

Report No.: AAEMT/RF/230228-01-01

# FCC Test Report

(Part 27)

**FCC ID: 2AWAS-901-00094**

## Client Information:

Applicant: Mavenir Systems, Inc.

Applicant add.: 1700 International Parkway, Suite 200 Richardson TX-75081 USA.

## Product Information:

EUT Name: Mavenir Dual-band B25B66 RRU

Model No.: MR44MOA

Brand Name: 

Standards: FCC PART 27

## AA Electro Magnetic Test Laboratory Private Limited

Add.: Plot No 174, Udyog Vihar - Phase 4, Sector 18,  
Gurgaon, Haryana, India

Date of Receipt: Feb. 28, 2023

Date of Test: Feb. 28~ Apr. 13, 2023

Date of Issue: Apr. 19, 2023

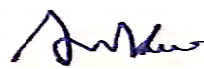
Test Result: Pass

Declaration of Conformity: Declaration of conformity of the results is based as per the standard limits

This device described above has been tested by AA Electro Magnetic Test Laboratory Private Limited, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

\*This test report must not be used by the client to claim product endorsement by any agency of the U.S. government.

Prepared By: (+ signature) Ankur Kumar



Reviewed & Approved by: (+ signature)

Dr. Lenin Raja (Authorized Representative) (/ lenin83/)



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## 2 Test Summary

### 2.1 Compliance with FCC Part 27

TEST	TEST REQUIREMENT	LIMIT	RESULT	REMARK
Equivalent Isotropic Radiated Power	2.1046; 27.50(d)(4)	< 1640 watts/MHz	PASS	Meet the requirement of limit.
Frequency Stability	2.1055; 27.54	N/A	PASS	Meet the requirement of limit.
Occupied Bandwidth	2.1049; 27.53	See 5.3.1	PASS	Meet the requirement of limit.
Peak to average ratio	2.1046; 27.50(a)	< 13 dB	PASS	Meet the requirement of limit.
Band Edge Measurements	27.53	< -19.02 dBm	PASS	Meet the requirement of limit.
Conducted Spurious Emissions	2.1051; 27.53	< -19.02 dBm	PASS	Meet the requirement of limit.
Radiated Spurious Emissions	2.1053; 27.53	< -13 dBm	PASS	Meet the requirement of limit.

## 2.2 Measurement Uncertainty

All measurements involve certain levels of uncertainties, the following measurements uncertainty Levels have estimated based on standards, the maximum value of the uncertainty as below:

No.	Item	Uncertainty
1	Conducted Emission Test	2.82dB
2	Radiated Emission Test	2.79dB
3	Spurious Emissions, Conducted	0.76dB
4	Output Power	1.16dB

## 2.3 Test Location

All tests were performed at:

AA Electro Magnetic Test Laboratory Private Limited

Plot No 174, Udyog Vihar - Phase 4, Sector 18, Gurgaon, Haryana, India

Tel.: +91-0124-4235350

### 3 Test Facility

The test facility is recognized, certified or accredited by the following organizations:

**ILAC / NABL Accreditation No.: TC-8597**

Three 3m Semi-Anechoic Chamber, 1 full-Anechoic chamber and 2 Shielding Rooms of AA Electro Magnetic Test Laboratory Private Limited have been registered by National Accreditation Board for Testing and Calibration Laboratories (NABL).

**ILAC –A2LA Accreditation No.: 5593.01**

Three 3m Semi-Anechoic Chamber, 1 full-Anechoic chamber and 2 Shielding Rooms of AA Electro Magnetic Test Laboratory Private Limited have been registered American Association of Laboratory Accreditation ( A2LA.)

**FCC- Recognition No.: 137777**

Three 3m Semi-Anechoic Chamber, 1 full-Anechoic chamber and 2 Shielding Rooms of AA Electro Magnetic Test Laboratory Private Limited have been registered by Federal Communications Commission (FCC).

**ISED Recognition No.: 26046**

Three 3m Semi-Anechoic Chamber, 1 full-Anechoic chamber and 2 Shielding Rooms of AA Electro Magnetic Test Laboratory Private Limited have been registered by Institute for Social and Economic Development.( ISED)

**VCCI- Registration No: 4053**

Three 3m Semi-Anechoic Chamber, 1 full-Anechoic chamber and 2 Shielding Rooms of AA Electro Magnetic Test Laboratory Private Limited have been registered by Voluntary Control Council for Interference.(VCCI)

**TEC Designation No.: IND063**

Three 3m Semi-Anechoic Chamber, 1 full-Anechoic chamber and 2 Shielding Rooms of AA Electro Magnetic Test Laboratory Private Limited have been registered by Telecommunication Engineering (TEC) Center

**BIS Recognition No: 816586**

BIS recognized as per CRS scheme for IT electronics, LED control gears, Lamp, Inverter / UPS are recognized as per LRS 2020

#### 3.1 Deviation from standard

None


#### 3.2 Abnormalities from standard conditions

None

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## 4 General Information

### 4.1 General Description of EUT

Manufacturer:	Mavenir Systems, Inc.	
Manufacturer Address:	1700 International Parkway, Suite 200 Richardson TX-75081 USA	
Applicant:	Mavenir Systems, Inc.	
Applicant add:	1700 International Parkway, Suite 200 Richardson TX-75081 USA	
EUT Name:	Mavenir Dual-band B25B66 RRU	
Model No:	MR44MOA	
Brand Name:		
Derivative model No.:	N/A	
Frequency Range:	LTE Band 66 Channel Bandwidth: 20MHz	2110 MHz ~ 2190 MHz
Modulation Technology:	QPSK, 16QAM, 64QAM, 256QAM,1024QAM	
Antenna Gain(dBi):	18.4dBi	
H/W No.:	901-00094-E12	
S/W No.:	MA-MR44MOA-R-230222_i_CUS_89	
Power Supply Range:	-38.5V to -57.5V DC, 35A(Max)	
Note:1	<p>For a more detailed features description, please refer to the manufacturer's Specifications or the User's Manual.</p> <p><b>Disclaimer:</b> Antenna type and Antenna gain is provided by manufacturer.</p>	
Condition of Sample on receipt:	Good / Satisfactory / Fit for Testing	
Opinions and Interpretations:	See the specific Note / Annexure if any in the whole /full report.	

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**4.2 EUT channels and frequencies list:**

Test Item	Tested Channel frequency	Channel Bandwidth	Modulation
Equivalent Isotropic Radiated Power	2120MHz, 2150MHz, 2180MHz	20MHz	QPSK, 16QAM, 64QAM, 256QAM,1024QAM
Occupied Bandwidth			
Peak to average ratio	2120MHz, 2150MHz, 2180MHz		
Frequency Stability	2150MHz		
Radiated Spurious Emissions	2120MHz, 2150MHz, 2180MHz		
Conducted Spurious Emissions	2120MHz, 2150MHz, 2180MHz		
Band Edge Measurements	2120MHz, 2150MHz, 2180MHz		QPSK

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### 4.3 EUT Peripheral List

No.	Equipment	Manufacturer	FCC ID	Model No.	Serial No.	Power cord	Remark
1.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### 4.4 Test Peripheral List

No.	Equipment	Manufacturer	EMC Compliance	Model No.	Serial No.	Power cord	signal cable
1	DC Power Supply	Anivo	N/A	N/A	N/A	N/A	N/A
2.	Laptop	DELL	N/A	Latitude E7240	6SJ2T02	2m unshielded	N/A



## 5 Equipments List for All Test Items

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	Spectrum Analyzer	Rohde and Schwarz	FSP	101163	2022/02/08	2024/02/07
2	Loop antenna	DAZE Beijing	ZN30900C	18052	2021/09/15	2023/09/15
3	Hi power horn antenna	DAZE Beijing	ZN30700	18012	2021/09/15	2023/09/15
4	Horn antenna	DAZE Beijing	ZN30702	18006	2022/03/23	2023/03/22
5	Horn antenna	DAZE Beijing	ZN30703	18005	2021/09/15	2023/09/15
6	Pre amplifier	KELIANDA	LNA-0009295	-	2023/01/13	2024/01/13
7	Pre amplifier	KELIANDA	CF-00218	-	2023/01/13	2024/01/13
8	Biconical Antenna	DAZE Beijing	ZN30505C	17038	2021/09/15	2023/09/15
9	EMI-RECEIVER	Schwarzbeck	FCKL	1528194	2023/01/13	2024/01/13
10	LISN	Kyoritsu	KNW-407	8-1789-5	2023/01/13	2024/01/13
11	Network-LISN	SCHWARZBECK	NNBM8125	81251314	2023/01/13	2024/01/13
12	Network-LISN	SCHWARZBECK	NNBM8125	81251315	2023/01/13	2024/01/13
13	PULSELIMITER	Rohde and Schwarz	ESH3-Z2	100681	2023/01/13	2024/01/13
14	50Ω Coaxial Switch	DAIWA	1565157	-	2023/01/13	2024/01/13
15	50Ω Coaxial Switch	-	-	-	2023/01/13	2024/01/13
16	Wireless signal power meter	DARE!!	RPR3006W	RFSW1902 20	2023/01/13	2024/01/13

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17	Signal Generator	KEYSIGHT	N5181A	512071	2023/01/13	2024/01/13
18	RF Vector Signal Generator	Keysight	N5182B	512094	2023/01/13	2024/01/13
19	Spectrum analyzer	R&S	FSV-40N	101385	2023/01/13	2024/01/13
20	Radio Communication Tester	R&S	CMW 500	124589	2021/09/15	2023/09/15
21	Signal Generator	R&S	SMP02	837017/004 836593/005	2021/09/15	2023/09/15
22	DC Regulated Power Supply	Metravi	RPS-3005	669076	2022/12/13	2023/12/12
23	Climatic Chamber	Sunrise Scientific Instruments	-	-	2022/11/22	2023/11/21
24	Attenuators	AGILENT	8494B	-	-	-
25	Attenuators	AGILENT	8495B	-	-	-
26	Vector Signal Analyzer	Anritsu	MS2850A	6272323218	16/09/21	15/09/23
27	Climatic Chamber	Warmax	-	-	-	-
28	Circulator	RF Lambda	-	-	-	-
29	Combiner	RF Lambda	-	-	-	-
30	RF Cables	Rosenburger	-	-	-	-
31	Attenuators	RF Lamda	-	-	-	-

## 5.1 EQUIVALENT ISOTROPICALLY RADIATED POWER MEASUREMENT

### 5.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

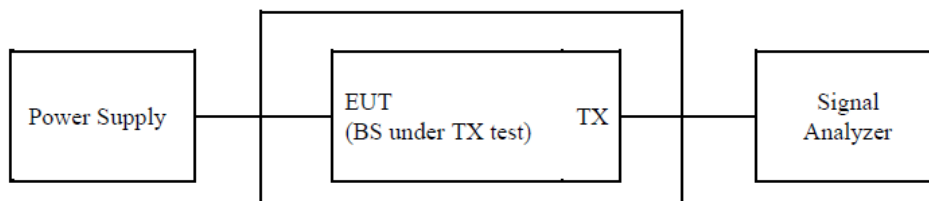
The Radiated Equivalent Isotropically Power shall be according to the specific rule Part 27.50(d)(4) that are limited to EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.

### 5.1.2 TEST PROCEDURES

1. Span to  $2 \times$  to  $3 \times$  the OBW
2. RBW  $\geq$  1% to 5% of the OBW
3. VBW  $\geq 3 \times$  RBW
4. Sweep time  $\geq 10 \times$  (number of points in sweep)  $\times$  (transmission symbol period)
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run"
7. If the EUT can be configured to transmit continuously, then set the trigger to free run
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple.
9. The trace was allowed to stabilize
10. Compute the power by integrating the spectrum across the OBW of the signal using the Instrument's band power measurement function, with the band/channel limits set equal to the OBW band edges.

### 5.1.3 TEST SETUP

#### CONDUCTED POWER MEASUREMENT



**5.1.4 Test results**

Frequency (MHz)	Channel BW (MHz)	Power Density (dBm/MHz)				EIRP Density (dBm/MHz)	Limit (dBm/MHz)
		Ant 1	Ant 2	Ant 3	Ant 4		
<b>QPSK</b>							
2120.00	20	33.08	33.03	33.02	33.11	57.48	< 62.15
2150.00	20	32.87	33.12	33.03	33.06	57.44	< 62.15
2180.00	20	32.95	32.89	33.16	33.10	57.46	< 62.15
<b>16QAM</b>							
2120.00	20	33.16	33.18	33.12	33.07	57.55	< 62.15
2150.00	20	33.10	33.02	32.97	33.03	57.45	< 62.15
2180.00	20	33.01	32.98	32.96	33.10	57.43	< 62.15
<b>64QAM</b>							
2120.00	20	33.11	33.01	33.03	33.04	57.46	< 62.15
2150.00	20	32.89	33.02	33.04	33.03	57.41	< 62.15
2180.00	20	32.99	32.92	33.06	33.11	57.44	< 62.15
<b>256QAM</b>							
2120.00	20	33.02	33.12	33.01	33.02	57.46	< 62.15
2150.00	20	33.10	32.97	33.12	33.04	57.44	< 62.15
2180.00	20	33.06	32.95	33.02	33.01	57.43	< 62.15
<b>1024QAM</b>							
2120.00	20	33.11	33.08	33.02	33.01	57.47	< 62.15
2150.00	20	32.93	33.01	32.94	33.04	57.40	< 62.15
2180.00	20	32.97	33.02	32.97	32.98	57.40	< 62.15

**Note 1:** Total Power Density (dBm/MHz) =  $10 \cdot \log_{10} \{ 10^{\frac{\text{ANT 1 Power (dBm/MHz)}}{10}} + 10^{\frac{\text{ANT 2 Power (dBm/MHz)}}{10}} + 10^{\frac{\text{ANT 3 Power (dBm/MHz)}}{10}} + 10^{\frac{\text{ANT 4 Power (dBm/MHz)}}{10}} \}$  (dBm/MHz).

**Note 2:** EIRP Density (dBm/MHz) = Total Power Density (dBm/MHz) + Antenna Gain (dBi).

**Observations:-** Observed EIRP of the submitted devices are within the limits See table 5.1.4. As per the observations the device meets the FCC requirements.

## 5.2 FREQUENCY STABILITY MEASUREMENT

### 5.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

### 5.2.2 TEST PROCEDURE

#### Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

#### 5.2.3 Frequency Stability Under Voltage Variations:

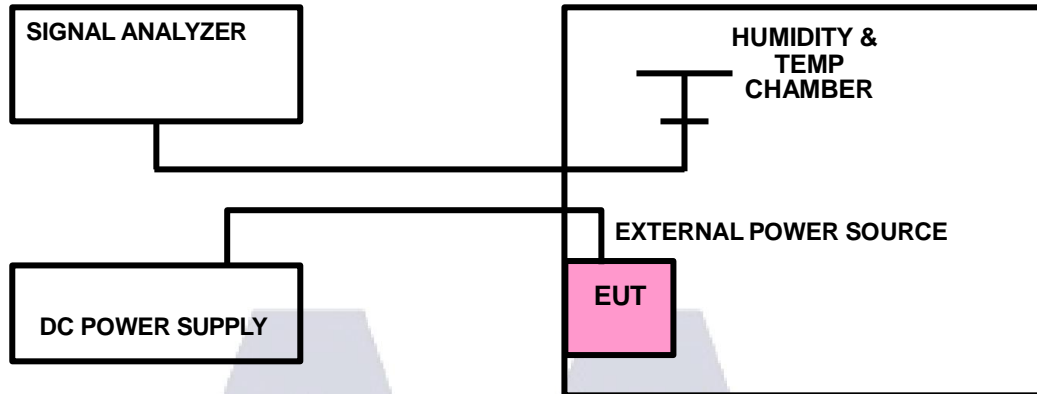
Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ( $\pm 20\%$ ) and endpoint (If a product is specified to Operate over a range of input voltage then the  $-20\%$  variation is applied to the lowermost voltage And the  $+20\%$  is applied to the uppermost voltage), record the maximum frequency change.

**NOTE:** The frequency error was recorded frequency error from the communication simulator.

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**5.2.4 TEST SETUP**



**5.2.5 TEST RESULTS**

**Frequency Error vs. Temperature**

Voltage (DC)	Temp (°C)	Frequency Tolerance (ppm)
-48V	- 40	-0.115
	- 35	-0.113
	- 25	-0.121
	-15	-0.121
	-5	-0.121
	+ 15	-0.121
	+ 25	-0.118
	+ 35	-0.118
	+ 45	-0.121
-38.5V	+ 25	-0.121
-57.5V	+ 25	-0.121

Note:- Testing is carried out in all possible configuration , only worst case data reported. This unit meets the FCC requirement.

### 5.3 OCCUPIED BANDWIDTH MEASUREMENT

#### 5.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

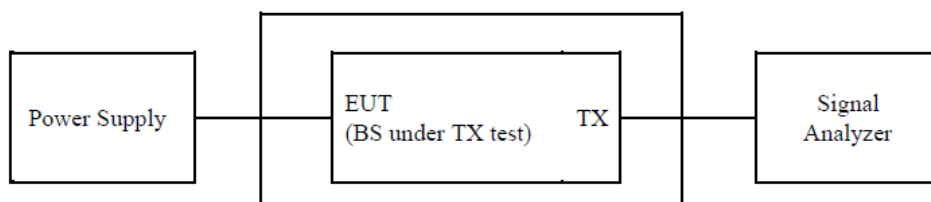
The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### 5.3.2 TEST PROCEDURE

1. Set center frequency to the nominal EUT channel center frequency;
2. RBW = The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW;
3. VBW  $\geq 3 \times$  RBW;
4. Detector = Peak;
5. Trace mode = max hold;
6. Sweep = auto couple;
7. Allow the trace to stabilize;
8. The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 26 dB below the reference level

Art

#### 5.3.3 TEST SETUP



**5.3.4 TEST RESULTS**

Frequency (MHz)	Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
<b>QPSK</b>			
<b>ANT1</b>			
2120.00	20	18.774	17.846
2150.00	20	18.750	17.846
2180.00	20	18.725	17.846
<b>ANT2</b>			
2120.00	20	18.725	17.846
2150.00	20	18.701	17.846
2180.00	20	18.652	17.846
<b>ANT3</b>			
2120.00	20	18.847	17.846
2150.00	20	18.798	17.822
2180.00	20	18.798	17.846
<b>ANT4</b>			
2120.00	20	18.774	17.846
2150.00	20	18.750	17.822
2180.00	20	18.798	17.846



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Frequency (MHz)	Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
<b>16QAM</b>			
<b>ANT1</b>			
2120.00	20	18.773	17.846
2150.00	20	18.749	17.846
2180.00	20	18.721	17.846
<b>ANT2</b>			
2120.00	20	18.723	17.846
2150.00	20	18.700	17.846
2180.00	20	18.651	17.846
<b>ANT3</b>			
2120.00	20	18.842	17.846
2150.00	20	18.794	17.829
2180.00	20	18.786	17.846
<b>ANT4</b>			
2120.00	20	18.769	17.846
2150.00	20	18.748	17.828
2180.00	20	18.792	17.846

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Frequency (MHz)	Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
<b>64QAM</b>			
<b>ANT1</b>			
2120.00	20	18.771	17.846
2150.00	20	18.750	17.846
2180.00	20	18.725	17.846
<b>ANT2</b>			
2120.00	20	18.725	17.846
2150.00	20	18.703	17.846
2180.00	20	18.652	17.846
<b>ANT3</b>			
2120.00	20	18.847	17.846
2150.00	20	18.792	17.846
2180.00	20	18.794	17.846
<b>ANT4</b>			
2120.00	20	18.771	17.846
2150.00	20	18.752	17.846
2180.00	20	18.791	17.846

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Frequency (MHz)	Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
<b>256QAM</b>			
<b>ANT1</b>			
2120.00	20	18.772	17.846
2150.00	20	18.750	17.846
2180.00	20	18.729	17.846
<b>ANT2</b>			
2120.00	20	18.723	17.846
2150.00	20	18.706	17.846
2180.00	20	18.651	17.846
<b>ANT3</b>			
2120.00	20	18.842	17.846
2150.00	20	18.798	17.829
2180.00	20	18.798	17.846
<b>ANT4</b>			
2120.00	20	18.779	17.846
2150.00	20	18.750	17.846
2180.00	20	18.799	17.846

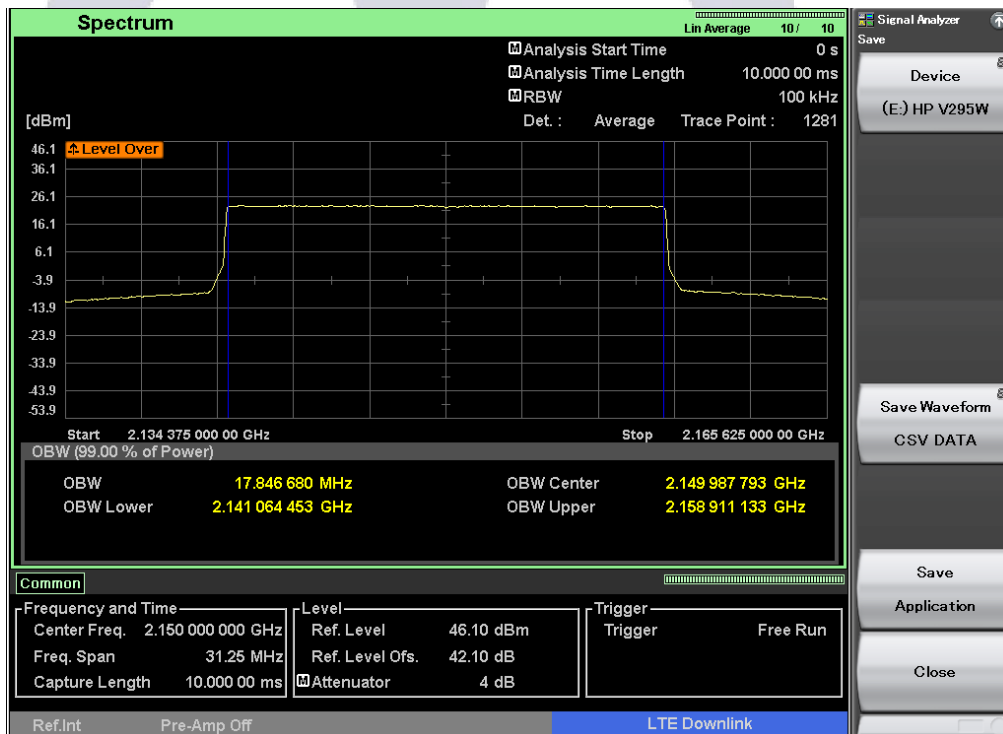
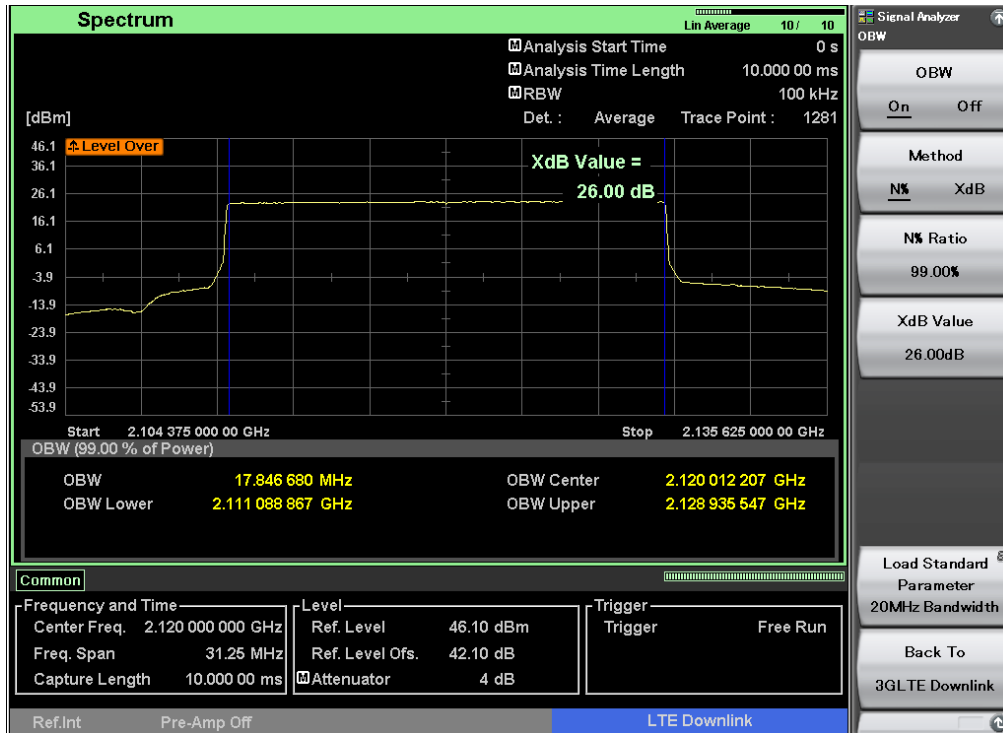
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Frequency (MHz)	Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
<b>1024QAM</b>			
<b>ANT1</b>			
2120.00	20	18.770	17.824
2150.00	20	18.749	17.800
2180.00	20	18.728	17.864
<b>ANT2</b>			
2120.00	20	18.721	17.840
2150.00	20	18.709	17.842
2180.00	20	18.645	17.824
<b>ANT3</b>			
2120.00	20	18.840	17.840
2150.00	20	18.799	17.828
2180.00	20	18.801	17.841
<b>ANT4</b>			
2120.00	20	18.782	17.829
2150.00	20	18.757	17.840
2180.00	20	18.792	17.838

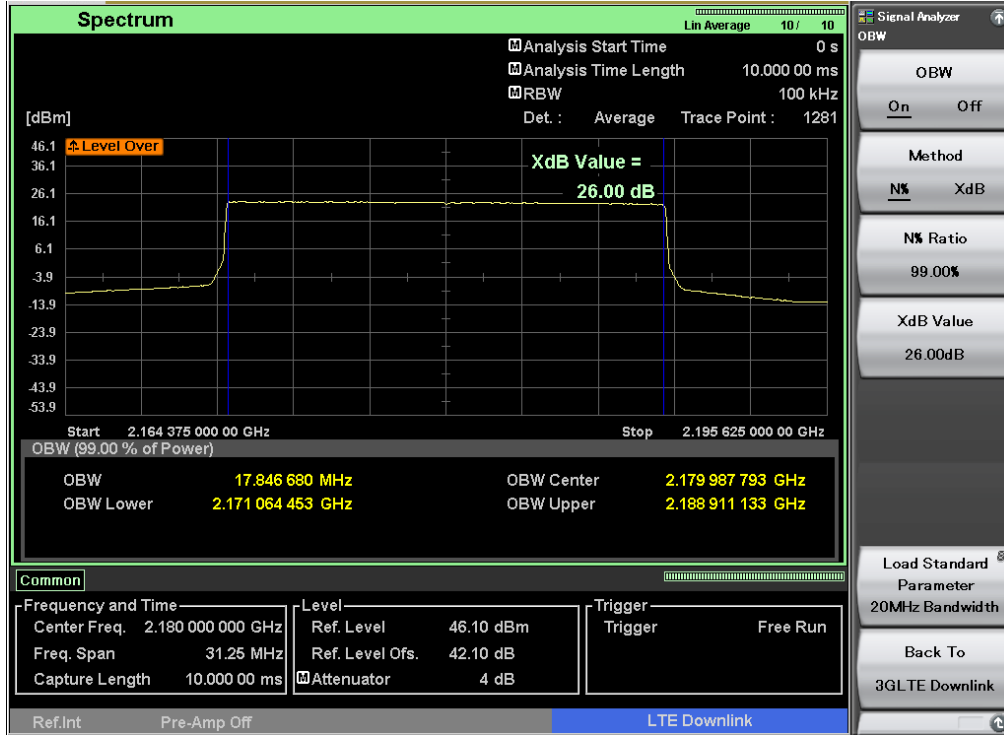
**Observations:-** Observed Occupied Bandwidth of the submitted devices are within the limits See table 5.3.4. As per the observations the device meets the FCC requirements.

