# APPLICATION FOR CERTIFICATION On Behalf of FUTABA Corporation Radio Control Model No. : T18MZ FCC ID : AZPT18MZ-24G Brand: Futaba

Prepared for : FUTABA Corporation 1080 Yabutsuka Chosei-son Chosei-gun Chiba, 299-4395 Japan.

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 File Number
 :
 C1M1110255

 Report Number
 :
 EM-F1000995

 Date of Test
 :
 Nov. 17 ~ 28, 2011

 Date of Report
 :
 Nov. 29, 2011

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# **TEST REPORT CERTIFICATION**

| Applicant       | : | FUTABA Corporation |   |         |  |
|-----------------|---|--------------------|---|---------|--|
| Manufacturer    | : | FUTABA Corporation |   |         |  |
| EUT Description | : | Radio Control      |   |         |  |
| FCC ID          | : | AZPT18MZ-24G       |   |         |  |
|                 |   | (A) Model No.      | : | T18MZ   |  |
|                 |   | (B) Serial No.     | : | N/A     |  |
|                 |   | (C) Brand          | : | Futaba  |  |
|                 |   | (D) Power Supply   | : | DC 7.4V |  |

Measurement Procedure Used:

FCC RULES AND REGULATIONS PART 15 SUBPART C, Oct. 2010 AND ANSI C63.4/2003

(FCC CFR 47 Part 15C, §15.207 and §15.209 and §15.247)

The device described above was tested by AUDIX Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart B & C limits.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC official limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corporation.

| Date of Test : Nov. 17 ~ 28, 201 | Date of Report : Nov. 29, 2011 |
|----------------------------------|--------------------------------|
|----------------------------------|--------------------------------|

| Producer | : |
|----------|---|
|          |   |

Jut Lon (Julie Hsu/Administrator) Signatory : (Ben Cheng/Manager

# **1. GENERAL INFORMATION**

# 1.1. Description of Device (EUT)

| Description       | : | Radio Control (Transmitter)   |
|-------------------|---|---|
| Model Number      | : | T18MZ   |
| Serial Number     | : | N/A   |
| FCC ID            | : | AZPT18MZ-24G  |
| Applicant         | : | FUTABA Corporation  |
|                   |   | 1080 Yabutsuka Chosei-son Chosei-gun<br>Chiba, 299-4395 Japan.  |
| Manufacturer      | : | FUTABA Corporation  |
|                   |   | 1080 Yabutsuka Chosei-son Chosei-gun<br>Chiba, 299-4395 Japan.  |
| Radio Technology  | : | FASSTest, FASST(DSSS) , S-FHSS (FHSS) Modulation  |
|                   |   | The FASSTest & FASST Modulation are<br>recorded in this report, the S-FHSS (FHSS)<br>Modulation is recorded in another report of<br>EM-F1000996.  |
|                   |   | The difference between FASSTest and FASST is<br>channel number. We perform all test items in<br>FASST as covering full channels. The FASST<br>is representative selected in this test report. |
| Frequency Band    | : | FASSTest: 2405.376MHz ~ 2472.960MHz<br>FASST : 2405.376MHz ~ 2477.056MHz<br>S-FHSS (FHSS): 2403.250MHz ~ 2447.500MHz  |
| Frequency Channel | : | FASSTest: 23 channel<br>FASST : 36 channels<br>S-FHSS (FHSS): 60 channels   |
| Tested Frequency  | : | FASST:<br>2405.376MHz (Channel 1)<br>2442.240MHz (Channel 19)<br>2477.056MHz (Channel 36)   |
| Antenna Gain      | : | 1.5dBi  |

| Date of Receipt of Sample | : | Oct. 24, 2011      |
|---------------------------|---|--------------------|
| Date of Test              | : | Nov. 17 ~ 28, 2011 |

# 1.2. Description of Test Facility

| Name of Firm                  | : | AUDIX Technology Corporation<br>EMC Department<br>No. 53-11, Dingfu, Linkou Dist.,<br>New Taipei City 244, Taiwan, R.O.C. |
|-------------------------------|---|---|
| Test Location & Facility (AC) | : | <b>Semi-Anechoic Chamber</b><br>No. 53-11, Dingfu, Linkou Dist.,<br>New Taipei City 244, Taiwan, R.O.C.                   |
|                               |   | May 14, 2009 Renewal on<br>Federal Communication Commission<br>Registration Number: 90993                                 |
| NVLAP Lab. Code               | : | 200077-0  |
| TAF Accreditation No          | : | 1724  |

# 1.3. Measurement Uncertainty

| Test Item      | Frequency Range | Uncertainty (dB) |  |
|----------------|-----------------|------------------|--|
|                | 30MHz~300MHz    | ± 2.91dB         |  |
| Radiation Test | 300MHz~1000MHz  | ± 2.74dB         |  |
| (Distance: 3m) | Above 1GHz      | ± 5.02dB         |  |

Remark: Uncertainty =  $ku_c(y)$ 

| Test Item                 | Uncertainty    |  |  |
|---------------------------|----------------|--|--|
| 6dB Bandwidth             | ± 0.05kHz      |  |  |
| Maximum peak output power | $\pm 0.33$ dBm |  |  |
| Emission Limitations      | ± 0.13dB       |  |  |
| Band edges                | ± 0.13dB       |  |  |
| Power spectral density    | ± 0.13dB       |  |  |

# 2. CONDUCTED EMISSION MEASUREMET

【The EUT only employs battery power for operation, no conductive emission limits are required according to FCC Part 15 Section §15.207】

# 3. RADIATED EMISSION MEASUREMENT

### 3.1. Test Equipment

The following test equipment was used during the radiated emission measurement:

3.1.1. For Frequency Range 30MHz~1000MHz (at Semi-Anechoic Chamber)

| Item | Туре                    | Manufacturer | Model No.       | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------------|--------------|-----------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer       | Agilent      | E4446A          | US44300366 | Aug. 04, 11' | Aug. 03, 12' |
| 2.   | Test Receiver           | R & S        | ESCS30          | 100339     | Jun. 23, 11' | Jun. 22, 12' |
| 3.   | Amplifier               | HP           | 8447D           | 2944A06305 | Feb. 10, 11' | Feb. 09, 12' |
| 4.   | Log Periodic<br>Antenna | Schwarzbeck  | UHALP<br>9108-A | 0810       | Mar. 08, 11' | Mar. 07, 12' |
| 5.   | Biconical Antenna       | CHASE        | VBA6106A        | 1264       | Mar. 08, 11' | Mar. 07, 12' |

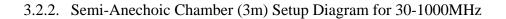
3.1.2. For Frequency Above 1GHz (at Semi-Anechoic Chamber)

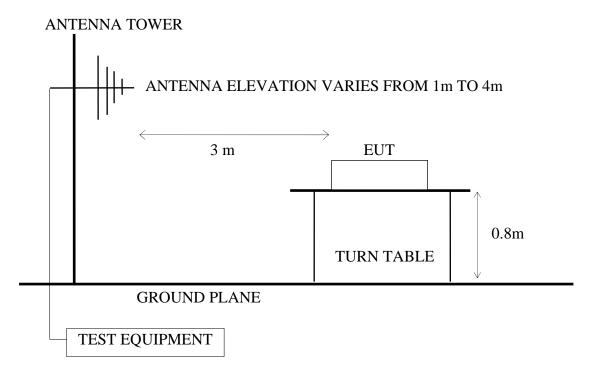
| Item | Туре                       | Manufacturer | Model No.          | Serial No. | Last Cal.    | Next Cal.    |
|------|----------------------------|--------------|--------------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer          | Agilent      | E4446A             | US44300366 | Aug. 04, 11' | Aug. 03, 12' |
| 2.   | Test Receiver              | R & S        | ESCS30             | 100339     | Jun. 23, 11' | Jun. 22, 12' |
| 3.   | Amplifier                  | HP           | 8449B              | 3008A00529 | Dec. 10, 10' | Dec. 09, 11' |
| 4.   | Horn Antenna               | EMCO         | 3115               | 9112-3775  | May 09, 11'  | May 08, 12'  |
| 5.   | Horn Antenna               | EMCO         | 3116               | 2653       | Oct. 07, 11' | Oct. 06, 12' |
| 6.   | 2.4GHz Notch<br>Filter     | EWT          | EWT-14-007<br>0-R1 | G2         | Dec. 05, 10' | Dec. 04, 11' |
|      | 3.5GHz High Pass<br>Filter | HP           | 84300-80038        | 005        | Jan. 05, 11' | Jan. 04, 12' |

3.2. Test Setup

3.2.1. Block Diagram of connection between EUT and simulators

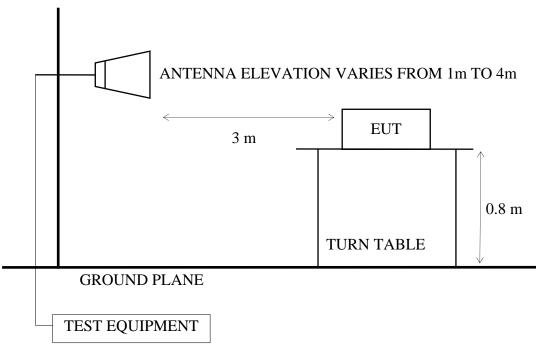
| RADIO CONTROL |  |
|---------------|--|
| (EUT)         |  |





3.2.3. Semi-Anechoic Chamber (3m) Setup Diagram for above 1GHz





| FREQUENCY  | DISTANCE | FIELD STREN | GTHS LIMITS |
|------------|----------|-------------|-------------|
| MHz        | Meters   | μV/m        | dBµV/m      |
| 30 ~ 88    | 3        | 100         | 40.0        |
| 88 ~ 216   | 3        | 150         | 43.5        |
| 216 ~ 960  | 3        | 200         | 46.0        |
| Above 960  | 3        | 500         | 54.0        |
| Above 1000 | 3        | 74.0 dBµV/  | m (Peak)    |
|            |          | 54.0 dBµV/  | m (Average) |

3.3. Radiated Emission Limits (§15.209)

Remark : (1) Emission level ( $dB\mu V/m$ ) = 20 log Emission level ( $\mu V/m$ )

- (2) The tighter limit applies at the edge between two frequency bands.
- (3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- (4) The limits in this table are based on CFR 47 Part 15.205(a)(b) and Part 15.209 (a).
- (5) The over 1GHz limit, FCC limit is used based on CFR 47 Part 15.35 (b) and Part 15.205(b) & Part 15.209(e) and Part 15.207(c).

### 3.4. Operating Condition of EUT

- 3.4.1. Set up the EUT (Radio Control) as shown on 3.2.
- 3.4.2. To turn on the power of all equipment.
- 3.4.3. The EUT was set to continuously transmit signals at 2405.376MHz 2442.240MHz and 2477.056MHz during testing.

### 3.5. Test Procedure

The EUT and its simulators were placed on a turn table which was 0.8 meter above the ground. The turn table rotated 360 degrees to determine the position of the maximum emission level. EUT was set to 3 meters away from the receiving antenna which was mounted on an antenna tower. The antenna could be moved up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna such as calibrated biconical and log-periodical antenna or horn antenna were used as a receiving antenna. Both horizontal and vertical polarization of the antenna were set on measurement. In order to find the maximum emission, all of the interface cables were manipulated according to FCC ANSI C63.4-2003 regulation.

The bandwidth of the R&S Test Receiver ESCS30 was set at 120kHz. (For 30MHz to 1000MHz)

The resolution bandwidth and video bandwidth of test spectrum analyzer is 1MHz for peak detection (PK) at frequency above 1GHz.

The resolution bandwidth of test spectrum analyzer is 1MHz and the video bandwidth is 10Hz for average detection (AV) at frequency above 1GHz.

The frequency range from 30MHz to 25GHz (Up to 10<sup>th</sup> harmonics from fundamental frequency) was checked.

Above 1GHz was measured with peak and average detector. For frequency from 7.5GHz to 25GHz, we checked it in 1 meter distance and with a shorter cable 2 meter instead of original's. There is no signal exist.

### 3.6. Radiated Emission Measurement Results

#### PASSED.

(All emissions not reported below are too low against the prescribed limits.)

EUT : Radio Control M/N : T18MZ

Test Date ∶ Nov. 23, 2011 Temperature ∶ 25°C Humidity ∶ 62%

#### For Frequency Range 30MHz~1000MHz:

The EUT emitted the fundamental frequency with data code at the stand, side and lying conditions.

The EUT select **worst position "stand"** and with following test modes was performed during this section testing and all the test results are listed in section 3.6.1.

| Moda | Channel | Frequency   | Test Mode | Position  | Reference Test Data |          |  |
|------|---------|-------------|-----------|-----------|---------------------|----------|--|
| Mode | Channel | riequency   | Test Mode | FOSILIOII | Horizontal          | Vertical |  |
| 1.   | 01      | 2405.376MHz |           | Stand     | # 2                 | # 1      |  |
| 2.   | 19      | 2442.240MHz | Transmit  | Stand     | # 2                 | #1       |  |
| 3.   | 36      | 2477.056MHz |           | Stand     | # 2                 | # 1      |  |

\* Above all final readings were measured with Quasi-Peak detector.

#### For Frequency above 1GHz:

The EUT select **worst position "stand"** and with following test modes was performed during this section testing and all the test results are listed in section 3.6.2.

| Mode | Channel | Frequency   | Test Mode | Position |
|------|---------|-------------|-----------|----------|
| 1.   | 01      | 2405.376MHz |           | Stand    |
| 2.   | 19      | 2442.240MHz | Transmit  | Stand    |
| 3.   | 36      | 2477.056MHz |           | Stand    |

\* Above all final readings were measured with Peak detector and Average detector.

#### For Restricted Bands:

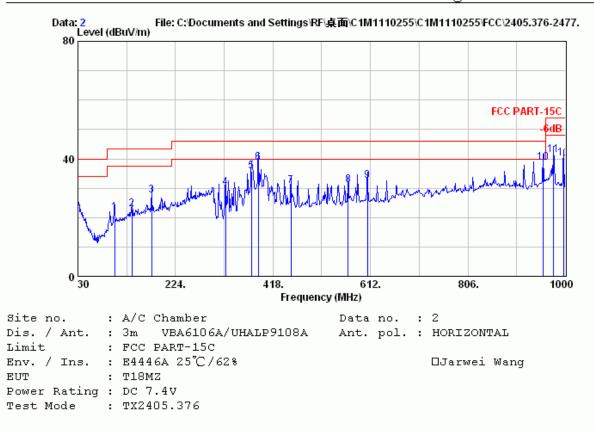
The EUT select **worst position "stand"** and was tested in restricted bands and all the test results are listed in section 3.6.3. (The restricted bands defined in part 15.205(a))

| Mode  | Channal             | Fraguanay   | Test Mode | Reference  | Test Data |
|-------|---------------------|-------------|-----------|------------|-----------|
| Widde | e Channel Frequence |             | Test Mode | Horizontal | Vertical  |
| 1.    | 01                  | 2405.376MHz | Transmit  | #1         | # 3       |
| 2.    | 36                  | 2477.056MHz | Transmit  | #7         | # 5       |

#### 3.6.1. Frequency Range 30-1000MHz



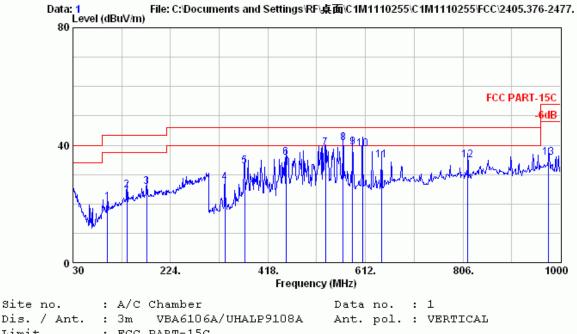
AUDIX TECHNOLOGY Corp. EMC Laboratory No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443 Tel:+886-2-26092133 Fax:+886-2-26099303 Email:ttemc@ttemc.com.tw



|       | Freq.<br>(MHz)   | Ant.<br>Factor<br>(dB/m) |      | Reading | Emission<br>Level<br>(dBµV/m) |       | Margin<br>(dB) | Remark |  |  |
|-------|--|--------------------------|------|---------|-------------------------------|-------|----------------|--------|--|--|
| 1     | 102.750  | 17.40                    | 2.10 | 2.25    | 21.75                         | 43.50 | 21.75          | QP     |  |  |
| 2     | 137.670  | 20.01                    | 2.43 | 0.47    | 22.91                         | 43.50 | 20.59          | QP     |  |  |
| 3     | 176.470  | 21.21                    | 2.90 | 3.35    | 27.46                         | 43.50 | 16.04          | QP     |  |  |
| 4     | 323.910  | 15.10                    | 4.14 | 10.95   | 30.19                         | 46.00 | 15.81          | QP     |  |  |
| 5     | 375.320  | 17.15                    | 4.60 | 13.91   | 35.65                         | 46.00 | 10.35          | QP     |  |  |
| 6     | 388.900  | 17.47                    | 4.80 | 16.44   | 38.71                         | 46.00 | 7.29           | QP     |  |  |
| 7     | 453.890  | 17.70                    | 5.50 | 7.71    | 30.91                         | 46.00 | 15.10          | QP     |  |  |
| 8     | 567.380  | 20.97                    | 6.50 | 3.51    | 30.99                         | 46.00 | 15.01          | QP     |  |  |
| 9     | 606.180  | 21.45                    | 6.20 | 4.77    | 32.42                         | 46.00 | 13.58          | QP     |  |  |
| 10    | 956.350  | 26.33                    | 7.60 | 4.64    | 38.57                         | 46.00 | 7.43           | QP     |  |  |
| 11    | 976.720  | 26.16                    | 7.70 | 7.36    | 41.22                         | 54.00 | 12.78          | QP     |  |  |
| 12    | 996.120  | 24.67                    | 7.71 | 7.64    | 40.02                         | 54.00 | 13.98          | QP     |  |  |
| Remar | Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading. |                          |      |         |                               |       |                |        |  |  |

The emission levels that are 20dB below the official limit are not reported.





