

3.8. Band Edge Emissions(Radiated)

Limit

Provident English Provident	(dBuV/m)(at 3m)				
Restricted Frequency Band (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 C63.10:2020 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 C63.10:2020on radiated measurement.
- 5. 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 2.2.

TRF No. FCC Part 15.247_R1





Test Results

Note:

- 1. Measurement = Reading level + Correct Factor
- 2.Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 3.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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Test	Volta	ge	DC	3.7V					
Ant.	Pol.		Hori	zontal					
Test	Mode	:	DH	5 Mode 2402	MHz				
90.0	dBu∀/m	ľ							
80							F	CC Part 15C (P	4
70									
60							F	CC Page 15C (A	n
50							3 4 5		
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10.0 2370	0.000				(MHz)				2405.0
No.	Mk.	Fre	q.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MH:	z	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2377.4	03	50.76	-10.93	39.83	74.00	-34.17	peak
2	- 13	2390.0	00	43.58	-10.92	32.66	74.00	-41.34	peak
3		2395.3	92	55.14	-10.91	44.23	74.00	-29.77	peak
4		2396.8	34	55.53	-10.92	44.61	74.00	-29.39	peak
5		2398.0	56	54.03	-10.92	43.11	74.00	-30.89	peak
6	*	2400.0	00	59.53	-10.92	48.61	74.00	-25.39	peak

Measurement = Reading level + Correct Factor

TRF No. FCC Part 15.247_R1

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Tes	t Volta	ge	DC 3.7	'V					
Ant	. Pol.		Vertica	ıl					
Tes	t Mode	ə:	DH5 M	lode 2402	2 MHz				
90.0	dBuV∕	m							
80							F	CC Part 15C (P	()
70									
60								CC Par) 15C (A	v
50								6	
40							*	5	
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20									
10.0	70.000				640.5				2405.0
23	70.000				(MIIZ)				2403.0
No	. Mk.	Free	q.	eading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	<u>z</u> (dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2381.1	30 4	12.77	<mark>-10.93</mark>	31.84	74.00	-42.16	peak
2		2390.0	00 4	40.70	-10.92	29.78	74.00	-44.22	peak
3		2394.7	62 4	12.82	-10.91	31.91	74.00	-42.09	peak
4		2397.9	16 5	50.84	-10.92	39.92	74.00	-34.08	peak
5		2399.1	34 4	17.43	-10.92	36.51	74.00	-37.49	peak
6	*	2400.0	00 5	55.34	-10.92	44.42	74.00	-29.58	peak

TRF No. FCC Part 15.247_R1

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	93777777577						All Constants				
Test '	Volta	ge	DC 3.7	V							
Ant.	Pol.		Horizor	ntal							
Test	Mode	:	DH5 M	ode 2480	MHz						
90.0	dBuV/n	n									
80	FCC Part 15C (PK)										
70		1									
60	FCC Part 15C (AV)										
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20											
10.0											
247	5.000				(MHz)				2500.0		
No.	Mk.	Fre	R eq.	eading Level	Factor	Measure- ment	Limit	Over			
		MH	z	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector		
1		2483.5	500	49. <mark>6</mark> 2	- <mark>10.88</mark>	38.74	74.00	-35.26	peak		
2	*	2484.2	220	54.22	-10.88	43.34	74.00	-30.66	peak		
3		2484.8	338	52.41	-10.88	41.53	74.00	-32.47	peak		
4)	2486.5	543	51.16	-10.88	40.28	74.00	-33.72	peak		
5		2492.1	177	45.56	-10.89	34.67	74.00	-39.33	peak		
6		2500.0	000	41.62	-10.88	30.74	74.00	-43.26	peak		

TRF No. FCC Part 15.247_R1

						AND LENGDWITTIN		
Test	t Volta	ige	DC 3.7V					
Ant.	Pol.		Vertical					
Test	Mod	e:	DH5 Mode 2480) MHz				
90.0	dBuV∕	'n						
80			L			F	CC Part 15C (P	K)
70			y .					
60						F	CC Part 15C (A	vi
50								
40		1		3	4	5		
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20								
10.0	75.000			(MHz)				2500.0
			Reading	Correct	Measure-	100 2.2		
No.	Mk	Free	4. Level	Factor	ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.50	00 41.58	-10.88	30.70	74.00	-43.30	peak
2	*	2483.84	43 52.24	-10.88	41.36	74.00	-32.64	peak
3		2486.44	48 50.20	-10.88	39.32	74.00	-34.68	peak
4		2490.15	50 42.92	-10.89	32.03	74.00	-41.97	peak
5		2494.03	35 43.75	-10.88	32.87	74.00	-41.13	peak

