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Note: Cable loss was 10.6 dB.

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10.6 Conducted Unwanted Emission

Requirement(s):

Spec	Item	Requirement			Applicable
§ 15.247 RSS247(5.5)	d)	For non-restricted band, In any 10 which the spread spectrum or digi the radio frequency power that is least 20 dB or 30dB below that in contains the highest level of the d method on output power to be use in § 15.209 (a) is not required	0 kHz bandwidth out tally modulated inten produced by the inter the 100 kHz bandwid esired power, detern ed. Attenuation below	tside the frequency band in tional radiator is operating, ntional radiator shall be at dth within the band that nined by the measurement <i>i</i> the general limits specified	
Test Setup Test Setup Spectrum Analyzer		EUT			
Test Procedure	558074 D01 DTS Meas Guidance v03r04 measurement procedure 1. Set the EUT to maximum power setting and enable the EUT transmit continuously. 2. Conducted unwanted emissions must be at least 30 dB down from the highest emission level wit authorized band as a measured. The attunation shall be be 30 dB instead of 20 dB when RMS con output power procedure is used. 3. Change modulation and channel bandwidth then repeat step 1 to 2. 4. Measured and record the results in the test report.		n level within the RMS conducted		
Test Date	07/19/	2016	Environmental condition	Temperature Relative Humidity Atmospheric Pressure	24ºC 44.9% 1010mbar
Remark	Remark Offset was added.				
Result	🖂 Pass 🛛 Fail				

Test Plot 🗆 N/A \boxtimes Yes (See below)

Test was done by Rachana Khanduri at RF Test Site.

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Conducted Unwanted Emission Test Plots



Conducted Unwanted Emission-802.11b Low-chain1



Conducted Unwanted Emission-802.11b Low-chain3

Trig: Free Run

VBW 300 kHz

Conducted Unwanted Emission-2.4G-802.11b Mid-chain1

Avg Type: Log-Pwr Avg/Hold: 1/1

1234

Stop 25.00 Sweep 2.386 s (1001

Auto Tur

Center Free

Start Fre

op Fr

CFS

2.497

12.5

ter Freq 12.515000000 GHz

Ref Offset 10.7 dB Ref 10.70 dBm

0.03 GHz BW 100 kHz



Conducted Unwanted Emission-2.4G-802.11b Low-chain2



Conducted Unwanted Emission-2.4G-802.11b Low-chain4



Conducted Unwanted Emission-2.4G-802.11b Mid-chain2

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Conducted Unwanted Emission -2.4G-802.11b High-chain3

Conducted Unwanted Emission -2.4G-802.11b High-chain4

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Avg Type: Log-Pwi Avg[Hold: 1/1

1234

Stop 25.00 G

Auto Tur

Center Fre

CF

Freq Offs







Conducted Unwanted Emission -2.4G-802.11g Low-chain3



Conducted Unwanted Emission -2.4G-802.11g Low-chain4

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	Test report No.	FCC IC_RF_SL16032801-RUC-016_DTS
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Ref CB FLB LCB NB CAB KLB Index Set 54 Index Index Set 54 Index Set 5	Image: Control Systems Analysis State State	r55 ACO CH2 INC FIZ INC CH2 INC CH2
s BW 100 kHz VBW 300 kHz Sweep 2.386 s (1001 pts)	#Res BW 100 kHz	VBW 300 kHz Sweep 2.386 s (1001 pts)





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Note: cable loss was 10.7dB.

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10.7 Radiated Spurious Emissions in restricted band

Requirement(s):

Spec	ltem	Requirement	Applicable
47CFR§15.247(d), RSS247(A8.5)	a)	For non-restricted band, In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB or 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, determined by the measurement method on output power to be used. Attenuation below the general limits specified in § 15.209(a) is not required □ 20 dB down □ 30 dB down	
·	b)	or restricted band, emission must also comply with the radiated emission limits specified in 15.209	\boxtimes
Test Setup		Semi Anechoic Chamber Radio Absorbing Material EUT 1.5m Ground Plane	pectrum Analyzer
Procedure	 The EUT was switched on and allowed to warm up to its normal operating condition. The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen. b. The EUT was then rotated to the direction that gave the maximum emission. c. Finally, the antenna height was adjusted to the height that gave the maximum emission. An average measurement was then made for that frequency point. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured. 		
Remark	The EUT was scanned up to 40GHz. Both horizontal and vertical polarities were investigated. The results show only the worst case. Radiated measurement was measured with antenna port terminated, there isn't outstanding emission found at the edge of restricted frequency, within x dB margin		
Result	⊠ Pass		

Test was done by Rachana Khanduri at 10m Chamber.

