



Test Report No.: W7L-P22090011RF03



# VARIANT FCC TEST REPORT

## (Part 15, Subpart E)

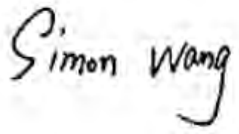
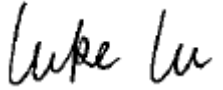
Applicant:	HMD Global Oy
Address:	Bertel Jungin aukio 9,02600 Espoo,Finland

Manufacturer or Supplier:	HMD Global Oy
Address:	Bertel Jungin aukio 9,02600 Espoo,Finland
Product:	Tablet PC
Brand Name:	NOKIA
Model Name:	TA-1462
FCC ID:	2AJOTTA-1462
Date of tests:	May. 15, 2022 ~ Oct. 11, 2022

The tests have been carried out according to the requirements of the following standard:

**FCC Part 15, Subpart E, Section 15.407**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
 Date: Oct. 11, 2022	 Date: Oct. 11, 2022

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P22050002RF03	Original release	May. 31, 2022
W7L-P22090011RF03	Base on the original product changing BT/WIFI/GPS antenna and decreasing antenna gain. This report verify power, CE and re-test RSE, other test data is copied from the original report W7L-P22050002RF03.	Oct. 11, 2022



# 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E		
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT
15.407(b)(6)	AC Power Conducted Emission	Compliance
15.407(b) (1/2/3/4/5)	Radiated Emission & Band Edge Measurement	Compliance
15.407(a/1/2/3)	Maximum conducted output Power	Compliance
15.407(a/1/2/3)	Peak Power Spectral Density	Compliance
15.403(i)	26 dB Bandwidth	Compliance
15.407(e)	6 dB Bandwidth	Compliance
15.203	Antenna Requirement	Compliance

**NOTE:**

1. Except the data of RSE and Band Edge Measurement, other data of 802.11a & 802.11n/ac (20/40) & 802.11ac 80 please refer to the appendix A/B.
2. Only the worse data were report.
- 3.The power table are not updated,Because the same as for original case power in Verified power.

## 1.1 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:

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	$\pm 2.70\text{dB}$
Radiated emissions (30MHz~1GMHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GMHz ~6GMHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GMHz ~18GMHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GMHz ~40GMHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Power Spectral Density	$\pm 0.85\text{ dB}$

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .



## 2 GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	Tablet PC
<b>BRAND NAME</b>	NOKIA
<b>MODEL NAME</b>	TA-1462
<b>NOMINAL VOLTAGE</b>	3.8Vdc (Li-ion, battery) 5Vdc (adapter)
<b>MODULATION</b>	OFDM
<b>TRANSFER RATE</b>	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 150.0Mbps 802.11ac: up to 433.3Mbps
<b>OPERATING FREQUENCY</b>	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
<b>NUMBER OF CHANNEL</b>	5180 ~ 5240MHz: 4 for 802.11a, 802.11n/ac (20MHz) 2 for 802.11n/ac (40MHz) 1 for 802. 802.11ac(80MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n/ac (20MHz) 2 for 802.11n/ac (40MHz) 1 for 802.11ac (80MHz) 5500 ~ 5720MHz: 12 for 802.11a, 802.11n/ac (20MHz)/ 6 for 802.11n/ac (40MHz) 3 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n/ac (20MHz) 3 for 802.11n/ac (40MHz) 2 for 802.11ac (80MHz)
<b>AVERAGE POWER</b>	37.33mW for 5180 ~ 5240MHz 43.85mW for 5260 ~ 5320MHz 61.94mW for 5500 ~ 5720MHz 58.34mW for 5745 ~ 5825MHz
<b>ANTENNA TYPE</b>	MONOPOLE Antenna
<b>ANTENNA GAIN</b>	-0.53 dBi for 5180 ~ 5240MHz -0.53 dBi for 5260 ~ 5320MHz -0.53 dBi for 5500 ~ 5720MHz -0.53 dBi for 5745 ~ 5825MHz
<b>HW VERSION</b>	V0.2
<b>SW VERSION</b>	00WW_0_190



<b>I/O PORTS</b>	Refer to user's manual
<b>CABLE SUPPLIED</b>	USB cable: non-shielded cable, with w/o ferrite core, 1 meter Earphone: non-shielded cable, with w/o ferrite core, 1.5 meter

**NOTE:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

<b>MODULATION MODE</b>	<b>TX FUNCTION</b>
<b>802.11a</b>	1TX /1RX
<b>802.11n/802.11ac (20MHz)</b>	1TX /1RX
<b>802.11n/802.11ac (40MHz)</b>	1TX /1RX
<b>802.11ac (80MHz)</b>	1TX /1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.





**List of Accessory:**

<b>ACCESSORIES</b>	<b>BRAND</b>	<b>MANUFACTURER</b>	<b>MODEL</b>	<b>SPECIFICATION</b>
Battery	NOKIA	HUNAN GAOYUAN BATTERY CO.,LTD	WWT50	Capacity: 3.8 Vdc, 5100mAh
AC Adapter	NOKIA	ShenZhenBaiJunD aElectronic CO., LTD.	AD-010U	I/P: 110-240Vac, 0.35A, O/P: 5.0Vdc, 2.0A
Earphone	NOKIA	HUIZHOU JUWEI ELECTRONICS CO.,LTD	JWEP1237-W27H	Signal Line, 1.5meter
USB Cable	Saibao	Saibao(Jiangxi) Communication Industrial Co.,Ltd	SWT-A116A	Signal Line, 1.0meter
LCD Panel 1	HUAXIAN	China display Optoelectronics Technology (Huizhou) Company Limited	8019-3	LCD, 8",800 * 1280, Add-on, $\alpha$ - Si, Non-airgap, A3
LCD Panel 2	COE	CHONG QIAN COE DISPLAY TECHNOLOGY CO., LTD.	T080ET011-HD1- QT	LCD, 8",800 * 1280,
Front Camera 1	C&T	SHENZHEN C&T TECHNOLOGY CO.,LTD	BC12715 V0	2M
Rear Camera 1	C&T	SHENZHEN C&T TECHNOLOGY CO.,LTD	BB18716 V0	8M



## 2.2 DESCRIPTION OF TEST MODES

### FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
42	5210 MHz		

### FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

2 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
58	5290 MHz		



**FOR 5500 ~ 5720MHz**

12 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	124	5620MHz
104	5520 MHz	128	5640MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

6 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	126	5630MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
106	5530 MHz	138	5690 MHz
122	5610 MHz		



**FOR 5745 ~ 5825MHz**

5 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
144	5720MHz	157	5785 MHz
149	5745 MHz	165	5825 MHz
153	5765 MHz		

3 channels are provided for 802.11n, 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
142	5710 MHz	159	5795 MHz
151	5755 MHz		

2 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
138	5690MHz	155	5775 MHz



### 2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	-	Powered by Adapter with wifi(5G) link
B	-	-	-	√	Powered by Battery with wifi(5G) link
C	-	-	-	-	Powered by USB with wifi(5G) link

Where **RE≥1G**: Radiated Emission above 1GHz      **RE<1G**: Radiated Emission below 1GHz  
**PLC**: Power Line Conducted Emission      **APCM**: Antenna Port Conducted Measurement

**NOTE:**  
The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.  
**NOTE:** "-" means no effect.

#### RADIATED EMISSION TEST (BELOW 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (40MHz)	5180-5240	38 to 46	38	OFDM	MCS0



**RADIATED EMISSION TEST (ABOVE 1GHz):**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11an/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11an/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11an/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11an/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11an/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11an/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11an/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11an/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0

**POWER LINE CONDUCTED EMISSION TEST:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11ac (80MHz)	5180-5240	42	42	OFDM	MCS0



**BANDEDGE MEASUREMENT:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11an/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11an/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11an/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11an/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11an/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11an/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac(80MHz))		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11an/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11an/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0



**ANTENNA PORT CONDUCTED MEASUREMENT:**

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 48	OFDM	6.0
A	802.11an/ac (20MHz)		36 to 48	36, 48	OFDM	MCS0
A	802.11an/ac (40MHz)		38 to 46	38, 46	OFDM	MCS0
A	802.11ac (80MHz)		42	42	OFDM	MCS0
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
A	802.11an/ac (20MHz)		52 to 64	52, 60, 64	OFDM	MCS0
A	802.11an/ac (40MHz)		54 to 62	54, 62	OFDM	MCS0
A	802.11ac (80MHz)		58	58	OFDM	MCS0
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
A	802.11an/ac (20MHz)		100 to 144	100, 116, 140, 144	OFDM	MCS0
A	802.11an/ac (40MHz)		102 to 142	102, 110, 134, 142	OFDM	MCS0
A	802.11ac (80MHz)		106 to 138	106, 138	OFDM	MCS0
A	802.11a	5745-5825	144 to 165	144, 149, 157,165	OFDM	6.0
A	802.11an/ac (20MHz)		144 to 165	144, 149, 157,165	OFDM	MCS0
A	802.11an/ac (40MHz)		142 to 159	142, 151, 159	OFDM	MCS0
A	802.11ac (80MHz)		138,155	138, 155	OFDM	MCS0





**TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
RE≥1G	23deg. C, 70%RH	DC 5V By Adapter	Star Le
PLC	25deg. C, 52%RH	DC 5V By Adapter	James Fu
APCM	25deg. C, 60%RH	DC 3.8V By Battery	James Fu



### 2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix A/B. Of this test report.

#### WORST-CASE DATA:

Measured Duty Cycle		
Mode		Duty Cycle [%]
		ANT0
5GHZ	11a	95.14
	11n20	94.26
	11n40	89.23
	11ac20	94.31
	11ac40	89.23
	11ac80	80.56

Note:

Duty cycle of test signal is < 98%, duty factor shall be considered.

### 2.4 DESCRIPTION OF SUPPORT UNITS

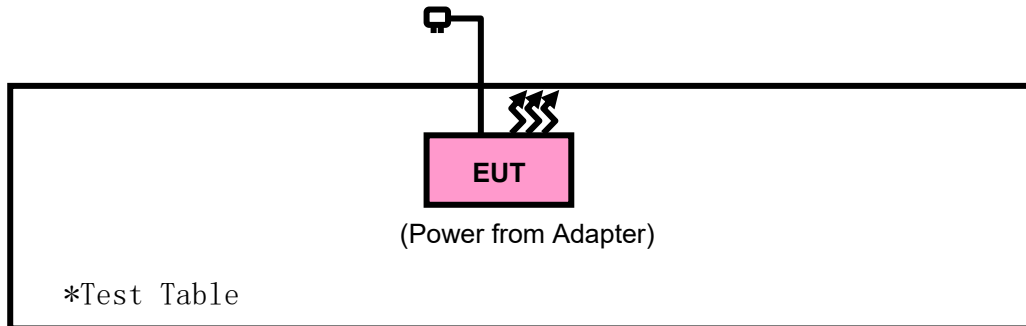
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Desktop	Lenovo	M73 SFF	PC04GRQV	N/A
2	Desktop	Lenovo	M73 SFF	PC06CS27	N/A
3	Laptop	Lenovo	Thnikpad L440	R90FTFKN	N/A
4	DC source	Kikusui/JP	PMX18-5A	0000001	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	AC Line: Unshielded, Detachable 1.5m
2	AC Line: Unshielded, Detachable 1.5m
3	AC Line: Unshielded, Detachable 1.5m
4	DC Line: Unshielded, Detachable 1.0m



## 2.4.1 CONFIGURATION OF SYSTEM UNDER TEST



## 2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart E (15.407)**

**KDB 789033 D02 General U-NII Test Procedures New Rules v02r01**

**ANSI C63.10-2013**

All test items have been performed and recorded as per the above standards.

**NOTE:** The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.



### 3 TEST TYPES AND RESULTS

#### 3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

##### 3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

##### 3.1.2 LIMITS OF UNWANTED EMISSION

RESTRICTED BANDS	APPLICABLE TO	LIMIT	
	789033 D02 General UNII Test Procedures New Rules v02r01	FIELD STRENGTH AT 3m (dBµV/m)	
	PK : 74	AV : 54	
OUT OF THE RESTRICTED BANDS	APPLICABLE TO	EIRP LIMIT (dBm/MHz)	EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m)
	15.407(b)(1)	PK : -27	PK : 68.2
	15.407(b)(2)		
	15.407(b)(3)		
15.407(b)(4)	See note 2 (FCC 16-24)		



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

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

2. All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

### 3.1.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 06,22	Mar. 05,23
Horn Antenna	ETS-LINDGREN	3117	00168692	Mar. 06,22	Mar. 05,23
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 24, 22	Aug. 24, 23
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120-3	3.2.06	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 02,22	Jun. 03,23
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Feb. 18,22	Feb. 17,23
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 21,22	Feb.20,23
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 25,21	Aug. 24,22
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 24,22	Aug. 25,23
Power Meter	Anritsu	ML2495A	1506002	Feb. 22,22	Feb. 21,23
Power Sensor	Anritsu	MA2411B	1339352	May. 06,22	May. 05,23
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.05,21	Sep. 04,22
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.04,22	Sep. 05,23

- NOTE:**
1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  2. The test was performed in 3m Chamber.
  3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.



### 3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ( $10 \log(1/\text{duty cycle})$ ).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

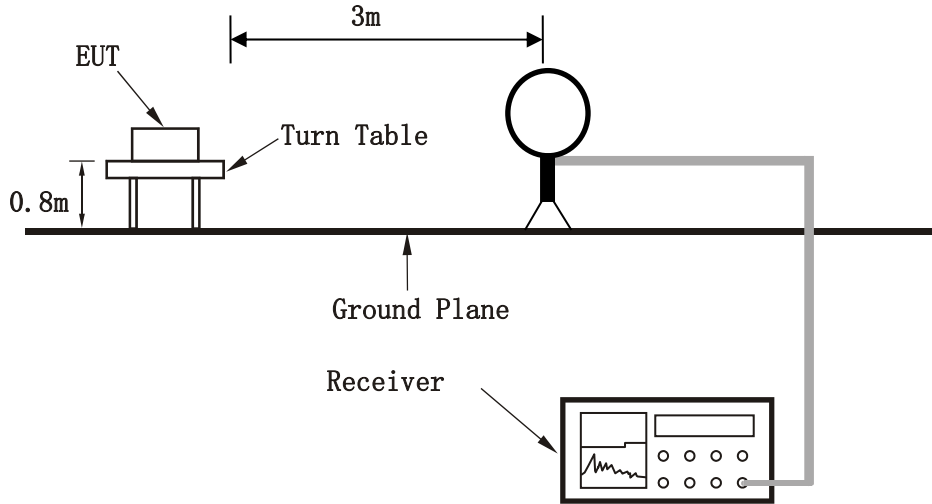
### 3.1.5 DEVIATION FROM TEST STANDARD

No deviation.

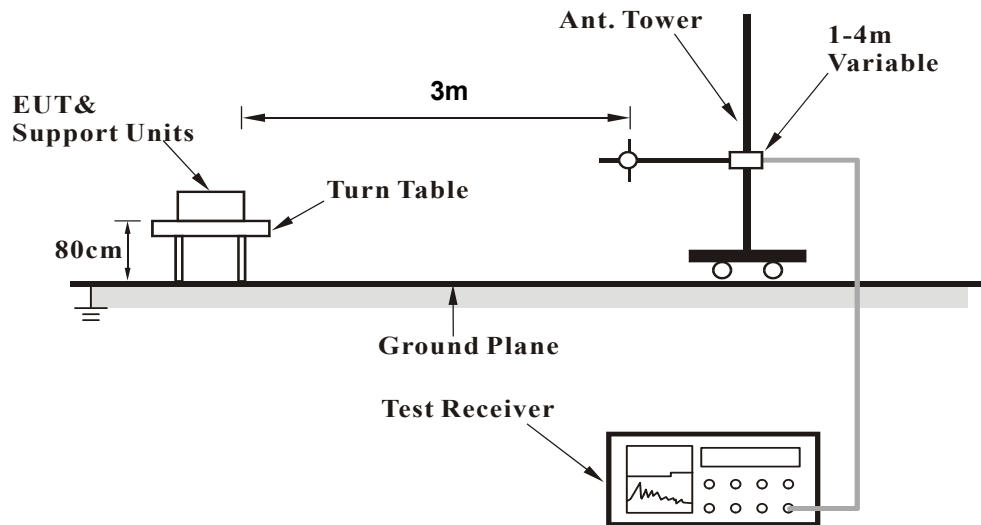


### 3.1.6 TEST SETUP

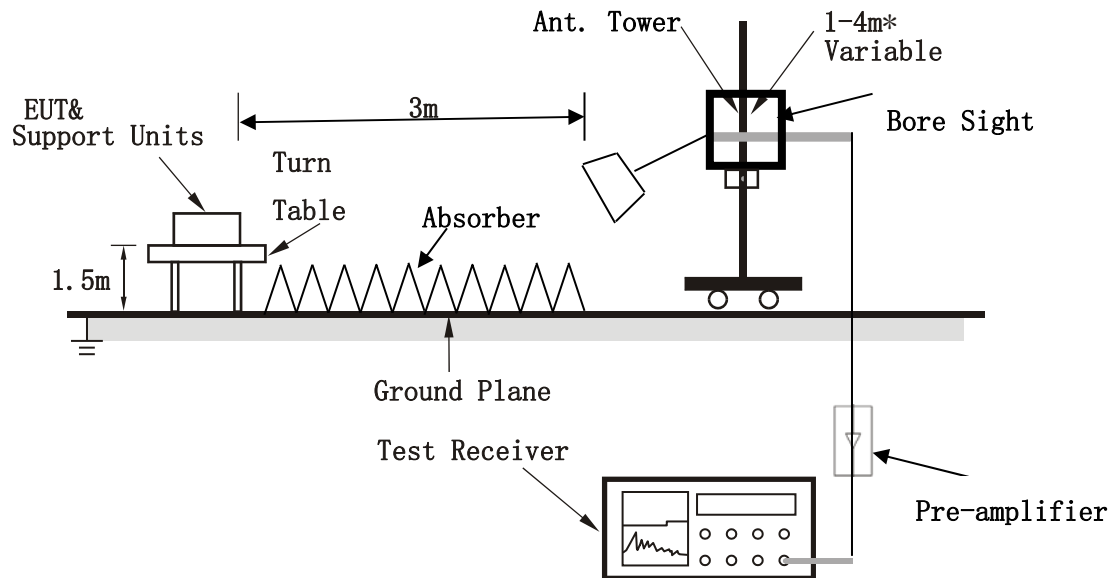
#### <Frequency Range 9KHz~30MHz >



#### < Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



**Note:** Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 3.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.





**3.1.8 TEST RESULTS**

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

**30 MHz – 1GHz data:**

**Band 1**

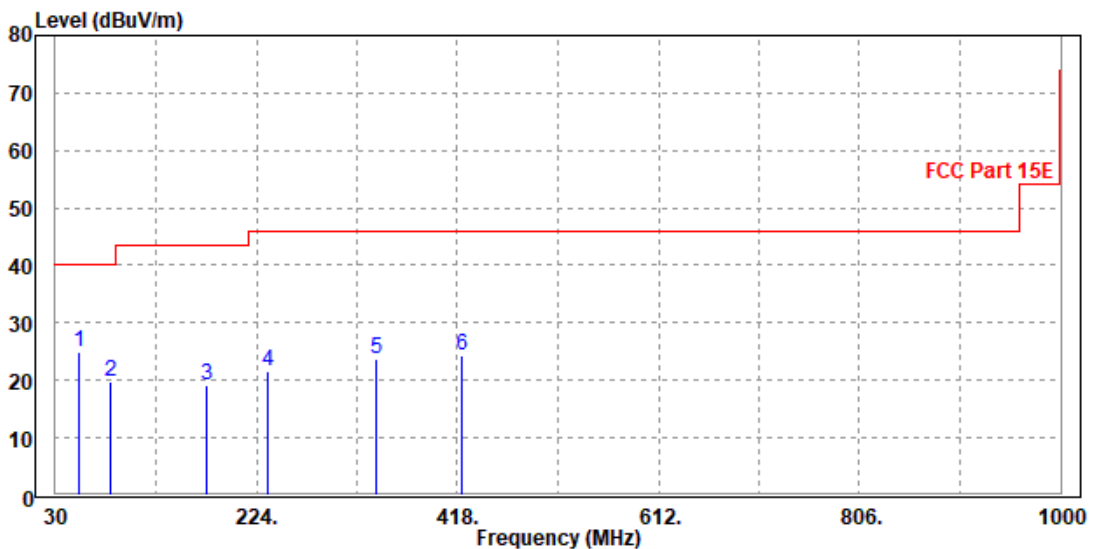
**802.11n (40MHz)**

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
52.31	24.8	51.41	40	-15.2	9.97	0.41	36.99	200	360	QP
82.38	19.72	48.2	40	-20.28	7.99	0.5	36.97	200	360	QP
175.5	19.26	43.69	43.5	-24.24	11.29	0.7	36.42	200	360	QP
235.64	21.55	44.15	46	-24.45	12.87	0.81	36.28	200	360	QP
340.4	23.67	44.12	46	-22.33	14.89	0.98	36.32	200	360	QP
422.85	24.35	43.08	46	-21.65	16.63	1.11	36.47	200	360	QP

**REMARKS:**

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.



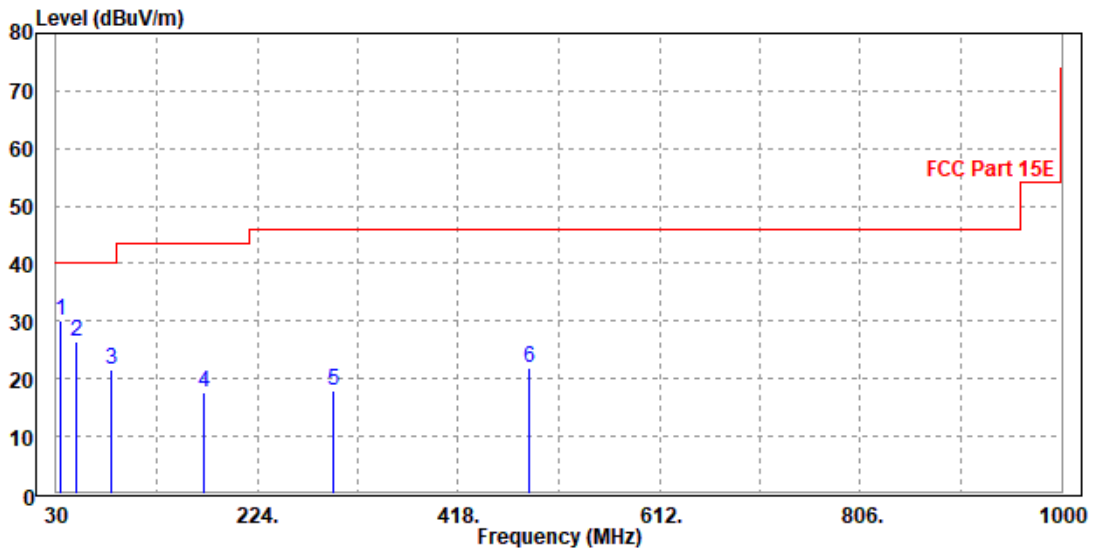


<b>CHANNEL</b>	Channel 38	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
33.88	29.97	48.66	40	-10.03	18.36	0.33	37.38	100	360	QP
49.4	26.51	53.2	40	-13.49	9.92	0.4	37.01	100	360	QP
82.38	21.66	50.29	40	-18.34	7.84	0.5	36.97	100	360	QP
172.59	17.55	42.21	43.5	-25.95	11.09	0.69	36.44	100	360	QP
297.72	18.02	39.43	46	-27.98	13.94	0.91	36.26	100	360	QP
486.87	21.82	39.78	46	-24.18	17.43	1.2	36.59	100	360	QP

**REMARKS:**

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.





ABOVE 1GHz WORST-CASE DATA:

Note: For higher frequency, the emission is too low to be detected.

Band 1

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.36	57.67	74	-18.64	34.52	9.52	46.35	100	170	Peak
5150	49.43	51.74	54	-4.57	34.52	9.52	46.35	100	170	Average
5180	103.31	105.54	/	/	34.54	9.58	46.35	100	170	Peak
5180	95.53	97.76	/	/	34.54	9.58	46.35	100	170	Average
5350	53.3	54.98	74	-20.7	34.68	9.94	46.3	100	170	Peak
5350	47.28	48.96	54	-6.72	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.06	56.29	74	-19.94	34.6	9.52	46.35	100	245	Peak
5150	49.75	51.98	54	-4.25	34.6	9.52	46.35	100	245	Average
5180	100.26	102.43	/	/	34.6	9.58	46.35	100	245	Peak
5180	92.54	94.71	/	/	34.6	9.58	46.35	100	245	Average
5350	52.9	54.66	74	-21.1	34.6	9.94	46.3	100	245	Peak
5350	47.21	48.97	54	-6.79	34.6	9.94	46.3	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5180MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.16	56.47	74	-19.84	34.52	9.52	46.35	100	170	Peak
5150	49.23	51.54	54	-4.77	34.52	9.52	46.35	100	170	Average
5200	103.39	105.55	/	/	34.56	9.62	46.34	100	170	Peak
5200	95.49	97.65	/	/	34.56	9.62	46.34	100	170	Average
5350	52.54	54.22	74	-21.46	34.68	9.94	46.3	100	170	Peak
5350	46.75	48.43	54	-7.25	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.57	55.8	74	-20.43	34.6	9.52	46.35	100	245	Peak
5150	48.08	50.31	54	-5.92	34.6	9.52	46.35	100	245	Average
5200	100.17	102.29	/	/	34.6	9.62	46.34	100	245	Peak
5200	92.98	95.1	/	/	34.6	9.62	46.34	100	245	Average
5350	53.87	55.63	74	-20.13	34.6	9.94	46.3	100	245	Peak
5350	46.99	48.75	54	-7.01	34.6	9.94	46.3	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5200MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.22	57.53	74	-18.78	34.52	9.52	46.35	100	170	Peak
5150	47.92	50.23	54	-6.08	34.52	9.52	46.35	100	170	Average
5240	103.47	105.5	/	/	34.59	9.71	46.33	100	170	Peak
5240	95.9	97.93	/	/	34.59	9.71	46.33	100	170	Average
5350	52.92	54.6	74	-21.08	34.68	9.94	46.3	100	170	Peak
5350	47.26	48.94	54	-6.74	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.61	56.84	74	-19.39	34.6	9.52	46.35	100	255	Peak
5150	48.09	50.32	54	-5.91	34.6	9.52	46.35	100	255	Average
5240	99.42	101.44	/	/	34.6	9.71	46.33	100	255	Peak
5240	92.85	94.87	/	/	34.6	9.71	46.33	100	255	Average
5350	54.4	56.16	74	-19.6	34.6	9.94	46.3	100	255	Peak
5350	48.27	50.03	54	-5.73	34.6	9.94	46.3	100	255	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5240MHz: Fundamental frequency.



802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.72	58.03	74	-18.28	34.52	9.52	46.35	100	170	Peak
5150	49.06	51.37	54	-4.94	34.52	9.52	46.35	100	170	Average
5180	103.51	105.74	/	/	34.54	9.58	46.35	100	170	Peak
5180	94.78	97.01	/	/	34.54	9.58	46.35	100	170	Average
5350	54.75	56.43	74	-19.25	34.68	9.94	46.3	100	170	Peak
5350	47.49	49.17	54	-6.51	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.13	56.36	74	-19.87	34.6	9.52	46.35	100	255	Peak
5150	49.07	51.3	54	-4.93	34.6	9.52	46.35	100	255	Average
5180	100.57	102.74	/	/	34.6	9.58	46.35	100	255	Peak
5180	92.07	94.24	/	/	34.6	9.58	46.35	100	255	Average
5350	52.93	54.69	74	-21.07	34.6	9.94	46.3	100	255	Peak
5350	47.77	49.53	54	-6.23	34.6	9.94	46.3	100	255	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5180MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.5	56.81	74	-19.5	34.52	9.52	46.35	100	170	Peak
5150	47.94	50.25	54	-6.06	34.52	9.52	46.35	100	170	Average
5200	103.24	105.4	/	/	34.56	9.62	46.34	100	170	Peak
5200	94.91	97.07	/	/	34.56	9.62	46.34	100	170	Average
5350	54.25	55.93	74	-19.75	34.68	9.94	46.3	100	170	Peak
5350	46.86	48.54	54	-7.14	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.13	55.36	74	-20.87	34.6	9.52	46.35	100	255	Peak
5150	48.11	50.34	54	-5.89	34.6	9.52	46.35	100	255	Average
5200	99.86	101.98	/	/	34.6	9.62	46.34	100	255	Peak
5200	91.74	93.86	/	/	34.6	9.62	46.34	100	255	Average
5350	53.34	55.1	74	-20.66	34.6	9.94	46.3	100	255	Peak
5350	47.22	48.98	54	-6.78	34.6	9.94	46.3	100	255	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5200MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.42	55.73	74	-20.58	34.52	9.52	46.35	100	170	Peak
5150	48.32	50.63	54	-5.68	34.52	9.52	46.35	100	170	Average
5240	103.17	105.2	/	/	34.59	9.71	46.33	100	170	Peak
5240	94.94	96.97	/	/	34.59	9.71	46.33	100	170	Average
5350	52.82	54.5	74	-21.18	34.68	9.94	46.3	100	170	Peak
5350	46.99	48.67	54	-7.01	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.19	58.42	74	-17.81	34.6	9.52	46.35	100	247	Peak
5150	48.55	50.78	54	-5.45	34.6	9.52	46.35	100	247	Average
5240	100.54	102.56	/	/	34.6	9.71	46.33	100	247	Peak
5240	92.42	94.44	/	/	34.6	9.71	46.33	100	247	Average
5350	54.47	56.23	74	-19.53	34.6	9.94	46.3	100	247	Peak
5350	47.44	49.2	54	-6.56	34.6	9.94	46.3	100	247	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5240MHz: Fundamental frequency.





802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.42	59.73	74	-16.58	34.52	9.52	46.35	100	170	Peak
5150	50.89	53.2	54	-3.11	34.52	9.52	46.35	100	170	Average
5190	98.3	100.49	/	/	34.55	9.6	46.34	100	170	Peak
5190	90.35	92.54	/	/	34.55	9.6	46.34	100	170	Average
5350	52.98	54.66	74	-21.02	34.68	9.94	46.3	100	170	Peak
5350	47.16	48.84	54	-6.84	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.53	58.76	74	-17.47	34.6	9.52	46.35	100	247	Peak
5150	50.44	52.67	54	-3.56	34.6	9.52	46.35	100	247	Average
5190	95.22	97.36	/	/	34.6	9.6	46.34	100	247	Peak
5190	87.33	89.47	/	/	34.6	9.6	46.34	100	247	Average
5350	52.8	54.56	74	-21.2	34.6	9.94	46.3	100	247	Peak
5350	46.79	48.55	54	-7.21	34.6	9.94	46.3	100	247	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5190MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 46	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.8	56.11	74	-20.2	34.52	9.52	46.35	100	170	Peak
5150	48.88	51.19	54	-5.12	34.52	9.52	46.35	100	170	Average
5230	98.29	100.35	/	/	34.58	9.69	46.33	100	170	Peak
5230	91.67	93.73	/	/	34.58	9.69	46.33	100	170	Average
5350	52.44	54.12	74	-21.56	34.68	9.94	46.3	100	170	Peak
5350	47.41	49.09	54	-6.59	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55	57.23	74	-19	34.6	9.52	46.35	100	247	Peak
5150	48.16	50.39	54	-5.84	34.6	9.52	46.35	100	247	Average
5230	96.16	98.2	/	/	34.6	9.69	46.33	100	247	Peak
5230	89.46	91.5	/	/	34.6	9.69	46.33	100	247	Average
5350	52.05	53.81	74	-21.95	34.6	9.94	46.3	100	247	Peak
5350	46.89	48.65	54	-7.11	34.6	9.94	46.3	100	247	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5230MHz: Fundamental frequency.



802.11ac (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.37	59.68	74	-16.63	34.52	9.52	46.35	100	170	Peak
5150	49.31	51.62	54	-4.69	34.52	9.52	46.35	100	170	Average
5180	103.15	105.38	/	/	34.54	9.58	46.35	100	170	Peak
5180	95.04	97.27	/	/	34.54	9.58	46.35	100	170	Average
5350	52.85	54.53	74	-21.15	34.68	9.94	46.3	100	170	Peak
5350	46.92	48.6	54	-7.08	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.39	56.62	74	-19.61	34.6	9.52	46.35	100	247	Peak
5150	48.72	50.95	54	-5.28	34.6	9.52	46.35	100	247	Average
5180	101.04	103.21	/	/	34.6	9.58	46.35	100	247	Peak
5180	91.93	94.1	/	/	34.6	9.58	46.35	100	247	Average
5350	52.8	54.56	74	-21.2	34.6	9.94	46.3	100	247	Peak
5350	46.91	48.67	54	-7.09	34.6	9.94	46.3	100	247	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5180MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.4	58.71	74	-17.6	34.52	9.52	46.35	100	170	Peak
5150	48.43	50.74	54	-5.57	34.52	9.52	46.35	100	170	Average
5200	102.86	105.02	/	/	34.56	9.62	46.34	100	170	Peak
5200	94.75	96.91	/	/	34.56	9.62	46.34	100	170	Average
5350	52.48	54.16	74	-21.52	34.68	9.94	46.3	100	170	Peak
5350	47.05	48.73	54	-6.95	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.4	56.63	74	-19.6	34.6	9.52	46.35	100	247	Peak
5150	48.4	50.63	54	-5.6	34.6	9.52	46.35	100	247	Average
5200	99.73	101.85	/	/	34.6	9.62	46.34	100	247	Peak
5200	92.05	94.17	/	/	34.6	9.62	46.34	100	247	Average
5350	53.91	55.67	74	-20.09	34.6	9.94	46.3	100	247	Peak
5350	46.4	48.16	54	-7.6	34.6	9.94	46.3	100	247	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5200MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.75	56.06	74	-20.25	34.52	9.52	46.35	100	170	Peak
5150	48.36	50.67	54	-5.64	34.52	9.52	46.35	100	170	Average
5240	102.87	104.9	/	/	34.59	9.71	46.33	100	170	Peak
5240	94.93	96.96	/	/	34.59	9.71	46.33	100	170	Average
5350	54.11	55.79	74	-19.89	34.68	9.94	46.3	100	170	Peak
5350	46.48	48.16	54	-7.52	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.84	57.07	74	-19.16	34.6	9.52	46.35	100	247	Peak
5150	48.1	50.33	54	-5.9	34.6	9.52	46.35	100	247	Average
5240	100.44	102.46	/	/	34.6	9.71	46.33	100	247	Peak
5240	92.21	94.23	/	/	34.6	9.71	46.33	100	247	Average
5350	53.08	54.84	74	-20.92	34.6	9.94	46.3	100	247	Peak
5350	47.2	48.96	54	-6.8	34.6	9.94	46.3	100	247	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5240MHz: Fundamental frequency.



802.11ac (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.84	60.15	74	-16.16	34.52	9.52	46.35	100	170	Peak
5150	50.64	52.95	54	-3.36	34.52	9.52	46.35	100	170	Average
5190	96.72	98.91	/	/	34.55	9.6	46.34	100	170	Peak
5190	89.89	92.08	/	/	34.55	9.6	46.34	100	170	Average
5350	54.65	56.33	74	-19.35	34.68	9.94	46.3	100	170	Peak
5350	46.82	48.5	54	-7.18	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.89	56.12	74	-20.11	34.6	9.52	46.35	100	225	Peak
5150	49.73	51.96	54	-4.27	34.6	9.52	46.35	100	225	Average
5190	92.75	94.89	/	/	34.6	9.6	46.34	100	225	Peak
5190	85.73	87.87	/	/	34.6	9.6	46.34	100	225	Average
5350	51.89	53.65	74	-22.11	34.6	9.94	46.3	100	225	Peak
5350	47.65	49.41	54	-6.35	34.6	9.94	46.3	100	225	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5190MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 46	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.48	55.79	74	-20.52	34.52	9.52	46.35	100	170	Peak
5150	48.09	50.4	54	-5.91	34.52	9.52	46.35	100	170	Average
5230	97.64	99.7	/	/	34.58	9.69	46.33	100	170	Peak
5230	89.67	91.73	/	/	34.58	9.69	46.33	100	170	Average
5350	52.61	54.29	74	-21.39	34.68	9.94	46.3	100	170	Peak
5350	47.01	48.69	54	-6.99	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.19	55.42	74	-20.81	34.6	9.52	46.35	100	225	Peak
5150	47.87	50.1	54	-6.13	34.6	9.52	46.35	100	225	Average
5230	94.57	96.61	/	/	34.6	9.69	46.33	100	225	Peak
5230	86.06	88.1	/	/	34.6	9.69	46.33	100	225	Average
5350	52.4	54.16	74	-21.6	34.6	9.94	46.3	100	225	Peak
5350	46.93	48.69	54	-7.07	34.6	9.94	46.3	100	225	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5230MHz: Fundamental frequency.



802.11ac (80MHz)

CHANNEL	TX Channel 42	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	57.24	59.55	74	-16.76	34.52	9.52	46.35	100	170	Peak
5150	50.36	52.67	54	-3.64	34.52	9.52	46.35	100	170	Average
5210	92.63	94.76	/	/	34.57	9.64	46.34	100	170	Peak
5210	86.44	88.57	/	/	34.57	9.64	46.34	100	170	Average
5350	53.25	54.93	74	-20.75	34.68	9.94	46.3	100	170	Peak
5350	47.15	48.83	54	-6.85	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.29	57.52	74	-18.71	34.6	9.52	46.35	100	195	Peak
5150	49.77	52	54	-4.23	34.6	9.52	46.35	100	195	Average
5210	90.16	92.26	/	/	34.6	9.64	46.34	100	195	Peak
5210	82.97	85.07	/	/	34.6	9.64	46.34	100	195	Average
5350	52.1	53.86	74	-21.9	34.6	9.94	46.3	100	195	Peak
5350	47.7	49.46	54	-6.3	34.6	9.94	46.3	100	195	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5210MHz: Fundamental frequency.



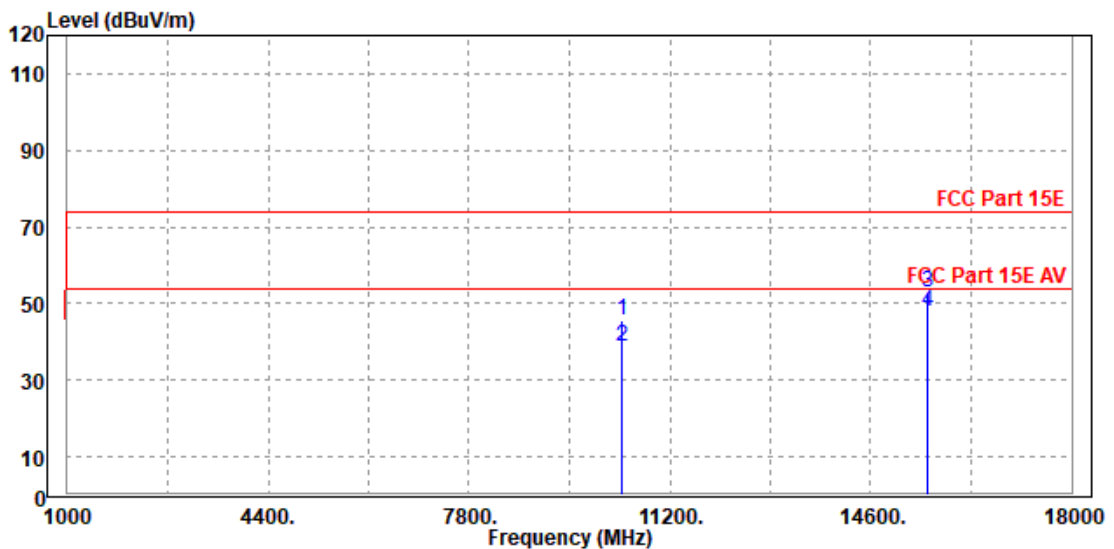


**Worst case harmonic:**

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 25GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

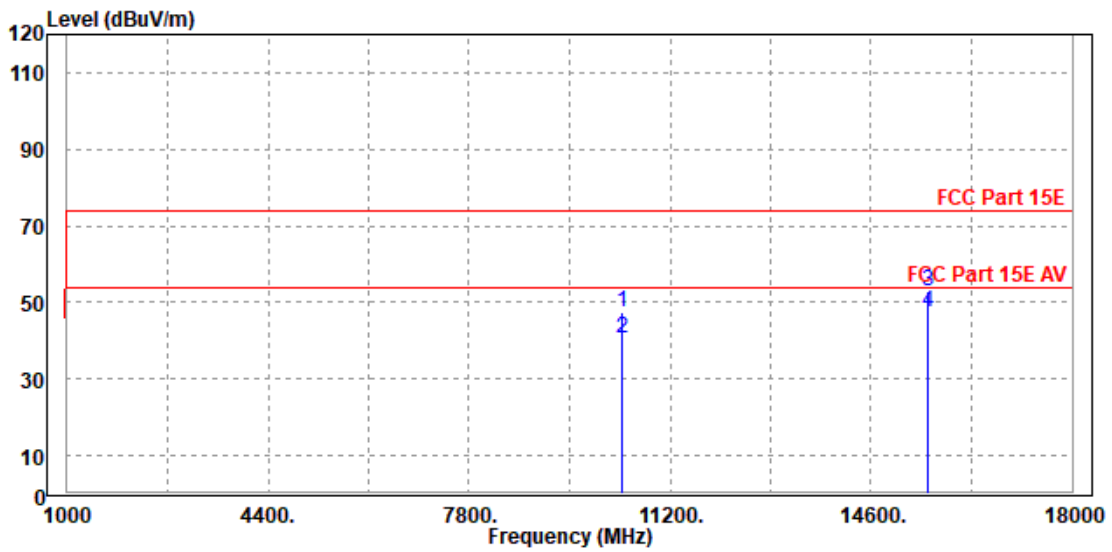
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10380.000	45.49	41.51	74.00	-28.51	3.98	Peak	Horizontal
2	10380.000	38.57	34.59	54.00	-15.43	3.98	Average	Horizontal
3	PK15569.000	52.89	38.62	74.00	-21.11	14.27	Peak	Horizontal
4	PP15569.000	48.06	33.79	54.00	-5.94	14.27	Average	Horizontal





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10384.000	47.29	42.17	74.00	-26.71	5.12	Peak	Vertical
2	10384.000	40.55	35.43	54.00	-13.45	5.12	Average	Vertical
3	PK15570.000	53.02	39.74	74.00	-20.98	13.28	Peak	Vertical
4	PP15570.000	47.41	34.13	54.00	-6.59	13.28	Average	Vertical



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5190MHz: Fundamental frequency.



