FCC Radio Test Report

FCC ID: V7TFH1201

This report concerns (check one): ■ **Original Grant** □ **Class II Change**

Project No.	:	1406C022
Equipment	:	High Power Wireless AC1200 Dual-band Router
Model Name	:	FH1201
Applicant	:	SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address	:	6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen,China.518052

Tested by: BTL Inc. EMC Laboratory
Date of Receipt: Jun. 06, 2014
Date of Test: Jun. 06, 2014 ~ Jun. 20, 2014
Issued Date: Jun. 23, 2014

Testing Engineer : David Mao
(David Mao)

Technical Manager : Leo Hung
(Leo Hung)

Authorized Signatory : Steven Lu
(Steven Lu)

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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 the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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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.

Table of Contents Page

Table of Contents Page

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FCCP-3-1406C022	Original Issue.	Jun. 23, 2014

1. CERTIFICATION

Equipment	:	High Power Wireless AC1200 Dual-band Router
Brand Name	:	Tenda
Model Name	:	FH1201
Applicant		SHENZHEN TENDA TECHNOLOGY CO.,LTD
Manufacturer	:	SHENZHEN TENDA TECHNOLOGY CO.,LTD
Address	:	6-8 Floor,Tower E3,No.1001,Zhongshanyuan Road,Nanshan District, Shenzhen,China.518052
Date of Test	:	Jun. 06, 2014 ~ Jun. 20, 2014
Test Item	:	ENGINEERING SAMPLE
Standard(s)	:	FCC Part15, Subpart C(15.247) / ANSI C63.4-2009

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-3-1406C022) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C			
Standard(s) Section **FCC**	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
15.209/15.205	Transmitter Radiated Emissions	PASS	

NOTE:

(1)" N/A" denotes test is not applicable in this test report.

(2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r01 (Measurement Guidelines of DTS)

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792
BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U，(dB)	NOTE
DG-CB03	CISPR	9KHz~30MHz	V	3.79	
		9KHz~30MHz	H	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	H	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	H	4.14	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	High Power Wireless AC1200 Dual-band Router	
Brand Name	Tenda	
Model Name	FH1201	
Model Difference	N/A	
Product Description	Operation Frequency	5745~5825 MHz
	Modulation Technology	802.11a/n/ac:OFDM
	Bit Rate of Transmitter	300Mbps
	Output Power (Max.)	802.11a: 24.59dBm 802.11n (20M): 26.24dBm 802.11n (40M): 26.14dBm 802.11ac (20M): 27.53 dBm 802.11ac (40M): 25.96 dBm 802.11ac (80M): 25.47 dBm
Power Source	DC Voltage supplied from AC/DC adapter. #1 Manufacturer:GOSPELL DIGITAL TECHNOLOGY CO.,LTD Model: GP005U-120-150 #2 Manufacturer: Dongguan Ponon Technology Co.,Ltd. Model: TEA12U-12150	
Power Rating	#1 I/P: AC 100-240V~0.5A 50 60Hz O/P: DC 12V/1.5A #5 I/P: AC 100-240V~50/60Hz 0.6A O/P: DC 12V/1.5A	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

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

2.

802.11a / 802.11n 20M / 802.11ac 20M					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	**5745**	153	5765	**157**	**5785**
161	5805	**165**	**5825**		

802.11n 40M / 802.11ac 40M			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	**5755**	**159**	**5795**

802.11ac 80M			
Channel	Frequency (MHz)		
155	**5775**		

3. Table for Filed Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
0	Tenda	Q5117	Dipole	N/A	4.85	TX/RX
1	Tenda	Q5117	Dipole	N/A	4.85	TX/RX

Note:
The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R). all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=4.85.

4.

Operating Mode / TX Mode	1TX	2TX
802.11a	V (ANT 2 or ANT 3)	-
802.11n(20MHz)	-	V (ANT 2 + ANT 3)
802.11n(40MHz)	-	V (ANT 2 + ANT 3)
802.11ac(40MHz)	-	V (ANT 2 + ANT 3)
802.11ac(80MHz)	-	V (ANT 2 + ANT 3)

3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX A MODE CHANNEL 149/157/165
Mode 2	TX N-20MHZ MODE CHANNEL 149/157/165
Mode 3	TX N-40MHZ MODE CHANNEL 151/159
Mode 4	TX AC N20 Mode Channel 149/157/165
Mode 5	TX AC N40 Mode Channel 151/159
Mode 6	TX AC N80 Mode Channel 155
Mode 7	TX MODE

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 4	TX MODE

For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode Channel 149/157/165
Mode 2	TX N20 Mode Channel 149/157/165
Mode 3	TX N40 Mode Channel 151/159
Mode 4	TX AC N20 Mode Channel 149/157/165
Mode 5	TX AC N40 Mode Channel 151/159
Mode 6	TX AC N80 Mode Channel 155

Note:

(1) For radiated below 1G test, the 802.11a is found to be the worst case and recorded.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

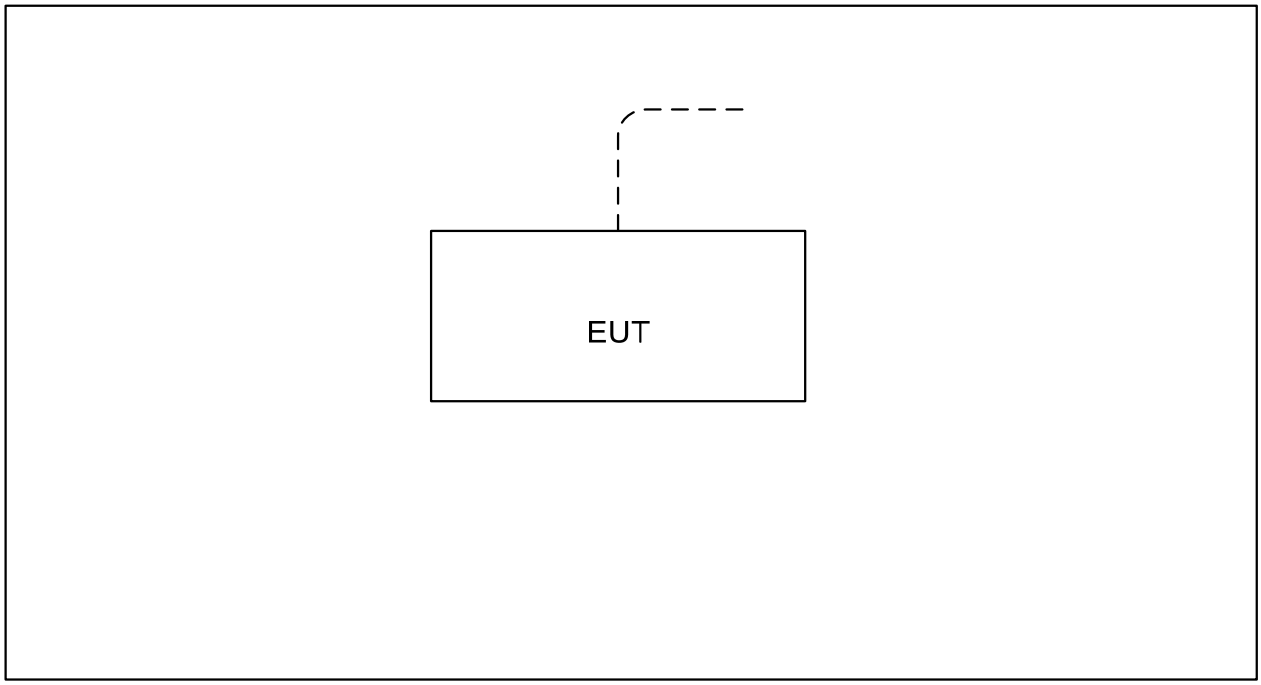
During testing, channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

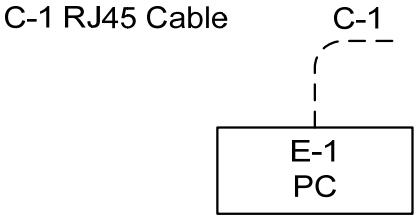
Test software version	MTOOL		
Frequency	5745 MHz	5785 MHz	5825MHz
TX A Mode	78	79	78
TX N20 Mode	70	70	69
TX AC 20 Mode	70	70	69

Test software version	MTOOL	
Frequency	5745 MHz	5825MHz
TX N40 Mode	72	72
TX AC 40 Mode	71	70

Test software version	MTOOL	
Frequency	5775 MHz	
TX AC 80 Mode	71	

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED





3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	PC	Dell 745	DCSM	DOC	G7K832X	-

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10m	-

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

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

4.1.2 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 equipments 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.

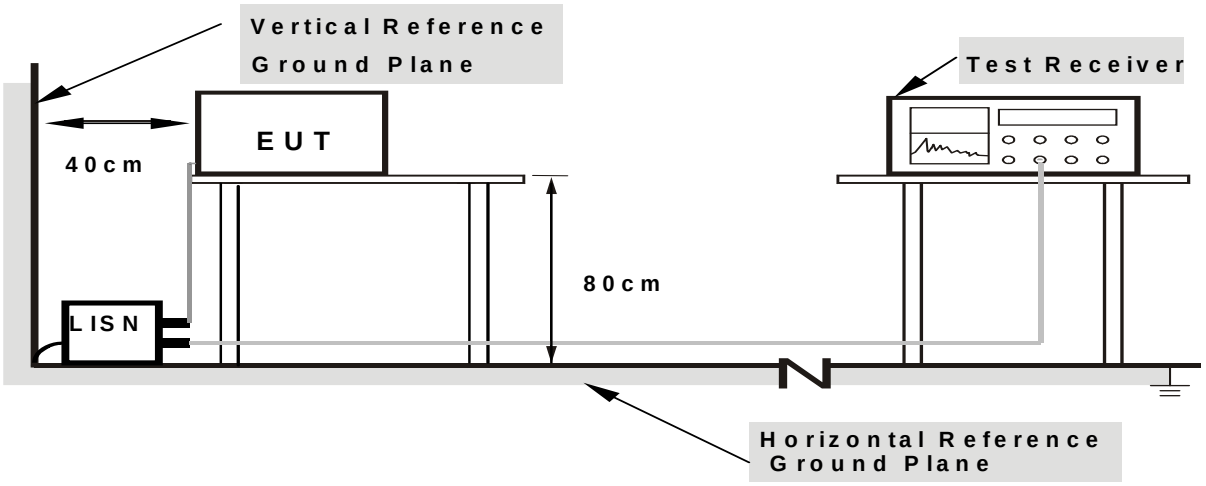
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING 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.

4.1.6 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9KHz-1000MHz)

20dB in any 100 KHz bandwidth outside the operating frequency band. 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.

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
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency (MHz)	(dBuV/m) (at 3 meters)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

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

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

4.2.2 TEST PROCEDURE

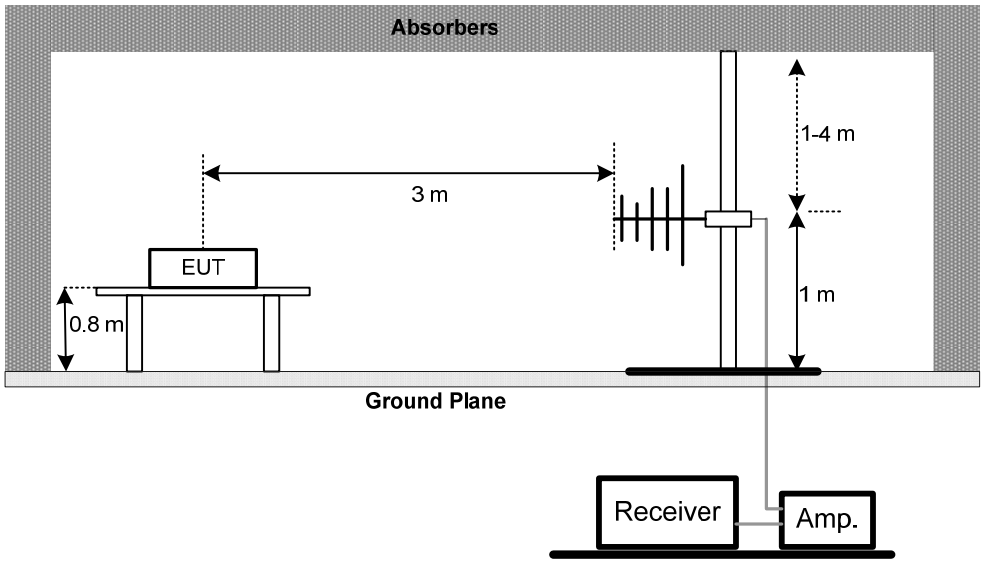
a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-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 0.8 m; 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. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

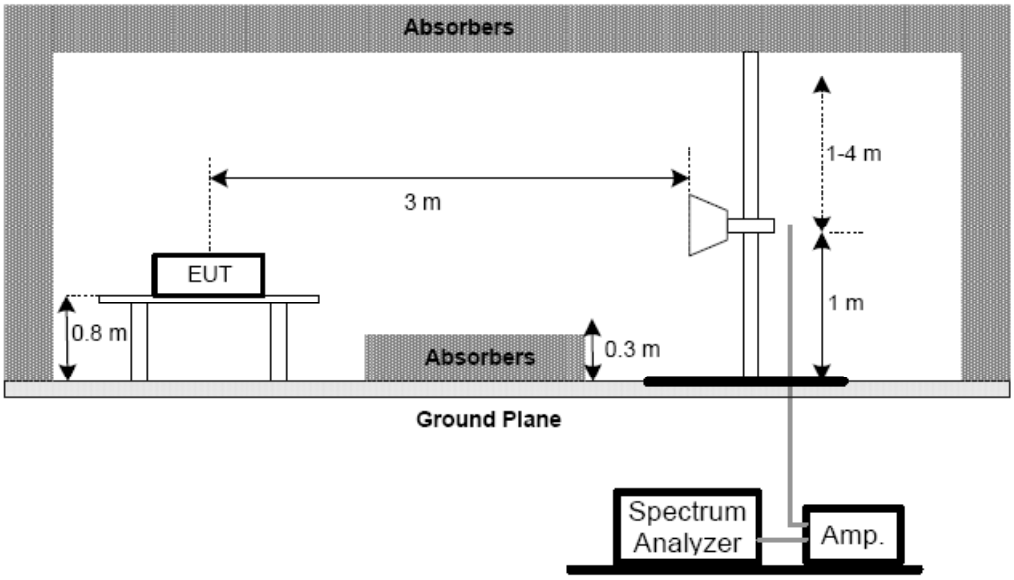
No deviation

4.2.4 TEST SETUP

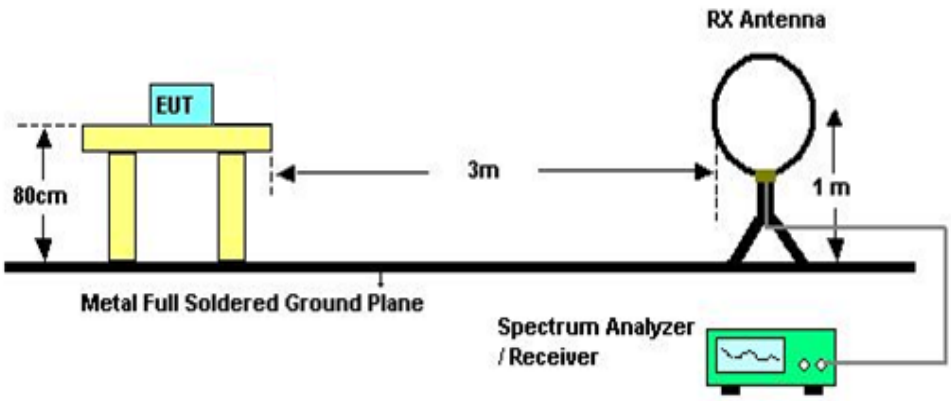
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.6 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

4.2.7 TEST RESULTS (9K TO 30MHZ)

Please refer to the Attachment B

4.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHZ)

Please refer to the Attachment C

Remark:

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz.
(2) 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.
(3) Measuring frequency range from 30MHz to 1000MHz.
(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

(1) 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.
(2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
(3) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
(4) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
(5) EUT Orthogonal Axis:
"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand
(6) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

5. BANDWIDTH TEST

5.1 Applied procedures

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	5725 - 5825	PASS

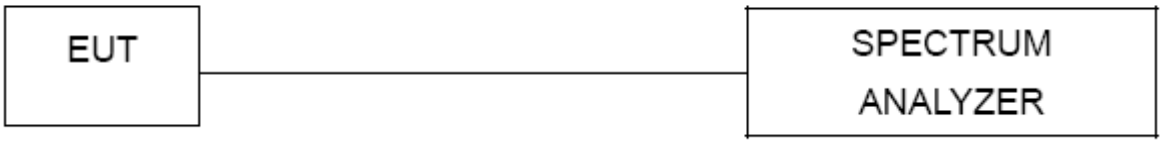
5.1.1 TEST PROCEDURE

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

5.1.6 TEST RESULTS

Please refer to the Attachment E.

6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	5725 - 5825	PASS

6.1.1 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
b. The maximum peak conducted output power was performed in accordance with method 9.1.3 of FCC KDB 558074 D01 DTS Meas Guidance v03r01.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.
Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

6.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

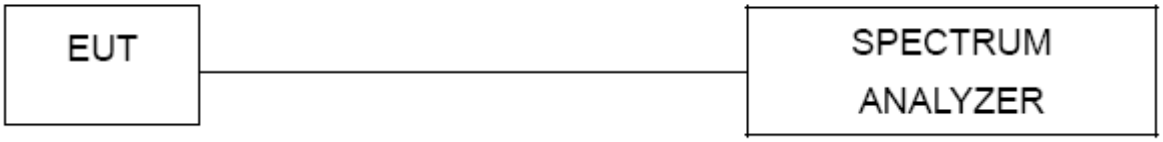
7.1.1 TEST PROCEDURE

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

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

7.1.6 TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	5745 - 5825	PASS

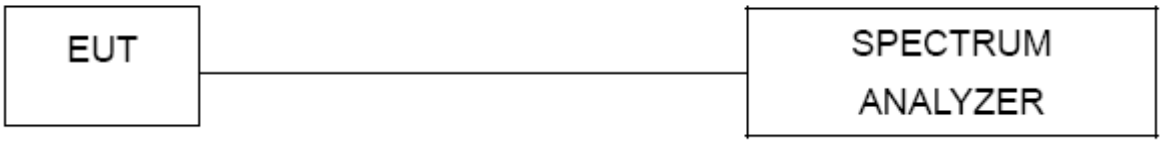
8.1.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting: RBW=3KHz, VBW=10KHz, Sweep time = Auto.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60Hz

8.1.6 TEST RESULTS

Please refer to the Attachment H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015
2	LISN	R&S	ENV216	101447	Mar. 29, 2015
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	EMCO	3142C	00066462	Mar. 29, 2015
2	Antenna	EMCO	3142C	00066464	Mar. 29, 2015
3	Amplifier	Agilent	8447D	2944A11203	Nov. 11, 2014
4	Amplifier	Agilent	8447D	2944A11204	Nov. 11, 2014
5	Spectrum Analyzer	Agilent	E4443A	MY48250370	Nov. 11, 2014
6	RF Pre-selector	Agilent	N9039A	MY46520201	Nov. 11, 2014
7	Test Cable	N/A	Cable_5m_8m_15m	N/A	Jan. 14, 2015
8	Test Cable	N/A	Cable_5m_11m_15m	N/A	Jan. 14, 2015
9	Spectrum Analyzer	Agilent	E4447A	MY48250208	Nov. 11, 2014
10	RF Pre-selector	Agilent	N9039A	MY46520214	Nov. 11, 2014
11	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A
12	Horn Antenna	EMCO	3115	9605-4803	Mar. 29, 2015
13	Amplifier	Agilent	8449B	3008A02584	Nov. 11, 2014
14	Spectrum Analyzer	Agilent	E4447A	MY48250208	Nov. 11, 2014
15	Test Cable	Huber+Suhner	SUCOFLEX_15m_4m	N/A	Jan. 14, 2015
16	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A
17	Broad-Band Horn Antenna（40G）	Schwarzbeck	BBHA 9170	9170319	Feb. 22, 2015

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Apr. 24, 2015
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Apr. 24,2015

