



Neutron Engineering Inc.

FCC Radio Test Report

FCC ID: QISTB-01

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

Issued Date : Apr. 09, 2014
Project No. : 1403C219
Equipment : TV BOX
Model Name : TB 01
Applicant : Huawei Technologies Co., Ltd.
Address : Administration Building, Headquarters of
Huawei Technologies Co., Ltd., Bantian,
Longgang District Shenzhen China

Tested by: Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Mar. 26, 2014

Date of Test: Mar. 26, 2014 ~ Apr. 08, 2014

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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.

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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.



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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FCCP-1-1403C219	Original Issue.	Apr. 09, 2014



1. CERTIFICATION

Equipment : TV BOX
Brand Name : HUAWEI
Model Name : TB 01
Applicant : Huawei Technologies Co., Ltd.
Manufacturer : Huawei Technologies Co., Ltd.
Address : Administration Building, Huawei Base, Bantian, Longgang District ,Shenzhen
518129, P.R.China
Factory : Huawei Technologies Co., Ltd.
Address : Administration Building, Huawei Base, Bantian, Longgang District ,Shenzhen
518129, P.R.China
Date of Test : Mar. 26, 2014 ~ Apr. 08, 2014
Test Item : ENGINEERING SAMPLE
Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.4 : 2009;
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-FCCP-1-1403C219) 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			
Standard(s) Section	Test Item	Judgment	Remark
FCC			
15.207	AC Power Line Conducted Emissions	PASS	
15.407(a)	26dB Spectrum Bandwidth	PASS	
15.407(a)	Maximum Conducted Output Power	PASS	
15.407(a)	Power Spectral Density	PASS	
15.407(a)	Peak Excursion	PASS	
15.407(a)	Radiated Emissions	PASS	
15.407(b)	Band Edge Emissions	PASS	
15.407(g)	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

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	TV BOX	
Brand Name	HUAWEI	
Model Name	TB 01	
Mode Different	N/A	
Product Description	Operation Frequency	Band 1:5150MHz~5250MHz Band 2:5250MHz~5350MHz Band 3:5470MHz~5725MHz
	Modulation Type	OFDM
	Bit Rate of Transmitter	11a:6/ 9/12/18/24/36/48/54Mbps 11n:300Mbps
	Output Power (Max.)-Band 1	802.11a:10.42dBm 802.11N20:13.33dBm 802.11N40:11.63dBm
	Output Power (Max.)-Band 2	802.11a:10.21 dBm 802.11N20:13.23dBm 802.11N40:11.27dBm
	Output Power (Max.)-Band 3	802.11a:9.98dBm 802.11N20:13.02dBm 802.11N40:11.65dBm
Power Source	Supplied from Li-ion Battery. Brand/ Model: HUAWEI / HW06(AAH29055)	
Power Rating	DC 3.7V 3560mAh(13.2Wh)	
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							
Band 1		Band 2		Band 3			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	52	5260	100	5500	116	5580
40	5200	56	5280	104	5520	132	5660
44	5220	60	5300	108	5540	136	5680
48	5240	64	5320	112	5560	140	5700

802.11n 40M							
Band 1		Band 2		Band 3			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	54	5270	102	5510	126	5630
46	5230	62	5310	110	5550	134	5670
				118	5590		

3. Antenna Specification:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Internal	N/A	2	TX/RX
2	N/A	N/A	Internal	N/A	2	TX/RX

Note:

(1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R).

4.

Operating Mode	1TX	2TX
TX Mode		
802.11a	V (ANT 1 or ANT 2)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 2)
802.11n(40MHz)	-	V (ANT 1 + ANT 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) TX A Mode / CH100, CH116, CH140(Band 3)
Mode 2	TX N20 Mode / CH36, CH40, CH48(Band 1) TX N20 Mode / CH52, CH56, CH64(Band 2) TX N20 Mode / CH100, CH116, CH140(Band 3)
Mode 3	TX N40 Mode / CH38, CH46 (Band 1) TX N40 Mode / CH54, CH62 (Band 2) TX N40 Mode/CH102, CH110, CH134(Band 3)
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) TX A Mode / CH100, CH116, CH140(Band 3)
Mode 2	TX N20 Mode / CH36, CH40, CH48(Band 1) TX N20 Mode / CH52, CH56, CH64(Band 2) TX N20 Mode / CH100, CH116, CH140(Band 3)
Mode 3	TX N40 Mode / CH38, CH46 (Band 1) TX N40 Mode / CH54, CH62 (Band 2) TX N40 Mode/CH102, CH110, CH134(Band 3)

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	N/A		
Frequency	5180 MHz	5200MHz	5240 MHz
A Mode	-1	-1	-1
Frequency	5260 MHz	5280 MHz	5320 MHz
A Mode	-1	-1	-1
Frequency	5500 MHz	5580 MHz	5700 MHz
A Mode	-1	-1	-1

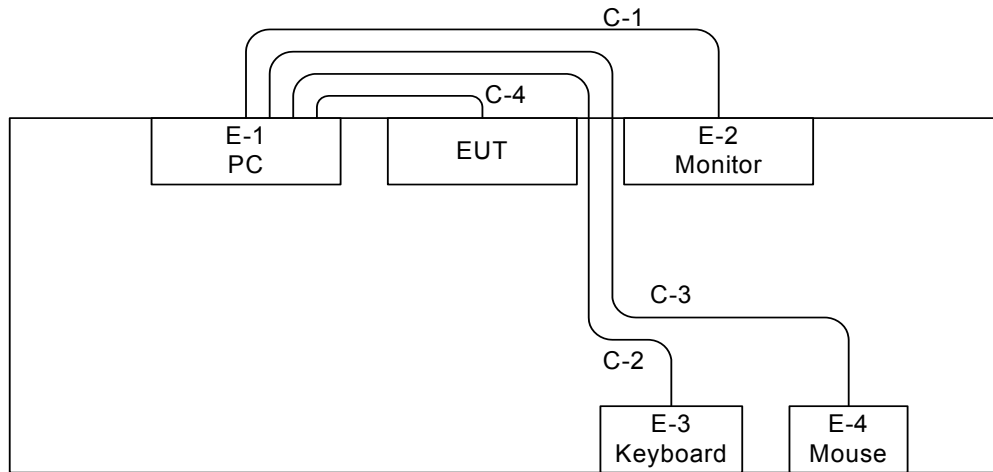
Test software version	N/A		
Frequency	5180 MHz	5200MHz	5240 MHz
N20 Mode	-1	-1	-1
Frequency	5260 MHz	5280 MHz	5320 MHz
N20 Mode	-1	-1	-1
Frequency	5500 MHz	5580 MHz	5700 MHz
N20 Mode	-1	-1	-1

Test software version	N/A		
Frequency	5190 MHz	5230MHz	
N40 Mode	-1	-1	
Frequency	5270 MHz	5310 MHz	
N40 Mode	-1	-1	
Frequency	5510 MHz	5550 MHz	5670 MHz
N40M Mode	-1	-1	-1

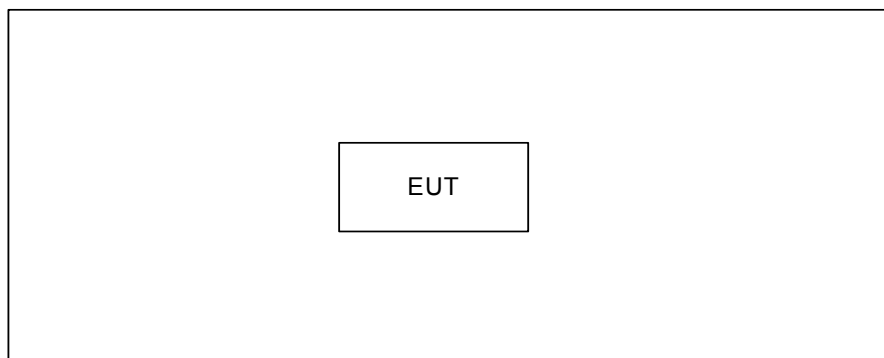


3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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	Series No.	Note
E-1	PC	Dell	745	DOC	G7K832X	
E-2	LCD monitor	Dell	E177FPc	DOC	CNOFJ179-64180-6AG-1W NS	
E-3	USB Keyboard	Dell	L100	DOC	CNORH6596589085C00U7	
E-4	USB Mouse	Dell	MO56UOA	DOC	G01003HO	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	YES	1.5m	D-Sub Cable
C-2	YES	NO	1.5m	USB Cable
C-3	YES	NO	1.5m	USB Cable
C-4	YES	NO	1.5m	USB Cable



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.

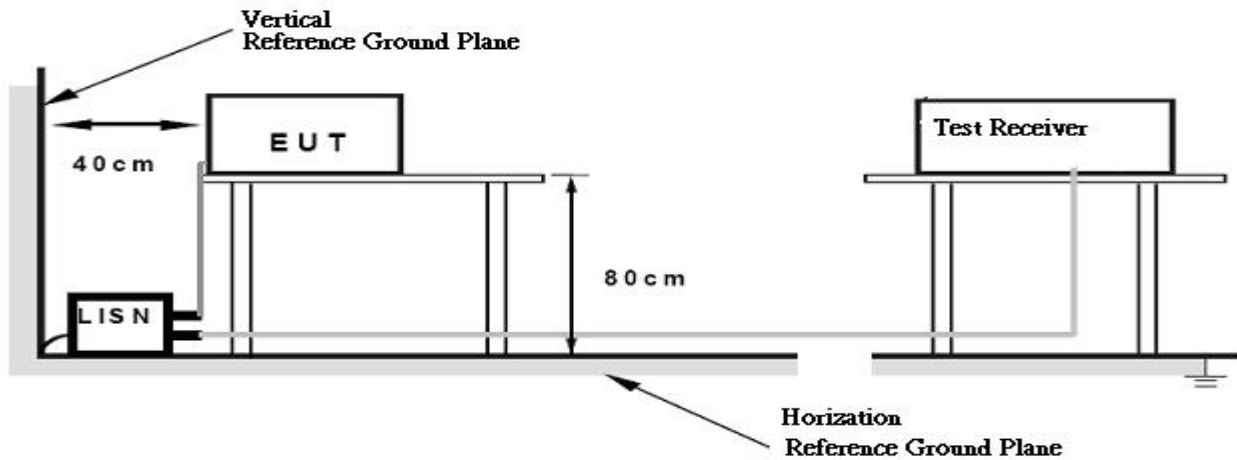
4.1.2 TEST PROCEDURE

- 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

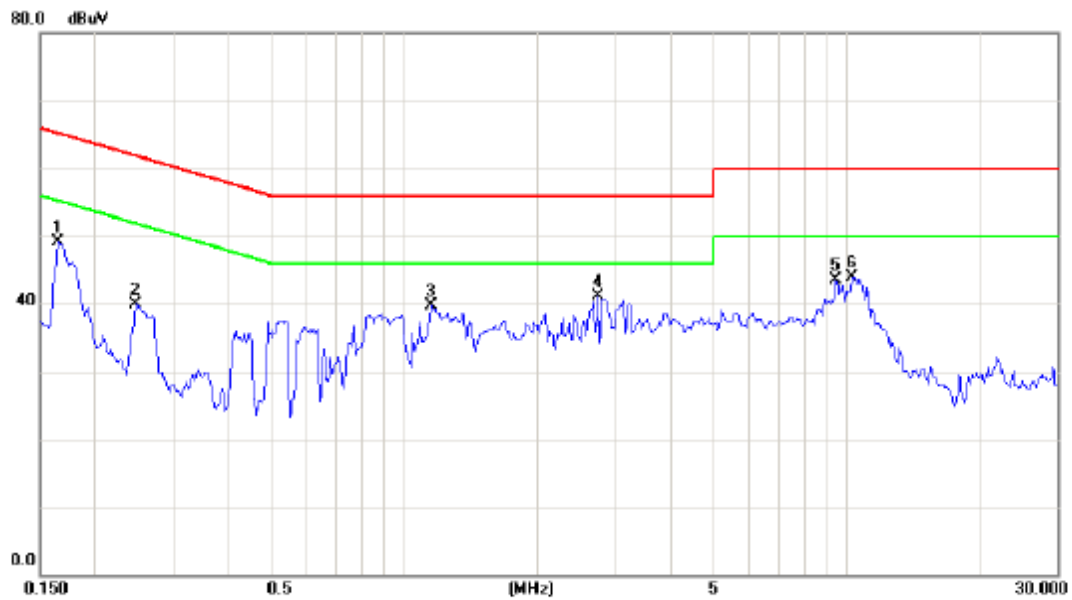
Remark:

- (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

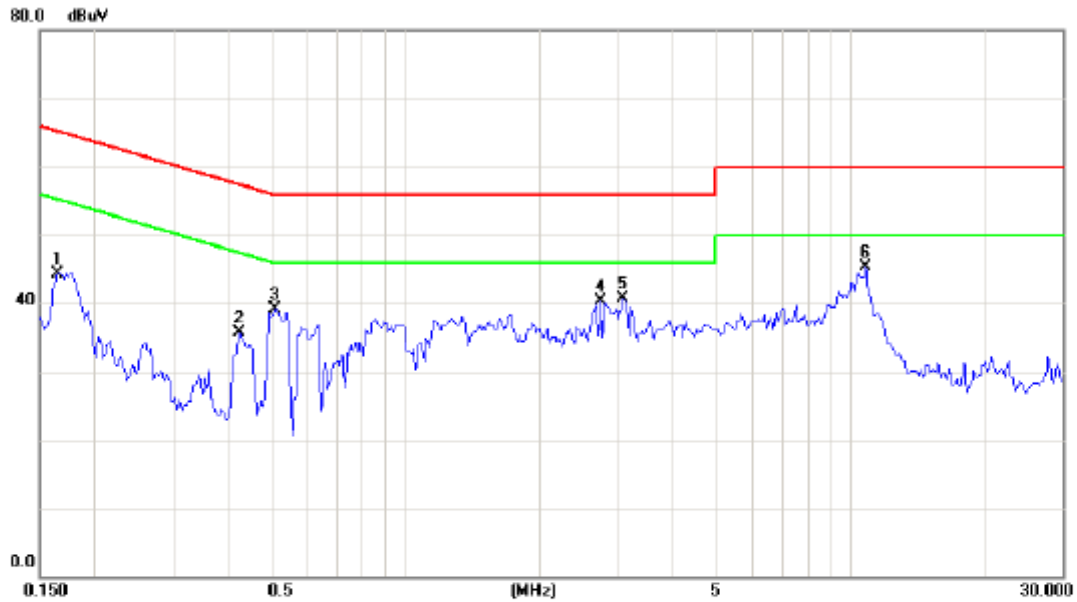


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1655	39.53	9.63	49.16	65.18	-16.02	peak	
2		0.2474	30.26	9.65	39.91	61.84	-21.93	peak	
3		1.1500	30.02	9.75	39.77	56.00	-16.23	peak	
4	*	2.7515	31.29	9.86	41.15	56.00	-14.85	peak	
5		9.4882	33.39	10.05	43.44	60.00	-16.56	peak	
6		10.3201	33.85	10.08	43.93	60.00	-16.07	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		0.1655	34.68	9.70	44.38	65.18	-20.80	peak	
2		0.4233	25.89	9.73	35.62	57.38	-21.76	peak	
3		0.5091	29.38	9.74	39.12	56.00	-16.88	peak	
4		2.7515	30.42	9.88	40.30	56.00	-15.70	peak	
5		3.0781	30.76	9.89	40.65	56.00	-15.35	peak	
6	*	10.8360	35.03	10.23	45.26	60.00	-14.74	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), then the 15.209(a) 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:

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

4.2.2 TEST PROCEDURE

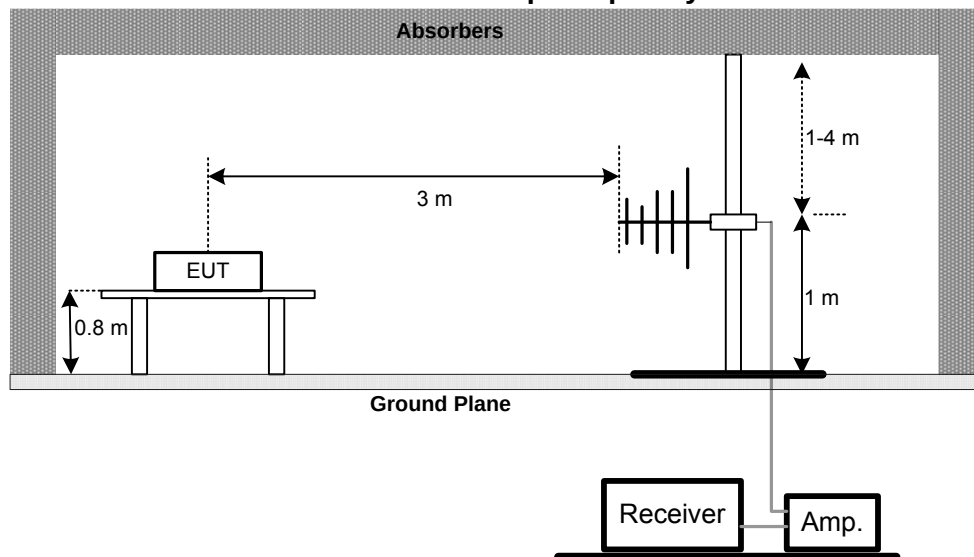
- The measuring distance of at 1.5m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 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

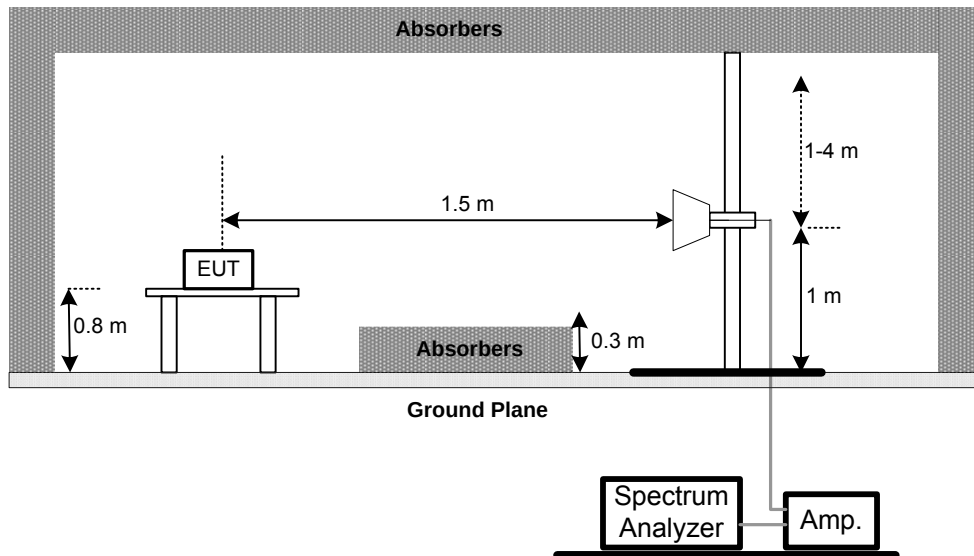
No deviation

4.2.4 TEST SETUP

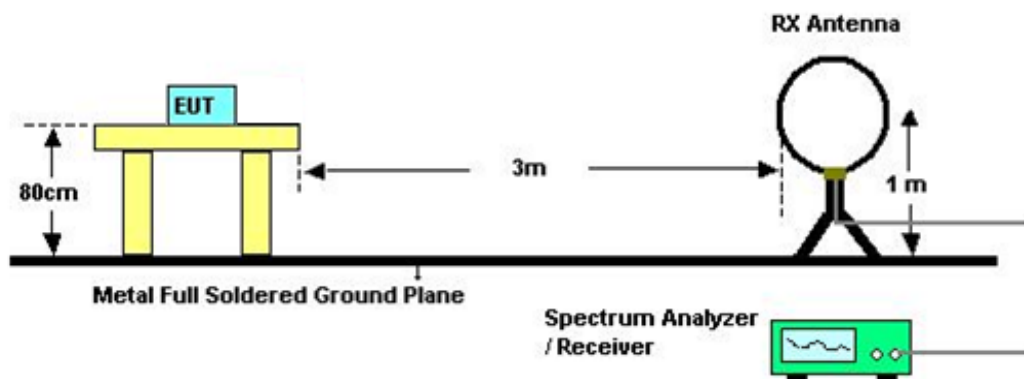
Radiated Emission Test Set-Up Frequency 30 - 1000MHz



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
0.0094	0°	68.32	24.30	92.62	128.10	-35.48	AV
0.0094	0°	72.37	24.30	96.67	148.10	-51.43	PK
0.0132	0°	70.34	24.30	94.64	125.19	-30.55	AV
0.0132	0°	79.54	24.30	103.84	145.19	-41.35	PK
0.0246	0°	56.67	24.01	80.68	119.79	-39.11	AV
0.0246	0°	60.24	24.01	84.25	139.79	-55.54	PK
0.0321	0°	61.11	23.53	84.64	117.47	-32.83	AV
0.0321	0°	65.64	23.53	89.17	137.47	-48.30	PK
0.5670	0°	18.34	20.01	38.35	72.53	-34.18	QP
1.7556	0°	18.25	19.52	37.77	69.54	-31.77	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0093	90°	76.35	24.30	100.65	128.21	-27.56	AVG
0.0093	90°	82.45	24.30	106.75	148.21	-41.46	PK
0.0237	90°	56.72	24.07	80.79	120.11	-39.32	AVG
0.0237	90°	59.87	24.07	83.94	140.11	-56.17	PK
0.0311	90°	57.25	23.60	80.85	117.75	-36.90	AVG
0.0311	90°	58.27	23.60	81.87	137.75	-55.88	PK
0.0426	90°	59.34	22.87	82.21	115.02	-32.81	AVG
0.0426	90°	63.22	22.87	86.09	135.02	-48.93	PK
0.4912	90°	17.37	19.82	37.19	73.78	-36.59	QP
1.7151	90°	18.36	19.53	37.89	69.54	-31.65	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.



4.2.8 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ

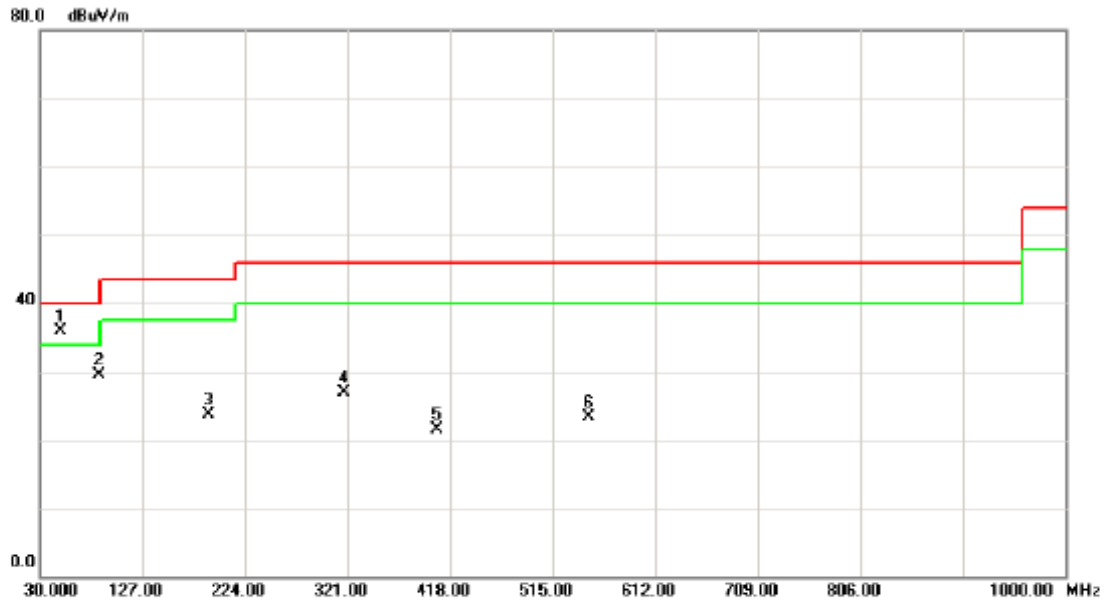
Remark:

- (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

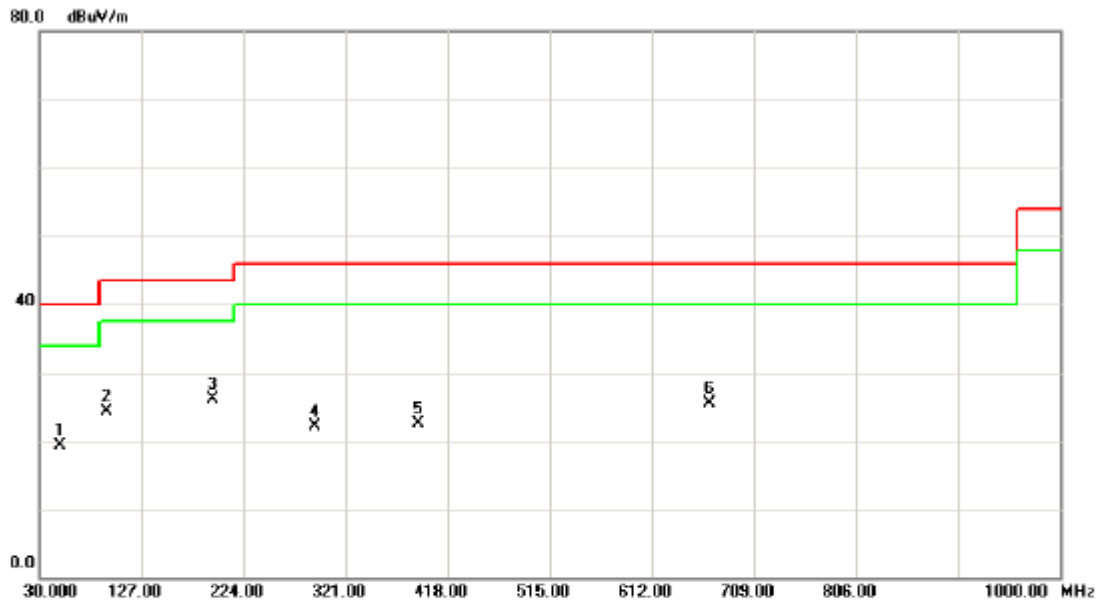


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	49.4000	50.52	-14.70	35.82	40.00	-4.18	peak	
2		86.2600	47.34	-17.93	29.41	40.00	-10.59	peak	
3		189.0800	37.96	-14.18	23.78	43.50	-19.72	peak	
4		317.1200	38.18	-11.32	26.86	46.00	-19.14	peak	
5		405.3900	31.27	-9.78	21.49	46.00	-24.51	peak	
6		548.9500	30.91	-7.70	23.21	46.00	-22.79	peak	



Test Mode : Band 1/TX A Mode 5180MHz

Horizontal

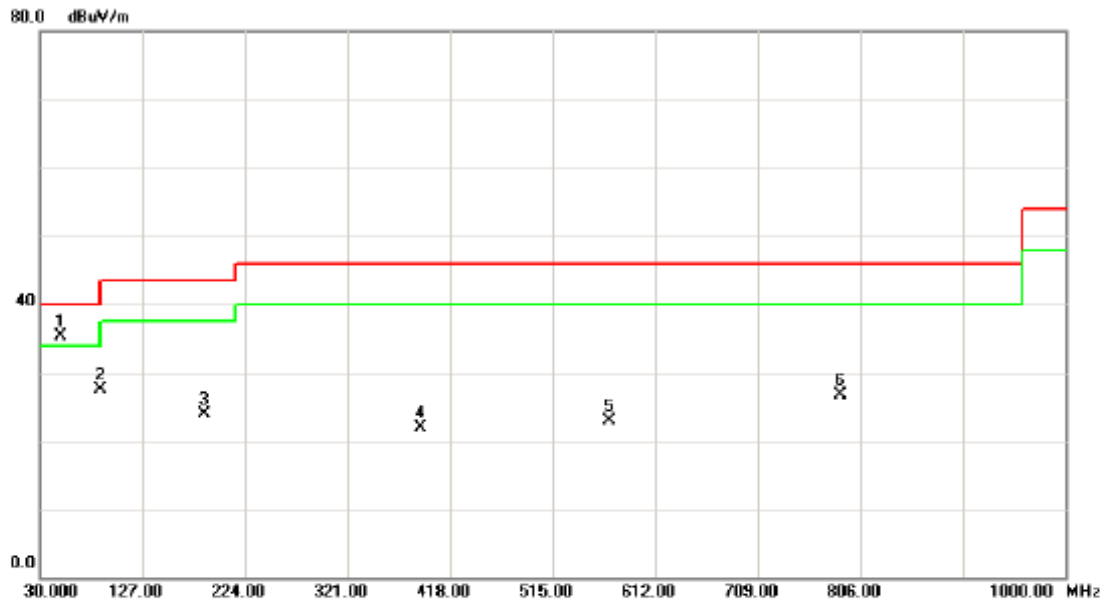


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		50.3700	34.06	-14.77	19.29	40.00	-20.71	peak	
2		94.0200	41.72	-17.43	24.29	43.50	-19.21	peak	
3	*	194.9000	40.79	-14.75	26.04	43.50	-17.46	peak	
4		291.9000	33.79	-11.70	22.09	46.00	-23.91	peak	
5		389.8700	32.78	-10.20	22.58	46.00	-23.42	peak	
6		667.2900	30.91	-5.31	25.60	46.00	-20.40	peak	



Test Mode : Band 1/TX A Mode 5200MHz

Vertical

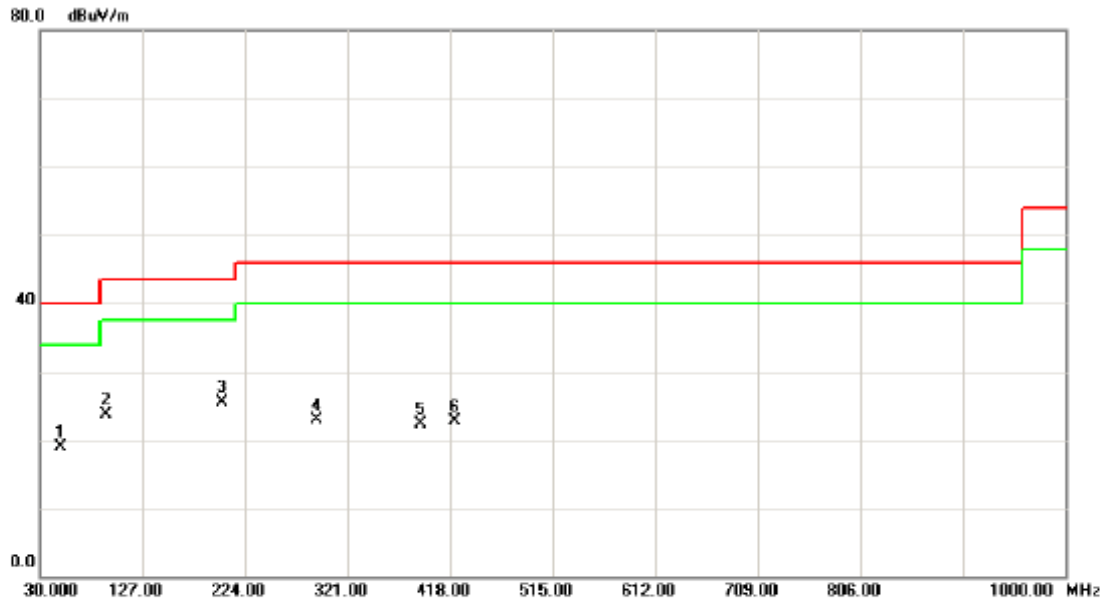


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	49.4000	50.08	-14.70	35.38	40.00	-4.62	peak	
2		87.2300	45.39	-17.97	27.42	40.00	-12.58	peak	
3		185.2000	37.53	-13.60	23.93	43.50	-19.57	peak	
4		389.8700	32.11	-10.20	21.91	46.00	-24.09	peak	
5		568.3500	30.68	-7.81	22.87	46.00	-23.13	peak	
6		787.5700	30.26	-3.56	26.70	46.00	-19.30	peak	



Test Mode : Band 1/TX A Mode 5200MHz

Horizontal

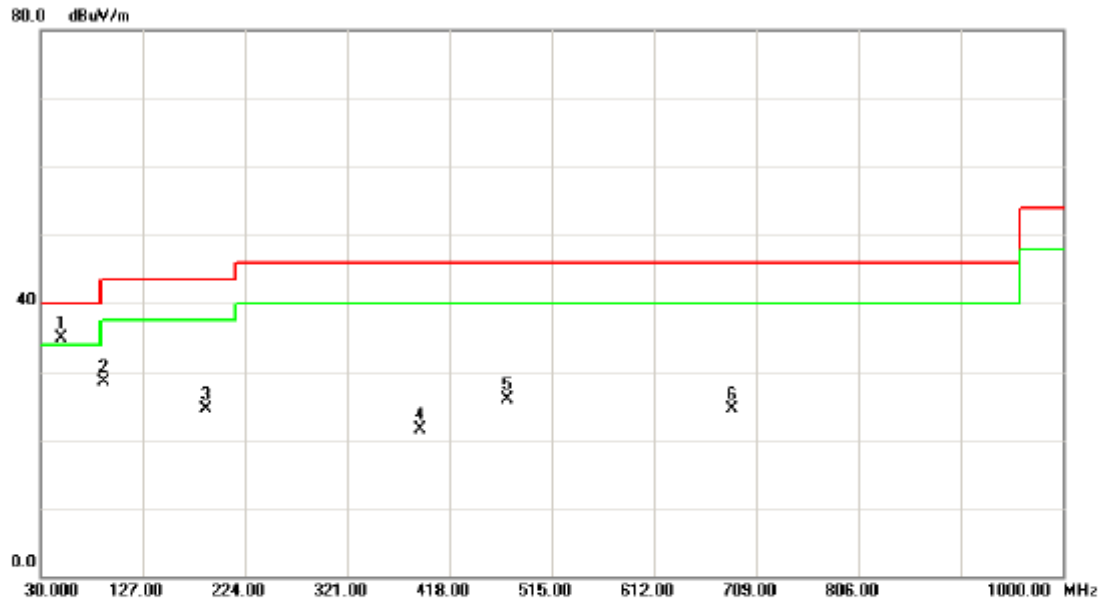


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		49.4000	33.60	-14.70	18.90	40.00	-21.10	peak	
2		92.0800	41.41	-17.76	23.65	43.50	-19.85	peak	
3	*	202.6600	40.80	-15.22	25.58	43.50	-17.92	peak	
4		291.9000	34.57	-11.70	22.87	46.00	-23.13	peak	
5		389.8700	32.50	-10.20	22.30	46.00	-23.70	peak	
6		421.8800	32.09	-9.46	22.63	46.00	-23.37	peak	



Test Mode : Band 1/TX A Mode 5240MHz

Vertical

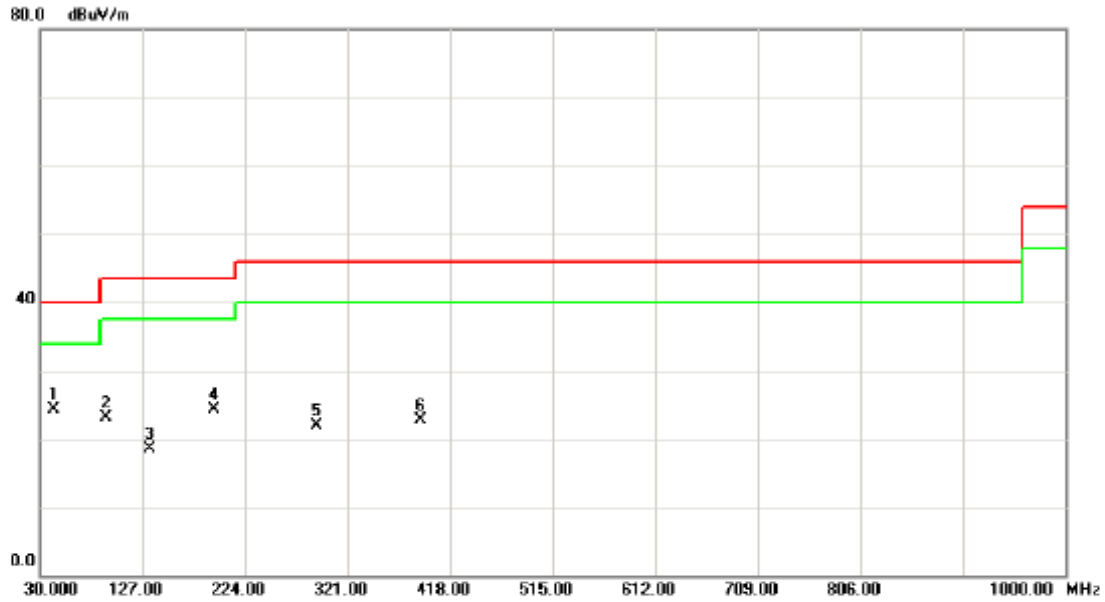


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	49.4000	49.62	-14.70	34.92	40.00	-5.08	peak	
2		90.1400	46.53	-18.09	28.44	43.50	-15.06	peak	
3		187.1400	38.34	-13.89	24.45	43.50	-19.05	peak	
4		389.8700	31.63	-10.20	21.43	46.00	-24.57	peak	
5		472.3200	35.38	-9.55	25.83	46.00	-20.17	peak	
6		686.6900	29.58	-5.00	24.58	46.00	-21.42	peak	



Test Mode : Band 1/TX A Mode 5240MHz

Horizontal

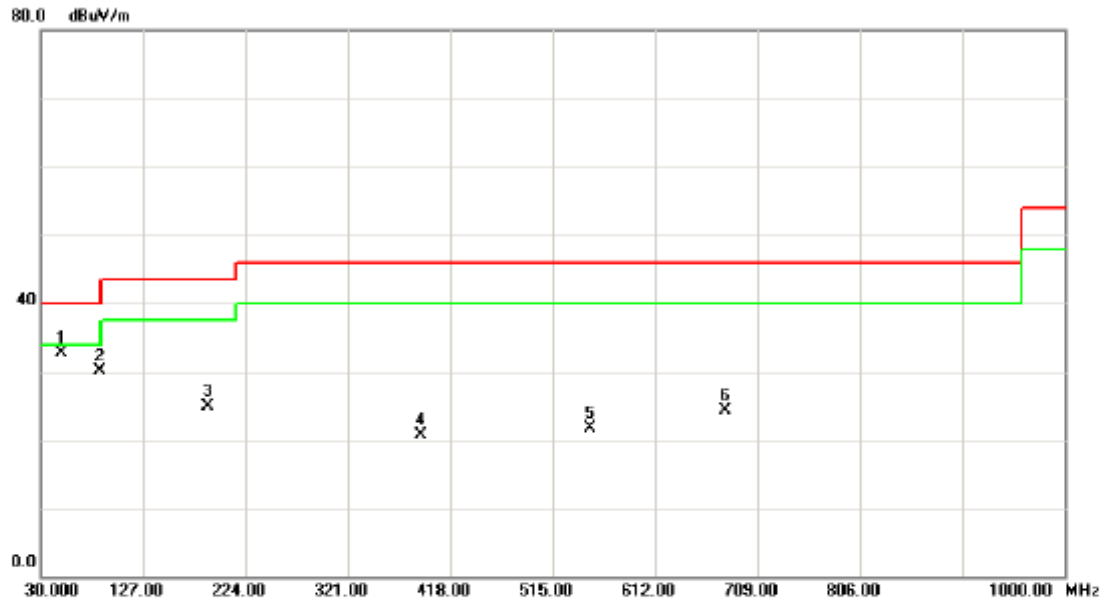


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	43.5800	38.61	-14.22	24.39	40.00	-15.61	peak	
2		92.0800	40.87	-17.76	23.11	43.50	-20.39	peak	
3		133.7900	31.97	-13.50	18.47	43.50	-25.03	peak	
4		194.9000	39.14	-14.75	24.39	43.50	-19.11	peak	
5		291.9000	33.57	-11.70	21.87	46.00	-24.13	peak	
6		389.8700	32.98	-10.20	22.78	46.00	-23.22	peak	



Test Mode : Band 2/TX A Mode 5260MHz

Vertical

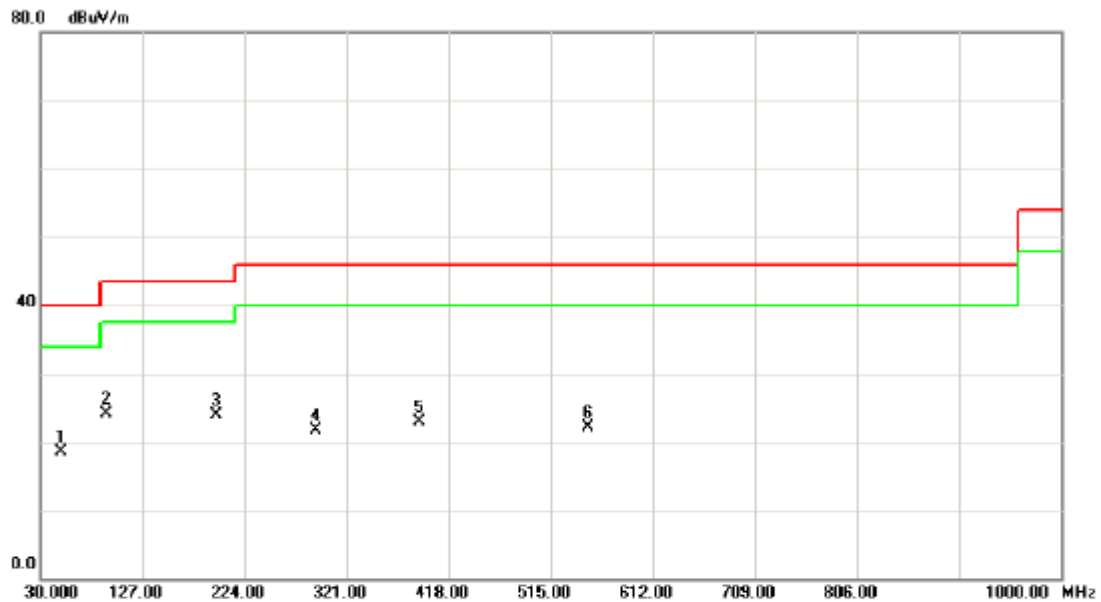


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	50.3700	47.47	-14.77	32.70	40.00	-7.30	peak	
2		86.2600	48.08	-17.93	30.15	40.00	-9.85	peak	
3		188.1100	38.86	-14.04	24.82	43.50	-18.68	peak	
4		389.8700	30.82	-10.20	20.62	46.00	-25.38	peak	
5		549.9200	29.44	-7.65	21.79	46.00	-24.21	peak	
6		678.9300	29.41	-5.12	24.29	46.00	-21.71	peak	



Test Mode : Band 2/TX A Mode 5260MHz

Horizontal

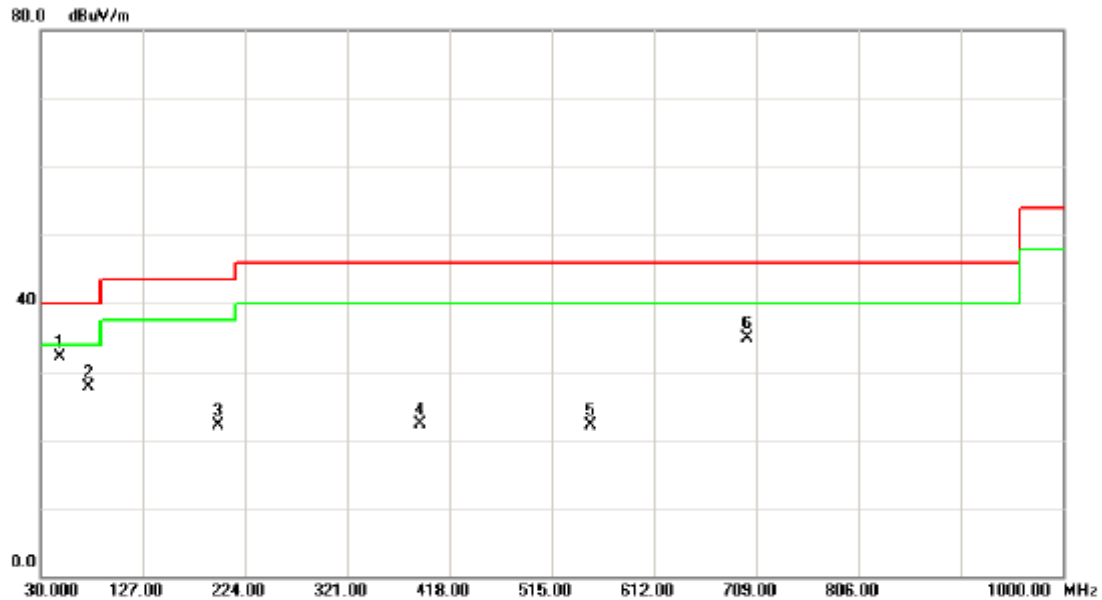


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		49.4000	33.22	-14.70	18.52	40.00	-21.48	peak	
2	*	92.0800	41.85	-17.76	24.09	43.50	-19.41	peak	
3		197.8100	38.92	-15.00	23.92	43.50	-19.58	peak	
4		291.9000	33.39	-11.70	21.69	46.00	-24.31	peak	
5		389.8700	33.14	-10.20	22.94	46.00	-23.06	peak	
6		549.9200	29.74	-7.65	22.09	46.00	-23.91	peak	



Test Mode : Band 2/TX A Mode 5280MHz

Vertical

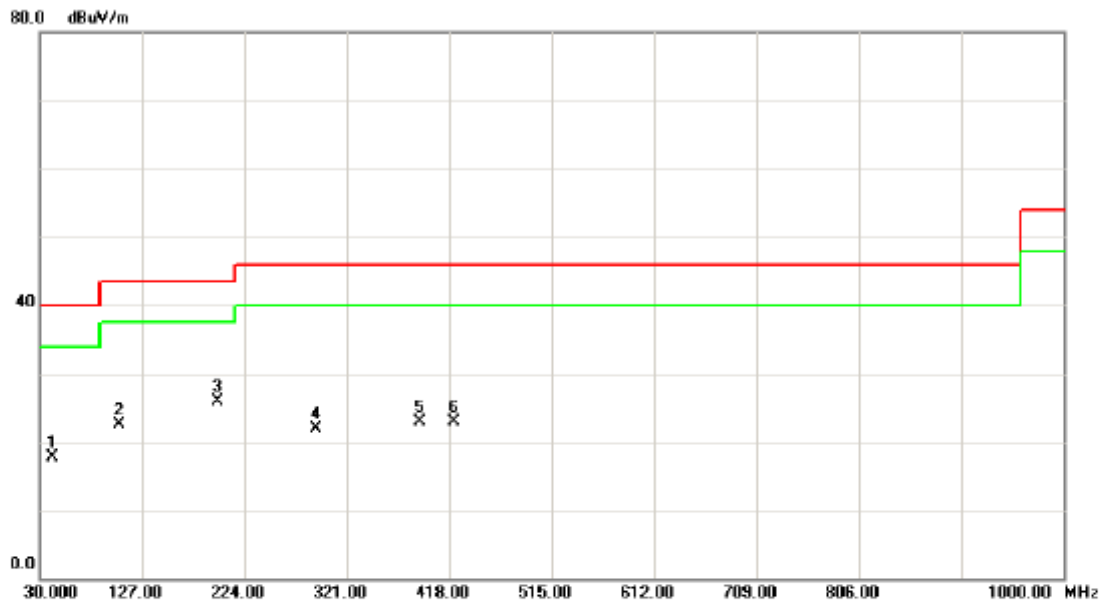


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	48.4300	46.61	-14.57	32.04	40.00	-7.96	peak	
2		75.5900	44.58	-16.85	27.73	40.00	-12.27	peak	
3		198.7800	37.10	-15.09	22.01	43.50	-21.49	peak	
4		389.8700	32.48	-10.20	22.28	46.00	-23.72	peak	
5		551.8600	29.68	-7.67	22.01	46.00	-23.99	peak	
6		700.2700	39.81	-4.81	35.00	46.00	-11.00	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		42.6100	32.10	-14.39	17.71	40.00	-22.29	peak	
2		105.6600	37.91	-15.38	22.53	43.50	-20.97	peak	
3	*	198.7800	41.02	-15.09	25.93	43.50	-17.57	peak	
4		291.9000	33.58	-11.70	21.88	46.00	-24.12	peak	
5		389.8700	33.14	-10.20	22.94	46.00	-23.06	peak	
6		421.8800	32.35	-9.46	22.89	46.00	-23.11	peak	



Test Mode : Band 2/TX A Mode 5320MHz

Vertical

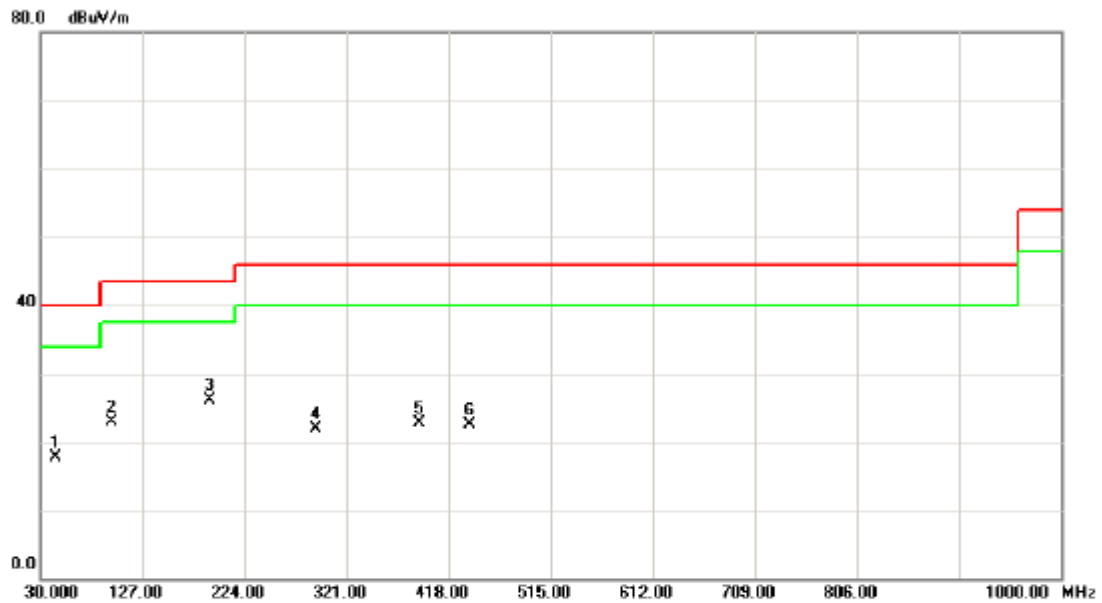


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	49.4000	45.75	-14.70	31.05	40.00	-8.95	peak	
2		94.0200	43.49	-17.43	26.06	43.50	-17.44	peak	
3		187.1400	33.78	-13.89	19.89	43.50	-23.61	peak	
4		389.8700	31.17	-10.20	20.97	46.00	-25.03	peak	
5		421.8800	30.38	-9.46	20.92	46.00	-25.08	peak	
6		568.3500	29.36	-7.81	21.55	46.00	-24.45	peak	



Test Mode : Band 2/TX A Mode 5320MHz

Horizontal

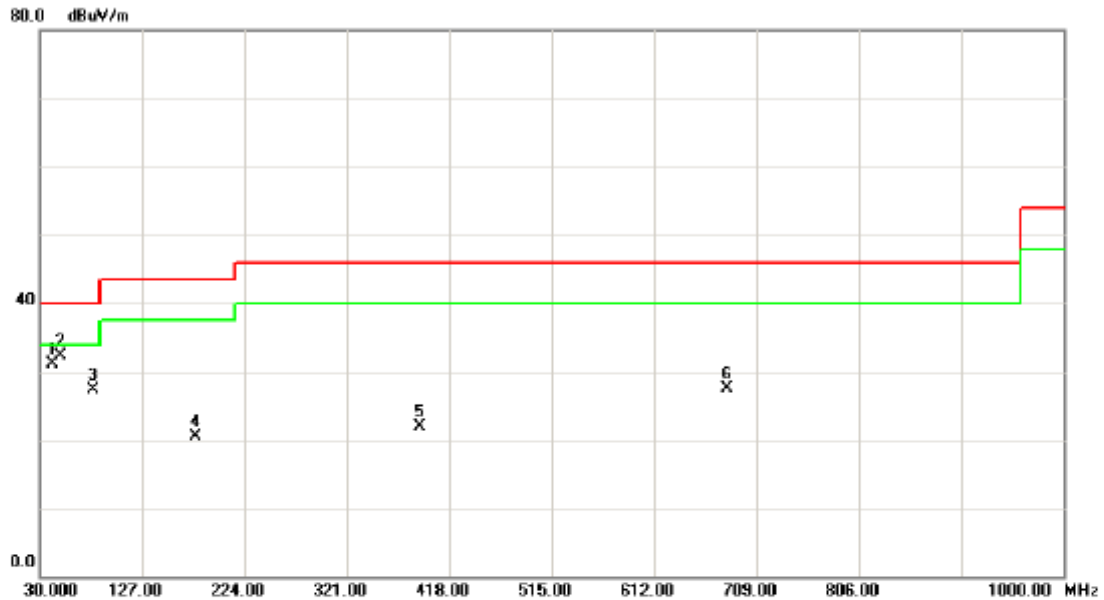


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		44.5500	31.77	-14.15	17.62	40.00	-22.38	peak	
2		97.9000	39.60	-16.66	22.94	43.50	-20.56	peak	
3	*	191.0200	40.43	-14.40	26.03	43.50	-17.47	peak	
4		291.9000	33.53	-11.70	21.83	46.00	-24.17	peak	
5		389.8700	32.91	-10.20	22.71	46.00	-23.29	peak	
6		438.3700	31.72	-9.14	22.58	46.00	-23.42	peak	



Test Mode : Band 3/TX A Mode 5500MHz

Vertical

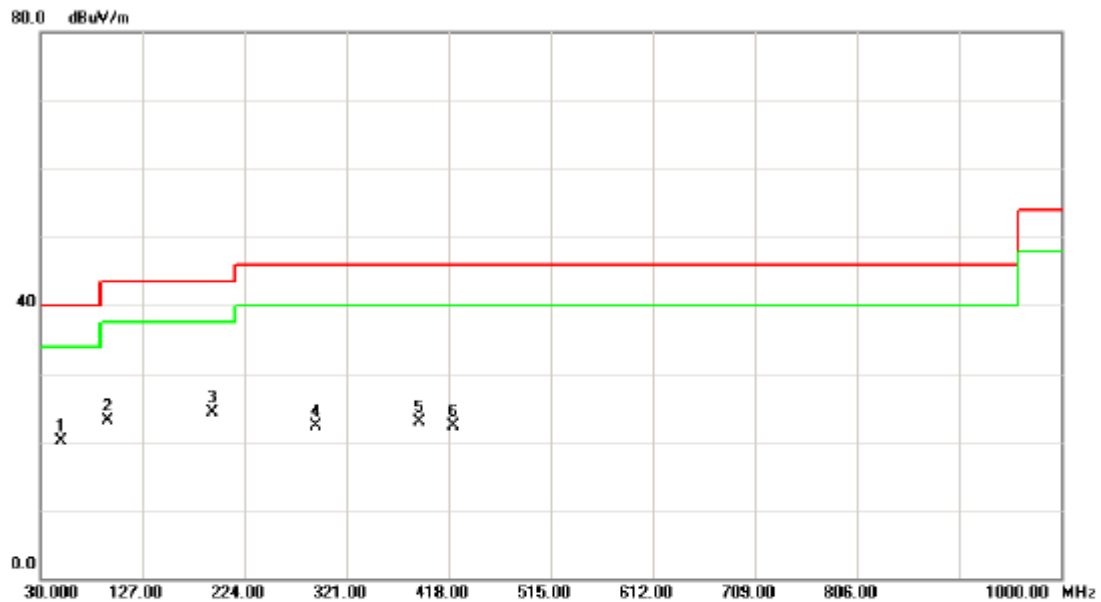


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		41.6400	45.61	-14.51	31.10	40.00	-8.90	peak	
2	*	50.3700	47.15	-14.77	32.38	40.00	-7.62	peak	
3		80.4400	44.77	-17.55	27.22	40.00	-12.78	peak	
4		178.4100	33.31	-12.82	20.49	43.50	-23.01	peak	
5		389.8700	32.16	-10.20	21.96	46.00	-24.04	peak	
6		680.8700	32.56	-5.10	27.46	46.00	-18.54	peak	



Test Mode : Band 3/TX A Mode 5500MHz

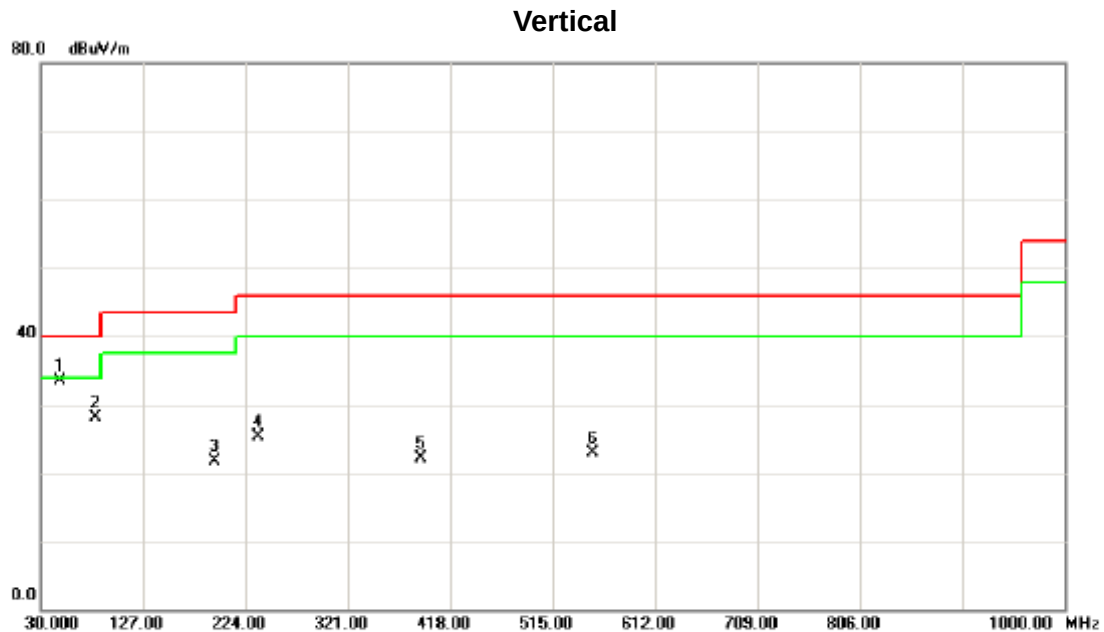
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		49.4000	34.81	-14.70	20.11	40.00	-19.89	peak	
2		94.0200	40.52	-17.43	23.09	43.50	-20.41	peak	
3	*	193.9300	38.96	-14.66	24.30	43.50	-19.20	peak	
4		291.9000	34.10	-11.70	22.40	46.00	-23.60	peak	
5		389.8700	33.05	-10.20	22.85	46.00	-23.15	peak	
6		421.8800	31.78	-9.46	22.32	46.00	-23.68	peak	



Test Mode : Band 3/TX A Mode 5580MHz

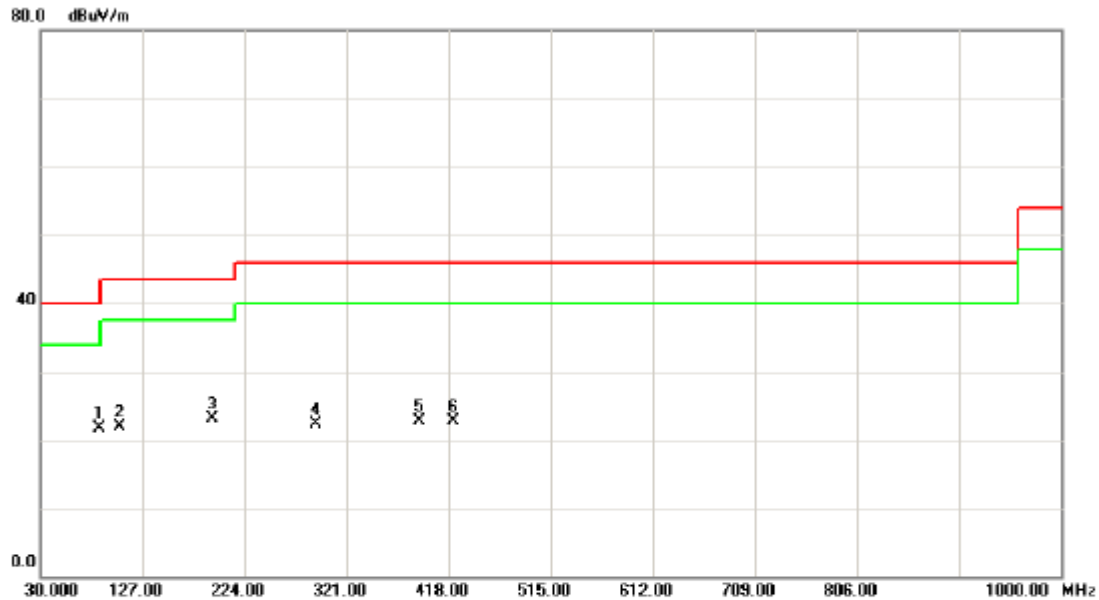


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	48.4300	48.15	-14.57	33.58	40.00	-6.42	peak	
2		82.3800	45.83	-17.68	28.15	40.00	-11.85	peak	
3		194.9000	36.51	-14.75	21.76	43.50	-21.74	peak	
4		236.6100	39.94	-14.70	25.24	46.00	-20.76	peak	
5		389.8700	32.22	-10.20	22.02	46.00	-23.98	peak	
6		552.8300	30.52	-7.67	22.85	46.00	-23.15	peak	



Test Mode : Band 3/TX A Mode 5580MHz

Horizontal

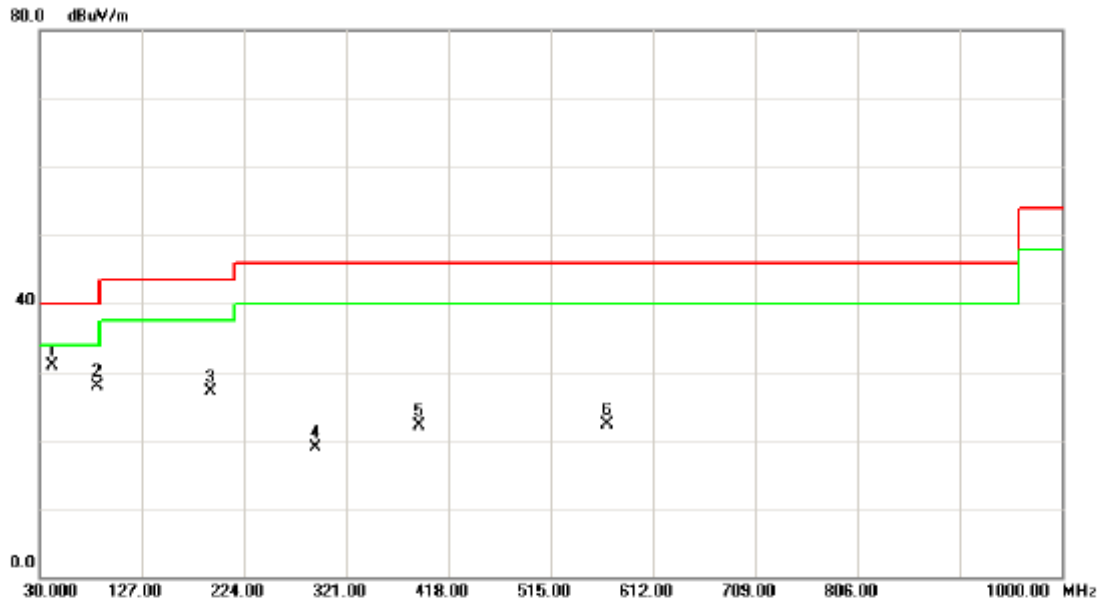


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	86.2600	39.68	-17.93	21.75	40.00	-18.25	peak	
2		105.6600	37.29	-15.38	21.91	43.50	-21.59	peak	
3		193.9300	37.85	-14.66	23.19	43.50	-20.31	peak	
4		291.9000	34.08	-11.70	22.38	46.00	-23.62	peak	
5		389.8700	32.92	-10.20	22.72	46.00	-23.28	peak	
6		421.8800	32.19	-9.46	22.73	46.00	-23.27	peak	



Test Mode : Band 3/TX A Mode 5700MHz

Vertical

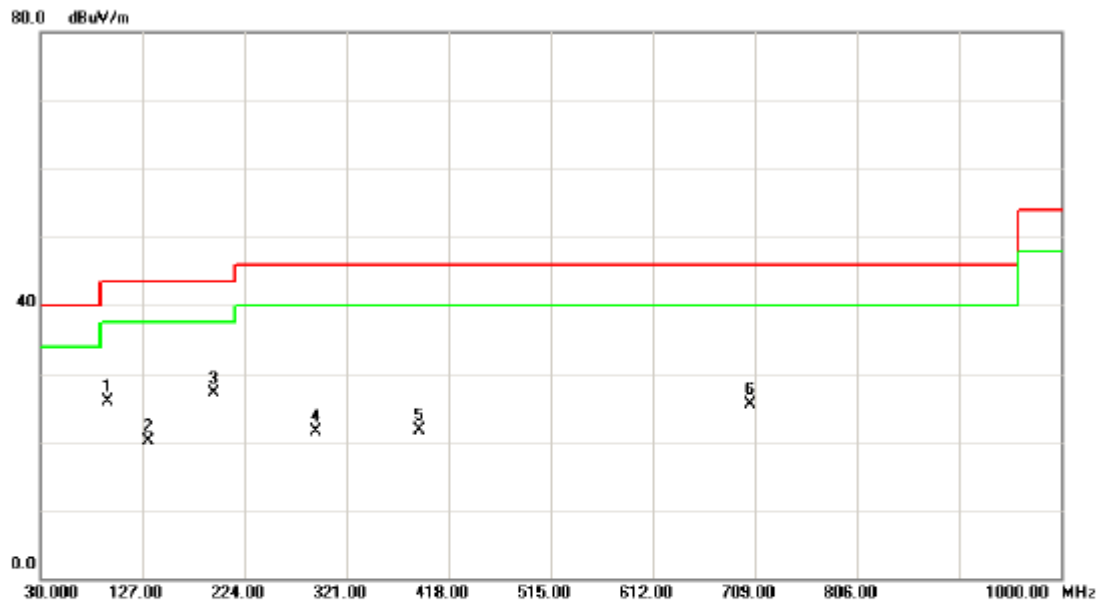


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	41.6400	45.51	-14.51	31.00	40.00	-9.00	peak	
2		84.3200	45.79	-17.82	27.97	40.00	-12.03	peak	
3		191.9900	41.54	-14.49	27.05	43.50	-16.45	peak	
4		291.9000	30.52	-11.70	18.82	46.00	-27.18	peak	
5		389.8700	32.24	-10.20	22.04	46.00	-23.96	peak	
6		568.3500	30.12	-7.81	22.31	46.00	-23.69	peak	



Test Mode : Band 3/TX A Mode 5700MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		94.0200	43.34	-17.43	25.91	43.50	-17.59	peak	
2		132.8200	33.55	-13.46	20.09	43.50	-23.41	peak	
3	*	194.9000	41.89	-14.75	27.14	43.50	-16.36	peak	
4		291.9000	33.12	-11.70	21.42	46.00	-24.58	peak	
5		389.8700	31.90	-10.20	21.70	46.00	-24.30	peak	
6		704.1500	30.22	-4.81	25.41	46.00	-20.59	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
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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	8.03	0.32	42.72	50.75	43.04	-54.02	-61.73	68.30	54.00	-27.00	-41.30	X/E
5176.20	V	56.60	48.07	42.78	99.38	90.85	-5.39	-13.92					X/F
10360.00	V	38.99	29.02	16.03	55.02	45.05	-49.75	-59.72	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	7.25	-1.44	42.72	49.97	41.28	-54.80	-63.49	68.30	54.00	-27.00	-41.30	X/E
5183.30	H	47.38	38.89	42.80	90.18	81.69	-14.59	-23.08					X/F
10360.00	H	38.11	29.02	16.03	54.14	45.05	-50.63	-59.72	68.30	54.00	-27.00	-41.30	X/H

Test Mode :	Band 1/ TX A Mode 5200MHz
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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	
5196.60	V	54.88	46.97	42.83	97.71	89.80	-7.06	-14.97					X/F
10400.00	V	39.21	29.17	15.97	55.18	45.14	-49.59	-59.63	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	
5197.20	H	47.14	38.80	42.84	89.98	81.64	-14.79	-23.13					X/F
10400.00	H	38.29	29.13	15.97	54.26	45.10	-50.51	-59.67	68.30	54.00	-27.00	-41.30	X/H

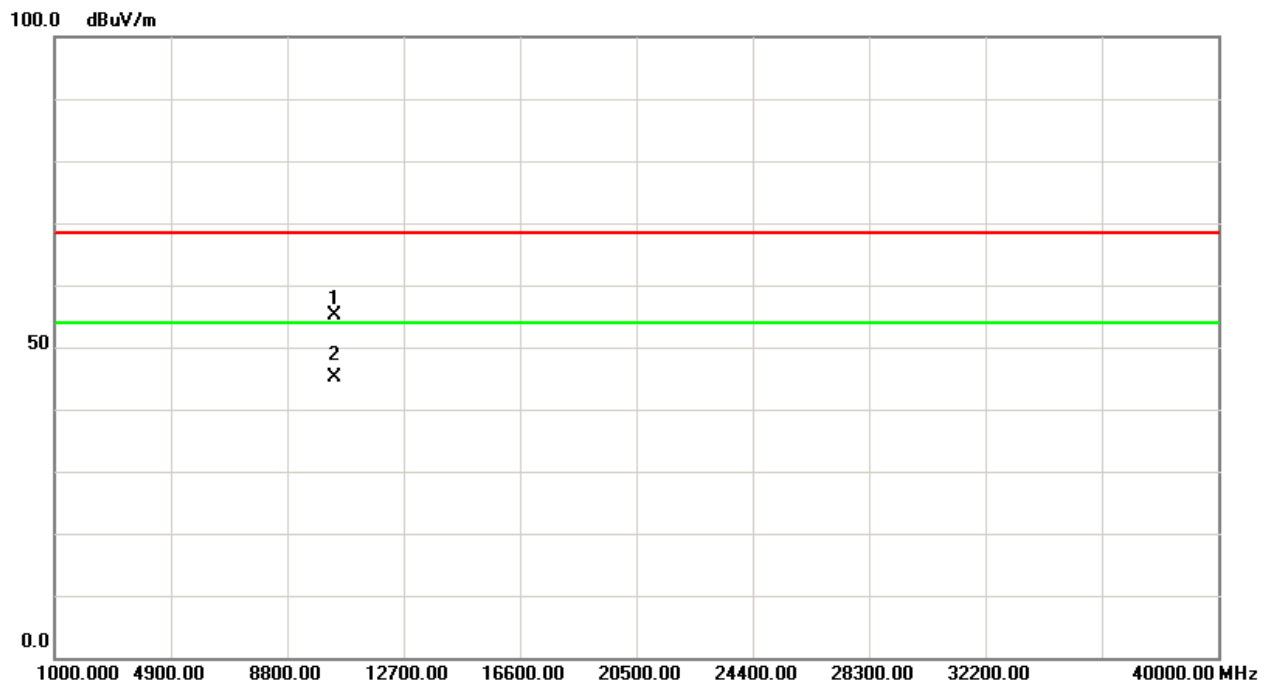
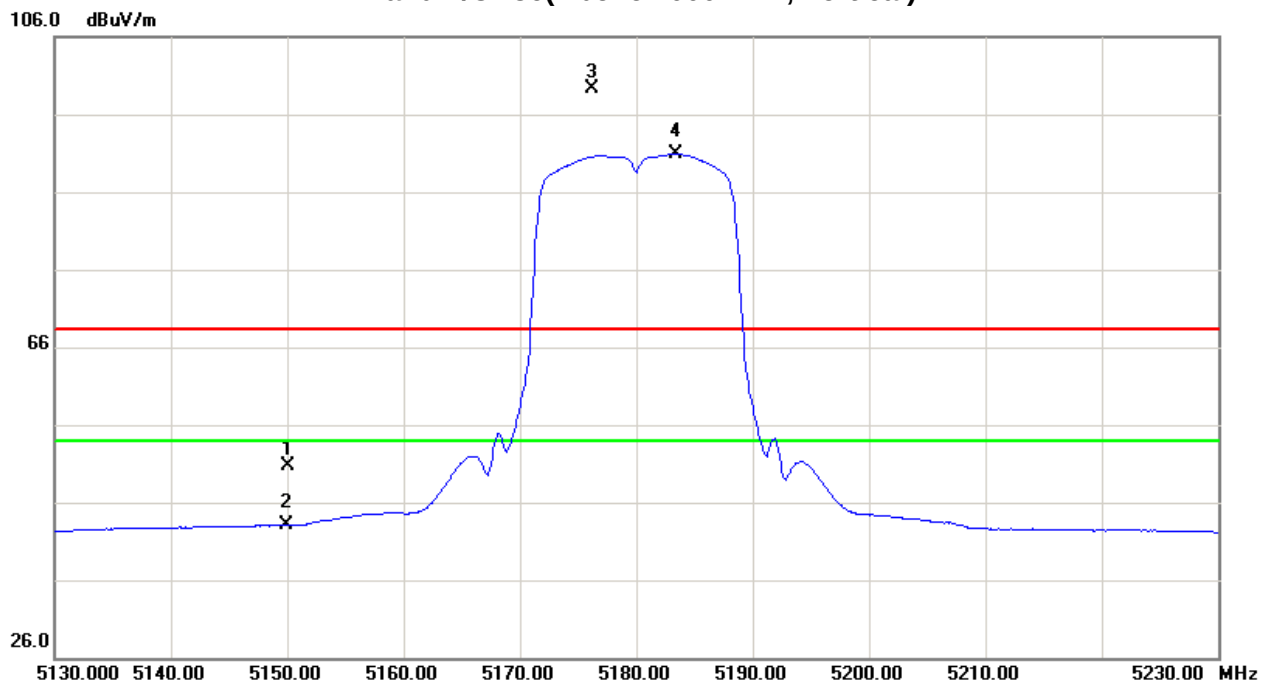
Test Mode :	Band 1/ TX A Mode 5240MHz
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Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5235.30	V	52.01	44.82	42.93	94.94	87.75	-9.83	-17.02					X/F
10480.00	V	39.51	29.48	15.86	55.37	45.34	-49.40	-59.43	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	
5243.70	H	45.75	37.68	42.95	88.70	80.63	-16.07	-24.14					X/F
10480.00	H	38.61	29.27	15.86	54.47	45.13	-50.30	-59.64	68.30	54.00	-27.00	-41.30	X/H



