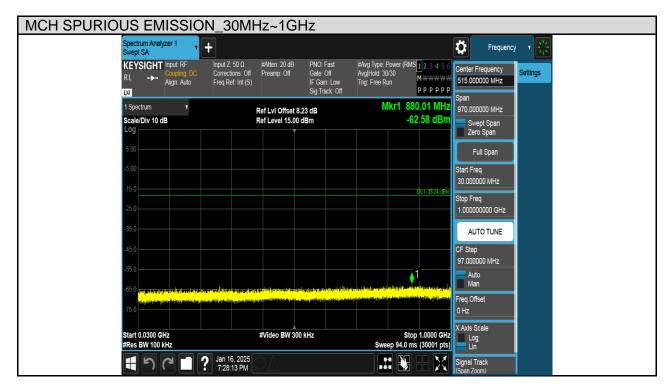
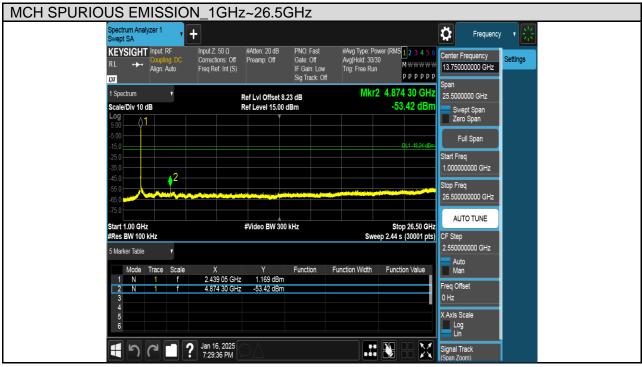


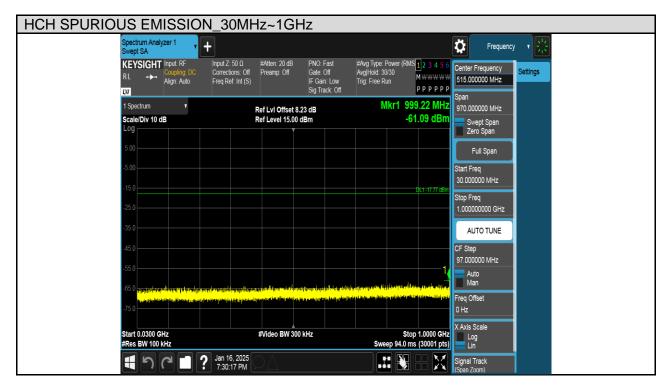
Test Mode	Channel	Verdict
11G	MCH	PASS

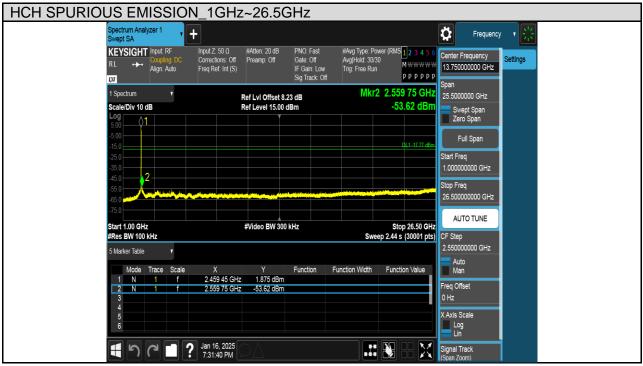






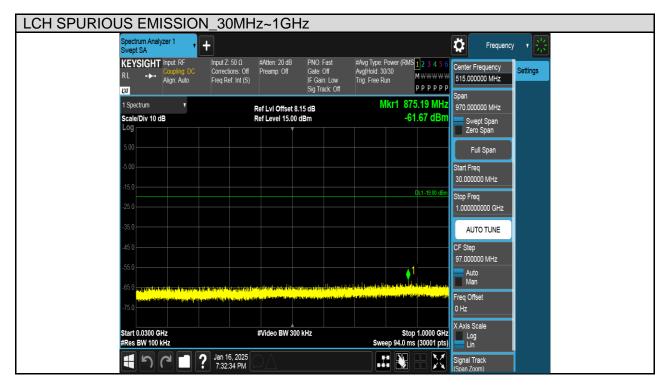
Test Mode	Channel	Verdict
11G	НСН	PASS

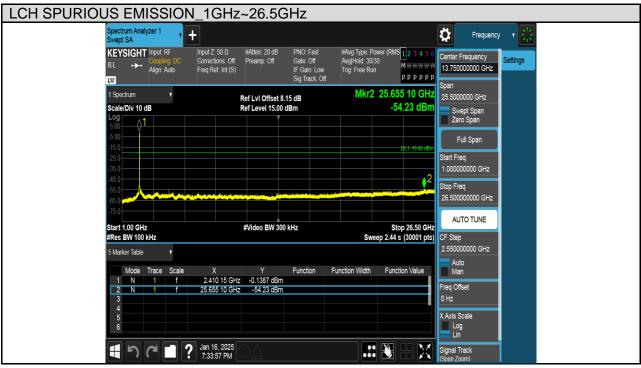






Test Mode	Channel	Verdict
11N HT20	LCH	PASS

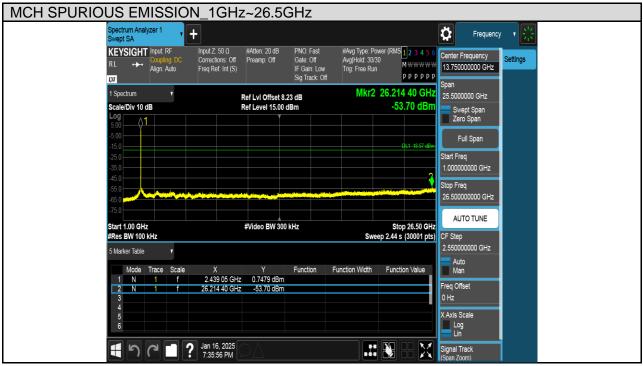






Test Mode	Channel	Verdict
11N HT20	MCH	PASS

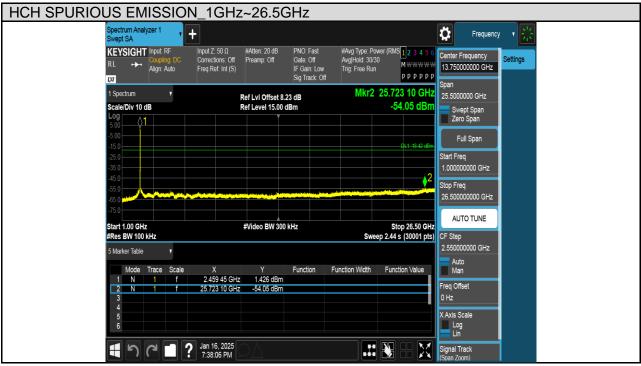


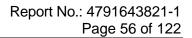




Test Mode	Channel	Verdict
11N HT20	НСН	PASS









# 8. RADIATED TEST RESULTS

# 8.1. LIMITS AND PROCEDURE

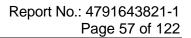
#### <u>LIMITS</u>

Please refer to FCC §15.205 and §15.209 Please refer to FCC KDB 558074 Radiation Disturbance Test Limit for FCC (Class B) (9Hz-1GHz)

Frequency (MHz)	Field Strength (microvolts/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
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.





## Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

Restricted bands of operation

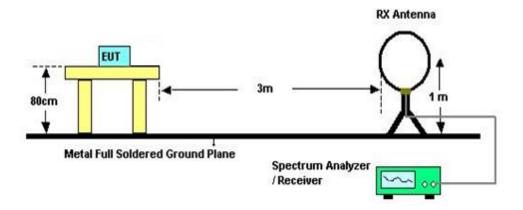
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. <sup>2</sup>Above 38.6c



## TEST SETUP AND PROCEDURE

#### Below 30MHz



### The setting of the spectrum analyser

RBW	200 Hz (From 9kHz to 0.15MHz)/ 9kHz (From 0.15MHz to 30MHz)
VBW	200 Hz (From 9kHz to 0.15MHz)/ 9kHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013

2. The EUT was arranged to its worst case and then 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. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 0.8 meter above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.

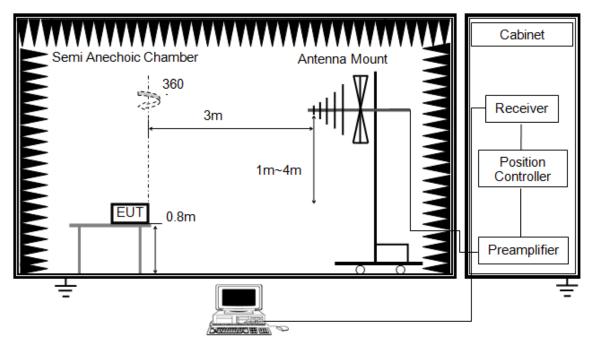
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector

6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. 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.

7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)



Below 1G



The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 0.8 meter above ground.

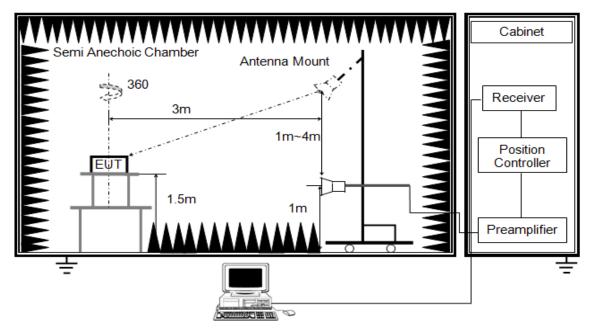
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. 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.

6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)



Above 1G



The setting of the spectrum analyser

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: See note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

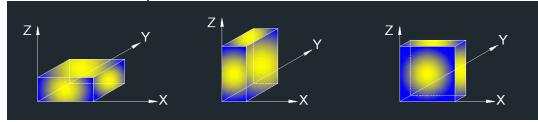
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz, the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements; and 1 MHz resolution bandwidth with video bandwidth  $\geq$ 1/T but not less than the setting list in section 7.1 when use peak detector, max hold to be run for at least [50\*(1/Duty Cycle)] traces for average measurements. For the Duty Cycle need to refer the results in section 7.1.

7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)



X axis, Y axis, Z axis positions:



Note: For all radiated test, EUT in one orthogonal axis (X axis) emissions had been tested and recorded in the report.