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014

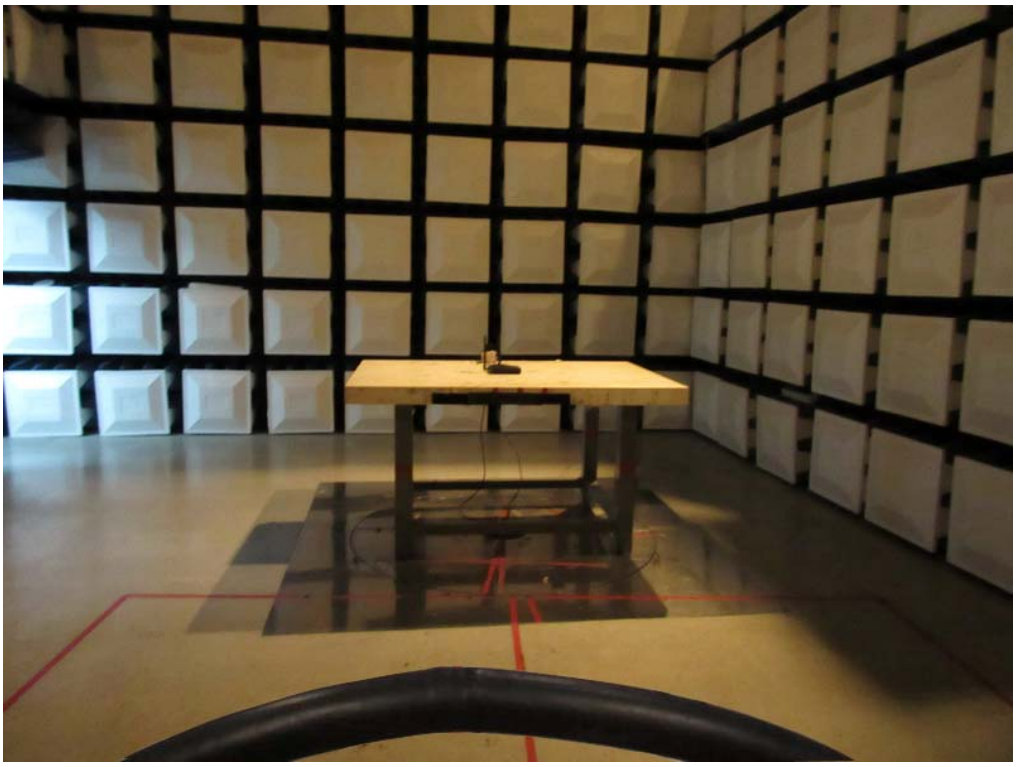
Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014

Remark: ”N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

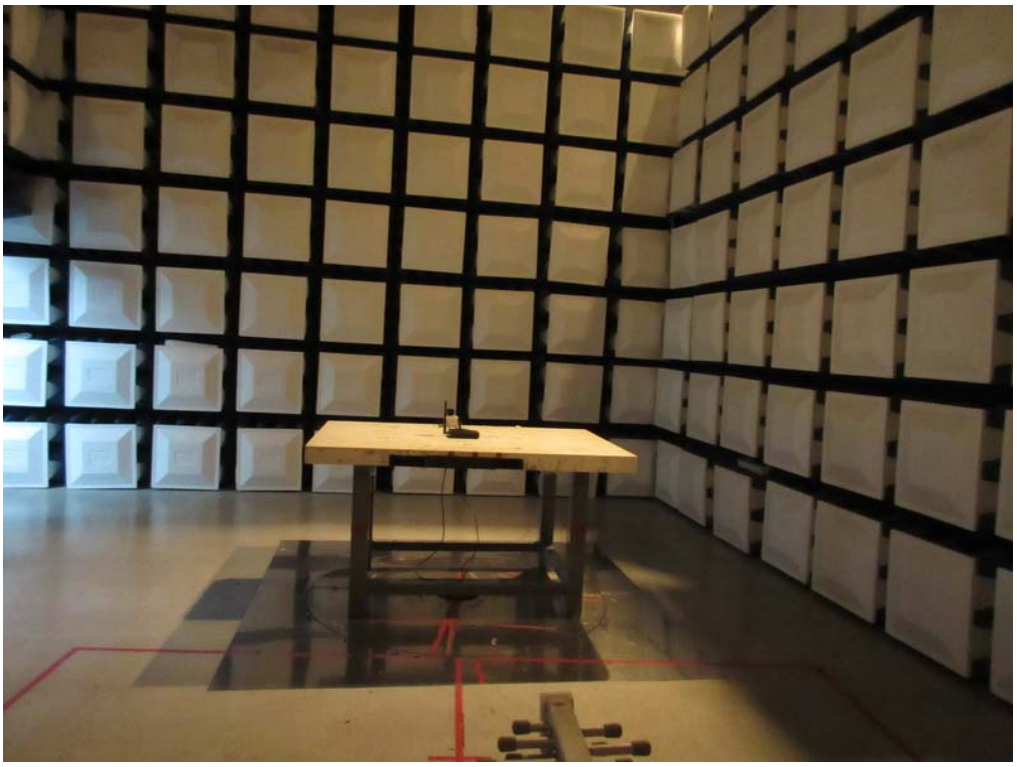
10. EUT TEST PHOTO

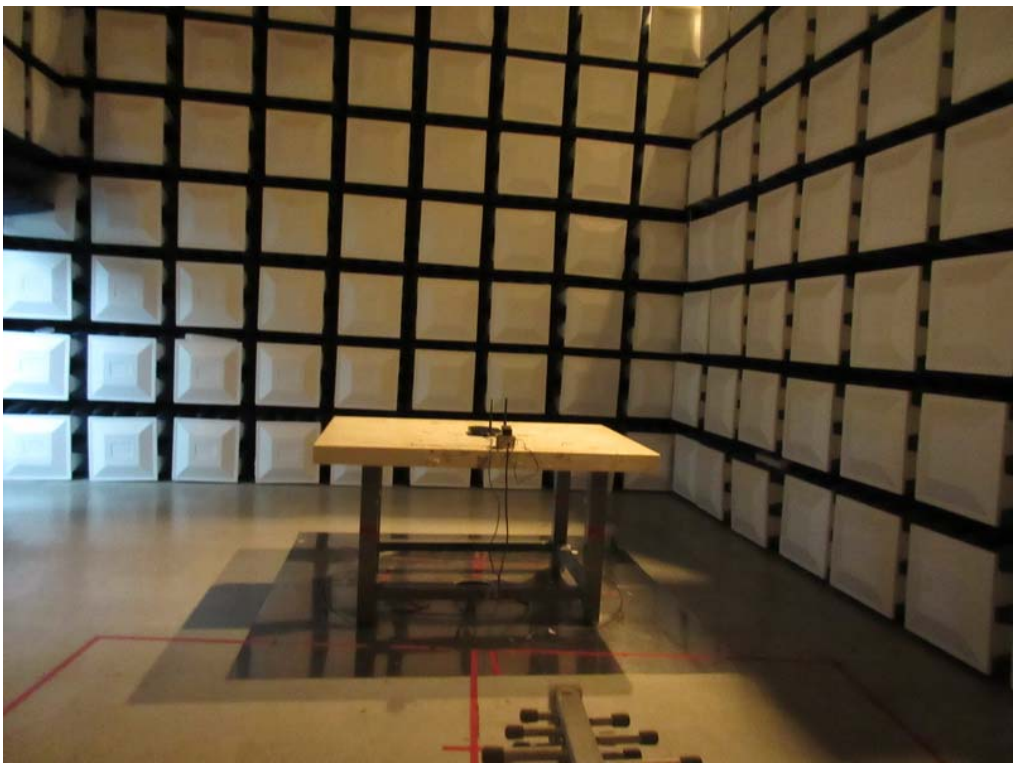
Conducted Measurement Photos

Radiated Measurement Photos
9KHz to 30MHz



Radiated Measurement Photos
30MHz to 1000MHz



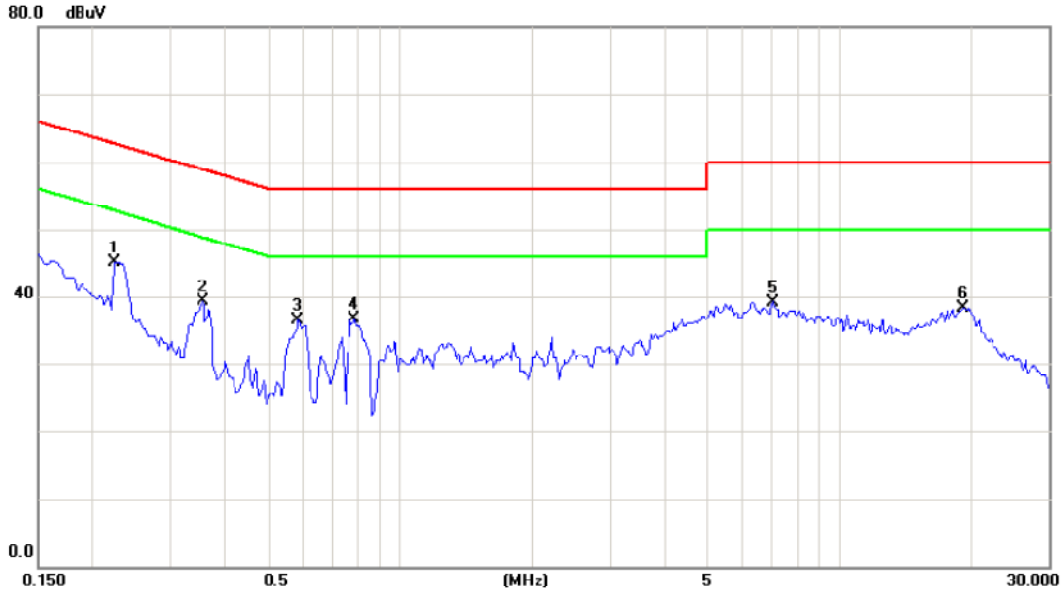


Radiated Measurement Photos
Above 1000MHz

ATTACHMENT A - CONDUCTED EMISSION

Test Mode :	TX MODE

Line

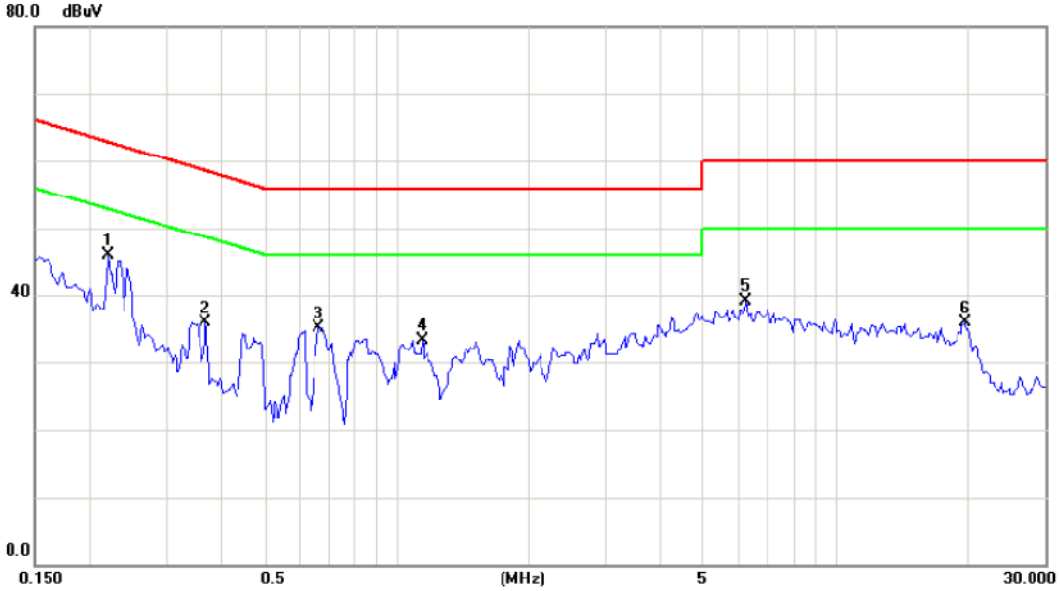


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2242	35.59	9.55	45.14	62.66	-17.52	peak	
2		0.3570	29.63	9.63	39.26	58.80	-19.54	peak	
3		0.5875	26.89	9.67	36.56	56.00	-19.44	peak	
4		0.7906	27.10	9.65	36.75	56.00	-19.25	peak	
5		7.0703	29.21	9.99	39.20	60.00	-20.80	peak	
6		19.2030	27.86	10.42	38.28	60.00	-21.72	peak	

Note：The test result has included the cable loss.

Test Mode :	TX MODE

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2203	36.37	9.61	45.98	62.81	-16.83	peak	
2		0.3688	26.21	9.63	35.84	58.53	-22.69	peak	
3		0.6617	25.44	9.66	35.10	56.00	-20.90	peak	
4		1.1461	23.71	9.68	33.39	56.00	-22.61	peak	
5		6.2344	29.08	9.93	39.01	60.00	-20.99	peak	
6		19.6836	25.51	10.42	35.93	60.00	-24.07	peak	

Note：The test result has included the cable loss.

ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)

Test Mode ：	TX Mode

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0213	0°	16.52	24.22	40.74	121.04	-80.30	AVG
0.0213	0°	18.19	24.22	42.41	141.04	-98.63	PEAK
0.0279	0°	17.15	23.80	40.95	118.69	-77.74	AVG
0.0279	0°	19.03	23.80	42.83	138.69	-95.86	PEAK
0.0331	0°	17.16	23.47	40.63	117.21	-76.58	AVG
0.0331	0°	20.08	23.47	43.55	137.21	-93.66	PEAK
0.0528	0°	18.47	22.34	40.81	113.15	-72.34	AVG
0.0528	0°	21.55	22.34	43.89	133.15	-89.26	PEAK
0.3170	0°	18.36	20.24	38.60	97.58	-58.98	AVG
0.3170	0°	21.05	20.24	41.29	117.58	-76.29	PEAK
1.5250	0°	18.73	19.55	38.28	63.94	-25.66	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0175	90°	17.51	24.30	41.81	122.74	-80.93	AVG
0.0175	90°	19.23	24.30	43.53	142.74	-99.21	PEAK
0.0269	90°	16.95	23.86	40.81	119.01	-78.20	AVG
0.0269	90°	18.33	23.86	42.19	139.01	-96.82	PEAK
0.0378	90°	20.03	23.17	43.20	116.05	-72.85	AVG
0.0378	90°	21.68	23.17	44.85	136.05	-91.20	PEAK
0.0519	90°	20.25	22.36	42.61	113.30	-70.69	AVG
0.0519	90°	23.39	22.36	45.75	133.30	-87.55	PEAK
0.3270	90°	18.45	20.22	38.67	97.31	-58.65	AVG
0.3270	90°	20.72	20.22	40.94	117.31	-76.38	PEAK
1.6750	90°	18.63	19.53	38.16	63.12	-24.96	QP

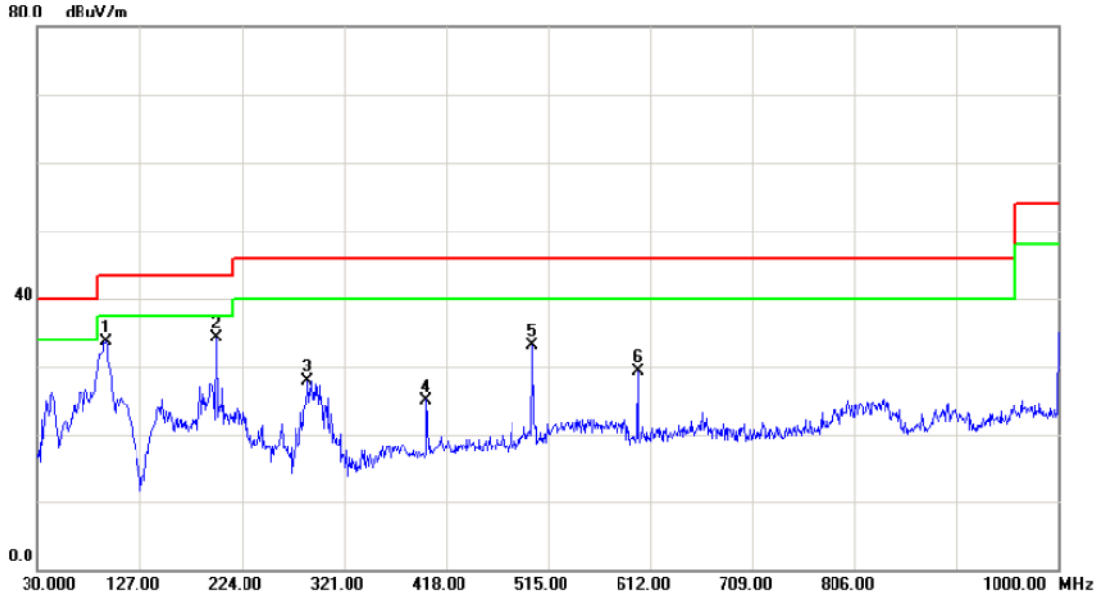
Remark:

(1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
(2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
(3) Limit line = specific limits (dBuV) + distance extrapolation factor.

ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode:	TX A MODE 5745MHz

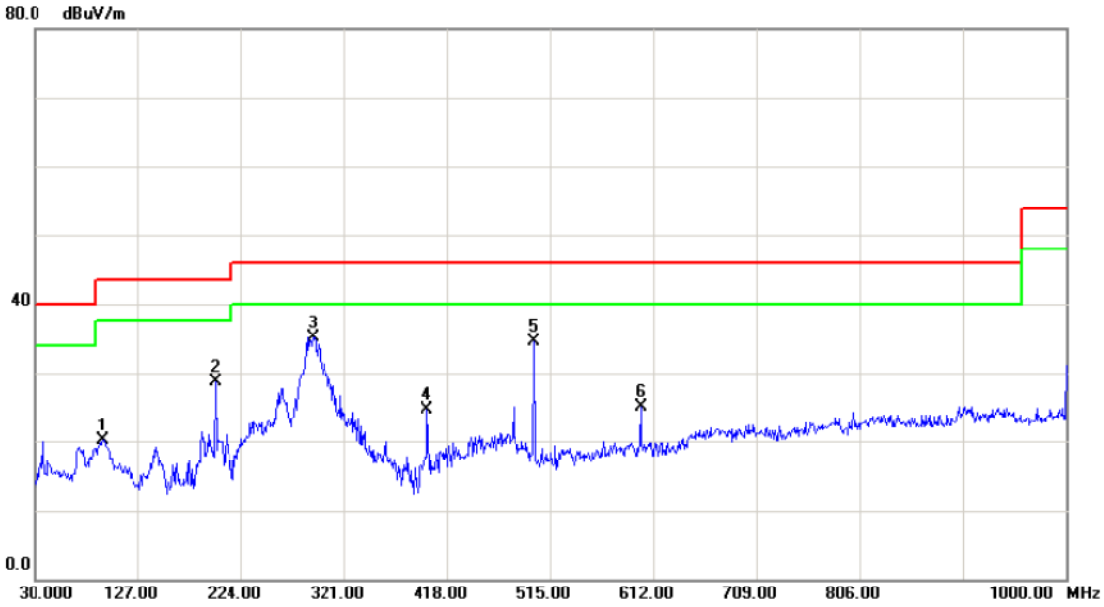
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		94.9900	50.96	-17.25	33.71	43.50	-9.79	peak	
2	*	199.7500	49.35	-15.13	34.22	43.50	-9.28	peak	
3		287.0500	39.40	-11.58	27.82	46.00	-18.18	peak	
4		399.5700	34.70	-9.70	25.00	46.00	-21.00	peak	
5		500.4500	43.57	-10.52	33.05	46.00	-12.95	peak	
6		600.3600	37.44	-8.08	29.36	46.00	-16.64	peak	

Test Mode:	TX A MODE 5745MHz

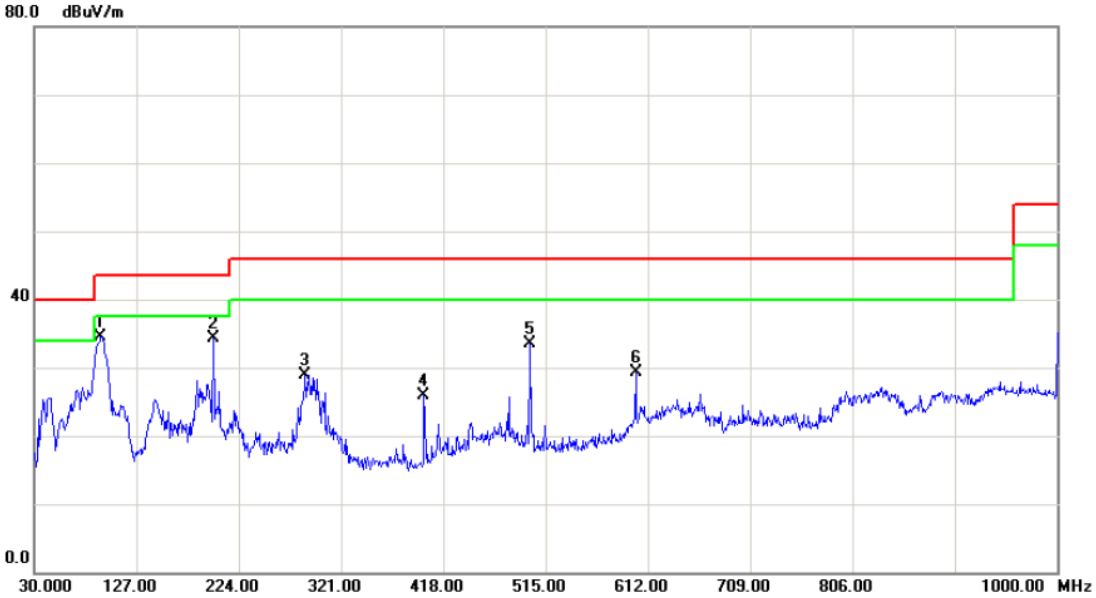
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		94.0200	37.39	-17.33	20.06	43.50	-23.44	peak	
2		199.7500	43.74	-15.13	28.61	43.50	-14.89	peak	
3	*	291.9000	46.27	-11.19	35.08	46.00	-10.92	peak	
4		399.5700	34.32	-9.70	24.62	46.00	-21.38	peak	
5		500.4500	45.09	-10.52	34.57	46.00	-11.43	peak	
6		600.3600	33.16	-8.08	25.08	46.00	-20.92	peak	

