

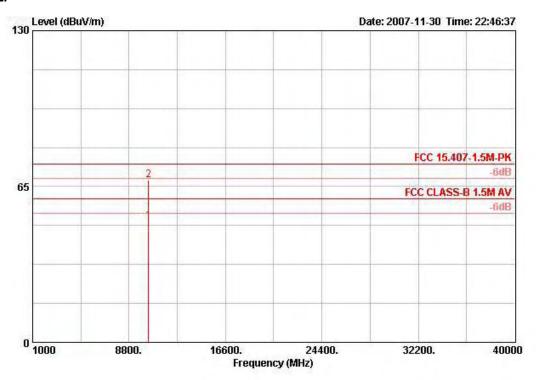
| | Freq | Level | | Limit Line | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|-------|---------------|-------|-------------------|------|-------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dВ | dBuV/m | dBuV | dB/m | dB | dB | - | | deg | |
| 1 @ | 11399.040 | 58.42 | -1.58 | 60.00 | 46.67 | 39.50 | 7.17 | 34.92 | AVERAGE | 102 | 287 | VERTICAL |
| 2 @ | 11400.120 | 73.98 | | | 62.23 | 39.50 | 7.17 | 34.92 | PEAK | 102 | 287 | VERTICAL |





| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|--|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 38 Ant. 1 + Ant. 3 |

2



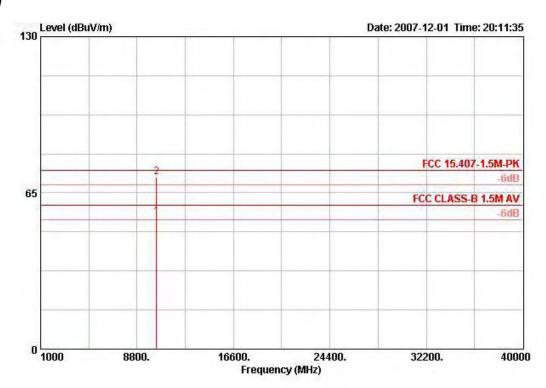
| Fre | eq Leve | Over el Limit | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|----------|----------|------------------|--------|-------|-------------------|------|-------|------|------------|--------------|------------|
| 10 | (z dBuV/ | /m dB | dBuV/m | dBuV | dB/m | dB | dB | | - Cm | deg | |
| 10380.00 | 50 67.5 | 59 -6.71 | 74.30 | 55.69 | 39.79 | 6.83 | 34.72 | PEAK | 119 | 279 | HORIZONTAL |

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| | Freq | Level | Over Limit | The second second | | Antenna Factor | | | Remark | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|---------------|-------------------|-------|-------------------|------|-------|--------|------------|--------------|-----------|
| | МНг | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 7 | cm | deg | - |
| 2 @ | 10380.600 | 71.41 | -2.89 | 74.30 | 59.50 | 39.79 | 6.83 | 34.72 | PEAK | 122 | 269 | VERTICAL |

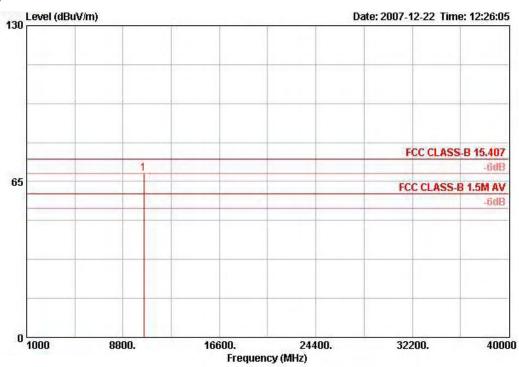
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| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|--|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 20MHz Ch 46 Ant. 1 + Ant. 3 |



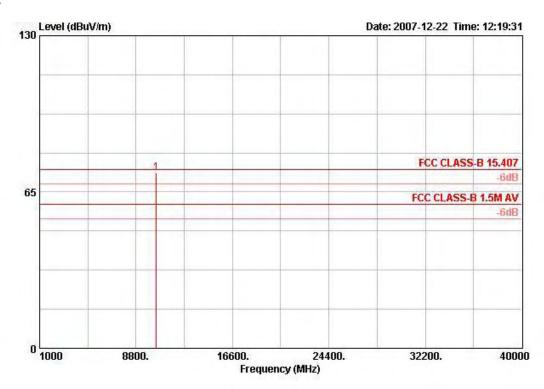
| | | | Over | Limit | ReadI | intenna | Cable | Preamp | | Ant | Table | |
|----|-----------|--------|-------|--------|-------|---------|-------|--------|--------|------|-------|------------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos | Pol/Phase |
| | MHz | dBuV/m | dВ | dBuV/m | dBuV | dB/m | dB | dB | - | - Cm | deg | |
| 10 | 10460.000 | 68.32 | -5.98 | 74.30 | 56.20 | 39.91 | 6.84 | 34.64 | PEAK | 120 | 283 | HORTZONTAL |

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| | | | Over | Limit | ReadI | Antenna | Cable | Preamp | | Ant | Table | |
|-----|-----------|--------|-------|--------|-------|---------|-------|--------|---------------|--------|--------------|---|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos Pol/Phas | e |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | Y | - — cm | deg | - |
| 1 @ | 10456.800 | 73.10 | -1.20 | 74.30 | 60.99 | 39.91 | 6.84 | 34.64 | PEAK | 128 | 282 VERTICAL | |

