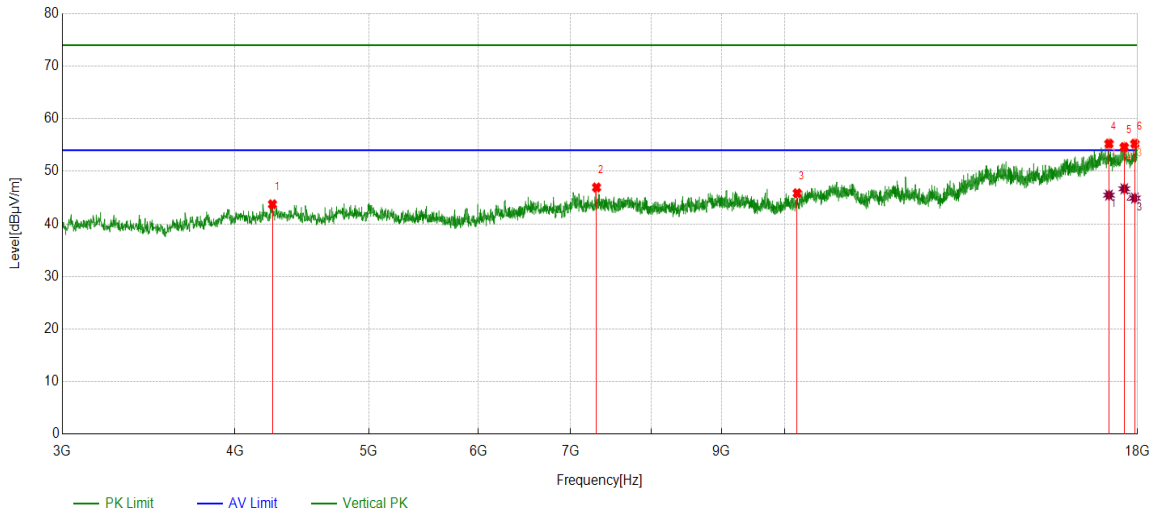




Test Mode	Channel	Polarization	Verdict
11N HT40	LCH	Vertical	PASS

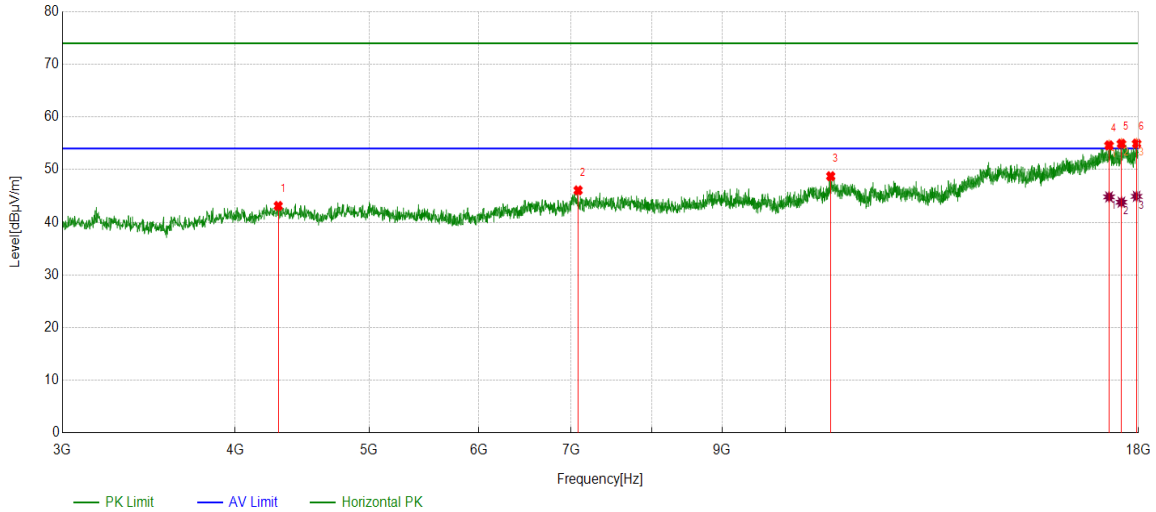


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	4258.2823	38.40	5.33	43.73	74.00	-30.27	peak
2	7307.4134	38.53	8.40	46.93	74.00	-27.07	peak
3	10208.401	35.65	10.18	45.83	74.00	-28.17	peak
4	17163.6455	36.29	18.96	55.25	74.00	-18.75	peak
		26.51	18.96	45.47	54.00	-8.53	average
5	17606.2008	34.98	19.61	54.59	74.00	-19.41	peak
		27.06	19.61	46.67	54.00	-7.33	average
6	17921.2402	35.58	19.66	55.24	74.00	-18.76	peak
		25.25	19.66	44.91	54.00	-9.09	average

- 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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 4. Peak: Peak detector.
 5. AVG: VBW refer to section 7.2.
 6. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
 7. 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 HT40	MCH	Horizontal	PASS