# 8.2. TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

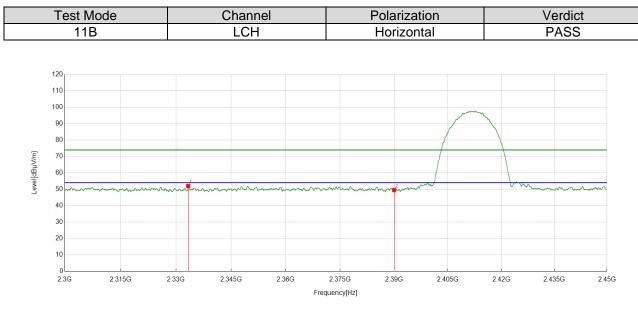
# 8.3. **RESTRICTED BANDEDGE**

#### TEST RESULT TABLE

Test Mode	Channel	Puw(dBm)	Verdict
	LCH	<limit< td=""><td>PASS</td></limit<>	PASS
11B	MCH	<limit< td=""><td>PASS</td></limit<>	PASS
	HCH	<limit< td=""><td>PASS</td></limit<>	PASS
	LCH	<limit< td=""><td>PASS</td></limit<>	PASS
11G	MCH	<limit< td=""><td>PASS</td></limit<>	PASS
	HCH	<limit< td=""><td>PASS</td></limit<>	PASS
	LCH	<limit< td=""><td>PASS</td></limit<>	PASS
11N HT20	MCH	<limit< td=""><td>PASS</td></limit<>	PASS
	НСН	<limit< td=""><td>PASS</td></limit<>	PASS



#### **TEST GRAPHS**



#### PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2333.3417	38.60	13.45	52.05	74.00	-21.95	Horizontal
2	2390.0000	36.07	13.48	49.55	74.00	-24.45	Horizontal

Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.

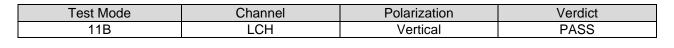
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).

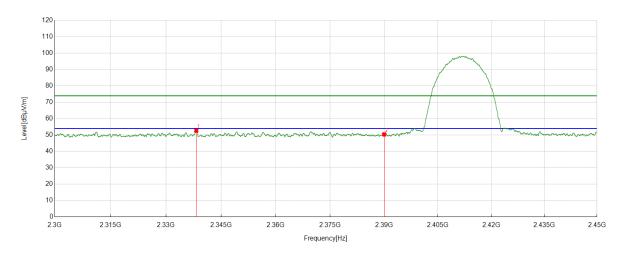
3. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



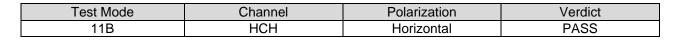


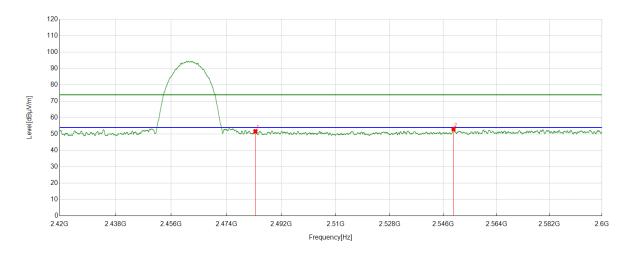


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2338.2735	39.23	13.45	52.68	74.00	-21.32	Vertical
2	2390.0000	36.89	13.48	50.37	74.00	-23.63	Vertical

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



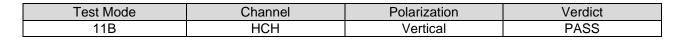


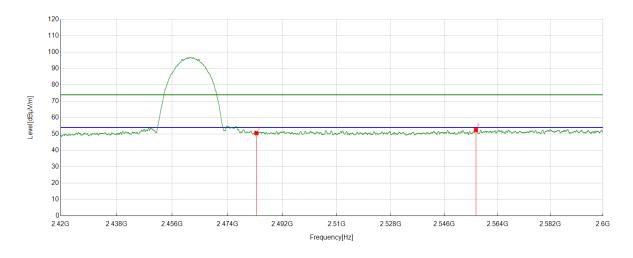


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	37.43	14.25	51.68	74.00	-22.32	Horizontal
2	2549.4362	38.40	14.63	53.03	74.00	-20.97	Horizontal

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



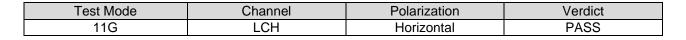


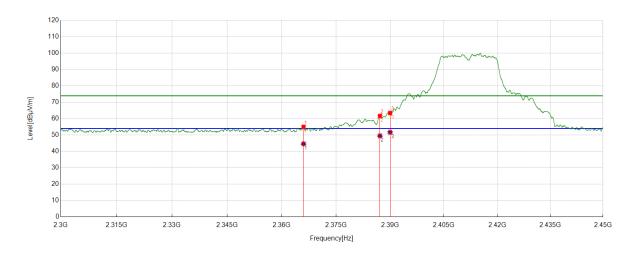


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	36.35	14.25	50.60	74.00	-23.40	Vertical
2	2556.6596	37.92	14.55	52.47	74.00	-21.53	Vertical

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







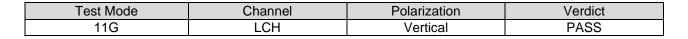
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2366.0083	41.42	13.52	54.94	74.00	-19.06	Horizontal
2	2387.1609	48.11	13.52	61.63	74.00	-12.37	Horizontal
3	2390.0000	49.99	13.48	63.47	74.00	-10.53	Horizontal

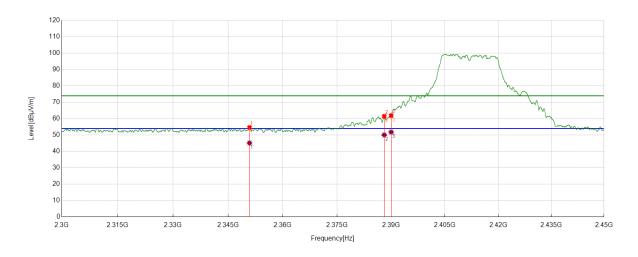
#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2366.0083	31.11	13.52	44.63	54.00	-9.37	Horizontal
2	2387.1609	35.97	13.52	49.49	54.00	-4.51	Horizontal
3	2390	38.21	13.48	51.69	54.00	-2.31	Horizontal

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







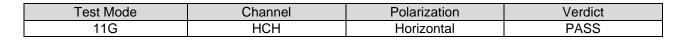
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2350.8939	41.05	13.53	54.58	74.00	-19.42	Vertical
2	2388.0798	47.92	13.50	61.42	74.00	-12.58	Vertical
3	2390.0000	48.42	13.48	61.90	74.00	-12.10	Vertical

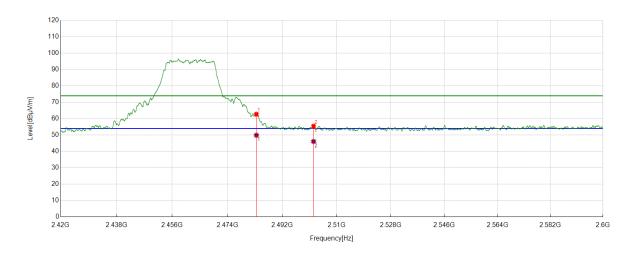
#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2350.8939	31.57	13.53	45.10	54.00	-8.90	Vertical
2	2388.0798	36.55	13.50	50.05	54.00	-3.95	Vertical
3	2390	38.32	13.48	51.80	54.00	-2.20	Vertical

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	48.44	14.25	62.69	74.00	-11.31	Horizontal
2	2502.3378	41.07	14.32	55.39	74.00	-18.61	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5	35.61	14.25	49.86	54.00	-4.14	Horizontal
2	2502.3378	31.74	14.32	46.06	54.00	-7.94	Horizontal

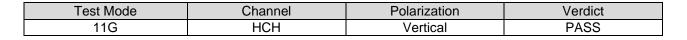
Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.

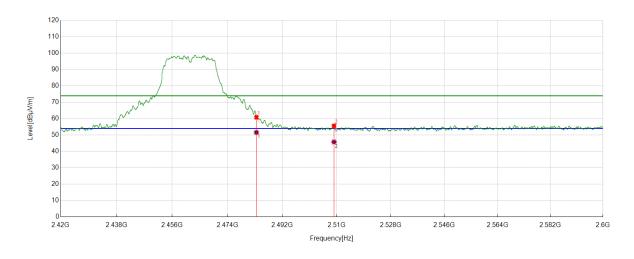
- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







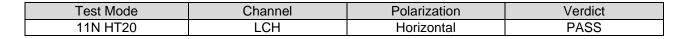
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	46.58	14.25	60.83	74.00	-13.17	Vertical
2	2509.1111	41.14	14.45	55.59	74.00	-18.41	Vertical

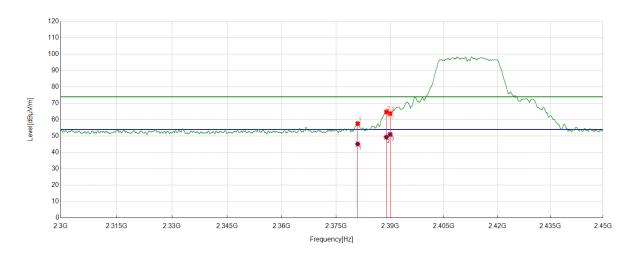
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5	37.34	14.25	51.59	54.00	-2.41	Vertical
2	2509.1111	31.32	14.45	45.77	54.00	-8.23	Vertical

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
- Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







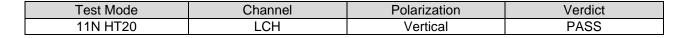
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2380.9914	43.99	13.59	57.58	74.00	-16.42	Horizontal
2	2388.9611	51.12	13.49	64.61	74.00	-9.39	Horizontal
3	2390.0000	50.21	13.48	63.69	74.00	-10.31	Horizontal

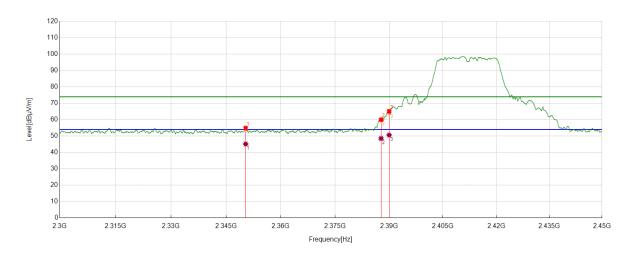
#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2380.9914	31.51	13.59	45.10	54.00	-8.90	Horizontal
2	2388.9611	35.78	13.49	49.27	54.00	-4.73	Horizontal
3	2390	37.47	13.48	50.95	54.00	-3.05	Horizontal

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







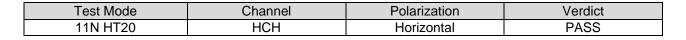
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2350.3875	41.31	13.54	54.85	74.00	-19.15	Vertical
2	2387.761	46.47	13.50	59.97	74.00	-14.03	Vertical
3	2390.0000	51.67	13.48	65.15	74.00	-8.85	Vertical

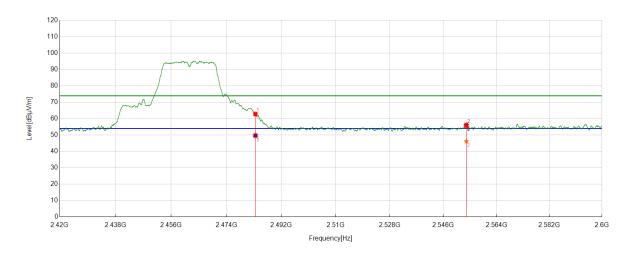
#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2350.3875	31.59	13.54	45.13	54.00	-8.87	Vertical
2	2387.761	34.99	13.50	48.49	54.00	-5.51	Vertical
3	2390	37.09	13.48	50.57	54.00	-3.43	Vertical

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	48.54	14.25	62.79	74.00	-11.21	Horizontal
2	2553.7567	41.34	14.58	55.92	74.00	-18.08	Horizontal

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5	35.43	14.25	49.68	54.00	-4.32	Horizontal
2	2553.7567	41.34	14.58	55.92	54.00	1.92	Horizontal

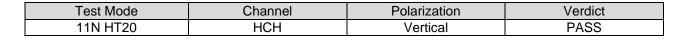
Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.

