

Test mode:

Report No.: GTS201806000179F03

Lowest

			iwo_onain					
Peak value:								_
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	47.52	26.91	3.56	35.87	42.12	74.00	-31.88	Horizontal
2390.00	55.84	27.11	3.64	35.08	50.51	74.00	-23.49	Horizontal
2310.00	48.61	26.91	3.56	35.89	43.21	74.00	-30.79	Vertical
2390.00	61.97	27.11	3.64	36.08	56.64	74.00	-17.36	Vertical
Average va	lue:							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	36.73	26.91	3.56	35.87	31.33	54.00	-22.67	Horizontal
2390.00	40.92	27.11	3.64	36.08	35.59	54.00	-18.41	Horizontal
2310.00	37.54	26.91	3.56	35.89	43.21	54.00	-21.86	Vertical
2390.00	45.81	27.11	3.64	36.08	40.48	54.00	-13.52	Vertical
Test mode:		802.11g_MI	IMO_Chain	A+B Tes	t channel:	Hi	ghest	
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	60.71	27.36	3.68	36.33	55.42	74.00	-18.58	Horizontal
2500.00	50.45	27.40	3.68	36.37	45.16	74.00	-28.84	Horizontal
2483.50	60.86	27.36	3.68	36.33	55.57	74.00	-18.43	Vertical
2500.00	50.42	27.40	3.68	36.37	45.13	74.00	-28.87	Vertical
Average va	lue:							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	45.14	27.36	3.68	36.33	39.85	54.00	-14.15	Horizontal
2500.00	38.88	27.40	3.68	36.37	33.59	54.00	-20.41	Horizontal
2483.50	45.45	27.36	3.68	36.33	40.16	54.00	-13.84	Vertical
2500.00	38.94	27.40	3.68	36.37	33.65	54.00	-20.35	Vertical
Remark:		-	<u>-</u>	•			•	-

Test channel:

802.11g\_MIMO\_Chain A+B

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- The emission levels of other frequencies are very lower than the limit and not show in test report.

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Test mode:		802.11n(HT A+B	20)_MIMO_	_Chain	Test channel:		Lowest	
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Lin (dBuV/m	I I imit	Polarization
2310.00	47.40	26.91	3.56	35.87	42.00	74.00	-32.00	Horizontal
2390.00	57.28	27.11	3.64	36.08	51.95	74.00	-22.05	Horizontal
2310.00	49.61	26.91	3.56	35.87	44.21	74.00	-29.79	Vertical
2390.00	66.25	27.11	3.64	36.08	60.92	74.00	-13.08	Vertical
Average va	lue:							-
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	I I imit I	Polarization
2310.00	36.97	26.91	3.56	35.87	31.57	54.00	-22.43	Horizontal
2390.00	42.78	27.11	3.64	36.08	37.45	54.00	-16.55	Horizontal
2310.00	38.27	26.91	3.56	35.87	32.87	54.00	-21.13	Vertical
2390.00	51.50	27.11	3.64	36.08	46.17	54.00	-7.83	Vertical
2030.00	31.30	21.11	5.04	30.06	40.17	34.00	-7.00	Vertical
	31.30		<u>.</u>					Vertical
Test mode:		802.11n(HT	<u>.</u>				Highest	Vertical
		802.11n(HT	20)_MIMO_	_Chain A+B			Highest	Vertical
Test mode:			<u>.</u>				Highest  Over	Polarization
Test mode: Peak value: Frequency	Read Level	802.11n(HT Antenna Factor	20)_MIMO_ Cable Loss	Chain A+B Preamp Factor	Test char	nnel:	Highest  Over e Limit	
Test mode: Peak value: Frequency (MHz)	Read Level (dBuV)	802.11n(HT Antenna Factor (dB/m)	20)_MIMO_ Cable Loss (dB)	Chain A+B  Preamp Factor (dB)	Level (dBuV/m)	Limit Lin	Highest  Over Limit (dB)	Polarization
Test mode: Peak value: Frequency (MHz) 2483.50	Read Level (dBuV) 61.86	Antenna Factor (dB/m) 27.36	Cable Loss (dB) 3.68	Chain A+B  Preamp Factor (dB) 36.33	Level (dBuV/m) 56.57	Limit Lin (dBuV/m	Highest  Over Limit (dB) -17.43	Polarization Horizontal
Test mode: Peak value: Frequency (MHz) 2483.50 2500.00	Read Level (dBuV) 61.86 50.42	802.11n(HT Antenna Factor (dB/m) 27.36 27.40	20)_MIMO_ Cable Loss (dB) 3.68 3.68	Chain A+B  Preamp Factor (dB) 36.33 36.37	Level (dBuV/m) 56.57 45.13	Limit Lin (dBuV/m 74.00 74.00	Highest  Over Limit (dB) -17.43 -28.87	Polarization Horizontal Horizontal
Test mode: Peak value: Frequency (MHz) 2483.50 2500.00 2483.50	Read Level (dBuV) 61.86 50.42 63.95 49.60	802.11n(HT Antenna Factor (dB/m) 27.36 27.40 27.36	20)_MIMO_ Cable Loss (dB) 3.68 3.68	Chain A+B  Preamp Factor (dB) 36.33 36.37 36.33	Level (dBuV/m) 56.57 45.13 58.66	Limit Lin (dBuV/m 74.00 74.00 74.00	Over Limit (dB) -17.43 -28.87 -15.34	Polarization Horizontal Horizontal Vertical
Test mode: Peak value: Frequency (MHz) 2483.50 2500.00 2483.50 2500.00	Read Level (dBuV) 61.86 50.42 63.95 49.60	802.11n(HT Antenna Factor (dB/m) 27.36 27.40 27.36	20)_MIMO_ Cable Loss (dB) 3.68 3.68	Chain A+B  Preamp Factor (dB) 36.33 36.37 36.33	Level (dBuV/m) 56.57 45.13 58.66	Limit Lin (dBuV/m 74.00 74.00 74.00	Highest  Over Limit (dB) -17.43 -28.87 -15.34 -29.69  Over Limit	Polarization Horizontal Horizontal Vertical
Test mode: Peak value: Frequency (MHz) 2483.50 2500.00 2483.50 2500.00 Average va	Read Level (dBuV) 61.86 50.42 63.95 49.60 <b>lue:</b> Read Level	802.11n(HT  Antenna Factor (dB/m) 27.36 27.40 27.36 27.40 Antenna Factor	20)_MIMO_ Cable Loss (dB) 3.68 3.68 3.68 3.68	Chain A+B  Preamp Factor (dB) 36.33 36.37 36.33 Preamp Factor	Level (dBuV/m) 56.57 45.13 58.66 44.31	Limit Lin (dBuV/m 74.00 74.00 74.00 Limit Lin	Highest  e	Polarization Horizontal Horizontal Vertical Vertical
Test mode: Peak value: Frequency (MHz) 2483.50 2500.00 2483.50 2500.00 Average va Frequency (MHz)	Read Level (dBuV) 61.86 50.42 63.95 49.60 <b>lue:</b> Read Level (dBuV)	Antenna Factor (dB/m) 27.36 27.40 27.36 27.40 Antenna Factor (dB/m)	20)_MIMO_ Cable Loss (dB) 3.68 3.68 3.68 Cable Loss (dB)	Chain A+B  Preamp Factor (dB) 36.33 36.37 36.33 Preamp Factor (dB)	Level (dBuV/m) 56.57 45.13 58.66 44.31 Level (dBuV/m)	Limit Lin (dBuV/m 74.00 74.00 74.00 Limit Lin (dBuV/m	Highest  Over Limit (dB) -17.43 -28.87 -15.34 -29.69  Over Limit (dB)	Polarization Horizontal Horizontal Vertical Vertical Polarization
Test mode: Peak value: Frequency (MHz)  2483.50  2500.00  2483.50  2500.00  Average va  Frequency (MHz)  2483.50	Read Level (dBuV) 61.86 50.42 63.95 49.60 Iue: Read Level (dBuV) 46.11	802.11n(HT Antenna Factor (dB/m) 27.36 27.40 27.36 27.40 Antenna Factor (dB/m) 27.36	20)_MIMO_ Cable Loss (dB) 3.68 3.68 3.68 Cable Loss (dB) 3.68	Preamp Factor (dB) 36.33 36.37 36.33 36.37 Preamp Factor (dB) 36.33	Level (dBuV/m) 56.57 45.13 58.66 44.31  Level (dBuV/m) 40.82	Limit Lin (dBuV/m 74.00 74.00 74.00 74.00 Limit Lin (dBuV/m 54.00	Highest  Over Limit (dB) -17.43 -28.87 -15.34 -29.69  Over Limit (dB) -13.18	Polarization Horizontal Horizontal Vertical Vertical Polarization Horizontal

