

FCC Radio Test Report

FCC ID: OFJCW-F25-140401

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

Project No. : 1405C020
Equipment : Wireless Video Transmission System
Model Name : CW-F25; CW-F25 TX; CW-F25 RX
Applicant : IDX Company, Ltd.
Address : 6-28-11 Shukugawara, Tama-ku, Kawasaki-shi
Kanagawa-ken, Japan

Date of Receipt : May 06, 2014
Date of Test : May 06, 2014~ Nov. 11, 2014
Issued Date : Nov. 12, 2014
Tested by : BTL Inc.

Testing Engineer

: David Mao
(David Mao)

Technical Manager

: Leo My
(Leo Hung)

Authorized Signatory

: Steven Lu
(Steven Lu)

B T L I N C .

No.3,Jinshagang 1st Road, Shixia,Dalang Town, Dongguan,
Guangdong, China.

TEL: +86-769-8318-3000FAX: +86-769-8319-6000

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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

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

BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Table of Contents	Page
1 . CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	12
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	14
3.5 DESCRIPTION OF SUPPORT UNITS	14
4 .EMC EMISSION TEST	15
4.1 CONDUCTED EMISSION MEASUREMENT	15
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	15
4.1.2 TEST PROCEDURE	15
4.1.3 DEVIATIONFROMTESTSTANDARD	15
4.1.4 TESTSETUP	16
4.1.5 EUT OPERATING CONDITIONS	16
4.1.6 EUT TEST CONDITIONS	16
4.1.7 TEST RESULTS	16
4.2 RADIATED EMISSION MEASUREMENT	17
4.2.1 RADIATED EMISSION LIMITS	17
4.2.2 TESTPROCEDURE	18
4.2.3 DEVIATIONFROMTESTSTANDARD	18
4.2.4 TESTSETUP	19
4.2.5 EUT OPERATING CONDITIONS	20
4.2.6 EUT TEST CONDITIONS	20
4.2.7 TEST RESULTS (9K TO 30MHZ)	20
4.2.8 TEST RESULTS (30 TO 1000 MHZ)	20
4.2.9 TEST RESULTS (ABOVE 1000 MHZ)	21
5 .BANDWIDTH TEST	22
5.1 APPLIED PROCEDURES	22
5.1.1 TEST PROCEDURE	22
5.1.2 DEVIATION FROM STANDARD	22
5.1.3 TEST SETUP	22
5.1.4 EUT OPERATION CONDITIONS	22
5.1.5 EUT TEST CONDITIONS	22
5.1.6 TEST RESULTS	22
6 .MAXIMUM OUTPUT POWER TEST	23

Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	23
6.1.1 TEST PROCEDURE	23
6.1.2 DEVIATION FROM STANDARD	23
6.1.3 TEST SETUP	23
6.1.4 EUT OPERATION CONDITIONS	23
6.1.5 EUT TEST CONDITIONS	23
6.1.6 TEST RESULTS	23
7 .ANTENNA CONDUCTED SPURIOUS EMISSION	24
7.1 APPLIED PROCEDURES / LIMIT	24
7.1.1 TEST PROCEDURE	24
7.1.2 DEVIATION FROM STANDARD	24
7.1.3 TEST SETUP	24
7.1.4 EUT OPERATION CONDITIONS	24
7.1.5 EUT TEST CONDITIONS	24
7.1.6 TEST RESULTS	24
8 .POWER SPECTRAL DENSITY TEST	25
8.1 APPLIED PROCEDURES / LIMIT	25
8.1.1 TEST PROCEDURE	25
8.1.2 DEVIATION FROM STANDARD	25
8.1.3 TEST SETUP	25
8.1.4 EUT OPERATION CONDITIONS	25
8.1.5 EUT TEST CONDITIONS	25
8.1.6 TEST RESULTS	25
9 .EUT TEST PHOTO	28
ATTACHMENT A -CONDUCTED EMISSION	35
ATTACHMENT B -RADIATED EMISSION (9KHZ TO 30MHZ)	38
ATTACHMENT C -RADIATED EMISSION (30MHZ TO 1000MHZ)	41
ATTACHMENT D -RADIATED EMISSION (ABOVE 1000MHZ)	50
ATTACHMENT E -BANDWIDTH	67
ATTACHMENT F -MAXIMUM OUTPUT POWER	70
ATTACHMENT G –ANTENNA CONDUCTED SPURIOUS EMISSION	72
ATTACHMENT H –POWER SPECTRAL DENSITY	89

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-2-1405C020	Original Issue.	Nov. 12, 2014

1. CERTIFICATION

Equipment : Wireless Video Transmission System
Brand Name : CAM~WAVE
Model Name : CW-F25; CW-F25 TX;CW-F25 RX
Applicant : IDX Company, Ltd.
Manufacturer: Shenzhen Crystal Video Technology Co.,LTD.
Address : F13,F518 Idea Land, Baoyuan Road, Baoan Central Area, Shenzhen, China
Factory : Shenzhen Crystal Video Technology Co.,LTD.
Address : F13,F518 Idea Land, Baoyuan Road, Baoan Central Area, Shenzhen, China
Date of Test : May 06, 2014~ Nov. 12, 2014
Test Sample : ENGINEERING SAMPLE
Standard(s) : FCC Part15, Subpart C(15.247) /ANSI C63.4-2009

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1405C020) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

NOTE:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r02 (Measurement Guidelines of DTS)

2.1 TEST FACILITY

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

2.2 MEASUREMENT UNCERTAINTY

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

The reported uncertainty of measurement $y \pm U$, 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	MeasurementFrequencyRange	U , (dB)	NOTE
DG-C02	CISPR	150 KHz~30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	MeasurementFrequencyRange	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	Wireless Video Transmission System	
Brand Name	CAM~WAVE	
Model Name	CW-F25;CW-F25 TX;CW-F25 RX	
Mode Different	Only differ in model name.	
Product Description	Operation Frequency	5745~5825 MHz
	Modulation Technology	802.11a/n:OFDM
	Bit Rate of Transmitter	300Mbps
	Output Power (Max.)	802.11n(40MHz): 25.77 dBm
Power Source	DC Voltage supplied from AC/DC adapter. Brand/model:DVE/DSA-12PFG-12FEU 120100	
Power Rating	I/P:100-240V 50/60Hz 0.5A O/P:DC 12V/1A	

Note:

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

2. Channel List:

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

3. Antenna Specification:

Group 1 of Dipole Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
A	Wanshih Electronic Co., Ltd.	WA1R5847A	Dipole	N/A	2.0	
B	Wanshih Electronic Co., Ltd.	WA1R5847A	Dipole	N/A	2.0	
C	Wanshih Electronic Co., Ltd.	WA1R5847A	Dipole	N/A	2.0	
D	Wanshih Electronic Co., Ltd.	WA1R5847A	Dipole	N/A	2.0	

Group 2 of MIMO Panel Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
A	IDX	TCTD5800-18M20M	MIMO Panel Antenna	N/A	18	Note(2)
B	IDX	TCTD5800-18M20M	MIMO Panel Antenna	N/A	18	Note(2)
C	IDX	TCTD5800-18M20M	MIMO Panel Antenna	N/A	18	Note(2)
D	IDX	TCTD5800-18M20M	MIMO Panel Antenna	N/A	18	Note(2)

Note:(1) The EUT incorporates a MIMO function. Physically, the EUT provides four completed four transmitters and four receivers (4T4R).

(2) For Group 2 of MIMO Panel Antenna gain, customer sells product with attenuating pad and 3 meter of cable, attenuating pad will loss 20dBi gain, 3 meter of cable will loss 3 dBi gain, so the final evaluated of gain is -5dBi.

4.

Operating Mode	4TX
TX Mode	
802.11n (40MHz)	V (ANT A + ANT B + ANT C+ANT D)

3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX N-40MHZ MODE CHANNEL 151/159
Mode 2	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 2	TX MODE

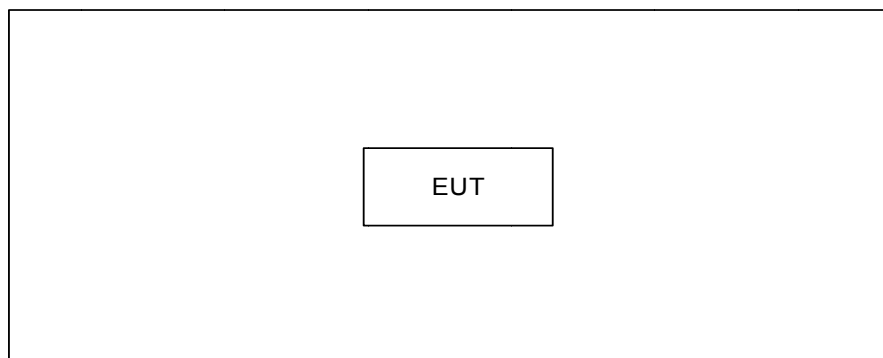
For Radiated Test	
Final Test Mode	Description
Mode 1	TX N-40MHZ MODE CHANNEL 151/159

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	N/A	
Frequency	5755 MHz	5795MHz
IEEE 802.11 n (40MHz)	13	13

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
-	-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	-

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

The following table is the setting of the receiver

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

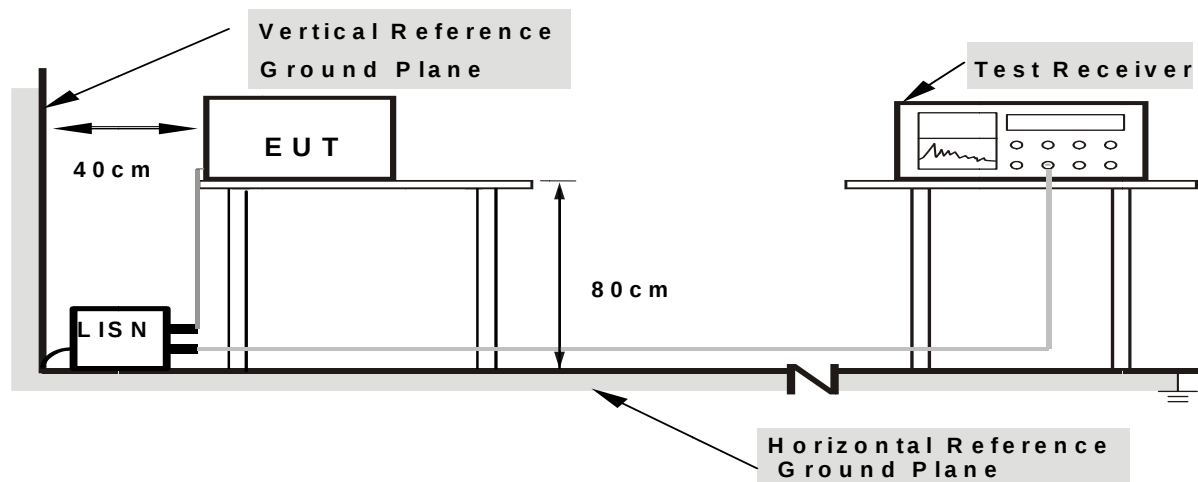
4.1.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the groundplane 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 TESTSETUP



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

4.1.5EUT 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.

4.1.6EUT TEST CONDITIONS

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

4.1.7TEST RESULTS

Please refer to the Attachment A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits,the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform ◦ In this case, a “ * ” marked in AVG Mode column of Interference Voltage Measured ◦
- (2) Measuring frequency range from 150KHz to 30MHz ◦

4.2 RADIATED EMISSION MEASUREMENT

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

20dB in any 100 KHz bandwidth outside the operating frequency band. In case the emission falls within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m) = 20log Emission level (uV/m).

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

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

4.2.2 TESTPROCEDURE

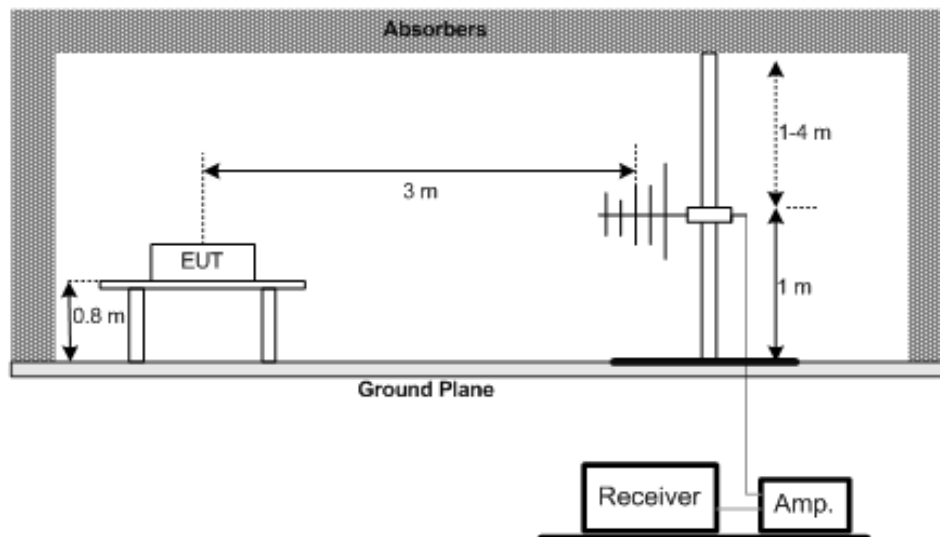
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.3DEVIATIONFROMTESTSTANDARD

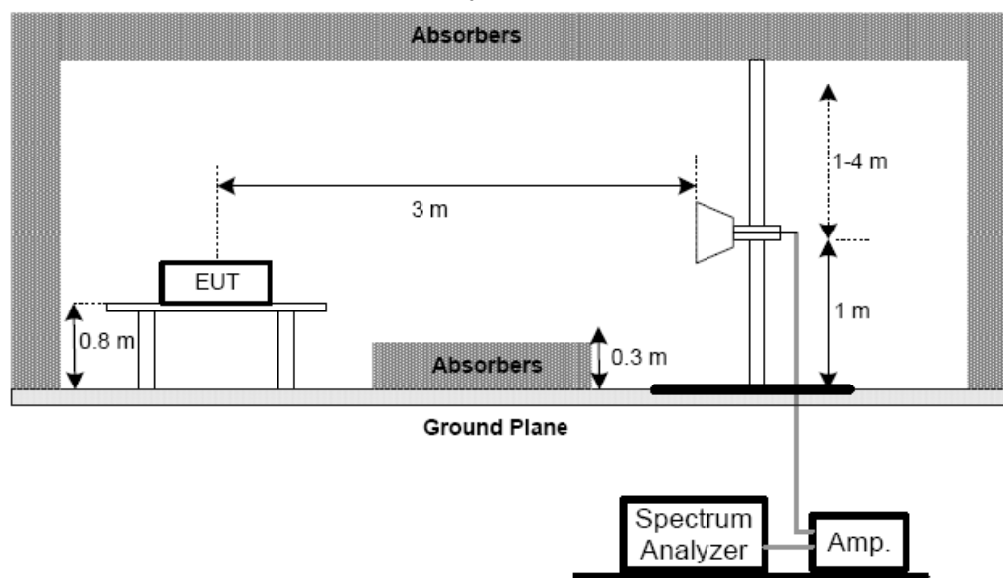
No deviation

4.2.4 TESTSETUP

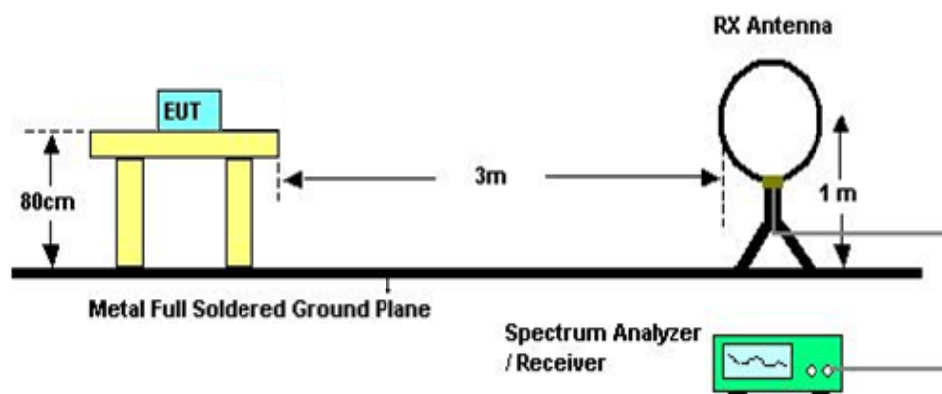
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

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

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9K TO 30MHZ)

Please refer to the Attachment B

Remark:

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

4.2.8 TEST RESULTS (30 TO 1000 MHZ)

Please refer to the Attachment C

Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz.
- (2) All readings are Peak unless otherwise stated QP in column of 『Note』 . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (3) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (5) EUT Orthogonal Axis:
"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand
- (6) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (7) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5.BANDWIDTH TEST

5.1Applied procedures

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

5.1.1TEST PROCEDURE

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

5.1.2DEVIATION FROM STANDARD

No deviation.

5.1.3TEST SETUP



5.1.4EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.5EUT TEST CONDITIONS

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

5.1.6TEST RESULTS

Please refer to the Attachment E.

6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance v03r02.

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

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7.ANTENNA CONDUCTED SPURIOUS EMISSION

7.1Applied procedures / limit

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

7.1.1TEST PROCEDURE

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

7.1.2DEVIATION FROM STANDARD

No deviation.

7.1.3TEST SETUP



7.1.4EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.5EUT TEST CONDITIONS

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

7.1.6TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

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

8.1.1 TEST PROCEDURE

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

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Attachment H.

