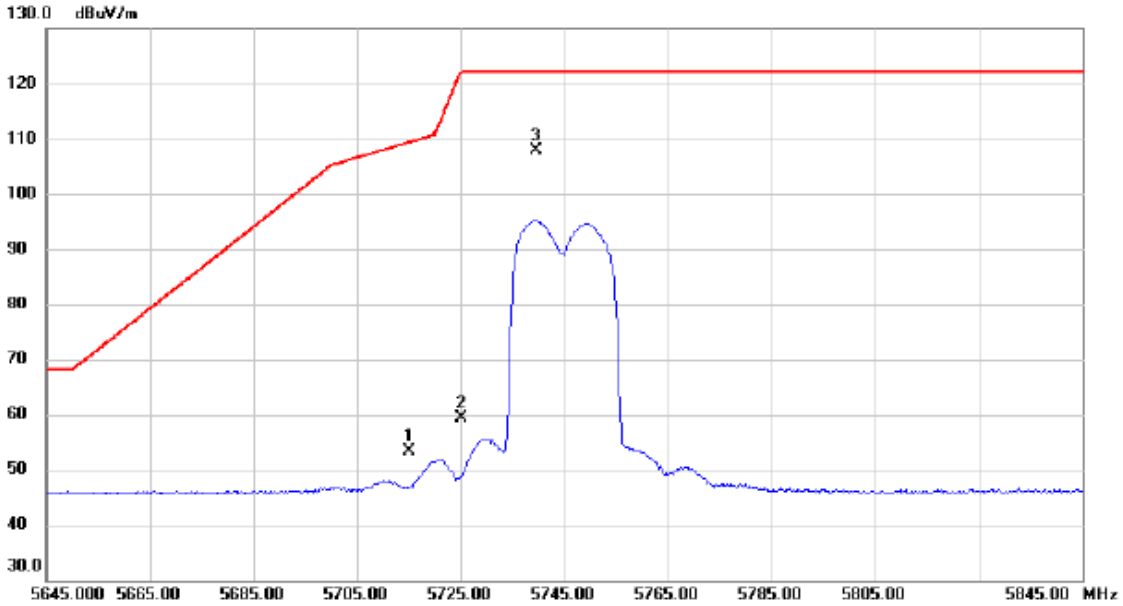


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11489.737	35.23	17.16	52.39	74.00	-21.61	peak	
2	*	11489.788	27.53	17.16	44.69	54.00	-9.31	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5745 MHz

Horizontal

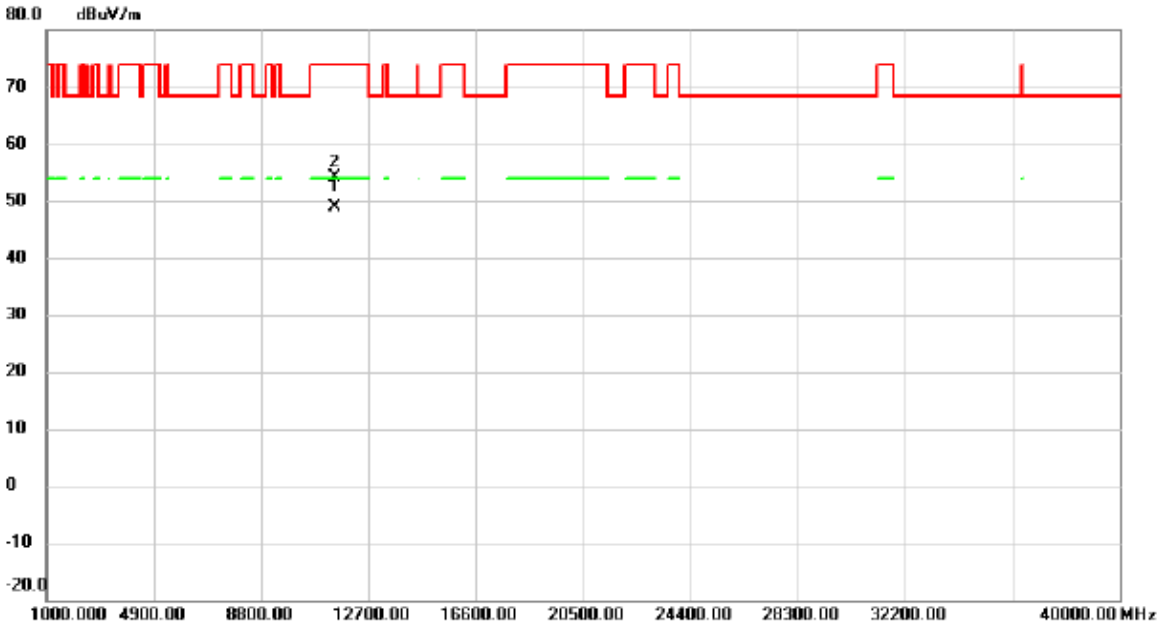


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	34.76	18.66	53.42	109.40	-55.98	peak	
2		5725.000	40.64	18.69	59.33	122.20	-62.87	peak	
3	*	5739.600	89.23	18.74	107.97	122.20	-14.23	peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5745 MHz

Horizontal

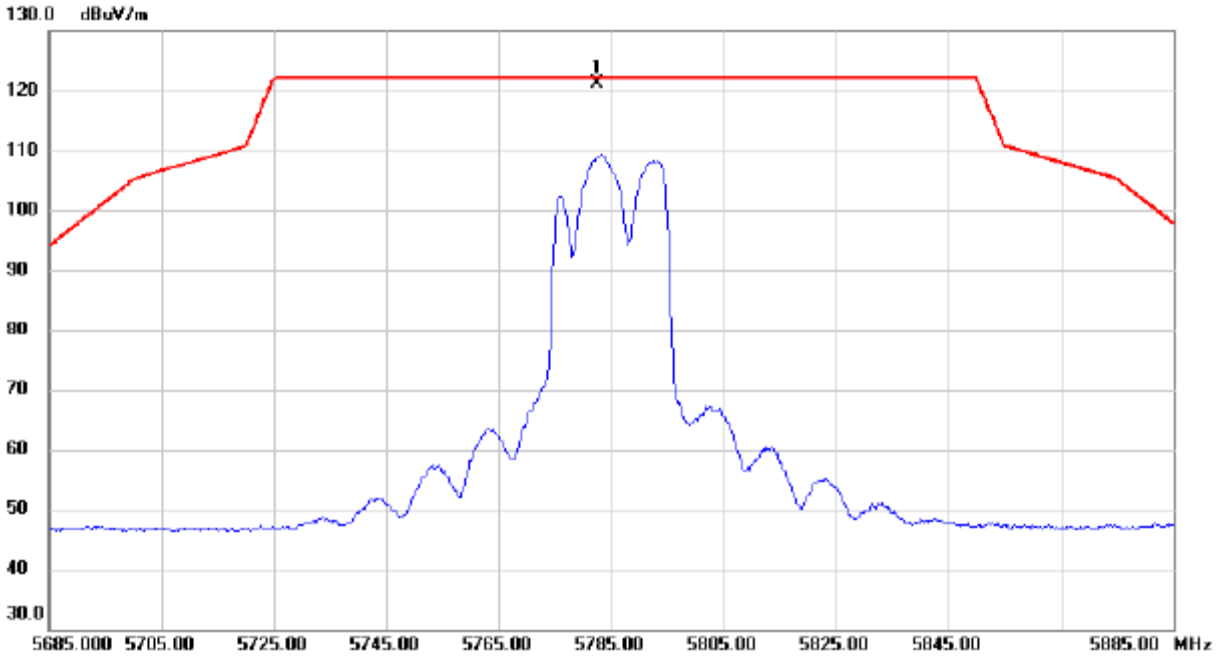


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11489.76	31.60	17.16	48.76	54.00	-5.24	AVG	
2		11489.81	36.89	17.16	54.05	74.00	-19.95	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5785 MHz

Vertical

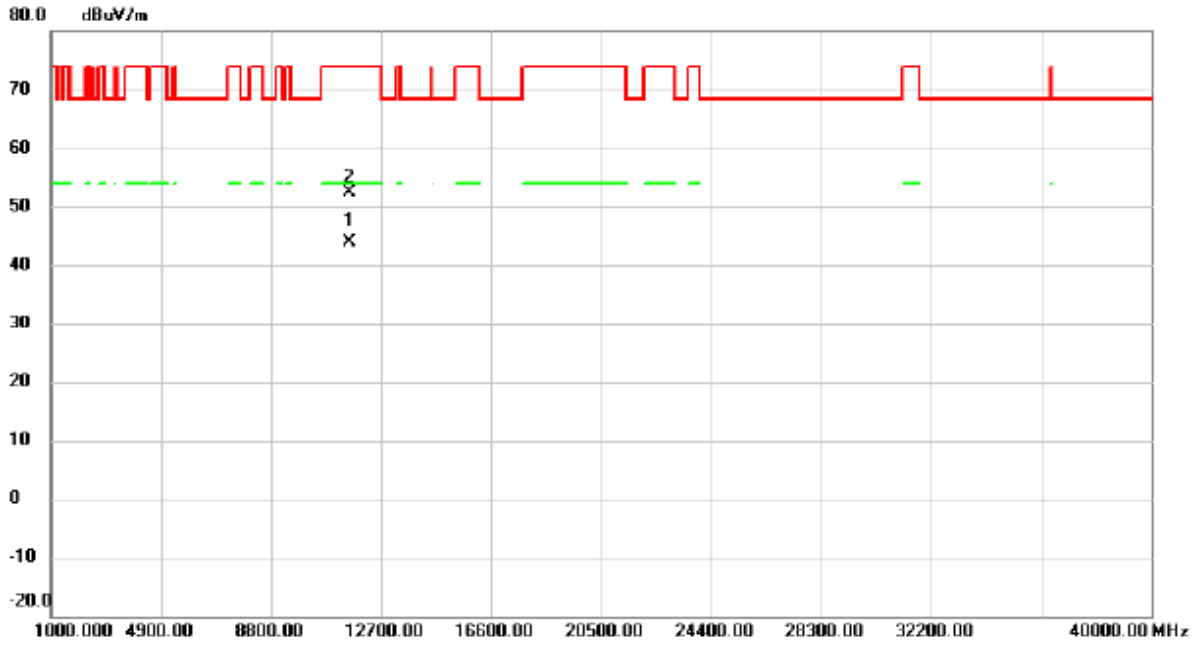


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5782.400	102.3	18.88	121.21	122.20	-0.99	peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5785 MHz