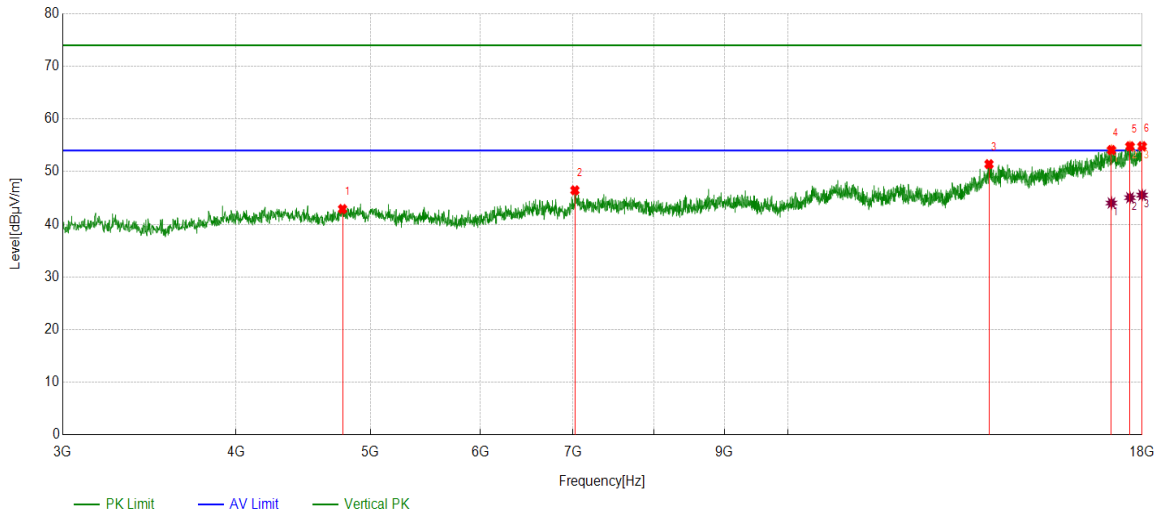


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	4297.6622	38.34	4.77	43.11	74.00	-30.89	peak
2	7080.5101	36.62	9.44	46.06	74.00	-27.94	peak
3	10782.2228	36.74	12.01	48.75	74.00	-25.25	peak
4	17139.2674	35.76	18.84	54.60	74.00	-19.40	peak
		25.98	18.84	44.82	54.00	-9.18	average
5	17495.5619	36.15	18.77	54.92	74.00	-19.08	peak
		25.05	18.77	43.82	54.00	-10.18	average
6	17943.743	35.33	19.61	54.94	74.00	-19.06	peak
		25.32	19.61	44.93	54.00	-9.07	average

- 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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 4. Peak: Peak detector.
 5. AVG: VBW refer to section 7.2.
 6. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
 7. 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 HT40	MCH	Vertical	PASS

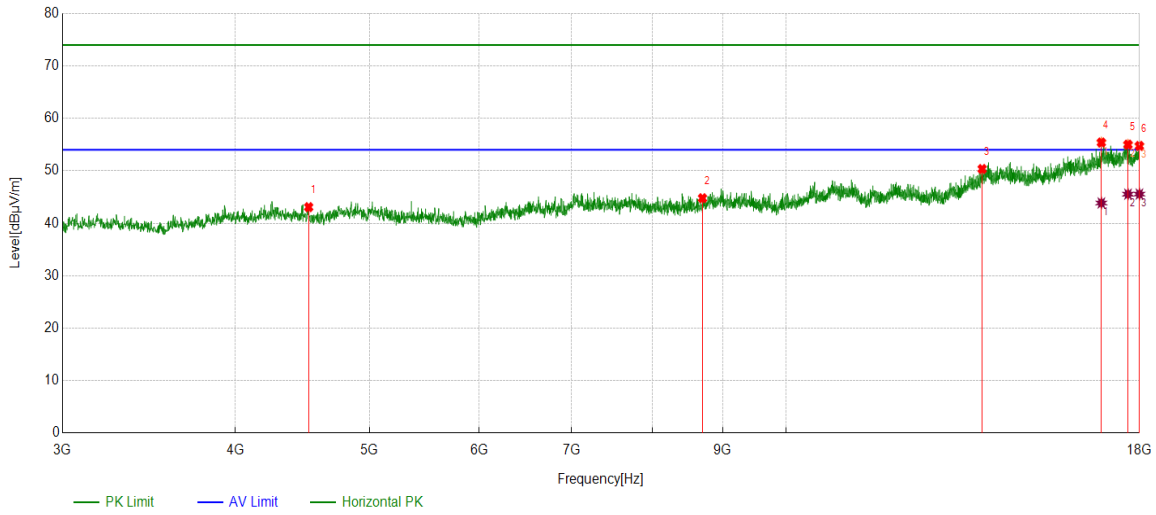


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	4773.9717	37.62	5.28	42.90	74.00	-31.10	peak
2	7020.5026	37.17	9.28	46.45	74.00	-27.55	peak
3	13960.7451	35.87	15.55	51.42	74.00	-22.58	peak
4	17107.3884	35.51	18.59	54.10	74.00	-19.90	peak
		25.46	18.59	44.05	54.00	-9.95	average
5	17641.8302	35.49	19.32	54.81	74.00	-19.19	peak
		25.74	19.32	45.06	54.00	-8.94	average
6	18000	35.18	19.64	54.82	74.00	-19.18	peak
		25.91	19.64	45.55	54.00	-8.45	average

