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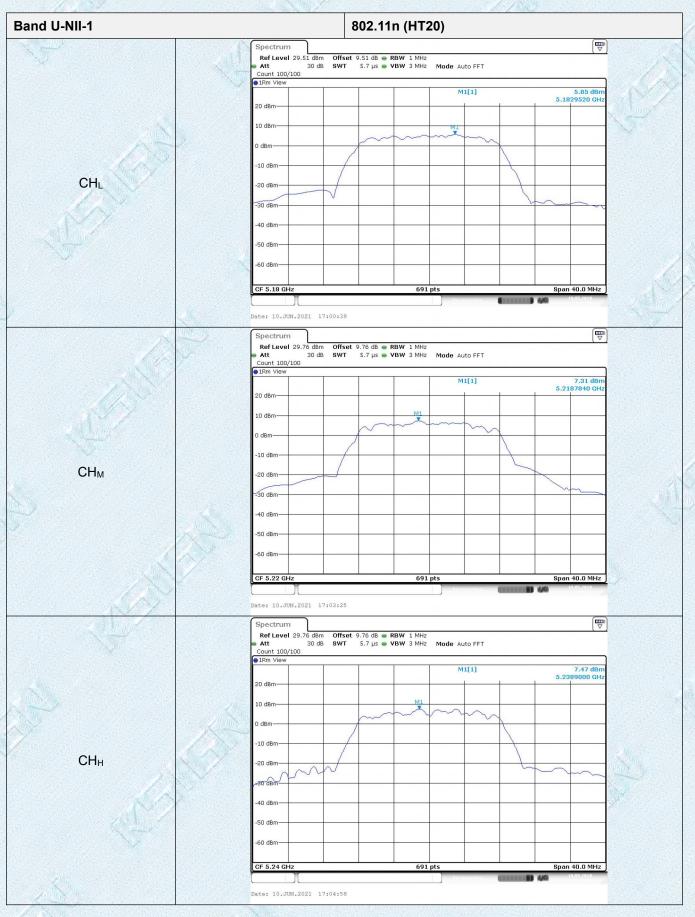
Report No.: KS2005S00105E01





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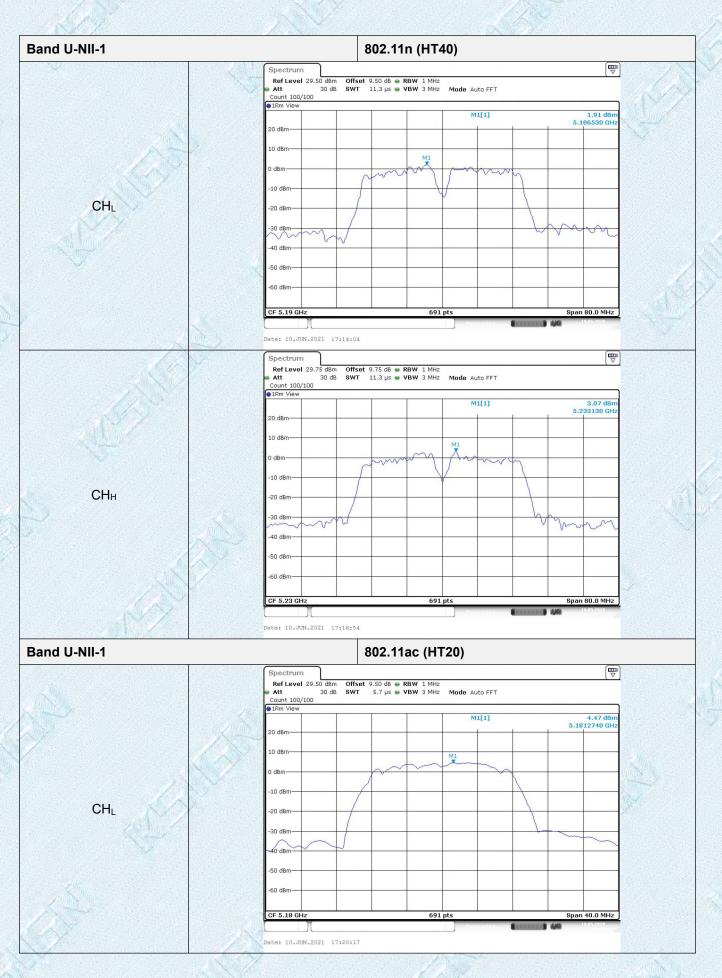
Report No.: KS2005S00105E01





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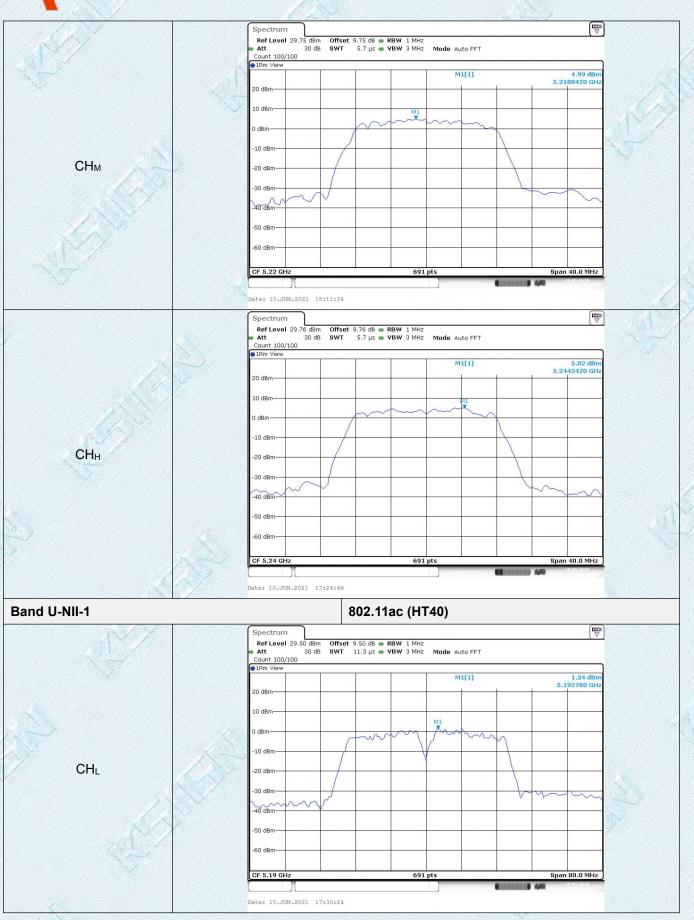
Report No.: KS2005S00105E01

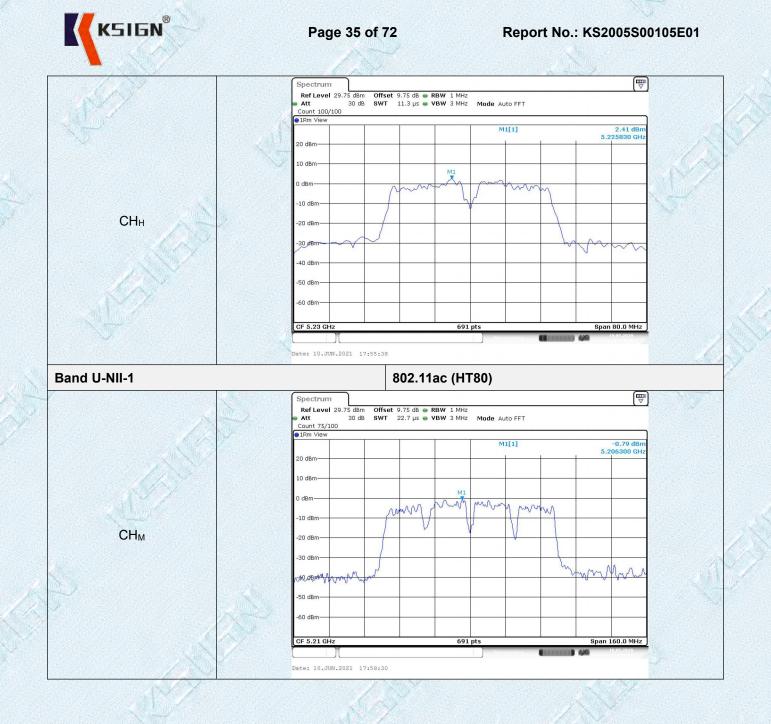




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Report No.: KS2005S00105E01





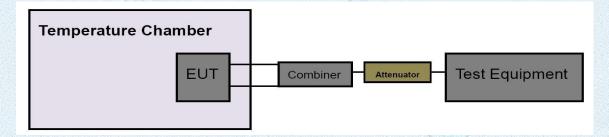


3.6. Frequency Stability Measurement

Limit

FCC Part 15 Subpart C(15.407)									
Test Item	Limit	Frequency Range(MHz)							
	Specified in the user's	5150~5250							
Dedis Francisco Managemento	manual, the transmitter center frequency tolerance shall be	5250~5350							
Peak Excursion Measurement	±20 ppm maximum for the 5 GHz band (IEEE 802.11n	5470~5725							
	specification)	5725~5850							