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Radiated Spurious Emissions in Restricted Band Test Results

Test specification	Restricted Band			
	Temp (°C):	24		
Environmental Conditions:	Humidity (%)	44.9		⊠ Pass
	Atmospheric (mPa):	1010.6		
Mains Power:	120VAC, 60Hz		Result	
Tested by:	Rachana Khanduri			
Test Date:	07/11/2016			
Remarks:	-]	

Restricted Band Measurement Plots:



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10.8 Radiated Spurious Emissions below 1GHz

Requirement(s):

Spec	Item	Requirement	Applicable
47CFR§15.247(d) RSS247 (5.5)	a)	Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band 	
Test Setup		Semi Anechoic Chamber Radio Absorbing Material	pectrum Analyzer
Procedure	1. 2. 3. 4.	 The EUT was switched on and allowed to warm up to its normal operating condition. The test was carried out at the selected frequency points obtained from the EUT chan Maximization of the emissions, was carried out by rotating the EUT, changing the ant polarization, and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission lever rotation of the EUT) was chosen. b. The EUT was then rotated to the direction that gave the maximum emission c. Finally, the antenna height was adjusted to the height that gave the maxim A Quasi-peak measurement was then made for that frequency point. 	racterisation. enna el over a full n. um emission. r points were
Remark	The E show	UT was scanned up to 1GHz. Both horizontal and vertical polarities were investigated. only the worst case.	The results
Result	⊠ Pa	ss 🗆 Fail	
Test Data ⊠ Yes Test Plot ⊠ Yes	(See be	slow) □ N/A	

Test was done by Gary Chou at 10m Chamber.

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Radiated Emission Test Results (Below 1GHz)

Test specification	below 1GHz				
	Temp (°C):	25			
Environmental Conditions:	Humidity (%)	45			
	Atmospheric (mbar):	1011			
Mains Power:	120VAC, 60Hz	120VAC, 60Hz			
Tested by:	Gary Chou				
Test Date:	11/29/2015				
Remarks:	N/A				



Frequency MHz	Raw dBuV	Cable Loss	AF dB	Amp dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
71.95	61.58	1.37	8.05	39.23	31.77	Quasi Max	۷	120	14	40.00	-8.23	Pass
30.61	42.26	0.81	21.54	38.41	26.20	Quasi Max	۷	216	29	40.00	-13.8	Pass
911.31	35.95	5.61	22.44	39.16	24.84	Quasi Max	۷	262	180	46.02	-21.18	Pass
81.23	53.40	1.44	7.80	39.40	23.24	Quasi Max	V	100	278	40.00	-16.76	Pass
105.77	55.50	1.70	9.66	39.67	27.19	Quasi Max	Н	299	275	43.52	-16.33	Pass
597.42	36.73	4.27	18.88	39.61	20.27	Quasi Max	۷	175	152	46.02	-25.75	Pass

Note: Both horizontal and vertical polarities were investigated. The results above show only the worst case.

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10.9 Radiated Spurious Emissions above 1GHz

Requirement(s):

