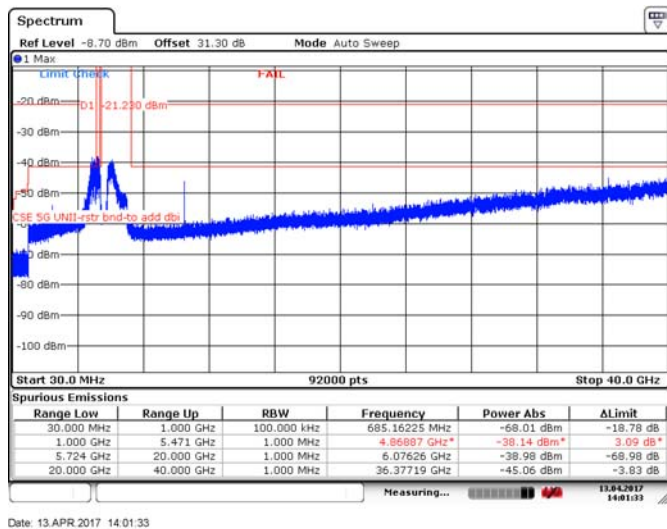


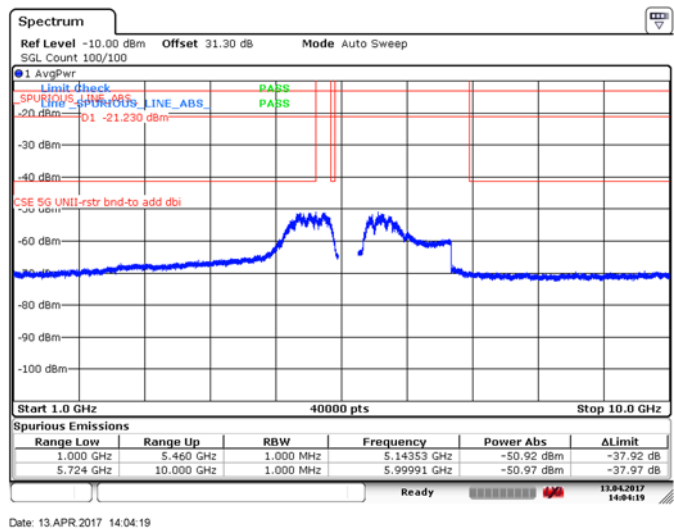
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



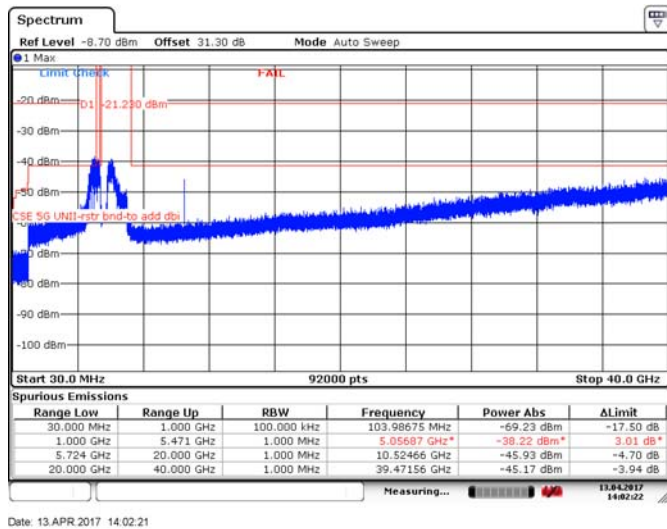
Date: 13 APR 2017 14:01:33

**Figure 8.4-217:** Spurious emissions within restricted bands, 10 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



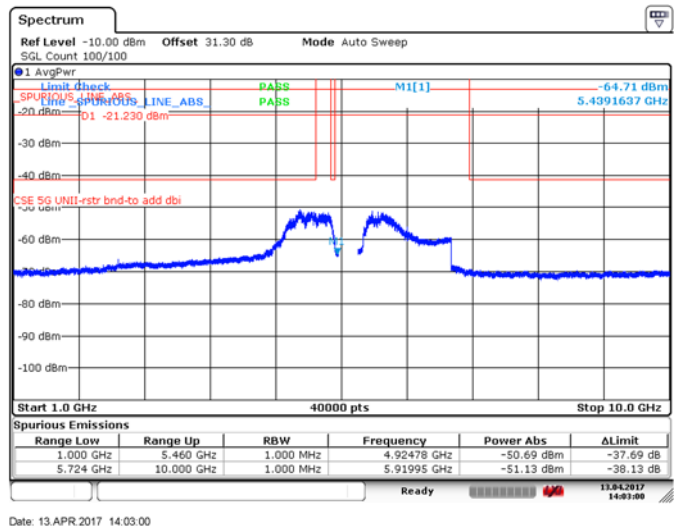
Date: 13 APR 2017 14:04:19

**Figure 8.4-218:** Average Spurious emissions within restricted bands, 10 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



Date: 13 APR 2017 14:02:21

**Figure 8.4-219:** Spurious emissions within restricted bands, 10 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

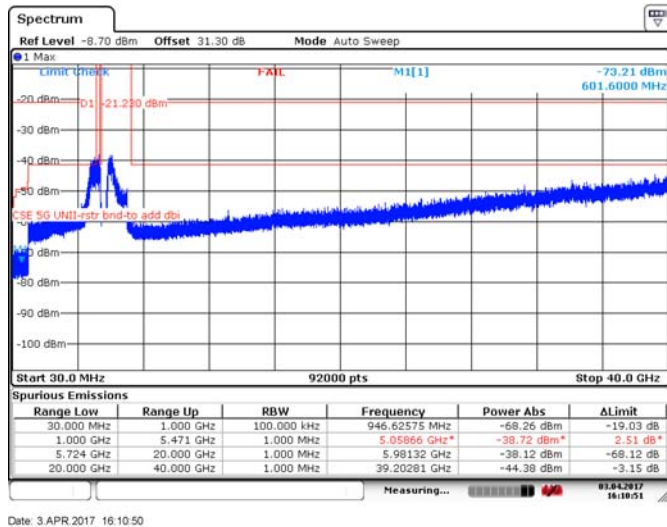


Date: 13 APR 2017 14:03:00

**Figure 8.4-220:** Average Spurious emissions within restricted bands, 10 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

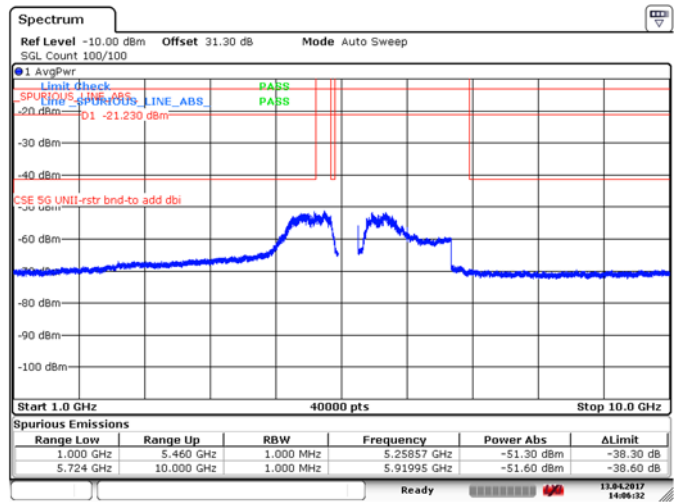
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = –21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = –41.23 dBm



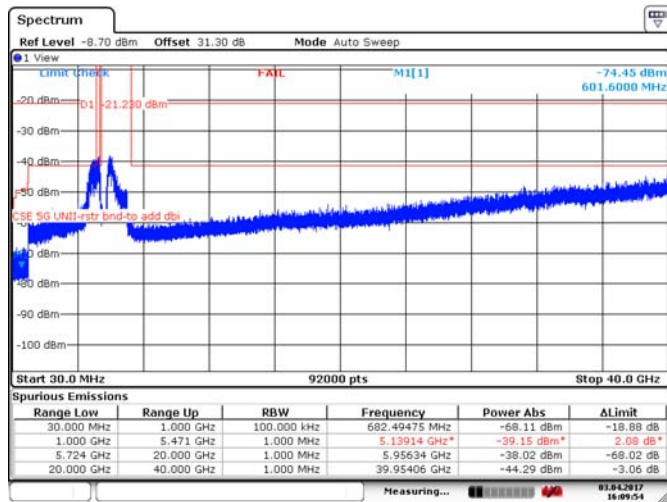
Date: 3 APR 2017 16:10:50

**Figure 8.4-221:** Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, cho, BPSK



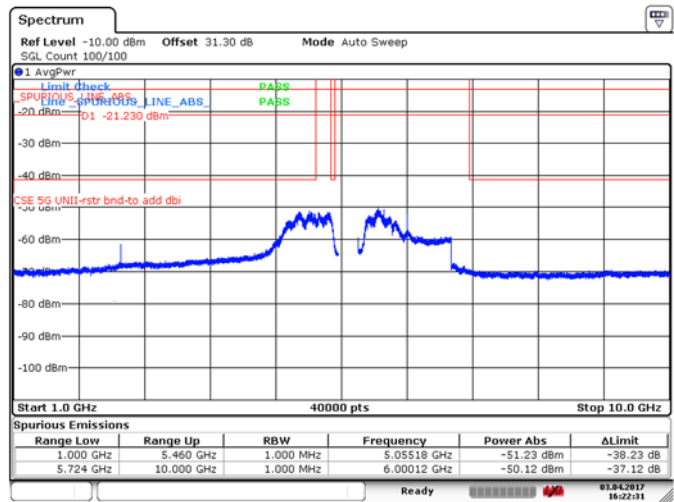
Date: 13 APR 2017 14:06:32

**Figure 8.4-222:** Average Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, cho, BPSK



Date: 3 APR 2017 16:09:54

**Figure 8.4-223:** Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, cho, 256-QAM

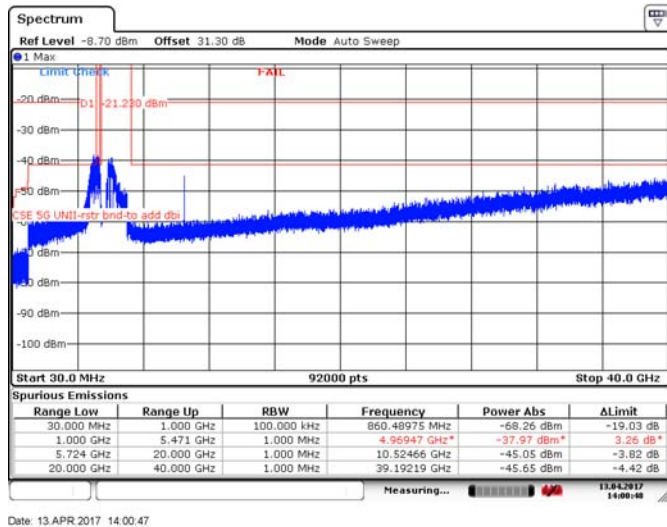


Date: 3 APR 2017 16:22:31

**Figure 8.4-224:** Average Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, cho, 256-QAM

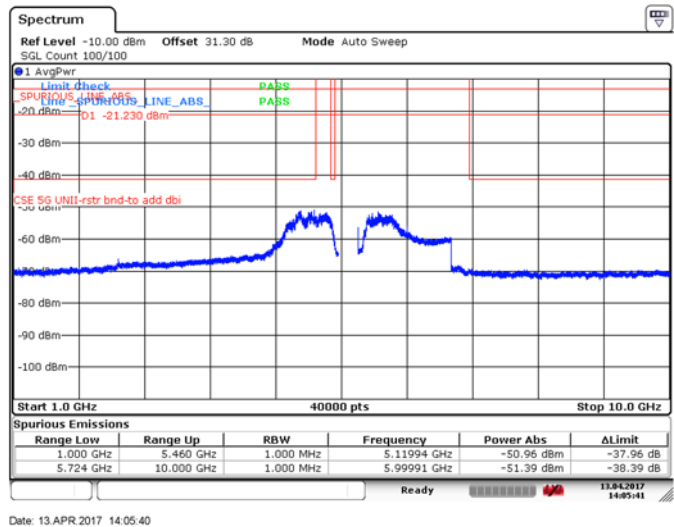
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = –21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = –41.23 dBm