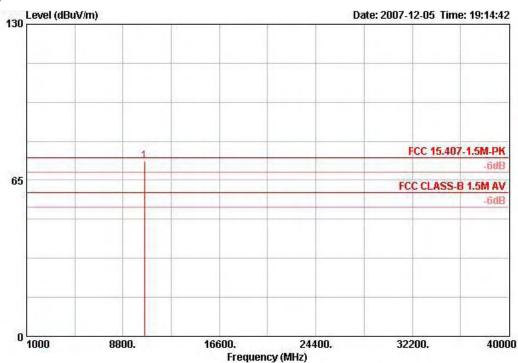
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| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|--|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 54 Ant. 1 + Ant. 3 |



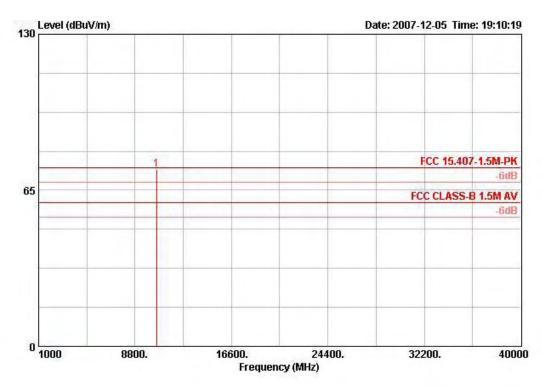
| | | | Over | Limit | ReadA | intenna | Cable | Preamp | | Ant | Table | |
|-----|-----------|--------|-------|--------|-------|---------|-------|--------|--------|-----|--------|----------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos Po | 1/Phase |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 7 | | deg | |
| 1 @ | 10539.940 | 73.11 | -1.19 | 74.30 | 60.89 | 39.97 | 6.86 | 34.60 | PEAK | 119 | 300 HO | RIZONTAL |

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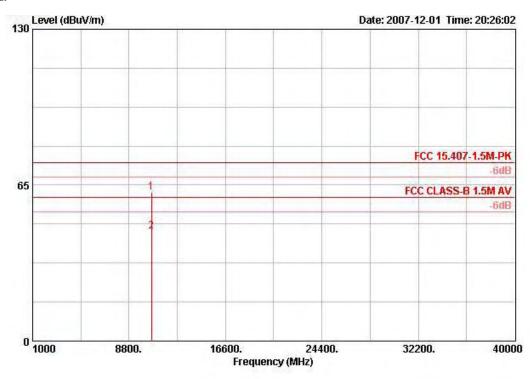


| | Freq | Level | | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|-------|--------|-------|-------------------|------|-------|---------------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | Y | - Cm | deg | - |
| 1.0 | 10530 880 | 23 20 | -0 60 | 74 30 | 61 48 | 30 07 | 6 86 | 34 60 | DEAK | 199 | 205 | WEDTTCAL |

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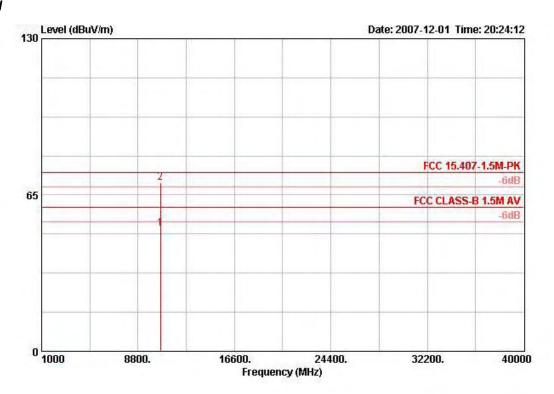


| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|--|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 62 Ant. 1 + Ant. 3 |



| | Freq | Level | | | | Antenna Factor | | Preamp Factor Re | Ant mark Pos | Table Pos | Pol/Phase |
|---|-----------|--------|--------|--------|-------|-------------------|------|---------------------|-----------------|--------------|------------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB - | cm | deg | |
| 1 | 10619.960 | 62.06 | | | 49.92 | 39.88 | 6.89 | 34.63 PE | AK 110 | 264 | HORIZONTAL |
| 2 | 10621.880 | 45.76 | -14.24 | 60.00 | 33.63 | 39.88 | 6.89 | 34.63 AV | ERAGE 110 | 264 | HORIZONTAL |

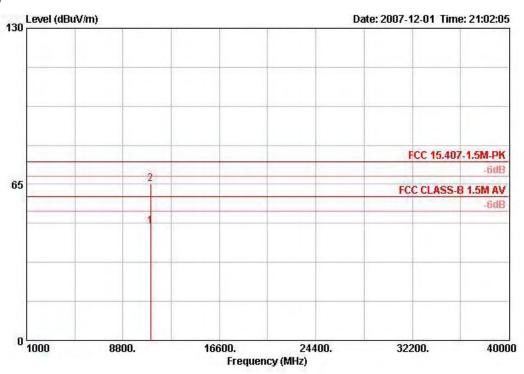




| | Freq | Level | | Limit Line | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|-------|---------------|-------|-------------------|------|-------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | - | | deg | |
| 1 | 10610.000 | 51.01 | -8.99 | 60.00 | 38.85 | 39.90 | 6.89 | 34.63 | AVERAGE | 111 | 288 | VERTICAL |
| 2 ! | 10620.080 | 70.06 | | | 57.92 | 39.88 | 6.89 | 34.63 | PEAK | 111 | 288 | VERTICAL |

