

Report No. : BLA-EMC-201911-A53-02
6.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407 (a) (1) (ii) & (a) (3)					
Test Method:	ANSI C63.10:2013, KDB 789033					
Limit:	Band 1: 17 dBm/MHz (The maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.); Band 4: 30dBm/500kHz					
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
Test Instruments:	Refer to section 5.7 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Passed					

Measurement Data

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China

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Band 1

Band I							
Mode	Test CH		(dBm)	Total	Limit	Result	
Wiode	1001011	ANT1	ANT2	(dBm)	(dBm)	rtoodit	
	Lowest	1.32	2.00	/	17.00	Pass	
802.11a	Middle	2.48	3.07	/	17.00	Pass	
	Highest	3.59	4.39	/	17.00	Pass	
	Lowest	1.19	2.00	4.62	17.00	Pass	
802.11n(HT20) MIMO	Middle	2.45	2.57	5.52	17.00	Pass	
	Highest	3.30	4.42	6.91	17.00	Pass	
802.11n(HT40)	Lowest	-1.26	-1.61	1.58	17.00	Pass	
MIMO	Highest	-0.74	-0.05	2.63	17.00	Pass	
	Lowest	-0.75	1.31	3.41	17.00	Pass	
802.11ac(HT20) MIMO	Middle	0.32	0.54	3.44	17.00	Pass	
	Highest	2.23	1.74	5.00	17.00	Pass	
802.11ac(HT40) MIMO	Lowest	-3.37	-3.33	-0.34	17.00	Pass	
	Highest	-1.53	-0.63	1.95	17.00	Pass	
802.11ac(HT80) MIMO	Middle	-2.92	-3.71	-0.29	17.00	Pass	

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Band 4

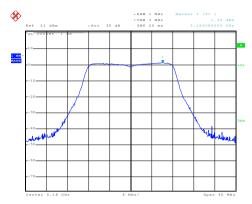
	T (011	PSD(d	Bm)	Total	Limit	5
Mode	Test CH	ANT1	ÁNT2	(dBm)	(dBm)	Result
	Lowest	2.06	3.70	/	30.00	Pass
802.11a	Middle	3.75	0.26	/	30.00	Pass
	Highest	3.52	-1.13	/	3.000	Pass
	Lowest	2.40	0.71	4.65	30.00	Pass
802.11n(HT20) MIMO	Middle	4.47	0.21	2.85	30.00	Pass
	Highest	4.29	-0.87	5.45	30.00	Pass
802.11n(HT40)	Lowest	-4.67	-3.22	-0.87	30.00	Pass
MIMO	Highest	-3.62	-4.20	-0.89	30.00	Pass
	Lowest	-0.13	1.57	2.22	3.000	Pass
802.11ac(HT20) MIMO	Middle	0.84	0.53	3.70	30.00	Pass
	Highest	0.20	-0.43	2.91	30.00	Pass
802.11ac(HT40) MIMO	Lowest	-5.07	-3.76	-1.36	30.00	Pass
IVIIIVIO	Highest	-3.41	-4.70	-1.00	30.00	Pass
802.11ac(HT80) MIMO	Middle	-6.23	-5.66	-2.93	30.00	Pass



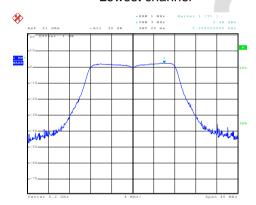
Test plot as follows:

Band 1: ANT1

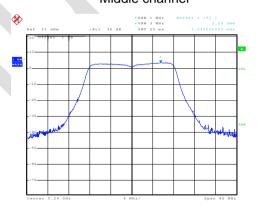




Lowest channel



Middle channel



Highest channel

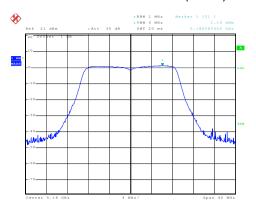
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

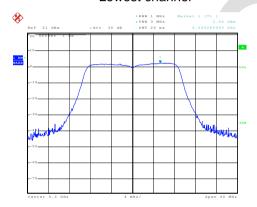
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



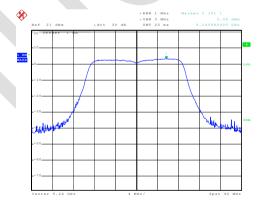
Test mode: 802.11n(HT20)



Lowest channel



Date: 6.DEC.2019 16:11:20 Middle channel



Highest channel

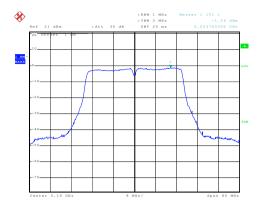
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

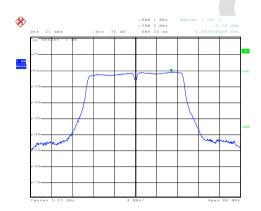
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11n(HT40)



Lowest channel



Highest channel

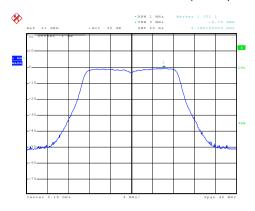
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

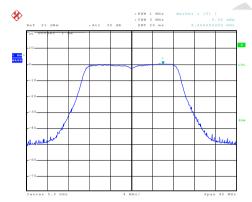
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



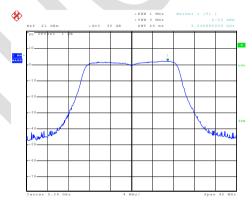
Test mode: 802.11ac(HT20)



Date: 6.DEC.2019 16:13:48 Lowest channel



Date: 6.DEC.2019 16:13:15 Middle channel



Highest channel

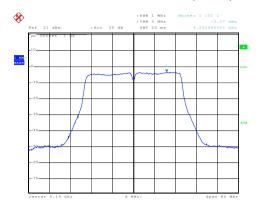
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

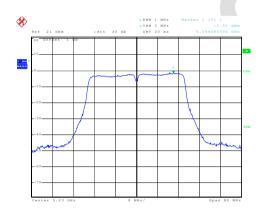
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11ac(HT40)



Lowest channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

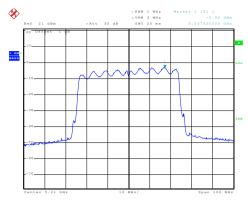
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Test mode: 802.11ac(HT80)



Middle channel

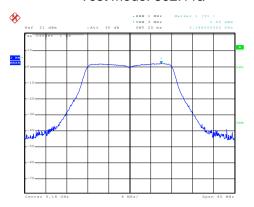
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

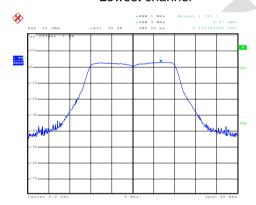
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China

Band1 ANT2:

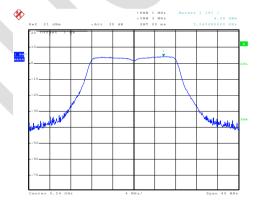
Test mode: 802.11a



Lowest channel



Middle channel



Highest channel

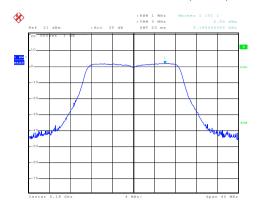
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

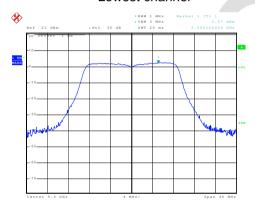
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



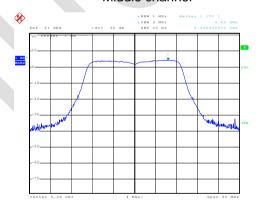
Test mode: 802.11n(HT20)



Lowest channel



Middle channel



Highest channel

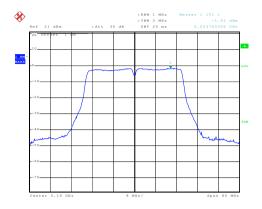
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

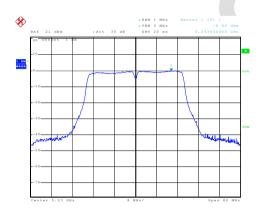
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11n(HT40)



Lowest channel



Highest channel

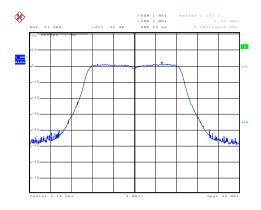
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

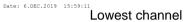
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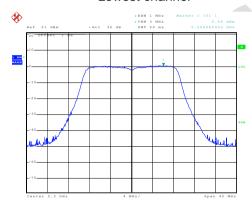
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



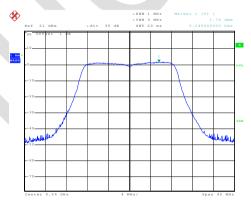
Test mode: 802.11ac(HT20)