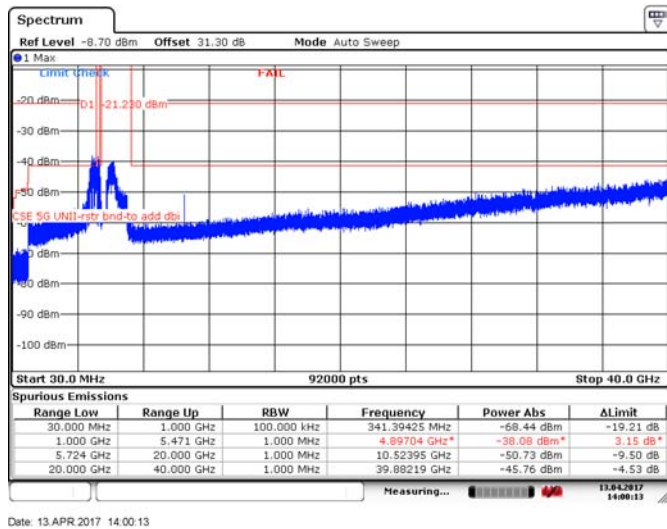
Date: 13 APR 2017 14:00:47

**Figure 8.4-225:** Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, ch1, BPSK



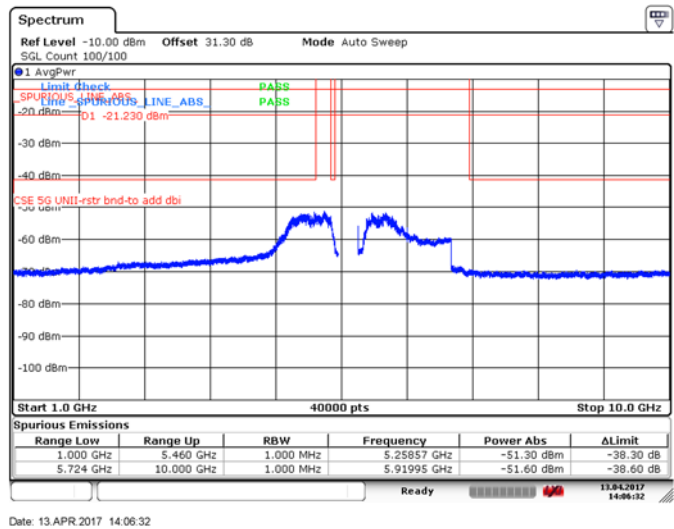
Date: 13 APR 2017 14:05:40

**Figure 8.4-226:** Average Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, ch1, BPSK



Date: 13 APR 2017 14:00:13

**Figure 8.4-227:** Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, ch1, 256-QAM

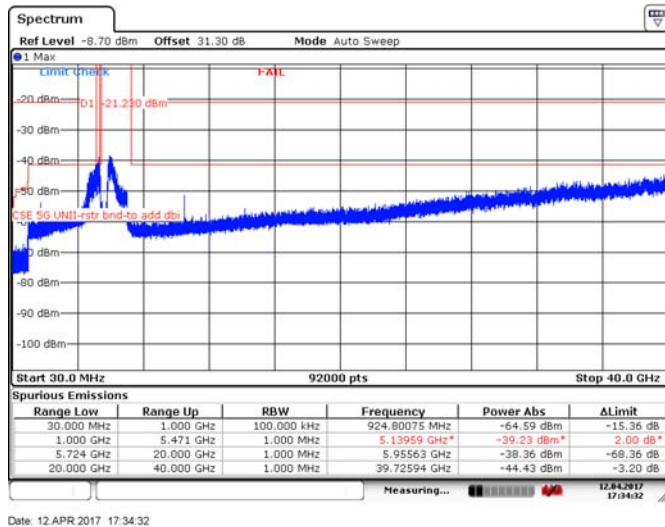


Date: 13 APR 2017 14:06:32

**Figure 8.4-228:** Average Spurious emissions within restricted bands, 10 MHz channel, high channel, 32 dBi antenna, ch1, 256-QAM

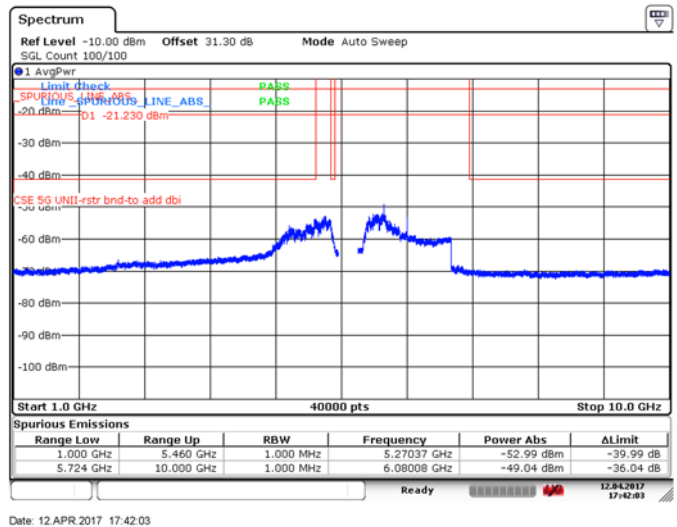
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



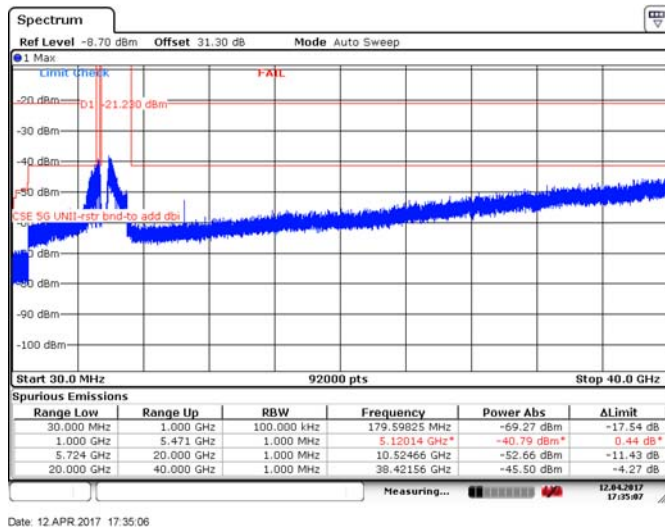
Date: 12 APR 2017 17:34:32

**Figure 8.4-229:** Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, cho, BPSK



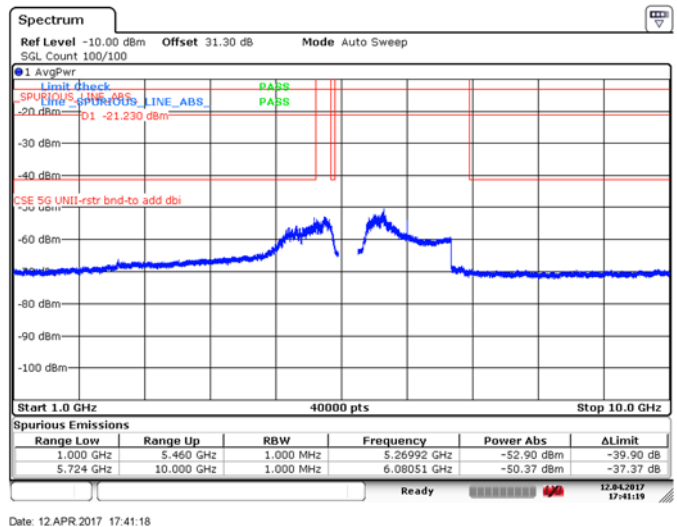
Date: 12 APR 2017 17:42:03

**Figure 8.4-230:** Average Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, cho, BPSK



Date: 12 APR 2017 17:35:06

**Figure 8.4-231:** Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, cho, 256QAM

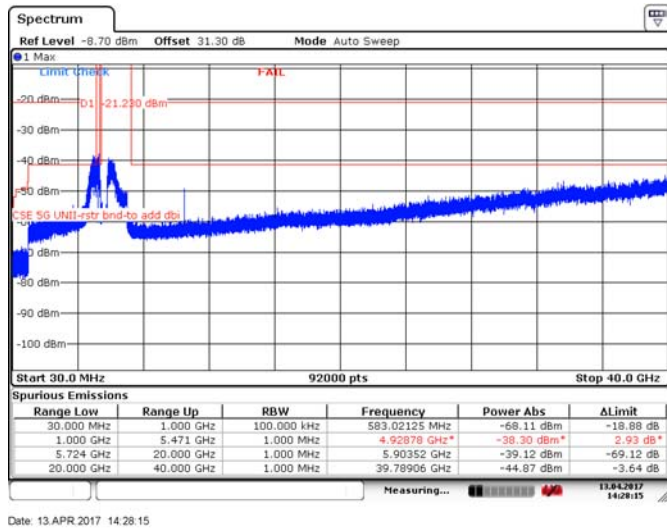


Date: 12 APR 2017 17:41:18

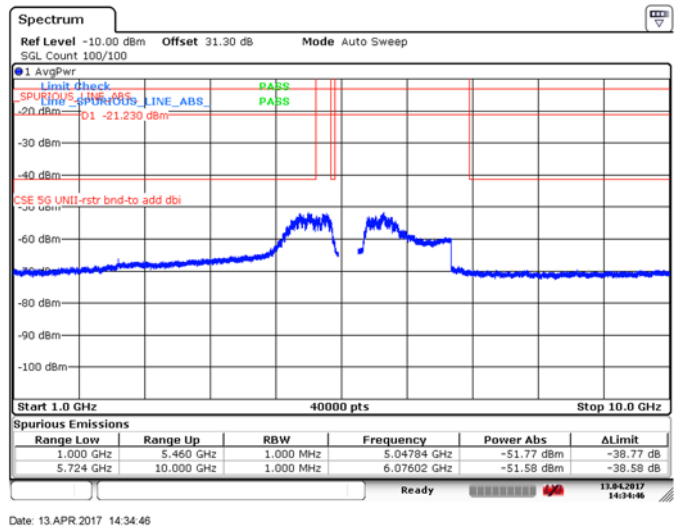
**Figure 8.4-232:** Average Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, cho, 256QAM

**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

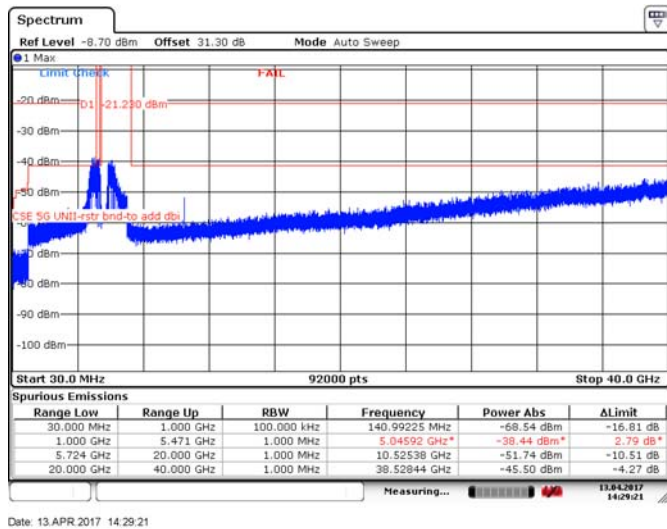
Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



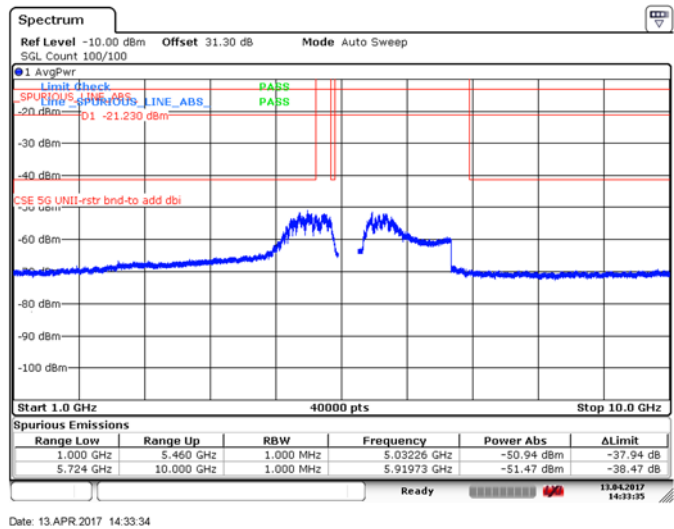
**Figure 8.4-233:** Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, ch1, BPSK



