

# 6.7 RADIATED UNDESIABLE EMISSION

### 6.7.1 LIMIT

 According to §15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

**Remark:** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

2. In the emission table above, the tighter limit applies at the band edges.

Frequency (MHz)	Field Strength (μV/m at 3-meter)	Field Strength (dBµV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

FCC ID: VW7SR616A Page 187 / 331

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

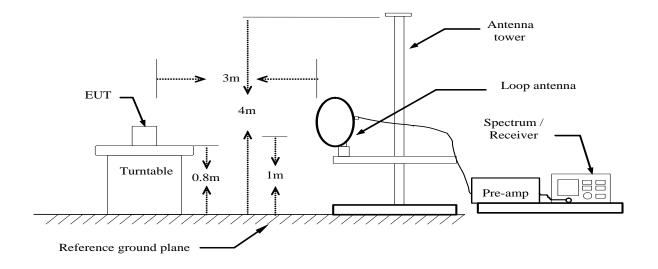
# **6.7.2 TEST INSTRUMENTS**

Radiated Emission Test Site 966 (2)												
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration							
PSA Series Spectrum  Analyzer	Agilent	N9010A	MY52221469	02/21/2017	02/20/2018							
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2017	02/20/2018							
Amplifier	EMEC	EM330	060661	03/18/2017	03/17/2018							
High Noise Amplifier	Agilent	8449B	3008A01838	02/21/2017	02/20/2018							
Loop Antenna	COM-POWER	AL-130	121044	121044 09/25/2016								
Bilog Antenna	SCHAFFNER	CBL6143	_6143 5082 (		02/20/2018							
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02/27/2017	02/27/2018							
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170 9170-497		02/27/2017	02/27/2018							
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R							
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R							
Controller	Sunol Sciences	SC104V	022310-1 N.C.R		N.C.R							
Controller	СТ	N/A	N/A	N.C.R	N.C.R							
Temp. / Humidity Meter	Anymetre	JR913	N/A	02/21/2017	02/20/2018							
Test S/W	FARAD		LZ-RF / CCS	S-SZ-3A2								

Report No.: C170704Z01-RP1-2

# **6.7.3 TEST CONFIGURATION**

# **Below 30MHz**

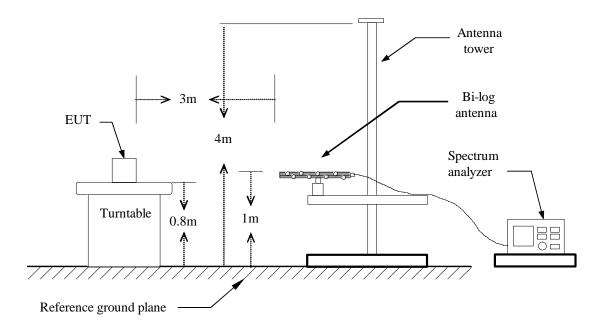


FCC ID: VW7SR616A Page 188 / 331

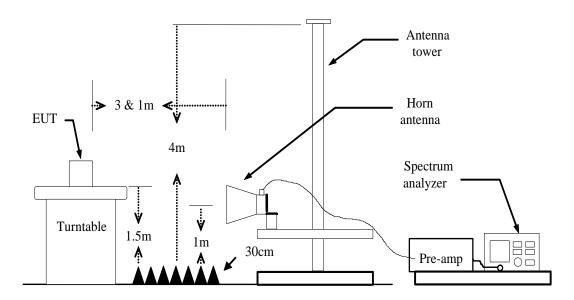
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Report No.: C170704Z01-RP1-2

# **Below 1 GHz**



# **Above 1 GHz**



For the actual test configuration, please refer to the related item – Photographs of the TEST CONFIGURATION.

FCC ID: VW7SR616A Page 189 / 331

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

### 6.7.4 MEASURING SETTING

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted	1MHz / 1MHz for Peak, 1 MHz / 1/T for
band)	Average
RB / VB (Emission in non-restricted	1MHz / 1MHz for Peak, 1 MHz / 1/T for
band)	Average

Report No.: C170704Z01-RP1-2

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB 100kHz for QP

# **6.7.5TEST PROCEDURE**

# 1) Sequence of testing 9 kHz to 30 MHz

### Setup:

- --- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- --- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- --- If the EUT is a floor standing device, it is placed on the ground.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 3 meter.
- --- The EUT was set into operation.

### Pre measurement:

- --- The turntable rotates from 0° to 315° using 45° steps.
- --- The antenna height is 0.8 meter.

FCC ID: VW7SR616A Page 190 / 331

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Report No.: C170704Z01-RP1-2

### **Final measurement:**

- --- Identified emissions during the pre measurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).
- --- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.
- --- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

# 2) Sequence of testing 30 MHz to 1 GHz

# Setup:

- --- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- --- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.
- --- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 3 meter.
- --- The EUT was set into operation.

### Pre measurement:

- --- The turntable rotates from 0° to 315° using 45° steps.
- --- The antenna is polarized vertical and horizontal.
- --- The antenna height changes from 1 to 3 meter.
- --- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

FCC ID: VW7SR616A Page 191 / 331

### **Final measurement:**

- --- The final measurement will be performed with minimum the six highest peaks.
- --- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter.

Report No.: C170704Z01-RP1-2

- --- The final measurement will be done with QP detector with an EMI receiver.
- --- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

# 3) Sequence of testing 1 GHz to 18 GHz

# Setup:

- --- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- --- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- --- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 3 meter.
- --- The EUT was set into operation.

### Pre measurement:

- --- The turntable rotates from 0° to 315° using 45° steps.
- --- The antenna is polarized vertical and horizontal.
- --- The antenna height scan range is 1 meter to 2.5 meter.
- --- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

FCC ID: VW7SR616A Page 192 / 331

# Final measurement:

- --- The final measurement will be performed with minimum the six highest peaks.
- --- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.

Report No.: C170704Z01-RP1-2

- --- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- --- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

# 4) Sequence of testing above 18 GHz Setup:

- --- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- --- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- --- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- --- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- --- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- --- The measurement distance is 1 meter.
- --- The EUT was set into operation.

### Pre measurement:

--- The antenna is moved spherical over the EUT in different polarisations of the antenna.

