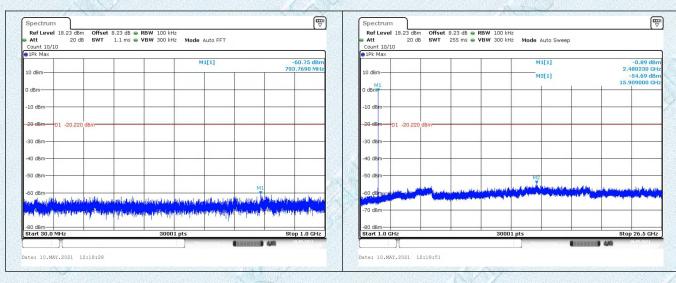
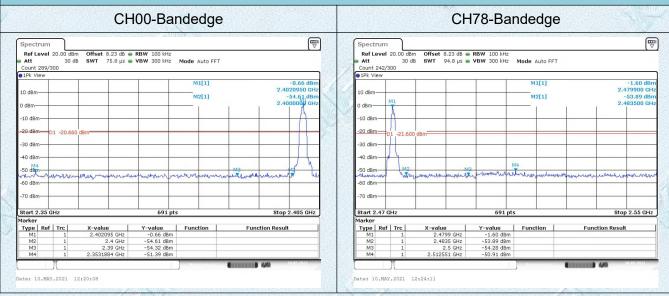
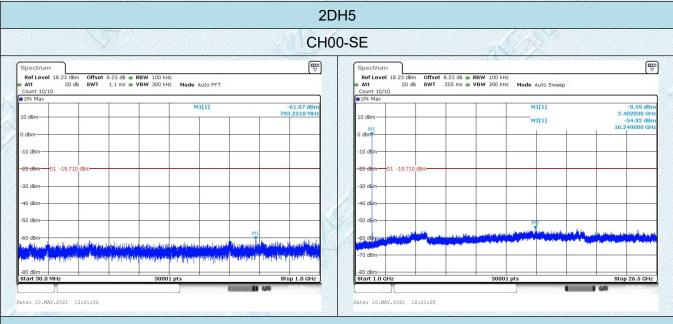


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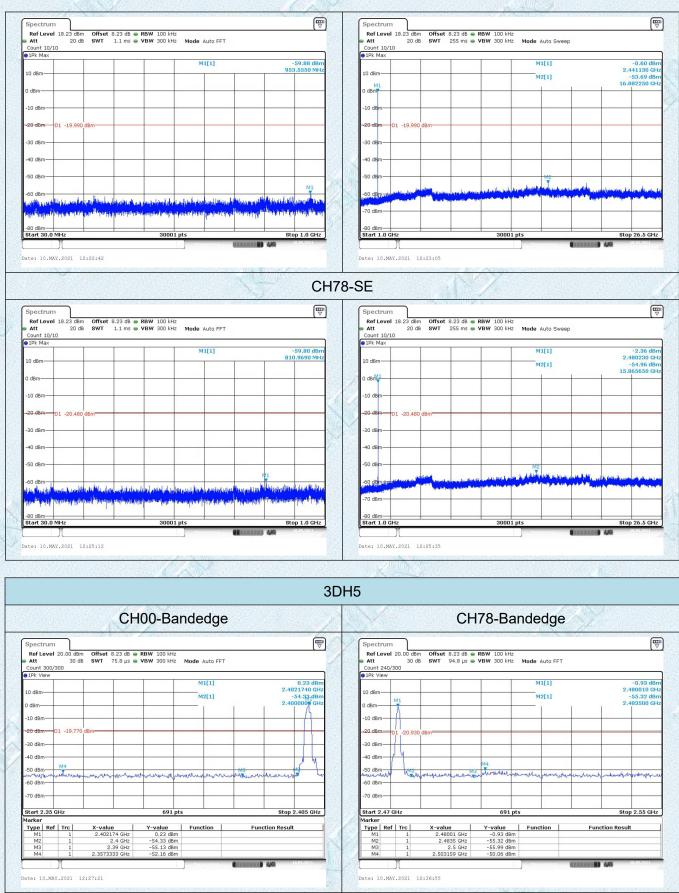