Test Configuration



Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser centre frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.
- (4) Set the RBW to: 10 kHz, VBW=10 kHz with peak detector and maxhold settings.
- (5) The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- (6) Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25℃ operating frequency as reference frequency.
- (7) Turn EUT off and set the chamber temperature to -20℃. After the temperature stabilized for approximately 30 minutes recorded the frequency.
- (8)Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

NOTE: The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

Test Mode

Please refer to the clause 2.2.

Test Result

Pre-scan 802.11a/n(HT20/HT40)/ac(HT20/HT40/HT80) modulation, and found the 802.11a modulation 5180MHz which it is worse case, so only show the test data for worse case.

Band	I U-NII-1
801.11a	5180 MHz
Voltage vs. Fr	equency Stability
Voltage (V)	Measurement Frequency (MHz)
7.60	5179.9926
6.46	5179.9954
8.74	5179.9975
Max. Deviation (MHz)	0.002
Max. Deviation (ppm)	0.3861
Limit (ppm)	20
Result	Pass
Temperature vs.	Frequency Stability
Temperature (°C)	Measurement Frequency (MHz)
-30	5179.9917
-20	5179.9919
-10	5179.9924
0	5179.9928
10	5179.9947
20	5179.9966
30	5179.9973
40	5179.9978
50	5179.9988
Max. Deviation (MHz)	0.002
Max. Deviation (ppm)	0.3861
Limit (ppm)	20
Result	Pass



3.7. Band Edge Emissions(Radiated)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.407(b): Limits of unwanted emission out of the restricted bands

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBuV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
	-27(Note 2)	68.2
E705 5050	10(Note 2)	105.2
5725~5850	15.6(Note 2)	110.8
	27(Note 2)	122.2

NOTE:

1, The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

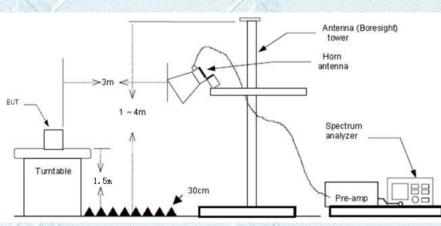
$1000000\sqrt{30P}$

2, According to FCC 16-24,All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

* Increase/Decreases with the linearly of the frequency.

For emission above 1GHz and in restricted band, according to FCC KDB 789033 D02 General UNII Test Procedure, all emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit. $E[dB\mu V/m] = EIRP[dBm] + 95.2$, for d = 3 meters.

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 RMS detector for Average value.



Test Mode

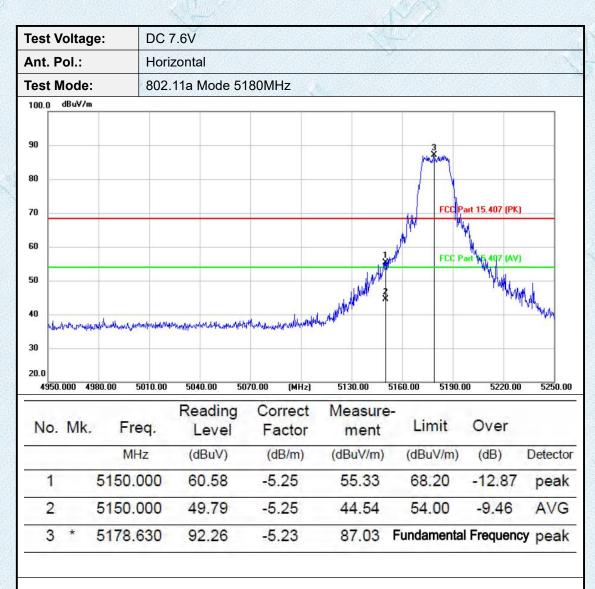
Please refer to the clause 2.2.

Test Results

Note:

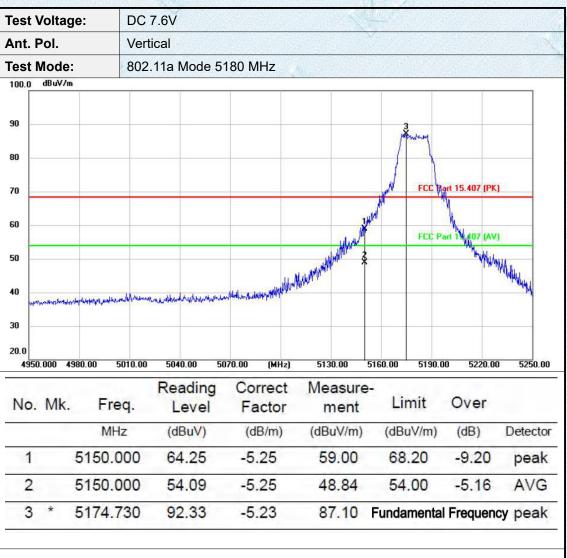
- 1.Measurement = Reading level + Correct Factor
- Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2.Pre-scan 802.11a/n(HT20/HT40)/ac(HT20/HT40/HT80) modulation, and found the 802.11a modulation which it is worse case for above 1GHz, so only show the test data for worse case.

KSIGN®



Measurement = Reading level + Correct Factor





Measurement = Reading level + Correct Factor

lest	t Voltag	je:	DC	7.6V					100			
Ant.	Pol.		Hor	izontal	I							
Test	t Mode	:	802	.11a N	/lode 5	240MHz	Auto					
100.0	dBuV/n	1			and the second	Chica de Constantino de Constantino		SURV. MARK				
90 - 80 - 70 - 50 -			and the second	por the second s	hy hy					2 Part 15.407 2 Part 15.407		
40	hadastrakelysine	(Alle Rev.					homethyterne	3 X	Manana	4244-1944-144 ¹ 494449	en with the the	nanyahilika
30 20.0		180.00	5210.00	5240		270.00 (MHz)					20.00	5450.00
30 20.0 51		180.00		Rea				0 536 ure-			20.00	
30 20.0 51	50.000 5	1180.00 Fr	5210.00	Rea Le	iding	270.00 (мнz) Correct	Measu	ure- nt	60.00 539	0.00 542 Over	20.00	
30 20.0 51	50.000 5	1180.00 Fr	5210.00 eq. Hz	Rea Le	iding evel	270.00 (MHz Correct Factor	Measu Measu mer	o 536 ure- nt m)	0.00 539 Limit	0.00 542 Over (dB)	20.00 D	5450.00
30 20.0 515 No	50.000 5 0. Mk.	Fr MI	5210.00 eq. Hz 360	Rea Le (dB 93.	ading evel BuV)	270.00 (MHz) Correct Factor (dB/m)	Measu Measu meu (dBuV/	0 536 ure- nt m) 1 F	Limit (dBuV/m)	0.00 542 Over (dB)	20.00 D ency	5450.00

