



Neutron Engineering Inc.

FCC&IC Radio Test Report

FCC ID: SIB-SNB02-NV7A

IC: 6719D-SNB02NV7A

This report concerns (check one): ☒ Original Grant ☐ Class II Change

Issued Date : Mar. 26, 2014
Project No. : 1403C085
Equipment : nabi Tablet
Model Name : SNB02-NV7A
Applicant : Foxconn International Inc.
Address : No.2,Ziyou St.,Tucheng Dist., New Taipei
City 236,Taiwan

Tested by: Neutron Engineering Inc. EMC Laboratory
Date of Receipt: Mar. 13, 2014
Date of Test: Mar. 13, 2014 ~ Mar. 25, 2014

Testing Engineer : David Mao
(David Mao)

Technical Manager : Leo Hung
(Leo Hung)

Authorized Signatory : Steven Lu
(Steven Lu)

Neutron Engineering Inc.

No.3,Jinshagang 1st Road, ShiXia,
Dalang Town, Dong Guan, China.

TEL: 0769-8318-3000

FAX: 0769-8319-6000



Declaration

Neutron 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.

Neutron'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. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

Neutron's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **Neutron-self**, extracts from the test report shall not be reproduced except in full with **Neutron's** authorized written approval.

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

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
1 . CERTIFICATION	7
2 . SUMMARY OF TEST RESULTS	8
2.1 TEST FACILITY	9
2.2 MEASUREMENT UNCERTAINTY	9
3 . GENERAL INFORMATION	10
3.1 GENERAL DESCRIPTION OF EUT	10
3.2 DESCRIPTION OF TEST MODES	12
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 DESCRIPTION OF SUPPORT UNITS	15
4 . EMC EMISSION TEST	16
4.1 CONDUCTED EMISSION MEASUREMENT	16
4.1.1 POWER LINE CONDUCTED EMISSION	16
4.1.2 TEST PROCEDURE	16
4.1.3 DEVIATION FROM TEST STANDARD	16
4.1.4 TEST SETUP	17
4.1.5 EUT OPERATING CONDITIONS	17
4.1.6 EUT TEST CONDITIONS	17
4.1.7 TEST RESULTS	17
4.2 RADIATED EMISSION MEASUREMENT	20
4.2.1 RADIATED EMISSION LIMITS	20
4.2.2 TEST PROCEDURE	21
4.2.3 DEVIATION FROM TEST STANDARD	21
4.2.4 TEST SETUP	21
4.2.5 EUT OPERATING CONDITIONS	22
4.2.6 EUT TEST CONDITIONS	22
4.2.7 TEST RESULTS (9K~ 30MHz)	23
4.2.8 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ	24
4.2.9 TEST RESULTS - ABOVE 1000MHZ	37
5 . 26dB SPECTRUM BANDWIDTH	76
5.1 APPLIED PROCEDURES / LIMIT	76
5.1.1 TEST PROCEDURE	76
5.1.2 DEVIATION FROM STANDARD	76
5.1.3 TEST SETUP	76
5.1.4 EUT OPERATION CONDITIONS	76
5.1.5 EUT TEST CONDITIONS	76
5.1.6 TEST RESULTS	77
6 . MAXIMUM CONDUCTED OUTPUT POWER	89



Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	89
6.1.1 TEST PROCEDURE	89
6.1.2 DEVIATION FROM STANDARD	89
6.1.3 TEST SETUP	89
6.1.4 EUT OPERATION CONDITIONS	89
6.1.5 EUT TEST CONDITIONS	89
6.1.6 TEST RESULTS	90
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	92
7.1 APPLIED PROCEDURES / LIMIT	92
7.1.1 TEST PROCEDURE	92
7.1.2 DEVIATION FROM STANDARD	92
7.1.3 TEST SETUP	92
7.1.4 EUT OPERATION CONDITIONS	92
7.1.5 EUT TEST CONDITIONS	92
7.1.6 TEST RESULTS	93
8 . POWER SPECTRAL DENSITY TEST	99
8.1 APPLIED PROCEDURES / LIMIT	99
8.1.1 TEST PROCEDURE	99
8.1.2 DEVIATION FROM STANDARD	99
8.1.3 TEST SETUP	99
8.1.4 EUT OPERATION CONDITIONS	99
8.1.5 EUT TEST CONDITIONS	99
9 . PEAK EXCURSION MEASUREMENT	112
9.1 APPLIED PROCEDURES / LIMIT	112
9.1.1 TEST PROCEDURE	112
9.1.2 DEVIATION FROM STANDARD	112
9.1.3 TEST SETUP	112
9.1.4 EUT OPERATION CONDITIONS	112
9.1.5 EUT TEST CONDITIONS	112
9.1.6 TEST RESULTS	113
10 . FREQUENCY STABILITY MEASUREMENT	125
10.1 APPLIED PROCEDURES / LIMIT	125
10.1.1 TEST PROCEDURE	125
10.1.2 DEVIATION FROM STANDARD	125
10.1.3 TEST SETUP	125
10.1.4 EUT OPERATION CONDITIONS	125
10.1.5 EUT TEST CONDITIONS	125
10.1.6 TEST RESULTS	126
11 . MEASUREMENT INSTRUMENTS LIST	128
12. EUT TEST PHOTO	130





REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FICP-4-1403C085	Original Issue.	Mar. 26, 2014



1. CERTIFICATION

Equipment : nabi Tablet
Brand Name : nabi
Model Name : SNB02-NV7A
Applicant : Foxconn International Inc.
Manufacturer : FUHU INC
Address : 909 N SEPULVEDA BLVD STE 540 EL SEGUNDO, CA 90245-2733
Factory : Hongfujin precision industry(wuhan) Co.,Ltd.
Address : 1#,2nd GUANG GU ROAD,DONGHU NEW TECHNOLOGY DEVELOPMENT
DISTRICT,WUHAN CITY,HUBEI PROVINCE,CHINA
Date of Test : Mar. 13, 2014 ~ Mar. 25, 2014
Test Item : ENGINEERING SAMPLE
Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.4 : 2009;
Canada RSS-210:2010
RSS-GEN Issue 3, Dec 2010
FCC KDB 789033 D01 General UNII Test Procedures v01r03 .

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FICP-4-1403C085) 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):

FCC Part15, Subpart E				
Canada RSS-210:2010/ RSS-GEN Issue 3, Dec 2010				
Standard(s) Section		Test Item	Judgment	Remark
FCC	IC			
15.207	RSS-GEN 7.2.2	AC Power Line Conducted Emissions	PASS	
15.407(a)	RSS-210 A9.2(1)	26dB Spectrum Bandwidth	PASS	
15.407(a)	RSS-210 A9.2(1)	Maximum Conducted Output Power	PASS	
15.407(a)	RSS-210 A9.2(1)	Power Spectral Density	PASS	
15.407(a)	-	Peak Excursion	PASS	
15.407(a)	RSS-210 Annex 8 (A8.5)	Radiated Emissions	PASS	
15.407(b)	RSS-210 A9.2(1)	Band Edge Emissions	PASS	
15.407(g)	RSS-210 A1.1.4	Frequency Stability	PASS	
15.203	-	Antenna Requirements	PASS	

NOTE:

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



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

Neutron's test firm number for FCC: 319330

Neutron's test firm number for IC: 4428B-1

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded 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	nabi Tablet	
Brand Name	nabi	
Model Name	SNB02-NV7A	
Mode Different	A model for multiple appearance, only differ in the color.	
Product Description	Operation Frequency	Band 1:5150MHz~5250MHz Band 2:5250MHz~5350MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	11a:6/ 9/12/18/24/36/48/54Mbps 11n:150Mbps
	Output Power (Max.)-Band 1	802.11a:13.95dBm 802.11n 20M:12.89dBm 802.11n 40M:12.95dBm
	Output Power (Max.)-Band 2	802.11a:13.69 dBm 802.11n 20M:12.83dBm 802.11n 40M:12.78dBm
Power Source	#1 DC voltage supplied from AC adapter. Brand / Model: Chicony / W12-010N3A #2 Supplied from rechargeable Li-ion polymer battery. Brand / Model: McNair / MLP4566111	
Power Rating	#1 I/P: AC 100-240V~50/60Hz 0.3A O/P: DC 5V 2A #2 DC 3.7V 4350mAh 16.10Wh	
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. Channel List:

802.11a / 802.11n 20M				802.11n 40M			
Band 1		Band 2		Band 1		Band 2	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	52	5260	38	5190	54	5270
40	5200	56	5280	46	5230	62	5310
44	5220	60	5300				
48	5240	64	5320				

3. Antenna Specification:

Group 1

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	Cortec	NB0309-N2S	PIFA	N/A	2.05	TX/RX

Group 2

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	晶鈦	AH-JT-0214N0304	PIFA	N/A	0.97	TX/RX

Note: Group 1 and Group 2 are same type antenna, Group 1 is recorded as the worst case since which gain is higher than Group 2.



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 Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48(Band 1) TX A Mode / CH52, CH56, CH64(Band 2)
Mode 2	TX N20 Mode / CH36, CH40, CH48(Band 1) TX N20 Mode / CH52, CH56, CH64(Band 2)
Mode 3	TX N40 Mode / CH38, CH46 (Band 1) TX N40 Mode / CH54, CH62 (Band 2)
Mode 4	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 / CH36, CH40, CH48(Band 1) TX A Mode / CH52, CH56, CH64(Band 2)
Mode 2	TX N20 Mode / CH36, CH40, CH48(Band 1) TX N20 Mode / CH52, CH56, CH64(Band 2)
Mode 3	TX N40 Mode / CH38, CH46 (Band 1) TX N40 Mode / CH54, CH62 (Band 2)

Note: For Radiated Below 1G test, the 802.11a mode is found to be the worst case and recorded.



3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

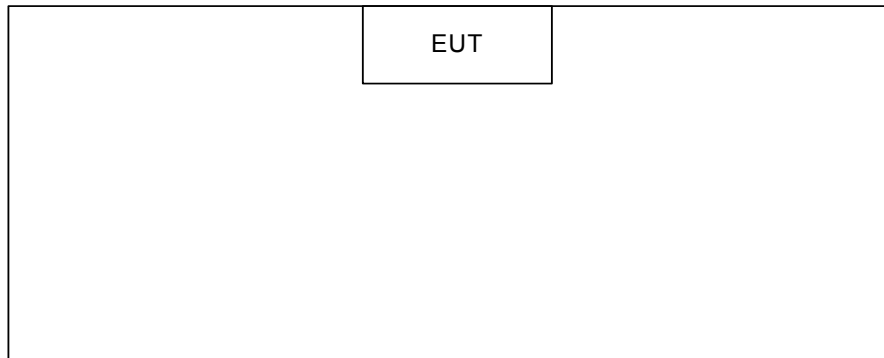
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

Test software version	USI BCM FCC CE REG Tool		
Frequency	5180 MHz	5200MHz	5240 MHz
A Mode	15	15	15
Frequency	5260 MHz	5280 MHz	5320 MHz
A Mode	20	20	20
Frequency	5180 MHz	5200MHz	5240 MHz
N20 Mode	15	15	15
Frequency	5260 MHz	5280 MHz	5320 MHz
N20 Mode	20	20	20
Frequency	5190 MHz	5230MHz	
N40 Mode	15	15	
Frequency	5270 MHz	5310 MHz	
N40 Mode	20	20	

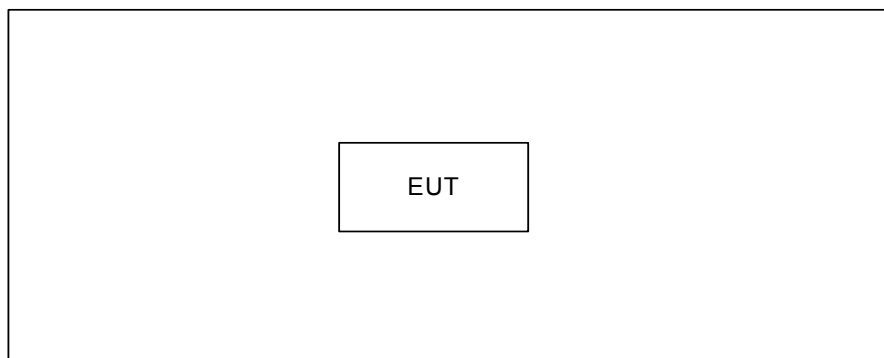


3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted TX Mode:



Radiated TX Mode:





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/IC	Series No.	Note
-	-	-	-	-	-	

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	



4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

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.

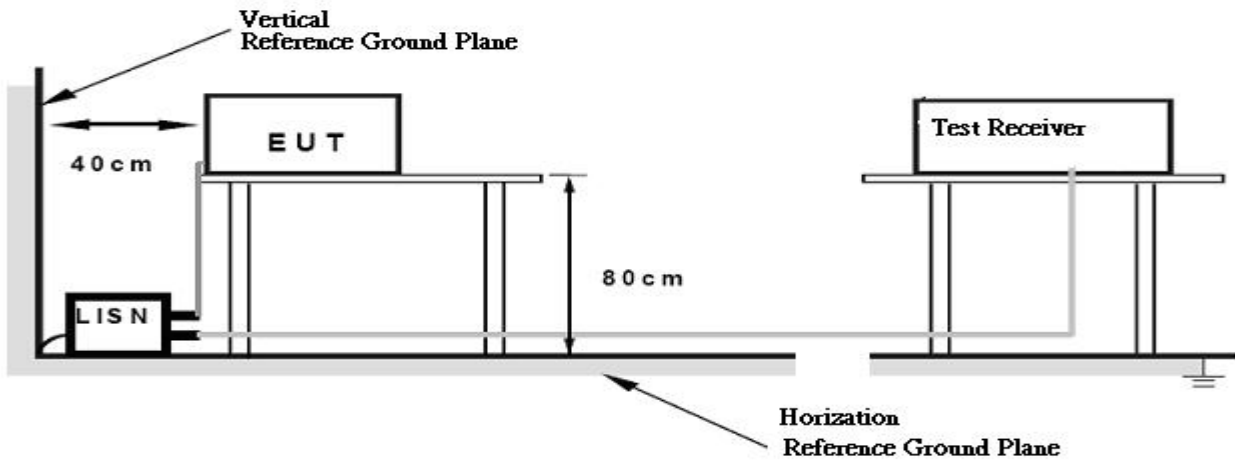
4.1.2 TEST PROCEDURE

- 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



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

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.



Test Mode : TX Mode

Line

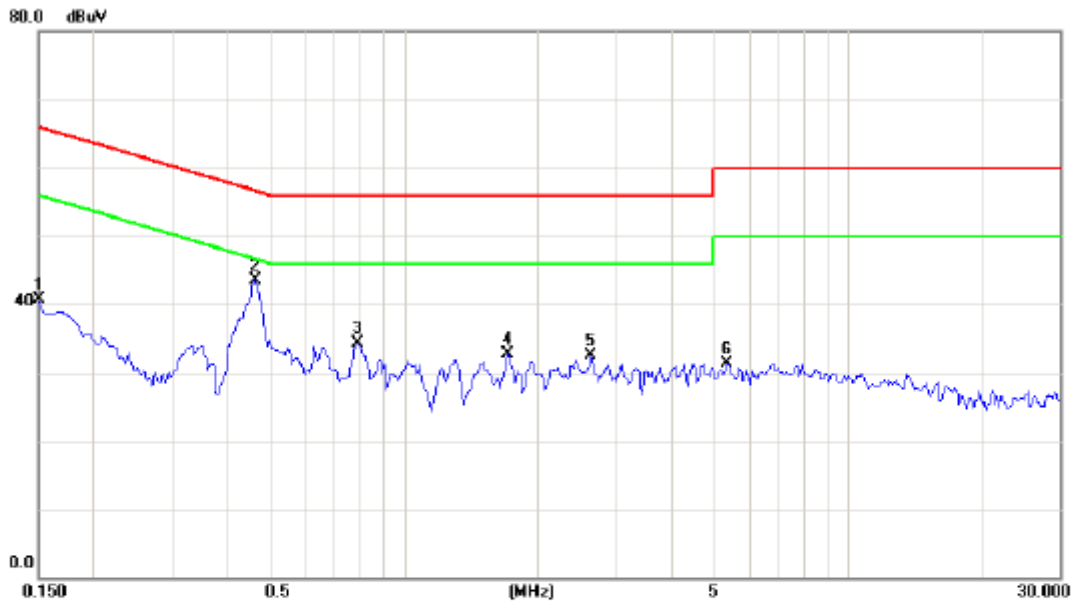


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.3375	28.91	9.67	38.58	59.26	-20.68	peak	
2 *	0.4625	39.05	9.70	48.75	56.65	-7.90	peak	
3	0.4625	27.80	9.70	37.50	46.65	-9.15	AVG	
4	0.7750	28.31	9.72	38.03	56.00	-17.97	peak	
5	0.9391	26.16	9.74	35.90	56.00	-20.10	peak	
6	1.7867	24.51	9.82	34.33	56.00	-21.67	peak	
7	4.3828	22.68	9.90	32.58	56.00	-23.42	peak	



Test Mode : TX Mode

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	31.10	9.70	40.80	66.00	-25.20	peak	
2	*	0.4625	33.80	9.74	43.54	56.65	-13.11	peak	
3		0.7867	24.60	9.75	34.35	56.00	-21.65	peak	
4		1.7125	22.94	9.84	32.78	56.00	-23.22	peak	
5		2.6461	22.65	9.88	32.53	56.00	-23.47	peak	
6		5.3516	21.40	9.97	31.37	60.00	-28.63	peak	



4.2 RADIATED EMISSION MEASUREMENT

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

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a) and RSS-210 section 2.2&A8.5, then the 15.209(a) and RSS-Gen limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
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

Notes:

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

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

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5825	-27	68.3
	-17	78.3

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

$$E = \frac{100000 \sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

4.2.2 TEST PROCEDURE

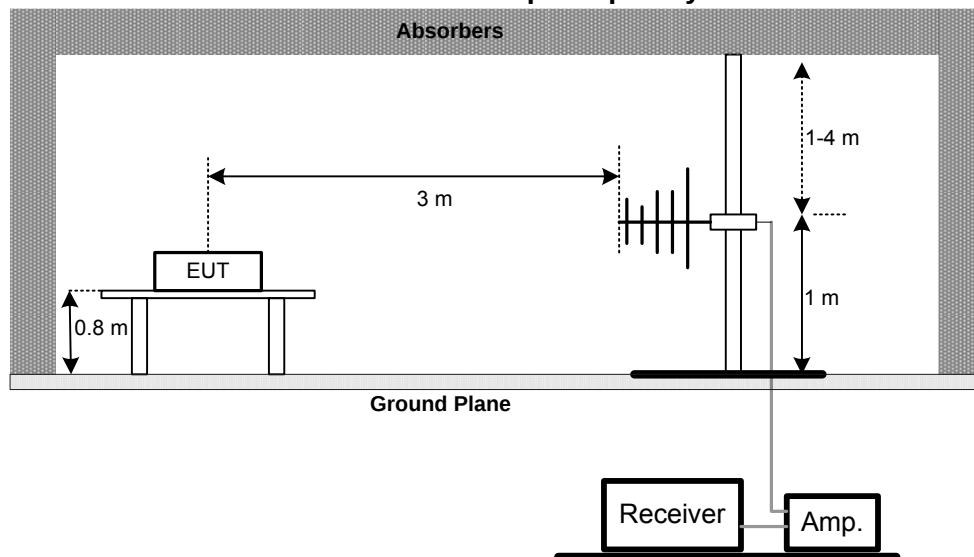
- The measuring distance of at 1.5m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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.
- 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.
- 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.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3 DEVIATION FROM TEST STANDARD

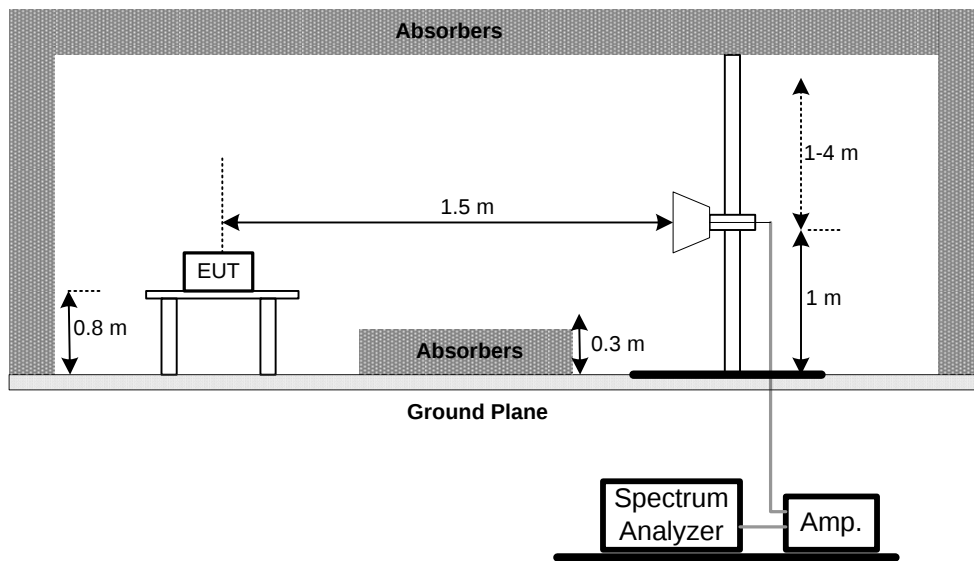
No deviation

4.2.4 TEST SETUP

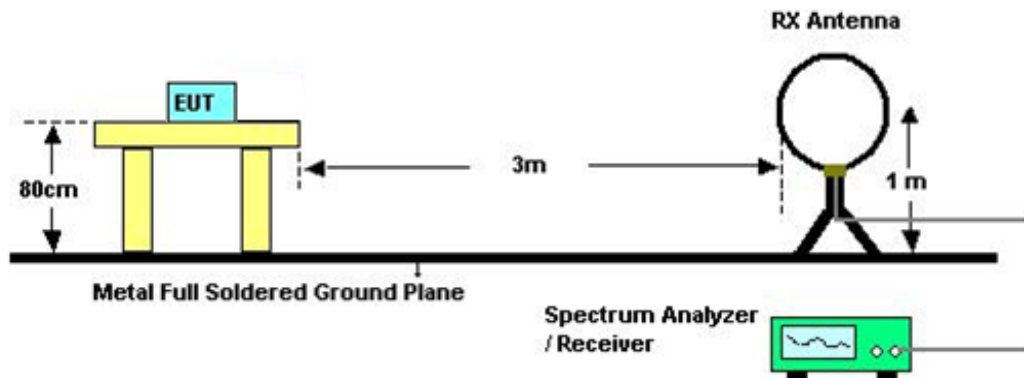
Radiated Emission Test Set-Up Frequency 30 - 1000MHz



Radiated Emission Test Set-Up Frequency Above 1 GHz



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: DC 3.7V



4.2.7 TEST RESULTS (9K~ 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
0.0095	0°	68.38	24.30	92.68	128.08	-35.40	AV
0.0095	0°	72.32	24.30	96.62	148.08	-51.46	PK
0.0133	0°	70.38	24.30	94.68	125.13	-30.45	AV
0.0133	0°	79.34	24.30	103.64	145.13	-41.49	PK
0.0242	0°	56.32	24.03	80.35	119.93	-39.57	AV
0.0242	0°	60.15	24.03	84.18	139.93	-55.74	PK
0.0325	0°	61.32	23.51	84.83	117.37	-32.54	AV
0.0325	0°	65.34	23.51	88.85	137.37	-48.52	PK
0.5630	0°	18.75	20.00	38.75	72.59	-33.84	QP
1.7552	0°	18.91	19.52	38.43	69.54	-31.11	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0094	90°	76.33	24.30	100.63	128.19	-27.56	AVG
0.0094	90°	82.38	24.30	106.68	148.19	-41.51	PK
0.0235	90°	56.33	24.08	80.41	120.18	-39.77	AVG
0.0235	90°	59.31	24.08	83.39	140.18	-56.79	PK
0.0314	90°	57.39	23.58	80.97	117.67	-36.70	AVG
0.0314	90°	58.23	23.58	81.81	137.67	-55.86	PK
0.0421	90°	59.64	22.90	82.54	115.12	-32.58	AVG
0.0421	90°	63.75	22.90	86.65	135.12	-48.47	PK
0.4917	90°	17.64	19.82	37.46	73.77	-36.31	QP
1.7158	90°	18.72	19.53	38.25	69.54	-31.29	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 = $40 \log (\text{specific distance} / \text{test distance})$ (dB);
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.



4.2.8 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ

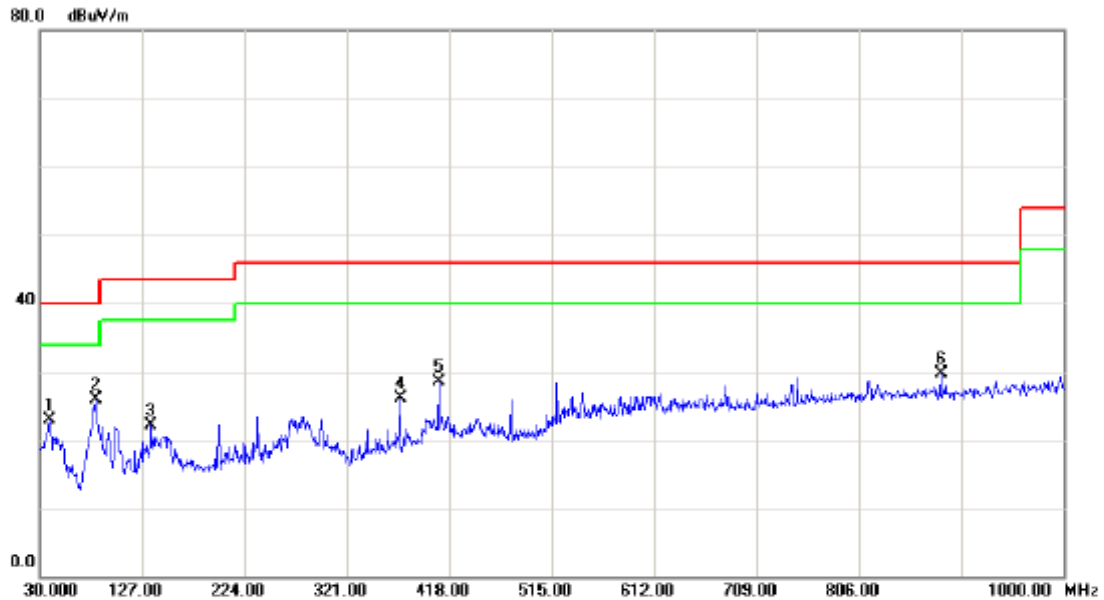
Remark:

- (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 ◦



Test Mode : Band 1/TX A Mode 5180MHz

Vertical

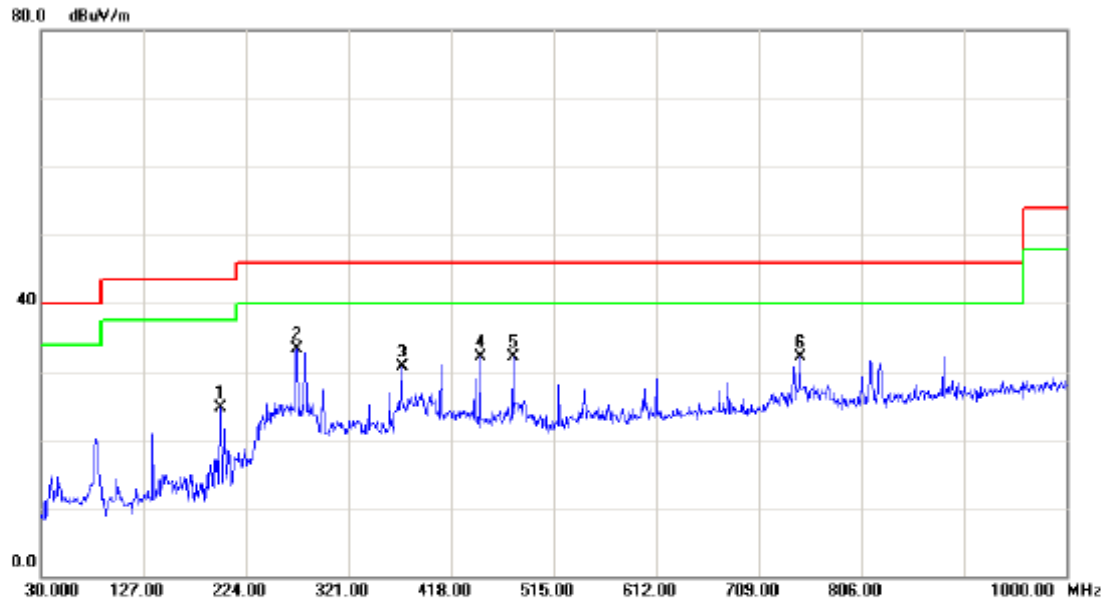


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		39.7000	39.84	-16.90	22.94	40.00	-17.06	peak	
2	*	83.3500	45.19	-19.26	25.93	40.00	-14.07	peak	
3		135.7300	40.21	-18.15	22.06	43.50	-21.44	peak	
4		371.4400	36.92	-10.78	26.14	46.00	-19.86	peak	
5		408.3000	38.24	-9.67	28.57	46.00	-17.43	peak	
6		883.6000	31.95	-2.18	29.77	46.00	-16.23	peak	



Test Mode : Band 1/TX A Mode 5180MHz

Horizontal

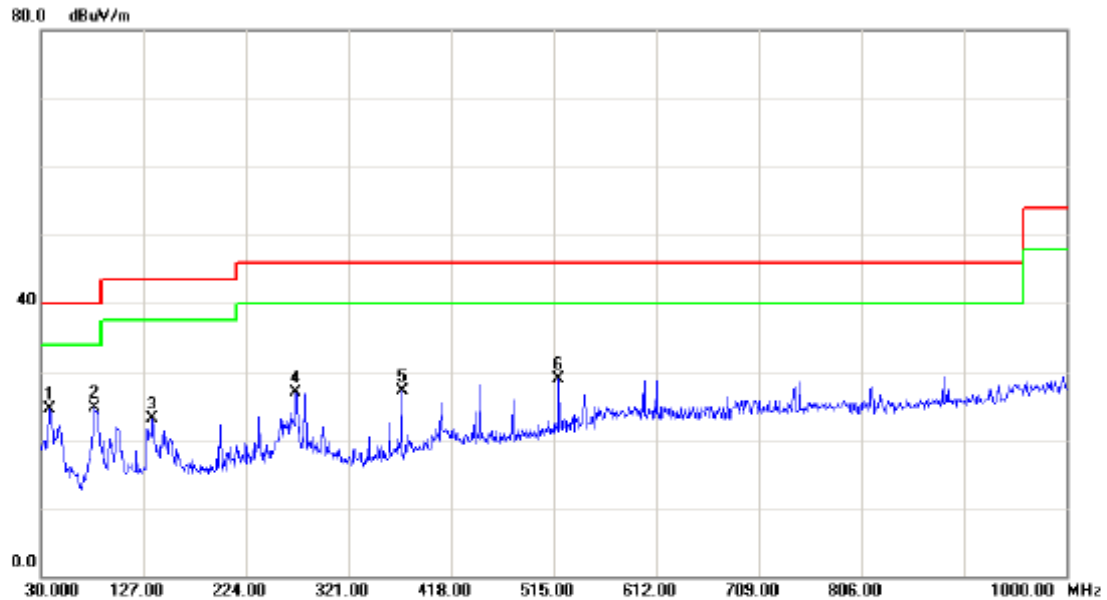


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	199.7500	41.66	-16.93	24.73	43.50	-18.77	peak	
2 *	272.5000	47.03	-13.65	33.38	46.00	-12.62	peak	
3	371.4400	41.49	-10.78	30.71	46.00	-15.29	peak	
4	445.1600	41.16	-9.09	32.07	46.00	-13.93	peak	
5	476.2000	40.84	-8.68	32.16	46.00	-13.84	peak	
6	747.8000	36.27	-4.26	32.01	46.00	-13.99	peak	



Test Mode : Band 1/TX A Mode 5200MHz

Vertical

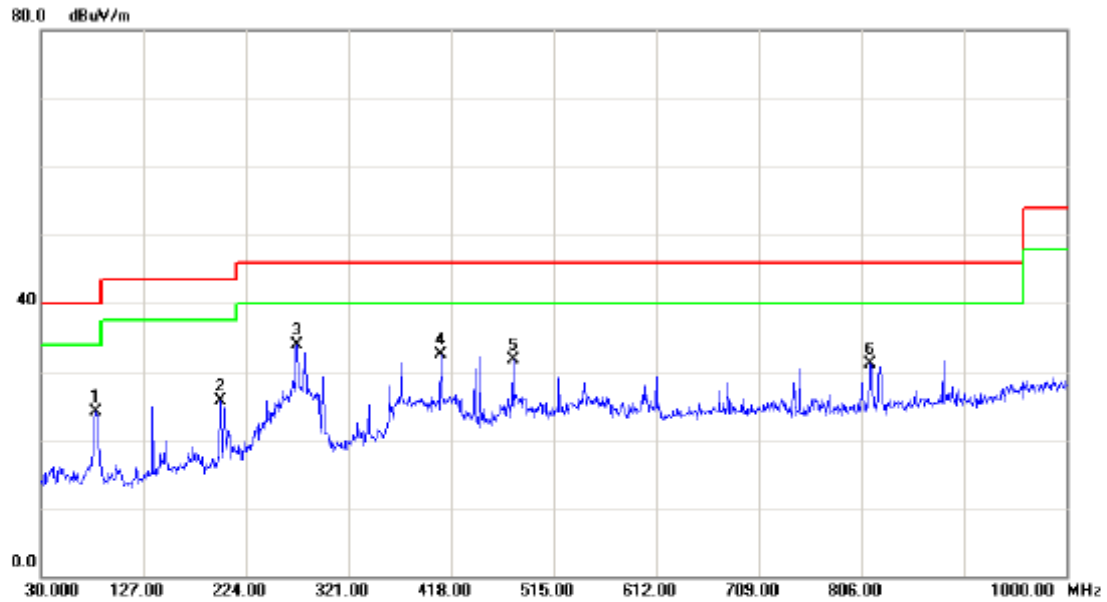


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	38.7300	41.53	-17.01	24.52	40.00	-15.48	peak	
2 *	80.4400	43.83	-19.22	24.61	40.00	-15.39	peak	
3	135.7300	41.21	-18.15	23.06	43.50	-20.44	peak	
4	271.5300	40.55	-13.72	26.83	46.00	-19.17	peak	
5	371.4400	37.92	-10.78	27.14	46.00	-18.86	peak	
6	519.8500	36.51	-7.68	28.83	46.00	-17.17	peak	



Test Mode : Band 1/TX A Mode 5200MHz

Horizontal

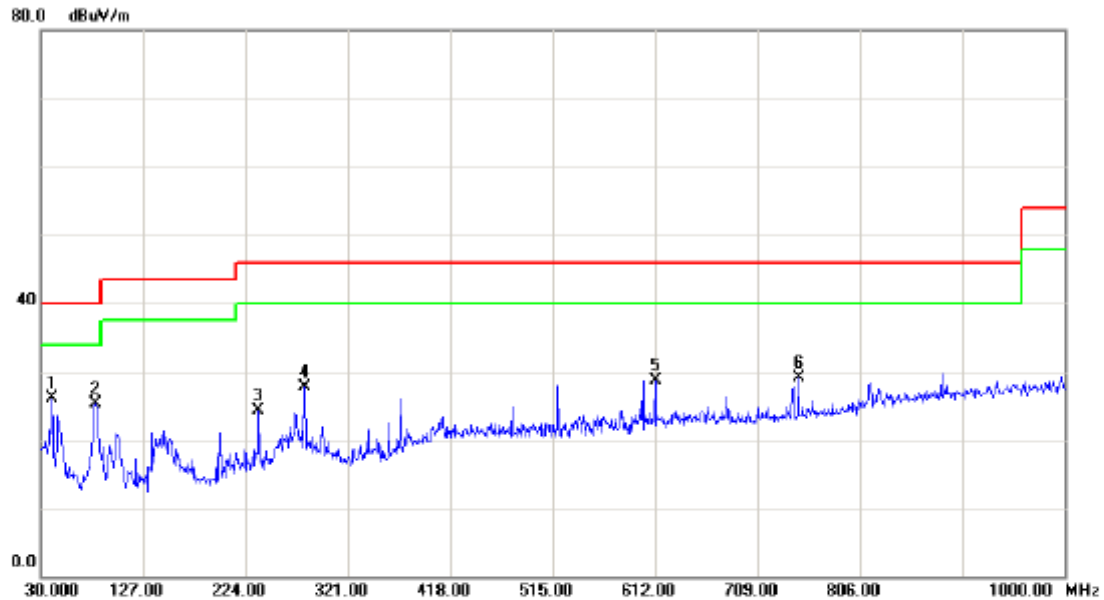


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	82.3800	43.30	-19.25	24.05	40.00	-15.95	peak	
2	199.7500	42.66	-16.93	25.73	43.50	-17.77	peak	
3 *	272.5000	47.53	-13.65	33.88	46.00	-12.12	peak	
4	408.3000	42.11	-9.67	32.44	46.00	-13.56	peak	
5	476.2000	40.34	-8.68	31.66	46.00	-14.34	peak	
6	814.7300	34.38	-3.35	31.03	46.00	-14.97	peak	



Test Mode : Band 1/TX A Mode 5240MHz

Vertical

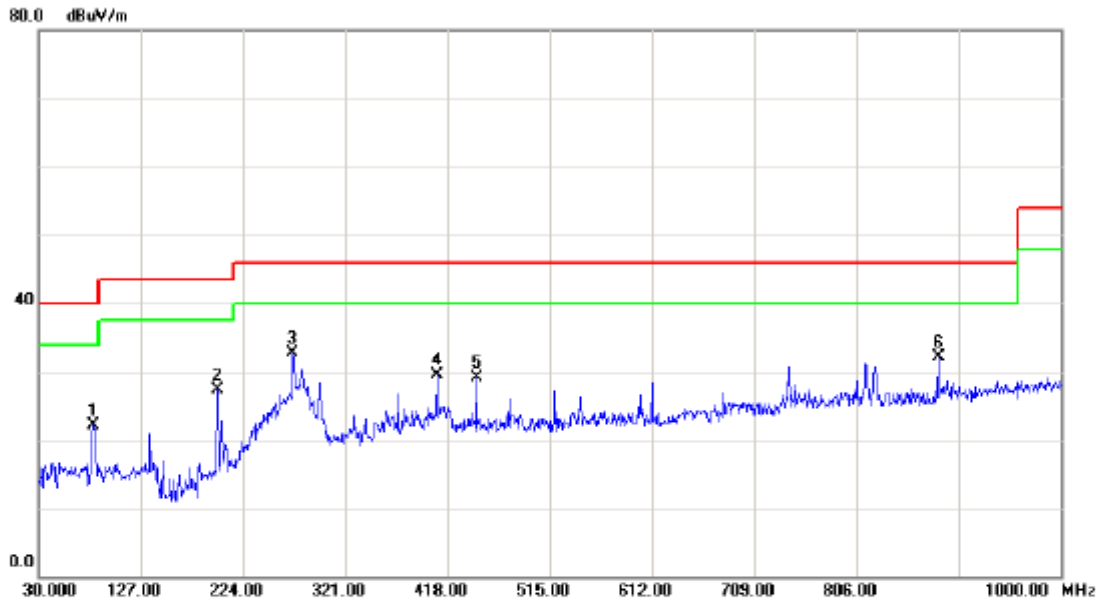


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	40.6700	42.95	-16.83	26.12	40.00	-13.88	peak	
2		82.3800	44.60	-19.25	25.35	40.00	-14.65	peak	
3		236.6100	40.06	-15.82	24.24	46.00	-21.76	peak	
4		280.2600	40.92	-13.16	27.76	46.00	-18.24	peak	
5		612.0000	34.09	-5.29	28.80	46.00	-17.20	peak	
6		747.8000	33.31	-4.26	29.05	46.00	-16.95	peak	



Test Mode : Band 1/TX A Mode 5240MHz

Horizontal

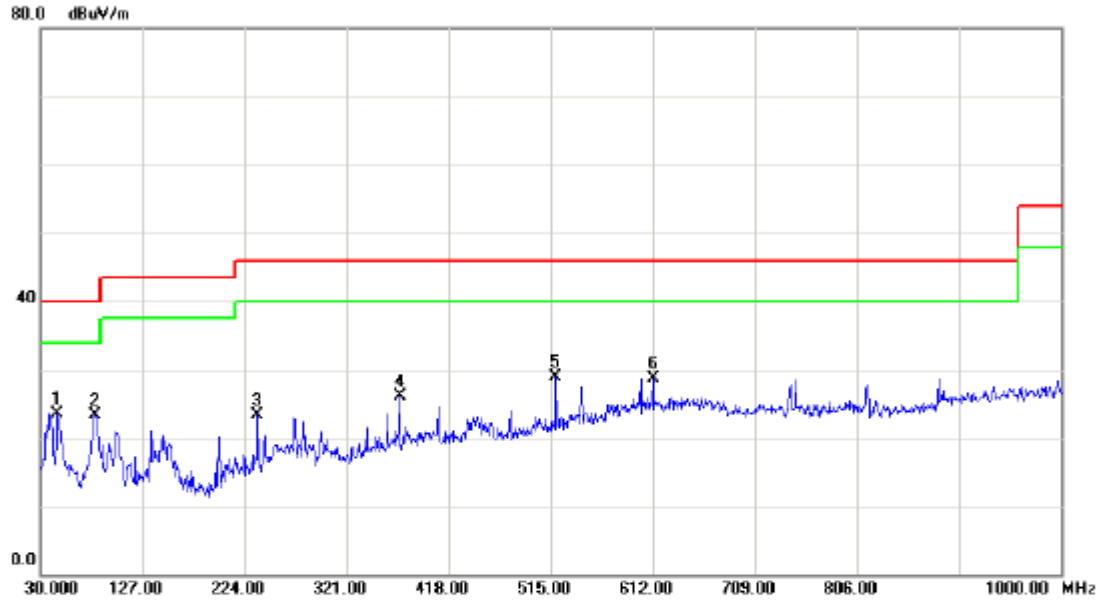


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		82.3800	41.30	-19.25	22.05	40.00	-17.95	peak	
2		199.7500	44.16	-16.93	27.23	43.50	-16.27	peak	
3	*	271.5300	46.41	-13.72	32.69	46.00	-13.31	peak	
4		408.3000	39.11	-9.67	29.44	46.00	-16.56	peak	
5		445.1600	38.16	-9.09	29.07	46.00	-16.93	peak	
6		883.6000	34.27	-2.18	32.09	46.00	-13.91	peak	



Test Mode : Band 2/TX A Mode 5260MHz

Vertical

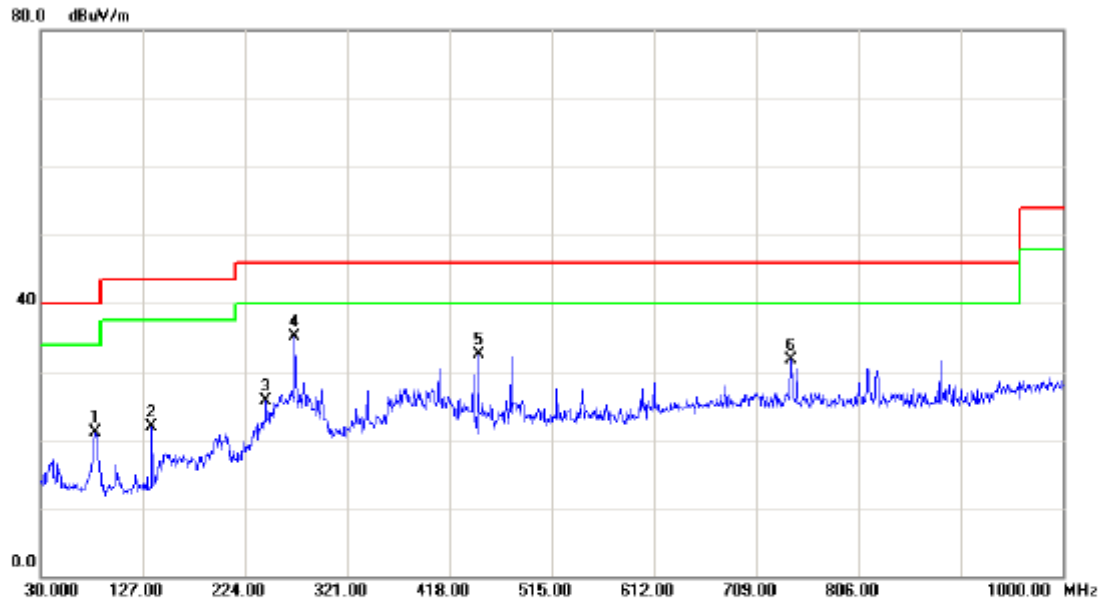


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	46.4900	40.73	-17.20	23.53	40.00	-16.47	peak	
2		82.3800	42.60	-19.25	23.35	40.00	-16.65	peak	
3		236.6100	39.06	-15.82	23.24	46.00	-22.76	peak	
4		371.4400	36.92	-10.78	26.14	46.00	-19.86	peak	
5		519.8500	36.51	-7.68	28.83	46.00	-17.17	peak	
6		612.0000	34.09	-5.29	28.80	46.00	-17.20	peak	