- 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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 4. Peak: Peak detector.
 5. AVG: VBW refer to section 7.2.
 6. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
 7. 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 HT40	HCH	Horizontal	PASS

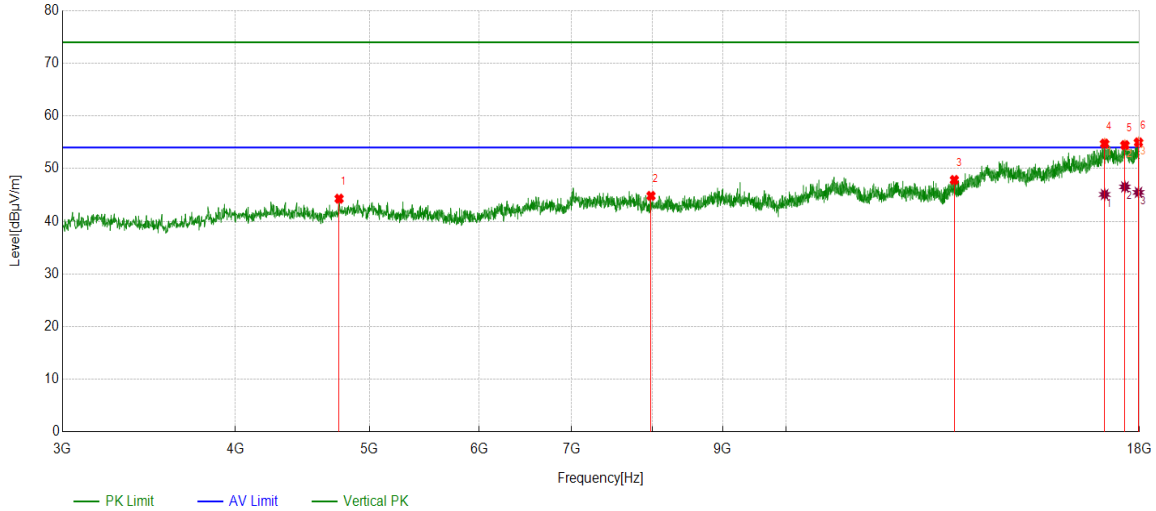


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	4518.9399	38.54	4.54	43.08	74.00	-30.92	peak
2	8700.7126	36.15	8.63	44.78	74.00	-29.22	peak
3	13855.732	35.04	15.31	50.35	74.00	-23.65	peak
4	16895.4869	36.95	18.45	55.40	74.00	-18.60	peak
		25.42	18.45	43.87	54.00	-10.13	average
5	17660.5826	35.39	19.61	55.00	74.00	-19.00	peak
		25.94	19.61	45.55	54.00	-8.45	average
6	18000	35.11	19.64	54.75	74.00	-19.25	peak
		25.93	19.64	45.57	54.00	-8.43	average

- 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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 4. Peak: Peak detector.
 5. AVG: VBW refer to section 7.2.
 6. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
 7. 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 HT40	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	4753.3442	39.03	5.26	44.29	74.00	-29.71	peak
2	7986.2483	36.73	8.10	44.83	74.00	-29.17	peak
3	13229.4037	35.61	12.24	47.85	74.00	-26.15	peak
4	16987.3734	35.38	19.37	54.75	74.00	-19.25	peak
		25.73	19.37	45.10	54.00	-8.90	average
5	17570.5713	34.43	20.04	54.47	74.00	-19.53	peak
		26.50	20.04	46.54	54.00	-7.46	average
6	17971.8715	35.48	19.50	54.98	74.00	-19.02	peak
		25.99	19.50	45.49	54.00	-8.51	average

