

FCC&IC Radio Test Report

FCC ID: SIB-SNBJR-MT5C

IC: 6719D-SNBJRMT5C

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

Project No. : 1406C191 Equipment : nabi Tablet

Model Name : SNBJR-MT5C; SNBJR-MT5D Applicant : Foxconn International Inc.

Address: No.2, Ziyou St., Tucheng Dist., New Taipei

City 236, Taiwan

Tested by: BTL Inc.

Date of Receipt: Jun. 24, 2014

Date of Test: Jun. 24, 2014~ Jul. 07, 2014

Issued Date: Jul. 11, 2014

Testing Engineer

(David Mac)

Technical Manager

(Leo Hung)

Authorized Signatory:

(Steven Lu)

BTL INC.

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

TEL: 0769-8318-3000 FAX: 0769-8319-6000

Report No.: NEI-FICP-2-1406C191 Page 1 of 104



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 Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

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

Report No.: NEI-FICP-2-1406C191 Page 2 of 104



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	11
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	12
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TE	STED 13
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 4.1.3 DEVIATION FROM TEST STANDARD	15 15
4.1.4 TEST SETUP	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 4.2.2 TEST PROCEDURE	17 18
4.2.3 DEVIATION FROM TEST STANDARD	18
4.2.4 TEST SETUP	19
4.2.5 EUT OPERATING CONDITIONS	20
4.2.6 EUT TEST CONDITIONS 4.2.7 TEST RESULTS (9K TO 30MHZ)	20 20
4.2.8 TEST RESULTS (BETWEEN 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 5.1.4 EUT OPERATION CONDITIONS	22 22
5.1.5 EUT TEST CONDITIONS	22
5.1.6 TEST RESULTS	22

Report No.: NEI-FICP-2-1406C191 Page 3 of 104



Table of Contents	Page
6 . MAXIMUM OUTPUT POWER TEST	23
6.1 APPLIED PROCEDURES / LIMIT	23
6.1.1 TEST PROCEDURE	23
6.1.2 DEVIATION FROM STANDARD	23
6.1.3 TEST SETUP 6.1.4 EUT OPERATION CONDITIONS	23 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 7.1.2 DEVIATION FROM STANDARD	24 24
7.1.2 DEVIATION FROM STANDARD 7.1.3 TEST SETUP	24 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 8.1.1 TEST PROCEDURE	25 25
8.1.1 TEST PROCEDURE 8.1.2 DEVIATION FROM STANDARD	25 25
8.1.3 TEST SETUP	25
8.1.4 EUT OPERATION CONDITIONS	25
8.1.5 EUT TEST CONDITIONS 8.1.6 TEST RESULTS	25 25
9 . MEASUREMENT INSTRUMENTS LIST	26
10 . EUT TEST PHOTO	28
ATTACHMENT A - CONDUCTED EMISSION	32
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	35
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	37
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	44
ATTACHMENT E - BANDWIDTH	77
ATTACHMENT F - MAXIMUM OUTPUT POWER	84
ATTACHMENT G – ANTENNA CONDUCTED SPURIOUS EMISSION	86
ATTACHMENT H – POWER SPECTRAL DENSITY	98

Report No.: NEI-FICP-2-1406C191 Page 4 of 104



REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FICP-2-1406C191	Original Issue.	Jul. 11, 2014

Report No.: NEI-FICP-2-1406C191 Page 5 of 104



1. CERTIFICATION

Equipment : nabi Tablet

Brand Name: nabi

Model Name: SNBJR-MT5C; SNBJR-MT5D Applicant Foxconn International Inc.

Manufacturer: FUHU INC

Address : 909 N SEPULVEDA BLVD STE 540 EL SEGUNDO, CA 90245-2733

Date of Test : Jun. 24, 2014~ Jul. 07, 2014 Test Item : ENGINEERING SAMPLE

Standard(s) : FCC Part15, Subpart C(15.247) / ANSI C63.4-2009

Canada RSS-210:2010 RSS-GEN Issue 3, Dec 2010

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. NEI-FICP-2-1406C191) 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).

Report No.: NEI-FICP-2-1406C191 Page 6 of 104



2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C Canada RSS-210:2010; RSS-GEN Issue 3, Dec 2010					
Standard	l(s) Section	Test Item	ludamont	Remark	
FCC	IC	rest item	Judgment	Remark	
15.207	RSS-GEN 7.2.2	Conducted Emission	PASS		
15.247(d)	RSS-210 Annex 8 (A8.5)	Antenna conducted Spurious Emission	PASS		
15.247(a)(2)	RSS-210 Annex 8 (A8.2(a))	6dB Bandwidth	PASS		
15.247(b)(3)	RSS-210 Annex 8 (A8.4(4))	Peak Output Power	PASS		
15.247(e)	RSS-210 Annex 8 (A8.2(b))	Power Spectral Density	PASS		
15.203	-	Antenna Requirement	PASS		
15.209/15.205	RSS-210 Annex 8 (A8.5)	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)

Report No.: NEI-FICP-2-1406C191 Page 7 of 104



2.1 TEST FACILITY

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

BTL's test firm number for FCC: 319330 BTL's test firm number for IC: 4428B-1

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 expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 % \circ

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	
		9KHz~30MHz	V	3.79		
		9KHz~30MHz	Η	3.57		
	3 CISPR	30MHz ~ 200MHz	V	3.82		
		30MHz ~ 200MHz	Н	3.60		
DG-CB03		200MHz ~ 1,000MHz	V	3.86		
DG-CB03		200MHz ~ 1,000MHz	Н	3.94		
		1GHz~18GHz	V	3.12		
		1GHz~18GHz	1GHz~18GHz	Η	3.68	
		18GHz~40GHz	V	4.15		
		18GHz~40GHz	Н	4.14		

Report No.: NEI-FICP-2-1406C191 Page 8 of 104



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	nabi Tablet		
Brand Name	nabi		
Model Name	SNBJR-MT5C; SNBJR-M	T5D	
Model Difference	Only differ in model name SNBJR-MT5D: 16GB).	and memory (SNBJR-MT5C: 8GB;	
	Operation Frequency	5745~5825 MHz	
	Modulation Technology	802.11a/n:OFDM	
Product Description	Bit Rate of Transmitter	300Mbps	
	Output Power (Max.)	802.11a: 22.50 dBm 802.11n(20MHz): 20.70 dBm 802.11n(40MHz): 21.50 dBm	
Power Source	#1 DC voltage supplied from AC adapter. Brand / Model: Chicony / W12-010N3A #2 Supplied from rechargeable Li-ion polymer battery. Brand / Model: McNair / MLP496069		
Power Rating	#1 I/P: AC 100-240V~50/60Hz 0.3A O/P: DC 5V 2A #2 DC 3.7V 2400mAh 8.88Wh		
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.

Report No.: NEI-FICP-2-1406C191 Page 9 of 104



2.

		802.11a / 8	02.11n 20M		
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785
161	5805	165	5825		

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

3. Table for Filed Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	JIENG TAI	AH-JT-0219N0304	PIFA	N/A	2.81

Report No.: NEI-FICP-2-1406C191 Page 10 of 104



3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX A MODE CHANNEL 149/157/165
Mode 2	TX N-20MHZ MODE CHANNEL 149/157/165
Mode 3	TX N-40MHZ MODE CHANNEL 151/159
Mode 4	TX MODE

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

For Conducted Test	
Final Test Mode	Description
Mode 4	TX MODE

For Radiated Test		
Final Test Mode	Description	
Mode 1	TX A MODE CHANNEL 149/157/165	
Mode 2	TX N-20MHZ MODE CHANNEL 149/157/165	
Mode 3	TX N-40MHZ MODE CHANNEL 151/159	

Note:

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

Report No.: NEI-FICP-2-1406C191 Page 11 of 104



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	5745 MHz	5785 MHz	5825 MHz
IEEE 802.11a	15.5	15.5	15.5
IEEE 802.11 n (20MHz)	14.5	14.5	14.5

Test software version	N/A	
Frequency	5755 MHz	5795 MHz
IEEE 802.11 n (40MHz)	15	15

Report No.: NEI-FICP-2-1406C191 Page 12 of 104



3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

EUT	

Report No.: NEI-FICP-2-1406C191 Page 13 of 104



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
-	-	-	-	-

Report No.: NEI-FICP-2-1406C191 Page 14 of 104



4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

The following table is the setting of the receiver

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

4.1.2 TEST PROCEDURE

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

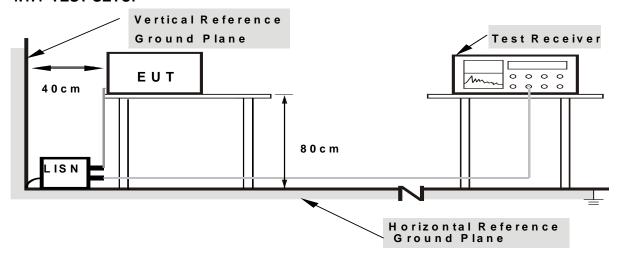
4.1.3 DEVIATION FROM TEST STANDARD

No deviation

Report No.: NEI-FICP-2-1406C191 Page 15 of 104



4.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.B oth of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Attachment A.

Remark:

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

Report No.: NEI-FICP-2-1406C191 Page 16 of 104



4.2 RADIATED EMISSION MEASUREMENT

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

20dB in any 100 KHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a) & RSS-210 section 2.2& Annex 8 (A8.5), then the 15.209(a)& RSS-Gen limit in the table below has to be followed.

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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	AND I AND I for Dook A MI I AND I for Average	
(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	

Report No.: NEI-FICP-2-1406C191 Page 17 of 104



4.2.2 TEST PROCEDURE

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

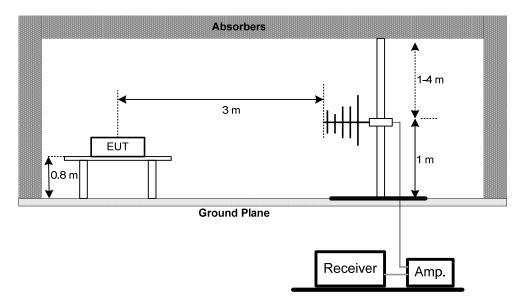
f. For the actual test configuration, please refer to the related Item –EUT Test Photos. 4.2.3 DEVIATION FROM TEST STANDARD No deviation

Report No.: NEI-FICP-2-1406C191 Page 18 of 104

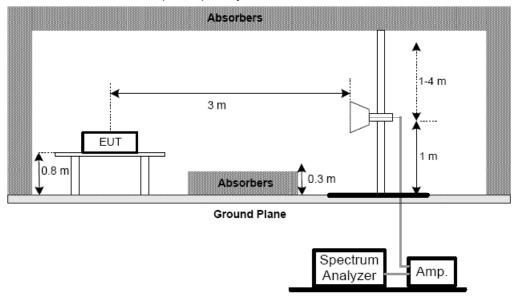


4.2.4 TEST SETUP

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



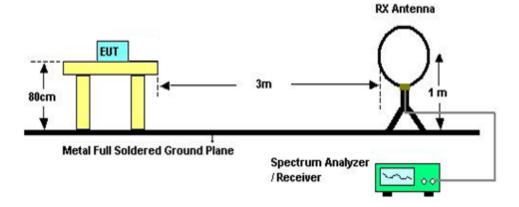
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



Report No.: NEI-FICP-2-1406C191 Page 19 of 104



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

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

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9K TO 30MHZ)

Please refer to the Attachment B

4.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHZ)

Please refer to the Attachment C

Remark:

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

Report No.: NEI-FICP-2-1406C191 Page 20 of 104



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

Report No.: NEI-FICP-2-1406C191 Page 21 of 104



5. BANDWIDTH TEST

5.1 Applied procedures

FCC Part15 (15.247) , Subpart C/ RSS-GEN and RSS-210						
Section Test Item Frequency Range (MHz) Result						
15.247(a)(2)						
RSS-GEN section 4.6.1	Bandwidth	5725 - 5825	PASS			
RSS-210 Annex 8 (A8.2(a))						

5.1.1 TEST PROCEDURE

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

5.1.4 EUT OPERATION CONDITIONS

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

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Attachment E.