Test Mode : Band 2/TX A Mode 5260MHz

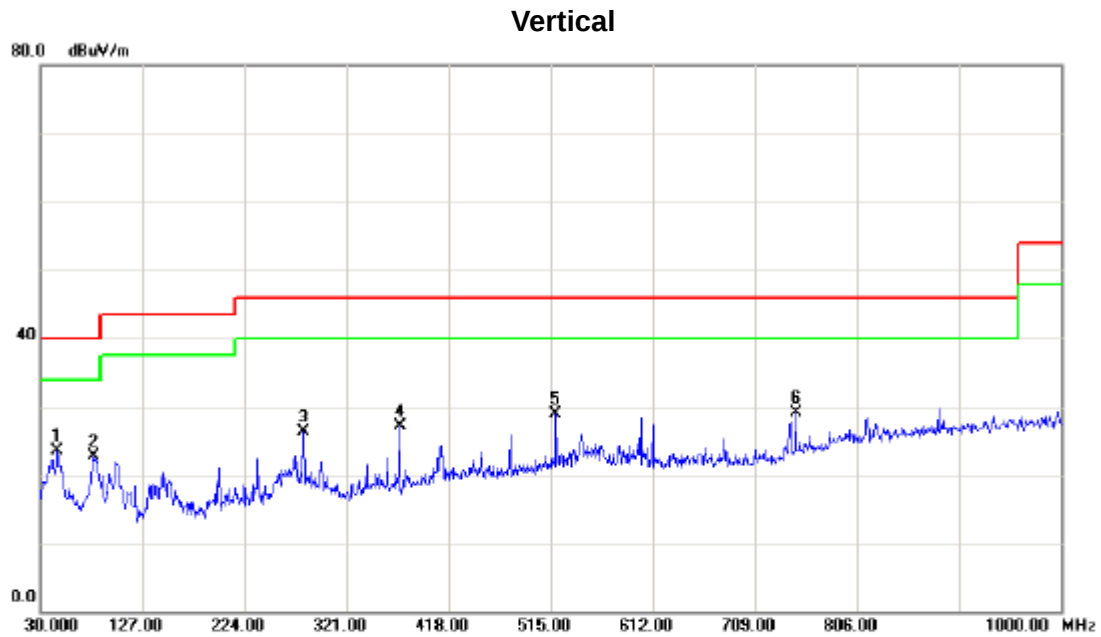
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		82.3800	40.30	-19.25	21.05	40.00	-18.95	peak	
2		135.7300	39.99	-18.15	21.84	43.50	-21.66	peak	
3		244.3700	41.12	-15.40	25.72	46.00	-20.28	peak	
4	*	271.5300	48.91	-13.72	35.19	46.00	-10.81	peak	
5		445.1600	41.66	-9.09	32.57	46.00	-13.43	peak	
6		741.9800	36.08	-4.31	31.77	46.00	-14.23	peak	



Test Mode : Band 2/TX A Mode 5280MHz

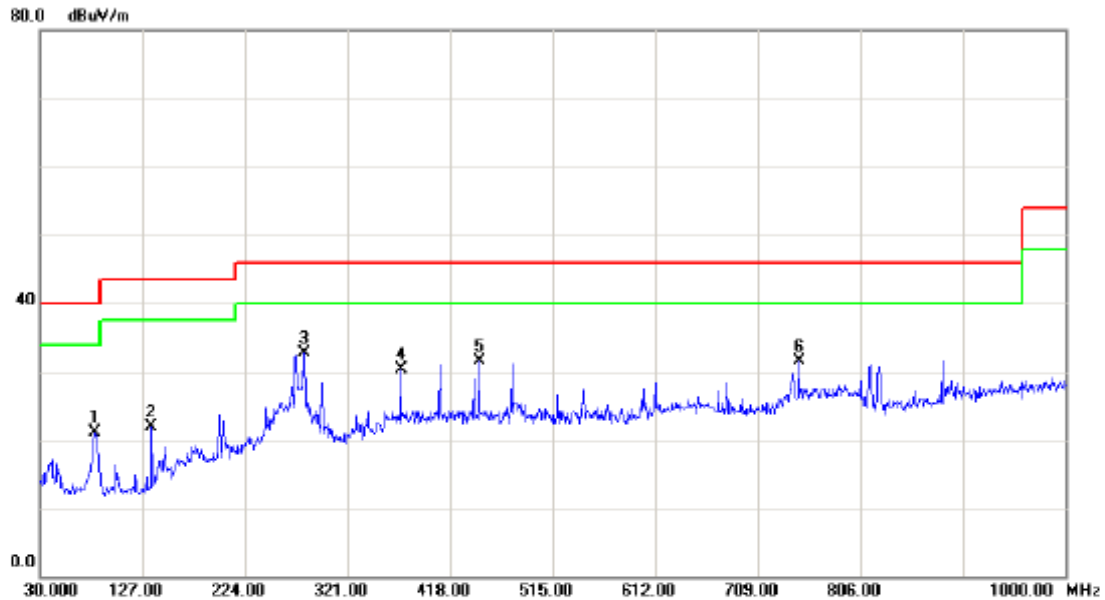


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	46.4900	40.73	-17.20	23.53	40.00	-16.47	peak	
2		80.4400	41.83	-19.22	22.61	40.00	-17.39	peak	
3		280.2600	39.42	-13.16	26.26	46.00	-19.74	peak	
4		371.4400	37.92	-10.78	27.14	46.00	-18.86	peak	
5		519.8500	36.51	-7.68	28.83	46.00	-17.17	peak	
6		747.8000	33.31	-4.26	29.05	46.00	-16.95	peak	



Test Mode : Band 2/TX A Mode 5280MHz

Horizontal

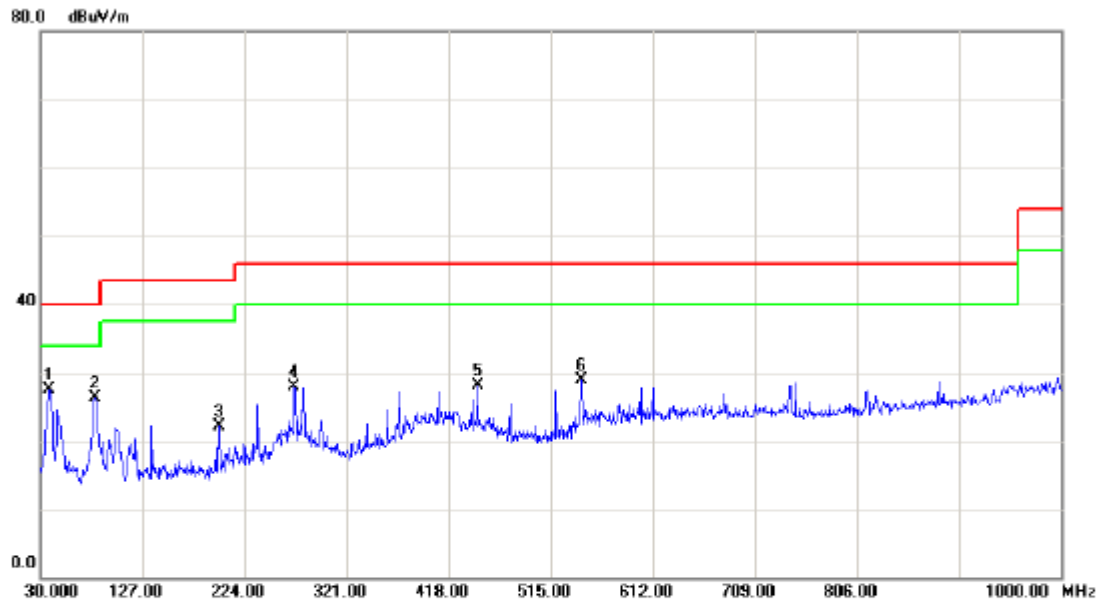


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	82.3800	40.30	-19.25	21.05	40.00	-18.95	peak	
2	135.7300	39.99	-18.15	21.84	43.50	-21.66	peak	
3 *	280.2600	45.88	-13.16	32.72	46.00	-13.28	peak	
4	371.4400	40.99	-10.78	30.21	46.00	-15.79	peak	
5	445.1600	40.66	-9.09	31.57	46.00	-14.43	peak	
6	747.8000	35.77	-4.26	31.51	46.00	-14.49	peak	



Test Mode : Band 2/TX A Mode 5320MHz

Vertical

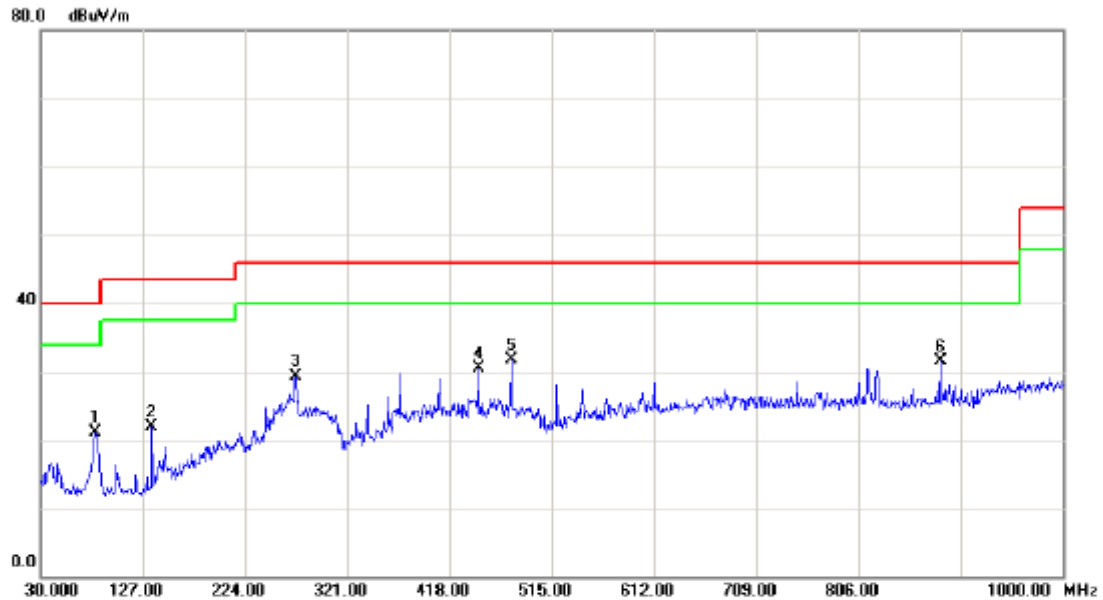


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	38.7300	44.53	-17.01	27.52	40.00	-12.48	peak	
2		82.3800	45.60	-19.25	26.35	40.00	-13.65	peak	
3		199.7500	39.01	-16.93	22.08	43.50	-21.42	peak	
4		271.5300	41.55	-13.72	27.83	46.00	-18.17	peak	
5		445.1600	37.23	-9.09	28.14	46.00	-17.86	peak	
6		544.1000	35.74	-6.81	28.93	46.00	-17.07	peak	



Test Mode : Band 2/TX A Mode 5320MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		82.3800	40.30	-19.25	21.05	40.00	-18.95	peak	
2		135.7300	39.99	-18.15	21.84	43.50	-21.66	peak	
3		272.5000	43.03	-13.65	29.38	46.00	-16.62	peak	
4		445.1600	39.66	-9.09	30.57	46.00	-15.43	peak	
5	*	476.2000	40.34	-8.68	31.66	46.00	-14.34	peak	
6		883.6000	33.77	-2.18	31.59	46.00	-14.41	peak	



4.2.9 TEST RESULTS - ABOVE 1000MHZ

Remark:

- (1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note 』 . Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (5) 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.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.



Test Mode : Band 1/ TX A Mode 5180MHz

Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5150.00	V	15.92	5.74	42.72	58.64	48.46	-46.13	-56.31	68.30	54.00	-27.00	-41.30	X/E
5181.40	V	58.90	50.93	42.80	101.70	93.73	-3.07	-11.04					X/F
10359.64	V	36.50	24.43	13.73	50.23	38.16	-54.54	-66.61	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5150.00	H	12.75	3.52	42.72	55.47	46.24	-49.30	-58.53	68.30	54.00	-27.00	-41.30	X/E
5181.50	H	56.30	48.89	42.80	99.10	91.69	-5.67	-13.08					X/F
10360.03	H	36.46	24.13	13.73	50.19	37.86	-54.58	-66.91	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 1/ TX A Mode 5200MHz

Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5199.20	V	58.44	50.73	42.84	101.28	93.57	-3.49	-11.20					X/F
10400.03	V	37.15	25.15	13.78	50.93	38.93	-53.84	-65.84	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5200.80	H	55.96	48.62	42.84	98.80	91.46	-5.97	-13.31					X/F
10400.42	H	36.85	23.57	13.78	50.63	37.35	-54.14	-67.42	68.30	54.00	-27.00	-41.30	X/H

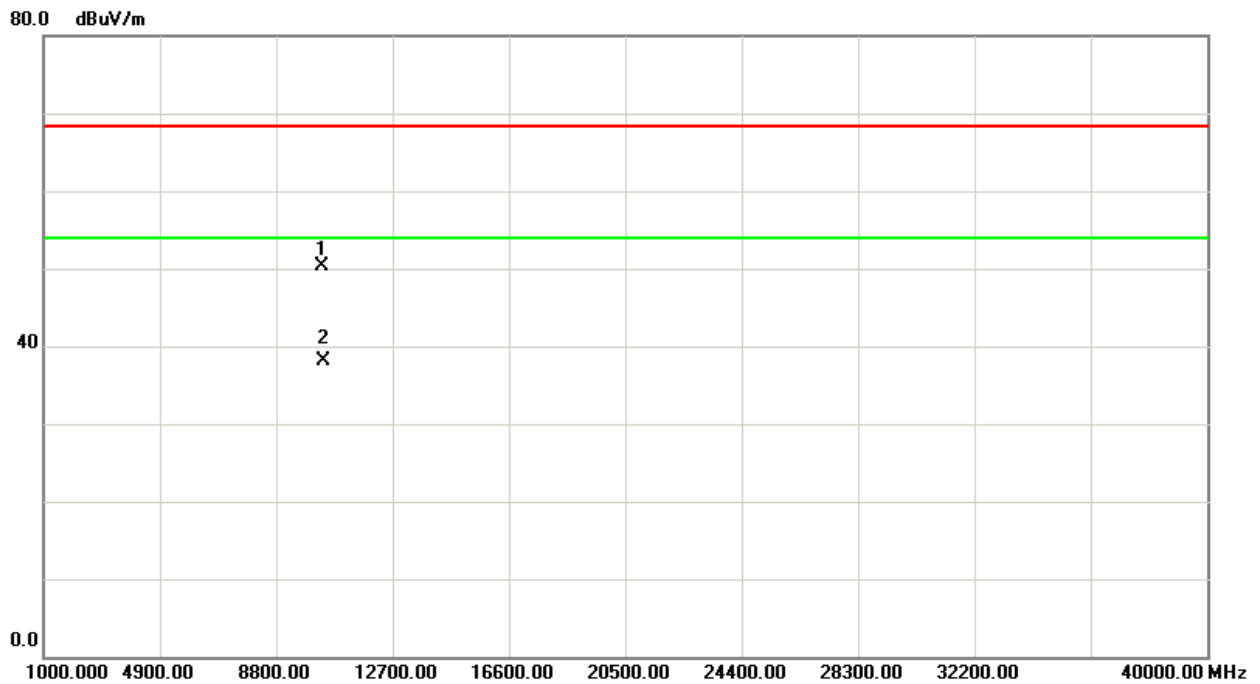
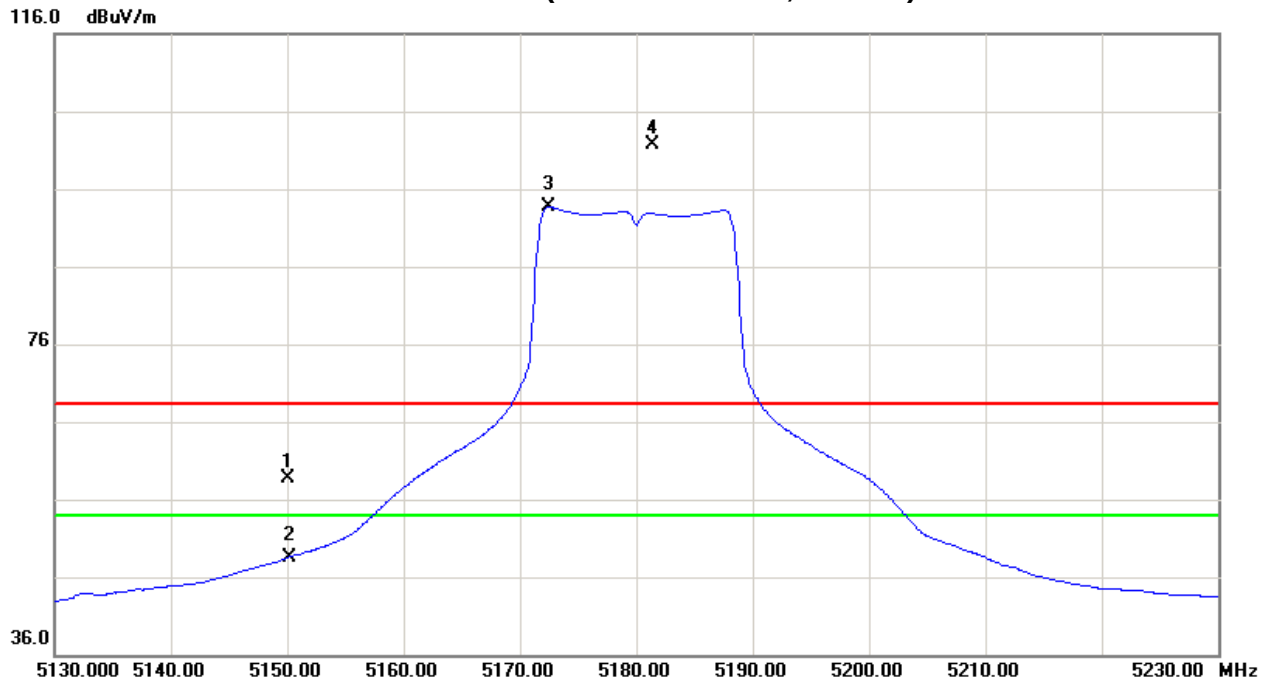
Test Mode : Band 1/ TX A Mode 5240MHz

Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5243.10	V	52.36	45.07	42.95	95.31	88.02	-9.46	-16.75					X/F
10480.04	V	36.65	24.34	13.87	50.52	38.21	-54.25	-66.56	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5233.20	H	56.03	48.35	42.92	98.95	91.27	-5.82	-13.50					X/F
10479.95	H	36.52	24.48	13.87	50.39	38.35	-54.38	-66.42	68.30	54.00	-27.00	-41.30	X/H



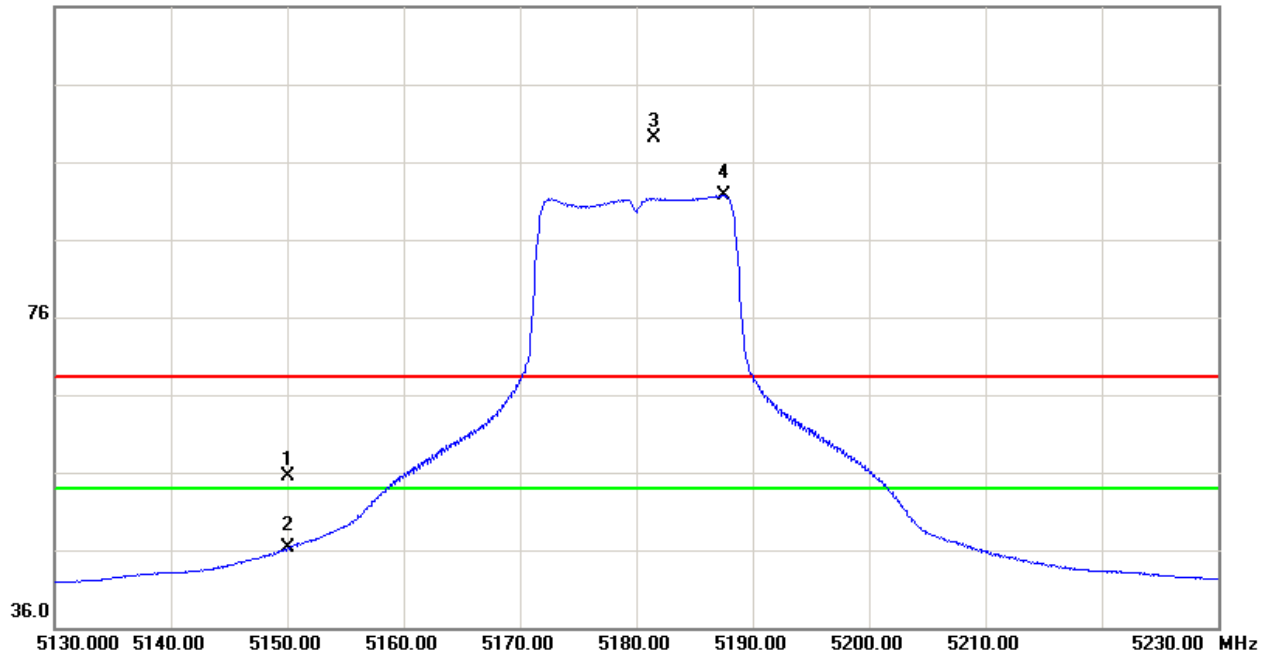
Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Vertical)



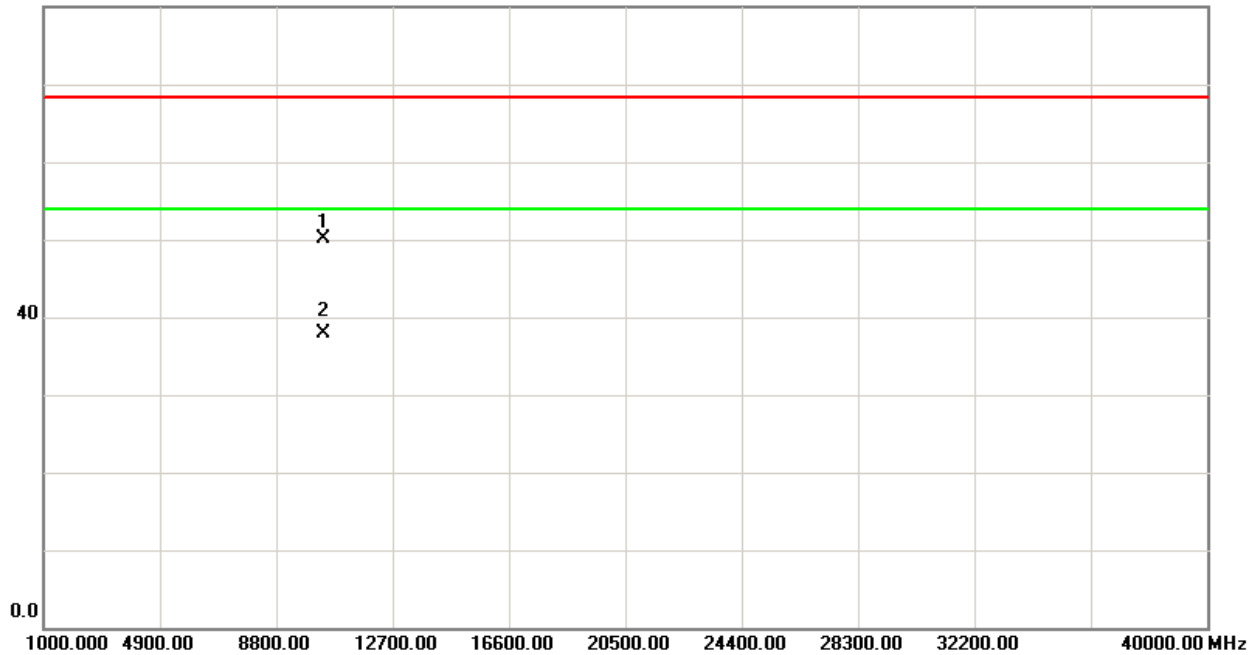


Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Horizontal)

116.0 dBuV/m

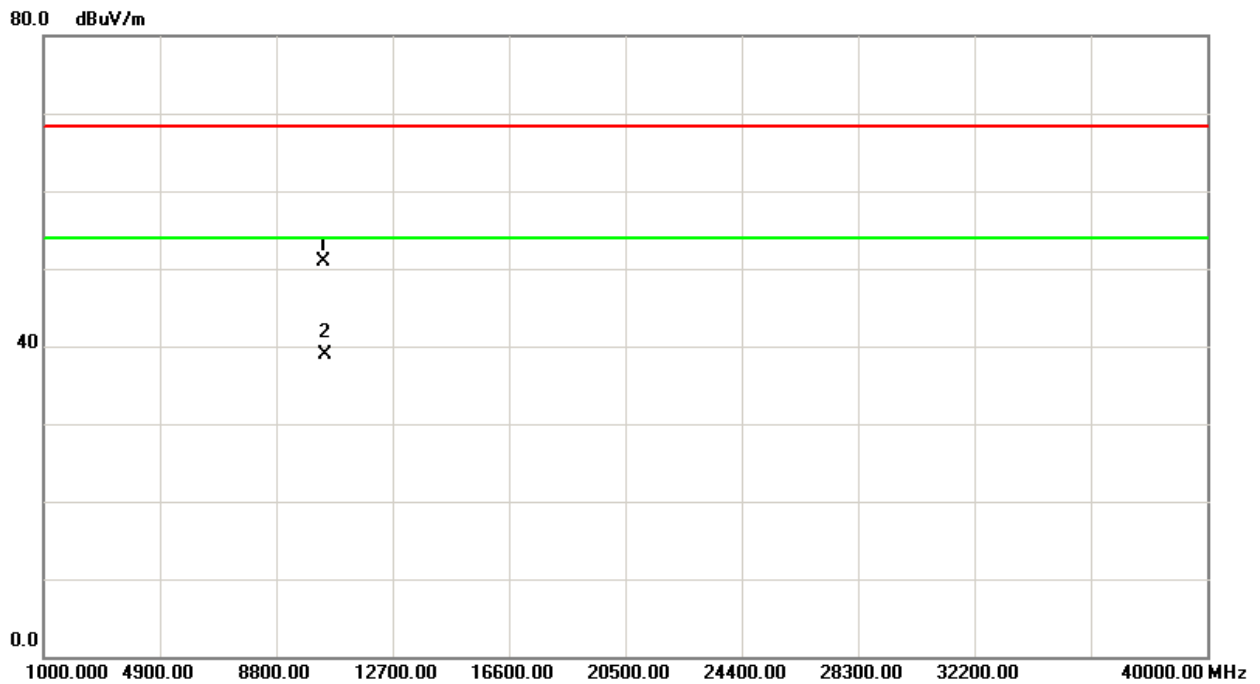
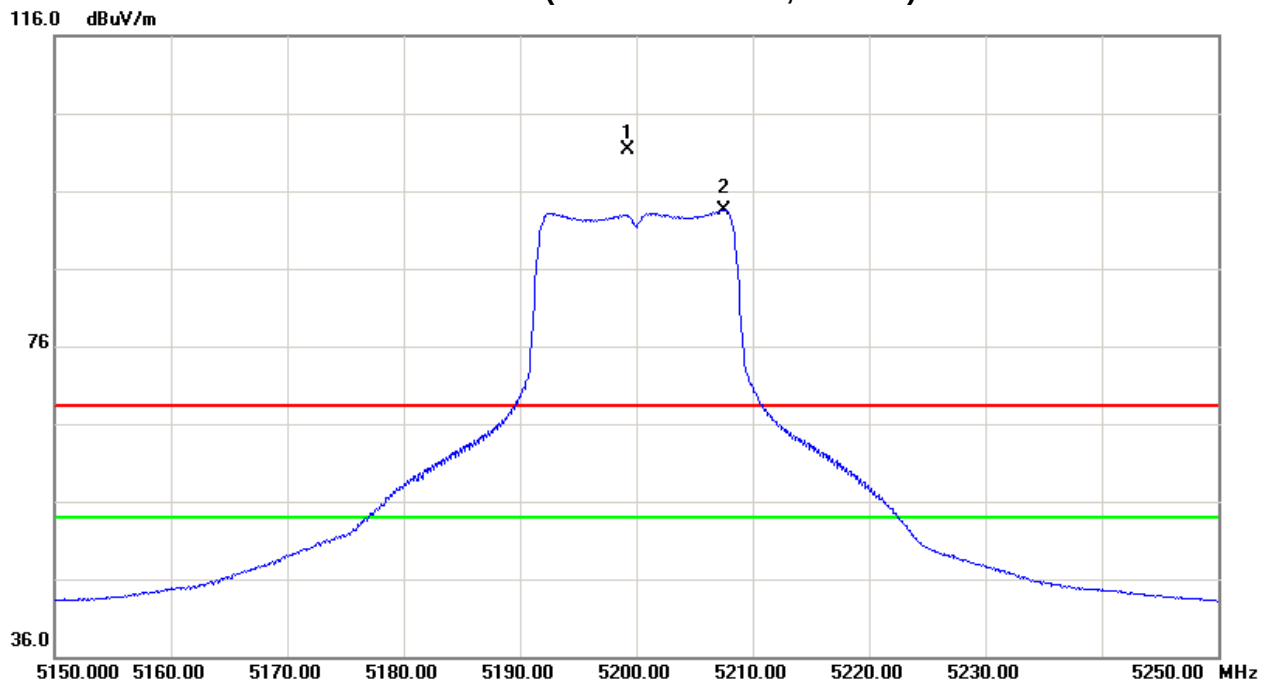


80.0 dBuV/m





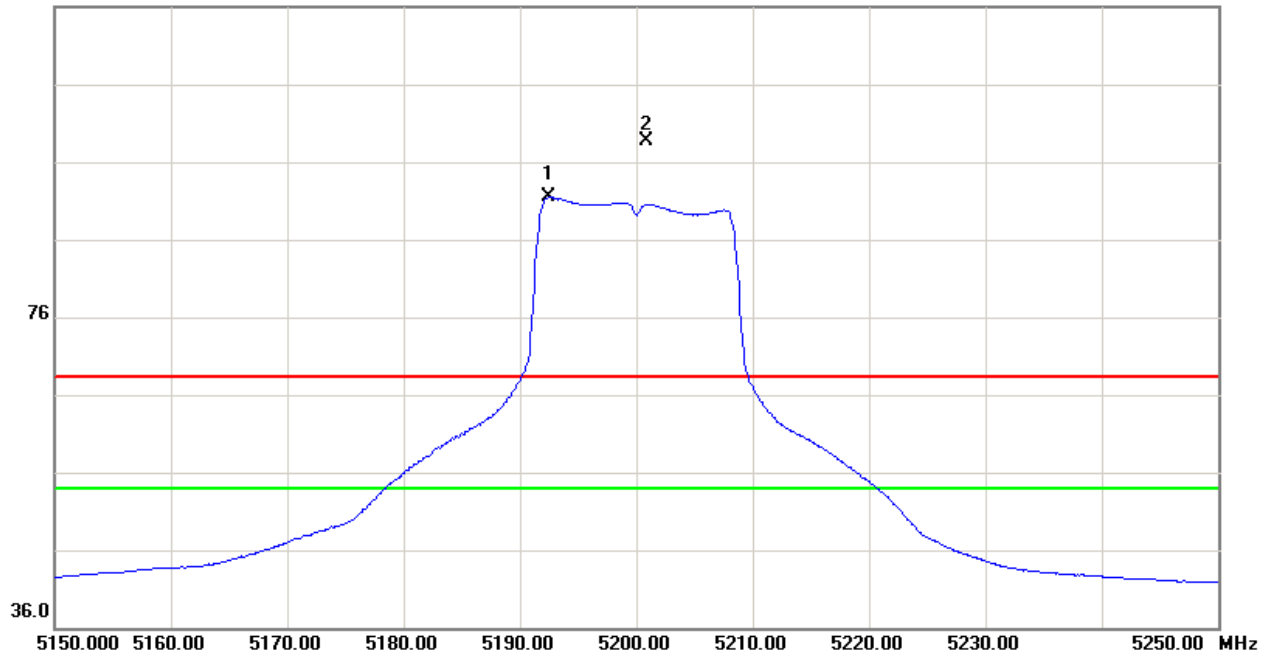
Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Vertical)



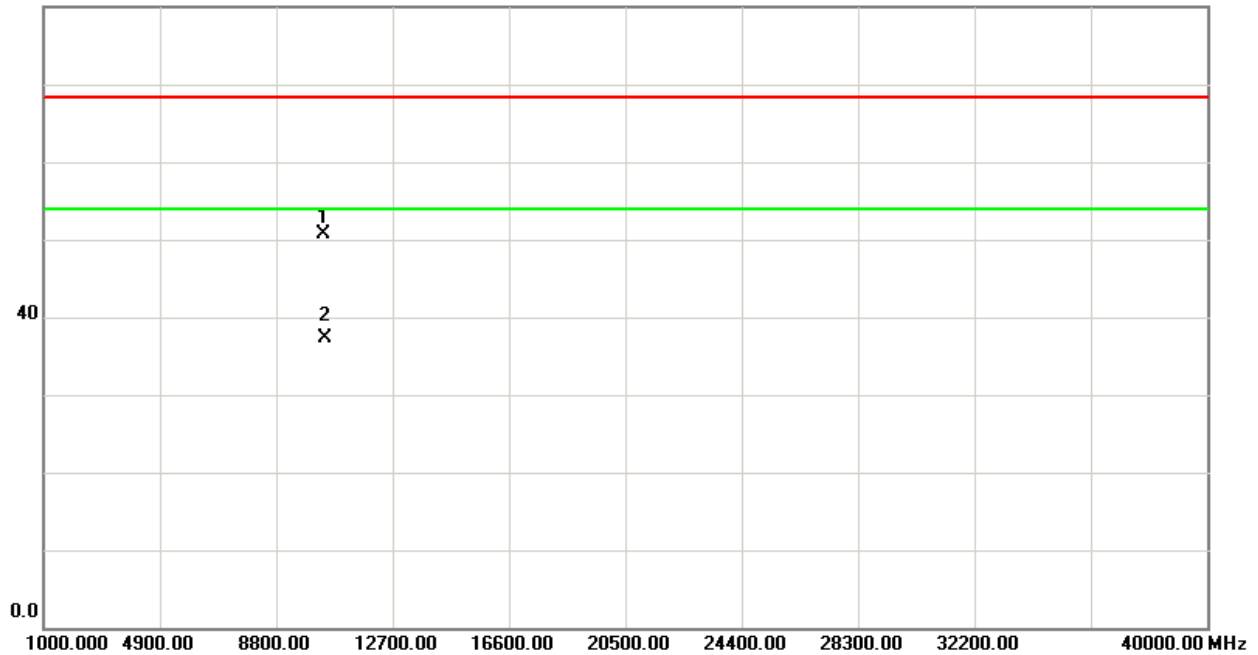


Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Horizontal)

116.0 dBuV/m

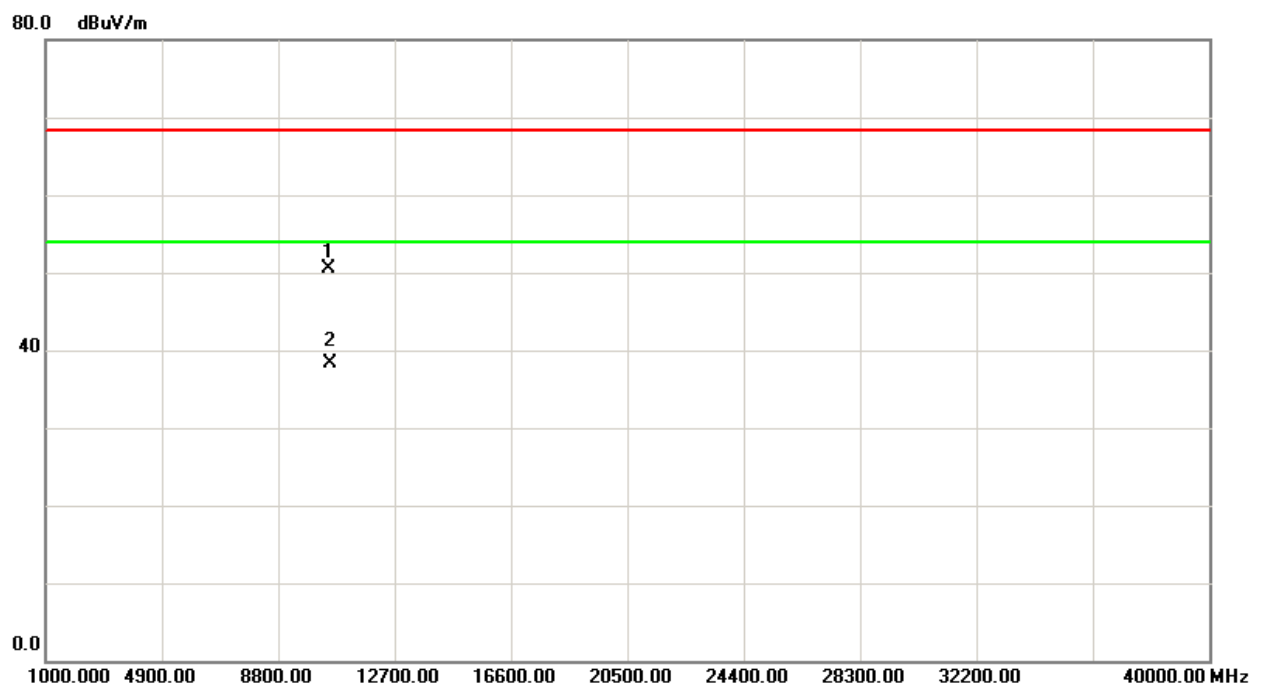
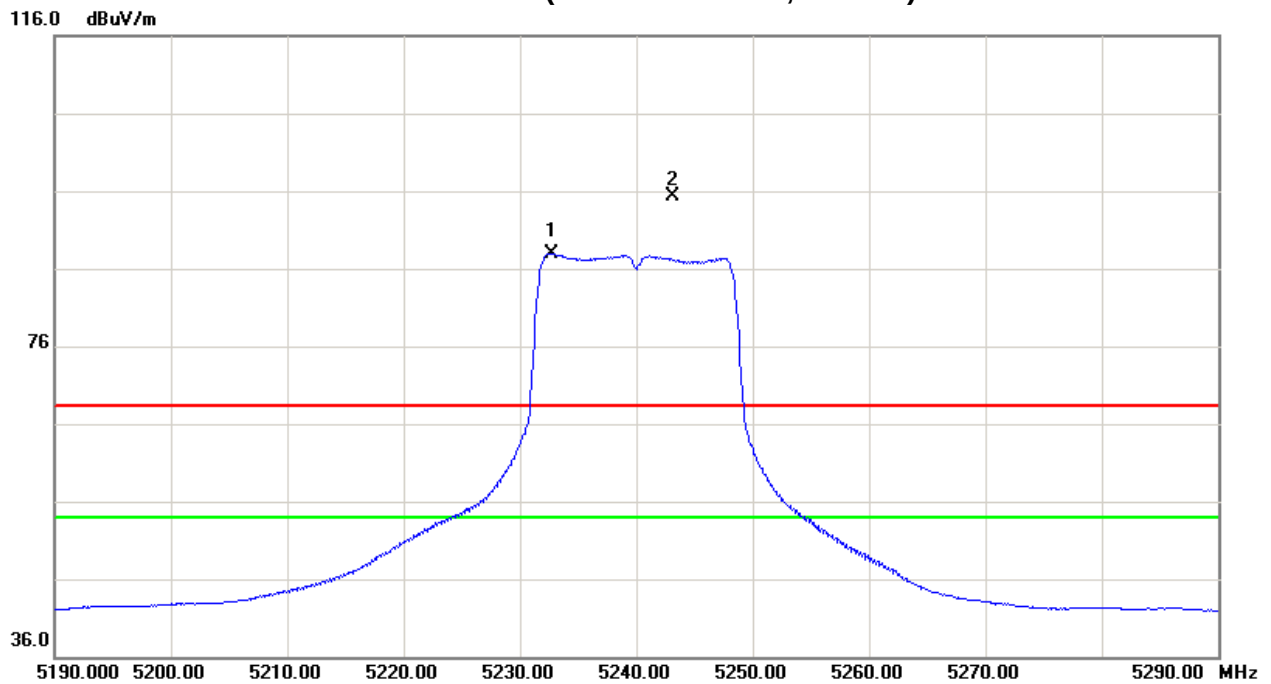


80.0 dBuV/m



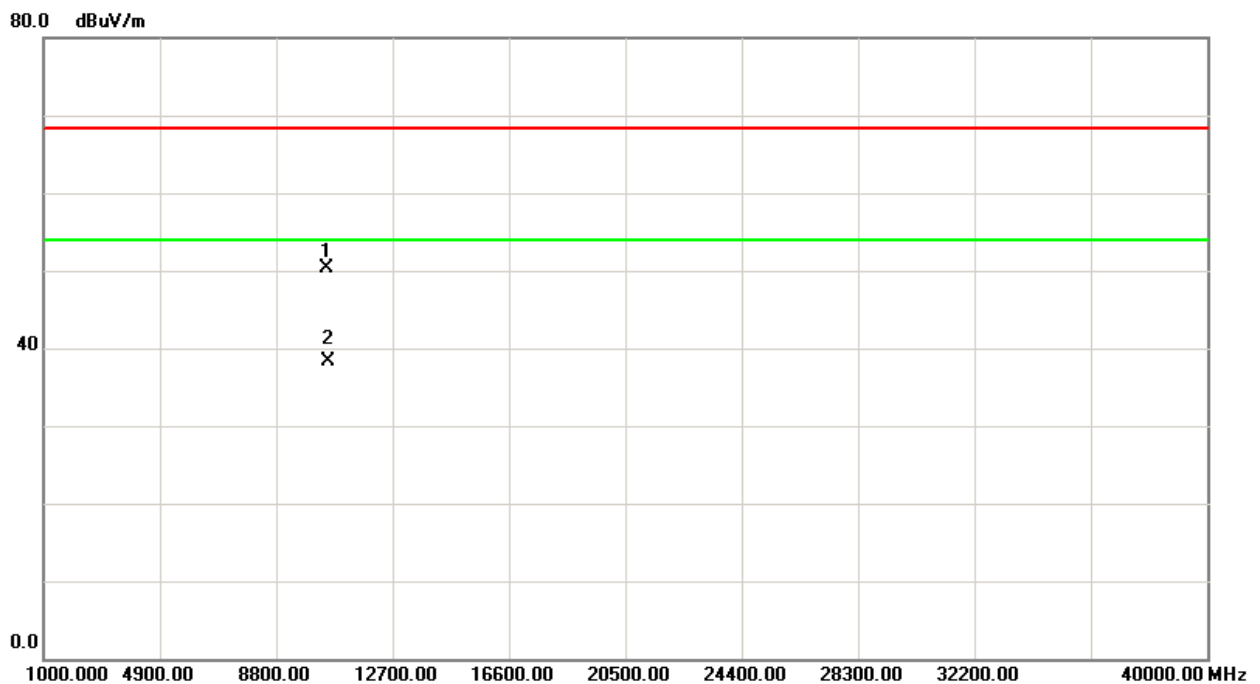
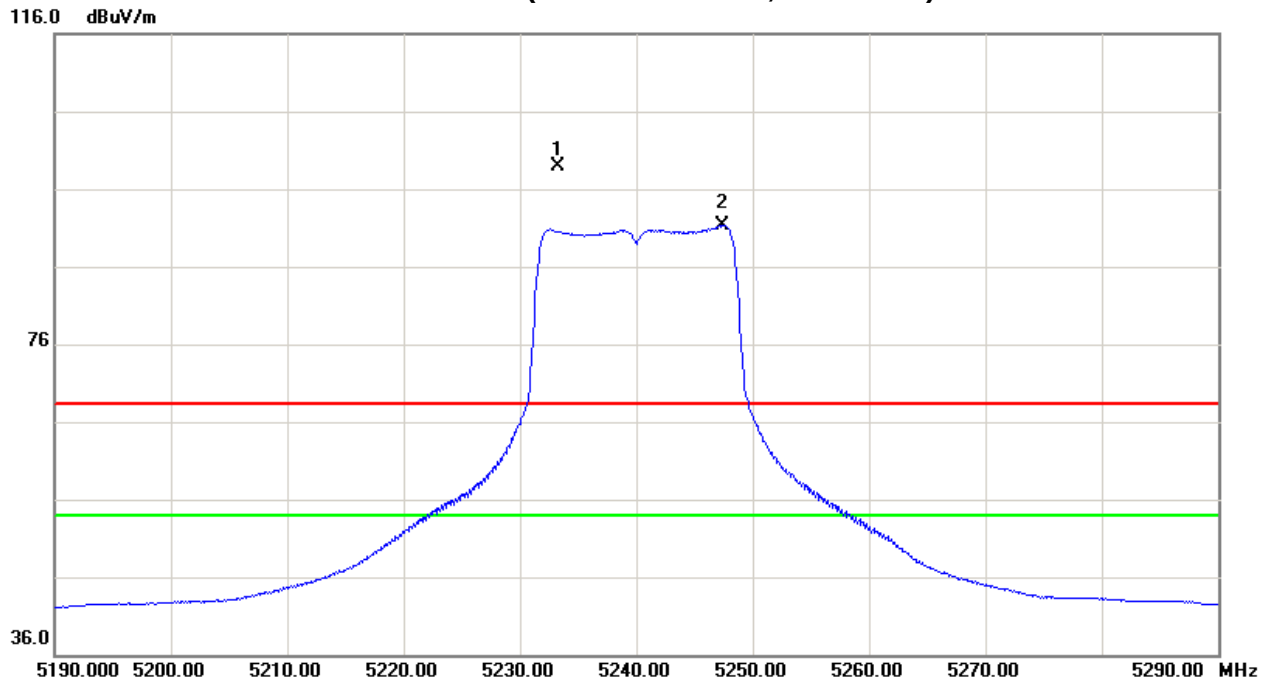


Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Vertical)





Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Horizontal)





Test Mode : Band 1/ TX N20 Mode 5180MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5150.00	V	13.53	4.48	42.72	56.25	47.20	-48.52	-57.57	68.30	54.00	-27.00	-41.30	X/E
5187.20	V	60.10	50.86	42.81	102.91	93.67	-1.86	-11.10					X/F
10360.28	V	36.43	24.34	13.73	50.16	38.07	-54.61	-66.70	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5150.00	H	13.27	3.54	42.72	55.99	46.26	-48.78	-58.51	68.30	54.00	-27.00	-41.30	X/E
5188.00	H	56.15	48.28	42.81	98.96	91.09	-5.81	-13.68					X/F
10359.88	H	36.24	28.18	13.73	49.97	41.91	-54.80	-62.86	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 1/ TX N20 Mode 5200MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5207.50	V	54.45	47.43	42.86	97.31	90.29	-7.46	-14.48					X/F
10400.32	V	36.41	24.87	13.78	50.19	38.65	-54.58	-66.12	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5201.20	H	54.72	47.52	42.84	97.56	90.36	-7.21	-14.41					X/F
10399.78	H	36.47	25.87	13.78	50.25	39.65	-54.52	-65.12	68.30	54.00	-27.00	-41.30	X/H

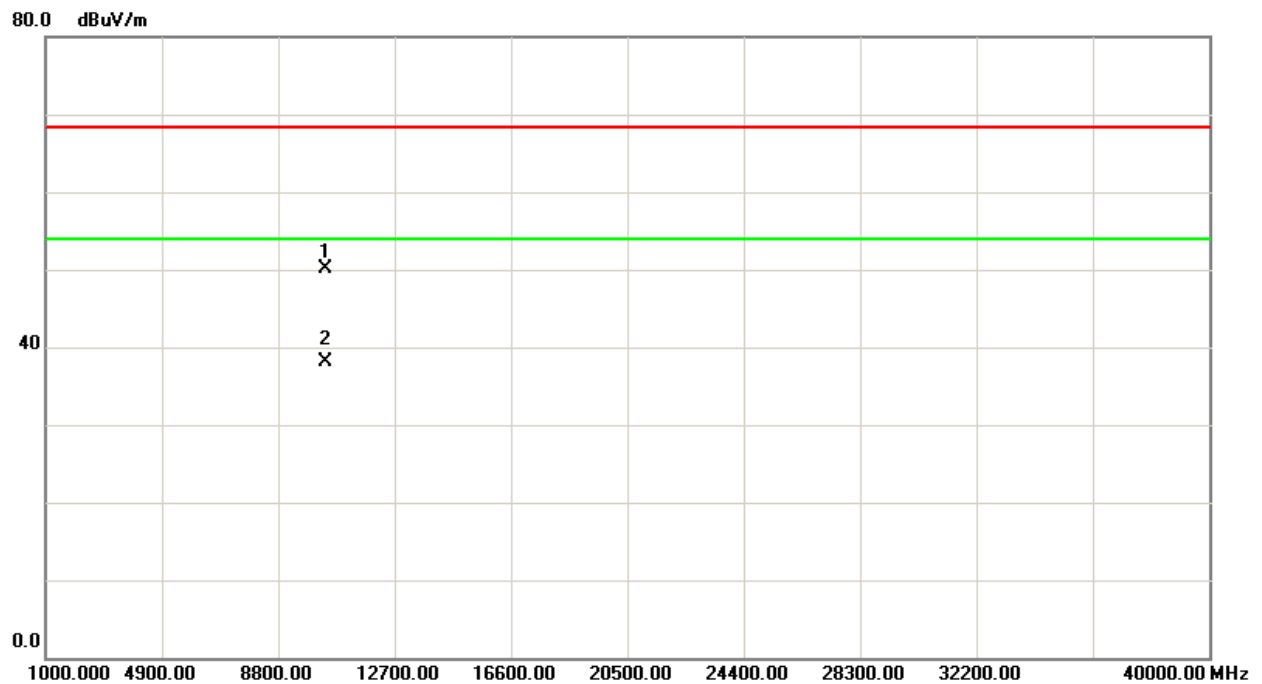
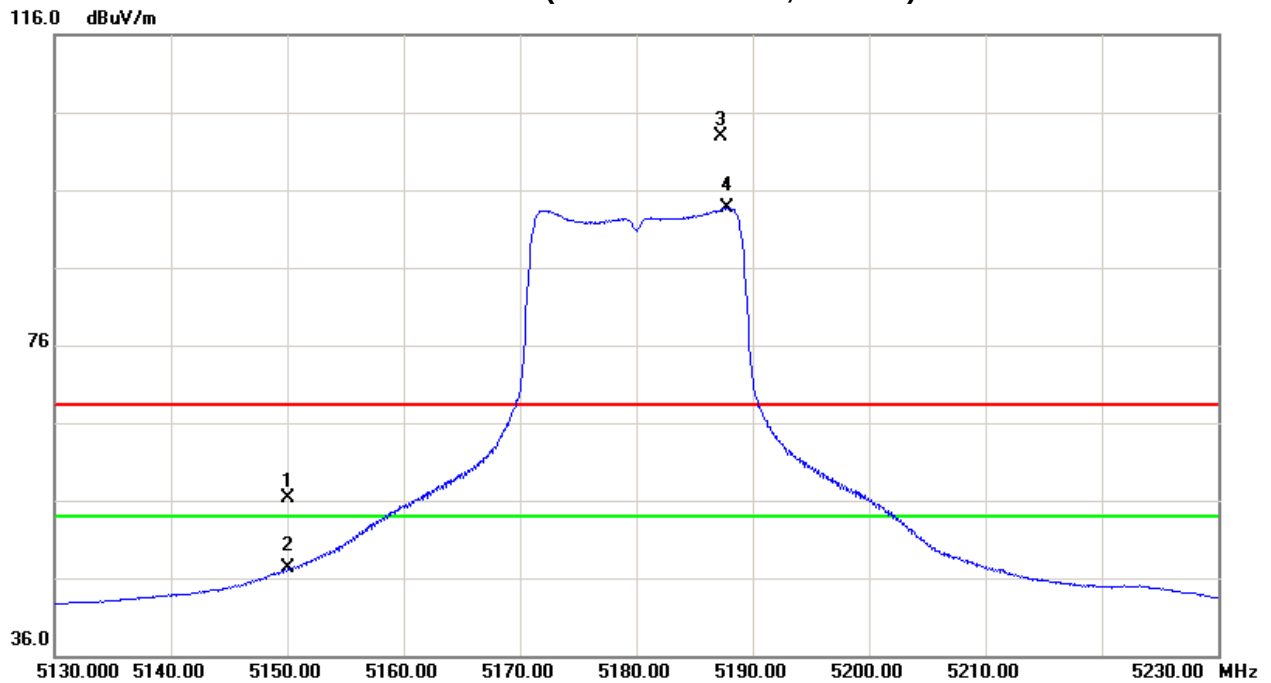
Test Mode : Band 1/ TX N20 Mode 5240MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5248.10	V	58.58	51.64	42.96	101.54	94.60	-3.23	-10.17					X/F
10480.27	V	36.43	24.56	13.87	50.30	38.43	-54.47	-66.34	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBUV/m)		Act.(dBm)		Limit(dBUV/m)		Limit(dBm)		Note
		Peak (dBUV)	AV (dBUV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5247.00	H	56.05	47.72	42.96	99.01	90.68	-5.76	-14.09					X/F
10480.26	H	39.08	26.22	13.87	52.95	40.09	-51.82	-64.68	68.30	54.00	-27.00	-41.30	X/H

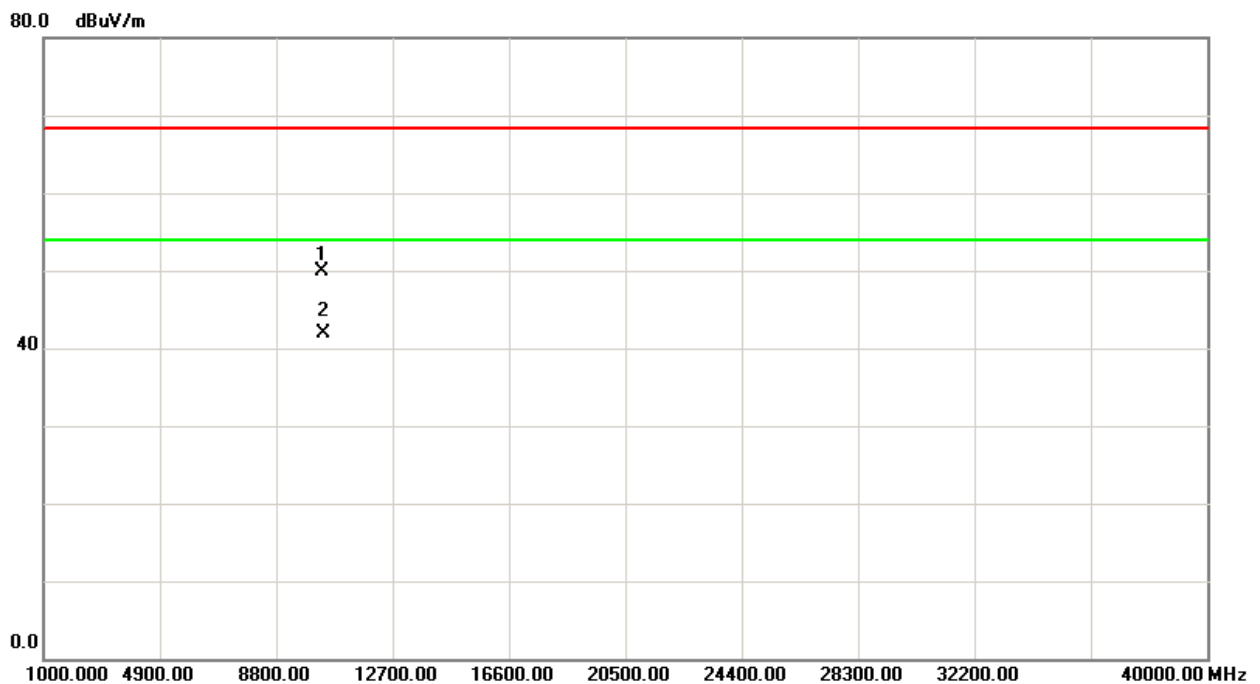
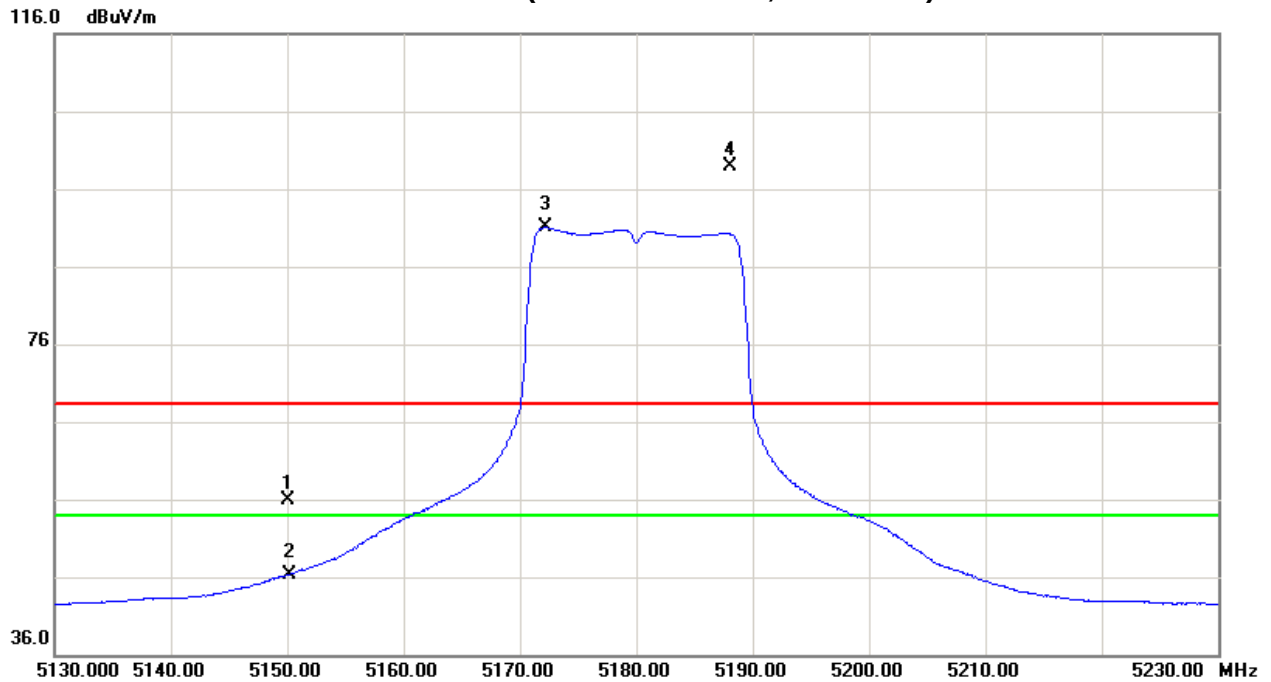


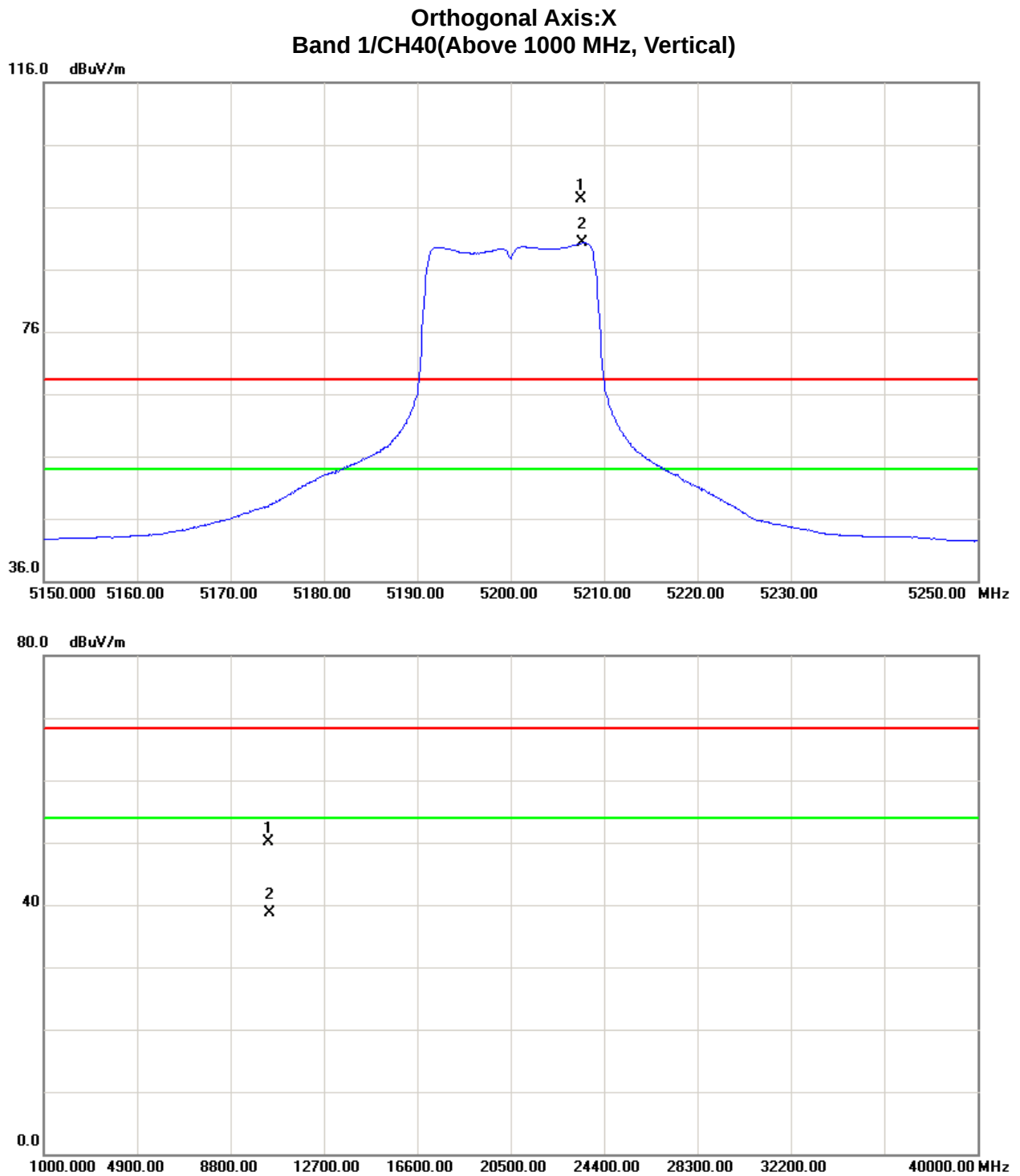
Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Vertical)





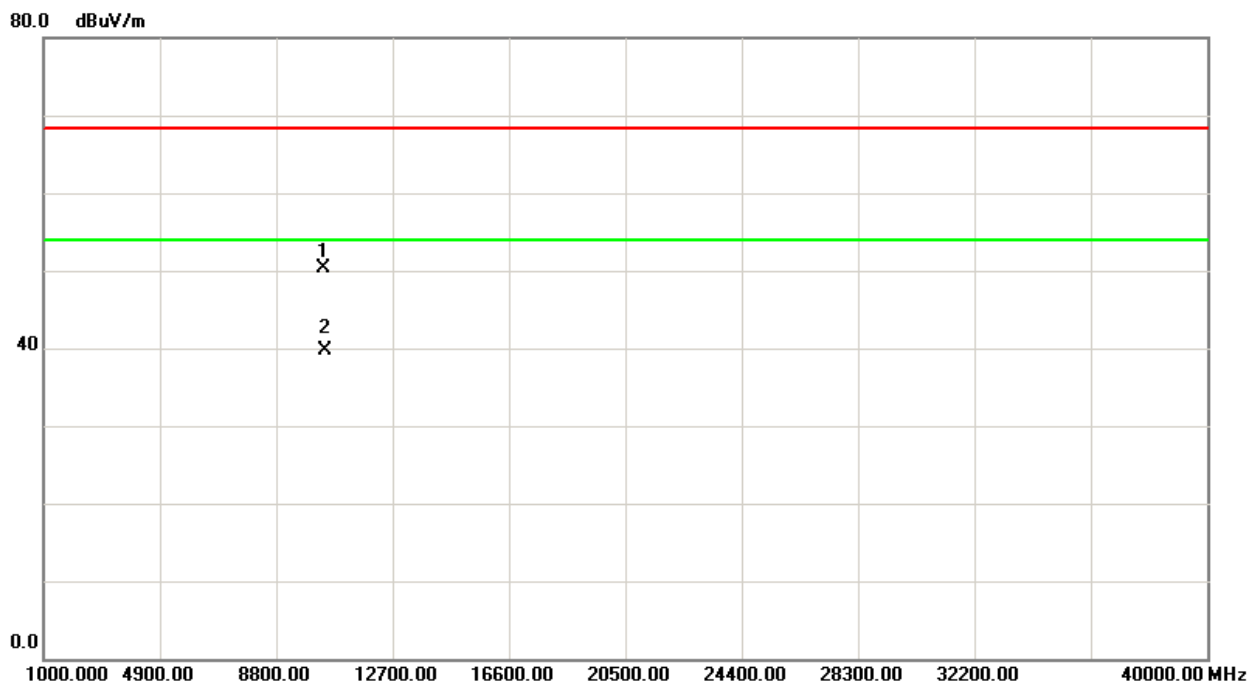
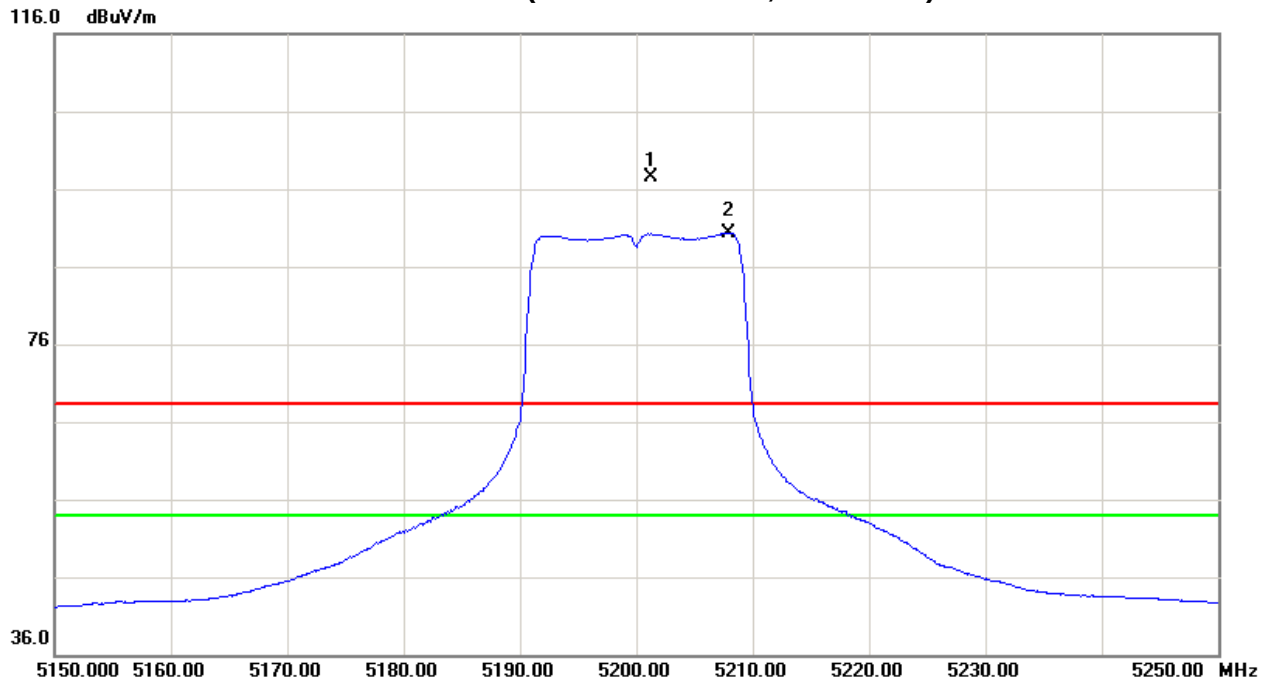
Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Horizontal)





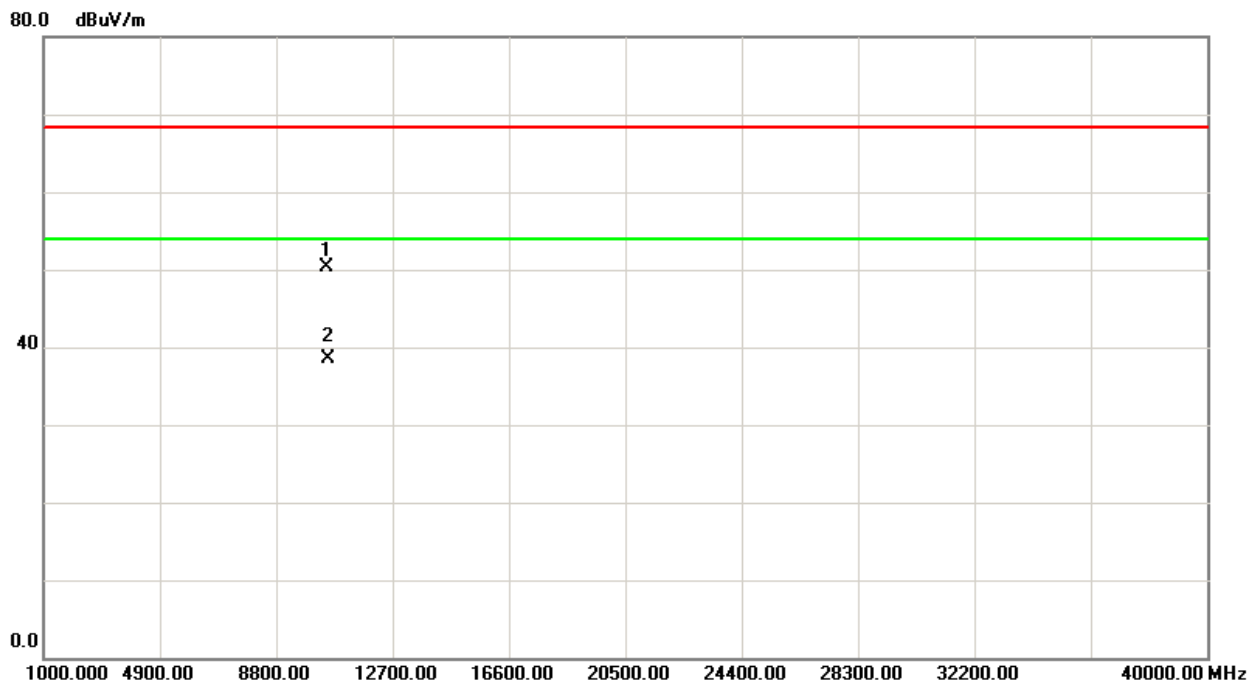
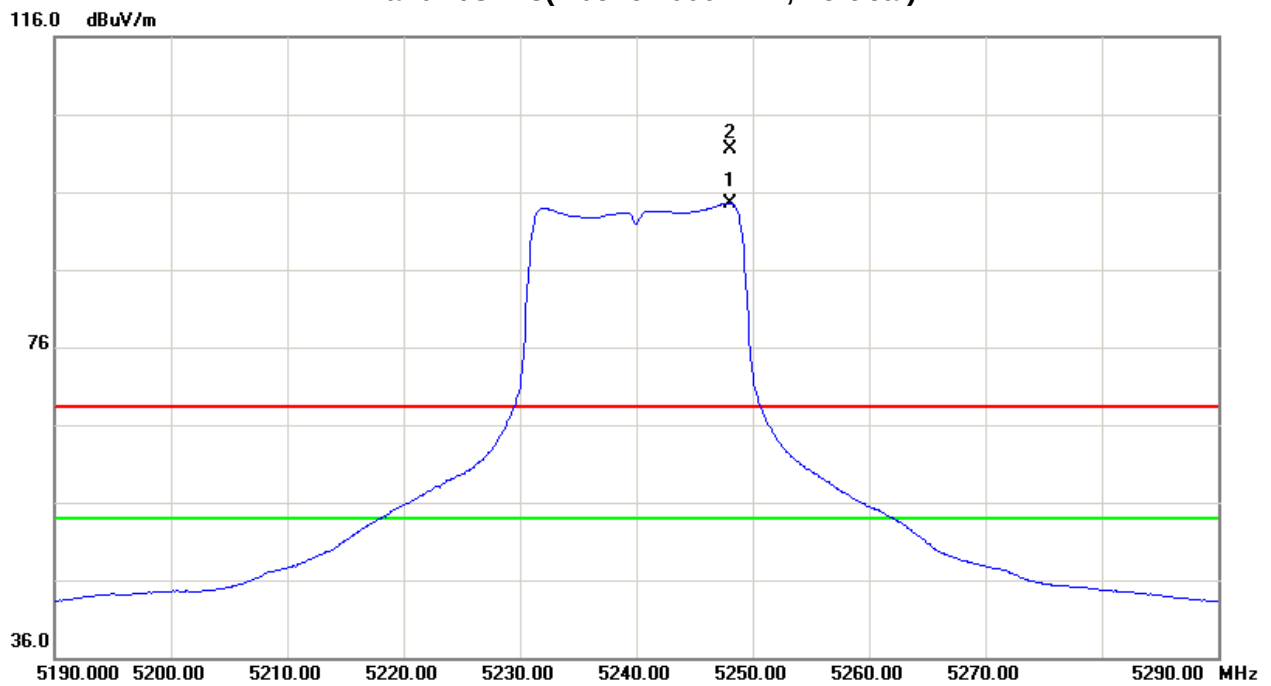


Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Horizontal)



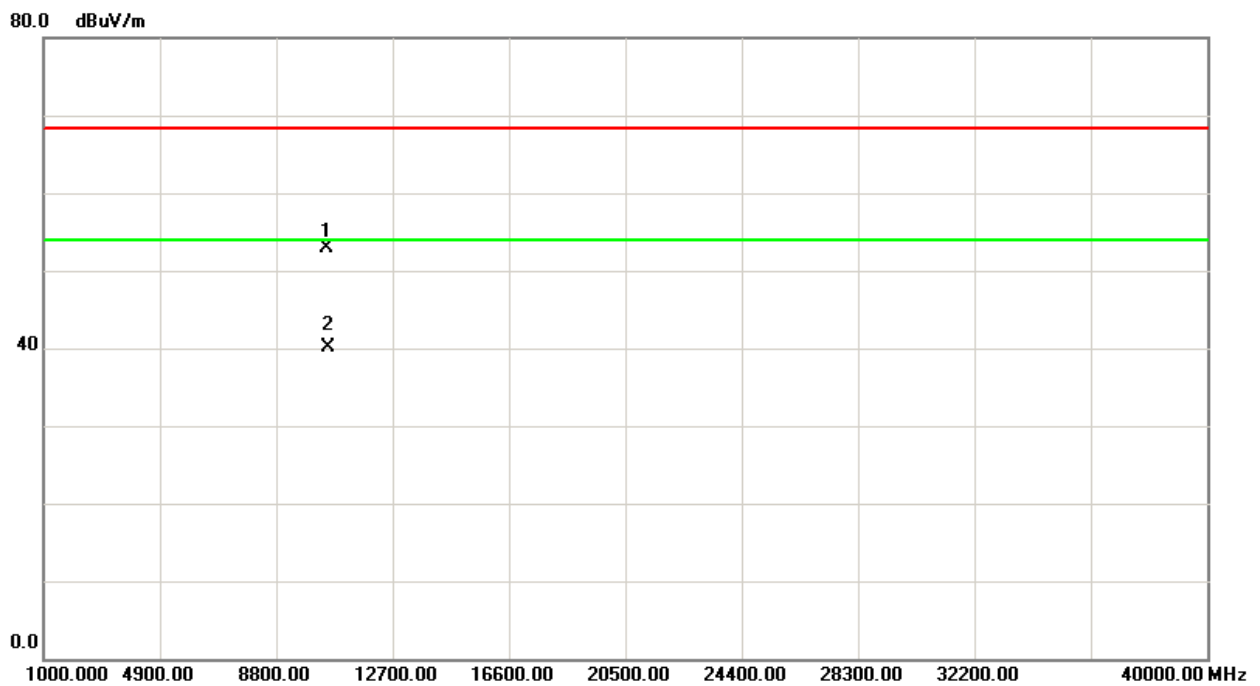
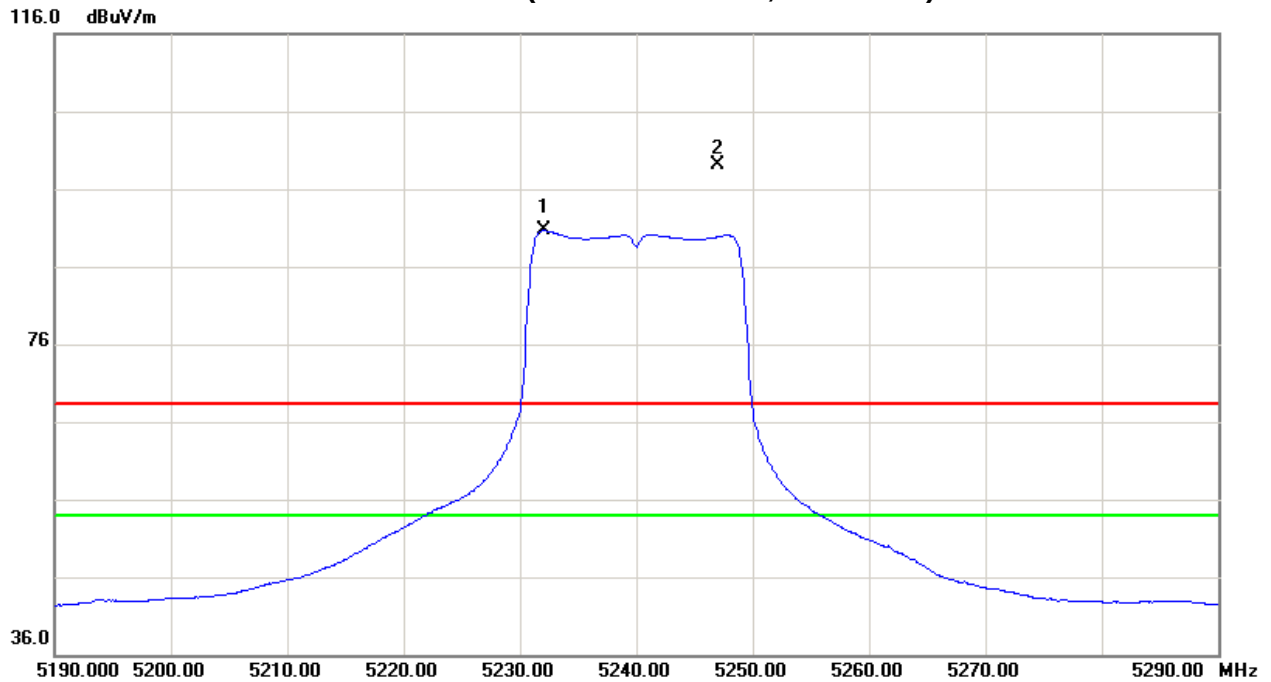


Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Vertical)





Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Horizontal)





Test Mode : Band 1/ TX N40 Mode 5190MHz

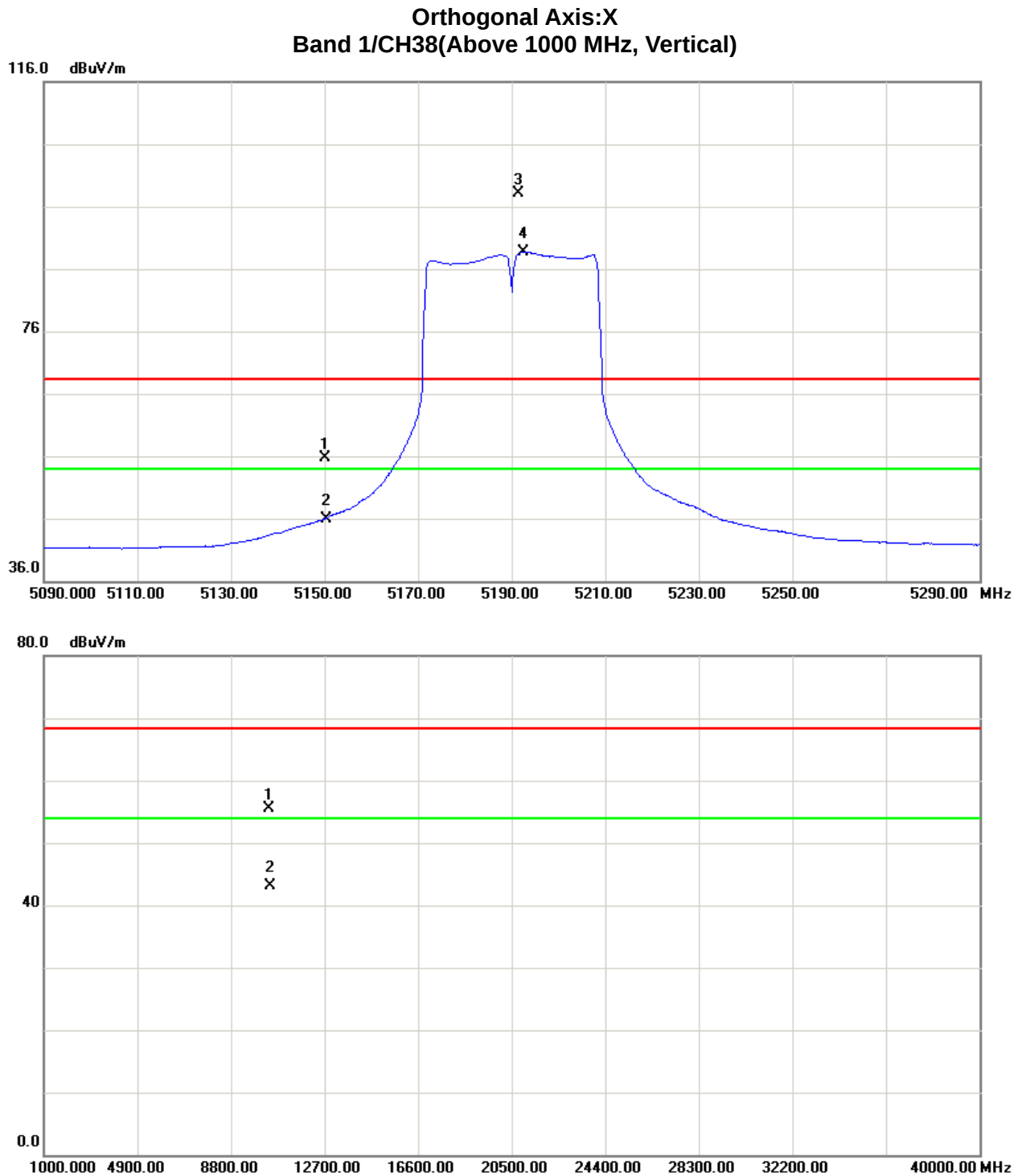
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5150.00	V	13.05	3.24	42.72	55.77	45.96	-49.00	-58.81	68.30	54.00	-27.00	-41.30	X/E
5191.40	V	55.23	45.96	42.82	98.05	88.78	-6.72	-15.99					X/F
10380.46	V	41.73	29.35	13.76	55.49	43.11	-49.28	-61.66	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5150.00	H	13.93	2.31	42.72	56.65	45.03	-48.12	-59.74	68.30	54.00	-27.00	-41.30	X/E
5196.60	H	49.97	41.37	42.83	92.80	84.20	-11.97	-20.57					X/F
10380.23	H	42.43	30.12	13.76	56.19	43.88	-48.58	-60.89	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 1/ TX N40 Mode 5230MHz

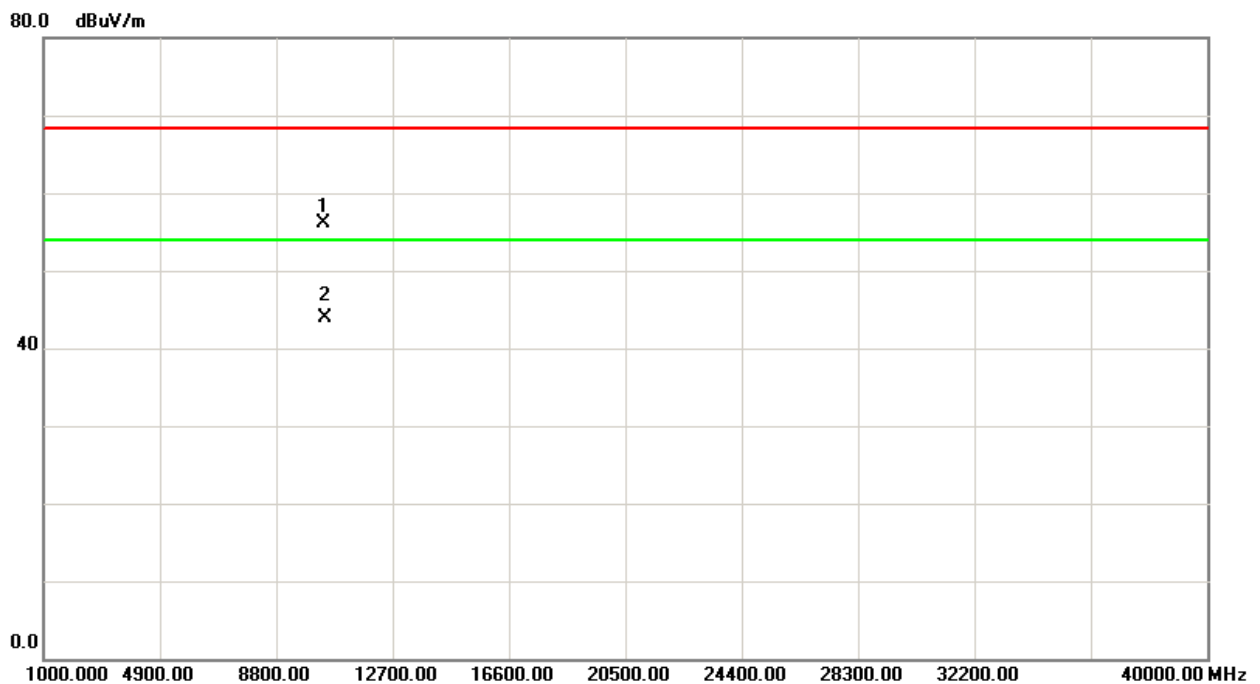
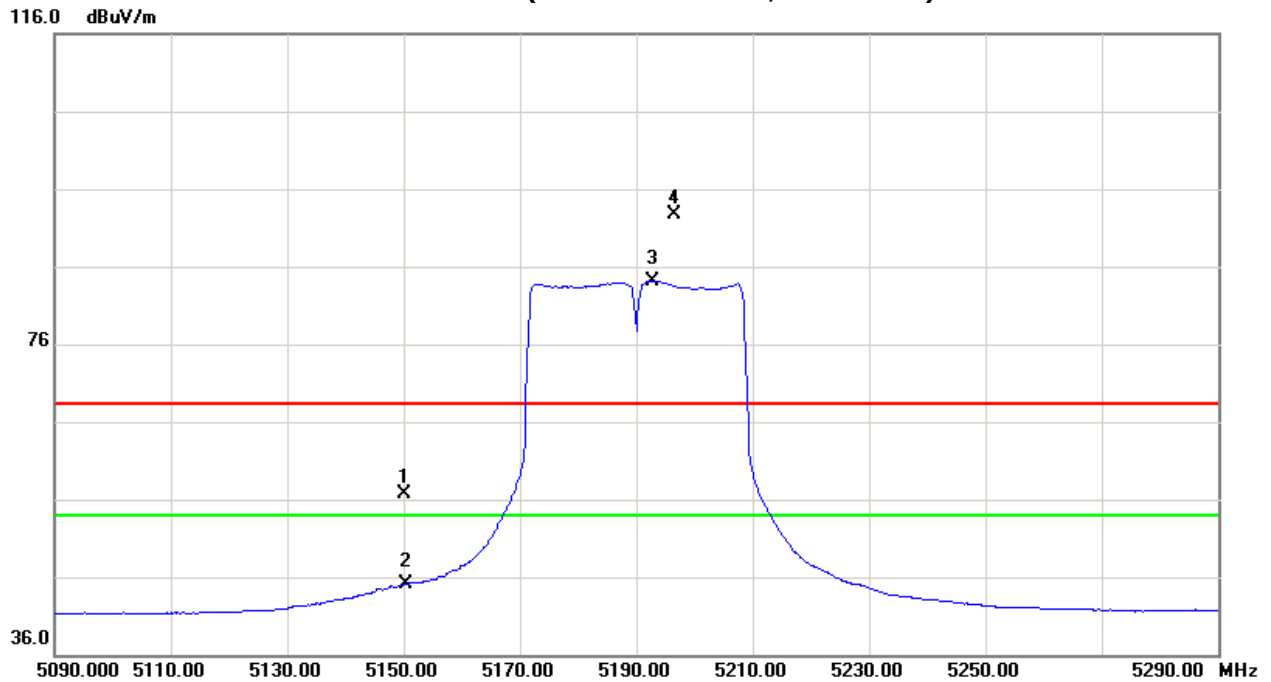
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5222.40	V	53.60	45.07	42.90	96.50	87.97	-8.27	-16.80					X/F
10460.49	V	41.55	29.62	13.85	55.40	43.47	-49.37	-61.30	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5232.40	H	50.64	42.30	42.92	93.56	85.22	-11.21	-19.55					X/F
10460.65	H	39.85	28.23	13.85	53.70	42.08	-51.07	-62.69	68.30	54.00	-27.00	-41.30	X/H