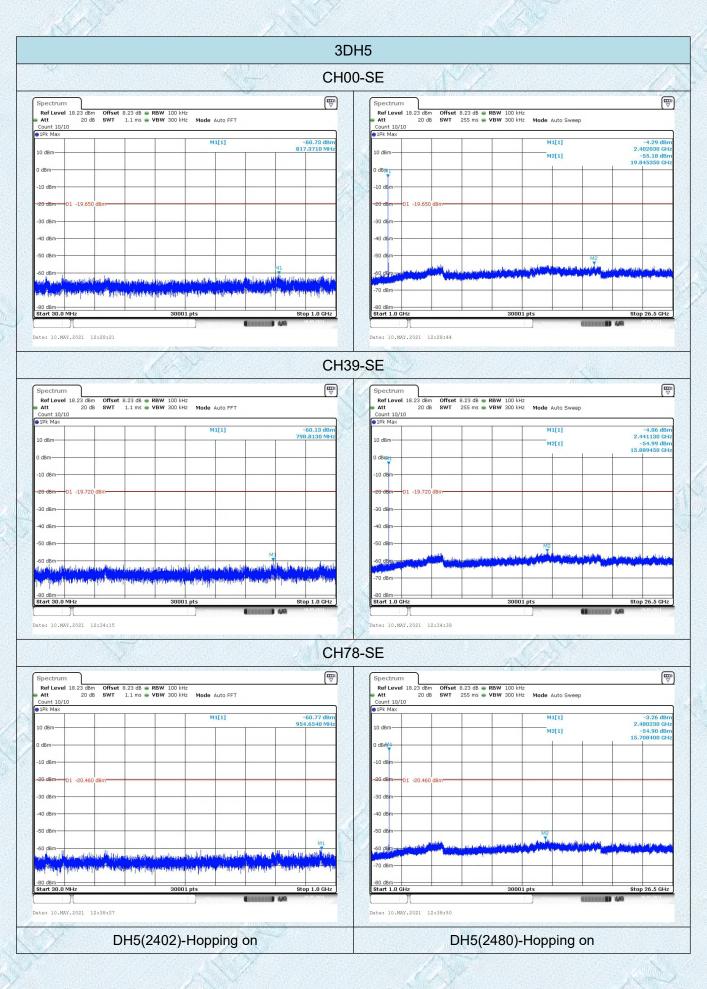
CH39-SE



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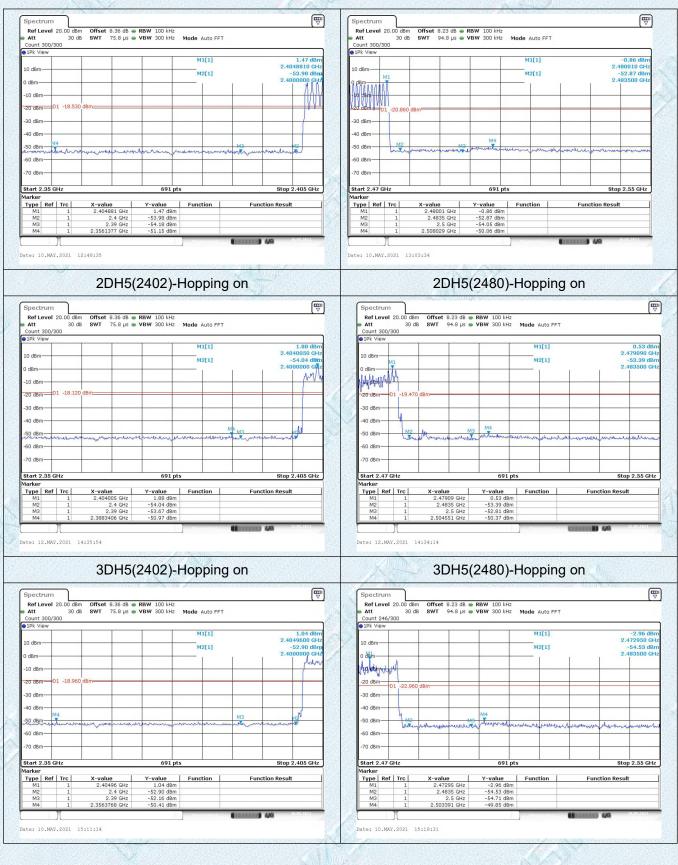






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#### Report No.: KS2104S1120E





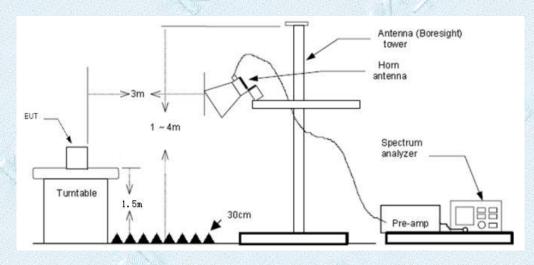
# 3.9. Band Edge Emissions(Radiated)

## Limit

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

Note: All restriction bands have been tested, only the worst case is reported.

# **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 DH5, 2DH5 and 3DH5 modulation, and found the DH5 modulation which it is worse case, so only show the test data for worse case.

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3

4

5

6 \* peak

peak

peak

peak

Test Volta	ge DC	3.7V			1/20		
Ant. Pol.	Hor	izontal		1	VEY.		
Test Mode	: DH	5 Mode 2402	MHz	1	QCC -		
100.0 dBuV/n	n						1
90							
80					F	C Part 15C (P)	
70							h
60					F	C P 51 15C (A)	0
50			1 ×	2	5	Ĵ	
40				× +		w la	WW
30	-	howhat	underson the marked the	a mar with the whole	handbladder 14		
20.0			(MHz)				2405.0
2370.000			(M12)				2403.0
	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
No. Mk.		the second se	1201	(dBuV/m)	(dBuV/m)	(dB)	-
No. Mk.	MHz	(dBuV)	(dB/m)	(ubuv/m)	(and min)	(ab)	Detector
No. Mk.	MHz 2385.743	(dBuV) 57.47	(dB/m) -10.92	46.55	74.00	-27.45	Detector

Measurement = Reading level + Correct Factor

54.17

52.28

55.64

64.86

-10.92

-10.92

-10.92

-10.92

43.25

41.36

44.72

53.94

74.00

74.00

74.00

74.00

-30.75

-32.64

-29.28

-20.06

2390.282

2392.564

2397.968

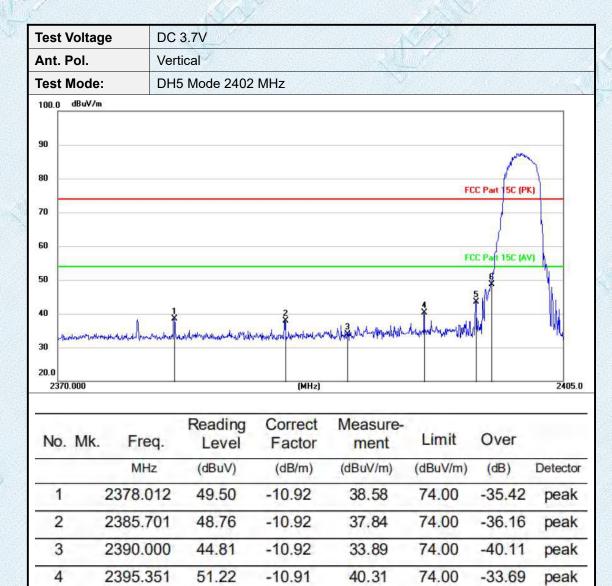
2400.000

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5

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Measurement = Reading level + Correct Factor

