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6.7.1 LIMIT

1. 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:

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



6.7.2 TEST INSTRUMENTS

Radiated Emission Test Site 966(2)										
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration					
PSA Series Spectrum Analyzer	Agilent	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						

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.



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.
- 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=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO / Detector=Peak

7. Repeat above procedures until the measurements for all frequencies are complete.



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

Frequency (MHz) Reading (dBuV)

Correct Factor (dB/m)

= Emission frequency in MHz

= Uncorrected Analyzer / Receiver reading

= Antenna factor + Cable loss – Amplifier gain

= Reading (dBuV) + Corr. Factor (dB/m) = Limit stated in standard

Result (dBuV/m) Limit (dBuV/m)

Margin (dB)

Q.P.

= Result (dBuV/m) – Limit (dBuV/m) = 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) Reading (dBuV) Correction Factor (dB/m) Result (dBuV/m) Limit (dBuV/m) Margin (dB) Peak AVG = Emission frequency in MHz

= Uncorrected Analyzer / Receiver reading

Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain

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

= Limit stated in standard

= Result (dBuV/m) – Limit (dBuV/m)

= Peak Reading

= Average Reading

Calculation Formula

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



6.7.6 TEST RESULTS

Below 1 GHz

Test Mode: TX

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Tested by: <u>Ad Gan</u> Date: <u>March 28, 2016</u>

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
60.0700	55.74	-23.98	31.76	40.00	-8.24	V	QP
95.9600	51.88	-24.11	27.77	43.50	-15.73	V	QP
123.1200	49.62	-21.02	28.60	43.50	-14.90	V	QP
171.6200	50.38	-22.92	27.46	43.50	-16.04	V	QP
222.0600	51.62	-20.66	30.96	46.00	-15.04	V	QP
799.2100	44.15	-11.12	33.03	46.00	-12.97	V	QP
37.7600	52.30	-15.48	36.82	40.00	-3.18	Н	QP
106.6300	50.26	-22.45	27.81	43.50	-15.69	Н	QP
147.3700	53.90	-21.63	32.27	43.50	-11.23	Н	QP
221.0900	50.57	-20.51	30.06	46.00	-15.94	Н	QP
638.1900	41.04	-12.48	28.56	46.00	-17.44	Н	QP
799.2100	43.44	-11.12	32.32	46.00	-13.68	Н	QP

Remark:

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).



<u>Above 1 GHz</u>

<u>1GHz~6GHz</u>

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

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Tested by: <u>Ad Gan</u> Date: <u>March 24, 2016</u>

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1765.000	56.49	-6.35	50.14	74.00	-23.86	V	peak
2020.000	48.80	-4.89	43.91	74.00	-30.09	V	peak
2400.000	47.34	-2.81	44.53	74.00	-29.47	V	peak
3015.000	42.74	-1.33	41.41	74.00	-32.59	V	peak
3995.000	42.09	1.57	43.66	74.00	-30.34	V	peak
4800.000	44.13	4.33	48.46	74.00	-25.54	V	peak
		·					
1765.000	52.74	-6.35	46.39	74.00	-27.61	Н	Peak
2020.000	51.75	-4.89	46.86	74.00	-27.14	Н	Peak
2400.000	45.42	-2.81	42.61	74.00	-31.39	Н	Peak
3045.000	43.21	-1.28	41.93	74.00	-32.07	Н	peak
3995.000	41.51	1.57	43.08	74.00	-30.92	Н	peak
4800.000	43.99	4.33	48.32	74.00	-25.68	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).



Antenna 0

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Ambient temperature:** 24°C **Relative humidity:** 52% RH **Tested by:** <u>Ad Gan</u> **Date:** May 19, 2016

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7728.000	31.06	9.12	40.18	74.00	-33.82	V	peak
8424.000	31.01	9.42	40.43	74.00	-33.57	V	peak
10356.000	36.20	13.08	49.28	74.00	-24.72	V	peak
13488.000	27.43	19.23	46.66	74.00	-27.34	V	peak
14820.000	28.53	21.06	49.59	74.00	-24.41	V	peak
15540.000	33.64	18.70	52.34	74.00	-21.66	V	peak
15540.000	33.19	18.70	51.89	54.00	-2.11	V	AVG
7728.000	31.33	9.12	40.45	74.00	-33.55	Н	Peak
8352.000	31.21	9.46	40.67	74.00	-33.33	Н	Peak
9828.000	30.21	11.48	41.69	74.00	-32.31	Н	Peak
10356.000	40.86	13.08	53.94	74.00	-20.06	Н	peak
10356.000	40.36	13.08	53.44	54.00	-0.56	Н	AVG
13152.000	28.58	18.35	46.93	74.00	-27.07	Н	peak
15540.000	35.31	18.70	54.01	74.00	-19.99	Н	peak
15540.000	34.78	18.70	53.48	54.00	-0.52	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: Ad Gan