Vertical

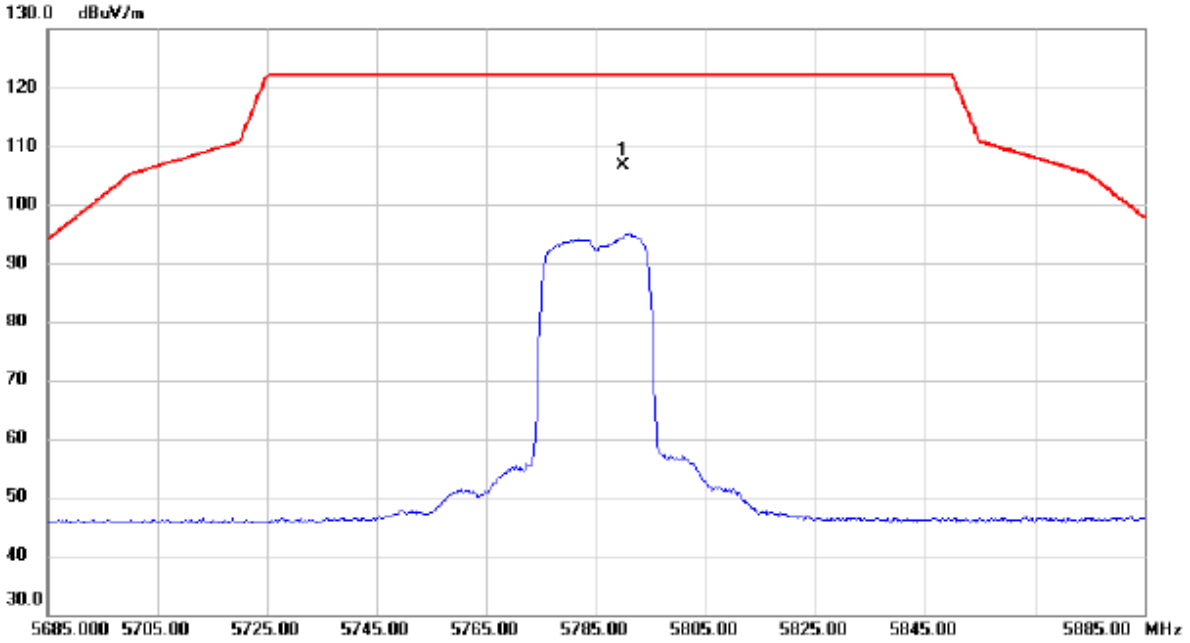


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11569.79	26.76	17.20	43.96	54.00	-10.04	AVG	
2		11569.99	35.20	17.20	52.40	74.00	-21.60	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5785 MHz

Horizontal

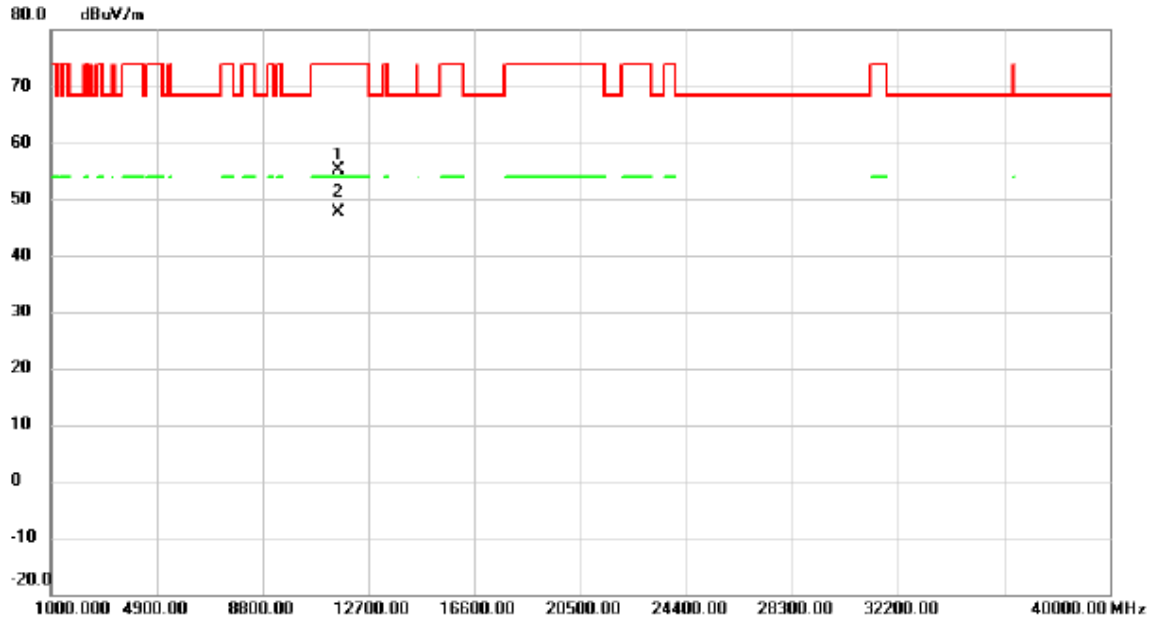


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5790.000	87.63	18.90	106.53	122.20	-15.67	peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5785 MHz

Horizontal

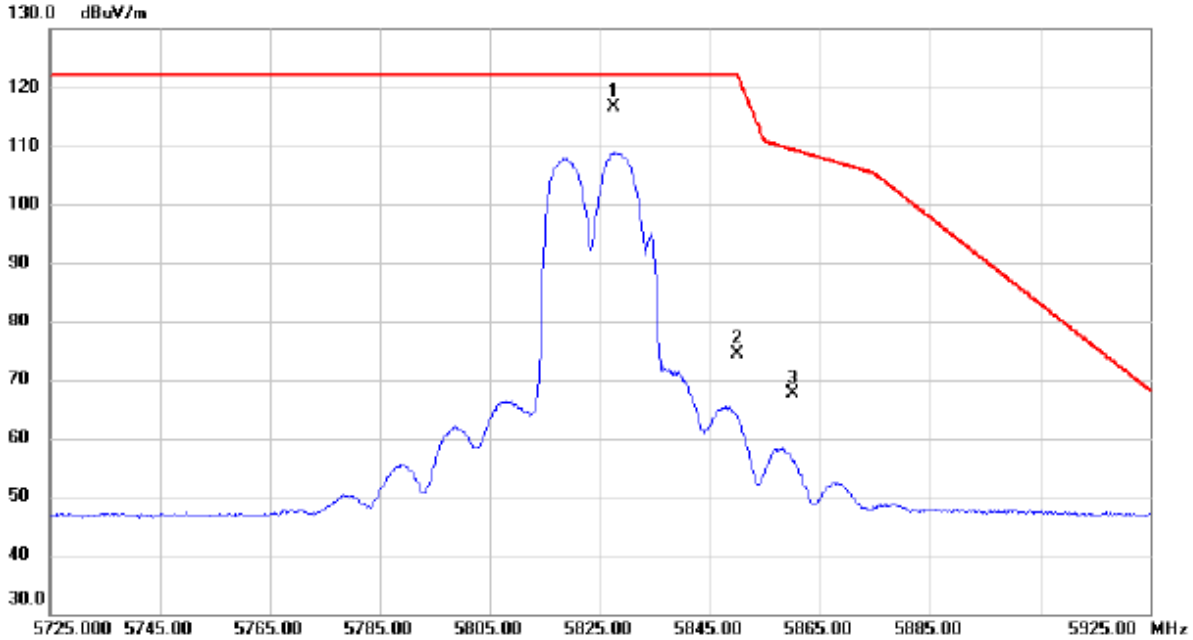


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11569.67	38.00	17.20	55.20	74.00	-18.80	peak	
2	*	11569.73	30.31	17.20	47.51	54.00	-6.49	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5825 MHz

Vertical

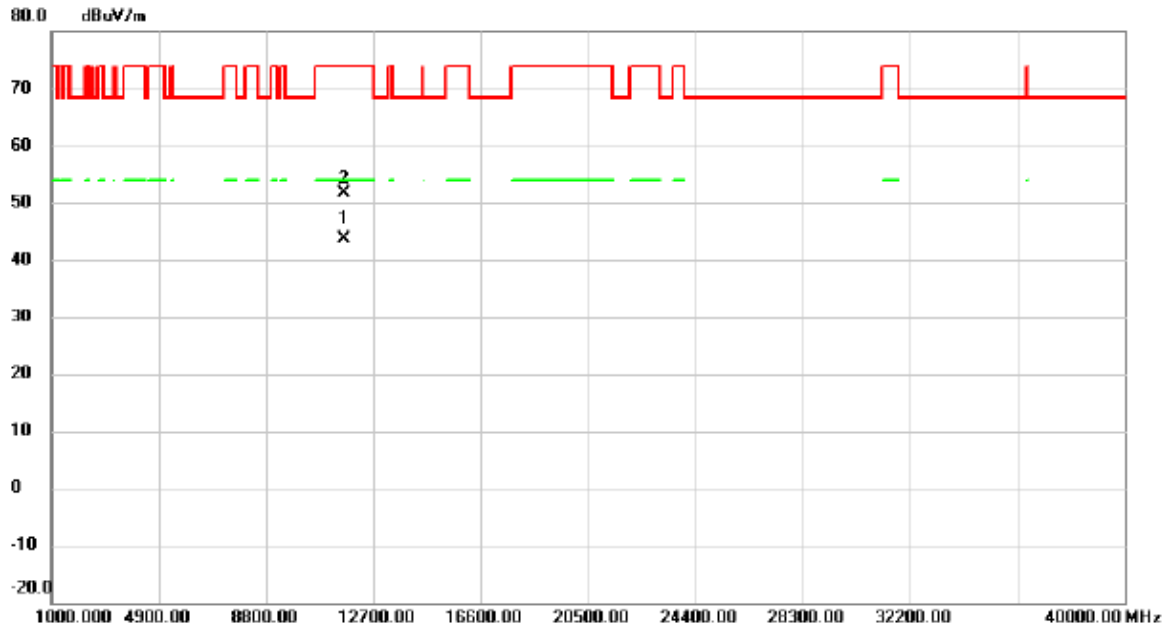


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5827.600	97.60	19.02	116.62	122.20	-5.58	peak	No Limit
2		5850.000	55.37	19.09	74.46	122.20	-47.74	peak	
3		5860.000	48.58	19.12	67.70	109.40	-41.70	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5825 MHz