TRF No. FCC Part 15.247_R1

Tes	t V	oltad	ae	DC	3.7V					
Ant	. P	ol.	<u> </u>	Hor	izontal					
Tes	t M	ode	:	DH	5-Hop Mode	2402MHz				
90.0	d	Bu¥/m			•					
80								FI	CC Part 15C (P	
70										
60								F	CC Par 15C (A	n
50										
40			X		2		3	5 Withour We	/**	
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20										
10.0 23	70.0	00				(MHz)				2405.0
					Reading	Correct	Measure-			
No).	Mk.	Fre	eq.	Level	Factor	ment	Limit	Over	
			MH	z	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
ľ	1		2375.2	226	52.30	-10.93	41.37	74.00	-32.63	peak
2	2		2382.5	579	46.86	-10.92	35.94	74.00	-38.06	peak
3	3		2390.0	000	44.02	-10.92	33.10	74.00	-40.90	peak
4	1		2393.4	143	53.23	-10.92	42.31	74.00	-31.69	peak
Ę	5		2395.4	156	51.88	-10.91	40.97	74.00	-33.03	peak
6	6	*	2400.0	000	59.83	-10.92	48.91	74.00	-25.09	peak

TRF No. FCC Part 15.247_R1

Test V	/olta	ge	DC 3.7V					
Ant. P	ol.		Vertical					
Test N	/lode	:	DH5-Hop Mod	le 2402 MHz				
90.0	dBu∀/n	n						
80						FI	CC Part 15C (PK) T
70								
60						F	CC Part 15C (AV	,
50							6	
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20								
10.0								
2370.	.000			(MHa	:]			2405.0
No.	Mk.	Free	Reading	g Correct Factor	Measure ment	- Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2373.02	24 50.75	-10.92	39.83	74.00	-34.17	peak
2		2382.6	47.26	-10.92	36.34	74.00	-37.66	peak
3		2390.00	00 43.71	-10.92	32.79	74.00	-41.21	peak
4		2392.88	47.87	-10.92	36.95	74.00	-37.05	peak
5		2394.0	59 47.13	<mark>-10.9</mark> 2	36.21	74.00	-37.79	peak
6	*	2400.00	00 54.21	-10.92	43.29	74.00	-30.71	peak

TRF No. FCC Part 15.247_R1

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est Voltage	DC 3.7V	
nt. Pol.	Horizontal	
est Mode:	DH5-Hop Mode 2480MHz	
90.0 dBuV/m		
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		FCC Part 15C (PK)
70		
60	l l	
	h	FCC Part 15C (AV)
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50		
20		
10.0		
2475 000	(MHz)	25

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	52.25	-10.88	41.37	74.00	-32.63	peak
2	*	2485.472	53.70	-10.88	42.82	74.00	-31.18	peak
3		2487.503	47.77	-10.88	36.89	74.00	-37.11	peak
4		2490.048	45.99	-10.89	35.10	74.00	-38.90	peak
5		2493.617	46.86	-10.89	35.97	74.00	-38.03	peak
6		2500.000	42.96	-10.88	32.08	74.00	- <mark>41.9</mark> 2	peak

TRF No. FCC Part 15.247_R1

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Test	Voltag	je	DC 3	.7V							
Ant.	Pol.		Vertio	al							
Test	Mode		DH5-	Нор Мо	de 24	80 MHz	<u>,</u>				
90.0	dBuV/m	i									
80	MM		Y)							FCC Part 15C (P	K)
70			-1								
60										FCC Part 15C (A	V)
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10.0	F 000										
247	5.000					(MH	z)				2500.0
No	. <mark>Mk</mark> .	Fre	eq.	Readin Leve	g (I	Correc Factor	t N r	leasure- ment	Limit	Over	6
		MH	z	(dBuV)		(dB/m)	(dBuV/m)	(dBuV/n	n) (dB)	Detector
1	_	2483.5	500	54.32		-10.88		43.44	74.00	-30.56	peak
2	*	2484.8	818	55.18		-10.88		44.30	74.00	-29.70	peak
3		2486.6	888	50.30		-10.88		39.42	74.00	-34.58	peak