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

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Read

Test mode:

Peak value:

Report No.: GTS201806000179F03

Lowest

Test channel:

Frequency (MHz)	Level (dBuV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Limit (dB)	Polarization
2310.00	47.37	26.91	3.56	35.87	41.97	74.00	-32.03	Horizontal
2390.00	61.59	27.11	3.64	36.08	56.26	74.00	-17.74	Horizontal
2310.00	48.49	26.91	3.56	35.87	43.09	74.00	-30.91	Vertical
2390.00	69.18	27.11	3.64	36.08	63.85	74.00	-10.15	Vertical
Average va	lue:							_
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	36.54	26.91	3.56	35.87	31.14	54.00	-22.86	Horizontal
2390.00	48.03	27.11	3.64	36.08	42.7	54.00	-11.3	Horizontal
2310.00	38.13	26.91	3.56	35.87	32.73	54.00	-21.27	Vertical
2390.00	55.35	27.11	3.64	36.08	50.02	54.00	-3.98	Vertical
Test mode:		802.11n(HT	40)_MIMO_	_Chain A+B	Tes	t channel:	Highest	
Peak value:	:							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	63.54	27.36	3.68	36.33	58.25	74.00	-15.75	Horizontal
2500.00	58.79	27.40	3.68	36.37	53.5	74.00	-20.5	Horizontal
2483.50	66.99	27.36	3.68	36.33	61.7	74.00	-12.3	Vertical
2500.00	59.96	27.40	3.68	36.37	54.67	74.00	-19.33	Vertical
Average va	lue:							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	50.04	27.36	3.68	36.33	44.75	54.00	-9.25	Horizontal
2500.00	43.51	27.40	3.68	36.37	38.22	54.00	-15.78	Horizontal
2483.50	53.63	27.36	3.68	36.33	48.34	54.00	-5.66	Vertical
2500.00	43.99	27.40	3.68	36.37	38.7	54.00	-15.3	Vertical
Remark:	-	-	-	-	•	-	•	