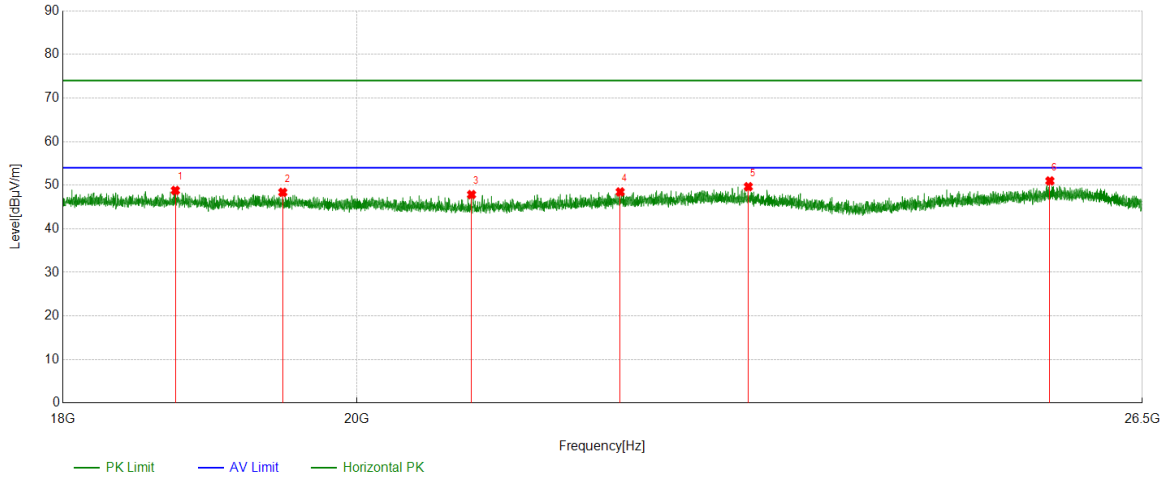
- Note: 1. Measurement = Reading Level + Correct Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 4. Peak: Peak detector.
 5. AVG: VBW refer to section 7.2.
 6. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
 7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Part III: 18GHz~26.5GHz



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

Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS

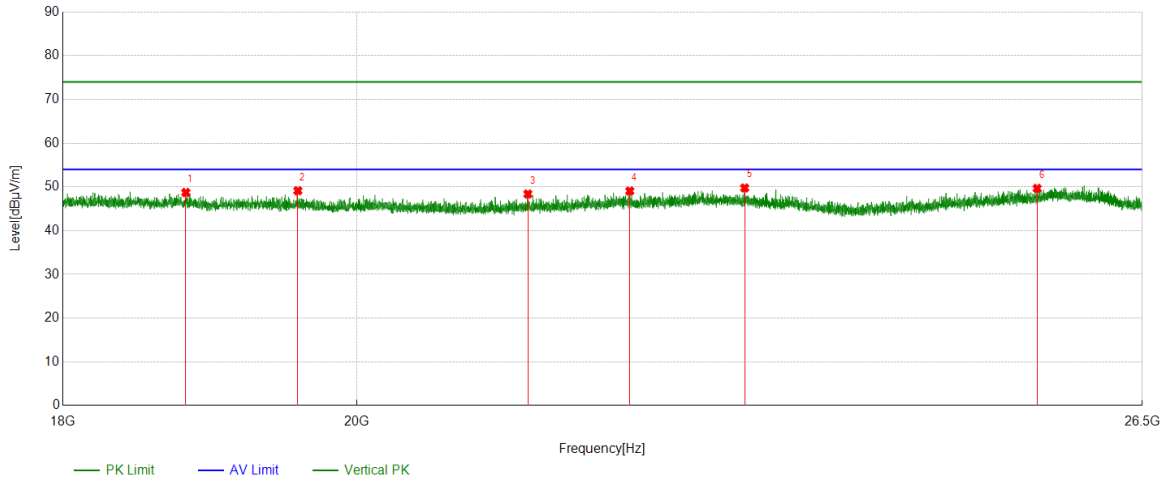


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18741.2741	49.82	-1.02	48.80	74.00	-25.20	peak
2	19476.5977	49.11	-0.74	48.37	74.00	-25.63	peak
3	20839.2839	48.76	-0.91	47.85	74.00	-26.15	peak
4	21979.2479	48.32	0.14	48.46	74.00	-25.54	peak
5	23012.1012	48.46	1.20	49.66	74.00	-24.34	peak
6	25637.1637	49.91	1.08	50.99	74.00	-23.01	peak

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.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18811.8312	49.79	-1.06	48.73	74.00	-25.27	peak
2	19582.0082	49.83	-0.70	49.13	74.00	-24.87	peak
3	21264.3264	49.13	-0.74	48.39	74.00	-25.61	peak
4	22054.9055	48.82	0.24	49.06	74.00	-24.94	peak
5	22981.4982	48.55	1.22	49.77	74.00	-24.23	peak
6	25520.7021	48.78	0.88	49.66	74.00	-24.34	peak