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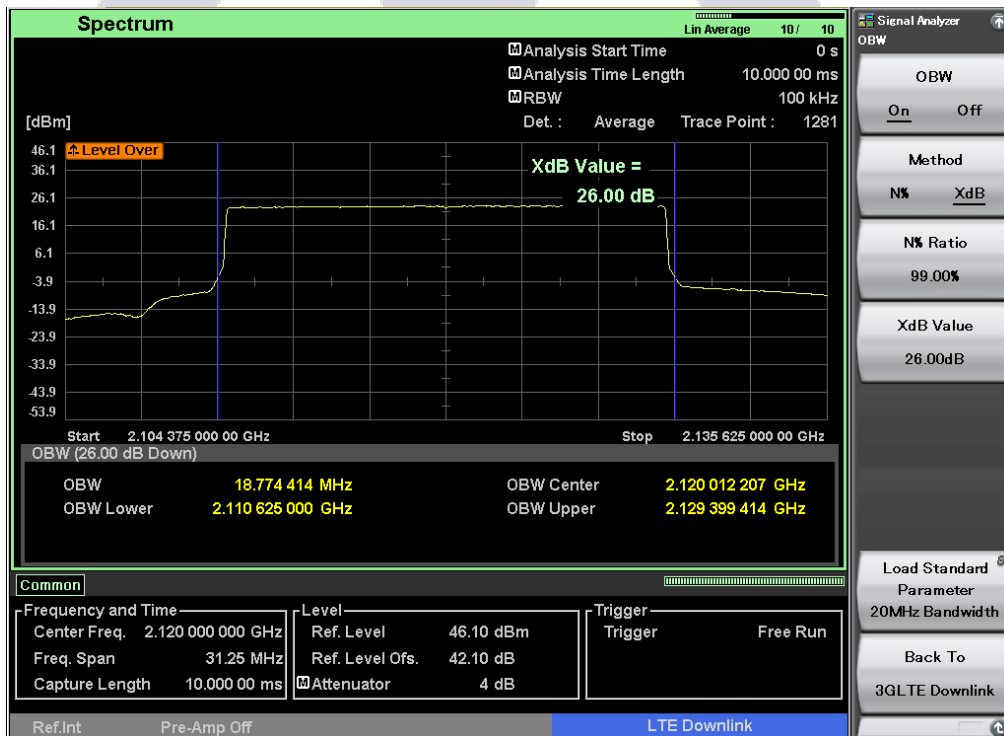
99% Bandwidth@ ANT1



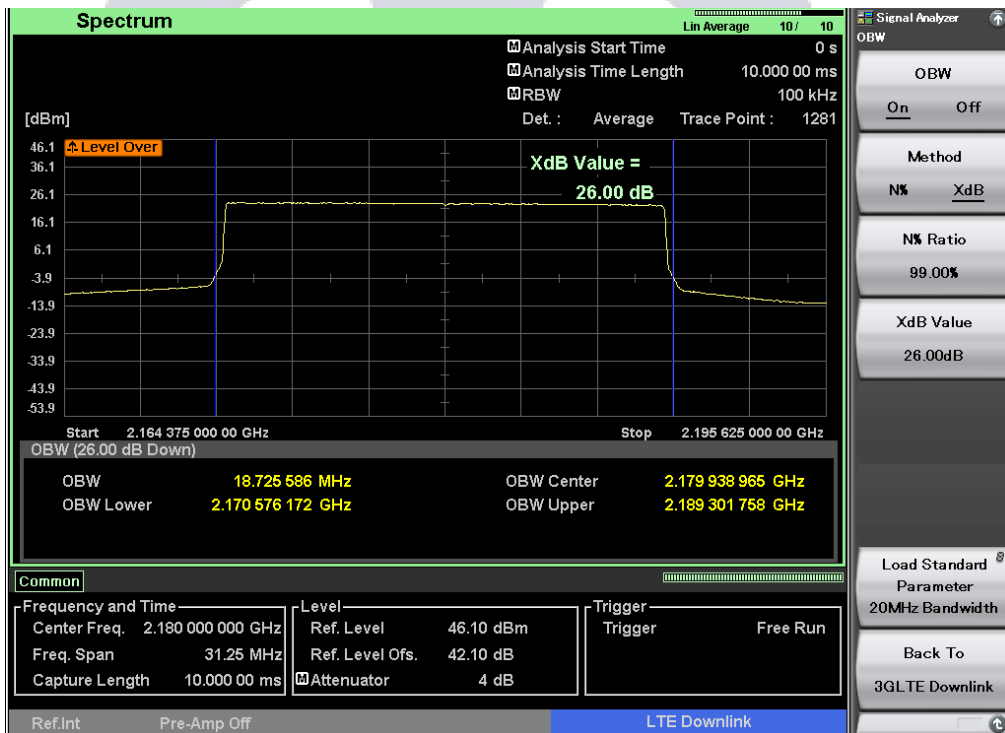
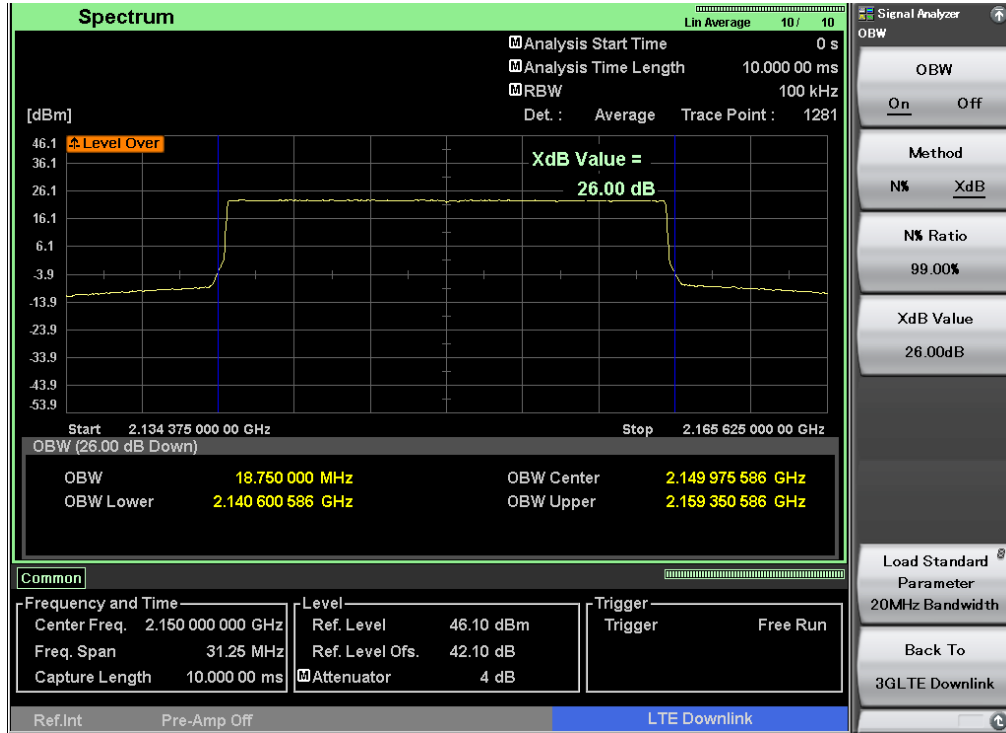
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26dB Bandwidth @ ANT1

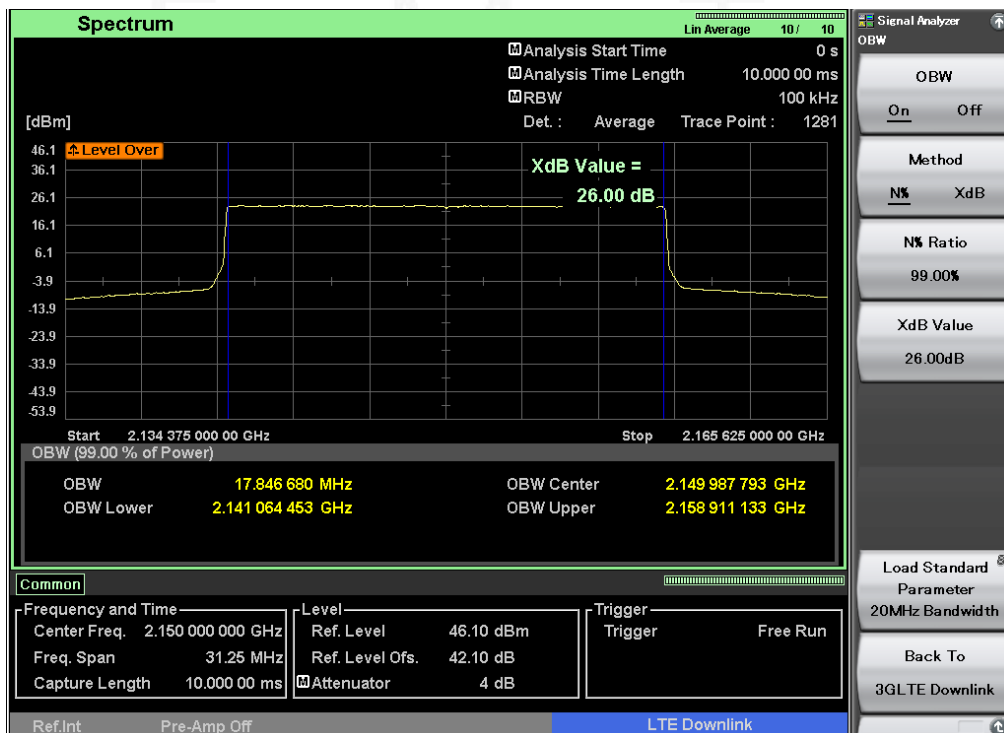
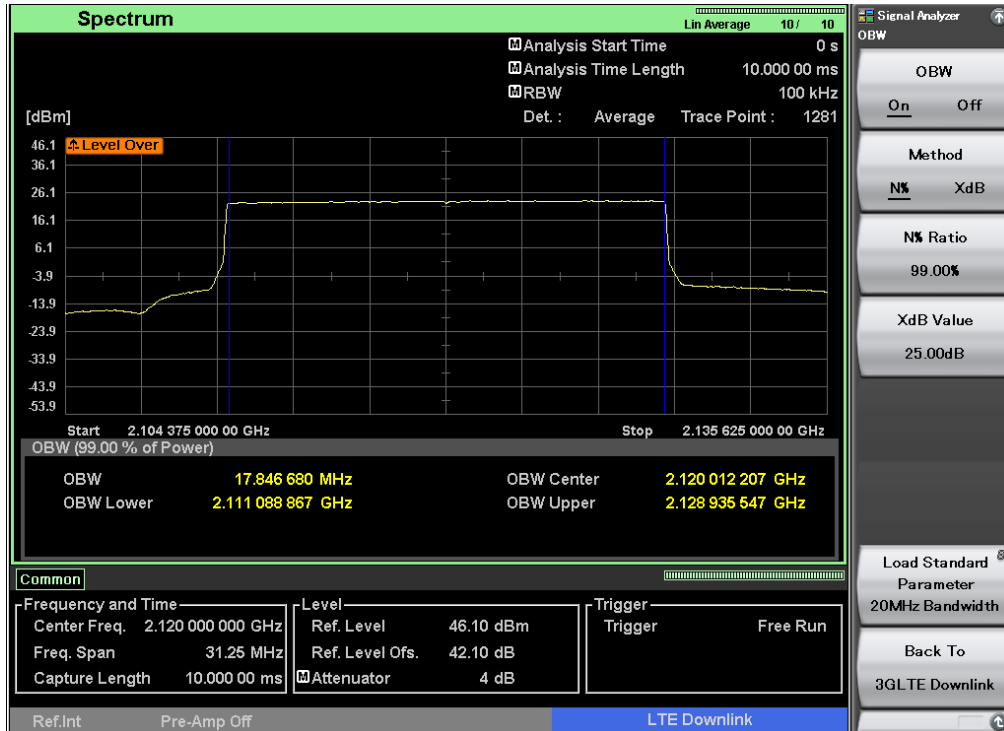


Report No.: AAEMT/RF/230228-01-01



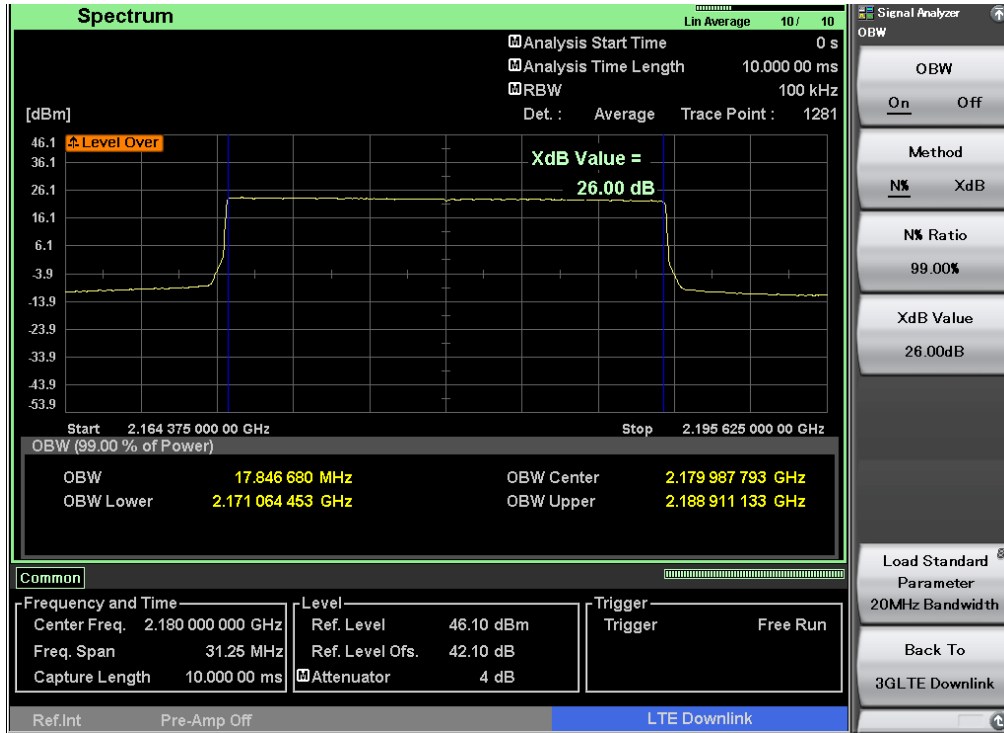
Report No.: AAEMT/RF/230228-01-01

99% Bandwidth@ ANT2

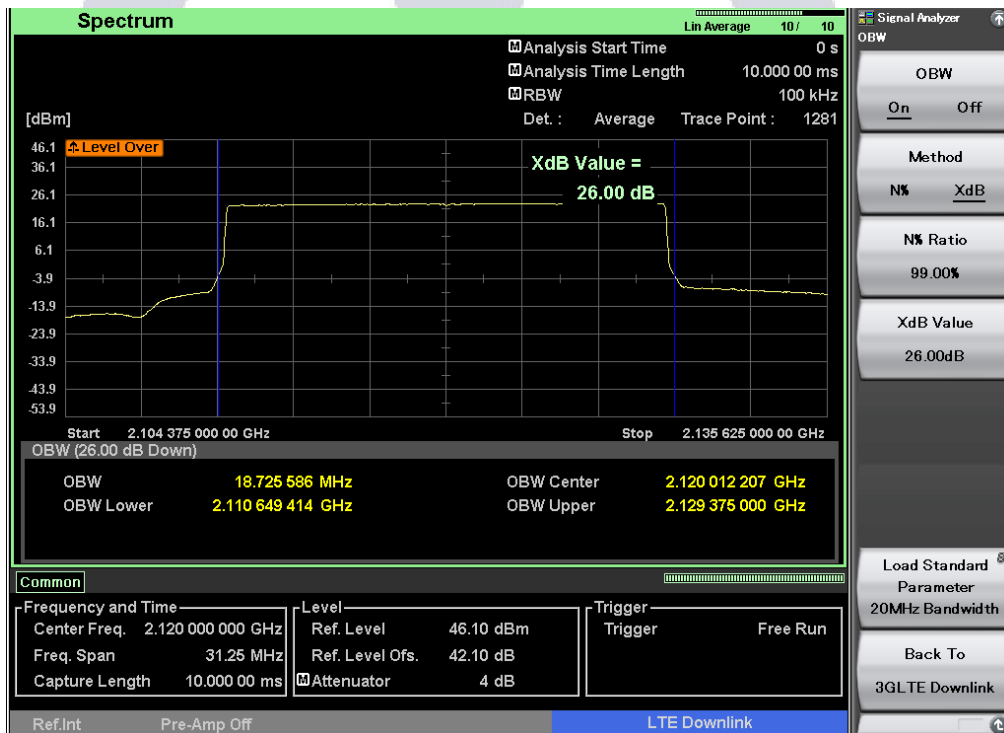




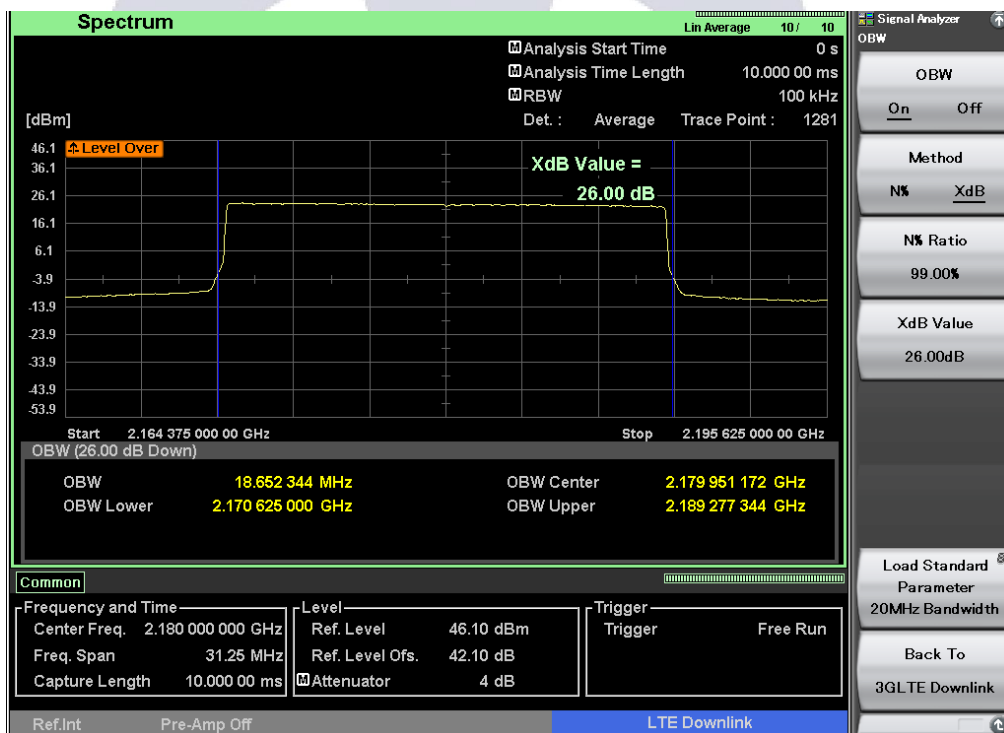
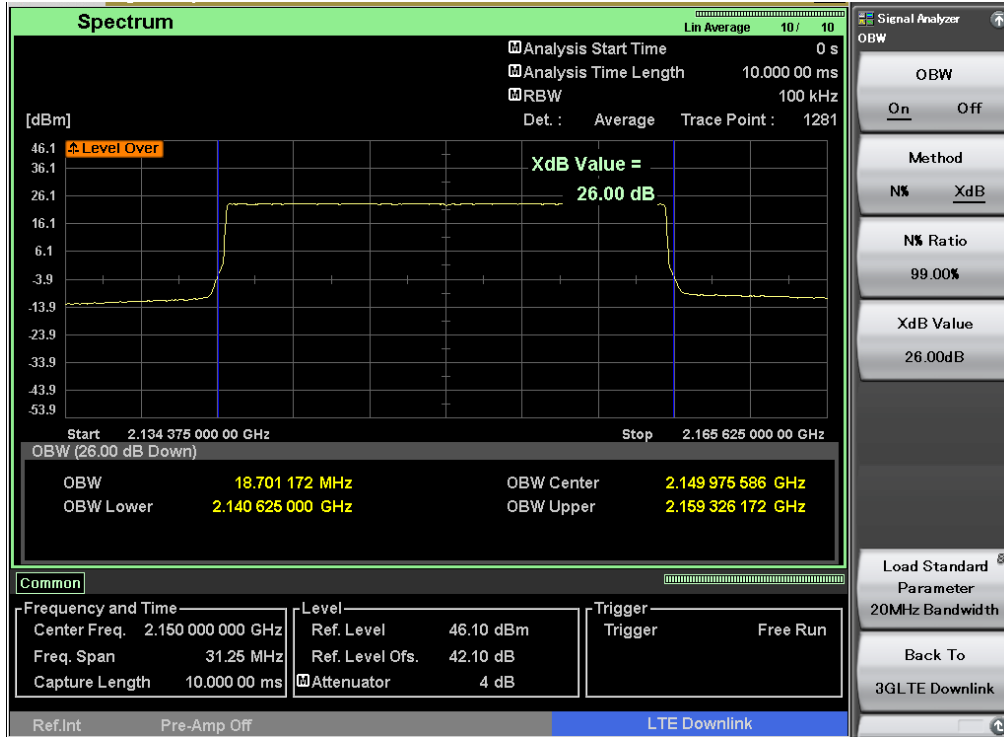
Report No.: AAEMT/RF/230228-01-01



26dB Bandwidth @ ANT2

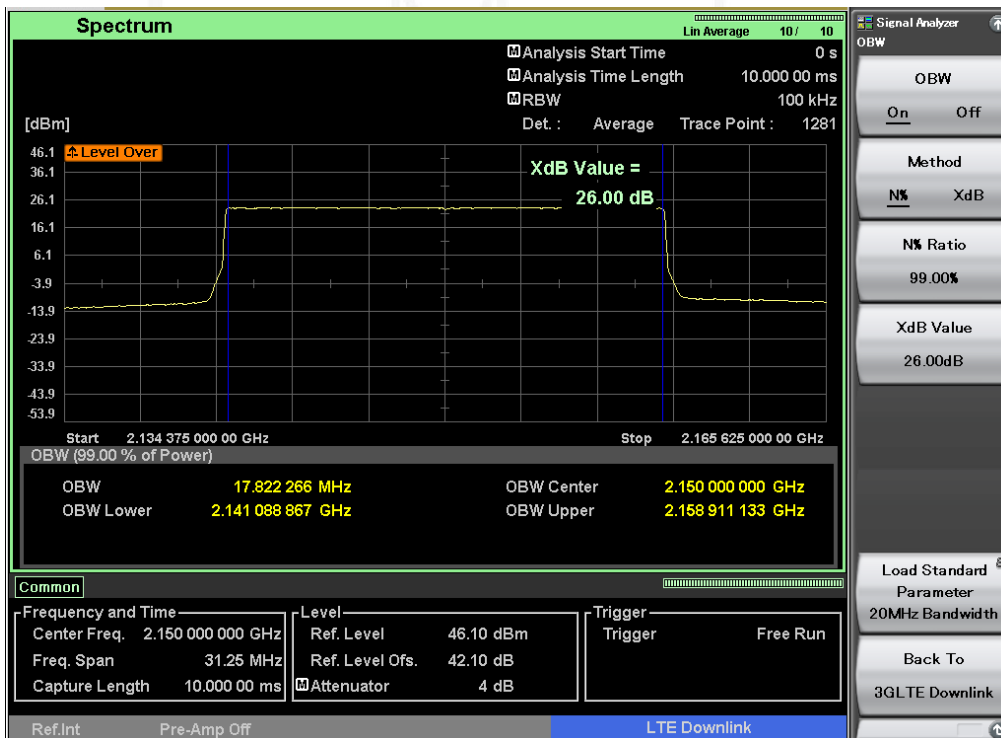
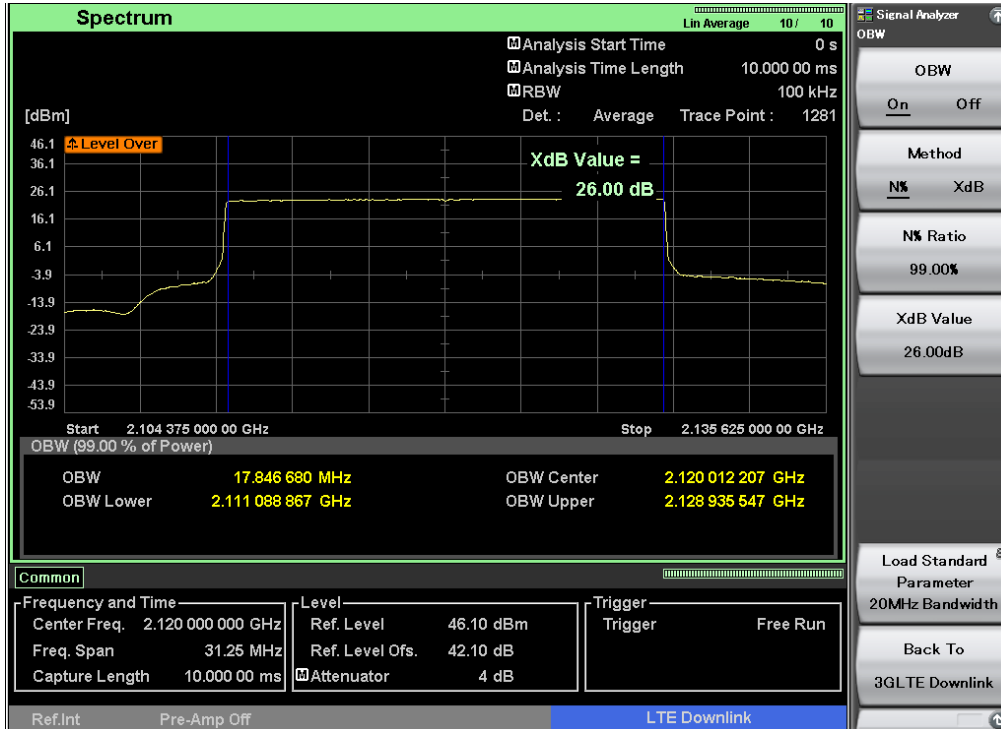