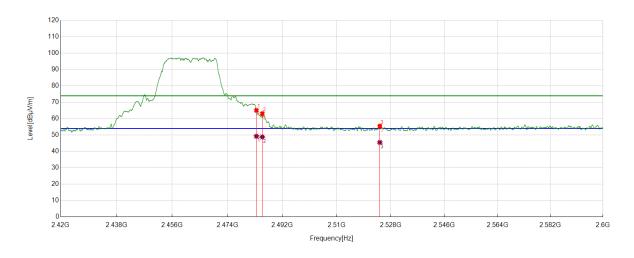
- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	50.80	14.25	65.05	74.00	-8.95	Vertical
2	2485.4382	48.75	14.29	63.04	74.00	-10.96	Vertical
3	2524.368	40.92	14.50	55.42	74.00	-18.58	Vertical

#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5	34.99	14.25	49.24	54.00	-4.76	Vertical
2	2485.4382	34.54	14.29	48.83	54.00	-5.17	Vertical
3	2524.368	30.96	14.50	45.46	54.00	-8.54	Vertical

- 2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable + Attenuator) Amplifier Gain.
- 4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# 8.4. SPURIOUS EMISSIONS

## TEST RESULTS TABLE

#### 1) For 1GHz~18GHz

Test Mode	Channel	Puw(dBm)	Verdict
	LCH	<limit< td=""><td>PASS</td></limit<>	PASS
11B	MCH	<limit< td=""><td>PASS</td></limit<>	PASS
	HCH	<limit< td=""><td>PASS</td></limit<>	PASS
	LCH	<limit< td=""><td>PASS</td></limit<>	PASS
11G	MCH	<limit< td=""><td>PASS</td></limit<>	PASS
	HCH	<limit< td=""><td>PASS</td></limit<>	PASS
	LCH	<limit< td=""><td>PASS</td></limit<>	PASS
11N HT20	MCH	<limit< td=""><td>PASS</td></limit<>	PASS
	HCH	<limit< td=""><td>PASS</td></limit<>	PASS

#### 2) For 9kHz~30MHz

Test Mode Channel		Puw(dBm)	Verdict	
11N HT20	HCH	<limit< th=""><th>PASS</th></limit<>	PASS	

#### Remark:

1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

#### 3) For 30MHz~1GHz

Test Mode	Channel	Puw(dBm)	Verdict
11N HT20	HCH	<limit< td=""><td>PASS</td></limit<>	PASS

Remark:

1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

#### 4) For 18GHz~26.5GHz

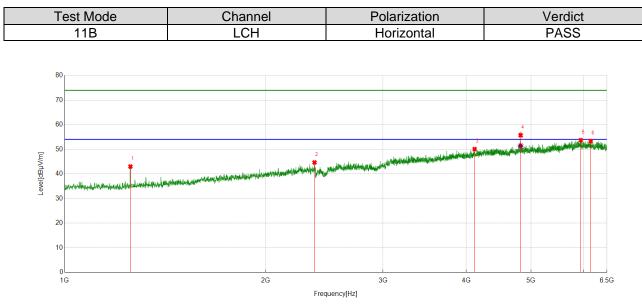
Test Mode	Channel	Puw(dBm)	Verdict	
11N HT20	HCH	<limit< th=""><th>PASS</th></limit<>	PASS	

#### Remark:

1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.



## Part 1: 1GHz~6.5GHz



## HARMONICS AND SPURIOUS EMISSIONS

# PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	44.56	-1.57	42.99	74.00	-31.01	Horizontal
2	2368.9836	39.84	4.80	44.64	74.00	-29.36	Horizontal
3	4116.8271	36.42	13.67	50.09	74.00	-23.91	Horizontal
4	4824.353	40.04	15.67	55.71	74.00	-18.29	Horizontal
5	5938.2423	35.20	18.52	53.72	74.00	-20.28	Horizontal
6	6145.8932	34.90	18.45	53.35	74.00	-20.65	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

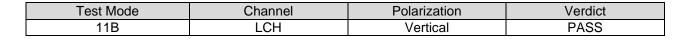
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

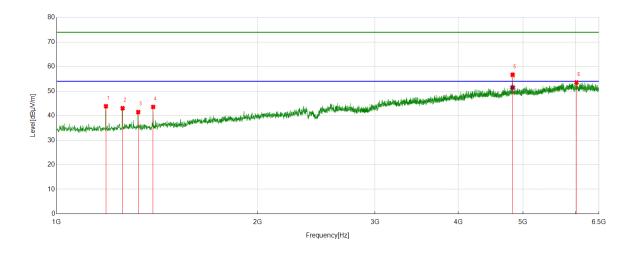
4. Peak: Peak detector.

5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.

6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.84	-2.00	43.84	74.00	-30.16	Vertical
2	1255.782	44.61	-1.57	43.04	74.00	-30.96	Vertical
3	1325.2282	42.63	-1.16	41.47	74.00	-32.53	Vertical
4	1395.3619	44.91	-1.35	43.56	74.00	-30.44	Vertical
5	4824.353	41.00	15.67	56.67	74.00	-17.33	Vertical
6	6014.5643	35.46	18.06	53.52	74.00	-20.48	Vertical

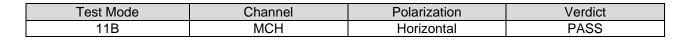
Note: 1. Measurement = Reading Level + Correct Factor,

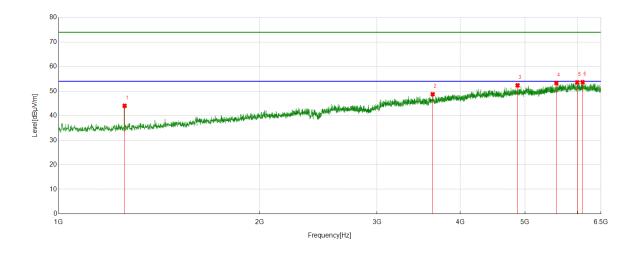
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.782	45.58	-1.57	44.01	74.00	-29.99	Horizontal
2	3636.2045	37.61	11.13	48.74	74.00	-25.26	Horizontal
3	4873.8592	37.28	15.08	52.36	74.00	-21.64	Horizontal
4	5571.759	36.06	17.22	53.28	74.00	-20.72	Horizontal
5	5986.3733	35.20	18.37	53.57	74.00	-20.43	Horizontal
6	6101.8877	35.35	18.30	53.65	74.00	-20.35	Horizontal

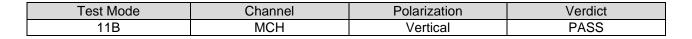
Note: 1. Measurement = Reading Level + Correct Factor,

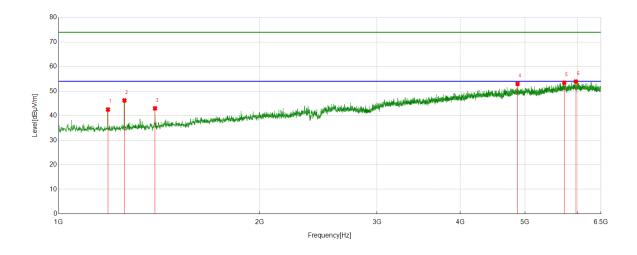
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	44.52	-2.00	42.52	74.00	-31.48	Vertical
2	1255.0944	47.80	-1.57	46.23	74.00	-27.77	Vertical
3	1394.6743	44.33	-1.35	42.98	74.00	-31.02	Vertical
4	4873.8592	37.86	15.08	52.94	74.00	-21.06	Vertical
5	5725.0906	35.93	17.49	53.42	74.00	-20.58	Vertical
6	5959.5574	35.35	18.56	53.91	74.00	-20.09	Vertical

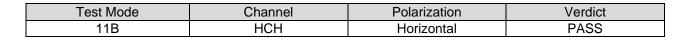
Note: 1. Measurement = Reading Level + Correct Factor,

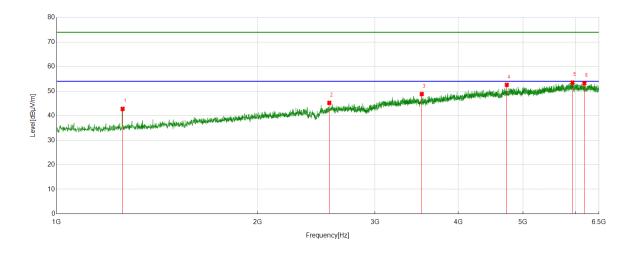
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.782	44.33	-1.57	42.76	74.00	-31.24	Horizontal
2	2562.8829	39.62	5.59	45.21	74.00	-28.79	Horizontal
3	3526.1908	38.23	10.59	48.82	74.00	-25.18	Horizontal
4	4728.7786	37.81	14.75	52.56	74.00	-21.44	Horizontal
5	5931.3664	34.64	18.85	53.49	74.00	-20.51	Horizontal
6	6180.2725	34.29	18.92	53.21	74.00	-20.79	Horizontal

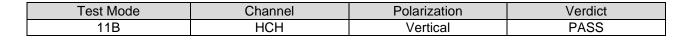
Note: 1. Measurement = Reading Level + Correct Factor,

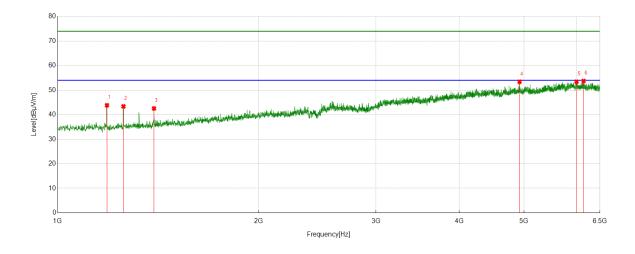
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.83	-2.00	43.83	74.00	-30.17	Vertical
2	1255.0944	44.95	-1.57	43.38	74.00	-30.62	Vertical
3	1394.6743	43.89	-1.35	42.54	74.00	-31.46	Vertical
4	4924.7406	38.07	15.34	53.41	74.00	-20.59	Vertical
5	5995.3119	35.14	18.28	53.42	74.00	-20.58	Vertical
6	6142.4553	35.35	18.38	53.73	74.00	-20.27	Vertical

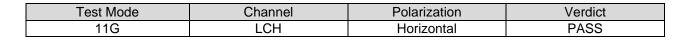
Note: 1. Measurement = Reading Level + Correct Factor,

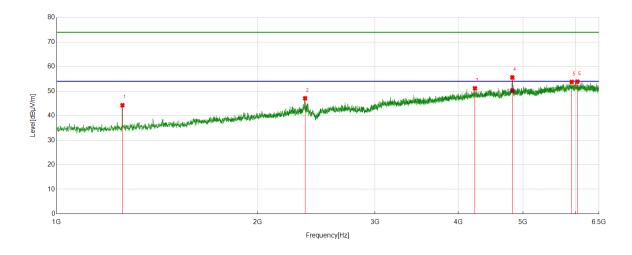
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	45.84	-1.57	44.27	74.00	-29.73	Horizontal
2	2357.2947	42.31	4.78	47.09	74.00	-26.91	Horizontal
3	4235.7795	37.24	13.92	51.16	74.00	-22.84	Horizontal
4	4819.5399	39.66	15.91	55.57	74.00	-18.43	Horizontal
5	5916.2395	35.27	18.50	53.77	74.00	-20.23	Horizontal
6	6033.1291	35.95	17.92	53.87	74.00	-20.13	Horizontal