Ambient temperature: <u>24°C</u> Relative humidity: 52% RH Date: May 19, 2016 Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (MHz) (dBuV) (dBuV/m) (dBuV/m) (dB) (V/H) (dB/m) 7764.000 30.65 9.19 39.84 74.00 -34.16 V peak 8424.000 9.42 40.57 74.00 -33.43 V 31.15 peak 10044.000 29.97 12.12 42.09 74.00 -31.91 V peak V 44.25 74.00 10944.000 29.34 14.91 -29.75 peak V 12792.000 28.33 17.26 45.59 74.00 -28.41 peak 15600.000 33.38 18.43 51.81 74.00 -22.19 V peak 10404.000 30.76 13.23 43.99 74.00 -30.01 н Peak Н 11064.000 29.34 15.05 44.39 74.00 -29.61Peak 44.47 н 11844.000 29.76 14.71 74.00 -29.53Peak 13548.000 27.48 19.39 46.87 74.00 -27.13 н peak 14808.000 74.00 Н 28.38 21.05 49.43 -24.57 peak 15600.000 н 30.98 18.43 49.41 74.00 -24.59peak

- 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 / 5240MHz /(CH High)

Tested by: Ad Gan

Ambient tem	Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>						
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7776.000	31.21	9.21	40.42	74.00	-33.58	V	peak
10476.000	36.85	13.46	50.31	74.00	-23.69	V	peak
11652.000	29.16	14.79	43.95	74.00	-30.05	V	peak
12936.000	28.40	17.74	46.14	74.00	-27.86	V	peak
14388.000	27.70	20.81	48.51	74.00	-25.49	V	peak
15720.000	35.63	17.88	53.51	74.00	-20.49	V	peak
15720.000	35.01	17.88	52.89	54.00	-1.11	V	AVG
							•
10476.000	32.56	13.46	46.02	74.00	-27.98	Н	Peak
11820.000	29.88	14.72	44.60	74.00	-29.40	Н	Peak
13524.000	27.22	19.33	46.55	74.00	-27.45	Н	Peak
14244.000	28.26	20.72	48.98	74.00	-25.02	Н	peak
14952.000	28.26	21.13	49.39	74.00	-24.61	Н	peak
15720.000	36.12	17.88	54.00	74.00	-20.00	Н	peak
15720.000	35.39	17.88	53.27	54.00	-0.73	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 / 5260MHz /(CH Low)

Tested by: Ad Gan

Ambient tem	Imbient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u> Date: <u>N</u>							
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark	
8364.000	30.68	9.45	40.13	74.00	-33.87	V	peak	
9612.000	29.86	10.86	40.72	74.00	-33.28	V	peak	
10884.000	28.98	14.72	43.70	74.00	-30.30	V	peak	
12204.000	29.03	15.32	44.35	74.00	-29.65	V	peak	
14940.000	28.07	21.13	49.20	74.00	-24.80	V	peak	
15720.000	31.09	17.88	48.97	74.00	-25.03	V	peak	
						·		
8364.000	31.01	9.45	40.46	74.00	-33.54	Н	Peak	
9144.000	30.96	9.51	40.47	74.00	-33.53	Н	Peak	
11064.000	29.25	15.05	44.30	74.00	-29.70	н	Peak	
11820.000	30.08	14.72	44.80	74.00	-29.20	Н	peak	
13524.000	27.65	19.33	46.98	74.00	-27.02	Н	peak	
15720.000	35.77	17.88	53.65	74.00	-20.35	н	peak	
15720.000	35.11	17.88	52.99	54.00	-1.01	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 / 5300MHz /(CH Mid)

