

Wireless Power Transfer
Test Report

for

Qisda Corporation

157, Shan-Ying Road, Gueishan,
Taoyuan 333, Taiwan, R.O.C.

Brand : DELL
Product Name : Flat Panel Monitor
Model Name : S2317HWib
FCC ID : VRSS2317HWIB
IC : 8729A-S2317HWIB

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APPENDIX A TEST PHOTOGRAPHS

TEST REPORT CERTIFICATION

Applicant : Qisda Corporation
Manufacture #1 : Qisda Corporation
Manufacture #2 : Qisda (Suzhou) Co., Ltd.
Model No. : S2317HWib
Serial No. : N/A
Brand : DELL
Power Supply : DC 19.5V

Applicable Standards:

FCC Rules and Regulations Part 15 Subpart C, Oct. 2014
RSS-Gen (Issue 4), November 2014
RSS-216 (Issue 1), November 2014
ANSI C63.10:2013

AUDIX Technology Corp. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report. *AUDIX Technology Corp.* does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens and samples.

Date of Test: 2015. 11. 12 ~ 25

Date of Report: 2015. 12. 02

Producer: Annie Yu
(Annie Yu/Administrator)

Signatory: Ben Cheng
(Ben Cheng/Manager)

1. REPORT HISTORY

| Revision | Date | Revision Summary | Report Number |
|----------|--------------|------------------|---------------|
| 0 | 2015. 12. 02 | Original Report. | EM-F150673 |

2. SUMMARY OF TEST RESULTS

| Rule | Description | Results |
|---------------------|------------------------------|-------------|
| 15.207/RSS-Gen §8.8 | Conducted Emission | PASS |
| 15.209/RSS-Gen §8.9 | Field strength Measurements. | PASS |
| RSS-Gen §8.1 | Emission Bandwidth | PASS |

3. GENERAL INFORMATION

3.1. Description of EUT

| | |
|---------------------------|--|
| Product | Flat Panel Monitor |
| Model Number | S2317HWib |
| Serial Number | N/A |
| Brand Name | DELL |
| Serial Number | N/A |
| Applicant | Qisda Corporation 157, Shan-Ying Road, Gueishan, Taoyuan 333, Taiwan, R.O.C. |
| Manufacturer | #1 Qisda Corporation 157, Shan-Ying Road, Gueishan, Taoyuan 333, Taiwan, R.O.C. #2 Qisda (Suzhou) Co., Ltd. No. 169, Zhujiang Road, New District, Suzhou, Jiangsu Province, P.R. China |
| Power Supply Rating | Refer to AC adapter rating. |
| Date of Receipt of Sample | 2015. 10. 27 |
| AC Adapter | #1 DELL, M/N HA65NS5-00 I/P: 100-240V~ 50-60Hz 1.7A O/P: 19.5V 3.34A O/P Cable: Unshielded, Undetachable, 1.8m, Bonded a ferrite core #2 DELL, M/N DA65NM111-00 I/P: 100-240V~ 1.6A 50-60Hz O/P: 19.5V 3.34A O/P Cable: Unshielded, Undetachable, 1.8m |
| Antenna Type | Loop antenna |
| Interface Ports | Bottom Side: One Power-adapter Port One Line-Out Port One HDMI Port Two USB downstream Ports One Micro-B Port (For Service Only) Stand Side: One DC Adapter Port One DC Out Cable |

3.2. EUT Specifications Assessed in Current Report

| Mode | Fundamental Range | Channel Number | Modulation |
|------|-------------------|----------------|------------|
| WPC | 110~205 kHz | 95 | - |

3.3. Tested Supporting System List

3.3.1. Support Peripheral Unit

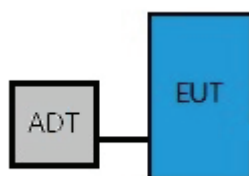
| No. | Product | Brand | Model No. | Serial No. | FCC ID |
|-----|---------------------|--------|-----------|------------|--------|
| 1. | Qi-Wireless-Charger | Fusion | WTU-050 | N/A | N/A |

3.3.2. Cable Lists

| No. | Cable Description Of The Above Support Units |
|-----|--|
| 1. | N/A |

3.4. Setup Configuration

3.4.1. EUT Configuration for Power Line and Radiated Emission



3.5. Operating Condition of EUT

To Set EUT on RF function under continues transmitting.

3.6. Description of Test Facility

Test Firm Name : AUDIX Technology Corporation
EMC Department
No. 53-11, Dingfu, Linkou Dist.,
New Taipei City 244, Taiwan

Test Location & Facility : No. 8 Shielded Room
No. 53-11, Dingfu, Linkou Dist.,
New Taipei City 244, Taiwan

Semi-Anechoic Chamber
No. 53-11, Dingfu, Linkou Dist.,
New Taipei City 244, Taiwan
Renewal on May 06, 2015
Federal Communication Commission
Registration Number: 90993

NVLAP Lab. Code : 200077-0

TAF Accreditation No : 1724

3.7. Measurement Uncertainty

| Test Item | Frequency Range | Uncertainty |
|----------------------------------|-----------------|-------------|
| Conduction Test | 150kHz~30MHz | ± 3.5dB |
| Radiation Test (Distance: 3m) | 30MHz~1000MHz | ± 3.64dB |
| | Above 1GHz | ± 4.70dB |