Middle channel



Highest channel

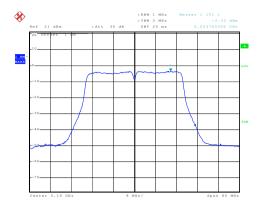
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

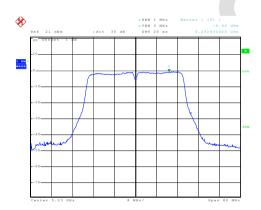
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11ac(HT40)



Lowest channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

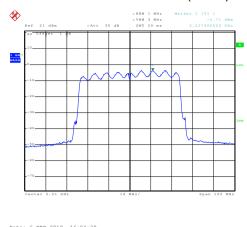
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Test mode: 802.11ac(HT80)



Middle channel

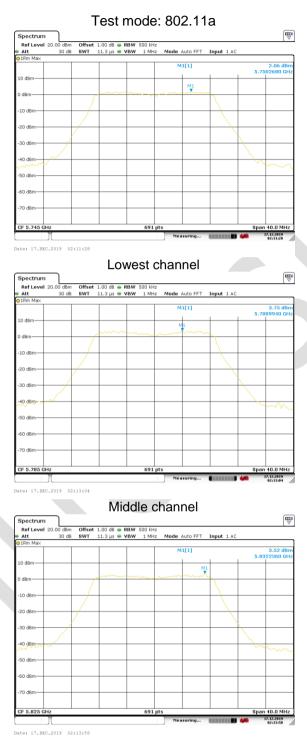
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

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Band 4 ANT1:



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

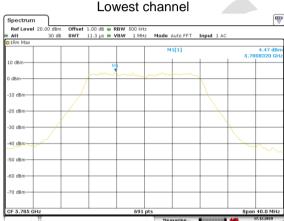
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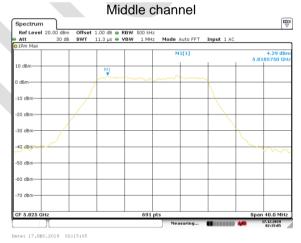
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11n(HT20)







Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

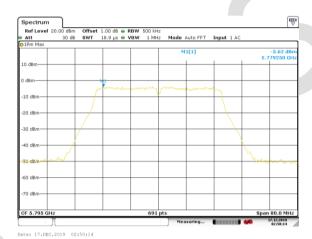
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11n(HT40)



Lowest channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

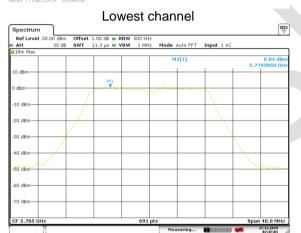
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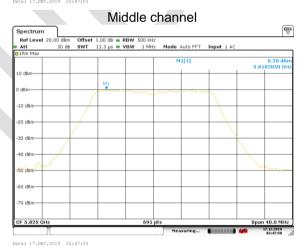
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11ac(HT20)







Highest channel

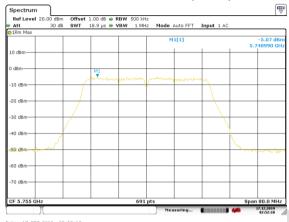
BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

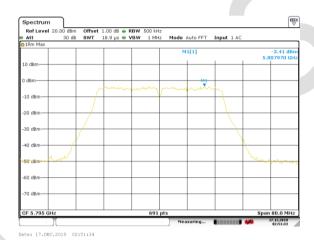
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11ac(HT40)



Lowest channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Middle channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

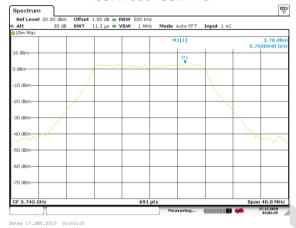
IOT Test Centre of BlueAsia,

No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China

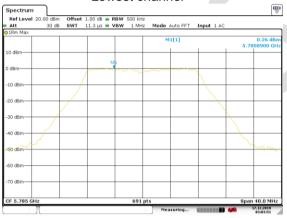


Band 4 ANT2:



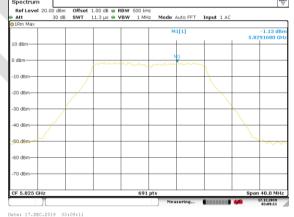


Lowest channel



6 Date: 17.DEC.2019 03:03:51

Middle channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

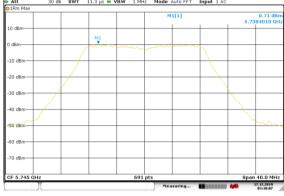
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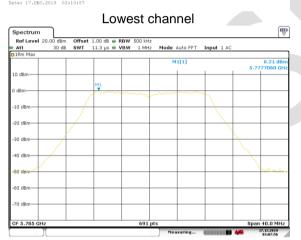
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China

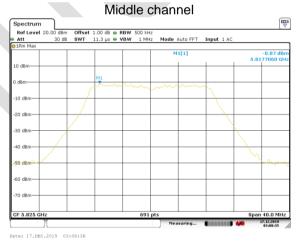


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Test mode: 802.11n(HT20)







Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11n(HT40)



Lowest channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

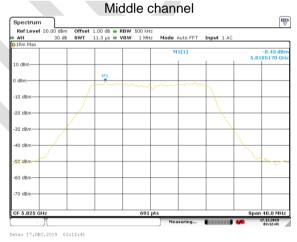
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11ac(HT20)







Highest channel

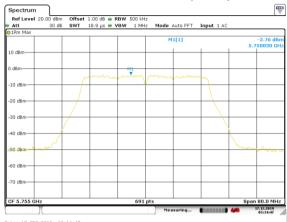
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Test mode: 802.11ac(HT40)



Lowest channel



Highest channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



Test mode: 802.11ac(HT80)



Middle channel

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

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6.6 Band Edge

Test Requirement:	FCC Part15 E Section 15.407 (b)					
Test Method:	ANSI C63.10:2013, KDB 789033					
Receiver setup:						
receiver detap.	Detector	RBW	VBW	Remark		
	Quasi-peak	120kHz	300kHz	Quasi-peak Va	alue	
	RMS	1MHz	3MHz	Average Valu	ıe	
Limit:						
			Limit (d	BuV/m @3m)	Remark	
	Bond	4	,	68.20	Peak Value	
	Band	ļ		54.00	Average Value	
	Band	1		68.20	Peak Value	
	Danu	7		54.00	Average Value	
	Remark: 1. Band 1/4 lir E[dBµV/m]:] + 95.2=68.2	2 dBuV/m, for EIPI	R[dBm]= -27dBm.	
Test Procedure:	the ground to determin 2. The EUT w antenna, who tower. 3. The antenn the ground Both horizo make the m 4. For each sucase and the meters and to find the r 5. The test-results specified B 6. If the emisses the limit specified B 7. The test-results and to find the r 8. Specified B 9. If the emisses the limit specified B 10. If the emisses the limit specified B 11. The test-results are specified B 12. The test-results are specified B 13. The test-results are specified B 14. The test-results are specified B 15. The test-results are specified B 16. If the emisses the limit specified B 17. The test-results are specified B 18. The test-results are specified B 19. The test-results are specified B 19. The test-results are specified B 19. The test-results are specified B 10. The test-results are specified B	at a 3 meters of the position	er camber. Ton of the histers away to ounted on to varied from the the maximum of the maximum of the was turner ading. The en was set with Maximum of the EUT in the testing corred. Other the testing corred. Other the testing corred. Other the testing corred. Other testing corred.	The table was roghest radiation. If you have the interference he top of a variation one meter to formum value of the zations of the analysis of the analysis of the analysis of the ed from 0 degree to Peak Detect Film Hold Mode, peak mode was all do be stopped an erwise the emissis of the emissis of the control of the peak mode was all the control of	ur meters above e field strength. Intenna are set to ged to its worst from 1 meter to 4 dees to 360 degrees function and at 10dB lower than and the peak values assions that did not using peak, quasi-	
Test setup:	Tum Table < 150cm > 1	1 11111111111	Test Antenna»	fier		
Test Instruments:	Refer to section	5.7 for deta	ails	W		
Test mode:	Refer to section	5.3 for deta	ails			

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

IOT Test Centre of BlueAsia,

No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China



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Test results: Passed

Band 1: ANT1:

			802.11a			
Test	channel	Lowest	Lev	el	P	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	55.43	-9.72	45.71	68.20	-22.49	Horizontal
5150.00	53.26	-9.60	43.66	68.20	-24.54	Vertical
			802.11a			
Test	channel	Lowest	Lev	el	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	41.32	-9.72	31.60	54.00	-22.40	Horizontal
5150.00	40.04	-9.60	30.44	54.00	-23.56	Vertical
			802.11a			
Test	channel	Highest	Lev	el	P	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	54.37	-9.44	44.93	68.20	-23.27	Horizontal
5350.00	52.21	-9.16	43.05	68.20	-25.15	Vertical
			802.11a			
Test	channel	Highest	Lev	el	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	40.05	-9.44	30.61	54.00	-23.99	Horizontal
5350.00	39.39	-9.16	30.23	54.00	-23.77	Vertical