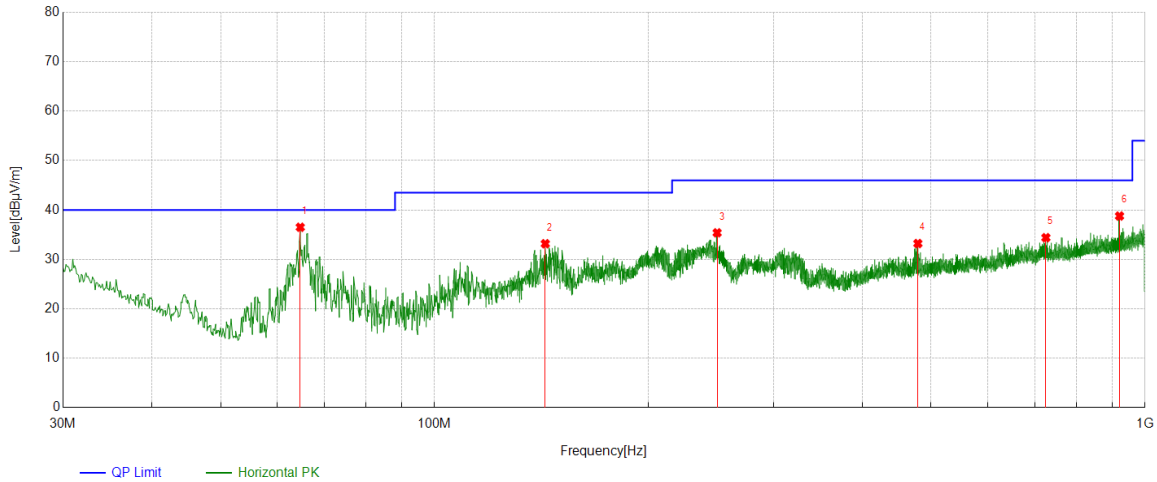
Note: 1.If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
 3. Measurement = Reading Level + Correct Factor.



Part IV: 30MHz~1GHz

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

Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS

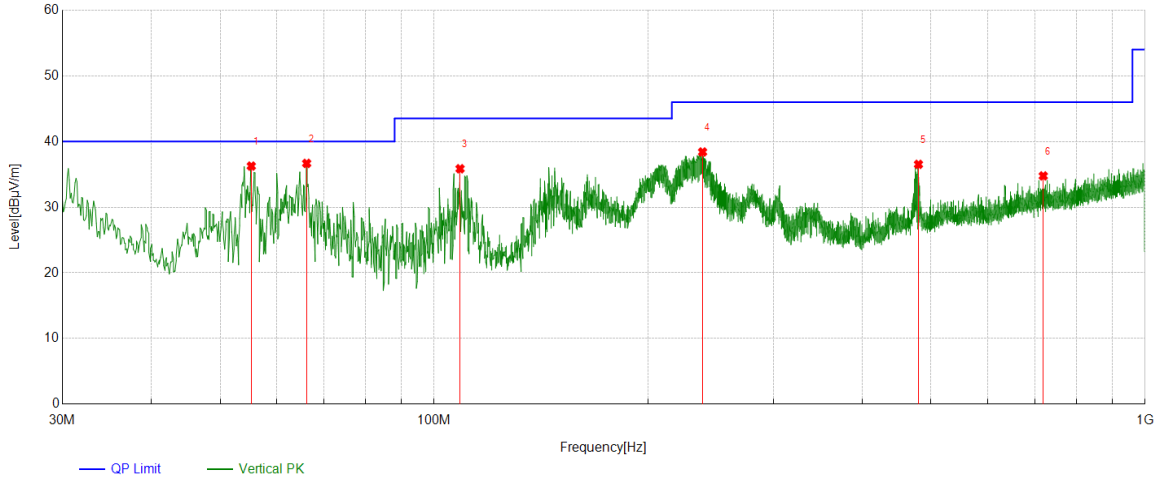


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	64.7295	21.77	14.73	36.50	40.00	-3.50	peak
2	143.2103	12.89	20.28	33.17	43.50	-10.33	peak
3	249.921	15.92	19.46	35.38	46.00	-10.62	peak
4	478.9609	7.36	25.85	33.21	46.00	-12.79	peak
5	725.2685	4.74	29.65	34.39	46.00	-11.61	peak
6	920.6461	6.65	32.12	38.77	46.00	-7.23	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.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	55.3195	21.78	14.48	36.26	40.00	-3.74	peak
2	66.1846	21.83	14.84	36.67	40.00	-3.33	peak
3	108.7719	16.74	19.11	35.85	43.50	-7.65	peak
4	238.5709	18.78	19.62	38.40	46.00	-7.60	peak
5	480.028	10.64	25.88	36.52	46.00	-9.48	peak
6	719.0599	5.20	29.56	34.76	46.00	-11.24	peak