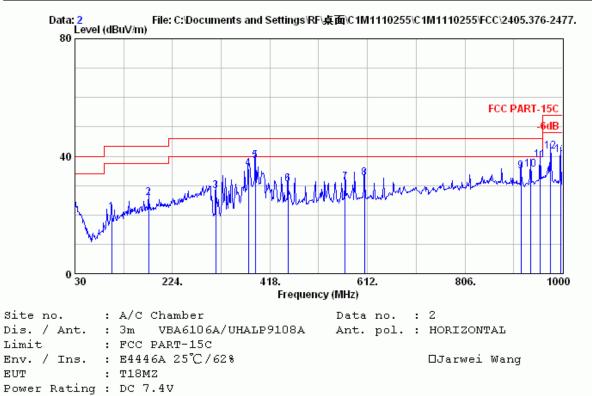
| Dis. / Ant. :  | 3m VBA6106A/UHALP9108A Ant. | pol. : | VERTICAL      |
|----------------|-----------------------------|--------|---------------|
| Limit :        | FCC PART-15C                |        |               |
| Env. / Ins. :  | E4446A 25°C/62%             |        | 🗆 Jarwei Wang |
| EUT :          | T18MZ                       |        |               |
| Power Rating : | DC 7.4V                     |        |               |
| Test Mode :    | TX2405.376                  |        |               |
|                |                             |        |               |

|  | -       | Factor |      | Reading | Emission<br>Level<br>(dBµV/m) |       | -     | Remark |  |
|--|---------|--------|------|---------|-------------------------------|-------|-------|--------|--|
| 1  | 98.870  | 16.96  | 2.10 | 1.31    | 20.37                         | 43.50 | 23.13 | QP     |  |
| 2  | 137.670 | 20.01  | 2.43 | 2.25    | 24.69                         | 43.50 | 18.81 | QP     |  |
| 3  | 176.470 | 21.21  | 2.90 | 1.62    | 25.72                         | 43.50 | 17.78 | QP     |  |
| 4  | 332.640 | 15.21  | 4.20 | 7.96    | 27.37                         | 46.00 | 18.63 | QP     |  |
| 5  | 371.440 | 17.08  | 4.60 | 11.24   | 32.91                         | 46.00 | 13.09 | QP     |  |
| 6  | 453.890 | 17.70  | 5.50 | 12.55   | 35.75                         | 46.00 | 10.25 | QP     |  |
| 7  | 532.460 | 19.64  | 7.00 | 12.27   | 38.90                         | 46.00 | 7.10  | QP     |  |
| 8  | 567.380 | 20.97  | 6.50 | 13.24   | 40.71                         | 46.00 | 5.29  | QP     |  |
| 9  | 586.780 | 21.01  | 6.30 | 12.00   | 39.31                         | 46.00 | 6.70  | QP     |  |
| 10   | 606.180 | 21.45  | 6.20 | 11.13   | 38.78                         | 46.00 | 7.22  | QP     |  |
| 11   | 644.980 | 21.15  | 6.30 | 7.46    | 34.90                         | 46.00 | 11.10 | QP     |  |
| 12   | 815.700 | 23.89  | 7.00 | 3.94    | 34.83                         | 46.00 | 11.17 | QP     |  |
| 13   | 976.720 | 26.16  | 7.70 | 1.97    | 35.83                         | 54.00 | 18.17 | QP     |  |
| Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.<br>2. The emission levels that are 20dB below the official<br>limit are not reported. |         |        |      |         |                               |       |       |        |  |



Test Mode : TX2442.24

AUDIX TECHNOLOGY Corp. EMC Laboratory No.53-11, Tin-fu Tsun, Lin-kou Hsiang, Taipei County, Taiwan R.O.C. Post Code:24443 Tel:+886-2-26092133 Fax:+886-2-26099303 Email:ttemc@ttemc.com.tw

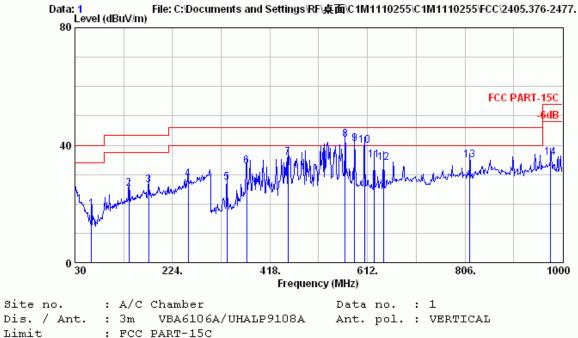


|           | Freq.<br>(MHz)  | Ant.<br>Factor<br>(dB/m) | Loss | Reading | Emission<br>Level<br>(dBµV/m) |       | -     | Remark |
|-----------|---|--------------------------|------|---------|-------------------------------|-------|-------|--------|
| 1         | 102.750   | 17.40                    | 2.10 | 1.29    | 20.79                         | 43.50 | 22.71 | QP     |
| 2         | 176.470   | 21.21                    | 2.90 | 1.80    | 25.91                         | 43.50 | 17.59 | QP     |
| 3         | 310.330   | 14.93                    | 4.00 | 9.18    | 28.11                         | 46.00 | 17.89 | QP     |
| 4         | 375.320   | 17.15                    | 4.60 | 13.99   | 35.74                         | 46.00 | 10.26 | QP     |
| 5         | 388.900   | 17.47                    | 4.80 | 16.04   | 38.31                         | 46.00 | 7.69  | QP     |
| 6         | 453.890   | 17.70                    | 5.50 | 7.28    | 30.48                         | 46.00 | 15.52 | QP     |
| 7         | 567.380   | 20.97                    | 6.50 | 3.71    | 31.18                         | 46.00 | 14.82 | QP     |
| 8         | 606.180   | 21.45                    | 6.20 | 4.95    | 32.60                         | 46.00 | 13.40 | QP     |
| 9         | 917.550   | 24.84                    | 7.40 | 2.67    | 34.91                         | 46.00 | 11.09 | QP     |
| 10        | 935.980   | 25.39                    | 7.50 | 2.52    | 35.41                         | 46.00 | 10.59 | QP     |
| 11        | 956.350   | 26.33                    | 7.60 | 4.82    | 38.75                         | 46.00 | 7.25  | QP     |
| 12        | 976.720   | 26.16                    | 7.70 | 7.63    | 41.49                         | 54.00 | 12.51 | QP     |
| 13        | 996.120   | 24.67                    | 7.71 | 7.93    | 40.31                         | 54.00 | 13.69 | QP     |
| <br>Remar | Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.<br>2. The emission levels that are 20dB below the official |                          |      |         |                               |       |       |        |

limit are not reported.



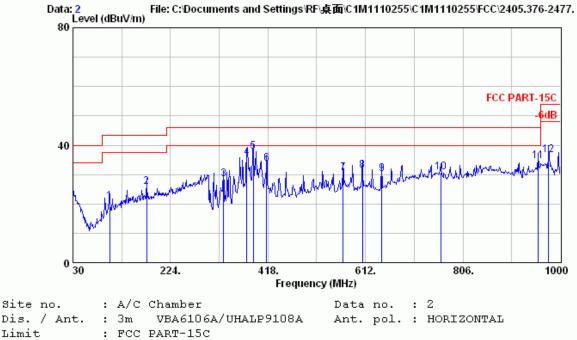
DJarwei Wang



| Limit        | : | FCC PART-15C    |
|--------------|---|-----------------|
| Env. / Ins.  | : | E4446A 25°C/62% |
| EUT          | : | T18MZ           |
| Power Rating | : | DC 7.4V         |
| Test Mode    | : | TX2442.24       |
|              |   |                 |

|  | -       |       |      | Reading | Emission<br>Level<br>(dBµV/m) |       | -     | Remark |
|--|---------|-------|------|---------|-------------------------------|-------|-------|--------|
| 1  | 62.980  | 12.04 | 1.63 | 4.62    | 18.29                         | 40.00 | 21.71 | QP     |
| 2  | 137.670 | 20.01 | 2.43 | 2.74    | 25.18                         | 43.50 | 18.32 | QP     |
| 3  | 176.470 | 21.21 | 2.90 | 2.38    | 26.49                         | 43.50 | 17.01 | QP     |
| 4  | 255.040 | 24.19 | 3.56 | 0.69    | 28.44                         | 46.00 | 17.56 | QP     |
| 5  | 332.640 | 15.21 | 4.20 | 7.88    | 27.29                         | 46.00 | 18.71 | QP     |
| 6  | 371.440 | 17.08 | 4.60 | 11.03   | 32.70                         | 46.00 | 13.30 | QP     |
| 7  | 453.890 | 17.70 | 5.50 | 12.41   | 35.60                         | 46.00 | 10.40 | QP     |
| 8  | 567.380 | 20.97 | 6.50 | 14.29   | 41.76                         | 46.00 | 4.24  | QP     |
| 9  | 586.780 | 21.01 | 6.30 | 13.14   | 40.45                         | 46.00 | 5.55  | QP     |
| 10   | 606.180 | 21.45 | 6.20 | 12.16   | 39.81                         | 46.00 | 6.19  | QP     |
| 11   | 624.610 | 21.31 | 6.20 | 7.32    | 34.83                         | 46.00 | 11.17 | QP     |
| 12   | 644.980 | 21.15 | 6.30 | 6.58    | 34.03                         | 46.00 | 11.97 | QP     |
| 13   | 815.700 | 23.89 | 7.00 | 3.91    | 34.80                         | 46.00 | 11.20 | QP     |
| 14   | 976.720 | 26.16 | 7.70 | 1.74    | 35.60                         | 54.00 | 18.40 | QP     |
| Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.<br>2. The emission levels that are 20dB below the official<br>limit are not reported. |         |       |      |         |                               |       |       |        |

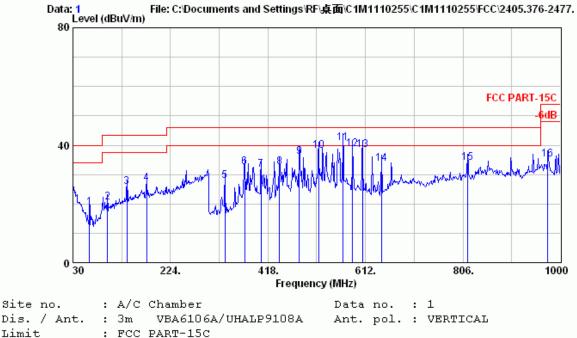




| SICE HO.     | • | A/C CHAMDEL            | Data | 110. | • | 4             |
|--------------|---|------------------------|------|------|---|---------------|
| Dis. / Ant.  | : | 3m VBA6106A/UHALP9108A | Ant. | pol. | : | HORIZONTAL    |
| Limit        | : | FCC PART-15C           |      |      |   |               |
| Env. / Ins.  | : | E4446A 25℃/62%         |      |      |   | 🛛 Jarwei Wang |
| EUT          | : | T18MZ                  |      |      |   |               |
| Power Rating | : | DC 7.4V                |      |      |   |               |
| Test Mode    | : | TX2477.056             |      |      |   |               |
|              |   |                        |      |      |   |               |

|       | -       | Factor   |         | Reading | Emission<br>Level<br>(dBµV/m) |       | -     | Remark |
|-------|---------|----------|---------|---------|-------------------------------|-------|-------|--------|
| 1     | 102.750 | 17.40    | 2.10    | 1.28    | 20.78                         | 43.50 | 22.72 | QP     |
| 2     | 176.470 | 21.21    | 2.90    | 1.78    | 25.89                         | 43.50 | 17.61 | QP     |
| 3     | 329.730 | 15.36    | 4.14    | 9.06    | 28.56                         | 46.00 | 17.44 | QP     |
| 4     | 376.290 | 17.15    | 4.60    | 13.90   | 35.65                         | 46.00 | 10.35 | QP     |
| 5     | 388.900 | 17.47    | 4.80    | 15.44   | 37.71                         | 46.00 | 8.29  | QP     |
| 6     | 415.090 | 16.99    | 5.10    | 11.62   | 33.70                         | 46.00 | 12.30 | QP     |
| 7     | 567.380 | 20.97    | 6.50    | 2.92    | 30.39                         | 46.00 | 15.61 | QP     |
| 8     | 606.180 | 21.45    | 6.20    | 3.58    | 31.24                         | 46.00 | 14.77 | QP     |
| 9     | 644.980 | 21.15    | 6.30    | 2.69    | 30.13                         | 46.00 | 15.87 | QP     |
| 10    | 761.380 | 23.68    | 6.70    | 0.40    | 30.78                         | 46.00 | 15.22 | QP     |
| 11    | 956.350 | 26.33    | 7.60    | 0.74    | 34.67                         | 46.00 | 11.33 | QP     |
| 12    | 976.720 | 26.16    | 7.70    | 2.74    | 36.60                         | 54.00 | 17.40 | QP     |
| Remar | 2. Th   | e emissi | ion lev |         | Factor + C<br>are 20dB        |       |       | -      |





| Dis. / Ant.  | : | 3m VBA6106A/UHALP9108A | Ant. | pol. | : | VERTICAL      |
|--------------|---|------------------------|------|------|---|---------------|
| Limit        | : | FCC PART-15C           |      |      |   |               |
| Env. / Ins.  | : | E4446A 25°C/62%        |      |      |   | 🛛 Jarwei Wang |
| EUT          | : | T18MZ                  |      |      |   |               |
| Power Rating | : | DC 7.4V                |      |      |   |               |
| Test Mode    | : | TX2477.056             |      |      |   |               |
|              |   |                        |      |      |   |               |

|       | Freq.<br>(MHz) | Factor   |         | Reading | Emission<br>Level<br>(dBµV/m) |       | -     | Remark |
|-------|----------------|----------|---------|---------|-------------------------------|-------|-------|--------|
| 1     | 62.980         | 12.04    | 1.63    | 5.03    | 18.70                         | 40.00 | 21.30 | QP     |
| 2     | 98.870         | 16.96    | 2.10    | 1.39    | 20.45                         | 43.50 | 23.06 | QP     |
| 3     | 137.670        | 20.01    | 2.43    | 3.43    | 25.88                         | 43.50 | 17.62 | QP     |
| 4     | 176.470        | 21.21    | 2.90    | 2.76    | 26.86                         | 43.50 | 16.64 | QP     |
| 5     | 332.640        | 15.21    | 4.20    | 8.32    | 27.72                         | 46.00 | 18.28 | QP     |
| 6     | 371.440        | 17.08    | 4.60    | 10.75   | 32.43                         | 46.00 | 13.57 | QP     |
| 7     | 404.420        | 17.47    | 4.90    | 9.16    | 31.53                         | 46.00 | 14.47 | QP     |
| 8     | 441.280        | 17.63    | 5.30    | 9.70    | 32.63                         | 46.00 | 13.37 | QP     |
| 9     | 480.080        | 18.68    | 6.05    | 11.42   | 36.15                         | 46.00 | 9.85  | QP     |
| 10    | 518.880        | 20.01    | 6.90    | 11.26   | 38.17                         | 46.00 | 7.83  | QP     |
| 11    | 567.380        | 20.97    | 6.50    | 13.34   | 40.82                         | 46.00 | 5.18  | QP     |
| 12    | 586.780        | 21.01    | 6.30    | 11.29   | 38.59                         | 46.00 | 7.41  | QP     |
| 13    | 606.180        | 21.45    | 6.20    | 10.86   | 38.51                         | 46.00 | 7.49  | QP     |
| 14    | 644.980        | 21.15    | 6.30    | 6.13    | 33.57                         | 46.00 | 12.43 | QP     |
| 15    | 815.700        | 23.89    | 7.00    | 3.09    | 33.98                         | 46.00 | 12.02 | QP     |
| 16    | 974.780        | 26.52    | 7.70    | 0.92    | 35.14                         | 54.00 | 18.86 | QP     |
| Remar | 2. Th          | e emissi | ion lev |         | Factor + C<br>are 20dB        |       |       | -      |