Report No.: AAEMT/RF/230228-01-01

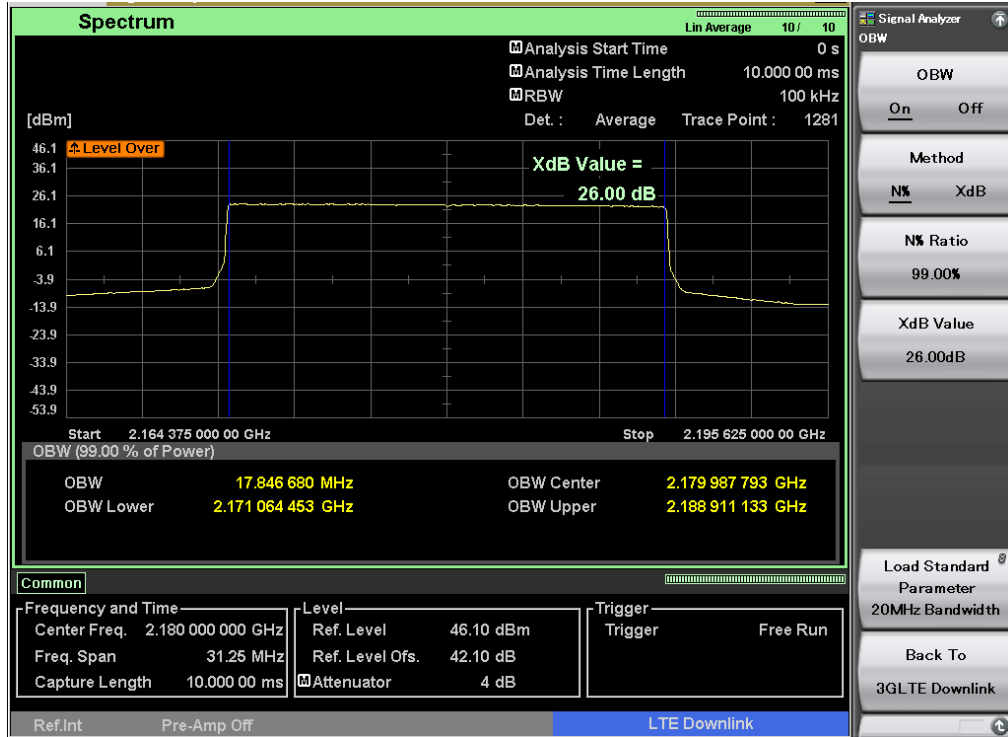


Report No.: AAEMT/RF/230228-01-01

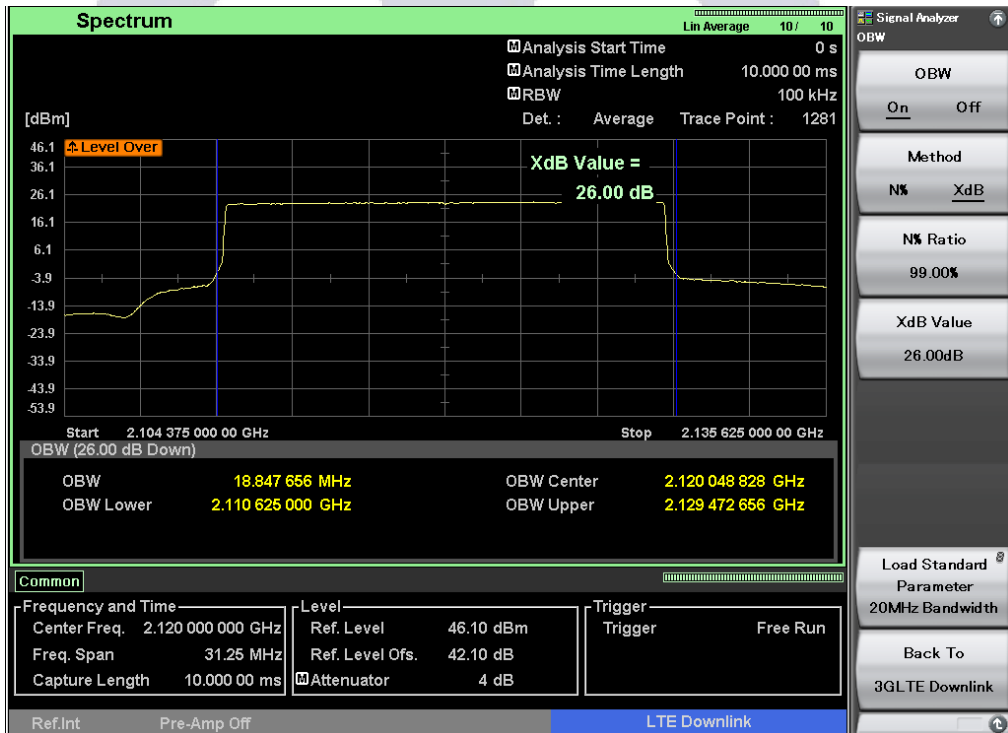
99% Bandwidth@ ANT3



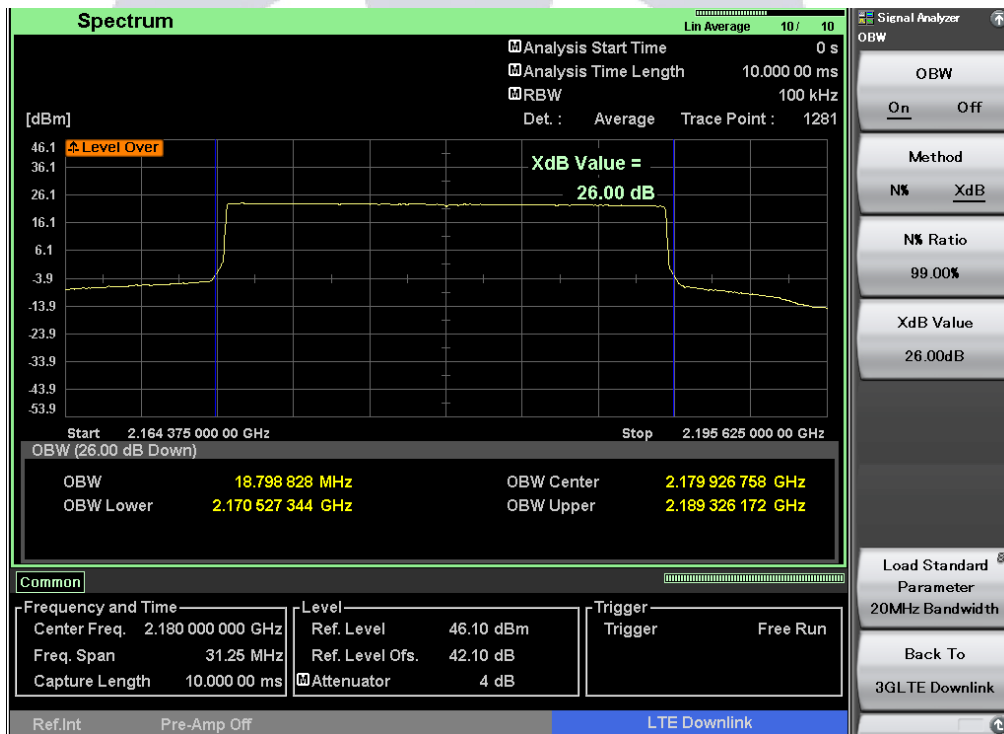
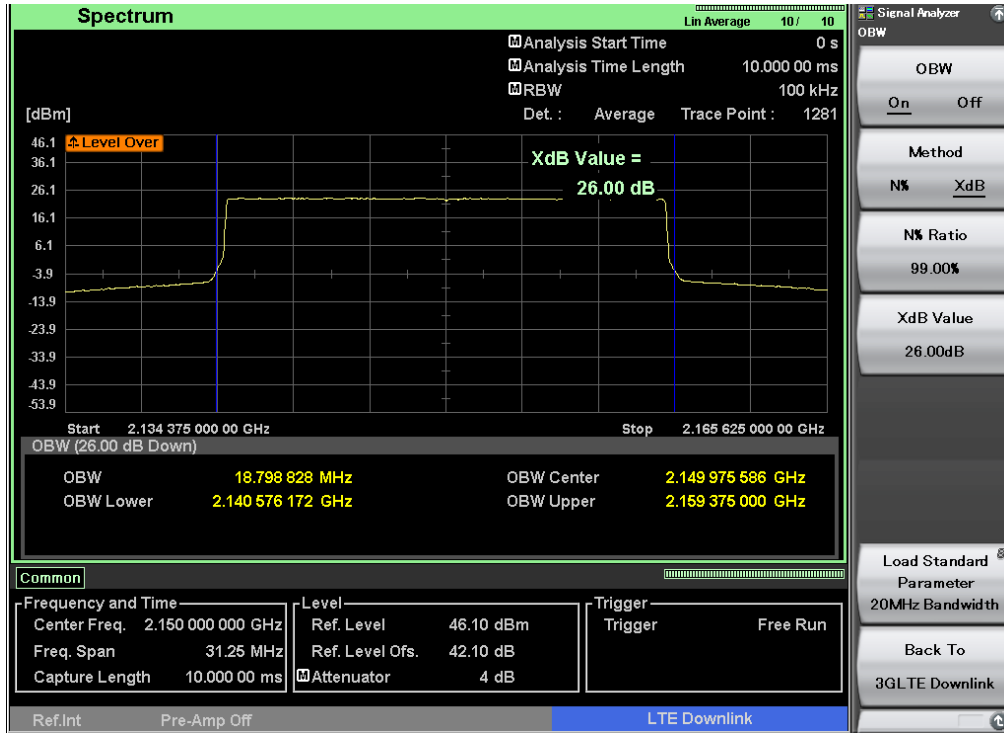
Report No.: AAEMT/RF/230228-01-01



26dB Bandwidth @ ANT3

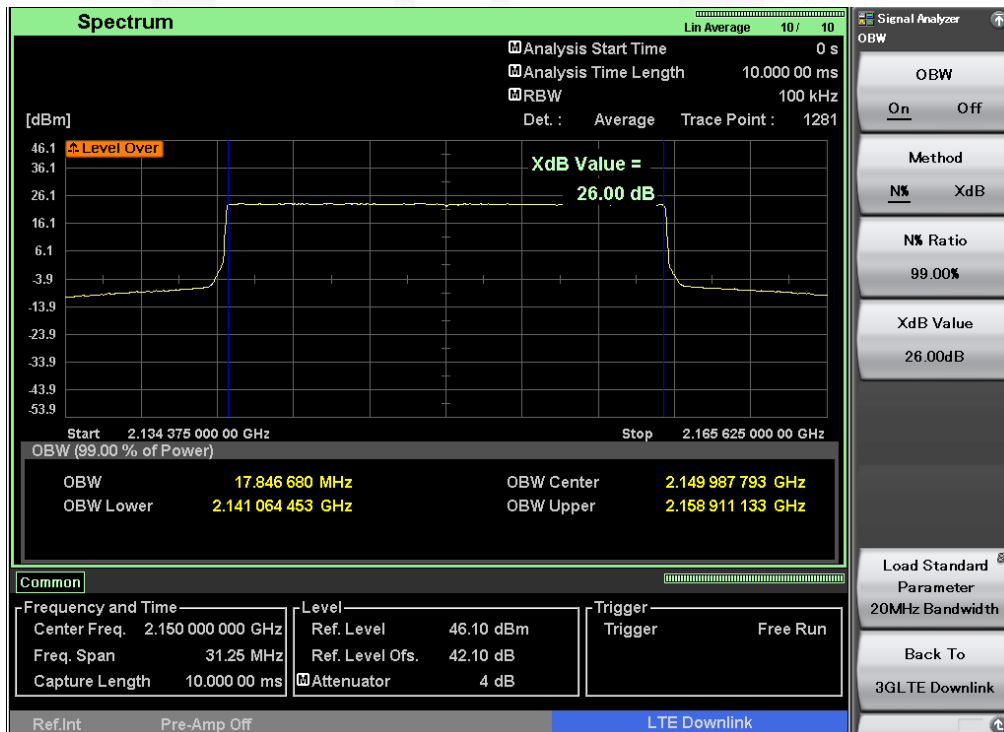
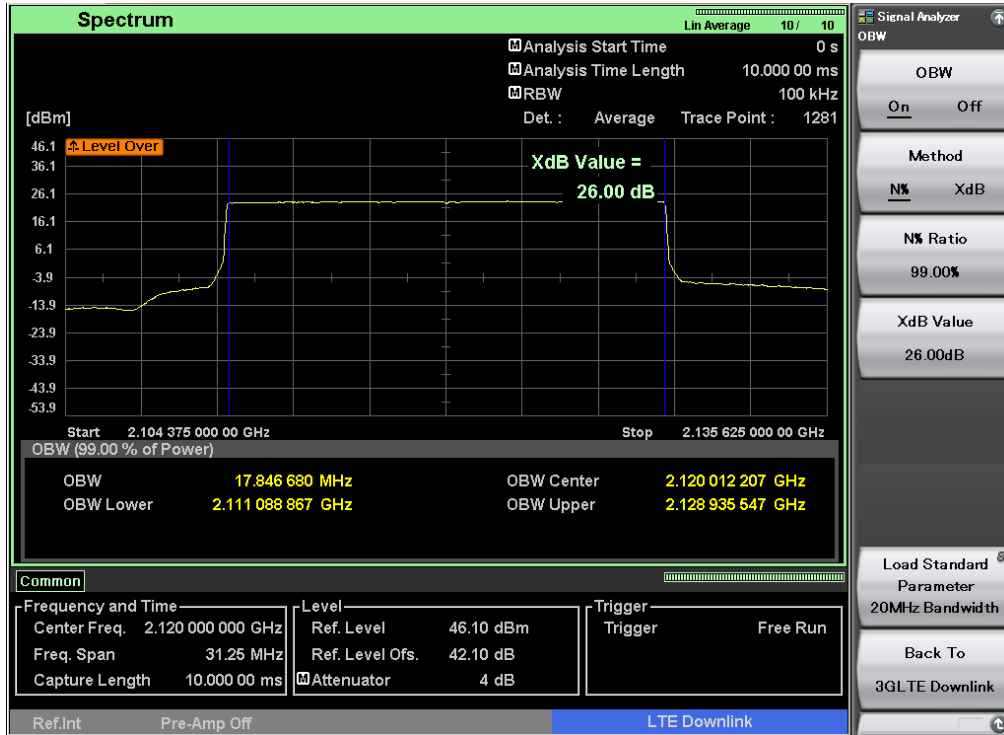


Report No.: AAEMT/RF/230228-01-01

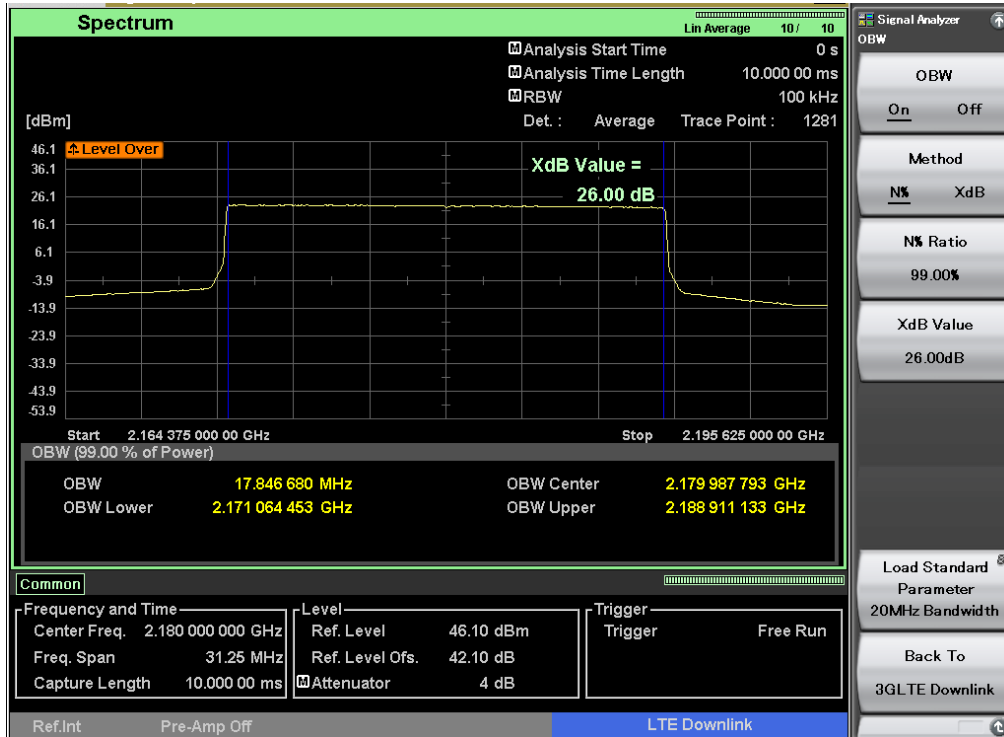


Report No.: AAEMT/RF/230228-01-01

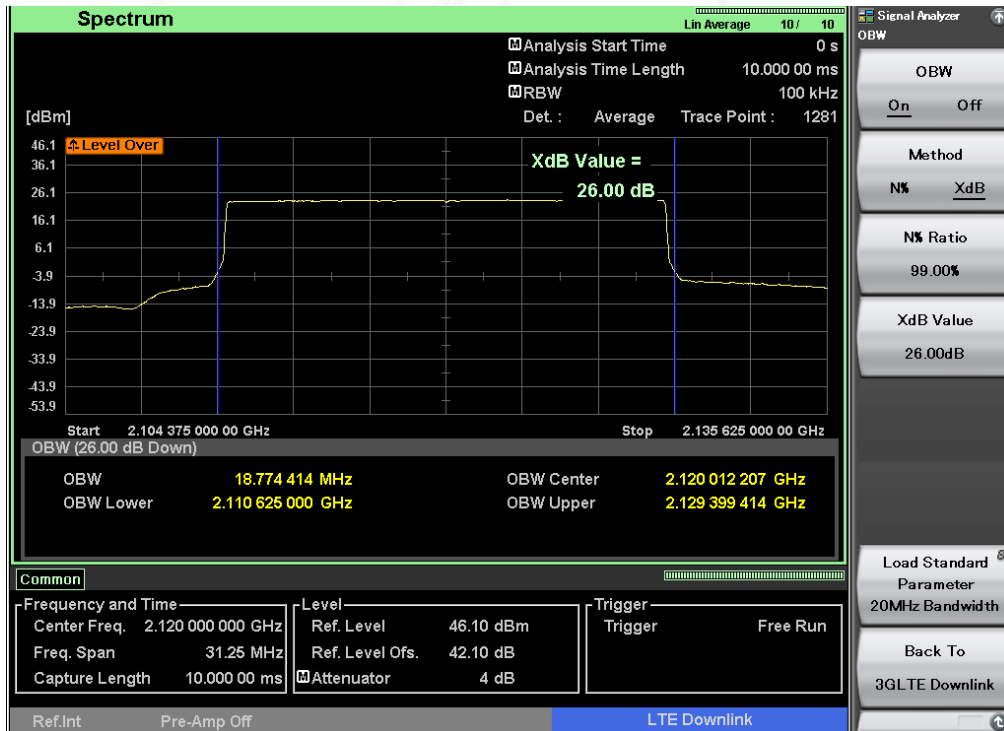
99% Bandwidth@ ANT4



Report No.: AAEMT/RF/230228-01-01



26dB Bandwidth @ ANT4



Report No.: AAEMT/RF/230228-01-01



Note:- Testing is carried out in all possible configuration , only worst case plot (With QPSK Modulation) reported.



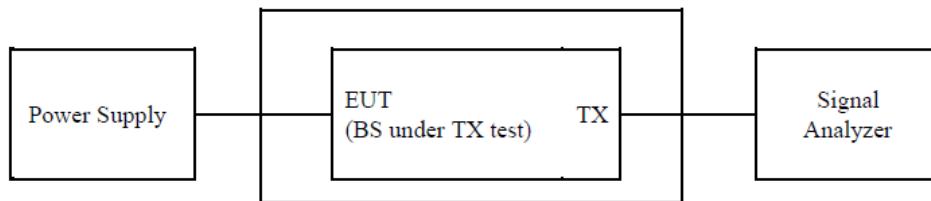
## 5.4 BAND EDGE MEASUREMENT

### 5.4.1 LIMITS OF BAND EDGE MEASUREMENT

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log (P)$  dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission limit equal to -13dBm.

The limit is adjusted to  $-13 \text{ dBm} - 10 * \log (4) = -19.02 \text{ dBm}$

### 5.4.2 TEST SETUP



### 5.4.3 TEST PROCEDURES

1. Set the analyzer frequency to Bottom or Top channel.
  1.  $RBW =$  The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW
  2.  $VBW \geq 3 * RBW$
  3. Sweep time = auto
  4. Detector = power averaging (rms)
  5. Set sweep trigger to "free run"
  6. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple.
- To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

**5.4.4. TEST RESULTS**

Frequency (MHz)	Channel BW (MHz)	Max Band Edge (dBm)				Limit (dBm)	Verdict
		Ant 1	Ant 2	Ant 3	Ant 4		
2120.0	20	-20.42	-24.17	-22.52	-22.28	≤ -19.02	Pass
2180.0	20	-22.14	-23.43	-21.73	-24.40	≤ -19.02	Pass

**Observations:-** Observed Band Edge of the submitted devices are within the limits See table 5.4.4. As per the observations the device meets the FCC requirements.