Band 2  
802.11a

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.71	56.02	74	-20.29	34.52	9.52	46.35	100	170	Peak
5150	47.79	50.1	54	-6.21	34.52	9.52	46.35	100	170	Average
5260	101.9	103.86	/	/	34.61	9.75	46.32	100	170	Peak
5260	95.8	97.76	/	/	34.61	9.75	46.32	100	170	Average
5350	52.6	54.28	74	-21.4	34.68	9.94	46.3	100	170	Peak
5350	46.54	48.22	54	-7.46	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.68	54.91	74	-21.32	34.6	9.52	46.35	100	195	Peak
5150	47.99	50.22	54	-6.01	34.6	9.52	46.35	100	195	Average
5260	100.65	102.62	/	/	34.6	9.75	46.32	100	195	Peak
5260	92.7	94.67	/	/	34.6	9.75	46.32	100	195	Average
5350	54.23	55.99	74	-19.77	34.6	9.94	46.3	100	195	Peak
5350	46.78	48.54	54	-7.22	34.6	9.94	46.3	100	195	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.31	55.62	74	-20.69	34.52	9.52	46.35	100	170	Peak
5150	48.98	51.29	54	-5.02	34.52	9.52	46.35	100	170	Average
5300	100.77	102.61	/	/	34.64	9.83	46.31	100	170	Peak
5300	93.93	95.77	/	/	34.64	9.83	46.31	100	170	Average
5350	53.61	55.29	74	-20.39	34.68	9.94	46.3	100	170	Peak
5350	46.82	48.5	54	-7.18	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.89	56.12	74	-20.11	34.6	9.52	46.35	100	195	Peak
5150	48.65	50.88	54	-5.35	34.6	9.52	46.35	100	195	Average
5300	100.35	102.23	/	/	34.6	9.83	46.31	100	195	Peak
5300	93.08	94.96	/	/	34.6	9.83	46.31	100	195	Average
5350	53.98	55.74	74	-20.02	34.6	9.94	46.3	100	195	Peak
5350	47.25	49.01	54	-6.75	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5300MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.79	55.1	74	-21.21	34.52	9.52	46.35	100	170	Peak
5150	47.39	49.7	54	-6.61	34.52	9.52	46.35	100	170	Average
5320	99.98	101.74	/	/	34.66	9.88	46.3	100	170	Peak
5320	93.52	95.28	/	/	34.66	9.88	46.3	100	170	Average
5350	52.93	54.61	74	-21.07	34.68	9.94	46.3	100	170	Peak
5350	47.37	49.05	54	-6.63	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.33	55.56	74	-20.67	34.6	9.52	46.35	100	195	Peak
5150	48.56	50.79	54	-5.44	34.6	9.52	46.35	100	195	Average
5320	99.3	101.12	/	/	34.6	9.88	46.3	100	195	Peak
5320	92.81	94.63	/	/	34.6	9.88	46.3	100	195	Average
5350	53.52	55.28	74	-20.48	34.6	9.94	46.3	100	195	Peak
5350	46.94	48.7	54	-7.06	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5320MHz: Fundamental frequency.



802.11n (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.89	58.2	74	-18.11	34.52	9.52	46.35	100	170	Peak
5150	47.12	49.43	54	-6.88	34.52	9.52	46.35	100	170	Average
5260	101.76	103.72	/	/	34.61	9.75	46.32	100	170	Peak
5260	94.2	96.16	/	/	34.61	9.75	46.32	100	170	Average
5350	55.21	56.89	74	-18.79	34.68	9.94	46.3	100	170	Peak
5350	46.59	48.27	54	-7.41	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.99	56.22	74	-20.01	34.6	9.52	46.35	100	195	Peak
5150	48.34	50.57	54	-5.66	34.6	9.52	46.35	100	195	Average
5260	101.64	103.61	/	/	34.6	9.75	46.32	100	195	Peak
5260	92.7	94.67	/	/	34.6	9.75	46.32	100	195	Average
5350	52.98	54.74	74	-21.02	34.6	9.94	46.3	100	195	Peak
5350	47.64	49.4	54	-6.36	34.6	9.94	46.3	100	195	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.77	56.08	74	-20.23	34.52	9.52	46.35	100	170	Peak
5150	48.72	51.03	54	-5.28	34.52	9.52	46.35	100	170	Average
5300	100.97	102.81	/	/	34.64	9.83	46.31	100	170	Peak
5300	93.03	94.87	/	/	34.64	9.83	46.31	100	170	Average
5350	52.56	54.24	74	-21.44	34.68	9.94	46.3	100	170	Peak
5350	47.35	49.03	54	-6.65	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.33	55.56	74	-20.67	34.6	9.52	46.35	100	195	Peak
5150	48.45	50.68	54	-5.55	34.6	9.52	46.35	100	195	Average
5300	99.99	101.87	/	/	34.6	9.83	46.31	100	195	Peak
5300	91.86	93.74	/	/	34.6	9.83	46.31	100	195	Average
5350	53.24	55	74	-20.76	34.6	9.94	46.3	100	195	Peak
5350	47.12	48.88	54	-6.88	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5300MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.15	57.46	74	-18.85	34.52	9.52	46.35	100	170	Peak
5150	47.82	50.13	54	-6.18	34.52	9.52	46.35	100	170	Average
5320	101.26	103.02	/	/	34.66	9.88	46.3	100	170	Peak
5320	92.73	94.49	/	/	34.66	9.88	46.3	100	170	Average
5350	56.28	57.96	74	-17.72	34.68	9.94	46.3	100	170	Peak
5350	48.04	49.72	54	-5.96	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.16	56.39	74	-19.84	34.6	9.52	46.35	100	195	Peak
5150	48.34	50.57	54	-5.66	34.6	9.52	46.35	100	195	Average
5320	99.79	101.61	/	/	34.6	9.88	46.3	100	195	Peak
5320	91.92	93.74	/	/	34.6	9.88	46.3	100	195	Average
5350	54.14	55.9	74	-19.86	34.6	9.94	46.3	100	195	Peak
5350	48.61	50.37	54	-5.39	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5320MHz: Fundamental frequency.





802.11n (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.85	56.16	74	-20.15	34.52	9.52	46.35	100	170	Peak
5150	48.05	50.36	54	-5.95	34.52	9.52	46.35	100	170	Average
5270	99.2	101.13	/	/	34.62	9.77	46.32	100	170	Peak
5270	91.4	93.33	/	/	34.62	9.77	46.32	100	170	Average
5350	53.66	55.34	74	-20.34	34.68	9.94	46.3	100	170	Peak
5350	47.83	49.51	54	-6.17	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.4	56.63	74	-19.6	34.6	9.52	46.35	100	195	Peak
5150	48.23	50.46	54	-5.77	34.6	9.52	46.35	100	195	Average
5270	96.23	98.18	/	/	34.6	9.77	46.32	100	195	Peak
5270	89.32	91.27	/	/	34.6	9.77	46.32	100	195	Average
5350	52.68	54.44	74	-21.32	34.6	9.94	46.3	100	195	Peak
5350	46.76	48.52	54	-7.24	34.6	9.94	46.3	100	195	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5270MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.9	55.21	74	-21.1	34.52	9.52	46.35	100	170	Peak
5150	48.29	50.6	54	-5.71	34.52	9.52	46.35	100	170	Average
5310	98.23	100.04	/	/	34.65	9.85	46.31	100	170	Peak
5310	90.14	91.95	/	/	34.65	9.85	46.31	100	170	Average
5350	54.03	55.71	74	-19.97	34.68	9.94	46.3	100	170	Peak
5350	48.93	50.61	54	-5.07	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.3	55.53	74	-20.7	34.6	9.52	46.35	100	195	Peak
5150	48.55	50.78	54	-5.45	34.6	9.52	46.35	100	195	Average
5310	95.37	97.23	/	/	34.6	9.85	46.31	100	195	Peak
5310	88.59	90.45	/	/	34.6	9.85	46.31	100	195	Average
5350	55.57	57.33	74	-18.43	34.6	9.94	46.3	100	195	Peak
5350	49.05	50.81	54	-4.95	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5310MHz: Fundamental frequency.



802.11ac (20MHz)

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.22	55.53	74	-20.78	34.52	9.52	46.35	100	170	Peak
5150	47.94	50.25	54	-6.06	34.52	9.52	46.35	100	170	Average
5260	101.88	103.84	/	/	34.61	9.75	46.32	100	170	Peak
5260	94.02	95.98	/	/	34.61	9.75	46.32	100	170	Average
5350	53.68	55.36	74	-20.32	34.68	9.94	46.3	100	170	Peak
5350	46.82	48.5	54	-7.18	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.71	55.94	74	-20.29	34.6	9.52	46.35	100	195	Peak
5150	48.09	50.32	54	-5.91	34.6	9.52	46.35	100	195	Average
5260	100.25	102.22	/	/	34.6	9.75	46.32	100	195	Peak
5260	92.47	94.44	/	/	34.6	9.75	46.32	100	195	Average
5350	53.35	55.11	74	-20.65	34.6	9.94	46.3	100	195	Peak
5350	47.08	48.84	54	-6.92	34.6	9.94	46.3	100	195	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 60	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.35	55.66	74	-20.65	34.52	9.52	46.35	100	170	Peak
5150	49.07	51.38	54	-4.93	34.52	9.52	46.35	100	170	Average
5300	99.8	101.64	/	/	34.64	9.83	46.31	100	170	Peak
5300	93.77	95.61	/	/	34.64	9.83	46.31	100	170	Average
5350	54.43	56.11	74	-19.57	34.68	9.94	46.3	100	170	Peak
5350	47.19	48.87	54	-6.81	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.62	55.85	74	-20.38	34.6	9.52	46.35	100	195	Peak
5150	47.73	49.96	54	-6.27	34.6	9.52	46.35	100	195	Average
5300	99.53	101.41	/	/	34.6	9.83	46.31	100	195	Peak
5300	91.33	93.21	/	/	34.6	9.83	46.31	100	195	Average
5350	53	54.76	74	-21	34.6	9.94	46.3	100	195	Peak
5350	46.61	48.37	54	-7.39	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5300MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	56.05	58.36	74	-17.95	34.52	9.52	46.35	100	170	Peak
5150	47.86	50.17	54	-6.14	34.52	9.52	46.35	100	170	Average
5320	100.32	102.08	/	/	34.66	9.88	46.3	100	170	Peak
5320	92.29	94.05	/	/	34.66	9.88	46.3	100	170	Average
5350	59.59	61.27	74	-14.41	34.68	9.94	46.3	100	170	Peak
5350	47.77	49.45	54	-6.23	34.68	9.94	46.3	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.59	56.82	74	-19.41	34.6	9.52	46.35	100	195	Peak
5150	48.35	50.58	54	-5.65	34.6	9.52	46.35	100	195	Average
5320	98.28	100.1	/	/	34.6	9.88	46.3	100	195	Peak
5320	91.21	93.03	/	/	34.6	9.88	46.3	100	195	Average
5350	57	58.76	74	-17	34.6	9.94	46.3	100	195	Peak
5350	48.04	49.8	54	-5.96	34.6	9.94	46.3	100	195	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5320MHz: Fundamental frequency.



802.11ac (40MHz)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.43	56.74	74	-19.57	34.52	9.52	46.35	100	170	Peak
5150	48.42	50.73	54	-5.58	34.52	9.52	46.35	100	170	Average
5270	98.23	100.16	/	/	34.62	9.77	46.32	100	170	Peak
5270	90.84	92.77	/	/	34.62	9.77	46.32	100	170	Average
5350	51.52	53.2	74	-22.48	34.68	9.94	46.3	100	170	Peak
5350	47.13	48.81	54	-6.87	34.68	9.94	46.3	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	53.1	55.33	74	-20.9	34.6	9.52	46.35	100	185	Peak
5150	48.68	50.91	54	-5.32	34.6	9.52	46.35	100	185	Average
5270	96.89	98.84	/	/	34.6	9.77	46.32	100	185	Peak
5270	89.49	91.44	/	/	34.6	9.77	46.32	100	185	Average
5350	54.2	55.96	74	-19.8	34.6	9.94	46.3	100	185	Peak
5350	46.58	48.34	54	-7.42	34.6	9.94	46.3	100	185	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5270MHz: Fundamental frequency.



<b>CHANNEL</b>	TX Channel 62	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.32	54.63	74	-21.68	34.52	9.52	46.35	100	160	Peak
5150	48.05	50.36	54	-5.95	34.52	9.52	46.35	100	160	Average
5310	96.36	98.17	/	/	34.65	9.85	46.31	100	160	Peak
5310	89.69	91.5	/	/	34.65	9.85	46.31	100	160	Average
5350	55.52	57.2	74	-18.48	34.68	9.94	46.3	100	160	Peak
5350	49.02	50.7	54	-4.98	34.68	9.94	46.3	100	160	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	55.53	57.76	74	-18.47	34.6	9.52	46.35	100	185	Peak
5150	48.12	50.35	54	-5.88	34.6	9.52	46.35	100	185	Average
5310	94.37	96.23	/	/	34.6	9.85	46.31	100	185	Peak
5310	89.9	91.76	/	/	34.6	9.85	46.31	100	185	Average
5350	54.99	56.75	74	-19.01	34.6	9.94	46.3	100	185	Peak
5350	49	50.76	54	-5	34.6	9.94	46.3	100	185	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5310MHz: Fundamental frequency.



802.11ac (80MHz)

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	54.23	56.54	74	-19.77	34.52	9.52	46.35	100	160	Peak
5150	48.43	50.74	54	-5.57	34.52	9.52	46.35	100	160	Average
5290	92.63	94.5	/	/	34.63	9.81	46.31	100	160	Peak
5290	87.01	88.88	/	/	34.63	9.81	46.31	100	160	Average
5350	54.34	56.02	74	-19.66	34.68	9.94	46.3	100	160	Peak
5350	49.47	51.15	54	-4.53	34.68	9.94	46.3	100	160	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5150	52.94	55.17	74	-21.06	34.6	9.52	46.35	100	185	Peak
5150	48.79	51.02	54	-5.21	34.6	9.52	46.35	100	185	Average
5290	92.05	93.95	/	/	34.6	9.81	46.31	100	185	Peak
5290	86.05	87.95	/	/	34.6	9.81	46.31	100	185	Average
5350	53.51	55.27	74	-20.49	34.6	9.94	46.3	100	185	Peak
5350	49.47	51.23	54	-4.53	34.6	9.94	46.3	100	185	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5290MHz: Fundamental frequency.



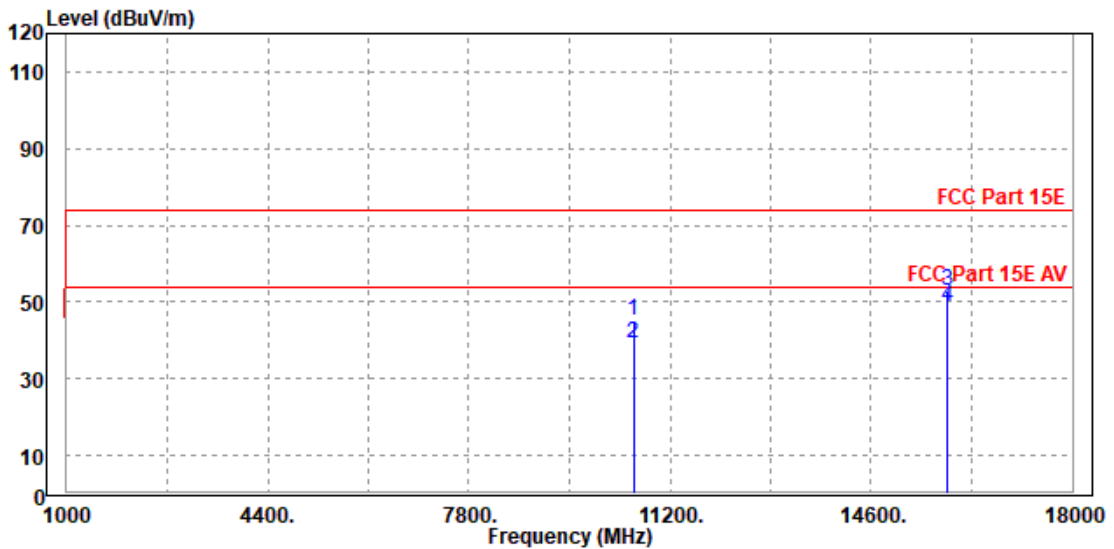


**Worst case harmonic:**

<b>CHANNEL</b>	TX Channel 58	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 25GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

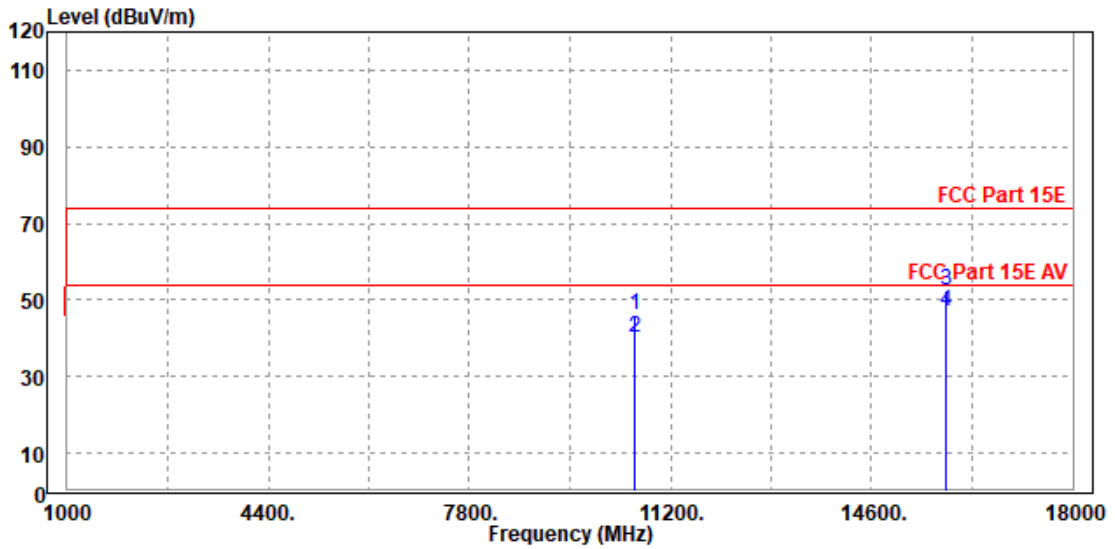
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10580.000	45.40	41.45	74.00	-28.60	3.95	Peak	Horizontal
2	10580.000	39.02	35.07	54.00	-14.98	3.95	Average	Horizontal
3	PK15875.000	52.75	38.11	74.00	-21.25	14.64	Peak	Horizontal
4	PP15875.000	48.77	34.13	54.00	-5.23	14.64	Average	Horizontal





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	10588.000	46.10	40.89	74.00	-27.90	5.21	Peak	Vertical
2	10588.000	39.97	34.76	54.00	-14.03	5.21	Average	Vertical
3	PK15870.000	52.38	39.16	74.00	-21.62	13.22	Peak	Vertical
4	PP15870.000	46.86	33.64	54.00	-7.14	13.22	Average	Vertical



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5290MHz: Fundamental frequency.



Band 3

802.11a

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.33	54.65	74	-20.67	34.77	10.17	46.26	100	165	Peak
5460	48.21	49.53	54	-5.79	34.77	10.17	46.26	100	165	Average
5470	54.49	55.78	68.2	-13.71	34.78	10.19	46.26	100	165	Peak
5500	97.84	99.03	/	/	34.8	10.26	46.25	100	165	Peak
5500	91.34	92.53	/	/	34.8	10.26	46.25	100	165	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	51.6	53.09	74	-22.4	34.6	10.17	46.26	100	200	Peak
5460	46.83	48.32	54	-7.17	34.6	10.17	46.26	100	200	Average
5470	54.8	56.27	68.2	-13.4	34.6	10.19	46.26	100	200	Peak
5500	95.43	96.82	/	/	34.6	10.26	46.25	100	200	Peak
5500	88.95	90.34	/	/	34.6	10.26	46.25	100	200	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.21	54.53	74	-20.79	34.77	10.17	46.26	100	170	Peak
5460	47.26	48.58	54	-6.74	34.77	10.17	46.26	100	170	Average
5470	54.44	55.73	68.2	-13.76	34.78	10.19	46.26	100	170	Peak
5580	97.69	98.43	/	/	34.9	10.59	46.23	100	170	Peak
5580	90.24	90.98	/	/	34.9	10.59	46.23	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.19	54.68	74	-20.81	34.6	10.17	46.26	100	245	Peak
5460	46.86	48.35	54	-7.14	34.6	10.17	46.26	100	245	Average
5470	52.61	54.08	68.2	-15.59	34.6	10.19	46.26	100	245	Peak
5580	95.6	96.54	/	/	34.7	10.59	46.23	100	245	Peak
5580	88.23	89.17	/	/	34.7	10.59	46.23	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5580MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.77	98.83	/	/	35.04	11.09	46.19	100	170	Peak
5700	92.11	92.17	/	/	35.04	11.09	46.19	100	170	Average
5725	57.72	57.64	68.2	-10.48	35.07	11.2	46.19	100	170	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.36	98.62	/	/	34.84	11.09	46.19	100	245	Peak
5700	90.97	91.23	/	/	34.84	11.09	46.19	100	245	Average
5725	58.82	58.94	68.2	-9.38	34.87	11.2	46.19	100	245	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5700MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.63	55.92	68.2	-13.57	34.78	10.19	46.26	100	160	Peak
5720	100.3	100.25	/	/	35.06	11.18	46.19	100	160	Peak
5720	93.1	93.05	/	/	35.06	11.18	46.19	100	160	Average
5850	56.77	55.98	68.2	-11.43	35.22	11.72	46.15	100	160	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	52.83	54.3	68.2	-15.37	34.6	10.19	46.26	100	250	Peak
5720	97.28	97.43	/	/	34.86	11.18	46.19	100	250	Peak
5720	90.47	90.62	/	/	34.86	11.18	46.19	100	250	Average
5850	57.57	56.98	68.2	-10.63	35.02	11.72	46.15	100	250	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.



802.11n (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.26	54.58	74	-20.74	34.77	10.17	46.26	100	170	Peak
5460	46.92	48.24	54	-7.08	34.77	10.17	46.26	100	170	Average
5470	58.69	59.98	68.2	-9.51	34.78	10.19	46.26	100	170	Peak
5500	97.05	98.24	/	/	34.8	10.26	46.25	100	170	Peak
5500	90.57	91.76	/	/	34.8	10.26	46.25	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	55.15	56.64	74	-18.85	34.6	10.17	46.26	100	245	Peak
5460	46.97	48.46	54	-7.03	34.6	10.17	46.26	100	245	Average
5470	53.31	54.78	68.2	-14.89	34.6	10.19	46.26	100	245	Peak
5500	95.71	97.1	/	/	34.6	10.26	46.25	100	245	Peak
5500	87.26	88.65	/	/	34.6	10.26	46.25	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.92	55.24	74	-20.08	34.77	10.17	46.26	100	180	Peak
5460	47.61	48.93	54	-6.39	34.77	10.17	46.26	100	180	Average
5470	53.75	55.04	68.2	-14.45	34.78	10.19	46.26	100	180	Peak
5580	98.09	98.83	/	/	34.9	10.59	46.23	100	180	Peak
5580	90.13	90.87	/	/	34.9	10.59	46.23	100	180	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.09	54.58	74	-20.91	34.6	10.17	46.26	100	245	Peak
5460	46.75	48.24	54	-7.25	34.6	10.17	46.26	100	245	Average
5470	53.73	55.2	68.2	-14.47	34.6	10.19	46.26	100	245	Peak
5580	95.07	96.01	/	/	34.7	10.59	46.23	100	245	Peak
5580	87.43	88.37	/	/	34.7	10.59	46.23	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5580MHz: Fundamental frequency.
- #: Out of restricted band.





<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	98.93	98.99	/	/	35.04	11.09	46.19	100	180	Peak
5700	91.35	91.41	/	/	35.04	11.09	46.19	100	180	Average
5725	59.32	59.24	68.2	-8.88	35.07	11.2	46.19	100	180	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	97.04	97.3	/	/	34.84	11.09	46.19	100	245	Peak
5700	89.89	90.15	/	/	34.84	11.09	46.19	100	245	Average
5725	58.09	58.21	68.2	-10.11	34.87	11.2	46.19	100	245	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5700MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	53.1	54.39	68.2	-15.1	34.78	10.19	46.26	100	160	Peak
5720	96.89	96.84	/	/	35.06	11.18	46.19	100	160	Peak
5720	91.18	91.13	/	/	35.06	11.18	46.19	100	160	Average
5850	56.92	56.13	68.2	-11.28	35.22	11.72	46.15	100	160	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	53.88	55.35	68.2	-14.32	34.6	10.19	46.26	100	250	Peak
5720	95.17	95.32	/	/	34.86	11.18	46.19	100	250	Peak
5720	89.28	89.43	/	/	34.86	11.18	46.19	100	250	Average
5850	55.74	55.15	68.2	-12.46	35.02	11.72	46.15	100	250	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.



802.11n (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.56	54.88	74	-20.44	34.77	10.17	46.26	100	180	Peak
5460	48.13	49.45	54	-5.87	34.77	10.17	46.26	100	180	Average
5470	54.48	55.77	68.2	-13.72	34.78	10.19	46.26	100	180	Peak
5510	93.97	95.11	/	/	34.81	10.3	46.25	100	180	Peak
5510	88.36	89.5	/	/	34.81	10.3	46.25	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.33	54.82	74	-20.67	34.6	10.17	46.26	100	245	Peak
5460	47.42	48.91	54	-6.58	34.6	10.17	46.26	100	245	Average
5470	53.36	54.83	68.2	-14.84	34.6	10.19	46.26	100	245	Peak
5510	89.96	91.3	/	/	34.61	10.3	46.25	100	245	Peak
5510	84.74	86.08	/	/	34.61	10.3	46.25	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5510MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.97	54.29	74	-21.03	34.77	10.17	46.26	100	180	Peak
5460	47.8	49.12	54	-6.2	34.77	10.17	46.26	100	180	Average
5470	54.73	56.02	68.2	-13.47	34.78	10.19	46.26	100	180	Peak
5550	93.63	94.54	/	/	34.86	10.47	46.24	100	180	Peak
5550	88.02	88.93	/	/	34.86	10.47	46.24	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.02	54.51	74	-20.98	34.6	10.17	46.26	100	245	Peak
5460	47.13	48.62	54	-6.87	34.6	10.17	46.26	100	245	Average
5470	53.7	55.17	68.2	-14.5	34.6	10.19	46.26	100	245	Peak
5550	90.21	91.32	/	/	34.66	10.47	46.24	100	245	Peak
5550	84.63	85.74	/	/	34.66	10.47	46.24	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	93.84	94.07	/	/	35	10.97	46.2	100	180	Peak
5670	88.69	88.92	/	/	35	10.97	46.2	100	180	Average
5725	55.57	55.49	68.2	-12.63	35.07	11.2	46.19	100	180	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5670	91.89	92.32	/	/	34.8	10.97	46.2	100	245	Peak
5670	86.65	87.08	/	/	34.8	10.97	46.2	100	245	Average
5725	55.1	55.22	68.2	-13.1	34.87	11.2	46.19	100	245	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5670MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 142	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	52.11	53.4	68.2	-16.09	34.78	10.19	46.26	100	160	Peak
5710	92.7	92.7	/	/	35.05	11.14	46.19	100	160	Peak
5710	88.54	88.54	/	/	35.05	11.14	46.19	100	160	Average
5850	57.27	56.48	68.2	-10.93	35.22	11.72	46.15	100	160	Peak

**ANTENNA POLARITY & test distance: Vertical at 3 m**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	52.8	54.27	68.2	-15.4	34.6	10.19	46.26	100	250	Peak
5710	89.97	90.17	/	/	34.85	11.14	46.19	100	250	Peak
5710	85.99	86.19	/	/	34.85	11.14	46.19	100	250	Average
5850	55.57	54.98	68.2	-12.63	35.02	11.72	46.15	100	250	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5710MHz: Fundamental frequency.
- #: Out of restricted band.



802.11ac (20MHz)

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.86	54.18	74	-21.14	34.77	10.17	46.26	100	180	Peak
5460	46.93	48.25	54	-7.07	34.77	10.17	46.26	100	180	Average
5470	56.51	57.8	68.2	-11.69	34.78	10.19	46.26	100	180	Peak
5500	97.79	98.98	/	/	34.8	10.26	46.25	100	180	Peak
5500	90.72	91.91	/	/	34.8	10.26	46.25	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.99	55.48	74	-20.01	34.6	10.17	46.26	100	245	Peak
5460	47.59	49.08	54	-6.41	34.6	10.17	46.26	100	245	Average
5470	53.44	54.91	68.2	-14.76	34.6	10.19	46.26	100	245	Peak
5500	94.96	96.35	/	/	34.6	10.26	46.25	100	245	Peak
5500	88.1	89.49	/	/	34.6	10.26	46.25	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 116	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.27	54.59	74	-20.73	34.77	10.17	46.26	100	180	Peak
5460	47.26	48.58	54	-6.74	34.77	10.17	46.26	100	180	Average
5470	53.3	54.59	68.2	-14.9	34.78	10.19	46.26	100	180	Peak
5580	97.44	98.18	/	/	34.9	10.59	46.23	100	180	Peak
5580	89.91	90.65	/	/	34.9	10.59	46.23	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.27	55.76	74	-19.73	34.6	10.17	46.26	100	245	Peak
5460	46.66	48.15	54	-7.34	34.6	10.17	46.26	100	245	Average
5470	51.74	53.21	68.2	-16.46	34.6	10.19	46.26	100	245	Peak
5580	94.55	95.49	/	/	34.7	10.59	46.23	100	245	Peak
5580	87.07	88.01	/	/	34.7	10.59	46.23	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5580MHz: Fundamental frequency.
- #: Out of restricted band.





<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	97.55	97.61	/	/	35.04	11.09	46.19	100	180	Peak
5700	90.58	90.64	/	/	35.04	11.09	46.19	100	180	Average
5725	60.85	60.77	68.2	-7.35	35.07	11.2	46.19	100	180	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5700	97.41	97.67	/	/	34.84	11.09	46.19	100	245	Peak
5700	89.49	89.75	/	/	34.84	11.09	46.19	100	245	Average
5725	55.28	55.4	68.2	-12.92	34.87	11.2	46.19	100	245	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5700MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 144	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	53.76	55.05	68.2	-14.44	34.78	10.19	46.26	100	160	Peak
5720	97.77	97.72	/	/	35.06	11.18	46.19	100	160	Peak
5720	91.16	91.11	/	/	35.06	11.18	46.19	100	160	Average
5850	55.56	54.77	68.2	-12.64	35.22	11.72	46.15	100	160	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	52.84	54.31	68.2	-15.36	34.6	10.19	46.26	100	250	Peak
5720	95.08	95.23	/	/	34.86	11.18	46.19	100	250	Peak
5720	88.73	88.88	/	/	34.86	11.18	46.19	100	250	Average
5850	55.14	54.55	68.2	-13.06	35.02	11.72	46.15	100	250	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.



802.11ac (40MHz)

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.95	54.27	74	-21.05	34.77	10.17	46.26	100	180	Peak
5460	48.01	49.33	54	-5.99	34.77	10.17	46.26	100	180	Average
5470	53.64	54.93	68.2	-14.56	34.78	10.19	46.26	100	180	Peak
5510	94.28	95.42	/	/	34.81	10.3	46.25	100	180	Peak
5510	87.65	88.79	/	/	34.81	10.3	46.25	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.27	53.76	74	-21.73	34.6	10.17	46.26	100	245	Peak
5460	47.56	49.05	54	-6.44	34.6	10.17	46.26	100	245	Average
5470	52.98	54.45	68.2	-15.22	34.6	10.19	46.26	100	245	Peak
5510	89.72	91.06	/	/	34.61	10.3	46.25	100	245	Peak
5510	84.82	86.16	/	/	34.61	10.3	46.25	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5510MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 110	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.77	54.09	74	-21.23	34.77	10.17	46.26	100	180	Peak
5460	47.72	49.04	54	-6.28	34.77	10.17	46.26	100	180	Average
5470	54.37	55.66	68.2	-13.83	34.78	10.19	46.26	100	180	Peak
5550	93.58	94.49	/	/	34.86	10.47	46.24	100	180	Peak
5550	87.07	87.98	/	/	34.86	10.47	46.24	100	180	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	52.13	53.62	74	-21.87	34.6	10.17	46.26	100	245	Peak
5460	46.91	48.4	54	-7.09	34.6	10.17	46.26	100	245	Average
5470	52.61	54.08	68.2	-15.59	34.6	10.19	46.26	100	245	Peak
5550	89.73	90.84	/	/	34.66	10.47	46.24	100	245	Peak
5550	84.19	85.3	/	/	34.66	10.47	46.24	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.02	55.34	74	-19.98	34.77	10.17	46.26	100	180	Peak
5460	48.43	49.75	54	-5.57	34.77	10.17	46.26	100	180	Average
5470	55	56.29	68.2	-13.2	34.78	10.19	46.26	100	180	Peak
5670	94.61	94.84	/	/	35	10.97	46.2	100	180	Peak
5670	88.21	88.44	/	/	35	10.97	46.2	100	180	Average

**ANTENNA POLARITY & test distance: Vertical at 3 m**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.87	56.36	74	-19.13	34.6	10.17	46.26	100	245	Peak
5460	47.58	49.07	54	-6.42	34.6	10.17	46.26	100	245	Average
5470	52.95	54.42	68.2	-15.25	34.6	10.19	46.26	100	245	Peak
5670	92.37	92.8	/	/	34.8	10.97	46.2	100	245	Peak
5670	86.36	86.79	/	/	34.8	10.97	46.2	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5670MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 142	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	54.91	56.2	68.2	-13.29	34.78	10.19	46.26	100	160	Peak
5720	94.61	94.56	/	/	35.06	11.18	46.19	100	160	Peak
5720	88.08	88.03	/	/	35.06	11.18	46.19	100	160	Average
5850	55.99	55.2	68.2	-12.21	35.22	11.72	46.15	100	160	Peak

**ANTENNA POLARITY & test distance: Vertical at 3 m**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	52.57	54.04	68.2	-15.63	34.6	10.19	46.26	100	250	Peak
5720	92.3	92.45	/	/	34.86	11.18	46.19	100	250	Peak
5720	85.62	85.77	/	/	34.86	11.18	46.19	100	250	Average
5850	55.81	55.22	68.2	-12.39	35.02	11.72	46.15	100	250	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.



802.11ac (80MHz)

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.8	55.12	74	-20.2	34.77	10.17	46.26	100	180	Peak
5460	47.49	48.81	54	-6.51	34.77	10.17	46.26	100	180	Average
5470	53.41	54.7	68.2	-14.79	34.78	10.19	46.26	100	180	Peak
5530	89.54	90.56	/	/	34.84	10.38	46.24	100	180	Peak
5530	84.7	85.72	/	/	34.84	10.38	46.24	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.4	54.89	74	-20.6	34.6	10.17	46.26	100	245	Peak
5460	47.84	49.33	54	-6.16	34.6	10.17	46.26	100	245	Average
5470	54.27	55.74	68.2	-13.93	34.6	10.19	46.26	100	245	Peak
5530	87.79	89.01	/	/	34.64	10.38	46.24	100	245	Peak
5530	81.52	82.74	/	/	34.64	10.38	46.24	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5530MHz: Fundamental frequency.
- #: Out of restricted band.



<b>CHANNEL</b>	TX Channel 122	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	53.92	55.24	74	-20.08	34.77	10.17	46.26	100	180	Peak
5460	46.78	48.1	54	-7.22	34.77	10.17	46.26	100	180	Average
5470	52.96	54.25	68.2	-15.24	34.78	10.19	46.26	100	180	Peak
5610	89.45	90.02	/	/	34.93	10.72	46.22	100	180	Peak
5610	84.01	84.58	/	/	34.93	10.72	46.22	100	180	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5460	54.56	56.05	74	-19.44	34.6	10.17	46.26	100	245	Peak
5460	46.87	48.36	54	-7.13	34.6	10.17	46.26	100	245	Average
5470	52.82	54.29	68.2	-15.38	34.6	10.19	46.26	100	245	Peak
5610	87.85	88.62	/	/	34.73	10.72	46.22	100	245	Peak
5610	81.31	82.08	/	/	34.73	10.72	46.22	100	245	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5610MHz: Fundamental frequency.
- #: Out of restricted band.





<b>CHANNEL</b>	TX Channel 138	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	52.74	54.03	68.2	-15.46	34.78	10.19	46.26	100	160	Peak
5690	89.52	89.64	/	/	35.03	11.05	46.2	100	160	Peak
5690	85.84	85.96	/	/	35.03	11.05	46.2	100	160	Average
5850	56.77	55.98	68.2	-11.43	35.22	11.72	46.15	100	160	Peak

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5470	53.02	54.49	68.2	-15.18	34.6	10.19	46.26	100	250	Peak
5690	86.99	87.31	/	/	34.83	11.05	46.2	100	250	Peak
5690	83.53	83.85	/	/	34.83	11.05	46.2	100	250	Average
5850	55.73	55.14	68.2	-12.47	35.02	11.72	46.15	100	250	Peak

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5690MHz: Fundamental frequency.
- #: Out of restricted band.



**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03

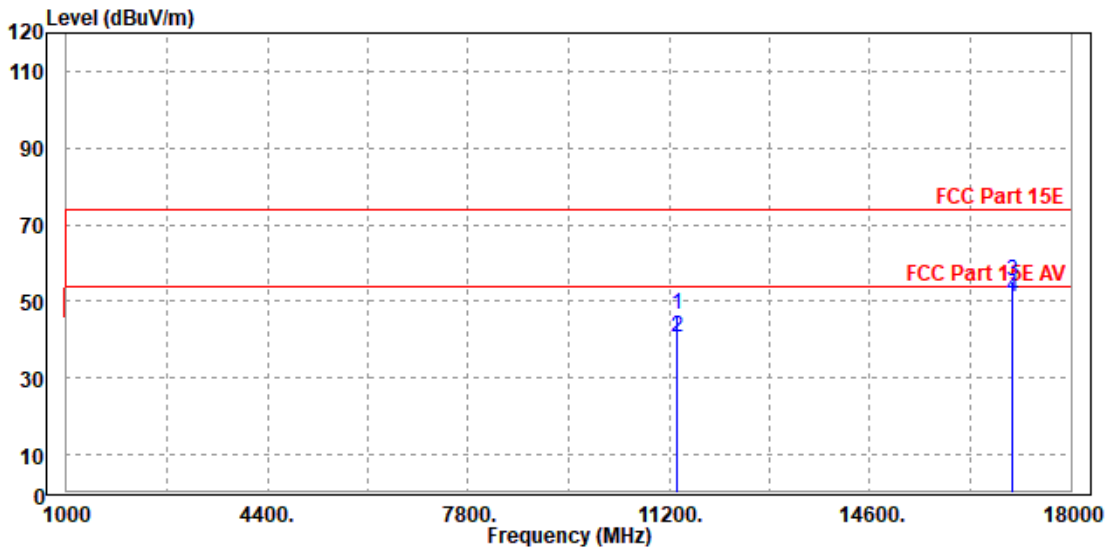
Worst case harmonic:

11ac40

<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 25GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

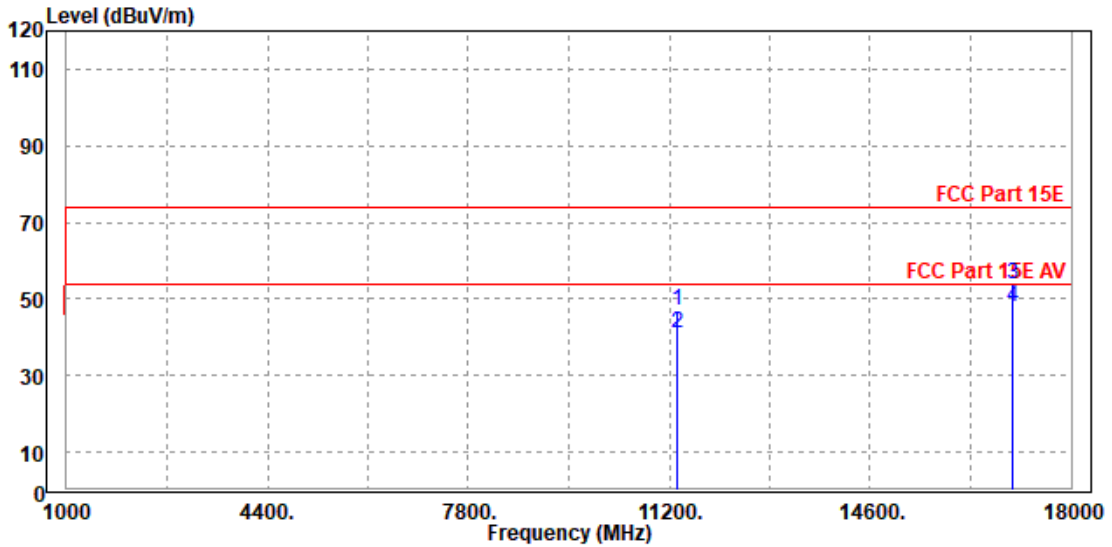
	Freq	Level	Read Level	Limit	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11336.000	46.74	40.62	74.00	-27.26	6.12	Peak	Horizontal
2	11336.000	40.64	34.52	54.00	-13.36	6.12	Average	Horizontal
3	PK17010.000	55.37	38.65	74.00	-18.63	16.72	Peak	Horizontal
4	PP17010.000	50.97	34.25	54.00	-3.03	16.72	Average	Horizontal





ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11340.000	46.93	40.26	74.00	-27.07	6.67	Peak	Vertical
2	11340.000	41.26	34.59	54.00	-12.74	6.67	Average	Vertical
3	PK17014.000	53.89	38.95	74.00	-20.11	14.94	Peak	Vertical
4	PP17014.000	48.09	33.15	54.00	-5.91	14.94	Average	Vertical



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5610MHz: Fundamental frequency.
- #: Out of restricted band.



Band 4:

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	99.76	99.57	/	/	35.09	11.28	46.18	100	170	Peak
5745	92.21	92.02	/	/	35.09	11.28	46.18	100	170	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	96.01	96.02	/	/	34.89	11.28	46.18	100	245	Peak
5745	89.75	89.76	/	/	34.89	11.28	46.18	100	245	Average

REMARKS:

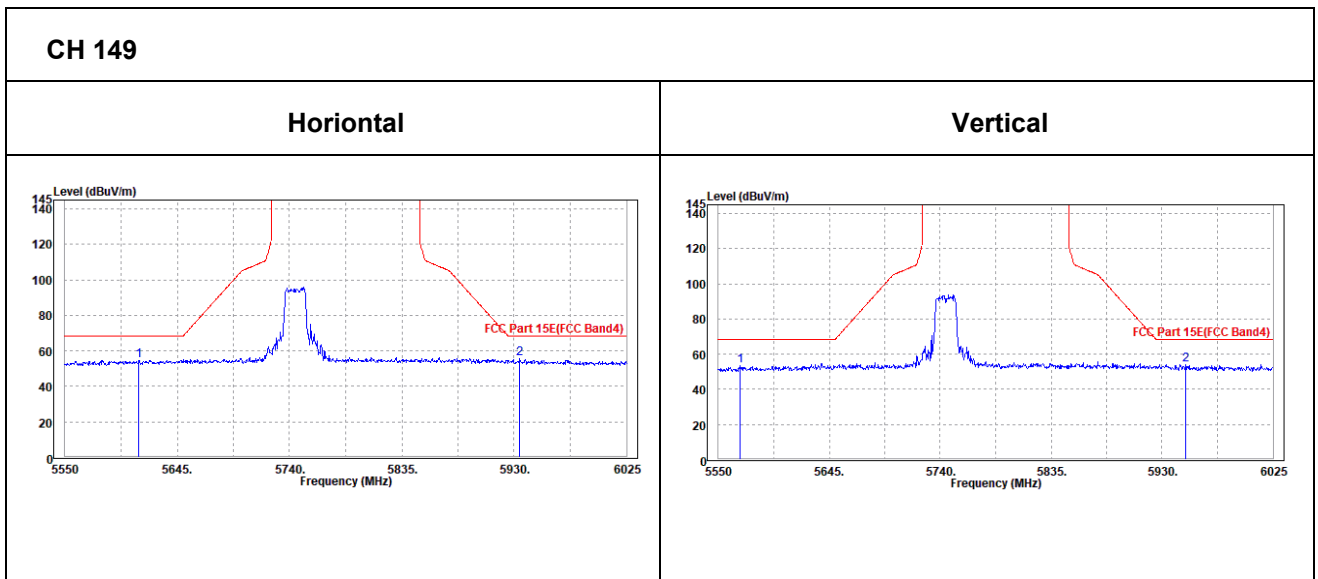
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.