25°C

Temperature :

|                       |                   | 11011 25,     | 2011                  | remp                            | <u> </u>      | 23 (   |
|-----------------------|-------------------|---------------|-----------------------|---------------------------------|---------------|--------|
| EUT:                  |                   | Radio Co      | ontrol                | Hu                              | midity :      | 62%    |
| Test Mode :           |                   | Transmit      | tting Mode, F         | requency: 24                    | 405.376MHz    |        |
| Emission<br>Frequency | Antenna<br>Factor | Cable<br>Loss | Reading<br>Horizontal | Emission<br>Level<br>Horizontal | Limits        | Margin |
| (MHz)                 | (dB/m)            | (dB)          | (dBµV)                | (dBµV/m)                        | $(dB\mu V/m)$ | (dB)   |
| 1015.12               | 24.35             | 4.21          | 18.64                 | 47.20                           | 54.00         | -6.80  |
| 1031.92               | 24.40             | 4.24          | 17.16                 | 45.80                           | 54.00         | -8.20  |
| 1053.76               | 24.44             | 4.29          | 20.09                 | 48.82                           | 54.00         | -5.18  |
| 1173.92               | 24.49             | 4.34          | 17.45                 | 46.28                           | 54.00         | -7.72  |
| 1090.72               | 24.54             | 4.37          | 18.10                 | 47.01                           | 54.00         | -6.99  |
| 1112.56               | 24.64             | 4.42          | 13.14                 | 42.20                           | 54.00         | -11.80 |
| 1132.72               | 24.69             | 4.46          | 13.26                 | 42.41                           | 54.00         | -11.59 |
| 3206.68               | 30.51             | 7.36          | 15.63                 | 53.50                           | 54.00         | -0.50  |
| 4813.00               | 32.92             | 9.14          | 15.99                 | 58.05                           | 74.00         | -15.95 |
| * 7214.00             | 35.84             | 11.25         | 11.74                 | 58.83                           | 63.54         | -4.71  |
| * 12030.00            | 38.69             | 14.96         | 12.10                 | 65.75                           | 83.54         | -17.79 |

3.6.2. Above 1GHz Frequency Range Measurement Results

Date of Test :

Nov. 23, 2011

Remarks: 1. Emission level=Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

3. All final readings of measurement were with Peak values.

4. If the Average limit is met when using a Peak detector, the Average detector is unnecessary

5. \*: Measured at 1m and limit is transformed to 83.54dBµV/m(Peak) & 63.54dBµV/m (Average) by adding a factor 9.5 which is calculated from 20log(3/1).

| Emission Frequency | Peak Value | Duty<br>Cycle<br>Factor | Average<br>Value<br>Horizontal | Limit         | Margin |
|--------------------|------------|-------------------------|--------------------------------|---------------|--------|
| (MHz)              | (dB/m)     | (dB)                    | (dBµV/m)                       | $(dB\mu V/m)$ | (dB)   |
| 4813.00            | 58.05      | -12.47                  | 45.58                          | 54.00         | 8.42   |
| * 12030.00         | 65.75      | -12.47                  | 53.28                          | 63.54         | 10.26  |

Remarks: 1. Duty Cycle Factor =  $20\log(1.83ms*13/100ms) = -12.47$ 

2. Average value=Peak value+ Duty Cycle Factor

3. All final readings of measurement were with Average values.

4. \*: Measured at 1m and limit is transformed to 63.54dBµV/m by adding a factor 9.5 which is calculated from 20log(3/1).

| Date of Test :        |                   | Nov. 23, 2    | 011                 | Temp                          | erature :  | 25°C   |
|-----------------------|-------------------|---------------|---------------------|-------------------------------|------------|--------|
| EUT:                  | Radio Control     |               |                     | Humidity :                    |            | 62%    |
| Test Mode :           |                   | Transmitti    | ng Mode, F          | requency: 24                  | 405.376MHz |        |
| Emission<br>Frequency | Antenna<br>Factor | Cable<br>Loss | Reading<br>Vertical | Emission<br>Level<br>Vertical | Limits     | Margin |
| (MHz)                 | (dB/m)            | (dB)          | (dBµV)              | $(dB\mu V/m)$                 | (dBµV/m)   | (dB)   |
| 1015.12               | 24.35             | 4.21          | 11.37               | 39.93                         | 54.00      | -14.07 |
| 1053.76               | 24.44             | 4.29          | 13.68               | 42.41                         | 54.00      | -11.59 |
| 1073.92               | 24.49             | 4.34          | 13.69               | 42.52                         | 54.00      | -11.48 |
| 1090.72               | 24.54             | 4.37          | 13.37               | 42.28                         | 54.00      | -11.72 |
| 1171.36               | 24.78             | 4.53          | 11.95               | 41.26                         | 54.00      | -12.74 |
| 1208.32               | 24.88             | 4.60          | 13.13               | 42.61                         | 54.00      | -11.39 |
| 1250.32               | 25.02             | 4.68          | 11.14               | 40.84                         | 54.00      | -13.16 |
| 3210.64               | 30.51             | 7.36          | 24.31               | 62.18                         | 74.00      | -11.82 |
| 4813.00               | 32.92             | 9.14          | 15.04               | 57.10                         | 74.00      | -16.90 |
| * 7218.00             | 35.84             | 11.25         | 17.83               | 64.92                         | 83.54      | -18.62 |
| * 12035.00            | 38.69             | 14.96         | 14.41               | 68.06                         | 83.54      | -15.48 |

Remarks: 1. Emission level=Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

3. All final readings of measurement were with Peak values.

4. If the Average limit is met when using a Peak detector, the Average detector is unnecessary

5. \*: Measured at 1m and limit is transformed to 83.54dBµV/m(Peak) & 63.54dBµV/m (Average) by adding a factor 9.5 which is calculated from 20log(3/1).

| Emission Frequency | Peak Value | Duty<br>Cycle<br>Factor | Average<br>Value<br>Vertical | Limit         | Margin |
|--------------------|------------|-------------------------|------------------------------|---------------|--------|
| (MHz)              | (dB/m)     | (dB)                    | $(dB\mu V/m)$                | $(dB\mu V/m)$ | (dB)   |
| 3210.64            | 62.18      | -12.47                  | 49.71                        | 54.00         | 4.29   |
| 4813.00            | 57.10      | -12.47                  | 44.63                        | 54.00         | 9.37   |
| * 7218.00          | 64.92      | -12.47                  | 52.45                        | 63.54         | 11.09  |
| * 12035.00         | 68.06      | -12.47                  | 55.59                        | 63.54         | 7.95   |

Remarks: 1. Duty Cycle Factor = 20log(1.83ms\*13/100ms) = -12.47

2. Average value=Peak value+ Duty Cycle Factor

3. All final readings of measurement were with Average values.

4. \*: Measured at 1m and limit is transformed to 63.54dBµV/m by adding a factor 9.5 which is calculated from 20log(3/1).

| Date of Test : | Nov. 23, 2011        | Temperature :          | 25°C |
|----------------|----------------------|------------------------|------|
| EUT :          | Radio Control        | Humidity :             | 62%  |
| Test Mode:     | Transmitting Mode, H | Frequency: 2442.240MHz | Z    |

| Emission<br>Frequency | Antenna<br>Factor | Cable<br>Loss | Reading<br>Horizontal | Emission<br>Level<br>Horizontal | Limits        | Margin |
|-----------------------|-------------------|---------------|-----------------------|---------------------------------|---------------|--------|
| (MHz)                 | (dB/m)            | (dB)          | (dBµV)                | $(dB\mu V/m)$                   | $(dB\mu V/m)$ | (dB)   |
| 1015.12               | 24.35             | 4.21          | 17.90                 | 46.46                           | 54.00         | -7.54  |
| 1033.60               | 24.40             | 4.25          | 16.44                 | 45.09                           | 54.00         | -8.91  |
| 1053.76               | 24.44             | 4.29          | 19.59                 | 48.32                           | 54.00         | -5.68  |
| 1073.92               | 24.49             | 4.34          | 16.19                 | 45.02                           | 54.00         | -8.98  |
| 1090.72               | 24.54             | 4.37          | 18.17                 | 47.08                           | 54.00         | -6.92  |
| 1132.72               | 24.69             | 4.46          | 12.86                 | 42.01                           | 54.00         | -11.99 |
| 3256.84               | 30.62             | 7.40          | 11.61                 | 49.63                           | 54.00         | -4.37  |
| 4888.00               | 33.09             | 9.16          | 15.23                 | 57.48                           | 74.00         | -16.52 |
| * 7324.00             | 36.09             | 11.44         | 11.70                 | 59.23                           | 63.54         | -4.31  |

Remarks: 1. Emission level=Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

3. All final readings of measurement were with Peak values.

4. If the Average limit is met when using a Peak detector, the Average detector is unnecessary

5. \*: Measured at 1m and limit is transformed to 83.54dBµV/m(Peak) & 63.54dBµV/m (Average) by adding a factor 9.5 which is calculated from 20log(3/1).

| Emission Frequency  | Peak Value       | Duty<br>Cycle<br>Factor | Average<br>Value<br>Horizontal | Limit         | Margin |
|---------------------|------------------|-------------------------|--------------------------------|---------------|--------|
| (MHz)               | (dB/m)           | (dB)                    | (dBµV/m)                       | $(dB\mu V/m)$ | (dB)   |
| * 4888.00           | 57.48            | -12.47                  | 45.01                          | 63.54         | 18.53  |
| Pemarke: 1 Duty Cyc | la Eactor $-201$ | og(1.83mg               | *13/100mc) -                   | 12/17         |        |

Remarks: 1. Duty Cycle Factor =  $20\log(1.83\text{ms}*13/100\text{ms}) = -12.47$ 

2. Average value=Peak value+ Duty Cycle Factor

3. All final readings of measurement were with Average values.

4. \*: Measured at 1m and limit is transformed to 63.54dBµV/m by adding a factor 9.5 which is calculated from 20log(3/1).

| Date of Test : | Nov. 23, 2011 | Temperature : | 25°C |  |
|----------------|---------------|---------------|------|--|
| EUT :          | Radio Control | Humidity :    | 62%  |  |

Transmitting Mode, Frequency: 2442.240MHz

| Emission<br>Frequency | Antenna<br>Factor | Cable<br>Loss | Reading<br>Vertical | Emission<br>Level<br>Vertical | Limits        | Margin |
|-----------------------|-------------------|---------------|---------------------|-------------------------------|---------------|--------|
| (MHz)                 | (dB/m)            | (dB)          | (dBµV)              | $(dB\mu V/m)$                 | $(dB\mu V/m)$ | (dB)   |
| 1015.12               | 24.35             | 4.21          | 11.47               | 40.03                         | 54.00         | -13.97 |
| 1053.76               | 24.44             | 4.29          | 13.28               | 42.01                         | 54.00         | -11.99 |
| 1073.92               | 24.49             | 4.34          | 12.45               | 41.28                         | 54.00         | -12.72 |
| 1090.72               | 24.54             | 4.37          | 12.40               | 41.31                         | 54.00         | -12.69 |
| 1171.36               | 24.78             | 4.53          | 12.17               | 41.48                         | 54.00         | -12.52 |
| 1250.32               | 25.02             | 4.68          | 12.49               | 42.19                         | 54.00         | -11.81 |
| 1325.00               | 25.22             | 4.91          | 11.08               | 41.21                         | 54.00         | -12.79 |
| 3256.84               | 30.62             | 7.40          | 21.09               | 59.11                         | 74.00         | -14.89 |
| 4888.00               | 33.09             | 9.16          | 14.93               | 57.18                         | 74.00         | -16.82 |
| * 7324.00             | 36.09             | 11.44         | 11.09               | 58.62                         | 63.54         | -4.92  |

Remarks: 1. Emission level=Antenna Factor + Cable Loss + Reading.

Test Mode :

2. The emission levels that are 20dB below the official limit are not reported.

3. All final readings of measurement were with Peak values.

4. If the Average limit is met when using a Peak detector, the Average detector is unnecessary

5. \*: Measured at 1m and limit is transformed to 83.54dBµV/m(Peak) & 63.54dBµV/m (Average) by adding a factor 9.5 which is calculated from 20log(3/1).

| Emission Frequency | Peak Value | Duty<br>Cycle<br>Factor | Average<br>Value<br>Vertical | Limit         | Margin |
|--------------------|------------|-------------------------|------------------------------|---------------|--------|
| (MHz)              | (dB/m)     | (dB)                    | $(dB\mu V/m)$                | $(dB\mu V/m)$ | (dB)   |
| 3256.84            | 59.11      | -12.47                  | 46.64                        | 54.00         | 7.36   |
| 4888.00            | 57.18      | -12.47                  | 44.71                        | 54.00         | 9.29   |

Remarks: 1. Duty Cycle Factor = 20log(1.83ms\*13/100ms) = -12.47

2. Average value=Peak value+ Duty Cycle Factor

3. All final readings of measurement were with Average values.

| Date of Test : | Nov. 23, 2011        | $\underline{\qquad} Temperature : \underline{\qquad} 25^{\circ}C$ |     |  |  |  |
|----------------|----------------------|---|-----|--|--|--|
| EUT :          | Radio Control        | Humidity :  | 62% |  |  |  |
| Test Mode:     | Transmitting Mode, I | Frequency: 2477.056MH   | Z   |  |  |  |

| Emission<br>Frequency | Antenna<br>Factor | Cable<br>Loss | Reading<br>Horizontal | Emission<br>Level<br>Horizontal | Limits        | Margin |
|-----------------------|-------------------|---------------|-----------------------|---------------------------------|---------------|--------|
| (MHz)                 | (dB/m)            | (dB)          | (dBµV)                | $(dB\mu V/m)$                   | $(dB\mu V/m)$ | (dB)   |
| 1015.12               | 24.35             | 4.21          | 18.20                 | 46.76                           | 54.00         | -7.24  |
| 1031.92               | 24.40             | 4.24          | 17.06                 | 45.70                           | 54.00         | -8.30  |
| 1053.76               | 24.44             | 4.29          | 20.16                 | 48.89                           | 54.00         | -5.11  |
| 1073.92               | 24.49             | 4.34          | 16.33                 | 45.16                           | 54.00         | -8.84  |
| 1090.72               | 24.54             | 4.37          | 18.15                 | 47.06                           | 54.00         | -6.94  |
| 1132.72               | 24.69             | 4.46          | 12.63                 | 41.78                           | 54.00         | -12.22 |
| 3303.04               | 30.69             | 7.47          | 11.70                 | 49.86                           | 54.00         | -4.14  |
| 4955.50               | 33.23             | 9.1           | 15.94                 | 58.27                           | 74.00         | -15.73 |
| * 7434.00             | 36.33             | 11.61         | 14.07                 | 62.01                           | 63.54         | -1.53  |
| * 12385.00            | 38.54             | 15.01         | 14.08                 | 67.63                           | 83.54         | -15.91 |

Remarks: 1. Emission level=Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

3. All final readings of measurement were with Peak values.

4. If the Average limit is met when using a Peak detector, the Average detector is unnecessary

5. \*: Measured at 1m and limit is transformed to 83.54dBµV/m(Peak) & 63.54dBµV/m (Average) by adding a factor 9.5 which is calculated from 20log(3/1).

| Emission Frequency | Peak Value | Duty<br>Cycle<br>Factor | Average<br>Value<br>Horizontal | Limit         | Margin |
|--------------------|------------|-------------------------|--------------------------------|---------------|--------|
| (MHz)              | (dB/m)     | (dB)                    | $(dB\mu V/m)$                  | $(dB\mu V/m)$ | (dB)   |
| 4955.50            | 58.27      | -12.47                  | 45.80                          | 54.00         | 8.20   |
| * 12385.00         | 67.63      | -12.47                  | 55.16                          | 63.54         | 8.38   |

Remarks: 1. Duty Cycle Factor = 20log(1.83ms\*13/100ms) = -12.47

2. Average value=Peak value+ Duty Cycle Factor

3. All final readings of measurement were with Average values.

4. \*: Measured at 1m and limit is transformed to 63.54dB $\mu$ V/m by adding a factor 9.5 which is calculated from 20log(3/1).

| Date of Test : | Nov. 23, 2011        | Temperature :         | 25°C |
|----------------|----------------------|-----------------------|------|
| EUT :          | Radio Control        | Humidity :            | 62%  |
| Test Mode :    | Transmitting Mode, I | Frequency: 2477.056MH | Z    |

| Emission<br>Frequency | Antenna<br>Factor | Cable<br>Loss | Reading<br>Vertical | Emission<br>Level<br>Vertical | Limits   | Margin |
|-----------------------|-------------------|---------------|---------------------|-------------------------------|----------|--------|
| (MHz)                 | (dB/m)            | (dB)          | (dBµV)              | (dBµV/m)                      | (dBµV/m) | (dB)   |
| 1015.12               | 24.35             | 4.21          | 10.94               | 39.50                         | 54.00    | -14.50 |
| 1053.76               | 24.44             | 4.29          | 12.33               | 41.06                         | 54.00    | -12.94 |
| 1090.72               | 24.54             | 4.37          | 12.74               | 41.65                         | 54.00    | -12.35 |
| 1171.36               | 24.78             | 4.53          | 12.03               | 41.34                         | 54.00    | -12.66 |
| 1208.32               | 24.88             | 4.60          | 11.40               | 40.88                         | 54.00    | -13.12 |
| 1250.32               | 25.02             | 4.68          | 11.44               | 41.14                         | 54.00    | -12.86 |
| 1653.52               | 26.3              | 6.52          | 10.71               | 43.53                         | 54.00    | -10.47 |
| 3303.04               | 30.69             | 7.47          | 20.30               | 58.46                         | 74.00    | -15.54 |
| 4958.50               | 33.23             | 9.10          | 16.33               | 58.66                         | 74.00    | -15.34 |
| 6604.00               | 34.43             | 10.55         | 11.32               | 56.30                         | 63.54    | -7.24  |

Remarks: 1. Emission level=Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

3. All final readings of measurement were with Peak values.

4. If the Average limit is met when using a Peak detector, the Average detector is unnecessary

5. \*: Measured at 1m and limit is transformed to 83.54dBµV/m(Peak) & 63.54dBµV/m (Average) by adding a factor 9.5 which is calculated from 20log(3/1).