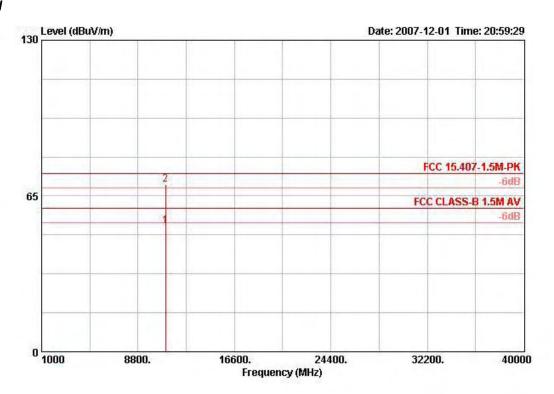


| Temperature | 26℃ | Humidity | 60% |
|---------------|---------|----------------|---|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 102 Ant. 1 + Ant. 3 |



| | Freq | Level | | Limit Line | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|---|-----------|--------|--------|---------------|-------|-------------------|------|-------|---------|------------|--------------|------------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | - | | deg | |
| 1 | 11017.790 | 47.30 | -12.70 | 60.00 | 35.55 | 39.50 | 7.03 | 34.78 | AVERAGE | 100 | 269 | HORIZONTAL |
| 2 | 11020.000 | 65.35 | | | 53.60 | 39.50 | 7.03 | 34.78 | PEAK | 100 | 269 | HORIZONTAL |

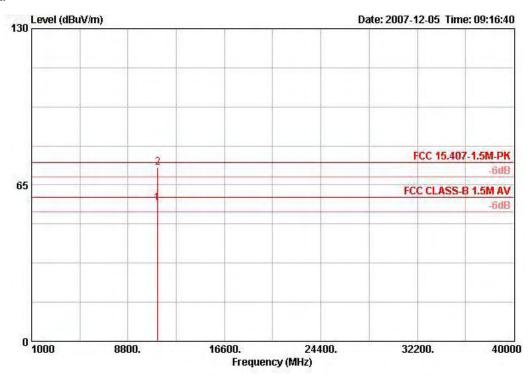




| | Freq | Level | | Limit Line | 5.07950707 | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|-------|---------------|------------|-------------------|------|-------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | - | cm | deg | |
| 1 | 11019.570 | 52.33 | -7.67 | 60.00 | 40.58 | 39.50 | 7.03 | 34.78 | AVERAGE | 117 | 284 | VERTICAL |
| 2 ! | 11019.990 | 69.95 | | | 58.20 | 39.50 | 7.03 | 34.78 | PEAK | 117 | 284 | VERTICAL |

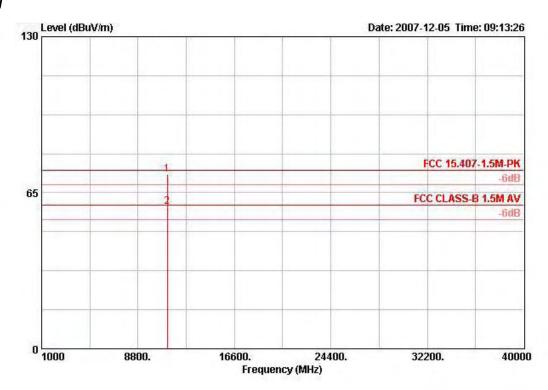


| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|---|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 118 Ant. 1 + Ant. 3 |



| | Freq | Level | Over Limit | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|---------------|--------|-------|-------------------|------|-------|---------|------------|--------------|------------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 1 | | deg | |
| 1 @ | 11179.000 | 57.45 | -2.55 | 60.00 | 45.70 | 39.50 | 7.09 | 34.84 | AVERAGE | 116 | 323 | HORIZONTAL |
| 2 @ | 11180.600 | 72.23 | | | 60.48 | 39.50 | 7.09 | 34.84 | PEAK | 116 | 323 | HORIZONTAL |

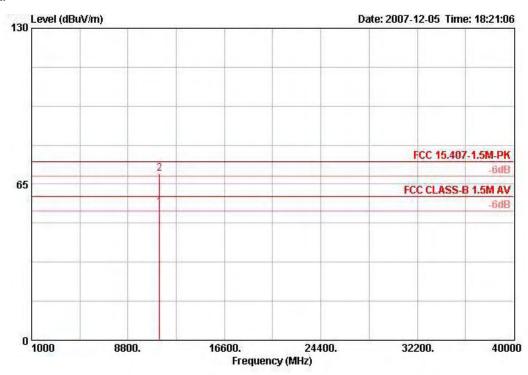




| | Freq | Level | Over Limit | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|---------------|--------|-------|-------------------|------|-------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | - | cm | deg | - |
| 1 @ | 11176.600 | 72.78 | | | 61.03 | 39.50 | 7.09 | 34.84 | PEAK | 104 | 317 | VERTICAL |
| 2 @ | 11178.800 | 59.33 | -0.67 | 60.00 | 47.58 | 39.50 | 7.09 | 34.84 | AVERAGE | 104 | 317 | VERTICAL |

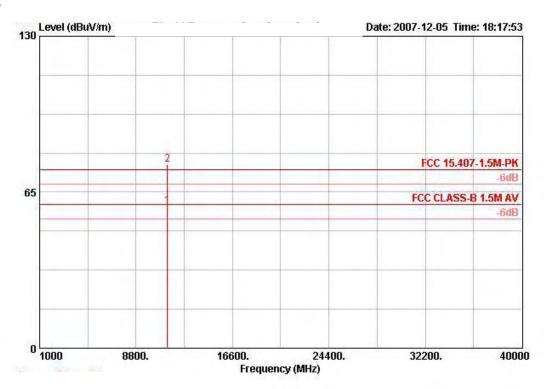


| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|---|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 134 Ant. 1 + Ant. 3 |



| | Freq | Level | | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|-------|--------|-------|-------------------|------|-------|---------|------------|--------------|------------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | - | cm. | deg | |
| 1! | 11339.000 | 55.28 | -4.72 | 60.00 | 43.53 | 39.50 | 7.14 | 34.89 | AVERAGE | 112 | 313 | HORIZONTAL |
| 2 ! | 11339.800 | 69.40 | | | 57.65 | 39.50 | 7.14 | 34.89 | PEAK | 112 | 313 | HORIZONTAL |





| | Freq | Level | | Limit Line | | Intenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|-----------|--------|-------|---------------|-------|-------------------|------|-------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | | | deg | |
| 1 @ | 11338.800 | 59.14 | -0.86 | 60.00 | 47.39 | 39.50 | 7.14 | 34.89 | AVERAGE | 111 | 283 | VERTICAL |
| 2 @ | 11340.000 | 76.59 | | | 64.84 | 39.50 | 7.14 | 34.89 | PEAK | 111 | 283 | VERTICAL |