Measurement = Reading level + Correct Factor

KSIGN

Fest	Volta	ge:	D	C 7.6V							C.R.S.				
Ant.	Pol.		Ve	ertical											
Test	Mode		80)2.11a	Mode 5	240M	Hz								
100.0	dBuV/m	1													
90 -				alin	1 X										
80 -					M					_					
ro										-	FCC	2 Part 15.407	7 (PK)		
:0			-	MANN	Willy.					_					
0			M	ŀ	- N	Wit					FLG	2 Part 15.407	(AV)		
0	Manunahashith	whichphyshest	Approx			Hidwin	Alverna	watering	townstationships	Zavenna	ul man get the many	had the second standard and a	Warning	whichmark	
0			_					Partie a s		3					
20.0	50.000 5	180.00	5210.0	<u>)0 </u>	0.00 5	270.00	(MHz)	533	0.00	5360.	00 539	0.00 54	20.00	5450	0.0
010				Dor	ading	0		Mar	asure			10.00			-
	Mk.	Fi	req.		evel		rrect ictor		nent		Limit	Ove	r		
	Mk.		req. IHz	Le	-	Fa		m			Limit dBuV/m)		1	Detect	to
			1Hz	Le (dE	evel	Fa	B/m)	m (dBu	nent	(0	dBuV/m)			Constant of	
	*	М	1Hz .080	Le (dE 90	evel BuV)	Fa (df	B/m)	m (dBu 85	nent uV/m)	(c Fu	dBuV/m)) (dB)	iency	Constant of	ak

Measurement = Reading level + Correct Factor



3.8. Radiated Spurious Emissions

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(b):

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)				
Service Services	(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)

Limits of unwanted emission out of the restricted bands

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBuV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
	-27(Note 2)	68.2
5725~5850	10(Note 2)	105.2
5725~5650	15.6(Note 2)	110.8
	27(Note 2)	122.2

NOTE:

1, The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

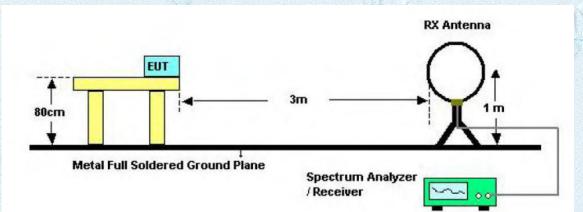
$$E = \frac{1000000\sqrt{30P}}{2} \text{ uV/m, where P is the eirp (Watts)}$$

2, According to FCC 16-24,All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

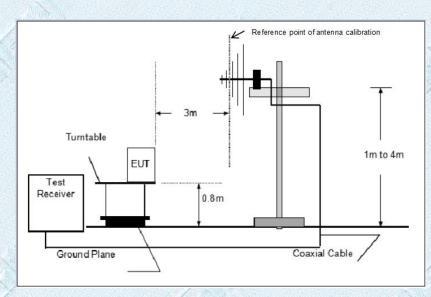


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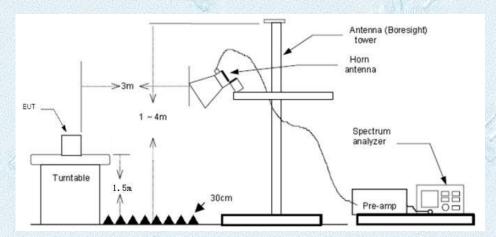
Test Configuration







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=3MHz Peak detector for Peak value.

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

Test Mode

Please refer to the clause 2.2.

Test Result

9 KHz~30 MHz and 18GHz~40GHz

From 9 KHz~30 MHz and 18GHz~40GHz: Conclusion: PASS

Note:

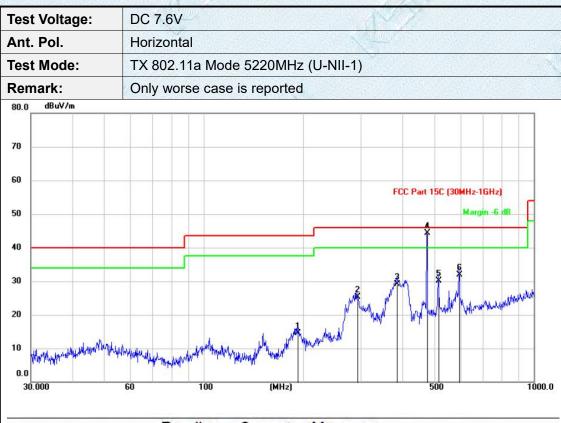
1) Measurement = Reading level + Correct Factor

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 802.11a/n(HT20/HT40)/ac(HT20/HT40/HT80) modulation, and found the 802.11a modulation 5220MHz which it is worse case for 30MHz-1GHz , so only show the test data for worse case.
- 6) Pre-scan 802.11a/n(HT20/HT40)/ac(HT20/HT40/HT80) modulation, and found the 802.11a modulation which it is worse case for above 1GHz, so only show the test data for worse case.



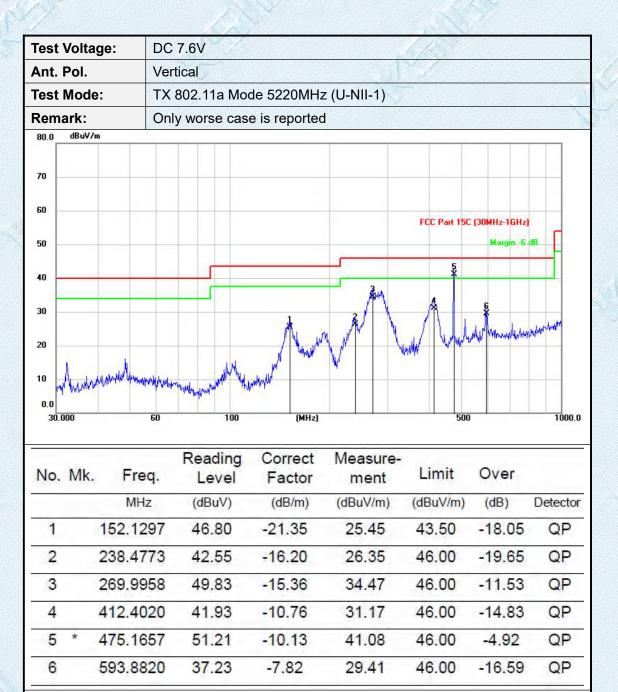
30MHz-1GHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		192.8238	32.78	-18.31	14.47	43.50	-29.03	QP
2		292.5708	40.13	-14.83	25.30	46.00	-20.70	QP
3		384.8753	40.57	-11.40	29.17	46.00	-16.83	QP
4	*	475.1657	54.42	-10.13	44.29	46.00	-1.71	QP
5		515.0760	39.63	-9.62	30.01	46.00	-15.99	QP
6		593.8820	39.80	-7.82	31.98	46.00	-14.02	QP

Measurement = Reading Level+ Correct Factor





Measurement = Reading Level+ Correct Factor



Test Voltage:	DC	7.6V					
Ant. Pol.	Hori	zontal					
Test Mode:	TX 8	302.11a Mo	de 5180MHz				
Remark:		eport for the	e emission w	hich more th	nan 10 dB b	elow the	
90.0 dBu∀/m	pics		•				
80							
70					FCC Pa	rt 15.407 (PK)	_
60					FCC Pa	rt 15.407 (AV)	_
50 2 × 3	4		5 \$	www.www.	manhaha	wayertha	inter
40 1 × 3 40 1 × 3 30	wounder	NAM Management	man M	w/W/Marinaa			
20 10.0 1000.000 2700.00	4400.00	6100.00 78	300.00 (MHz)	11200.00 12	900.00 14600.0	0 16300.00	18000.00
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1 114	7.900	51.25	-12.14	39.11	68.20	-29.09	peak
2 142	5.000	57.46	-11.87	45.59	68.20	-22.61	peak
3 237	5.300	53.63	-10.93	42.70	68.20	-25.50	peak
4 * 518	2.000	51.86	-5.23	46.63	68.20	-21.57	peak

