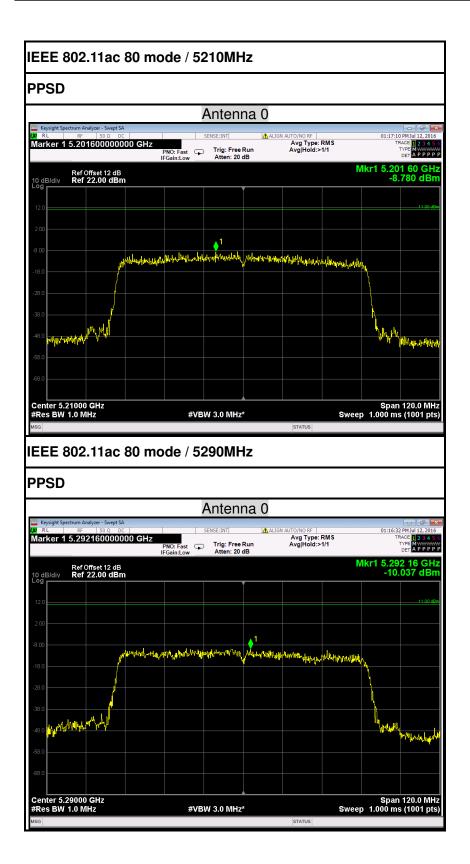
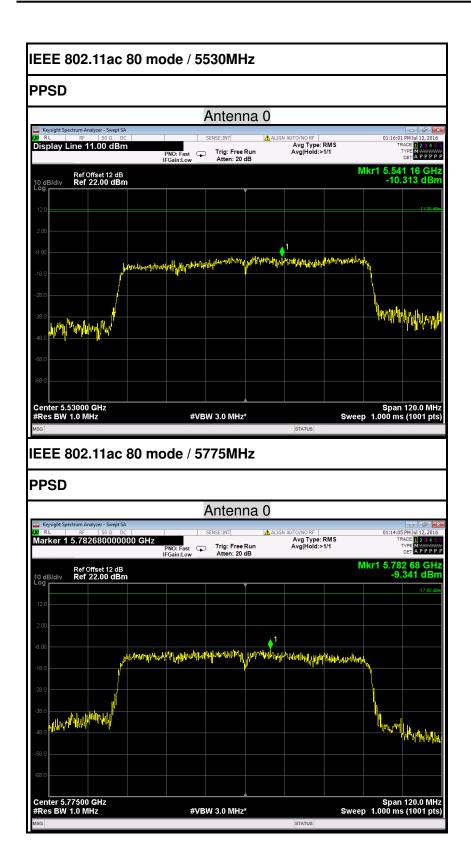
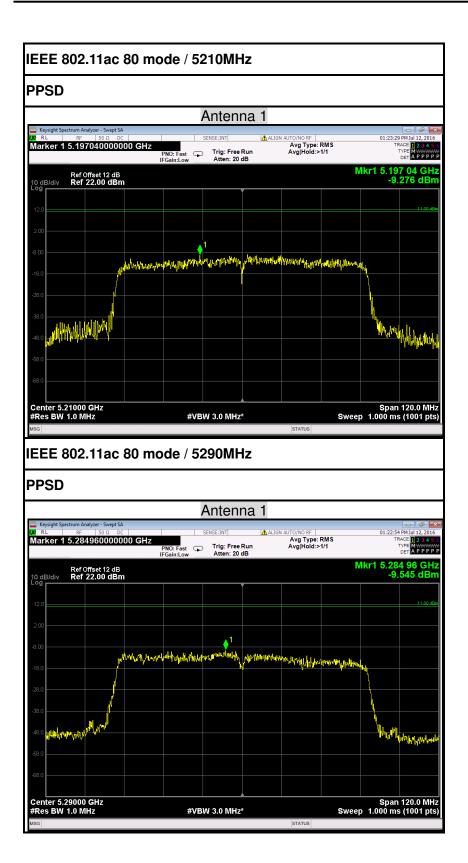


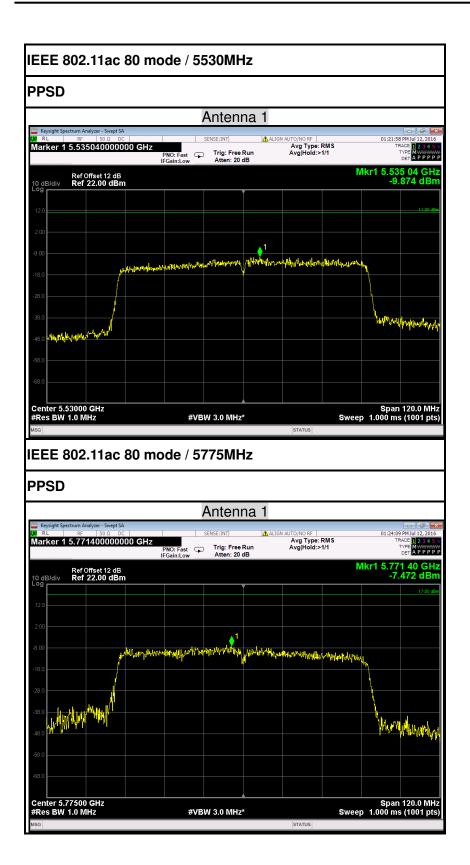
ON Services (Shenzhen) Inc. Report No.: C160606Z02-RP1-4







(Shenzhen) Inc. Report No.: C160606Z02-RP1-4



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.: C160606Z02-RP1-4

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: ZVA09 Page 145 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

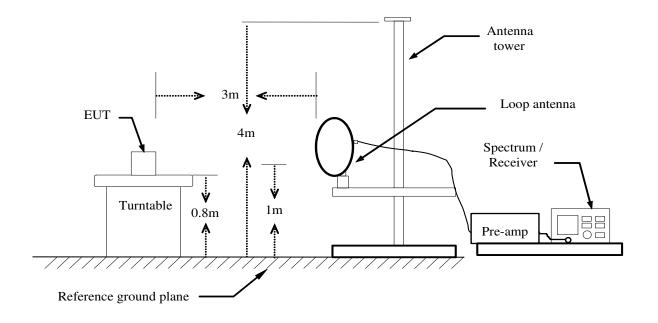
6.7.2 TEST INSTRUMENTS

	Radiated I	Emission Test	Site 966(2)		
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
PSA Series Spectrum Analyzer	Agilent	E4446A	US44300399	02/21/2016	02/20/2017
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2016	02/20/2017
Amplifier	EMEC	EM330	060661	03/18/2016	03/17/2017
High Noise Amplifier	Agilent	8449B	3008A01838	02/21/2016	02/20/2017
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	02/28/2016	02/27/2017
Bilog Antenna	SCHAFFNER	CBL6143	5082	02/21/2016	02/20/2017
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02/28/2016	02/27/2017
Loop Antenna	COM-POWER	AL-130	121044	09/25/2015	09/24/2016
Turn Table	N/A	N/A	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	02/21/2016	02/20/2017
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Test S/W	FARAD		LZ-RF / CCS	S-SZ-3A2	

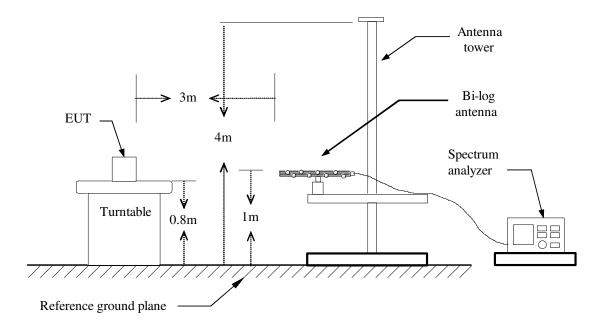
Report No.: C160606Z02-RP1-4

6.7.3 TEST CONFIGURATION

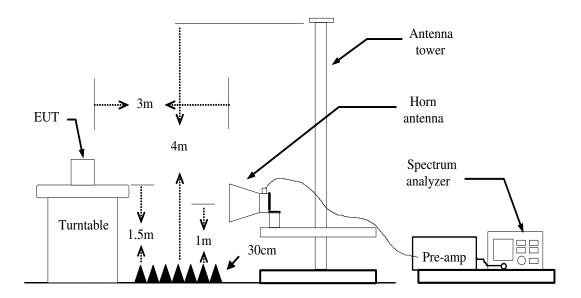
Below 30MHz



Below 1 GHz



Above 1 GHz



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

FCC ID: ZVA09 Page 147 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

6.7.4 TEST PROCEDURE

- 1. The EUT is placed on a turntable, which is 0.8m or 1.5m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.