Remark : Uncertainty = $k_{uc}(y)$

4. MEASUREMENT EQUIPMENT LIST

4.1. Conducted Emission Measurement

| Item | Type | Manufacturer | Model No. | Serial No. | Cal. Date | Cal. Due |
|------|---------------|--------------|-----------|------------|--------------|--------------|
| 1. | Test Receiver | R&S | ESR3 | 101774 | 2015. 02. 06 | 2016. 02. 06 |
| 2. | A.M.N. | R&S | ENV4200 | 825358/003 | 2015. 04. 07 | 2016. 04. 06 |
| 3. | Pulse Limiter | R&S | ESH3-Z2 | 100354 | 2015. 01. 17 | 2016. 01. 16 |

4.2. Radiated Emission Measurement

4.2.1. Frequency Range 9kHz~30MHz

| Item | Type | Manufacturer | Model No. | Serial No. | Cal. Date | Cal. Due |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1. | Spectrum Analyzer | Agilent | N9010A-526 | MY53400071 | 2015. 09. 14 | 2016. 09. 13 |
| 2. | Test Receiver | R & S | ESCS30 | 100338 | 2015. 06. 24 | 2016. 06. 23 |
| 3. | Loop Antenna | R&S | HFH2-Z2 | 891847/27 | 2014. 12. 26 | 2015. 12. 25 |

4.2.2. Frequency Range 30MHz~1000MHz

| Item | Type | Manufacturer | Model No. | Serial No. | Cal. Date | Cal. Due |
|------|-------------------|--------------|------------|------------|--------------|--------------|
| 1. | Spectrum Analyzer | Agilent | N9010A-526 | MY53400071 | 2015. 09. 14 | 2016. 09. 13 |
| 2. | Test Receiver | R & S | ESCS30 | 100338 | 2015. 06. 24 | 2016. 06. 23 |
| 3. | Amplifier | HP | 8447D | 2944A06305 | 2015. 02. 12 | 2016. 02. 11 |
| 4. | Bilog Antenna | CHASE | CBL6112D | 33821 | 2015. 02. 27 | 2016. 02. 26 |

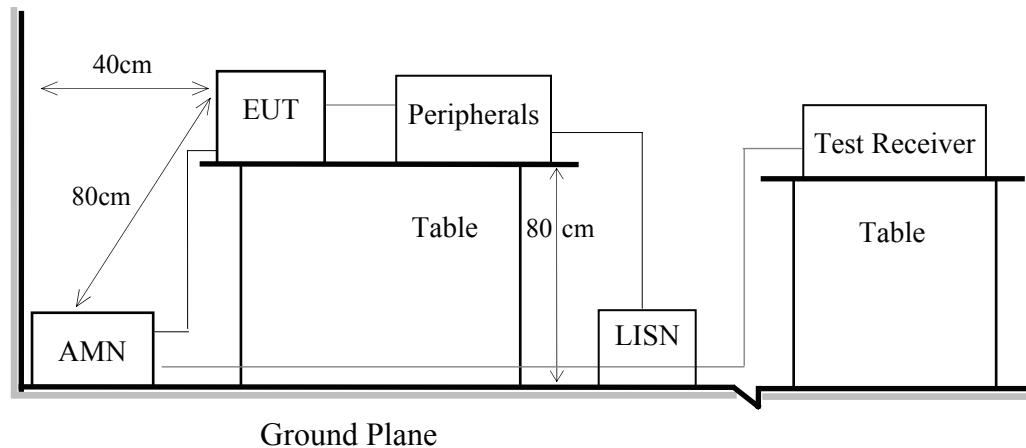
4.3. RF Conducted Measurement

| Item | Type | Manufacturer | Model No. | Serial No. | Cal. Date | Cal. Interval |
|------|-------------------|--------------|------------|------------|--------------|---------------|
| 1. | Spectrum Analyzer | Agilent | N9030A-526 | MY53310269 | 2015. 11. 28 | 1 Year |
| 2. | Loop Antenna | ETS | 7405 | N/A | N.C.R | N.C.R |

5. CONDUCTED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup

Shielded Room Setup Diagram



5.2. Power Line Conducted Emission Limit

| Frequency | Conducted Limit | |
|-----------------|--------------------|--------------------|
| | Quasi-Peak Level | Average Level |
| 150kHz ~ 500kHz | 66 ~ 56 dB μ V | 56 ~ 46 dB μ V |
| 500kHz ~ 5MHz | 56 dB μ V | 46 dB μ V |
| 5MHz ~ 30MHz | 60 dB μ V | 50 dB μ V |

Remark 1.: If the average limit is met when using a Quasi-Peak detector, the measurement using the average detector is not required.

2.: The lower limit applies to the band edges.

5.3. Test Procedure

- 5.3.1. To set up the EUT as indicated in ANSI C 63.10. The EUT was placed on the table which has 80 cm height to the ground and 40 cm distance to the conducting wall.
- 5.3.2. Power supplier of the EUT was connected to the AC mains through an Artificial Mains Network (A.M.N.).
- 5.3.3. The AC power supplies to all peripheral devices must be provided through line impedance stabilization network (L.I.S.N.)
- 5.3.4. Checking frequency range from 150 kHz to 30 MHz and record the emission which does not have 20 dB below limit.