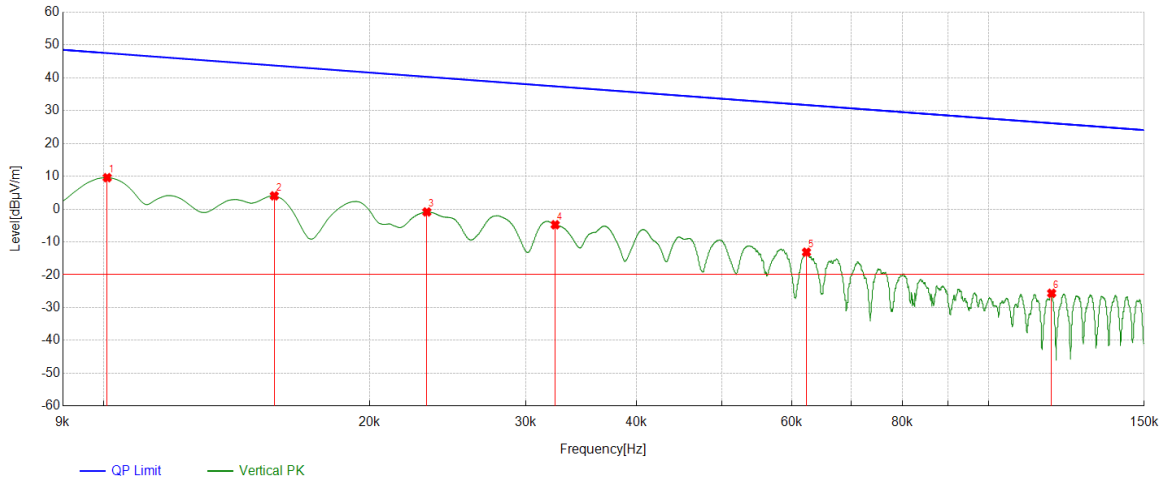
Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
 3. Measurement = Reading Level + Correct Factor.



Part V: 9KHz~30MHz

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

Test Mode	Channel	Frequency Range	Verdict
11B	MCH	9KHz~150KHz	PASS

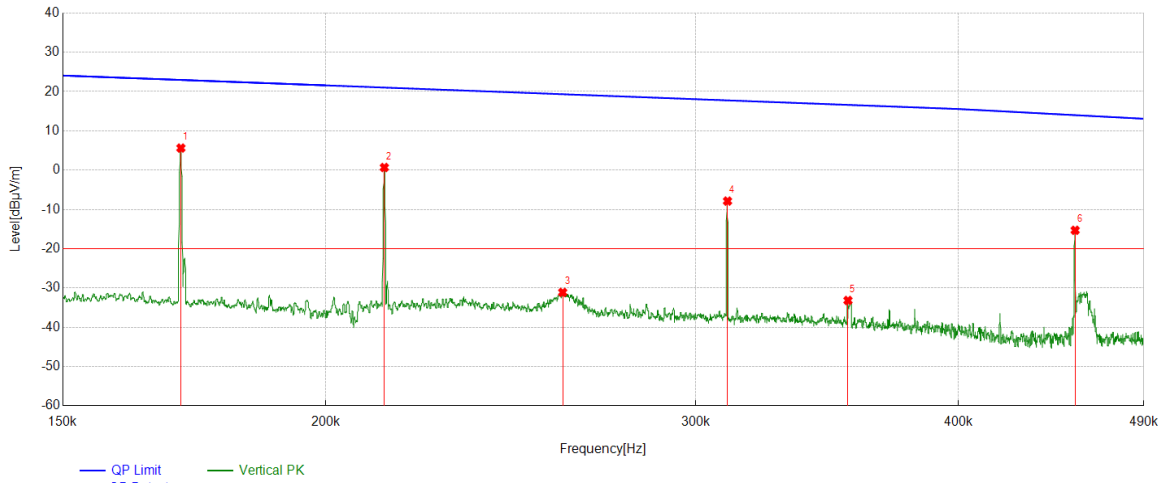


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0101	71.57	-61.99	9.58	47.53	-37.95	peak
2	0.0156	65.97	-61.93	4.04	43.75	-39.71	peak
3	0.0232	60.99	-61.86	-0.87	40.27	-41.14	peak
4	0.0324	57.02	-61.79	-4.77	37.39	-42.16	peak
5	0.0623	48.70	-61.83	-13.13	31.71	-44.84	peak
6	0.1179	36.27	-61.90	-25.63	26.18	-51.81	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. Result 300m= Result 3m-80 dBuV/m
 3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
 4. 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