54.45

59.58

-10.92

-10.92

43.53

48.66

74.00

74.00

-30.47

-25.34

peak

peak

2398.921

2400.000

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lest	Voltag	je DC	3.7V		1	909 - C		
Ant.	Pol.	Hor	rizontal					
Test	Mode:	DH	5 Mode 2480	MHz				
100.0 90 80 70 60 50	dBuV/m				3		C Part 15C (PK) C Part 15C (AV) 5	
40	NM		Miller	1				
	, MK.	Freq.	Reading	(MHz) Correct	Measure-	Limit	Over	2500.0
20.0 247	<sup>₩</sup> <sup>₩</sup> 75.000 Mk.	Freq.	Level	Correct Factor	Measure- ment		- 2/6 20	
20.0 247	Mk.	Freq. MHz 2483.500		(MHz) Correct	Measure-	Limit (dBuV/m) 74.00	Over (dB) -37.70	2500.0 Detector peak
20.0 247 NO.	Mk.	MHz	Level (dBuV)	(MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	(dBuV/m)	(dB)	Detector
<sup>20.0</sup> 247 No.	Mk.	MHz 2483.500	Level (dBuV) 47.18	(MHz) Correct Factor (dB/m) -10.88	Measure- ment (dBuV/m) 36.30	(dBuV/m) 74.00	(dB) -37.70	Detector peak
<sup>20.0</sup> 247 No. 1 2	Mk.	MHz 2483.500 2485.032	Level (dBuV) 47.18 54.41	(MHz) Correct Factor (dB/m) -10.88 -10.88	Measure- ment (dBuV/m) 36.30 43.53	(dBuV/m) 74.00 74.00	(dB) -37.70 -30.47	Detector peak peak
<sup>20.0</sup> 247 No. 1 2 3	Mk.	MHz 2483.500 2485.032 2491.392	Level (dBuV) 47.18 54.41 52.39	(MHz) Correct Factor (dB/m) -10.88 -10.88 -10.89	Measure- ment (dBuV/m) 36.30 43.53 41.50	(dBuV/m) 74.00 74.00 74.00	(dB) -37.70 -30.47 -32.50	Detector peak peak peak

Measurement = Reading level + Correct Factor

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3

4

5

2487.285

2490.608

2492.662

Test	Volta	ge l	DC 3.7V					
Ant.	Pol.		Vertical					
Test	Mode	): I	DH5 Mode 2480	MHz				
100.0 90 80 70 60 50 40 30 20.0 247	dBuW/A			<u>З</u> (МНz)	day-day by man to got a ferral formation of	5	CC Part 15C (PK CC Part 15C (AV	/)
No.	. Mk.	Freq	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.50	0 48.79	-10.88	37.91	74.00	-36.09	peak
2	*	2485.15	0 50.95	-10.88	40.07	74.00	-33.93	peak

39.75

36.14

37.54

74.00

74.00

74.00

74.00

-34.25

-37.86

-36.46

-41.37

peak

peak

peak

peak

6 2500.000 43.51 -10.88 32.63 Measurement = Reading level + Correct Factor

50.63

47.03

48.43

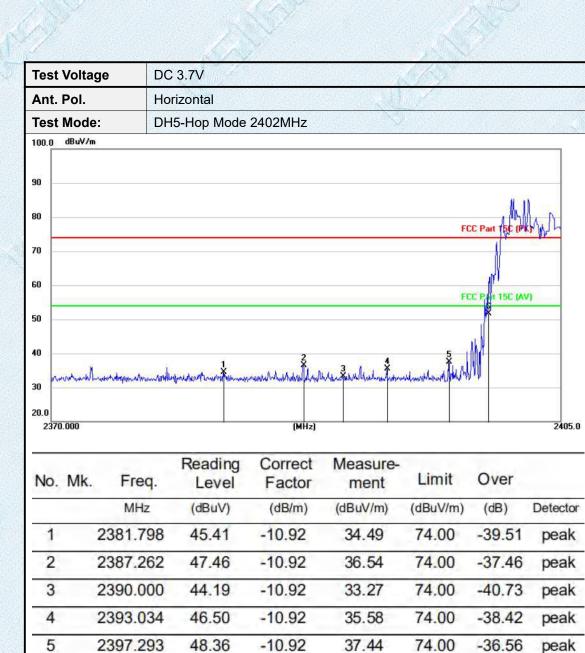
-10.88

-10.89

-10.89

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Measurement = Reading level + Correct Factor

62.62

-10.92

51.70

74.00

-22.30

peak

2400.000

6

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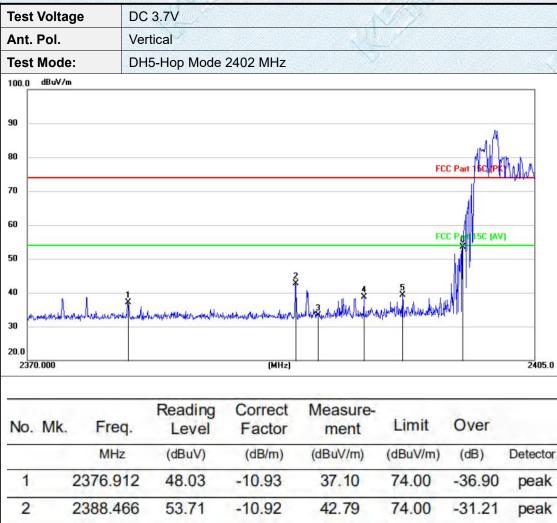
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peak

peak

peak

peak



3 2390.000 44.18 -10.92 33.26 74.00 -40.74 2393.188 49.69 38.77 74.00 -35.23 4 -10.9239.40 5 2395.869 50.31 74.00 -34.60 -10.91 6 2400.000 64.37 -10.9253.45 74.00 -20.55