Test Mode:	TX A MODE 5785MHz

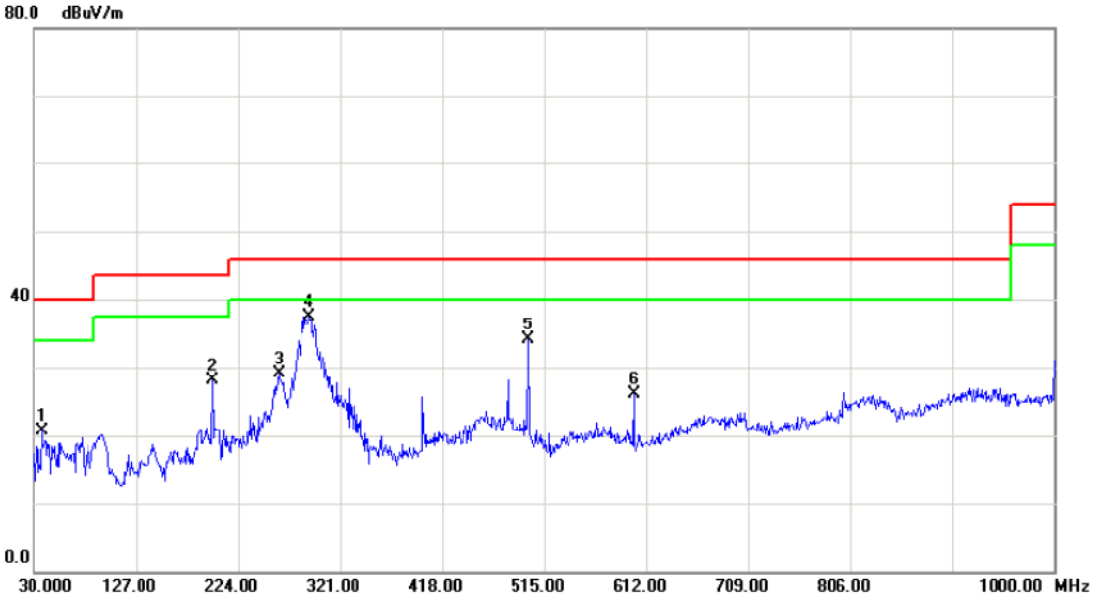
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	93.0500	52.01	-17.42	34.59	43.50	-8.91	peak	
2		199.7500	49.35	-15.13	34.22	43.50	-9.28	peak	
3		287.0500	40.40	-11.58	28.82	46.00	-17.18	peak	
4		399.5700	35.70	-9.70	26.00	46.00	-20.00	peak	
5		500.4500	44.07	-10.52	33.55	46.00	-12.45	peak	
6		600.3600	37.44	-8.08	29.36	46.00	-16.64	peak	

Test Mode:	TX A MODE 5785MHz

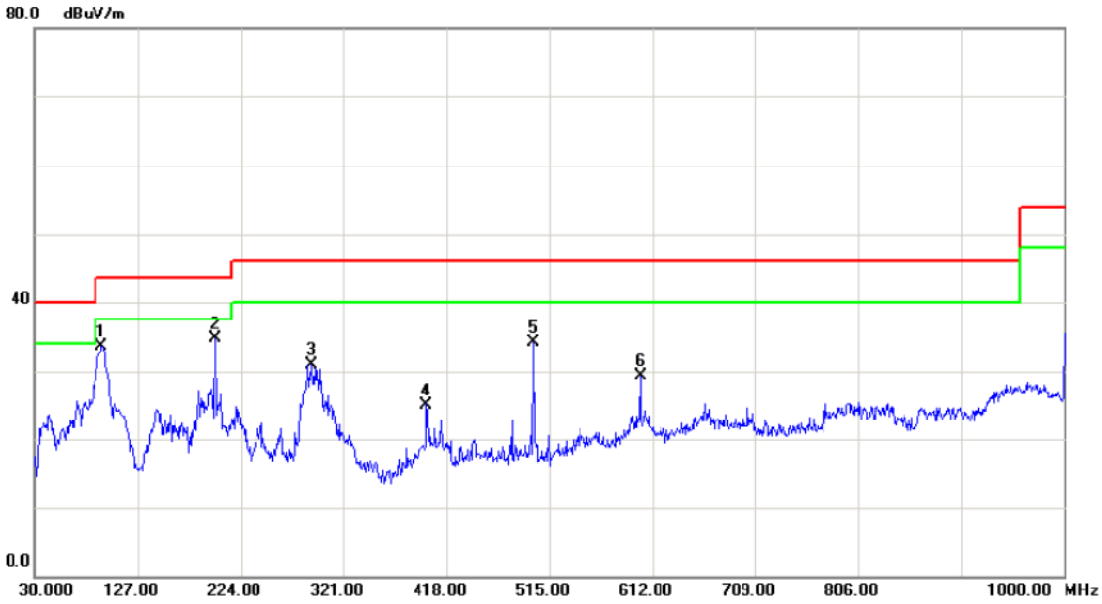
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		37.7600	35.33	-14.53	20.80	40.00	-19.20	peak	
2		199.7500	43.24	-15.13	28.11	43.50	-15.39	peak	
3		262.8000	42.97	-13.78	29.19	46.00	-16.81	peak	
4	*	291.9000	48.77	-11.19	37.58	46.00	-8.42	peak	
5		500.4500	44.59	-10.52	34.07	46.00	-11.93	peak	
6		600.3600	34.16	-8.08	26.08	46.00	-19.92	peak	

Test Mode:	TX A MODE 5825MHz

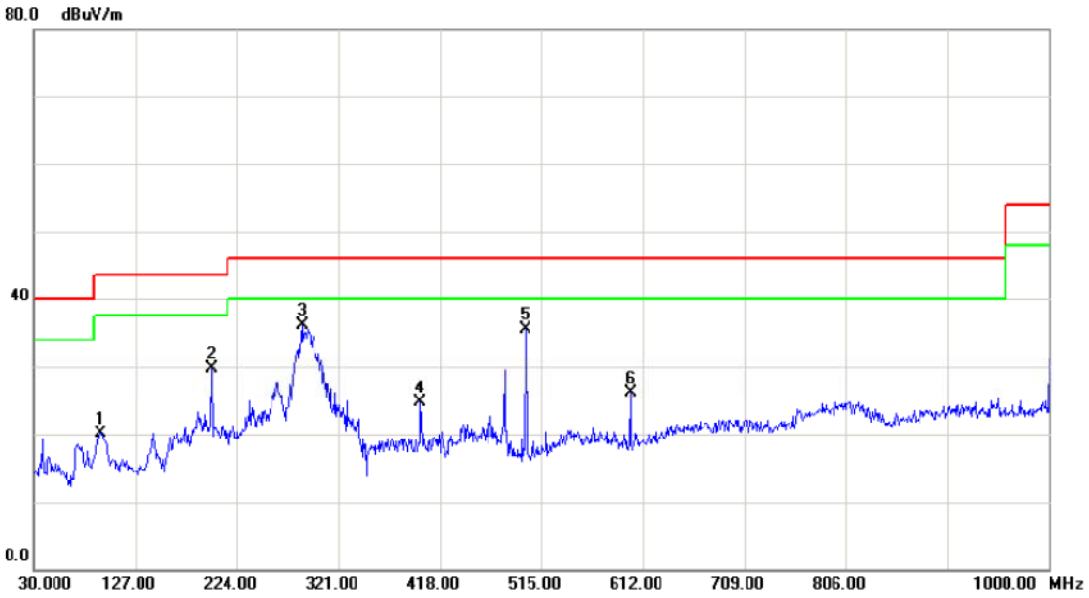
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Dctcctor	Commcnt
1		93.0500	51.01	-17.42	33.59	43.50	-9.91	peak	
2	*	199.7500	49.85	-15.13	34.72	43.50	-8.78	peak	
3		290.9300	42.03	-11.21	30.82	46.00	-15.18	peak	
4		399.5700	34.70	-9.70	25.00	46.00	-21.00	peak	
5		500.4500	44.57	-10.52	34.05	46.00	-11.95	peak	
6		600.3600	37.44	-8.08	29.36	46.00	-16.64	peak	

Test Mode:	TX A MODE 5825MHz

Horizontal

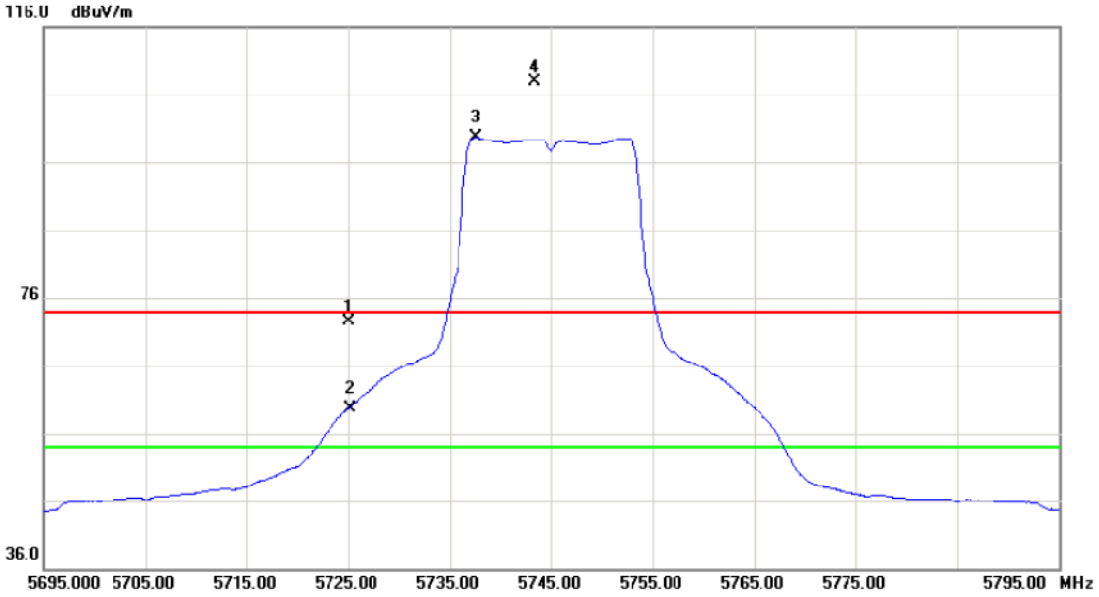


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		94.0200	37.39	-17.33	20.06	43.50	-23.44	peak	
2		199.7500	44.74	-15.13	29.61	43.50	-13.89	peak	
3	*	286.0800	47.77	-11.70	36.07	46.00	-9.93	peak	
4		399.5700	34.32	-9.70	24.62	46.00	-21.38	peak	
5		500.4500	46.09	-10.52	35.57	46.00	-10.43	peak	
6		600.3600	34.16	-8.08	26.08	46.00	-19.92	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Orthogonal Axis :	X
Test Mode :	TX A Mode 5745MHz

Vertical

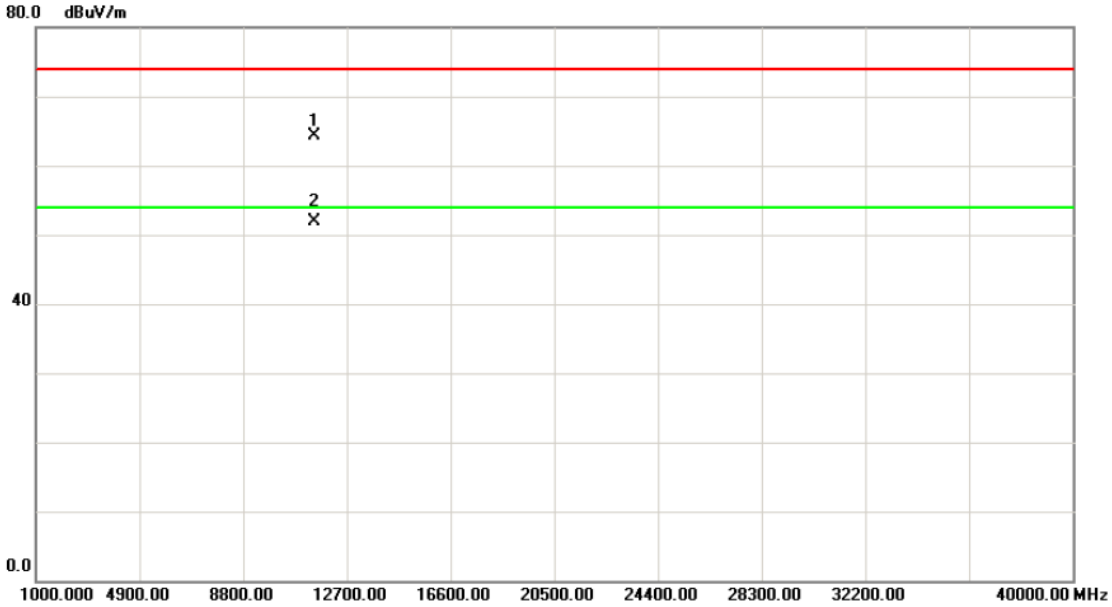


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	27.87	44.58	72.45	74.00	-1.55	peak	
2	X	5725.000	15.19	44.58	59.77	54.00	5.77	AVG	
3	*	5737.600	55.01	44.65	99.66	54.00	45.66	AVG	Fundamental frequency, no limit
4	X	5743.300	63.26	44.67	107.93	74.00	33.93	peak	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX A Mode 5745MHz

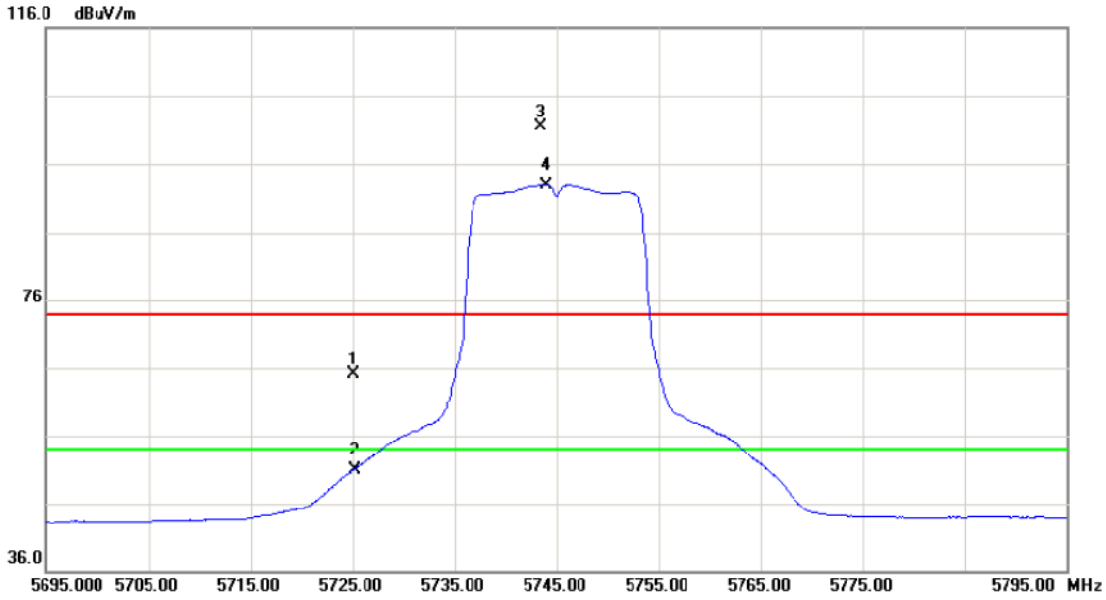
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.50	47.88	16.47	64.35	74.00	-9.65	peak	
2	*	11490.50	35.37	16.47	51.84	54.00	-2.16	AVG	

Orthogonal Axis :	X
Test Mode :	TX A Mode 5745MHz

Horizontal

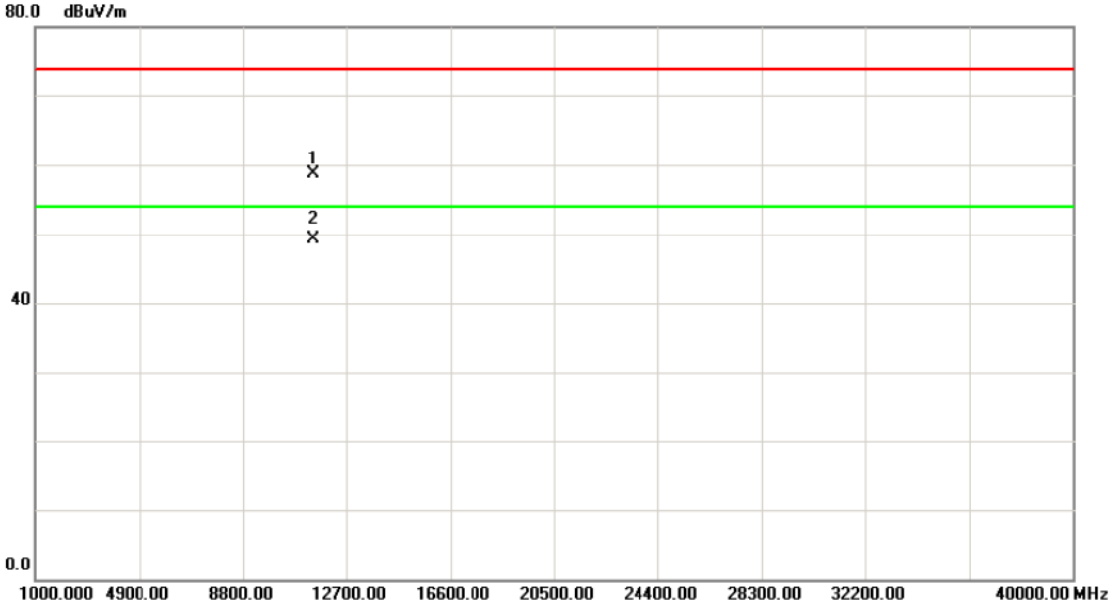


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	20.53	44.58	65.11	74.00	-8.89	peak	
2		5725.000	6.37	44.58	50.95	54.00	-3.05	AVG	
3	X	5743.400	56.83	44.67	101.50	74.00	27.50	peak	Fundamental frequency, no limit
4	*	5744.000	48.29	44.68	92.97	54.00	38.97	AVG	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX A Mode 5745MHz

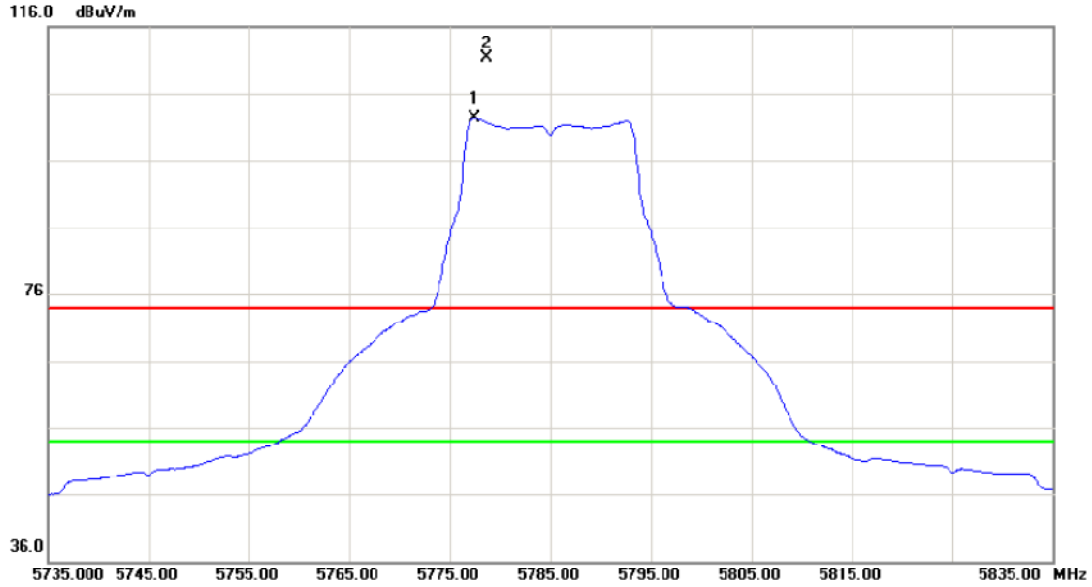
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.10	42.32	16.47	58.79	74.00	-15.21	peak	
2	*	11490.10	32.78	16.47	49.25	54.00	-4.75	AVG	