802.11n(HT40)\_MIMO\_Chain A+B

Antenna Cable Preamp

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



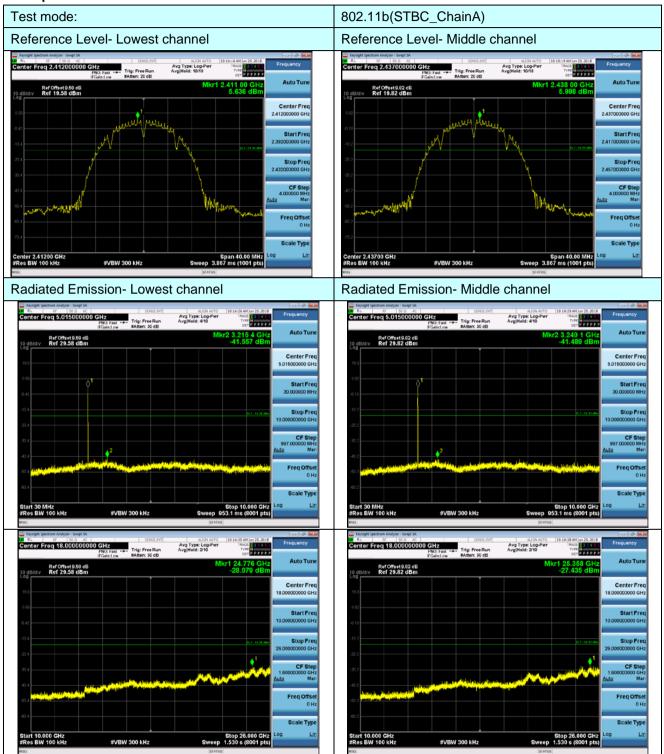
# 7.7 Spurious Emission

# 7.7.1 Conducted Emission Method

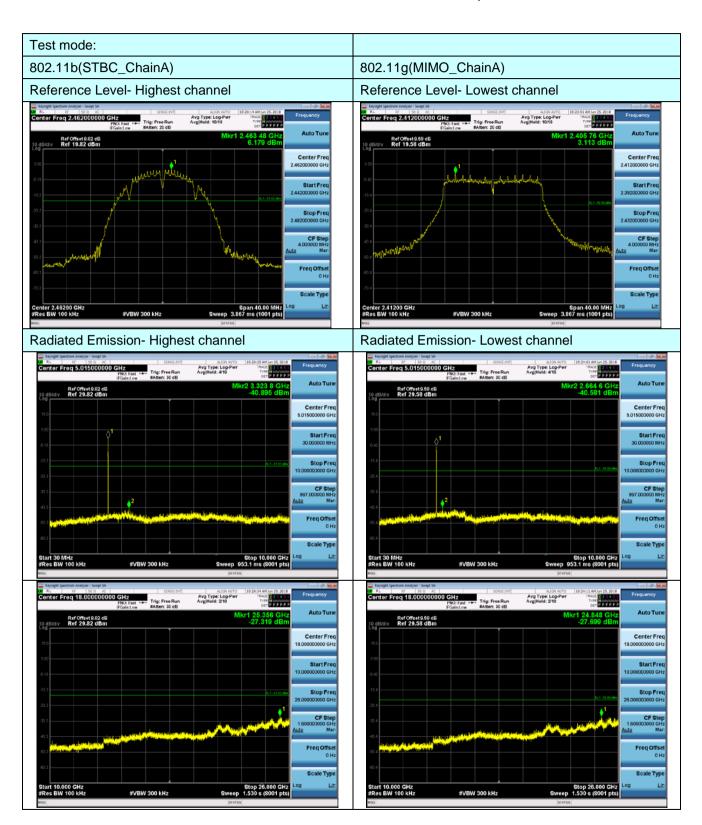
Test Requirement:	FCC Part15 C Section 15.247 (d)						
Test Method:	KDB558074 D01 DTS Meas Guidance V04						
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.						
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane						
Test Instruments:	Refer to section 6.0 for details						
Test mode:	Refer to section 5.2 for details						
Test results:	Pass						



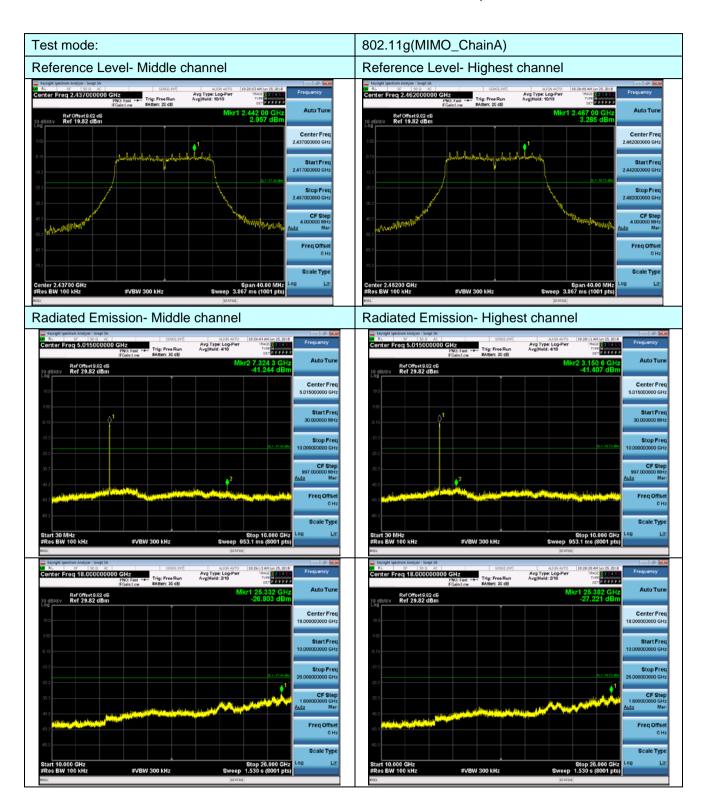
# Test plot as follows:



