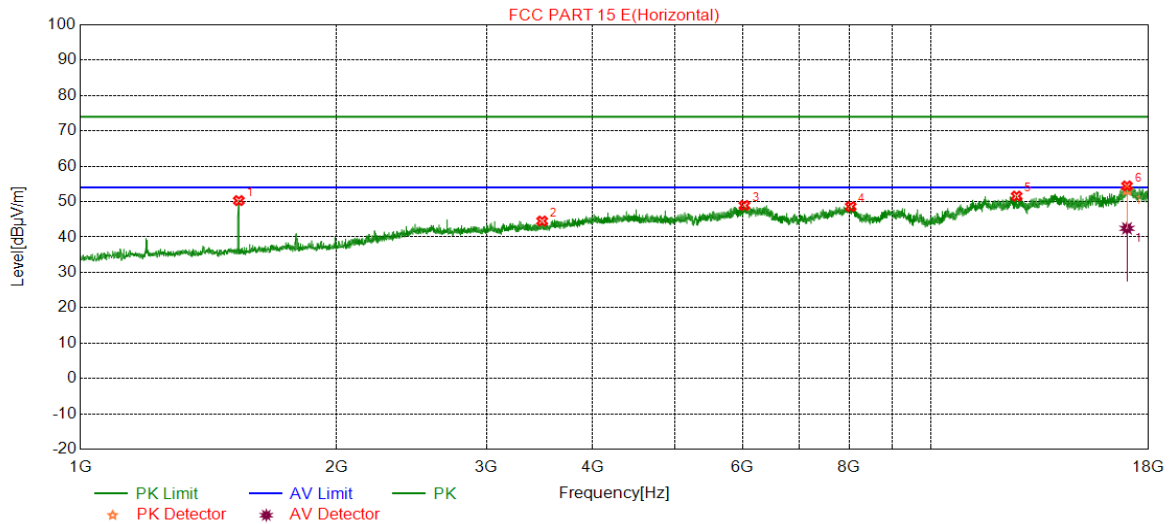




Test Mode	Channel	Polarization	Verdict
11AC20	5180	Horizontal	PASS

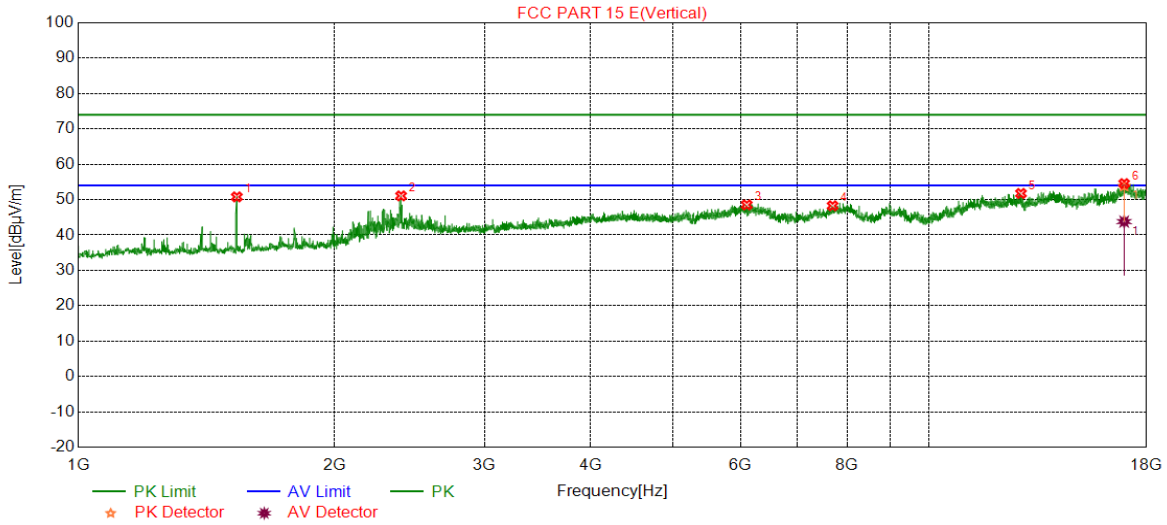


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.54	-2.25	50.29	74.00	-23.71	peak
2	3488.2480	38.82	5.69	44.51	74.00	-29.49	peak
3	6029.6716	38.21	10.71	48.92	74.00	-25.08	peak
4	8039.3399	36.60	12.00	48.60	74.00	-25.40	peak
5	12594.0990	35.41	16.15	51.56	74.00	-22.44	peak
6	16976.3294	34.48	19.97	54.45	74.00	-19.55	peak
		22.47	19.97	42.44	54.00	-11.56	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=10 Hz.
 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
11AC20	5180	Vertical	PASS

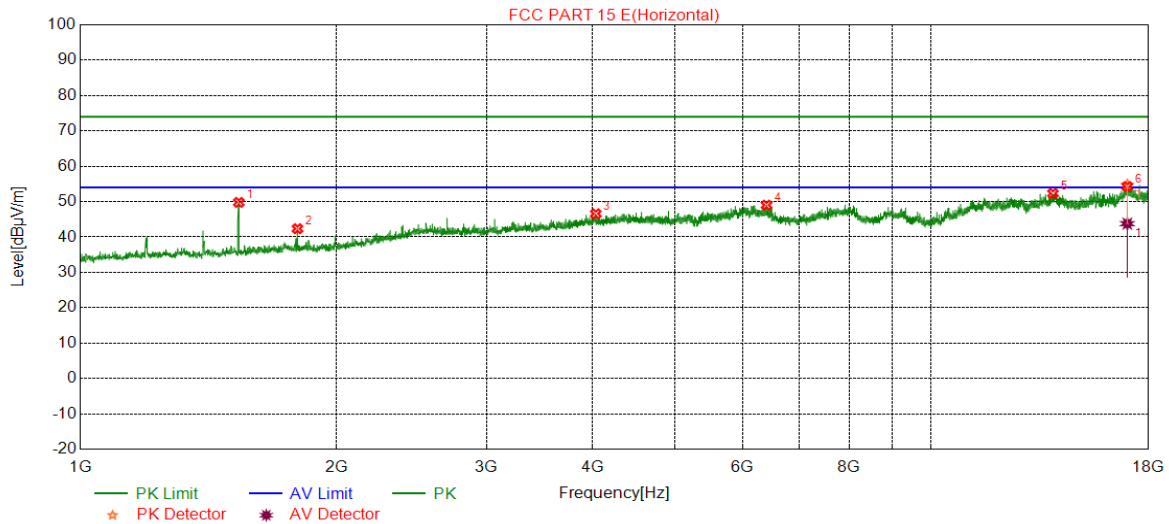


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	53.02	-2.25	50.77	74.00	-23.23	peak
2	2394.4824	48.42	2.63	51.05	74.00	-22.95	peak
3	6101.1835	37.28	11.24	48.52	74.00	-25.48	peak
4	7696.1994	36.90	11.36	48.26	74.00	-25.74	peak
5	12810.7185	36.42	15.32	51.74	74.00	-22.26	peak
6	16937.9897	35.03	19.51	54.54	74.00	-19.46	peak
		24.28	19.51	43.79	54.00	-10.21	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=10 Hz.
 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
11AC20	5200	Horizontal	PASS

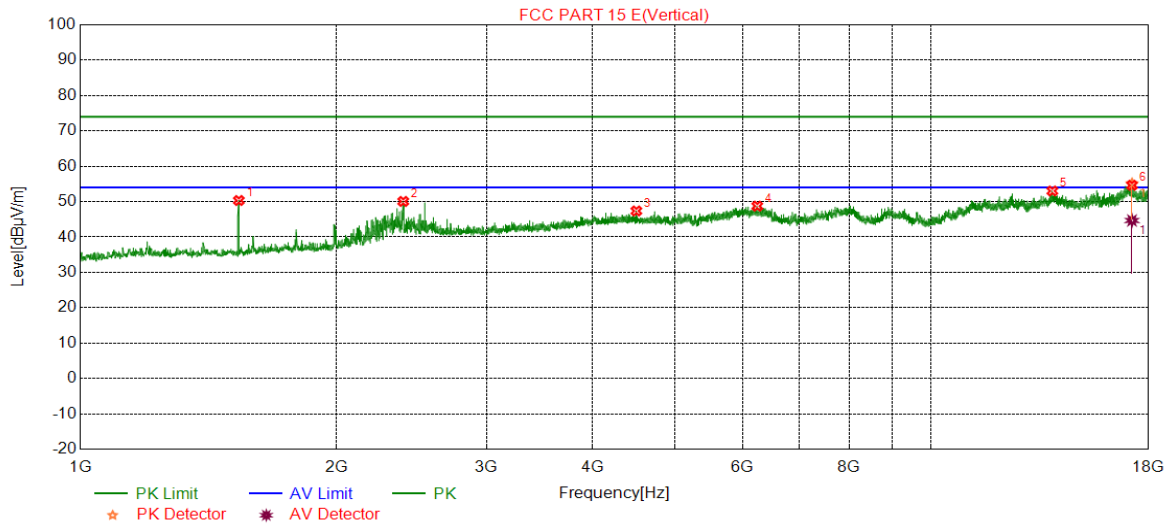


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.03	-2.25	49.78	74.00	-24.22	peak
2	1799.4666	43.75	-1.40	42.35	74.00	-31.65	peak
3	4033.7556	39.15	7.42	46.57	74.00	-27.43	peak
4	6401.9003	37.88	11.13	49.01	74.00	-24.99	peak
5	13895.7326	35.63	16.69	52.32	74.00	-21.68	peak
6	16989.7483	35.25	19.00	54.25	74.00	-19.75	peak
		24.77	19.00	43.77	54.00	-10.23	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=10 Hz.
 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
11AC20	5200	Vertical	PASS