Spec	Item	Requirement	Applicable
47CFR§15.247(d), RSS247(A8.5)	a)	For non-restricted band, In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB or 30dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, determined by the measurement method on output power to be used. Attenuation below the general limits specified in § 15.209(a) is not required	
	b)	or restricted band, emission must also comply with the radiated emission limits specified in 15.209	\boxtimes
Test Setup		Semi Anechoic Chamber adio Absorbing Material EUT 1.5m Ground Plane	Spectrum Analyzer
Procedure	1. 2. 3. 4.	 The EUT was switched on and allowed to warm up to its normal operating condition. The test was carried out at the selected frequency points obtained from the EUT chara Maximization of the emissions, was carried out by rotating the EUT, changing the anter and adjusting the antenna height in the following manner: a. Vertical or horizontal polarisation (whichever gave the higher emission level rotation of the EUT) was chosen. b. The EUT was then rotated to the direction that gave the maximum emission c. Finally, the antenna height was adjusted to the height that gave the maximum An average measurement was then made for that frequency point. 	acterisation. enna polarization, over a full n. im emission. points were
Remark	The EU show on	Γ was scanned up to 40GHz. Both horizontal and vertical polarities were investigated. Iy the worst case. There isn't outstanding emission found at the edge of restricted fre	The results quency.
Result	⊠ Pass		
Test Data ⊠ Yes (Se Test Plot □ Yes (Se Test was done by Ga	ee below) ee below) ary Chou	□ N/A ⊠ N/A at <i>3m Chamber</i> .	
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Radiated Emission Test Results (Above 1GHz)

Test specification	Restricted Band				
	Temp (°C):	23			
Environmental Conditions:	Humidity (%)	44		⊠ Pass	
	Atmospheric (mPa):	1015			
Mains Power:	120VAC, 60Hz		Result		
Tested by:	Gary Chou				
Test Date:	11/30/2015 - 12/02/2015	11/30/2015 - 12/02/2015			
Remarks:	-				

1GHz-25GHz - 802.11b - 2412MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4157.36	61.41	8.90	51.01	32.11	58.77	Peak Max	Н	208	174	74	-15.23	Pass
2074.86	63.27	4.35	52.78	27.18	56.38	Peak Max	۷	133	112	74	-17.62	Pass
4157.36	49.17	8.90	51.01	32.11	46.53	Average Max	Н	208	174	54	-7.47	Pass
2074.86	51.25	4.35	52.78	27.18	44.36	Average Max	۷	133	112	54	-9.64	Pass

1GHz-25GHz- 802.11b - 2437MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4126.02	61.25	8.82	51.01	32.00	58.4	Peak Max	٧	121	46	74	-15.61	Pass
6160.04	58.64	10.68	49.39	34.92	58.64	Peak Max	۷	127	142	74	-15.36	Pass
2019.81	64.00	4.30	52.78	25.98	56.89	Peak Max	۷	178	123	74	-17.12	Pass
4126.02	49.26	8.82	51.01	32.00	46.41	Average Max	V	121	46	54	-7.59	Pass
6160.04	46.44	10.68	49.39	34.92	46.44	Average Max	۷	127	142	54	-7.57	Pass
2019.81	51.58	4.30	52.78	25.98	44.47	Average Max	۷	178	123	54	-9.53	Pass

1GHz-25GHz- 802.11b - 2462MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4168.18	60.45	8.92	51.01	32.11	57.88	Peak Max	۷	227	359	74	-16.12	Pass
6131.62	58.59	10.65	49.39	34.98	58.49	Peak Max	V	130	86	74	-15.51	Pass
4322.43	59.50	9.30	50.60	32.34	57.96	Peak Max	V	150	51	74	-16.04	Pass
4168.18	48.99	8.92	51.01	32.11	46.42	Average Max	۷	227	359	54	-7.58	Pass
6131.62	46.57	10.65	49.39	34.98	46.47	Average Max	V	130	86	54	-7.54	Pass
4322.43	46.92	9.30	50.6	32.34	45.38	Average Max	V	150	51	54	-8.62	Pass

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1GHz-25GHz - 802.11g - 2412MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
6063.52	59.22	10.56	49.39	34.98	58.87	Peak Max	V	228	324	74	-15.13	Pass
6305.04	56.69	10.86	49.09	34.48	57.21	Peak Max	٧	201	114	74	-16.79	Pass
1970.40	63.63	4.27	52.78	25.98	56.65	Peak Max	٧	185	278	74	-17.35	Pass
6063.52	46.68	10.56	49.39	34.98	46.33	Average Max	٧	228	324	54	-7.67	Pass
6305.04	45.20	10.86	49.09	34.48	45.72	Average Max	٧	201	114	54	-8.28	Pass
1970.40	51.01	4.27	52.78	25.98	44.03	Average Max	۷	185	278	54	-9.98	Pass