Measurement = Reading level + Correct Factor



Test Voltag	je DC	3.7V			SP Z		
Ant. Pol.	Hor	izontal			Dec.		
Test Mode:	: DH	5-Hop Mode	2480MHz				
100.0 dBuV/m 90	. 111.00						
	where the	1			FC	C Part 15C (PK	1
60					F	C Part 15C (AV	
50			2				
80		1 Whatter	(MHz)	Where we want the second	2 Maluar Caracter	departure holes and	2500.
20.0 2475.000	Freq.	Reading	мн <sub>z</sub> ) Согrect Factor	Measure- ment	Limit	over	2500.
20.0 2475.000	Freq. MHz		Correct		Limit	over (dB)	
20.0 2475.000 No. Mk.		Level	Correct Factor	ment	- Planner	Totao.	Detecto
no 2475.000 No. Mk.	MHz	Level (dBuV)	Correct Factor (dB/m)	ment (dBuV/m)	(dBuV/m)	(dB)	Detecto peak
No. Mk.	MHz 2483.500	Level (dBuV) 43.48	Correct Factor (dB/m) -10.88	ment (dBuV/m) 32.60	(dBuV/m) 74.00	(dB) -41.40	Detecto peak peak
No. Mk.	MHz 2483.500 2485.390	Level (dBuV) 43.48 55.60	Correct Factor (dB/m) -10.88 -10.88	ment (dBuV/m) 32.60 44.72	(dBuV/m) 74.00 74.00	(dB) -41.40 -29.28	Detecto peak peak peak
No. Mk. 1 2 * 3 4	MHz 2483.500 2485.390 2487.483	Level (dBuV) 43.48 55.60 47.81	Correct Factor (dB/m) -10.88 -10.88 -10.88	ment (dBuV/m) 32.60 44.72 36.93	(dBuV/m) 74.00 74.00 74.00	(dB) -41.40 -29.28 -37.07	Detector peak peak peak peak

Measurement = Reading level + Correct Factor

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Test	Volta	ge DC	3.7V		4	Ser.		
Ant.	Pol.	Ver	rtical		24			
Test	Mode	: DH	5-Hop Mode	2480 MHz				
100.0 90 80 70 60 50 40 30	dBuV/i			2 3 Man Madada and and and and and and and and an	for the second		C Part 15C (PK)	
20.0								
247	75.000			(MHz)				2500.0
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MIL	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
		MHz	()					
1	-	2483.500	43.66	-10.88	32.78	74.00	-41.22	peak
1		111111		-10.88 -10.88	32.78 41.15	74.00 74.00	-41.22 -32.85	peak peak

Measurement = Reading level + Correct Factor

47.83

50.75

42.80

-10.89

-10.88

-10.88

36.94

39.87

31.92

74.00

74.00

74.00

-37.06

-34.13

-42.08

peak

peak

peak

2493.133

2497.952

2500.000

4

5

6

# 3.10. Radiated Spurious Emissions

## Limit

### 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

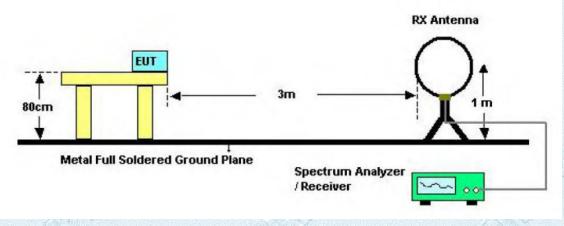
#### Radiated Emission Limit (Above 1000MHz)

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

#### Note:

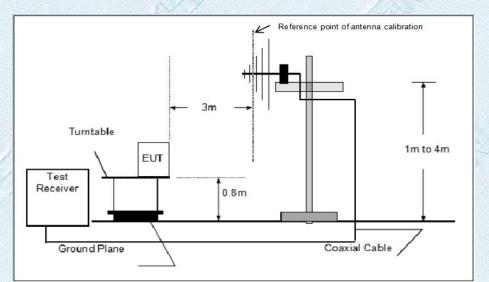
- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

# **Test Configuration**

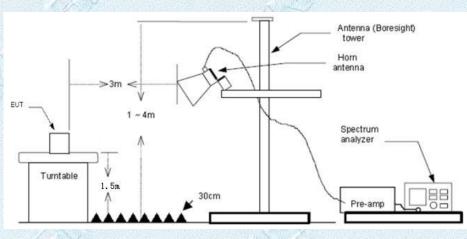


Below 30MHz Test Setup

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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 10<sup>th</sup> harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

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



#### Test Mode

Please refer to the clause 2.3.

#### Test Result

#### 9 KHz~30 MHz and 18GHz~25GHz

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

#### Note:

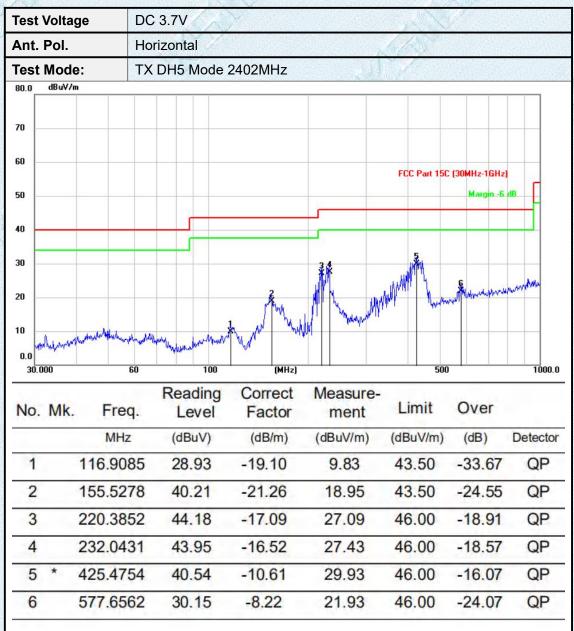
- Measurement = Reading level + Correct Factor Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
- 3) The emission levels of other frequencies are very lower than 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 DH5, 2DH5 and 3DH5 modulation, and found the DH5 modulation 2402MHz which it is worse case for 30MHz-1GHz, so only show the test data for worse case.
- Pre-scan DH5, 2DH5 and 3DH5 modulation, and found the DH5 modulation which it is worse case for above 1GHz, so only show the test data for worse case.