Vertical

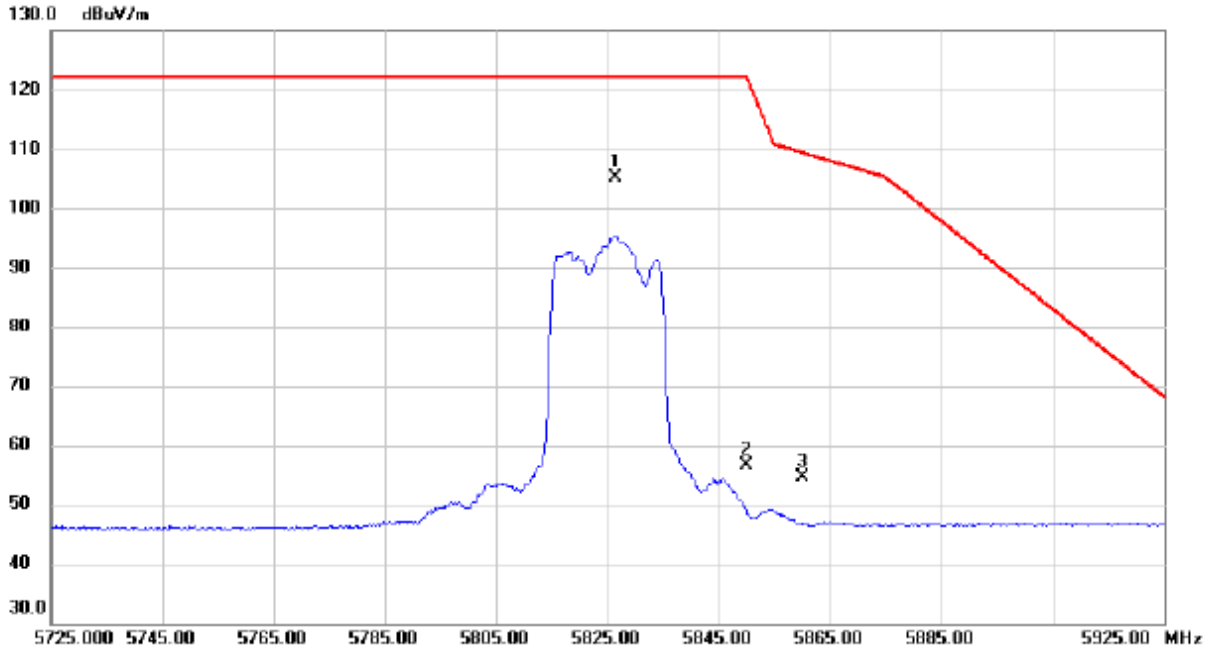


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11649.71	26.45	17.22	43.67	54.00	-10.33	AVG	
2		11649.82	34.53	17.22	51.75	74.00	-22.25	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5825 MHz

Horizontal

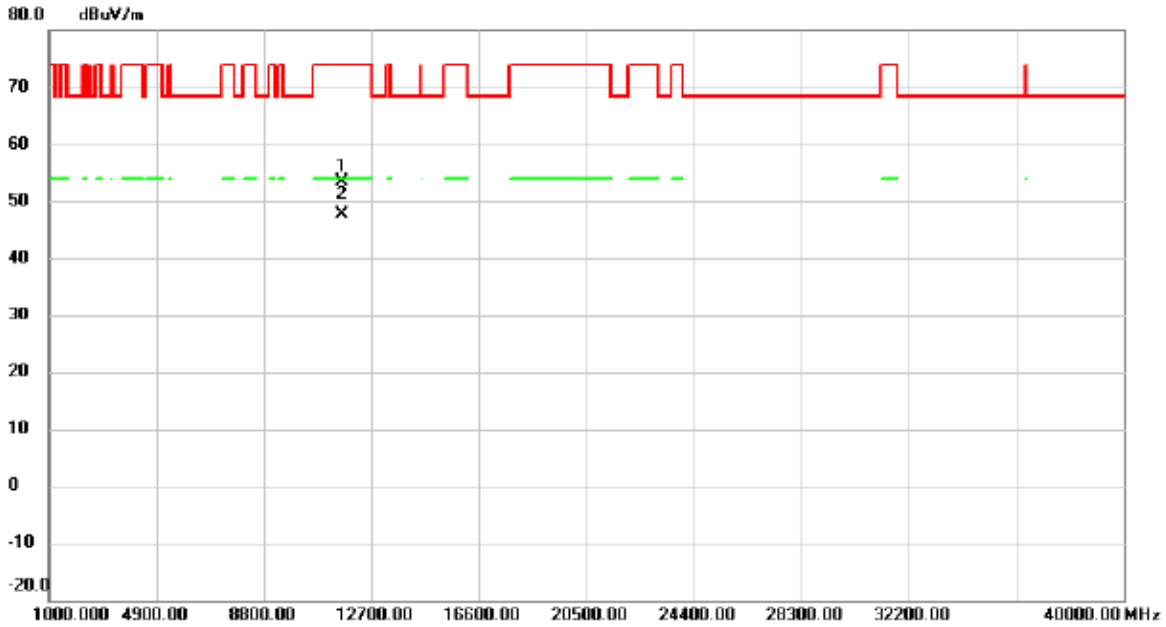


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5826.400	86.04	19.01	105.05	122.20	-17.15	peak	No Limit
2		5850.000	37.43	19.09	56.52	122.20	-65.68	peak	
3		5860.000	35.49	19.12	54.61	109.40	-54.79	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW20) Mode 5825 MHz

Horizontal

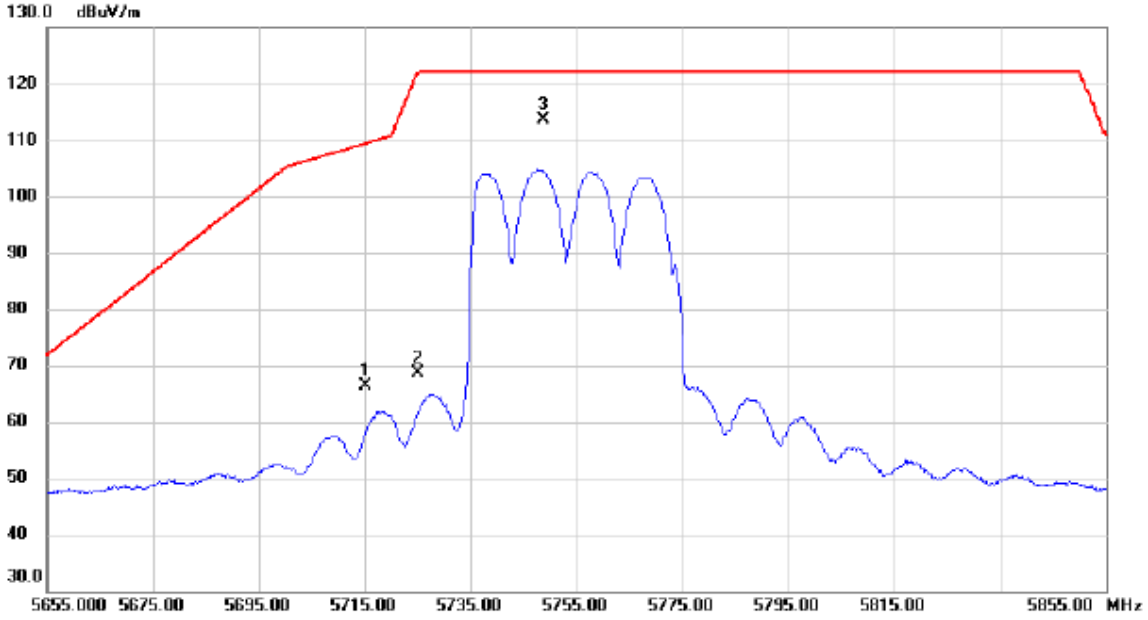


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11649.66	36.08	17.22	53.30	74.00	-20.70	peak	
2	*	11649.80	30.53	17.22	47.75	54.00	-6.25	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5755 MHz

Vertical

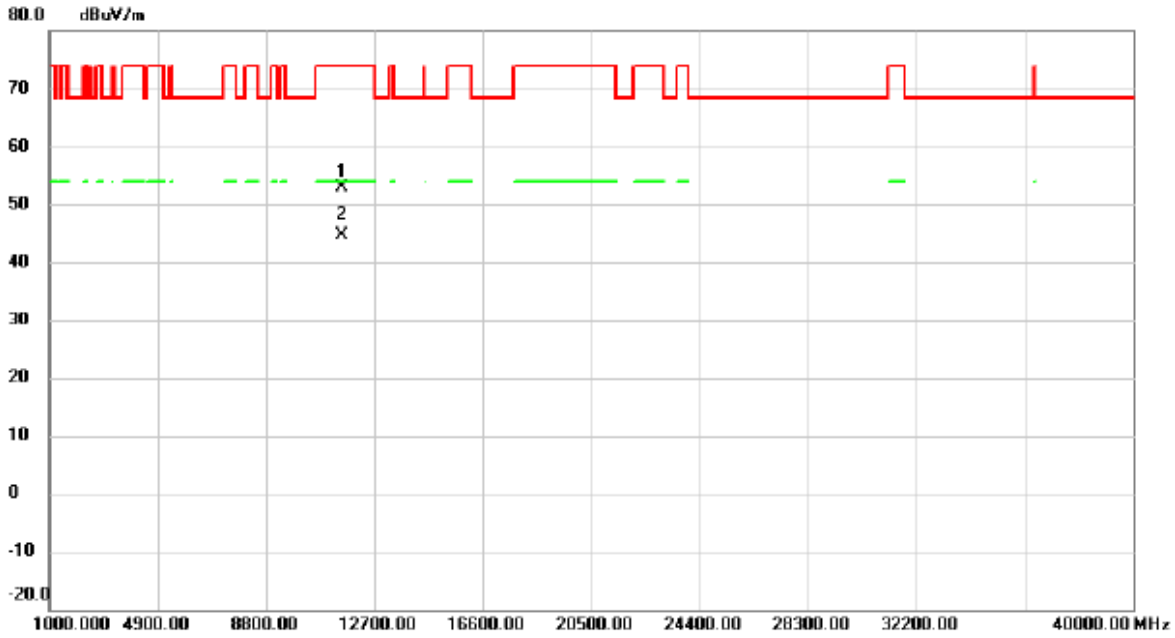


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	47.80	18.66	66.46	109.40	-42.94	peak	
2		5725.000	49.95	18.69	68.64	122.20	-53.56	peak	
3	*	5748.600	94.88	18.77	113.65	122.20	-8.55	peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5755 MHz

