

# **FCC Radio Test Report**

FCC ID: 2ABZMAP365

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

**Project No.** : 1502C010B

**Equipment**: Wireless Access Point

Model Name : AP365

Applicant : SHENZHEN IP-COM NETWORKS CO.,LTD.
Address : Room 101, Unit A, First Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen,

Date of Receipt : Oct. 26, 2015

**Date of Test** : Oct. 26, 2015 ~ Nov. 27, 2015

Issued Date : Nov. 30, 2015 Tested by : BTL Inc.

**Testing Engineer** 

(Shawn Xiao)

Technical Manager

(David Mao)

**Authorized Signatory** 

(Steven Lu)

# BTL INC.

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

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

Report No.: BTL-FCCP-2-1502C010B Page 1 of 316



#### **Declaration**

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

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#### Limitation

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

Report No.: BTL-FCCP-2-1502C010B Page 2 of 316



Table of Contents	Page
1 . CERTIFICATION	7
2 . SUMMARY OF TEST RESULTS	8
2.1 TEST FACILITY	9
2.2 MEASUREMENT UNCERTAINTY	9
3 . GENERAL INFORMATION	10
3.1 GENERAL DESCRIPTION OF EUT	10
3.2 DESCRIPTION OF TEST MODES	13
3.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING	15
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TEST	ED 17
3.5 DESCRIPTION OF SUPPORT UNITS	17
4 . EMC EMISSION TEST	18
4.1 CONDUCTED EMISSION MEASUREMENT	18
4.1.1 POWER LINE CONDUCTED EMISSION 4.1.2 TEST PROCEDURE	18 18
4.1.3 DEVIATION FROM TEST STANDARD	18
4.1.4 TEST SETUP	19
4.1.5 EUT OPERATING CONDITIONS	19
4.1.6 EUT TEST CONDITIONS 4.1.7 TEST RESULTS	19 19
4.1.7 TEST RESULTS  4.2 RADIATED EMISSION MEASUREMENT	20
4.2.1 RADIATED EMISSION LIMITS	20
4.2.2 TEST PROCEDURE	21
4.2.3 DEVIATION FROM TEST STANDARD	21
4.2.4 TEST SETUP 4.2.5 EUT OPERATING CONDITIONS	21 22
4.2.6 EUT TEST CONDITIONS	22
4.2.7 TEST RESULTS (9K TO 30MHz)	23
4.2.8 TEST RESULTS (BETWEEN 30 TO 1000 MHz)	23
4.2.9 TEST RESULTS (ABOVE 1000 MHz)	23
5 . PECTRUM BANDWIDTH	24
5.1 APPLIED PROCEDURES / LIMIT	24
5.1.1 TEST PROCEDURE 5.1.2 DEVIATION FROM STANDARD	24 24
5.1.3 TEST SETUP	24 24
5.1.4 EUT OPERATION CONDITIONS	24
5.1.5 EUT TEST CONDITIONS	25
5.1.6 TEST RESULTS	25
6. MAXIMUM CONDUCTED OUTPUT POWER	26

Report No.: BTL-FCCP-2-1502C010B Page 3 of 316



Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	26
6.1.1 TEST PROCEDURE	26
6.1.2 DEVIATION FROM STANDARD	27
6.1.3 TEST SETUP	27
6.1.4 EUT OPERATION CONDITIONS	27
6.1.5 EUT TEST CONDITIONS	27
6.1.6 TEST RESULTS	27
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	28
7.1 APPLIED PROCEDURES / LIMIT	28
7.1.1 TEST PROCEDURE	28
7.1.2 DEVIATION FROM STANDARD	28
7.1.3 TEST SETUP	28
7.1.4 EUT OPERATION CONDITIONS	28
7.1.5 EUT TEST CONDITIONS	28
7.1.6 TEST RESULTS	28
8 . POWER SPECTRAL DENSITY TEST	29
8.1 APPLIED PROCEDURES / LIMIT	29
8.1.1 TEST PROCEDURE	29
8.1.1 DEVIATION FROM STANDARD	30
8.1.2 TEST SETUP	30
8.1.3 EUT OPERATION CONDITIONS	30
8.1.4 EUT TEST CONDITIONS	30
8.1.5 TEST RESULTS	30
9 . FREQUENCY STABILITY MEASUREMENT	31
9.1 APPLIED PROCEDURES / LIMIT	31
9.1.1 TEST PROCEDURE	31
9.1.2 DEVIATION FROM STANDARD	31
9.1.3 TEST SETUP	32
9.1.4 EUT OPERATION CONDITIONS	32
9.1.5 EUT TEST CONDITIONS 9.1.6 TEST RESULTS	32 32
	-
10 . MEASUREMENT INSTRUMENTS LIST	33
11 . EUT TEST PHOTOS	35
ATTACHMENT A - CONDUCTED EMISSION	39
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	42
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	44
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	57
ATTACHMENT E - BANDWIDTH	176

Report No.: BTL-FCCP-2-1502C010B Page 4 of 316



Table of Contents	Page
ATTACHMENT F - MAXIMUM OUTPUT POWER	199
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	212
ATTACHMENT H - POWER SPECTRAL DENSITY	245
ATTACHMENT I - FREQUENCY STABILITY	314

Report No.: BTL-FCCP-2-1502C010B Page 5 of 316



# **REPORT ISSUED HISTORY**

Issued No.	Description	Issued Date
BTL-FCCP-2-1502C010B	Original Issue.	Nov. 30, 2015

Report No.: BTL-FCCP-2-1502C010B Page 6 of 316



#### 1. CERTIFICATION

Equipment : Wireless Access Point

Brand Name: IP-COM Model Name: AP365

Applicant : SHENZHEN IP-COM NETWORKS CO.,LTD. Manufacturer : SHENZHEN IP-COM NETWORKS CO.,LTD.

Address : Room 101, Unit A, First Floor, Tower E3, No. 1001, Zhongshanyuan Road,

Nanshan District, Shenzhen, China. 518052

Date of Test : Oct. 26, 2015 ~ Nov. 27, 2015

Test Sample: Engineering Sample

Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.10-2013

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-2-1502C010B) 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.: BTL-FCCP-2-1502C010B Page 7 of 316



# 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E				
Standard(s) Section FCC	. Test Item	Judgment	Remark	
15.207	AC Power Line Conducted Emissions	PASS		
15.407(a)	Spectrum Bandwidth	PASS		
15.407(a)	Maximum Conducted Output Power	PASS		
15.407(a)	Power Spectral Density	PASS		
15.407(a)	Radiated Emissions	PASS		
15.407(b)	Band Edge Emissions	PASS		
15.407(g)	Frequency Stability	PASS		
15.203	Antenna Requirements	PASS		

## NOTE:

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

Report No.: BTL-FCCP-2-1502C010B Page 8 of 316



#### 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

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 BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{cispr}$  requirement.

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

## A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 KHz ~ 30MHz	2.32

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)													
		9KHz~30MHz	V	3.79													
		9KHz~30MHz	Н	3.57													
		30MHz ~ 200MHz	V	3.82													
		30MHz ~ 200MHz	Ι	3.78													
DG CB03	200M	CISPR	CISPR	CISPR	CICDD	CICDD	CICDD	CICDD	CICDD	CICDD	CICDD	CICDE	CICDB	CICDE	200MHz ~ 1,000MHz	<b>V</b>	4.10
DG-CB03					200MHz ~ 1,000MHz	Ι	4.06										
		1GHz~18GHz	<b>V</b>	3.12													
			1GHz~18GHz	Ι	3.68												
		18GHz~40GHz	٧	4.15													
		18GHz~40GHz	Ι	4.14													

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

Report No.: BTL-FCCP-2-1502C010B Page 9 of 316



## 3. GENERAL INFORMATION

# 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Access Point		
Brand Name	IP-COM		
Model Name	AP365		
Mode Different	NA		
	Operation Frequency	UNII-1: 5150-5250MHz UNII-3: 5725-5850MHz	
	Modulation Type	OFDM	
	Bit Rate of Transmitter	1300Mbps	
Product Description	Output Power (Max.)for UNII-1	802.11a: 17.19dBm 802.11n (20M): 27.19dBm 802.11n (40M): 26.17dBm 802.11ac (20M): 26.22dBm 802.11ac (40M): 28.36dBm 802.11ac (80M): 26.00dBm	
	Output Power (Max.)for UNII-3	802.11a: 20.87dBm 802.11n (20M): 27.72dBm 802.11n (40M): 22.49dBm 802.11ac (20M): 24.31dBm 802.11ac (40M): 27.47dBm 802.11ac (80M): 25.25dBm	
Power Source	DC voltage Supplied from AC/DC adapter Brand/Model: SHENZHEN HEWEISHUN NETWORK TECHNOLOGY CO., LTD/BN031-A65051		
Power Rating	I/P: 100-240VAC 50/60Hz 1.5A O/P: 51V /1.25A		

Report No.: BTL-FCCP-2-1502C010B Page 10 of 316



#### Note:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- 2. The product will be sold with 2 kinds of base plates, the test results would not be affected by the appearance difference.
- 3. Channel List:

902	110				
802.11a 802.11n 20MHz 802.11ac 20MHz		802.11n 40Mh 802.11ac 40M		802.11ad	c 80MHz
UNI	I-1	UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

802.11a 802.11n 20MHz 802.11ac 20MHz		802.11n 40MHz 802.11ac 40MHz		802.11ac 80MHz	
UNI	I-3	UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

## 4. Antenna Specification:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Internal	lpex	3.00	5G
2	N/A	N/A	Internal	lpex	3.00	5G
3	N/A	N/A	Internal	lpex	3.00	5G

## . Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and receivers (3T3R). All transmit signals are completely uncorrelated, then, Direction gain =  $G_{ANT}$ , that is Directional gain=3
- (2) .ANT 1 is the worst case for 1TX

Report No.: BTL-FCCP-2-1502C010B Page 11 of 316



5.

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

Report No.: BTL-FCCP-2-1502C010B Page 12 of 316



## 3.2 DESCRIPTION OF TEST MODES

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

Pretest Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 8	TX N20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 9	TX N40 Mode / CH151,CH159 (UNII-3)
Mode 10	TX AC20 Mode / CH149,CH157,CH165 (UNII-3)
Mode 11	TX AC40 Mode / CH151,CH159 (UNII-3)
Mode 12	TX AC80 Mode / CH155 (UNII-3)
Mode 13	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 13	TX Mode		

Report No.: BTL-FCCP-2-1502C010B Page 13 of 316



For Radiated Test			
Final Test Mode Description			
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)		
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)		
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)		
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)		
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)		
Mode 6	TX AC80 Mode / CH42 (UNII-1)		
Mode 7	TX A Mode / CH149,CH157,CH165 (UNII-3)		
Mode 8	TX N20 Mode / CH149,CH157,CH165 (UNII-3)		
Mode 9	TX N40 Mode / CH151,CH159 (UNII-3)		
Mode 10	TX AC20 Mode / CH149,CH157,CH165 (UNII-3)		
Mode 11	TX AC40 Mode / CH151,CH159 (UNII-3)		
Mode 12	TX AC80 Mode / CH155 (UNII-3)		

## Note:

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

Report No.: BTL-FCCP-2-1502C010B Page 14 of 316



## 3.3 TABLE OF PARAMETERS OF TEST 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

UNII-1 - 1TX				
Test Software Version	MTool			
Frequency (MHz)	5180 5200 5240			
A Mode 50 55 58				

UNII-3 - 1TX				
Test Software Version	MTool			
Frequency (MHz)	5745 5785 5825			
A Mode 68 75 60				

Report No.: BTL-FCCP-2-1502C010B Page 15 of 316



UNII-1 - 3TX				
Test Software Version	MTool			
Frequency (MHz)	5180 5200 5240			
N20 Mode	63 74 66			
Frequency (MHz)	5190	5230		
N40 Mode	54	72		

UNII-3 - 3TX				
Test Software Version	MTool			
Frequency (MHz)	5745 5785 5825			
N20 Mode	66 74 65			
Frequency (MHz)	5755	5795		
N40 Mode	60	66		

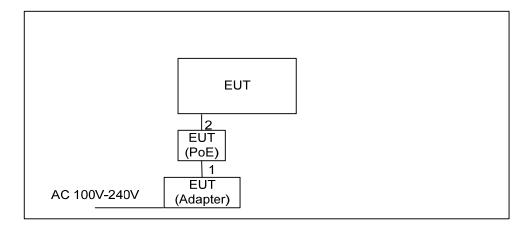
UNII-1 - 3TX					
Test Software Version		MTool			
Frequency (MHz)	5180 5200 5240				
AC20 Mode	66	74	68		
Frequency (MHz)	5190	5230			
AC40 Mode	58	72			
Frequency (MHz)	5210				
AC80 Mode	60				

UNII-3 - 3TX				
Test Software Version	MTool			
Frequency (MHz)	5745 5785 5825			
AC20 Mode	70	62	62	
Frequency (MHz)	5755	5795		
AC40 Mode	62	68		
Frequency (MHz)	5775			
AC80 Mode	62			

Report No.: BTL-FCCP-2-1502C010B Page 16 of 316



## 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/IC	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1m	DC cable
2	NO	NO	10m	RJ45 cable

Report No.: BTL-FCCP-2-1502C010B Page 17 of 316



## 4. EMC EMISSION TEST

#### 4.1 CONDUCTED EMISSION MEASUREMENT

## **4.1.1 POWER LINE CONDUCTED EMISSION** (Frequency Range 150kHz-30MHz)

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

#### Note:

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

#### **4.1.2 TEST PROCEDURE**

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

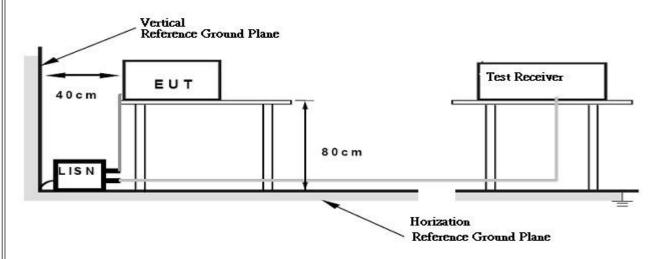
#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

Report No.: BTL-FCCP-2-1502C010B Page 18 of 316



#### 4.1.4 TEST SETUP



#### 4.1.5 EUT OPERATING CONDITIONS

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

The EUT was programmed to be in continuously transmitting/TX Mode mode.