**Oobe Data**

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5612.7	54.77	56.21	68.2	-13.43	34.94	9.84	46.22	100	0	Peak
5934.75	55.73	56.59	68.2	-12.47	35.32	9.95	46.13	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5568.525	53.43	55.16	68.2	-14.77	34.68	9.82	46.23	100	360	Peak
5950.425	54.04	55.07	68.2	-14.16	35.14	9.95	46.12	100	360	Peak





<b>CHANNEL</b>	TX Channel 157	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	100.08	99.66	/	/	35.14	11.45	46.17	100	170	Peak
5785	92.83	92.41	/	/	35.14	11.45	46.17	100	170	Average
<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	95.48	95.26	/	/	34.94	11.45	46.17	100	245	Peak
5785	89.72	89.5	/	/	34.94	11.45	46.17	100	245	Average

**REMARKS:**

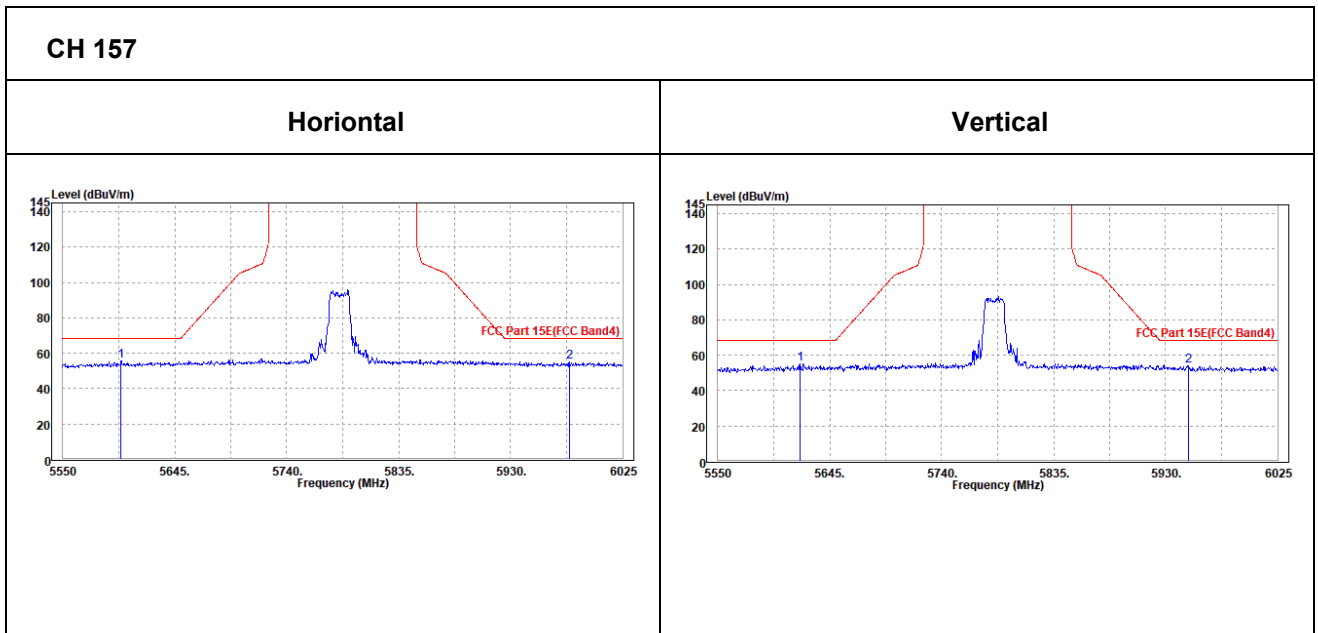
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.



**Oobe Data**

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5599.4	55.62	57.09	68.2	-12.58	34.92	9.83	46.22	100	360	Peak
5979.875	55.06	55.84	68.2	-13.14	35.38	9.96	46.12	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5619.825	55	56.64	68.2	-13.2	34.74	9.84	46.22	100	0	Peak
5949.475	53.91	54.94	68.2	-14.29	35.14	9.95	46.12	100	0	Peak





<b>CHANNEL</b>	TX Channel 165	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	100.01	99.36	/	/	35.19	11.62	46.16	100	170	Peak
5825	92.67	92.02	/	/	35.19	11.62	46.16	100	170	Average
<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	95.94	95.49	/	/	34.99	11.62	46.16	100	245	Peak
5825	89.34	88.89	/	/	34.99	11.62	46.16	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.

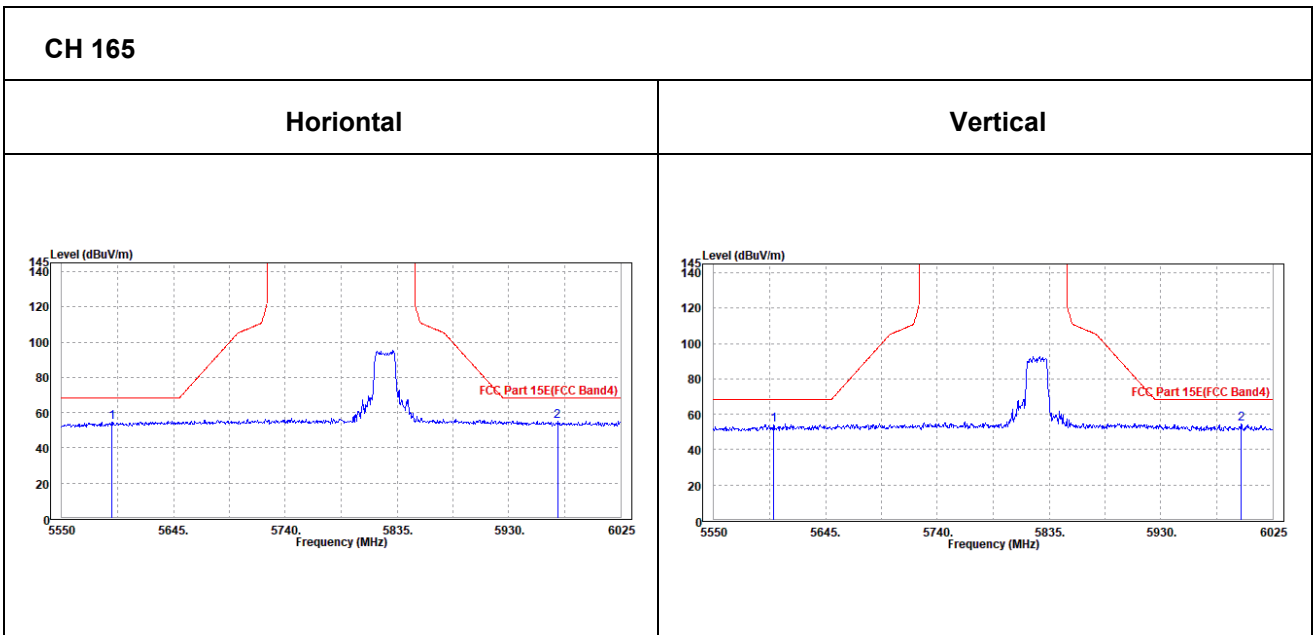




**Oobe Data**

802.11a

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5592.75	54.72	56.2	68.2	-13.48	34.91	9.83	46.22	100	0	Peak
5971.325	55.35	56.14	68.2	-12.85	35.37	9.96	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.825	54.3	55.97	68.2	-13.9	34.72	9.83	46.22	100	360	Peak
5998.4	54.82	55.76	68.2	-13.38	35.2	9.97	46.11	100	360	Peak





802.11n (20MHz)

<b>CHANNEL</b>	TX Channel 149	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	99.7	99.51	/	/	35.09	11.28	46.18	100	170	Peak
5745	92.58	92.39	/	/	35.09	11.28	46.18	100	170	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	97.17	97.18	/	/	34.89	11.28	46.18	100	245	Peak
5745	90	90.01	/	/	34.89	11.28	46.18	100	245	Average

**REMARKS:**

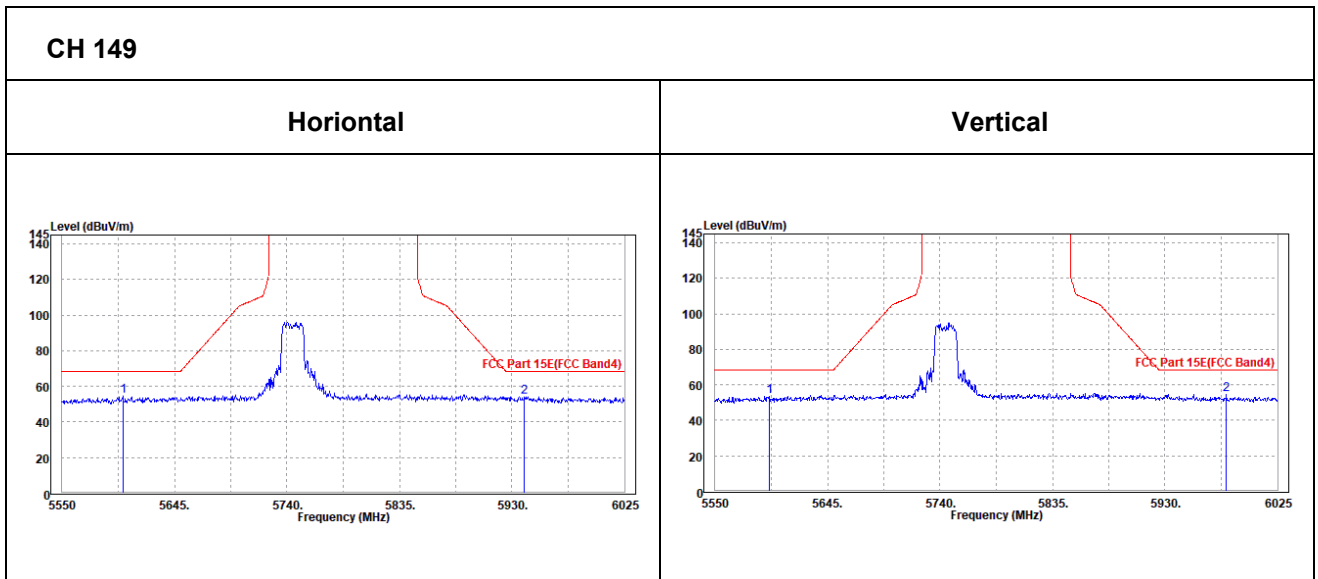
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.



**Oobe Data**

**802.11n (20MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5601.3	54.31	55.78	68.2	-13.89	34.92	9.83	46.22	100	360	Peak	
5940.45	54.13	54.98	68.2	-14.07	35.33	9.95	46.13	100	360	Peak	
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5596.075	53.57	55.24	68.2	-14.63	34.72	9.83	46.22	100	0	Peak	
5981.775	54.76	55.74	68.2	-13.44	35.18	9.96	46.12	100	0	Peak	





<b>CHANNEL</b>	TX Channel 157	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	101.85	101.43	/	/	35.14	11.45	46.17	100	170	Peak
5785	92.9	92.48	/	/	35.14	11.45	46.17	100	170	Average
<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	97.84	97.62	/	/	34.94	11.45	46.17	100	245	Peak
5785	89.49	89.27	/	/	34.94	11.45	46.17	100	245	Average

**REMARKS:**

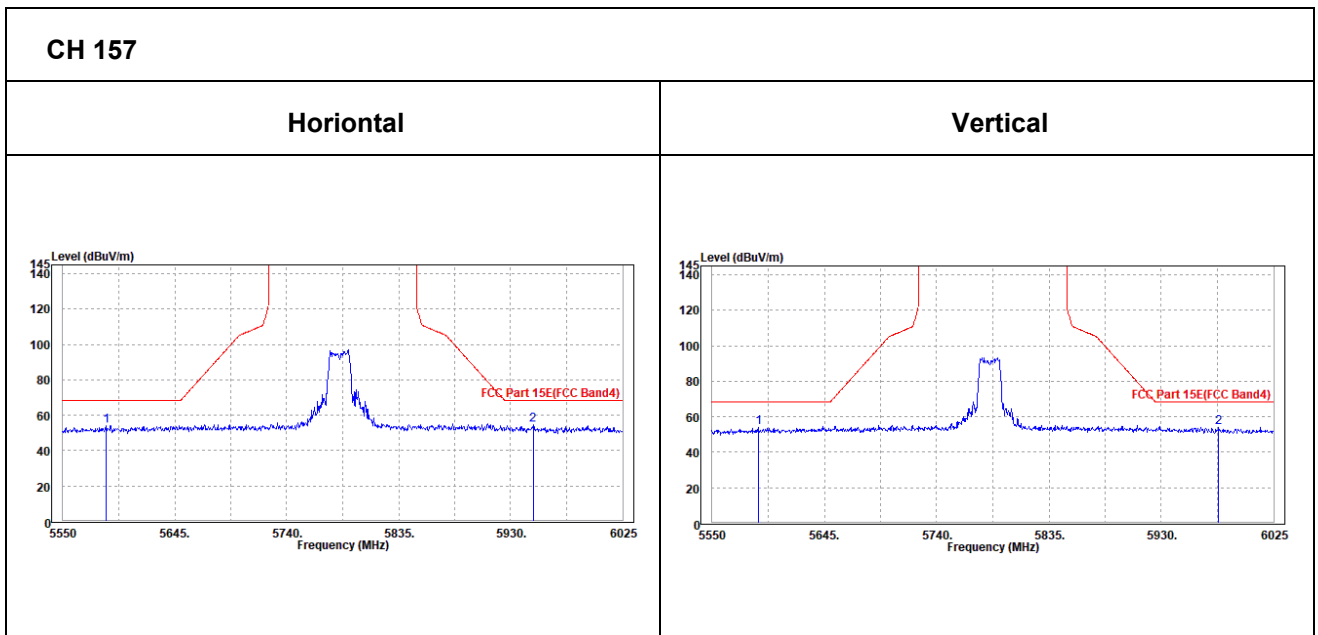
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.



**OOBE DATA**

**802.11n (20MHZ)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5586.575	53.89	55.39	68.2	-14.31	34.9	9.83	46.23	100	0	Peak
5949	54.82	55.65	68.2	-13.38	35.34	9.95	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5588.95	54.14	55.83	68.2	-14.06	34.71	9.83	46.23	100	360	Peak
5978.45	54.05	55.04	68.2	-14.15	35.17	9.96	46.12	100	360	Peak





<b>CHANNEL</b>	TX Channel 165	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	101.27	100.62	/	/	35.19	11.62	46.16	100	170	Peak
5825	92.61	91.96	/	/	35.19	11.62	46.16	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	96.76	96.31	/	/	34.99	11.62	46.16	100	245	Peak
5825	88.81	88.36	/	/	34.99	11.62	46.16	100	245	Average

**REMARKS:**

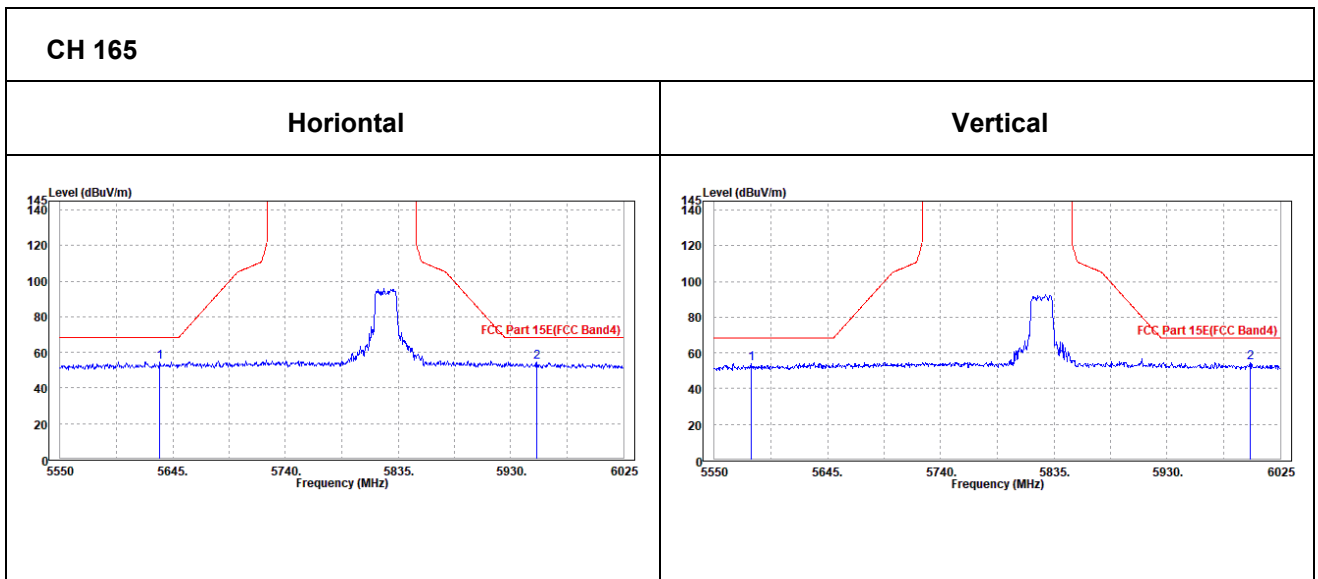
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.



**Oobe Data**

**802.11n (20MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5634.075	54.73	56.13	68.2	-13.47	34.96	9.85	46.21	100	360	Peak
5951.85	54.59	55.42	68.2	-13.61	35.34	9.95	46.12	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5581.35	54.31	56.01	68.2	-13.89	34.7	9.83	46.23	100	0	Peak
5999.825	54.79	55.73	68.2	-13.41	35.2	9.97	46.11	100	0	Peak





**802.11n (40MHz)**

<b>CHANNEL</b>	TX Channel 151	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	95.73	95.48	/	/	35.11	11.32	46.18	100	170	Peak
5755	89.83	89.58	/	/	35.11	11.32	46.18	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	92.82	92.77	/	/	34.91	11.32	46.18	100	245	Peak
5755	86.93	86.88	/	/	34.91	11.32	46.18	100	245	Average

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

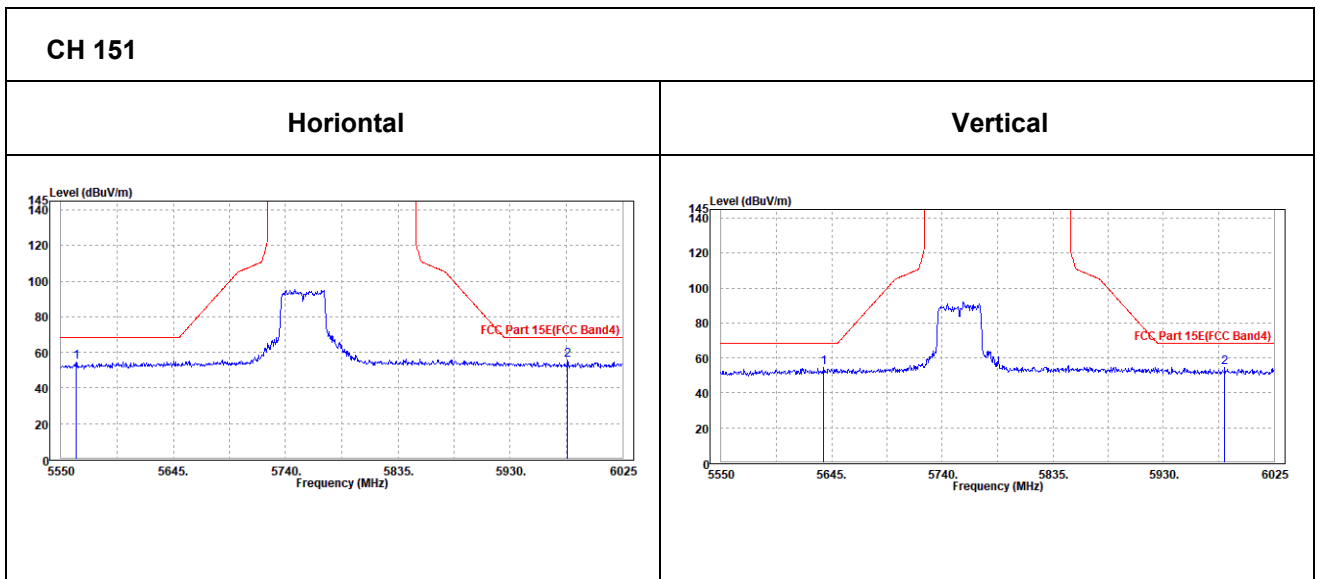




**Oobe Data**

**802.11n (40MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5562.825	54.43	55.96	68.2	-13.77	34.88	9.82	46.23	100	0	Peak
5978.45	55.5	56.29	68.2	-12.7	35.37	9.96	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5638.35	54.72	56.31	68.2	-13.48	34.77	9.85	46.21	100	360	Peak
5982.725	54.39	55.36	68.2	-13.81	35.18	9.96	46.11	100	360	Peak





<b>CHANNEL</b>	TX Channel 159	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	95.67	95.2	/	/	35.15	11.49	46.17	100	170	Peak
5795	89.87	89.4	/	/	35.15	11.49	46.17	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	91.95	91.68	/	/	34.95	11.49	46.17	100	245	Peak
5795	86.18	85.91	/	/	34.95	11.49	46.17	100	245	Average

**REMARKS:**

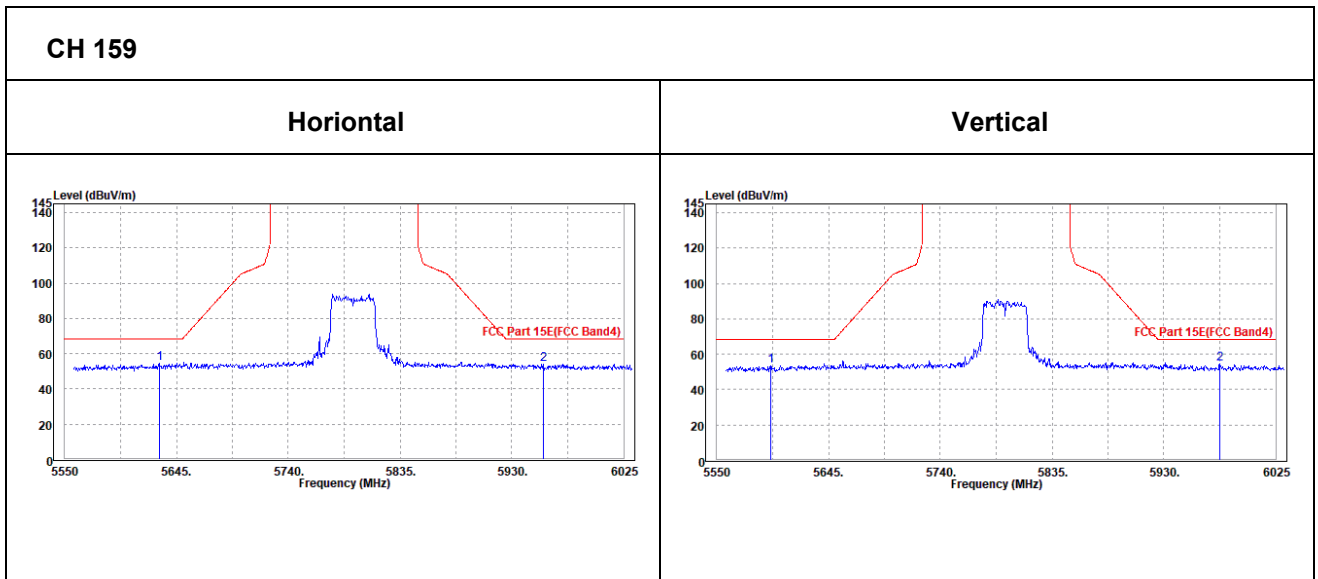
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5795MHz: Fundamental frequency.



**Oobe Data**

**802.11n (40MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5630.175	54.46	55.87	68.2	-13.74	34.96	9.84	46.21	100	0	Peak
5956.5	54.17	54.98	68.2	-14.03	35.35	9.96	46.12	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5595.975	53.47	55.14	68.2	-14.73	34.72	9.83	46.22	100	360	Peak
5977.4	54.32	55.31	68.2	-13.88	35.17	9.96	46.12	100	360	Peak





802.11ac (20MHz)

<b>CHANNEL</b>	TX Channel 149	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	100.91	100.72	/	/	35.09	11.28	46.18	100	170	Peak
5745	92.53	92.34	/	/	35.09	11.28	46.18	100	170	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5745	97.61	97.62	/	/	34.89	11.28	46.18	100	245	Peak
5745	89.56	89.57	/	/	34.89	11.28	46.18	100	245	Average

**REMARKS:**

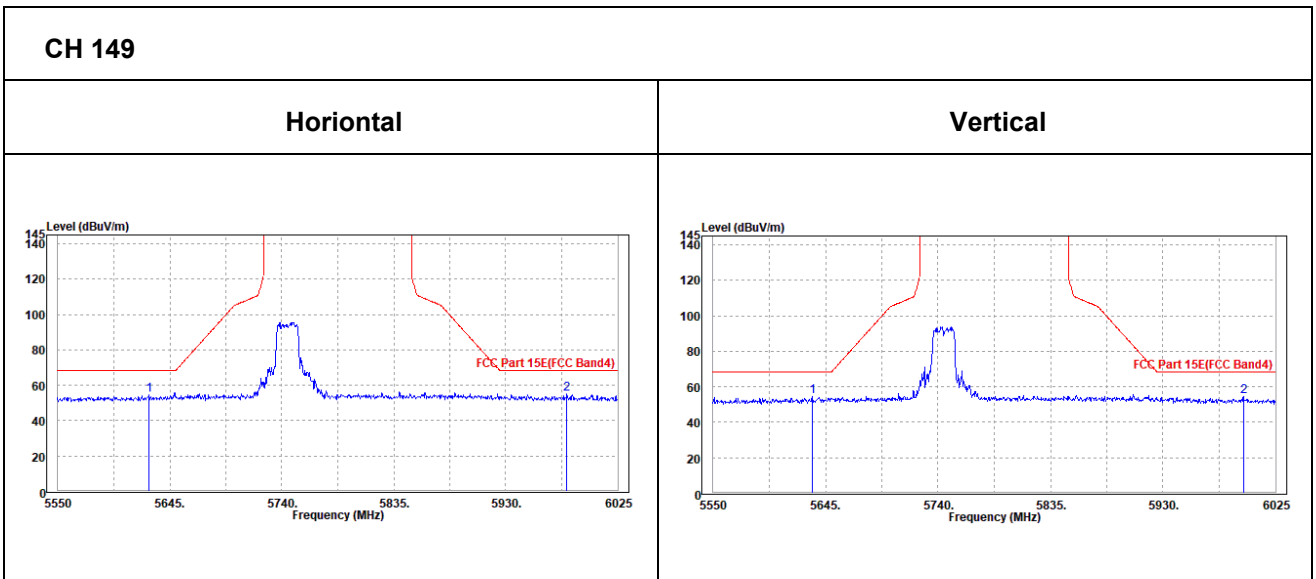
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.



**Oobe Data**

**802.11ac (20MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5627.425	54.39	55.81	68.2	-13.81	34.95	9.84	46.21	100	0	Peak	
5981.775	55.09	55.87	68.2	-13.11	35.38	9.96	46.12	100	0	Peak	
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5633.6	54.52	56.12	68.2	-13.68	34.76	9.85	46.21	100	360	Peak	
5997.925	54.37	55.31	68.2	-13.83	35.2	9.97	46.11	100	360	Peak	





CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	101.42	101	/	/	35.14	11.45	46.17	100	170	Peak
5785	92.87	92.45	/	/	35.14	11.45	46.17	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5785	97.58	97.36	/	/	34.94	11.45	46.17	100	245	Peak
5785	89.36	89.14	/	/	34.94	11.45	46.17	100	245	Average

REMARKS:

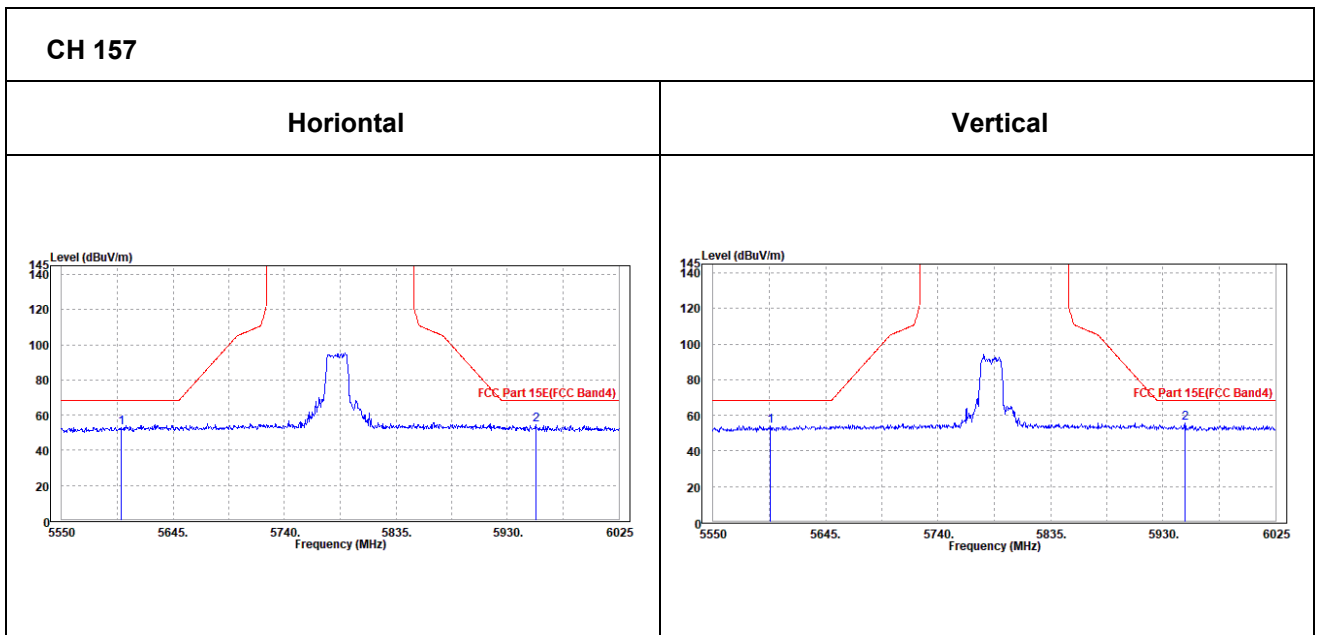
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.



**OBE DATA**

**802.11ac (20MHZ)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5600.825	53.16	54.63	68.2	-15.04	34.92	9.83	46.22	100	360	Peak
5954.225	54.76	55.58	68.2	-13.44	35.35	9.95	46.12	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV /m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5597.975	54.02	55.69	68.2	-14.18	34.72	9.83	46.22	100	0	Peak
5948.525	55.63	56.66	68.2	-12.57	35.14	9.95	46.12	100	0	Peak





<b>CHANNEL</b>	TX Channel 165	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	101.9	101.25	/	/	35.19	11.62	46.16	100	170	Peak
5825	92.7	92.05	/	/	35.19	11.62	46.16	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5825	97.26	96.81	/	/	34.99	11.62	46.16	100	245	Peak
5825	89.22	88.77	/	/	34.99	11.62	46.16	100	245	Average

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.

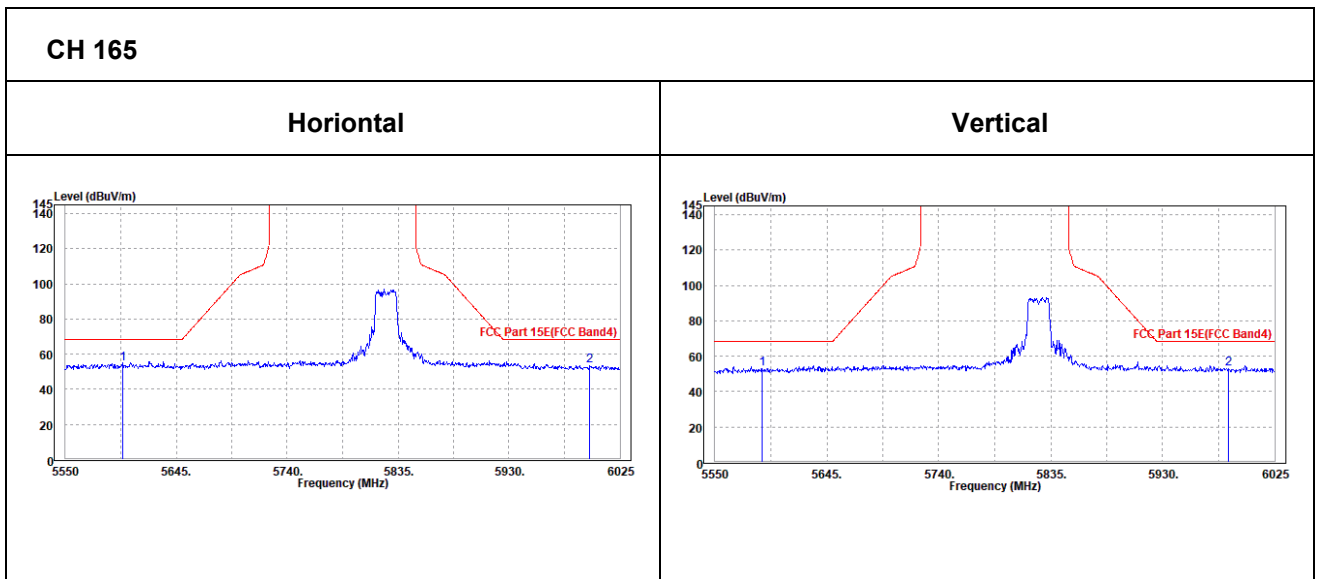




**Oobe Data**

**802.11ac (20MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5599.4	54.31	55.78	68.2	-13.89	34.92	9.83	46.22	100	360	Peak
5999.35	53.44	54.18	68.2	-14.76	35.4	9.97	46.11	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5590.375	52.88	54.56	68.2	-15.32	34.71	9.83	46.22	100	0	Peak
5985.575	53.16	54.12	68.2	-15.04	35.18	9.97	46.11	100	0	Peak





**802.11ac (40MHz)**

<b>CHANNEL</b>	TX Channel 151	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	94.49	94.24	/	/	35.11	11.32	46.18	100	170	Peak
5755	89.73	89.48	/	/	35.11	11.32	46.18	100	170	Average

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5755	92.23	92.18	/	/	34.91	11.32	46.18	100	245	Peak
5755	86.87	86.82	/	/	34.91	11.32	46.18	100	245	Average

**REMARKS:**

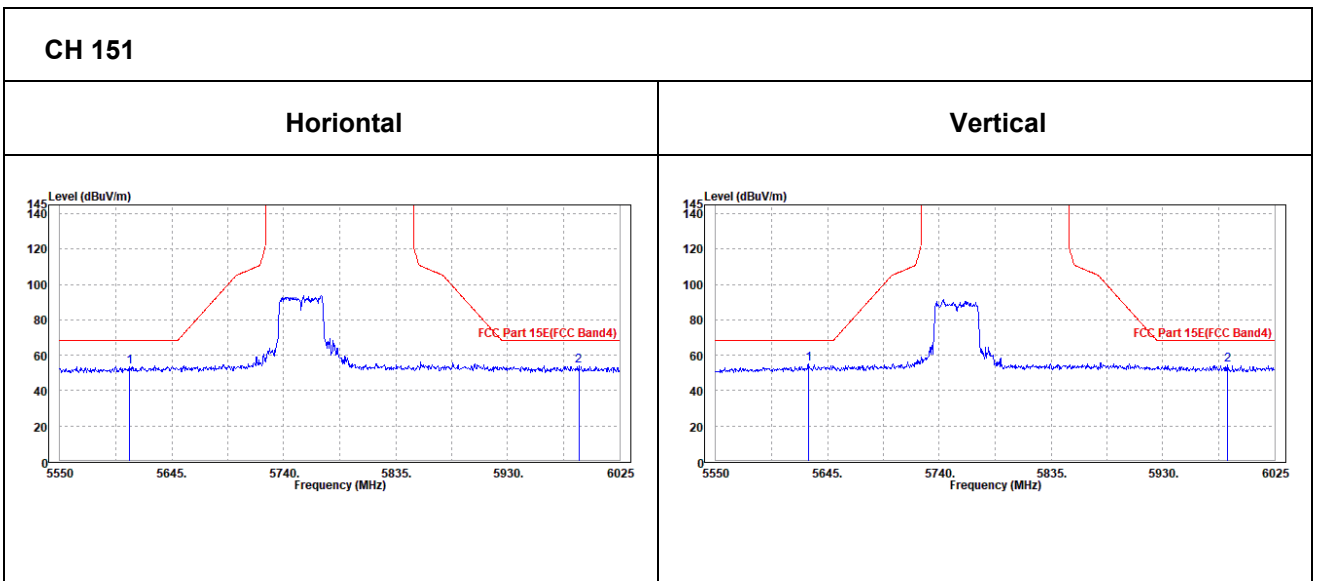
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.



**Oobe Data**

**802.11ac (40MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5609.375	53.55	55	68.2	-14.65	34.93	9.84	46.22	100	360	Peak
5990.325	54.11	54.86	68.2	-14.09	35.39	9.97	46.11	100	360	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5628.85	54.88	56.5	68.2	-13.32	34.75	9.84	46.21	100	0	Peak
5985.1	54.5	55.47	68.2	-13.7	35.18	9.96	46.11	100	0	Peak





<b>CHANNEL</b>	TX Channel 159	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	95.7	95.23	/	/	35.15	11.49	46.17	100	170	Peak
5795	89.17	88.7	/	/	35.15	11.49	46.17	100	170	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5795	92.97	92.7	/	/	34.95	11.49	46.17	100	245	Peak
5795	86.49	86.22	/	/	34.95	11.49	46.17	100	245	Average

**REMARKS:**

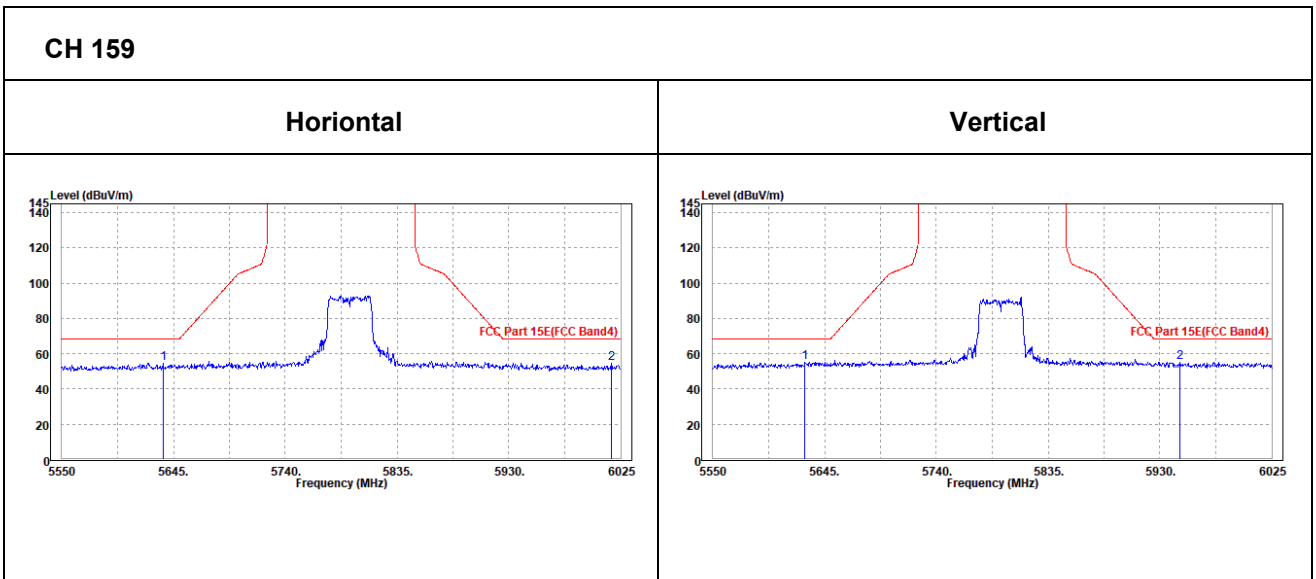
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5795MHz: Fundamental frequency.



**Oobe Data**

**802.11ac (40MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5635.975	54.53	55.93	68.2	-13.67	34.96	9.85	46.21	100	0	Peak
6016.925	54.7	55.43	68.2	-13.5	35.4	9.98	46.11	100	0	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5628.375	55.26	56.88	68.2	-12.94	34.75	9.84	46.21	100	360	Peak
5947.1	55.3	56.33	68.2	-12.9	35.14	9.95	46.12	100	360	Peak





802.11ac (80MHz)

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	90.66	90.29	/	/	35.13	11.41	46.17	100	170	Peak
5775	86.05	85.68	/	/	35.13	11.41	46.17	100	170	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5775	89.31	89.14	/	/	34.93	11.41	46.17	100	245	Peak
5775	83.44	83.27	/	/	34.93	11.41	46.17	100	245	Average

REMARKS:

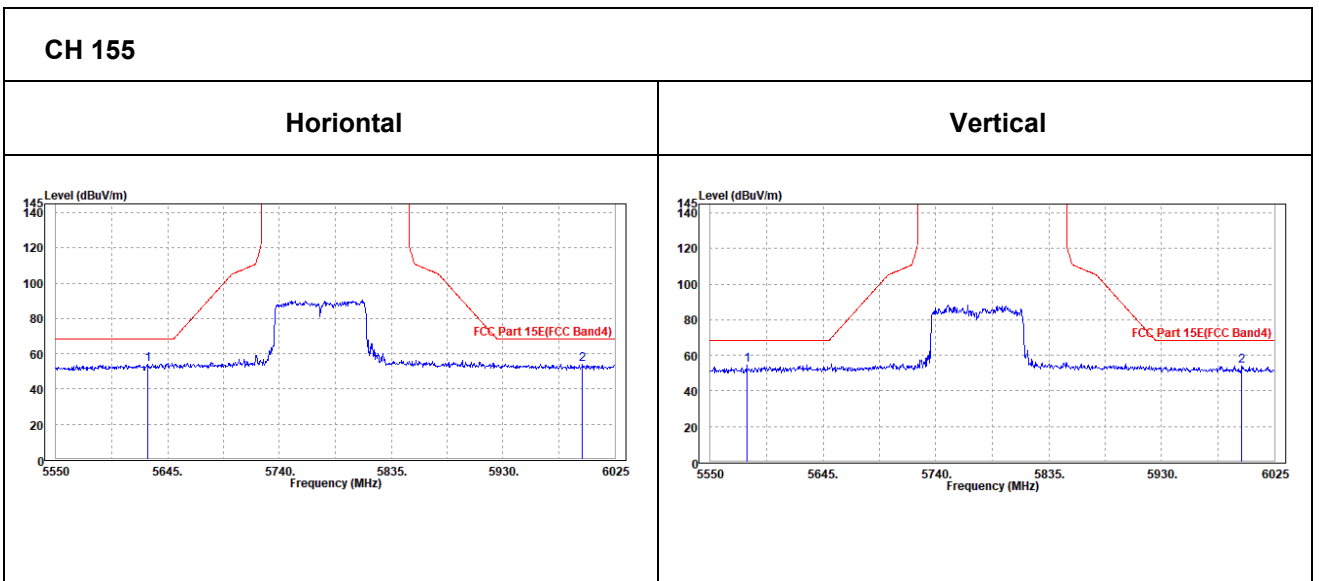
- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5775MHz: Fundamental frequency.