8.1.7. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015
2	LISN	R&S	ENV216	100087	Mar. 29, 2015
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	Mar. 29, 2015
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 29, 2015
2	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015
3	Receiver	AGILENT	N9038A	MY52130039	Sep. 30, 2015
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2015
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	Mar. 29, 2015
7	Amplifier	Agilent	8449B	3008A02274	Mar. 29, 2015
8	Receiver	AGILENT	N9038A	MY52130039	Sep. 30, 2015
9	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 30, 2015
10	Controller	CT	SC100	N/A	N/A
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Feb. 22, 2015
12	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 22, 2015
13	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Mar. 29, 2015
14	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 29, 2015
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 29, 2015

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

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

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

9.EUT TEST PHOTO

Conducted Measurement Photos



Group 1 of Dipole Antenna

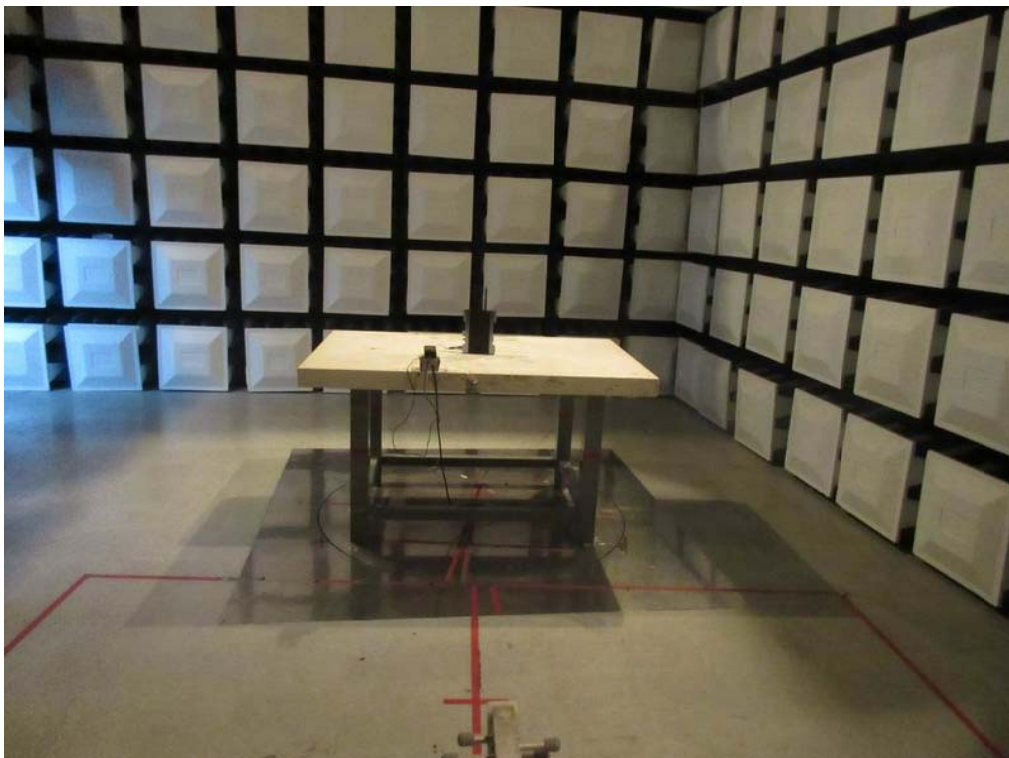
Radiated Measurement Photos

9KHz to 30MHz



Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

Above 1000MHz



Group 2 of MIMO Panel Antenna

Radiated Measurement Photos

9KHz to 30MHz



Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

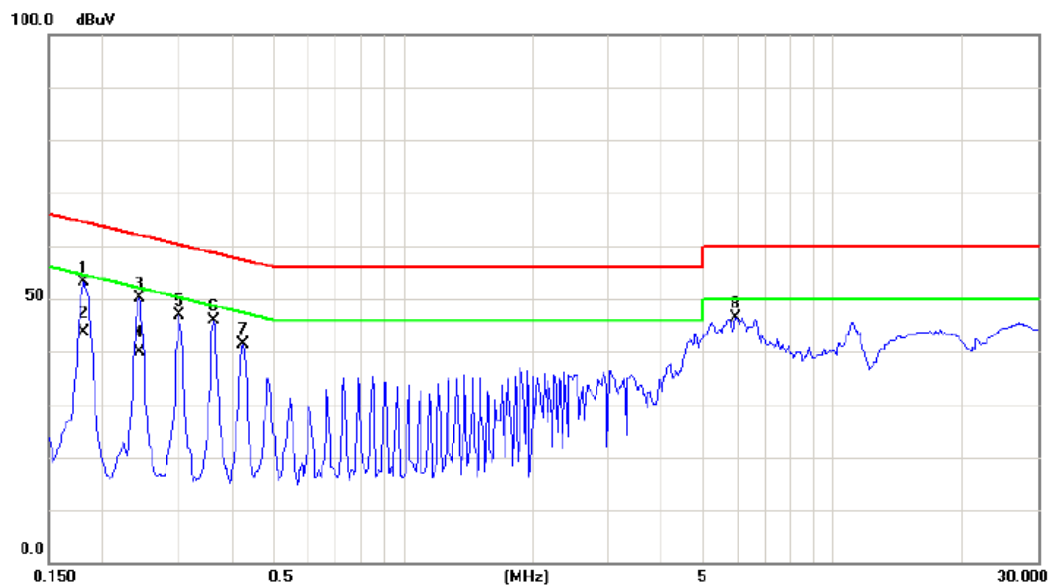
Above 1000MHz



ATTACHMENT A -CONDUCTED EMISSION

Test Mode : TX MODE

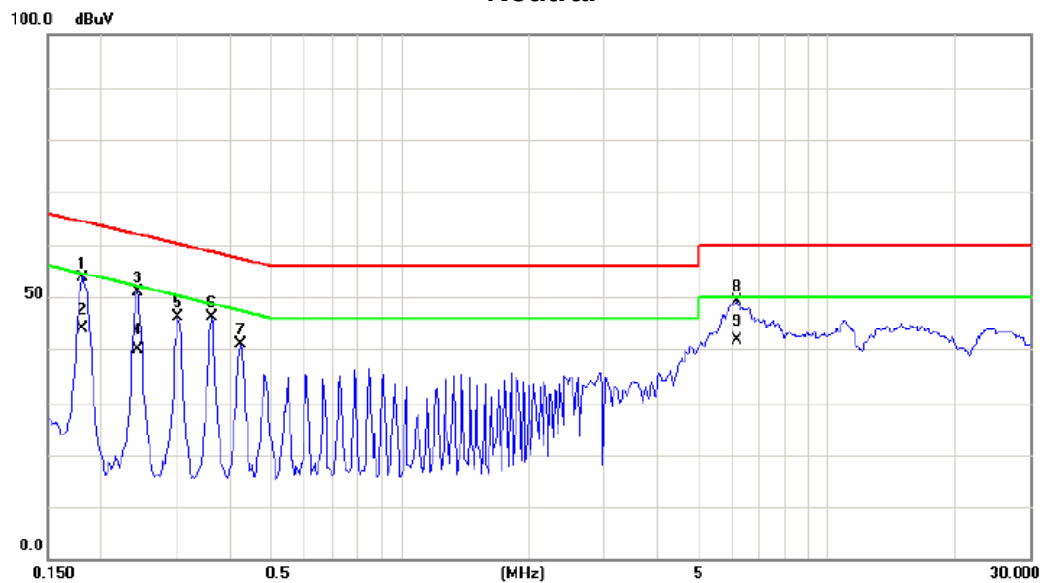
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1812	43.62	9.49	53.11	64.43	-11.32	peak	
2	*	0.1812	34.10	9.49	43.59	54.43	-10.84	AVG	
3		0.2437	40.58	9.50	50.08	61.97	-11.89	peak	
4		0.2437	30.50	9.50	40.00	51.97	-11.97	AVG	
5		0.3023	37.40	9.51	46.91	60.18	-13.27	peak	
6		0.3648	36.32	9.52	45.84	58.62	-12.78	peak	
7		0.4273	31.74	9.53	41.27	57.31	-16.04	peak	
8		5.9492	36.77	9.72	46.49	60.00	-13.51	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	0.1812	44.23	9.49	53.72	64.43	-10.71	peak	
2	0.1812	34.30	9.49	43.79	54.43	-10.64	AVG	
3	0.2437	41.48	9.49	50.97	61.97	-11.00	peak	
4	0.2437	30.30	9.49	39.79	51.97	-12.18	AVG	
5	0.3023	36.75	9.50	46.25	60.18	-13.93	peak	
6	0.3648	36.52	9.51	46.03	58.62	-12.59	peak	
7	0.4273	31.44	9.52	40.96	57.31	-16.35	peak	
8	6.1913	39.31	9.73	49.04	60.00	-10.96	peak	
9 *	6.1913	32.00	9.73	41.73	50.00	-8.27	AVG	

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

Group 1 of Dipole Antenna

Test Mode:	TX Mode 5745MHz
------------	-----------------

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°	68.72	24.97	93.69	108.13	-14.44	AVG
0.0095	0°	75.69	24.97	100.66	128.13	-27.47	PEAK
0.0231	0°	43.28	24.10	67.38	100.33	-32.95	AVG
0.0235	0°	51.47	24.10	75.57	120.33	-44.76	PEAK
0.0312	0°	48.39	23.59	71.98	97.72	-25.74	AVG
0.0317	0°	49.65	23.59	73.24	117.72	-44.48	PEAK
0.0424	0°	51.72	22.88	74.60	95.06	-20.46	AVG
0.0425	0°	55.63	22.88	78.51	115.06	-36.55	PEAK
0.4916	0°	17.31	19.82	37.13	73.77	-36.64	QP
1.7158	0°	17.98	19.53	37.51	69.54	-32.03	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°	73.14	24.30	97.44	128.26	-30.82	AVG
0.0093	90°	81.39	24.30	105.69	148.26	-42.57	PEAK
0.0232	90°	54.87	24.10	78.97	120.29	-41.33	AVG
0.0235	90°	57.16	24.10	81.26	140.29	-59.04	PEAK
0.0316	90°	56.34	23.57	79.91	117.61	-37.71	AVG
0.0319	90°	57.53	23.57	81.10	137.61	-56.52	PEAK
0.0423	90°	58.47	22.89	81.36	115.08	-33.72	AVG
0.0426	90°	62.79	22.89	85.68	135.08	-49.40	PEAK
0.4917	90°	18.31	19.82	38.13	73.77	-35.64	QP
1.7151	90°	19.12	19.53	38.65	69.54	-30.89	QP

Group 2 of MIMO Panel Antenna

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°	16.31	24.97	41.28	108.13	-66.85	AVG
0.0095	0°	16.89	24.97	41.86	128.13	-86.27	PEAK
0.0231	0°	7.53	24.10	31.63	100.33	-68.70	AVG
0.0235	0°	8.91	24.10	33.01	120.33	-87.32	PEAK
0.0312	0°	6.54	23.59	30.13	97.72	-67.59	AVG
0.0317	0°	7.43	23.59	31.02	117.72	-86.70	PEAK
0.0424	0°	3.85	22.88	26.73	95.06	-68.33	AVG
0.0425	0°	5.13	22.88	28.01	115.06	-87.05	PEAK
0.4916	0°	18.45	19.82	38.27	73.77	-35.50	QP
1.7158	0°	16.74	19.53	36.27	69.54	-33.27	QP

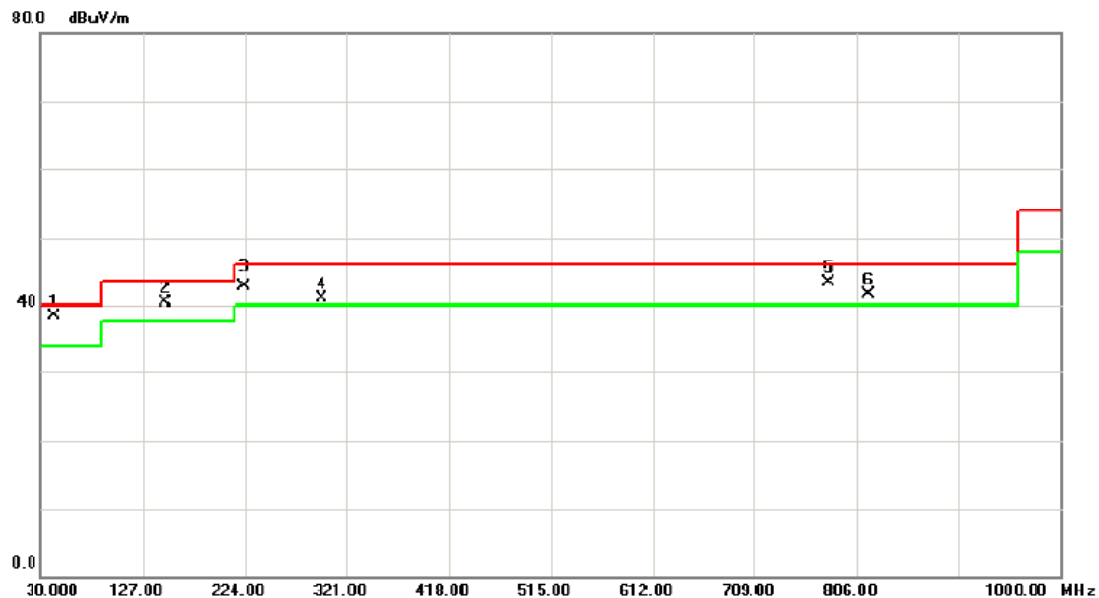
Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0093	90°	15.68	24.30	39.98	128.26	-88.28	AVG
0.0093	90°	16.87	24.30	41.17	148.26	-107.09	PEAK
0.0232	90°	7.91	24.10	32.01	120.29	-88.29	AVG
0.0235	90°	8.76	24.10	32.86	140.29	-107.44	PEAK
0.0316	90°	5.31	23.57	28.88	117.61	-88.74	AVG
0.0319	90°	6.37	23.57	29.94	137.61	-107.68	PEAK
0.0423	90°	3.56	22.89	26.45	115.08	-88.63	AVG
0.0426	90°	4.71	22.89	27.60	135.08	-107.48	PEAK
0.4917	90°	17.23	19.82	37.05	73.77	-36.72	QP
1.7151	90°	18.25	19.53	37.78	69.54	-31.76	QP

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

Group 1 of Dipole Antenna

Test Mode: TX N40 MODE 5755MHz

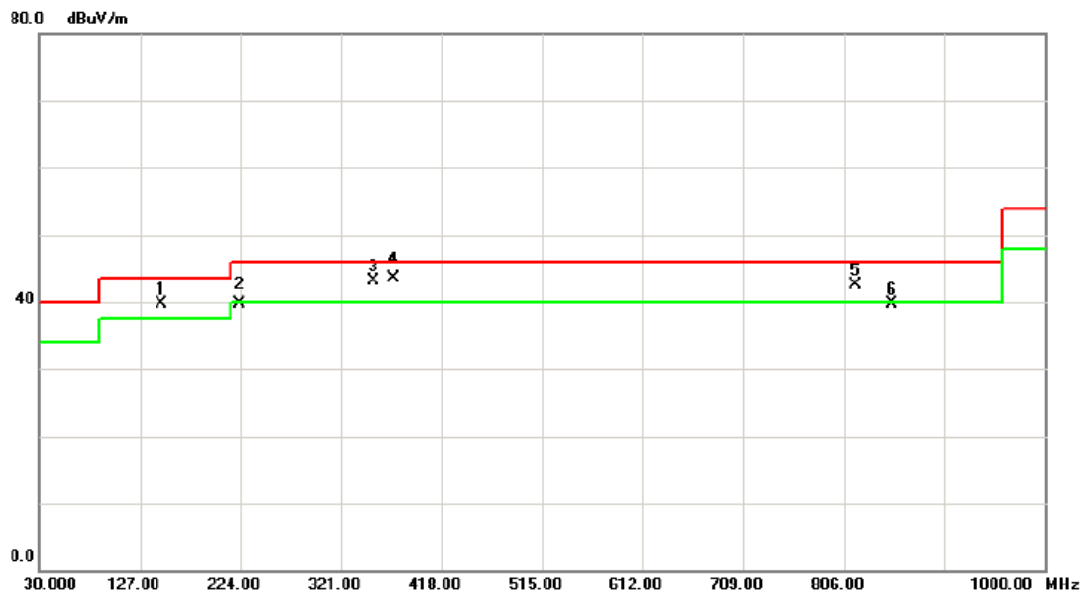
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	43.5800	51.95	-13.74	38.21	40.00	-1.79	peak	
2	!	148.3400	53.55	-13.18	40.37	43.50	-3.13	peak	
3	!	223.0300	57.43	-14.68	42.75	46.00	-3.25	QP	
4	!	296.7500	51.90	-11.05	40.85	46.00	-5.15	peak	
5	!	779.8100	47.00	-3.60	43.40	46.00	-2.60	peak	
6	!	816.6700	44.52	-2.98	41.54	46.00	-4.46	peak	

Test Mode: TX N40 MODE 5755MHz

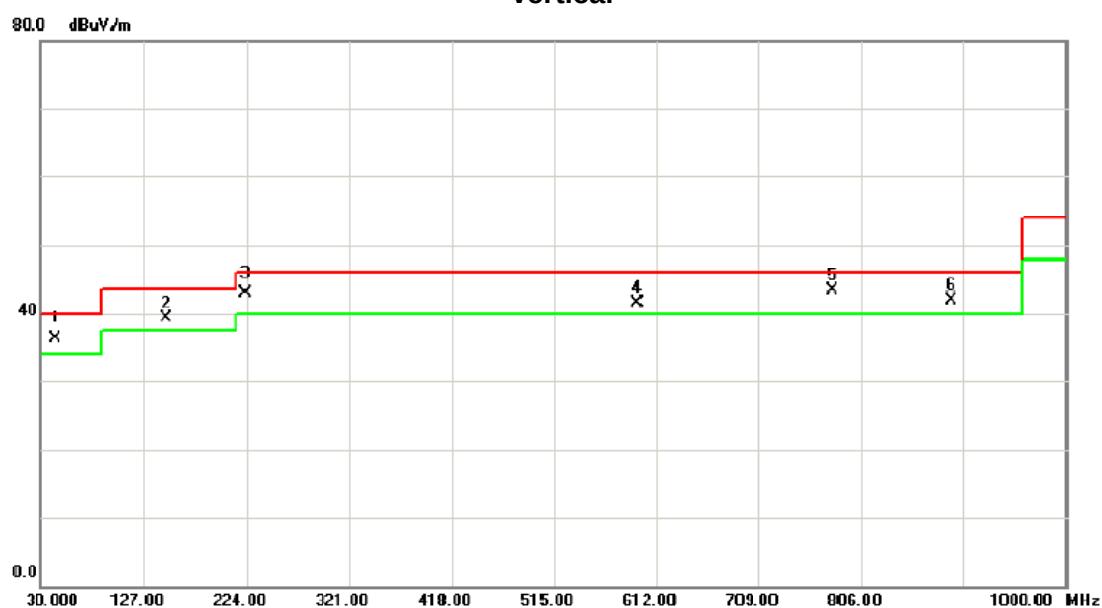
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	!	148.3400	52.97	-13.18	39.79	43.50	-3.71	peak	
2		223.0300	54.36	-14.68	39.68	46.00	-6.32	QP	
3	!	353.0100	54.77	-11.65	43.12	46.00	-2.88	peak	
4	*	371.4400	54.31	-10.82	43.49	46.00	-2.51	QP	
5	!	816.6700	45.50	-2.98	42.52	46.00	-3.48	peak	
6		853.5300	42.84	-3.04	39.80	46.00	-6.20	peak	

Test Mode: TX N40 MODE 5795MHz

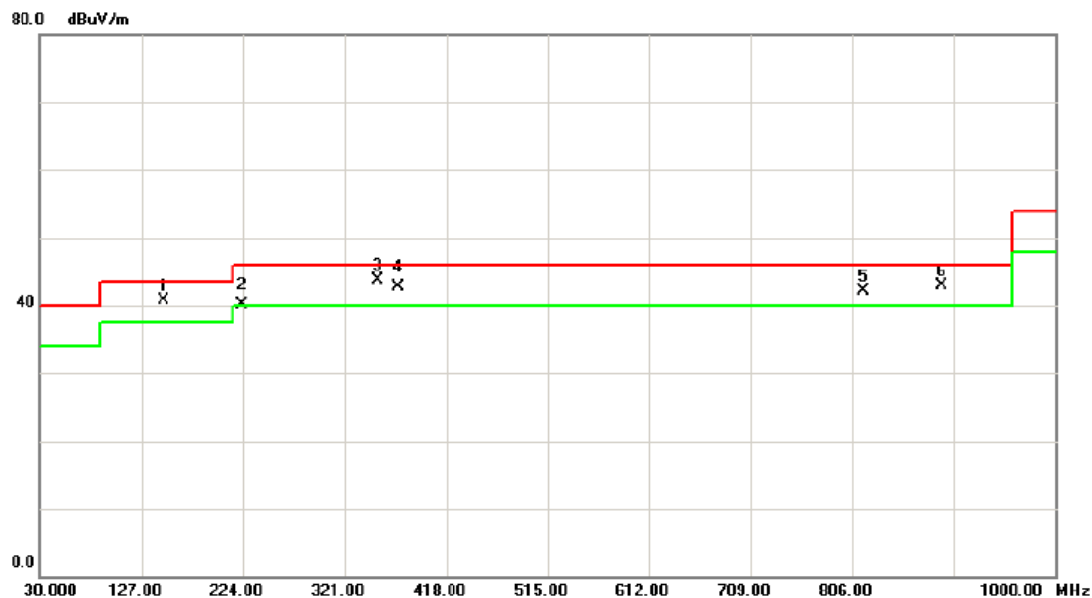
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	!	43.5800	50.12	-13.74	36.38	40.00	-3.62	QP	
2	!	148.3400	52.55	-13.18	39.37	43.50	-4.13	peak	
3	!	223.0300	57.49	-14.68	42.81	46.00	-3.19	QP	
4	!	594.5400	49.35	-7.91	41.44	46.00	-4.56	peak	
5	*	779.8100	47.00	-3.60	43.40	46.00	-2.60	peak	
6	!	891.3600	43.74	-1.81	41.93	46.00	-4.07	peak	