## **4.1.6 EUT TEST CONDITIONS**

Temperature: 24°C Relative Humidity: 60% 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.: BTL-FCCP-2-1502C010B Page 19 of 316



## **4.2 RADIATED EMISSION MEASUREMENT**

#### **4.2.1 RADIATED EMISSION LIMITS**

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/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
Above 960	500	3

#### Note:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBµV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
5470-5725	-27	68.3
5705 F050	-27 (beyond 10MHz of the band edge)	68.3
5725-5850	-17 (within 10 MHz of band edge)	78.3

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:  $E = \frac{1000000\sqrt{30P}}{3} \, \mu \text{V/m}$ , where P is the eirp (Watts)

Report No.: BTL-FCCP-2-1502C010B Page 20 of 316



#### **4.2.2 TEST PROCEDURE**

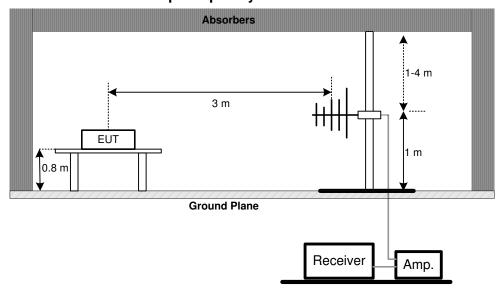
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-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 or 1.5m, 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 radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. 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. (below 1GHz)
- f. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- g. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

#### 4.2.4 TEST SETUP

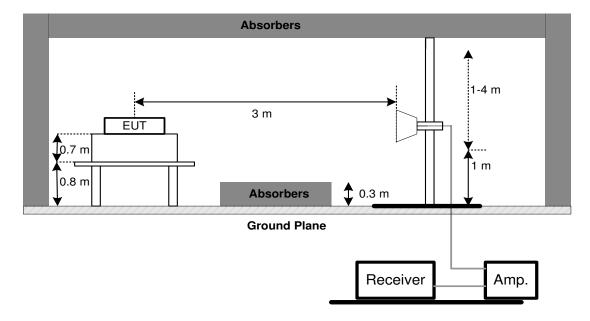
#### (A) Radiated Emission Test Set-Up Frequency Below 1GHz



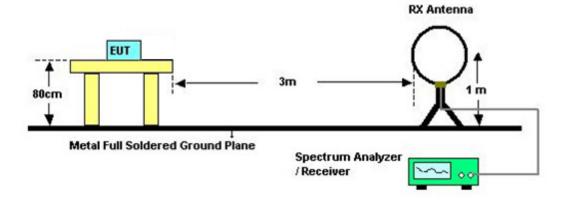
Report No.: BTL-FCCP-2-1502C010B Page 21 of 316



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



## (C) Radiated emissions below 30MHz



#### 4.2.5 EUT OPERATING 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.

#### **4.2.6 EUT TEST CONDITIONS**

Temperature: 24°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

Report No.: BTL-FCCP-2-1502C010B Page 22 of 316



## 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 (specific distance / test distance) (dB);
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

## 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 =  $0.3 \text{ sec./MHz} \circ$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note $_{
  m l}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m o}$
- (3) Measuring frequency range from 30MHz to 1000MHz o
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table  $\circ$

#### 4.2.9 TEST RESULTS (ABOVE 1000 MHz)

Please refer to the Attachment D.

#### Remark:

- (1) Spectrum Setting: 30MHz 1000MHz , RBW= 100kHz, VBW=100kHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axes:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.
- (8) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.

Report No.: BTL-FCCP-2-1502C010B Page 23 of 316



## 5. PECTRUM BANDWIDTH

## **5.1 APPLIED PROCEDURES / LIMIT**

FCC Part15, Subpart E			
Test Item Limit		Frequency Range (MHz)	Result
	26 dB Bandwidth	5150-5250	PASS
Bandwidth	Minimum 500kHz 6dB Bandwidth	5725-5850	PASS

## **5.1.1 TEST PROCEDURE**

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.	Spectrum Parameters	Setting
	Attenuation	Auto
	Span Frequency	> 26dB Bandwidth
	RBW	300 kHz
	VBW	1000 kHz
	Detector	Peak
	Trace	Max Hold
	Sweep Time	Auto

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

## **5.1.2 DEVIATION FROM STANDARD**

No deviation.

#### 5.1.3 TEST SETUP



## **5.1.4 EUT OPERATION CONDITIONS**

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

Report No.: BTL-FCCP-2-1502C010B Page 24 of 316



5.1.5 EUT TEST CONDITIONS					
Temperature: 24°C	Relative Humidity: 52%	Test Voltage: AC 120V/60Hz			
<b>5.1.6 TEST RESULT</b> Please refer to the At					

Report No.: BTL-FCCP-2-1502C010B Page 25 of 316



## 6. MAXIMUM CONDUCTED OUTPUT POWER

## **6.1 APPLIED PROCEDURES / LIMIT**

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
	Fixed:1 Watt (30dBm)		
Conducted Output	Mobile and portable:	5150-5250	PASS
Power	250mW (24dBm)		
	1 Watt (30dBm)	5725-5850	PASS

Note: The maximum e.i.r.p at anyelevation angle above 30 degrees as measured from the horizon must not exceed 125mW(21dBm)

## **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.

Spectrum Parameter	Setting
Attenuation	Auto
Chan Fraguenay	Encompass the entire emissions bandwidth (EBW) of the
Span Frequency	signal
RBW	= 1MHz.
VBW	≥ 3MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

c. Test was performed in accordance with method of KDB 789033 D02.

Report No.: BTL-FCCP-2-1502C010B Page 26 of 316



## **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.

## **6.1.5 EUT TEST CONDITIONS**

Temperature: 24°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

## 6.1.6 TEST RESULTS

Please refer to the Attachment F.

Report No.: BTL-FCCP-2-1502C010B Page 27 of 316



## 7. ANTENNA CONDUCTED SPURIOUS EMISSION

#### 7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E				
Test Item	Limit	Frequency Range (MHz)	Result	
	-27dBm/MHz	5150-5250	PASS	
Antenna conducted Spurious Emission	Below -17dBm/MHz within 10MHz of band edge, below -27dBm/MHz beyond 10MHz of the band edge	5725-5850	PASS	

#### 7.1.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.		
D.	Spectrum Parameter	Setting
	Attenuation	Auto
	RBW	1000kHz
	VBW	1000kHz
	Trace	Max Hold
	Sweep Time	Auto

c. Offset=antenna gain+cable loss

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP



## 7.1.4 EUT OPERATION CONDITIONS

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

## 7.1.5 EUT TEST CONDITIONS

Temperature: 24°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

## 7.1.6 TEST RESULTS

Please refer to the Attachment G.

Report No.: BTL-FCCP-2-1502C010B Page 28 of 316



## 8. POWER SPECTRAL DENSITY TEST

## 8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	Other then Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250	PASS
	30dBm/500kHz	5725-5850	PASS

#### **8.1.1 TEST PROCEDURE**

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.	Spectrum Parameter	Setting
	Attenuation	Auto
	Chan Eraguanay	Encompass the entire emissions bandwidth (EBW) of the
	Span Frequency	signal
	RBW	= 1MHz.
	VBW	≥ 3MHz.
	Detector	RMS
	Trace	Max Hold
	Sweep Time	Auto

#### Note:

- 1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
- 2. The value measured with RBW=1MHz is to be added with 10log(500kHz/1MHz) which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.

Report No.: BTL-FCCP-2-1502C010B Page 29 of 316



## **8.1.1 DEVIATION FROM STANDARD**

No deviation.

## 8.1.2 TEST SETUP



## **8.1.3 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.

## **8.1.4 EUT TEST CONDITIONS**

Temperature: 24°C Relative Humidity: 52% Test Voltage: AC 120V/60Hz

## 8.1.5 TEST RESULTS

Please refer to the Attachment H.

Report No.: BTL-FCCP-2-1502C010B Page 30 of 316



## 9. FREQUENCY STABILITY MEASUREMENT

## 9.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item Limit Frequency Range (MHz) Result			
Construction Obstation	Specified in the	5150-5250	PASS
Frequency Stability user's manual		5725-5850	PASS

## 9.1.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

	the block diagram bolow,					
b.	Spectrum Parameter	Setting				
	Attenuation	Auto				
	Span Frequency	Entire absence of modulation emissions bandwidth				
	RBW	10 kHz				
	VBW	10 kHz				
	Sweep Time	Auto				

c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

## 9.1.2 DEVIATION FROM STANDARD

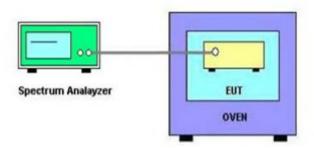
No deviation.

Report No.: BTL-FCCP-2-1502C010B Page 31 of 316

d. User manual temperature is 0°C~40°C.



## **9.1.3 TEST SETUP**



## 9.1.4 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.

## 9.1.5 EUT TEST CONDITIONS

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

## 9.1.6 TEST RESULTS

Please refer to the Attachment I.

Report No.: BTL-FCCP-2-1502C010B Page 32 of 316



# 10. MEASUREMENT INSTRUMENTS LIST

	Conducted Emission Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until		
1	LISN	EMCO	699837	0052765	Mar. 28, 2016		
2	LISN	R&S	ENV216	101447	Mar. 28, 2016		
3	Test Cable	emci	RG223(9KHz -30MHz)	C_17	Mar. 13, 2016		
4	EMI Test Receiver	R&S	ESCS30	826547/022	Mar. 28, 2016		
5	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 28, 2016		
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	Schwarbeck	VULB9160	9160-3232	Mar. 28, 2016		
2	Amplifier	HP	8447D	2944A09673	Nov. 09, 2016		
3	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 11, 2016		
4	Test Cable	emci	LMR-400(30MH z-1GHz)	C-01	Jun. 28, 2016		
5	Controller	CT	SC100	N/A	N/A		
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A		
7	Antenna	ETS	3115	00075789	Mar. 28, 2016		
8	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2016		
9	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 11, 2016		
10	Test Cable	emci	EMC104-SM-S M-10000(1GHz -26.5GHz)	C-68	Jun. 28, 2016		
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Mar. 28, 2016		
12	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 28, 2016		
13	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 07, 2016		

Report No.: BTL-FCCP-2-1502C010B Page 33 of 316



	Spectrum Bandwidth Measurement					
Ite	em	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
	1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

	Maximum Conducted Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	power Meter	ANRITSU	ML2495A	1128009	Mar. 28, 2016	
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 28, 2016	

	Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016	

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

	Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until	
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016	
2	Const Temp. & Hu midity Chamber	Giant Force	ITH-225-20- S	IAB0309-001	Dec.12, 2015	

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

All calibration period of equipment list is one year.

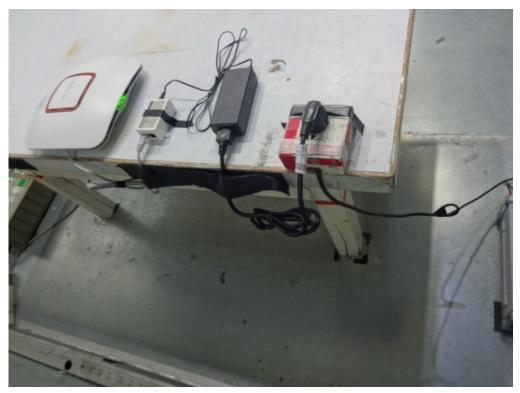
Report No.: BTL-FCCP-2-1502C010B Page 34 of 316



# 11. EUT TEST PHOTOS







Report No.: BTL-FCCP-2-1502C010B Page 35 of 316



# **Radiated Measurement Photos**

9KHz to 30MHz





Report No.: BTL-FCCP-2-1502C010B Page 36 of 316



# **Radiated Measurement Photos**







Report No.: BTL-FCCP-2-1502C010B Page 37 of 316



# **Radiated Measurement Photos**

# Above 1000MHz





Report No.: BTL-FCCP-2-1502C010B Page 38 of 316



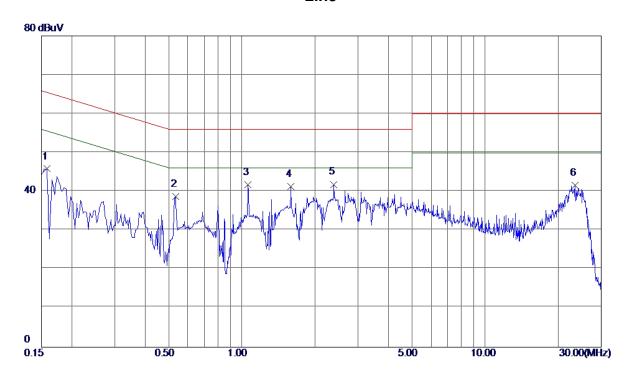
ATTACHMENT A - CONDUCTED EMISSION

Report No.: BTL-FCCP-2-1502C010B Page 39 of 316





# Line



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0. 1580	36. 29	9. 55	45.84	65. 57	-19.73	Peak	
2	0. 5340	29.07	9. 69	38. 76	56.00	-17.24	Peak	
3	1.0620	32.03	9. 80	41.83	56.00	-14. 17	Peak	
4	1. 5940	31.40	9. 85	41. 25	56.00	-14.75	Peak	
5	2. 3900	31.86	9. 98	41.84	56.00	-14. 16	Peak	
6	23. 4260	31.75	9. 92	41.67	60.00	-18. 33	Peak	

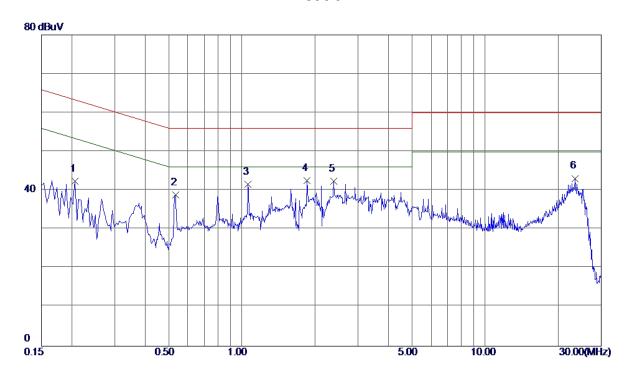
Note: The test result has included the cable loss.

