

# RF TEST REPORT

Test Report No.....: RF240311020-01-003

Product(s) Name.....: SOM

Model(s).....: SOM7981

Trade Mark.....: N/A

Applicant.....: OpenEmbed M&C

Address.....: Room 408, Bldg 3, Minle industry park, Meiban Blvd, LongHua  
District, Shenzhen, Guangdong

Receipt Date.....: 2024.04.26

Test Date.....: 2024.04.27~2024.07.17

Issued Date.....: 2024.07.30

Standards.....: ETSI EN 300 440 V2.1.1 (2017-03)

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

| Prepared By:       | Checked By:      | Approved By:    |  |
|--------------------|------------------|-----------------|---------------------------------------------------------------------------------------|
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# Table of Contents

|                                                                           |           |
|---------------------------------------------------------------------------|-----------|
| <b>History of this test report.....</b>                                   | <b>4</b>  |
| <b>1. General Information .....</b>                                       | <b>5</b>  |
| 1.1 Applicant.....                                                        | 5         |
| 1.2 Manufacturer .....                                                    | 5         |
| 1.3 Factory.....                                                          | 5         |
| 1.4 Basic Description of Equipment Under Test.....                        | 5         |
| 1.5 Channel list.....                                                     | 5         |
| <b>2. Summary of Test Results .....</b>                                   | <b>6</b>  |
| 2.1 Summary of Test Items .....                                           | 6         |
| 2.2 Application of Harmonized Standard .....                              | 6         |
| 2.3 Test Instruments.....                                                 | 7         |
| 2.4 Test Condition .....                                                  | 8         |
| 2.5 Measurement Uncertainty .....                                         | 9         |
| 2.6 Test Location .....                                                   | 10        |
| 2.7 Deviation from Standards .....                                        | 10        |
| 2.8 Abnormalities from Standard Conditions .....                          | 10        |
| <b>3. Test Procedure And Results .....</b>                                | <b>11</b> |
| 3.1 Equivalent isotropically radiated power (e.i.r.p.).....               | 11        |
| 3.1.1 Limit.....                                                          | 11        |
| 3.1.2 Test Procedure .....                                                | 11        |
| 3.1.3 Test Setup .....                                                    | 12        |
| 3.1.4 Test Result .....                                                   | 13        |
| 3.2 Permitted range of operating frequencies .....                        | 23        |
| 3.2.1 Limit.....                                                          | 23        |
| 3.2.2 Test Procedure .....                                                | 23        |
| 3.2.3 Test Setup .....                                                    | 23        |
| 3.2.4 Test Result .....                                                   | 24        |
| 3.3 Unwanted emissions in the spurious domain & Spurious radiations ..... | 32        |
| 3.3.1 Limit.....                                                          | 32        |
| 3.3.2 Test Procedure .....                                                | 32        |

|           |                                                  |           |
|-----------|--------------------------------------------------|-----------|
| 3.3.3     | Test Setup .....                                 | 32        |
| 3.3.4     | Test Result .....                                | 33        |
| 3.4       | Adjacent channel selectivity .....               | 70        |
| 3.4.1     | Limit .....                                      | 70        |
| 3.4.2     | Test Procedure .....                             | 70        |
| 3.4.3     | Test Setup .....                                 | 71        |
| 3.4.4     | Test Result (worst case) .....                   | 71        |
| 3.5       | Blocking or desensitization .....                | 72        |
| 3.5.1     | Limit .....                                      | 72        |
| 3.5.2     | Test Procedure .....                             | 72        |
| 3.5.3     | Test Setup .....                                 | 73        |
| 3.5.4     | Test Result (worst case for 802.11a) .....       | 73        |
| <b>4.</b> | <b>Photographs of EUT .....</b>                  | <b>74</b> |
| <b>5.</b> | <b>Photographs of Radiated Test Set-up .....</b> | <b>75</b> |

## History of this test report

Original Report Issue Date: 2024.07.30

- No additional attachment
- Additional attachments were issued following record

| Attachment No. | Issue Date | Description |
|----------------|------------|-------------|
|                |            |             |
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# 1. General Information

## 1.1 Applicant

### OpenEmbed M&C

Room 408, Bldg 3, Minle industry park, Meiban Blvd, LongHua District, Shenzhen, Guangdong

## 1.2 Manufacturer

### OpenEmbed M&C

Room 408, Bldg 3, Minle industry park, Meiban Blvd, LongHua District, Shenzhen, Guangdong

## 1.3 Factory

### Dongguan Yue Shun electronic technology Co., LTD

No. 19 Junpeng Road, Shitanpu Community, Tangxia Town, Dongguan City

## 1.4 Basic Description of Equipment Under Test

|                     |                                                                                                                                  |                |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------|
| Product No.         | POC240311020-S001                                                                                                                |                |
| Equipment Name      | SOM                                                                                                                              |                |
| Model Number        | SOM7981                                                                                                                          |                |
| Trade Mark          | N/A                                                                                                                              |                |
| Power Supply        | DC 12V From Adapter                                                                                                              |                |
| Operate temperature | -20℃~60℃                                                                                                                         |                |
| EUT Stage           | ○ Product Unit                                                                                                                   | ● Final-Sample |
| Operation Frequency | 5725 MHz~5875 MHz                                                                                                                |                |
| Product Type        | For IEEE 802.11a: WLAN(SISO)<br>For IEEE 802.11n/ac/ax: WLAN(MIMO)                                                               |                |
| Nominal Bandwidth   | 20MHz / 40MHz / 80MHz                                                                                                            |                |
| Modulation          | OFDM                                                                                                                             |                |
| Antenna gain        | Ant1: 5.16 dBi, Ant2: 5.16 dBi, Ant2: 5.16 dBi                                                                                   |                |
| Antenna type        | External Antenna                                                                                                                 |                |
| Data Rate (Mbps)    | IEEE 11a mode : 6/9/12/18/24/36/48/54<br>IEEE 11n mode : up to 450<br>IEEE 11ac mode : up to 1560<br>IEEE 11ax mode : up to 3603 |                |

## 1.5 Channel list

| Channel Information   |                            |                     |                |
|-----------------------|----------------------------|---------------------|----------------|
| Frequency Range (MHz) | IEEE Std. 802.11           | Ch. Frequency (MHz) | Channel Number |
| 5725-5875             | 802.11a/n/ac/ax<br>(20MHz) | 5745-5825           | 149-165        |
|                       | 802.11n/ac/ax<br>(40MHz)   | 5755-5795           | 151-159        |
|                       | 802.11ac/ax<br>(80MHz)     | 5775                | 155            |

## 2. Summary of Test Results

### 2.1 Summary of Test Items

| Test item                                          | Test require     | Results    |
|----------------------------------------------------|------------------|------------|
| Equivalent isotropically radiated power (e.i.r.p.) | Sub-clause 4.2.2 | Pass       |
| Permitted range of operating frequencies           | Sub-clause 4.2.3 | Pass       |
| Unwanted emissions in the spurious domain          | Sub-clause 4.2.4 | Pass       |
| Duty cycle                                         | Sub-clause 4.2.5 | N/A Note 1 |
| Additional requirements for FHSS equipment         | Sub-clause 4.2.6 | N/A Note 2 |
| Adjacent channel selectivity                       | Sub-clause 4.3.3 | Pass       |
| Blocking or desensitization                        | Sub-clause 4.3.4 | Pass       |
| Spurious radiations                                | Sub-clause 4.3.5 | Pass       |

Note: N/A is an abbreviation for Not Applicable and means this test item is not applicable for this device according to the technology characteristic of device.

Note (1): Not applicable, This requirement applies to RFID transmitters operating in 2446 MHz to 2454 MHz only.

Note (2): Not applicable, since the test applies to FHSS Device only

### 2.2 Application of Harmonized Standard

| No. | Reference Standards              | Standards Title                                                                                                                                   |
|-----|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | ETSI EN 300 440 V2.1.1 (2017-03) | Short Range Devices (SRD);<br>Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard for access to radio spectrum |

## 2.3 Test Instruments

| No.                    | Equipment                                    | Manufacturer                    | Type No.              | Serial No.                 | Inventory No. | Cal. date<br>(yyyy/mm/dd) | Cal. Due date<br>(yyyy/mm/dd) |
|------------------------|----------------------------------------------|---------------------------------|-----------------------|----------------------------|---------------|---------------------------|-------------------------------|
| Radiated Emissions     |                                              |                                 |                       |                            |               |                           |                               |
| 1                      | Test receiver                                | Rohde&Schwarz                   | ESU                   | 100184                     | JLE011        | 2024/4/24                 | 2025/4/23                     |
| 2                      | Horn Antenna                                 | SCHWARZBEC<br>K                 | BBHA<br>9120 D        | 9120D-1273                 | JLE028        | 2024/4/20                 | 2025/4/19                     |
| 3                      | Low frequency<br>amplifier                   | Unknown                         | LNA<br>0920N          | 2014                       | JLE023        | 2024/4/24                 | 2025/4/23                     |
| 4                      | High frequency<br>amplifier                  | Schwarzbeck                     | BBV 9718              | 284                        | JLE024        | 2024/4/24                 | 2025/4/23                     |
| 5                      | Log periodic<br>antenna                      | Schwarzbeck                     | VULB<br>9168          | 1151                       | JLE012        | 2024/4/20                 | 2025/4/19                     |
| 6                      | Temp&Humidity<br>Recorder                    | Meideshi                        | JR900                 | /                          | JLE021        | 2024/4/24                 | 2025/4/23                     |
| 7                      | RF cable(966<br>chamber)9kHz-<br>1GHz        | Unknown                         | Unknown               | Unknown                    | /             | 2024/4/24                 | 2025/4/23                     |
| 8                      | RF cable(966<br>chamber)1GHz-<br>18GHz       | Unknown                         | Unknown               | Unknown                    | /             | 2024/4/24                 | 2025/4/23                     |
| 9                      | Test software                                | Farad<br>Technology Co.,<br>Ltd | EZ-EMC Ver.TW-03A2    |                            |               |                           |                               |
| RF Conducted Emissions |                                              |                                 |                       |                            |               |                           |                               |
| 1                      | MXA Signal<br>Analyzer                       | Keysight                        | N9021B                | MY60080169                 | JLE050        | 2024/4/20                 | 2025/4/19                     |
| 2                      | RF Control Unit                              | dsusoft                         | JS0806-2              | 21G8060449                 | JLE053        | 2024/4/20                 | 2025/4/19                     |
| 3                      | power supply<br>unit                         | dsusoft                         | JS0806-<br>4ADC       | N/A                        | JLE055        | 2024/4/20                 | 2025/4/19                     |
| 4                      | VXG Signal<br>Generator                      | Keysight                        | M9384B                | MY61270787                 | JLE051        | 2024/4/20                 | 2025/4/19                     |
| 5                      | EXG Analog<br>Signal<br>Generator            | Keysight                        | N5173B                | MY59101282                 | JLE052        | 2024/4/20                 | 2025/4/19                     |
| 6                      | Wideband<br>Radio<br>Communication<br>Tester | Rohde&Schwarz                   | CMW500                | 1201.0002K5<br>0-116064-Dt | JLE054        | 2024/4/20                 | 2025/4/19                     |
| 7                      | Test software                                | dsusoft                         | JS1120-3 Ver.3.2.22.0 |                            |               |                           |                               |

## 2.4 Test Condition

|                   |                   |                                                                                                     |                                                                                               |
|-------------------|-------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Normal Condition  | Temperature       | 15 °C to 35 °C                                                                                      |                                                                                               |
|                   | Relative humidity | 20 % to 75 %.                                                                                       |                                                                                               |
|                   | Voltage           | <input type="checkbox"/> Mains voltage                                                              | Nominal mains voltage                                                                         |
|                   |                   | <input type="checkbox"/> Lead-acid battery                                                          | 1.1 * the nominal voltage of the battery                                                      |
|                   |                   | <input checked="" type="checkbox"/> Other                                                           | The normal test voltage shall be that declared by the equipment provider                      |
| Extreme Condition | Temperature       | <input checked="" type="checkbox"/> The temperature range as declared by the manufacturer           |                                                                                               |
|                   |                   | <input type="checkbox"/> Temperature category I (General): -20 °C to +55 °C                         |                                                                                               |
|                   |                   | <input type="checkbox"/> Temperature category II (Portable): -10 °C to +55 °C                       |                                                                                               |
|                   |                   | <input type="checkbox"/> Temperature category III (Equipment for normal indoor use): 5 °C to +35 °C |                                                                                               |
|                   | Voltage           | <input type="checkbox"/> Mains voltage                                                              | ±10 %* the nominal mains voltage                                                              |
|                   |                   | <input type="checkbox"/> Lead-acid battery                                                          | 1,3 and 0,9 multiplied by the nominal voltage of the battery                                  |
|                   |                   | <input type="checkbox"/> Leclanché or the lithium battery                                           | Lower extreme voltage: 0.85*the nominal voltage<br>upper extreme voltage: The nominal voltage |
|                   |                   | <input type="checkbox"/> Nickel-cadmium battery                                                     | Lower extreme voltage: 0.9*the nominal voltage<br>upper extreme voltage: The nominal voltage  |
|                   |                   | <input checked="" type="checkbox"/> Other                                                           | The normal test voltage shall be that declared by the equipment provider                      |

|                            |                 |               |
|----------------------------|-----------------|---------------|
| Test Environment Parameter | 100.9~101.3kPa  |               |
| Test Relative Humidity     | 47%~54%         |               |
| Value                      | Temperature(°C) | Voltage DC(V) |
| NTNV                       | 25              | 12            |
| LTLV                       | -20             | 10.8          |
| LTHV                       | -20             | 13.2          |
| HTLV                       | 60              | 10.8          |
| HTHV                       | 60              | 13.2          |

Remark:

- 1) The EUT just work in such extreme temperature of -20~60°C.
- 2) NT: Normal Temperature  
NV: Normal Voltage  
LT: Low Extreme Test Temperature  
HT: High Extreme Test Temperature  
LV: Low Extreme Test Voltage  
HV: High Extreme Test Voltage

## 2.5 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

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

| Uncertainty                            |             |
|----------------------------------------|-------------|
| Parameter                              | Uncertainty |
| Occupied Channel Bandwidth             | ±102kHz     |
| RF power conducted                     | ±0.377dB    |
| Power Spectral Density                 | ±0.743dB    |
| Conducted Spurious Emission            | ±1.328dB    |
| Conducted emission(9kHz~30MHz) AC main | ±2.68dB     |
| Radiated emission(9kHz~30MHz)          | ±2.74dB     |
| Radiated emission (30MHz~1GHz)         | ±4.22dB     |
| Radiated emission (1GHz~18GHz)         | ±5.06dB     |
| Radiated emission (18GHz~40GHz)        | ±4.98dB     |

## 2.6 Test Location

|                           |                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company:                  | Shenzhen Haiyun Standard Technical CO., Ltd.                                                                                                                     |
| Address:                  | Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China |
| CNAS Registration Number: | CNAS L18252                                                                                                                                                      |
| CAB identifier:           | CN0145                                                                                                                                                           |
| A2LA Certificate Number:  | 6823.01                                                                                                                                                          |
| Telephone:                | 0755-26024411                                                                                                                                                    |

## 2.7 Deviation from Standards

None

## 2.8 Abnormalities from Standard Conditions

None

### 3. Test Procedure And Results

#### 3.1 Equivalent isotropically radiated power (e.i.r.p.)

##### 3.1.1 Limit

The transmitter maximum e.i.r.p. under normal and extreme test conditions is provided in table 2

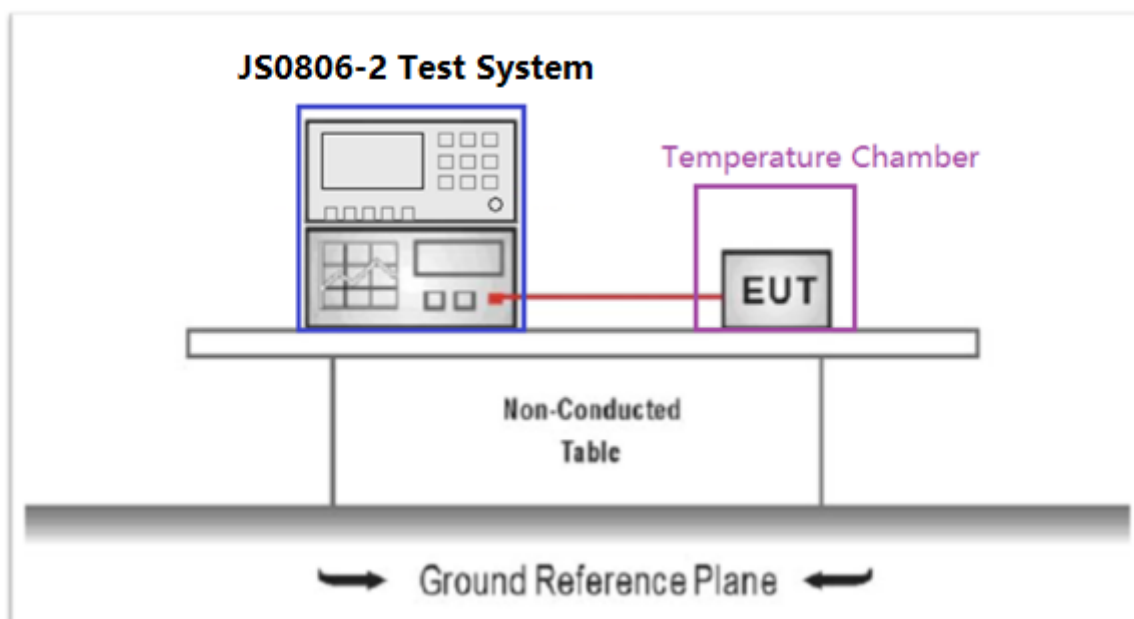
**Table 2: Maximum radiated power (e.i.r.p.)**

| Entry                                                                                                                                                                                                                                                                                                                                    | Frequency Bands            | Power           | Application                                                     | Notes                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|-----------------------------------------------------------------|------------------------------|
| 1                                                                                                                                                                                                                                                                                                                                        | 2 400 MHz to 2 483,5 MHz   | 10 mW e.i.r.p.  | Non-specific short range devices                                |                              |
| 2                                                                                                                                                                                                                                                                                                                                        | 2 400 MHz to 2 483,5 MHz   | 25 mW e.i.r.p.  | Radiodetermination devices                                      |                              |
| 3                                                                                                                                                                                                                                                                                                                                        | (a) 2 446 MHz to 2 454 MHz | 500 mW e.i.r.p. | Radio Frequency Identification (RFID) devices                   | See also table 4 and Annex G |
| 4                                                                                                                                                                                                                                                                                                                                        | (b) 2 446 MHz to 2 454 MHz | 4 W e.i.r.p.    | Radio Frequency Identification (RFID) devices                   | See also table 4 and Annex G |
| 5                                                                                                                                                                                                                                                                                                                                        | 5 725 MHz to 5 875 MHz     | 25 mW e.i.r.p.  | Non-specific short range devices                                |                              |
| 6                                                                                                                                                                                                                                                                                                                                        | 9 200 MHz to 9 500 MHz     | 25 mW e.i.r.p.  | Radiodetermination devices                                      |                              |
| 7                                                                                                                                                                                                                                                                                                                                        | 9 500 MHz to 9 975 MHz     | 25 mW e.i.r.p.  | Radiodetermination devices                                      |                              |
| 8                                                                                                                                                                                                                                                                                                                                        | 10,5 GHz to 10,6 GHz       | 500 mW e.i.r.p. | Radiodetermination devices                                      |                              |
| 9                                                                                                                                                                                                                                                                                                                                        | 13,4 GHz to 14,0 GHz       | 25 mW e.i.r.p.  | Radiodetermination devices                                      |                              |
| 10                                                                                                                                                                                                                                                                                                                                       | 17,1 GHz to 17,3 GHz       | 400 mW e.i.r.p. | Radiodetermination devices                                      | See Annex H                  |
| 11                                                                                                                                                                                                                                                                                                                                       | 24,00 GHz to 24,25 GHz     | 100 mW e.i.r.p. | Non-specific short range devices and radiodetermination devices |                              |
| <b>NOTE:</b> The spectrum ranges in some entries are not harmonised throughout all EU territory, specifically entries 4, 9, and 11 have been identified as such. Implementers are cautioned to refer to CEPT/ERC Recommendation 70-03 [i.2] as well as current National Radio plans to verify acceptance within intended regions of use. |                            |                 |                                                                 |                              |

##### 3.1.2 Test Procedure

Please refer to ETSI EN 300 440 Sub-clause 4.2.2.3 for the measurement method.

### 3.1.3 Test Setup



### 3.1.4 Test Result

| TestCondition | Test Mode  | Antenna | Frequency [MHz] | EIRP [dBm]   | EIRP Limit [dBm] | Verdict |
|---------------|------------|---------|-----------------|--------------|------------------|---------|
| NTNV          | 11A        | Ant1    | 5745            | 11.90        | 13.98            | PASS    |
|               | 11A        | Ant2    | 5745            | 12.01        | 13.98            | PASS    |
|               | 11A        | Ant3    | 5745            | 13.63        | 13.98            | PASS    |
|               | 11A        | Ant1    | 5785            | 11.71        | 13.98            | PASS    |
|               | 11A        | Ant2    | 5785            | 11.95        | 13.98            | PASS    |
|               | 11A        | Ant3    | 5785            | <b>13.80</b> | 13.98            | PASS    |
|               | 11A        | Ant1    | 5825            | 11.22        | 13.98            | PASS    |
|               | 11A        | Ant2    | 5825            | 11.52        | 13.98            | PASS    |
|               | 11A        | Ant3    | 5825            | 12.99        | 13.98            | PASS    |
|               | 11N20MIMO  | Ant1    | 5745            | 7.36         | 13.98            | PASS    |
|               | 11N20MIMO  | Ant2    | 5745            | 7.47         | 13.98            | PASS    |
|               | 11N20MIMO  | Ant3    | 5745            | 9.93         | 13.98            | PASS    |
|               | 11N20MIMO  | total   | 5745            | 13.20        | 13.98            | PASS    |
|               | 11N20MIMO  | Ant1    | 5785            | 7.68         | 13.98            | PASS    |
|               | 11N20MIMO  | Ant2    | 5785            | 8.15         | 13.98            | PASS    |
|               | 11N20MIMO  | Ant3    | 5785            | 9.88         | 13.98            | PASS    |
|               | 11N20MIMO  | total   | 5785            | 13.45        | 13.98            | PASS    |
|               | 11N20MIMO  | Ant1    | 5825            | 7.93         | 13.98            | PASS    |
|               | 11N20MIMO  | Ant2    | 5825            | 8.34         | 13.98            | PASS    |
|               | 11N20MIMO  | Ant3    | 5825            | 9.92         | 13.98            | PASS    |
|               | 11N20MIMO  | total   | 5825            | 13.59        | 13.98            | PASS    |
|               | 11N40MIMO  | Ant1    | 5755            | 7.79         | 13.98            | PASS    |
|               | 11N40MIMO  | Ant2    | 5755            | 7.86         | 13.98            | PASS    |
|               | 11N40MIMO  | Ant3    | 5755            | 10.23        | 13.98            | PASS    |
|               | 11N40MIMO  | total   | 5755            | 13.55        | 13.98            | PASS    |
|               | 11N40MIMO  | Ant1    | 5795            | 8.39         | 13.98            | PASS    |
|               | 11N40MIMO  | Ant2    | 5795            | 8.39         | 13.98            | PASS    |
|               | 11N40MIMO  | Ant3    | 5795            | 9.71         | 13.98            | PASS    |
|               | 11N40MIMO  | total   | 5795            | 13.65        | 13.98            | PASS    |
|               | 11AC20MIMO | Ant1    | 5745            | 7.36         | 13.98            | PASS    |
|               | 11AC20MIMO | Ant2    | 5745            | 7.59         | 13.98            | PASS    |
|               | 11AC20MIMO | Ant3    | 5745            | 9.88         | 13.98            | PASS    |
|               | 11AC20MIMO | total   | 5745            | 13.20        | 13.98            | PASS    |
|               | 11AC20MIMO | Ant1    | 5785            | 7.72         | 13.98            | PASS    |
|               | 11AC20MIMO | Ant2    | 5785            | 8.15         | 13.98            | PASS    |
|               | 11AC20MIMO | Ant3    | 5785            | 10.12        | 13.98            | PASS    |

|      |            |       |      |       |       |      |
|------|------------|-------|------|-------|-------|------|
|      | 11AC20MIMO | total | 5785 | 13.57 | 13.98 | PASS |
|      | 11AC20MIMO | Ant1  | 5825 | 6.99  | 13.98 | PASS |
|      | 11AC20MIMO | Ant2  | 5825 | 7.66  | 13.98 | PASS |
|      | 11AC20MIMO | Ant3  | 5825 | 9.07  | 13.98 | PASS |
|      | 11AC20MIMO | total | 5825 | 12.77 | 13.98 | PASS |
|      | 11AC40MIMO | Ant1  | 5755 | 7.63  | 13.98 | PASS |
|      | 11AC40MIMO | Ant2  | 5755 | 8.02  | 13.98 | PASS |
|      | 11AC40MIMO | Ant3  | 5755 | 10.02 | 13.98 | PASS |
|      | 11AC40MIMO | total | 5755 | 13.46 | 13.98 | PASS |
|      | 11AC40MIMO | Ant1  | 5795 | 7.92  | 13.98 | PASS |
|      | 11AC40MIMO | Ant2  | 5795 | 8.32  | 13.98 | PASS |
|      | 11AC40MIMO | Ant3  | 5795 | 9.87  | 13.98 | PASS |
|      | 11AC40MIMO | total | 5795 | 13.56 | 13.98 | PASS |
|      | 11AC80MIMO | Ant1  | 5775 | 7.53  | 13.98 | PASS |
|      | 11AC80MIMO | Ant2  | 5775 | 7.81  | 13.98 | PASS |
|      | 11AC80MIMO | Ant3  | 5775 | 9.56  | 13.98 | PASS |
|      | 11AC80MIMO | total | 5775 | 13.17 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5745 | 6.95  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5745 | 7.74  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5745 | 9.98  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5745 | 13.19 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5785 | 7.87  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5785 | 8.71  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5785 | 10.10 | 13.98 | PASS |
|      | 11AX20MIMO | total | 5785 | 13.76 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5825 | 7.17  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5825 | 7.82  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5825 | 9.29  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5825 | 12.96 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5755 | 7.91  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5755 | 7.96  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5755 | 10.23 | 13.98 | PASS |
|      | 11AX40MIMO | total | 5755 | 13.61 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5795 | 8.11  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5795 | 8.46  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5795 | 10.03 | 13.98 | PASS |
|      | 11AX40MIMO | total | 5795 | 13.72 | 13.98 | PASS |
|      | 11AX80MIMO | Ant1  | 5775 | 7.75  | 13.98 | PASS |
|      | 11AX80MIMO | Ant2  | 5775 | 8.10  | 13.98 | PASS |
|      | 11AX80MIMO | Ant3  | 5775 | 9.89  | 13.98 | PASS |
|      | 11AX80MIMO | total | 5775 | 13.46 | 13.98 | PASS |
| HTHV | 11A        | Ant1  | 5745 | 11.67 | 13.98 | PASS |