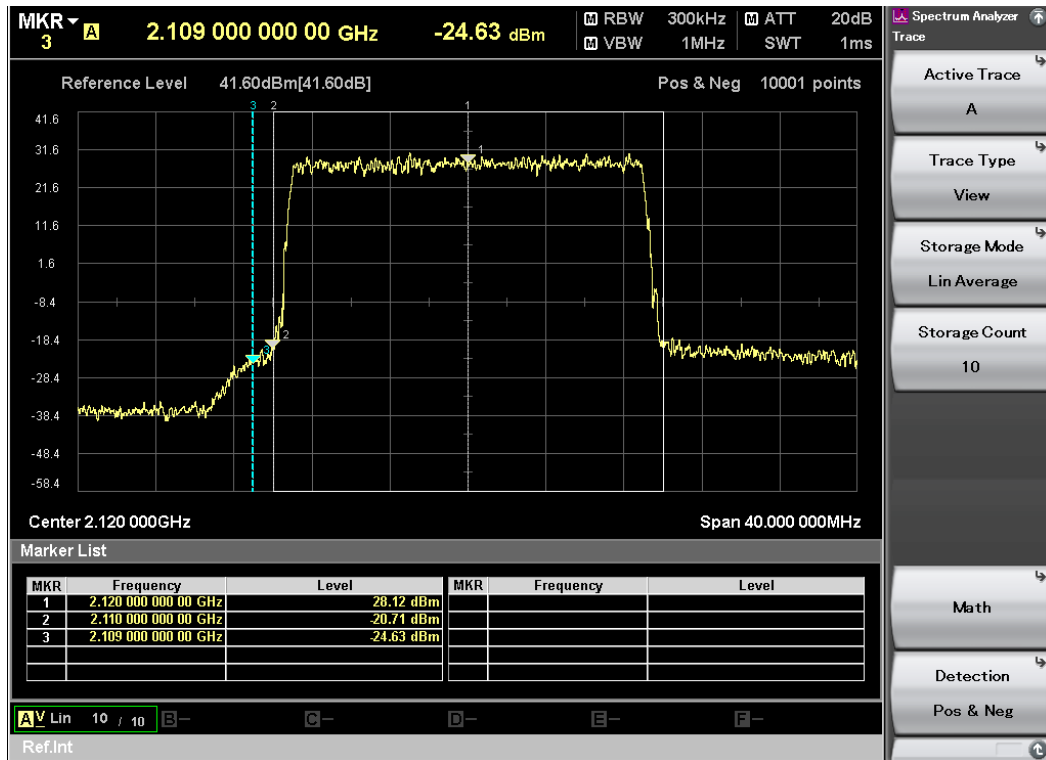
Report No.: AAEMT/RF/230228-01-01

Test Plots

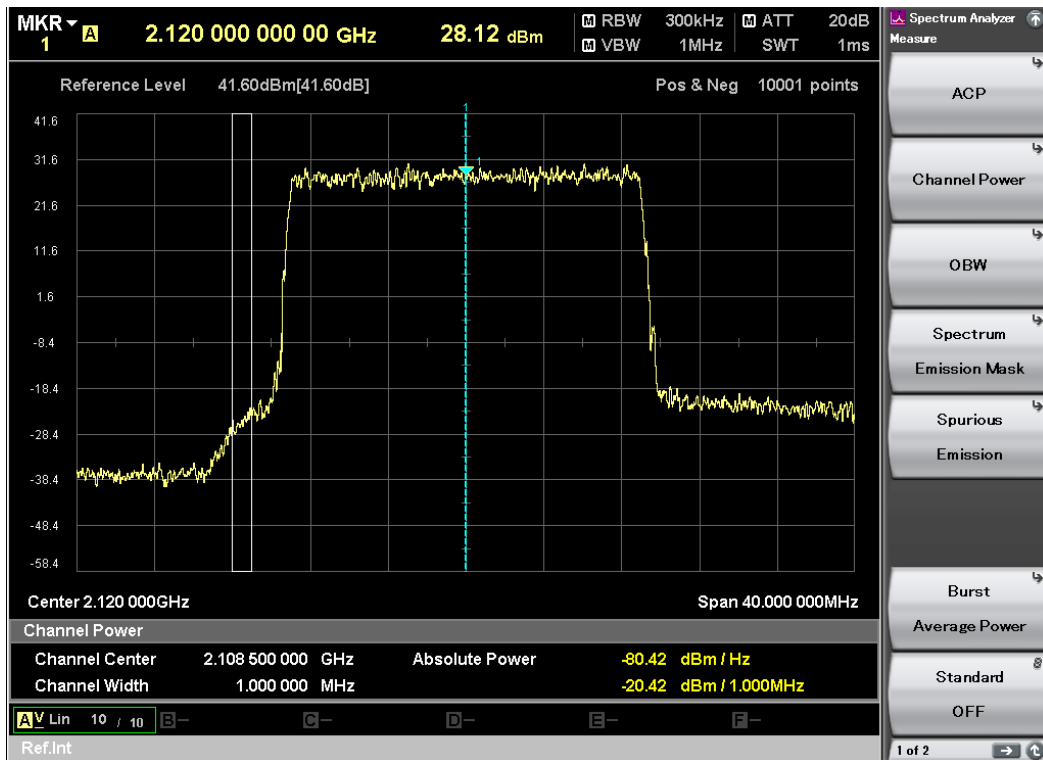
LTE Band 66

Channel Bandwidth: 20 MHz ANT1

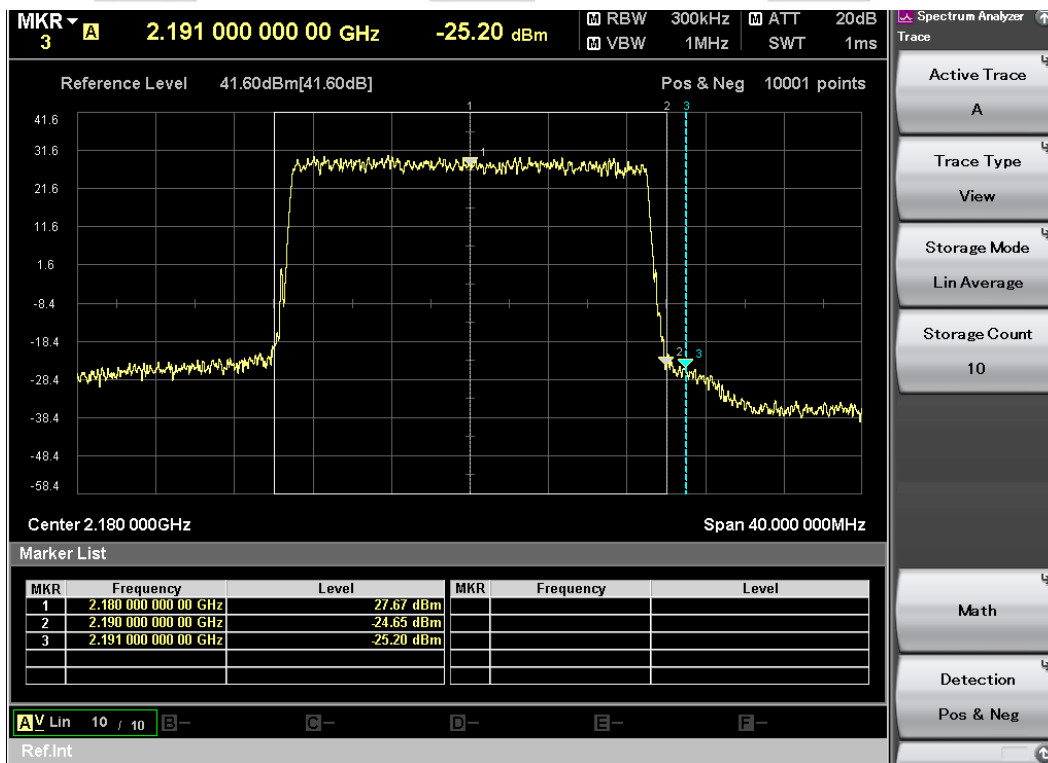
2120MHz



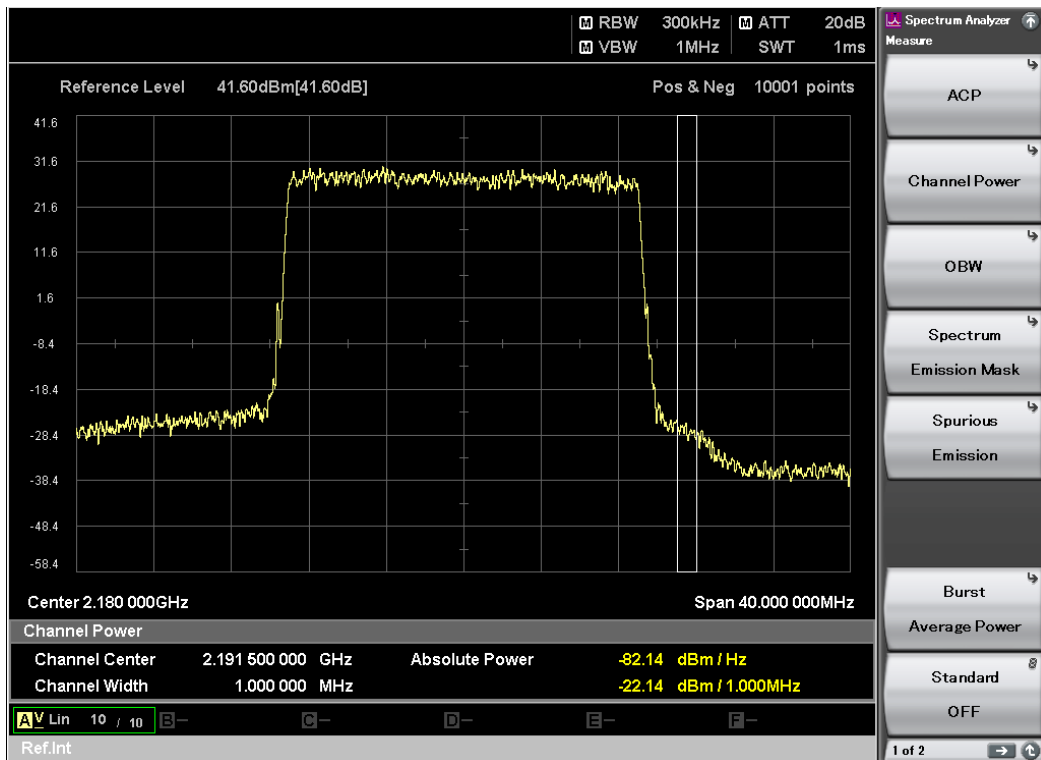
Report No.: AAEMT/RF/230228-01-01



2180MHz



Report No.: AAEMT/RF/230228-01-01



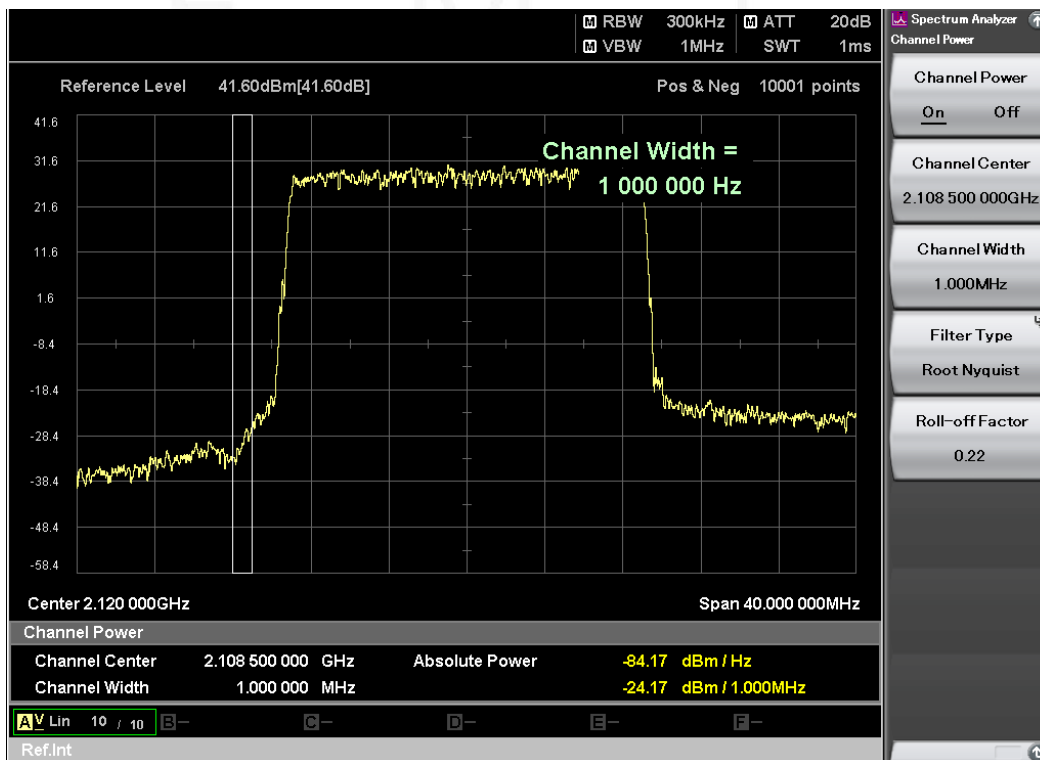
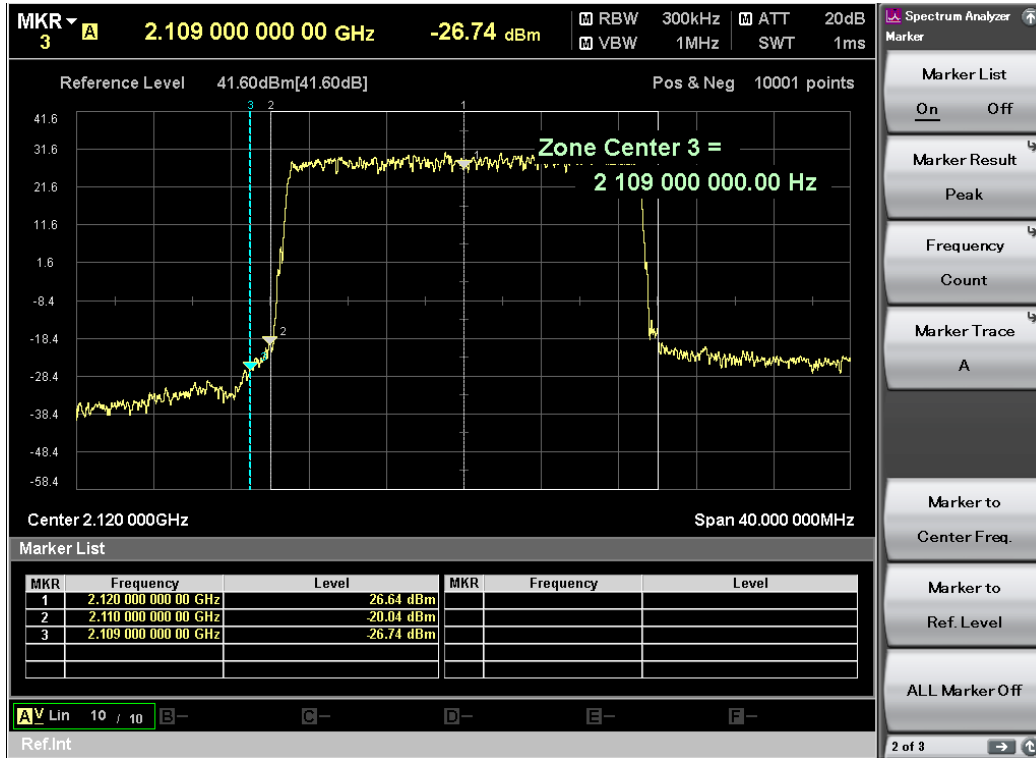
Report No.: AAEMT/RF/230228-01-01

Test Plots

LTE Band 66

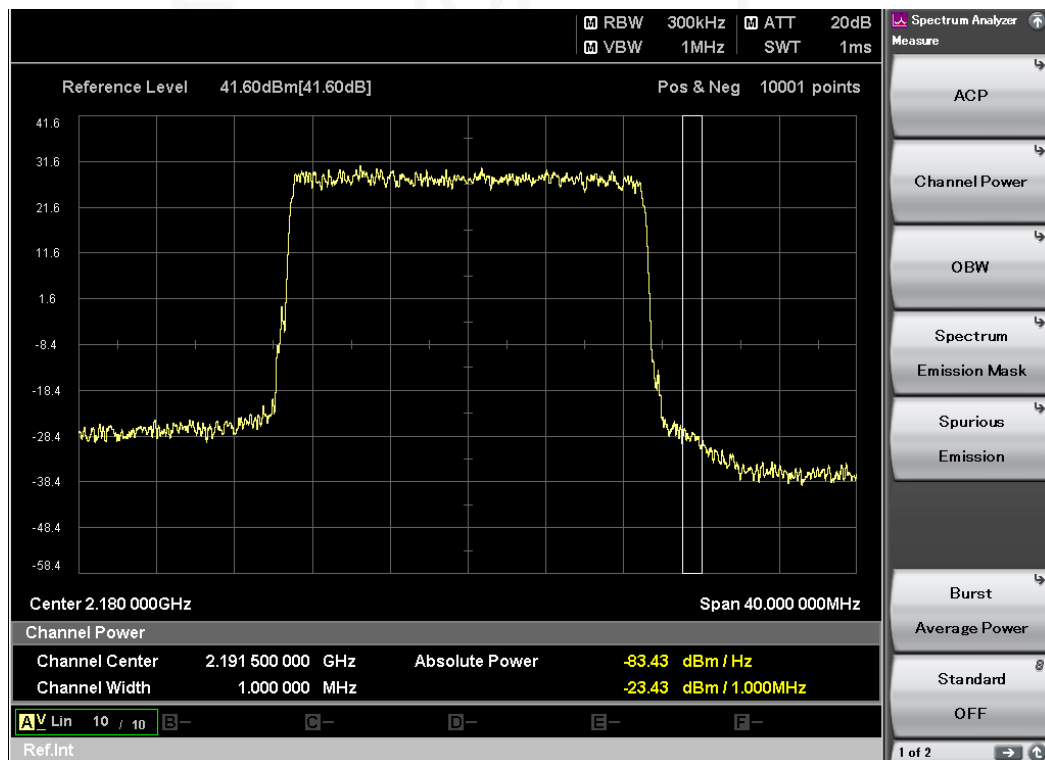
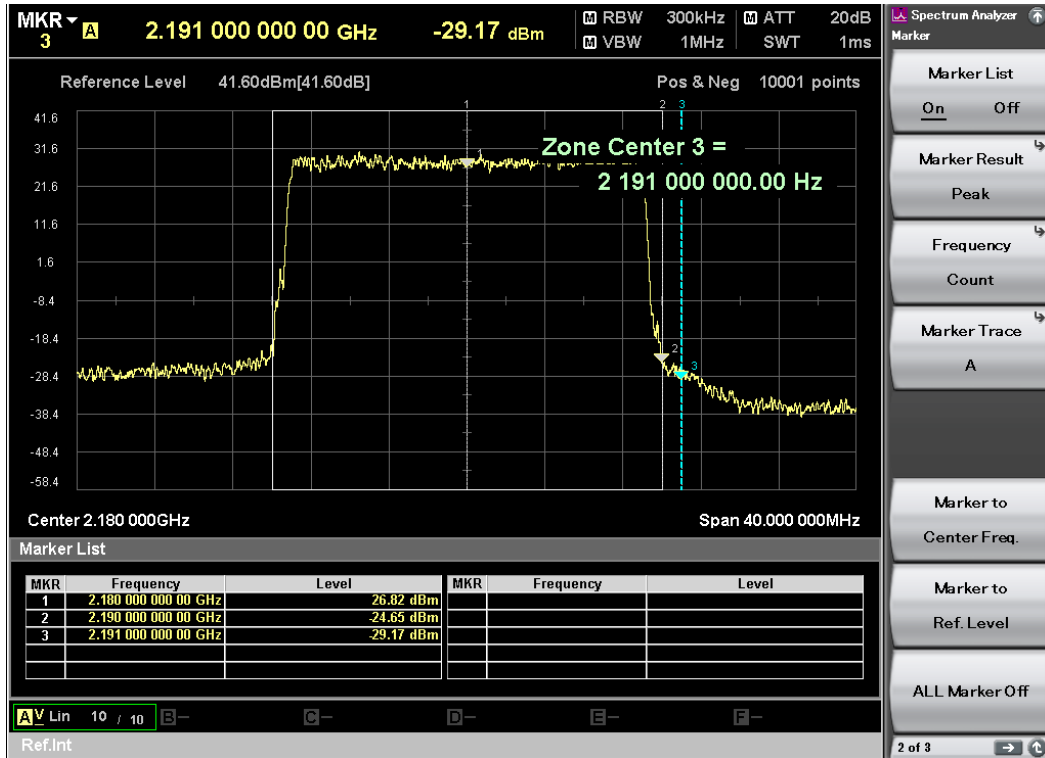
Channel Bandwidth: 20 MHz ANT2

2120MHz



Report No.: AAEMT/RF/230228-01-01

2180MHz



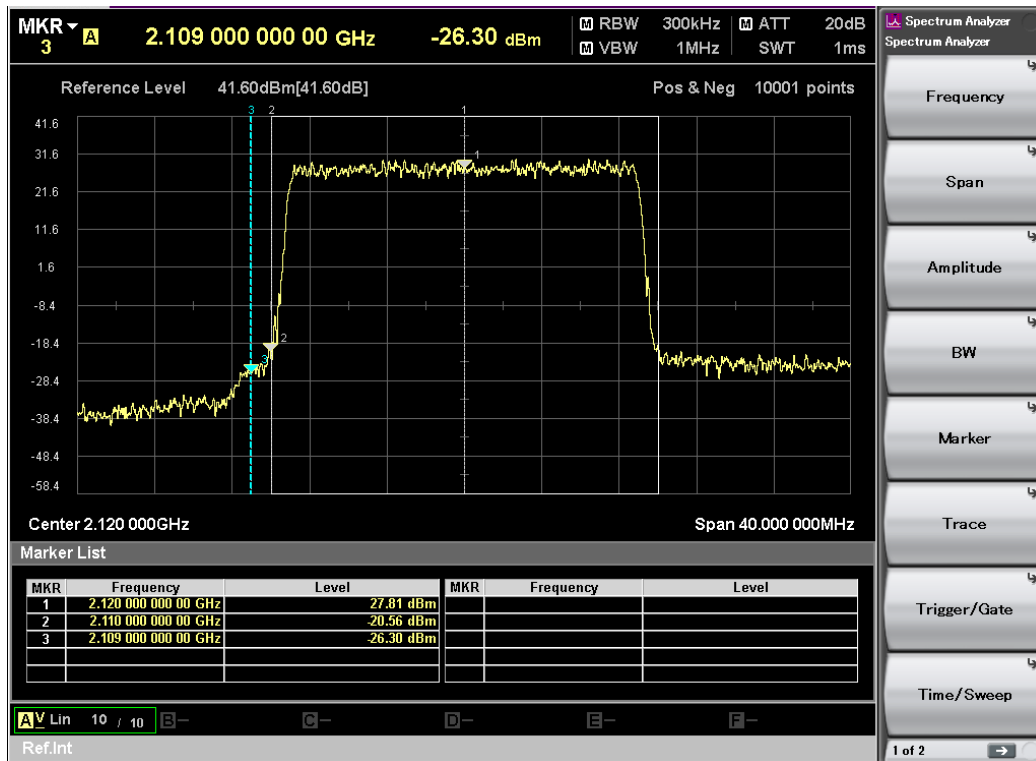
Report No.: AAEMT/RF/230228-01-01

Test Plots

LTE Band 66

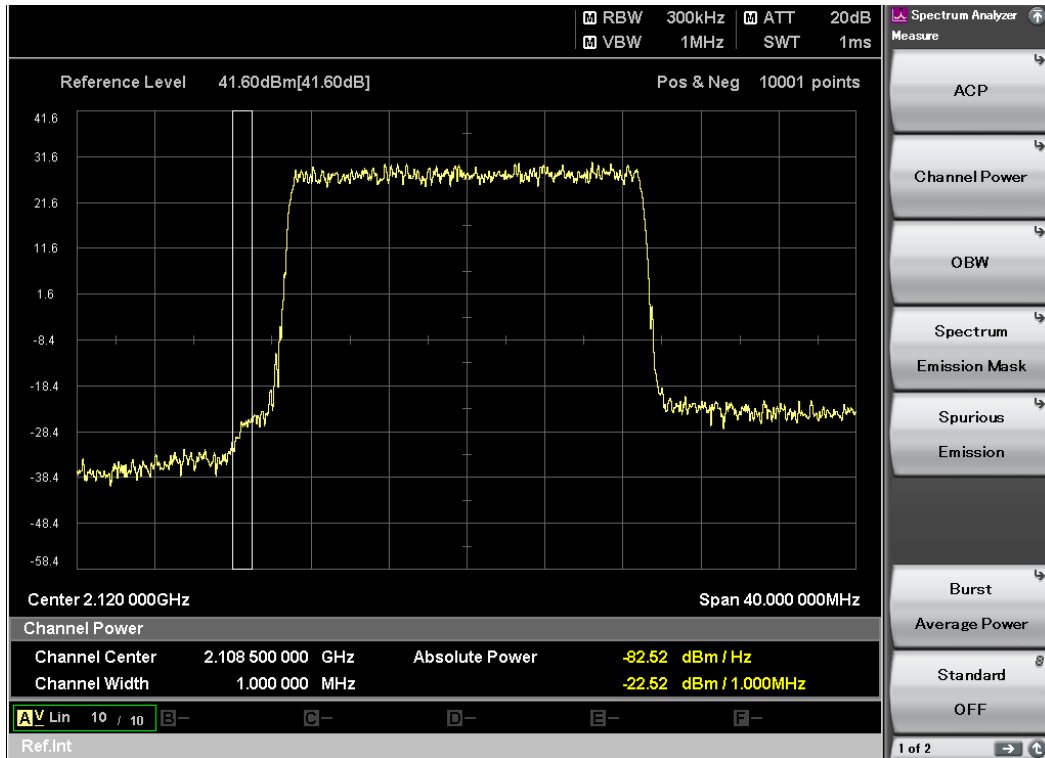
Channel Bandwidth: 20 MHz ANT3

2120MHz

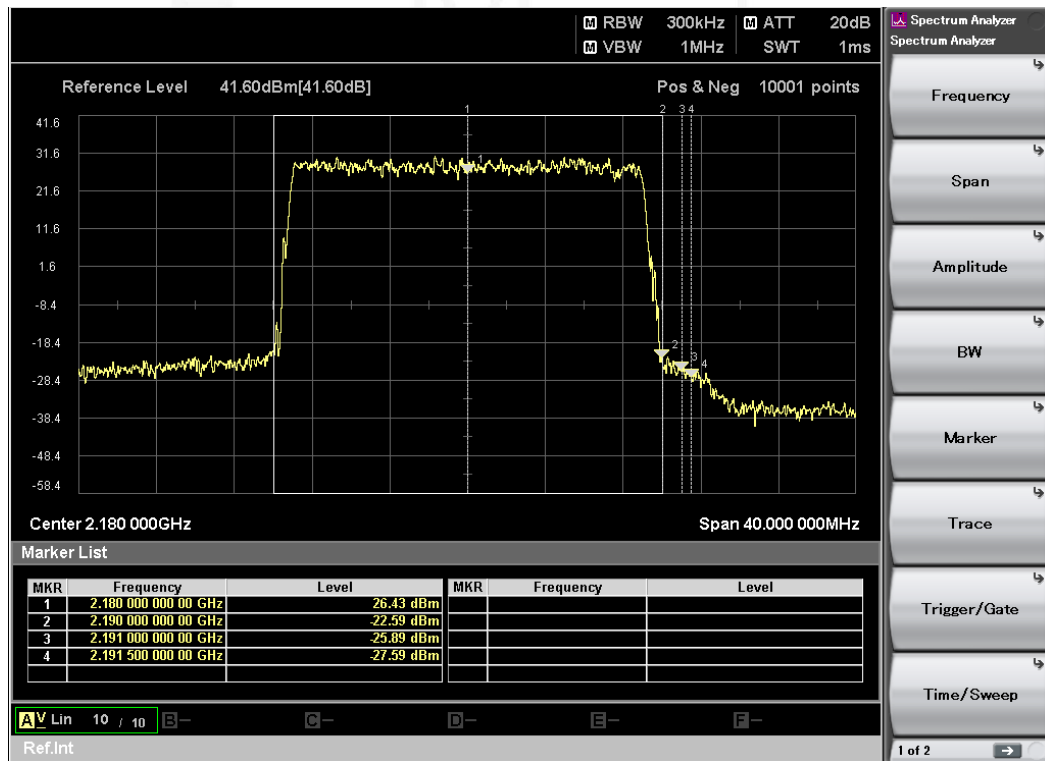




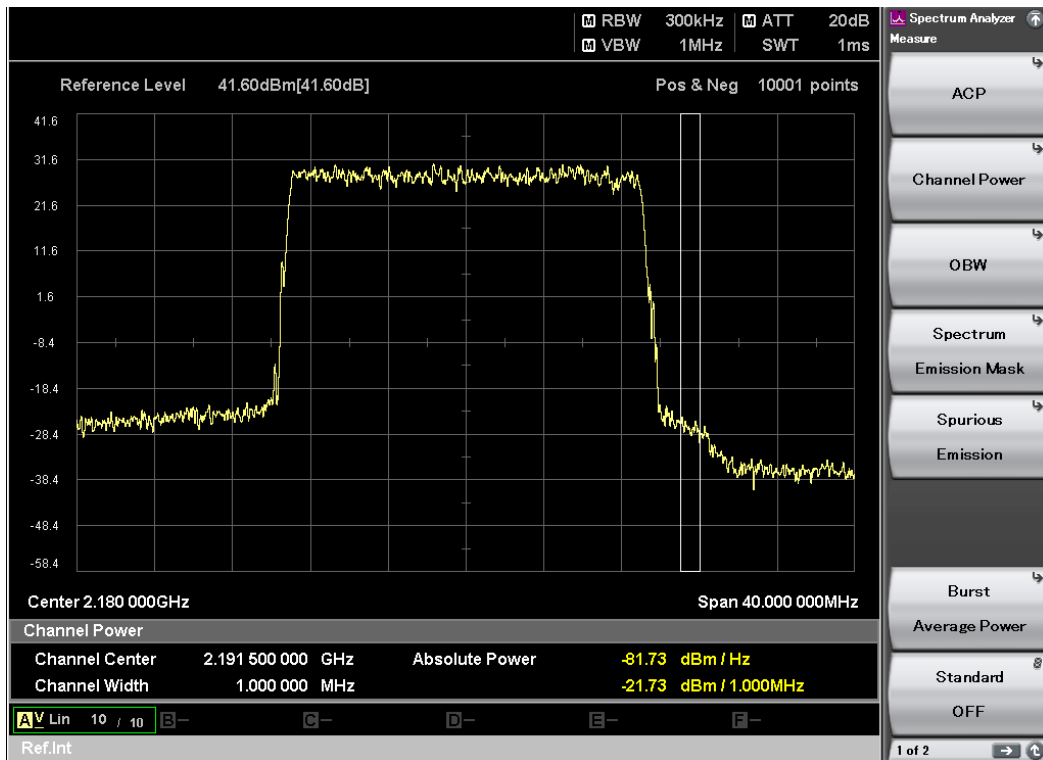
Report No.: AAEMT/RF/230228-01-01



2180MHz



Report No.: AAEMT/RF/230228-01-01

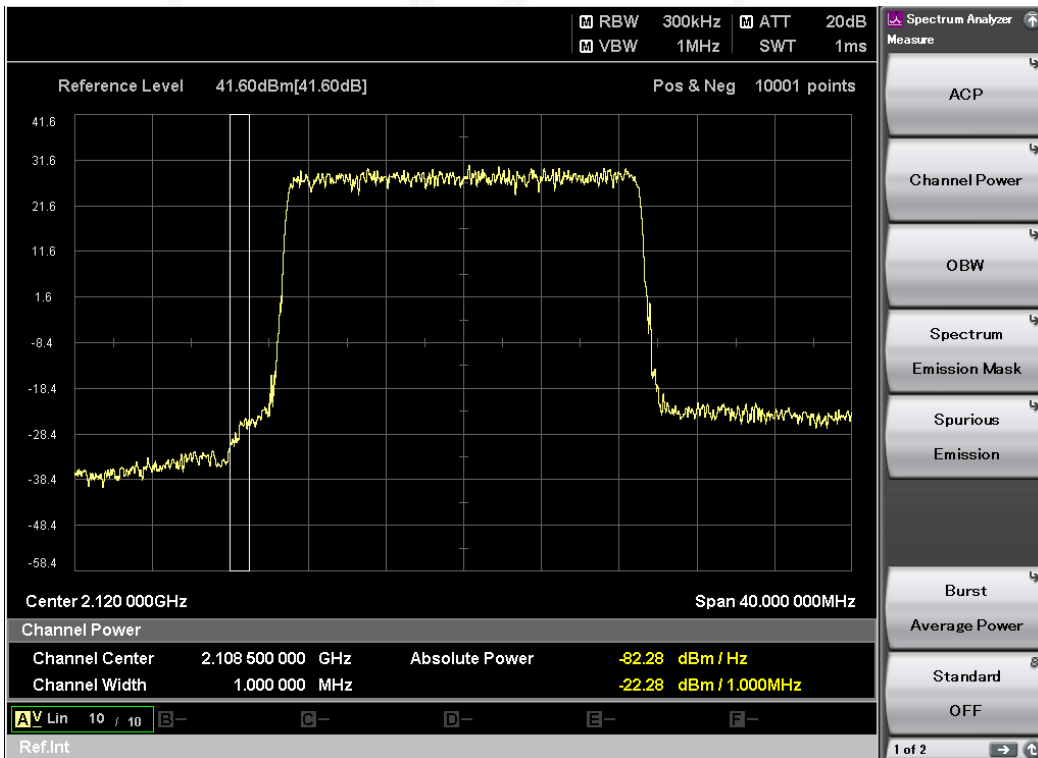
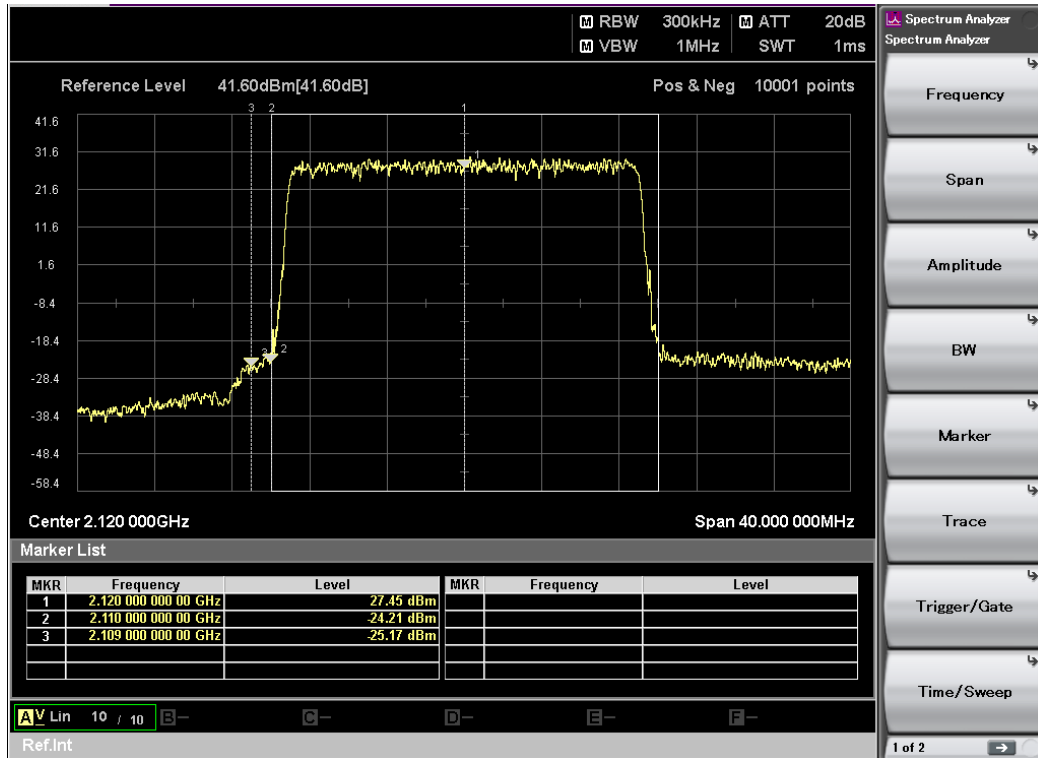


Report No.: AAEMT/RF/230228-01-01

Test Plots

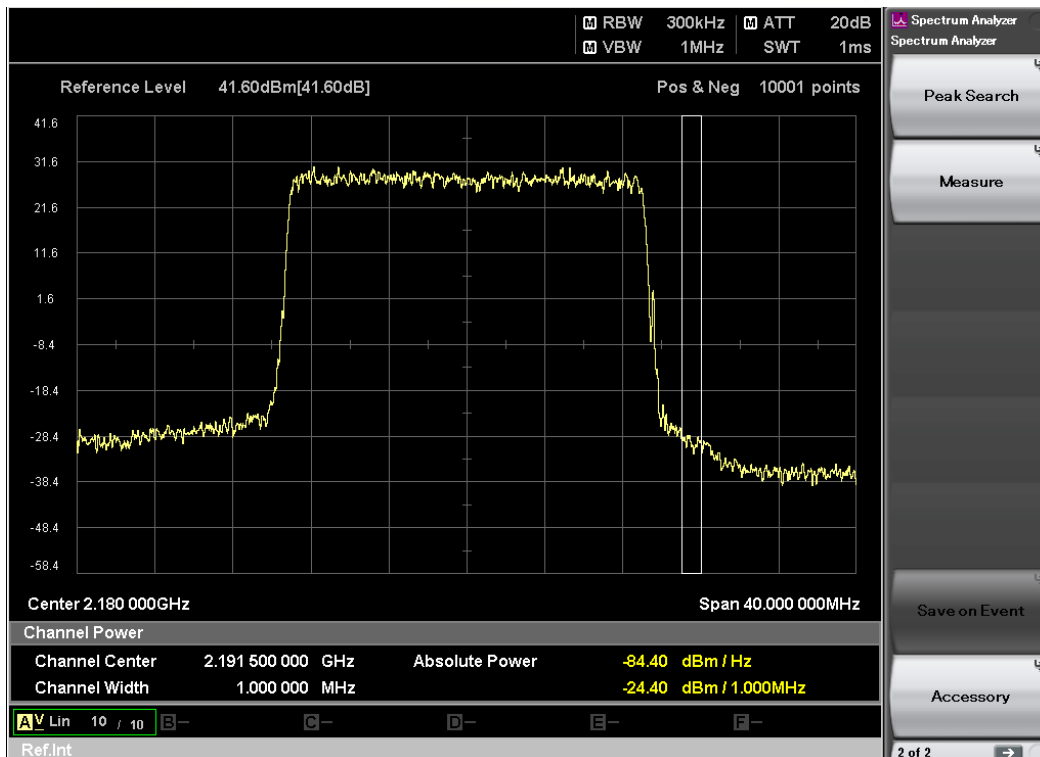
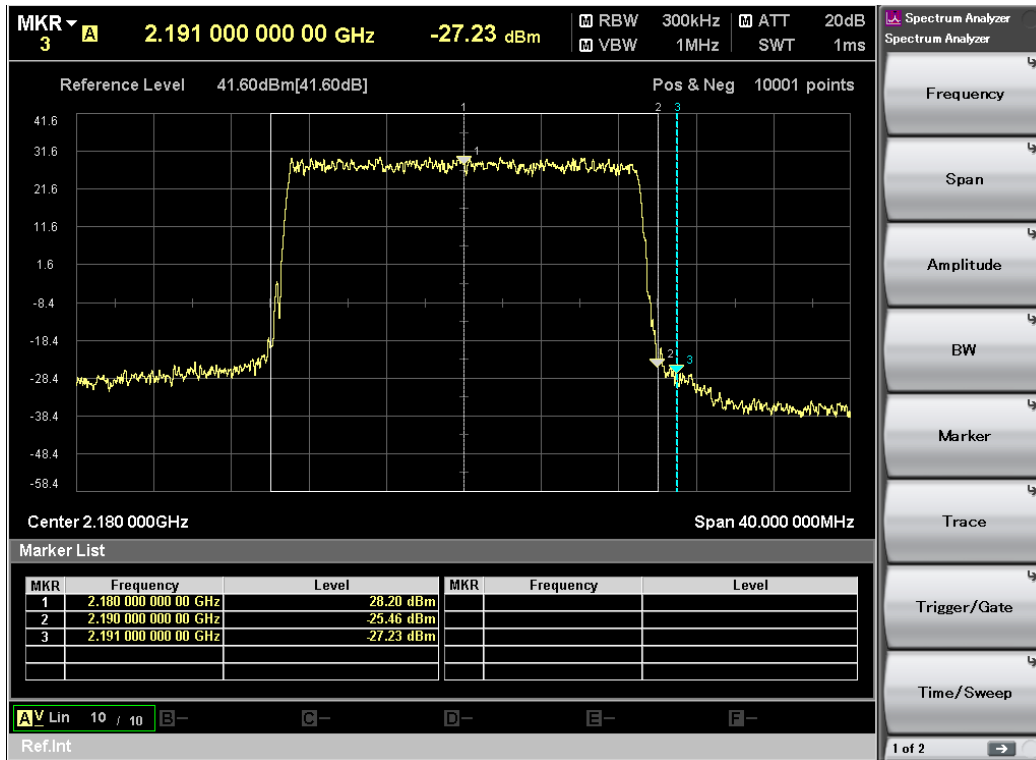
LTE Band 66