Report No.: BTL-FCCP-2-1502C010B Page 40 of 316





# **Neutral**



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2060	32.94	9. 50	42.44	63. 37	-20.93	Peak	
2	0.5340	29. 26	9. 56	38.82	<b>56. 00</b>	-17. 18	Peak	
3	1.0620	32.01	9. 59	41.60	<b>56.00</b>	-14.40	Peak	
4	1.8580	32.81	9. 70	42. 51	<b>56.00</b>	-13.49	Peak	
5	2. 3900	32.60	9. 76	42. 36	56.00	-13.64	Peak	
6	23. 4180	33. 13	9. 99	43. 12	60.00	-16.88	Peak	

Note: The test result has included the cable loss.

Report No.: BTL-FCCP-2-1502C010B Page 41 of 316



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

Report No.: BTL-FCCP-2-1502C010B Page 42 of 316



Test Mode: TX MODE

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0124	0°	13.67	24.7813	38.4513	125.7358	-87.2845	AVG
0.0124	0°	14.53	24.7813	39.3113	145.7358	-106.4245	PEAK
0.0286	0°	6.85	23.7553	30.6053	118.4769	-87.8716	AVG
0.0286	0°	8.36	23.7553	32.1153	138.4769	-106.3616	PEAK
0.0393	0°	3.27	23.0777	26.3477	115.7164	-89.3687	AVG
0.0393	0°	5.79	23.0777	28.8677	135.7164	-106.8487	PEAK
0.0578	0°	1.27	22.2440	23.5140	112.3657	-88.8517	AVG
0.0578	0°	2.62	22.2440	24.8640	132.3657	-107.5017	PEAK
0.5106	0°	19.55	19.8339	39.3839	73.4426	-34.0587	QP
1.9625	0°	23.97	19.5038	43.4738	69.5400	-26.0662	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0136	90°	13.46	24.3000	37.7600	124.9334	-87.1734	AVG
0.0136	90°	15.13	24.3000	39.4300	144.9334	-105.5034	PEAK
0.0273	90°	7.64	23.8377	31.4777	118.8810	-87.4033	AVG
0.0273	90°	9.07	23.8377	32.9077	138.8810	-105.9733	PEAK
0.0469	90°	5.47	22.5963	28.0663	114.1808	-86.1144	AVG
0.0469	90°	6.55	22.5963	29.1463	134.1808	-105.0344	PEAK
0.0595	90°	1.72	22.2100	23.9300	112.1139	-88.1839	AVG
0.0595	90°	2.94	22.2100	25.1500	132.1139	-106.9639	PEAK
0.6307	90°	22.67	20.2182	42.8882	71.6078	-28.7195	QP
2.0622	90°	24.71	19.4627	44.1727	69.5400	-25.3673	QP

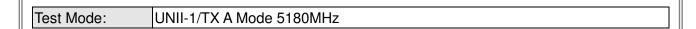
Report No.: BTL-FCCP-2-1502C010B Page 43 of 316



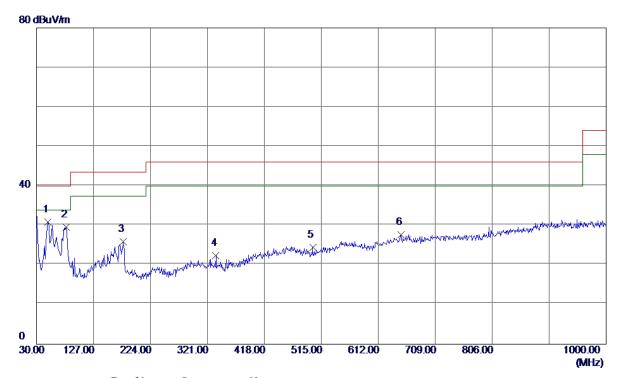
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Report No.: BTL-FCCP-2-1502C010B Page 44 of 316





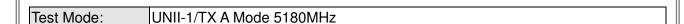
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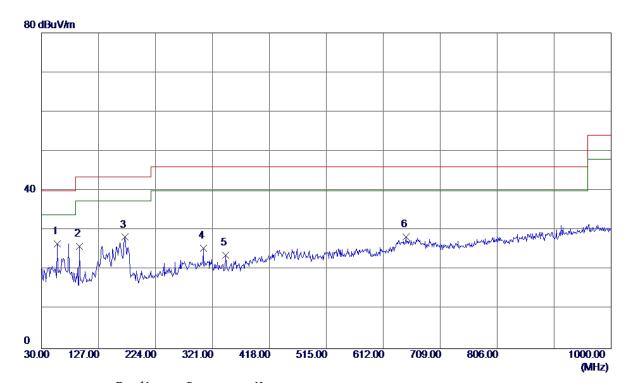


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	49.4000	43. 29	-12.43	30.86	40.00	-9. 14	Peak	
2	80.4400	45. 29	-15.72	29. 57	40.00	-10.43	Peak	
3	177. 4400	37. 25	-11. 38	25. 87	43.50	-17.63	Peak	
4	335. 5500	32. 15	-9.82	22. 33	46.00	-23.67	Peak	
5	500. 4500	31.86	-7. 36	24. 50	46.00	-21. 50	Peak	
6	650. 8000	29. 36	-1.64	27.72	46.00	-18. 28	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 45 of 316



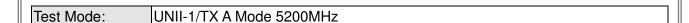




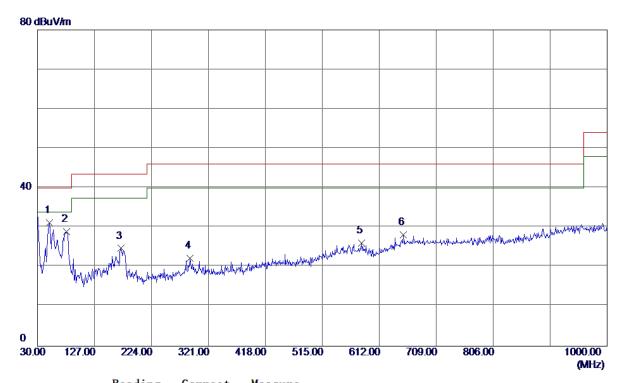
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	57. 1600	39. 52	-13. 02	26. 50	40.00	-13. 50	Peak	
2	94.9900	41.38	-15. 51	25. 87	43.50	-17.63	Peak	
3	172. 5900	39. 45	-11. 21	28. 24	43.50	-15. 26	Peak	
4	305. 4800	35. 06	-9.62	25. 44	46.00	-20. 56	Peak	
5	343. 3100	33. 53	-9.88	23.65	46.00	-22. 35	Peak	
6	650. 8000	29. 93	-1.64	28. 29	46.00	-17.71	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 46 of 316





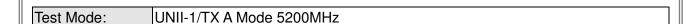
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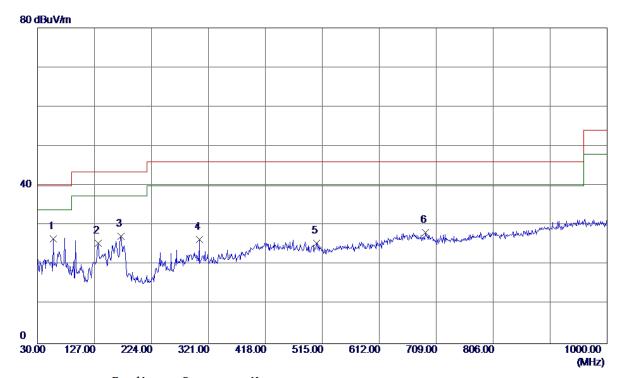


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	50. 3700	43.64	-12.48	31. 16	40.00	-8.84	Peak	
2	79. 4700	44.69	-15. 66	29. 03	40.00	-10. 97	Peak	
3	172. 5900	35. 93	-11. 21	24.72	43.50	-18.78	Peak	
4	289. 9600	32. 14	-9.83	22. 31	46.00	-23.69	Peak	
5	581. 9300	30. 75	-4.63	26. 12	46.00	-19.88	Peak	
6	652. 7400	29. 79	-1.63	28. 16	46.00	-17.84	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 47 of 316







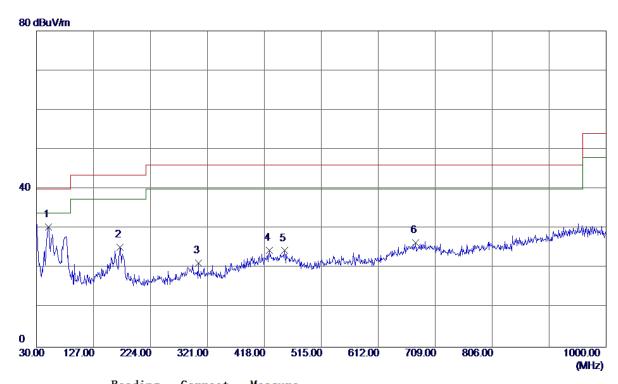
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	57. 1600	39. 52	-13.02	26. 50	40.00	-13. 50	Peak	
2	133. 7899	36. 92	-11. 53	25. 39	43.50	-18. 11	Peak	
3	172. 5900	38. 45	-11. 21	27. 24	43.50	-16. 26	Peak	
4	305. 4800	36.06	-9.62	26. 44	46.00	-19. 56	Peak	
5	505. 3000	32.60	-7.09	25. 51	46.00	-20.49	Peak	
6	690. 5700	29. 71	-1.50	28. 21	46.00	-17.79	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 48 of 316



Test Mode: UNII-1/TX A Mode 5240MHz

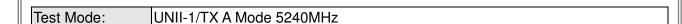
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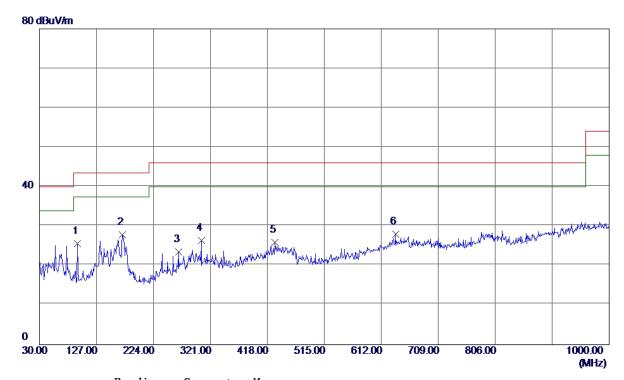


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	50. 3700	42.88	-12.48	30. 40	40.00	-9. 60	Peak	
2	172. 5900	36. 48	-11. 21	25. 27	43.50	-18. 23	Peak	
3	305. 4800	30.84	-9.62	21. 22	46.00	-24.78	Peak	
4	426.7300	31. 03	<b>-6.53</b>	24. 50	46.00	<b>-21.50</b>	Peak	
5	452. 9200	30. 38	-5. 98	24. 40	46.00	-21.60	Peak	
6	676. 0200	28. 00	-1.55	26. 45	46.00	-19. 55	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 49 of 316







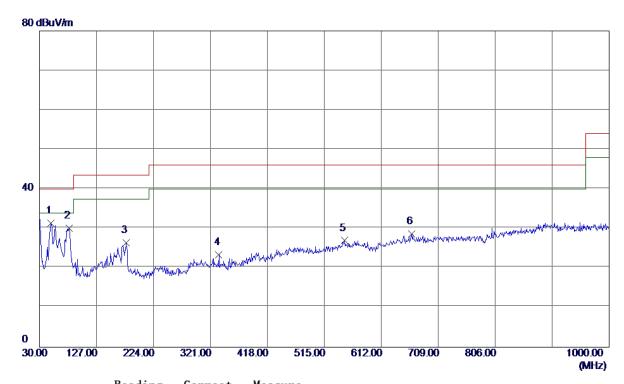
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	94.9900	41.08	-15. 51	25. 57	43.50	-17.93	Peak	
2	171.6200	39. 07	-11. 18	27. 89	43.50	-15.61	Peak	
3	266.6800	35. 61	-12.07	23. 54	46.00	-22.46	Peak	
4	305.4800	35. 95	-9.62	26. 33	46.00	-19.67	Peak	
5	430.6100	32. 30	-6. 43	25. 87	46.00	-20. 13	Peak	
6	636. 2500	30. 47	-2.47	28. 00	46.00	-18.00	Peak	
<u>4</u> 5	171. 6200 266. 6800 305. 4800 430. 6100	39. 07 35. 61 35. 95 32. 30	-11. 18 -12. 07 -9. 62 -6. 43	27. 89 23. 54 26. 33 25. 87	43. 50 46. 00 46. 00 46. 00	-15. 61 -22. 46 -19. 67 -20. 13	Peak Peak Peak Peak	