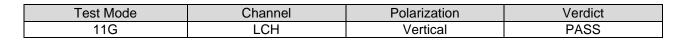
Note: 1. Measurement = Reading Level + Correct Factor,

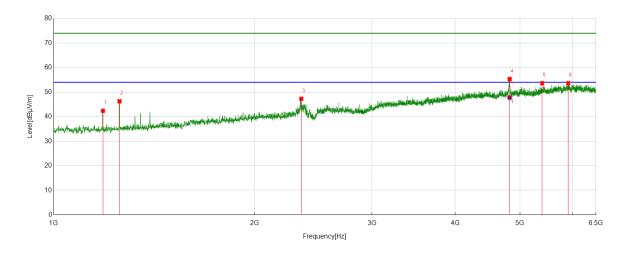
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	44.40	-2.00	42.40	74.00	-31.60	Vertical
2	1255.0944	47.86	-1.57	46.29	74.00	-27.71	Vertical
3	2351.1064	42.51	4.77	47.28	74.00	-26.72	Vertical
4	4825.0406	39.69	15.63	55.32	74.00	-18.68	Vertical
5	5397.7997	36.81	16.84	53.65	74.00	-20.35	Vertical
6	5905.9257	35.58	18.08	53.66	74.00	-20.34	Vertical

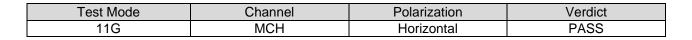
Note: 1. Measurement = Reading Level + Correct Factor,

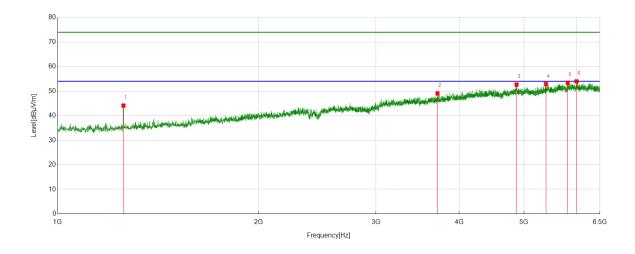
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	45.71	-1.57	44.14	74.00	-29.86	Horizontal
2	3709.7762	36.75	12.33	49.08	74.00	-24.92	Horizontal
3	4874.5468	37.56	15.10	52.66	74.00	-21.34	Horizontal
4	5394.3618	36.17	16.74	52.91	74.00	-21.09	Horizontal
5	5814.4768	35.01	18.35	53.36	74.00	-20.64	Horizontal
6	5995.3119	35.71	18.28	53.99	74.00	-20.01	Horizontal

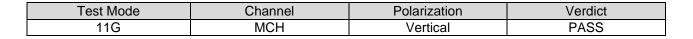
Note: 1. Measurement = Reading Level + Correct Factor,

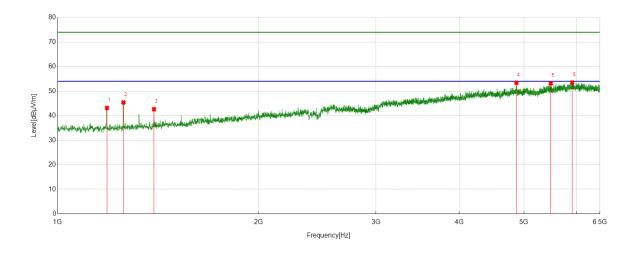
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.15	-2.00	43.15	74.00	-30.85	Vertical
2	1255.0944	46.95	-1.57	45.38	74.00	-28.62	Vertical
3	1394.6743	43.98	-1.35	42.63	74.00	-31.37	Vertical
4	4871.1089	38.34	15.03	53.37	74.00	-20.63	Vertical
5	5483.748	36.51	16.65	53.16	74.00	-20.84	Vertical
6	5904.5506	35.47	18.04	53.51	74.00	-20.49	Vertical

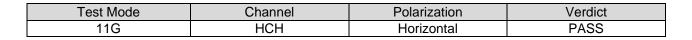
Note: 1. Measurement = Reading Level + Correct Factor,

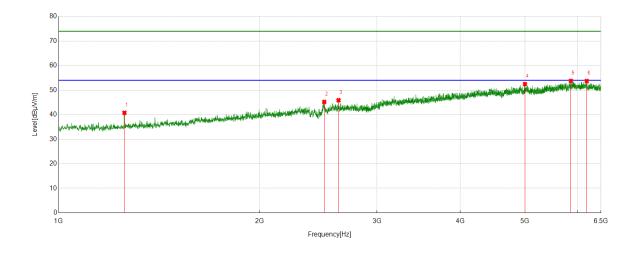
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	42.34	-1.57	40.77	74.00	-33.23	Horizontal
2	2501.0001	39.32	5.88	45.20	74.00	-28.80	Horizontal
3	2627.5159	39.21	6.66	45.87	74.00	-28.13	Horizontal
4	4999.6875	37.18	15.29	52.47	74.00	-21.53	Horizontal
5	5858.4823	35.95	17.83	53.78	74.00	-20.22	Horizontal
6	6188.5236	34.95	18.77	53.72	74.00	-20.28	Horizontal

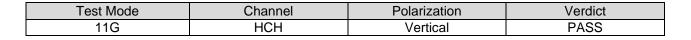
Note: 1. Measurement = Reading Level + Correct Factor,

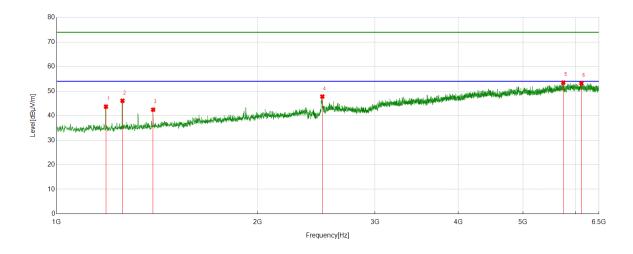
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.68	-2.00	43.68	74.00	-30.32	Vertical
2	1255.0944	47.65	-1.57	46.08	74.00	-27.92	Vertical
3	1395.3619	43.80	-1.35	42.45	74.00	-31.55	Vertical
4	2501.6877	41.91	5.88	47.79	74.00	-26.21	Vertical
5	5746.4058	35.73	17.73	53.46	74.00	-20.54	Vertical
6	6116.327	35.09	18.15	53.24	74.00	-20.76	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

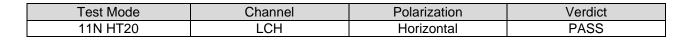
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

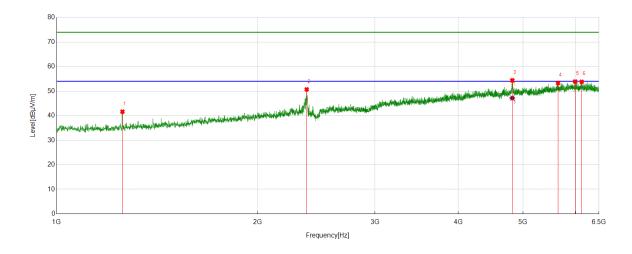
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







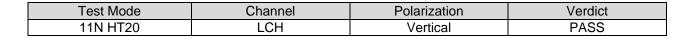
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.0944	43.19	-1.57	41.62	74.00	-32.38	Horizontal
2	2370.3588	45.89	4.81	50.70	74.00	-23.30	Horizontal
3	4818.8524	38.50	15.86	54.36	74.00	-19.64	Horizontal
4	5642.5803	35.72	17.56	53.28	74.00	-20.72	Horizontal
5	5986.3733	35.53	18.37	53.90	74.00	-20.10	Horizontal
6	6123.8905	35.54	18.26	53.80	74.00	-20.20	Horizontal

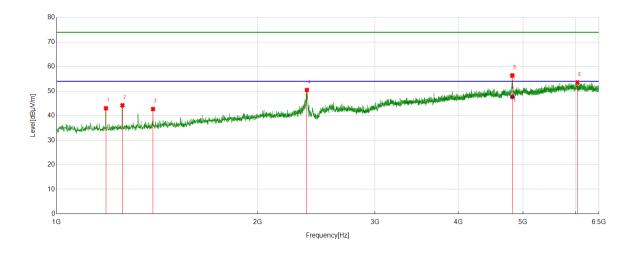
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







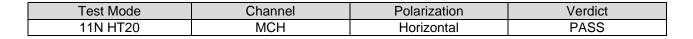
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.01	-2.00	43.01	74.00	-30.99	Vertical
2	1255.0944	45.80	-1.57	44.23	74.00	-29.77	Vertical
3	1394.6743	44.06	-1.35	42.71	74.00	-31.29	Vertical
4	2371.734	45.65	4.82	50.47	74.00	-23.53	Vertical
5	4818.8524	40.53	15.86	56.39	74.00	-17.61	Vertical
6	6033.8167	35.59	17.92	53.51	74.00	-20.49	Vertical

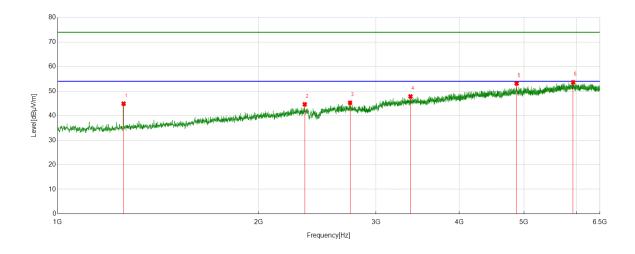
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.





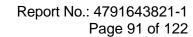


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.782	46.45	-1.57	44.88	74.00	-29.12	Horizontal
2	2346.2933	39.78	4.85	44.63	74.00	-29.37	Horizontal
3	2743.718	38.41	6.84	45.25	74.00	-28.75	Horizontal
4	3379.735	37.92	9.91	47.83	74.00	-26.17	Horizontal
5	4875.2344	37.98	15.11	53.09	74.00	-20.91	Horizontal
6	5924.4906	34.84	18.79	53.63	74.00	-20.37	Horizontal

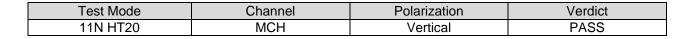
Note: 1. Measurement = Reading Level + Correct Factor,

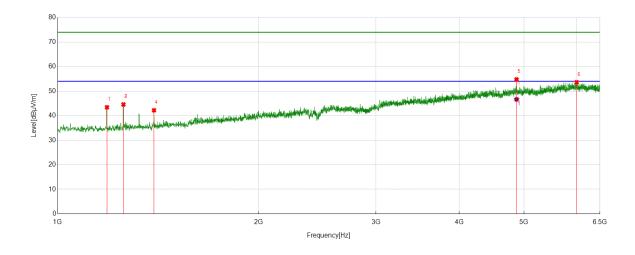
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.