|  |            |       |      |       |       |      |
|--|------------|-------|------|-------|-------|------|
|  | 11A        | Ant2  | 5745 | 11.99 | 13.98 | PASS |
|  | 11A        | Ant3  | 5745 | 13.58 | 13.98 | PASS |
|  | 11A        | Ant1  | 5785 | 11.71 | 13.98 | PASS |
|  | 11A        | Ant2  | 5785 | 11.88 | 13.98 | PASS |
|  | 11A        | Ant3  | 5785 | 13.56 | 13.98 | PASS |
|  | 11A        | Ant1  | 5825 | 11.18 | 13.98 | PASS |
|  | 11A        | Ant2  | 5825 | 11.30 | 13.98 | PASS |
|  | 11A        | Ant3  | 5825 | 12.97 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5745 | 7.34  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5745 | 7.35  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5745 | 9.92  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5745 | 13.15 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5785 | 7.50  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5785 | 8.09  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5785 | 9.66  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5785 | 13.28 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5825 | 7.81  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5825 | 8.27  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5825 | 9.83  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5825 | 13.50 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5755 | 7.72  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5755 | 7.83  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5755 | 10.22 | 13.98 | PASS |
|  | 11N40MIMO  | total | 5755 | 13.52 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5795 | 8.22  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5795 | 8.33  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5795 | 9.51  | 13.98 | PASS |
|  | 11N40MIMO  | total | 5795 | 13.50 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5745 | 7.25  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5745 | 7.39  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5745 | 9.73  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5745 | 13.05 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5785 | 7.66  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5785 | 8.14  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5785 | 10.03 | 13.98 | PASS |
|  | 11AC20MIMO | total | 5785 | 13.51 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5825 | 6.93  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5825 | 7.63  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5825 | 9.03  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5825 | 12.72 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5755 | 7.51  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5755 | 7.97  | 13.98 | PASS |

|      |            |       |      |       |       |      |
|------|------------|-------|------|-------|-------|------|
|      | 11AC40MIMO | Ant3  | 5755 | 9.95  | 13.98 | PASS |
|      | 11AC40MIMO | total | 5755 | 13.38 | 13.98 | PASS |
|      | 11AC40MIMO | Ant1  | 5795 | 7.92  | 13.98 | PASS |
|      | 11AC40MIMO | Ant2  | 5795 | 8.20  | 13.98 | PASS |
|      | 11AC40MIMO | Ant3  | 5795 | 9.69  | 13.98 | PASS |
|      | 11AC40MIMO | total | 5795 | 13.45 | 13.98 | PASS |
|      | 11AC80MIMO | Ant1  | 5775 | 7.32  | 13.98 | PASS |
|      | 11AC80MIMO | Ant2  | 5775 | 7.68  | 13.98 | PASS |
|      | 11AC80MIMO | Ant3  | 5775 | 9.54  | 13.98 | PASS |
|      | 11AC80MIMO | total | 5775 | 13.06 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5745 | 6.74  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5745 | 7.65  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5745 | 9.75  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5745 | 13.01 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5785 | 7.68  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5785 | 8.54  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5785 | 9.87  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5785 | 13.56 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5825 | 7.03  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5825 | 7.71  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5825 | 9.22  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5825 | 12.86 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5755 | 7.90  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5755 | 7.94  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5755 | 10.16 | 13.98 | PASS |
|      | 11AX40MIMO | total | 5755 | 13.57 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5795 | 8.02  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5795 | 8.32  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5795 | 9.95  | 13.98 | PASS |
|      | 11AX40MIMO | total | 5795 | 13.62 | 13.98 | PASS |
|      | 11AX80MIMO | Ant1  | 5775 | 7.64  | 13.98 | PASS |
|      | 11AX80MIMO | Ant2  | 5775 | 8.07  | 13.98 | PASS |
|      | 11AX80MIMO | Ant3  | 5775 | 9.73  | 13.98 | PASS |
|      | 11AX80MIMO | total | 5775 | 13.35 | 13.98 | PASS |
| HTLV | 11A        | Ant1  | 5745 | 11.81 | 13.98 | PASS |
|      | 11A        | Ant2  | 5745 | 11.80 | 13.98 | PASS |
|      | 11A        | Ant3  | 5745 | 13.53 | 13.98 | PASS |
|      | 11A        | Ant1  | 5785 | 11.50 | 13.98 | PASS |
|      | 11A        | Ant2  | 5785 | 11.89 | 13.98 | PASS |
|      | 11A        | Ant3  | 5785 | 13.74 | 13.98 | PASS |
|      | 11A        | Ant1  | 5825 | 11.17 | 13.98 | PASS |
|      | 11A        | Ant2  | 5825 | 11.36 | 13.98 | PASS |

|  |            |       |      |       |       |      |
|--|------------|-------|------|-------|-------|------|
|  | 11A        | Ant3  | 5825 | 12.88 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5745 | 7.26  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5745 | 7.25  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5745 | 9.83  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5745 | 13.06 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5785 | 7.54  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5785 | 7.91  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5785 | 9.81  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5785 | 13.31 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5825 | 7.77  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5825 | 8.15  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5825 | 9.89  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5825 | 13.48 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5755 | 7.64  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5755 | 7.77  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5755 | 10.14 | 13.98 | PASS |
|  | 11N40MIMO  | total | 5755 | 13.45 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5795 | 8.31  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5795 | 8.24  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5795 | 9.70  | 13.98 | PASS |
|  | 11N40MIMO  | total | 5795 | 13.58 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5745 | 7.12  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5745 | 7.42  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5745 | 9.81  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5745 | 13.06 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5785 | 7.58  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5785 | 8.03  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5785 | 10.10 | 13.98 | PASS |
|  | 11AC20MIMO | total | 5785 | 13.48 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5825 | 6.84  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5825 | 7.44  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5825 | 8.87  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5825 | 12.57 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5755 | 7.52  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5755 | 7.85  | 13.98 | PASS |
|  | 11AC40MIMO | Ant3  | 5755 | 10.01 | 13.98 | PASS |
|  | 11AC40MIMO | total | 5755 | 13.38 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5795 | 7.76  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5795 | 8.12  | 13.98 | PASS |
|  | 11AC40MIMO | Ant3  | 5795 | 9.67  | 13.98 | PASS |
|  | 11AC40MIMO | total | 5795 | 13.37 | 13.98 | PASS |
|  | 11AC80MIMO | Ant1  | 5775 | 7.38  | 13.98 | PASS |

|      |            |       |      |       |       |      |
|------|------------|-------|------|-------|-------|------|
|      | 11AC80MIMO | Ant2  | 5775 | 7.57  | 13.98 | PASS |
|      | 11AC80MIMO | Ant3  | 5775 | 9.53  | 13.98 | PASS |
|      | 11AC80MIMO | total | 5775 | 13.04 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5745 | 6.75  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5745 | 7.63  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5745 | 9.74  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5745 | 13.00 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5785 | 7.67  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5785 | 8.65  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5785 | 9.89  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5785 | 13.60 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5825 | 6.95  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5825 | 7.62  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5825 | 9.06  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5825 | 12.74 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5755 | 7.87  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5755 | 7.83  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5755 | 10.12 | 13.98 | PASS |
|      | 11AX40MIMO | total | 5755 | 13.52 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5795 | 8.06  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5795 | 8.33  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5795 | 9.85  | 13.98 | PASS |
|      | 11AX40MIMO | total | 5795 | 13.59 | 13.98 | PASS |
|      | 11AX80MIMO | Ant1  | 5775 | 7.61  | 13.98 | PASS |
|      | 11AX80MIMO | Ant2  | 5775 | 8.01  | 13.98 | PASS |
|      | 11AX80MIMO | Ant3  | 5775 | 9.68  | 13.98 | PASS |
|      | 11AX80MIMO | total | 5775 | 13.30 | 13.98 | PASS |
| HTLV | 11A        | Ant1  | 5745 | 11.70 | 13.98 | PASS |
|      | 11A        | Ant2  | 5745 | 11.78 | 13.98 | PASS |
|      | 11A        | Ant3  | 5745 | 13.41 | 13.98 | PASS |
|      | 11A        | Ant1  | 5785 | 11.57 | 13.98 | PASS |
|      | 11A        | Ant2  | 5785 | 11.79 | 13.98 | PASS |
|      | 11A        | Ant3  | 5785 | 13.72 | 13.98 | PASS |
|      | 11A        | Ant1  | 5825 | 10.97 | 13.98 | PASS |
|      | 11A        | Ant2  | 5825 | 11.39 | 13.98 | PASS |
|      | 11A        | Ant3  | 5825 | 12.75 | 13.98 | PASS |
|      | 11N20MIMO  | Ant1  | 5745 | 7.35  | 13.98 | PASS |
|      | 11N20MIMO  | Ant2  | 5745 | 7.37  | 13.98 | PASS |
|      | 11N20MIMO  | Ant3  | 5745 | 9.79  | 13.98 | PASS |
|      | 11N20MIMO  | total | 5745 | 13.10 | 13.98 | PASS |
|      | 11N20MIMO  | Ant1  | 5785 | 7.45  | 13.98 | PASS |
|      | 11N20MIMO  | Ant2  | 5785 | 7.91  | 13.98 | PASS |

|  |            |       |      |       |       |      |
|--|------------|-------|------|-------|-------|------|
|  | 11N20MIMO  | Ant3  | 5785 | 9.84  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5785 | 13.30 | 13.98 | PASS |
|  | 11N20MIMO  | Ant1  | 5825 | 7.77  | 13.98 | PASS |
|  | 11N20MIMO  | Ant2  | 5825 | 8.15  | 13.98 | PASS |
|  | 11N20MIMO  | Ant3  | 5825 | 9.69  | 13.98 | PASS |
|  | 11N20MIMO  | total | 5825 | 13.39 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5755 | 7.67  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5755 | 7.81  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5755 | 10.13 | 13.98 | PASS |
|  | 11N40MIMO  | total | 5755 | 13.46 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5795 | 8.26  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5795 | 8.33  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5795 | 9.64  | 13.98 | PASS |
|  | 11N40MIMO  | total | 5795 | 13.56 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5745 | 7.28  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5745 | 7.39  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5745 | 9.73  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5745 | 13.06 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5785 | 7.60  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5785 | 8.04  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5785 | 10.05 | 13.98 | PASS |
|  | 11AC20MIMO | total | 5785 | 13.47 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5825 | 6.87  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5825 | 7.41  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5825 | 8.84  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5825 | 12.56 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5755 | 7.44  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5755 | 7.84  | 13.98 | PASS |
|  | 11AC40MIMO | Ant3  | 5755 | 9.97  | 13.98 | PASS |
|  | 11AC40MIMO | total | 5755 | 13.34 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5795 | 7.79  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5795 | 8.09  | 13.98 | PASS |
|  | 11AC40MIMO | Ant3  | 5795 | 9.86  | 13.98 | PASS |
|  | 11AC40MIMO | total | 5795 | 13.45 | 13.98 | PASS |
|  | 11AC80MIMO | Ant1  | 5775 | 7.52  | 13.98 | PASS |
|  | 11AC80MIMO | Ant2  | 5775 | 7.62  | 13.98 | PASS |
|  | 11AC80MIMO | Ant3  | 5775 | 9.36  | 13.98 | PASS |
|  | 11AC80MIMO | total | 5775 | 13.02 | 13.98 | PASS |
|  | 11AX20MIMO | Ant1  | 5745 | 6.90  | 13.98 | PASS |
|  | 11AX20MIMO | Ant2  | 5745 | 7.58  | 13.98 | PASS |
|  | 11AX20MIMO | Ant3  | 5745 | 9.96  | 13.98 | PASS |
|  | 11AX20MIMO | total | 5745 | 13.12 | 13.98 | PASS |

|      |            |       |      |       |       |      |
|------|------------|-------|------|-------|-------|------|
|      | 11AX20MIMO | Ant1  | 5785 | 7.74  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5785 | 8.51  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5785 | 10.04 | 13.98 | PASS |
|      | 11AX20MIMO | total | 5785 | 13.65 | 13.98 | PASS |
|      | 11AX20MIMO | Ant1  | 5825 | 6.93  | 13.98 | PASS |
|      | 11AX20MIMO | Ant2  | 5825 | 7.82  | 13.98 | PASS |
|      | 11AX20MIMO | Ant3  | 5825 | 9.09  | 13.98 | PASS |
|      | 11AX20MIMO | total | 5825 | 12.81 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5755 | 7.90  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5755 | 7.90  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5755 | 10.04 | 13.98 | PASS |
|      | 11AX40MIMO | total | 5755 | 13.51 | 13.98 | PASS |
|      | 11AX40MIMO | Ant1  | 5795 | 7.97  | 13.98 | PASS |
|      | 11AX40MIMO | Ant2  | 5795 | 8.25  | 13.98 | PASS |
|      | 11AX40MIMO | Ant3  | 5795 | 9.84  | 13.98 | PASS |
|      | 11AX40MIMO | total | 5795 | 13.54 | 13.98 | PASS |
|      | 11AX80MIMO | Ant1  | 5775 | 7.52  | 13.98 | PASS |
|      | 11AX80MIMO | Ant2  | 5775 | 7.91  | 13.98 | PASS |
|      | 11AX80MIMO | Ant3  | 5775 | 9.83  | 13.98 | PASS |
|      | 11AX80MIMO | total | 5775 | 13.31 | 13.98 | PASS |
| LTLV | 11A        | Ant1  | 5745 | 11.65 | 13.98 | PASS |
|      | 11A        | Ant2  | 5745 | 11.95 | 13.98 | PASS |
|      | 11A        | Ant3  | 5745 | 13.41 | 13.98 | PASS |
|      | 11A        | Ant1  | 5785 | 11.69 | 13.98 | PASS |
|      | 11A        | Ant2  | 5785 | 11.78 | 13.98 | PASS |
|      | 11A        | Ant3  | 5785 | 13.65 | 13.98 | PASS |
|      | 11A        | Ant1  | 5825 | 11.09 | 13.98 | PASS |
|      | 11A        | Ant2  | 5825 | 11.37 | 13.98 | PASS |
|      | 11A        | Ant3  | 5825 | 12.86 | 13.98 | PASS |
|      | 11N20MIMO  | Ant1  | 5745 | 7.17  | 13.98 | PASS |
|      | 11N20MIMO  | Ant2  | 5745 | 7.39  | 13.98 | PASS |
|      | 11N20MIMO  | Ant3  | 5745 | 9.82  | 13.98 | PASS |
|      | 11N20MIMO  | total | 5745 | 13.07 | 13.98 | PASS |
|      | 11N20MIMO  | Ant1  | 5785 | 7.64  | 13.98 | PASS |
|      | 11N20MIMO  | Ant2  | 5785 | 7.95  | 13.98 | PASS |
|      | 11N20MIMO  | Ant3  | 5785 | 9.66  | 13.98 | PASS |
|      | 11N20MIMO  | total | 5785 | 13.28 | 13.98 | PASS |
|      | 11N20MIMO  | Ant1  | 5825 | 7.70  | 13.98 | PASS |
|      | 11N20MIMO  | Ant2  | 5825 | 8.15  | 13.98 | PASS |
|      | 11N20MIMO  | Ant3  | 5825 | 9.80  | 13.98 | PASS |
|      | 11N20MIMO  | total | 5825 | 13.42 | 13.98 | PASS |
|      | 11N40MIMO  | Ant1  | 5755 | 7.70  | 13.98 | PASS |

|  |            |       |      |       |       |      |
|--|------------|-------|------|-------|-------|------|
|  | 11N40MIMO  | Ant2  | 5755 | 7.64  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5755 | 10.04 | 13.98 | PASS |
|  | 11N40MIMO  | total | 5755 | 13.38 | 13.98 | PASS |
|  | 11N40MIMO  | Ant1  | 5795 | 8.23  | 13.98 | PASS |
|  | 11N40MIMO  | Ant2  | 5795 | 8.39  | 13.98 | PASS |
|  | 11N40MIMO  | Ant3  | 5795 | 9.61  | 13.98 | PASS |
|  | 11N40MIMO  | total | 5795 | 13.56 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5745 | 7.32  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5745 | 7.56  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5745 | 9.70  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5745 | 13.10 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5785 | 7.52  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5785 | 7.99  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5785 | 10.06 | 13.98 | PASS |
|  | 11AC20MIMO | total | 5785 | 13.44 | 13.98 | PASS |
|  | 11AC20MIMO | Ant1  | 5825 | 6.98  | 13.98 | PASS |
|  | 11AC20MIMO | Ant2  | 5825 | 7.41  | 13.98 | PASS |
|  | 11AC20MIMO | Ant3  | 5825 | 8.91  | 13.98 | PASS |
|  | 11AC20MIMO | total | 5825 | 12.62 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5755 | 7.39  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5755 | 7.86  | 13.98 | PASS |
|  | 11AC40MIMO | Ant3  | 5755 | 9.90  | 13.98 | PASS |
|  | 11AC40MIMO | total | 5755 | 13.29 | 13.98 | PASS |
|  | 11AC40MIMO | Ant1  | 5795 | 7.88  | 13.98 | PASS |
|  | 11AC40MIMO | Ant2  | 5795 | 8.14  | 13.98 | PASS |
|  | 11AC40MIMO | Ant3  | 5795 | 9.77  | 13.98 | PASS |
|  | 11AC40MIMO | total | 5795 | 13.45 | 13.98 | PASS |
|  | 11AC80MIMO | Ant1  | 5775 | 7.33  | 13.98 | PASS |
|  | 11AC80MIMO | Ant2  | 5775 | 7.74  | 13.98 | PASS |
|  | 11AC80MIMO | Ant3  | 5775 | 9.49  | 13.98 | PASS |
|  | 11AC80MIMO | total | 5775 | 13.06 | 13.98 | PASS |
|  | 11AX20MIMO | Ant1  | 5745 | 6.74  | 13.98 | PASS |
|  | 11AX20MIMO | Ant2  | 5745 | 7.64  | 13.98 | PASS |
|  | 11AX20MIMO | Ant3  | 5745 | 9.83  | 13.98 | PASS |
|  | 11AX20MIMO | total | 5745 | 13.04 | 13.98 | PASS |
|  | 11AX20MIMO | Ant1  | 5785 | 7.73  | 13.98 | PASS |
|  | 11AX20MIMO | Ant2  | 5785 | 8.56  | 13.98 | PASS |
|  | 11AX20MIMO | Ant3  | 5785 | 9.94  | 13.98 | PASS |
|  | 11AX20MIMO | total | 5785 | 13.61 | 13.98 | PASS |
|  | 11AX20MIMO | Ant1  | 5825 | 7.12  | 13.98 | PASS |
|  | 11AX20MIMO | Ant2  | 5825 | 7.61  | 13.98 | PASS |
|  | 11AX20MIMO | Ant3  | 5825 | 9.17  | 13.98 | PASS |

|  |            |       |      |       |       |      |
|--|------------|-------|------|-------|-------|------|
|  | 11AX20MIMO | total | 5825 | 12.83 | 13.98 | PASS |
|  | 11AX40MIMO | Ant1  | 5755 | 7.71  | 13.98 | PASS |
|  | 11AX40MIMO | Ant2  | 5755 | 7.80  | 13.98 | PASS |
|  | 11AX40MIMO | Ant3  | 5755 | 10.00 | 13.98 | PASS |
|  | 11AX40MIMO | total | 5755 | 13.41 | 13.98 | PASS |
|  | 11AX40MIMO | Ant1  | 5795 | 7.90  | 13.98 | PASS |
|  | 11AX40MIMO | Ant2  | 5795 | 8.26  | 13.98 | PASS |
|  | 11AX40MIMO | Ant3  | 5795 | 9.91  | 13.98 | PASS |
|  | 11AX40MIMO | total | 5795 | 13.55 | 13.98 | PASS |
|  | 11AX80MIMO | Ant1  | 5775 | 7.61  | 13.98 | PASS |
|  | 11AX80MIMO | Ant2  | 5775 | 7.96  | 13.98 | PASS |
|  | 11AX80MIMO | Ant3  | 5775 | 9.78  | 13.98 | PASS |
|  | 11AX80MIMO | total | 5775 | 13.33 | 13.98 | PASS |

## 3.2 Permitted range of operating frequencies

### 3.2.1 Limit

The width of the power spectrum envelope is  $f_H - f_L$  for a given operating frequency. In equipment that allows adjustment or selection of different operating frequencies, the power envelope takes up different positions in the allowed band. The frequency range is determined by the lowest value of  $f_L$  and the highest value of  $f_H$  resulting from the adjustment of the equipment to the lowest and highest operating frequencies.

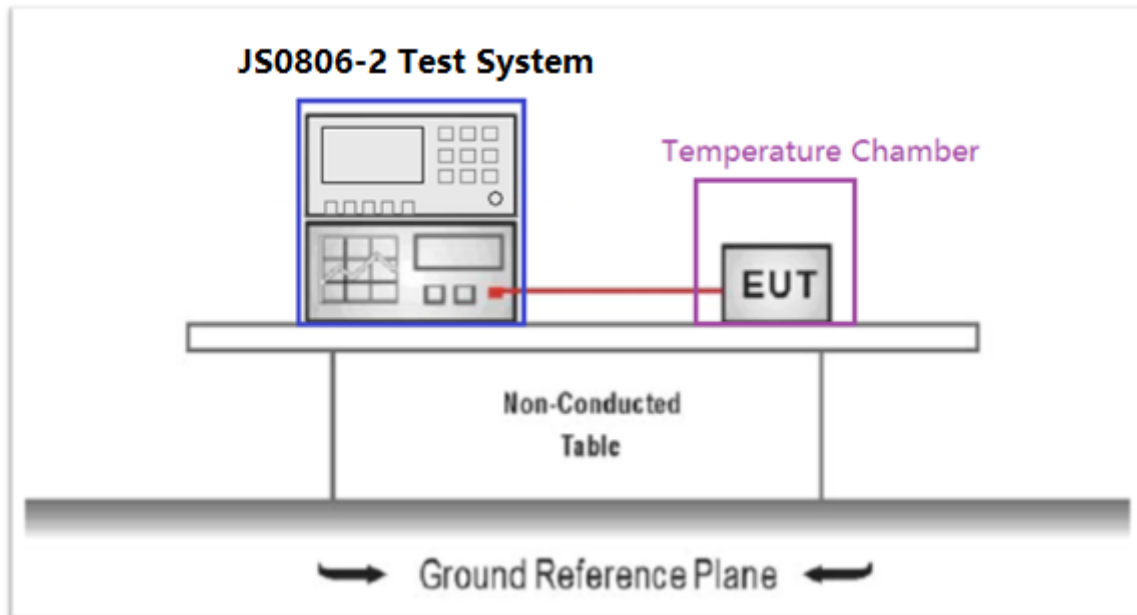
The occupied bandwidth (i.e. the bandwidth in which 99 % of the wanted emission is contained) of the transmitter shall fall within the assigned frequency band.

For all equipment the frequency range shall lie within the frequency band given by clause 4.2.2.4, table 2. For non-harmonized frequency bands the available frequency range may differ between national administrations.

### 3.2.2 Test Procedure

Please refer to ETSI EN 300 440 Sub-clause 4.2.3.3 for the measurement method.

### 3.2.3 Test Setup



### 3.2.4 Test Result

| TestCondition | TestMode   | Antenna | Frequency[MHz] | FL [MHz] | FH[MHz] | Limit[MHz]   | Verdict |
|---------------|------------|---------|----------------|----------|---------|--------------|---------|
| NTNV          | 11A        | Ant1    | 5745           | 5736.21  | 5753.51 | 5725 to 5850 | PASS    |
|               | 11A        | Ant2    | 5745           | 5736.40  | 5753.52 | 5725 to 5850 | PASS    |
|               | 11A        | Ant3    | 5745           | 5735.92  | 5753.96 | 5725 to 5850 | PASS    |
|               | 11A        | Ant1    | 5785           | 5776.40  | 5793.52 | 5725 to 5850 | PASS    |
|               | 11A        | Ant2    | 5785           | 5776.40  | 5793.52 | 5725 to 5850 | PASS    |
|               | 11A        | Ant3    | 5785           | 5776.20  | 5793.72 | 5725 to 5850 | PASS    |
|               | 11A        | Ant1    | 5825           | 5816.41  | 5833.51 | 5725 to 5850 | PASS    |
|               | 11A        | Ant2    | 5825           | 5816.39  | 5833.71 | 5725 to 5850 | PASS    |
|               | 11A        | Ant3    | 5825           | 5816.17  | 5833.73 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant1    | 5745           | 5735.60  | 5754.14 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant2    | 5745           | 5735.58  | 5754.32 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant3    | 5745           | 5735.37  | 5754.56 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant1    | 5785           | 5775.77  | 5794.32 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant2    | 5785           | 5775.60  | 5794.32 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant3    | 5785           | 5775.54  | 5794.36 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant1    | 5825           | 5815.78  | 5834.14 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant2    | 5825           | 5815.54  | 5834.37 | 5725 to 5850 | PASS    |
|               | 11N20MIMO  | Ant3    | 5825           | 5815.53  | 5834.36 | 5725 to 5850 | PASS    |
|               | 11N40MIMO  | Ant1    | 5755           | 5736.61  | 5773.30 | 5725 to 5850 | PASS    |
|               | 11N40MIMO  | Ant2    | 5755           | 5736.50  | 5773.33 | 5725 to 5850 | PASS    |
|               | 11N40MIMO  | Ant3    | 5755           | 5736.46  | 5773.56 | 5725 to 5850 | PASS    |
|               | 11N40MIMO  | Ant1    | 5795           | 5776.65  | 5813.34 | 5725 to 5850 | PASS    |
|               | 11N40MIMO  | Ant2    | 5795           | 5776.46  | 5813.30 | 5725 to 5850 | PASS    |
|               | 11N40MIMO  | Ant3    | 5795           | 5776.46  | 5813.46 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant1    | 5745           | 5735.56  | 5754.36 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant2    | 5745           | 5735.35  | 5754.58 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant3    | 5745           | 5735.09  | 5754.80 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant1    | 5785           | 5775.75  | 5794.15 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant2    | 5785           | 5775.58  | 5794.35 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant3    | 5785           | 5775.54  | 5794.37 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant1    | 5825           | 5815.77  | 5834.32 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant2    | 5825           | 5815.54  | 5834.36 | 5725 to 5850 | PASS    |
|               | 11AC20MIMO | Ant3    | 5825           | 5815.53  | 5834.40 | 5725 to 5850 | PASS    |
|               | 11AC40MIMO | Ant1    | 5755           | 5736.62  | 5773.46 | 5725 to 5850 | PASS    |
|               | 11AC40MIMO | Ant2    | 5755           | 5736.46  | 5773.47 | 5725 to 5850 | PASS    |
|               | 11AC40MIMO | Ant3    | 5755           | 5736.38  | 5773.50 | 5725 to 5850 | PASS    |
|               | 11AC40MIMO | Ant1    | 5795           | 5776.61  | 5813.30 | 5725 to 5850 | PASS    |
|               | 11AC40MIMO | Ant2    | 5795           | 5776.45  | 5813.31 | 5725 to 5850 | PASS    |
|               | 11AC40MIMO | Ant3    | 5795           | 5776.45  | 5813.49 | 5725 to 5850 | PASS    |
|               | 11AC80MIMO | Ant1    | 5775           | 5736.63  | 5813.26 | 5725 to 5850 | PASS    |

