

ANT 2

Con	figuration Bar	nd I (5150 - 5	250 MHz)	
Mode	Test channel	Level [dBm/MHz]	Limit (dBm/MHz)	Result
802.11a	CH36	3.49	11	_o PASS
802.11a	CH40	3.44	11 JAKETES	PASS
802.11a	CH48	2.12	11	PASS
802.11n(HT20)	CH36	2.63	10.99	PASS
802.11n(HT20)	CH40	2.29	10.99	PASS
802.11n(HT20)	CH48	1.85	10.99	PASS
802.11n(HT40)	CH38	-0.11	10.99	PASS
802.11n(HT40)	CH46	-0.6	10.99	PASS
802.11ac(HT20)	CH36	2.71	10.99	PASS
802.11ac(HT20)	CH40	2.76	10.99	PASS
802.11ac(HT20)	CH48	0.9	10.99	PASS
802.11ac(HT40)	CH38	0.24	10.99	PASS
802.11ac(HT40)	CH46	-0.61	10.99	PASS
802.11ac(HT80)	CH42	-2.32	10.99	PASS

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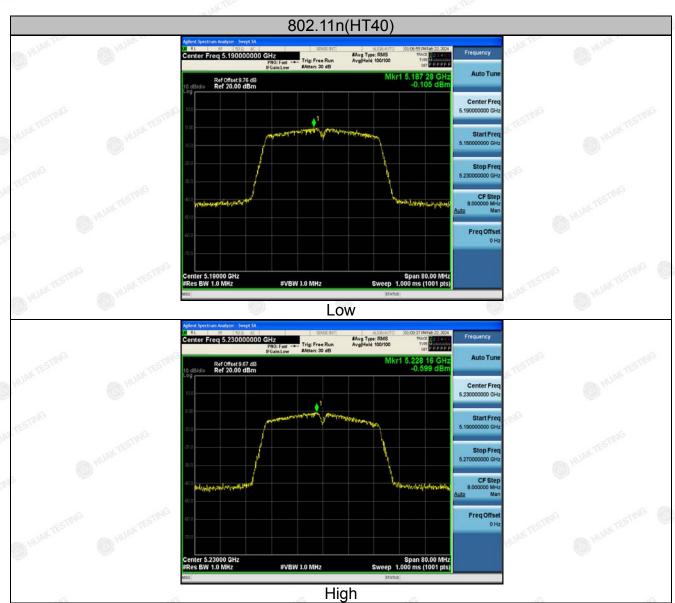
Test plots as follows: Band I (5150 – 5250 MHz)





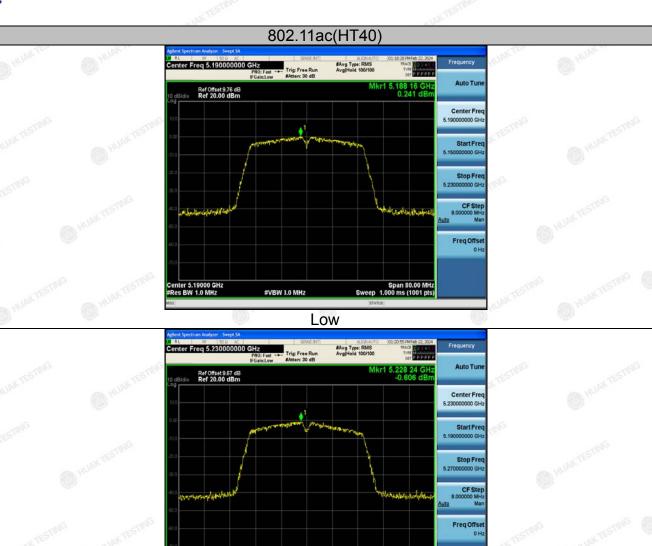
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High





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High



Low

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For MIMO antenna port 1+antenna port 2

Configuration Band IV (5150 - 5250MHz)

Mode Test channel		Power Density (dBm)	Limit (dBm/MHz)	Result	
802.11n(HT20)	CH36	5.33	10.99	PASS	
802.11n(HT20)	CH40	5.21	10.99	PASS	
802.11n(HT20)	CH48	4.77	10.99	PASS	
802.11n(HT40)	CH38	2.72	10.99	PASS	
802.11n(HT40)	CH46	3.05	10.99	PASS	
802.11ac(HT20)	CH36	5.73	10.99	PASS	
802.11ac(HT20)	CH40	5.57	10.99	PASS	
802.11ac(HT20)	CH48	4.62	10.99	PASS	
802.11ac(HT40)	CH38	3.18	10.99	PASS	
802.11ac(HT40)	CH46	2.87	10.99	PASS	
802.11ac(HT80)	CH42	0.43	10.99	PASS	

Note: This product supports antenna 1 and antenna 2 launch, but only support 802.11 n/ac for MIMO mode, not support 802.11 a for MIMO mode.