Measurement = Reading level + Correct Factor

8141.700

9680.200

5

6

41.80

42.09

2.04

3.37

43.84

45.46

68.20

68.20

-24.36

-22.74

peak

peak



Test Vo	sitage:	DC	7.00					V Z			
Ant. Po	ol.	Verti	ical								
Test M	ode:	TX 8	302.11a N	Mode 5	180MI	Ηz	-				
Remar	k:	April 12,523-031	eport for cribed lir		nission	which m	ore th	nan 10 dB	below	the	
90.0 dB	Bu∀/m	pres		m.			12/2/17				
80											
70								FCC	Part 15.407	(PK)	
60								FCC	Part 15.407	(AV)	
50				_		6	4.4.4	da u	- 4 - 4	MAN	wanter
1 2 1 X	3X	4		- marine	month	manne	www	phillippine and the second sec	John parrier	2-48.5	Second State
40	1	in the second second	and the state	- ANY							
1. AL	1 . A Libborg	martiner	VNnn								
30	3	nutration	WWW								
30	Mundubler	in when have a	Man								
20	Winnell Myn Astrone	inviter Mary									
		4400.00	6100.00	7800.00	(MHz)			900.00 1460		300.00	18000.00
20			6100.00	7800.00	(MHz)	11200.0	00 12	900.00 1460		300.00	18000.00
20	00 2700.00	4400.00	6100.00 Readin	7800.00	(MHz)	Meas	00 12 Sure-	900.00 1460	0.00 163		18000.00
20	00 2700.00 Mk. Fr	4400.00 req.	6100.00 Readin Leve	7800.00 Ig Co I F	(MHz) orrect actor	Meas me	oo 12 sure-	900.00 1460 Limit	0.00 163 Ove	ər	
20 10.0 1000.00	00 2700.00 Mk. Fr M	4400.00 req. IHz	6100.00 Readin Leve (dBuV)	7800.00 Ig C(I F ((MHz) orrect actor (dB/m)	Meas me (dBuV	oo 12 sure- ent //m)	900.00 1460 Limit (dBuV/m	0.00 163 Ove) (dB)	er)	Detector
20 10.0 1000.00 No. N	00 2700.00 Mk. Fr M 1147.	4400.00 req. IHz .900	6100.00 Readin Leve (dBuV) 53.41	7800.00 Ig Co I F (-1	(MHz) orrect actor (dB/m) 2.14	Meas me (dBuV 41.2	00 12 sure- ent //m) 27	900.00 1460 Limit (dBuV/m 68.20	0.00 163 Ove) (dB) -26.	er) 93	Detector peak
20 10.0 1000.00	00 2700.00 Mk. Fr M	4400.00 req. IHz .900	6100.00 Readin Leve (dBuV)	7800.00 Ig Co I F (-1	(MHz) orrect actor (dB/m)	Meas me (dBuV	00 12 sure- ent //m) 27	900.00 1460 Limit (dBuV/m	0.00 163 Ove) (dB)	er) 93	Detector
20 10.0 1000.00 No. N	00 2700.00 Mk. Fr M 1147.	4400.00 req. IHz .900 .000	6100.00 Readin Leve (dBuV) 53.41	7800.00 Ig Co I F (-1	(MHz) orrect actor (dB/m) 2.14	Meas me (dBuV 41.2	00 12 sure- ent //m) 27 65	900.00 1460 Limit (dBuV/m 68.20	0.00 163 Ove) (dB) -26.	er) 93 55	Detector peak
20 10.0 1000.00 No. N 1 2	00 2700.00 Mk. Fr M 1147. 1425.	4400.00 req. IHz .900 .000 .300	6100.00 Readin Leve (dBuV) 53.41 54.52	7800.00 Ig Co I F (-1 -1 -1	(MHz) orrect actor (dB/m) 2.14 1.87	Meas me (dBuV 41.2	00 12 sure- ent //m) 27 65 13	900.00 1460 Limit (dBuV/m 68.20 68.20	0.00 163 Ove) (dB) -26, -25.	93 55 07	Detector peak peak
20 10.0 1000.00 No. N 1 2 3	⁰⁰ 2700.00 Mk. Fr M 1147. 1425. 2375.	4400.00 req. IHz .900 .000 .300 .600	6100.00 Readin Leve (dBuV) 53.41 54.52 55.06	7800.00	(MHz) orrect actor (dB/m) 2.14 1.87 0.93	Meas me (dBuV 41.1 42.1 44.	00 12 sure- ent 27 65 13 14	2000.00 1460 Limit (dBuV/m 68.20 68.20 68.20	0.00 163 Ove) (dB) -26. -25. -24.	93 55 07 06	Detector peak peak peak

Measurement = Reading level + Correct Factor

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Test	Voltag	e:	DC 7	.6V				NAV.			
Ant.	Pol.		Horiz	zontal			2				
Test	Mode:		TX 8	02.11a M	lode 52	20MHz	<u>.</u>	S			
Rem	ark:			eport for t		ssion w	hich more	than 10 dE	3 below	the	
90.0	dBuV/m							1	1	1	
80											
70								FC	Part 15.407	(PK)	
60								FC	Part 15.407	(AV)	
50	2		_		6			m a buch a hold the a	When the who	, Joshing and the	holowing
40		mathe	mun	Walker	Nor Martine	mm	man	FCI			
30 20	lh huririyawine	AN AND AND AND AND AND AND AND AND AND A									
10.0 100	0.000 27	00.00 4	400.00	6100.00	7800.00	(MHz)	11200.00	12900.00 146	600.00 163	300.00	18000.00
No	. Mk.	Fre	q.	Reading Level	-	actor	Measure ment	e- Limit	Ove	er	
		MH	z	(dBuV)	(d	IB/m)	(dBuV/m)	(dBuV/m	n) (dB)	1	Detector
1		1197.2	200	51.35	-12	2.04	39.31	68.20	-28.	89	peak
2	*	1425.0	000	58.63	-11	1.87	46.76	68.20	-21.	44	peak
3	2	2375.3	300	53.95	-10	0.93	43.02	68.20	-25.	18	peak
4		5222.8	800	45.15	-5	.18	39.97	68.20	-28.	23	peak
5		6329.5	500	44.02	-2	.69	41.33	68.20	-26.	87	peak
6		8272.6	000	42.27	2.	.00	44.27	68.20	-23.	93	peak

Measurement = Reading level + Correct Factor



Test Voltage:	DC 7.6V					
Ant. Pol.	Vertical					
Test Mode:	TX 802.11a I	Mode 5220MH	z			
Remark:	No report for prescribed line	[·] the emission v mit.	vhich more th	nan 10 dB	below the	
90.0 dBuV/m				1		
80						
70				FCC P	Part 15.407 (PK)	
60				FCC P	art 15.407 (AV)	
50 2 3		6	100	Maranam	mount	phone where
40 2 30	www.west Westernet	a and the second of the	MAN MANY C	A Normal Carlos		
20						
10.0 1000.000 2700.00	4400.00 6100.00	7800.00 (MHz)	11200.00 12	900.00 14600	0.00 16300.00	18000.00
No. Mk. Fr	Readin req. Leve	-	Measure- ment	Limit	Over	
M	IHz (dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1 1147	.900 51.95	-12.14	39.81	68.20	-28.39	peak
2 1425	.000 55.60	-11.87	43.73	68.20	-24.47	peak
3 2375	.300 54.36	-10.93	43.43	68.20	-24.77	peak
4 4809	.700 44.21	-5.91	38.30	68.20	-29.90	peak
5 6482	.500 43.14	-2.17	40.97	68.20	-27.23	peak

Measurement = Reading level + Correct Factor

42.32

2.02

44.34

68.20

-23.86

peak

8180.800

6

×



Test	Voltage	:	DC	7.6V				-	Ś	J.						
Ant.	Pol.		Hori	zontal				242	in the second							
Test	Mode:		ТХ 8	302.11a M	ode 524	40MHz	<u>z</u>									
Rem	nark:			eport for t cribed lim		ssion w	vhich mc	ore th	nan 10	dB	below	the				
90.0	dBu∀/m								1							
80																
70										FCC F	Part 15.407	(PK)				
60										FCC F	Part 15.407					
50	3							1.4.4	Jacob	H	Araw	An	vorightern			
40	1 1	all market	S.	S Marthaman	numerally	www.ww	munn	WWW	(Annor -	YUTM	Para a la fact					
30	1411/11/10/http://	allenter														
20																
10.0 10	00.000 2700	.00 44	00.00	6100.00	7800.00	(MHz)	11200.00	0 12	900.00	14600).00 163	00.00	18000.00			
No.	Mk.	Freq		Reading Level		rect	Measu mer		Lim	it	Ove	r				
_		MHz		(dBuV)	(dE	B/m)	(dBuV/	m)	(dBu\	//m)	(dB)		Detector			
1	11	98.90	0	51.15	-12	.03	39.1	2	68.2	20	-29.	08	peak			
2	* 14	25.00	0	58.42	-11	.87	46.5	5	68.2	20	-21.	65	peak			
3	23	875.30	0	54.57	-10	.93	43.6	4	68.2	20	-24.	56	peak			
4	33	327.30	0	45.91	-9.	99	35.9	2	68.2	20	-32.1	28	peak			
5	49	21.90	0	45.30	-5.	60	39.7	0	68.2	20	-28.	50	peak			
6	52	43.20	0	48.10	-5.	16	42.9	4	68.2	20	-25.	26	peak			