|      |            |      |      |         |         |              |      |
|------|------------|------|------|---------|---------|--------------|------|
|      | 11AC80MIMO | Ant2 | 5775 | 5736.63 | 5813.27 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant3 | 5775 | 5736.62 | 5813.29 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5745 | 5735.19 | 5754.73 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5745 | 5735.22 | 5754.65 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5745 | 5735.14 | 5754.77 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5785 | 5775.22 | 5794.66 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5785 | 5775.16 | 5794.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5785 | 5775.16 | 5794.76 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5825 | 5815.24 | 5834.69 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5825 | 5815.19 | 5834.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5825 | 5815.15 | 5834.76 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5755 | 5735.79 | 5774.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5755 | 5735.78 | 5774.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5755 | 5735.70 | 5774.16 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5795 | 5775.79 | 5814.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5795 | 5775.78 | 5814.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5795 | 5775.78 | 5814.15 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant1 | 5775 | 5735.82 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant2 | 5775 | 5735.80 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant3 | 5775 | 5735.80 | 5814.12 | 5725 to 5850 | PASS |
| LTLV | 11A        | Ant1 | 5745 | 5736.21 | 5753.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5745 | 5736.40 | 5753.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5745 | 5735.92 | 5753.96 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5785 | 5776.20 | 5793.72 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5825 | 5816.41 | 5833.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5825 | 5816.39 | 5833.71 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5825 | 5816.17 | 5833.73 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5745 | 5735.60 | 5754.14 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant2 | 5745 | 5735.58 | 5754.32 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant3 | 5745 | 5735.37 | 5754.56 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5785 | 5775.77 | 5794.32 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant2 | 5785 | 5775.60 | 5794.32 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant3 | 5785 | 5775.54 | 5794.36 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5825 | 5815.78 | 5834.14 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant2 | 5825 | 5815.54 | 5834.37 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant3 | 5825 | 5815.53 | 5834.36 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant1 | 5755 | 5736.61 | 5773.30 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant2 | 5755 | 5736.50 | 5773.33 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant3 | 5755 | 5736.46 | 5773.56 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant1 | 5795 | 5776.65 | 5813.34 | 5725 to 5850 | PASS |

|      |            |      |      |         |         |              |      |
|------|------------|------|------|---------|---------|--------------|------|
|      | 11N40MIMO  | Ant2 | 5795 | 5776.46 | 5813.30 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant3 | 5795 | 5776.46 | 5813.46 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant1 | 5745 | 5735.56 | 5754.36 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant2 | 5745 | 5735.35 | 5754.58 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant3 | 5745 | 5735.09 | 5754.80 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant1 | 5785 | 5775.75 | 5794.15 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant2 | 5785 | 5775.58 | 5794.35 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant3 | 5785 | 5775.54 | 5794.37 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant1 | 5825 | 5815.77 | 5834.32 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant2 | 5825 | 5815.54 | 5834.36 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant3 | 5825 | 5815.53 | 5834.40 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant1 | 5755 | 5736.62 | 5773.46 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant2 | 5755 | 5736.46 | 5773.47 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant3 | 5755 | 5736.38 | 5773.50 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant1 | 5795 | 5776.61 | 5813.30 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant2 | 5795 | 5776.45 | 5813.31 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant3 | 5795 | 5776.45 | 5813.49 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant1 | 5775 | 5736.63 | 5813.26 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant2 | 5775 | 5736.63 | 5813.27 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant3 | 5775 | 5736.62 | 5813.29 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5745 | 5735.19 | 5754.73 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5745 | 5735.22 | 5754.65 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5745 | 5735.14 | 5754.77 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5785 | 5775.22 | 5794.66 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5785 | 5775.16 | 5794.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5785 | 5775.16 | 5794.76 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5825 | 5815.24 | 5834.69 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5825 | 5815.19 | 5834.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5825 | 5815.15 | 5834.76 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5755 | 5735.79 | 5774.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5755 | 5735.78 | 5774.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5755 | 5735.70 | 5774.16 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5795 | 5775.79 | 5814.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5795 | 5775.78 | 5814.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5795 | 5775.78 | 5814.15 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant1 | 5775 | 5735.82 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant2 | 5775 | 5735.80 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant3 | 5775 | 5735.80 | 5814.12 | 5725 to 5850 | PASS |
| LTHV | 11A        | Ant1 | 5745 | 5736.21 | 5753.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5745 | 5736.40 | 5753.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5745 | 5735.92 | 5753.96 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |

|  |            |      |      |         |         |              |      |
|--|------------|------|------|---------|---------|--------------|------|
|  | 11A        | Ant2 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|  | 11A        | Ant3 | 5785 | 5776.20 | 5793.72 | 5725 to 5850 | PASS |
|  | 11A        | Ant1 | 5825 | 5816.41 | 5833.51 | 5725 to 5850 | PASS |
|  | 11A        | Ant2 | 5825 | 5816.39 | 5833.71 | 5725 to 5850 | PASS |
|  | 11A        | Ant3 | 5825 | 5816.17 | 5833.73 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant1 | 5745 | 5735.60 | 5754.14 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant2 | 5745 | 5735.58 | 5754.32 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant3 | 5745 | 5735.37 | 5754.56 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant1 | 5785 | 5775.77 | 5794.32 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant2 | 5785 | 5775.60 | 5794.32 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant3 | 5785 | 5775.54 | 5794.36 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant1 | 5825 | 5815.78 | 5834.14 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant2 | 5825 | 5815.54 | 5834.37 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant3 | 5825 | 5815.53 | 5834.36 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant1 | 5755 | 5736.61 | 5773.30 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant2 | 5755 | 5736.50 | 5773.33 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant3 | 5755 | 5736.46 | 5773.56 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant1 | 5795 | 5776.65 | 5813.34 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant2 | 5795 | 5776.46 | 5813.30 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant3 | 5795 | 5776.46 | 5813.46 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant1 | 5745 | 5735.56 | 5754.36 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant2 | 5745 | 5735.35 | 5754.58 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant3 | 5745 | 5735.09 | 5754.80 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant1 | 5785 | 5775.75 | 5794.15 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant2 | 5785 | 5775.58 | 5794.35 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant3 | 5785 | 5775.54 | 5794.37 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant1 | 5825 | 5815.77 | 5834.32 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant2 | 5825 | 5815.54 | 5834.36 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant3 | 5825 | 5815.53 | 5834.40 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant1 | 5755 | 5736.62 | 5773.46 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant2 | 5755 | 5736.46 | 5773.47 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant3 | 5755 | 5736.38 | 5773.50 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant1 | 5795 | 5776.61 | 5813.30 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant2 | 5795 | 5776.45 | 5813.31 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant3 | 5795 | 5776.45 | 5813.49 | 5725 to 5850 | PASS |
|  | 11AC80MIMO | Ant1 | 5775 | 5736.63 | 5813.26 | 5725 to 5850 | PASS |
|  | 11AC80MIMO | Ant2 | 5775 | 5736.63 | 5813.27 | 5725 to 5850 | PASS |
|  | 11AC80MIMO | Ant3 | 5775 | 5736.62 | 5813.29 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant1 | 5745 | 5735.19 | 5754.73 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant2 | 5745 | 5735.22 | 5754.65 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant3 | 5745 | 5735.14 | 5754.77 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant1 | 5785 | 5775.22 | 5794.66 | 5725 to 5850 | PASS |

|      |            |      |      |         |         |              |      |
|------|------------|------|------|---------|---------|--------------|------|
|      | 11AX20MIMO | Ant2 | 5785 | 5775.16 | 5794.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5785 | 5775.16 | 5794.76 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5825 | 5815.24 | 5834.69 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5825 | 5815.19 | 5834.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5825 | 5815.15 | 5834.76 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5755 | 5735.79 | 5774.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5755 | 5735.78 | 5774.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5755 | 5735.70 | 5774.16 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5795 | 5775.79 | 5814.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5795 | 5775.78 | 5814.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5795 | 5775.78 | 5814.15 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant1 | 5775 | 5735.82 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant2 | 5775 | 5735.80 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant3 | 5775 | 5735.80 | 5814.12 | 5725 to 5850 | PASS |
| HTLV | 11A        | Ant1 | 5745 | 5736.21 | 5753.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5745 | 5736.40 | 5753.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5745 | 5735.92 | 5753.96 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5785 | 5776.20 | 5793.72 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5825 | 5816.41 | 5833.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5825 | 5816.39 | 5833.71 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5825 | 5816.17 | 5833.73 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5745 | 5735.60 | 5754.14 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant2 | 5745 | 5735.58 | 5754.32 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant3 | 5745 | 5735.37 | 5754.56 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5785 | 5775.77 | 5794.32 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant2 | 5785 | 5775.60 | 5794.32 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant3 | 5785 | 5775.54 | 5794.36 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5825 | 5815.78 | 5834.14 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant2 | 5825 | 5815.54 | 5834.37 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant3 | 5825 | 5815.53 | 5834.36 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant1 | 5755 | 5736.61 | 5773.30 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant2 | 5755 | 5736.50 | 5773.33 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant3 | 5755 | 5736.46 | 5773.56 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant1 | 5795 | 5776.65 | 5813.34 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant2 | 5795 | 5776.46 | 5813.30 | 5725 to 5850 | PASS |
|      | 11N40MIMO  | Ant3 | 5795 | 5776.46 | 5813.46 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant1 | 5745 | 5735.56 | 5754.36 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant2 | 5745 | 5735.35 | 5754.58 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant3 | 5745 | 5735.09 | 5754.80 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant1 | 5785 | 5775.75 | 5794.15 | 5725 to 5850 | PASS |

|      |            |      |      |         |         |              |      |
|------|------------|------|------|---------|---------|--------------|------|
|      | 11AC20MIMO | Ant2 | 5785 | 5775.58 | 5794.35 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant3 | 5785 | 5775.54 | 5794.37 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant1 | 5825 | 5815.77 | 5834.32 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant2 | 5825 | 5815.54 | 5834.36 | 5725 to 5850 | PASS |
|      | 11AC20MIMO | Ant3 | 5825 | 5815.53 | 5834.40 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant1 | 5755 | 5736.62 | 5773.46 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant2 | 5755 | 5736.46 | 5773.47 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant3 | 5755 | 5736.38 | 5773.50 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant1 | 5795 | 5776.61 | 5813.30 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant2 | 5795 | 5776.45 | 5813.31 | 5725 to 5850 | PASS |
|      | 11AC40MIMO | Ant3 | 5795 | 5776.45 | 5813.49 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant1 | 5775 | 5736.63 | 5813.26 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant2 | 5775 | 5736.63 | 5813.27 | 5725 to 5850 | PASS |
|      | 11AC80MIMO | Ant3 | 5775 | 5736.62 | 5813.29 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5745 | 5735.19 | 5754.73 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5745 | 5735.22 | 5754.65 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5745 | 5735.14 | 5754.77 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5785 | 5775.22 | 5794.66 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5785 | 5775.16 | 5794.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5785 | 5775.16 | 5794.76 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant1 | 5825 | 5815.24 | 5834.69 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant2 | 5825 | 5815.19 | 5834.70 | 5725 to 5850 | PASS |
|      | 11AX20MIMO | Ant3 | 5825 | 5815.15 | 5834.76 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5755 | 5735.79 | 5774.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5755 | 5735.78 | 5774.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5755 | 5735.70 | 5774.16 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant1 | 5795 | 5775.79 | 5814.13 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant2 | 5795 | 5775.78 | 5814.14 | 5725 to 5850 | PASS |
|      | 11AX40MIMO | Ant3 | 5795 | 5775.78 | 5814.15 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant1 | 5775 | 5735.82 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant2 | 5775 | 5735.80 | 5814.09 | 5725 to 5850 | PASS |
|      | 11AX80MIMO | Ant3 | 5775 | 5735.80 | 5814.12 | 5725 to 5850 | PASS |
| HTHV | 11A        | Ant1 | 5745 | 5736.21 | 5753.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5745 | 5736.40 | 5753.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5745 | 5735.92 | 5753.96 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5785 | 5776.40 | 5793.52 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5785 | 5776.20 | 5793.72 | 5725 to 5850 | PASS |
|      | 11A        | Ant1 | 5825 | 5816.41 | 5833.51 | 5725 to 5850 | PASS |
|      | 11A        | Ant2 | 5825 | 5816.39 | 5833.71 | 5725 to 5850 | PASS |
|      | 11A        | Ant3 | 5825 | 5816.17 | 5833.73 | 5725 to 5850 | PASS |
|      | 11N20MIMO  | Ant1 | 5745 | 5735.60 | 5754.14 | 5725 to 5850 | PASS |

|  |            |      |      |         |         |              |      |
|--|------------|------|------|---------|---------|--------------|------|
|  | 11N20MIMO  | Ant2 | 5745 | 5735.58 | 5754.32 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant3 | 5745 | 5735.37 | 5754.56 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant1 | 5785 | 5775.77 | 5794.32 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant2 | 5785 | 5775.60 | 5794.32 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant3 | 5785 | 5775.54 | 5794.36 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant1 | 5825 | 5815.78 | 5834.14 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant2 | 5825 | 5815.54 | 5834.37 | 5725 to 5850 | PASS |
|  | 11N20MIMO  | Ant3 | 5825 | 5815.53 | 5834.36 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant1 | 5755 | 5736.61 | 5773.30 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant2 | 5755 | 5736.50 | 5773.33 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant3 | 5755 | 5736.46 | 5773.56 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant1 | 5795 | 5776.65 | 5813.34 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant2 | 5795 | 5776.46 | 5813.30 | 5725 to 5850 | PASS |
|  | 11N40MIMO  | Ant3 | 5795 | 5776.46 | 5813.46 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant1 | 5745 | 5735.56 | 5754.36 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant2 | 5745 | 5735.35 | 5754.58 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant3 | 5745 | 5735.09 | 5754.80 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant1 | 5785 | 5775.75 | 5794.15 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant2 | 5785 | 5775.58 | 5794.35 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant3 | 5785 | 5775.54 | 5794.37 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant1 | 5825 | 5815.77 | 5834.32 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant2 | 5825 | 5815.54 | 5834.36 | 5725 to 5850 | PASS |
|  | 11AC20MIMO | Ant3 | 5825 | 5815.53 | 5834.40 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant1 | 5755 | 5736.62 | 5773.46 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant2 | 5755 | 5736.46 | 5773.47 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant3 | 5755 | 5736.38 | 5773.50 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant1 | 5795 | 5776.61 | 5813.30 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant2 | 5795 | 5776.45 | 5813.31 | 5725 to 5850 | PASS |
|  | 11AC40MIMO | Ant3 | 5795 | 5776.45 | 5813.49 | 5725 to 5850 | PASS |
|  | 11AC80MIMO | Ant1 | 5775 | 5736.63 | 5813.26 | 5725 to 5850 | PASS |
|  | 11AC80MIMO | Ant2 | 5775 | 5736.63 | 5813.27 | 5725 to 5850 | PASS |
|  | 11AC80MIMO | Ant3 | 5775 | 5736.62 | 5813.29 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant1 | 5745 | 5735.19 | 5754.73 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant2 | 5745 | 5735.22 | 5754.65 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant3 | 5745 | 5735.14 | 5754.77 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant1 | 5785 | 5775.22 | 5794.66 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant2 | 5785 | 5775.16 | 5794.70 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant3 | 5785 | 5775.16 | 5794.76 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant1 | 5825 | 5815.24 | 5834.69 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant2 | 5825 | 5815.19 | 5834.70 | 5725 to 5850 | PASS |
|  | 11AX20MIMO | Ant3 | 5825 | 5815.15 | 5834.76 | 5725 to 5850 | PASS |
|  | 11AX40MIMO | Ant1 | 5755 | 5735.79 | 5774.14 | 5725 to 5850 | PASS |

|  |            |      |      |         |         |              |      |
|--|------------|------|------|---------|---------|--------------|------|
|  | 11AX40MIMO | Ant2 | 5755 | 5735.78 | 5774.13 | 5725 to 5850 | PASS |
|  | 11AX40MIMO | Ant3 | 5755 | 5735.70 | 5774.16 | 5725 to 5850 | PASS |
|  | 11AX40MIMO | Ant1 | 5795 | 5775.79 | 5814.13 | 5725 to 5850 | PASS |
|  | 11AX40MIMO | Ant2 | 5795 | 5775.78 | 5814.14 | 5725 to 5850 | PASS |
|  | 11AX40MIMO | Ant3 | 5795 | 5775.78 | 5814.15 | 5725 to 5850 | PASS |
|  | 11AX80MIMO | Ant1 | 5775 | 5735.82 | 5814.09 | 5725 to 5850 | PASS |
|  | 11AX80MIMO | Ant2 | 5775 | 5735.80 | 5814.09 | 5725 to 5850 | PASS |
|  | 11AX80MIMO | Ant3 | 5775 | 5735.80 | 5814.12 | 5725 to 5850 | PASS |

### 3.3 Unwanted emissions in the spurious domain & Spurious radiations

#### 3.3.1 Limit

The maximum power limits of any unwanted emissions in the spurious domain are given in table 3.

**Table 3: Spurious emissions**

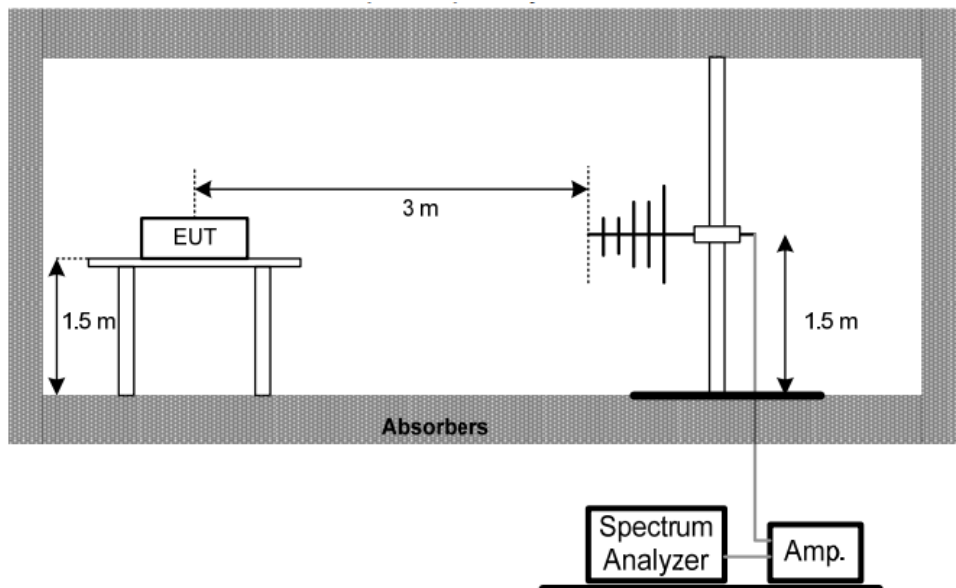
| Frequency ranges | 47 MHz to 74 MHz<br>87,5 MHz to 108 MHz<br>174 MHz to 230 MHz<br>470 MHz to 862 MHz | Other frequencies<br>$\leq 1\,000$ MHz | Frequencies<br>$> 1\,000$ MHz |
|------------------|-------------------------------------------------------------------------------------|----------------------------------------|-------------------------------|
| State            |                                                                                     |                                        |                               |
| Operating        | 4 nW                                                                                | 250 nW                                 | 1 $\mu$ W                     |
| Standby          | 2 nW                                                                                | 2 nW                                   | 20 nW                         |

#### 3.3.2 Test Procedure

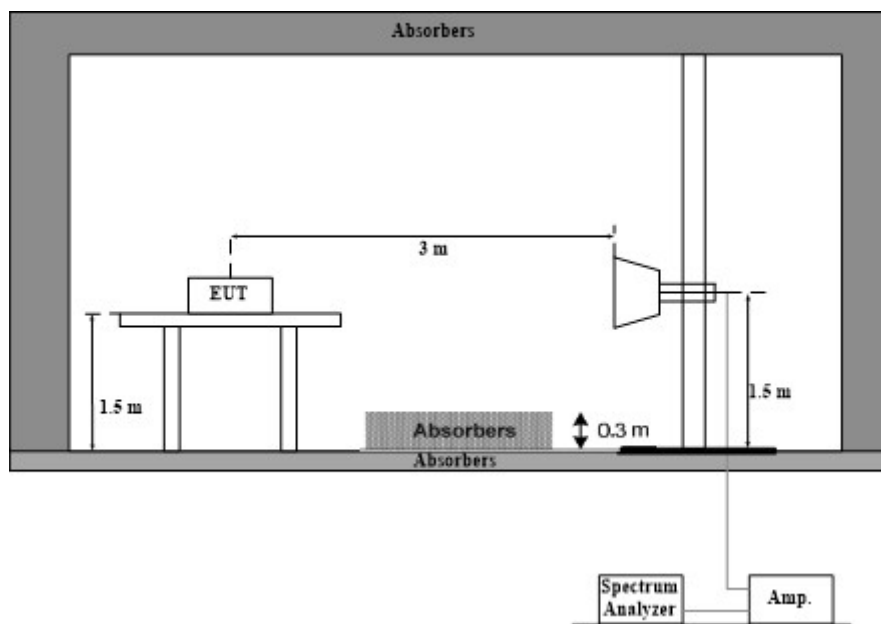
Please refer to ETSI EN 300 440 Sub-clause 4.2.4.3 and 4.3.5.3.3 for the measurement method.

#### 3.3.3 Test Setup

Radiated measurement test set-up frequency below 1 GHz:



Radiated measurement test set-up frequency above 1 GHz:



### 3.3.4 Test Result

NOTE: The test results and plot for testing range of “30 MHz to 40 GHz” showed as below is part of the worst case for all Test Modes and Channels, above 18GHz is too lower that the limit, so not show in this report.

Worst case for 802.11A was recorded

For radiated measurement

| Test Mode | Antenna | Test Channel(MHz) | Result [dBm]   | Limit[dBm]     | Verdict |
|-----------|---------|-------------------|----------------|----------------|---------|
| 11A       | Ant1    | 5745              | See test graph | See test graph | PASS    |
|           | Ant2    | 5745              | See test graph | See test graph | PASS    |
|           | Ant3    | 5745              | See test graph | See test graph | PASS    |
|           | Ant1    | 5825              | See test graph | See test graph | PASS    |
|           | Ant2    | 5825              | See test graph | See test graph | PASS    |
|           | Ant3    | 5825              | See test graph | See test graph | PASS    |

For conducted measurement

| TestMode | Antenna | Frequency[MHz] | Freq. [MHz] | Level[dBm] | Limit[dBm] | Verdict |
|----------|---------|----------------|-------------|------------|------------|---------|
| TX-11A   | Ant1    | 5745           | 29.62       | -70.84     | -36        | PASS    |
|          | Ant1    | 5745           | 49.27       | -71.22     | -54        | PASS    |
|          | Ant1    | 5745           | 85.06       | -71.06     | -36        | PASS    |
|          | Ant1    | 5745           | 106.67      | -71.03     | -54        | PASS    |
|          | Ant1    | 5745           | 154.53      | -70.35     | -36        | PASS    |

|  |      |      |          |        |     |      |
|--|------|------|----------|--------|-----|------|
|  | Ant1 | 5745 | 214.99   | -70.45 | -54 | PASS |
|  | Ant1 | 5745 | 330.8    | -69.77 | -36 | PASS |
|  | Ant1 | 5745 | 568      | -69.67 | -54 | PASS |
|  | Ant1 | 5745 | 877.32   | -70.07 | -36 | PASS |
|  | Ant1 | 5745 | 3717.46  | -41.04 | -30 | PASS |
|  | Ant1 | 5745 | 36285.21 | -42.06 | -30 | PASS |
|  | Ant2 | 5745 | 40.66    | -70.59 | -36 | PASS |
|  | Ant2 | 5745 | 57.4     | -69.47 | -54 | PASS |
|  | Ant2 | 5745 | 86.39    | -70.65 | -36 | PASS |
|  | Ant2 | 5745 | 99.51    | -70.3  | -54 | PASS |
|  | Ant2 | 5745 | 121.6    | -70.1  | -36 | PASS |
|  | Ant2 | 5745 | 221.94   | -70.49 | -54 | PASS |
|  | Ant2 | 5745 | 432.32   | -70.16 | -36 | PASS |
|  | Ant2 | 5745 | 858.47   | -69.37 | -54 | PASS |
|  | Ant2 | 5745 | 884.22   | -68.56 | -36 | PASS |
|  | Ant2 | 5745 | 3607.45  | -39.11 | -30 | PASS |
|  | Ant2 | 5745 | 38595.29 | -42.03 | -30 | PASS |
|  | Ant3 | 5745 | 41.81    | -70.53 | -36 | PASS |
|  | Ant3 | 5745 | 69.92    | -70.13 | -54 | PASS |
|  | Ant3 | 5745 | 80.53    | -70.32 | -36 | PASS |
|  | Ant3 | 5745 | 94.06    | -70.1  | -54 | PASS |
|  | Ant3 | 5745 | 111.23   | -69.39 | -36 | PASS |
|  | Ant3 | 5745 | 212.02   | -69.84 | -54 | PASS |
|  | Ant3 | 5745 | 446.48   | -69.32 | -36 | PASS |
|  | Ant3 | 5745 | 769.1    | -68.99 | -54 | PASS |
|  | Ant3 | 5745 | 863.52   | -68.97 | -36 | PASS |
|  | Ant3 | 5745 | 4707.49  | -40.12 | -30 | PASS |
|  | Ant3 | 5745 | 39492.25 | -42.11 | -30 | PASS |
|  | Ant1 | 5825 | 38.27    | -71.58 | -36 | PASS |
|  | Ant1 | 5825 | 57.4     | -71.01 | -54 | PASS |
|  | Ant1 | 5825 | 78.13    | -71.71 | -36 | PASS |
|  | Ant1 | 5825 | 95.45    | -71.52 | -54 | PASS |
|  | Ant1 | 5825 | 154.53   | -71.01 | -36 | PASS |
|  | Ant1 | 5825 | 199.09   | -70.27 | -54 | PASS |
|  | Ant1 | 5825 | 447.2    | -71.13 | -36 | PASS |
|  | Ant1 | 5825 | 835.74   | -70.37 | -54 | PASS |
|  | Ant1 | 5825 | 970.19   | -69.06 | -36 | PASS |
|  | Ant1 | 5825 | 4028.03  | -41.13 | -30 | PASS |
|  | Ant1 | 5825 | 39109.57 | -43.21 | -30 | PASS |
|  | Ant2 | 5825 | 25.99    | -70.98 | -36 | PASS |
|  | Ant2 | 5825 | 47.62    | -70.92 | -54 | PASS |
|  | Ant2 | 5825 | 85.57    | -71.54 | -36 | PASS |

|  |      |      |          |        |     |      |
|--|------|------|----------|--------|-----|------|
|  | Ant2 | 5825 | 98.02    | -70.98 | -54 | PASS |
|  | Ant2 | 5825 | 116.18   | -70.53 | -36 | PASS |
|  | Ant2 | 5825 | 223.73   | -70.7  | -54 | PASS |
|  | Ant2 | 5825 | 428.24   | -70.53 | -36 | PASS |
|  | Ant2 | 5825 | 741.66   | -70.24 | -54 | PASS |
|  | Ant2 | 5825 | 918.44   | -69.94 | -36 | PASS |
|  | Ant2 | 5825 | 4022.9   | -41.59 | -30 | PASS |
|  | Ant2 | 5825 | 38593.42 | -41.91 | -30 | PASS |
|  | Ant3 | 5825 | 32.19    | -70.91 | -36 | PASS |
|  | Ant3 | 5825 | 47.41    | -71.09 | -54 | PASS |
|  | Ant3 | 5825 | 76.12    | -70.77 | -36 | PASS |
|  | Ant3 | 5825 | 102.03   | -71.19 | -54 | PASS |
|  | Ant3 | 5825 | 113.41   | -71.28 | -36 | PASS |
|  | Ant3 | 5825 | 176.18   | -71.19 | -54 | PASS |
|  | Ant3 | 5825 | 384.56   | -71.41 | -36 | PASS |
|  | Ant3 | 5825 | 855.34   | -69.85 | -54 | PASS |
|  | Ant3 | 5825 | 947.28   | -69.39 | -36 | PASS |
|  | Ant3 | 5825 | 3602.69  | -41    | -30 | PASS |
|  | Ant3 | 5825 | 38573.82 | -41.95 | -30 | PASS |