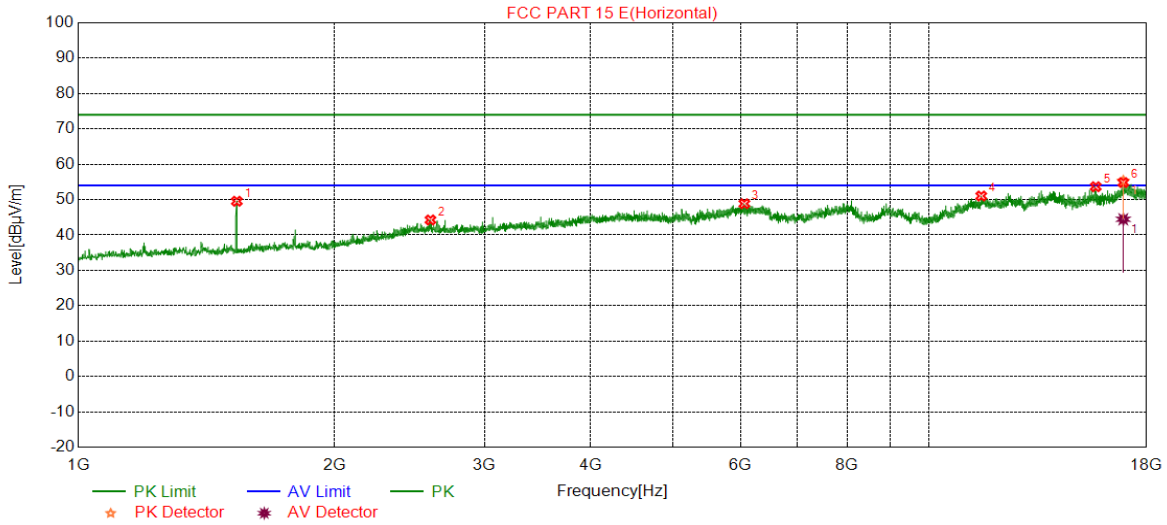


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.57	-2.25	50.32	74.00	-23.68	peak
2	2395.3992	47.42	2.64	50.06	74.00	-23.94	peak
3	4501.3336	39.23	8.13	47.36	74.00	-26.64	peak
4	6243.2905	37.67	11.06	48.73	74.00	-25.27	peak
5	13872.7288	36.23	16.78	53.01	74.00	-20.99	peak
6	17208.2847	35.69	18.93	54.62	74.00	-19.38	peak
		25.74	18.93	44.67	54.00	-9.33	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=10 Hz.
 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
11AC20	5240	Horizontal	PASS

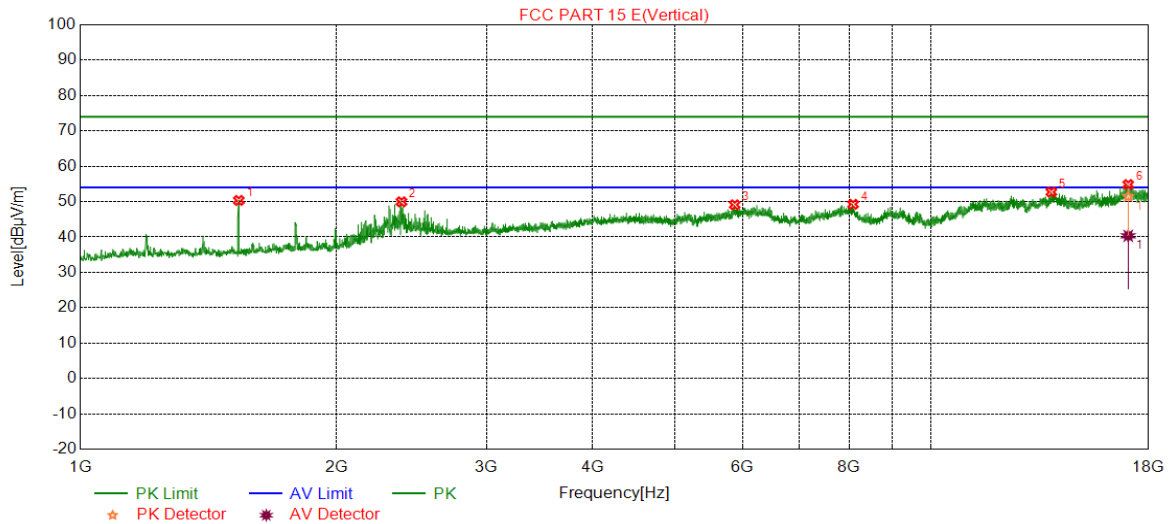


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	51.79	-2.25	49.54	74.00	-24.46	peak
2	2592.5154	40.44	3.81	44.25	74.00	-29.75	peak
3	6061.7603	38.09	10.75	48.84	74.00	-25.16	peak
4	11507.1679	35.78	15.24	51.02	74.00	-22.98	peak
5	15684.2807	35.16	18.49	53.65	74.00	-20.35	peak
6	16897.7330	36.03	18.80	54.83	74.00	-19.17	peak
		25.64	18.80	44.44	54.00	-9.56	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=10 Hz.
 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
11AC20	5240	Vertical	PASS

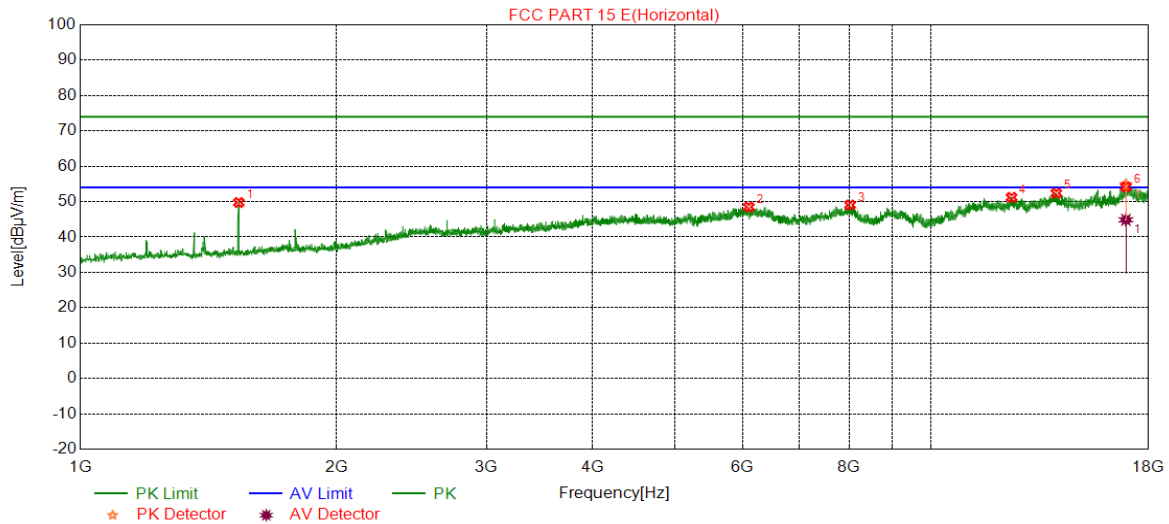


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.59	-2.25	50.34	74.00	-23.66	peak
2	2384.3974	47.36	2.59	49.95	74.00	-24.05	peak
3	5873.8123	38.87	10.23	49.10	74.00	-24.90	peak
4	8091.0985	37.44	11.81	49.25	74.00	-24.75	peak
5	13834.3891	36.26	16.45	52.71	74.00	-21.29	peak
6	17031.9220	35.52	19.31	54.83	74.00	-19.17	peak
		21.02	19.31	40.33	54.00	-13.67	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=10 Hz.
 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
11AC40	5190	Horizontal	PASS