Test Mode	Channel	Frequency Range	Verdict
11B	MCH	150KHz~490Hz	PASS

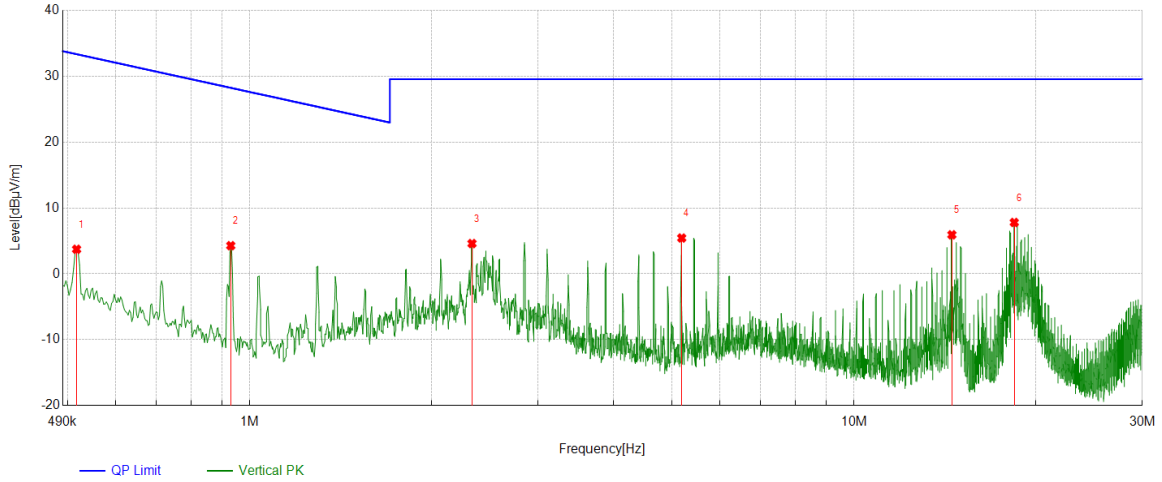


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1707	67.53	-61.91	5.62	22.96	-17.34	peak
2	0.2133	62.61	-61.93	0.68	21.02	-20.34	peak
3	0.2593	30.83	-61.95	-31.12	19.33	-50.45	peak
4	0.3106	54.09	-61.97	-7.88	17.76	-25.64	peak
5	0.3544	28.80	-61.97	-33.17	16.61	-49.78	peak
6	0.4545	46.65	-61.96	-15.31	14.00	-29.31	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. Result 300m= Result 3m-80 dBuV/m
 3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
 4. 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



Test Mode	Channel	Frequency Range	Verdict
11B	MCH	490KHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.5166	25.68	-21.95	3.73	33.34	-29.61	peak
2	0.9297	26.21	-21.93	4.28	28.24	-23.96	peak
3	2.3316	26.46	-21.86	4.60	29.54	-24.94	peak
4	5.1855	27.22	-21.78	5.44	29.54	-24.10	peak
5	14.5205	27.55	-21.62	5.93	29.54	-23.61	peak
6	18.4162	29.31	-21.51	7.80	29.54	-21.74	peak

- Note: 1. Measurement = Reading Level + Correct Factor.
 2. Result 30m= Result 3m-40 dBuV/m
 3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
 4. 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