Tested by: Ad Gan

Ambient temperature: <u>24°C</u> Relative humidity: 52% RH Date: May 19, 2016 Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (MHz) (dBuV) (dBuV/m) (dBuV/m) (dB) (V/H) (dB/m) 10260.000 30.06 12.79 42.85 74.00 -31.15 V peak 10596.000 13.83 50.72 74.00 -23.28 V 36.89 peak 12996.000 27.93 17.94 45.87 74.00 -28.13 V peak V 47.25 74.00 13560.000 27.83 19.42 -26.75 peak -24.82 V 15000.000 28.02 21.16 49.18 74.00 peak 15900.000 34.20 17.06 51.26 74.00 -22.74 V peak 7752.000 30.84 9.17 40.01 74.00 -33.99 Н Peak Н 8448.000 31.06 9.40 40.46 74.00 -33.54 Peak 12.12 42.22 н 10044.000 30.10 74.00 -31.78Peak 10596.000 36.27 13.83 50.10 74.00 -23.90 н peak 74.00 Н 13080.000 27.84 18.16 46.00 -28.00 peak 15888.000 36.96 17.12 54.08 74.00 -19.92 н peak 15888.000 36.31 17.12 53.43 54.00 -0.57 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 / 5320MHz /(CH High)

Tested by: Ad Gan

Ambient temperature: <u>24°C</u> Relative humidity: 52% RH Date: May 19, 2016 Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (MHz) (dBuV) (dBuV/m) (dBuV/m) (dB) (V/H) (dB/m) 6948.000 31.02 7.62 38.64 74.00 -35.36 V peak 8232.000 29.99 9.52 39.51 74.00 -34.49 V peak 9360.000 30.14 10.14 40.28 74.00 -33.72 V peak V 74.00 10056.000 30.20 12.15 42.35 -31.65 peak V 10632.000 35.67 13.94 49.61 74.00 -24.39 peak 15960.000 36.37 16.79 53.16 74.00 -20.84 V peak V 15960.000 16.79 52.38 54.00 -1.62 AVG 35.59 Н 8376.000 31.09 9.44 40.53 74.00 -33.47 Peak н 10644.000 34.37 13.98 48.35 74.00 -25.65Peak 11844.000 29.86 14.71 44.57 74.00 -29.43 н Peak 74.00 Н 12888.000 28.65 17.58 46.23 -27.77 peak 14988.000 27.86 21.15 49.01 74.00 -24.99н peak 16.79 53.94 74.00 Н 15960.000 37.15 -20.06 peak 15960.000 36.62 16.79 53.41 54.00 -0.59 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 / 5500MHz /(CH Low)

Tested by: Ad Gan

Ambient temperature: <u>24°C</u> Relative humidity: 52% RH Date: May 19, 2016 Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (dBuV/m) (MHz) (dBuV) (dBuV/m) (dB) (V/H) (dB/m) 7740.000 30.91 9.14 40.05 74.00 -33.95 V peak 8484.000 31.08 9.38 40.46 74.00 -33.54 V peak 10020.000 29.59 12.04 41.63 74.00 -32.37 V peak V 74.00 11004.000 30.81 15.08 45.89 -28.11 peak V 13140.000 27.49 18.32 45.81 74.00 -28.19 peak 16500.000 30.81 20.00 50.81 74.00 -23.19 V peak 7752.000 30.47 9.17 39.64 74.00 -34.36 Н Peak 40.29 Н 8376.000 30.85 9.44 74.00 -33.71 Peak н 11004.000 35.93 15.08 51.01 74.00 -22.99Peak 12924.000 28.05 17.70 45.75 74.00 -28.25 н peak 21.14 14964.000 49.29 74.00 Н 28.15 -24.71peak 16500.000 33.83 20.00 53.83 74.00 -20.17 н peak 16500.000 33.12 20.00 53.12 54.00 -0.88 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 / 5580MHz /(CH Mid)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Tested by: <u>Ad Gan</u> **Date:** May 19, 2016