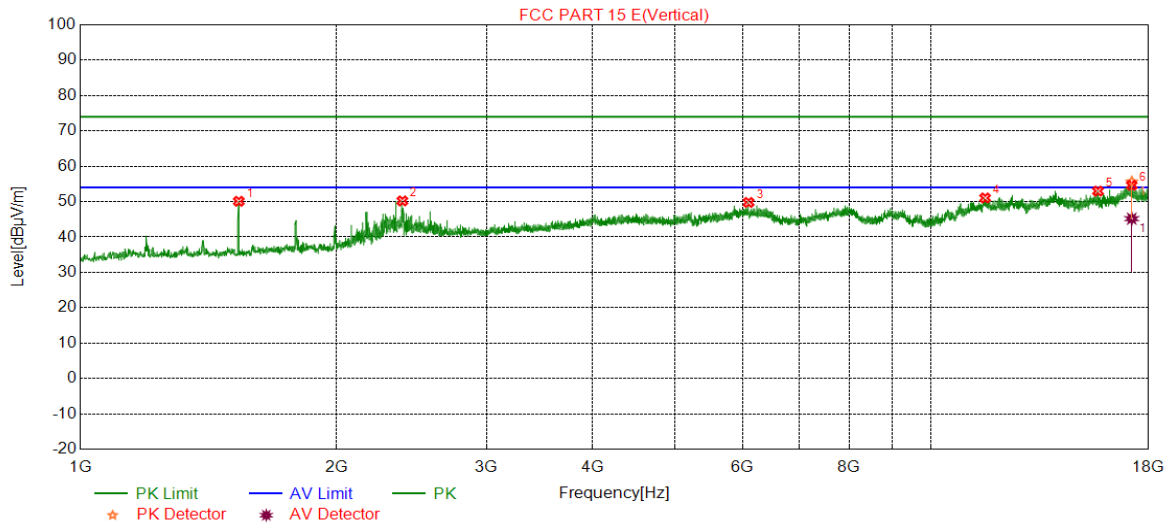


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	51.99	-2.25	49.74	74.00	-24.26	peak
2	6103.0172	37.22	11.26	48.48	74.00	-25.52	peak
3	8025.9210	36.80	12.25	49.05	74.00	-24.95	peak
4	12421.5703	35.59	15.61	51.20	74.00	-22.80	peak
5	14024.1707	35.12	17.26	52.38	74.00	-21.62	peak
6	16926.4877	35.10	19.07	54.17	74.00	-19.83	peak
		25.79	19.07	44.86	54.00	-9.14	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=10 Hz.
 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
11AC40	5190	Vertical	PASS

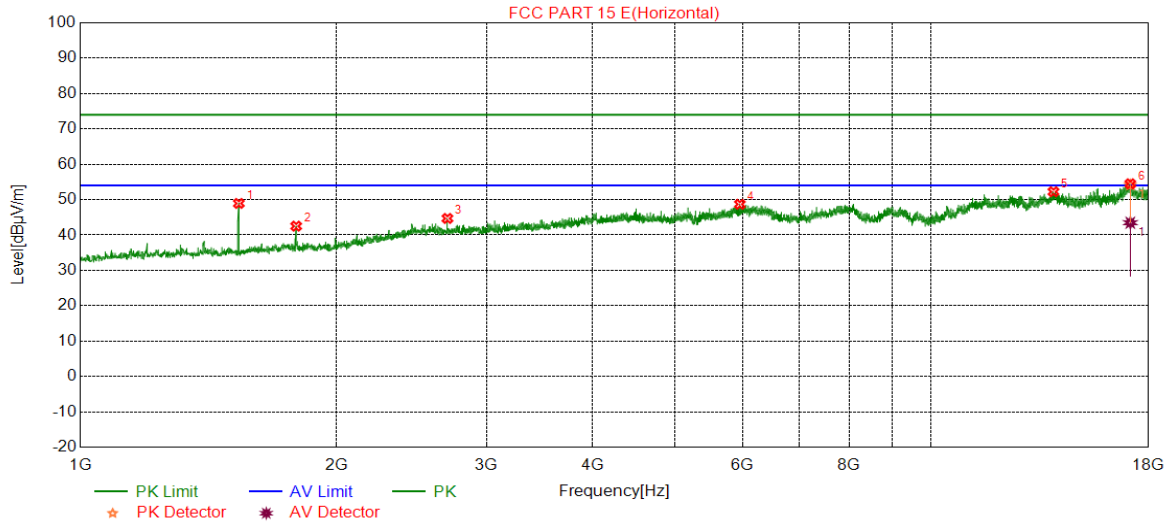


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.34	-2.25	50.09	74.00	-23.91	peak
2	2389.8983	47.60	2.60	50.20	74.00	-23.80	peak
3	6098.4331	38.63	11.14	49.77	74.00	-24.23	peak
4	11564.6774	35.94	15.09	51.03	74.00	-22.97	peak
5	15695.7826	35.26	17.71	52.97	74.00	-21.03	peak
6	17196.7828	35.62	18.99	54.61	74.00	-19.39	peak
		26.19	18.99	45.18	54.00	-8.82	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=10 Hz.
 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
11AC40	5230	Horizontal	PASS

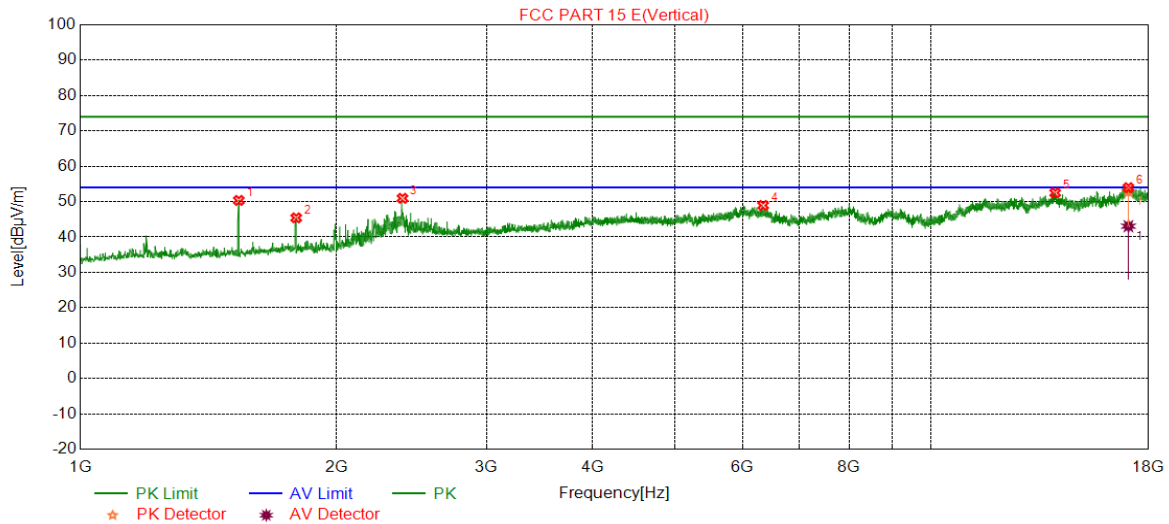


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	51.18	-2.25	48.93	74.00	-25.07	peak
2	1793.0488	43.94	-1.44	42.50	74.00	-31.50	peak
3	2699.7833	40.90	3.78	44.68	74.00	-29.32	peak
4	5956.3261	38.33	10.36	48.69	74.00	-25.31	peak
5	13914.9025	35.31	16.92	52.23	74.00	-21.77	peak
6	17129.6883	35.29	19.19	54.48	74.00	-19.52	peak
		24.28	19.19	43.47	54.00	-10.53	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=10 Hz.
 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
11AC40	5230	Vertical	PASS

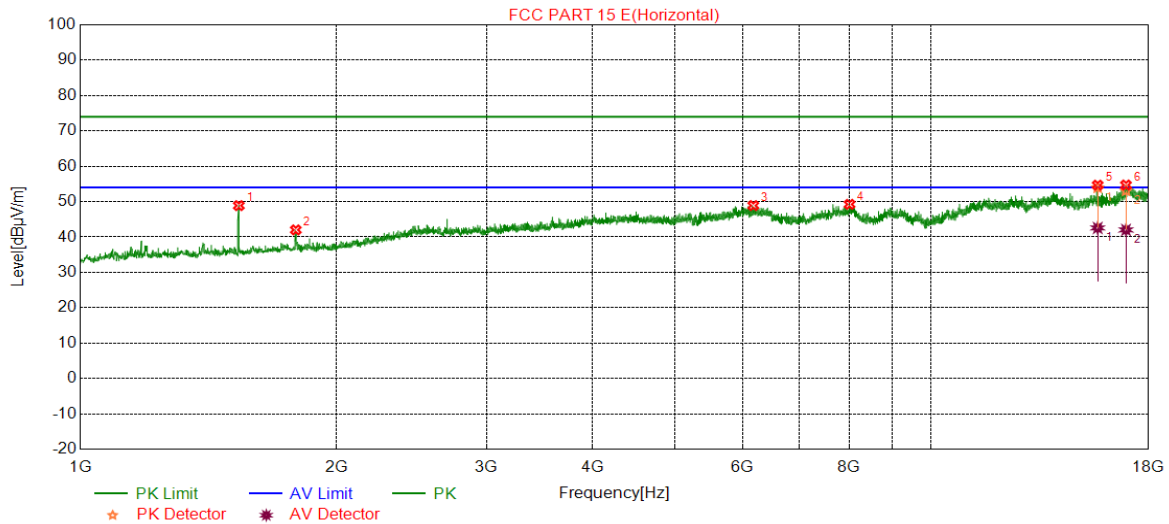


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.59	-2.25	50.34	74.00	-23.66	peak
2	1793.0488	46.85	-1.44	45.41	74.00	-28.59	peak
3	2390.8151	48.33	2.60	50.93	74.00	-23.07	peak
4	6343.2239	37.84	11.08	48.92	74.00	-25.08	peak
5	13980.0800	35.54	16.94	52.48	74.00	-21.52	peak
6	17041.5069	34.06	19.89	53.95	74.00	-20.05	peak
		23.16	19.89	43.05	54.00	-10.95	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=10 Hz.
 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
11AC 80	5210	Horizontal	PASS