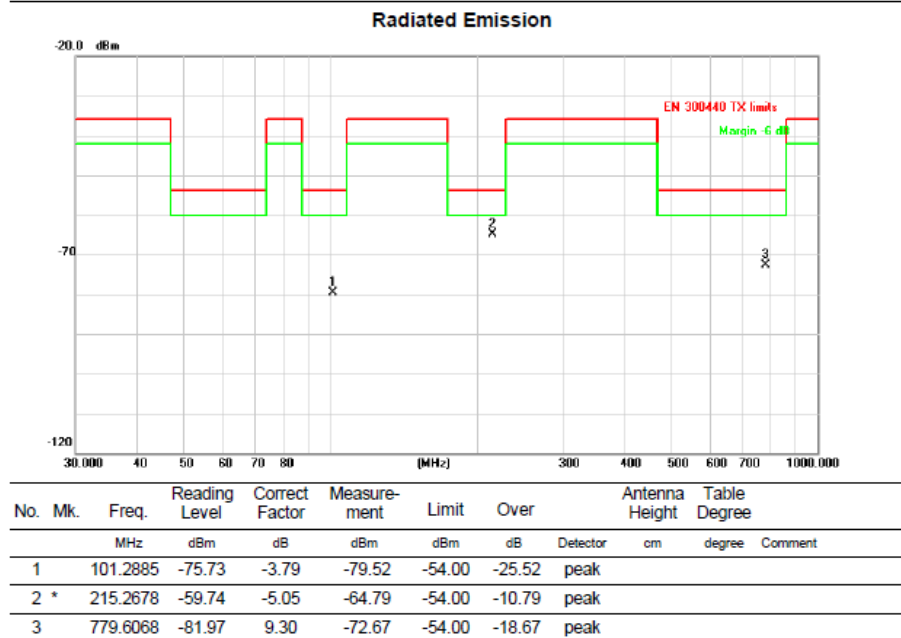
| TestMode | Antenna | Frequency[MHz] | Freq. [MHz] | Level[dBm] | Limit[dBm] | Verdict |
|----------|---------|----------------|-------------|------------|------------|---------|
| RX-11A   | Ant1    | 5745           | 684.17      | -79.87     | -57.00     | PASS    |
|          | Ant1    | 5745           | 36644.59    | -52.94     | -47.00     | PASS    |
|          | Ant2    | 5745           | 764.22      | -79.9      | -57.00     | PASS    |
|          | Ant2    | 5745           | 38572.55    | -51.82     | -47.00     | PASS    |
|          | Ant3    | 5745           | 819.9       | -79.07     | -57.00     | PASS    |
|          | Ant3    | 5745           | 36922.8     | -51.97     | -47.00     | PASS    |
|          | Ant1    | 5785           | 749.79      | -78.79     | -57.00     | PASS    |
|          | Ant1    | 5785           | 38607.65    | -52.38     | -47.00     | PASS    |
|          | Ant2    | 5785           | 998.83      | -79.53     | -57.00     | PASS    |
|          | Ant2    | 5785           | 39149.77    | -51.95     | -47.00     | PASS    |
|          | Ant3    | 5785           | 885.72      | -78.06     | -57.00     | PASS    |
|          | Ant3    | 5785           | 38605.05    | -52.97     | -47.00     | PASS    |
|          | Ant1    | 5825           | 911.95      | -80.3      | -57.00     | PASS    |
|          | Ant1    | 5825           | 38157.84    | -52.61     | -47.00     | PASS    |
|          | Ant2    | 5825           | 715.86      | -80.06     | -57.00     | PASS    |
|          | Ant2    | 5825           | 35557.75    | -52.76     | -47.00     | PASS    |
|          | Ant3    | 5825           | 978.26      | -79.85     | -57.00     | PASS    |
|          | Ant3    | 5825           | 39135.47    | -52.58     | -47.00     | PASS    |

For radiated measurement

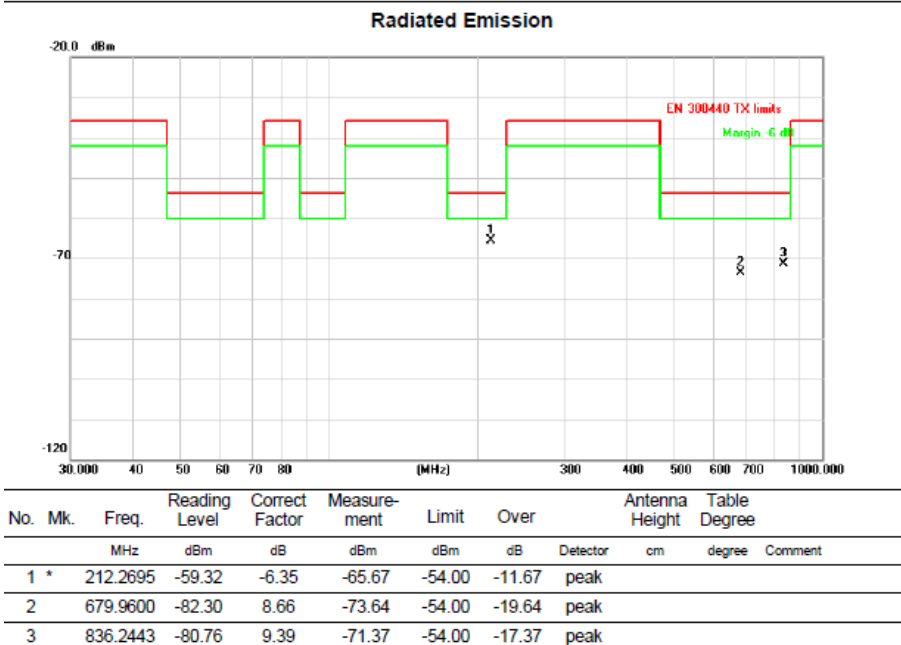
TX\_Below\_1G

### 11A\_Ant1\_5745(30MHz-1GHz)

Vertical

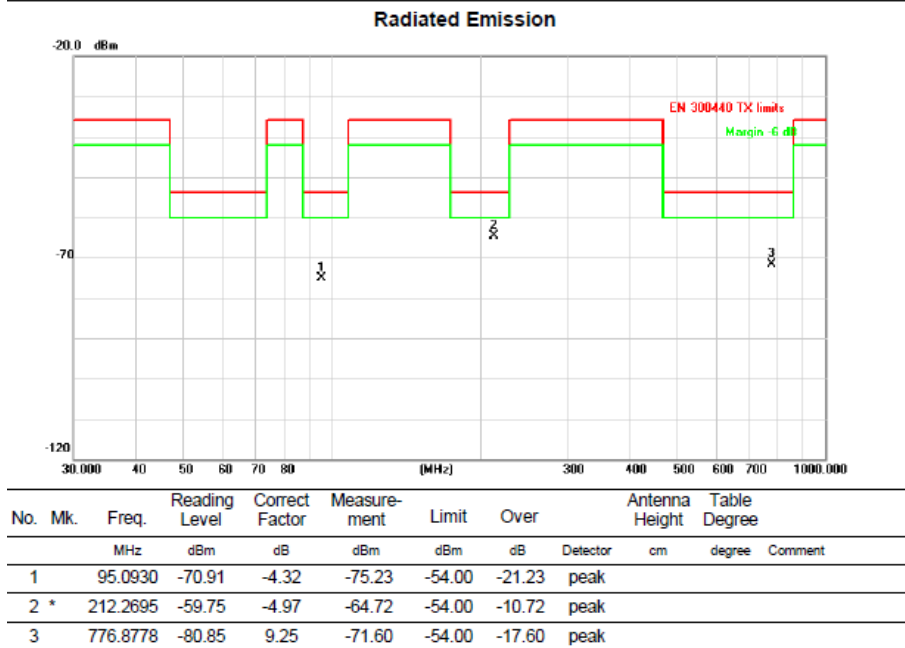


Horizontal

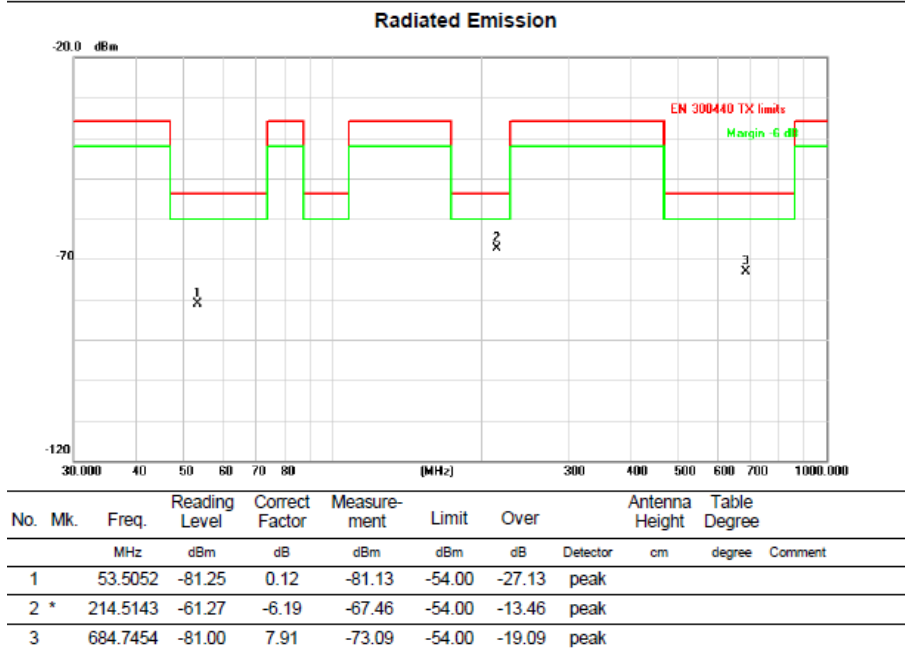


## 11A\_Ant1\_5825(30MHz-1GHz)

### Vertical



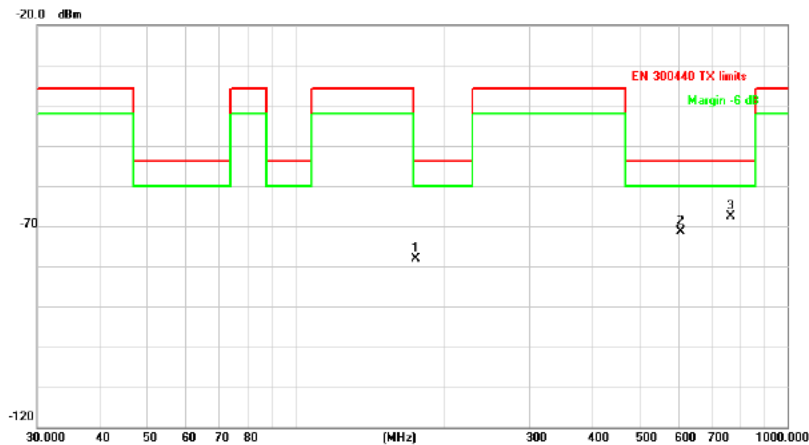
### Horizontal



# 11A\_Ant2\_5745(30MHz-1GHz)

## Vertical

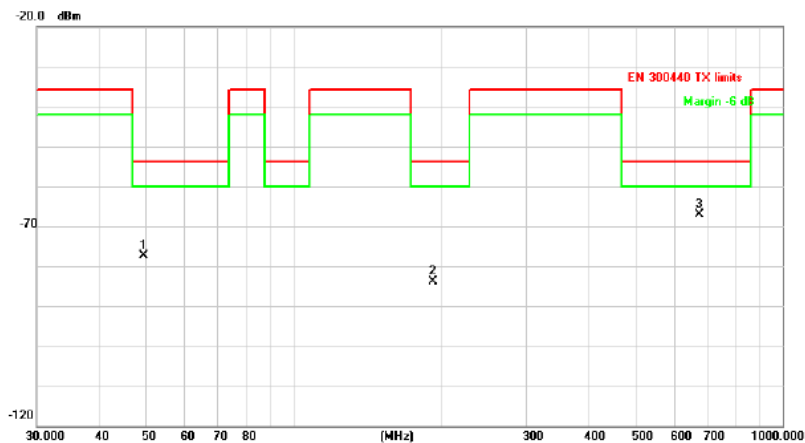
### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 175.6515 | -78.10        | -0.08          | -78.18      | -54.00 | -24.18 | peak           |              |         |
| 2   |     | 607.7867 | -75.48        | 4.07           | -71.41      | -54.00 | -17.41 | peak           |              |         |
| 3 * |     | 768.7482 | -76.70        | 9.11           | -67.59      | -54.00 | -13.59 | peak           |              |         |

## Horizontal

### Radiated Emission

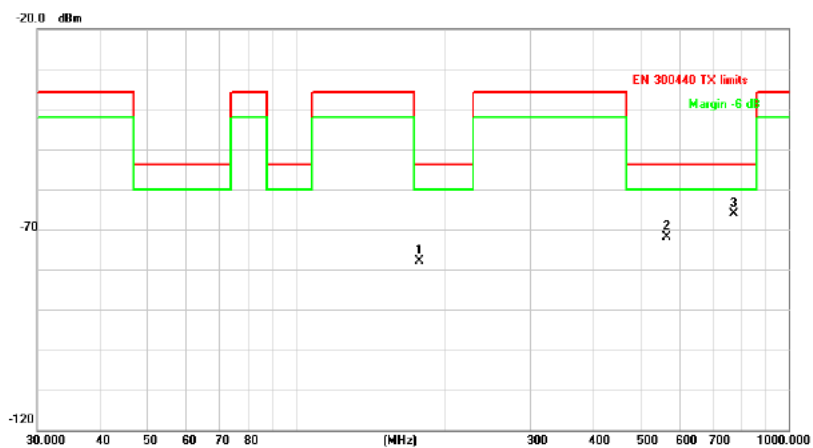


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 49.5327  | -77.73        | 0.33           | -77.40      | -54.00 | -23.40 | peak           |              |         |
| 2   |     | 192.4186 | -77.24        | -6.67          | -83.91      | -54.00 | -29.91 | peak           |              |         |
| 3 * |     | 677.5798 | -75.69        | 8.58           | -67.11      | -54.00 | -13.11 | peak           |              |         |

## 11A\_Ant2\_5825(30MHz-1GHz)

### Vertical

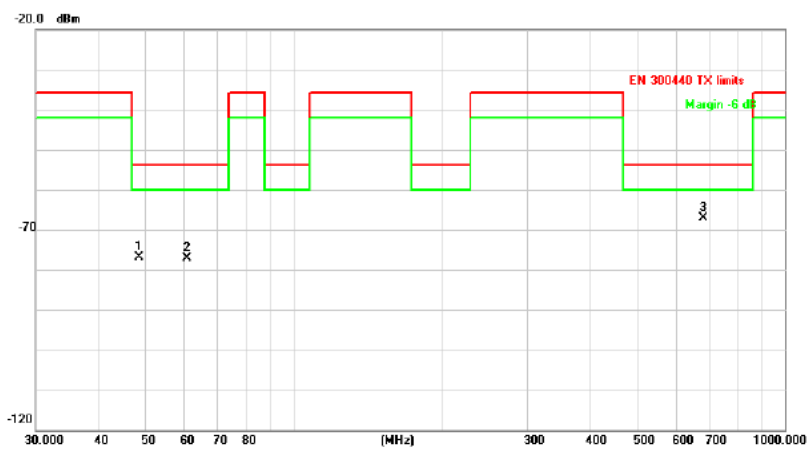
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 178.7584 | -77.52        | -0.29          | -77.81      | -54.00 | -23.81 | peak           |              |         |
| 2   |     | 564.6390 | -76.33        | 4.53           | -71.80      | -54.00 | -17.80 | peak           |              |         |
| 3 * |     | 771.4486 | -75.36        | 9.16           | -66.20      | -54.00 | -12.20 | peak           |              |         |

### Horizontal

#### Radiated Emission

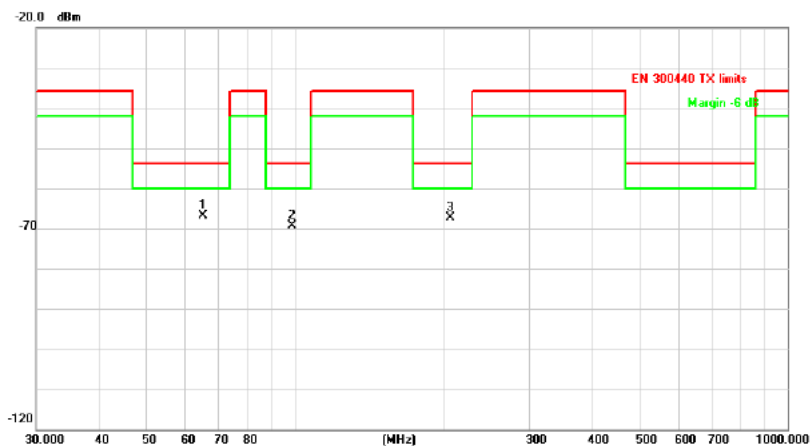


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 48.5016  | -77.30        | 0.38           | -76.92      | -54.00 | -22.92 | peak           |              |         |
| 2   |     | 60.7044  | -76.72        | -0.46          | -77.18      | -54.00 | -23.18 | peak           |              |         |
| 3 * |     | 679.9600 | -75.67        | 8.66           | -67.01      | -54.00 | -13.01 | peak           |              |         |

# 11A\_Ant3\_5745(30MHz-1GHz)

## Vertical

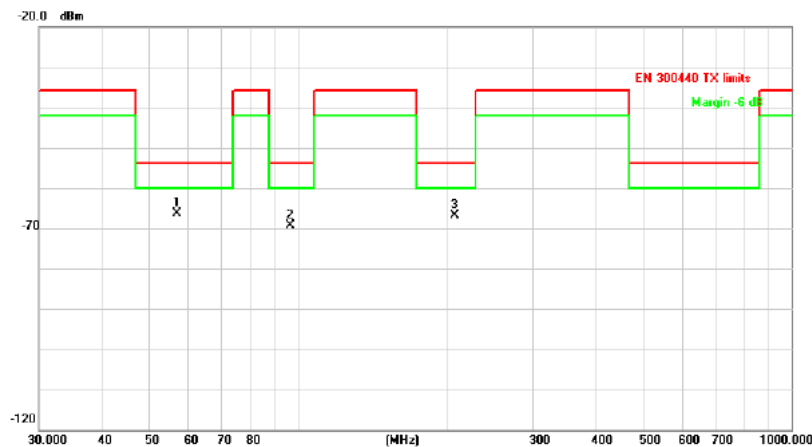
### Radiated Emission



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|----------|-------------------------|-----------------|---------|
| 1   | *   | 65.1145      | -86.56                  | 19.60                   | -66.96                  | -54.00       | -12.96     | peak     |                         |                 |         |
| 2   |     | 99.1797      | -87.30                  | 17.91                   | -69.39                  | -54.00       | -15.39     | peak     |                         |                 |         |
| 3   |     | 206.3976     | -85.78                  | 18.44                   | -67.34                  | -54.00       | -13.34     | peak     |                         |                 |         |

## Horizontal

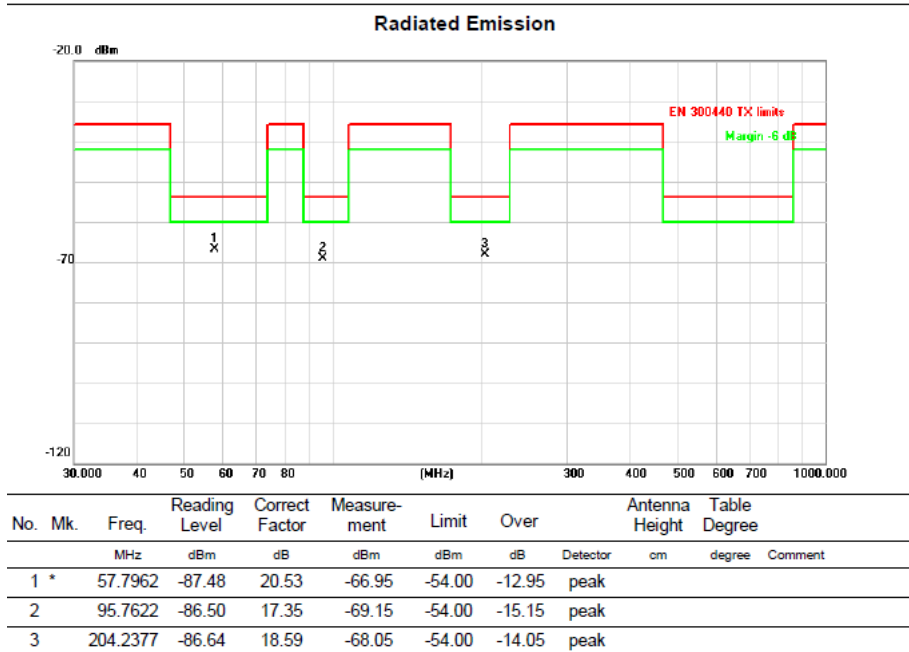
### Radiated Emission



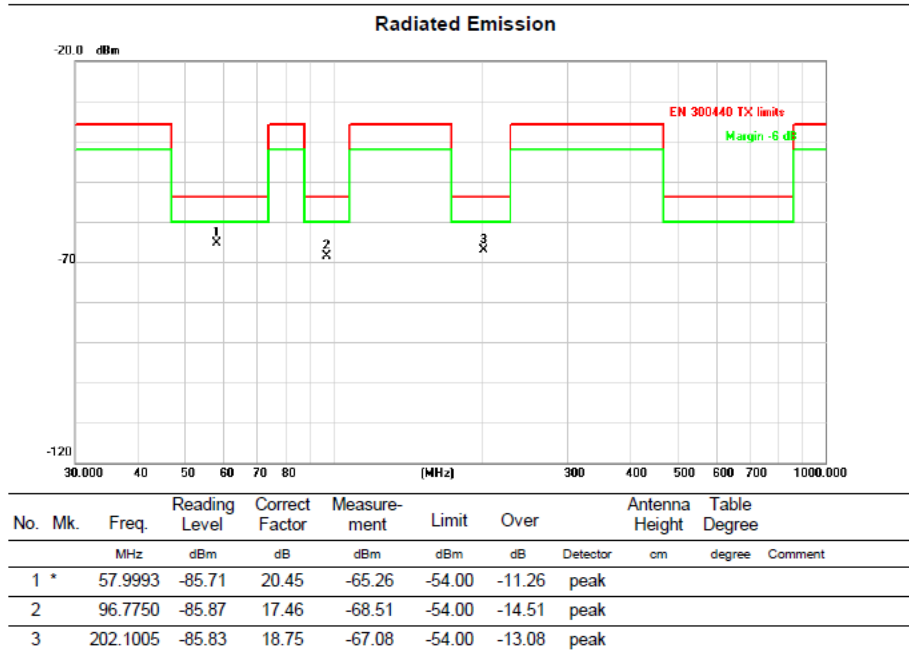
| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBm | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBm | Limit<br>dBm | Over<br>dB | Detector | Antenna<br>Height<br>cm | Table<br>Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|----------|-------------------------|-----------------|---------|
| 1   | *   | 56.9912      | -87.27                  | 20.84                   | -66.43                  | -54.00       | -12.43     | peak     |                         |                 |         |
| 2   |     | 96.4362      | -86.65                  | 17.41                   | -69.24                  | -54.00       | -15.24     | peak     |                         |                 |         |
| 3   |     | 207.1226     | -85.19                  | 18.38                   | -66.81                  | -54.00       | -12.81     | peak     |                         |                 |         |

## 11A\_Ant3\_5825(30MHz-1GHz)

### Vertical



### Horizontal



TX\_Above\_1G:

11A\_Ant1\_5745(1GHz-18GHz)