Report No.: NEI-FICP-2-1406C191 Page 22 of 104



6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C/ RSS-210						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247(b)(3) RSS-210 Annex 8.4(4)	Maximum Output Power	1 Watt or 30dBm	5725 - 5825	PASS		

6.1.1 TEST PROCEDURE

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

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP

EUT	Power Meter
	1 Ower weter

6.1.4 EUT OPERATION CONDITIONS

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

Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

Report No.: NEI-FICP-2-1406C191 Page 23 of 104



7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

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

7.1.1 TEST PROCEDURE

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

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

7.1.4 EUT OPERATION CONDITIONS

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

7.1.5 EUT TEST CONDITIONS

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

7.1.6 TEST RESULTS

Please refer to the Attachment G.

Report No.: NEI-FICP-2-1406C191 Page 24 of 104



8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

	FCC Part15 (15.247) , Subpart C / RSS-210					
Section	Frequency Range (MHz)	Result				
15.247(e) RSS-210 Annex 8(A8.2(b))	Power Spectral Density	8 dBm (in any 3KHz)	5745 - 5825	PASS		

8.1.1 TEST PROCEDURE

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

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.4 EUT OPERATION CONDITIONS

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

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Attachment H.

Report No.: NEI-FICP-2-1406C191 Page 25 of 104



9. MEASUREMENT INSTRUMENTS LIST

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

	Radiated Emission Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	Antenna	EMCO	3142C	00066462	Mar. 29, 2015		
2	Antenna	EMCO	3142C	00066464	Mar. 29, 2015		
3	Amplifier	Agilent	8447D	2944A11203	Nov. 11, 2014		
4	Amplifier	Agilent	8447D	2944A11204	Nov. 11, 2014		
5	Spectrum Analyzer	Agilent	E4443A	MY48250370	Nov. 11, 2014		
6	RF Pre-selector	Agilent	N9039A	MY46520201	Nov. 11, 2014		
7	Test Cable	N/A	Cable_5m_8m _15m	N/A	Jan. 14, 2015		
8	Test Cable	N/A	Cable_5m_11 m_15m	N/A	Jan. 14, 2015		
9	Spectrum Analyzer	Agilent	E4447A	MY48250208	Nov. 11, 2014		
10	RF Pre-selector	Agilent	N9039A	MY46520214	Nov. 11, 2014		
11	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A		
12	Horn Antenna	EMCO	3115	9605-4803	Mar. 29, 2015		
13	Amplifier	Agilent	8449B	3008A02584	Nov. 11, 2014		
14	Spectrum Analyzer	Agilent	E4447A	MY48250208	Nov. 11, 2014		
15	Test Cable	Huber+Suhner	SUCOFLEX_1 5m_4m	N/A	Jan. 14, 2015		
16	Multi-Device Controller	ETS-Lindgren	2090	N/A	N/A		

Report No.: NEI-FICP-2-1406C191 Page 26 of 104



	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.

Report No.: NEI-FICP-2-1406C191 Page 27 of 104



10. EUT TEST PHOTO

Conducted Measurement Photos





Report No.: NEI-FICP-2-1406C191 Page 28 of 104



Radiated Measurement Photos

9KHz~30MHz





Report No.: NEI-FICP-2-1406C191 Page 29 of 104



Radiated Measurement Photos

30~1000MHz





Report No.: NEI-FICP-2-1406C191 Page 30 of 104



Radiated Measurement Photos

Above 1000MHz





Report No.: NEI-FICP-2-1406C191 Page 31 of 104

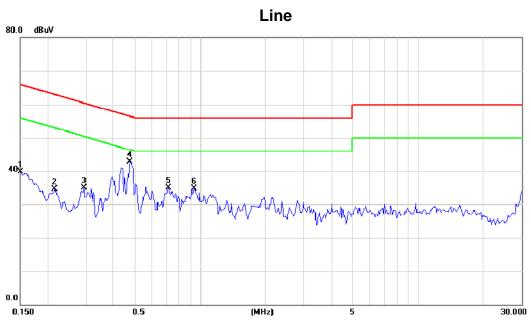


ATTACHMENT A - CONDUCTED EMISSION

Report No.: NEI-FICP-2-1406C191 Page 32 of 104



Test Mode : TX MODE



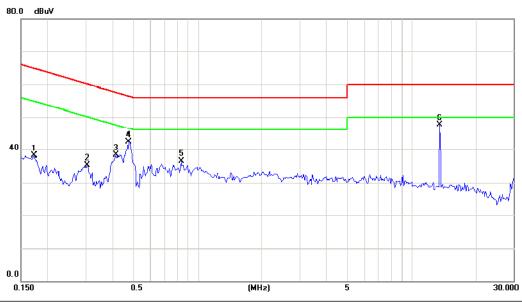
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∀	dB	dBu∀	dBu∨	dB	Detector	Comment
1	0.1500	30.14	9.52	39.66	66.00	-26.34	peak	
2	0.2164	24.97	9.55	34.52	62.96	-28.44	peak	
3	0.2945	25.28	9.59	34.87	60.40	-25.53	peak	
4 *	0.4781	33.04	9.69	42.73	56.37	-13.64	peak	
5	0.7164	25.22	9.62	34.84	56.00	-21.16	peak	
6	0.9391	24.95	9.69	34.64	56.00	-21.36	peak	

Report No.: NEI-FICP-2-1406C191 Page 33 of 104



Test Mode : TX MODE

Neutral



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1734	28.46	9.62	38.08	64.80	-26.72	peak	
2	0.3063	25.65	9.62	35.27	60.07	-24.80	peak	
3	0.4156	28.76	9.63	38.39	57.54	-19.15	peak	
4	0.4781	32.76	9.64	42.40	56.37	-13.97	peak	
5	0.8375	26.79	9.67	36.46	56.00	-19.54	peak	
6 *	13.5586	37.52	10.23	47.75	60.00	-12.25	peak	

Report No.: NEI-FICP-2-1406C191 Page 34 of 104



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

Report No.: NEI-FICP-2-1406C191 Page 35 of 104



Test Mode : TX Mode 5745MHz

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOIE
0.0094	0°	76.35	24.97	101.32	108.10	-6.79	AVG
0.0095	0°	82.36	24.97	107.33	128.10	-20.78	PEAK
0.0233	0°	56.38	24.09	80.47	100.26	-19.79	AVG
0.0235	0°	59.35	24.09	83.44	120.26	-36.82	PEAK
0.0315	0°	57.35	23.57	80.92	97.64	-16.72	AVG
0.0316	0°	58.35	23.57	81.92	117.64	-35.72	PEAK
0.0424	0°	59.35	22.88	82.23	95.06	-12.83	AVG
0.0427	0°	63.35	22.88	86.23	115.06	-28.83	PEAK
0.4916	0°	17.45	19.82	37.27	73.77	-36.50	QP
1.7156	0°	18.63	19.53	38.16	69.54	-31.38	QP

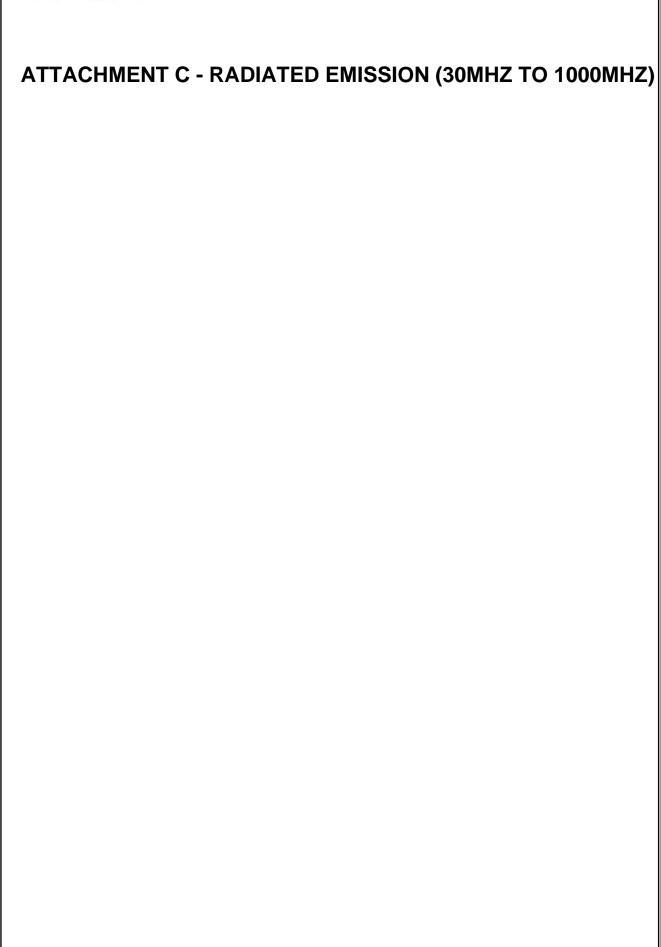
	ı						1
Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	NOIC
0.0094	90°	76.35	24.30	100.65	128.19	-27.54	AVG
0.0095	90°	82.36	24.30	106.66	148.19	-41.53	PEAK
0.0235	90°	56.38	24.08	80.46	120.18	-39.72	AVG
0.0236	90°	59.35	24.08	83.43	140.18	-56.75	PEAK
0.0314	90°	57.35	23.58	80.93	117.67	-36.74	AVG
0.0316	90°	58.35	23.58	81.93	137.67	-55.74	PEAK
0.0425	90°	59.35	22.88	82.23	115.04	-32.81	AVG
0.0426	90°	63.35	22.88	86.23	135.04	-48.81	PEAK
0.4915	90°	17.45	19.82	37.27	73.77	-36.50	QP
1.7156	90°	18.63	19.53	38.16	69.54	-31.38	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.