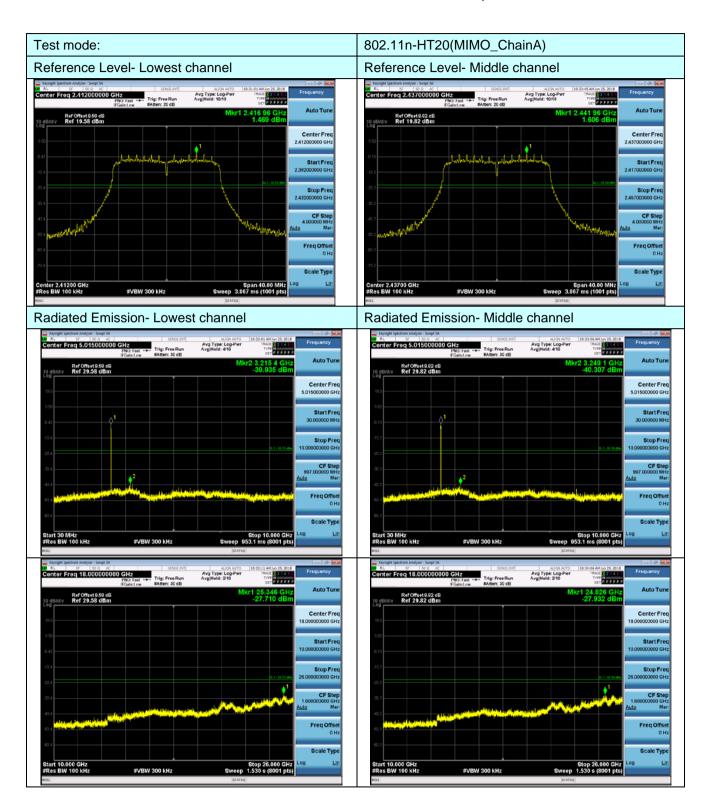




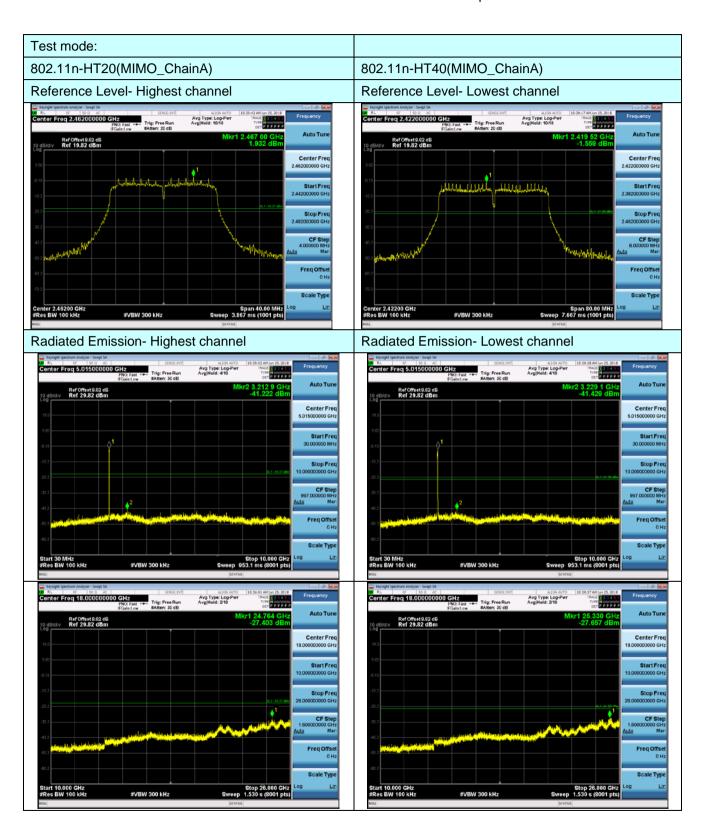




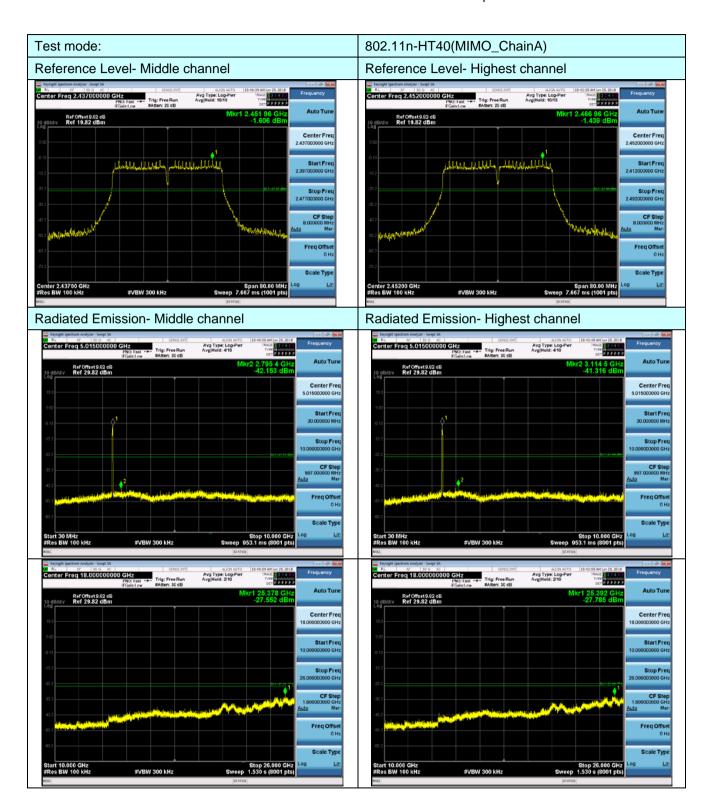










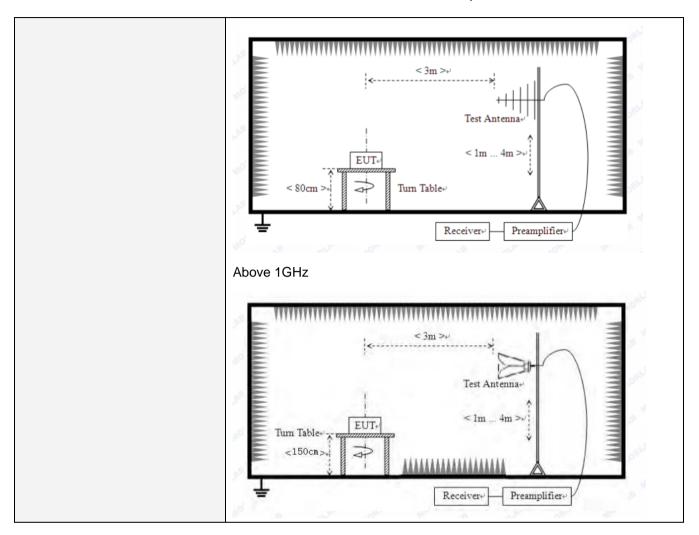




# 7.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section	on 15	5.209							
Test Method:	ANSI C63.10:2013									
Test Frequency Range:	9kHz to 25GHz									
Test site:	Measurement Distar	nce: 3	3m							
Receiver setup:	Frequency		Detector	RB∖	N	VBW	'	Value		
	9KHz-150KHz	ă	ıasi-peak	200H	Ηz	600Hz	Z	Quasi-peak		
	150KHz-30MHz	Qι	ıasi-peak	9KH	lz	30KHz	z	Quasi-peak		
	30MHz-1GHz	Qι	ıasi-peak	100K	Hz	300KH	lz	Quasi-peak		
	Above 1GHz		Peak	1M⊦	łz	3MHz	<u>z</u>	Peak		
	Above Toriz		Peak	1M⊦	łz	10Hz		Average		
Limit:	Frequency		Limit (u\	//m)	V	alue	M	easurement Distance		
	0.009MHz-0.490M	lHz	2400/F(k	(Hz)		QP		300m		
	0.490MHz-1.705M	lHz	24000/F(	KHz)	(	QP		300m		
	1.705MHz-30MH	lz	30		QP		30m			
	30MHz-88MHz		100		QP					
	88MHz-216MHz				(	QP				
	216MHz-960MH	z 200				QP		3m		
	960MHz-1GHz		500		QP			Om		
	Above 1GHz		500		Αv	erage				
	7.5575 151.5		5000	)	P	Peak				
Test setup:	Below 30MHz  Turntable  EUT  Ground Plane	<b>1</b> 0.	3m8 m	Coaxial	Cable /	[	Tes Rece			
	Below 1GHz									







Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
	The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
	4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
	The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

### Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Z-axis which it is worse case.

### Measurement data:

# ■ 9kHz~30MHz

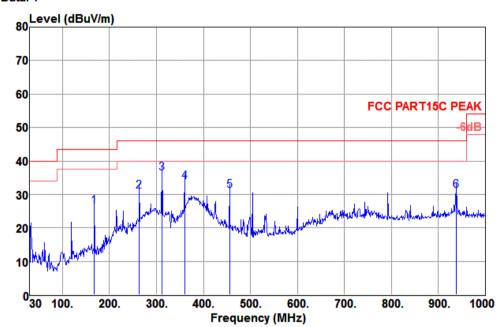
The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.



# ■ Below 1GHz

#### Horizontal:



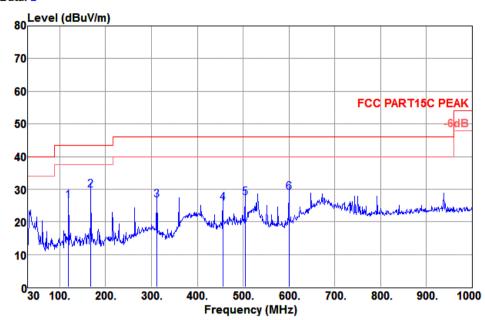


Freq MHz	Reading 1eve1 dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit 1evel dBuV/m	Over limit dB	Remark
167. 740	43.04	13. 43	2. 53	32. 52	26. 48	43. 50	-17. 02	QP
263.770	48.50	11.81	3. 25	32. 53	31.03	46.00	-14.97	QP
312.270	52. 11	13. 13	3. 52	32. 51	36. 25	46.00	-9.75	QP
