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Test Mode:	802.11n(HT20) Mode			
Channel frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)		
2412	17.942			
2437	18.022	>=0.5		
2462	18.022			
	2412 MHz			

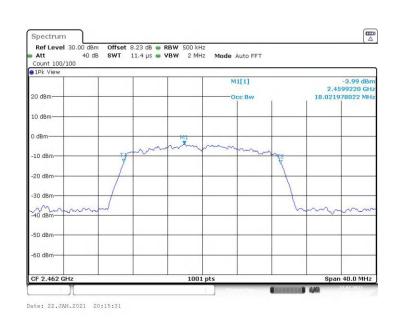


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2437 MHz

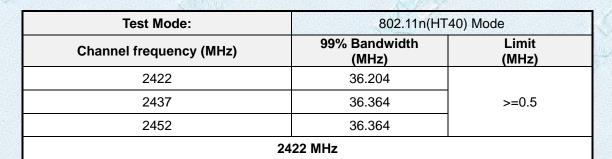


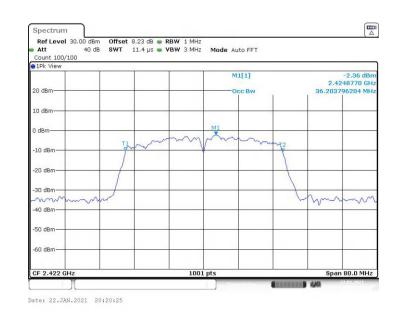
2462 MHz



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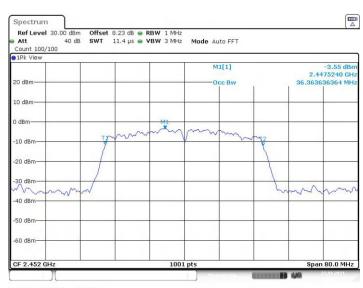


KSIGN®

2437 MHz



2452 MHz



Date: 22.JAN.2021 20:33:19



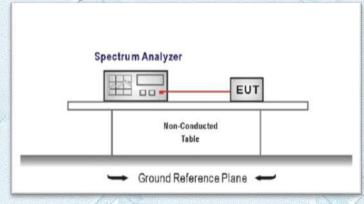
3.5. Band edge and Spurious Emission (conducted)

Limit

FCC CFR Title 47 Part 15 Subpart C Section15.247 (d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

Test Configuration



Test Procedure

- 1. Connect EUT RF Output port to the Spectrum Analyzer through an RF attenuator.
- 2. Spectrum Setting:
 - RBW=100KHz VBW=300KHz. Detector function: Peak. Trace: Max hold. Sweep = Auto couple.

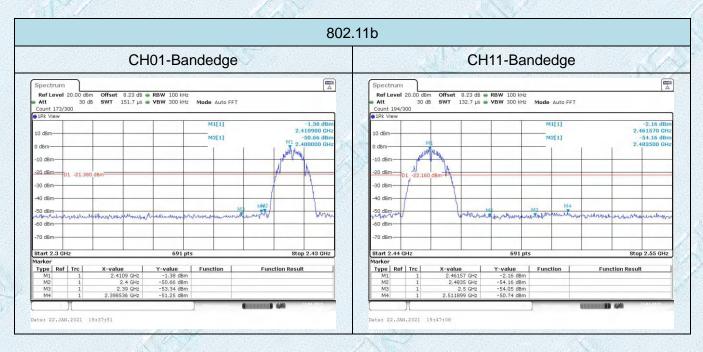
Allow the trace to stabilize.

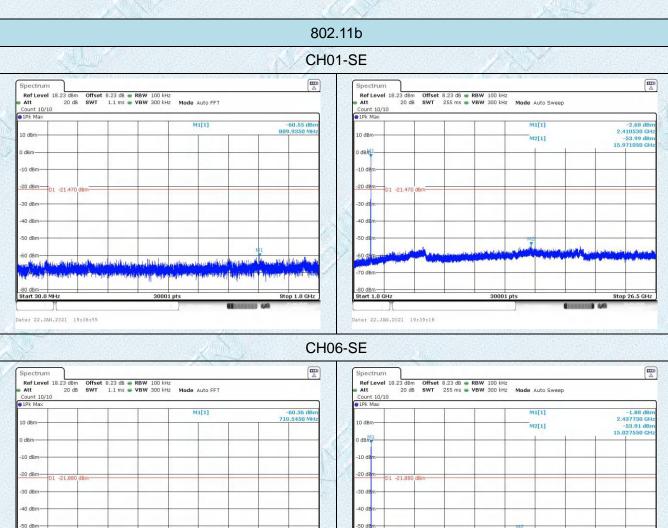
Test Mode

Please refer to the clause 2.3.