ANT2:

ANT2:						
			802.11a			
Test	channel	Lowest	Lev	el	P	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	53.76	-9.72	44.04	68.20	-24.16	Horizontal
5150.00	52.19	-9.60	42.59	68.20	-25.61	Vertical
			802.11a			
Test	channel	Lowest	Lev	el	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	42.07	-9.72	32.35	54.00	-21.65	Horizontal
5150.00	41.45	-9.60	31.85	54.00	-22.15	Vertical
			802.11a			
Test	channel	Highest	Lev	el	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	53.59	-9.44	44.15	68.20	-24.05	Horizontal
5350.00	52.01	-9.16	42.85	68.20	-25.35	Vertical
			802.11a			
Test	channel	Highest	Lev	el	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	40.04	-9.44	30.60	54.00	-23.40	Horizontal
5350.00	39.58	-9.16	30.42	54.00	-23.58	Vertical

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MIMO:

	802.11n-HT20							
Test o	hannel	Lowest	Le	vel	Р	eak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5150.00	55.36	-9.72	45.64	68.20	-22.56	Horizontal		
5150.00	51.04	-9.60	41.44	68.20	-26.76	Vertical		
			802.11n-HT20					
Test o	hannel	Lowest	Le	vel	Ave	erage		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5150.00	41.58	-9.72	31.86	54.00	-22.14	Horizontal		
5150.00	39.37	-9.60	29.77	54.00	-24.23	Vertical		
			802.11n-HT20					
Test o	hannel	Highest	Level		Peak			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	55.46	-9.44	46.02	68.20	-22.18	Horizontal		
5350.00	53.71	-9.16	44.55	68.20	-23.65	Vertical		
			802.11n-HT20					
Test o	hannel	Highest	Le	vel	Ave	erage		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	41.15	-9.44	31.71	54.00	-22.29	Horizontal		
5350.00	40.03	-9.16	30.87	54.00	-23.13	Vertical		

			802.11n-HT40			
Test of	hannel	Lowest	Le	vel	Р	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	53.68	-9.72	43.96	68.20	-24.24	Horizontal
5150.00	52.14	-9.60	42.54	68.20	-25.66	Vertical
			802.11n-HT40			
Test o	hannel	Lowest	Le	vel	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	39.67	-9.72	29.95	54.00	-24.05	Horizontal
5150.00	40.11	-9.60	30.51	54.00	-23.49	Vertical
			802.11n-HT40			
Test o	hannel	Highest	Level		Р	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	53.47	-9.44	44.03	68.20	-24.17	Horizontal
5350.00	52.51	-9.16	43.35	68.20	-24.85	Vertical
			802.11n-HT40			
Test o	hannel	Highest	Le	vel	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	39.48	-9.44	30.04	54.00	-23.96	Horizontal
5350.00	38.14	-9.16	28.98	54.00	-25.02	Vertical

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			802.11ac-HT20			
Test c	hannel	Lowest	Le	vel	Р	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	53.35	-9.72	43.63	68.20	-24.57	Horizontal
5150.00	51.89	-9.60	42.29	68.20	-25.91	Vertical
			802.11ac-HT20			
Test o	hannel	Lowest	Le	vel	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	40.24	-9.72	30.52	54.00	-23.48	Horizontal
5150.00	39.19	-9.60	29.59	54.00	-24.41	Vertical
			802.11ac-HT20			
Test o	hannel	Highest	Le	vel	P	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	54.58	-9.44	45.14	68.20	-23.06	Horizontal
5350.00	52.13	-9.16	42.97	68.20	-25.23	Vertical
			802.11ac-HT20			
Test o	hannel	Highest	Le	vel	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	40.21	-9.44	30.77	54.00	-23.23	Horizontal
5350.00	39.76	-9.16	30.60	54.00	-23.40	Vertical

	802.11ac-HT40							
Test c	hannel	Lowest	Le	vel	Р	eak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5150.00	54.01	-9.72	44.29	68.20	-23.91	Horizontal		
5150.00	53.37	-9.60	43.77	68.20	-24.43	Vertical		
			802.11ac-HT40					
Test o	hannel	Lowest	Le	vel	Av	erage		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5150.00	40.02	-9.72	30.30	54.00	-23.70	Horizontal		
5150.00	40.16	-9.60	30.56	54.00	-23.44	Vertical		
			802.11ac-HT40					
Test o	hannel	Highest	Le	vel	P	Peak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	53.74	-9.44	44.30	68.20	-23.90	Horizontal		
5350.00	52.81	-9.16	43.65	68.20	-24.55	Vertical		
			802.11ac-HT40					
Test o	hannel	Highest	Le	vel	Av	erage		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5350.00	39.69	-9.44	30.25	54.00	-23.75	Horizontal		
5350.00	40.03	-9.16	30.87	54.00	-23.13	Vertical		

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			802.11ac-HT80			
Test of	hannel		Le	vel	P	'eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	53.58	-9.72	43.86	68.20	-24.34	Horizontal
5150.00	52.05	-9.60	42.45	68.20	-25.75	Vertical
			802.11ac-HT80			
Test of	hannel		Le	vel	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5150.00	39.03	-9.72	29.31	54.00	-24.69	Horizontal
5150.00	38.24	-9.60	28.64	54.00	-25.36	Vertical
			802.11ac-HT80			
Test of	hannel		Le	vel	P	'eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	54.25	-9.44	44.81	68.20	-23.39	Horizontal
5350.00	52.86	-9.16	43.70	68.20	-24.50	Vertical
			802.11ac-HT80			
Test of	Test channel L		Le	vel	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	39.06	-9.44	29.62	54.00	-24.38	Horizontal
5350.00	39.34	-9.16	30.18	54.00	-23.82	Vertical

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.
- 3. Correct factor= Antenna Factor + Cable Loss Preamplifier Factor

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Band 4: ANT1:

	802.11a							
Test of	hannel	Lowest	Le	vel	P	eak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	56.36	-8.58	47.78	68.20	-20.42	Horizontal		
5725.00	54.03	-8.49	45.54	68.20	-22.66	Vertical		
			802.11a					
Test of	hannel	Lowest	Le	vel	Ave	erage		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5725.00	42.03	-8.58	33.45	54.00	-20.55	Horizontal		
5725.00	43.54	-8.49	35.05	54.00	-18.95	Vertical		
			802.11a					
Test of	hannel	Highest	Level		P	eak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5850.00	52.78	-8.25	44.53	68.20	-23.67	Horizontal		
5850.00	51.46	-8.34	43.12	68.20	-25.08	Vertical		
			802.11a					
Test of	hannel	nel Highest Level		Ave	erage			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
5850.00	41.36	-8.25	33.11	54.00	-20.89	Horizontal		
5850.00	39.29	-8.34	30.95	54.00	-23.05	Vertical		

ANT2:

ANT2:						
			802.11a			
Test channel		Lowest	Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	54.36	-8.58	45.78	68.20	-22.42	Horizontal
5725.00	53.91	-8.49	45.42	68.20	-22.78	Vertical
			802.11a			
Test c	hannel	Lowest	Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	42.36	-8.58	33.78	54.00	-20.22	Horizontal
5725.00	41.08	-8.49	32.59	54.00	-21.41	Vertical
			802.11a			
Test c	hannel	Highest	Le	vel	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	53.24	-8.25	44.99	68.20	-23.21	Horizontal
5850.00	52.09	-8.34	43.75	68.20	-24.45	Vertical
			802.11a			
Test channel Highest		Highest	Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	41.14	-8.25	32.89	54.00	-21.11	Horizontal
5850.00	39.91	-8.34	31.57	54.00	-22.43	Vertical

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802.11n-HT20						
Test channel		Lowest	Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	55.01	-8.58	46.43	68.20	-21.77	Horizontal
5725.00	54.23	-8.49	45.74	68.20	-22.46	Vertical
			802.11n-HT20			
Tes	t channel	Lowest	Le	vel	Ave	rage
Frequency (MHz)	Read Level (dBuV/m)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	40.17	-8.58	31.59	54.00	-22.41	Horizontal
5725.00	39.65	-8.49	31.16	54.00	-22.84	Vertical
			802.11n-HT20			
Tes	t channel	Highest	Le	vel	Pe	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	53.37	-8.25	45.12	68.20	-23.08	Horizontal
5850.00	52.06	-8.34	43.72	68.20	-24.48	Vertical
802.11n-HT20						
Test channel		Highest	Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	39.65	-8.25	31.40	54.00	-22.60	Horizontal
5850.00	38.16	-8.34	29.82	54.00	-24.18	Vertical