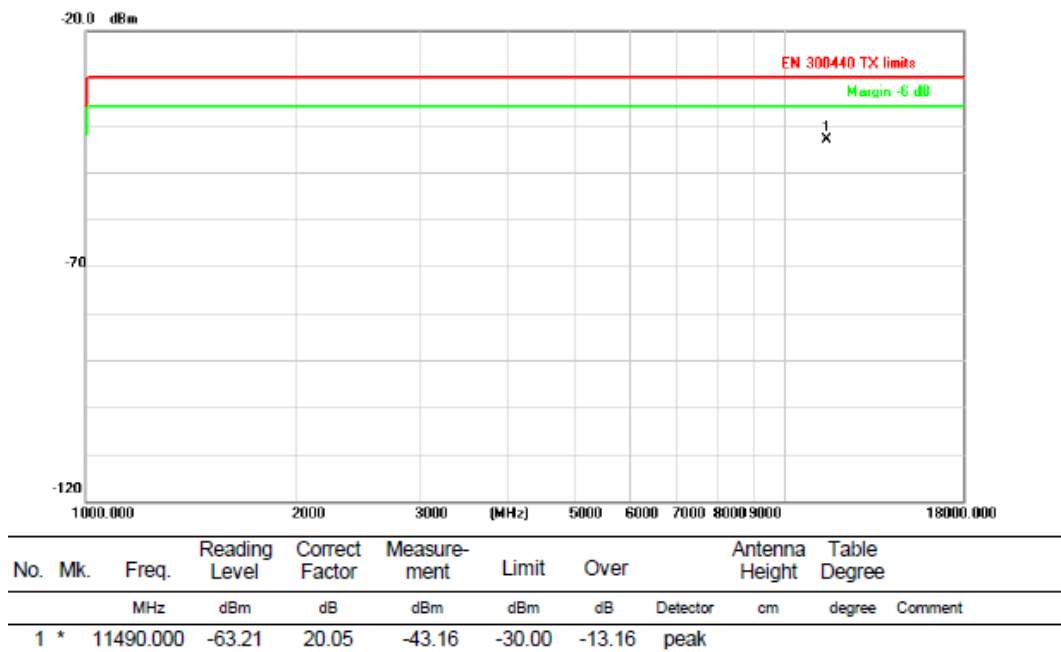
Vertical

Radiated Emission



Horizontal

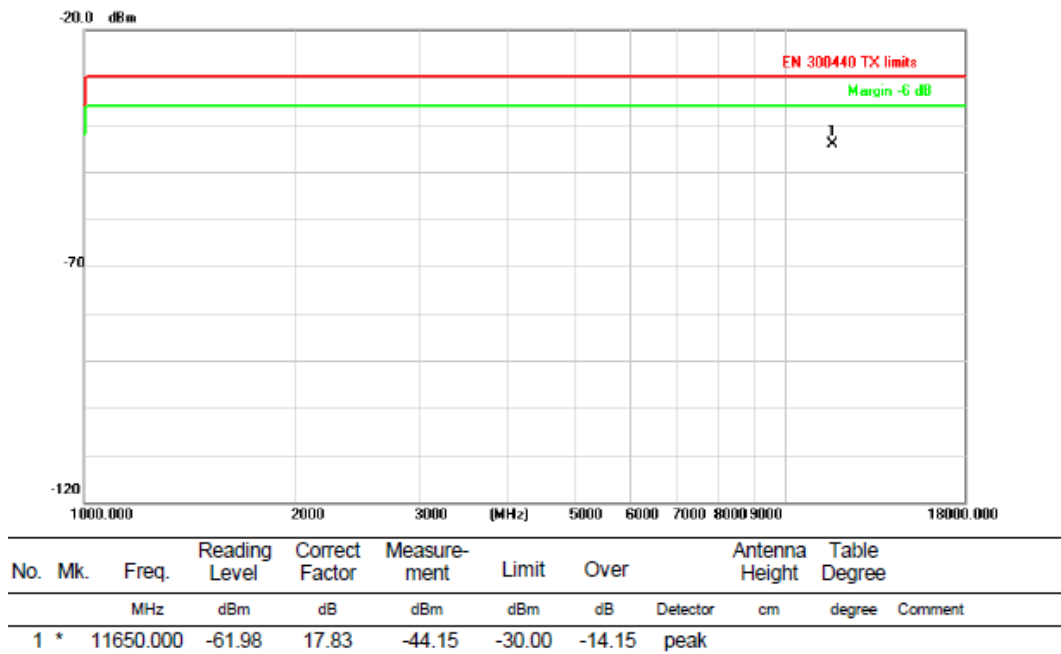
Radiated Emission



# 11A\_Ant1\_5825(1GHz-18GHz)

## Vertical

### Radiated Emission



## Horizontal

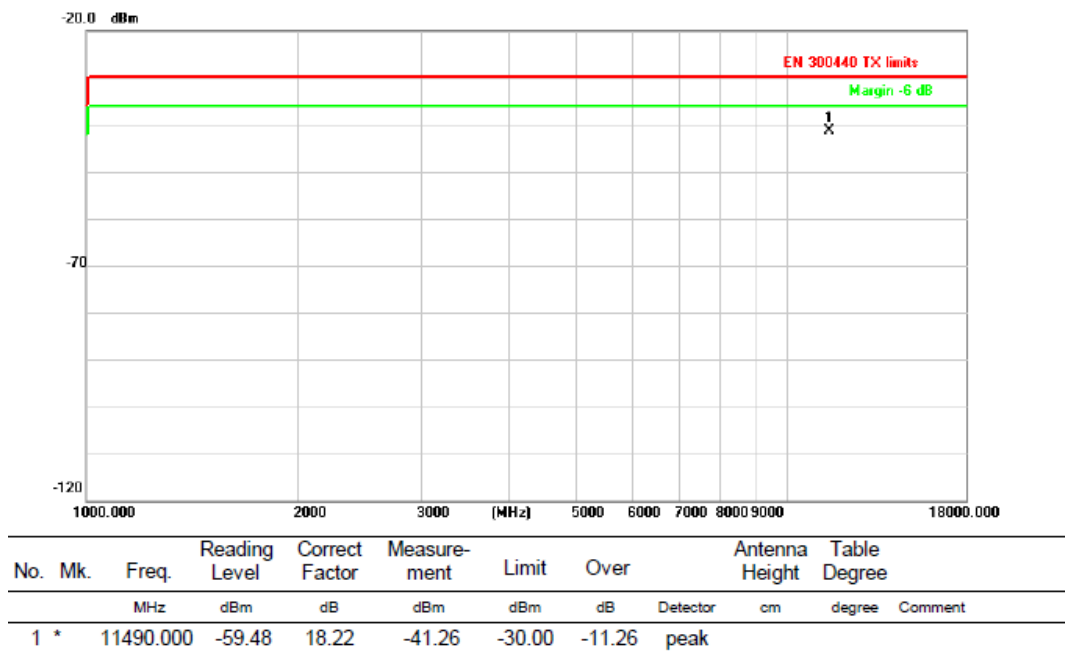
### Radiated Emission



# 11A \_ Ant2\_5745(1GHz-18GHz)

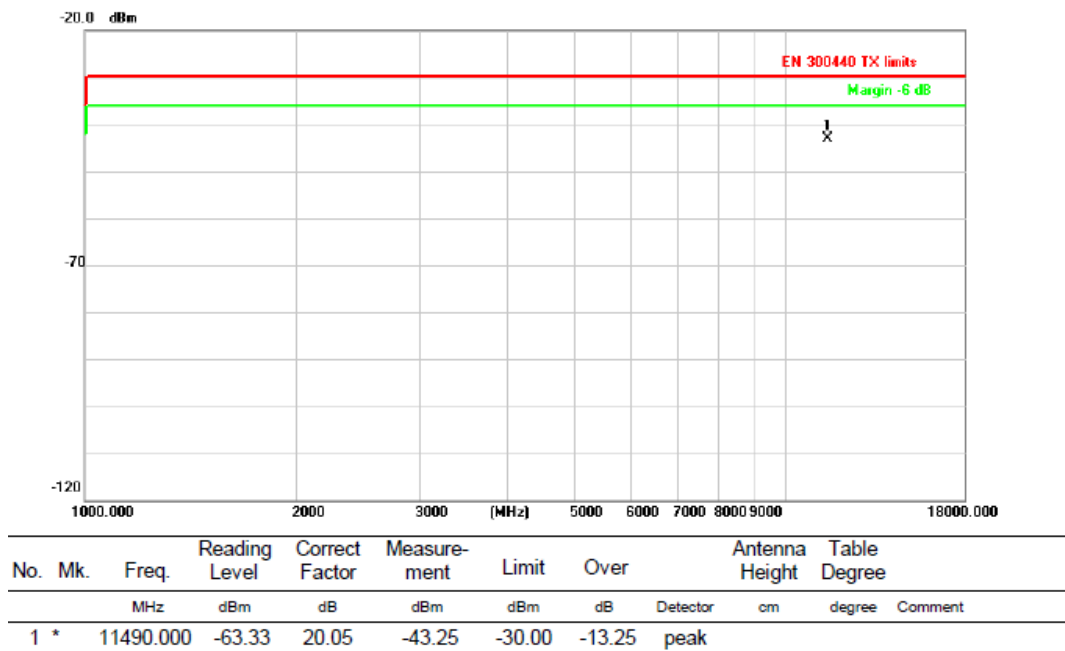
## Vertical

### Radiated Emission



## Horizontal

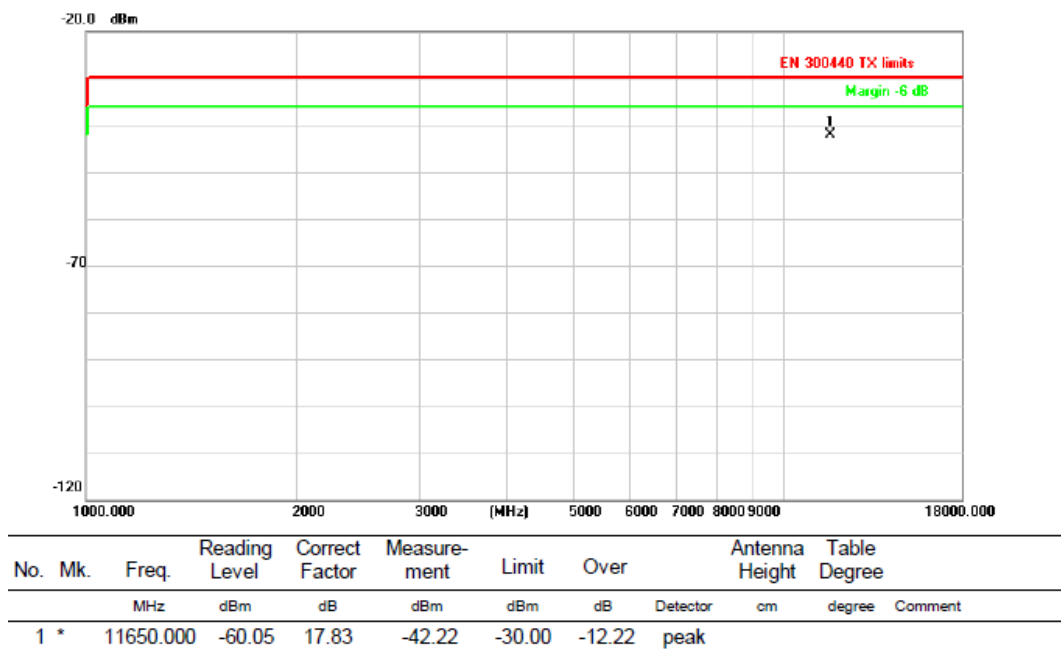
### Radiated Emission



# 11A\_Ant2\_5825(1GHz-18GHz)

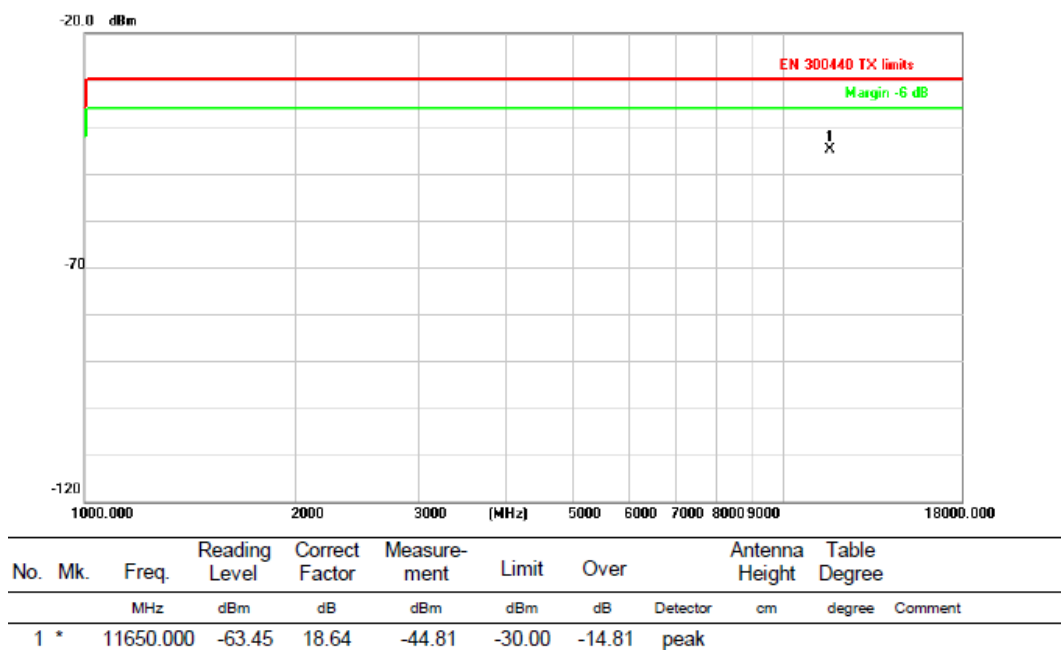
## Vertical

### Radiated Emission



## Horizontal

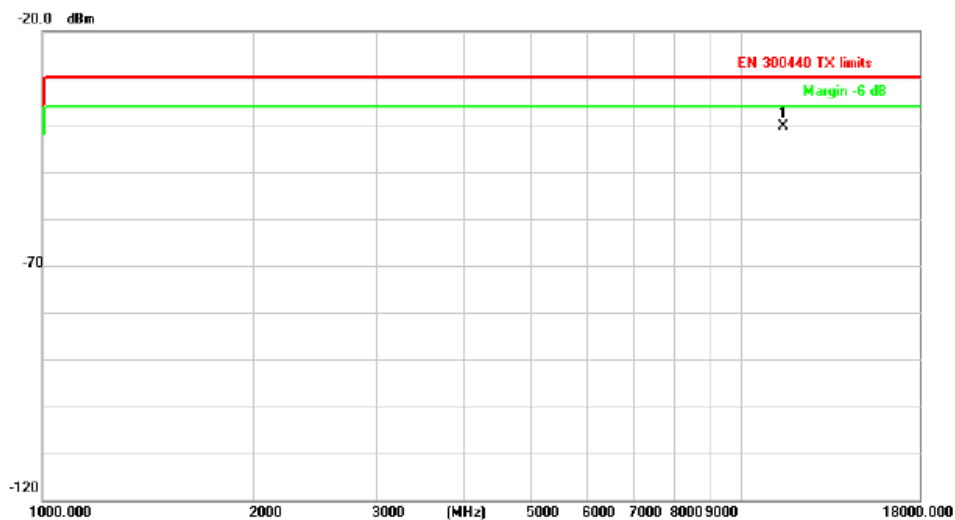
### Radiated Emission



# 11A \_ Ant3\_5745(1GHz-18GHz)

## Vertical

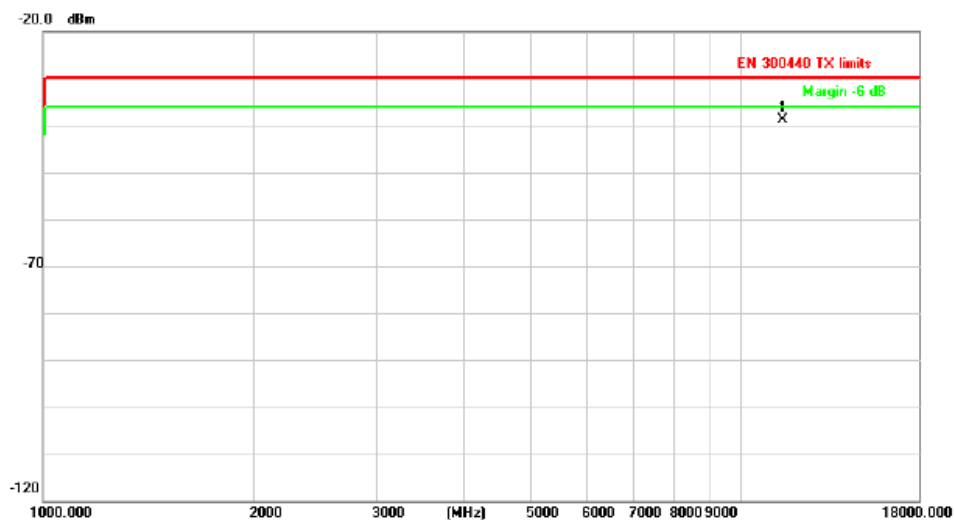
### Radiated Emission



| No. | Mk. | Freq.     | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|-----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz       | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   | *   | 11490.000 | -58.58        | 18.22          | -40.36      | -30.00 | -10.36 | peak           |              |

## Horizontal

### Radiated Emission

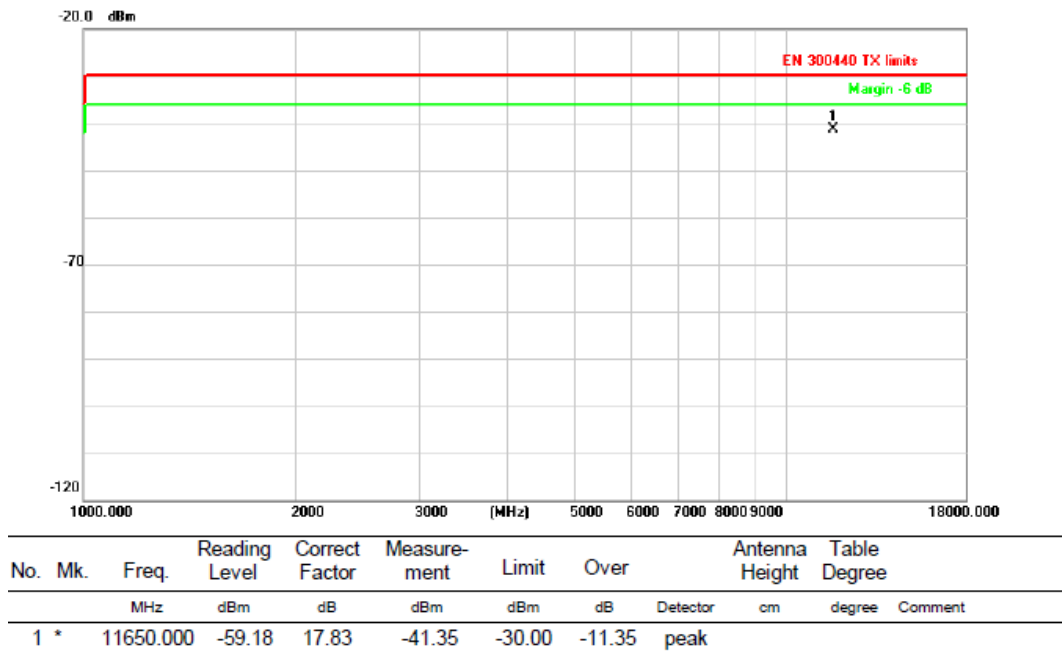


| No. | Mk. | Freq.     | Reading Level | Correct Factor | Measurement | Limit  | Over  | Antenna Height | Table Degree |
|-----|-----|-----------|---------------|----------------|-------------|--------|-------|----------------|--------------|
|     |     | MHz       | dBm           | dB             | dBm         | dBm    | dB    | cm             | degree       |
| 1   | *   | 11490.000 | -58.80        | 20.05          | -38.75      | -30.00 | -8.75 | peak           |              |

# 11A\_Ant3\_5825(1GHz-18GHz)

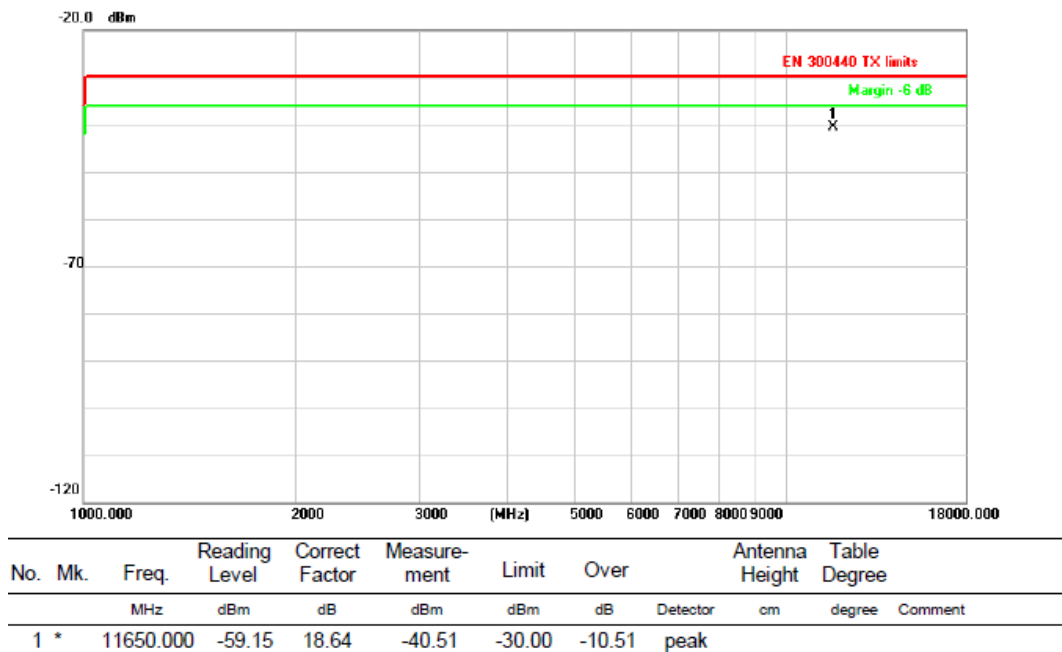
## Vertical

### Radiated Emission



## Horizontal

### Radiated Emission

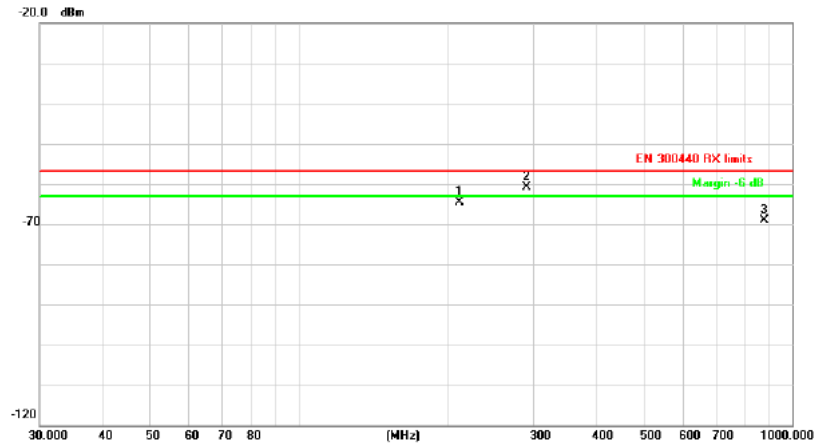


## RX\_Below\_1G

### 11A\_Ant1\_5745(30MHz-1GHz)

#### Vertical

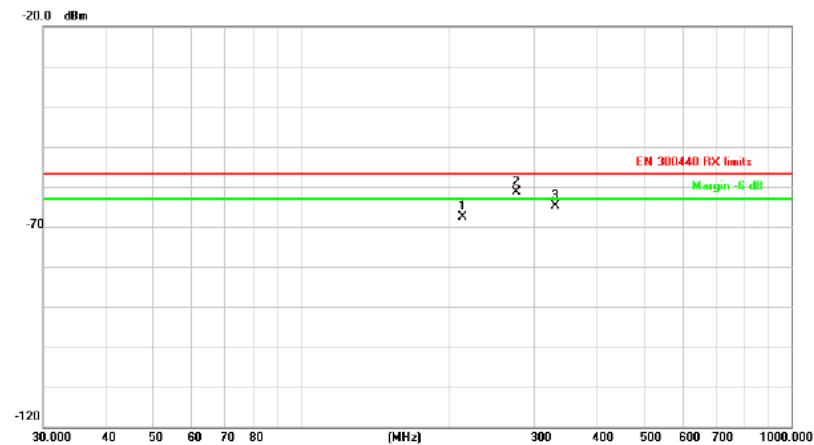
##### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   |     | 211.5265 | -59.55        | -4.95          | -64.50      | -57.00 | -7.50  | peak           |              |
| 2   | *   | 290.0172 | -57.36        | -3.61          | -60.97      | -57.00 | -3.97  | peak           |              |
| 3   |     | 875.2470 | -76.42        | 7.36           | -69.06      | -57.00 | -12.06 | peak           |              |

#### Horizontal

##### Radiated Emission

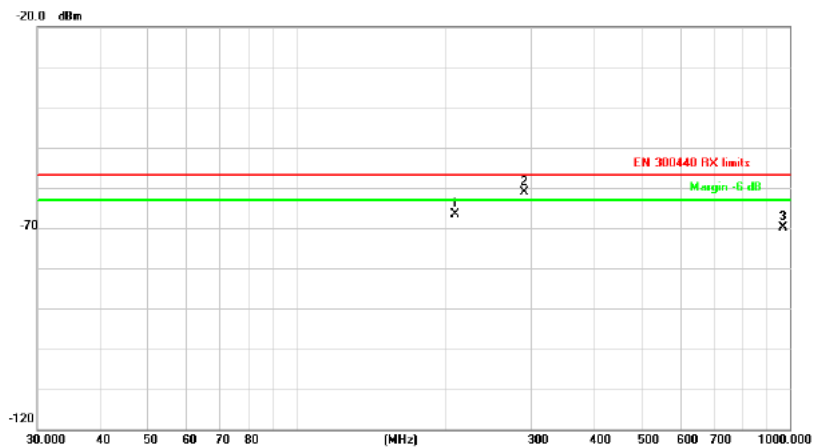


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   |     | 213.7634 | -61.42        | -6.24          | -67.66      | -57.00 | -10.66 | peak           |              |
| 2   | *   | 275.1570 | -60.66        | -0.81          | -61.47      | -57.00 | -4.47  | peak           |              |
| 3   |     | 330.1950 | -60.73        | -4.16          | -64.89      | -57.00 | -7.89  | peak           |              |

## 11A\_Ant1\_5825(30MHz-1GHz)

### Vertical

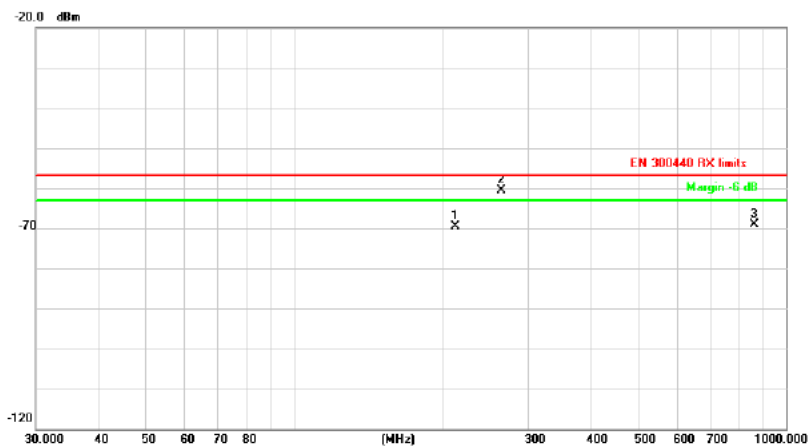
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 209.3130 | -61.66        | -4.89          | -66.55      | -57.00 | -9.55  | peak           |              |         |
| 2 * |     | 289.0021 | -57.54        | -3.64          | -61.18      | -57.00 | -4.18  | peak           |              |         |
| 3   |     | 965.5421 | -80.24        | 10.27          | -69.97      | -57.00 | -12.97 | peak           |              |         |

### Horizontal

#### Radiated Emission

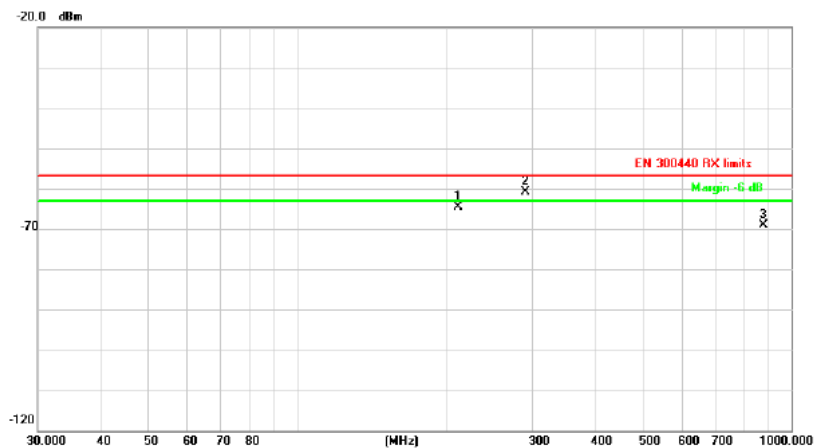


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 213.0151 | -63.42        | -6.30          | -69.72      | -57.00 | -12.72 | peak           |              |         |
| 2 * |     | 264.7457 | -60.49        | -0.25          | -60.74      | -57.00 | -3.74  | peak           |              |         |
| 3   |     | 860.0352 | -80.29        | 11.24          | -69.05      | -57.00 | -12.05 | peak           |              |         |