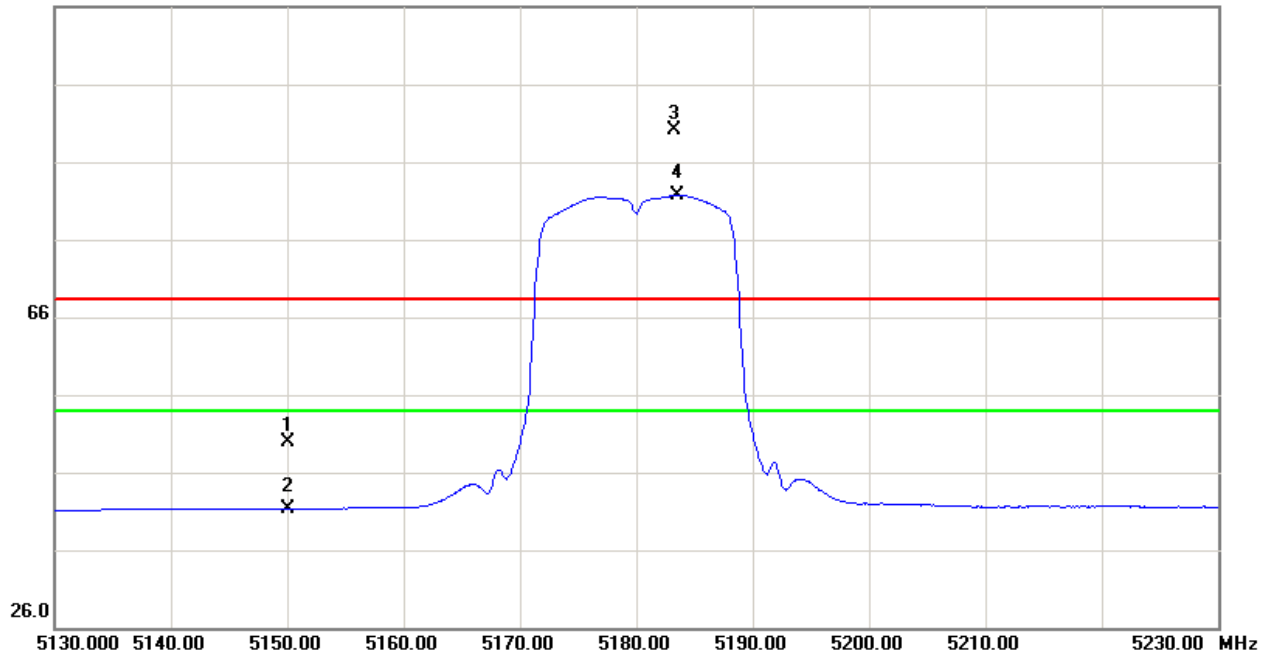
Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Vertical)



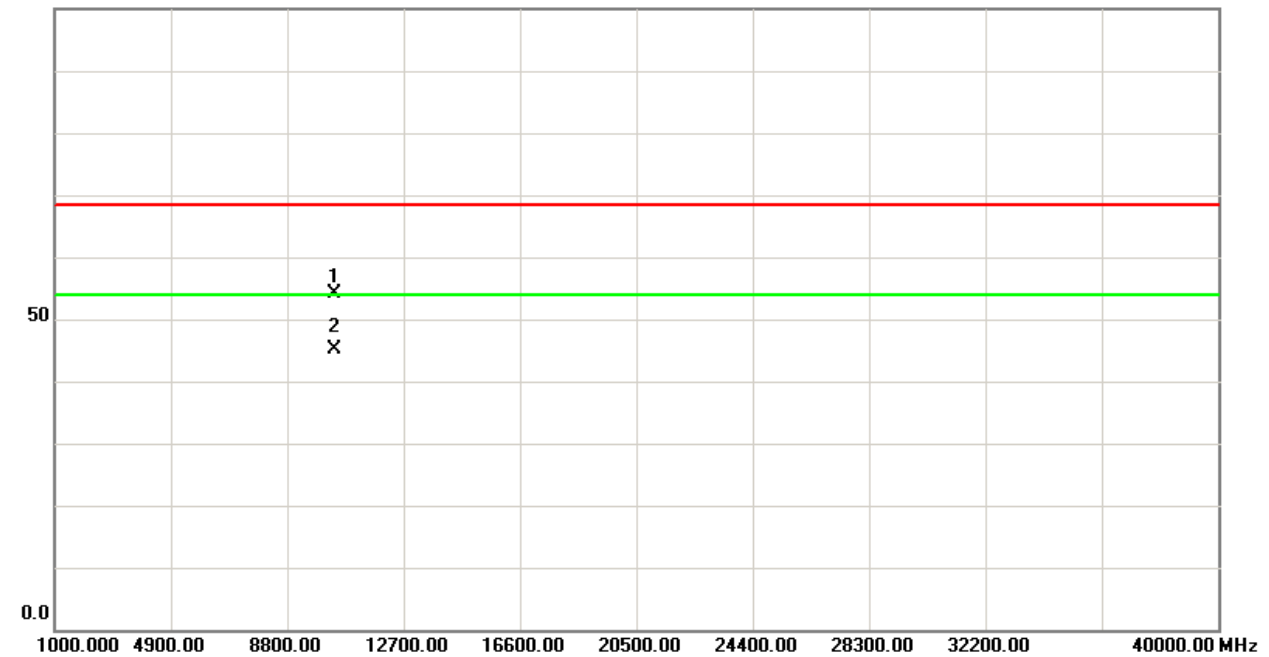


Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Horizontal)

106.0 dBuV/m

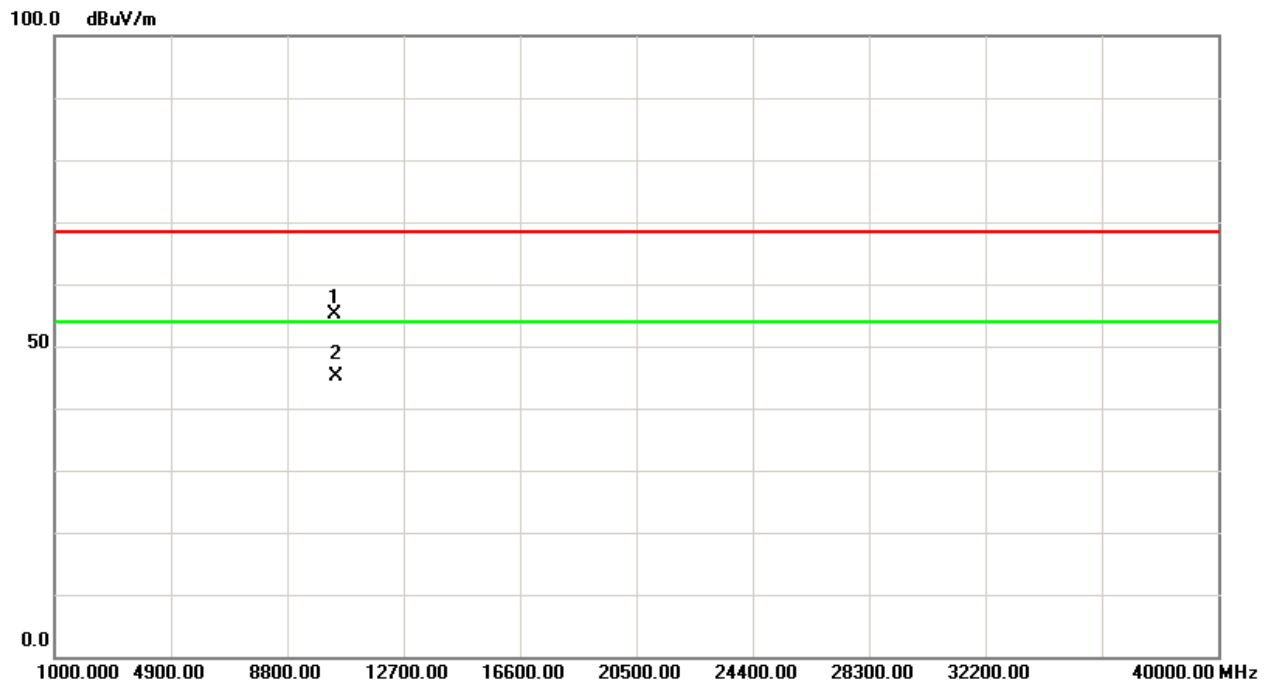
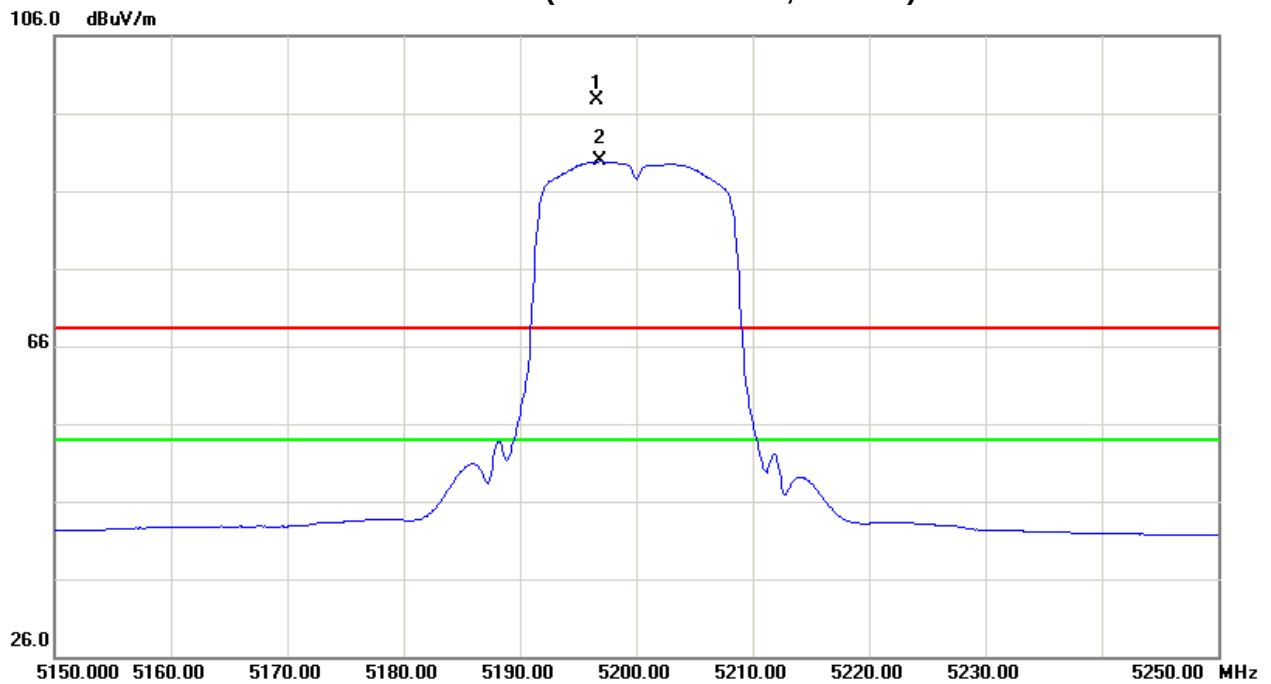


100.0 dBuV/m



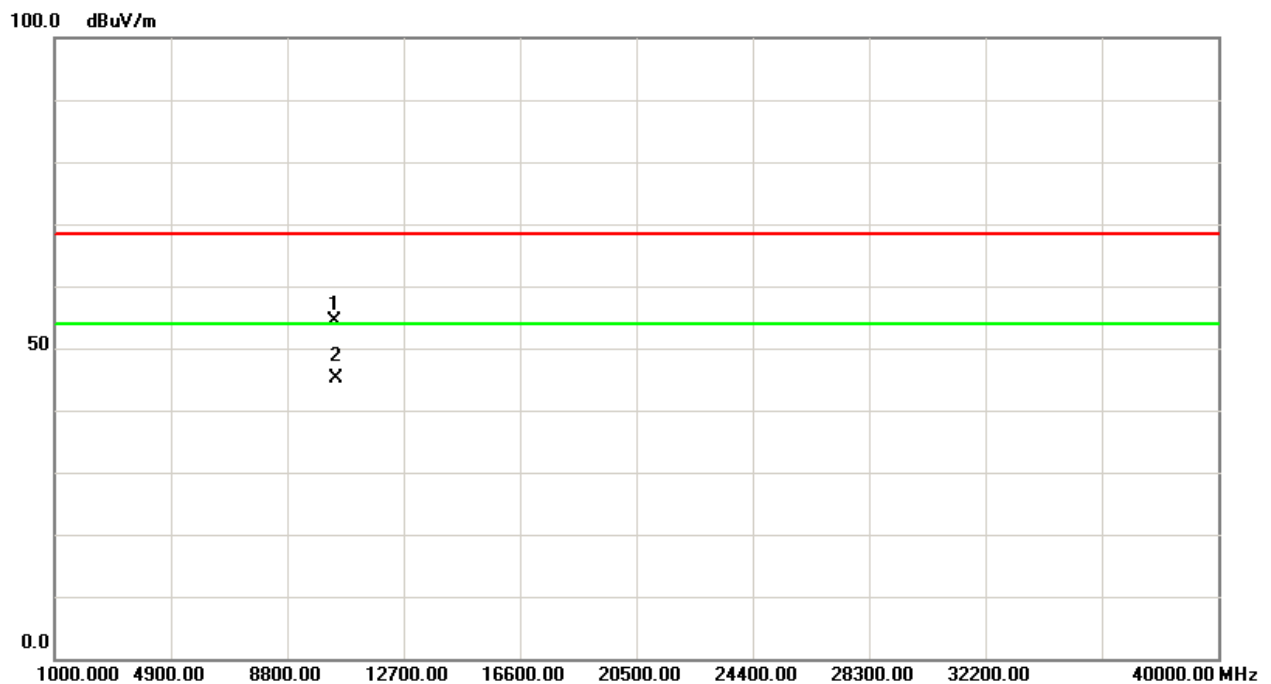
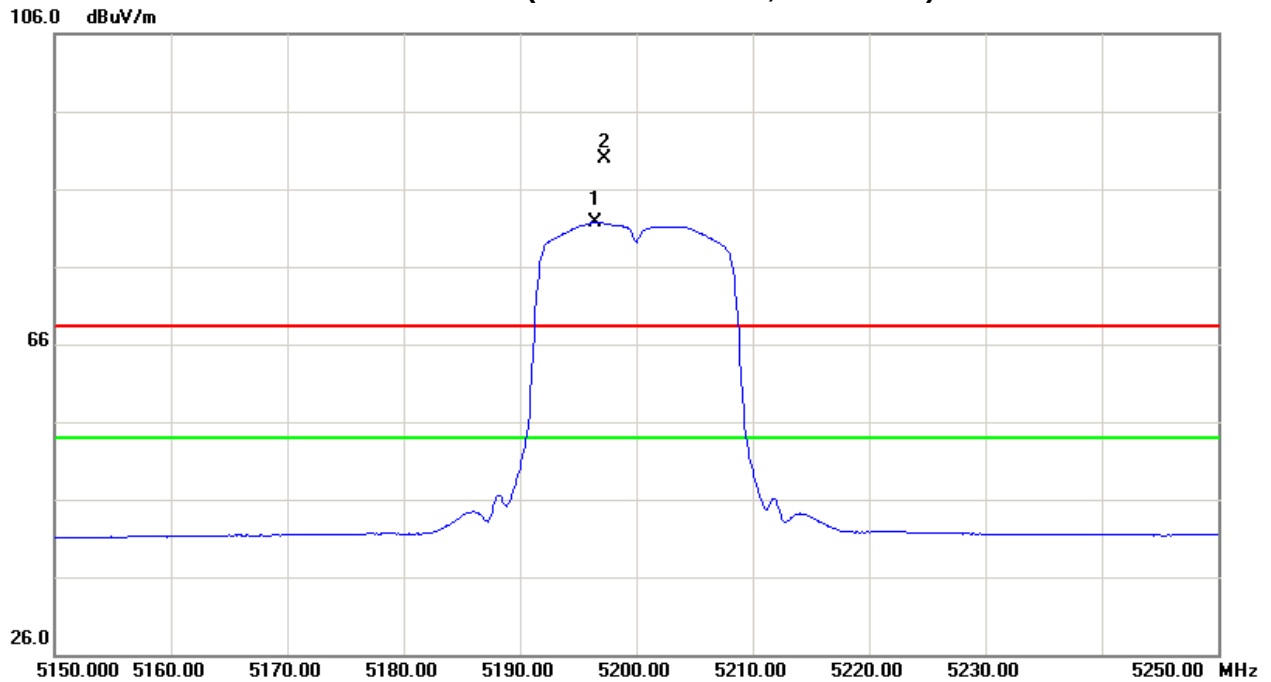


Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Vertical)





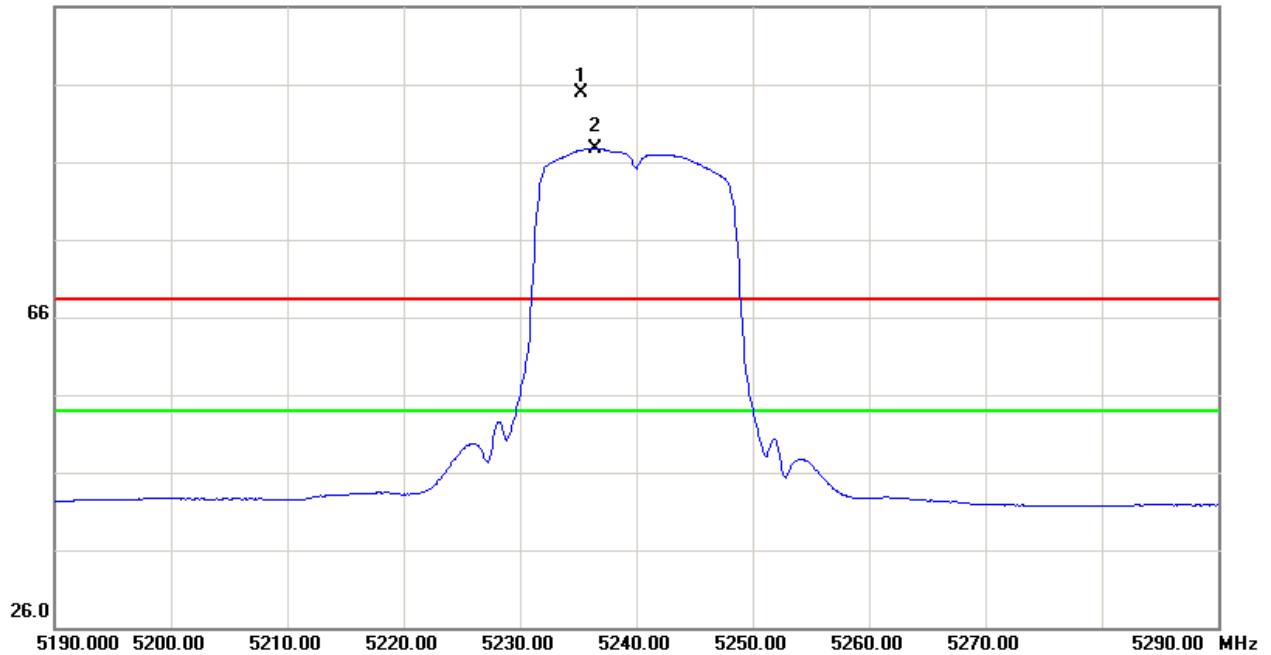
Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Horizontal)



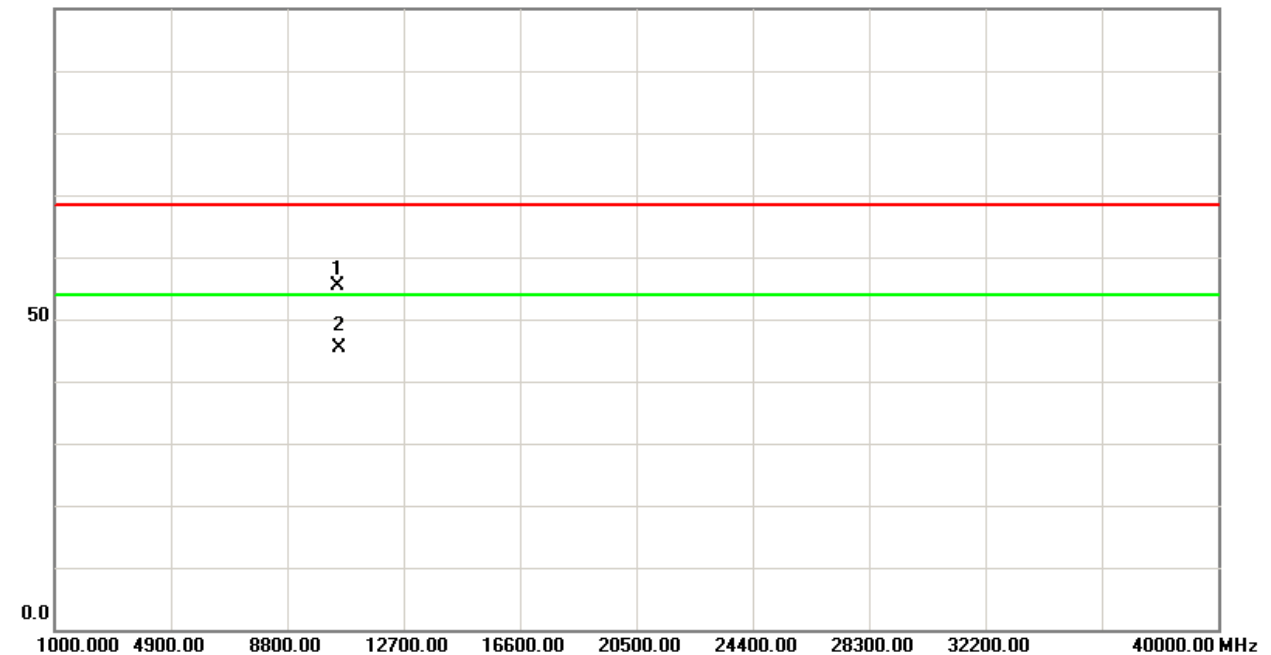


Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Vertical)

106.0 dBuV/m



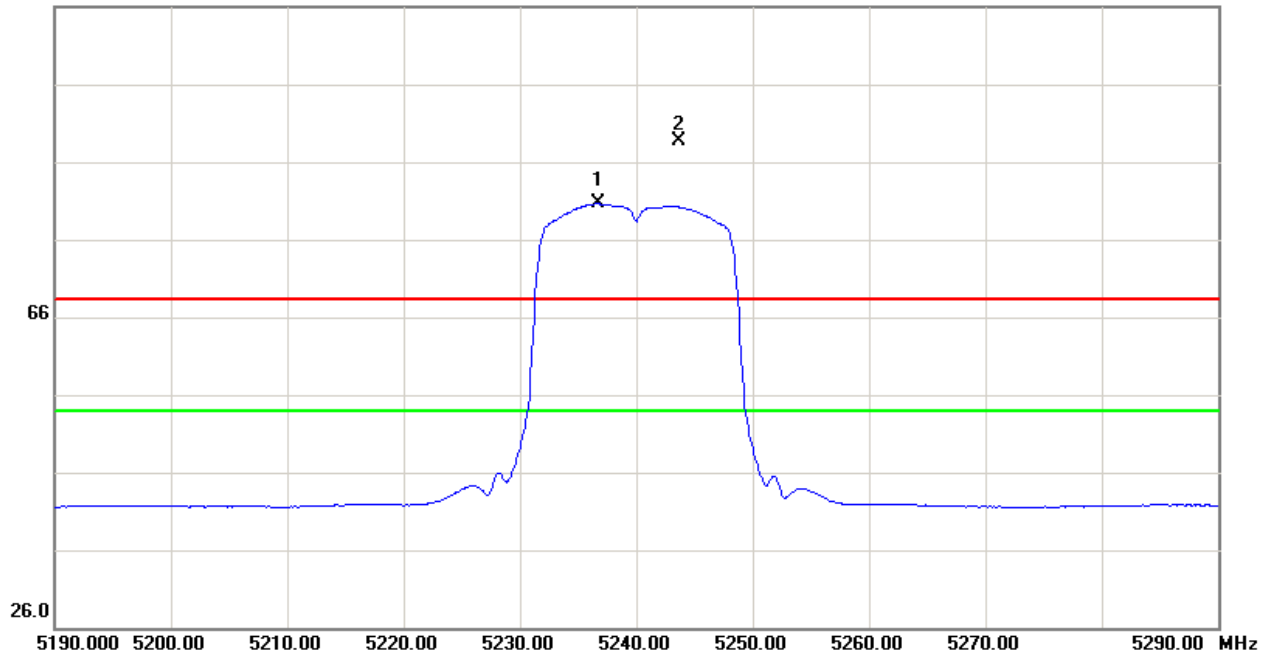
100.0 dBuV/m



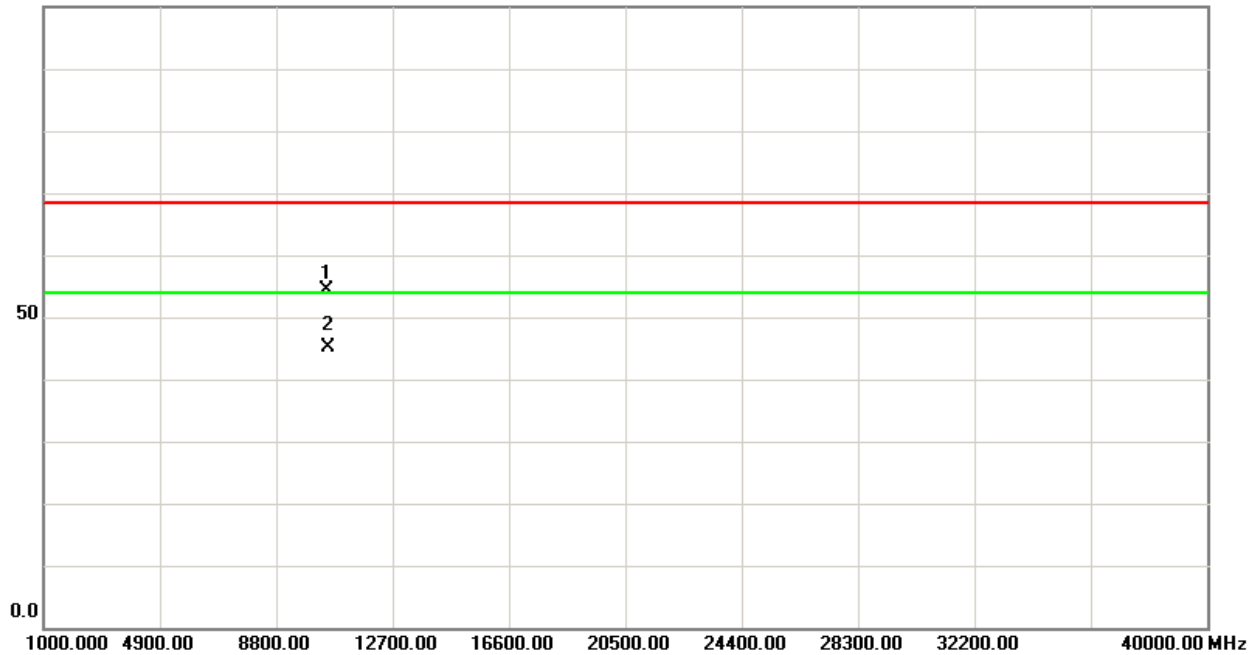


Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Horizontal)

106.0 dBuV/m



100.0 dBuV/m





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	7.51	0.33	42.72	50.23	43.05	-54.54	-61.72	68.30	54.00	-27.00	-41.30	X/E
5177.10	V	55.96	47.80	42.78	98.74	90.58	-6.03	-14.19					X/F
10360.00	V	38.84	29.08	16.03	54.87	45.11	-49.90	-59.66	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	7.48	-1.42	42.72	50.20	41.30	-54.57	-63.47	68.30	54.00	-27.00	-41.30	X/E
5183.50	H	48.26	40.19	42.80	91.06	82.99	-13.71	-21.78					X/F
10360.00	H	38.23	29.11	16.03	54.26	45.14	-50.51	-59.63	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	
5198.40	V	53.25	45.36	42.84	96.09	88.20	-8.68	-16.57					X/F
10400.00	V	39.25	29.17	15.97	55.22	45.14	-49.55	-59.63	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	
5201.50	H	48.86	40.84	42.84	91.70	83.68	-13.07	-21.09					X/F
10400.00	H	38.23	29.10	15.97	54.20	45.07	-50.57	-59.70	68.30	54.00	-27.00	-41.30	X/H

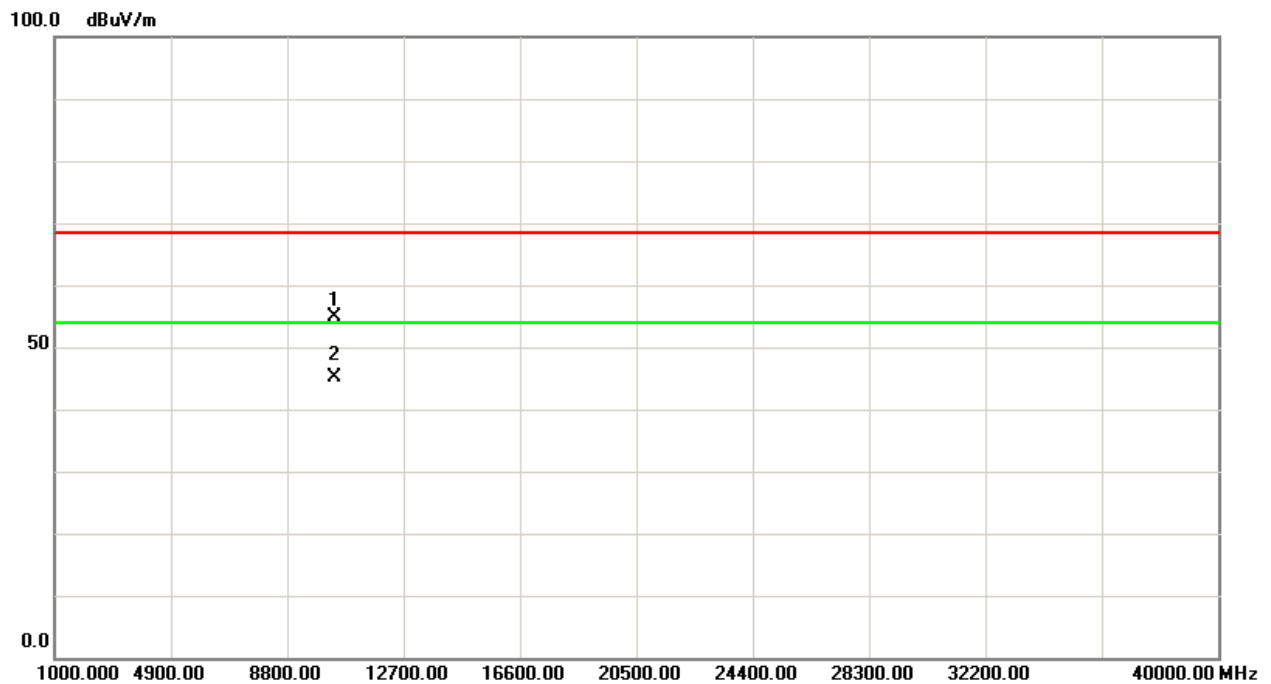
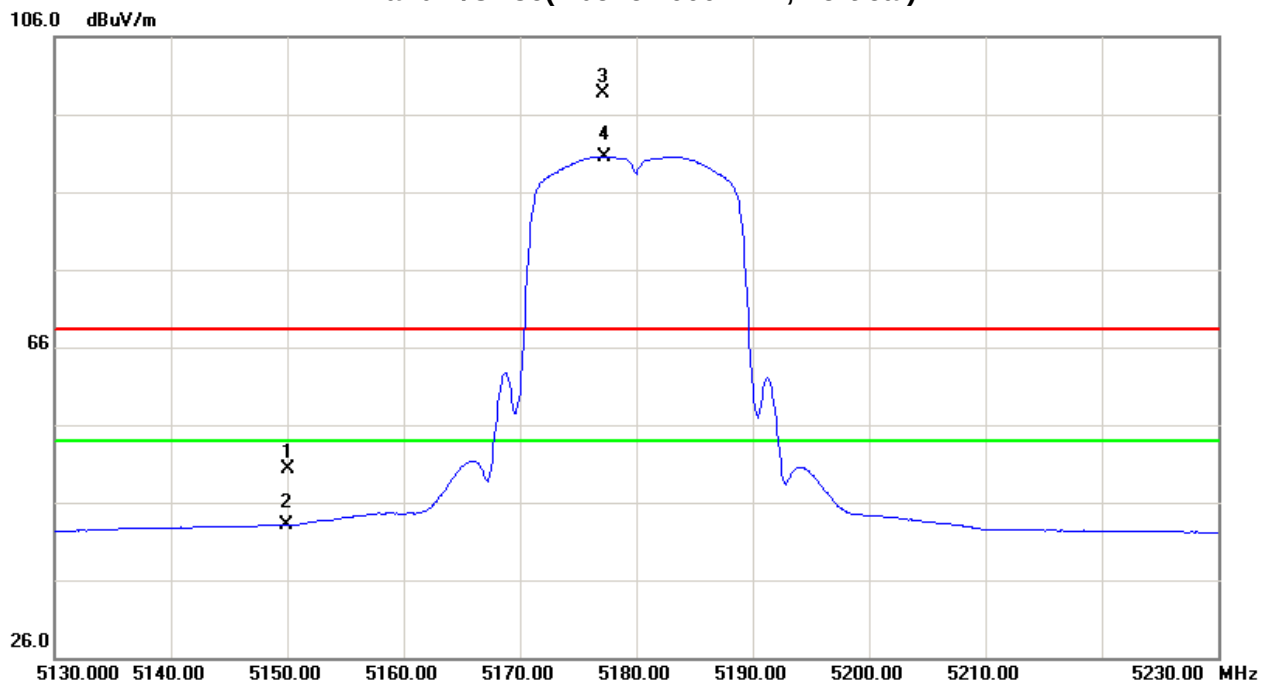
Test Mode : Band 1/ TX N20 Mode 5240MHz

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	
5237.20	V	52.38	44.39	42.93	95.31	87.32	-9.46	-17.45					X/F
10480.00	V	39.49	29.35	15.86	55.35	45.21	-49.42	-59.56	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	
5241.80	H	48.87	41.80	42.95	91.82	84.75	-12.95	-20.02					X/F
10480.00	H	38.65	29.22	15.86	54.51	45.08	-50.26	-59.69	68.30	54.00	-27.00	-41.30	X/H



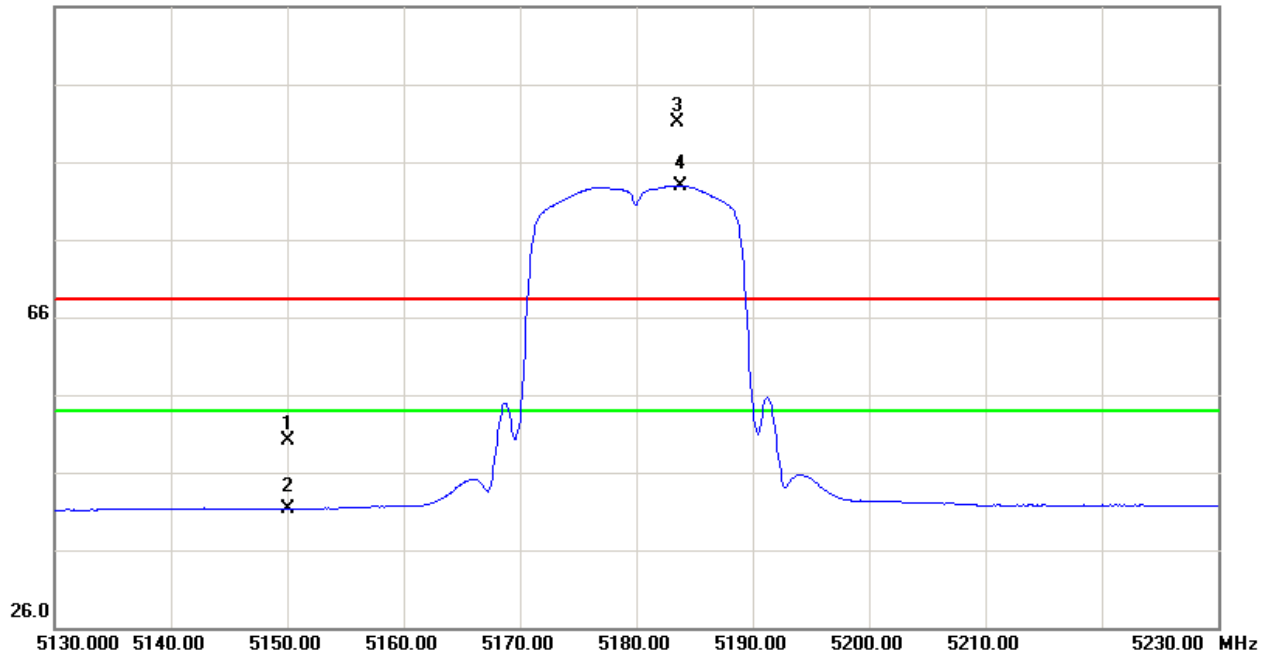
Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Vertical)



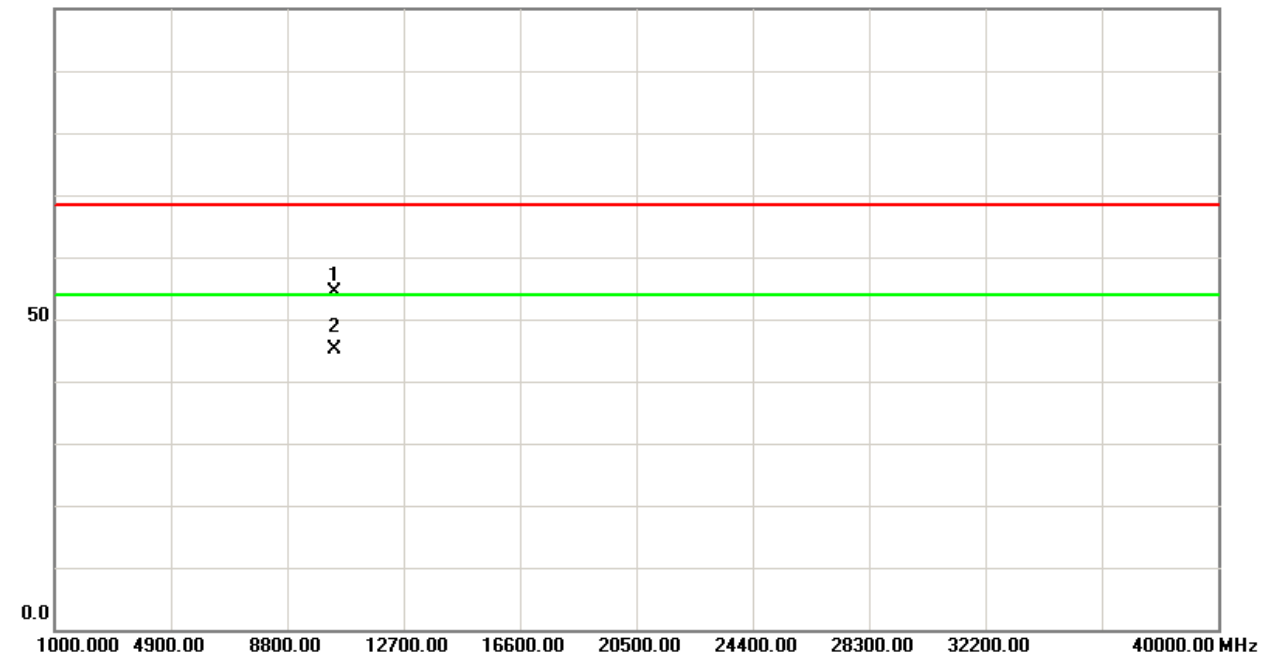


Orthogonal Axis:X
Band 1/CH36(Above 1000 MHz, Horizontal)

106.0 dBuV/m



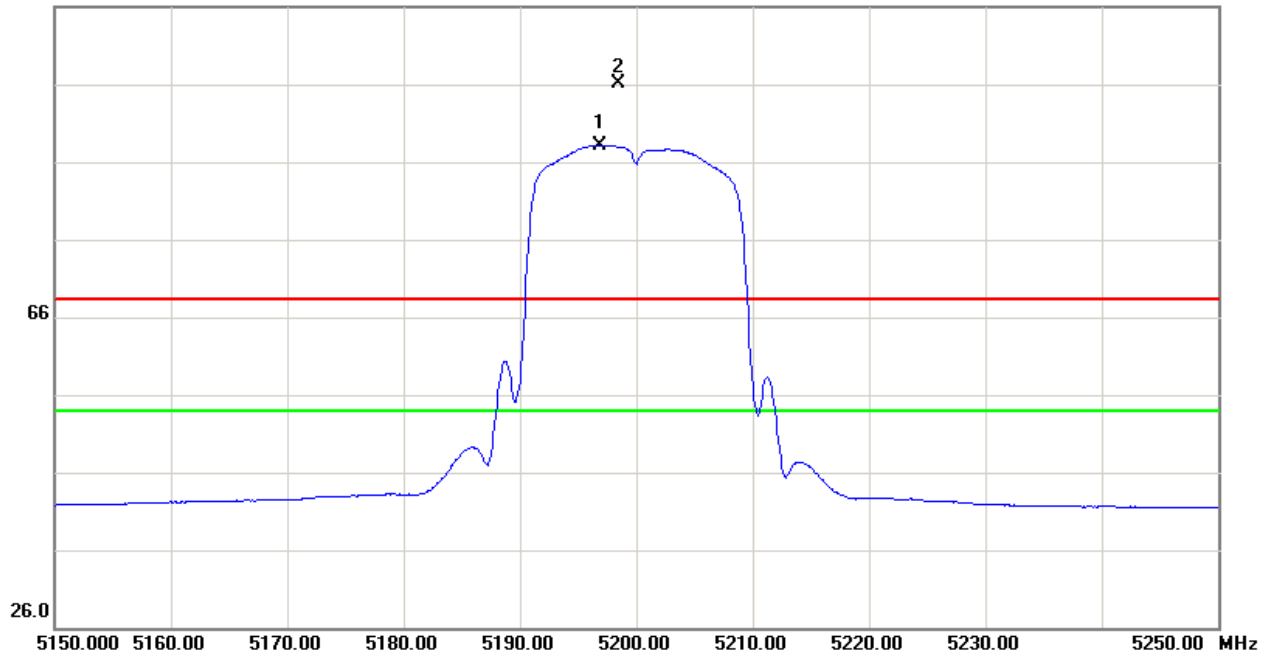
100.0 dBuV/m



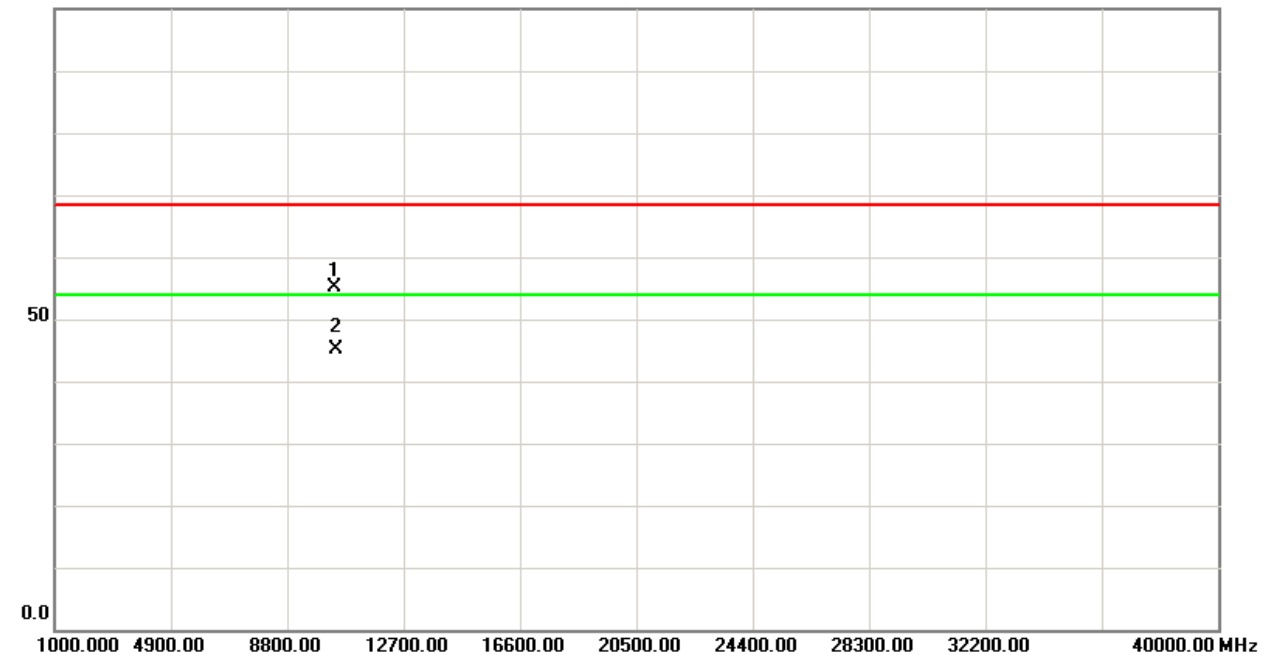


Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Vertical)

106.0 dBuV/m



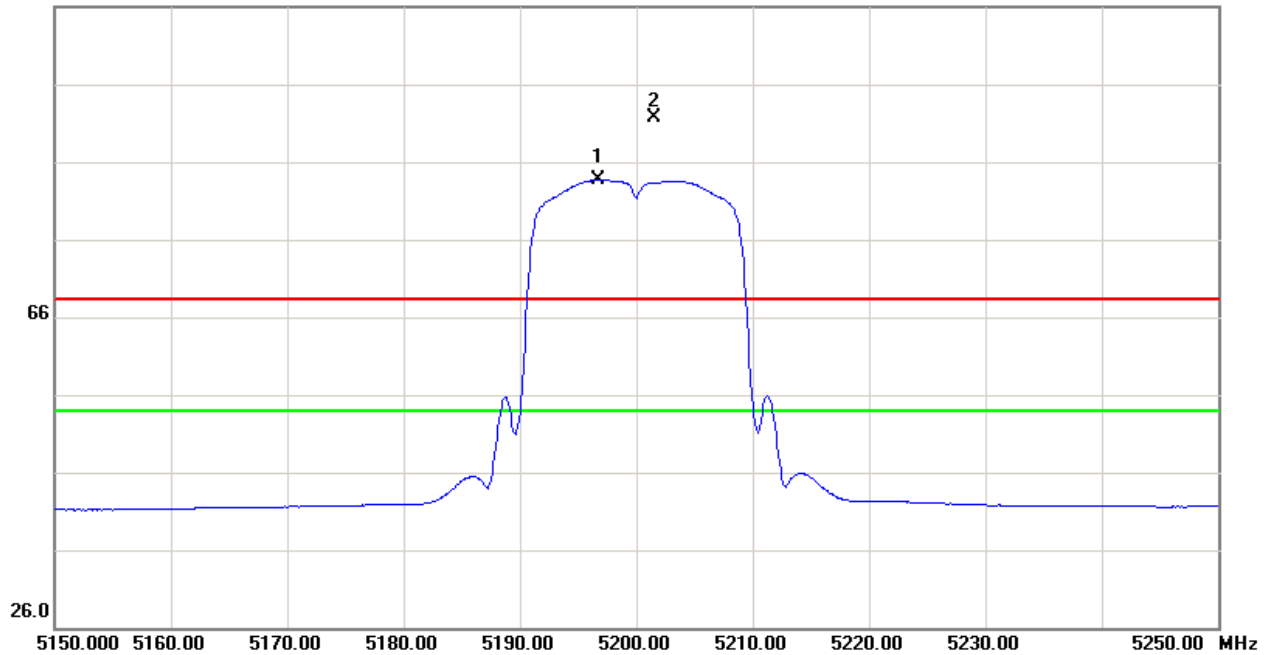
100.0 dBuV/m



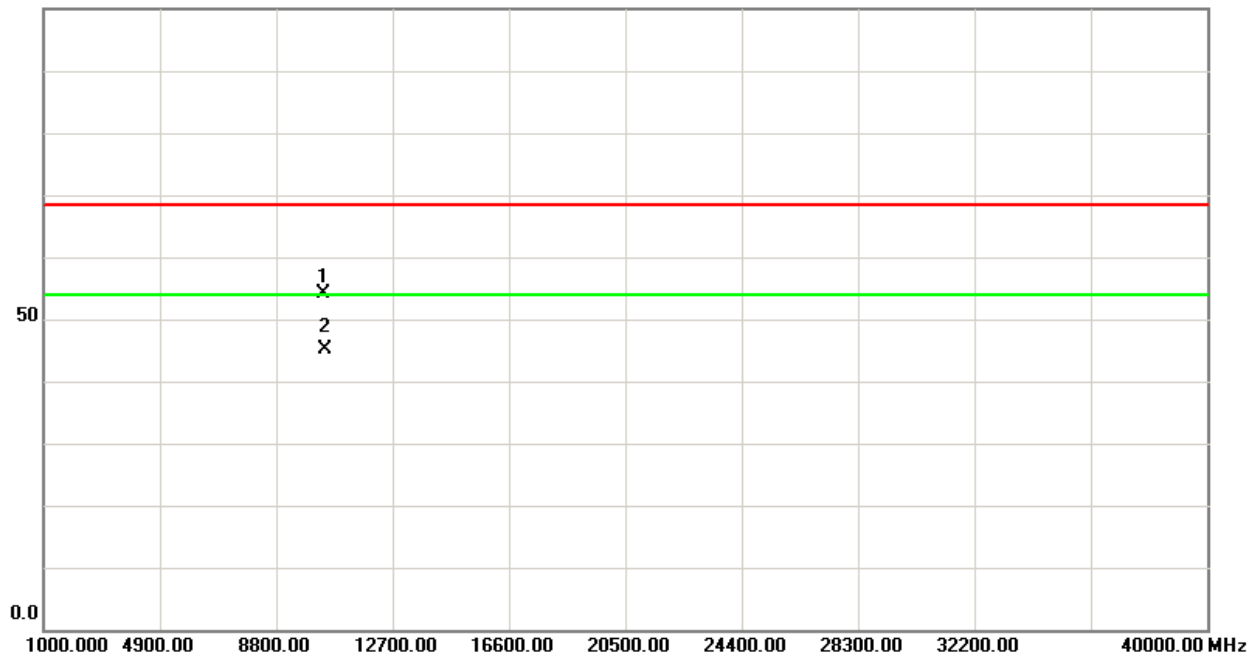


Orthogonal Axis:X
Band 1/CH40(Above 1000 MHz, Horizontal)

106.0 dBuV/m

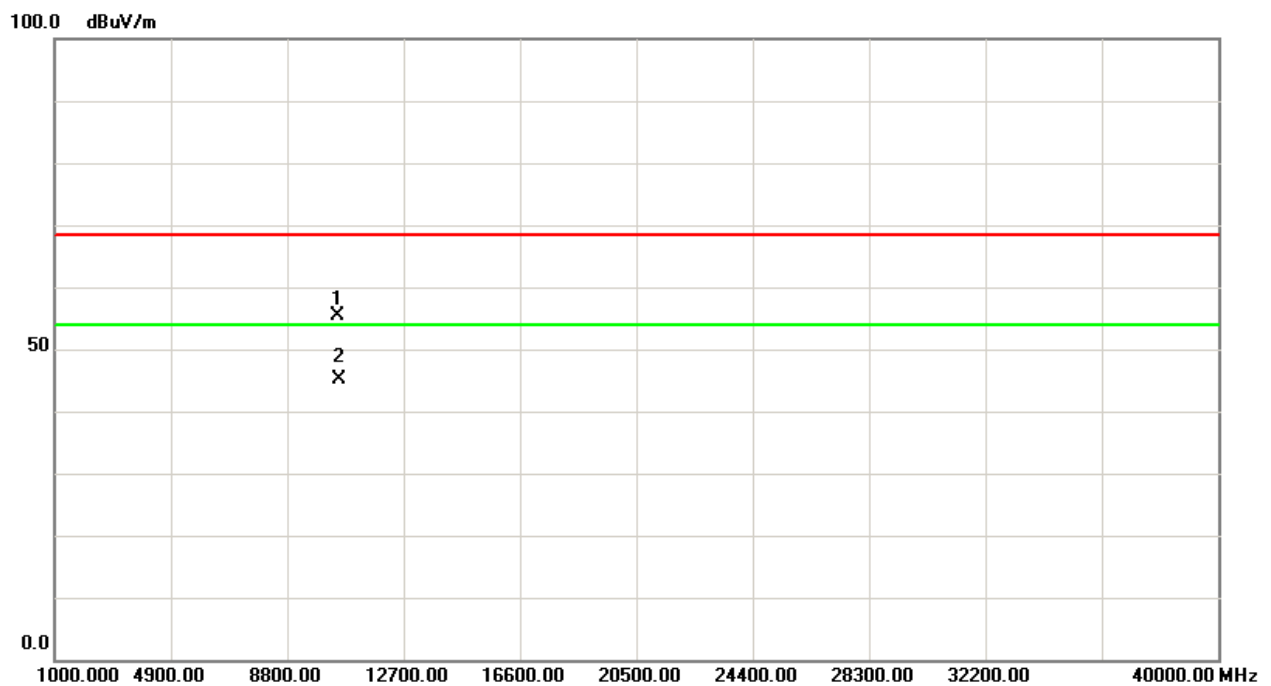
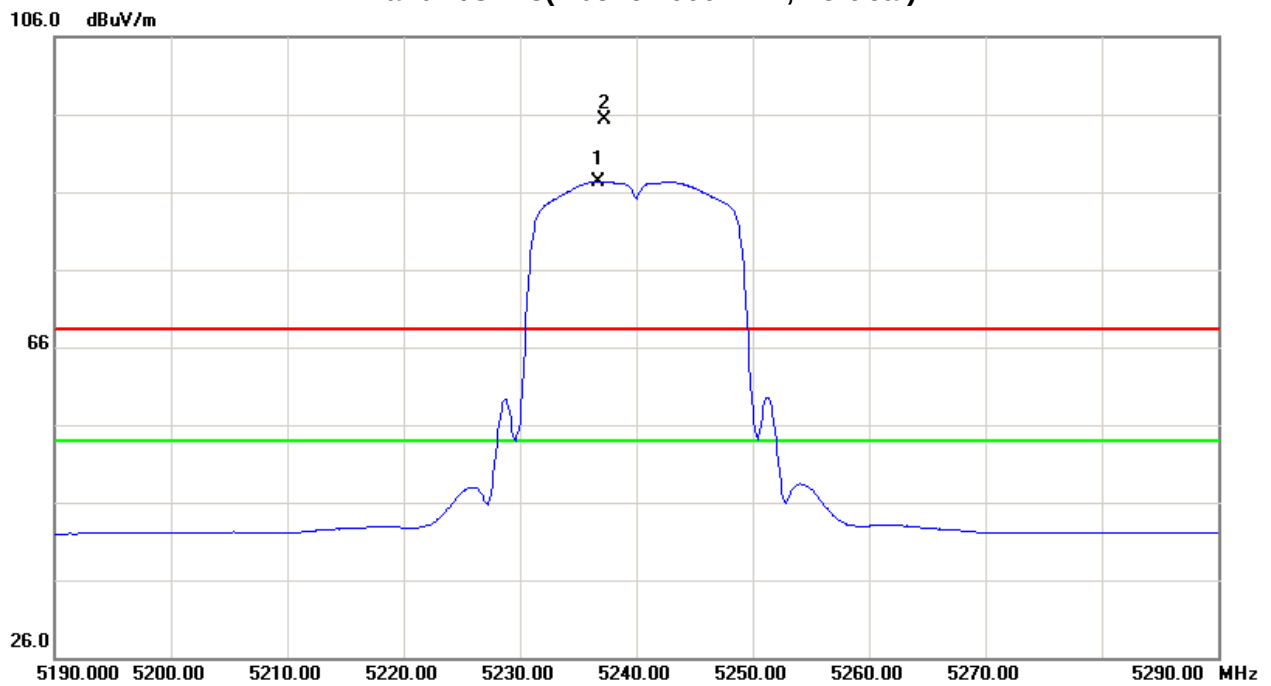


100.0 dBuV/m



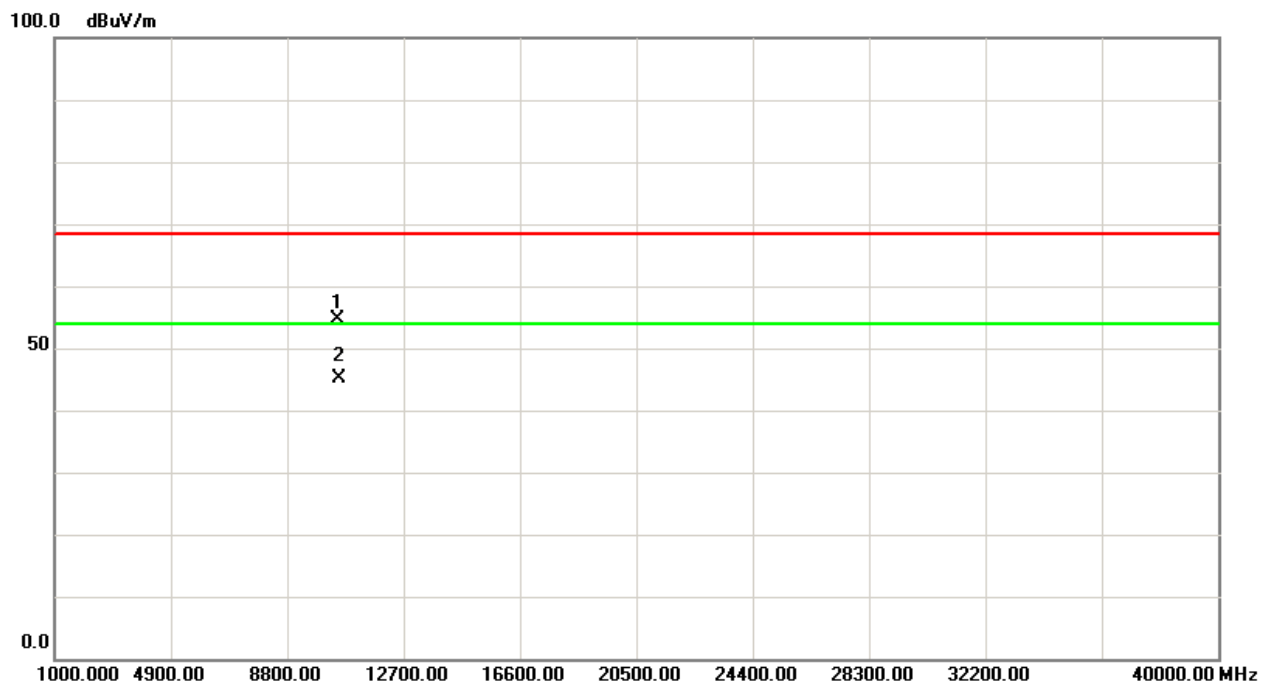
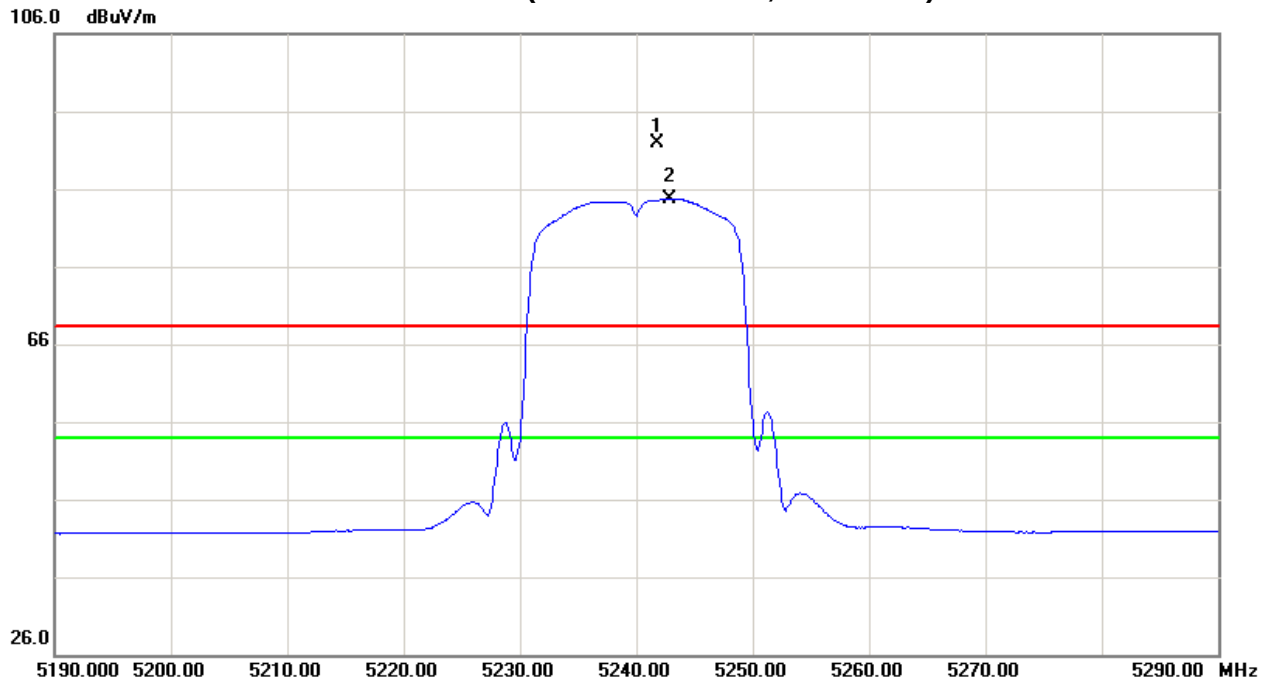


Orthogonal Axis:X
Band 1/CH48(Above 1000 MHz, Vertical)





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





Test Mode : Band 1/ TX 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	8.70	0.18	42.72	51.42	42.90	-53.35	-61.87	68.30	54.00	-27.00	-41.30	X/E
5183.40	V	50.37	40.90	42.80	93.17	83.70	-11.60	-21.07					X/F
10380.00	V	38.86	29.35	16.00	54.86	45.35	-49.91	-59.42	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	
5150.00	H	7.60	-0.13	42.72	50.32	42.59	-54.45	-62.18	68.30	54.00	-27.00	-41.30	X/E
5185.80	H	44.94	35.64	42.81	87.75	78.45	-17.02	-26.32					X/F
10380.00	H	38.37	29.05	16.00	54.37	45.05	-50.40	-59.72	68.30	54.00	-27.00	-41.30	X/H

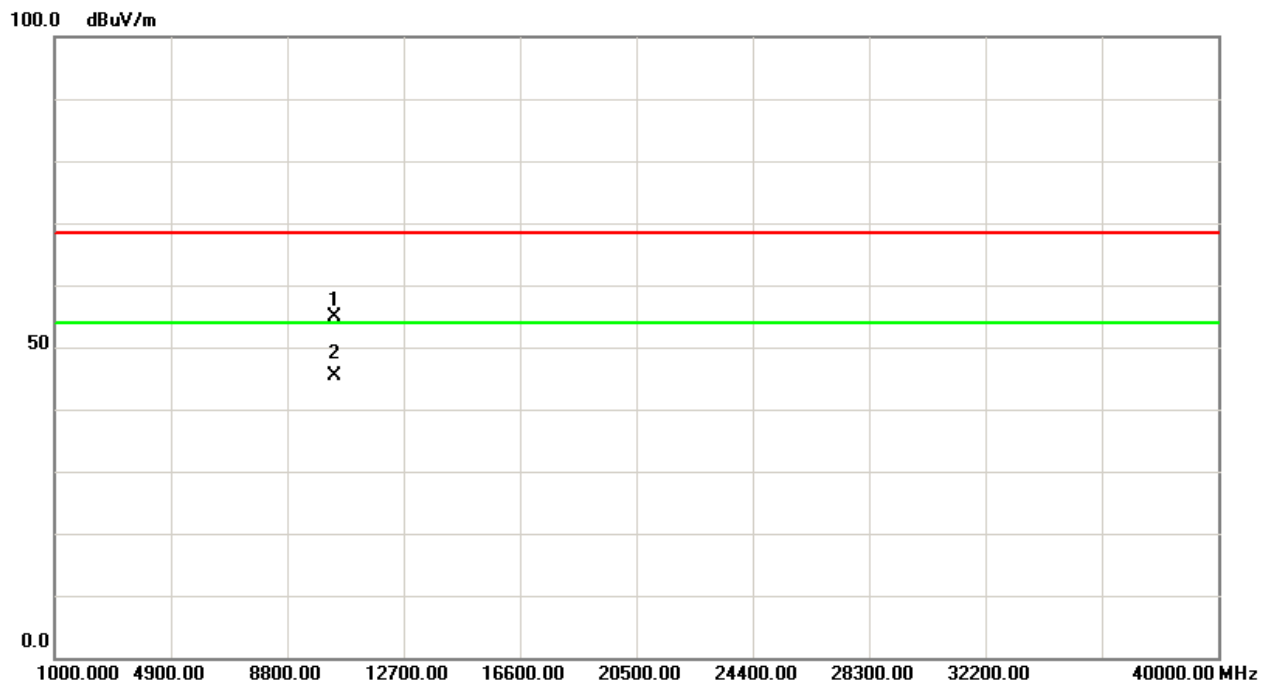
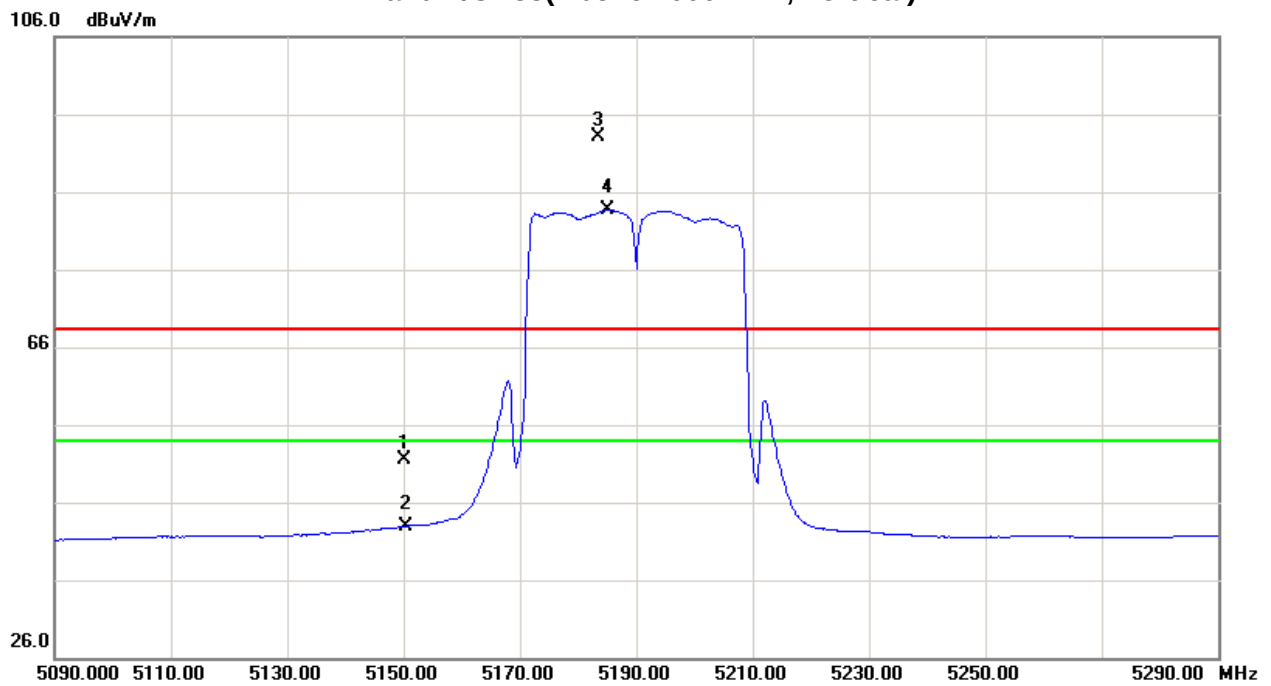
Test Mode : Band 1/ TX N40 Mode 5230MHz

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	
5228.20	V	47.83	38.82	42.92	90.75	81.74	-14.02	-23.03					X/F
10460.00	V	39.35	29.12	15.88	55.23	45.00	-49.54	-59.77	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	
5226.60	H	43.69	35.51	42.90	86.59	78.41	-18.18	-26.36					X/F
10460.00	H	38.72	29.29	15.88	54.60	45.17	-50.17	-59.60	68.30	54.00	-27.00	-41.30	X/H

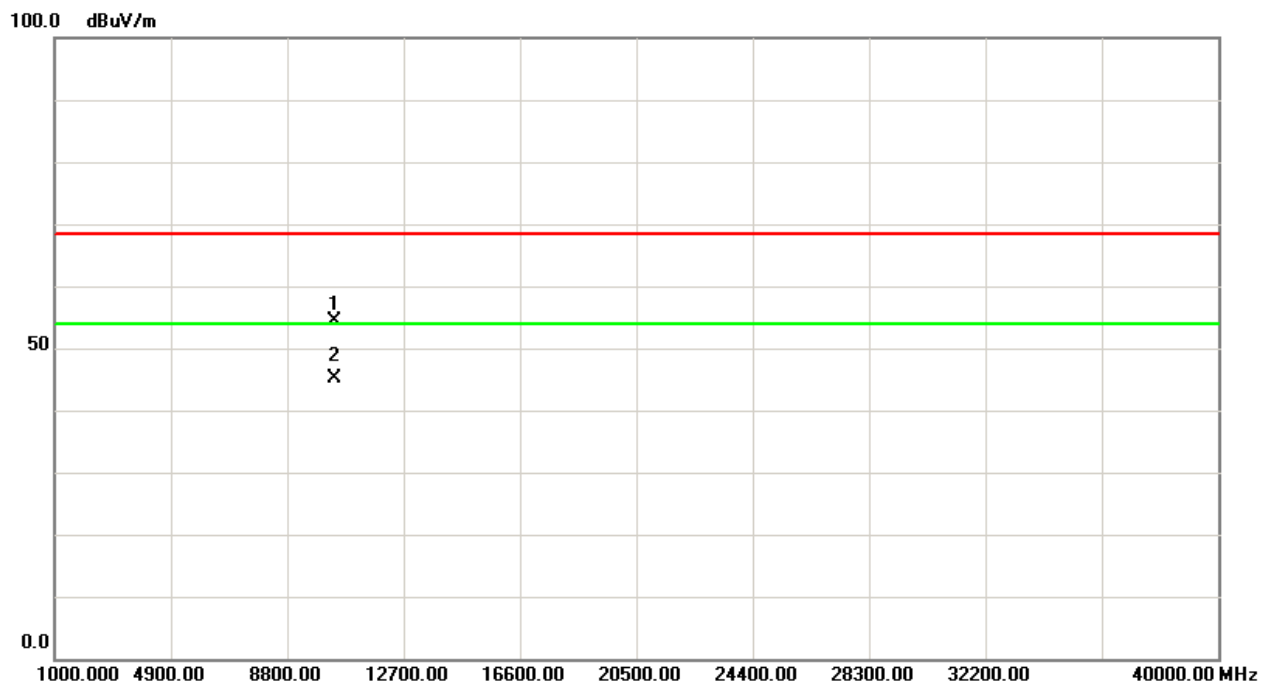
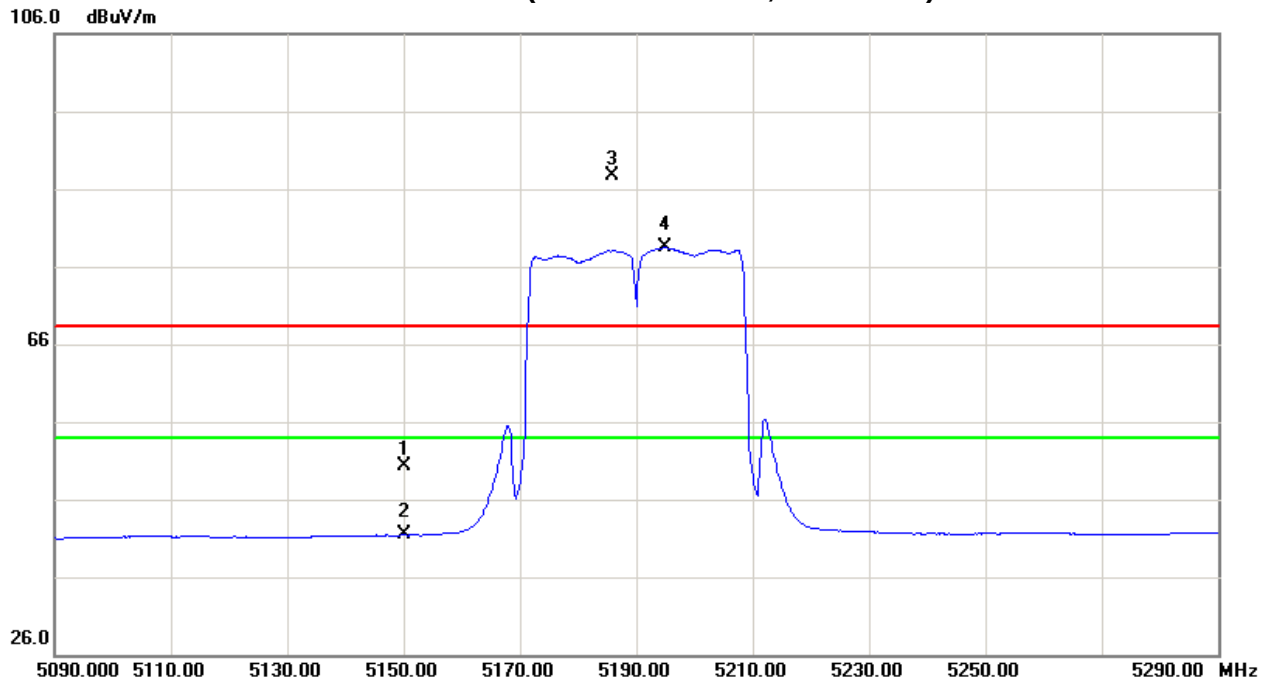