Vertical

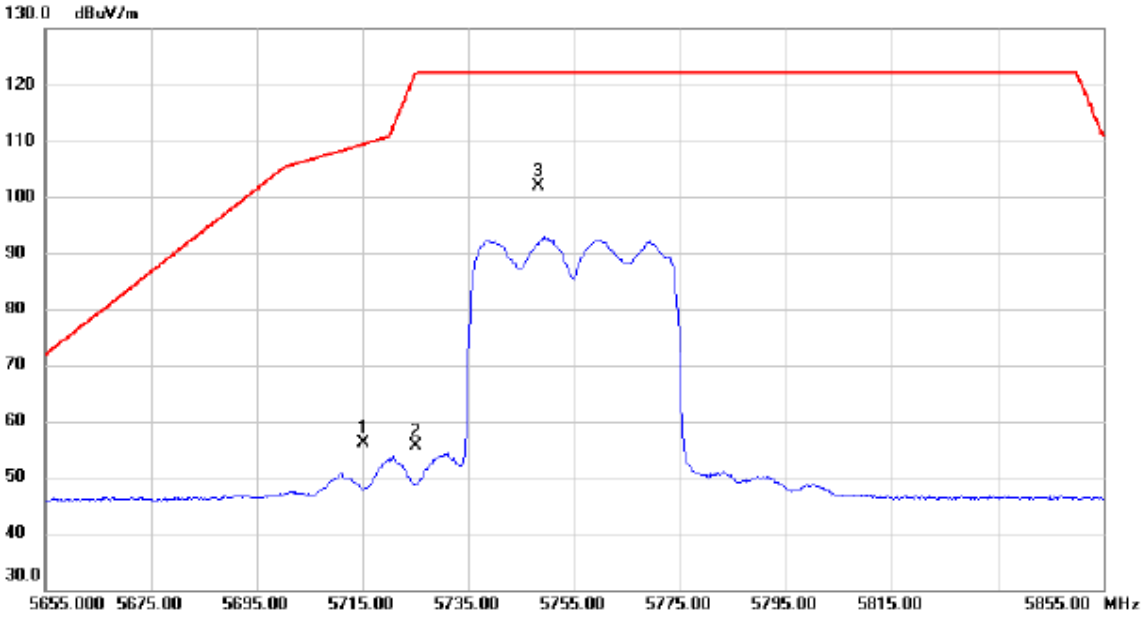


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11509.69	35.58	17.18	52.76	74.00	-21.24	peak	
2	*	11509.76	27.49	17.18	44.67	54.00	-9.33	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5755 MHz

Horizontal

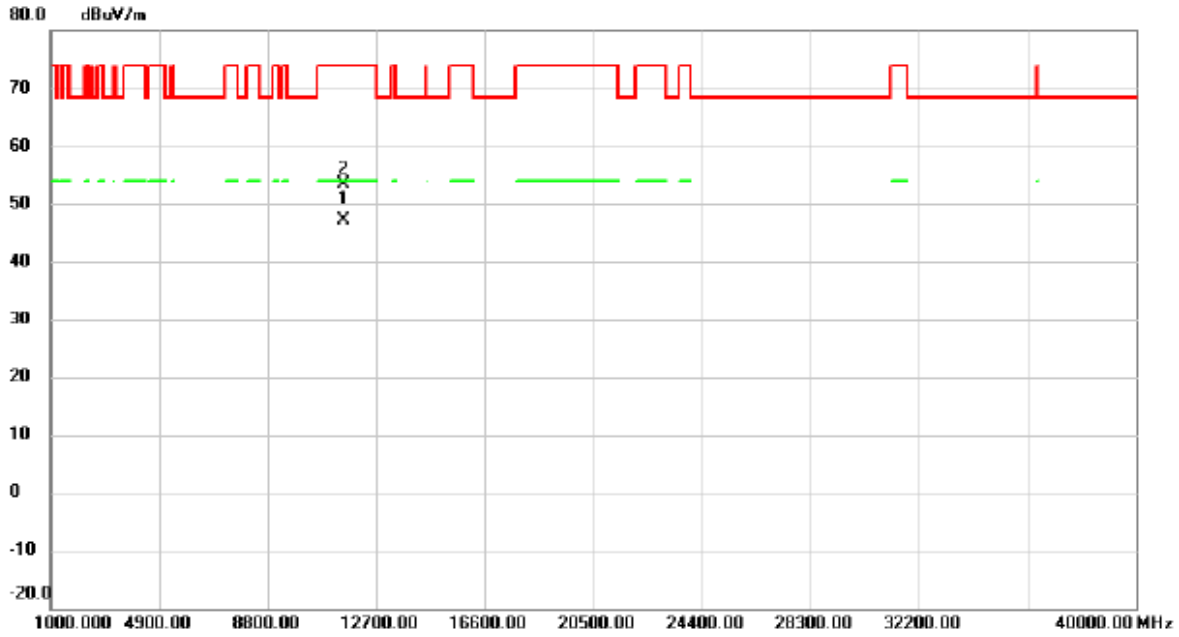


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5715.000	37.54	18.66	56.20	109.40	-53.20	peak	
2		5725.000	37.03	18.69	55.72	122.20	-66.48	peak	
3	*	5748.200	83.23	18.77	102.00	122.20	-20.20	peak	No Limit

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5755 MHz

Horizontal

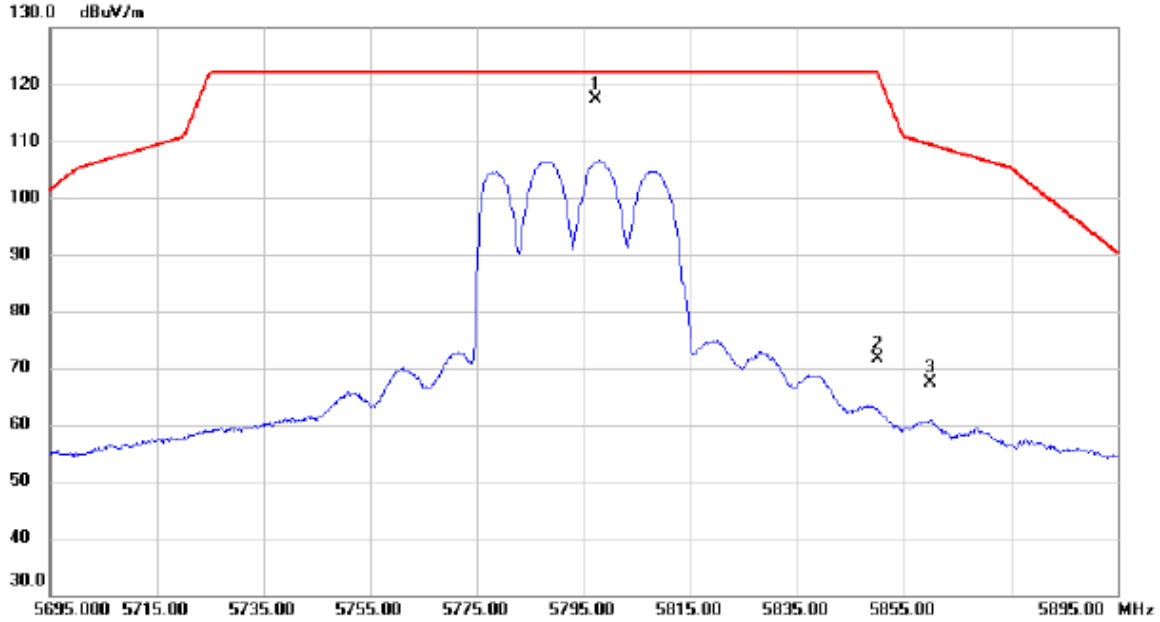


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11509.77	29.93	17.18	47.11	54.00	-6.89	AVG	
2		11510.05	36.16	17.18	53.34	74.00	-20.66	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5795 MHz