Report No.: NEI-FICP-2-1406C191 Page 36 of 104



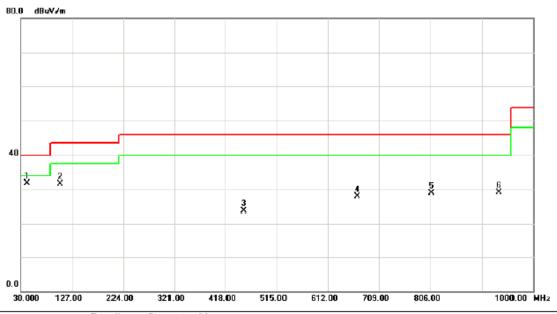


Report No.: NEI-FICP-2-1406C191 Page 37 of 104



Test Mode: TX A MODE 5745MHz

Vertical



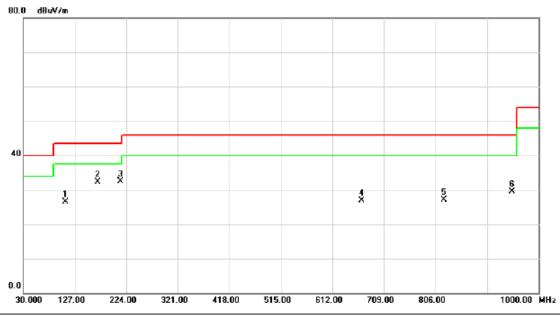
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	41.6400	45.79	-14.12	31.67	40.00	-8.33	peak	
2		103.7200	47.61	-16.11	31.50	43.50	-12.00	peak	
3	4	451.9500	32.28	-8.74	23.54	46.00	-22.46	peak	
4	(666.3200	32.85	-5.12	27.73	46.00	-18.27	peak	
5		807.9400	31.60	-2.97	28.63	46.00	-17.37	peak	
6	(935.9800	29.58	-0.67	28.91	46.00	-17.09	peak	

Report No.: NEI-FICP-2-1406C191 Page 38 of 104



Test Mode: TX A MODE 5745MHz

Horizontal

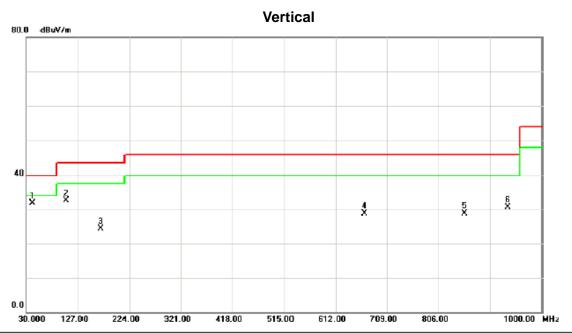


N	0.	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		109.5400	42.00	-15.46	26.54	43.50	-16.96	peak	
	2		170.6500	45.12	-12.78	32.34	43.50	-11.16	peak	
	3	*	212.3600	47.90	-15.31	32.59	43.50	-10.91	peak	
	4		666.3200	31.98	-5.12	26.86	46.00	-19.14	peak	
	5		821.5200	30.16	-3.06	27.10	46.00	-18.90	peak	
	6		949.5600	29.79	-0.31	29.48	46.00	-16.52	peak	

Report No.: NEI-FICP-2-1406C191 Page 39 of 104



Test Mode: TX A MODE 5785MHz



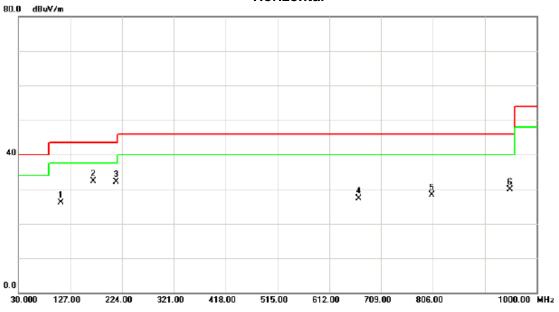
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	41.6400	45.79	-14.12	31.67	40.00	-8.33	peak	
2		105.6600	48.42	-15.89	32.53	43.50	-10.97	peak	
3		169.6800	37.05	-12.79	24.26	43.50	-19.24	peak	
4		666.3200	33.85	-5.12	28.73	46.00	-17.27	peak	
5		854.5000	31.87	-3.10	28.77	46.00	-17.23	peak	
6		935.9800	31.08	-0.67	30.41	46.00	-15.59	peak	

Report No.: NEI-FICP-2-1406C191 Page 40 of 104



Test Mode: TX A MODE 5785MHz

Horizontal



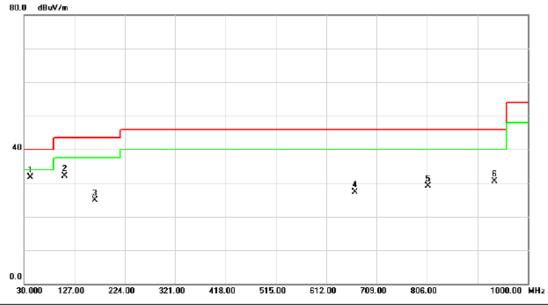
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		109.5400	41.50	-15.46	26.04	43.50	-17.46	peak	
2	*	170.6500	45.12	-12.78	32.34	43.50	-11.16	peak	
3		212.3600	47.40	-15.31	32.09	43.50	-11.41	peak	
4		666.3200	32.48	-5.12	27.36	46.00	-18.64	peak	
5		804.0600	31.21	-2.94	28.27	46.00	-17.73	peak	
6		949.5600	30.29	-0.31	29.98	46.00	-16.02	peak	

Report No.: NEI-FICP-2-1406C191 Page 41 of 104



Test Mode: TX A MODE 5825MHz

Vertical



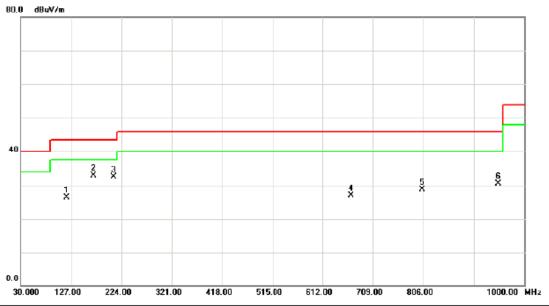
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	41.6400	45.79	-14.12	31.67	40.00	-8.33	peak	
2	,	107.6000	47.86	-15.68	32.18	43.50	-11.32	peak	
3		165.8000	38.07	-13.23	24.84	43.50	-18.66	peak	
4	(666.3200	32.35	-5.12	27.23	46.00	-18.77	peak	
5	8	807.9400	32.10	-2.97	29.13	46.00	-16.87	peak	
6	(935.9800	31.08	-0.67	30.41	46.00	-15.59	peak	

Report No.: NEI-FICP-2-1406C191 Page 42 of 104



Test Mode: TX A MODE 5825MHz

Horizontal



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		118.2700	40.85	-14.45	26.40	43.50	-17.10	peak	
2	*	170.6500	45.62	-12.78	32.84	43.50	-10.66	peak	
3		208.4800	47.85	-15.35	32.50	43.50	-11.00	peak	
4		666.3200	31.98	-5.12	26.86	46.00	-19.14	peak	
5		804.0600	31.71	-2.94	28.77	46.00	-17.23	peak	
6		949.5600	30.79	-0.31	30.48	46.00	-15.52	peak	

Report No.: NEI-FICP-2-1406C191 Page 43 of 104



3TL ----ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Report No.: NEI-FICP-2-1406C191 Page 44 of 104



5695.000 5705.00

5715.00

5725.00

5735.00

Test Mode: TX A Mode 5745MHz

Vertical 120.0 dBuV/m 3 x 4 x 40.0

No. MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5725.000	24.82	44.58	69.40	74.00	-4.60	peak	
2 X	5725.000	12.64	44.58	57.22	54.00	3.22	ΛVG	
3 X	5746.100	63.43	44.69	108.12	74.00	34.12	peak	Fundamental frequency, no limit
4 *	5746.100	55.96	44.69	100.65	54.00	46.65	AVG	Fundamental frequency, no limit

5745.00

5755.00

5765.00

5775.00

5795.00 MHz

Report No.: NEI-FICP-2-1406C191 Page 45 of 104



0.0

1000.000 4900.00

8800.00

Test Mode: TX A Mode 5745MHz

No	. N	Иk.	Freq.		Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*		1492.60		18.47	43.15	54.00	-10.85	AVG	
2		1	1493.50	33.74	18.47	52.21	74.00	-21.79	peak	

12700.00 16600.00 20500.00 24400.00 28300.00 32200.00

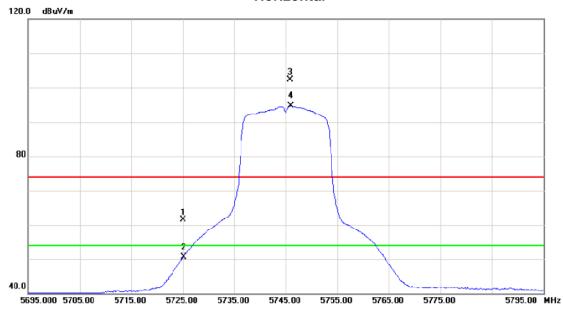
40000.00 MHz

Report No.: NEI-FICP-2-1406C191 Page 46 of 104



Test Mode: TX A Mode 5745MHz

Horizontal



No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	16.92	44.58	61.50	74.00	-12.50	peak	
2		5725.000	5.89	44.58	50.47	54.00	-3.53	AVG	
3	X	5745.800	57.69	44.69	102.38	74.00	28.38	peak	Fundamental frequencry. no limit
4	*	5746.000	49.93	44.69	94.62	54.00	40.62	AVG	Fundamental frequencry. no limit

Report No.: NEI-FICP-2-1406C191 Page 47 of 104



Test Mode: TX A Mode 5745MHz

Horizontal



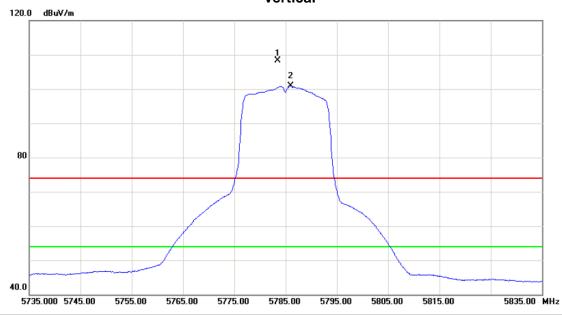
No.	Mk	. Freq.			Measure- ment		Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11495.20		18.48	42.06	54.00	-11.94	AVG	
2		11495.60	32.26	18.49	50.75	74.00	-23.25	peak	