**Figure 8.4-234:** Average Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, ch1, BPSK



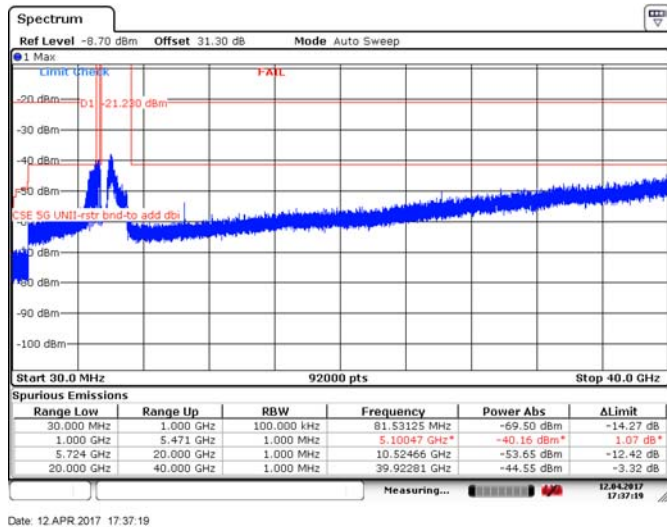
**Figure 8.4-235:** Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, ch1, 256QAM



**Figure 8.4-236:** Average Spurious emissions within restricted bands, 20 MHz channel, low channel, 32 dBi antenna, ch1, 256QAM

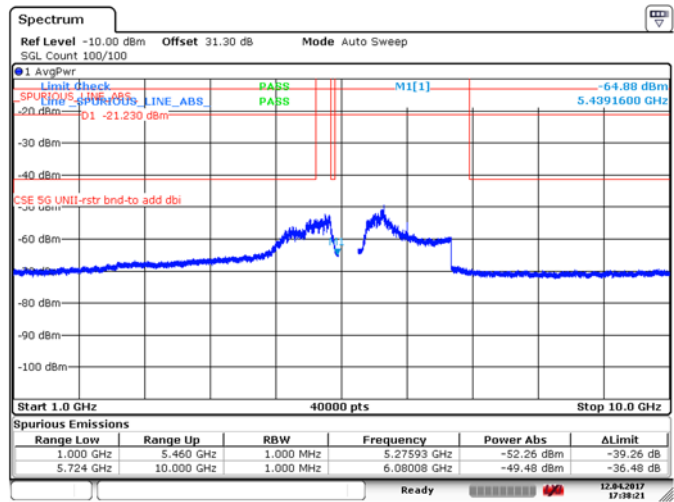
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



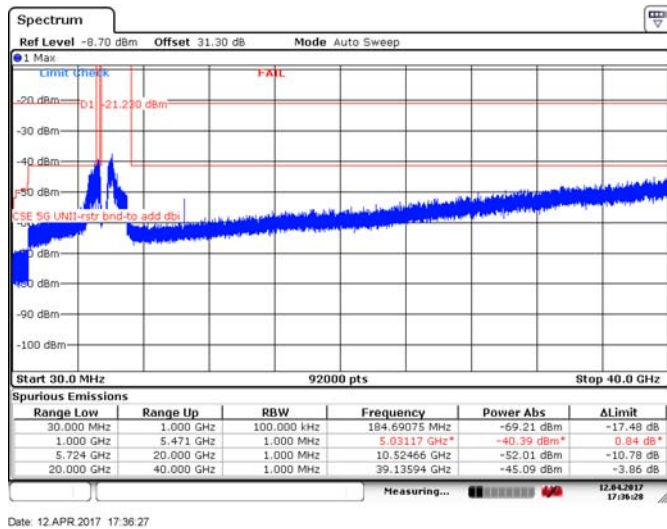
Date: 12 APR 2017 17:37:19

**Figure 8.4-237:** Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, cho, BPSK



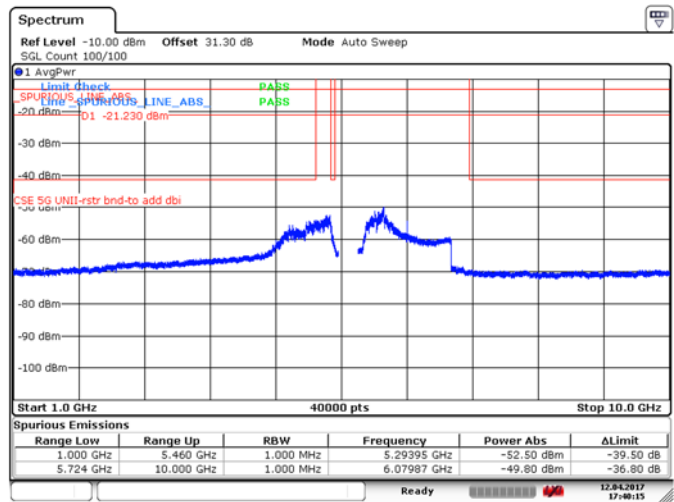
Date: 12 APR 2017 17:38:21

**Figure 8.4-238:** Average Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, cho, BPSK



Date: 12 APR 2017 17:36:27

**Figure 8.4-239:** Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, cho, 256-QAM

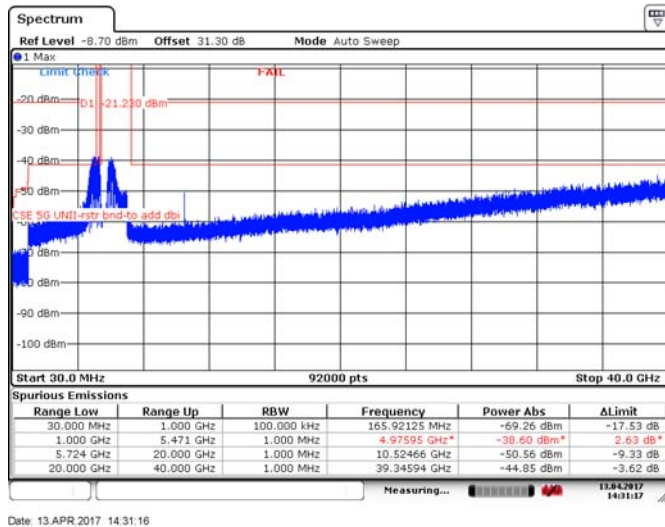


Date: 12 APR 2017 17:40:15

**Figure 8.4-240:** Average Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, cho, 256-QAM

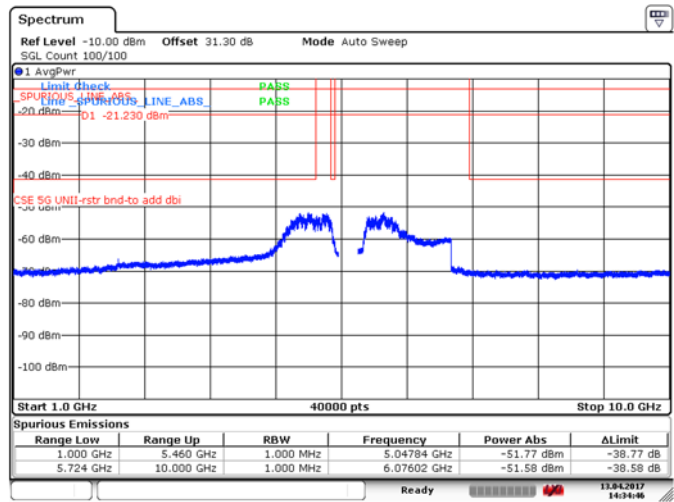
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



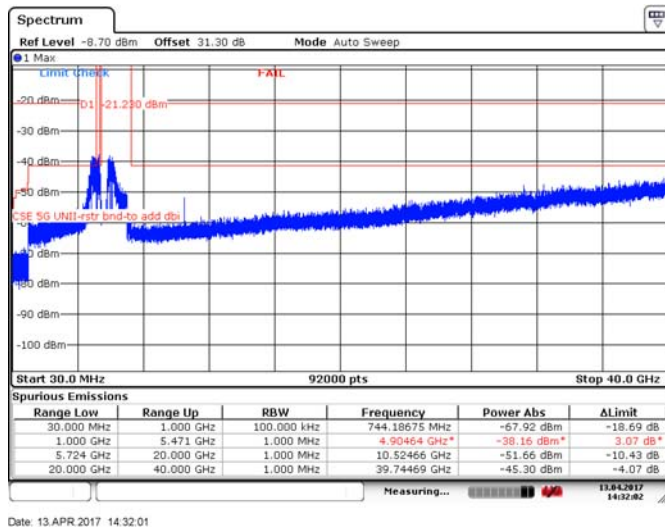
Date: 13 APR 2017 14:31:16

**Figure 8.4-241:** Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



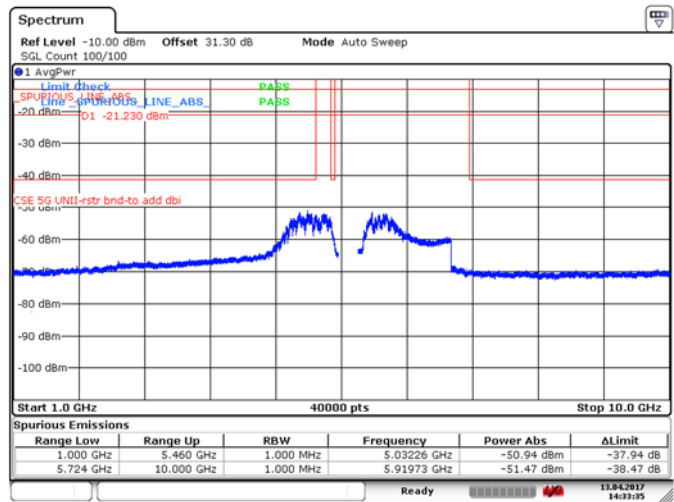
Date: 13 APR 2017 14:34:46

**Figure 8.4-242:** Average Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



Date: 13 APR 2017 14:32:01

**Figure 8.4-243:** Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

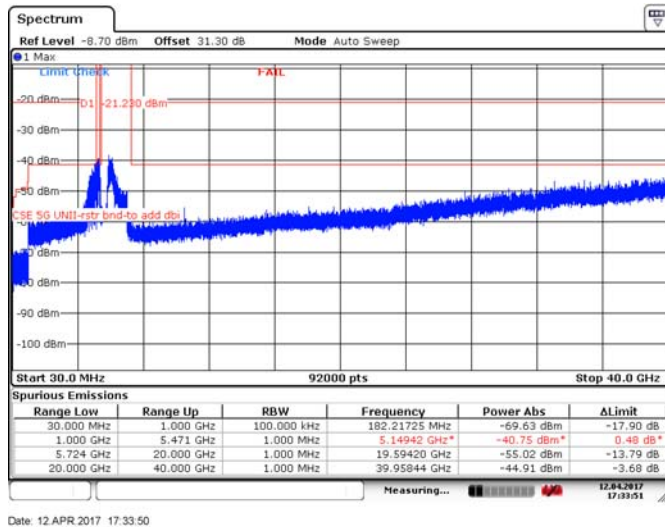


Date: 13 APR 2017 14:33:34

**Figure 8.4-244:** Average Spurious emissions within restricted bands, 20 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

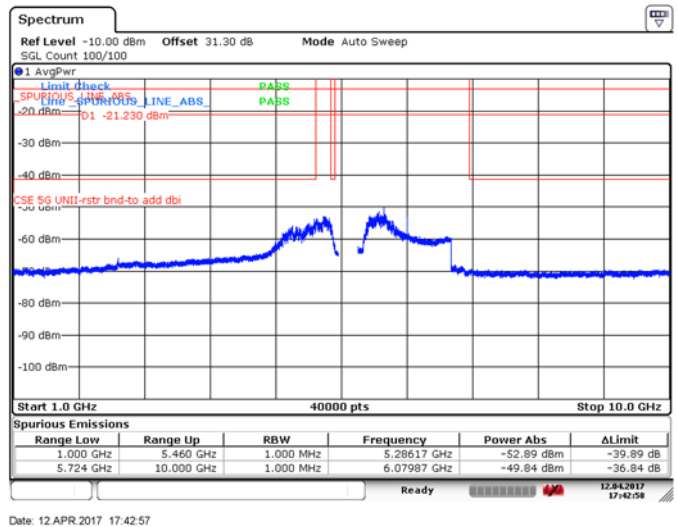
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