**Oobe Data**

**802.11ac (80MHz)**

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5628.375	53.79	55.21	68.2	-14.41	34.95	9.84	46.21	100	360	Peak	
5997.45	54.24	54.98	68.2	-13.96	35.4	9.97	46.11	100	360	Peak	
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M											
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK	
5580.875	54.46	56.16	68.2	-13.74	34.7	9.83	46.23	100	0	Peak	
5997.45	54.19	55.13	68.2	-14.01	35.2	9.97	46.11	100	0	Peak	





**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03

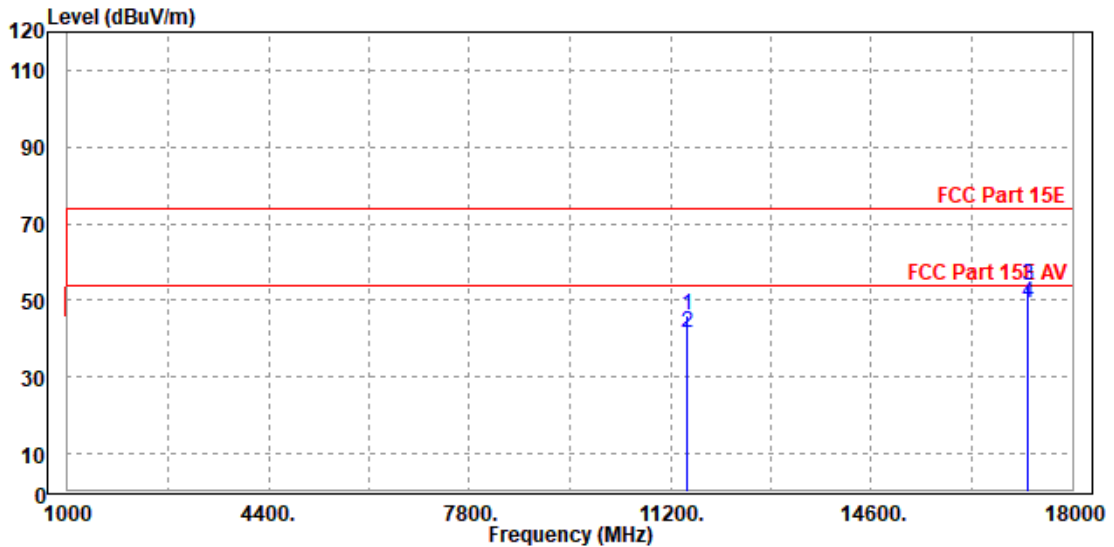
Worst case harmonic:

11a

<b>CHANNEL</b>	TX Channel 149	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11490.000	46.27	40.04	74.00	-27.73	6.23	Peak	Horizontal
2	11490.000	41.61	35.38	54.00	-12.39	6.23	Average	Horizontal
3	PK17235.000	53.64	37.19	74.00	-20.36	16.45	Peak	Horizontal
4	PP17235.000	49.31	32.86	54.00	-4.69	16.45	Average	Horizontal

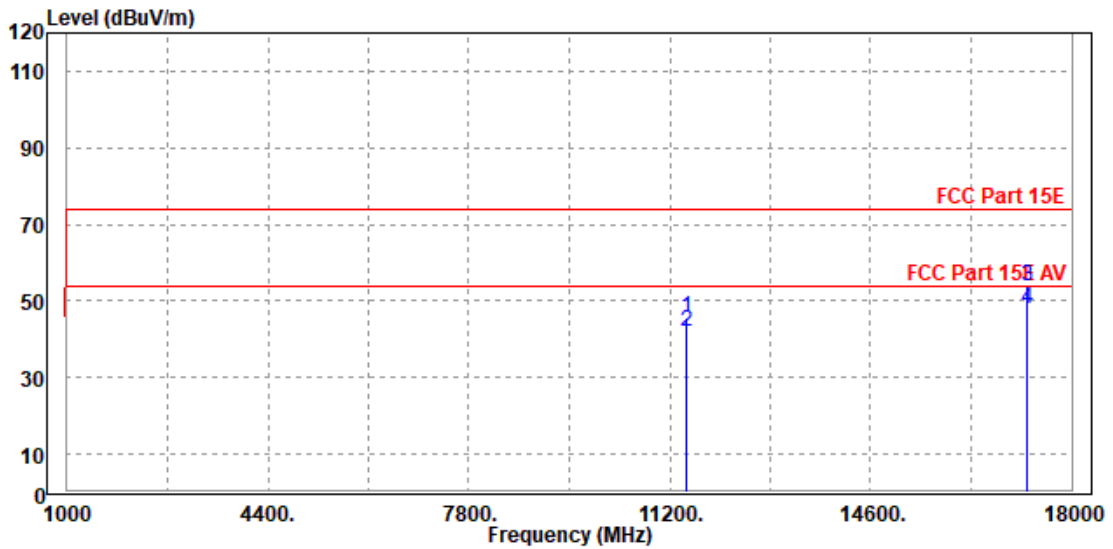






ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	11489.000	45.73	38.91	74.00	-28.27	6.82	Peak	Vertical
2	11489.000	41.90	35.08	54.00	-12.10	6.82	Average	Vertical
3	PK17235.000	53.90	38.87	74.00	-20.10	15.03	Peak	Vertical
4	PP17235.000	47.88	32.85	54.00	-6.12	15.03	Average	Vertical



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.



### 3.2 CONDUCTED EMISSION MEASUREMENT

#### 3.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBµV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Feb. 15,22	Feb. 14,23
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Mar. 04,22	Mar. 03,23

**NOTE:**

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

#### 3.2.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

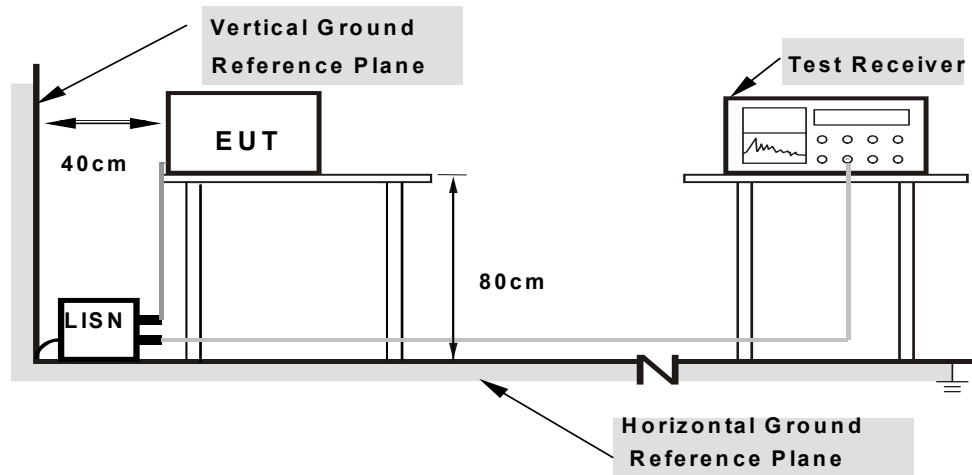
**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.



### 3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.2.5 TEST SETUP



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

For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 3.2.6 EUT OPERATING CONDITIONS

Same as 3.1.7.



### 3.2.7 TEST RESULTS

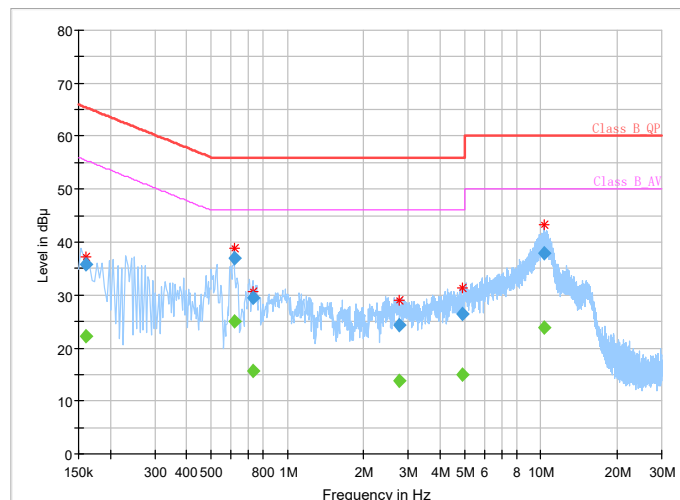
#### CONDUCTED WORST-CASE DATA:

<b>Frequency Range</b>	150KHz ~ 30MHz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9 kHz
<b>Input Power</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	24deg. C, 55%RH
<b>Tested By</b>	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.160000	---	22.16	55.46	33.30	L1	ON	9.7
0.160000	35.88	---	65.46	29.58	L1	ON	9.7
0.620000	---	25.15	46.00	20.85	L1	ON	9.7
0.620000	36.85	---	56.00	19.15	L1	ON	9.7
0.736000	---	15.67	46.00	30.33	L1	ON	9.7
0.736000	29.50	---	56.00	26.50	L1	ON	9.7
2.756000	---	13.88	46.00	32.12	L1	ON	9.7
2.756000	24.38	---	56.00	31.62	L1	ON	9.7
4.928000	---	15.01	46.00	30.99	L1	ON	9.7
4.928000	26.35	---	56.00	29.65	L1	ON	9.7
10.340000	---	23.94	50.00	26.06	L1	ON	9.8
10.340000	37.87	---	60.00	22.13	L1	ON	9.8

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Limit value - Emission level
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

Full Spectrum



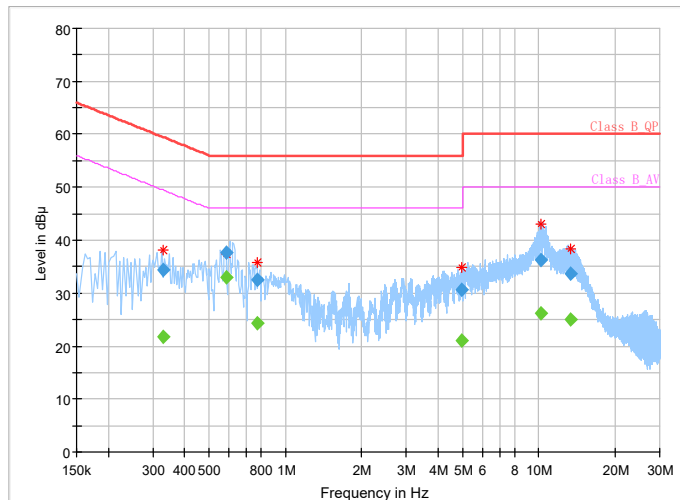


<b>Frequency Range</b>	150KHz ~ 30MHz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9 kHz
<b>Input Power</b>	120Vac, 60Hz	<b>Environmental Conditions</b>	24deg. C, 55%RH
<b>Tested By</b>	Carl Xie		

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.328000	---	21.85	49.50	27.65	N	ON	9.7
0.328000	34.33	---	59.50	25.17	N	ON	9.7
0.588000	---	33.08	46.00	12.92	N	ON	9.7
0.588000	37.77	---	56.00	18.23	N	ON	9.7
0.772000	---	24.31	46.00	21.69	N	ON	9.7
0.772000	32.63	---	56.00	23.37	N	ON	9.7
4.982000	---	21.00	46.00	25.00	N	ON	9.8
4.982000	30.60	---	56.00	25.40	N	ON	9.8
10.152000	---	26.10	50.00	23.90	N	ON	9.8
10.152000	36.28	---	60.00	23.72	N	ON	9.8
13.304000	---	24.95	50.00	25.05	N	ON	9.8
13.304000	33.58	---	60.00	26.42	N	ON	9.8

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Limit value - Emission level
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

Full Spectrum





### 3.3 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

#### 3.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\cong$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
	<b>B</b>	Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

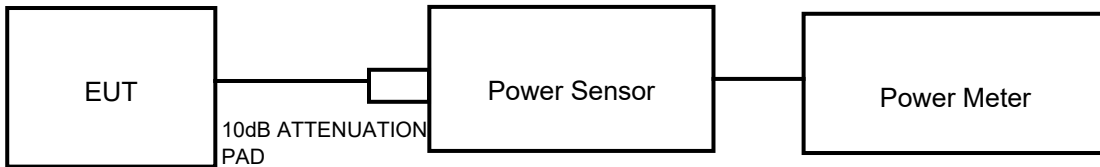
**NOTE:** Where B is the 26dB emission bandwidth in MHz.



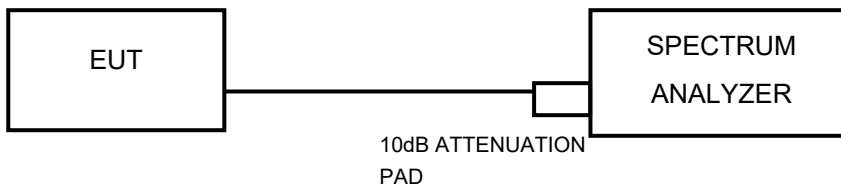
### 3.3.2 TEST SETUP

#### FOR POWER OUTPUT MEASUREMENT

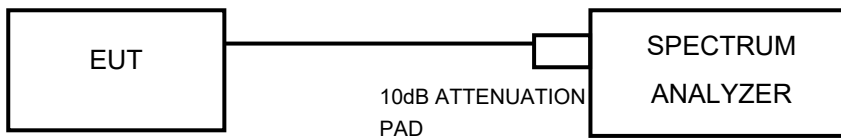
##### 802.11a, 802.11n/ac (20MHz), 802.11 n/ac (40MHz) TEST CONFIGURATION



##### 11ac TEST CONFIGURATION



#### FOR 26dB BANDWIDTH



### 3.3.3 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 22,22	Feb. 21,23
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 18,22	Feb. 17,23
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.15,22	May.14,23
Power Sensor	ANRITSU	MA2411B	1339352	May. 06,22	May. 05,23

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.



### 3.3.4 TEST PROCEDURE

#### FOR POWER MEASUREMENT

##### For 802.11a, 802.11 n/ac (20MHz), 802.11 n/ac (40MHz)

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

##### For 802.11ac (80MHz)

1. Measure the duty cycle,  $x$ , of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW  $\geq$  3 MHz.
5. Number of points in sweep  $\geq 2 \times \text{span} / \text{RBW}$ . (This ensures that bin-to-bin spacing is  $\leq \text{RBW}/2$ , so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Add  $10 \log (1/x)$ , where  $x$  is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10 \log (1/0.25) = 6 \text{ dB}$  if the duty cycle is 25%.





#### **FOR 99 PERCENT OCCUPIED BANDWIDTH**

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW  $\geq 3 \cdot$  RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

#### **FOR 26dB BANDWIDTH**

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### **FOR 6dB BANDWIDTH**

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



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### 3.3.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



**BUREAU** Test Report No.: W7L-P22090011RF03  
**VERITAS**

### 3.3.7 TEST RESULTS

Please Refer to Appendix A/B. Of this test report.

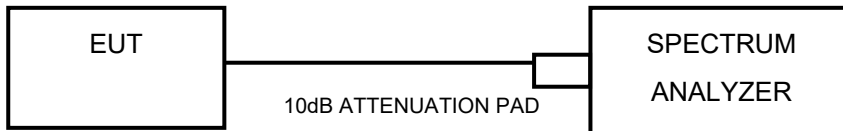


### 3.4 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

#### 3.4.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Client devices	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

#### 3.4.2 TEST SETUP



#### 3.4.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.



### 3.4.4 TEST PROCEDURES

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Add  $10 \log (1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
- 7) Record the max value

### 3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.4.6 EUT OPERATING CONDITIONS

Same as 3.1.7.



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### 3.4.7 TEST RESULTS

Please Refer to Appendix A/B. Of this test report.



### 3.5 AUTOMATICALLY DISCONTINUE TRANSMISSION

#### 3.5.1 LIMIT OF AUTOMATICALLY DISCONTINUE TRANSMISSION

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

#### 3.5.2 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

#### 3.5.3 TEST RESULT

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission



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## 4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).





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## 5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.



# 6 APPENDIX A EMISSION BANDWIDTH TEST RESULT

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.840	5167.120	5190.960	---	---
		5200	22.600	5188.920	5211.520	---	---
		5240	21.360	5229.040	5250.400	---	---
		5260	27.440	5245.600	5273.040	---	---
		5300	26.440	5287.160	5313.600	---	---
		5320	24.760	5308.360	5333.120	---	---
		5500	24.600	5486.320	5510.920	---	---
		5580	25.000	5567.160	5592.160	---	---
		5700	24.760	5687.480	5712.240	---	---
		5745	25.320	5730.240	5755.560	---	---
		5785	25.280	5773.200	5798.480	---	---
		5825	24.200	5813.280	5837.480	---	---
11N20SISO	Ant1	5180	26.280	5166.520	5192.800	---	---
		5200	30.120	5184.800	5214.920	---	---
		5240	28.960	5226.560	5255.520	---	---
		5260	24.520	5247.760	5272.280	---	---
		5300	23.720	5288.480	5312.200	---	---
		5320	25.360	5308.320	5333.680	---	---
		5500	27.840	5487.920	5515.760	---	---
		5580	26.080	5568.240	5594.320	---	---
		5700	31.320	5684.040	5715.360	---	---
		5745	28.000	5732.360	5760.360	---	---
		5785	27.360	5771.000	5798.360	---	---
		5825	29.200	5810.880	5840.080	---	---
11N40SISO	Ant1	5190	43.600	5170.240	5213.840	---	---
		5230	46.720	5208.400	5255.120	---	---
		5270	40.240	5250.400	5290.640	---	---
		5310	44.240	5286.400	5330.640	---	---
		5510	42.480	5488.160	5530.640	---	---
		5550	40.560	5529.200	5569.760	---	---
		5670	40.080	5650.240	5690.320	---	---



		5755	42.160	5732.760	5774.920	---	---
		5795	43.200	5773.960	5817.160	---	---
11AC20SISO	Ant1	5180	29.160	5164.200	5193.360	---	---
		5200	27.200	5187.040	5214.240	---	---
		5240	30.320	5226.880	5257.200	---	---
		5260	29.800	5243.520	5273.320	---	---
		5300	26.680	5287.000	5313.680	---	---
		5320	25.720	5307.200	5332.920	---	---
		5500	28.400	5486.320	5514.720	---	---
		5580	32.360	5563.160	5595.520	---	---
		5700	29.240	5684.480	5713.720	---	---
		5745	29.960	5728.560	5758.520	---	---
		5785	28.080	5771.160	5799.240	---	---
		5825	26.920	5811.800	5838.720	---	---
		11AC40SISO	Ant1	5190	45.520	5167.200	5212.720
5230	47.840			5208.080	5255.920	---	---
5270	46.480			5245.920	5292.400	---	---
5310	46.400			5287.440	5333.840	---	---
5510	41.760			5487.920	5529.680	---	---
5550	45.120			5524.480	5569.600	---	---
5670	42.480			5649.760	5692.240	---	---
5755	49.120			5730.760	5779.880	---	---
5795	46.080			5773.400	5819.480	---	---
11AC80SISO	Ant1	5210	83.520	5169.840	5253.360	---	---
		5290	83.520	5250.640	5334.160	---	---
		5530	84.960	5488.080	5573.040	---	---
		5610	82.400	5568.560	5650.960	---	---
		5775	83.040	5734.520	5817.560	---	---