Report No.: BTL-FCCP-2-1502C010B Page 50 of 316



Test Mode: UNII-3/TX A Mode 5745MHz

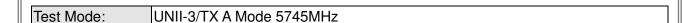
# Vertical

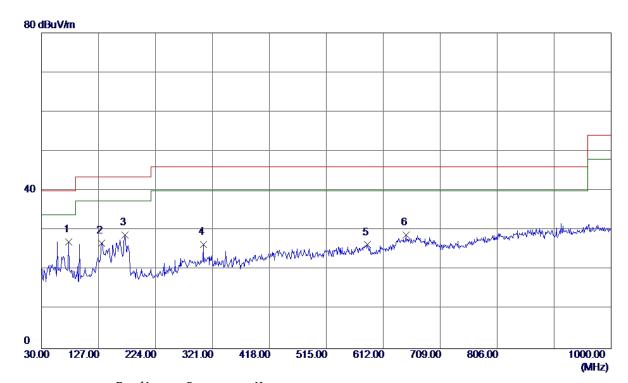


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	49.4000	43.79	-12.43	31. 36	40.00	-8.64	Peak	
2	80.4400	45. 79	-15.72	30. 07	40.00	-9.93	Peak	
3	177. 4400	37.75	-11. 38	26. 37	43.50	-17. 13	Peak	
4	335. 5500	33. 15	<b>-9.</b> 82	23. 33	46.00	-22.67	Peak	
5	549. 9200	31. 58	-4.62	26. 96	46.00	-19.04	Peak	
6	663. 4099	30. 21	-1. 59	28. 62	46.00	-17. 38	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 51 of 316





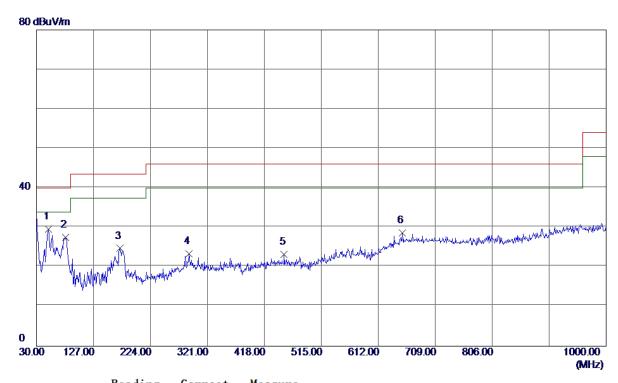


Report No.: BTL-FCCP-2-1502C010B Page 52 of 316



Test Mode: UNII-3/TX A Mode 5785MHz

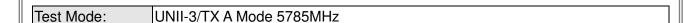
# Vertical

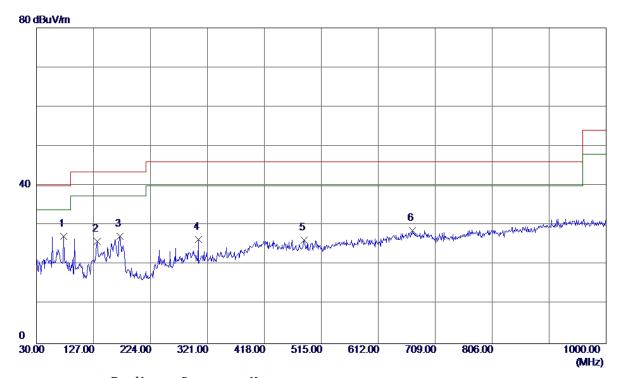


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	50. 3700	42. 14	-12.48	29. 66	40.00	-10. 34	Peak	
2	79. 4700	43. 19	-15. 66	27. 53	40.00	-12.47	Peak	
3	172. 5900	35. 93	-11. 21	24.72	43.50	-18.78	Peak	
4	289. 9600	33. 14	-9.83	23. 31	46.00	-22.69	Peak	
5	451.9500	29. 12	-5. 95	23. 17	46.00	-22.83	Peak	
6	652.7400	30. 29	-1.63	28. 66	46.00	-17.34	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 53 of 316



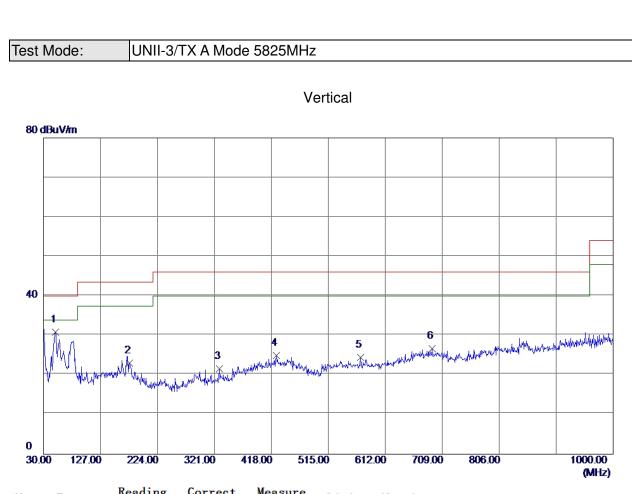




No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	76. 5600	42.54	-15. 39	27. 15	40.00	-12.85	Peak	
2	133. 7899	37.42	-11. 53	25. 89	43.50	-17.61	Peak	
3	172. 5900	38. 45	-11. 21	27. 24	43.50	-16. 26	Peak	
4	305. 4800	36.06	-9.62	26. 44	46.00	-19. 56	Peak	
5	485. 9000	33. 21	-6. 97	26. 24	46.00	-19.76	Peak	
6	670. 2000	30. 14	-1. 57	28. 57	46.00	-17.43	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 54 of 316

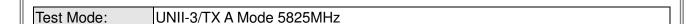


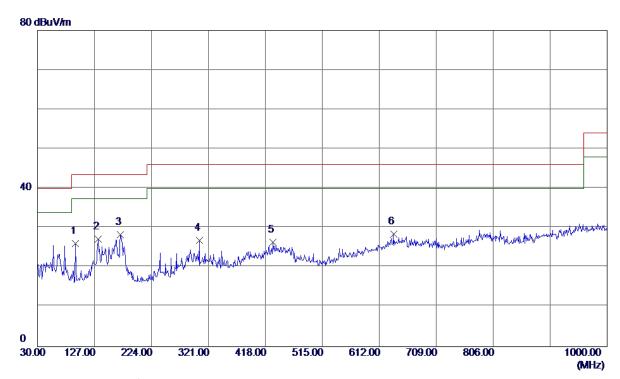


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	50. 3700	43. 38	-12.48	30. 90	40.00	-9. 10	Peak	
2	176. 4700	34. 37	-11. 35	23. 02	43.50	-20.48	Peak	
3	329.7300	31. 39	-9. 78	21.61	46.00	-24.39	Peak	
4	426.7300	31. 53	-6. 53	25. 00	46.00	-21.00	Peak	
5	570. 2900	29. 04	-4.63	24.41	46.00	-21.59	Peak	
6	691. 5400	28. 24	-1.50	26.74	46.00	-19. 26	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 55 of 316







No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	94.9900	41.58	-15. 51	26. 07	43.50	-17.43	Peak	
2	133. 7899	38. 70	-11. 53	27. 17	43.50	-16. 33	Peak	
3	171.6200	39. 57	-11. 18	28. 39	43.50	-15. 11	Peak	
4	305. 4800	36. 45	-9.62	26. 83	46.00	-19. 17	Peak	
5	430.6100	32.80	-6. 43	26. 37	46.00	-19.63	Peak	
6	636. 2500	30. 97	-2.47	28. 50	46.00	-17.50	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 56 of 316



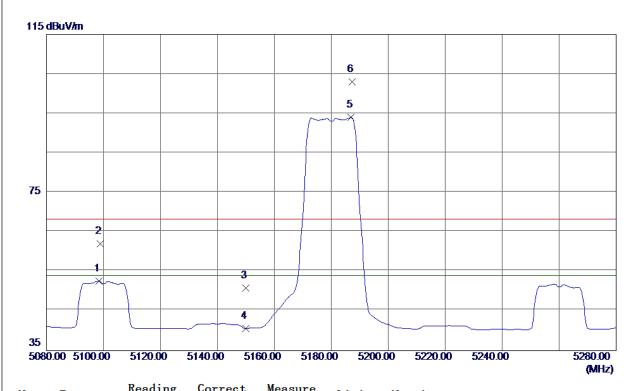
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Report No.: BTL-FCCP-2-1502C010B Page 57 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX A Mode 5180MHz

#### **Vertical**



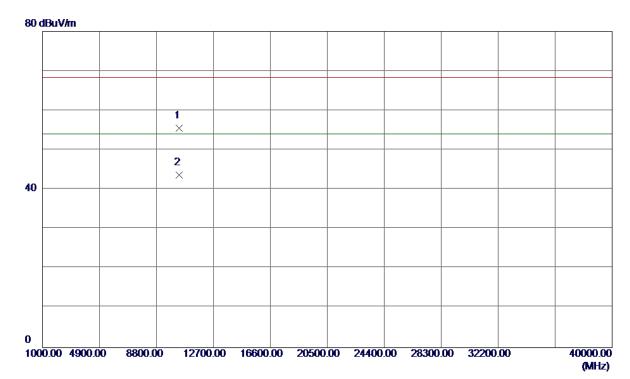
No.	Freq.	Keading Level	Correct Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5098. 4000	12.49	40. 11	52. 60	54.00	-1.40	AVG	
2	5098. 8000	21. 98	40. 11	62.09	68. 30	-6. 21	Peak	
3	5150. 0000	10. 67	40. 22	50.89	68.30	-17.41	Peak	
4	5150.0000	0.42	40. 22	40.64	54.00	-13. 36	AVG	
5	5187.0000	53. 73	40.30	94. 03	54.00	40.03	AVG	No Limit
6	5187. 4000	62. 67	40.30	102. 97	68. 30	34.67	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 58 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5180MHz

# Vertical



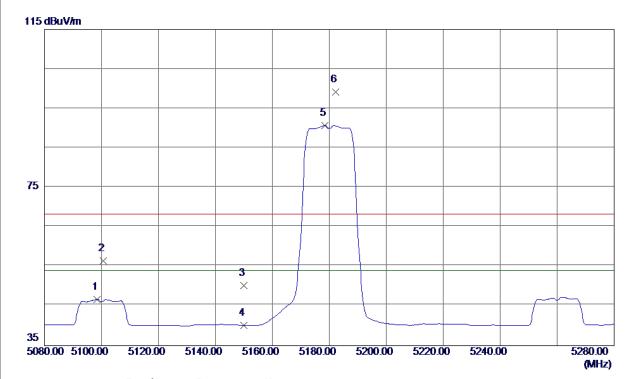
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10359.6300	41. 25	14. 32	55. 57	68.30	-12.73	Peak	
2	10360. 7200	29. 40	14. 33	43.73	54.00	-10. 27	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 59 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX A Mode 5180MHz

#### Horizontal



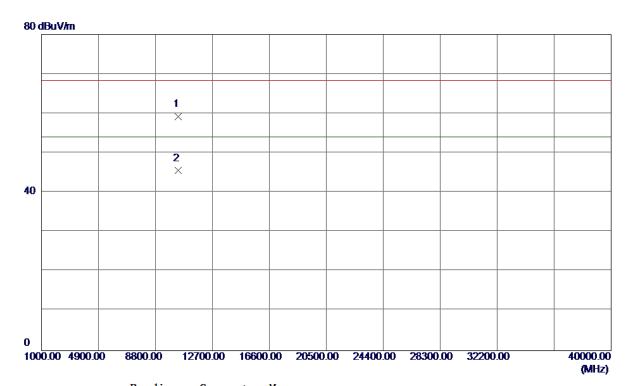
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5098. 4000	6. 61	40. 11	46.72	54.00	-7. 28	AVG	
2	5100.6000	16. 40	40. 11	56. 51	68.30	-11.79	Peak	
3	5150.0000	9. 98	40. 22	50. 20	68.30	-18. 10	Peak	
4	5150.0000	-0.12	40. 22	40. 10	54.00	-13.90	AVG	
5	5178. 4000	50. 38	40. 28	90. 66	54.00	36. 66	AVG	No Limit
6	5182. 2000	58. 92	40. 29	99. 21	68. 30	30. 91	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 60 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX A Mode 5180MHz

#### Horizontal



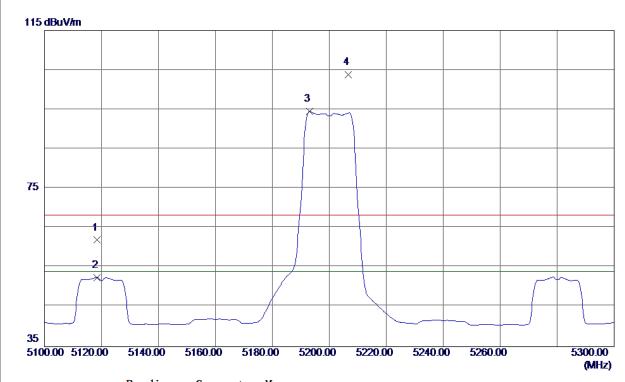
No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10359.6400	44.87	14. 32	59. 19	68.30	-9. 11	Peak	
2	10361. 2900	31. 19	14. 33	45. 52	54.00	-8.48	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 61 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