359.800	48.35	14.04	3.86	32.49	33. 76	46.00	-12.24	QP
455.830	43.49	15. 75	4.34	32. 52	31.06	46.00	-14.94	QP
937. 920	34. 95	21.93	6.43	32.06	31.25	46.00	-14.75	QP



# Vertical:

Data: 2



Freq MHz	Reading 1eve1 dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	1eve1 dBuV	Limit level dBuV/m	Over limit dB	Remark
119. 240	44. 59	12. 12	2. 11	32. 47	26. 35	43. 50	-17. 15	QP
167. 740	46. 34	13. 43	2. 53	32. 52	29. 78	43. 50	-13. 72	QP
312. 270	42. 51	13. 13	3. 52	32. 51	26. 65	46. 00	-19. 35	QP
455. 830	38. 26	15. 75	4. 34	32. 52	25. 83	46. 00	-20. 17	QP
504. 330	38. 88	16. 58	4. 51	32. 56	27. 41	46. 00	-18. 59	QP
600. 360	38. 21	18. 40	5. 02	32. 69	28. 94	46. 00	-17. 06	QP



# ■ Above 1GHz

Test mode:		802.11b_STI	BC_Chain	A+B	Test channel: Low		Lowe	est	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4824.00	44.04	31.28	5.44	36.26	44.5	74.	.00	-29.5	Vertical
7236.00	39.39	35.94	7.02	34.27	48.08	74.	.00	-25.92	Vertical
9648.00	39.96	37.87	7.82	34.15	51.5	74.	.00	-22.5	Vertical
12060.00	*					74.	.00		Vertical
14472.00	*					74.	.00		Vertical
16884.00	*					74.	.00		Vertical
4824.00	49.52	31.28	5.44	36.26	49.98	74.	.00	-24.02	Horizontal
7236.00	40.77	35.94	7.02	34.27	49.46	74.	.00	-24.54	Horizontal
9648.00	38.94	37.87	7.82	34.15	50.48	74.	.00	-23.52	Horizontal
12060.00	*					74.	.00		Horizontal
14472.00	*					74.	.00		Horizontal
16884.00	*					74.	.00		Horizontal
Average val	ue:							T	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4824.00	35.27	31.28	5.44	36.26	35.73	54.	00	-18.27	Vertical
7236.00	27.93	35.94	7.02	34.27	36.62	54.	00	-17.38	Vertical
9648.00	25.65	37.87	7.82	34.15	37.19	54.	00	-16.81	Vertical
12060.00	*					54.	00		Vertical
14472.00	*					54.	00		Vertical
16884.00	*					54.	00		Vertical
4824.00	35.89	31.28	5.44	36.26	36.35	54.	00	-17.65	Horizontal
7236.00	26.45	35.94	7.02	34.27	35.14	54.	00	-18.86	Horizontal
9648.00	25.59	37.87	7.82	34.15	37.13	54.	00	-16.87	Horizontal
12060.00	*					54.	00		Horizontal
14472.00	*					54.	00		Horizontal
16884.00	*					54.	00		Horizontal