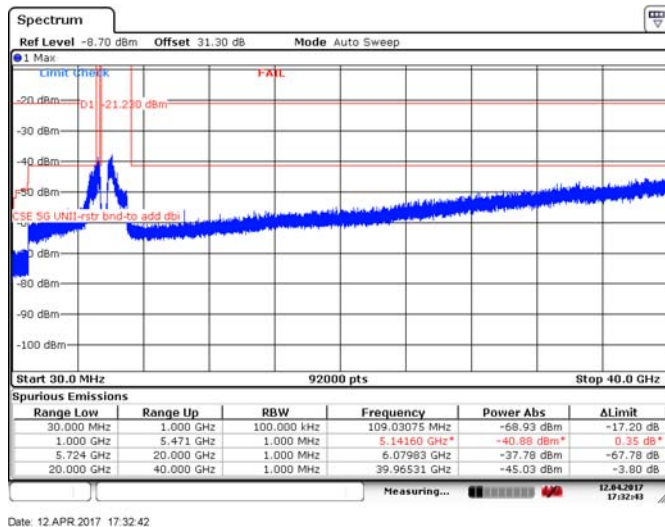
Date: 12 APR 2017 17:33:50

**Figure 8.4-245:** Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, cho, BPSK



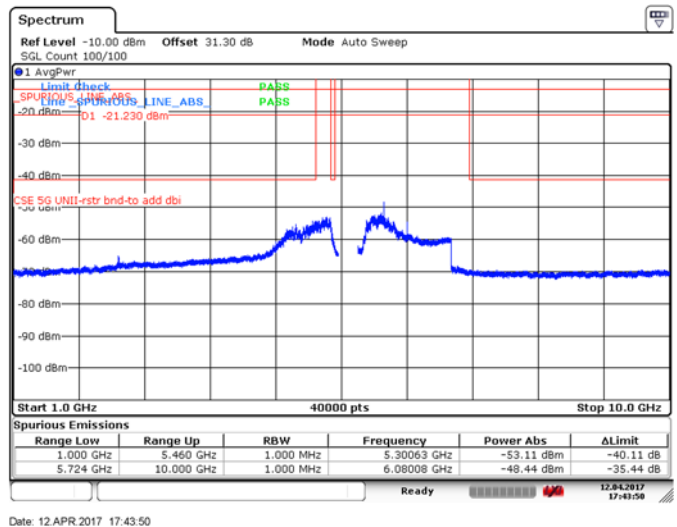
Date: 12 APR 2017 17:42:57

**Figure 8.4-246:** Average Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, cho, BPSK



Date: 12 APR 2017 17:32:42

**Figure 8.4-247:** Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, cho, 256-QAM,



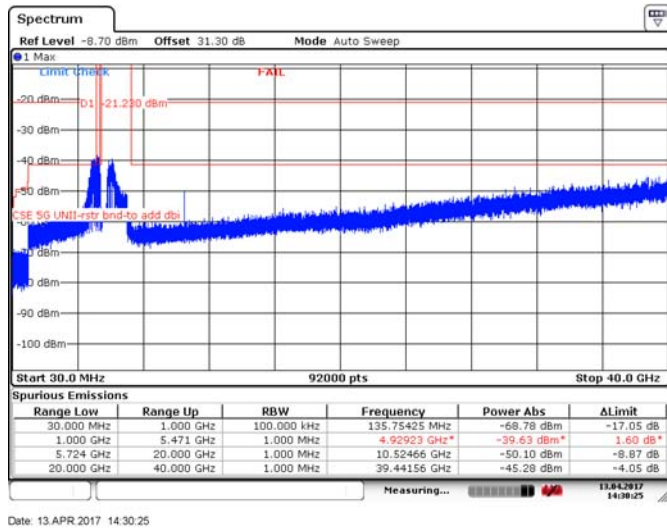
Date: 12 APR 2017 17:43:50

**Figure 8.4-248:** Average Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, cho, 256-QAM,



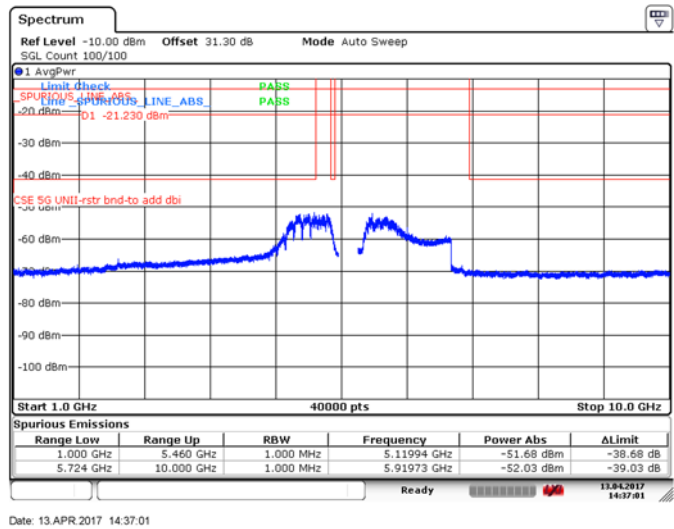
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



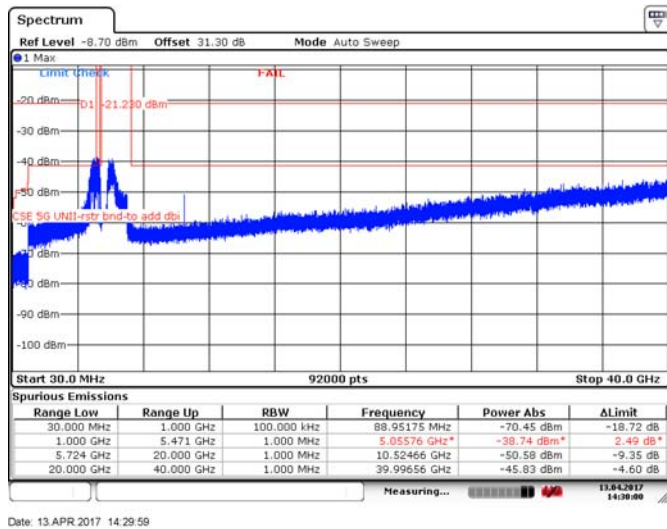
Date: 13 APR 2017 14:30:25

**Figure 8.4-249:** Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, ch1, BPSK



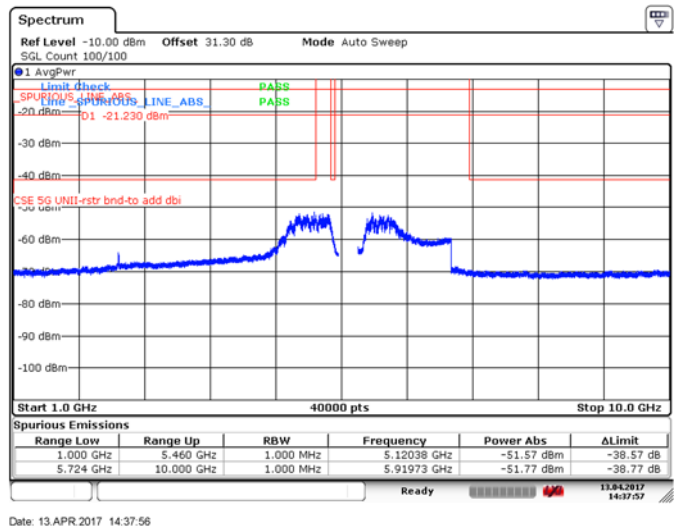
Date: 13 APR 2017 14:37:01

**Figure 8.4-250:** Average Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, ch1, BPSK



Date: 13 APR 2017 14:29:59

**Figure 8.4-251:** Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, ch1, 256-QAM,

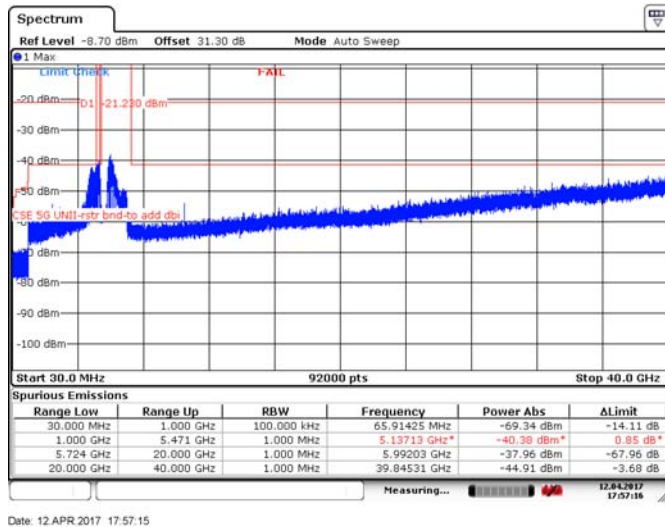


Date: 13 APR 2017 14:37:56

**Figure 8.4-252:** Average Spurious emissions within restricted bands, 20 MHz channel, high channel, 32 dBi antenna, ch1, 256-QAM,

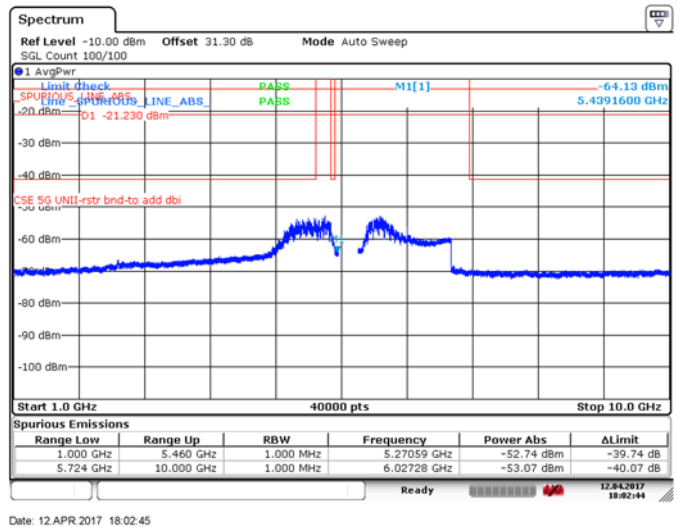
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = –21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = –41.23 dBm