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			802.11n-HT40			
Test channel		Lowest	Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	53.69	-8.58	45.11	68.20	-23.09	Horizontal
5725.00	52.01	-8.49	43.52	68.20	-24.68	Vertical
			802.11n-HT40			
Tes	st channel	Lowest	Le	vel	Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	39.95	-8.58	31.37	54.00	-22.63	Horizontal
5725.00	40.43	-8.49	31.94	54.00	-22.06	Vertical
			802.11n-HT40			
Tes	Test channel		Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	54.49	-8.25	46.24	68.20	-21.96	Horizontal
5850.00	53.03	-8.34	44.69	68.20	-23.51	Vertical
			802.11n-HT40			
Test channel		Highest	Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	39.91	-8.25	31.66	54.00	-22.34	Horizontal
5850.00	40.15	-8.34	31.81	54.00	-22.19	Vertical

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802.11ac-HT20							
Test channel		Lowest	Level		Peak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5725.00	54.36	-8.58	45.78	68.20	-22.42	Horizontal	
5725.00	53.07	-8.49	44.58	68.20	-23.62	Vertical	
			802.11ac-HT20				
Tes	t channel	Lowest	Le	vel	Ave	rage	
Frequency (MHz)	Read Level (dBuV/m)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5725.00	42.03	-8.58	33.45	54.00	-20.55	Horizontal	
5725.00	41.19	-8.49	32.70	54.00	-21.30	Vertical	
			802.11ac-HT20				
Tes	t channel	Highest	Le	vel	Pe	eak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5850.00	53.74	-8.25	45.49	68.20	-22.71	Horizontal	
5850.00	52.06	-8.34	43.72	68.20	-24.48	Vertical	
802.11ac-HT20							
Test channel		Highest	Level		Average		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5850.00	39.45	-8.25	31.20	54.00	-22.80	Horizontal	
5850.00	40.03	-8.34	31.69	54.00	-22.31	Vertical	

			802.11ac-HT40			
Test channel		Lowest	Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	55.17	-8.58	46.59	68.20	-21.61	Horizontal
5725.00	53.06	-8.49	44.57	68.20	-23.63	Vertical
			802.11ac-HT40			
Tes	t channel	Lowest	Le	vel	Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	40.25	-8.58	31.67	54.00	-22.33	Horizontal
5725.00	39.37	-8.49	30.88	54.00	-23.12	Vertical
			802.11ac-HT40			
Tes	t channel	Highest	Le	vel	Pe	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	55.51	-8.25	47.26	68.20	-20.94	Horizontal
5850.00	54.03	-8.34	45.69	68.20	-22.51	Vertical
			802.11ac-HT40			
Test channel		Highest	Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	39.65	-8.25	31.40	54.00	-22.60	Horizontal
5850.00	40.01	-8.34	31.67	54.00	-22.33	Vertical

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			802.11ac-HT80			
Tes	t channel		Level		Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	55.03	-8.58	46.45	68.20	-21.75	Horizontal
5725.00	53.71	-8.49	45.22	68.20	-22.95	Vertical
			802.11ac-HT80			
Tes	t channel		Le	vel	Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5725.00	39.06	-8.58	30.48	54.00	-23.52	Horizontal
5725.00	39.14	-8.49	30.65	54.00	-23.55	Vertical
			802.11ac-HT80			
Tes	Test channel		Le	vel	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	54.41	-8.25	46.16	68.20	-22.04	Horizontal
5850.00	53.03	-8.34	44.69	68.20	-23.51	Vertical
			802.11ac-HT80			
Test channel			Level		Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5850.00	42.11	-8.25	33.86	54.00	-20.14	Horizontal
5850.00	41.34	-8.34	33.00	54.00	-21.00	Vertical

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.
- 3. Correct factor = Antenna Factor + Cable Loss Preamplifier Factor

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6.7 Spurious Emission

6.7.1 Restricted Band

Test Procedure: 7. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degree to determine the position of the highest radiation. 8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height anten tower. 9. 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. 10. 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 degree to find the maximum reading. 11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 12. 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 value of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quare peak or average method as specified and then reported in a data sheet. Test setup: Refer to section 5.7 for details Refer to section 5.3 for details	6.7.1	.1 Restricted Band								
Test Frequency Range: Band 1: 4.5 GHz to 5.15 GHz and 5.35GHz to 5.46GHz Test site: Measurement Distance: 3m Receiver setup: Frequency Detector RBW VBW Remark Above 1GHz RMS 1MHz 3MHz Peak Value Above 1GHz RMS 1MHz 3MHz Average Value Limit: Frequency Limit (dBuV/m ®3m) Remark Above 1GHz 74.00 Peak Value Above 1GHz 74.00 Average Value Test Procedure: 7. The EUT was placed on the top of a rotating table 0.8 meters above to determine the position of the highest radiation. 8. The EUT was placed on the top of a variable-height anten tower. 9. 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. 10. 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 truted from 0 degrees to 360 degree to find the maximum reading. 11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 12. If the emission level of the EUT in peak mode was 10dB lower that the limit specified, then testing could be stopped and the peak value of the EUT would be reported. Otherwise the emissions that did no have 10dB margin would be re-tested one by one using peak, qua peak or average method as specified and then reported in a data sheet. Test setup:		Test Requirement:	FCC Part15 E S	Section 15.407	(b)					
Receiver setup: Frequency		Test Method:	ANSI C63.10: 2	2013						
Test site: Measurement Distance: 3m Frequency Detector RBW VBW Remark Above 1GHz Peak 1MHz 3MHz Average Value RMS 1MHz 3MHz Average Value RMS 1MHz 3MHz Average Value Above 1GHz Frequency Limit (dBuV/m @3m) Remark Above 1GHz Frequency S4.00 Average Value S4.00 Average Value S4.00 Average Value Above 1GHz S4.00 Average Value Above 1GHz S4.00 Average Value Above 1GHz S4.00 Average Value Average Value Above 1GHz S4.00 Average Value Ave		Test Frequency Range:				z to 5.46GH	Ηz			
Frequency Detector RBW VBW Remark Above 1GHz Peak 1MHz 3MHz Average Value RMS 1MHz 3MHz Average Value Above 1GHz Frequency Limit (dBuV/m @3m) Remark Above 1GHz 74.00 Peak Value Above 1GHz 74.00 Average Value 1GHz 74.00 A		Test site:								
Frequency Detector RBW VBW Remark Above 1GHz Peak 1MHz 3MHz Peak Value RMS 1MHz 3MHz Average Value RMS 1MHz 3MHz Average Value Above 1GHz 74.00 Peak Value 54.00 Average Value Above 1GHz 74.00 Peak Value 54.00 Average Value 75.00 Avera										
Limit: Frequency		Trocorror cotup.	Frequency							
Limit: Frequency			Above 1GHz							
Frequency Above 1GHz 74.00 Peak Value 54.00 Average Value 54.00 Average Value 75.00 Average Value 76.00 The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degree to determine the position of the highest radiation. 8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height anten tower. 9. 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. 10. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meters to 4 meters and the rotal table was turned from 0 degrees to 360 degree to find the maximum reading. 11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 12. 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 value of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quare peak or average method as specified and then reported in a data sheet. Test setup: Test setup: Refer to section 5.7 for details Refer to section 5.3 for details		Limit		Average value						
Test Procedure: 7. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degree to determine the position of the highest radiation. 8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height anten tower. 9. 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. 10. For each suspected emission, the EUT was arranged to its worst case and then the antenna was turned from 0 degrees to 360 degree to find the maximum reading. 11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 12. If the emission level of the EUT in peak mode was 10dB lower that the limit specified, then testing could be stopped and the peak value of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quapeak or average method as specified and then reported in a data sheet. Test setup: Refer to section 5.7 for details Refer to section 5.3 for details		LIIIIII.	Frequency Limit (dBuV/m @3m) Re				Remark			
Test Procedure: 7. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degree to determine the position of the highest radiation. 8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height anten tower. 9. 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. 10. 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 tuned from 0 degrees to 360 degree to find the maximum reading. 11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 12. If the emission level of the EUT in peak mode was 10dB lower that the limit specified, then testing could be stopped and the peak value of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quapeak or average method as specified and then reported in a data sheet. Test setup: Refer to section 5.7 for details Refer to section 5.3 for details				-	_					
the ground at a 3 meter camber. The table was rotated 360 degree to determine the position of the highest radiation. 8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height anten tower. 9. 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. 10. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned from 0 degrees to 360 degree to find the maximum reading. 11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 12. If the emission level of the EUT in peak mode was 10dB lower that the limit specified, then testing could be stopped and the peak value of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quarpeak or average method as specified and then reported in a data sheet. Test setup: Test Instruments: Refer to section 5.7 for details Refer to section 5.3 for details			54.00 Average				Average Value			
Test Instruments: Refer to section 5.7 for details Test mode: Refer to section 5.3 for details			the ground to determing the EUT wantenna, watower. 9. The antenna the ground Both horizon make the range and the meters and to find the the Indian the limit spoof the EUT have 10dB peak or av	at a 3 meter of the the position was set 3 meter which was mount a height is various and height is various and vertice measurement. The the rota table maximum reactions and width with sion level of the would be reposited margin would	camber. The of the highers away from the on the tried from one the maximum cal polarization, the EU awas turned was turned was set to P Maximum He EUT in peasesting could borted. Otherwise re-tested	table was rest radiation. If the interferop of a variation of the analysis of	rence-receiving able-height antenna our meters above he field strength. Intenna are set to haged to its worst from 1 meter to 4 rees to 360 degrees. Function and his 10dB lower than and the peak values issions that did not be using peak, quasi-			
Test mode: Refer to section 5.3 for details		Test setup:	Tum Tables Survey Surve							
		Test Instruments:	Refer to section	5.7 for details	;					
		Test mode:	Refer to section	5.3 for details	i					
Test results: Passed		Test results:	Passed							

BlueAsia of Technical Services(Shenzhen) Co., Ltd.