Test Mode: TX N40 MODE 5795MHz

Horizontal

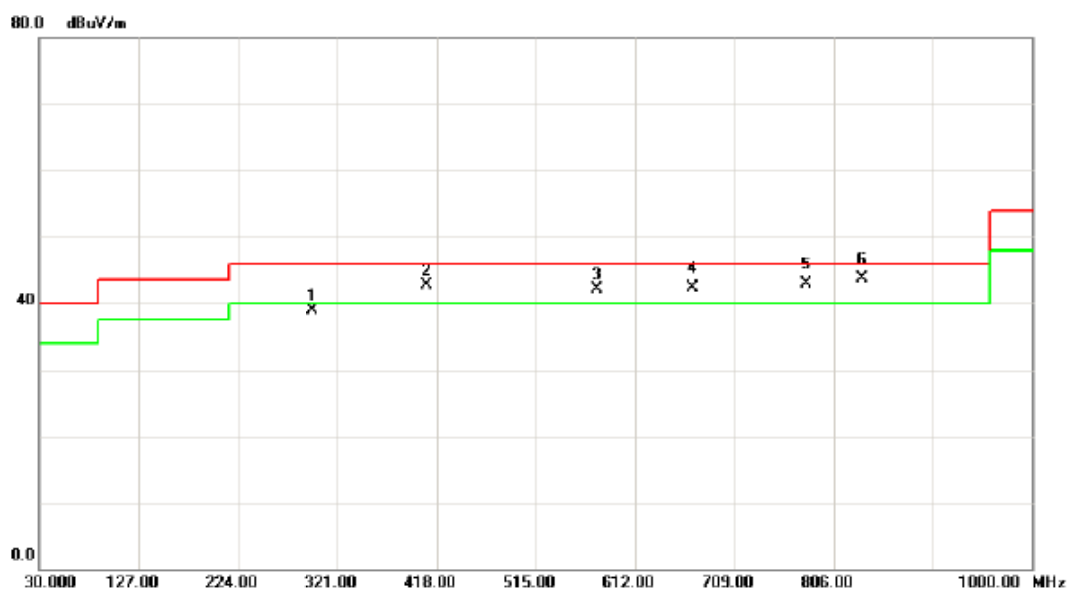


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	!	148.3400	53.97	-13.18	40.79	43.50	-2.71	peak	
2	!	223.0300	54.86	-14.68	40.18	46.00	-5.82	QP	
3	*	353.0100	55.27	-11.65	43.62	46.00	-2.38	peak	
4	!	371.4400	53.47	-10.82	42.65	46.00	-3.35	QP	
5	!	816.6700	45.00	-2.98	42.02	46.00	-3.98	peak	
6	!	891.3600	44.76	-1.81	42.95	46.00	-3.05	peak	

Group 2 of MIMO Panel Antenna

Test Mode: TX N40 MODE 5755MHz

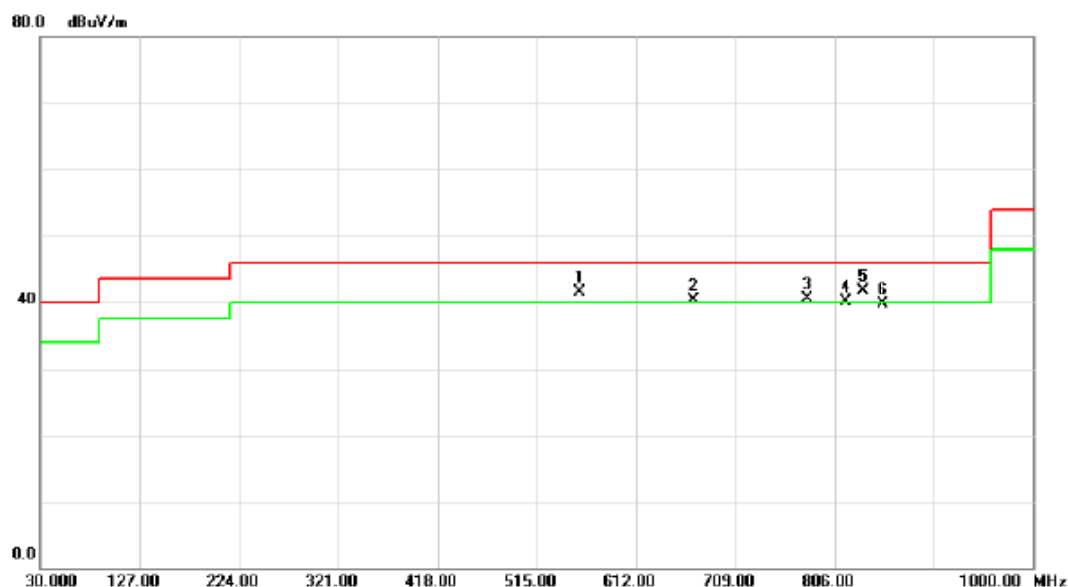
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		296.7500	49.88	-11.05	38.83	46.00	-7.17	peak	
2	!	408.3000	52.12	-9.38	42.74	46.00	-3.26	peak	
3	!	575.1400	50.12	-7.92	42.20	46.00	-3.80	peak	
4	!	668.2600	47.36	-5.07	42.29	46.00	-3.71	QP	
5	!	779.8100	46.58	-3.60	42.98	46.00	-3.02	QP	
6	*	833.1600	46.84	-3.06	43.78	46.00	-2.22	QP	

Test Mode: TX N40 MODE 5755MHz

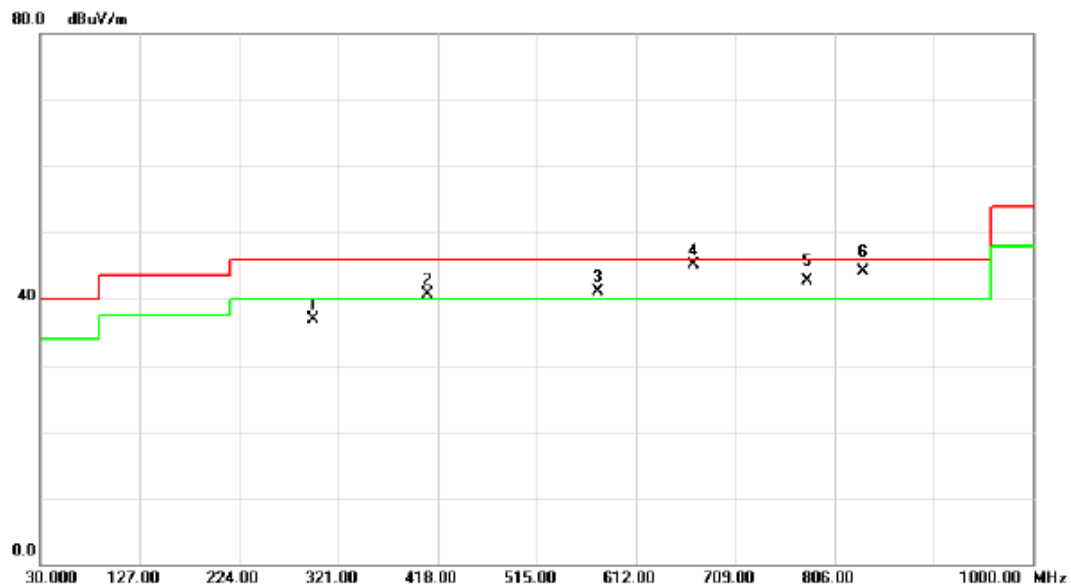
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	!	556.7100	49.40	-7.92	41.48	46.00	-4.52	peak	
2	!	668.2600	45.47	-5.07	40.40	46.00	-5.60	peak	
3	!	779.8100	44.08	-3.60	40.48	46.00	-5.52	peak	
4	!	816.6700	43.17	-2.98	40.19	46.00	-5.81	peak	
5	*	834.1300	44.75	-3.07	41.68	46.00	-4.32	peak	
6		853.5300	42.82	-3.04	39.78	46.00	-6.22	peak	

Test Mode: TX N40 MODE 5795MHz

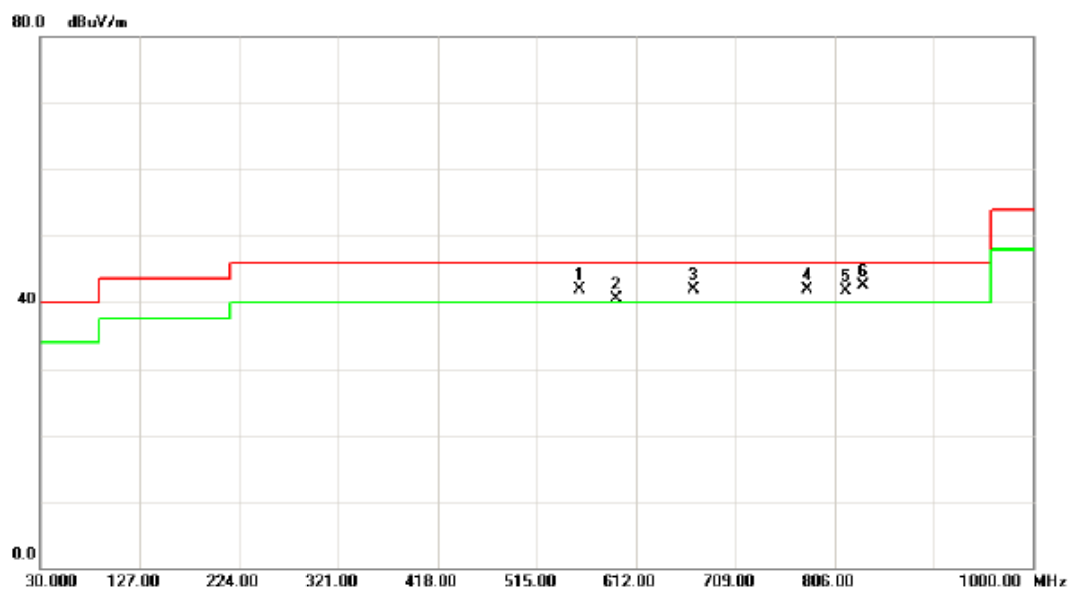
Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		296.7500	47.88	-11.05	36.83	46.00	-9.17	peak	
2	!	408.3000	50.12	-9.38	40.74	46.00	-5.26	peak	
3	!	575.1400	49.12	-7.92	41.20	46.00	-4.80	peak	
4	*	668.2600	50.19	-5.07	45.12	46.00	-0.88	peak	
5	!	779.8100	46.37	-3.60	42.77	46.00	-3.23	QP	
6	!	833.1600	47.15	-3.06	44.09	46.00	-1.91	QP	

Test Mode: TX N40 MODE 5795MHz

Horizontal



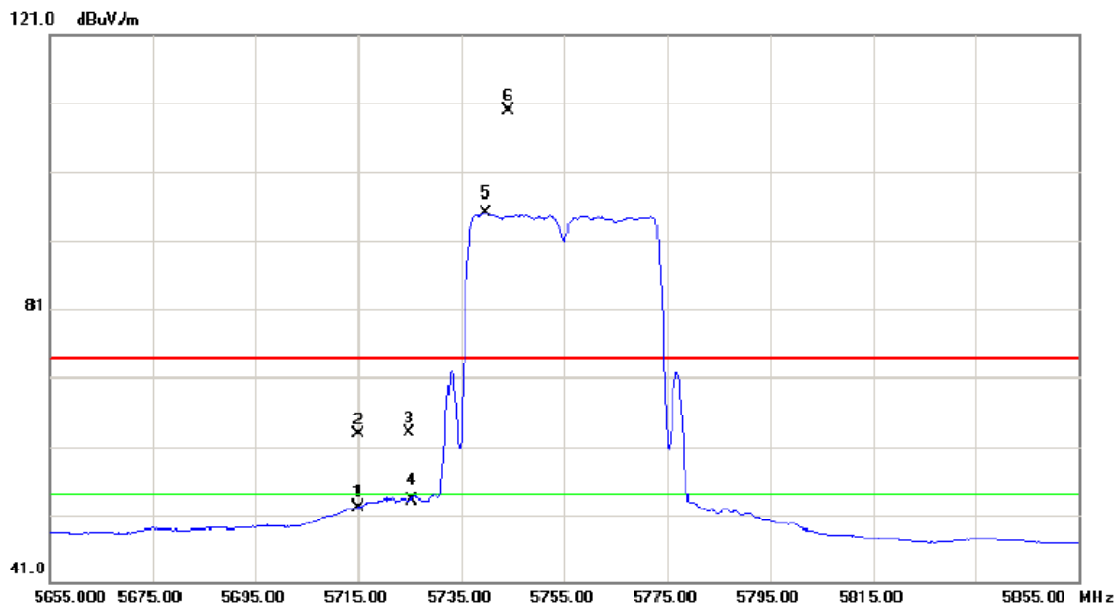
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	!	556.7100	49.90	-7.92	41.98	46.00	-4.02	peak	
2	!	593.5700	48.38	-7.92	40.46	46.00	-5.54	peak	
3	!	668.2600	46.97	-5.07	41.90	46.00	-4.10	peak	
4	!	779.8100	45.58	-3.60	41.98	46.00	-4.02	peak	
5	!	816.6700	44.67	-2.98	41.69	46.00	-4.31	peak	
6	*	833.1600	45.48	-3.06	42.42	46.00	-3.58	peak	

ATTACHMENT D -RADIATED EMISSION (ABOVE 1000MHZ)

Group 1 of Dipole Antenna

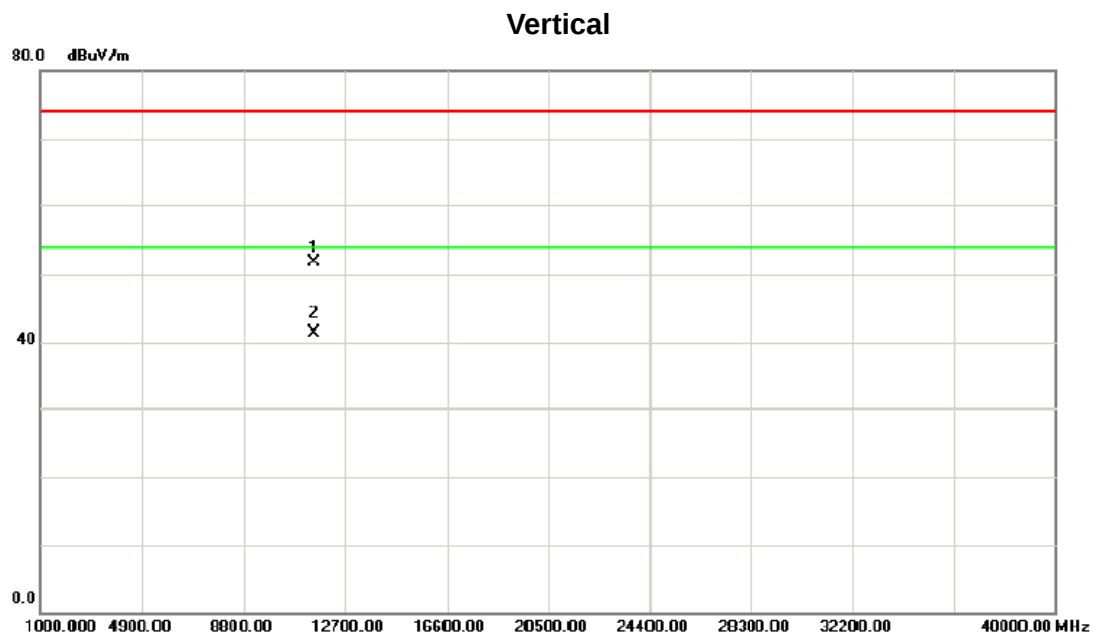
Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz

Vertical



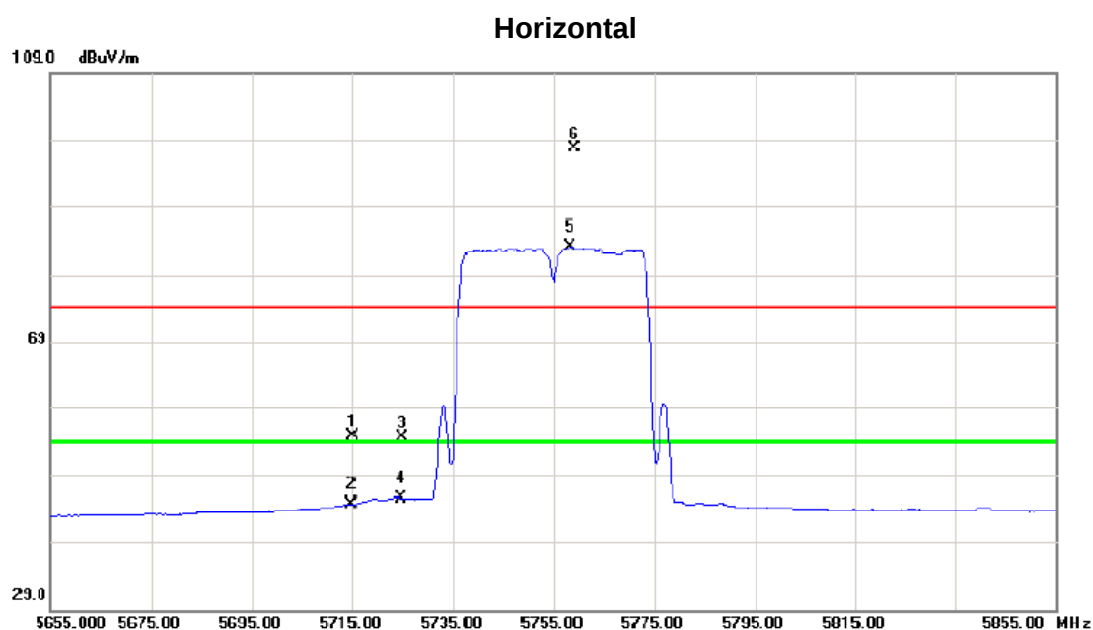
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5715.000	42.24	9.94	52.18	74.00	-21.82	peak	
2		5715.000	52.80	9.94	62.74	74.00	-11.26	peak	
3		5725.000	52.93	9.99	62.92	74.00	-11.08	peak	
4		5725.000	43.18	9.99	53.17	54.00	-0.83	AVG	
5	*	5739.600	84.87	10.06	94.93	54.00	40.93	AVG	no limit
6	X	5744.200	99.80	10.09	109.89	74.00	35.89	peak	no limit

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz



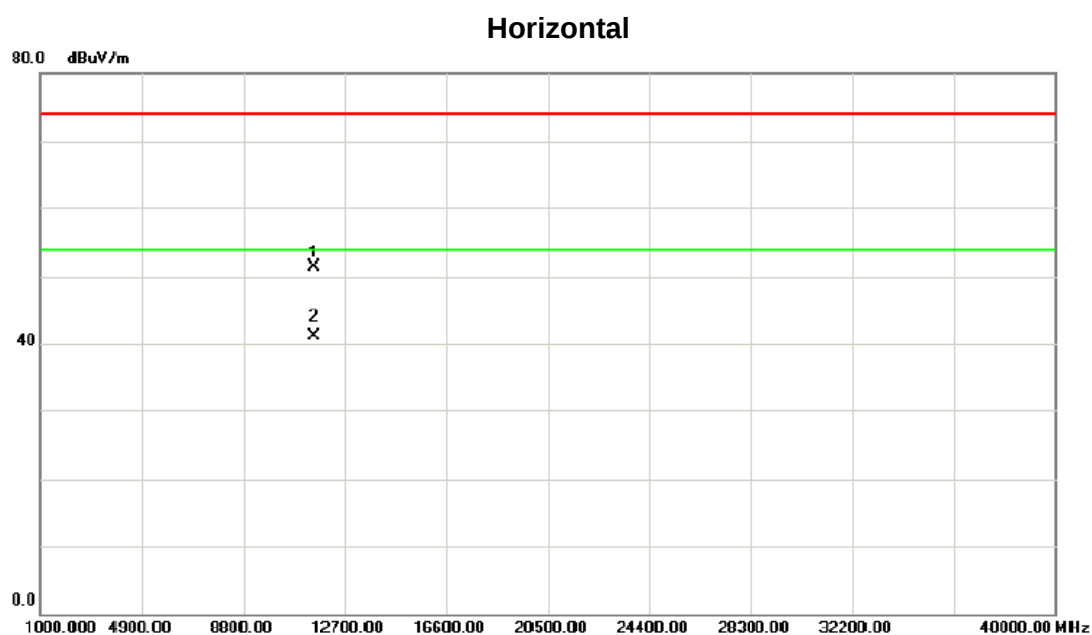
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11510.35	35.22	16.49	51.71	74.00	-22.29	peak	
2	*	11510.35	24.73	16.49	41.22	54.00	-12.78	AVG	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz



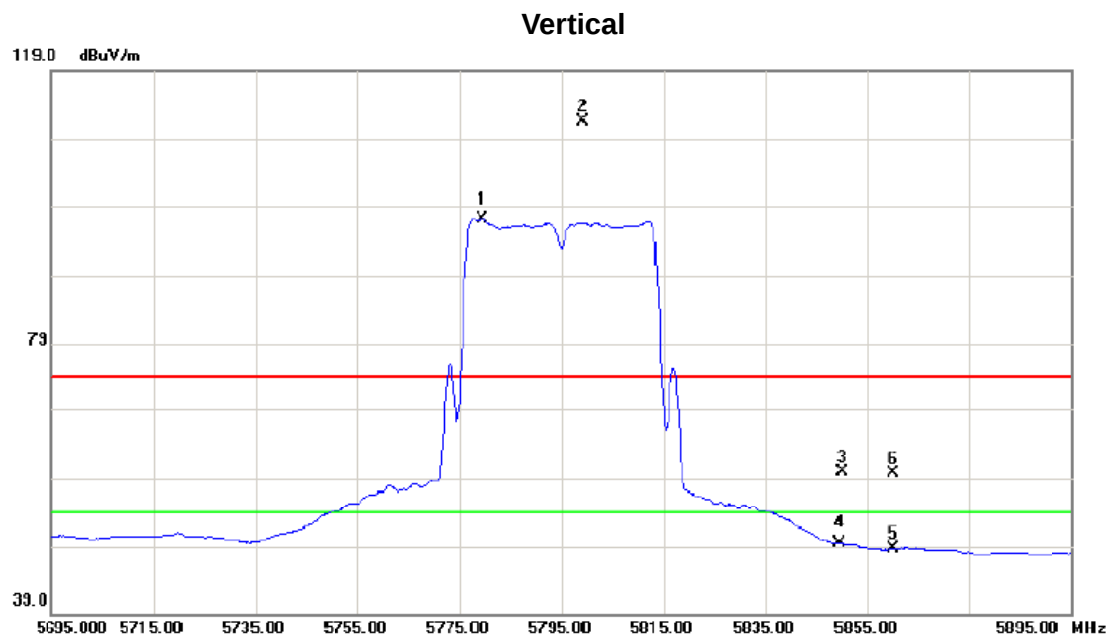
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5715.000	44.70	9.94	54.64	74.00	-19.36	peak	
2		5715.000	34.84	9.94	44.78	54.00	-9.22	AVG	
3		5725.000	44.59	9.99	54.58	74.00	-19.42	peak	
4		5725.000	35.51	9.99	45.50	54.00	-8.50	AVG	
5	*	5758.400	72.92	10.17	83.09	54.00	29.09	AVG	no limit
6	X	5759.200	87.48	10.17	97.65	74.00	23.65	peak	no limit

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11509.25	34.74	16.49	51.23	74.00	-22.77	peak	
2	*	11509.25	24.56	16.49	41.05	54.00	-12.95	AVG	

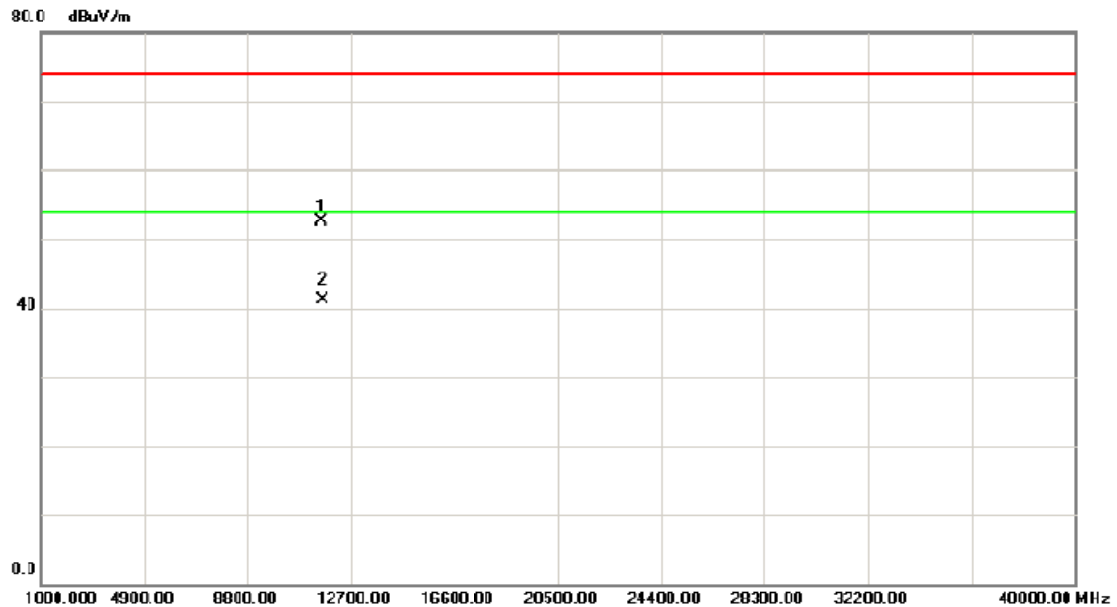
Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	5779.400	86.84	10.27	97.11	54.00	43.11	AVG	no limit
2	X	5799.200	101.1	10.38	111.49	74.00	37.49	peak	no limit
3		5850.000	49.21	10.64	59.85	74.00	-14.15	peak	
4		5850.000	38.77	10.64	49.41	54.00	-4.59	AVG	
5		5860.000	38.01	10.68	48.69	74.00	-25.31	peak	
6		5860.000	49.01	10.68	59.69	74.00	-14.31	peak	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

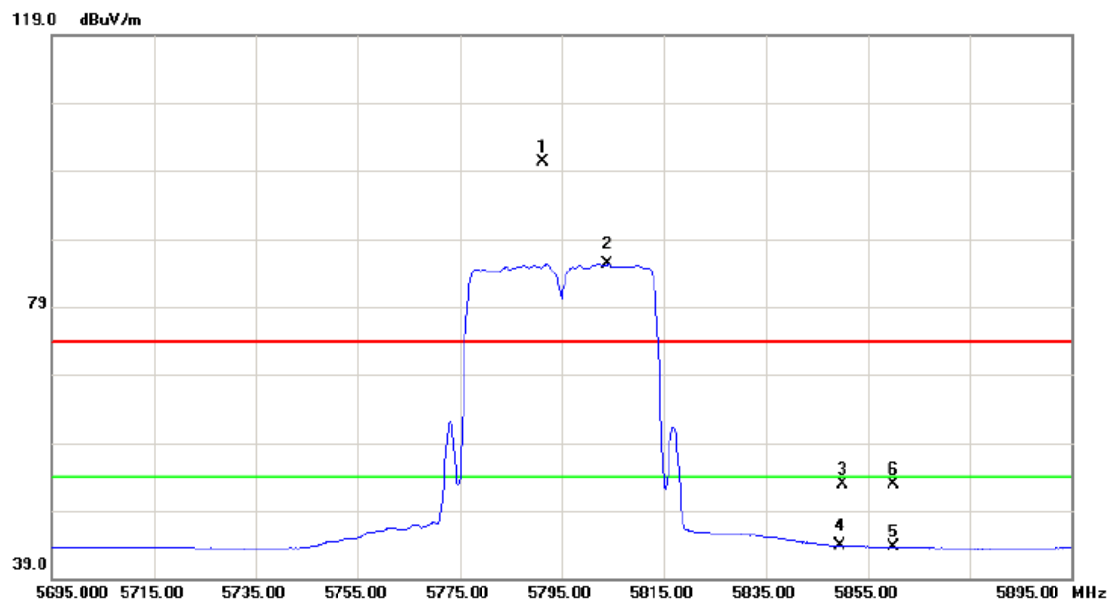
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11590.15	35.98	16.43	52.41	74.00	-21.59	peak	
2	*	11590.15	24.64	16.43	41.07	54.00	-12.93	AVG	

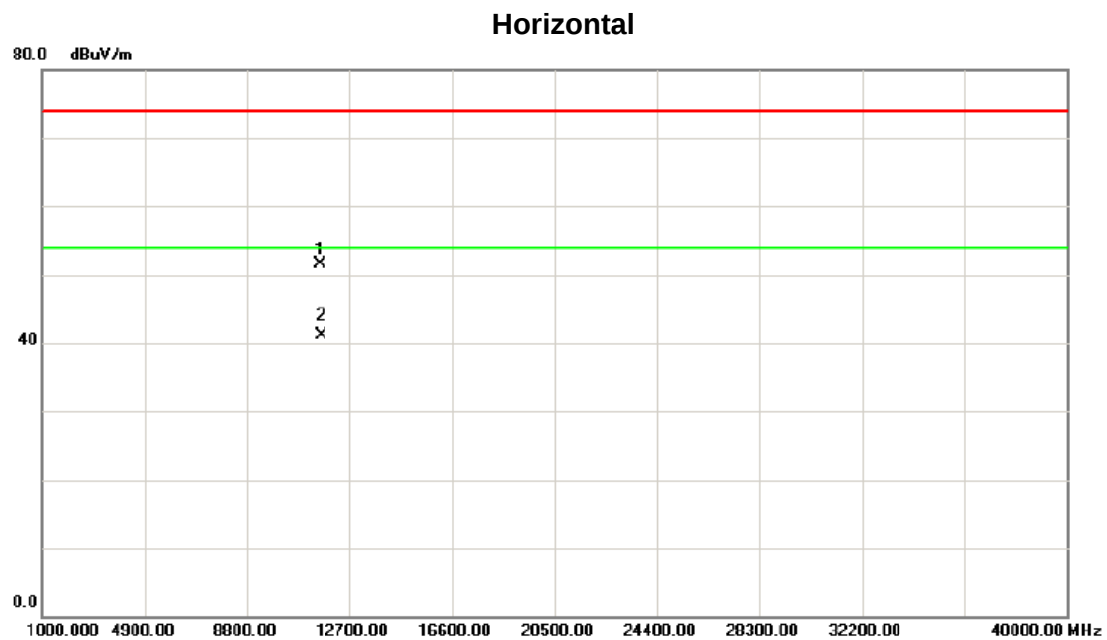
Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	5791.400	90.04	10.33	100.37	74.00	26.37	peak	no limit
2	*	5804.000	74.86	10.40	85.26	54.00	31.26	AVG	no limit
3		5850.000	42.26	10.64	52.90	74.00	-21.10	peak	
4		5850.000	33.20	10.64	43.84	54.00	-10.16	AVG	
5		5860.000	32.97	10.68	43.65	74.00	-30.35	peak	
6		5860.000	42.24	10.68	52.92	74.00	-21.08	peak	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

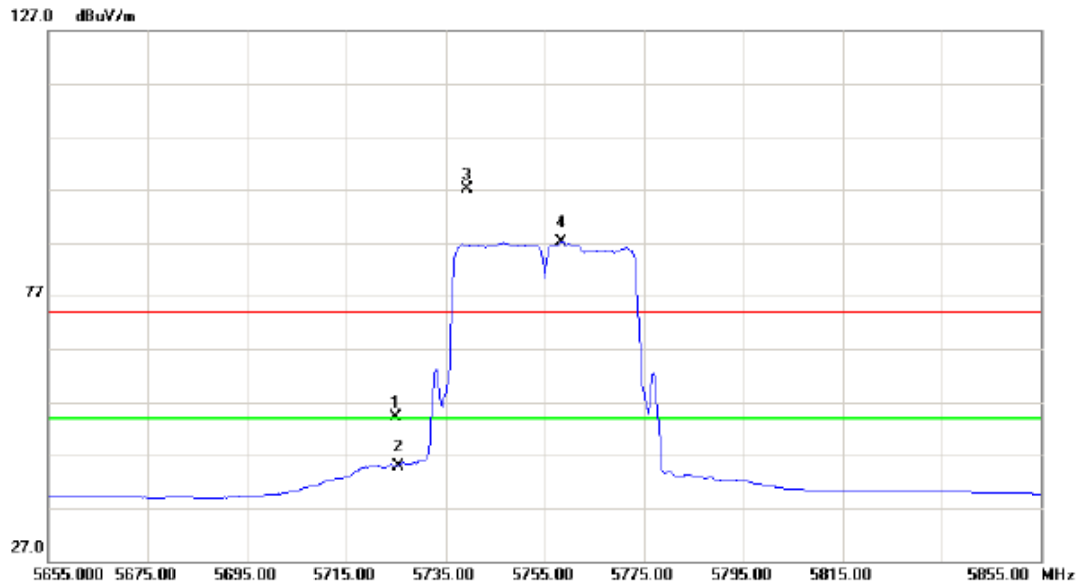


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11590.60	35.14	16.43	51.57	74.00	-22.43	peak	
2	*	11590.82	24.64	16.43	41.07	54.00	-12.93	AVG	

Group 2 of MIMO Panel Antenna

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz

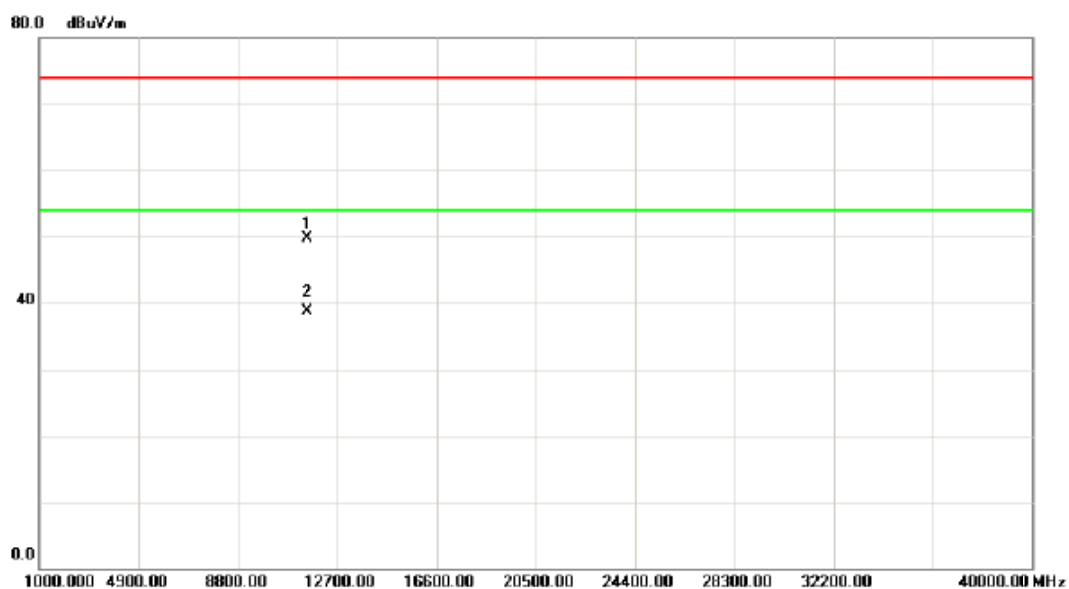
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5725.000	13.00	41.10	54.10	74.00	-19.90	peak	
2		5725.000	3.73	41.10	44.83	54.00	-9.17	AVG	
3	X	5739.400	56.07	41.15	97.22	74.00	23.22	peak	No Limit
4	*	5758.400	45.93	41.24	87.17	54.00	33.17	AVG	No Limit

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz

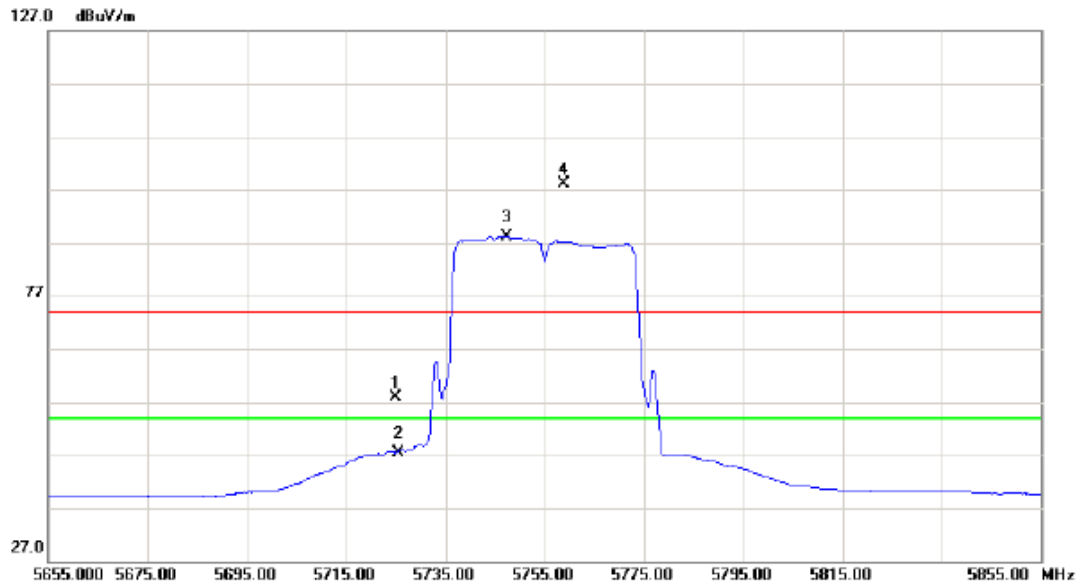
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11511.26	33.23	16.48	49.71	74.00	-24.29	peak	
2	*	11511.26	22.18	16.48	38.66	54.00	-15.34	AVG	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz

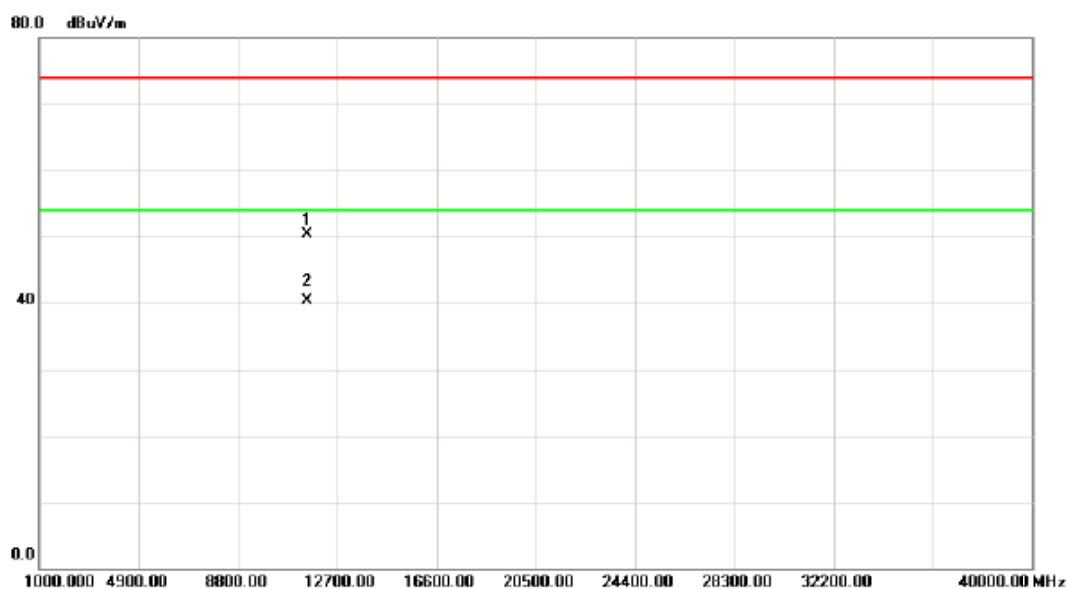
Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		5725.000	16.82	41.10	57.92	74.00	-16.08	peak	
2		5725.000	6.40	41.10	47.50	54.00	-6.50	AVG	
3	*	5747.400	46.95	41.19	88.14	54.00	34.14	AVG	No Limit
4	X	5758.800	56.78	41.24	98.02	74.00	24.02	peak	No Limit