#### **RADIATED EMISSION BELOW 30MHZ**

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

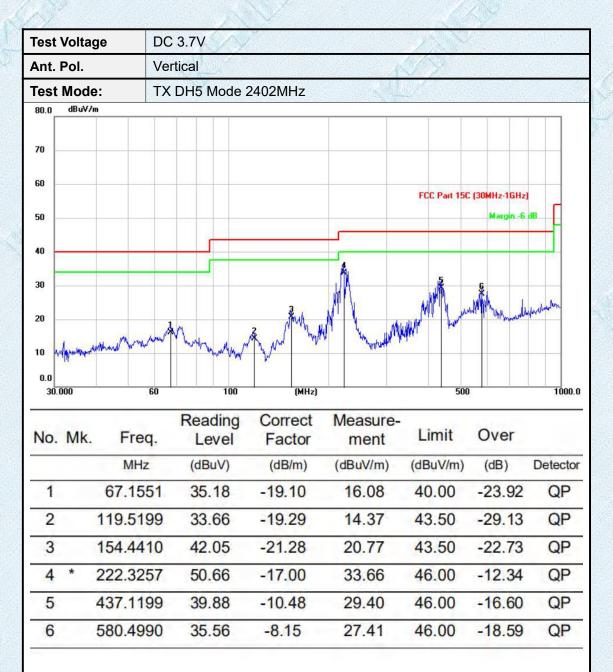


## 30MHz-1GHz



Measurement = Reading level + Correct Factor

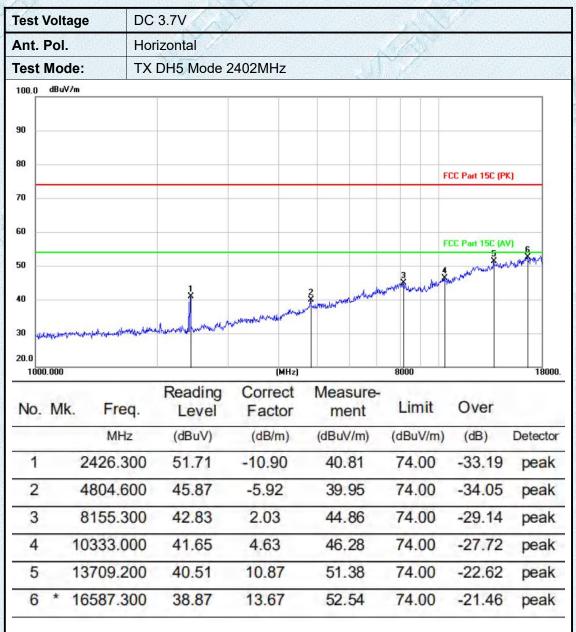




Measurement = Reading level + Correct Factor



## Adobe 1GHz



Measurement = Reading level + Correct Factor

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Test Vo	oltage	DC 3	3.7V					
Ant. Po	ol.	Verti	ical		100 A.L.			
Test M	lode:	TXE	OH5 Mode 2	2402MHz				
100.0 dl	lBu¥/m							
90								
80						FC	CC Part 15C (PK	
70								
60						FC	CC Part 15C (AV	
50					3	4	mutphenerge	Richard
				1000	r	Light Tores		
40			¥	2 X	under James and Martin	man der den den fan tan		
	alalan sani da darada sala sala	whiteements	second radialization	and the second	and the design of the second	, normal participation ( the second sec		
		ntheorem	espanners and descended	and the second	enter denotes aleman deres	8000		18000.
30 <sub>yh</sub> yyy 20.0	000	_	Reading	a balle and have been and	Measure- ment		Over	
30 <sub>wh</sub> hiyi 20.0 1000.00	000	eq.	Reading	(MHz)	Measure-	8000		18000.
30 <sub>wh</sub> hiyi 20.0 1000.00	Mk. Fre	eq. Iz	Reading Level	(MHz) Correct Factor	Measure- ment	8000 Limit	Over	18000.
30 20.0 1000.00	™. Fre	eq. Iz 500	Reading Level (dBuV)	(MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	8000 Limit (dBuV/m)	Over (dB)	18000. Detector peak
30 20.0 1000.00 No. N 1	000 Mk. Fre M⊦ 2402.5	eq. Iz 500	Reading Level (dBuV) 47.95	(MHz) Correct Factor (dB/m) -10.91	Measure- ment (dBuV/m) 37.04	8000 Limit (dBuV/m) 74.00	Over (dB) -36.96	18000. Detector peak peak
30 20.0 1000.00 No. N 1 2	Mk. Fre MF 2402.9 3725.7	eq. Hz 500 100 300	Reading Level (dBuV) 47.95 49.76	(MHz) Correct Factor (dB/m) -10.91 -9.12	Measure- ment (dBuV/m) 37.04 40.64	8000 Limit (dBuV/m) 74.00 74.00	Over (dB) -36.96 -33.36	18000. Detector peak peak
30 20.0 1000.00 No. N 1 2 3	Mk. Fre MF 2402.9 3725.7 5987.8	eq. Hz 500 100 300 700	Reading Level (dBuV) 47.95 49.76 50.09	(MHz) Correct Factor (dB/m) -10.91 -9.12 -3.83	Measure- ment (dBuV/m) 37.04 40.64 46.26	8000 Limit (dBuV/m) 74.00 74.00 74.00	Over (dB) -36.96 -33.36 -27.74	Detector peak peak peak