Test Results







tart 1.0 GHz

ate: 22.JAN.2021 19:44:30

30001 pts

Stop 26.5 GHz

Concernent 640

in the lab

an a hanan da sa karan sa sa sa kara da sa

30001 pt

the delia

Start 30.0 MHz

Date: 22.JAN.2021 19:44:08

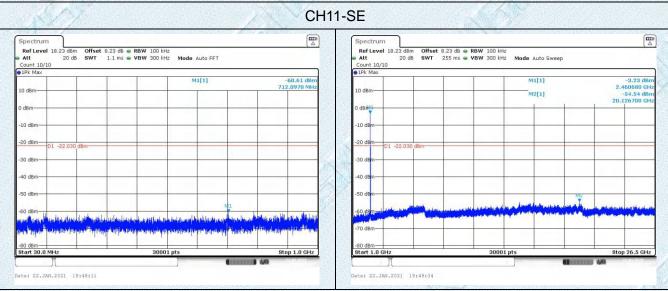
an ideatiful

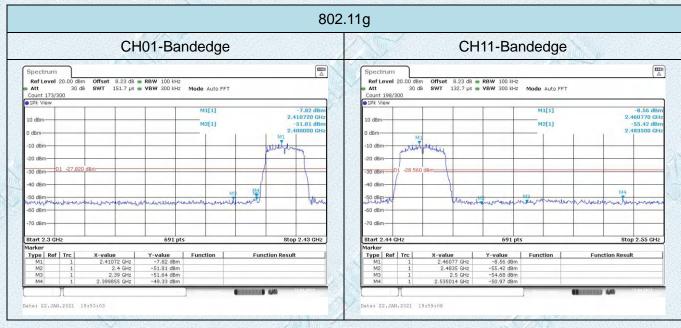
Jesel andres a Analysian

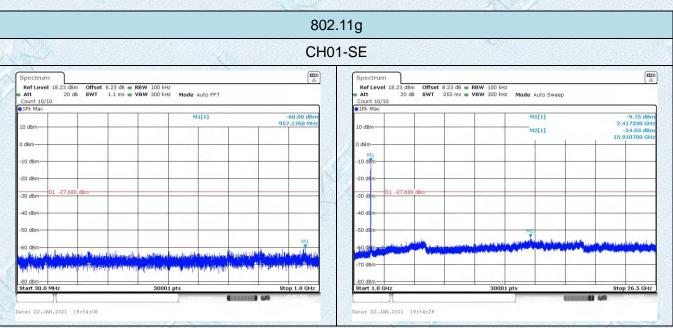
And ADA

Stop 1.0 GHz

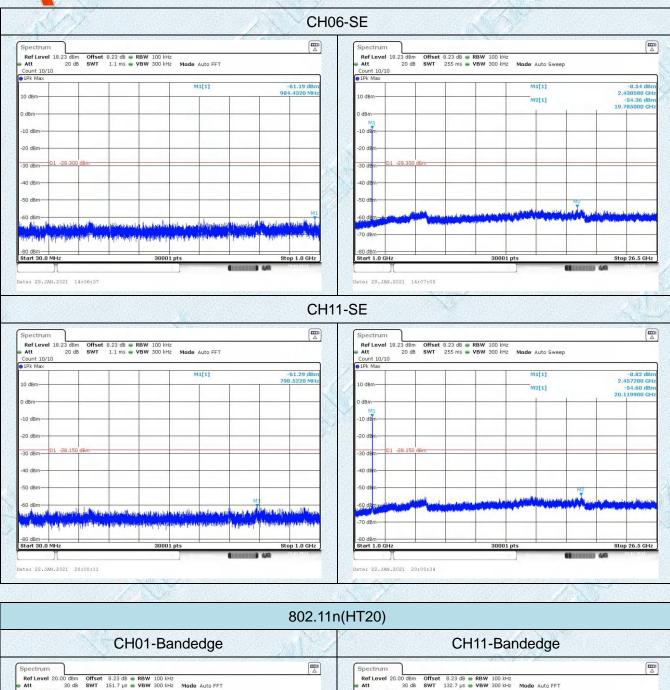












Count 164/300 1Pk View Count 199/300 1Pk View M1[1] -9.72 dB 2.414488 GF -52.06 dB 2.400000 GF M1[1] 10 dBn 10 dBm M2[1] M2[1] 0 dBm D dBm -10 dBm-10 dBm un all the hard and a -20 dBm--20 dBm -28.91 30 dBn 01 -29.7 -30 dBm-40 dBr 40 dBm -50 dB -50 dBm unanna mound Marile anorthe -60 di -60 dBm -70 dBm -70 dBm Start 2.44 GHz Marker Type Ref Trc M1 1 Start 2.3 GHz 691 Stop 2.43 GHz 691 pts Y-value -9.72 dBm Y-value Type Ref Trc X-value 2.46077 GHz 2.4835 GHz 2.5 GHz 2.505362 GHz X-value 2.41448 GHz 2.4 GHz 2.39 GHz 2.399855 GHz Function Function Result Function Function Result -8.91 dBm -54.08 dBm -54.21 dBm -50.62 dBm -9.72 dBm -52.06 dBm -55.28 dBm -51.08 dBm 100 B 640 IR 640 JL. Date: 22.JAN.2021 20:07:26 Date: 22.JAN.2021 20:15:46

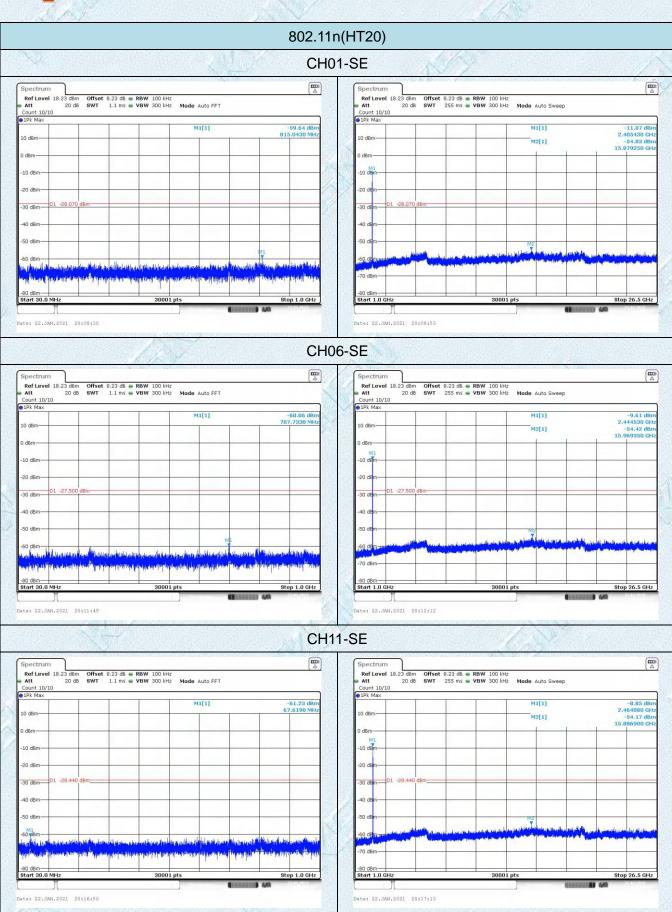
 Ref Level
 20.00
 dBm
 Offset
 8.23
 dB
 RBW
 100
 kHz