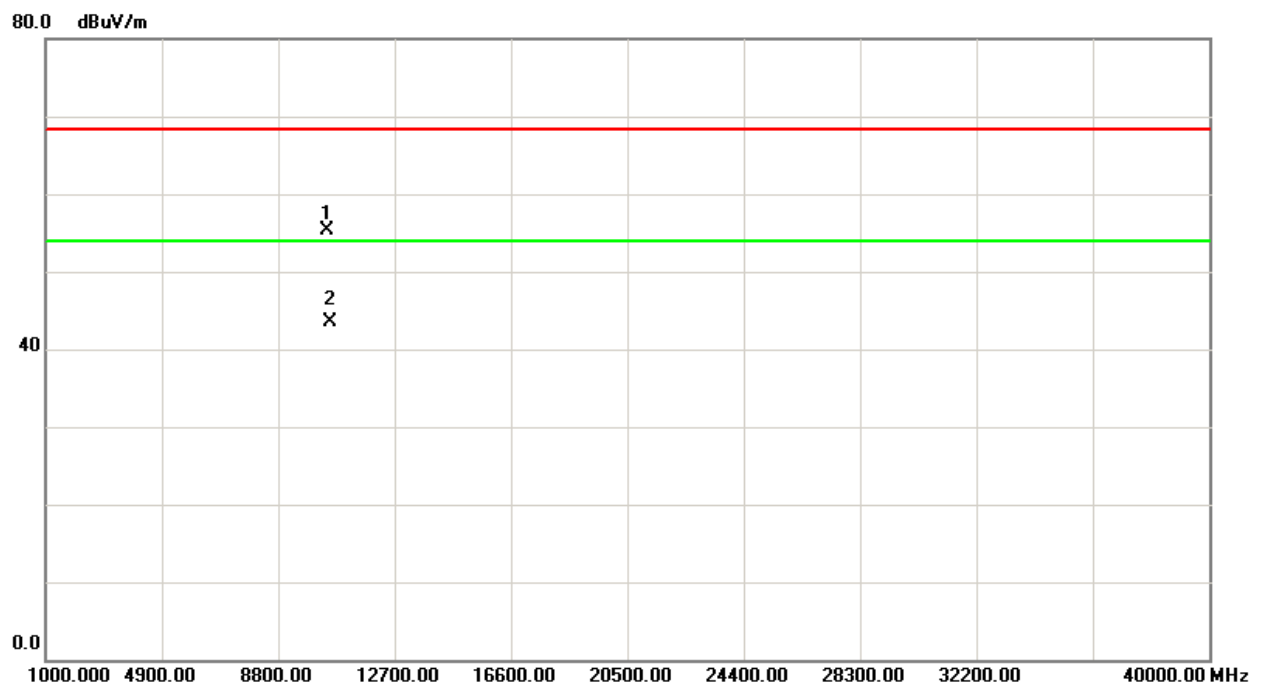
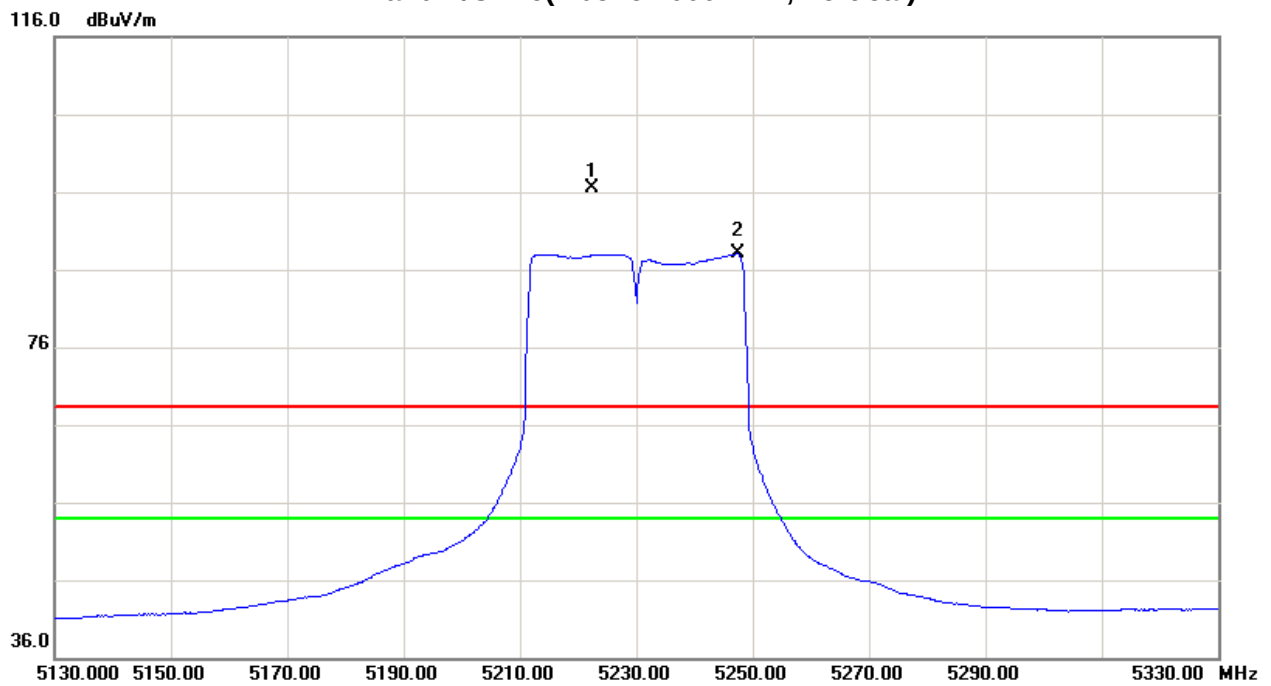


Orthogonal Axis:X
Band 1/CH38(Above 1000 MHz, Horizontal)



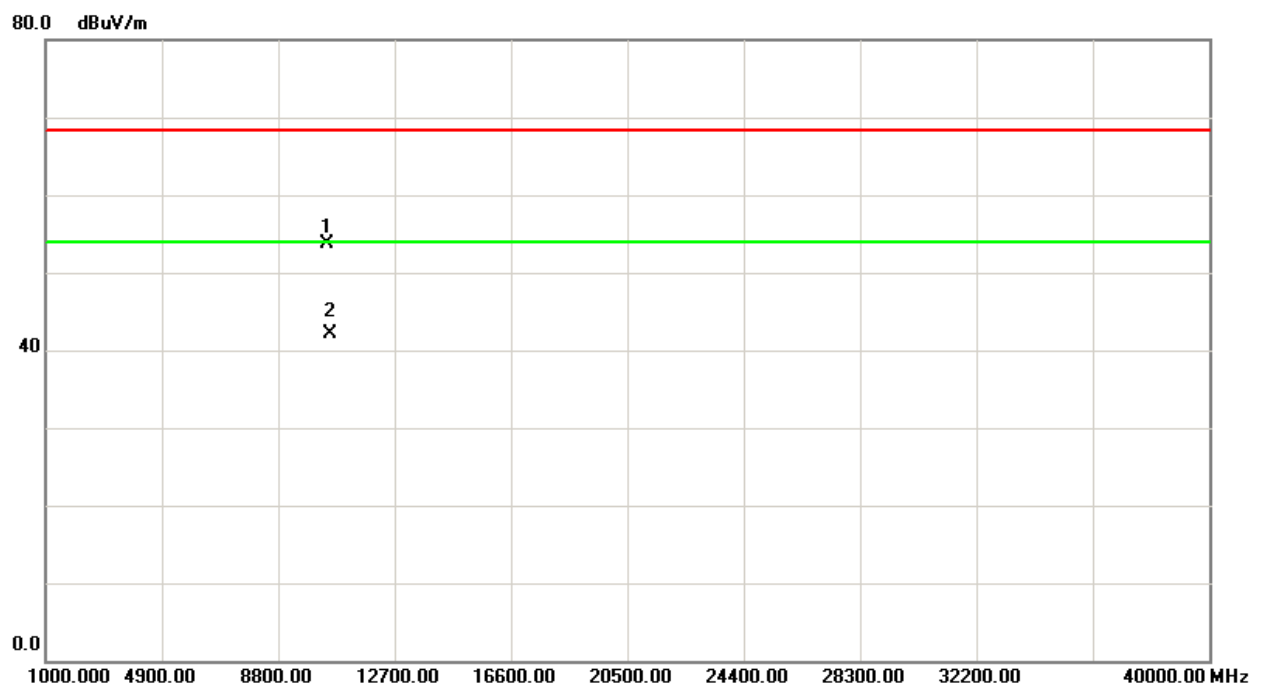
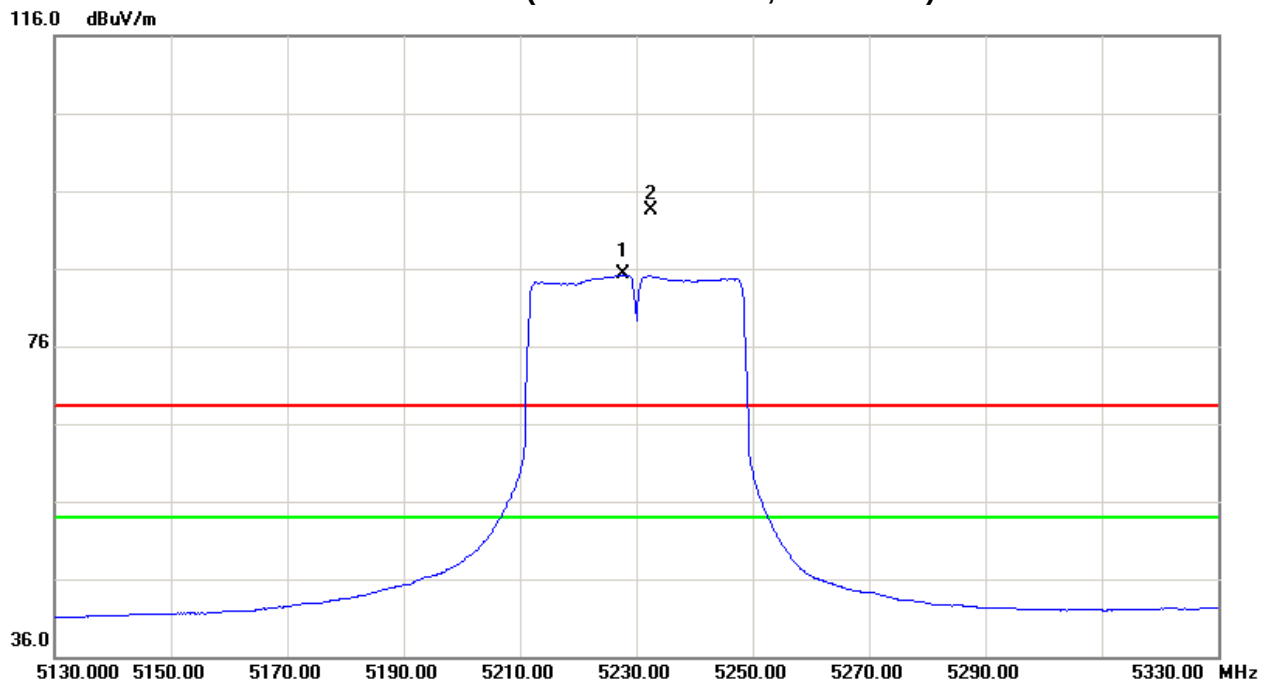


Orthogonal Axis:X
Band 1/CH46(Above 1000 MHz, Vertical)





Orthogonal Axis:X
Band 1/CH46(Above 1000 MHz, Horizontal)





Test Mode : Band 2/ TX A Mode 5260MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5253.50	V	58.80	51.80	42.98	101.78	94.78	-2.99	-9.99					X/F
10519.93	V	36.45	24.22	13.90	50.35	38.12	-54.42	-66.65	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5253.90	H	55.18	47.64	42.98	98.16	90.62	-6.61	-14.15					X/F
10519.76	H	36.34	24.45	13.90	50.24	38.35	-54.53	-66.42	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 2/ TX A Mode 5280MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5284.90	V	58.86	51.14	43.06	101.92	94.20	-2.85	-10.57					X/F
10559.71	V	36.34	24.78	13.90	50.24	38.68	-54.53	-66.09	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5287.50	H	57.56	50.02	43.06	100.62	93.08	-4.15	-11.69					X/F
10560.23	H	36.66	24.32	13.90	50.56	38.22	-54.21	-66.55	68.30	54.00	-27.00	-41.30	X/H

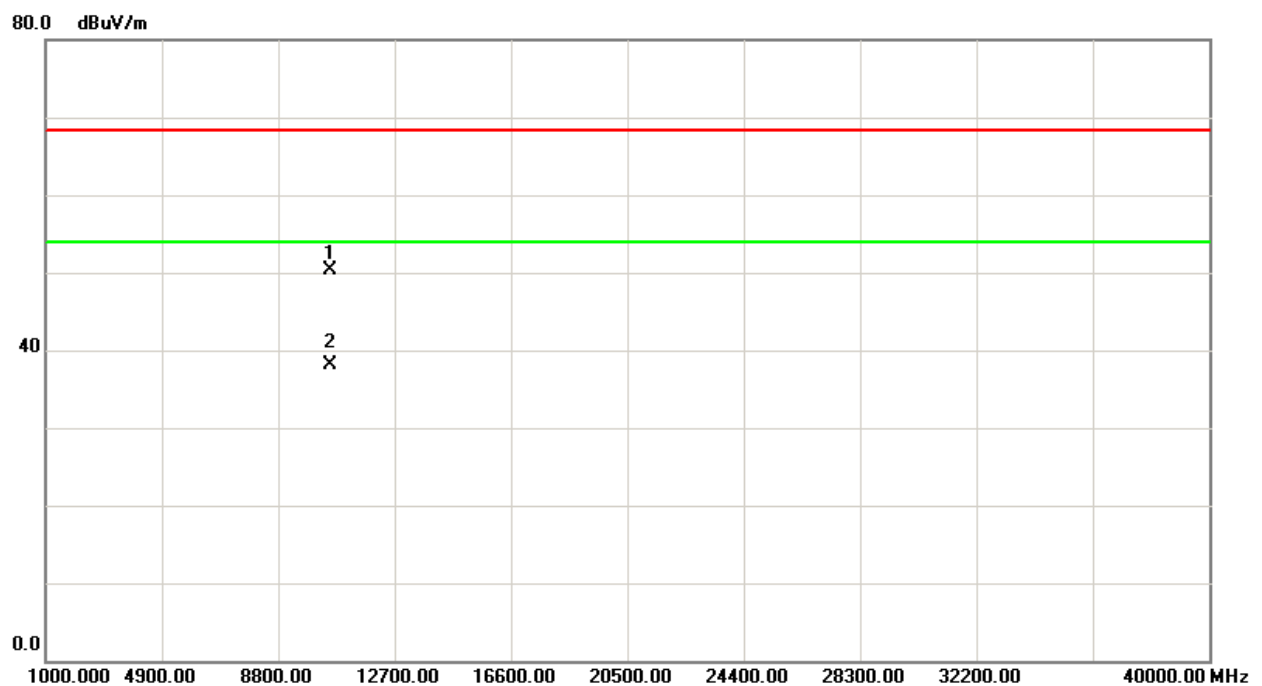
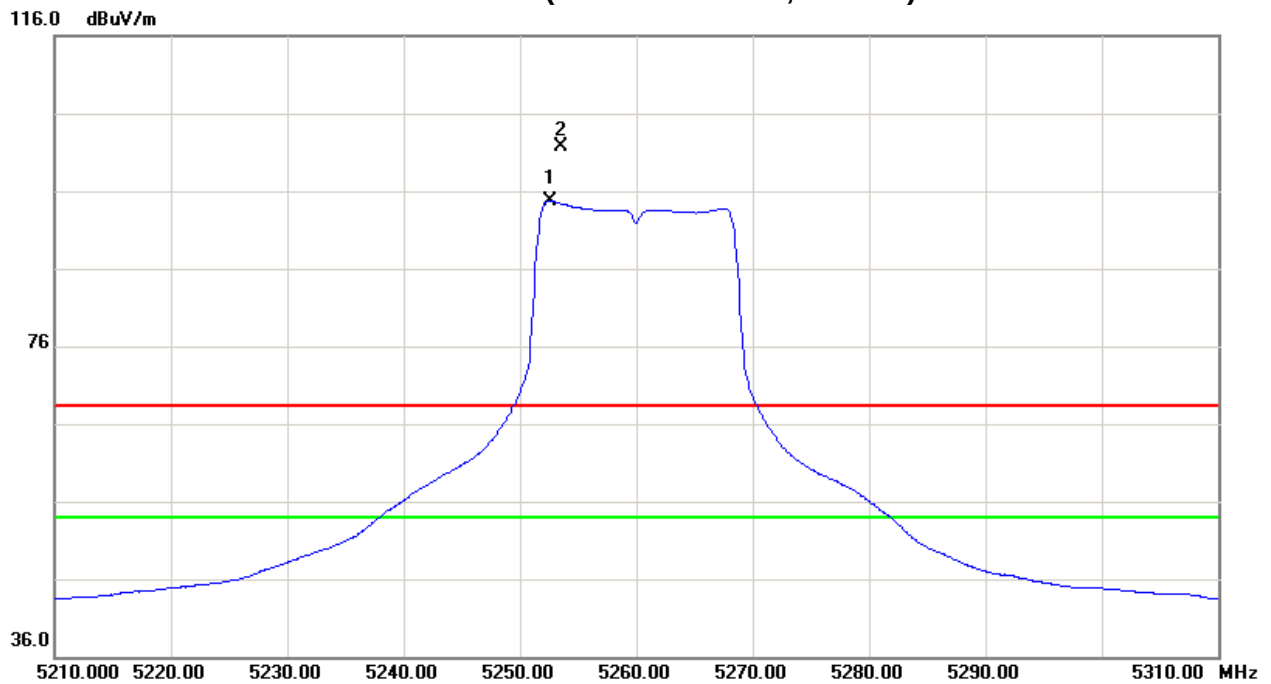
Test Mode : Band 2/ TX A Mode 5320MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5327.40	V	60.96	53.52	43.15	104.11	96.67	-0.66	-8.10					X/F
5350.00	V	16.57	7.07	43.21	59.78	50.28	-44.99	-54.49	68.30	54.00	-27.00	-41.30	X/E
10639.76	V	36.54	24.39	13.90	50.44	38.29	-54.33	-66.48	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5318.40	H	58.18	49.79	43.13	101.31	92.92	-3.46	-11.85					X/F
5350.00	H	11.75	3.60	43.21	54.96	46.81	-49.81	-57.96	68.30	54.00	-27.00	-41.30	X/E
10640.20	H	36.40	24.32	13.90	50.30	38.22	-54.47	-66.55	68.30	54.00	-27.00	-41.30	X/H

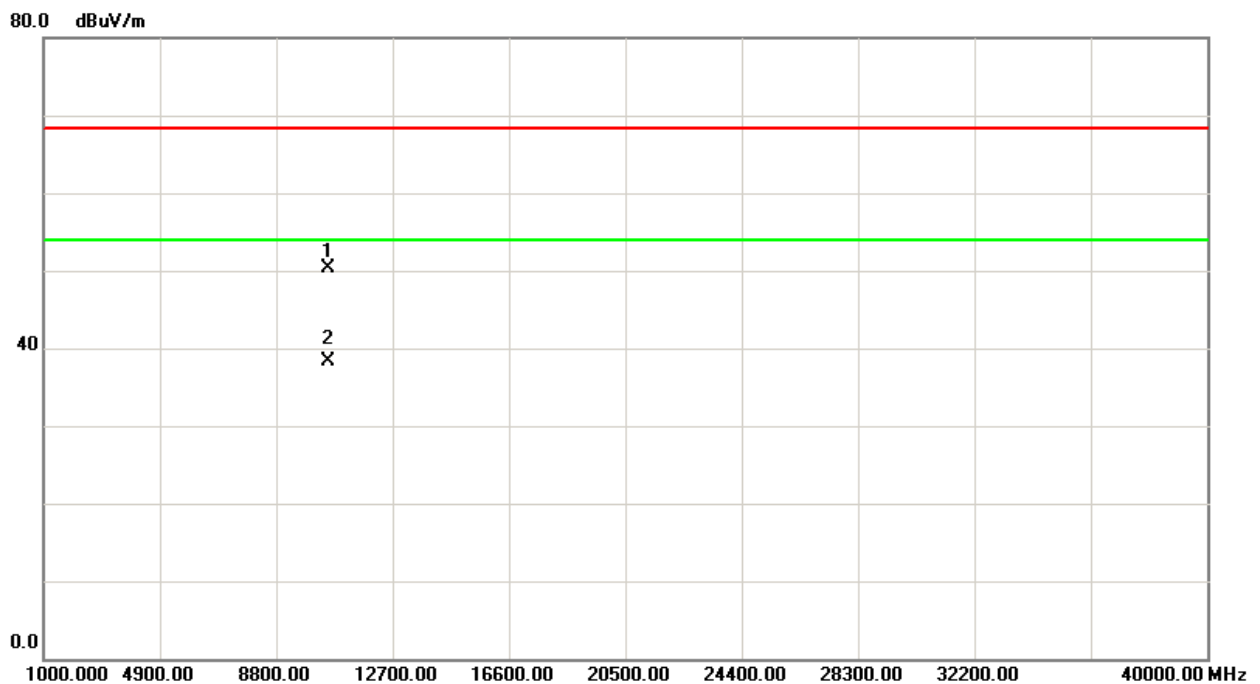
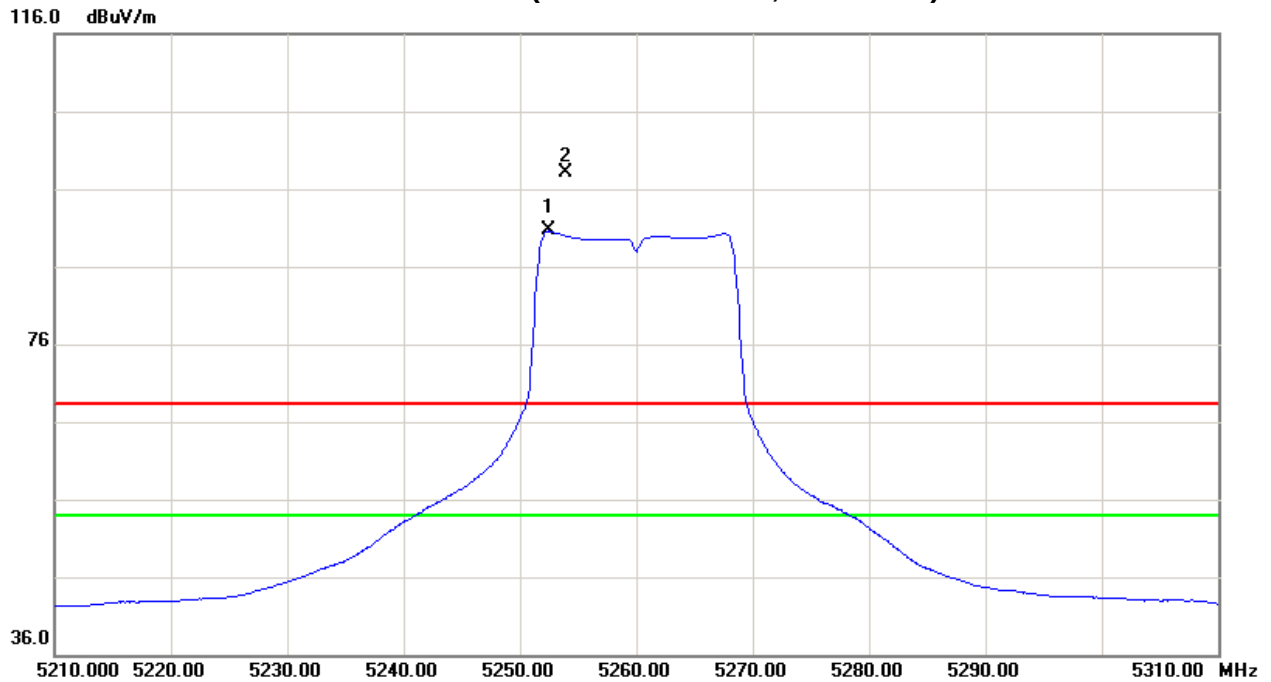


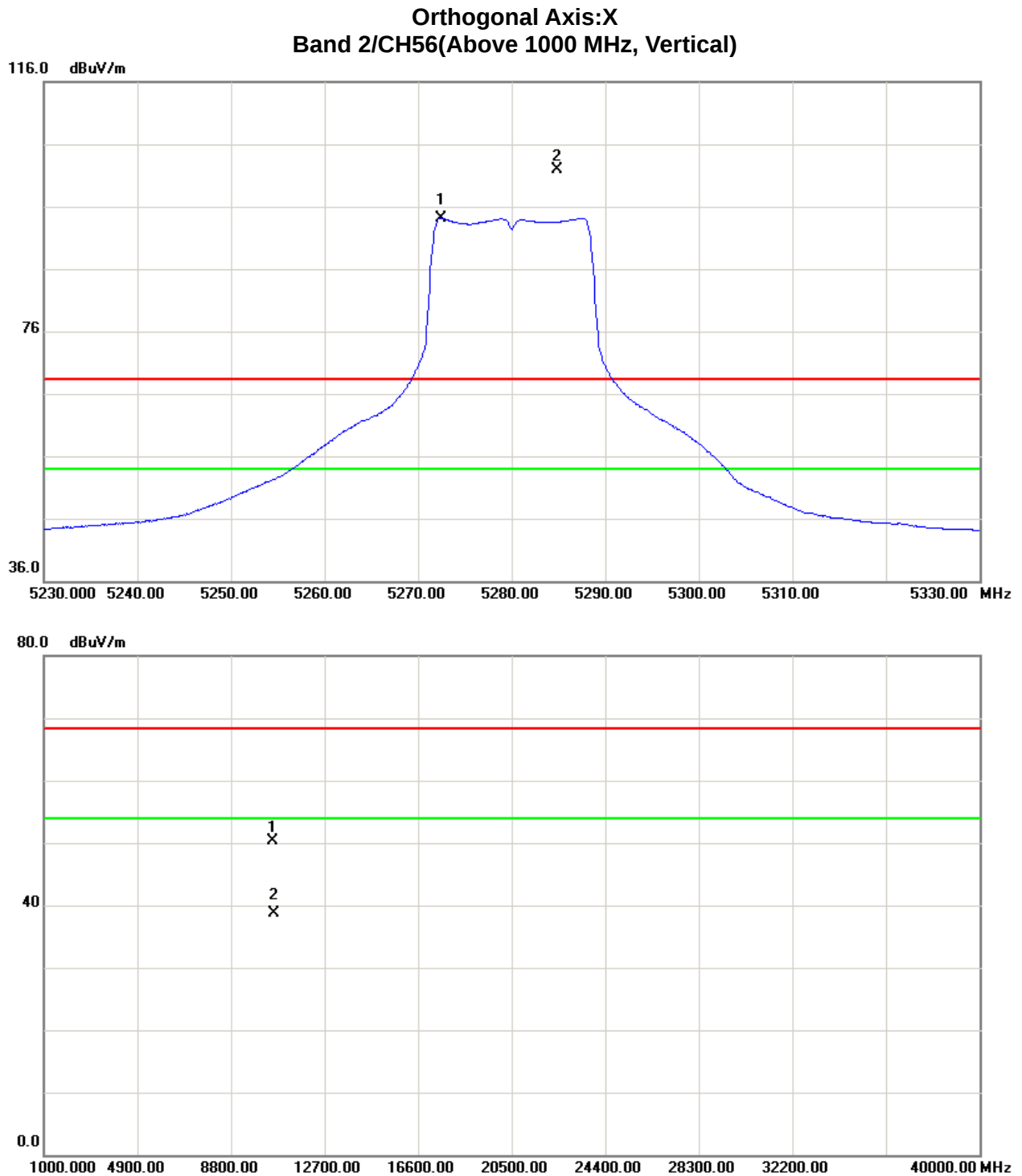
Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Vertical)





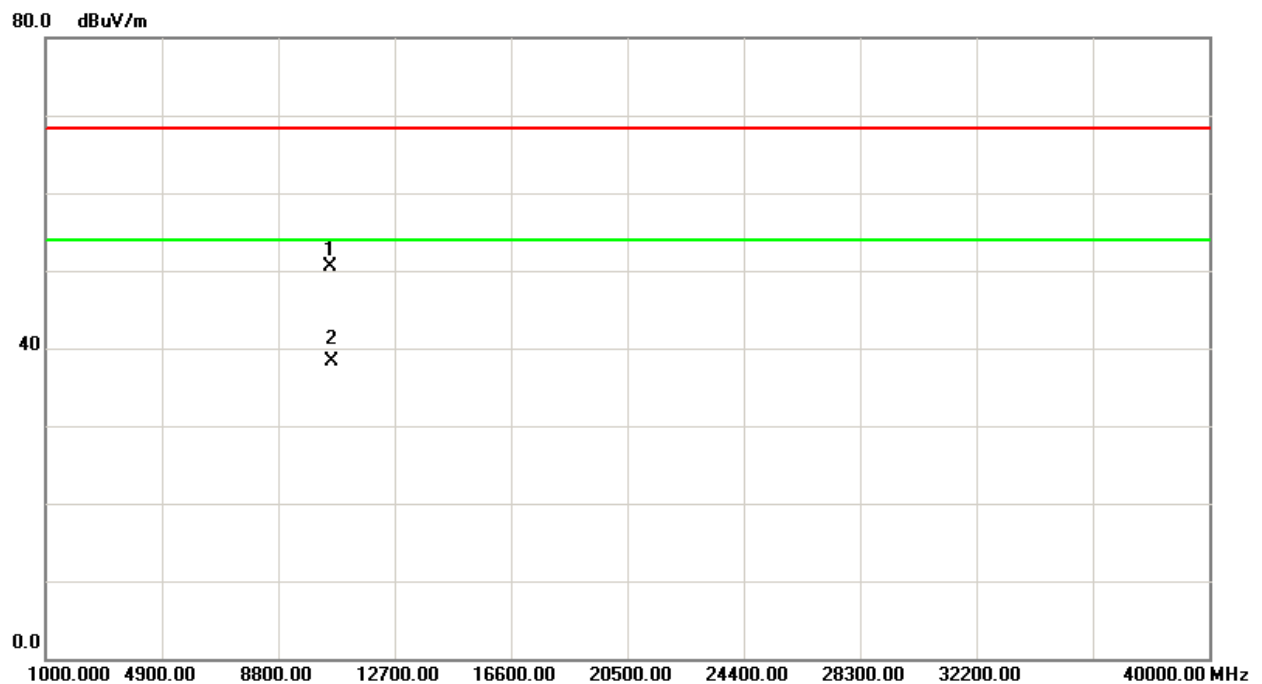
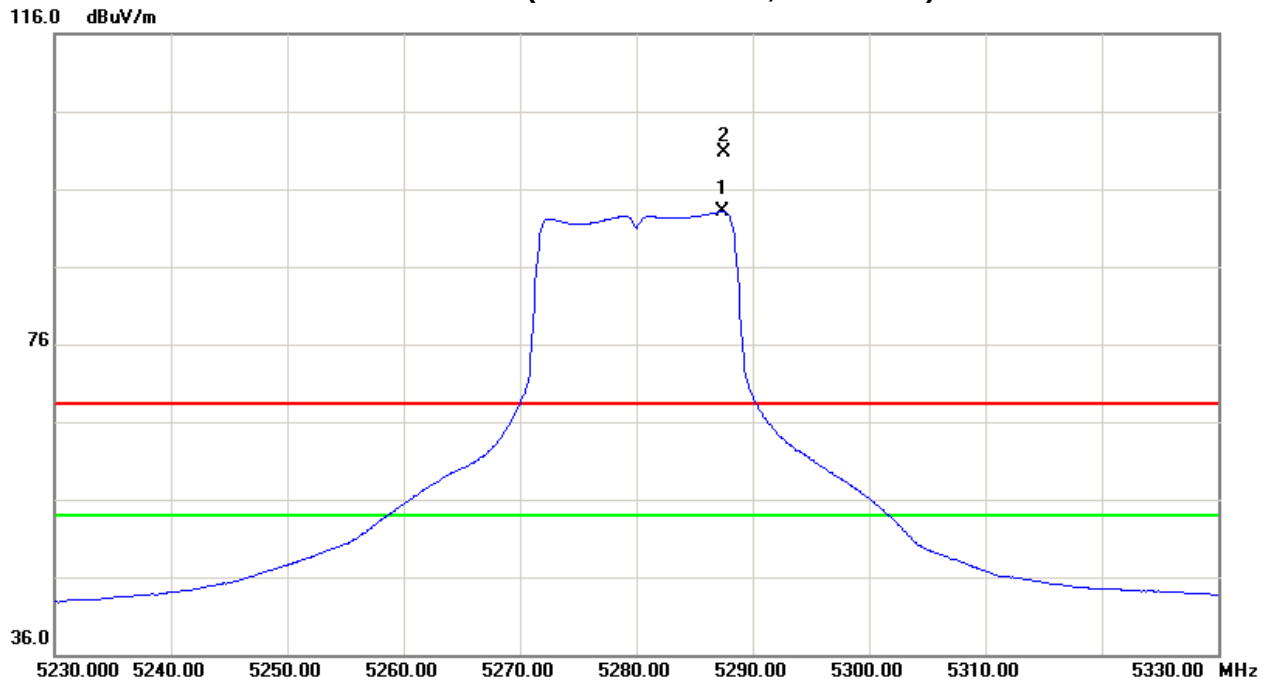
Orthogonal Axis:X
Band 2/CH52 (Above 1000 MHz, Horizontal)

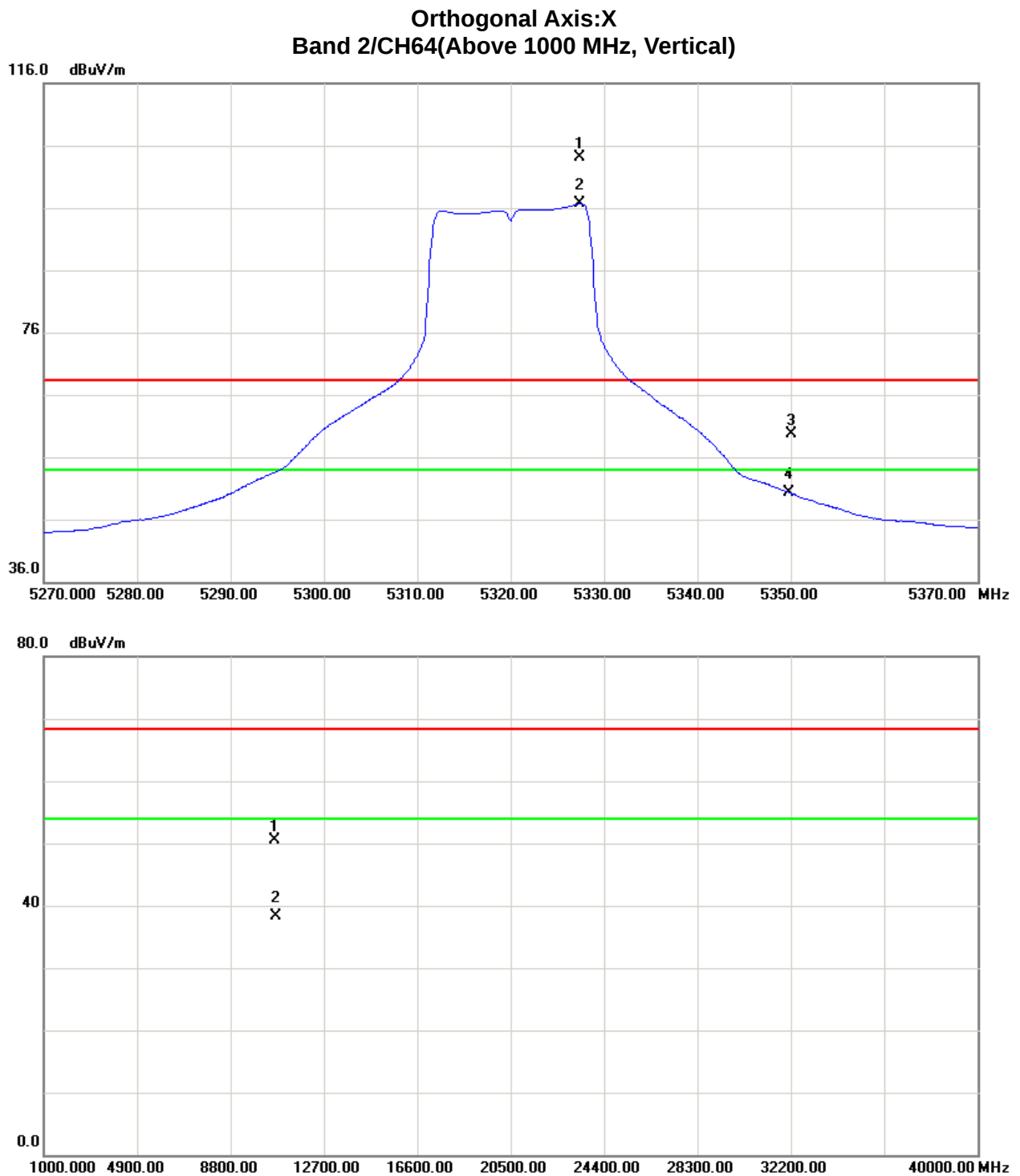






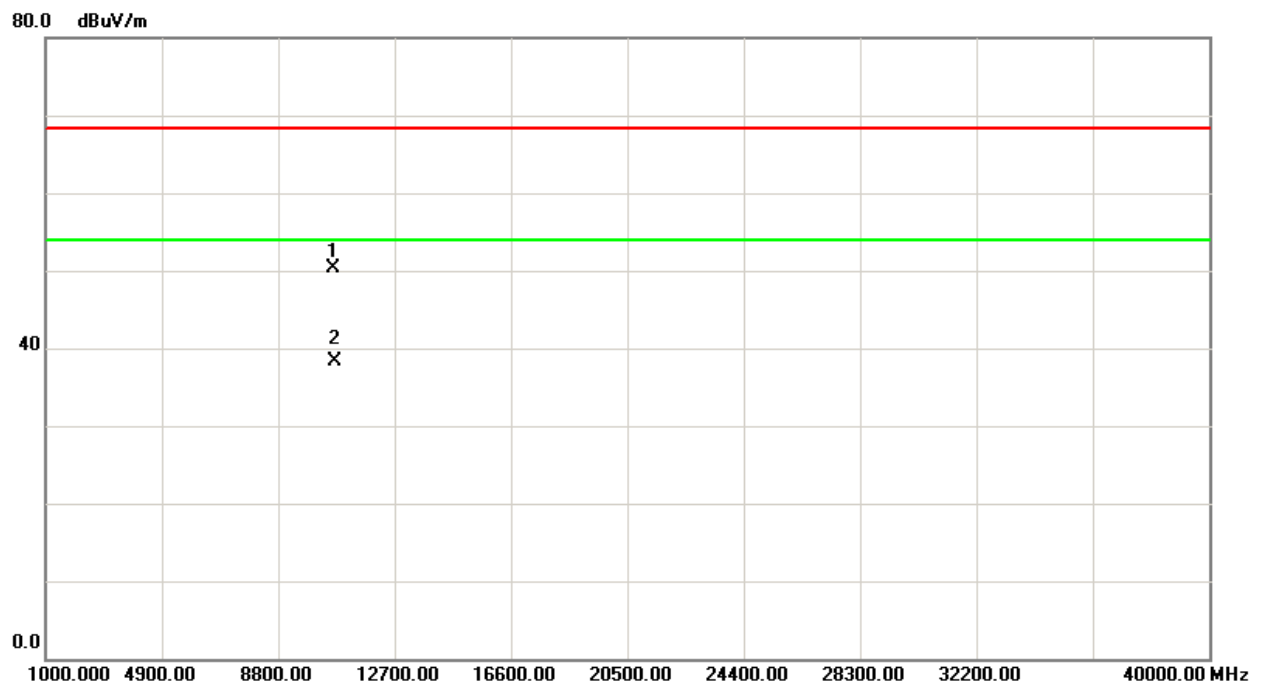
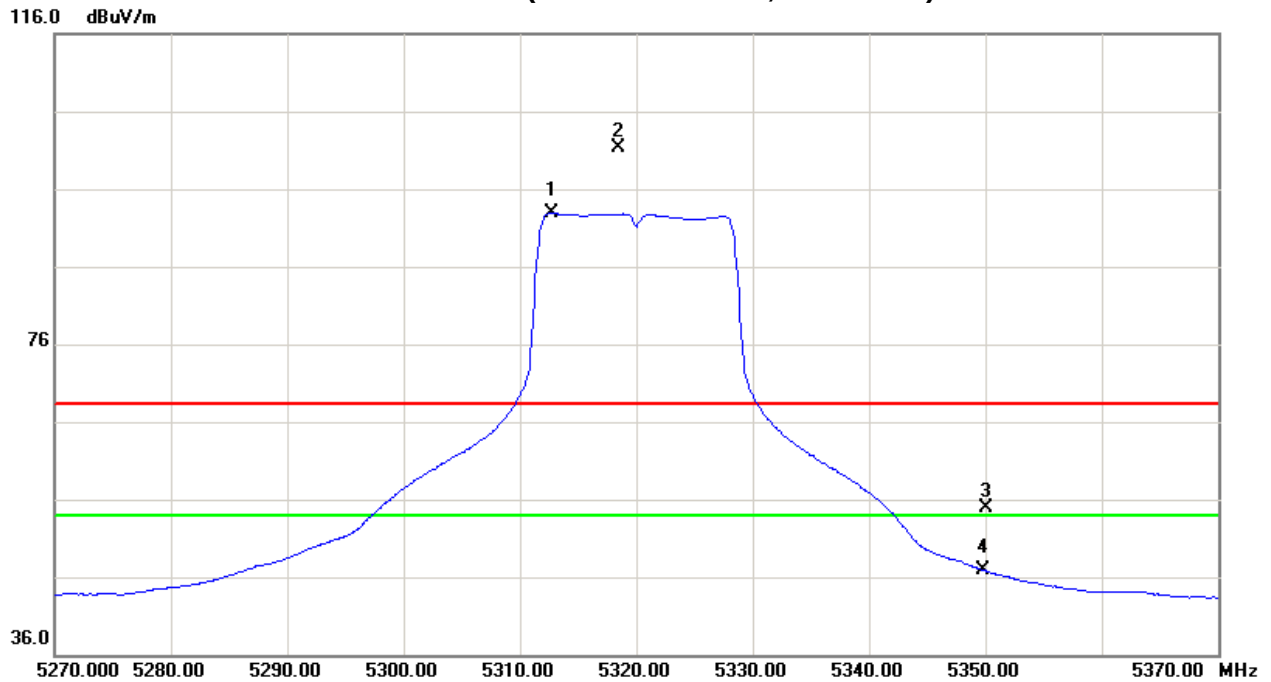
Orthogonal Axis:X
Band 2/CH56(Above 1000 MHz, Horizontal)







Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Horizontal)





Test Mode : Band 2/ TX N20 Mode 5260MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5253.10	V	58.15	51.12	42.97	101.12	94.09	-3.65	-10.68					X/F
10520.17	V	36.54	24.47	13.90	50.44	38.37	-54.33	-66.40	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5263.00	H	56.04	48.39	43.00	99.04	91.39	-5.73	-13.38					X/F
10519.51	H	36.22	24.31	13.90	50.12	38.21	-54.65	-66.56	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 2/ TX N20 Mode 5280MHz