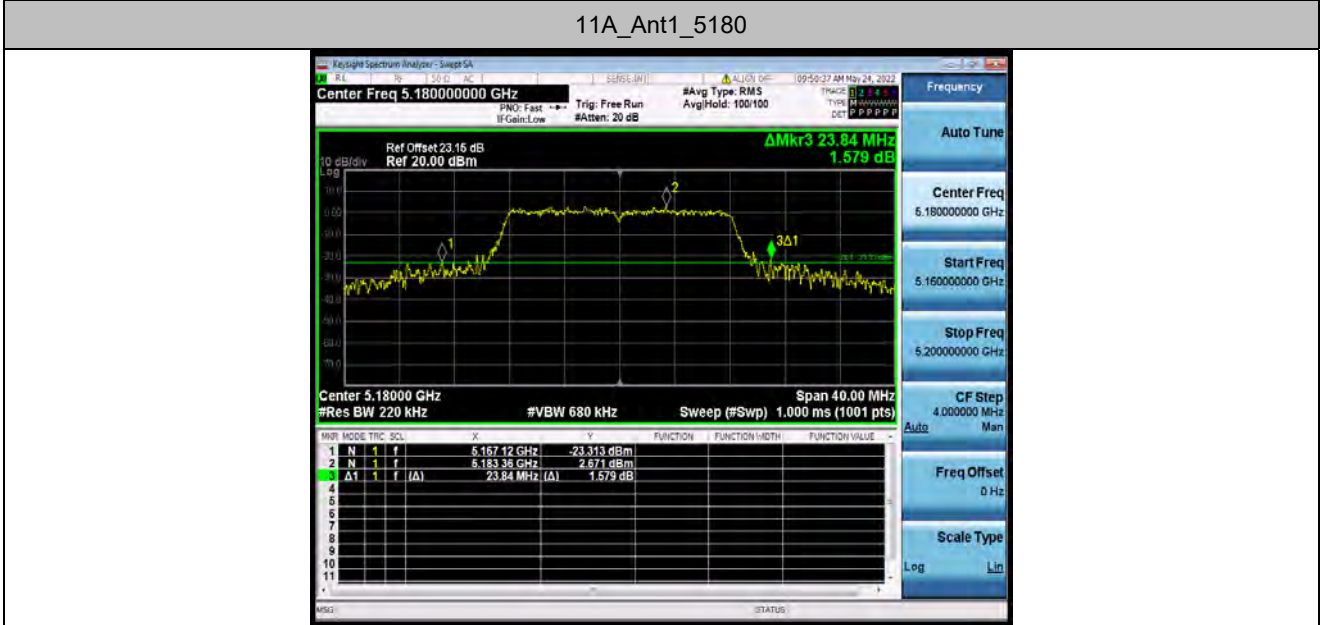


BUREAU VERITAS

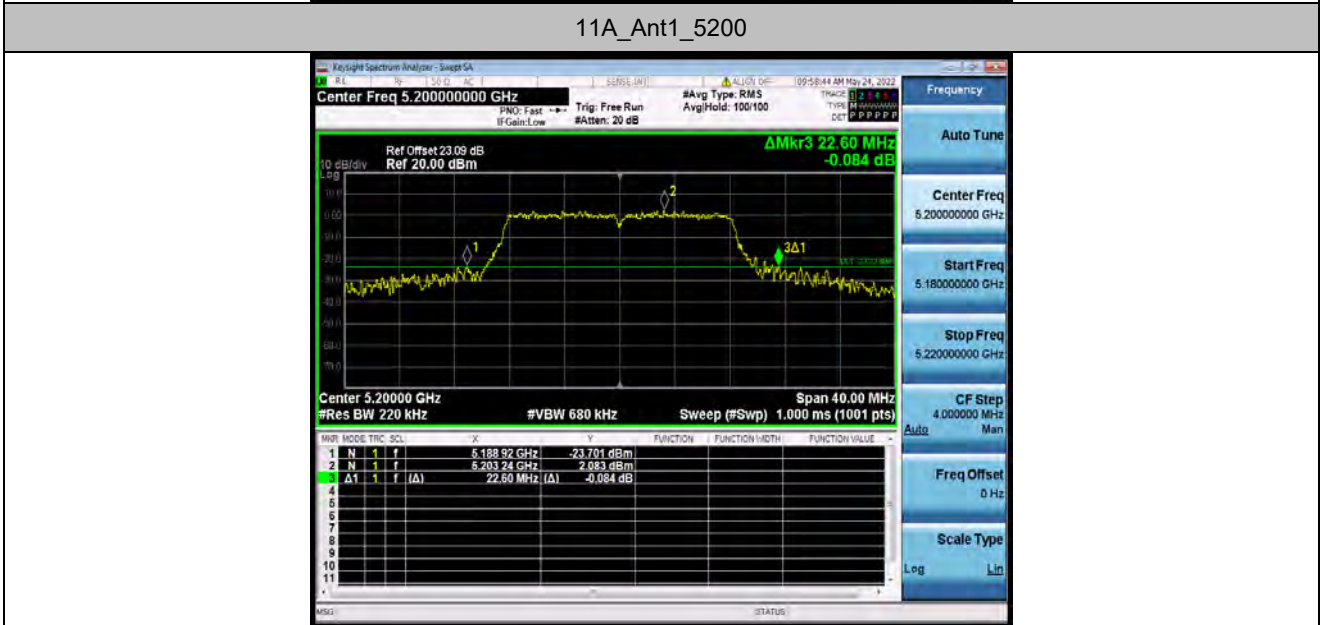
Test Report No.: W7L-P22090011RF03

### TEST GRAPHS

11A\_Ant1\_5180



11A\_Ant1\_5200

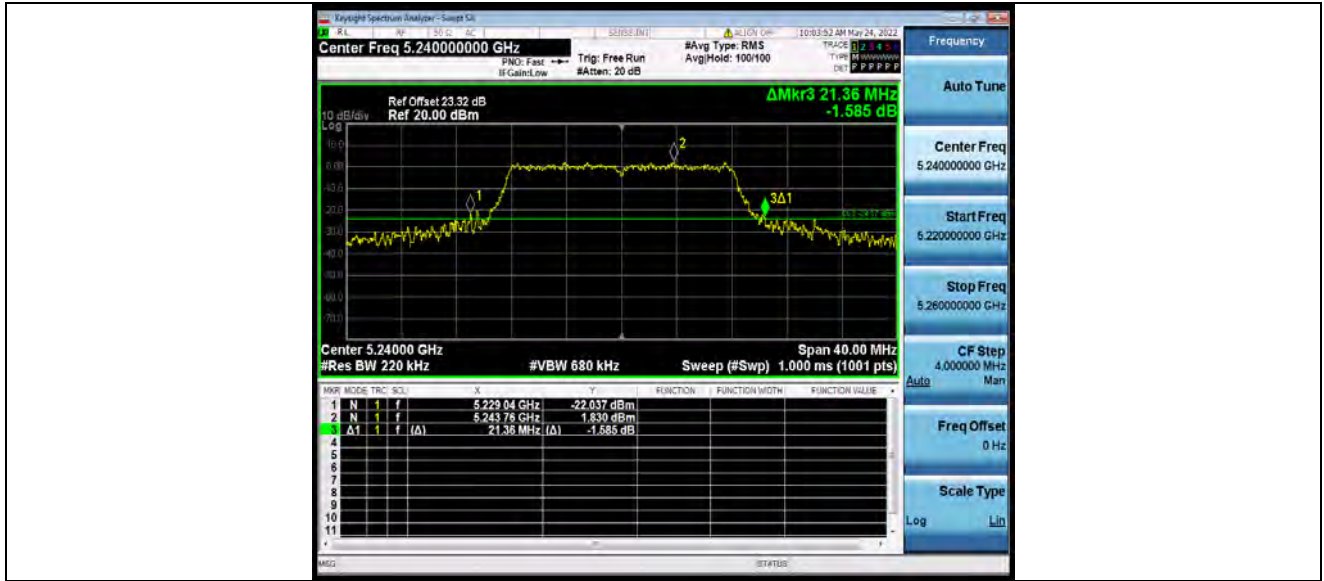


11A\_Ant1\_5240



BUREAU VERITAS

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11A\_Ant1\_5260



11A\_Ant1\_5300

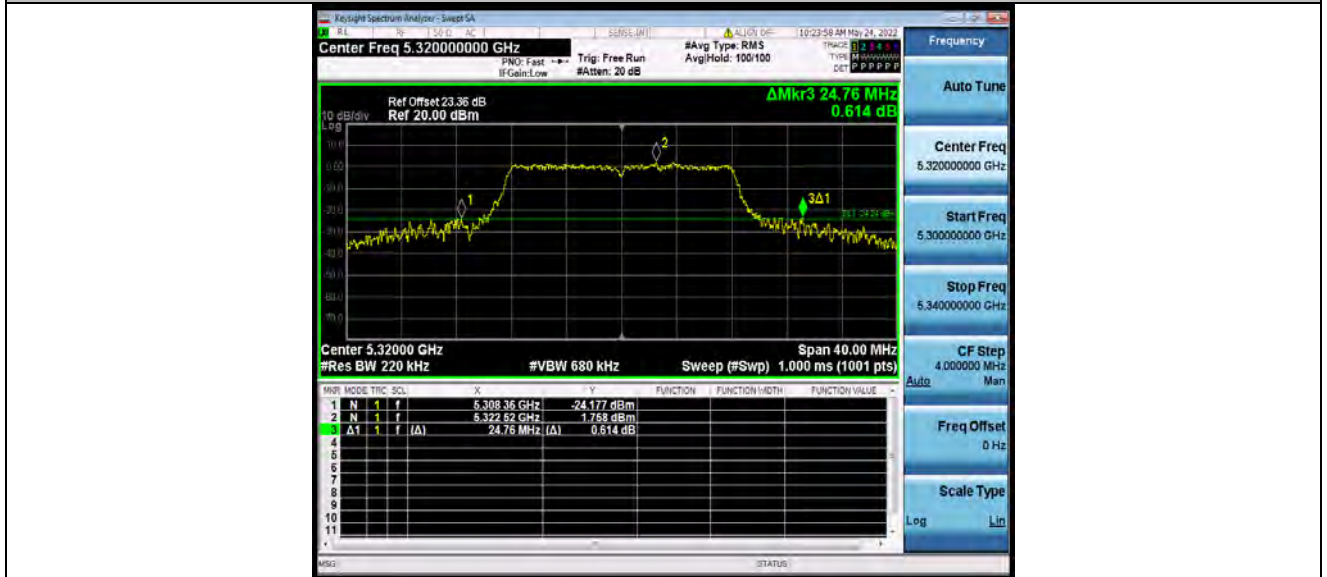


BUREAU VERITAS

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11A\_Ant1\_5320

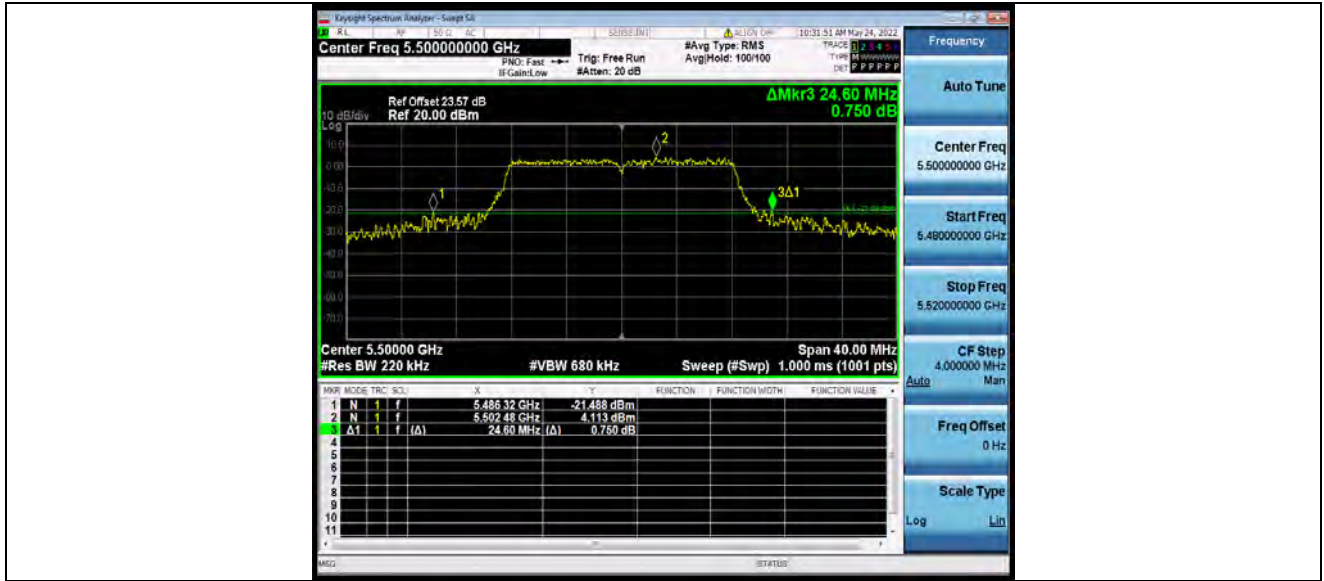


11A\_Ant1\_5500

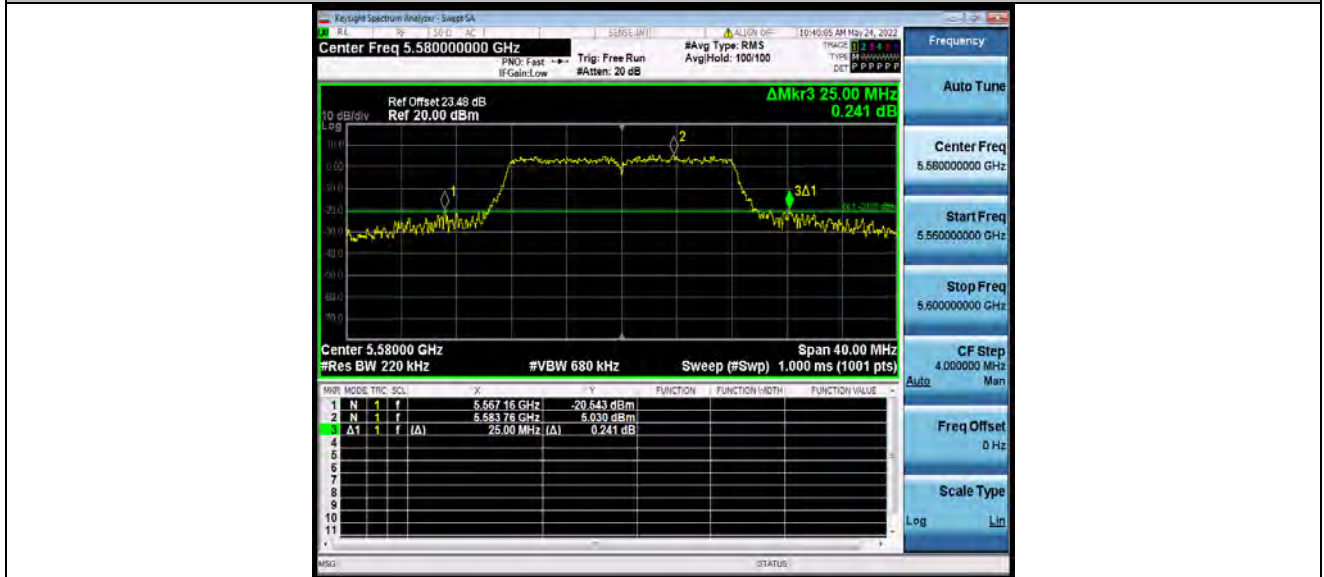


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5580



11A\_Ant1\_5700



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5745



11A\_Ant1\_5785



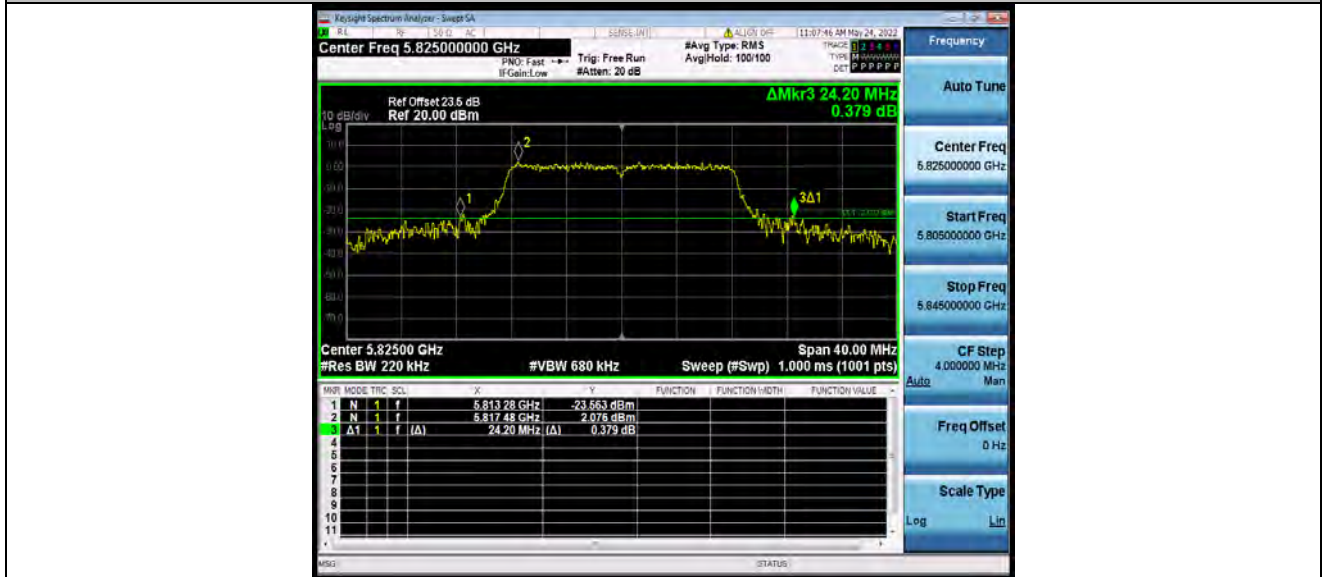


**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5825

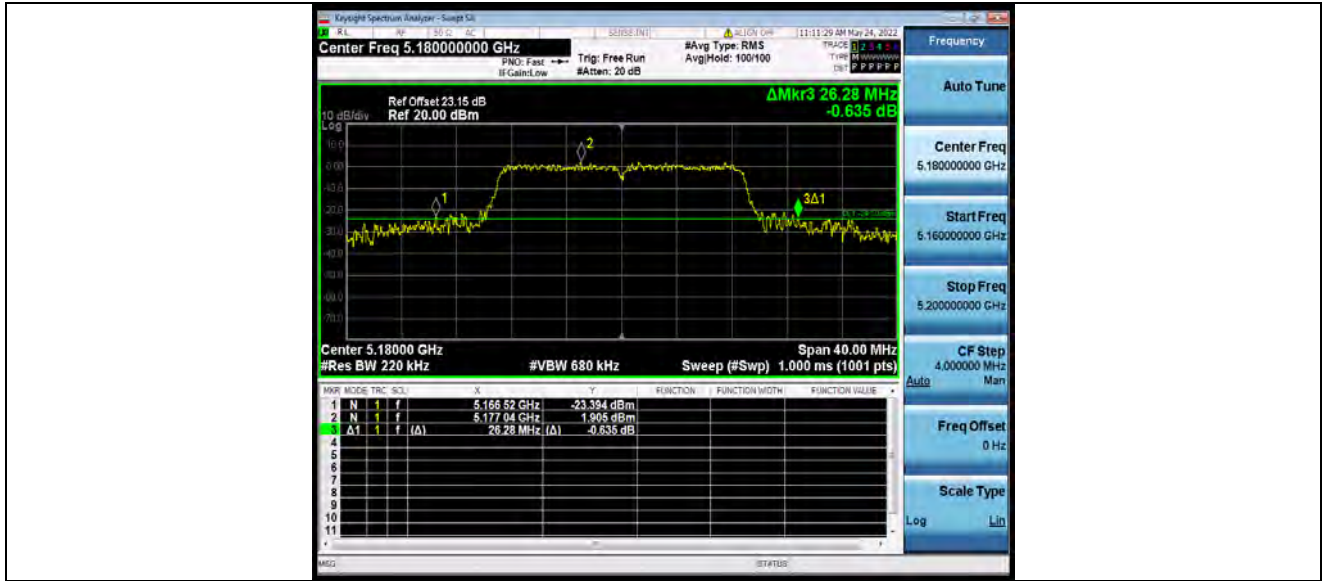


11N20SISO\_Ant1\_5180

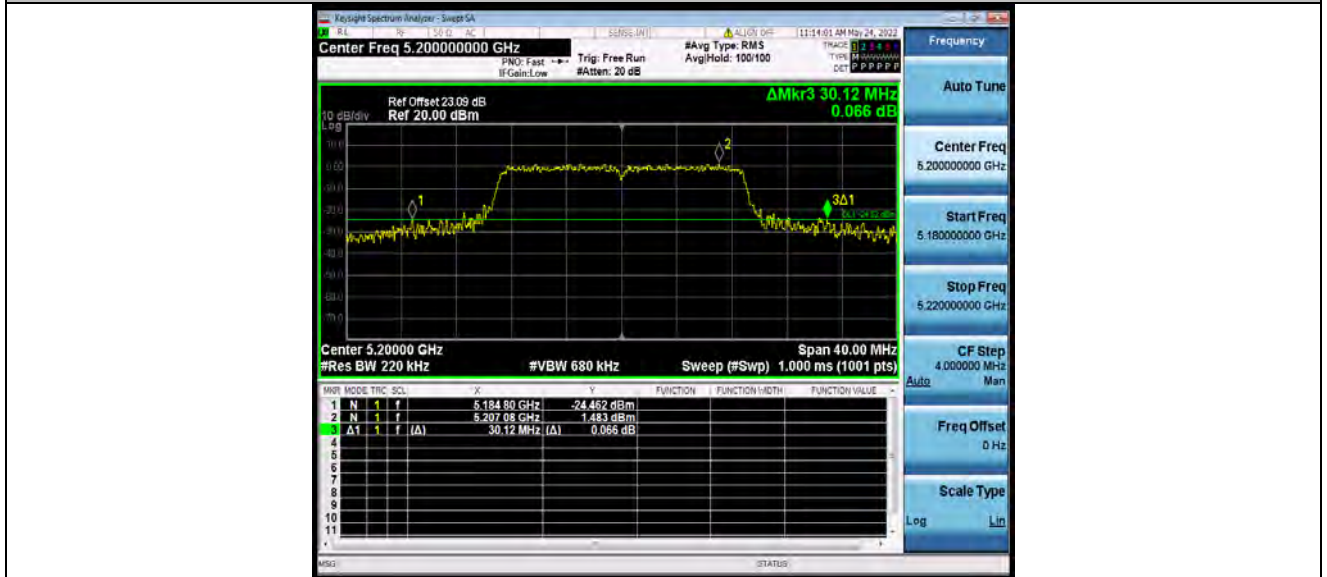


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5200

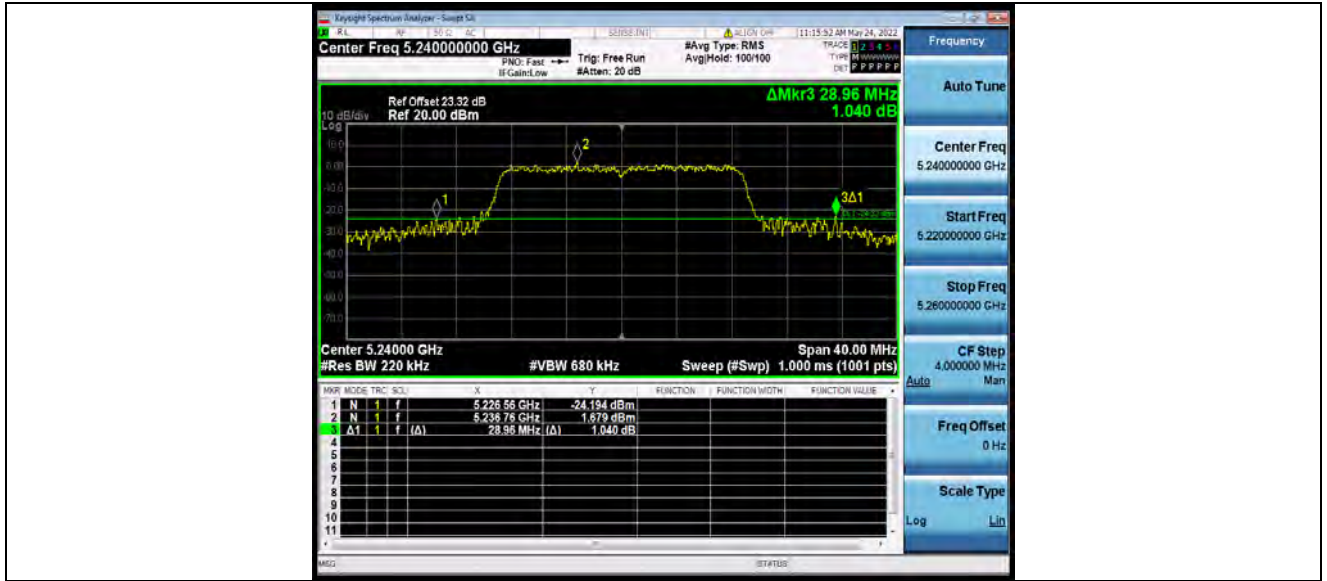


11N20SISO\_Ant1\_5240

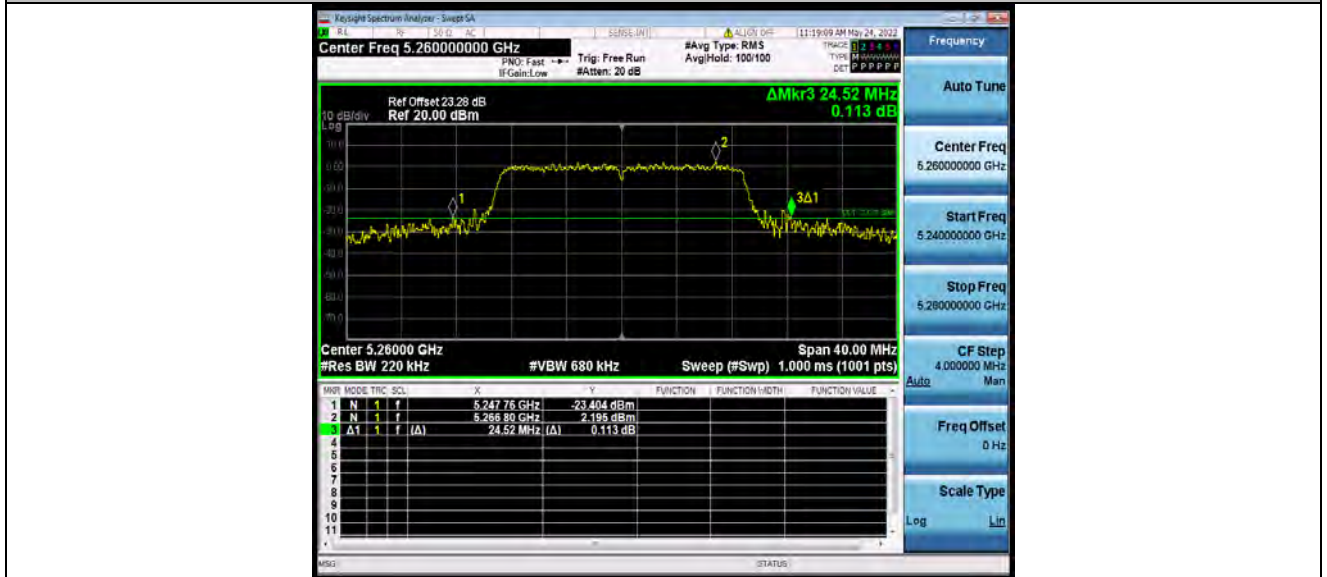


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5260

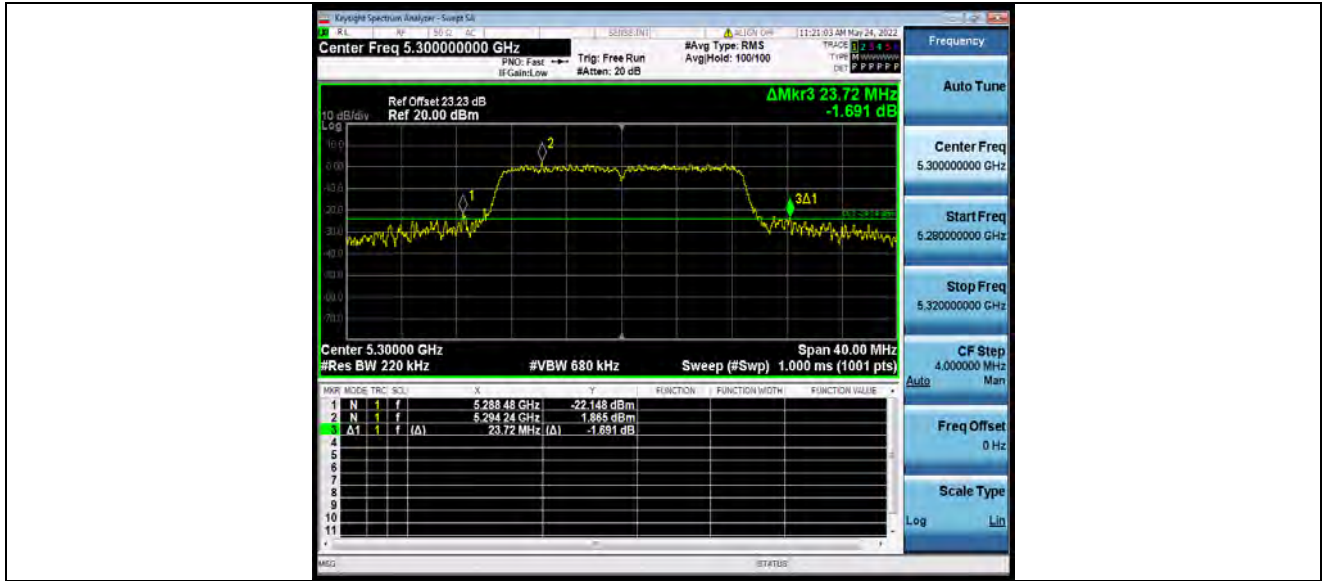


11N20SISO\_Ant1\_5300



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5320



11N20SISO\_Ant1\_5500



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5580

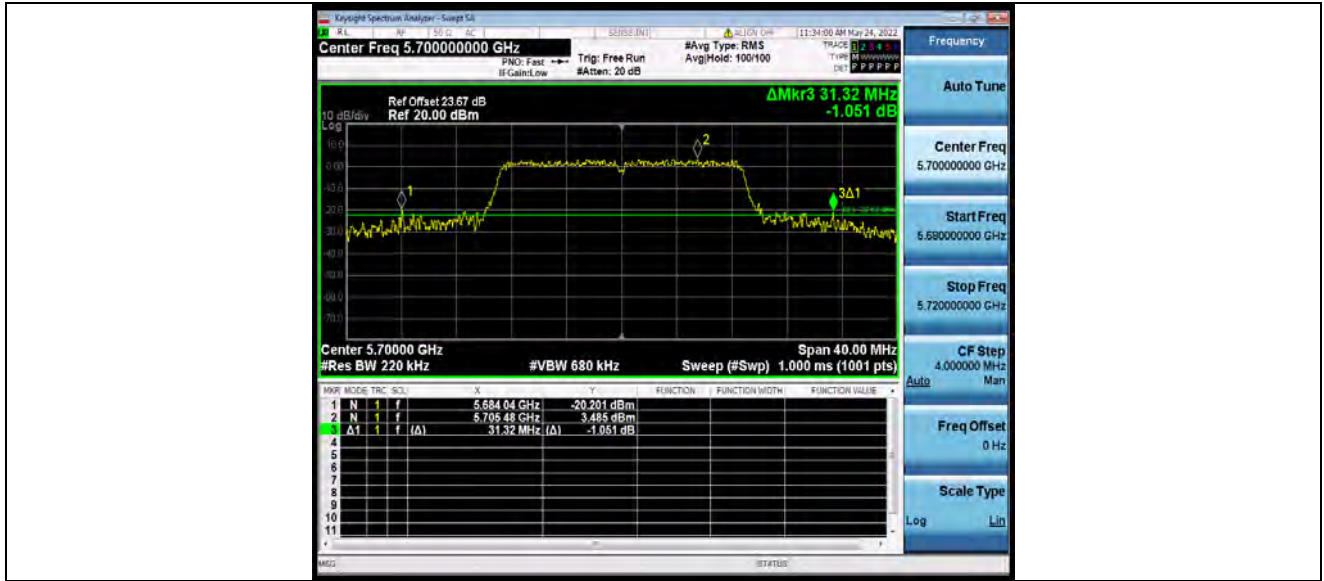


11N20SISO\_Ant1\_5700



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5745

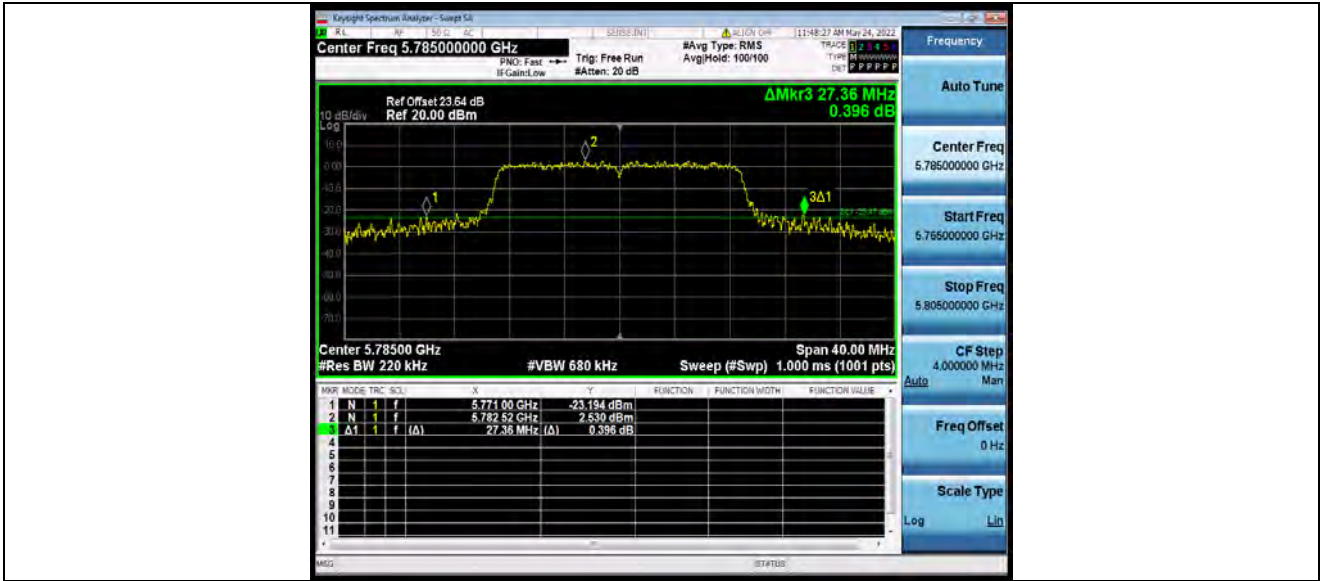


11N20SISO\_Ant1\_5785



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5825



11N40SISO\_Ant1\_5190



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5230



11N40SISO\_Ant1\_5270





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5310

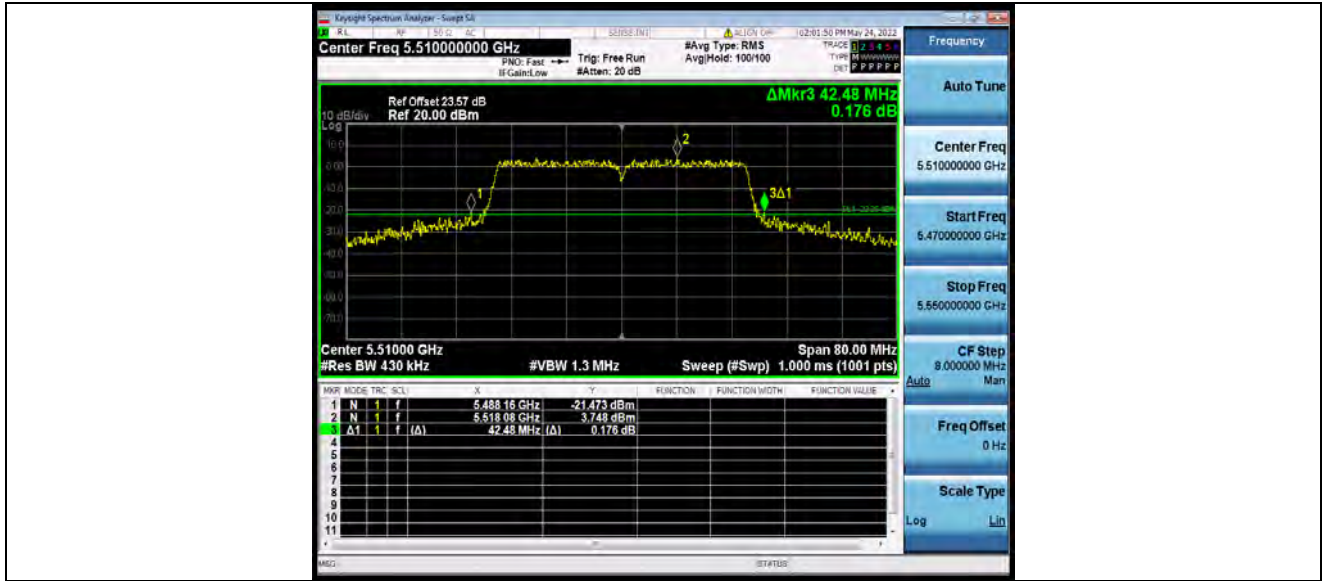


11N40SISO\_Ant1\_5510



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5550

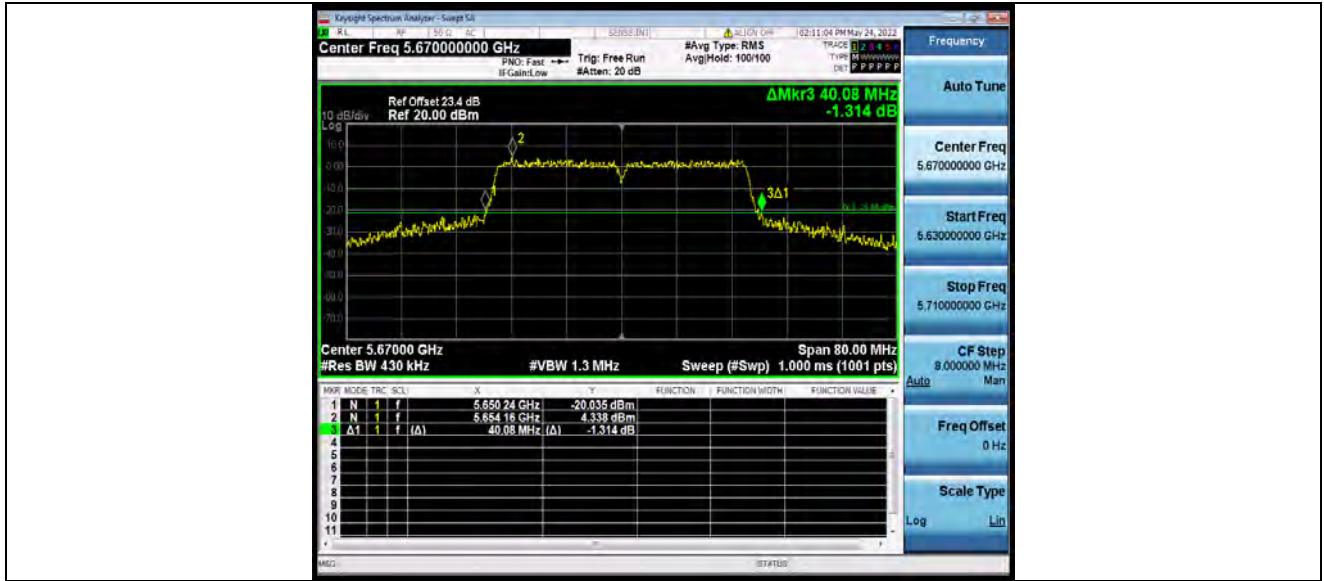


11N40SISO\_Ant1\_5670



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5755



11N40SISO\_Ant1\_5795



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5180



11AC20SISO\_Ant1\_5200

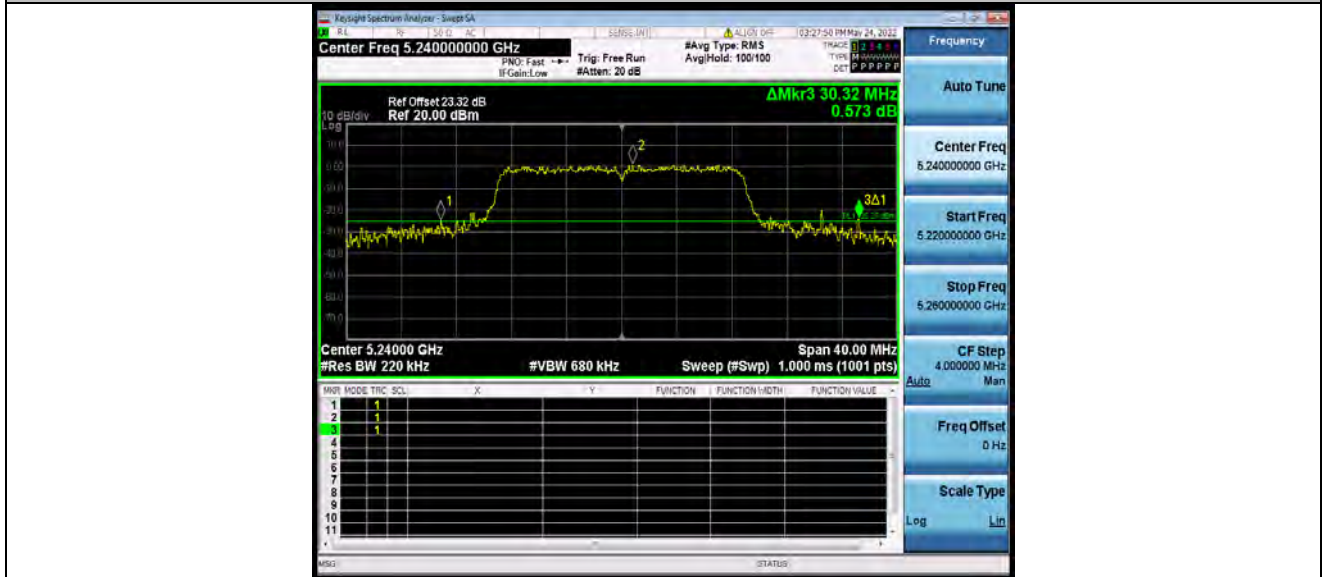


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5240



11AC20SISO\_Ant1\_5260

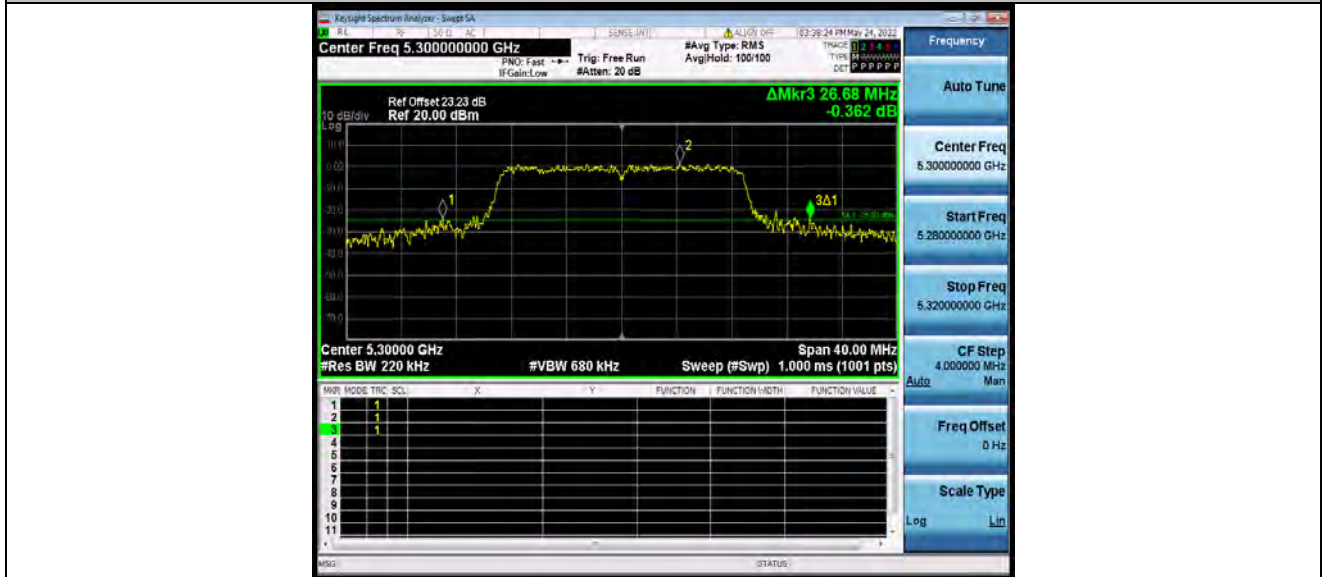


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5300



11AC20SISO\_Ant1\_5320



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5500



11AC20SISO\_Ant1\_5580



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5700



11AC20SISO\_Ant1\_5745





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5785



11AC20SISO\_Ant1\_5825

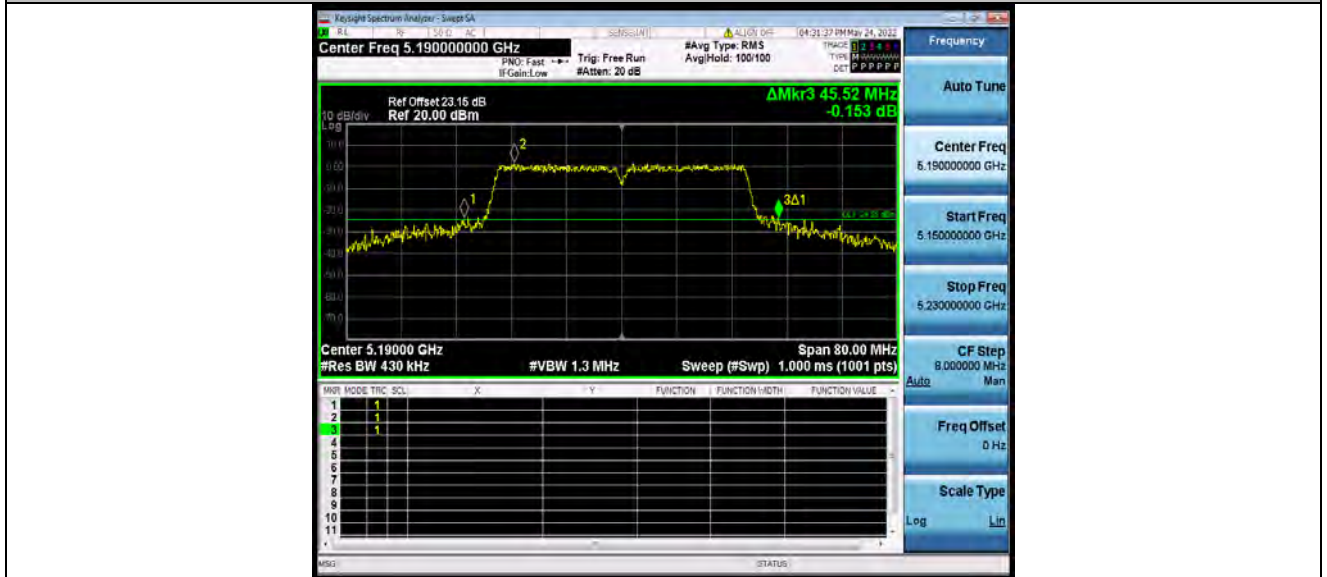


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230

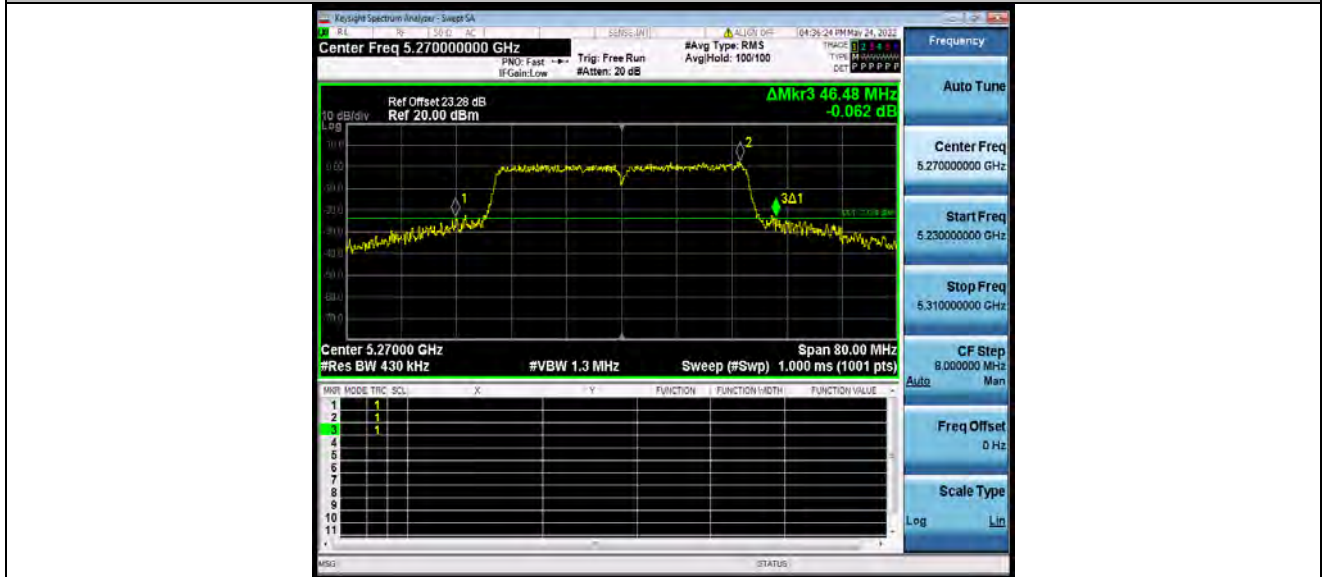


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5270



11AC40SISO\_Ant1\_5310



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5510



11AC40SISO\_Ant1\_5550



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5670



11AC40SISO\_Ant1\_5755



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5795



11AC80SISO\_Ant1\_5210



**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03



11AC80SISO\_Ant1\_5290



11AC80SISO\_Ant1\_5530



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC80SISO\_Ant1\_5610



11AC80SISO\_Ant1\_5775





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03





### OCCUPIED CHANNEL BANDWIDTH TEST RESULT

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.894	5171.518	5188.412	---	---
		5200	16.876	5191.555	5208.431	---	---
		5240	16.951	5231.513	5248.464	---	---
		5260	16.913	5251.558	5268.471	---	---
		5300	16.930	5291.508	5308.438	---	---
		5320	16.837	5311.567	5328.404	---	---
		5500	16.882	5491.536	5508.418	---	---
		5580	16.937	5571.525	5588.462	---	---
		5700	16.982	5691.510	5708.492	---	---
		5745	16.828	5736.568	5753.396	---	---
		5785	16.930	5776.526	5793.456	---	---
		5825	16.947	5816.535	5833.482	---	---
11N20SISO	Ant1	5180	17.913	5171.037	5188.950	---	---
		5200	17.855	5191.076	5208.931	---	---
		5240	17.841	5231.095	5248.936	---	---
		5260	17.855	5251.071	5268.926	---	---
		5300	17.813	5291.113	5308.926	---	---
		5320	17.830	5311.090	5328.920	---	---
		5500	17.856	5491.079	5508.935	---	---
		5580	17.883	5571.043	5588.926	---	---
		5700	17.850	5691.066	5708.916	---	---
		5745	17.838	5736.078	5753.916	---	---
		5785	17.829	5776.079	5793.908	---	---
		5825	17.814	5816.094	5833.908	---	---
11N40SISO	Ant1	5190	36.464	5171.784	5208.248	---	---
		5230	36.420	5211.853	5248.273	---	---
		5270	36.437	5251.840	5288.277	---	---
		5310	36.455	5291.861	5328.316	---	---
		5510	36.440	5491.793	5528.233	---	---
		5550	36.415	5531.759	5568.174	---	---
		5670	36.441	5651.819	5688.260	---	---



		5755	36.498	5736.783	5773.281	---	---
		5795	36.428	5776.813	5813.241	---	---
11AC20SISO	Ant1	5180	17.856	5171.073	5188.929	---	---
		5200	17.875	5191.097	5208.972	---	---
		5240	17.875	5231.065	5248.940	---	---
		5260	17.878	5251.059	5268.937	---	---
		5300	17.878	5291.075	5308.953	---	---
		5320	17.802	5311.106	5328.908	---	---
		5500	17.799	5491.087	5508.886	---	---
		5580	17.864	5571.046	5588.910	---	---
		5700	17.908	5691.054	5708.962	---	---
		5745	17.836	5736.084	5753.920	---	---
		5785	17.948	5776.006	5793.954	---	---
		5825	17.883	5816.045	5833.928	---	---
		11AC40SISO	Ant1	5190	36.388	5171.807	5208.195
5230	36.465			5211.811	5248.276	---	---
5270	36.428			5251.852	5288.280	---	---
5310	36.507			5291.761	5328.268	---	---
5510	36.404			5491.802	5528.206	---	---
5550	36.446			5531.781	5568.227	---	---
5670	36.524			5651.715	5688.239	---	---
5755	36.412			5736.853	5773.265	---	---
5795	36.361			5776.833	5813.194	---	---
11AC80SISO	Ant1	5210	75.940	5172.193	5248.133	---	---
		5290	75.825	5252.338	5328.163	---	---
		5530	75.887	5492.064	5567.951	---	---
		5610	75.897	5571.976	5647.873	---	---
		5775	75.914	5737.154	5813.068	---	---



### TEST GRAPHS





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5260



11A\_Ant1\_5300



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5320



11A\_Ant1\_5500



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5580



11A\_Ant1\_5700



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5745



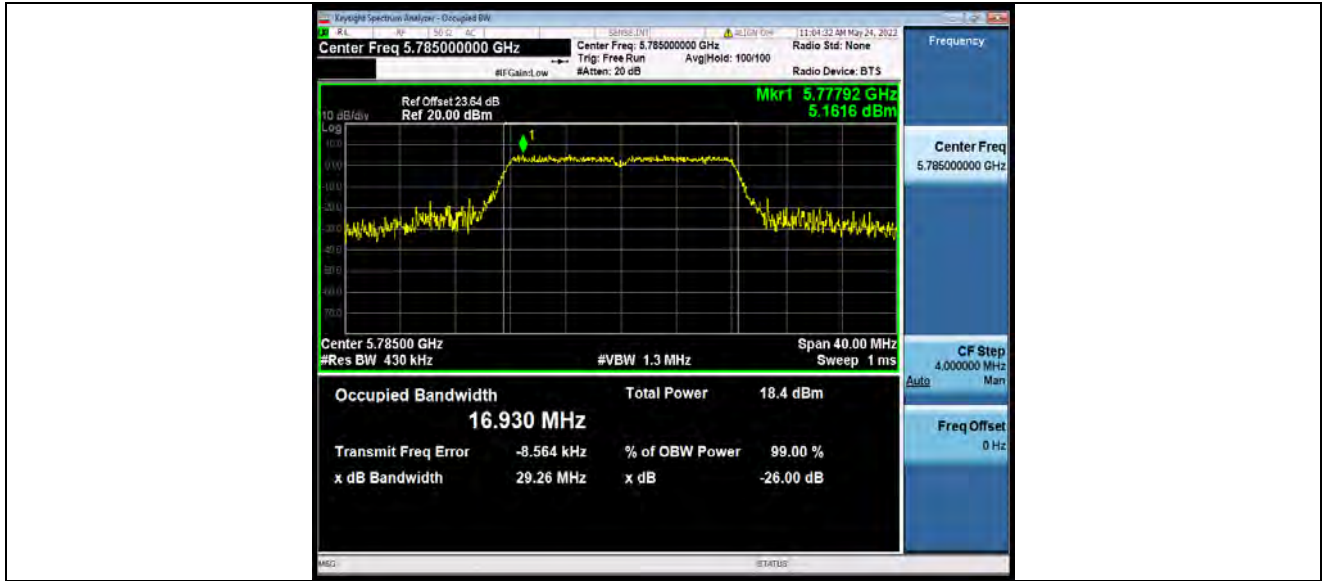
11A\_Ant1\_5785





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5825



11N20SISO\_Ant1\_5180



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5200

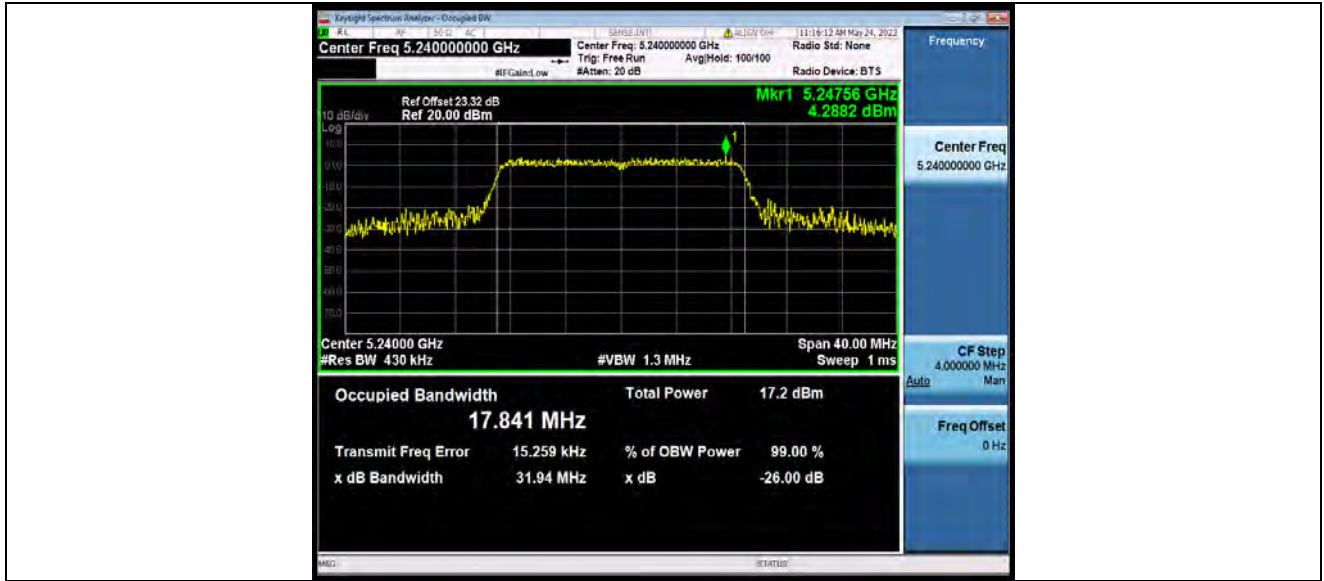


11N20SISO\_Ant1\_5240



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5260

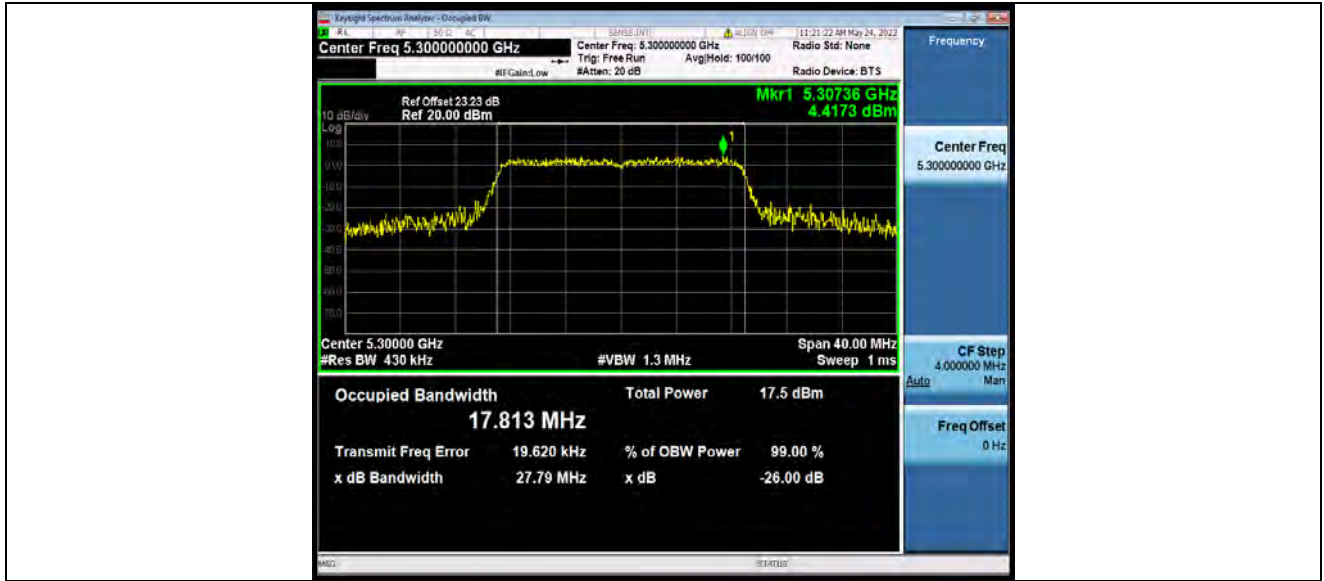


11N20SISO\_Ant1\_5300



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5320



11N20SISO\_Ant1\_5500



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5580



11N20SISO\_Ant1\_5700



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5745

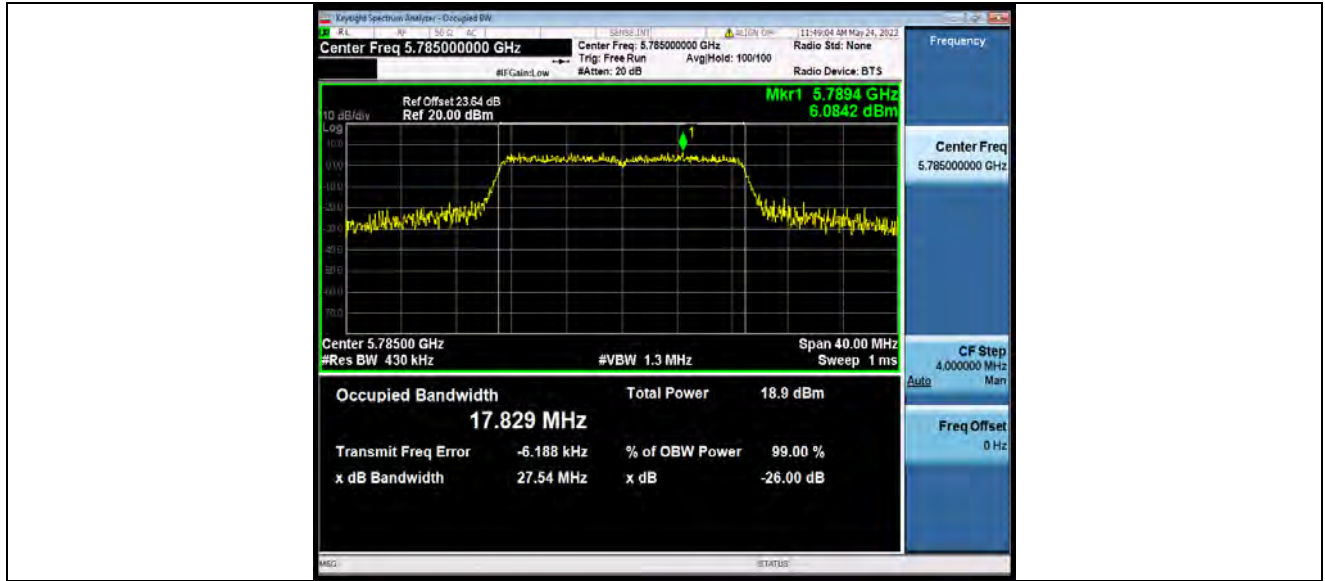


11N20SISO\_Ant1\_5785



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5825



11N40SISO\_Ant1\_5190



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5230



11N40SISO\_Ant1\_5270





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



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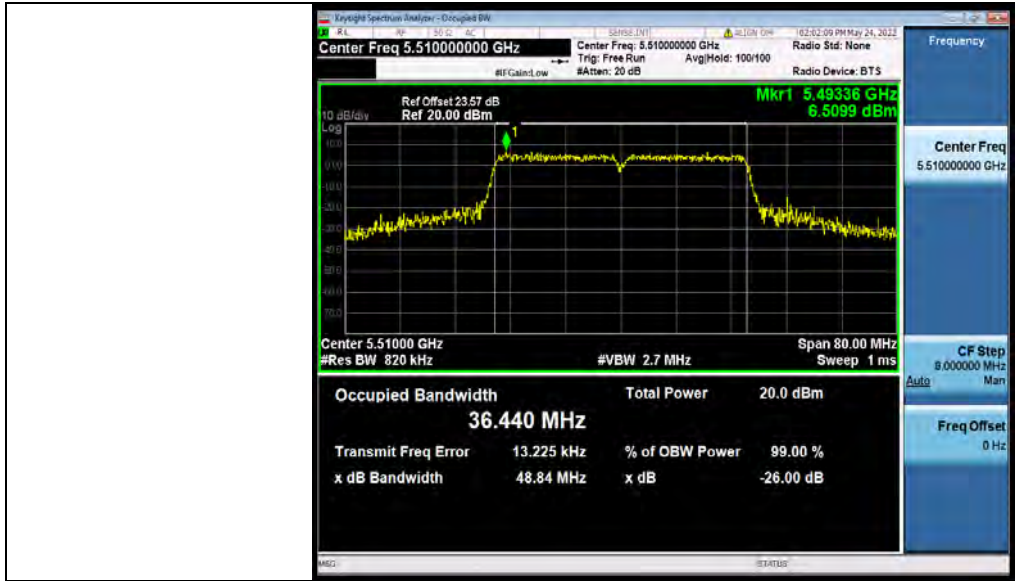


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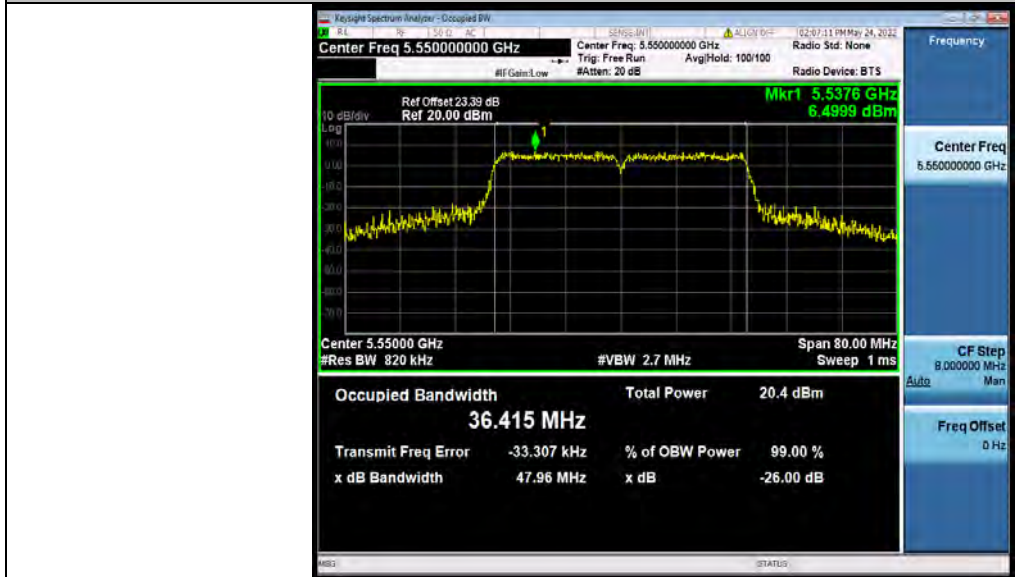