Vertical

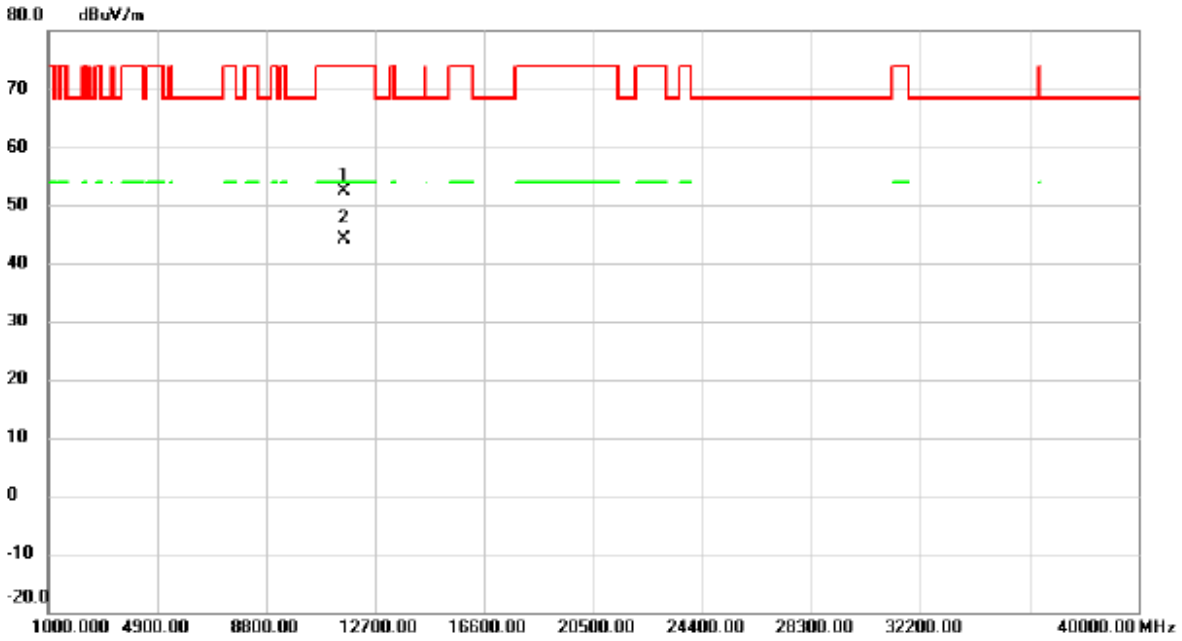


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5797.400	98.35	18.92	117.27	122.20	-4.93	peak	No Limit
2		5850.000	52.47	19.09	71.56	122.20	-50.64	peak	
3		5860.000	48.28	19.12	67.40	109.40	-42.00	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5795 MHz

Vertical

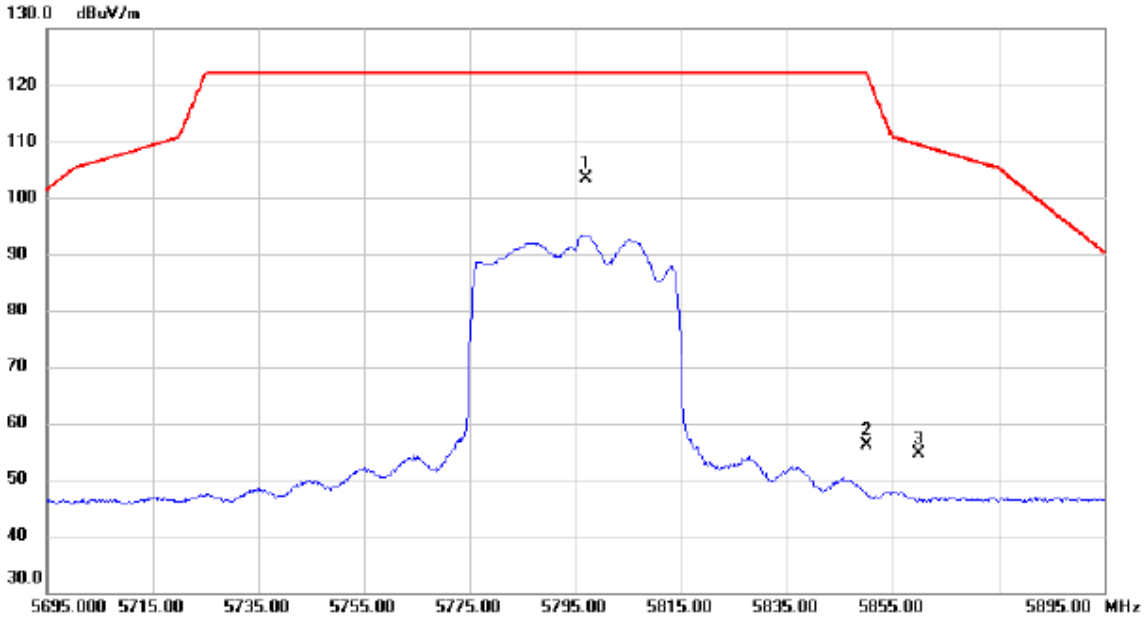


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11589.79	35.20	17.21	52.41	74.00	-21.59	peak	
2	*	11589.84	26.83	17.21	44.04	54.00	-9.96	AVG	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5795 MHz

Horizontal

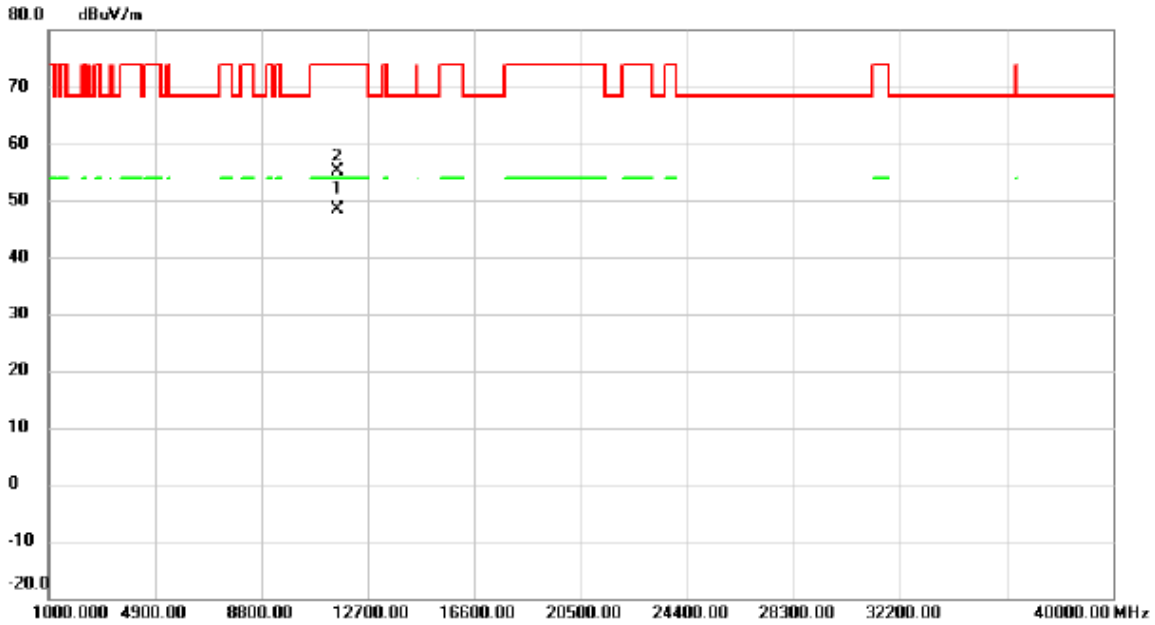


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5797.100	84.58	18.92	103.50	122.20	-18.70	peak	No Limit
2		5850.000	37.16	19.09	56.25	122.20	-65.95	peak	
3		5860.000	35.39	19.12	54.51	109.40	-54.89	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW40) Mode 5795 MHz

Horizontal

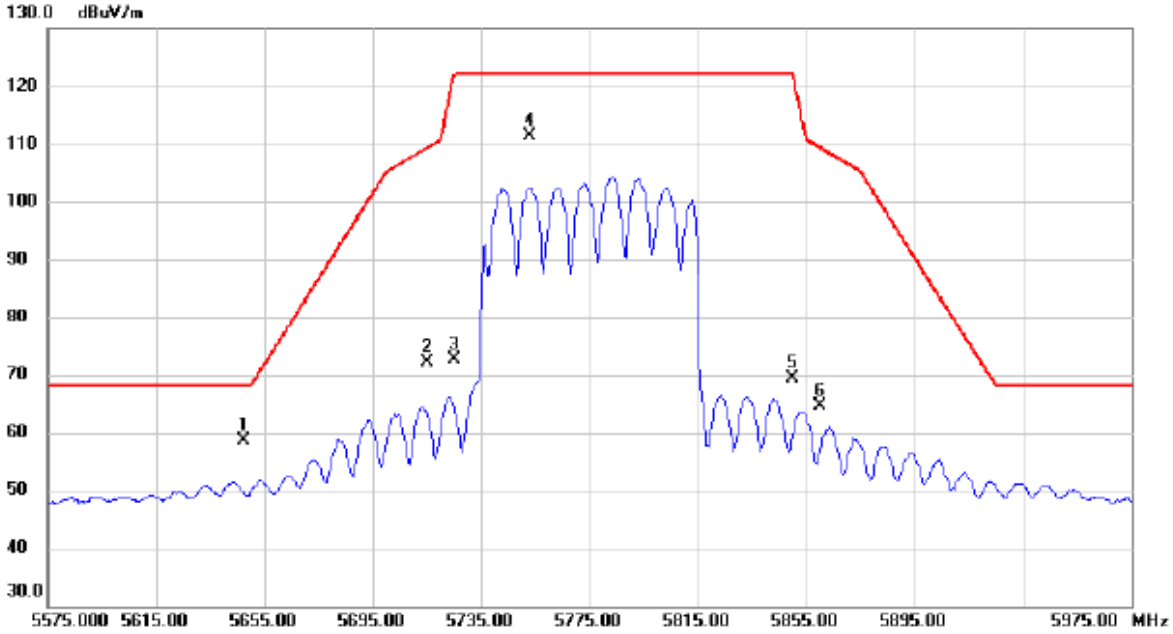


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11589.78	31.24	17.21	48.45	54.00	-5.55	AVG	
2		11589.80	37.83	17.21	55.04	74.00	-18.96	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW80) Mode 5775 MHz