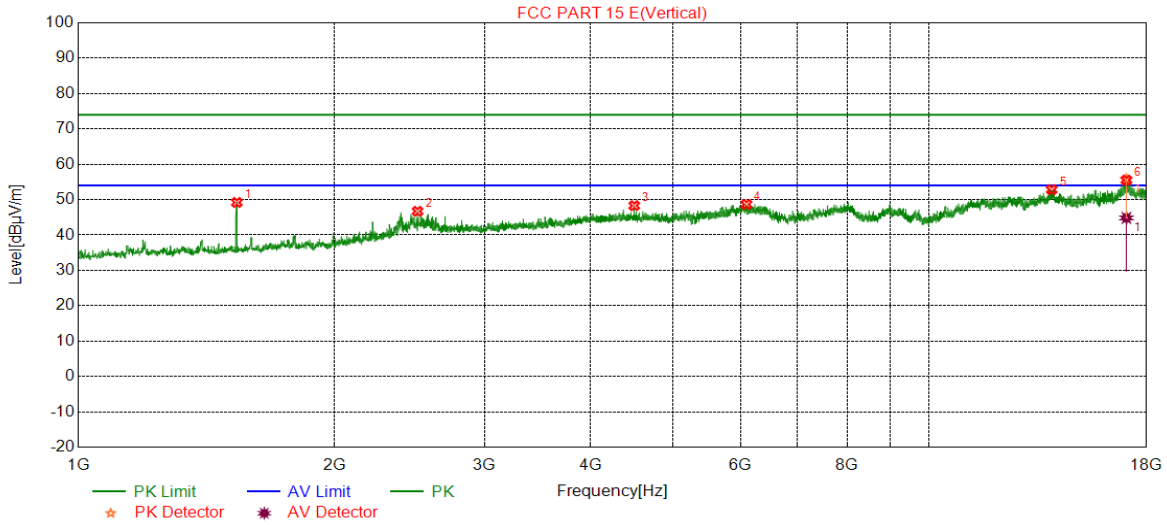


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	51.12	-2.25	48.87	74.00	-25.13	peak
2	1791.2152	43.46	-1.45	42.01	74.00	-31.99	peak
3	6176.3627	38.00	10.88	48.88	74.00	-25.12	peak
4	8014.4191	36.85	12.39	49.24	74.00	-24.76	peak
5	15682.3637	36.01	18.65	54.66	74.00	-19.34	peak
		23.91	18.65	42.56	54.00	-11.44	average
6	16930.3217	35.39	19.31	54.70	74.00	-19.30	peak
		23.91	18.65	42.56	54.00	-11.44	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=10 Hz.
 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
11AC 80	5210	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	51.45	-2.25	49.20	74.00	-24.80	peak
2	2503.5839	43.11	3.58	46.69	74.00	-27.31	peak
3	4500.4167	40.15	8.14	48.29	74.00	-25.71	peak
4	6096.5994	37.62	11.04	48.66	74.00	-25.34	peak
5	13922.5704	35.65	17.17	52.82	74.00	-21.18	peak
6	17041.5069	35.63	19.89	55.52	74.00	-18.48	peak
		24.94	19.89	44.83	54.00	-9.17	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=10 Hz.
 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.5.2. UNII-III BAND

Test Mode	Channel	P _{uw} (dBm)	Verdict
11A	5745	<Limit	PASS
	5785	<Limit	PASS
	5825	<Limit	PASS
11AC20	5745	<Limit	PASS
	5785	<Limit	PASS
	5825	<Limit	PASS
11AC40	5755	<Limit	PASS
	5795	<Limit	PASS
11AC80	5775	<Limit	PASS

Remark:

1) For this product, it has two antennas, antenna1 and antenna2, the 802.11a is use the SISO technical, but the ant1 and ant2 can transmitter in the same time under those modes. The 802.11n and 802.11ac are both use the SISO and MIMO technical.

2) EUT support for SISO and CDD MIMO Transmission, only 802.11n/ac supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.

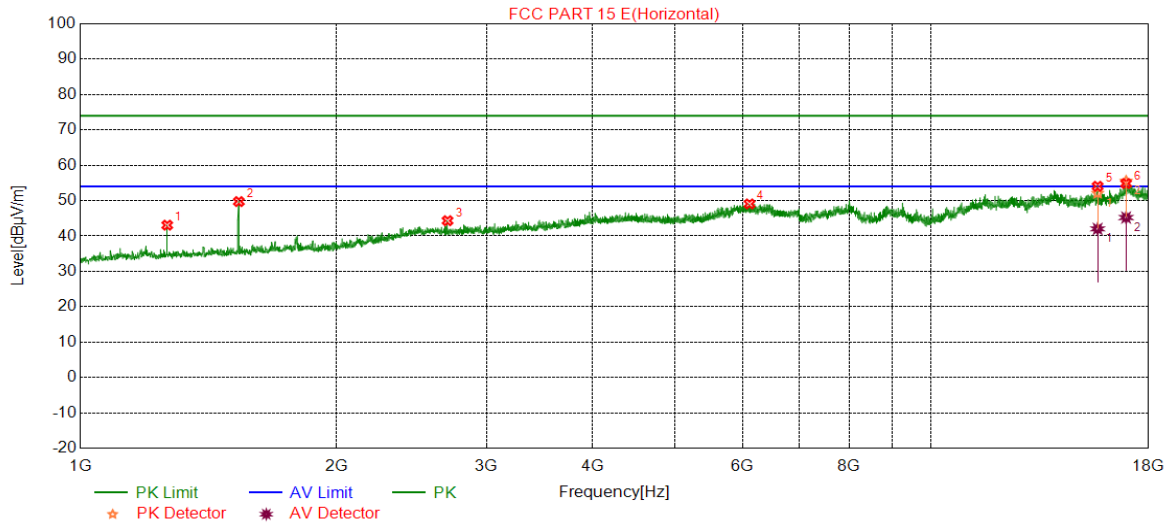
3) 11n HT20 mode set the same power level as 11ac HT20 mode, and 11n HT40 mode set the same power level as 11ac HT40 mode, besides the 11ac HT20 mode and 11ac HT40 mode were worse case, so only the 11ac HT20 mode and 11ac HT40 mode were tested in this report.

4) Pre-testing all test, find the modes of 11A and 11AC are the worst case, so only the data of the 11A mode and 11AC mode are included in this test report.



Test Graphs:

Test Mode	Channel	Polarization	Verdict
11A	5745	Horizontal	PASS

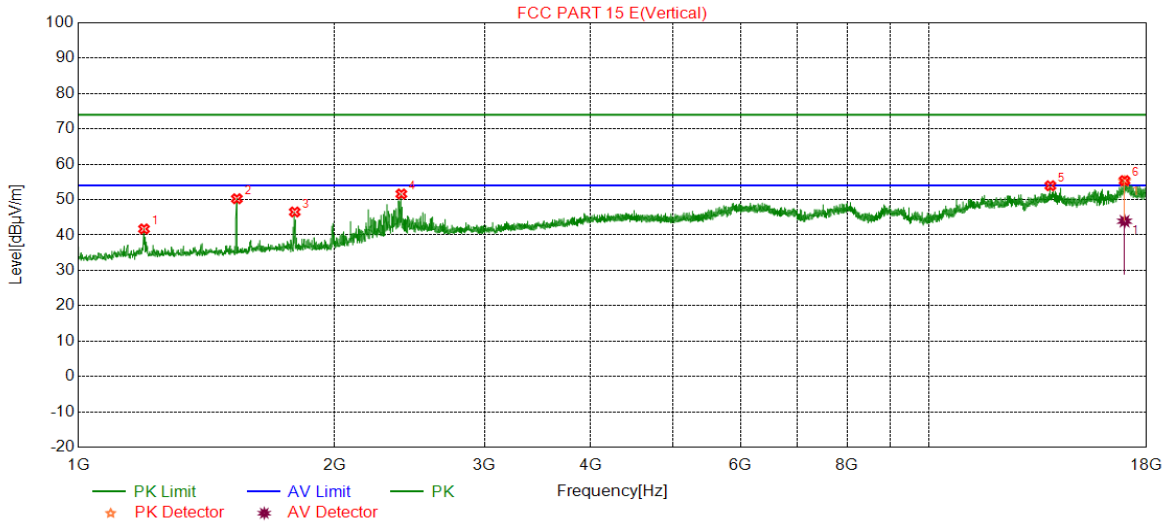


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1264.9608	46.45	-3.39	43.06	74.00	-30.94	peak
2	1535.4226	52.45	-2.72	49.73	74.00	-24.27	peak
3	2700.7001	40.93	3.39	44.32	74.00	-29.68	peak
4	6114.0190	38.51	10.56	49.07	74.00	-24.93	peak
5	15680.4447	35.24	18.81	54.05	74.00	-19.95	peak
		23.20	18.81	42.01	54.00	-11.99	average
6	16936.0718	35.36	19.46	54.82	74.00	-19.18	peak
		25.76	19.46	45.22	54.00	-8.78	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=10 Hz.
 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
11A	5745	Vertical	PASS