Channel Bandwidth: 20 MHz ANT4



Report No.: AAEMT/RF/230228-01-01

2180MHz

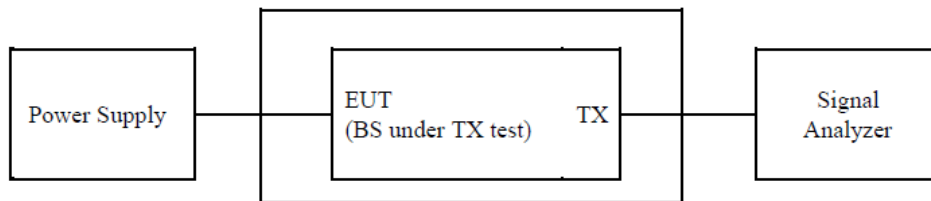


## 5.5 PEAK TO AVERAGE RATIO

### 5.5.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

### 5.5.2 Test Setup



### 5.5.3 Test Procedures

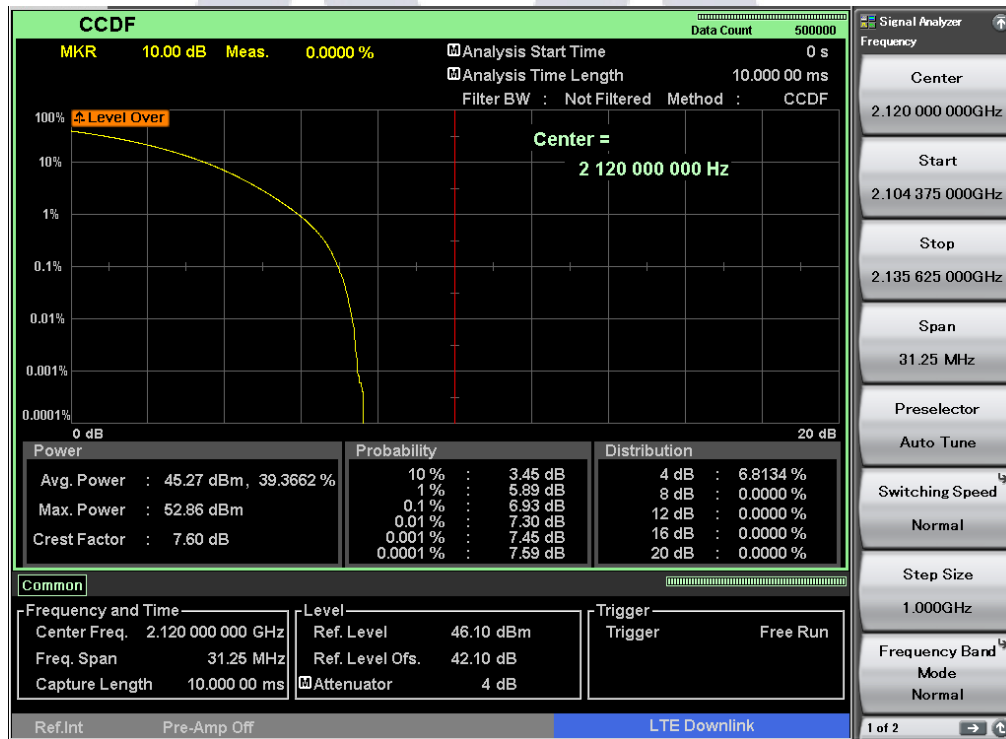
1. Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1 %.

Report No.: AAEMT/RF/230228-01-01

### 5.5.4 Test Result

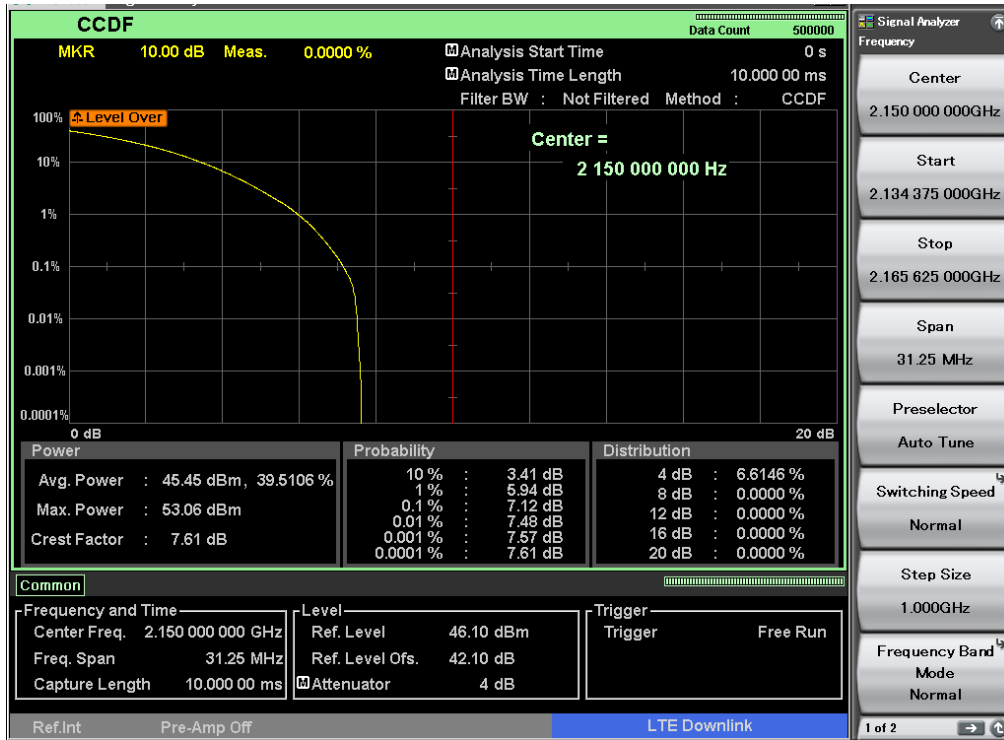
Frequency (MHz)	Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
2120.00	20	6.93	≤ 13.00	Pass
2150.00	20	7.12	≤ 13.00	Pass
2180.00	20	7.60	≤ 13.00	Pass

2120MHz



Report No.: AAEMT/RF/230228-01-01

2150MHz



2180MHz



Note:- Testing is carried out in all possible configuration , only worst case plot reported.

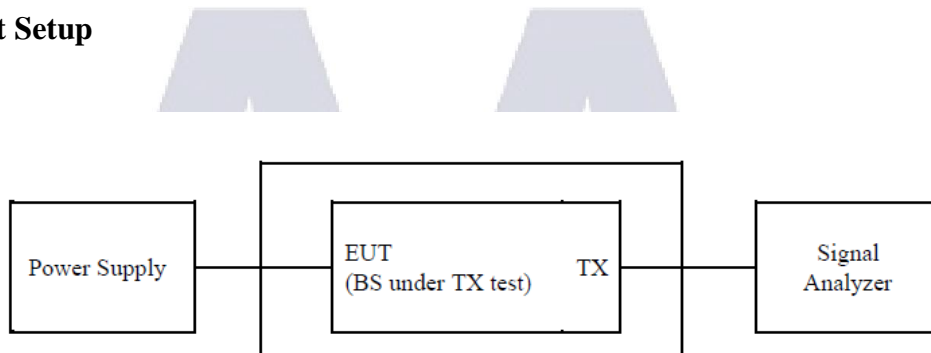
## 5.6 Conducted Spurious Emissions

### 5.6.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit equal to -13 dBm.

The limit is adjusted to  $-13\text{dBm} - 10 * \log(4) = -19.02\text{dBm}$

### 5.6.2 Test Setup



### 5.6.3 Test Procedure

1. Set the analyzer frequency to low or high channel.
2. RBW = 100kHz or 1MHz
3. VBW  $\geq 3 * \text{RBW}$
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to "free run."
7. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple.

To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

Sr. No.	Frequency Range	RBW
1.	9KHz~30MHz	100KHz
2.	30MHz~3GHz	1MHz
3.	3GHz~20GHz	1MHz



Report No.: AAEMT/RF/230228-01-01

#### 5.6.4 Test Results

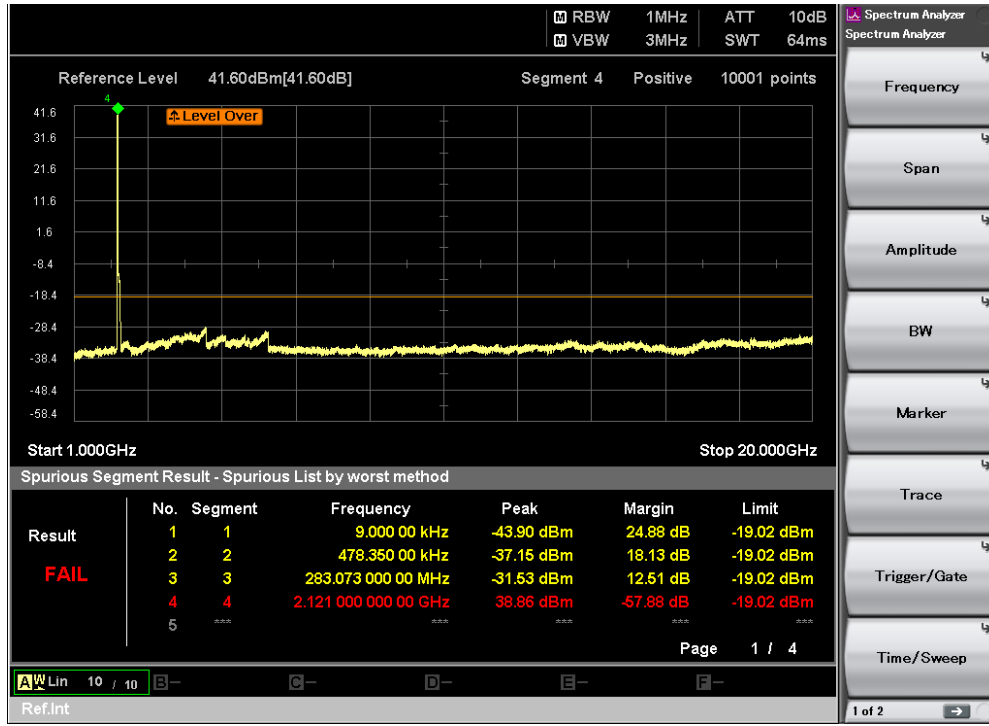
Frequency (MHz)	Channel BW (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
2120.0	20	0.009 ~ 30	-37.15	$\leq -19.02$	Pass
		30 ~ 20000	-31.53	$\leq -19.02$	Pass
2150.0	20	0.009 ~ 30	-38.29	$\leq -19.02$	Pass
		30 ~ 20000	-34.94	$\leq -19.02$	Pass
2180.0	20	0.009 ~ 30	-37.23	$\leq -19.02$	Pass
		30 ~ 20000	-34.94	$\leq -19.02$	Pass

Report No.: AAEMT/RF/230228-01-01

LTE Band 66

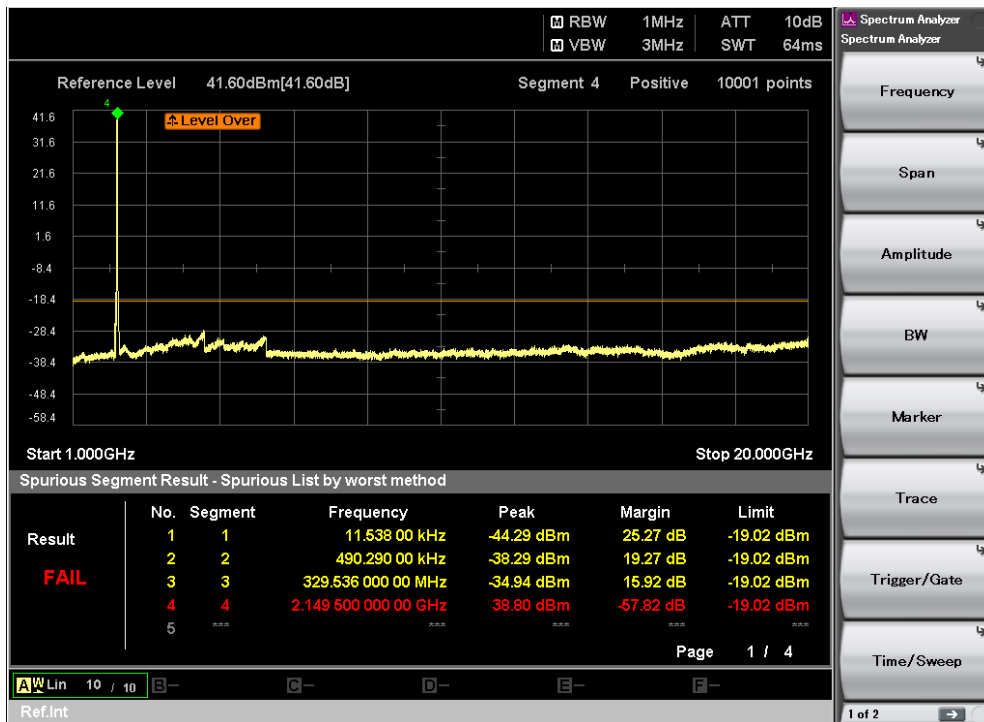
Channel Bandwidth: 20 MHz

2120MHz



Note:- Marker in Segment 4 is desired intentional frequency of EUT, Hence, considered as PASS.

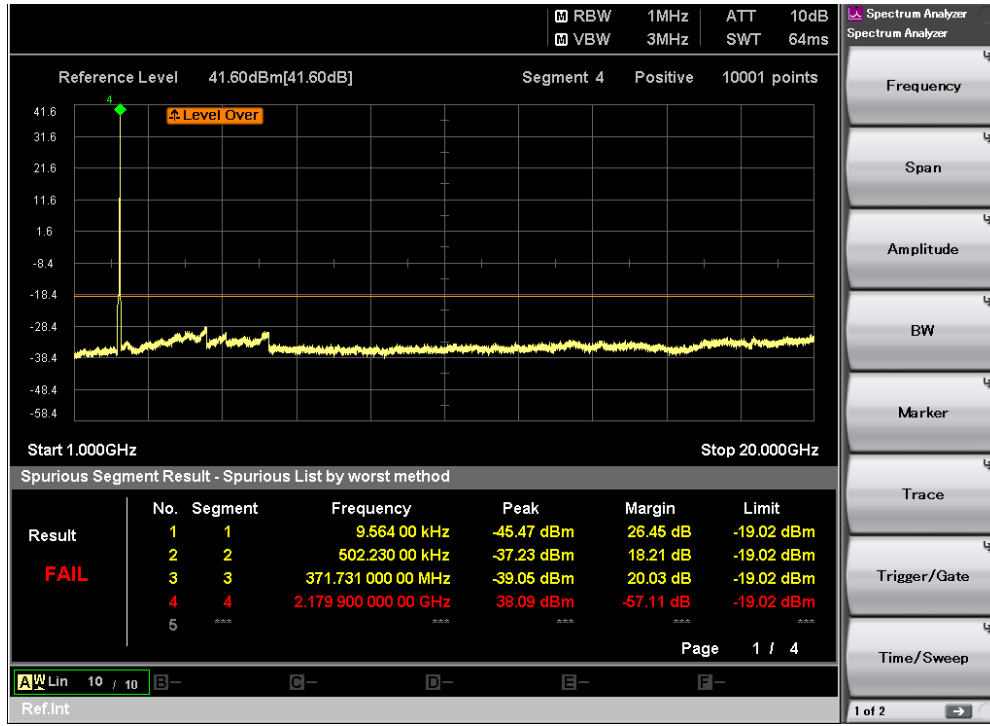
2150MHz



Report No.: AAEMT/RF/230228-01-01

Note:- Marker in Segment 4 is desired intentional frequency of EUT, Hence, considered as PASS.

2180MHz



Note:- Marker in Segment 4 is desired intentional frequency of EUT, Hence, considered as PASS.

## 5.7 Radiated Spurious Emission

### 5.7.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log (P)$  dB. The emission limit is equal to -13 dBm.

$E$  (dB $\mu$ V/m) = EIRP (dBm) -  $20 \log D$  + 104.8; where  $D$  is the measurement distance in meters. The emission limit equal to 82.3dB $\mu$ V/m.

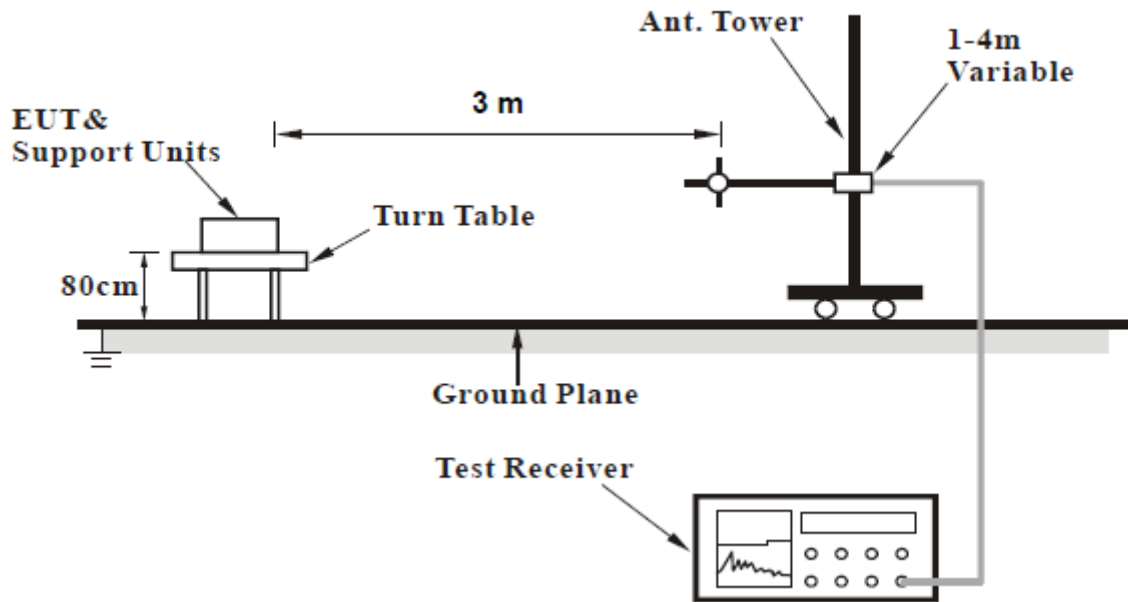
### 5.7.2 Test Procedure

1. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
2. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G.
3. EIRP = Output power level of S.G – TX cable loss + Antenna gain
4. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15 dB

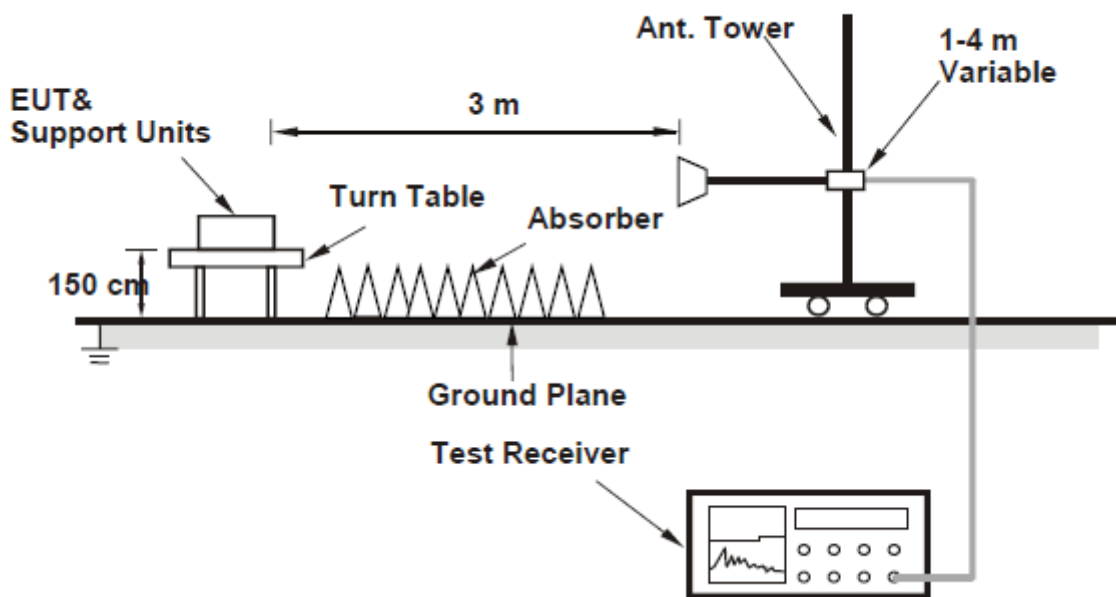
**NOTE:** The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.

### 5.7.3 Test Setup

#### <Radiated Emission below or equal 1 GHz>



#### <Radiated Emission above 1 GHz>



### 5.7.4 Test Results

LTE Band 66

Channel Bandwidth: 20MHz

2120MHz

Vertical

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		30.9700	52.21	-11.81	40.40	82.30	-41.90	peak
2		59.1000	47.48	-10.93	36.55	82.30	-45.75	peak
3		67.8300	45.22	-14.02	31.20	82.30	-51.10	peak
4		88.2000	41.31	-12.02	29.29	82.30	-53.01	peak
5	*	384.0500	45.86	-4.80	41.06	82.30	-41.24	peak
6		931.1300	34.70	4.86	39.56	82.30	-42.74	peak

Report No.: AAEMT/RF/230228-01-01

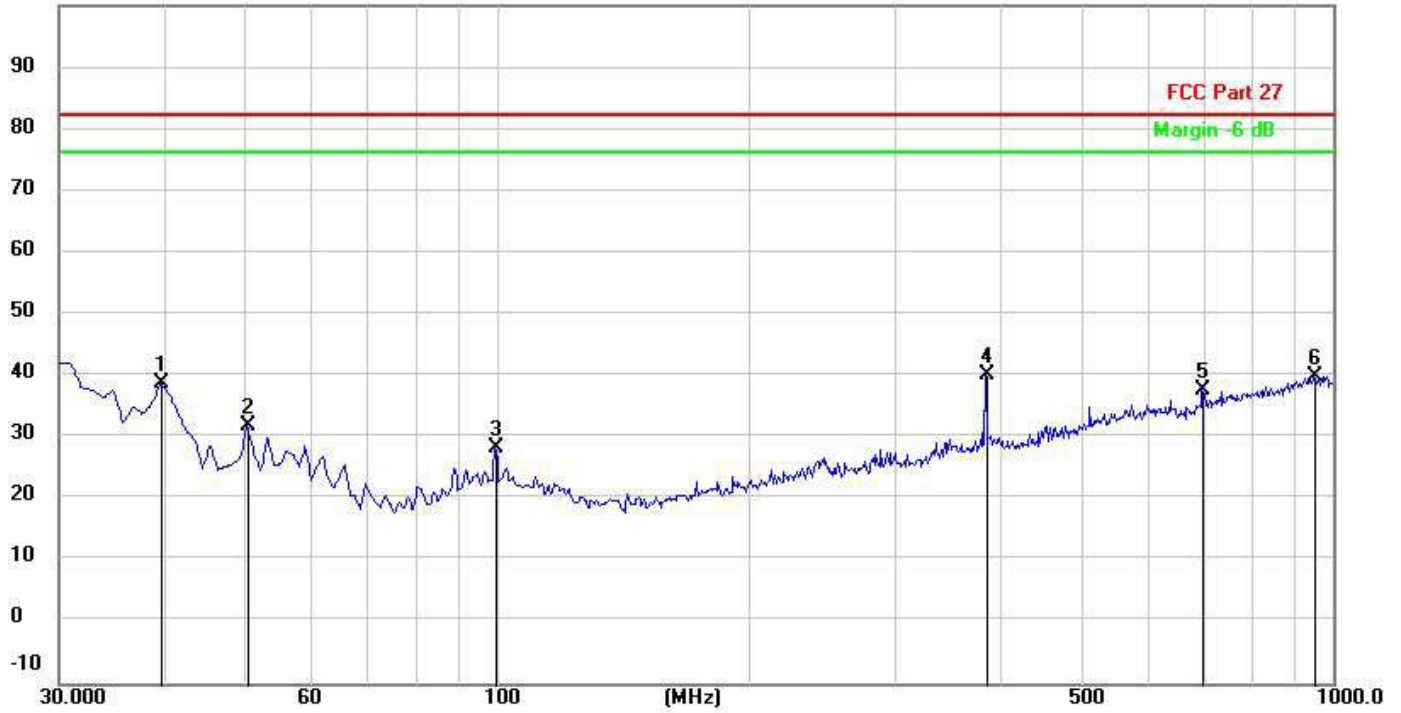
**LTE Band 66**

**Channel Bandwidth: 20MHz**

**2120MHz**

**Horizontal**

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		39.7000	51.30	-12.47	38.83	82.30	-43.47	peak
2		50.3700	44.21	-12.40	31.81	82.30	-50.49	peak
3		99.8399	40.34	-12.00	28.34	82.30	-53.96	peak
4	*	384.0500	47.12	-6.80	40.32	82.30	-41.98	peak
5		699.3000	38.15	-0.47	37.68	82.30	-44.62	peak
6		949.5600	36.87	3.06	39.93	82.30	-42.37	peak

Report No.: AAEMT/RF/230228-01-01

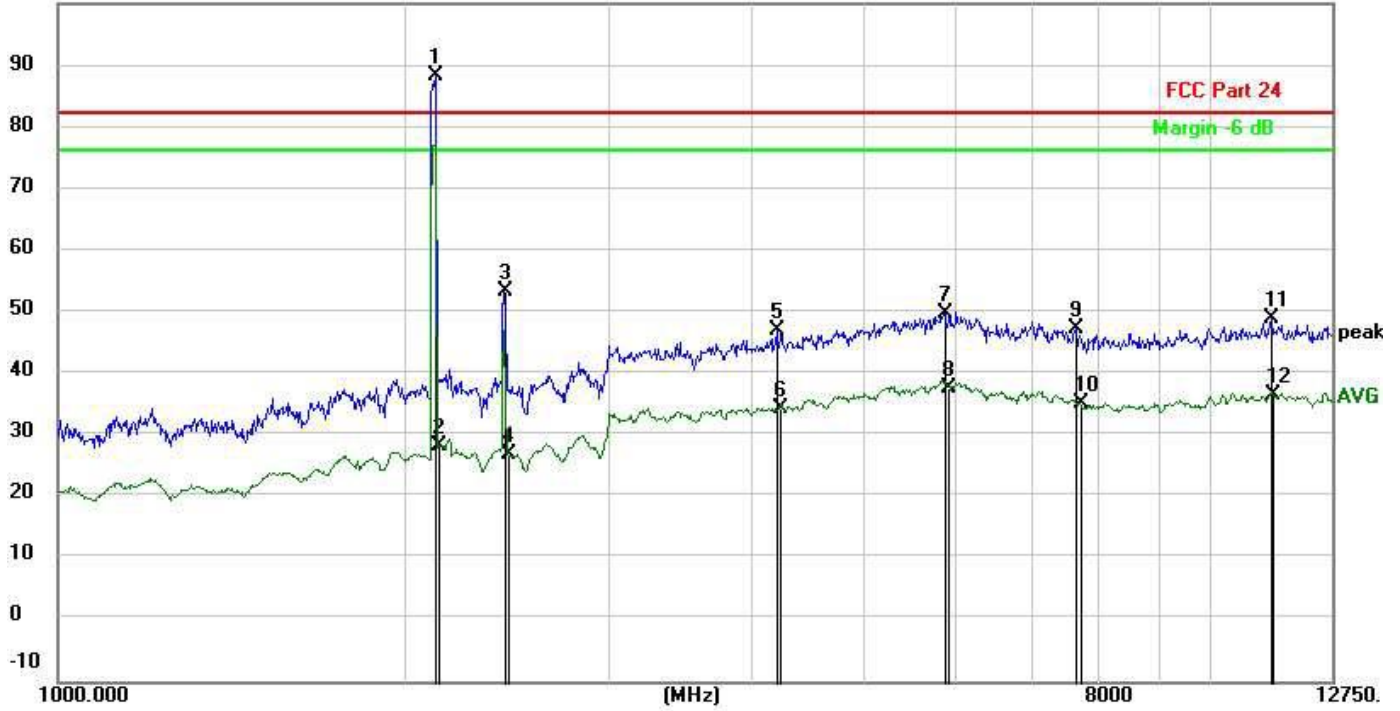
LTE Band 66

Channel Bandwidth: 20MHz

2120MHz

Vertical

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2124.374	82.65	5.63	88.28	82.30	5.98	peak
2		2140.659	22.71	5.65	28.36	82.30	-53.94	AVG
3		2437.410	47.53	5.97	53.50	82.30	-28.80	peak
4		2456.095	21.07	5.99	27.06	82.30	-55.24	AVG
5		4202.500	37.29	9.69	46.98	82.30	-35.32	peak
6		4223.950	24.74	9.73	34.47	82.30	-47.83	AVG
7		5880.782	36.51	13.31	49.82	82.30	-32.48	peak
8		5925.863	24.43	13.42	37.85	82.30	-44.45	AVG
9		7643.682	35.32	12.02	47.34	82.30	-34.96	peak
10		7702.278	23.43	11.87	35.30	82.30	-47.00	AVG
11		11283.54	36.19	12.80	48.99	82.30	-33.31	peak
12		11341.14	23.65	12.84	36.49	82.30	-45.81	AVG

Note:- Marker 1 is desired intentional frequency, Hence considered as PASS.