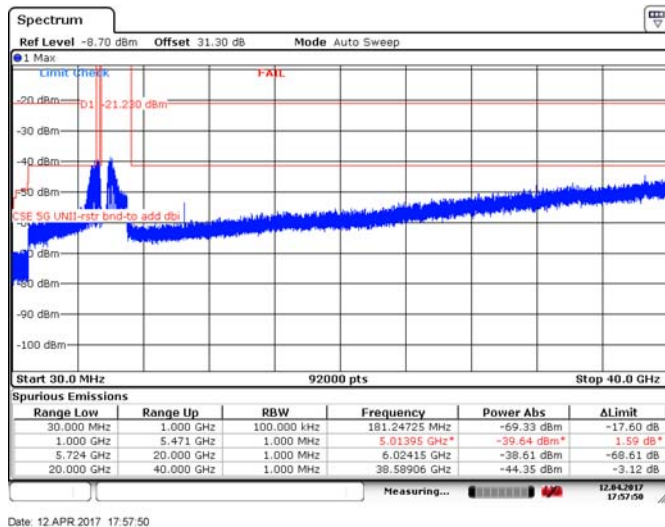
Date: 12 APR 2017 17:57:15

**Figure 8.4-253:** Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, cho, BPSK



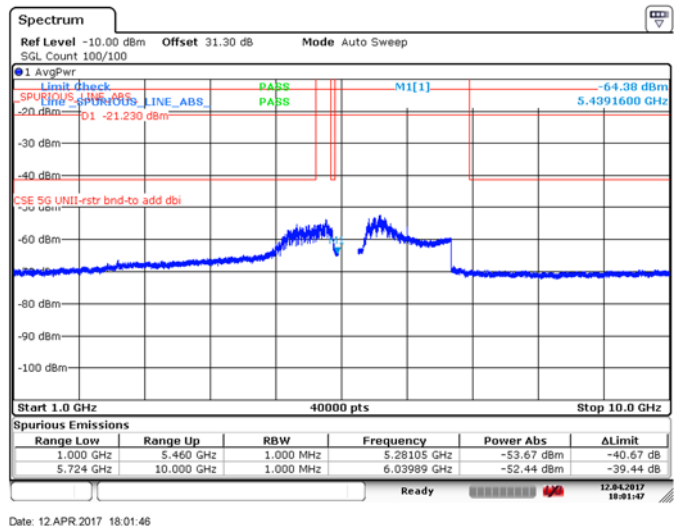
Date: 12 APR 2017 18:02:45

**Figure 8.4-254:** Average Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, cho, BPSK



Date: 12 APR 2017 17:57:50

**Figure 8.4-255:** Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, cho, 256QAM

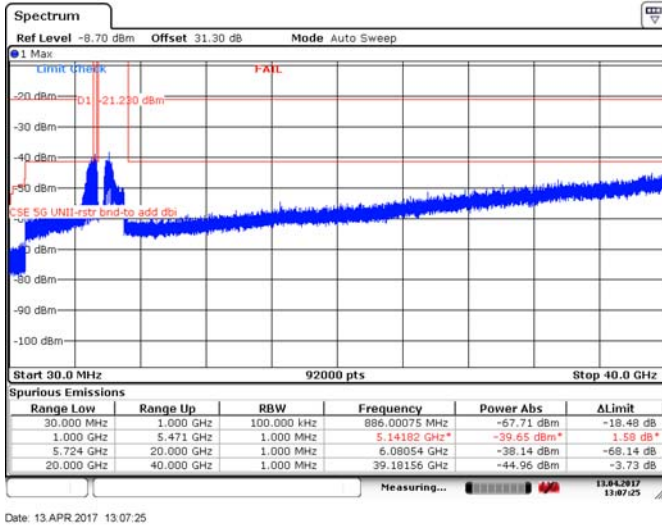


Date: 12 APR 2017 18:01:46

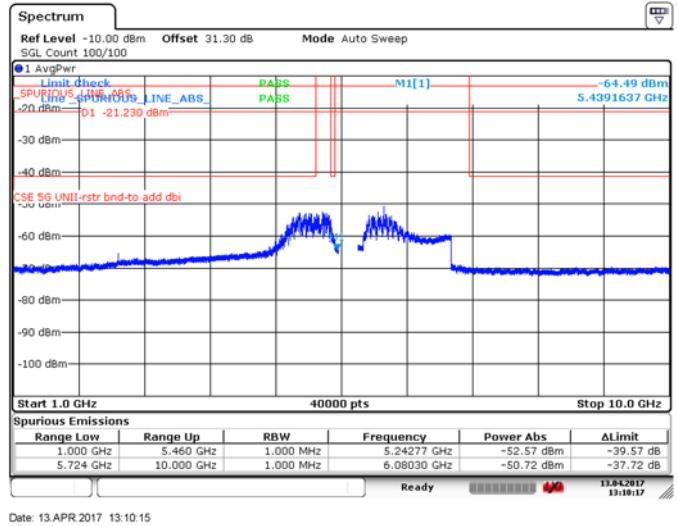
**Figure 8.4-256:** Average Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, cho, 256QAM

**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

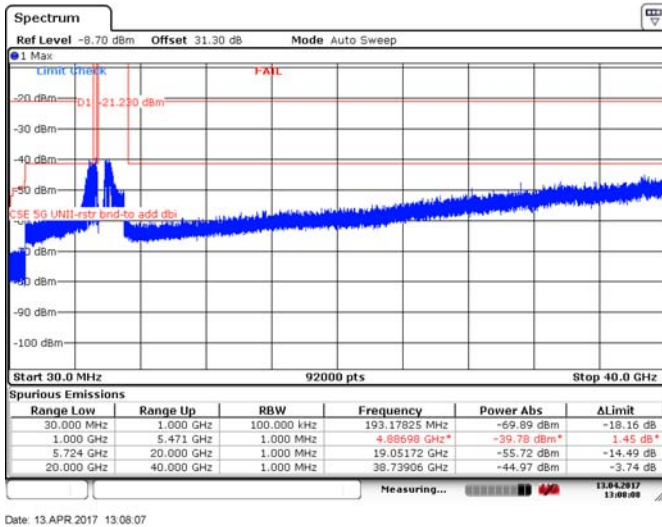
Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = –21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = –41.23 dBm



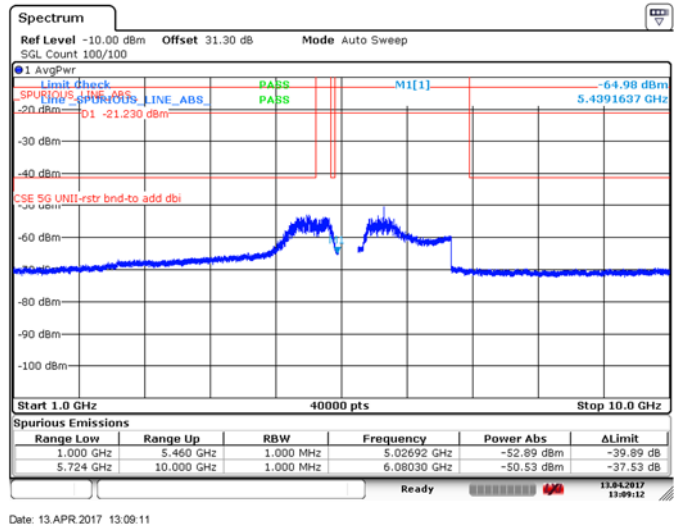
**Figure 8.4-257:** Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, ch1, BPSK



**Figure 8.4-258:** Average Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, ch1, BPSK



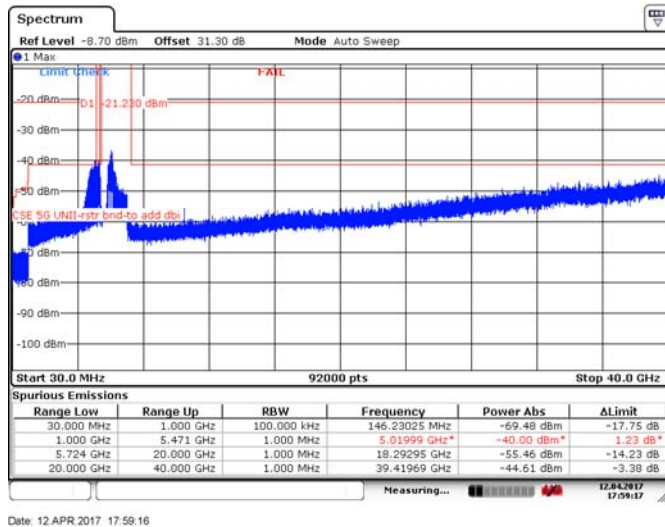
**Figure 8.4-259:** Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, ch1, 256QAM



**Figure 8.4-260:** Average Spurious emissions within restricted bands, 40 MHz channel, low channel, 32 dBi antenna, ch1, 256QAM

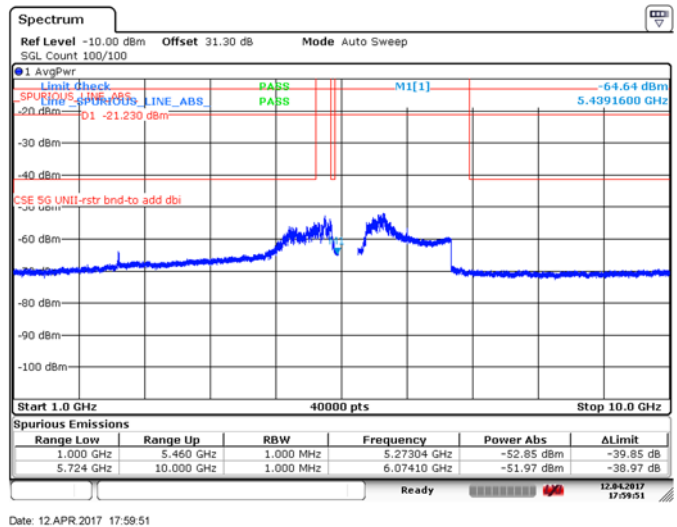
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = –21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = –41.23 dBm



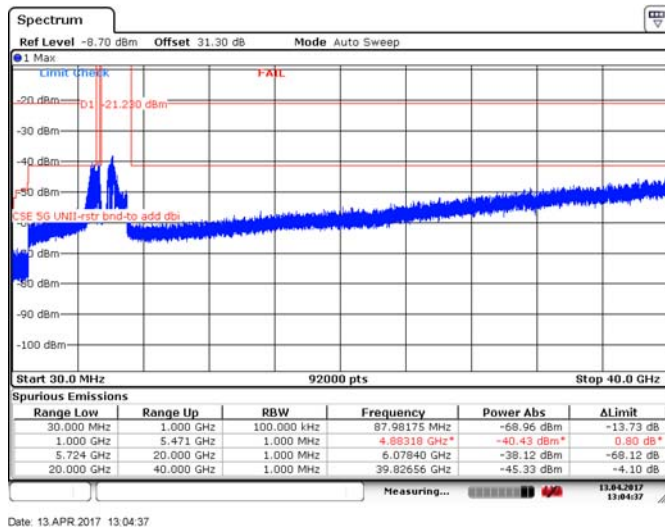
Date: 12 APR 2017 17:59:16

**Figure 8.4-261:** Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, cho, BPSK



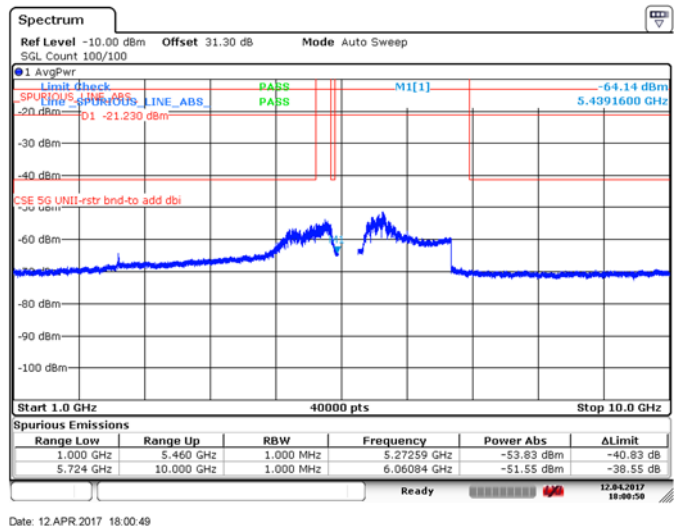
Date: 12 APR 2017 17:59:51

**Figure 8.4-262:** Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



Date: 13 APR 2017 13:04:37

**Figure 8.4-263:** Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, cho, 256-QAM

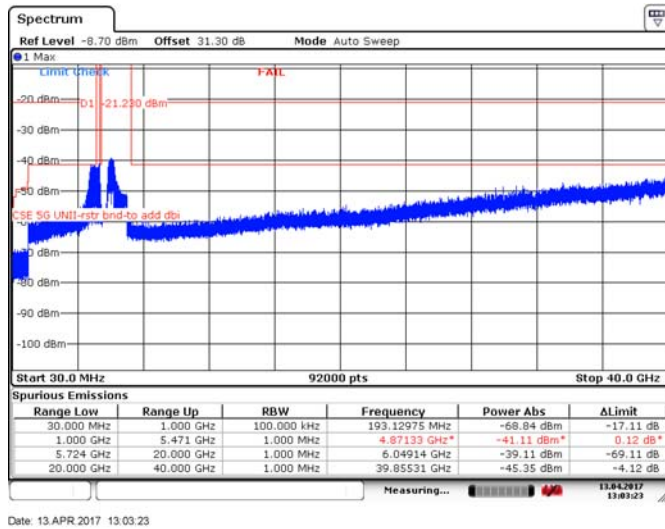


Date: 12 APR 2017 18:00:49

**Figure 8.4-264:** Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

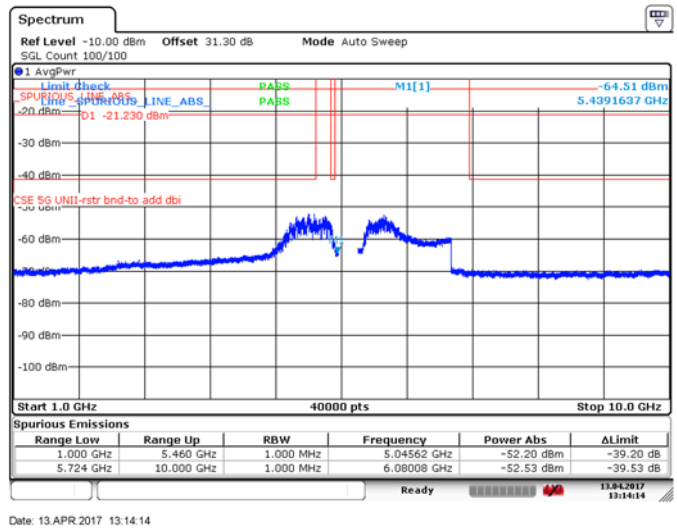
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = –21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = –41.23 dBm