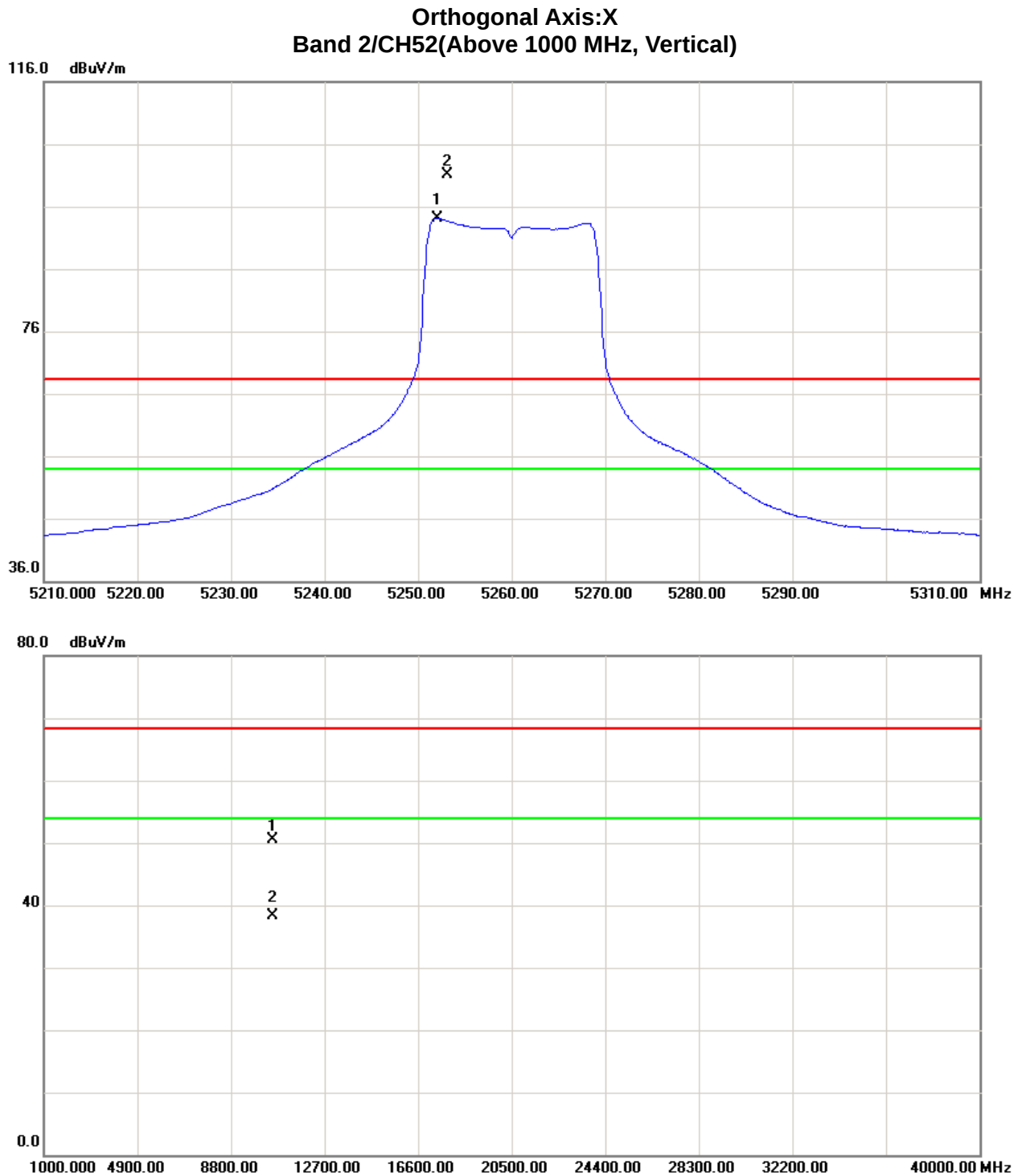
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5283.10	V	58.56	49.85	43.04	101.60	92.89	-3.17	-11.88					X/F
10560.28	V	36.28	24.55	13.90	50.18	38.45	-54.59	-66.32	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5287.30	H	55.35	47.88	43.06	98.41	90.94	-6.36	-13.83					X/F
10560.41	H	36.19	24.22	13.90	50.09	38.12	-54.68	-66.65	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 2/ TX N20 Mode 5320MHz

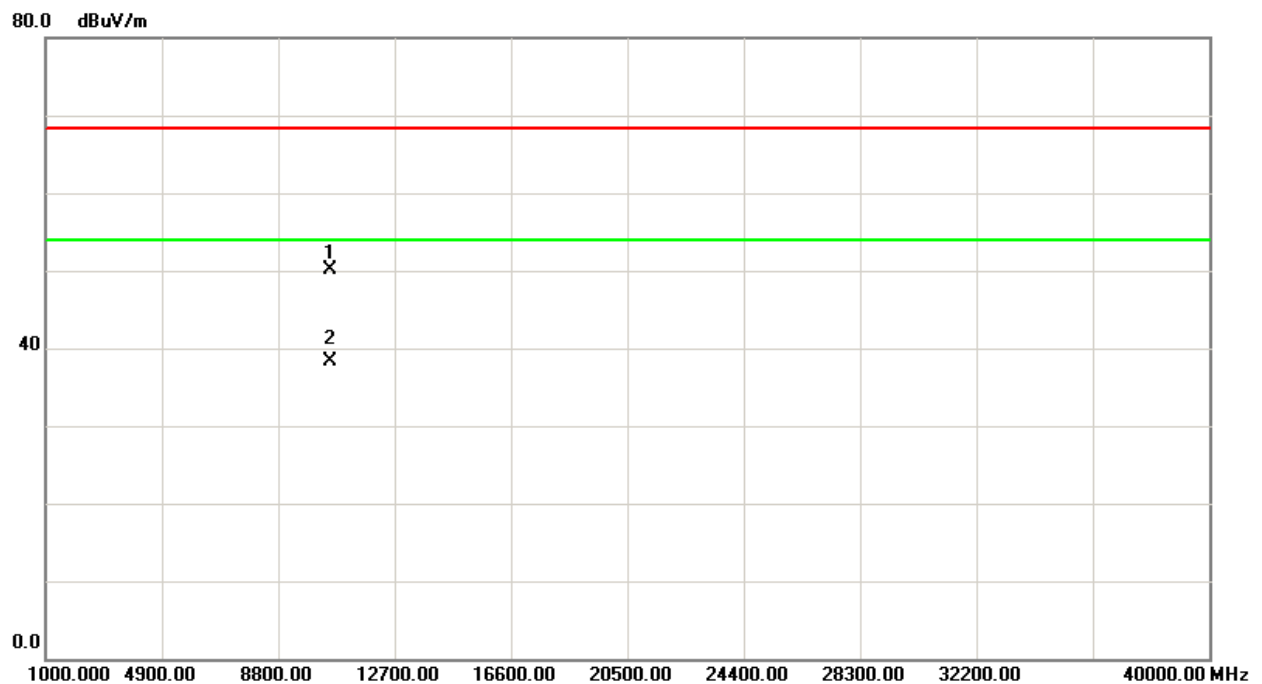
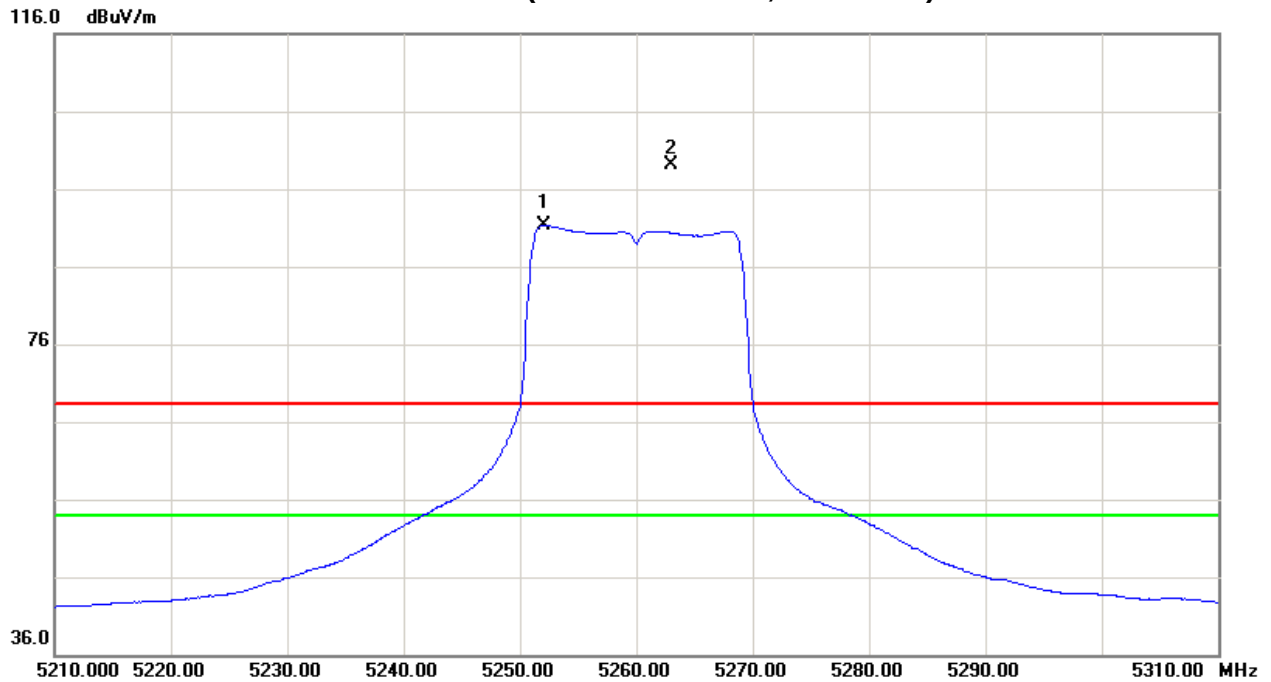
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5314.20	V	59.88	51.65	43.12	103.00	94.77	-1.77	-10.00					X/F
5350.00	V	15.58	6.30	43.21	58.79	49.51	-45.98	-55.26	68.30	54.00	-27.00	-41.30	X/E
10639.72	V	36.12	24.45	13.90	50.02	38.35	-54.75	-66.42	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5315.00	H	56.67	49.06	43.12	99.79	92.18	-4.98	-12.59					X/F
5350.00	H	13.11	3.78	43.21	56.32	46.99	-48.45	-57.78	68.30	54.00	-27.00	-41.30	X/E
10640.27	H	36.52	24.47	13.90	50.42	38.37	-54.35	-66.40	68.30	54.00	-27.00	-41.30	X/H



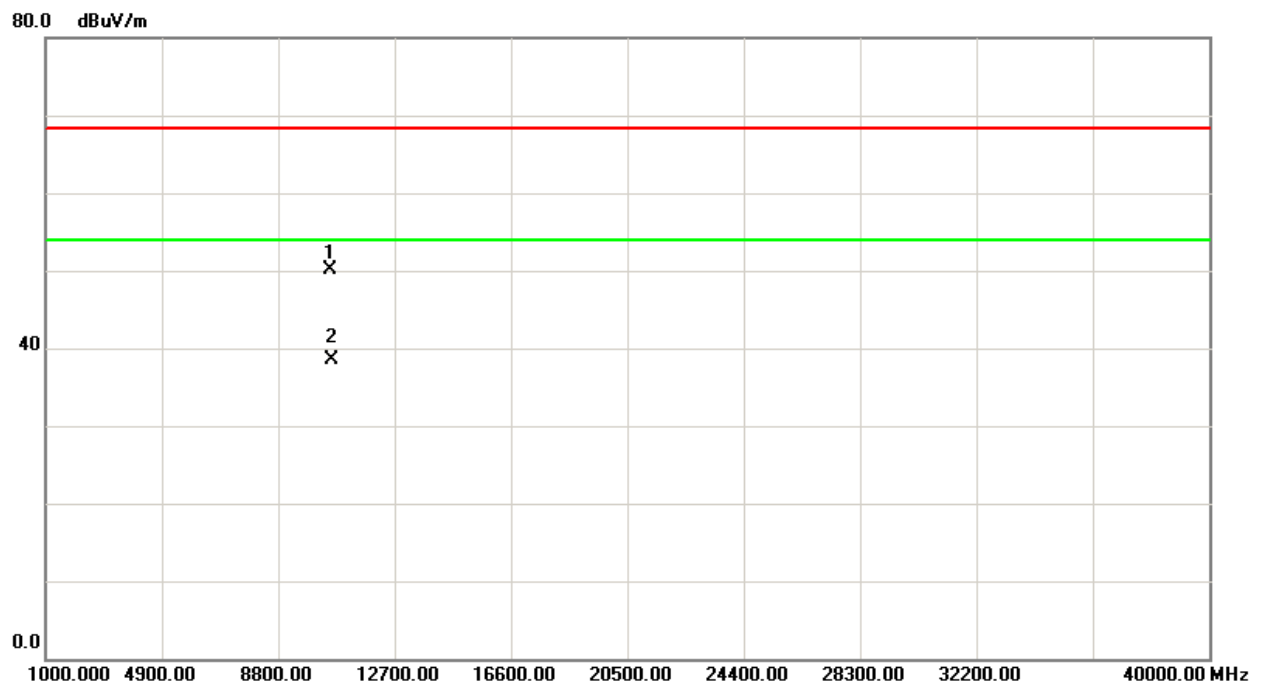
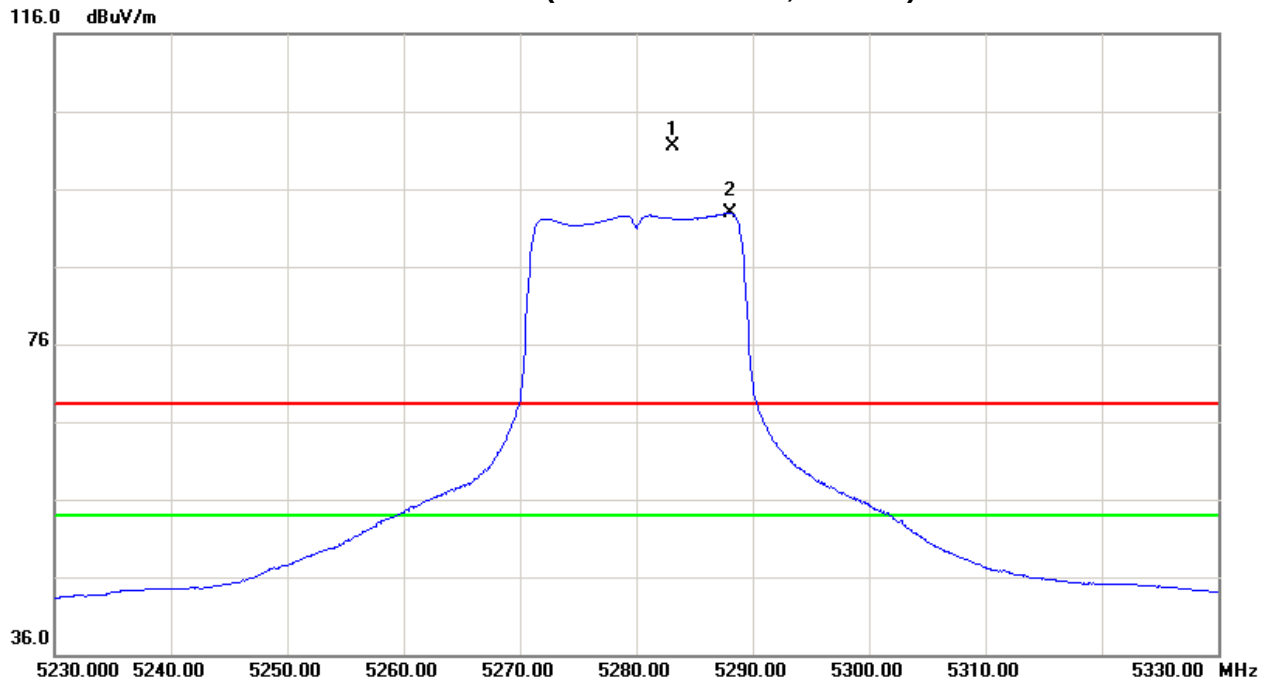


Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Horizontal)



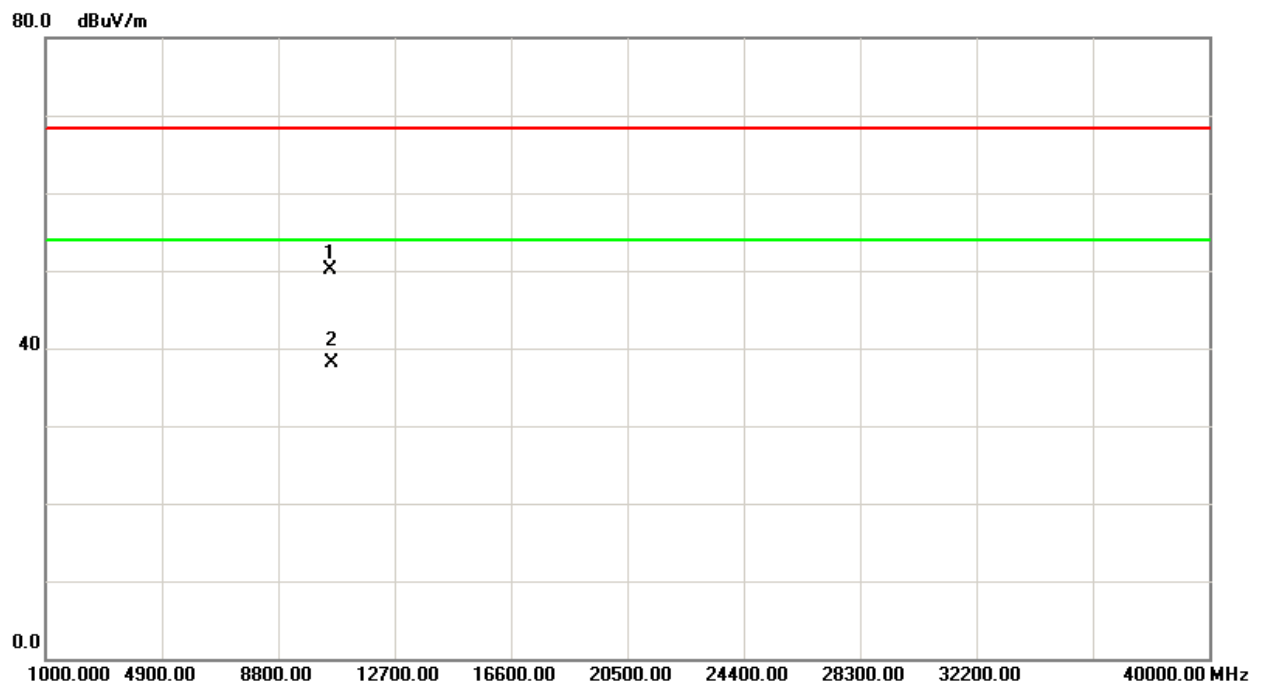
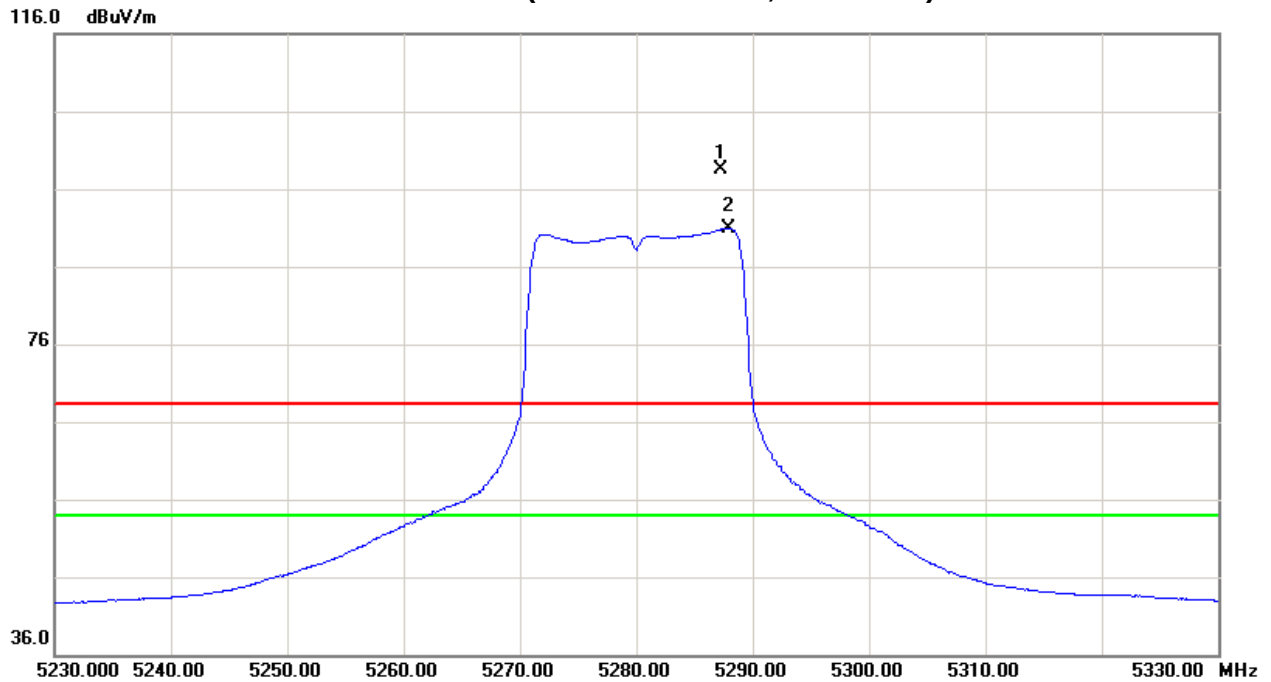


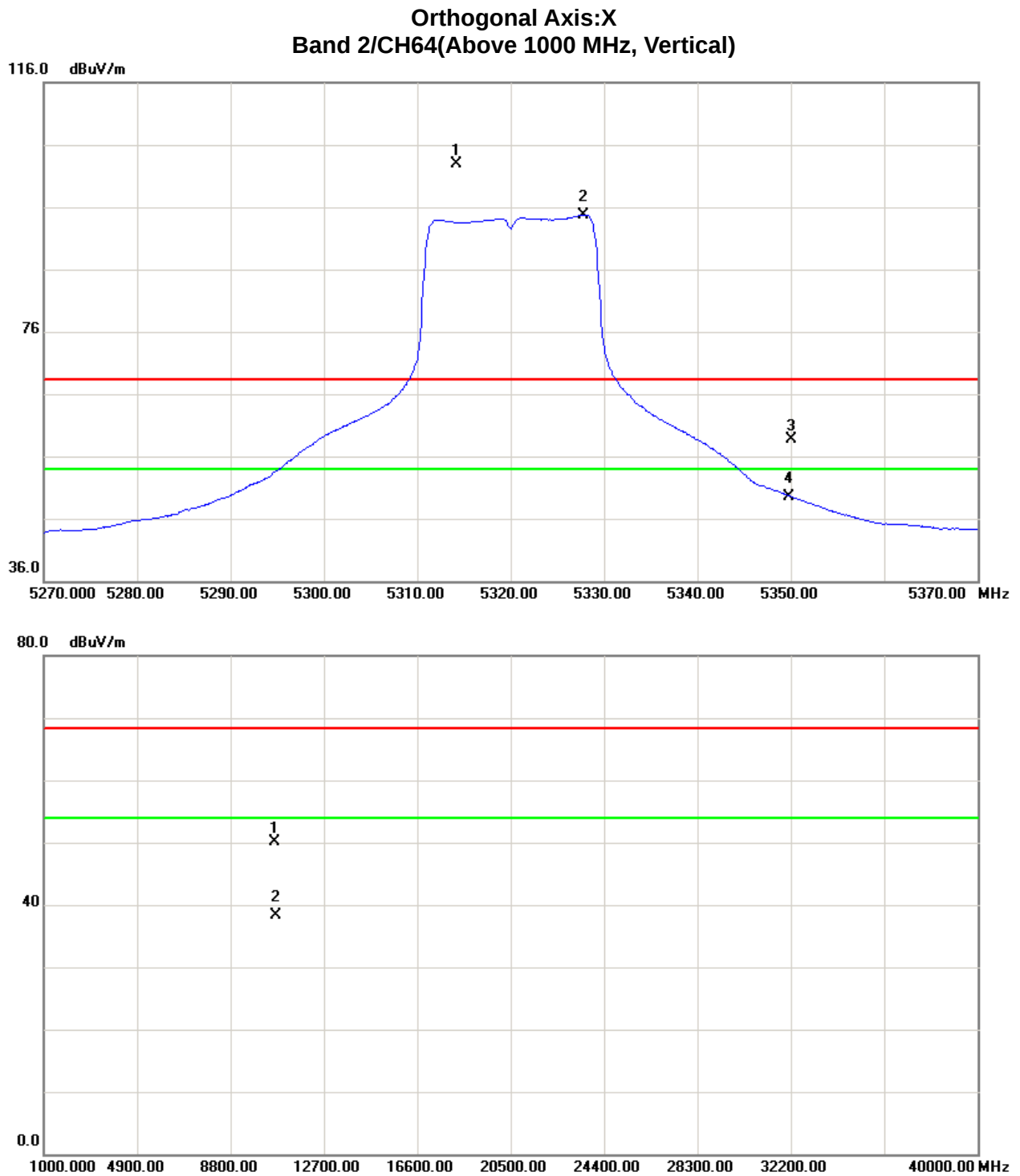
Orthogonal Axis:X
Band 2/CH56(Above 1000 MHz, Vertical)





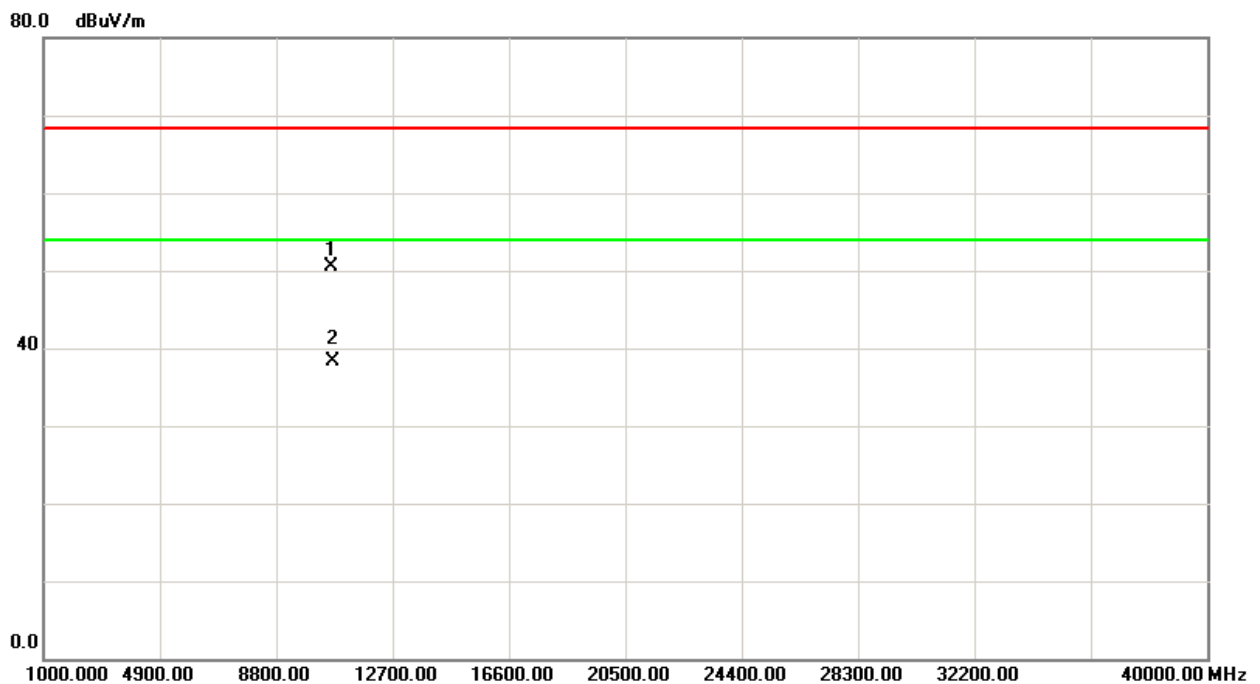
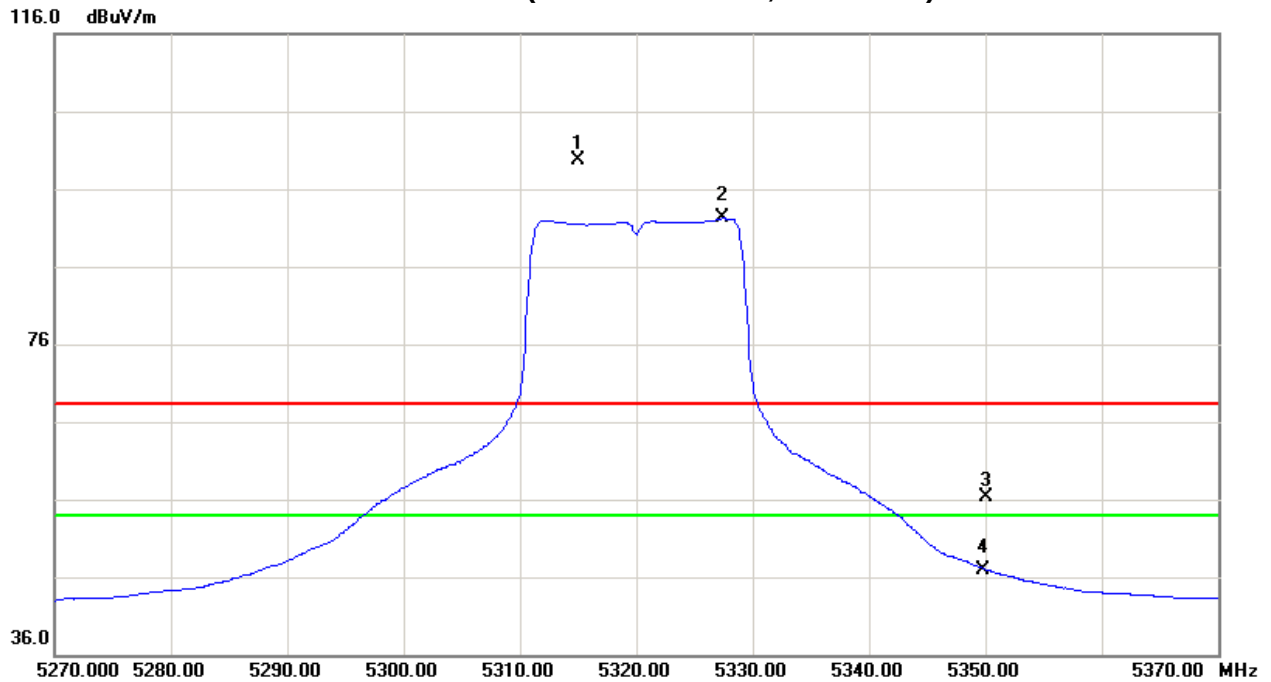
Orthogonal Axis:X
Band 2/CH56(Above 1000 MHz, Horizontal)







Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Horizontal)





Test Mode : Band 2/ TX N40 Mode 5270MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5286.40	V	53.60	44.73	43.06	96.66	87.79	-8.11	-16.98					X/F
10380.38	V	41.75	29.32	13.76	55.51	43.08	-49.26	-61.69	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5285.40	H	49.60	40.57	43.06	92.66	83.63	-12.11	-21.14					X/F
10540.26	H	41.41	30.29	13.90	55.31	44.19	-49.46	-60.58	68.30	54.00	-27.00	-41.30	X/H

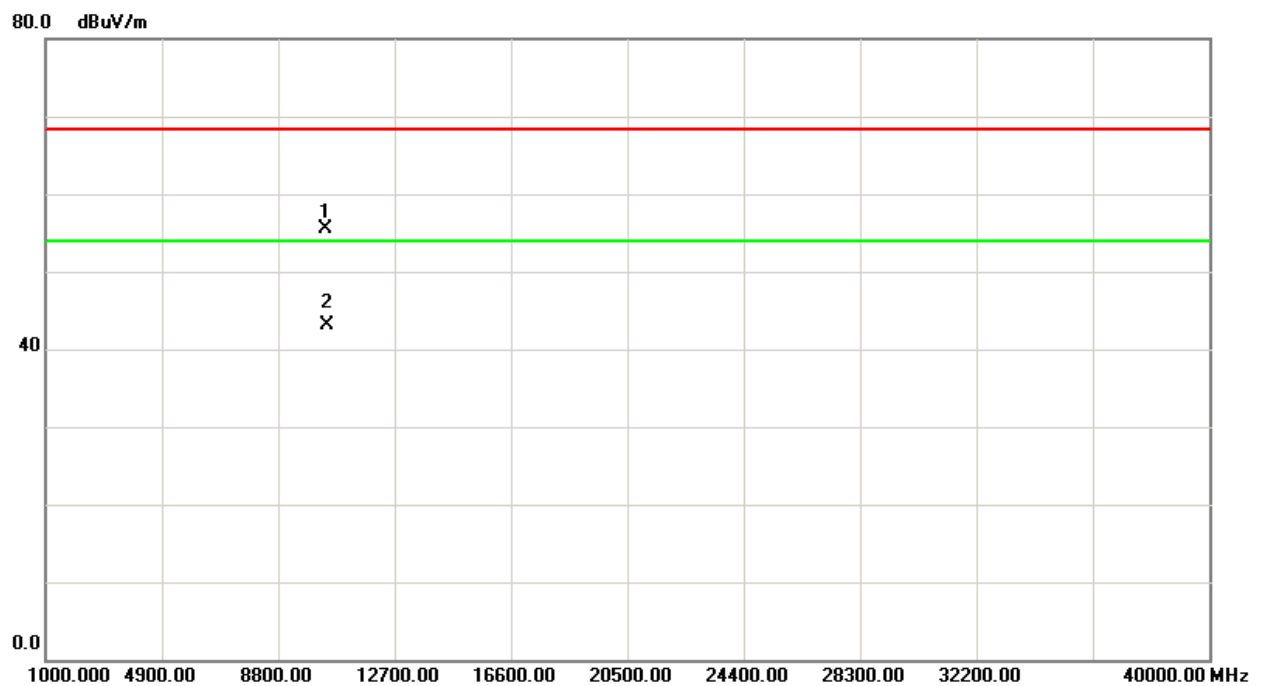
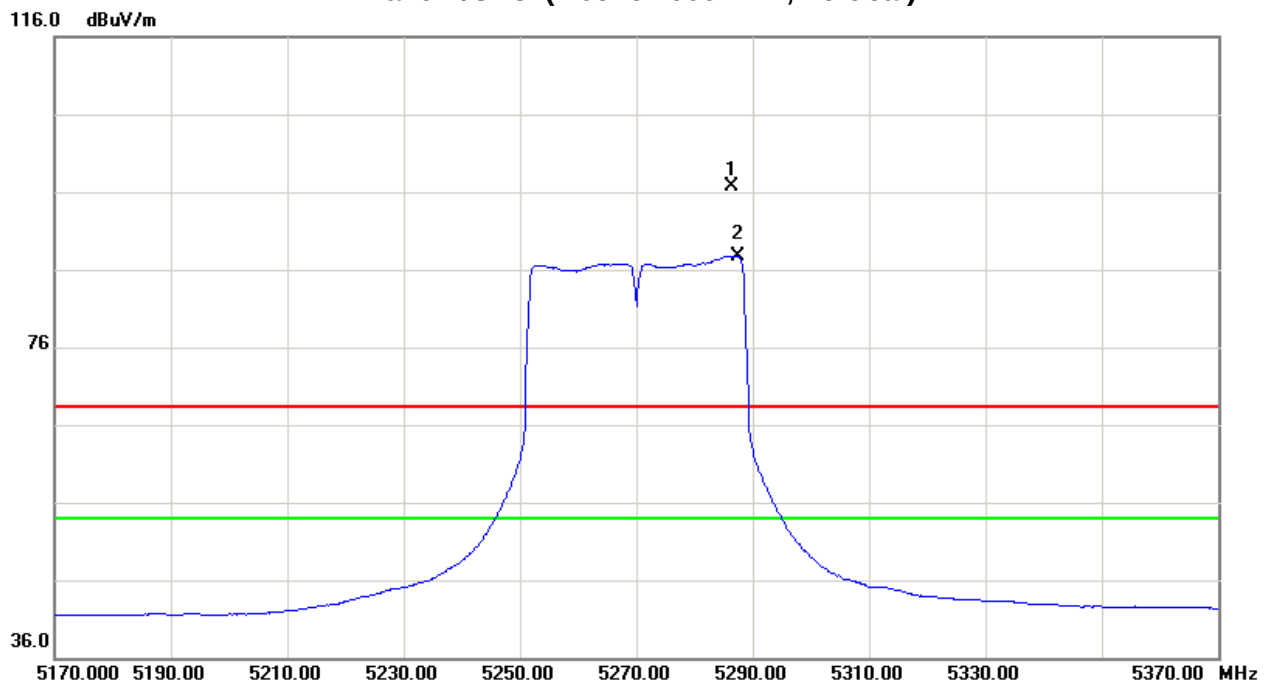
Test Mode : Band 2/ TX N40 Mode 5310MHz

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5316.40	V	53.33	44.61	43.13	96.46	87.74	-8.31	-17.03					X/F
5350.00	V	11.87	1.67	43.21	55.08	44.88	-49.69	-59.89	68.30	54.00	-27.00	-41.30	X/E
10620.14	V	42.54	30.11	13.90	56.44	44.01	-48.33	-60.76	68.30	54.00	-27.00	-41.30	X/H

Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5296.60	H	51.38	42.12	43.08	94.46	85.20	-10.31	-19.57					X/F
5350.00	H	11.79	0.89	43.21	55.00	44.10	-49.77	-60.67	68.30	54.00	-27.00	-41.30	X/E
10620.52	H	40.28	28.62	13.90	54.18	42.52	-50.59	-62.25	68.30	54.00	-27.00	-41.30	X/H

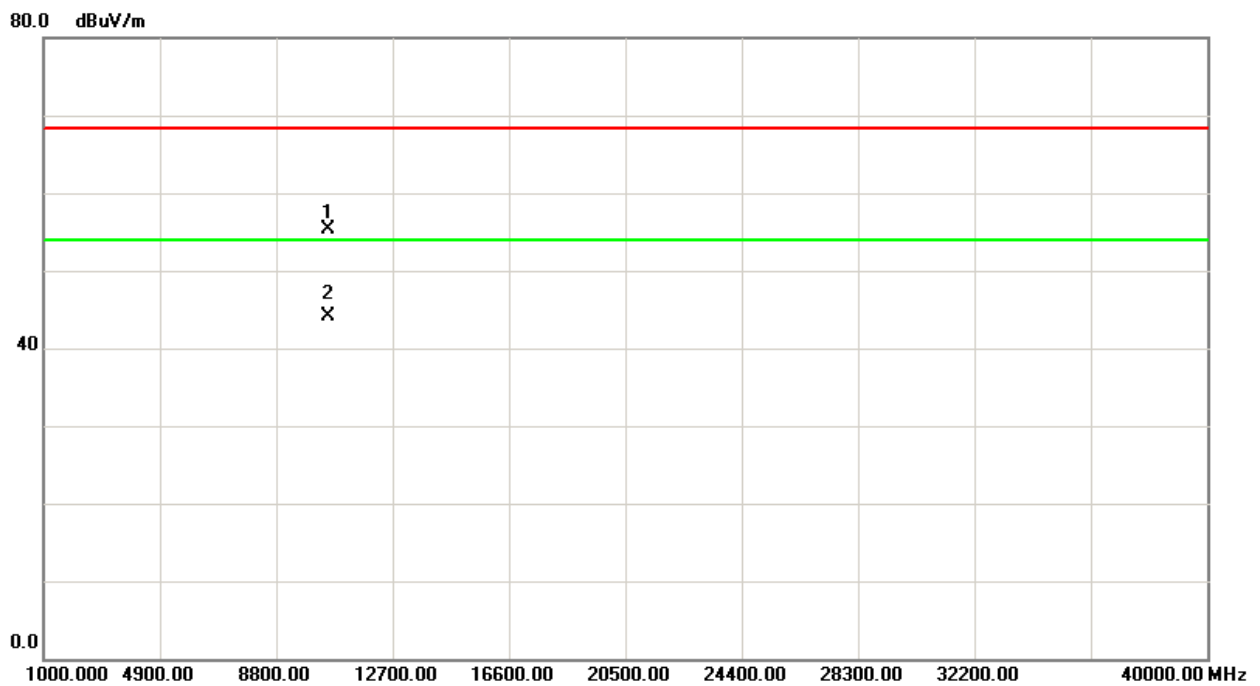
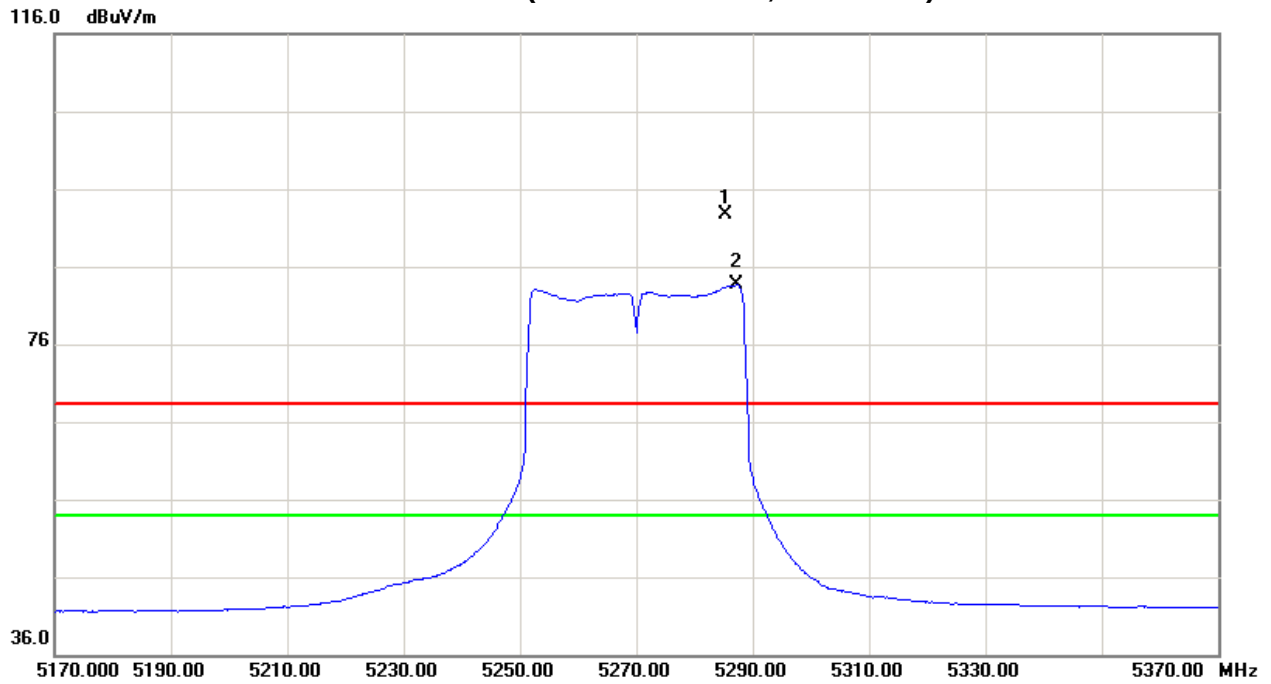


Orthogonal Axis:X
Band 2/CH54(Above 1000 MHz, Vertical)