Report No.: AAEMT/RF/230228-01-01

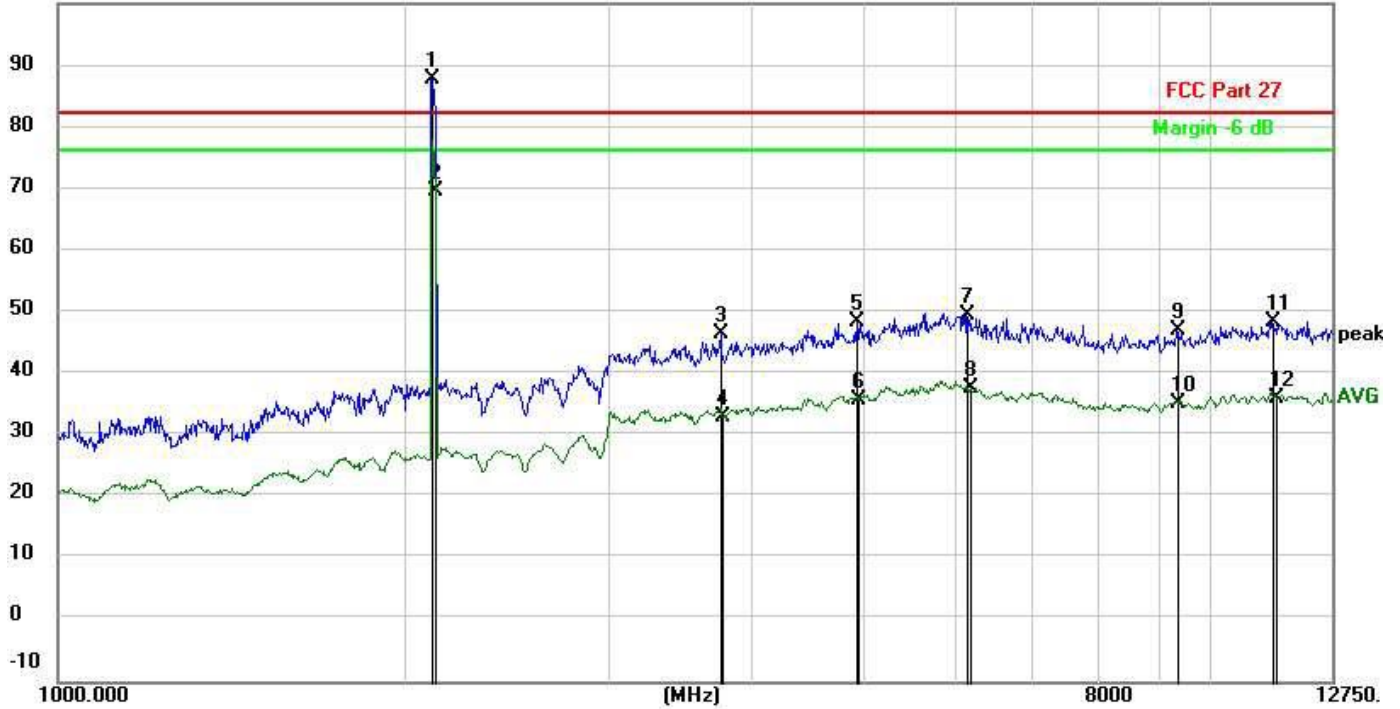
LTE Band 66

Channel Bandwidth: 20MHz

2120MHz

Horizontal

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2108.213	82.20	5.62	87.82	82.30	5.52	peak
2		2124.374	63.87	5.63	69.50	82.30	-12.80	AVG
3		3757.208	37.82	8.74	46.56	82.30	-35.74	peak
4		3776.385	24.29	8.79	33.08	82.30	-49.22	AVG
5		4933.497	36.99	11.44	48.43	82.30	-33.87	peak
6		4946.072	24.36	11.47	35.83	82.30	-46.47	AVG
7		6140.854	36.51	13.14	49.65	82.30	-32.65	peak
8		6187.929	24.62	12.98	37.60	82.30	-44.70	AVG
9		9346.262	34.95	12.08	47.03	82.30	-35.27	peak
10		9370.083	23.23	12.09	35.32	82.30	-46.98	AVG
11		11312.30	35.64	12.82	48.46	82.30	-33.84	peak
12		11428.07	23.18	12.90	36.08	82.30	-46.22	AVG

Note:- Marker 1 is desired intentional frequency, Hence considered as PASS.

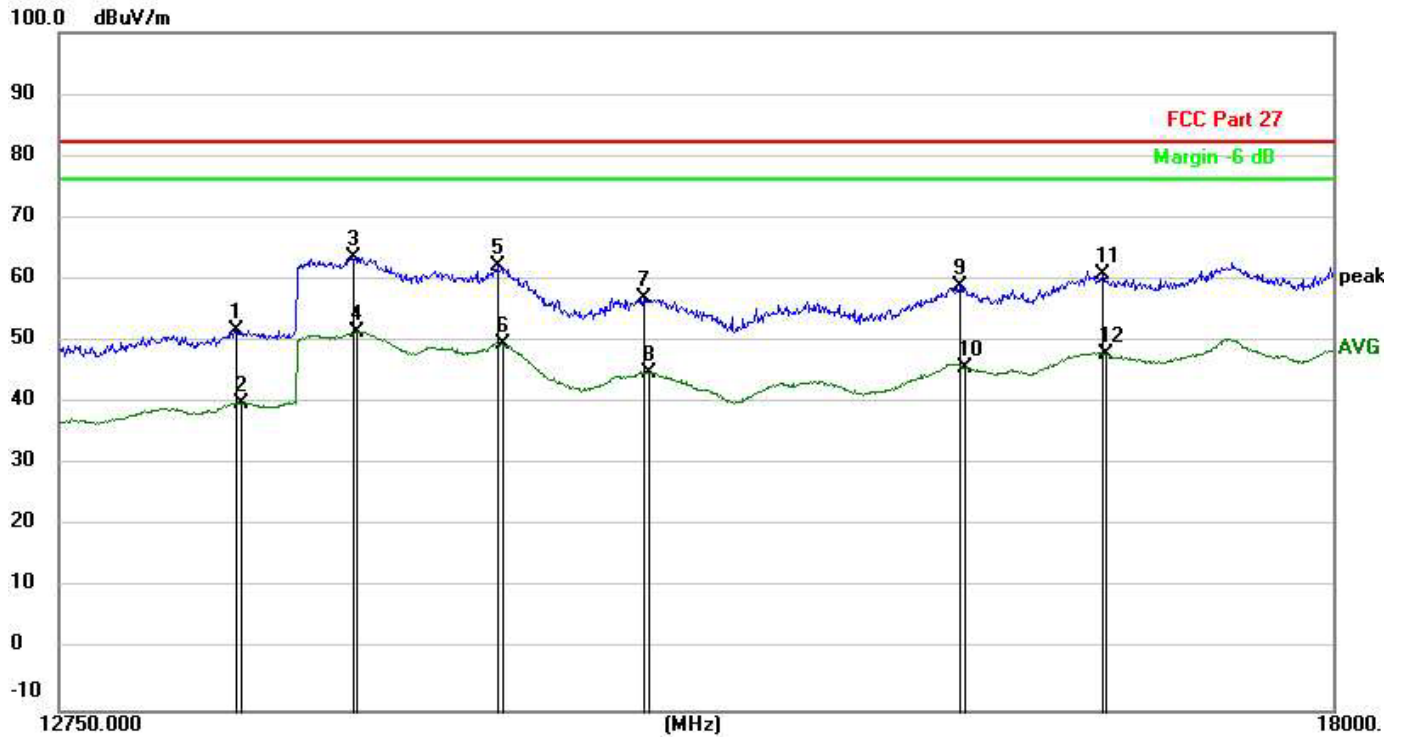
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2120MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		13376.02	37.15	14.65	51.80	82.30	-30.50	peak
2		13394.49	25.26	14.73	39.99	82.30	-42.31	AVG
3	*	13802.42	48.25	15.44	63.69	82.30	-18.61	peak
4		13821.48	35.88	15.46	51.34	82.30	-30.96	AVG
5		14355.83	49.12	12.94	62.06	82.30	-20.24	peak
6		14370.69	36.68	12.82	49.50	82.30	-32.80	AVG
7		14936.57	47.63	9.28	56.91	82.30	-25.39	peak
8		14957.19	35.73	9.15	44.88	82.30	-37.42	AVG
9		16270.17	46.54	12.22	58.76	82.30	-23.54	peak
10		16287.01	33.37	12.32	45.69	82.30	-36.61	AVG
11		16910.85	46.49	14.34	60.83	82.30	-21.47	peak
12		16928.35	33.50	14.37	47.87	82.30	-34.43	AVG

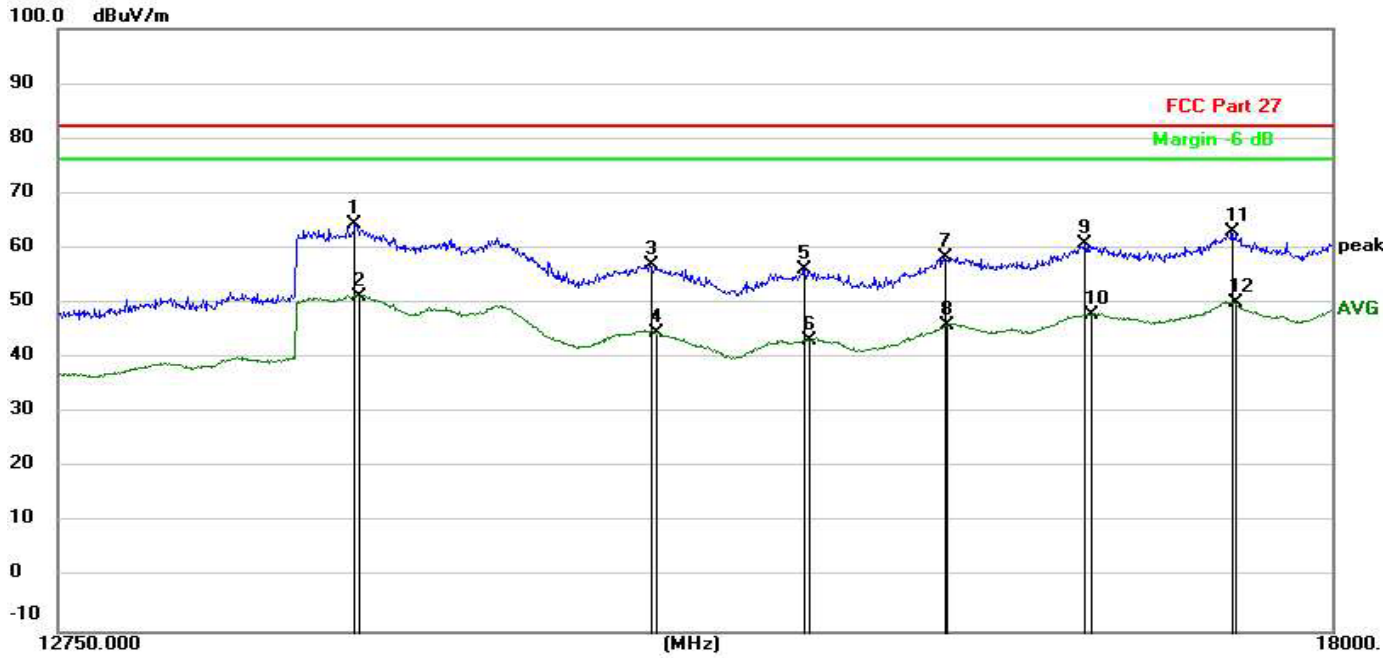
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2120MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	13816.71	48.95	15.46	64.41	82.30	-17.89	peak
2		13831.01	35.82	15.46	51.28	82.30	-31.02	AVG
3		14967.51	47.89	9.10	56.99	82.30	-25.31	peak
4		14988.17	35.57	8.97	44.54	82.30	-37.76	AVG
5		15599.87	47.02	9.12	56.14	82.30	-26.16	peak
6		15626.79	33.88	9.22	43.10	82.30	-39.20	AVG
7		16202.98	46.64	11.82	58.46	82.30	-23.84	peak
8		16214.16	34.12	11.89	46.01	82.30	-36.29	AVG
9		16835.21	46.62	14.20	60.82	82.30	-21.48	peak
10		16858.45	33.62	14.25	47.87	82.30	-34.43	AVG
11		17516.25	47.64	15.39	63.03	82.30	-19.27	peak
12		17534.38	34.66	15.37	50.03	82.30	-32.27	AVG

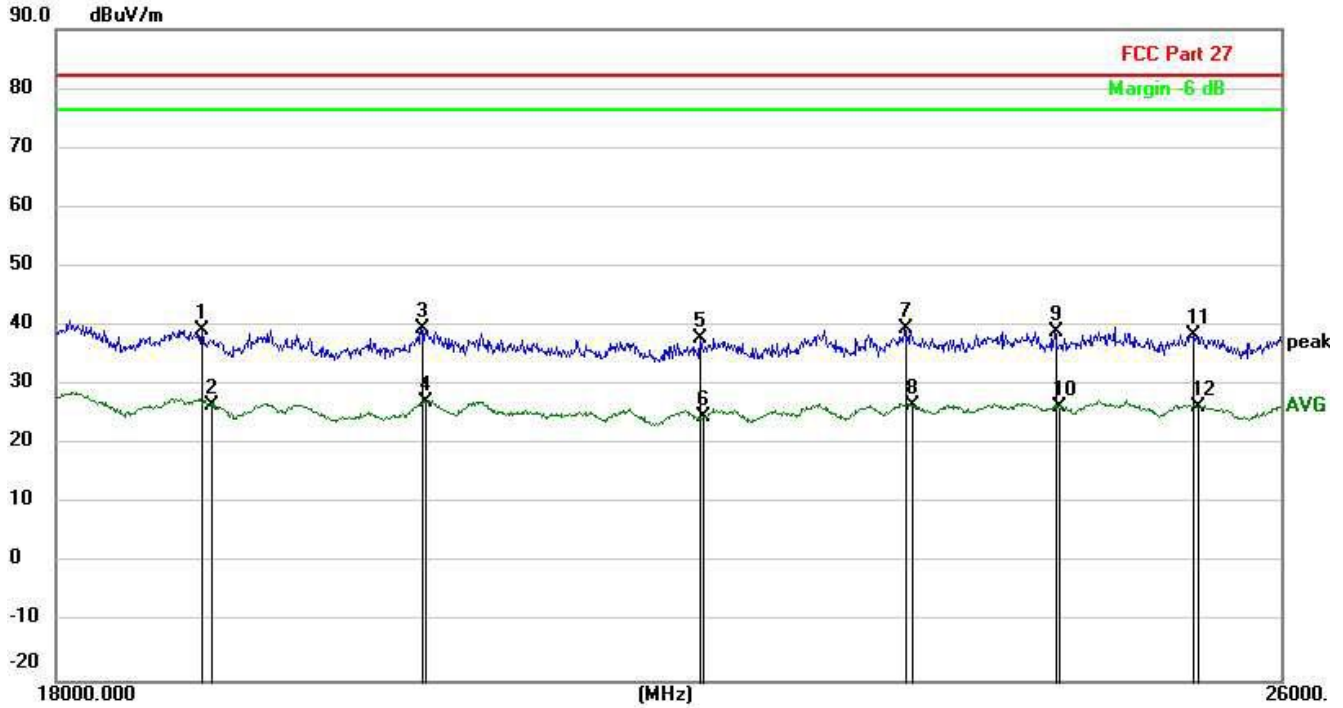
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2120MHz

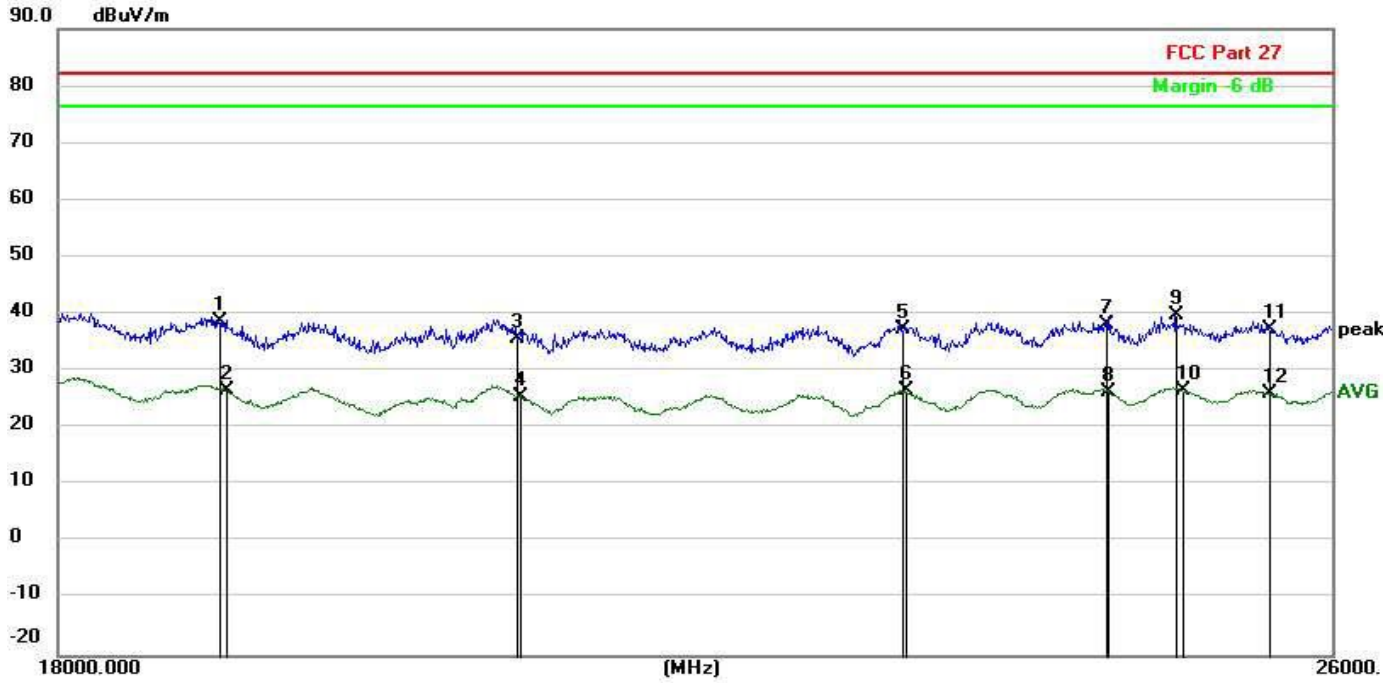
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		18805.15	46.12	-6.76	39.36	82.30	-42.94	peak
2		18853.62	33.50	-6.78	26.72	82.30	-55.58	AVG
3		20084.60	47.22	-7.76	39.46	82.30	-42.84	peak
4		20114.17	34.98	-7.76	27.22	82.30	-55.08	AVG
5		21841.13	45.66	-7.77	37.89	82.30	-44.41	peak
6		21865.24	32.43	-7.76	24.67	82.30	-57.63	AVG
7	*	23224.43	47.22	-7.64	39.58	82.30	-42.72	peak
8		23267.17	34.36	-7.64	26.72	82.30	-55.58	AVG
9		24290.06	46.60	-7.55	39.05	82.30	-43.25	peak
10		24316.87	33.90	-7.55	26.35	82.30	-55.95	AVG
11		25320.65	46.06	-7.50	38.56	82.30	-43.74	peak
12		25348.60	33.88	-7.49	26.39	82.30	-55.91	AVG

Report No.: AAEMT/RF/230228-01-01

LTE Band 66  
 Channel Bandwidth: 20MHz  
 2120MHz  
 Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		18853.62	45.46	-6.78	38.68	82.30	-43.62	peak
2		18895.26	33.36	-6.81	26.55	82.30	-55.75	AVG
3		20547.77	43.49	-7.77	35.72	82.30	-46.58	peak
4		20562.89	33.28	-7.77	25.51	82.30	-56.79	AVG
5		22961.19	44.90	-7.67	37.23	82.30	-45.07	peak
6		22986.53	34.18	-7.66	26.52	82.30	-55.78	AVG
7		24352.67	45.61	-7.55	38.06	82.30	-44.24	peak
8		24370.58	33.97	-7.55	26.42	82.30	-55.88	AVG
9	*	24850.21	47.24	-7.52	39.72	82.30	-42.58	peak
10		24895.94	34.18	-7.52	26.66	82.30	-55.64	AVG
11		25526.32	44.94	-7.49	37.45	82.30	-44.85	peak
12		25535.71	33.46	-7.49	25.97	82.30	-56.33	AVG

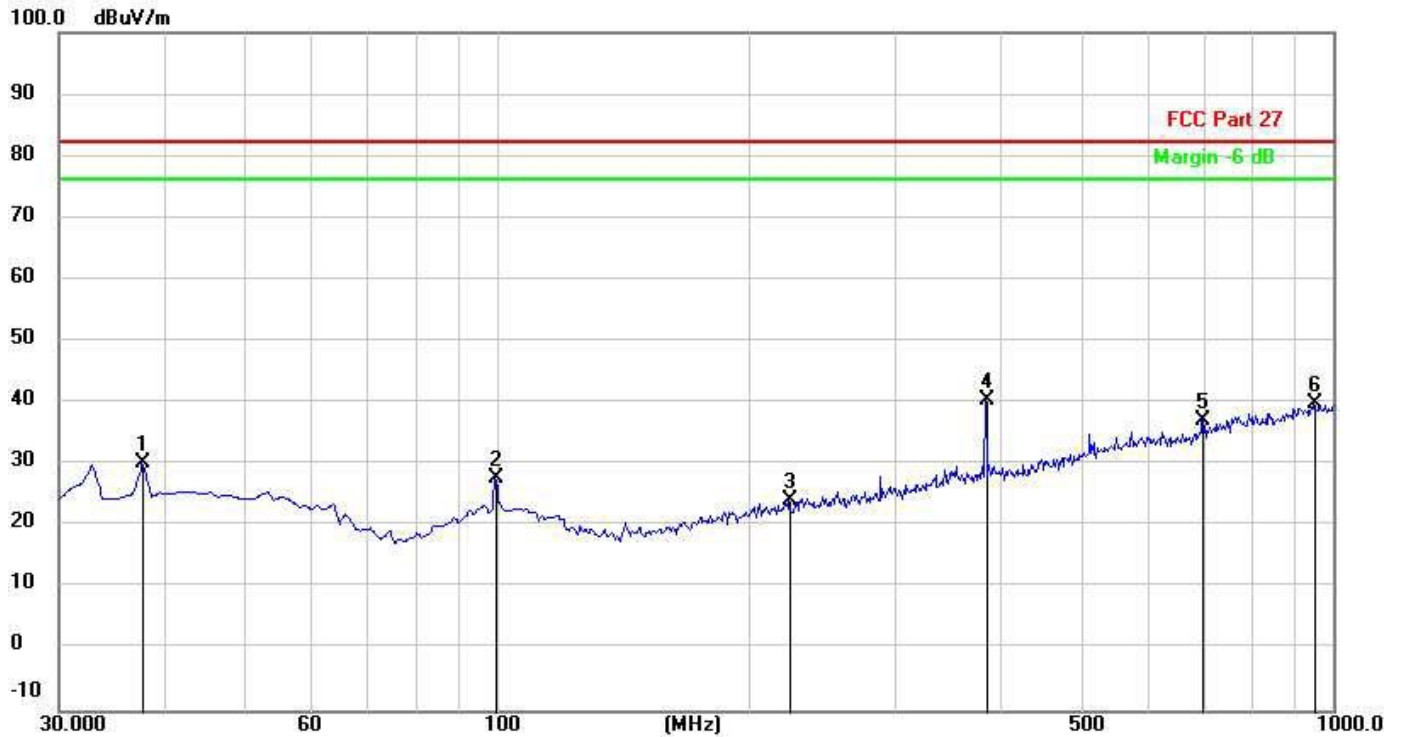
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2150MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	37.7599	43.15	-12.99	30.16	82.30	-52.14	peak
2	99.8399	39.71	-12.00	27.71	82.30	-54.59	peak
3	224.0000	35.97	-11.74	24.23	82.30	-58.07	peak
4 *	384.0500	47.28	-6.80	40.48	82.30	-41.82	peak
5	698.3300	37.64	-0.48	37.16	82.30	-45.14	peak
6	951.5000	36.83	3.08	39.91	82.30	-42.39	peak

Report No.: AAEMT/RF/230228-01-01

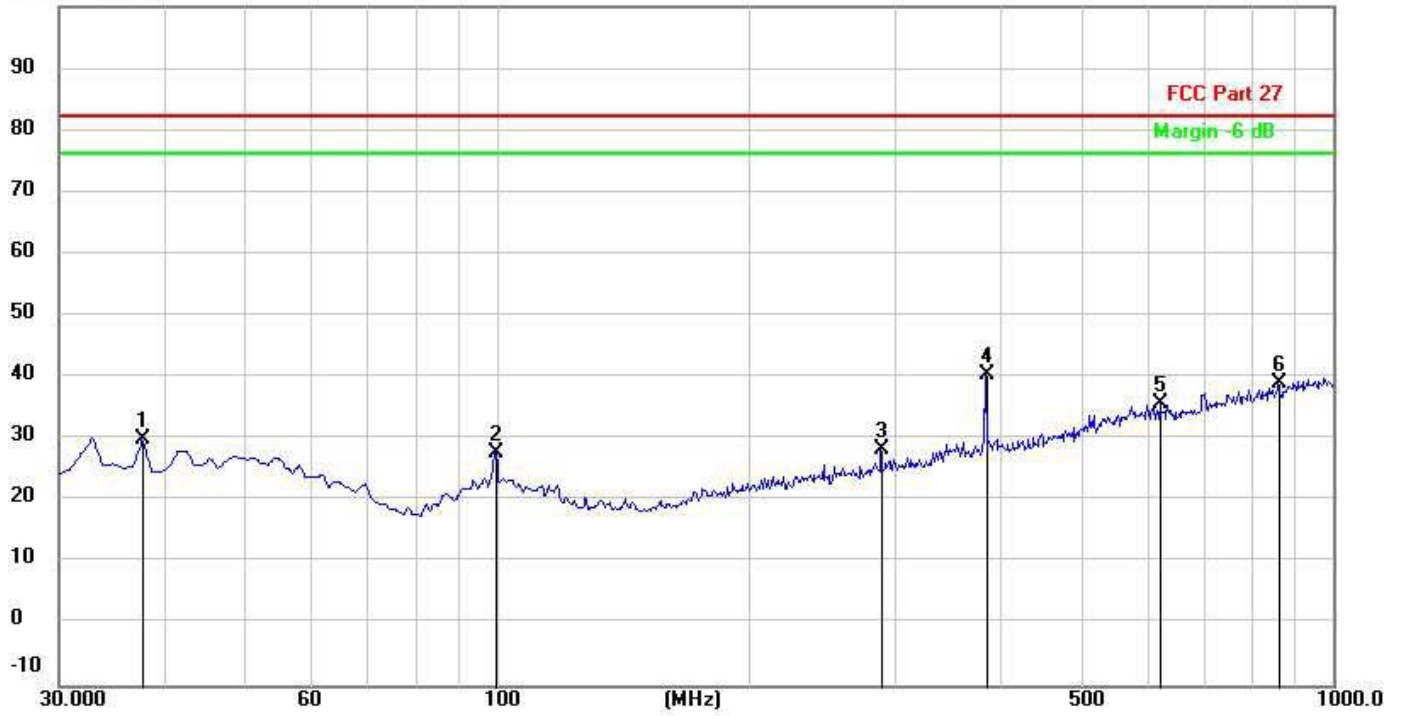
**LTE Band 66**

**Channel Bandwidth: 20MHz**

**2150MHz**

**Horizontal**

100.0 dBuV/m



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector
1	37.7599	40.99	-10.99	30.00	82.30	-52.30	peak
2	99.8399	37.89	-10.00	27.89	82.30	-54.41	peak
3	288.0200	35.82	-7.49	28.33	82.30	-53.97	peak
4 *	384.0500	45.27	-4.80	40.47	82.30	-41.83	peak
5	620.7300	34.65	1.11	35.76	82.30	-46.54	peak
6	860.3200	35.10	3.91	39.01	82.30	-43.29	peak