| Emission Frequency | Peak Value | Duty<br>Cycle<br>Factor | Average<br>Value<br>Vertical | Limit         | Margin |
|--------------------|------------|-------------------------|------------------------------|---------------|--------|
| (MHz)              | (dB/m)     | (dB)                    | (dBµV/m)                     | $(dB\mu V/m)$ | (dB)   |
| 3303.04            | 58.46      | -12.47                  | 45.99                        | 54.00         | 8.01   |
| 4958.50            | 58.66      | -12.47                  | 46.19                        | 54.00         | 7.81   |

Remarks: 1. Duty Cycle Factor = 20log(1.83ms\*13/100ms) = -12.47

2. Average value=Peak value+ Duty Cycle Factor

3. All final readings of measurement were with Average values.

|        | 3.6.3. Restricte  | ed Bands Mea  | asureme   | ent Results  |  |                                   |         |
|--------|---|---|---|--|--|-----------------------------------|---------|
|        | Date of Test :  | Nov. 23, 2011   |   |  |  | emperature :                      | 25°C    |
|        | EUT:  |   | Radio   | Control  |  | Humidity :                        | 62%     |
|        | Test Mode:  | T   | ransmit   | , Channel: 01  | , Frequency  | : 2405.376MHz                     | Z       |
|        | Emission<br>Frequency   | Antenna<br>Factor   | Cable<br>Loss   | Reading<br>Horizontal  | Emission<br>Level<br>Horizontal  | Limits                            | Margin  |
|        | (MHz)   | (dB/m)  | (dB)  | (dBµV)   | $(dB\mu V/m)$  | $(dB\mu V/m)$                     | (dB)    |
| Peak*  | 2329.440  | 28.03   | 6.26  | 13.43  | 47.72  | 74.00                             | 26.28   |
|        | Emission  |   | exceed  | the limits sho   | 11   |                                   | Margin  |
|        | Frequency   |   |   | Factor   | Horizontal   |                                   | Wiargin |
|        | (MHz)   | (dB/m)  |   | (dB)   | $(dB\mu V/m)$  | $(dB\mu V/m)$                     | (dB)    |
| Averag | ge* 2329.440  | 47.72   | -   | -12.47   | 35.25  | 54.00                             | 18.75   |
|        | 4. '*' T<br>excee   | The field strer<br>ad the limits s  | igth of e<br>shown i                                  | emission appoint and a section 15.2  | earing within<br>209.<br><sup>W</sup> Corp EMC Laboratory<br><u>Lin-kou Hsiang Taipei</u><br><u>2</u> Pool Code 24443<br>Factesso 2 20099303<br>m.tw | band 2310-2420<br>n Part 15.205(a |         |
|        | Limit<br>Env. / Ins.<br>BUT<br>Power Ratin<br>Test Mode<br>Preg<br>(MHz<br> | : A/C Chamber<br>: 3m 3115(3775)<br>: PCC PART-15C (16-<br>: B4446A 25C/62%<br>: T18MZ<br>g : DC 7.4V<br>: TX2405.376<br>Ant. Cable<br>. Factor Loss Reac<br>) (dB/m) (dB) (dB) | FK)<br>FK)<br>Emissii<br>ting Level<br>♥) (dBµ♥/1<br> | 2382. 2406.<br>MH2)<br>Data no. : 1<br>Ant. pol. : HORIZONTA<br>UJarwei W<br>Data<br>(dBµV/m) (dB)<br>74.00 26.28 pe | Mang<br>mark<br><br>ak   |                                   |         |
|        | 3 2406.2<br><br>Remarks: 1.   | 40 28.11 6.36 72.<br>Emission Level= Ante<br>The emission levels  | 00 106.48<br>enna Factor<br>that are 20               |  | eak<br><br>ng.   |                                   |         |
|        |   | limit are not report  | ed.   |  |  |                                   |         |

3.6.3. Restricted Bands Measurement Results

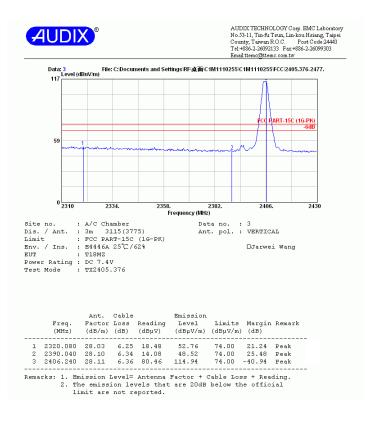
AUDIX Technology Corporation Report No. EM-F1000995

|        | Date of Test :        | Nov. 23, 2011  |                                   |                             |                            | Temperature :  | 25°C   |
|--------|-----------------------|--|-----------------------------------|-----------------------------|----------------------------|--|--------|
|        | EUT:                  |  | Radio Control                     |                             |                            | Humidity :   | 62%    |
|        | Test Mode :           | Т  | ransmit,                          | Channel: (                  | )1, Frequer                | ncy: 2405.376MI  | Iz     |
|        | Emission<br>Frequency | Antenna<br>Factor  | Cable<br>Loss                     | Reading<br>Vertical         | Emissi<br>Leve<br>Vertic   | 1  | Margin |
|        | (MHz)                 | (dB/m)   | (dB)                              | (dBµV)                      | (dBµV/                     | (dB $\mu$ V/m)   | (dB)   |
| Peak*  | 2320.080              | 28.03  | 6.25                              | 18.48                       | 52.76                      | 5 74.00  | 21.24  |
|        | Remark :              | <ol> <li>Low freq<br/>2310-242</li> <li>'*' The f</li> </ol> | uency se<br>20MHz).<br>ield strer | ection (spurning the of emi | rious in the<br>ssion appe | ble Loss + Read<br>restricted band<br>aring within Part<br>ction 15.209. | C      |
|        | Emission<br>Frequency | Peak<br>Value  |                                   | y Cycle<br>Factor           | Average V<br>Vertica       |  | Margin |
|        | (MHz)                 | (dB/m  | )                                 | (dB)                        | (dBµV/r                    | n) (dBµV/m   | ) (dB) |
| Averag | e* 2320.080           | 52.76  | -                                 | 12.47                       | 40.29                      | 54.00  | 13.71  |
| R      | emarks: 1. Duty       | -  | -                                 | g(1.830ms <sup>2</sup>      |                            | ) = -12.47   |        |

2. Average value=Peak value+Duty Cycle Factor

3. Low frequency section (spurious in the restricted band 2310-2420MHz).

4. '\*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.

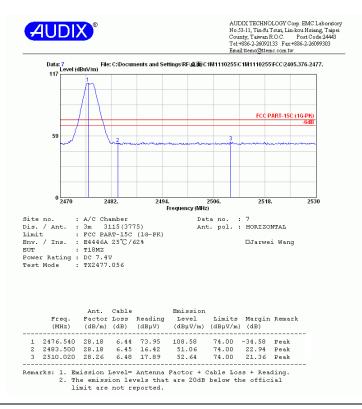


|         | Date of Test :        |  | Nov. 23, 2011                    |                               |                                 | mperature :        | 25°C   |  |  |
|---------|-----------------------|--|----------------------------------|-------------------------------|---------------------------------|--------------------|--------|--|--|
|         | EUT:                  |  | Radio Control                    |                               |                                 | Humidity :         | 62%    |  |  |
|         | Test Mode :           | 1  | Fransmit                         | , Channel: 6                  | 8, Frequency:                   | uency: 2477.056MHz |        |  |  |
| -       | Emission<br>Frequency | Antenna<br>Factor  | Cable<br>Loss                    | Reading<br>Horizontal         | Emission<br>Level<br>Horizontal | Limits             | Margin |  |  |
|         | (MHz)                 | (dB/m)   | (dB)                             | (dBµV)                        | $(dB\mu V/m)$                   | (dBµV/m)           | (dB)   |  |  |
| Peak*   | 2483.500              | 28.18  | 6.45                             | 16.42                         | 51.05                           | 74.00              | 22.95  |  |  |
|         | Remark :              | <ol> <li>Low free<br/>2450-252</li> <li>. '*' The f</li> </ol> | quency s<br>30MHz)<br>field stre | ection (spuri<br>ngth of emis | ous in the rest                 | g within Part 1    | -      |  |  |
|         | Emission<br>Frequency | Peak<br>Value  |                                  | ty Cycle A<br>Factor          | Average Value<br>Horizontal     | e Limit            | Margin |  |  |
|         | (MHz)                 | (dB/m  | )                                | (dB)                          | $(dB\mu V/m)$                   | $(dB\mu V/m)$      | (dB)   |  |  |
| Average | e* 2483.500           | 51.05  | 5 -                              | 12.47                         | 38.58                           | 54.00              | 15.42  |  |  |
| R       | emarks: 1. Duty       | Cycle Facto  | r = 2010                         | g(1.830ms*                    | 13/100 ms) = -                  | 12.47              |        |  |  |

Remarks: 1. Duty Cycle Factor =  $20\log(1.830\text{ms}*13/100\text{ms}) = -12.47$ 

2. Average value=Peak value+Duty Cycle Factor

- 3. Low frequency section (spurious in the restricted band 2450-2530MHz).
- 4. '\*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.

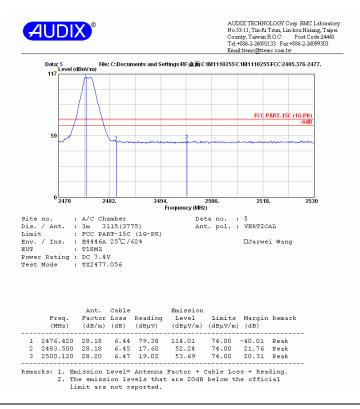


|        | Date of Test :        |   | Nov. 23, 2011                       |                       |                          | emperature :    | 25°C   |
|--------|-----------------------|---|-------------------------------------|-----------------------|--------------------------|-----------------|--------|
|        | EUT:                  |   | Radio                               | Control               |                          | Humidity :      | 62%    |
|        | Test Mode :           | ]   | Fransmit,                           | Channel:              | 58, Frequency:           | 2477.056MHz     | 2      |
| -      | Emission<br>Frequency | Antenna<br>Factor   | Cable<br>Loss                       | Reading<br>Vertical   |                          | Limits          | Margin |
|        | (MHz)                 | (dB/m)  | (dB)                                | (dBµV)                | (dBµV/m)                 | (dBµV/m)        | (dB)   |
| Peak*  | 2483.500              | 28.18   | 6.45                                | 17.60                 | 52.23                    | 74.00           | 21.77  |
| _      | Remark :              | <ol> <li>Low free<br/>2450-25</li> <li>. '*' The f</li> </ol> | quency se<br>30MHz).<br>field strer | ection (spungth of em | rious in the res         | g within Part 1 | -      |
|        | Emission<br>Frequency | Peak<br>Value   |                                     | y Cycle<br>Factor     | Average Valu<br>Vertical | e Limit         | Margin |
|        | (MHz)                 | (dB/m   | ı)                                  | (dB)                  | $(dB\mu V/m)$            | $(dB\mu V/m)$   | (dB)   |
| Averag | e* 2483.500           | 52.23   | 3 -                                 | 12.47                 | 39.76                    | 54.00           | 14.24  |
| R      | emarks: 1. Duty       | Cycle Facto   | r = 2010                            | v(1.830ms)            | *13/100ms) =             | -12 47          |        |

Remarks: 1. Duty Cycle Factor =  $20\log(1.830\text{ms}*13/100\text{ms}) = -12.47$ 

2. Average value=Peak value-Duty Cycle Factor

- 3. Low frequency section (spurious in the restricted band 2450-2530MHz).
- 4. '\*' The field strength of emission appearing within Part 15.205(a) shall not exceed the limits shown in section 15.209.



# 4. DUTY CYCLE FACTOR

### 4.1. Test Equipment

The following test equipment was used during the duty cycle factor measurement:

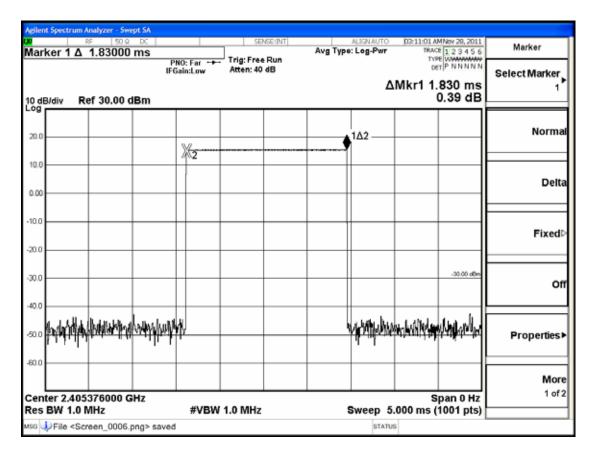
| Item | Туре              | Manufacturer | Model No.  | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A-544 | US51350140 | Oct. 14, 11' | Oct. 13, 12' |

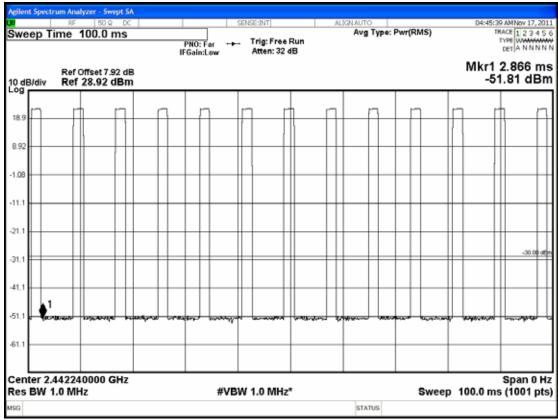
# 4.2. Block Diagram of Test Setup

| RADIO CONTROL | SPECTRUM |
|---------------|----------|
| (EUT)         | ANALYZER |

# 4.3. Test Results **PASSED.**

(Test Date: Nov. 28, 2011 Temperature : 25°C Humidity : 52%)





Duty Cycle Factor=20log(dwell time\*13/100ms) =20log(1.83ms\*13/100ms)=-12.47

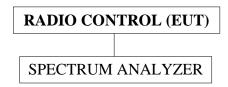
# 5. 6dB BANDWIDTH MEASUREMENT

### 5.1. Test Equipment

The following test equipment was used during the 20dB bandwidth measurement:

| Item | Туре              | Manufacturer | Model No.  | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A-544 | US51350140 | Oct. 14, 11' | Oct. 13, 12' |

### 5.2. Block Diagram of Test Setup



### 5.3. Specification Limits (§15.247(a)(2))

The minimum 6dB bandwidth shall be at least 500kHz.

### 5.4. Operating Condition of EUT

- 5.4.1. Set up the EUT and simulator as shown on 5.2.
- 5.4.2. To turn on the power of all equipment.
- 5.4.3. EUT (Radio Control) was on transmitting frequency function during the testing.

### 5.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

The measurement guideline was according to KDB 558074.

### 5.6. Test Results

**PASSED.** All the test results are attached in next pages.

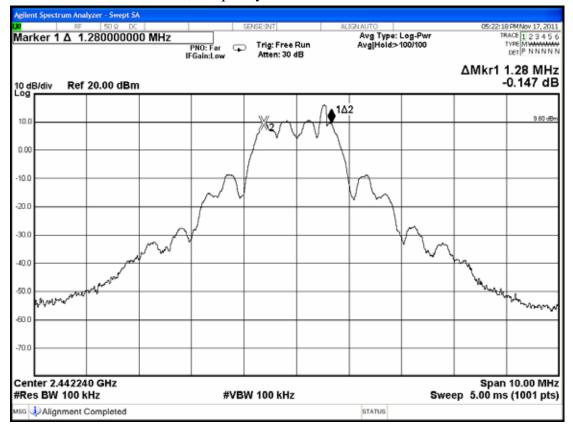
(Test Date: Nov. 17, 2011 Temperature :  $25^{\circ}$  Humidity : 52%)

| Mode | Channel | Frequency   | 6dB Bandwidth |
|------|---------|-------------|---------------|
| 1.   | CH 01   | 2405.376MHz | 1.24MHz       |
| 2.   | CH 19   | 2442.240MHz | 1.28MHz       |
| 3.   | CH 36   | 2477.056MHz | 1.30MHz       |

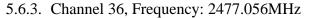
[Limit: least 500kHz]



#### 5.6.1. Channel 01, Frequency: 2405.376MHz



#### 5.6.2. Channel 19, Frequency: 2442.240MHz





# 6. MAXIMUM PEAK OUTPUT POWER MEASUREMENT

### 6.1. Test Equipment

The following test equipment was used during the maximum peak output power measurement:

| Item | Туре              | Manufacturer | Model No.  | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A-544 | US51350140 | Oct. 14, 11' | Oct. 13, 12' |

#### 6.2. Block Diagram of Test Setup

The same as section.4.2.

### 6.3. Specification Limits (§15.247(b)-(3))

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is : 1Watt. (30dBm)

### 6.4. Operating Condition of EUT

Same as 6dB bandwidth measurement which was listed in 5.4 except the test set up replaced by section 6.2.