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5755MHz

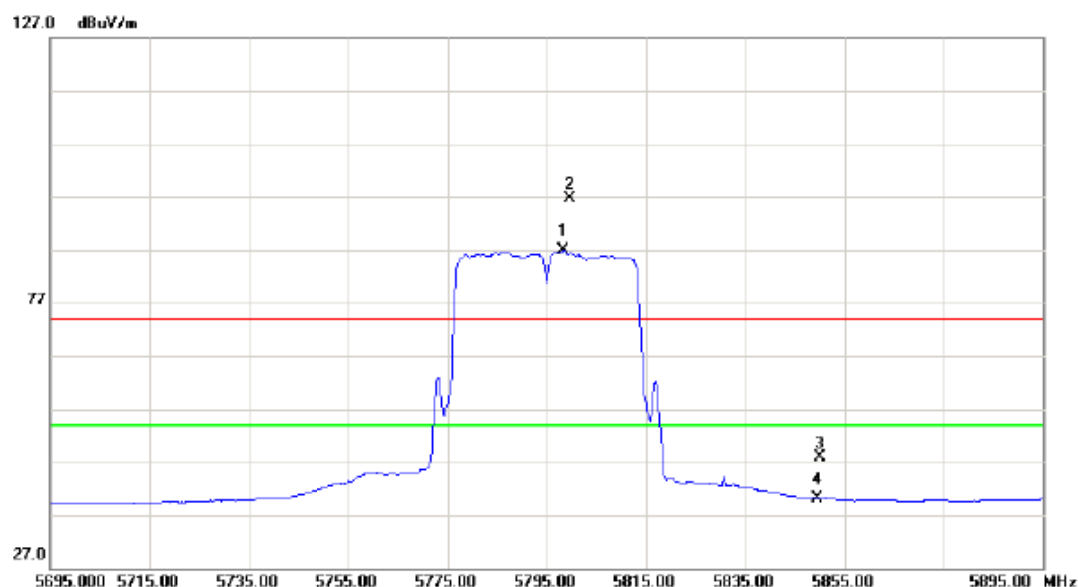
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11508.73	33.85	16.49	50.34	74.00	-23.66	peak	
2	*	11508.73	23.86	16.49	40.35	54.00	-13.65	AVG	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

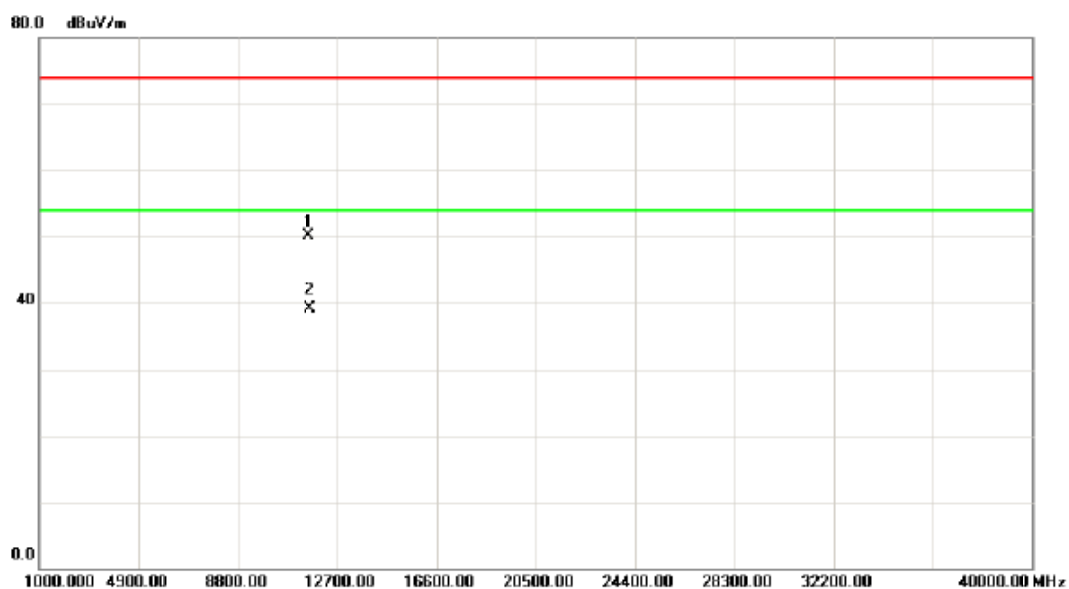
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	5798.400	45.37	41.40	86.77	54.00	32.77	AVG	No Limit
2	X	5799.600	55.28	41.41	96.69	74.00	22.69	peak	No Limit
3		5850.000	6.33	41.62	47.95	74.00	-26.05	peak	
4		5850.000	-1.42	41.62	40.20	54.00	-13.80	AVG	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

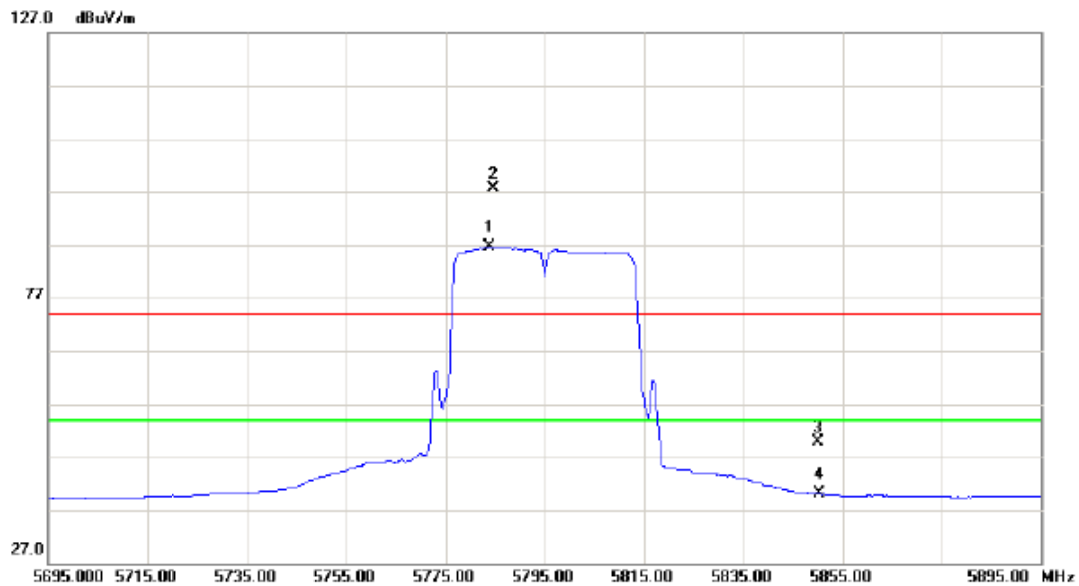
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11591.97	33.75	16.43	50.18	74.00	-23.82	peak	
2	*	11591.97	22.58	16.43	39.01	54.00	-14.99	AVG	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

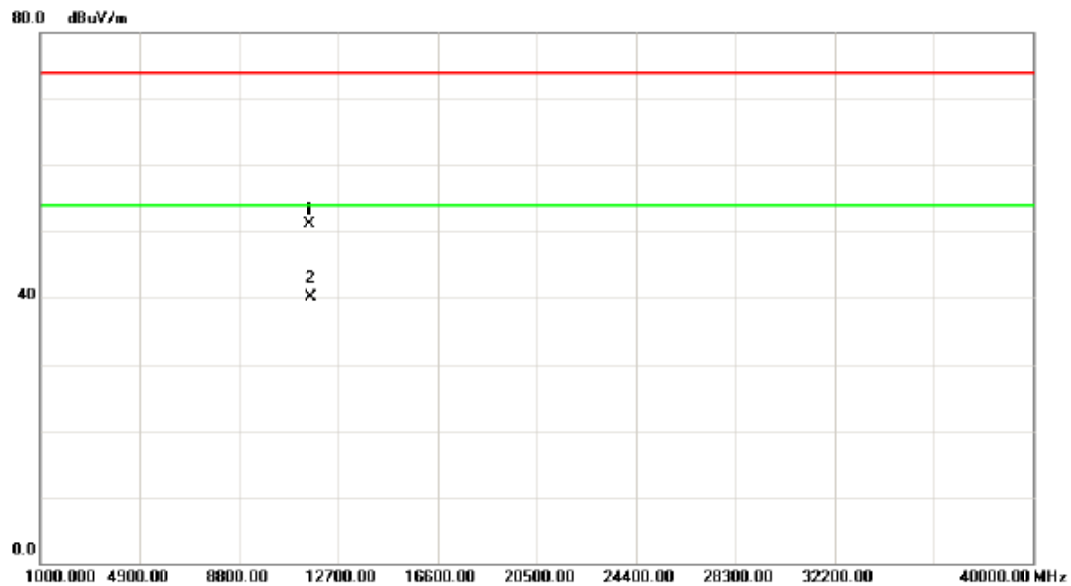
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	5784.000	45.39	41.34	86.73	54.00	32.73	AVG	No Limit
2	X	5784.600	56.33	41.34	97.67	74.00	23.67	peak	No Limit
3		5850.000	8.25	41.62	49.87	74.00	-24.13	peak	
4		5850.000	-1.53	41.62	40.09	54.00	-13.91	AVG	

Orthogonal Axis :	X
Test Mode :	TXN40 Mode 5795MHz

Horizontal



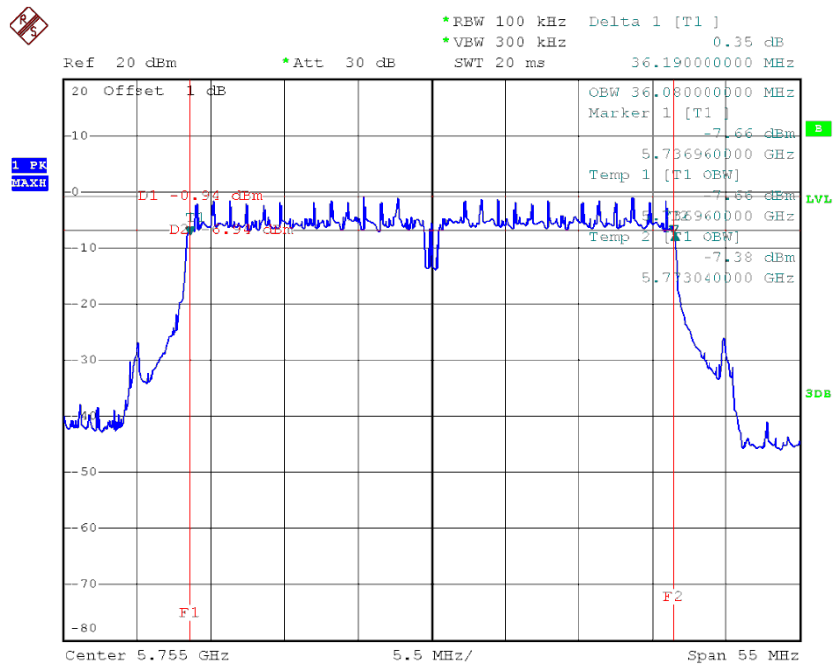
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11589.11	34.70	16.44	51.14	74.00	-22.86	peak	
2	*	11589.11	23.61	16.44	40.05	54.00	-13.95	AVG	

ATTACHMENT E -BANDWIDTH

Test Mode : TX N-40MHz Mode_CH151/159

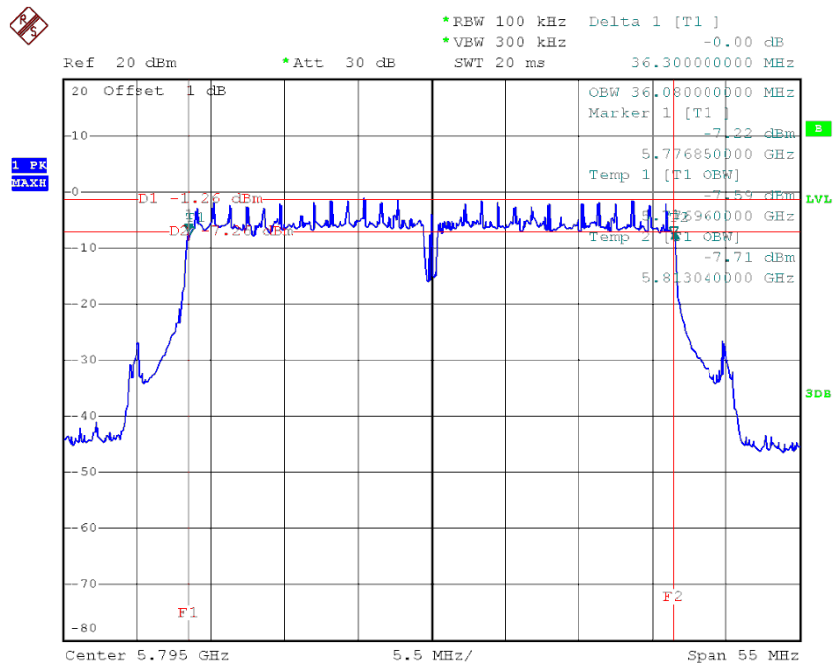
Test Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH151	5755	36.19	36.08	>=500KHz
CH159	5795	36.30	36.08	>=500KHz

TX CH 151



Date: 28.AUG.2014 20:54:25

TX CH 159



Date: 28.AUG.2014 21:09:50

ATTACHMENT F -MAXIMUM OUTPUT POWER

Test Mode : TX N-40M Mode_ANT A

Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	19.99	30	1
CH159	5795	19.76	30	1

Test Mode : TX N-40M Mode_ANT B

Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	19.71	30	1
CH159	5795	19.78	30	1

Test Mode : TX N-40M Mode_ANT C

Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	19.41	30	1
CH159	5795	19.36	30	1

Test Mode : TX N-40M Mode_ANT D

Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	19.87	30	1
CH159	5795	19.91	30	1

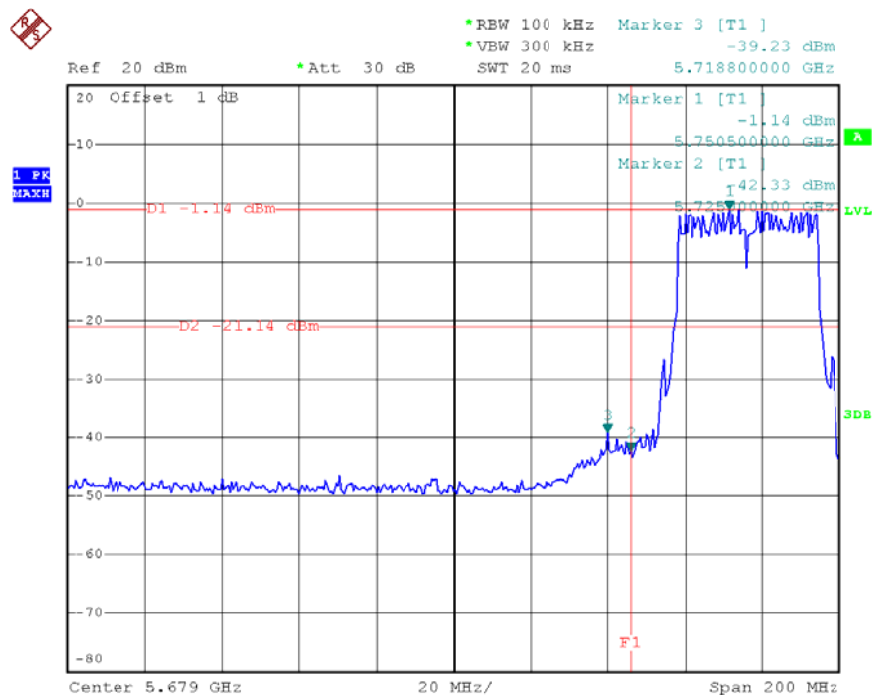
Test Mode : TX N-40M Mode_Total

Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH151	5755	25.77	30	1
CH159	5795	25.73	30	1

ATTACHMENT G –ANTENNA CONDUCTED SPURIOUS EMISSION

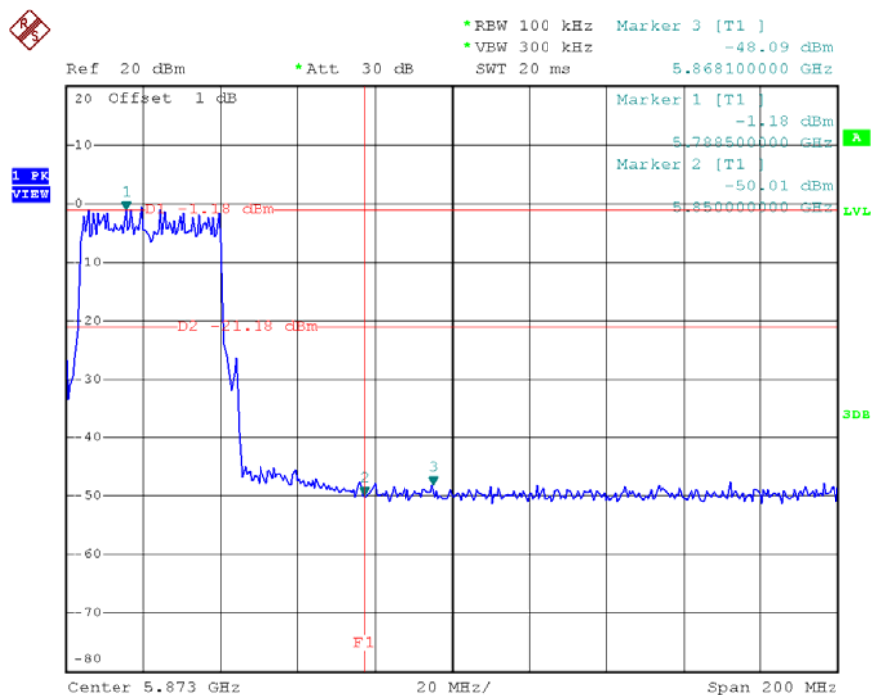
Test Mode :	TX N-40M Mode_ANT A
-------------	---------------------