Report No.: AAEMT/RF/230228-01-01

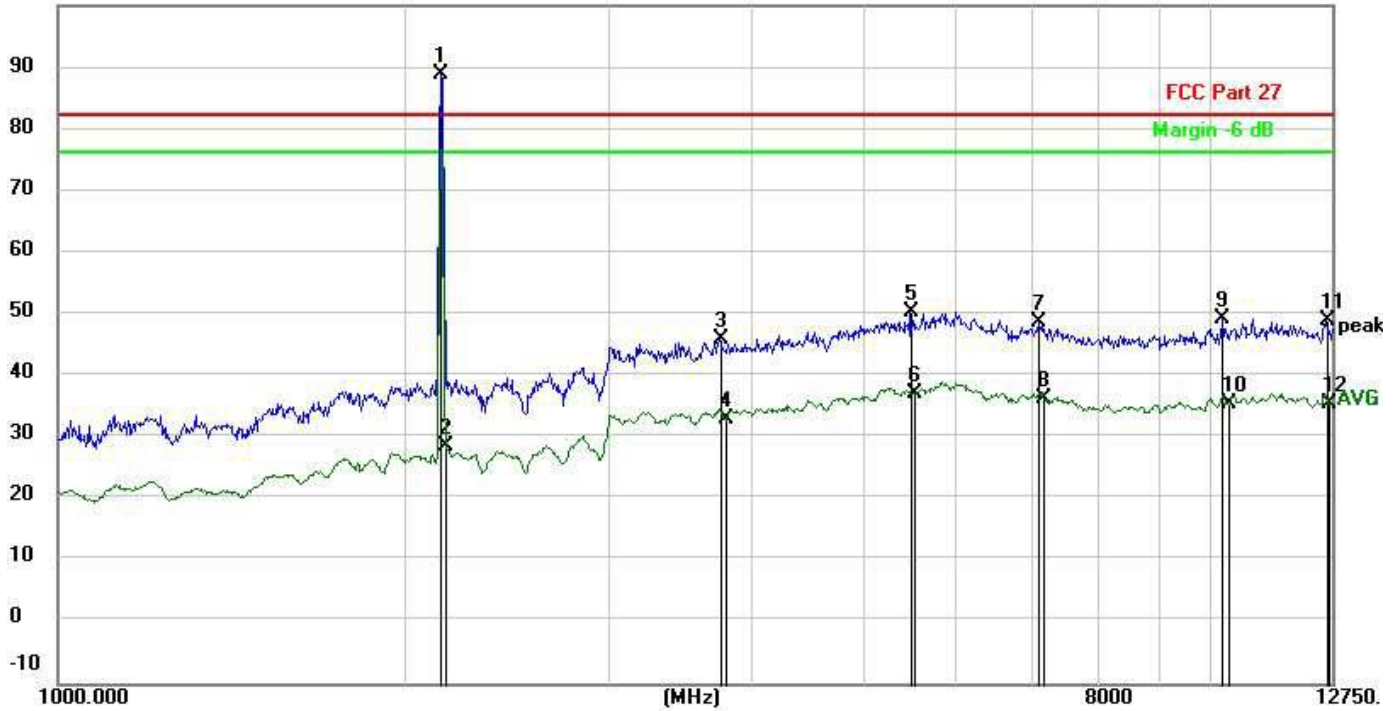
LTE Band 66

Channel Bandwidth: 20MHz

2150MHz

Vertical

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2151.585	83.20	5.66	88.86	82.30	6.56	peak
2		2168.079	22.90	5.67	28.57	82.30	-53.73	AVG
3		3747.657	37.11	8.74	45.85	82.30	-36.45	peak
4		3786.011	24.11	8.81	32.92	82.30	-49.38	AVG
5		5490.177	37.96	12.41	50.37	82.30	-31.93	peak
6		5518.199	24.85	12.45	37.30	82.30	-45.00	AVG
7		7099.746	36.38	12.46	48.84	82.30	-33.46	peak
8		7172.406	24.00	12.45	36.45	82.30	-45.85	AVG
9		10243.21	36.62	12.57	49.19	82.30	-33.11	peak
10		10348.04	22.74	12.65	35.39	82.30	-46.91	AVG
11		12588.75	36.72	12.30	49.02	82.30	-33.28	peak
12		12685.25	23.11	12.46	35.57	82.30	-46.73	AVG

Note:- Marker 1 is desired intentional frequency, Hence considered as PASS.



Report No.: AAEMT/RF/230228-01-01

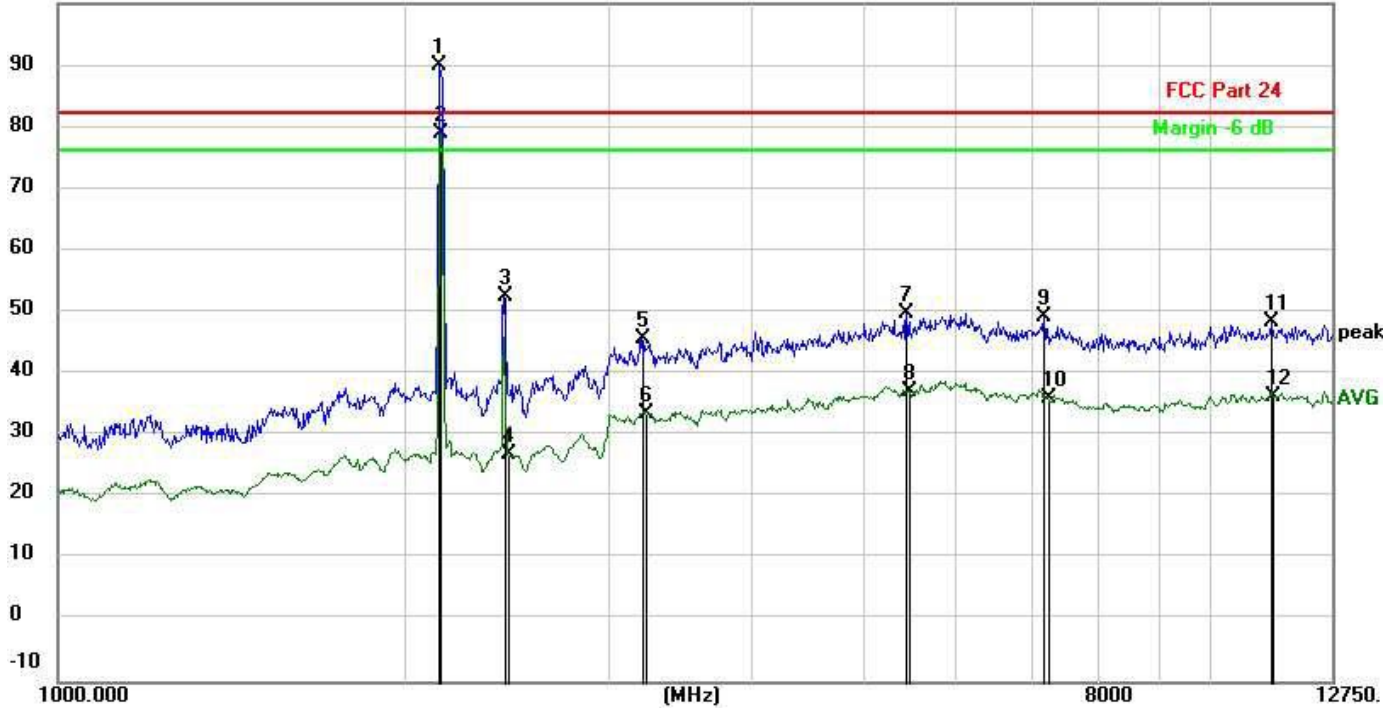
LTE Band 66

Channel Bandwidth: 20MHz

2150MHz

Horizontal

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2140.659	84.43	5.65	90.08	82.30	7.78	peak
2		2151.585	73.27	5.66	78.93	82.30	-3.37	AVG
3		2437.410	46.47	5.97	52.44	82.30	-29.86	peak
4		2456.095	21.01	5.99	27.00	82.30	-55.30	AVG
5		3208.660	37.95	7.73	45.68	82.30	-36.62	peak
6		3233.257	25.79	7.76	33.55	82.30	-48.75	AVG
7		5448.410	37.37	12.34	49.71	82.30	-32.59	peak
8		5462.297	24.84	12.36	37.20	82.30	-45.10	AVG
9		7172.406	36.86	12.45	49.31	82.30	-32.99	peak
10		7227.389	23.76	12.44	36.20	82.30	-46.10	AVG
11		11283.54	35.58	12.80	48.38	82.30	-33.92	peak
12		11341.14	23.62	12.84	36.46	82.30	-45.84	AVG

Note:- Marker 1 is desired intentional frequency, Hence considered as PASS.

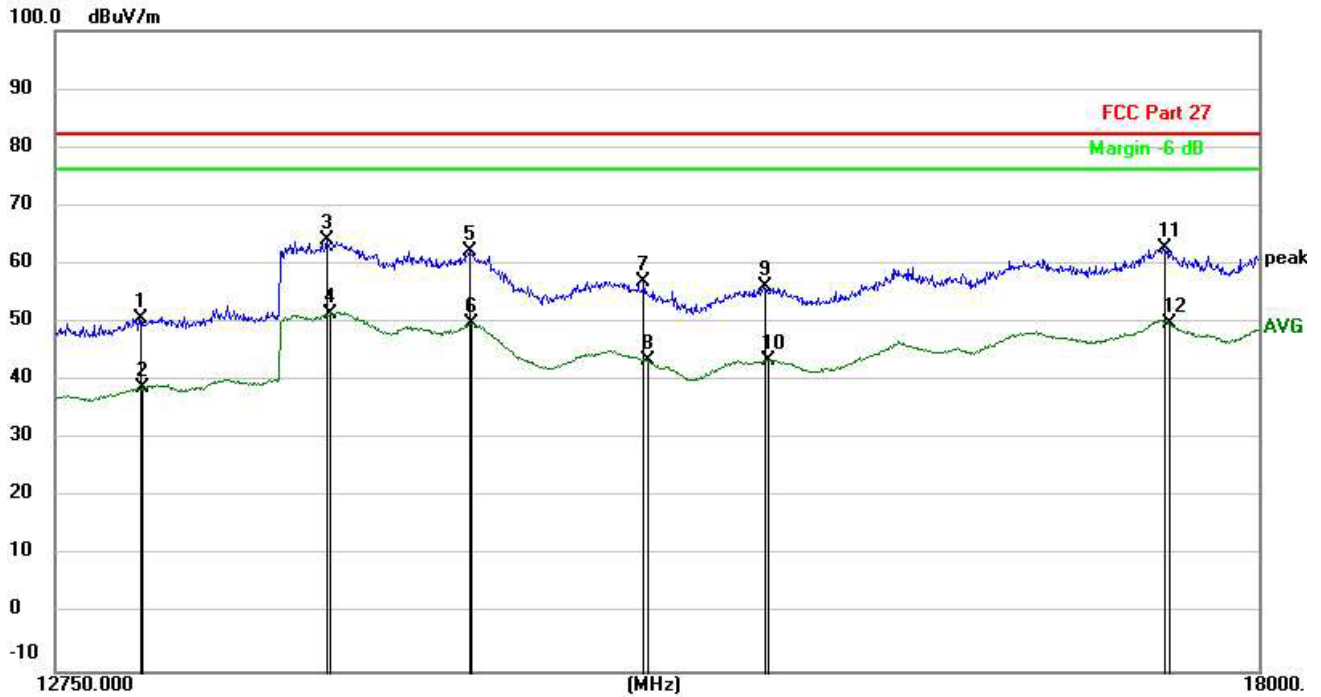
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2150MHz

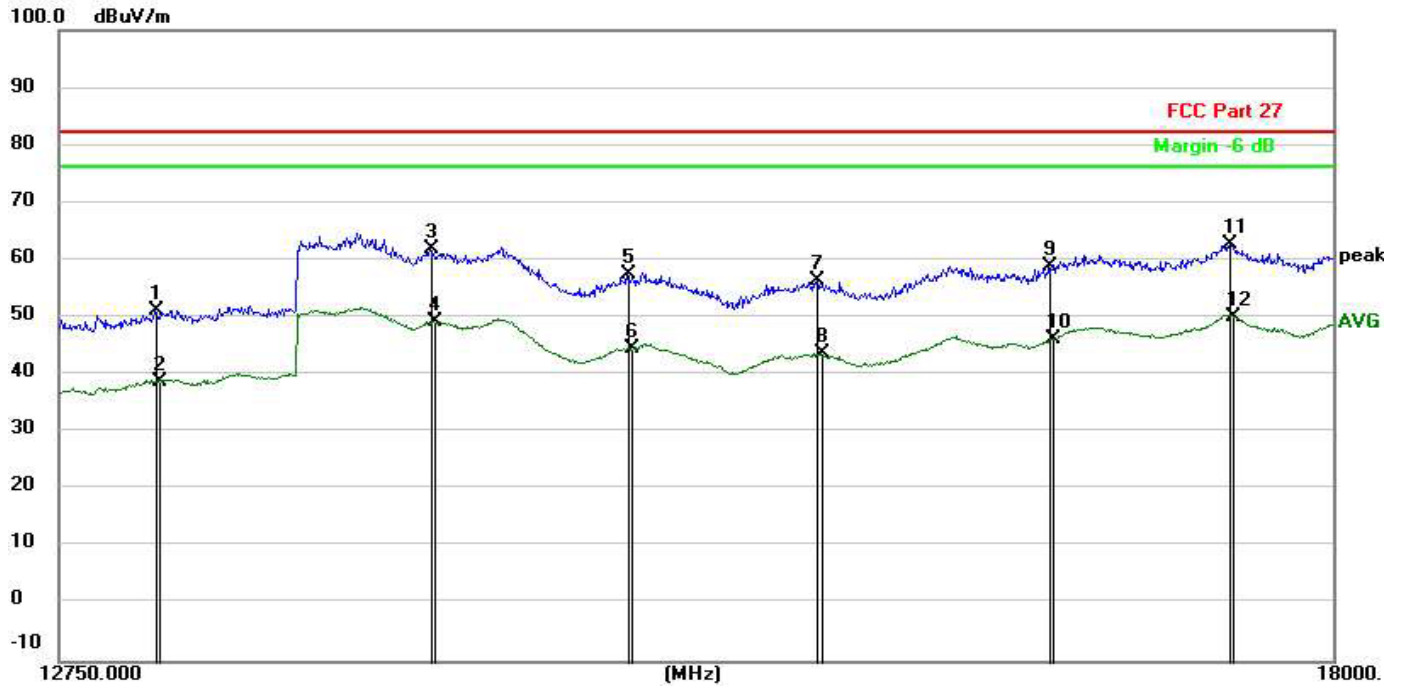
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		13061.51	37.38	13.27	50.65	82.30	-31.65	peak
2		13075.03	25.46	13.33	38.79	82.30	-43.51	AVG
3	*	13783.40	48.71	15.42	64.13	82.30	-18.17	peak
4		13792.91	35.91	15.43	51.34	82.30	-30.96	AVG
5		14355.83	49.30	12.94	62.24	82.30	-20.06	peak
6		14365.73	36.89	12.86	49.75	82.30	-32.55	AVG
7		15091.90	48.07	8.87	56.94	82.30	-25.36	peak
8		15107.52	34.68	8.87	43.55	82.30	-38.75	AVG
9		15621.40	47.05	9.20	56.25	82.30	-26.05	peak
10		15637.57	34.25	9.26	43.51	82.30	-38.79	AVG
11		17516.25	47.25	15.39	62.64	82.30	-19.66	peak
12		17540.43	34.47	15.37	49.84	82.30	-32.46	AVG

Report No.: AAEMT/RF/230228-01-01

**LTE Band 66**  
**Channel Bandwidth: 20MHz**  
**2150MHz**  
**Horizontal**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		13084.05	37.87	13.37	51.24	82.30	-31.06	peak
2		13097.59	25.46	13.43	38.89	82.30	-43.41	AVG
3		14095.84	47.04	14.88	61.92	82.30	-20.38	peak
4		14110.43	34.36	14.77	49.13	82.30	-33.17	AVG
5		14869.76	47.79	9.67	57.46	82.30	-24.84	peak
6		14885.15	35.00	9.58	44.58	82.30	-37.72	AVG
7		15653.76	47.09	9.31	56.40	82.30	-25.90	peak
8		15669.96	34.27	9.38	43.65	82.30	-38.65	AVG
9		16667.69	44.85	13.91	58.76	82.30	-23.54	peak
10		16684.94	32.28	13.93	46.21	82.30	-36.09	AVG
11	*	17504.17	47.33	15.40	62.73	82.30	-19.57	peak
12		17522.29	34.83	15.39	50.22	82.30	-32.08	AVG

Report No.: AAEMT/RF/230228-01-01

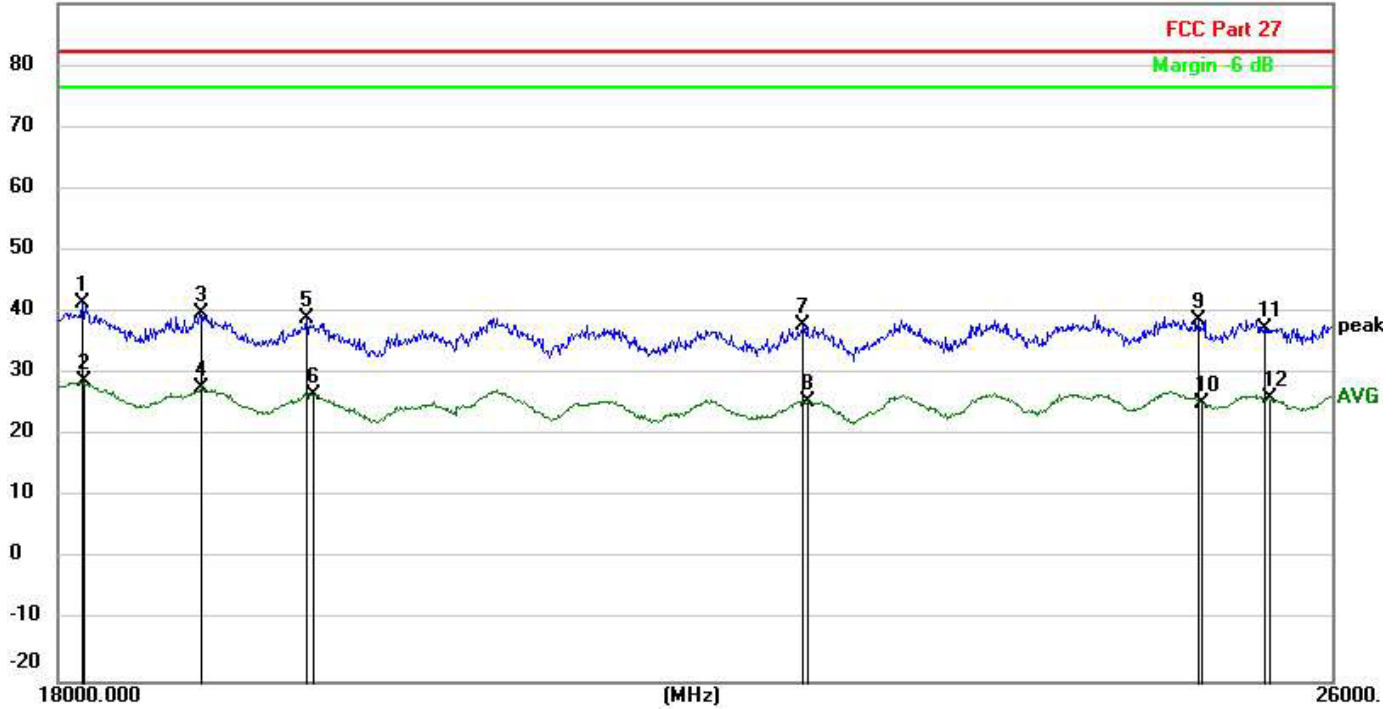
LTE Band 66

Channel Bandwidth: 20MHz

2150MHz

Vertical

90.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	18126.20	47.93	-6.55	41.38	82.30	-40.92	peak
2		18132.86	35.28	-6.56	28.72	82.30	-53.58	AVG
3		18749.91	46.50	-6.75	39.75	82.30	-42.55	peak
4		18763.70	34.38	-6.76	27.62	82.30	-54.68	AVG
5		19338.11	46.14	-7.14	39.00	82.30	-43.30	peak
6		19380.83	33.79	-7.18	26.61	82.30	-55.69	AVG
7		22320.17	45.70	-7.72	37.98	82.30	-44.32	peak
8		22344.80	33.21	-7.72	25.49	82.30	-56.81	AVG
9		25015.24	46.35	-7.52	38.83	82.30	-43.47	peak
10		25042.85	32.79	-7.51	25.28	82.30	-57.02	AVG
11		25498.18	44.91	-7.49	37.42	82.30	-44.88	peak
12		25526.32	33.47	-7.49	25.98	82.30	-56.32	AVG

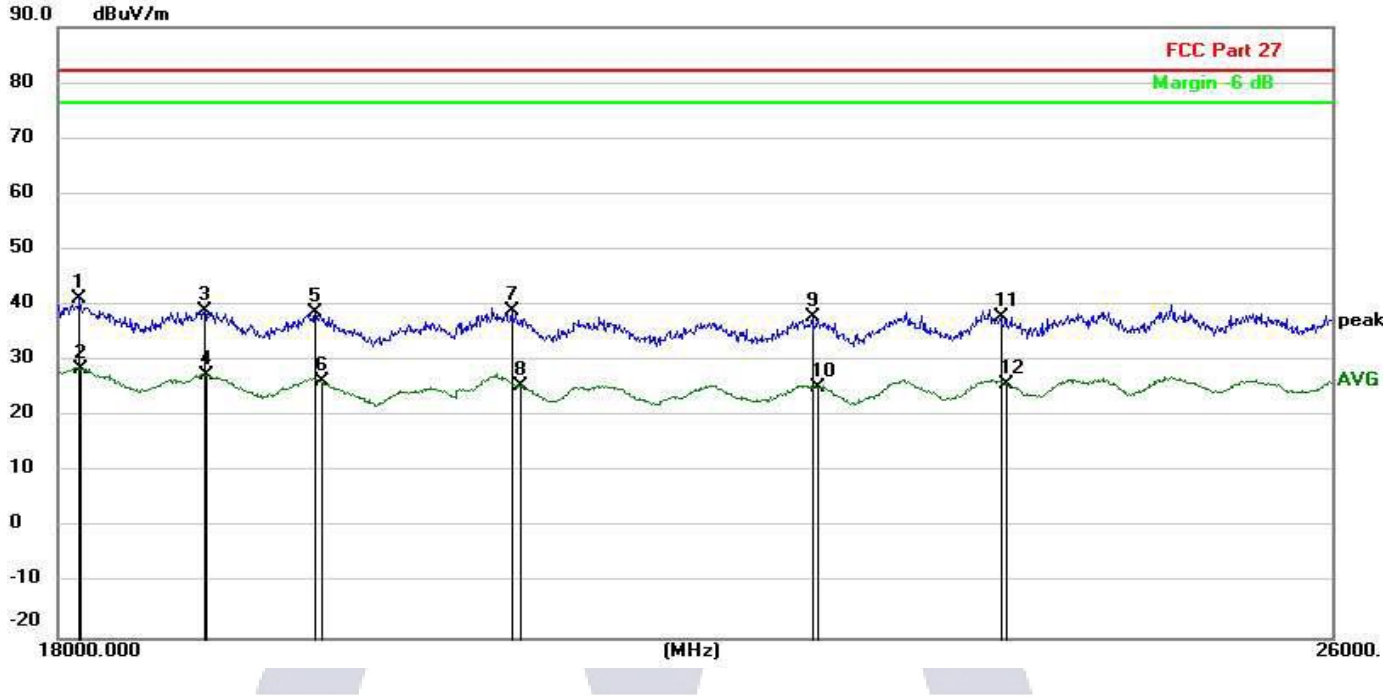
Report No.: AAEMT/RF/230228-01-01

**LTE Band 66**

**Channel Bandwidth: 20MHz**

**2150MHz**

**Horizontal**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	18112.87	47.61	-6.55	41.06	82.30	-41.24	peak
2		18119.53	35.02	-6.55	28.47	82.30	-53.83	AVG
3		18777.51	45.72	-6.76	38.96	82.30	-43.34	peak
4		18784.42	34.12	-6.76	27.36	82.30	-54.94	AVG
5		19387.95	45.83	-7.19	38.64	82.30	-43.66	peak
6		19416.49	33.43	-7.21	26.22	82.30	-56.08	AVG
7		20517.57	46.69	-7.77	38.92	82.30	-43.38	peak
8		20562.89	33.21	-7.77	25.44	82.30	-56.86	AVG
9		22377.69	45.68	-7.72	37.96	82.30	-44.34	peak
10		22410.63	33.04	-7.71	25.33	82.30	-56.97	AVG
11		23629.31	45.44	-7.60	37.84	82.30	-44.46	peak
12		23664.09	33.44	-7.60	25.84	82.30	-56.46	AVG

Report No.: AAEMT/RF/230228-01-01

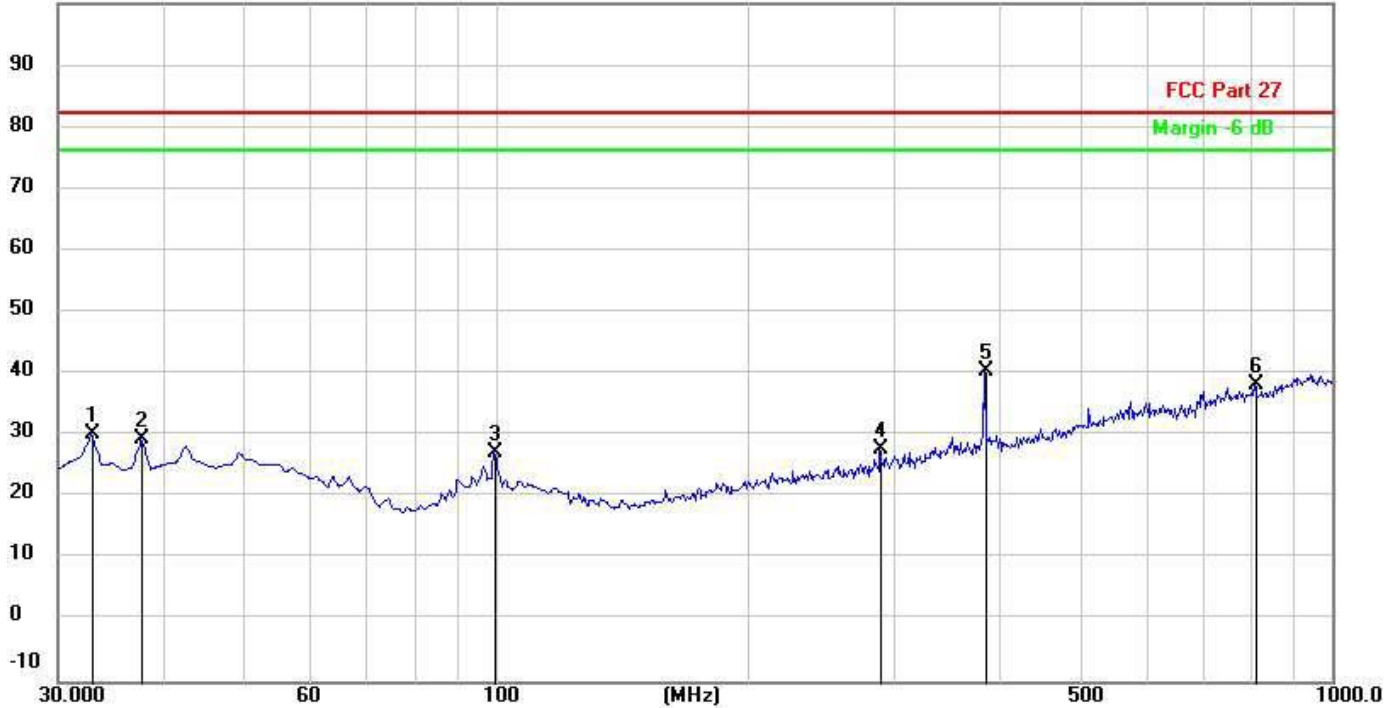
LTE Band 66

Channel Bandwidth: 20MHz

2180MHz

Vertical

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		32.9100	41.97	-11.77	30.20	82.30	-52.10	peak
2		37.7599	40.50	-10.99	29.51	82.30	-52.79	peak
3		99.8399	37.13	-10.00	27.13	82.30	-55.17	peak
4		288.0200	35.38	-7.49	27.89	82.30	-54.41	peak
5	*	384.0500	45.16	-4.80	40.36	82.30	-41.94	peak
6		809.8800	35.11	3.16	38.27	82.30	-44.03	peak