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4.6. Band Edge

4.6.1. Test Specification

Test Requirement:	FCC CFR47 Part 15E Section 15.407						
Test Method:	ANSI C63.10 2013	PHARTE.	HUAKTES				
	TING	TING					
	Frequency	Limit (dBuV/m @3m)	Detector				
Limit:	Above 1G	74.0	Peak				
	Above 1G	54.0	Average				
	NG						
Test Setup:	LSm EUT	Ant. feed point 3 m Ground Plane Receiver	1-4 m				
Test Mode:	Transmitting mode v	with modulation	THE STINE				

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MAR	HAN
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. 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. 5. 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
Test Result:	reported in a data sheet. PASS

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4.6.2. Test Instruments

	Radia	ated Emission	Test Site (96	66)	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Receiver	R&S	ESRP3	HKE-005	Feb. 20, 2024	Feb. 19, 2025
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 20, 2024	Feb. 19, 2025
Preamplifier	EMCI	EMC051845 SE	HKE-015	Feb. 20, 2024	Feb. 19, 2025
Preamplifier	Agilent	83051A	HKE-016	Feb. 20, 2024	Feb. 19, 2025
Loop antenna	Schwarzbeck	FMZB 1519 B	HKE-014	Feb. 21, 2024	Feb. 20, 2026
Broadband antenna	Schwarzbeck	VULB 9163	HKE-012	Feb. 21, 2024	Feb. 20, 2026
Horn antenna	Schwarzbeck	9120D	HKE-013	Feb. 21, 2024	Feb. 20, 2026
Antenna Mast	Keleto	CC-A-4M	N/A	N/A	N/A
Position controller	Taiwan MF	MF7802	HKE-011	Feb. 20, 2024	Feb. 19, 2025
Radiated test software	Tonscend	TS+ Rev 2.5.0.0	HKE-082	N/A	N/A
RF cable (9KHz-1GHz)	Times	381806-001	N/A	N/A	N/A
Hf antenna	Schwarzbeck	LB-180400-K F	HKE-031	Feb. 21, 2024	Feb. 20, 2026
RF cable	Tonscend	1-18G	HKE-099	Feb. 20, 2024	Feb. 19, 2025
RF cable	Times	1-40G	HKE-034	Feb. 20, 2024	Feb. 19, 2025
Horn Antenna	Schewarzbeck	BBHA 9170	HKE-017	Feb. 21, 2024	Feb. 20, 2026
Spectrum analyzer	R&S	FSP40	HKE-025	Feb. 20, 2024	Feb. 19, 2025

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).



4.6.3. Test Data

ANT 1

Operation Mode: 802.11a Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	55.02	-2.49	52.53	74	-21.47	peak
5150	NG WHUN	-2.49	1	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	52.16	-2.49	49.67	74	-24.33	peak
5150	1	-2.49	() NO	54	₆ 1 0	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	54.2	-2.11	52.09	74	-21.91	peak
5350	STING /	-2.11	1 STING	54	KTESTIN 1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Detector Type	Margin	Limits	Emission Level	Factor	Meter Reading	Frequency
Detector Type	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(dBµV)	(MHz)
peak	-22.03	511 ¹¹⁶ 74	51.97	-2.11	54.08	5350
AVG	HUAR	54	(HOME	-2.11	HUAN /	5350

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: 802.11n20 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52.69	-2.49	50.2	74	-23.8	peak
5150	1	-2.49	O HIVE	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	54.26	-2.49	51.77	74	-22.23	peak
5150	-STING /	-2.49	/ STING	54	KTESTING /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	53.28	-2.11	51.17	74	-22.83	peak
5350	STING /	-2.11	1 STING	54	ESTA 1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	52.99	-2.11	50.88	⁹⁶ 74	-23.12	peak
5350	ALIAN I	-2.11	C HUA	54	l I	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: 802.11 n40 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	53.19	-2.49	50.7	74	-23.3	peak
5150	STING /	-2.49	LAK TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52.75	-2.49	50.26	74	-23.74	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	54.82	-2.11	52.71	74	-21.29	peak
5350	STING /	-2.11	STING	54	ESTA-	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5350	52.69	-2.11	50.58	⁹⁶ 74	-23.42	peak
5350	HIAL I	-2.11	T HUM	54	luku-	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



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Operation Mode: 802.11 ac20 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5150	53.16	-2.49	50.67	74	-23.33	peak
5150	STING /	-2.49	LAX TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	52.74	-2.49	50.25	74	-23.75	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



Operation Mode: TX CH High with 5.2G

Horizontal

TEST	requency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
NG	5350	52.64	-2.11	50.53	74	-23.47	peak
	5350	STIME /	-2.11	- MAY AESTINE	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	53.16	-2.11	51.05	74	-22.95	peak
5350	1	-2.11	1	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



Operation Mode: 802.11 ac40 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	54.87	-2.49	52.38	74	-21.62	peak
5150	STING /	-2.49	LOW ESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

7) William 11			2010/17		- 17/71	ACCION TO
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	53.26	-2.49	50.77	74	-23.23	peak
5150	1	-2.49	1	54	ESTING /	AVG
	-C-	- 41. 3	- 0	- 4		.6