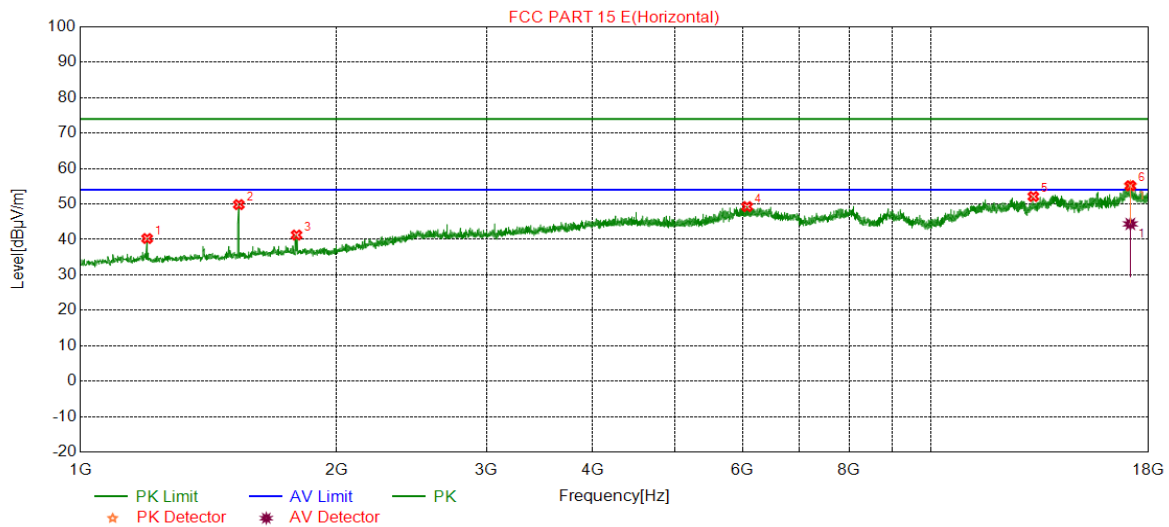


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1194.3657	45.25	-3.54	41.71	74.00	-32.29	peak
2	1535.4226	52.97	-2.72	50.25	74.00	-23.75	peak
3	1795.7993	48.29	-1.79	46.50	74.00	-27.50	peak
4	2396.3161	49.31	2.29	51.60	74.00	-22.40	peak
5	13872.7252	37.14	16.78	53.92	74.00	-20.08	peak
6	16957.1586	35.65	19.73	55.38	74.00	-18.62	peak
		24.17	19.73	43.90	54.00	-10.10	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=10 Hz.
 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
11A	5785	Horizontal	PASS

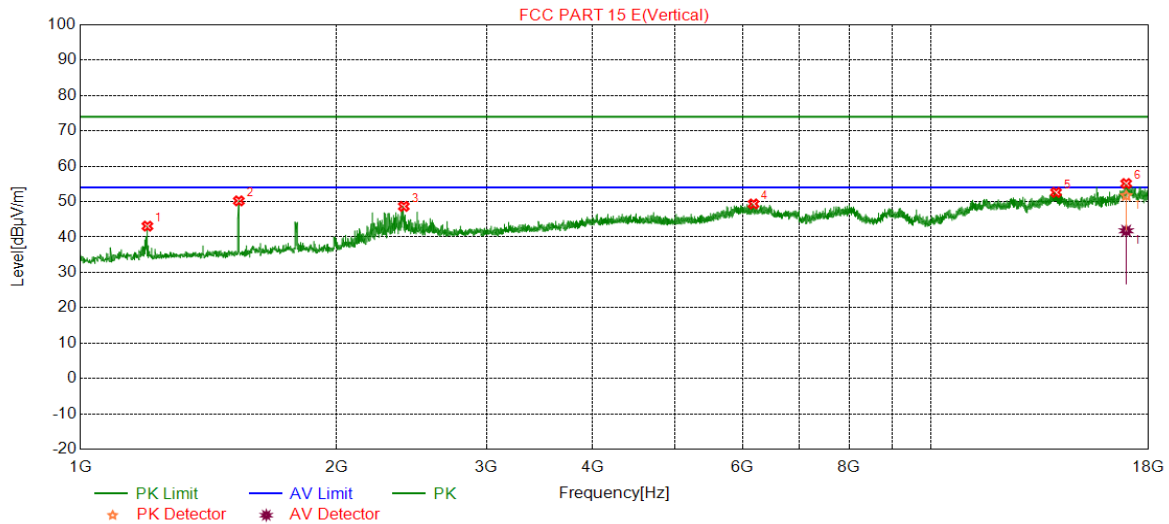


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.0330	43.81	-3.55	40.26	74.00	-33.74	peak
2	1535.4226	52.55	-2.72	49.83	74.00	-24.17	peak
3	1794.8825	43.03	-1.79	41.24	74.00	-32.76	peak
4	6074.5958	38.79	10.47	49.26	74.00	-24.74	peak
5	13178.7756	37.15	14.95	52.10	74.00	-21.90	peak
6	17131.6045	35.97	19.19	55.16	74.00	-18.84	peak
		25.19	19.19	44.38	54.00	-9.62	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=10 Hz.
 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
11A	5785	Vertical	PASS

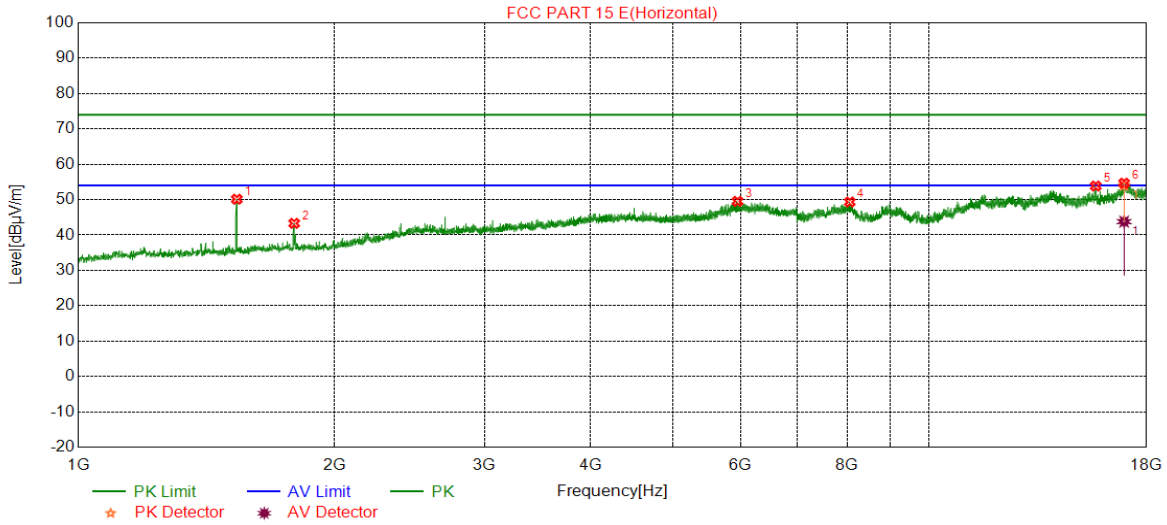


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.9498	46.62	-3.55	43.07	74.00	-30.93	peak
2	1535.4226	52.93	-2.72	50.21	74.00	-23.79	peak
3	2399.0665	46.34	2.31	48.65	74.00	-25.35	peak
4	6179.1132	38.93	10.42	49.35	74.00	-24.65	peak
5	14012.6653	34.97	17.63	52.60	74.00	-21.40	peak
6	16939.9057	35.56	19.55	55.11	74.00	-18.89	peak
		22.20	19.55	41.75	54.00	-12.25	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=10 Hz.
 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
11A	5825	Horizontal	PASS