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Band 1:

ANT1:

	802.11a									
Test	channel	Lowest	Lev	el el	P	eak				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4500.00	54.14	-8.45	45.69	74.00	-28.31	Horizontal				
4500.00	53.29	-8.45	44.84	74.00	-29.16	Vertical				
			802.11a							
Test	channel	Lowest	Lev	rel	Ave	erage				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4500.00	38.87	-8.45	30.42	54.00	-23.58	Horizontal				
4500.00	39.52	-8.45	31.07	54.00	-22.93	Vertical				
			802.11a							
Test	channel	Highest	Level		P	eak				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
5460.00	53.37	-9.87	43.50	74.00	-30.50	Horizontal				
5460.00	52.25	-9.50	42.75	74.00	-31.25	Vertical				
			802.11a							
Test	channel	Highest	Lev	rel	Ave	erage				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
5460.00	39.58	-9.87	29.71	54.00	-24.29	Horizontal				
5460.00	40.03	-9.50	30.53	54.00	-23.47	Vertical				

ANT2:

ANI2:							
			802.11a				
Test	channel	Lowest	Lev	el	Р	'eak	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4500.00	54.57	-8.45	46.12	74.00	-27.88	Horizontal	
4500.00	53.41	-8.45	44.96	74.00	-29.04	Vertical	
			802.11a				
Test	channel	Lowest	Lev	el	Ave	erage	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4500.00	39.06	-8.45	30.61	54.00	-23.39	Horizontal	
4500.00	38.44	-8.45	29.99	54.00	-24.01	Vertical	
			802.11a				
Test	channel	Highest	Level		Peak		
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5460.00	53.36	-9.87	43.49	74.00	-30.51	Horizontal	
5460.00	52.24	-9.50	42.74	74.00	-31.26	Vertical	
			802.11a				
Test	channel	Highest	Lev	el	Ave	erage	
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5460.00	38.84	-9.87	28.97	54.00	-25.03	Horizontal	
5460.00	39.46	-9.50	29.96	54.00	-24.04	Vertical	

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MIMO:

	802.11n-HT20									
Test c	hannel	Lowest	Le	vel	Р	eak				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4500.00	53.65	-8.45	45.20	74.00	-28.80	Horizontal				
4500.00	52.42	-8.45	43.97	74.00	-30.03	Vertical				
			802.11n-HT20							
Test c	hannel	Lowest	Le	vel	Ave	erage				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4500.00	39.03	-8.45	30.58	54.00	-23.42	Horizontal				
4500.00	38.84	-8.45	30.39	54.00	-23.61	Vertical				
			802.11n-HT20							
Test c	hannel	Highest	Le	vel	Р	eak				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
5460.00	53.15	-9.87	43.28	74.00	-30.72	Horizontal				
5460.00	52.20	-9.50	42.70	74.00	-31.30	Vertical				
			802.11n-HT20							
Test c	hannel	Highest	Le	vel	Ave	erage				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
5460.00	39.23	-9.87	29.36	54.00	-24.64	Horizontal				
5460.00	39.09	-9.50	29.59	54.00	-24.41	Vertical				

			802.11n-HT40			
Test of	hannel	Lowest	Le	vel	Р	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4500.00	54.41	-8.45	45.96	74.00	-28.04	Horizontal
4500.00	53.32	-8.45	44.87	74.00	-29.13	Vertical
			802.11n-HT40			
Test o	hannel	Lowest	Le	vel	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
4500.00	41.14	-8.45	32.69	54.00	-21.31	Horizontal
4500.00	39.38	-8.45	30.93	54.00	-23.07	Vertical
			802.11n-HT40			
Test o	hannel	Highest	Level		P	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5460.00	53.74	-9.87	43.87	74.00	-30.13	Horizontal
5460.00	52.22	-9.50	42.72	74.00	-31.28	Vertical
			802.11n-HT40			
Test c	hannel	Highest	Le	vel	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5460.00	39.17	-9.87	29.30	54.00	-24.70	Horizontal
5460.00	38.84	-9.50	29.34	54.00	-24.66	Vertical

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802.11ac-HT20									
Test c	hannel	Lowest	Le	vel	Р	'eak			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
4500.00	54.23	-8.45	45.78	74.00	-28.22	Horizontal			
4500.00	53.26	-8.45	44.81	74.00	-29.19	Vertical			
			802.11ac-HT20						
Test o	hannel	Lowest	Le	vel	Ave	erage			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
4500.00	38.48	-8.45	30.03	54.00	-23.97	Horizontal			
4500.00	39.26	-8.45	30.81	54.00	-23.19	Vertical			
			802.11ac-HT20						
Test o	hannel	Highest	Level		Р	'eak			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
5460.00	54.17	-9.87	44.30	74.00	-29.70	Horizontal			
5460.00	53.36	-9.50	43.86	74.00	-30.14	Vertical			
			802.11ac-HT20						
Test channel		Highest	Le	vel	Ave	erage			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
5460.00	39.22	-9.87	29.35	54.00	-24.65	Horizontal			
5460.00	38.34	-9.50	28.84	54.00	-26.16	Vertical			

	802.11ac-HT40									
Test o	hannel	Lowest	Lev	vel	Р	eak				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4500.00	53.36	-8.45	44.91	74.00	-29.09	Horizontal				
4500.00	52.87	-8.45	44.42	74.00	-29.58	Vertical				
			802.11ac-HT40							
Test o	hannel	Lowest	Lev	vel	Ave	erage				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
4500.00	40.44	-8.45	31.99	54.00	-22.01	Horizontal				
4500.00	39.56	-8.45	31.11	54.00	-22.89	Vertical				
			802.11ac-HT40							
Test o	hannel	Highest	Level		Peak					
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
5460.00	54.41	-9.87	44.54	74.00	-29.46	Horizontal				
5460.00	53.03	-9.50	43.53	74.00	-30.47	Vertical				
			802.11ac-HT40							
Test o	hannel	Highest	Lev	vel	Ave	erage				
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization				
5460.00	39.69	-9.87	29.82	54.00	-24.18	Horizontal				
5460.00	39.06	-9.50	29.56	54.00	-24.44	Vertical				

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802.11ac-HT80									
Test of	hannel		Le	vel	P	'eak			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
4500.00	54.43	-8.45	45.98	74.00	-28.02	Horizontal			
4500.00	52.58	-8.45	44.13	74.00	-29.87	Vertical			
			802.11ac-HT80						
Test of	hannel		Le	vel	Av	erage			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
4500.00	39.69	-8.45	31.24	54.00	-22.76	Horizontal			
4500.00	40.02	-8.45	31.57	54.00	-22.43	Vertical			
			802.11ac-HT80						
Test of	hannel		Le	vel	Р	'eak			
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
5460.00	53.36	-9.87	43.49	74.00	-30.51	Horizontal			
5460.00	52.24	-9.50	42.74	74.00	-31.26	Vertical			
			802.11ac-HT80						
Test channel		Le	vel	Average					
Frequency (MHz)	Read Level (dBuV/m)	Correct Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
5460.00	39.09	-9.87	29.22	54.00	-24.78	Horizontal			
5460.00	38.83	-9.50	29.33	54.00	-24.67	Vertical			

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.
- 3. Correct factor = Antenna Factor + Cable Loss Preamplifier Factor

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Band 4: 802.11a ANT1:

Test ch	annel	Lowest	Le	vel	P	eak
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	53.47	-9.44	44.03	74.00	-29.97	Horizontal
5460.00	52.51	-9.87	42.64	74.00	-31.36	Horizontal
5350.00	53.36	-9.44	43.92	74.00	-30.08	Vertical
5460.00	52.71	-9.87	42.84	74.00	-31.16	Vertical
Test ch	annel	Lowest	Le	vel	Ave	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	39.06	-9.44	29.62	54.00	-24.38	Horizontal
5460.00	38.87	-9.87	29.00	54.00	-25.00	Horizontal
5350.00	38.65	-9.44	29.21	54.00	-24.79	Vertical
5460.00	38.43	-9.87	28.56	54.00	-25.44	Vertical