Note: Item 2 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = $20 \log Emission$ level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

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4.7. Band Edge Emissions Measurement

4.7.1. Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.470-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies | Field Strength | Measurement Distance | | | | |
|-------------|--------------------|----------------------|--|--|--|--|
| (MHz) | (micorvolts/meter) | (meters) | | | | |
| 0.009~0.490 | 2400/F(KHz) | 300 | | | | |
| 0.490~1.705 | 24000/F(KHz) | 30 | | | | |
| 1.705~30.0 | 30 | 30 | | | | |
| 30~88 | 100 | 3 | | | | |
| 88~216 | 150 | 3 | | | | |
| 216~960 | 200 | 3 | | | | |
| Above 960 | 500 | 3 | | | | |

4.7.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

| Spectrum Parameter | Setting |
|---|--|
| Attenuation | Auto |
| Span Frequency | 100 MHz |
| RB / VB (Emission in restricted band) | 1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average |
| RB / VB (Emission in non-restricted band) | 1 MHz /1 MHz for Peak |

4.7.3. Test Procedures

- 1. The test procedure is the same as section 4.6.3, only the frequency range investigated is limited to 100MHz around bandedges.
- 2. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

4.7.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.6.4.

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4.7.5. Test Deviation

There is no deviation with the original standard.

4.7.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.7.7. Test Result of Band Edge and Fundamental Emissions

| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|--|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 20MHz Ch 36, 52, 64 Ant. 1 + Ant. 3 |

Channel 36

| | 00 2 <u>55</u> 700 000 | | Over | | | | | Preamp | | Ant | Table | |
|-----|---------------------------|--------|-------|--------|-------|--------|------|--------|---------|-----|-------|-----------|
| | Freq | Level | Limit | Line | rever | Factor | Loss | Factor | Remark | Pos | Pos | Pol/Phase |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | (d) (d) | cm | deg | K |
| 1 | 5150.000 | 67.96 | | | 29.02 | 34.00 | 4.95 | 0.00 | PEAK | 136 | 93 | VERTICAL |
| 2 @ | 5150.000 | 56.60 | -3.40 | 60.00 | 17.65 | 34.00 | 4.95 | 0.00 | AVERAGE | 136 | 93 | VERTICAL |
| 3 @ | 5180.600 | 119.17 | | | 80.13 | 34.07 | 4.97 | 0.00 | PEAK | 136 | 93 | VERTICAL |
| 4 @ | 5181.800 | 107.90 | | | 68.87 | 34.07 | 4.97 | 0.00 | AVERAGE | 136 | 93 | VERTICAL |

Item 3, 4 are the fundamental frequency at 5180 MHz.

Note: Item 1 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

Channel 52

| | | | 0ver | Limit | Read | Antenna | Cable | Preamp | | Ant | Table | |
|-----|----------|--------|-------|--------|-------|---------|-------|--------|---------|-----|-------|-----------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos | Pol/Phase |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 4F | cm | deg | i i |
| 1 @ | 5262.800 | 100.55 | | | 61.28 | 34.23 | 5.04 | 0.00 | AVERAGE | 123 | 89 | VERTICAL |
| 2 @ | 5263.400 | 112.49 | | | 73.22 | 34.23 | 5.04 | 0.00 | PEAK | 123 | 89 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5260 MHz.

Channel 64

| | | | 0ver | Limit | Read | Antenna | Cable | Preamp | | Ant | Table | |
|-----|----------|--------|-------|--------|-------|---------|-------|--------|----------------|-----|-------|-----------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos | Pol/Phase |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | () | cm | deg | i i |
| 1 @ | 5318.000 | 117.73 | | | 78.32 | 34.33 | 5.08 | 0.00 | PEAK | 129 | 36 | VERTICAL |
| 2 @ | 5321.400 | 105.53 | | | 66.11 | 34.33 | 5.08 | 0.00 | AVERAGE | 129 | 36 | VERTICAL |
| 3 ! | 5350.000 | 70.03 | | | 30.50 | 34.40 | 5.13 | 0.00 | PEAK | 129 | 36 | VERTICAL |
| 4 @ | 5350.000 | 57.01 | -2.99 | 60.00 | 17.49 | 34.40 | 5.13 | 0.00 | AVERAGE | 129 | 36 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5320 MHz.

Note: Item 3 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

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| Temperature | 26℃ | Humidity | 60% |
|---------------|---------|----------------|---|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 20MHz Ch 100, 120, 140 Ant. 1 + Ant. 3 |

Channel 100

| | Freq | Level | Over Limit | | | Antenna Factor | | Preamp Factor | Remark | Ant Pos | Table Pos | Pol/Phase |
|------------|----------|--------|---------------|--------|-------|-------------------|------|------------------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 90 P | | deg | ki . |
| 1 | 5460.000 | 67.39 | | | 27.57 | 34.60 | 5.22 | 0.00 | PEAK | 124 | 38 | VERTICAL |
| 2 @ | 5460.000 | 56.74 | -3.26 | 60.00 | 16.92 | 34.60 | 5.22 | 0.00 | AVERAGE | 124 | 38 | VERTICAL |
| 3! | 5470.000 | 68.31 | -5.99 | 74.30 | 28.46 | 34.63 | 5.22 | 0.00 | PEAK | 124 | 38 | VERTICAL |
| 4 @ | 5497.200 | 104.39 | | | 64.45 | 34.70 | 5.24 | 0.00 | AVERAGE | 124 | 38 | VERTICAL |
| 5 @ | 5498.800 | 116.54 | | | 76.60 | 34.70 | 5.24 | 0.00 | PEAK | 124 | 38 | VERTICAL |

Item 4, 5 are the fundamental frequency at 5500 MHz.