 Att
 30
 dB
 SWT
 132.7 μs
 WBW
 300 kHz
 Mode
 Auto FFT

-8.91 dBn 2.460770 GH -54.08 dBn 2.483500 GH

Stop 2.55 GHz

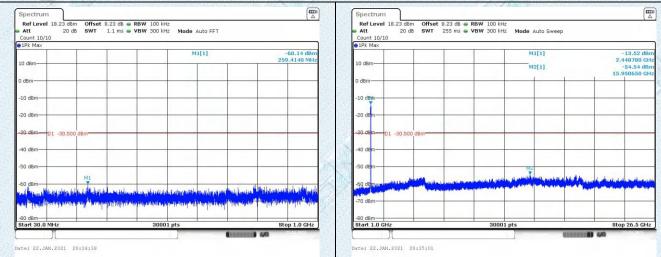






802.11n(HT40) CH03-Bandedge CH09-Bandedge Spectrum Spectrum Ref Level 20.00 dBm Offset 8.23 dB RBW 100 kHz Att 30 dB SWT 151.7 µs VBW 300 kHz Ref Level 20.00 dBm Offset 8.23 dB RBW 100 kHz Att 30 dB SWT 132.7 µs VBW 300 kHz Mode Auto FFT Mode Auto FFT Count 197/300 Count 163/300 1Pk View -11.97 dBn 2.424450 GH -52.84 dBn 2.400000 GH -9.64 dBr 2.449470 GH -53.78 dBr 2.483500 GH M1[1] M1[1] 10 dBn 10 dBr M2[1] M2[1] 0 dBr 0 dBm M2 -10 dBm -19 dBrit mble -20 dBm Y -30 dBm-01 -29.6 -30 dBm 1 -31.9 40 dBm -40 dBm Wel -50 dBm -50 dBm M3 anther when the char marin alablede 1 apound abushas 4 330 Arrent h as moderne uto 1 malalam -60 dBm -60 dBm--70 dB -70 dBm Start 2.3 GH Stop 2.43 GHz Start 2.44 GHz Stop 2.55 GHz 691 pt 691 pt X-value 2.44947 GHz 2.4835 GHz 2.5 GHz 797913 GHz -9.64 dBm Y-value -11.97 dBm -52.84 dBm -54.96 dBm -50.75 dBm Type Ref Trc Function Function Result Type Ref Trc Function Function Result 2.42445 GHz -9.64 -53.78 -54.07 -50.50 Date: 22.JAN.2021 20:20:41 Date: 22.JAN.2021 20:33:35 802.11n(HT40) CH03-SE Spectrum Spectrum Ref Level 18.23 dBm Att 20 dB Offset 8.23 dB RBW 100 kHz SWT 1.1 ms VBW 300 kHz Mode Auto FFT Ref Level 18.23 dBm Offset 8.23 dB RBW 100 kHz Att 20 dB SWT 255 ms VBW 300 kHz Mode Auto Sweet Count 10/10 Count 10/10 1Pk Ma 1Pk Ma M1[1] 61.26 dE M1[1] 12,10 dB 812.0 0 MH 2.413 0 GH 10 dBn 10 dBr M2[1] -54.12 dB 20.186200 GH dB -10 dB -10 di 20 20 dB 40 dB 40 50 di 60 dBm a way and of steams AND AND AND A REAL t 30.0 MHz .0 GHz 100 30001 Stop 26.5 GHz Date: 22.JAN.2021 20:21:45 Date: 22.JAN.2021 20:22:08 CH06-SE Spectrum Spectrum Ref Level 18.23 dBm Offset 8.23 dB RBW 100 kHz Att 20 dB SWT 255 ms VBW 300 kHz Mode Auto Sweep Ref Level 18.23 dBm Offset 8.23 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto FFT Count 10/10 Count 10/10 Plpk Max -13.20 dBi 2.444530 GH -54.21 dBi 16.282150 GH -58.57 dB M1[1] 954.0720 MH 10 dB 10 di M2[1] -10 dBn -10 di 20 30 30 d 40 40 di 50 di -50 (M1 60 di 70 dBr Start 30.0 .0 GHz Start 1.0 G 30001 Stop 26.5 GHz Date: 22.JAN.2021 20:28:49 Date: 22.JAN.2021 20:29:11 CH09-SE





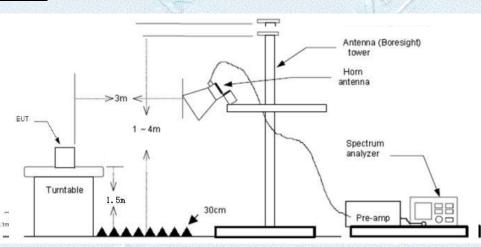


3.6. Band Edge Emissions(Radiated)

Limit

Restricted Frequency Band	(dBuV/	m)(at 3m)
(MHz)	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

Test Configuration



Test Procedure

- 1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- The receiver set as follow:
 RBW=1MHz, VBW=3MHz PEAK detector for Peak value.
 RBW=1MHz, VBW=10Hz with PEAK detector for Average Value.

Test Mode

Please refer to the clause 2.3.

Test Results

Note:

1.Measurement = Reading level + Correct Factor

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

2.Pre-scan 802.11b, 802.11g, 802.11n(HT20) and 802.11n(HT40) mode, and found the 802.11b mode which it is worse case, so only show the test data for worse case.