ANT2:

Test ch	annel	Lowest	Le	vel	P	eak			
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
5350.00	52.36	-9.44	42.92	74.00	-31.08	Horizontal			
5460.00	53.01	-9.87	43.14	74.00	-30.86	Horizontal			
5350.00	53.54	-9.44	44.10	74.00	-29.90	Vertical			
5460.00	53.69	-9.87	43.82	74.00	-30.18	Vertical			
Test ch	annel	Lowest	Le	vel	Ave	erage			
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization			
5350.00	39.69	-9.44	30.25	54.00	-23.75	Horizontal			
5460.00	38.43	-9.87	28.56	54.00	-25.44	Horizontal			
5350.00	38.57	-9.44	29.13	54.00	-24.87	Vertical			
5460.00	38.81	-9.87	28.94	54.00	-25.06	Vertical			

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MIMO:

802.11n-HT20

Test c	hannel	Lowest	Level		F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	53.78	-9.44	44.34	74.00	-29.66	Horizontal
5460.00	53.36	-9.87	43.49	74.00	-30.51	Horizontal
5350.00	52.58	-9.44	43.14	74.00	-30.86	Vertical
5460.00	53.03	-9.87	43.16	74.00	-30.84	Vertical
Test c	hannel	Lowest	Lev	el	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	37.57	-9.44	28.13	54.00	-25.87	Horizontal
5460.00	38.26	-9.87	28.39	54.00	-25.61	Horizontal
5350.00	38.74	-9.44	29.30	54.00	-24.70	Vertical
5460.00	38.26	-9.87	28.39	54.00	-25.61	Vertical

802.11n-HT40

302.1111-11140						
Test c	hannel	Lowest	Lev	el	F	Peak
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	53.32	-9.44	43.88	74.00	-30.12	Horizontal
5460.00	53.41	-9.87	43.54	74.00	-30.46	Horizontal
5350.00	54.02	-9.44	44.58	74.00	-29.42	Vertical
5460.00	53.39	-9.87	43.52	74.00	-30.48	Vertical
Test c	hannel	Lowest	Lev	el	Av	erage
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
5350.00	38.84	-9.44	29.40	54.00	-24.60	Horizontal
5460.00	38.65	-9.87	28.78	54.00	-25.22	Horizontal
5350.00	38.34	-9.44	28.90	54.00	-2510	Vertical
5460.00	38.69	-9.87	28.82	54.00	-25.18	Vertical

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802.11ac-HT80

Test	t channel		Le	vel	F	Peak	
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	53.36	-9.44	43.92	74.00	-30.08	Horizontal	
5460.00	52.74	-9.87	42.87	74.00	-31.13	Horizontal	
5350.00	54.04	-9.44	44.60	74.00	-29.40	Vertical	
5460.00	53.92	-9.87	44.05	74.00	-29.95	Vertical	
Test	channel		Level		Av	Average	
Frequency (MHz)	Read Level (dBuV/m)	Correct factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
5350.00	39.58	-9.44	30.14	54.00	-23.86	Horizontal	
5460.00	38.03	-9.87	28.16	54.00	-25.84	Horizontal	
5350.00	37.86	-9.44	28.42	54.00	-25.58	Vertical	
5460.00	38.30	-9.87	28.43	54.00	-25.57	Vertical	

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.
- 3. Correct factor = Antenna Factor + Cable Loss Preamplifier Factor
- 4. All modulations have been tested ,only worse cases is reported

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6.7.2 Unwanted Emissions in the Restricted Bands

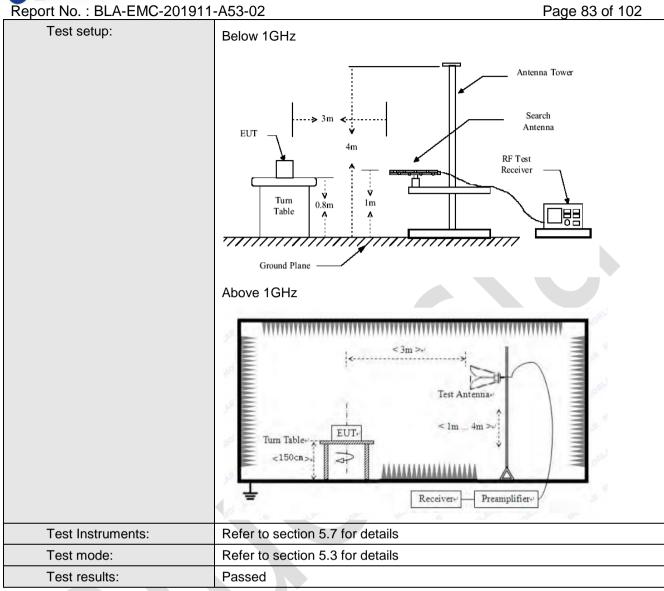
Test Requirement:	FCC Part15 C Section 15.209 and 15.205					
Test Method:	ANSI C63.10:20)13				
Test Frequency Range:	30MHz to 40GH	lz				
Test site:	Measurement D	istance: 3m				
Receiver setup:	Frequency 30MHz-1GHz Above 1GHz	Detector Quasi-peak Peak	RBW 120kHz 1MHz	VBW 300kHz 3MHz	Remark Quasi-peak Value Peak Value	
Limit:	Frequency Limit (dBuV/m @3m) Remark 30MHz-88MHz 40.0 Quasi-peak Value 88MHz-216MHz 43.5 Quasi-peak Value 216MHz-960MHz 46.0 Quasi-peak Value 960MHz-1GHz 54.0 Quasi-peak Value Frequency Limit (dBm/MHz) Remark Above 1GHz 68.20 Peak Value Remark: 1. Above 1GHz limit: E[dBµV/m] = EIRP[dBm] + 95.2=68.2 dBuV/m, for EIPR[dBm]=-27dBm.					
Test Procedure:	1. Above 1GHz limit: E[dBµV/m] = EIRP[dBm] + 95.2=68.2 dBuV/m, for EIPR[dBm]=-27dBm.					

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Below 1GHz Horizontal:

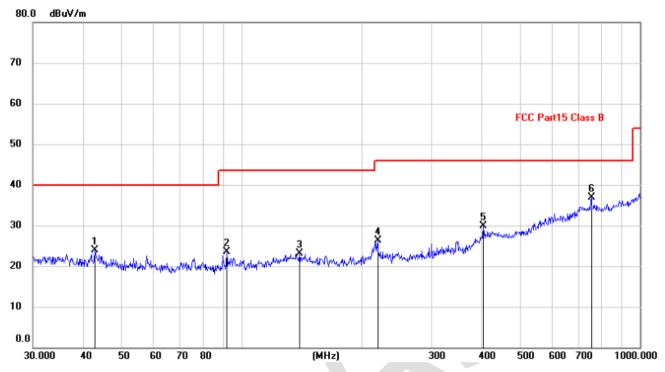
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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		34.1561	10.83	12.95	23.78	40.00	-16.22	QP
2		90.2205	13.61	9.49	23.10	43.50	-20.40	QP
3		155.3642	10.31	13.12	23.43	43.50	-20.07	QP
4		199.2855	16.23	9.92	26.15	43.50	-17.35	QP
5		269.4284	17.34	12.99	30.33	46.00	-15.67	QP
6	*	400.4318	14.47	16.88	31.35	46.00	-14.65	QP

Vertical:

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		42.8997	9.77	14.23	24.00	40.00	-16.00	QP
2		91.8161	13.80	9.67	23.47	43.50	-20.03	QP
3		139.8506	9.87	13.18	23.05	43.50	-20.45	QP
4		219.8447	14.94	11.43	26.37	46.00	-19.63	QP
5		404.6664	12.96	16.97	29.93	46.00	-16.07	QP
6	*	755.3872	13.37	23.45	36.82	46.00	-9.18	QP

Above 1GHz:

Band 1:

ANTI.									
802.11a mode Lowest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	48.26	2.56	50.82	68.20	-17.38	Vertical			
10360.00	48.14	2.56	50.70	68.20	-17.50	Horizontal			
	802	2.11a mode Lowest	channel (Averag	e Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	32.23	2.56	34.79	54.00	-19.21	Vertical			
10360.00	31.74	2.56	34.30	54.00	-19.70	Horizontal			

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	802.11a mode Middle channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10400.00	48.06	2.71	50.77	68.20	-17.43	Vertical				
10400.00	48.22	2.71	50.93	68.20	-17.27	Horizontal				
	80	2.11a mode Middle	channel (Average	e Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10400.00	31.78	2.71	34.49	54.00	-19.51	Vertical				
10400.00	32.03	2.71	34.74	54.00	-19.26	Horizontal				