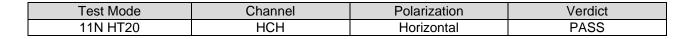
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.42	-2.00	43.42	74.00	-30.58	Vertical
2	1255.0944	46.14	-1.57	44.57	74.00	-29.43	Vertical
3	1255.0944	46.14	-1.57	44.57	74.00	-29.43	Vertical
4	1394.6743	43.54	-1.35	42.19	74.00	-31.81	Vertical
5	4873.8592	39.67	15.08	54.75	74.00	-19.25	Vertical
6	5998.0623	35.34	18.27	53.61	74.00	-20.39	Vertical

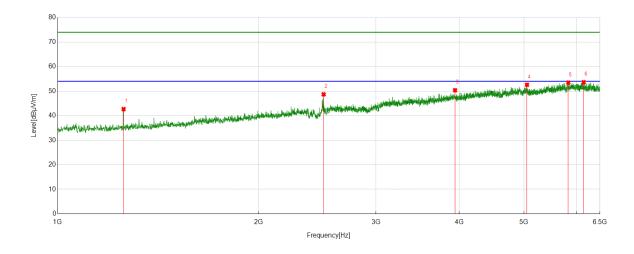
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







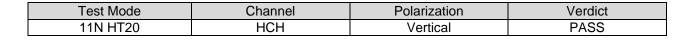
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1255.782	44.24	-1.57	42.67	74.00	-31.33	Horizontal
2	2504.4381	42.80	5.89	48.69	74.00	-25.31	Horizontal
3	3941.4927	38.04	12.33	50.37	74.00	-23.63	Horizontal
4	5052.6316	36.56	16.02	52.58	74.00	-21.42	Horizontal
5	5826.1658	34.76	18.68	53.44	74.00	-20.56	Horizontal
6	6144.5181	35.21	18.42	53.63	74.00	-20.37	Horizontal

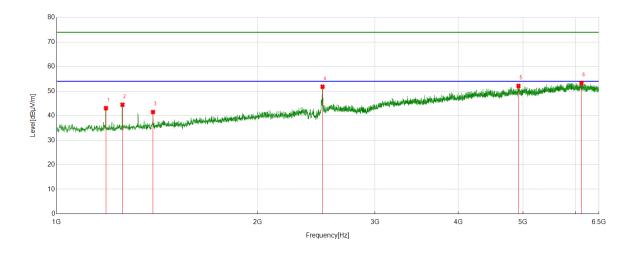
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1185.6482	45.06	-2.00	43.06	74.00	-30.94	Vertical
2	1255.0944	46.02	-1.57	44.45	74.00	-29.55	Vertical
3	1394.6743	42.82	-1.35	41.47	74.00	-32.53	Vertical
4	2503.7505	45.89	5.89	51.78	74.00	-22.22	Vertical
5	4923.3654	36.78	15.34	52.12	74.00	-21.88	Vertical
6	6118.3898	35.07	18.21	53.28	74.00	-20.72	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

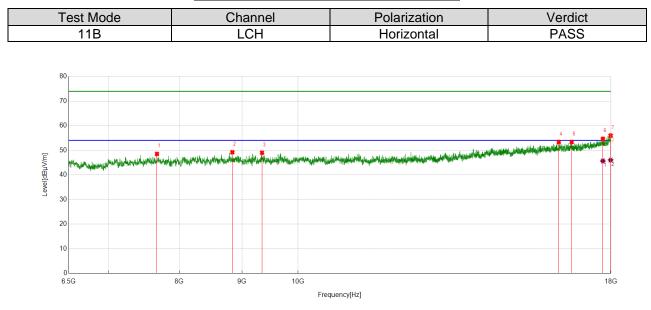
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

- 4. Peak: Peak detector.
- 5. For below 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



# Part 2: 6.5GHz~18GHz



## HARMONICS AND SPURIOUS EMISSIONS

#### PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7673.1466	43.28	5.25	48.53	74.00	-25.47	Horizontal
2	8840.5426	42.85	6.37	49.22	74.00	-24.78	Horizontal
3	9346.6058	42.57	6.42	48.99	74.00	-25.01	Horizontal
4	16319.3524	38.48	14.90	53.38	74.00	-20.62	Horizontal
5	16719.0274	37.07	16.27	53.34	74.00	-20.66	Horizontal
6	17728.2785	36.13	18.52	54.65	74.00	-19.35	Horizontal
7	17987.0609	36.19	19.80	55.99	74.00	-18.01	Horizontal

#### AV Result:

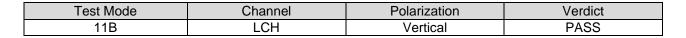
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17728.2785	27.14	18.52	45.66	54.00	-8.34	Horizontal
2	17987.0609	26.20	19.80	46.00	54.00	-8.00	Horizontal

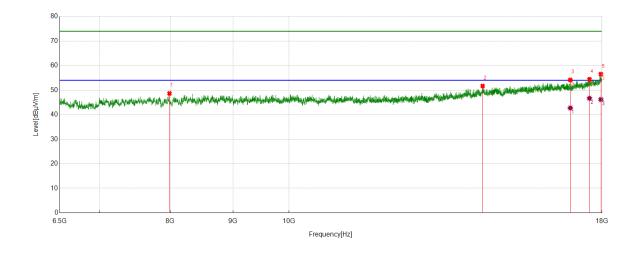
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







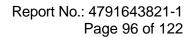
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7989.4362	43.06	5.60	48.66	74.00	-25.34	Vertical
2	14385.6732	38.94	12.76	51.70	74.00	-22.30	Vertical
3	16960.5576	38.02	16.11	54.13	74.00	-19.87	Vertical
4	17581.6352	36.43	17.96	54.39	74.00	-19.61	Vertical
5	17962.6203	36.88	19.63	56.51	74.00	-17.49	Vertical

#### AV Result:

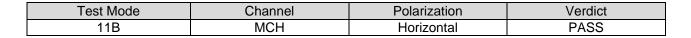
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16960.5576	26.61	16.11	42.72	54.00	-11.28	Vertical
2	17581.6352	28.70	17.96	46.66	54.00	-7.34	Vertical
3	17962.6203	26.55	19.63	46.18	54.00	-7.82	Vertical

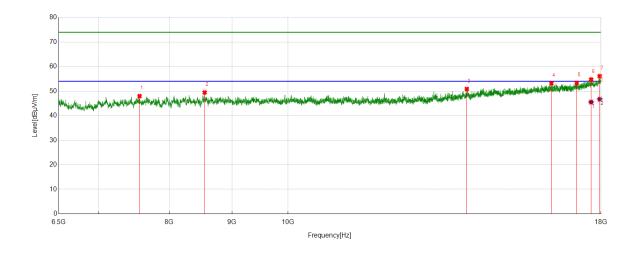
Note: 1. Measurement = Reading Level + Correct Factor,

- Correct Factor = Antenna Factor + Loss (Cable + Filter) Amplifier Gain.
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.









No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7566.7583	43.22	4.75	47.97	74.00	-26.03	Horizontal
2	8551.5689	43.03	6.42	49.45	74.00	-24.55	Horizontal
3	13990.3113	39.25	11.62	50.87	74.00	-23.13	Horizontal
4	16399.8625	38.21	15.03	53.24	74.00	-20.76	Horizontal
5	17197.7747	36.75	16.60	53.35	74.00	-20.65	Horizontal
6	17669.3337	36.64	18.07	54.71	74.00	-19.29	Horizontal
7	17956.8696	36.50	19.59	56.09	74.00	-17.91	Horizontal

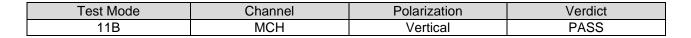
#### AV Result:

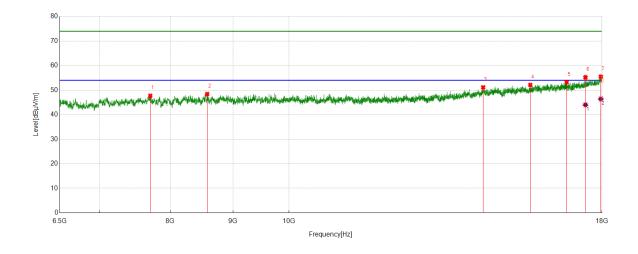
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17669.3337	27.46	18.07	45.53	54.00	-8.47	Horizontal
2	17956.8696	27.12	19.59	46.71	54.00	-7.29	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7706.2133	42.34	5.34	47.68	74.00	-26.32	Vertical
2	8576.0095	42.05	6.35	48.40	74.00	-25.60	Vertical
3	14400.05	38.37	12.73	51.10	74.00	-22.90	Vertical
4	15732.7791	37.94	14.17	52.11	74.00	-21.89	Vertical
5	16844.1055	37.04	16.21	53.25	74.00	-20.75	Vertical
6	17449.3687	37.62	17.59	55.21	74.00	-18.79	Vertical
7	17961.1826	35.85	19.63	55.48	74.00	-18.52	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17449.3687	26.41	17.59	44.00	54.00	-10.00	Vertical
2	17961.1826	26.76	19.63	46.39	54.00	-7.61	Vertical

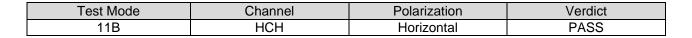
Note: 1. Measurement = Reading Level + Correct Factor,

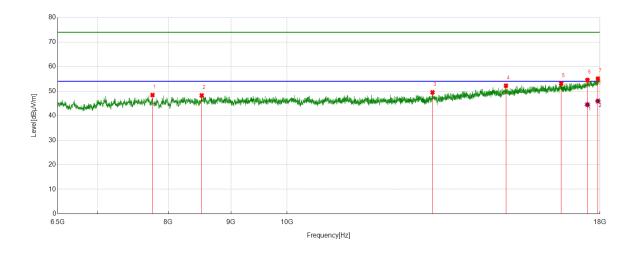
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Form-ULID-008536-9 V4.0







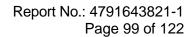
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7768.0335	43.44	4.97	48.41	74.00	-25.59	Horizontal
2	8519.94	41.72	6.54	48.26	74.00	-25.74	Horizontal
3	13142.0803	39.81	9.69	49.50	74.00	-24.50	Horizontal
4	15085.8232	39.04	13.18	52.22	74.00	-21.78	Horizontal
5	16734.8419	37.05	16.03	53.08	74.00	-20.92	Horizontal
6	17580.1975	36.55	17.95	54.50	74.00	-19.50	Horizontal
7	17929.5537	35.67	19.37	55.04	74.00	-18.96	Horizontal

AV Result:

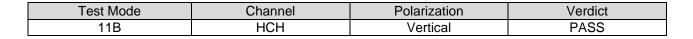
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17580.1975	26.53	17.95	44.48	54.00	-9.52	Horizontal
2	17929.5537	26.58	19.37	45.95	54.00	-8.05	Horizontal

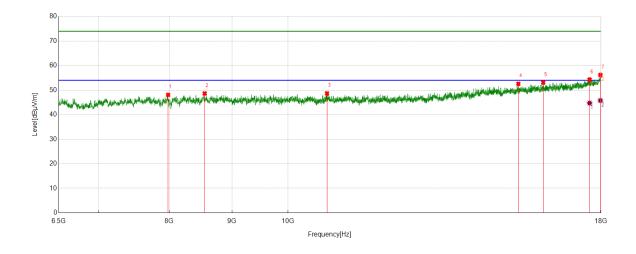
Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.