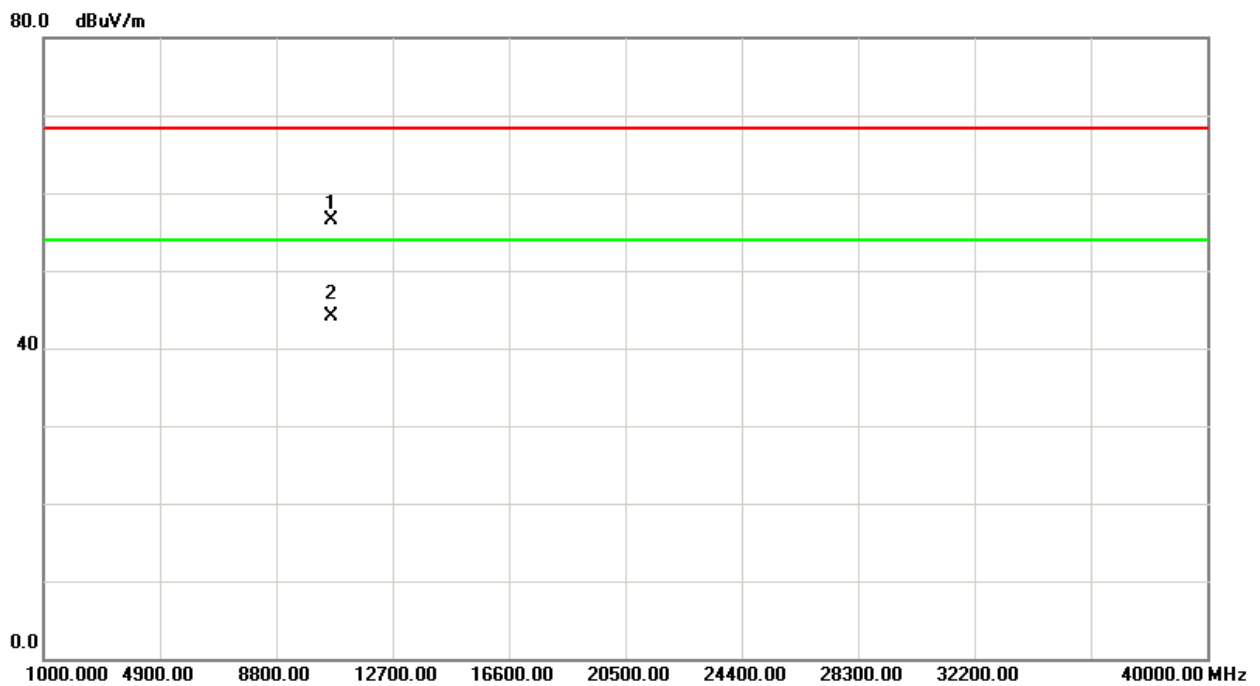
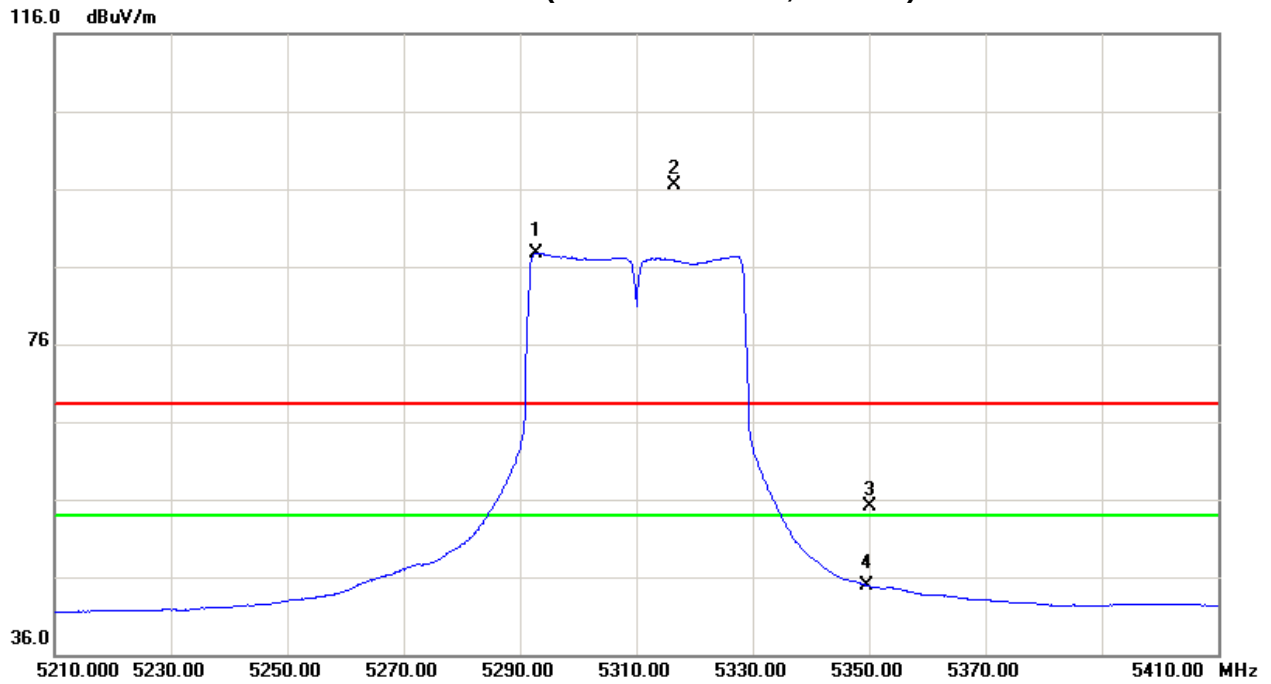


Orthogonal Axis:X
Band 2/CH54(Above 1000 MHz, Horizontal)



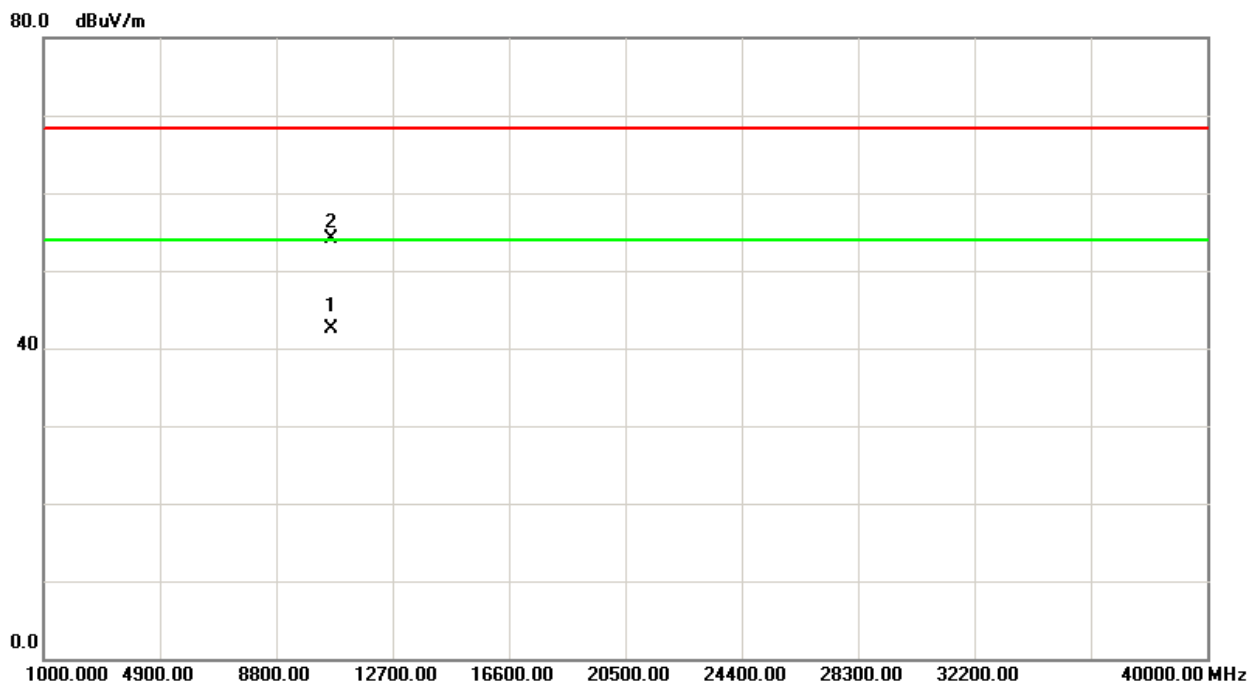
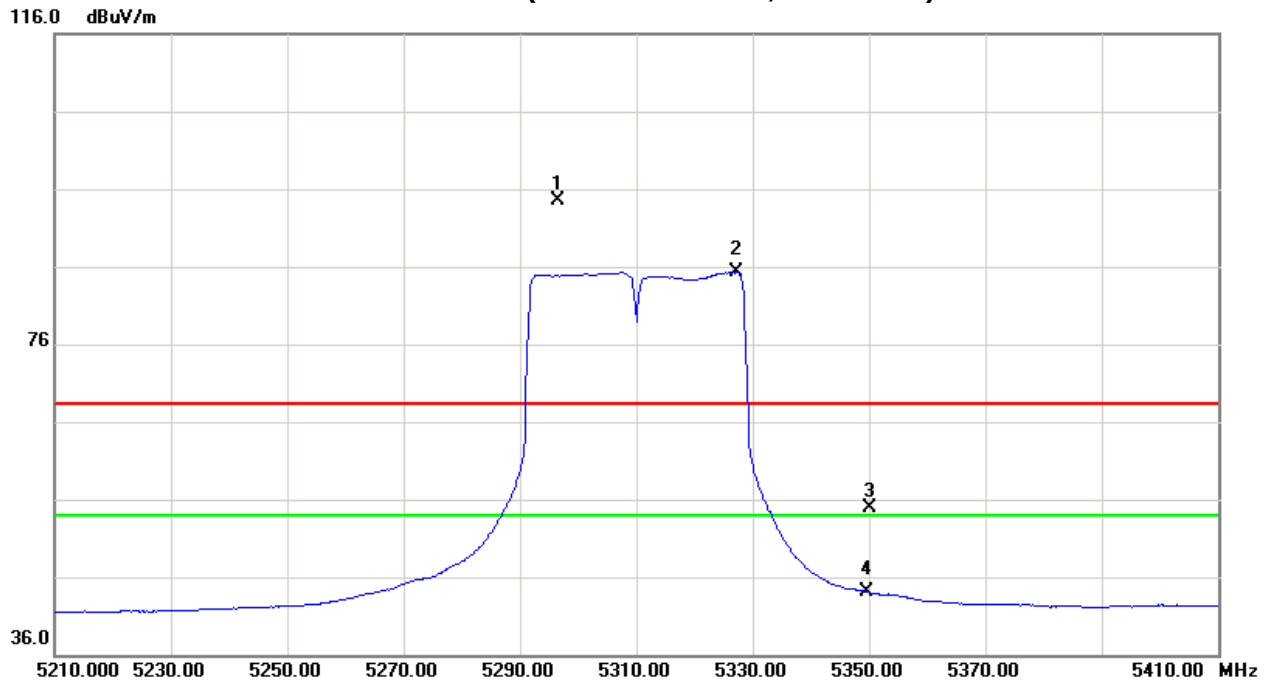


Orthogonal Axis:X
Band 2/CH62(Above 1000 MHz, Vertical)





Orthogonal Axis:X
Band 2/CH62(Above 1000 MHz, Horizontal)





5. 26dB SPECTRUM BANDWIDTH

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E/ RSS-210: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
26 dB Bandwidth	-----	5150MHz~5250 5250MHz~5350	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 Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RB	300 kHz
VB	1000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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

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.

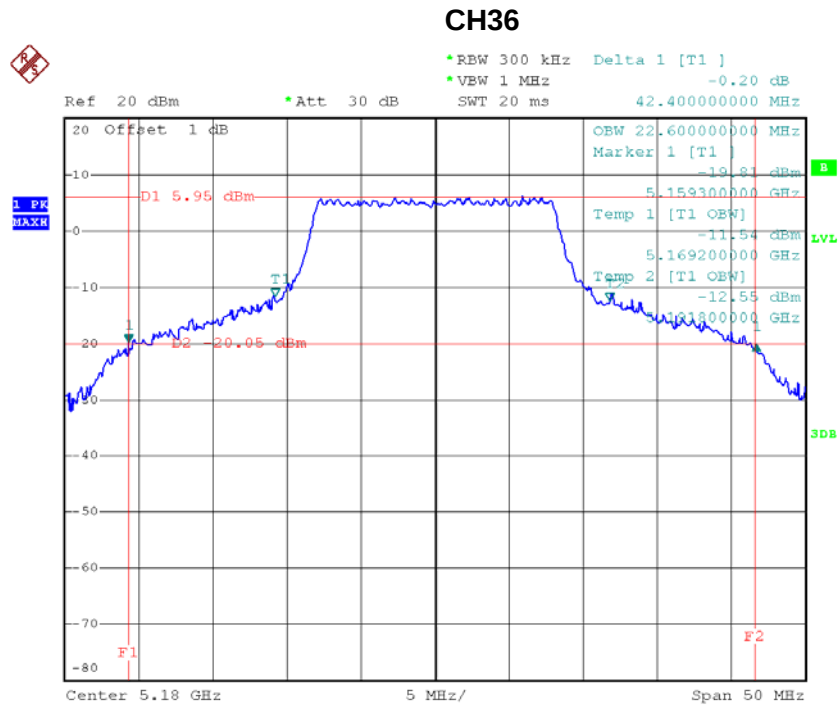
5.1.5 EUT TEST CONDITIONS

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



5.1.6 TEST RESULTS

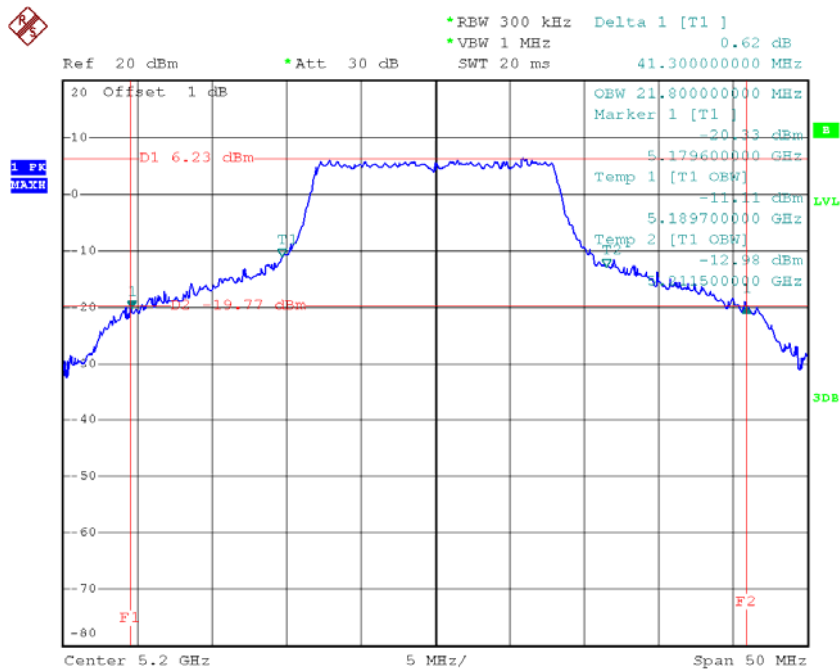
Test Mode : Band 1/TX A Mode_CH36/40/48



Date: 19.MAR.2014 15:25:49

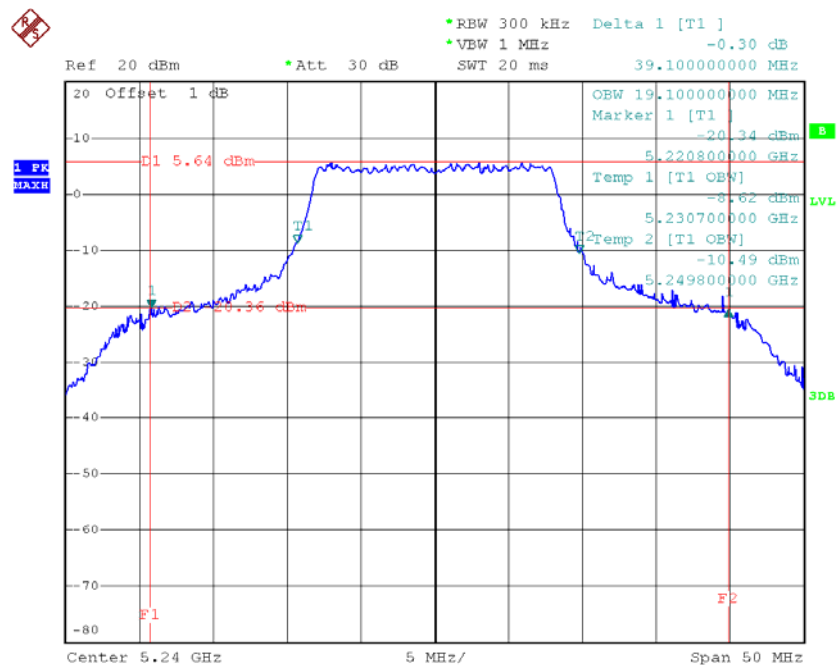


CH40



Date: 19.MAR.2014 15:33:00

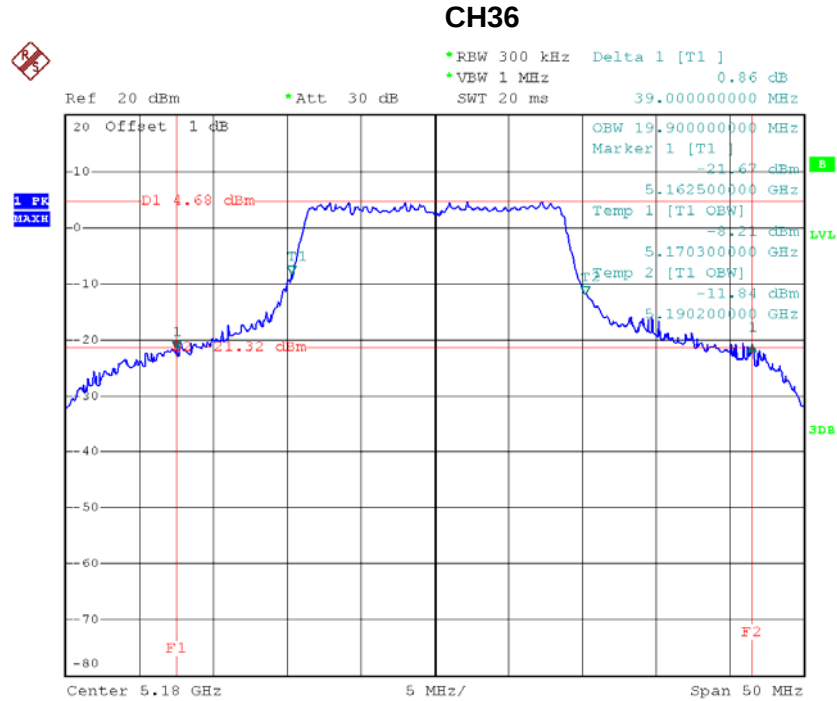
CH48



Date: 19.MAR.2014 15:35:29



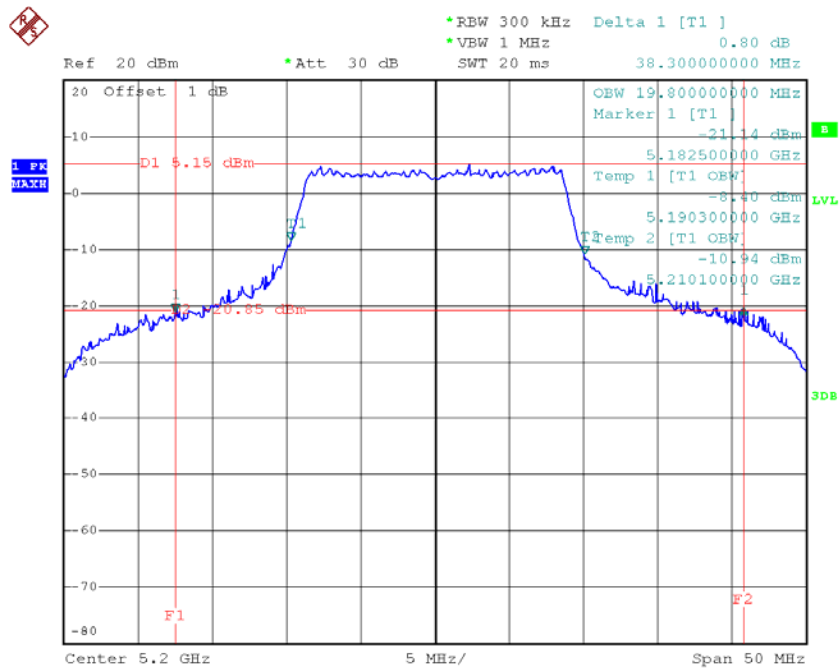
Test Mode : Band 1/TXN20 Mode_CH36/40/48



Date: 19.MAR.2014 16:05:08

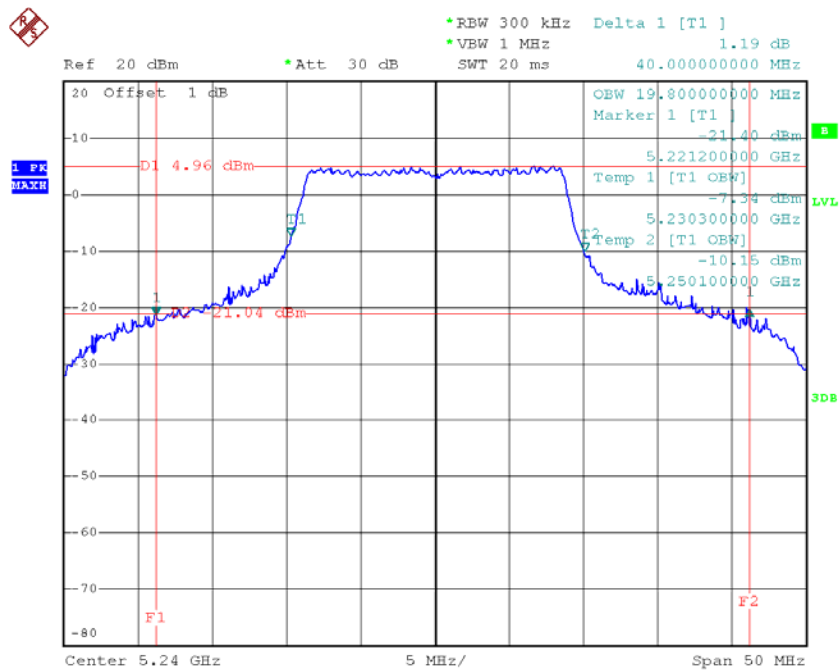


CH40



Date: 19.MAR.2014 16:02:24

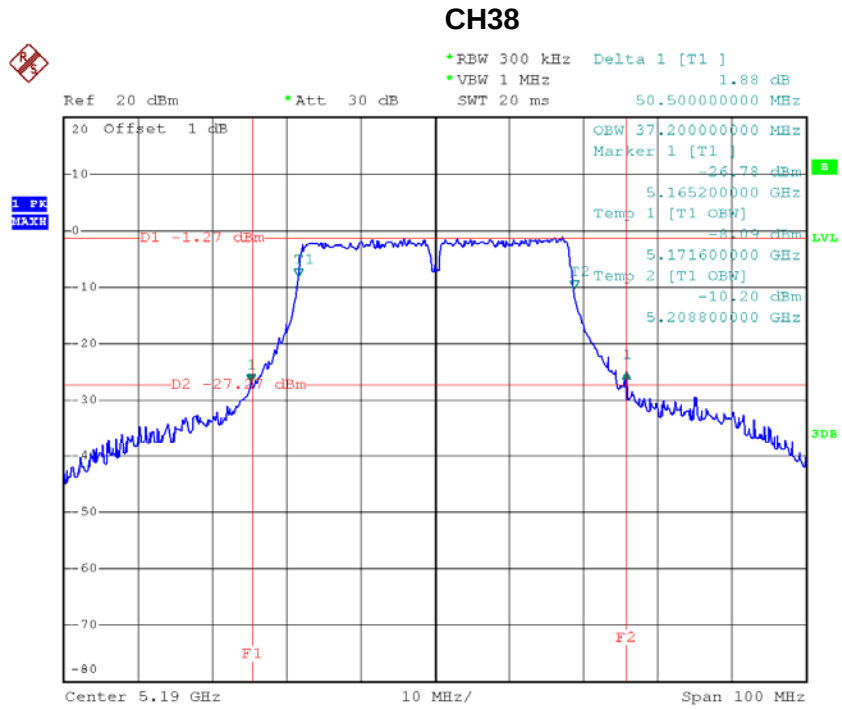
CH48



Date: 19.MAR.2014 16:00:42



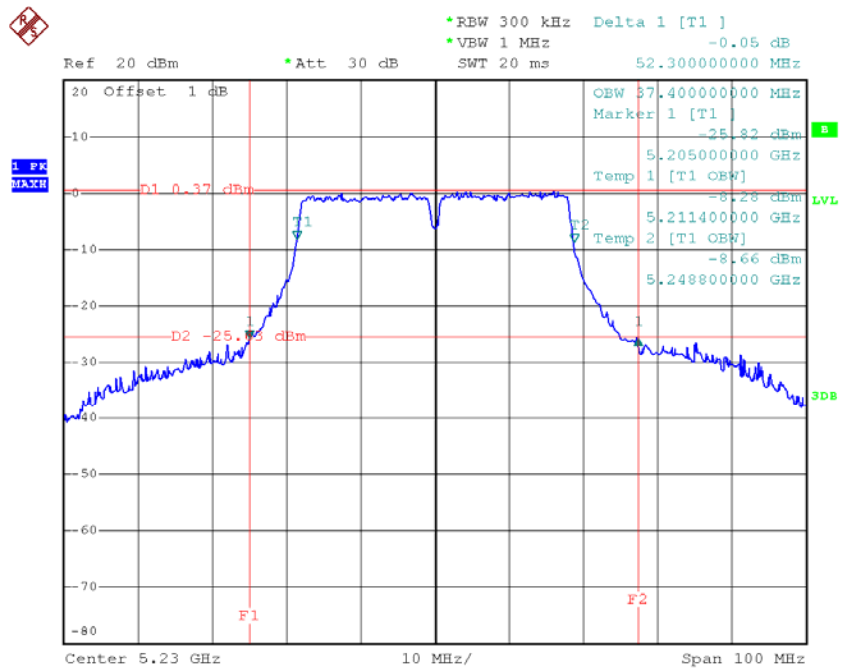
Test Mode : Band 1/TX N40 Mode_CH38/46



Date: 19.MAR.2014 16:08:09



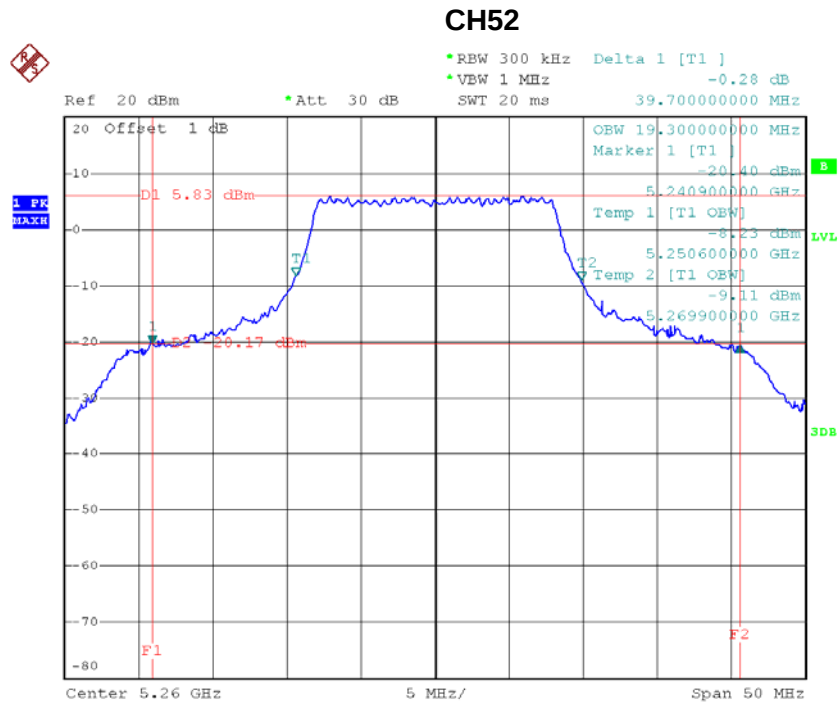
CH46



Date: 19.MAR.2014 16:11:17



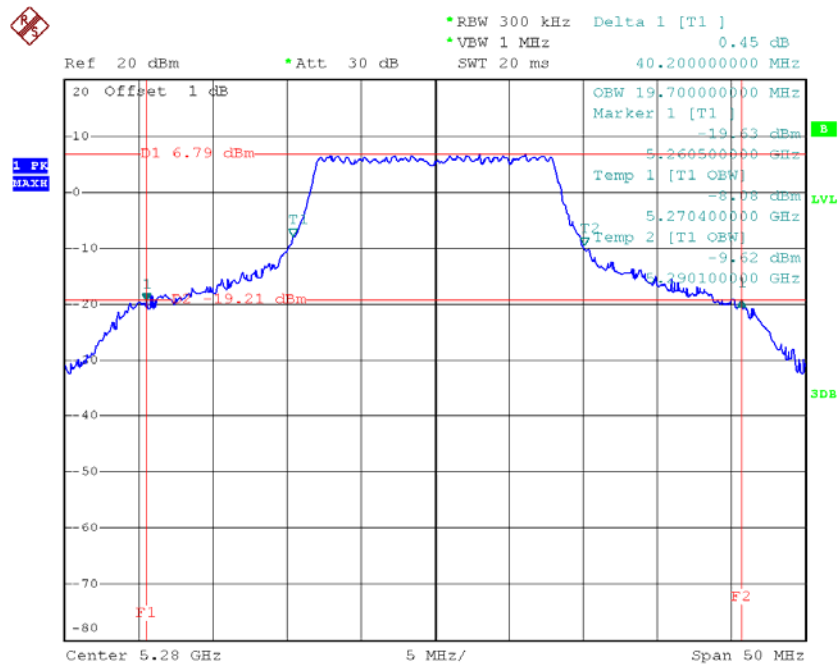
Test Mode : Band 2/TX A Mode_CH52/56/64



Date: 19.MAR.2014 15:43:29

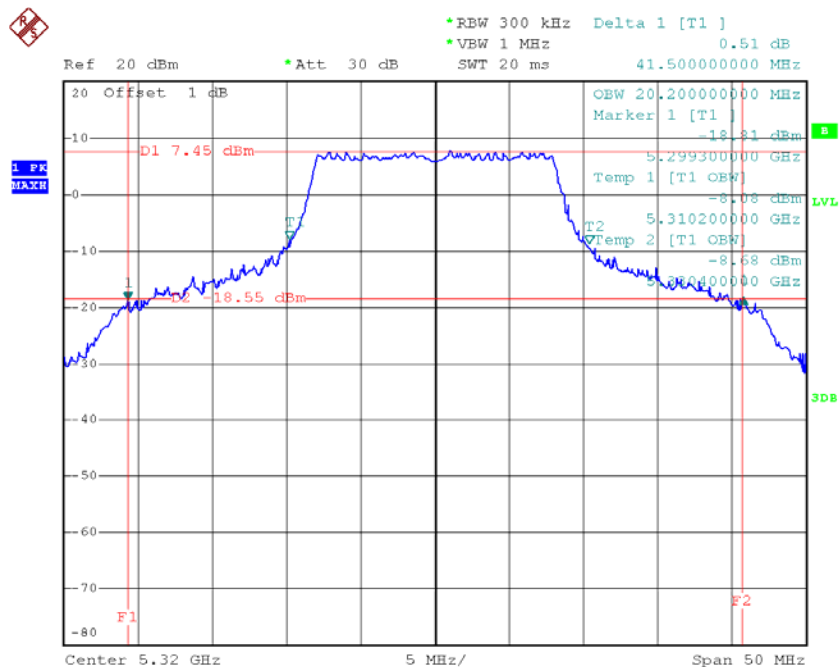


CH56



Date: 19.MAR.2014 15:46:39

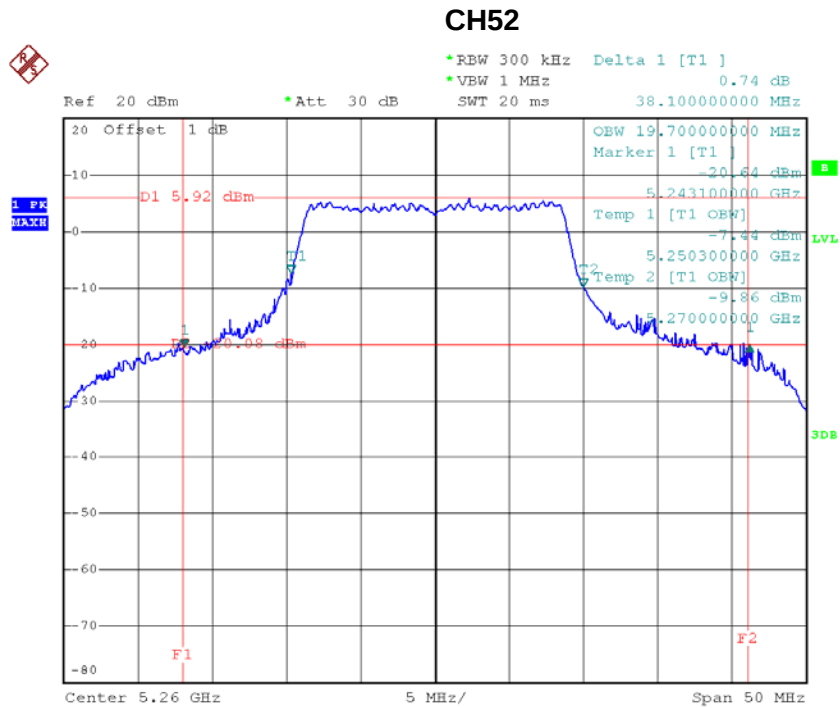
CH64



Date: 19.MAR.2014 15:49:40



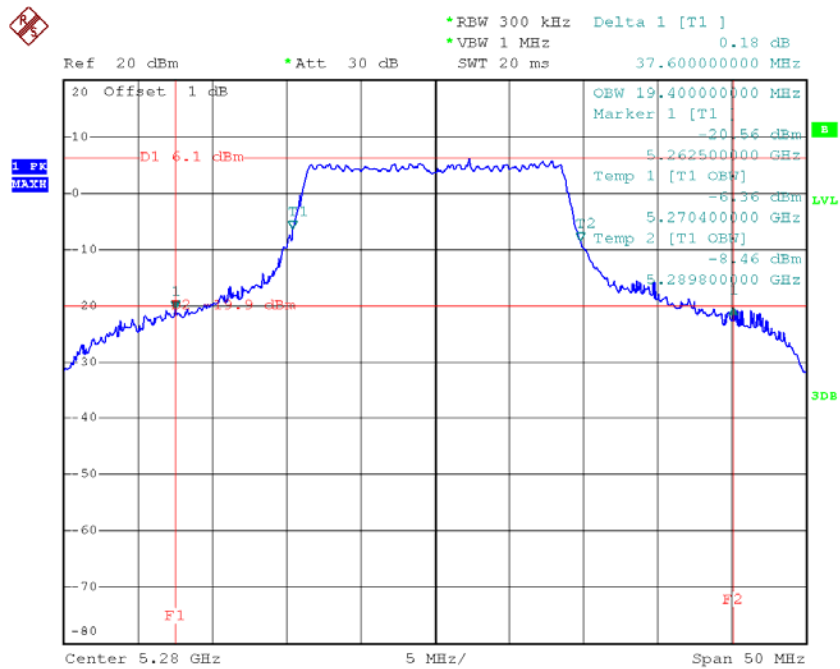
Test Mode : Band 2/TX N20 Mode_CH52/56/64



Date: 19.MAR.2014 15:57:34

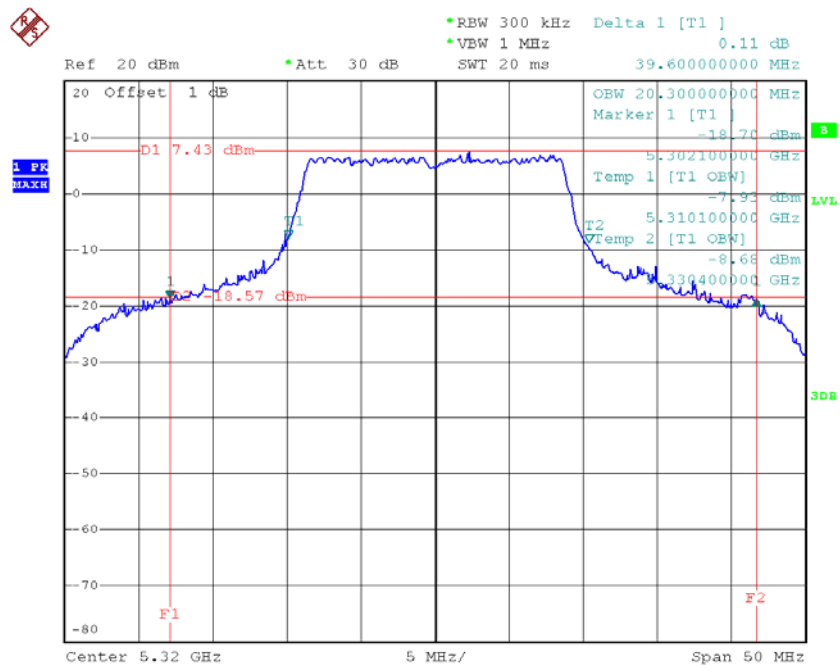


CH56



Date: 19.MAR.2014 15:55:10

CH64

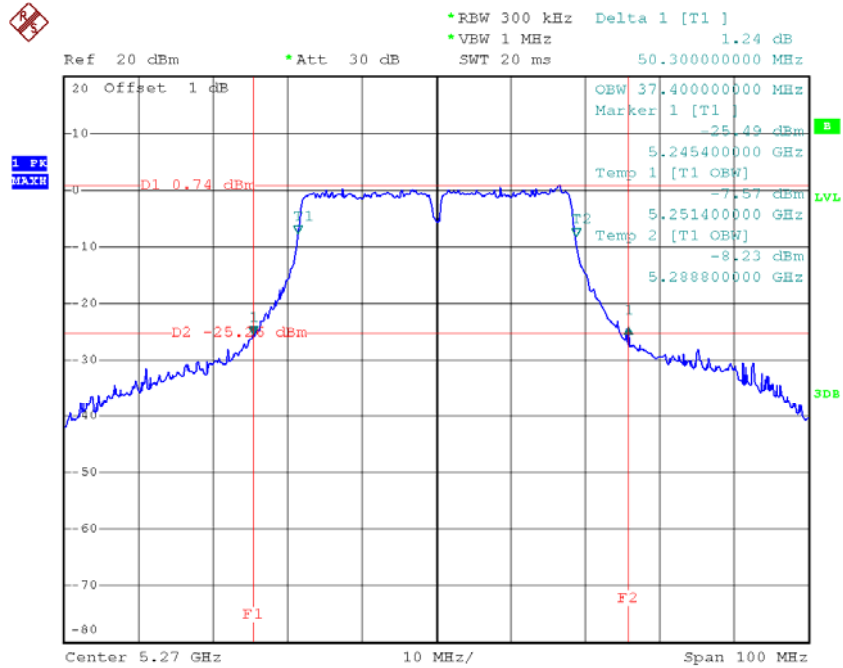


Date: 19.MAR.2014 15:51:37



Test Mode : Band 2/TX N40 Mode_CH54/62

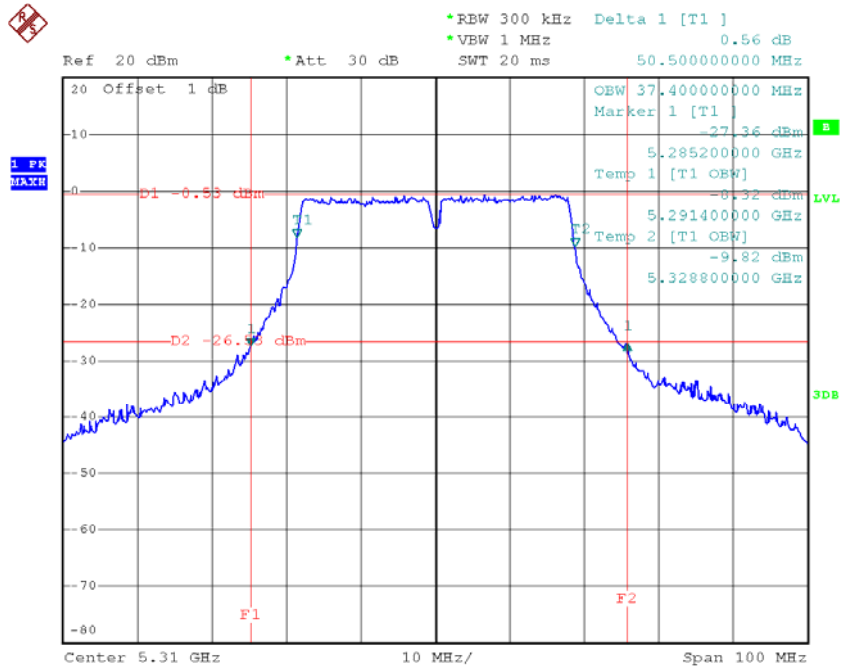
CH54



Date: 19.MAR.2014 16:13:28



CH62



Date: 19.MAR.2014 16:16:03



6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E/ RSS-210: 2010			
Test Item	Frequency Range (MHz)	Limit	Result
Conducted Output Power	5150 - 5250	not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B,	PASS
	5250 - 5350	not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B	PASS

Note: where “B” is the 26 dB emissions bandwidth in MHz.

6.1.1 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- Test was performed in accordance with method of KDB 789033 D01.

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.