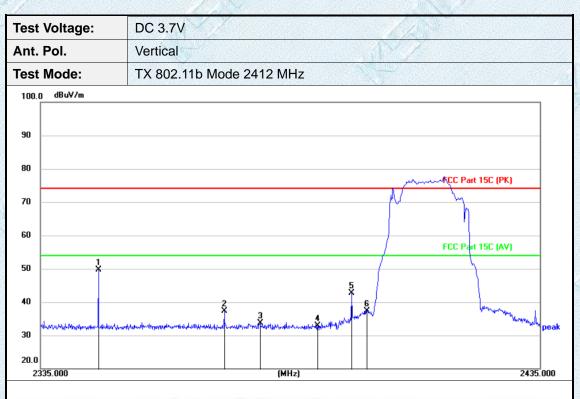
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Test	Voltag	ge: DC	3.7V		1	V Y		
Ant.	Pol.	Hor	rizontal					
Test	Mode	: ТХ	802.11b Mod	le 2412MHz				
100.0	dBuV∕r	n						
90								
80						N mmm#	CC Part 15C (F	PK]
70							J.	
60 -					M	F	CC Part 15C (/	AV]
50				3	a sman			Sulley
40	4 MB . I. J.	felow Manyuski wana wana watata wa wa	1 2 management	town and the state of the state	A AMUNAT			WWWWWWW pea
30	of a file of the other states of the other sta	la de la companya de						
20.0								
233	5.000			(MHz)				2435.000
No.	Mk.	Freq.	Reading	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
_			10 71	40.00	00.70	74.00	05.00	
1		2363.410	49.71	-10.93	38.78	74.00	35.22	peak

6	*	2400.000	55.12	-10.92	44.20	74.00	29.80	peak
5		2390.000	52.41	-10.92	41.49	74.00	32.51	peak
4		2387.160	55.06	-10.92	44.14	74.00	29.86	peak
3		2383.290	53.83	-10.92	42.91	74.00	31.09	peak
2		2371.700	51.25	-10.92	40.33	74.00	33.67	peak
1		2363.410	49.71	-10.93	38.78	74.00	35.22	реак

Measurement = Reading level + Correct Factor

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	2346.470	60.69	-10.93	49.76	74.00	24.24	peak
2		2371.330	48.32	-10.92	37.40	74.00	36.60	peak
3		2378.680	44.68	-10.92	33.76	74.00	40.24	peak
4		2390.000	43.74	-10.92	32.82	74.00	41.18	peak
5		2396.850	53.67	-10.92	42.75	74.00	31.25	peak
6		2400.000	48.31	-10.92	37.39	74.00	36.61	peak

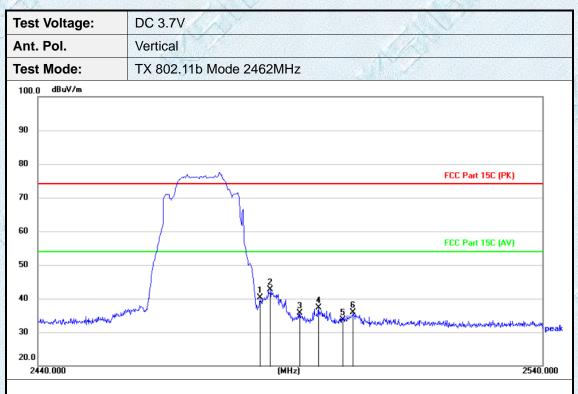
Measurement = Reading level + Correct Factor



Test	Volta	ge: DC	3.7V	X				
Ant.	Pol.	Но	rizontal			Charles .		
Test	Mode	: ТХ	802.11b Mod	le 2462MHz		and the second		
100.0 90 - 80 - 70 -	dBuV∕r	n	Munit	1		FC	C Part 15C (P)	9
60						FC	C Part 15C (A)	0
50 - 40 _M	and when the state	mart		4 3	March And Annulling Street	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Marganalda	SMMMY/MY/HI peak
30 20.0 244	0.000			(MHz)				2540.000
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	1	MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	2483.500	54.08	-10.88	43.20	74.00	30.80	peak
2		2492.190	52.49	-10.89	41.60	74.00	32.40	peak
3	_	2496.950	52.28	-10.88	41.40	74.00	32.60	peak
4		2500.000	50.05	-10.88	39.17	74.00	34.83	peak
5	_	2506.780	49.69	-10.87	38.82	74.00	35. <mark>1</mark> 8	peak
		2520.070	48.80	-10.87	37.93	74.00	36.07	peak

Measurement = Reading level + Correct Factor

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	_	MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	51.11	-10.88	40.23	74.00	33.77	peak
2	*	2485.670	53.65	-10.88	42.77	74.00	31.23	peak
3		2491.460	46.56	- <mark>10.8</mark> 9	35.67	74.00	38.33	peak
4		2495.140	48.07	-10.87	37.20	74.00	36.80	peak
5		2500.000	44.62	-10.88	33.74	74.00	40.26	peak
6		2502.080	46.70	-10.88	35.82	74.00	38.18	peak

Measurement = Reading level + Correct Factor

3.7. Spurious Emission (Radiated)

<u>Limit</u>

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

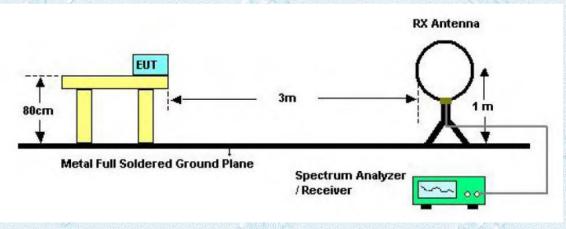
Frequency	Distance Met	ers(at 3m)
(MHz)	Peak	Average
Above 1000	74	54

Note:

(1) The tighter limit applies at the band edges.