Report No.: C160606Z02-RP1-4

- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Set the spectrum analyzer in the following setting as:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz:

- (a) PEAK: RBW=1MHz / VBW=3MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO / Detector=Peak
- 7. Repeat above procedures until the measurements for all frequencies are complete.

FCC ID: ZVA09 Page 148 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

6.7.5 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.: C160606Z02-RP1-4

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 Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

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: ZVA09 Page 149 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

6.7.6 TEST RESULTS

Below 1 GHz

Test Mode: TX Tested by: Jack Chen

Report No.: C160606Z02-RP1-4

Ambient temperature: 24°C Relative humidity: 52% RH Date: June 13, 2016

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
41.6400	47.13	-14.77	32.36	40.00	-7.64	V	QP
125.0600	41.07	-20.21	20.86	43.50	-22.64	V	QP
131.8500	42.15	-19.16	22.99	43.50	-20.51	V	QP
183.2600	42.81	-18.59	24.22	43.50	-19.28	V	QP
437.4000	40.89	-14.96	25.93	46.00	-20.07	V	QP
715.7900	39.85	-10.97	28.88	46.00	-17.12	V	QP
44.5500	47.34	-15.19	32.15	40.00	-7.85	Н	QP
87.2300	53.15	-23.62	29.53	40.00	-10.47	Н	QP
197.8100	44.52	-18.61	25.91	43.50	-17.59	Н	QP
327.7900	42.73	-17.49	25.24	46.00	-20.76	Н	QP
472.3200	40.37	-14.68	25.69	46.00	-20.31	Н	QP
867.1100	34.70	-9.51	25.19	46.00	-20.81	Н	QP

- 1. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz)
- 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).

Above 1 GHz 1GHz~6GHz

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

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

Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1165.000	51.74	-7.92	43.82	74.00	-30.18	V	peak
1495.000	50.02	-6.89	43.13	74.00	-30.87	V	peak
2165.000	47.38	-4.10	43.28	74.00	-30.72	V	peak
2415.000	46.68	-2.73	43.95	74.00	-30.05	V	peak
2665.000	44.87	-1.96	42.91	74.00	-31.09	V	peak
3455.000	44.29	-0.60	43.69	74.00	-30.31	V	peak
2045.000	45.94	-4.75	41.19	74.00	-32.81	Н	Peak
2670.000	44.38	-1.95	42.43	74.00	-31.57	Н	Peak
3455.000	45.79	-0.60	45.19	74.00	-28.81	Н	Peak
4020.000	42.14	1.66	43.80	74.00	-30.20	Н	peak
4330.000	42.33	2.75	45.08	74.00	-28.92	Н	peak
4910.000	41.81	4.69	46.50	74.00	-27.50	Н	peak

- 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.
- 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).

Antenna 0

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

Tested by: Jack Chen

Report No.: C160606Z02-RP1-4

Ambient temperature: 24°C Relative humidity: 52% RH Date: June 7, 2016

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9984.000	30.98	11.93	42.91	74.00	-31.09	V	peak
10944.000	30.45	14.91	45.36	74.00	-28.64	V	peak
13008.000	29.34	17.97	47.31	74.00	-26.69	V	peak
14004.000	28.11	20.58	48.69	74.00	-25.31	V	peak
14508.000	28.43	20.87	49.30	74.00	-24.70	V	peak
15540.000	34.19	18.70	52.89	74.00	-21.11	V	peak
15540.000	31.40	18.70	50.10	54.00	-3.90	V	AVG
9984.000	31.10	11.93	43.03	74.00	-30.97	Н	Peak
11040.000	29.86	15.06	44.92	74.00	-29.08	Н	Peak
11844.000	30.83	14.71	45.54	74.00	-28.46	Н	Peak
13140.000	28.53	18.32	46.85	74.00	-27.15	Н	peak
14220.000	28.20	20.71	48.91	74.00	-25.09	Н	peak
15540.000	33.33	18.70	52.03	74.00	-21.97	Н	peak
15540.000	31.67	18.70	50.37	54.00	-3.63	Н	AVG

- 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).

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid) Tested by: Jack Chen Relative humidity: 52% RH Ambient temperature: 24°C Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10272.000	30.46	12.82	43.28	74.00	-30.72	V	peak
11208.000	30.00	14.99	44.99	74.00	-29.01	V	peak
12492.000	29.64	16.27	45.91	74.00	-28.09	V	peak
13776.000	27.18	19.99	47.17	74.00	-26.83	V	peak
14736.000	28.69	21.01	49.70	74.00	-24.30	V	peak
14964.000	28.44	21.14	49.58	74.00	-24.42	V	peak
7764.000	31.53	9.19	40.72	74.00	-33.28	Н	Peak
9744.000	30.12	11.24	41.36	74.00	-32.64	Н	Peak
10524.000	29.98	13.60	43.58	74.00	-30.42	Н	Peak
12456.000	29.40	16.15	45.55	74.00	-28.45	Н	peak
14316.000	28.14	20.76	48.90	74.00	-25.10	Н	peak
14892.000	28.42	21.10	49.52	74.00	-24.48	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 using peak/average detector mode.
- Average test would be performed if the peak result were greater than the average limit. 3.
- 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.
- 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.
- Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: ZVA09 Page 153 / 257 Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9492.000	30.86	10.52	41.38	74.00	-32.62	٧	peak
10056.000	30.94	12.15	43.09	74.00	-30.91	V	peak
11040.000	30.29	15.06	45.35	74.00	-28.65	V	peak
12612.000	29.35	16.67	46.02	74.00	-27.98	V	peak
14388.000	28.68	20.81	49.49	74.00	-24.51	V	peak
14988.000	28.40	21.15	49.55	74.00	-24.45	V	peak
8412.000	31.79	9.42	41.21	74.00	-32.79	Н	Peak
10500.000	29.93	13.53	43.46	74.00	-30.54	Н	Peak
11040.000	29.82	15.06	44.88	74.00	-29.12	Н	Peak
12456.000	29.57	16.15	45.72	74.00	-28.28	Н	peak
14508.000	28.24	20.87	49.11	74.00	-24.89	Н	peak
14844.000	28.40	21.07	49.47	74.00	-24.53	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: ZVA09