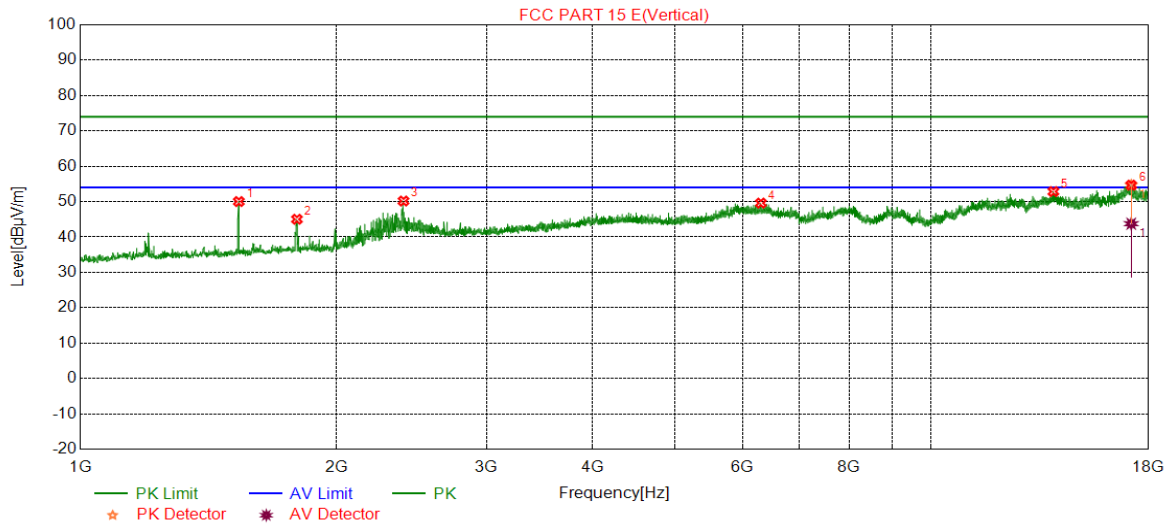


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.84	-2.72	50.12	74.00	-23.88	peak
2	1793.0488	45.10	-1.81	43.29	74.00	-30.71	peak
3	5949.9083	39.31	10.20	49.51	74.00	-24.49	peak
4	8062.3351	37.49	11.85	49.34	74.00	-24.66	peak
5	15686.1957	35.49	18.34	53.83	74.00	-20.17	peak
6	16936.0718	35.19	19.46	54.65	74.00	-19.35	peak
		24.32	19.46	43.78	54.00	-10.22	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=10 Hz.
 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
11A	5825	Vertical	PASS

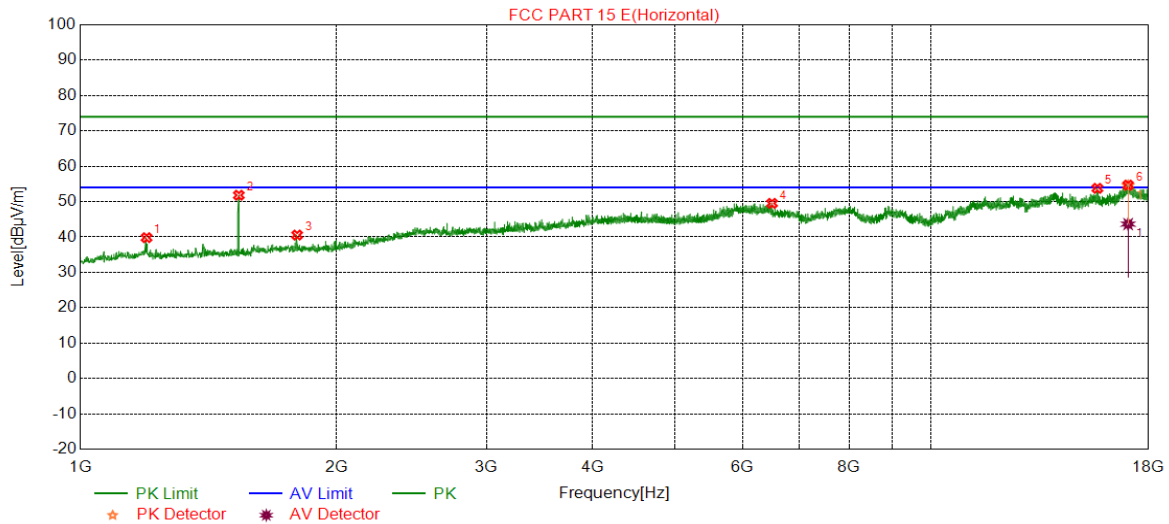


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	52.74	-2.72	50.02	74.00	-23.98	peak
2	1796.7161	46.80	-1.78	45.02	74.00	-28.98	peak
3	2397.2329	47.87	2.30	50.17	74.00	-23.83	peak
4	6304.7175	38.65	10.94	49.59	74.00	-24.41	peak
5	13912.9819	36.06	16.78	52.84	74.00	-21.16	peak
6	17171.8613	36.33	18.32	54.65	74.00	-19.35	peak
		25.43	18.32	43.75	54.00	-10.25	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=10 Hz.
 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
11AC20	5745	Horizontal	PASS

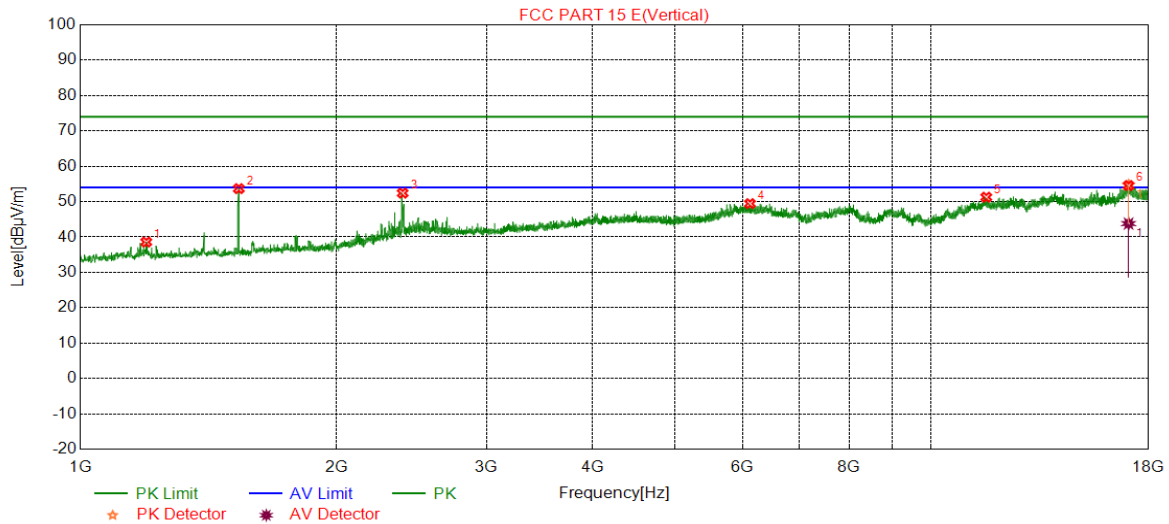


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1196.1994	43.35	-3.54	39.81	74.00	-34.19	peak
2	1535.4226	54.53	-2.72	51.81	74.00	-22.19	peak
3	1797.6329	42.32	-1.77	40.55	74.00	-33.45	peak
4	6497.2495	38.55	10.95	49.50	74.00	-24.50	peak
5	15668.9428	35.56	18.20	53.76	74.00	-20.24	peak
6	17028.0872	35.47	19.21	54.68	74.00	-19.32	peak
		24.44	19.21	43.65	54.00	-10.35	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=10 Hz.
 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
11AC 20	5745	Vertical	PASS

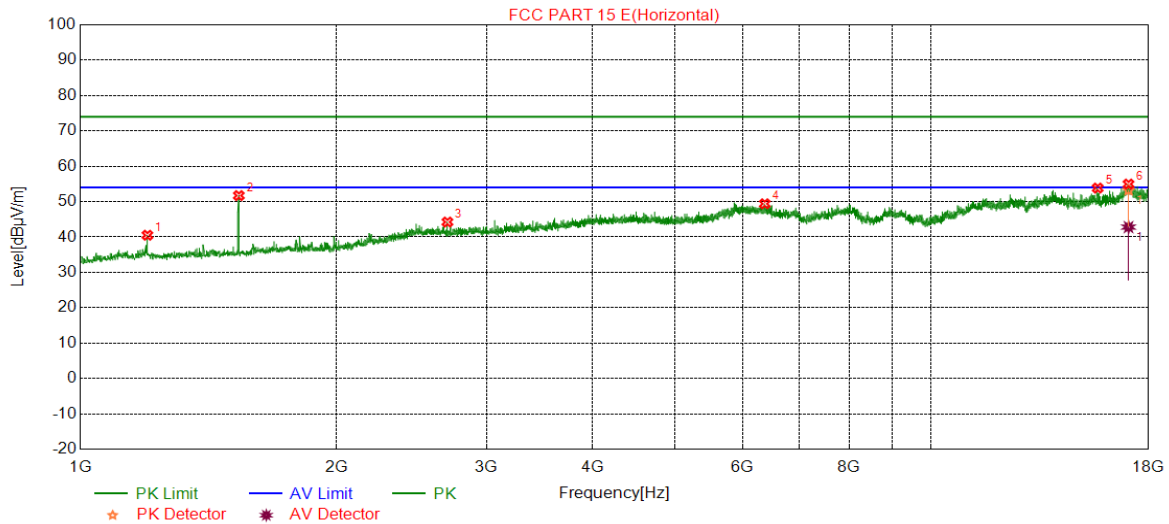


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1195.2825	42.11	-3.54	38.57	74.00	-35.43	peak
2	1535.4226	56.39	-2.72	53.67	74.00	-20.33	peak
3	2391.7320	50.15	2.25	52.40	74.00	-21.60	peak
4	6121.3536	38.91	10.53	49.44	74.00	-24.56	peak
5	11601.0946	35.99	15.26	51.25	74.00	-22.75	peak
6	17049.1740	35.17	19.38	54.55	74.00	-19.45	peak
		24.41	19.38	43.79	54.00	-10.21	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=10 Hz.
 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
11AC 20	5785	Horizontal	PASS