6.1.5 EUT TEST CONDITIONS

Temperature: 25°C
Relative Humidity: 55%
Test Voltage: DC 3.7V



6.1.6 TEST RESULTS

Test Mode :Band 1/TX A Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH36	5180	13.90	17.00	0.0501
CH40	5200	13.95	17.00	0.0501
CH48	5240	13.47	17.00	0.0501

Test Mode :Band 1/TX N20 Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH36	5180	12.59	17.00	0.0501
CH40	5200	12.71	17.00	0.0501
CH48	5240	12.89	17.00	0.0501

Test Mode : Band 1/TX N40 Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH38	5190	10.64	17.00	0.0501
CH46	5230	12.95	17.00	0.0501



Test Mode :Band 2/TX A Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	13.45	24	0.251
CH56	5280	13.69	24	0.251
CH64	5320	13.22	24	0.251

Test Mode :Band 2/TX N20 Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	12.83	24	0.251
CH56	5280	12.53	24	0.251
CH64	5320	12.67	24	0.251

Test Mode :Band 2/TX N40 Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	12.78	24	0.251
CH62	5310	10.45	24	0.251



7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E/ RSS-210: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Antenna conducted Spurious Emission	-27 dBm/1MHz	5150 – 5250 5250 – 5350	PASS

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 Parameter	Setting
Attenuation	Auto
RB	1000 kHz
VB	1000 kHz
Trace	Max Hold
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

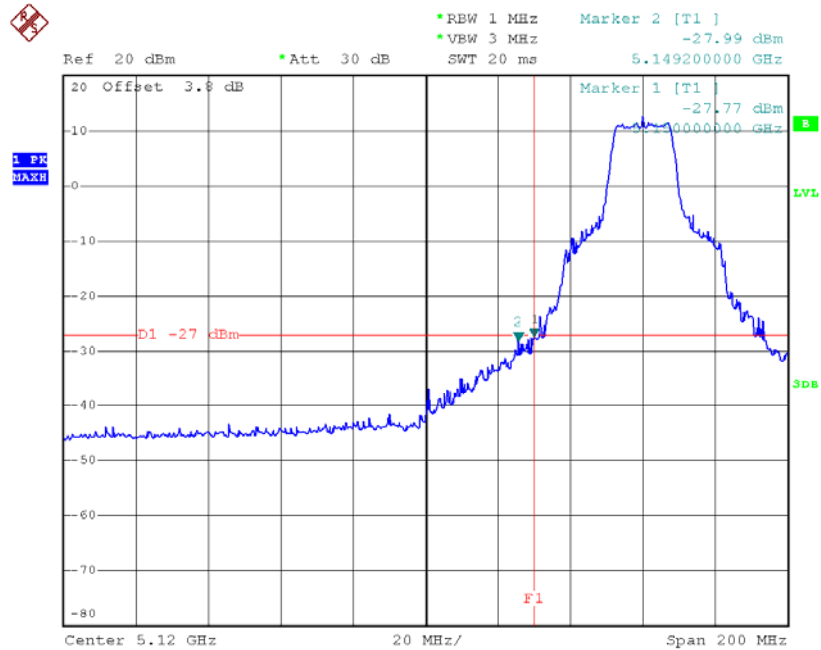
Temperature: 25°C
Relative Humidity: 55%
Test Voltage: AC 120V/60HZ



7.1.6 TEST RESULTS

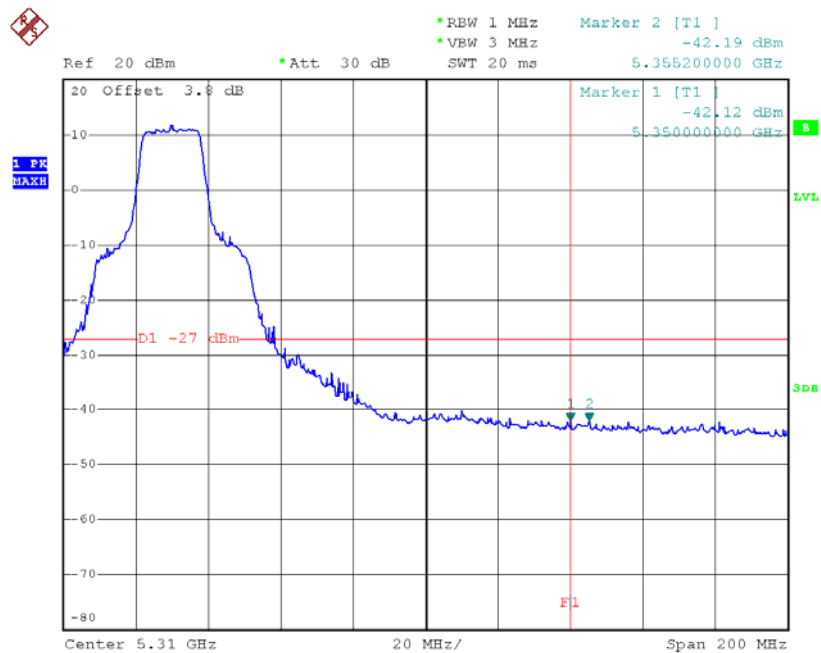
Test Mode : Band 1/TX A Mode

TX mode CH36



Date: 19.MAR.2014 14:30:19

TX mode CH48

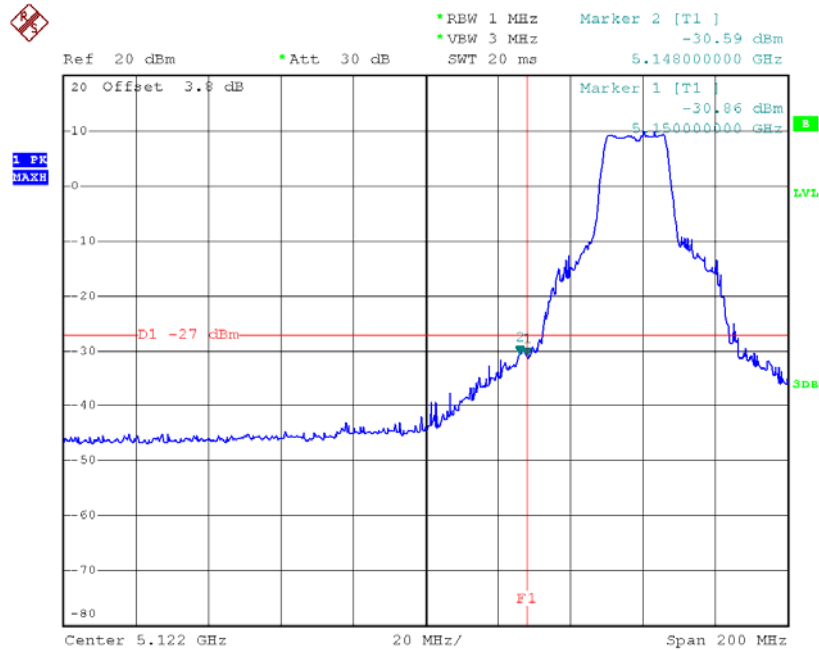


Date: 19.MAR.2014 14:41:03



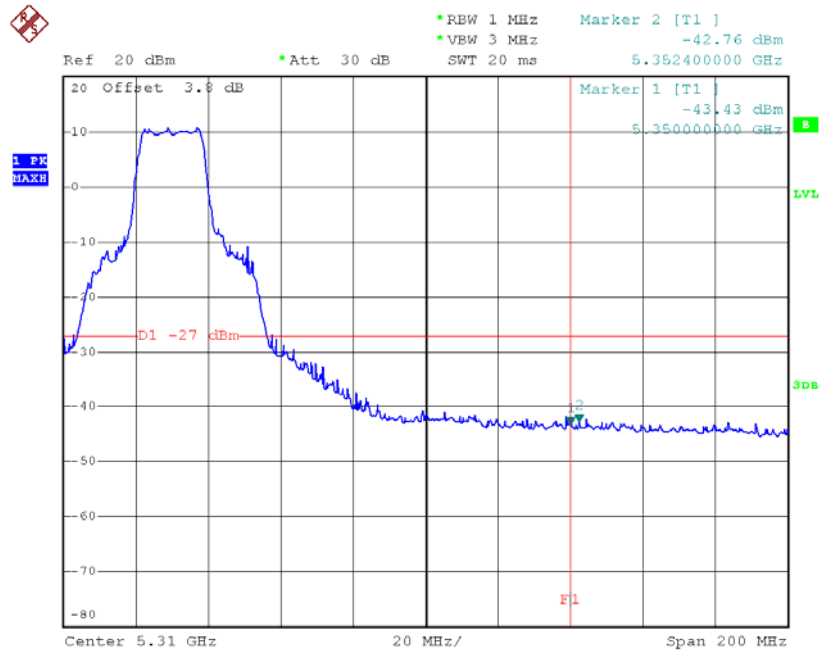
Test Mode : Band 1/TX N20 Mode

TX mode CH36



Date: 19.MAR.2014 15:07:01

TX mode CH48

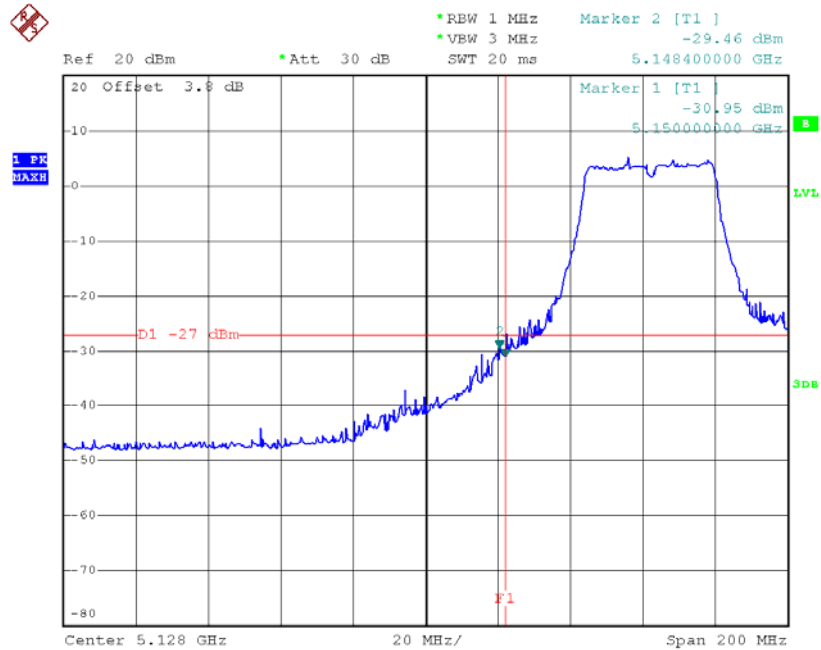


Date: 19.MAR.2014 14:43:50



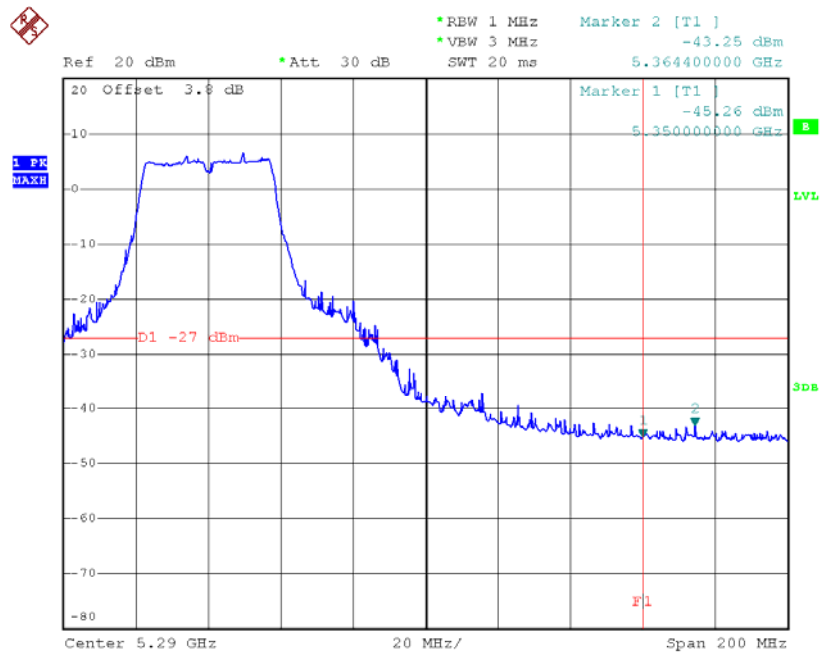
Test Mode : Band 1/TX N40 Mode

TX mode CH38



Date: 19.MAR.2014 15:11:13

TX mode CH46

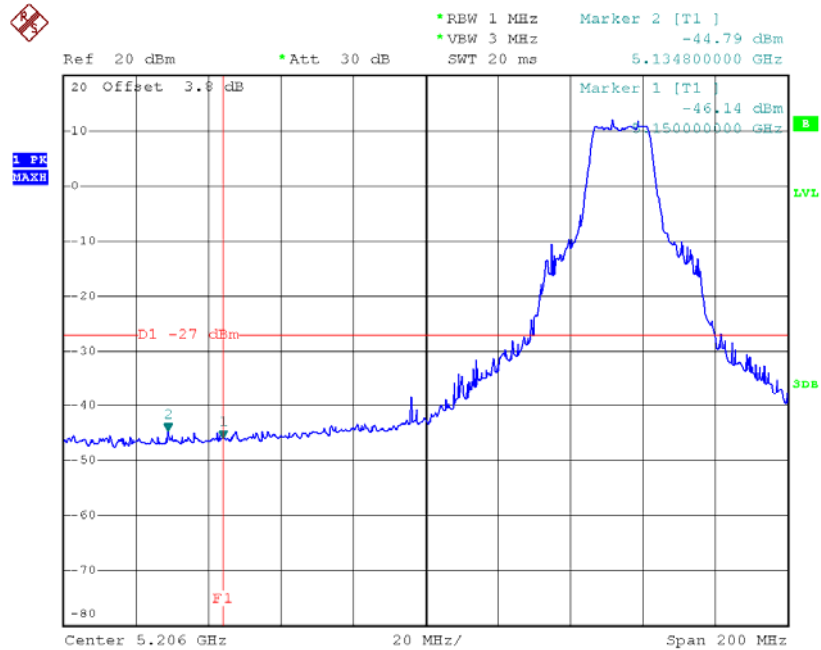


Date: 19.MAR.2014 14:45:18



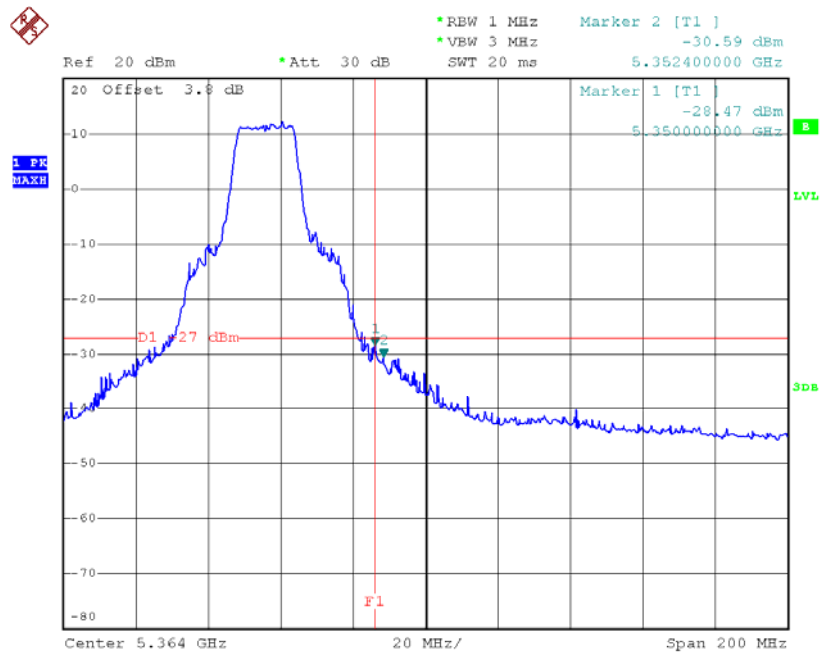
Test Mode : Band 2/TX A Mode

TX mode CH52



Date: 19.MAR.2014 15:01:44

TX mode CH64

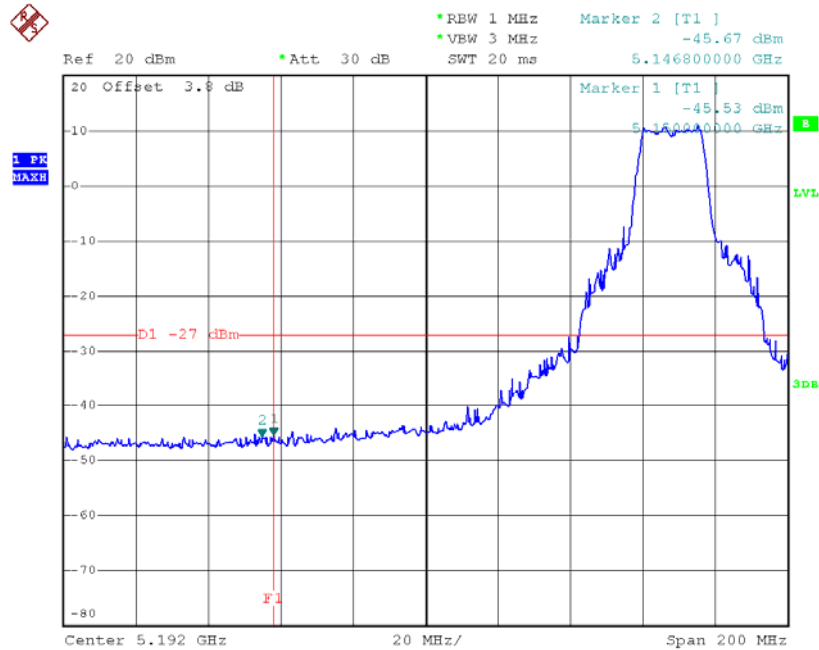


Date: 19.MAR.2014 14:59:16



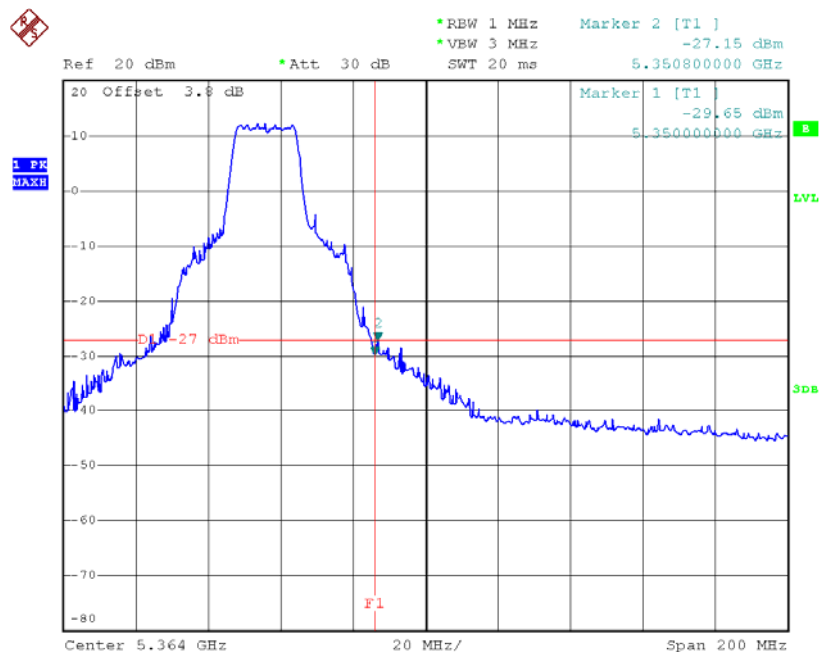
Test Mode : Band 2/TX N20 Mode

TX mode CH52



Date: 19.MAR.2014 15:08:14

TX mode CH64

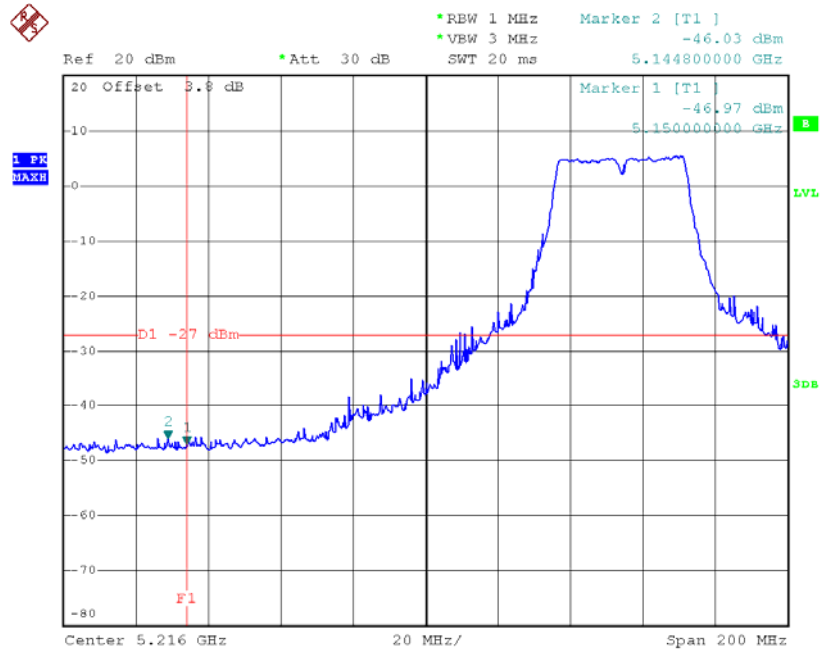


Date: 19.MAR.2014 14:57:33



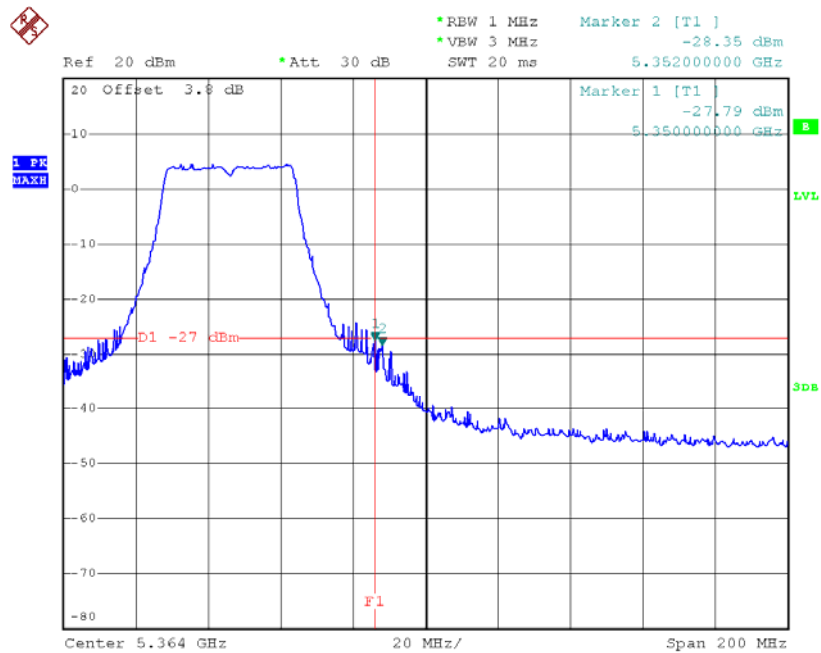
Test Mode : Band 2/TX N40 Mode

TX mode CH54



Date: 19.MAR.2014 15:09:30

TX mode CH62



Date: 19.MAR.2014 14:54:25



8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E/ RSS-210: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	4 dBm	5150 - 5250	PASS
	11 dBm	5250 - 5350	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 Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	= 1 MHz.
VB	≥ 3 MHz.
Detector	RMS
Trace	Max Hold
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.

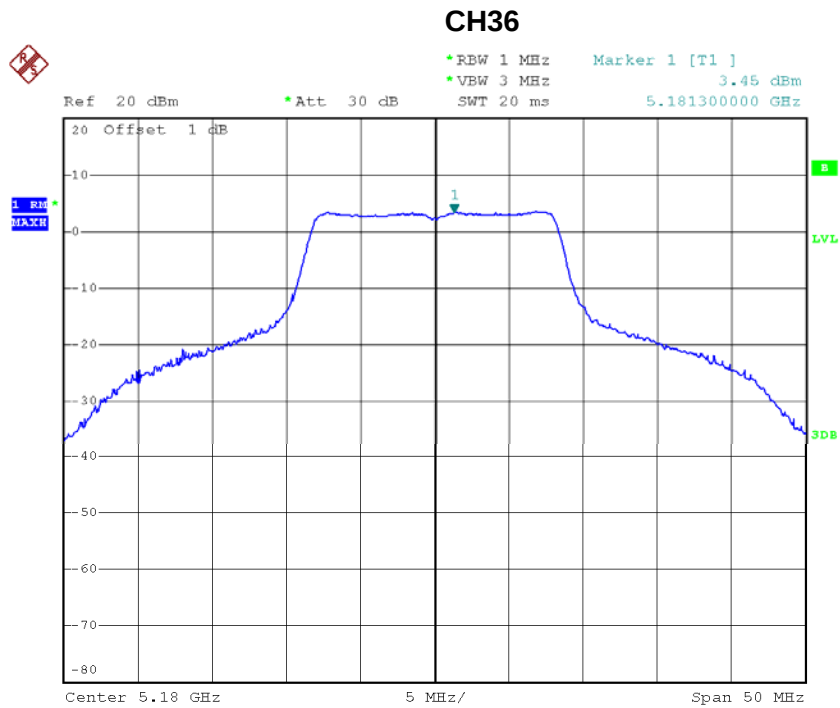
8.1.5 EUT TEST CONDITIONS

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



8.1.6 TEST RESULTS

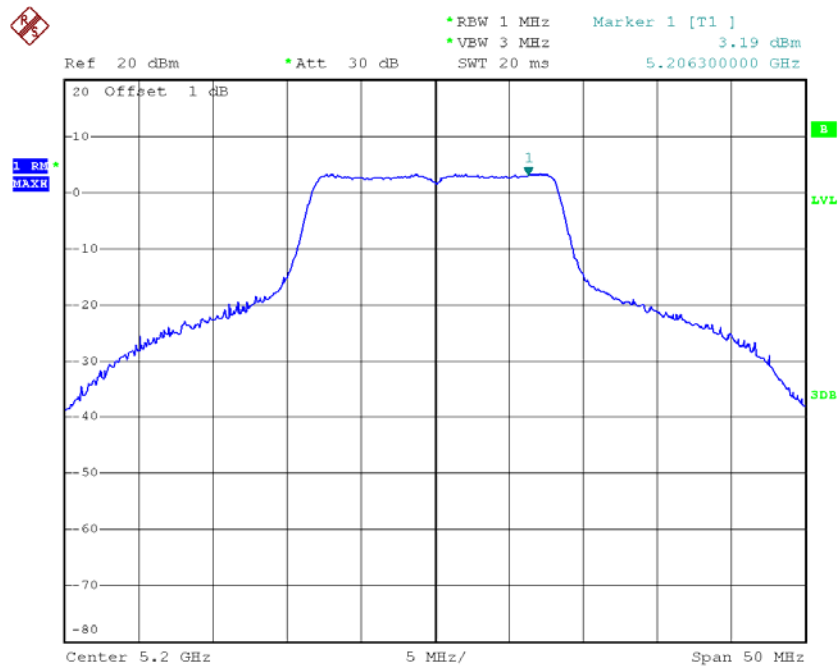
Test Mode : Band 1/TX A Mode_CH36/40/48



Date: 19.MAR.2014 13:55:37

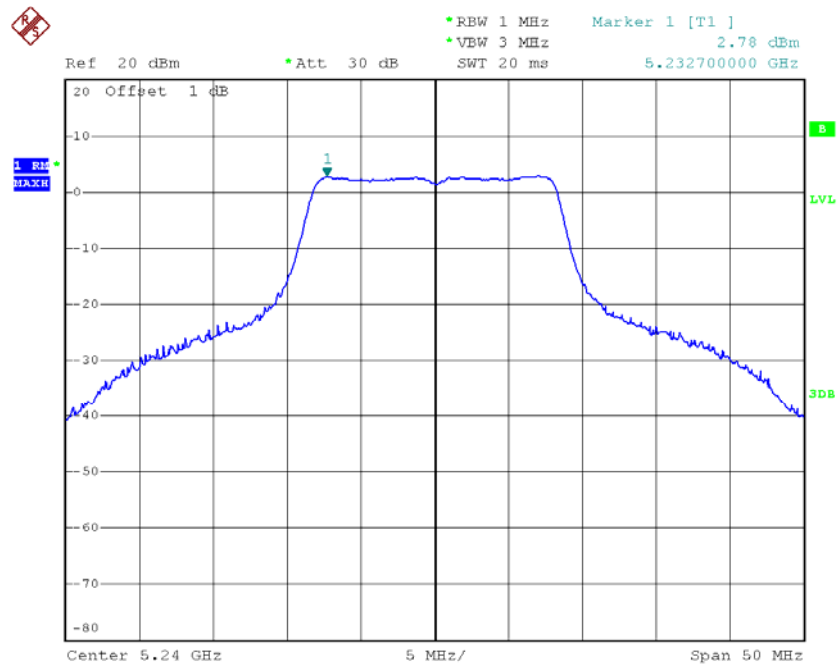


CH40



Date: 19.MAR.2014 14:15:18

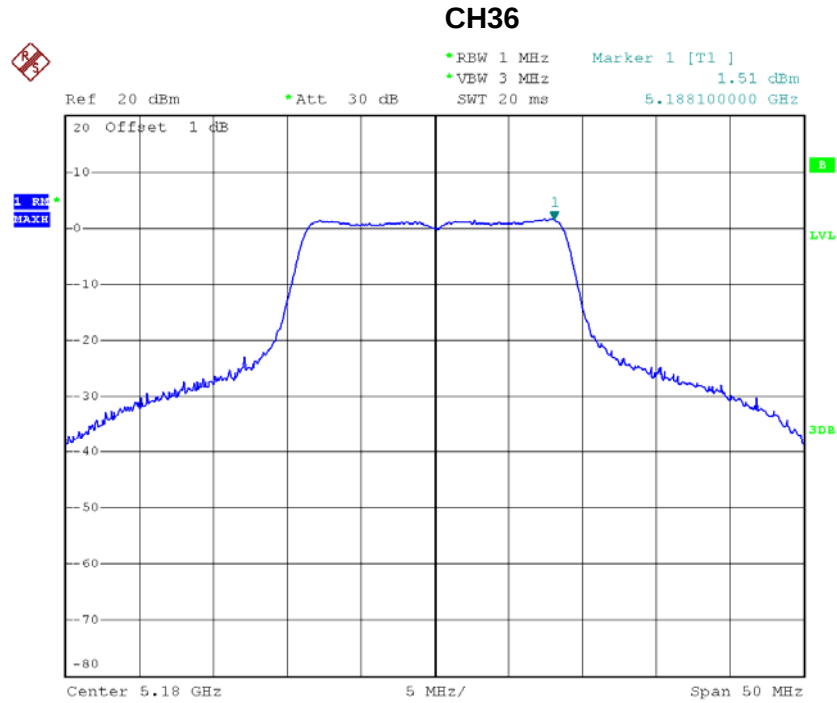
CH48



Date: 19.MAR.2014 14:16:27



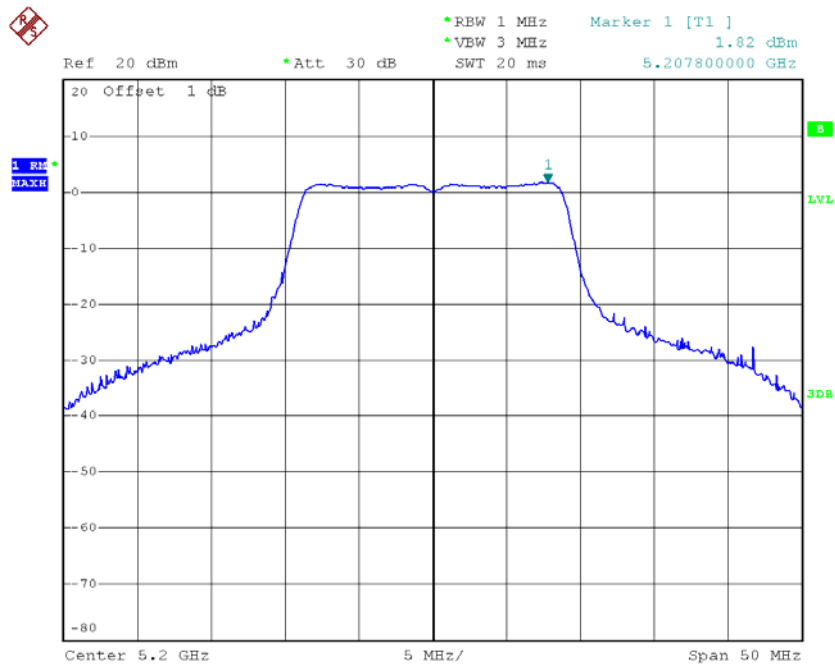
Test Mode : Band 1/TX N20 Mode_CH13/40/48



Date: 19.MAR.2014 14:20:15

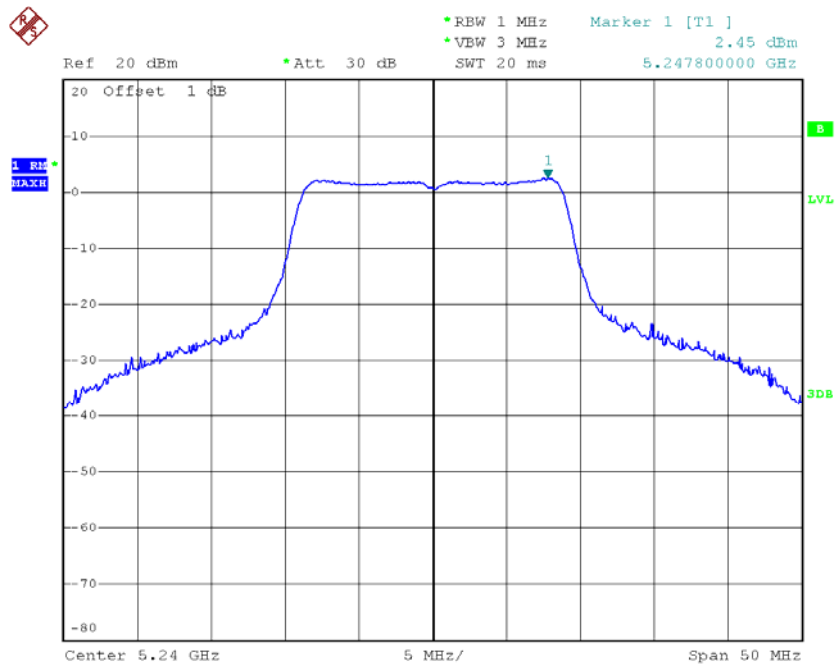


CH40



Date: 19.MAR.2014 14:22:05

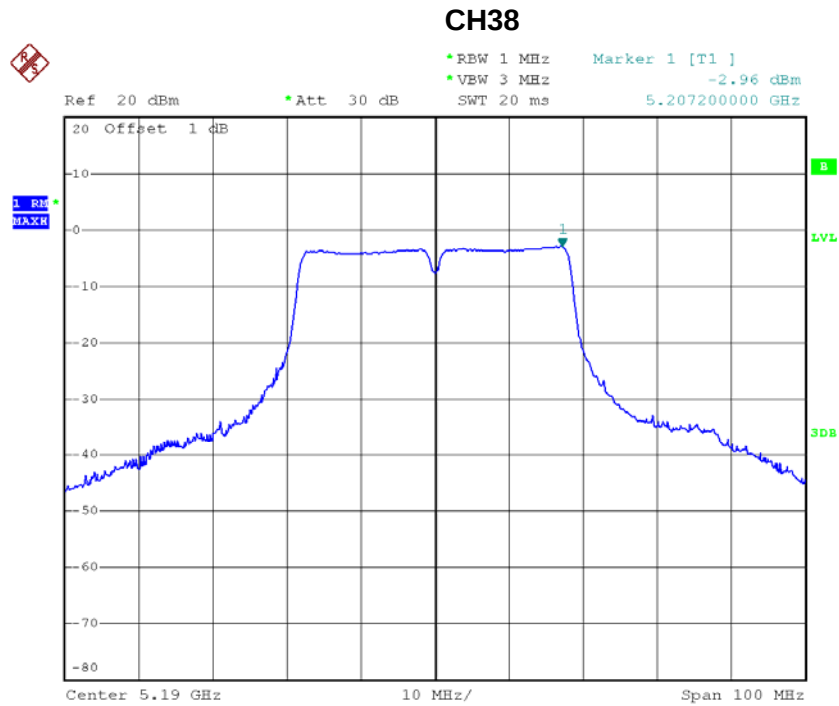
CH48



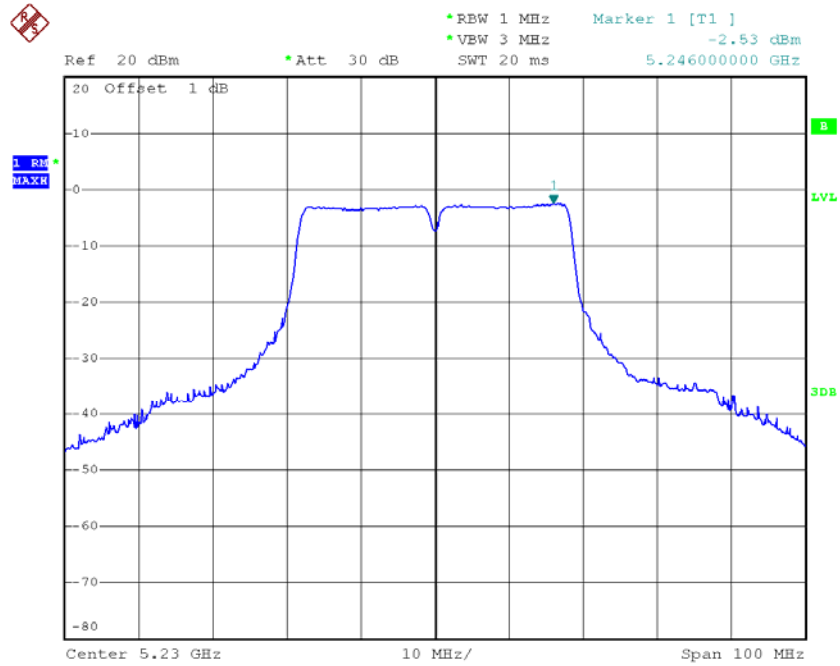
Date: 19.MAR.2014 14:22:26



Test Mode : Band 1/TX N40 Mode_CH38/46



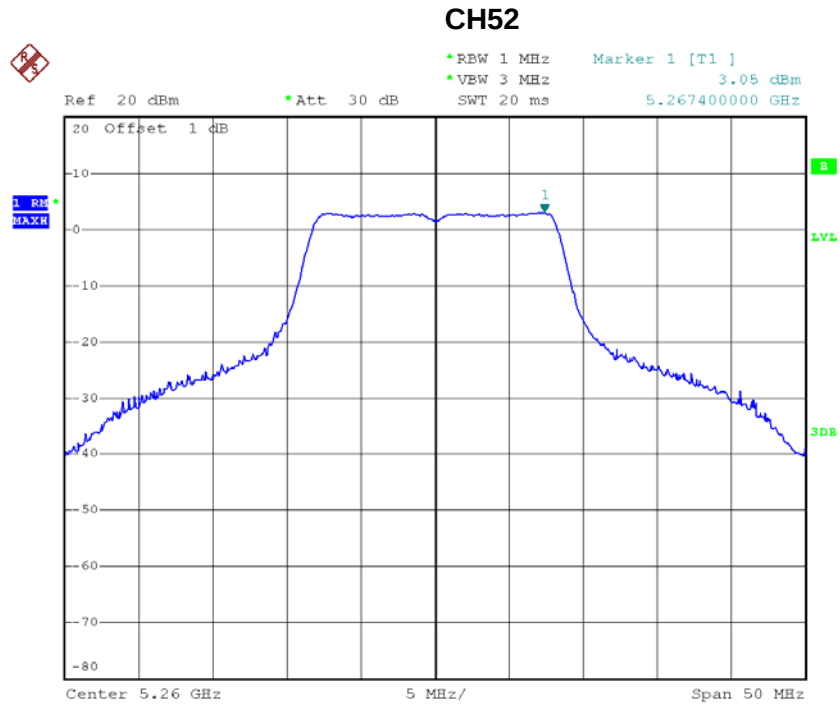
Date: 19.MAR.2014 14:25:21



Date: 19.MAR.2014 14:25:46



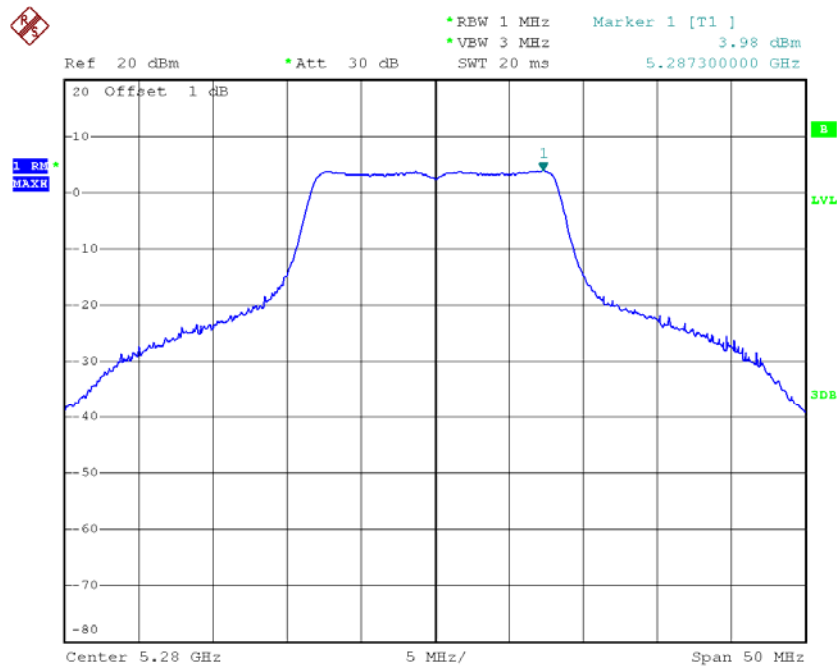
Test Mode : Band 2/TX A Mode_CH52/56/64



Date: 19.MAR.2014 14:17:06

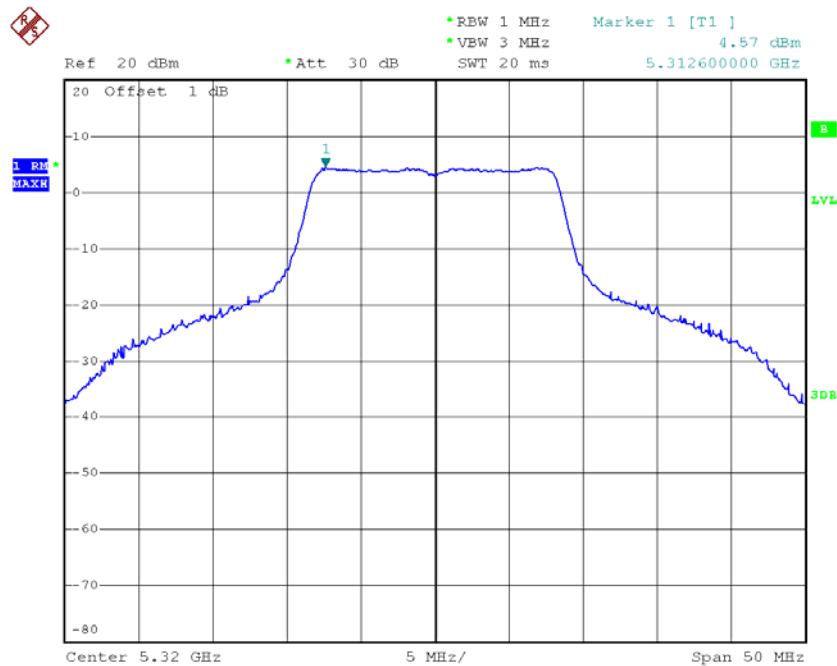


CH56



Date: 19.MAR.2014 14:17:42

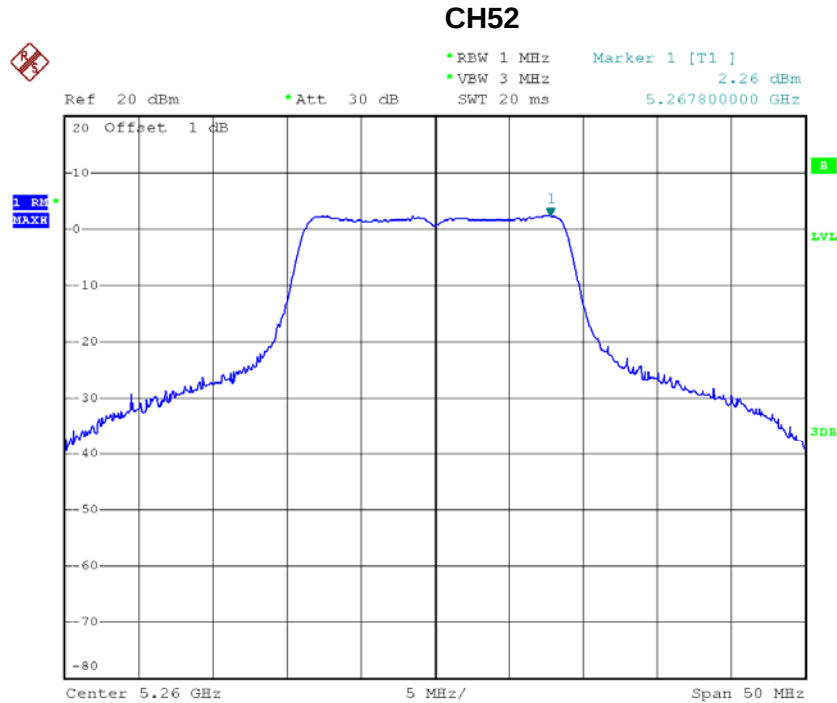
CH64



Date: 19.MAR.2014 14:18:38



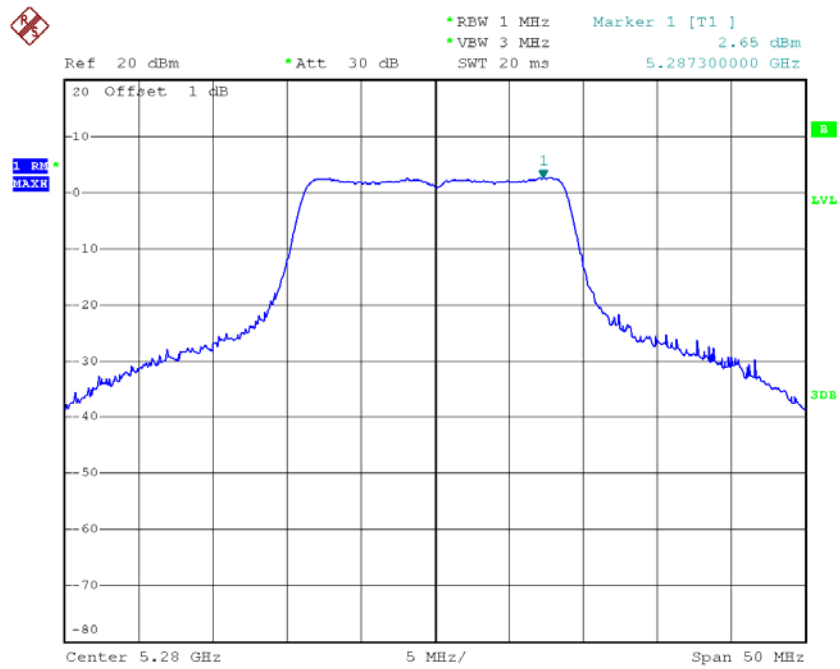
Test Mode : Band 2/TX N20 Mode_CH52/56/64



Date: 19.MAR.2014 14:22:42

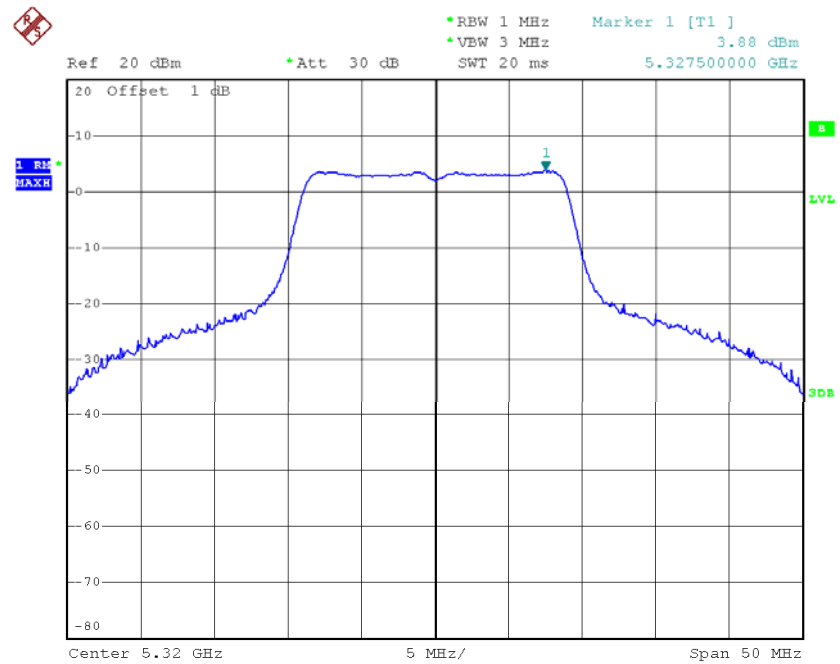


CH56



Date: 19.MAR.2014 14:23:03

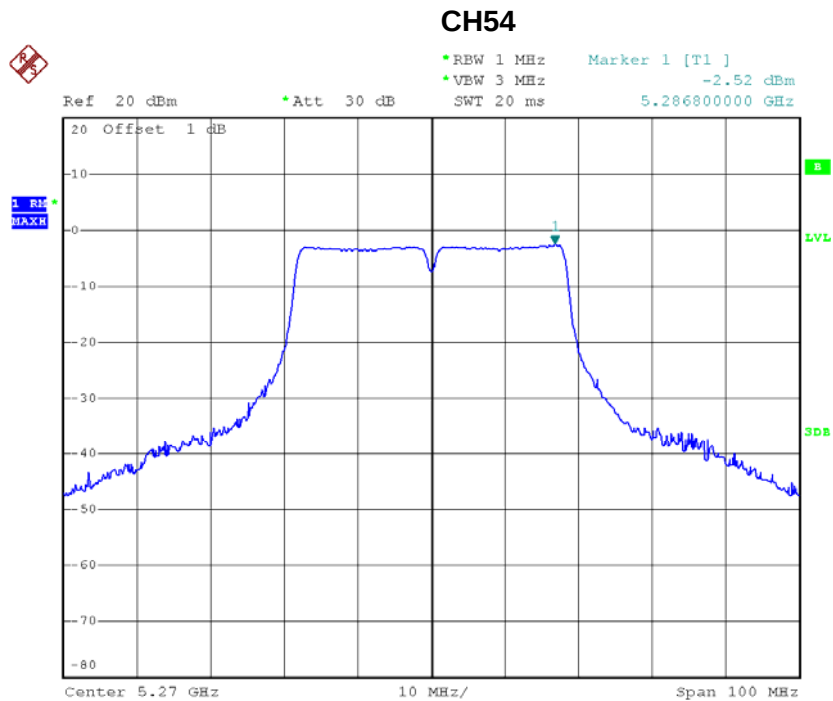
CH64



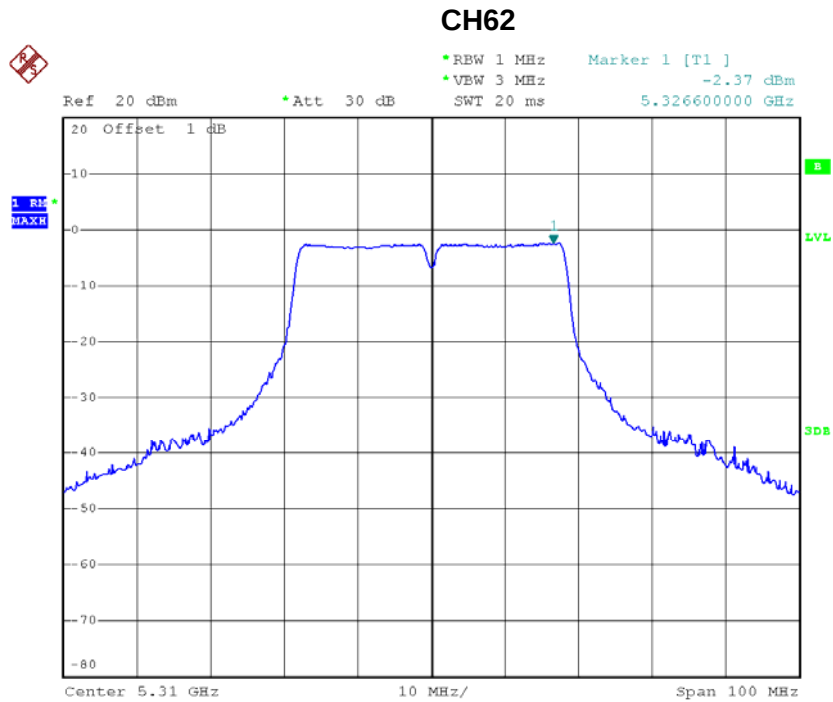
Date: 19.MAR.2014 14:23:21



Test Mode : Band 2/TX N40 Mode_CH54/62



Date: 19.MAR.2014 14:26:12



Date: 19.MAR.2014 14:26:32



9. PEAK EXCURSION MEASUREMENT

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E/ RSS-210: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Peak Excursion Measurement	13 dB	5150 - 5250	PASS
		5250 - 5350	PASS

9.1.1 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 Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 3000 kHz (Average Trace)
Detector	Peak (Peak Trace) / RMS (Average Trace)
Trace	Max Hold
Sweep Time	60s

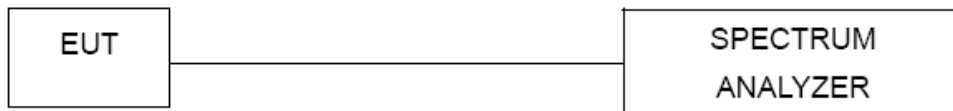
c. Peak Trace: Set RBW = 1 MHz, VBW $\geq$ 3 MHz with peak detector and maxhold settings.

d. Average Trace: set RBW = 1 MHz, VBW = 3 MHz with RMS detector and trace average across 100 traces in power averaging mode.