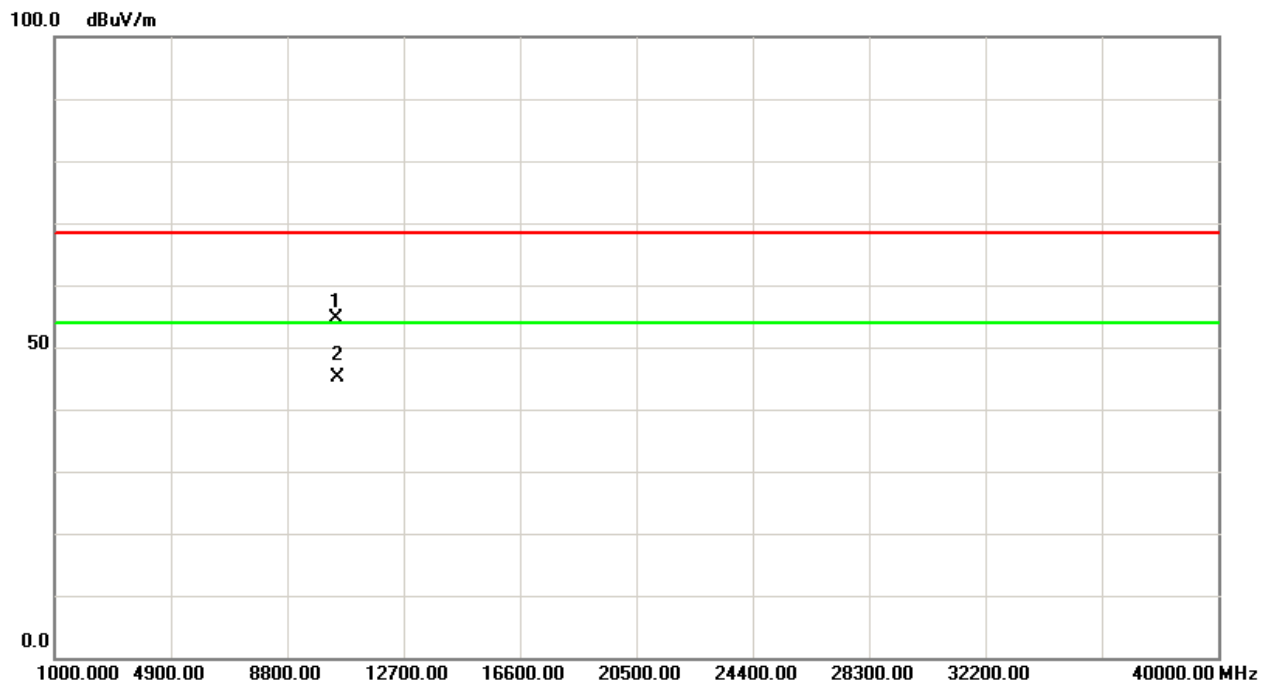
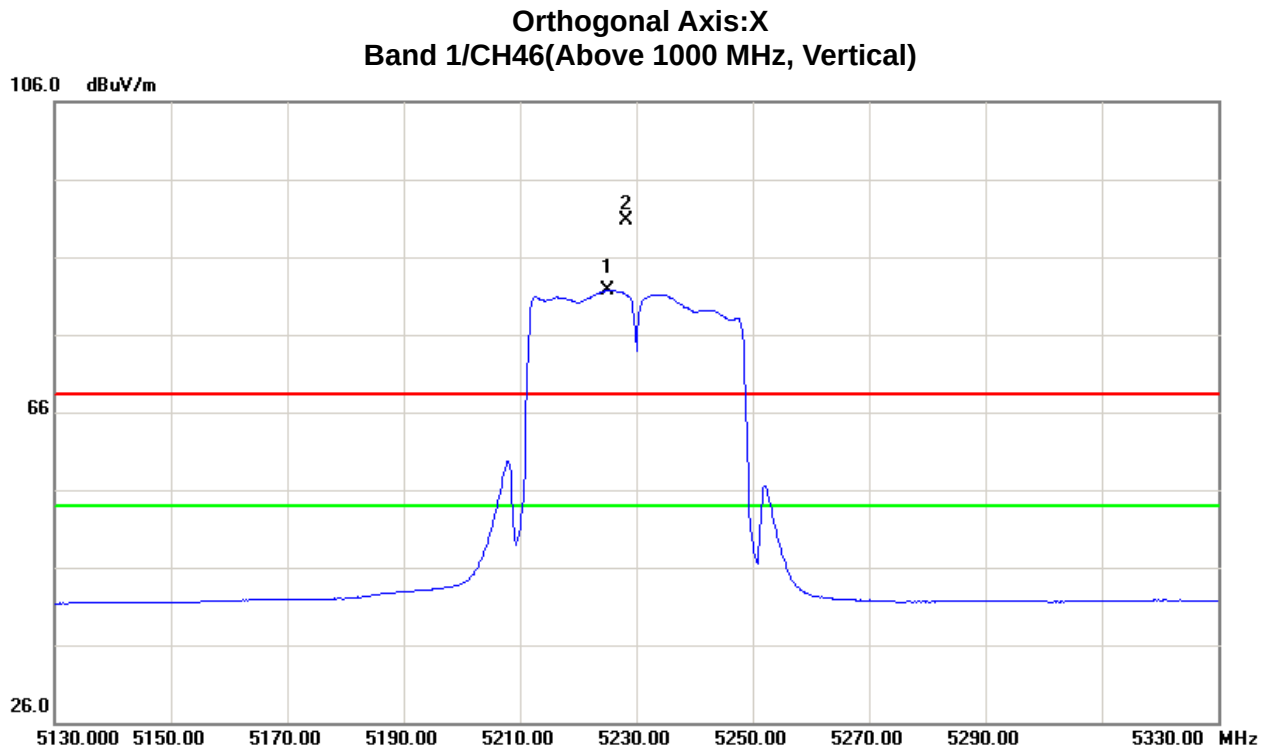
Orthogonal Axis:X
Band 1/CH38(Above 1000 MHz, Vertical)





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

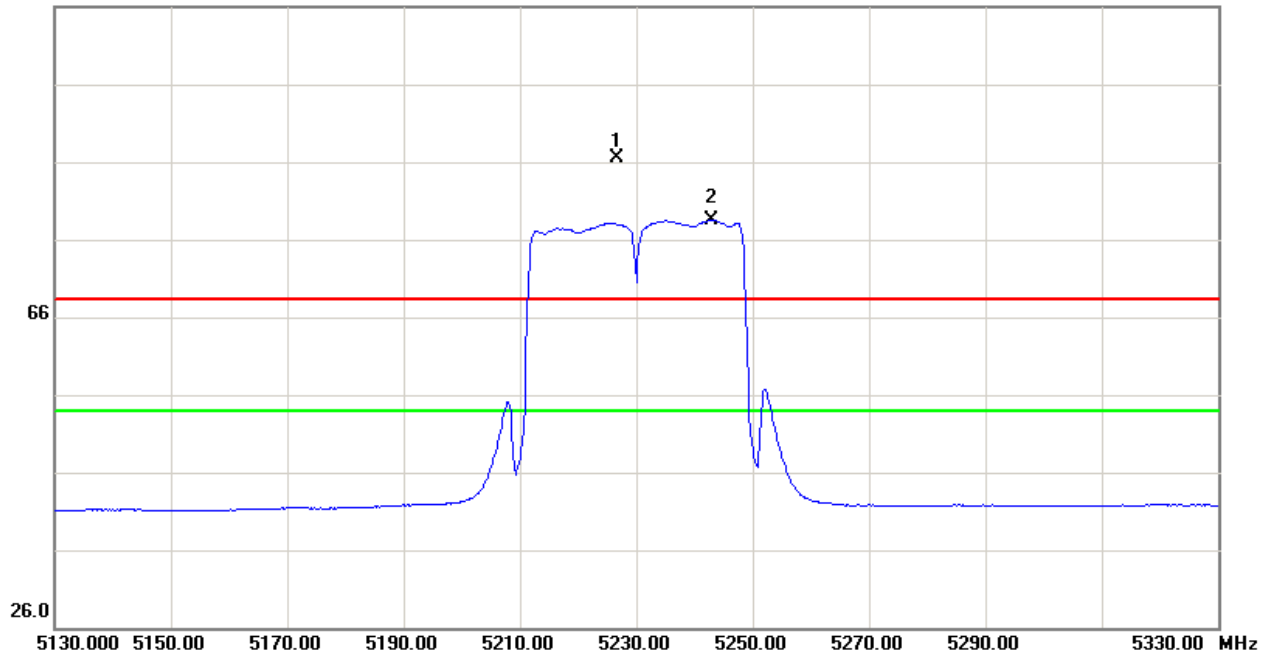




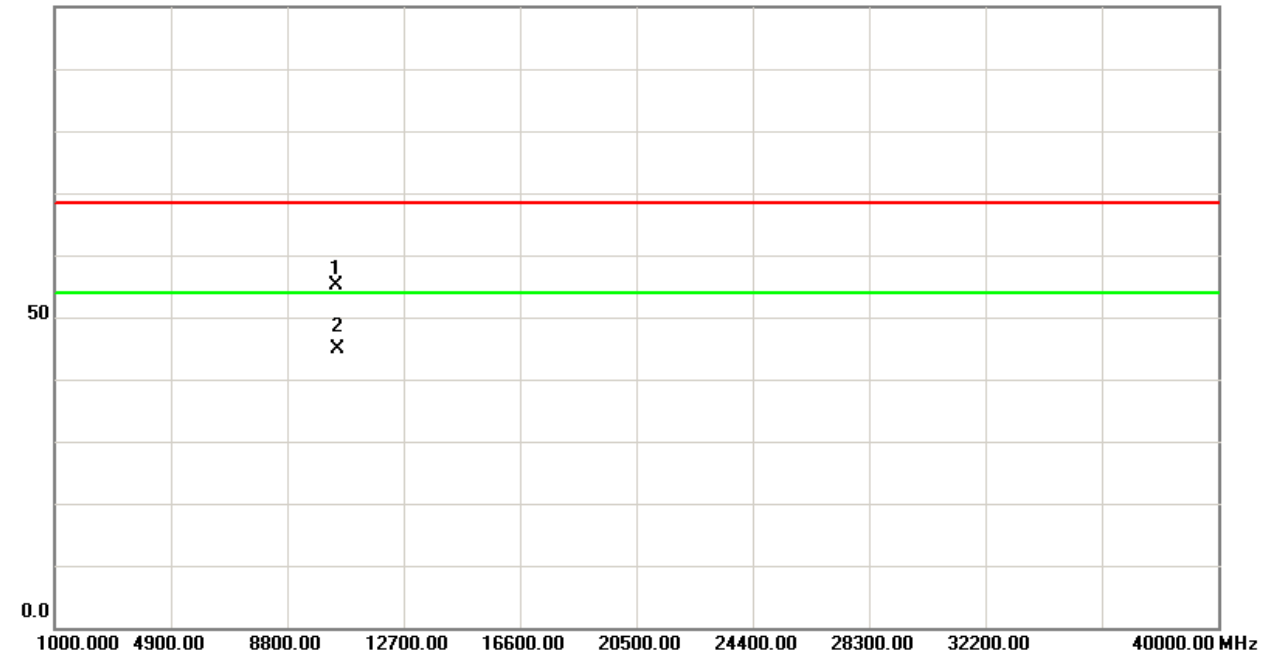


Orthogonal Axis:X
Band 1/CH46(Above 1000 MHz, Horizontal)

106.0 dBuV/m



100.0 dBuV/m





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	
5256.10	V	51.59	43.86	42.98	94.57	86.84	-10.20	-17.93					X/F
10520.00	V	39.69	29.60	15.88	55.57	45.48	-49.20	-59.29	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	
5257.30	H	45.60	37.96	42.98	88.58	80.94	-16.19	-23.83					X/F
10520.00	H	38.64	29.34	15.88	54.52	45.22	-50.25	-59.55	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	
5282.60	V	48.60	40.47	43.04	91.64	83.51	-13.13	-21.26					X/F
10560.00	V	39.34	29.17	15.99	55.33	45.16	-49.44	-59.61	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	
5277.00	H	45.79	38.33	43.03	88.82	81.36	-15.95	-23.41					X/F
10560.00	H	39.34	29.55	15.99	55.33	45.54	-49.44	-59.23	68.30	54.00	-27.00	-41.30	X/H

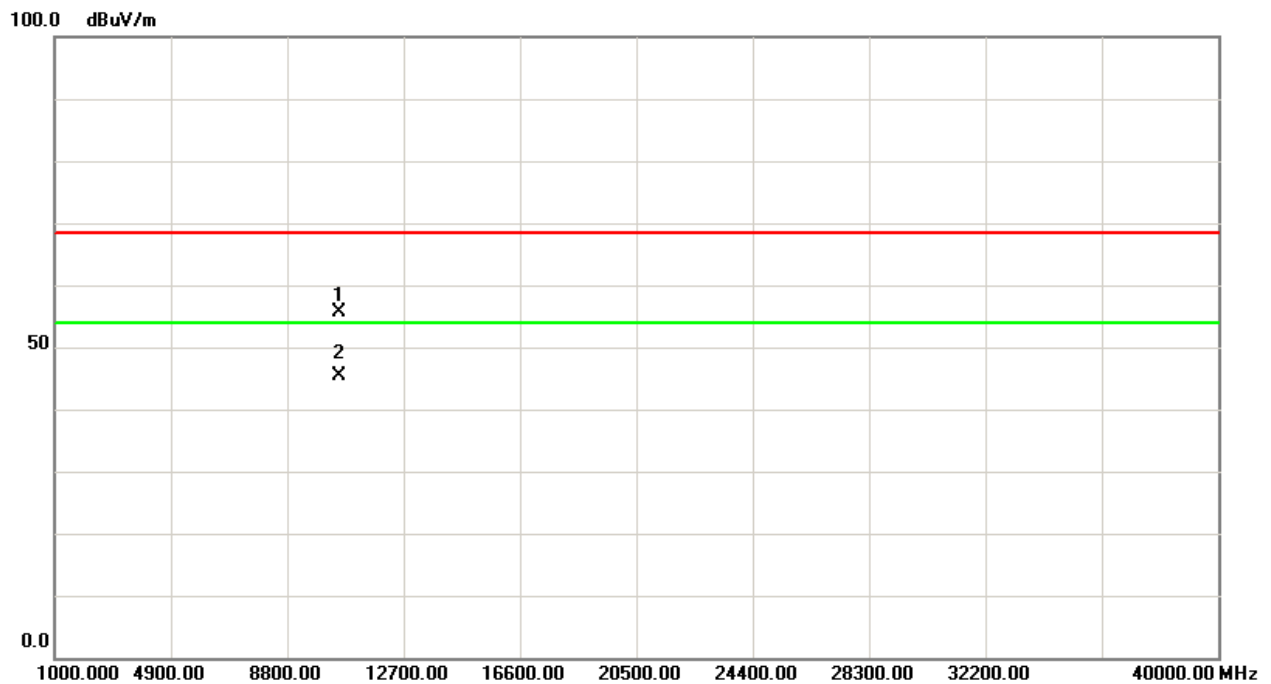
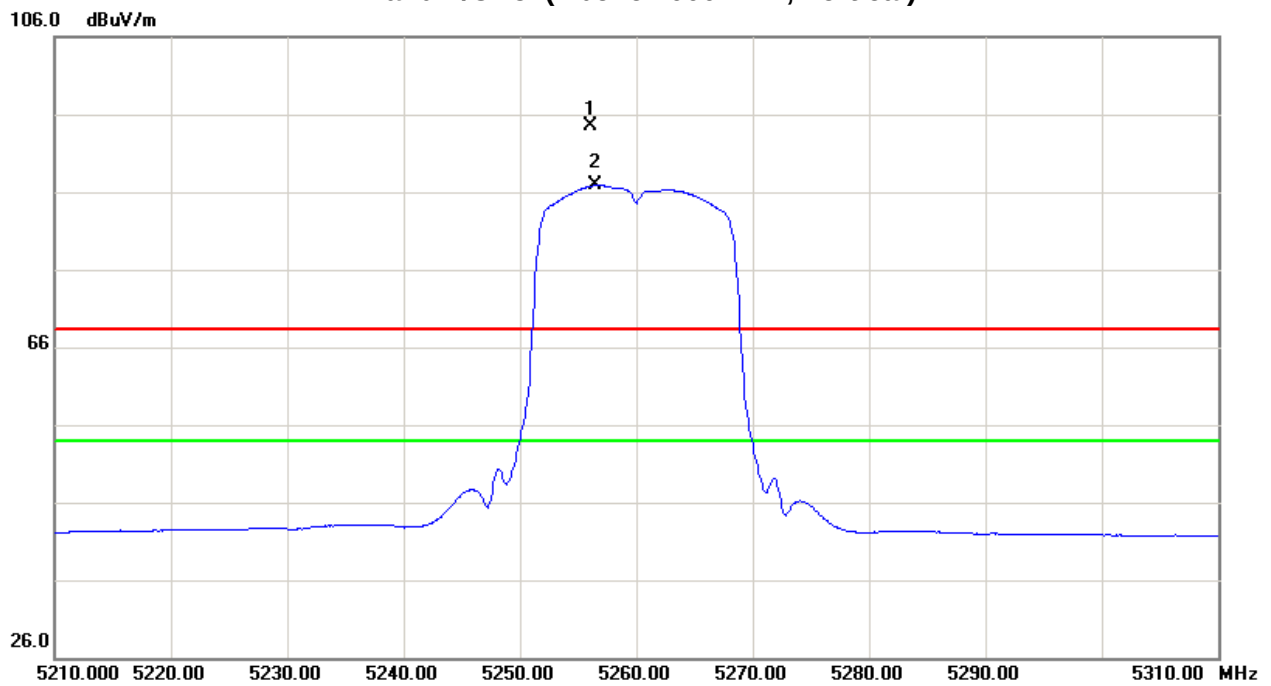
Test Mode : Band 2/ TX A Mode 5320MHz

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	
5317.90	V	53.96	45.38	43.13	97.09	88.51	-7.68	-16.26					X/F
5350.00	V	7.16	-0.80	43.21	50.37	42.41	-54.40	-62.36	68.30	54.00	-27.00	-41.30	X/E
10640.00	V	39.27	29.05	16.22	55.49	45.27	-49.28	-59.50	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	
5316.40	H	51.44	42.08	43.13	94.57	85.21	-10.20	-19.56					X/F
5350.00	H	7.80	-0.92	43.21	51.01	42.29	-53.76	-62.48	68.30	54.00	-27.00	-41.30	X/E
10640.00	H	39.25	29.23	16.22	55.47	45.45	-49.30	-59.32	68.30	54.00	-27.00	-41.30	X/H

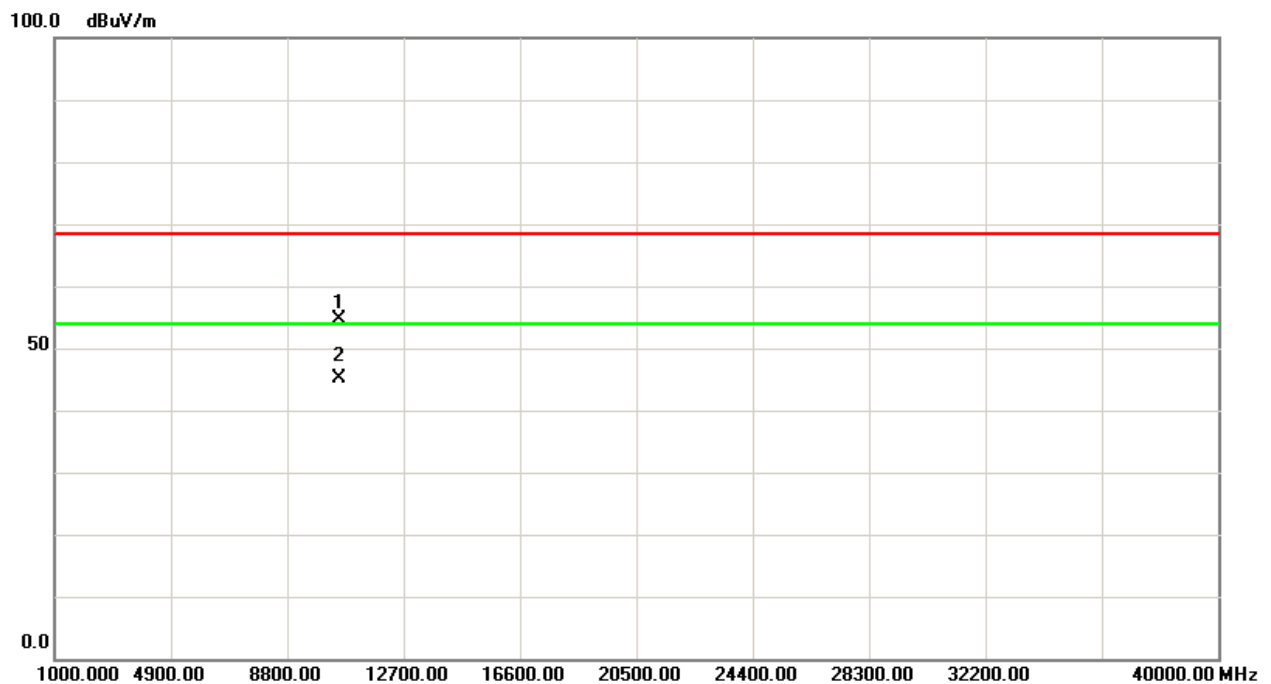
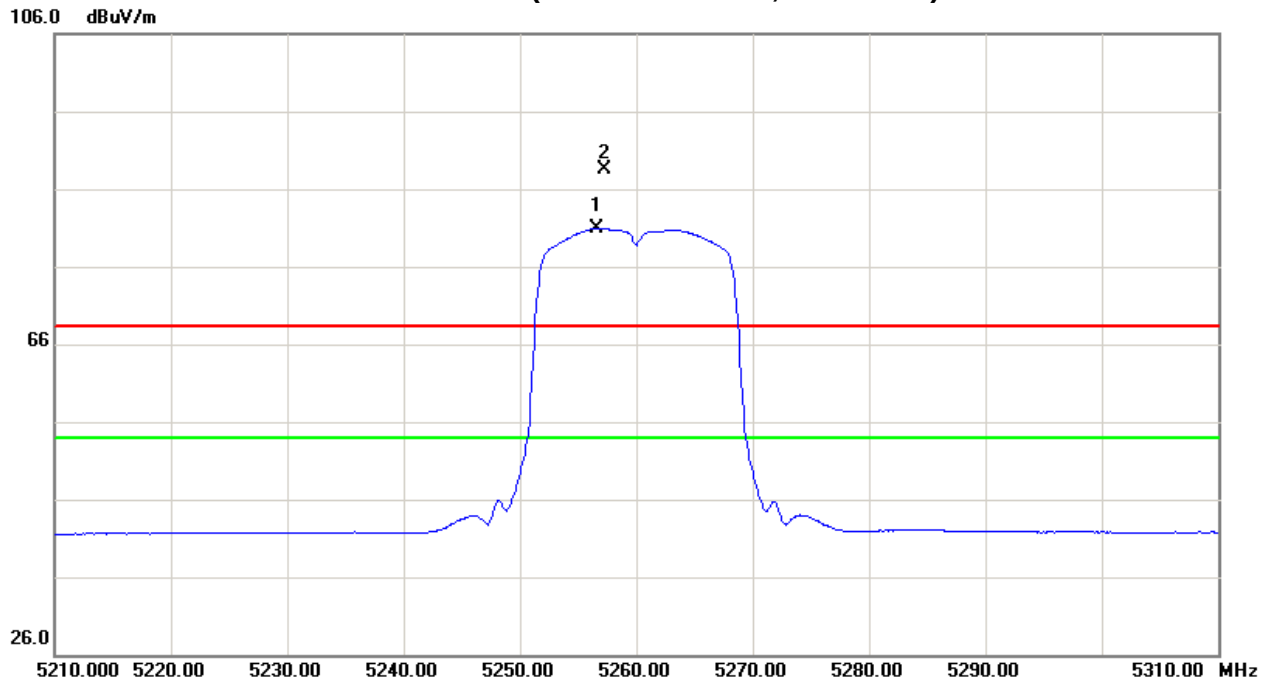


Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Vertical)



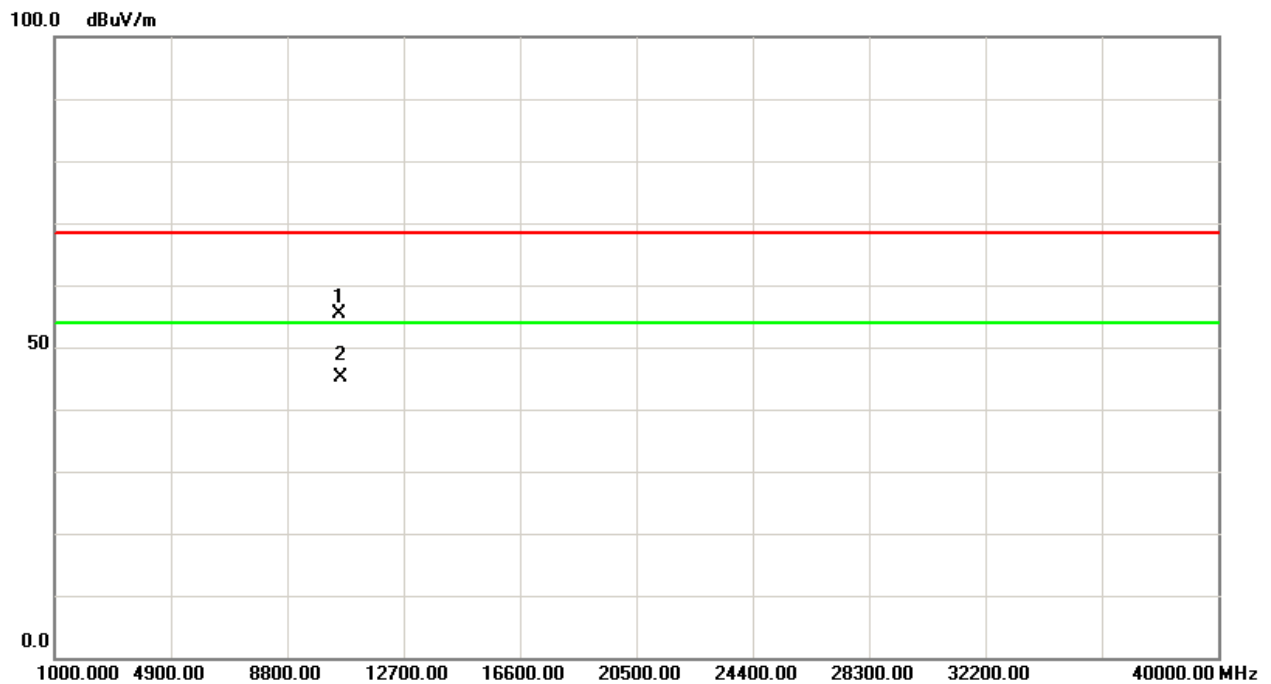
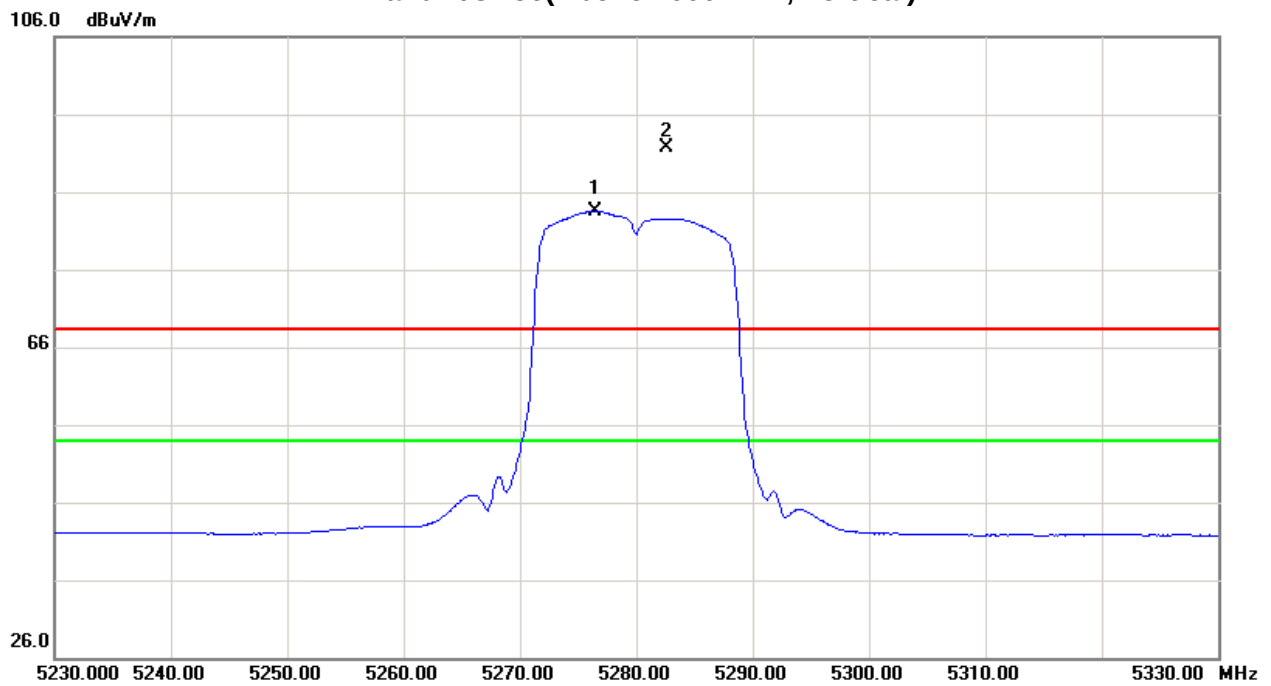


Orthogonal Axis:X
Band 2/CH52 (Above 1000 MHz, Horizontal)



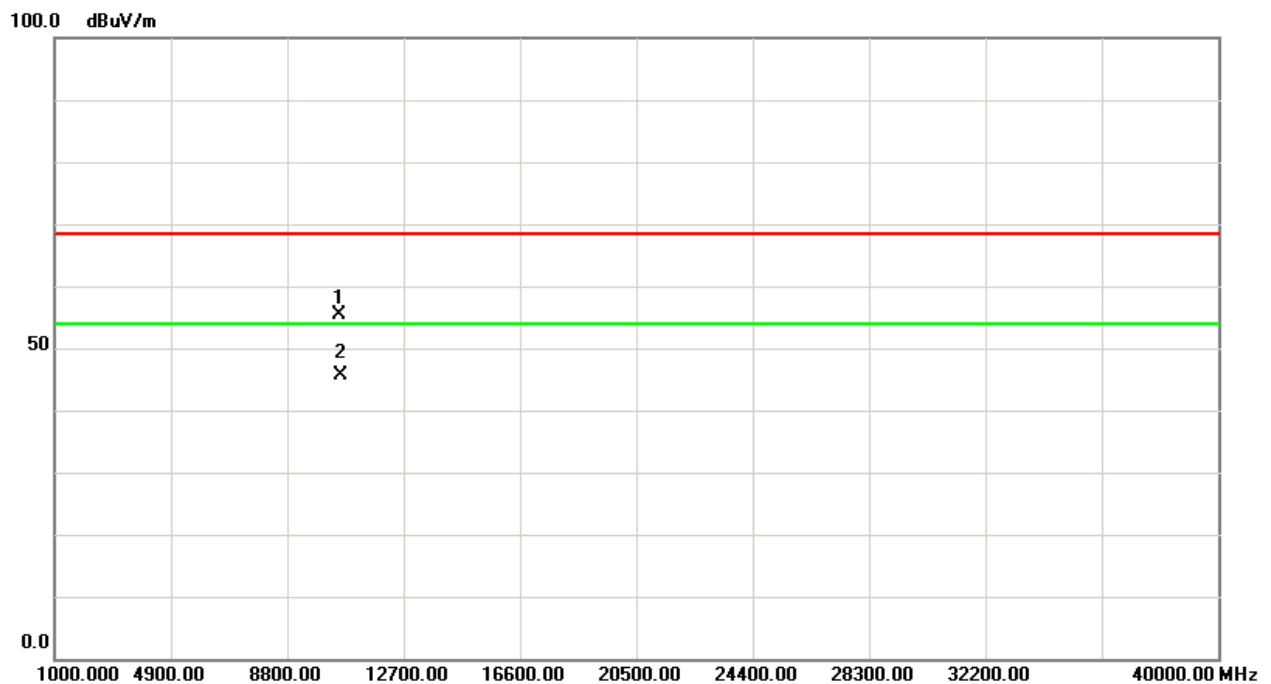
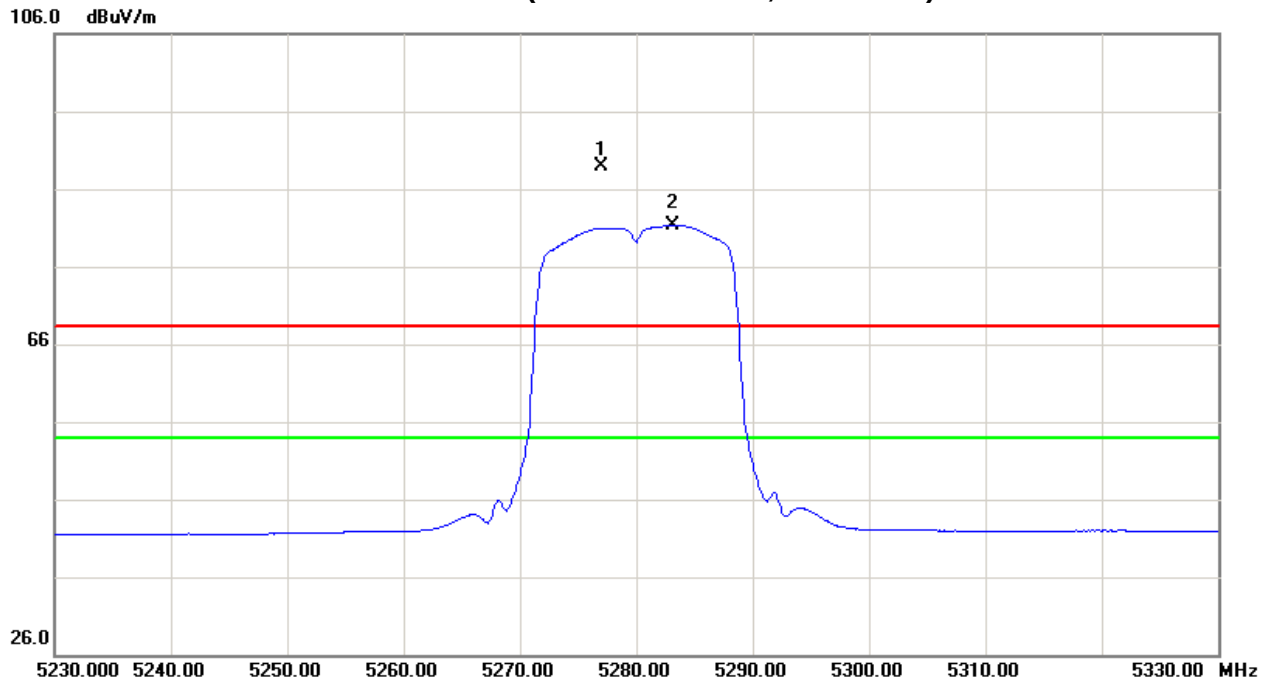


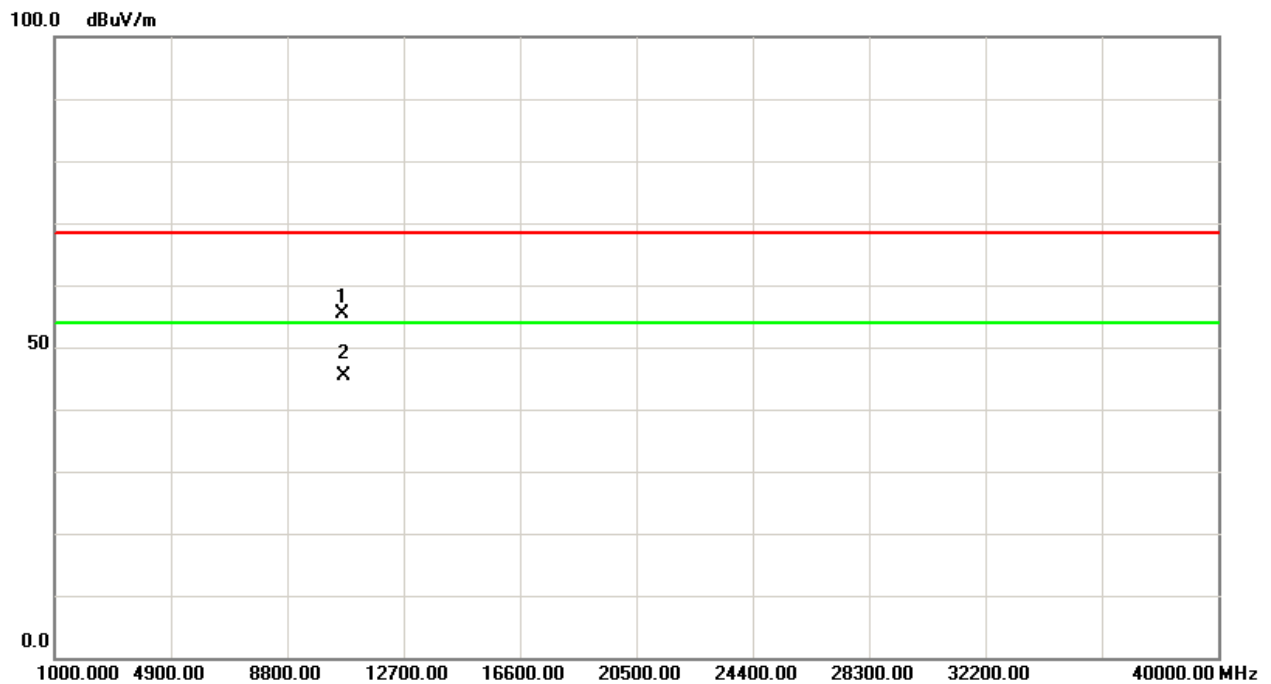
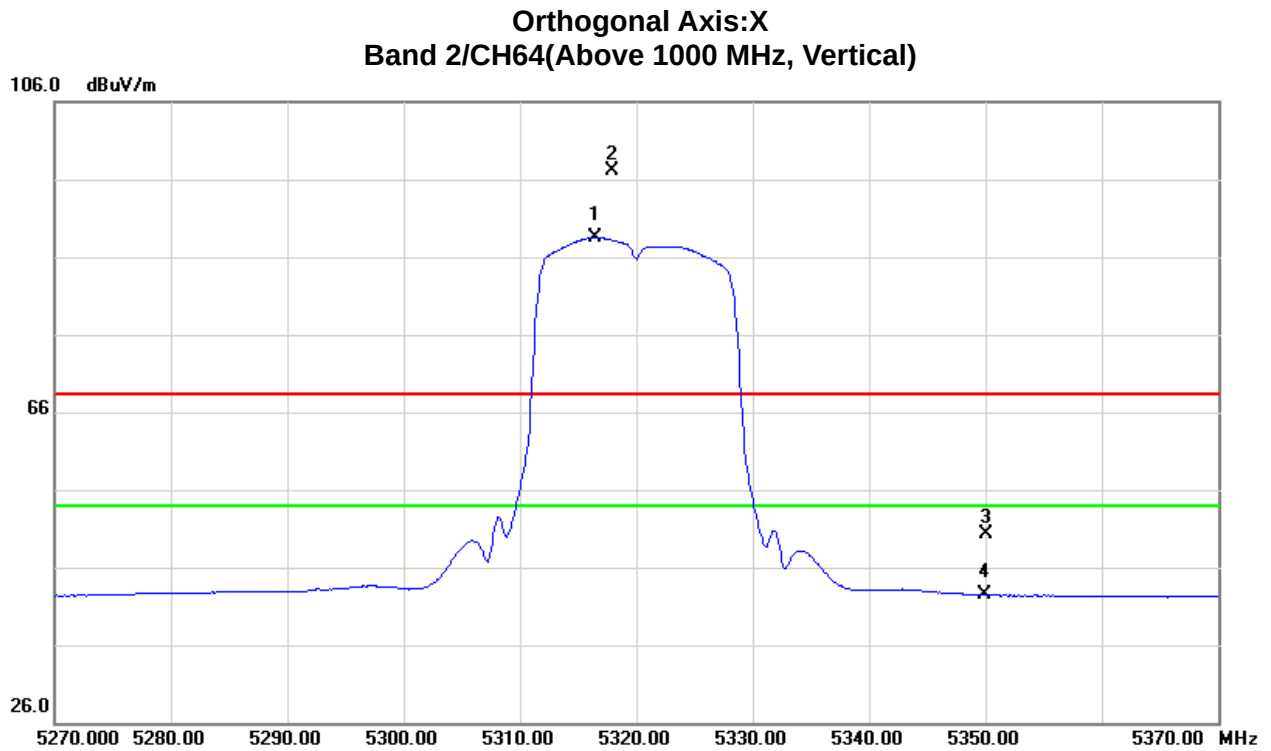
Orthogonal Axis:X
Band 2/CH56(Above 1000 MHz, Vertical)





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

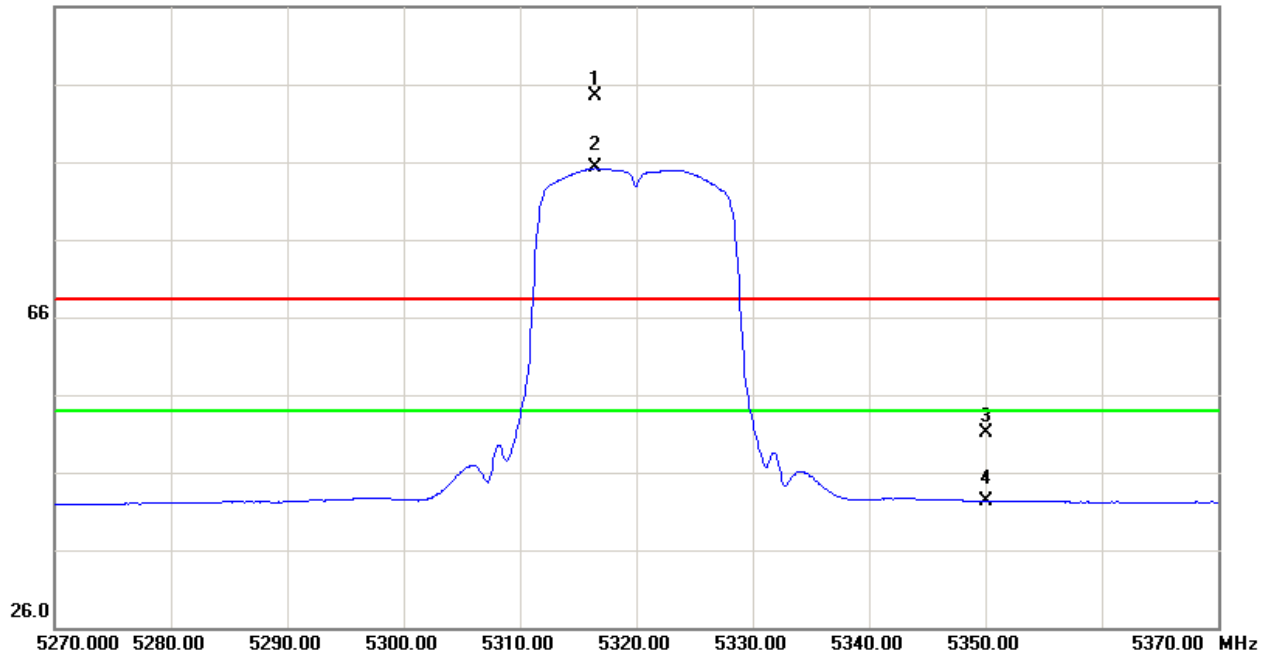




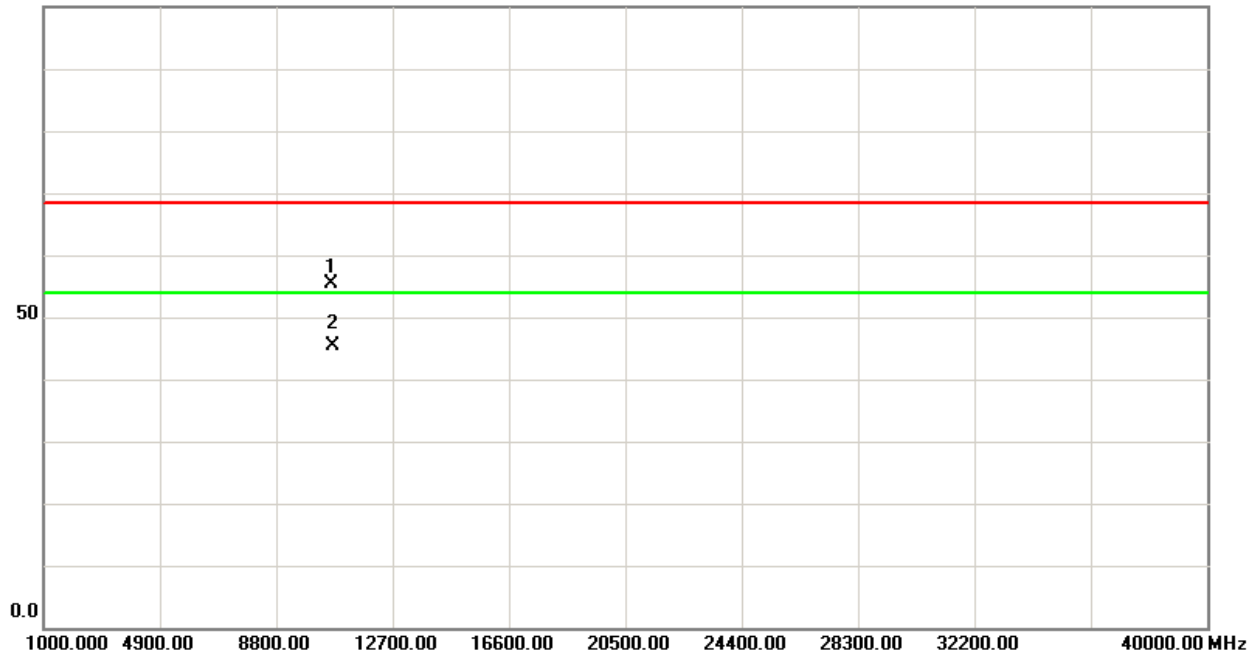


Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Horizontal)

106.0 dBuV/m



100.0 dBuV/m





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	
5255.40	V	53.41	44.90	42.98	96.39	87.88	-8.38	-16.89					X/F
10520.00	V	39.74	29.52	15.88	55.62	45.40	-49.15	-59.37	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	
5262.20	H	51.75	42.28	43.00	94.75	85.28	-10.02	-19.49					X/F
10520.00	H	38.82	29.45	15.88	54.70	45.33	-50.07	-59.44	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 2/ TX N20 Mode 5280MHz

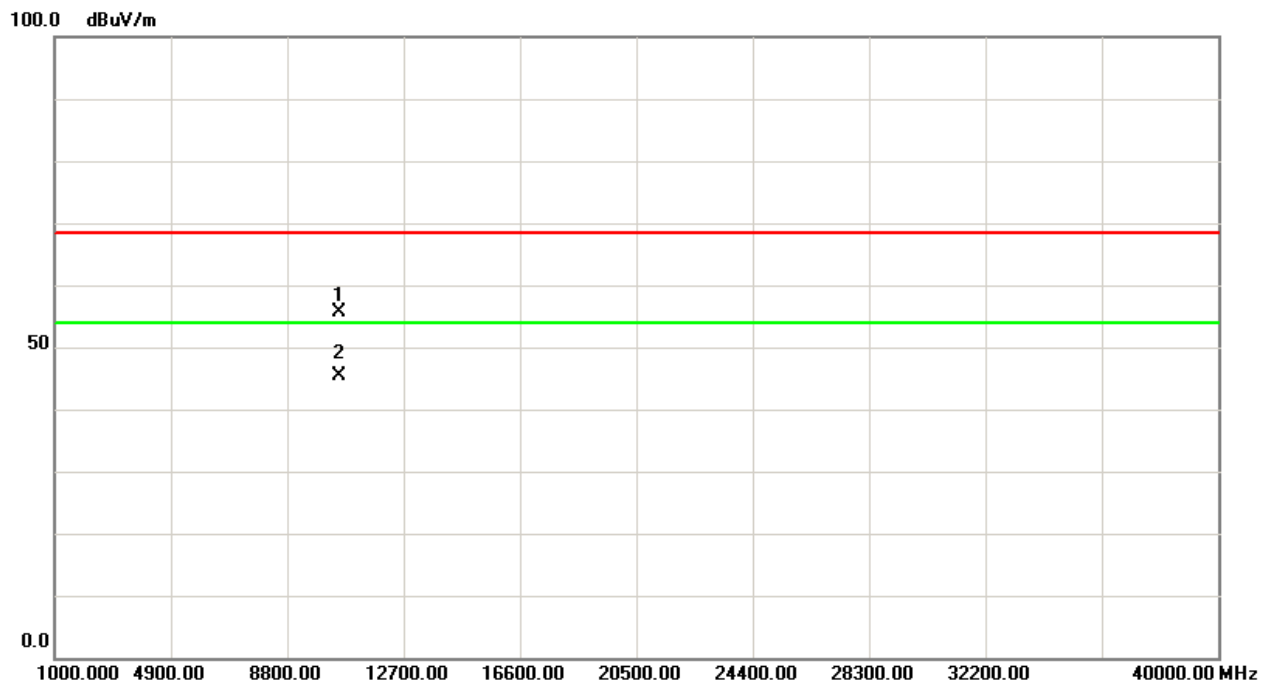
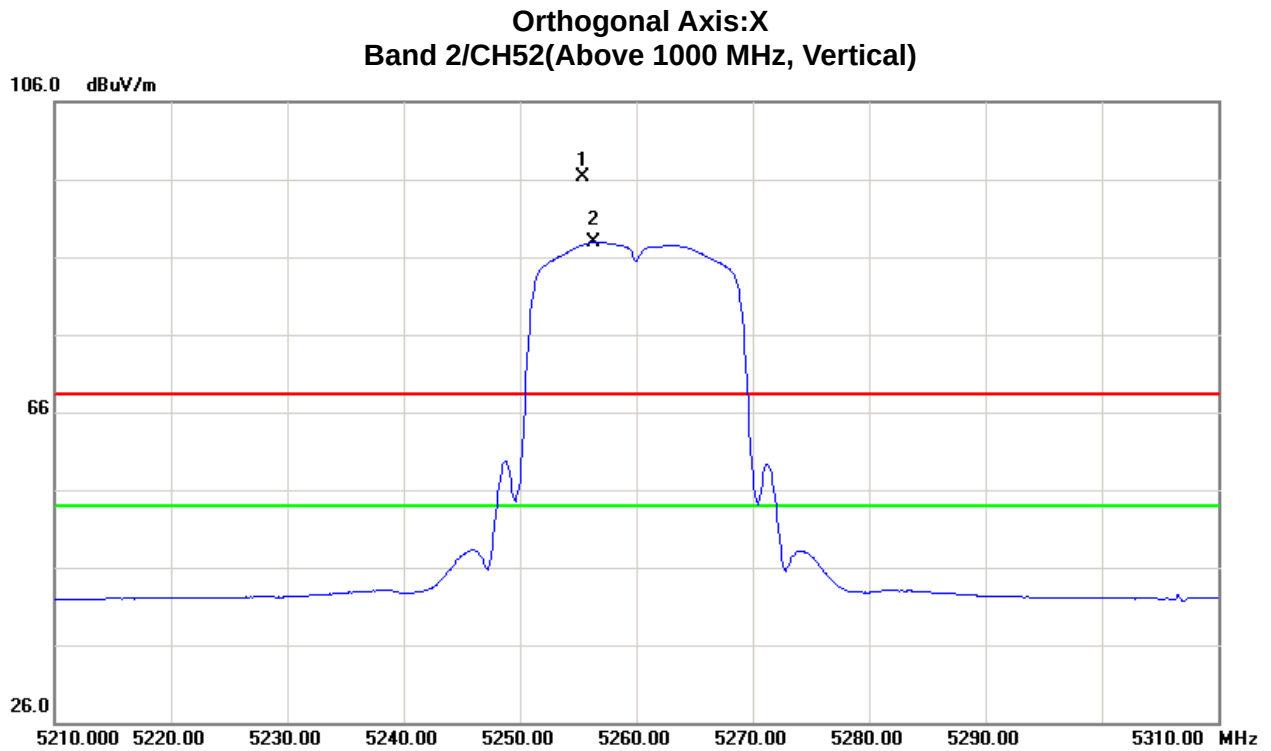
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5276.60	V	51.80	44.22	43.03	94.83	87.25	-9.94	-17.52					X/F
10560.00	V	39.37	29.24	15.99	55.36	45.23	-49.41	-59.54	68.30	54.00	-27.00	-41.30	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	
5276.80	H	48.81	41.71	43.03	91.84	84.74	-12.93	-20.03					X/F
10560.00	H	39.42	29.62	15.99	55.41	45.61	-49.36	-59.16	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	
5317.40	V	54.07	45.05	43.13	97.20	88.18	-7.57	-16.59					X/F
5350.00	V	7.33	-0.80	43.21	50.54	42.41	-54.23	-62.36	68.30	54.00	-27.00	-41.30	X/E
10640.00	V	39.29	29.15	16.22	55.51	45.37	-49.26	-59.40	68.30	54.00	-27.00	-41.30	X/H

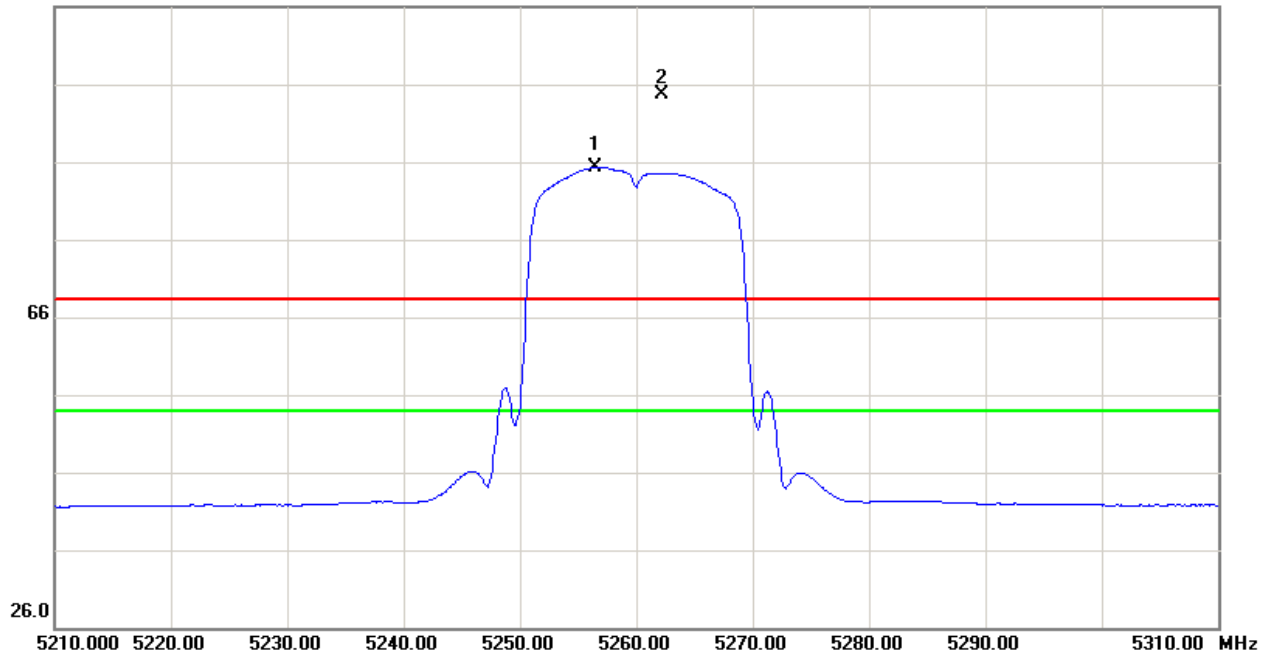
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5315.70	H	50.61	42.77	43.13	93.74	85.90	-11.03	-18.87					X/F
5350.00	H	6.82	-0.93	43.21	50.03	42.28	-54.74	-62.49	68.30	54.00	-27.00	-41.30	X/E
10640.00	H	39.29	29.21	16.22	55.51	45.43	-49.26	-59.34	68.30	54.00	-27.00	-41.30	X/H



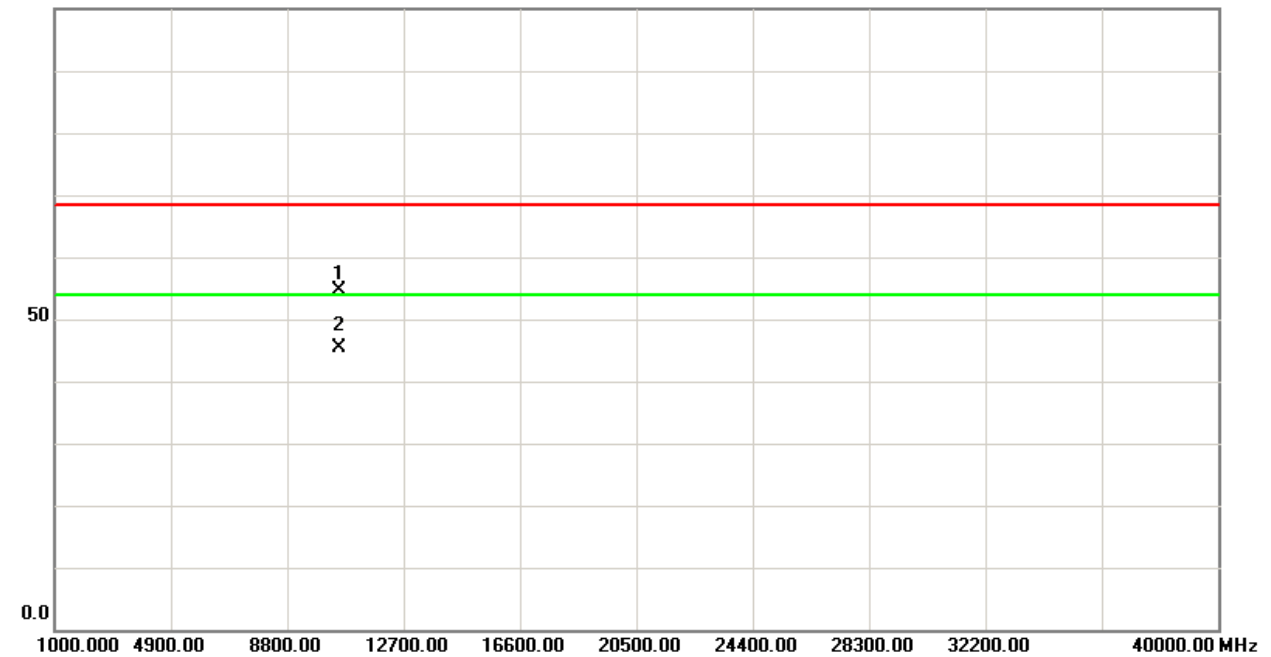


Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Horizontal)

106.0 dBuV/m



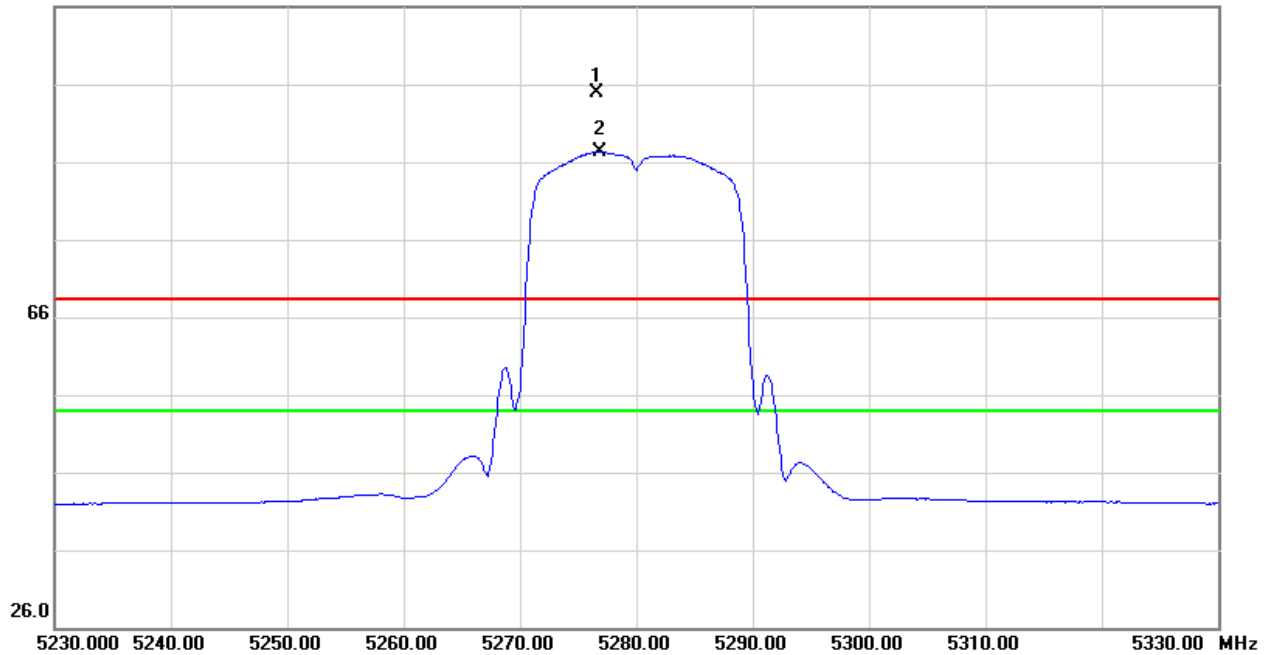
100.0 dBuV/m



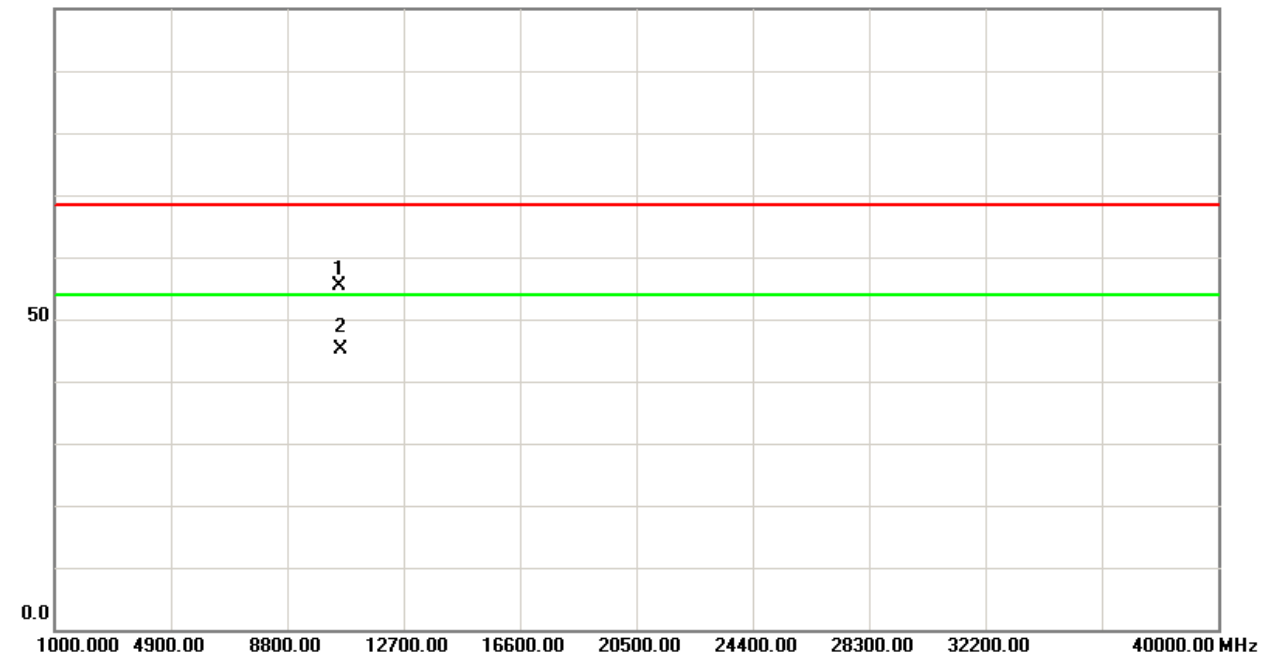


Orthogonal Axis:X
Band 2/CH56(Above 1000 MHz, Vertical)

106.0 dBuV/m



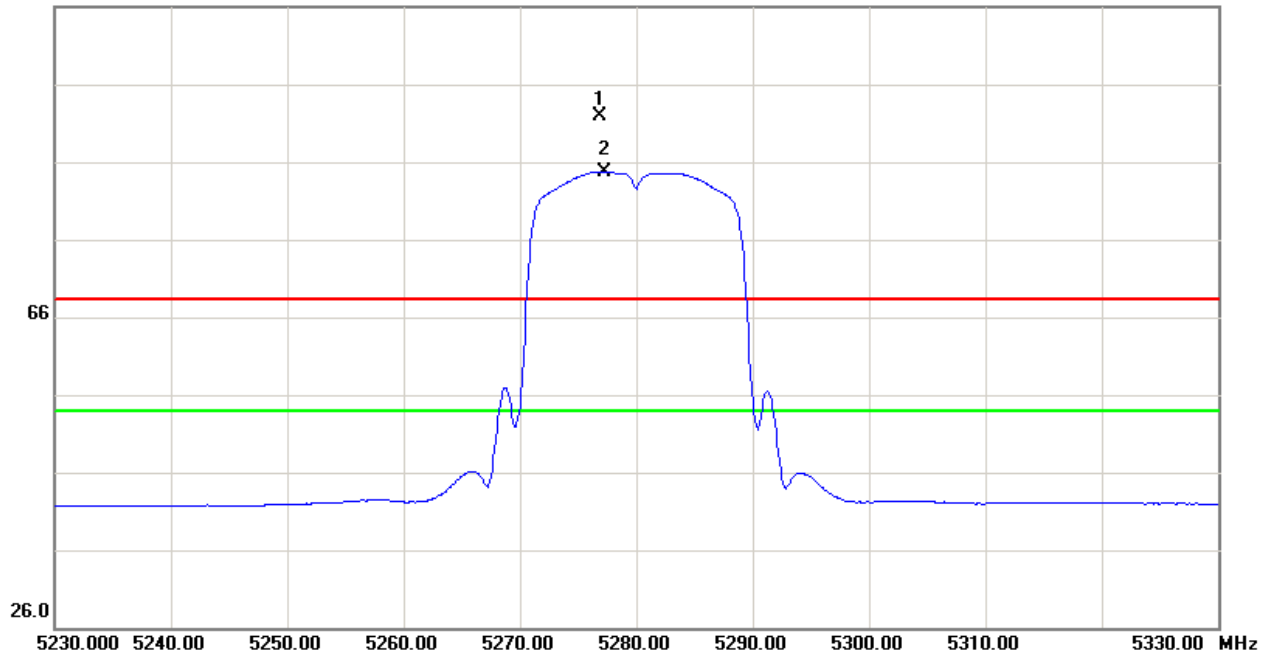
100.0 dBuV/m



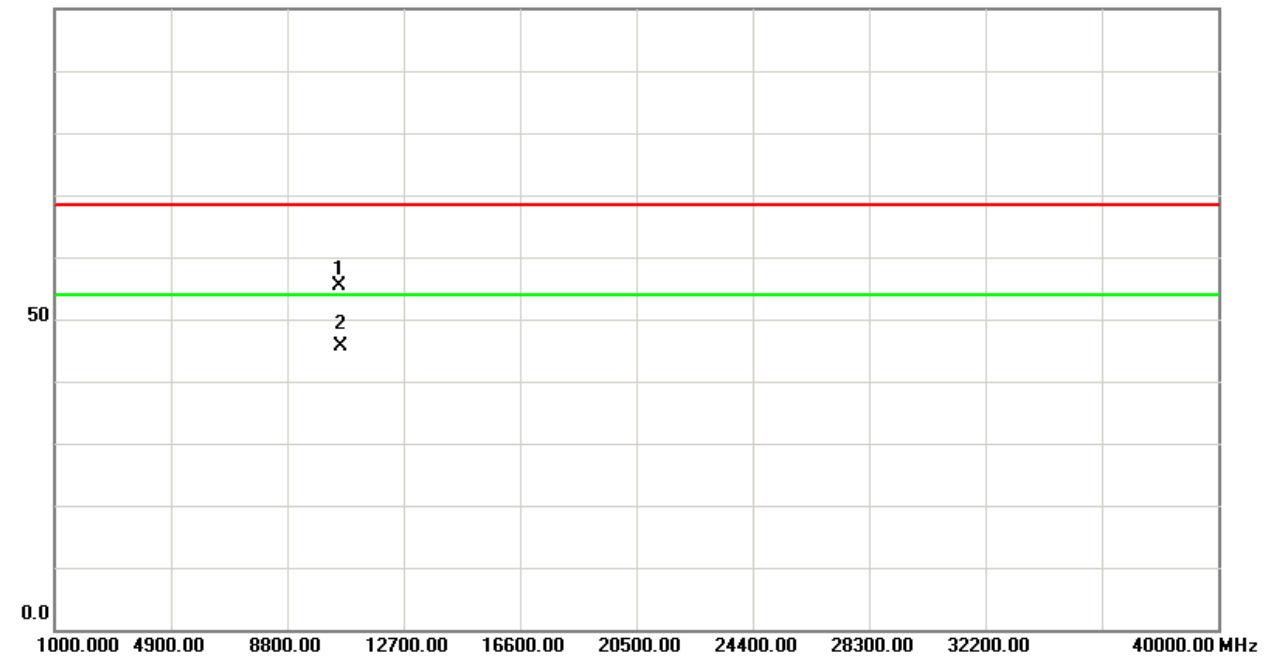


Orthogonal Axis:X
Band 2/CH56(Above 1000 MHz, Horizontal)

106.0 dBuV/m

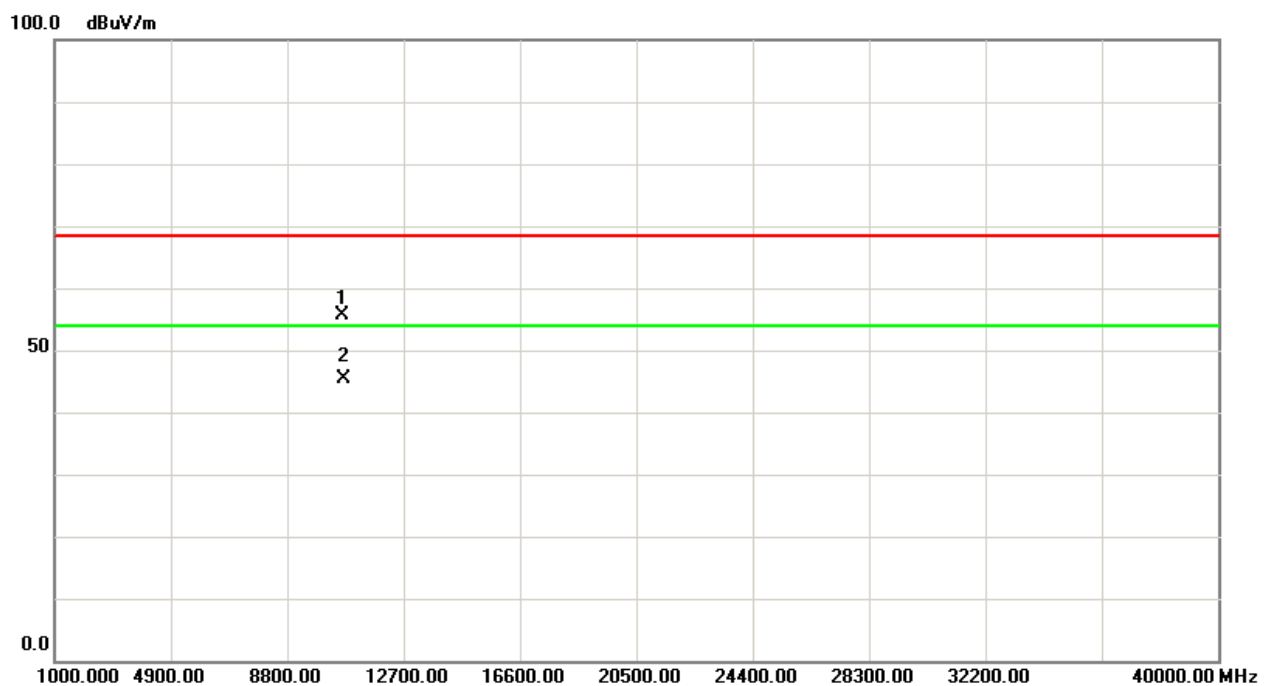
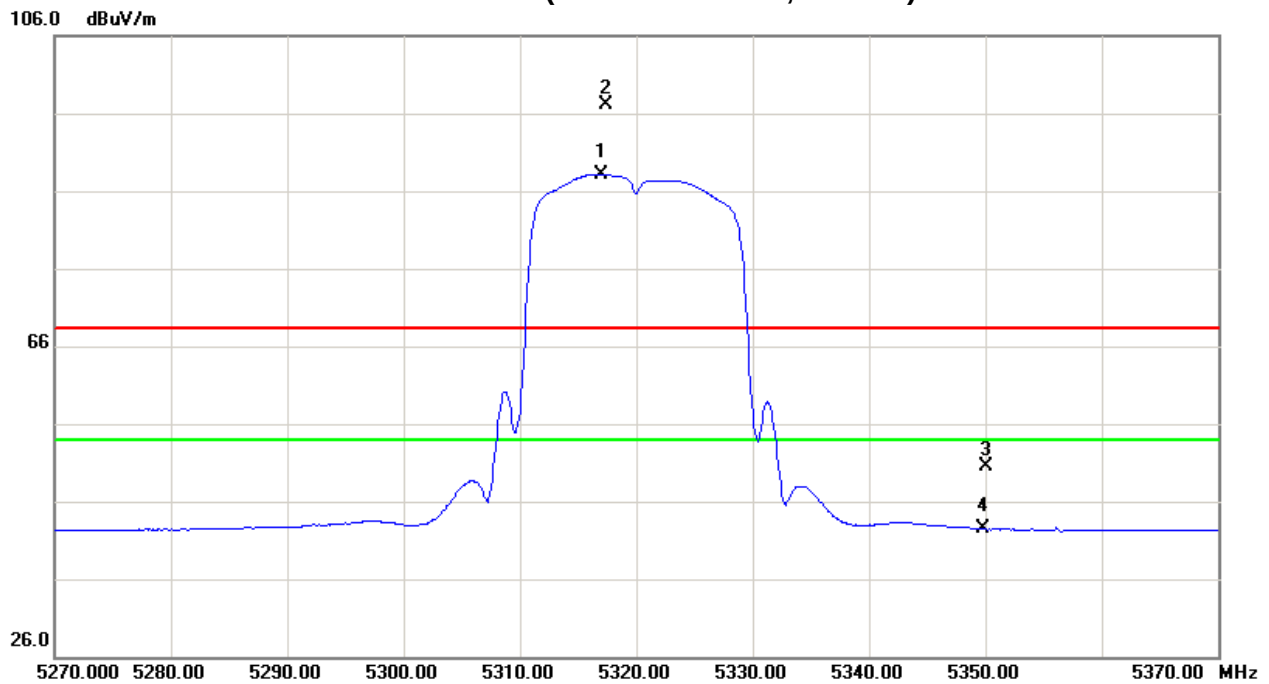


100.0 dBuV/m



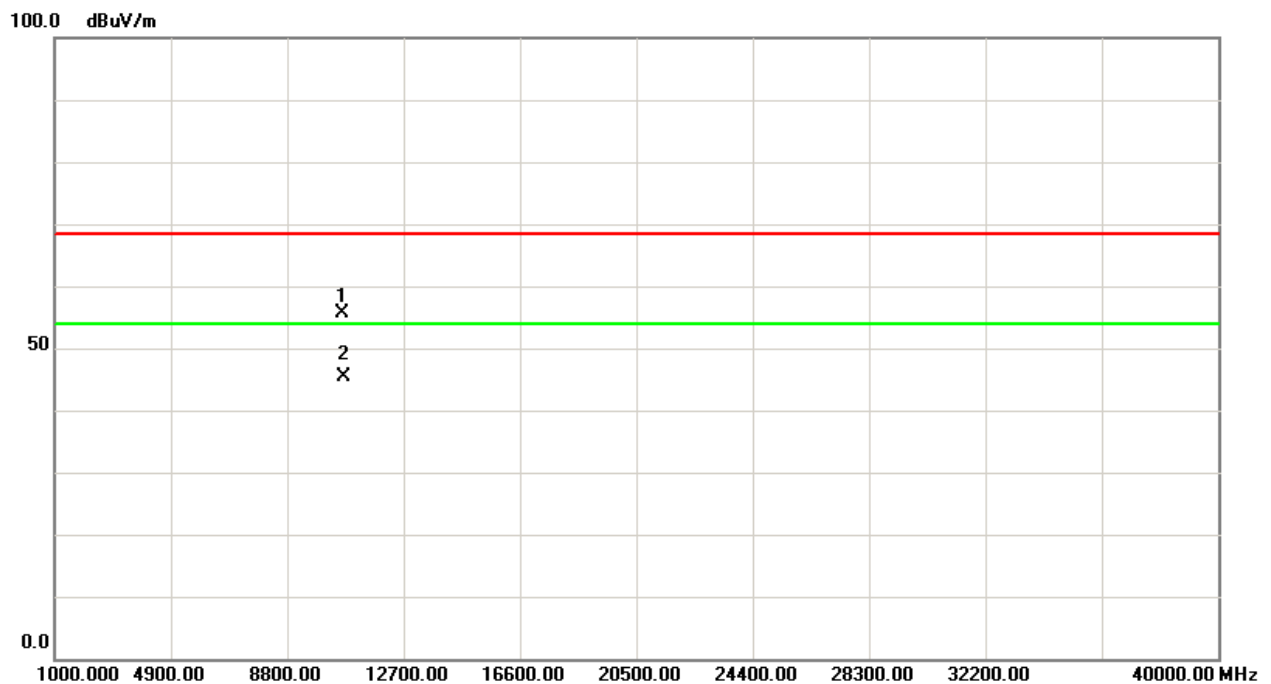
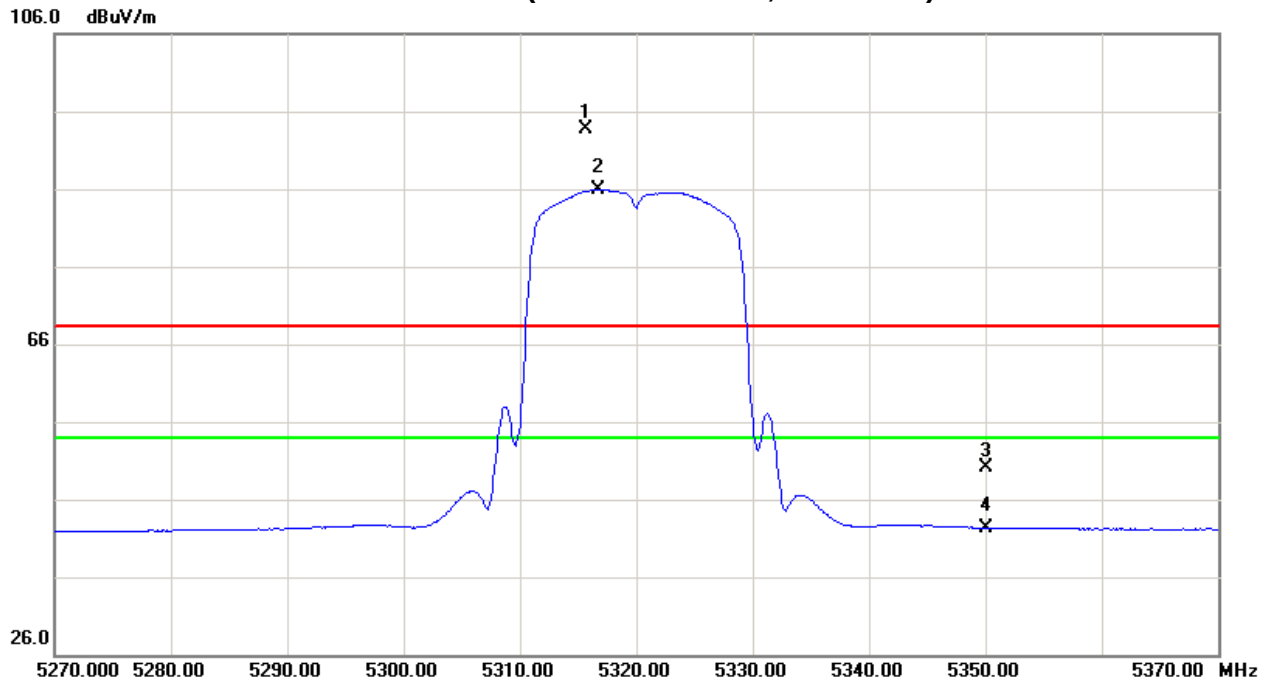


Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Vertical)





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	
5279.40	V	46.87	38.95	43.04	89.91	81.99	-14.86	-22.78					X/F
10540.00	V	39.83	29.41	15.94	55.77	45.35	-49.00	-59.42	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	
5260.00	H	43.91	35.77	42.99	86.90	78.76	-17.87	-26.01					X/F
10540.00	H	38.73	29.24	15.94	54.67	45.18	-50.10	-59.59	68.30	54.00	-27.00	-41.30	X/H

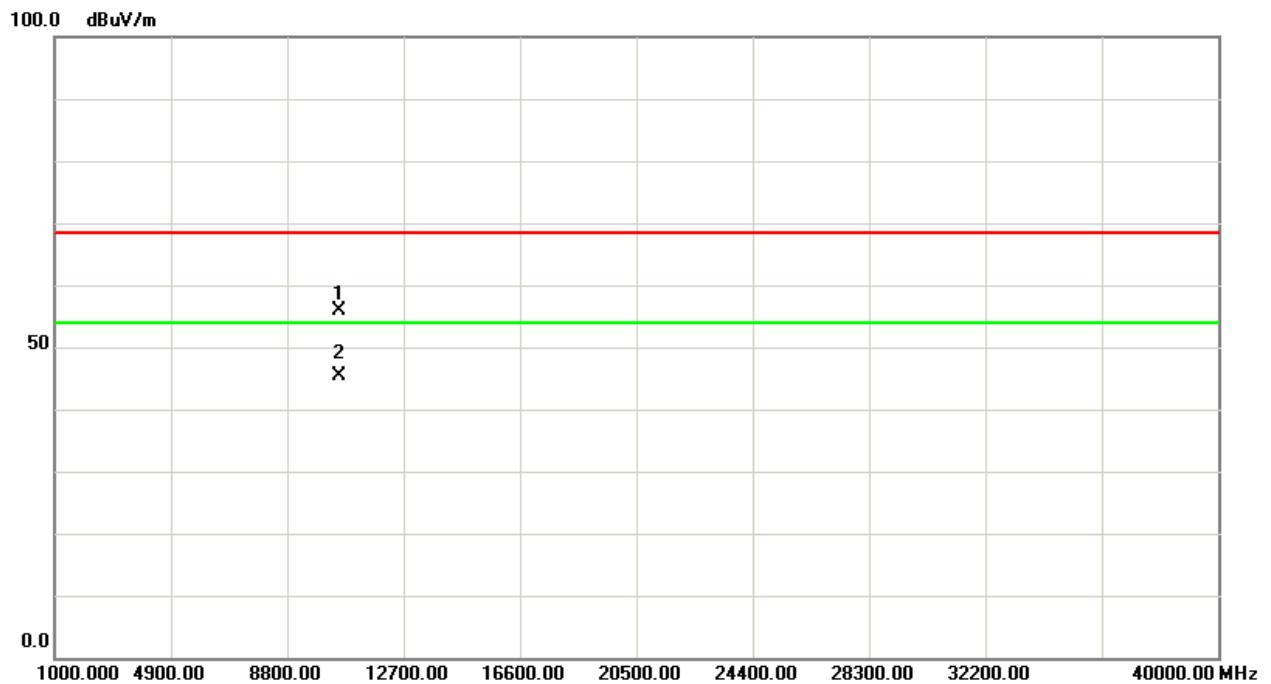
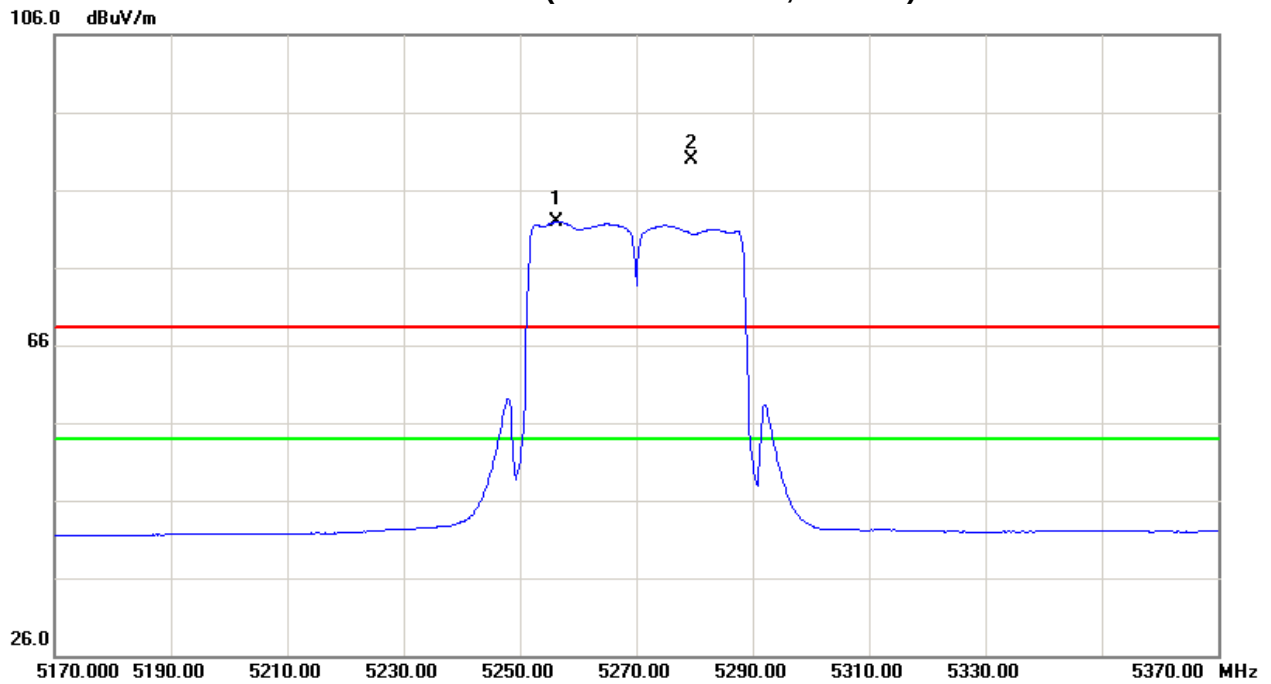
Test Mode : Band 2/ TX N40 Mode 5310MHz

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	
5308.00	V	48.10	39.34	43.10	91.20	82.44	-13.57	-22.33					X/F
5350.00	V	9.18	-0.91	43.21	52.39	42.30	-52.38	-62.47	68.30	54.00	-27.00	-41.30	X/E
10620.00	V	39.55	29.21	16.17	55.72	45.38	-49.05	-59.39	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	
5322.20	H	43.74	35.55	43.15	86.89	78.70	-17.88	-26.07					X/F
5350.00	H	7.89	-1.07	43.21	51.10	42.14	-53.67	-62.63	68.30	54.00	-27.00	-41.30	X/E
10620.00	H	39.81	29.46	16.17	55.98	45.63	-48.79	-59.14	68.30	54.00	-27.00	-41.30	X/H

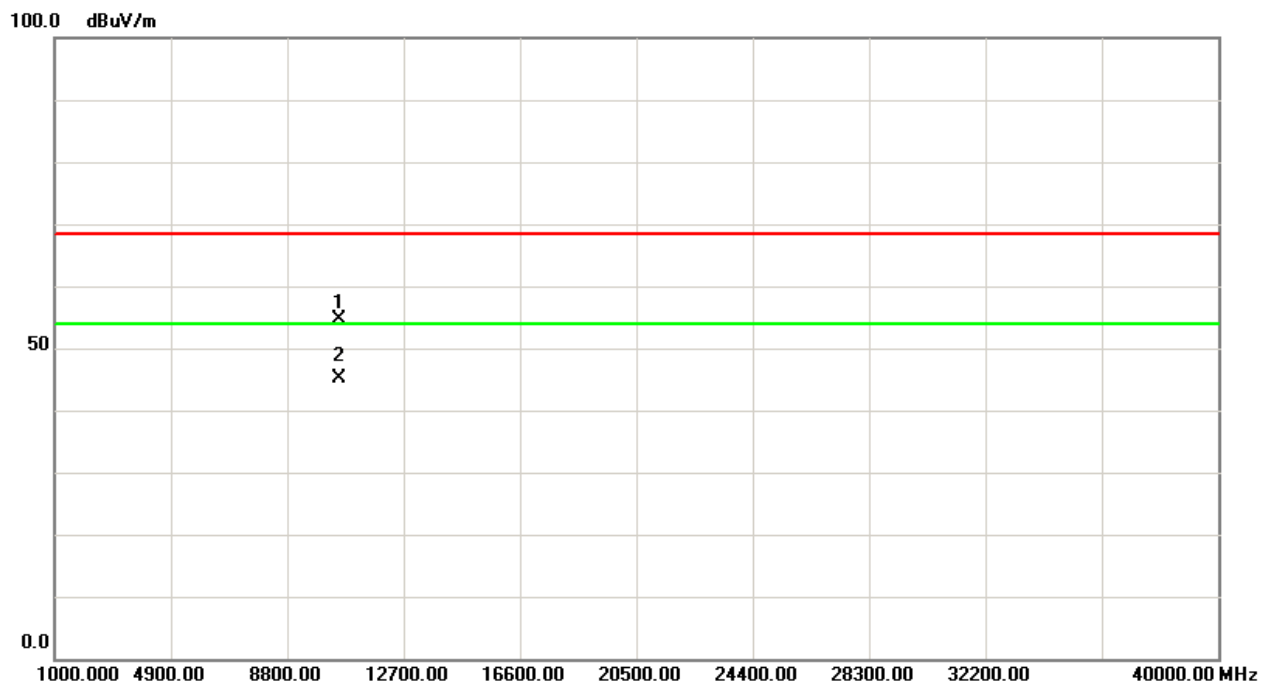
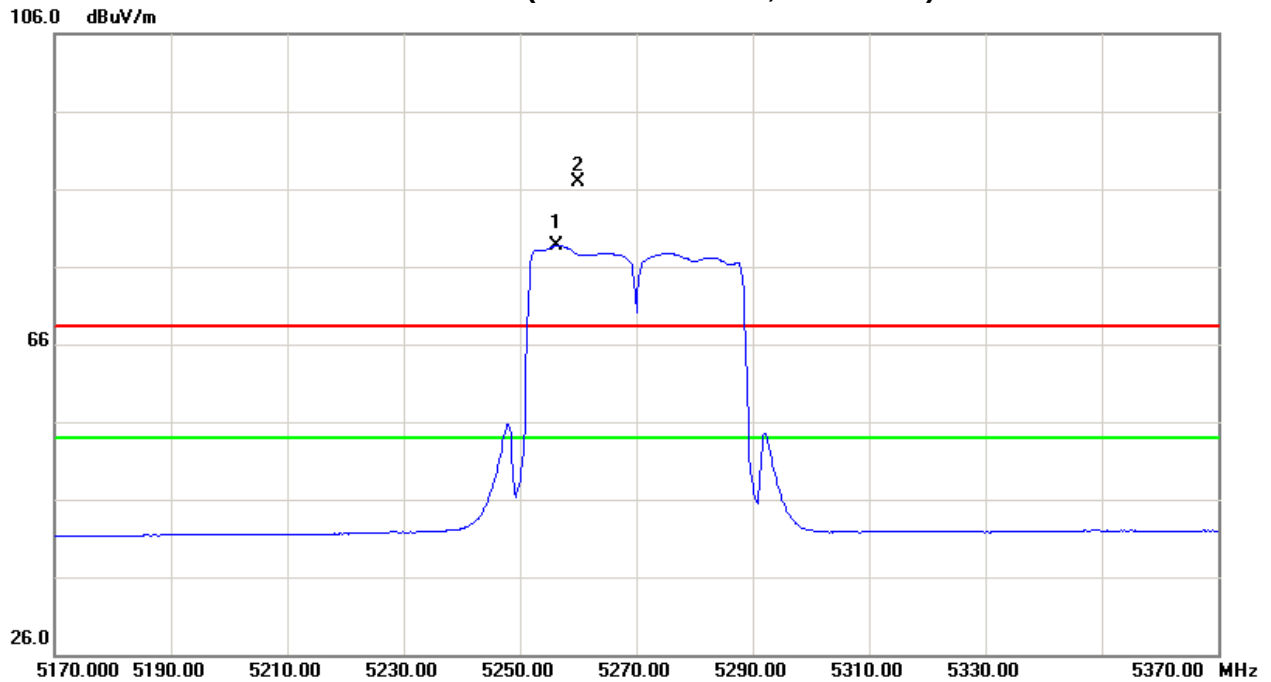


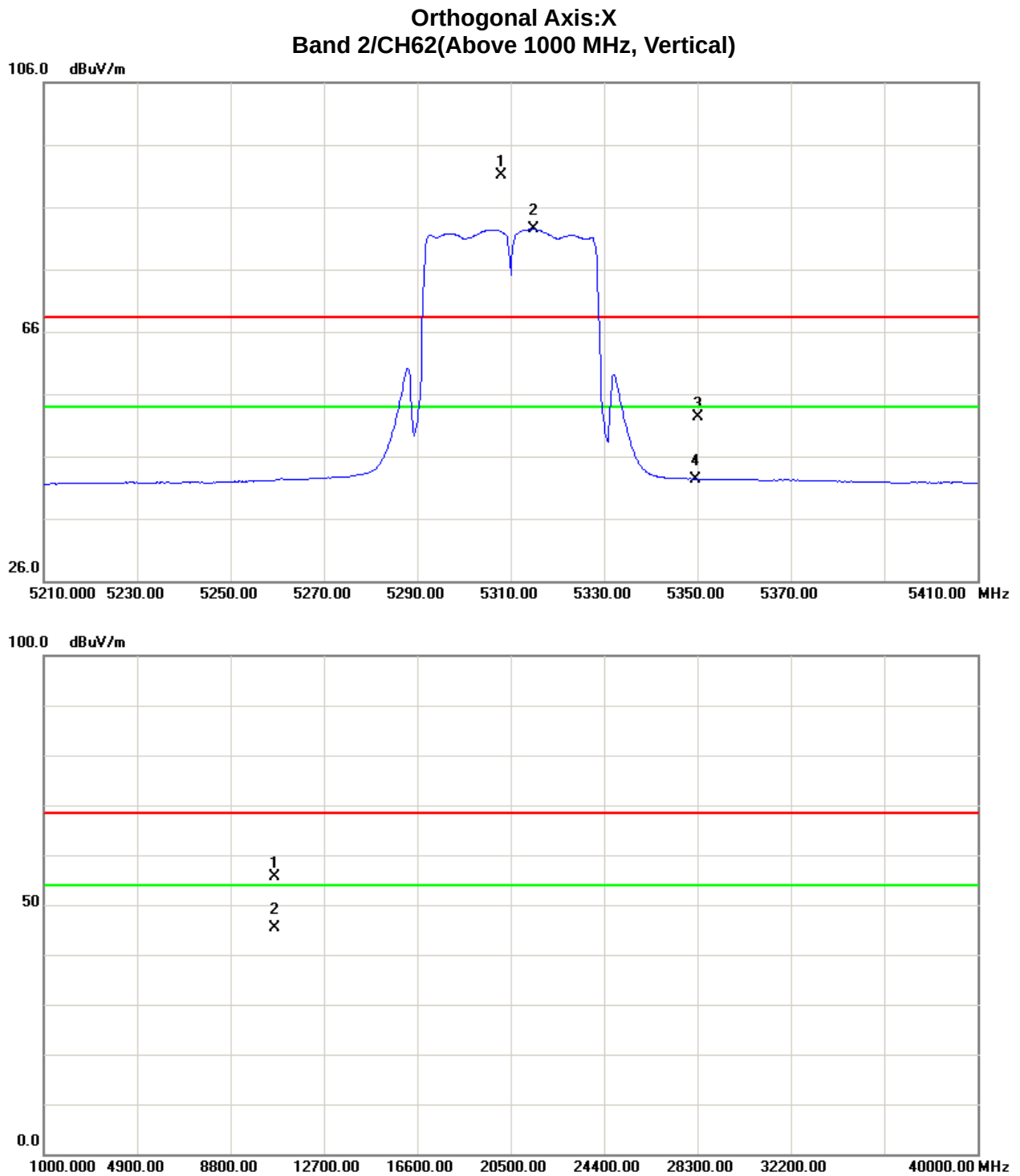
Orthogonal Axis:X
Band 2/CH54(Above 1000 MHz, Vertical)





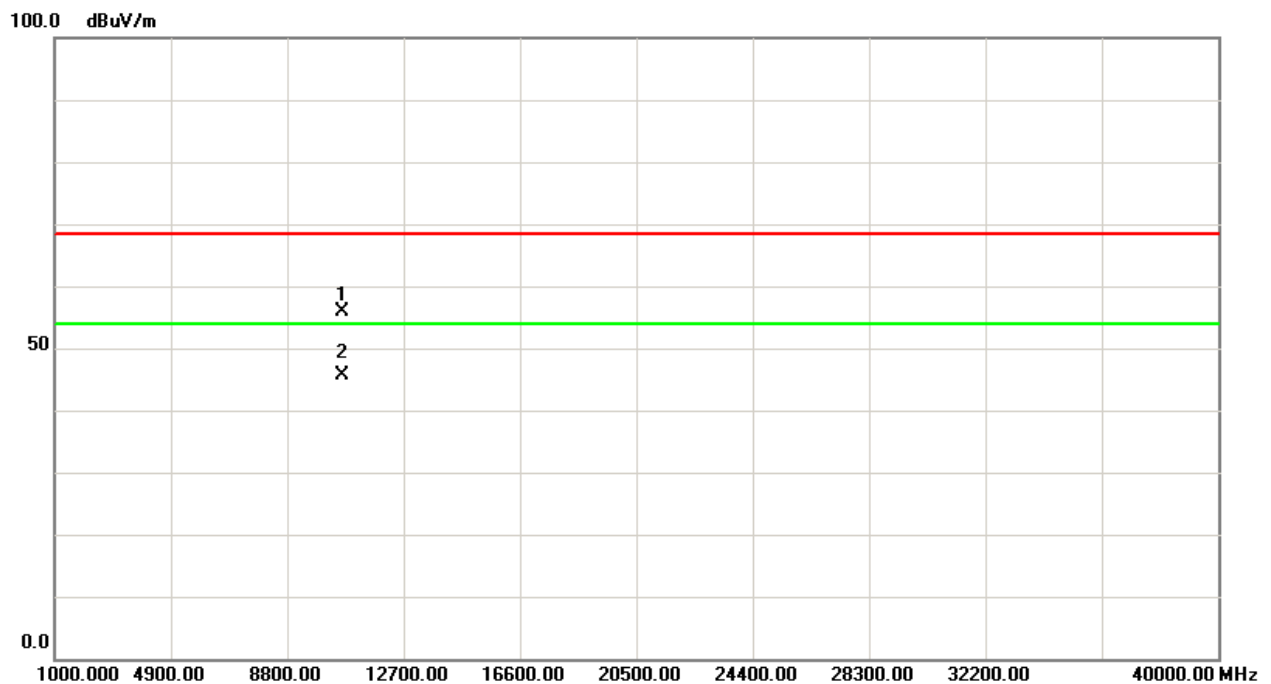
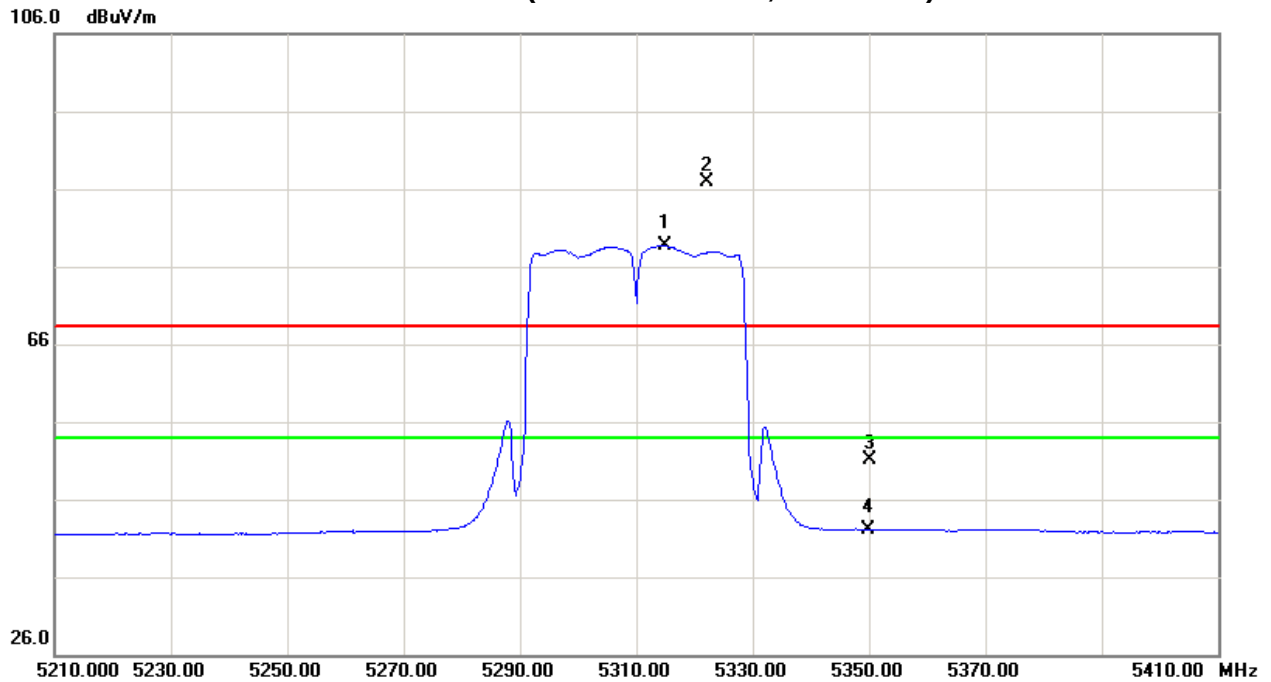
Orthogonal Axis:X
Band 2/CH54(Above 1000 MHz, Horizontal)







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





Test Mode : Band 3/ TX A Mode 5500MHz

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	
5460.00	V	8.85	-0.27	43.49	52.34	43.22	-52.43	-61.55	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	8.58	0.02	43.50	52.08	43.52	-52.69	-61.25	68.30	54.00	-27.00	-41.30	X/E
5496.70	V	54.03	45.78	43.57	97.60	89.35	-7.17	-15.42					X/F
11000.00	V	38.56	28.48	17.26	55.82	45.74	-48.95	-59.03	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	
5460.00	H	7.38	-1.35	43.49	50.87	42.14	-53.90	-62.63	68.30	54.00	-27.00	-41.30	X/E
5470.00	H	5.52	-1.29	43.50	49.02	42.21	-55.75	-62.56	68.30	54.00	-27.00	-41.30	X/E
5495.00	H	45.23	37.23	43.57	88.80	80.80	-15.97	-23.97					X/F
11000.00	H	39.15	28.74	17.26	56.41	46.00	-48.36	-58.77	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 3/ TX A Mode 5580MHz

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	
5577.00	V	51.38	44.08	43.84	95.22	87.92	-9.55	-16.85					X/F
11160.00	V	38.17	28.52	17.65	55.82	46.17	-48.95	-58.60	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	
5578.60	H	47.62	40.05	43.85	91.47	83.90	-13.30	-20.87					X/F
11160.00	H	38.82	28.29	17.65	56.47	45.94	-48.30	-58.83	68.30	54.00	-27.00	-41.30	X/H

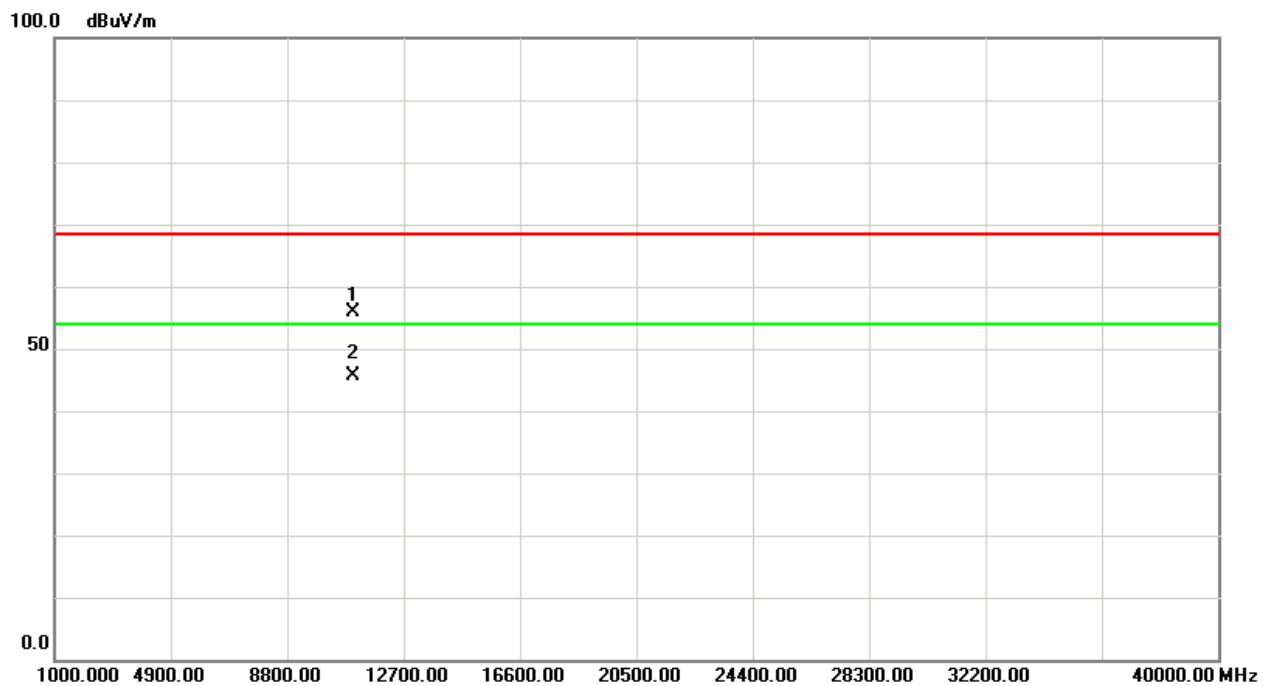
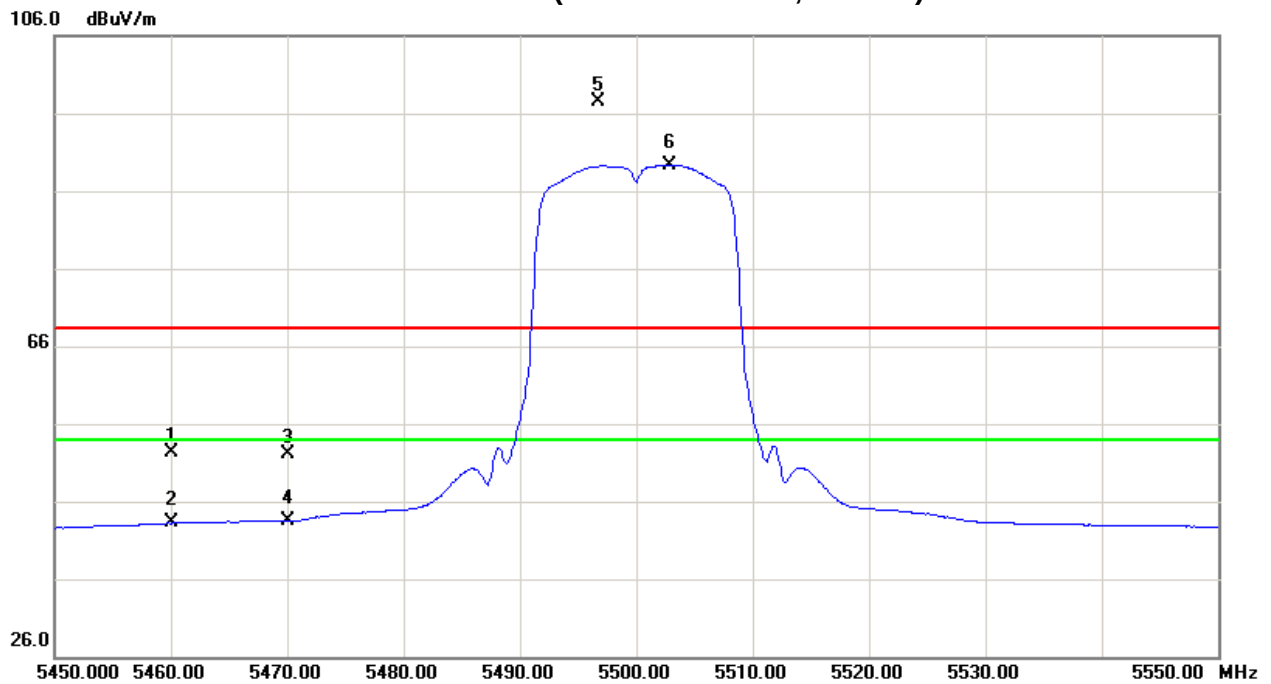
Test Mode : Band 3/ TX A Mode 5700MHz

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	
5697.30	V	51.35	42.93	44.25	95.60	87.18	-9.17	-17.59					X/F
5725.00	V	7.23	-0.48	44.34	51.57	43.86	-53.20	-60.91	68.30	54.00	-27.00	-41.30	X/E
11400.00	V	37.43	27.86	18.24	55.67	46.10	-49.10	-58.67	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	
5704.10	H	44.60	36.64	44.28	88.88	80.92	-15.89	-23.85					X/F
5725.00	H	7.03	-1.22	44.34	51.37	43.12	-53.40	-61.65	68.30	54.00	-27.00	-41.30	X/E
11400.00	H	38.35	27.12	18.24	56.59	45.36	-48.18	-59.41	68.30	54.00	-27.00	-41.30	X/H

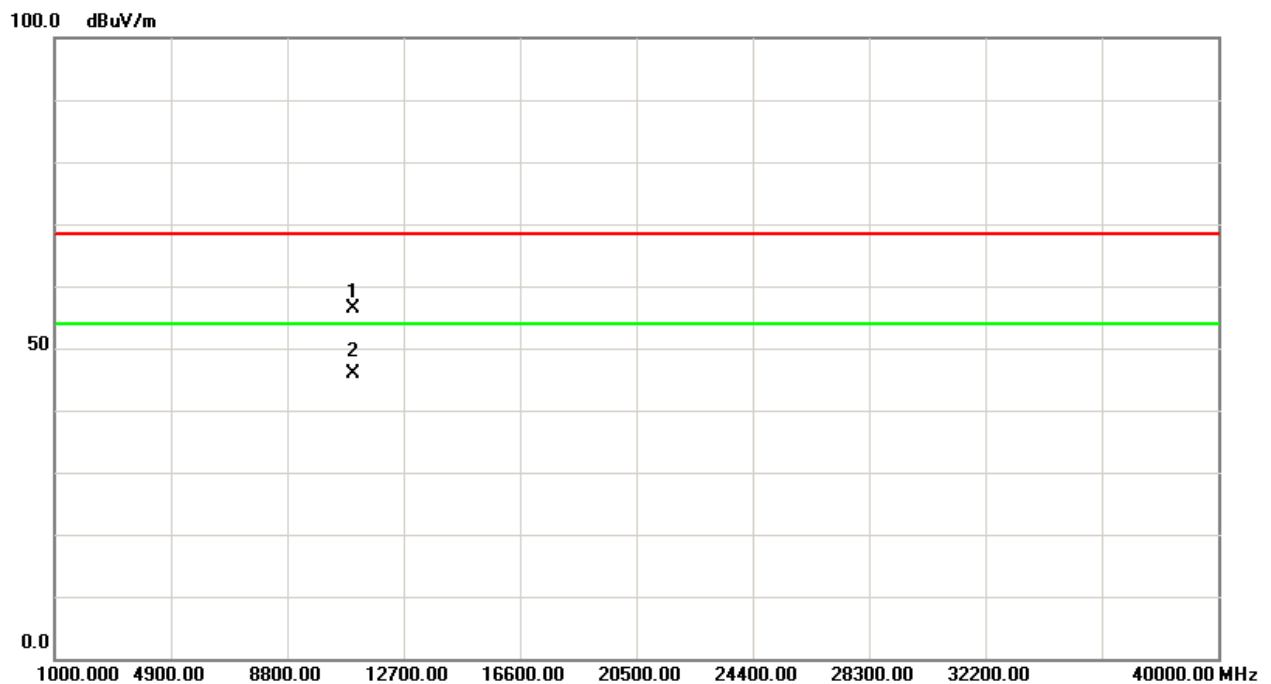
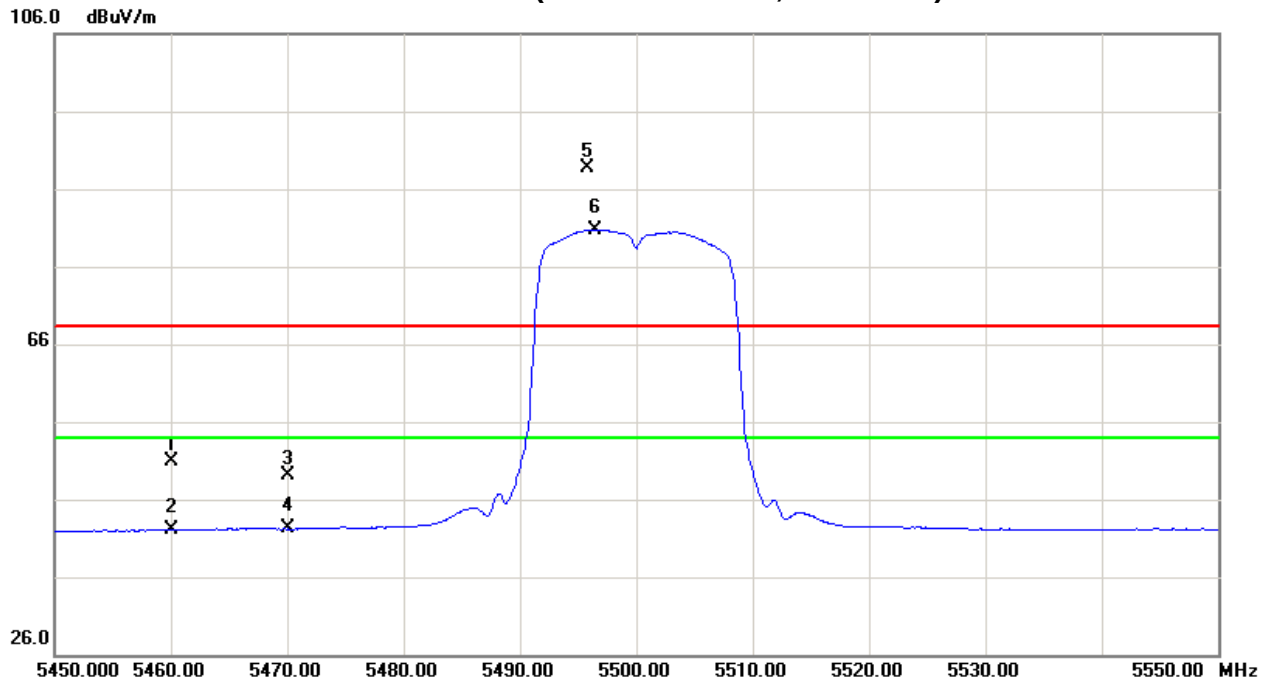


Orthogonal Axis:X
Band 3/CH100(Above 1000 MHz, Vertical)





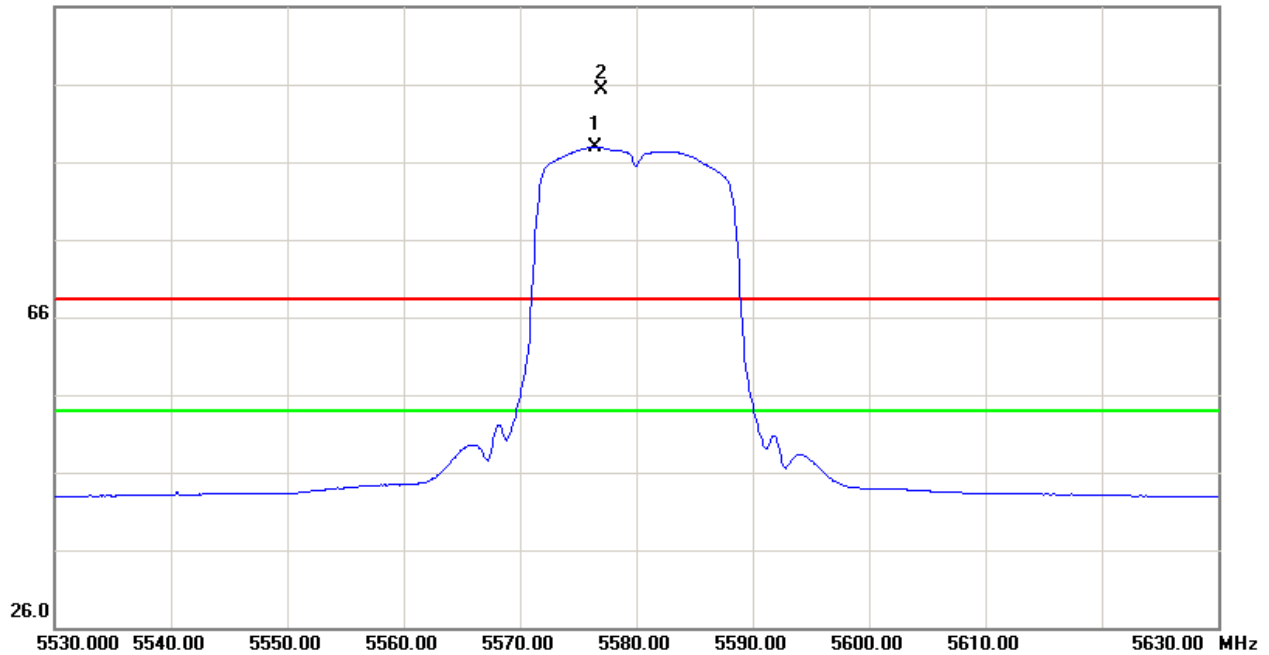
Orthogonal Axis:X
Band 3/CH100(Above 1000 MHz, Horizontal)



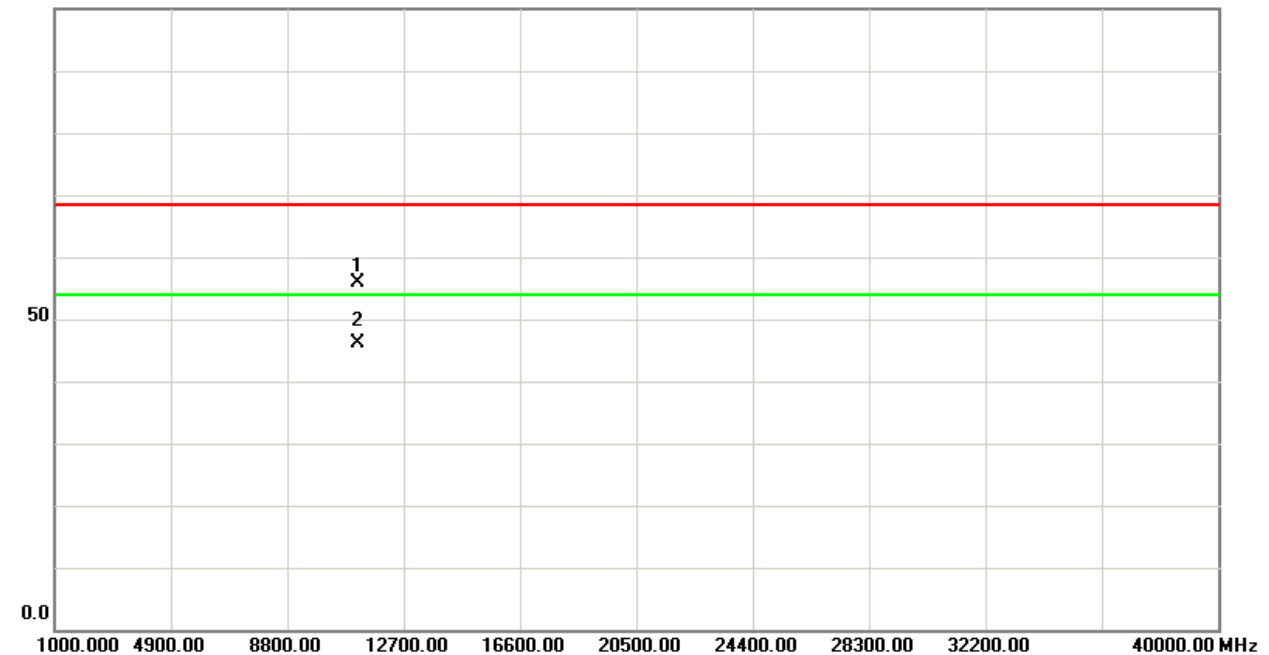


Orthogonal Axis:X
Band 3/CH116(Above 1000 MHz, Vertical)

106.0 dBuV/m

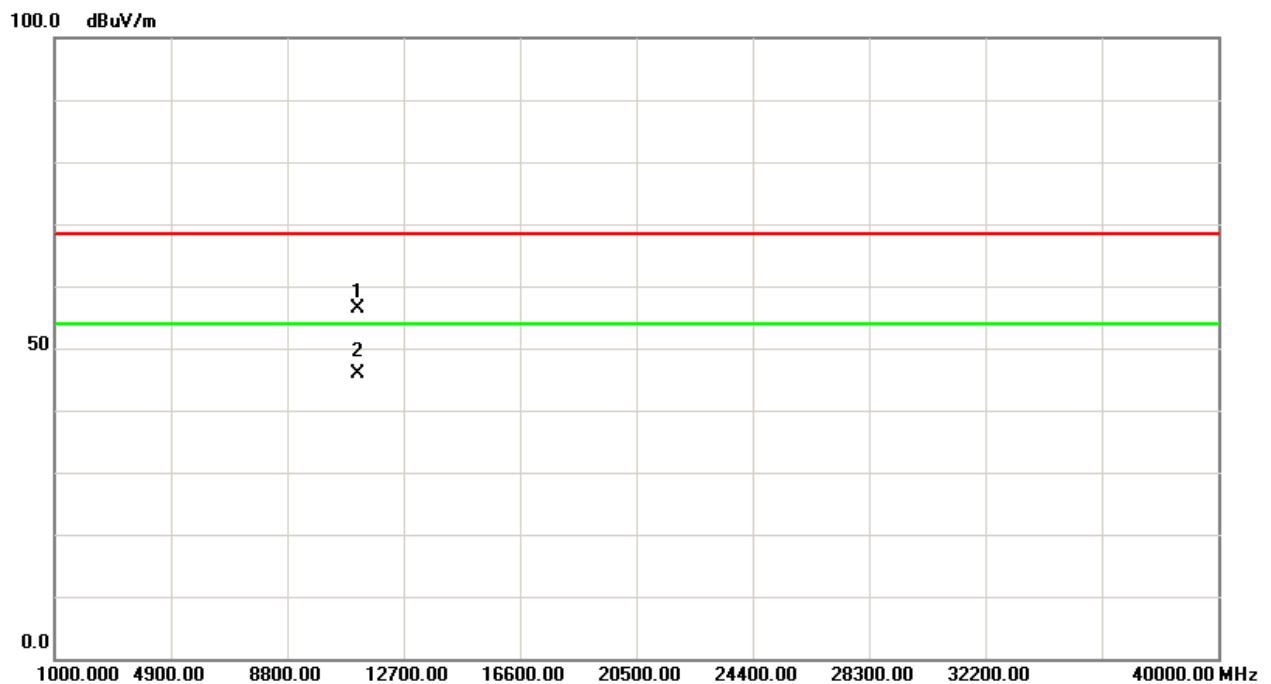
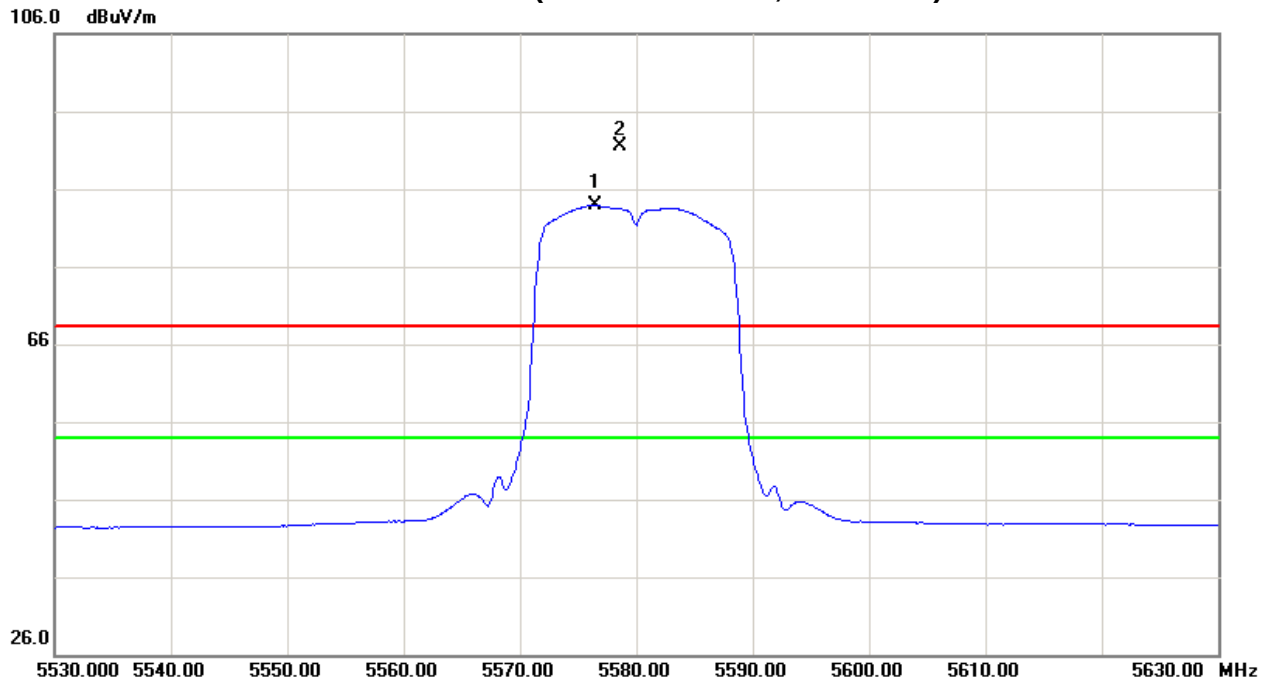


100.0 dBuV/m



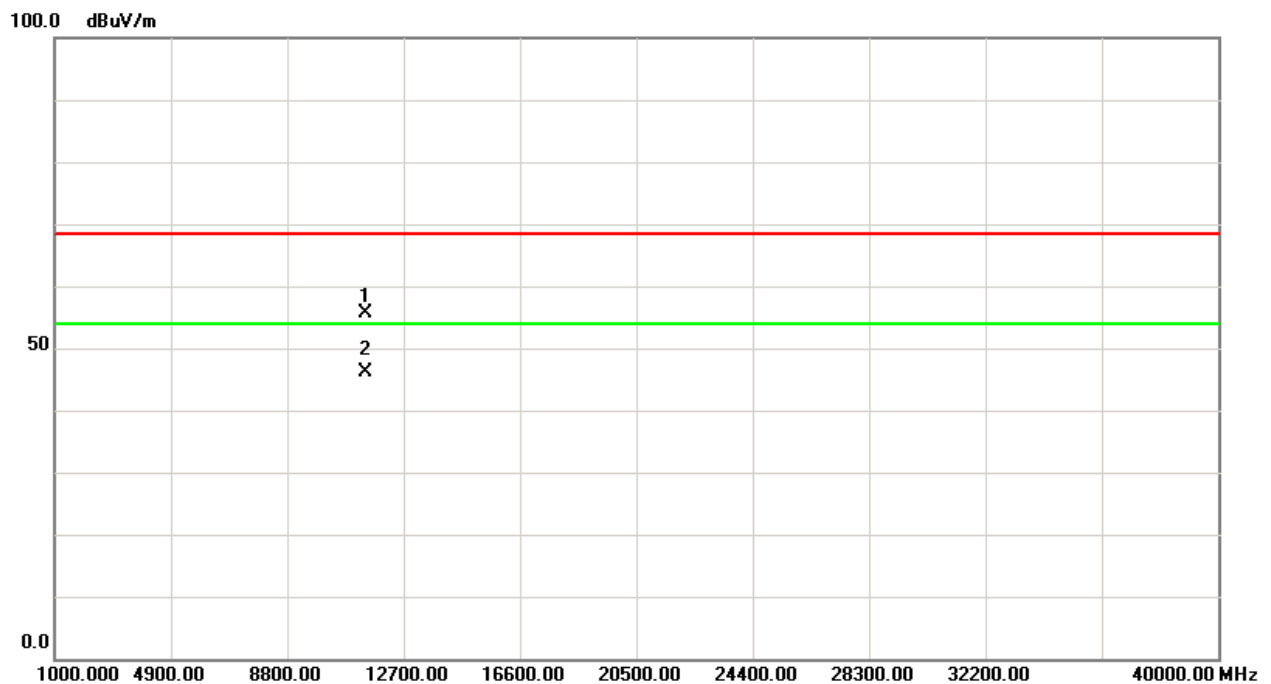
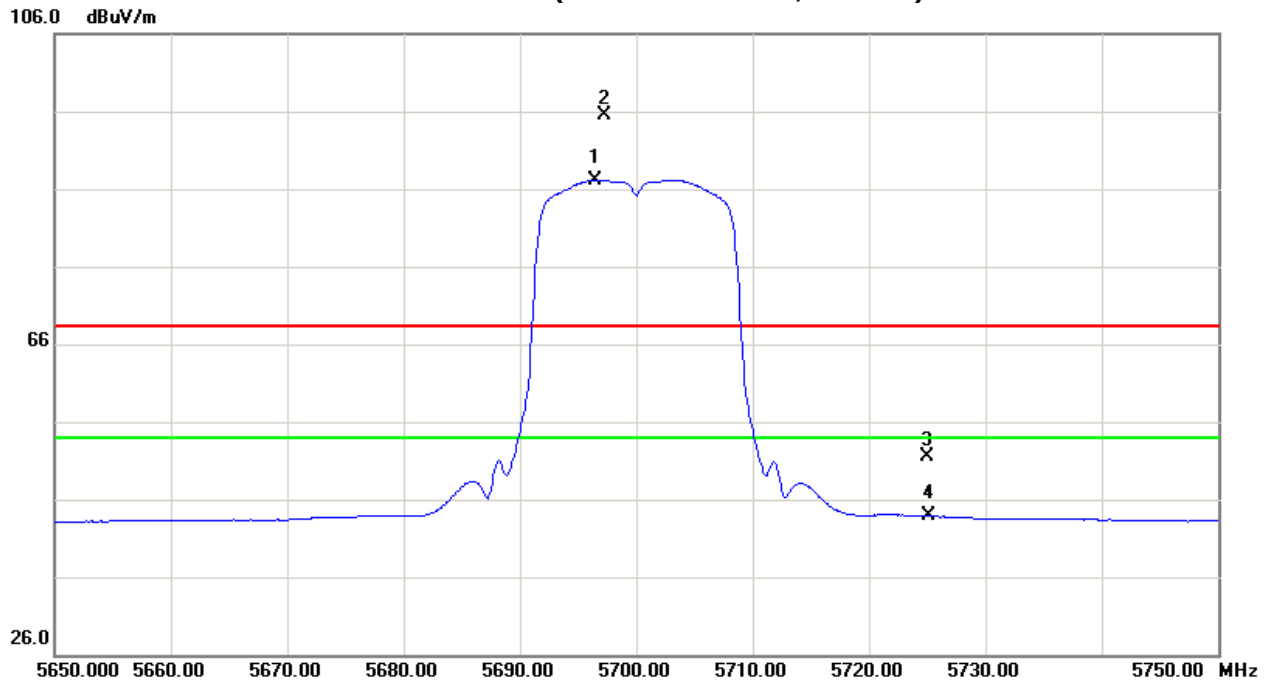


Orthogonal Axis:X
Band 3/CH116(Above 1000 MHz, Horizontal)



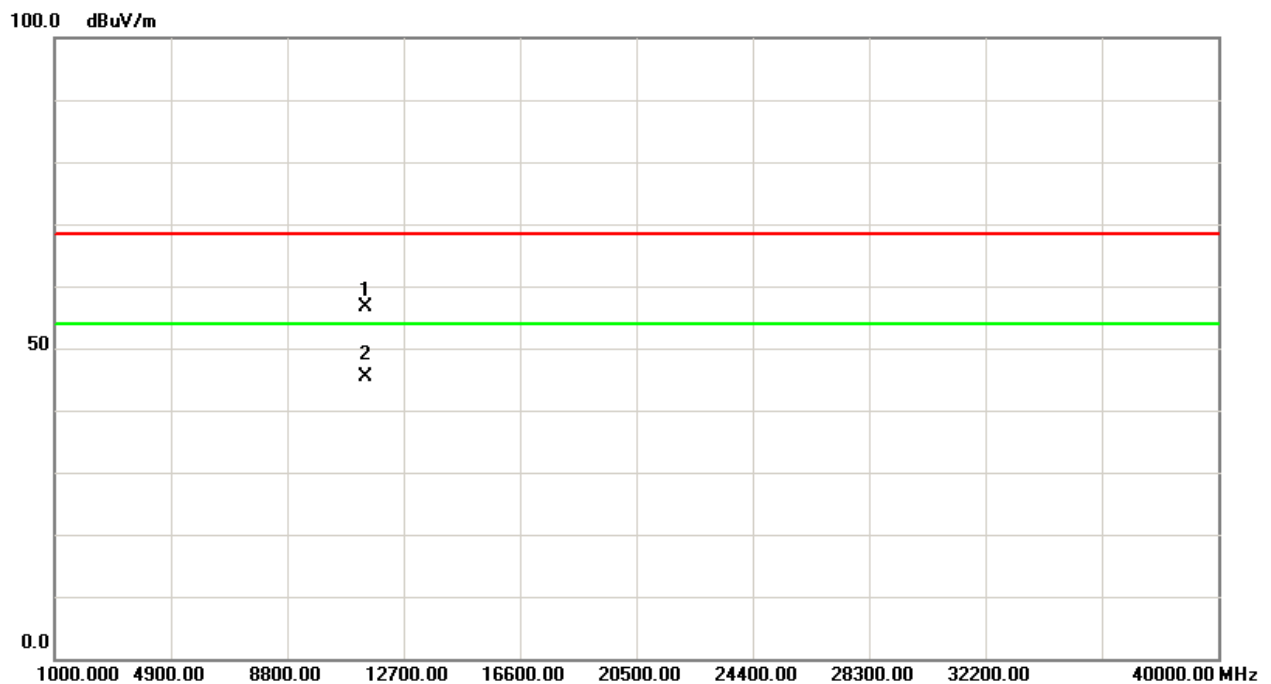
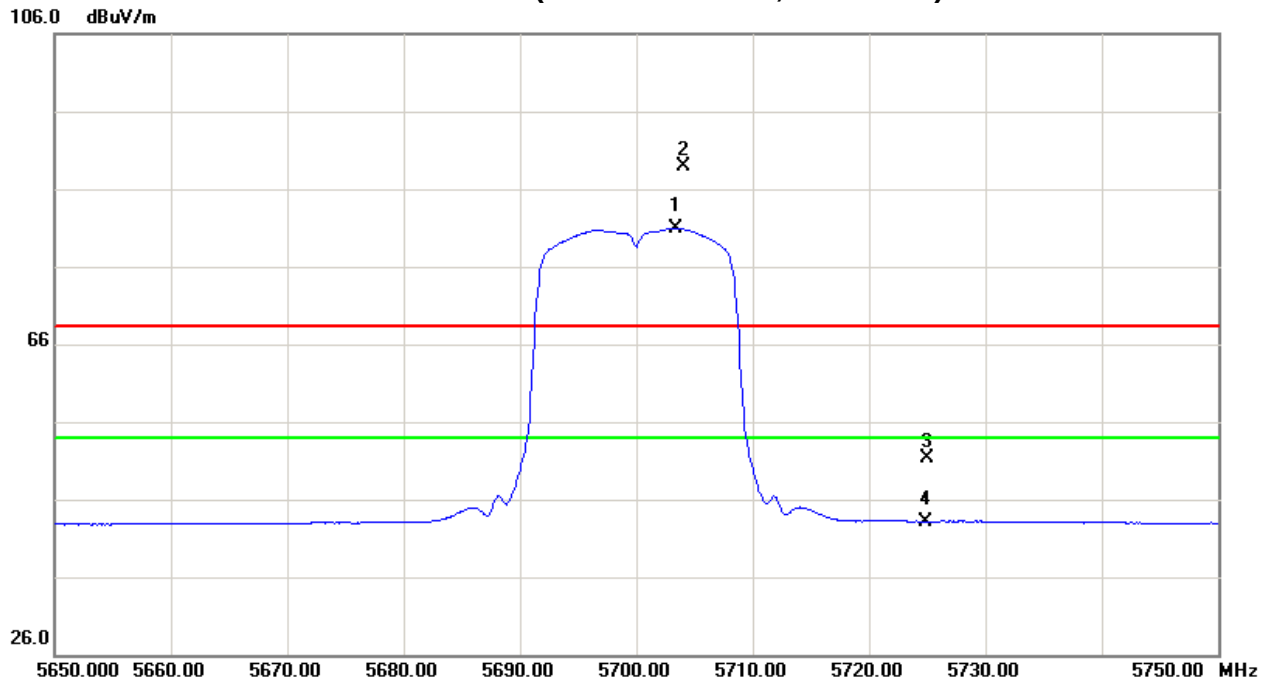


Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Vertical)





Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Horizontal)





Test Mode : Band 3/ TX N20 Mode 5500MHz

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	
5460.00	V	9.02	-0.45	43.49	52.51	43.04	-52.26	-61.73	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	6.69	-0.19	43.50	50.19	43.31	-54.58	-61.46	68.30	54.00	-27.00	-41.30	X/E
5496.40	V	54.06	45.47	43.57	97.63	89.04	-7.14	-15.73					X/F
11000.00	V	38.42	28.18	17.26	55.68	45.44	-49.09	-59.33	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	
5460.00	H	6.41	-1.33	43.49	49.90	42.16	-54.87	-62.61	68.30	54.00	-27.00	-41.30	X/E
5470.00	H	5.95	-1.23	43.50	49.45	42.27	-55.32	-62.50	68.30	54.00	-27.00	-41.30	X/E
5501.80	H	46.71	38.50	43.59	90.30	82.09	-14.47	-22.68					X/F
11000.00	H	39.11	28.65	17.26	56.37	45.91	-48.40	-58.86	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 3/ TX N20 Mode 5580MHz

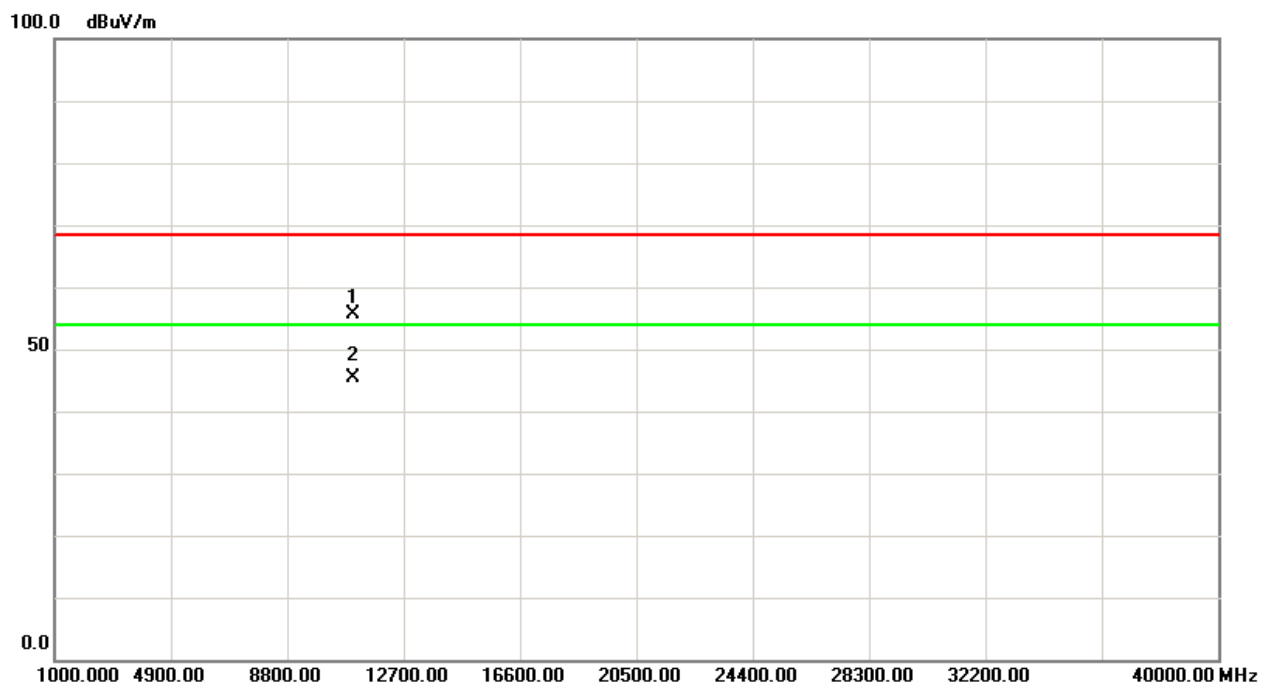
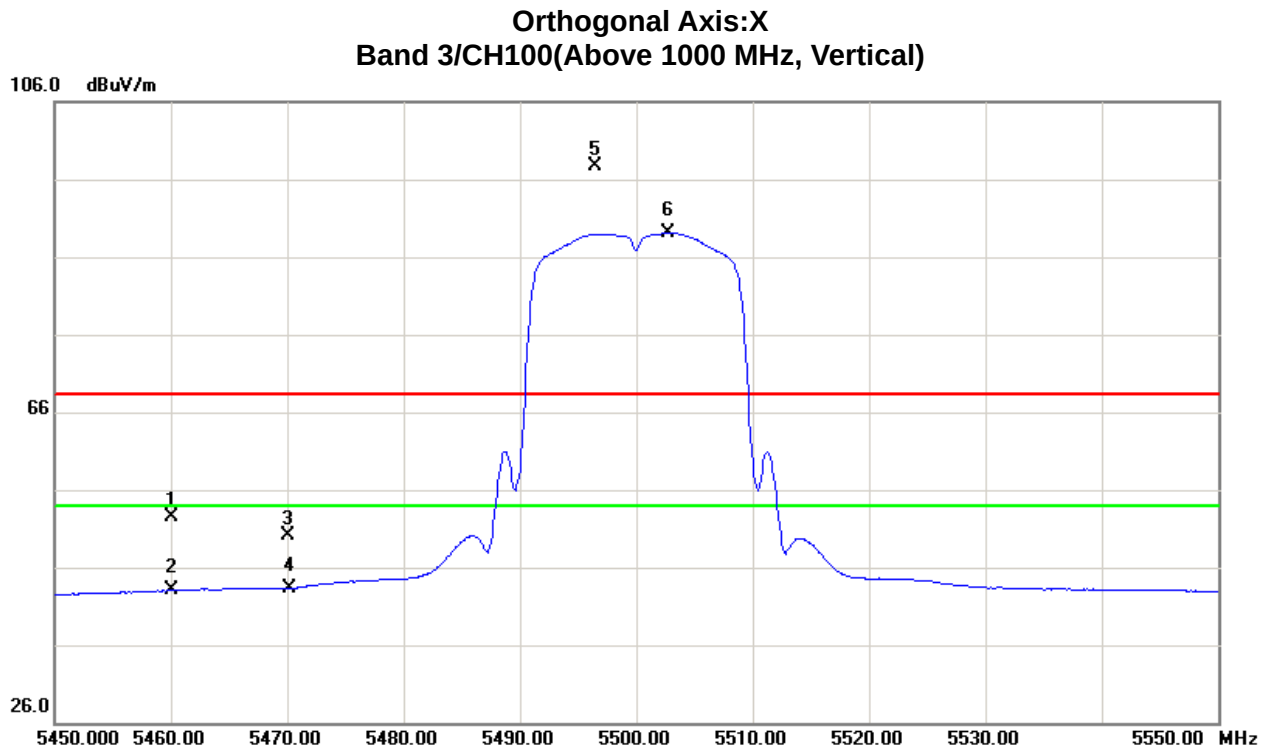
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5574.40	V	52.77	45.29	43.83	96.60	89.12	-8.17	-15.65					X/F
11160.00	V	38.24	28.39	17.65	55.89	46.04	-48.88	-58.73	68.30	54.00	-27.00	-41.30	X/H

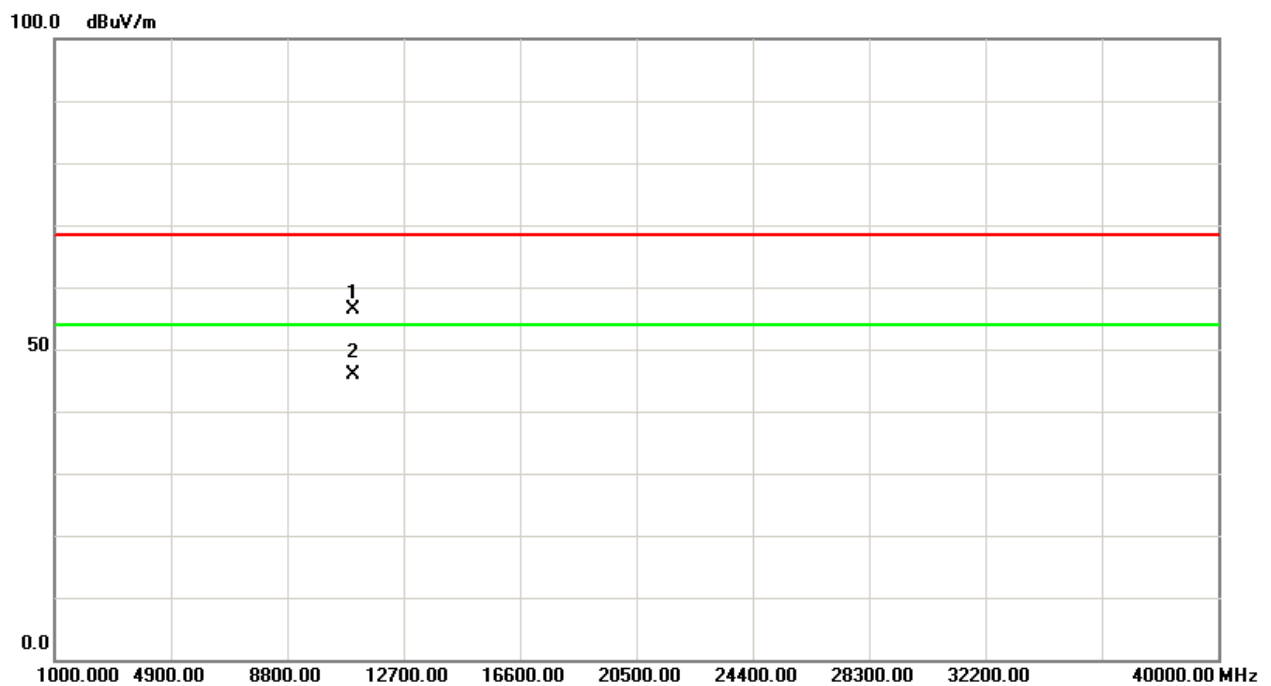
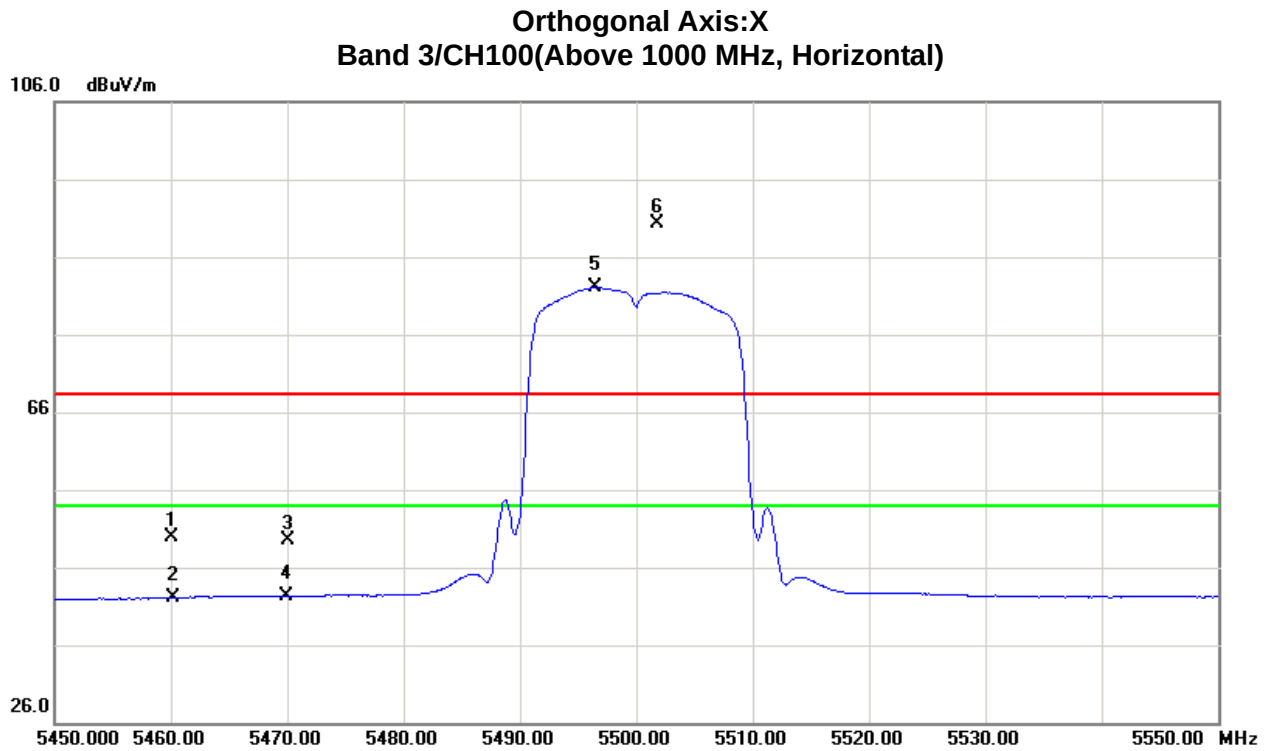
Freq. (MHz)	Ant.Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5581.80	H	45.00	37.08	43.86	88.86	80.94	-15.91	-23.83					X/F
11160.00	H	38.97	28.27	17.65	56.62	45.92	-48.15	-58.85	68.30	54.00	-27.00	-41.30	X/H