Measurement = Reading level + Correct Factor



	Voltage	DC	3.7V			S. A.		
Ant.	Pol.	Hori	zontal			1200		
Test	Mode:	TXI	OH5 Mode 2	2441MHz		Y/		
100.0	dBu∀/m							
90 — 80 —						F	CC Part 15C (Pl	K)
70								
60 -							CC Part 15C (A)	
50						4	and a second and	
40			*		2 3 and a state of the second	manunalia	N-49-	
30 🚜	Hunder Margarille Marthallow Shophast	and a month of the alder	month when when a	aparenter and a second and				
20.0	hannan an a	kere anna tha dhe ala e	man and and a second	e/e-e/stanteerstanteerreger		8000		1800
20.0	0.000	eq.	Reading		Measure- ment		Over	1800
20.0	0.000 Mk. Fr		Reading	(MHz)	Measure-	8000	Over (dB)	
20.0	0.000 Mk. Fr	req. Hz	Reading Level	(MHz) Correct Factor	Measure- ment	8000 Limit	1000	Detector
20.0 1000 NO.	0.000 Mk. Fr M	req. Hz .500	Reading Level (dBuV)	(MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	8000 Limit (dBuV/m)	(dB)	Detector peak
20.0 1000 No.	0.000 Mk. Fr M 2402	req. Hz .500 .100	Reading Level (dBuV) 51.96	(MHz) Correct Factor (dB/m) -10.91	Measure- ment (dBuV/m) 41.05	8000 Limit (dBuV/m) 74.00	(dB) -32.95	Detector peak peak
20.0 1000 No. 1 2	0.000 Mk. Fr M 2402 4881	req. Hz .500 .100 .000	Reading Level (dBuV) 51.96 46.74	(MHz) Correct Factor (dB/m) -10.91 -5.71	Measure- ment (dBuV/m) 41.05 41.03	8000 Limit (dBuV/m) 74.00 74.00	(dB) -32.95 -32.97	Detector peak peak peak
20.0 1000 No. 1 2 3	0.000 Mk. Fr 2402 4881 6525	req. Hz .500 .100 .000 .500	Reading Level (dBuV) 51.96 46.74 44.63	(MHz) Correct Factor (dB/m) -10.91 -5.71 -2.04	Measure- ment (dBuV/m) 41.05 41.03 42.59	8000 Limit (dBuV/m) 74.00 74.00 74.00	(dB) -32.95 -32.97 -31.41	Detector peak peak peak peak peak

Measurement = Reading level + Correct Factor

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lest	t Voltage	DC			REPAIRS CONTRACTOR	6.25 SAL \$ 170/02	Section Sectio	
Ant.	. Pol.	Ver	tical		24			
Test	t Mode:	ТХ	DH5 Mode	2441MHz				
100.0 Г	) dBuV/m							
90								
80						F	CC Part 15C (PK	q
70								
60	3					F	CC Part 15C (AV	3 6
50					2	3	Annan	And the second
					×	A INT	<b>1</b>	
40				1 . Anyteman	a todal and a second	- Marine Marine		
	st-ustraintentronophysics.M	and the second	unang been and the	marker Anappana	whether and when the	and the second sec		
30 20.0	yl-ydsynlyddw afnop <sup>ddy</sup> ydd M 00.000	Nutran	generating been any the	(MHz)	all be deligen and a second second	8000		18000.
30 20.0 100	00.000	eq.	Reading	nge de Ander d'Anne anne	Measure- ment		Over	18000.
30 20.0 100	00.000	eq.	Reading	(MHz) Correct	Measure-	8000	Over (dB)	18000.
30 20.0 100	00.000 . Mk. Fre	eq. Hz	Reading Level	(MHz) Correct Factor	Measure- ment	8000 Limit	- energy	1
30 20.0 100	00.000 Mk. Fre Mi 3721.	eq. Hz 700	Reading Level (dBuV)	(MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	8000 Limit (dBuV/m)	(dB)	Detector
30 20.0 100 NO.	00.000 Mk. Fre Mi 3721. 5981.	eq. Hz 700 000	Reading Level (dBuV) 48.54	(MHz) Correct Factor (dB/m) -9.12	Measure- ment (dBuV/m) 39.42	8000 Limit (dBuV/m) 74.00	(dB) -34.58	Detector peak
<sup>30</sup> 20.0 100 No.	00.000 Mk. Fre Mi 3721. 5981.	eq. Hz 700 000 200	Reading Level (dBuV) 48.54 49.09	(MHz) Correct Factor (dB/m) -9.12 -3.84	Measure- ment (dBuV/m) 39.42 45.25	8000 Limit (dBuV/m) 74.00 74.00	(dB) -34.58 -28.75	Detector peak peak
<sup>30</sup> 20.0 100 No.	00.000 Mk. Fre Mi 3721. 5981. 8048.	eq. Hz 700 000 200 300	Reading Level (dBuV) 48.54 49.09 43.49	(MHz) Correct Factor (dB/m) -9.12 -3.84 2.06	Measure- ment (dBuV/m) 39.42 45.25 45.55	8000 Limit (dBuV/m) 74.00 74.00 74.00	(dB) -34.58 -28.75 -28.45	Detector peak peak peak

Measurement = Reading level + Correct Factor



1031 1	oltage	DC 3	3.7V		4			
Ant. P	Pol.	Horiz	zontal		20			
Test M	Node:	TXE	OH5 Mode 2	2480MHz				
100.0	dBuV/m							
90								
80						F	CC Part 15C (PI	q
70								
60						F	CC Part 15C (A)	0 5 6
50						3 Ju	n selone por series mill	and David
						Renter beau of		
40				werdenham	- Sumawald ward	A Real Areas and		
30 mart	lager and the second	mhrunberthe	washing	wanadrinadriv	Margaret			
		onderen booklas	watch	(MHz)	Mangaratherman	8000		18000
30 made 20.0 1000.0	000		Reading Level		Measure- ment		Over	18000
30 mark 20.0 1000.0	000	q.	Reading	(MHz) Correct	Measure-	8000		18000 Detector
30	ooo Mk. Free	q. 2	Reading Level	(MHz) Correct Factor	Measure- ment	BOOD	Over	
30 ved 20.0 1000.0	000 Mk. Free MH2	q. 2 00	Reading Level (dBuV)	(MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	8000 Limit (dBuV/m)	Over (dB)	Detector
30 mad 20.0 1000.0 No. N	000 Mk. Free MHz 4961.0	q. 2 00 00	Reading Level (dBuV) 45.16	(MHz) Correct Factor (dB/m) -5.50	Measure- ment (dBuV/m) 39.66	8000 Limit (dBuV/m) 74.00	Over (dB) -34.34	Detector peak
30 mod 20.0 1000.0 No. N 1 2	000 Mk. Free MHz 4961.0 7618.1	q. 2 00 00 00	Reading Level (dBuV) 45.16 43.75	(MHz) Correct Factor (dB/m) -5.50 1.11	Measure- ment (dBuV/m) 39.66 44.86	8000 Limit (dBuV/m) 74.00 74.00	Over (dB) -34.34 -29.14	Detector peak peak