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5550

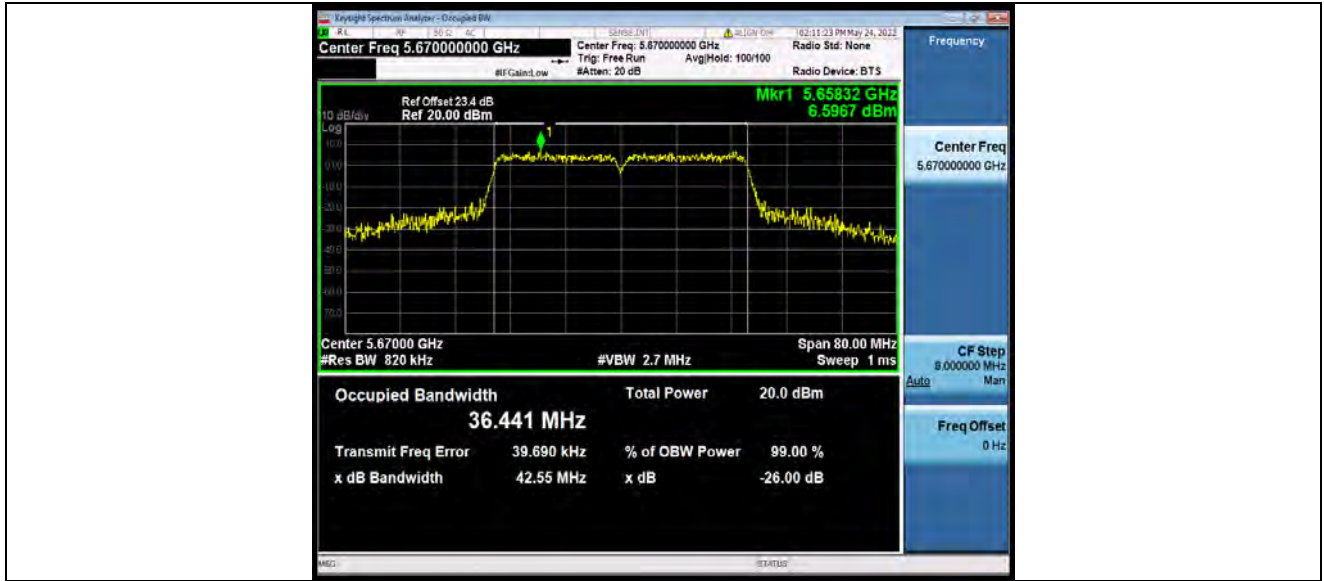


11N40SISO\_Ant1\_5670



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5755

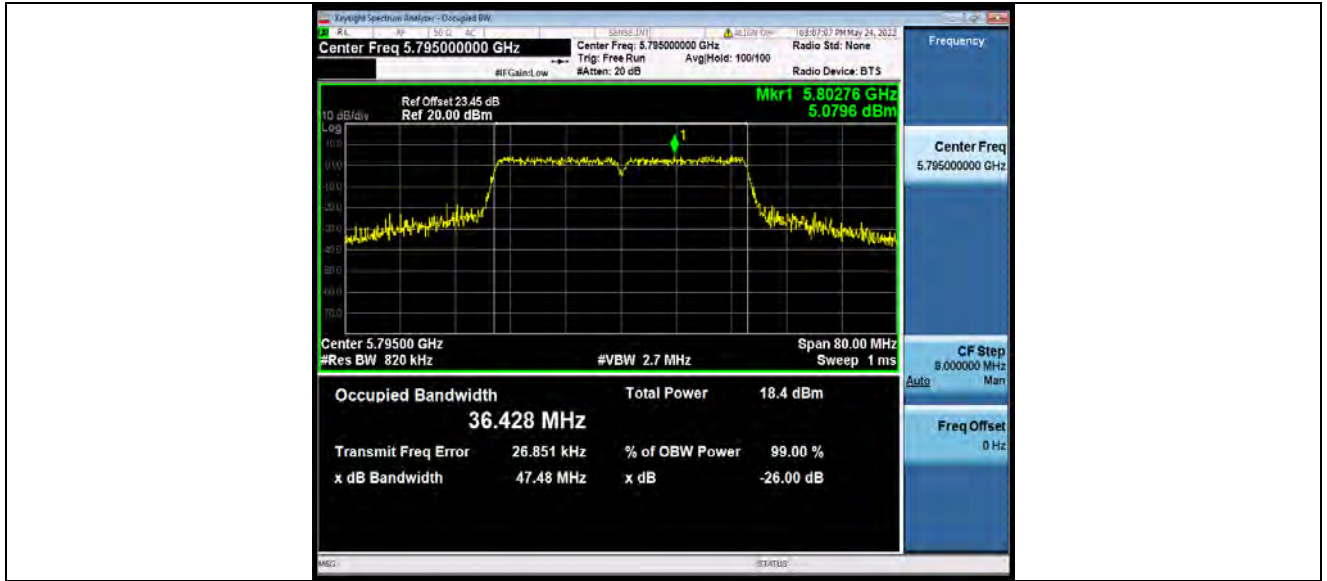


11N40SISO\_Ant1\_5795



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5180



11AC20SISO\_Ant1\_5200



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5240



11AC20SISO\_Ant1\_5260



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5300



11AC20SISO\_Ant1\_5320

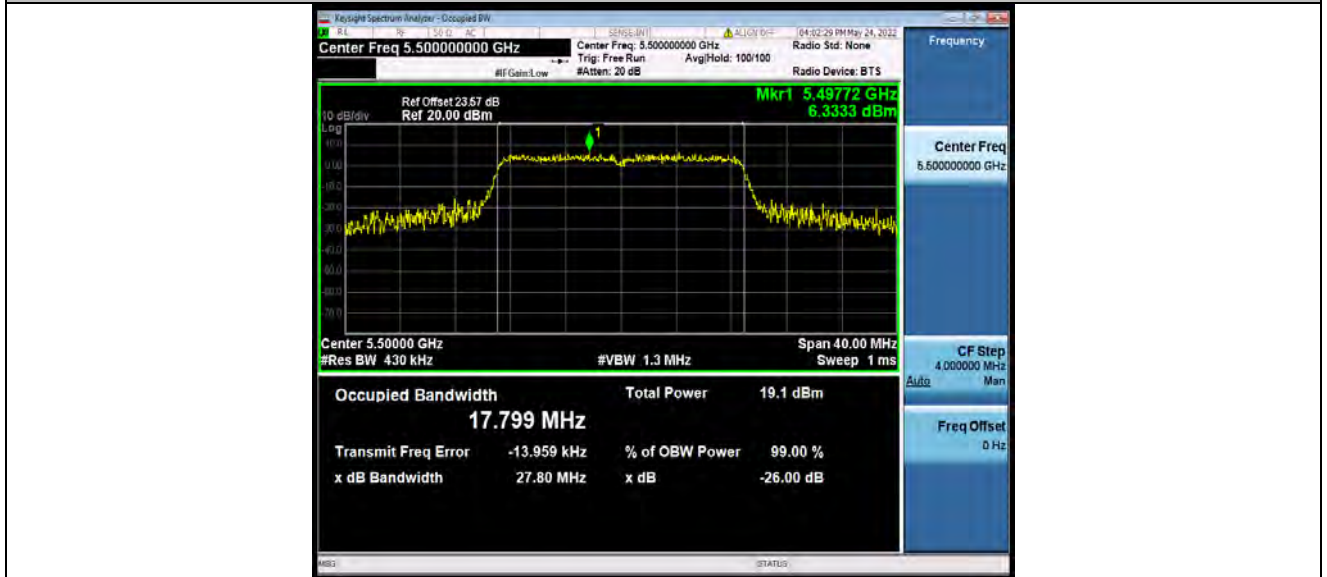


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



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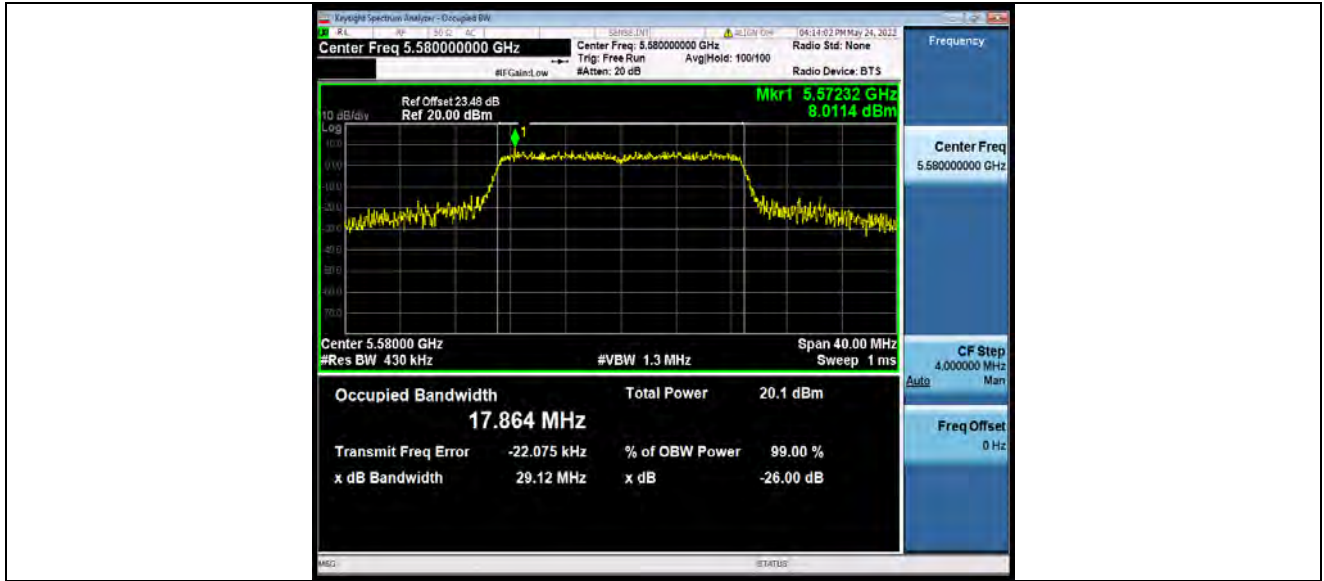


11AC20SISO\_Ant1\_5580



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5700



11AC20SISO\_Ant1\_5745





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5785

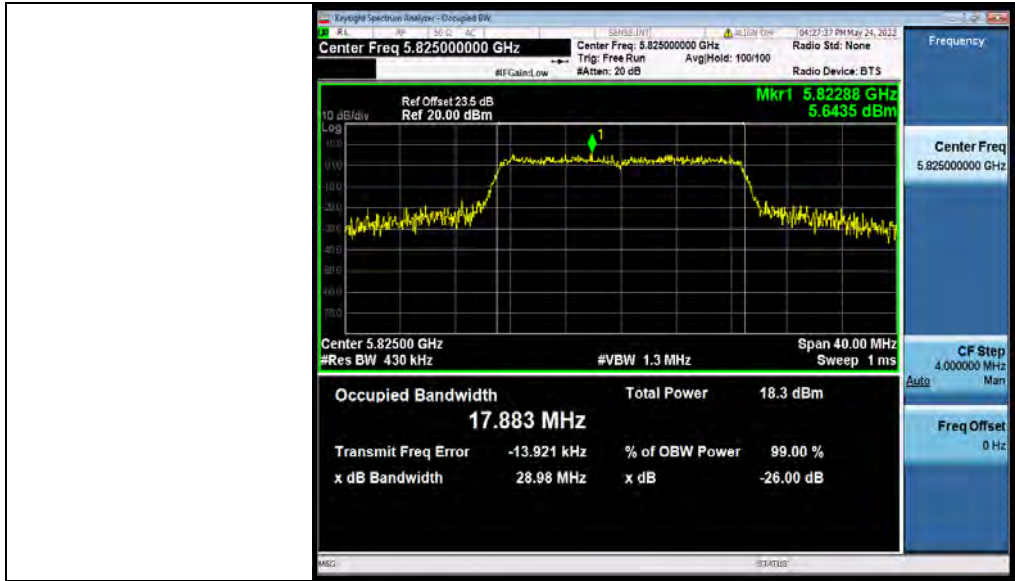


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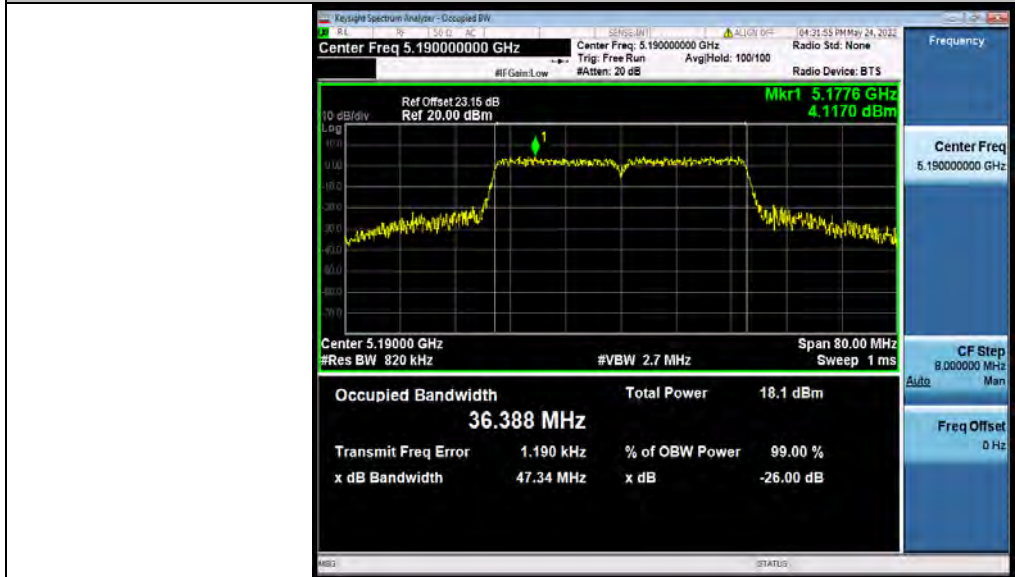


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5190



11AC40SISO\_Ant1\_5230



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5270



11AC40SISO\_Ant1\_5310



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5510



11AC40SISO\_Ant1\_5550



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5670



11AC40SISO\_Ant1\_5755

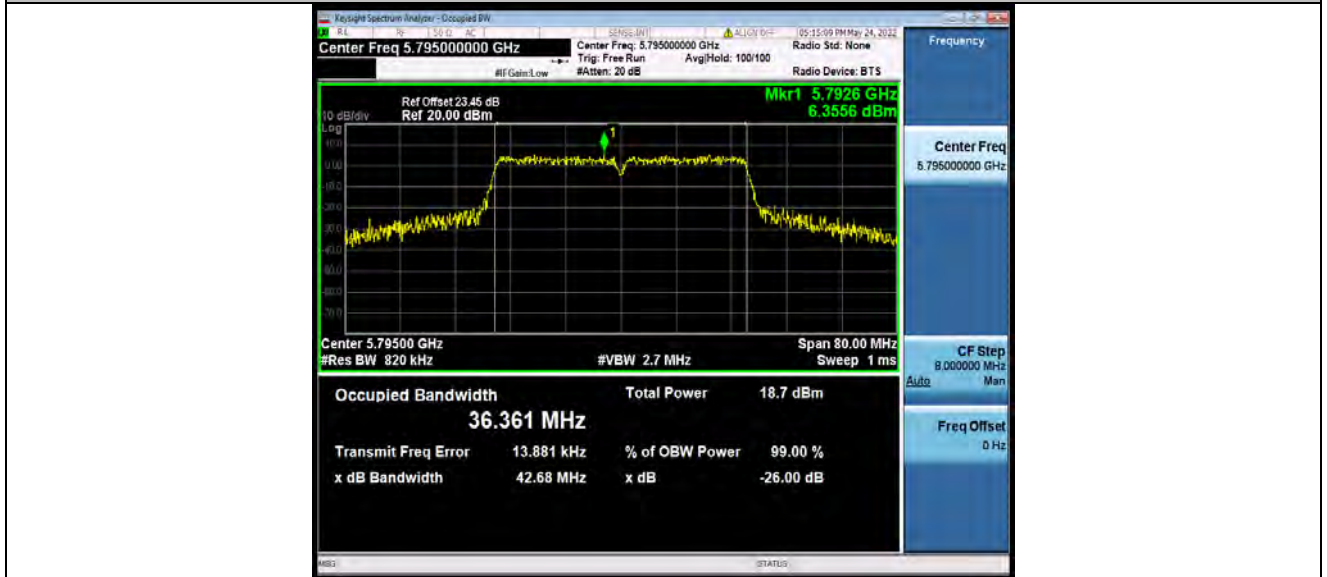


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5795



11AC80SISO\_Ant1\_5210



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC80SISO\_Ant1\_5290



11AC80SISO\_Ant1\_5530



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC80SISO\_Ant1\_5610



11AC80SISO\_Ant1\_5775





BUREAU VERITAS

Test Report No.: W7L-P22090011RF03





### MIN EMISSION BANDWIDTH

### TEST RESULT B4

TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.360	5736.800	5753.160	0.5	PASS
		5785	16.360	5776.800	5793.160	0.5	PASS
		5825	16.360	5816.800	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.360	5736.240	5753.600	0.5	PASS
		5785	17.160	5776.480	5793.640	0.5	PASS
		5825	17.400	5816.320	5833.720	0.5	PASS
11N40SISO	Ant1	5755	36.320	5736.920	5773.240	0.5	PASS
		5795	36.240	5777.000	5813.240	0.5	PASS
11AC20SISO	Ant1	5745	17.320	5736.320	5753.640	0.5	PASS
		5785	17.440	5776.200	5793.640	0.5	PASS
		5825	17.240	5816.360	5833.600	0.5	PASS
11AC40SISO	Ant1	5755	36.240	5736.920	5773.160	0.5	PASS
		5795	36.400	5776.760	5813.160	0.5	PASS
11AC80SISO	Ant1	5775	75.520	5737.240	5812.760	0.5	PASS

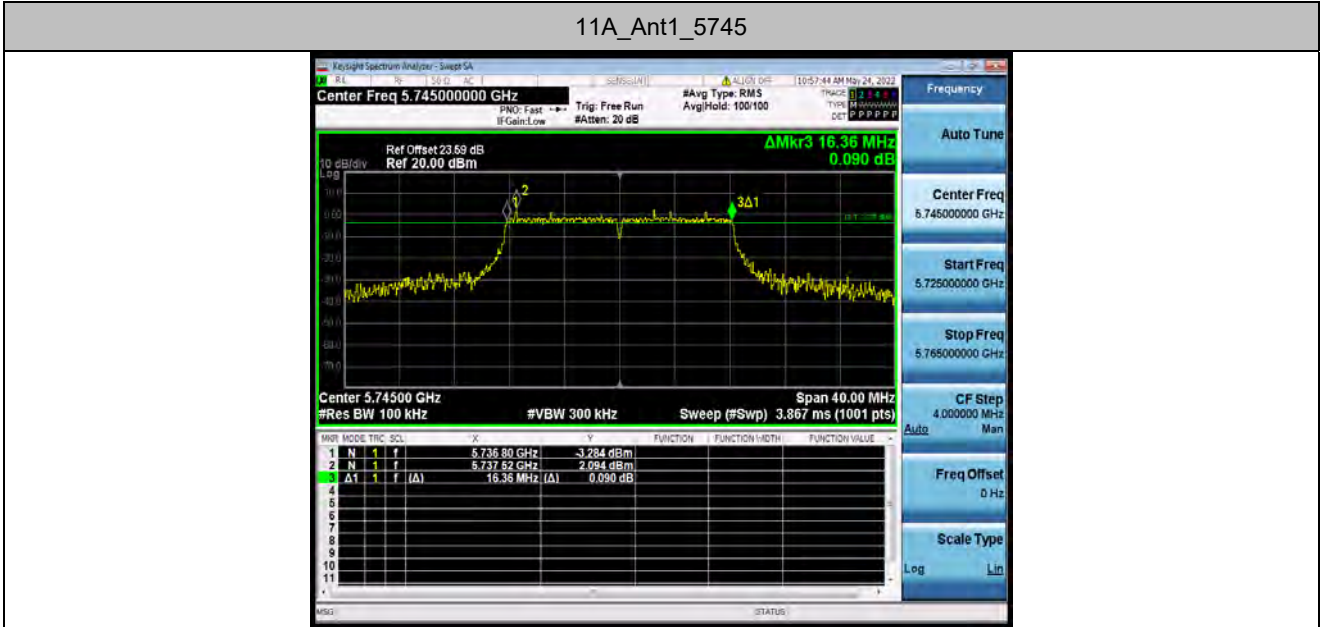


BUREAU VERITAS

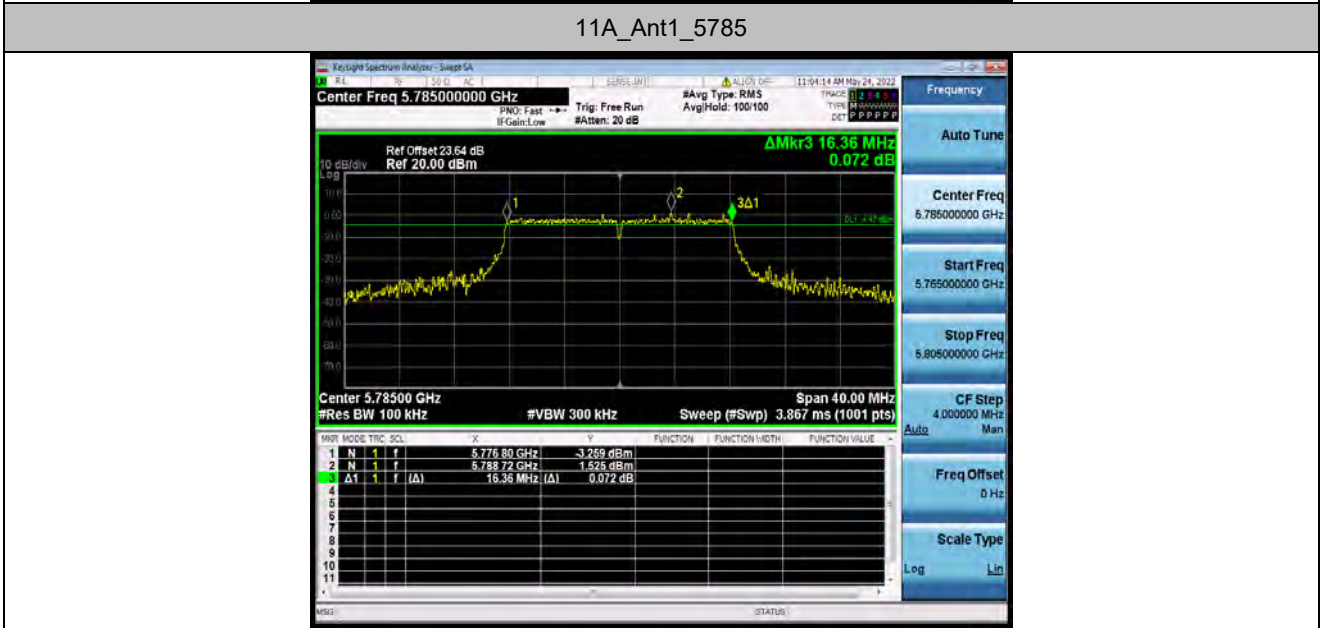
Test Report No.: W7L-P22090011RF03

### TEST GRAPHS B4

11A\_Ant1\_5745



11A\_Ant1\_5785

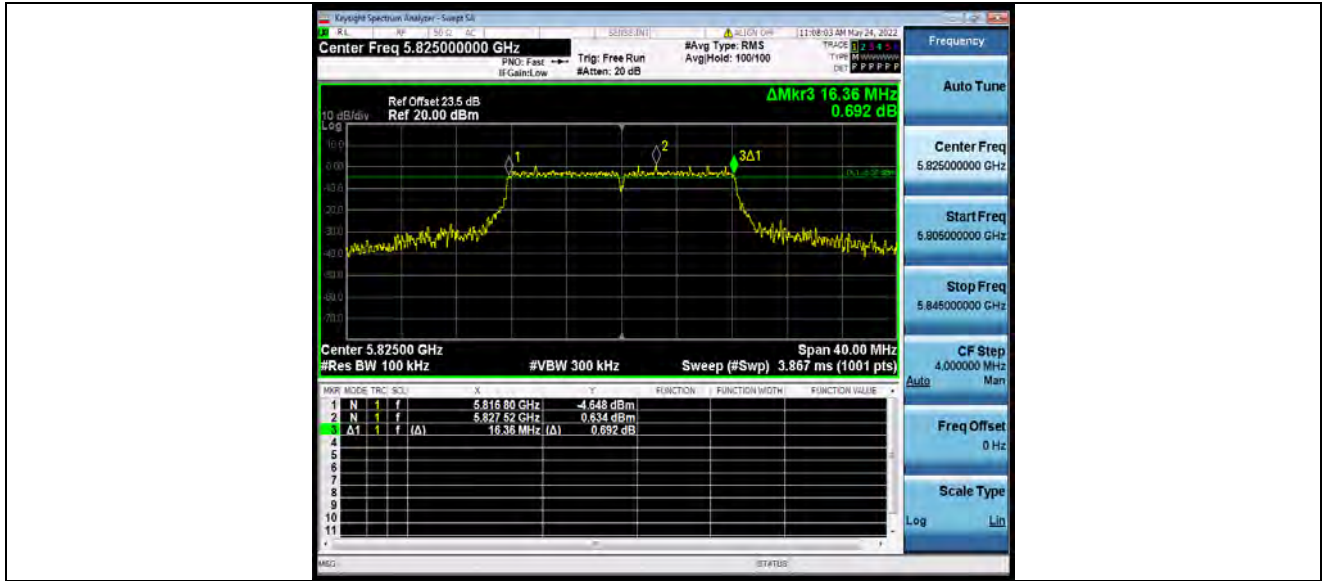


11A\_Ant1\_5825

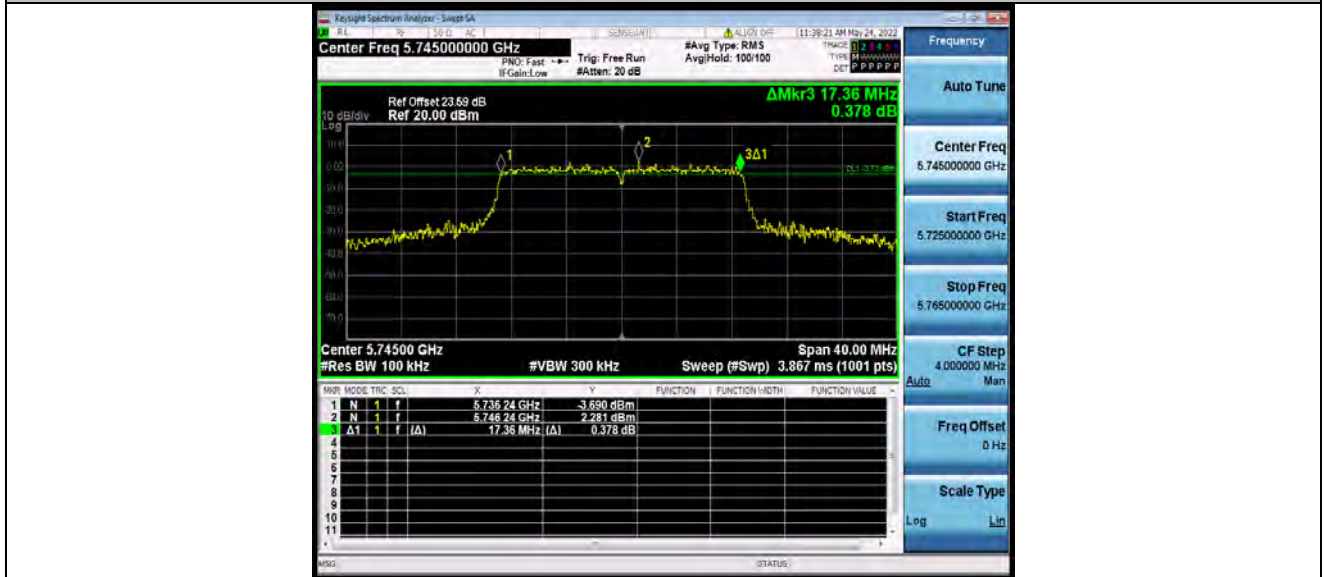


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5745

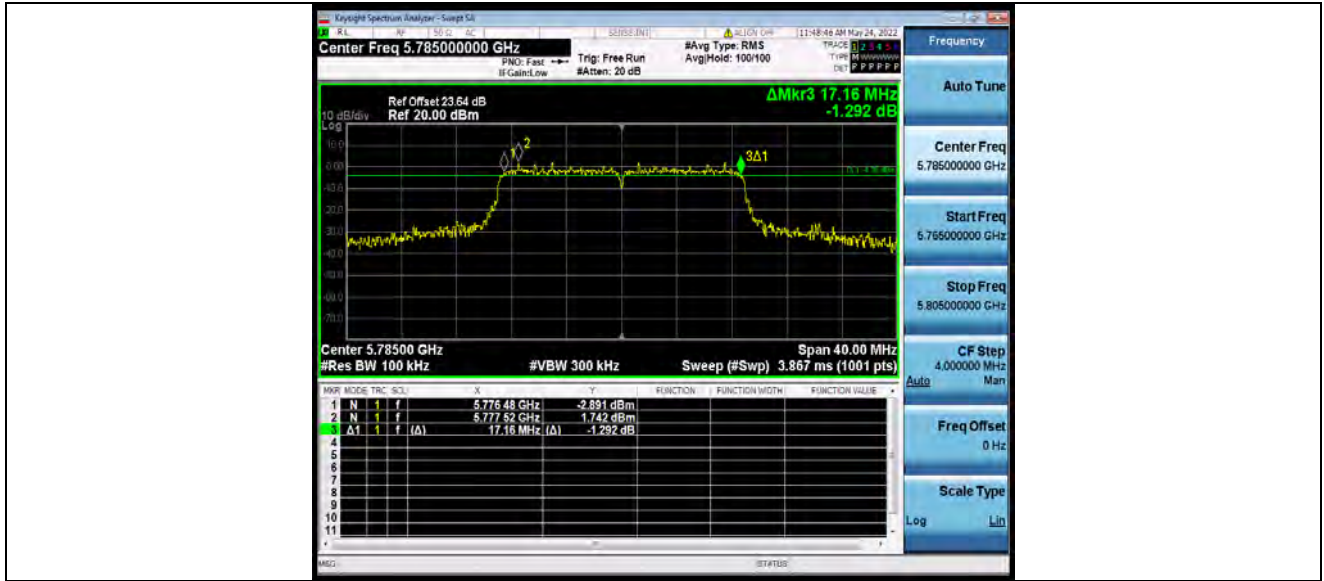


11N20SISO\_Ant1\_5785



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5825



11N40SISO\_Ant1\_5755



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5795

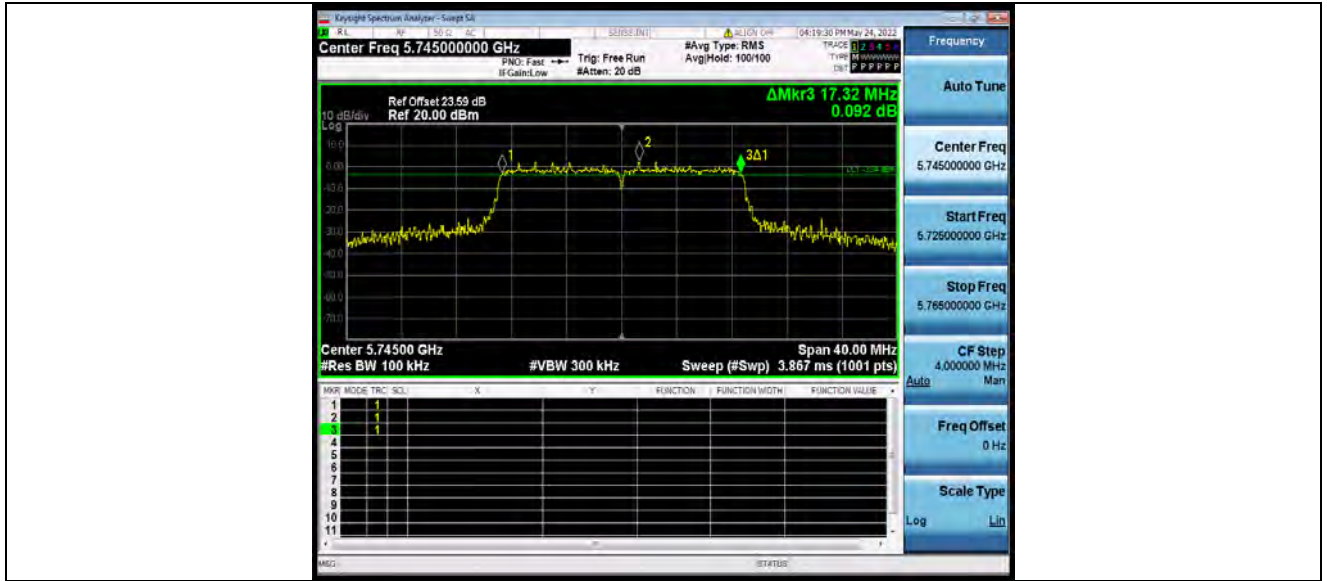


11AC20SISO\_Ant1\_5745

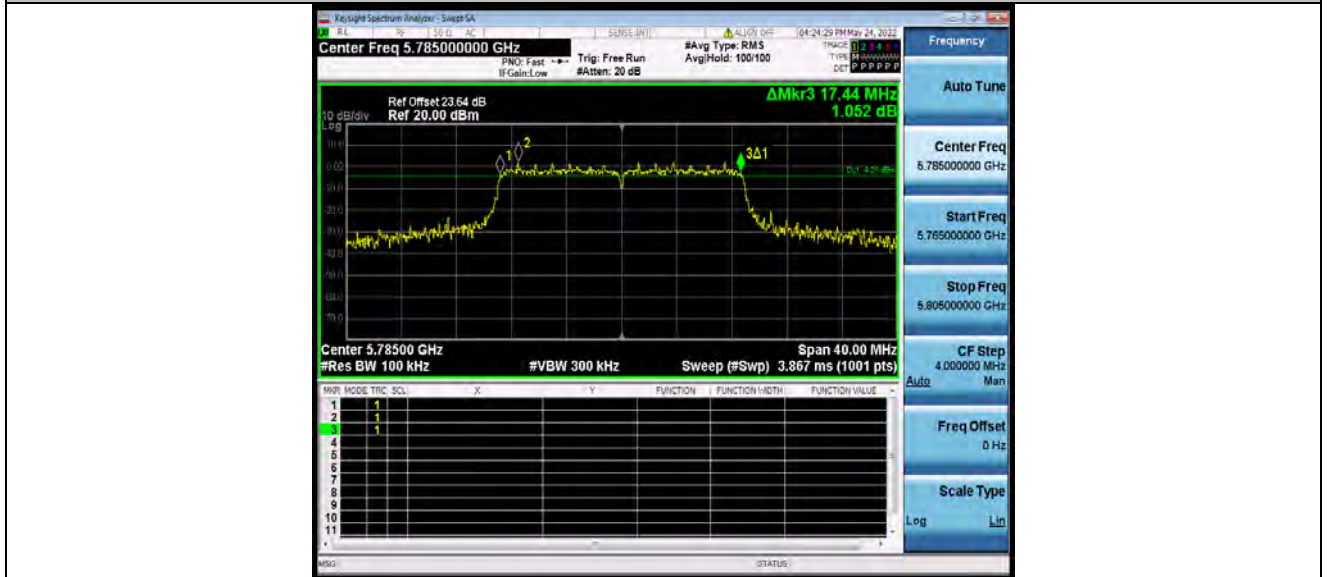


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5785

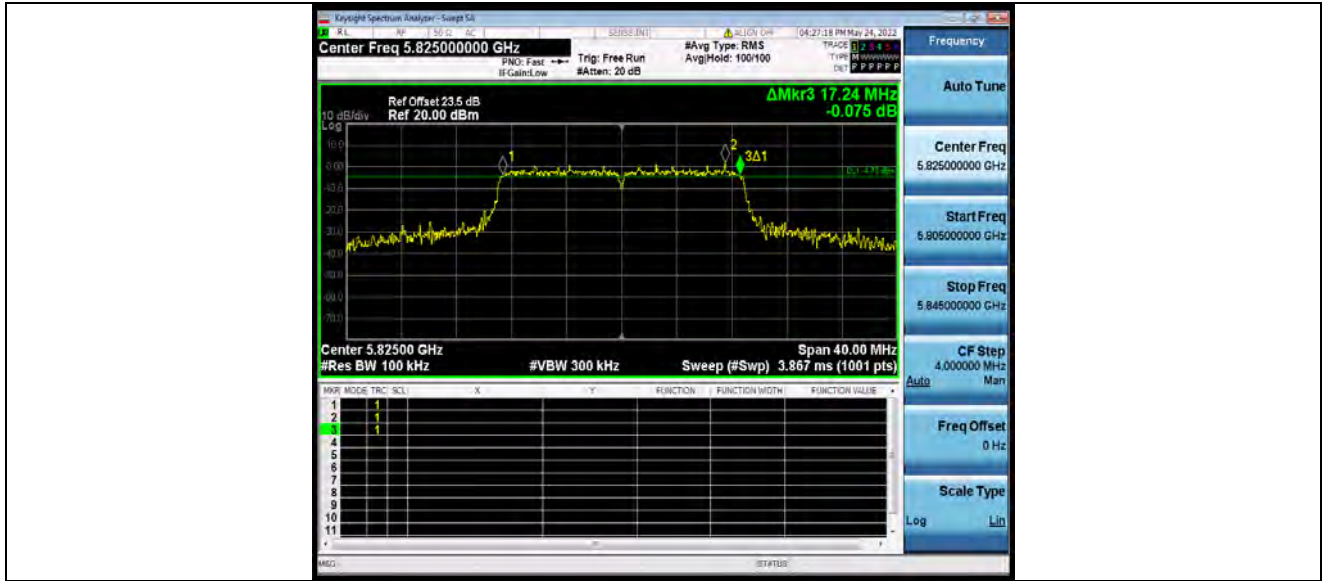


11AC20SISO\_Ant1\_5825



BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC40SISO\_Ant1\_5755



11AC40SISO\_Ant1\_5795



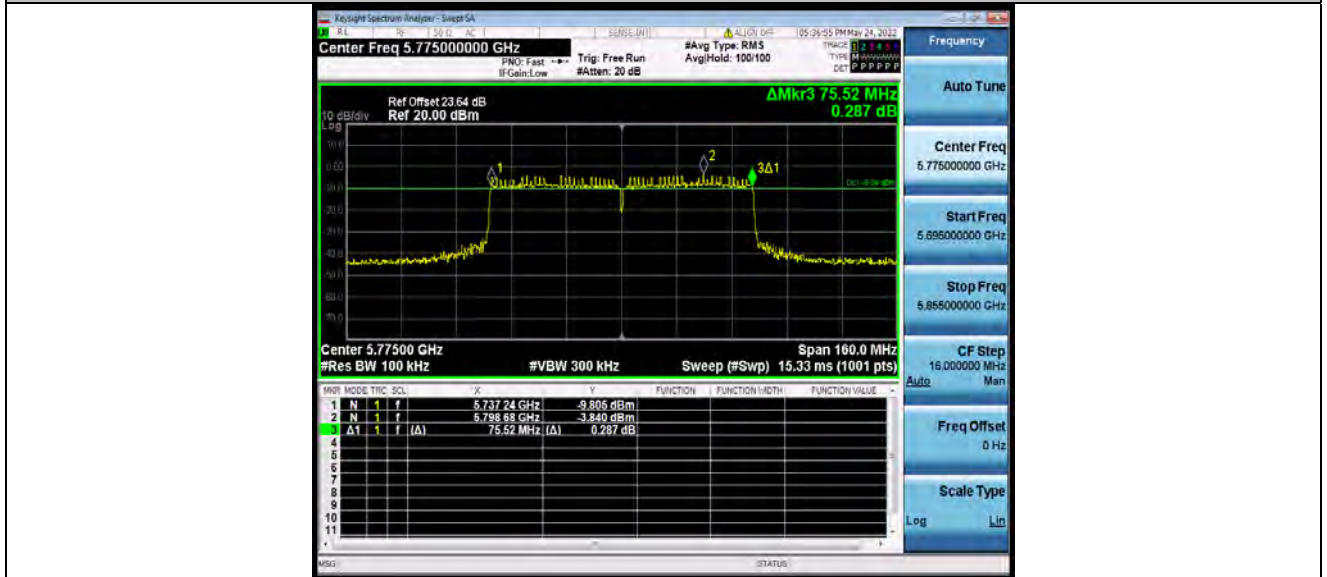


**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03



11AC80SISO\_Ant1\_5775





### DUTY CYCLE TEST RESULT

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.36	1.43	95.10
		5200	1.36	1.43	95.10
		5240	1.36	1.44	94.44
		5260	1.36	1.45	93.79
		5300	1.36	1.44	94.44
		5320	1.36	1.47	92.52
		5500	1.36	1.43	95.10
		5580	1.37	1.44	95.14
		5700	1.36	1.44	94.44
		5745	1.36	1.44	94.44
		5785	1.36	1.43	95.10
		5825	1.36	1.43	95.10
11N20SISO	Ant1	5180	1.16	1.25	92.80
		5200	1.15	1.23	93.50
		5240	1.15	1.24	92.74
		5260	1.15	1.22	94.26
		5300	1.15	1.22	94.26
		5320	1.15	1.23	93.50
		5500	1.15	1.24	92.74
		5580	1.15	1.22	94.26
		5700	1.15	1.22	94.26
		5745	1.15	1.22	94.26
		5785	1.15	1.22	94.26
		5825	1.15	1.22	94.26
11N40SISO	Ant1	5190	0.58	0.65	89.23
		5230	0.58	0.65	89.23
		5270	0.58	0.65	89.23
		5310	0.57	0.65	87.69
		5510	0.58	0.67	86.57
		5550	0.57	0.65	87.69



		5670	0.57	0.65	87.69
		5755	0.58	0.67	86.57
		5795	0.58	0.65	89.23
11AC20SISO	Ant1	5180	1.16	1.26	92.06
		5200	1.16	1.24	93.55
		5240	1.16	1.23	94.31
		5260	1.15	1.23	93.50
		5300	1.16	1.24	93.55
		5320	1.16	1.23	94.31
		5500	1.16	1.24	93.55
		5580	1.16	1.23	94.31
		5700	1.16	1.24	93.55
		5745	1.16	1.25	92.80
		5785	1.16	1.48	78.38
		5825	1.16	1.23	94.31
		11AC40SISO	Ant1	5190	0.58
5230	0.58			0.65	89.23
5270	0.58			0.66	87.88
5310	0.58			0.66	87.88
5510	0.58			0.67	86.57
5550	0.58			0.67	86.57
5670	0.58			0.66	87.88
5755	0.58			0.65	89.23
5795	0.58			0.70	82.86
11AC80SISO	Ant1	5210	0.29	0.36	80.56
		5290	0.29	0.40	72.50
		5530	0.29	0.36	80.56
		5610	0.29	0.39	74.36
		5775	0.29	0.37	78.38