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	53.16	-2.11	51.05	74	-22.95	peak
5350	STIPS /	-2.11	WAY ESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5350	52.47	-2.11	50.36	74	-23.64	peak
5350	1	-2.11	1	54	I I	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Operation Mode: 802.11 ac80 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	53.16	-2.49	50.67	74	-23.33	peak
5150	STING /	-2.49	LAK TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52.79	-2.49	50.3	74	-23.7	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

TEST	requency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
NG	5350	52.94	-2.11	50.83	74	-23.17	peak
	5350	STITUTE /	-2.11	HANTESTINE	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	53.46	-2.11	51.35	74	-22.65	peak
5350	1	-2.11	1	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



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ANT 2

Operation Mode: 802.11a Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Data star Tuna
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	54.16	-2.49	51.67	74	-22.33	peak
5150	1	-2.49	% 1	54	s / ©	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	53.62	-2.49	51.13	74	-22.87	peak
5150	ESTING /	-2.49	- WAY TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	54.28	-2.11	52.17	74	-21.83	peak
5350	TESTING 1	-2.11	THAN TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	54.16	-2.11	52.05	74	-21.95	peak
5350	1	-2.11	1	54	I I	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



Operation Mode: 802.11n20 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	51.26	-2.49	48.77	74	-25.23	peak
5150	1	-2.49	MINKTE	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52	-2.49	49.51	74	-24.49	peak
5150	STING /	-2.49	1 STING	54	K TESTING	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	53.16	-2.11	51.05	74	-22.95	peak
5350	STING /	-2.11	STING	54	ESTITE /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

(HUAI	Margin	Limits	Emission Level	Factor	Meter Reading	Frequency
Detector Type	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(dBµV)	(MHz)
peak	-24.57	74	49.43	-2.11	51.54	5350
AVG	Water 1	54	T HOME	-2.11	MIAN	5350

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Operation Mode: 802.11 n40 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	53.26	-2.49	50.77	74	-23.23	peak
5150	STING /	-2.49	LAKTESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	51.24	-2.49	48.75	74	-25.25	peak
5150	1	-2.49	1	54	ESTING /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	52.85	-2.11	50.74	74	-23.26	peak
5350	STING /	-2.11	STING	54	ESTITE 1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	51.46	-2.11	49.35	⁹⁶ 74	-24.65	peak
5350	HIAL I	-2.11	T HUM	54	luku-	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



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Operation Mode: 802.11 ac20 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	55.28	-2.49	52.79	74	-21.21	peak
5150	STING /	-2.49	LAK PESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	54.27	-2.49	51.78	74	-22.22	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	 Detector Type
5350	53.29	-2.11	51.18	74	-22.82	peak
5350	STING /	-2.11	/ STING	54	ESTA I	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	HUAI
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	52.74	-2.11	50.63	74	-23.37	peak
5350	Man	-2.11	T HUM	54	NAME 1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Operation Mode: 802.11 ac40 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	56.22	-2.49	53.73	74	-20.27	peak
5150	STING /	-2.49	LAK ESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52.98	-2.49	50.49	74	-23.51	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	54.15	-2.11	52.04	74	-21.96	peak
5350	STING /	-2.11	/ STNG	54	ESTITUTE 1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	53.01	-2.11	50.9	[©] 74	-23.1	peak
5350	I I	-2.11	N HUM	54	NAME /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Operation Mode: 802.11 ac80 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type	
5150	52.58	-2.49	50.09	74	-23.91	peak	
5150	STING /	-2.49	LAK TESTING	54	1	AVG	

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52.34	-2.49	49.85	74	-24.15	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

TEST	requency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type	
	(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type	
NG	5350	51.34	-2.11	49.23	74	-24.77	peak	
	5350	STIME /	-2.11	HANTESTINE	54	1	AVG	

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
5350	52.32	-2.11	50.21	74	-23.79	peak
5350	1	-2.11	1	54	I I	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



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MIMO

Operation Mode: 802.11n20 Mode with 5.2G TX CH Low

Horizontal

OL.	101	100	-101		101	100
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	52.32	-2.49	49.83	74	-24.17	peak
5150	1	-2.49	1	54	1	AVG
-6	ALIC MINI		-0	VIC THEFT	-0-	-ME

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	52.33	-2.49	49.84	74	-24.16	peak
5150	1	-2.49	MAKE	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	51.74	-2.11	49.63	74	-24.37	peak
5350	STING /	-2.11	/ STNG	54	ESTIMATE /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	52.69	-2.11	50.58	[©] 74	-23.42	peak
5350	ALIAN 1	-2.11	T HUM	54	WA 1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: 802.11 n40 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	56.38	-2.49	53.89	74	-20.11	peak
5150	STING /	-2.49	LAKTESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	54.15	-2.49	51.66	74	-22.34	peak
5150	1	-2.49	1	54	STING /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Dotootor Typo
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	55.02	-2.11	52.91	74	-21.09	peak
5350	STING /	-2.11	STING	54	ESTITE 1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Detector Type	Margin	Limits	Emission Level	Factor	Meter Reading	Frequency
- Detector Type	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(dBµV)	(MHz)
peak	-21.79	[©] 74	52.21	-2.11	54.32	5350
AVG	NA I	54	T HUM	-2.11	ALLIAN 1	5350