Orthogonal Axis :	X
Test Mode :	TX A Mode 5785MHz

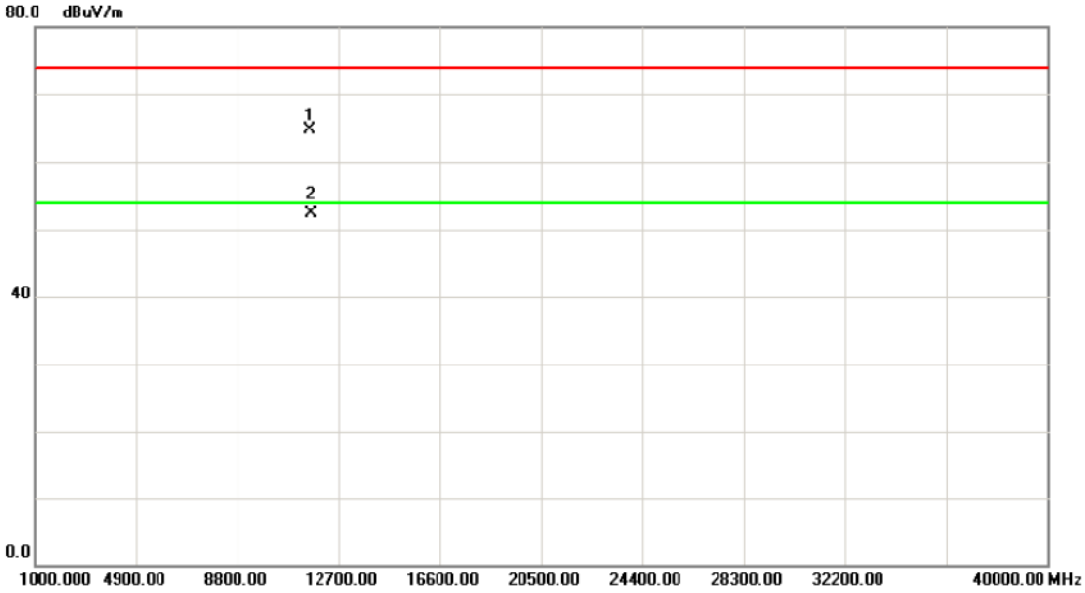
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5777.500	57.43	44.85	102.28	54.00	48.28	AVG	Fundamental frequency, no limit
2	X	5778.600	66.52	44.86	111.38	74.00	37.38	peak	Fundamental frequency, no limit

Orthogonal Axis :	X
Test Mode :	TX A Mode 5785MHz

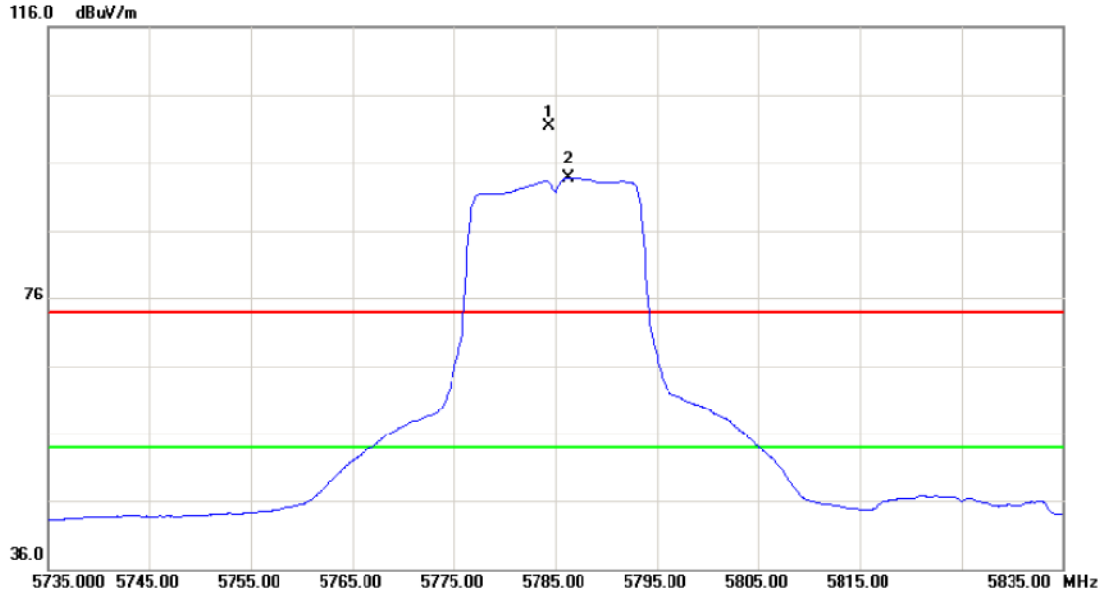
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11569.850	48.21	16.44	64.65	74.00	-9.35	peak	
2	*	11569.850	35.85	16.44	52.29	54.00	-1.71	AVG	

Orthogonal Axis :	X
Test Mode :	TX A Mode 5785MHz

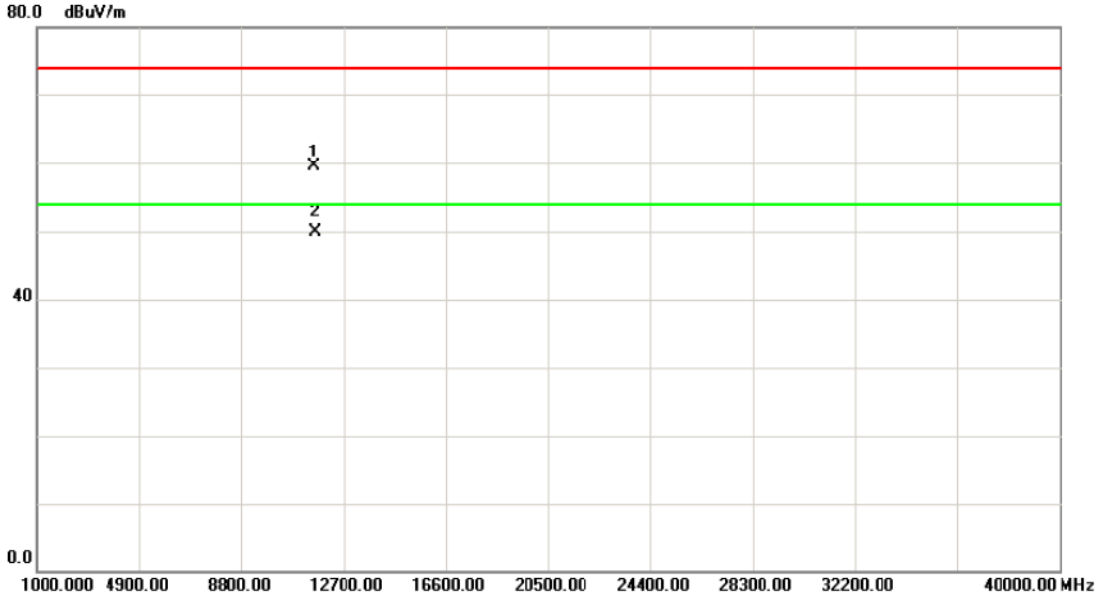
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5784.400	56.51	44.89	101.40	74.00	27.40	peak	Fundamental frequency, no limit
2	*	5786.300	48.86	44.90	93.76	54.00	39.76	AVG	Fundamental frequency, no limit

Orthogonal Axis :	X
Test Mode :	TX A Mode 5785MHz

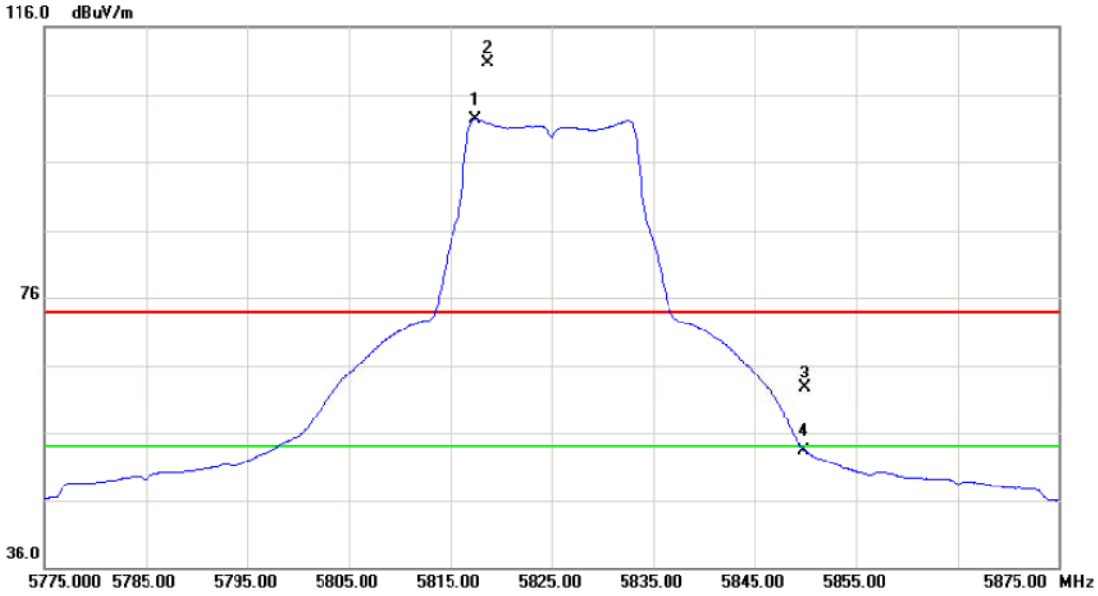
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.23	43.04	16.44	59.48	74.00	-14.52	peak	
2	*	11570.23	33.52	16.44	49.96	54.00	-4.04	AVG	

Orthogonal Axis :	X
Test Mode :	TX A Mode 5825MHz

Vertical

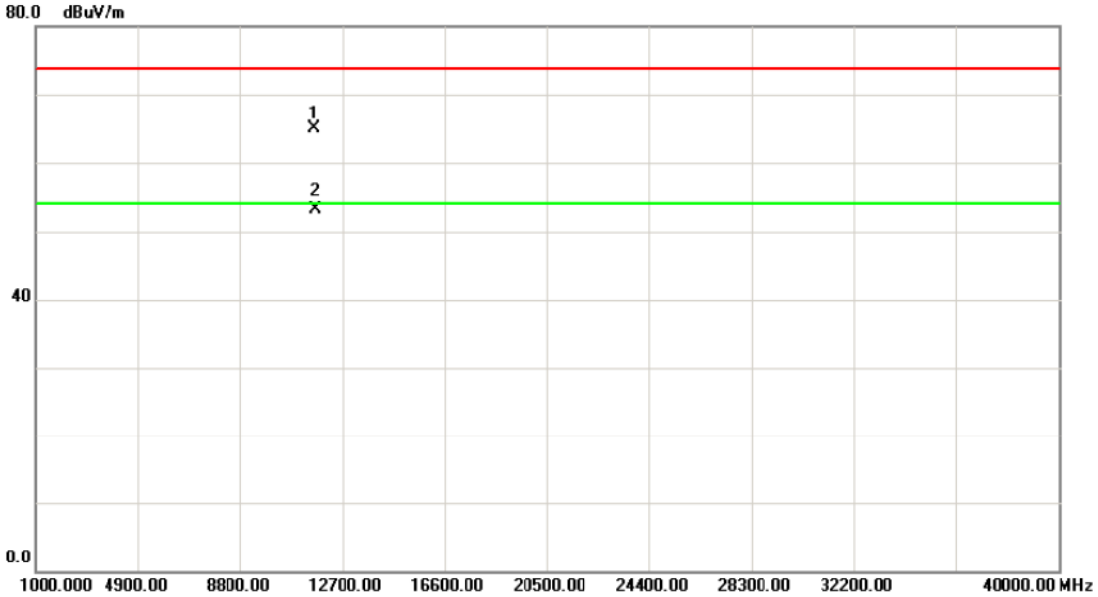


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5817.500	57.23	45.06	102.29	54.00	48.29	AVG	Fundamental frequency, no limit
2	X	5818.600	65.55	45.06	110.61	74.00	36.61	peak	Fundamental frequency, no limit
3		5850.000	17.45	45.23	62.68	74.00	-11.32	peak	
4		5850.000	7.99	45.23	53.22	54.00	-0.78	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX A Mode 5825MHz

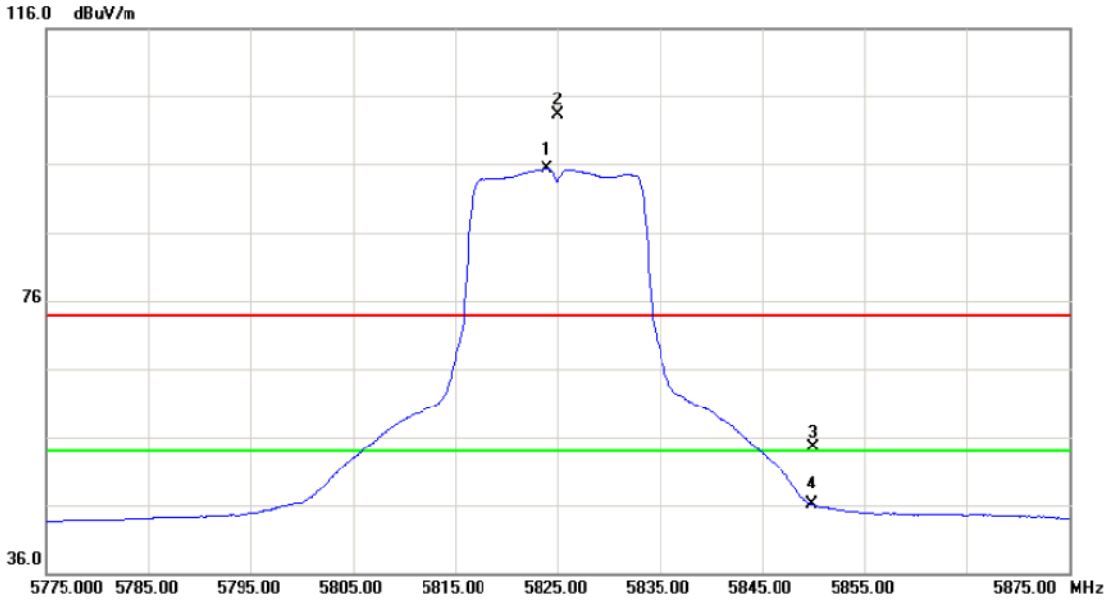
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.11	48.79	16.40	65.19	74.00	-8.81	peak	
2	*	11650.11	36.71	16.40	53.11	54.00	-0.89	AVG	

Orthogonal Axis :	X
Test Mode :	TX A Mode 5825MHz

Horizontal

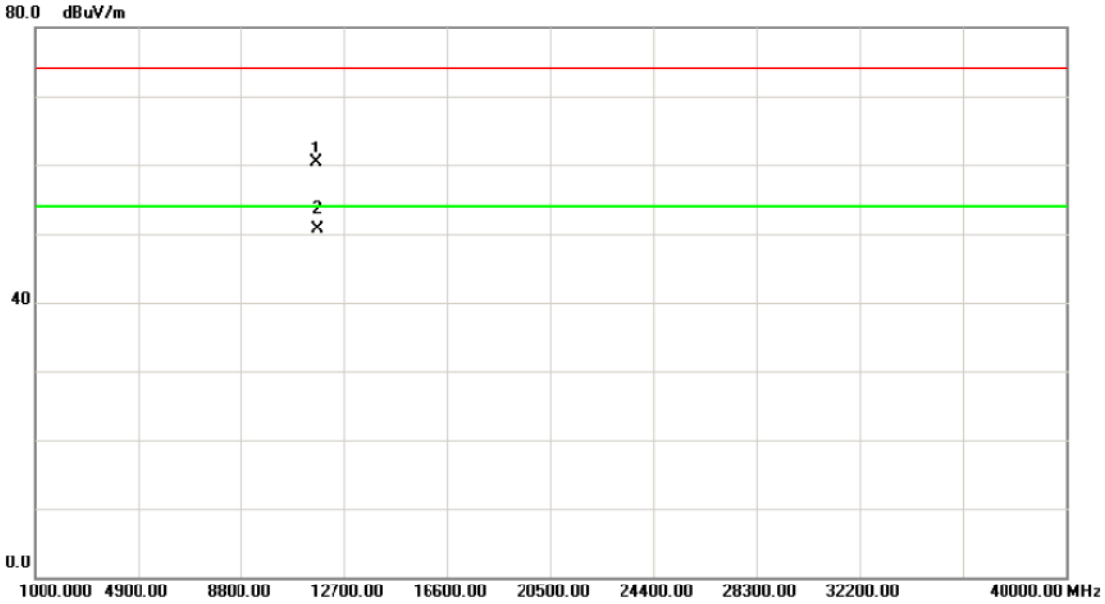


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5824.000	50.17	45.10	95.27	54.00	41.27	AVG	Fundamental frequency, no limit
2	X	5825.100	58.28	45.10	103.38	74.00	29.38	peak	Fundamental frequency, no limit
3		5850.000	9.33	45.23	54.56	74.00	-19.44	peak	
4		5850.000	0.79	45.23	46.02	54.00	-7.98	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX A Mode 5825MHz

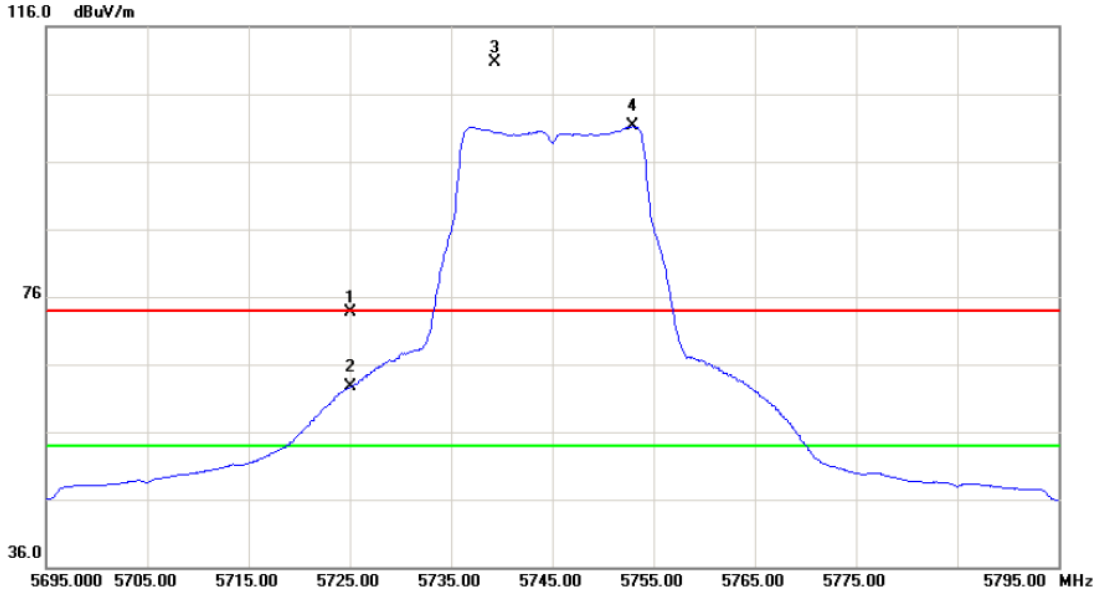
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.12	43.86	16.40	60.26	74.00	-13.74	peak	
2	*	11650.12	34.24	16.40	50.64	54.00	-3.36	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5745MHz