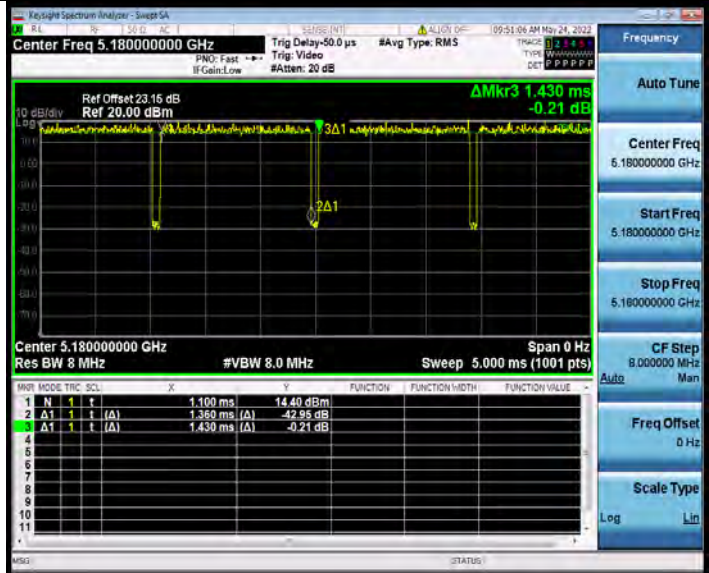


BUREAU VERITAS

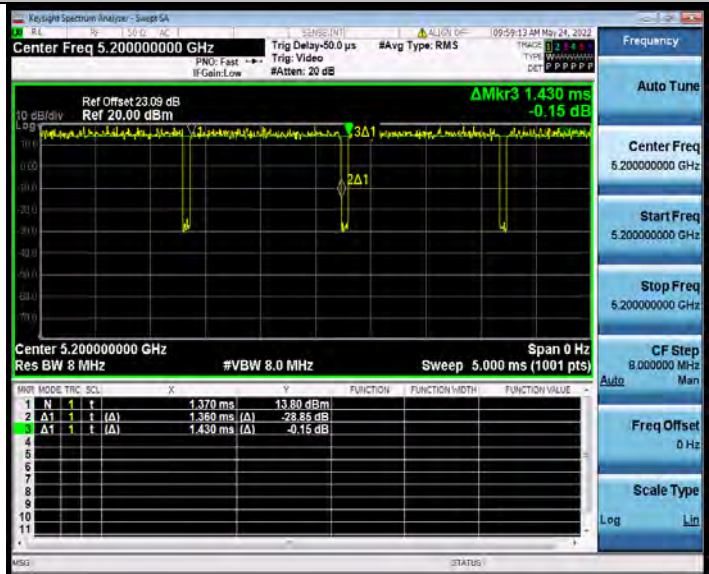
Test Report No.: W7L-P22090011RF03

### TEST GRAPHS

11A\_Ant1\_5180



11A\_Ant1\_5200

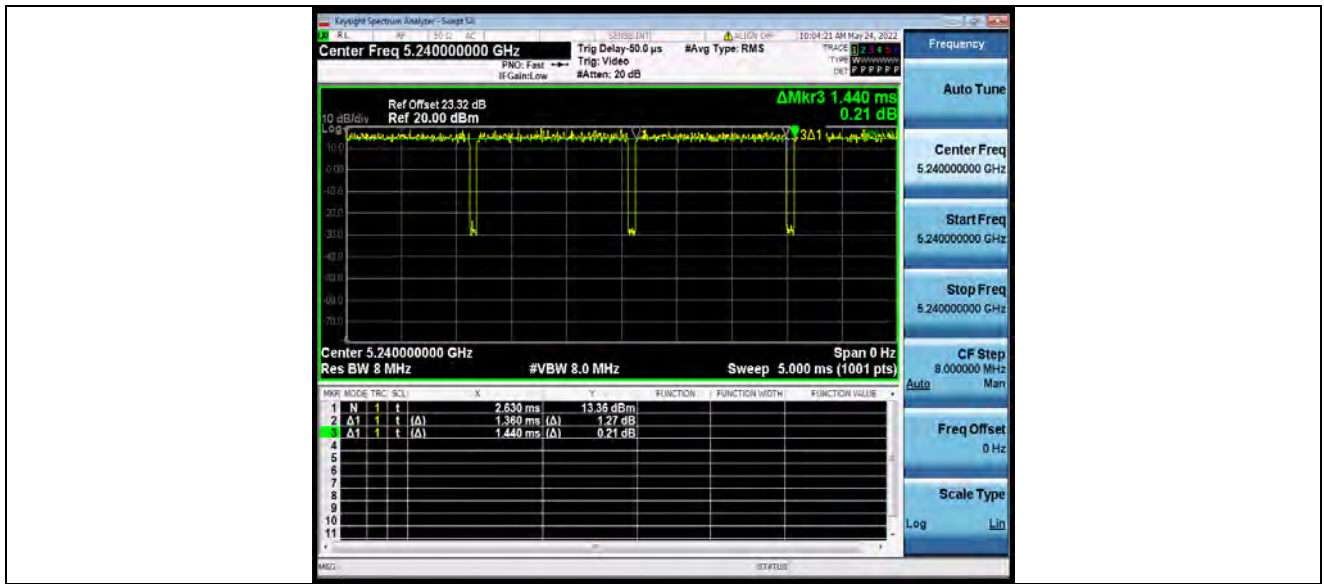


11A\_Ant1\_5240

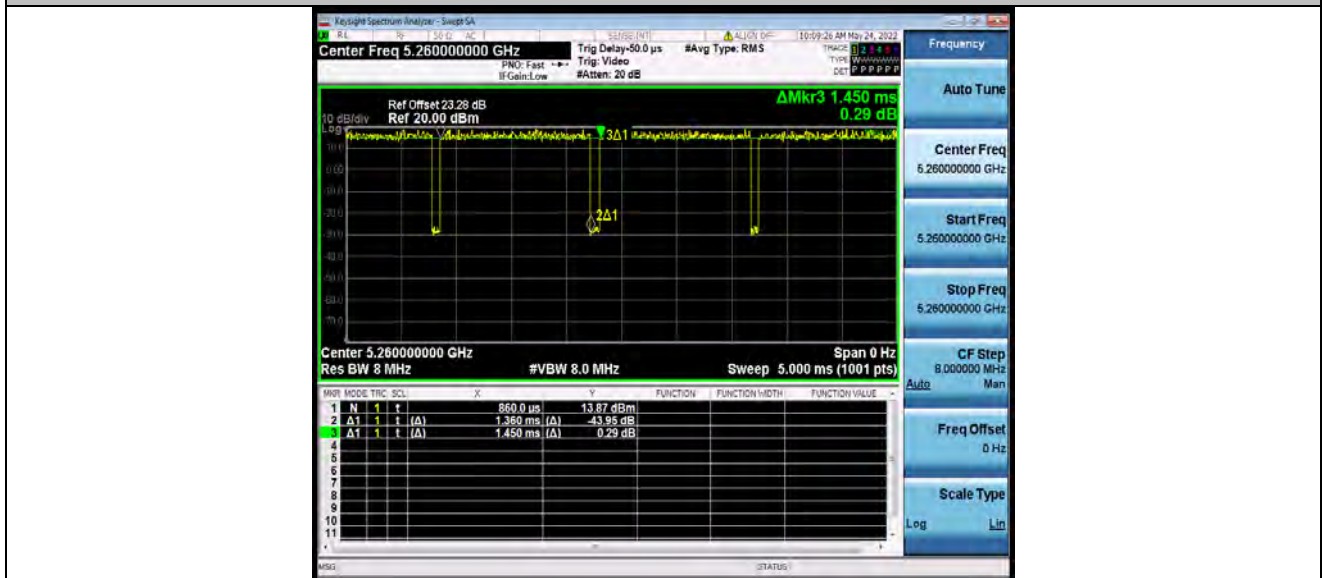


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11A\_Ant1\_5260

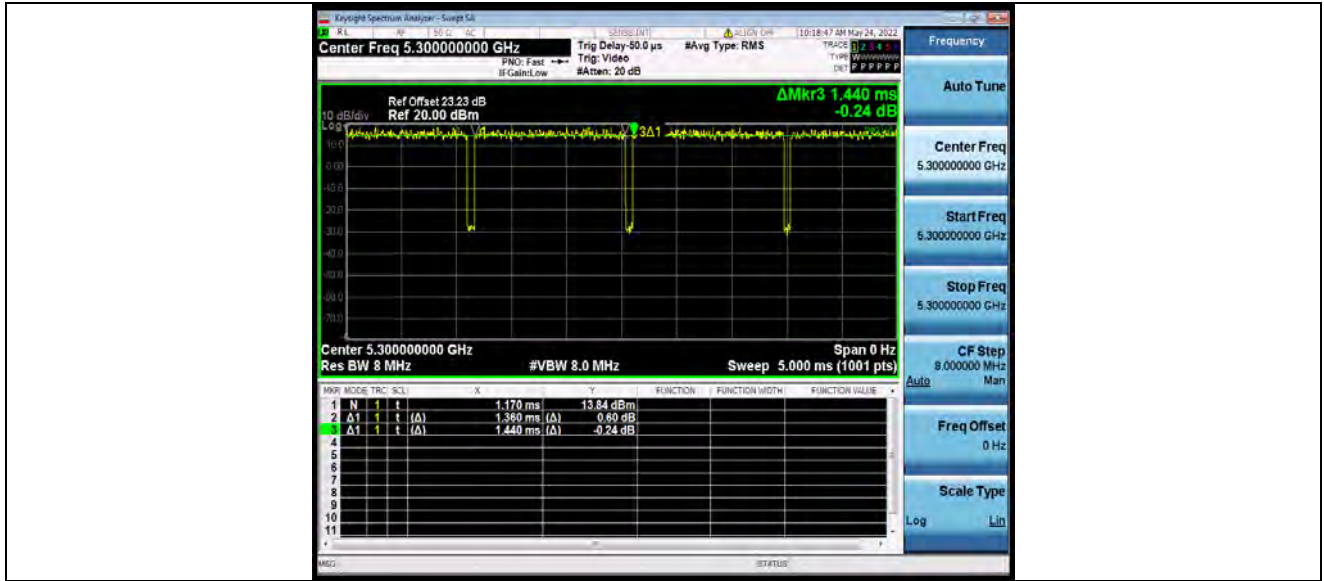


11A\_Ant1\_5300

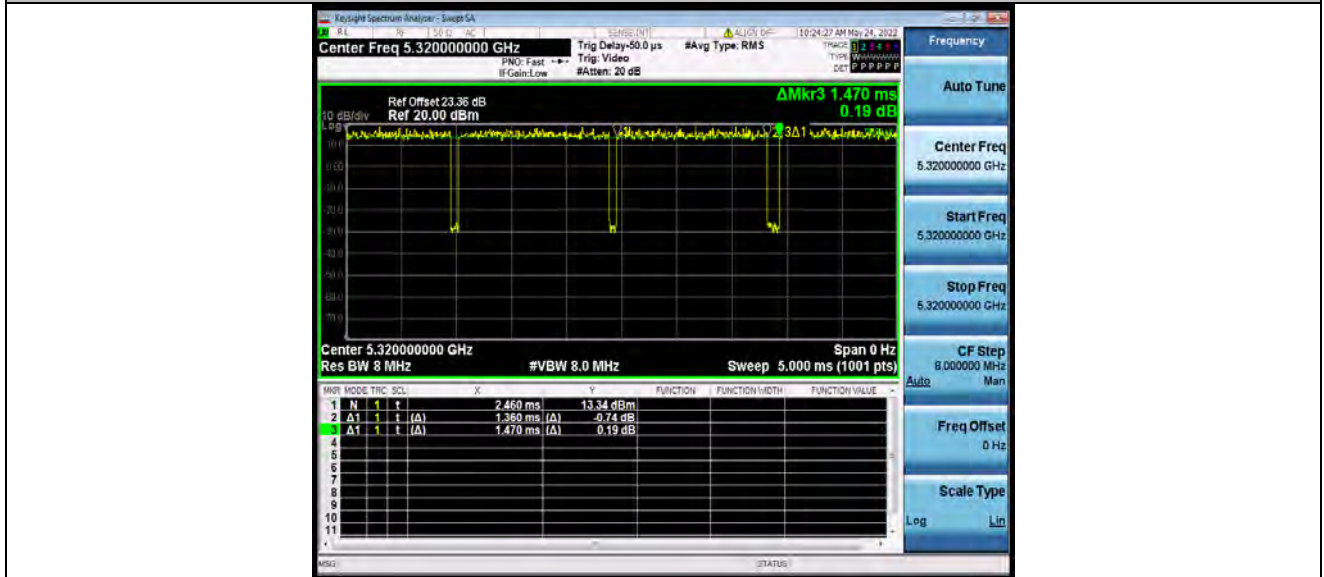


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Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5320

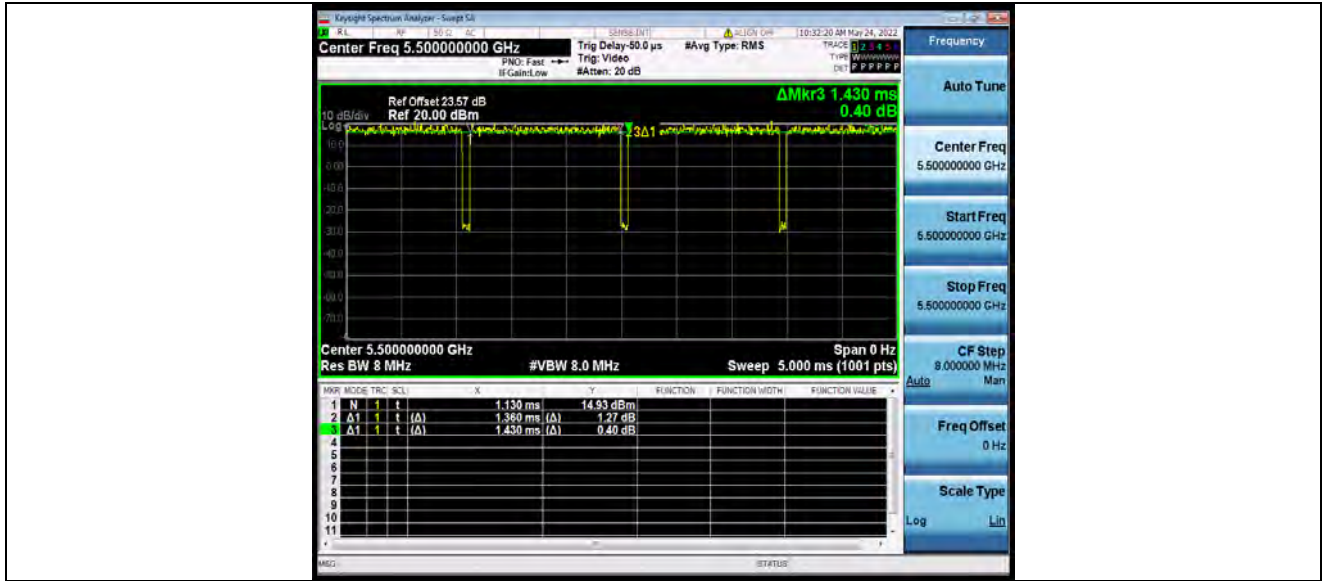


11A\_Ant1\_5500

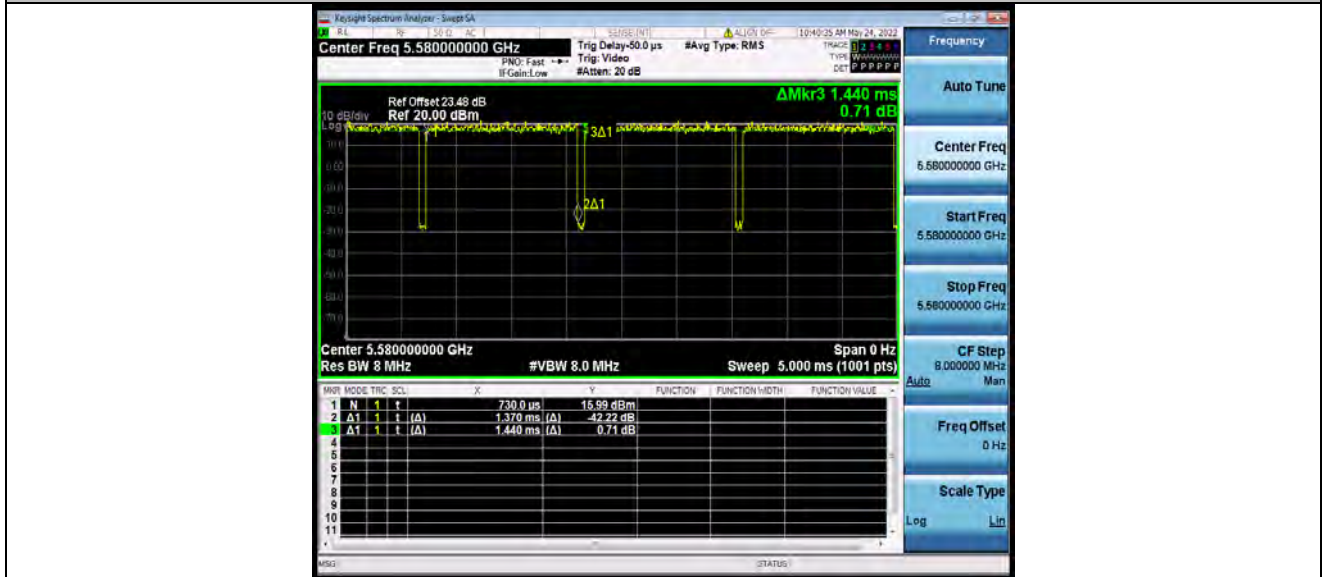


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5580

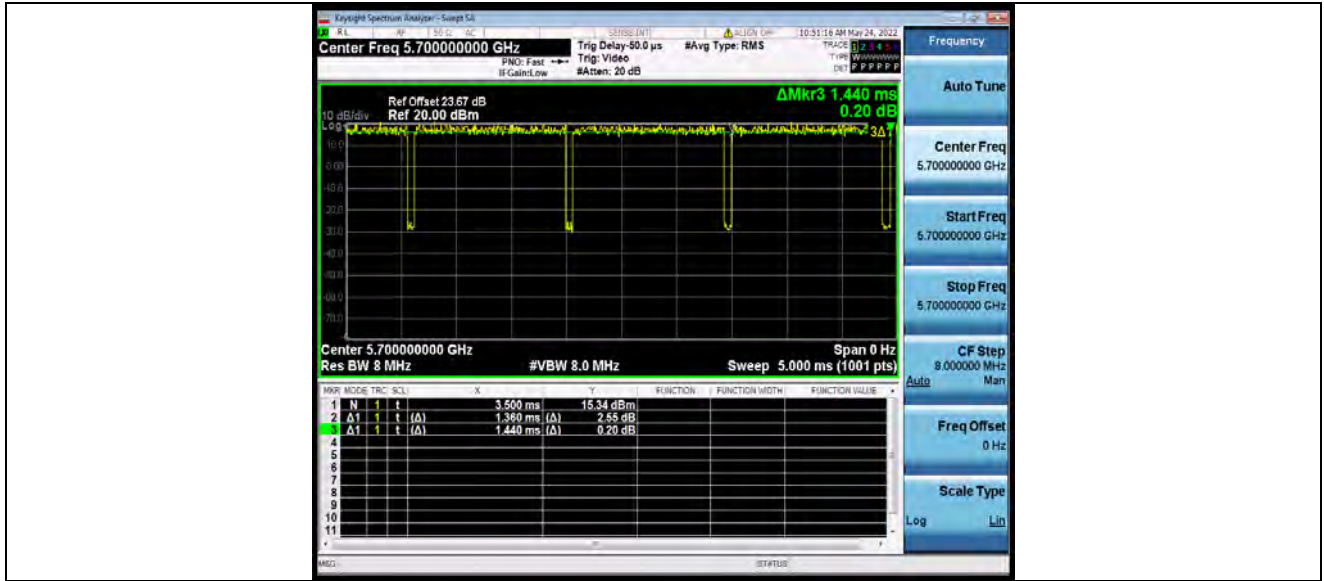


11A\_Ant1\_5700

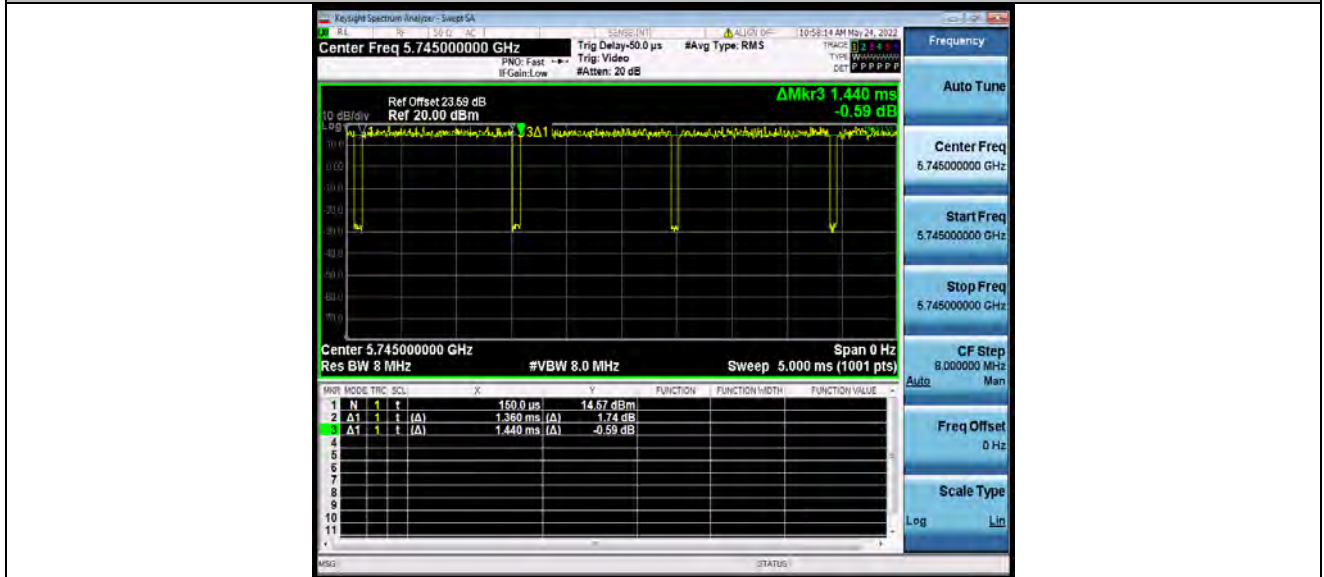


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5745



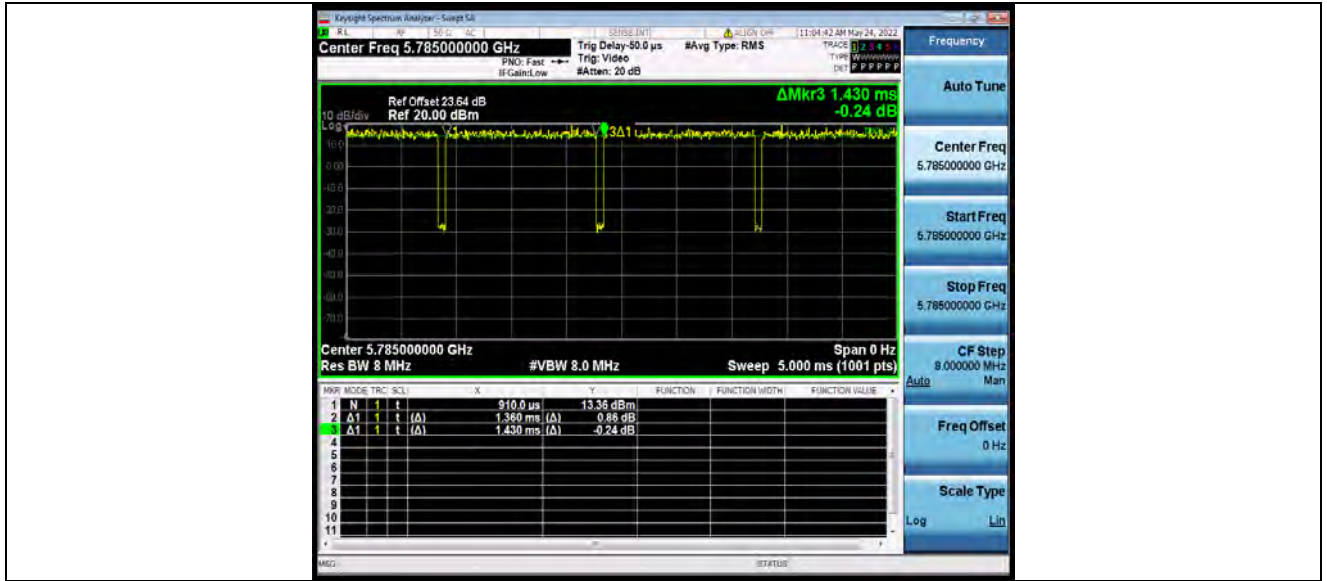
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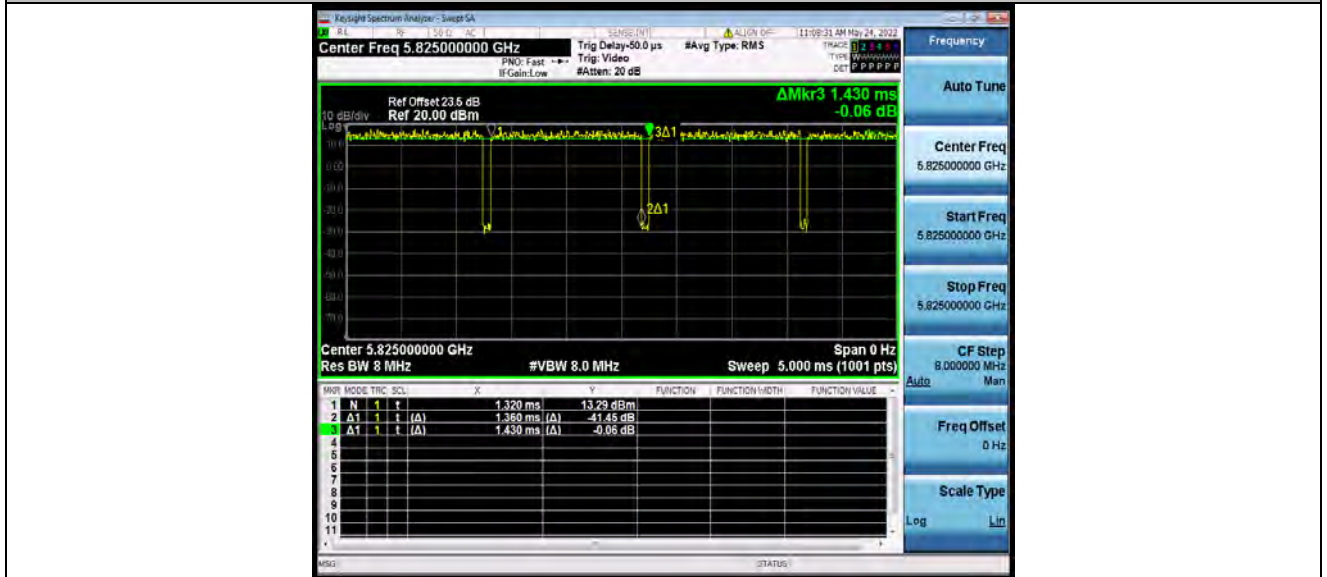