TX HT40 modeCH151



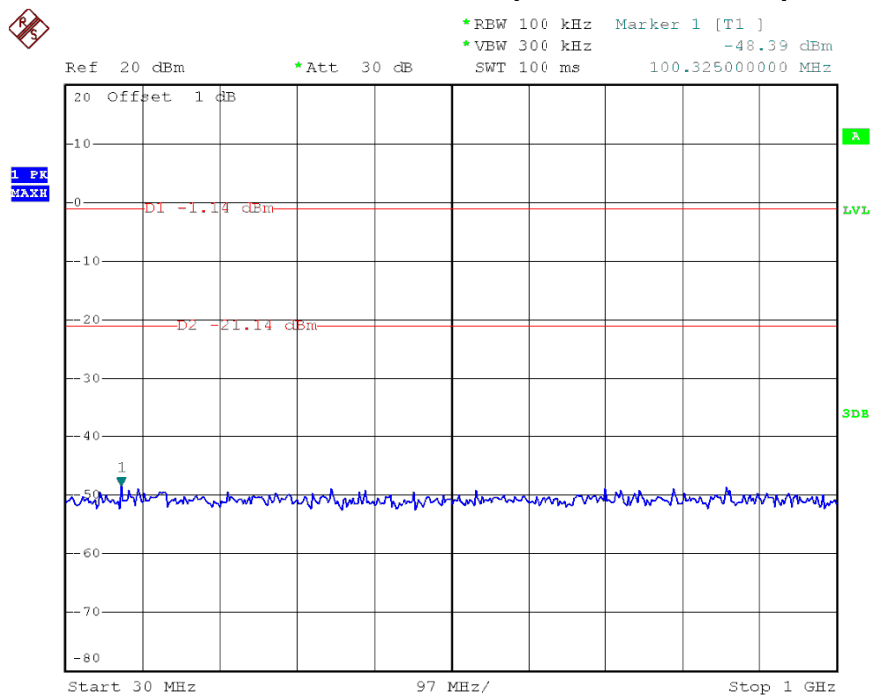
Date: 28.AUG.2014 20:56:13

TX HT40 modeCH159



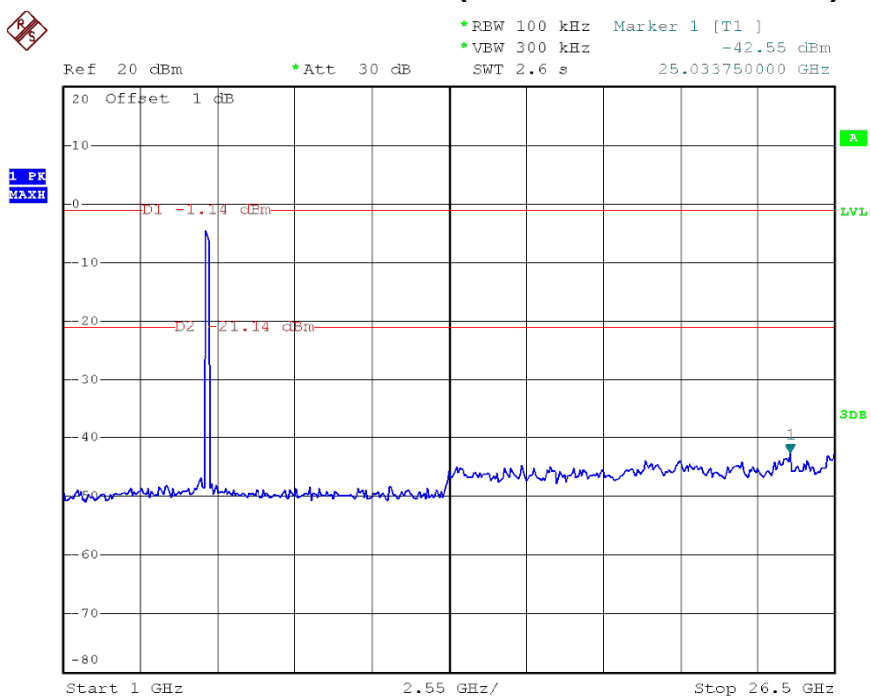
Date: 28.AUG.2014 21:13:08

TX HT40 modeCH151 (30MHz to 1000MHz)



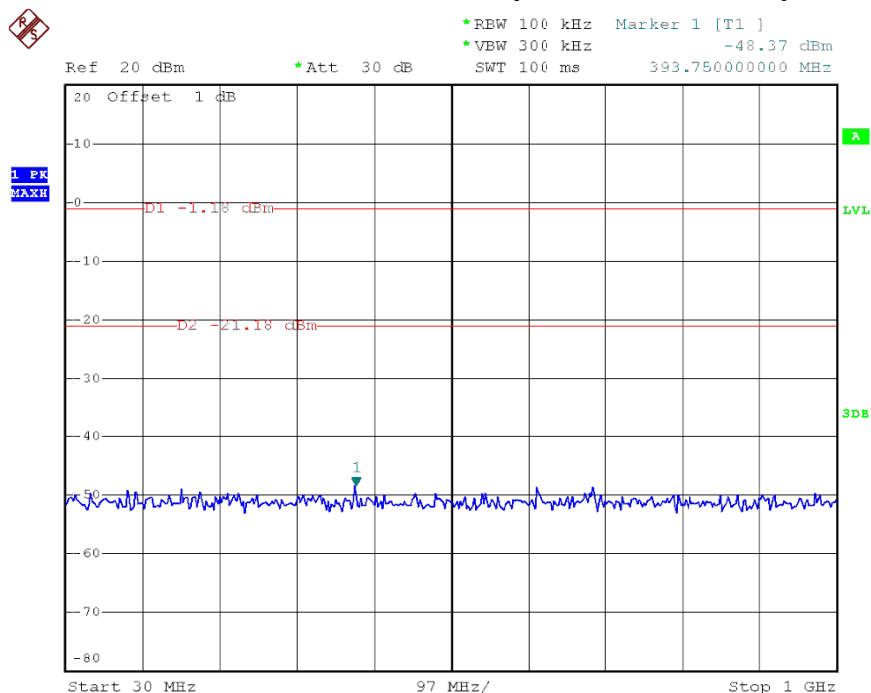
Date: 28.AUG.2014 20:56:34

TX HT40 modeCH151 (1000MHz to 10th Harmonic)



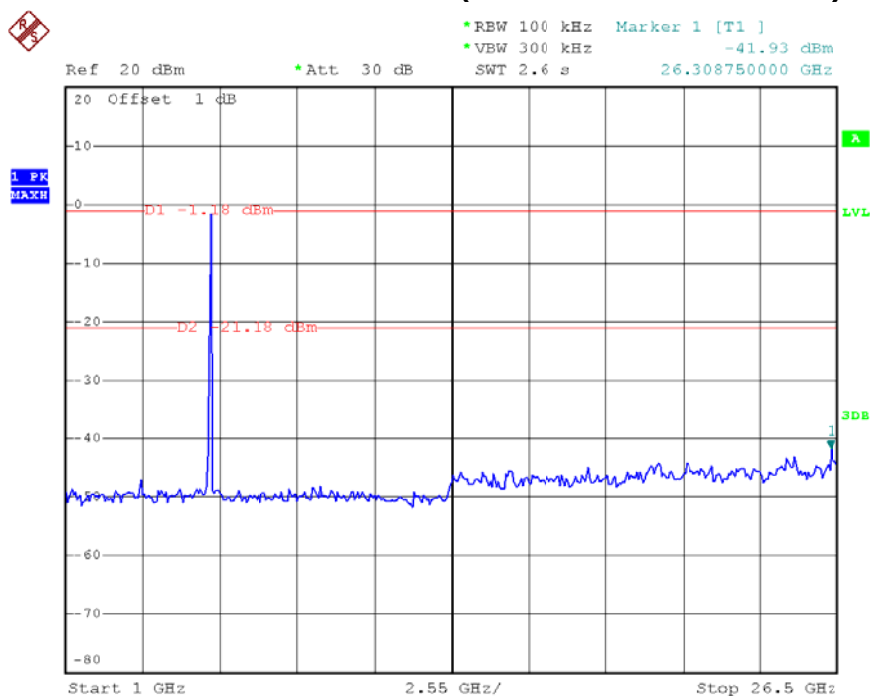
Date: 28.AUG.2014 20:56:54

TX HT40 modeCH159 (30MHz to 1000MHz)



Date: 28.AUG.2014 21:13:27

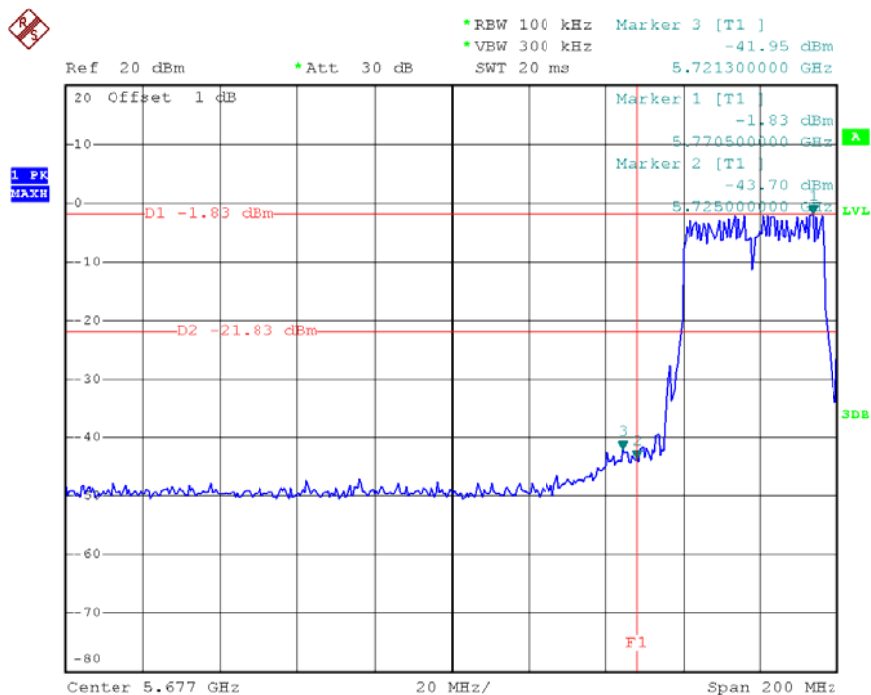
TX HT40 modeCH159 (1000MHz to 10th Harmonic)



Date: 28.AUG.2014 21:13:39

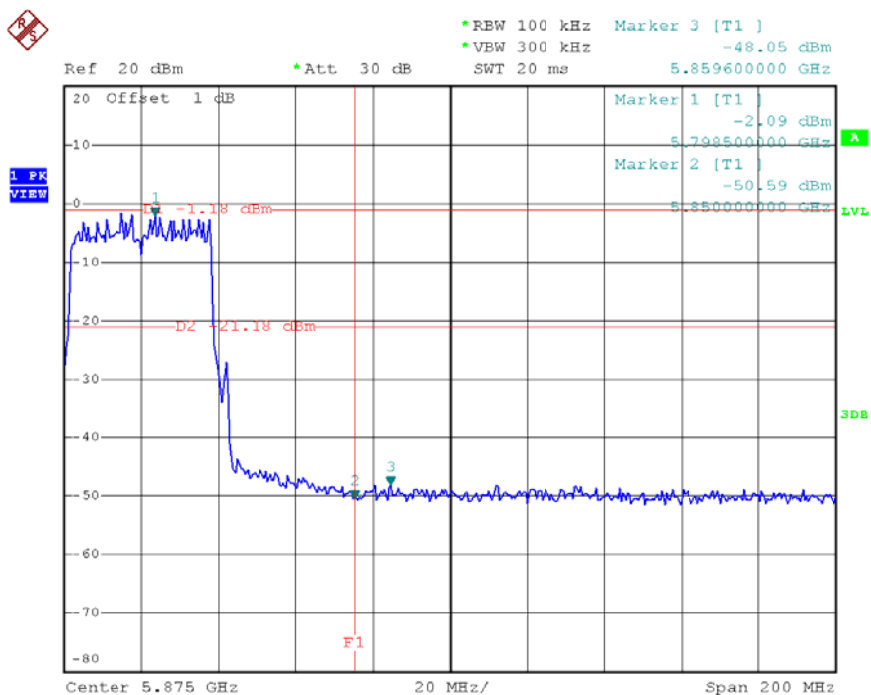
Test Mode :	TX N-40M Mode_ANT B
-------------	---------------------

TX HT40 modeCH151



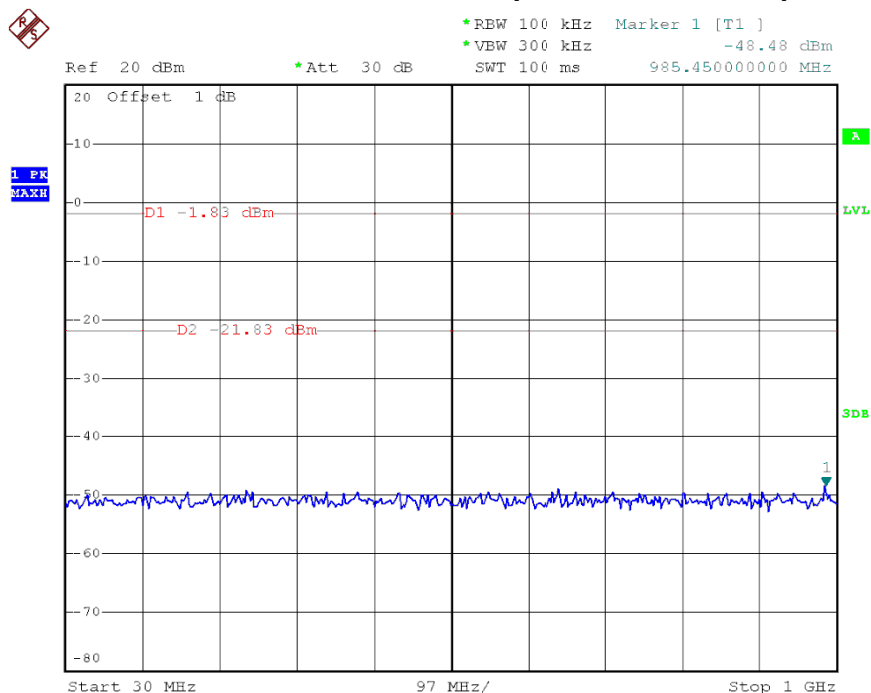
Date: 28.AUG.2014 20:57:53

TX HT40 modeCH159



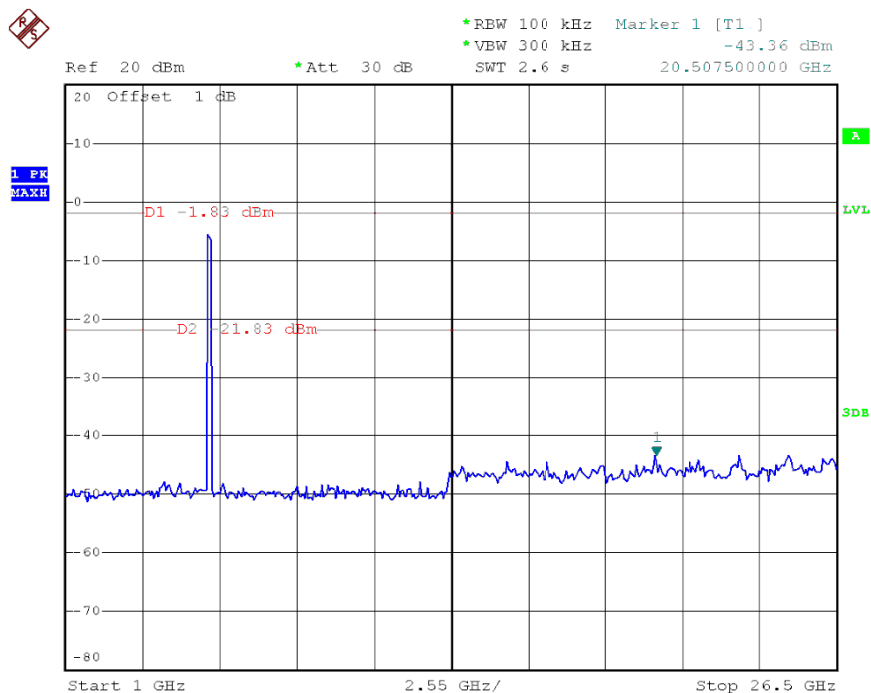
Date: 28.AUG.2014 21:15:07

TX HT40 modeCH151 (30MHz to 1000MHz)



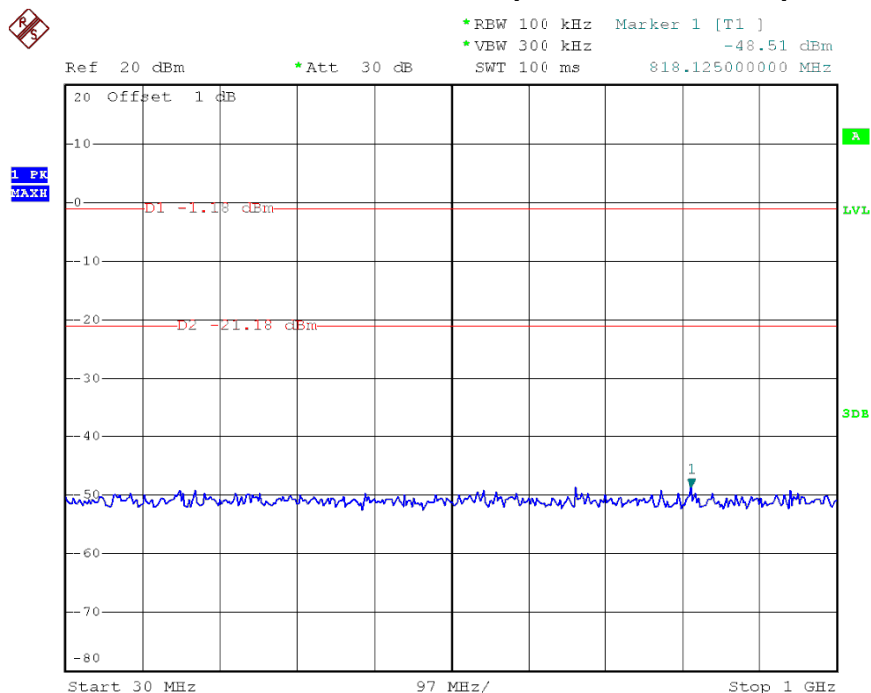
Date: 28.AUG.2014 20:58:13

TX HT40 modeCH151 (1000MHz to 10th Harmonic)



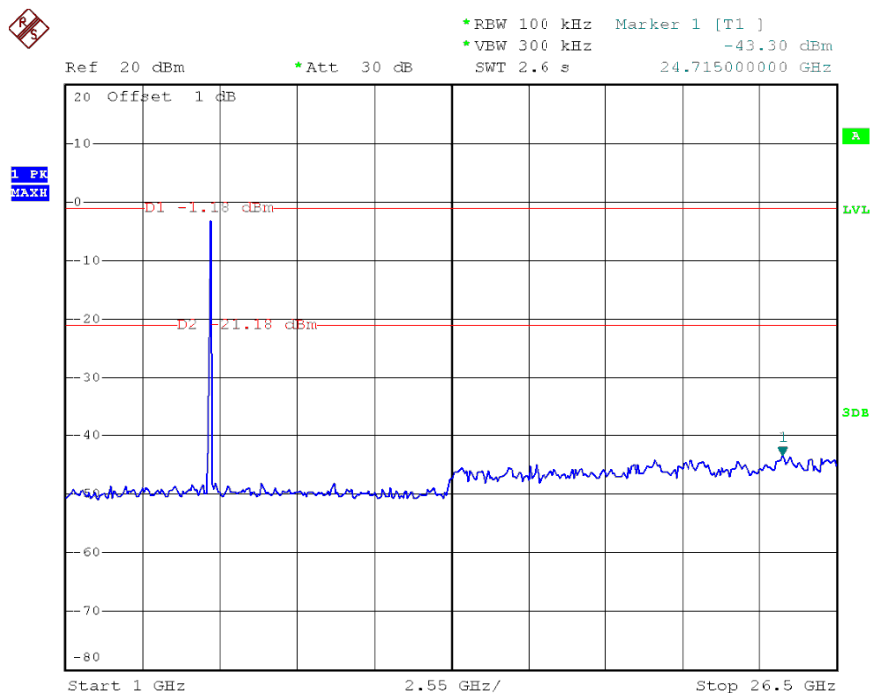
Date: 28.AUG.2014 20:58:26

TX HT40 modeCH159 (30MHz to 1000MHz)