5.4. Conducted Emission Measurement Results

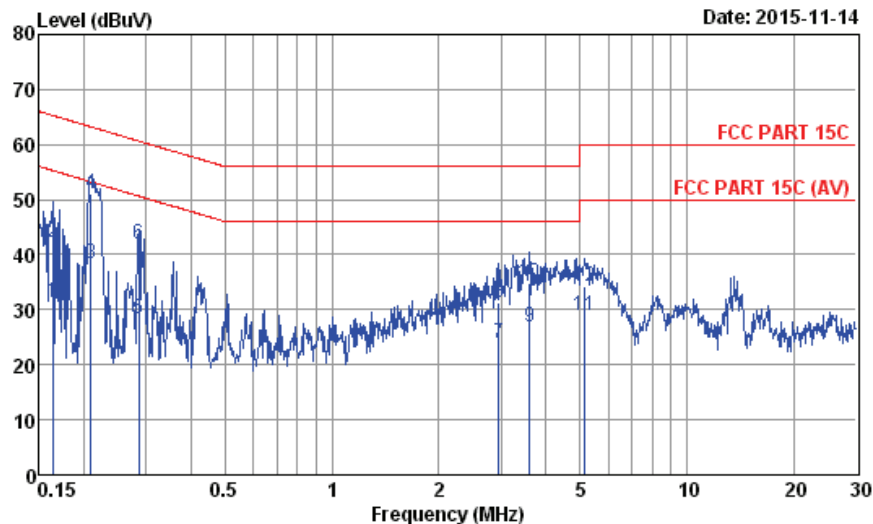
PASSED.

| | | | |
|--------------|---|------------|----------|
| Test Date | 2015/11/14 | Temp./Hum. | 26°C/57% |
| Test Voltage | DC 19.5V (Via AC Adaptor, M/N HA65NS5-00) | | |



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Email: emc@audixtech.com

Data: 2 File: D:\test data\REPORT\2015\1M1510XXX\1M1510238-C-D-RF-EM6 (8) Date: 2015-11-14



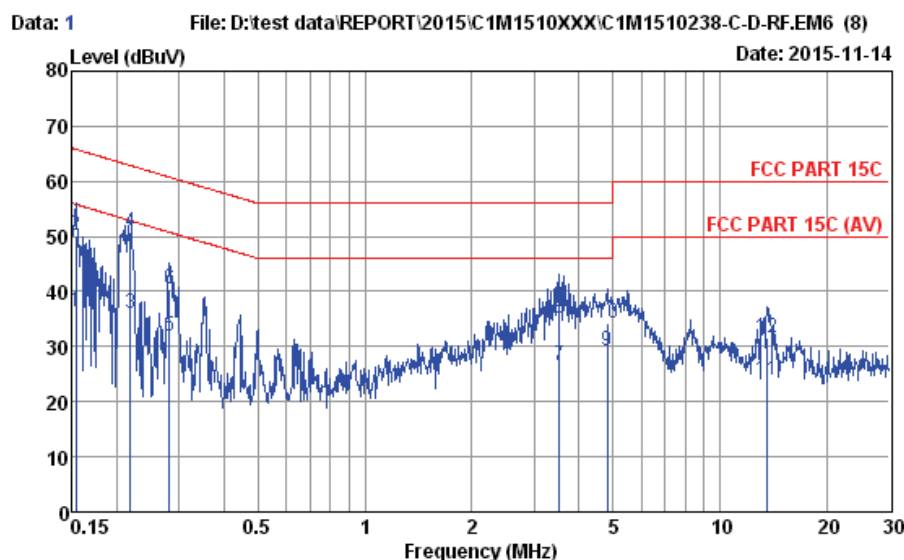
Site no. : No.8 Shielded Room Data no. : 2
Condition : ENV4200 358 (H) Phase : NEUTRAL
Limit : FCC PART 15C
Env. / Ins. : 26°C / 57% ESR3 (1774) Engineer : Tim
EUT : S2317HWib
Power Rating : 120Vac/60Hz
Test Mode : Operating
ADP: HA65NS5-00

| | Freq. (MHz) | AMN Factor (dB) | Cable Loss (dB) | Pulse Att. (dB) | Reading (dBμV) | Emission Level (dBμV) | Limits (dBμV) | Margin (dB) | Remark |
|----|----------------|-----------------------|-----------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.163 | 10.26 | 0.03 | 9.87 | 11.05 | 31.21 | 55.30 | 24.09 | Average |
| 2 | 0.163 | 10.26 | 0.03 | 9.87 | 21.92 | 42.08 | 65.30 | 23.22 | QP |
| 3 | 0.209 | 10.27 | 0.03 | 9.87 | 18.17 | 38.34 | 53.23 | 14.89 | Average |
| 4 | 0.209 | 10.27 | 0.03 | 9.87 | 31.04 | 51.21 | 63.23 | 12.02 | QP |
| 5 | 0.286 | 10.24 | 0.03 | 9.87 | 8.13 | 28.27 | 50.63 | 22.36 | Average |
| 6 | 0.286 | 10.24 | 0.03 | 9.87 | 21.88 | 42.02 | 60.63 | 18.61 | QP |
| 7 | 2.946 | 10.20 | 0.11 | 9.88 | 3.75 | 23.94 | 46.00 | 22.06 | Average |
| 8 | 2.946 | 10.20 | 0.11 | 9.88 | 11.08 | 31.27 | 56.00 | 24.73 | QP |
| 9 | 3.603 | 10.20 | 0.12 | 9.88 | 6.65 | 26.85 | 46.00 | 19.15 | Average |
| 10 | 3.603 | 10.20 | 0.12 | 9.88 | 14.66 | 34.86 | 56.00 | 21.14 | QP |
| 11 | 5.139 | 10.19 | 0.15 | 9.90 | 8.74 | 28.98 | 50.00 | 21.02 | Average |
| 12 | 5.139 | 10.19 | 0.15 | 9.90 | 13.92 | 34.16 | 60.00 | 25.84 | QP |

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.