Measurement = Reading level + Correct Factor

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Test	t Volta	ge.	DC	CONTRACTOR OF	the second s	10/01/15/100	100000000000000000000000000000000000000		2900 A.M. 1	1-1-115-1-4		<u>(343) 43</u>	(3.34)	12.3			14
Ant.	. Pol.		Vert	Vertical													
	t Mode):	TX 802.11a Mode 5240MHz														
Rem	nark:			No report for the emission which more than 10 dB below the prescribed limit.													
90.0	dBuV/n	n	pres	SCHDE		<u>m.</u>											
80												-					
70												FCC	Part 1	5.407	(PK)	-	
60												FCC	Part 1	5.407	(AV)		
50								6				416		- 1.1.4	white	un um	
	12 3				5	. water the	nautr	n Trun	um	www.	Manne	- Mar	Hundrer	VV4			
	×		1.00		- A 44		and all all		17 No 1								
40 >	all the start	1 He strong	my	how	www.	erv	a a g										
30	Allabline	Muhallander	- A	how	www.	e) en hander a										_	
30	MANNAN	Muchallen	- A	how	M/Wayotha												
30 20	will while we	Muchallensen	-	how													
30 20 10.0			4400.00	6100.		7800.00		Hz)			12900.00		00.00		800.00	1800	10.00
30 20 10.0																	10.00
30 20 10.0 100	00.000 2	2700.00 4	1400.00	6100 Read	ding	7800.00) (M	IHz)	1120 Mea	00.00 asure	12900.00	146	00.00	163	800.00		10.00
30 20 10.0 100		2700.00 4	4400.00 q.	6100 Read	ding	7800.00 3 Cu F	orrec acto	uHz) ct pr	Mea m	asure nent	12900.00 - Lir	146 nit	00.00 C	163)∨e	r	1800	
30 20 10.0 100	00.000 2	2700.00 4	4400.00 q.	6100 Read	ding	7800.00 3 Cu F) (M	uHz) ct pr	Mea m	00.00 asure	12900.00	146 nit	00.00 C	163	r		
30 20 10.0 100	. Mk.	2700.00 4	4400.00 q. z	6100 Read	ding evel uV)	7800.00 g C(F (orrec acto	ct or	1120 Mea m (dBu	asure nent	12900.00 - Lir	146 nit	00.00 O	163)∨e	:00.00 r	1800	tor
30 20 10.0 100 No.	. Mk.	2700.00 Fre MH:	4400.00 q. z	6100 Read Le (dB)	ding evel uV)	7800.00 g Co F (-1	orrec acto	iHz) ct or)	Mea m (dBu 40	asure ient iV/m)	12900.00 - Lir (dBu	146 nit IV/m .20	00.00 O) (-2	163)∨e (dB)	r 15	1800	tor:
30 20 10.0 100 No.	. Mk.	Fre MH: 1147.9	4400.00 q. z 000 00	6100 Read Le (dBi 52.	ding avel uV) .19 .06	7800.00 g Co F (-1 -1	orrec acto (dB/m 2.14	HHz) Ct pr))	1120 Mea m (dBu 40 43	asure ient iV/m) 0.05	12900.00 Lir (dBu 68.	146 mit 1V/m 20 20	00.00 O) (-2 -2	163)ve (dB) 228.	r 15 01	1800 Detect	tor ak ak
30 20 10.0 100 No.	. Mk.	Fre MH: 1147.9 1425.0	4400.00 q. z 000 000	6100 Read Le (dB 52. 55.	ding evel uV) .19 .06	7800.00 g Co F (-1 -1 -1	orrec acto (dB/m 2.14	HHz) Ct Dr)) 4 7	1120 Mea m (dBu 40 43 43	asure ient iV/m) 0.05 0.19	12900.00 Lir (dBu 68.	146 mit 1V/m 20 20 20	00.00 0) (-2 -2 -2	163 0ve (dB) 228.	r 15 01 05	1800 Detection pea	ak ak
30 20 10.0 100 No. 1 2 3	. Mk.	Fre MH: 1147.9 1425.0 2375.3	4400.00 q. z 000 000 000 000	6100 Read (dBi 52. 55. 54.	ding evel uV) .19 .06 .34	7800.00 F (-1 -1 -1 -1	orrec acto (dB/m 1.87 0.93	HHz) Ct Dr)) 14 7	1120 Mea m (dBu 40 43 43 38	asure nent IV/m) 0.05 3.19 3.15	12900.00 Lir (dBu 68. 68.	146 mit 20 20 20 20	00.00 0) ((-2 -2 -2 -2	163 0ve (dB) 228. 225.(225.(r 15 01 05 66	1800 Detection pea	ttor ak ak ak

Measurement = Reading level + Correct Factor

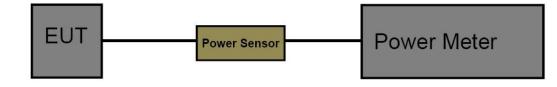


3.9. Conducted Spurious Emission

Limit

LIMITS AND MEASUREMENT RESULT								
	Measurement Result							
Applicable Limits	Test channel	Criteria						
-27dBm/MHz	5150MHz-5250MHz	PASS						

Test Configuration



Test Procedure

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2, Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to KDB 789033 for compliance to FCC 47CFR 15.407 requirements.

Test Mode

Please refer to the clause 2.2.

Test Result



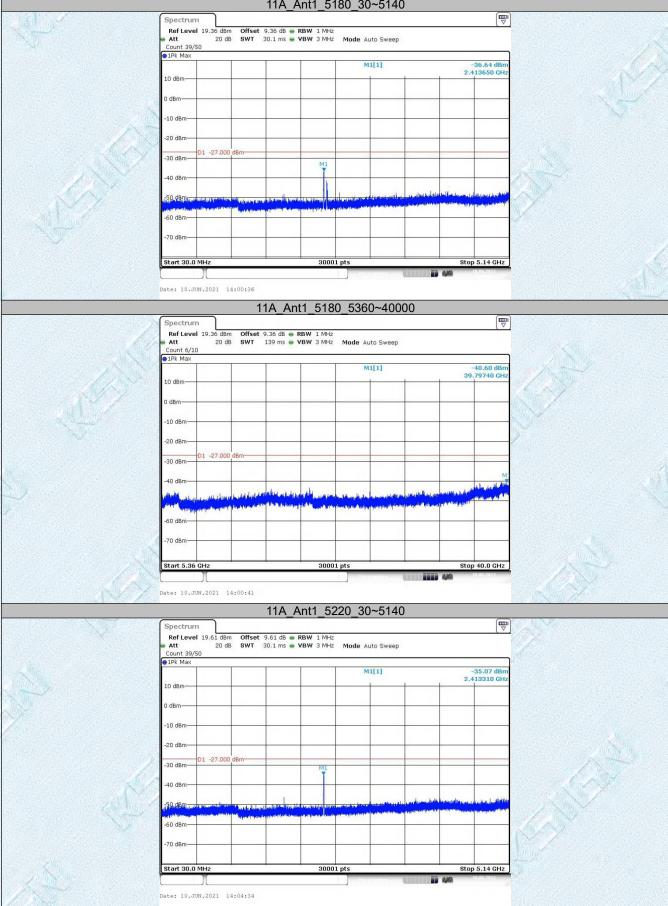
Test Mode	Ant	Channel	Freq Range [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict	
N.M.			30~5140	2413.65	-36.64	-27	PASS	
			5180	5140~5360	39797.4	-40.6	-27	1.5
			5360~40000	2413.31	-35.07	-27	PASS	
			30~5140	39634.6	-39.39	-27	PASS	
11A	Ant1	5220	5140~5360	2411.1	-36.97	-27		
		N. Sie	5360~40000	39567.6	-40.53	-27	PASS	
	A.S		30~5140	2413.65	-35.3	-27	PASS	
	C A	5240	5140~5360	39772	-39.41	-27		
	1.50		5360~40000	2413.31	-35.22	-27	PASS	
1			30~5140	39731.5	-39.54	-27	PASS	
		5180	5140~5360	2411.44	-39.09	-27		
			5360~40000	39985.6	-40.08	-27	PASS	
			30~5140	2413.31	-38.2	-27	PASS	
11N20SISO	Ant1	5220	5140~5360	39119.6	-40.62	-27		
			5360~40000	2408.2	-39.8	-27	PASS	
			30~5140	39603.4	-40.42	-27	PASS	
		5240	5140~5360	2411.1	-42.53	-27		
		A State	5360~40000	39238.5	-39.94	-27	PASS	
			30~5140	2413.65	-40.61	-27	PASS	
	and the	5190	5140~5360	39233.9	-40.31	-27		
			5360~40000	2413.99	-42.49	-27	PASS	
11N40SISO	Ant1		30~5140	39800.8	-39.61	-27	PASS	
	02.87	5230	5140~5360	5133.95	-42.17	-27		
and the second	11		5360~40000	39168.1	-39.95	-27	PASS	
- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1	1		30~5140	2457.59	-35.56	-27	PASS	
1. A.		5180	5140~5360	39147.3	-40.38	-27		
			5360~40000	30~5140	-33.37	-27	PASS	
			30~5140	5360~40000	-34.86	-27	PASS	
11AC20SISO	Ant1	5220	5140~5360	2413.65	-36.64	-27		
			5360~40000	39797.4	-40.6	-27	PASS	
			30~5140	2413.31	-35.07	-27	PASS	
		5240	5140~5360	39634.6	-39.39	-27	11100	
		5240	5360~40000	2411.1	-36.97	-27	PASS	
		N/	30~5140	39567.6	-40.53	-27	PASS	
		5190	5140~5360	2413.65	-35.3	-27		
	15V2		5360~40000	39772	-39.41	-27	PASS	
11AC40SISO	Ant1		30~5140	2413.31	-35.22	-27	PASS	
		5230	5140~5360	39731.5	-39.54	-27		
		0200	5360~40000	2411.44	-39.09	-27	PASS	
			30~5140	39985.6	-40.08	-27	PASS	
11AC80SISO	Ant1	5210	5140~5360	2413.31	-38.2	-27	17.00	
		0210	5360~40000	39119.6	-40.62	-27	PASS	