# Vertical



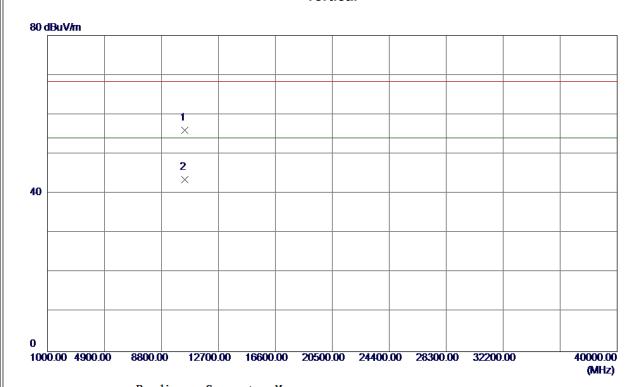
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5118. 4000	21.81	40. 15	61. 96	68.30	-6. 34	Peak	
2	5118. 4000	12. 33	40. 15	52. 48	54.00	-1.52	AVG	
3	5193.0000	54. 27	40.31	94. 58	54.00	40.58	AVG	No Limit
4	5206.6000	63. 47	40. 34	103.81	68. 30	35. 51	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 62 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

#### Vertical

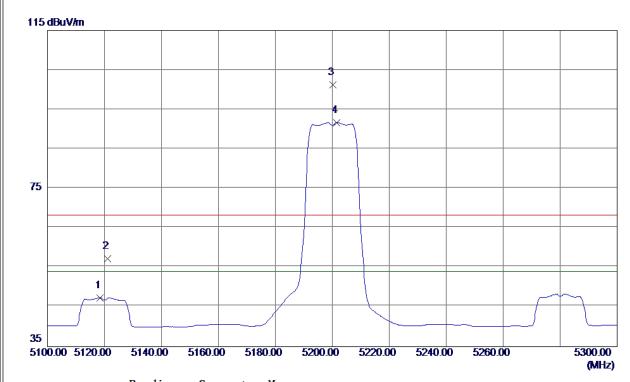


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10399. 3600	41.63	14.40	56. 03	68.30	-12. 27	Peak	
2	10401. 2500	29. 08	14.41	43. 49	54.00	-10. 51	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 63 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz

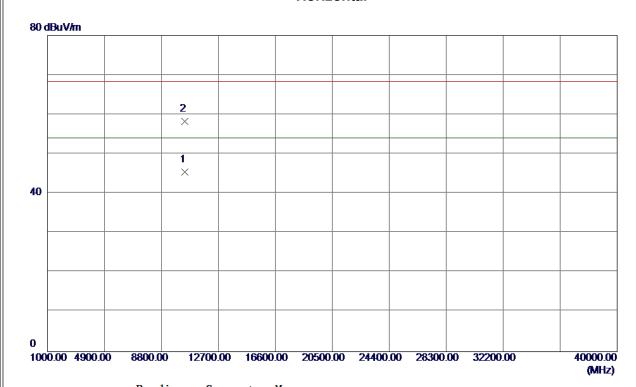


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5118.4000	7. 20	40. 15	47. 35	54.00	-6. 65	AVG	
2	5121. 2000	17.09	40. 16	57. 25	68.30	-11.05	Peak	
3	5200. 2000	60.85	40.32	101. 17	68.30	32.87	Peak	No Limit
4	5201.6000	51. 38	40. 33	91.71	54.00	37.71	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 64 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5200MHz



No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10401. 0800	30. 98	14.41	45. 39	54.00	-8. 61	AVG	
2	10401. 3300	43. 79	14.41	58. 2 <b>0</b>	68. 30	-10. 10	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 65 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX A Mode 5240MHz

# Vertical

# 

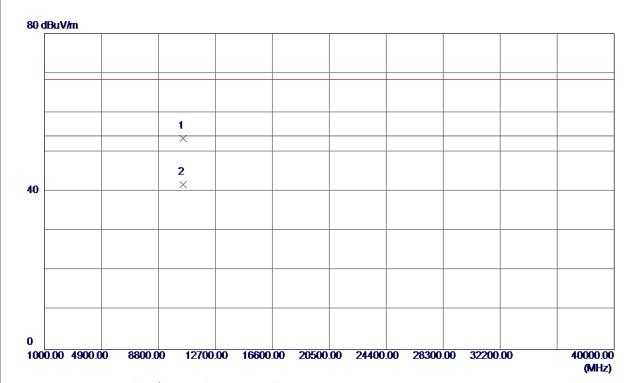
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5233. 0000	55. 66	40. 39	96.05	54.00	42.05	AVG	No Limit
2	5247. 4000	65. 81	40.42	106. 23	68. 30	37. 93	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 66 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz

#### Vertical



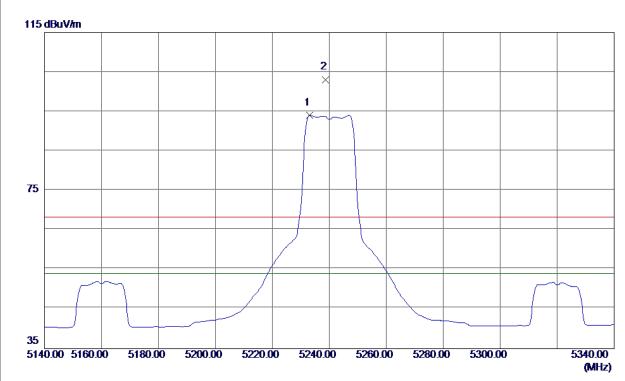
No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10479. 3800	38. 95	14. 56	53. 51	68.30	-14.79	Peak	
2	10480. 4300	27. 27	14. 56	41.83	54.00	-12. 17	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 67 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX A Mode 5240MHz

#### Horizontal

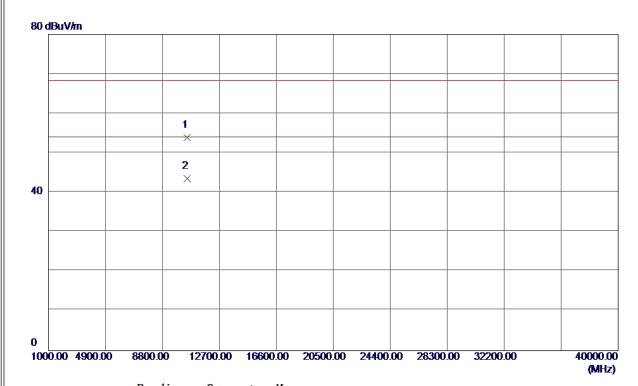


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5233. 0000	53. 72	40.39	94. 11	54.00	40.11	AVG	No Limit
2	5238. 6000	62. 67	40.41	103. 08	68. 30	34. 78	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 68 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX A Mode 5240MHz



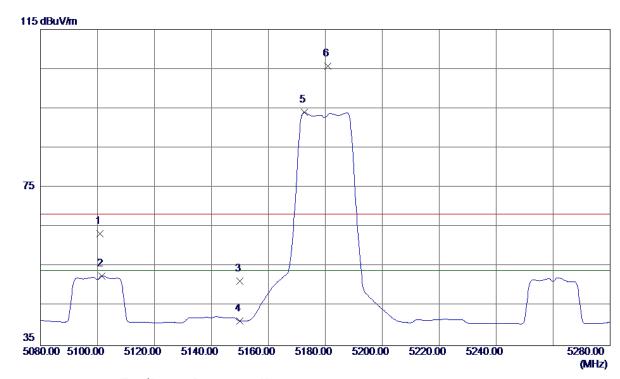
No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10480. 5900	39. 36	14. 56	53. 92	68.30	-14.38	Peak	
2	10481. 3700	28. 89	14. 56	43. 45	54.00	-10. 55	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 69 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N20 Mode 5180MHz

# Vertical



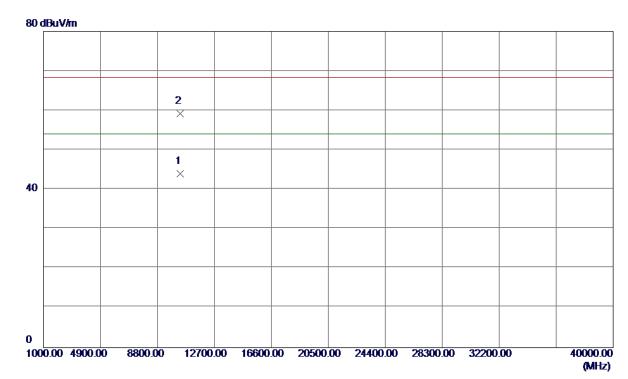
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5100.8000	23. 15	40. 11	63. 26	68.30	-5.04	Peak	
2	5101.6000	12. 52	40. 12	52. 64	54.00	-1.36	AVG	
3	5150.0000	11.06	40. 22	51. 28	68.30	-17.02	Peak	
4	5150.0000	0. 98	40. 22	41. 20	54.00	-12.80	AVG	
5	5172. 6000	53.74	40. 27	94. 01	54.00	40.01	AVG	No Limit
6	5180. 8000	65. 47	40. 28	105. 75	68. 30	37.45	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 70 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz

# Vertical



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10359. 1000	29.66	14. 32	43.98	54.00	-10.02	AVG	
2	10362. 2000	44.86	14. 33	59. 19	68.30	-9. 11	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 71 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N20 Mode 5180MHz

#### Horizontal

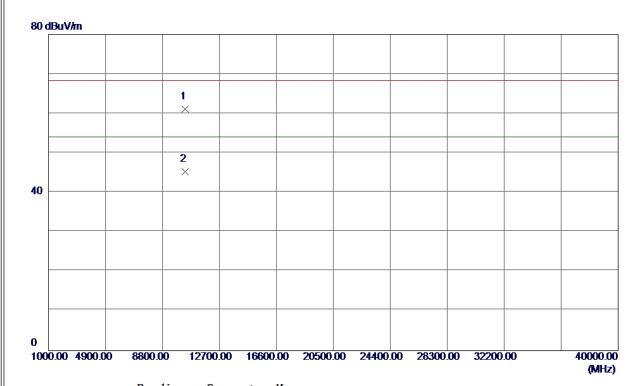
# 

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5098. 4000	9. 38	40. 11	49. 49	54.00	-4.51	AVG	
2	5106.6000	20.89	40. 13	61.02	68.30	-7. 28	Peak	
3	5150.0000	11. 97	40. 22	52. 19	68.30	-16. 11	Peak	
4	5150.0000	0. 20	40. 22	40.42	54.00	-13.58	AVG	
5	5178. 4000	51.86	40. 28	92. 14	54.00	38. 14	AVG	No Limit
6	5179. 4000	63. 57	40. 28	103.85	68. 30	35. 55	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 72 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5180MHz



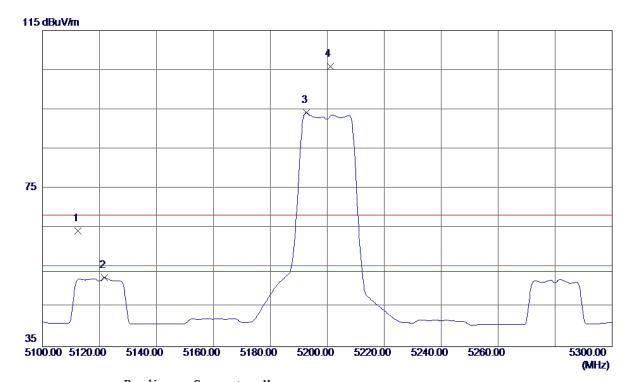
MHz         dBuV/m         dB dBuV/m         dB uV/m         dB uV/m         dB Detector         Comment           1         10360.8900 46.73         14.33         61.06         68.30         -7.24         Peak           2         10361.5000 30.89         14.33         45.22         54.00         -8.78         AVG	No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2 10361. 5000 30. 89 14. 33 45. 22 54. 00 -8. 78 AVG	1	10360.8900	46.73	14. 33	61.06	68.30	-7.24	Peak	
	2	10361. 5000	30. 89	14. 33	45. 22	54.00	-8. 78	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 73 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N20 Mode 5200MHz

#### Vertical

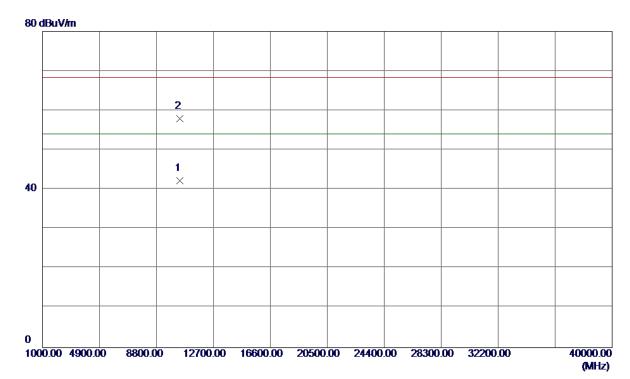


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5112.4000	24. 16	40. 14	64. 30	68.30	-4.00	Peak	
2	5121.8000	12. 27	40. 16	52.43	54.00	-1.57	AVG	
3	5192.6000	53.87	40.31	94. 18	54.00	40. 18	AVG	No Limit
4	5201.0000	65. 55	40. 33	105.88	68. 30	37. 58	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 74 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5200MHz



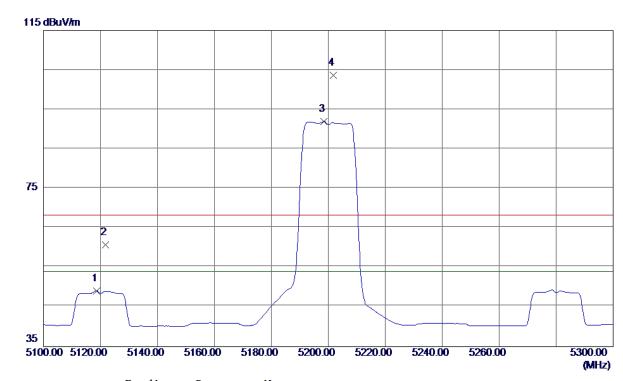
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10398. 6000	27.78	14.40	42. 18	54.00	-11.82	AVG	
2	10402. 1000	43. 46	14.41	57.87	68. 30	-10.43	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 75 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N20 Mode 5200MHz