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7740.000	30.40	9.14	39.54	74.00	-34.46	V	peak
9168.000	30.08	9.58	39.66	74.00	-34.34	V	peak
9720.000	29.89	11.17	41.06	74.00	-32.94	V	peak
9996.000	30.49	11.97	42.46	74.00	-31.54	V	peak
11160.000	37.85	15.01	52.86	74.00	-21.14	V	peak
11160.000	37.08	15.01	52.09	54.00	-1.91	V	AVG
16740.000	32.21	21.63	53.84	74.00	-20.16	V	peak
16740.000	31.49	21.63	53.12	54.00	-0.88	V	AVG
7752.000	30.23	9.17	39.40	74.00	-34.60	Н	Peak
8412.000	30.62	9.42	40.04	74.00	-33.96	Н	Peak
11160.000	38.75	15.01	53.76	74.00	-20.24	Н	peak
11160.000	38.06	15.01	53.07	54.00	-0.93	н	AVG
14280.000	27.69	20.74	48.43	74.00	-25.57	н	peak
15072.000	28.04	20.83	48.87	74.00	-25.13	Н	peak
16740.000	32.25	21.63	53.88	74.00	-20.12	Н	peak
16740.000	31.56	21.63	53.19	54.00	-0.81	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 / 5700MHz /(CH High) Tested by: Ad Gan Ambient temperature: <u>24°C</u> Relative humidity: 52% RH Date: May 19, 2016 Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (MHz) (dBuV) (dBuV/m) (dBuV/m) (dB) (V/H) (dB/m) 7752.000 31.02 9.17 40.19 74.00 -33.81 V peak 8448.000 9.40 40.52 74.00 -33.48 V 31.12 peak 10272.000 29.77 12.82 42.59 74.00 -31.41 V peak V 74.00 11400.000 33.76 14.90 48.66 -25.34 peak V 12960.000 28.16 17.82 45.98 74.00 -28.02 peak 14892.000 27.79 21.10 48.89 74.00 -25.11 V peak 6180.000 38.48 6.37 44.85 74.00 -29.15 н Peak Н 10296.000 29.75 12.90 42.65 74.00 -31.35 Peak 14.90 54.16 н 11400.000 39.26 74.00 -19.84Peak 11400.000 38.62 14.90 53.52 54.00 -0.48 н AVG 74.00 Н 12936.000 28.40 17.74 46.14 -27.86 peak 14916.000 27.96 21.11 49.07 74.00 -24.93 н peak 52.57 74.00 Н 17100.000 29.20 23.37 -21.43 peak 17100.000 28.50 23.37 51.87 54.00 -2.13 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 / 5745MHz /(CH Low)

Ambient temperature: <u>24°C</u> Relative humidity: <u>52% RH</u>

Tested by: <u>Ad Gan</u> **Date:** May 19, 2016

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6228.000	37.18	6.45	43.63	74.00	-30.37	V	peak
7644.000	30.88	8.96	39.84	74.00	-34.16	V	peak
9732.000	29.31	11.21	40.52	74.00	-33.48	V	peak
11064.000	29.04	15.05	44.09	74.00	-29.91	V	peak
11484.000	38.89	14.87	53.76	74.00	-20.24	V	peak
11484.000	38.14	14.87	53.01	54.00	-0.99	V	AVG
17244.000	29.18	23.34	52.52	74.00	-21.48	V	peak
17244.000	28.52	23.34	51.86	54.00	-2.14	V	AVG
	·	·					
6228.000	37.33	6.45	43.78	74.00	-30.22	Н	Peak
10764.000	28.80	14.35	43.15	74.00	-30.85	н	Peak
11484.000	38.65	14.87	53.52	74.00	-20.48	Н	Peak
13548.000	27.47	19.39	46.86	74.00	-27.14	Н	peak
15000.000	28.04	21.16	49.20	74.00	-24.80	Н	peak
17244.000	28.61	23.34	51.95	74.00	-22.05	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 802.11a / 5785MHz /(CH Mid) Tested by: Ad Gan Ambient temperature: <u>24°C</u> Relative humidity: 52% RH Date: May 19, 2016 Correction Antenna Frequency Reading Result Limit Margin Remark Factor Pole (MHz) (dBuV) (dBuV/m) (dBuV/m) (dB) (V/H) (dB/m) 7032.000 30.88 7.76 38.64 74.00 -35.36 V peak 8436.000 9.41 40.47 74.00 -33.53 V 31.06 peak 10056.000 30.00 12.15 42.15 74.00 -31.85 V peak V 44.25 74.00 10848.000 29.64 14.61 -29.75 peak V 11496.000 33.76 14.86 48.62 74.00 -25.38 peak 15036.000 28.12 21.00 49.12 74.00 -24.88 V peak 6228.000 37.15 6.45 43.60 74.00 -30.40н Peak Н 8448.000 30.74 9.40 40.14 74.00 -33.86 Peak н 10056.000 30.08 12.15 42.23 74.00 -31.77 Peak 10392.000 29.07 13.20 42.27 74.00 -31.73 н peak 74.00 Н 11496.000 38.95 14.86 53.81 -20.19 peak 11496.000 38.28 14.86 53.14 54.00 -0.86 н AVG 23.35 52.23 74.00 -21.77 Н 17232.000 28.88 peak 17232.000 28.29 23.35 51.64 54.00 -2.36 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).