### **Final measurement:**

- --- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
- --- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

FCC ID: VW7SR616A Page 193 / 331

### 6.7.6 DATA SAPLE

### **Below 1GHz**

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXX.XXXX	36.37	-12.20	24.17	40.00	-15.83	V	QP

Report No.: C170704Z01-RP1-2

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer / Receiver reading Correct Factor (dB/m) = Antenna factor + Cable loss - Amplifier gain Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Result (dBuV/m) - Limit (dBuV/m)

Q.P. = Quasi-peak Reading

### Above 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXXX.XXXX	62.09	-11.42	50.67	74.00	-23.33	V	Peak
XXXX.XXXX	49.78	-11.42	38.36	54.00	-15.64	V	AVG

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer / Receiver reading Correction Factor (dB/m) = Antenna factor + Cable loss - Amplifier gain = Reading (dBuV) + Corr. Factor (dB/m) Result (dBuV/m)

= Limit stated in standard Limit (dBuV/m)

Margin (dB) = Result (dBuV/m) - Limit (dBuV/m)

Peak = Peak Reading AVG = Average Reading

### **Calculation Formula**

Margin (dB) = Result (dBuV/m) - Limits (dBuV/m) Result (dBuV/m) = Reading (dBuV) + Correction Factor

FCC ID: VW7SR616A Page 194 / 331 This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

### 6.7.7 TEST RESULTS

# **Below 1 GHz**

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low)

Tested by: Saber Huang

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
137.6700	47.67	-12.22	35.45	43.50	-8.05	V	QP
250.1900	50.74	-9.09	41.65	46.00	-4.35	V	QP
375.3200	50.23	-7.28	42.95	46.00	-3.05	V	QP
624.6100	45.71	-3.71	42.00	46.00	-4.00	V	QP
749.7400	34.93	-3.11	31.82	46.00	-14.18	V	QP
874.8700	38.66	-2.31	36.35	46.00	-9.65	V	QP
137.6700	50.05	-12.22	37.83	43.50	-5.67	Н	QP
250.1900	52.77	-9.09	43.68	46.00	-2.32	Н	QP
375.3200	48.32	-7.28	41.04	46.00	-4.96	Н	QP
440.3100	38.85	-5.39	33.46	46.00	-12.54	Н	QP
624.6100	43.42	-3.71	39.71	46.00	-6.29	Н	QP
874.8700	38.03	-2.31	35.72	46.00	-10.28	Н	QP

Pre-scan all mode and recorded the worst case results in this report (802.11a (Low Mid)).

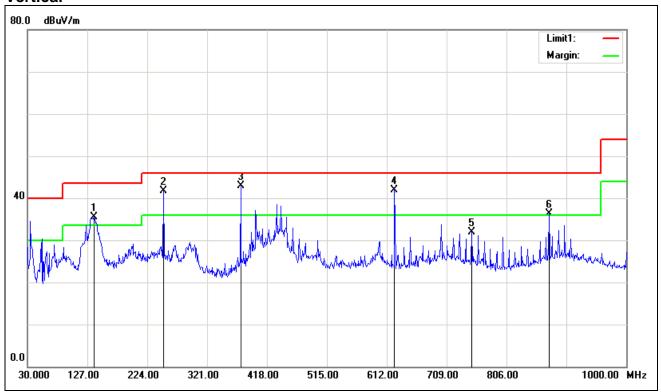
# Remark:

- 1. No emission found between lowest internal used/generated frequency to 30MHz ( $9kHz\sim30MHz$ )
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.
- 3. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Quasi-peak limit (dBuV/m).

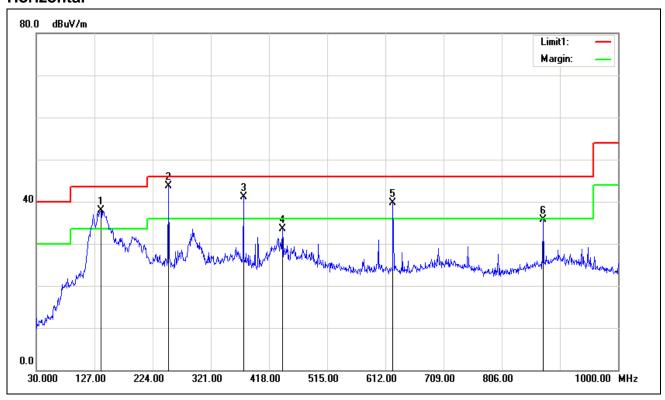
1.

Report No.: C170704Z01-RP1-2

# **Vertical**



# Horizontal



FCC ID: VW7SR616A Page 196 / 331 Above 1 GHz 1GHz~6GHz

**Test Mode:** TX / IEEE 802.11a / 5180MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Tested by: Saber Huang

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1200.000	52.66	-7.79	44.87	68.23	-23.36	V	peak
1925.000	46.85	-5.48	41.37	68.23	-26.86	V	peak
2040.000	46.34	-4.78	41.56	68.23	-26.67	V	peak
2660.000	46.03	-1.97	44.06	68.23	-24.17	V	peak
3200.000	48.12	-1.02	47.10	68.23	-21.13	V	peak
3945.000	42.65	1.36	44.01	68.23	-24.22	V	peak
1645.000	45.90	-6.60	39.30	68.23	-28.93	Н	Peak
2360.000	45.51	-3.03	42.48	68.23	-25.75	Н	Peak
2500.000	49.81	-2.26	47.55	68.23	-20.68	Н	Peak
2800.000	45.90	-1.72	44.18	68.23	-24.05	Н	peak
3600.000	47.49	-0.10	47.39	68.23	-20.84	Н	peak
4315.000	41.62	2.70	44.32	68.23	-23.91	Н	peak

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 197 / 331

# **Above 6GHz**

# Antenna 0

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8148.000	31.88	9.57	41.45	68.23	-26.78	V	peak
7356.000	31.65	8.39	40.04	68.23	-28.19	V	peak
9024.000	31.45	9.17	40.62	68.23	-27.61	V	peak
10032.000	30.76	12.08	42.84	68.23	-25.39	V	peak
10704.000	30.62	14.16	44.78	68.23	-23.45	V	peak
11508.000	31.24	14.86	46.10	68.23	-22.13	V	peak
7716.000	31.14	9.10	40.24	68.23	-27.99	Н	Peak
8112.000	31.31	9.59	40.90	68.23	-27.33	Н	Peak
8976.000	31.31	9.11	40.42	68.23	-27.81	Н	Peak
9792.000	30.18	11.38	41.56	68.23	-26.67	Н	peak
10716.000	29.99	14.20	44.19	68.23	-24.04	Н	peak
11256.000	31.40	14.97	46.37	68.23	-21.86	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 198 / 331

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7140.000	31.46	7.97	39.43	68.23	-28.80	V	peak
7752.000	31.59	9.17	40.76	68.23	-27.47	V	peak
8148.000	31.46	9.57	41.03	68.23	-27.20	V	peak
9252.000	30.33	9.83	40.16	68.23	-28.07	V	peak
9924.000	30.38	11.76	42.14	68.23	-26.09	V	peak
10800.000	29.80	14.46	44.26	68.23	-23.97	V	peak
6864.000	31.44	7.48	38.92	68.23	-29.31	Н	Peak
7164.000	31.36	8.02	39.38	68.23	-28.85	Н	Peak
8100.000	31.53	9.60	41.13	68.23	-27.10	Н	Peak
8412.000	31.24	9.42	40.66	68.23	-27.57	Н	peak
9072.000	30.55	9.31	39.86	68.23	-28.37	Н	peak
9852.000	30.08	11.55	41.63	68.23	-26.60	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 199 / 331

Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7476.000	30.68	8.63	39.31	68.23	-28.92	V	peak
8028.000	31.49	9.63	41.12	68.23	-27.11	V	peak
8364.000	31.80	9.45	41.25	68.23	-26.98	V	peak
9396.000	30.33	10.24	40.57	68.23	-27.66	V	peak
9888.000	31.31	11.66	42.97	68.23	-25.26	V	peak
10644.000	30.13	13.98	44.11	68.23	-24.12	V	peak
7224.000	31.14	8.14	39.28	68.23	-28.95	Н	Peak
7932.000	30.77	9.52	40.29	68.23	-27.94	Н	Peak
8340.000	31.30	9.46	40.76	68.23	-27.47	Н	Peak
8640.000	30.58	9.30	39.88	68.23	-28.35	Н	peak
9456.000	30.46	10.41	40.87	68.23	-27.36	Н	peak
9828.000	30.57	11.48	42.05	68.23	-26.18	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 200 / 331

Test Mode: TX / IEEE 802.11a / 5260MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6708.000	31.31	7.23	38.54	68.23	-29.69	V	peak
7068.000	31.35	7.83	39.18	68.23	-29.05	V	peak
7608.000	31.52	8.89	40.41	68.23	-27.82	V	peak
8028.000	31.49	9.63	41.12	68.23	-27.11	V	peak
9888.000	31.31	11.66	42.97	68.23	-25.26	V	peak
10644.000	30.13	13.98	44.11	68.23	-24.12	V	peak
7224.000	31.14	8.14	39.28	68.23	-28.95	Н	Peak
7740.000	31.70	9.14	40.84	68.23	-27.39	Н	Peak
8088.000	31.89	9.60	41.49	68.23	-26.74	Н	Peak
8952.000	31.09	9.13	40.22	68.23	-28.01	Н	peak
9828.000	30.57	11.48	42.05	68.23	-26.18	Н	peak
10668.000	29.79	14.05	43.84	68.23	-24.39	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 201 / 331

Test Mode: TX / IEEE 802.11a / 5300MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7092.000	30.81	7.88	38.69	68.23	-29.54	V	peak
7908.000	31.38	9.47	40.85	68.23	-27.38	V	peak
8280.000	31.29	9.50	40.79	68.23	-27.44	V	peak
9372.000	30.51	10.17	40.68	68.23	-27.55	V	peak
10644.000	30.52	13.98	44.50	68.23	-23.73	V	peak
11280.000	31.03	14.96	45.99	68.23	-22.24	V	peak
7500.000	31.16	8.68	39.84	68.23	-28.39	Н	Peak
8496.000	31.12	9.38	40.50	68.23	-27.73	Н	Peak
9048.000	31.56	9.24	40.80	68.23	-27.43	Н	Peak
9420.000	31.00	10.31	41.31	68.23	-26.92	Н	peak
10044.000	30.58	12.12	42.70	68.23	-25.53	Н	peak
10824.000	29.73	14.53	44.26	68.23	-23.97	Н	peak

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 202 / 331

Test Mode: TX / IEEE 802.11a / 5320MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7680.000	31.87	9.03	40.90	68.23	-27.33	V	peak
8040.000	31.56	9.63	41.19	68.23	-27.04	V	peak
9000.000	31.61	9.10	40.71	68.23	-27.52	V	peak
9420.000	31.22	10.31	41.53	68.23	-26.70	V	peak
10860.000	29.27	14.65	43.92	68.23	-24.31	V	peak
11448.000	30.41	14.88	45.29	68.23	-22.94	V	peak
7452.000	31.04	8.58	39.62	68.23	-28.61	Н	Peak
8016.000	31.41	9.64	41.05	68.23	-27.18	Н	Peak
8448.000	31.23	9.40	40.63	68.23	-27.60	Н	Peak
9288.000	30.51	9.93	40.44	68.23	-27.79	Н	peak
10140.000	30.12	12.41	42.53	68.23	-25.70	Н	peak
10680.000	29.78	14.09	43.87	68.23	-24.36	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 203 / 331

Test Mode: TX / IEEE 802.11a / 5500MHz /(CH Low)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6816.000	31.80	7.40	39.20	68.23	-29.03	V	peak
7980.000	31.37	9.61	40.98	68.23	-27.25	V	peak
8424.000	31.57	9.42	40.99	68.23	-27.24	V	peak
9300.000	30.80	9.96	40.76	68.23	-27.47	V	peak
10356.000	30.21	13.08	43.29	68.23	-24.94	V	peak
11028.000	29.31	15.07	44.38	68.23	-23.85	V	peak
7176.000	31.93	8.04	39.97	68.23	-28.26	Н	Peak
7848.000	31.26	9.35	40.61	68.23	-27.62	Н	Peak
8136.000	31.42	9.58	41.00	68.23	-27.23	Н	Peak
9036.000	31.49	9.20	40.69	68.23	-27.54	Н	peak
9408.000	30.81	10.28	41.09	68.23	-27.14	Н	peak
10440.000	29.52	13.34	42.86	68.23	-25.37	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 204 / 331

Test Mode: TX / IEEE 802.11a / 5580MHz /(CH Mid)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7320.000	31.09	8.32	39.41	68.23	-28.82	V	peak
8100.000	31.69	9.60	41.29	68.23	-26.94	V	peak
9060.000	30.96	9.27	40.23	68.23	-28.00	V	peak
9372.000	30.30	10.17	40.47	68.23	-27.76	V	peak
10356.000	31.87	13.08	44.95	68.23	-23.28	V	peak
11304.000	30.78	14.95	45.73	68.23	-22.50	V	peak
7032.000	31.33	7.76	39.09	68.23	-29.14	Н	Peak
7944.000	31.30	9.54	40.84	68.23	-27.39	Н	Peak
8388.000	31.44	9.44	40.88	68.23	-27.35	Н	peak
9048.000	30.56	9.24	39.80	68.23	-28.43	Н	peak
9384.000	30.31	10.21	40.52	68.23	-27.71	Н	peak
11172.000	30.30	15.00	45.30	68.23	-22.93	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 205 / 331

Test Mode: TX / IEEE 802.11a / 5700MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7716.000	31.38	9.10	40.48	68.23	-27.75	V	peak
8280.000	31.46	9.50	40.96	68.23	-27.27	V	peak
9108.000	30.75	9.41	40.16	68.23	-28.07	V	peak
9432.000	30.42	10.34	40.76	68.23	-27.47	V	peak
9888.000	30.39	11.66	42.05	68.23	-26.18	V	peak
11304.000	31.28	14.95	46.23	68.23	-22.00	V	peak
7044.000	31.71	7.79	39.50	68.23	-28.73	Н	Peak
8064.000	31.36	9.61	40.97	68.23	-27.26	Н	Peak
8544.000	30.92	9.35	40.27	68.23	-27.96	Н	Peak
9348.000	30.42	10.10	40.52	68.23	-27.71	Н	peak
10560.000	30.08	13.72	43.80	68.23	-24.43	Н	peak
11148.000	31.34	15.01	46.35	68.23	-21.88	Н	peak