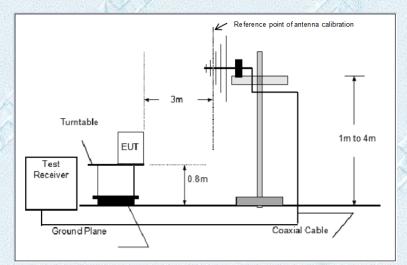
(2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

Test Configuration

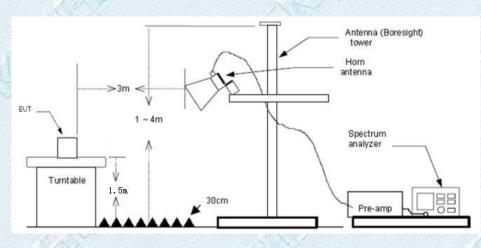


Below 30MHz Test Setup

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Below 1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

- 1. The EUT was setup and tested according to ANSI C63.10:2013
- 2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
- 4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
- 5. Set to the maximum power setting and enable the EUT transmit continuously.
- 6. Use the following spectrum analyzer settings
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Below 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(3) From 1 GHz to 10th harmonic:

RBW=1MHz, VBW=1MHz Peak detector for Peak value. RBW=1MHz, VBW=10Hz Peak detector for Average value.

Test Mode

Please refer to the clause 2.3.

KSIGN

Test Result

9 KHz~30 MHz and 18GHz~25GHz

From 9 KHz~30 MHz and 18GHz~25GHz: Conclusion: PASS

Note:

- Measurement = Reading level + Correct Factor
 Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
- 3) The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4) The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 5) Pre-scan 802.11b/g/n(HT20/HT40) modulation, and found the 802.11b modulation which it is worse case for above 1GHz, so only show the test data for worse case.

BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.



Test	Volta	ge: DC	C 3.7V			185		
Ant.	Pol.	Ho	orizontal		A.	SEY		
Test	Mode	e: TX	(802.11b Mod	de 2412MHz	31	and a		
80.0	dBu¥∕	m						
70								
60						FCC Part 15C (30MHz-1GHz)	
50							Margin -6 di	
40								
30								www.
20		1		3	- water and a star was the	anter & where the prach	hayaaylayadaan hadaan hadaan aha	
10	ellerer in stad	ang is the second as the construction of the second s	www.unewarder	Halled March and March	and the second sec			
0.0 30.	.000	60	100	(MHz)		500		1000.0
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	48.0445	25.04	-10.44	14.60	40.00	-25.40	QP
2		105.0137	24.99	-12.97	12.02	43.50	-31.48	QP
3		152.0231	30.95	-16.52	14.43	43.50	-29.07	QP
4		228.4904	25.00	-12.20	12.80	46.00	-33.20	QP
5		282.1923	25.47	-10.85	14.62	46.00	-31.38	QP
6		399.8706	25.41	-8.66	16.75	46.00	-29.25	QP

Measurement = Reading Level+ Correct Factor

3

4

5

6

63.2023

110.7627

226.3374

328.4627

QP

QP

QP

QP

-27.60

-31.71

-32.61

-30.18

Test	Volta	ge:	DC	3.7V		1	869		
Ant.	Pol.		Ver	tical					
Test	Mode	:	TX	802.11b Mod	de 2412MHz				
80.0	dBu¥∕	m							
70									
60							FCC Part 15C	(30MHz-1GHz)	
50								Margin -6 d	B [
40									
30									and the grant
20 10	hypomerula	and the state of the	~~~	Mary Mark Mark Mark	Mary manager all all and a	non the manufacture	en plannen aller feren	alter per franchische son an	
0.0 30	.000		60	100	(MHz)		500		1000.0
No.	Mk.	Free	į .	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	47.926	67	24.50	-10.45	14.05	40.00	-25.95	QP
2		53.542	28	24.10	-11.07	13.03	40.00	-26.97	QP