1GHz-25GHz- 802.11g - 2437MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4240.51	61.04	9.10	51.01	32.11	58.95	Peak Max	Н	219	202	74	-15.05	Pass
6108.74	58.24	10.62	49.39	34.98	58.06	Peak Max	Н	165	37	74	-15.94	Pass
4180.42	62.37	8.95	51.01	32.11	59.88	Peak Max	٧	166	96	74	-14.13	Pass
4240.51	48.33	9.10	51.01	32.11	46.24	Average Max	Н	219	202	54	-7.76	Pass
6108.74	46.52	10.62	49.39	34.98	46.34	Average Max	Н	165	37	54	-7.66	Pass
4180.42	48.82	8.95	51.01	32.11	46.33	Average Max	٧	166	96	54	-7.67	Pass

1GHz-25GHz- 802.11g - 2462MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4063.90	61.71	8.66	51.01	32.00	58.42	Peak Max	۷	179	18	74	-15.58	Pass
1063.93	61.92	3.45	53.85	23.41	55.79	Peak Max	Н	109	299	74	-18.21	Pass
6321.07	56.26	10.88	49.09	34.48	56.84	Peak Max	۷	189	290	74	-17.16	Pass
4063.90	49.55	8.66	51.01	32.00	46.26	Average Max	۷	179	18	54	-7.74	Pass
1063.93	50.36	3.45	53.85	23.41	44.23	Average Max	Н	109	299	54	-9.77	Pass
6321.07	44.98	10.88	49.09	34.48	45.56	Average Max	V	189	290	54	-8.44	Pass

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1GHz-25GHz - 802.11n-20M - 2412MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4071.53	61.62	8.68	51.01	32.00	58.39	Peak Max	٧	130	45	74	-15.61	Pass
6130.02	58.41	10.64	49.39	34.98	58.30	Peak Max	Н	251	114	74	-15.70	Pass
4298.55	59.14	9.24	50.60	32.34	57.44	Peak Max	٧	251	29	74	-16.56	Pass
4071.53	49.45	8.68	51.01	32.00	46.22	Average Max	٧	130	45	54	-7.78	Pass
6130.02	46.54	10.64	49.39	34.98	46.43	Average Max	Н	251	114	54	-7.57	Pass
4298.55	47.13	9.24	50.60	32.34	45.43	Average Max	٧	251	29	54	-8.57	Pass

1GHz-25GHz- 802.11n-20M - 2437MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1968.65	62.45	4.26	52.78	25.98	55.48	Peak Max	Н	251	86	74	-18.52	Pass
6256.91	57.70	10.80	49.09	34.48	58.05	Peak Max	٧	251	268	74	-15.95	Pass
6258.48	57.54	10.80	49.09	34.48	57.89	Peak Max	٧	251	242	74	-16.11	Pass
1968.65	50.95	4.26	52.78	25.98	43.98	Average Max	Н	251	86	54	-10.02	Pass
6256.91	45.54	10.80	49.09	34.48	45.89	Average Max	٧	251	268	54	-8.11	Pass
6258.48	45.56	10.80	49.09	34.48	45.91	Average Max	V	251	242	54	-8.09	Pass

1GHz-25GHz- 802.11n-20M - 2462MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
3127.90	59.77	5.34	51.69	31.01	55.00	Peak Max	۷	251	183	74	-19.00	Pass
3256.68	59.55	5.45	51.34	31.55	54.82	Peak Max	V	251	284	74	-19.18	Pass
11173.10	51.57	12.71	47.94	39.45	56.12	Peak Max	V	251	28	74	-17.88	Pass
3127.90	48.06	5.34	51.69	31.01	43.29	Average Max	V	251	183	54	-10.72	Pass
3256.68	47.73	5.45	51.34	31.55	43.00	Average Max	V	251	284	54	-11.00	Pass
11173.10	40.10	12.71	47.94	39.45	44.65	Average Max	V	251	28	54	-9.35	Pass