Vertical

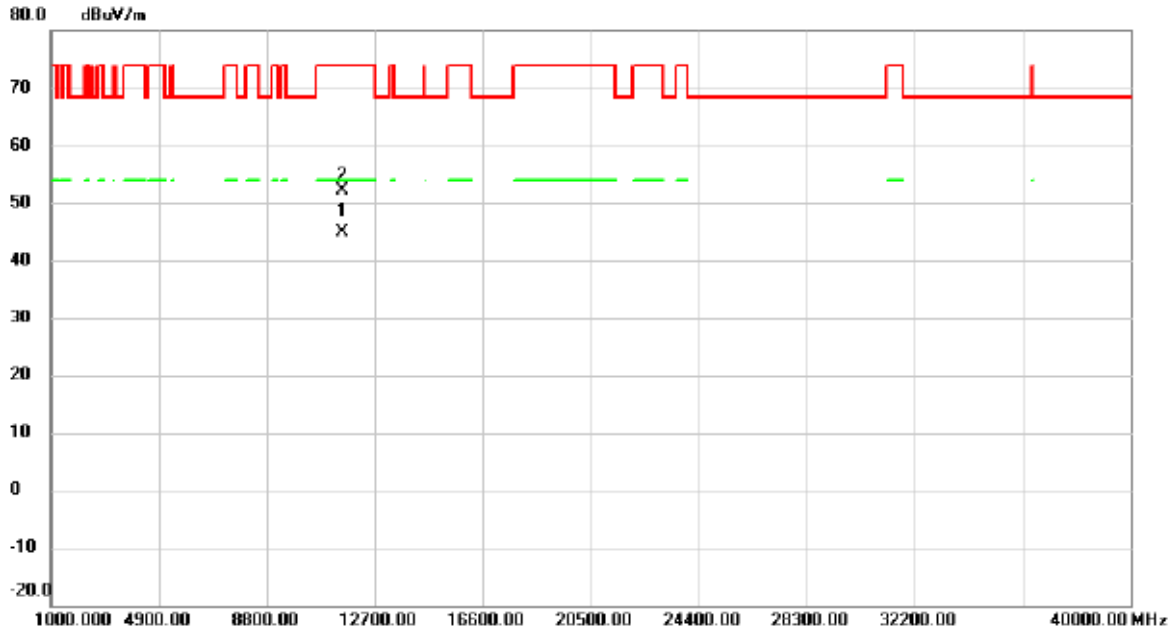


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5647.000	40.08	18.43	58.51	68.20	-9.69	peak	
2		5715.000	53.39	18.66	72.05	109.40	-37.35	peak	
3		5725.000	53.91	18.69	72.60	122.20	-49.60	peak	
4		5752.600	92.63	18.78	111.41	122.20	-10.79	peak	No Limit
5		5850.000	50.21	19.09	69.30	122.20	-52.90	peak	
6		5860.000	45.55	19.12	64.67	109.40	-44.73	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW80) Mode 5775 MHz

Vertical

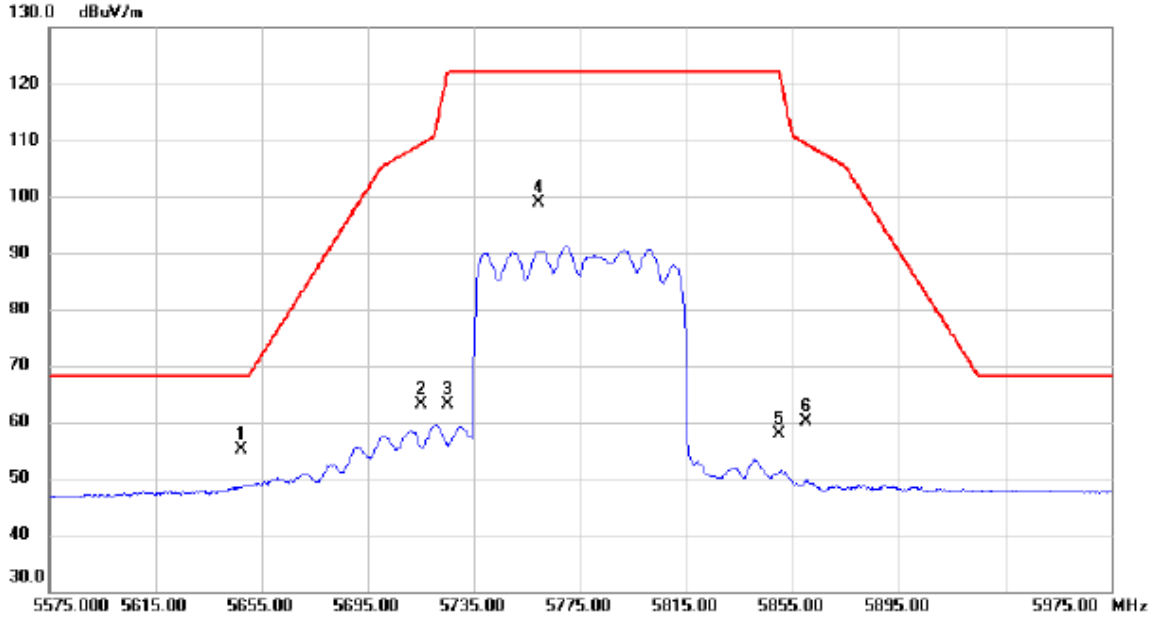


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11549.77	27.64	17.19	44.83	54.00	-9.17	AVG	
2		11549.86	34.87	17.19	52.06	74.00	-21.94	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW80) Mode 5775 MHz

Horizontal

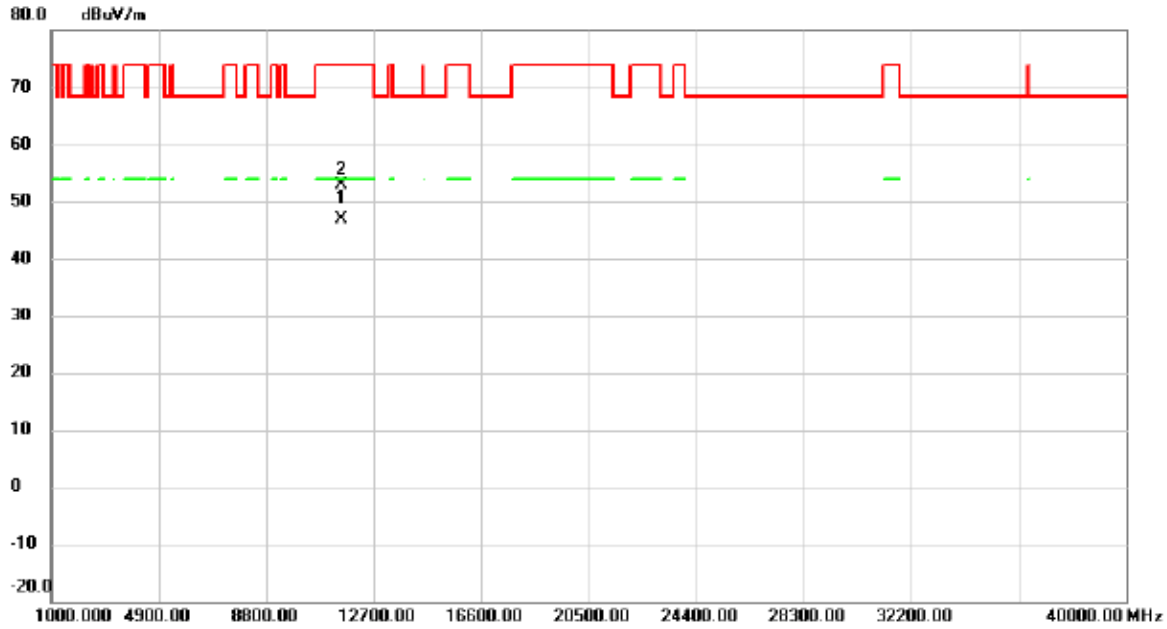


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5647.000	36.72	18.43	55.15	68.20	-13.05	peak	
2		5715.000	44.57	18.66	63.23	109.40	-46.17	peak	
3		5725.000	44.51	18.69	63.20	122.20	-59.00	peak	
4		5759.400	80.06	18.80	98.86	122.20	-23.34	peak	No Limit
5		5850.000	38.90	19.09	57.99	122.20	-64.21	peak	
6		5860.000	41.04	19.12	60.16	109.40	-49.24	peak	

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

Orthogonal Axis	X
Test Mode	UNII-3_TX AX (HEW80) Mode 5775 MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11549.79	29.57	17.19	46.76	54.00	-7.24	AVG	
2		11549.84	35.62	17.19	52.81	74.00	-21.19	peak	

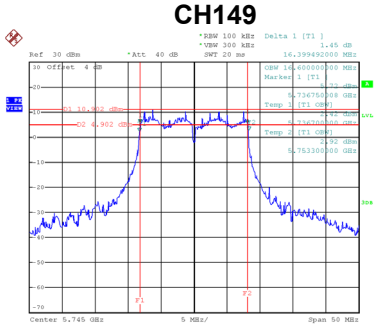
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	UNII-3_TX A Mode

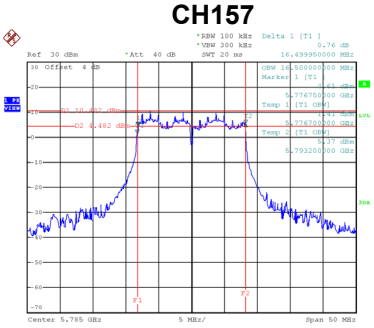
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
149	5745	16.40	500	Complies
157	5785	16.50	500	Complies
165	5825	16.41	500	Complies

CH149



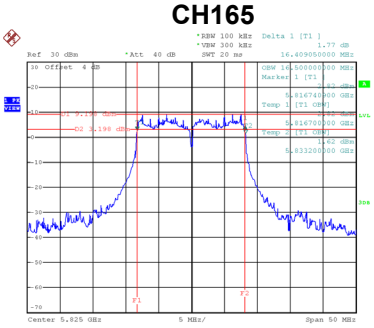
Date: 16.APR.2020 20:11:25

CH157



Date: 16.APR.2020 20:12:36

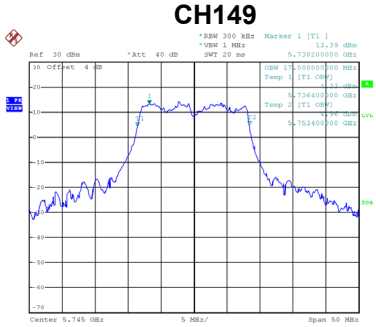
CH165



Date: 16.APR.2020 20:13:34

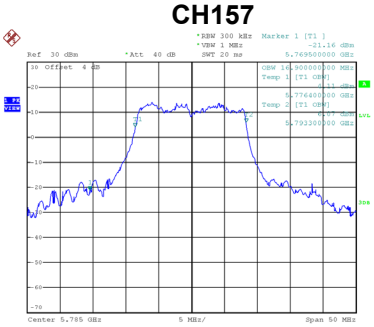
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
149	5745	17.00	Complies
157	5785	16.90	Complies
165	5825	16.90	Complies