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Email: emc@audixtech.com



Site no. : No.8 Shielded Room Data no. : 1
Condition : ENV4200 358 (H) Phase : LINE
Limit : FCC PART 15C
Env. / Ins. : 26°C / 57% ESR3 (1774) Engineer : Tim
EUT : S2317HWib
Power Rating : 120Vac/60Hz
Test Mode : Operating
ADP: HA65NS5-00

| | Freq. (MHz) | AMN Factor (dB) | Cable Loss (dB) | Pulse Att. (dB) | Reading (dBμV) | Emission Level (dBμV) | Limits (dBμV) | Margin (dB) | Remark |
|----|----------------|-----------------------|-----------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.153 | 10.25 | 0.03 | 9.87 | 16.20 | 36.35 | 55.82 | 19.47 | Average |
| 2 | 0.153 | 10.25 | 0.03 | 9.87 | 30.12 | 50.27 | 65.82 | 15.55 | QP |
| 3 | 0.219 | 10.28 | 0.03 | 9.87 | 15.70 | 35.88 | 52.88 | 17.00 | Average |
| 4 | 0.219 | 10.28 | 0.03 | 9.87 | 30.74 | 50.92 | 62.88 | 11.96 | QP |
| 5 | 0.282 | 10.26 | 0.03 | 9.87 | 11.61 | 31.77 | 50.76 | 18.99 | Average |
| 6 | 0.282 | 10.26 | 0.03 | 9.87 | 20.21 | 40.37 | 60.76 | 20.39 | QP |
| 7 | 3.528 | 10.21 | 0.12 | 9.88 | 6.40 | 26.61 | 46.00 | 19.39 | Average |
| 8 | 3.528 | 10.21 | 0.12 | 9.88 | 14.81 | 35.02 | 56.00 | 20.98 | QP |
| 9 | 4.822 | 10.20 | 0.14 | 9.90 | 8.94 | 29.18 | 46.00 | 16.82 | Average |
| 10 | 4.822 | 10.20 | 0.14 | 9.90 | 14.04 | 34.28 | 56.00 | 21.72 | QP |
| 11 | 13.551 | 10.13 | 0.24 | 9.91 | 3.72 | 24.00 | 50.00 | 26.00 | Average |
| 12 | 13.551 | 10.13 | 0.24 | 9.91 | 11.45 | 31.73 | 60.00 | 28.27 | QP |

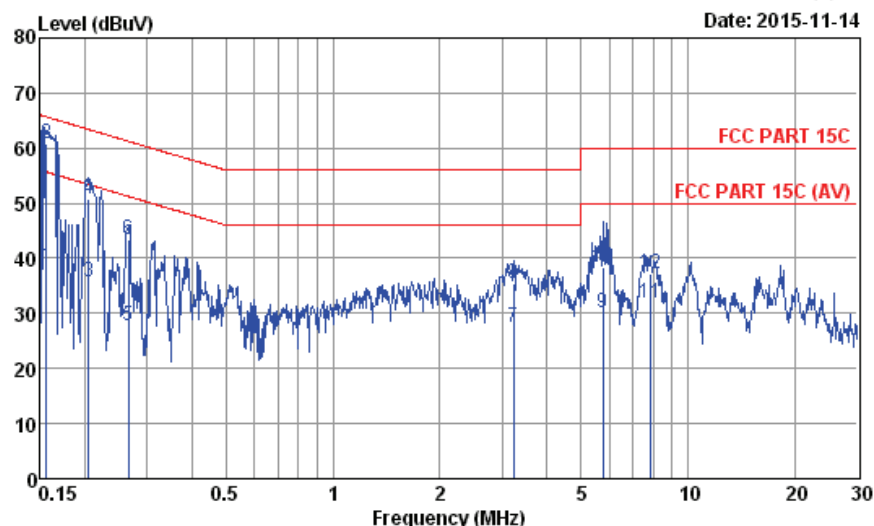
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

| | | | |
|--------------|--|------------|----------|
| Test Date | 2015/11/14 | Temp./Hum. | 26°C/57% |
| Test Voltage | DC 19.5V (Via AC Adaptor, M/N DA65NM111-00) | | |



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Data: 4 File: D:\test data\REPORT\2015\1M1510XXX\1M1510238-C-D-RF-EM6 (8)