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: 802.11 ac20 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5150	53.26	-2.49	50.77	74	-23.23	peak
5150	STING /	-2.49	LAX TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	51.22	-2.49	48.73	74	-25.27	peak
5150	1	-2.49	1	54	ESTING /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

TEST	requency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
693	(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
NG	5350	53.26	-2.11	51.15	74	-22.85	peak
	5350	STIME /	-2.11	MAKAESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5350	52.64	-2.11	50.53	74	-23.47	peak
5350	1	-2.11	1	54	I I	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.



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Operation Mode: 802.11 ac40 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	52.68	-2.49	50.19	74	-23.81	peak
5150	STING /	-2.49	LAK TESTING	54 MARK	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	51.26	-2.49	48.77	74	-25.23	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: TX CH High with 5.2G

Horizontal

TES	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
N^G	5350	51.24	-2.11	49.13	74	-24.87	peak
	5350	STITUTE /	-2.11	MAKKESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5350	52.38	-2.11	50.27	74	-23.73	peak
5350	1	-2.11	1	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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Operation Mode: 802.11 ac80 Mode with 5.2G TX CH Low

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5150	54.16	-2.49	51.67	74	-22.33	peak
5150	STING /	-2.49	LAX TESTING	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
5150	52.22	-2.49	49.73	74	-24.27	peak
5150	1	-2.49	1	54	esting /	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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TESTING TESTING

Operation Mode: TX CH High with 5.2G

Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
5350	51.15	-2.11	49.04	74	-24.96	peak
5350	JK TE STIME /	-2.11	"IAV/ESTINE	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
5350	51.47	-2.11	49.36	74	-24.64	peak
5350	1	-2.11	1	54	1	AVG

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- 1. If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.
- 2. In restricted bands of operation, the spurious emissions below the permissible value more than 20dB.
- 3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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4.7. Spurious Emission