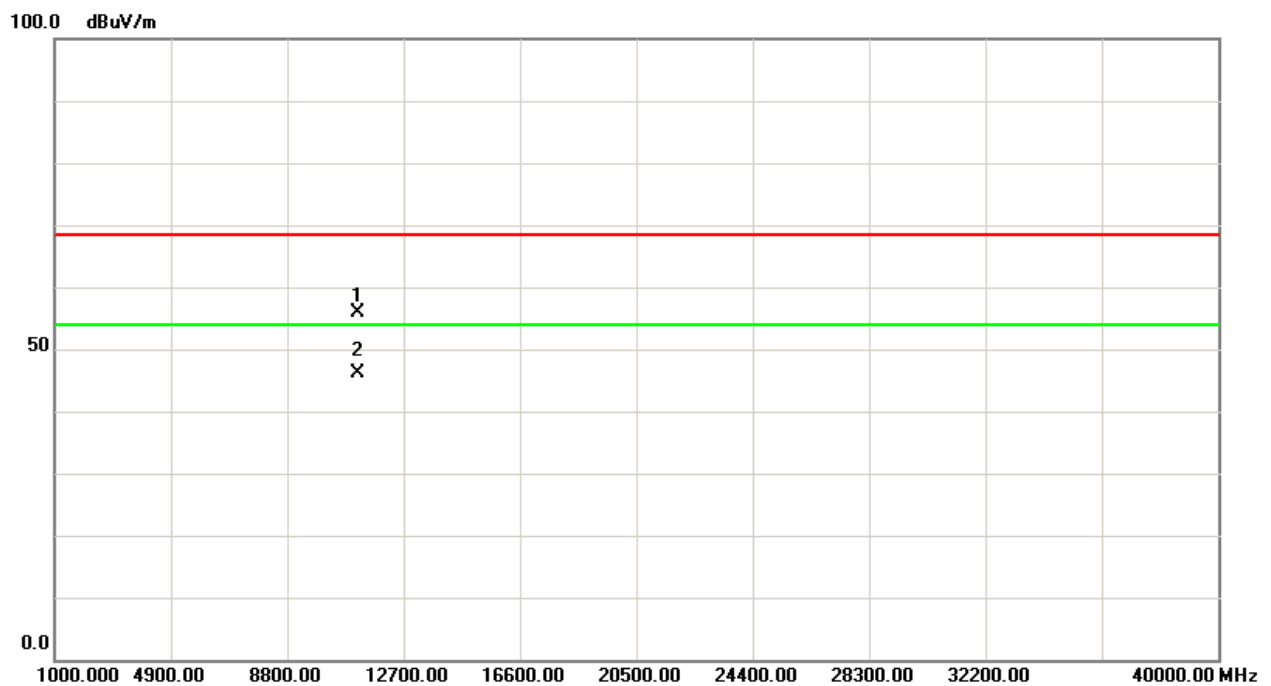
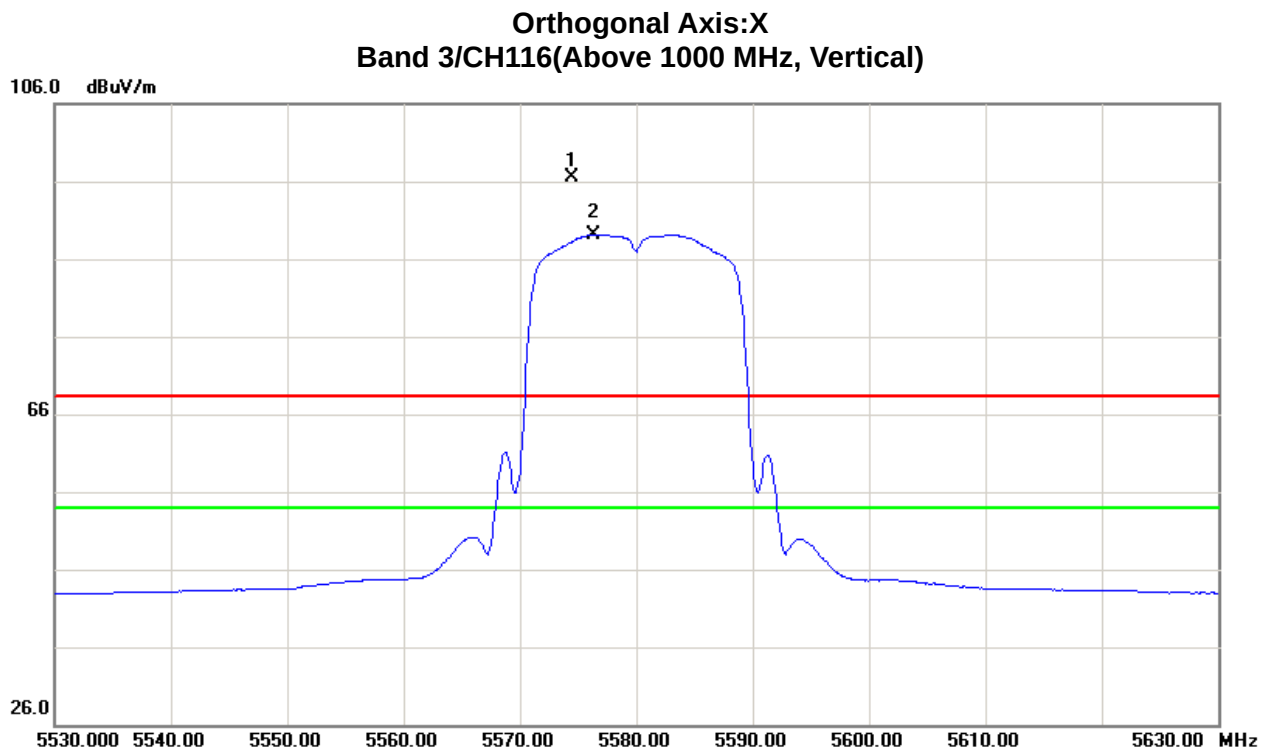
Test Mode : Band 3/ TX N20 Mode 5700MHz

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	
5699.50	V	51.05	43.03	44.26	95.31	87.29	-9.46	-17.48					X/F
5725.00	V	8.66	-0.63	44.34	53.00	43.71	-51.77	-61.06	68.30	54.00	-27.00	-41.30	X/E
11400.00	V	37.47	27.81	18.24	55.71	46.05	-49.06	-58.72	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	
5697.10	H	42.98	34.07	44.25	87.23	78.32	-17.54	-26.45					X/F
5725.00	H	6.53	-1.28	44.34	50.87	43.06	-53.90	-61.71	68.30	54.00	-27.00	-41.30	X/E
11400.00	H	38.37	27.15	18.24	56.61	45.39	-48.16	-59.38	68.30	54.00	-27.00	-41.30	X/H

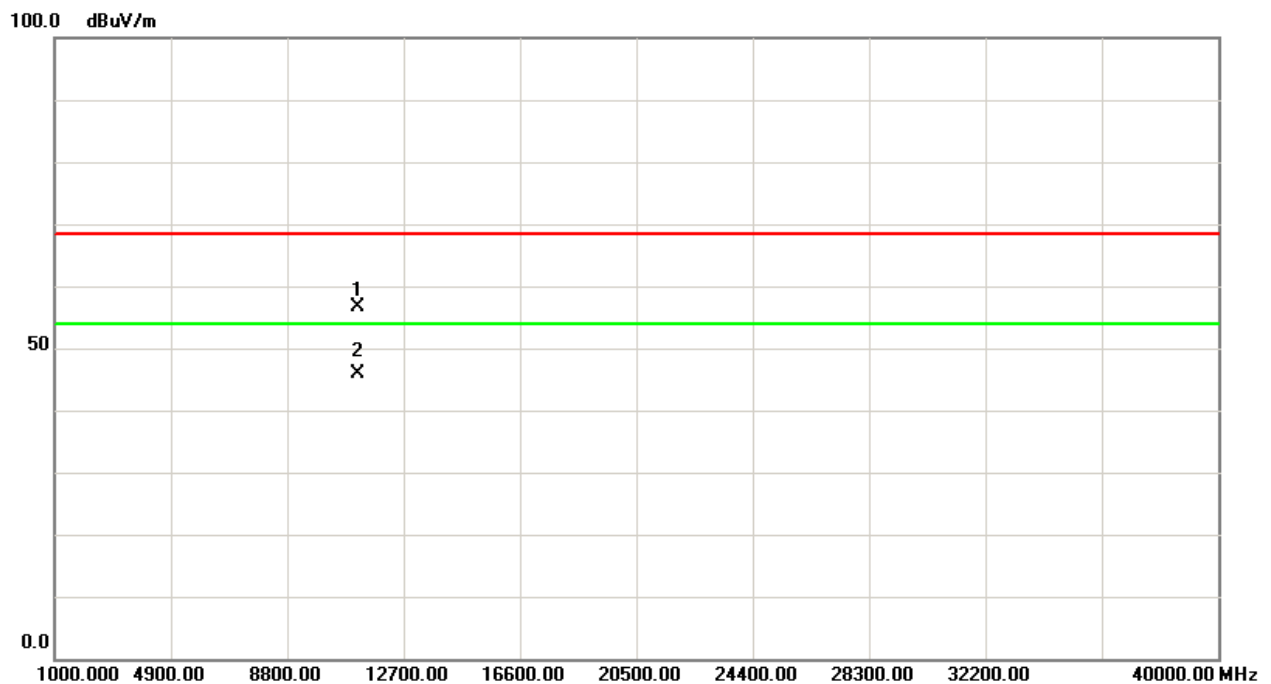
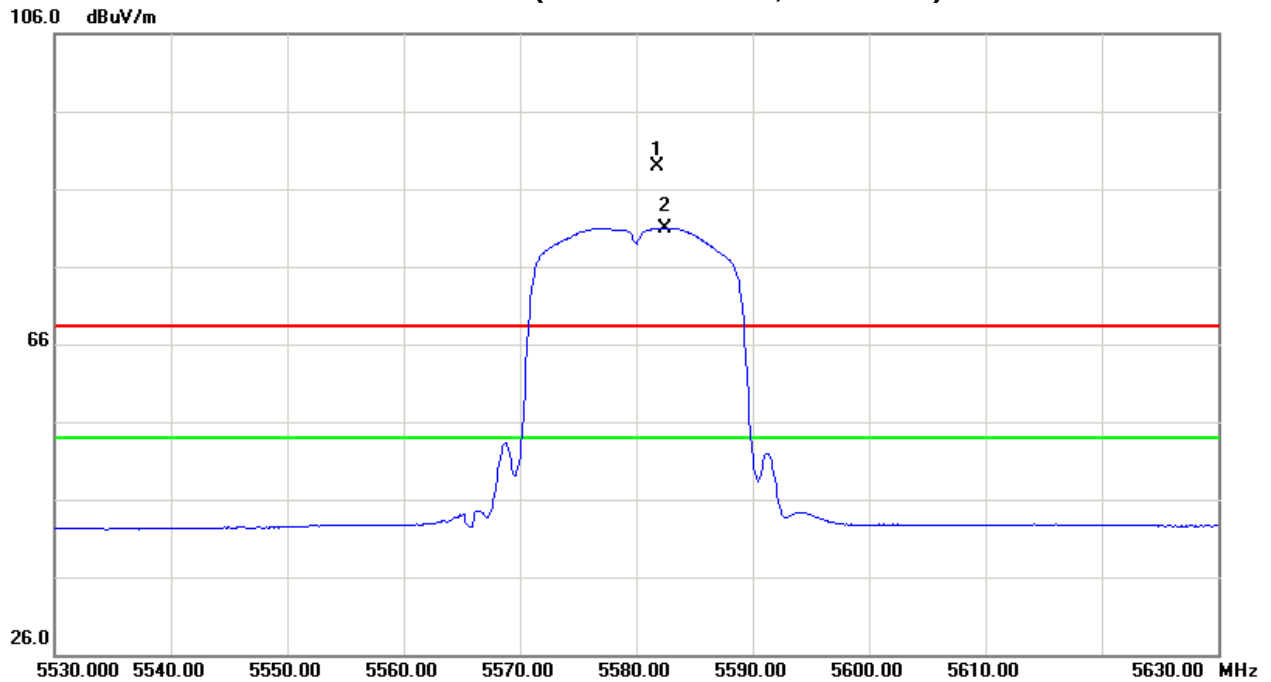






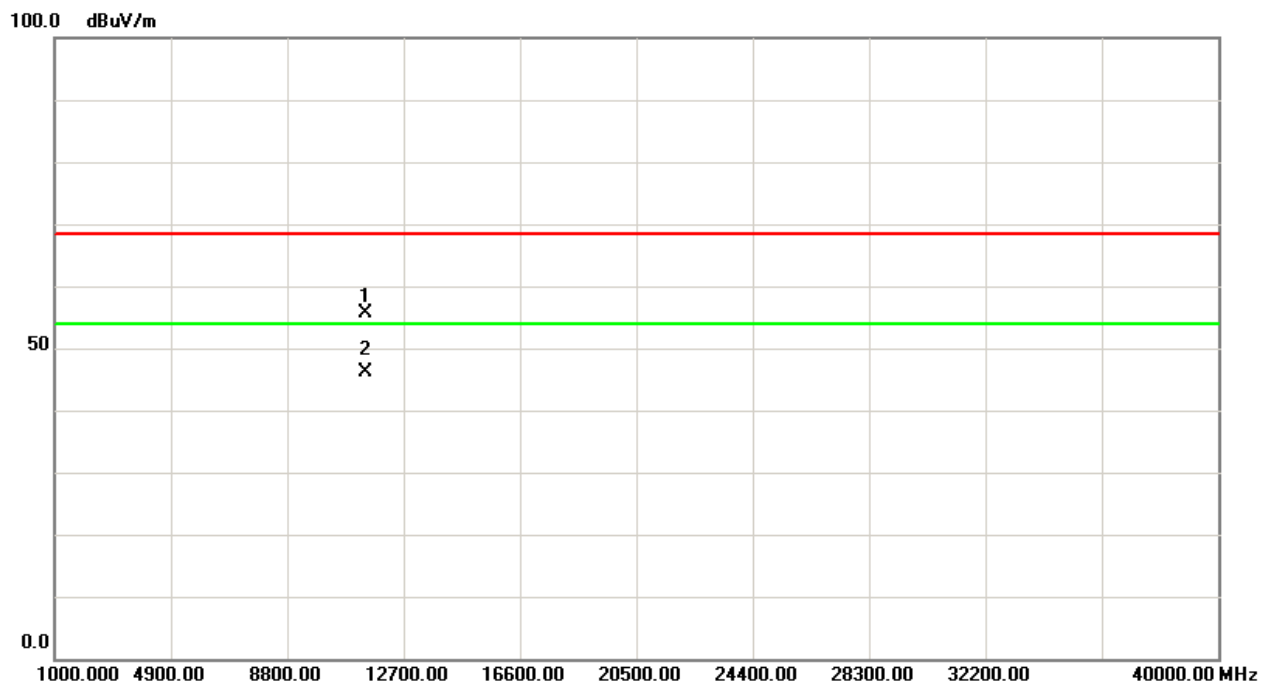
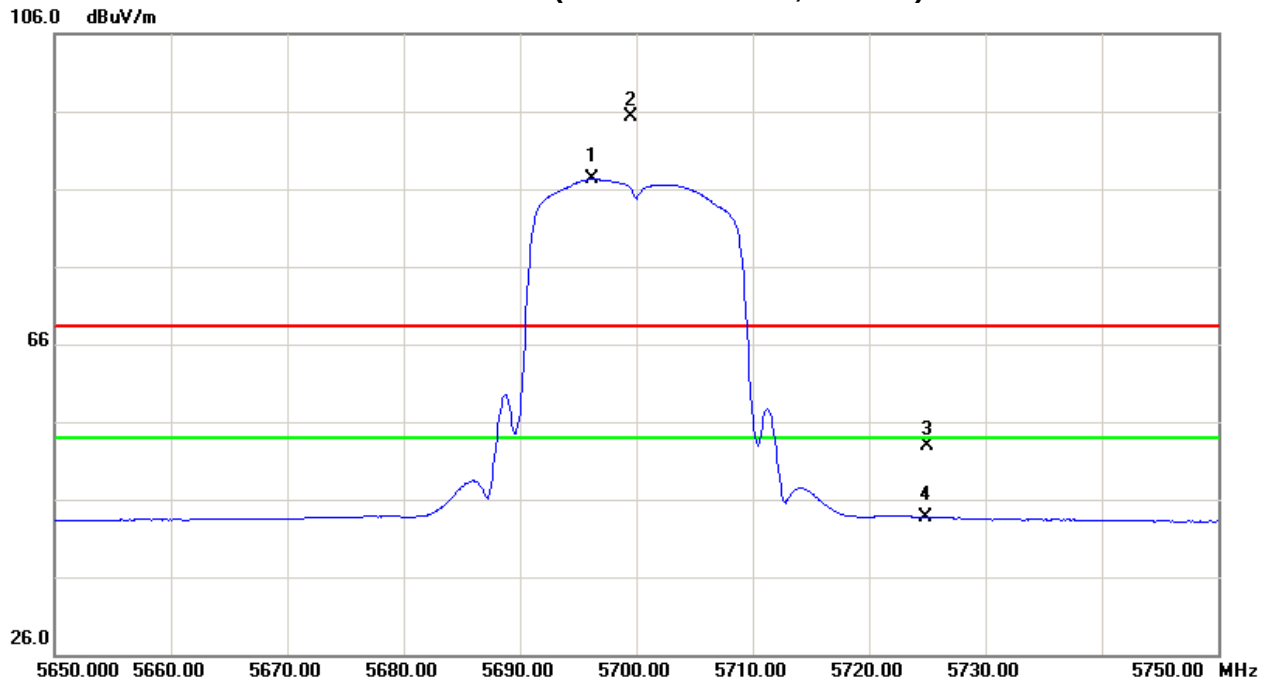


Orthogonal Axis:X
Band 3/CH116(Above 1000 MHz, Horizontal)





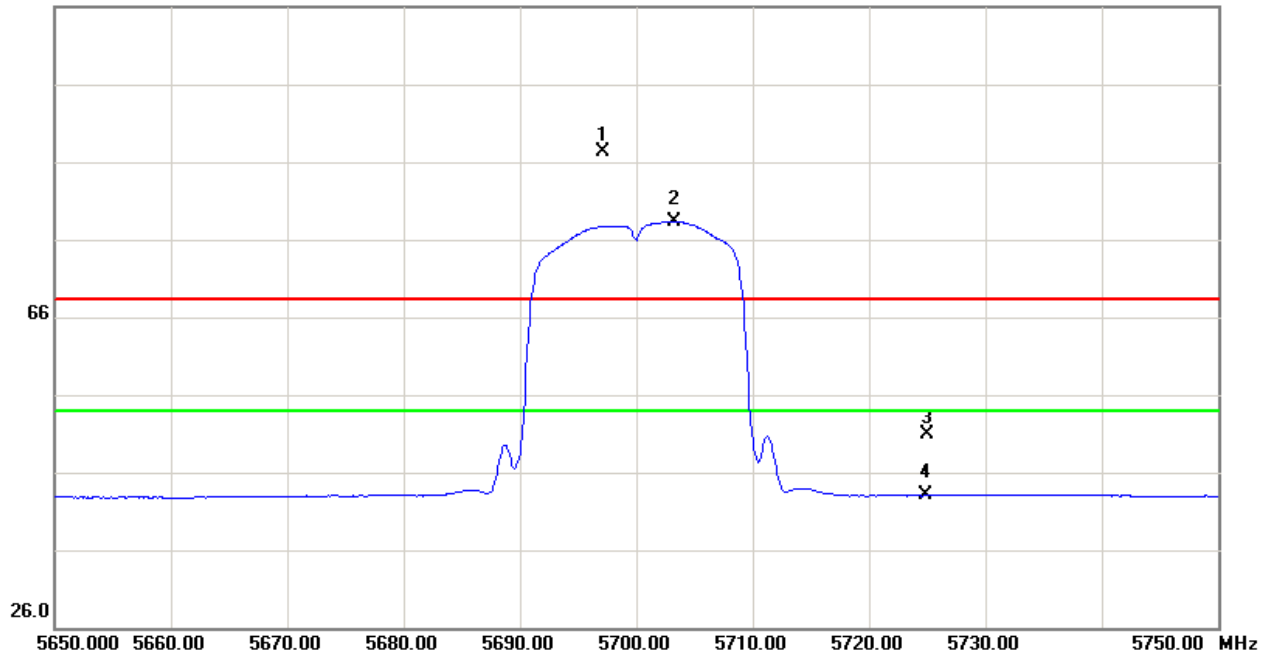
Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Vertical)



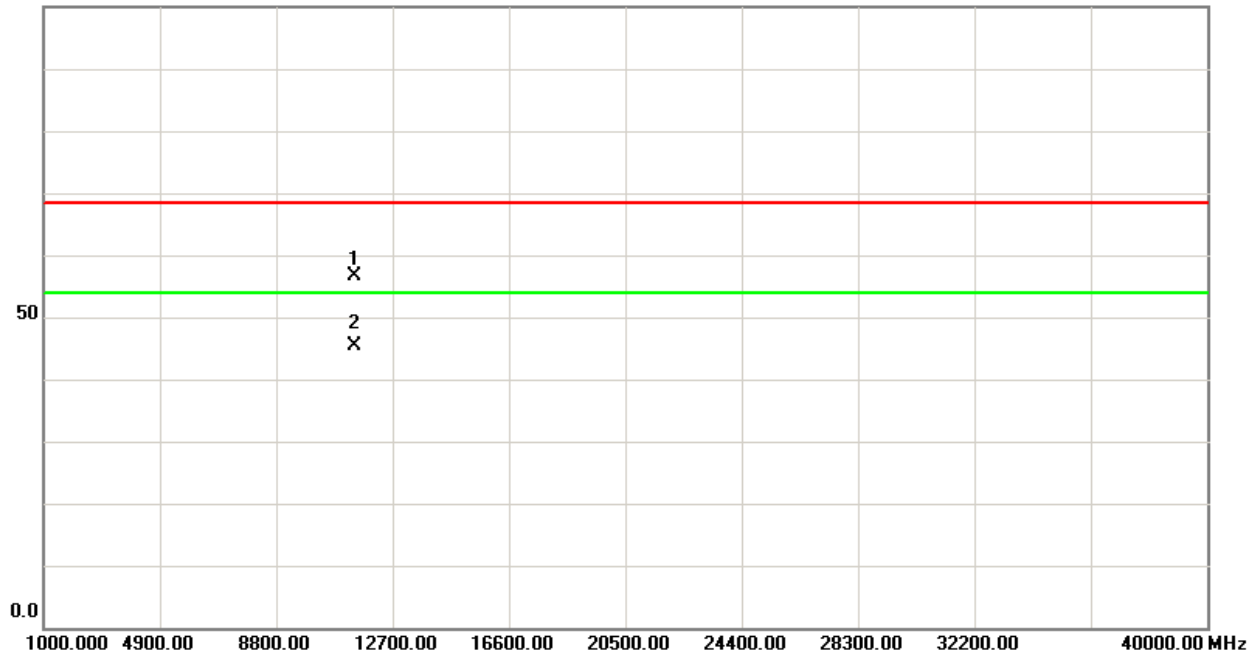


Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Horizontal)

106.0 dBuV/m



100.0 dBuV/m





Test Mode : Band 3/ TX N40 Mode 5510MHz

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	
5460.00	V	7.13	-0.71	43.49	50.62	42.78	-54.15	-61.99	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	8.02	0.07	43.50	51.52	43.57	-53.25	-61.20	68.30	54.00	-27.00	-41.30	X/E
5502.60	V	47.01	38.54	43.59	90.60	82.13	-14.17	-22.64					X/F
11020.00	V	39.58	28.22	17.31	56.89	45.53	-47.88	-59.24	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	
5460.00	H	5.39	-1.12	43.49	48.88	42.37	-55.89	-62.40	68.30	54.00	-27.00	-41.30	X/E
5470.00	H	6.17	-0.72	43.50	49.67	42.78	-55.10	-61.99	68.30	54.00	-27.00	-41.30	X/E
5505.20	H	43.45	33.95	43.60	87.05	77.55	-17.72	-27.22					X/F
11020.00	H	38.57	28.27	17.31	55.88	45.58	-48.89	-59.19	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 3/ TX N40 Mode 5550MHz

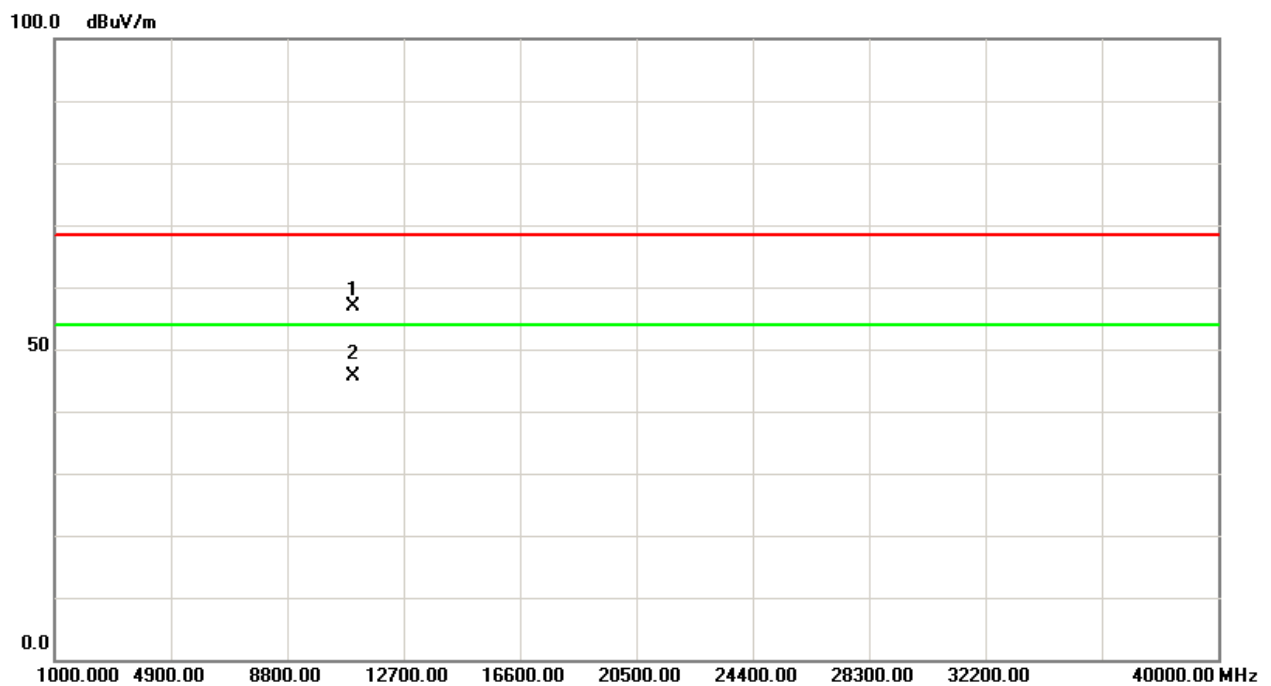
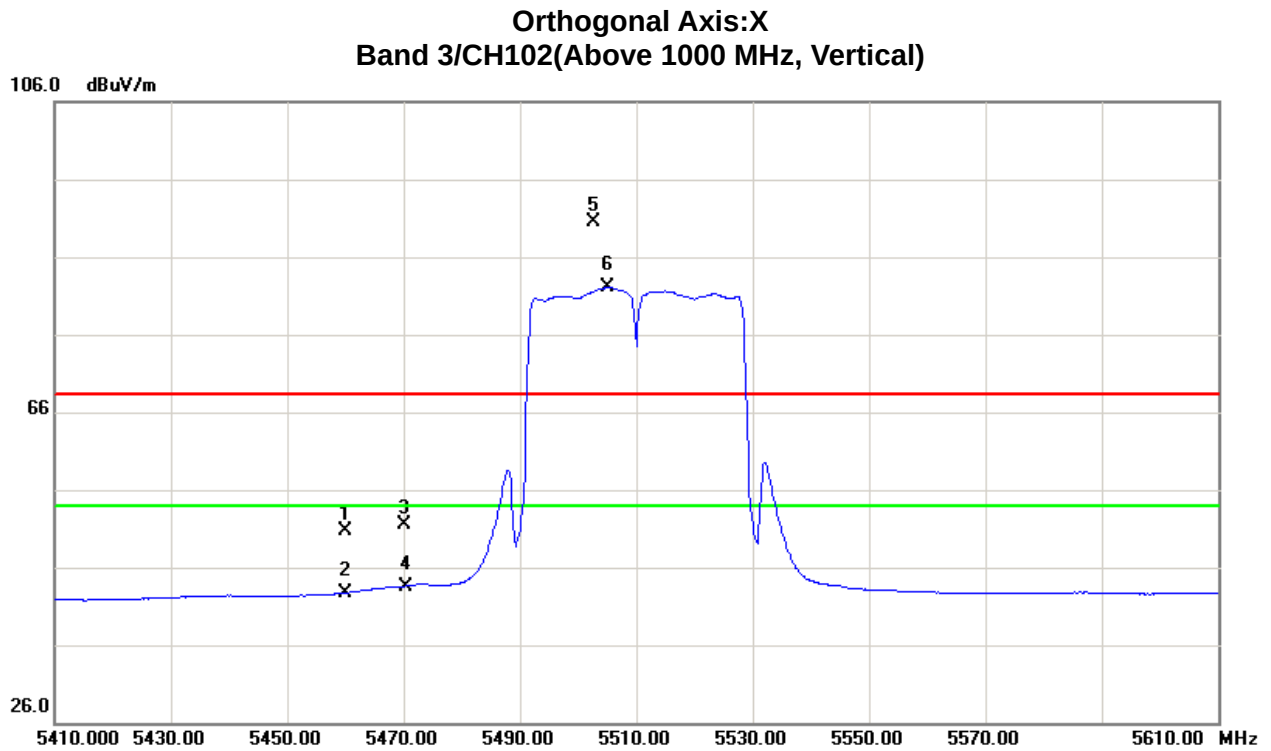
Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5536.20	V	47.64	37.85	43.74	91.38	81.59	-13.39	-23.18					X/F
11100.00	V	39.35	28.91	17.51	56.86	46.42	-47.91	-58.35	68.30	54.00	-27.00	-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	
5556.60	H	39.78	31.86	43.77	83.55	75.63	-21.22	-29.14					X/F
11100.00	H	38.94	28.13	17.51	56.45	45.64	-48.32	-59.13	68.30	54.00	-27.00	-41.30	X/H

Test Mode : Band 3/ TX N40 Mode 5670MHz

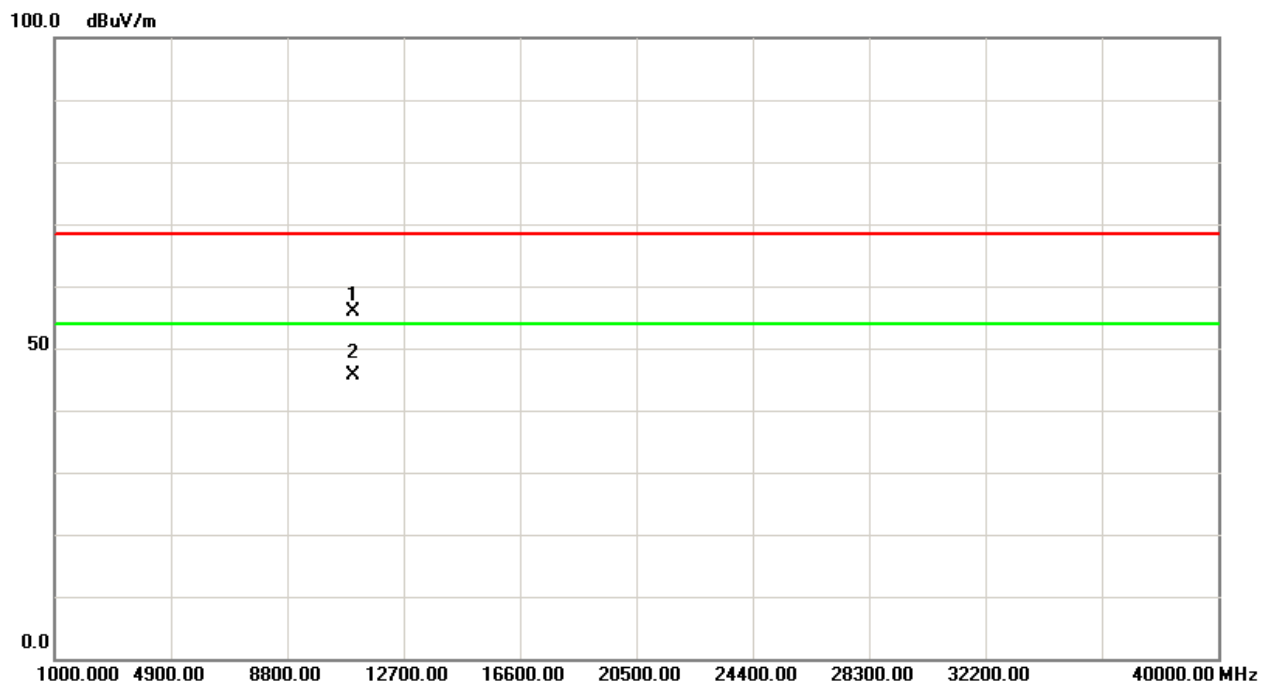
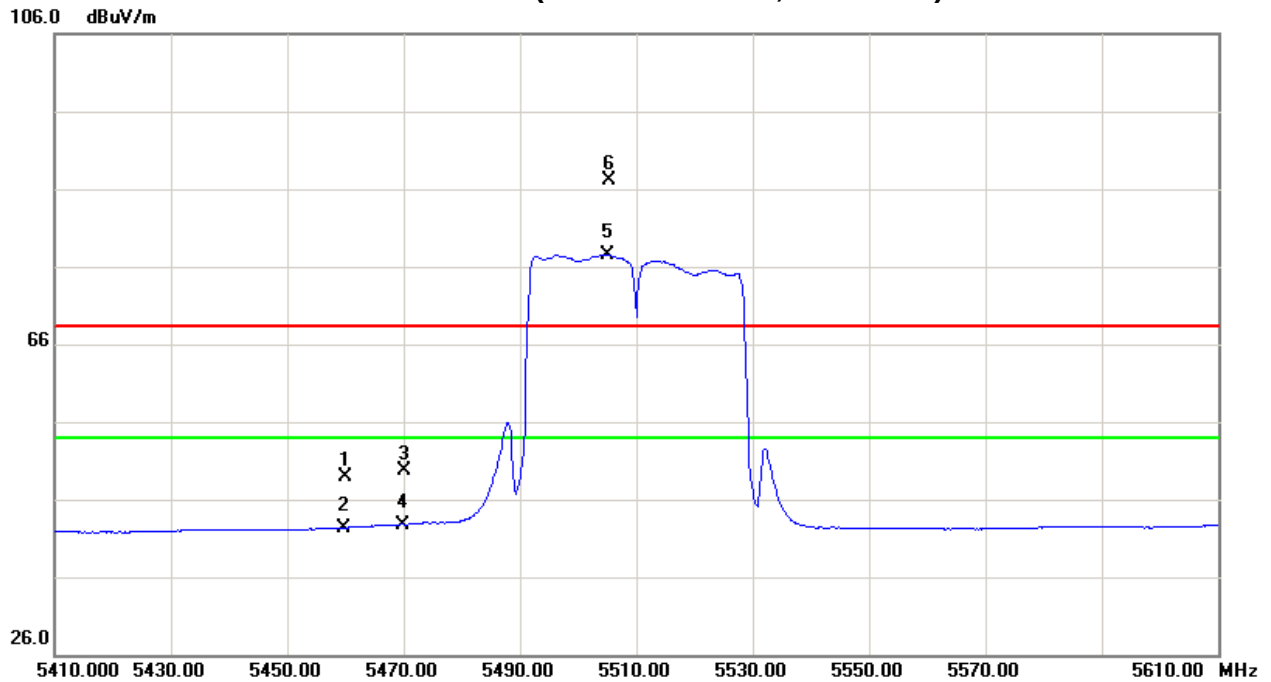
Freq. (MHz)	Ant. Pol. H/V	Reading		Ant./CF CF(dB)	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak (dBuV)	AV (dBuV)		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
5657.00	V	46.26	38.04	44.12	90.38	82.16	-14.39	-22.61					X/F
5725.00	V	7.40	-1.05	44.34	51.74	43.29	-53.03	-61.48	68.30	54.00	-27.00	-41.30	X/E
11340.00	V	38.25	27.41	18.10	56.35	45.51	-48.42	-59.26	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	
5657.00	H	39.16	29.80	44.12	83.28	73.92	-21.49	-30.85					X/F
5725.00	H	6.65	-1.38	44.34	50.99	42.96	-53.78	-61.81	68.30	54.00	-27.00	-41.30	X/E
11340.00	H	37.88	27.25	18.10	55.98	45.35	-48.79	-59.42	68.30	54.00	-27.00	-41.30	X/H



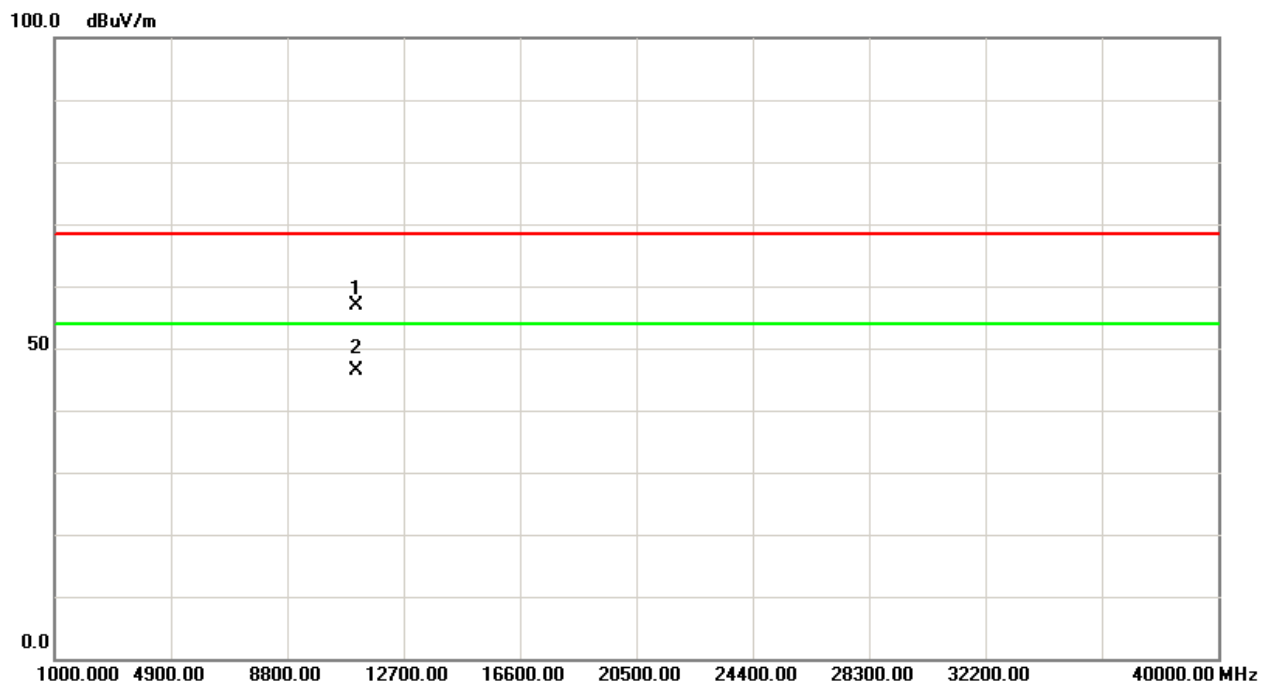
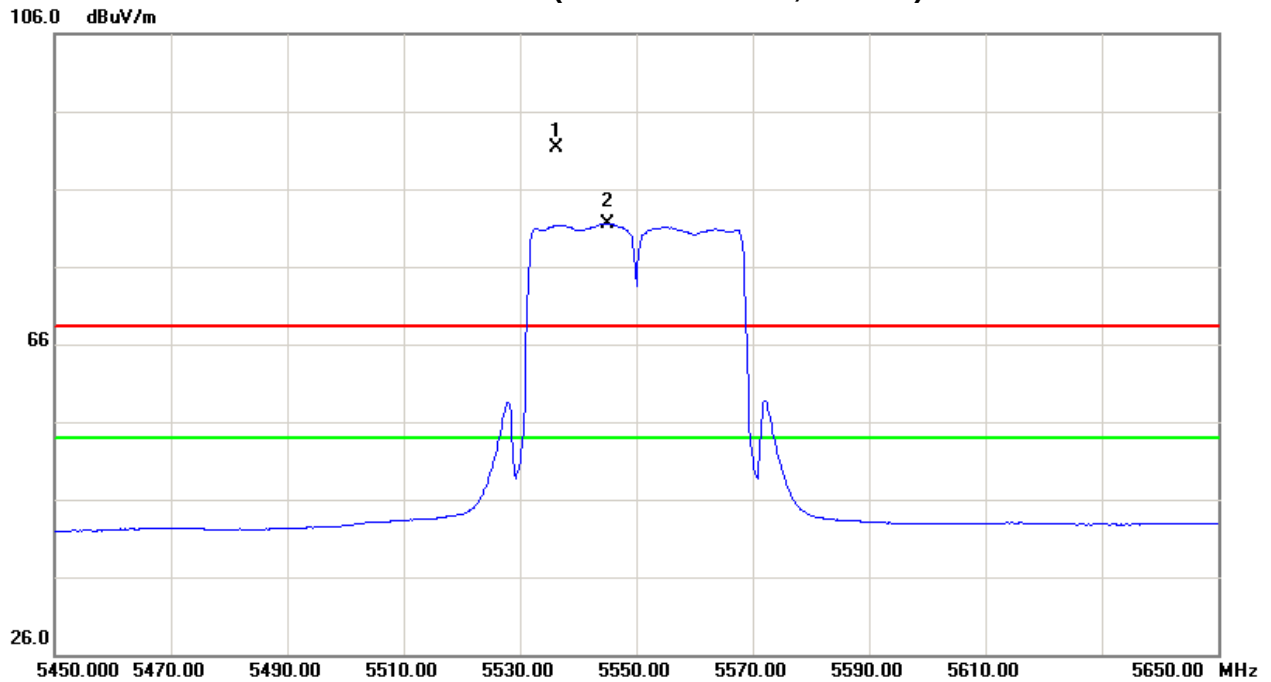


Orthogonal Axis:X
Band 3/CH102(Above 1000 MHz, Horizontal)



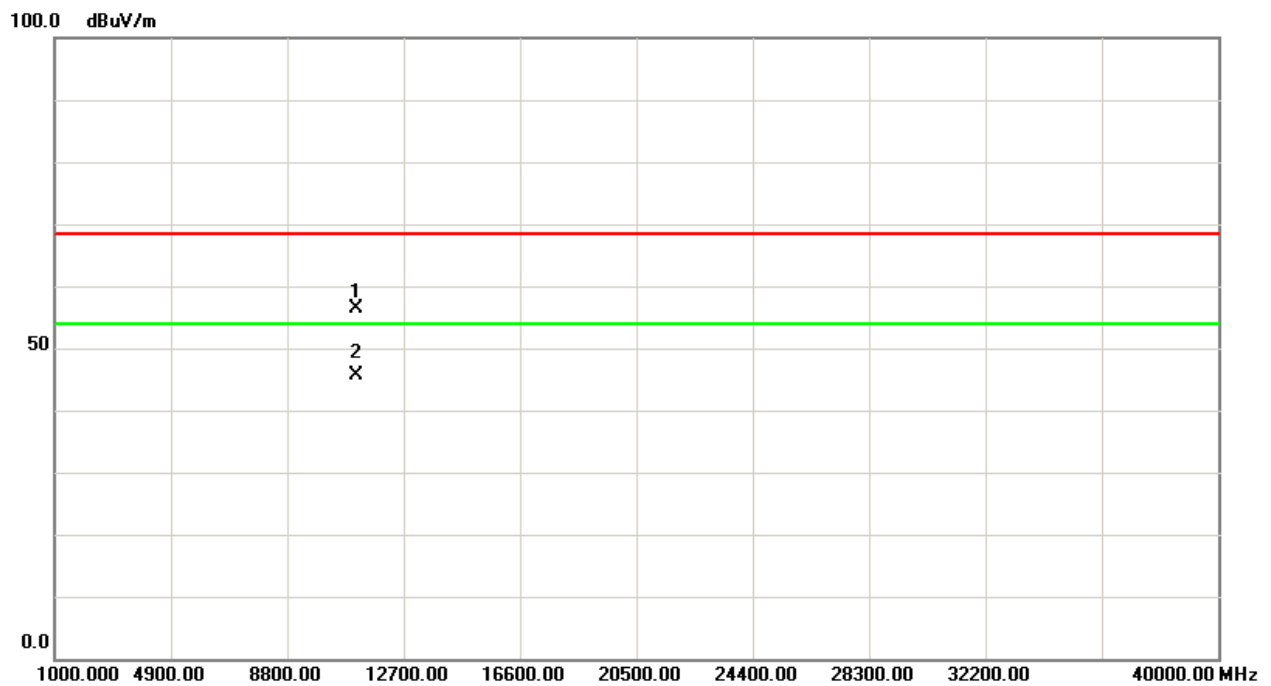
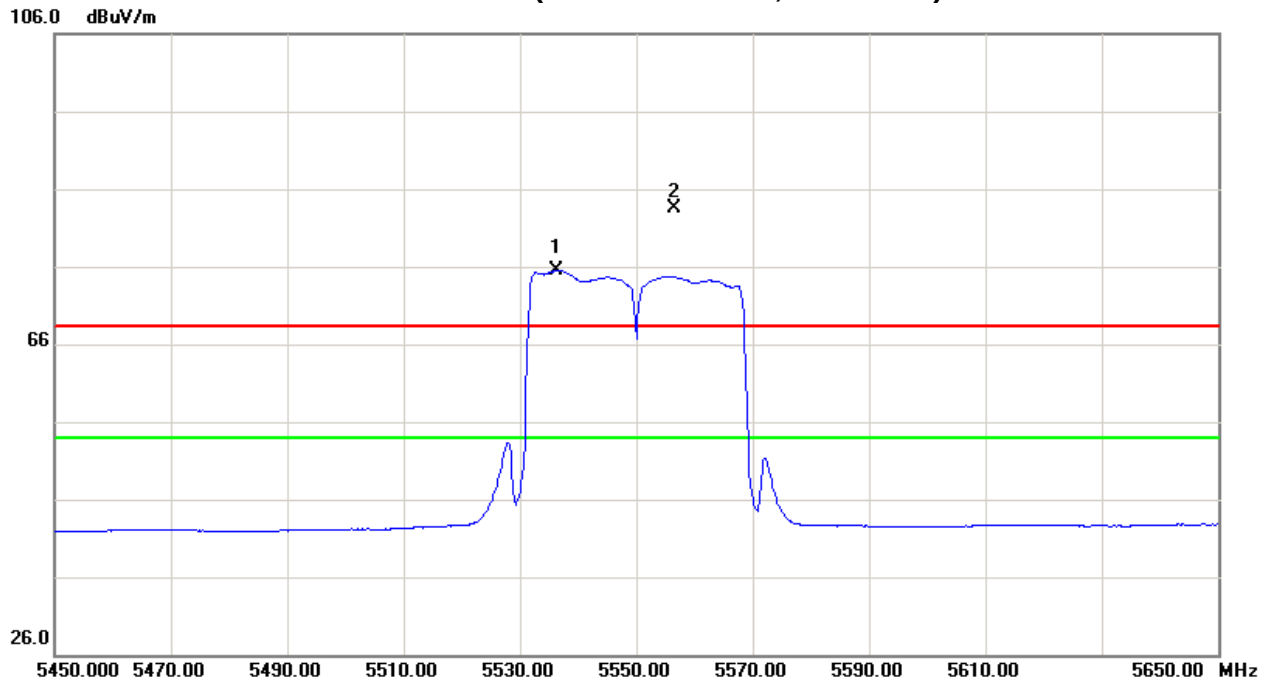


Orthogonal Axis:X
Band 3/CH110(Above 1000 MHz, Vertical)



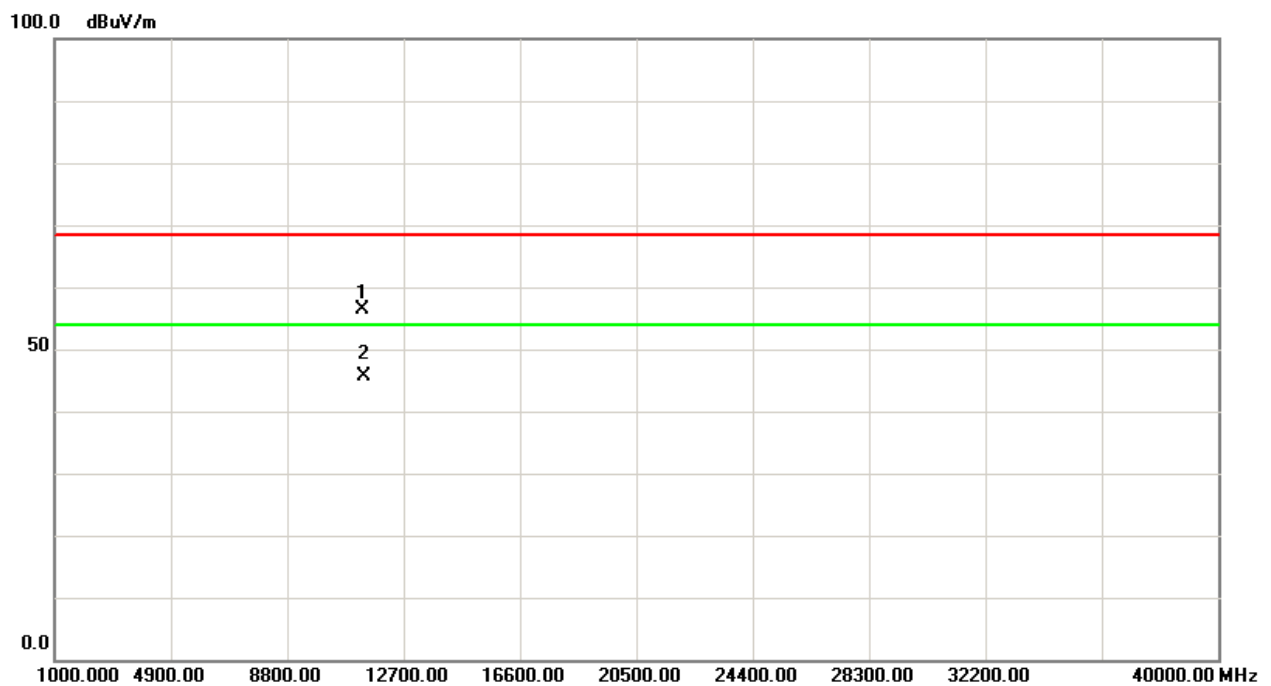
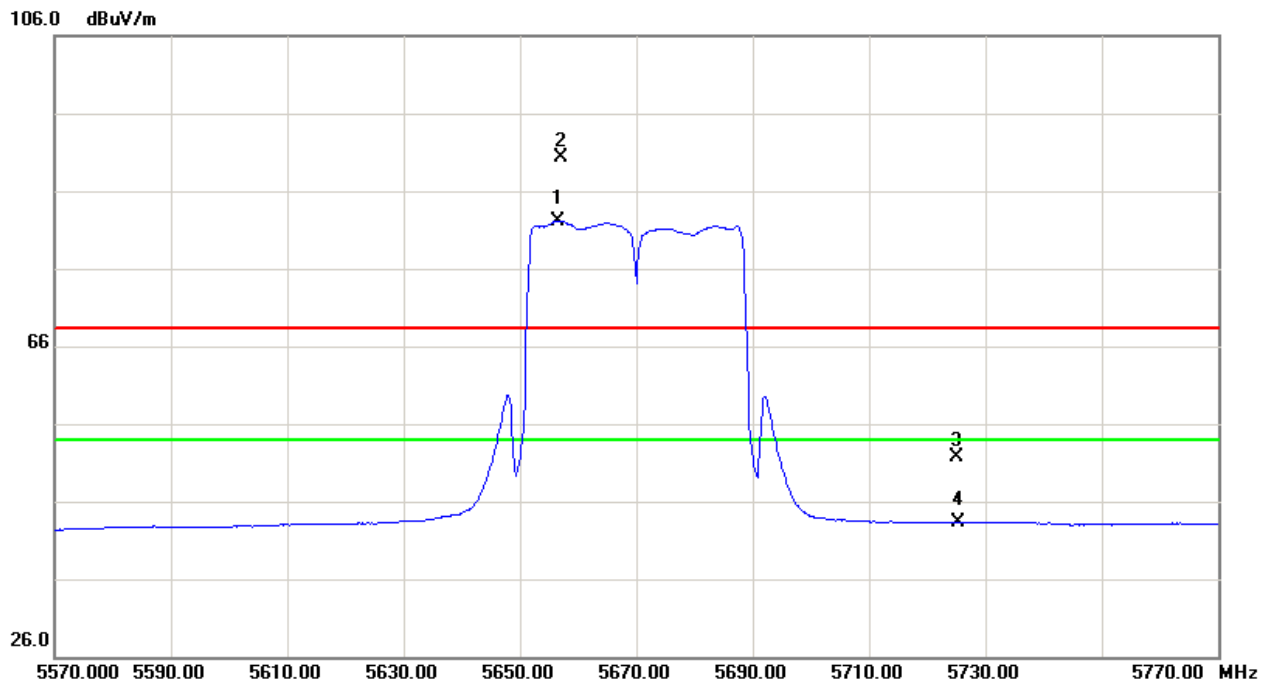


Orthogonal Axis:X
Band 3/CH110(Above 1000 MHz, Horizontal)





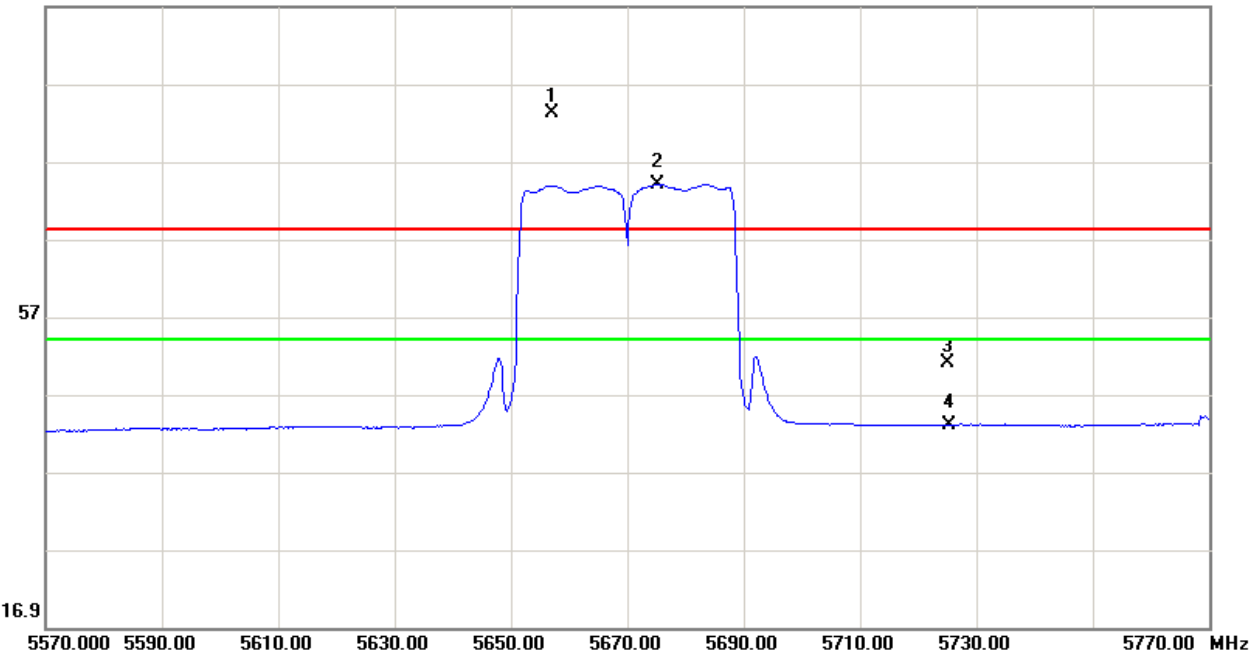
Orthogonal Axis:X
Band 3/CH134(Above 1000 MHz, Vertical)



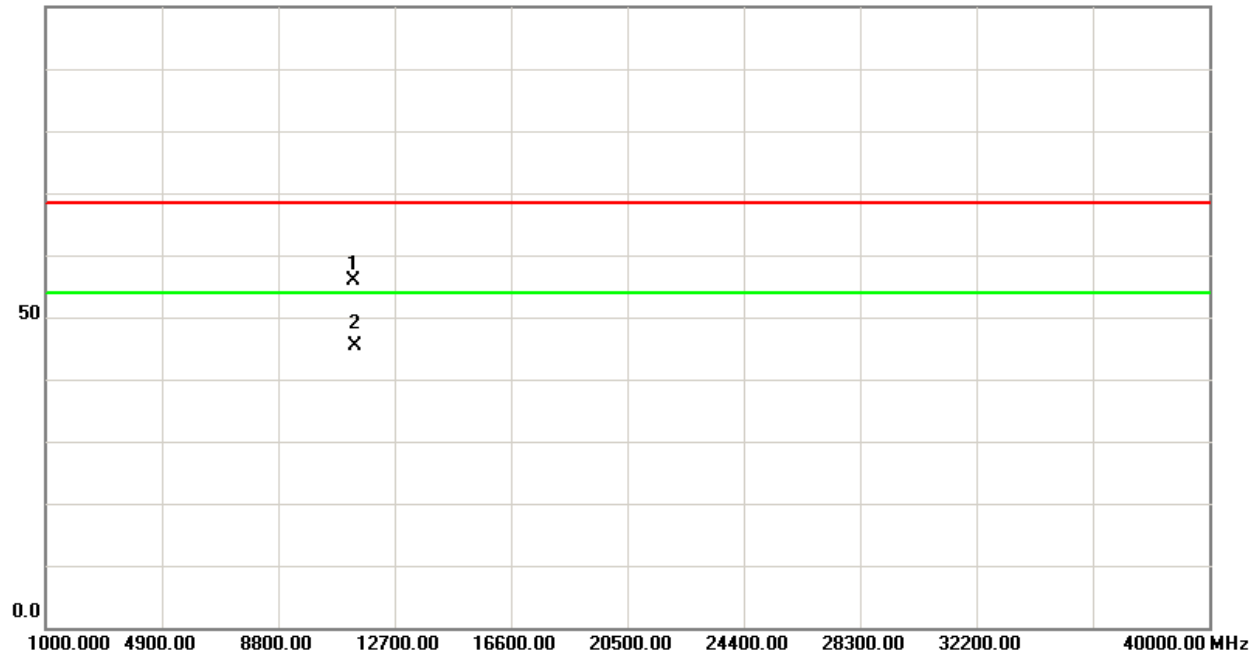


Orthogonal Axis:X
Band 3/CH134(Above 1000 MHz, Horizontal)

96.9 dBuV/m



100.0 dBuV/m





5. 26dB SPECTRUM BANDWIDTH

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
26 dB Bandwidth	-----	5150MHz~5250 5250MHz~5350 5470MHz~5725	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

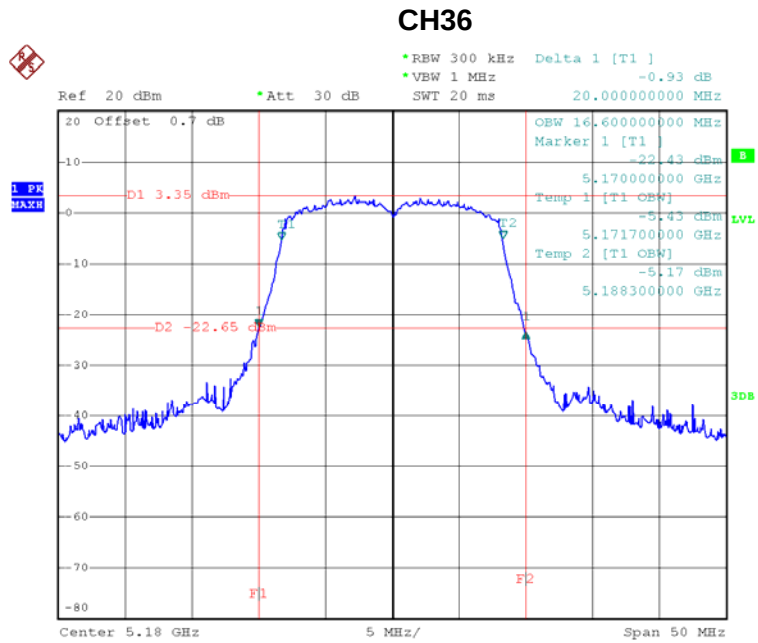
Relative Humidity: 55%

Test Voltage: DC 3.7V



5.1.6 TEST RESULTS

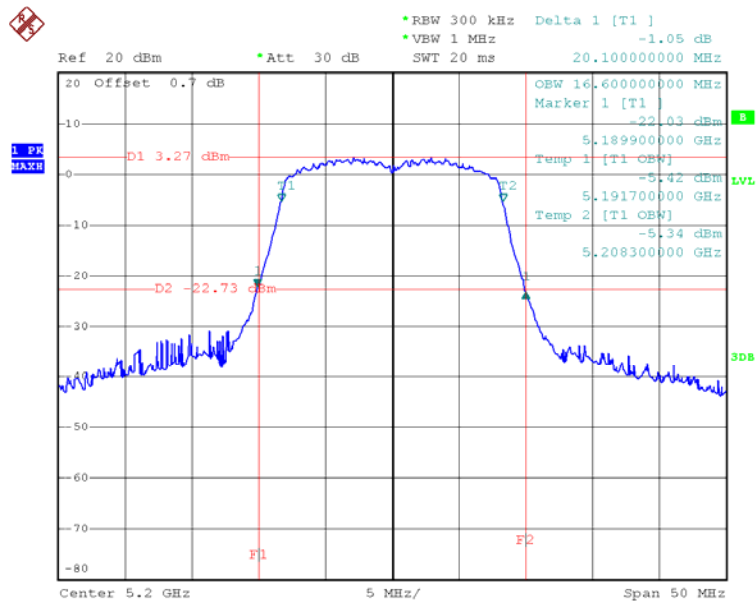
Test Mode : Band 1/TX A Mode_CH36/40/48



Date: 7.APR.2014 16:45:42

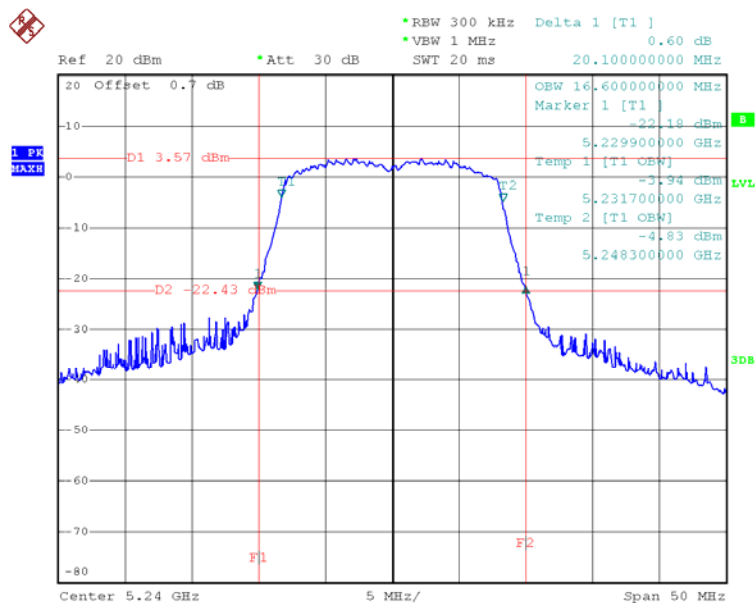


CH40



Date: 7.APR.2014 16:48:15

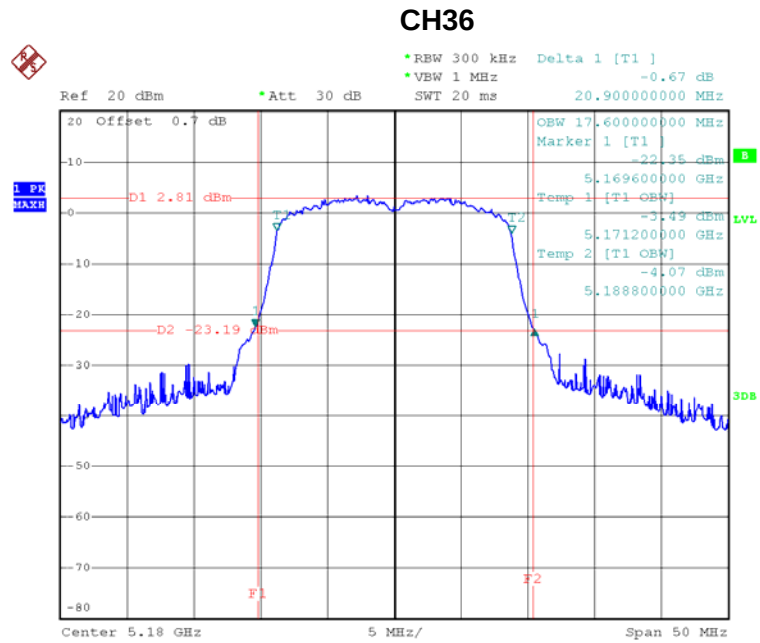
CH48



Date: 7.APR.2014 16:49:40



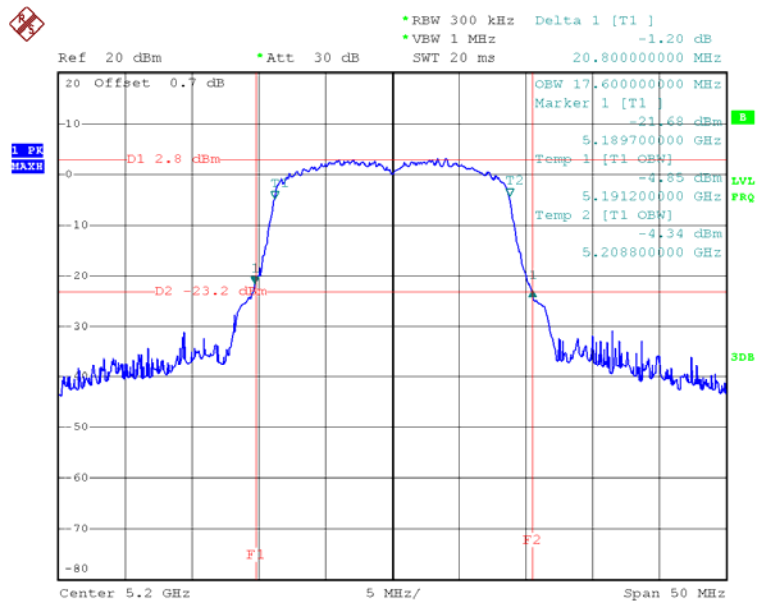
Test Mode : Band 1/TXN20 Mode_CH36/40/48-ANT 1



Date: 7.APR.2014 17:12:09

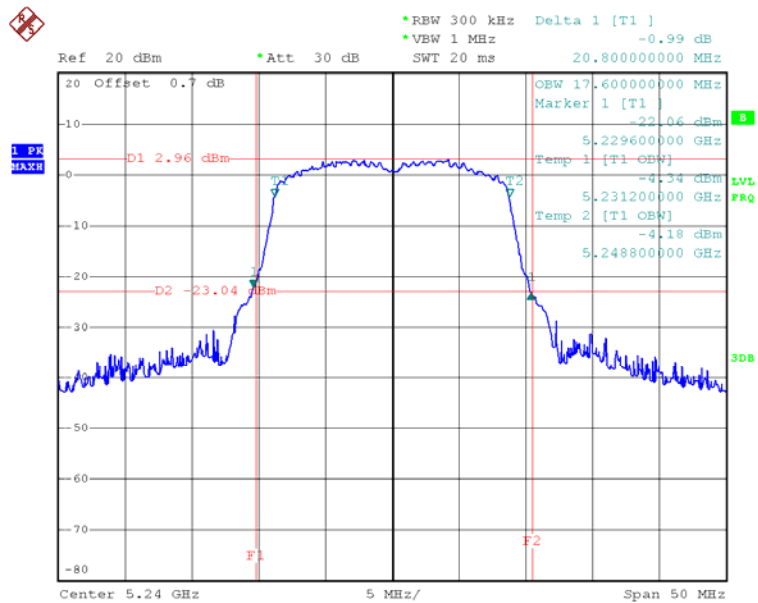


CH40



Date: 7.APR.2014 17:13:42

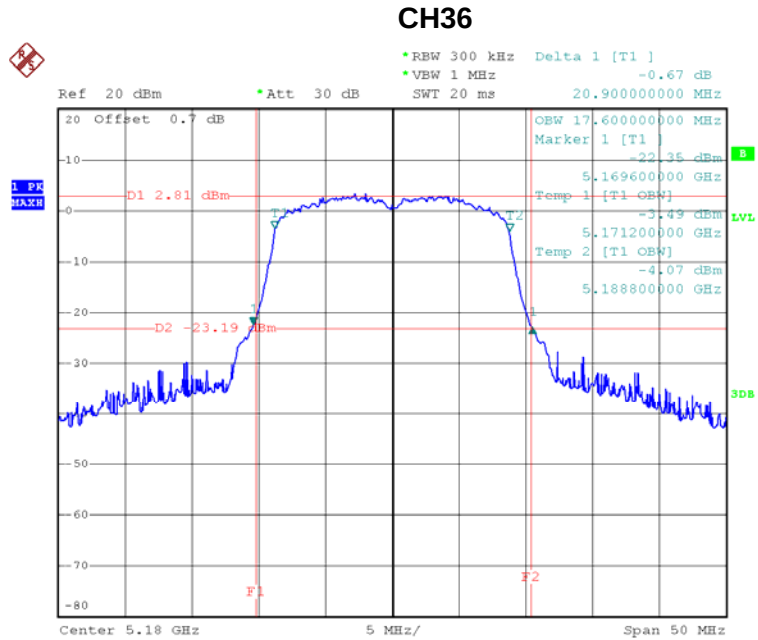
CH48



Date: 7.APR.2014 17:14:34



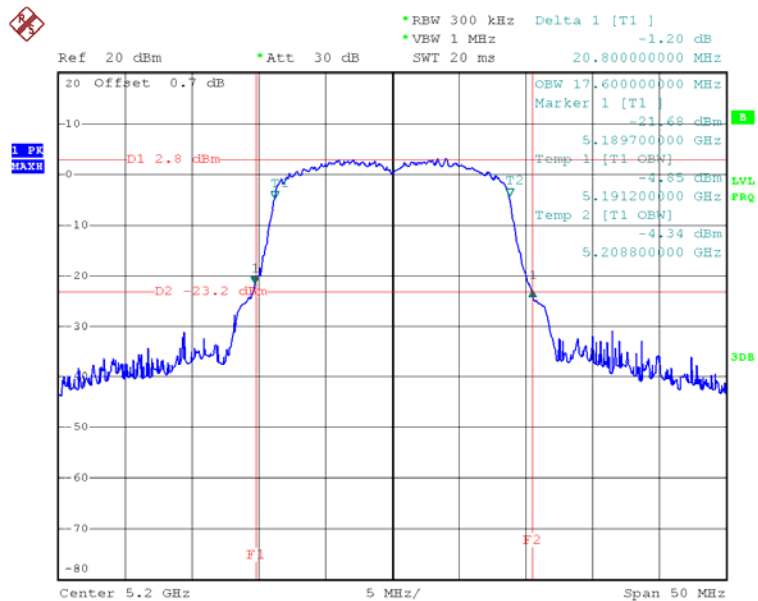
Test Mode : Band 1/TXN20 Mode_CH36/40/48-ANT 2



Date: 7.APR.2014 17:12:09

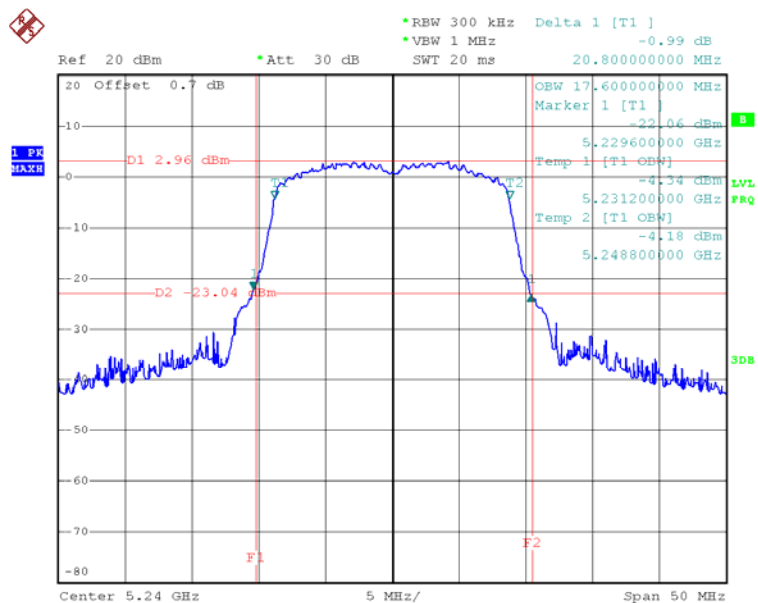


CH40



Date: 7.APR.2014 17:13:42

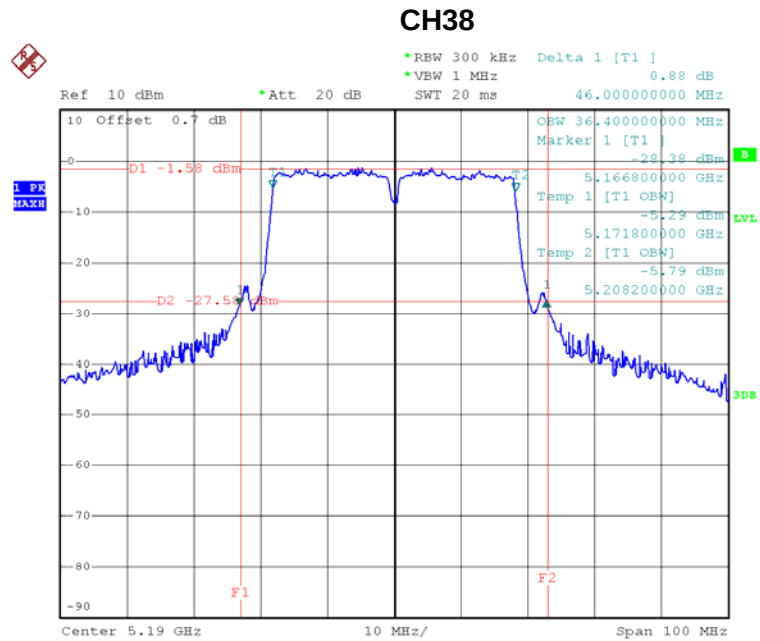
CH48



Date: 7.APR.2014 17:14:34



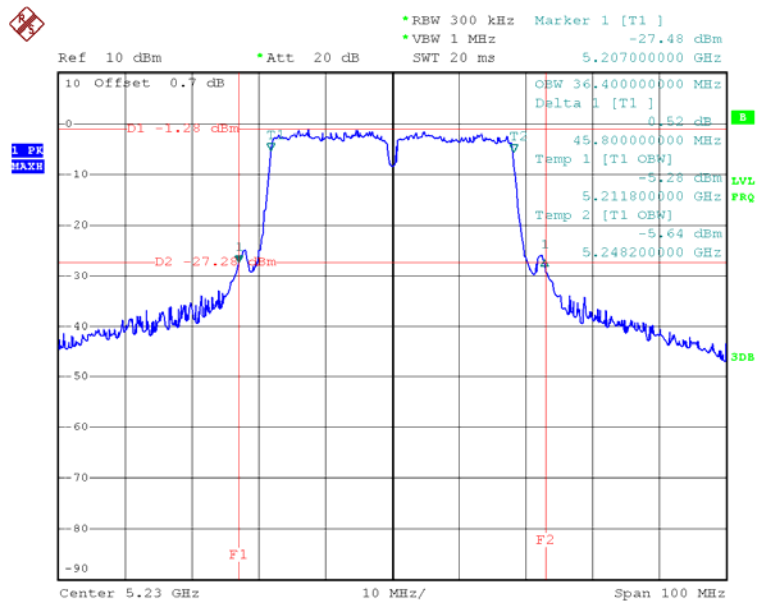
Test Mode : Band 1/TX N40 Mode_CH38/46-ANT 1



Date: 7.APR.2014 17:42:52



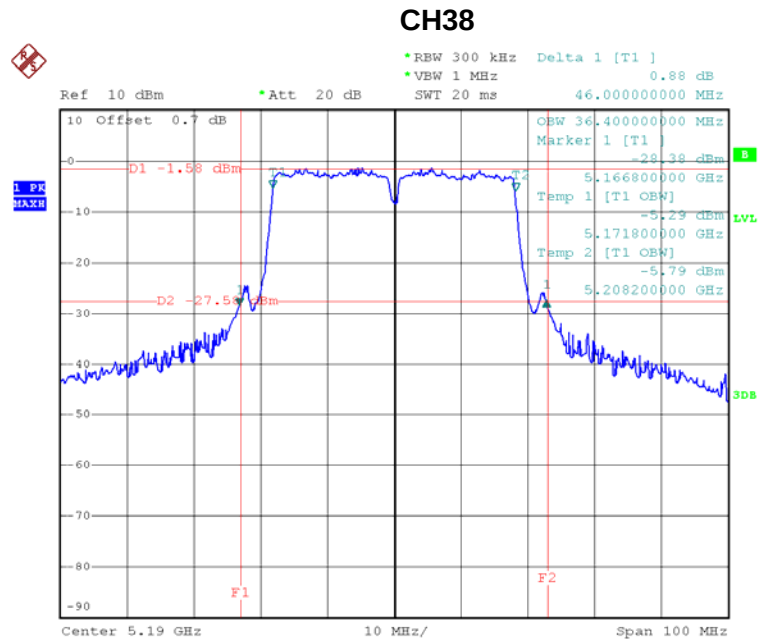
CH46



Date: 7.APR.2014 17:43:51



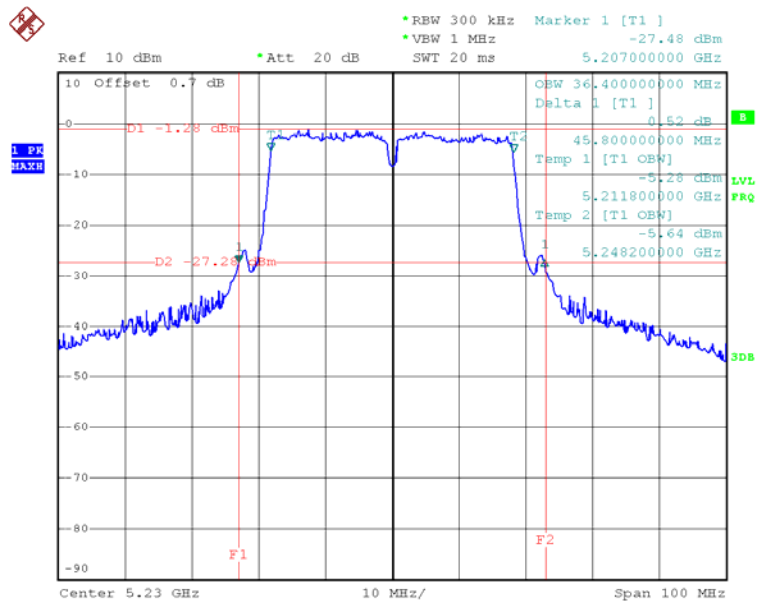
Test Mode : Band 1/TX N40 Mode_CH38/46-ANT 2