#### Remark.

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11b_ST	BC_Chain	A+B	Test channel: Mi		Middl	le	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4874.00	45.56	31.4	5.41	36.24	46.13	74.	00	-27.87	Vertical
7311.00	41.76	36.12	7.24	34.35	50.77	74.	00	-23.23	Vertical
9748.00	40.78	38.05	7.96	34.19	52.6	74.	00	-21.4	Vertical
12185.00	*					74.	00		Vertical
14622.00	*					74.	00		Vertical
17059.00	*					74.	00		Vertical
4874.00	44.22	31.4	5.41	36.24	44.79	74.	00	-29.21	Horizontal
7311.00	41.02	36.12	7.24	34.35	50.03	74.	00	-23.97	Horizontal
9748.00	40.57	38.05	7.96	34.19	52.39	74.	00	-21.61	Horizontal
12185.00	*					74.	00		Horizontal
14622.00	*					74.	00		Horizontal
17059.00	*					74.	00		Horizontal
Average val	ue:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4874.00	35.73	31.4	5.41	36.24	36.3	54.	00	-17.7	Vertical
7311.00	27.6	36.12	7.24	34.35	36.61	54.	00	-17.39	Vertical
9748.00	26.68	38.05	7.96	34.19	38.5	54.	00	-15.5	Vertical
12185.00	*					54.	00		Vertical
14622.00	*					54.	00		Vertical
17059.00	*					54.	00		Vertical
4874.00	30.33	31.4	5.41	36.24	30.9	54.	00	-23.1	Horizontal
7311.00	26.1	36.12	7.24	34.35	35.11	54.	00	-18.89	Horizontal
9748.00	26.68	38.05	7.96	34.19	38.5	54.	00	-15.5	Horizontal
12185.00	*					54.	00		Horizontal
14622.00	*					54.	00		Horizontal
17059.00	*					54.	00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11b_ST	BC_Chain	A+B	Test channel: Hi		est	
Peak value:						•		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	45.01	31.52	5.38	36.23	45.68	74.00	-28.32	Vertical
7386.00	38.65	36.29	7.46	34.42	47.98	74.00	-26.02	Vertical
9848.00	39.91	38.23	8.04	34.23	51.95	74.00	-22.05	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	44.34	31.52	5.38	36.23	45.01	74.00	-28.99	Horizontal
7386.00	38.6	36.29	7.46	34.42	47.93	74.00	-26.07	Horizontal
9848.00	40.64	38.23	8.04	34.23	52.68	74.00	-21.32	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal
Average val	ue:							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	36.1	31.52	5.38	36.23	36.77	54.00	-17.23	Vertical
7386.00	25.81	36.29	7.46	34.42	35.14	54.00	-18.86	Vertical
9848.00	26.69	38.23	8.04	34.23	38.73	54.00	-15.27	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	32.24	31.52	5.38	36.23	32.91	54.00	-21.09	Horizontal
7386.00	24.81	36.29	7.46	34.42	34.14	54.00	-19.86	Horizontal
9848.00	26.73	38.23	8.04	34.23	38.77	54.00	-15.23	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11g_MI	MO_Chain	A+B	Test chann	nel:	lowes	st	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4824.00	42.03	31.28	5.44	36.26	42.49	74.	00	-31.51	Vertical
7236.00	38.9	35.94	7.02	34.27	47.59	74.	00	-26.41	Vertical
9648.00	38.68	37.87	7.82	34.15	50.22	74.	00	-23.78	Vertical
12060.00	*					74.	00		Vertical
14472.00	*					74.	00		Vertical
16884.00	*					74.	00		Vertical
4824.00	41.25	31.28	5.44	36.26	41.71	74.	00	-32.29	Horizontal
7236.00	38.86	35.94	7.02	34.27	47.55	74.	00	-26.45	Horizontal
9648.00	38.86	37.87	7.82	34.15	50.4	74.	00	-23.6	Horizontal
12060.00	*					74.	00		Horizontal
14472.00	*					74.	00		Horizontal
16884.00	*					74.	00		Horizontal
Average val	ue:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4824.00	27.58	31.28	5.44	36.26	28.04	54.	00	-25.96	Vertical
7236.00	26.13	35.94	7.02	34.27	34.82	54.	00	-19.18	Vertical
9648.00	25.61	37.87	7.82	34.15	37.15	54.	00	-16.85	Vertical
12060.00	*					54.	00		Vertical
14472.00	*					54.	00		Vertical
16884.00	*					54.	00		Vertica
4824.00	26.15	31.28	5.44	36.26	26.61	54.	00	-27.39	Horizontal
7236.00	25.85	35.94	7.02	34.27	34.54	54.	00	-19.46	Horizontal
9648.00	25.59	37.87	7.82	34.15	37.13	54.	00	-16.87	Horizontal
12060.00	*					54.	00		Horizontal
14472.00	*					54.	00		Horizontal
16884.00	*					54.	00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11g_MI	MO_Chain	A+B	Test chann	nel:	Middl	le	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4874.00	48.49	31.4	5.41	36.24	49.06	74.	00	-24.94	Vertical
7311.00	40.39	36.12	7.24	34.35	49.4	74.	00	-24.6	Vertical
9748.00	39.55	38.05	7.96	34.19	51.37	74.	00	-22.63	Vertical
12185.00	*					74.	00		Vertical
14622.00	*					74.	00		Vertical
17059.00	*					74.	00		Vertical
4874.00	46.04	31.4	5.41	36.24	46.61	74.	00	-27.39	Horizontal
7311.00	38.72	36.12	7.24	34.35	47.73	74.	00	-26.27	Horizontal
9748.00	39.29	38.05	7.96	34.19	51.11	74.00		-22.89	Horizontal
12185.00	*					74.00			Horizontal
14622.00	*					74.00			Horizontal
17059.00	*					74.00			Horizontal
Average value	ue:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4874.00	35.59	31.4	5.41	36.24	36.16	54.	00	-17.84	Vertical
7311.00	27.25	36.12	7.24	34.35	36.26	54.	00	-17.74	Vertical
9748.00	25.97	38.05	7.96	34.19	37.79	54.	00	-16.21	Vertical
12185.00	*					54.	00		Vertical
14622.00	*					54.	00		Vertical
17059.00	*					54.	00		Vertical
4874.00	30.88	31.4	5.41	36.24	31.45	54.	00	-22.55	Horizontal
7311.00	26.01	36.12	7.24	34.35	35.02	54.	00	-18.98	Horizontal
9748.00	26.01	38.05	7.96	34.19	37.83	54.	00	-16.17	Horizontal
12185.00	*					54.	00		Horizontal
14622.00	*					54.	00		Horizontal
17059.00	*					54.	00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11g_MI	MO_Chain	A+B	Test channel: H		est	