## 11A\_Ant2\_5745(30MHz-1GHz)

### Vertical

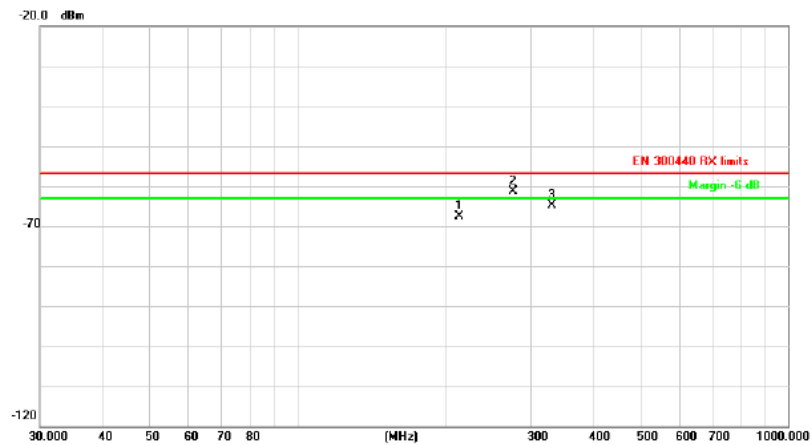
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 211.5264 | -59.57        | -4.95          | -64.52      | -57.00 | -7.52  | peak           |              |         |
| 2   | *   | 290.0172 | -57.34        | -3.61          | -60.95      | -57.00 | -3.95  | peak           |              |         |
| 3   |     | 875.2471 | -76.40        | 7.36           | -69.04      | -57.00 | -12.04 | peak           |              |         |

### Horizontal

#### Radiated Emission

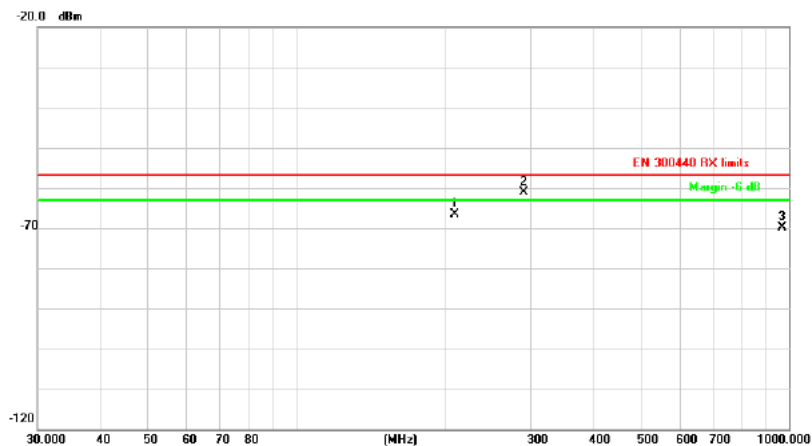


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 213.7632 | -61.41        | -6.24          | -67.65      | -57.00 | -10.65 | peak           |              |         |
| 2   | *   | 275.1570 | -60.61        | -0.81          | -61.42      | -57.00 | -4.42  | peak           |              |         |
| 3   |     | 330.1951 | -60.75        | -4.16          | -64.91      | -57.00 | -7.91  | peak           |              |         |

## 11A\_Ant2\_5825(30MHz-1GHz)

### Vertical

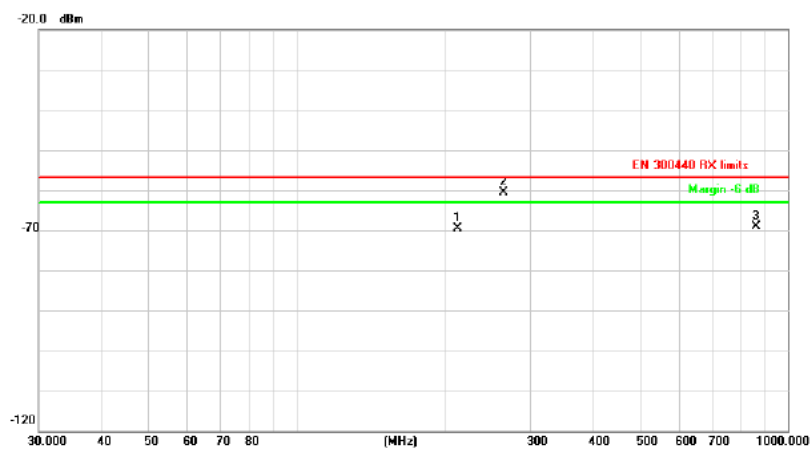
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   |     | 209.3131 | -61.62        | -4.89          | -66.51      | -57.00 | -9.51  | peak           |              |
| 2   | *   | 289.0020 | -57.52        | -3.64          | -61.16      | -57.00 | -4.16  | peak           |              |
| 3   |     | 965.5420 | -80.25        | 10.27          | -69.98      | -57.00 | -12.98 | peak           |              |

### Horizontal

#### Radiated Emission

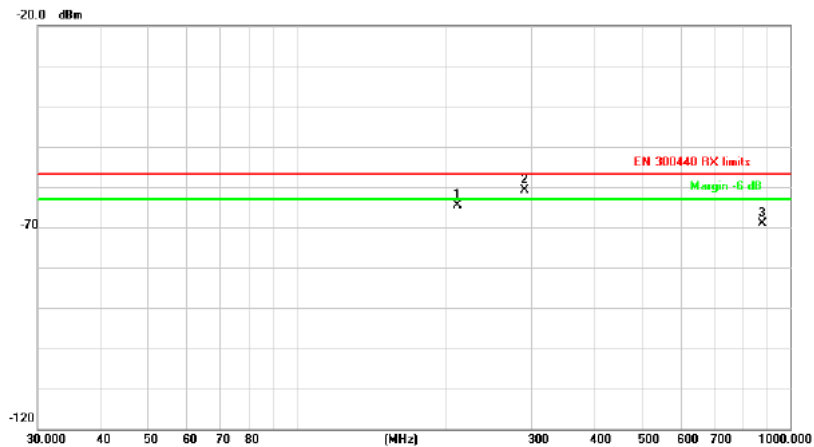


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       |
| 1   |     | 213.0150 | -63.41        | -6.30          | -69.71      | -57.00 | -12.71 | peak           |              |
| 2   | *   | 264.7457 | -60.50        | -0.25          | -60.75      | -57.00 | -3.75  | peak           |              |
| 3   |     | 860.0353 | -80.26        | 11.24          | -69.02      | -57.00 | -12.02 | peak           |              |

## 11A\_Ant3\_5745(30MHz-1GHz)

### Vertical

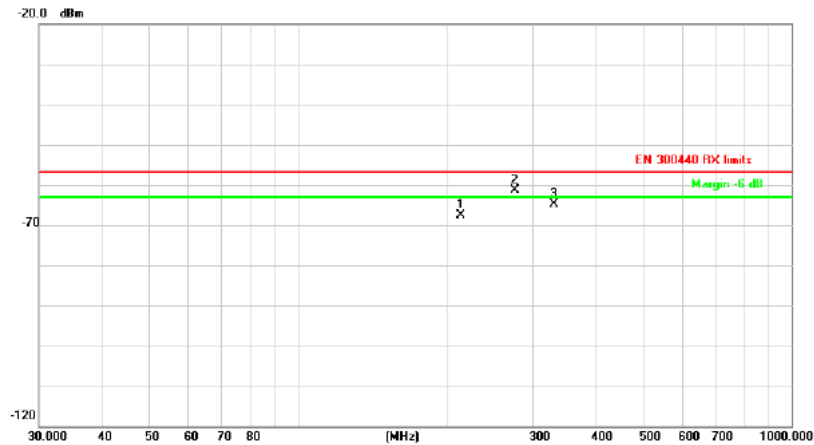
#### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 211.5264 | -59.57        | -4.95          | -64.52      | -57.00 | -7.52  | peak           |              |         |
| 2   | *   | 290.0172 | -57.34        | -3.61          | -60.95      | -57.00 | -3.95  | peak           |              |         |
| 3   |     | 875.2471 | -76.44        | 7.36           | -69.08      | -57.00 | -12.08 | peak           |              |         |

### Horizontal

#### Radiated Emission

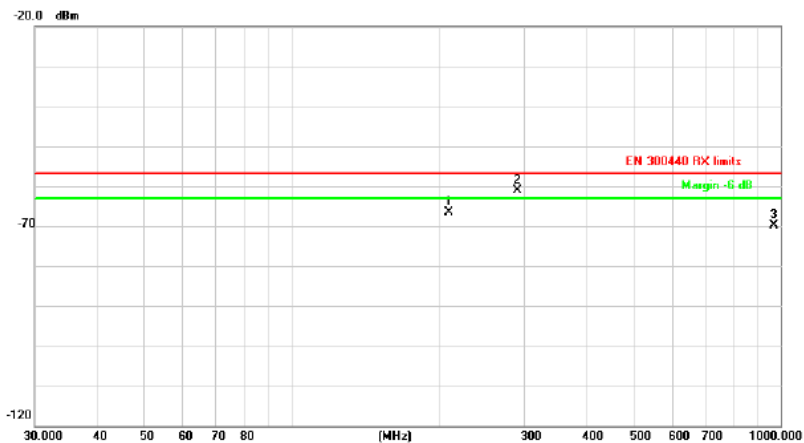


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 213.7631 | -61.40        | -6.24          | -67.64      | -57.00 | -10.64 | peak           |              |         |
| 2   | *   | 275.1589 | -60.67        | -0.81          | -61.48      | -57.00 | -4.48  | peak           |              |         |
| 3   |     | 330.1951 | -60.70        | -4.16          | -64.86      | -57.00 | -7.86  | peak           |              |         |

# 11A\_Ant3\_5825(30MHz-1GHz)

## Vertical

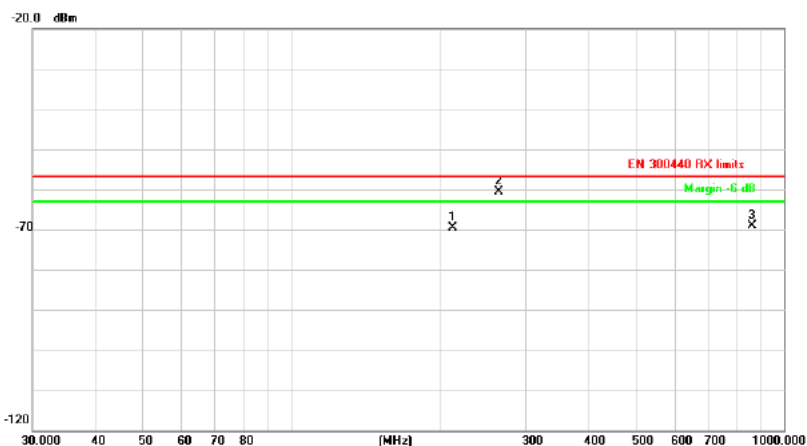
### Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 209.3131 | -61.65        | -4.89          | -66.54      | -57.00 | -9.54  | peak           |              |         |
| 2 * |     | 289.0021 | -57.51        | -3.64          | -61.15      | -57.00 | -4.15  | peak           |              |         |
| 3   |     | 965.5422 | -80.21        | 10.27          | -69.94      | -57.00 | -12.94 | peak           |              |         |

## Horizontal

### Radiated Emission



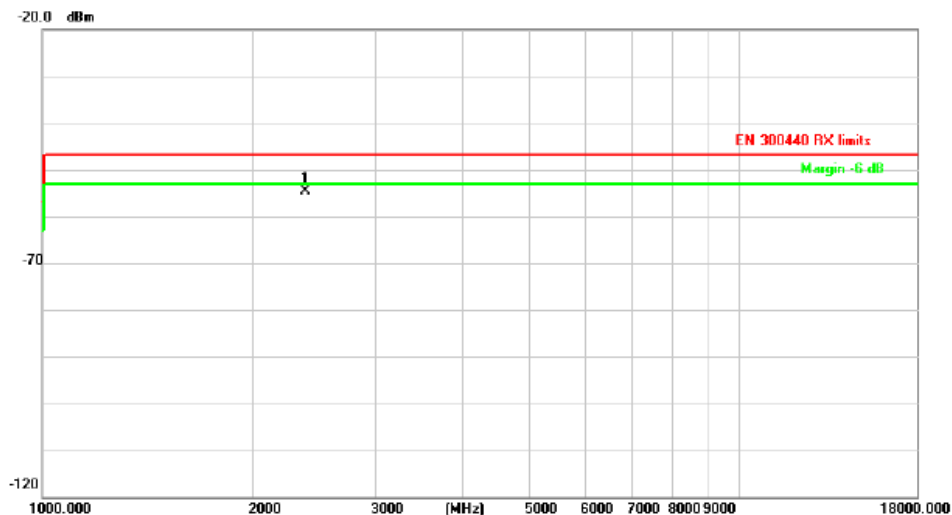
| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over   | Antenna Height | Table Degree |         |
|-----|-----|----------|---------------|----------------|-------------|--------|--------|----------------|--------------|---------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB     | cm             | degree       | Comment |
| 1   |     | 213.0152 | -63.40        | -6.30          | -69.70      | -57.00 | -12.74 | peak           |              |         |
| 2 * |     | 264.7455 | -60.46        | -0.25          | -60.71      | -57.00 | -3.71  | peak           |              |         |
| 3   |     | 860.0351 | -80.30        | 11.24          | -69.06      | -57.00 | -12.06 | peak           |              |         |

RX\_Above\_1G:

11A\_Ant1\_5745(1GHz-18GHz)

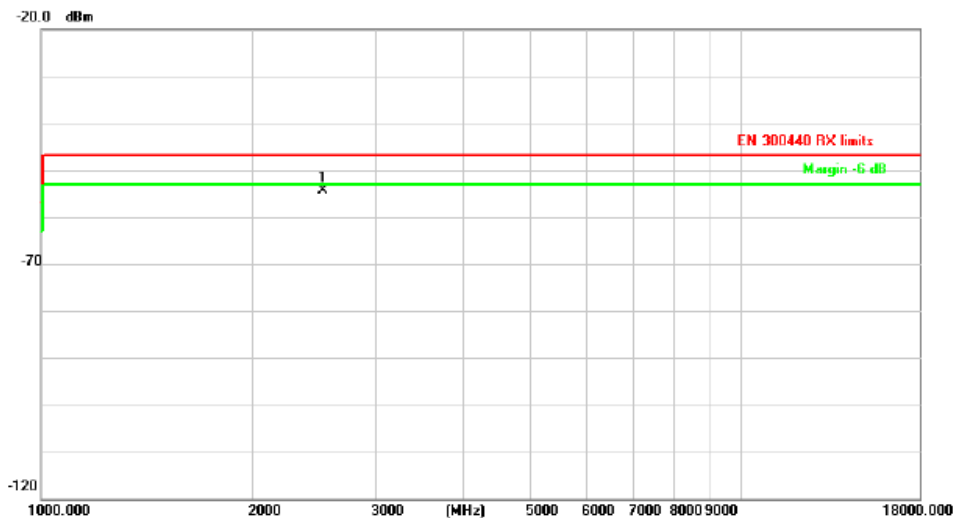
Vertical

### Radiated Emission



Horizontal

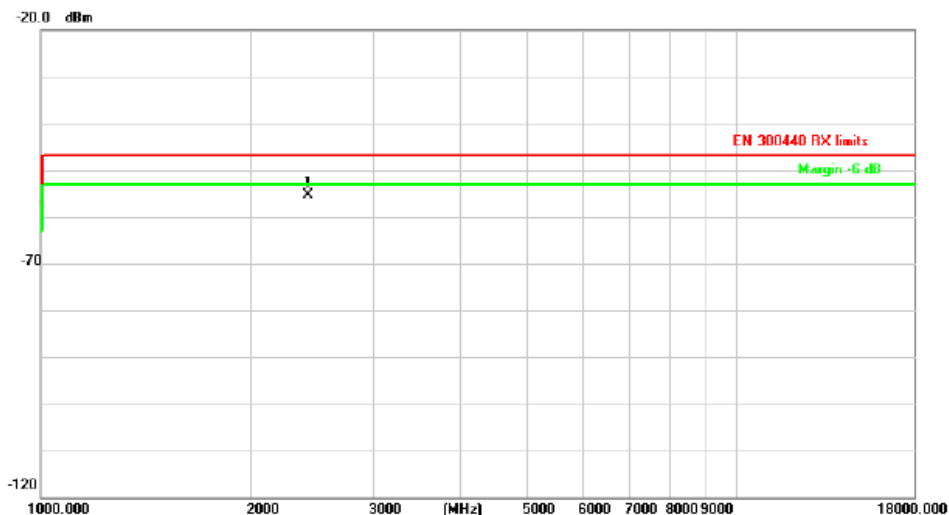
### Radiated Emission



# 11A \_ Ant1\_5825(1GHz-18GHz)

Vertical

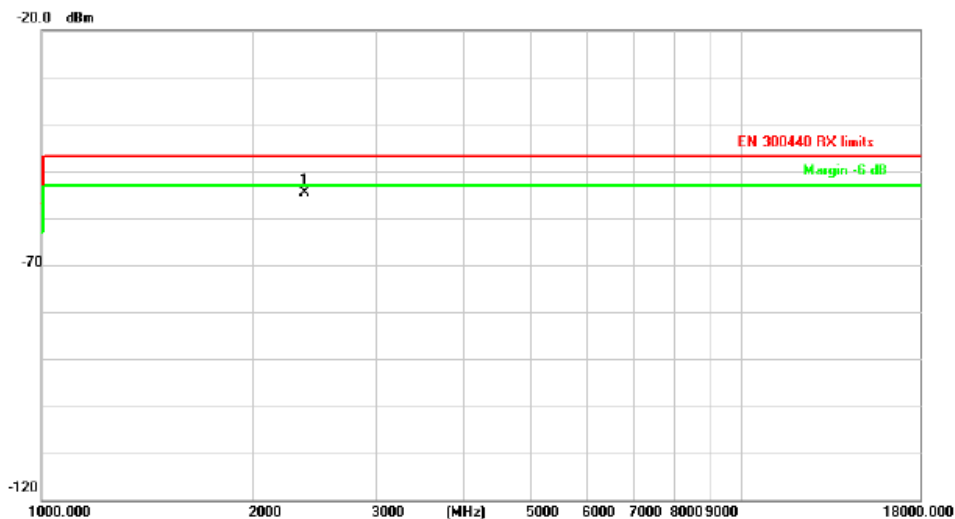
## Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over  | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|-------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB    | cm             | degree       |
| 1   | *   | 2414.672 | -69.59        | 14.30          | -55.29      | -47.00 | -8.29 | peak           |              |

Horizontal

## Radiated Emission

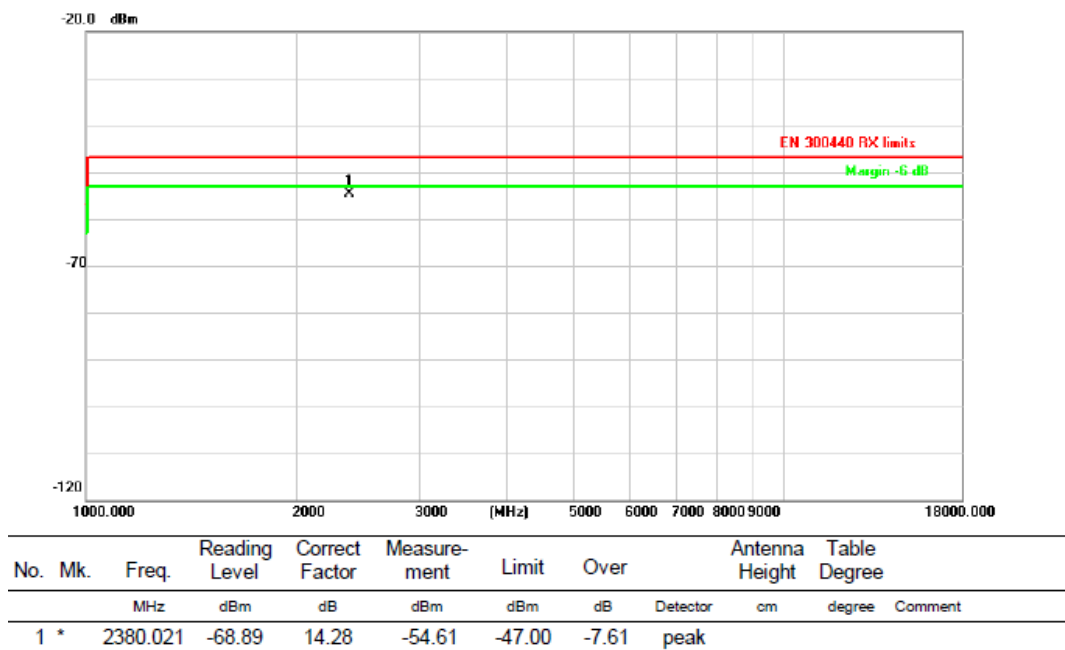


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over  | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|-------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB    | cm             | degree       |
| 1   | *   | 2366.308 | -68.81        | 14.29          | -54.52      | -47.00 | -7.52 | peak           |              |

# 11A\_Ant2\_5745(1GHz-18GHz)

Vertical

## Radiated Emission



Horizontal

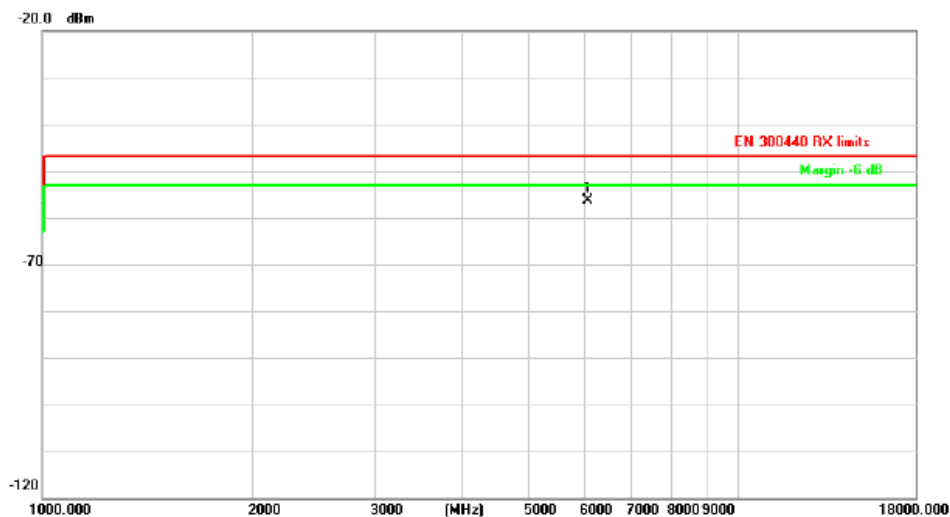
## Radiated Emission



# 11A\_Ant2\_5825(1GHz-18GHz)

Vertical

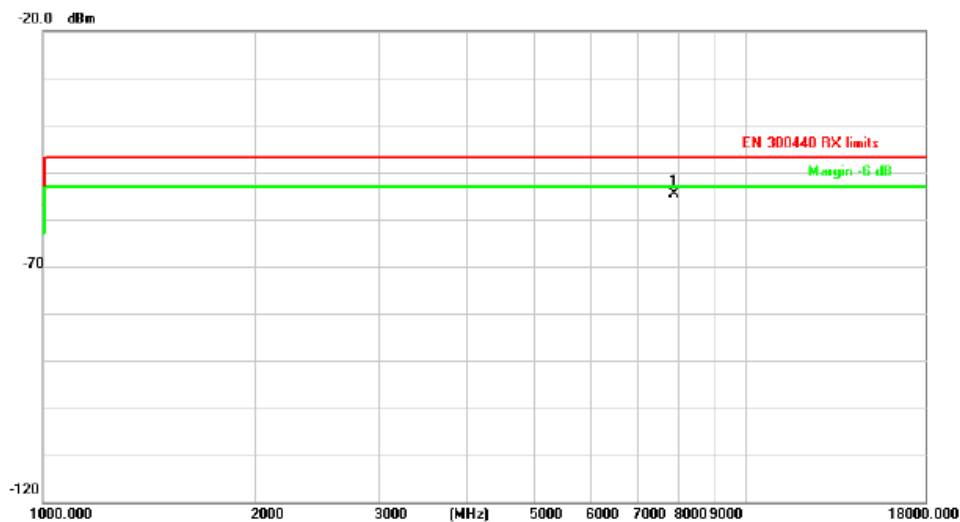
## Radiated Emission



| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over  | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|-------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB    | cm             | degree       |
| 1   | *   | 6071.410 | -54.10        | -2.25          | -56.35      | -47.00 | -9.35 | peak           |              |

Horizontal

## Radiated Emission

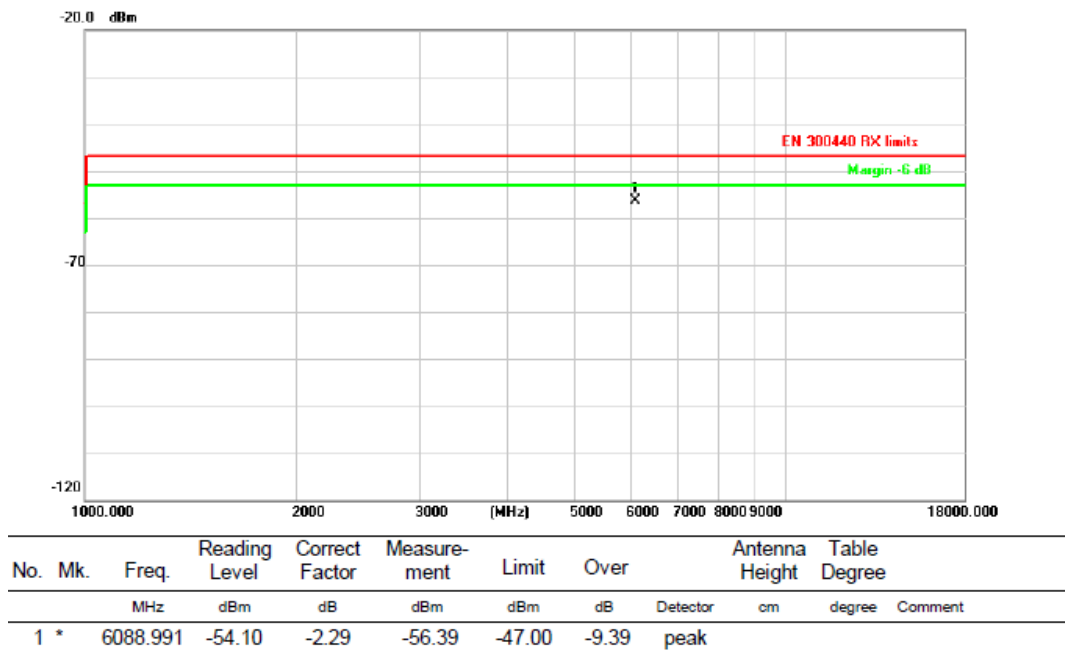


| No. | Mk. | Freq.    | Reading Level | Correct Factor | Measurement | Limit  | Over  | Antenna Height | Table Degree |
|-----|-----|----------|---------------|----------------|-------------|--------|-------|----------------|--------------|
|     |     | MHz      | dBm           | dB             | dBm         | dBm    | dB    | cm             | degree       |
| 1   | *   | 7875.252 | -56.99        | 2.45           | -54.54      | -47.00 | -7.54 | peak           |              |