Report No.: NEI-FICP-2-1406C191 Page 48 of 104



Test Mode: TX A Mode 5785MHz

Vertical



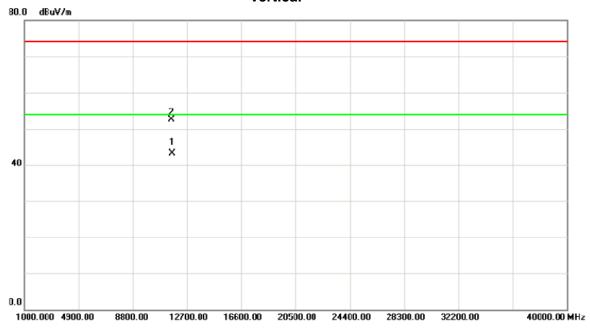
No.	M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5783.400	63.40	44.89	108.29	74.00	34.29	peak	Fundamental frequencry, no limit
2	*	5786.000	56.05	44.90	100.95	54.00	46.95	AVG	Fundamental frequencry, no limit

Report No.: NEI-FICP-2-1406C191 Page 49 of 104



Test Mode: TX A Mode 5785MHz

Vertical



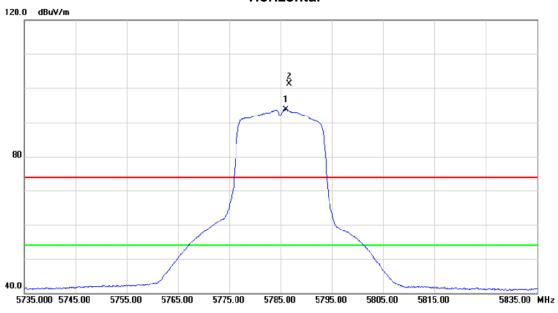
	No.	Mk	Freq.	Level	Factor			Over			
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment	
	1	*	11572.60	24.68	18.67	43.35	54.00	-10.65	AVG		
	2		11573.80	33.76	18.67	52.43	74.00	-21.57	peak		

Report No.: NEI-FICP-2-1406C191 Page 50 of 104



Test Mode: TX A Mode 5785MHz

Horizontal



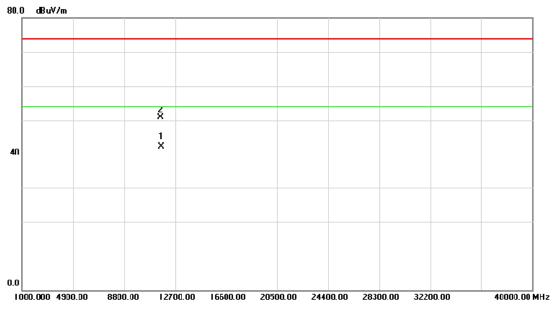
No.	М	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5786.000	48.72	44.90	93.62	54.00	39.62	AVG	Fundamental frequencry, no limit
2	X	5786.600	56.31	44.90	101.21	74.00	27.21	peak	Fundamental frequencry. no limit

Report No.: NEI-FICP-2-1406C191 Page 51 of 104



Test Mode: TX A Mode 5785MHz

Horizontal



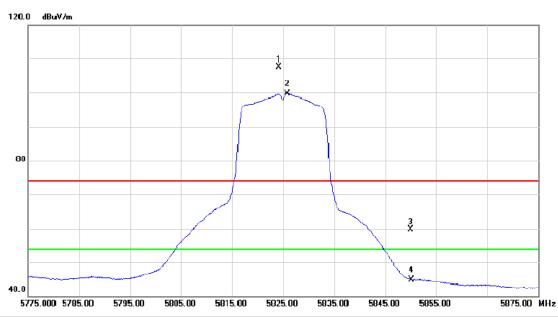
No.	Mk	. Freq.			Measure- ment		Over		
		MHz	dBu∀	dВ	dBuV/m	dBu√/m	dВ	Detector	Comment
1	:A	11572.60	23.46	18.67	42.13	54.00	-11.87	AVG	
2		11573.80	32.19	18.67	50.86	74.00	-23.14	peak	

Report No.: NEI-FICP-2-1406C191 Page 52 of 104



Test Mode: TX A Mode 5825MHz

Vertical



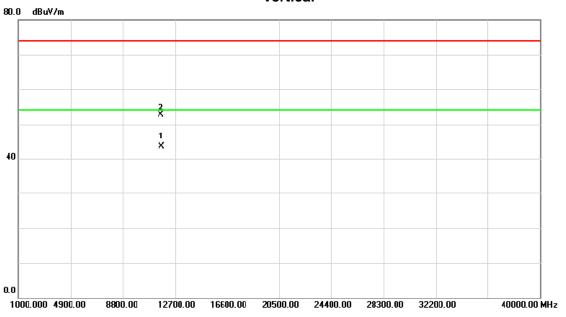
No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 X	582 4 .100	62.50	4 5.10	107.60	74.00	33.60	peak	Fundamental frequency, no limit
2 *	5825.900	54.61	45.10	99.71	54.00	45.71	AVG	Fundamental frequency, no limit
3	5850.000	14.41	45.23	59.64	74.00	-14.36	peak	
4	5850.000	-0.23	45.23	45.00	54.00	-9.00	AVG	

Report No.: NEI-FICP-2-1406C191 Page 53 of 104



Test Mode: TX A Mode 5825MHz

Vertical



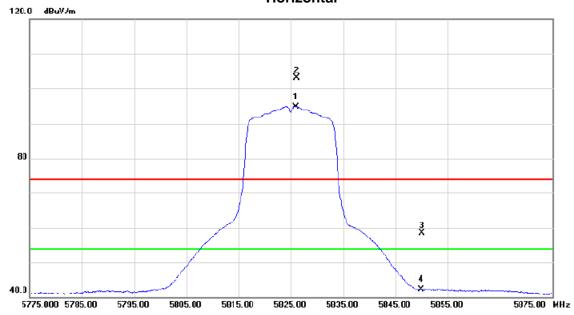
No.	Mk	. Freq.			Measure- ment		Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	k	11652.30	24.69	18.87	43.56	54.00	-10.44	AVG	
2		11654.80	33.74	18.88	52.62	74.00	-21.38	peak	

Report No.: NEI-FICP-2-1406C191 Page 54 of 104



Test Mode: TX A Mode 5825MHz

Horizontal



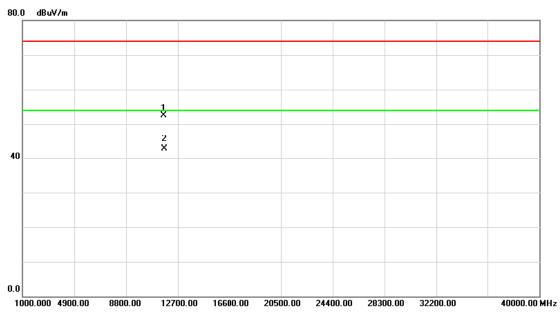
No.	MI	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5	826.000	49.62	45.10	94.72	54.00	40.72	AVG	Fundamental frequency, no limit
2	Χ	5	826.100	57.99	45.10	103.09	74.00	29.09	peak	Fundamental frequency, no limit
3		5	850.000	13.27	45.23	58.50	74.00	-15.50	peak	
4		5	850.000	-2.89	45.23	42.34	54.00	-11.66	AVG	

Report No.: NEI-FICP-2-1406C191 Page 55 of 104



Test Mode: TX A Mode 5825MHz

Horizontal



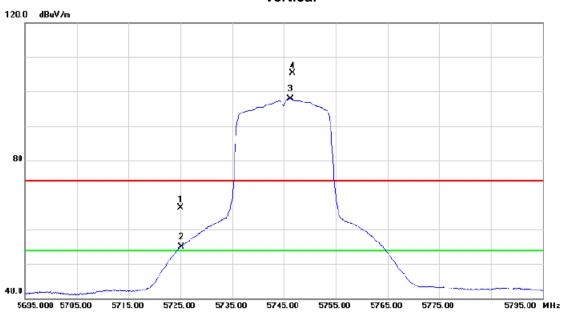
No)_	Mk	. Freq.			Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1			11653.80			52.45	74.00	-21.55	peak	
2	2	*	11654.60	23.75	18.87	42.62	54.00	-11.38	AVG	

Report No.: NEI-FICP-2-1406C191 Page 56 of 104



Test Mode: TX N20 Mode 5745MHz

Vertical



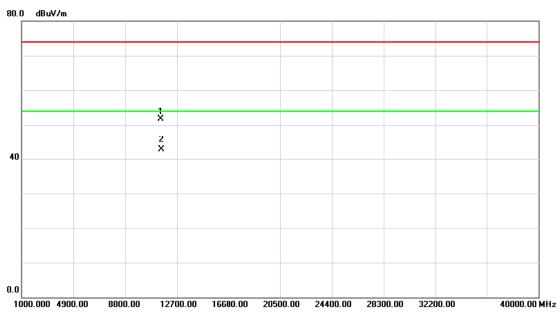
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	21.81	44.58	66.39	74.00	-7.61	peak	
2	Х	5725.000	10.30	44.58	54.88	54.00	0.88	AVG	
3	*	5746.200	53.15	44.69	97.84	54.00	43.84	AVG	Fundamental frequency, no limit
4	X	5746 700	60 54	44 70	105 24	74 00	31 24	peak	Fundamental frequency, no limit

Report No.: NEI-FICP-2-1406C191 Page 57 of 104



Test Mode: TX N20 Mode 5745MHz

Vertical



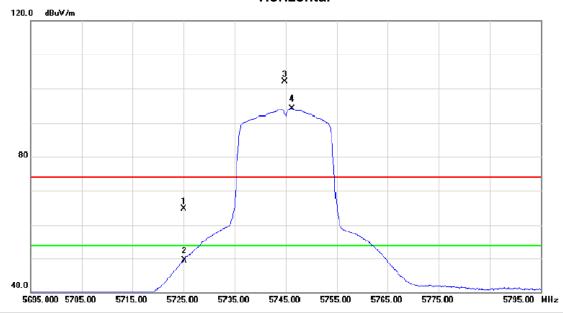
No.	Mk	c. Freq.			Measure- ment		Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11495.20		18.48	51.68	74.00	-22.32	peak	
2		11498.50		18.49	42.67	54.00	-11.33	AVG	

Report No.: NEI-FICP-2-1406C191 Page 58 of 104



Test Mode: TX N20 Mode 5745MHz

Horizontal



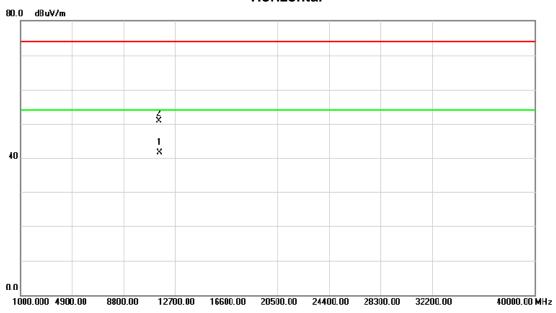
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		5725.000	20.08	44.58	64.66	74.00	-9.34	peak	
	2		5725.000	4.99	44.58	49.57	54.00	-4.43	AVG	
	3	X	5744.800	57.42	44.69	102.11	74.00	28.11	peak	Fundamental frequency, no limit
	4	*	5746.200	49.39	44.69	94.08	54.00	40.08	AVG	Fundamental frequency, no limit
_										