	802.11a mode Highest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10480.00	47.89	3.04	50.93	68.20	-17.27	Vertical				
10480.00	47.65	3.04	50.69	68.20	-17.51	Horizontal				
	802	2.11a mode Highes	t channel (Averag	e Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10480.00	31.75	3.04	34.79	54.00	-19.21	Vertical				
10480.00	32.03	3.04	35.07	54.00	-18.93	Horizontal				

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AITIZ.										
	802.11a mode Lowest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10360.00	48.52	2.56	51.08	68.20	-17.12	Vertical				
10360.00	48.31	2.56	50.87	68.20	-17.33	Horizontal				
	80	2.11a mode Lowest	channel (Averag	e Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10360.00	32.26	2.56	34.82	54.00	-19.18	Vertical				
10360.00	31.74	2.56	34.30	54.00	-19.70	Horizontal				

	802.11a mode Middle channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10400.00	48.26	2.71	50.97	68.20	-17.23	Vertical				
10400.00	47.81	2.71	50.52	68.20	-17.68	Horizontal				
	80	2.11a mode Middle	channel (Average	e Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10400.00	32.11	2.71	34.82	54.00	-19.18	Vertical				
10400.00	32.06	2.71	34.77	54.00	-19.23	Horizontal				

	802.11a mode Highest channel (Peak Value)									
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10480.00	47.63	3.04	50.67	68.20	-17.53	Vertical				
10480.00	47.52	3.04	50.56	68.20	-17.64	Horizontal				
	802	2.11a mode Highes	t channel (Averag	e Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization				
10480.00	30.58	3.04	33.62	54.00	-20.38	Vertical				
10480.00	31.47	3.04	34.51	54.00	-19.49	Horizontal				

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	802.11n20 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	48.74	2.56	51.30	68.20	-16.90	Vertical			
10360.00	48.23	2.56	50.79	68.20	-17.41	Horizontal			
	802	.11n20 mode Lowe	st channel (Avera	ge Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	32.45	2.56	35.01	54.00	-18.99	Vertical			
10360.00	32.03	2.56	34.59	54.00	-19.41	Horizontal			

	802.11n20 mode Middle channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10400.00	47.36	2.71	50.07	68.20	-18.13	Vertical			
10400.00	48.14	2.71	50.85	68.20	-17.35	Horizontal			
	802	.11n20 mode Middl	e channel (Avera	ge Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10400.00	32.03	2.71	34.74	54.00	-19.26	Vertical			
10400.00	31.44	2.71	34.15	54.00	-19.85	Horizontal			

	802.11n20 mode Highest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10480.00	48.26	3.04	51.30	68.20	-16.90	Vertical			
10480.00	48.03	3.04	51.07	68.20	-17.13	Horizontal			
	802.	11n20 mode Highe	st channel (Avera	ige Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10480.00	32.07	3.04	35.11	54.00	-18.69	Vertical			
10480.00	32.65	3.04	35.69	54.00	-18.31	Horizontal			

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1. 450.00.101									
	802.11n40 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10380.00	48.02	2.65	50.67	68.20	-17.53	Vertical			
10380.00	48.26	2.65	50.91	68.20	-17.29	Horizontal			
	802	.11n40 mode Lowe	st channel (Avera	ge Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10380.00	32.58	2.65	35.28	54.00	-18.77	Vertical			
10380.00	31.16	2.65	33.81	54.00	-20.19	Horizontal			

	802.11n40 mode Highest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10460.00	48.03	2.87	50.90	68.20	-17.30	Vertical			
10460.00	47.82	2.87	50.69	68.20	-17.51	Horizontal			
	802.	11n40 mode Highe	st channel (Avera	ge Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10460.00	31.25	2.87	34.12	54.00	-19.88	Vertical			
10460.00	32.28	2.87	35.15	54.00	-18.85	Horizontal			

	802.11ac20 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	48.15	2.56	50.71	68.20	-17.49	Vertical			
10360.00	48.06	2.56	50.62	68.20	-17.58	Horizontal			
	802.	11ac20 mode Lowe	est channel (Avera	age Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10360.00	31.17	2.56	33.73	54.00	-20.27	Vertical			
10360.00	32.22	2.56	34.78	54.00	-19.22	Horizontal			

802.11ac20 mode Middle channel (Peak Value)							
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
10400.00	48.32	2.71	51.03	68.20	-17.17	Vertical	
10400.00	48.08	2.71	50.79	68.20	-17.41	Horizontal	

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802.11ac20 mode Middle channel (Average Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
10400.00	32.26	2.71	34.97	54.00	-19.03	Vertical		
10400.00	32.34	2.71	35.05	54.00	-18.95	Horizontal		

	802.11ac20 mode Highest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10480.00	48.17	3.04	51.21	68.20	-16.99	Vertical			
10480.00	42.03	3.04	45.07	68.20	-23.13	Horizontal			
	802.1	11ac20 mode High	est channel (Avera	age Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10480.00	32.26	3.04	35.30	54.00	-18.70	Vertical			
10480.00	32.84	3.04	35.88	54.00	-18.12	Horizontal			

	802.11ac40 mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10380.00	48.21	2.65	50.86	68.20	-17.34	Vertical			
10380.00	47.68	2.65	50.33	68.20	-17.87	Horizontal			
	802.	11ac40 mode Lowe	est channel (Avera	age Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10380.00	33.45	2.65	36.10	54.00	-17.90	Vertical			
10380.00	32.61	2.65	35.26	54.00	-18.74	Horizontal			

	802.11ac40 mode Highest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10460.00	48.36	2.87	51.23	68.20	-16.97	Vertical			
10460.00	47.83	2.87	50.70	68.20	-17.50	Horizontal			
	802.	11ac40 mode Highe	est channel (Avera	age Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10460.00	33.03	2.87	35.90	54.00	-16.97	Vertical			
10460.00	32.29	2.87	50.70	54.00	-17.50	Horizontal			

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	802.11ac80 mode Middle channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10420.00	48.36	2.79	51.15	68.20	-17.05	Vertical			
10420.00	48.12	2.79	50.91	68.20	-17.29	Horizontal			
	802.	11ac80 mode Midd	le channel (Avera	ge Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
10420.00	32.06	2.79	34.85	54.00	-19.15	Vertical			
10420.00	31.87	2.79	34.66	54.00	-19.34	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.
- 3. Correct factor = Antenna Factor + Cable Loss Preamplifier Factor

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	802.11a mode Lowest channel (Peak Value)								
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
11490.00	47.15	3.84	50.99	68.20	-17.21	Vertical			
11490.00	47.62	3.84	51.46	68.20	-16.74	Horizontal			
	802.	11a mode Lowest cha	nnel (Average	Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization			
11490.00	31.23	3.84	35.07	54.00	-18.93	Vertical			
11490.00	30.41	3.84	34.25	54.00	-19.75	Horizontal			

	802.11a mode Middle channel (Peak Value)							
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
11570.00	47.47	3.91	51.38	68.20	-16.82	Vertical		
11570.00	46.15	3.91	50.06	68.20	-18.14	Horizontal		
	802	.11a mode Middle char	nnel (Average	Value)				
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization		
11570.00	32.03	3.91	35.94	54.00	-18.06	Vertical		
11570.00	31.41	3.91	35.32	54.00	-18.68	Horizontal		

	802.11a mode Highest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
11650.00	46.36	4.23	50.59	68.20	-17.61	Vertical	
11650.00	46.27	4.23	50.50	68.20	-17.70	Horizontal	
	802.	11a mode Highest cha	nnel (Average \	/alue)			
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
11650.00	31.14	4.23	35.37	54.00	-18.63	Vertical	
11650.00	32.27	4.23	36.50	54.00	-17.50	Horizontal	

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802.11a mode Lowest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.00	47.04	3.84	50.88	68.20	-17.32	Vertical
11490.00	47.26	3.84	51.10	68.20	-17.10	Horizontal
	802.	11a mode Lowest char	nnel (Average V	'alue)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.00	32.08	3.84	35.92	54.00	-18.08	Vertical
11490.00	31.64	3.84	35.48	54.00	-18.52	Horizontal

802.11a mode Middle channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.00	47.51	3.91	51.42	68.20	-16.78	Vertical
11570.00	46.69	3.91	50.60	68.20	-17.60	Horizontal
	802	.11a mode Middle char	nnel (Average V	alue)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.00	30.01	3.91	33.92	54.00	-20.08	Vertical
11570.00	31.23	3.91	35.14	54.00	-18.86	Horizontal

	802.11a mode Highest channel (Peak Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.00	47.30	4.23	51.53	68.20	-16.67	Vertical
11650.00	47.06	4.23	51.29	68.20	-16.91	Horizontal
	802.	11a mode Highest cha	nnel (Average \	/alue)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.00	31.24	4.23	35.47	54.00	-18.53	Vertical
11650.00	32.02	4.23	36.25	54.00	-17.75	Horizontal