Site no. : No.8 Shielded Room Data no. : 4
Condition : ENV4200 358 (H) Phase : NEUTRAL
Limit : FCC PART 15C
Env. / Ins. : 26°C / 57% ESR3 (1774) Engineer : Tim
EUT : S2317HWib
Power Rating : 120Vac/60Hz
Test Mode : Operating
ADP: DA65NM111-00

| | Freq. (MHz) | AMN Factor (dB) | Cable Loss (dB) | Pulse Att. (dB) | Reading (dBμV) | Emission Level (dBμV) | Limits (dBμV) | Margin (dB) | Remark |
|----|----------------|-----------------------|-----------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.156 | 10.25 | 0.03 | 9.87 | 18.18 | 38.33 | 55.69 | 17.36 | Average |
| 2 | 0.156 | 10.25 | 0.03 | 9.87 | 40.55 | 60.70 | 65.69 | 4.99 | QP |
| 3 | 0.205 | 10.27 | 0.03 | 9.87 | 15.61 | 35.78 | 53.40 | 17.62 | Average |
| 4 | 0.205 | 10.27 | 0.03 | 9.87 | 30.60 | 50.77 | 63.40 | 12.63 | QP |
| 5 | 0.266 | 10.25 | 0.03 | 9.87 | 7.55 | 27.70 | 51.25 | 23.55 | Average |
| 6 | 0.266 | 10.25 | 0.03 | 9.87 | 23.38 | 43.53 | 61.25 | 17.72 | QP |
| 7 | 3.224 | 10.20 | 0.11 | 9.88 | 7.30 | 27.49 | 46.00 | 18.51 | Average |
| 8 | 3.224 | 10.20 | 0.11 | 9.88 | 15.26 | 35.45 | 56.00 | 20.55 | QP |
| 9 | 5.744 | 10.19 | 0.16 | 9.90 | 9.74 | 29.99 | 50.00 | 20.01 | Average |
| 10 | 5.744 | 10.19 | 0.16 | 9.90 | 18.27 | 38.52 | 60.00 | 21.48 | QP |
| 11 | 7.810 | 10.19 | 0.19 | 9.90 | 11.71 | 31.99 | 50.00 | 18.01 | Average |
| 12 | 7.810 | 10.19 | 0.19 | 9.90 | 17.01 | 37.29 | 60.00 | 22.71 | QP |

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

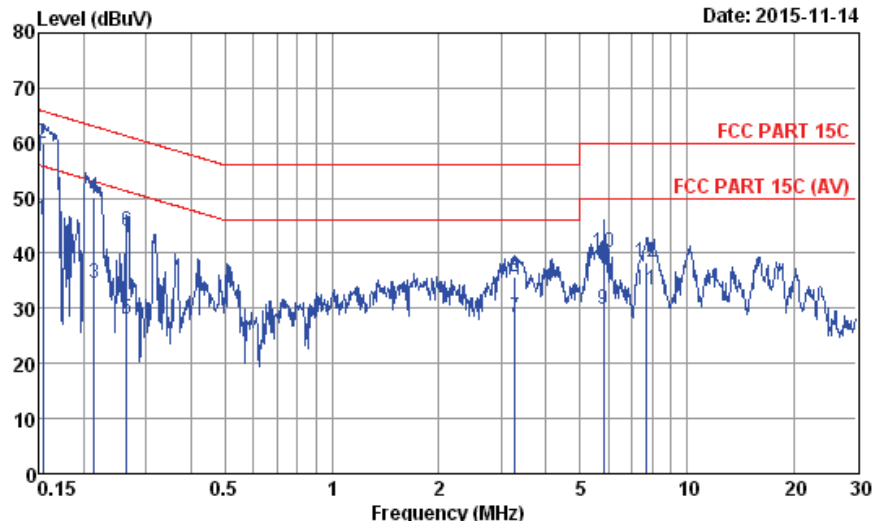
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Data: 3 File: D:\test data\REPORT\2015\C1M1510XXX\C1M1510238-C-D-RF-EM6 (8) Date: 2015-11-14



Site no. : No.8 Shielded Room Data no. : 3
Condition : ENV4200 358 (H) Phase : LINE
Limit : FCC PART 15C
Env. / Ins. : 26°C / 57% ESR3 (1774) Engineer : Tim
EUT : S2317HWib
Power Rating : 120Vac/60Hz
Test Mode : Operating
ADP: DA65NM111-00

| | Freq. (MHz) | AMN Factor (dB) | Cable Loss (dB) | Pulse Att. (dB) | Reading (dBμV) | Emission Level (dBμV) | Limits (dBμV) | Margin (dB) | Remark |
|----|----------------|-----------------------|-----------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.153 | 10.25 | 0.03 | 9.87 | 25.78 | 45.93 | 55.82 | 9.89 | Average |
| 2 | 0.153 | 10.25 | 0.03 | 9.87 | 39.65 | 59.80 | 65.82 | 6.02 | QP |
| 3 | 0.214 | 10.28 | 0.03 | 9.87 | 14.39 | 34.57 | 53.05 | 18.48 | Average |
| 4 | 0.214 | 10.28 | 0.03 | 9.87 | 30.01 | 50.19 | 63.05 | 12.86 | QP |
| 5 | 0.264 | 10.27 | 0.03 | 9.87 | 8.01 | 28.18 | 51.29 | 23.11 | Average |
| 6 | 0.264 | 10.27 | 0.03 | 9.87 | 23.91 | 44.08 | 61.29 | 17.21 | QP |
| 7 | 3.276 | 10.21 | 0.12 | 9.88 | 8.25 | 28.46 | 46.00 | 17.54 | Average |
| 8 | 3.276 | 10.21 | 0.12 | 9.88 | 15.40 | 35.61 | 56.00 | 20.39 | QP |
| 9 | 5.805 | 10.19 | 0.16 | 9.90 | 9.59 | 29.84 | 50.00 | 20.16 | Average |
| 10 | 5.805 | 10.19 | 0.16 | 9.90 | 19.78 | 40.03 | 60.00 | 19.97 | QP |
| 11 | 7.687 | 10.18 | 0.19 | 9.90 | 13.13 | 33.40 | 50.00 | 16.60 | Average |
| 12 | 7.687 | 10.18 | 0.19 | 9.90 | 18.25 | 38.52 | 60.00 | 21.48 | QP |