46.94

51.28

43.31

-10.89

-10.87

-10.88

36.05

40.41

32.43

74.00

74.00

74.00

-37.95

-33.59

-41.57

peak

peak

peak

2489.530

2495.032

2500.000

4

5

6

TRF No. FCC Part 15.247_R1



3.9. Radiated Spurious Emissions

Limit

Radiated Emission Limits (9 kHz~1000 MHz)

Field Strength (microvolt/meter)	Measurement Distance (meters)			
2400/F(KHz)	300			
24000/F(KHz)	30			
30	30			
100	3			
150	3			
200	3			
500	3			
	Field Strength (microvolt/meter) 2400/F(KHz) 24000/F(KHz) 30 100 150 200 500			

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



TRF No. FCC Part 15.247_R1





Below 1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

(SIGN

- 1. The EUT was setup and tested according to ANSI C63.10:2020
- 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=3MHz Peak detector for Peak value.

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

TRF No. FCC Part 15.247_R1



Test Mode

Please refer to the clause 2.2.

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
- 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, found the DH5-CH00 Channel Below 1GHz 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.

TRF No. FCC Part 15.247_R1



30MHz-1GHz

Test	Volta	ge	DC	3.7V							
Ant.	Pol.		Hor	izontal							
Test	Mode):	DH	5 Mode 2	2402	MHz					
80.0	dBuV/m										, , , , , , , , , , , , , , , , , , ,
70 -								_			
60 -									FCC 0-1 15	C (2014) - 1011-	
50 -									FUL Part 15	Margin -6	,
40 -								_			
30					-			-			
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0.0 30.0	00		60	1	00	(MHz)			50	0	1000.0
No.	Mk.	Free	q.	Readir Leve	ng el	Correct Factor	Measu men	re- t	Limit	Over	
		MHz	z	(dBuV)	(dB/m)	(dBuV/n	n)	(dBuV/m)	(dB)	Detector
1		66.68	56	32.68	3	-19.01	13.67	7	40.00	-26.33	QP
2		72.84	66	34.37	7	-20.00	14.37	7	40.00	-25.63	QP
3		123.43	84	34.50)	-19.87	14.63	3	43.50	-28.87	QP
4		206.47	00	33.11	1	-17.72	15.39	9	43.50	-28.11	QP
5		648.52	16	26.73	3	-7.37	19.36	6	46.00	-26.64	QP
6	*	927.70	60	26.34	1	-3.97	22.37	7	46.00	-23.63	QP

Measurement = Reading level + Correct Factor

TRF No. FCC Part 15.247_R1



TRF No. FCC Part 15.247_R1



Adobe 1GHz

Test	t Vol	tage		DC	3.7V								
Ant	. Pol			Hor	izontal								
Test	t Mo	de:		ТΧ	DH5 Mode 2	2402MHz							
90.0	dBu	V/m								_			
80											FC	C Part 15C (PK)
70										_			
60									_		FC	C Part 15C (AVI
50									1	< ,	3	* un	5
40									Ample	man	Water W	hereeffeld	
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20													
10.0													
10	00.000					(MHz)			8000			18000.
No	o. N	lk.	Fre	q.	Level	Fact	tor	Meas	sure- ent	Lin	nit	Over	
			MH:	z	(dBuV)	(dB/i	n)	(dBu\	//m)	(dBu	V/m)	(dB)	Detector
	1	7	205.0	00	46.76	-0.0	9	46.	67	74.	00	-27.33	3 peak
2	2	8	155.3	00	40.71	2.03	3	42.	74	74.	00	-31.26	b peak
:	3	10	071.2	00	38.79	4.19)	42.	98	74.	00	-31.02	2 peak
4	4	12	279.5	00	37.98	8.50)	46.	48	74.	00	-27.52	2 peak
ł	5	14	504.8	00	37.16	10.5	8	47.	74	74.	00	-26.26	6 peak
(6 *	17	224.8	00	36.35	13.1	9	49.	54	74.	00	-24.46	b peak