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 206 / 331

Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7044.000	31.55	7.79	39.34	68.23	-28.89	V	peak
8016.000	31.30	9.64	40.94	68.23	-27.29	V	peak
8544.000	30.76	9.35	40.11	68.23	-28.12	V	peak
9324.000	30.58	10.03	40.61	68.23	-27.62	V	peak
11148.000	31.50	15.01	46.51	68.23	-21.72	V	peak
11364.000	30.55	14.92	45.47	68.23	-22.76	V	peak
8004.000	31.19	9.65	40.84	68.23	-27.39	Н	Peak
8952.000	31.01	9.13	40.14	68.23	-28.09	Н	Peak
9876.000	30.71	11.62	42.33	68.23	-25.90	Н	Peak
11172.000	31.26	15.00	46.26	68.23	-21.97	Н	peak
11532.000	30.07	14.85	44.92	68.23	-23.31	Н	peak
12636.000	29.57	16.75	46.32	68.23	-21.91	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 207 / 331

Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7416.000	31.23	8.51	39.74	68.23	-28.49	V	peak
8412.000	31.49	9.42	40.91	68.23	-27.32	V	peak
9468.000	30.09	10.45	40.54	68.23	-27.69	V	peak
10116.000	30.26	12.34	42.60	68.23	-25.63	V	peak
10584.000	29.79	13.79	43.58	68.23	-24.65	V	peak
11304.000	30.32	14.95	45.27	68.23	-22.96	V	peak
7224.000	31.46	8.14	39.60	68.23	-28.63	Н	Peak
7644.000	31.47	8.96	40.43	68.23	-27.80	Н	Peak
8076.000	31.29	9.61	40.90	68.23	-27.33	Н	Peak
8376.000	31.25	9.44	40.69	68.23	-27.54	Н	peak
9444.000	30.49	10.38	40.87	68.23	-27.36	Н	peak
11148.000	30.89	15.01	45.90	68.23	-22.33	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 208 / 331

Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7260.000	31.02	8.21	39.23	68.23	-29.00	V	peak
8376.000	30.56	9.44	40.00	68.23	-28.23	V	peak
9024.000	31.43	9.17	40.60	68.23	-27.63	V	peak
9732.000	30.20	11.21	41.41	68.23	-26.82	V	peak
10776.000	29.78	14.39	44.17	68.23	-24.06	V	peak
11388.000	30.62	14.91	45.53	68.23	-22.70	V	peak
7248.000	31.28	8.18	39.46	68.23	-28.77	Н	Peak
8088.000	31.54	9.60	41.14	68.23	-27.09	Н	Peak
8412.000	31.44	9.42	40.86	68.23	-27.37	Н	Peak
9036.000	31.02	9.20	40.22	68.23	-28.01	Н	peak
9948.000	30.53	11.83	42.36	68.23	-25.87	Н	peak
10644.000	30.30	13.98	44.28	68.23	-23.95	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 209 / 331

Antenna 1

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7080.000	31.66	7.86	39.52	68.23	-28.71	V	peak
7608.000	31.20	8.89	40.09	68.23	-28.14	V	peak
8424.000	31.54	9.42	40.96	68.23	-27.27	V	peak
9420.000	30.61	10.31	40.92	68.23	-27.31	V	peak
10356.000	30.07	13.08	43.15	68.23	-25.08	V	peak
10896.000	29.74	14.76	44.50	68.23	-23.73	V	peak
7056.000	31.09	7.81	38.90	68.23	-29.33	Н	Peak
7740.000	31.78	9.14	40.92	68.23	-27.31	Н	Peak
8940.000	31.45	9.13	40.58	68.23	-27.65	Н	Peak
9924.000	30.72	11.76	42.48	68.23	-25.75	Н	peak
10644.000	29.77	13.98	43.75	68.23	-24.48	Н	peak
11556.000	30.33	14.84	45.17	68.23	-23.06	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 210 / 331

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	31.71	8.28	39.99	68.23	-28.24	V	peak
7980.000	31.55	9.61	41.16	68.23	-27.07	V	peak
8364.000	31.45	9.45	40.90	68.23	-27.33	V	peak
9276.000	30.91	9.89	40.80	68.23	-27.43	V	peak
10620.000	30.22	13.90	44.12	68.23	-24.11	V	peak
11376.000	30.81	14.91	45.72	68.23	-22.51	V	peak
8064.000	31.61	9.61	41.22	68.23	-27.01	Н	Peak
8976.000	31.30	9.11	40.41	68.23	-27.82	Н	Peak
9804.000	30.00	11.42	41.42	68.23	-26.81	Н	Peak
10524.000	30.67	13.60	44.27	68.23	-23.96	Н	peak
11220.000	30.81	14.98	45.79	68.23	-22.44	Н	peak
11748.000	30.05	14.75	44.80	68.23	-23.43	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 211 / 331

Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7764.000	31.54	9.19	40.73	68.23	-27.50	V	peak
8220.000	31.35	9.53	40.88	68.23	-27.35	V	peak
9384.000	30.51	10.21	40.72	68.23	-27.51	V	peak
9900.000	30.14	11.69	41.83	68.23	-26.40	V	peak
10356.000	31.32	13.08	44.40	68.23	-23.83	V	peak
11268.000	31.09	14.96	46.05	68.23	-22.18	V	peak
7620.000	31.71	8.91	40.62	68.23	-27.61	Н	Peak
8412.000	31.67	9.42	41.09	68.23	-27.14	Н	Peak
9012.000	31.16	9.13	40.29	68.23	-27.94	Н	Peak
9828.000	29.97	11.48	41.45	68.23	-26.78	Н	peak
11148.000	31.10	15.01	46.11	68.23	-22.12	Н	peak
11724.000	30.05	14.76	44.81	68.23	-23.42	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 212 / 331

Test Mode: TX / IEEE 802.11a / 5260MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7704.000	31.54	9.07	40.61	68.23	-27.62	V	peak
7980.000	31.46	9.61	41.07	68.23	-27.16	V	peak
8064.000	31.73	9.61	41.34	68.23	-26.89	V	peak
8220.000	31.07	9.53	40.60	68.23	-27.63	V	peak
9360.000	32.03	10.14	42.17	68.23	-26.06	V	peak
11136.000	31.28	15.02	46.30	68.23	-21.93	V	peak
7668.000	31.13	9.00	40.13	68.23	-28.10	Н	Peak
8988.000	30.84	9.11	39.95	68.23	-28.28	Н	Peak
9360.000	30.92	10.14	41.06	68.23	-27.17	Н	Peak
9864.000	30.49	11.59	42.08	68.23	-26.15	Н	peak
10800.000	30.73	14.46	45.19	68.23	-23.04	Н	peak
11196.000	30.85	14.99	45.84	68.23	-22.39	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 213 / 331