# 11A\_Ant3\_5745(1GHz-18GHz)

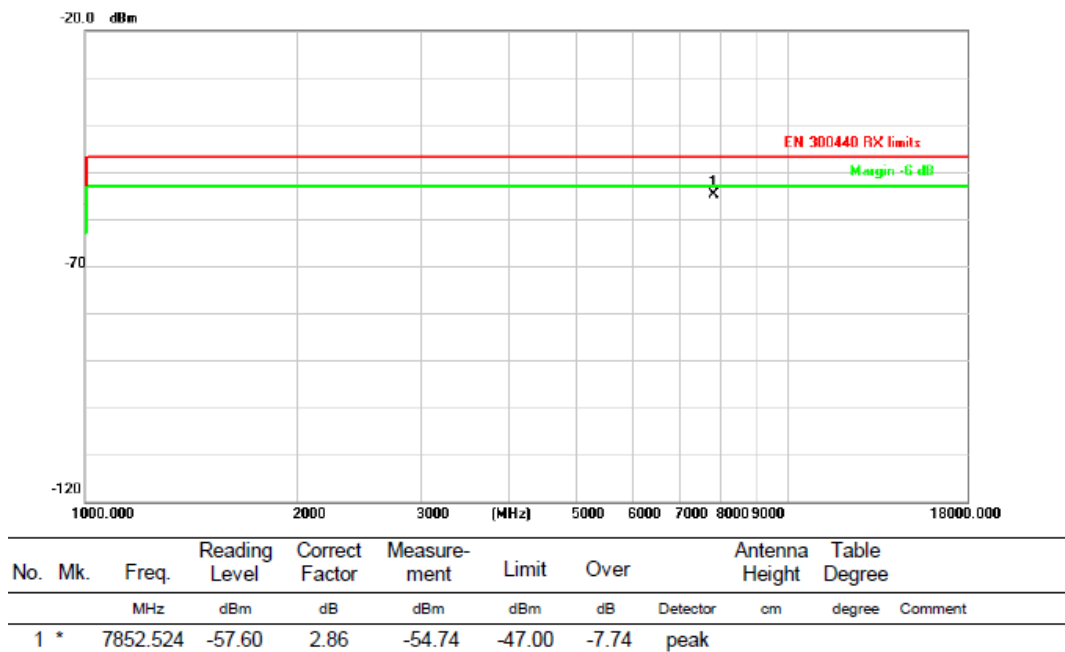
Vertical

## Radiated Emission



Horizontal

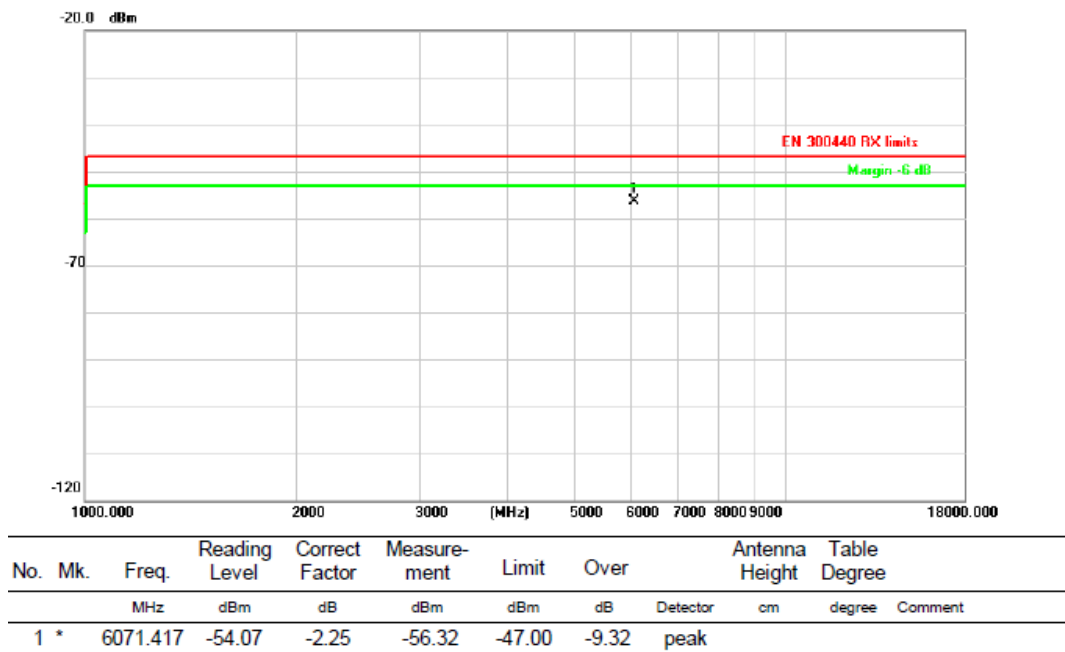
## Radiated Emission



# 11A\_Ant3\_5825(1GHz-18GHz)

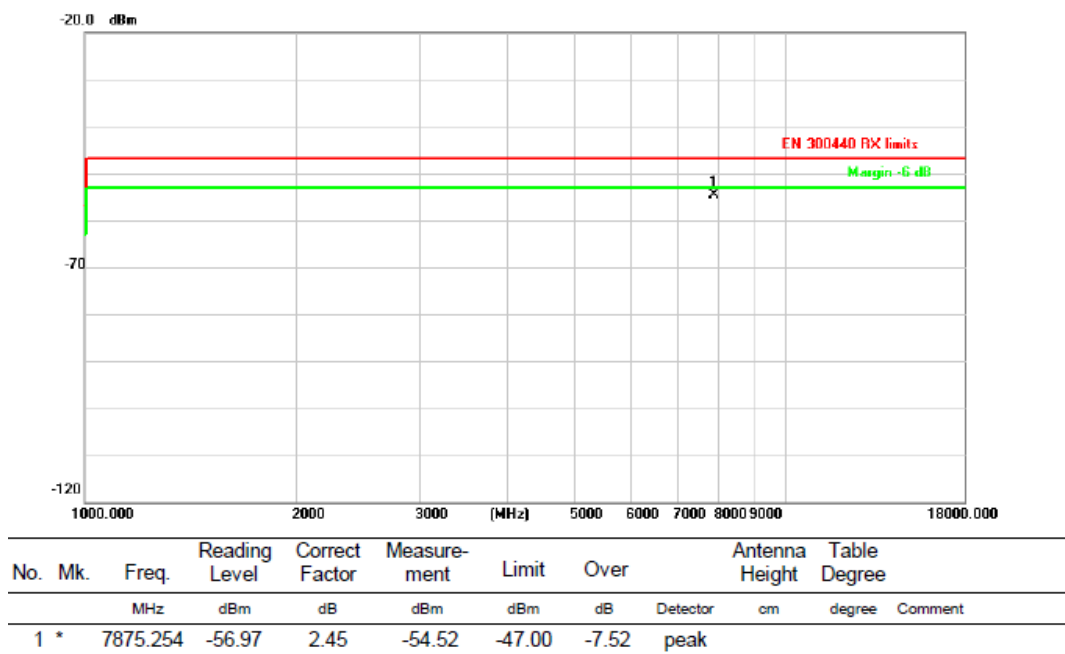
Vertical

## Radiated Emission

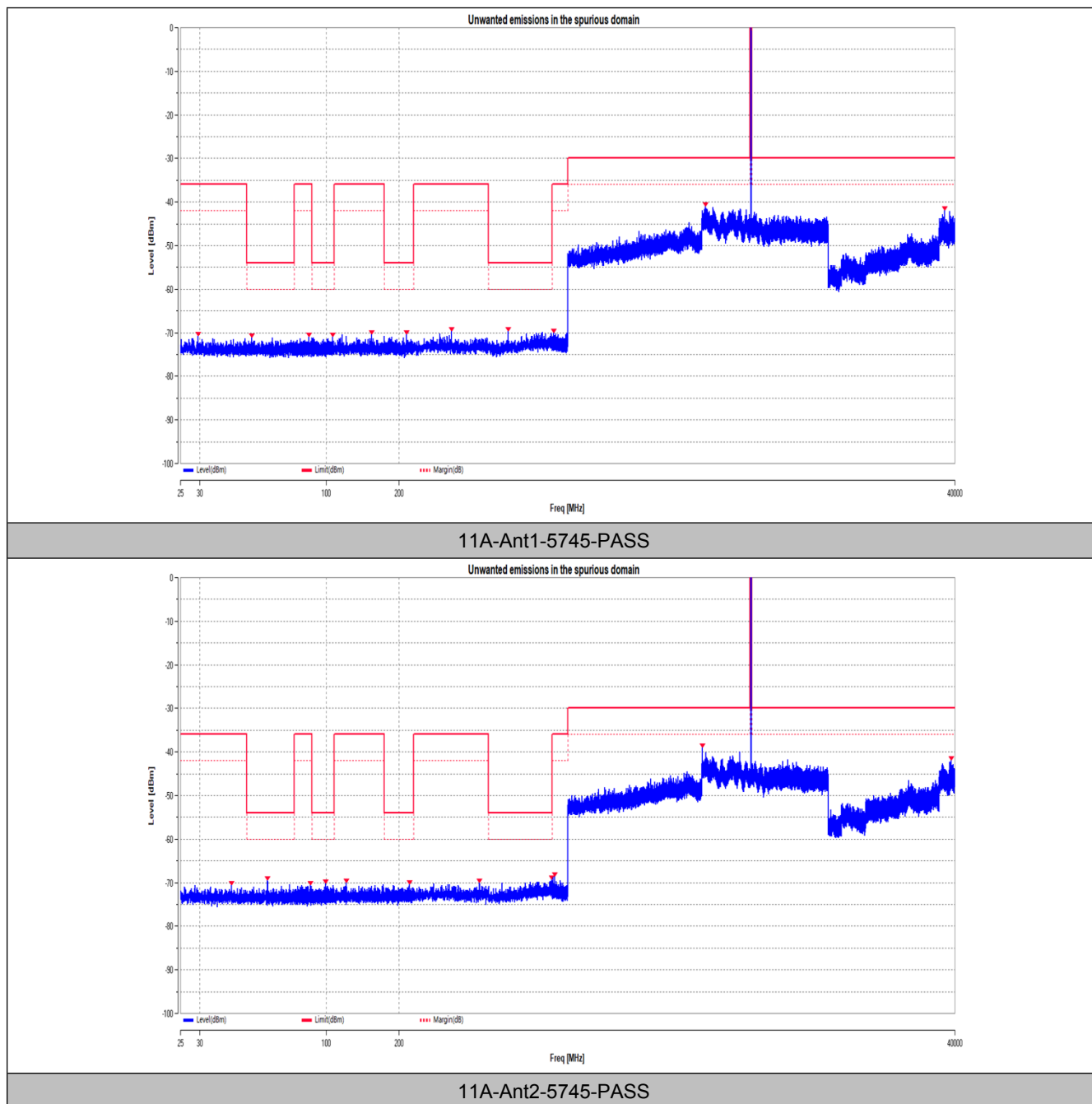


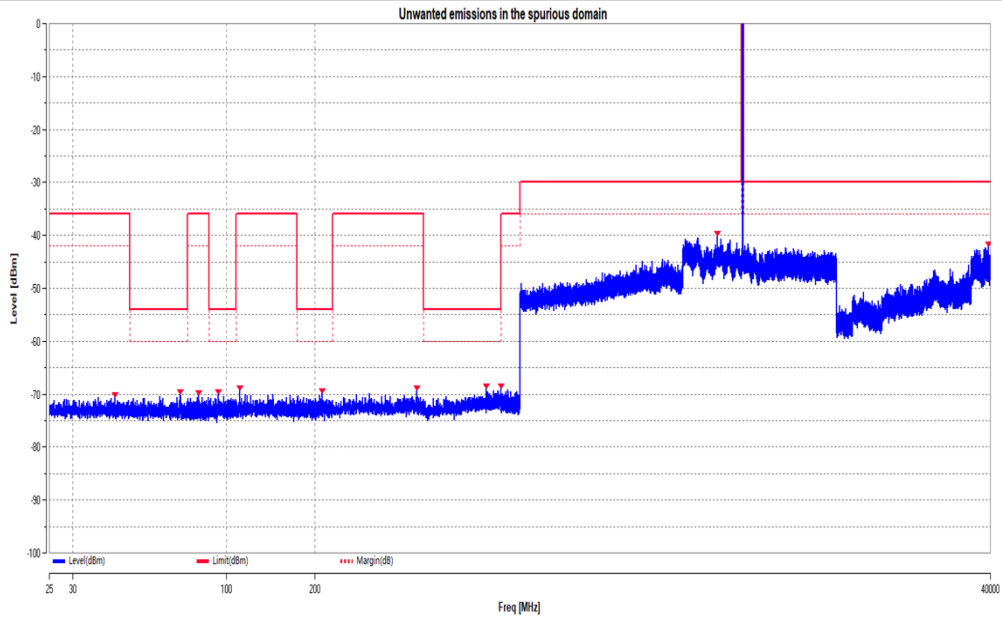
Horizontal

## Radiated Emission

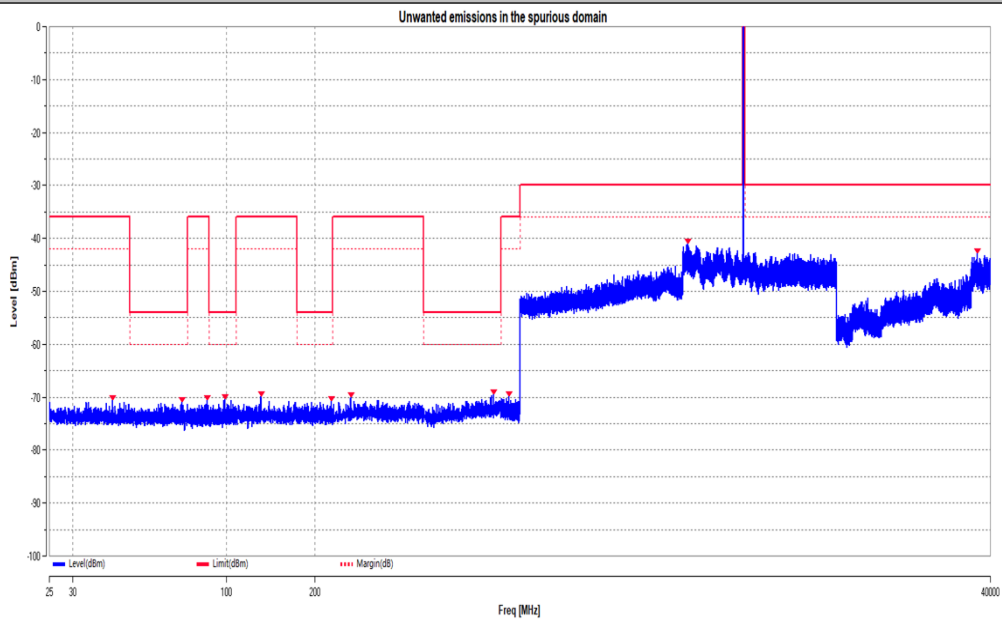


For conducted measurement

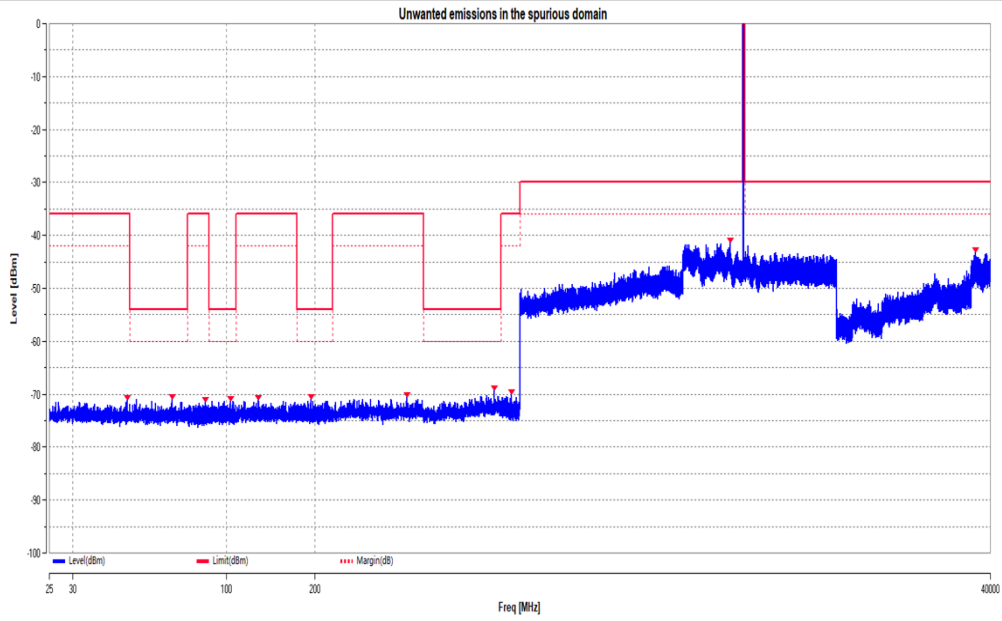




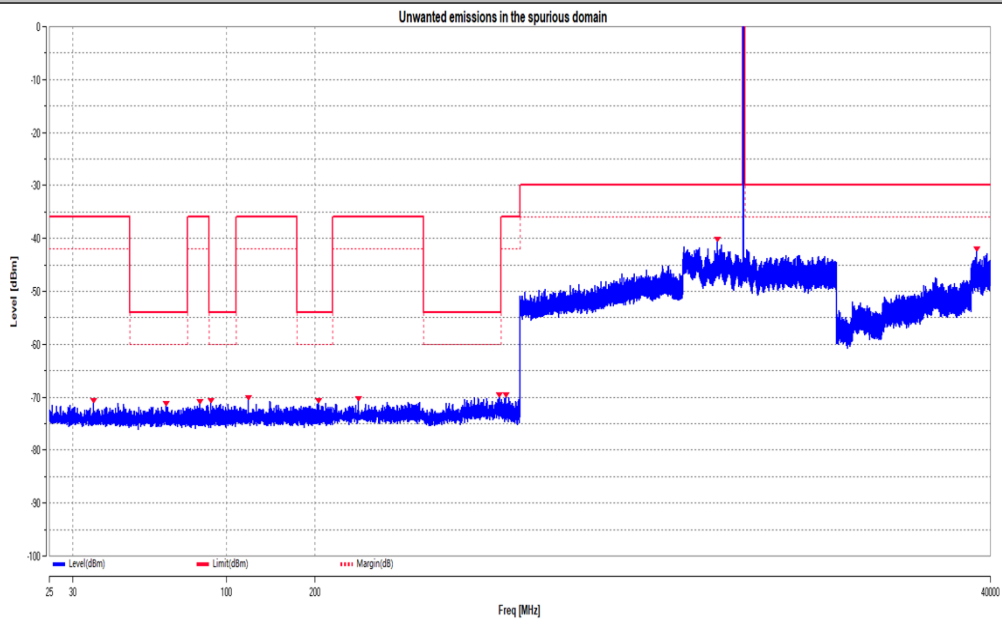
11A-Ant3-5745-PASS



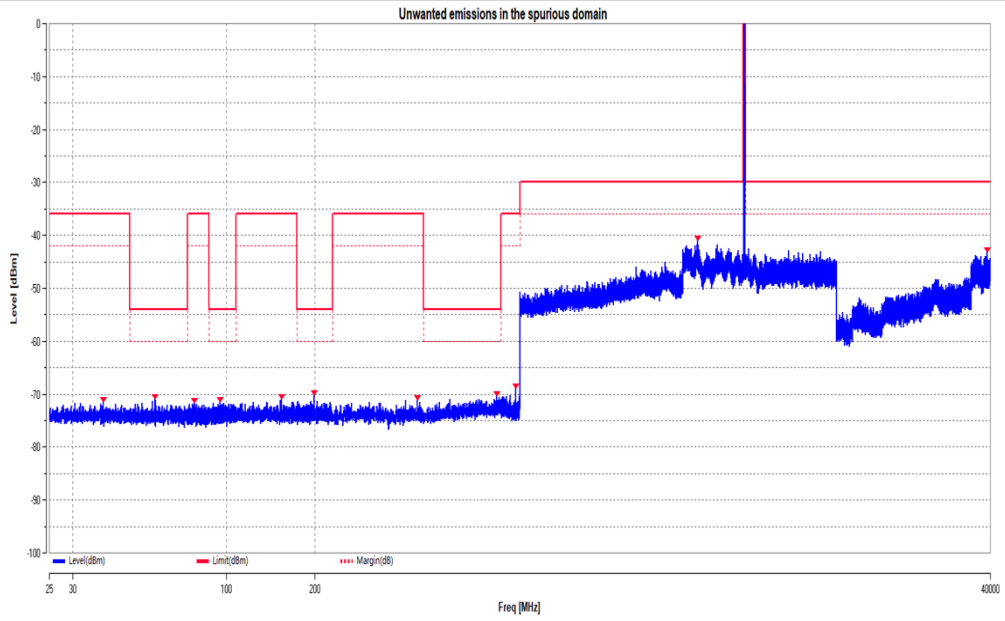
11A-Ant1-5785-PASS



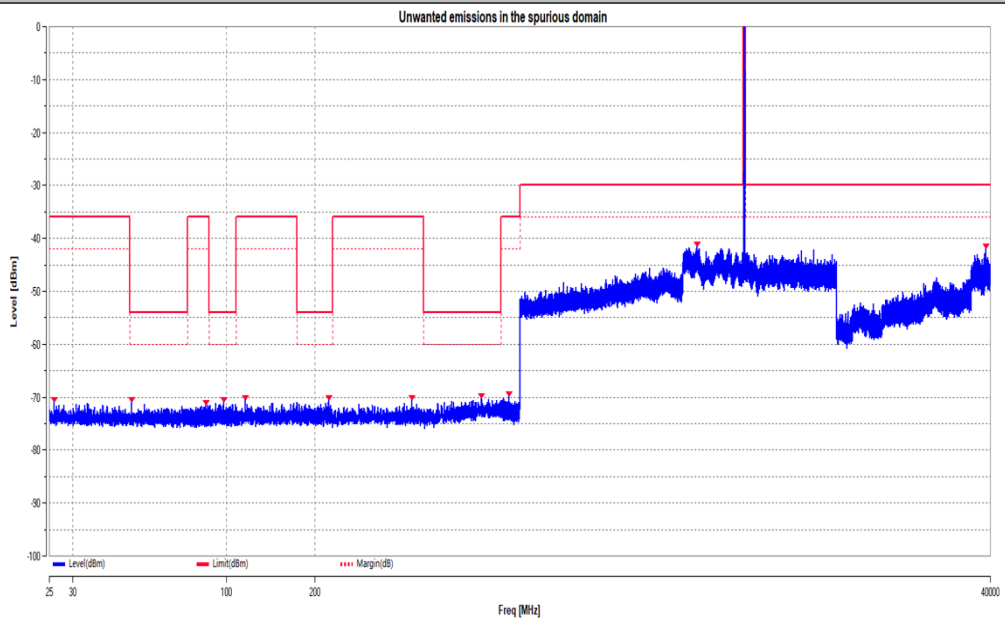
11A-Ant2-5785-PASS



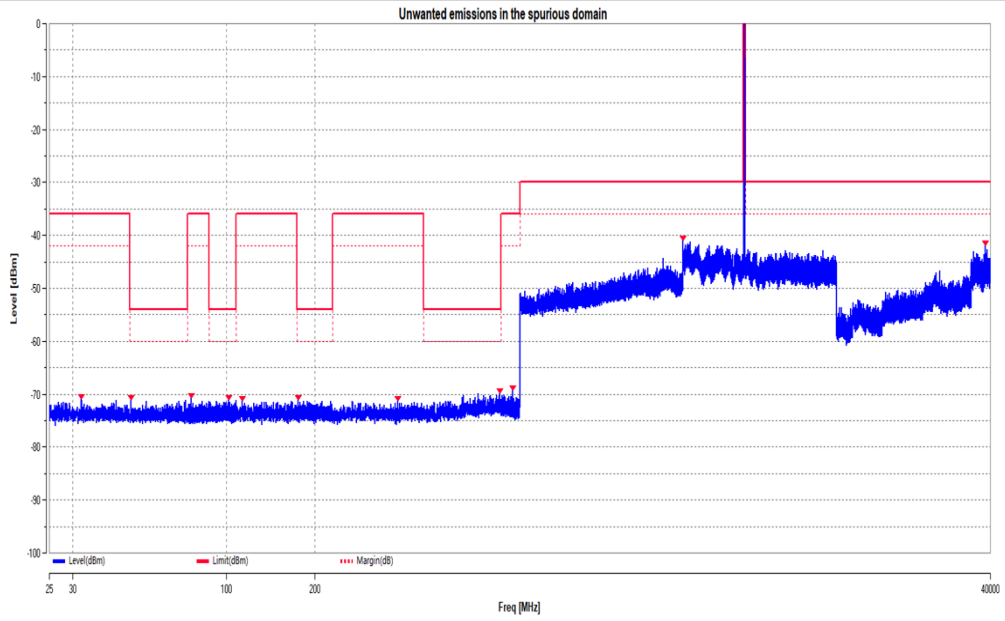
11A-Ant3-5785-PASS



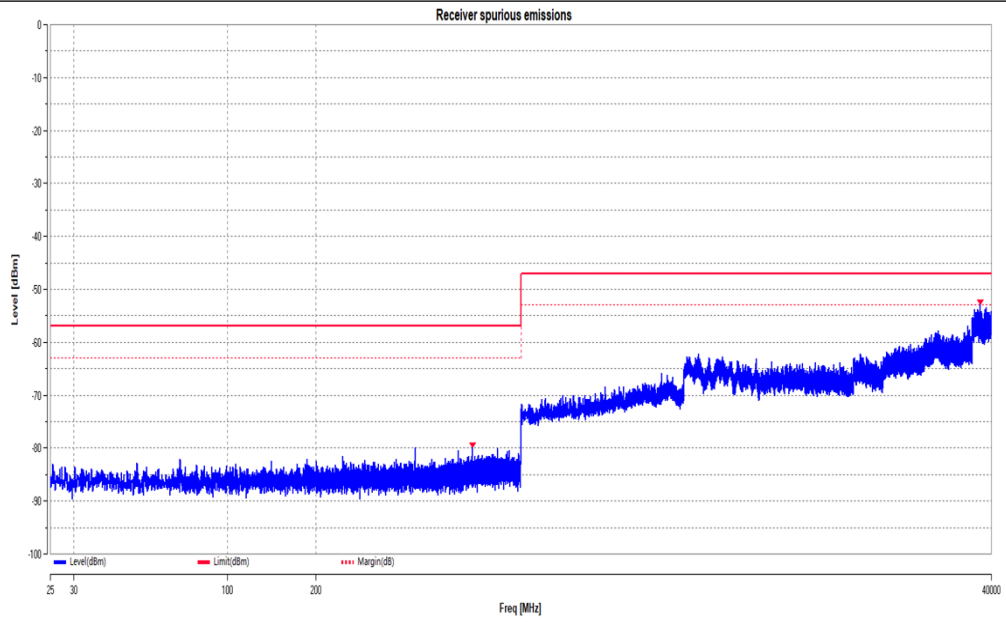
11A-Ant1-5825-PASS



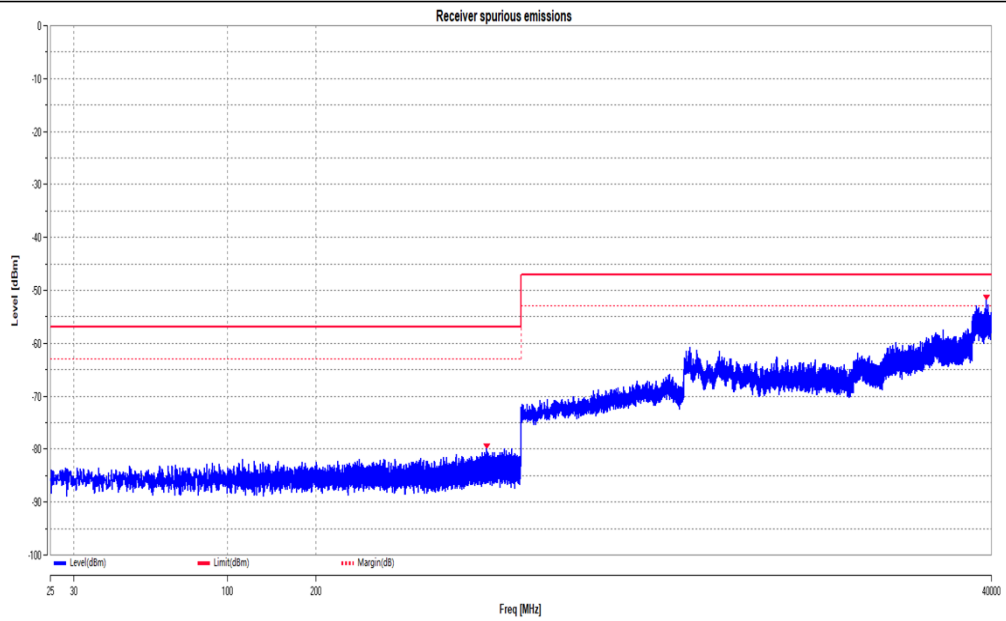
11A-Ant2-5825-PASS



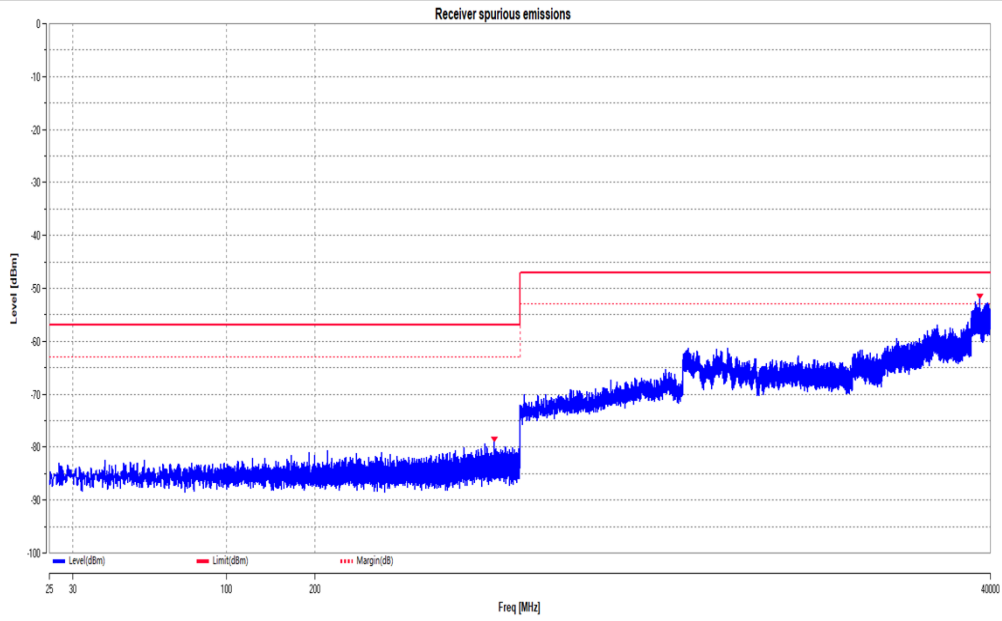
11A-Ant3-5825-PASS



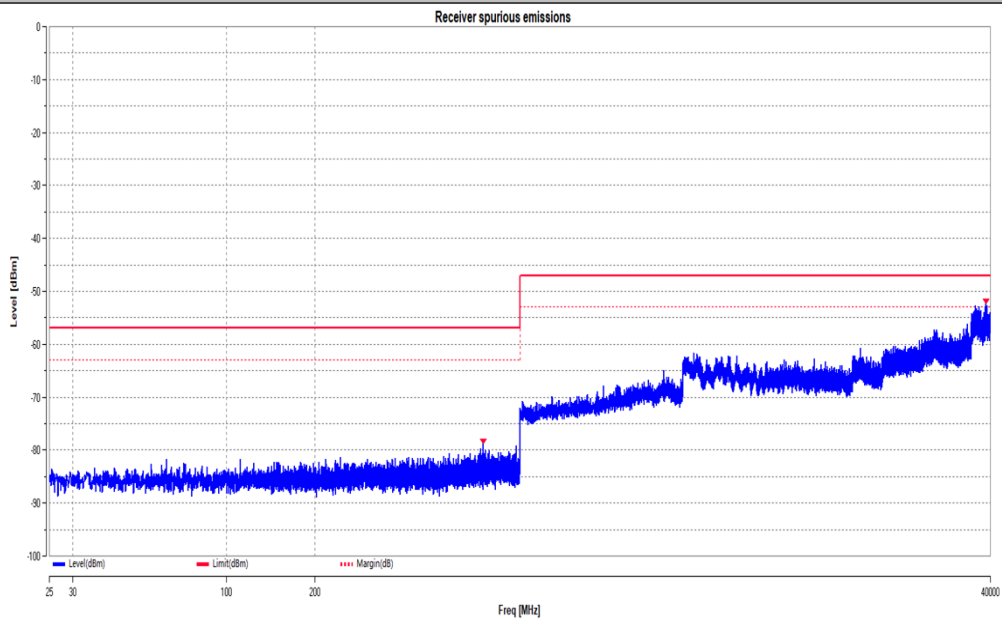
11A-Ant1-5745-PASS



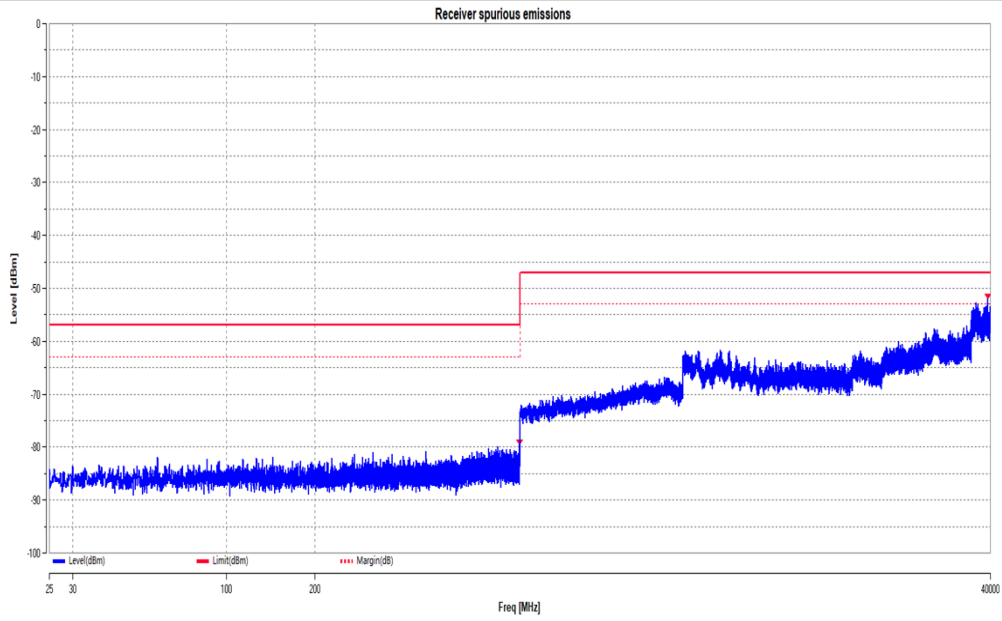
11A-Ant2-5745-PASS



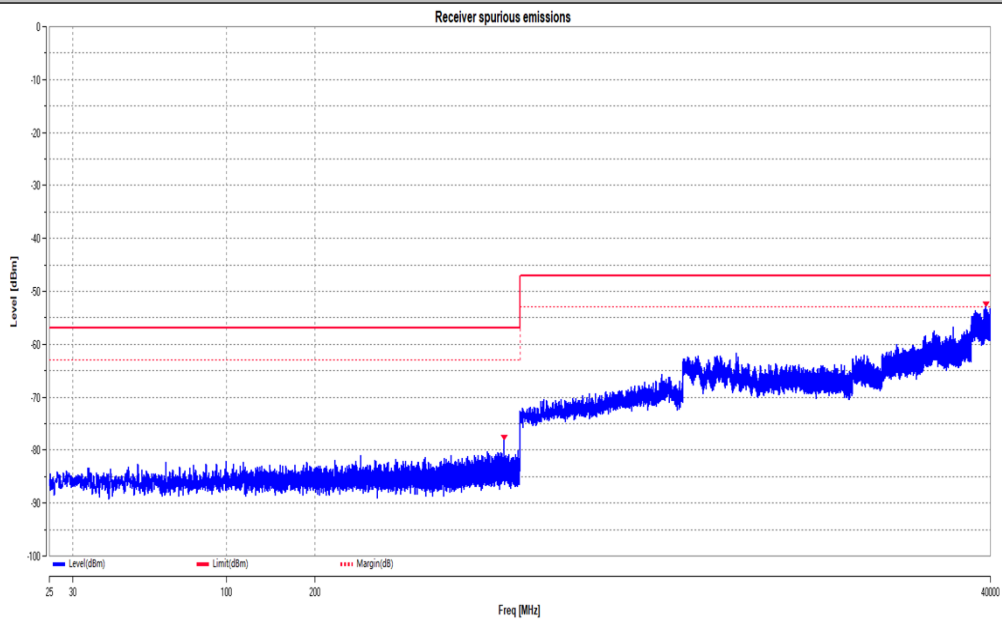
11A-Ant3-5745-PASS



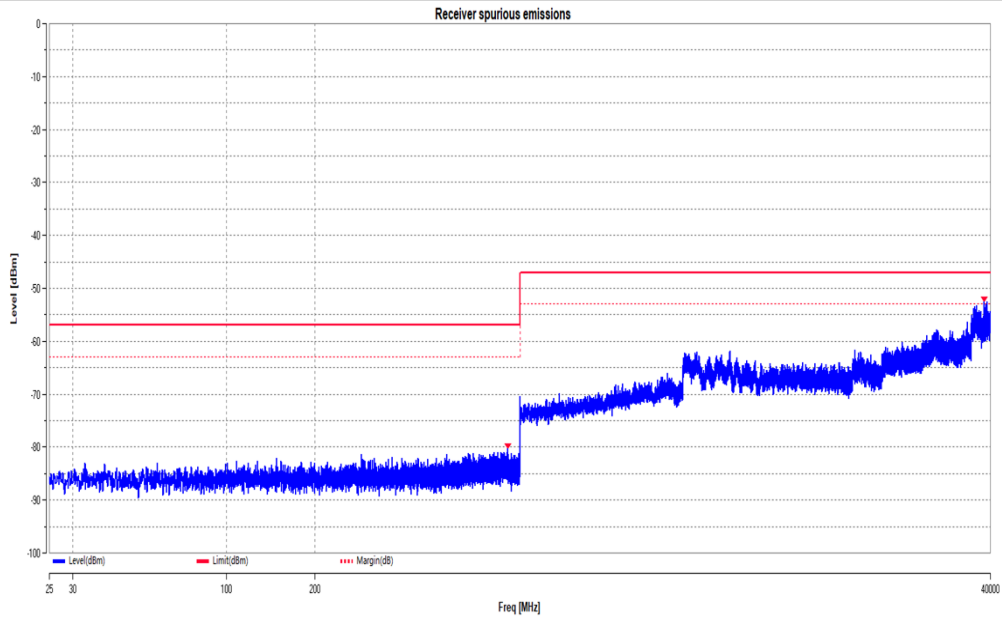
11A-Ant1-5785-PASS



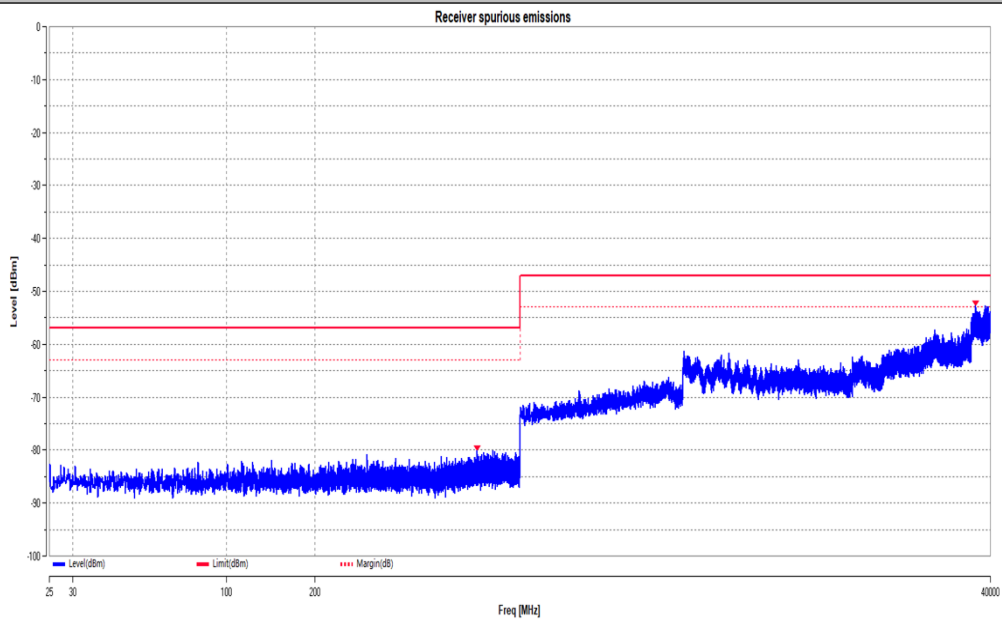
11A-Ant2-5785-PASS



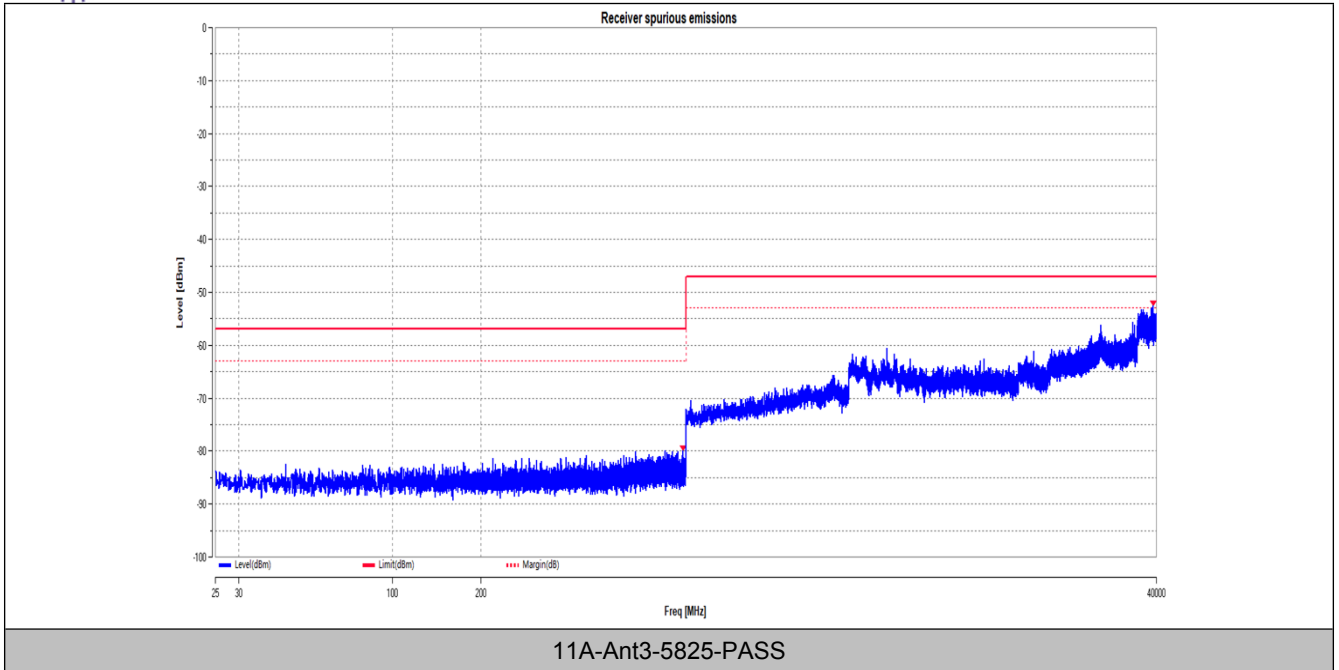
11A-Ant3-5785-PASS



11A-Ant1-5825-PASS



11A-Ant2-5825-PASS



### 3.4 Adjacent channel selectivity

#### 3.4.1 Limit

| Receiver Category | Limit       |
|-------------------|-------------|
| 1                 | -30 dBm + k |
| 2                 | No limit    |
| 3                 | No limit    |

The correction factor, k, is as follows:

$$k = -20\log f - 10\log BW$$

Where:

f is the frequency in GHz;

BW is the channel bandwidth in MHz.

The factor k is limited within the following:

$$-40 \text{ dBm} < K < 0$$

The measured blocking level shall be stated in the test report.

#### 3.4.2 Test Procedure

Two signal generators A and B shall be connected to the receiver via a combining network to the receiver, either:

- a) via a test fixture or a test antenna to the receiver integrated, dedicated or test antenna; or
- b) directly to the receiver permanent or temporary antenna connector.

The method of coupling to the receiver shall be stated in the test report.

Signal generator A shall be at the nominal frequency of the receiver, with normal modulation of the wanted signal.

Signal generator B shall be unmodulated and shall be adjusted to a test frequency at approximately 10 times, 20 times and 50 times of the receive channel bandwidth above upper band edge of the receive channel.

Initially signal generator B shall be switched off and using signal generator A the level which still gives sufficient response shall be established. The output level of generator A shall then be increased by 3 dB.

Signal generator B is then switched on and adjusted until the wanted criteria are met. This level shall be recorded.

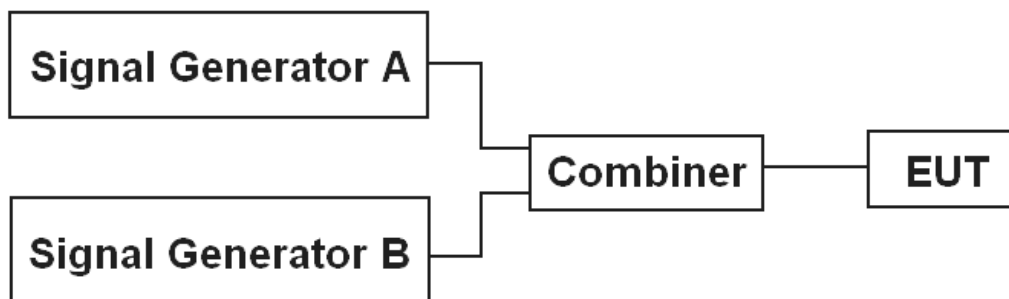
The measurement shall be repeated with the test frequency for signal generator B at approximately 10 times, 20 times and 50 times of the receive channel bandwidth below the lower band edge of the receive channel.

The blocking or desensitization shall be recorded as the level in dBm of lowest level of the unwanted signal (generator B).

For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres. In this case, the blocking or desensitization shall be recorded as the ratio in dB of lowest level of the unwanted signal (generator B) resulting in a

non-read of the tag. to the declared sensitivity of the receiver +3 dB.

### 3.4.3 Test Setup



### 3.4.4 Test Result (worst case)

| Test Channel (MHz) | Test mode | Frequency offset    | Test results (dBm) | Limit (dBm) |
|--------------------|-----------|---------------------|--------------------|-------------|
| 5785               | 802.11a   | + channel bandwidth | -46.75             | -57.39      |
|                    |           | - channel bandwidth | -48.36             | -57.39      |

Remark: EUT is category 1 receiver.

BW=16.400MHz (declared by manufacturer)

For 5785MHz:  $k = -20 \log 5.785 - 10 \log 16.400 = -27.39$

## 3.5 Blocking or desensitization

### 3.5.1 Limit

| Receiver category | Limit                                     |
|-------------------|-------------------------------------------|
| 1                 | -30 dBm + k                               |
| 2                 | -45 dBm + k                               |
| 3                 | -60 dBm + k (only from EN 300 440 v2.2.1) |

The correction factor, k, is as follows:

$$k = -20\log f - 10\log BW$$

Where:

- f is the frequency in GHz;