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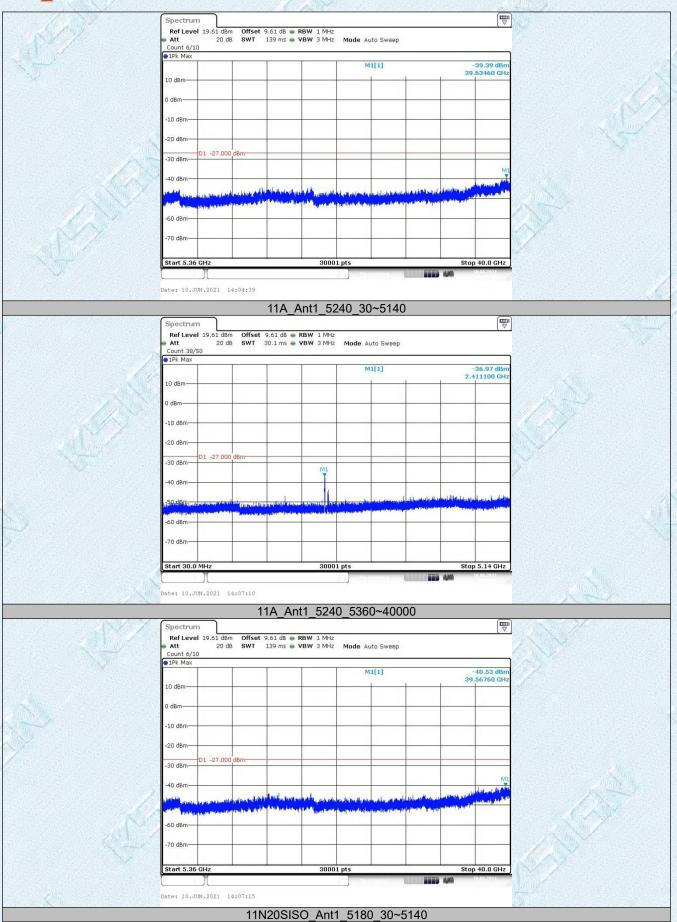