Test Mode: TX / IEEE 802.11a / 5300MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	32.05	8.28	40.33	68.23	-27.90	V	peak
7644.000	31.34	8.96	40.30	68.23	-27.93	V	peak
8040.000	31.45	9.63	41.08	68.23	-27.15	V	peak
8964.000	31.05	9.12	40.17	68.23	-28.06	V	peak
9828.000	30.24	11.48	41.72	68.23	-26.51	V	peak
10476.000	30.23	13.46	43.69	68.23	-24.54	V	peak
7404.000	30.95	8.49	39.44	68.23	-28.79	Н	Peak
7992.000	31.15	9.63	40.78	68.23	-27.45	Н	Peak
8388.000	31.47	9.44	40.91	68.23	-27.32	Н	Peak
9408.000	30.27	10.28	40.55	68.23	-27.68	Н	peak
9840.000	29.83	11.52	41.35	68.23	-26.88	Н	peak
10356.000	30.13	13.08	43.21	68.23	-25.02	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 214 / 331

Test Mode: TX / IEEE 802.11a / 5320MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7200.000	31.18	8.09	39.27	68.23	-28.96	V	peak
7680.000	31.57	9.03	40.60	68.23	-27.63	V	peak
8484.000	30.85	9.38	40.23	68.23	-28.00	V	peak
9396.000	30.61	10.24	40.85	68.23	-27.38	V	peak
11160.000	30.85	15.01	45.86	68.23	-22.37	V	peak
12384.000	29.68	15.91	45.59	68.23	-22.64	V	peak
6336.000	31.88	6.62	38.50	68.23	-29.73	Н	Peak
7944.000	31.17	9.54	40.71	68.23	-27.52	Н	Peak
8304.000	31.22	9.48	40.70	68.23	-27.53	Н	Peak
9252.000	30.45	9.83	40.28	68.23	-27.95	Н	peak
9816.000	30.07	11.45	41.52	68.23	-26.71	Н	peak
10608.000	30.28	13.86	44.14	68.23	-24.09	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 215 / 331

Test Mode: TX / IEEE 802.11a / 5500MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7632.000	31.35	8.93	40.28	68.23	-27.95	V	peak
8412.000	31.12	9.42	40.54	68.23	-27.69	V	peak
9384.000	30.70	10.21	40.91	68.23	-27.32	V	peak
9912.000	30.53	11.73	42.26	68.23	-25.97	V	peak
10356.000	30.44	13.08	43.52	68.23	-24.71	V	peak
11364.000	30.91	14.92	45.83	68.23	-22.40	V	peak
7248.000	31.11	8.18	39.29	68.23	-28.94	Н	Peak
8064.000	31.16	9.61	40.77	68.23	-27.46	Н	Peak
8988.000	31.28	9.11	40.39	68.23	-27.84	Н	Peak
9588.000	29.81	10.79	40.60	68.23	-27.63	Н	peak
10140.000	30.21	12.41	42.62	68.23	-25.61	Н	peak
10572.000	30.56	13.75	44.31	68.23	-23.92	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 216 / 331

Test Mode: TX / IEEE 802.11a / 5580MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7944.000	31.64	9.54	41.18	68.23	-27.05	V	peak
8328.000	31.44	9.47	40.91	68.23	-27.32	V	peak
9012.000	31.04	9.13	40.17	68.23	-28.06	V	peak
9888.000	30.44	11.66	42.10	68.23	-26.13	V	peak
10356.000	31.19	13.08	44.27	68.23	-23.96	V	peak
11232.000	31.01	14.98	45.99	68.23	-22.24	V	peak
6588.000	31.45	7.03	38.48	68.23	-29.75	Н	Peak
7572.000	31.19	8.82	40.01	68.23	-28.22	Н	Peak
8460.000	31.13	9.40	40.53	68.23	-27.70	Н	Peak
9072.000	31.76	9.31	41.07	68.23	-27.16	Н	peak
9420.000	30.21	10.31	40.52	68.23	-27.71	Н	peak
10524.000	30.18	13.60	43.78	68.23	-24.45	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 217 / 331

Test Mode: TX / IEEE 802.11a / 5700MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7548.000	31.68	8.77	40.45	68.23	-27.78	V	peak
8160.000	31.72	9.56	41.28	68.23	-26.95	V	peak
8364.000	31.65	9.45	41.10	68.23	-27.13	V	peak
8976.000	30.93	9.11	40.04	68.23	-28.19	V	peak
10728.000	30.54	14.24	44.78	68.23	-23.45	V	peak
11892.000	30.78	14.69	45.47	68.23	-22.76	V	peak
7068.000	31.18	7.83	39.01	68.23	-29.22	Н	Peak
7764.000	31.04	9.19	40.23	68.23	-28.00	Н	Peak
7932.000	31.55	9.52	41.07	68.23	-27.16	Н	Peak
9012.000	30.81	9.13	39.94	68.23	-28.29	Н	peak
10968.000	29.44	14.98	44.42	68.23	-23.81	Н	peak
11136.000	30.93	15.02	45.95	68.23	-22.28	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 218 / 331

Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7980.000	31.22	9.61	40.83	68.23	-27.40	V	peak
8568.000	31.14	9.34	40.48	68.23	-27.75	V	peak
9024.000	31.64	9.17	40.81	68.23	-27.42	V	peak
10368.000	30.46	13.12	43.58	68.23	-24.65	V	peak
11136.000	31.17	15.02	46.19	68.23	-22.04	V	peak
11856.000	30.27	14.70	44.97	68.23	-23.26	V	peak
7728.000	31.16	9.12	40.28	68.23	-27.95	Н	Peak
8232.000	31.14	9.52	40.66	68.23	-27.57	Н	Peak
9024.000	30.63	9.17	39.80	68.23	-28.43	Н	Peak
10248.000	29.79	12.75	42.54	68.23	-25.69	Н	peak
11208.000	30.95	14.99	45.94	68.23	-22.29	Н	peak
11844.000	30.14	14.71	44.85	68.23	-23.38	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 219 / 331

Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7764.000	31.52	9.19	40.71	68.23	-27.52	V	peak
8352.000	31.91	9.46	41.37	68.23	-26.86	V	peak
9036.000	31.27	9.20	40.47	68.23	-27.76	V	peak
10584.000	30.96	13.79	44.75	68.23	-23.48	V	peak
11532.000	30.15	14.85	45.00	68.23	-23.23	V	peak
12612.000	29.97	16.67	46.64	68.23	-21.59	V	peak
7824.000	31.20	9.31	40.51	68.23	-27.72	Н	Peak
7968.000	31.63	9.59	41.22	68.23	-27.01	Н	Peak
9012.000	31.44	9.13	40.57	68.23	-27.66	Н	Peak
10476.000	30.84	13.46	44.30	68.23	-23.93	Н	peak
11148.000	30.80	15.01	45.81	68.23	-22.42	Н	peak
11724.000	29.90	14.76	44.66	68.23	-23.57	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 220 / 331

Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7716.000	31.64	9.10	40.74	68.23	-27.49	V	peak
8148.000	31.65	9.57	41.22	68.23	-27.01	V	peak
9012.000	31.67	9.13	40.80	68.23	-27.43	V	peak
10356.000	30.78	13.08	43.86	68.23	-24.37	V	peak
11172.000	31.30	15.00	46.30	68.23	-21.93	V	peak
12612.000	29.31	16.67	45.98	68.23	-22.25	V	peak
6912.000	31.51	7.56	39.07	68.23	-29.16	Н	Peak
7752.000	31.08	9.17	40.25	68.23	-27.98	Н	Peak
8364.000	31.30	9.45	40.75	68.23	-27.48	Н	Peak
9672.000	30.08	11.04	41.12	68.23	-27.11	Н	peak
10536.000	29.62	13.64	43.26	68.23	-24.97	Н	peak
11136.000	31.11	15.02	46.13	68.23	-22.10	Н	peak

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 221 / 331

Antenna 2

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6744.000	30.86	7.29	38.15	68.23	-30.08	V	peak
7512.000	30.94	8.70	39.64	68.23	-28.59	V	peak
8196.000	31.31	9.54	40.85	68.23	-27.38	V	peak
9432.000	30.76	10.34	41.10	68.23	-27.13	V	peak
10260.000	29.91	12.79	42.70	68.23	-25.53	V	peak
13284.000	28.53	18.70	47.23	68.23	-21.00	V	peak
6756.000	31.11	7.30	38.41	68.23	-29.82	Н	Peak
7500.000	30.69	8.68	39.37	68.23	-28.86	Н	Peak
8364.000	30.65	9.45	40.10	68.23	-28.13	Н	Peak
9072.000	30.22	9.31	39.53	68.23	-28.70	Н	peak
10056.000	29.92	12.15	42.07	68.23	-26.16	Н	peak
11052.000	29.46	15.06	44.52	68.23	-23.71	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 222 / 331

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	31.71	8.28	39.99	68.23	-28.24	V	peak
7704.000	31.08	9.07	40.15	68.23	-28.08	V	peak
8208.000	31.11	9.54	40.65	68.23	-27.58	V	peak
9276.000	30.91	9.89	40.80	68.23	-27.43	V	peak
10620.000	30.22	13.90	44.12	68.23	-24.11	V	peak
11376.000	30.81	14.91	45.72	68.23	-22.51	V	peak
7188.000	31.16	8.07	39.23	68.23	-29.00	Н	Peak
7812.000	30.86	9.28	40.14	68.23	-28.09	Н	Peak
9336.000	30.95	10.07	41.02	68.23	-27.21	Н	Peak
10980.000	29.61	15.02	44.63	68.23	-23.60	Н	peak
11220.000	30.81	14.98	45.79	68.23	-22.44	Н	peak
11748.000	30.05	14.75	44.80	68.23	-23.43	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 223 / 331

Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6516.000	31.66	6.92	38.58	68.23	-29.65	V	peak
7176.000	30.96	8.04	39.00	68.23	-29.23	V	peak
8052.000	30.83	9.62	40.45	68.23	-27.78	V	peak
9516.000	30.14	10.59	40.73	68.23	-27.50	V	peak
10356.000	31.32	13.08	44.40	68.23	-23.83	V	peak
11268.000	31.09	14.96	46.05	68.23	-22.18	V	peak
6840.000	31.12	7.44	38.56	68.23	-29.67	Н	Peak
7464.000	31.05	8.60	39.65	68.23	-28.58	Н	Peak
8160.000	31.13	9.56	40.69	68.23	-27.54	Н	Peak
9828.000	29.97	11.48	41.45	68.23	-26.78	Н	peak
11148.000	31.10	15.01	46.11	68.23	-22.12	Н	peak
11724.000	30.05	14.76	44.81	68.23	-23.42	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 224 / 331

Test Mode: TX / IEEE 802.11a / 5260MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6312.000	31.31	6.59	37.90	68.23	-30.33	V	peak
6864.000	31.64	7.48	39.12	68.23	-29.11	V	peak
8388.000	31.13	9.44	40.57	68.23	-27.66	V	peak
9360.000	32.03	10.14	42.17	68.23	-26.06	V	peak
10092.000	30.19	12.27	42.46	68.23	-25.77	V	peak
11136.000	31.28	15.02	46.30	68.23	-21.93	V	peak
7116.000	31.06	7.93	38.99	68.23	-29.24	Н	Peak
7908.000	31.22	9.47	40.69	68.23	-27.54	Н	Peak
8724.000	30.19	9.25	39.44	68.23	-28.79	Н	Peak
9600.000	29.90	10.83	40.73	68.23	-27.50	Н	peak
10188.000	29.53	12.56	42.09	68.23	-26.14	Н	peak
11196.000	30.85	14.99	45.84	68.23	-22.39	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 225 / 331

Test Mode: TX / IEEE 802.11a / 5300MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	32.05	8.28	40.33	68.23	-27.90	V	peak
8040.000	31.45	9.63	41.08	68.23	-27.15	V	peak
8628.000	30.07	9.30	39.37	68.23	-28.86	V	peak
9144.000	30.00	9.51	39.51	68.23	-28.72	V	peak
9828.000	30.24	11.48	41.72	68.23	-26.51	V	peak
10476.000	30.23	13.46	43.69	68.23	-24.54	V	peak
7224.000	30.64	8.14	38.78	68.23	-29.45	Н	Peak
8196.000	31.59	9.54	41.13	68.23	-27.10	Н	Peak
8988.000	31.20	9.11	40.31	68.23	-27.92	Н	Peak
9408.000	30.27	10.28	40.55	68.23	-27.68	Н	peak
10356.000	30.13	13.08	43.21	68.23	-25.02	Н	peak
11928.000	29.82	14.67	44.49	68.23	-23.74	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 226 / 331

Test Mode: TX / IEEE 802.11a / 5320MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Tested by: Saber Huang

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7200.000	31.18	8.09	39.27	68.23	-28.96	V	peak
7320.000	30.88	8.32	39.20	68.23	-29.03	V	peak
7860.000	30.98	9.38	40.36	68.23	-27.87	V	peak
9216.000	29.74	9.72	39.46	68.23	-28.77	V	peak
10584.000	29.96	13.79	43.75	68.23	-24.48	V	peak
12384.000	29.68	15.91	45.59	68.23	-22.64	V	peak
6336.000	31.88	6.62	38.50	68.23	-29.73	Н	Peak
7020.000	31.39	7.74	39.13	68.23	-29.10	Н	Peak
8304.000	31.22	9.48	40.70	68.23	-27.53	Н	Peak
9252.000	30.45	9.83	40.28	68.23	-27.95	Н	peak
10608.000	30.28	13.86	44.14	68.23	-24.09	Н	peak
11448.000	30.08	14.88	44.96	68.23	-23.27	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 227 / 331