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1GHz-25GHz - 802.11n-40M - 2422MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
4242.61	60.15	9.10	51.01	32.11	58.07	Peak Max	٧	155	149	74	-15.93	Pass
6151.53	57.67	10.67	49.39	34.92	57.64	Peak Max	٧	109	28	74	-16.36	Pass
4104.36	60.88	8.76	51.01	32.00	57.87	Peak Max	٧	111	250	74	-16.13	Pass
4242.61	48.21	9.10	51.01	32.11	46.13	Average Max	٧	155	149	54	-7.87	Pass
6151.53	46.43	10.67	49.39	34.92	46.40	Average Max	٧	109	28	54	-7.60	Pass
4104.36	49.19	8.76	51.01	32.00	46.18	Average Max	٧	111	250	54	-7.82	Pass

1GHz-25GHz- 802.11n-40M - 2437MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
1990.56	63.56	4.28	52.78	25.98	56.44	Peak Max	۷	174	121	74	-17.56	Pass
5067.13	56.26	10.37	50.28	33.71	57.11	Peak Max	۷	139	342	74	-16.90	Pass
6258.53	57.69	10.80	49.09	34.48	58.04	Peak Max	٧	199	23	74	-15.96	Pass
1990.56	51.38	4.28	52.78	25.98	44.26	Average Max	٧	174	121	54	-9.74	Pass
5067.13	44.10	10.37	50.28	33.71	44.95	Average Max	٧	139	342	54	-9.05	Pass
6258.53	45.51	10.8	49.09	34.48	45.86	Average Max	V	199	23	54	-8.14	Pass

1GHz-25GHz- 802.11n-40M - 2452MHz

Frequency MHz	Raw dBuV	Cable Loss	Amp dB	AF dB	Level dBuV/m	Measurement Type	Pol	Hgt cm	Azt Deg	Limit dBuV/m	Margin dB	Pass /Fail
5393.12	56.63	8.78	49.99	33.12	55.67	Peak Max	۷	125	335	74	-18.33	Pass
10185.10	52.77	10.99	48.74	38.52	55.05	Peak Max	۷	233	106	74	-18.95	Pass
10635.50	52.71	11.80	48.58	39.42	56.06	Peak Max	Н	119	92	74	-17.94	Pass
5393.12	45.02	8.78	49.99	33.12	44.06	Average Max	۷	125	335	54	-9.94	Pass
10185.10	41.37	10.99	48.74	38.52	43.65	Average Max	V	233	106	54	-10.35	Pass
10635.50	41.33	11.8	48.58	39.42	44.68	Average Max	Н	119	92	54	-9.32	Pass

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Annex A. TEST INSTRUMENT

Instrument	Model	Manufacturer	Serial #	Cal Date	Cal Cycle	Cal Due	In use
Conducted Emissions							
R & S Receiver	ESIB 40	Rohde & Schwarz	100179	06/08/2016	1 Year	06/08/2017	~
CHASE LISN (9k-30MHz)	MN2050B	Chase	1018	08/16/2016	1 Year	08/16/2017	~
Radiated Emissions							r
R & S Receiver	ESIB 40	Rohde & Schwarz	100179	06/08/2016	1 Year	06/08/2017	N
Spectrum Analyzer	N9010A	Keysight	10SL0219	08/02/2016	1 Year	08/02/2017	V
Pre-Amplifier (1-26.5GHz)	8449B	Hewlett Packard	3008A00715	03/30/2016	1 Year	03/30/2017	~
Preamplifier (100KHz-7GHz)	LPA-6-30	RF Bay, Inc.	11140711	02/10/2016	1 Year	02/10/2017	~
ETS-Lingren Loop Antenna	6512	ETS-Lingren	00049120	07/14/2016	1 Year	07/14/2017	
Bi-Log antenna (30MHz~2GHz)	JB1	Sunol Sciences	A030702	07/08/2016	1 Year	07/08/2017	~
Horn Antenna (1-26.5GHz)	3115	EMCO	10SL0059	08/11/2016	1 Year	08/11/2017	V
3 Meters SAC	3M	ETS-Lingren	N/A	06/09/2016	1 Year	06/09/2017	~
10 Meters SAC	10M	ETS-Lingren	N/A	07/06/2016	1 Year	07/06/2017	
RF Conducted Measurement							
Spectrum Analyzer	N9010A	Keysight	10SL0219	08/02/2016	1 Year	08/02/2017	N
RF Cable	FXC- 0B1F0B-24	Applied Interconnect	NSN	N/A	N/A	N/A	•
Attenuator - 10dB (SMA)	50HF-010 SMA	JFW Industries, Inc	803	N/A	N/A	N/A	•
USB RF Power Sensor	7002-006	ETS-Lingren	10SL0190	09/03/2015	1 Year	09/03/2016	