Report No.: NEI-FICP-2-1406C191 Page 59 of 104



Test Mode: TX N20 Mode 5745MHz

Horizontal



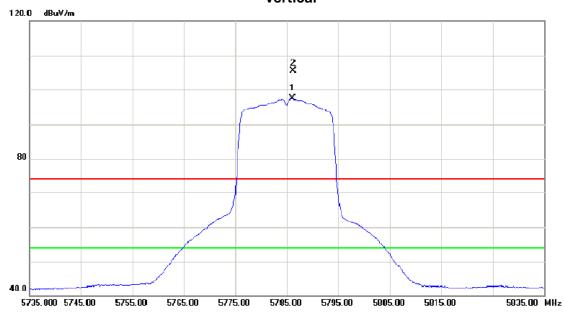
No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	٨	11497.20	23.08	18.49	41.57	54.00	-12.43	AVG	
2		11497.60	32.42	18.49	50.91	74.00	-23.09	peak	

Report No.: NEI-FICP-2-1406C191 Page 60 of 104



Test Mode: TX N20 Mode 5785MHz

Vertical

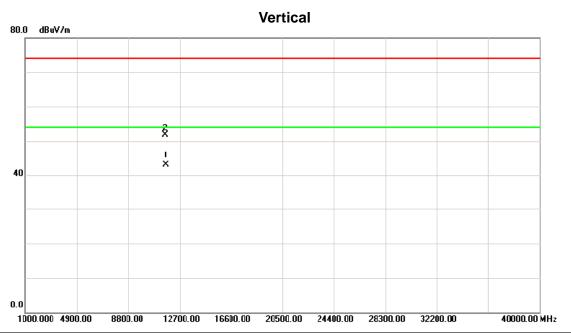


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5786.100	52.61	44.90	97.51	54.00	43.51	AVG	Fundamental frequency, no limit
2	X	5786.200	60.52	44.90	105.42	74.00	31.42	peak	Fundamental frequency, no limit

Report No.: NEI-FICP-2-1406C191 Page 61 of 104



Test Mode: TX N20 Mode 5785MHz



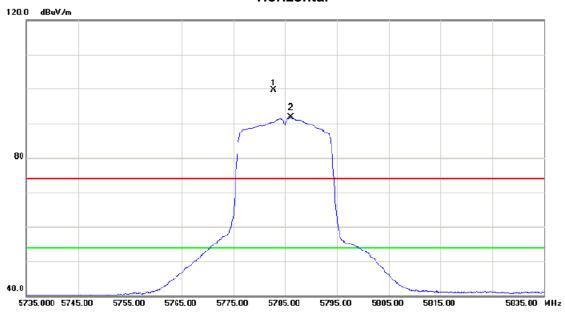
No.	Mk	. Freq.			Measure- ment		Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11574.90	24.18	18.67	42.85	54.00	-11.15	AVG	
2		11578.60	33.06	18.69	51.75	74.00	-22.25	peak	

Report No.: NEI-FICP-2-1406C191 Page 62 of 104



Test Mode: TX N20 Mode 5785MHz

Horizontal



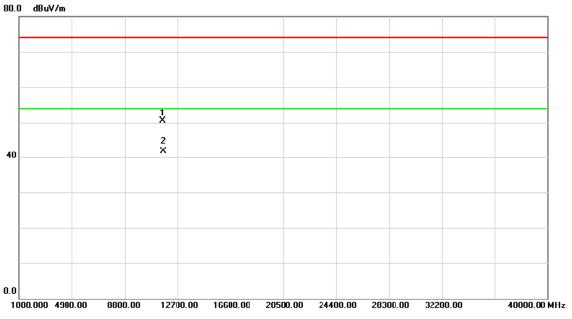
No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5782.800	54.85	44.87	99.72	74.00	25.72	peak	Fundamental frequency, no limit
2	*	5786.100	46.71	44.90	91.61	54.00	37.61	AVG	Fundamental frequency, no limit

Report No.: NEI-FICP-2-1406C191 Page 63 of 104



Test Mode: TX N20 Mode 5785MHz

Horizontal



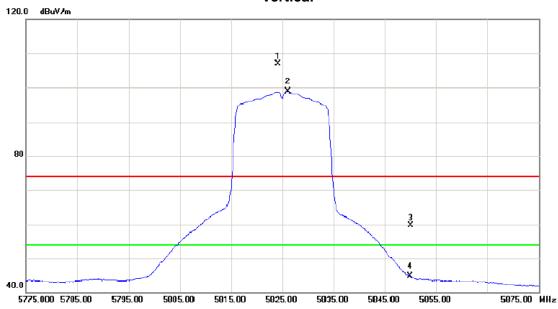
No.	M	lk.	Freq.	Reading Level		Measure- ment	Limit	Over		
			MHz	dBu∨	dB	dBuV/m	dBuV/m	dΒ	Detector	Comment
1		115	74.60	31.86	18.67	50.53	74.00	-23.47	peak	
2	*	115	78.50	22.97	18.69	41.66	54.00	-12.34	AVG	

Report No.: NEI-FICP-2-1406C191 Page 64 of 104



Test Mode: TX N20 Mode 5825MHz

Vertical



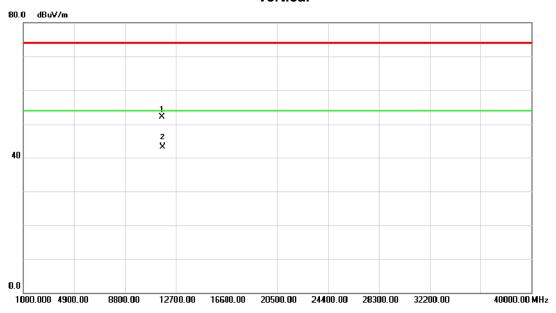
	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	X	5824.100	61.85	45.10	106.95	74.00	32.95	peak	Fundamental frequency, no limit
	2	*	5826.100	53.76	45.10	98.86	54.00	4 4.86	AVG	Fundamental frequency, no limit
	3		5850.000	14.40	45.23	59.63	74.00	-14.37	peak	
_	4		5850.000	-0.39	45.23	44.84	54.00	-9.16	AVG	

Report No.: NEI-FICP-2-1406C191 Page 65 of 104



Test Mode: TX N20 Mode 5825MHz

Vertical



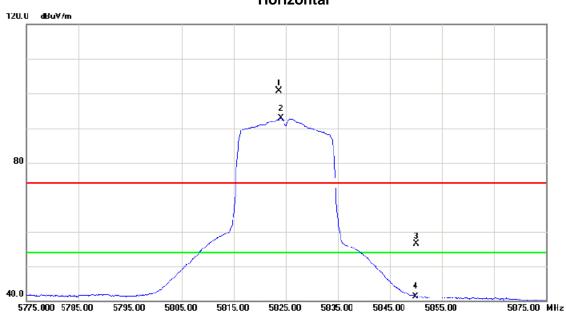
No). l	Mk.	Freq.		Correct Factor	Measure- ment		Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	1		11653.80		18.87	52.15	74.00	-21.85	peak	
2	2	*	11654.30	24.29	18.87	43.16	54.00	-10.84	AVG	

Report No.: NEI-FICP-2-1406C191 Page 66 of 104



Test Mode: TX N20 Mode 5825MHz

Horizontal



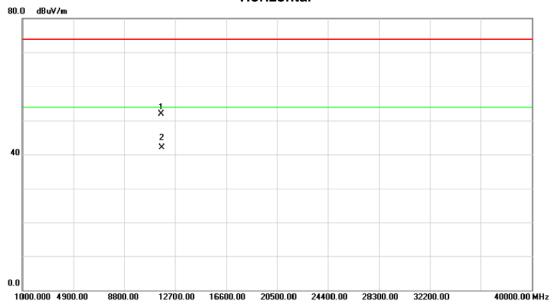
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Х	5823.600	55.56	45.09	100.65	74.00	26.65	peak	Fundamental frequency, no limit
2	*	5824.000	47.59	45.10	92.69	54.00	38.69	AVG	Fundamental frequency, no limit
3		5850.000	11.26	45.23	56.49	74.00	-17.51	peak	
4		5850.000	-3.84	45.23	41.39	54.00	-12.61	AVG	

Report No.: NEI-FICP-2-1406C191 Page 67 of 104



Test Mode: TX N20 Mode 5825MHz

Horizontal



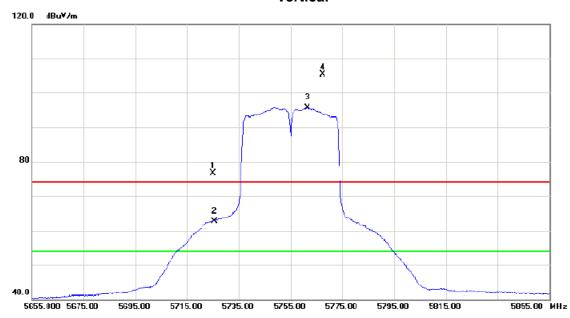
1	No.	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over		
			MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		11654.20	33.06	18.87	51.93	74.00	-22.07	peak	
	2	*	11658.50	23.21	18.89	42.10	54.00	-11.90	AVG	

Report No.: NEI-FICP-2-1406C191 Page 68 of 104



Test Mode: TX N40 Mode 5755MHz

Vertical



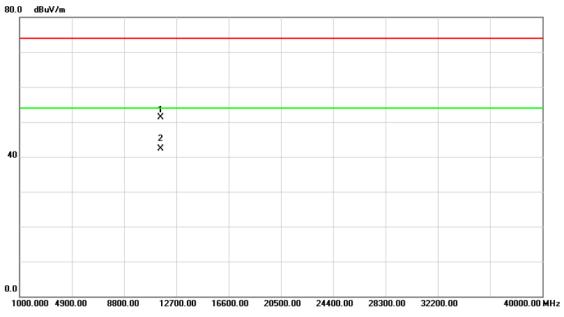
No. M	Λk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 X	(5725.000	32.13	44.58	76.71	74.00	2.71	peak	
2 X	Κ	5725.000	18.20	44.58	62.78	54.00	8.78	AVG	
3 *	r	5761.400	50.87	44.77	95.64	54.00	41.64	AVG	Fundamental frequency, no limit
4 X	(5767.400	60.47	44.80	105.27	74.00	31.27	peak	Fundamental frequency, no limit