4.7.1.1. Test Specification

Frequency Range: Measurement Distance: Antenna Polarization: Operation mode: Tr Receiver Setup: Ur FC ge FC O O O 1 3 8 2 A FC GE GE FC GE FC GE GE GE FC GE	ansmitting Frequency KHz- 150kHz- 150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sputic Part15.20 neral field serequency .009-0.490 .490-1.705	Vertical mode v Detecte Quasi-pe Quasi-pe Peak Peak rious em 05 shall c	vith or eak eak issic	modulat RBW 200Hz 9kHz 120KHz 1MHz 1MHz ons fallen oly with the set forth indicate the se	VBW 1kHz 30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Remark Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters) 300	
Measurement Distance: Antenna Polarization: Operation mode: Receiver Setup: Ur FC ge Ge Limit: For design and the set of the	ansmitting Frequency Hz- 150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sputic Part15.20 neral field serequency 009-0.490 .490-1.705	Vertical mode v Detecte Quasi-pe Quasi-pe Peak Peak rrious em 05 shall c	vith or eak eak eak issic	RBW 200Hz 9kHz 120KHz 1MHz 1MHz ons fallen oly with the set forth in the s	VBW 1kHz 30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Antenna Polarization: Operation mode: Receiver Setup: Ur FC ge ge Final Polarization: Ur FC ge GE A Limit: For design and the polarization: Treatment of the polarization: Antenna Polarization: Hotel of the polarization: Antenna Polarization: Treatment of the polarization: Antenna Polarization: Treatment of the polarization: Antenna Polarization: Treatment of the polarization of th	ansmitting Frequency KHz- 150kHz- 150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sputic Part15.20 neral field serequency .009-0.490 .490-1.705	Detector Quasi-pe Quasi-pe Quasi-pe Peak Peak Peak rrious em 05 shall co	vith or eak eak eak issic	RBW 200Hz 9kHz 120KHz 1MHz 1MHz ons fallen oly with the set forth in the s	VBW 1kHz 30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Peceiver Setup: Receiver Setup: Ur FC ge Ge Limit: Fo	Frequency KHz- 150kHz 150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sputic Part15.20 neral field s requency .009-0.490 .490-1.705	Detector Quasi-pe Quasi-pe Quasi-pe Peak Peak Peak rrious em 05 shall co	vith or eak eak eak issic	RBW 200Hz 9kHz 120KHz 1MHz 1MHz ons fallen oly with the set forth in the s	VBW 1kHz 30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Receiver Setup: Ur FC ge ge Limit: Fo	Frequency KHz- 150kHz- 150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sput C Part15.20 neral field serequency .009-0.490 .490-1.705	Detector Quasi-po Quasi-po Peak Peak Peak Irious em 05 shall c	or eak eak eak eak esissic compmits	RBW 200Hz 9kHz 120KHz 1MHz 1MHz ons fallen oly with the set forth in the s	VBW 1kHz 30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Receiver Setup: Ur FC ge ge Limit: Fo	Frequency KHz- 150kHz- 150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sput C Part15.20 neral field serequency .009-0.490 .490-1.705	Detector Quasi-po Quasi-po Peak Peak Peak Irious em 05 shall c	or eak eak eak eak esissic compmits	RBW 200Hz 9kHz 120KHz 1MHz 1MHz ons fallen oly with the set forth in the s	VBW 1kHz 30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Receiver Setup: Ur FC ge ge F 0 0 1 3 8 2 A F0 dB	150kHz- 30MHz 0MHz-1GHz Above 1GHz wanted sput C Part15.20 neral field strequency .009-0.490 .490-1.705	Quasi-pe Quasi-pe Peak Peak Irious em 05 shall c	issic comp mits Fi (n	9kHz 120KHz 1MHz 1MHz Ons fallen oly with the set forth in itelity is set forth in itelity is set forth in itelity is set forth. Itelity is set forth in itelity is set forth in itelity is set forth in itelity is set forth. Itelity is set forth in itelity is set forth i	30kHz 300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Ur FC ge FC O O O O O O O O O O O O O O O O O O	30MHz 0MHz-1GHz Above 1GHz wanted sput CC Part15.20 neral field s requency .009-0.490 .490-1.705	Quasi-pe Peak Peak Irious em 05 shall o	issicomp mits Fi (n	120KHz 1MHz 1MHz ons fallen oly with th set forth i ield Streng nicrovolts/	300KHz 3MHz 10Hz in restricte in § 15.20 gth /meter) z)	Quasi-peak Value Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Ur FC ge F O O O O O O O O O O O O O O O O O O	wanted spuce Part15.20 neral field surequency .009-0.490	Peak Peak Irious em 05 shall c	issic comp mits Fi (n	1MHz 1MHz ons fallen oly with the set forth i ield Streng nicrovolts/	3MHz 10Hz in restricte in § 15.20 gth (meter)	Peak Value Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Ur FC ge F0 0 0 0 1 3 8 2 A FC dB	wanted spuce Part15.20 neral field serequency .009-0.490	Peak Irious em 05 shall c	issic comp mits Fi (m	1MHz ons fallen oly with the set forth i ield Streng nicrovolts/	10Hz in restricte in § 15.20 gth /meter) z)	Average Value ed bands per 9 as below table, Measurement Distance (meters)	
Ur FC ge F0 0 0 0 1 3 8 2 A FC dB	wanted spuce Part15.20 neral field serequency .009-0.490	irious em 05 shall c	issic comp mits Fi (n	ons fallen oly with th set forth i ield Strent nicrovolts/	in restricte e in § 15.20 gth /meter) z)	ed bands per 9 as below table, Measurement Distance (meters)	
FO ge	C Part15.20 neral field s requency .009-0.490 .490-1.705	05 shall c	Fi (n	oly with the set forth in set forth in set forth in set forth in set for set f	e in § 15.20 gth /meter) z)	9 as below table, Measurement Distance (meters)	
Limit:	.490-1.705	NEST				300	
Limit:	6.77	NETEST	24	4000/E/J			
Limit:				4000/F(KF	0/F(KHz) 30		
Limit:	1.705-30			0	MAKTE	30	
Limit:	30-88			00	(63)	3	
Limit:	88-216 216-960			50		3	
Limit:	bove 960		_	00 00		3	
Δ.Ι.	r band I&II& μV/m, for E r transmitte	IRP(dBm	ı)= -2	27dBm	TESTING		
MI to fro to ed	Hz or more a 10 dBm/MH m 25 MHz a a level of 15	above or Iz at 25 M above or 5.6 dBm/l n 5 MHz	belo /IHz : belo /IHz abov	ow the bar above or ow the bar at 5 MHz ve or belov	nd edge ir below the nd edge in above or w the ban	dBm/MHz at 75 ncreasing linearly band edge, and acreasing linearly below the band d edge increasing edge.	
EII		95.2=78.2	2 dB		EIRP(dB	: E[dBμV/m] = m)= -27dBm ; /m] = EIRP[dBm]	

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For radiated emissions below 30MHz 30MHz to 1GHz Test setup: **Ground Plane** Above 1GHz 1. 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 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on **Test Procedure:** 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

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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 rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.
	5. 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 bere-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test results:	PASS

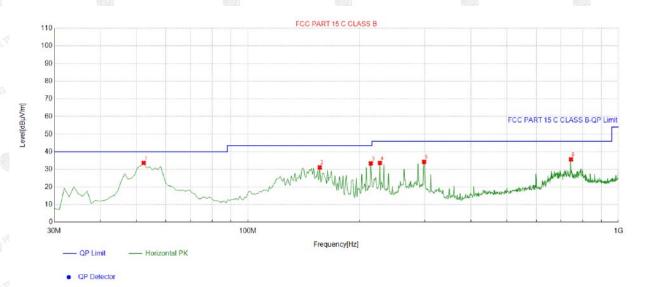
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4.7.2. Test Data