Vertical

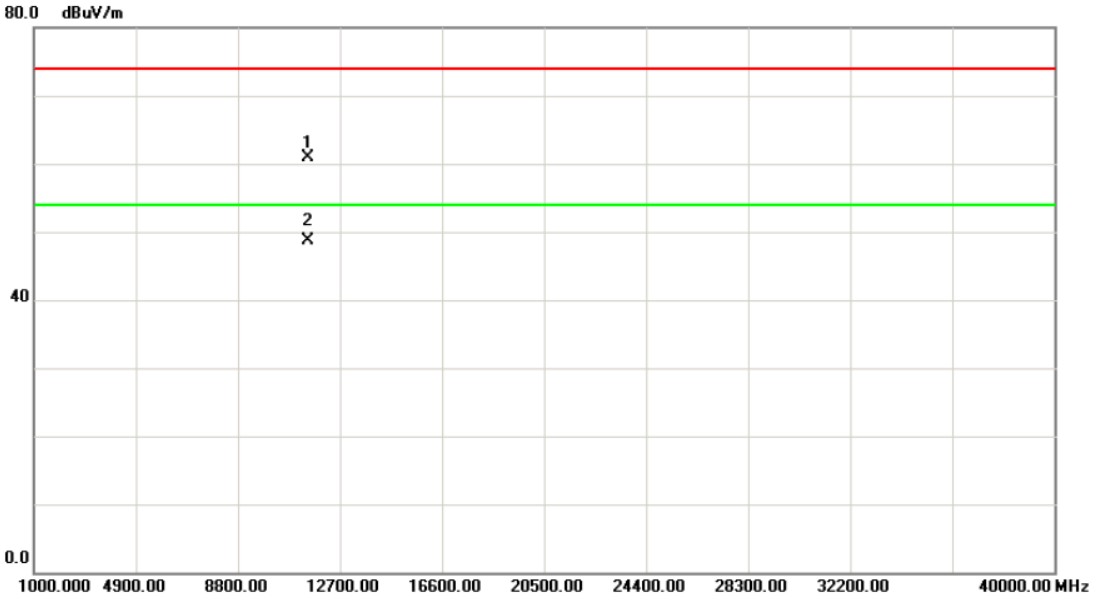


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	29.04	44.58	73.62	74.00	-0.38	peak	
2	X	5725.000	18.09	44.58	62.67	54.00	8.67	AVG	
3	X	5739.300	66.13	44.65	110.78	74.00	36.78	peak	Fundamental frequency, no limit
4	*	5752.900	56.49	44.72	101.21	54.00	47.21	AVG	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5745MHz

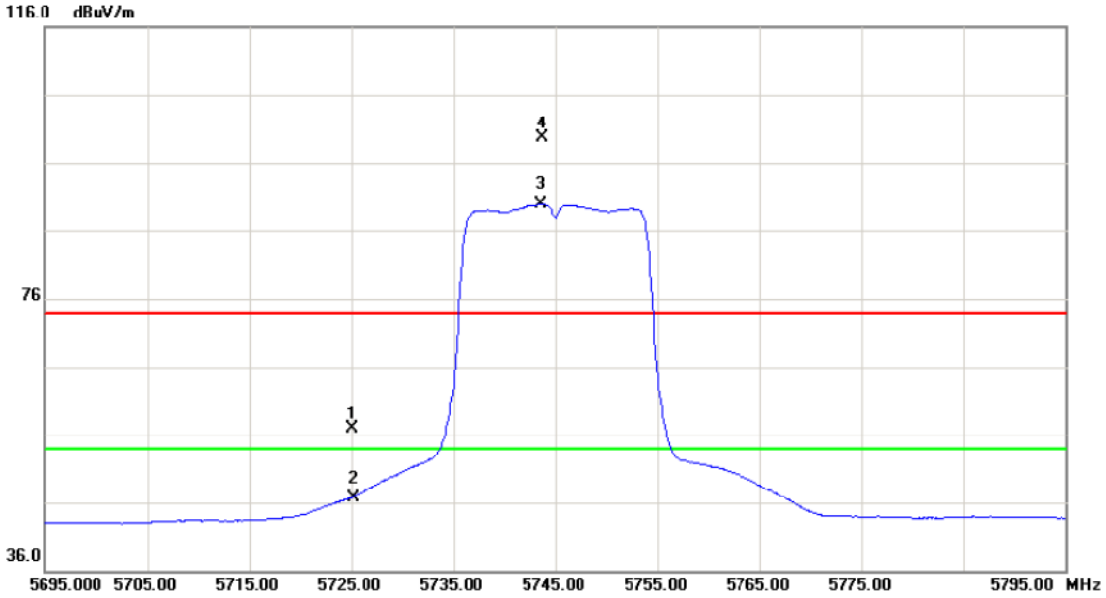
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.160	44.36	16.47	60.83	74.00	-13.17	peak	
2	*	11490.160	32.15	16.47	48.62	54.00	-5.38	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5745MHz

Horizontal

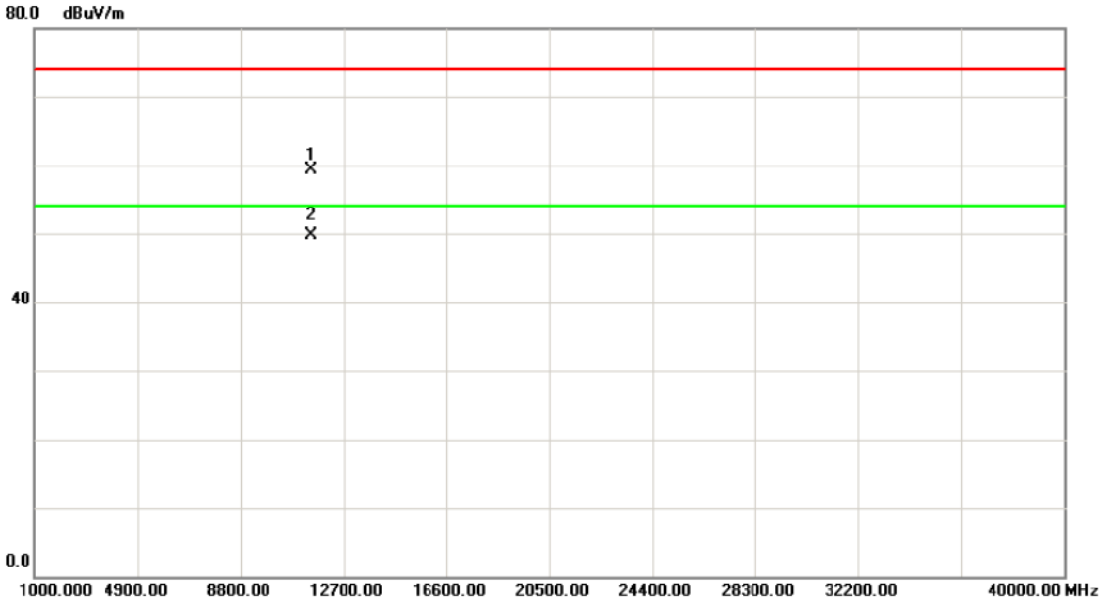


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	12.35	44.58	56.93	74.00	-17.07	peak	
2		5725.000	2.21	44.58	46.79	54.00	-7.21	AVG	
3	*	5743.600	45.22	44.68	89.90	54.00	35.90	AVG	Fundamental frequency, no limit
4	X	5743.700	54.95	44.68	99.63	74.00	25.63	peak	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5745MHz

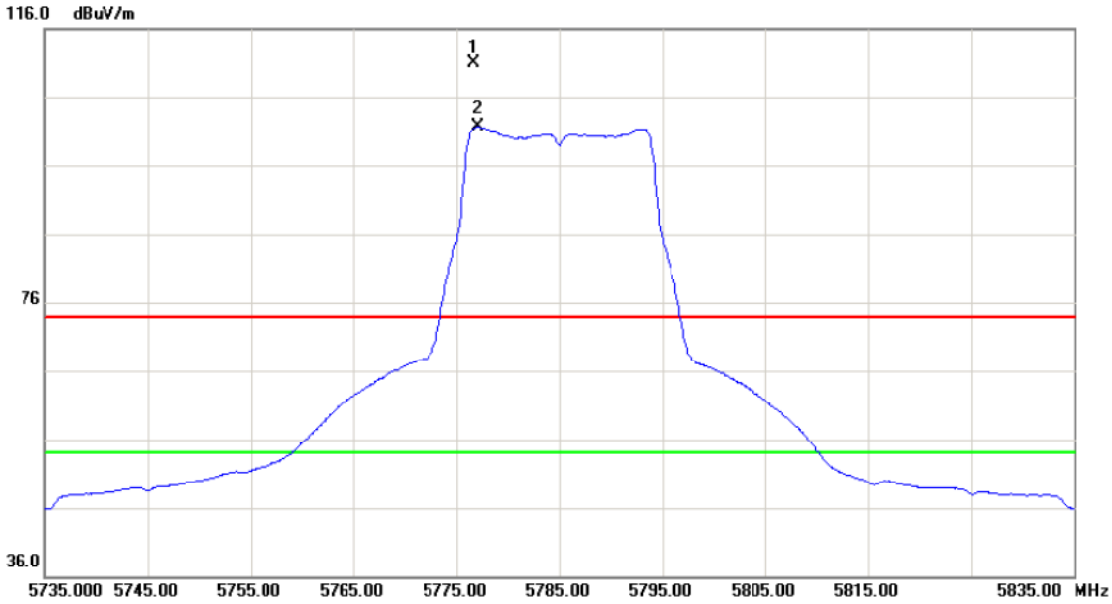
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11489.63	42.79	16.47	59.26	74.00	-14.74	peak	
2	*	11489.63	33.17	16.47	49.64	54.00	-4.36	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5785MHz

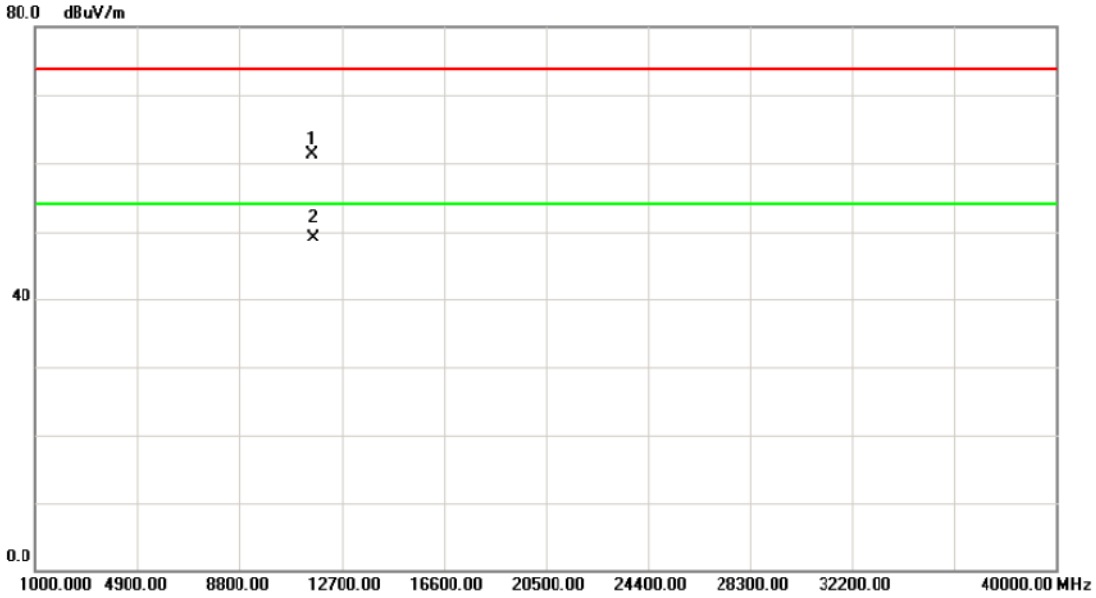
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5776.700	66.12	44.85	110.97	74.00	36.97	peak	Fundamental frequency, no limit
2	*	5777.100	56.58	44.85	101.43	54.00	47.43	AVG	Fundamental frequency, no limit

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5785MHz

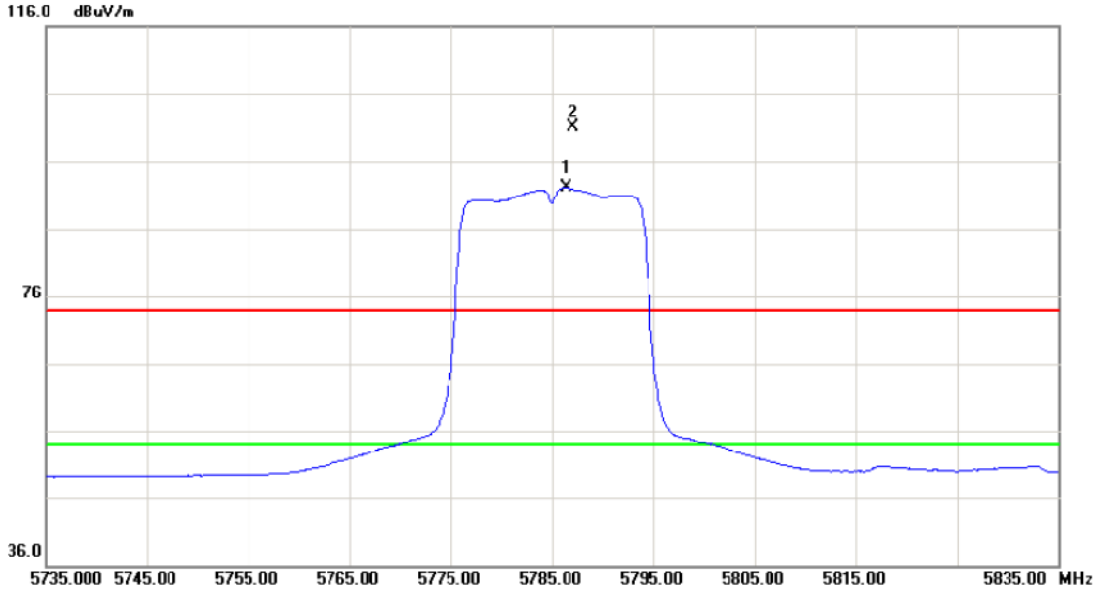
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.08	44.94	16.44	61.38	74.00	-12.62	peak	
2	*	11570.08	32.74	16.44	49.18	54.00	-4.82	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5785MHz

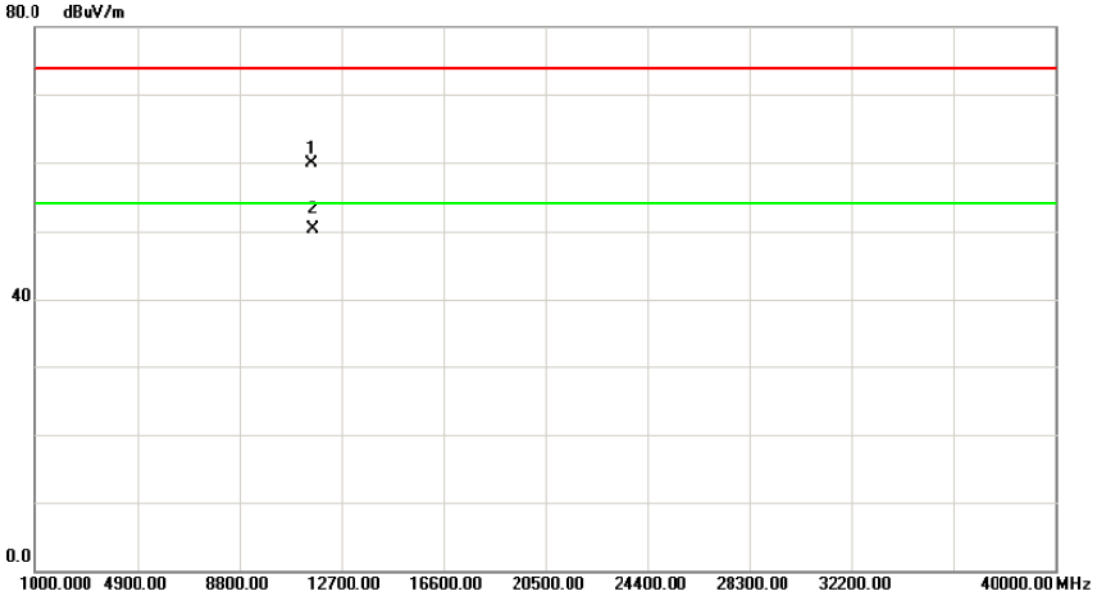
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5786.400	47.19	44.90	92.09	54.00	38.09	AVG	Fundamental frequency, no limit
2	X	5787.100	56.21	44.90	101.11	74.00	27.11	peak	Fundamental frequency, no limit

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5785MHz

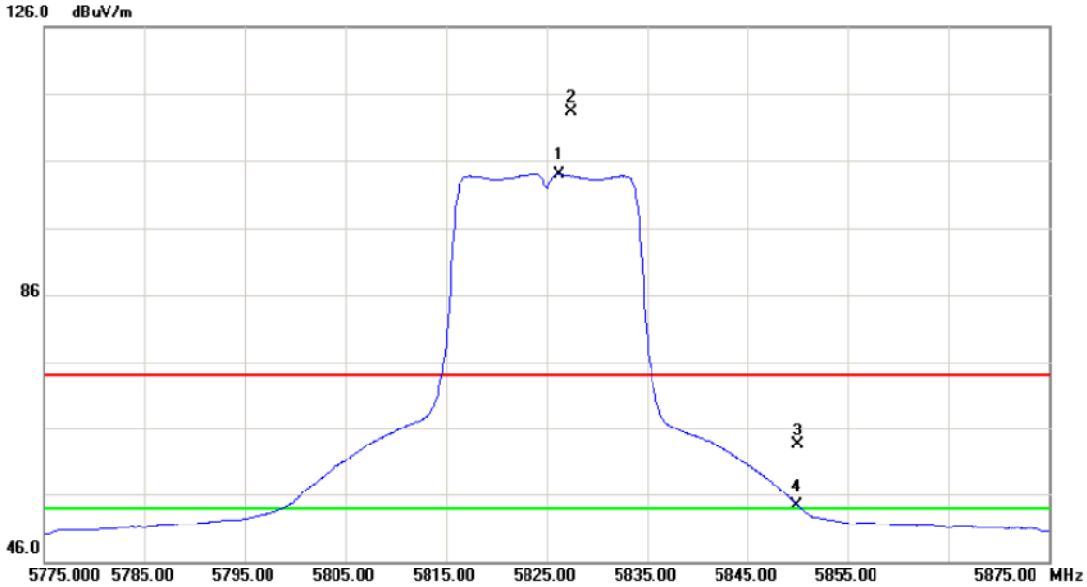
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11569.63	43.52	16.44	59.96	74.00	-14.04	peak	
2	*	11569.63	33.83	16.44	50.27	54.00	-3.73	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5825MHz

Vertical

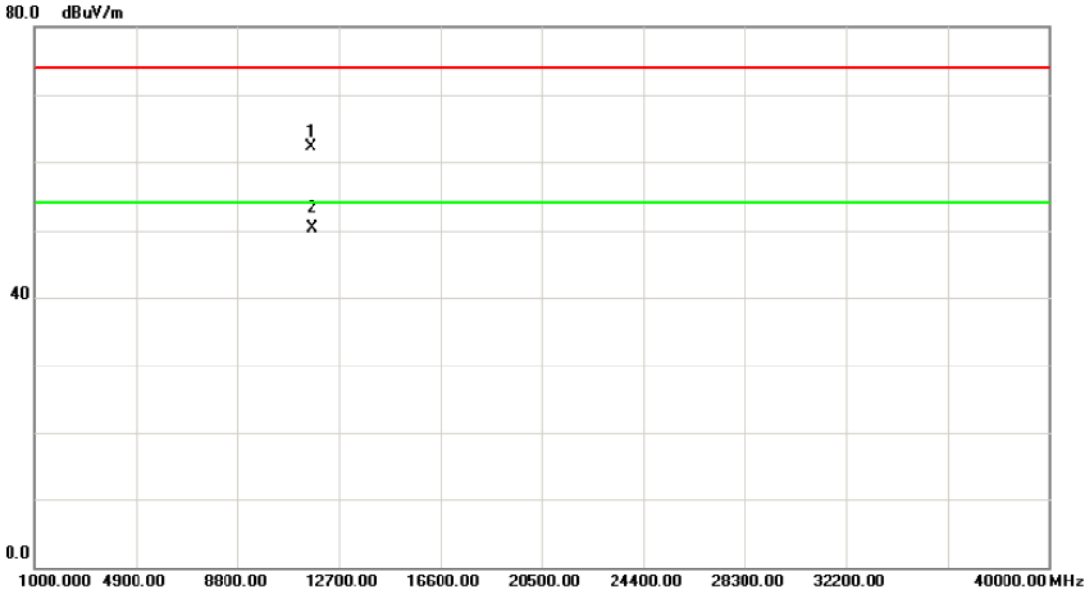


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5826.200	58.81	45.11	103.92	54.00	49.92	AVG	Fundamental frequency, no limit
2	X	5827.400	68.13	45.11	113.24	74.00	39.24	peak	Fundamental frequency, no limit
3		5850.000	18.35	45.23	63.58	74.00	-10.42	peak	
4	X	5850.000	9.12	45.23	54.35	54.00	0.35	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5825MHz