Measurement = Reading level + Correct Factor

TRF No. FCC Part 15.247_R1

Test	Volt	ade	DC	3.7V			1940 F.C. 96 (1987) (177)					
Ant.	Pol.		Vert	ical								
Test	Мос	le:	TX DH5 Mode 2402MHz									
90.0	dBu'	√/m										
80								ECC Part 15C (D)				
70								ruu rait ibu (ri	N			
60								FCC Part 15C (A	V)			
50								5	6			
40						3	manut	energy of the second				
					in manufacture and	and person Martin Providence						
30	MUMM	opinion of the states of the second	history M.	all a superior of the standard	Machana.							
20												
10.0												
10	00.000				(MHz)		8000		18000.			
No	M	k. Fre	q.	Reading Level	Correct Factor	Measure- ment	Limit	Over				
		MH:	z	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector			
1		4389.8	00	43.00	-7.12	35.88	74.00	-38.12	peak			
2		5979.3	00	42.78	-3.84	38.94	74.00	-35.06	peak			
3		7206.7	00	44.47	-0.07	44.40	74.00	-29.60	peak			
4		9688.7	00	40.02	3.38	43.40	74.00	-30.60	peak			
5		13913.2	00	36.48	11.12	47.60	74.00	-26.40	peak			
6	*	16475.1	00	36.31	13.75	50.06	74.00	-23.94	peak			

TRF No. FCC Part 15.247_R1

Test	Volt	age	DC	3.7V								
Ant.	Pol.		Hor	izontal								
Test	Мос	le:	ТΧ	DH5 Mode 2	441MHz							
90.0	dBu\	//m						21				
80										FCC Par	t 15C (PI	()
70												
60										FCC Par	15C (A)	0
50								2		4	5	ANA A
40						- Charl	1 march march	www.	manam	3 Martin	and the second	
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20									_			
10.0												
100	00.000				M)	(Hz)	1		8000			18000.
No.	M	k. Fre	q.	Reading Level	Correc Facto	ct or	Measur ment	re- t	Limit	0	/er	
		MH	z	(dBuV)	(dB/m)	(dBuV/m	1)	(dBuV/m	n) (d	B)	Detector
1		4881.1	00	44.15	-5.71		38.44	ł	74.00	-3	5.56	peak
2		7322.3	00	45.01	0.27		45.28	3	74.00	-28	8.72	peak
3		10180.0	00	39.21	4.38		43.59)	74.00	-30	0.41	peak
4		11689.6	00	38.07	7.25		45.32	2	74.00	-28	8.68	peak
5		14015.2	00	36.72	11.21		47.93	}	74.00	-26	6.07	peak
6	*	17216.3	00	37.82	13.20		51.02	2	74.00	-22	2.98	peak

TRF No. FCC Part 15.247_R1



TRF No. FCC Part 15.247_R1

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Test	Volt	age	DC 3	3.7V						
Ant.	Pol		Horiz	zontal						
Test	Мо	de:	TX D	0H5 Mode 2	480MHz					
90.0	dBu\	//m				T				
80									FCC Part 15C (P	K)
70										
60									FCC Part 15C (A	vi
50							3	1	4 mm	And the stand of t
40						1	And Antonia	hanna	www	
30	Annahitetta	Narathermonia	hatella the state	wholeware another	northrough a free free free free free free free fr					
20										
10.0										
100	00.000				(M	Hz)		8000		18000.
No	M	k. Fre	q.	Reading Level	Correc Facto	r Meas r me	sure- ent	Limit	Over	
		MH	z	(dBuV)	(dB/m) (dBu\	//m)	(dBuV/m)	(dB)	Detector
1		4794.4	00	43.90	-5.95	37.	95	74.00	-36.05	peak
2		6395.8	00	42.22	-2.46	39.	76	74.00	-34.24	peak
3		7439.6	00	42.56	0.64	43.	20	74.00	-30.80	peak
4		11652.2	00	37.80	7.17	44.	97	74.00	-29.03	peak
5		14020.3	00	36.51	11.21	47.	72	74.00	-26.28	peak
6	*	16393.5	00	36.48	13.55	50.	03	74.00	-23.97	peak