CH149



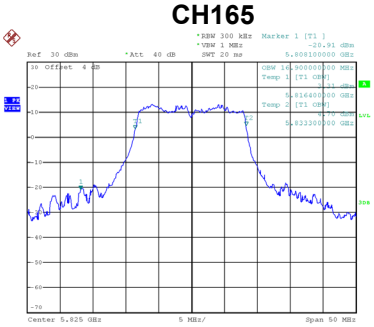
Date: 16.APR.2020 20:27:50

CH157



Date: 16.APR.2020 20:29:01

CH165

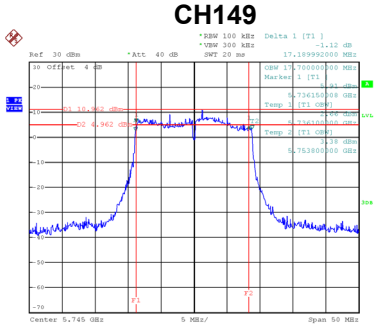


Date: 16.APR.2020 20:29:46

Test Mode	UNII-3_TX AC (VHT20) Mode

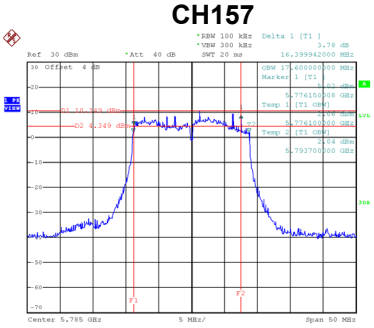
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
149	5745	17.19	500	Complies
157	5785	16.40	500	Complies
165	5825	16.40	500	Complies

CH149



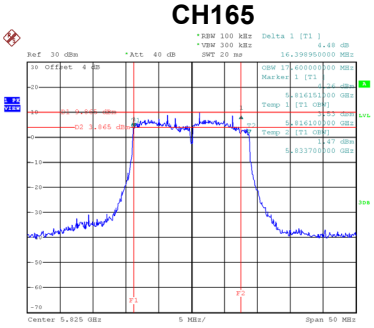
Date: 16.APR.2020 20:14:17

CH157



Date: 16.APR.2020 20:15:42

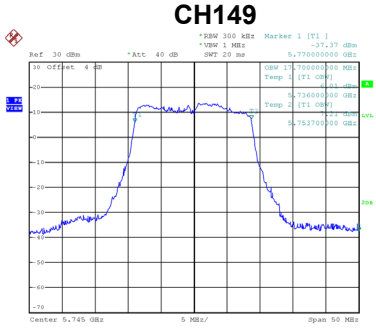
CH165



Date: 16.APR.2020 20:16:30

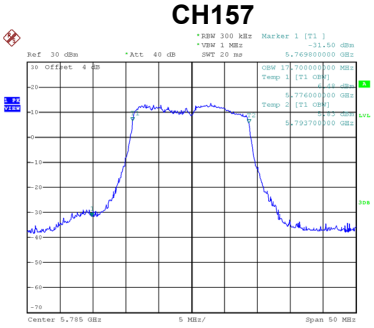
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
149	5745	17.70	Complies
157	5785	17.70	Complies
165	5825	17.70	Complies

CH149



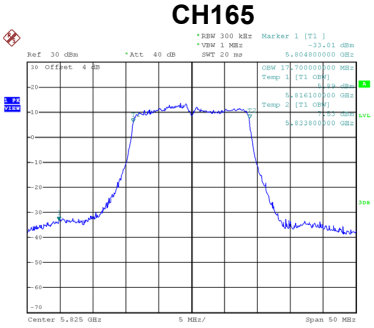
Date: 16.APR.2020 20:30:09

CH157



Date: 16.APR.2020 20:30:31

CH165

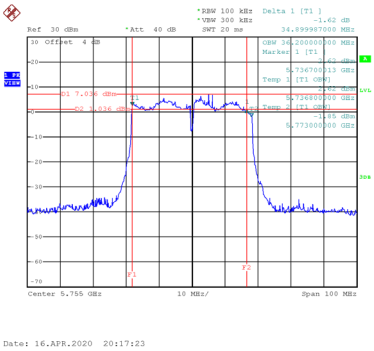


Date: 16.APR.2020 20:30:58

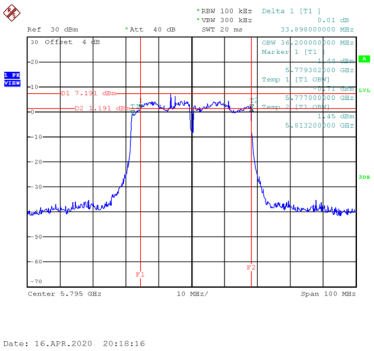
Test Mode	UNII-3_TX AC (VHT40) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
151	5755	34.90	500	Complies
159	5795	33.90	500	Complies

CH151

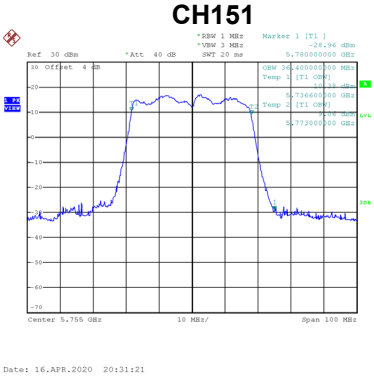


CH159

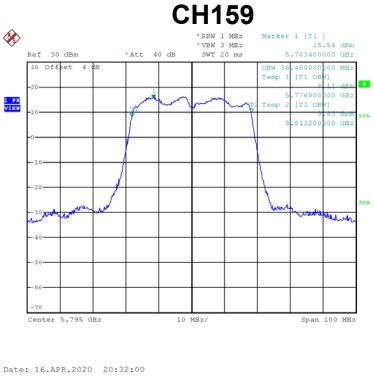


Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
151	5755	36.40	Complies
159	5795	36.40	Complies

CH151



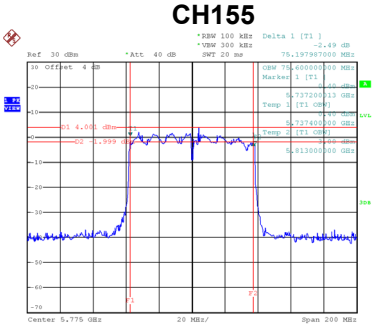
CH159



Test Mode	UNII-3_TX AC (VHT80) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
155	5775	75.20	500	Complies

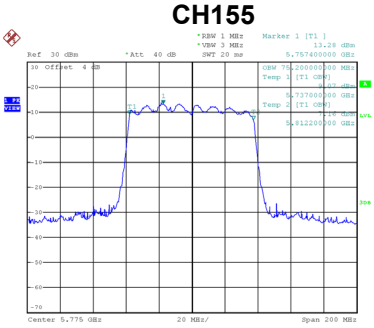
CH155



Date: 16.APR.2020 20:19:03

Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
155	5775	75.20	Complies

CH155

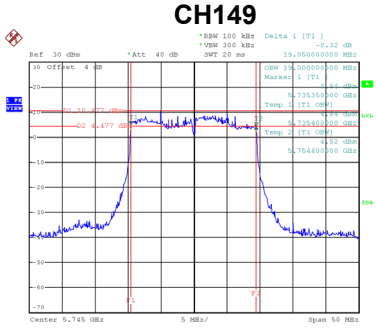


Date: 16.APR.2020 20:32:58

Test Mode	UNII-3_TX AX (HEW20) Mode

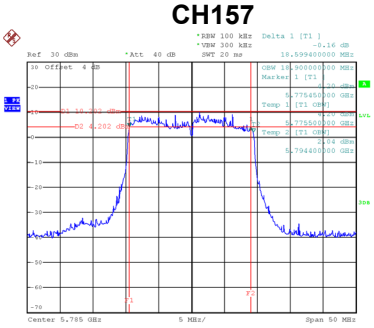
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
149	5745	19.05	500	Complies
157	5785	18.60	500	Complies
165	5825	18.89	500	Complies

CH149



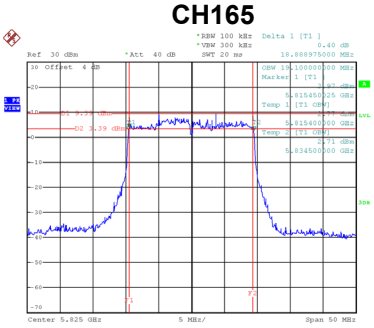
Date: 16.APR.2020 20:19:43

CH157



Date: 16.APR.2020 20:21:38

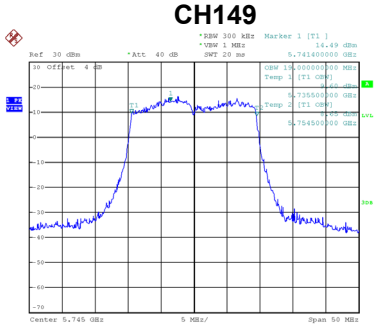
CH165



Date: 16.APR.2020 20:23:10

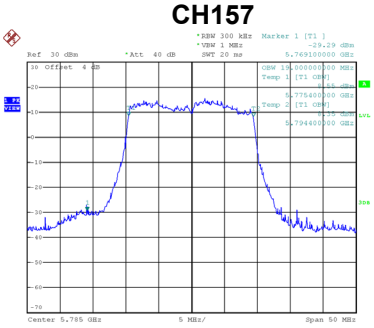
Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
149	5745	19.00	Complies
157	5785	19.00	Complies
165	5825	19.00	Complies