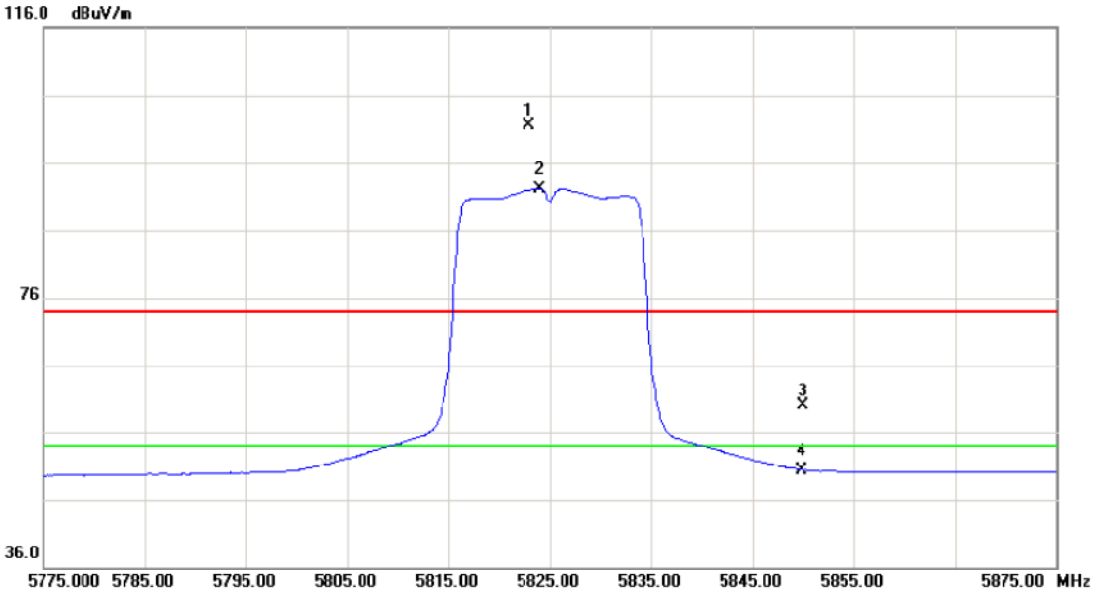
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.11	45.96	16.40	62.36	74.00	-11.64	peak	
2	*	11650.11	33.82	16.40	50.22	54.00	-3.78	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5825MHz

Horizontal

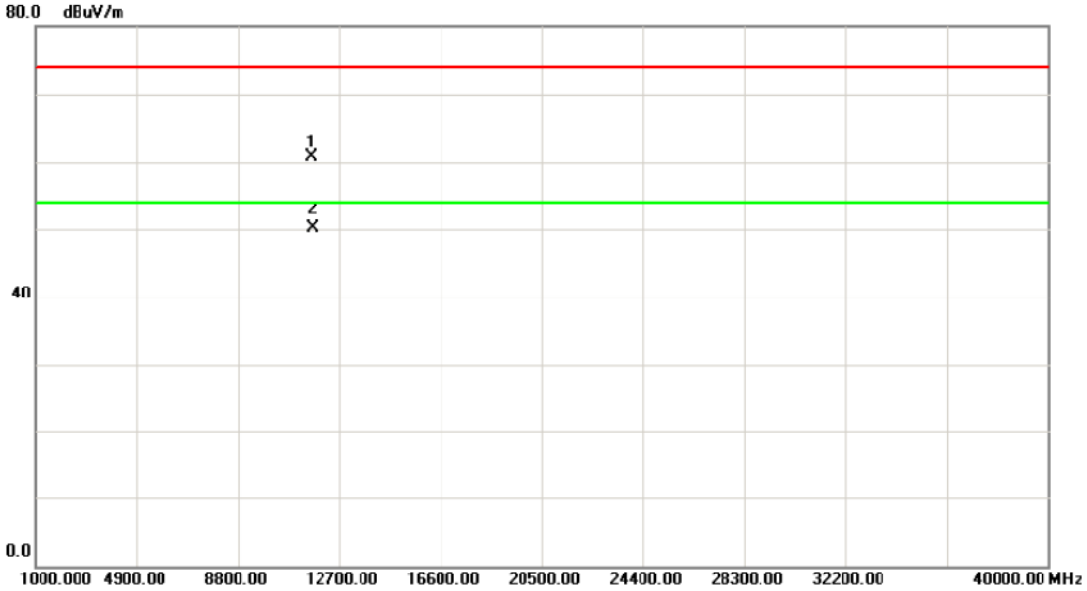


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5822.900	56.33	45.09	101.42	74.00	27.42	peak	Fundamental frequency, no limit
2	*	5824.000	47.06	45.10	92.16	54.00	38.16	AVG	Fundamental frequency, no limit
3		5850.000	14.91	45.23	60.14	74.00	-13.86	peak	
4		5850.000	5.15	45.23	50.38	54.00	-3.62	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N20 Mode 5825MHz

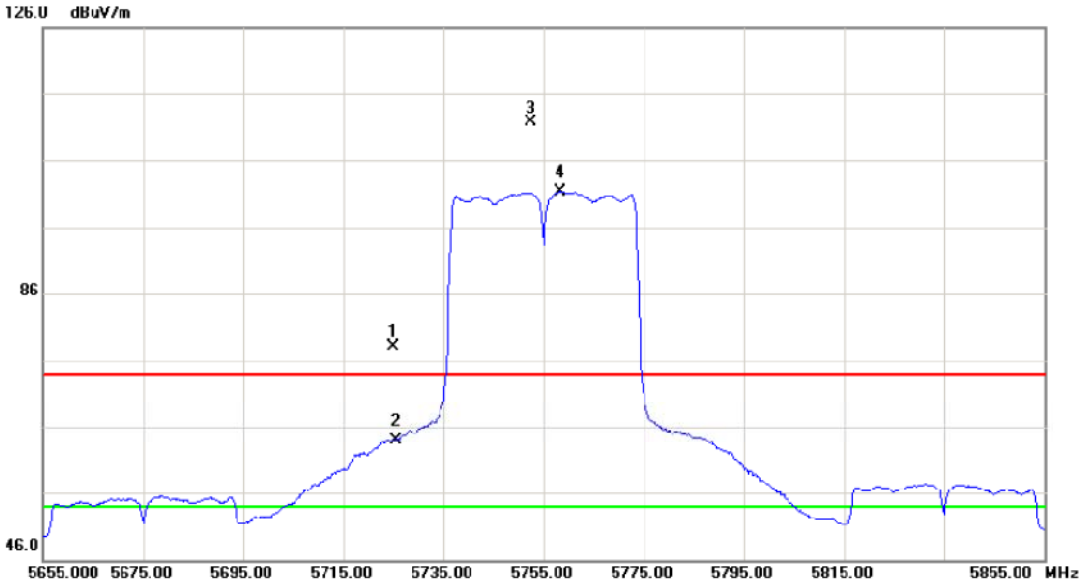
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.38	44.36	16.40	60.76	74.00	-13.24	peak	
2	*	11650.38	33.78	16.40	50.18	54.00	-3.82	AVG	

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5755MHz

Vertical

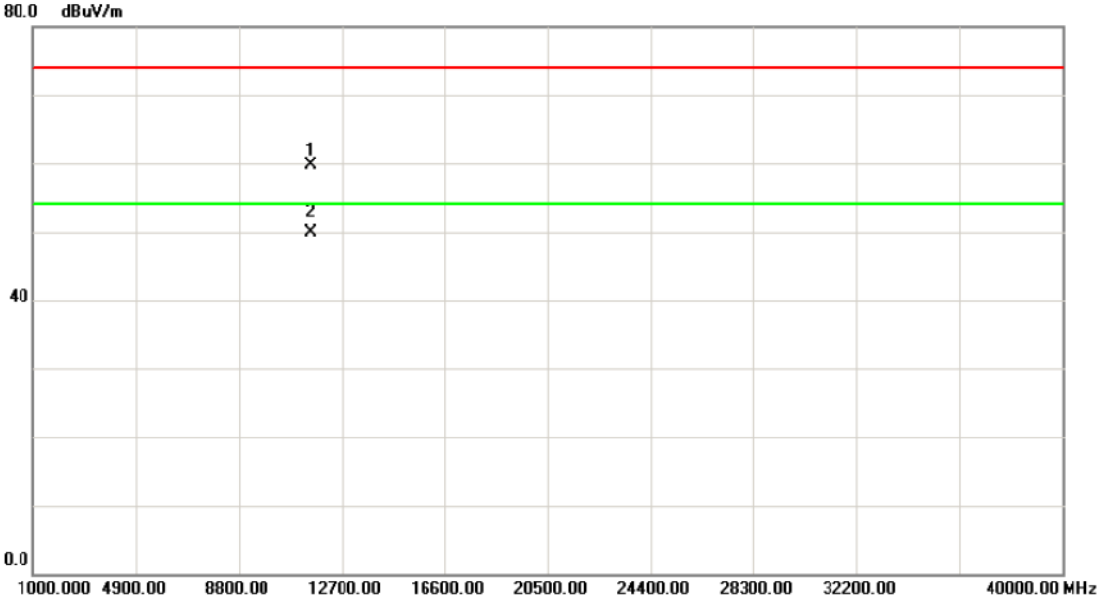


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5725.000	33.55	44.58	78.13	74.00	4.13	peak	
2	X	5725.000	19.26	44.58	63.84	54.00	9.84	AVG	
3	X	5752.400	66.91	44.72	111.63	74.00	37.63	peak	Fundamental frequency, no limit
4	*	5758.400	56.64	44.76	101.40	54.00	47.40	AVG	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5755MHz

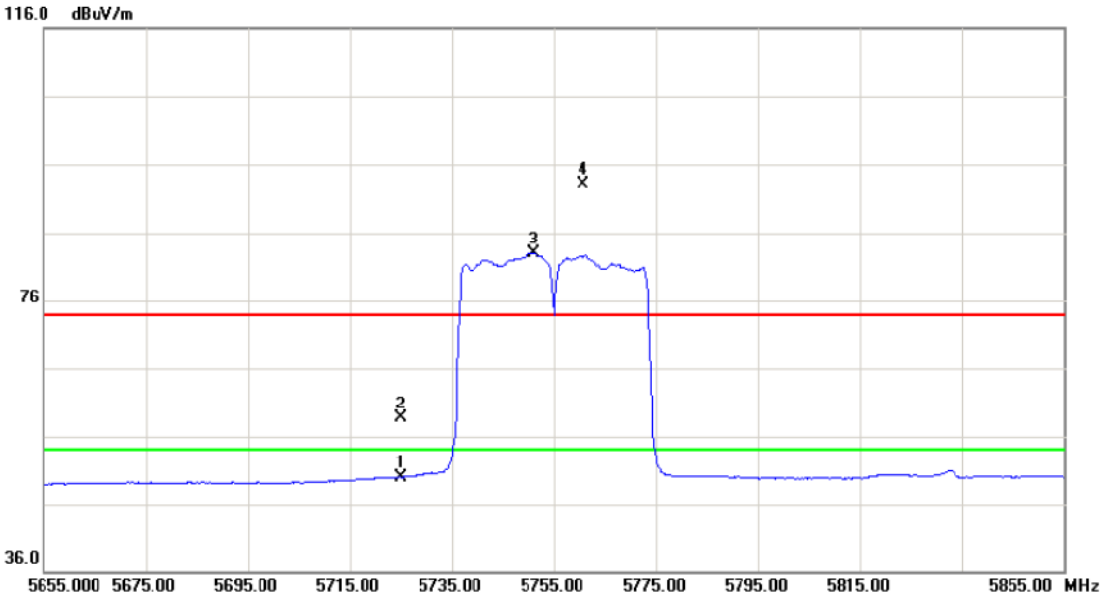
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.23	43.25	16.49	59.74	74.00	-14.26	peak	
2	*	11510.23	33.47	16.49	49.96	54.00	-4.04	AVG	

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5755MHz

Horizontal

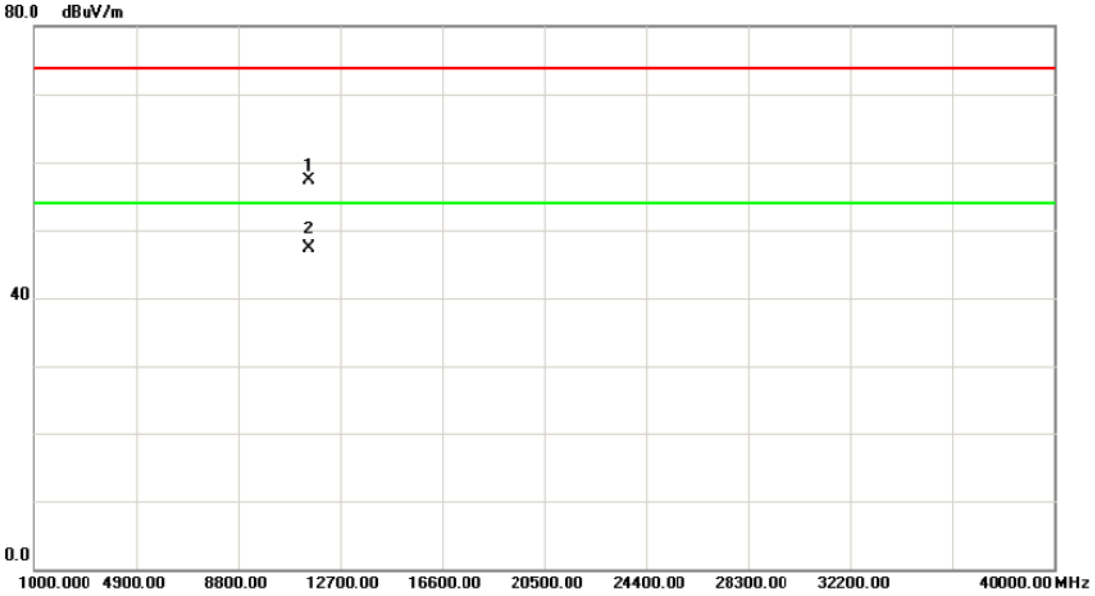


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	5.38	44.58	49.96	74.00	-24.04	peak	
2		5725.000	14.05	44.58	58.63	74.00	-15.37	peak	
3	X	5751.000	38.23	44.71	82.94	74.00	8.94	peak	Fundamental frequency, no limit
4	*	5760.800	48.25	44.77	93.02	74.00	19.02	peak	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5755MHz

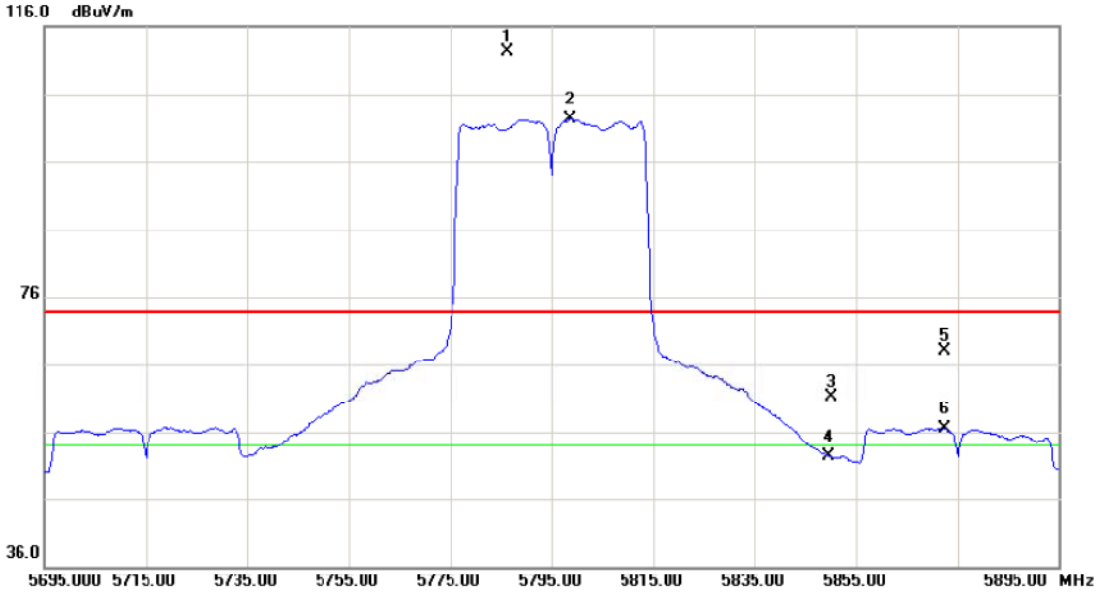
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.63	40.75	16.49	57.24	74.00	-16.76	peak	
2	*	11510.63	30.89	16.49	47.38	54.00	-6.62	AVG	

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5795MHz

Vertical

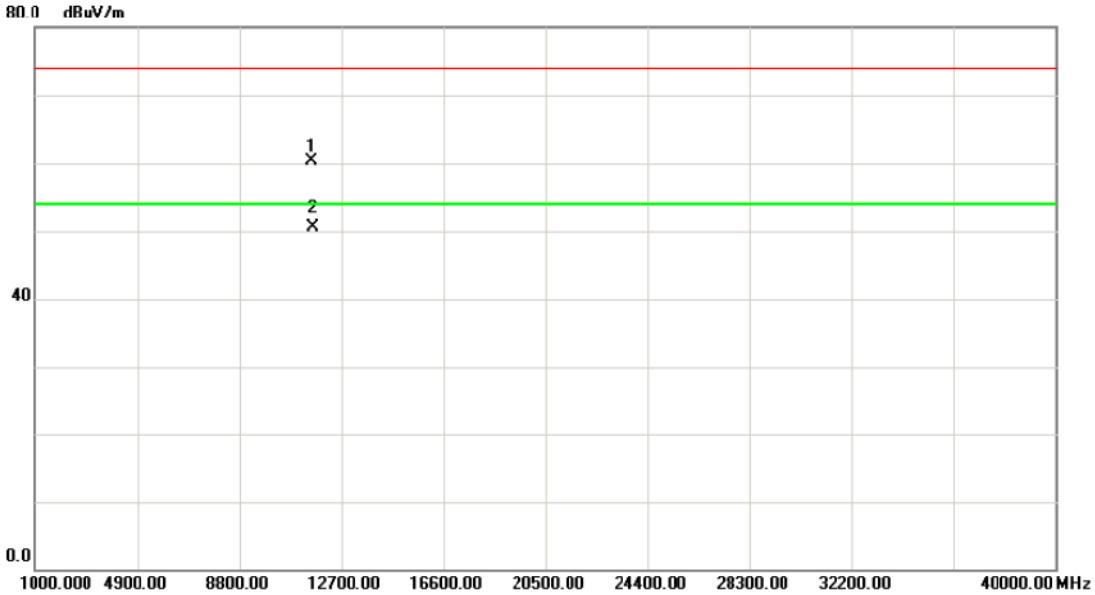


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5786.200	67.36	44.90	112.26	74.00	38.26	peak	Fundamental frequency, no limit
2	*	5798.600	57.39	44.96	102.35	54.00	48.35	AVG	Fundamental frequency, no limit
3		5850.000	16.03	45.23	61.26	74.00	-12.74	peak	
4		5850.000	6.98	45.23	52.21	54.00	-1.79	AVG	
5		5872.400	22.80	45.34	68.14	74.00	-5.86	peak	
6	X	5872.400	11.14	45.34	56.48	54.00	2.48	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5795MHz

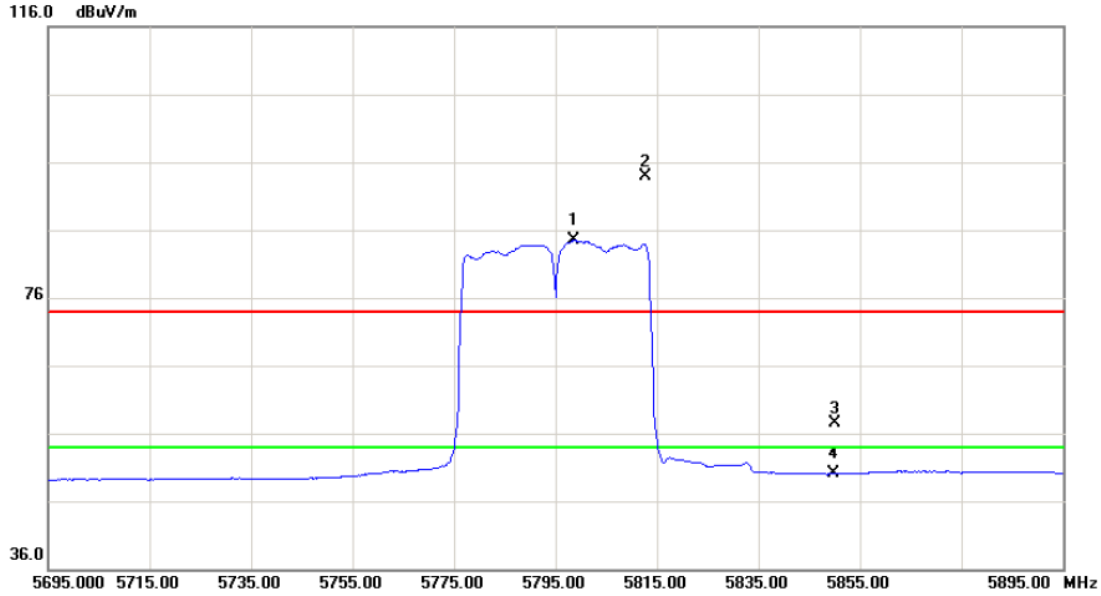
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11589.97	43.86	16.43	60.29	74.00	-13.71	peak	
2	*	11589.97	34.02	16.43	50.45	54.00	-3.55	AVG	