Date: 7.APR.2014 17:42:52



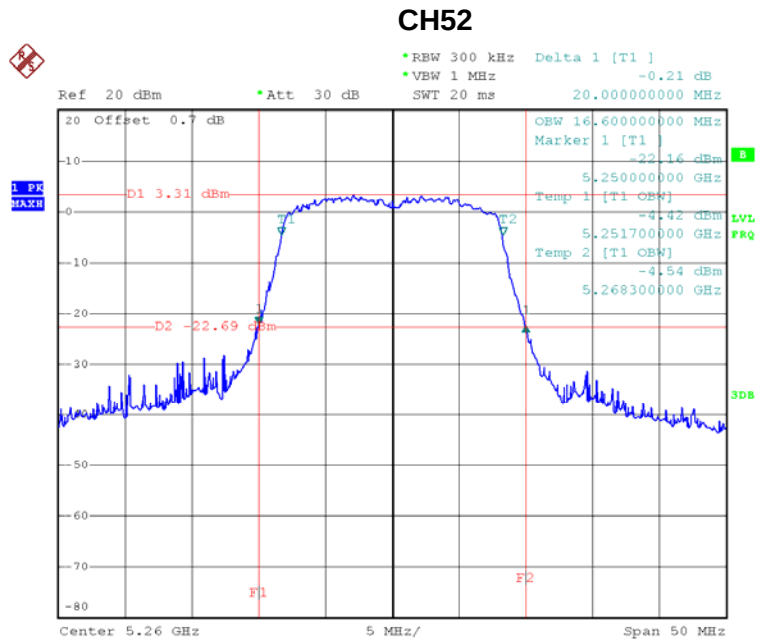
CH46



Date: 7.APR.2014 17:43:51



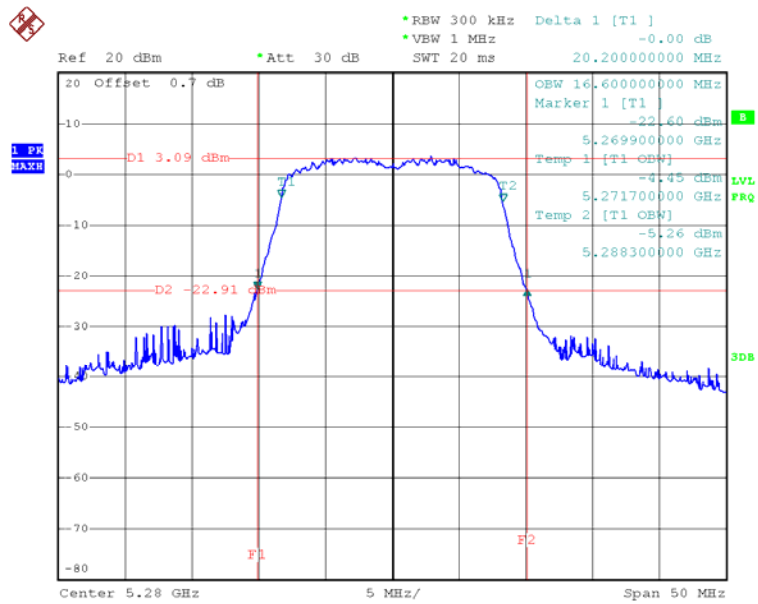
Test Mode : Band 2/TX A Mode_CH52/56/64



Date: 7.APR.2014 16:51:01

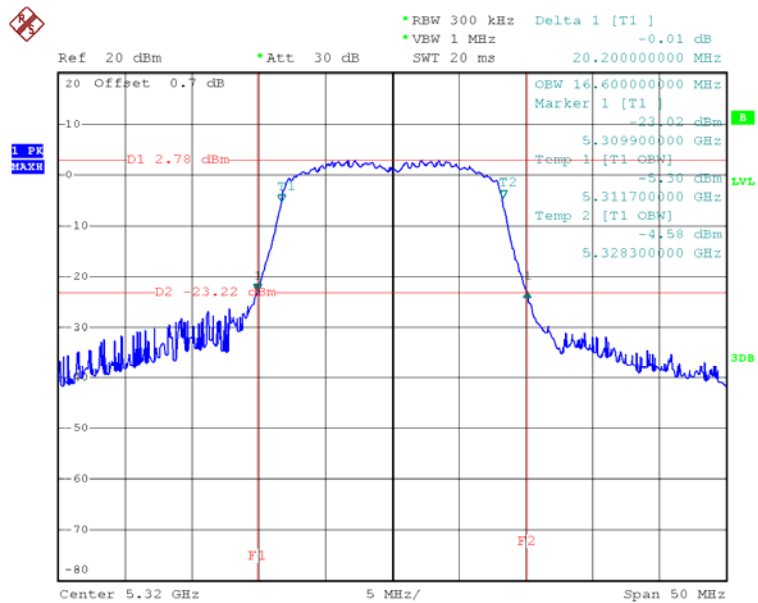


CH56



Date: 7.APR.2014 16:53:19

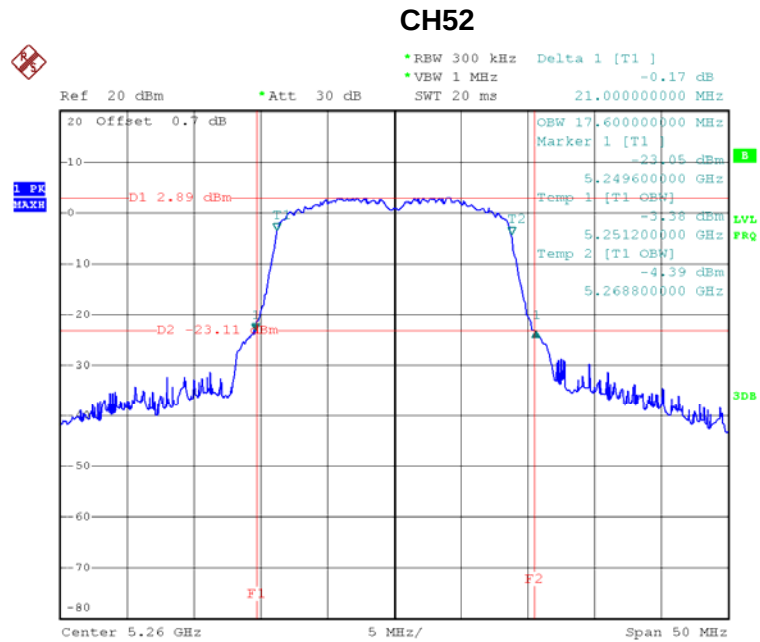
CH64



Date: 7.APR.2014 16:55:23



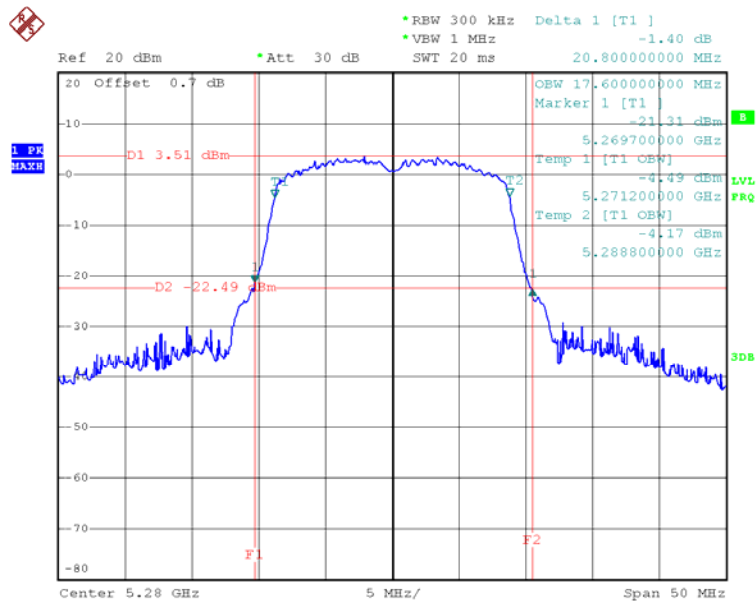
Test Mode : Band 2/TX N20 Mode_CH52/56/64-ANT 1



Date: 7.APR.2014 17:22:56

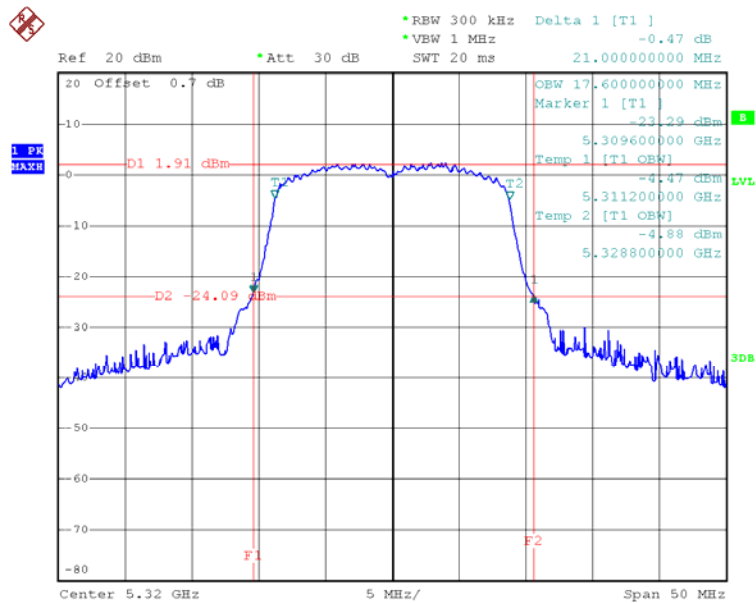


CH56



Date: 7.APR.2014 17:24:51

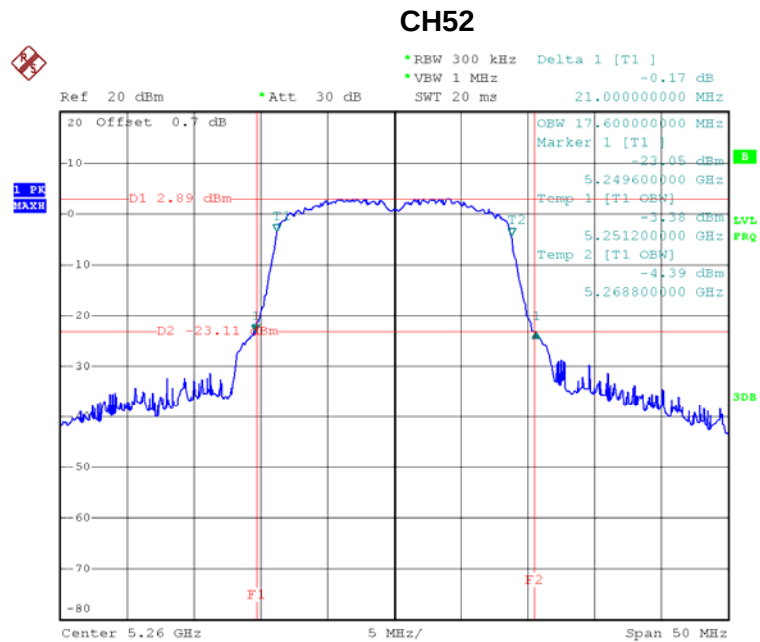
CH64



Date: 7.APR.2014 17:26:39



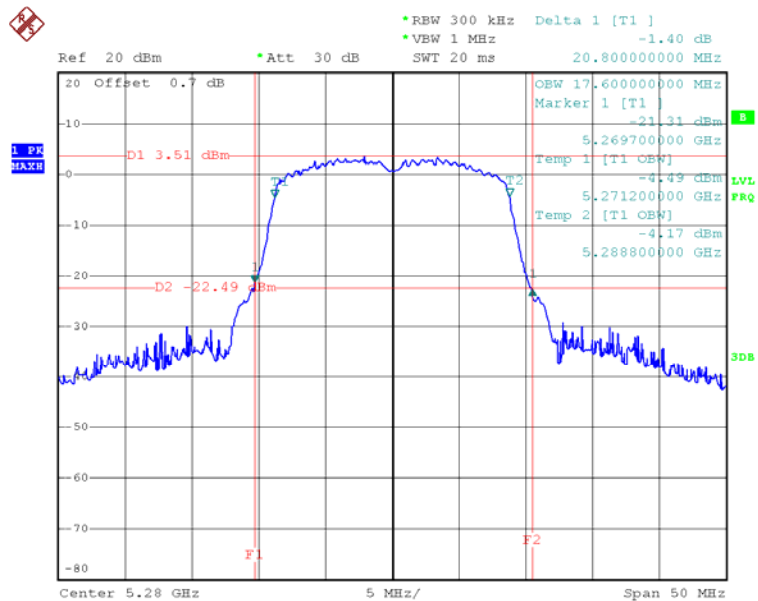
Test Mode : Band 2/TX N20 Mode_CH52/56/64-ANT 2



Date: 7.APR.2014 17:22:56

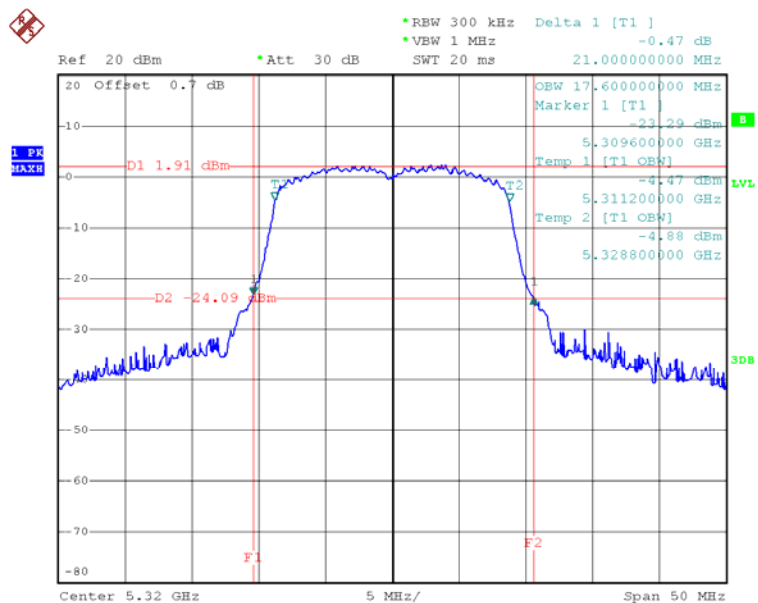


CH56



Date: 7.APR.2014 17:24:51

CH64

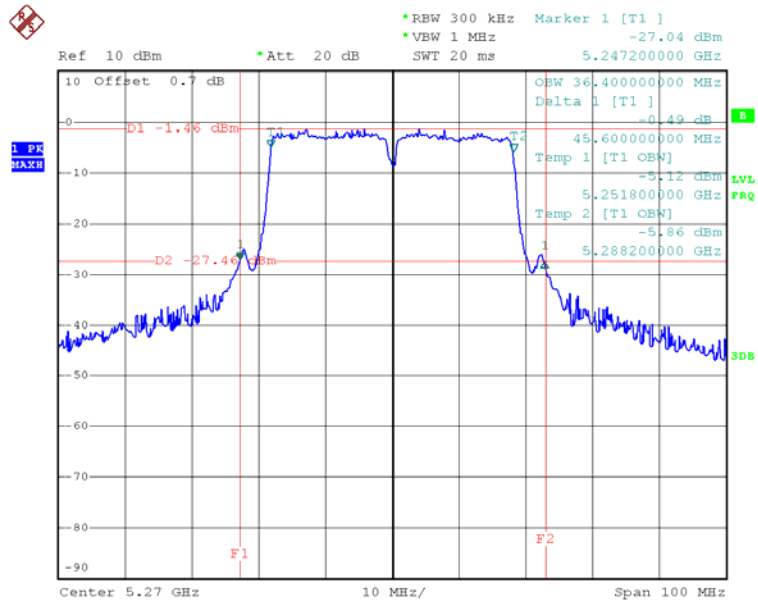


Date: 7.APR.2014 17:26:39



Test Mode : Band 2/TX N40 Mode_CH54/62-ANT 1

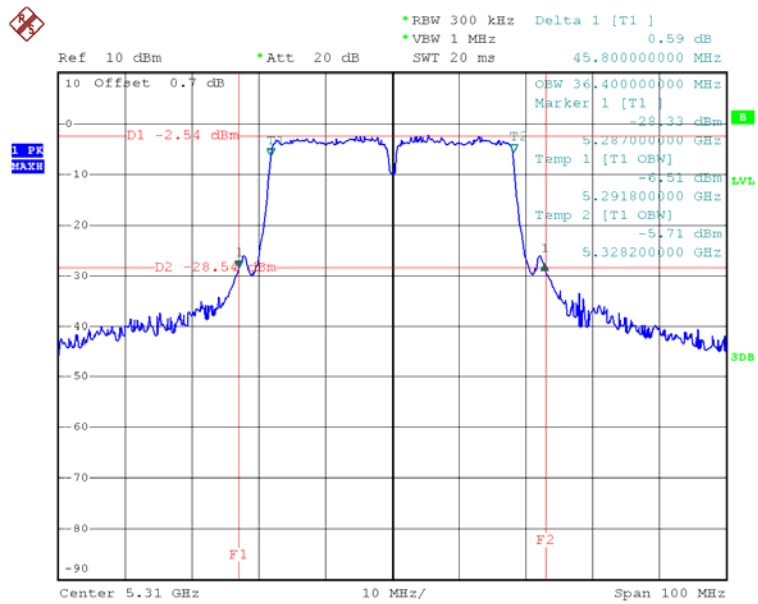
CH54



Date: 7.APR.2014 17:44:33



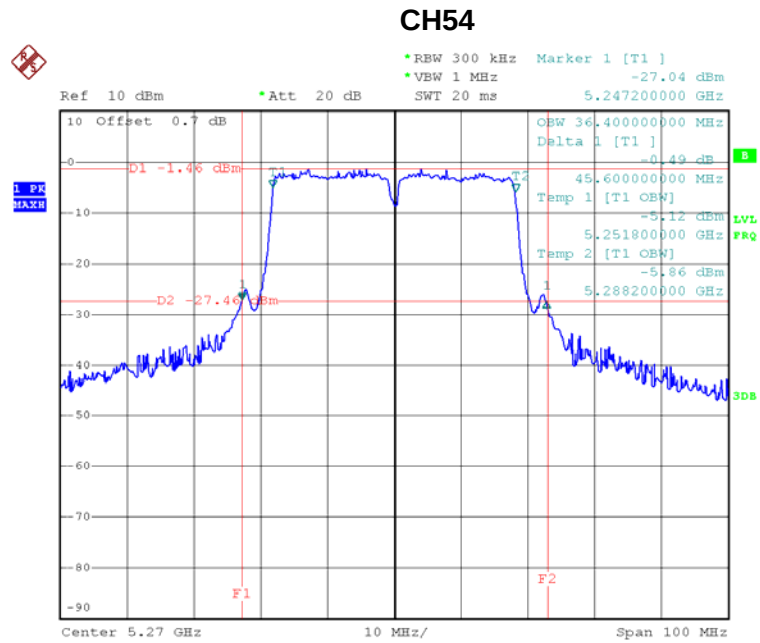
CH62



Date: 7.APR.2014 17:46:22



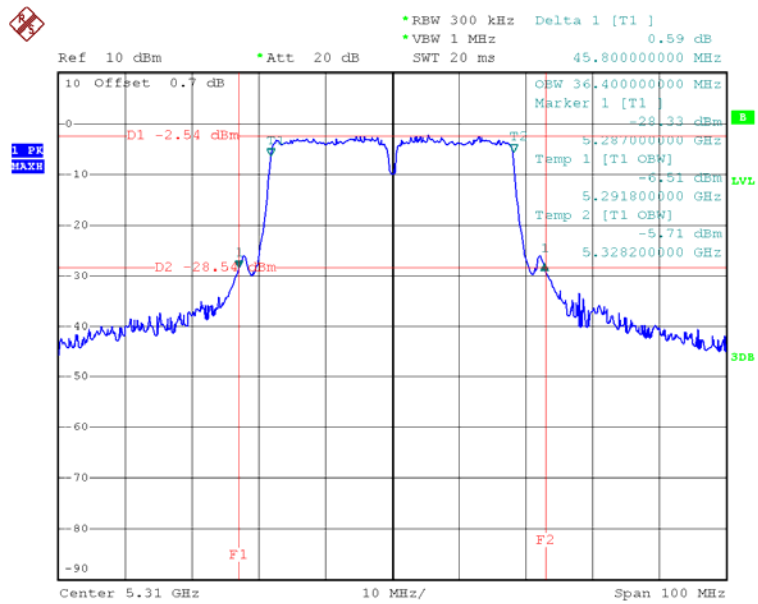
Test Mode : Band 2/TX N40 Mode_CH54/62-ANT 2



Date: 7.APR.2014 17:44:33



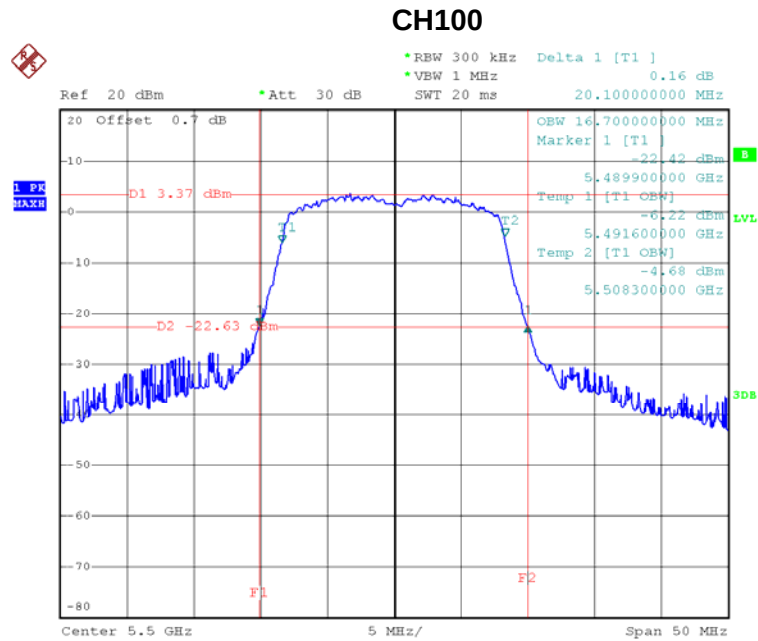
CH62



Date: 7.APR.2014 17:46:22



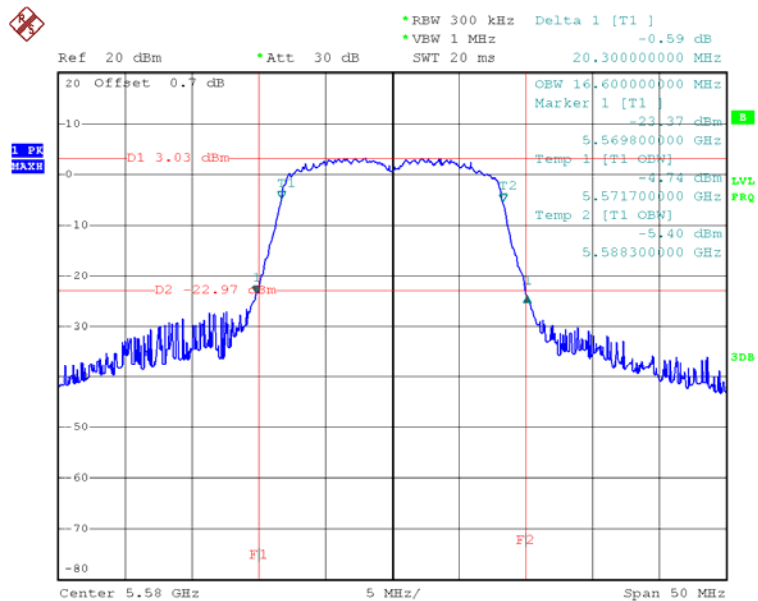
Test Mode : Band 3/TX A Mode_CH100/116/140



Date: 7.APR.2014 16:58:00

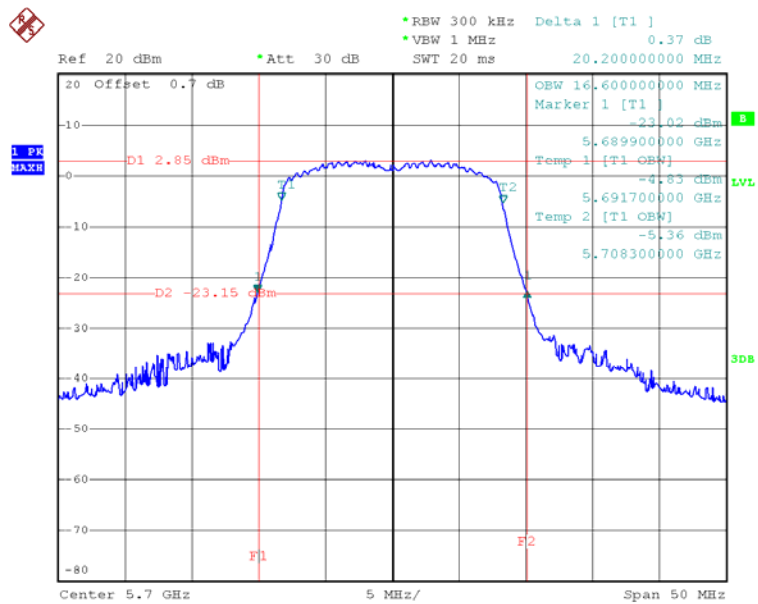


CH116



Date: 7.APR.2014 16:59:46

CH140

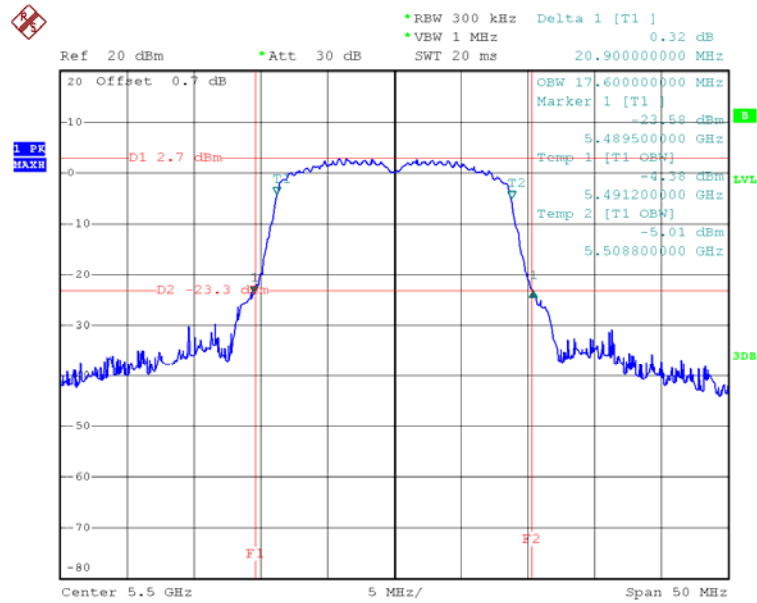


Date: 7.APR.2014 17:02:10



Test Mode : Band 3/TX N20 Mode_CH100/116/140-ANT 1

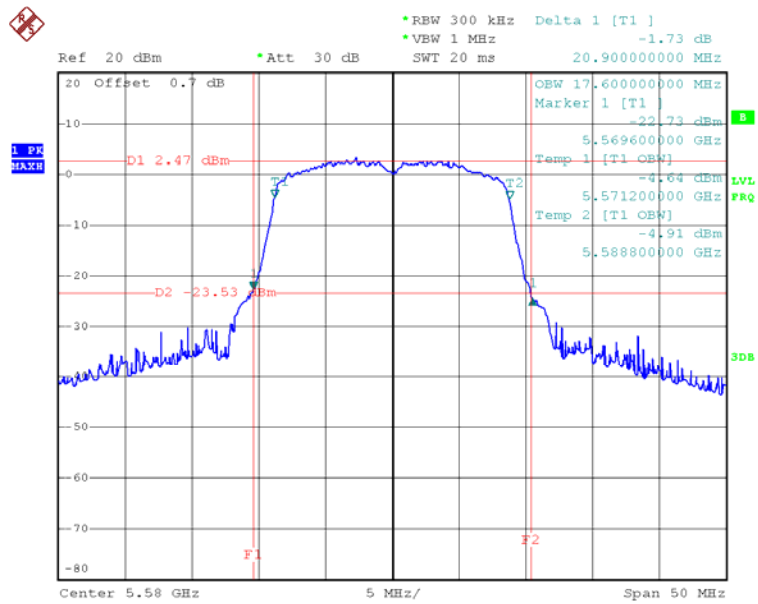
CH100



Date: 7.APR.2014 17:29:23

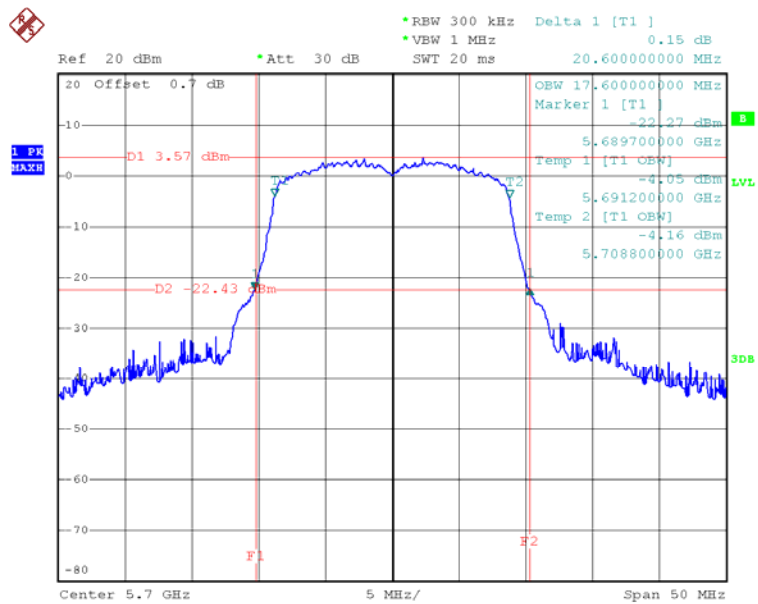


CH116



Date: 7.APR.2014 17:30:56

CH140

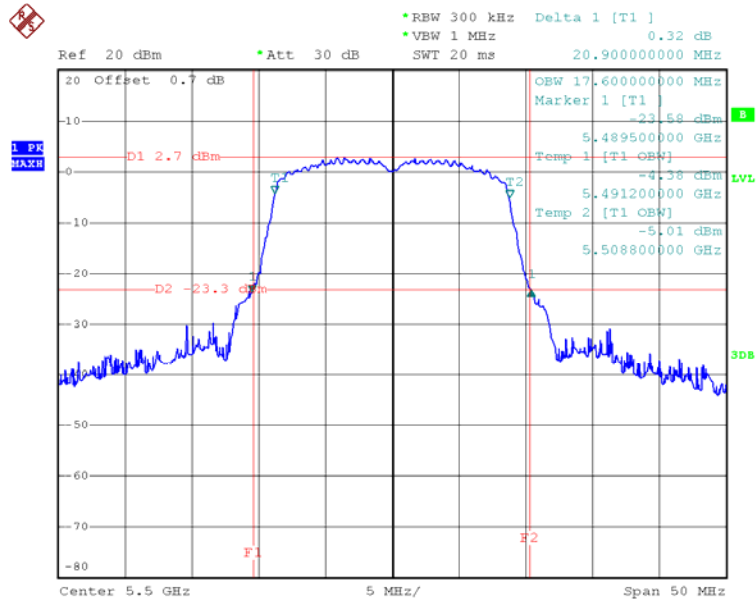


Date: 7.APR.2014 17:33:22



Test Mode : Band 3/TX N20 ModeCH100/116/140-ANT 2

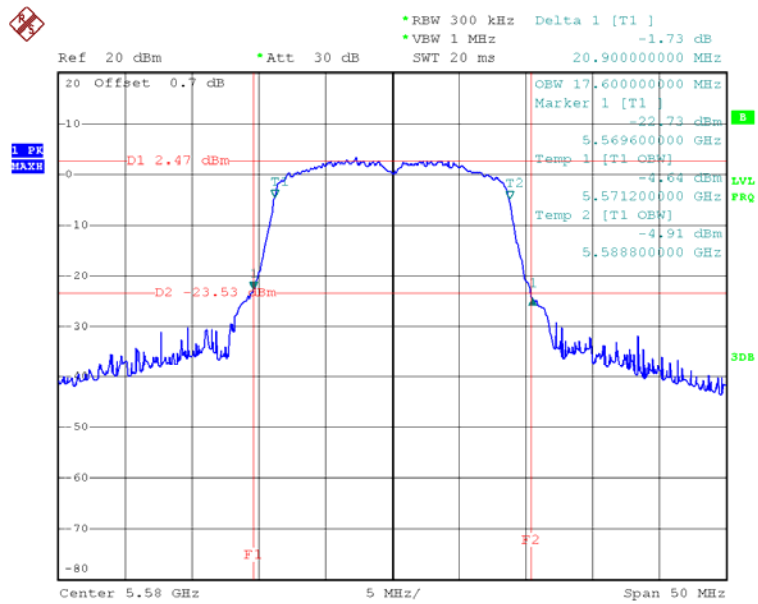
CH100



Date: 7.APR.2014 17:29:23

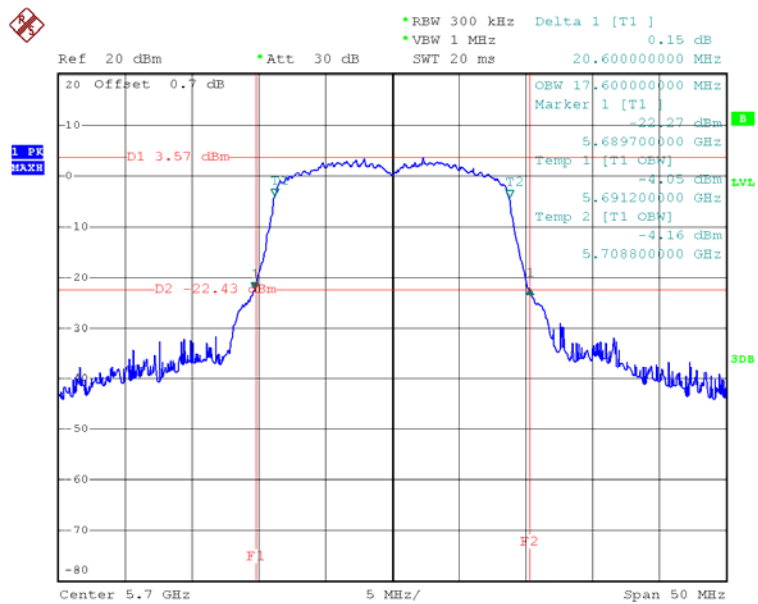


CH116



Date: 7.APR.2014 17:30:56

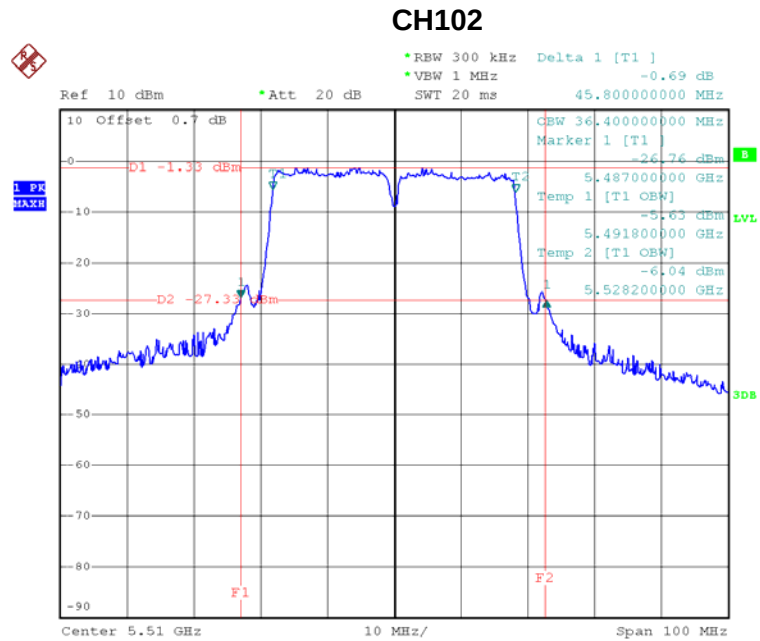
CH140



Date: 7.APR.2014 17:33:22



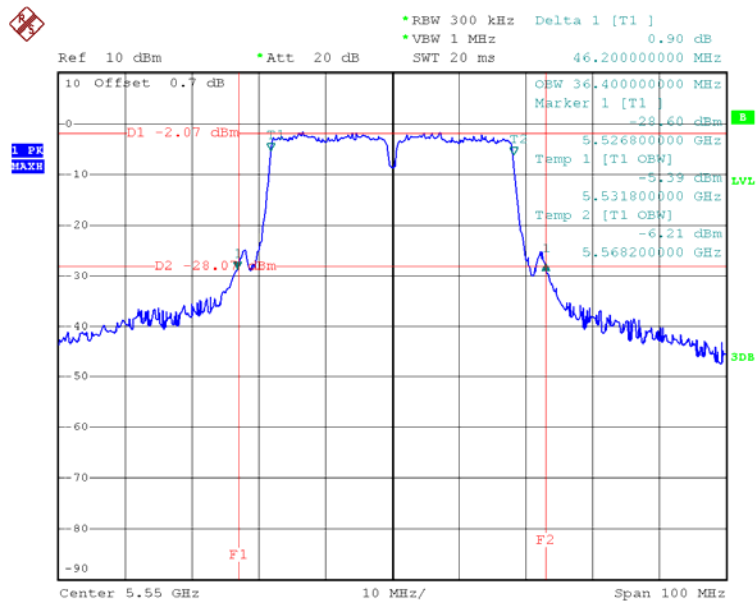
Test Mode : Band 3/TX N40 Mode_CH102/110/134-ANT 1



Date: 7.APR.2014 17:49:23

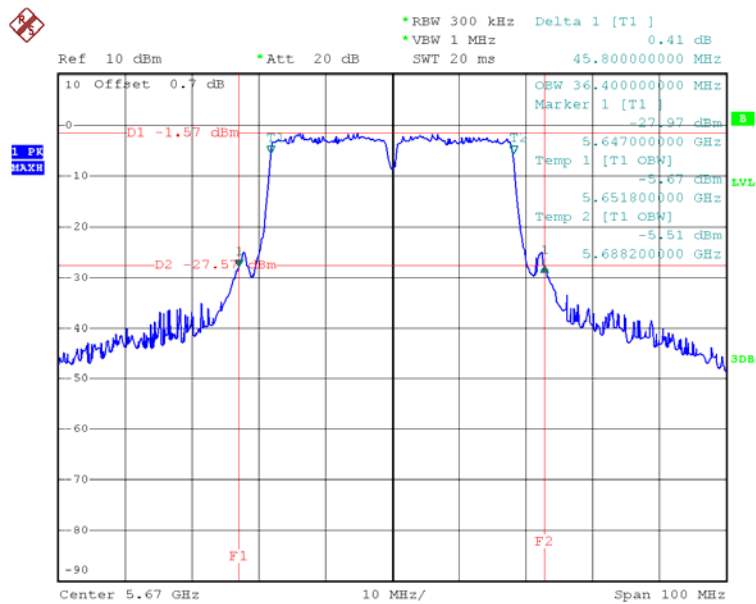


CH110



Date: 7.APR.2014 17:58:08

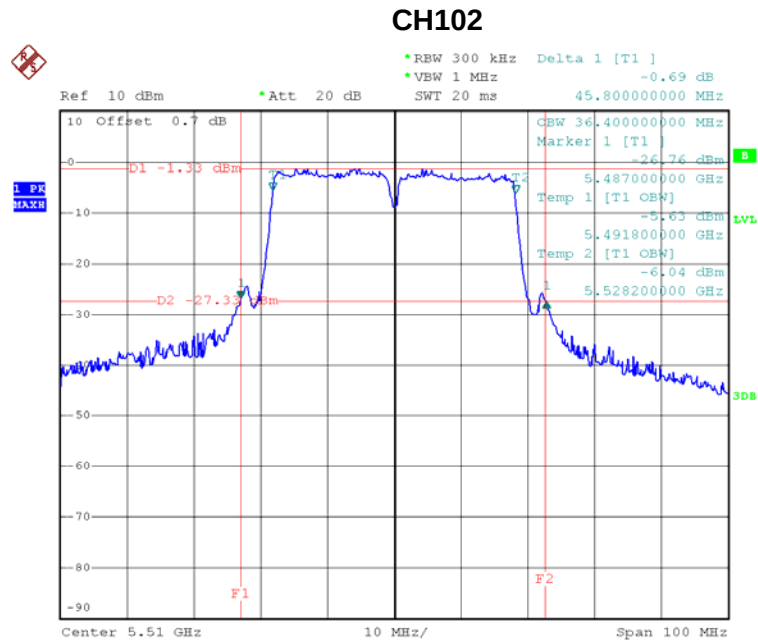
CH134



Date: 7.APR.2014 18:03:23



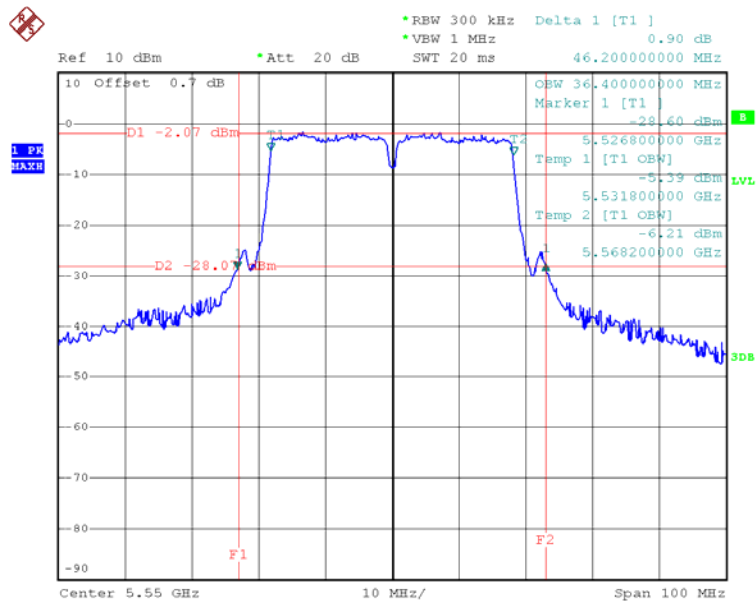
Test Mode : Band 3/TX N40 Mode_CH102/110/134-ANT 2



Date: 7.APR.2014 17:49:23

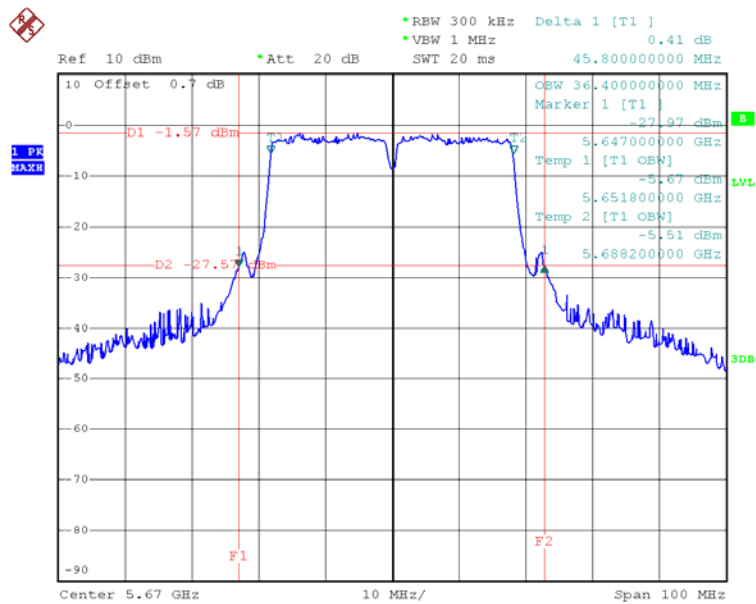


CH110



Date: 7.APR.2014 17:58:08

CH134



Date: 7.APR.2014 18:03:23



6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
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
	5470 - 5725	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

- 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
RBW	= 1 MHz.
VBW	$\geq$ 3 MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

- b. 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	10.37	17.00	0.0501
CH40	5200	10.42	17.00	0.0501
CH48	5240	10.03	17.00	0.0501



Test Mode :Band 1/TX N20 Mode-ANT 1

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH36	5180	10.03	17.00	0.0501
CH40	5200	10.12	17.00	0.0501
CH48	5240	10.54	17.00	0.0501

Test Mode :Band 1/TX N20 Mode-ANT 2

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH36	5180	10.10	17.00	0.0501
CH40	5200	10.34	17.00	0.0501
CH48	5240	10.08	17.00	0.0501

Test Mode :Band 1/TX N20 Mode-Total

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH36	5180	13.08	17.00	0.0501
CH40	5200	13.24	17.00	0.0501
CH48	5240	13.33	17.00	0.0501



Test Mode : Band 1/TX N40 Mode-ANT 1

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH38	5190	8.55	17.00	0.0501
CH46	5230	8.37	17.00	0.0501

Test Mode : Band 1/TX N40 Mode-ANT 2

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH38	5190	8.69	17.00	0.0501
CH46	5230	8.67	17.00	0.0501

Test Mode : Band 1/TX N40 Mode-Total

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH38	5190	11.63	17.00	0.0501
CH46	5230	11.53	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	10.20	24	0.251
CH56	5280	10.21	24	0.251
CH64	5320	9.47	24	0.251



Test Mode :Band 2/TX N20 Mode-ANT 1

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	10.30	24	0.251
CH56	5280	9.76	24	0.251
CH64	5320	9.66	24	0.251

Test Mode :Band 2/TX N20 Mode-ANT 2

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	10.13	24	0.251
CH56	5280	9.96	24	0.251
CH64	5320	9.66	24	0.251

Test Mode :Band 2/TX N20 Mode-Total

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	13.23	24	0.251
CH56	5280	12.87	24	0.251
CH64	5320	12.67	24	0.251



Test Mode :Band 2/TX N40 Mode-ANT 1

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	8.12	24	0.251
CH62	5310	8.11	24	0.251

Test Mode :Band 2/TX N40 Mode-ANT 2

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	8.40	24	0.251
CH62	5310	8.04	24	0.251

Test Mode :Band 2/TX N40 Mode-Total

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	11.27	24	0.251
CH62	5310	11.09	24	0.251



Test Mode :Band 3/TX A Mode				
Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	9.98	24	0.251
CH116	5580	8.88	24	0.251
CH140	5700	9.93	24	0.251



Test Mode :Band 3/TX N20 Mode-ANT 1

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	9.82	24	0.251
CH116	5580	8.66	24	0.251
CH140	5700	9.80	24	0.251

Test Mode :Band 3/TX N20 Mode-ANT 2

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	10.19	24	0.251
CH116	5580	8.72	24	0.251
CH140	5700	9.78	24	0.251

Test Mode :Band 3/TX N20 Mode-Total

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	13.02	24	0.251
CH116	5580	11.70	24	0.251
CH140	5700	12.80	24	0.251



Test Mode :Band 3/TX N40 Mode-ANT 1

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	8.82	24	0.251
CH110	5550	8.47	24	0.251
CH134	5670	8.68	24	0.251

Test Mode :Band 3/TX N40 Mode-ANT 2

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	8.45	24	0.251
CH110	5550	8.68	24	0.251
CH134	5670	8.17	24	0.251

Test Mode :Band 3/TX N40 Mode-Total

Test Channel	Frequency (MHz)	Conducted Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	11.65	24	0.251
CH110	5550	11.59	24	0.251
CH134	5670	11.44	24	0.251



7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Antenna conducted Spurious Emission	-27 dBm/1MHz	5150 – 5250 5250 – 5350 5470 – 5725	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

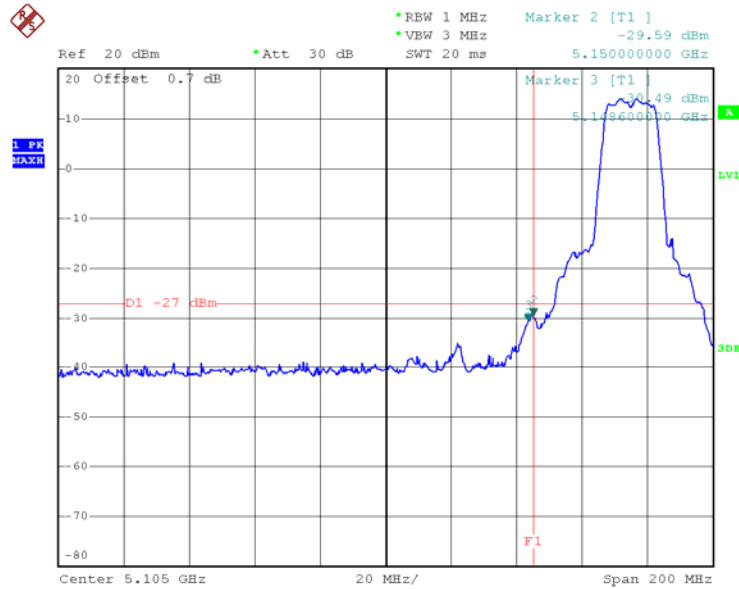
Temperature: 25°C
Relative Humidity: 55%
Test Voltage: DC 3.7V