No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7983.6855	42.62	5.45	48.07	74.00	-25.93	Vertical
2	8551.5689	42.23	6.42	48.65	74.00	-25.35	Vertical
3	10759.845	41.79	6.88	48.67	74.00	-25.33	Vertical
4	15412.1765	38.90	13.70	52.60	74.00	-21.40	Vertical
5	16149.7062	38.19	14.89	53.08	74.00	-20.92	Vertical
6	17619.0149	36.22	18.07	54.29	74.00	-19.71	Vertical
7	17979.8725	36.35	19.81	56.16	74.00	-17.84	Vertical

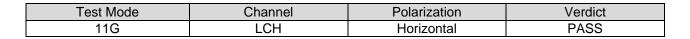
#### AV Result:

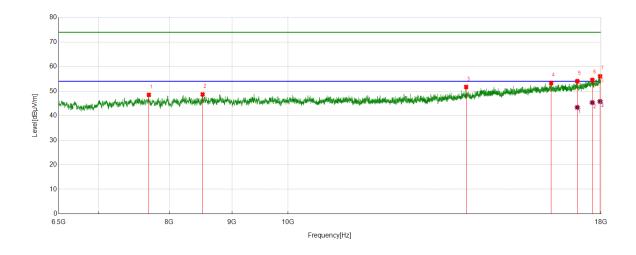
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17619.0149	26.65	18.07	44.72	54.00	-9.28	Vertical
2	17979.8725	25.96	19.81	45.77	54.00	-8.23	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7700.4626	42.88	5.60	48.48	74.00	-25.52	Horizontal
2	8518.5023	42.24	6.44	48.68	74.00	-25.32	Horizontal
3	13973.0591	40.17	11.53	51.70	74.00	-22.30	Horizontal
4	16392.6741	38.29	15.00	53.29	74.00	-20.71	Horizontal
5	17216.4646	37.32	16.73	54.05	74.00	-19.95	Horizontal
6	17709.5887	36.17	18.36	54.53	74.00	-19.47	Horizontal
7	17969.8087	36.39	19.63	56.02	74.00	-17.98	Horizontal

#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17216.4646	26.64	16.73	43.37	54.00	-10.63	Horizontal
2	17709.5887	26.97	18.36	45.33	54.00	-8.67	Horizontal
3	17969.8087	26.16	19.63	45.79	54.00	-8.21	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

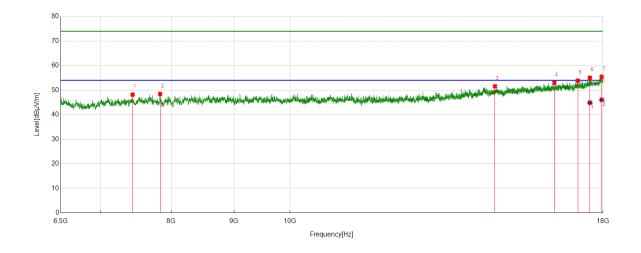
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

This report shall not be reproduced except in full, without the written approval of UL-CCIC COMPANY LIMITED.



Test Mode	Test Mode Channel		Verdict	
11G	LCH	Vertical	PASS	



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7441.6802	43.99	4.18	48.17	74.00	-25.83	Vertical
2	7835.6045	43.19	5.25	48.44	74.00	-25.56	Vertical
3	14694.7743	38.77	12.79	51.56	74.00	-22.44	Vertical
4	16430.0538	37.59	15.43	53.02	74.00	-20.98	Vertical
5	17170.4588	37.41	16.46	53.87	74.00	-20.13	Vertical
6	17561.5077	37.21	17.79	55.00	74.00	-19.00	Vertical
7	17956.8696	35.83	19.59	55.42	74.00	-18.58	Vertical

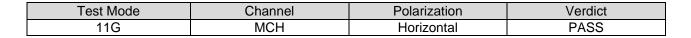
#### AV Result:

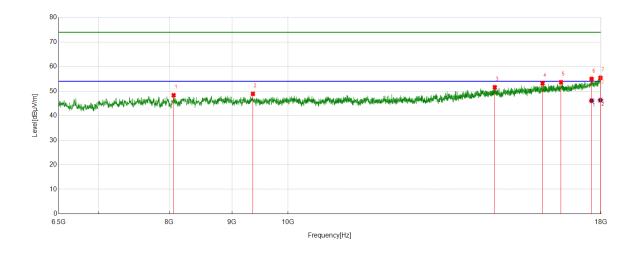
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17561.5077	27.08	17.79	44.87	54.00	-9.13	Vertical
2	17956.8696	26.46	19.59	46.05	54.00	-7.95	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	8067.0709	42.73	5.60	48.33	74.00	-25.67	Horizontal
2	9362.4203	42.45	6.45	48.90	74.00	-25.10	Horizontal
3	14745.0931	38.71	12.88	51.59	74.00	-22.41	Horizontal
4	16129.5787	38.45	14.74	53.19	74.00	-20.81	Horizontal
5	16697.4622	37.66	15.98	53.64	74.00	-20.36	Horizontal
6	17685.1481	36.80	18.15	54.95	74.00	-19.05	Horizontal
7	17982.7478	35.60	19.81	55.41	74.00	-18.59	Horizontal

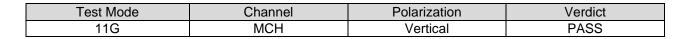
AV Result:

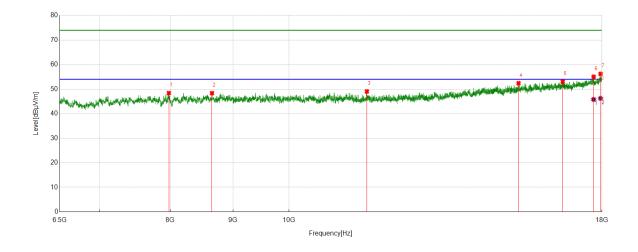
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17685.1481	27.96	18.15	46.11	54.00	-7.89	Horizontal
2	17982.7478	26.50	19.81	46.31	54.00	-7.69	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7980.8101	43.02	5.38	48.40	74.00	-25.60	Vertical
2	8653.6442	42.14	6.23	48.37	74.00	-25.63	Vertical
3	11575.0094	41.40	7.64	49.04	74.00	-24.96	Vertical
4	15389.1736	38.81	13.60	52.41	74.00	-21.59	Vertical
5	16720.4651	36.77	16.32	53.09	74.00	-20.91	Vertical
6	17719.6525	36.53	18.48	55.01	74.00	-18.99	Vertical
7	17952.5566	36.66	19.53	56.19	74.00	-17.81	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17719.6525	27.31	18.48	45.79	54.00	-8.21	Vertical
2	17952.5566	26.71	19.53	46.24	54.00	-7.76	Vertical

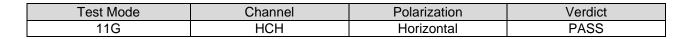
Note: 1. Measurement = Reading Level + Correct Factor,

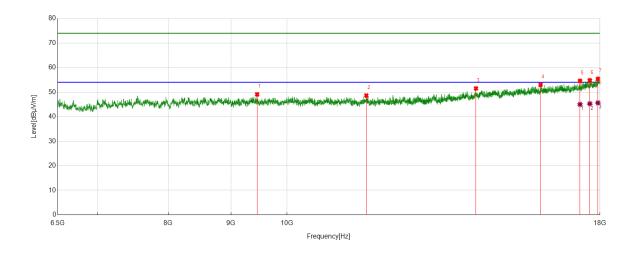
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Form-ULID-008536-9 V4.0







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	9454.4318	42.50	6.57	49.07	74.00	-24.93	Horizontal
2	11606.6383	41.07	7.54	48.61	74.00	-25.39	Horizontal
3	14260.5951	39.46	12.05	51.51	74.00	-22.49	Horizontal
4	16099.3874	38.32	14.65	52.97	74.00	-21.03	Horizontal
5	17337.2297	37.39	17.17	54.56	74.00	-19.44	Horizontal
6	17659.2699	36.73	18.07	54.80	74.00	-19.20	Horizontal
7	17930.9914	36.01	19.37	55.38	74.00	-18.62	Horizontal

#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17337.2297	27.83	17.17	45.00	54.00	-9.00	Horizontal
2	17659.2699	27.20	18.07	45.27	54.00	-8.73	Horizontal
3	17930.9914	26.25	19.37	45.62	54.00	-8.38	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

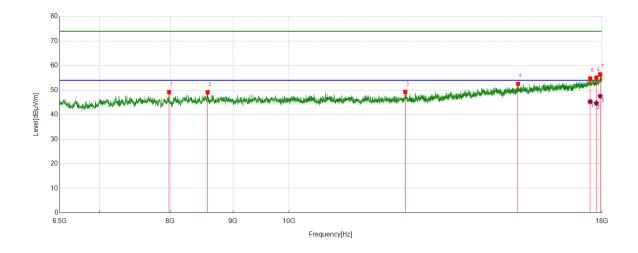
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

This report shall not be reproduced except in full, without the written approval of UL-CCIC COMPANY LIMITED.



Test Mode	Channel	Polarization	Verdict
11G	НСН	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7983.6855	43.74	5.45	49.19	74.00	-24.81	Vertical
2	8583.1979	42.87	6.27	49.14	74.00	-24.86	Vertical
3	12440.4926	40.89	8.43	49.32	74.00	-24.68	Vertical
4	15374.7968	38.95	13.64	52.59	74.00	-21.41	Vertical
5	17607.5134	36.63	18.06	54.69	74.00	-19.31	Vertical
6	17811.664	36.13	18.93	55.06	74.00	-18.94	Vertical
7	17942.4928	36.98	19.46	56.44	74.00	-17.56	Vertical

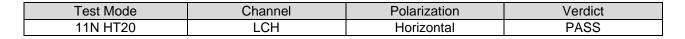
#### AV Result:

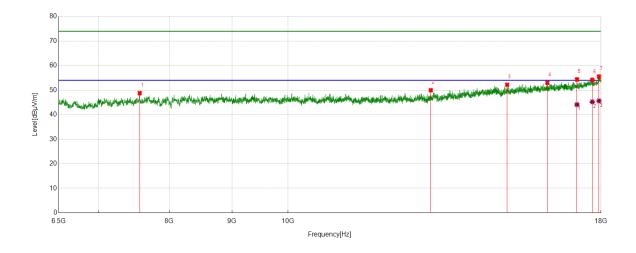
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17607.5134	27.22	18.06	45.28	54.00	-8.72	Vertical
2	17811.664	25.72	18.93	44.65	54.00	-9.35	Vertical
3	17942.4928	28.08	19.46	47.54	54.00	-6.46	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7569.6337	43.93	4.86	48.79	74.00	-25.21	Horizontal
2	13075.947	40.43	9.53	49.96	74.00	-24.04	Horizontal
3	15091.5739	38.97	13.22	52.19	74.00	-21.81	Horizontal
4	16274.7843	37.83	15.16	52.99	74.00	-21.01	Horizontal
5	17206.4008	37.64	16.71	54.35	74.00	-19.65	Horizontal
6	17708.151	35.83	18.35	54.18	74.00	-19.82	Horizontal
7	17933.8667	36.11	19.40	55.51	74.00	-18.49	Horizontal