- BW is the channel bandwidth in MHz.

The factor k is limited within the following:

- $0 < k < 40$  dB.

The measured blocking level shall be stated in the test report.

### 3.5.2 Test Procedure

Two signal generators A and B shall be connected to the receiver via a combining network to the receiver, either:

- via a test fixture or a test antenna to the receiver integrated, dedicated or test antenna; or
- directly to the receiver permanent or temporary antenna connector.

The method of coupling to the receiver shall be stated in the test report.

Signal generator A shall be at the nominal frequency of the receiver, with normal modulation of the wanted signal.

Signal generator B shall be unmodulated and shall be adjusted to a test frequency at approximately 10 times, 20 times and 50 times of the receive channel bandwidth above upper band edge of the receive channel.

Initially signal generator B shall be switched off and using signal generator A the level which still gives sufficient response shall be established. The output level of generator A shall then be increased by 3 dB.

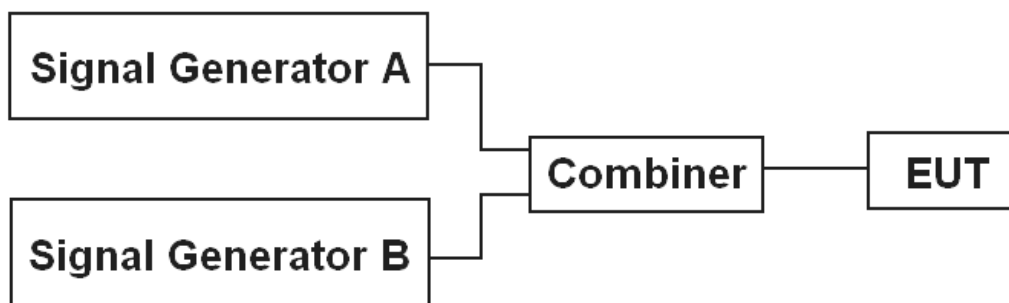
Signal generator B is then switched on and adjusted until the wanted criteria are met. This level shall be recorded.

The measurement shall be repeated with the test frequency for signal generator B at approximately 10 times, 20 times and 50 times of the receive channel bandwidth below the lower band edge of the receive channel.

The blocking or desensitization shall be recorded as the level in dBm of lowest level of the unwanted signal (generator B).

For tagging systems (e.g. RF identification, anti-theft, access control, location and similar systems) signal generator A may be replaced by a physical tag positioned at 70 % of the measured system range in metres. In this case, the blocking or desensitization shall be recorded as the ratio in dB of lowest level of the unwanted signal (generator B) resulting in a non-read of the tag. to the declared sensitivity of the receiver +3 dB.

### 3.5.3 Test Setup



### 3.5.4 Test Result (worst case for 802.11a)

| Test Channel (MHz) | Blocking Signal Frequency (MHz) | Blocking Signal Power (dBm) | Type of Blocking Signal | Limit (dBm) | Result |
|--------------------|---------------------------------|-----------------------------|-------------------------|-------------|--------|
| 5745               | 5580.94                         | -51.81                      | CW                      | -57.34      | PASS   |
|                    | 5416.88                         | -51.14                      | CW                      | -57.34      | PASS   |
|                    | 4924.7                          | -50.55                      | CW                      | -57.34      | PASS   |
|                    | 5909.06                         | -49.70                      | CW                      | -57.34      | PASS   |
|                    | 6073.12                         | -50.52                      | CW                      | -57.34      | PASS   |
|                    | 6565.3                          | -51.21                      | CW                      | -57.34      | PASS   |
| 5825               | 5660.94                         | -51.57                      | CW                      | -57.46      | PASS   |
|                    | 5496.88                         | -50.48                      | CW                      | -57.46      | PASS   |
|                    | 5004.7                          | -49.41                      | CW                      | -57.46      | PASS   |
|                    | 5989.06                         | -49.69                      | CW                      | -57.46      | PASS   |
|                    | 6153.12                         | -50.21                      | CW                      | -57.46      | PASS   |
|                    | 6645.3                          | -51.34                      | CW                      | -57.46      | PASS   |

Remark: EUT is category 1 receiver.

5745MHz: BW=16.428MHz

5825MHz: BW=16.432MHz

For 5745MHz:  $k = -20 \log 5.745 - 10 \log 16.428 = -27.34$

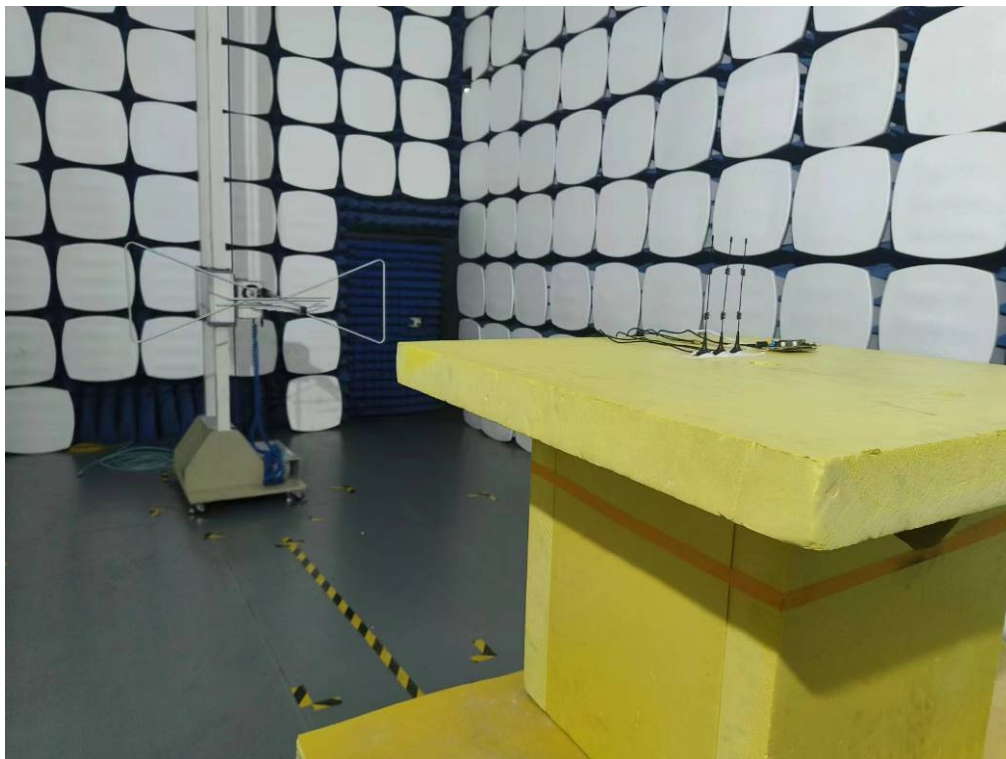
For 5825MHz:  $k = -20 \log 5.825 - 10 \log 16.432 = -27.46$

## 4. Photographs of EUT

Refer to Report No: EMC240311020-01-001 for Appendix-B Photographs of EUT.

## 5. Photographs of Radiated Test Set-up

Below 1G



Above 1G



## Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

## Shenzhen Haiyun Standard Technology Co., Ltd.

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Email: service@hy-lab.cn

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(END OF REPORT)