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

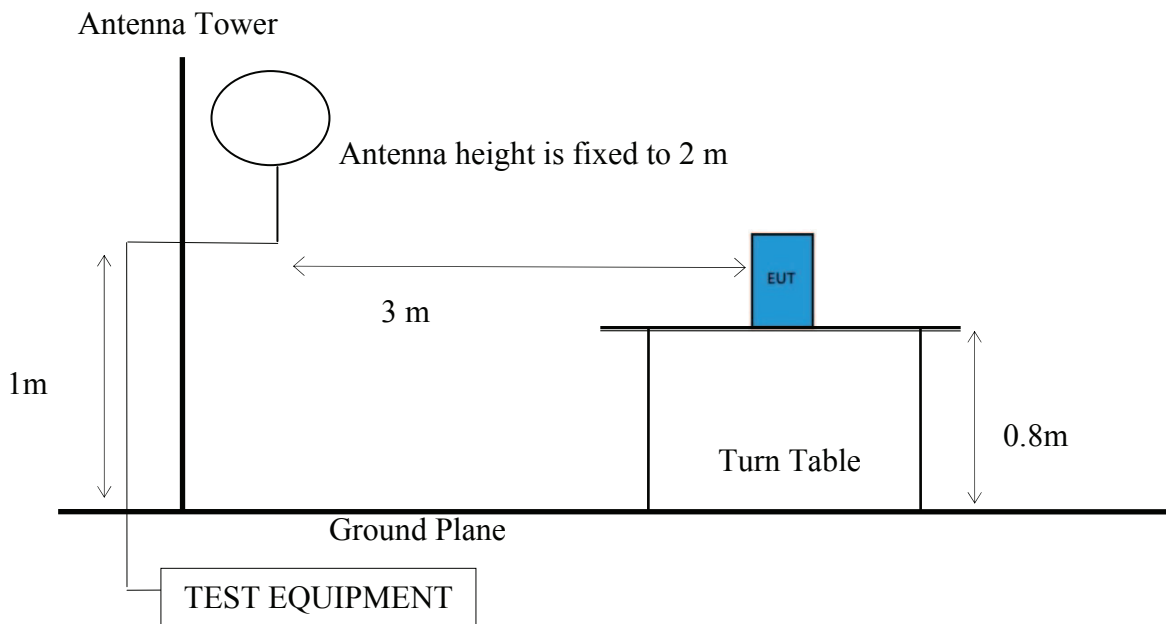
6. RADIATED SPURIOUS EMISSION MEASUREMENT

6.1. Block Diagram of Test Setup

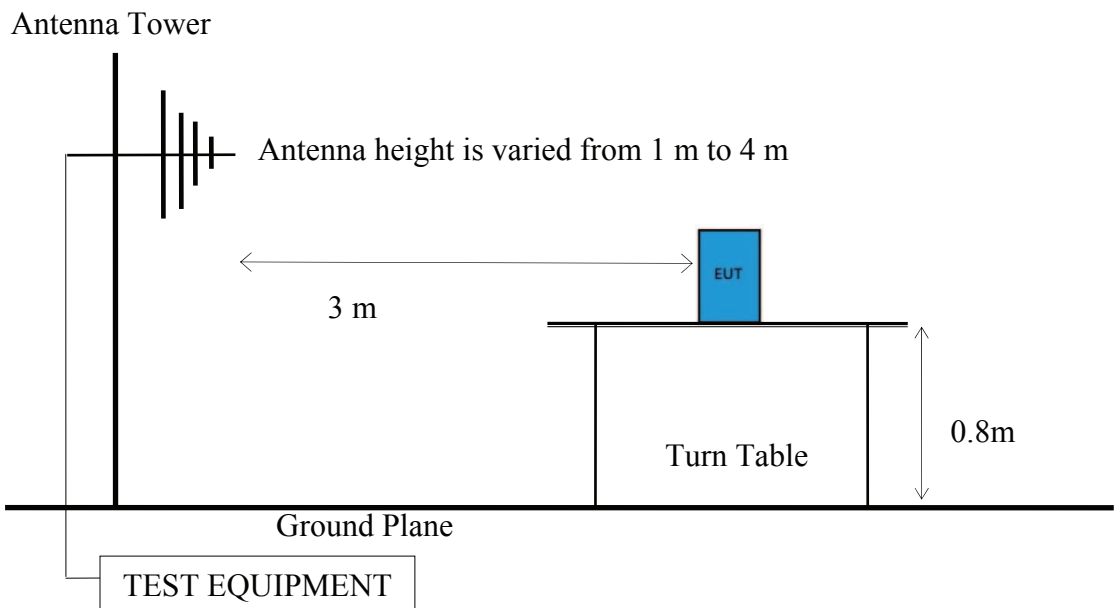
6.1.1. Block Diagram of EUT

Indicated as section 3.5

6.1.2. Setup Diagram for 9kHz-30MHz



6.1.3. Setup Diagram for 30MHz-1000MHz



6.2. Radiated Spurious Emission Limits

| Frequency (MHz) | Distance (m) | Limits | |
|-----------------|--------------|--------------|-----------|
| | | dB μ V/m | μ V/m |
| 0.009 - 0.490 | 300 | 67.6 | 2400/kHz |
| 0.490 - 1.705 | 30 | 87.6 | 24000/kHz |
| 1.705 - 30 | 30 | 29.5 | 30 |
| 30 - 88 | 3 | 40.0 | 100 |
| 88- 216 | 3 | 43.5 | 150 |
| 216- 960 | 3 | 46.0 | 200 |
| Above 960 | 3 | 54.0 | 500 |