#### Horizontal



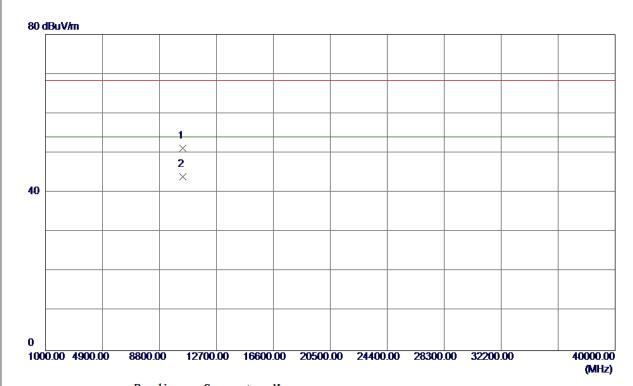
MHz         dBuV/m         dB         dBuV/m         dB uV/m         dB         Detector         Comment           1         5118.6000 8.96         40.15         49.11         54.00         -4.89         AVG           2         5121.8000 20.65         40.16         60.81         68.30         -7.49         Peak           3         5198.4000 51.65         40.32         91.97         54.00         37.97         AVG         No Limit	No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
2 5121.8000 20.65 40.16 60.81 68.30 -7.49 Peak		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	5118.6000	8. 96	40. 15	49. 11	54.00	-4.89	AVG	
3 5198.4000 51.65 40.32 91.97 54.00 37.97 AVG No Limit	2	5121.8000	20.65	40. 16	60.81	68.30	-7.49	Peak	
	3	5198. 4000	51.65	40. 32	91.97	54.00	37.97	AVG	No Limit
4 5201.8000 63.31 40.33 103.64 68.30 35.34 Peak No Limit	4	5201.8000	63. 31	40. 33	103.64	68.30	35. 34	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 76 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N20 Mode 5200MHz

#### Horizontal

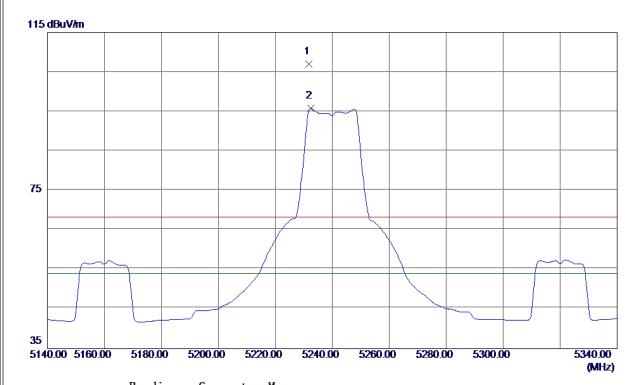


MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector         Comment           1         10401.5700 36.77         14.41         51.18         68.30         -17.12         Peak           2         10401.9300 29.59         14.41         44.00         54.00         -10.00         AVG	No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2 10401, 9300 29, 59 14, 41 44, 00 54, 00 -10, 00 AVG	1	10401.5700	36. 77	14.41	51. 18	68.30	-17. 12	Peak	
	2	10401. 9300	29. 59	14.41	44.00	54.00	-10.00	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 77 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz

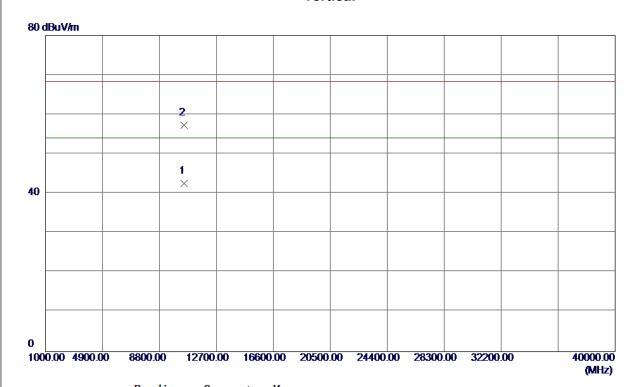


MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector         Comment           1         5231.8000 66.60         40.39         106.99         68.30         38.69         Peak         No Limit           2         5232.4000 55.34         40.39         95.73         54.00         41.73         AVG         No Limit	No.	. Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2 5232,4000 55,34 40,39 95,73 54,00 41,73 AVG No Limit	1	5231.8000	66. 60	40. 39	106. 99	68.30	38. 69	Peak	No Limit
	2	5232. 4000	55. 34	40. 39	95. 73	54.00	41.73	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 78 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz



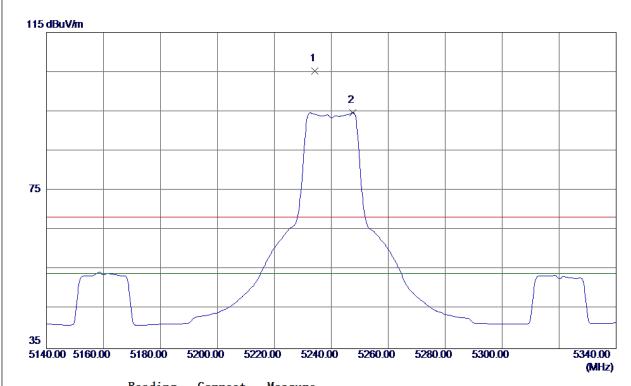
No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10479.7600	27. 93	14. 56	42.49	54.00	-11.51	AVG	
2	10480. 3800	42. 75	14. 56	57. 31	68. 30	-10.99	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 79 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N20 Mode 5240MHz

#### Horizontal

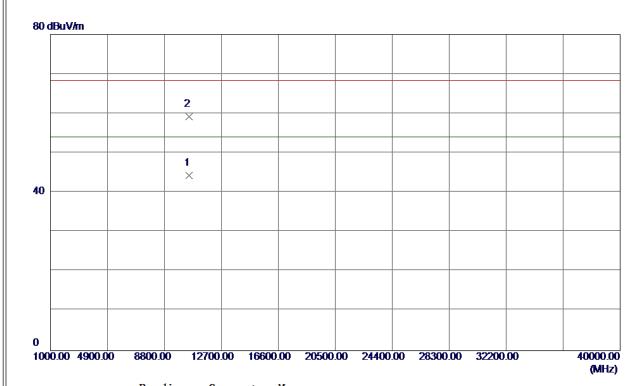


No.	Freq.	Keading Level	Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5234. 2000	64.77	40.40	105. 17	68.30	36. 87	Peak	No Limit
2	5247.6000	54. 28	40. 42	94.70	54.00	40.70	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 80 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N20 Mode 5240MHz



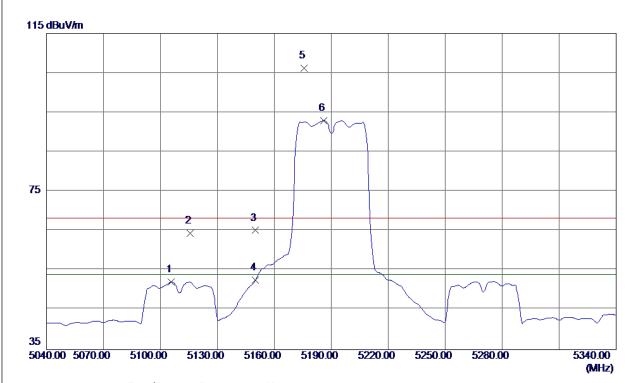
No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10479.7699	29.73	14. 56	44. 29	54.00	-9.71	AVG	
2	10479.8300	44.67	14. 56	59. 23	68. 30	-9. 07	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 81 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N40 Mode 5190MHz

# Vertical

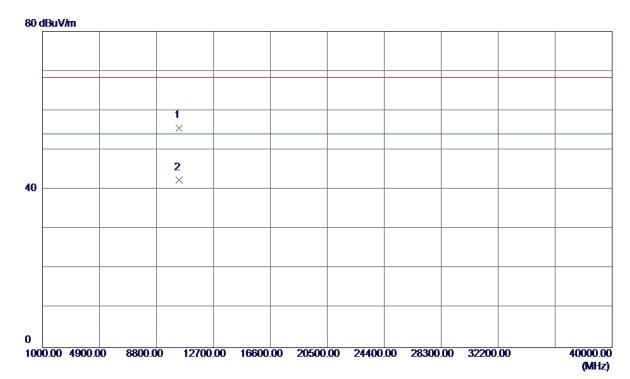


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5105. 7000	11. 94	40. 12	52. 06	54.00	-1.94	AVG	
2	5115. 6000	24. 28	40. 14	64.42	68.30	-3.88	Peak	
3	5150.0000	24.94	40. 22	65. 16	68.30	-3. 14	Peak	
4	5150.0000	12. 39	40. 22	52.61	54.00	-1. 39	AVG	
5	5175. 6000	65. 88	40. 27	106. 15	68. 30	37.85	Peak	No Limit
6	5186. 1000	52. 63	40. 29	92. 92	54.00	38. 92	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 82 of 316



Orthogonal Axis:	x
Test Mode:	UNII-1/ TX N40 Mode 5190MHz



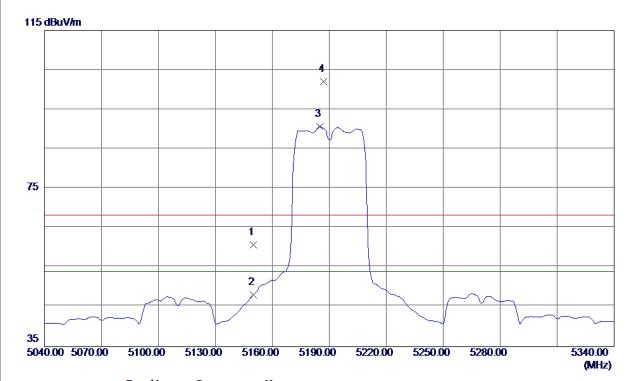
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10380. 9700	41. 23	14. 37	55. 60	68.30	-12.70	Peak	
2	10381. 0900	28. 04	14. 37	42.41	54.00	-11. 59	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 83 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N40 Mode 5190MHz

#### Horizontal

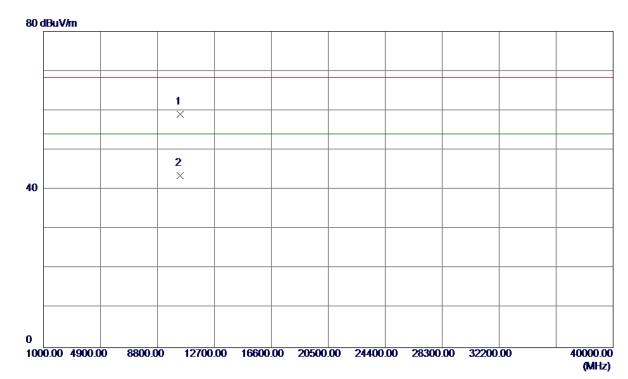


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5150.0000	20.61	40. 22	60.83	68.30	-7.47	Peak	
2	5150.0000	7. 89	40. 22	48. 11	54.00	-5.89	AVG	
3	5184.9000	50. 34	40. 29	90.63	54.00	36. 63	AVG	No Limit
4	5187.0000	61.69	40. 30	101.99	68.30	33. 69	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 84 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5190MHz



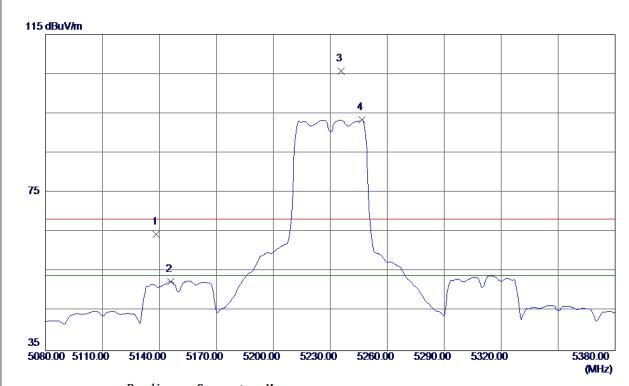
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10380. 1700	44.73	14. 37	59. 10	68. 30	-9. 20	Peak	
2	10380. 3300	29. 14	14. 37	43. 51	54.00	-10.49	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 85 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N40 Mode 5230MHz

# Vertical

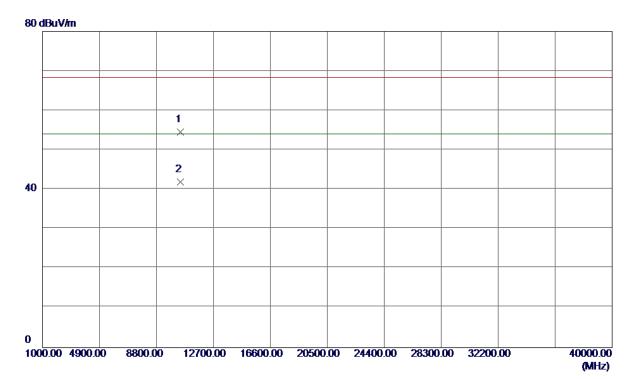


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5138. 5000	24. 24	40. 19	64.43	68.30	-3.87	Peak	
2	5146. 0000	12. 23	40. 21	52.44	54.00	-1.56	AVG	
3	5235. 7000	65. 30	40.40	105. 70	68.30	37.40	Peak	No Limit
4	5246. 8000	52. 99	40. 42	93.41	54.00	39.41	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 86 of 316



Orthogonal Axis:	x
Test Mode:	UNII-1/ TX N40 Mode 5230MHz



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10460. 2000	39. 98	14. 52	54. 50	68.30	-13.80	Peak	
2	10460. 3300	27. 37	14. 52	41.89	54.00	-12. 11	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 87 of 316