Page 154 / 257

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

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8340.000	31.66	9.46	41.12	74.00	-32.88	٧	peak
10248.000	30.78	12.75	43.53	74.00	-30.47	V	peak
11280.000	30.48	14.96	45.44	74.00	-28.56	V	peak
13008.000	29.90	17.97	47.87	74.00	-26.13	V	peak
15000.000	28.74	21.16	49.90	74.00	-24.10	V	peak
15780.000	32.41	17.61	50.02	74.00	-23.98	V	peak
8376.000	31.79	9.44	41.23	74.00	-32.77	Н	Peak
10752.000	29.74	14.31	44.05	74.00	-29.95	Н	Peak
12228.000	30.01	15.39	45.40	74.00	-28.60	Н	Peak
13140.000	29.16	18.32	47.48	74.00	-26.52	Н	peak
15000.000	28.61	21.16	49.77	74.00	-24.23	Н	peak
15780.000	31.60	17.61	49.21	74.00	-24.79	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: ZVA09 Page 155 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7740.000	31.75	9.14	40.89	74.00	-33.11	٧	peak
10272.000	30.29	12.82	43.11	74.00	-30.89	V	peak
11052.000	30.56	15.06	45.62	74.00	-28.38	V	peak
12420.000	29.48	16.03	45.51	74.00	-28.49	V	peak
13752.000	27.62	19.93	47.55	74.00	-26.45	V	peak
14928.000	28.58	21.12	49.70	74.00	-24.30	V	peak
8448.000	31.75	9.40	41.15	74.00	-32.85	Н	Peak
10284.000	30.65	12.86	43.51	74.00	-30.49	Н	Peak
12444.000	30.37	16.11	46.48	74.00	-27.52	Н	Peak
12960.000	29.89	17.82	47.71	74.00	-26.29	Н	peak
14844.000	29.00	21.07	50.07	74.00	-23.93	Н	peak
15900.000	31.97	17.06	49.03	74.00	-24.97	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: ZVA09 Page 156 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8376.000	31.79	9.44	41.23	74.00	-32.77	V	peak
11040.000	30.40	15.06	45.46	74.00	-28.54	V	peak
12936.000	29.47	17.74	47.21	74.00	-26.79	V	peak
14244.000	28.57	20.72	49.29	74.00	-24.71	V	peak
15000.000	28.50	21.16	49.66	74.00	-24.34	V	peak
15684.000	29.38	18.05	47.43	74.00	-26.57	V	peak
7764.000	31.54	9.19	40.73	74.00	-33.27	Н	Peak
8448.000	31.76	9.40	41.16	74.00	-32.84	Н	Peak
11316.000	30.18	14.94	45.12	74.00	-28.88	Н	Peak
12384.000	29.74	15.91	45.65	74.00	-28.35	Н	peak
13944.000	27.42	20.43	47.85	74.00	-26.15	Н	peak
15024.000	28.81	21.05	49.86	74.00	-24.14	Н	peak

Remark:

- 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.
- 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: ZVA09

Page 157 / 257

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

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

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
11004.000	29.75	15.08	44.83	74.00	-29.17	V	peak
12384.000	29.42	15.91	45.33	74.00	-28.67	V	peak
13596.000	27.62	19.52	47.14	74.00	-26.86	V	peak
14460.000	28.42	20.85	49.27	74.00	-24.73	V	peak
15000.000	28.56	21.16	49.72	74.00	-24.28	V	peak
16500.000	30.87	20.00	50.87	74.00	-23.13	V	peak
9828.000	30.50	11.48	41.98	74.00	-32.02	Н	Peak
11316.000	30.63	14.94	45.57	74.00	-28.43	Н	Peak
12432.000	30.00	16.07	46.07	74.00	-27.93	Н	Peak
14244.000	28.41	20.72	49.13	74.00	-24.87	Н	peak
14808.000	28.47	21.05	49.52	74.00	-24.48	Н	peak
16500.000	30.99	20.00	50.99	74.00	-23.01	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 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.
- 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: ZVA09

Page 158 / 257

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

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10956.000	30.29	14.94	45.23	74.00	-28.77	٧	peak
12936.000	29.24	17.74	46.98	74.00	-27.02	V	peak
13512.000	28.03	19.30	47.33	74.00	-26.67	V	peak
14244.000	29.00	20.72	49.72	74.00	-24.28	V	peak
15000.000	28.70	21.16	49.86	74.00	-24.14	V	peak
16740.000	29.77	21.63	51.40	74.00	-22.60	V	peak
8376.000	31.76	9.44	41.20	74.00	-32.80	Н	Peak
9972.000	31.19	11.90	43.09	74.00	-30.91	Н	Peak
11844.000	30.51	14.71	45.22	74.00	-28.78	Н	peak
12984.000	29.42	17.90	47.32	74.00	-26.68	Н	peak
15012.000	28.67	21.11	49.78	74.00	-24.22	Н	peak
16740.000	30.12	21.63	51.75	74.00	-22.25	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.
- 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: ZVA09 Page 159 / 257

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

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

Tested by: Jack Chen

Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8472.000	32.53	9.39	41.92	74.00	-32.08	V	peak
10512.000	30.16	13.57	43.73	74.00	-30.27	V	peak
10800.000	29.31	14.46	43.77	74.00	-30.23	V	peak
12912.000	29.59	17.66	47.25	74.00	-26.75	V	peak
15072.000	28.69	20.83	49.52	74.00	-24.48	V	peak
17100.000	29.07	23.37	52.44	74.00	-21.56	V	peak
17100.000	28.20	23.37	51.57	54.00	-2.43	V	AVG
9612.000	30.37	10.86	41.23	74.00	-32.77	Н	Peak
10500.000	30.24	13.53	43.77	74.00	-30.23	Н	Peak
11304.000	30.31	14.95	45.26	74.00	-28.74	Н	Peak
13896.000	27.78	20.31	48.09	74.00	-25.91	Н	peak
14436.000	28.75	20.83	49.58	74.00	-24.42	Н	peak
17100.000	28.80	23.37	52.17	74.00	-21.83	Н	peak
17100.000	27.00	23.37	50.37	54.00	-3.63	Н	AVG

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.
- 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: ZVA09

Page 160 / 257

Tested by: Jack Chen **Test Mode:** TX / IEEE 802.11a / 5745MHz /(CH Low) Relative humidity: 52% RH Ambient temperature: 24°C Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7752.000	31.88	9.17	41.05	74.00	-32.95	V	peak
8304.000	31.34	9.48	40.82	74.00	-33.18	V	peak
9240.000	30.91	9.79	40.70	74.00	-33.30	V	peak
11004.000	30.51	15.08	45.59	74.00	-28.41	V	peak
12612.000	29.50	16.67	46.17	74.00	-27.83	V	peak
14424.000	28.40	20.83	49.23	74.00	-24.77	V	peak
8340.000	31.68	9.46	41.14	74.00	-32.86	Н	Peak
10944.000	30.01	14.91	44.92	74.00	-29.08	Н	Peak
11844.000	30.94	14.71	45.65	74.00	-28.35	Н	Peak
12636.000	29.24	16.75	45.99	74.00	-28.01	Н	peak
14460.000	28.28	20.85	49.13	74.00	-24.87	Н	peak
17232.000	30.46	23.35	53.81	74.00	-20.19	Н	peak
17232.000	28.63	23.35	51.98	54.00	-2.02	Н	AVG

Remark:

- 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 using peak/average detector mode.
- 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 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 "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).

FCC ID: ZVA09 Page 161 / 257 Test Mode: TX / IEEE 802.11a / 5785MHz /(CH Mid)

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8580.000	31.47	9.33	40.80	74.00	-33.20	V	peak
10032.000	30.76	12.08	42.84	74.00	-31.16	V	peak
11088.000	30.20	15.04	45.24	74.00	-28.76	V	peak
12948.000	29.12	17.78	46.90	74.00	-27.10	V	peak
14316.000	28.03	20.76	48.79	74.00	-25.21	V	peak
14916.000	28.60	21.11	49.71	74.00	-24.29	V	peak
8352.000	31.77	9.46	41.23	74.00	-32.77	Н	Peak
10284.000	30.47	12.86	43.33	74.00	-30.67	Н	Peak
11316.000	30.02	14.94	44.96	74.00	-29.04	Н	Peak
12984.000	28.97	17.90	46.87	74.00	-27.13	Н	peak
14124.000	27.67	20.65	48.32	74.00	-25.68	Н	peak
17352.000	29.71	23.32	53.03	74.00	-20.97	Н	peak
17352.000	28.06	23.32	51.38	54.00	-2.62	Н	AVG

- 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).