CH149



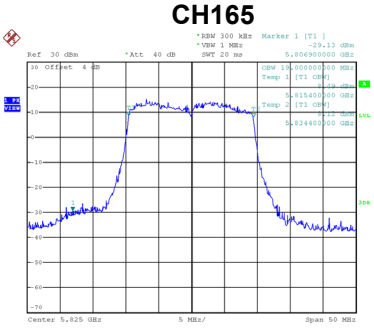
Date: 16.APR.2020 20:33:39

CH157



Date: 16.APR.2020 20:34:04

CH165

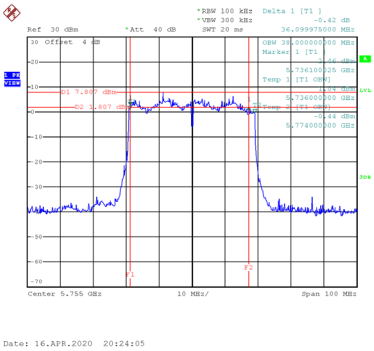


Date: 16.APR.2020 20:34:30

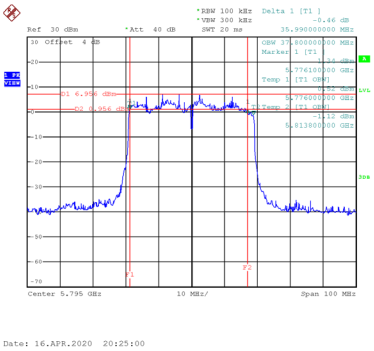
Test Mode	UNII-3_TX AX (HEW40) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
151	5755	36.10	500	Complies
159	5795	36.00	500	Complies

CH151

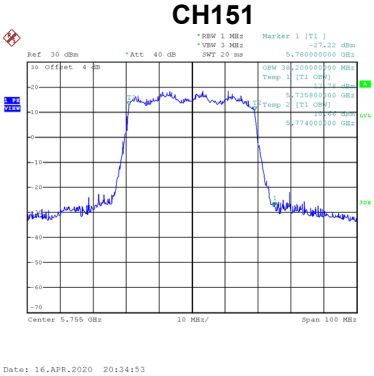


CH159

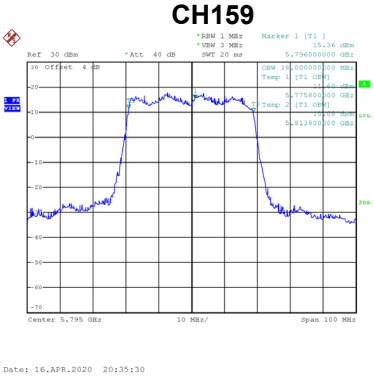


Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
151	5755	38.20	Complies
159	5795	38.00	Complies

CH151



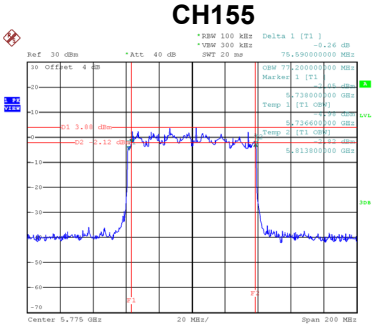
CH159



Test Mode	UNII-3_TX AX (HEW80) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	6 dB Bandwidth Min. Limit (kHz)	Result
155	5775	75.59	500	Complies

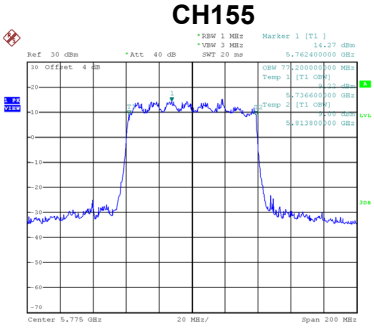
CH155



Date: 16.APR.2020 20:47:59

Channel	Frequency (MHz)	99 % Emission Bandwidth (MHz)	Result
155	5775	77.20	Complies

CH155



Date: 16.APR.2020 20:35:54

APPENDIX F - MAXIMUM OUTPUT POWER

Test Mode	UNII-3_TX A Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	22.65	0.22	22.87	30.00	1.00	Complies
157	5785	22.58	0.22	22.80	30.00	1.00	Complies
165	5825	22.51	0.22	22.73	30.00	1.00	Complies

Test Mode	UNII-3_TX A Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	23.04	0.22	23.26	30.00	1.00	Complies
157	5785	23.31	0.22	23.53	30.00	1.00	Complies
165	5825	22.96	0.22	23.18	30.00	1.00	Complies

Test Mode	UNII-3_TX A Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	26.08	30.00	1.00	Complies
157	5785	26.19	30.00	1.00	Complies
165	5825	25.97	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT20) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	22.47	0.24	22.71	30.00	1.00	Complies
157	5785	22.49	0.24	22.73	30.00	1.00	Complies
165	5825	22.27	0.24	22.51	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT20) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	23.02	0.24	23.26	30.00	1.00	Complies
157	5785	23.21	0.24	23.45	30.00	1.00	Complies
165	5825	22.86	0.24	23.10	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT20) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	26.00	30.00	1.00	Complies
157	5785	26.11	30.00	1.00	Complies
165	5825	25.82	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT40) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	22.51	0.16	22.67	30.00	1.00	Complies
159	5795	22.43	0.16	22.59	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT40) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	22.88	0.16	23.04	30.00	1.00	Complies
159	5795	23.22	0.16	23.38	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT40) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	25.87	30.00	1.00	Complies
159	5795	26.01	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT80) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	22.49	0.20	22.69	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT80) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	23.08	0.20	23.28	30.00	1.00	Complies

Test Mode	UNII-3_TX AC (VHT80) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	26.01	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW20) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	22.36	0.17	22.53	30.00	1.00	Complies
157	5785	22.42	0.17	22.59	30.00	1.00	Complies
165	5825	22.37	0.17	22.54	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW20) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	22.87	0.17	23.04	30.00	1.00	Complies
157	5785	23.22	0.17	23.39	30.00	1.00	Complies
165	5825	22.91	0.17	23.08	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW20) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	25.80	30.00	1.00	Complies
157	5785	26.02	30.00	1.00	Complies
165	5825	25.83	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW40) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	22.45	0.21	22.66	30.00	1.00	Complies
159	5795	22.39	0.21	22.60	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW40) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	22.78	0.21	22.99	30.00	1.00	Complies
159	5795	23.28	0.21	23.49	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW40) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	25.84	30.00	1.00	Complies
159	5795	26.08	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW80) Mode_Ant. 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	22.55	0.19	22.74	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW80) Mode_Ant. 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	23.23	0.19	23.42	30.00	1.00	Complies

Test Mode	UNII-3_TX AX (HEW80) Mode_Total

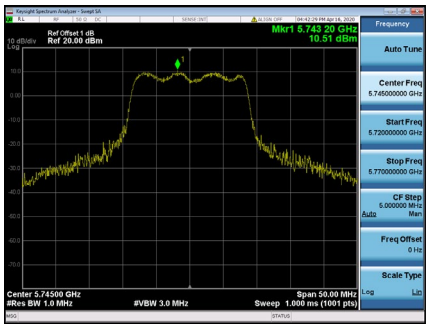
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	26.10	30.00	1.00	Complies

APPENDIX G - POWER SPECTRAL DENSITY

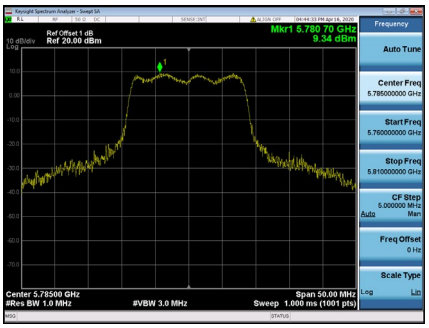
Test Mode	UNII-3_TX A Mode_Ant. 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	10.51	0.22	10.73	30.00	Complies
157	5785	9.34	0.22	9.56	30.00	Complies
165	5825	8.72	0.22	8.94	30.00	Complies

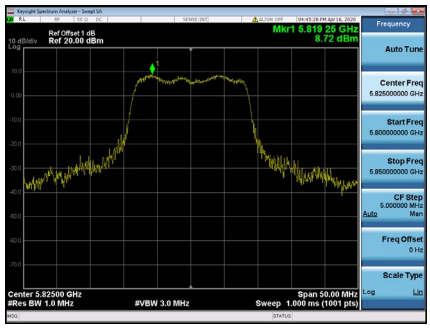
CH149



CH157



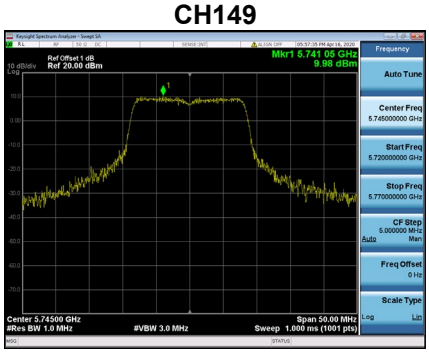
CH165



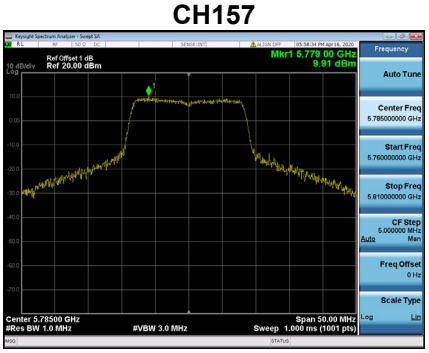
Test Mode	UNII-3_TX A Mode_Ant. 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	9.98	0.22	10.20	30.00	Complies
157	5785	9.91	0.22	10.13	30.00	Complies
165	5825	8.88	0.22	9.10	30.00	Complies

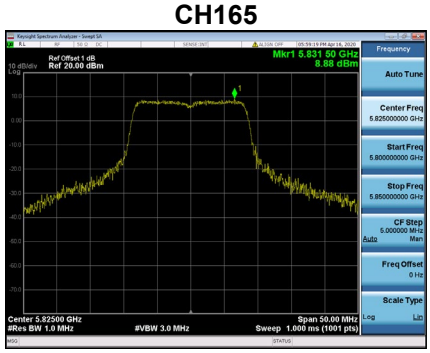
CH149



CH157



CH165



Test Mode	UNII-3_TX A Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	13.49	30.00	Complies
157	5785	12.87	30.00	Complies
165	5825	12.03	30.00	Complies