Date: 28.AUG.2014 21:15:21

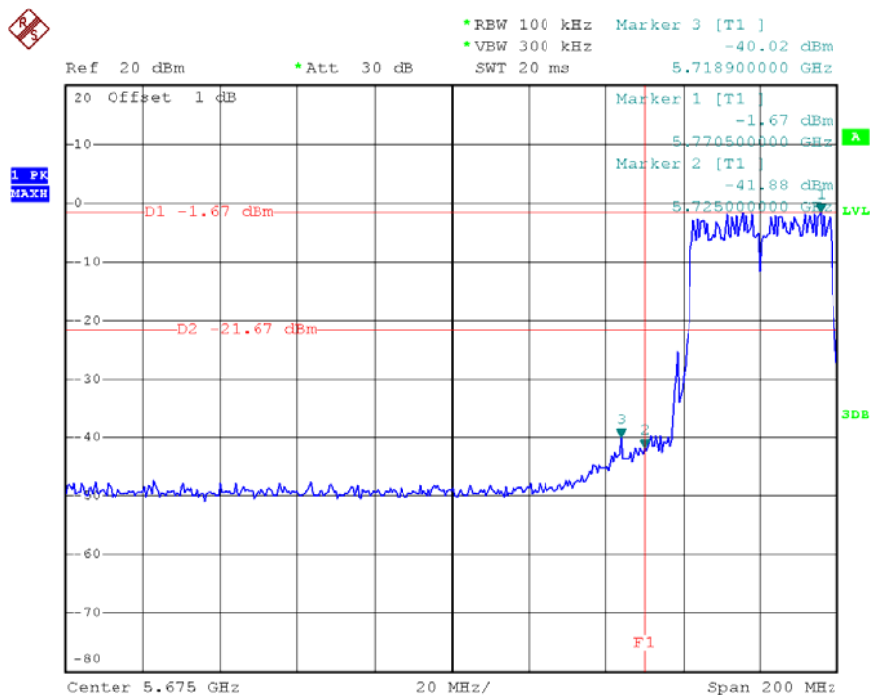
TX HT40 modeCH159 (1000MHz to 10th Harmonic)



Date: 28.AUG.2014 21:15:38

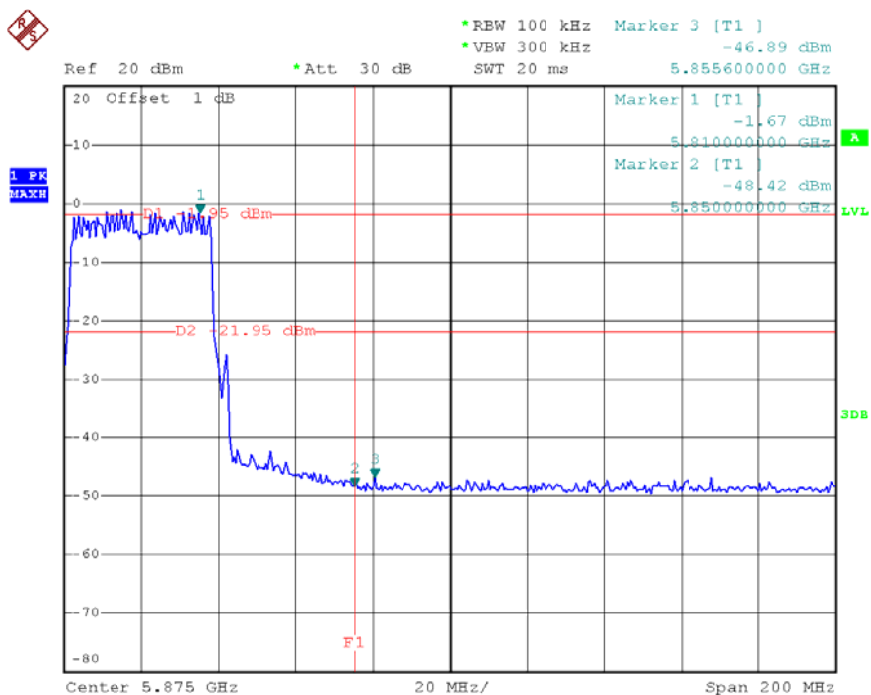
Test Mode :	TX N-40M Mode_ANT C
-------------	---------------------

TX HT40 modeCH151



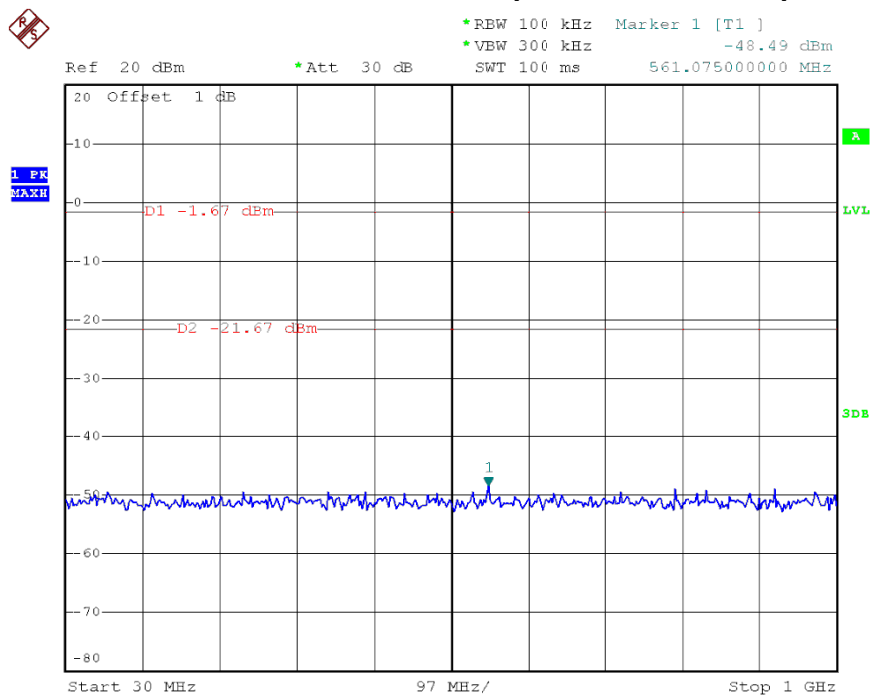
Date: 28.AUG.2014 21:01:56

TX HT40 modeCH159



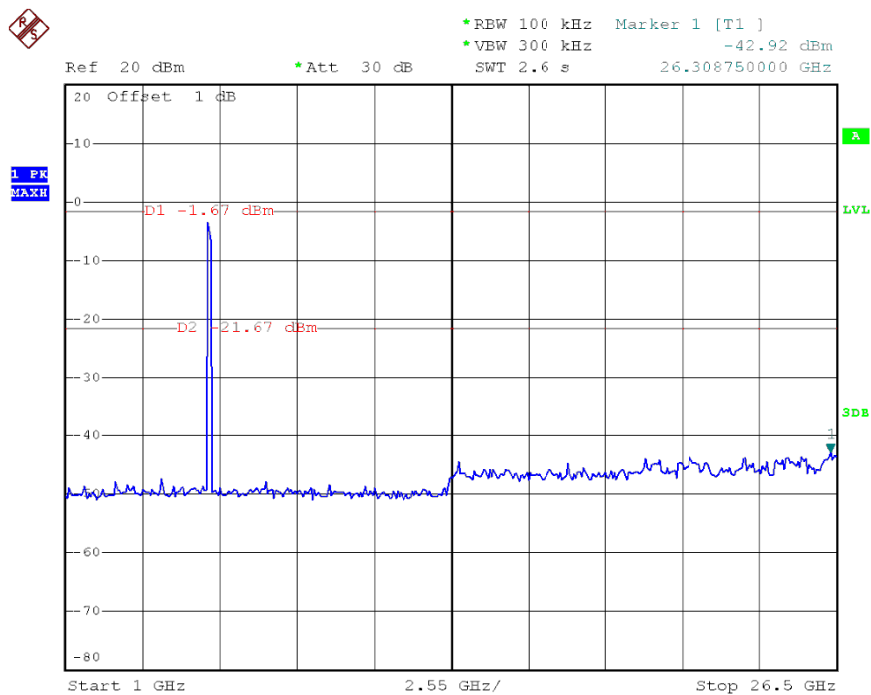
Date: 28.AUG.2014 21:06:10

TX HT40 modeCH151 (30MHz to 1000MHz)



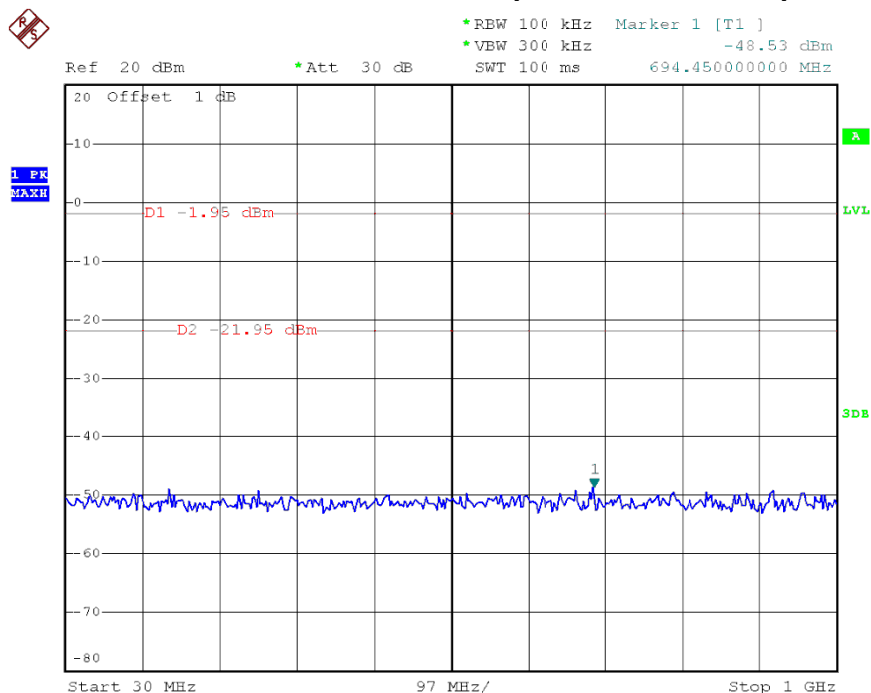
Date: 28.AUG.2014 21:02:07

TX HT40 modeCH151 (1000MHz to 10th Harmonic)



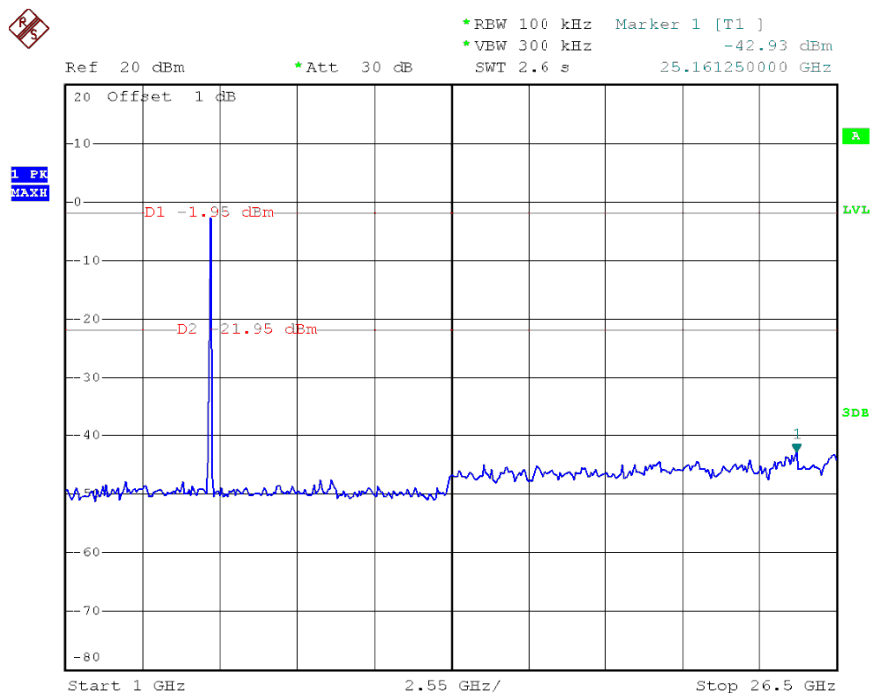
Date: 28.AUG.2014 21:02:25

TX HT40 modeCH159 (30MHz to 1000MHz)



Date: 28.AUG.2014 21:06:23

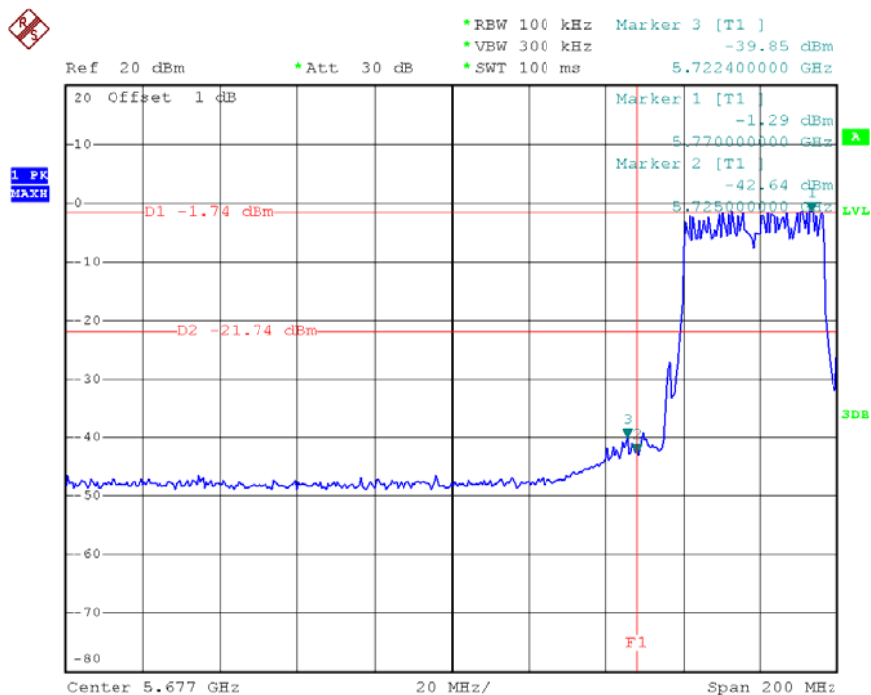
TX HT40 modeCH159 (1000MHz to 10th Harmonic)



Date: 28.AUG.2014 21:06:40

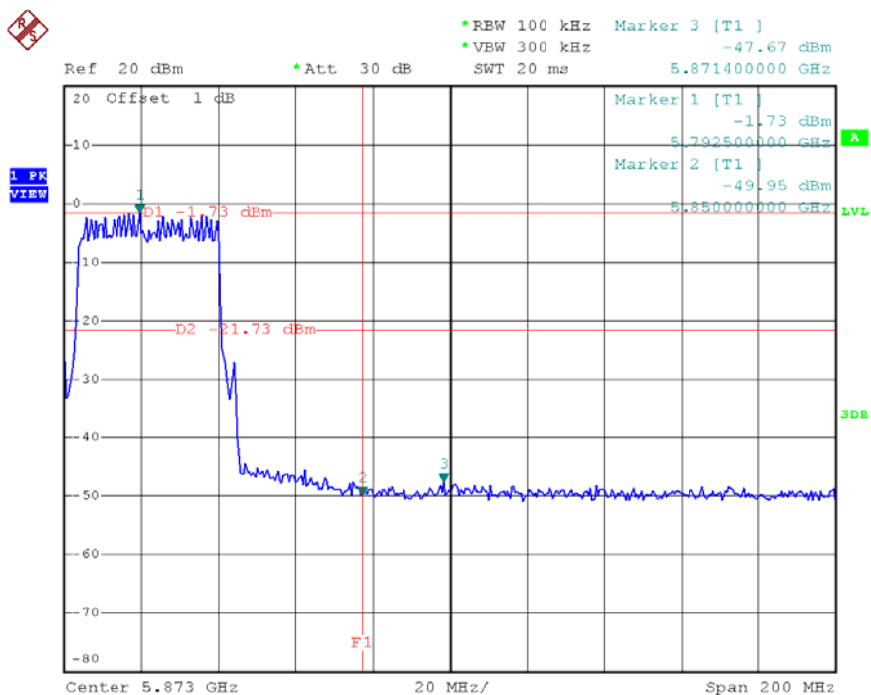
Test Mode :	TX N-40M Mode_ANT D
-------------	---------------------

TX HT40 modeCH151



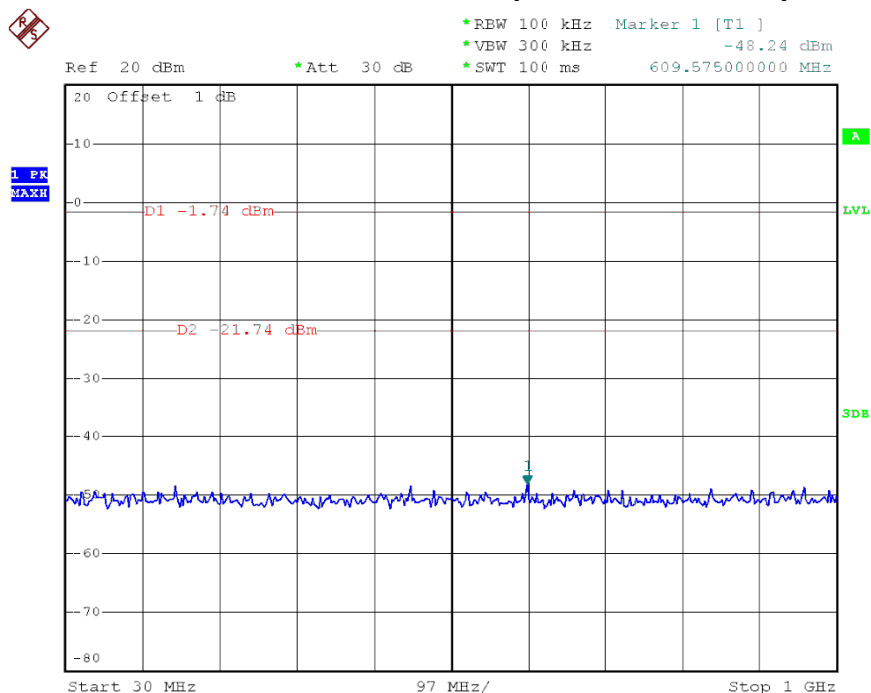
Date: 28.AUG.2014 20:48:25

TX HT40 modeCH159



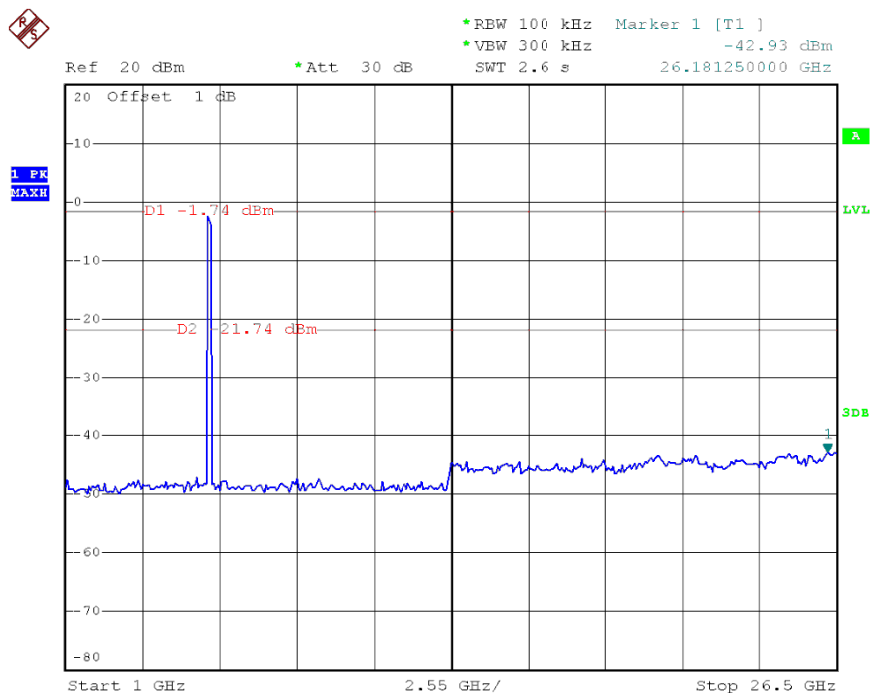
Date: 28.AUG.2014 21:11:35

TX HT40 modeCH151 (30MHz to 1000MHz)