Report No.: NEI-FICP-2-1406C191 Page 69 of 104



Test Mode: TX N40 Mode 5755MHz

Vertical



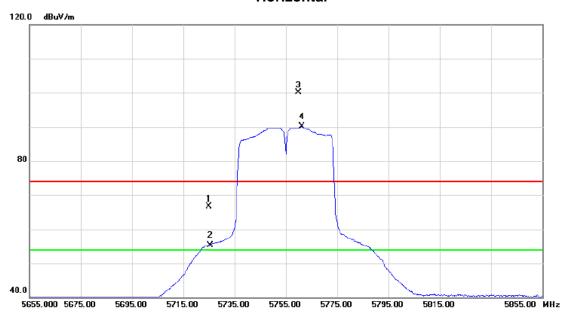
No.	Mk.	. Freq.			Measure- ment		Over		
'		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11512.50	32.76	18.52	51.28	74.00	-22.72	peak	
2	*	11513.60	23.80	18.52	42.32	54.00	-11.68	AVG	

Report No.: NEI-FICP-2-1406C191 Page 70 of 104



Test Mode: TX N40 Mode 5755MHz

Horizontal



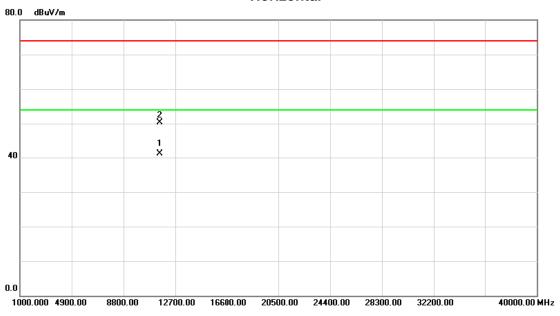
No	. MI	k. Fi	req.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		M	lHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.	000	22.08	44.58	66.66	74.00	-7.34	peak	
2	X	5725.	000	10.76	44.58	55.34	54.00	1.34	AVG	
3	X	5759.	800	55.33	44.76	100.09	74.00	26.09	peak	Fundamental frequency, no limit
4	*	5761.	200	45.28	44.77	90.05	54.00	36.05	AVG	Fundamental frequency, no limit

Report No.: NEI-FICP-2-1406C191 Page 71 of 104



Test Mode: TX N40 Mode 5755MHz

Horizontal



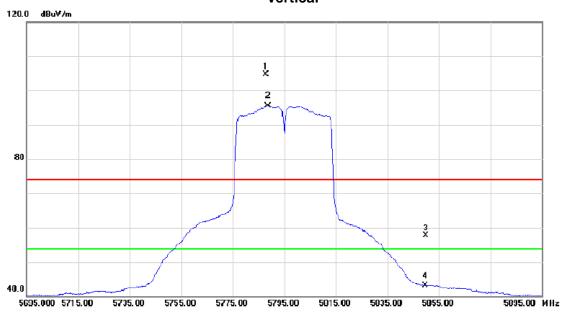
No.	Mk	k. Freq.			Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11513.70	22.64	18.53	41.17	54.00	-12.83	AVG	
2		11516.90	31.86	18.54	50.40	74.00	-23.60	peak	

Report No.: NEI-FICP-2-1406C191 Page 72 of 104



Test Mode: TX N40 Mode 5795MHz

Vertical



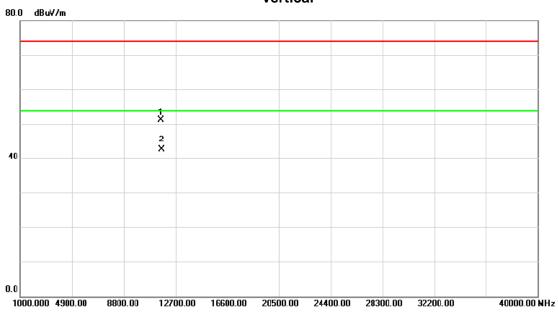
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	Х	5787.800	59.83	44.91	104.74	74.00	30.74	peak	Fundamental frequency, no limit
2	*	5788.800	50.53	44.91	95.44	54.00	41.44	AVG	Fundamental frequency, no limit
3		5850.000	12.39	45.23	57.62	74.00	-16.38	peak	
4		5850.000	-2.06	45.23	43.17	54.00	-10.83	AVG	

Report No.: NEI-FICP-2-1406C191 Page 73 of 104



Test Mode: TX N40 Mode 5795MHz

Vertical

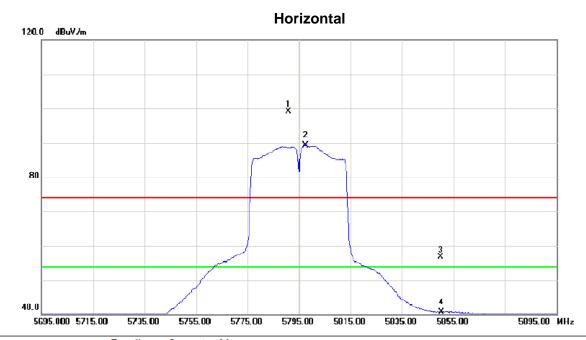


No.	Mk	c. Freq.	Reading Level		Measure- ment		Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1			32 60		51 32	74 00	-22 68	peak	
2	*		23.75	18.74	42.49	54.00	-11.51	AVG	

Report No.: NEI-FICP-2-1406C191 Page 74 of 104



Test Mode: TX N40 Mode 5795MHz



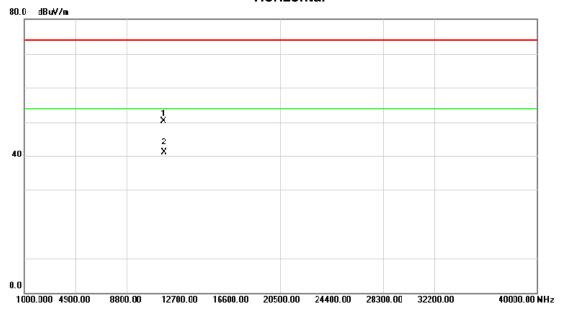
No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	5790.800	54.19	44.92	99.11	74.00	25.11	peak	Fundamental frequency, no limit
2	*	5797.400	4 4.38	44.96	89.34	54.00	35.34	AVG	Fundamental frequency, no limit
3		5850.000	11.54	45.23	56.77	74.00	-17.23	peak	
4		5850.000	-4.48	45.23	40.75	54.00	-13.25	AVG	

Report No.: NEI-FICP-2-1406C191 Page 75 of 104



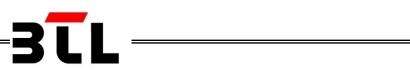
Test Mode: TX N40 Mode 5795MHz

Horizontal



No.	Mk	. Freq.			Measure ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBu∀/m	ďΒ	Delector	Comment
1		11590.48	31.57	18.72	50.29	74.00	-23.71	peak	
2	*	11592.80	22.36	18.72	41.08	54.00	-12.92	AVG	

Report No.: NEI-FICP-2-1406C191 Page 76 of 104



ATTACHMENT E - BANDWIDTH

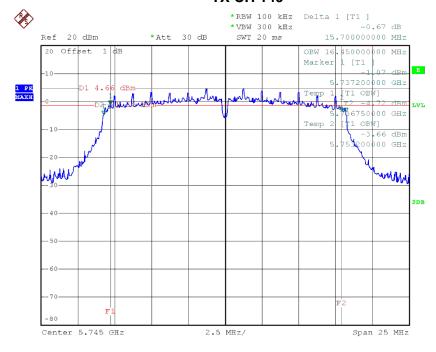
Report No.: NEI-FICP-2-1406C191 Page 77 of 104



Test Mode: TX A Mode_CH149/157/165

Test Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH149	5745	15.70	16.45	>=500KHz
CH157	5785	15.55	16.45	>=500KHz
CH165	5825	15.60	15.45	>=500KHz

TX CH 149

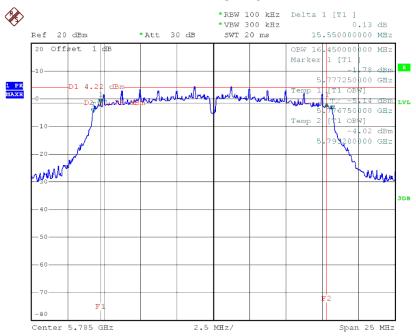


Date: 27.JUN.2014 06:27:10

Report No.: NEI-FICP-2-1406C191 Page 78 of 104

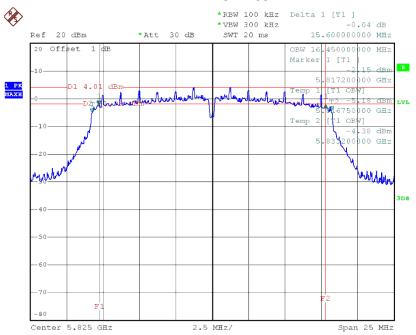


TX CH 157



Date: 27.JUN.2014 06:35:29

TX CH 165



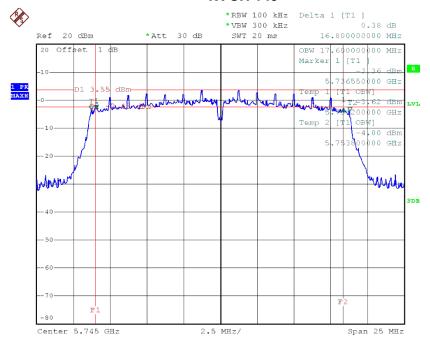
Date: 27.JUN.2014 06:36:36



Test Mode: TX N-20MHz Mode_CH149/157/165

Test Channel	Frequency	6dB Bandwidth	99% Occupied BW	LIMIT
Test Chamilei	(MHz)	(MHz)	(MHz)	(MHz)
CH149	5745	16.80	17.60	>=500KHz
CH157	5785	16.75	17.55	>=500KHz
CH165	5825	16.90	17.60	>=500KHz

TX CH 149

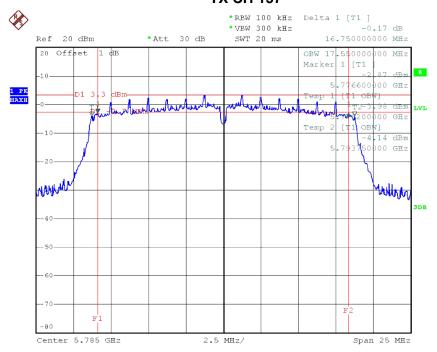


Date: 27.JUN.2014 06:47:29

Report No.: NEI-FICP-2-1406C191 Page 80 of 104

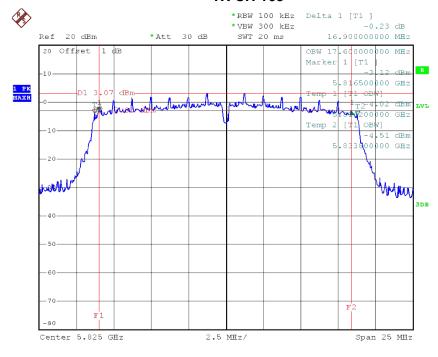


TX CH 157



Date: 27.JUN.2014 06:42:50

TX CH 165



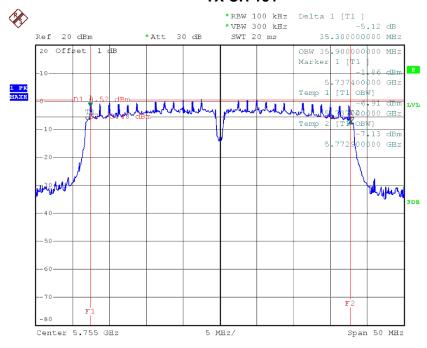
Date: 27.JUN.2014 06:41:53



Test Mode: TX N-40MHz Mode_CH151/159

Test Channel	Frequency	6dB Bandwidth	99% Occupied BW	LIMIT
rest orialine	(MHz)	(MHz)	(MHz)	(MHz)
CH151	5755	35.30	35.90	>=500KHz
CH159	5795	35.20	35.80	>=500KHz