Tested by: Jack Chen **Test Mode:** TX / IEEE 802.11a / 5825MHz /(CH High) Ambient temperature: 24°C Relative humidity: 52% RH Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10056.000	30.74	12.15	42.89	74.00	-31.11	V	peak
11208.000	30.10	14.99	45.09	74.00	-28.91	V	peak
11832.000	30.84	14.71	45.55	74.00	-28.45	V	peak
12912.000	29.35	17.66	47.01	74.00	-26.99	V	peak
14508.000	28.89	20.87	49.76	74.00	-24.24	V	peak
14964.000	28.68	21.14	49.82	74.00	-24.18	V	peak
8436.000	31.97	9.41	41.38	74.00	-32.62	Н	Peak
10176.000	30.73	12.53	43.26	74.00	-30.74	Н	Peak
12936.000	29.60	17.74	47.34	74.00	-26.66	Н	Peak
14460.000	28.40	20.85	49.25	74.00	-24.75	Н	peak
16608.000	27.94	20.73	48.67	74.00	-25.33	Н	peak
17472.000	30.07	23.30	53.37	74.00	-20.63	Н	peak
17472.000	27.92	23.30	51.22	54.00	-2.78	Н	AVG

Remark:

- 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 using peak/average detector mode.
- 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 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 "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).

FCC ID: ZVA09 Page 163 / 257



Compliance Certification Services (Shenzhen) Inc.

Antenna 1

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

Tested by: Jack Chen

Ambient temperature: 24°C Relative humidity: 52% RH Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8376.000	31.53	9.44	40.97	74.00	-33.03	V	peak
11040.000	30.38	15.06	45.44	74.00	-28.56	V	peak
12912.000	29.47	17.66	47.13	74.00	-26.87	V	peak
14412.000	28.48	20.82	49.30	74.00	-24.70	V	peak
15000.000	28.62	21.16	49.78	74.00	-24.22	V	peak
17280.000	28.44	23.34	51.78	74.00	-22.22	V	peak
10512.000	30.14	13.57	43.71	74.00	-30.29	Н	Peak
11844.000	30.67	14.71	45.38	74.00	-28.62	Н	Peak
13008.000	29.40	17.97	47.37	74.00	-26.63	Н	Peak
14472.000	28.68	20.85	49.53	74.00	-24.47	Н	peak
14988.000	28.67	21.15	49.82	74.00	-24.18	Н	peak
17124.000	27.91	23.37	51.28	74.00	-22.72	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.
- 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: ZVA09 Page 164 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8352.000	31.95	9.46	41.41	74.00	-32.59	٧	peak
11016.000	30.35	15.07	45.42	74.00	-28.58	V	peak
11844.000	31.02	14.71	45.73	74.00	-28.27	V	peak
13584.000	28.02	19.49	47.51	74.00	-26.49	V	peak
14268.000	28.64	20.74	49.38	74.00	-24.62	V	peak
14844.000	28.84	21.07	49.91	74.00	-24.09	V	peak
7752.000	31.58	9.17	40.75	74.00	-33.25	Н	Peak
11052.000	30.16	15.06	45.22	74.00	-28.78	Н	Peak
12456.000	29.53	16.15	45.68	74.00	-28.32	Н	Peak
13896.000	27.29	20.31	47.60	74.00	-26.40	Н	peak
14280.000	28.16	20.74	48.90	74.00	-25.10	Н	peak
15600.000	32.58	18.43	51.01	74.00	-22.99	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 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.
- 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: ZVA09 Page 165 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
12348.000	29.97	15.79	45.76	74.00	-28.24	V	peak
13464.000	28.08	19.17	47.25	74.00	-26.75	V	peak
13872.000	27.25	20.24	47.49	74.00	-26.51	V	peak
14244.000	28.76	20.72	49.48	74.00	-24.52	V	peak
14940.000	28.51	21.13	49.64	74.00	-24.36	V	peak
15720.000	31.19	17.88	49.07	74.00	-24.93	V	peak
8376.000	31.80	9.44	41.24	74.00	-32.76	Н	Peak
10260.000	30.87	12.79	43.66	74.00	-30.34	Н	Peak
12492.000	29.28	16.27	45.55	74.00	-28.45	Н	Peak
14340.000	28.31	20.78	49.09	74.00	-24.91	Н	peak
14916.000	28.50	21.11	49.61	74.00	-24.39	Н	peak
15720.000	31.11	17.88	48.99	74.00	-25.01	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: ZVA09 Page 166 / 257

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

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10296.000	30.64	12.90	43.54	74.00	-30.46	٧	peak
11064.000	30.03	15.05	45.08	74.00	-28.92	V	peak
11844.000	30.59	14.71	45.30	74.00	-28.70	V	peak
12912.000	29.53	17.66	47.19	74.00	-26.81	V	peak
14460.000	28.46	20.85	49.31	74.00	-24.69	V	peak
14952.000	28.65	21.13	49.78	74.00	-24.22	V	peak
10296.000	30.37	12.90	43.27	74.00	-30.73	Н	Peak
10872.000	30.26	14.68	44.94	74.00	-29.06	Н	Peak
12984.000	29.51	17.90	47.41	74.00	-26.59	Н	Peak
14244.000	28.19	20.72	48.91	74.00	-25.09	Н	peak
14952.000	28.44	21.13	49.57	74.00	-24.43	Н	peak
17112.000	28.32	23.37	51.69	74.00	-22.31	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: ZVA09 Page 167 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10284.000	30.43	12.86	43.29	74.00	-30.71	V	peak
10740.000	29.49	14.27	43.76	74.00	-30.24	V	peak
12168.000	30.03	15.20	45.23	74.00	-28.77	V	peak
12960.000	29.42	17.82	47.24	74.00	-26.76	V	peak
13908.000	27.30	20.34	47.64	74.00	-26.36	V	peak
15000.000	28.52	21.16	49.68	74.00	-24.32	V	peak
8352.000	31.52	9.46	40.98	74.00	-33.02	Н	Peak
10572.000	29.88	13.75	43.63	74.00	-30.37	Н	Peak
11844.000	30.76	14.71	45.47	74.00	-28.53	Н	Peak
12900.000	29.12	17.62	46.74	74.00	-27.26	Н	peak
14268.000	28.34	20.74	49.08	74.00	-24.92	Н	peak
14952.000	28.59	21.13	49.72	74.00	-24.28	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: ZVA09 Page 168 / 257

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

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9660.000	30.46	11.00	41.46	74.00	-32.54	٧	peak
10500.000	30.21	13.53	43.74	74.00	-30.26	V	peak
11316.000	30.38	14.94	45.32	74.00	-28.68	V	peak
12984.000	29.26	17.90	47.16	74.00	-26.84	V	peak
13980.000	27.33	20.53	47.86	74.00	-26.14	V	peak
14904.000	28.78	21.10	49.88	74.00	-24.12	V	peak
9756.000	30.02	11.28	41.30	74.00	-32.70	Н	Peak
10512.000	29.89	13.57	43.46	74.00	-30.54	Н	Peak
12912.000	29.43	17.66	47.09	74.00	-26.91	Н	Peak
13584.000	27.71	19.49	47.20	74.00	-26.80	Н	peak
14952.000	28.57	21.13	49.70	74.00	-24.30	Н	peak
17172.000	28.60	23.36	51.96	74.00	-22.04	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.
- 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: ZVA09 Page 169 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8388.000	31.64	9.44	41.08	74.00	-32.92	٧	peak
9612.000	30.52	10.86	41.38	74.00	-32.62	V	peak
10872.000	30.23	14.68	44.91	74.00	-29.09	V	peak
13008.000	28.94	17.97	46.91	74.00	-27.09	V	peak
14088.000	27.93	20.63	48.56	74.00	-25.44	V	peak
14568.000	28.15	20.91	49.06	74.00	-24.94	V	peak
10896.000	30.42	14.76	45.18	74.00	-28.82	Н	Peak
11820.000	30.26	14.72	44.98	74.00	-29.02	Н	Peak
13008.000	29.42	17.97	47.39	74.00	-26.61	Н	Peak
14316.000	28.30	20.76	49.06	74.00	-24.94	Н	peak
14976.000	28.65	21.15	49.80	74.00	-24.20	Н	peak
15300.000	28.97	19.79	48.76	74.00	-25.24	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: ZVA09