Measurement = Reading Level+ Correct Factor

25.41

25.24

25.68

25.67

-13.01

-13.45

-12.29

-9.85

12.40

11.79

13.39

15.82

40.00

43.50

46.00

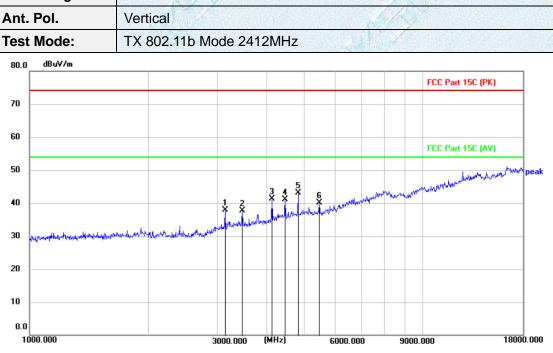
46.00



	Volta	ge:	DC 3.	7V			5.60°		
Ant.	Pol.		Horiz	ontal		S.C.	and the second		
Test	Mod	e:	TX 80	02.11b Mo	de 2412MH	z 🚫			
80.0	dBu¥∕	m							
-							F	CC Part 15C (Pl	9
70 -									
60 -								CC Part 15C (AV	0
50									
						6 X	a have all the	witheretained	w/w/ we poor
40			1	2	3 Lama Jul	S.	ALCONC. THE		
30	Nerrowski	where the provides	m 1	minument	a Armiter Manual Contraction				
20									
20									
10									
0.0	0 000			20			9000.000		18000 000
0.0	0.000			30	000.000 (MHz)	6000.000	9000.000)	18000.000
0.0				Reading	Correct	Measure-			18000.000
0.0	0.000 Mk.		1 .				9000.000	Over	18000.000
0.0		Free	1 .	Reading	Correct	Measure-			18000.000 Detector
0.0			1.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
0.0 100		MHz	4. 	Reading Level (dBuV)	Correct Factor (dB/m)	Measure- ment (dBuV/m)	Limit (dBuV/m)	Over (dB)	Detector
0.0 100 No.		MHz 1931.60	1. 00 00	Reading Level (dBuV) 44.52	Correct Factor (dB/m) -11.12	Measure- ment (dBuV/m) 33.40	Limit (dBuV/m) 74.00	Over (dB) 40.60	Detector peak
0.0 100 No. 1 2		MHz 1931.60 2412.70	1. 00 00 00	Reading Level (dBuV) 44.52 45.06	Correct Factor (dB/m) -11.12 -10.92	Measure- ment (dBuV/m) 33.40 34.14	Limit (dBuV/m) 74.00 74.00	Over (dB) 40.60 39.86	Detector peak peak
0.0 100 No. 1 2 3		MHz 1931.60 2412.70 3147.10	1. 00 00 00 00	Reading Level (dBuV) 44.52 45.06 46.62	Correct Factor (dB/m) -11.12 -10.92 -10.32	Measure- ment (dBuV/m) 33.40 34.14 36.30	Limit (dBuV/m) 74.00 74.00 74.00	Over (dB) 40.60 39.86 37.70	Detector peak peak peak

Measurement = Reading level + Correct Factor

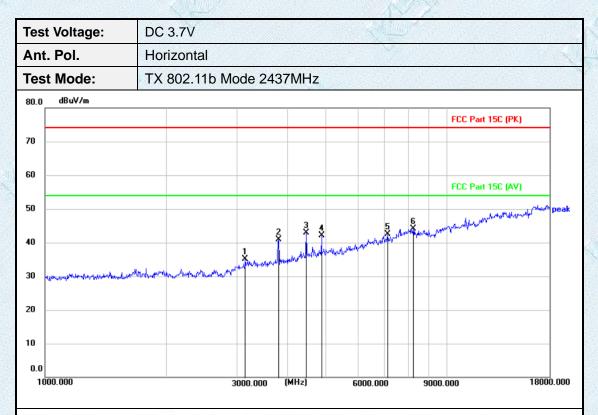




No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3148.800	48.28	-10.32	37.96	74.00	36.04	peak
2		3476.900	47.36	-9.72	37.64	74.00	36.36	peak
3		4141.600	49.28	-7.95	41.33	74.00	32.67	peak
4		4474.800	47.86	-6.84	41.02	74.00	32.98	peak
5	*	4823.300	48.96	-5.87	43.09	74.00	30.91	peak
6		5467.600	45.08	-4.96	40.12	74.00	33.88	peak

Measurement = Reading level + Correct Factor

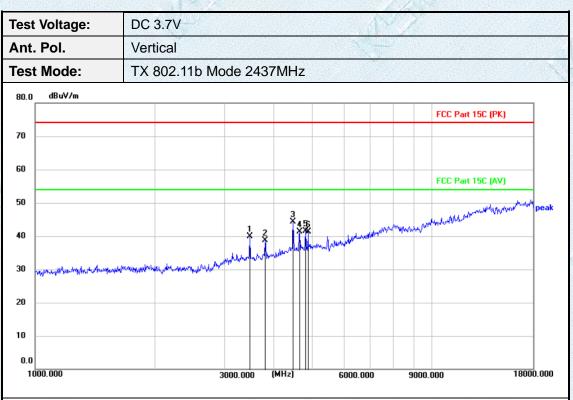
KSIGN



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3150.500	45.42	-10.31	35.11	74.00	38.89	peak
2		3813.500	49.80	-8.89	40.91	74.00	33.09	peak
3		4473.100	49.82	-6.85	42.97	74.00	31.03	peak
4		4884.500	47.79	-5.70	42.09	74.00	31.91	peak
5		7128.500	42.91	-0.32	42.59	74.00	31.41	peak
6	*	8250.500	42.03	2.00	44.03	74.00	29.97	peak

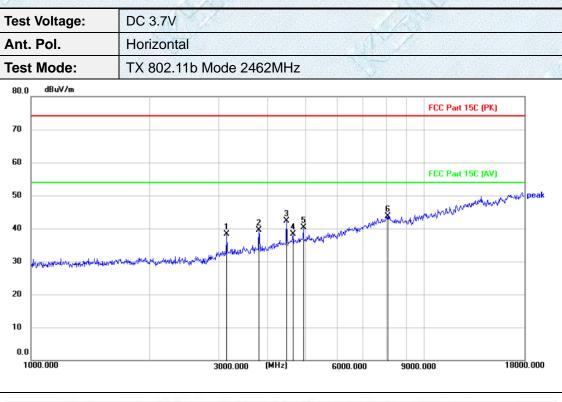
Measurement = Reading level + Correct Factor

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	i.e	3480.300	49.71	-9.71	40.00	74.00	34.00	peak
2		3811.800	47.66	-8.90	38.76	74.00	35.24	peak
3	*	4473.100	51.15	-6.85	44.30	74.00	29.70	peak
4		4641.400	47.61	-6.36	41.25	74.00	32.75	peak
5	1	4804.600	47.43	-5.92	41.51	74.00	32.49	peak
6		4884.500	47.00	-5.70	41.30	74.00	32.70	peak

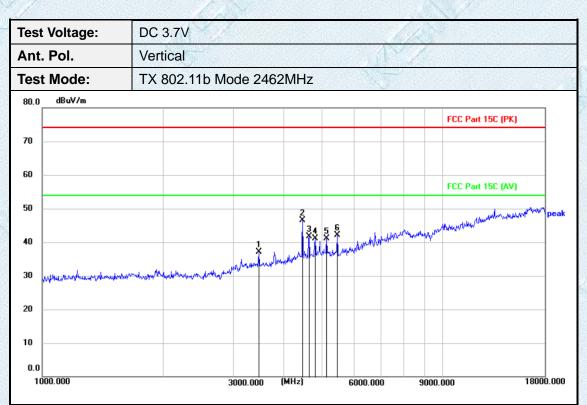
Measurement = Reading level + Correct Factor