Test Mode: TX / IEEE 802.11a / 5500MHz /(CH Low)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6516.000	31.44	6.92	38.36	68.23	-29.87	V	peak
7632.000	31.35	8.93	40.28	68.23	-27.95	V	peak
9384.000	30.70	10.21	40.91	68.23	-27.32	V	peak
9912.000	30.53	11.73	42.26	68.23	-25.97	V	peak
10692.000	29.99	14.13	44.12	68.23	-24.11	V	peak
11364.000	30.91	14.92	45.83	68.23	-22.40	V	peak
6840.000	31.19	7.44	38.63	68.23	-29.60	Н	Peak
7248.000	31.11	8.18	39.29	68.23	-28.94	Н	Peak
8064.000	31.16	9.61	40.77	68.23	-27.46	Н	Peak
10572.000	30.56	13.75	44.31	68.23	-23.92	Н	peak
11268.000	30.32	14.96	45.28	68.23	-22.95	Н	peak
11772.000	29.69	14.74	44.43	68.23	-23.80	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 228 / 331

Test Mode: TX / IEEE 802.11a / 5580MHz /(CH Mid)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7296.000	30.84	8.28	39.12	68.23	-29.11	V	peak
8064.000	30.91	9.61	40.52	68.23	-27.71	V	peak
8844.000	29.73	9.19	38.92	68.23	-29.31	V	peak
9888.000	30.44	11.66	42.10	68.23	-26.13	V	peak
10356.000	31.19	13.08	44.27	68.23	-23.96	V	peak
11232.000	31.01	14.98	45.99	68.23	-22.24	V	peak
6408.000	31.60	6.74	38.34	68.23	-29.89	Н	Peak
7248.000	31.23	8.18	39.41	68.23	-28.82	Н	Peak
7572.000	31.19	8.82	40.01	68.23	-28.22	Н	Peak
8184.000	30.73	9.55	40.28	68.23	-27.95	Н	peak
9420.000	30.21	10.31	40.52	68.23	-27.71	Н	peak
10524.000	30.18	13.60	43.78	68.23	-24.45	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 229 / 331

Test Mode: TX / IEEE 802.11a / 5700MHz /(CH High)

Ambient temperature: 24°C Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6804.000	31.29	7.38	38.67	68.23	-29.56	V	peak
7548.000	31.68	8.77	40.45	68.23	-27.78	V	peak
8364.000	31.65	9.45	41.10	68.23	-27.13	V	peak
9672.000	30.74	11.04	41.78	68.23	-26.45	V	peak
10728.000	30.54	14.24	44.78	68.23	-23.45	V	peak
11892.000	30.78	14.69	45.47	68.23	-22.76	V	peak
7068.000	31.18	7.83	39.01	68.23	-29.22	Н	Peak
7764.000	31.04	9.19	40.23	68.23	-28.00	Н	Peak
8448.000	30.84	9.40	40.24	68.23	-27.99	Н	Peak
9012.000	30.81	9.13	39.94	68.23	-28.29	Н	peak
9888.000	30.31	11.66	41.97	68.23	-26.26	Н	peak
10968.000	29.44	14.98	44.42	68.23	-23.81	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 230 / 331

Test Mode: TX / IEEE 802.11a / 5745MHz /(CH Low)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7980.000	31.22	9.61	40.83	68.23	-27.40	V	peak
8568.000	31.14	9.34	40.48	68.23	-27.75	V	peak
9024.000	31.64	9.17	40.81	68.23	-27.42	V	peak
10368.000	30.46	13.12	43.58	68.23	-24.65	V	peak
11136.000	31.17	15.02	46.19	68.23	-22.04	V	peak
11856.000	30.27	14.70	44.97	68.23	-23.26	V	peak
7044.000	31.24	7.79	39.03	68.23	-29.20	Н	Peak
8232.000	31.14	9.52	40.66	68.23	-27.57	Н	Peak
9084.000	30.36	9.34	39.70	68.23	-28.53	Н	Peak
9828.000	31.02	11.48	42.50	68.23	-25.73	Н	peak
11208.000	30.95	14.99	45.94	68.23	-22.29	Н	peak
11844.000	30.14	14.71	44.85	68.23	-23.38	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 231 / 331

Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7764.000	31.52	9.19	40.71	68.23	-27.52	V	peak
8352.000	31.91	9.46	41.37	68.23	-26.86	V	peak
9588.000	29.80	10.79	40.59	68.23	-27.64	V	peak
10584.000	30.96	13.79	44.75	68.23	-23.48	V	peak
11532.000	30.15	14.85	45.00	68.23	-23.23	V	peak
12612.000	29.97	16.67	46.64	68.23	-21.59	V	peak
7068.000	31.14	7.83	38.97	68.23	-29.26	Н	Peak
7968.000	31.63	9.59	41.22	68.23	-27.01	Н	Peak
9348.000	30.72	10.10	40.82	68.23	-27.41	Н	Peak
10020.000	30.38	12.04	42.42	68.23	-25.81	Н	peak
11148.000	30.80	15.01	45.81	68.23	-22.42	Н	peak
11724.000	29.90	14.76	44.66	68.23	-23.57	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 232 / 331

Test Mode: TX / IEEE 802.11a / 5825MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6432.000	31.38	6.78	38.16	68.23	-30.07	V	peak
7092.000	31.08	7.88	38.96	68.23	-29.27	V	peak
9012.000	31.67	9.13	40.80	68.23	-27.43	V	peak
9816.000	29.61	11.45	41.06	68.23	-27.17	V	peak
11172.000	31.30	15.00	46.30	68.23	-21.93	V	peak
12612.000	29.31	16.67	45.98	68.23	-22.25	V	peak
6912.000	31.51	7.56	39.07	68.23	-29.16	Н	Peak
7488.000	30.94	8.65	39.59	68.23	-28.64	Н	Peak
8364.000	31.30	9.45	40.75	68.23	-27.48	Н	Peak
9672.000	30.08	11.04	41.12	68.23	-27.11	Н	peak
10536.000	29.62	13.64	43.26	68.23	-24.97	Н	peak
11136.000	31.11	15.02	46.13	68.23	-22.10	Н	peak

## Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 233 / 331

# Combine with Antenna 0 and Antenna 1 and Antenna 2

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5180MHz /(CH Low) Tested by: Saber Huang
Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7260.000	31.38	8.21	39.59	68.23	-28.64	V	peak
8172.000	31.68	9.56	41.24	68.23	-26.99	V	peak
8796.000	30.67	9.21	39.88	68.23	-28.35	V	peak
9372.000	30.82	10.17	40.99	68.23	-27.24	V	peak
11004.000	29.88	15.08	44.96	68.23	-23.27	V	peak
11592.000	30.68	14.82	45.50	68.23	-22.73	V	peak
6900.000	30.91	7.54	38.45	68.23	-29.78	Н	Peak
7596.000	30.68	8.86	39.54	68.23	-28.69	Н	Peak
8076.000	31.28	9.61	40.89	68.23	-27.34	Н	Peak
8448.000	30.98	9.40	40.38	68.23	-27.85	Н	peak
10104.000	29.96	12.30	42.26	68.23	-25.97	Н	peak
11136.000	30.21	15.02	45.23	68.23	-23.00	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 234 / 331