6.3. Test Procedure

Frequency Range 9kHz~30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 2 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

- (1) RBW = 9kHz with peak and average detector.
- (2) Detector: average and peak (9kHz-490kHz)
Q.P. (490kHz-30MHz)

Frequency Range 30MHz ~ 1000MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna varied from 1 m to 4 m to find the maximum emission level. Both horizontal and vertical polarization are required. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 regulation.

Spectrum Analyzer is used for pre-testing with following setting:

- (1) RBW = 120KHz
- (2) VBW \geq 3 x RBW.
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode = max hold.
- (6) Allow sweeps to continue until the trace stabilizes.
- (7) When peak-detected value is lower than limit that the measurement using the Q.P. detector is not required. Otherwise using Q.P. for finally measurement.

6.4. Measurement Result Explanation

■ Emission Level = Antenna Factor + Cable Loss + Meter Reading

6.5. Test Results

PASSED.

| | | | |
|--------------|---------------------------|------------|----------|
| Test Date | 2015/11/12 | Temp./Hum. | 24°C/56% |
| Test Voltage | DC 19.5V (Via AC Adaptor) | | |

6.5.1. Frequency Range 9kHz~30MHz

Antenna at 0 Degree

| Test Frequency (MHz) | Test Result (dBμV/m at 3m) | Limits (dBμV/m at 3m) | Margin (dB) | Detector |
|-------------------------|-------------------------------|--------------------------|----------------|----------|
| 0.132910 | 76.00 | 105.13 | 29.130 | Peak |
| 0.265820 | 42.40 | 99.11 | 56.710 | Peak |
| 0.398730 | 53.80 | 95.59 | 41.790 | Peak |
| 0.664550 | 42.30 | 111.15 | 68.850 | Peak |
| 0.930370 | 30.60 | 108.23 | 77.630 | Peak |

Antenna at 90 Degree

| Test Frequency (MHz) | Test Result (dBμV/m at 3m) | Limits (dBμV/m at 3m) | Margin (dB) | Detector |
|-------------------------|-------------------------------|--------------------------|----------------|----------|
| 0.132910 | 67.80 | 105.13 | 37.330 | Peak |
| 0.265820 | 42.50 | 99.11 | 56.610 | Peak |
| 0.398730 | 46.40 | 95.59 | 49.190 | Peak |
| 0.664550 | 42.80 | 111.15 | 68.350 | Peak |
| 0.930370 | 34.20 | 108.23 | 74.030 | Peak |

Note: All emissions are lower than the ambient level cannot be measured.

6.5.2. Frequency Range 30MHz ~ 1000MHz

Antenna at Horizontal Polarization

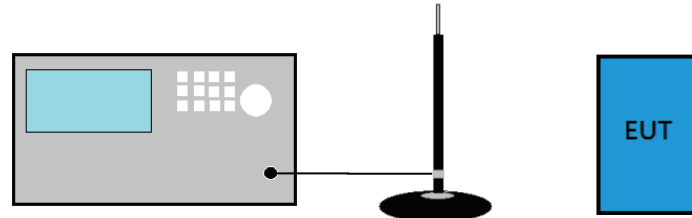
| Emission Frequency (MHz) | Antenna Factor (dB/m) | Cable Loss (dB) | Meter Reading (dB μ V) | Emission Level (dB μ V/m) | Limits (dB μ V/m) | Margin (dB) | Detector |
|--------------------------------|-----------------------------|-----------------------|----------------------------------|-------------------------------------|--------------------------|----------------|----------|
| 244.37 | 12.06 | 4.29 | 24.10 | 40.45 | 46.00 | 5.55 | Peak |
| 396.66 | 15.47 | 5.62 | 19.84 | 40.93 | 46.00 | 5.07 | Peak |
| 679.90 | 18.66 | 6.68 | 14.00 | 39.34 | 46.00 | 6.66 | Peak |

Antenna at Vertical Polarization

| Emission Frequency (MHz) | Antenna Factor (dB/m) | Cable Loss (dB) | Meter Reading (dB μ V) | Emission Level (dB μ V/m) | Limits (dB μ V/m) | Margin (dB) | Detector |
|--------------------------------|-----------------------------|-----------------------|----------------------------------|-------------------------------------|--------------------------|----------------|----------|
| 145.43 | 10.86 | 3.57 | 23.94 | 38.37 | 43.50 | 5.13 | Peak |
| 445.16 | 16.22 | 6.03 | 16.79 | 39.04 | 46.00 | 6.96 | Peak |
| 594.54 | 18.27 | 6.50 | 18.70 | 43.47 | 46.00 | 2.53 | Peak |
| 891.36 | 20.53 | 7.51 | 16.13 | 44.17 | 46.00 | 1.83 | Peak |

7. EMISSION BANDWIDTH MEASUREMENT

7.1. Block Diagram of Test Setup



7.2. Specification Limits

The 99% bandwidth shall be no wider than 0.25% of the center frequency for device operating between 70MHz and 900MHz. For devices operating above 900MHz, the emission shall be no wider than 0.5% of the centre frequency.