7.1.6 TEST RESULTS

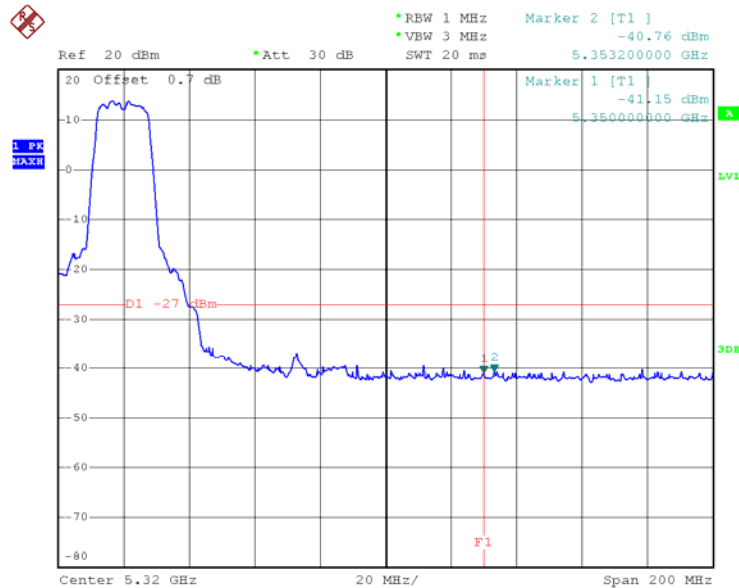
Test Mode : Band 1/TX A Mode

TX mode CH36



Date: 7.APR.2014 11:00:39

TX mode CH48



Date: 7.APR.2014 11:14:25



TX mode CH36

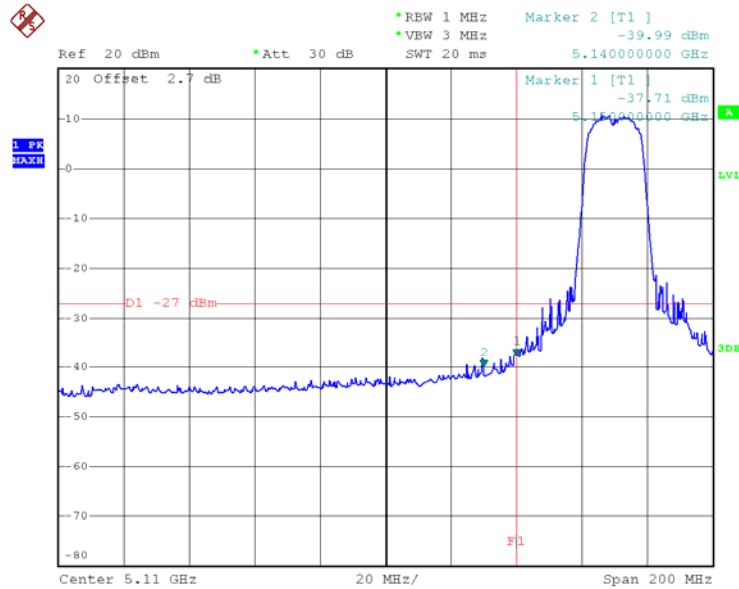


Date: 7.APR.2014 19:45:16



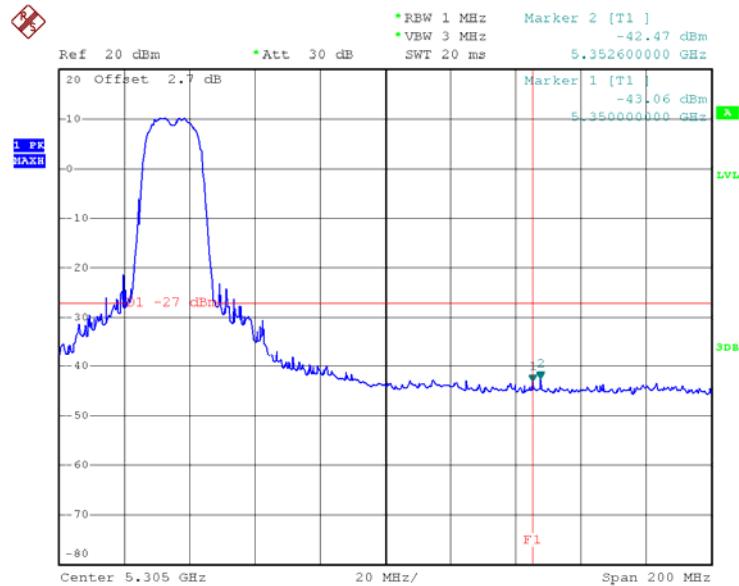
Test Mode : Band 1/TX N20 Mode-ANT 2

TX mode CH36



Date: 7.APR.2014 19:43:01

TX mode CH48

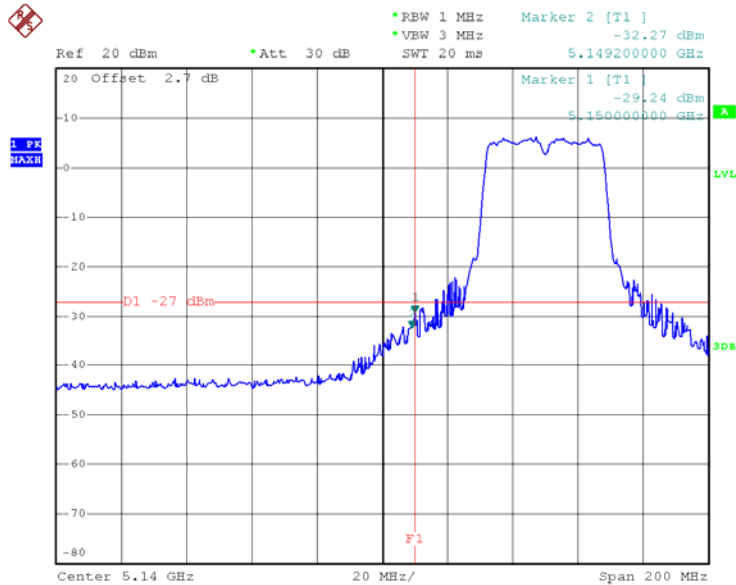


Date: 7.APR.2014 19:45:05



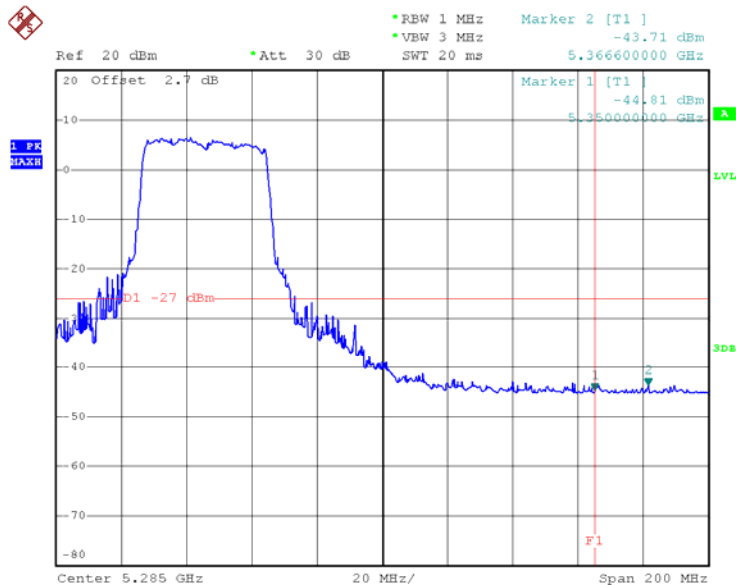
Test Mode : Band 1/TX N40 Mode-ANT 1

TX mode CH38



Date: 7.APR.2014 19:33:13

TX mode CH46

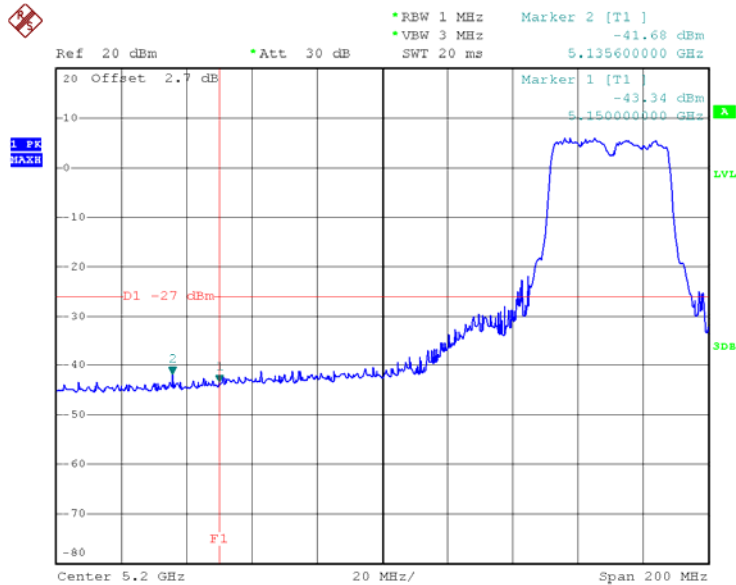


Date: 7.APR.2014 19:31:08



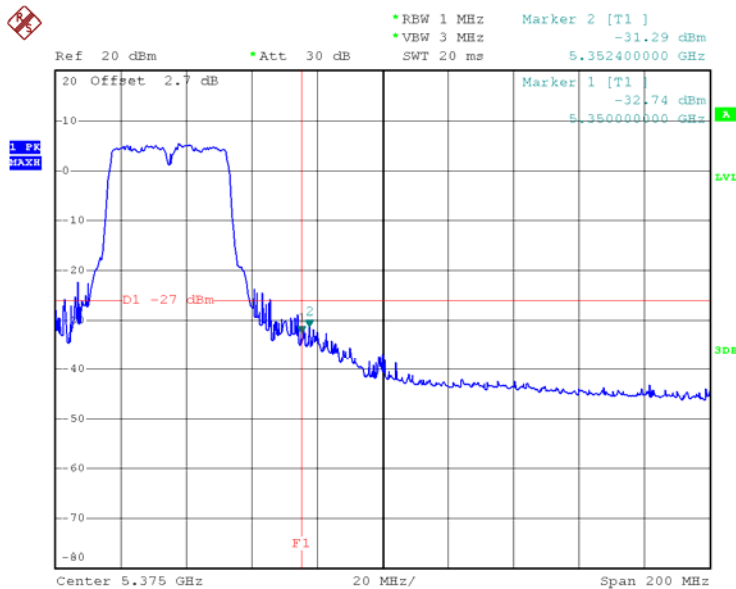
Test Mode : Band 1/TX N40 Mode-ANT 2

TX mode CH38



Date: 7.APR.2014 19:29:55

TX mode CH46

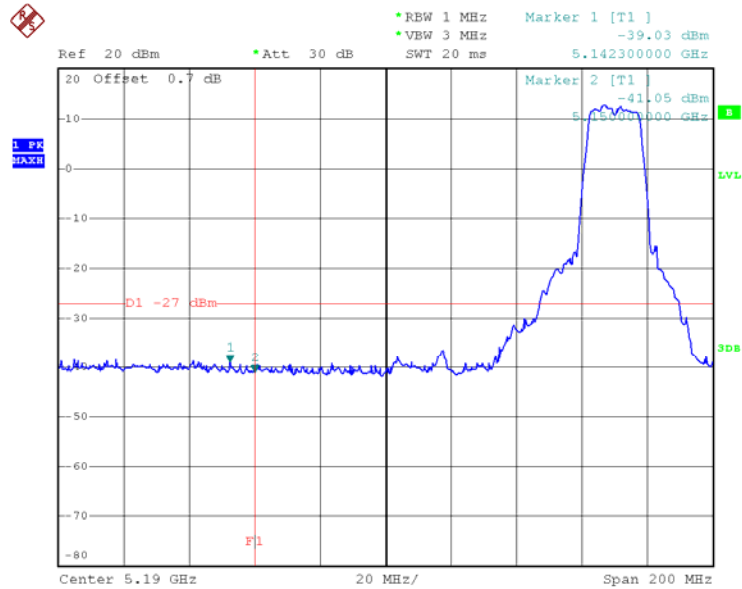


Date: 7.APR.2014 19:28:29



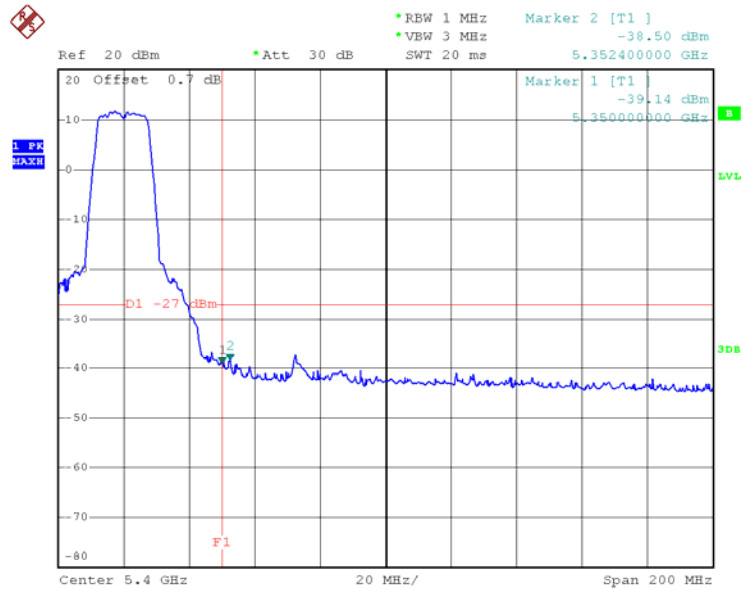
Test Mode : Band 2/TX A Mode

TX mode CH52



Date: 7.APR.2014 14:11:19

TX mode CH64

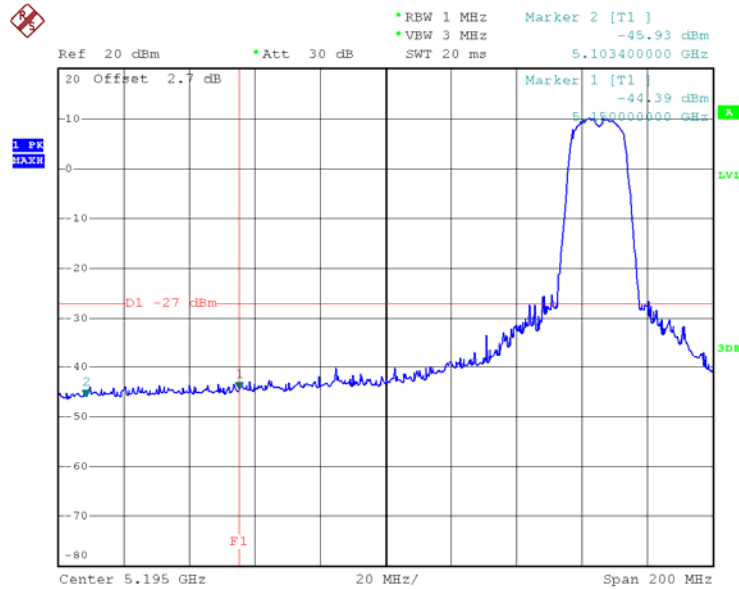


Date: 7.APR.2014 14:22:28



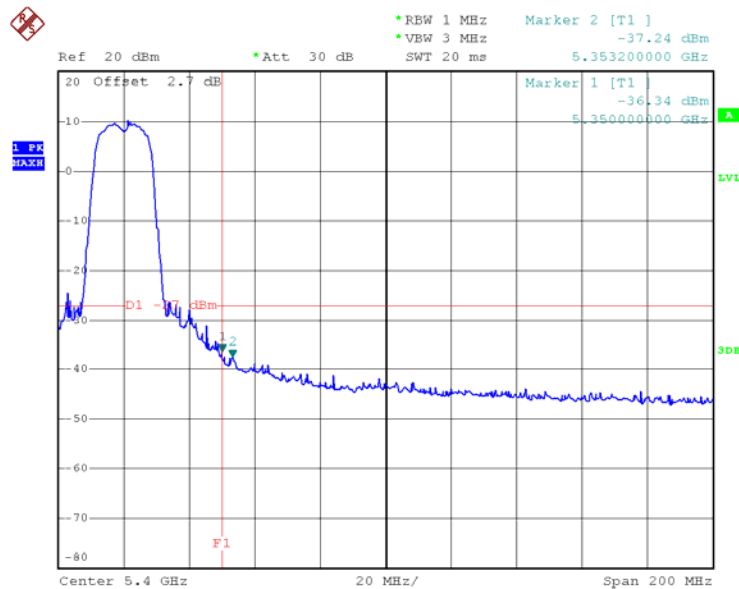
Test Mode : Band 2/TX N20 Mode-ANT 1

TX mode CH52



Date: 7.APR.2014 19:46:13

TX mode CH64

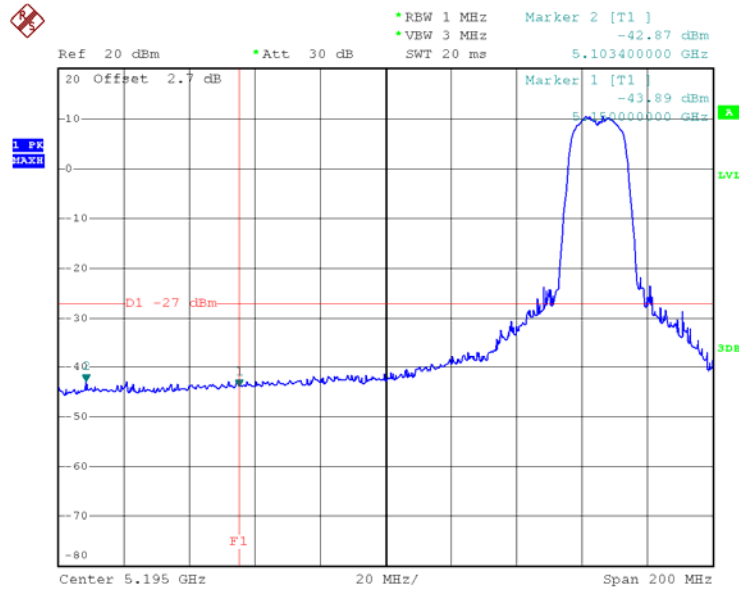


Date: 7.APR.2014 19:48:20



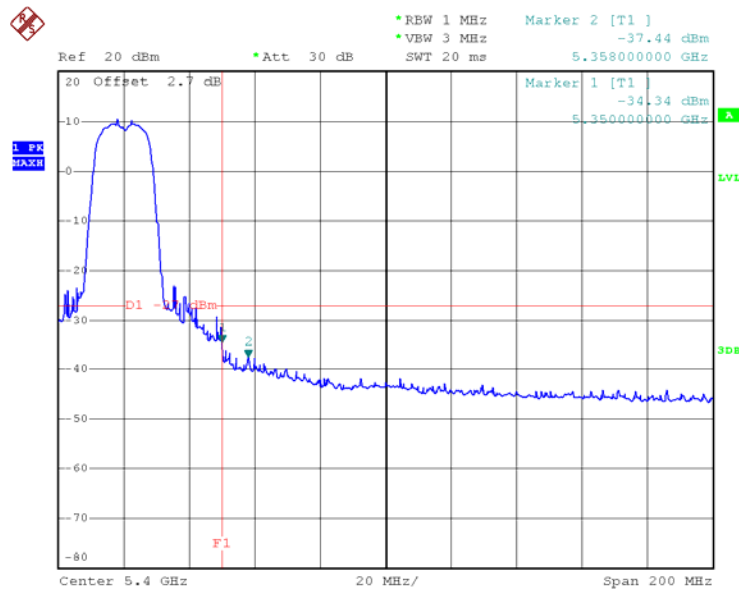
Test Mode : Band 2/TX N20 Mode-ANT 2

TX mode CH52



Date: 7.APR.2014 19:46:06

TX mode CH64

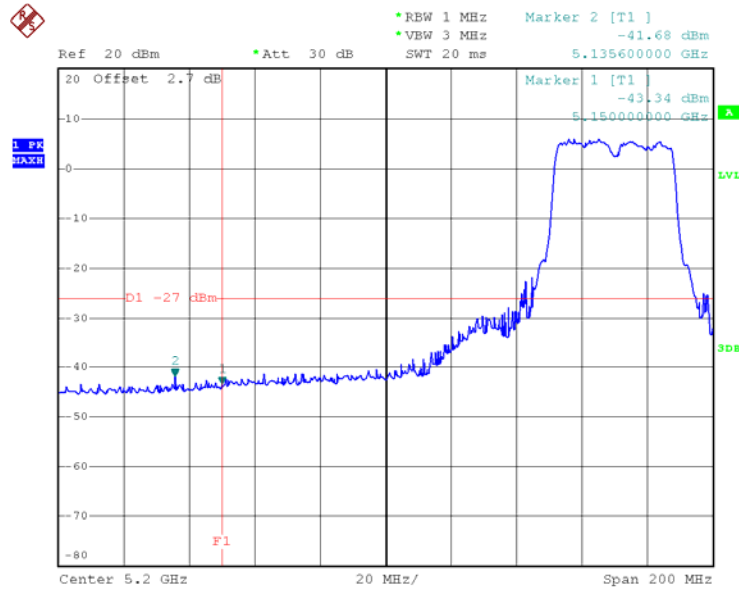


Date: 7.APR.2014 19:48:07



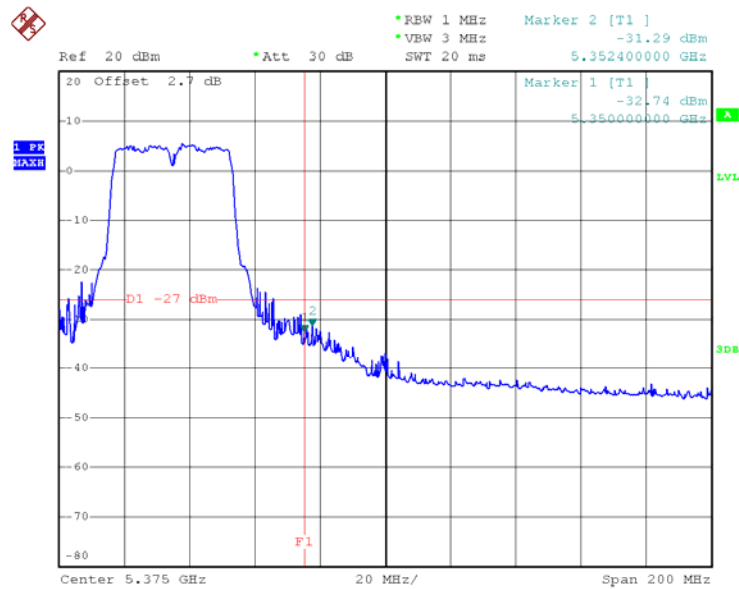
Test Mode : Band 2/TX N40 Mode-ANT 1

TX mode CH54



Date: 7.APR.2014 19:29:55

TX mode CH62

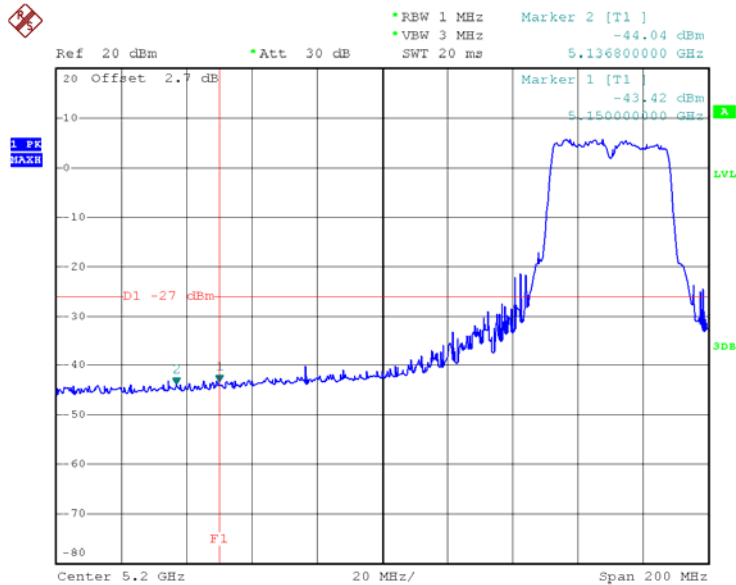


Date: 7.APR.2014 19:28:29



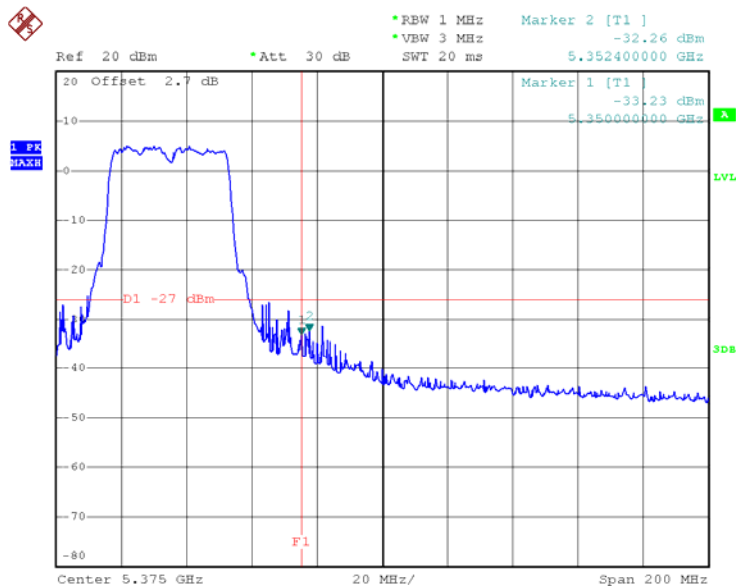
Test Mode : Band 2/TX N40 Mode-ANT 2

TX mode CH54



Date: 7.APR.2014 19:30:06

TX mode CH62

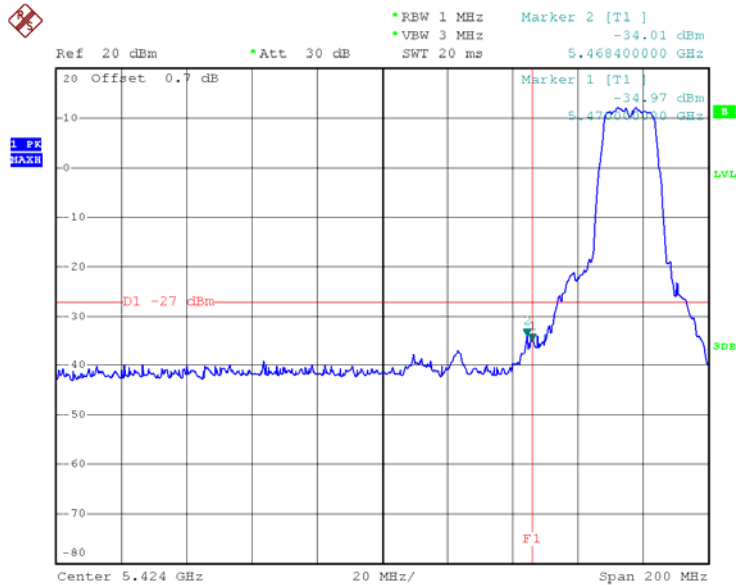


Date: 7.APR.2014 19:28:41



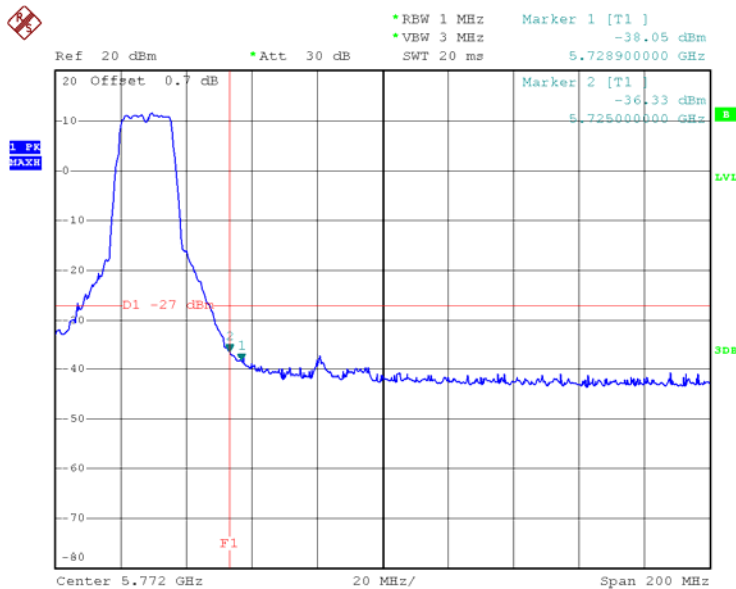
Test Mode : Band 3/TX A Mode

TX mode CH100



Date: 7.APR.2014 14:29:30

TX mode CH140

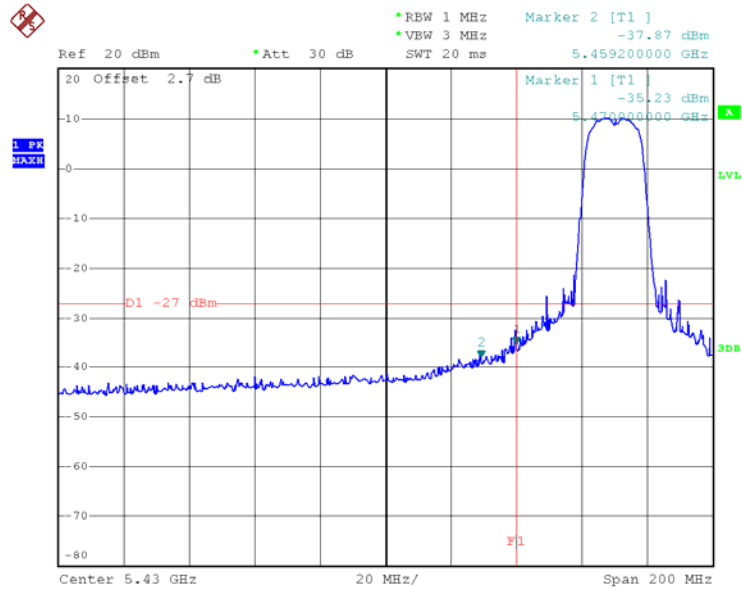


Date: 7.APR.2014 14:38:34



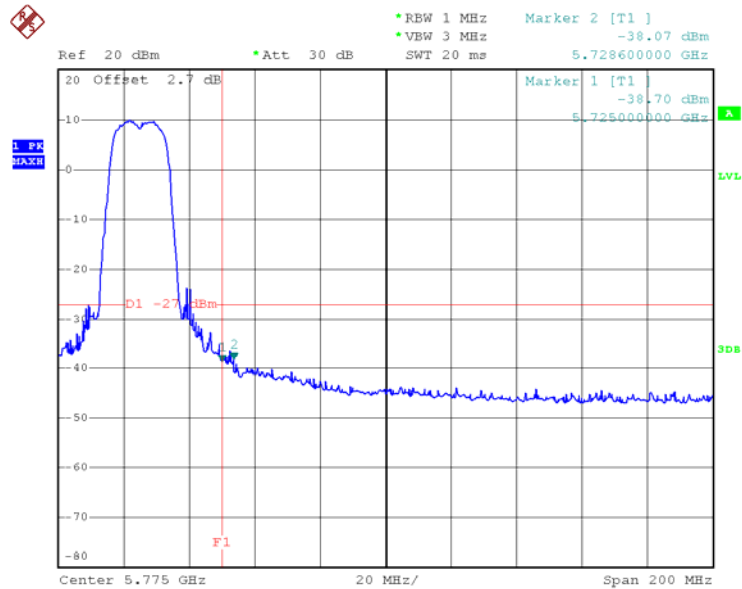
Test Mode : Band 3/TX N20 Mode-ANT 1

TX mode CH100



Date: 7.APR.2014 19:51:30

TX mode CH140

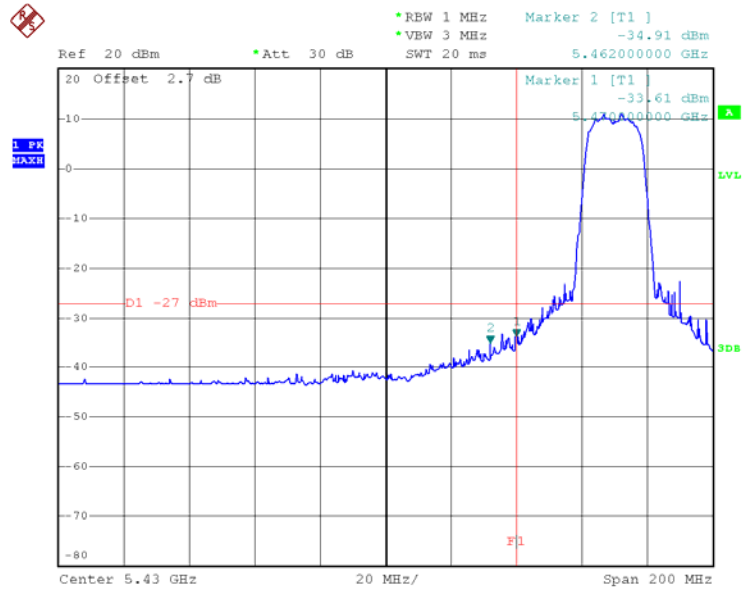


Date: 7.APR.2014 19:53:28



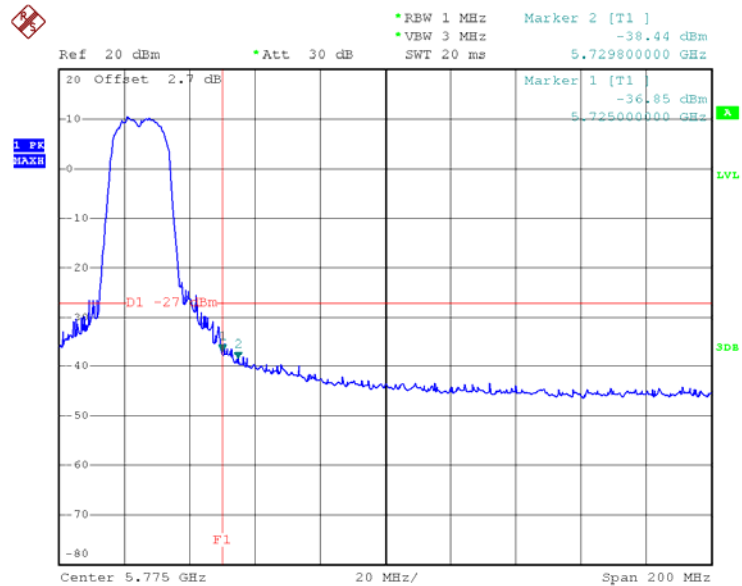
Test Mode : Band 3/TX N20 Mode-ANT 2

TX mode CH100



Date: 7.APR.2014 19:51:13

TX mode CH140

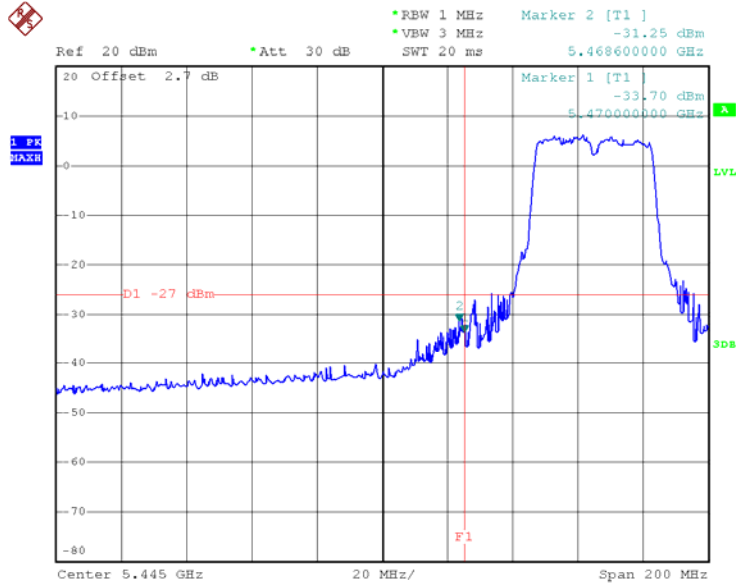


Date: 7.APR.2014 19:53:19



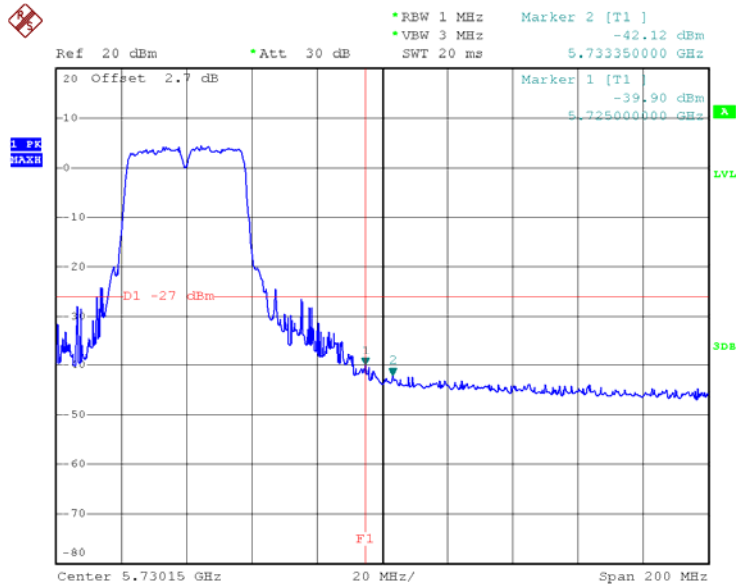
Test Mode : Band 3/TX N40 Mode-ANT 1

TX mode CH102



Date: 7.APR.2014 19:25:25

TX mode CH134

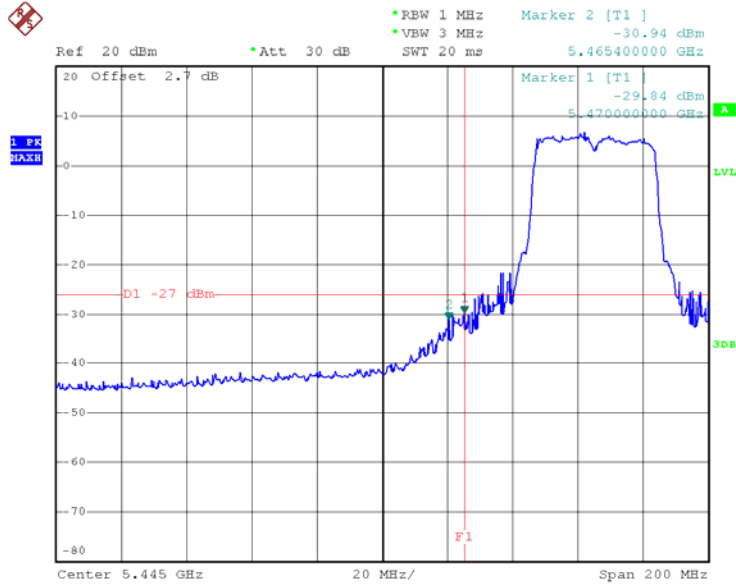


Date: 7.APR.2014 19:24:11



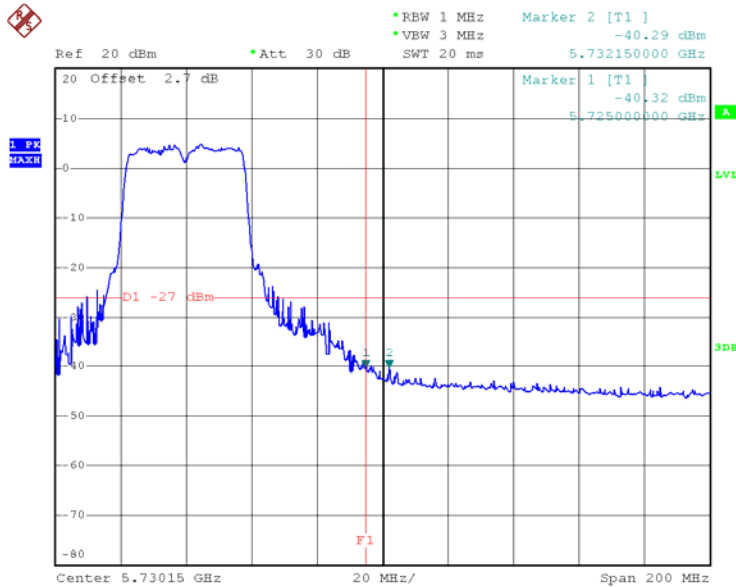
Test Mode : Band 3/TX N40 Mode-ANT 2

TX mode CH102



Date: 7.APR.2014 19:25:11

TX mode CH134



Date: 7.APR.2014 19:23:52



8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	4 dBm	5150 - 5250	PASS
	11 dBm	5250 - 5350	PASS
	11 dBm	5470 - 5725	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.

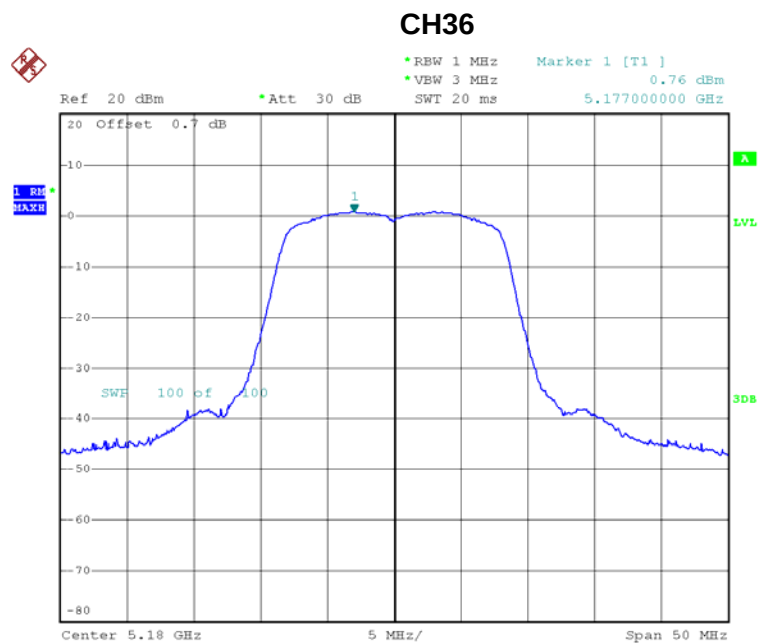
8.1.5 EUT TEST CONDITIONS

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



8.1.6 TEST RESULTS

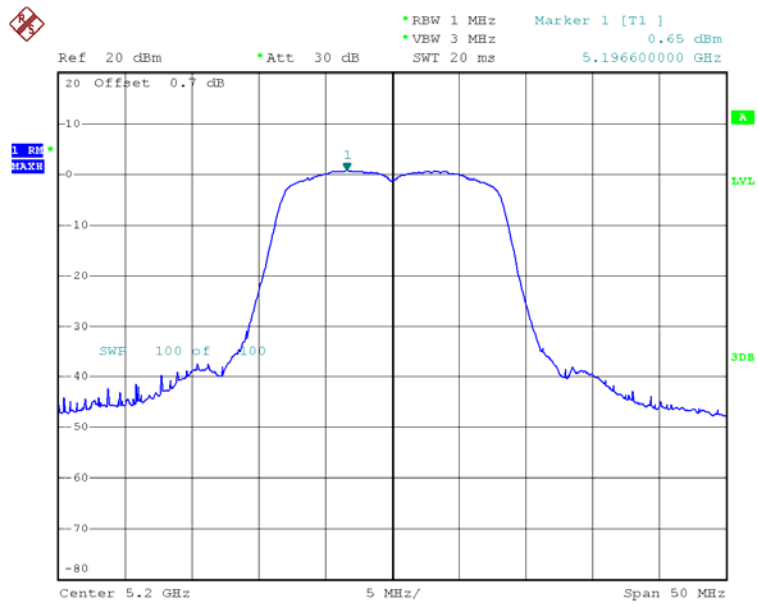
Test Mode : Band 1/TX A Mode_CH36/40/48



Date: 7.APR.2014 20:46:09

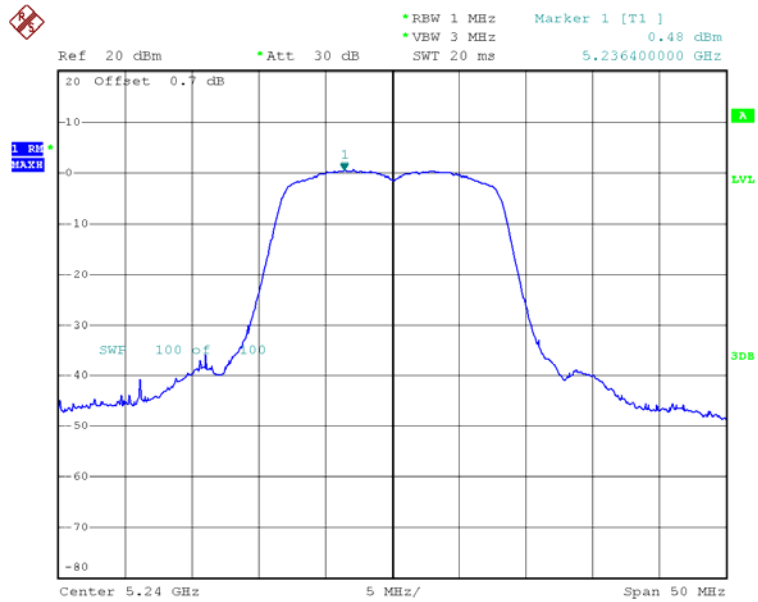


CH40



Date: 7.APR.2014 20:47:42

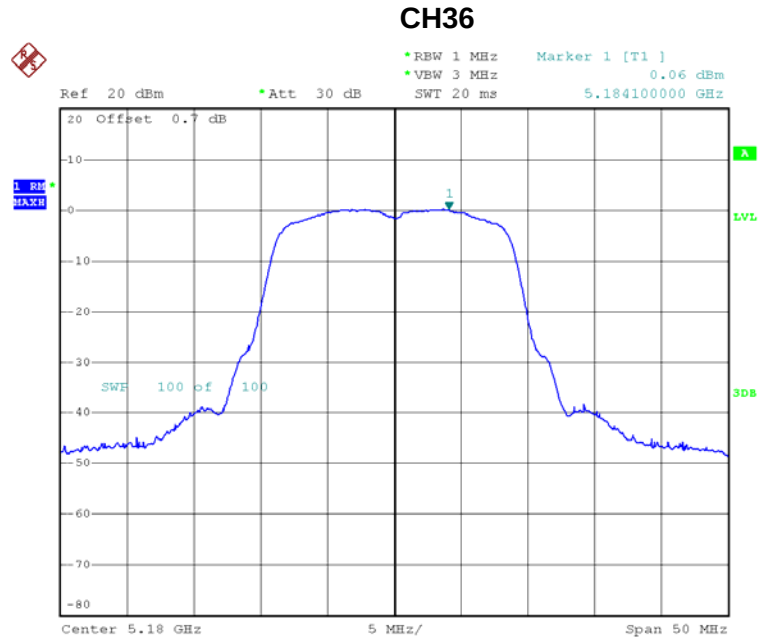
CH48



Date: 7.APR.2014 20:49:38



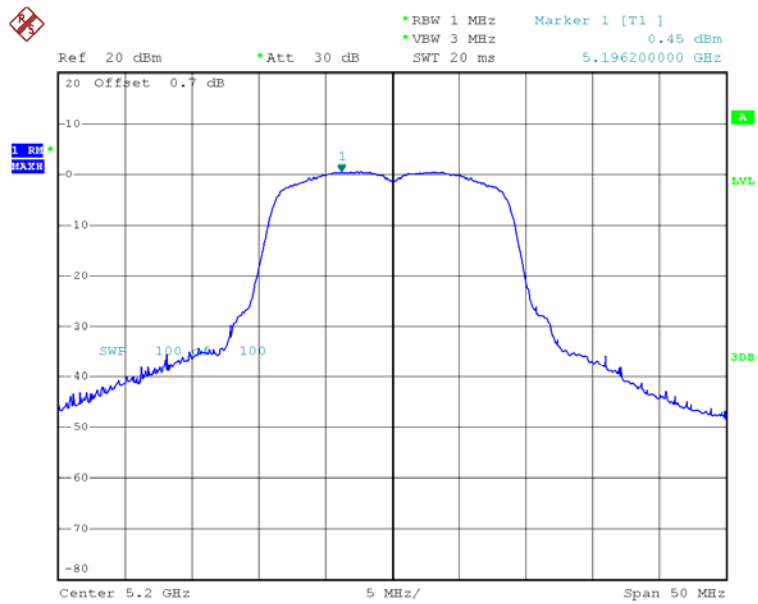
Test Mode : Band 1/TX N20 Mode_CH13/40/48-ANT 1



Date: 7.APR.2014 20:37:25

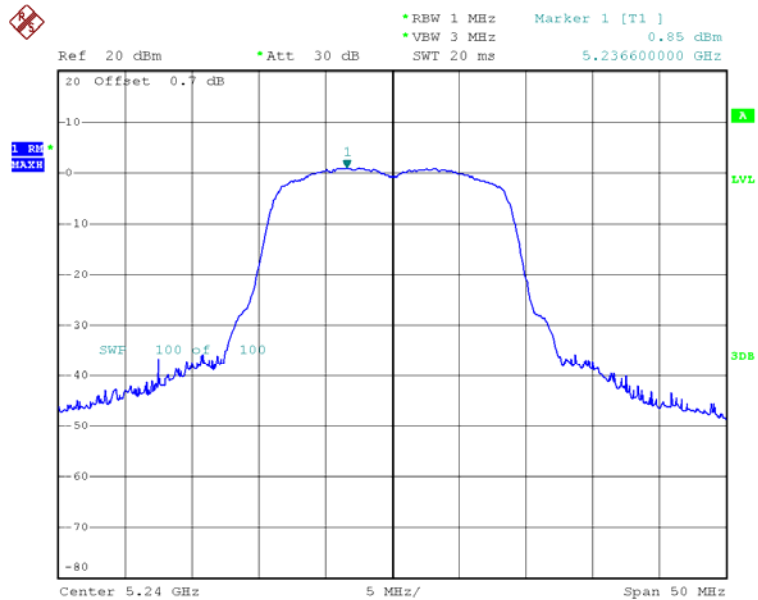


CH40



Date: 7.APR.2014 20:32:37

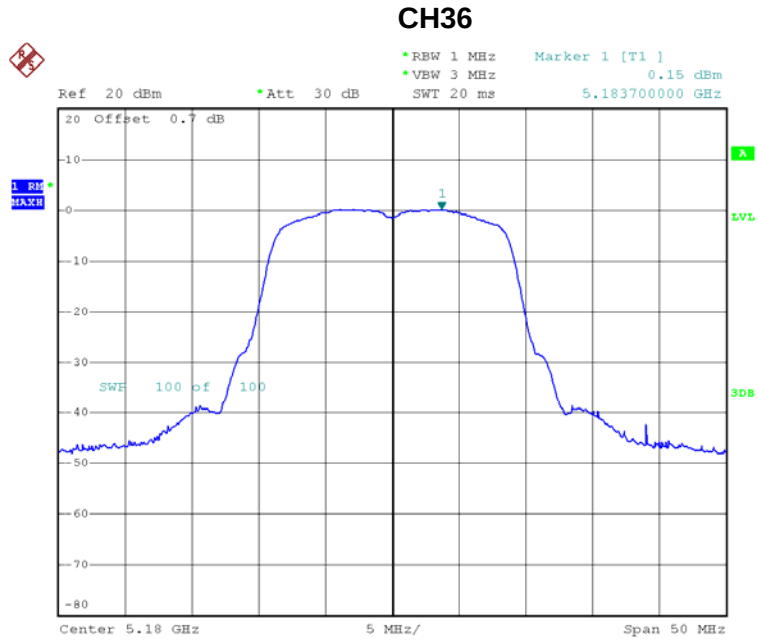
CH48



Date: 7.APR.2014 20:29:05



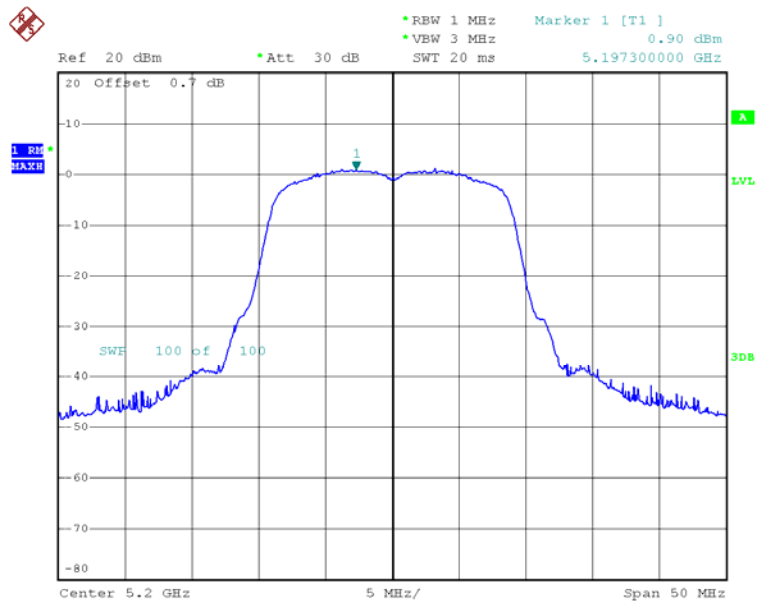
Test Mode : Band 1/TX N20 Mode_CH13/40/48-ANT 2



Date: 7.APR.2014 20:35:56

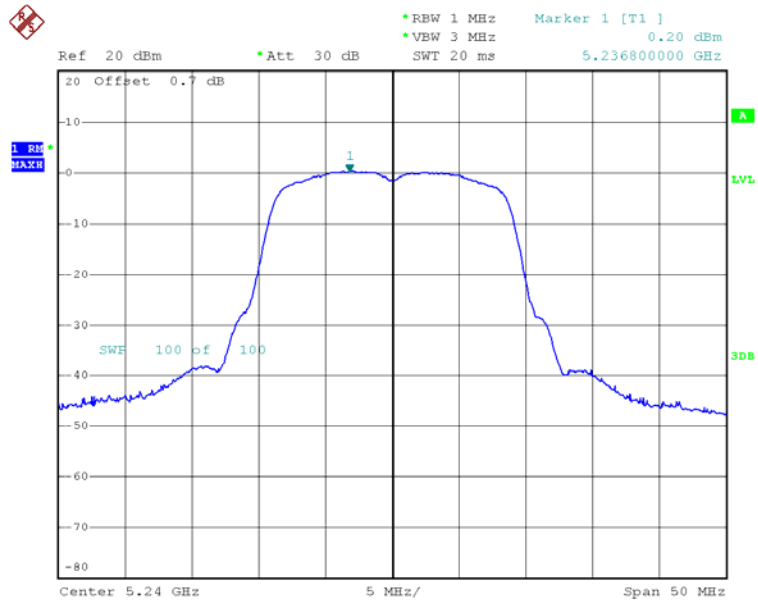


CH40



Date: 7.APR.2014 20:31:35

CH48



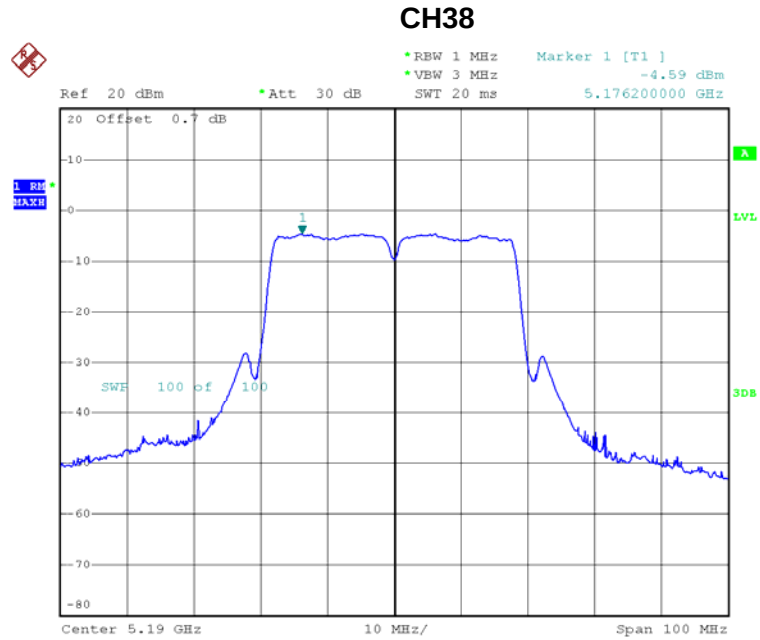
Date: 7.APR.2014 20:27:58



Test Mode : Band 1/TX N20 Mode-Total			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	3.12	4.00
CH40	5200	3.69	4.00
CH48	5240	3.55	4.00



Test Mode : Band 1/TX N40 Mode_CH38/46-ANT 1



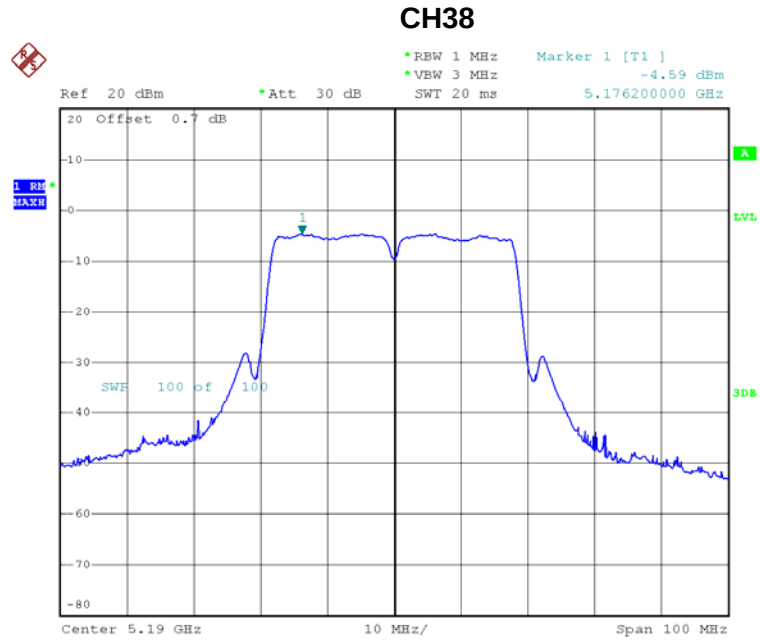
Date: 7.APR.2014 18:48:05



Date: 7.APR.2014 18:44:26



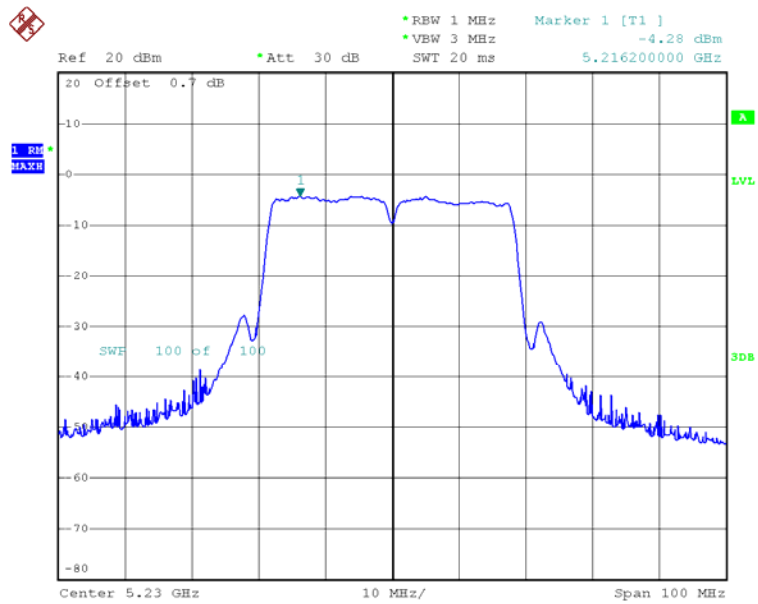
Test Mode : Band 1/TX N40 Mode_CH38/46-ANT 2



Date: 7.APR.2014 18:48:05



CH46



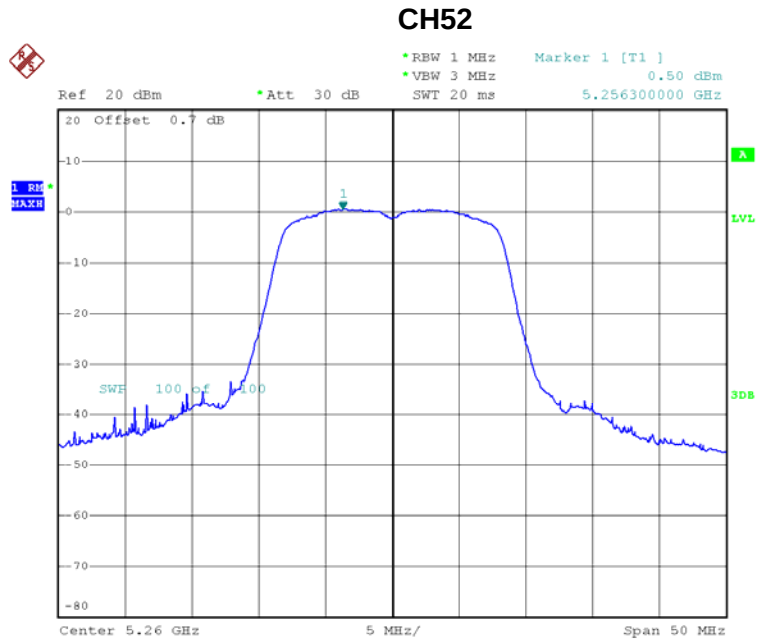
Date: 7.APR.2014 18:56:52



Test Mode : Band 1/TX N40 Mode-Total			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH38	5190	-1.58	4.00
CH46	5230	-1.34	4.00



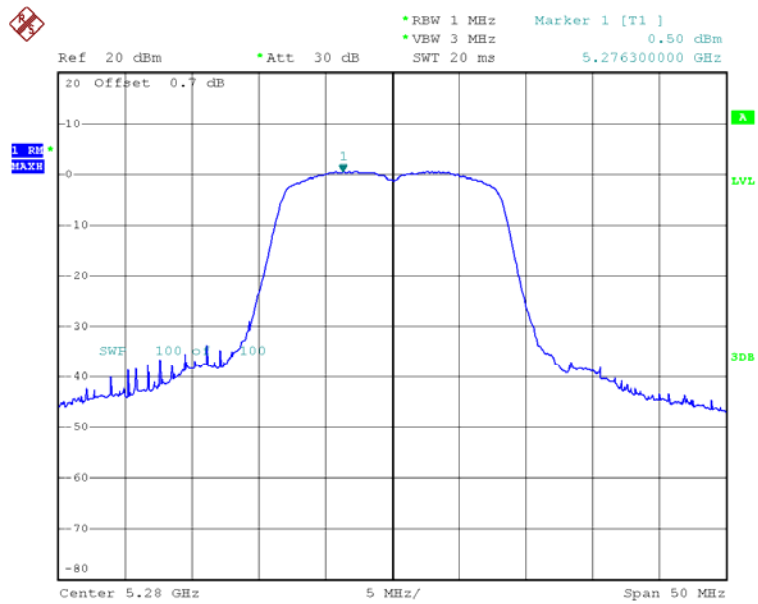
Test Mode : Band 2/TX A Mode_CH52/56/64



Date: 7.APR.2014 20:50:51

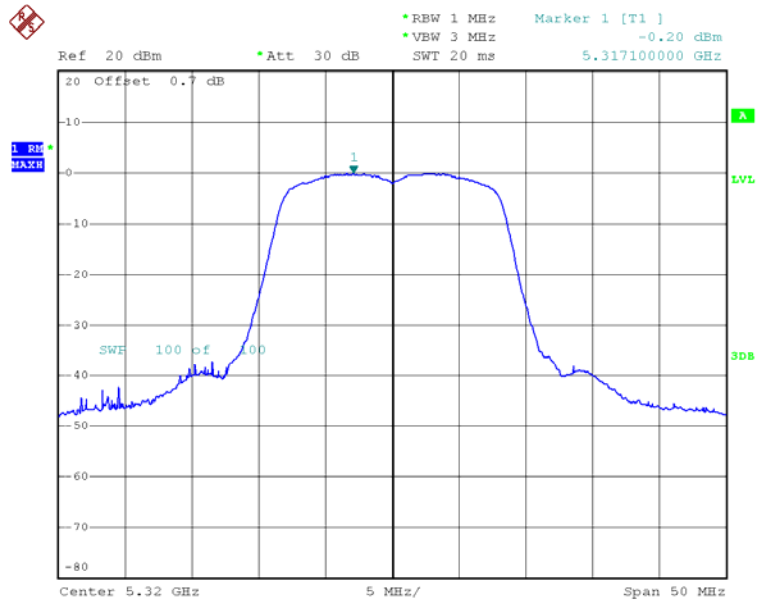


CH56



Date: 7.APR.2014 20:52:27

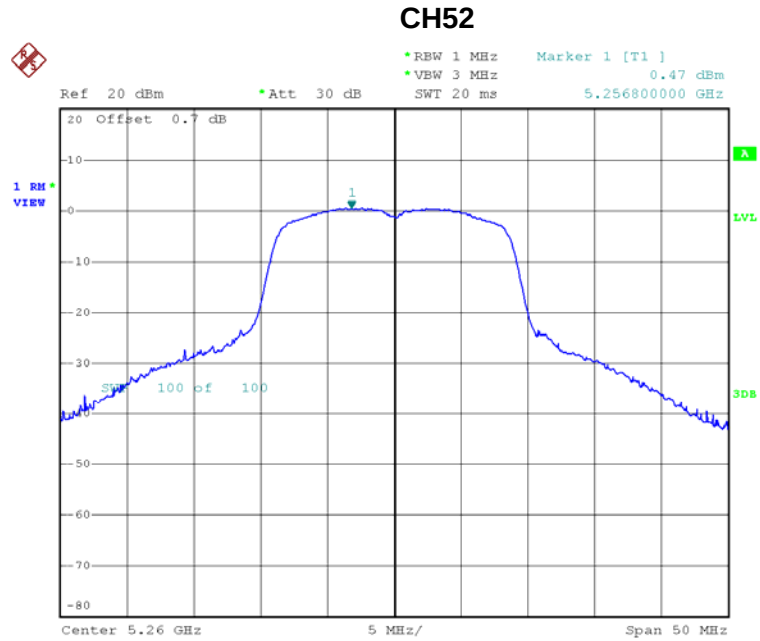
CH64



Date: 7.APR.2014 20:54:32



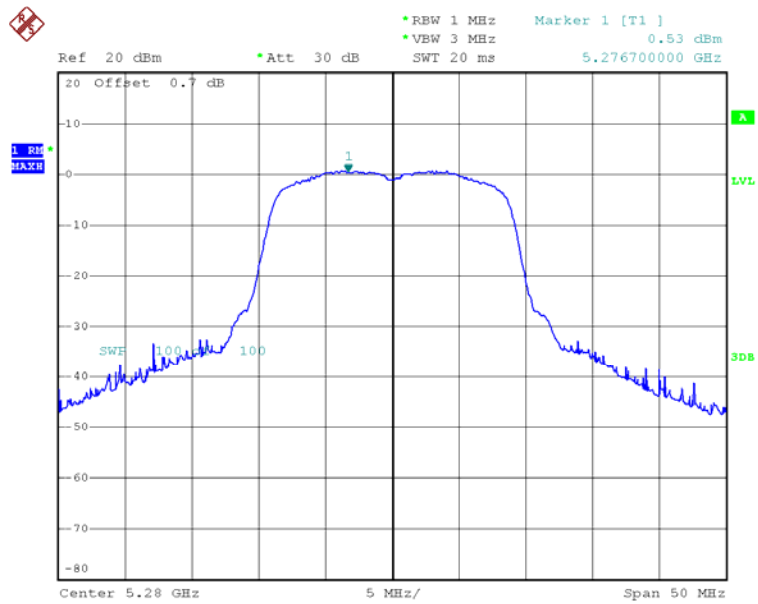
Test Mode : Band 2/TX N20 Mode_CH52/56/64-ANT 1



Date: 7.APR.2014 20:26:30

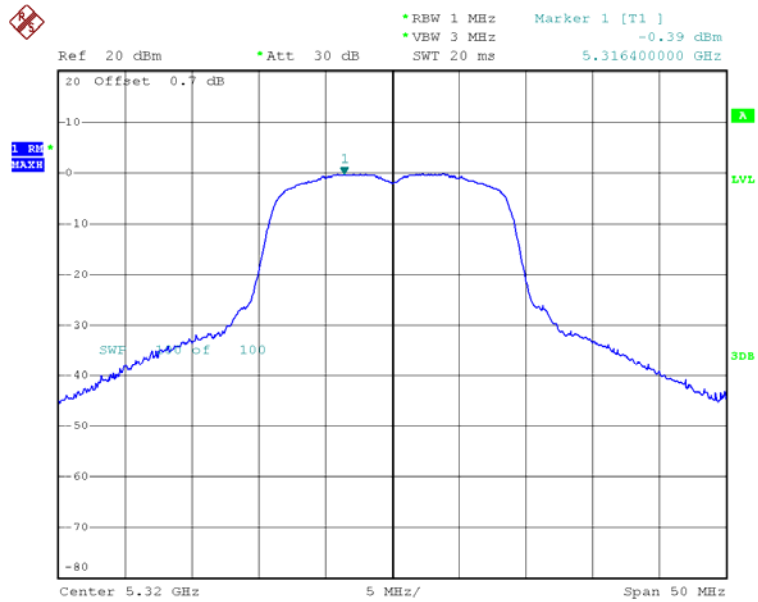


CH56



Date: 7.APR.2014 20:19:10

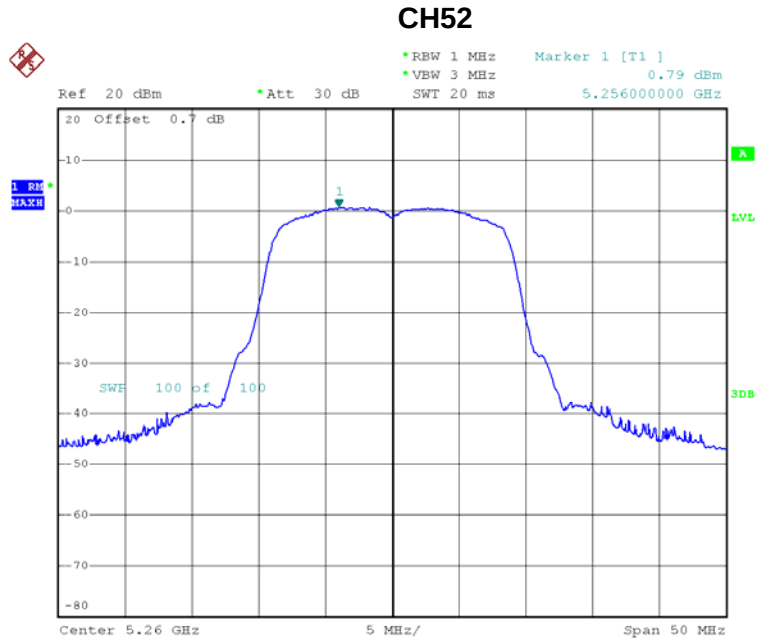
CH64



Date: 7.APR.2014 20:15:00



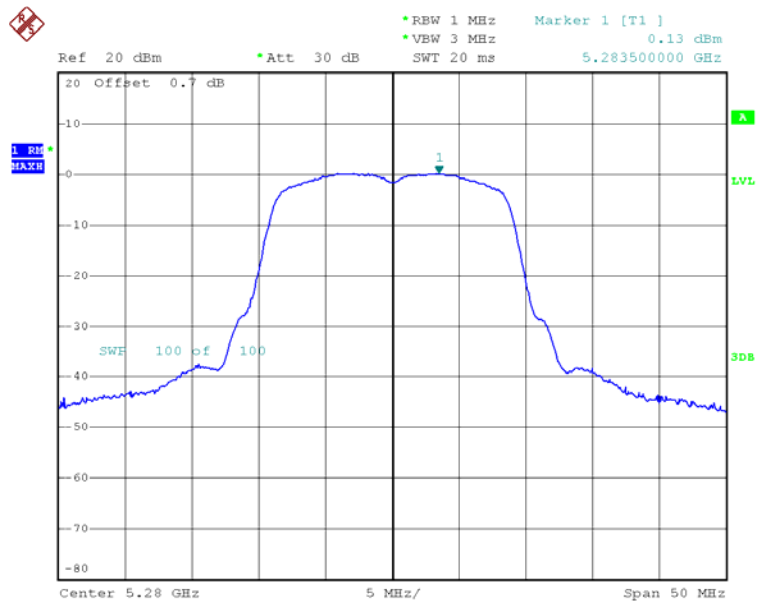
Test Mode : Band 2/TX N20 Mode_CH52/56/64-ANT 2



Date: 7.APR.2014 20:25:18

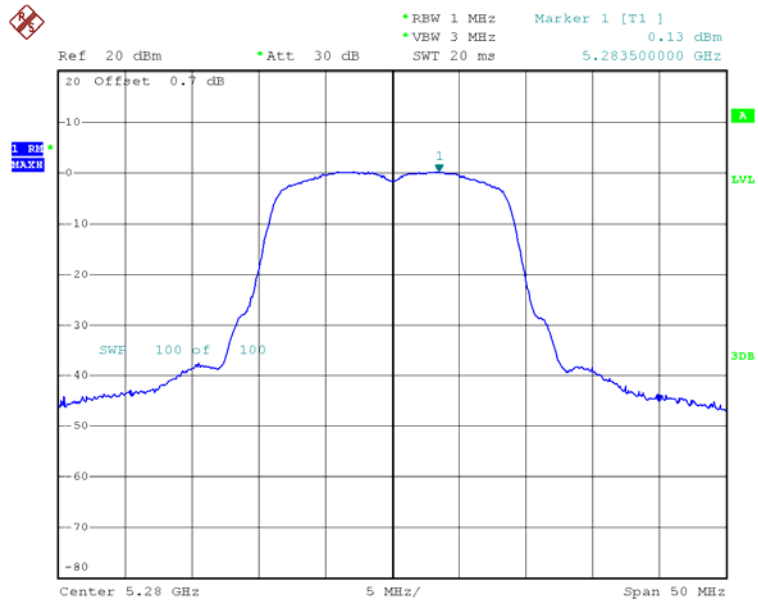


CH56



Date: 7.APR.2014 20:17:07

CH64



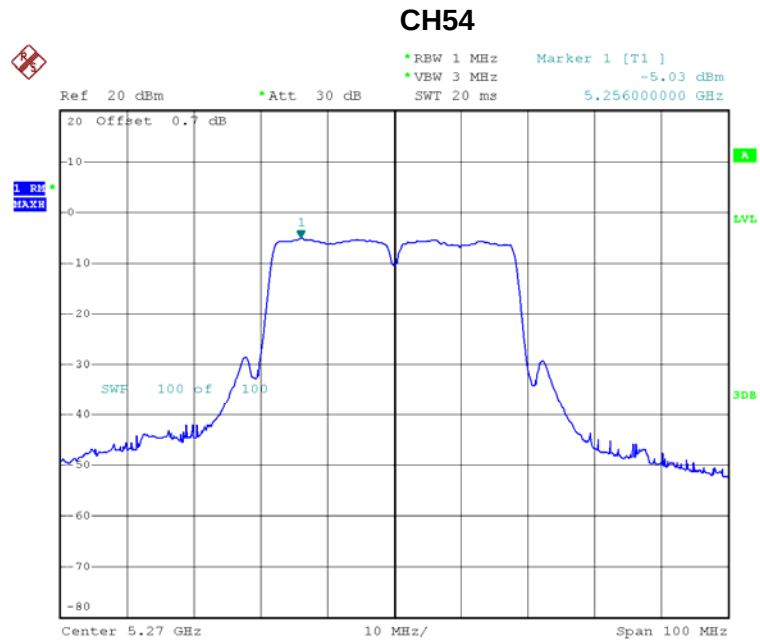
Date: 7.APR.2014 20:17:07



Test Mode : Band 2/TX N20 Mode-Total			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	3.64	11
CH56	5280	3.34	11
CH64	5320	2.87	11



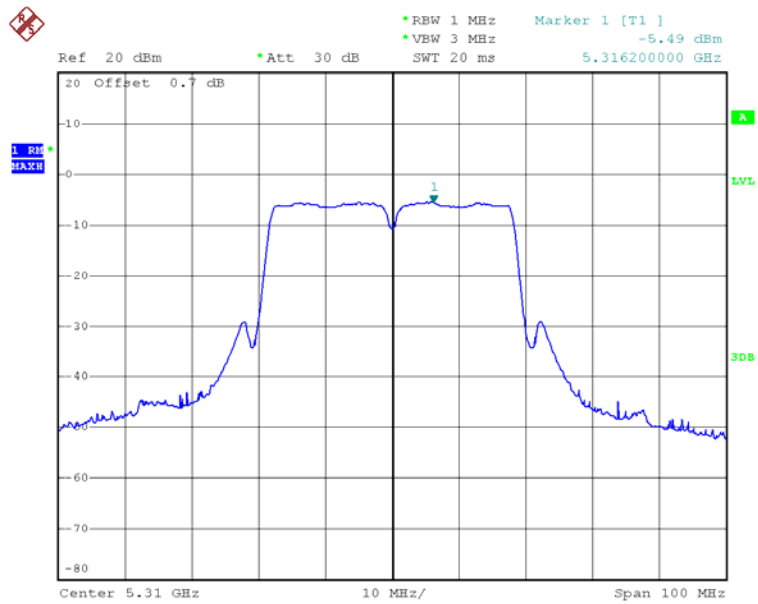
Test Mode : Band 2/TX N40 Mode_CH54/62-ANT 1



Date: 7.APR.2014 18:42:52



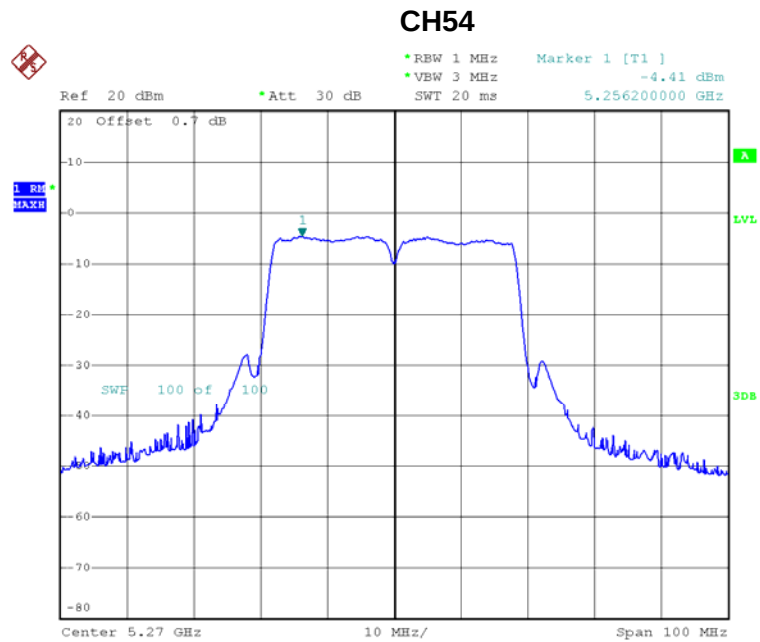
CH62



Date: 7.APR.2014 18:34:58



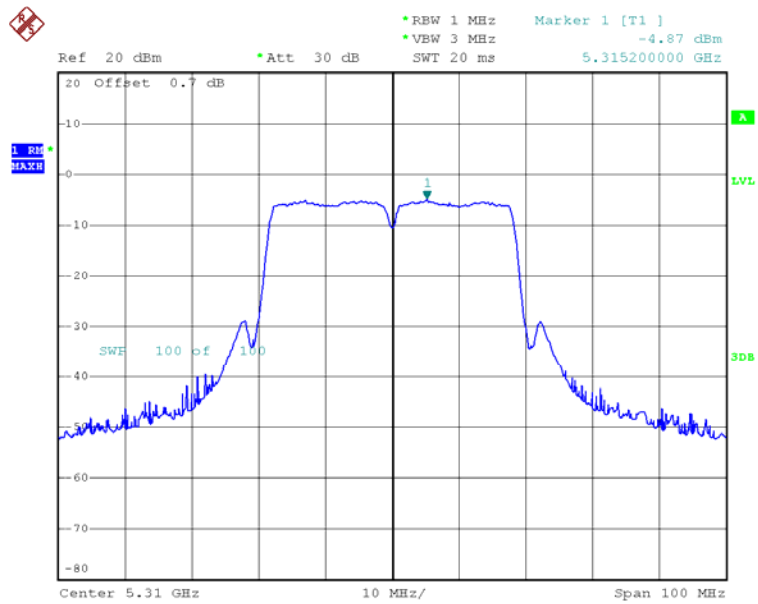
Test Mode : Band 2/TX N40 Mode_CH54/62-ANT 2



Date: 7.APR.2014 18:58:28



CH62



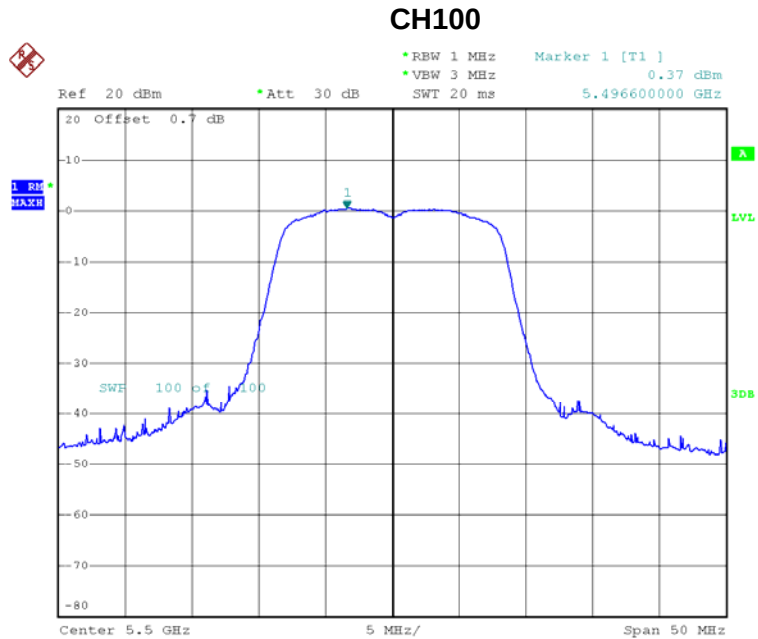
Date: 7.APR.2014 19:00:19



Test Mode : Band 2/TX N40 Mode-Total			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	-1.70	11
CH62	5310	-2.16	11



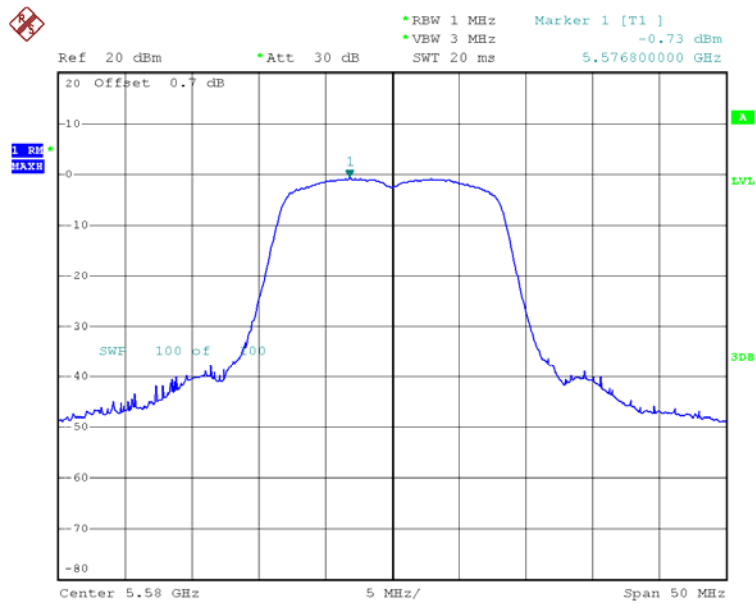
Test Mode : Band 3/TX A Mode_CH100/116/140



Date: 7.APR.2014 20:56:19

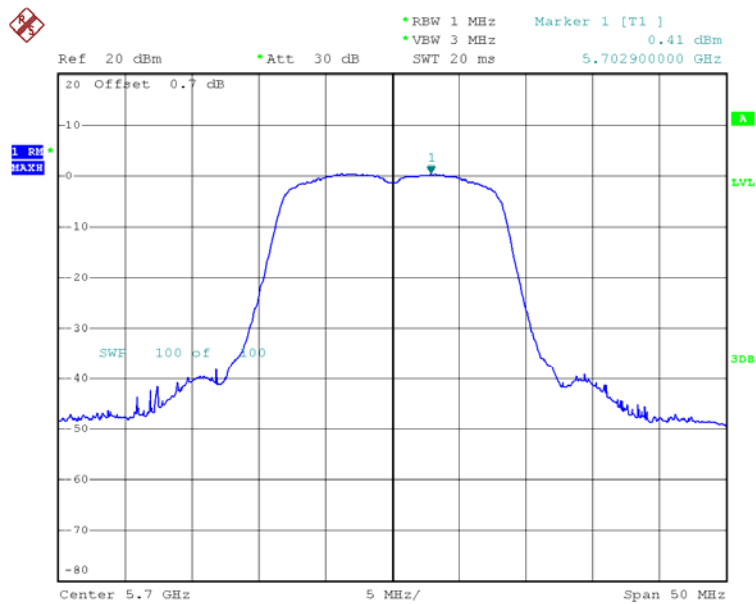


CH116



Date: 7.APR.2014 21:01:19

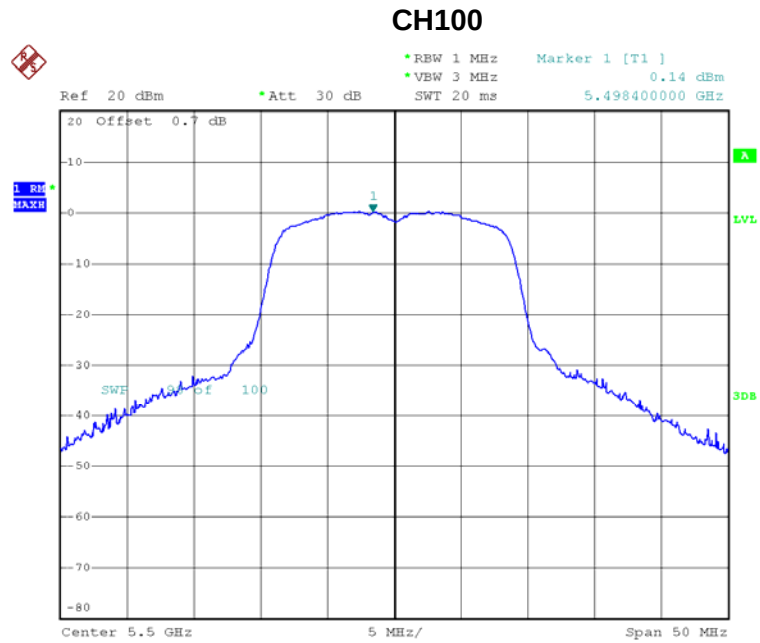
CH140



Date: 7.APR.2014 21:03:08



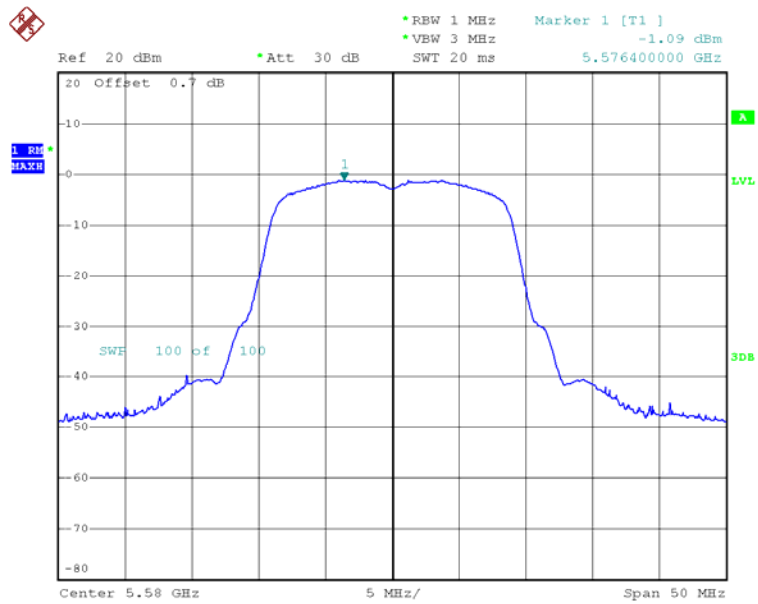
Test Mode : Band 3/TX N20 Mode_CH100/116/140-ANT 1



Date: 7.APR.2014 20:11:02

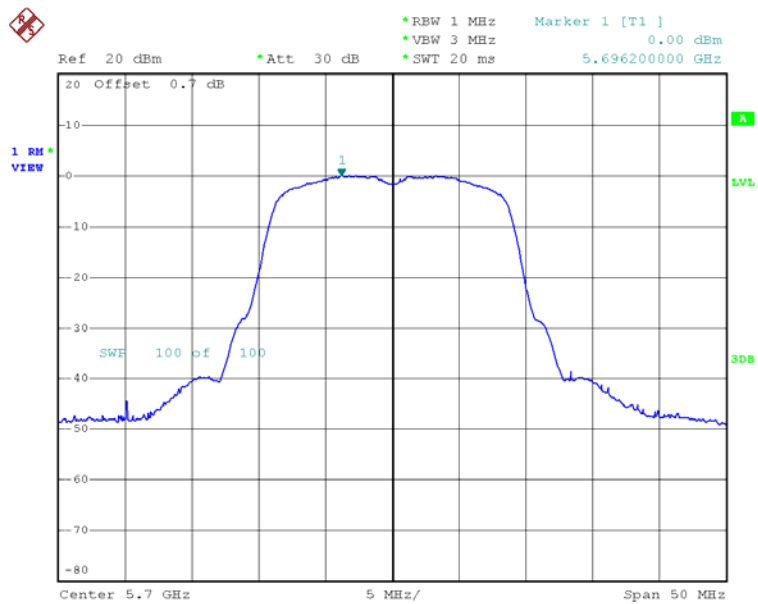


CH116



Date: 7.APR.2014 20:07:16

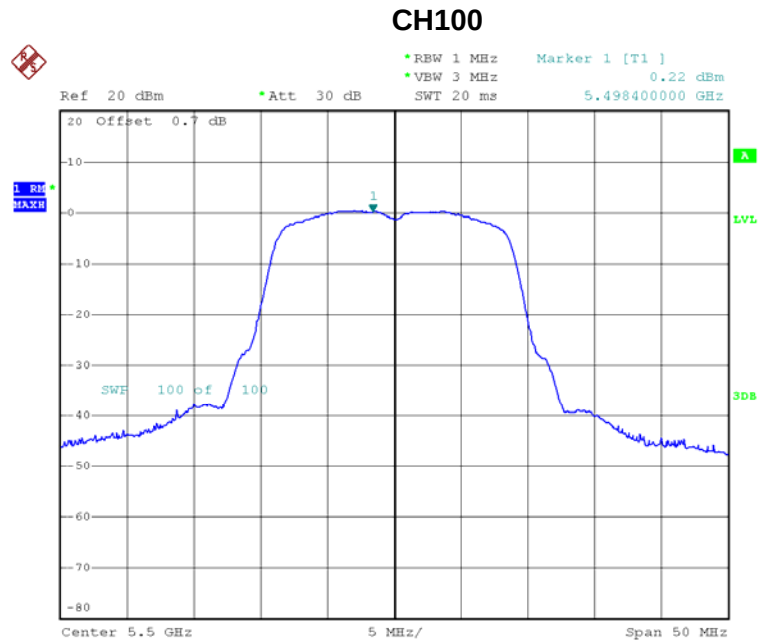
CH140



Date: 7.APR.2014 20:02:46



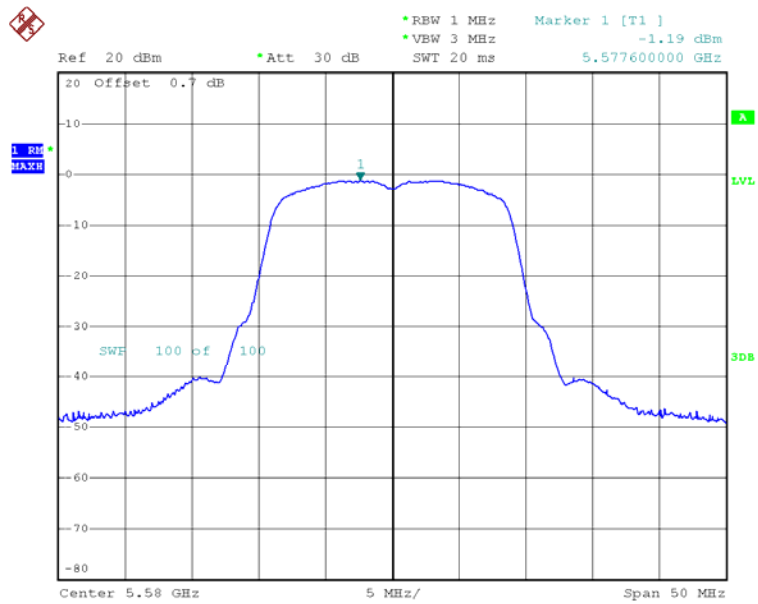
Test Mode : Band 3/TX N20 Mode_CH100/116/140-ANT 2



Date: 7.APR.2014 20:10:09

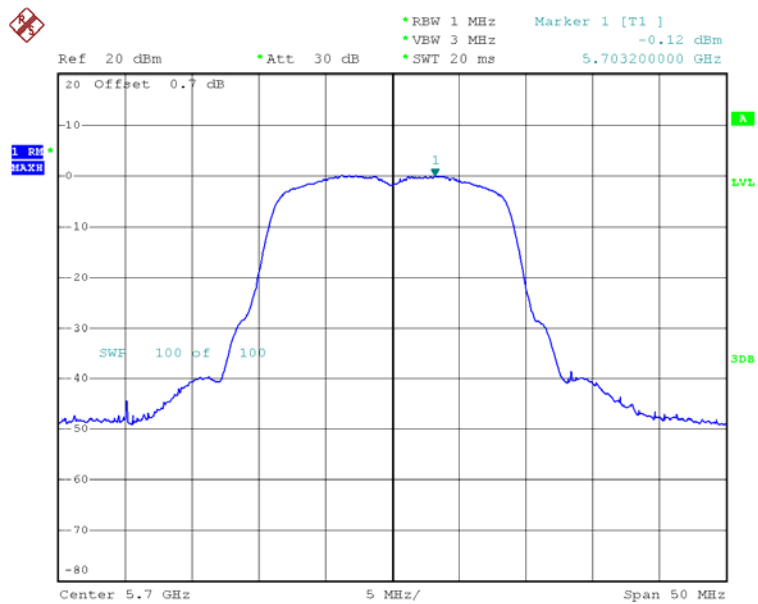


CH116



Date: 7.APR.2014 20:06:30

CH140



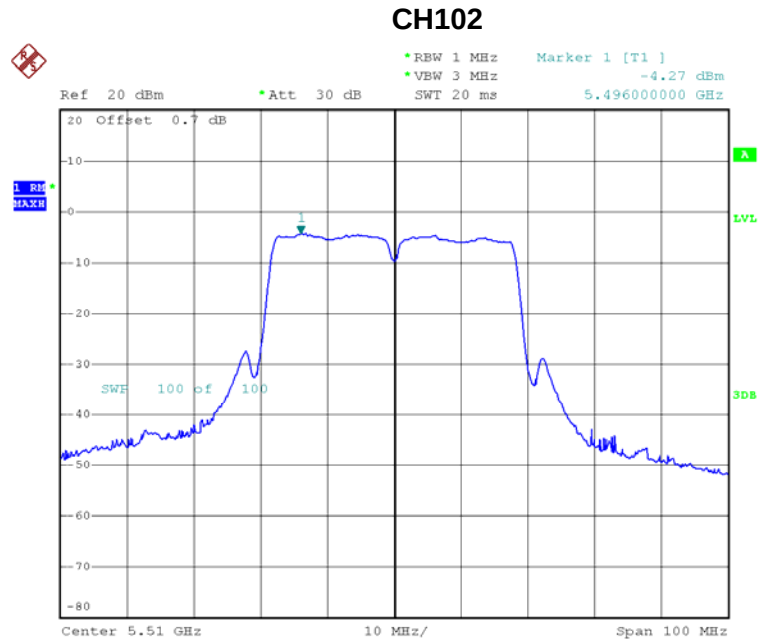
Date: 7.APR.2014 20:00:49



Test Mode : Band 3/TX N20 Mode-Total			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	3.19	11
CH116	5580	1.87	11
CH140	5700	2.95	11



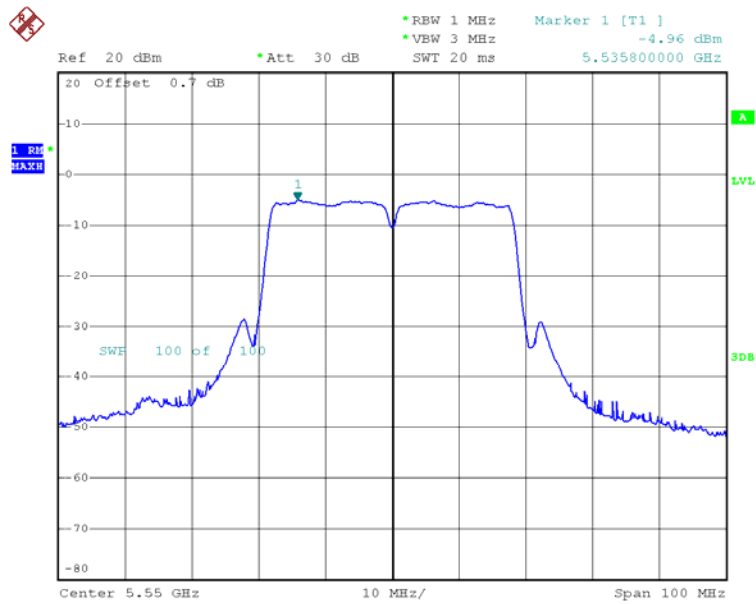
Test Mode : Band 3/TX N40 Mode_CH102/110/134-ANT 1



Date: 7.APR.2014 18:21:43

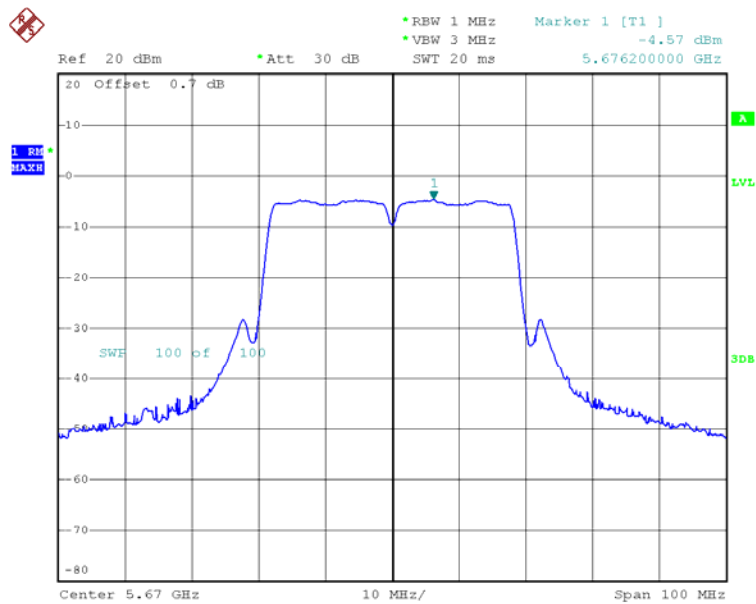


CH110



Date: 7.APR.2014 18:17:41

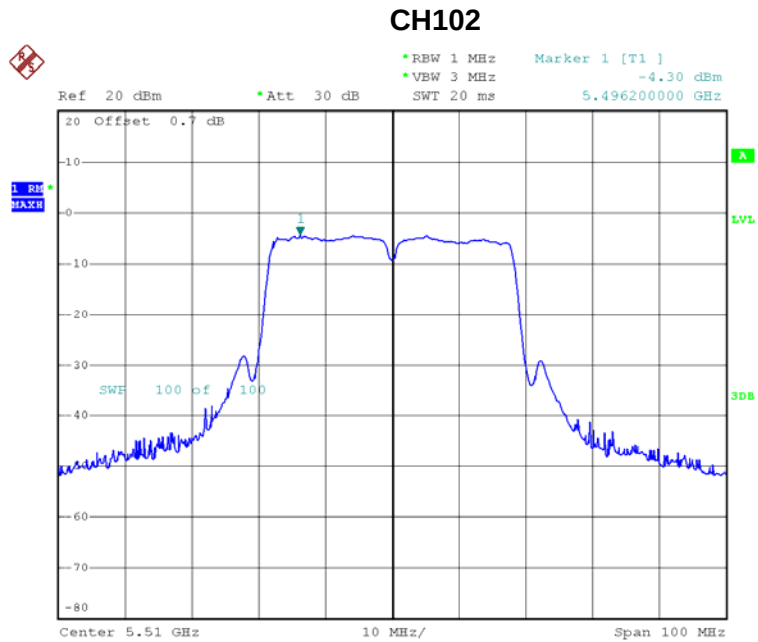
CH134



Date: 7.APR.2014 18:11:54



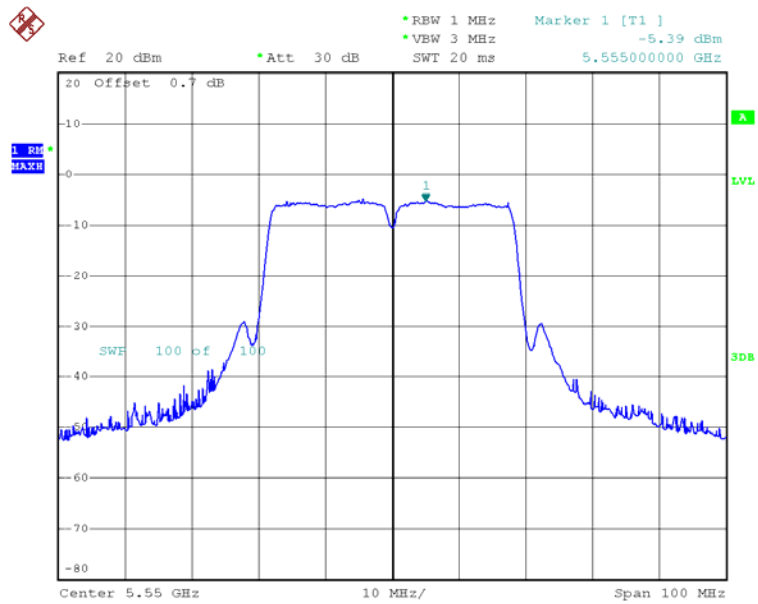
Test Mode : Band 3/TX N40 Mode_CH102/110/134-ANT 2