#### 6.5. Test Procedure

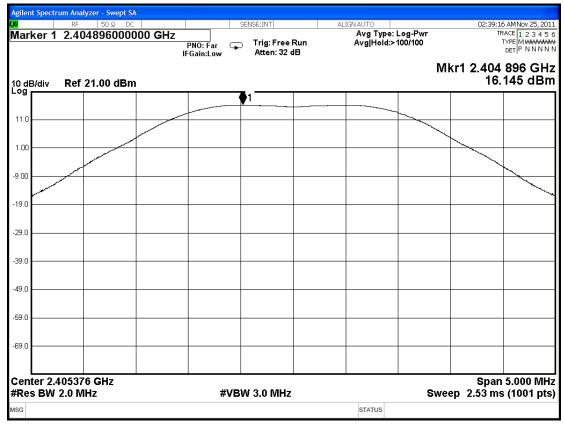
Setting the spectrum span to encompass the EBW, RBW=2MHz and VBW=3MHz. The find the peak value The measurement guideline was according to KDB 558074.

#### 6.6. Test Results

**PASSED.** All the test results are listed below.

(Test Date: Nov. 25, 2011 Temperature :  $25^{\circ}$  Humidity : 57%)

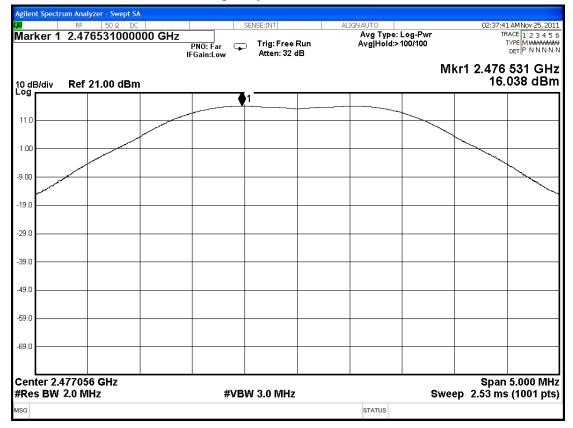
| No. | Channel | Test Frequency | Peak Output Power | Limit |
|-----|---------|----------------|-------------------|-------|
| 1.  | CH 01   | 2405.376MHz    | 16145dBm          | 30dBm |
| 2.  | CH 19   | 2442.240MHz    | 16.120dBm         | 30dBm |
| 3.  | CH 36   | 2477.056MHz    | 16.038dBm         | 30dBm |



#### 6.6.1. Channel 01, Frequency: 2405.376MHz

### 6.6.2. Channel 19, Frequency: 2442.240MHz

| 69.0                                |                                  |                                |   |
|-------------------------------------|----------------------------------|--------------------------------|---|
| 59.0                                |                                  |                                |   |
| 49.0                                |                                  |                                |   |
| 39.0                                |                                  |                                |   |
| 29.0                                |                                  |                                |   |
| 3.0                                 |                                  |                                |   |
| 9.0                                 |                                  |                                |   |
| 9.00                                |                                  |                                |   |
| 1.00                                |                                  |                                |   |
| 11.0                                |                                  |                                |   |
|                                     | <br><b>♦</b> 1                   |                                |   |
| 0 dB/div Ref 21.00 dBm              |                                  |                                | Mkr1 2.441 745 GH<br>16.120 dBr           |
| arker 1 2.4417450000                | ➡ Trig: Free Run<br>Atten: 32 dB | Avg Hold>100/100               |   |
| RF 50 Ω DC<br>arker 1 2.44174500000 | SENSE:INT                        | ALIGNAUTO<br>Avg Type: Log-Pwr | 02:37:07 AM Nov 25, 20<br>TRACE 1 2 3 4 5 |



### 6.6.3. Channel 36, Frequency: 2477.056MHz

# 7. EMISSION LIMITATIONS MEASUREMENT

## 7.1. Test Equipment

The following test equipment was used during the emission limitations test:

| Item | Туре              | Manufacturer | Model No.  | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A-544 | US51350140 | Oct. 14, 11' | Oct. 13, 12' |

## 7.2. Block Diagram of Test Setup

The same as section.4.2.

7.3. Specification Limits (§15.247(c))

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (See Section 15.205(c)).(% This test result attaching to §3.6.3)

## 7.4. Operating Condition of EUT

Same as 6dB bandwidth measurement which was listed in 5.4 except the test set up replaced by section 7.2.

## 7.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW.

The measurement guideline was according to KDB 558074.

## 7.6. Test Results

**PASSED.** The testing data was attached in the next pages.

(Test Date: Nov. 17, 2011 Temperature : 25°C Humidity : 52%)

| Agilent Spec   | trum Analyzer - Sv  |   |   |  | N DATE OF LAND         |                       | as well as pro-                    | barra sa a                               |  |  |
|--|---|---|---|--|------------------------|-----------------------|------------------------------------|--|--|--|
| Marker   | 1 1.602060  |   | iHz<br>NO: Fast 🕞   | Trig: Free   |                        | Avg Type<br>Avg Hold: | Log-Pwr<br>>100/100                | TRA                                      | MNov 17, 2011<br>CE 1 2 3 4 5 6<br>PE MWWWWW<br>ET P N N N N N | Peak Search  |
| 10 dB/div  | Ref 20.00   | IFO                                     | Gain:Low  | Atten: 30  | ₫B                     |                       | Mkr                                | 1 1.602                                  | 06 GHz<br>27 dBm   | Next Peak  |
|  | Rei 20.00   |   |   |  |                        |                       |                                    |  |  |  |
| 10.0   | _   |   |   |  |                        |                       |                                    |  |  | Next Pk Right  |
| 0.00   |   |   |   |  |                        |                       |                                    |  |  |  |
| -10.0  | _   |   |   |  |                        |                       |                                    |  | -9.50 dBm  | Next Pk Left   |
| -20.0  |   |   |   |  |                        |                       |                                    |  |  |  |
| -30.0  |   |   |   |  |                        |                       |                                    |  |  | Marker Delta   |
| -40.0  |   |   |   |  |                        |                       |                                    |  |  | Mkr→CF   |
| -50.0  |   |   |   |  |                        |                       |                                    |  |  | Miki→Cr  |
| -60.0  |   |   |   |  |                        |                       |                                    | 1  |  | Mkr→RefLvi   |
| -70.0  | had and a second  | e.els::                                 | and a state of the second s | and a straight of the second | a,t-qasso,angolus      | لاستراده الطعر ارتعسن | ine an isin a she                  | a an | a for she and the owned  |  |
|  |   |   |   |  |                        |                       |                                    |  |  | More<br>1 of 2   |
| Start 30.<br>#Res BW   | .0 MHz<br>V 100 kHz   |   | #VBW  | 100 kHz  |                        |                       | Sweep                              | Stop 2.<br>238 ms                        | 0000 GHz<br>(1001 pts)   | 1072   |
| ısg 🦺 File   | e <screen_0022< td=""><td>.png&gt; saved</td><td>1</td><td></td><td></td><td></td><td>STATU</td><td>s</td><td></td><td></td></screen_0022<> | .png> saved                             | 1   |  |                        |                       | STATU                              | s  |  |  |
| Agilent Spec   |   |   |   |  |                        |                       |                                    |  |  |  |
|  | trum Analyzer - Sv  |   | _   |  | 1. Longer, 411. June 1 |                       |                                    |  |  |  |
| X  |   | 2 DC  <br>000000 G                      |   | Trig: Free   |                        |                       | ALIGNAUTO<br>: Log-Pwr<br>: 37/100 | TRA<br>TY                                | MNov 17, 2011<br>CE 1 2 3 4 5 6<br>PE MW                       | Peak Search  |
| n<br>Marker  | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | iHz<br>NO: Fast G<br>Sain:Low   |  | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               |  |  |
| X  | RF 50 \$  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               | CE 123456<br>PE MWWWWW<br>ET P NNNNN                           |  |
| Marker<br>10 dB/div  | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               |  | NextPeak   |
| Marker<br>Marker   | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               |  | NextPeak   |
| Marker   | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               |  | Next Peak<br>Next Pk Right   |
| Marker<br>10 dB/div<br>10.0  | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left   |
| Marker   | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left   |
| Marker<br>10 dB/div<br>10.0<br>.0.0<br>.0.0<br>.0.0  | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Trig: Free   | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta   |
| Marker<br>10 dB/div<br>10.0<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.0000<br>.000<br>.000<br>.0000<br>.000<br>.000<br>.000<br>.000<br>.00   | i 3.209000  | 2 DC<br>000000 G<br>PI<br>IF(           | NO: Fast 😱  | Atten: 30  | e Run                  | Avg Type              | : Log-Pwr<br>37/100                | TRA<br>TY<br>0<br>Akr1 3.2               | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta   |
| Marker<br>10 dB/div<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0    | i 3.209000  | ک ایک ا<br>000000 G<br>PI<br>IFO<br>dBm | NO: Fast 😱  | 1  | e Run<br>IdB           | Avg Type<br>Avg Hold: | : Log-Pwr<br>37/100                | 1RA<br>1Y<br>0<br>1kr1 3.2<br>-43.9      | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   |
| Marker<br>10 dB/div<br>10.0<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.0000<br>.0000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.00   | Ref 20.00   | ک ایک ا<br>000000 G<br>PI<br>IFO<br>dBm | NO: Fast Galaxies   | 1  | e Run<br>IdB           | Avg Type<br>Avg Hold: | : Log-Pwr<br>37/100                | 1RA<br>1Y<br>0<br>1kr1 3.2<br>-43.9      | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More                          |
| Marker<br>Marker<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10.0<br>10 | Ref 20.00   | ک ایک ا<br>000000 G<br>PI<br>IFO<br>dBm | NO: Fast Saln:Low   | 1  | e Run<br>dB            | Avg Type<br>Avg Hold: | : Log-Pwr<br>37/100<br>N           | 14kr1 3.2<br>-43.9                       | 209 GHz<br>75 dBm  | Peak Search<br>Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More<br>1 of 2 |
| Marker<br>Marker<br>10 dB/div<br>10.0<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.000<br>.0000<br>.0000<br>.000<br>.000<br>.000<br>.000<br>.000        | Ref 20.00   | dBm                                     | NO: Fast Saln:Low   | 1  | e Run<br>dB            | Avg Type<br>Avg Hold: | : Log-Pwr<br>37/100<br>N           | 14kr1 3.2<br>-43.9                       | 209 GHz<br>75 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More                          |

7.6.1. Channel 01, Frequency: 2405.376MHz

| Agile   | nt Spectru                   | m Analyzer - S                              |                                      |                             |                         |           |           |                                      |  |  |   |
|---|------------------------------|---|--------------------------------------|-----------------------------|-------------------------|-----------|-----------|--------------------------------------|--|--|---|
| Mar   | ker 1                        |   | <u>a oc</u>  <br>0000000 G           |                             |                         | NSEONT    |           | Log-Pwr                              | TRAC   | MNov 17, 2011<br>8 1 2 3 4 5 6   | Peak Search   |
|   |                              |   |                                      | NO: Fast 🖵<br>Gain:Low      | Trig: Free<br>Atten: 30 |           | Avg Hold: | 17/100                               | 06   | E MWWWWW<br>T P N N N N N  |   |
| 10 d  | B/div                        | Ref 20.00                                   | dBm                                  |                             |                         |           |           | N                                    | 1kr1 7.2<br>-55.60   | 20 GHz<br>62 dBm   | NextPeak  |
| Ĺŏĝ   |                              |   |                                      |                             |                         |           |           |                                      |  |  |   |
| 10.0  |                              |   |                                      |                             |                         |           |           |                                      |  |  | Next Pk Right   |
| 0.00  |                              | _   |                                      |                             |                         |           |           |                                      |  |  |   |
| -10.0   |                              |   |                                      |                             |                         |           |           |                                      |  | -9.20 dBm  | Next Pk Left  |
|   |                              |   |                                      |                             |                         |           |           |                                      |  |  |   |
| -20.0   | $\vdash$                     |   |                                      |                             |                         |           |           |                                      |  |  | Marker Delta  |
| -30.0   | $\vdash$                     |   | +                                    |                             |                         |           |           |                                      |  |  |   |
| -40.0   | <u> </u>                     |   |                                      |                             |                         |           |           |                                      |  |  | Mkr→CF  |
| -50.0   |                              |   |                                      |                             | 1-                      |           |           |                                      |  |  |   |
| -60.0   | Murpo                        |   | harmonthe                            | مدهرستاليريه                | mar                     | مصليسي    | سسمحاه    | and the second                       | dana series  | manthem  | Mkr→RefLvl  |
|   | ····                         |   |                                      | 1 1-11                      |                         |           |           |                                      |  | 4 a  | INIKI → KCI L VI  |
| -70.0   |                              |   |                                      |                             |                         |           |           |                                      |  |  | More  |
| Sta   | t 5.000                      |   |                                      |                             |                         |           |           |                                      | Stop 10  | .000 GHz   | 1 of 2  |
|   |                              | 100 kHz                                     |                                      | #VBW                        | 100 kHz                 |           |           | Sweep                                | 603 ms (   | 1001 pts)  |   |
| #Re   | S BW 1                       |   |                                      |                             |                         |           |           |                                      | -  | 1001 pts/  |   |
| #Re<br>MSG  |                              |   |                                      |                             |                         |           |           | STATU                                | -  |  |   |
| #Re<br>MSG  |                              | m Analyzer - S                              |                                      |                             | SE                      | NSE:INT   |           | STATU                                | 08   |  |   |
| #Re<br>MSG<br>Agile   | nt Spectru                   | <mark>m Analyzer - S</mark><br>RF 50        | x DC<br>00000000                     | GHz                         |                         | NSE:INT   | Avg Type  | ALIGNAUTO                            | 5<br> 06:20:30 Pf<br>TRAC                                  | MNov 17, 2011  | Peak Search   |
| #Re<br>MSG<br>Agile   | nt Spectru                   | <mark>m Analyzer - S</mark><br>RF 50        | 00000000<br>P                        |                             |                         | Run       |           | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | B<br>D6:28:30 P<br>TRAC<br>TVS<br>D6                       | MNov 17, 2011<br>1 1 2 3 4 5 6<br>E M  |   |
| #Re<br>Msg<br>Agile<br>Mar  | nt Spectru<br>Ker 1          | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 4Nov 17, 2011<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 9 NNNNN<br>25 GHz                         | Peak Search<br>Next Peak  |
| #Re<br>Msg<br>Agile<br>Mar  | nt Spectru                   | <mark>m Analyzer - S</mark><br>RF 50        | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | MNov 17, 2011<br>1 1 2 3 4 5 6<br>E M  |   |
| #Re<br>MSG<br>Agile<br>Mar<br>10 d  | nt Spectru<br>Ker 1          | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 4Nov 17, 2011<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 9 NNNNN<br>25 GHz                         | Next Peak   |
| #Re<br>Msg<br>Mar<br>Mar<br>10.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 4Nov 17, 2011<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 9 NNNNN<br>25 GHz                         | Next Peak   |
| #Re<br>MSG<br>Mar<br>Mar<br>10 d  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 25 GHz<br>52 dBm   | Next Peak<br>Next Pk Right  |
| #Re<br>Msg<br>Mar<br>Mar<br>10.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 4Nov 17, 2011<br>1 2 3 4 5 6<br>1 2 3 4 5 6<br>1 9 NNNNN<br>25 GHz                         | Next Peak<br>Next Pk Right  |
| #Re<br>MSG<br>MGI<br>Mar<br>10.0<br>10.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 25 GHz<br>52 dBm   | Next Peak<br>Next Pk Right  |
| #Rea<br>MSG<br>Actie<br>Mar<br>10.0<br>0.00<br>-10.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 25 GHz<br>52 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| #Re<br>usc<br>vo<br>Mar<br>10.0<br>0.00<br>-10.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 25 GHz<br>52 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| #Rea<br>MSG<br>Actie<br>Mar<br>10.0<br>0.00<br>-10.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>87 50<br>10.82500         | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 25 GHz<br>52 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| #Re<br>MSG<br>Actient<br>Mar<br>10.00<br>-10.0<br>-20.0<br>-30.0  | nt Spestru<br>ker 1<br>B/div | m Analyzer - 5<br>10.82500<br>Ref 20.00     | © DC<br>00000000<br>P<br>IF          | GHz<br>NO: Fast 😱           | Trig: Free              | Run       | Avg Type  | ALIGNAUTO<br>2: Log-Pwr<br>2: 55/100 | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 25 GHz<br>52 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |
| #Re<br>MSG<br>Adde<br>Main<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-30.0<br>-40.0  | B/div                        | m Analyzer - 5<br>10.82500<br>Ref 20.00     | © DC<br>00000000<br>P<br>IF<br>0 dBm | GHz<br>NO: Fast<br>Gain:Low | Trig: Free<br>Atten: 30 | Run<br>dB | Avg Type  | MI                                   | 06:20:30 PF<br>TRAC<br>TVS<br>06<br>kr1 10.8               | 4Nov 17, 2011<br>E [1 2 3 4 5 6<br>E M 4000<br>TP NNNN<br>25 GHz<br>52 dBm<br>-9 20 dbn    | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF                        |
| #Re<br>wsc<br>Address<br>10 dd<br>10 dd<br>10 0<br>000<br>-10.0<br>-20.0<br>-20.0<br>-40.0<br>-60.0   | B/div                        | m Analyzer - 5<br>10.82500<br>Ref 20.00     | 2 DC<br>00000000<br>P<br>IF<br>0 dBm | GHz<br>NO: Fast<br>Gain:Low | Trig: Free<br>Atten: 30 | Run<br>dB | Avg Type  | MI                                   | s<br>D6:20:30 P<br>TRAC<br>TYS<br>CE<br>kr1 10.8<br>-56.65 | 4Nov 17, 2011<br>E [1 2 3 4 5 6<br>E M 4000<br>TP NNNN<br>25 GHz<br>52 dBm<br>-9 20 dbn    | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF                        |
| #Re<br>wso<br>Address<br>10 dd<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-30.0<br>-40.0<br>-50.0   | B/div                        | m Analyzer - 5<br>10.82500<br>Ref 20.00     | 2 DC<br>00000000<br>P<br>IF<br>0 dBm | GHz<br>NO: Fast<br>Gain:Low | Trig: Free<br>Atten: 30 | Run<br>dB | Avg Type  | MI                                   | s<br>D6:20:30 P<br>TRAC<br>TYS<br>CE<br>kr1 10.8<br>-56.65 | 4Nov 17, 2011<br>E [1 2 3 4 5 6<br>E M 4000<br>TP NNNN<br>25 GHz<br>52 dBm<br>-9 20 dbn    | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More |
| #Re<br>usc<br>Address<br>Main<br>10 dd<br>10 dd<br>10 dd<br>10 dd<br>0.00<br>-10.0<br>-20.0<br>-20.0<br>-30.0<br>-40.0<br>-60.0<br>-60.0<br>Stail | ker 1                        | m Analyzer - 3<br>10.82500<br>Ref 20.00<br> | 2 DC<br>00000000<br>P<br>IF<br>0 dBm | GHz<br>NO: Fast<br>Gain:Low | hanisestanda            | Run<br>dB | Avg Type  |                                      | Stop 15.   | 112 3 4 5 6<br>E 12 3 4 5 6<br>E MWWWW<br>P NNNN<br>25 GHz<br>52 dBm<br>-9 20 dBm          | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More |
| #Re<br>usc<br>Address<br>Main<br>10 dd<br>10 dd<br>10 dd<br>10 dd<br>0.00<br>-10.0<br>-20.0<br>-20.0<br>-30.0<br>-40.0<br>-60.0<br>-60.0<br>Stail | ker 1                        | m Analyzer - 5<br>10.82500<br>Ref 20.00     | 2 DC<br>00000000<br>P<br>IF<br>0 dBm | GHz<br>NO: Fast<br>Gain:Low | Trig: Free<br>Atten: 30 | Run<br>dB | Avg Type  |                                      | Stop 15.<br>603 ms (                                       | 4Nov 17, 2011<br>E 1 2 3 4 5 6<br>E M 40000000<br>TP NNNN<br>25 GHz<br>52 dBm<br>-9.20 dbn | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |

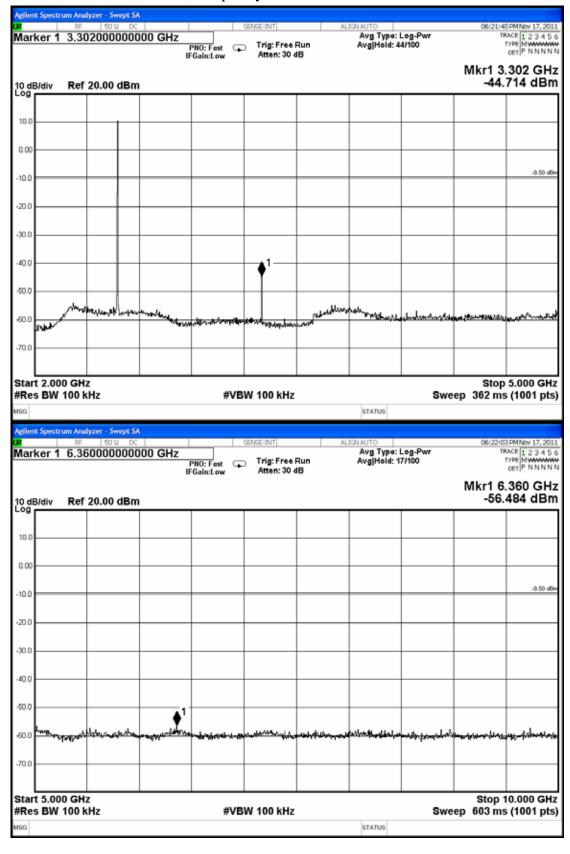
| Design of the second se | 20-00-0MM/sec 37, 2033  | ALIGNAUTO                 |                      | NSEINT        | 65                      |                               |   | RF 50 G                                  | n apecu u  | 1 10   |
|--|---|---------------------------|----------------------|---------------|-------------------------|-------------------------------|---|--|------------|--|
| Peak Search  | 29:09 PM Nov 17, 2011<br>TRACE 1 2 3 4 5 6<br>TYPE MWWWWW   | : Log-Pwr                 | Avg Type<br>Avg Hold |               |                         |                               |   | 18.62000                                 | 'ker 1     | Mar  |
| NextPeak   | DET P NNNNN   |                           | 11 211 1010          |               | Atten: 30               | NO: Fast 🕞<br>Gain:Low        | IF(   |  |            |  |
| NEXIFEAK   | 18.620 GHz<br>55.421 dBm  | M                         |                      |               |                         |                               | d.D   | D-6 20 00                                | D.L.E.     |  |
|  |   |                           |                      |               |                         |                               | dBm   | Ref 20.00                                | B/div      | Log  |
| Next Pk Right  |   |                           |                      |               |                         |                               |   |  |            | 10.0   |
|  |   |                           |                      |               |                         |                               |   |  |            | 10.0   |
|  |   |                           |                      |               |                         |                               | -   | -  |            | 0.00   |
| Next Pk Left   | -9.20 dBm   |                           |                      |               |                         |                               |   |  |            | -10.0  |
|  |   |                           |                      |               |                         |                               |   |  |            | 10.0   |
| Marker Delta   |   |                           |                      |               |                         |                               | +   |  | $\vdash$   | -20.0  |
| Marker Deita   |   |                           |                      |               |                         |                               |   |  |            | -30.0  |
|  |   |                           |                      |               |                         |                               |   |  |            |  |
| Mkr→CF   |   |                           |                      |               |                         |                               | +   | +  |            | -40.0  |
|  |   | -1-                       |                      |               |                         |                               |   |  |            | -50.0  |
|  | And the Real Property and   | <b>♥</b> ' _ ]            | I. I. humans         | المعالم ما    |                         |                               |   |  |            |  |
| Mkr→RefLvl   |   | din a distri              | nt-selants. Annu     | 1217 Y 1949 M |                         | What Kan May                  | ومجارف المحتجز والمراقع   | and product and a special section of the | -accurate  | -60.0  |
|  |   |                           |                      |               |                         |                               |   |  |            | -70.0  |
| More   |   |                           |                      |               |                         |                               |   |  |            |  |
| 1 of 2   | p 20.000 GHz  |                           |                      |               |                         |                               |   |  | rt 15.00   |  |
|  | ms (1001 pts)   |                           |                      |               | 100 kHz                 | #VBW                          |   | 00 kHz                                   | s BW 1     | #Re:   |
|  |   | STATUS                    |                      |               |                         |                               |   |  |            |  |
|  |   | _                         |                      |               |                         |                               |   |  |            | MSG  |
| Baak Saarah  | 30:11 PMNov 17, 2011  | ALISNAUTO                 |                      | NSE:INT       | SE                      |                               | vept SA<br>2 DC   | n Analyzer - Sv<br>RF 50 s               | nt Spectru |  |
| Peak Search  | TRACE 1 2 3 4 5 6   | : Log-Pwr                 |                      | Run           | Trig: Free              |                               | 2 DC 000000   |  |            | Agilen<br>1 <mark>0</mark> 0   |
| Peak Search<br>Next Peak   | TYPE MWWWWWW<br>DET P N N N N N   | : Log-Pwr<br>59/100       | Avg Type             | Run           |                         | GHz<br>NO: Fast G<br>Galn:Low | 0000000<br>P  | RF 50 \$                                 |            | Agilen<br>1 <mark>0</mark> 0   |
|  | TRACE 1 2 3 4 5 6   | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | RF 50 \$                                 | ker 1      | Agilen<br>Va<br>Mari   |
|  | TRACE 123456<br>TYPE MWWWWW<br>DET PNNNNN<br>23.160 GHz   | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | ker 1      | Agilen<br>100<br>Mari  |
|  | TRACE 123456<br>TYPE MWWWWW<br>DET PNNNNN<br>23.160 GHz   | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | Ker 1      | Agilen<br>Va<br>Mari   |
| Next Peak  | TRACE 123456<br>TYPE MWWWWW<br>DET PNNNNN<br>23.160 GHz   | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | Ker 1      | Agilen<br>Mari<br>10 de<br>Log   |
| Next Peak<br>Next Pk Right   | TRACE 123456<br>TYPE MWWWWW<br>DET PNNNNN<br>23.160 GHz   | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | Ker 1      | Agilen<br>War<br>10 dB<br>Log  |
| Next Peak  | TRACE 123456<br>TYPE MWWWWW<br>DET PNNNNN<br>23.160 GHz   | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | B/div      | Agilen<br>Mari<br>10 de<br>Log   |
| Next Peak<br>Next Pk Right   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | B/div      | Agilen<br>00<br>Mari<br>10.0<br>10.0<br>-10.0  |
| Next Peak<br>Next Pk Right   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | 85 50 s<br>23.160000                     | B/div      | Agilen<br>Us<br>Mar<br>10 de<br>Log<br>10.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | ≈ 50 s<br>23.160000                      | B/div      | Agilen<br>00<br>Mari<br>10.0<br>10.0<br>-10.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | ≈ 50 s<br>23.160000                      | B/div      | Agilen<br>00<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-30.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | ≈ 50 s<br>23.160000                      | B/div      | Agilen<br>un<br>Mari<br>10.00<br>0.00<br>-10.0   |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type             | Run           | Trig: Free              | NO: Fast 🕞                    | 2 DC<br>0000000<br>P<br>IF  | ≈ 50 s<br>23.160000                      | B/div      | Agilen<br>00<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-30.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   | 23.160 GHz<br>33.097 dBm  | : Log-Pwr<br>59/100       | Avg Type<br>Avg Hold | e Run<br>dB   | Trig: Free<br>Atten: 30 | NO: Fast 🕞                    | 2 DC 000000<br>P<br>IF(   | ≈ 50 s<br>23.160000                      | B/div      | Action<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0   |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta   | 23.160 GHz<br>53.097 dBm  | : Log-Pwr<br>59/100       | Avg Type<br>Avg Hold | e Run<br>dB   | Trig: Free<br>Atten: 30 | NO: Fast Galaxies             | 2 DC 000000<br>P<br>IF(   | Ref 20.00                                | B/div      | Agilen<br>vo<br>Mari<br>10 dE<br>Log<br>10.0<br>-10.0<br>-20.0<br>-30.0<br>-40.0   |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   | 23.160 GHz<br>53.097 dBm  | : Log-Pwr<br>59/100       | Avg Type<br>Avg Hold | e Run<br>dB   | Trig: Free<br>Atten: 30 | NO: Fast Galaxies             | 2 DC 000000<br>P<br>IF(   | Ref 20.00                                | B/div      | Action<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0   |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl  | 23.160 GHz<br>53.097 dBm  | : Log-Pwr<br>59/100       | Avg Type<br>Avg Hold | e Run<br>dB   | Trig: Free<br>Atten: 30 | NO: Fast Galaxies             | 2 DC 000000<br>P<br>IF(   | Ref 20.00                                | B/div      | Action<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0 |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   | 23.160 GHz<br>53.097 dBm  | : Log-Pwr<br>59/100<br>Mk | Avg Type<br>Avg Hold | e Run<br>dB   | Trig: Free<br>Atten: 30 | NO: Fast Saln:Low             | 2 DC 000000<br>P<br>IF(   | Ref 20.00                                | B/div      | Action<br>Mari<br>10 di<br>Log<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-40.0<br>-50.0<br>-60.0<br>Star  |
|  | Land (in 2 (in 2 (in 1 (in 1(in 1 |                           | Se lectrary          | alt wijdzani  |                         |                               | ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا<br>ا |  |            | -10.0<br>-20.0<br>-30.0<br>-40.0<br>-50.0<br>-60.0<br>-70.0<br>Star  |

| Peak Search  |   |   |  |                           |                                  |         |                      |                            | Analyzer - Sw | it spectru |   |
|--|---|---|--|---------------------------|----------------------------------|---------|----------------------|----------------------------|---------------|------------|---|
|  | PMNov 17, 2011<br>ACE 1 2 3 4 5 6   | TRAC  | Log-Pwr                                    |                           | SENSE: INT                       |         | Hz                   | 000000 G                   | .6276700      | ker 1      | Marl  |
|  | DET P N N N N N   | T13<br>D8   | 44/100                                     | Avg Hold                  | ree Run<br>: 30 dB               |         | NO: Fast Gain:Low    | P                          |               |            |   |
| NextPeak   | 7 67 GHz  | 1 1.627   | Mkr  |                           |                                  |         | oomicou              |                            |               |            |   |
|  | 601 dBm   | -52.6   |  |                           |                                  |         |                      | dBm                        | ef 20.00 (    | B/div      | 10 dE   |
|  |   |   |  |                           |                                  |         |                      |                            |               |            | Log   |
| Next Pk Right  |   |   |  |                           |                                  |         |                      |                            |               |            | 10.0  |
|  |   |   |  |                           |                                  |         |                      |                            |               |            | 10.0  |
|  |   |   |  |                           | _                                |         |                      |                            |               |            | 0.00  |
| Next Pk Left   | -9.20 dBm   |   |  |                           |                                  |         |                      |                            |               |            |   |
|  | 18.20 004   |   |  | -                         | -                                | -       |                      | -                          |               |            | -10.0   |
|  |   |   |  |                           |                                  |         |                      |                            |               |            | ~~~   |
| Marker Delta   |   |   |  |                           |                                  |         |                      |                            |               |            | -20.0   |
|  |   |   |  |                           |                                  |         |                      |                            |               |            | -30.0   |
|  |   |   |  |                           |                                  |         |                      |                            |               |            |   |
| Mkr→CF   | +   |   |  |                           |                                  | +       |                      |                            |               | <u> </u>   | -40.0   |
|  |   | <b>A</b> 1  |  |                           |                                  |         |                      |                            |               |            |   |
|  |   | <b>Y</b>  |  |                           |                                  |         |                      |                            |               |            | -50.0   |
| Mkr→RefLv  |   |   |  |                           |                                  |         |                      |                            |               |            | -60.0   |
| MIKI - Kei EV  | waterharm   | with the second   | wellowerlyn                                | alles and stranged by the | white                            | lphene  | an warder            | monum                      | man           | winder     |   |
|  |   |   |  | _                         | _                                | -       |                      |                            |               |            | -70.0   |
| More   |   |   |  |                           |                                  |         |                      |                            |               |            |   |
| 1 of 2   | .0000 GHz   | Stop 2.0  |  |                           |                                  | -       |                      |                            | Hz            | t 30.0     | Star  |
|  | (1001 pts)  | 238 ms (  | Sweep                                      |                           | Hz                               | V 100 k | #VBW                 |                            | 0 kHz         | s BW 1     | #Res  |
|  |   | 2S  |  |                           |                                  |         |                      |                            |               |            |   |
|  |   |   | STATU                                      |                           |                                  |         |                      |                            |               |            | MSG   |
|  |   |   |  |                           |                                  |         |                      |                            | Analyzer - Sw | t Spectru  |   |
| Peak Search  | PM Nov 17, 2011<br>ACE 1 2 3 4 5 6  | D6:32:22 P  | ALIGNAUTO                                  |                           | SENSE: (INT                      |         | SHz                  | DC                         | RF 50 Ω       |            | Agilen<br><mark>Ju</mark>   |
| Peak Search  | PMNov 17, 2011<br>ACE 12 3 4 5 6<br>YPE MWWWWWW<br>DET P N N N N N                        | D6:32:22 P  | ALIGNAUTO                                  | Avg Typ<br>Avg Hold       | SENSE:INT<br>Free Run<br>: 30 dB |         | NO: Fast 🕞           | DC<br>000000 G<br>P        |               |            | Agilen<br><mark>Ju</mark>   |
| Peak Search<br>Next Peak   | ACE 123456<br>YPE MWWWWW<br>DET P N N N N N   | 06:32:22 P<br>TRAC<br>TVI<br>D                                | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         |                      | DC<br>000000 G<br>P        | RF 50 Ω       |            | Agilen<br><mark>Ju</mark>   |
|  | PMNov 17, 2011<br>MCE 12 3 4 5 6<br>YPE M WWWWWW<br>DET P N N N N N<br>257 GHz<br>835 dBm | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | RF 50 Ω       | ker 1      | Agilen<br>Xa<br>Marl  |
|  | ACT 123456<br>YPE MWWWWWW<br>DET P NNNNN<br>257 GHz                                       | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>20<br>Mari  |
| NextPeak   | ACT 123456<br>YPE MWWWWWW<br>DET P NNNNN<br>257 GHz                                       | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>Xa<br>Marl  |
| NextPeak   | ACT 123456<br>YPE MWWWWWW<br>DET P NNNNN<br>257 GHz                                       | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>Mari<br>10 de<br>Log  |
| NextPeak   | ACT 123456<br>YPE MWWWWWW<br>DET P NNNNN<br>257 GHz                                       | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>Mari<br>10 de<br>Log  |
|  | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>Mari<br>10 de<br>Log  |
| Next Peak<br>Next Pk Right   | ACT 123456<br>YPE MWWWWWW<br>DET P NNNNN<br>257 GHz                                       | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>Mari<br>10 de<br>Log  |
| Next Peak<br>Next Pk Right   | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilem<br>30<br>Mari<br>10.0<br>10.0<br>0.00  |
| Next Peak<br>Next Pk Right   | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>Mari<br>10 de<br>Log<br>10.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left   | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilem<br>30<br>Mari<br>10.0<br>10.0<br>0.00  |
| Next Peak<br>Next Pk Right<br>Next Pk Left   | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          | Atter   | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>A<br>Mari<br>10.0<br>0.00<br>-10.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left   | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          |         | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Agilen<br>A<br>Mari<br>10.0<br>0.00<br>-10.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                         | ACE 123456<br>WE WANNE<br>257 GHz<br>335 dBm  | D6:32:22 P<br>TRAC<br>119<br>00<br>Wkr1 3.2                   | ALIGNAUTO<br>: Log-Pwr<br>23/100           |                           | ree Run                          | Atter   | NO: Fast 🕞           | DC<br>000000 G<br>P<br>IF( | .2570000      | ker 1      | Acilen<br>39<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-30.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                         | ACE 123456<br>VPE MANNAN<br>257 GHz<br>335 dBm<br>-0.00 dbn                               | 06:32-22 P<br>IRAG<br>110<br>00<br>Wkr1 3.2<br>-43.8          | ALSON AUTO<br>:: LogPwr<br>23/100          | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast Gain:Low    | dBm                        | Ref 20.00 (   | ker 1      | Agilen<br>2<br>Mari<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-30.0  |
| Next Pk Right<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF           | ACE 123456<br>VPE MANNAN<br>257 GHz<br>335 dBm<br>-0.00 dbn                               | 06:32-22 P<br>IRAG<br>110<br>00<br>Wkr1 3.2<br>-43.8          | ALSON AUTO<br>:: LogPwr<br>23/100          | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast Gain:Low    | dBm                        | Ref 20.00 (   | ker 1      | Agilen<br>30<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-40.0<br>-50.0   |
| Next Pk Right<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF           | ACE 123456<br>VPE MANNAN<br>257 GHz<br>335 dBm<br>-0.00 dbn                               | 06:32-22 P<br>IRAG<br>110<br>00<br>Wkr1 3.2<br>-43.8          | ALSON AUTO<br>:: LogPwr<br>23/100          |                           | iree Run<br>30 dB                | Atter   | NO: Fast Gain:Low    | dBm                        | Ref 20.00 (   | ker 1      | Acilen<br>39<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-30.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                         | ACE 123456<br>VPE MANNAN<br>257 GHz<br>335 dBm<br>-0.00 dbn                               | 06:32-22 P<br>IRAG<br>110<br>00<br>Wkr1 3.2<br>-43.8          | ALSON AUTO<br>:: LogPwr<br>23/100          | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast Gain:Low    | dBm                        | .2570000      | ker 1      | Agilen<br>30<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-40.0<br>-50.0   |
| Next Pk Right<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF           | ACE 123456<br>VPE MANNAN<br>257 GHz<br>335 dBm<br>-0.00 dbn                               | 06:32-22 P<br>IRAG<br>110<br>00<br>Wkr1 3.2<br>-43.8          | ALSON AUTO<br>:: LogPwr<br>23/100          | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast Gain:Low    | dBm                        | Ref 20.00 (   | ker 1      | Action<br>Mari<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0  |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF               | ACE 12 3 4 5 6<br>PE MANNA<br>257 GHz<br>335 dBm<br>.0.50 dBm<br>.0.50 dBm                | 06:32-22 P<br>IRAG<br>TYP<br>OR<br>Mkr1 3.2<br>-43.8<br>-43.8 | ALSONAUTO<br>:: Log-Pwr<br>23/100<br>N     | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast Gain:Low    | dBm                        | еf 20.00 (    | ker 1      | Action<br>Mari<br>10 dE<br>Log<br>10.00<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-2 |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lv | ACE 123456<br>WPE MANNAN<br>257 GHz<br>335 dBm<br>  | D6:32-22P<br>TRAC<br>TW<br>TW<br>Mkr1 3.2<br>-43.8            | Alsonauto<br>:: Log-Pwr<br>23/100<br>N<br> | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast<br>Gain:Law | dBm                        | еf 20.00 (    | ker 1      | Action<br>Mari<br>10 dE<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-2 |
| Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lv | ACE 12 3 4 5 6<br>PE MANNA<br>257 GHz<br>335 dBm<br>.0.50 dBm<br>.0.50 dBm                | D6:32-22P<br>TRAC<br>TW<br>TW<br>Mkr1 3.2<br>-43.8            | ALSONAUTO<br>:: Log-Pwr<br>23/100<br>N     | Avg Hoid                  | iree Run<br>30 dB                | Atter   | NO: Fast<br>Gain:Law | dBm                        | еf 20.00 (    | ker 1      | Action<br>Mari<br>10 dE<br>Log<br>10.00<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-2 |