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	46.09	31.52	5.38	36.23	46.76	74.00	-27.24	Vertical
7386.00	39.64	36.29	7.46	34.42	48.97	74.00	-25.03	Vertical
9848.00	39.55	38.23	8.04	34.23	51.59	74.00	-22.41	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	45.05	31.52	5.38	36.23	45.72	74.00	-28.28	Horizontal
7386.00	38.78	36.29	7.46	34.42	48.11	74.00	-25.89	Horizontal
9848.00	38.61	38.23	8.04	34.23	50.65	74.00	-23.35	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal
Average val							•	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	34.37	31.52	5.38	36.23	35.04	54.00	-18.96	Vertical
7386.00	26.21	36.29	7.46	34.42	35.54	54.00	-18.46	Vertical
9848.00	26.01	38.23	8.04	34.23	38.05	54.00	-15.95	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	36.33	31.52	5.38	36.23	37	54.00	-17.00	Horizontal
7386.00	25.14	36.29	7.46	34.42	34.47	54.00	-19.53	Horizontal
9848.00	26.01	38.23	8.04	34.23	38.05	54.00	-15.95	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*					54.00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(HT2	20)_MIMO	_Chain A+B	Test char	nnel:	Lowe	est	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4824.00	47.86	31.28	5.44	36.26	48.32	74.00		-25.68	Vertical
7236.00	40.77	35.94	7.02	34.27	49.46	74.	00	-24.54	Vertical
9648.00	40.09	37.87	7.82	34.15	51.63	74.	00	-22.37	Vertical
12060.00	*					74.	00		Vertical
14472.00	*					74.	00		Vertical
16884.00	*					74.	00		Vertical
4824.00	41.83	31.28	5.44	36.26	42.29	74.	00	-31.71	Horizontal
7236.00	38.82	35.94	7.02	34.27	47.51	74.	00	-26.49	Horizontal
9648.00	39.96	37.87	7.82	34.15	51.5	74.00		-22.50	Horizontal
12060.00	*					74.00			Horizontal
14472.00	*					74.00			Horizontal
16884.00	*					74.00			Horizontal
Average val	ue:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4824.00	35.26	31.28	5.44	36.26	35.72	54.	00	-18.28	Vertical
7236.00	27.22	35.94	7.02	34.27	35.91	54.	00	-18.09	Vertical
9648.00	26.91	37.87	7.82	34.15	38.45	54.	00	-15.55	Vertical
12060.00	*					54.	00		Vertical
14472.00	*					54.	00		Vertical
16884.00	*					54.	00		Vertical
4824.00	29.85	31.28	5.44	36.26	30.31	54.	00	-23.69	Horizontal
7236.00	26.08	35.94	7.02	34.27	34.77	54.	00	-19.23	Horizontal
9648.00	26.89	37.87	7.82	34.15	38.43	54.	00	-15.57	Horizontal
12060.00	*					54.	00		Horizontal
14472.00	*					54.	00		Horizontal
16884.00	*					54.00			Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(HT2	20)_MIMO	_Chain A+B	Test char	nnel:	Midd	е	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4874.00	47.36	31.4	5.41	36.24	47.93	74.	00	-26.07	Vertical
7311.00	39.12	36.12	7.24	34.35	48.13	74.	00	-25.87	Vertical
9748.00	39.99	38.05	7.96	34.19	51.81	74.	00	-22.19	Vertical
12185.00	*					74.	00		Vertical
14622.00	*					74.	00		Vertical
17059.00	*					74.	00		Vertical
4874.00	43.21	31.4	5.41	36.24	43.78	74.	00	-30.22	Horizontal
7311.00	39.17	36.12	7.24	34.35	48.18	74.	00	-25.82	Horizontal
9748.00	39.41	38.05	7.96	34.19	51.23	74.00		-22.77	Horizontal
12185.00	*					74.00			Horizontal
14622.00	*					74.00			Horizontal
17059.00	*					74.00			Horizontal
Average val	ue:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4874.00	35.91	31.4	5.41	36.24	36.48	54.	00	-17.52	Vertical
7311.00	26.71	36.12	7.24	34.35	35.72	54.	00	-18.28	Vertical
9748.00	27.05	38.05	7.96	34.19	38.87	54.	00	-15.13	Vertical
12185.00	*					54.	00		Vertical
14622.00	*					54.	00		Vertical
17059.00	*					54.	00		Vertical
4874.00	30.6	31.4	5.41	36.24	31.17	54.	00	-22.83	Horizontal
7311.00	25.82	36.12	7.24	34.35	34.83	54.	00	-19.17	Horizontal
9748.00	26.06	38.05	7.96	34.19	37.88	54.	00	-16.12	Horizontal
12185.00	*					54.	00		Horizontal
14622.00	*					54.	00		Horizontal
17059.00	*					54.	00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(HT2	20)_MIMO	_Chain A+B	Test char	nnel:	Highe	est	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4924.00	45.77	31.52	5.38	36.23	46.44	74.	.00	-27.56	Vertical
7386.00	38.75	36.29	7.46	34.42	48.08	74.	.00	-25.92	Vertical
9848.00	39.47	38.23	8.04	34.23	51.51	74.	.00	-22.49	Vertical
12310.00	*					74.	.00		Vertical
14772.00	*					74.	.00		Vertical
17234.00	*					74.	.00		Vertical
4924.00	45.16	31.52	5.38	36.23	45.83	74.	.00	-28.17	Horizontal
7386.00	39.06	36.29	7.46	34.42	48.39	74.	.00	-25.61	Horizontal
9848.00	38.78	38.23	8.04	34.23	50.82	74.00		-23.18	Horizontal
12310.00	*					74.00			Horizontal
14772.00	*					74.00			Horizontal
17234.00	*					74.00			Horizontal
Average val		_							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4924.00	34.36	31.52	5.38	36.23	35.03	54.	.00	-18.97	Vertical
7386.00	25.78	36.29	7.46	34.42	35.11	54.	.00	-18.89	Vertical
9848.00	25.99	38.23	8.04	34.23	38.03	54.	.00	-15.97	Vertical
12310.00	*					54.	.00		Vertical
14772.00	*					54.	.00		Vertical
17234.00	*					54.	.00		Vertical
4924.00	31.55	31.52	5.38	36.23	32.22	54.	.00	-21.78	Horizontal
7386.00	25.08	36.29	7.46	34.42	34.41	54.	.00	-19.59	Horizontal
9848.00	26.01	38.23	8.04	34.23	38.05	54.	.00	-15.95	Horizontal
12310.00	*					54.	.00		Horizontal
14772.00	*					54.	.00		Horizontal
17234.00	*					54.00			Horizontal