Report No.: AAEMT/RF/230228-01-01

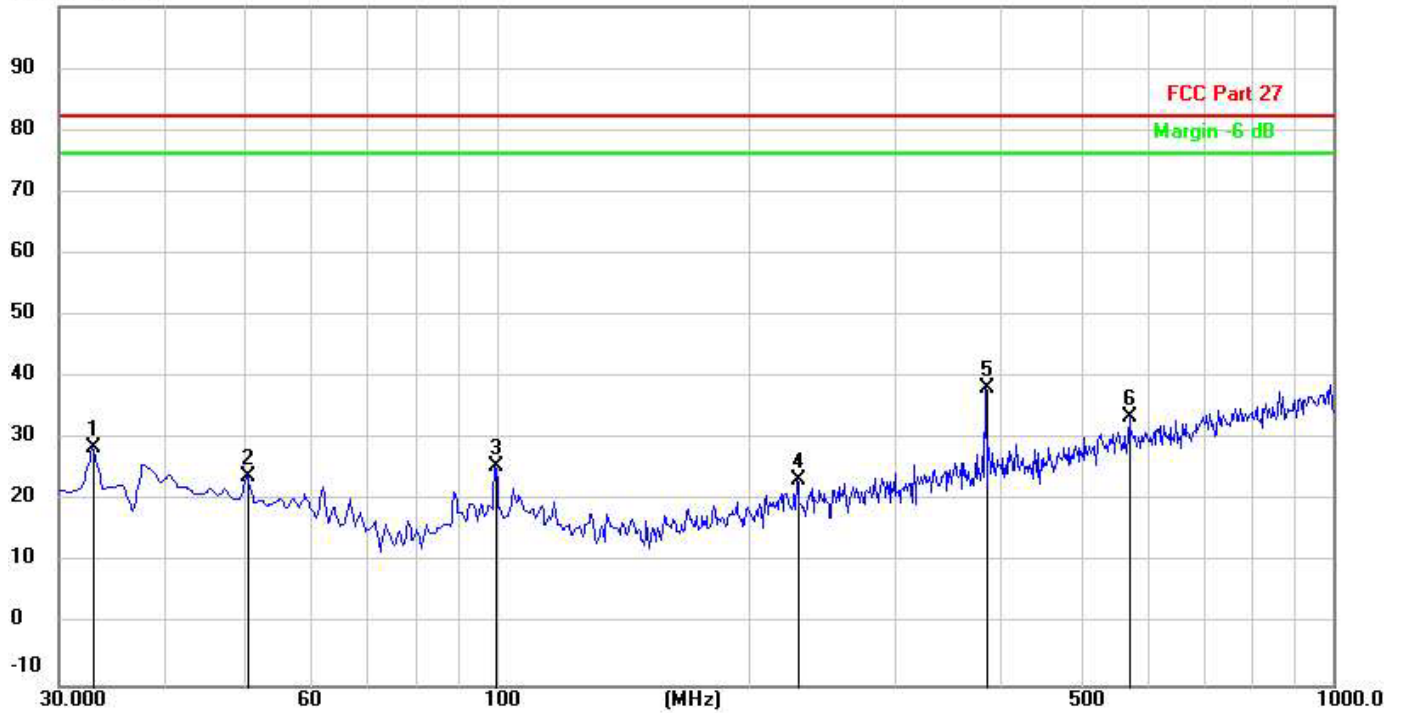
**LTE Band 66**

**Channel Bandwidth: 20MHz**

**2180MHz**

**Horizontal**

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		32.9100	42.41	-13.77	28.64	82.30	-53.66	peak
2		50.4089	36.28	-12.40	23.88	82.30	-58.42	peak
3		99.8399	37.73	-12.00	25.73	82.30	-56.57	peak
4		228.8500	34.88	-11.52	23.36	82.30	-58.94	peak
5	*	384.0500	44.93	-6.80	38.13	82.30	-44.17	peak
6		571.2600	35.31	-1.69	33.62	82.30	-48.68	peak

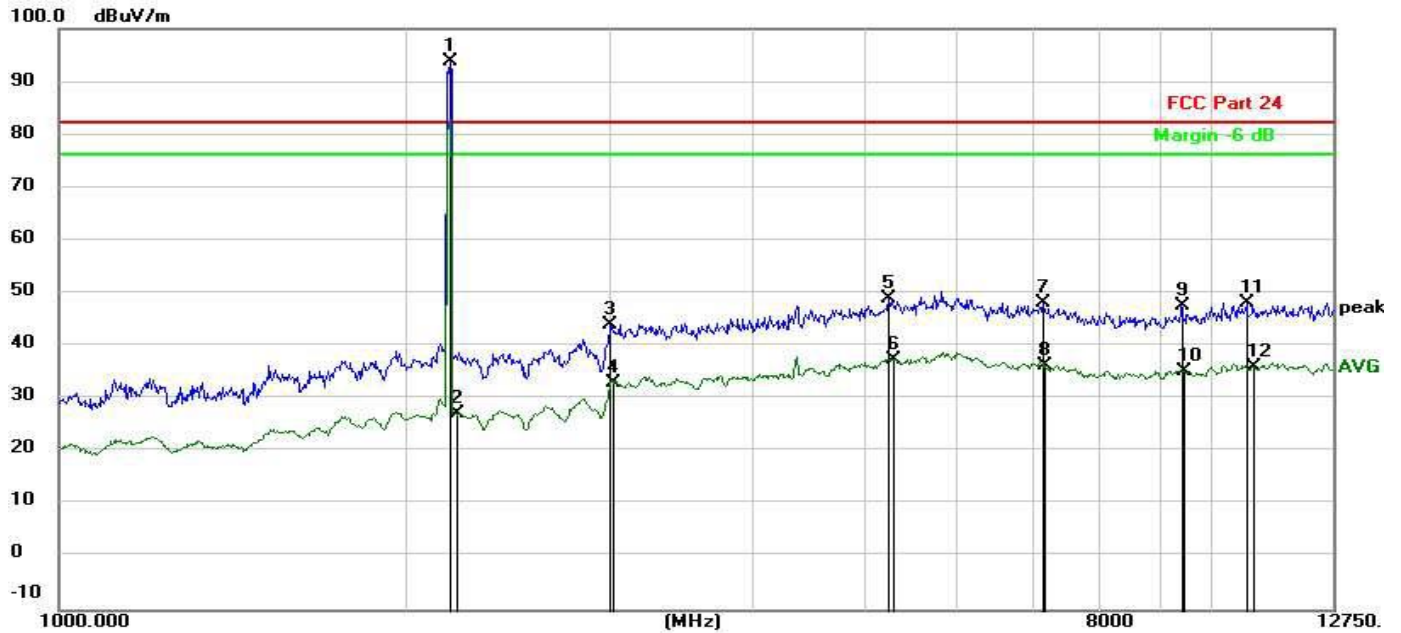
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2180MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2184.699	88.12	5.70	93.82	82.30	11.52	peak
2		2212.683	21.56	5.73	27.29	82.30	-55.01	AVG
3		3003.173	36.72	7.41	44.13	82.30	-38.17	peak
4		3026.195	25.66	7.46	33.12	82.30	-49.18	AVG
5		5244.295	37.02	12.00	49.02	82.30	-33.28	peak
6		5297.966	25.44	12.10	37.54	82.30	-44.76	AVG
7		7135.984	35.63	12.45	48.08	82.30	-34.22	peak
8		7172.406	23.95	12.45	36.40	82.30	-45.90	AVG
9		9417.909	35.49	12.13	47.62	82.30	-34.68	peak
10		9465.978	22.99	12.17	35.16	82.30	-47.14	AVG
11		10723.47	35.58	12.68	48.26	82.30	-34.04	peak
12		10860.83	23.54	12.64	36.18	82.30	-46.12	AVG

Note:- Marker 1 is desired intentional frequency, Hence considered as PASS.



Report No.: AAEMT/RF/230228-01-01

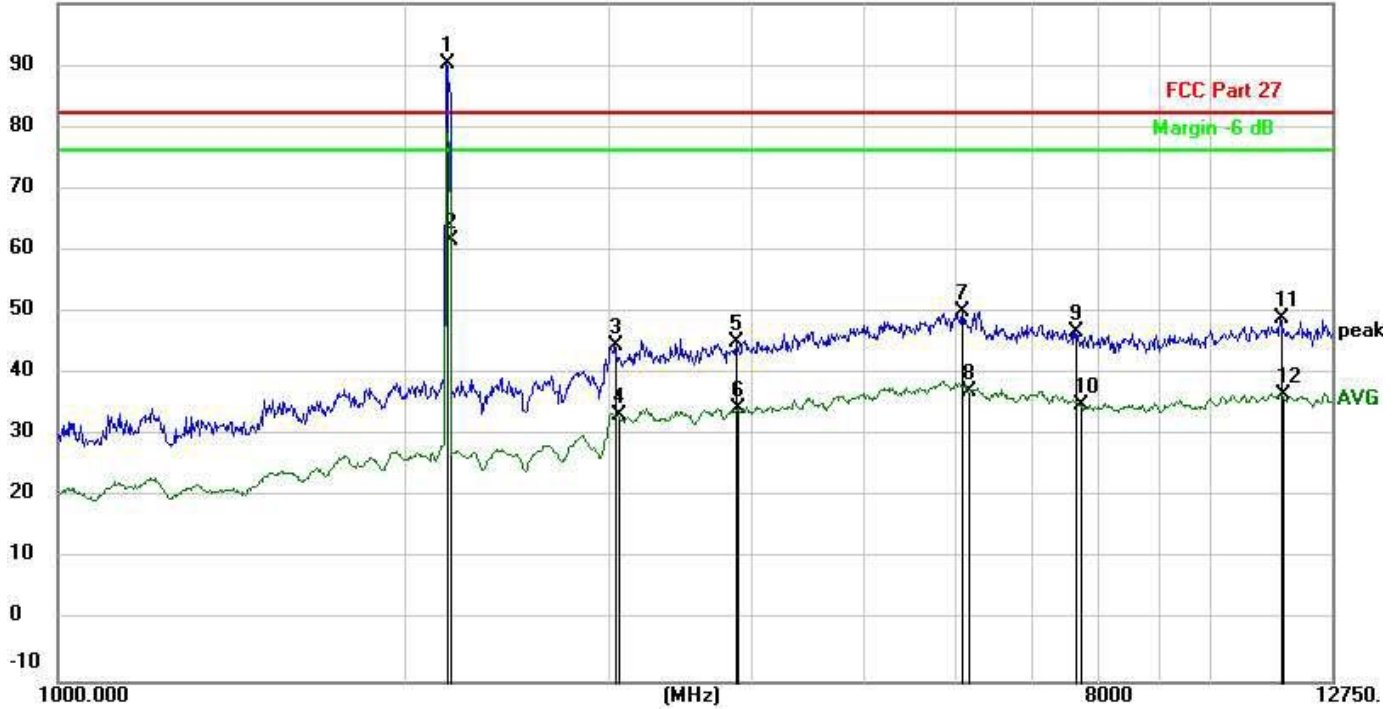
LTE Band 66

Channel Bandwidth: 20MHz

2180MHz

Horizontal

100.0 dBuV/m



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	2173.605	84.53	5.68	90.21	82.30	7.91	peak
2		2190.267	56.02	5.71	61.73	82.30	-20.57	AVG
3		3041.641	37.24	7.47	44.71	82.30	-37.59	peak
4		3057.166	25.89	7.50	33.39	82.30	-48.91	AVG
5		3873.748	36.13	9.02	45.15	82.30	-37.15	peak
6		3893.520	25.30	9.07	34.37	82.30	-47.93	AVG
7		6094.137	36.72	13.29	50.01	82.30	-32.29	peak
8		6156.506	24.10	13.09	37.19	82.30	-45.11	AVG
9		7624.250	34.68	12.07	46.75	82.30	-35.55	peak
10		7702.278	23.11	11.87	34.98	82.30	-47.32	AVG
11		11486.40	36.16	12.94	49.10	82.30	-33.20	peak
12		11545.03	23.85	12.90	36.75	82.30	-45.55	AVG

Note:- Marker 1 is desired intentional frequency, Hence considered as PASS.

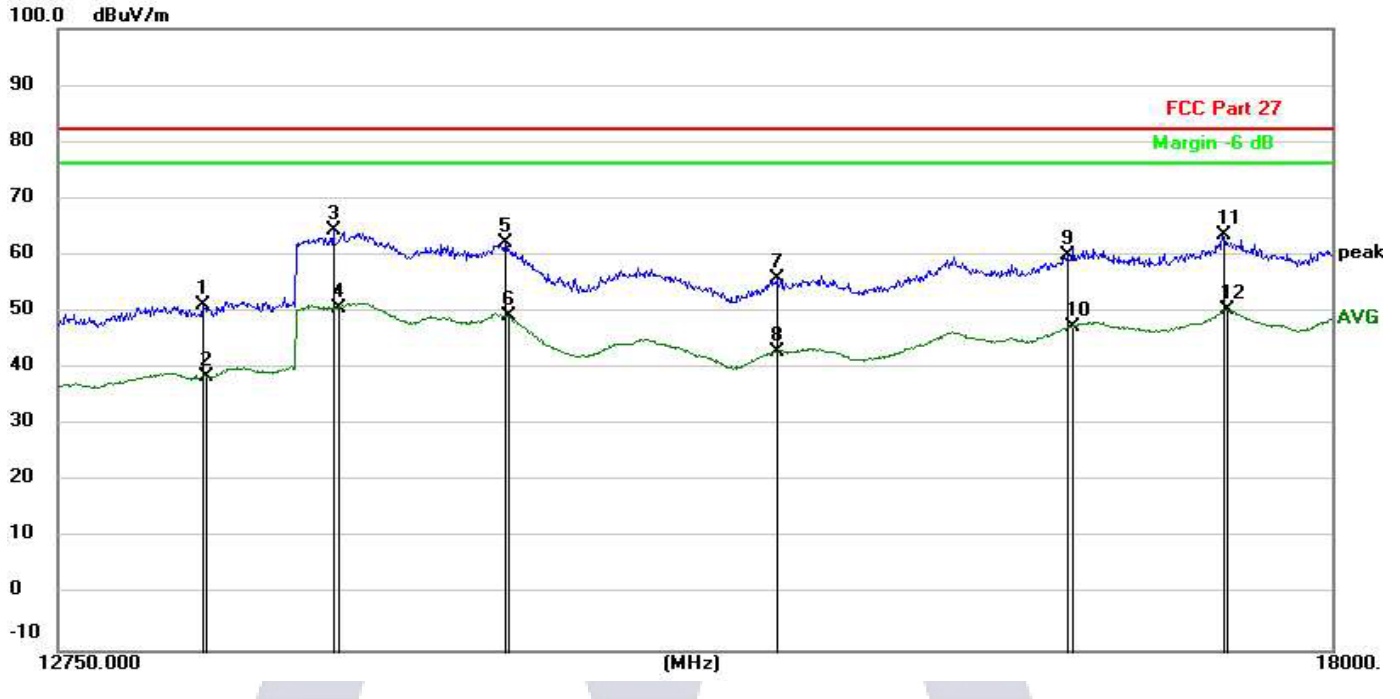
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2180MHz

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		13261.20	36.99	14.15	51.14	82.30	-31.16	peak
2		13274.93	24.40	14.21	38.61	82.30	-43.69	AVG
3	*	13735.95	49.11	15.39	64.50	82.30	-17.80	peak
4		13754.91	35.18	15.40	50.58	82.30	-31.72	AVG
5		14390.52	49.54	12.67	62.21	82.30	-20.09	peak
6		14405.42	36.58	12.56	49.14	82.30	-33.16	AVG
7		15487.31	47.06	8.75	55.81	82.30	-26.49	peak
8		15487.31	34.30	8.75	43.05	82.30	-39.25	AVG
9		16754.13	45.82	14.06	59.88	82.30	-22.42	peak
10		16771.47	33.32	14.09	47.41	82.30	-34.89	AVG
11		17474.02	48.23	15.36	63.59	82.30	-18.71	peak
12		17498.14	34.85	15.40	50.25	82.30	-32.05	AVG

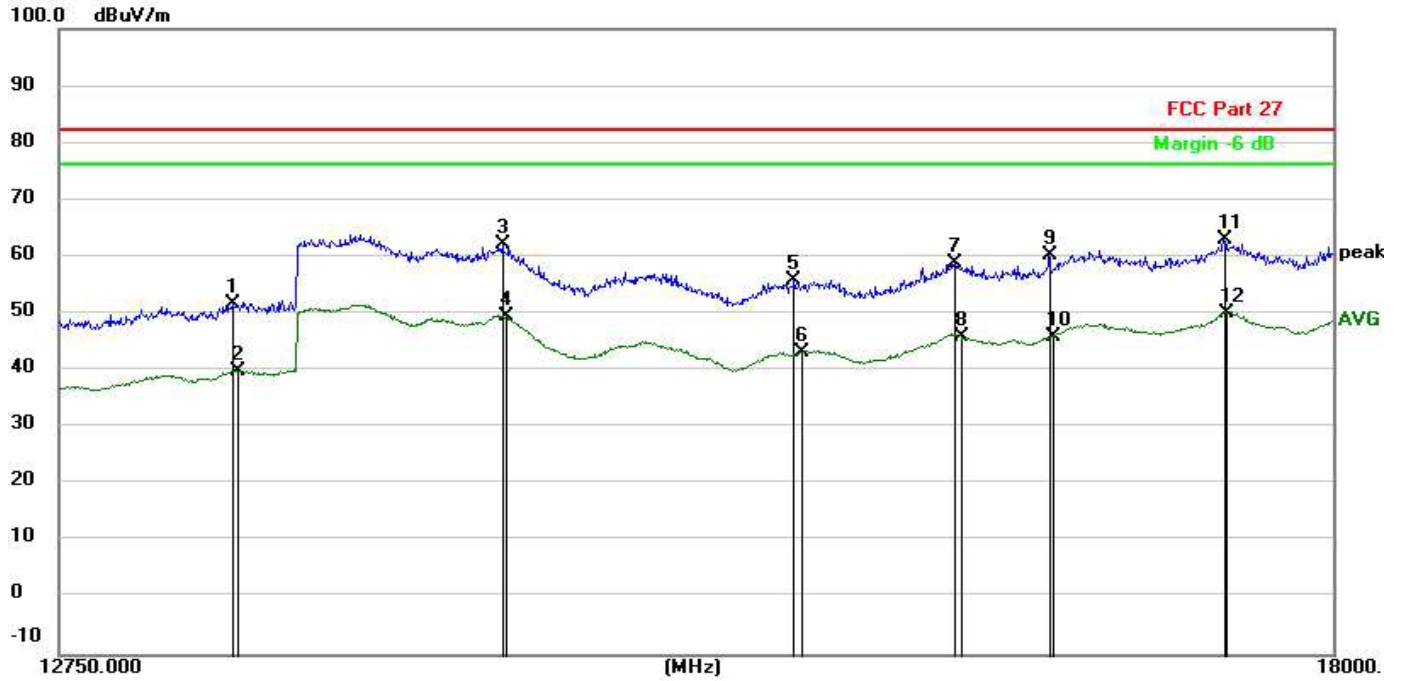
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2180MHz

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1		13362.19	37.05	14.60	51.65	82.30	-30.65	peak
2		13380.64	25.16	14.67	39.83	82.30	-42.47	AVG
3		14375.64	49.32	12.78	62.10	82.30	-20.20	peak
4		14390.52	36.82	12.67	49.49	82.30	-32.81	AVG
5		15556.89	46.87	8.96	55.83	82.30	-26.47	peak
6		15583.74	34.27	9.06	43.33	82.30	-38.97	AVG
7		16247.74	46.84	12.09	58.93	82.30	-23.37	peak
8		16275.78	33.75	12.25	46.00	82.30	-36.30	AVG
9		16667.69	46.40	13.91	60.31	82.30	-21.99	peak
10		16679.19	32.14	13.92	46.06	82.30	-36.24	AVG
11	*	17474.02	47.59	15.36	62.95	82.30	-19.35	peak
12		17486.08	34.76	15.37	50.13	82.30	-32.17	AVG

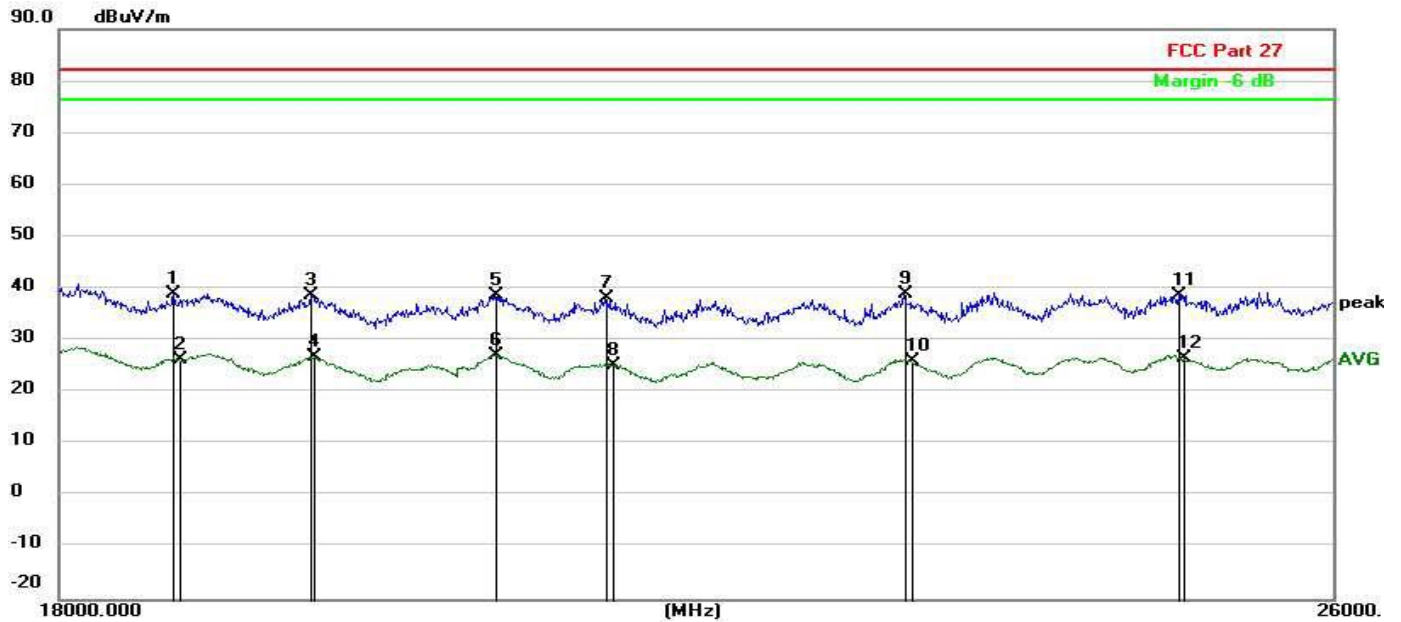
Report No.: AAEMT/RF/230228-01-01

**LTE Band 66**

**Channel Bandwidth: 20MHz**

**2180MHz**

**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	18605.68	45.63	-6.70	38.93	82.30	-43.37	peak
2		18633.06	32.93	-6.72	26.21	82.30	-56.09	AVG
3		19359.46	45.94	-7.16	38.78	82.30	-43.52	peak
4		19373.70	34.07	-7.17	26.90	82.30	-55.40	AVG
5		20412.21	46.51	-7.76	38.75	82.30	-43.55	peak
6		20419.72	35.01	-7.76	27.25	82.30	-55.05	AVG
7		21075.80	45.94	-7.80	38.14	82.30	-44.16	peak
8		21114.59	32.99	-7.80	25.19	82.30	-57.11	AVG
9		22969.63	46.55	-7.66	38.89	82.30	-43.41	peak
10		23020.37	33.65	-7.67	25.98	82.30	-56.32	AVG
11		24868.49	46.37	-7.52	38.85	82.30	-43.45	peak
12		24905.10	34.14	-7.52	26.62	82.30	-55.68	AVG

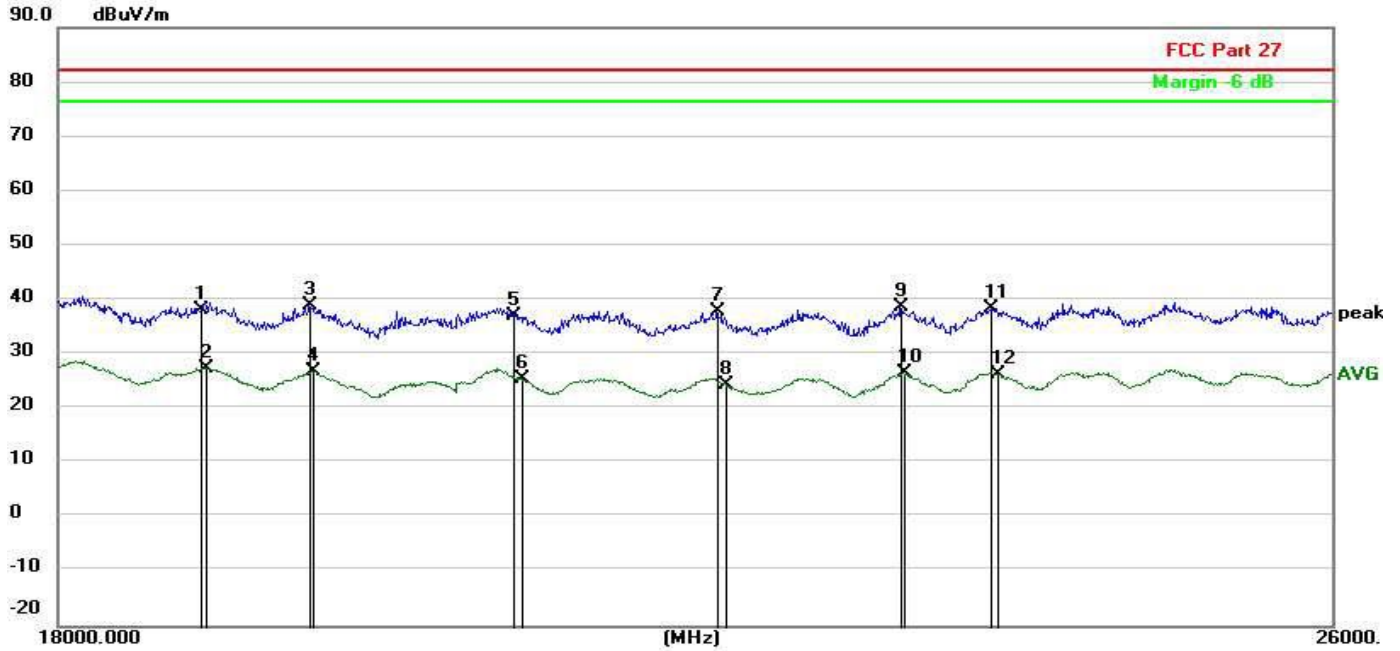
Report No.: AAEMT/RF/230228-01-01

LTE Band 66

Channel Bandwidth: 20MHz

2180MHz

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		18763.70	44.86	-6.76	38.10	82.30	-44.20	peak
2		18784.42	34.26	-6.76	27.50	82.30	-54.80	AVG
3	*	19352.34	46.26	-7.15	39.11	82.30	-43.19	peak
4		19366.58	34.09	-7.16	26.93	82.30	-55.37	AVG
5		20532.66	44.85	-7.77	37.08	82.30	-45.22	peak
6		20570.45	33.20	-7.77	25.43	82.30	-56.87	AVG
7		21768.96	45.54	-7.77	37.77	82.30	-44.53	peak
8		21825.07	32.11	-7.77	24.34	82.30	-57.96	AVG
9		22952.75	46.35	-7.67	38.68	82.30	-43.62	peak
10		22969.63	34.18	-7.66	26.52	82.30	-55.78	AVG
11		23559.90	46.16	-7.61	38.55	82.30	-43.75	peak
12		23603.26	33.88	-7.60	26.28	82.30	-56.02	AVG



**\*\*End of Report\*\***