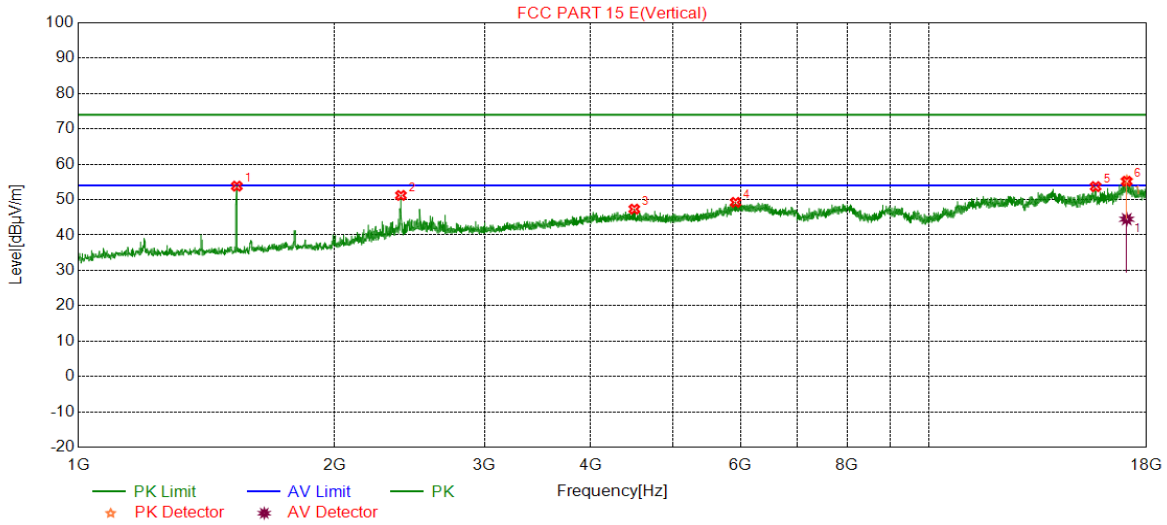


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.9498	44.05	-3.55	40.50	74.00	-33.50	peak
2	1535.4226	54.43	-2.72	51.71	74.00	-22.29	peak
3	2699.7833	40.86	3.37	44.23	74.00	-29.77	peak
4	6371.6453	38.79	10.60	49.39	74.00	-24.61	peak
5	15682.3617	35.18	18.65	53.83	74.00	-20.17	peak
6	17047.2570	35.45	19.51	54.96	74.00	-19.04	peak
		23.29	19.51	42.80	54.00	-11.20	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=10 Hz.
 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
11AC 20	5785	Vertical	PASS

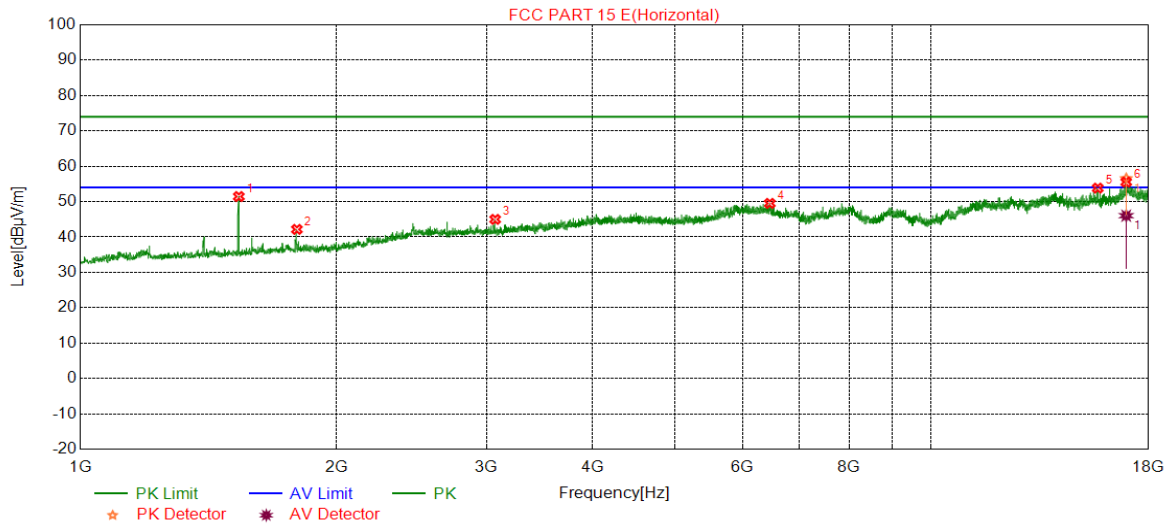


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	56.53	-2.72	53.81	74.00	-20.19	peak
2	2393.5656	48.92	2.27	51.19	74.00	-22.81	peak
3	4500.4167	39.56	7.76	47.32	74.00	-26.68	peak
4	5920.5701	38.70	10.52	49.22	74.00	-24.78	peak
5	15680.4447	34.86	18.81	53.67	74.00	-20.33	peak
6	17056.8420	35.27	19.92	55.19	74.00	-18.81	peak
		24.55	19.92	44.47	54.00	-9.53	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=10 Hz.
 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
11AC 20	5825	Horizontal	PASS

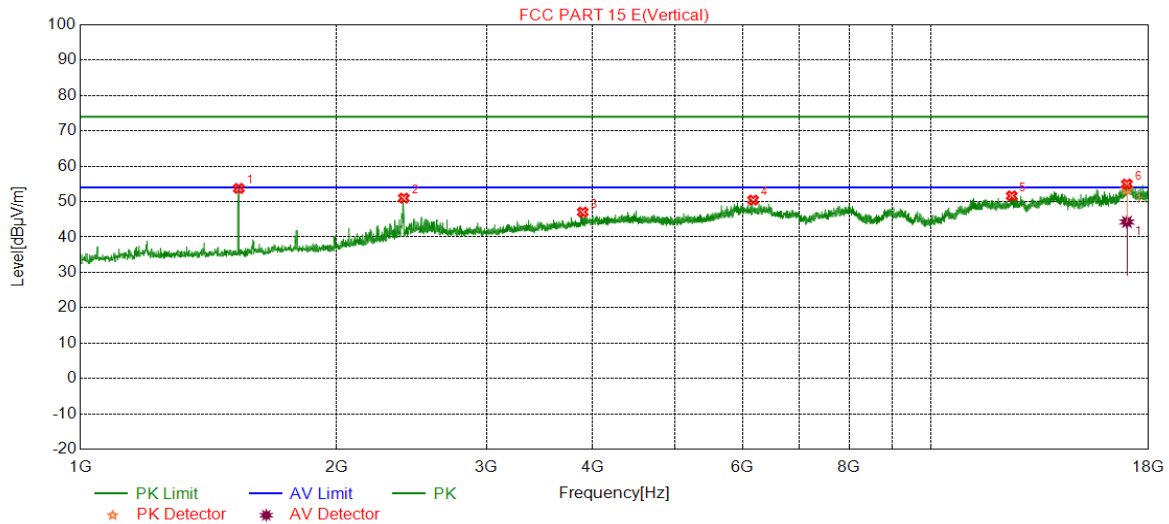


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	54.16	-2.72	51.44	74.00	-22.56	peak
2	1796.7161	43.93	-1.78	42.15	74.00	-31.85	peak
3	3072.0120	41.16	3.82	44.98	74.00	-29.02	peak
4	6458.7431	38.46	11.04	49.50	74.00	-24.50	peak
5	15684.2787	35.33	18.49	53.82	74.00	-20.18	peak
6	16939.9057	35.98	19.55	55.53	74.00	-18.47	peak
		26.47	19.55	46.02	54.00	-7.98	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=10 Hz.
 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
11AC 20	5825	Vertical	PASS