Date: 7.APR.2014 19:06:31

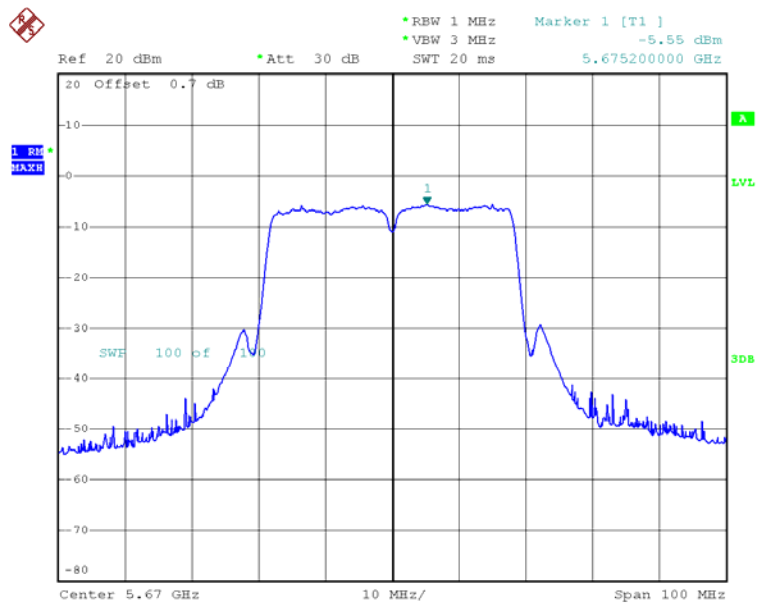


CH110



Date: 7.APR.2014 19:11:22

CH134



Date: 7.APR.2014 19:16:10



Test Mode : Band 3/TX N40 Mode-Total			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	-1.27	11
CH110	5550	-2.16	11
CH134	5670	-2.02	11



9. PEAK EXCURSION MEASUREMENT

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Peak Excursion Measurement	13 dB	5150 - 5250	PASS
		5250 - 5350	PASS
		5470 - 5725	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

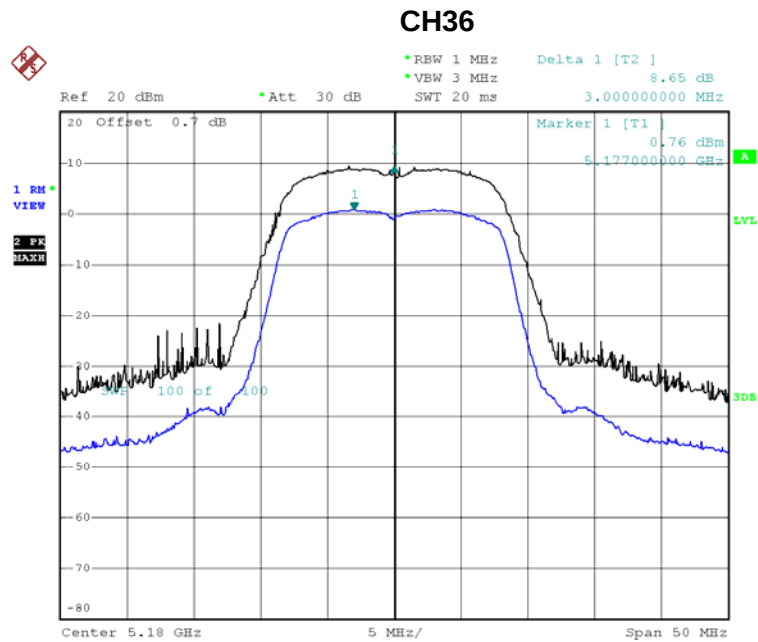
Relative Humidity: 55%

Test Voltage: DC 3.7V



9.1.6 TEST RESULTS

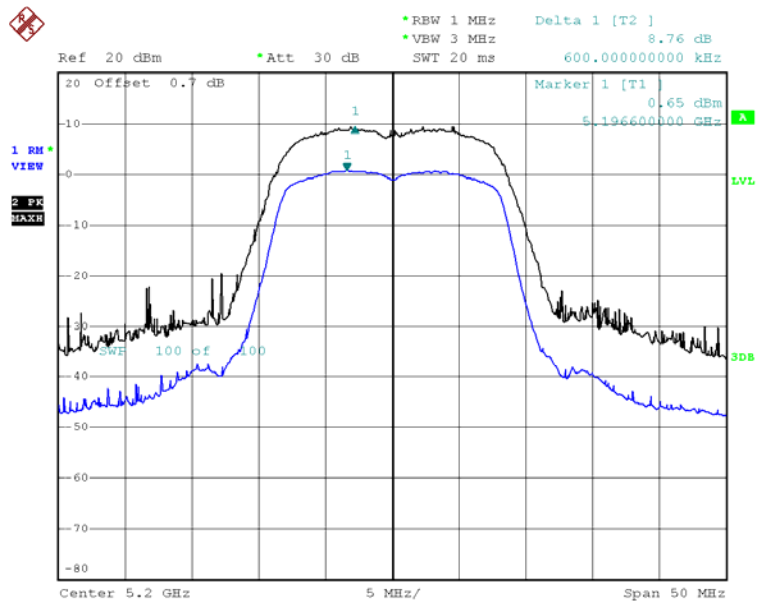
Test Mode :Band 1/TX A Mode_CH36/40/48



Date: 7.APR.2014 20:46:28

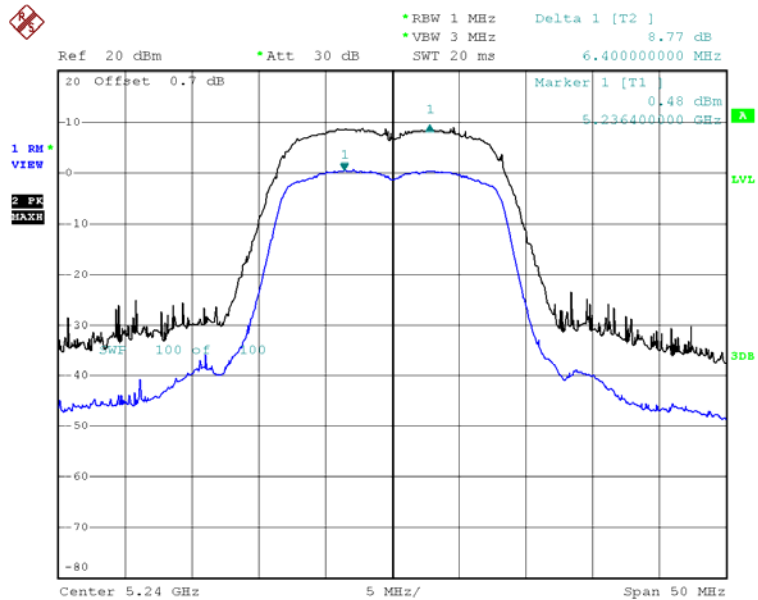


CH40



Date: 7.APR.2014 20:47:54

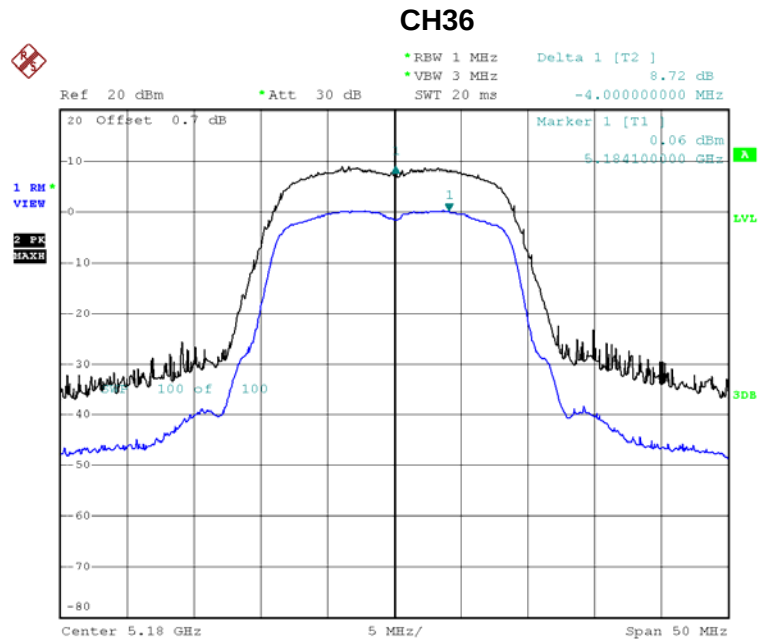
CH48



Date: 7.APR.2014 20:49:48



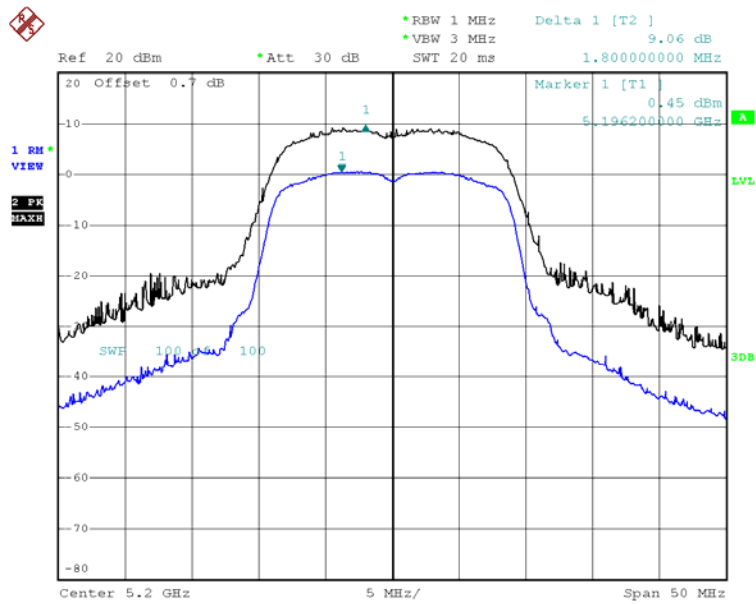
Test Mode :Band 1/TX N20 Mode_CH36/40/48-ANT 1



Date: 7.APR.2014 20:37:40

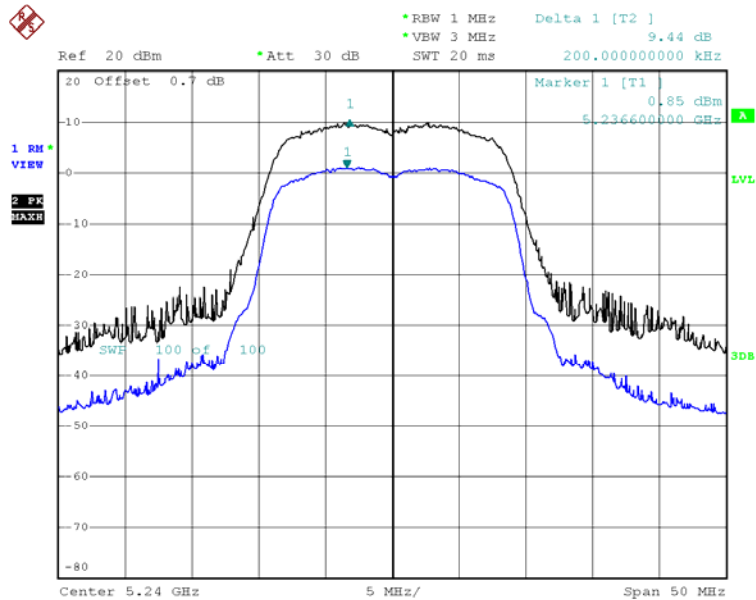


CH40



Date: 7.APR.2014 20:32:53

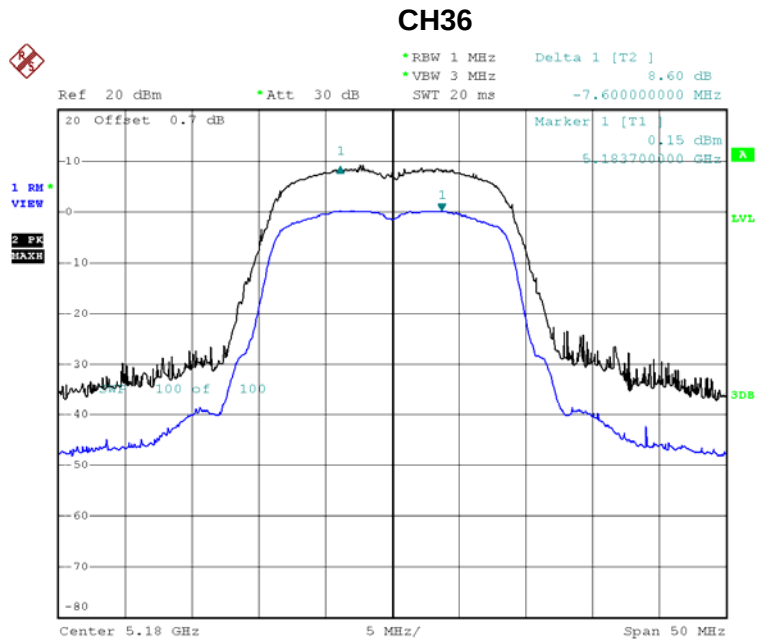
CH48



Date: 7.APR.2014 20:29:20



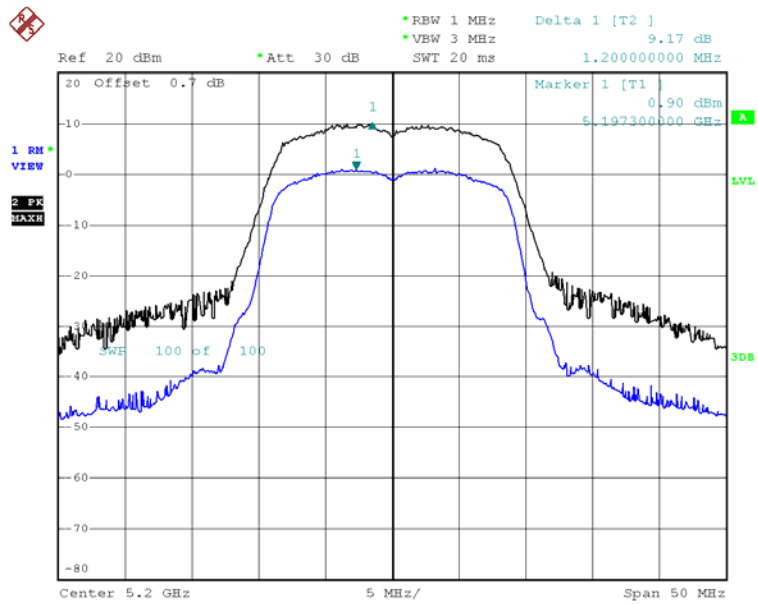
Test Mode :Band 1/TX N20 Mode_CH36/40/48-ANT 2



Date: 7.APR.2014 20:36:08

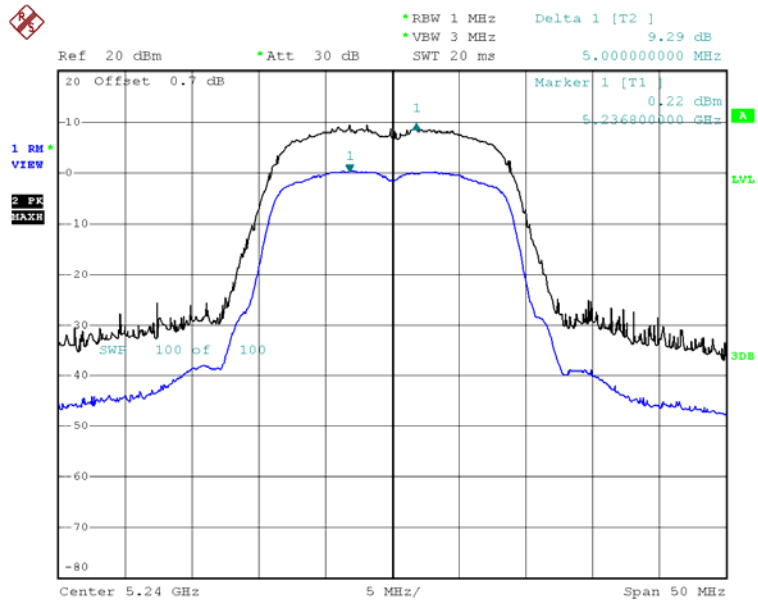


CH40



Date: 7.APR.2014 20:32:12

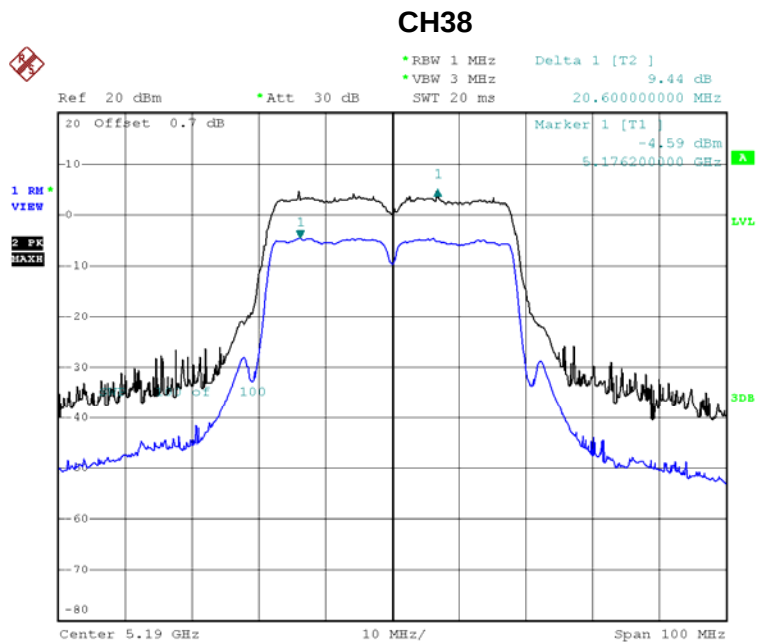
CH48



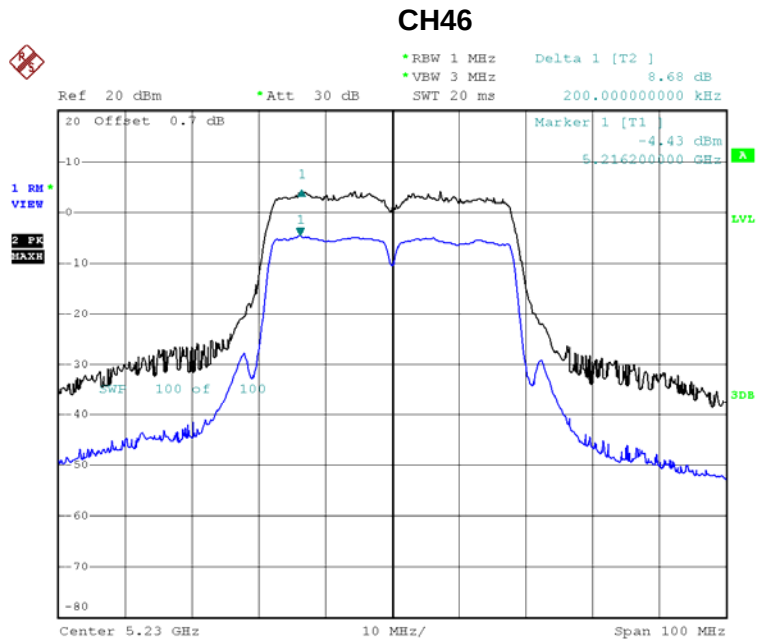
Date: 7.APR.2014 20:28:10



Test Mode :Band 1/TX N40 Mode_CH38/46-ANT 1



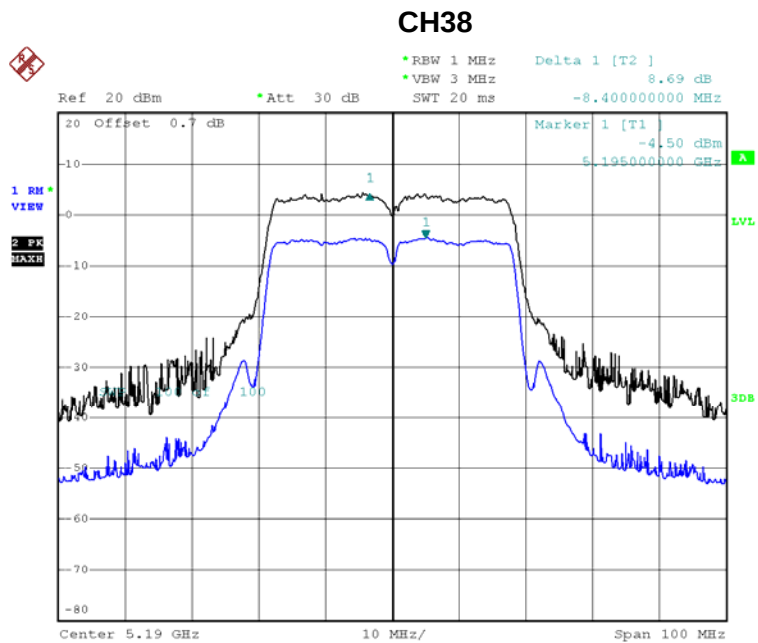
Date: 7.APR.2014 18:48:21



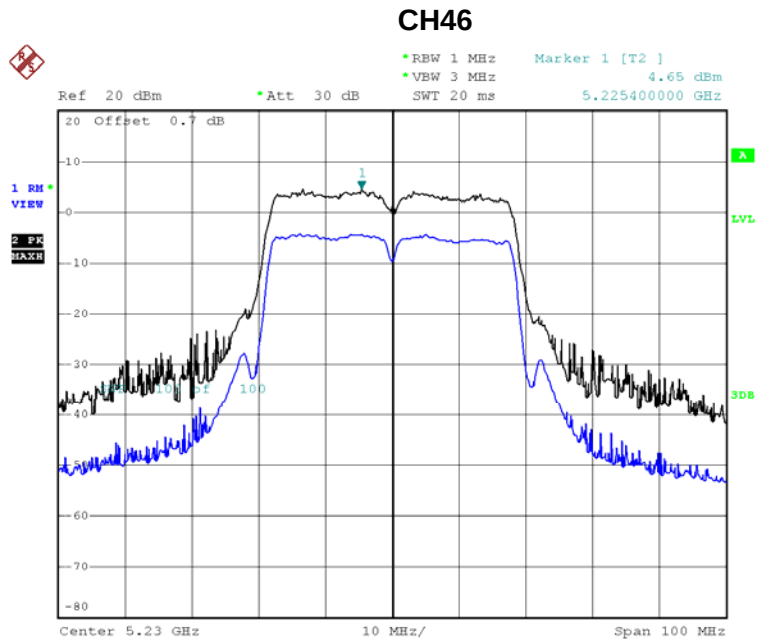
Date: 7.APR.2014 18:45:23



Test Mode :Band 1/TX N40 Mode_CH38/46-ANT 2



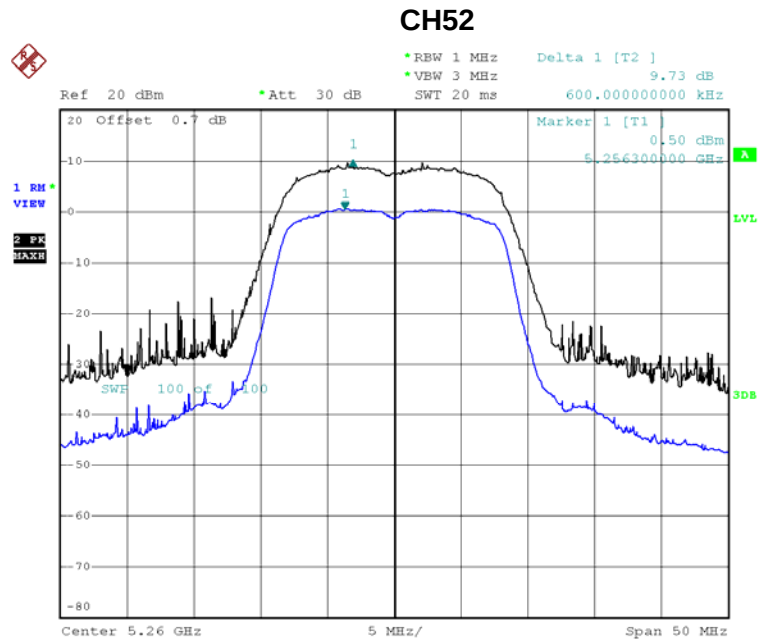
Date: 7.APR.2014 18:53:17



Date: 7.APR.2014 18:57:05



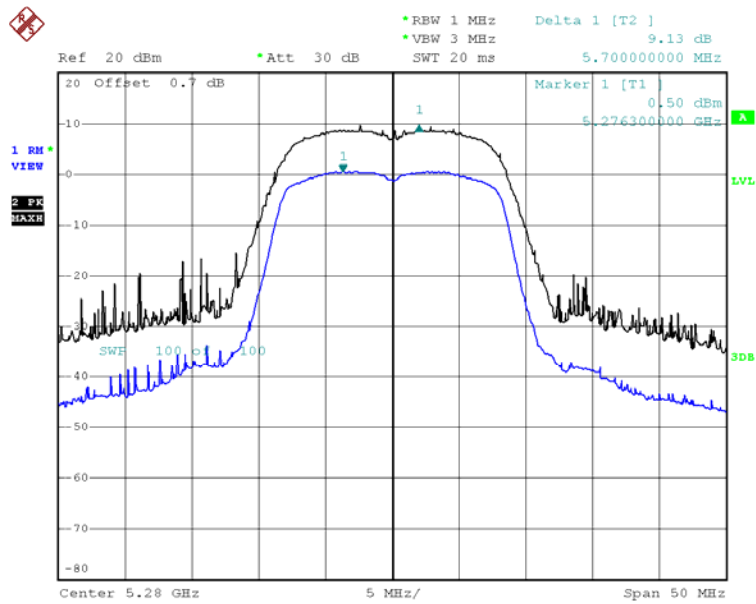
Test Mode :Band 2/TX A Mode_CH52/56/64



Date: 7.APR.2014 20:51:03

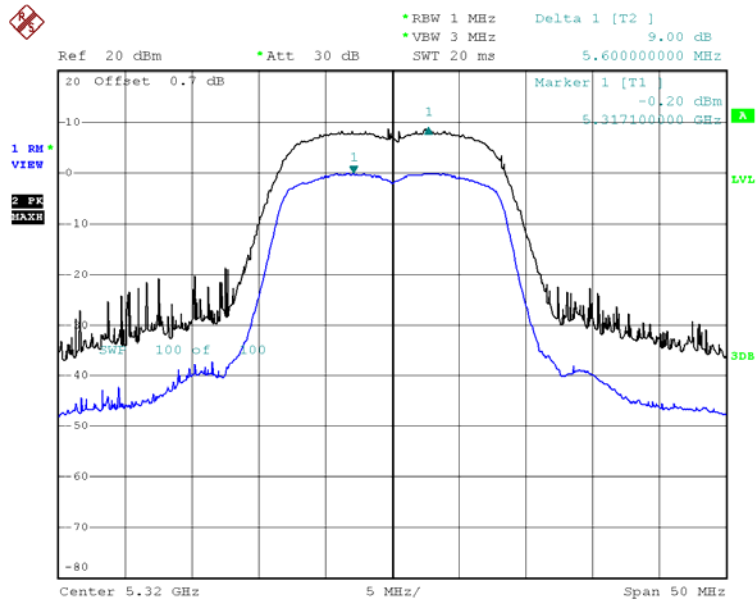


CH56



Date: 7.APR.2014 20:52:37

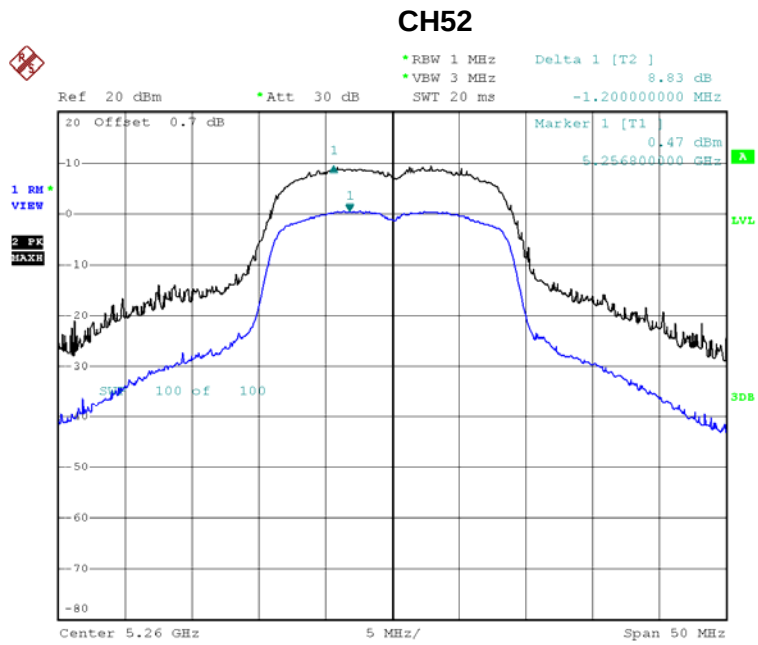
CH64



Date: 7.APR.2014 20:54:46



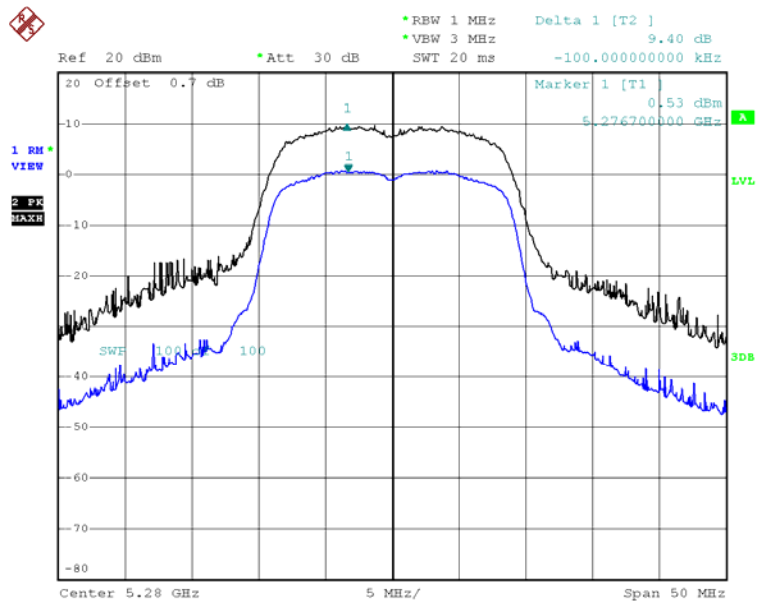
Test Mode :Band 2/TX N20 Mode_CH52/56/64-ANT 1



Date: 7.APR.2014 20:26:07

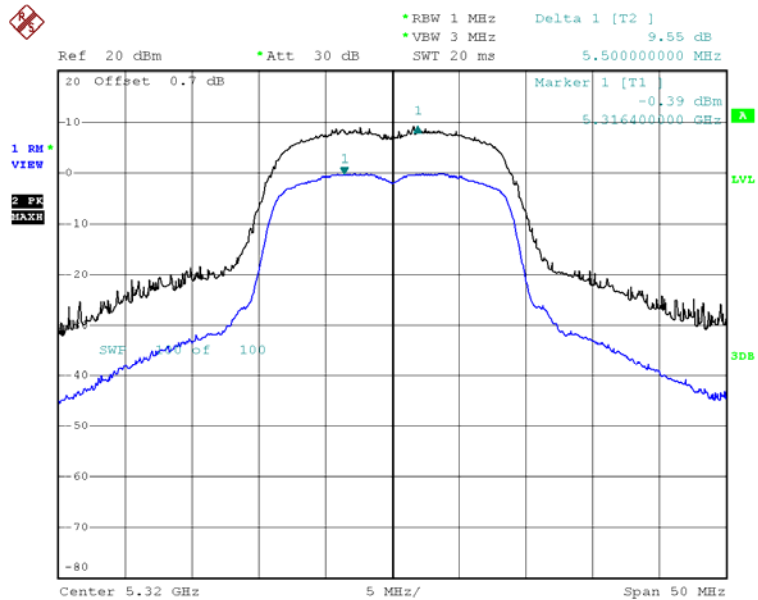


CH56



Date: 7.APR.2014 20:19:30

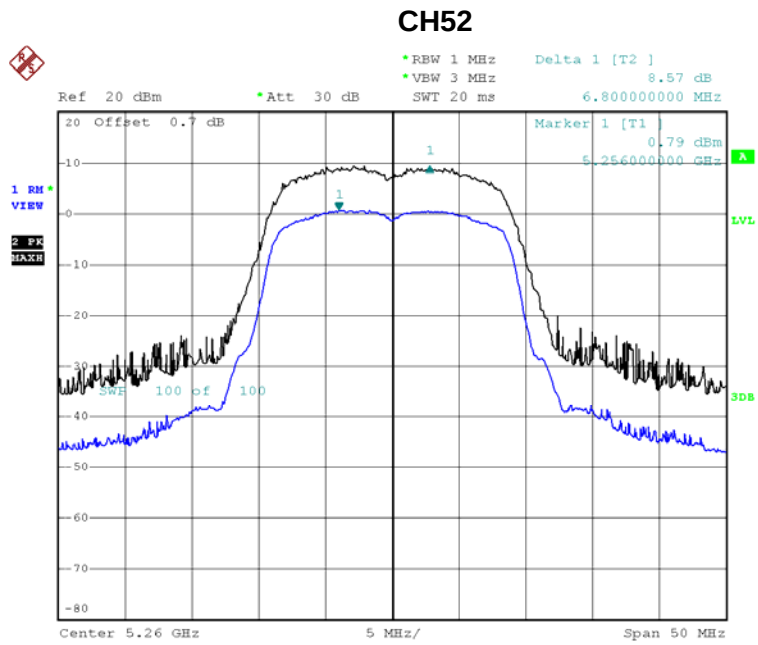
CH64



Date: 7.APR.2014 20:15:14



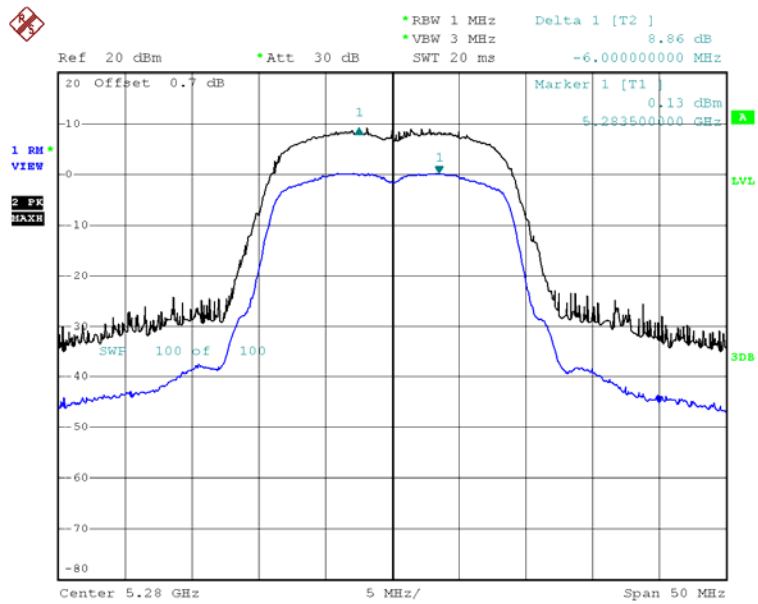
Test Mode :Band 2/TX N20 Mode_CH52/56/64-ANT 2



Date: 7.APR.2014 20:25:30

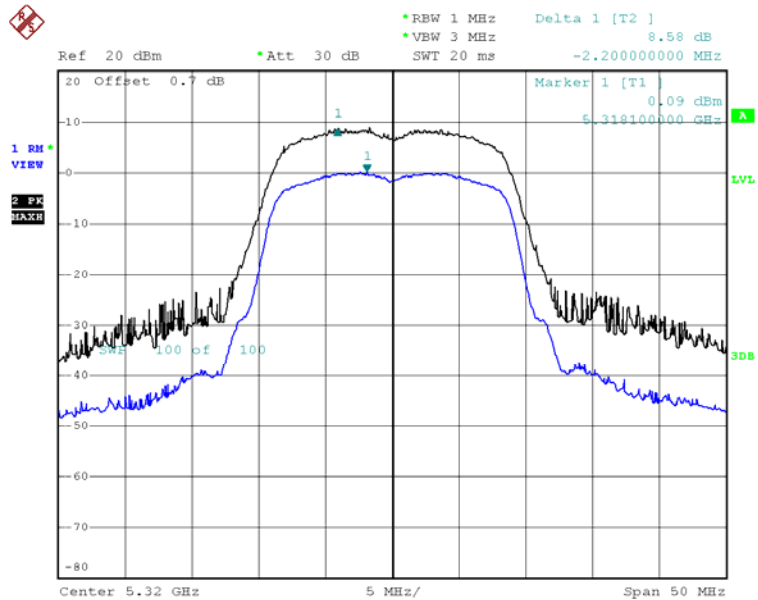


CH56



Date: 7.APR.2014 20:17:18

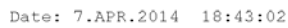
CH64

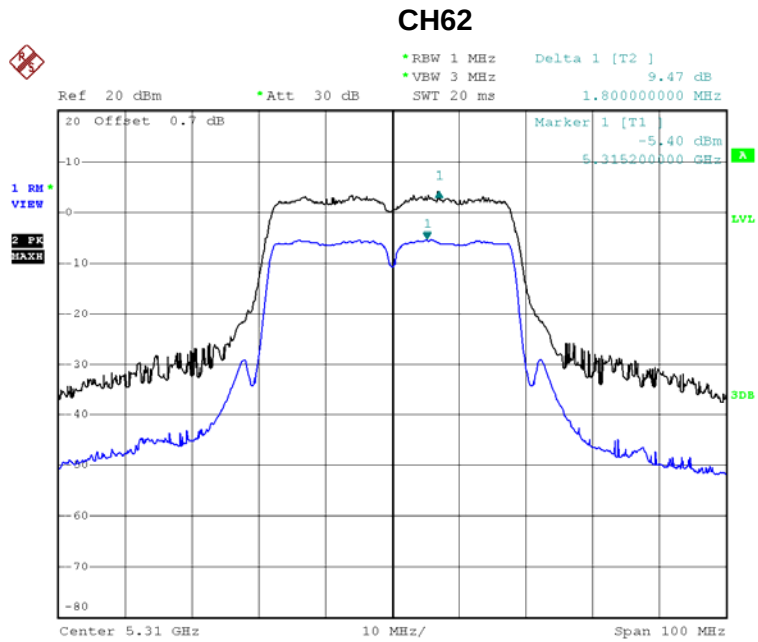


Date: 7.APR.2014 20:14:42



CH54



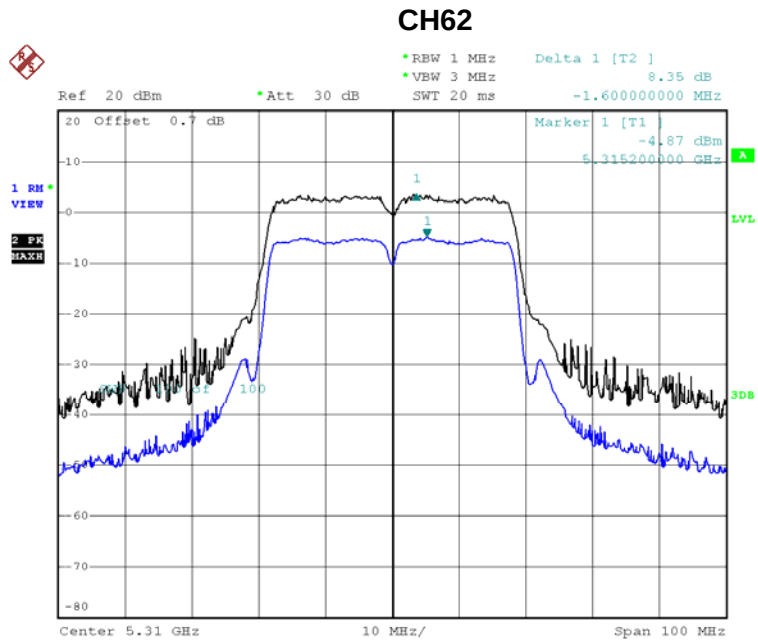


Date: 7.APR.2014 18:35:46



CH54

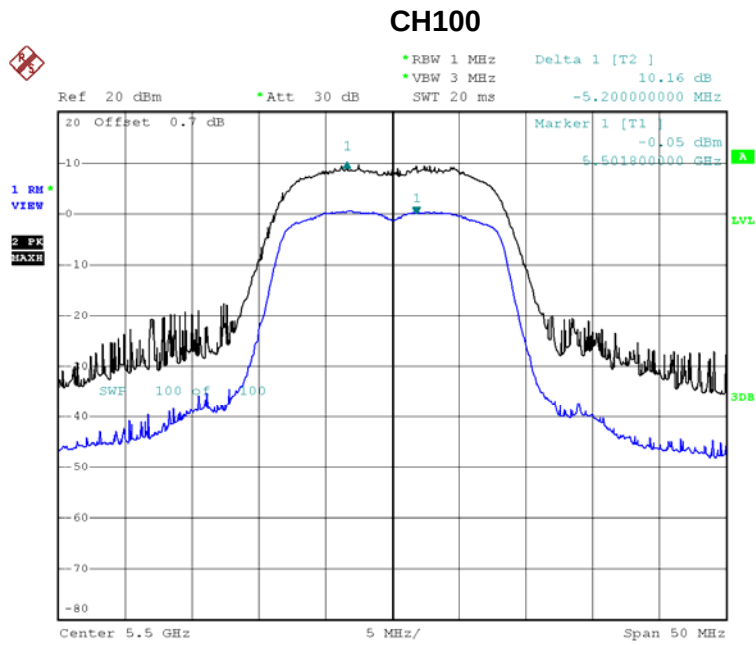




Date: 7.APR.2014 19:00:41



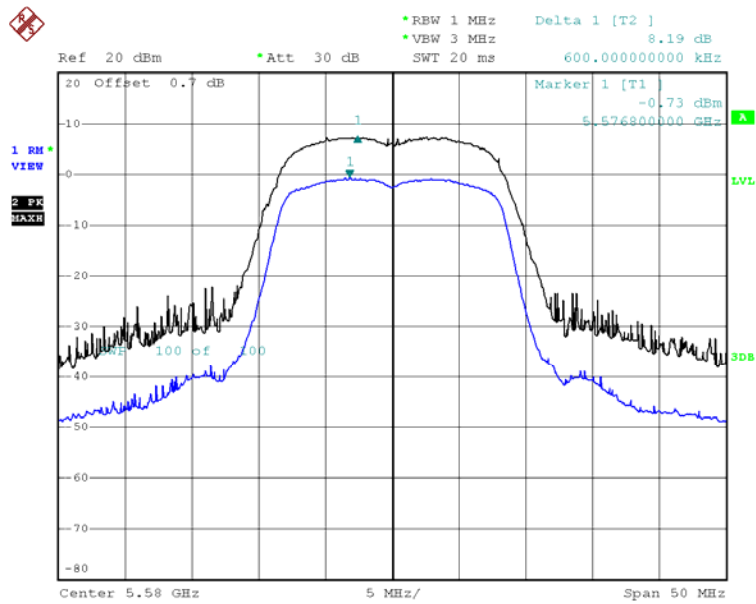
Test Mode : Band 3/TX A Mode_CH110/116/140



Date: 7.APR.2014 20:57:01

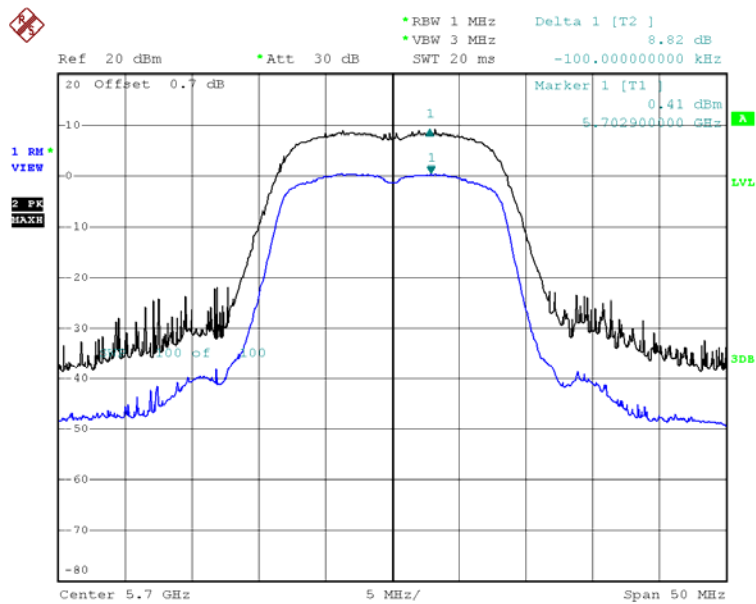


CH116



Date: 7.APR.2014 21:01:34

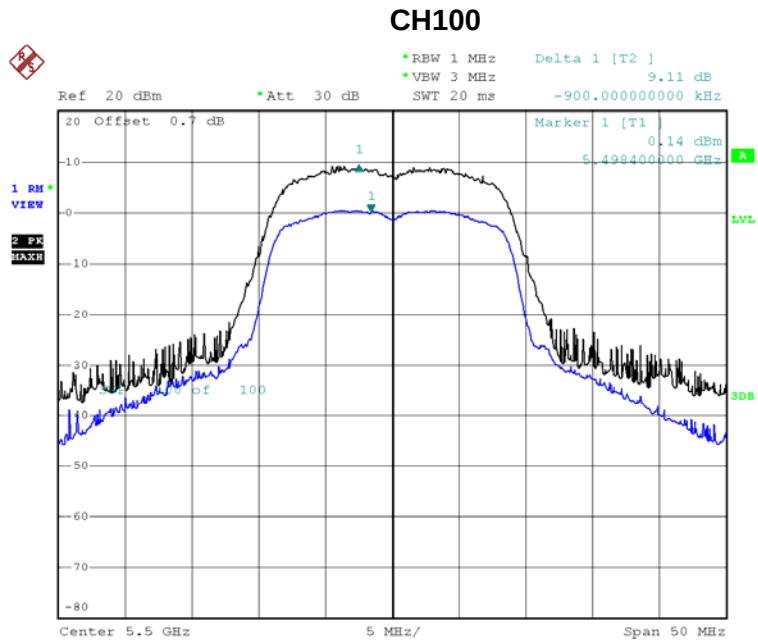
CH140



Date: 7.APR.2014 21:03:28



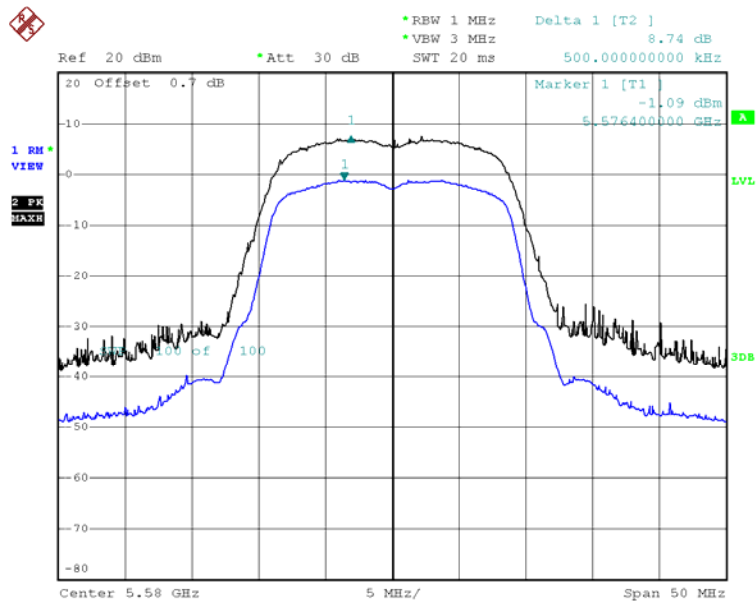
Test Mode : Band 3/TX N20 Mode_CH110/116/140-ANT 1



Date: 7.APR.2014 20:11:28

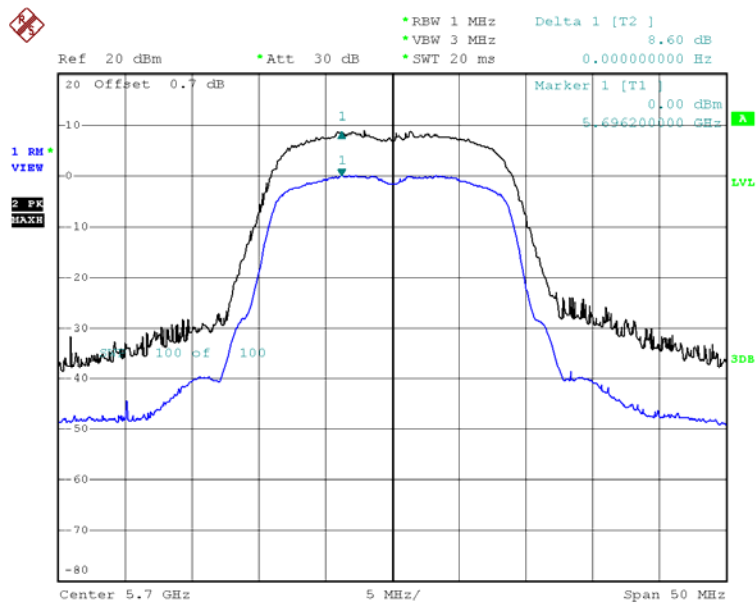


CH116



Date: 7.APR.2014 20:07:28

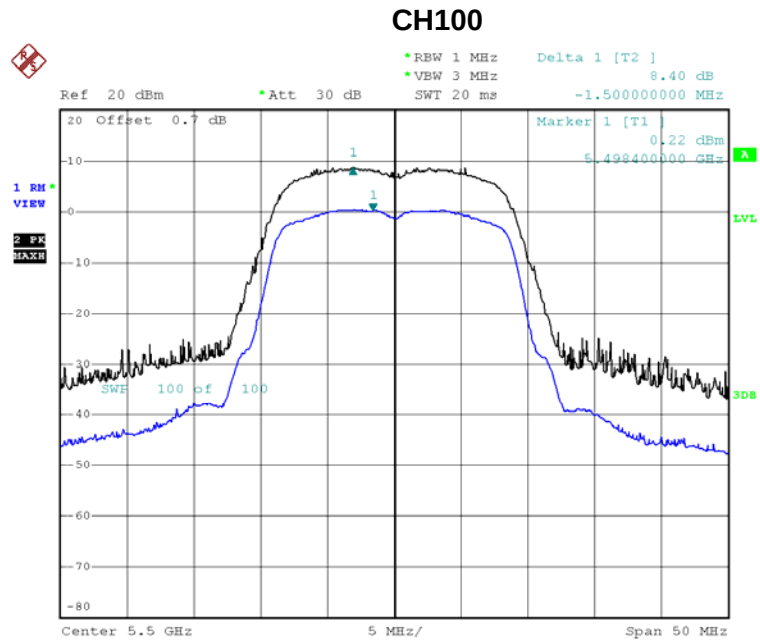
CH140



Date: 7.APR.2014 20:02:22



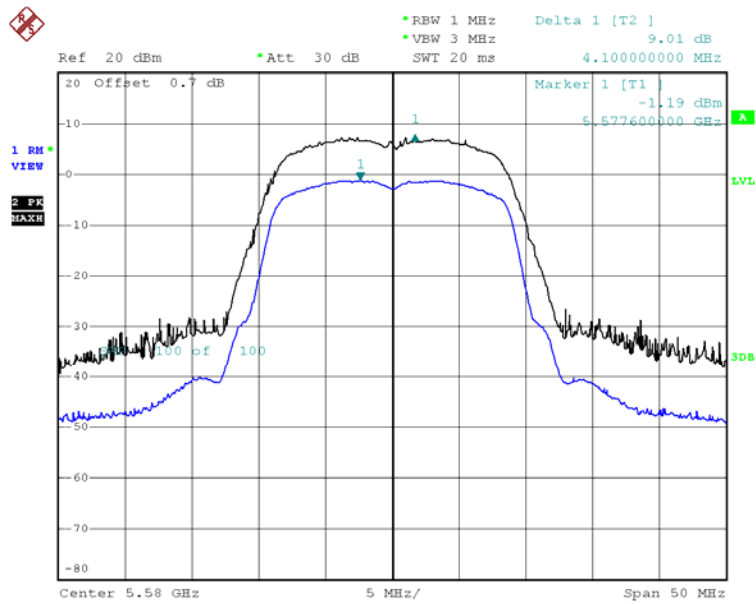
Test Mode : Band 3/TX N20 Mode_CH110/116/140-ANT 2



Date: 7.APR.2014 20:10:24

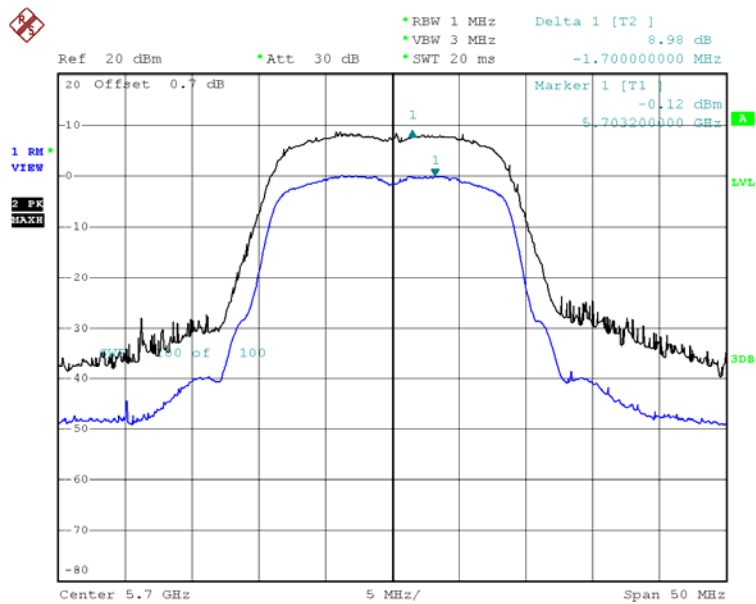


CH116



Date: 7.APR.2014 20:06:44

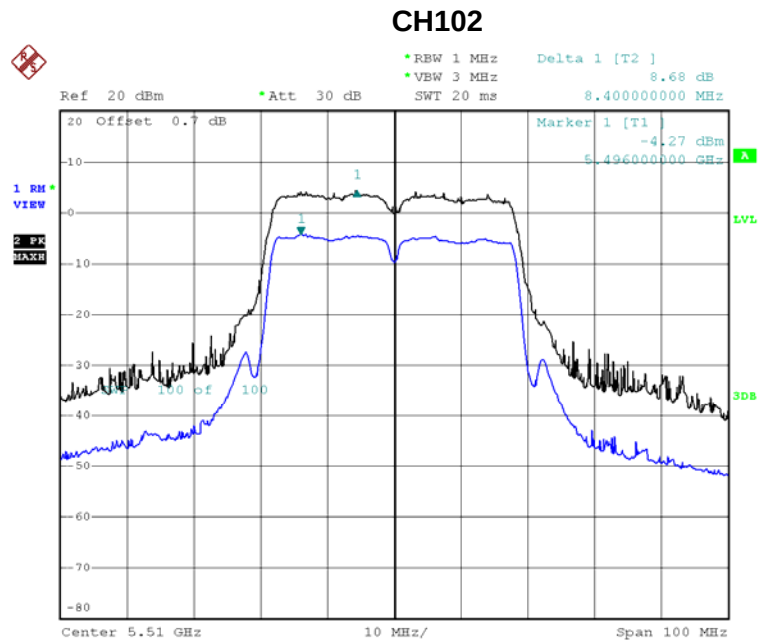
CH140



Date: 7.APR.2014 20:01:07



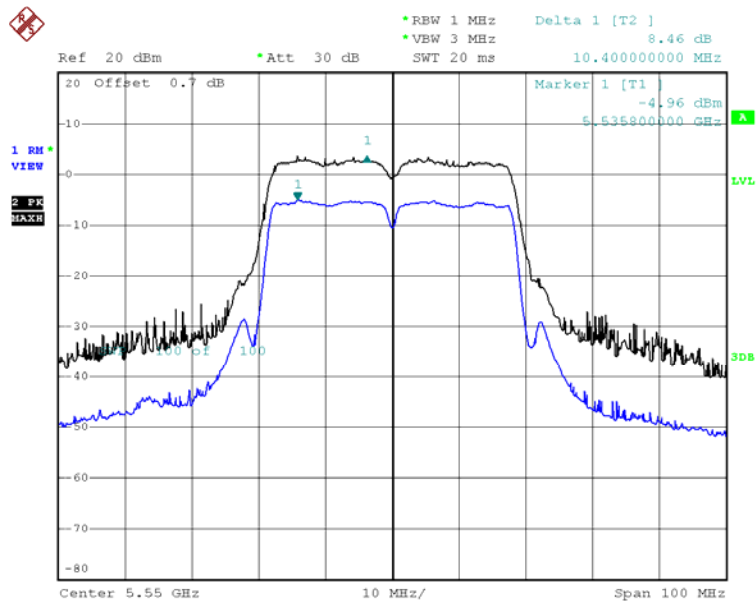
Test Mode : Band 3/TX N40 Mode_CH102/110/134-ANT 1



Date: 7.APR.2014 18:21:55

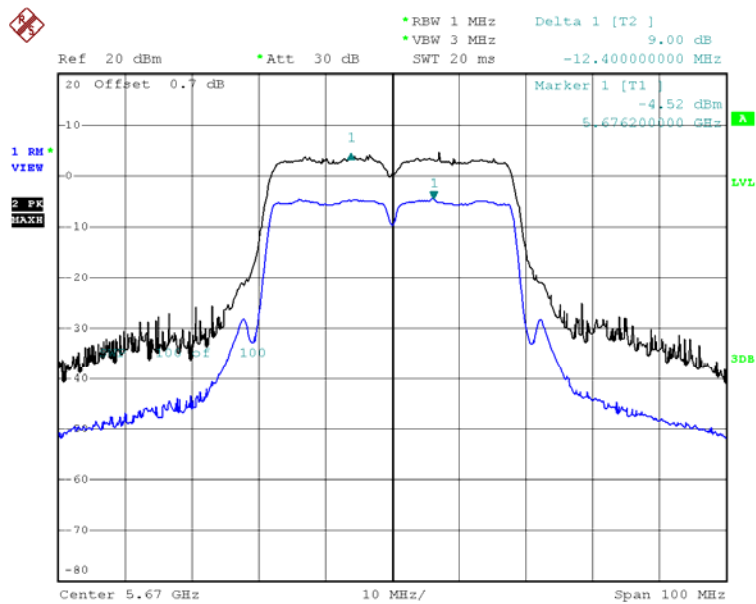


CH110



Date: 7.APR.2014 18:17:56

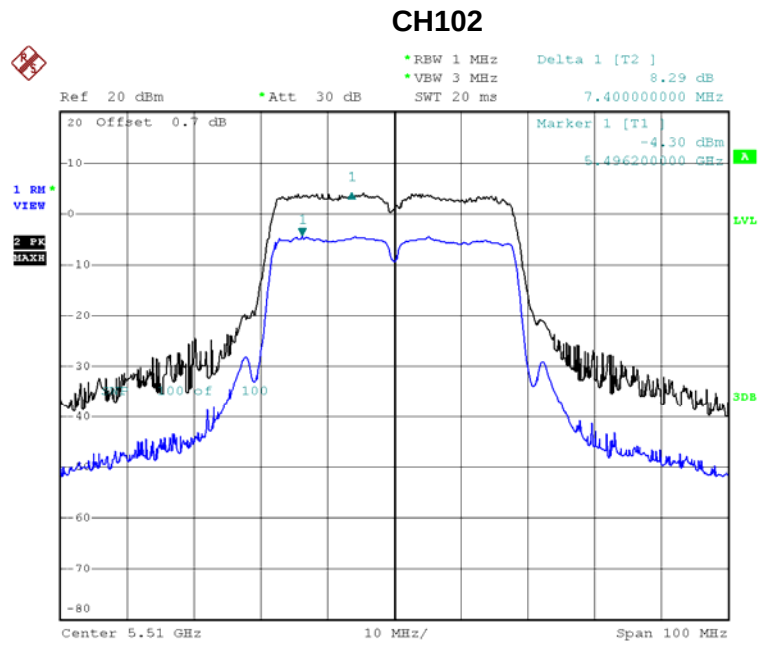
CH134



Date: 7.APR.2014 18:12:45



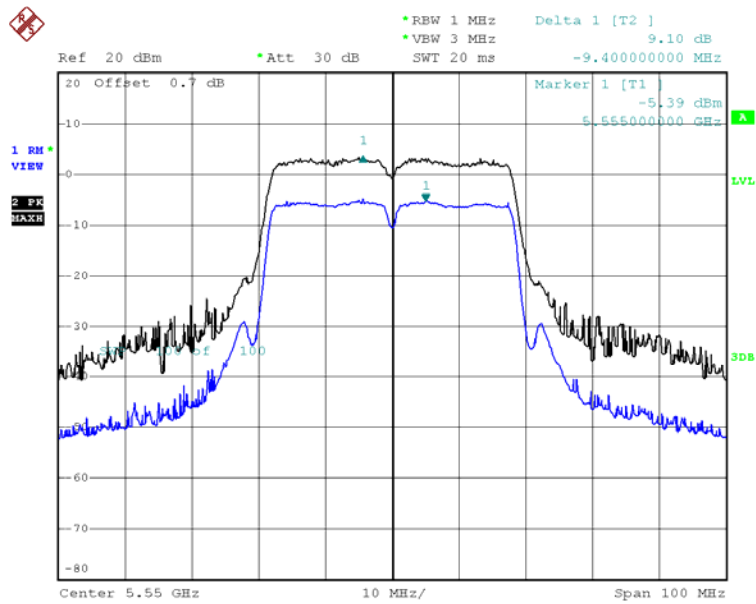
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Date: 7.APR.2014 19:06:50

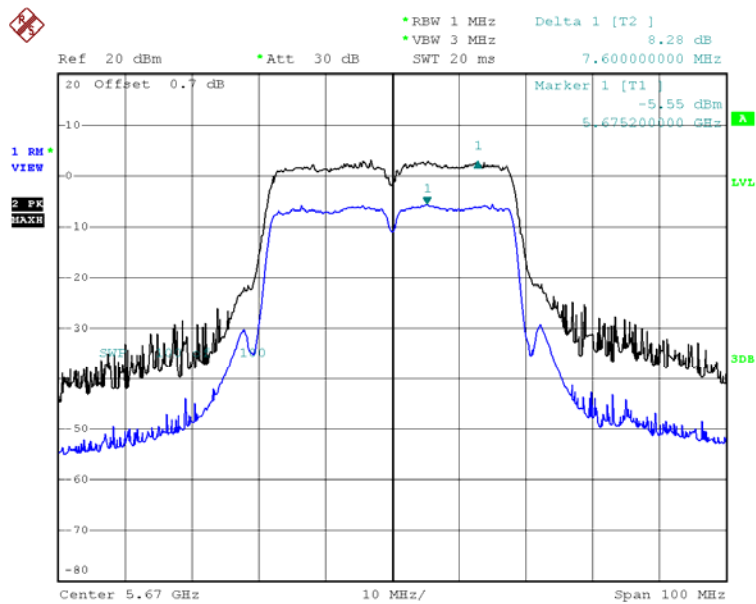


CH110



Date: 7.APR.2014 19:11:39

CH134



Date: 7.APR.2014 19:16:24



10. FREQUENCY STABILITY MEASUREMENT

10.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E 15.407(g)			
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 5°C~35°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
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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
5	5179.963000
15	5179.964000
25	5179.966000
35	5179.962000
Max. Deviation (MHz)	0.038000
Max. Deviation (ppm)	7.34



Test Mode :	Band 2
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Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5320
132	5320.000000
120	5319.986000
118	5319.989000
Max. Deviation (MHz)	0.014000
Max. Deviation (ppm)	2.63

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5320
5	5320.016000
15	5320.001000
25	5320.004000
35	5320.005000
Max. Deviation (MHz)	0.016000
Max. Deviation (ppm)	3.0075



Test Mode :	Band 3
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Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5700
132	5700.000000
120	5699.988000
118	5699.987000
Max. Deviation (MHz)	0.013000
Max. Deviation (ppm)	2.28

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5700
5	5700.015000
15	5700.003000
25	5700.004000
35	5700.001000
Max. Deviation (MHz)	0.015000
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.



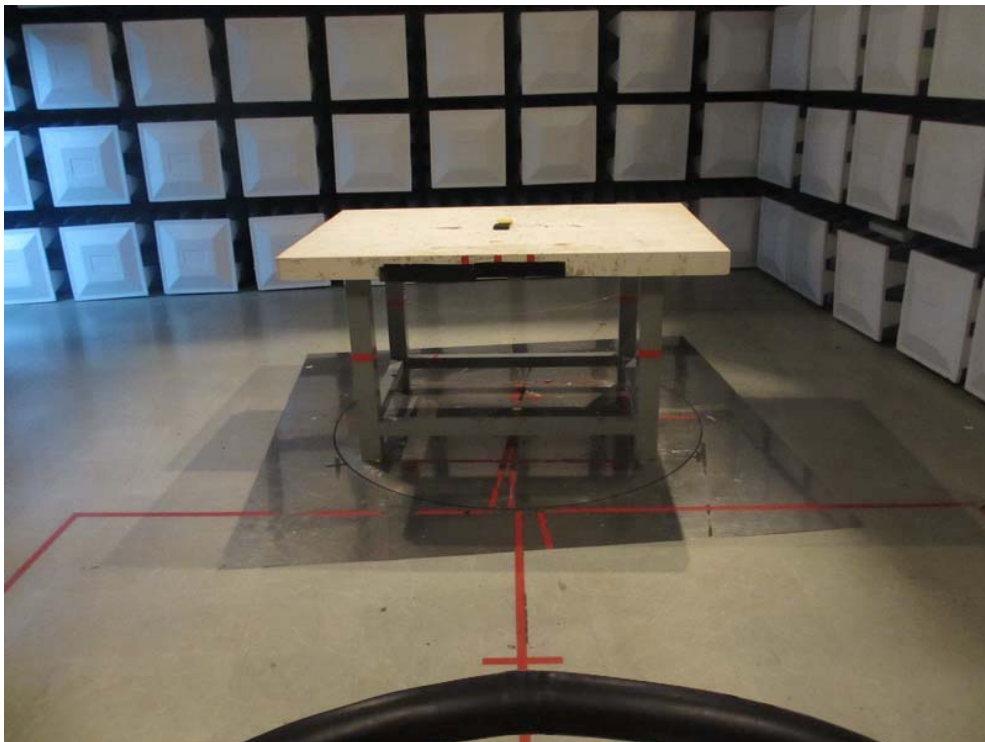
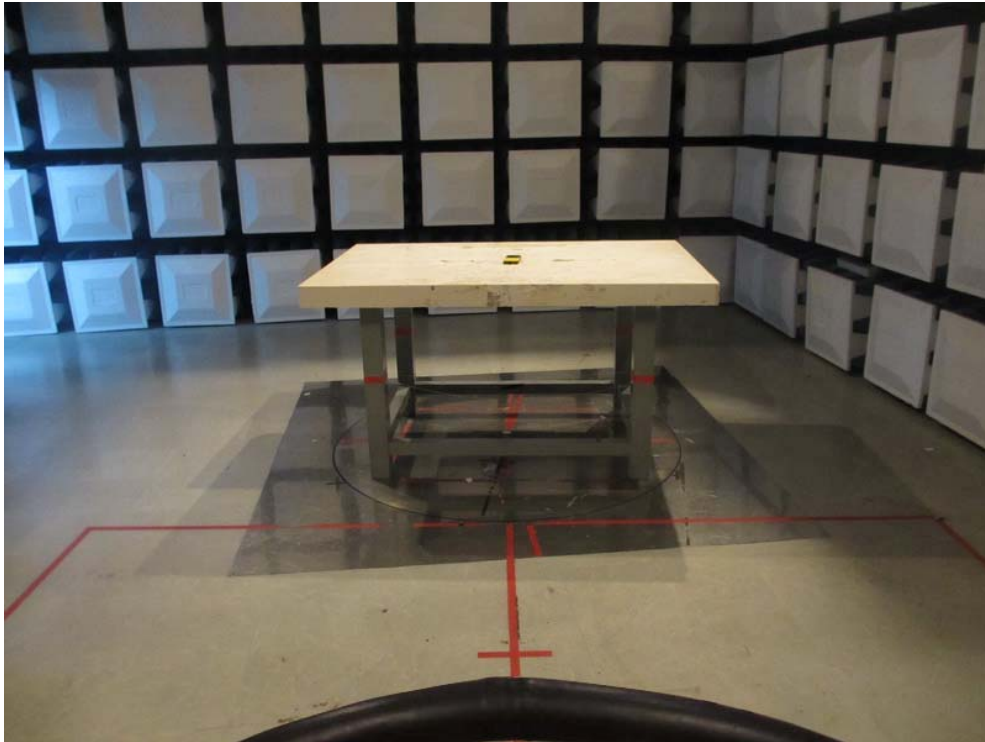
12. EUT TEST PHOTO

Conducted Measurement Photos



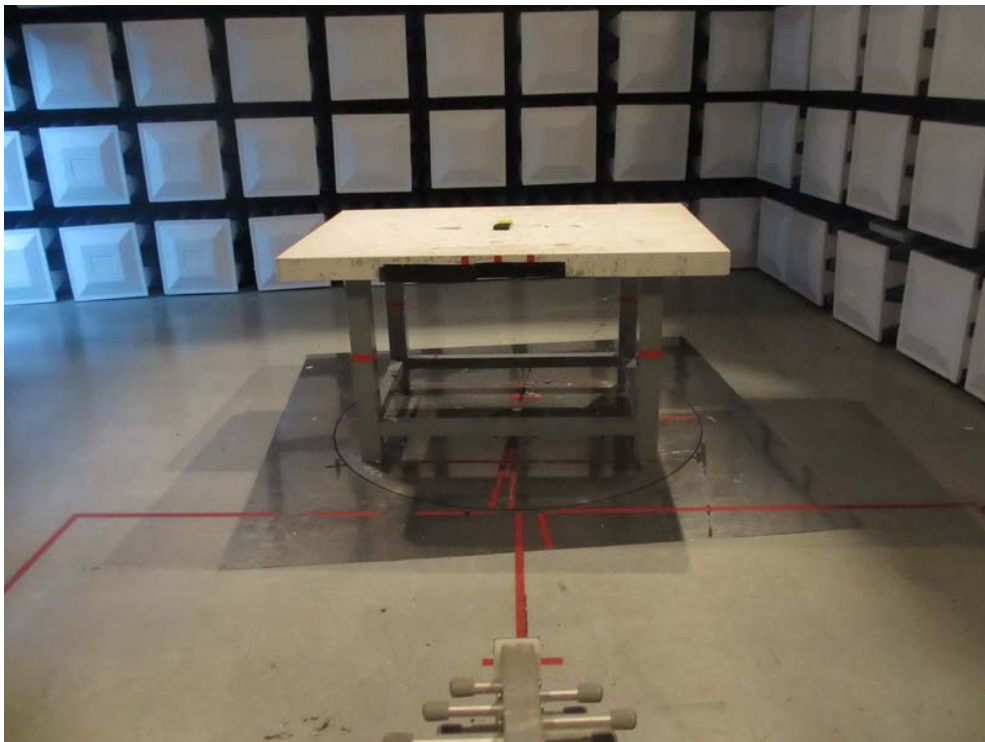
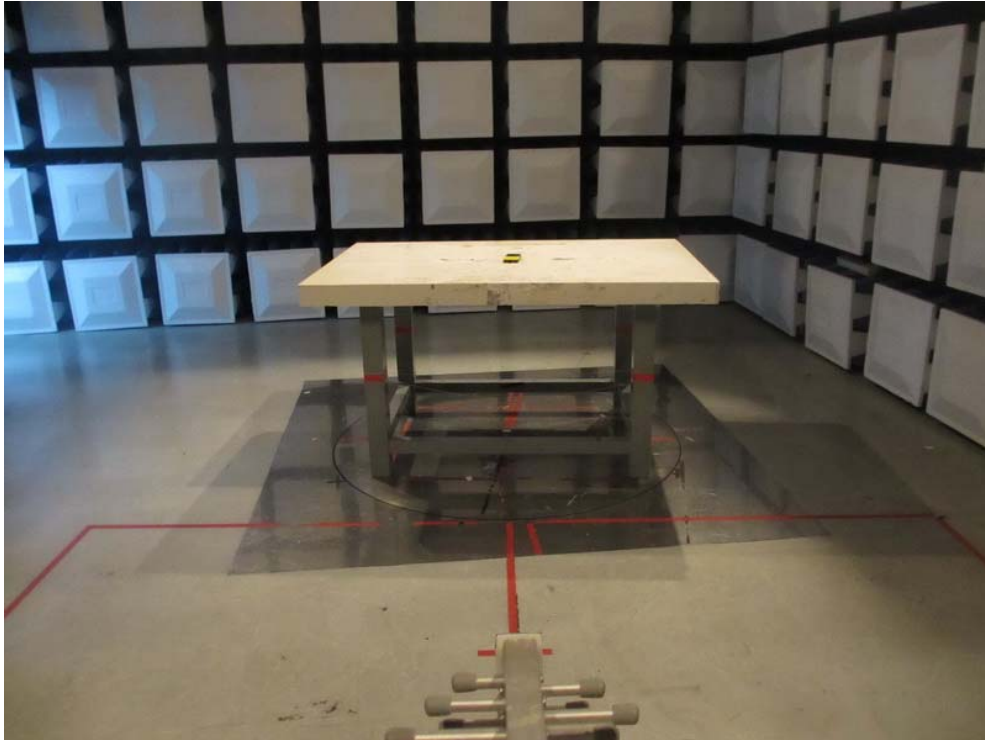


**Radiated Measurement Photos
9K~30MHz**





**Radiated Measurement Photos
30~1000MHz**





**Radiated Measurement Photos
Above 1000MHz**