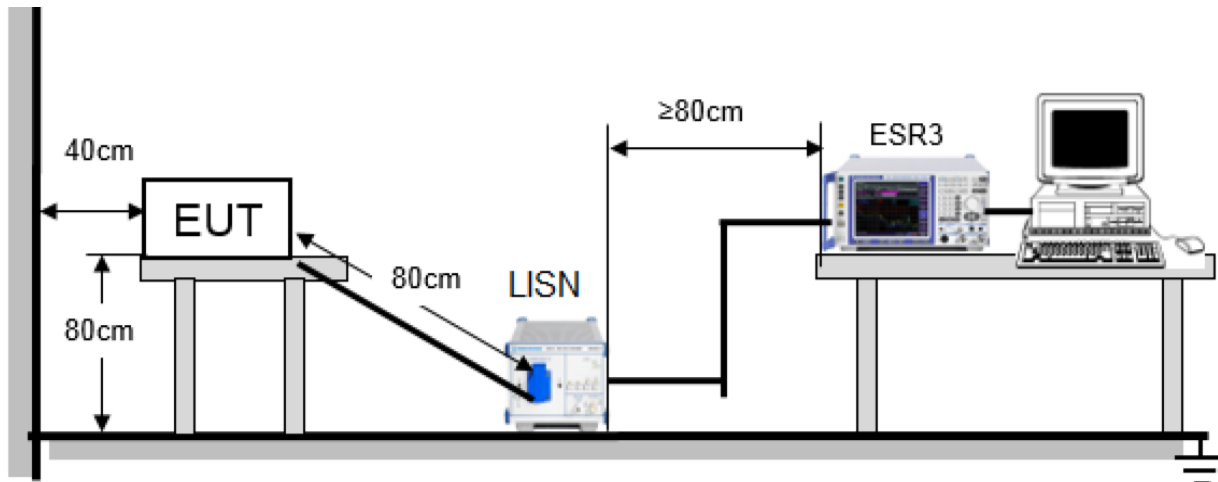
8. AC POWER LINE CONDUCTED EMISSIONS

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



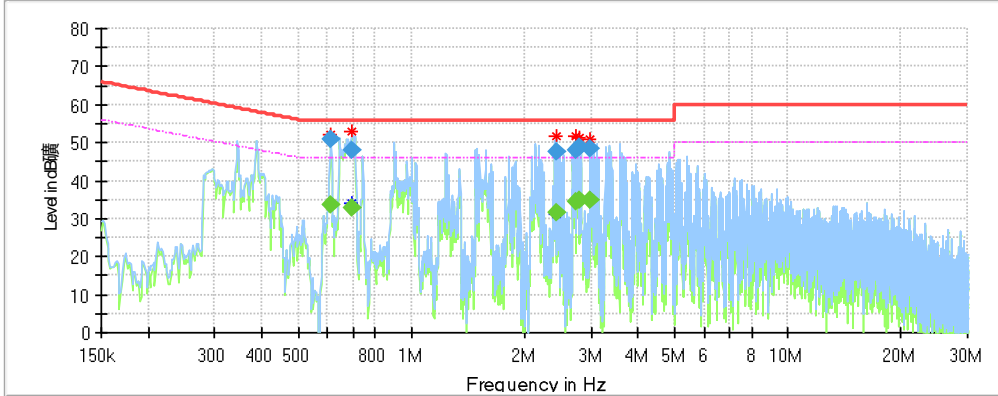
The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) 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 RESULTS (WORST CASE CONFIGURATION)

For L Line:



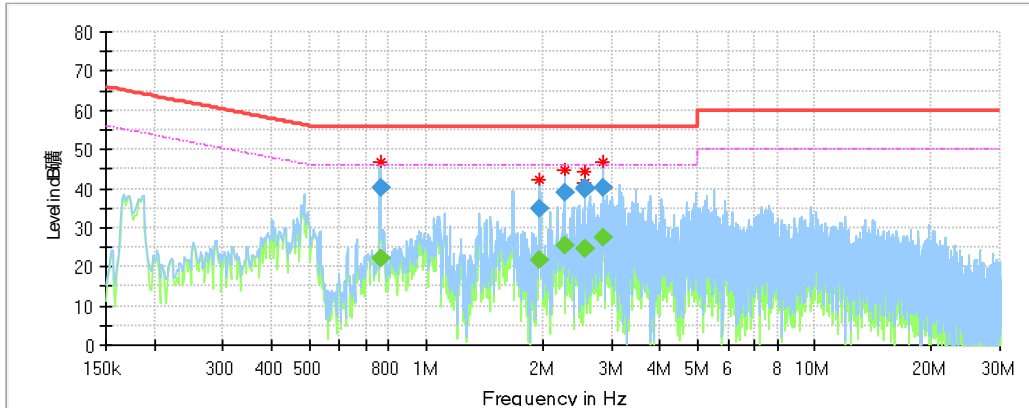
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.611183	---	33.73	46.00	12.27	1000.0	9.000	L1	OFF	9.4
0.611183	50.91	---	56.00	5.09	1000.0	9.000	L1	OFF	9.4
0.694763	---	32.63	46.00	13.37	1000.0	9.000	L1	OFF	9.5
0.694763	48.06	---	56.00	7.94	1000.0	9.000	L1	OFF	9.5
2.436510	---	31.63	46.00	14.37	1000.0	9.000	L1	OFF	9.7
2.436510	47.72	---	56.00	8.28	1000.0	9.000	L1	OFF	9.7
2.727548	47.88	---	56.00	8.12	1000.0	9.000	L1	OFF	9.7
2.727548	---	34.33	46.00	11.67	1000.0	9.000	L1	OFF	9.7
2.794710	48.76	---	56.00	7.24	1000.0	9.000	L1	OFF	9.7
2.794710	---	34.80	46.00	11.20	1000.0	9.000	L1	OFF	9.7
2.973810	---	34.97	46.00	11.03	1000.0	9.000	L1	OFF	9.6
2.973810	48.60	---	56.00	7.40	1000.0	9.000	L1	OFF	9.6

- 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 MCH of 11B mode which is the worst case, so only the worst case is included in this test report.



For N Line:



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.761925	---	22.23	46.00	23.77	1000.0	9.000	N	OFF	9.6
0.761925	40.15	---	56.00	15.85	1000.0	9.000	N	OFF	9.6
1.963388	---	21.85	46.00	24.15	1000.0	9.000	N	OFF	9.5
1.963388	34.98	---	56.00	21.02	1000.0	9.000	N	OFF	9.5
2.266365	---	25.46	46.00	20.54	1000.0	9.000	N	OFF	9.5
2.269350	38.85	---	56.00	17.15	1000.0	9.000	N	OFF	9.5
2.557403	40.25	---	56.00	15.75	1000.0	9.000	N	OFF	9.6
2.557403	---	24.67	46.00	21.33	1000.0	9.000	N	OFF	9.6
2.569343	39.97	---	56.00	16.03	1000.0	9.000	N	OFF	9.6
2.569343	---	24.57	46.00	21.43	1000.0	9.000	N	OFF	9.6
2.861873	---	27.43	46.00	18.57	1000.0	9.000	N	OFF	9.6
2.861873	40.33	---	56.00	15.67	1000.0	9.000	N	OFF	9.6

- 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 MCH of 11B mode swich is the worst case, so only the worst case is included in this test report.



9. 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 CONNECTOR

EUT has a EUT with one Integral antenna.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi

END OF REPORT