Page 170 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9612.000	31.28	10.86	42.14	74.00	-31.86	V	peak
11316.000	30.29	14.94	45.23	74.00	-28.77	V	peak
13008.000	29.56	17.97	47.53	74.00	-26.47	V	peak
14352.000	28.60	20.78	49.38	74.00	-24.62	V	peak
14952.000	28.72	21.13	49.85	74.00	-24.15	V	peak
17268.000	28.31	23.34	51.65	74.00	-22.35	V	peak
11844.000	30.45	14.71	45.16	74.00	-28.84	Н	Peak
12888.000	29.01	17.58	46.59	74.00	-27.41	Н	Peak
13944.000	27.18	20.43	47.61	74.00	-26.39	Н	Peak
14244.000	28.50	20.72	49.22	74.00	-24.78	Н	peak
15048.000	28.27	20.94	49.21	74.00	-24.79	Н	peak
16740.000	27.36	21.63	48.99	74.00	-25.01	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 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: ZVA09

Page 171 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8400.000	32.21	9.43	41.64	74.00	-32.36	V	peak
10500.000	30.46	13.53	43.99	74.00	-30.01	V	peak
11316.000	30.70	14.94	45.64	74.00	-28.36	V	peak
12780.000	29.40	17.22	46.62	74.00	-27.38	V	peak
14424.000	28.83	20.83	49.66	74.00	-24.34	V	peak
14976.000	28.97	21.15	50.12	74.00	-23.88	V	peak
9636.000	31.03	10.93	41.96	74.00	-32.04	Н	Peak
10620.000	30.52	13.90	44.42	74.00	-29.58	Н	Peak
11832.000	30.58	14.71	45.29	74.00	-28.71	Н	Peak
12984.000	29.81	17.90	47.71	74.00	-26.29	Н	peak
14244.000	28.80	20.72	49.52	74.00	-24.48	Н	peak
15024.000	29.22	21.05	50.27	74.00	-23.73	Н	peak

Remark:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in freq
- uency above 1000MHz were made with an instrument using peak/average detector mode.
- 4. Average test would be performed if the peak result were greater than the average limit.
- 5. 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.
- 6. 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.
- 7. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: ZVA09 Page 172 / 257

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

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

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8556.000	31.97	9.34	41.31	74.00	-32.69	V	peak
10620.000	30.56	13.90	44.46	74.00	-29.54	V	peak
11316.000	30.51	14.94	45.45	74.00	-28.55	V	peak
12984.000	29.57	17.90	47.47	74.00	-26.53	V	peak
14088.000	28.53	20.63	49.16	74.00	-24.84	V	peak
15000.000	29.54	21.16	50.70	74.00	-23.30	V	peak
7728.000	32.56	9.12	41.68	74.00	-32.32	Н	Peak
10056.000	31.42	12.15	43.57	74.00	-30.43	Н	Peak
11208.000	30.42	14.99	45.41	74.00	-28.59	Н	Peak
12912.000	30.46	17.66	48.12	74.00	-25.88	Н	peak
14268.000	28.78	20.74	49.52	74.00	-24.48	Н	peak
14952.000	29.22	21.13	50.35	74.00	-23.65	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: ZVA09

Page 173 / 257

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

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

Tested by: Jack Chen

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10020.000	31.53	12.04	43.57	74.00	-30.43	V	peak
10812.000	30.20	14.50	44.70	74.00	-29.30	V	peak
11316.000	30.76	14.94	45.70	74.00	-28.30	V	peak
12984.000	29.69	17.90	47.59	74.00	-26.41	V	peak
14712.000	28.83	20.99	49.82	74.00	-24.18	V	peak
15204.000	28.98	20.23	49.21	74.00	-24.79	V	peak
10080.000	31.41	12.23	43.64	74.00	-30.36	Н	Peak
11352.000	30.78	14.93	45.71	74.00	-28.29	Н	Peak
12420.000	30.65	16.03	46.68	74.00	-27.32	Н	Peak
12780.000	30.27	17.22	47.49	74.00	-26.51	Н	peak
14508.000	28.84	20.87	49.71	74.00	-24.29	Н	peak
15000.000	29.26	21.16	50.42	74.00	-23.58	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: ZVA09 Page 174 / 257

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

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

Date: June 8, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10176.000	30.87	12.53	43.40	74.00	-30.60	V	peak
11016.000	30.72	15.07	45.79	74.00	-28.21	V	peak
12192.000	30.53	15.28	45.81	74.00	-28.19	V	peak
13008.000	29.63	17.97	47.60	74.00	-26.40	V	peak
14244.000	29.00	20.72	49.72	74.00	-24.28	V	peak
14916.000	28.83	21.11	49.94	74.00	-24.06	V	peak
7752.000	31.97	9.17	41.14	74.00	-32.86	Н	Peak
9972.000	31.13	11.90	43.03	74.00	-30.97	Н	Peak
12444.000	30.07	16.11	46.18	74.00	-27.82	Н	Peak
12912.000	30.14	17.66	47.80	74.00	-26.20	Н	peak
14124.000	28.46	20.65	49.11	74.00	-24.89	Н	peak
14952.000	29.13	21.13	50.26	74.00	-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.
- 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: ZVA09 Page 175 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Combine with Antenna 0 and Antenna 1 and Antenna 2

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5180MHz /(CH Low)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8376.000	31.89	9.44	41.33	74.00	-32.67	V	peak
10848.000	30.45	14.61	45.06	74.00	-28.94	V	peak
12072.000	30.82	14.88	45.70	74.00	-28.30	V	peak
13008.000	29.49	17.97	47.46	74.00	-26.54	V	peak
14208.000	28.56	20.70	49.26	74.00	-24.74	V	peak
14988.000	29.04	21.15	50.19	74.00	-23.81	V	peak
10500.000	30.65	13.53	44.18	74.00	-29.82	Н	Peak
11316.000	30.91	14.94	45.85	74.00	-28.15	Н	Peak
12420.000	30.13	16.03	46.16	74.00	-27.84	Н	Peak
12912.000	29.86	17.66	47.52	74.00	-26.48	Н	peak
14016.000	27.75	20.59	48.34	74.00	-25.66	Н	peak
14892.000	29.06	21.10	50.16	74.00	-23.84	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 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: ZVA09

Page 176 / 257

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

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8376.000	31.81	9.44	41.25	74.00	-32.75	V	peak
10032.000	31.17	12.08	43.25	74.00	-30.75	V	peak
11208.000	30.67	14.99	45.66	74.00	-28.34	V	peak
12792.000	29.95	17.26	47.21	74.00	-26.79	V	peak
14280.000	28.46	20.74	49.20	74.00	-24.80	V	peak
14916.000	28.75	21.11	49.86	74.00	-24.14	V	peak
10392.000	30.88	13.20	44.08	74.00	-29.92	Н	Peak
11316.000	30.31	14.94	45.25	74.00	-28.75	Н	Peak
12936.000	29.80	17.74	47.54	74.00	-26.46	Н	Peak
14280.000	28.86	20.74	49.60	74.00	-24.40	Н	peak
14856.000	28.91	21.08	49.99	74.00	-24.01	Н	peak
15108.000	28.97	20.67	49.64	74.00	-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.
- 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: ZVA09