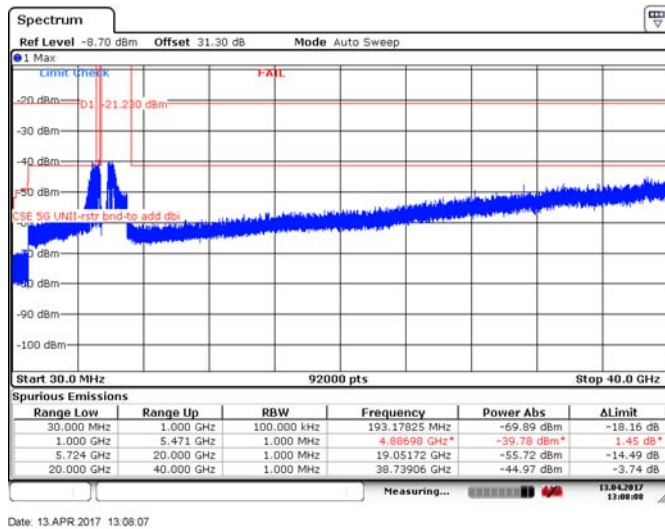
Date: 13 APR 2017 13:03:23

**Figure 8.4-265:** Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



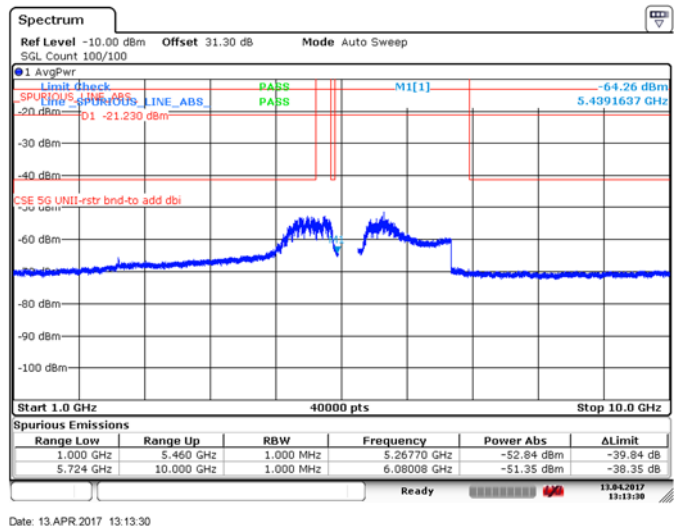
Date: 13 APR 2017 13:14:14

**Figure 8.4-266:** Average Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, ch1, BPSK



Date: 13 APR 2017 13:08:07

**Figure 8.4-267:** Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

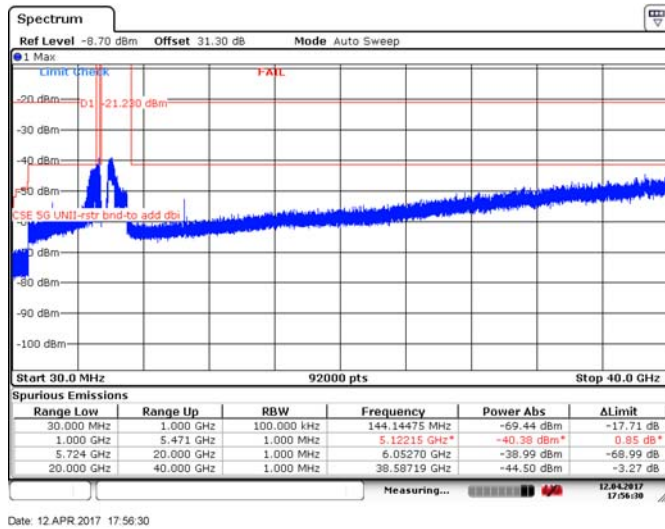


Date: 13 APR 2017 13:13:30

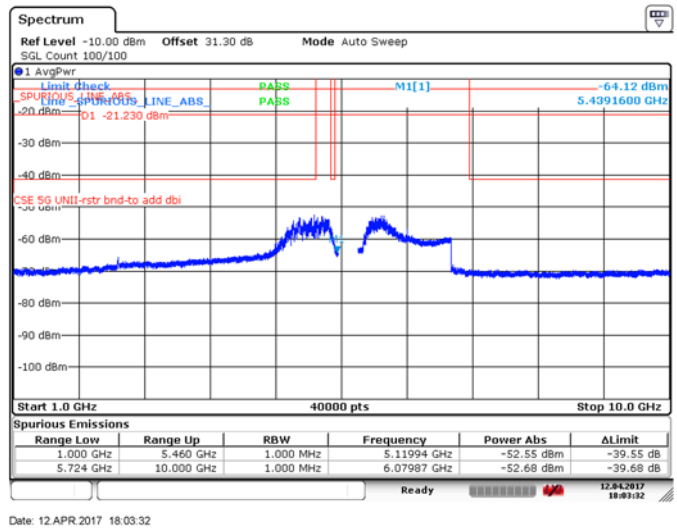
**Figure 8.4-268:** Average Spurious emissions within restricted bands, 40 MHz channel, mid channel, 32 dBi antenna, ch1, 256-QAM

**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

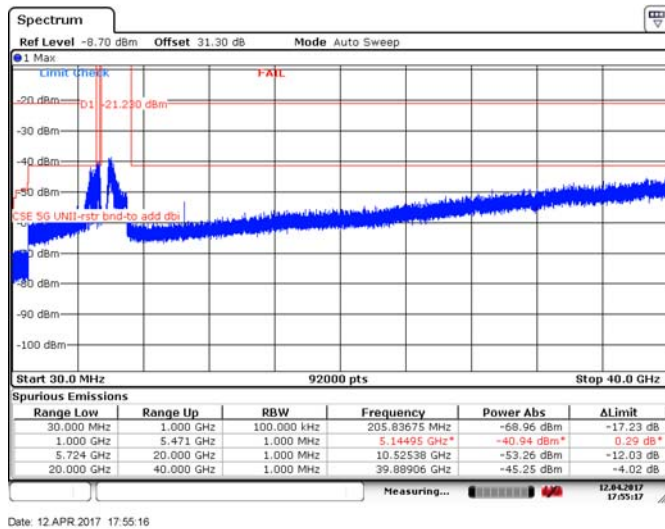
Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



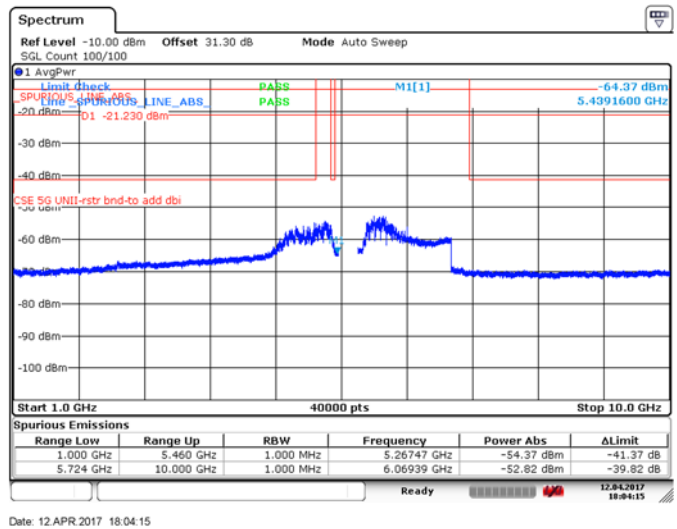
**Figure 8.4-269:** Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, cho, BPSK



**Figure 8.4-270:** Average Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, cho, BPSK



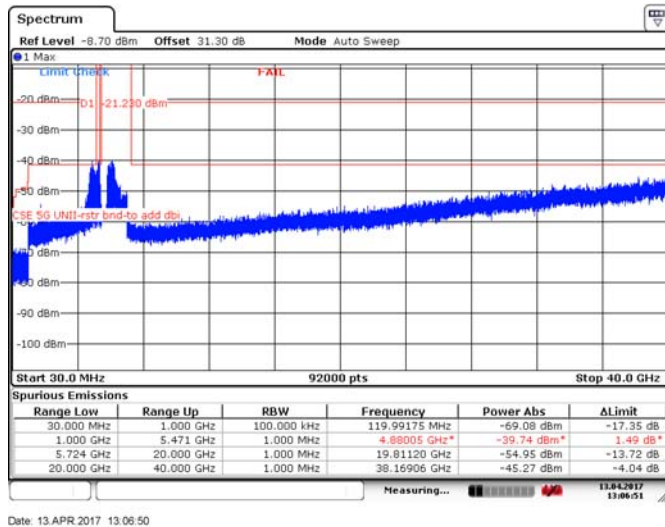
**Figure 8.4-271:** Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, cho, 256-QAM



**Figure 8.4-272:** Average Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, cho, 256-QAM

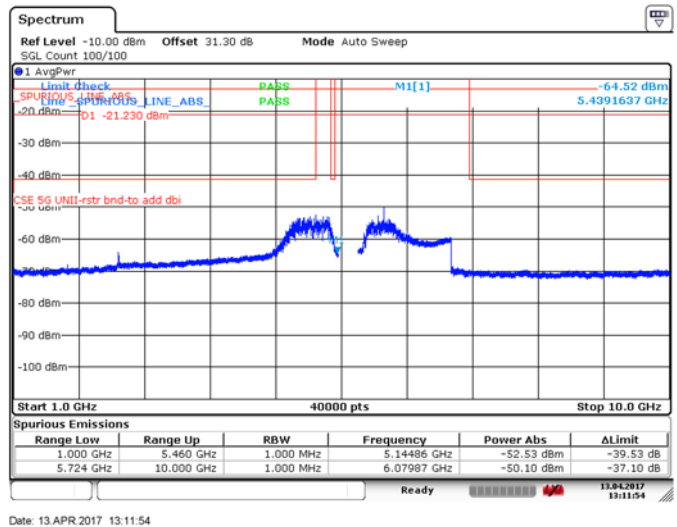
**Section 8** Testing data  
**Test name** FCC 15.407(b) and RSS-247 6.2.3 Spurious (out-of-band) emissions  
**Specification** FCC Part 15 Subpart E and RSS-247 Issue 2

Peak limit EIRP equivalent: 74 dBμV/m – 95.23 dB = -21.23 dBm  
 Average limit EIRP equivalent: 54 dBμV/m – 95.23 dB = -41.23 dBm