All the test modes completed for test. only the worst result of (802.11a at 5180MHz) was reported Below 1GHz

Horizontal



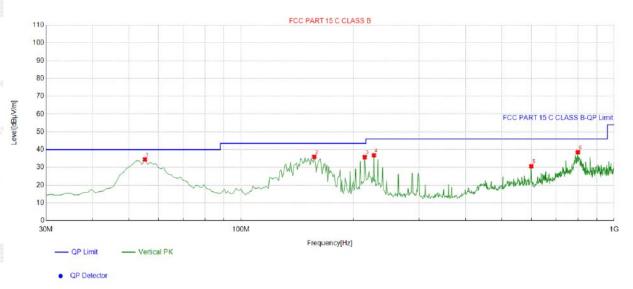
Suspected List Freq. Factor Reading Limit Margin Height Level Angle NO. Polarity [MHz] [dB] [dBµV/m] $[dB\mu V/m]$ [dBµV/m] [dB] [cm] [°] -14.35 40.00 52.332332 48.04 33.69 6.31 100 190 Horizontal 1 156.22622 -18.2649.40 31.14 43.50 12.36 100 107 Horizontal 3 214.48448 -14.46 47.88 33.42 43.50 10.08 100 Horizontal 143 227.10710 -13.98 47.63 33.65 46.00 12.35 100 146 Horizontal 5 298.95895 -11.95 46.28 34.33 46.00 11.67 100 242 Horizontal 46.00 100 744.63463 -2.93 38.64 35.71 10.29 38 Horizontal

Remark: Factor = Cable loss + Antenna factor - Preamplifier; Level = Reading + Factor; Margin = Limit - Level

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Vertical



Suspe	Suspected List								
	Freq.	Factor	Reading	Level	Limit	Margin	Height	Angle	
NO.	[MHz]	[dB]	[dBµV/m]	[dBµV/m]	[dBµV/m]	[dB]	[cm]	[°]	Polarity
1	55.245245	-14.32	48.78	34.46	40.00	5.54	100	250	Vertical
2	157.19719	-18.07	53.98	35.91	43.50	7.59	100	260	Vertical
3	214.48448	-14.46	50.21	35.75	43.50	7.75	100	195	Vertical
4	227.10710	-13.98	50.78	36.80	46.00	9.20	100	208	Vertical
5	599.95996	-4.93	35.55	30.62	46.00	15.38	100	195	Vertical
6	799.97998	-1.81	40.38	38.57	46.00	7.43	100	184	Vertical

Remark: Factor = Cable loss + Antenna factor - Preamplifier; Level = Reading + Factor; Margin = Limit - Level

Harmonics and Spurious Emissions

Frequency Range (9 kHz-30MHz)

3	Frequency (MHz)	Level@3m (dBµV/m)	Limit@3m (dBµV/m)
	"TESTINE	TESTING	HUA" VIESTING
	HUM	Marian Marian	
		Inc	-STING
	- HUAK		JANE CO

Note: 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

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Above 1GHz

RADIATED EMISSION TEST

LOW CH 36 (802.11 a Mode with 5.2G)/5180

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Tune
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
3647	54.27	-4.59	49.68	74	-24.32	peak
3647	39.75	-4.59	35.16	54	-18.84	AVG
10360	51.77	3.74	55.51	68.2	-12.69	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

		FE 33-25	10.7000	20.000		
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	53.93	-4.59	49.34	74	-24.66	peak
3647	38.13	-4.59	33.54	54	-20.46	AVG
10360	50.57	3.74	54.31	68.2	-13.89	peak
(1989)	*	603000	(887)		M. O	(2)

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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MID CH40 (802.11 a Mode with 5.2G)/5200

Horizontal:

Meter Reading	Factor	Emission Level	Limits	Margin	- Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
53.01	-4.59	48.42	74	-25.58	peak
38.26	-4.59	33.67	54	-20.33	AVG
49.02	3.74	52.76	68.2	-15.44	peak
	(dBµV) 53.01 38.26	(dBµV) (dB) 53.01 -4.59 38.26 -4.59	(dBμV) (dB) (dBμV/m) 53.01 -4.59 48.42 38.26 -4.59 33.67	(dBμV) (dB) (dBμV/m) (dBμV/m) 53.01 -4.59 48.42 74 38.26 -4.59 33.67 54	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m) 53.01 -4.59 48.42 74 -25.58 38.26 -4.59 33.67 54 -20.33

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
52.79	-4.59	48.2	74	-25.8	peak
38.43	-4.59	33.84	54	-20.16	AVG
50.65	3.74	54.39	68.2	-13.81	peak
	(dBµV) 52.79 38.43	(dBµV) (dB) 52.79 -4.59 38.43 -4.59	(dBµV) (dB) (dBµV/m) 52.79 -4.59 48.2 38.43 -4.59 33.84	(dBμV) (dB) (dBμV/m) (dBμV/m) 52.79 -4.59 48.2 74 38.43 -4.59 33.84 54	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m) 52.79 -4.59 48.2 74 -25.8 38.43 -4.59 33.84 54 -20.16