Page 177 / 257

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5240MHz /(CH High)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7752.000	32.05	9.17	41.22	74.00	-32.78	V	peak
9732.000	30.74	11.21	41.95	74.00	-32.05	V	peak
11844.000	30.61	14.71	45.32	74.00	-28.68	V	peak
12960.000	29.61	17.82	47.43	74.00	-26.57	V	peak
14280.000	28.67	20.74	49.41	74.00	-24.59	V	peak
15012.000	29.07	21.11	50.18	74.00	-23.82	V	peak
10056.000	31.24	12.15	43.39	74.00	-30.61	Н	Peak
11064.000	30.40	15.05	45.45	74.00	-28.55	Н	Peak
11316.000	30.76	14.94	45.70	74.00	-28.30	Н	Peak
13008.000	29.67	17.97	47.64	74.00	-26.36	Н	peak
14244.000	28.91	20.72	49.63	74.00	-24.37	Н	peak
14952.000	28.86	21.13	49.99	74.00	-24.01	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.
- 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: ZVA09 Page 178 / 257
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 / 5260MHz /(CH Low)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10500.000	30.96	13.53	44.49	74.00	-29.51	V	peak
10944.000	30.38	14.91	45.29	74.00	-28.71	V	peak
11832.000	30.97	14.71	45.68	74.00	-28.32	V	peak
12984.000	29.83	17.90	47.73	74.00	-26.27	V	peak
14736.000	28.67	21.01	49.68	74.00	-24.32	V	peak
15108.000	29.41	20.67	50.08	74.00	-23.92	V	peak
9312.000	31.58	10.00	41.58	74.00	-32.42	Н	Peak
10176.000	30.94	12.53	43.47	74.00	-30.53	Н	Peak
11340.000	30.62	14.93	45.55	74.00	-28.45	Н	Peak
12792.000	29.56	17.26	46.82	74.00	-27.18	Н	peak
14016.000	28.48	20.59	49.07	74.00	-24.93	Н	peak
14916.000	28.76	21.11	49.87	74.00	-24.13	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.
- 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: ZVA09 Page 179 / 257
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 / 5300MHz /(CH Mid)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9828.000	30.55	11.48	42.03	74.00	-31.97	V	peak
10512.000	30.83	13.57	44.40	74.00	-29.60	V	peak
11832.000	30.87	14.71	45.58	74.00	-28.42	V	peak
12936.000	29.93	17.74	47.67	74.00	-26.33	V	peak
14040.000	28.36	20.60	48.96	74.00	-25.04	V	peak
14916.000	29.00	21.11	50.11	74.00	-23.89	V	peak
8376.000	32.42	9.44	41.86	74.00	-32.14	Н	Peak
10056.000	31.34	12.15	43.49	74.00	-30.51	Н	Peak
10932.000	30.03	14.87	44.90	74.00	-29.10	Н	Peak
12228.000	30.55	15.39	45.94	74.00	-28.06	Н	peak
12936.000	29.68	17.74	47.42	74.00	-26.58	Н	peak
13824.000	27.57	20.12	47.69	74.00	-26.31	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 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: ZVA09 Page 180 / 257
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 / 5320MHz /(CH High)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10500.000	30.77	13.53	44.30	74.00	-29.70	V	peak
11280.000	30.46	14.96	45.42	74.00	-28.58	V	peak
12264.000	30.38	15.51	45.89	74.00	-28.11	V	peak
13068.000	29.61	18.13	47.74	74.00	-26.26	V	peak
14172.000	28.69	20.68	49.37	74.00	-24.63	V	peak
14916.000	29.25	21.11	50.36	74.00	-23.64	V	peak
10524.000	31.25	13.60	44.85	74.00	-29.15	Н	Peak
11856.000	31.33	14.70	46.03	74.00	-27.97	Н	Peak
12912.000	29.91	17.66	47.57	74.00	-26.43	Н	Peak
13560.000	28.30	19.42	47.72	74.00	-26.28	Н	peak
14316.000	28.84	20.76	49.60	74.00	-24.40	Н	peak
14976.000	29.16	21.15	50.31	74.00	-23.69	Н	peak

- 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 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.
- 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).

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

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10104.000	31.24	12.30	43.54	74.00	-30.46	V	peak
10500.000	31.04	13.53	44.57	74.00	-29.43	V	peak
11016.000	30.32	15.07	45.39	74.00	-28.61	V	peak
12936.000	29.73	17.74	47.47	74.00	-26.53	V	peak
14316.000	28.54	20.76	49.30	74.00	-24.70	V	peak
15000.000	28.99	21.16	50.15	74.00	-23.85	V	peak
7764.000	31.97	9.19	41.16	74.00	-32.84	Н	Peak
10056.000	31.15	12.15	43.30	74.00	-30.70	Н	Peak
11208.000	30.50	14.99	45.49	74.00	-28.51	Н	Peak
13140.000	29.39	18.32	47.71	74.00	-26.29	Н	peak
14136.000	28.35	20.66	49.01	74.00	-24.99	Н	peak
15000.000	29.10	21.16	50.26	74.00	-23.74	Н	peak

- 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).

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5580MHz /(CH Mid)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9384.000	31.08	10.21	41.29	74.00	-32.71	V	peak
10500.000	30.97	13.53	44.50	74.00	-29.50	V	peak
10860.000	30.24	14.65	44.89	74.00	-29.11	V	peak
12228.000	30.00	15.39	45.39	74.00	-28.61	V	peak
14316.000	28.43	20.76	49.19	74.00	-24.81	V	peak
14976.000	28.85	21.15	50.00	74.00	-24.00	V	peak
10500.000	30.94	13.53	44.47	74.00	-29.53	Н	Peak
11052.000	30.56	15.06	45.62	74.00	-28.38	Н	Peak
12612.000	29.50	16.67	46.17	74.00	-27.83	Н	Peak
12912.000	30.00	17.66	47.66	74.00	-26.34	Н	peak
14388.000	28.67	20.81	49.48	74.00	-24.52	Н	peak
14856.000	29.33	21.08	50.41	74.00	-23.59	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 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: ZVA09 Page 183 / 257
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 / 5700MHz /(CH High)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10500.000	30.77	13.53	44.30	74.00	-29.70	V	peak
11460.000	30.35	14.88	45.23	74.00	-28.77	V	peak
12936.000	29.95	17.74	47.69	74.00	-26.31	V	peak
13584.000	28.35	19.49	47.84	74.00	-26.16	V	peak
14316.000	28.89	20.76	49.65	74.00	-24.35	V	peak
14820.000	28.65	21.06	49.71	74.00	-24.29	V	peak
8460.000	31.88	9.40	41.28	74.00	-32.72	Н	Peak
10032.000	31.74	12.08	43.82	74.00	-30.18	Н	Peak
11436.000	30.32	14.89	45.21	74.00	-28.79	Н	Peak
11844.000	30.69	14.71	45.40	74.00	-28.60	Н	peak
13008.000	29.65	17.97	47.62	74.00	-26.38	Н	peak
14904.000	29.11	21.10	50.21	74.00	-23.79	Н	peak

- 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).

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5745MHz /(CH Low)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8448.000	32.38	9.40	41.78	74.00	-32.22	V	peak
10272.000	31.14	12.82	43.96	74.00	-30.04	V	peak
11844.000	31.03	14.71	45.74	74.00	-28.26	V	peak
12960.000	29.65	17.82	47.47	74.00	-26.53	V	peak
14424.000	28.73	20.83	49.56	74.00	-24.44	V	peak
15000.000	29.06	21.16	50.22	74.00	-23.78	V	peak
9360.000	31.32	10.14	41.46	74.00	-32.54	Н	Peak
10248.000	30.75	12.75	43.50	74.00	-30.50	Н	Peak
11304.000	30.45	14.95	45.40	74.00	-28.60	Н	Peak
12492.000	29.88	16.27	46.15	74.00	-27.85	Н	peak
12960.000	29.69	17.82	47.51	74.00	-26.49	Н	peak
14988.000	28.75	21.15	49.90	74.00	-24.10	Н	peak

- 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.
- 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).