<sup>1</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2 &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(HT40)_MIMO_Chain A+B			Test char	nnel: Low	est	
Peak value:					<u> </u>	•		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4844.00	46.62	31.33	5.43	36.25	47.13	74.00	-26.87	Vertical
7266.00	40.08	36.01	7.11	34.3	48.9	74.00	-25.1	Vertical
9688.00	39.19	37.94	7.88	34.16	50.85	74.00	-23.15	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4844.00	41.96	31.33	5.43	36.25	42.47	74.00	-31.53	Horizontal
7266.00	38.52	36.01	7.11	34.3	47.34	74.00	-26.66	Horizontal
9688.00	39.68	37.94	7.88	34.16	51.34	74.00	-22.66	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal

# Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4844.00	35.57	31.33	5.43	36.25	36.08	54.00	-17.92	Vertical
7266.00	26.51	36.01	7.11	34.3	35.33	54.00	-18.67	Vertical
9688.00	26.65	37.94	7.88	34.16	38.31	54.00	-15.69	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4844.00	29.73	31.33	5.43	36.25	30.24	54.00	-23.76	Horizontal
7266.00	25.87	36.01	7.11	34.3	34.69	54.00	-19.31	Horizontal
9688.00	26.65	37.94	7.88	34.16	38.31	54.00	-15.69	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(HT	40)_MIMO	_Chain A+B	B Test channel: Mid		Midd	le	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4874.00	47.07	31.4	5.41	36.24	47.64	74.00		-26.36	Vertical
7311.00	39.28	36.12	7.24	34.35	48.29	74.	00	-25.71	Vertical
9748.00	38.92	38.05	7.96	34.19	50.74	74.	00	-23.26	Vertical
12185.00	*					74.	00		Vertical
14622.00	*					74.	00		Vertical
17059.00	*					74.	00		Vertical
4874.00	42.53	31.4	5.41	36.24	43.1	74.	00	-30.9	Horizontal
7311.00	39.12	36.12	7.24	34.35	48.13	74.	00	-25.87	Horizontal
9748.00	38.72	38.05	7.96	34.19	50.54	74.00		-23.46	Horizontal
12185.00	*					74.00			Horizontal
14622.00	*					74.00			Horizontal
17059.00	*					74.00			Horizontal
Average val	ue:	•							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4874.00	34.13	31.4	5.41	36.24	34.7	54.	00	-19.3	Vertical
7311.00	25.97	36.12	7.24	34.35	34.98	54.	00	-19.02	Vertical
9748.00	26.04	38.05	7.96	34.19	37.86	54.	00	-16.14	Vertical
12185.00	*					54.	00		Vertical
14622.00	*					54.	00		Vertical
17059.00	*					54.	00		Vertical
4874.00	30.41	31.4	5.41	36.24	30.98	54.	00	-23.02	Horizontal
7311.00	25.62	36.12	7.24	34.35	34.63	54.	00	-19.37	Horizontal
9748.00	26.08	38.05	7.96	34.19	37.9	54.	00	-16.1	Horizontal
12185.00	*					54.	00		Horizontal
14622.00	*					54.	00		Horizontal
17059.00	*					54.	00		Horizontal

<sup>1.</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2. &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(HT	40)_MIMO	_Chain A+B	Test char	nnel:	Highe	est	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4904.00	44.33	31.47	5.39	36.23	44.96	74.00		-29.04	Vertical
7356.00	38.63	36.22	7.37	34.39	47.83	74.	00	-26.17	Vertical
9808.00	39.18	38.15	8.03	34.22	51.14	74.	00	-22.86	Vertical
12310.00	*					74.	00		Vertical
14772.00	*					74.	00		Vertical
17234.00	*					74.	00		Vertical
4904.00	43.15	31.47	5.39	36.23	43.78	74.	00	-30.22	Horizontal
7356.00	38.75	36.22	7.37	34.39	47.95	74.	00	-26.05	Horizontal
9808.00	39.5	38.15	8.03	34.22	51.46	74.00		-22.54	Horizontal
12310.00	*					74.00			Horizontal
14772.00	*					74.00			Horizontal
17234.00	*					74.00			Horizontal
Average val	ue:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBu		Over Limit (dB)	polarization
4904.00	33.55	31.47	5.39	36.23	34.18	54.	00	-19.82	Vertical
7356.00	25.61	36.22	7.37	34.39	34.81	54.	00	-19.19	Vertical
9808.00	25.95	38.15	8.03	34.22	37.91	54.	00	-16.09	Vertical
12310.00	*					54.	00		Vertical
14772.00	*					54.	00		Vertical
17234.00	*					54.	00		Vertical
4904.00	29.78	31.47	5.39	36.23	30.41	54.	00	-23.59	Horizontal
7356.00	25.19	36.22	7.37	34.39	34.39	54.	00	-19.61	Horizontal
9808.00	25.95	38.15	8.03	34.22	37.91	54.	00	-16.09	Horizontal
12310.00	*					54.	00		Horizontal
14772.00	*					54.00			Horizontal
17234.00	*					54.00			Horizontal

<sup>1</sup> Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

<sup>2 &</sup>quot;\*", means this data is the too weak instrument of signal is unable to test.



# 8 Test Setup Photo

Radiated Emission







Conducted Emission



# 9 EUT Constructional Details

Reference to the test report No. GTS201806000179F01

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