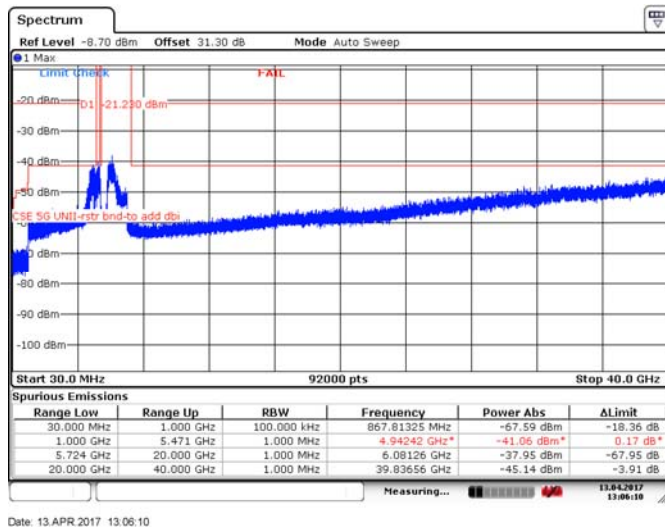
Date: 13.APR 2017 13:06:50

**Figure 8.4-273:** Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, ch1, BPSK



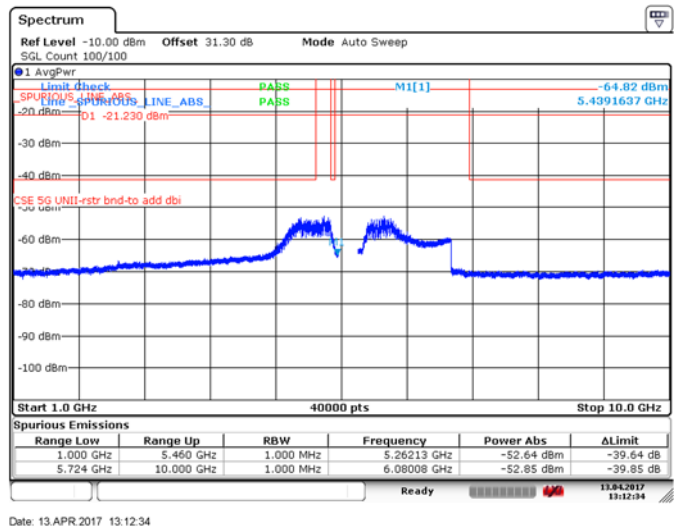
Date: 13.APR 2017 13:11:54

**Figure 8.4-274:** Average Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, ch1, BPSK



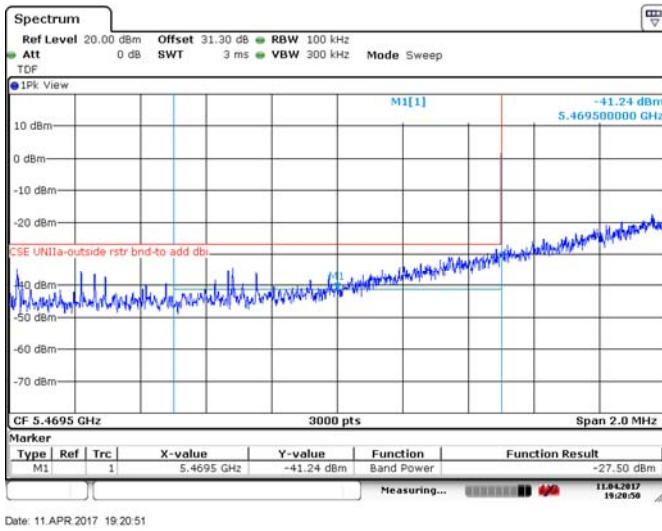
Date: 13.APR 2017 13:06:10

**Figure 8.4-275:** Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, ch1, 256-QAM



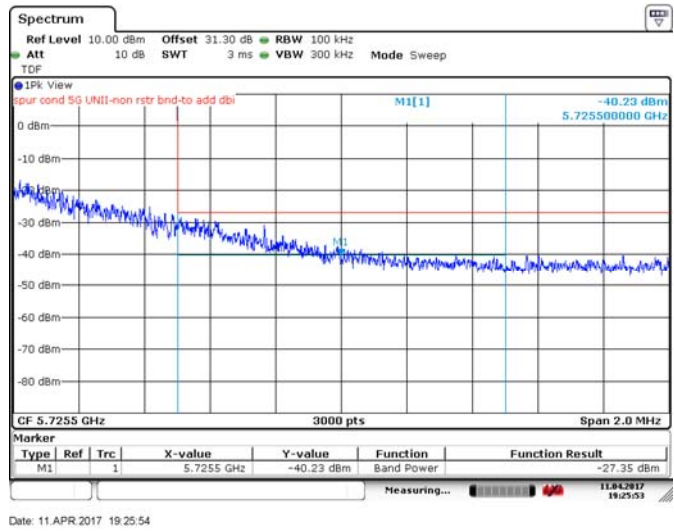
Date: 13.APR 2017 13:12:34

**Figure 8.4-276:** Average Spurious emissions within restricted bands, 40 MHz channel, high channel, 32 dBi antenna, ch1, 256-QAM



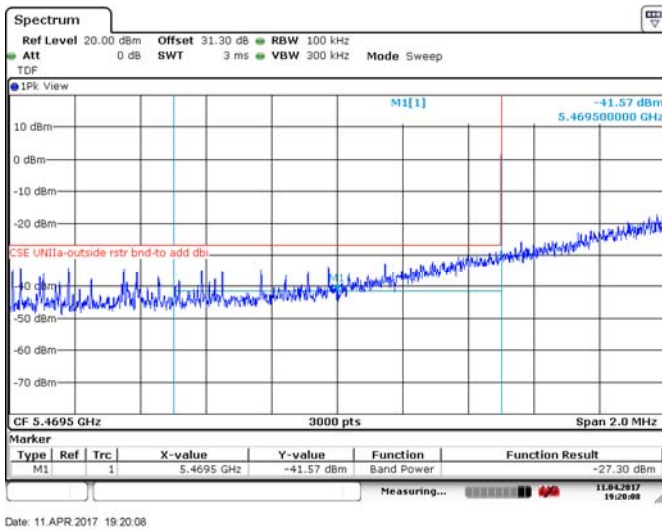
Date: 11.APR.2017 19:20:51

**Figure 8.4-277:** Lower band edge, 10 MHz channel, 32 dBi antenna, BPSK



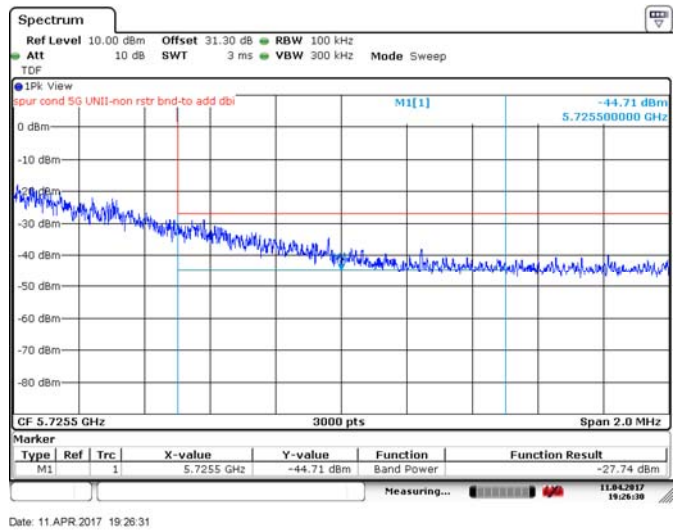
Date: 11.APR.2017 19:25:54

**Figure 8.4-278:** Upper band edge, 10 MHz channel, 32 dBi antenna, BPSK



Date: 11.APR.2017 19:20:08

**Figure 8.4-279:** Lower band edge, 10 MHz channel, 32 dBi antenna, 256QAM



Date: 11.APR.2017 19:26:31

**Figure 8.4-280:** Upper band edge, 10 MHz channel, 32 dBi antenna, 256QAM



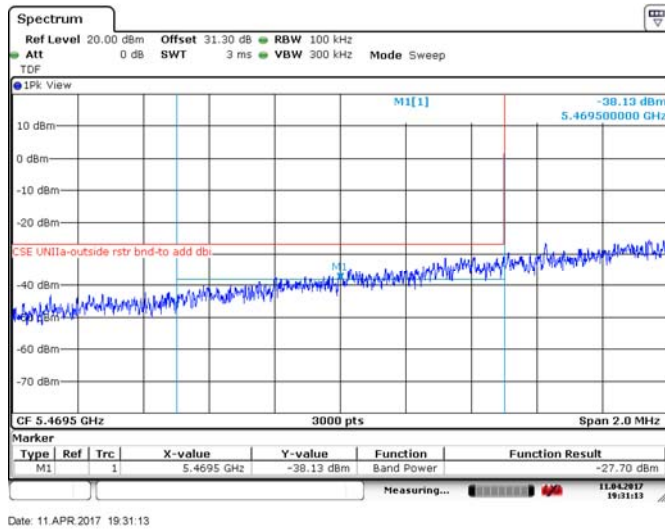


Figure 8.4-281: Lower band edge, 20 MHz channel, 32 dBi antenna, BPSK

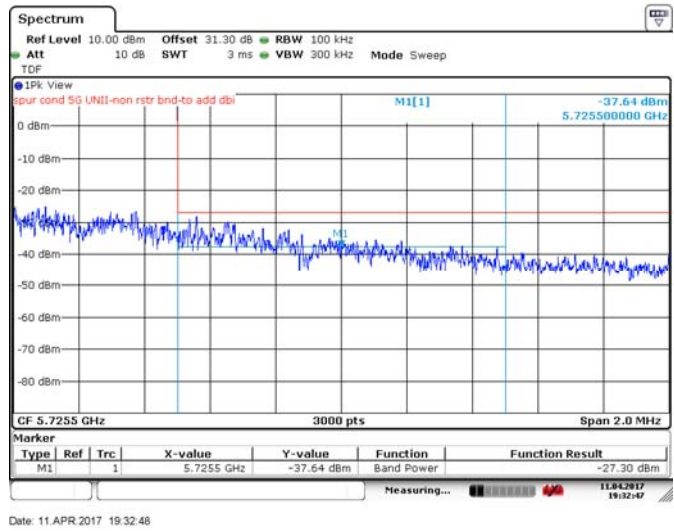


Figure 8.4-282: Upper band edge, 20 MHz channel, 32 dBi antenna, BPSK

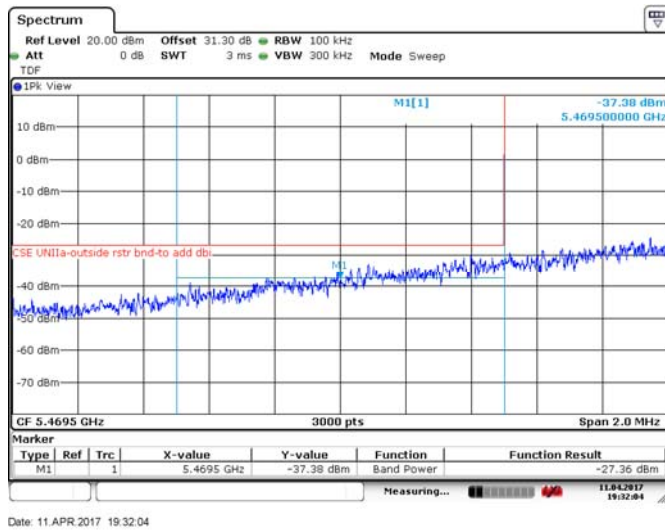


Figure 8.4-283: Lower band edge, 20 MHz channel, 32 dBi antenna, 256QAM

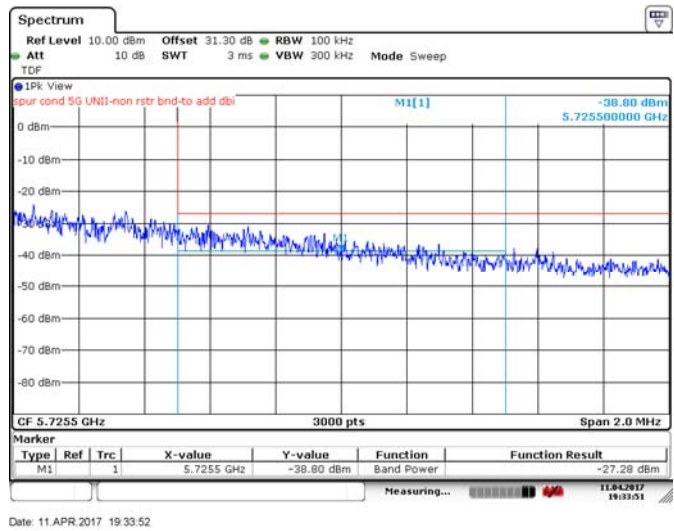
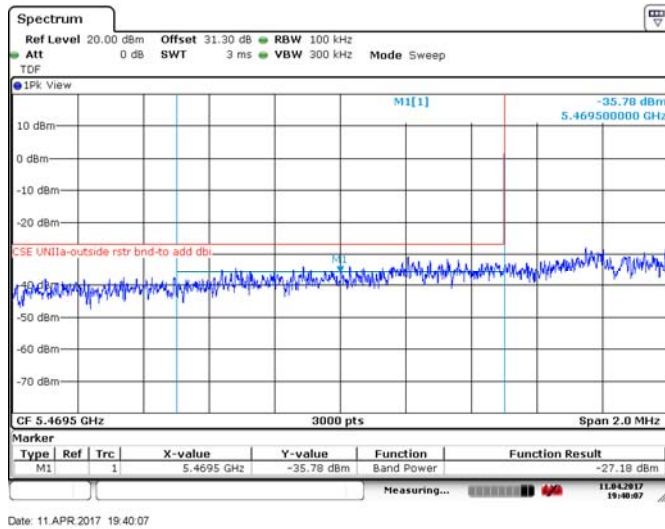
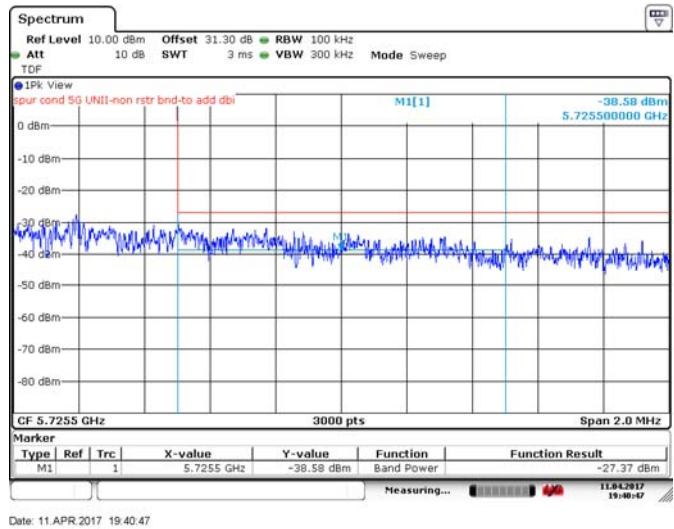