Note: Item 1 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

Channel 120

| | Freq | Level | Over Limit | | | Antenna Factor | | | Remark | Ant Pos | Table Pos | Pol/Phase |
|-----|----------|--------|---------------|--------|-------|-------------------|------|------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 49 - X | cm | deg | \$i |
| 1 @ | 5594.400 | 112.66 | | | 72.60 | 34.77 | 5.29 | 0.00 | PEAK | 136 | 32 | VERTICAL |
| 2 @ | 5596.400 | 100.99 | | | 60.93 | 34.77 | 5.29 | 0.00 | AVERAGE | 136 | 32 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5600 MHz.

Channel 140

| | Freq | Level | Over Limit | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|-----|----------|--------|---------------|--------|-------|-------------------|------|------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dВ | dBuV/m | dBu∀ | dB/m | dB | dB | W = | cm | deg | K: |
| 1 @ | 5697.800 | 114.66 | | | 74.47 | 34.85 | 5.34 | 0.00 | PEAK | 108 | 104 | VERTICAL |
| 2 @ | 5701.400 | 102.32 | | | 62.12 | 34.87 | 5.34 | 0.00 | AVERAGE | 108 | 104 | VERTICAL |
| 3 ! | 5731.000 | 69.83 | -4.47 | 74.30 | 29.58 | 34.88 | 5.37 | 0.00 | PEAK | 108 | 104 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5700 MHz.



| Temperature | 26 ℃ | Humidity | 60% |
|---------------|-------------|----------------|--|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 38, 54, 62 Ant. 1 + Ant. 3 |

Channel 38

| | | | 0ver | Limit | Read | Antenna | Cable | Preamp | | Ant | Table | |
|-----|----------|--------|-------|--------|-------|---------|-------|--------|---------|-----|-------|-----------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos | Pol/Phase |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 49 - 30 | cm | deg | 45 |
| 1 @ | 5150.000 | 75.50 | | | 36.56 | 34.00 | 4.95 | 0.00 | PEAK | 100 | 31 | VERTICAL |
| 2 @ | 5150.000 | 59.59 | -0.41 | 60.00 | 20.65 | 34.00 | 4.95 | 0.00 | AVERAGE | 100 | 31 | VERTICAL |
| 3 @ | 5188.000 | 113.91 | | | 74.88 | 34.07 | 4.97 | 0.00 | PEAK | 100 | 31 | VERTICAL |
| 4 @ | 5201.600 | 101.60 | | | 62.51 | 34.10 | 4.99 | 0.00 | AVERAGE | 100 | 31 | VERTICAL |

Item 3, 4 are the fundamental frequency at 5190 MHz.

Item 1 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

Channel 54

| | Freq | Level | Over Limit | | | Antenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|------------|----------|--------|---------------|--------|-------|-------------------|------|------|---------|------------|--------------|----------------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 35 | cm | deg | 1 1 |
| 1 @ | 5260.400 | 106.14 | | | 66.87 | 34.23 | 5.04 | 0.00 | PEAK | 123 | 26 | VERTICAL |
| 2 @ | 5261.600 | 94.77 | | | 55.50 | 34.23 | 5.04 | 0.00 | AVERAGE | 123 | 26 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5270 MHz.

Channel 62

| | Freq | Level | Over Limit | | | Antenna Factor | | Preamp Factor | Remark | Ant Pos | Table Pos | Pol/Phase |
|-----|----------|--------|---------------|--------|-------|-------------------|------|------------------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dВ | dBuV/m | dBuV | dB/m | dB | dB | 4 T | Cm. | deg | Š. |
| 1 @ | 5318.400 | 114.32 | | | 74.91 | 34.33 | 5.08 | 0.00 | PEAK | 118 | 90 | VERTICAL |
| 2 @ | 5318.800 | 102.38 | | | 62.96 | 34.33 | 5.08 | 0.00 | AVERAGE | 118 | 90 | VERTICAL |
| 3 @ | 5350.000 | 73.62 | | | 34.09 | 34.40 | 5.13 | 0.00 | PEAK | 118 | 90 | VERTICAL |
| 4 @ | 5350.000 | 59.71 | -0.29 | 60.00 | 20.18 | 34.40 | 5.13 | 0.00 | AVERAGE | 118 | 90 | VERTICAL |

Item1, 2 are the fundamental frequency at 5310 MHz.

Note: Item 3 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

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| Temperature | 26℃ | Humidity | 60% |
|---------------|---------|----------------|---|
| Test Engineer | Aric Li | Configurations | Draft n MCS8 40MHz Ch 102, 118, 134 Ant. 1 + Ant. 3 |

Channel 102

| | Freq | Level | Over Limit | | | Antenna Factor | | Preamp Factor | Remark | Ant Pos | Table Pos | Pol/Phase |
|------------|----------|--------|---------------|--------|-------|-------------------|------|------------------|---------|------------|--------------|---------------|
| | MHz | dBuV/m | dВ | dBuV/m | dBuV | dB/m | dB | dB | 78 T | | deg | (1 |
| 1 @ | 5460.000 | 57.17 | -2.83 | 60.00 | 17.36 | 34.60 | 5.22 | 0.00 | AVERAGE | 125 | 39 | VERTICAL |
| 2 ! | 5460.000 | 69.16 | | | 29.34 | 34.60 | 5.22 | 0.00 | PEAK | 125 | 39 | VERTICAL |
| 3 @ | 5468.000 | 73.15 | -1.15 | 74.30 | 33.30 | 34.63 | 5.22 | 0.00 | PEAK | 125 | 39 | VERTICAL |
| 4 @ | 5494.000 | 113.02 | | | 73.11 | 34.67 | 5.24 | 0.00 | PEAK | 125 | 39 | VERTICAL |
| 5 @ | 5496.800 | 100.40 | | | 60.46 | 34.70 | 5.24 | 0.00 | AVERAGE | 125 | 39 | VERTICAL |

Item 4, 5 are the fundamental frequency at 5510MHz.