7.3. Test Procedure

- (1) Set RBW close to 1-5 % of OBW.
- (2) Set $VBW \geq RBW$.
- (3) Detector = Peak.
- (4) Trace mode = max hold.
- (5) Sweep = auto couple.
- (6) Allow the trace to stabilize.
- (7) Setting channel bandwidth function x % to 99% to record the final bandwidth.

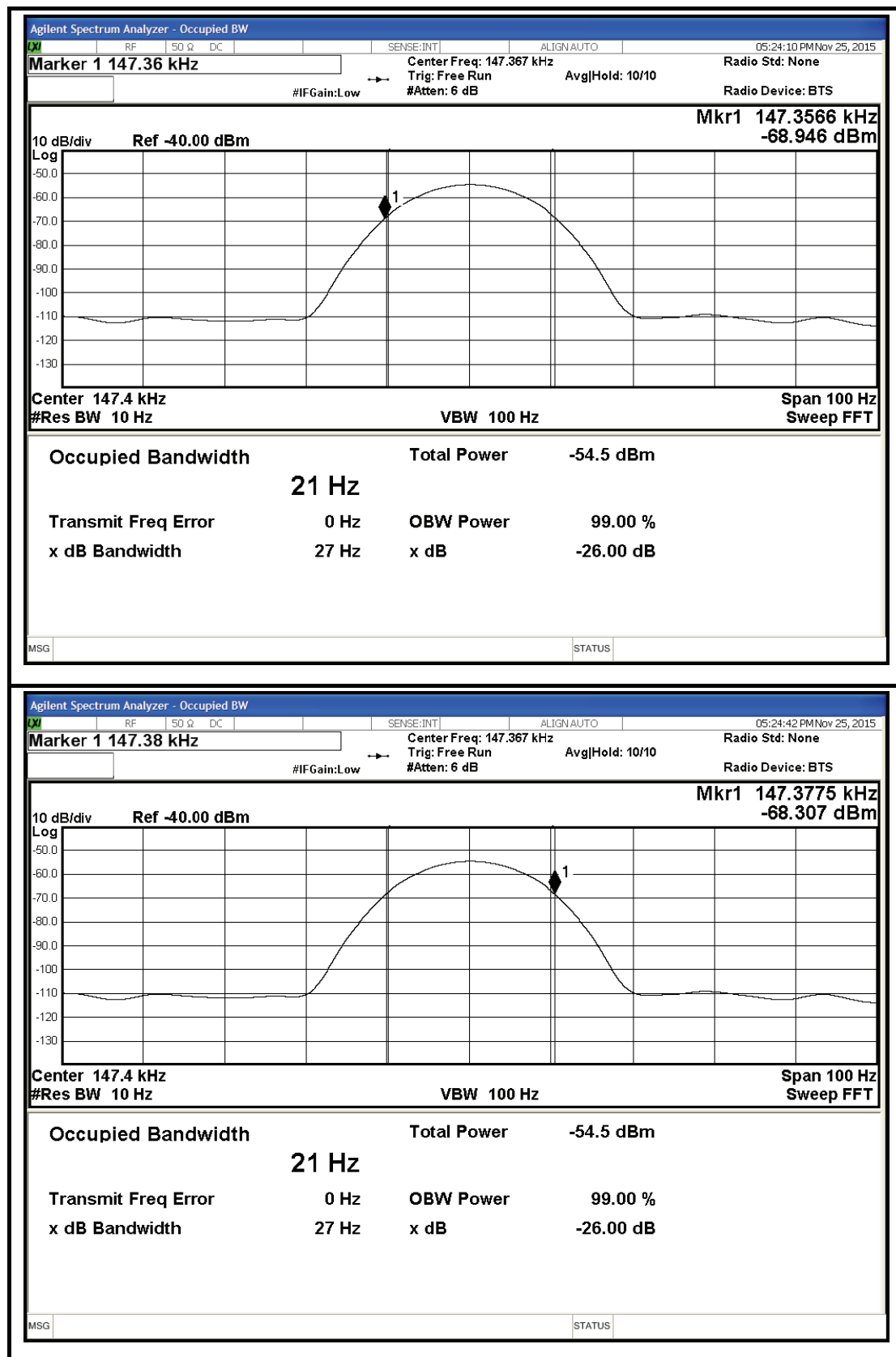
7.4. Test Results

| | | | |
|--------------|---------------------------|------------|----------|
| Test Date | 2015/11/25 | Temp./Hum. | 25°C/45% |
| Test Voltage | DC 19.5V (Via AC Adaptor) | Frequency | 147.4MHz |

7.4.1. Emission Bandwidth Measurement Results

| Center Frequency (MHz) | Occupied Bandwidth (MHz) | Tolerance (%) | Limit (%) |
|------------------------|--------------------------|---------------|-----------|
| 147.4 | 0.000021 | 0.000 | 0.25 |

7.4.2. Graph of Bandwidth Measurement



8. DEVIATION TO TEST SPECIFICATIONS

【NONE】