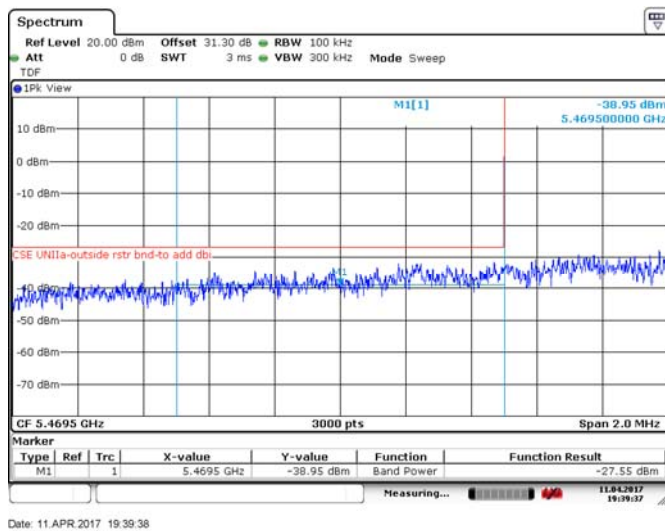
Figure 8.4-284: Upper band edge, 20 MHz channel, 32 dBi antenna, 256QAM



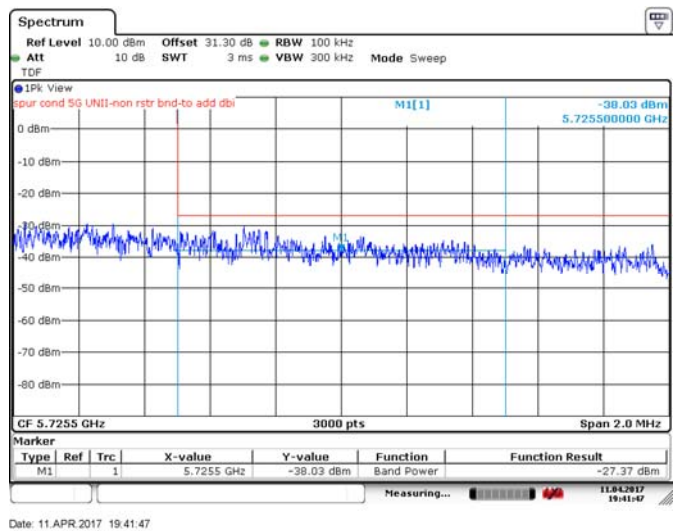
**Figure 8.4-285:** Lower band edge, 40 MHz channel, 32 dBi antenna, BPSK



**Figure 8.4-286:** Upper band edge, 40 MHz channel, 32 dBi antenna, BPSK



**Figure 8.4-287:** Lower band edge, 40 MHz channel, 32 dBi antenna, 256QAM



**Figure 8.4-288:** Upper band edge, 40 MHz channel, 32 dBi antenna, 256QAM

## 8.5 FCC 15.407(g) and RSS-Gen 8.11 Frequency stability

### 8.5.1 Definitions and limits

Manufacturers of U-NII (IC: LE-LAN) devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 8.5.2 Test summary

|                |                |                    |           |
|----------------|----------------|--------------------|-----------|
| Test date:     | April 19, 2017 | Temperature:       | 21 °C     |
| Test engineer: | Yong Huang     | Air pressure:      | 1008 mbar |
| Verdict:       | Pass           | Relative humidity: | 31 %      |

### 8.5.3 Observations, settings and special notes

Spectrum analyser settings:

|                       |          |
|-----------------------|----------|
| Resolution bandwidth: | 10 Hz    |
| Video bandwidth:      | 10 Hz    |
| Detector mode:        | Peak     |
| Trace mode:           | Max Hold |

### 8.5.4 Test data

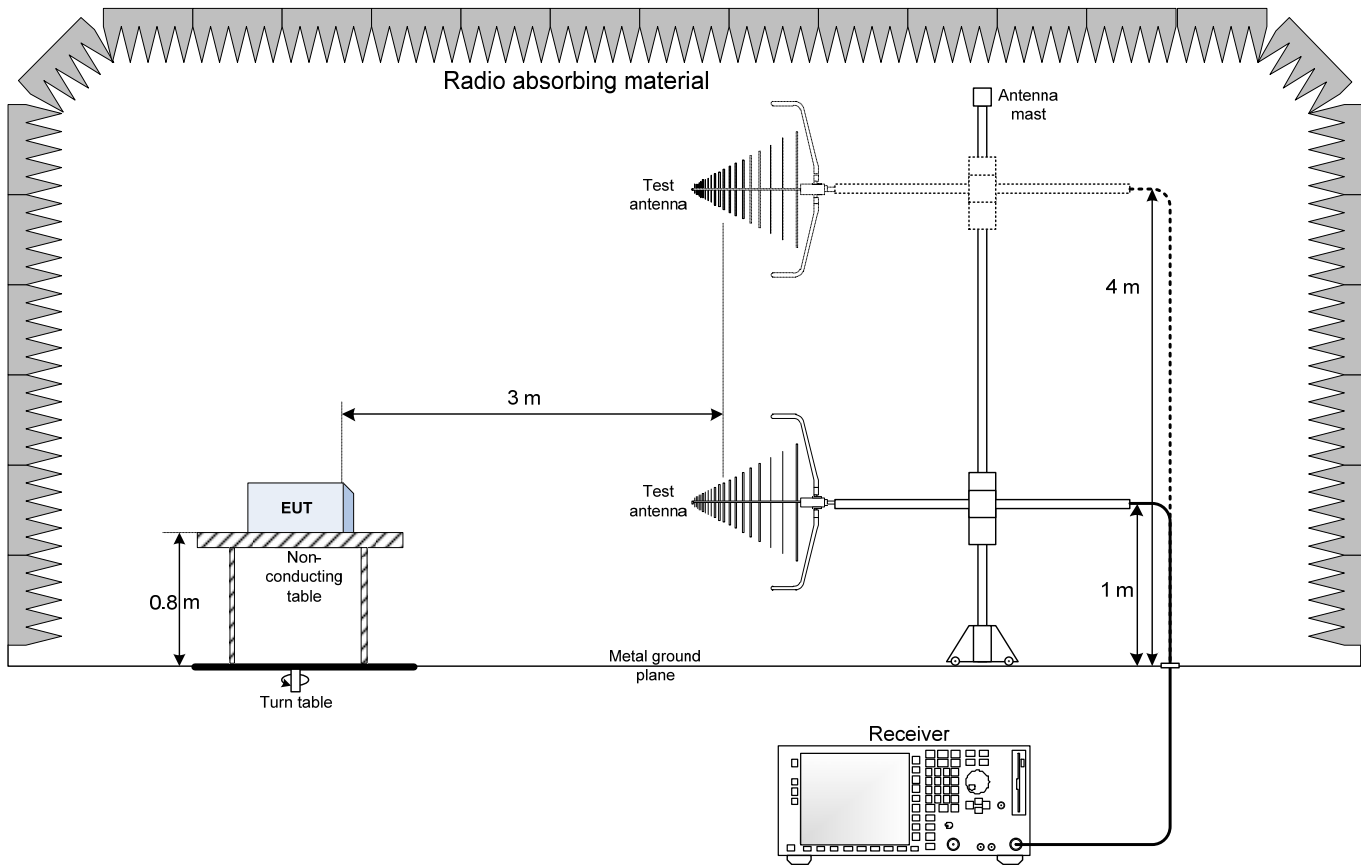
**Table 8.5-1: Frequency drift measurement**

| Test conditions | Frequency, Hz | Drift, Hz |
|-----------------|---------------|-----------|
| +50 °C, Nominal | 5474998550    | -26246    |
| +40 °C, Nominal | 5475007530    | -17266    |
| +30 °C, Nominal | 5475010130    | -14666    |
| +20 °C, +15 %   | 5475026500    | 1704      |
| +20 °C, Nominal | 5475024796    | reference |
| +20 °C, -15 %   | 5475025200    | 404       |
| +10 °C, Nominal | 5475040180    | 15384     |
| 0 °C, Nominal   | 5475052420    | 27624     |
| -10 °C, Nominal | 5475068630    | 43834     |
| -20 °C, Nominal | 5475062120    | 37324     |
| -30 °C, Nominal | 5475083290    | 58494     |

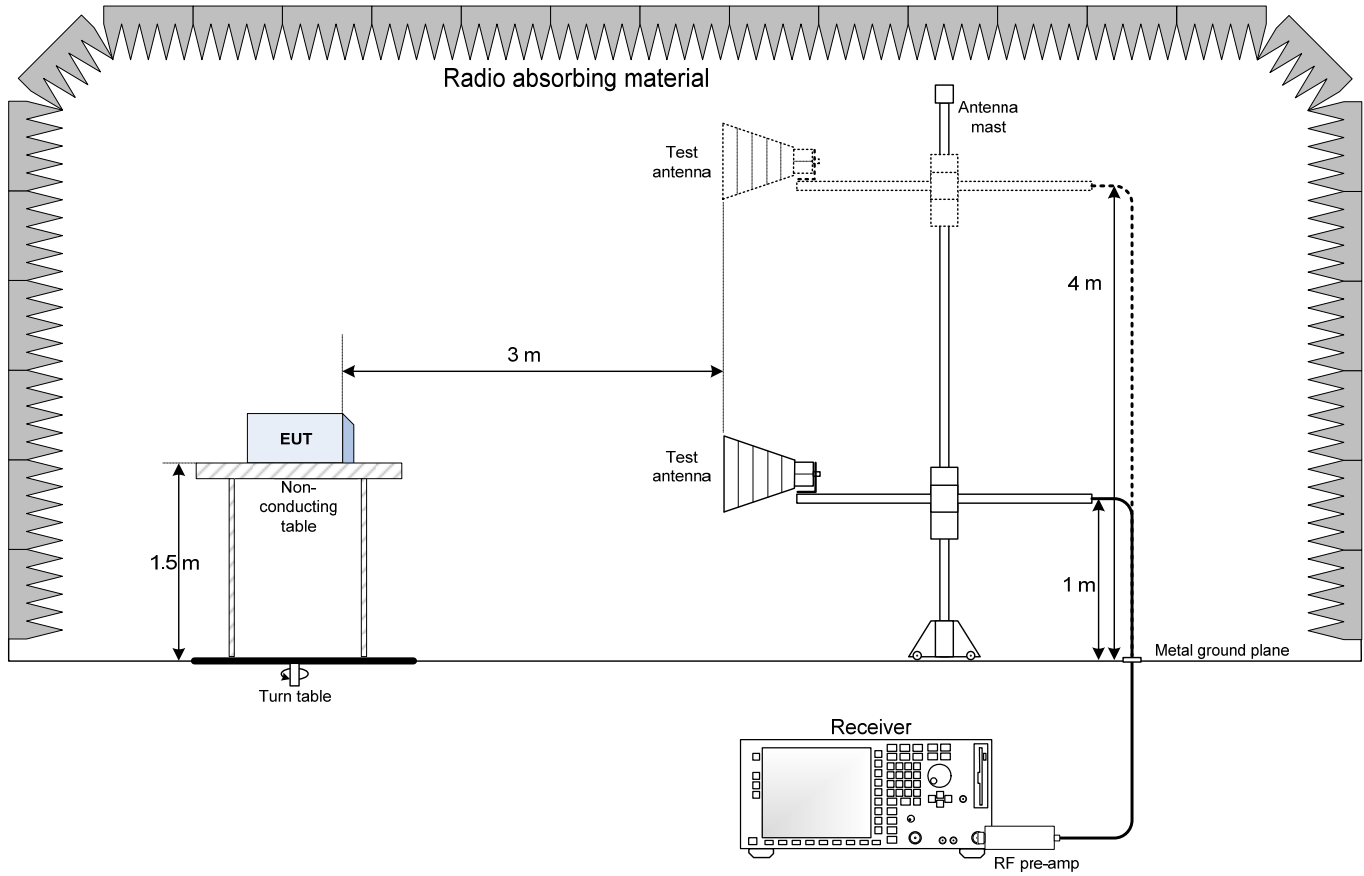
Note: Minimum lower band edge margin is more than 350 kHz.  
 Minimum upper band edge margin is more than 2MHz  
 The frequency drifts in above table are within these minimum margins, the emissions are deemed to maintain within the band of operation.

## Section 9. Block diagrams of test set-ups

### 9.1 Radiated emissions set-up for frequencies below 1 GHz



### 9.2 Radiated emissions set-up for frequencies above 1 GHz



### 9.3 Conducted antenna port set-up