TX CH 151

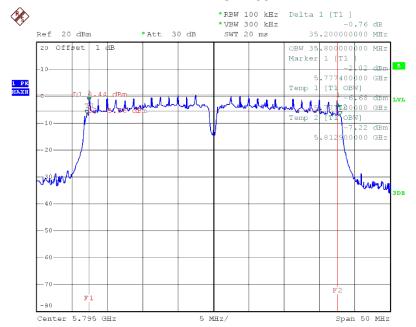


Date: 27.JUN.2014 06:49:27

Report No.: NEI-FICP-2-1406C191 Page 82 of 104

3**T**L

TX CH 159



Date: 27.JUN.2014 06:53:53

Report No.: NEI-FICP-2-1406C191 Page 83 of 104



ATTACHMENT F - MAXIMUM OUTPUT POWER

Report No.: NEI-FICP-2-1406C191 Page 84 of 104



Test Mode : TX A Mode							
Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)			
CH149	5745	22.50	30	1			
CH157	5785	22.30	30	1			
CH165	5825	22.10	30	1			

	Test Mode : TX N-20M Mode							
Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)				
CH149	5745	20.70	30	1				
CH157	5785	20.60	30	1				
CH165	5825	20.60	30	1				

Test Mode : TX N-40M Mode							
Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)			
CH151	5755	21.50	30	1			
CH159	5795	21.40	30	1			

Report No.: NEI-FICP-2-1406C191 Page 85 of 104



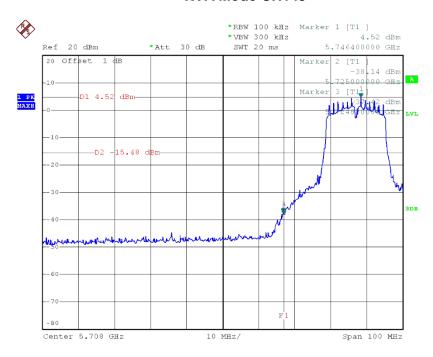
ATTACHMENT G – ANTENNA CONDUCTED SPURIOUS EMISSION

Report No.: NEI-FICP-2-1406C191 Page 86 of 104



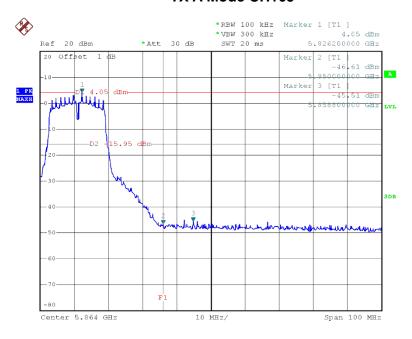
Test Mode: TX A Mode

TX A Mode CH149



Date: 27.JUN.2014 06:32:11

TX A Mode CH165

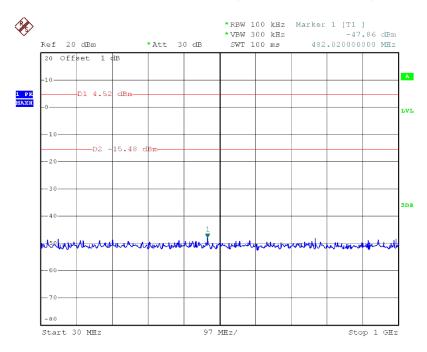


Date: 27.JUN.2014 06:37:35

Report No.: NEI-FICP-2-1406C191 Page 87 of 104

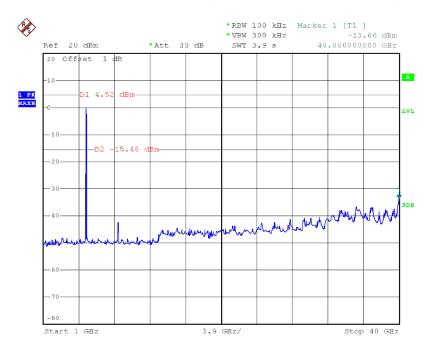


TX A Mode CH149 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:32:27

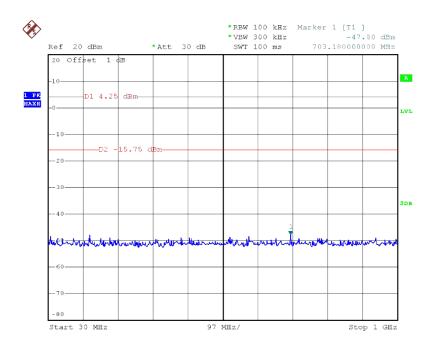
TX A Mode CH149 (1000MHz to 10th Harmonic)



Date: 27.JUN.2014 06:32:59

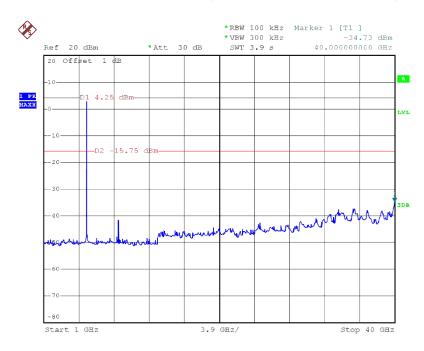


TX A Mode CH157 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:33:57

TX A Mode CH157 (1000MHz to 10th Harmonic)

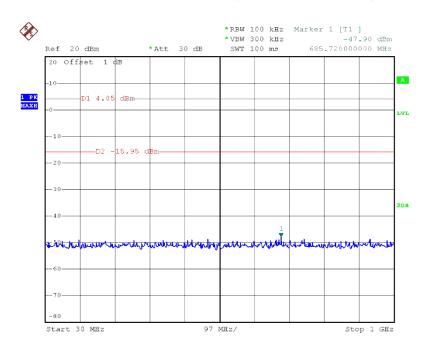


Date: 27.JUN.2014 06:34:10

Report No.: NEI-FICP-2-1406C191 Page 89 of 104

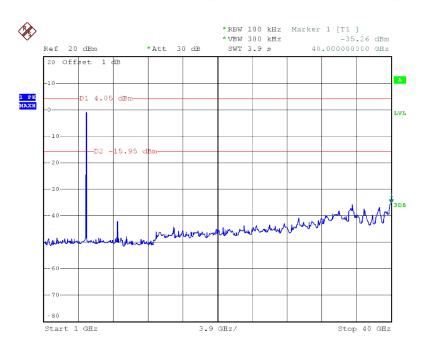


TX A Mode CH165 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:37:50

TX A Mode CH165 (1000MHz to 10th Harmonic)



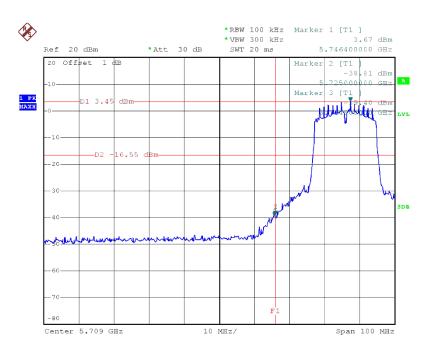
Date: 27.JUN.2014 06:38:03

Report No.: NEI-FICP-2-1406C191 Page 90 of 104



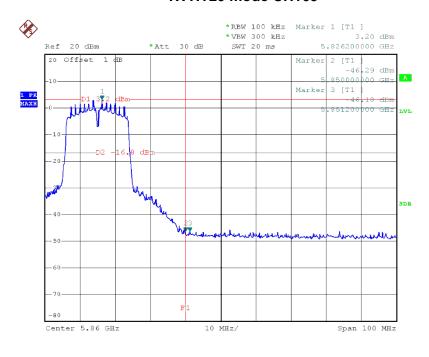
Test Mode: TX N-20M Mode

TX HT20 mode CH149



Date: 27.JUN.2014 06:46:14

TX HT20 mode CH165

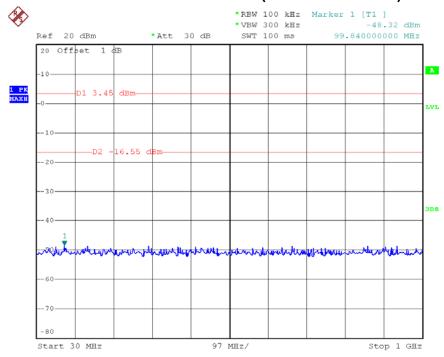


Date: 27.JUN.2014 06:40:11

Report No.: NEI-FICP-2-1406C191 Page 91 of 104

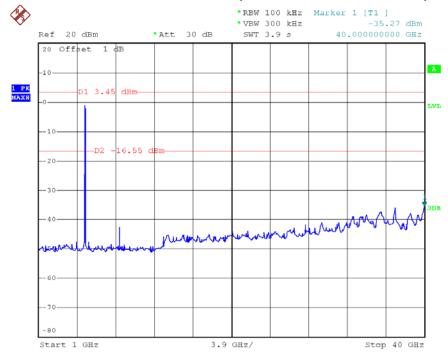


TX HT20 mode CH149 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:46:29

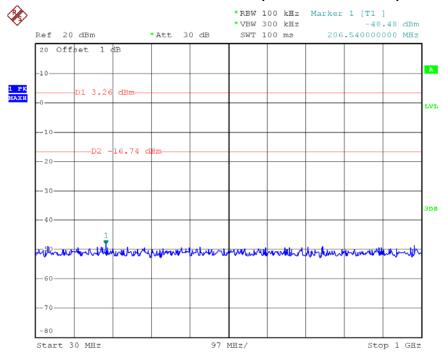
TX HT20 mode CH149 (1000MHz to 10th Harmonic)



Date: 27.JUN.2014 06:46:48

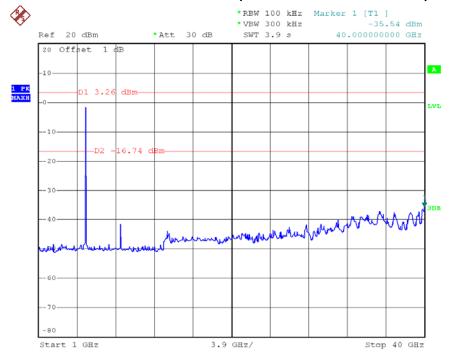


TX HT20 mode CH157 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:43:46

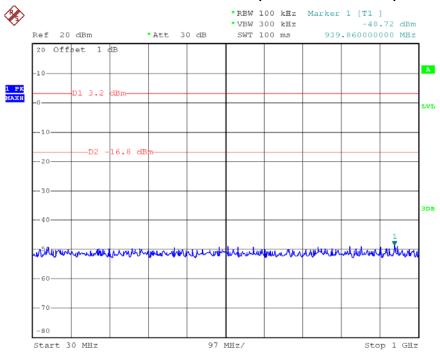
TX HT20 mode CH157 (1000MHz to 10th Harmonic)