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3150.500	48.66	-10.31	38.35	74.00	35.65	peak
2		3811.800	48.49	-8.90	39.59	74.00	34.41	peak
3		4473.100	49.13	-6.85	42.28	74.00	31.72	peak
4		4641.400	44.62	-6.36	38.26	74.00	35.74	peak
5		4944.000	45.76	-5.53	40.23	74.00	33.77	peak
6	*	8085.600	41.73	2.05	43.78	74.00	30.22	peak
_								

Measurement = Reading level + Correct Factor





No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3480.300	46.86	-9.71	37.15	74.00	36.85	peak
2	*	4474.800	53.40	-6.84	46.56	74.00	27.44	peak
3		4641.400	48.06	-6.36	41.70	74.00	32.30	peak
4		4806.300	47.11	-5.92	41.19	74.00	32.81	peak
5		5137.800	46.38	-5.26	41.12	74.00	32.88	peak
6		5471.000	47.04	-4.96	42.08	74.00	31.92	peak

Measurement = Reading level + Correct Factor



3.8. Conducted Emission

Limit

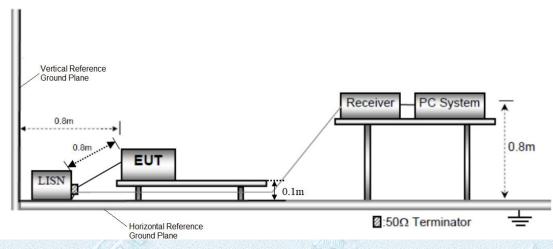
Conducted Emission Test Limit

Frequency	Maximum RF Line Voltage (dBµV)				
Frequency	Quasi-peak Level	Average Level			
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

Notes:

- (1) *Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Configuration



Test Procedure

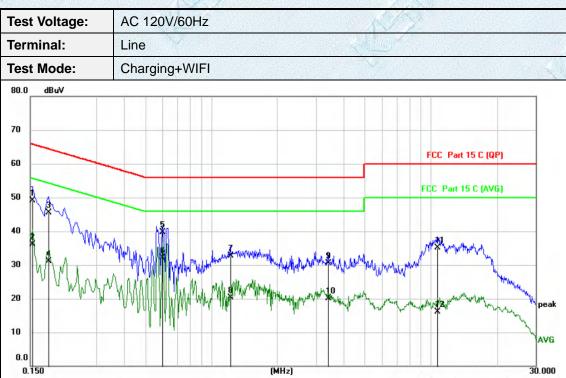
- 1. The EUT was setup according to ANSI C63.10:2013 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 0.1m above the conducting ground plane. The vertical conducting plane was located 80 cm to the rear of the EUT. All other surfaces of EUT were at least 0.8m from any other grounded conducting surface.
- The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment.
 The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 7. During the above scans, the emissions were maximized by cable manipulation.

Test Mode:

Please refer to the clause 2.3.

Test Results

Pre-scan 802.11b/g/n(HT20/HT40) modulation, and found the 802.11b modulation 2412MHz which it is worse case, so only show the test data for worse case.

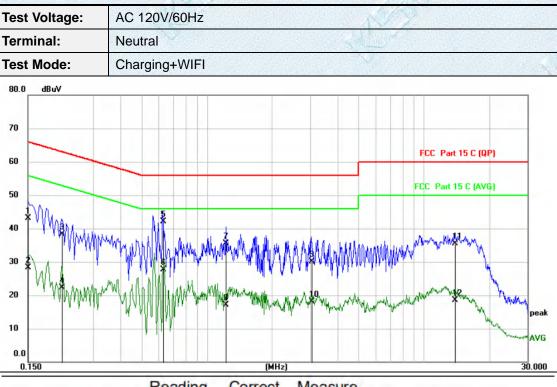


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Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
	0.1539	38.29	10.82	49.11	65.79	-16.68	QP
	0.1539	25.31	10.82	36.13	55.79	-19.66	AVG
	0.1819	34.68	10.86	45.54	64.40	-18.86	QP
	0.1819	20.27	10.86	31.13	54.40	-23.27	AVG
	0.5980	28.80	10.90	39.70	56.00	-16.30	QP
*	0.5980	21.22	10.90	32.12	46.00	-13.88	AVG
	1.2260	21.73	10.88	32.61	56.00	-23.39	QP
	1.2260	9.50	10.88	20.38	46.00	-25.62	AVG
	3.4100	19.65	10.93	30.58	56.00	-25.42	QP
	3.4100	9.12	10.93	20.05	46.00	-25.95	AVG
	10.6899	24.19	10.96	35.15	60.00	-24.85	QP
	10.6899	5.22	10.96	16.18	50.00	-33.82	AVG
	Mk.	Mk. Freq. MHz 0.1539 0.1539 0.1539 0.1819 0.1819 0.5980 * 0.5980 * 0.5980 1.2260 1.2260 3.4100 3.4100 10.6899	Mk. Reading Level MHz dBuV 0.1539 38.29 0.1539 38.29 0.1539 25.31 0.1819 34.68 0.1819 20.27 0.5980 28.80 * 0.5980 21.22 1.2260 21.73 1.2260 9.50 3.4100 19.65 3.4100 9.12 10.6899 24.19	Mk.Freq.Reading LevelCorrect FactorMHzdBuVdB0.153938.2910.820.153925.3110.820.153925.3110.820.181934.6810.860.181920.2710.860.598028.8010.90*0.598021.2210.901.226021.7310.881.22609.5010.883.41009.1210.9310.689924.1910.96	Mk.Reading LevelCorrect FactorMeasurementMHzdBuVdBdBuV0.153938.2910.8249.110.153925.3110.8236.130.153925.3110.8236.130.181934.6810.8645.540.181920.2710.8631.130.598028.8010.9039.70*0.598021.2210.9032.121.226021.7310.8832.611.22609.5010.8820.383.410019.6510.9330.583.41009.1210.9320.0510.689924.1910.9635.15	Mk.Freq.Reading LevelCorrect FactorMeasurementLimitMHzdBuVdBdBuVdBuVdBuV0.153938.2910.8249.1165.790.153925.3110.8236.1355.790.181934.6810.8645.5464.400.181920.2710.8631.1354.400.598028.8010.9039.7056.00*0.598021.2210.9032.1246.001.22609.5010.8820.3846.003.410019.6510.9330.5856.003.41009.1210.9320.0546.0010.689924.1910.9635.1560.00	Mk.Freq.Reading LevelCorrect FactorMeasure- mentLimitOverMHzdBuVdBdBuVdBuVdBdBuVdB0.153938.2910.8249.1165.79-16.680.153925.3110.8236.1355.79-19.660.181934.6810.8645.5464.40-18.860.181920.2710.8631.1354.40-23.270.598028.8010.9039.7056.00-16.30*0.598021.2210.9032.1246.00-13.881.226021.7310.8832.6156.00-23.391.22609.5010.8820.3846.00-25.623.410019.6510.9330.5856.00-25.4210.689924.1910.9635.1560.00-24.85