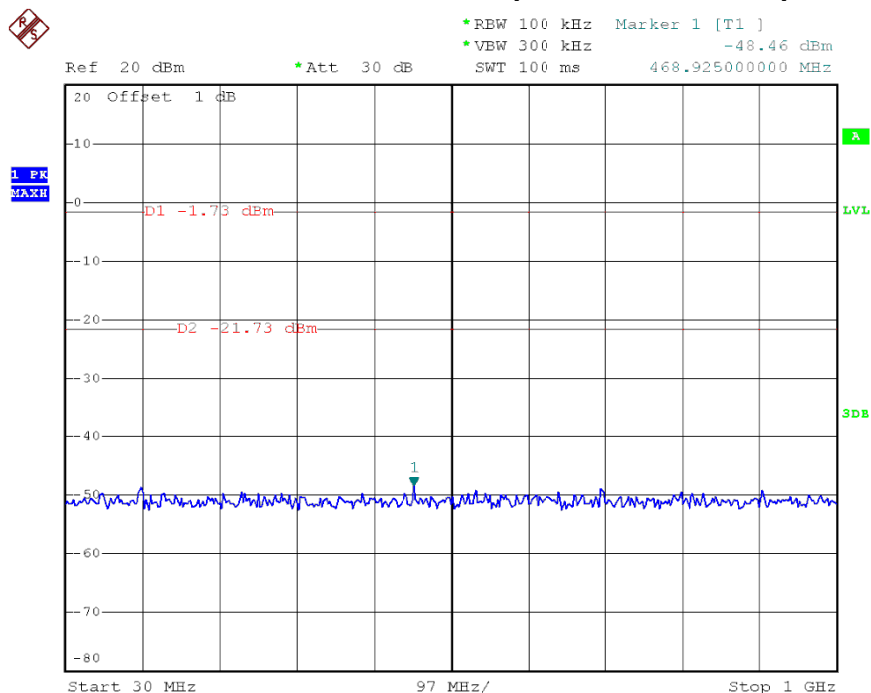
Date: 28.AUG.2014 20:49:09

TX HT40 modeCH151 (1000MHz to 10th Harmonic)



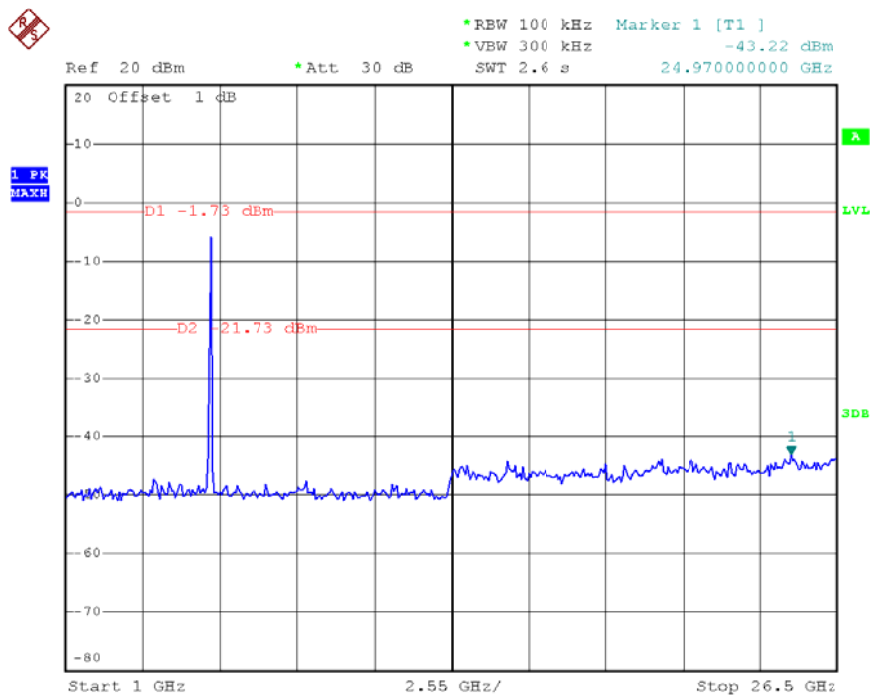
Date: 28.AUG.2014 20:51:01

TX HT40 modeCH159 (30MHz to 1000MHz)



Date: 28.AUG.2014 21:11:50

TX HT40 modeCH159 (1000MHz to 10th Harmonic)



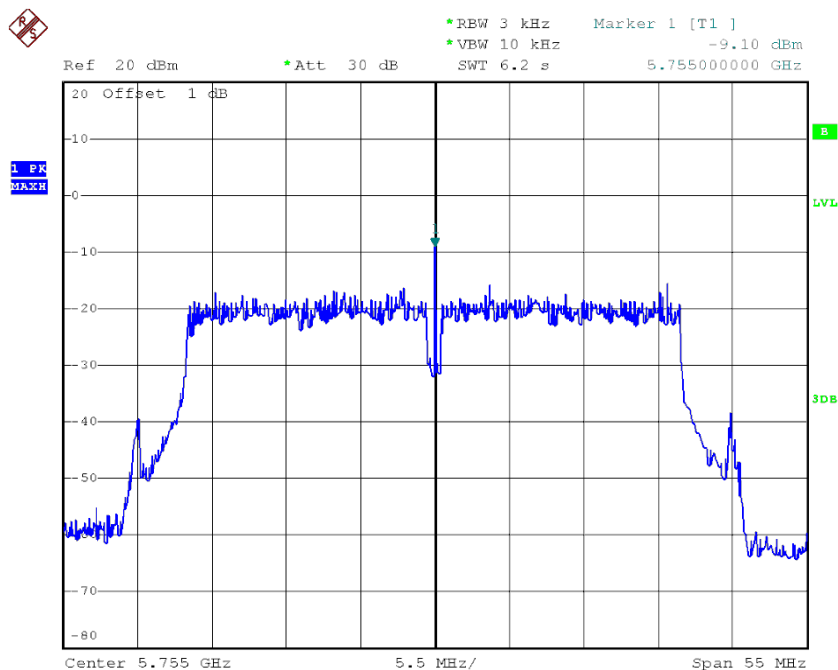
Date: 28.AUG.2014 21:12:06

ATTACHMENT H –POWER SPECTRAL DENSITY

Test Mode : TX N-40M Mode_CH151/159_ANT A

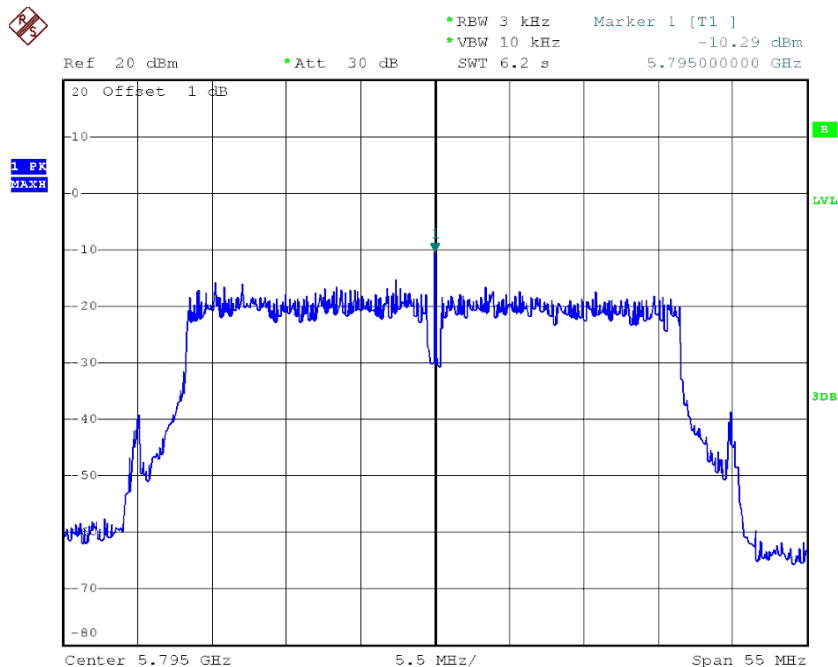
Test Channel	Frequency (MHz)	Power Density (dBm)	Limit (dBm)
CH151	5755	-9.10	8
CH159	5795	-10.29	8

TX CH151



Date: 28.AUG.2014 20:54:48

TX CH159

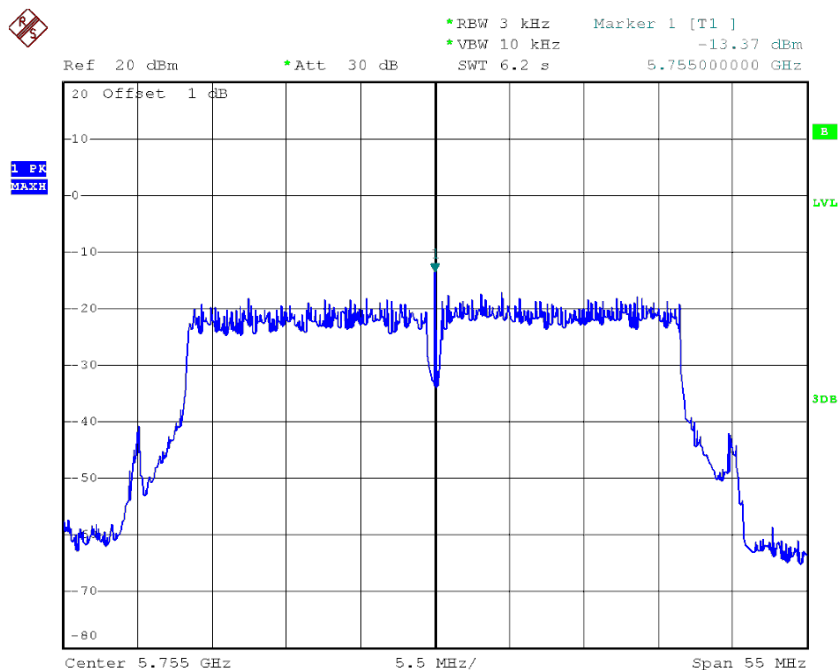


Date: 28.AUG.2014 21:13:51

Test Mode : TX N-40M Mode_CH151/159_ANT B

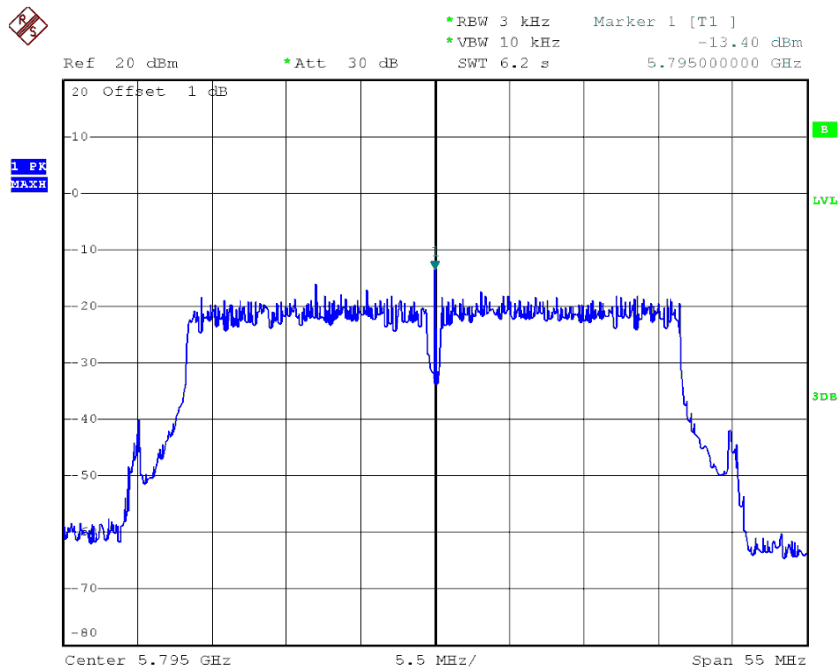
Test Channel	Frequency (MHz)	Power Density (dBm)	Limit (dBm)
CH151	5755	-13.37	8
CH159	5795	-13.40	8

TX CH151



Date: 28.AUG.2014 20:58:46

TX CH165

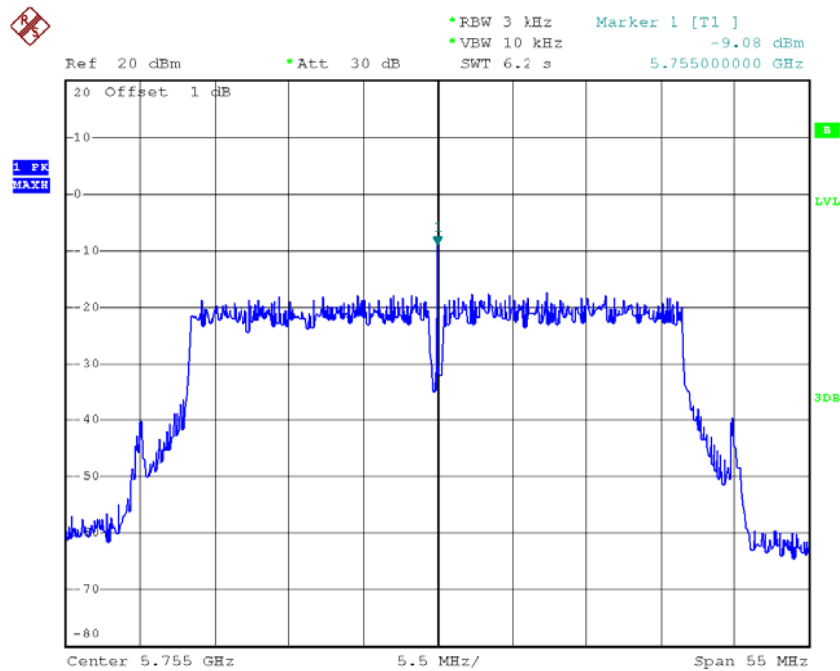


Date: 28.AUG.2014 21:14:27

Test Mode : TX N-40M Mode_CH151/159_ANT C

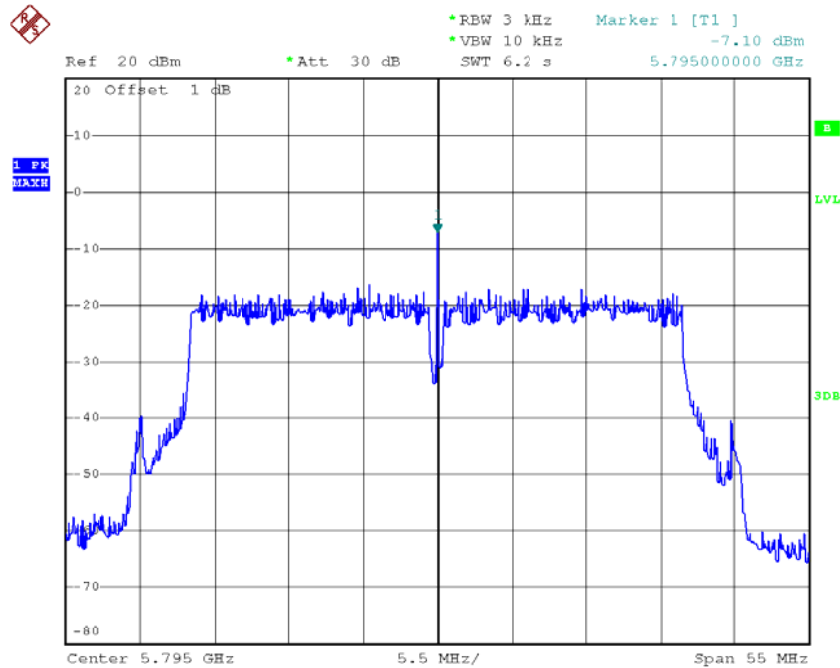
Test Channel	Frequency (MHz)	Power Density (dBm)	Limit (dBm)
CH151	5755	-9.08	8
CH159	5795	-7.10	8

TX CH151



Date: 28.AUG.2014 21:01:16

TX CH159

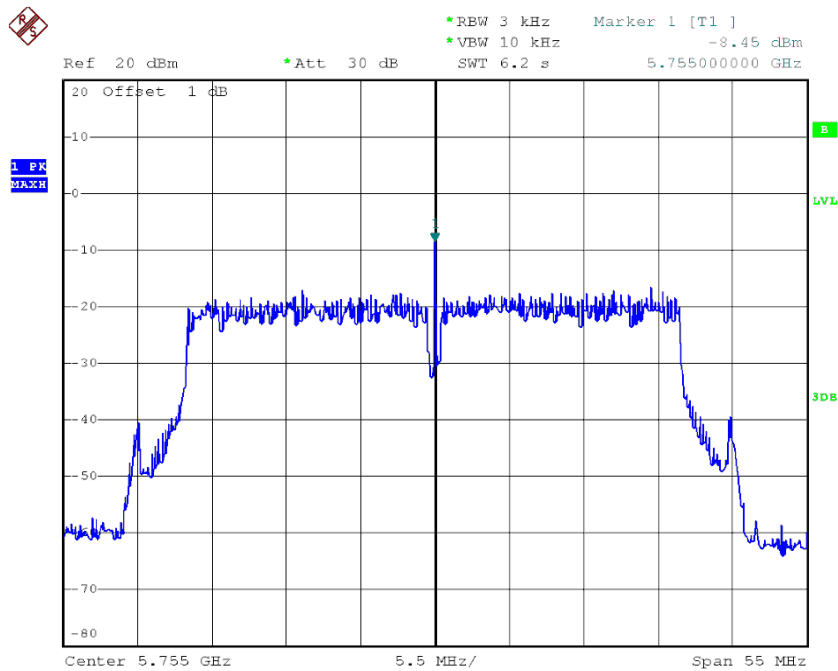


Date: 28.AUG.2014 21:06:58

Test Mode : TX N-40M Mode_CH151/159_ANT D

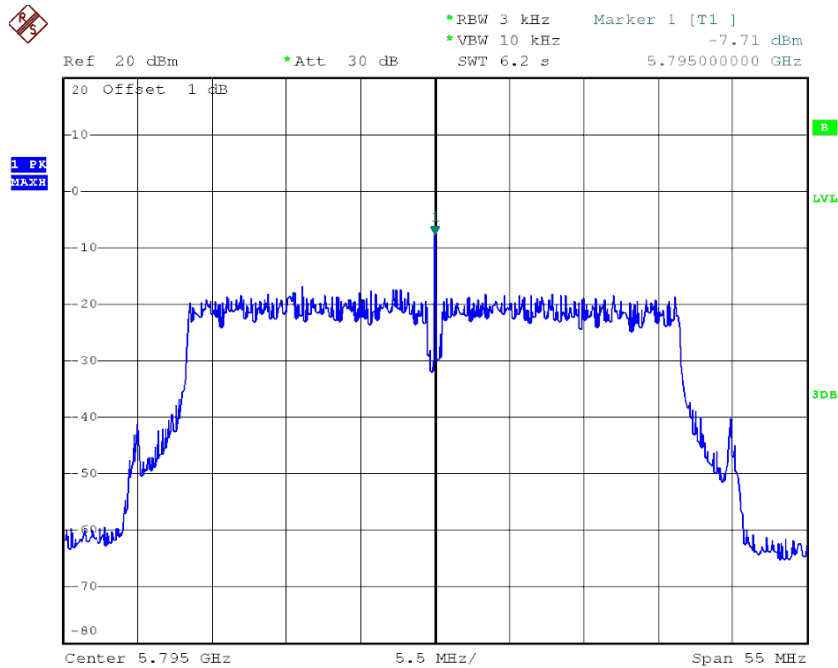
Test Channel	Frequency (MHz)	Power Density (dBm)	Limit (dBm)
CH151	5755	-8.45	8
CH159	5795	-7.71	8

TX CH151



Date: 28.AUG.2014 20:41:20

TX CH165



Date: 28.AUG.2014 21:10:37

Test Mode : TX N-40M Mode_CH151/159_Total

Test Channel	Frequency (MHz)	Power Density (dBm)	Limit (dBm)
CH151	5755	-3.61	8
CH159	5795	-2.98	8