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11A\_Ant1\_5825

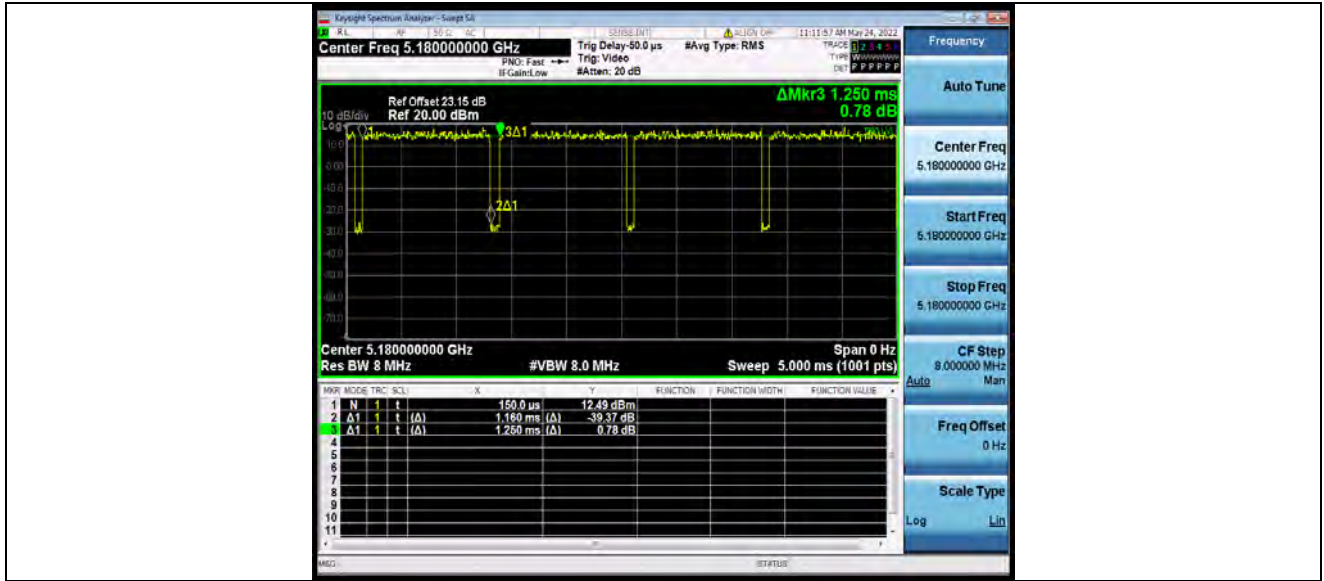


11N20SISO\_Ant1\_5180

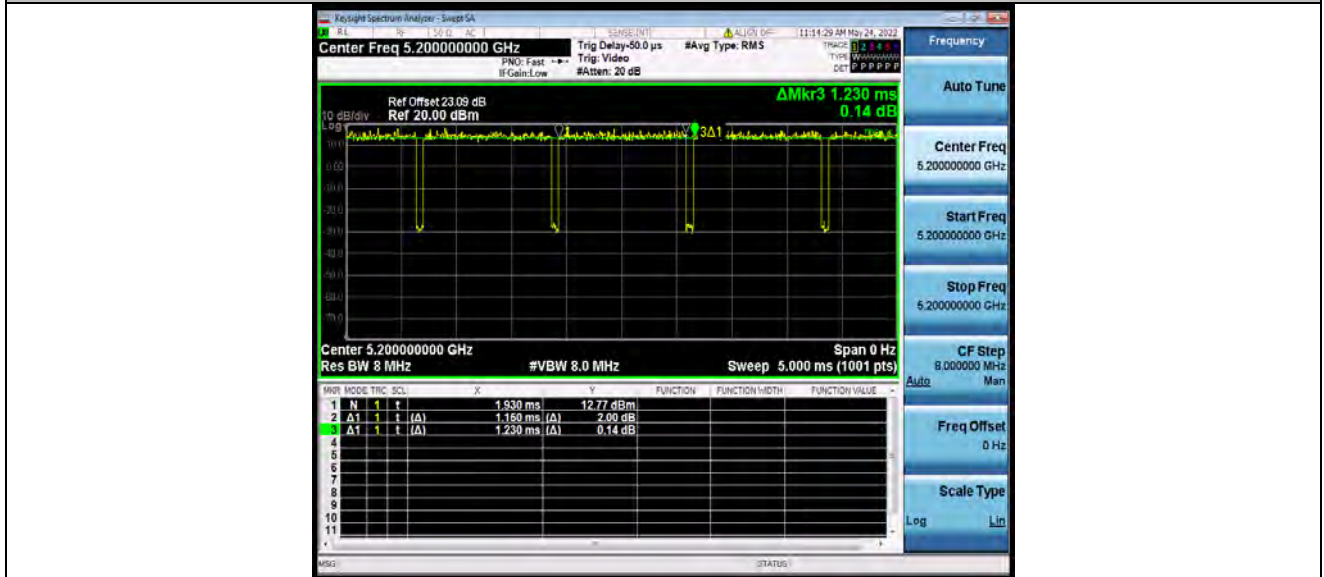


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5200

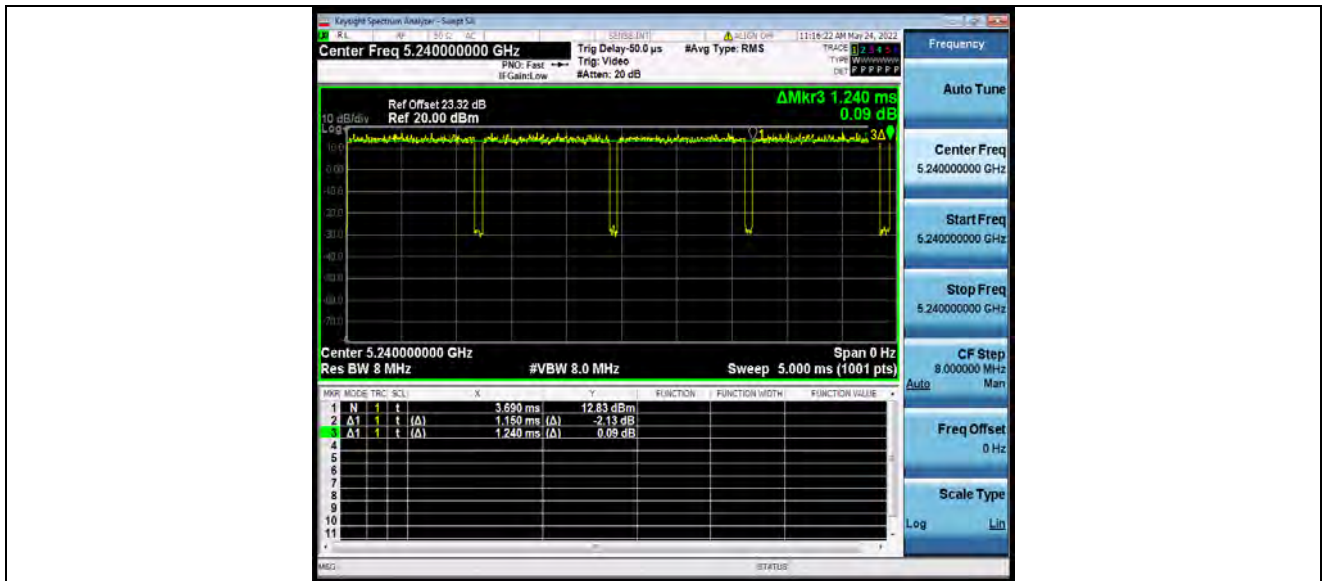


11N20SISO\_Ant1\_5240

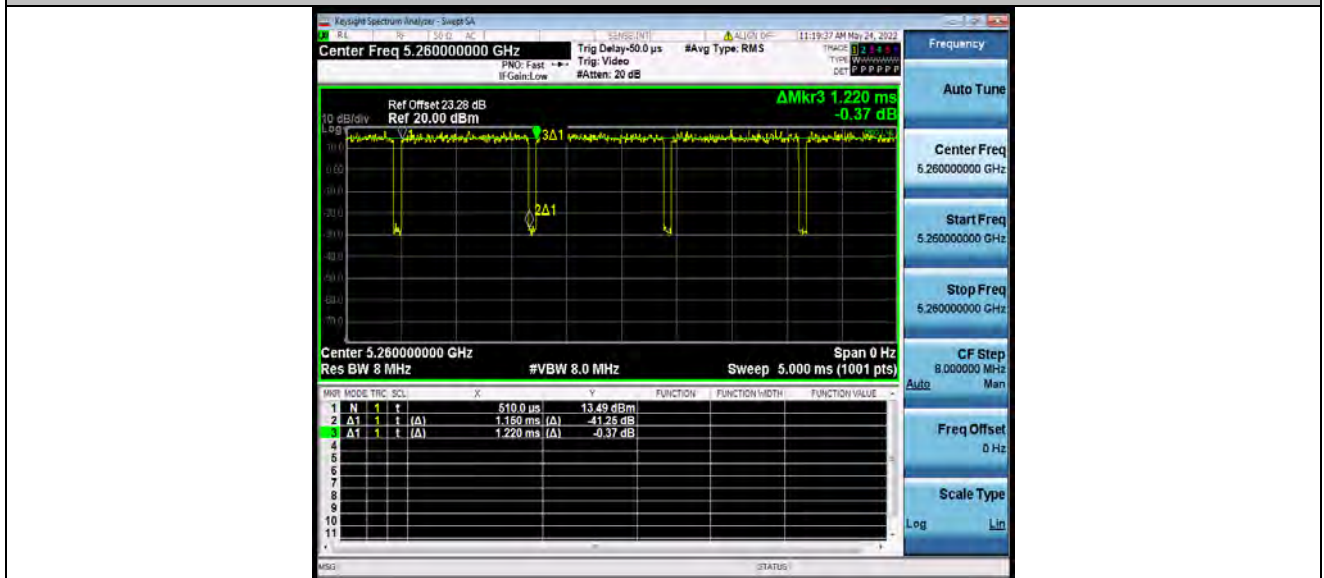


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5260

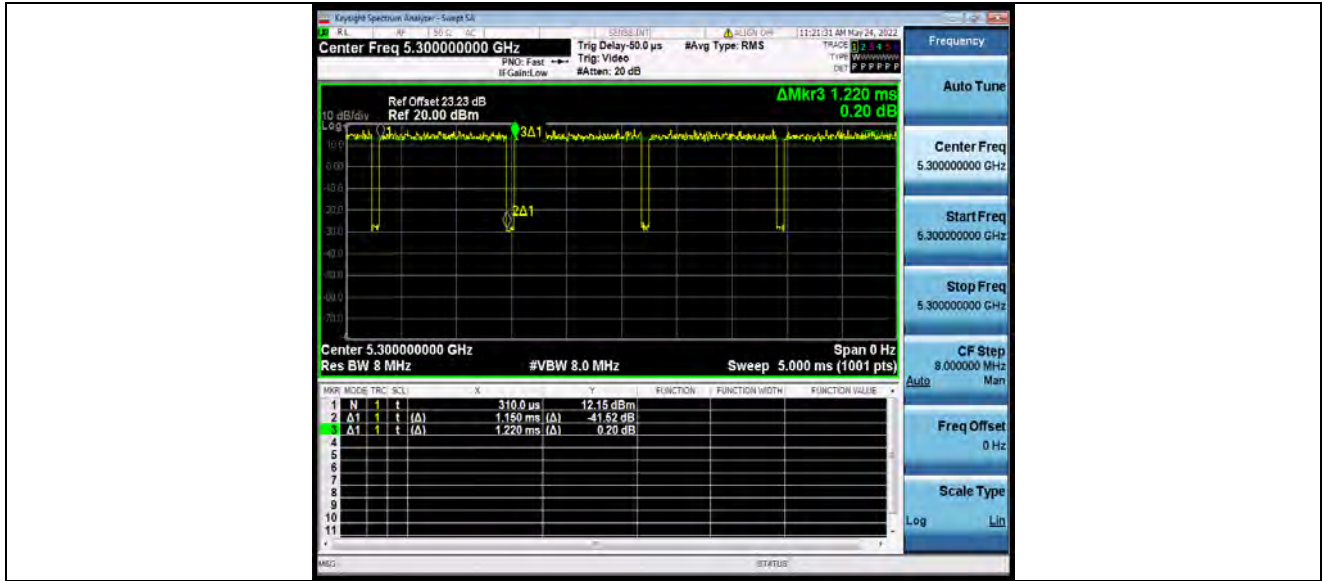


11N20SISO\_Ant1\_5300

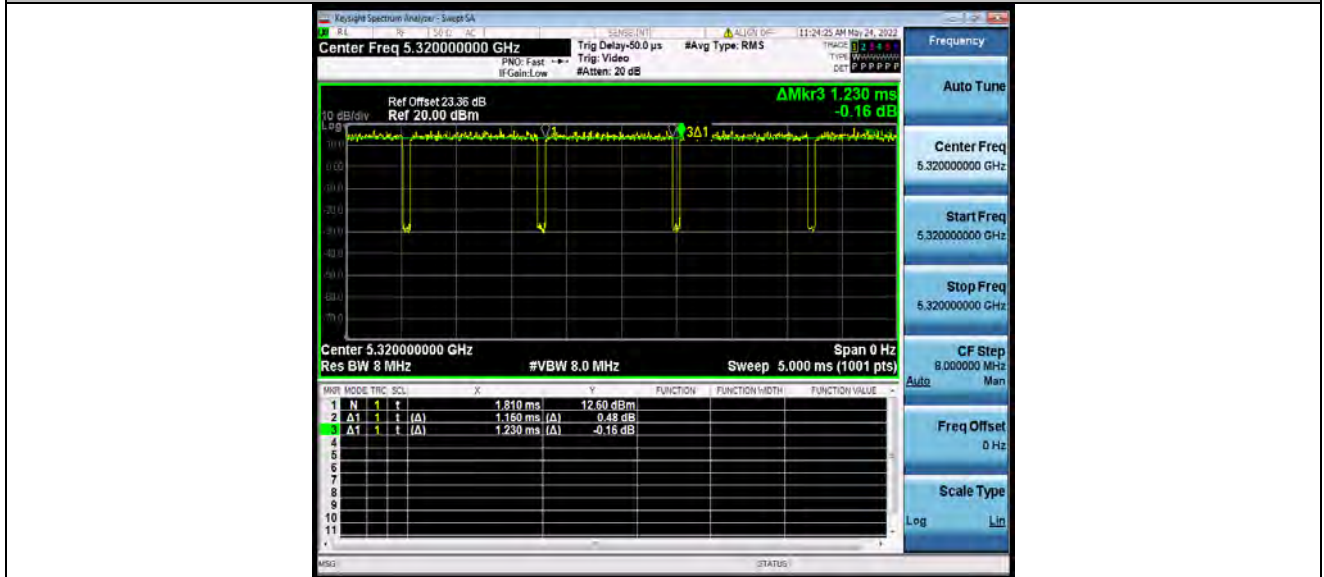


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5320

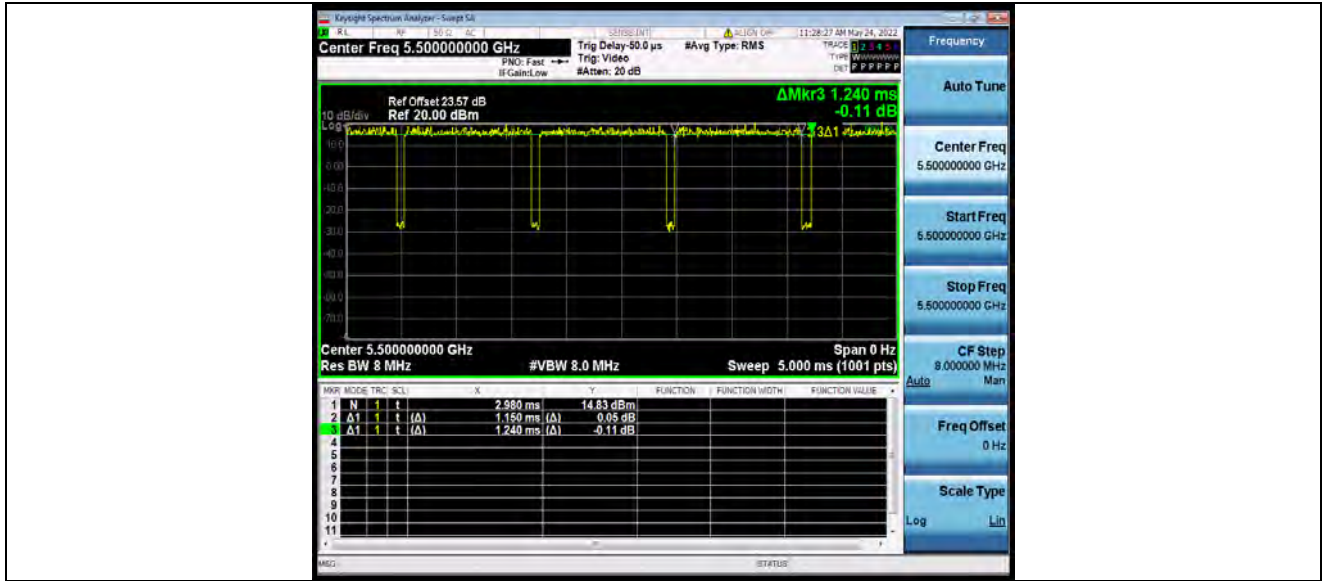


11N20SISO\_Ant1\_5500

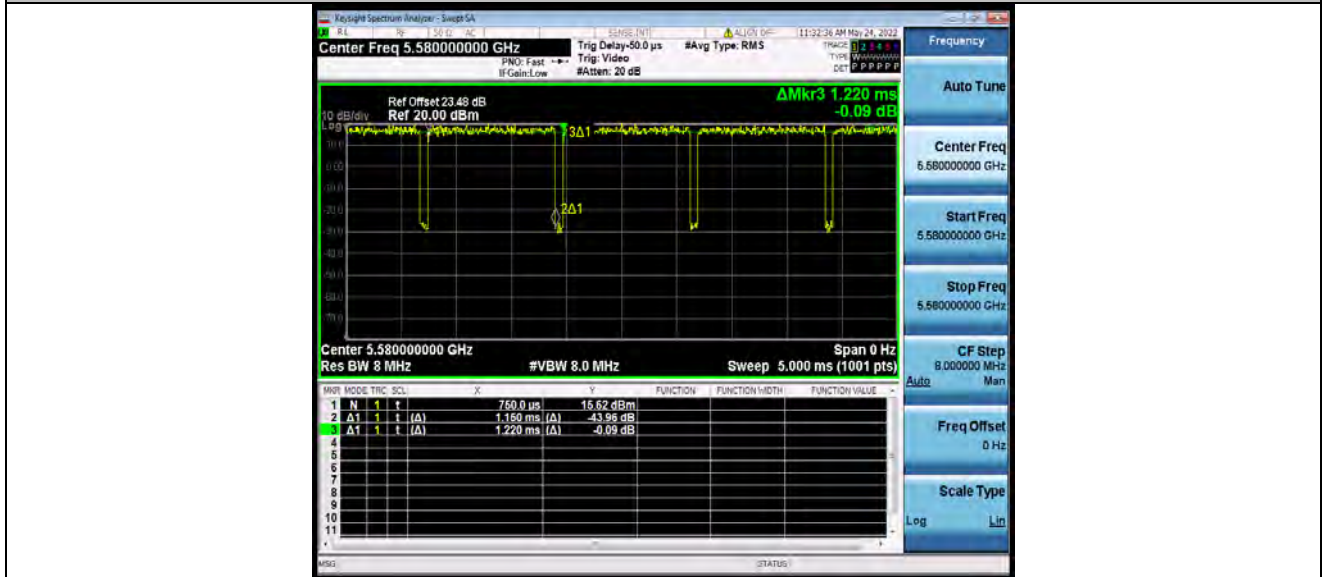


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5580

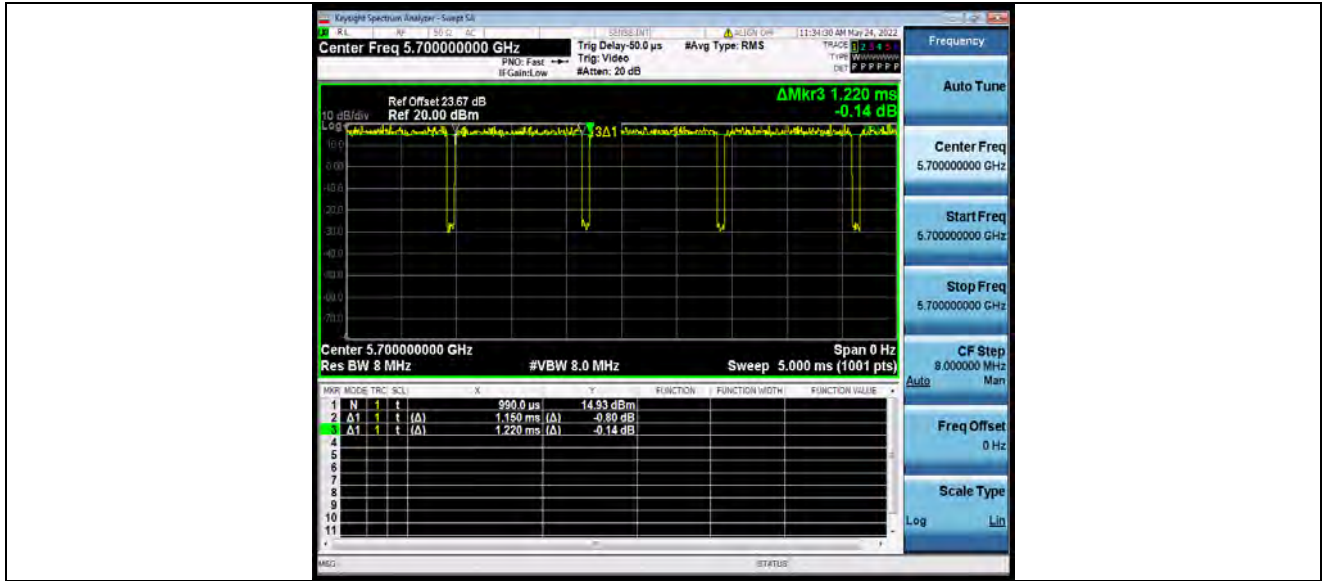


11N20SISO\_Ant1\_5700

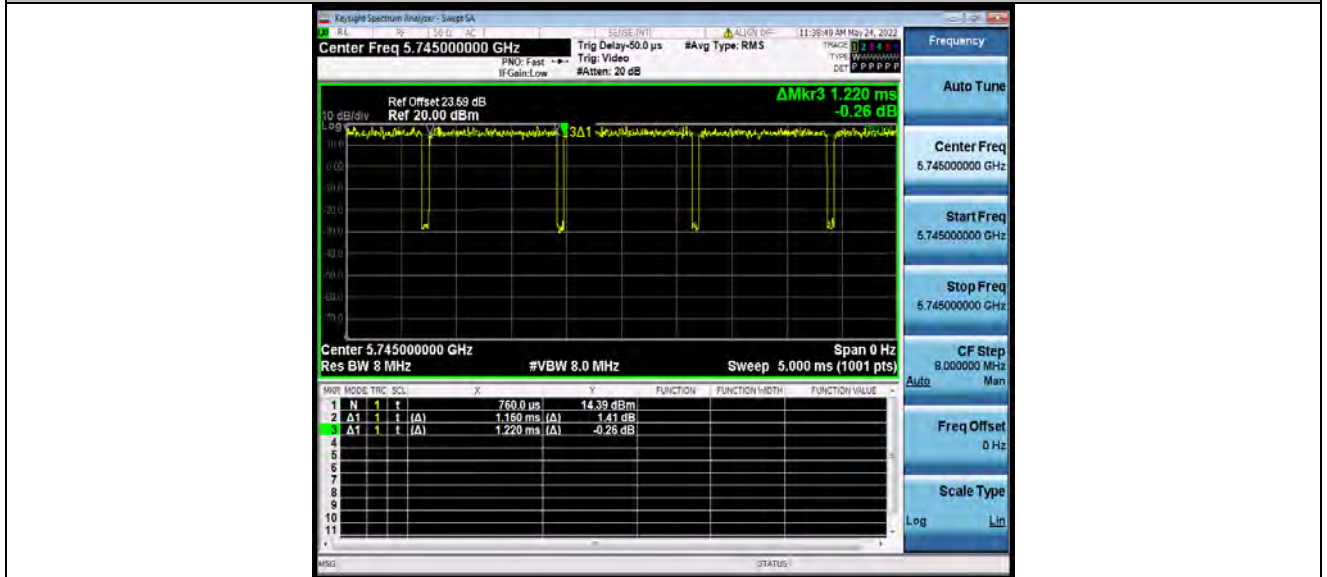


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5745

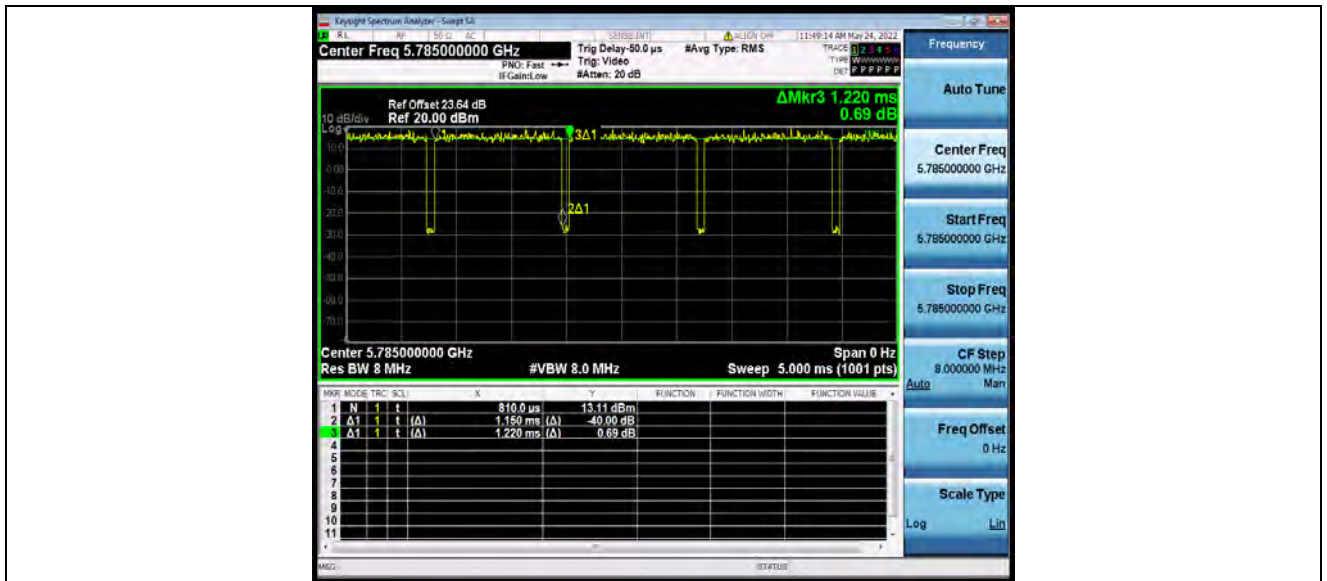


11N20SISO\_Ant1\_5785

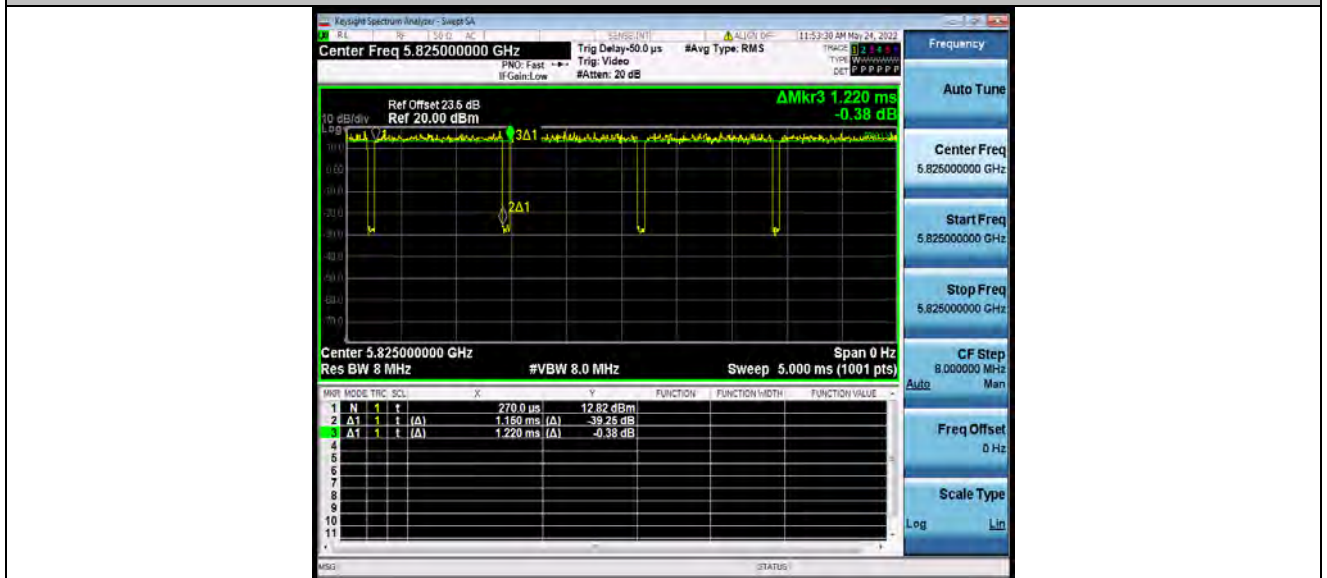


**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03



11N20SISO\_Ant1\_5825

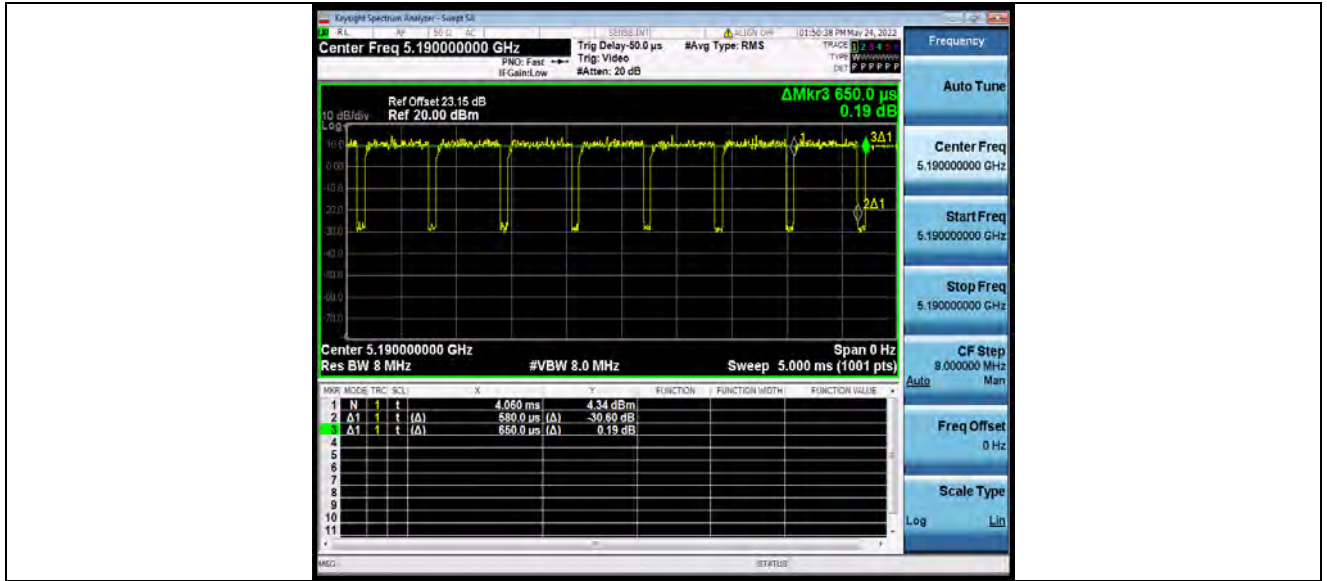


11N40SISO\_Ant1\_5190

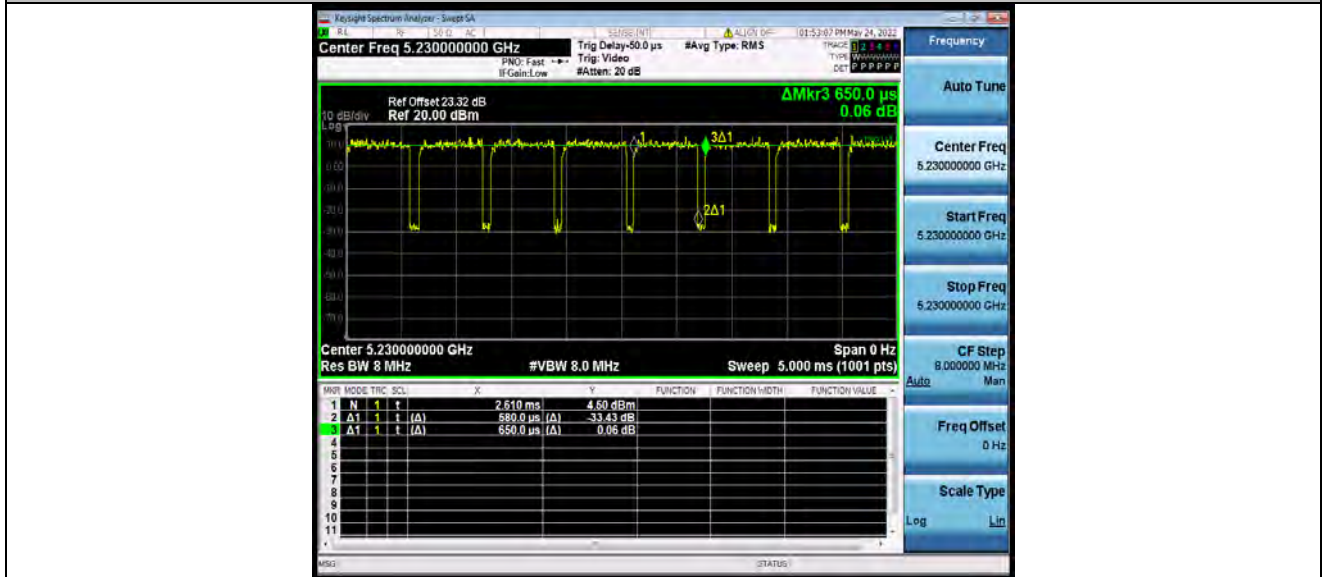


**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5230



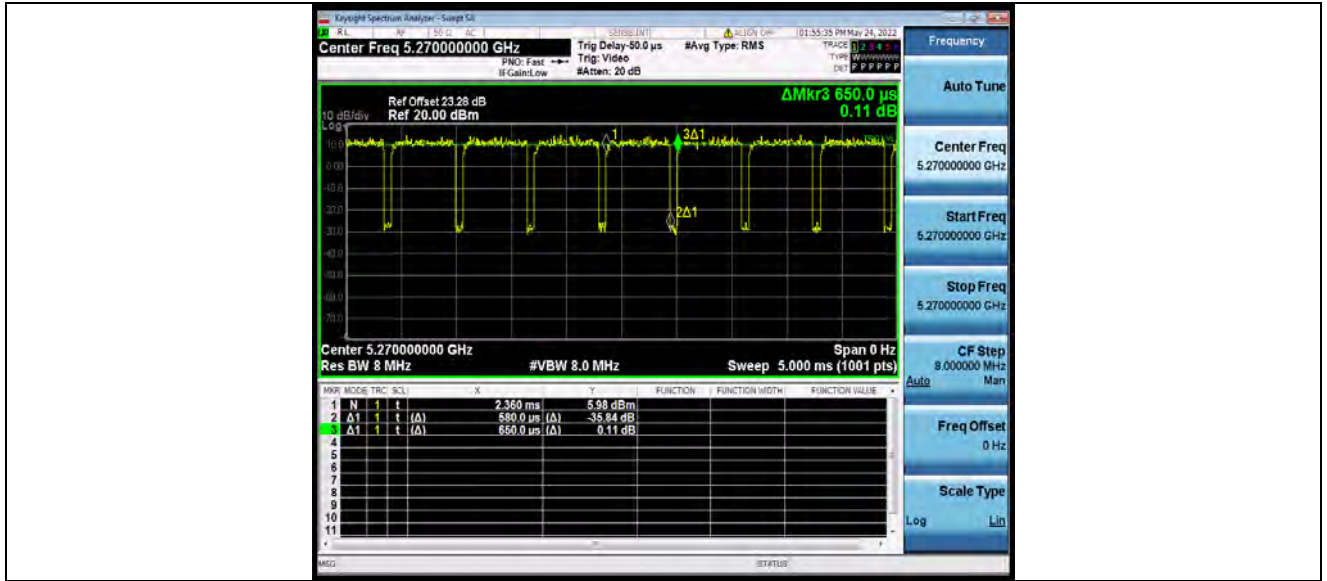
11N40SISO\_Ant1\_5270



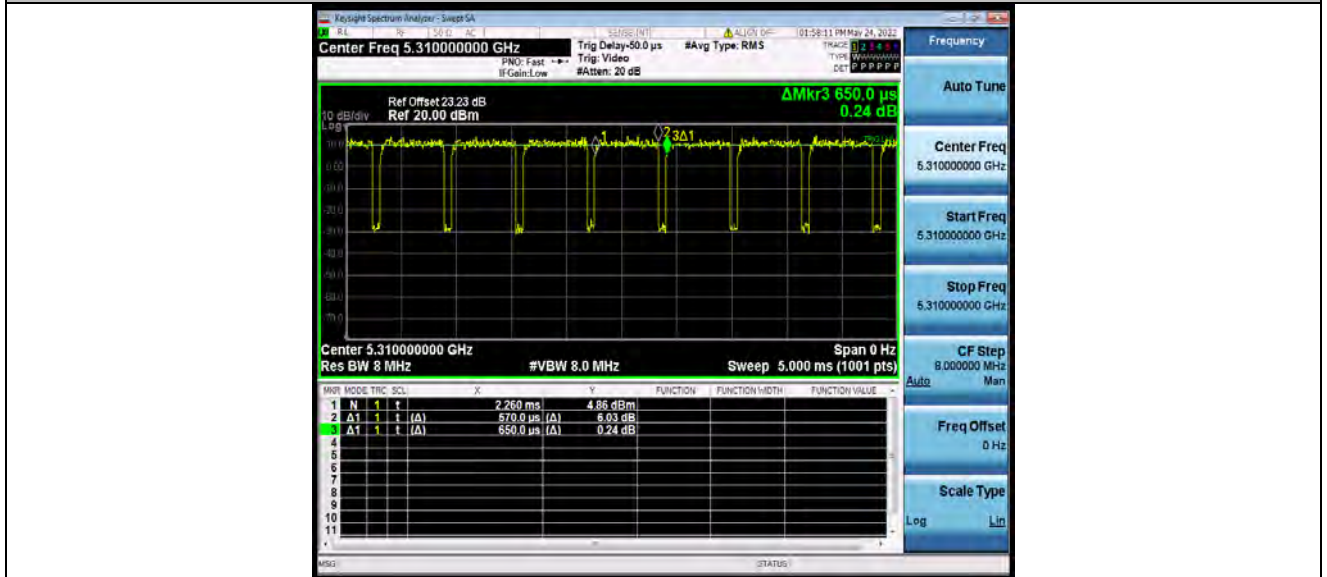


**BUREAU  
VERITAS**

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5310

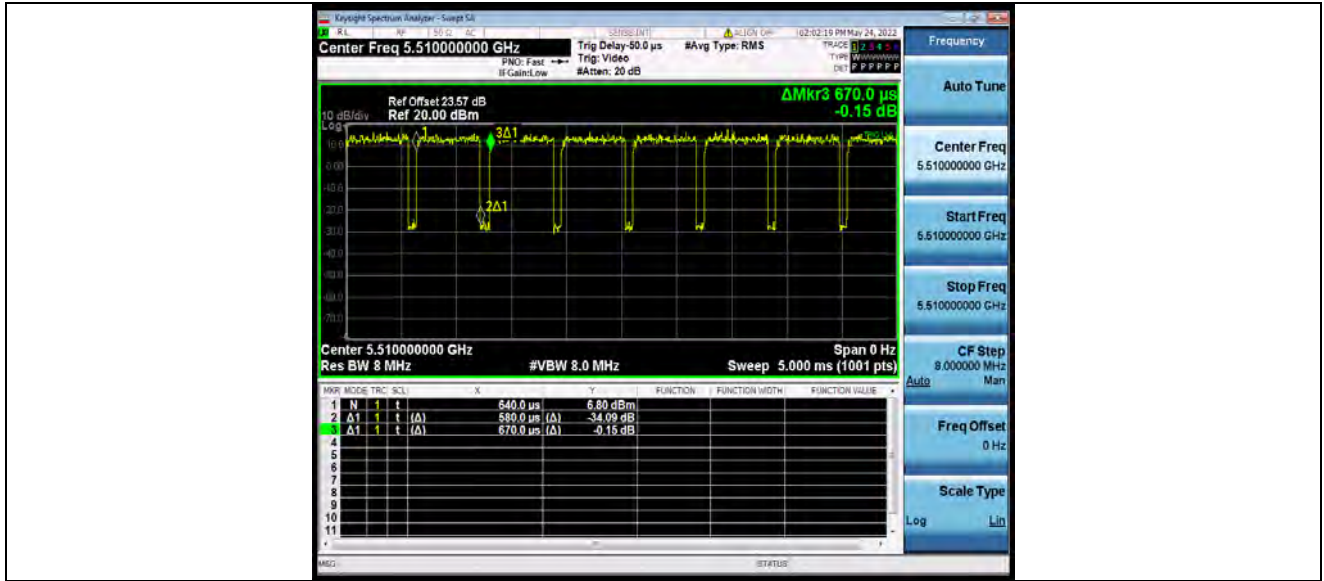


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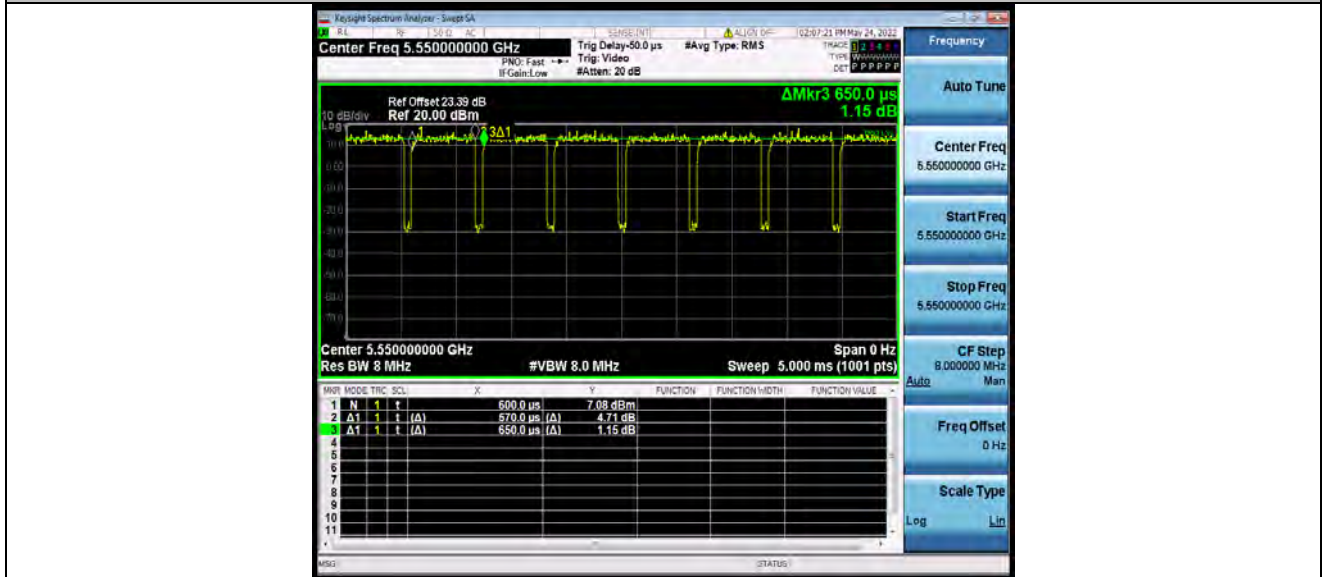


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5550

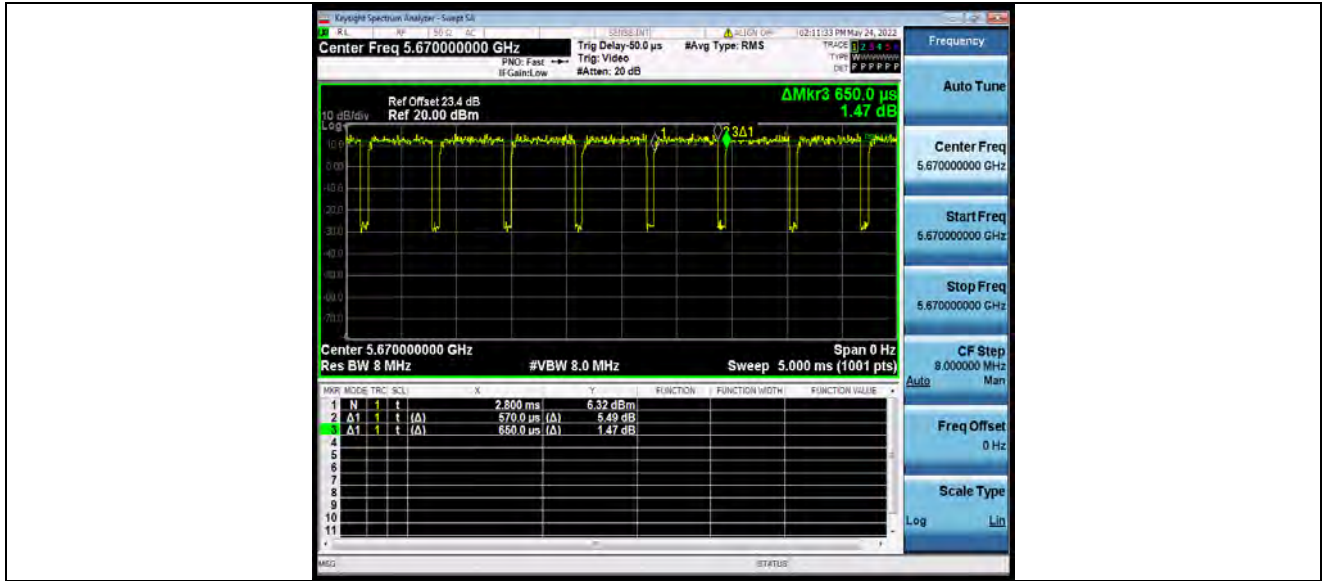


11N40SISO\_Ant1\_5670

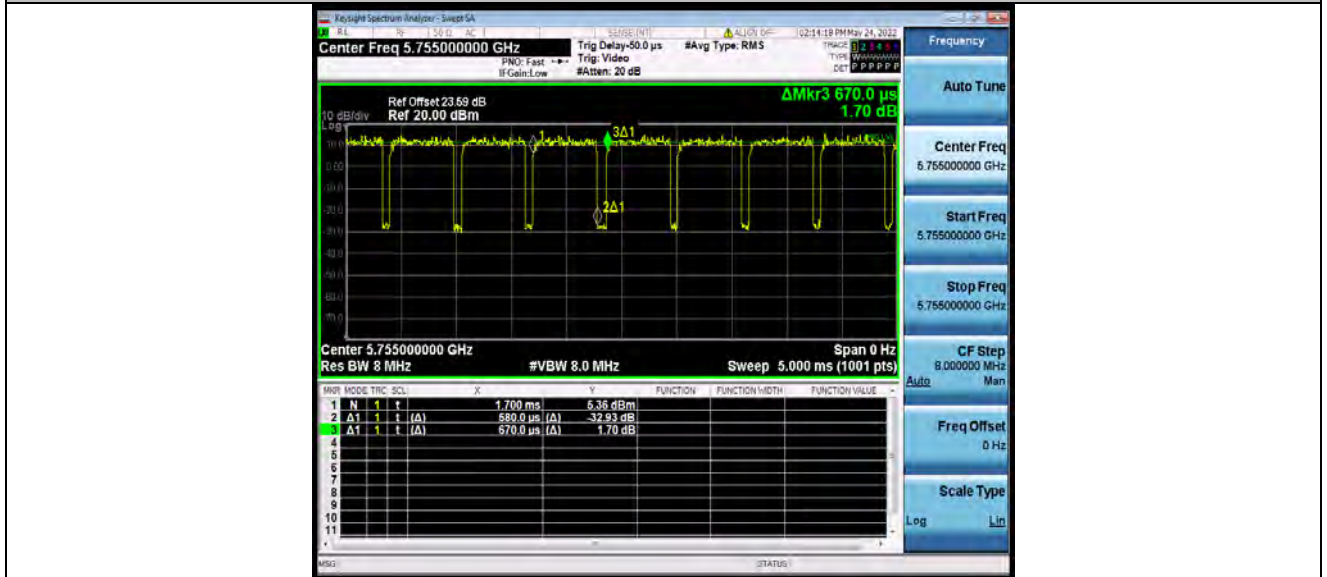


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11N40SISO\_Ant1\_5755

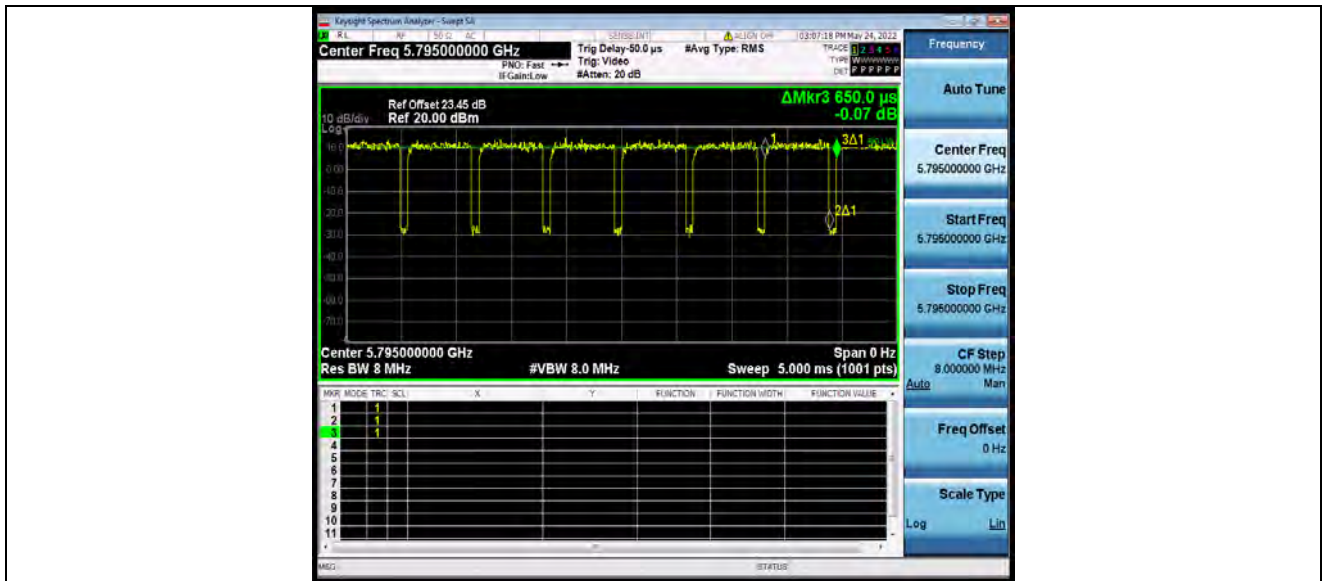


11N40SISO\_Ant1\_5795

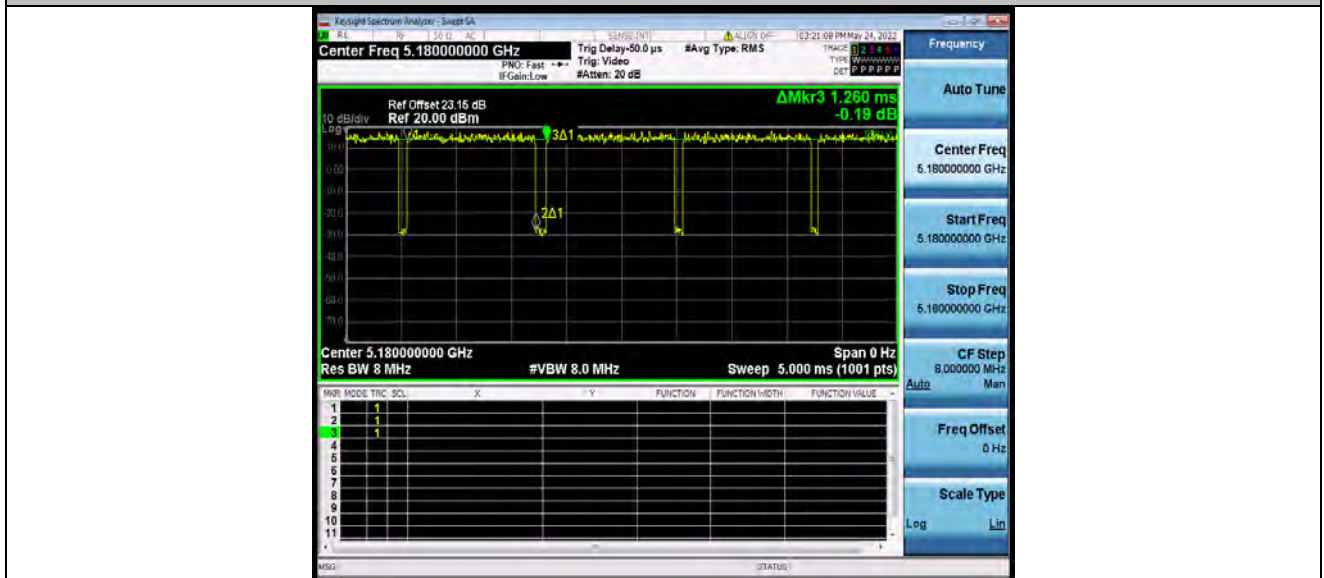


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5180

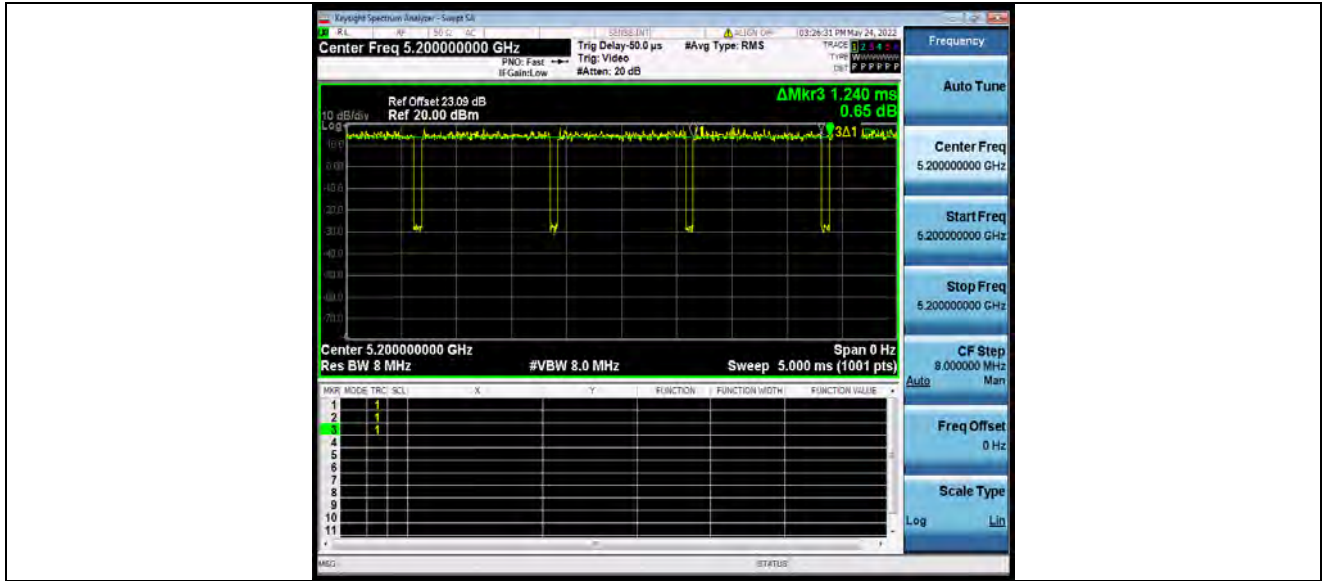


11AC20SISO\_Ant1\_5200

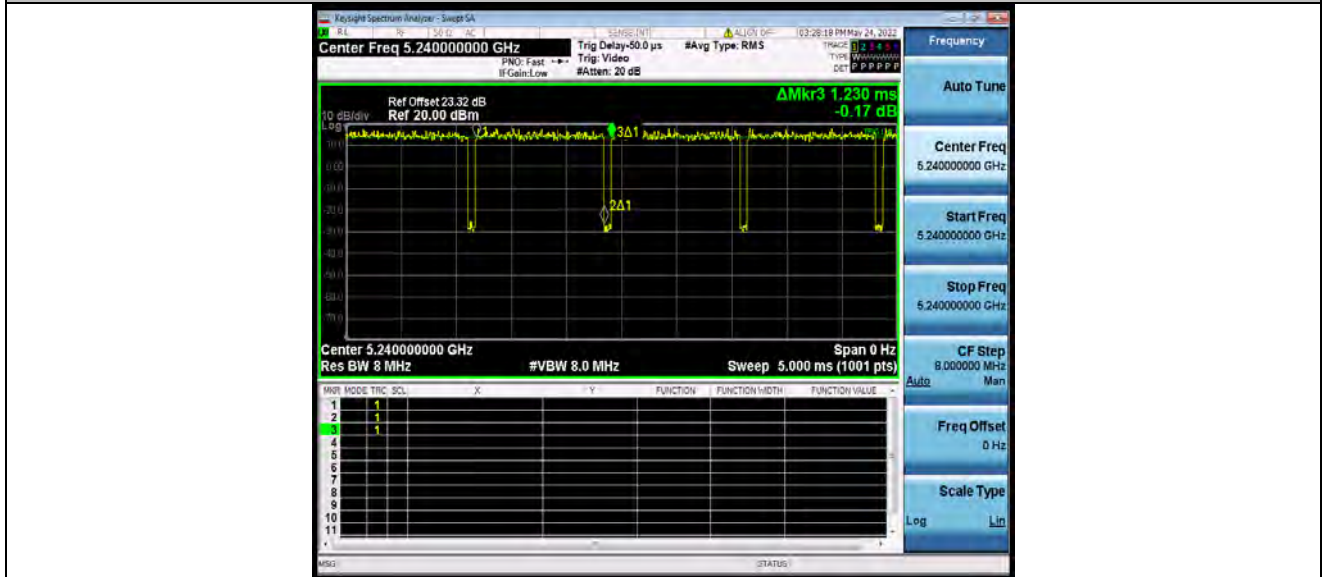


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5240

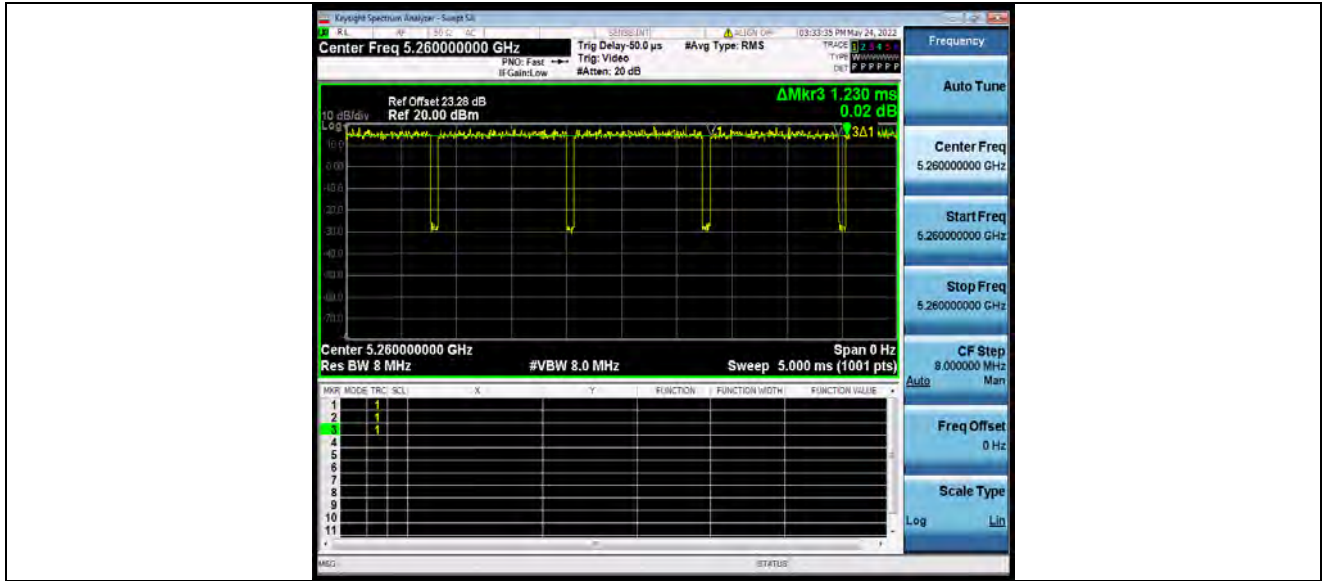


11AC20SISO\_Ant1\_5260

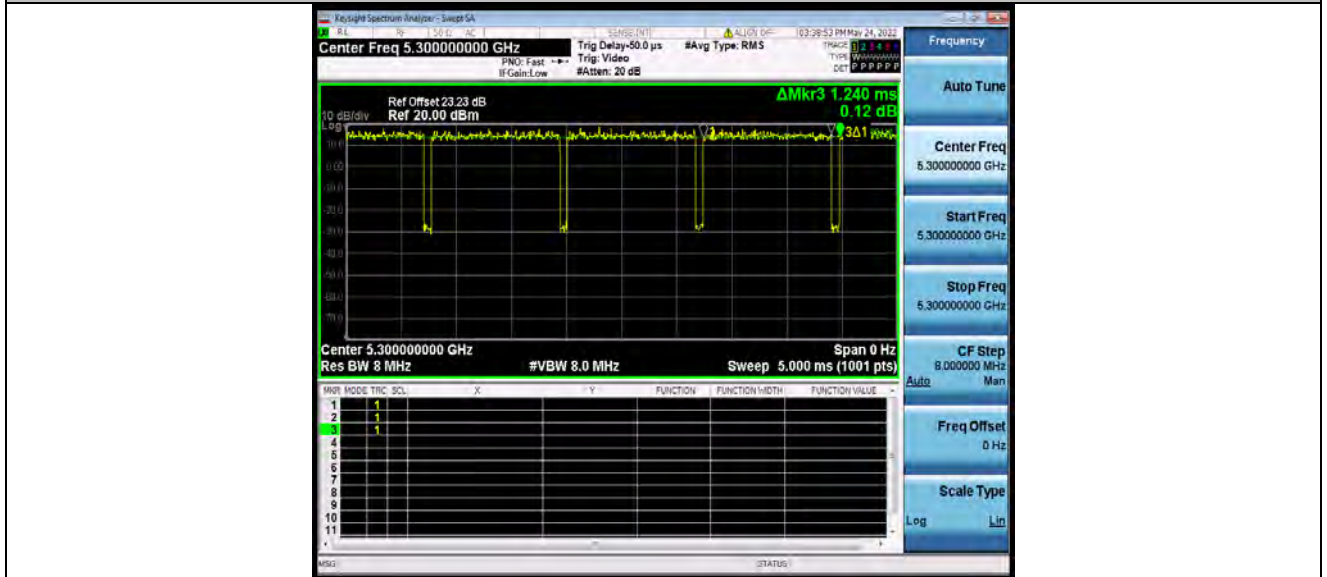


BUREAU VERITAS

Test Report No.: W7L-P22090011RF03



11AC20SISO\_Ant1\_5300



11AC20SISO\_Ant1\_5320