11A_Ant1_5180_30~5140

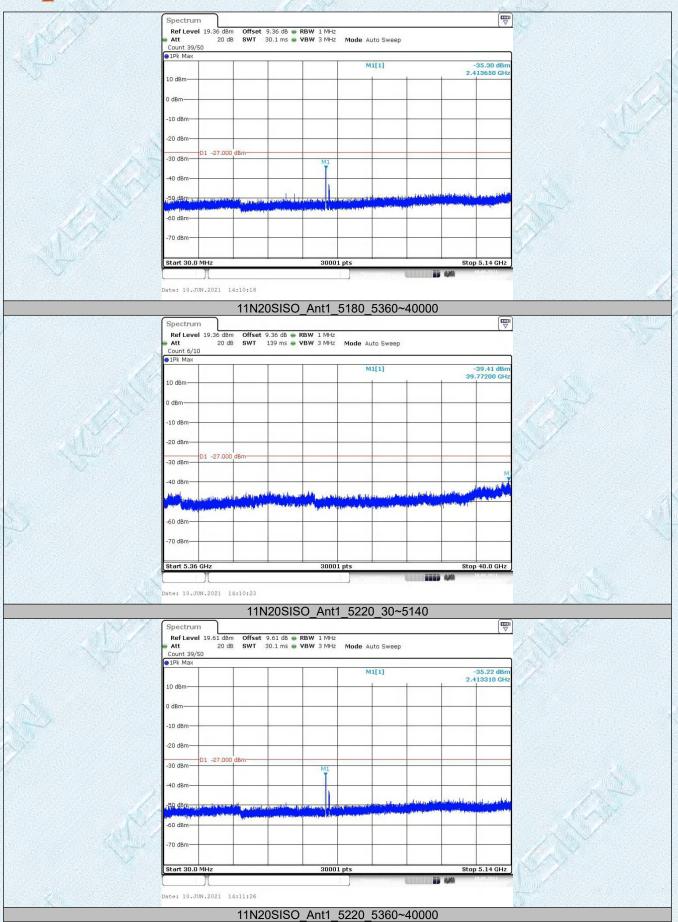


11A_Ant1_5220_5360~40000

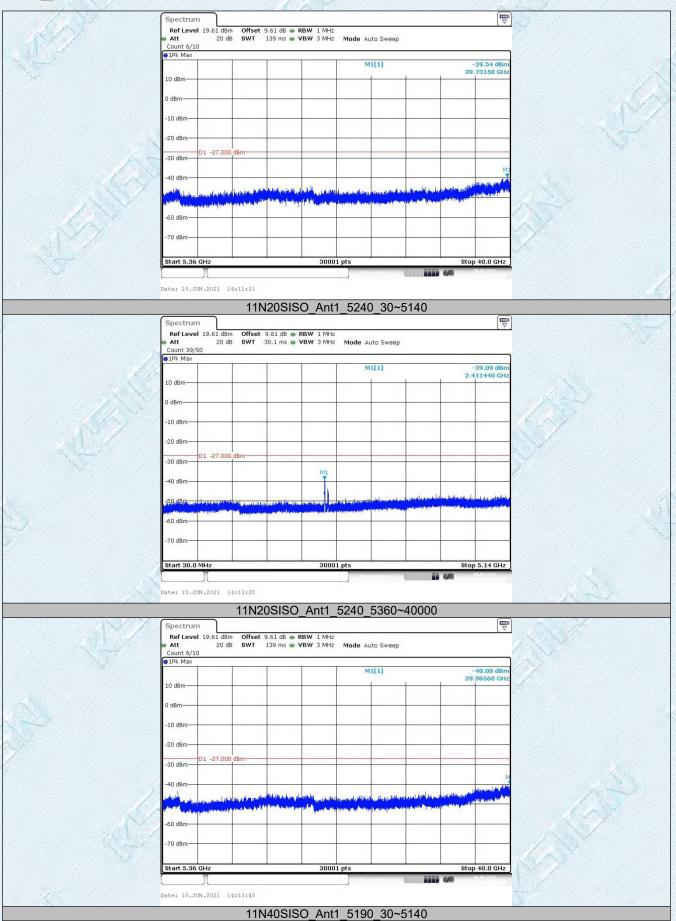




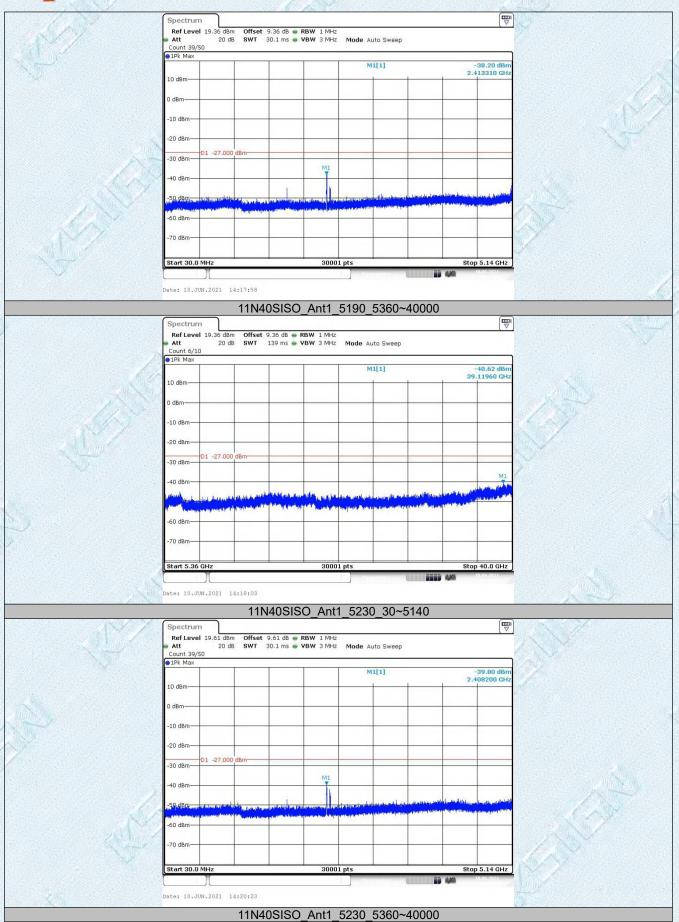




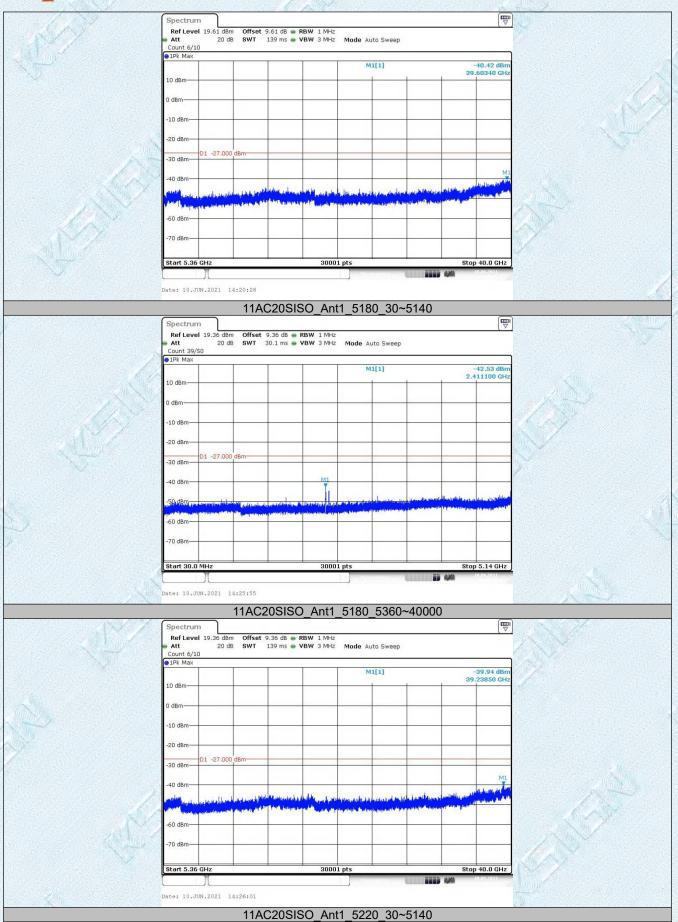




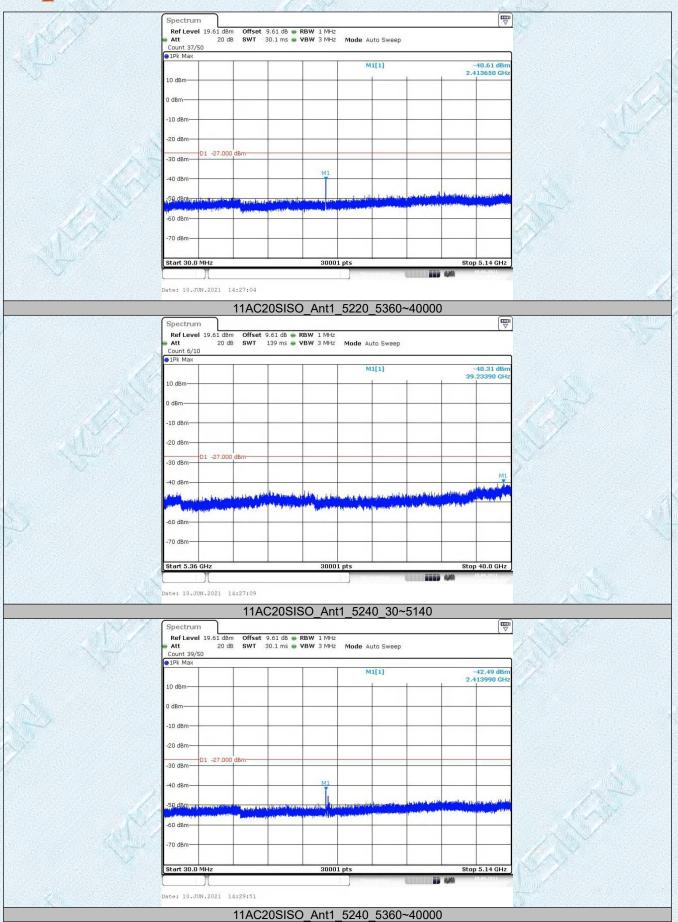




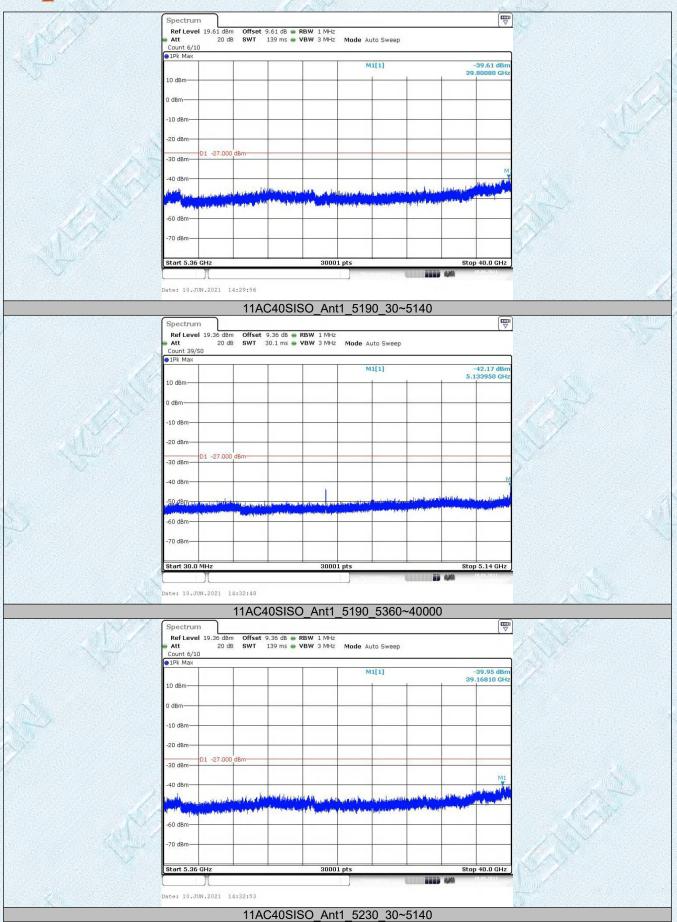




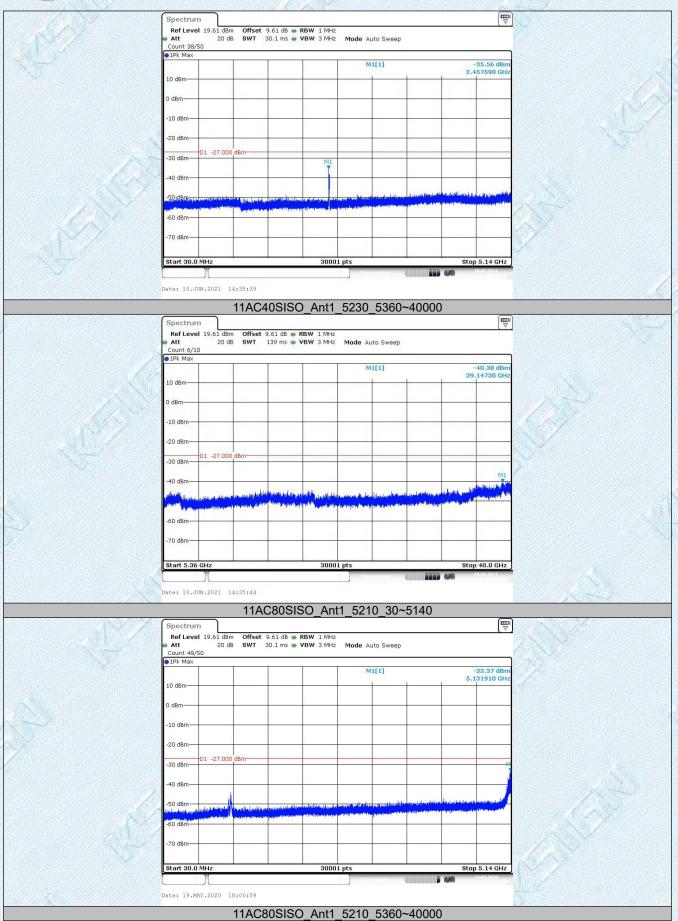




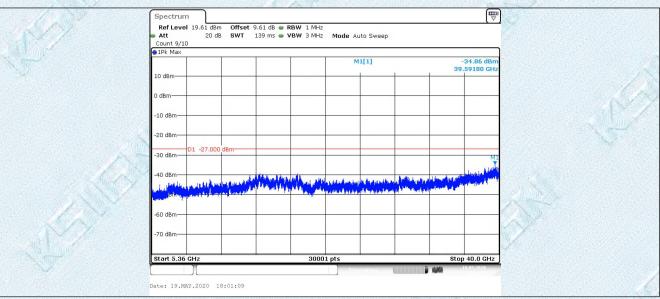








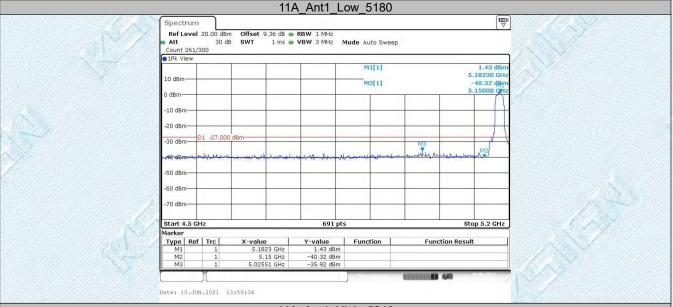




Band edge measurements

TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
44.6	A == 14	Low	5180	-35.92	<=-27	PASS
11A	Ant1	High	5240	-37.74	<=-27	PASS
111000100	A pt1	Low	5180	-36.92	<=-27	PASS
11N20SISO	Ant1	High	5240	-37.23	<=-27	PASS
11N40SISO	Ant1	Low	5190	-31.95	<=-27	PASS
111405150	Anu	High	5230	-37.24	<=-27	PASS