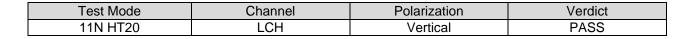
#### AV Result:

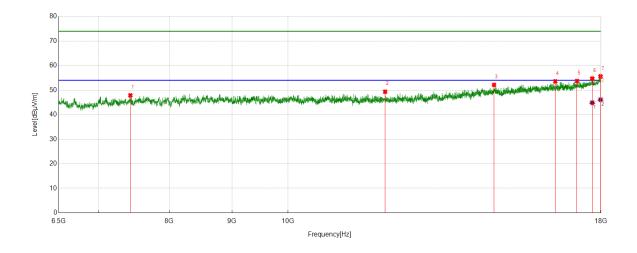
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17206.4008	27.38	16.71	44.09	54.00	-9.91	Horizontal
2	17708.151	26.87	18.35	45.22	54.00	-8.78	Horizontal
3	17933.8667	26.21	19.40	45.61	54.00	-8.39	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7437.3672	43.66	4.21	47.87	74.00	-26.13	Vertical
2	12000.5626	41.03	8.32	49.35	74.00	-24.65	Vertical
3	14724.9656	39.33	12.81	52.14	74.00	-21.86	Vertical
4	16519.1899	37.69	15.90	53.59	74.00	-20.41	Vertical
5	17207.8385	36.97	16.74	53.71	74.00	-20.29	Vertical
6	17706.7133	36.35	18.33	54.68	74.00	-19.32	Vertical
7	17984.1855	35.80	19.80	55.60	74.00	-18.40	Vertical

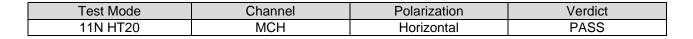
AV Result:

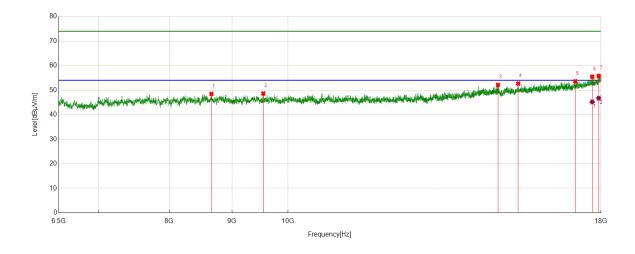
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17706.7133	26.53	18.33	44.86	54.00	-9.14	Vertical
2	17984.1855	26.30	19.80	46.10	54.00	-7.90	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	8660.8326	42.01	6.43	48.44	74.00	-25.56	Horizontal
2	9546.4433	42.33	6.31	48.64	74.00	-25.36	Horizontal
3	14832.7916	39.28	12.87	52.15	74.00	-21.85	Horizontal
4	15409.3012	38.99	13.69	52.68	74.00	-21.32	Horizontal
5	17151.769	37.13	16.46	53.59	74.00	-20.41	Horizontal
6	17706.7133	37.11	18.33	55.44	74.00	-18.56	Horizontal
7	17923.803	36.39	19.36	55.75	74.00	-18.25	Horizontal

#### AV Result:

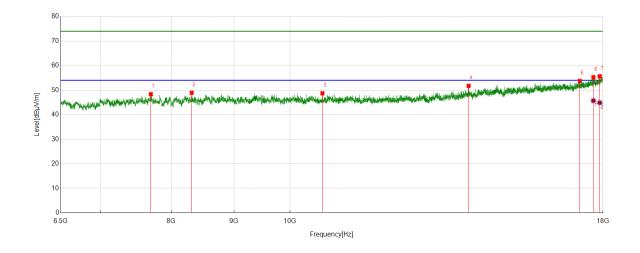
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17706.7133	26.88	18.33	45.21	54.00	-8.79	Horizontal
2	17923.803	27.35	19.36	46.71	54.00	-7.29	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7700.4626	42.76	5.60	48.36	74.00	-25.64	Vertical
2	8314.3518	42.76	6.14	48.90	74.00	-25.10	Vertical
3	10627.5784	41.75	6.98	48.73	74.00	-25.27	Vertical
4	13985.9982	40.14	11.62	51.76	74.00	-22.24	Vertical
5	17232.279	37.02	16.74	53.76	74.00	-20.24	Vertical
6	17677.9597	37.12	18.10	55.22	74.00	-18.78	Vertical
7	17889.2987	36.30	19.30	55.60	74.00	-18.40	Vertical

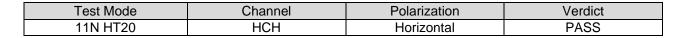
#### AV Result:

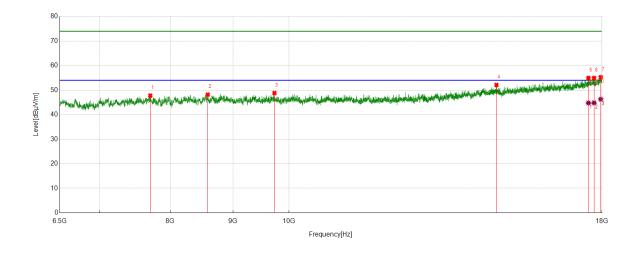
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17677.9597	27.61	18.10	45.71	54.00	-8.29	Vertical
2	17889.2987	25.58	19.30	44.88	54.00	-9.12	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7706.2133	42.42	5.34	47.76	74.00	-26.24	Horizontal
2	8584.6356	41.97	6.20	48.17	74.00	-25.83	Horizontal
3	9730.4663	42.25	6.56	48.81	74.00	-25.19	Horizontal
4	14763.783	39.17	12.95	52.12	74.00	-21.88	Horizontal
5	17547.1309	37.19	17.73	54.92	74.00	-19.08	Horizontal
6	17732.5916	36.36	18.54	54.90	74.00	-19.10	Horizontal
7	17958.3073	35.66	19.60	55.26	74.00	-18.74	Horizontal

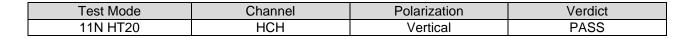
#### AV Result:

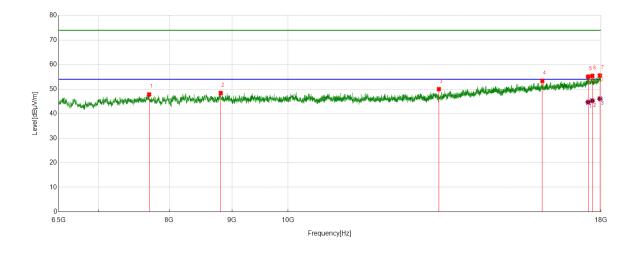
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17547.1309	27.04	17.73	44.77	54.00	-9.23	Horizontal
2	17732.5916	26.27	18.54	44.81	54.00	-9.19	Horizontal
3	17958.3073	26.69	19.60	46.29	54.00	-7.71	Horizontal

Note: 1. Measurement = Reading Level + Correct Factor,

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	7704.7756	42.44	5.40	47.84	74.00	-26.16	Vertical
2	8813.2267	42.14	6.29	48.43	74.00	-25.57	Vertical
3	13275.7845	39.84	10.15	49.99	74.00	-24.01	Vertical
4	16122.3903	38.50	14.84	53.34	74.00	-20.66	Vertical
5	17568.6961	37.15	17.89	55.04	74.00	-18.96	Vertical
6	17708.151	37.04	18.35	55.39	74.00	-18.61	Vertical
7	17962.6203	35.92	19.63	55.55	74.00	-18.45	Vertical

#### AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17568.6961	26.79	17.89	44.68	54.00	-9.32	Vertical
2	17708.151	26.92	18.35	45.27	54.00	-8.73	Vertical
3	17962.6203	26.45	19.63	46.08	54.00	-7.92	Vertical

Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
- 4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
- 5. For above 6.5GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
- 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

This report shall not be reproduced except in full, without the written approval of UL-CCIC COMPANY LIMITED.



# Part 3: 18GHz~26.5GHz

#### Test Mode Channel Polarization Verdict 11N HT20 HCH Horizontal PASS 80 70 60 50 Level[dBµV/m] 40 30 20 10

#### SPURIOUS EMISSIONS 18GHz TO 26.5GHz (WORST-CASE CONFIGURATION)

ΡK	Result:

0∟ 18G

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	18729.3729	49.97	-6.24	43.73	74.00	-30.27	Horizontal
2	20062.3062	48.64	-5.11	43.53	74.00	-30.47	Horizontal
3	21621.3621	49.04	-5.79	43.25	74.00	-30.75	Horizontal
4	23019.752	49.26	-3.52	45.74	74.00	-28.26	Horizontal
5	24795.5796	50.01	-3.32	46.69	74.00	-27.31	Horizontal
6	25966.1466	49.35	-2.71	46.64	74.00	-27.36	Horizontal

Frequency[Hz]

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit. 2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

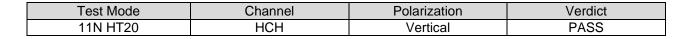
3. Measurement = Reading Level + Correct Factor,

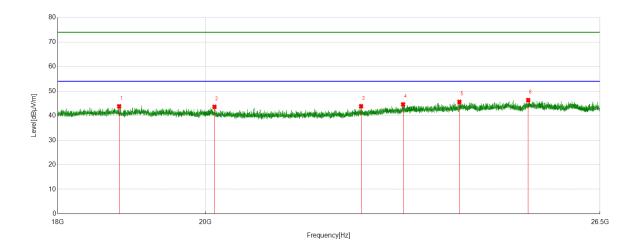
20G

Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	18807.5808	50.00	-6.19	43.81	74.00	-30.19	Vertical
2	20130.313	48.80	-5.20	43.60	74.00	-30.40	Vertical
3	22349.0349	48.90	-5.05	43.85	74.00	-30.15	Vertical
4	23028.2528	48.12	-3.52	44.60	74.00	-29.40	Vertical
5	23971.8472	48.28	-2.65	45.63	74.00	-28.37	Vertical
6	25177.2677	49.78	-3.43	46.35	74.00	-27.65	Vertical

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit. 2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

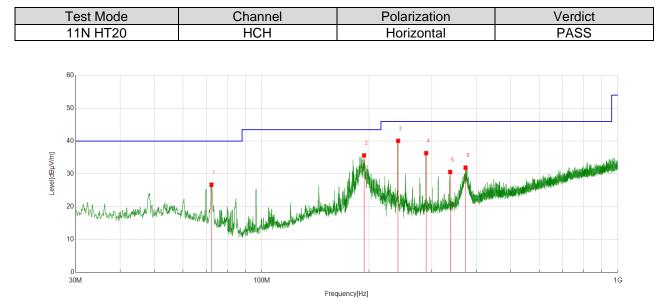
3. Measurement = Reading Level + Correct Factor, Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Form-ULID-008536-9 V4.0



## Part 4: 30MHz~1GHz

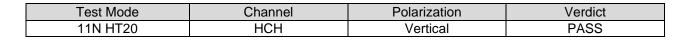


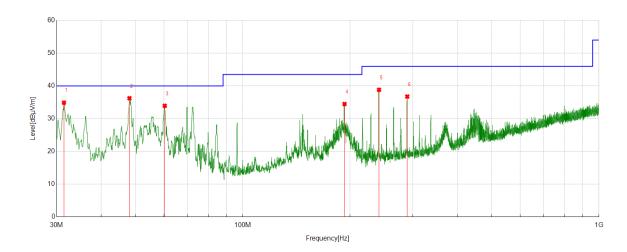
#### SPURIOUS EMISSIONS 30M TO 1GHz (WORST-CASE CONFIGURATION)

No.	Frequency	Reading Level	Correct Factor	or Result Limit		Margin	Remark	
	[MHz]	[dBuV]	[dBuV] [dB/m]		[dBuV/m]	[dB]		
1	72.1992	9.18	17.53	26.71	40.00	-13.29	Peak	
2	193.6554	18.24	17.40	35.64	43.50	-7.86	Peak	
3	241.2871	21.15	18.93	40.08	46.00	-5.92	Peak	
4	289.3069	15.52	20.83	36.35	46.00	-9.65	Peak	
5	337.8118	8.48	22.11	30.59	46.00	-15.41	Peak	
6	373.2203	8.98	22.93	31.91	46.00	-14.09	Peak	

- Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit. 2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
  - 3. Measurement = Reading Level + Correct Factor,
  - Correct Factor = Antenna Factor + Loss (Cable).