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802.11n20 mode Lowest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.00	46.68	3.84	50.52	68.20	-17.68	Vertical
11490.00	46.22	3.84	50.06	68.20	-18.14	Horizontal
	802.1	1n20 mode Lowest ch	annel (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.00	31.24	3.84	35.08	54.00	-18.92	Vertical
11490.00	32.03	3.84	35.87	54.00	-18.13	Horizontal

802.11n20 mode Middle channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.00	47.04	3.91	50.95	68.20	-17.25	Vertical
11570.00	46.11	3.91	50.02	68.20	-18.18	Horizontal
	802.1	1n20 mode Middle cha	annel (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.00	31.25	3.91	35.16	54.00	-18.84	Vertical
11570.00	32.06	3.91	35.97	54.00	-18.03	Horizontal

802.11n20 mode Highest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.00	46.46	4.23	50.69	68.20	-17.51	Vertical
11650.00	45.81	4.23	50.04	68.20	-18.16	Horizontal
	802.1	1n20 mode Highest ch	annel (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.00	31.14	4.23	35.37	54.00	-18.63	Vertical
11650.00	32.35	4.23	36.58	54.00	-17.42	Horizontal

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802.11n40 mode Lowest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11510.00	46.03	3.88	49.91	68.20	-18.29	Vertical
11510.00	46.14	3.88	50.02	68.20	-18.18	Horizontal
	802.1	1n40 mode Lowest cha	annel (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11510.00	30.04	3.88	33.92	54.00	-20.08	Vertical
11510.00	31.25	3.88	35.13	54.00	-18.87	Horizontal

	802.11n40 mode Highest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
11590.00	47.15	4.02	51.17	68.20	-17.03	Vertical	
11590.00	45.62	4.02	49.64	68.20	-18.56	Horizontal	
	802.1	1n40 mode Highest ch	annel (Average	Value)			
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization	
11590.00	31.11	4.02	35.13	54.00	-18.87	Vertical	
11590.00	31.65	4.02	35.67	54.00	-18.33	Horizontal	

802.11ac20 mode Lowest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.00	47.42	3.84	51.26	68.20	-16.94	Vertical
11490.00	46.36	3.84	50.20	68.20	-18.00	Horizontal
	802.1	1ac20 mode Lowest ch	nannel (Average	Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11490.00	32.02	3.84	35.86	54.00	-18.14	Vertical
11490.00	31.25	3.84	35.09	54.00	-18.91	Horizontal

802.11ac20 mode Middle channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.00	46.26	3.91	50.17	68.20	-18.03	Vertical
11570.00	45.47	3.91	49.38	68.20	-18.82	Horizontal
802.11ac20 mode Middle channel (Average Value)						

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Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11570.00	31.01	3.91	34.92	54.00	-19.08	Vertical
11570.00	30.78	3.91	34.69	54.00	-19.31	Horizontal

802.11ac20 mode Highest channel (Peak Value)						
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.00	47.14	4.23	51.37	68.20	-16.38	Vertical
11650.00	46.65	4.23	50.88	68.20	-17.32	Horizontal
	802.11	1ac20 mode Highest	channel (Averag	je Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11650.00	30.02	4.23	34.25	54.00	-19.75	Vertical
11650.00	29.74	4.23	33.97	54.00	-20.03	Horizontal

	802.11ac40 mode Lowest channel (Peak Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11510.00	46.03	3.88	49.91	68.20	-18.29	Vertical
11510.00	46.15	3.88	50.03	68.20	-18.17	Horizontal
	802.1	1ac40 mode Lowest	channel (Averag	e Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11510.00	29.03	3.88	32.91	54.00	-21.09	Vertical
11510.00	31.25	3.88	35.13	54.00	-18.87	Horizontal

	802.11ac40 mode Highest channel (Peak Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11590.00	45.36	4.02	49.38	68.20	-18.82	Vertical
11590.00	46.17	4.02	50.19	68.20	-18.01	Horizontal
	802.1	1ac40 mode Highest	channel (Averag	je Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11590.00	32.03	4.02	36.05	54.00	-17.95	Vertical
11590.00	31.24	4.02	35.26	54.00	-18.74	Horizontal

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·	802.11ac80 mode Middle channel (Peak Value)					
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11550.00	46.36	3.89	50.25	68.20	-17.95	Vertical
11550.00	45.24	3.89	49.13	68.20	-19.07	Horizontal
	802.1	1ac80 mode Middle o	channel (Average	e Value)		
Frequency (MHz)	Read Level (dBuV)	Correct factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
11550.00	30.24	3.89	34.13	54.00	-19.87	Vertical
11550.00	31.33	3.89	35.22	54.00	-18.78	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.
- 3. Correct factor = Antenna Factor + Cable Loss Preamplifier Factor
- 4. All modulations all have been tested, only worse cases is reported.

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6.8 Frequency stability

Test Requirement:	FCC Part15 E Section 15.407 (g)		
Limit:	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.		
Test setup:	Spectrum analyzer EUT Variable Power Supply Note: Measurement setup for testing on Antenna connector		
Test procedure:	 The EUT is installed in an environment test chamber with external power source. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT. A sufficient stabilization period at each temperature is used prior to each frequency measurement. When temperature is stabled, measure the frequency stability. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions. 		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Refer to section 5.3 for details, and all channels have been tested, only shows the worst channel data in this report.		
Test results:	Passed		

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Measurement Data (the worst channel):

Band 1:

Voltage vs. Frequency Stability (Lowest channel=5180MHz)

Test conditions		Francisco (MIII-)	May Davistian (num)	
Temp(°C)	Voltage(AC /60Hz)	Frequency(MHz)	Max. Deviation (ppm)	
	138	5179.985200	2.86	
20	120	5179.977800	4.29	
	102	5179.986100	2.68	

Temperature vs. Frequency Stability (Lowest channel=5180MHz)

Test condit	ions	Francisco (MIII-)	May Davistian (name)		
Voltage(AC /60Hz)	Temp(°C)	Frequency(MHz)	Max. Deviation (ppm)		
	-30	5179.991400	1.66		
	-20	5179.984300	3.03		
	-10	5179.978200	4.21		
	0	5179.984100	3.07		
120	10	5179.983300	3.22		
	20	5179.978200	4.21		
	30	5179.987800	2.36		
	40	5179.986700	2.57		
	50	5179.979800	3.90		

Band 4:

Voltage vs. Frequency Stability (Lowest channel=5745MHz)

Test conditions		Fraguera ov/MUE)	May Deviation (name)	
Temp(°C)	Voltage(AC /60Hz)	Frequency(MHz)	Max. Deviation (ppm)	
	138	5744.986400	2.65	
20	120	5744.977400	2.37	
	102	5744.983200	2.56	

Temperature vs. Frequency Stability (Lowest channel=5745MHz)

Test conditions		Fragueney/MU=)	May Davistian (nnm)	
Voltage(AC /60Hz)	Temp(°C)	Frequency(MHz)	Max. Deviation (ppm)	
	-30	5744.988400	2.02	
	-20	5744.986500	2.35	
	-10	5744.978900	3.67	
	0	5744.987400	2.19	
120	10	5744.990100	1.72	
	20	5744.985600	2.51	
	30	5744.990600	1.64	
	40	5744.979200	3.62	
	50	5744.989800	1.78	

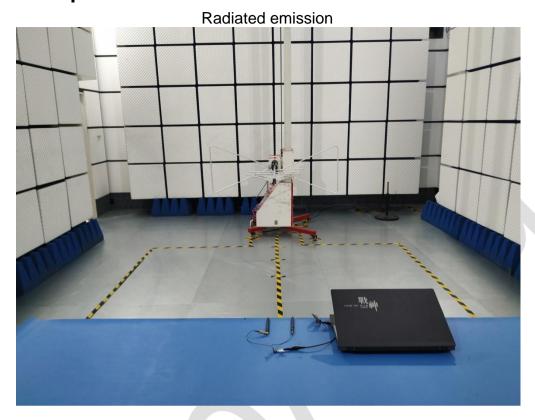
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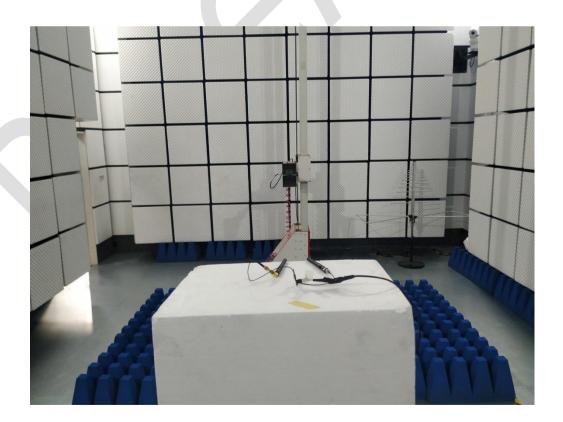
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7 Test Setup Photo





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Conducted Emission



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8 EUT Constructional Details

Reference to the test report No. BLA-EMC-201911-A53-01

-----End of report-----

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