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5785MHz /(CH Mid)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9612.000	31.52	10.86	42.38	74.00	-31.62	V	peak
10944.000	30.37	14.91	45.28	74.00	-28.72	V	peak
11844.000	30.73	14.71	45.44	74.00	-28.56	V	peak
12984.000	29.85	17.90	47.75	74.00	-26.25	V	peak
14088.000	28.94	20.63	49.57	74.00	-24.43	V	peak
15024.000	28.92	21.05	49.97	74.00	-24.03	V	peak
8448.000	32.31	9.40	41.71	74.00	-32.29	Н	Peak
10032.000	31.50	12.08	43.58	74.00	-30.42	Н	Peak
12420.000	30.57	16.03	46.60	74.00	-27.40	Н	Peak
13584.000	28.10	19.49	47.59	74.00	-26.41	Н	peak
14280.000	28.97	20.74	49.71	74.00	-24.29	Н	peak
14916.000	29.03	21.11	50.14	74.00	-23.86	Н	peak

- 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).

Test Mode: TX / IEEE 802.11n HT 20 MHz / 5825MHz /(CH High)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7656.000	32.01	8.98	40.99	74.00	-33.01	V	peak
9828.000	30.75	11.48	42.23	74.00	-31.77	V	peak
12420.000	30.28	16.03	46.31	74.00	-27.69	V	peak
12984.000	29.76	17.90	47.66	74.00	-26.34	V	peak
14328.000	28.88	20.77	49.65	74.00	-24.35	V	peak
14808.000	29.50	21.05	50.55	74.00	-23.45	V	peak
9732.000	31.12	11.21	42.33	74.00	-31.67	Н	Peak
10932.000	30.26	14.87	45.13	74.00	-28.87	Н	Peak
12444.000	30.33	16.11	46.44	74.00	-27.56	Н	Peak
13008.000	29.55	17.97	47.52	74.00	-26.48	Н	peak
13944.000	27.97	20.43	48.40	74.00	-25.60	Н	peak
14964.000	29.58	21.14	50.72	74.00	-23.28	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.
- 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: ZVA09 Page 187 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Combine with Antenna 0 and Antenna 1 and Antenna 2

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5190MHz /(CH Low)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8364.000	31.52	9.45	40.97	74.00	-33.03	V	peak
9960.000	31.09	11.86	42.95	74.00	-31.05	V	peak
12264.000	30.59	15.51	46.10	74.00	-27.90	V	peak
12912.000	30.12	17.66	47.78	74.00	-26.22	V	peak
14736.000	28.87	21.01	49.88	74.00	-24.12	V	peak
15036.000	29.16	21.00	50.16	74.00	-23.84	V	peak
10620.000	30.74	13.90	44.64	74.00	-29.36	Н	Peak
11316.000	31.07	14.94	46.01	74.00	-27.99	Н	Peak
12960.000	30.00	17.82	47.82	74.00	-26.18	Н	Peak
14208.000	28.55	20.70	49.25	74.00	-24.75	Н	peak
15024.000	29.02	21.05	50.07	74.00	-23.93	Н	peak
15540.000	31.17	18.70	49.87	74.00	-24.13	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: ZVA09 Page 188 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5230MHz /(CH High)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10860.000	30.33	14.65	44.98	74.00	-29.02	V	peak
12360.000	29.78	15.83	45.61	74.00	-28.39	V	peak
12984.000	29.80	17.90	47.70	74.00	-26.30	V	peak
14424.000	28.59	20.83	49.42	74.00	-24.58	V	peak
14856.000	28.80	21.08	49.88	74.00	-24.12	V	peak
15660.000	32.15	18.16	50.31	74.00	-23.69	V	peak
9864.000	31.19	11.59	42.78	74.00	-31.22	Н	Peak
12648.000	29.42	16.78	46.20	74.00	-27.80	Н	Peak
13560.000	28.14	19.42	47.56	74.00	-26.44	Н	Peak
14364.000	28.30	20.79	49.09	74.00	-24.91	Н	peak
15000.000	28.88	21.16	50.04	74.00	-23.96	Н	peak
15660.000	32.87	18.16	51.03	74.00	-22.97	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.
- 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: ZVA09 Page 189 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5270MHz /(CH Low)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10056.000	30.79	12.15	42.94	74.00	-31.06	V	peak
12444.000	29.74	16.11	45.85	74.00	-28.15	V	peak
13584.000	27.92	19.49	47.41	74.00	-26.59	V	peak
14292.000	28.53	20.75	49.28	74.00	-24.72	V	peak
14856.000	28.75	21.08	49.83	74.00	-24.17	V	peak
15780.000	32.08	17.61	49.69	74.00	-24.31	V	peak
10284.000	31.03	12.86	43.89	74.00	-30.11	Н	Peak
12936.000	29.54	17.74	47.28	74.00	-26.72	Н	Peak
14016.000	28.63	20.59	49.22	74.00	-24.78	Н	Peak
14268.000	28.48	20.74	49.22	74.00	-24.78	Н	peak
14952.000	28.94	21.13	50.07	74.00	-23.93	Н	peak
15780.000	32.39	17.61	50.00	74.00	-24.00	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 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.
- 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: ZVA09 Page 190 / 257

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5310MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10032.000	30.96	12.08	43.04	74.00	-30.96	V	peak
11304.000	30.37	14.95	45.32	74.00	-28.68	V	peak
13008.000	29.46	17.97	47.43	74.00	-26.57	V	peak
14268.000	28.69	20.74	49.43	74.00	-24.57	V	peak
14916.000	28.80	21.11	49.91	74.00	-24.09	V	peak
15900.000	32.26	17.06	49.32	74.00	-24.68	V	peak
8352.000	31.70	9.46	41.16	74.00	-32.84	Н	Peak
9504.000	30.49	10.55	41.04	74.00	-32.96	Н	Peak
11820.000	30.55	14.72	45.27	74.00	-28.73	Н	Peak
12984.000	29.55	17.90	47.45	74.00	-26.55	Н	peak
14892.000	28.81	21.10	49.91	74.00	-24.09	Н	peak
15900.000	32.57	17.06	49.63	74.00	-24.37	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 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.
- 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: ZVA09

Page 191 / 257

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5510MHz /(CH Low)

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

Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
11088.000	29.86	15.04	44.90	74.00	-29.10	V	peak
12348.000	29.79	15.79	45.58	74.00	-28.42	V	peak
13008.000	29.72	17.97	47.69	74.00	-26.31	V	peak
13776.000	27.82	19.99	47.81	74.00	-26.19	V	peak
14880.000	28.71	21.09	49.80	74.00	-24.20	V	peak
16512.000	30.67	20.08	50.75	74.00	-23.25	V	peak
7752.000	31.77	9.17	40.94	74.00	-33.06	Н	Peak
8376.000	31.70	9.44	41.14	74.00	-32.86	Н	Peak
11040.000	29.74	15.06	44.80	74.00	-29.20	Н	Peak
14052.000	27.91	20.61	48.52	74.00	-25.48	Н	peak
15000.000	28.60	21.16	49.76	74.00	-24.24	Н	peak
16500.000	31.96	20.00	51.96	74.00	-22.04	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: ZVA09 Page 192 / 257