TRF No. FCC Part 15.247_R1

Test	Voltag	e	DC	3.7V							
Ant.	Pol.		Ver	lical							
Test	Mode:		ТΧ	DH5 Mode 2	480MHz						
90.0	dBuV/m						1		r r r		
80									F	CC Part 15C (Pl	9
70											
60										CC Part 15C (A)	0
50										5	6 mil
40							1 1	2	with my Anyong white	well-	
30	your Mathematic	yfundfrugetur efnil	newywhe	erentravister Adams of the and All	honormallingth	motor	- Arthold Hall				
20											
10.0 100	0.000				(M	Hz)			8000		18000.
No	. Mk.	Fre	eq.	Reading Level	Correc Facto	r or	Measu mer	ure- nt	Limit	Over	
		MH	z	(dBuV)	(dB/m)	(dBuV/r	n)	(dBuV/m)	(dB)	Detector
1		5076.6	600	40.98	-5.32		35.6	6	74.00	-38.34	peak
2		6407.7	00	41.31	-2.41		38.9	0	74.00	-35.10	peak
3		8575.2	200	40.06	1.92		41.9	8	74.00	-32.02	peak
4	1	0134.1	00	38.88	4.29		43.17		74.00	-30.83	peak
5	1	4559.2	200	36.39	10.69		47.0	8	74.00	-26.92	peak

35.25

16519.300

Note:

6 *

All test modes had been tested. The GFSK(DH5) modulation is the worst case and recorded in the report.

49.03

74.00

-24.97

peak

13.78

TRF No. FCC Part 15.247_R1



3.10. Conducted Emission

Limit

Conducted Emission Test Limit

Ender	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 C63.10:2020 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- 3. 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 2.2

TRF No. FCC Part 15.247 R1



Test Results

Pre-scan DH5, 2DH5,3DH5 modulation, and found the DH5 modulation 2402MHz which it is worse case, so only show the test data for worse case.



Remarks:

1.Measurement = Reading Level+ Correct Factor

2.Over = Measurement -Limit

TRF No. FCC Part 15.247_R1



Test	Voltage:	AC 12	20V/60Hz					
Term	inal:	Neutra	al					
80.0	dBuV	1						
70	2							
60						F	CC Part 15 C (QP	<u>n</u>
50						FC	C Part 15 C (AVG	1
40		Iller				m	-	
30	Marin Marin	AN WIN ANY		E WY MAN W	ነ ለ እ ለ ስ ስ ስ ለለስ	MANNIN	Www.www.	
20	IVVVV II	W NY NY	II \∕* ¥	WYY	V V V V V V V	naan.		peak
10		°I	1					AVG
0.0	0			(MHz)				30.000
			Reading	Correct	Measure-	-		
No.	Mk.	Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1580	23.93	10.71	34.64	65.57	-30.93	QP
2		0.1580	16.40	10.71	27.11	55.57	-28.46	AVG
3		0.2860	23.13	10.56	33.69	60.64	-26.95	QP
4		0.2860	18.82	10.56	29.38	50.64	-21.26	AVG
5		0.6500	28.23	10.44	38.67	56.00	-17.33	QP
6		0.6500	21.03	10.44	31.47	46.00	-14.53	AVG
7		0.6700	31.83	10.44	42.27	56.00	-13.73	QP
8	*	0.6700	25.13	10.44	35.57	46.00	-10.43	AVG
9		1.1180	27.80	10.48	38.28	56.00	-17.72	QP
10	9	1.1180	20.96	10.48	31.44	46.00	-14.56	AVG
11		9.8660	24.51	10.59	35.10	60.00	-24.90	QP
12	1	9.8660	17.31	10.59	27.90	50.00	-22.10	AVG

Remarks:

1.Measurement = Reading Level+ Correct Factor

2.Over = Measurement -Limit

TRF No. FCC Part 15.247_R1



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 5th and 9th 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:

0246	62 64	78 1	73 75 77

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.

TRF No. FCC Part 15.247_R1



Page 71 of 81

Radiated Measurement (Below 1GHz)



Radiated Measurement (Above 1GHz)



TRF No. FCC Part 15.247_R1



RF Conducted



CONDUCTED EMISSION TEST SETUP



TRF No. FCC Part 15.247_R1



Page 73 of 81

5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

External Photographs





TRF No. FCC Part 15.247_R1









Page 75 of 81





TRF No. FCC Part 15.247_R1









Internal Photographs





TRF No. FCC Part 15.247_R1























Page 81 of 81



--THE END--

TRF No. FCC Part 15.247_R1