7.6.2. Channel 19, Frequency: 2442.240MHz

| Agile   | nt Spectrur    | n Analyzer - Sv     |                              |                               |                         |               |  |  |  |  |  |
|---|----------------|---------------------|------------------------------|-------------------------------|-------------------------|---------------|--|--|--|--|--|
| Mar   | ker 1          | 7.330000            | 2 DC  <br>000000 G           | iHz                           |                         | NSE:INT       | Avg Type   | Log-Pwr                                | TRAC   | 4Nov 17, 2011<br>6 1 2 3 4 5 6   | Peak Search  |
|   |                |                     |                              | NO: Fast 😱<br>Gain:Low        | Trig: Free<br>Atten: 30 |               | Avg Hold:  | 34/100                                 | 06   |  |  |
| 10 d  | B/div          | Ref 20.00           | dBm                          |                               |                         |               |  | N                                      | 1kr1 7.3<br>-54.9  | 30 GHz<br>22 dBm   | NextPeak   |
| Ĺŏĝ   |                |                     |                              |                               |                         |               |  |  |  |  |  |
| 10.0  |                |                     |                              |                               |                         |               |  |  |  |  | Next Pk Right  |
| 0.00  |                |                     |                              |                               |                         |               |  |  |  |  |  |
| -10.0   |                |                     |                              |                               |                         |               |  |  |  | -9.50 dBm  | Next Pk Left   |
|   |                |                     |                              |                               |                         |               |  |  |  |  |  |
| -20.0   |                |                     |                              |                               |                         |               |  |  |  |  | Marker Delta   |
| -30.0   |                |                     |                              |                               |                         |               |  |  |  |  |  |
| -40.0   | <u> </u>       |                     |                              |                               |                         |               |  |  |  |  | Mkr→CF   |
| -50.0   | <u> </u>       |                     |                              |                               | <b>1</b> -              |               |  |  |  |  |  |
| -60.0   | we we          | ي والما الم         | والمسلحان بينيه فالما        | humple                        | umplant                 | attern at the | and the state of t | الاشائيون والانتخا                     | chronicalula   | and a state of the | Mkr→RefLvl   |
| -70.0   |                |                     |                              |                               |                         |               |  |  |  |  |  |
| -70.0   |                |                     |                              |                               |                         |               |  |  |  |  | More   |
|   | t 5.000        |                     |                              |                               |                         |               |  | -                                      | Stop 10  | 000 GHz  | 1 of 2   |
| #Re   | s BW 1         | 00 KHZ              |                              | #VBW                          | 100 kHz                 |               |  |  | 603 ms (   | 1001 pts)  |  |
|   |                |                     |                              |                               |                         |               |  |  |  |  |  |
| MSG   |                |                     |                              |                               |                         |               |  | STATU                                  | >  |  |  |
|   | nt Spectrur    | n Analyzer - Sv     |                              |                               | SE                      | NSE(INT)      |  |  | -  | Nev 17, 2011   |  |
| Agiler  |                |                     | 0000000                      |                               |                         | NSEGNT        | Avg Type   | ALIGNAUTO                              | 06:34:19 P   | 4Nov 17, 2011<br>6 1 2 3 4 5 6   | Peak Search  |
| Agiler  |                | RF 50 \$            | DC  <br>0000000 (<br>Pl      | GHz<br>NO: Fast 🖵<br>Galn:Low |                         | Run           |  | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:04:10 P<br>TRAC<br>TVP<br>D6                                    | E 1 2 3 4 5 6<br>E M<br>T P N N N N N  |  |
| Agiler<br>Dø<br>Mar   | ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   |  |
| Agiler<br>Dø<br>Mar   | ker 1          | RF 50 \$            | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | E 1 2 3 4 5 6<br>E M<br>T P N N N N N  |  |
| Agiler<br>ya<br>Mar   | ker 1<br>B/div | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | NextPeak   |
| Agiles<br>Mar<br>10 d<br>Log  | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | NextPeak   |
| Agiles<br>Mar<br>10 d<br>10.0<br>10.0   | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | Next Peak<br>Next Pk Right   |
| Agiles<br>Mar<br>10 d<br>Log  | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | Next Peak<br>Next Pk Right   |
| Agiles<br>Mar<br>10 d<br>10.0<br>10.0   | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | Next Peak<br>Next Pk Right<br>Next Pk Left   |
| Agiler<br>(7)<br>Mar<br>10 d<br>Log<br>10.0<br>-10.0  | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | Next Peak<br>Next Pk Right<br>Next Pk Left   |
| Aciter<br>un<br>Mar<br>10.0<br>10.0<br>0.00<br>-10.0  | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta   |
| Action<br>00<br>Mar<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-30.0  | Ker 1          | is 50 s<br>13.96500 | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run           | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | D6:34:18 P<br>TRAC<br>TVF<br>CF<br>CF<br>CF<br>1 13.9              | 65 GHz   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta   |
| Action<br>Mar<br>10 d<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-20.0<br>-30.0<br>-40.0  | B/div          | Ref 20.00           | 20000000<br>P<br>IFC         | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB   | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | .9.50 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   |
| Action<br>or<br>Mar<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-30.0<br>-40.0   | B/div          | Ref 20.00           | 2 DC<br>0000000<br>Pi<br>IF( | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB   | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 65 GHz   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   |
| Action<br>Mar<br>10 d<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-20.0<br>-30.0<br>-40.0  | B/div          | Ref 20.00           | 20000000<br>P<br>IFC         | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB   | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | .9.50 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF   |
| Action<br>Mar<br>10 d<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-20.0<br>-30.0<br>-40.0<br>-50.0<br>-60.0<br>-70.0   | B/div          | Ref 20.00           | 20000000<br>P<br>IFC         | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB   | Avg Type   | ALIGNAUTO<br>: Log-Pwr<br>35/100       | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More                          |
| Action<br>Mar<br>10 d<br>Log<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0 | B/div          | Ref 20.00           | 20000000<br>P<br>IFC         | NO: Fast C                    | Trig: Free<br>Atten: 30 | 4B            | Avg Type   | ALSONAUTO<br>: Log-Pwr<br>35/100<br>MI | 1<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5<br>5 | .9.50 dBm  | Peak Search<br>Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>Nore<br>1 of 2 |

| Agile  | nt Spectru        | m Analyzer - Sv                         |                             |                               |                         |             |  |                           | 04.05.10.5                              |   |   |
|--|-------------------|---|-----------------------------|-------------------------------|-------------------------|-------------|--|---------------------------|---|---|---|
| Mar  | ker 1             | 19.24500                                |                             |                               |                         | NSEGNT      | Avg Type   | Log-Pwr                   | TRAC                                    | MNov 17, 2011<br>8 1 2 3 4 5 6<br>9 M                       | Peak Search   |
|  |                   |   |                             | NO: Fast 🖵<br>Gain:Low        | Trig: Free<br>Atten: 30 |             | Avg Hold:  | 50/100                    | D                                       | PNNNN   |   |
| 10 d   | B/div             | Ref 20.00                               | dBm                         |                               |                         |             |  | M                         | kr1 19.2<br>-55.0                       | 45 GHz<br>45 dBm  | NextPeak  |
| Log  |                   |   |                             |                               |                         |             |  |                           |   |   |   |
| 10.0   |                   |   |                             |                               |                         |             |  |                           |   |   | Next Pk Right   |
| 0.00   |                   | _                                       |                             |                               |                         |             |  |                           |   |   |   |
| -10.0  |                   |   |                             |                               |                         |             |  |                           |   | -9.50 dBm   | Next Pk Left  |
|  |                   |   |                             |                               |                         |             |  |                           |   |   |   |
| -20.0  |                   |   |                             |                               |                         |             |  |                           |   |   | Marker Delta  |
| -30.0  |                   |   |                             |                               |                         |             |  |                           |   |   |   |
| -40.0  | ┝──               | _                                       |                             |                               |                         |             |  |                           |   |   | Mkr→CF  |
| -50.0  |                   |   |                             |                               |                         |             |  |                           |   |   |   |
|  |                   | فوومايد أحقور والمع                     |                             | المريد ما                     |                         |             | م  | unite                     | mantines                                | Hermon  |   |
| -60.0  | -www.p            | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | MAY ARE COMPANY OF BUILDING | TAT YOU LAND                  | WAY-TRONGTON OF THE     |             | an <b>a</b> nn an a |                           |   |   | Mkr→RefLvl  |
| -70.0  | <u> </u>          |   |                             |                               |                         |             |  |                           |   |   |   |
|  |                   |   |                             |                               |                         |             |  |                           |   |   | More<br>1 of 2  |
|  | t 15.00<br>s BW 1 | 0 GHz<br>00 kHz                         |                             | #VBW                          | 100 kHz                 |             |  | Sweep                     |   | .000 GHz<br>1001 pts)                                       | 1012  |
| MSG  |                   |   |                             |                               |                         |             |  | STATU                     |   | 1001 pto,   |   |
|  |                   |   |                             |                               |                         |             |  |                           |   |   |   |
| Agile  | nt Spectru        | m Analyzer - Sv                         | rept SA                     |                               |                         |             |  | -                         |   |   |   |
| 1,00   |                   | RF 50 \$                                | 2 DC                        | GHz                           | SE                      | NSE:INT     |  | ALIGNAUTO                 | TRAC                                    | MNov 20, 2011<br>8 1 2 3 4 5 6                              | Peak Search   |
| 1,00   |                   |   | 0000000<br>P                | GHz<br>NO: Fast 🕞<br>Gain:Low |                         | Run         |  | : Log-Pwr                 | TRAC                                    | MNov 20, 2011<br>8 1 2 3 4 5 6<br>9 MMMMMM<br>1 P N N N N N |   |
| <mark>ye</mark><br>Mar   | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  |   |
| <mark>ye</mark><br>Mar   | ker 1             | RF 50 \$                                | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | 8 123456<br>6 MWWWWWW<br>7 P NNNNN                          |   |
| Mar<br>10 d  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | NextPeak  |
| 00<br>Mar<br>10 d<br>Log<br>-10.0  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | NextPeak  |
| Mar<br>Mar<br>10 d<br>Log  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak   |
| 00<br>Mar<br>10 d<br>Log<br>-10.0  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak   |
| Mar<br>10 d<br>Log<br>-10.0  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| 01<br>Mar<br>10 d<br>-10.0<br>-20.0<br>-20.0<br>-30.0  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| Mar<br>10 d<br>Log<br>-10.0<br>-20.0   | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| 01<br>Mar<br>10 d<br>-10.0<br>-20.0<br>-20.0<br>-30.0  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |
| 20<br>Mar<br>10 d<br>Log<br>-10.0<br>-20.0<br>-30.0<br>-40.0<br>-50.0  | ker 1             | ≅ 50 s<br>24.190000                     | DC<br>D000000<br>P<br>IF    | NO: Fast 😱                    | Trig: Free              | Run         | Avg Type   | : Log-Pwr<br>30/100       | ۲۳۸<br>۲۱۶<br>rt                        | * 123456<br>* MWWWWW<br>* PNNNNN<br>90 GHz                  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |
| -10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0  | ker 1             | ≅ 50 s<br>24.190000                     | Bm                          | NO: Fast Galan:Low            | Trig: Free<br>Atten: 10 | e Run<br>dB | Avg Type<br>Avg Hold:                                | M                         | kr1 24.1                                | 90 GHz<br>84 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF                        |
| -10.0<br>-10.0<br>-20.0<br>-30.0<br>-40.0<br>-60.0   | ker 1             | Ref 0.00 d                              | Bm                          | NO: Fast Galan:Low            | Trig: Free<br>Atten: 10 | e Run<br>dB | Avg Type<br>Avg Hold:                                | M                         | kr1 24.1                                | 90 GHz<br>84 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF                        |
| -10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0  | ker 1             | Ref 0.00 d                              | Bm                          | NO: Fast Galan:Low            | Trig: Free<br>Atten: 10 | e Run<br>dB | Avg Type<br>Avg Hold:                                | M                         | kr1 24.1                                | 90 GHz<br>84 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl         |
| -10.0<br>-10.0<br>-20.0<br>-30.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.0<br>-40.00 | ker 1             | Ref 0.00 d                              | Bm                          | NO: Fast Galan:Low            | Trig: Free<br>Atten: 10 | e Run<br>dB | Avg Type<br>Avg Hold:                                | M                         | 1<br>-74.1<br>-74.1                     | * 123456<br>************************************            | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl         |
| IO d<br>Mar           10 d<br>Log           -100           -200 </td <td>ker 1</td> <td>Ref 0.00 d</td> <td>Bm</td> <td>NO: Fast Sala:Low</td> <td>Trig: Free<br/>Atten: 10</td> <td>a a fundada</td> <td>Avg Type<br/>Avg Hold:</td> <td>: Log-Pwr<br/>30/100<br/>MI</td> <td>1<br/>-74.1<br/>-74.1<br/>-74.1<br/>Stop 25</td> <td>90 GHz<br/>84 dBm</td> <td>Next Peak<br/>Next Pk Right<br/>Next Pk Left<br/>Marker Delta<br/>Mkr→CF<br/>Mkr→Ref Lvl<br/>More</td>  | ker 1             | Ref 0.00 d                              | Bm                          | NO: Fast Sala:Low             | Trig: Free<br>Atten: 10 | a a fundada | Avg Type<br>Avg Hold:                                | : Log-Pwr<br>30/100<br>MI | 1<br>-74.1<br>-74.1<br>-74.1<br>Stop 25 | 90 GHz<br>84 dBm  | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More |