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Annex B. SIEMIC Accreditation

Accreditations	Document	Scope / Remark	
ISO 17025 (A2LA)	A	Please see the documents for the detailed scope	
ISO Guide 65 (A2LA)	A	Please see the documents for the detailed scope	
TCB Designation		A1, A2, A3, A4, B1, B2, B3, B4, C	
FCC DoC Accreditation	A	FCC Declaration of Conformity Accreditation	
FCC Site Registration	A	3 meter site	
FCC Site Registration	A	10 meter site	
IC Site Registration	A	3 meter site	
IC Site Registration	A	10 meter site	
EU NB		Radio & Telecommunications Terminal Equipment: EN45001 – EN ISO/IEC 17025	
		Electromagnetic Compatibility: EN45001 – EN ISO/IEC 17025	
Singapore iDA CB(Certification Body)		Phase I, Phase II	
Vietnam MIC CAB Accreditation		Please see the document for the detailed scope	
Hong Kong OFCA	A	(Phase II) OFCA Foreign Certification Body for Radio and Telecom	
	A	(Phase I) Conformity Assessment Body for Radio and Telecom	
	A	Radio: Scope A – All Radio Standard Specification in Category I	
Industry Canada CAB	TA.	Telecom: CS-03 Part I, II, V, VI, VII, VIII	

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Japan Recognized Certification Body Designation		 Radio: A1. Terminal equipment for purpose of calling Telecom: B1. Specified radio equipment specified in Article 38-2, Paragraph 1, Item 1 of the Radio Law 	
Korea CAB Accreditation		 EMI: KCC Notice 2008-39, RRL Notice 2008-3: CA Procedures for EMI KN22: Test Method for EMI EMS: KCC Notice 2008-38, RRL Notice 2008-4: CA Procedures for EMS KN24, KN61000-4-2, -4-3, -4-4, -4-5, -4-6, -4-8, -4-11: Test Method for EMS 	
		Radio: RRL Notice 2008-26, RRL Notice 2008-2, RRL Notice 2008-10, RRL Notice 2007-49, RRL Notice 2007-20, RRL Notice 2007-21, RRL Notice 2007-80, RRL Notice 2004-68	
		Telecom: President Notice 20664, RRL Notice 2007-30, RRL Notice 2008-7 with attachments 1, 3, 5, 6; President Notice 20664, RRL Notice 2008-7 with attachment 4	
Taiwan NCC CAB Recognition	R	LP0002, PSTN01, ADSL01, ID0002, IS6100, CNS14336, PLMN07, PLMN01, PLMN08	
Taiwan BSMI CAB Recognition	R	CNS 13438	
Japan VCCI	×	R-3083: Radiation 3 meter site C-3421: Main Ports Conducted Interference Measurement T-1597: Telecommunication Ports Conducted Interference Measurement	
Australia CAB Recognition	ħ	EMC: AS/NZS CISPR 11, AS/NZS CISPR 14.1, AS/NZS CISPR22, AS/NZS 61000.6.3, AS/NZS 61000.6.4	
		Radio communications: AS/NZS 4281, AS/NZS 4268, AS/NZS 4280.1, AS/NZS 4280.2, AS/NZS 4295, AS/NZS 4582, AS/NZS 4583, AS/NZS 4769.1, AS/NZS 4769.2, AS/NZS 4770, AS/NZS 4771	
		Telecommunications: AS/ACIF S002:05, AS/ACIF S003:06, AS/ACIF S004:06 AS/ACIF S006:01, AS/ACIF S016:01, AS/ACIF S031:01, AS/ACIF S038:01, AS/ACIF S040:01, AS/ACIF S041:05, AS/ACIF S043.2:06, AS/ACIF S60950.1	
Australia NATA Recognition	Z	AS/ACIF S002, AS/ACIF S003, AS/ACIF S004, AS/ACIF S006, AS/ACIF S016,AS/ACIF S031, AS/ACIF S038, AS/ACIF S040, AS/ACIF S041, AS/ACIF S043.2	

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