9.1.2 DEVIATION FROM STANDARD

No deviation.

9.1.3 TEST SETUP



9.1.4 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.

9.1.5 EUT TEST CONDITIONS

Temperature: 25°C

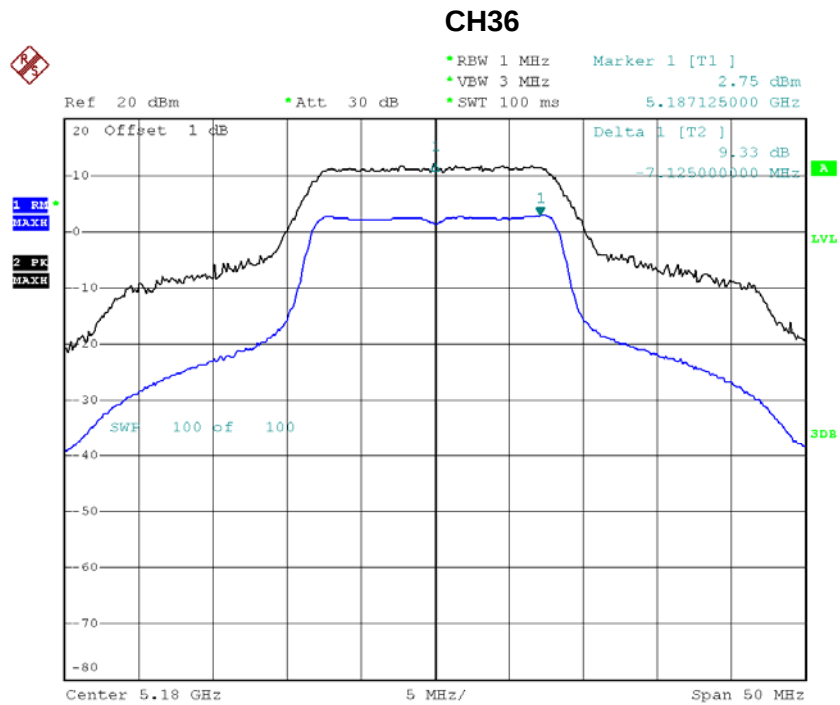
Relative Humidity: 55%

Test Voltage: AC 120V/60HZ



9.1.6 TEST RESULTS

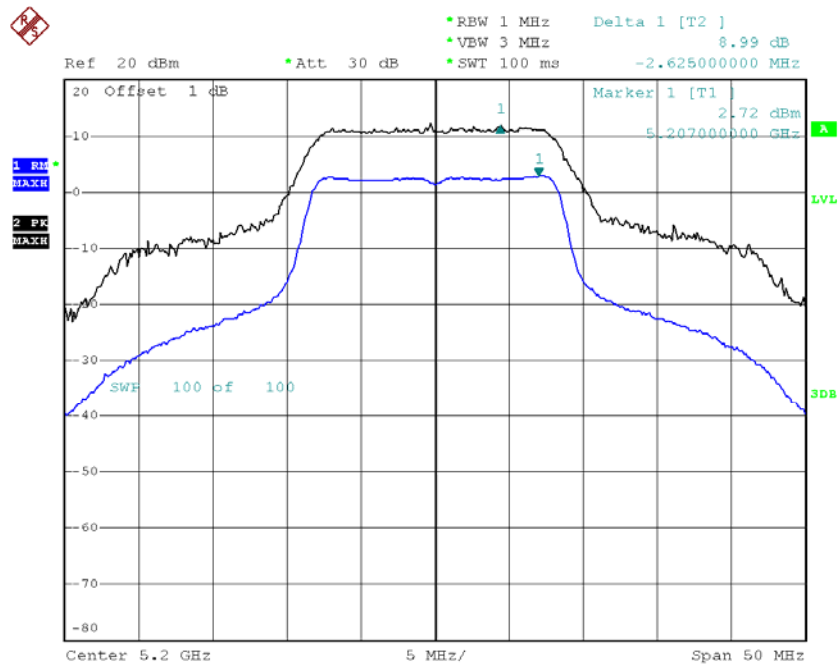
Test Mode :Band 1/TX A Mode_CH36/40/48



Date: 19.MAR.2014 15:29:15

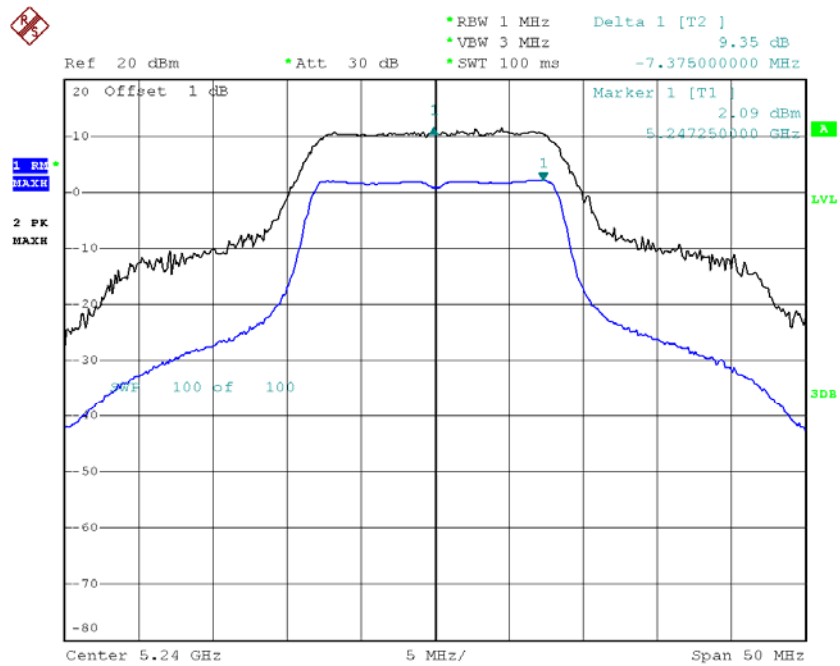


CH40



Date: 19.MAR.2014 15:31:29

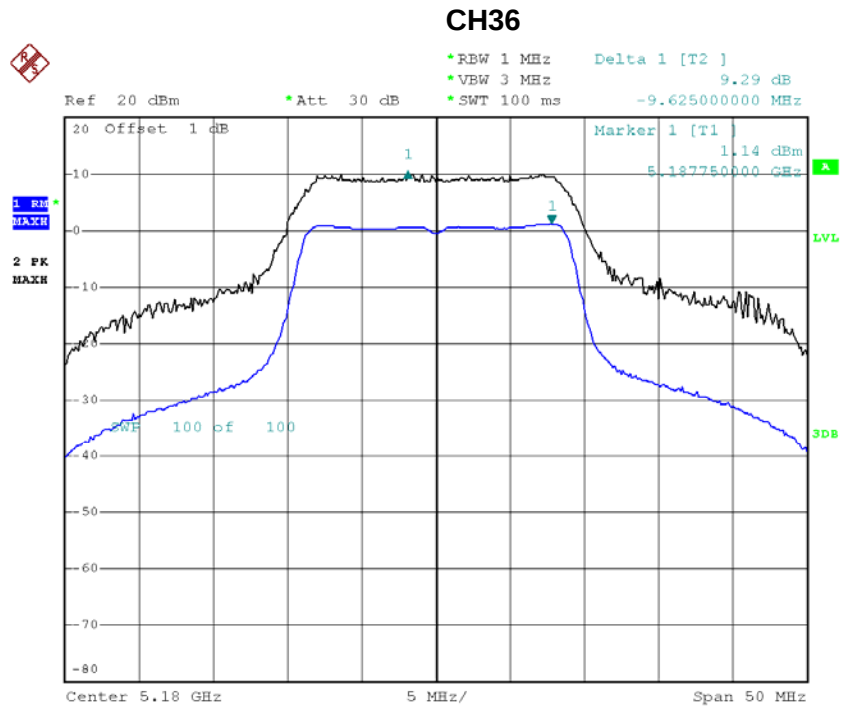
CH48



Date: 19.MAR.2014 15:36:08



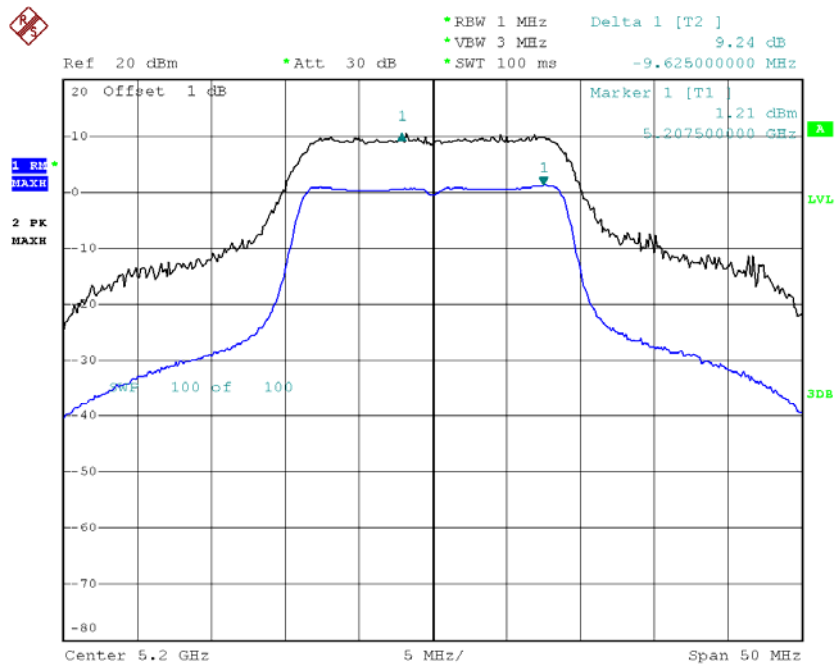
Test Mode :Band 1/TX N20 Mode_CH36/40/48



Date: 19.MAR.2014 16:03:25

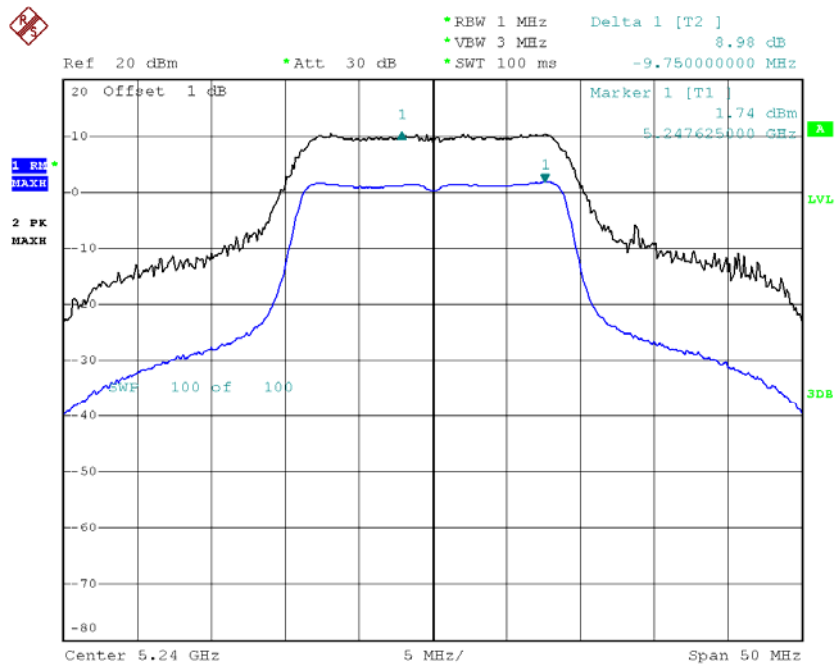


CH40



Date: 19.MAR.2014 16:02:52

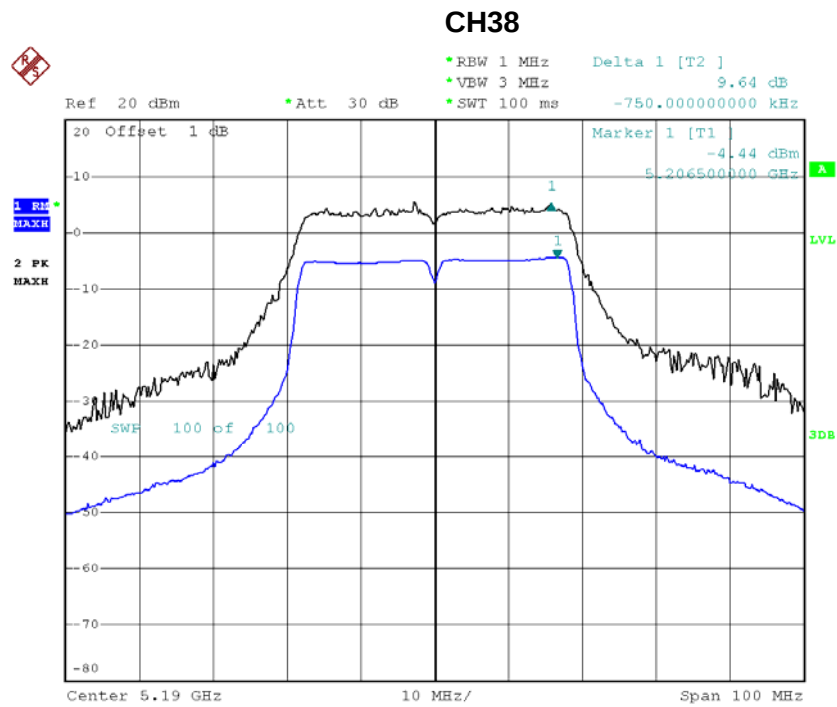
CH48



Date: 19.MAR.2014 15:58:44



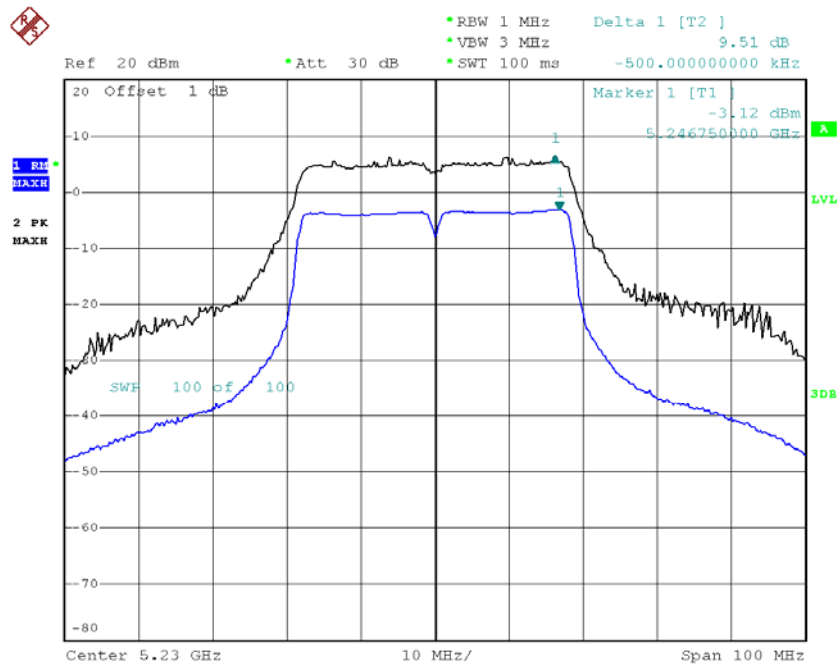
Test Mode :Band 1/TX N40 Mode_CH38/46



Date: 19.MAR.2014 16:08:55



CH46



Date: 19.MAR.2014 16:09:37

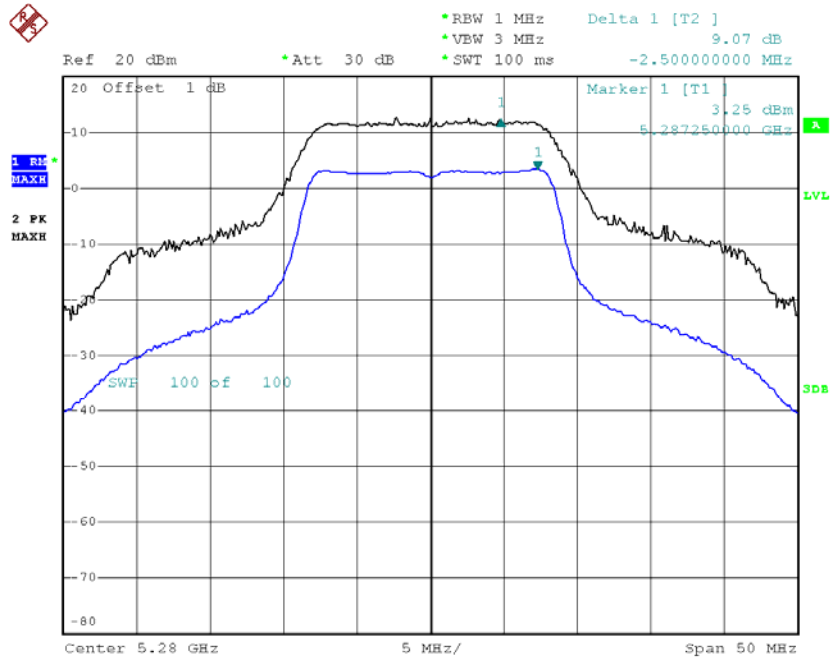


CH52



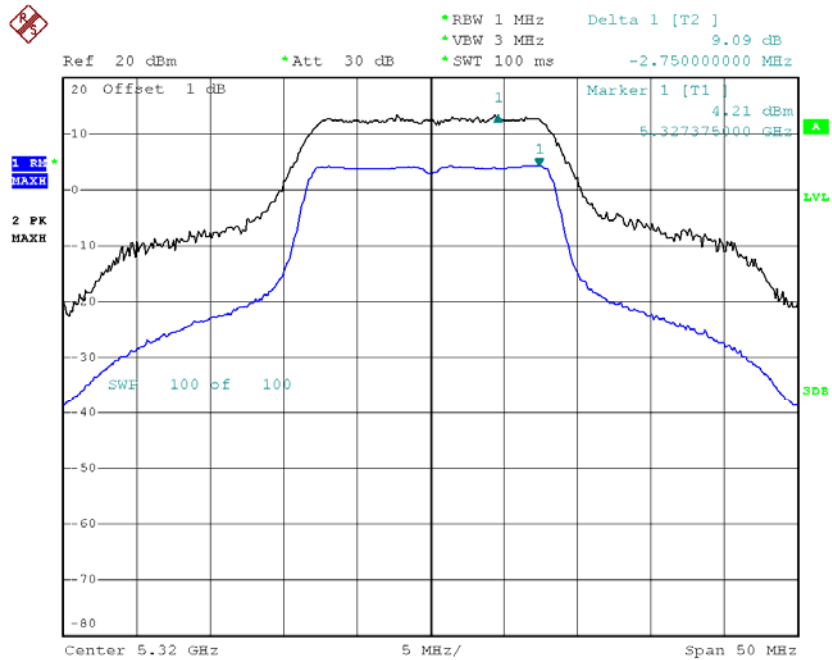


CH56



Date: 19.MAR.2014 15:47:09

CH64

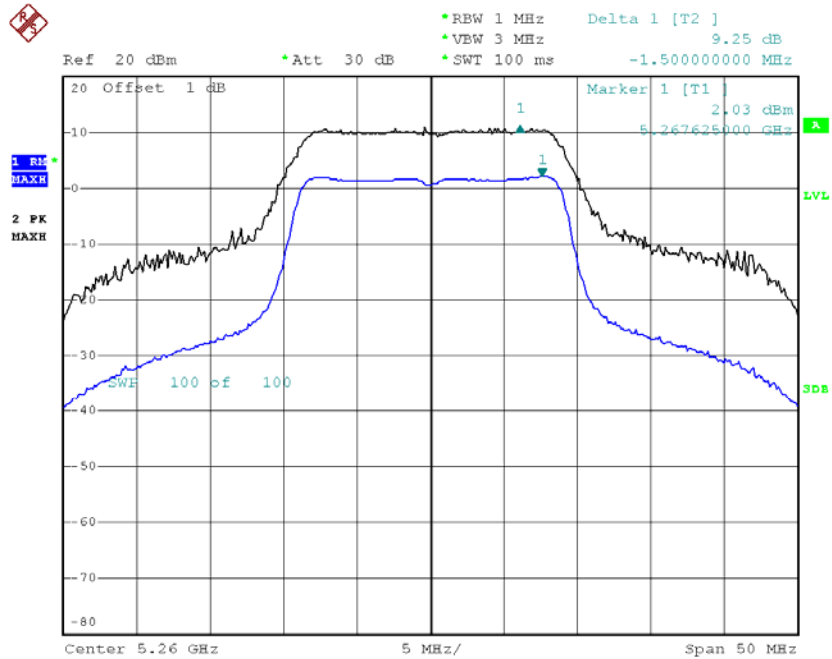


Date: 19.MAR.2014 15:48:11



Test Mode :Band 2/TX N20 Mode_CH52/56/64

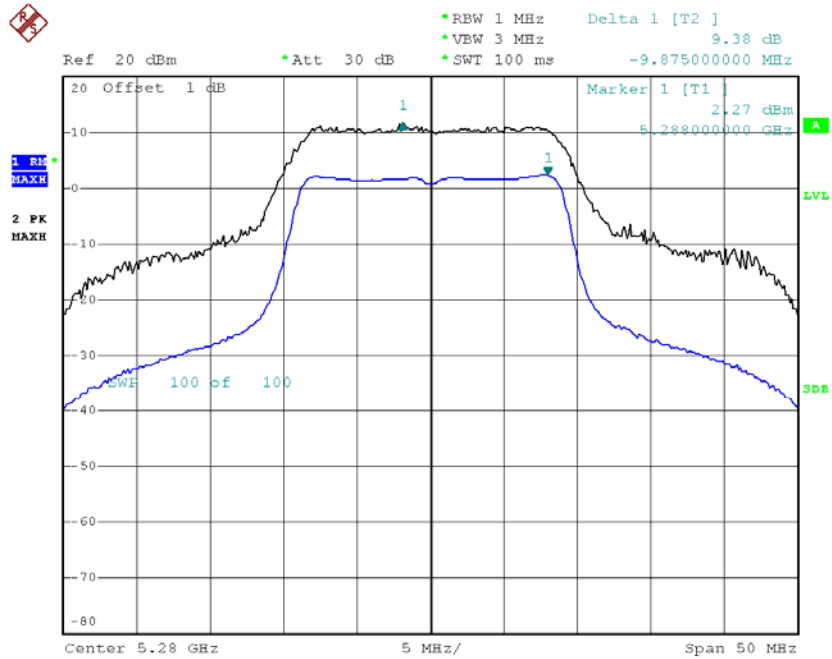
CH52



Date: 19.MAR.2014 15:58:05

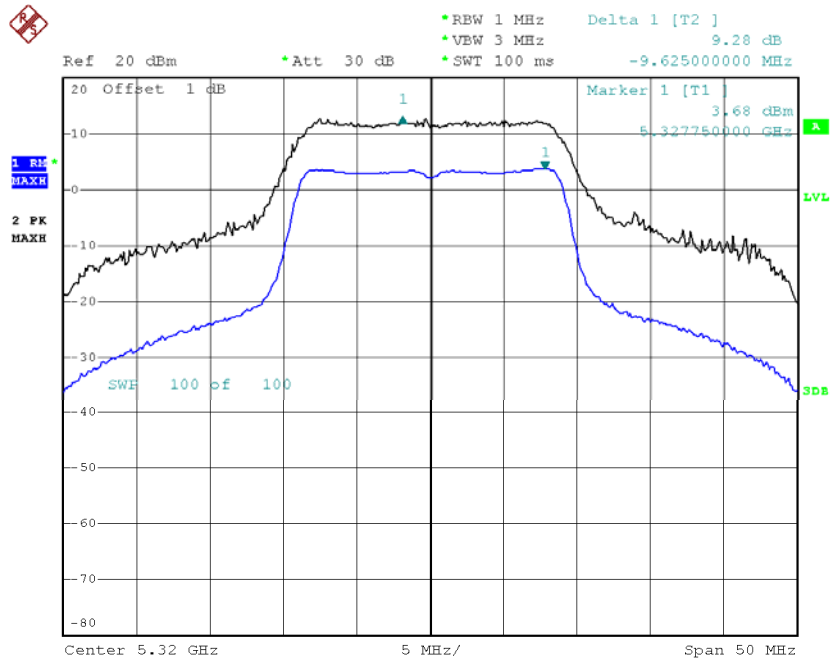


CH56



Date: 19.MAR.2014 15:53:29

CH64

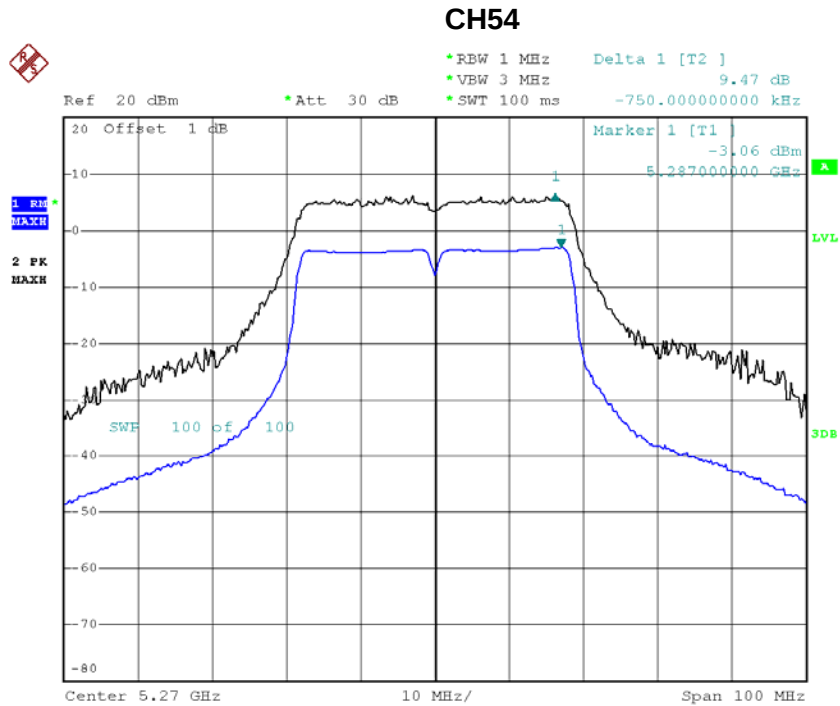


Date: 19.MAR.2014 15:52:09

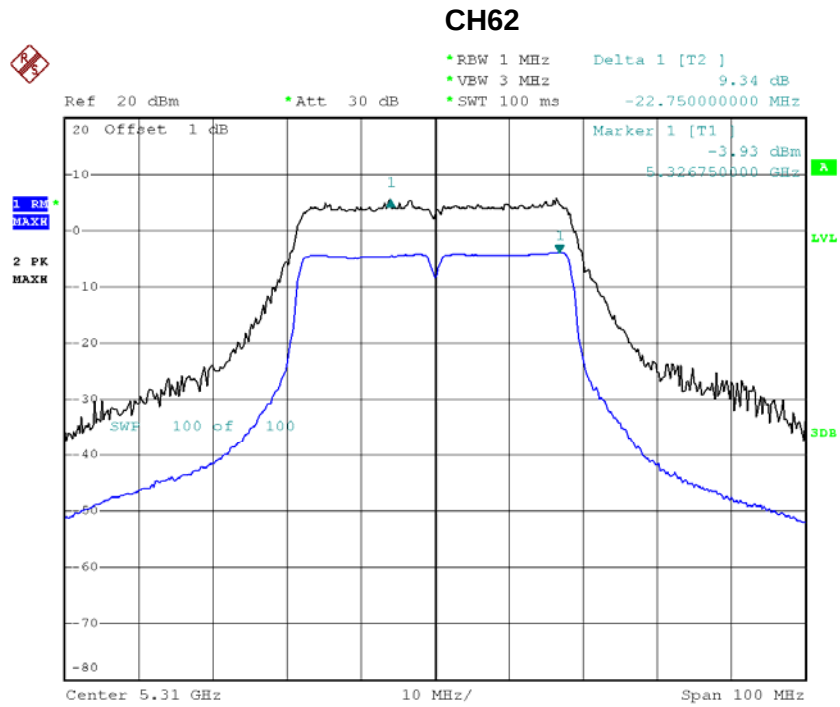


Test Mode :Band 2/TX N40 Mode_CH54/62

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH54	5270	8.99	13
CH62	5310	8.13	13



Date: 19.MAR.2014 16:14:02



Date: 19.MAR.2014 16:14:44



10. FREQUENCY STABILITY MEASUREMENT

10.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E 15.407(g) / RSS-210 A1.1.4			
Test Item	Limit	Frequency Range (MHz)	Result
Frequency Stability	specified in the user's manual	5150 – 5250	PASS
		5250 – 5350	PASS
		5470 – 5725	PASS

10.1.1 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 Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	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 -30°C~50°C.

10.1.2 DEVIATION FROM STANDARD

No deviation.

10.1.3 TEST SETUP



10.1.4 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.

10.1.5 EUT TEST CONDITIONS

Temperature: 25°C

Relative Humidity: 55%

Test Voltage: AC 120V/60HZ



10.1.6 TEST RESULTS

Test Mode : Band 1

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5180
132	5180.000000
120	5179.985000
118	5179.984000
Max. Deviation (MHz)	0.016000
Max. Deviation (ppm)	3.09

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5180
-20	5179.986000
-10	5179.984000
0	5179.989000
10	5179.986000
20	5179.983000
30	5179.986000
40	5179.982000
50	5179.986000
60	5179.985000
70	5179.985000
Max. Deviation (MHz)	0.018000
Max. Deviation (ppm)	3.47



Test Mode :	Band 2
--------------------	---------------

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5320
132	5320.002000
120	5320.018000
118	5320.017000
Max. Deviation (MHz)	0.018000
Max. Deviation (ppm)	3.38

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5320
-20	5320.012000
-10	5320.011000
0	5320.013000
10	5320.011000
20	5320.010000
30	5320.011000
40	5320.013000
50	5320.014000
60	5320.012000
70	5320.011000
Max. Deviation (MHz)	0.014000
Max. Deviation (ppm)	2.6316



11. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Apr. 25, 2014
2	LISN	R&S	ENV216	100087	Nov.15, 2014
3	Test Cable	N/A	C_17	N/A	Mar.14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	Apr. 25, 2014
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Apr. 25, 2014

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Apr. 25, 2014
2	Amplifier	HP	8447D	2944A09673	Apr. 25, 2014
3	Test Receiver	R&S	ESCI	100382	Apr. 25, 2014
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 02, 2014
5	Antenna	ETS	3115	00075789	Apr. 25, 2014
6	Amplifier	Agilent	8449B	3008A02274	Apr. 25, 2014
7	Spectrum	Agilent	E4408B	US39240143	Nov.15, 2014
8	Test Cable	HUBER+SUHNER	C-45	N/A	Apr. 30, 2014
9	Controller	CT	SC100	N/A	N/A
10	Horn Antenna	EMCO	3115	9605-4803	Apr. 25, 2014
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Apr. 25, 2014
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct. 22, 2014

26dB Spectrum Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.15, 2014

Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.15, 2014



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.15, 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.15, 2014

Peak Excursion Measurement

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.15, 2014

Frequency Stability Measurement

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov.15, 2014
2	Precision Oven Tester	HOLINK	H-T-1F-D	BA03101701	May.25.2014

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

All calibration period of equipment list is one year.



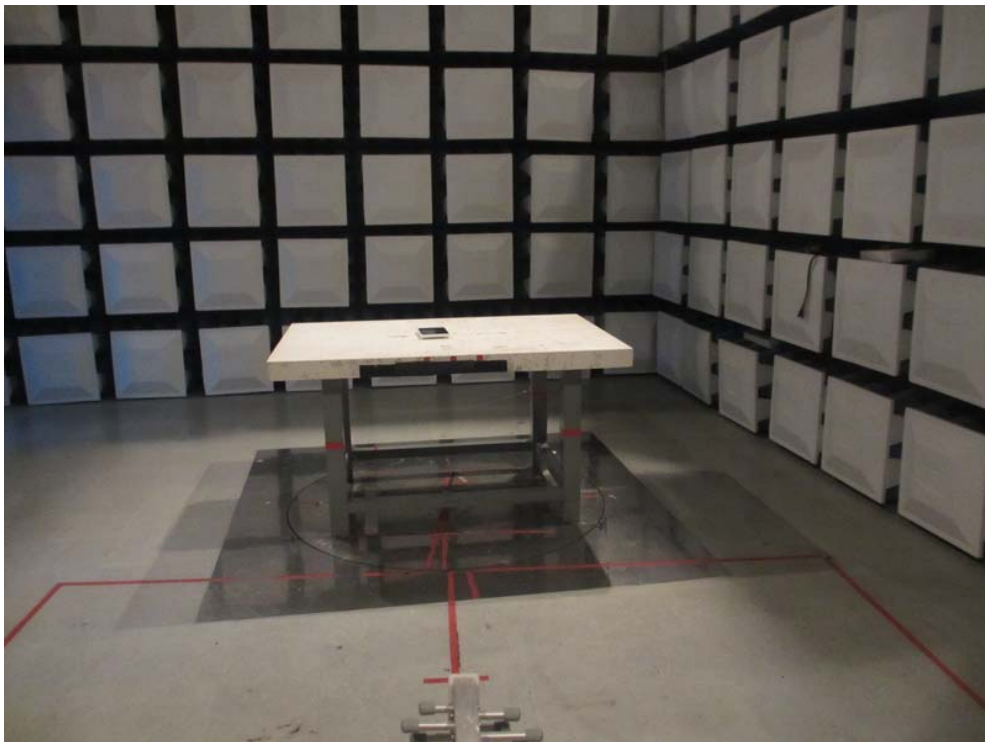
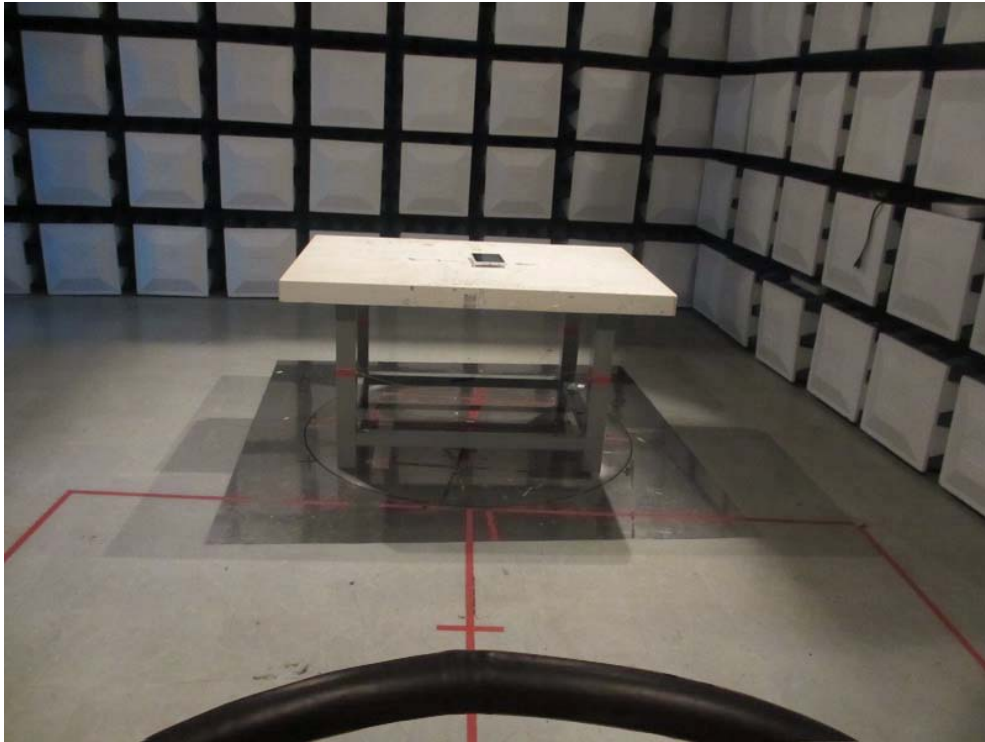
12. EUT TEST PHOTO

Conducted Measurement Photos



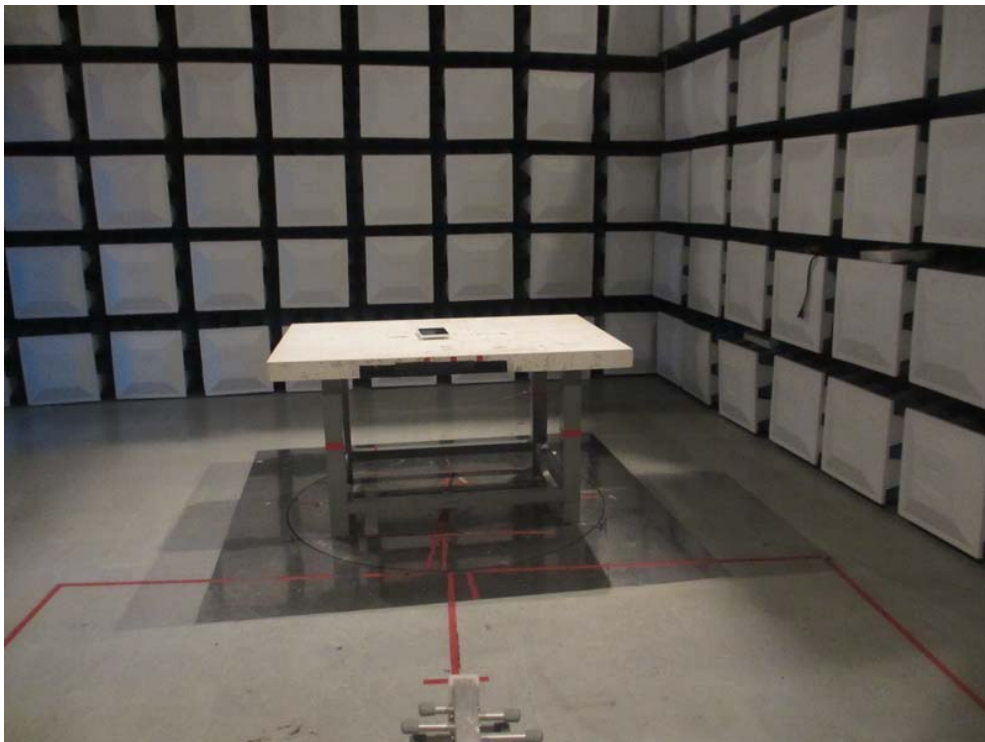


**Radiated Measurement Photos
9K~30MHz**





**Radiated Measurement Photos
30~1000MHz**





**Radiated Measurement Photos
Above 1000MHz**