Note: Item 2 fall in restricted band, thus 15.209 limit applies. However, the test site distance has been moved to 1.5m, the corresponding limit will be adjusted to 80dBuV/m.

Channel 118

| | Freq | Level | Over Limit | Limit Line | | intenna Factor | | | | Ant Pos | Table Pos | Pol/Phase |
|------------|----------|--------|---------------|---------------|-------|-------------------|------|------|---------|------------|--------------|-----------|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dВ | dB | 49 70 | | deg | |
| 1 @ | 5576.000 | 94.94 | | | 54.91 | 34.76 | 5.28 | 0.00 | AVERAGE | 176 | 55 | VERTICAL |
| 2 @ | 5578.000 | 109.71 | | | 69.66 | 34.76 | 5.29 | 0.00 | PEAK | 176 | 55 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5590 MHz.

Channel 134

| | | | 0ver | Limit | Read | Antenna | Cable | Preamp | | Ant | Table | |
|------------|----------|--------|-------|--------|-------|---------|-------|--------|---------|-----|-------|-----------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Factor | Remark | Pos | Pos | Pol/Phase |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | 49 30 | cm | deg | 5) |
| 1 @ | 5653.600 | 100.51 | | | 60.37 | 34.82 | 5.32 | 0.00 | AVERAGE | 120 | 76 | VERTICAL |
| 2 @ | 5656.400 | 111.96 | | | 71.80 | 34.82 | 5.33 | 0.00 | PEAK | 120 | 76 | VERTICAL |
| 3 @ | 5727.000 | 71.52 | -2.78 | 74.30 | 31.29 | 34.88 | 5.35 | 0.00 | PEAK | 120 | 76 | VERTICAL |

Item 1, 2 are the fundamental frequency at 5670 MHz.

Note:

Emission level (dBuV/m) = $20 \log Emission$ level (uV/m)

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

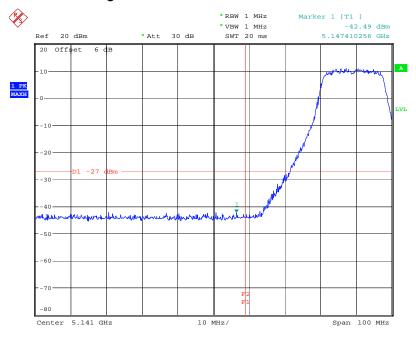
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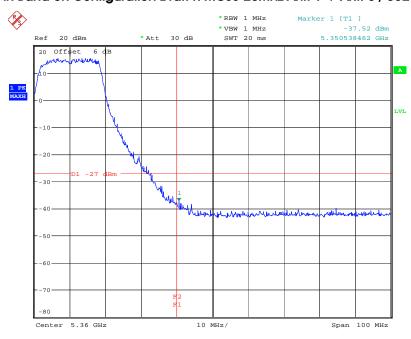


EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. 1 + Ant. 3 / 5180 MHz



Date: 9.DEC.2007 13:46:00

EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. 1 + Ant. 3 / 5320 MHz



Date: 9.DEC.2007 13:44:53

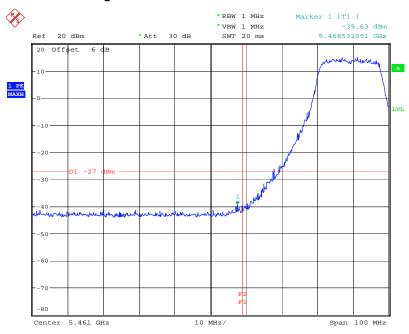
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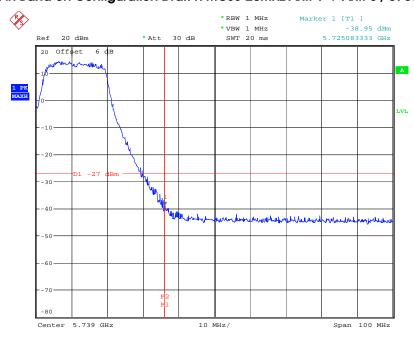


EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. 1 + Ant. 3 / 5500 MHz



Date: 9.DEC.2007 13:43:46

EIRP Emission in Band on Configuration Draft n MCS8 20MHz Ant. 1 + Ant. 3 / 5700 MHz



Date: 9.DEC.2007 13:42:17

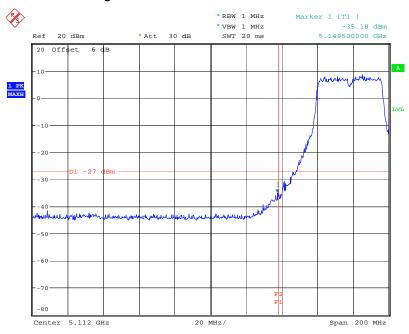
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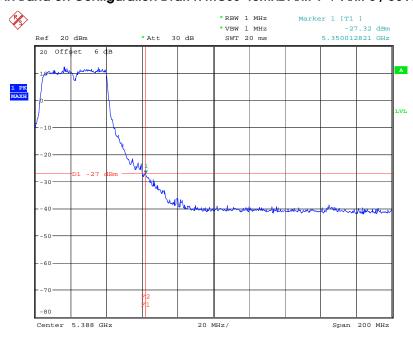


EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. 1 + Ant. 3 / 5190 MHz



Date: 9.DEC.2007 13:32:55

EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. 1 + Ant. 3 / 5310 MHz



Date: 9.DEC.2007 13:35:50

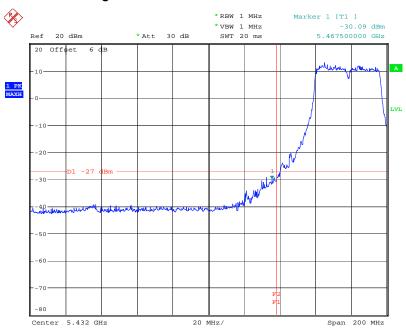
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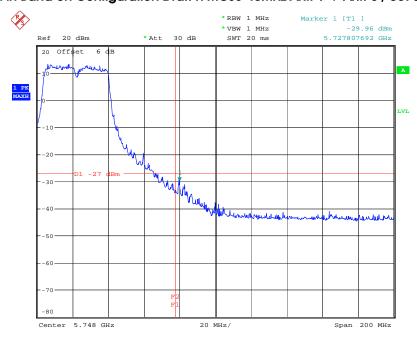


EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. 1 + Ant. 3 / 5510MHz



Date: 9.DEC.2007 13:37:42

EIRP Emission in Band on Configuration Draft n MCS8 40MHz Ant. 1 + Ant. 3 / 5670 MHz



Date: 9.DEC.2007 13:40:47

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4.8. Frequency Stability Measurement

4.8.1. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or ± 20 ppm (Draft n specification).

4.8.2. Measuring Instruments and Setting

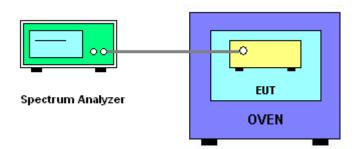
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

| Spectrum Parameter | Setting |
|--------------------|--|
| Attenuation | Auto |
| Span Frequency | Entire absence of modulation emissions bandwidth |
| RB | 10 kHz |
| VB | 10 kHz |
| Sweep Time | Auto |

4.8.3. Test Procedures

- 1. The transmitter output (antenna port) was connected to the spectrum analyser.
- 2. EUT have transmitted absence of modulation signal and fixed channelize.
- 3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
- 4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
- 5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc \times 10⁶ ppm and the limit is less than \pm 20ppm (Draft n specification).
- 6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
- 7. Extreme temperature rule is -30°C~50°C.
- 8. Measuring multiple antennas, the connector is required to link with spectrum analyser through a combiner.

4.8.4. Test Setup Layout



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4.8.5. Test Deviation

There is no deviation with the original standard.

4.8.6. EUT Operation during Test

The EUT was programmed to be in continuously un-modulation transmitting mode.

4.8.7. Test Result of Frequency Stability

Voltage vs. Frequency Stability

| Voltage | Measurement Frequency (MHz) |
|----------------------|-----------------------------|
| (V) | 5260 MHz |
| 126.50 | 5260.009300 |
| 110.00 | 5260.023500 |
| 93.50 | 5259.993200 |
| Max. Deviation (MHz) | 0.023500 |
| Max. Deviation (ppm) | 4.47 |

Temperature vs. Frequency Stability

| Temperature | Measurement Frequency (MHz) | | | | |
|----------------------|-----------------------------|--|--|--|--|
| (°C) | 5260 MHz | | | | |
| -30 | 5260.046300 | | | | |
| -20 | 5260.050570 | | | | |
| -10 | 5260.045700 | | | | |
| 0 | 5260.014100 | | | | |
| 10 | 5260.012900 | | | | |
| 20 | 5259.983500 | | | | |
| 30 | 5259.965300 | | | | |
| 40 | 5259.961200 | | | | |
| 50 | 5259.955600 | | | | |
| Max. Deviation (MHz) | 0.050570 | | | | |
| Max. Deviation (ppm) | 9.61 | | | | |

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4.9. Antenna Requirements

4.9.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

4.9.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

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5. LIST OF MEASURING EQUIPMENTS