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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HIGH CH 48 (802.11a Mode with 5.2G)/5240

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Datasta Tarin
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	53.95	-4.59	49.36	74	-24.64	peak
3647	39.6	-4.59	35.01	54	-18.99	AVG
10480	51.17	3.75	54.92	68.2	-13.28	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
3647	54.3	-4.59	49.71	74	-24.29	peak
3647	37.81	-4.59	33.22	54	-20.78	AVG
10480	50.37	3.75	54.12	68.2	-14.08	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed. (7) All modes of operation were investigated and the worst-case of Ant 1 are reported.



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5.2G 802.11n20 Mode All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 36

Horizontal:

	17	170	130		11 300	170
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	52.53	-4.59	47.94	74	-26.06	peak
3647	38.38	-4.59	33.79	54	-20.21	AVG
10360	49.09	3.74	52.83	68.2	-15.37	peak

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	54.8	-4.59	50.21	74	-23.79	peak
3647	38.3	-4.59	33.71	54	-20.29	AVG
10360	49.09	3.74	52.83	68.2	-15.37	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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MID CH40

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	53.39	-4.59	48.8	74	-25.2	peak
3647	39.22	-4.59	34.63	54	-19.37	AVG
10400	49.91	3.74	53.65	68.2	₆ -14.55	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Datastar Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	54.3	-4.59	49.71	74	-24.29	peak
3647	37.67	-4.59	33.08	54	-20.92	AVG
10400	51.26	3.74	55	68.2	-13.2	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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HIGH CH 48

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
3647	52.78	-4.59	48.19	74	-25.81	peak
3647	39.25	-4.59	34.66	54	-19.34	AVG
10480	49.1	3.75	52.85	68.2	-15.35	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

12 (322)	9	1002223	(Sign)		\$65,073.7	(300)
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	_ Detector Type
3647	53.28	-4.59	48.69	74	-25.31	peak
3647	39.9	-4.59	35.31	54	-18.69	AVG
10480	50.57	3.75	54.32	68.2	-13.88	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark.

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.2G 802.11n40 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 38

Horizontal:

atten V	10.	ALL SID.	and MD.	and the	7"	and the
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	54.51	-4.59	49.92	74	-24.08	peak
3647	38.46	-4.59	33.87	54	-20.13	AVG
10360	51.28	3.74	55.02	68.2	-13.18	peak

Vertical:

	- CC	1000				100
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	54.08	-4.59	49.49	74	-24.51	peak
3647	39.18	-4.59	34.59	54	-19.41	AVG
10360	49.25	3.74	52.99	68.2	-15.21	peak
-611	175	261	175	Vall /	2511	1661

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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HIGH CH 46

Horizontal:

Meter Reading	Factor	Emission Level	Limits	Margin	Dotactor Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
52.3	-4.59	47.71	74	-26.29	peak
38.85	-4.59	34.26	54	-19.74	AVG
51.43	3.75	55.18	68.2	₆ -13.02	peak
	(dBµV) 52.3 38.85	(dBµV) (dB) 52.3 -4.59 38.85 -4.59	(dBμV) (dB) (dBμV/m) 52.3 -4.59 47.71 38.85 -4.59 34.26	(dBμV) (dB) (dBμV/m) (dBμV/m) 52.3 -4.59 47.71 74 38.85 -4.59 34.26 54	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m) 52.3 -4.59 47.71 74 -26.29 38.85 -4.59 34.26 54 -19.74

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Detector Type
3647	54.7	-4.59	50.11	74	-23.89	peak
3647	40.31	-4.59	35.72	54	-18.28	AVG
10480	50.83	3.75	54.58	68.2	-13.62	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.2G 802.11ac20 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 36

Horizontal:

	- =	V A			
Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
54.29	-4.59	49.7	74	-24.3	peak
38.35	-4.59	33.76	54	-20.24	AVG
51.63	3.74	55.37	68.2	-12.83	peak
	(dBµV) 54.29 38.35	(dBµV) (dB) 54.29 -4.59 38.35 -4.59	(dBμV) (dB) (dBμV/m) 54.29 -4.59 49.7 38.35 -4.59 33.76	(dBμV) (dB) (dBμV/m) (dBμV/m) 54.29 -4.59 49.7 74 38.35 -4.59 33.76 54	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m) 54.29 -4.59 49.7 74 -24.3 38.35 -4.59 33.76 54 -20.24

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

				400		
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	52.42	-4.59	47.83	74	-26.17	peak
3647	38.05	-4.59	33.46	54	-20.54	AVG
10360	51.78	3.74	55.52	68.2	-12.68	peak
2- 70		- 4 02 -	- 40		103	CIO.