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5795MHz

Horizontal

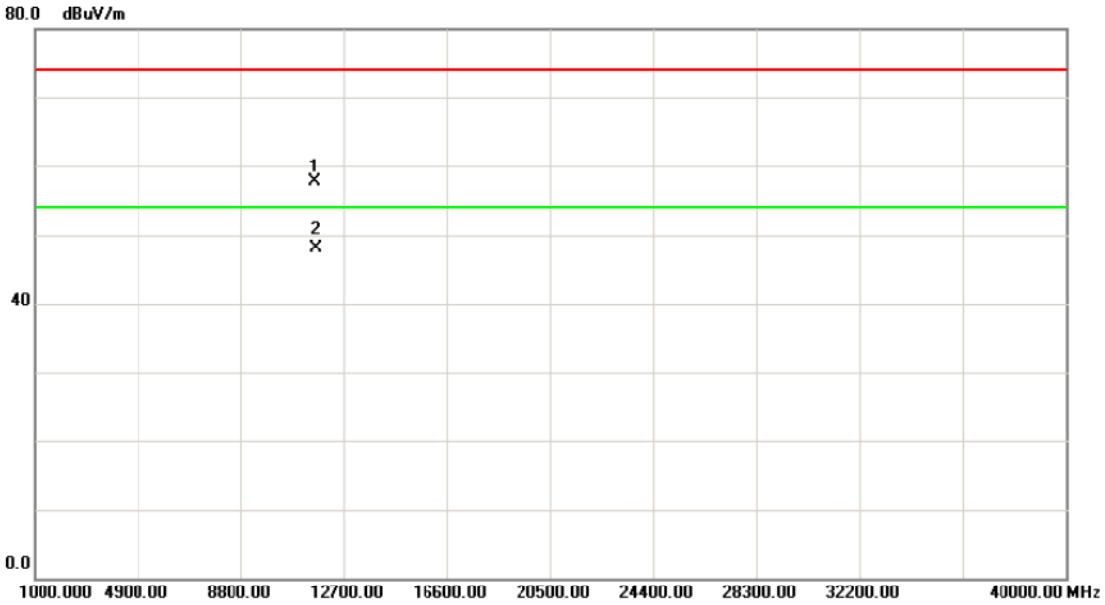


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5798.600	39.49	44.96	84.45	54.00	30.45	AVG	Fundamental frequency, no limit
2	X	5812.800	48.77	45.04	93.81	74.00	19.81	peak	Fundamental frequency, no limit
3		5850.000	12.26	45.23	57.49	74.00	-16.51	peak	
4		5850.000	4.80	45.23	50.03	54.00	-3.97	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX N40 Mode 5795MHz

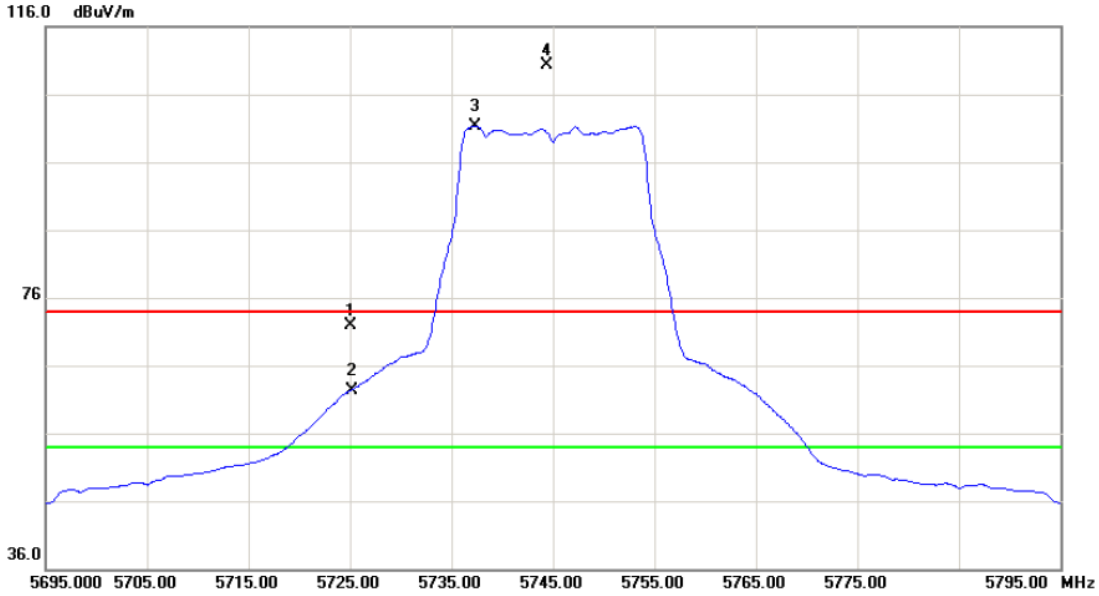
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.04	41.37	16.43	57.80	74.00	-16.20	peak	
2	*	11590.04	31.52	16.43	47.95	54.00	-6.05	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5745MHz

Vertical

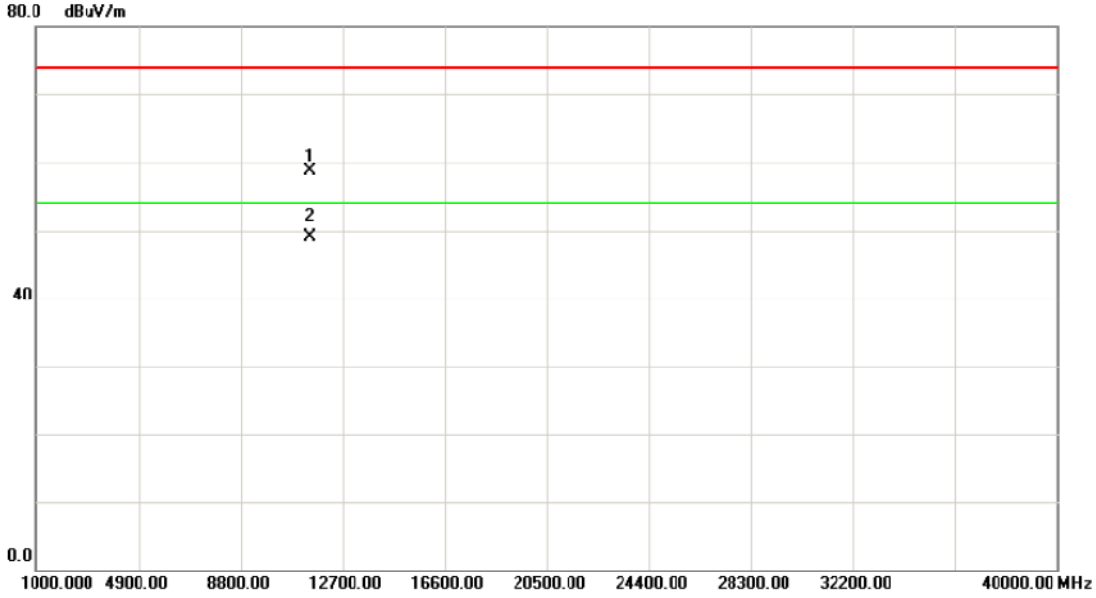


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	27.25	44.58	71.83	74.00	-2.17	peak	
2	X	5725.000	17.72	44.58	62.30	54.00	8.30	AVG	
3	*	5737.300	56.71	44.64	101.35	54.00	47.35	AVG	Fundamental frequency, no limit
4	X	5744.400	65.56	44.69	110.25	74.00	36.25	peak	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5745MHz

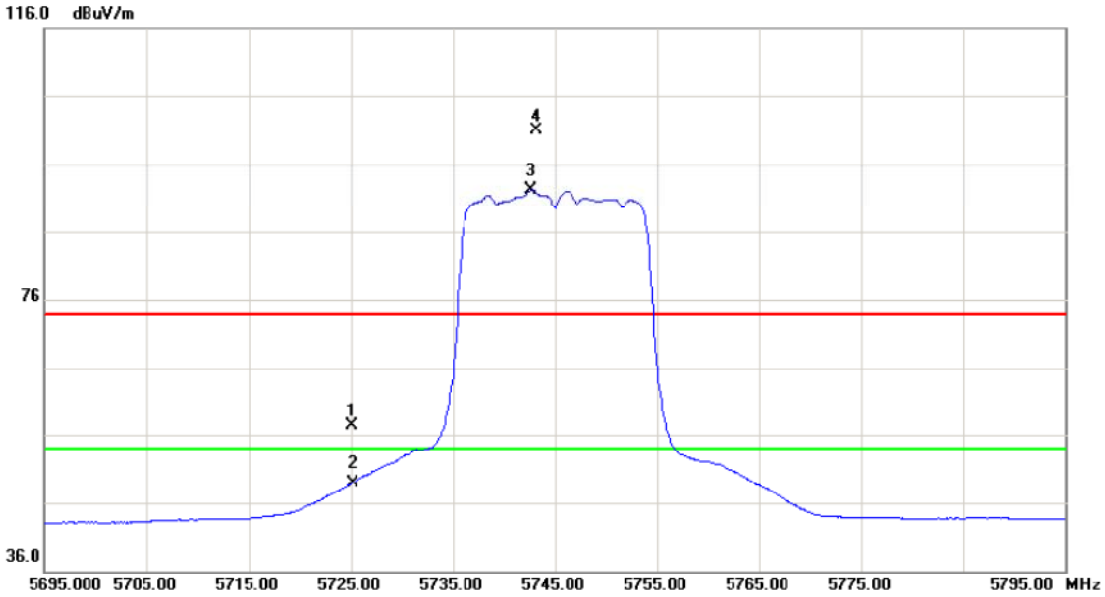
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.15	42.31	16.47	58.78	74.00	-15.22	peak	
2	*	11490.15	32.65	16.47	49.12	54.00	-4.88	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5745MHz

Horizontal

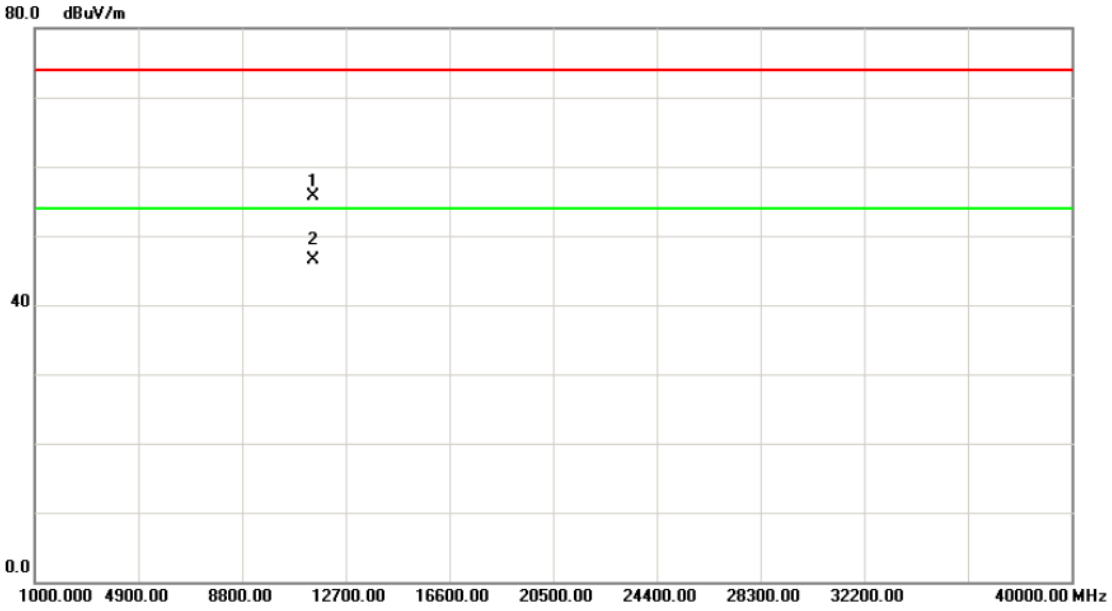


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	12.89	44.58	57.47	74.00	-16.53	peak	
2		5725.000	4.24	44.58	48.82	54.00	-5.18	AVG	
3	*	5742.700	47.49	44.67	92.16	54.00	38.16	AVG	Fundamental frequency, no limit
4	X	5743.200	56.21	44.67	100.88	74.00	26.88	peak	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5745MHz

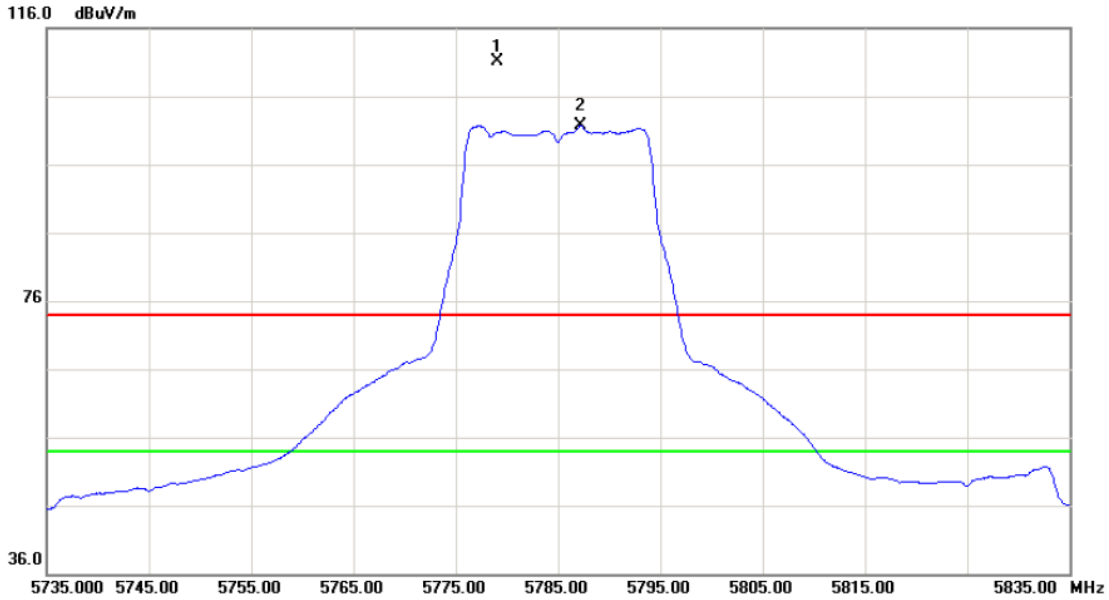
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.10	39.23	16.47	55.70	74.00	-18.30	peak	
2	*	11490.10	30.04	16.47	46.51	54.00	-7.49	AVG	

Orthogonal Axis :	X
Test Mode :	TX N20 AC Mode 5785MHz

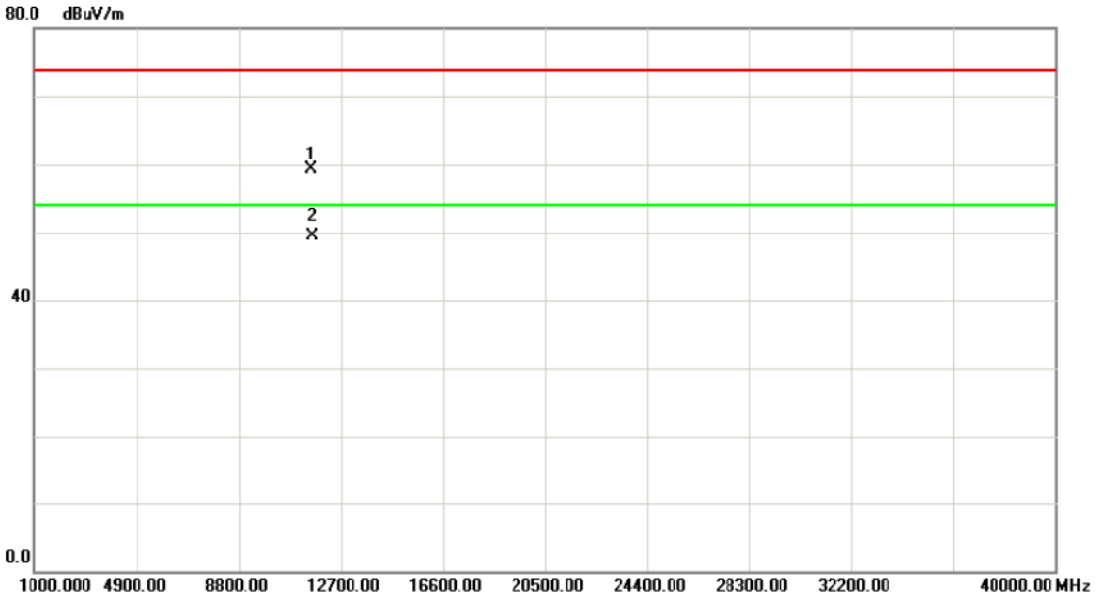
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5779.000	66.23	44.86	111.09	74.00	37.09	peak	Fundamental frequency, no limit
2	*	5787.200	56.75	44.90	101.65	54.00	47.65	AVG	Fundamental frequency, no limit

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5785MHz

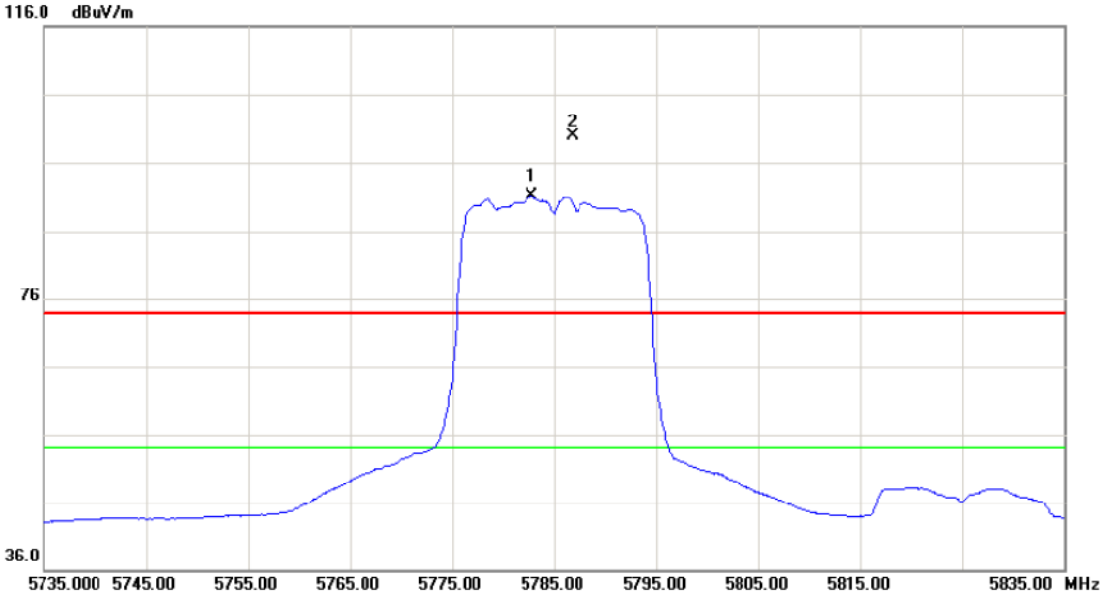
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.28	42.86	16.44	59.30	74.00	-14.70	peak	
2	*	11570.28	33.12	16.44	49.56	54.00	-4.44	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5785MHz

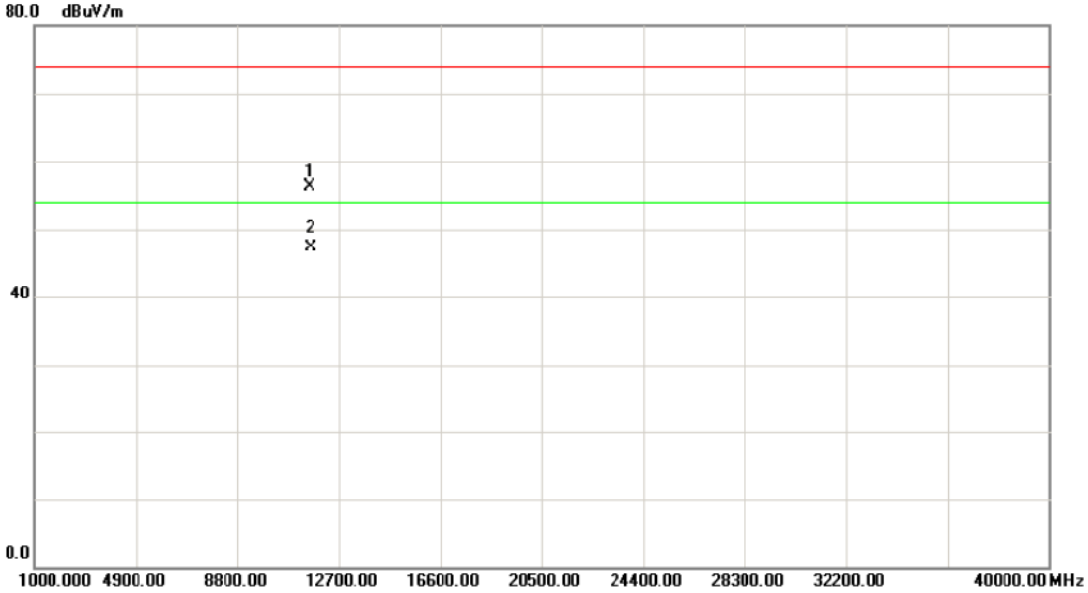
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5782.800	46.19	44.87	91.06	54.00	37.06	AVG	Fundamental frequency, no limit
2	X	5786.800	54.94	44.90	99.84	74.00	25.84	peak	Fundamental frequency, no limit