11AC20SISO	Ant1	Low	5180	-36.75	<=-27	PASS
TIAC205150	Anu	High	5240	-38.14	<=-27	PASS
11AC40SISO	Ant1	Low	5190	-34.61	<=-27	PASS
TIAC405150	Anti	High	5230	-38.13	<=-27	PASS
1140000100	A pt1	Low	5210	-33.11	<=-27	PASS
11AC80SISO	Ant1	High	5210	-37.63	<=-27	PASS

Test Graphs



11A_Ant1_High_5240



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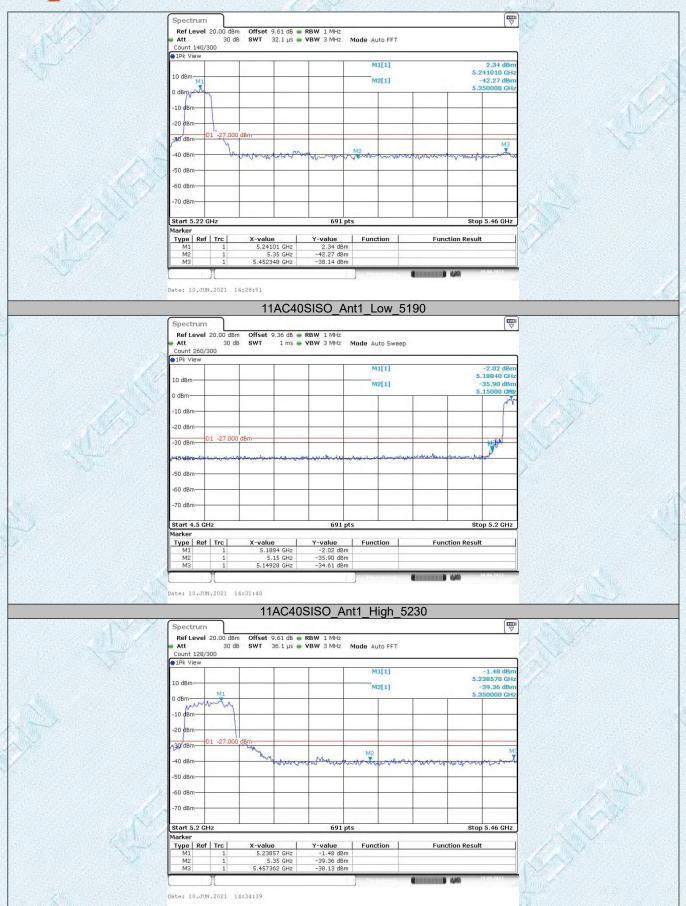


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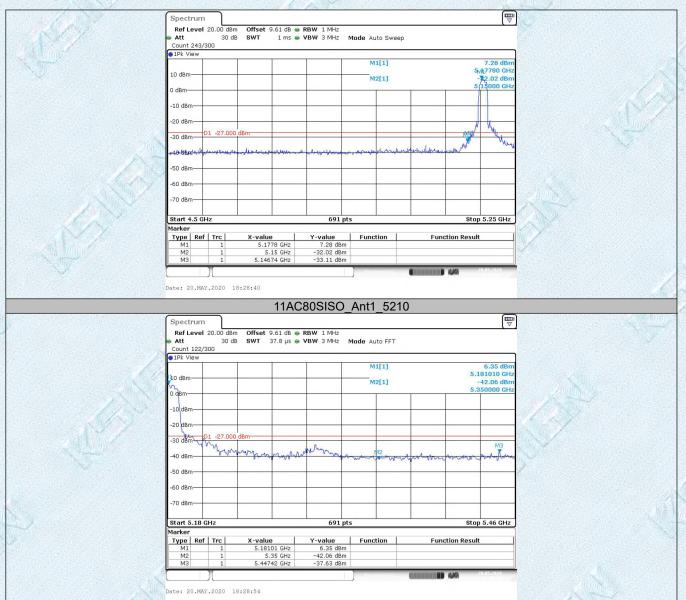


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Report No.: KS2005S00105E01

4. EUT TEST PHOTOS

KSIGN

Reference to the document No.: Test Photos.

KSIGN

5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

Reference to the document No.: External Photos and Internal Photos.

****THE END*****