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5200MHz /(CH Mid) Tested by: Saber Huang

Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7308.000	31.52	8.30	39.82	68.23	-28.41	V	peak
8112.000	31.42	9.59	41.01	68.23	-27.22	V	peak
8316.000	31.03	9.48	40.51	68.23	-27.72	V	peak
9324.000	31.16	10.03	41.19	68.23	-27.04	V	peak
10668.000	30.28	14.05	44.33	68.23	-23.90	V	peak
12480.000	28.90	16.23	45.13	68.23	-23.10	V	peak
6120.000	31.81	6.27	38.08	68.23	-30.15	Н	Peak
7392.000	31.15	8.46	39.61	68.23	-28.62	Н	Peak
8376.000	31.59	9.44	41.03	68.23	-27.20	Н	Peak
9900.000	30.21	11.69	41.90	68.23	-26.33	Н	peak
10512.000	29.72	13.57	43.29	68.23	-24.94	Н	peak
11976.000	30.56	14.65	45.21	68.23	-23.02	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 235 / 274
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5240MHz /(CH High) Tested by: Saber Huang Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7716.000	31.23	9.10	40.33	68.23	-27.90	V	peak
8340.000	31.41	9.46	40.87	68.23	-27.36	V	peak
8928.000	30.60	9.14	39.74	68.23	-28.49	V	peak
9960.000	30.12	11.86	41.98	68.23	-26.25	V	peak
11148.000	31.42	15.01	46.43	68.23	-21.80	V	peak
11724.000	30.15	14.76	44.91	68.23	-23.32	V	peak
7764.000	31.41	9.19	40.60	68.23	-27.63	Н	Peak
8004.000	31.73	9.65	41.38	68.23	-26.85	Н	Peak
9300.000	30.57	9.96	40.53	68.23	-27.70	Н	Peak
10356.000	30.14	13.08	43.22	68.23	-25.01	Н	peak
11208.000	31.07	14.99	46.06	68.23	-22.17	Н	peak
11544.000	30.02	14.84	44.86	68.23	-23.37	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- Average test would be performed if the peak result were greater than the average limit. 3.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) - Average limit (dBuV/m).

FCC ID: VW7SR616A Page 236 / 274 Test Mode: TX / IEEE 802.11n HT 20 MHz / 5260MHz /(CH Low) Tested by: Saber Huang

Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8136.000	31.40	9.58	40.98	68.23	-27.25	V	peak
8940.000	30.54	9.13	39.67	68.23	-28.56	V	peak
9480.000	30.40	10.48	40.88	68.23	-27.35	V	peak
10608.000	30.01	13.86	43.87	68.23	-24.36	V	peak
11268.000	30.85	14.96	45.81	68.23	-22.42	V	peak
12552.000	29.69	16.47	46.16	68.23	-22.07	V	peak
7524.000	31.12	8.72	39.84	68.23	-28.39	Н	Peak
8136.000	31.60	9.58	41.18	68.23	-27.05	Н	Peak
8628.000	30.94	9.30	40.24	68.23	-27.99	Н	Peak
9324.000	30.44	10.03	40.47	68.23	-27.76	Н	peak
9996.000	30.02	11.97	41.99	68.23	-26.24	Н	peak
10560.000	30.14	13.72	43.86	68.23	-24.37	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 237 / 331

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5300MHz /(CH Mid) Tested by: Saber Huang

Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8016.000	31.81	9.64	41.45	68.23	-26.78	V	peak
8556.000	30.95	9.34	40.29	68.23	-27.94	V	peak
9804.000	30.32	11.42	41.74	68.23	-26.49	V	peak
10044.000	30.51	12.12	42.63	68.23	-25.60	V	peak
11148.000	30.95	15.01	45.96	68.23	-22.27	V	peak
12564.000	29.29	16.51	45.80	68.23	-22.43	V	peak
7752.000	32.04	9.17	41.21	68.23	-27.02	Н	Peak
8052.000	31.26	9.62	40.88	68.23	-27.35	Н	Peak
8772.000	30.72	9.23	39.95	68.23	-28.28	Н	Peak
10116.000	29.98	12.34	42.32	68.23	-25.91	Н	peak
11160.000	30.79	15.01	45.80	68.23	-22.43	Н	peak
12648.000	29.48	16.78	46.26	68.23	-21.97	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 238 / 331

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5320MHz /(CH High) Tested by: Saber Huang
Ambient temperature: 24°C Relative humidity: 52% RH Date: August 12, 2017

Report No.: C170704Z01-RP1-2

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7632.000	31.22	8.93	40.15	68.23	-28.08	V	peak
8436.000	30.81	9.41	40.22	68.23	-28.01	V	peak
8976.000	31.21	9.11	40.32	68.23	-27.91	V	peak
10356.000	30.77	13.08	43.85	68.23	-24.38	V	peak
11196.000	31.16	14.99	46.15	68.23	-22.08	V	peak
12216.000	29.63	15.35	44.98	68.23	-23.25	V	peak
7224.000	31.11	8.14	39.25	68.23	-28.98	Н	Peak
8436.000	30.99	9.41	40.40	68.23	-27.83	Н	Peak
8952.000	31.28	9.13	40.41	68.23	-27.82	Н	Peak
10356.000	30.26	13.08	43.34	68.23	-24.89	Н	peak
11304.000	31.17	14.95	46.12	68.23	-22.11	Н	peak
12648.000	29.31	16.78	46.09	68.23	-22.14	Н	peak

### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: VW7SR616A Page 239 / 331

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5500MHz /(CH Low) Tested by: Saber Huang

Report No.: C170704Z01-RP1-2

Relative humidity: <u>52% RH</u> Date: August 12, 2017 Ambient temperature: <u>24°C</u>

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7572.000	31.56	8.82	40.38	68.23	-27.85	V	peak
8028.000	31.33	9.63	40.96	68.23	-27.27	V	peak
9336.000	30.23	10.07	40.30	68.23	-27.93	V	peak
11016.000	29.66	15.07	44.73	68.23	-23.50	V	peak
11436.000	30.12	14.89	45.01	68.23	-23.22	V	peak
12396.000	30.26	15.95	46.21	68.23	-22.02	V	peak
7896.000	31.24	9.45	40.69	68.23	-27.54	Н	Peak
8604.000	30.48	9.32	39.80	68.23	-28.43	Н	Peak
9096.000	30.53	9.38	39.91	68.23	-28.32	Н	Peak
10116.000	29.84	12.34	42.18	68.23	-26.05	Н	peak
10704.000	29.86	14.16	44.02	68.23	-24.21	Н	peak
11280.000	30.41	14.96	45.37	68.23	-22.86	Н	peak

#### Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument 2. using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit.
- Data of measurement within this frequency range shown " --- " in the table above means the 4. reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser, with 5. " N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m). 6.

FCC ID: VW7SR616A Page 240 / 331