7.6.3. Channel 36, Frequency: 2477.056MHz

| Agiler  | nt Spectrum        | Analyzer - Sw                 |                            |                               |                         |                            |   |  |   |  |   |
|---|--------------------|-------------------------------|----------------------------|-------------------------------|-------------------------|----------------------------|---|--|---|--|---|
| Mar   | ker 1 1            | <sup>№</sup> 50 Ω<br>4.435000 |                            |                               |                         | NSEGNT                     |   | Log-Pwr                                | 06:22:35 P  | Nov 17, 2011<br>8 1 2 3 4 5 6<br>8 M<br>7 P N N N N N        | Peak Search   |
|   |                    |                               |                            | NO: Fast 🖵<br>Gain:Low        | Atten: 30               |                            | Avginoia:   | 26/100                                 | DE  | PNNNNN   | NextBack  |
|   |                    |                               | -                          |                               |                         |                            |   | M                                      |   | 35 GHz<br>47 dBm   | Next Peak   |
| 10 d<br>Log   | B/div F            | Ref 20.00 (                   | 1Bm                        |                               |                         |                            |   |  | -55.5   |  |   |
|   |                    |                               |                            |                               |                         |                            |   |  |   |  | Next Pk Right   |
| 10.0  |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
| 0.00  |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
| -10.0   |                    |                               |                            |                               |                         |                            |   |  |   | -9.50 dBm  | Next Pk Left  |
| -10.0   |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
| -20.0   | <u> </u>           |                               |                            |                               |                         |                            |   |  |   |  |   |
| -30.0   |                    |                               |                            |                               |                         |                            |   |  |   |  | Marker Delta  |
|   |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
| -40.0   | <u> </u>           |                               |                            |                               |                         |                            |   |  |   |  | Mkr→CF  |
| -50.0   |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
|   |                    |                               |                            |                               |                         |                            |   |  | . ♦   |  |   |
| -60.0   | whether the second | a and the second              | borisoppose                | ensaderadaşê,                 | إجاشيته يقونه وتد       | ۍيېزلي <del>ند</del> ه مېټ | and the state of the | del the shirt water                    | planessites   | nin kanabre  | Mkr→RefLvl  |
| -70.0   |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
| -10.0   |                    |                               |                            |                               |                         |                            |   |  |   |  | More  |
| Star  | t 10.000           | GHz                           |                            |                               |                         |                            |   |  | Stop 15   | .000 GHz   | 1 of 2  |
|   | s BW 10            |                               |                            | #VBW                          | 100 kHz                 |                            |   | Sweep                                  |   | 1001 pts)  |   |
| MSG   |                    |                               |                            |                               |                         |                            |   | STATU                                  | 65  |  |   |
|   |                    |                               |                            |                               |                         |                            |   |  |   |  |   |
|   | nt Spectrum        | Analyzer - Sw                 |                            |                               | 20                      | USEQUIT                    |   |  |   | 4New 17, 2011  |   |
| Agiler  |                    |                               | DC 000000                  |                               |                         | NSEGNT                     | Avg Type  | ALIGNAUTO                              | D6:23:06 P  | MNov 17, 2011<br>8 1 2 3 4 5 6                               | Peak Search   |
| Agiler  |                    | RF 50 Q                       | DC<br>1000000<br>Pl        | GHz<br>NO: Fast 🕞<br>Saln:Low |                         | Run                        |   | ALIGNAUTO<br>: Log-Pwr<br>21/100       | 06:23:05 Pi<br>TRAC<br>TVP<br>DR                                  | 8 1 2 3 4 5 6<br>6 M<br>7 P N N N N N                        |   |
| Agiler<br>ve<br>Mar   | ker 1 1            | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    |  | Peak Search<br>Next Peak  |
| Agiler<br>ve<br>Mar   | ker 1 1            | RF 50 Q                       | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 8 1 2 3 4 5 6<br>6 M<br>7 P N N N N N                        |   |
| Agiler<br>W<br>Mar<br>10 di<br>Log  | ker 1 1            | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    |  | NextPeak  |
| Agiler<br>Va<br>Mar   | ker 1 1            | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    |  | NextPeak  |
| Agiler<br>W<br>Mar<br>10 di<br>Log  | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    |  | NextPeak  |
| Agler<br>Mar<br>10 di<br>Log  | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    |  | Next Peak   |
| Agiler<br>Mar<br>10 di<br>Log   | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 70 GHz<br>71 dBm   | Next Peak   |
| Agler<br>Mar<br>10 di<br>Log  | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 70 GHz<br>71 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| Agiler<br>(a<br>Mar<br>10.0<br>10.0<br>-10.0<br>-20.0   | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 70 GHz<br>71 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| Agiler<br>07<br>10 dl<br>10.0<br>0.00<br>-10.0  | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 70 GHz<br>71 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| Agiler<br>(a<br>Mar<br>10.0<br>10.0<br>-10.0<br>-20.0   | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 70 GHz<br>71 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |
| Acilem<br>or<br>Mar<br>10 di<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-30.0<br>-40.0  | ker 1 1<br>B/div F | 9.370000                      | DC<br>1000000<br>Pi<br>IF( | NO: Fast 😱                    | Trig: Free              | Run                        | Avg Type  | ALIGNAUTO<br>: Log-Pwr<br>21/100       | D5:23:05 P<br>TRAC<br>TV<br>DF<br>Ref<br>119.3                    | 70 GHz<br>71 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |
| Aciter<br>00<br>Mar<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-30.0  | ker 1 1            | Ref 20.00 (                   | IBm                        | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB                | Avg Type<br>Avg Hold:   | ALSONAUTO<br>:: LogPwr<br>21/100<br>MI | b:23:06 P<br>TRAC<br>119<br>ce<br>kr1 19.3<br>-55.3               | e 12 3 4 5 6<br>E M WANNE<br>70 GHz<br>71 dBm                | Next Peak<br>Next Pk Right<br>Next Pk Left  |
| Acilem<br>or<br>Mar<br>10 di<br>10.0<br>0.00<br>-10.0<br>-20.0<br>-30.0<br>-40.0  | ker 1 1            | 9.370000                      | IBm                        | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB                | Avg Type<br>Avg Hold:   | ALSONAUTO<br>:: LogPwr<br>21/100<br>MI | b:23:06 P<br>TRAC<br>119<br>ce<br>kr1 19.3<br>-55.3               | 70 GHz<br>71 dBm   | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta                                  |
| Action<br>Mar<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0   | ker 1 1            | Ref 20.00 (                   | IBm                        | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB                | Avg Type<br>Avg Hold:   | ALSONAUTO<br>:: LogPwr<br>21/100<br>MI | b:23:06 P<br>TRAC<br>119<br>ce<br>kr1 19.3<br>-55.3               | e 12 3 4 5 6<br>E M WANNE<br>70 GHz<br>71 dBm                | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF                        |
| Action<br>Mar<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0   | ker 1 1            | Ref 20.00 (                   | IBm                        | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB                | Avg Type<br>Avg Hold:   | ALSONAUTO<br>:: LogPwr<br>21/100<br>MI | b:23:06 P<br>TRAC<br>119<br>ce<br>kr1 19.3<br>-55.3               | e 12 3 4 5 6<br>E M WANNE<br>70 GHz<br>71 dBm                | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl         |
| Action<br>Mar<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20 | ker 1 1            | Ref 20.00 (                   | IBm                        | NO: Fast G                    | Trig: Free<br>Atten: 30 | e Run<br>dB                | Avg Type<br>Avg Hold:   | ALSONAUTO<br>:: LogPwr<br>21/100<br>MI | 105-23-06 PT<br>TRAC<br>TYPE<br>CR<br>119.3<br>-55.3<br>-55.3     | E 12 3 4 5 6<br>E Museumono<br>70 GHz<br>71 dBm<br>-9.50 dbn | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF                        |
| Action<br>Mar<br>10 dl<br>10.0<br>10.0<br>-10.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20.0<br>-20 | ker 1 1            | Ref 20.00 (                   | IBm                        | NO: Fast Contraction          | Trig: Free<br>Atten: 30 | E Run<br>dB                | Avg Type<br>Avg Hold:   | ALSONAUTO<br>:: LogPwr<br>21/100<br>MI | D5:23:06 P<br>TRAC<br>TYS<br>ce<br>kr1 19.3<br>-55.3<br>-55.3<br> | e 12 3 4 5 6<br>E M WANNE<br>70 GHz<br>71 dBm                | Next Peak<br>Next Pk Right<br>Next Pk Left<br>Marker Delta<br>Mkr→CF<br>Mkr→Ref Lvl<br>More |

| 10 dB/div       Ref 20.00 dBm       -52.905 dBm         10.0       -52.905 dBm       -52.905 dBm         10.0       -60.000       -60.000         -10.0   | Search<br>ext Peak<br>Pk Right<br>t Pk Left<br>ker Delta |
|---|--|
| INFO TABLE TOW       Atten: 30 dB       Mkr1 24.010 GHz       Net         10 dB/div       Ref 20.00 dBm       -52.905 dBm       -       Next I         10.0   | Pk Right<br>t Pk Left                                    |
| 10.0  | t Pk Left  |
| -10.0 -20.0 |  |
| -200<br>-300<br>-400  | ker Delta  |
| -30.0   |  |
|   |  |
| -50.0   | Mkr→CF   |
|   | →RefLvi  |
| -70.0 Start 20.000 GHz Stop 25.000 GHz  | More<br>1 of 2   |
| #Res BW 100 kHz #VBW 100 kHz Sweep 603 ms (1001 pts)  |  |
| Agilent Spectrum Analyzer - Swept SA  |  |
| OR         DS         DC         SENSE:INT         ALIGNAUTO         D6:24:01 PMNov 17, 2011           Marker 1         1.651310000000 GHz         Trig: Free Run         Avg Type: Log-Pwr         TRACE 1 2 3 4 5 6         Peak S  | earch  |
| IFGaln:Low Atten: 30 dB Mkr1 1.651 31 GHz No<br>10 dB/div Ref 20.00 dBm -52.205 dBm   | extPeak  |
|   | Pk Right   |
| 0.00<br>-10.0   | t Pk Left  |
| -20.0 Mark  | ker Delta  |
|   |  |
| 30.0  | Mkr→CF   |
|   |  |
| -40.0<br>-40.0<br>-50.0   | Mkr→CF<br>→RefLvl<br>More                                |

## 8. BAND EDGES MEASUREMENT

## 8.1. Test Equipment

The following test equipment was used during the band edges measurement:

| Item | Туре              | Manufacturer | Model No.  | Serial No. | Last Cal.    | Next Cal.    |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1.   | Spectrum Analyzer | Agilent      | N9030A-544 | US51350140 | Oct. 14, 11' | Oct. 13, 12' |

## 8.2. Block Diagram of Test Setup

The same as section.4.2.

## 8.3. Specification Limits (§15.247(c))

The highest level should be at least 20 dB below that in the 100kHz bandwidth.

## 8.4. Operating Condition of EUT

Same as 6dB bandwidth measurement which was listed in 5.4 except the test set up replaced by section 8.2.

## 8.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

The measurement guideline was according to KDB 558074.

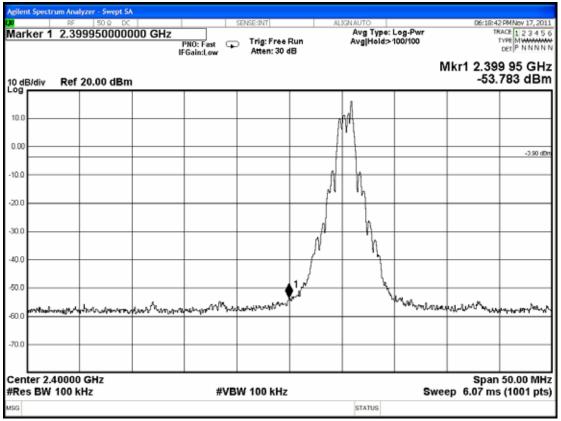
## 8.6. Test Results

**PASSED.** All the test results are attached in next pages.

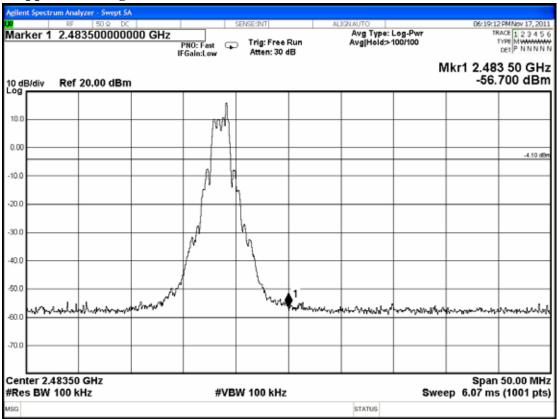
(Test Date: Nov. 17, 2011 Temperature : 25°C Humidity : 52%)

Below Band edge: The highest emission level is -53.783dBm on 2.39990GHz. Upper Band edge : The highest emission level is -56.700dBm on 2.48350GHz.

#### **Below Band edge**



#### **Upper Band edge**



## 9. POWER SPECTRAL DENSITY MEASUREMENT

## 9.1. Test Equipment

The following test equipment was used during the power spectral density measurement:

| Ι | tem | Туре              | Manufacturer | Model No.  | Serial No. | Last Cal.    | Next Cal.    |
|---|-----|-------------------|--------------|------------|------------|--------------|--------------|
|   | 1.  | Spectrum Analyzer | Agilent      | N9030A-544 | US51350140 | Oct. 14, 11' | Oct. 13, 12' |

## 9.2. Block Diagram of Test Setup

The same as section.4.2.

## 9.3. Specification Limits (§15.247(d))

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

## 9.4. Operating Condition of EUT

Same as 6dB bandwidth measurement which was listed in 5.4 except the test set up replaced by section 9.2.

## 9.5. Test Procedure

The transmitter output was connected to the spectrum analyzer. The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/300kHz. The measurement guideline was according to KDB 558074.

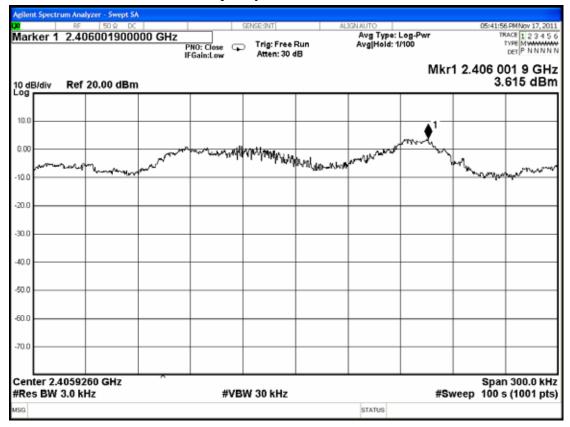
## 9.6. Test Results

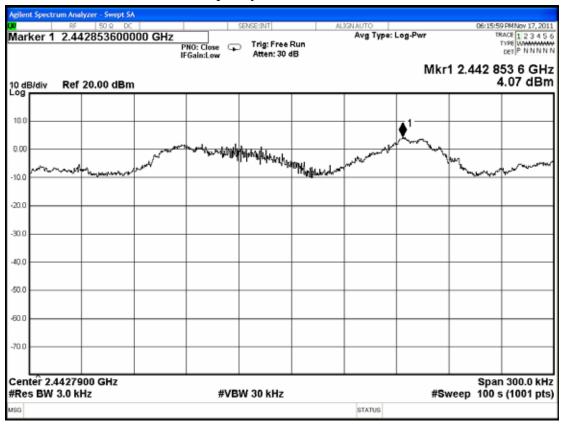
**PASSED.** All the test results are attached in next pages.

(Test Date: Nov. 17, 2011 Temperature : 23°C Humidity : 57%)

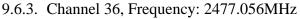
| No. | Channel | Test Frequency | Power Spectral<br>Density (dBm) | Limit |
|-----|---------|----------------|---------------------------------|-------|
| 1.  | CH 01   | 2405.926MHz    | 3.615dBm                        | 8dBm  |
| 2.  | CH 19   | 2442.790MHz    | 4.070dBm                        | 8dBm  |
| 3.  | CH 36   | 2477.556MHz    | 3.760dBm                        | 8dBm  |

## 9.6.1. Channel 01, Frequency: 2405.376MHz





## 9.6.2. Channel 19, Frequency: 2442.240MHz





# **10.DEVIATION TO TEST SPECIFICATIONS**

# [NONE]