No.	Frequency	Reading Level	Correct Factor	Result Lim		Margin	Remark	
	[MHz]	[dBuV] [dB/m]		[dBuV/m] [dBuV/m]		[dB]		
1	31.4551	16.21	18.67	34.88	40.00	-5.12	Peak	
2	48.0438	15.82	20.42	36.24	40.00	-3.76	Peak	
3	60.364	14.11	19.82	33.93	40.00	-6.07	Peak	
4	192.9763	17.10	17.39	34.49	43.50	-9.01	Peak	
5	241.1901	19.90	18.93	38.83	46.00	-7.17	Peak	
6	289.501	15.93	20.84	36.77	46.00	-9.23	Peak	

Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit. 2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

3. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable).



## Part 5: 9kHz~30MHz

	Test M 11N F			hannel HCH			ency Ra ∼150k⊦					rdict \SS
		1120		псп		9KHZ	~150KF	12			PA	100
	60											
	50											
	40											
	30											
	20											
	10											
[W]	0											
Level[dBµV/m]	-10											
wel[c	-20											
Ľ	-30											
	-40											
						f		<b>"</b> 3	¥		. <b>#</b>	<b>4</b>
		wwwwwww	Mummun	mandanalyhalyhayadaha	www.www.www.www.	a normalisanepally	Manyha, Marcal Marine 11	write	profession produces	manhaland	Mining and	Maril Marilla Maril
	-60											a the summing
	-70											
	-80											I
	9k		20k		30k	40k	60k		80k			1

#### SPURIOUS EMISSIONS Below 30MHz (WORST CASE CONFIGURATION-FACE ON)

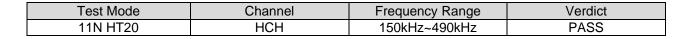
No.	Frequency	Reading Level	Factor Result Limit		Margin	Remark		
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]		
1	0.0205	18.73	-61.74	-43.01	41.38	-84.39	Peak	
2	0.04	17.91	-61.60	-43.69	35.57	-79.26	Peak	
3	0.0675	13.75	-61.61	-47.86	31.01	-78.87	Peak	
4	0.08	16.77	-61.61	-44.84	29.54	-74.38	Peak	
5	0.1046	16.10	-61.71	-45.61	27.21	-72.82	Peak	
6	0.12	14.25	-61.72	-47.47	26.02	-73.49	Peak	

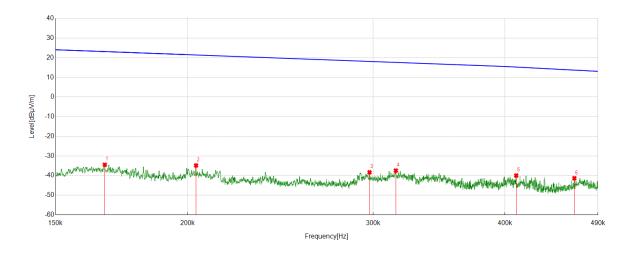
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.







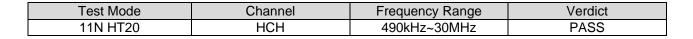
No.	Frequency	Reading Level	Correct Factor			Margin	Remark
	[MHz]	[dBuV]	V] [dB/m] [dBuV/m]		[dBuV/m]	[dBuV/m] [dB]	
1	0.167	27.26	-61.75	-34.49	23.15	-57.64	Peak
2	0.2038	26.94	-61.77	-34.83	21.42	-56.25	Peak
3	0.2976	23.49	-61.82	-38.33	18.13	-56.46	Peak
4	0.3152	24.36	-61.82	-37.46	17.63	-55.09	Peak
5	0.4099	21.86	-61.84	-39.98	15.26	-55.24	Peak
6	0.4654	20.51	-61.87	-41.36	13.71	-55.07	Peak

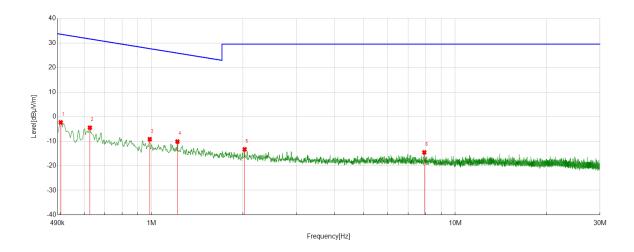
Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.







No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	0.5018	19.55	-21.89	-2.34	33.59	-35.93	Peak
2	0.6258	17.41	-21.89	-4.48	31.67	-36.15	Peak
3	0.9858	12.68	-21.87	-9.19	27.72	-36.91	Peak
4	1.216	11.71	-21.85	-10.14	25.91	-36.05	Peak
5	2.0247	8.52	-21.83	-13.31	29.54	-42.85	Peak
6	7.9125	7.15	-21.69	-14.54	29.54	-44.08	Peak

Note: 1. Measurement = Reading Level + Correct Factor,

Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



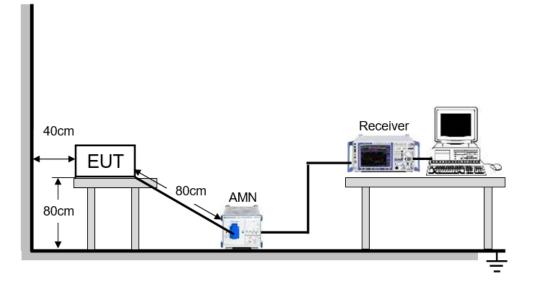
# 9. AC POWER LINE CONDUCTED EMISSIONS

# LIMITS

## Please refer to FCC §15.207 (a)

FREQUENCY (MHz)	Limit (dBuV)					
	Quasi-peak	Average				
0.15 -0.5	66 - 56 *	56 - 46 *				
0.50 -5.0	56.00	46.00				
5.0 -30.0	60.00	50.00				

## TEST SETUP AND PROCEDURE



The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

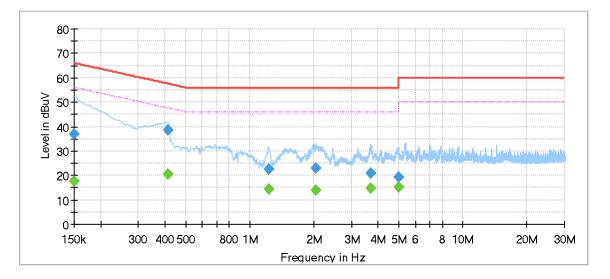
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.



## TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

## LINE L RESULTS (WORST-CASE CONFIGURATION)



# Final\_Result

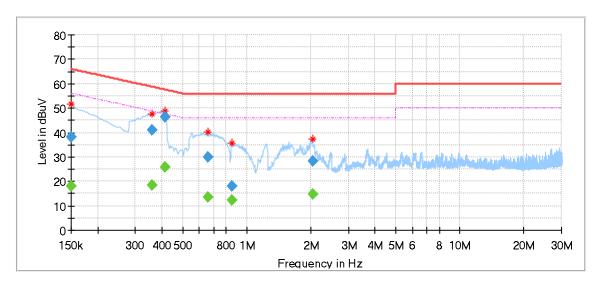
Frequency [MHz]	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.150000		17.76	56.00	38.24	1000.0	9.000	L1	OFF	9.6
0.150000	37.08		66.00	28.92	1000.0	9.000	L1	OFF	9.6
0.413675		20.50	47.57	27.08	1000.0	9.000	L1	OFF	9.6
0.413675	38.73		57.57	18.84	1000.0	9.000	L1	OFF	9.6
1.224600		14.35	46.00	31.65	1000.0	9.000	L1	OFF	9.6
1.224600	22.57		56.00	33.43	1000.0	9.000	L1	OFF	9.6
2.047963		13.88	46.00	32.12	1000.0	9.000	L1	OFF	9.6
2.047963	23.01		56.00	32.99	1000.0	9.000	L1	OFF	9.6
3.709613		14.73	46.00	31.27	1000.0	9.000	L1	OFF	9.6
3.709613	20.80		56.00	35.20	1000.0	9.000	L1	OFF	9.6
4.980725		15.28	46.00	30.72	1000.0	9.000	L1	OFF	9.7
4.980725	19.40		56.00	36.60	1000.0	9.000	L1	OFF	9.7

Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

- 2. Test setup: RBW: 200 Hz (9 kHz-150 kHz), 9 kHz (150 kHz-30 MHz).
- 3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
- 4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
- 5. Pre-testing all test modes and channels, and find the HCH of 11N HT20 which is the worst case, so only the worst case is included in this test report.

Form-ULID-008536-9 V4.0





# LINE N RESULTS (WORST-CASE CONFIGURATION)

# Final\_Result

Frequency [MHz]	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
0.150000		17.89	56.00	38.11	1000.0	9.000	Ν	OFF	9.5
0.150000	38.12		66.00	27.88	1000.0	9.000	Ν	OFF	9.5
0.358950		18.52	48.75	30.24	1000.0	9.000	Ν	OFF	9.6
0.358950	41.11		58.75	17.64	1000.0	9.000	Ν	OFF	9.6
0.413675		25.82	47.57	21.75	1000.0	9.000	Ν	OFF	9.6
0.413675	46.19		57.57	11.39	1000.0	9.000	Ν	OFF	9.6
0.657450		13.43	46.00	32.57	1000.0	9.000	Ν	OFF	9.6
0.657450	29.97		56.00	26.03	1000.0	9.000	Ν	OFF	9.6
0.856450		12.47	46.00	33.53	1000.0	9.000	Ν	OFF	9.6
0.856450	18.21		56.00	37.79	1000.0	9.000	Ν	OFF	9.6
2.042988		14.66	46.00	31.34	1000.0	9.000	Ν	OFF	9.6
2.042988	28.32		56.00	27.68	1000.0	9.000	Ν	OFF	9.6

- 2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
- 3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
- 4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
- 5. Pre-testing all test modes and channels, and find the HCH of 11N HT20 which is the worst case, so only the worst case is included in this test report.



# **10. ANTENNA REQUIREMENTS**

## APPLICABLE REQUIREMENTS

#### Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi

# END OF REPORT