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5785MHz

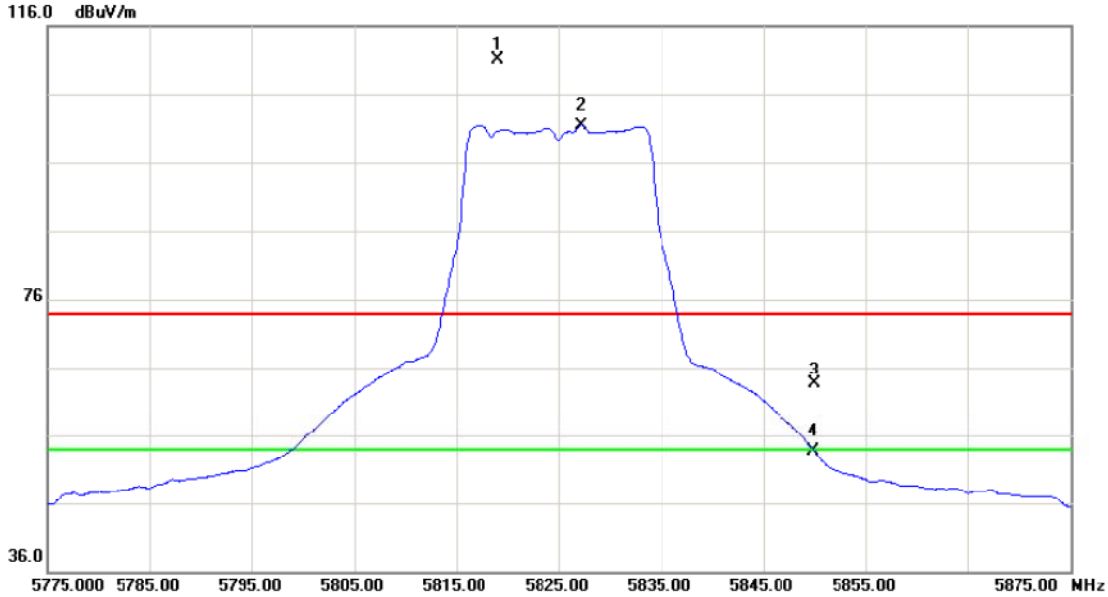
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11569.82	39.96	16.44	56.40	74.00	-17.60	peak	
2	*	11569.82	30.87	16.44	47.31	54.00	-6.69	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5825MHz

Vertical

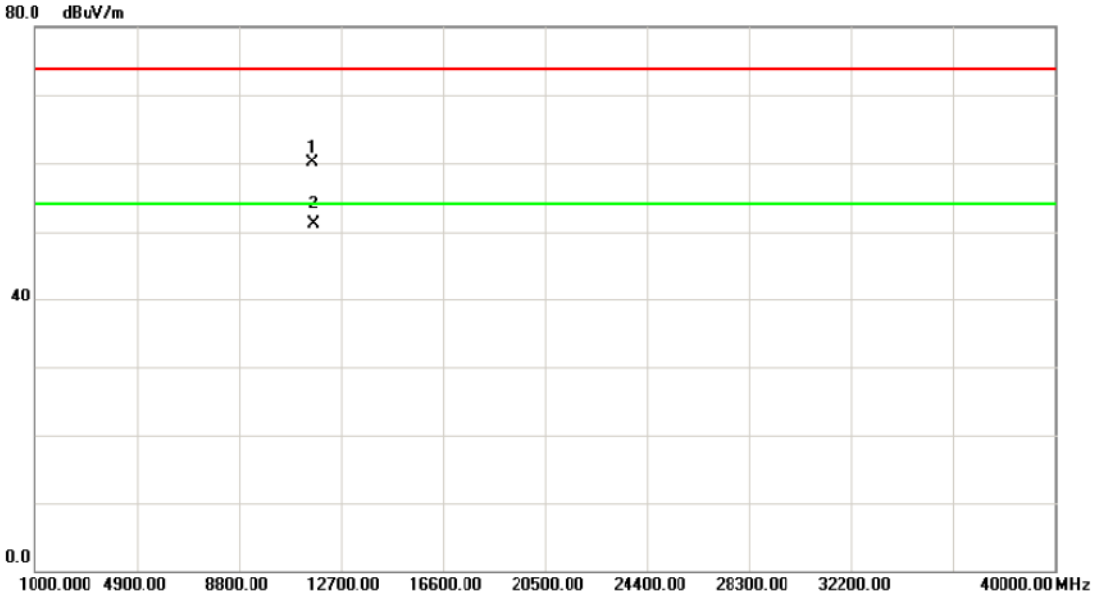


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5819.100	65.97	45.06	111.03	74.00	37.03	peak	Fundamental frequency, no limit
2	*	5827.200	56.49	45.11	101.60	54.00	47.60	AVG	Fundamental frequency, no limit
3		5850.000	18.26	45.23	63.49	74.00	-10.51	peak	
4		5850.000	8.50	45.23	53.73	54.00	-0.27	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5825MHz

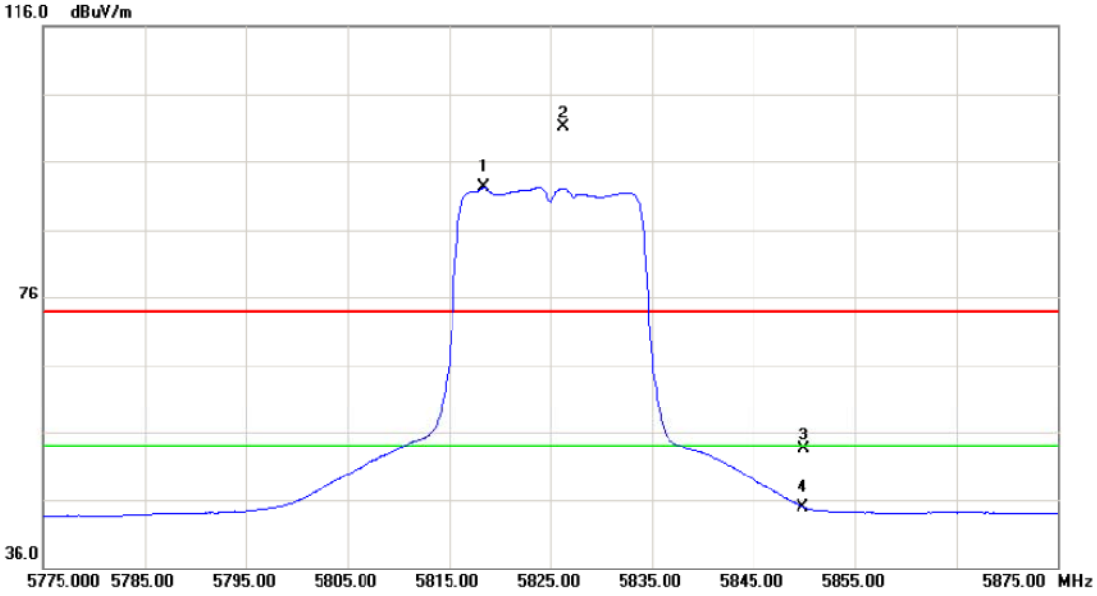
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.02	43.64	16.40	60.04	74.00	-13.96	peak	
2	*	11650.02	34.78	16.40	51.18	54.00	-2.82	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5825MHz

Horizontal

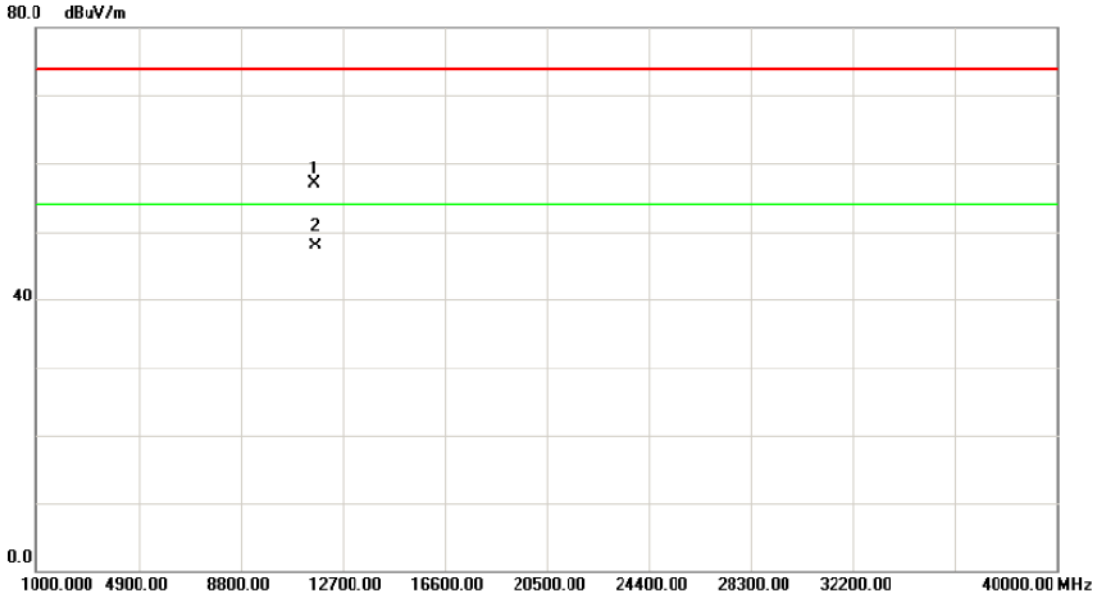


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5818.400	47.21	45.06	92.27	54.00	38.27	AVG	Fundamental frequency, no limit
2	X	5826.300	56.05	45.11	101.16	74.00	27.16	peak	Fundamental frequency, no limit
3		5850.000	8.37	45.23	53.60	74.00	-20.40	peak	
4		5850.000	-0.25	45.23	44.98	54.00	-9.02	AVG	

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX AC N20 Mode 5825MHz

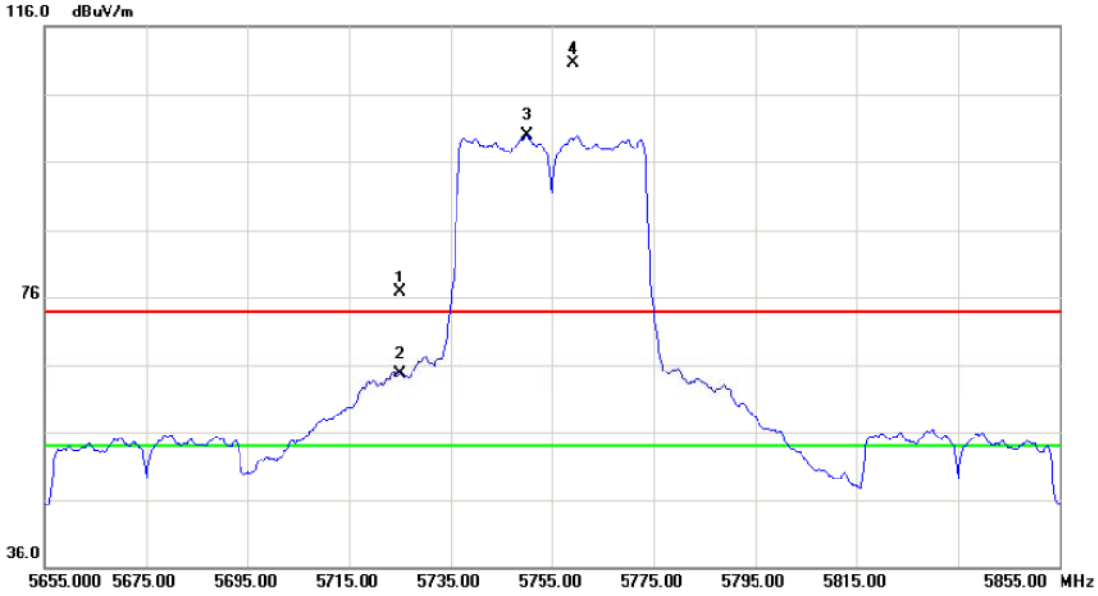
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.28	40.76	16.40	57.16	74.00	-16.84	peak	
2	*	11650.28	31.58	16.40	47.98	54.00	-6.02	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N40 Mode 5755MHz

Vertical

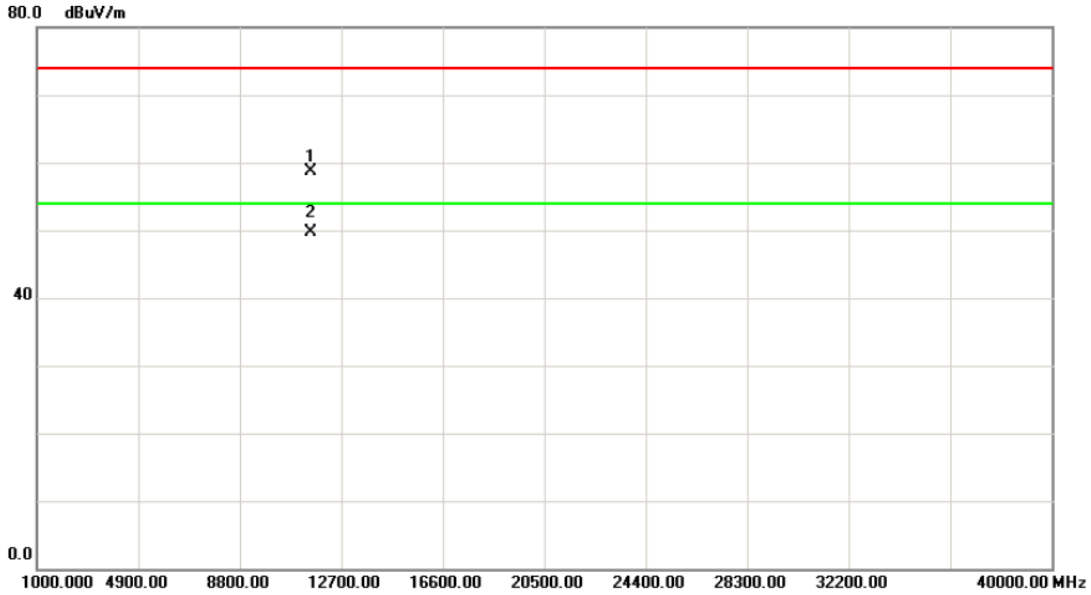


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5725.000	32.07	44.58	76.65	74.00	2.65	peak	
2	X	5725.000	20.06	44.58	64.64	54.00	10.64	AVG	
3	*	5750.000	55.21	44.71	99.92	54.00	45.92	AVG	Fundamental frequency, no limit
4	X	5759.200	65.69	44.76	110.45	74.00	36.45	peak	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX AC N40 Mode 5755MHz

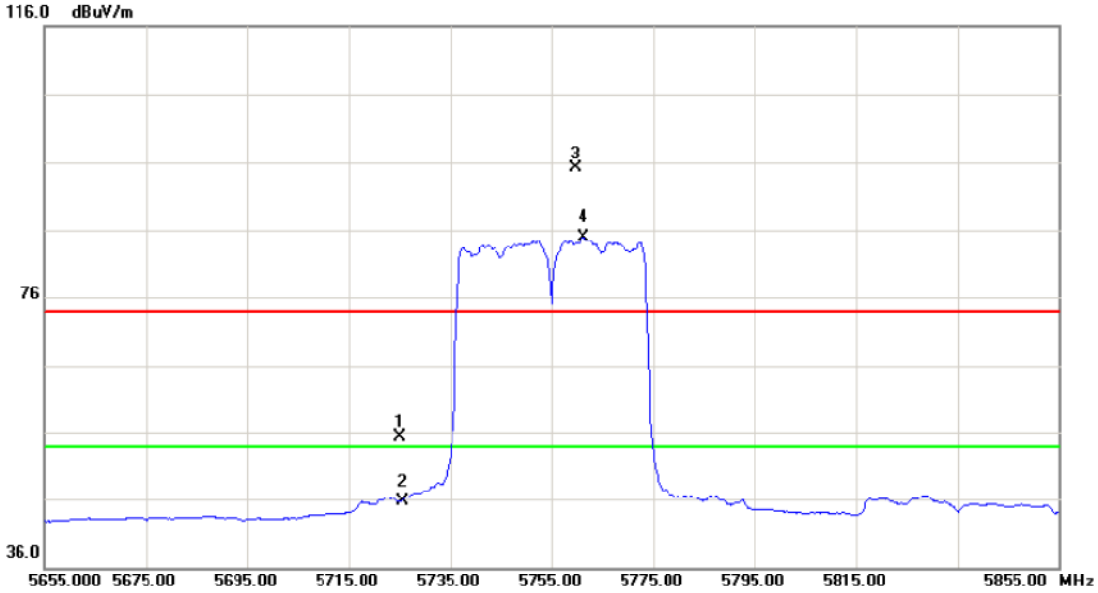
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.36	42.26	16.49	58.75	74.00	-15.25	peak	
2	*	11510.36	33.15	16.49	49.64	54.00	-4.36	AVG	

Orthogonal Axis :	X
Test Mode :	TX AC N40 Mode 5755MHz

Horizontal

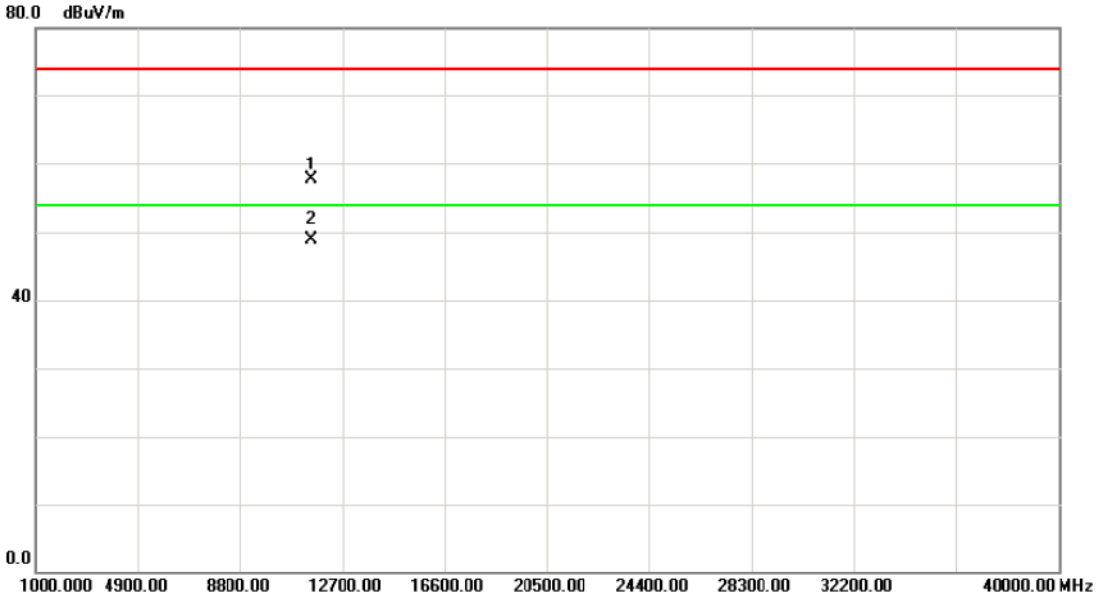


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	10.73	44.58	55.31	74.00	-18.69	peak	
2		5725.000	1.17	44.58	45.75	54.00	-8.25	AVG	
3	X	5759.600	50.30	44.76	95.06	74.00	21.06	peak	Fundamental frequency, no limit
4	*	5761.200	40.19	44.77	84.96	54.00	30.96	AVG	Fundamental frequency, no limit

Note:The band edge frequency Limit line= fundamental - 20dB

Orthogonal Axis :	X
Test Mode :	TX AC N40 Mode 5755MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11509.64	41.23	16.49	57.72	74.00	-16.28	peak	
2	*	11509.64	32.46	16.49	48.95	54.00	-5.05	AVG	