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Remark |
|-----------------------------|----------------------|-------------------|-------------|----------------------|---------------------|--------------------------|
| EMC Receiver | R&S | ESCS 30 | 100359 | 9kHz – 2.75GHz | Mar. 01, 2007 | Conduction (CO04-HY) |
| LISN | MessTec | NNB-2/16Z | 99079 | 9kHz – 30MHz | Mar. 31, 2007 | Conduction (CO04-HY) |
| LISN (Support Unit) | EMCO | 3810/2NM | 9703-1839 | 9kHz – 30MHz | Mar. 22, 2007 | Conduction (CO04-HY) |
| RF Cable-CON | UTIFLEX | 3102-26886-4 | CB049 | 9kHz – 30MHz | Apr. 20, 2007 | Conduction (CO04-HY) |
| ISN | SCHAFFNER | ISN T400 | 21653 | 9kHz –30MHz | May 09, 2007 | Conduction (CO04-HY) |
| EMI Filter | LINDGREN | LRE-2030 | 2651 | < 450 Hz | N/A | Conduction (CO04-HY) |
| Isolation Transformer | Erika Fiedler OHG | D-65396 Walluf | 58 | 45MHz-2.15GHz | N/A | Conduction (CO04-HY) |
| 3m Semi Anechoic Chamber | SIDT FRANKONIA | SAC-3M | 03CH03-HY | 30 MHz - 1 GHz 3m | Jun. 14, 2007 | Radiation (03CH03-HY) |
| Amplifier | SCHAFFNER | CPA9231A | 1886 | 9 kHz - 2 GHz | Jan. 22, 2007 | Radiation (03CH03-HY) |
| Amplifier | Agilent | 8449B | 3008A02120 | 1 GHz - 26.5 GHz | Jun. 07, 2007 | Radiation (03CH03-HY) |
| Amplifier | MITEQ | AMF-6F-260400 | 923364 | 26.5 GHz - 40 GHz | Jan. 22, 2007* | Radiation (03CH03-HY) |
| Spectrum Analyzer | R&S | FSP40 | 100305 | 9 kHz - 40 GHz | Sep. 27, 2007 | Radiation (03CH03-HY) |
| Loop Antenna | R&S | HFH2-Z2 | 860004/001 | 9 kHz - 30 MHz | May 23, 2006* | Radiation (03CH03-HY) |
| Bilog Antenna | SCHAFFNER | CBL 6112D | 22237 | 30 MHz – 1 GHz | Jul. 21, 2007 | Radiation (03CH03-HY) |
| Horn Antenna | EMCO | 3115 | 6741 | 1GHz ~ 18GHz | May 04, 2007 | Radiation (03CH03-HY) |
| Horn Antenna | SCHWARZBECK | BBHA9170 | BBHA9170154 | 15 GHz - 40 GHz | NCR | Radiation (03CH03-HY) |
| RF Cable-R03m | Jye Bao | RG142 | CB021 | 30 MHz - 1 GHz | Dec. 03, 2007 | Radiation (03CH03-HY) |
| RF Cable-HIGH | SUHNER | SUCOFLEX 106 | 03CH03-HY | 1 GHz - 40 GHz | Dec. 03, 2007 | Radiation (03CH03-HY) |
| Turn Table | HD | DS 420 | 420/650/00 | 0 – 360 degree | N/A | Radiation (03CH03-HY) |
| Antenna Mast | HD | MA 240 | 240/560/00 | 1 m - 4 m | N/A | Radiation (03CH03-HY) |
| Spectrum Analyzer | R&S | FSP30 | 100023 | 9kHz ~ 30GHz | Dec. 17, 2007 | Conducted (TH01-HY) |
| Power Meter | R&S | NRVS | 100444 | DC ~ 40GHz | Jun. 27, 2007 | Conducted (TH01-HY) |
| Power Sensor | R&S | NRV-Z51 | 100458 | DC ~ 30GHz | Jun. 27, 2007 | Conducted (TH01-HY) |
| Power Sensor | R&S | NRV-Z32 | 100057 | 30MHz ~ 6GHz | Jun. 27, 2007 | Conducted (TH01-HY) |
| AC Power Source | HPC | HPA-500W | HPA-9100024 | AC 0 ~ 300V | May 04, 2007* | Conducted (TH01-HY) |
| DC Power Source | G.W. | GPC-6030D | C671845 | DC 1V ~ 60V | Mar. 03, 2007 | Conducted (TH01-HY) |

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| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Remark |
|----------------------------|------------------|-----------|------------|-----------------|---------------------|------------------------|
| Temp. and Humidity Chamber | KSON | THS-C3L | 612 | N/A | Oct. 01, 2007 | Conducted (TH01-HY) |
| RF CABLE-1m | Jye Bao | RG142 | CB034-1m | 20MHz ~ 7GHz | Dec. 01, 2007 | Conducted (TH01-HY) |
| RF CABLE-2m | Jye Bao | RG142 | CB035-2m | 20MHz ~ 1GHz | Dec. 01, 2007 | Conducted (TH01-HY) |
| Vector Signal Generator | R&S | SMU200A | 102098 | 100kHz ~ 6GHz | Nov. 14, 2007 | Conducted (TH01-HY) |
| Signal Generator | al Generator R&S | | 100116 | 10MHz ~ 40GHz | Mar. 07, 2007 | Conducted (TH01-HY) |

Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.

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^{*} Calibration Interval of instruments listed above is two year.



6. TEST LOCATION

| SHIJR | ADD | : | 6FI., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. |
|--------|-----|---|--|
| | TEL | : | 886-2-2696-2468 |
| | FAX | : | 886-2-2696-2255 |
| HWA YA | ADD | : | No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. |
| | TEL | : | 886-3-327-3456 |
| | FAX | : | 886-3-318-0055 |
| LINKOU | ADD | : | No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C |
| | TEL | : | 886-2-2601-1640 |
| | FAX | : | 886-2-2601-1695 |
| DUNGHU | ADD | : | No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C. |
| | TEL | : | 886-2-2631-4739 |
| | FAX | : | 886-2-2631-9740 |
| JUNGHE | ADD | : | 7FI., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. |
| | TEL | : | 886-2-8227-2020 |
| | FAX | : | 886-2-8227-2626 |
| NEIHU | ADD | : | 4FI., No. 339, Hsin Hu 2 nd Rd., Taipei 114, Taiwan, R.O.C. |
| | TEL | : | 886-2-2794-8886 |
| | FAX | : | 886-2-2794-9777 |
| JHUBEI | ADD | : | No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. |
| | TEL | : | 886-3-656-9065 |
| | FAX | : | 886-3-656-9085 |
| | | | |



7. TAF CERTIFICATE OF ACCREDITATION



Certificate No.: L1190-070110

財團法人全國認證基金會 Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.

EMC & Wireless Communications Laboratory

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria

: ISO/IEC 17025:2005

Accreditation Number

: 1190

Originally Accredited

: December 15, 2003

Effective Period

: January 10, 2007 to January 09, 2010

Accredited Scope

: Testing Field, see described in the Appendix

Accreditation Program for Designated Testing Laboratory

Specific Accreditation

for Commodities Inspection

Program

Accreditation Program for Telecommunication Equipment

Testing Laboratory

Jay-San Chen

President, Taiwan Accreditation Foundation

Date: January 10, 2007

P1, total 9 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.

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