13.55

53.51

74.00

-20.49

peak

Measurement = Reading level + Correct Factor

39.96

17840.200

6 \*

KSIGN®

Test	voita	9-	10000	3.7V			N. A.			
		Verti	/ertical							
		TX [	K DH5 Mode 2480MHz							
100.0 Г	dBuV/r	m								
90										
80							F	CC Part 15C (PI	K)	
70										
60							F	CC Part 15C (A)	V) 6	
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30 20.0	uh. Muranhan 00.000	u an		none	(MHz)		8000		18000.	
30 20.0 10		Frec			months themanded	Measure- ment		Over	18000.	
30 20.0 10	00.000		<b>į</b> .	Reading	(MHz) Correct	Measure-	8000		18000. Detector	
30 20.0 10	00.000 Mk.	Free	1.	Reading Level	(MHz) Correct Factor	Measure- ment	8000 Limit	Over		
30 20.0 100 NO.	00.000 Mk.	Frec	1. 00	Reading Level (dBuV)	(MHz) (MHz) Correct Factor (dB/m)	Measure- ment (dBuV/m)	sooo Limit (dBuV/m)	Over (dB)	Detector	
30 20.0 10 NO.	00.000 Mk.	Frec MHz 2480.7(	ą. 200 200	Reading Level (dBuV) 54.48	(MHz) Correct Factor (dB/m) -10.89	Measure- ment (dBuV/m) 43.59	8000 Limit (dBuV/m) 74.00	Over (dB) -30.41	Detector peak	
30 20.0 100 No.	00.000 Mk.	Frec MHz 2480.70 3726.80	a. 00 00	Reading Level (dBuV) 54.48 50.08	(MHz) Correct Factor (dB/m) -10.89 -9.12	Measure- ment (dBuV/m) 43.59 40.96	8000 Limit (dBuV/m) 74.00 74.00	Over (dB) -30.41 -33.04	Detector peak peak	
<sup>30</sup> 20.0 10 No. 1 2 3	00.000 Mk.	Frec MHz 2480.70 3726.80 5977.60	4. 00 00 00 00	Reading Level (dBuV) 54.48 50.08 49.87	(MHz) Correct Factor (dB/m) -10.89 -9.12 -3.85	Measure- ment (dBuV/m) 43.59 40.96 46.02	8000 Limit (dBuV/m) 74.00 74.00 74.00	Over (dB) -30.41 -33.04 -27.98	Detector peak peak peak	

## Measurement = Reading level + Correct Factor

Note: The main frequency has been screened by the filter .



# 3.11. Pseudorandom Frequency Hopping Sequence

### LIMIT

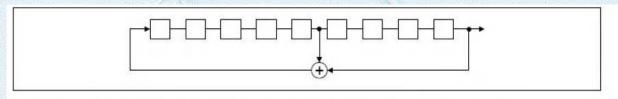
#### FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(1):

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hop-ping channel, whichever is greater. Al-ternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hop-ping channel bandwidths of their cor-responding transmitters and shall shift frequencies in synchronization with the transmitted signals.

#### TEST RESULTS

The pseudorandom frequency hopping sequence may be generated in a nice-stage shift register whose 5<sup>th</sup> and 9<sup>th</sup> stage outputs are added in a modulo-two addition stage.And the result is fed back to the input of the friststage.The sequence begins with the frist one of 9 consecutive ones, for example: the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence:29-1=511 bits
- Longest sequence of zeros:8(non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An explame of pseudorandom frequency hopping sequence as follows:

0	2	4	6	62 64	78 1	73 75 7
- 1						

Each frequency used equally one the average by each transmitter.

The system receiver have input bandwidths that match the hopping channel bandwidths of their corresponding transmitter and shift frequencies in synchronization with the transmitted signals.



# **4.EUT TEST PHOTOS**

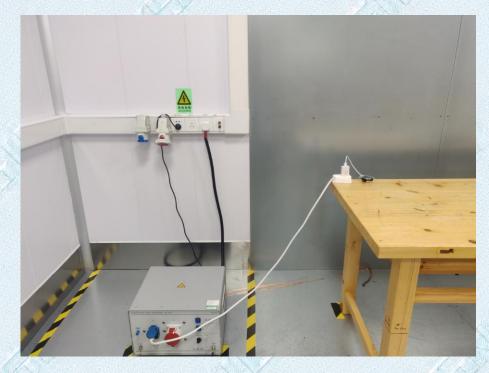


Radiated Measurement (Above 1GHz)