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5550MHz /(CH Mid)
Ambient temperature: 24°C Relative humidity: 52% RH Date: June 7, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
9336.000	30.85	10.07	40.92	74.00	-33.08	V	peak
12096.000	30.17	14.96	45.13	74.00	-28.87	V	peak
12636.000	29.41	16.75	46.16	74.00	-27.84	V	peak
14616.000	28.54	20.94	49.48	74.00	-24.52	V	peak
16740.000	29.61	21.63	51.24	74.00	-22.76	V	peak
17244.000	28.46	23.34	51.80	74.00	-22.20	V	peak
8340.000	31.94	9.46	41.40	74.00	-32.60	Н	Peak
9384.000	30.69	10.21	40.90	74.00	-33.10	Н	Peak
11088.000	29.74	15.04	44.78	74.00	-29.22	Н	Peak
12912.000	29.41	17.66	47.07	74.00	-26.93	Н	peak
14196.000	28.97	20.69	49.66	74.00	-24.34	Н	peak
17016.000	27.80	23.39	51.19	74.00	-22.81	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 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: ZVA09 Page 193 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5670MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8364.000	32.19	9.45	41.64	74.00	-32.36	V	peak
10056.000	31.78	12.15	43.93	74.00	-30.07	V	peak
11304.000	30.46	14.95	45.41	74.00	-28.59	V	peak
12984.000	29.94	17.90	47.84	74.00	-26.16	V	peak
14244.000	28.71	20.72	49.43	74.00	-24.57	V	peak
15012.000	29.15	21.11	50.26	74.00	-23.74	V	peak
7716.000	32.38	9.10	41.48	74.00	-32.52	Н	Peak
11052.000	30.18	15.06	45.24	74.00	-28.76	Н	Peak
12204.000	30.39	15.32	45.71	74.00	-28.29	Н	Peak
13956.000	27.65	20.46	48.11	74.00	-25.89	Н	peak
14880.000	29.13	21.09	50.22	74.00	-23.78	Н	peak
15648.000	30.13	18.21	48.34	74.00	-25.66	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.
- 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: ZVA09 Page 194 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5755MHz /(CH Low)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7728.000	31.92	9.12	41.04	74.00	-32.96	V	peak
10152.000	30.85	12.45	43.30	74.00	-30.70	V	peak
11040.000	30.23	15.06	45.29	74.00	-28.71	V	peak
12468.000	30.33	16.19	46.52	74.00	-27.48	V	peak
14232.000	28.37	20.71	49.08	74.00	-24.92	V	peak
14964.000	28.72	21.14	49.86	74.00	-24.14	V	peak
6216.000	34.01	6.43	40.44	74.00	-33.56	Н	Peak
8364.000	32.25	9.45	41.70	74.00	-32.30	Н	Peak
11052.000	30.15	15.06	45.21	74.00	-28.79	Н	Peak
12348.000	30.18	15.79	45.97	74.00	-28.03	Н	peak
14916.000	28.68	21.11	49.79	74.00	-24.21	Н	peak
15144.000	28.90	20.50	49.40	74.00	-24.60	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.
- 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: ZVA09 Page 195 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11n HT 40 MHz / 5795MHz /(CH High)

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

Date: June 12, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10032.000	31.11	12.08	43.19	74.00	-30.81	V	peak
10800.000	30.05	14.46	44.51	74.00	-29.49	V	peak
11856.000	30.84	14.70	45.54	74.00	-28.46	V	peak
12912.000	29.73	17.66	47.39	74.00	-26.61	V	peak
14544.000	28.59	20.90	49.49	74.00	-24.51	V	peak
15000.000	28.93	21.16	50.09	74.00	-23.91	V	peak
9612.000	30.85	10.86	41.71	74.00	-32.29	Н	Peak
10512.000	30.48	13.57	44.05	74.00	-29.95	Н	Peak
11844.000	30.71	14.71	45.42	74.00	-28.58	Н	Peak
13500.000	28.32	19.27	47.59	74.00	-26.41	Н	peak
14916.000	28.94	21.11	50.05	74.00	-23.95	Н	peak
17244.000	28.38	23.34	51.72	74.00	-22.28	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 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.
- 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: ZVA09 Page 196 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Combine with Antenna 0 and Antenna 1 and Antenna 2

Test Mode: TX / IEEE 802. 11ac 80 / 5210MHz /(CH Low)

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

Tested by: Jack Chen

Date: June 13, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
8376.000	32.04	9.44	41.48	74.00	-32.52	V	peak
10524.000	31.57	13.60	45.17	74.00	-28.83	V	peak
11340.000	30.84	14.93	45.77	74.00	-28.23	V	peak
12996.000	29.96	17.94	47.90	74.00	-26.10	٧	peak
14124.000	28.78	20.65	49.43	74.00	-24.57	V	peak
14964.000	29.31	21.14	50.45	74.00	-23.55	V	peak
9624.000	31.62	10.90	42.52	74.00	-31.48	Н	Peak
10800.000	30.28	14.46	44.74	74.00	-29.26	Н	Peak
12240.000	30.46	15.43	45.89	74.00	-28.11	Н	Peak
14244.000	28.70	20.72	49.42	74.00	-24.58	Н	peak
14916.000	29.01	21.11	50.12	74.00	-23.88	Н	peak
15540.000	31.46	18.70	50.16	74.00	-23.84	Н	peak

- 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).

Test Mode: TX / IEEE 802. 11ac 80 / 5290MHz /(CH High)

Ambient temperature: 24°C

Relative humidity: 52% RH

Date: June 13, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
10944.000	30.15	14.91	45.06	74.00	-28.94	V	peak
11292.000	30.87	14.95	45.82	74.00	-28.18	V	peak
12780.000	29.55	17.22	46.77	74.00	-27.23	V	peak
13008.000	29.66	17.97	47.63	74.00	-26.37	V	peak
14316.000	28.65	20.76	49.41	74.00	-24.59	V	peak
15096.000	29.10	20.72	49.82	74.00	-24.18	V	peak
10308.000	30.96	12.93	43.89	74.00	-30.11	Н	Peak
11040.000	30.58	15.06	45.64	74.00	-28.36	Н	Peak
12936.000	29.62	17.74	47.36	74.00	-26.64	Н	Peak
14244.000	28.55	20.72	49.27	74.00	-24.73	Н	peak
15012.000	28.73	21.11	49.84	74.00	-24.16	Н	peak
15780.000	33.30	17.61	50.91	74.00	-23.09	Н	peak

- 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).

Test Mode: TX / IEEE 802. 11ac 80 / 5530MHz

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

Tested by: Jack Chen

Date: June 13, 2016

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7764.000	32.27	9.19	41.46	74.00	-32.54	V	peak
9636.000	31.82	10.93	42.75	74.00	-31.25	V	peak
11004.000	30.54	15.08	45.62	74.00	-28.38	V	peak
14052.000	28.53	20.61	49.14	74.00	-24.86	V	peak
14916.000	28.77	21.11	49.88	74.00	-24.12	V	peak
16500.000	29.70	20.00	49.70	74.00	-24.30	V	peak
10056.000	31.11	12.15	43.26	74.00	-30.74	Н	Peak
11160.000	30.37	15.01	45.38	74.00	-28.62	Н	Peak
12948.000	29.91	17.78	47.69	74.00	-26.31	Н	Peak
14340.000	28.53	20.78	49.31	74.00	-24.69	Н	peak
15024.000	28.63	21.05	49.68	74.00	-24.32	Н	peak
16500.000	31.69	20.00	51.69	74.00	-22.31	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 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: ZVA09 Page 199 / 257
This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode: TX / IEEE 802.11ac 80 / 5775MHz Tested by: Jack Chen Date: June 13, 2016 Ambient temperature: <u>24°C</u> Relative humidity: 52% RH

Report No.: C160606Z02-RP1-4

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6204.000	34.07	6.41	40.48	74.00	-33.52	V	peak
9972.000	31.31	11.90	43.21	74.00	-30.79	V	peak
11316.000	30.63	14.94	45.57	74.00	-28.43	V	peak
12984.000	29.73	17.90	47.63	74.00	-26.37	V	peak
14328.000	28.62	20.77	49.39	74.00	-24.61	V	peak
15072.000	29.26	20.83	50.09	74.00	-23.91	V	peak
6204.000	38.30	6.41	44.71	74.00	-29.29	Н	Peak
10176.000	30.87	12.53	43.40	74.00	-30.60	Н	Peak
11856.000	30.96	14.70	45.66	74.00	-28.34	Н	Peak
12984.000	29.65	17.90	47.55	74.00	-26.45	Н	peak
14460.000	28.50	20.85	49.35	74.00	-24.65	Н	peak
17244.000	28.30	23.34	51.64	74.00	-22.36	Н	peak

Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental 1. frequency.
- 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.
- 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.
- 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.
- Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).

FCC ID: ZVA09 Page 200 / 257 This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.