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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MID CH40

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	52.96	-4.59	48.37	74	-25.63	peak
3647	37.88	-4.59	33.29	54	-20.71	AVG
10400	50.35	3.74	54.09	68.2	-14.11	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	52.3	-4.59	47.71	74	-26.29	peak
3647	39.23	-4.59	34.64	54	-19.36	AVG
10400	49.96	3.74	53.7	68.2	-14.5	peak

Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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HIGH CH 48

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	54.62	-4.59	50.03	74	-23.97	peak
3647	39.34	-4.59	34.75	54	-19.25	AVG
10480	51.8	3.75	55.55	68.2	-12.65	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	53.67	-4.59	49.08	74	-24.92	peak
3647	40.4	-4.59	35.81	54	-18.19	AVG
10480	49.43	3.75	53.18	68.2	-15.02	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.2G 802.11ac40 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 38

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	52.27	-4.59	47.68	74	-26.32	peak
3647	39.98	-4.59	35.39	54	-18.61	AVG
10360	51.41	3.74	55.15	68.2	-13.05	peak
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Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

	260	76.0	200		200	70,0
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
3647	55.21	-4.59	50.62	74	-23.38	peak
3647	38.5	-4.59	33.91	54	-20.09	AVG
10360	51.4	3.74	55.14	68.2	-13.06	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

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HIGH CH 46

Horizontal:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	53.67	-4.59	49.08	74	-24.92	peak
3647	42.11	-4.59	37.52	54	-16.48	AVG
10480	50.53	3.75	54.28	68.2	-13.92	peak

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
53.17	-4.59	48.58	74	-25.42	peak
39.49	-4.59	34.9	54	-19.1	AVG
50.16	3.75	53.91	68.2	-14.29	peak
	(dBµV) 53.17 39.49	(dBµV) (dB) 53.17 -4.59 39.49 -4.59	(dBμV) (dB) (dBμV/m) 53.17 -4.59 48.58 39.49 -4.59 34.9	(dBμV) (dB) (dBμV/m) (dBμV/m) 53.17 -4.59 48.58 74 39.49 -4.59 34.9 54	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m) 53.17 -4.59 48.58 74 -25.42 39.49 -4.59 34.9 54 -19.1

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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5.2G 802.11ac80 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

CH 42

Horizontal:

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Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Detector Type
3647	54.36	-4.59	49.77	74	-24.23	peak
3647	39.51	-4.59	34.92	54	-19.08	AVG
10360	49.1	3.74	52.84	68.2	-15.36	peak
15 - 140°		1 10%	and thousand		1/25	UO

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	— Detector Type
3647	55.13	-4.59	50.54	74	-23.46	peak
3647	39.12	-4.59	34.53	54	-19.47	AVG
10360	51.09	3.74	54.83	68.2	-13.37	peak
-7111-	46.77	-4	W 460	Va. (1)	2711.	400

Remark: Factor = Antenna Factor + Cable Loss - Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

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4.8. Frequency Stability Measurement

4.8.1. Test Specification

Test Requirement:	FCC Part15 Section 15.407(g)
Test Method:	ANSI C63.10: 2013
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Setup:	Spectrum Analyzer EUT AC/DC Power supply
Test Procedure:	The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Test Result:	PASS MARTESTING MALARITESTING MALARITESTING MARTESTING
Remark:	N/A

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Test Result as follows:

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
HUAKTE	40.8V	5180.011	MAK TESS 11	5240.002	2
5.2G Band	48V	5179.994	-6	5239.988	-12
	55.2V	5179.998	-2	5240.012	12

Mode	Temperature (°C)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
	-30	5180.008	8	5240.005	5
	-20	5179.991	-9	5240.025	25
	-10	5179.992	-8	5239.994	-16
	0	5180.015	15	5239.988	-12
5.2G Band	10	5180.013	13	5240.036	36
	20	5179.990	-10	5240.007	7
	30	5180.019	19	5240.040	40
	40	5180.006	TESTING 6 M HO	5239.087	-13
	50	5179.089	-11	5239.999	-1 HUM

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4.9. Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.249, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Antenna Connected Construction

The antenna used in this product is a External Antenna, need professional installation. It conforms to the standard requirements. and the best case gain of the antenna is Antenna port 1:3dBi and Antenna port 2:3dBi.

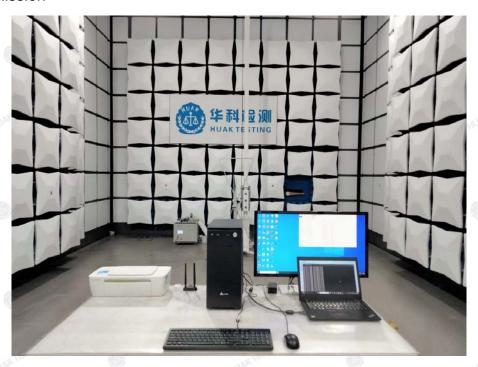


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5. Photographs of Test Setup

Radiated Emission





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Conducted Emission



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TEL: +86-755 2302 9901 FAX: +86-755 2302 9901 E-mail: service@cer-mark.com

Add: 1-2F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China





6. Photos of the EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos

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

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