Orthogonal Axis: X
Test Mode: UNII-1/ TX N40 Mode 5230MHz

#### Horizontal

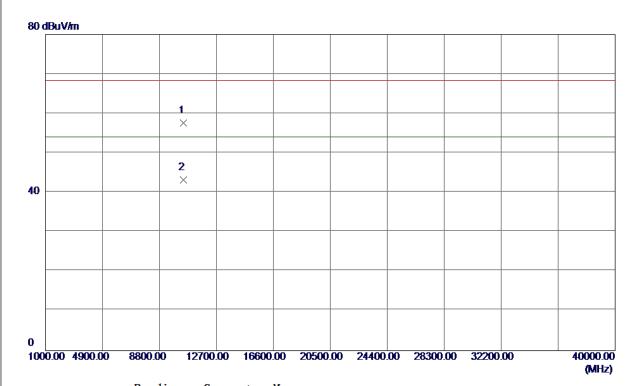
# 75 5080.00 5110.00 5140.00 5170.00 5200.00 5230.00 5280.00 5290.00 5320.00 5380.00 (MHz)

No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5225. 2000	51.46	40. 38	91.84	54.00	37.84	AVG	No Limit
2	5234. 2000	63.84	40. 40	104. 24	68. 30	35. 94	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 88 of 316



Orthogonal Axis:	X
Test Mode:	UNII-1/ TX N40 Mode 5230MHz

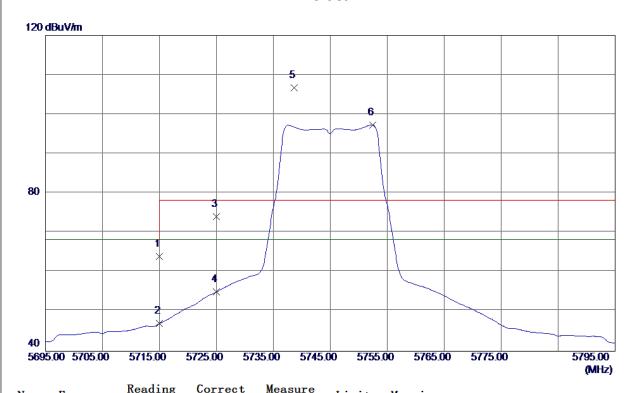


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	10460. 2100	43.09	14. 52	57.61	68.30	-10.69	Peak	
2	10461. 3700	28. 67	14. 52	43. 19	54.00	-10.81	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 89 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz

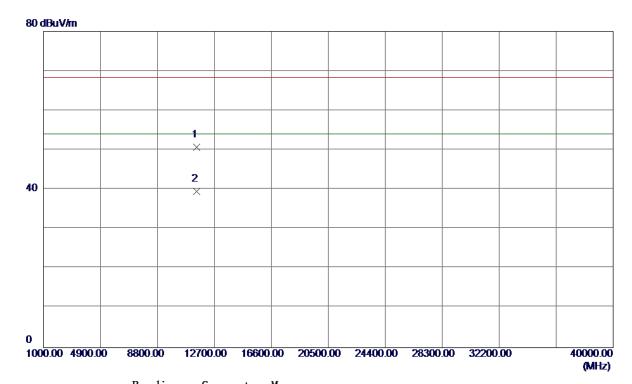


No.	Freq.	Level	Factor	measure	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715. 0000	22. 76	41. 25	64.01	68.30	-4.29	Peak	
2	5715. 0000	5. 74	41. 25	46. 99	68. 30	-21.31	AVG	
3	5725. 0000	32.81	41. 27	74.08	78. 30	-4.22	Peak	
4	5725. 0000	13. 76	41. 27	<b>55. 03</b>	68.30	-13. 27	AVG	
5	5738. 7000	65. 47	41. 28	106. 75	78.30	28. 45	Peak	No Limit
6	5752. 4000	56. 04	41.30	97. 34	68.30	29.04	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 90 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz



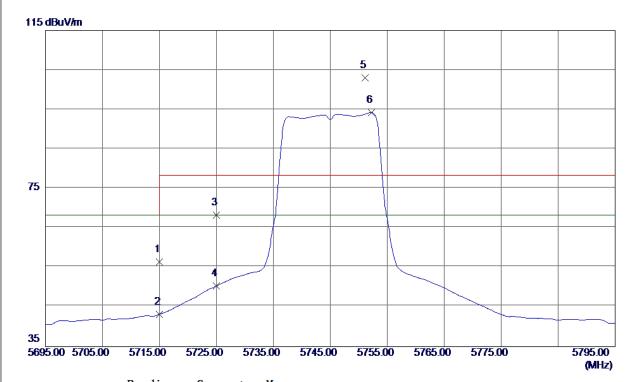
MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector         Comment           1         11490.3700 35.26         15.52         50.78         68.30         -17.52         Peak           2         11490.5400 23.94         15.52         39.46         54.00         -14.54         AVG	No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
2 11490. 5400 23. 94 15. 52 39. 46 54. 00 -14. 54 AVG	1	11490. 3700	35. 26	15. 52	50. 78	68.30	-17.52	Peak	
	2	11490. 5400	23. 94	15. 52	39. 46	54.00	-14.54	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 91 of 316



Orthogonal Axis: X
Test Mode: UNII-3/TX A Mode 5745MHz

#### Horizontal

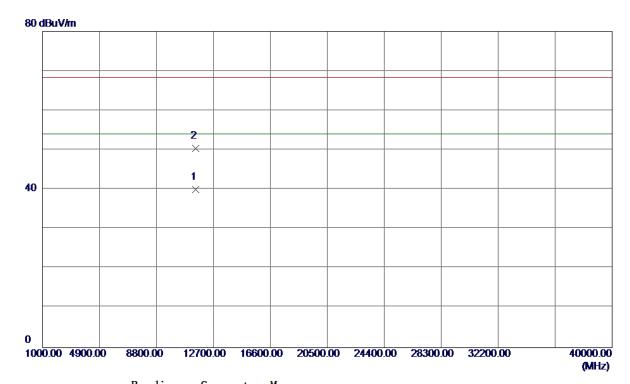


No. 11eq. Level Factor ment Finit Margin	
MHz dBuV/m dB dBuV/m dBuV/m dB Detector Co	omment
1 5715.0000 16.30 40.20 56.50 68.30 -11.80 Peak	
2 5715. 0000 3. 02 40. 20 43. 22 68. 30 -25. 08 AVG	
3 5725.0000 28.08 40.24 68.32 78.30 -9.98 Peak	
4 5725. 0000 10. 11 40. 24 50. 35 68. 30 -17. 95 AVG	
5 5751.1000 62.61 40.35 102.96 78.30 24.66 Peak No	o Limit
6 5752. 2000 53. 80 40. 36 94. 16 68. 30 25. 86 AVG No.	o Limit

Report No.: BTL-FCCP-2-1502C010B Page 92 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5745MHz



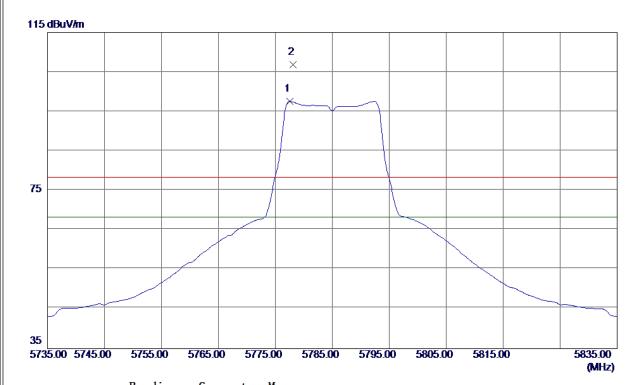
No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11491. 3500	24.42	15. 52	39. 94	54.00	-14.06	AVG	
2	11491. 4600	34. 94	15. 52	50. 46	68. 30	-17.84	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 93 of 316



Orthogonal Axis: X
Test Mode: UNII-3/TX A Mode 5785MHz

# Vertical

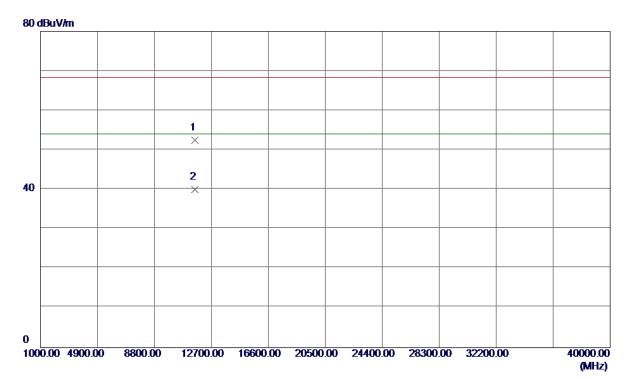


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5777. 5000	56. 23	41. 34	97. 57	68.30	29. 27	AVG	No Limit
2	5778. 1000	65. 48	41. 34	106.82	78. 30	28. 52	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 94 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz



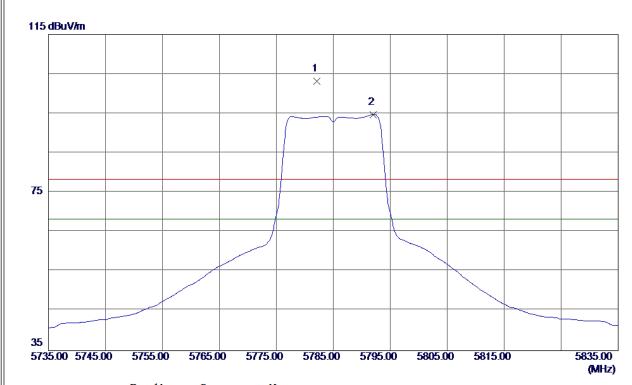
No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11570. 4600	36. 94	15. 55	52. 49	68.30	-15.81	Peak	
2	11571. 2500	24. 46	15. 55	40. 01	54.00	-13. 99	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 95 of 316



Orthogonal Axis: X
Test Mode: UNII-3/TX A Mode 5785MHz

#### Horizontal

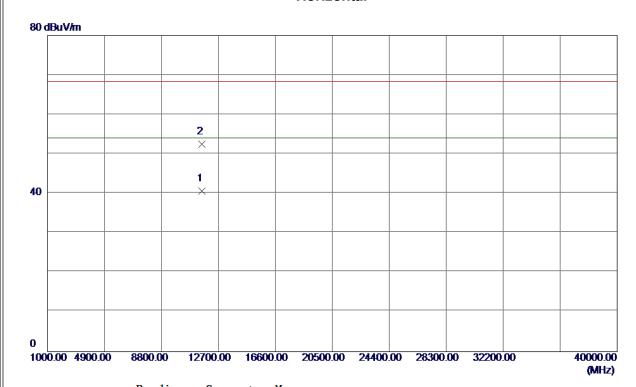


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5782. 1000	62.65	40. 49	103. 14	78.30	24.84	Peak	No Limit
2	5792. 0000	54. 14	40. 53	94.67	68.30	26. 37	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 96 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5785MHz

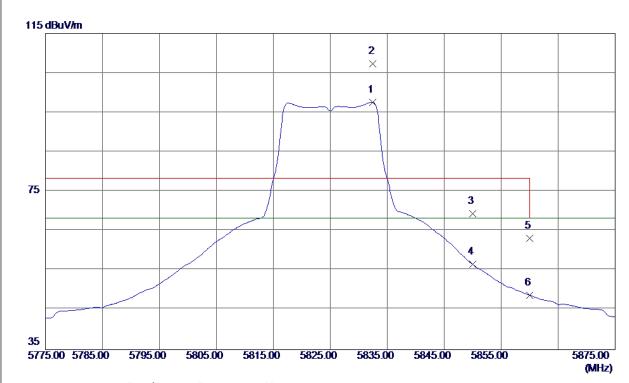


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11571. 3500	25. 09	15. 55	40.64	54.00	-13. 36	AVG	
2	11571. 4600	36. 93	15. 55	52. 48	68. 30	-15.82	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 97 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

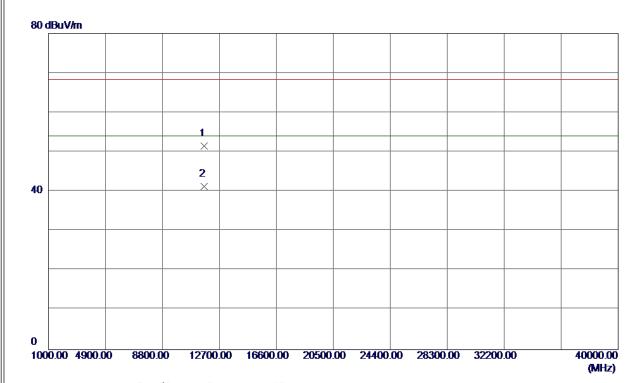


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5832. 4000	56. 19	41.41	97. 60	68.30	29. 30	AVG	No Limit
2	5832. 5000	65. 87	41.41	107. 28	78.30	28. 98	Peak	No Limit
3	5850.0000	27.89	41.44	69. 33	78.30	-8. 97	Peak	
4	5850.0000	15. 15	41.44	56. 59	68. 30	-11.71	AVG	
5	5860.0000	21.68	41.45	63. 13	78. 30	-15. 17	Peak	
6	5860. 0000	7. 34	41.45	48. 79	68.30	-19. 51	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 98 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz



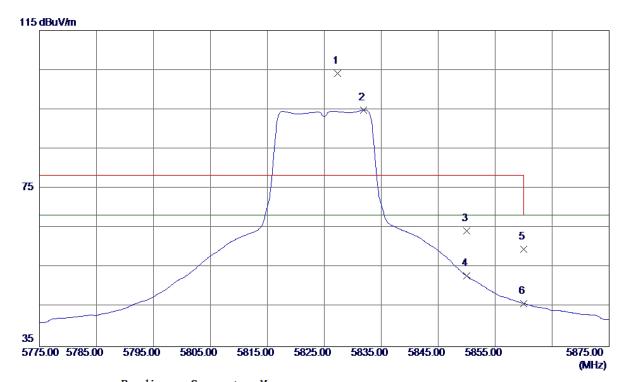
No.	Freq.	Keading Level	Factor	measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11650. 7600	35. 96	15. 58	51. 54	68.30	-16. 76	Peak	
2	11651. 4600	25. 73	15. 58	41. 31	54.00	-12. 69	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 99 of 316



Orthogonal Axis: X
Test Mode: UNII-3/TX A Mode 5825MHz

#### Horizontal

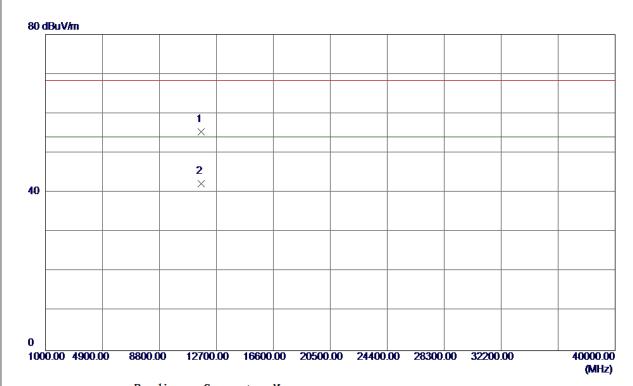


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5827. 3000	63. 39	40.69	104.08	78.30	25. 78	Peak	No Limit
2	5831.9000	54. 12	40.71	94.83	68.30	26. 53	AVG	No Limit
3	5850.0000	23. 56	40.79	64. 35	78.30	-13.95	Peak	
4	5850.0000	12. 13	40.79	52. 92	68.30	-15. 38	AVG	
5	5860.0000	18.75	40.83	59. 58	78.30	-18.72	Peak	
6	5860.0000	5. 12	40.83	45. 95	68.30	-22. 35	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 100 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX A Mode 5825MHz

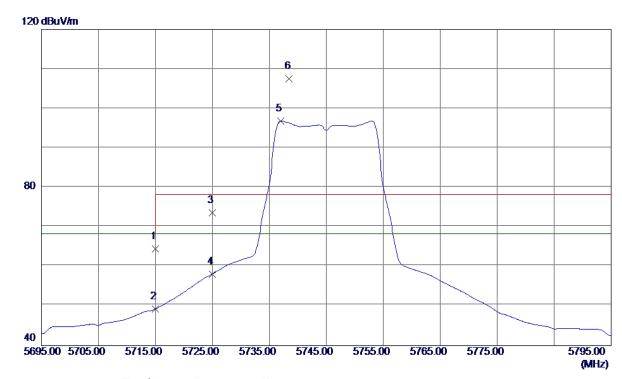


MHz         dBuV/m         dB         dBuV/m         dBuV/m         dB         Detector         Comment           1         11649.7300         39.81         15.58         55.39         68.30         -12.91         Peak	No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
1 11649.7300 39.81 15.58 55.39 68.30 -12.91 Peak		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	11649.7300	39. 81	15. 58	55. 39	68.30	-12.91	Peak	
2 11651. 4600 26. 69 15. 58 42. 27 54. 00 -11. 73 AVG	2	11651. 4600	26. 69	15. 58	42. 27	54.00	-11.73	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 101 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

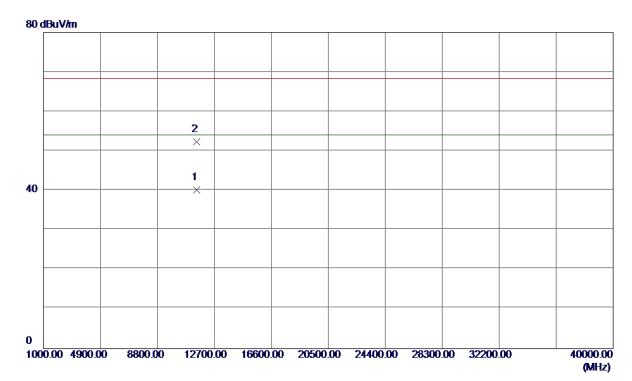


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715. 0000	23. 22	41. 25	64.47	68.30	-3.83	Peak	
2	5715. 0000	8. 02	41. 25	49. 27	68.30	-19.03	AVG	
3	5725. 0000	32. 28	41. 27	73. 55	78.30	-4.75	Peak	
4	5725. 0000	16.82	41. 27	58. 09	68.30	-10. 21	AVG	
5	5737. 0000	55. 53	41. 28	96. 81	68. 30	28. 51	AVG	No Limit
6	5738. 5000	66. 31	41. 28	107. 59	78. 30	29. 29	Peak	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 102 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

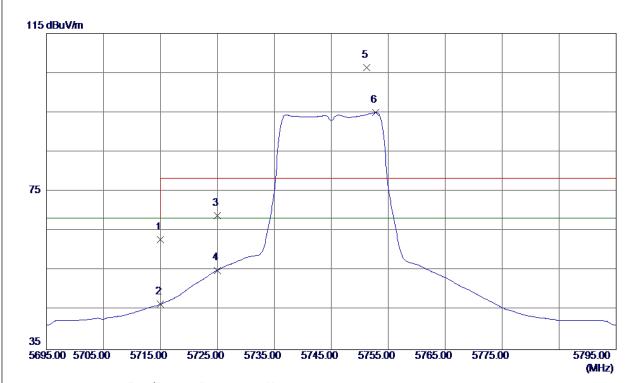


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11490. 3500	24. 57	15. 52	40.09	54.00	-13.91	AVG	
2	11491. 2400	36. 73	15. 52	52. 25	68.30	-16. 05	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 103 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz

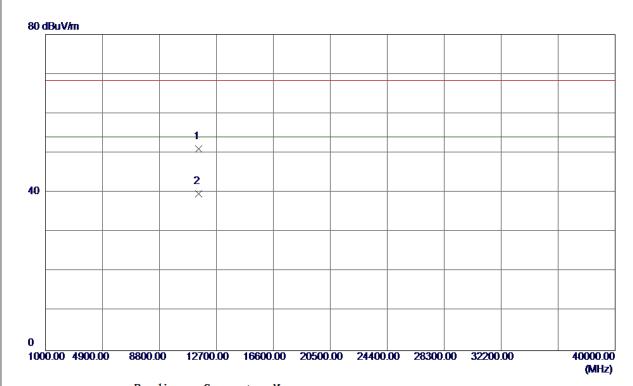


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5715. 0000	22.65	40. 20	62.85	68.30	-5.45	Peak	
2	5715. 0000	6. 27	40. 20	46. 47	68.30	-21.83	AVG	
3	5725. 0000	28. 75	40. 24	68. 99	78. 30	-9. 31	Peak	
4	5725. 0000	14.84	40. 24	<b>55. 08</b>	68.30	-13. 22	AVG	
5	5751. 2000	66. 02	40. 36	106. 38	78. 30	28. 08	Peak	No Limit
6	5752. 8000	54. 58	40. 36	94. 94	68. 30	26.64	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 104 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5745MHz



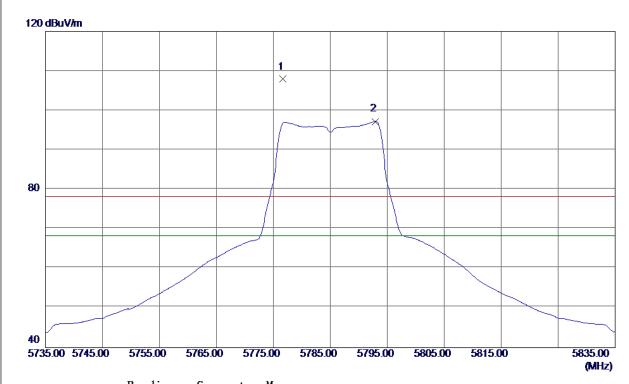
	tn tr/ tn n
MHz dBuV/m dB dBuV/m	dBuV/m dB Detector Comment
1 11489. 9400 35. 55 15. 52 51. 07	68.30 -17.23 Peak
2 11490. 4300 24. 15 15. 52 39. 67	54.00 -14.33 AVG

Report No.: BTL-FCCP-2-1502C010B Page 105 of 316



Orthogonal Axis: X
Test Mode: UNII-3/TX N20 Mode 5785MHz

#### Vertical

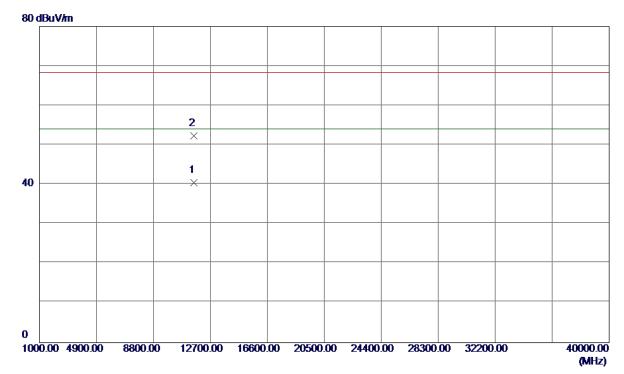


	No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
1 5776.7000 66.58 41.34 107.92 78.30 29.62 Peak No Lin		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	5776. 7000	66. 58	41.34	107. 92	78.30	29.62	Peak	No Limit
2 5792. 9000 55. 84 41. 36 97. 20 68. 30 28. 90 AVG No Lin	2	5792. 9000	55.84	41. 36	97. 20	68. 30	28. 90	AVG	No Limit

Report No.: BTL-FCCP-2-1502C010B Page 106 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

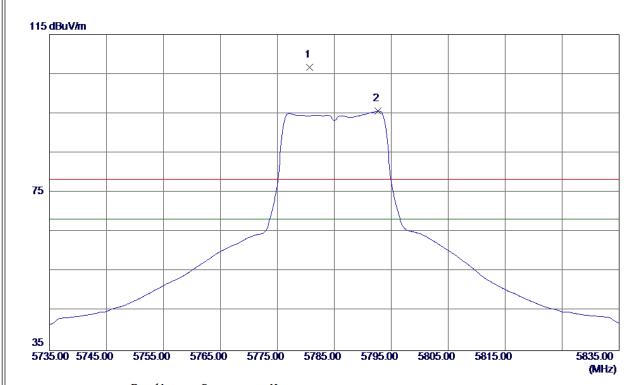


No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11570. 5599	24.92	15. 55	40. 47	54.00	-13. 53	AVG	
2	11570.6200	36. 73	15. 55	52. 28	68. 30	-16. 02	Peak	

Report No.: BTL-FCCP-2-1502C010B Page 107 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

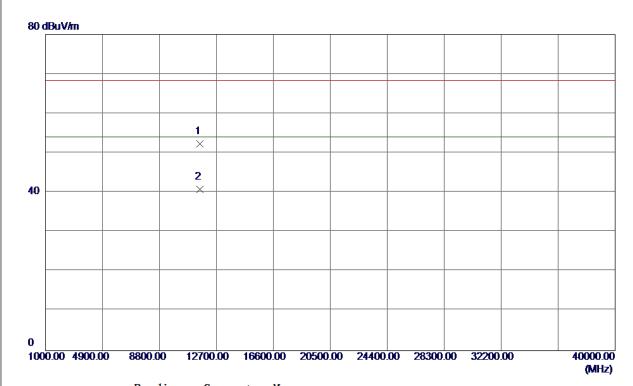


MHz dBuV/m dB dBuV/m dBuV/m dB Detector Com	
	omment
1 5780. 7000 66. 20 40. 48 106. 68 78. 30 28. 38 Peak No	o Limit
2 5792. 7000 55. 05 40. 54 95. 59 68. 30 27. 29 AVG No	o Limit

Report No.: BTL-FCCP-2-1502C010B Page 108 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5785MHz

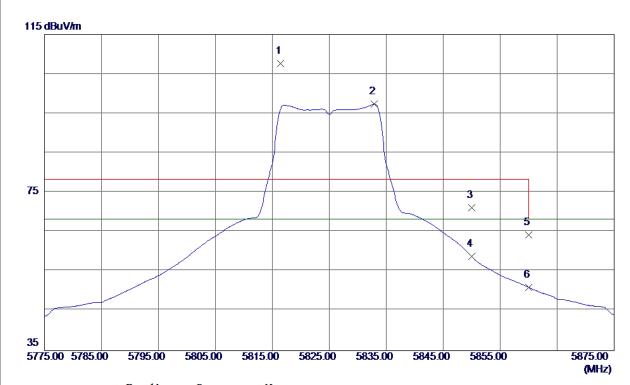


No.	Freq.	Keading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	11570.7600	36. 75	15. 55	52. 30	68.30	-16.00	Peak	
2	11572.6500	25. 25	15. 55	40.80	54.00	-13. 20	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 109 of 316



Orthogonal Axis:	X
Test Mode:	UNII-3/TX N20 Mode 5825MHz



No.	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	5816. 4000	66. 31	41.39	107.70	78.30	29.40	Peak	No Limit
2	5832. 9000	55. 93	41.41	97. 34	68.30	29.04	AVG	No Limit
3	5850.0000	29.65	41.44	71.09	78.30	-7.21	Peak	
4	5850.0000	17. 38	41.44	58. 82	68.30	-9.48	AVG	
5	5860.0000	22. 78	41.45	64. 23	78.30	-14.07	Peak	
6	5860. 0000	9. 57	41.45	51.02	68.30	-17. 28	AVG	

Report No.: BTL-FCCP-2-1502C010B Page 110 of 316