Date: 27.JUN.2014 06:44:01

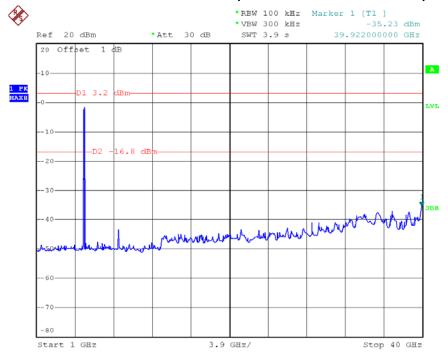


TX HT20 mode CH165 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:40:26

TX HT20 mode CH165 (1000MHz to 10th Harmonic)

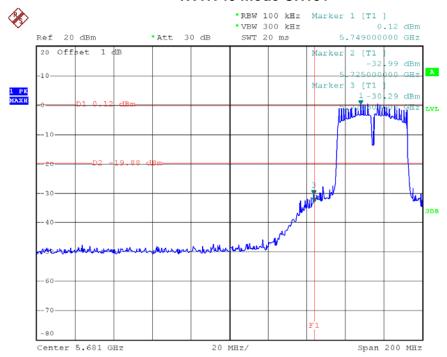


Date: 27.JUN.2014 06:40:40



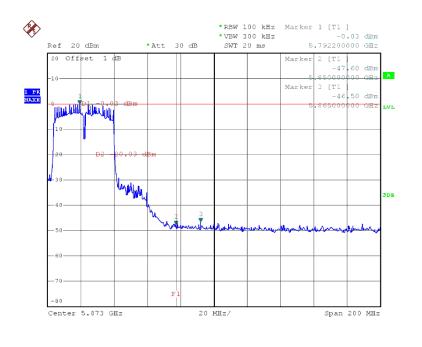
Test Mode: TX N-40M Mode

TX HT40 mode CH151



Date: 27.JUN.2014 06:50:19

TX HT40 mode CH159

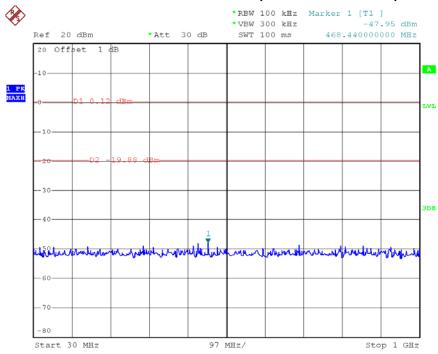


Date: 27.JUN.2014 06:52:15

Report No.: NEI-FICP-2-1406C191

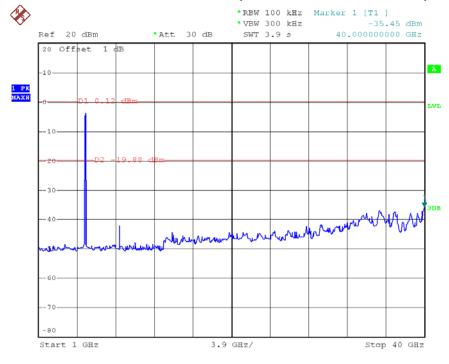


TX HT40 mode CH151 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:50:32

TX HT40 mode CH151 (1000MHz to 10th Harmonic)

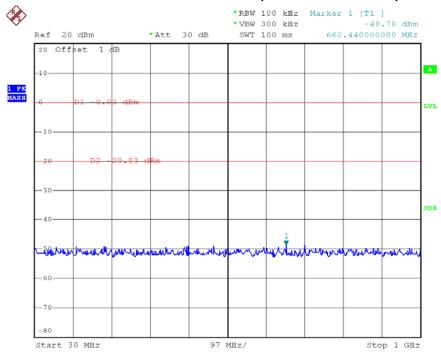


Date: 27.JUN.2014 06:50:47

Report No.: NEI-FICP-2-1406C191

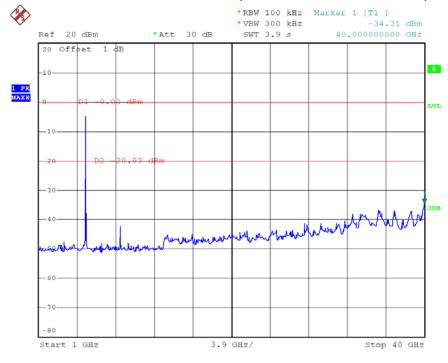


TX HT40 mode CH159 (30MHz to 1000MHz)



Date: 27.JUN.2014 06:52:26

TX HT40 mode CH159 (1000MHz to 10th Harmonic)



Date: 27.JUN.2014 06:52:55

Report No.: NEI-FICP-2-1406C191 Page 97 of 104



ATTACHMENT H – POWER SPECTRAL DENSITY

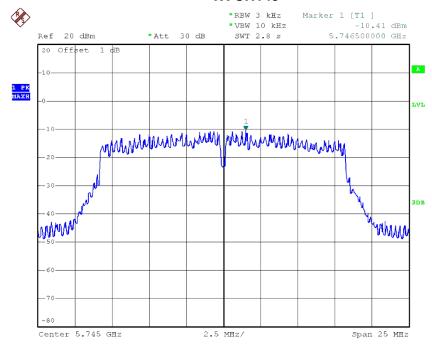
Report No.: NEI-FICP-2-1406C191 Page 98 of 104



Test Mode :TX A Mode_CH149/157/165

Test C	hannel	Frequency	Power Density	LIMIT	
lest O	manner	(MHz)	(dBm)	(dBm)	
СН	149	5745 MHz	-10.41	8	
СН	157	5785 MHz	-9.79	8	
CH	165	5825 MHz	-10.97	8	

TX CH149

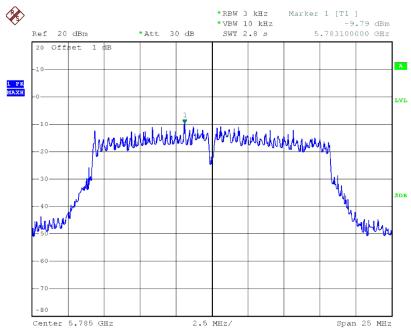


Date: 27.JUN.2014 06:28:09

Report No.: NEI-FICP-2-1406C191 Page 99 of 104

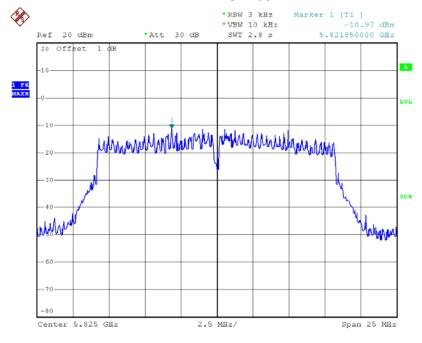


TX CH157



Date: 27.JUN.2014 06:34:31

TX CH165



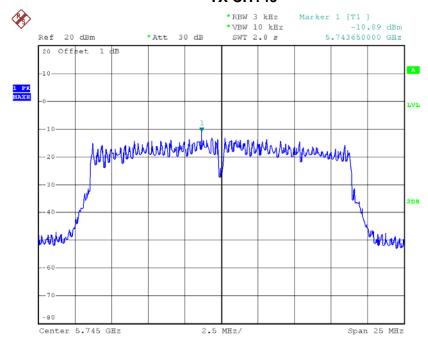
Date: 27.JUN.2014 06:36:52



Test Mode: TX N-20M Mode_CH149/157/165

Test Channel	Frequency (MHz)	Power Density (dBm)	Limit (dBm)
CH149	5745	-10.89	8
CH157	5785	-12.54	8
CH165	5825	-12.41	8

TX CH149

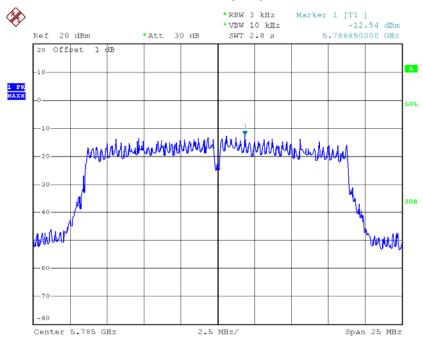


Date: 27.JUN.2014 06:45:23

Report No.: NEI-FICP-2-1406C191 Page 101 of 104

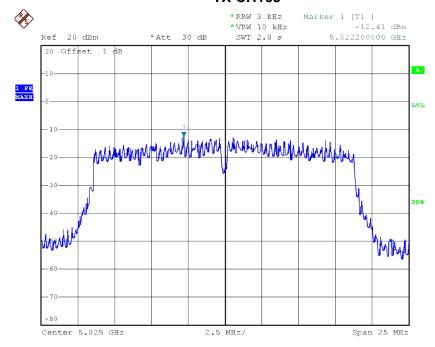


TX CH157



Date: 27.JUN.2014 06:43:05

TX CH165



Date: 27.JUN.2014 06:41:03



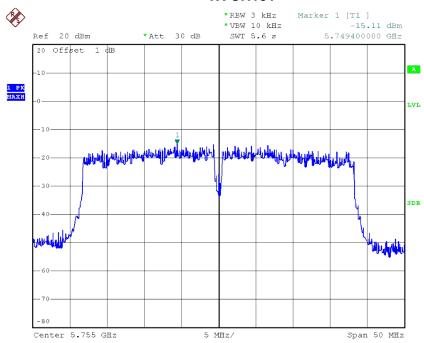
Test Mode: TX N-40M Mode_CH151/159

Test Channel	Frequency	Power Density	Limit
	(MHz)	(dBm)	(dBm)
CH151	5755	-15.11	8
CH159	5795	-14.40	8

Report No.: NEI-FICP-2-1406C191 Page 103 of 104

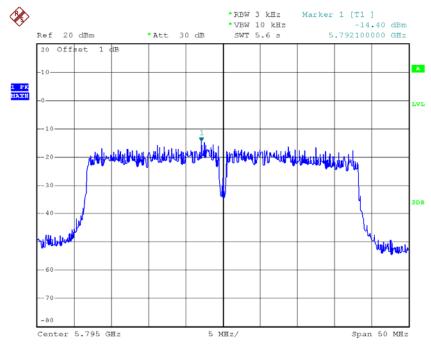


TX CH151



Date: 27.JUN.2014 06:51:07

TX CH159



Date: 27.JUN.2014 06:51:32