# CONDUCTED EMISSION TEST SETUP



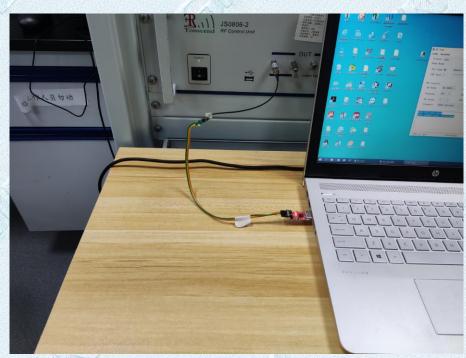
RF Conducted





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Report No.: KS2104S1120E

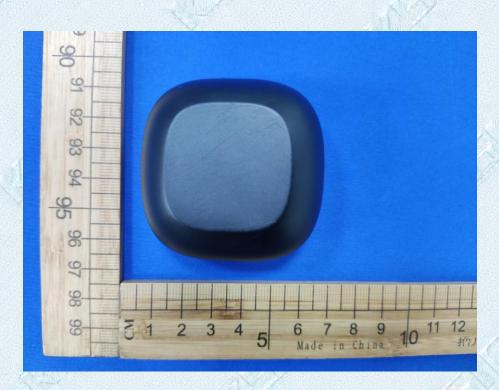




# **5.PHOTOGRAPHS OF EUT CONSTRUCTIONAL**

# External Photographs

































# Internal photos

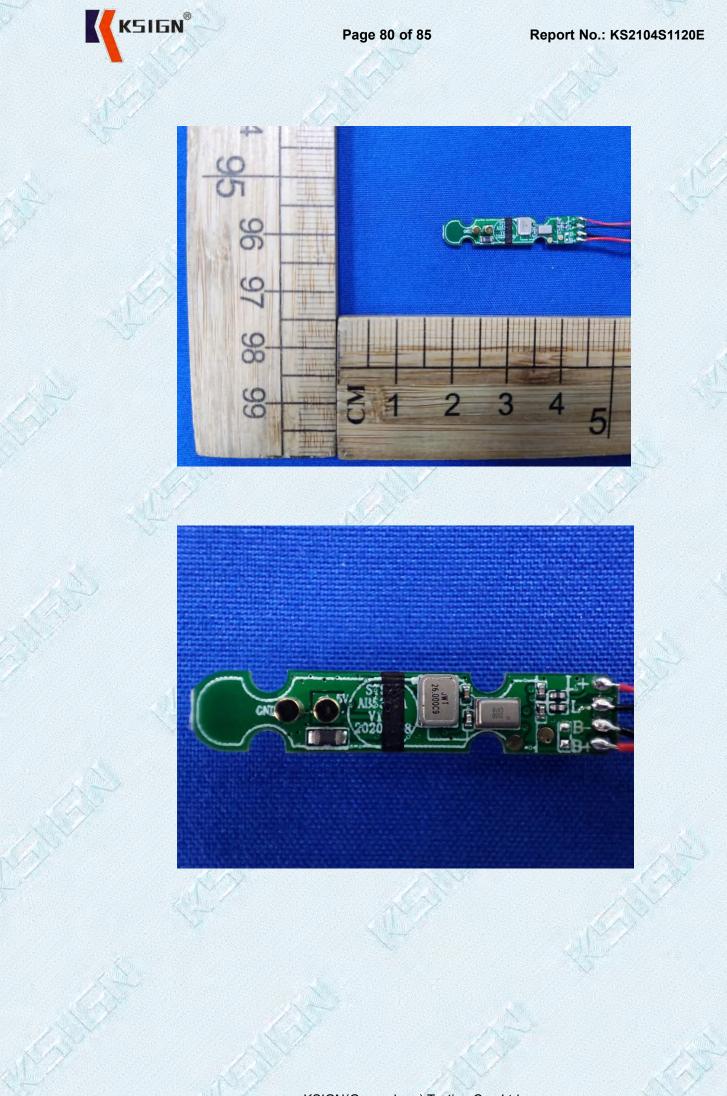




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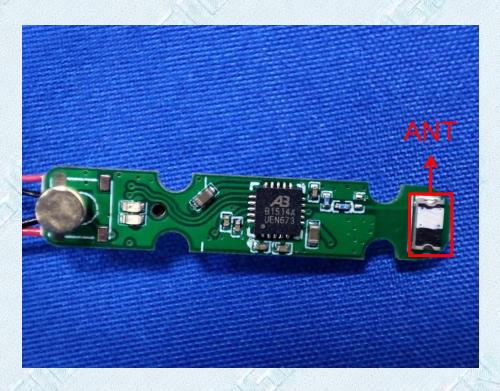








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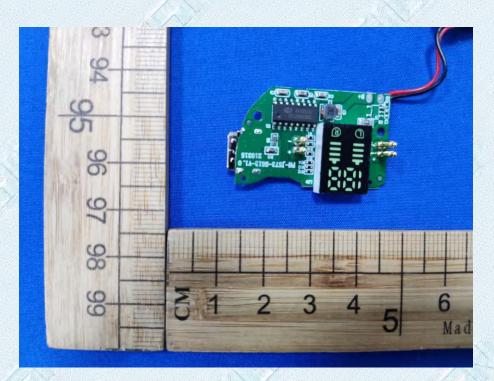


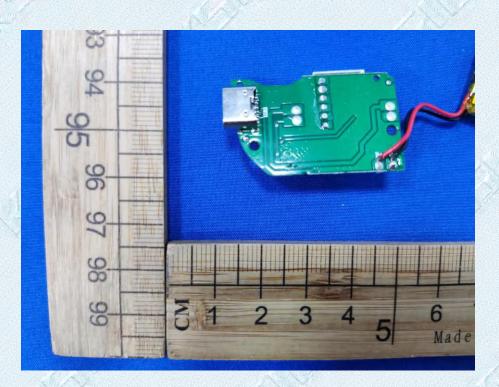






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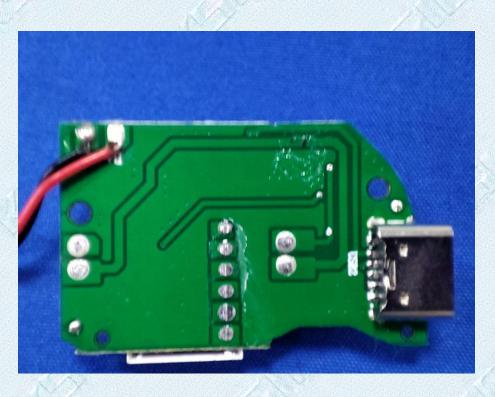






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