Remarks:

1.Measurement = Reading Level+ Correct Factor

2.Over = Measurement -Limit



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1500	32.28	10.83	43.11	66.00	-22.89	QP
2		0.1500	17.43	10.83	28.26	56.00	-27.74	AVG
3	-	0.2140	27.35	10.87	38.22	63.05	-24.83	QP
4		0.2140	11.46	10.87	22.33	53.05	-30.72	AVG
5	*	0.6300	31.18	10.87	42.05	56.00	-13.95	QP
6		0.6300	16.88	10.87	27.75	46.00	-18.25	AVG
7		1.2260	24.54	10.88	35.42	56.00	-20.58	QP
8		1.2260	6.15	10.88	17.03	46.00	-28.97	AVG
9		3.0380	19.16	10.92	30.08	56.00	-25.92	QP
10		3.0380	7.14	10.92	18.06	46.00	-27.94	AVG
11		13.8620	24.57	10.91	35.48	60.00	-24.52	QP
12		13.8620	7.58	10.91	18.49	50.00	-31.51	AVG

Remarks:

1.Measurement = Reading Level+ Correct Factor 2.Over = Measurement -Limit

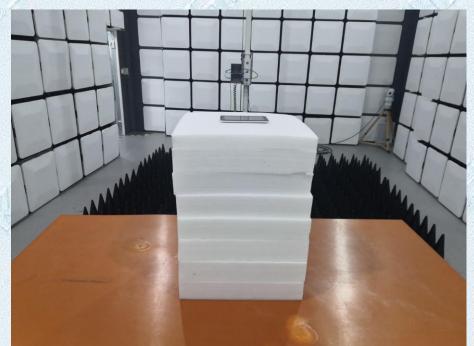


4.EUT TEST PHOTOS

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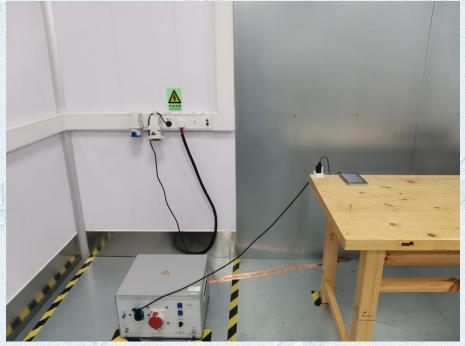
Radiated Emissions (Above 1GHz)







Conducted Emission



5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

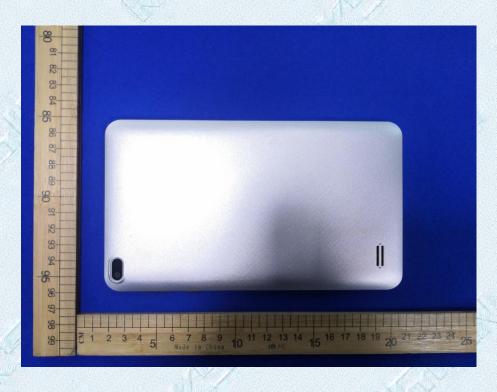
KSIGN®

External Photographs















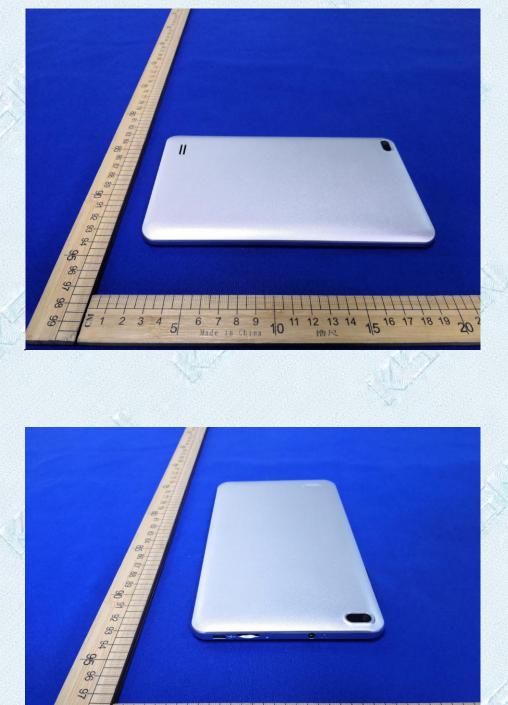












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Internal Photographs