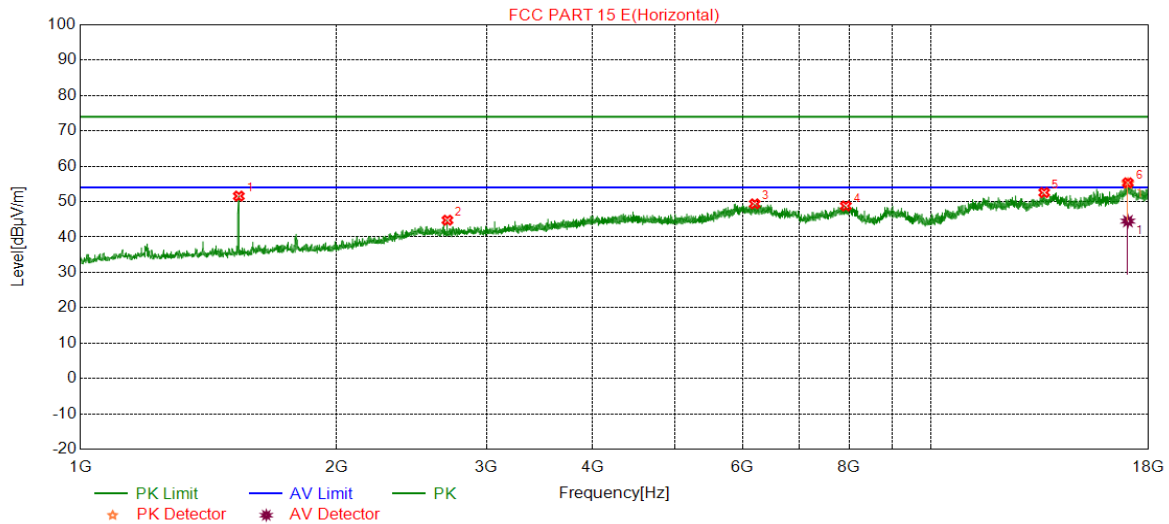


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	56.46	-2.72	53.74	74.00	-20.26	peak
2	2399.0665	48.68	2.31	50.99	74.00	-23.01	peak
3	3893.4822	40.50	6.54	47.04	74.00	-26.96	peak
4	6172.6954	40.06	10.37	50.43	74.00	-23.57	peak
5	12429.2334	36.06	15.56	51.62	74.00	-22.38	peak
6	16972.4945	34.61	20.37	54.98	74.00	-19.02	peak
		23.88	20.37	44.25	54.00	-9.75	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=10 Hz.
 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
11AC 40	5755	Horizontal	PASS

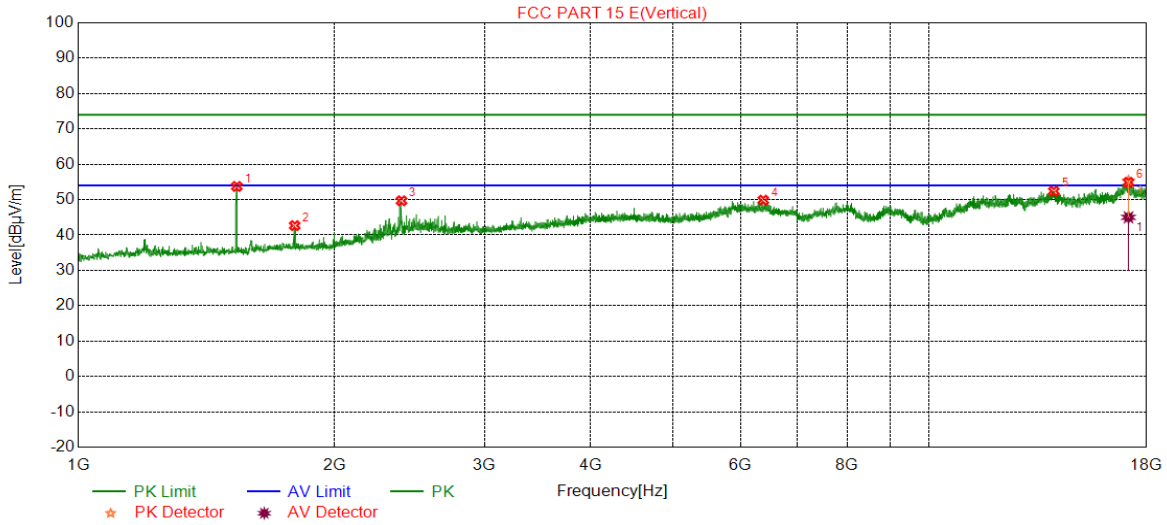


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	54.28	-2.72	51.56	74.00	-22.44	peak
2	2699.7833	41.38	3.37	44.75	74.00	-29.25	peak
3	6200.2000	39.00	10.37	49.37	74.00	-24.63	peak
4	7933.8969	36.62	12.16	48.78	74.00	-25.22	peak
5	13569.8411	36.43	16.12	52.55	74.00	-21.45	peak
6	17016.5852	35.81	19.51	55.32	74.00	-18.68	peak
		24.97	19.51	44.48	54.00	-9.52	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=10 Hz.
 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
11AC 40	5755	Vertical	PASS

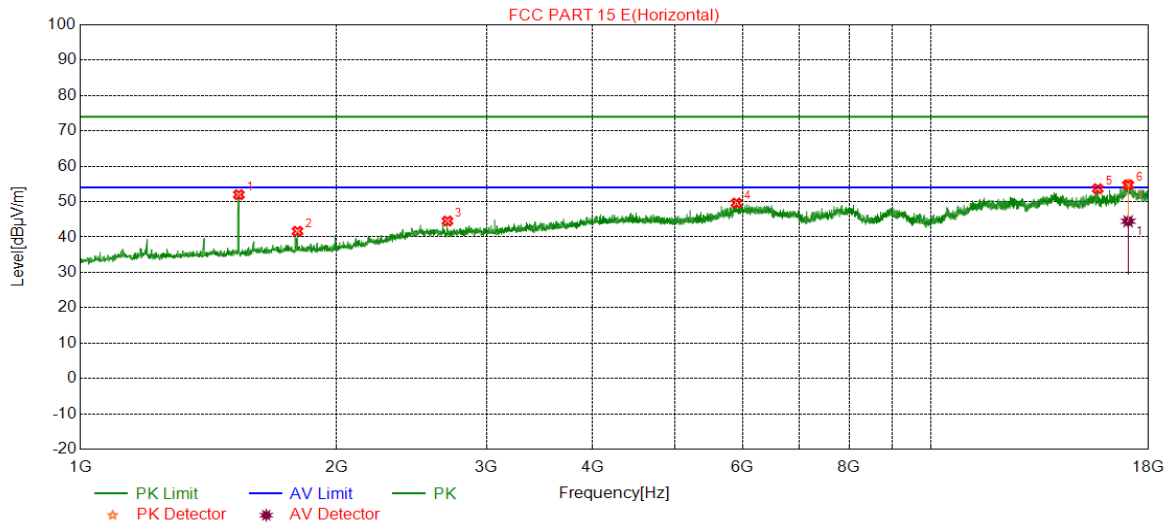


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	56.44	-2.72	53.72	74.00	-20.28	peak
2	1795.7993	44.44	-1.79	42.65	74.00	-31.35	peak
3	2397.2329	47.37	2.30	49.67	74.00	-24.33	peak
4	6379.8966	39.08	10.77	49.85	74.00	-24.15	peak
5	14003.0804	34.72	17.67	52.39	74.00	-21.61	peak
6	17137.3555	35.74	19.16	54.90	74.00	-19.10	peak
		25.83	19.16	44.99	54.00	-9.01	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=10 Hz.
 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
11AC 40	5795	Horizontal	PASS

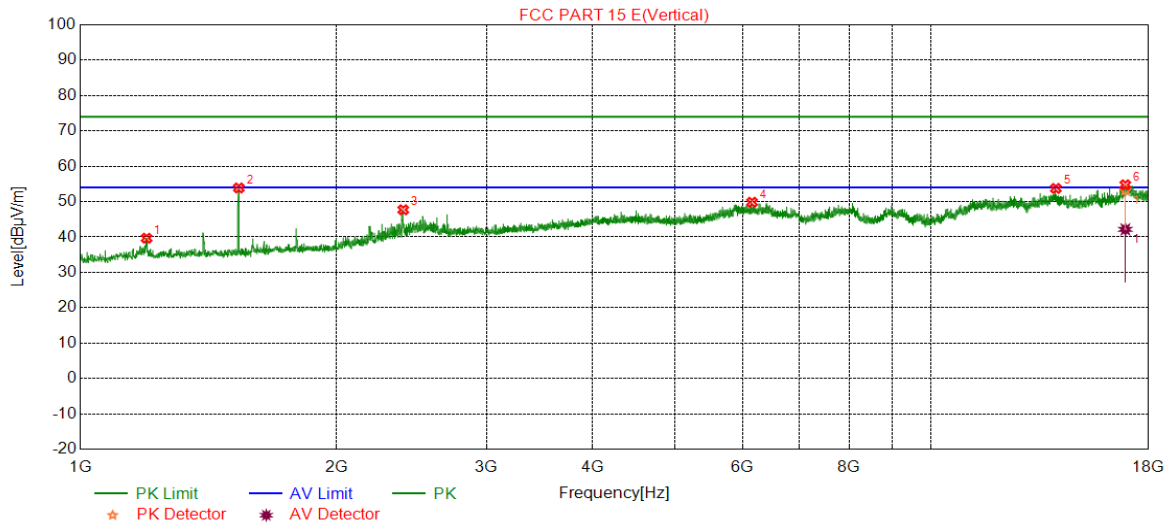


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	54.68	-2.72	51.96	74.00	-22.04	peak
2	1799.4666	43.37	-1.75	41.62	74.00	-32.38	peak
3	2699.7833	41.15	3.37	44.52	74.00	-29.48	peak
4	5902.2337	39.14	10.46	49.60	74.00	-24.40	peak
5	15682.3617	34.99	18.65	53.64	74.00	-20.36	peak
6	17030.0042	35.62	19.14	54.76	74.00	-19.24	peak
		25.30	19.14	44.44	54.00	-9.56	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=10 Hz.
 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
11AC 40	5795	Vertical	PASS

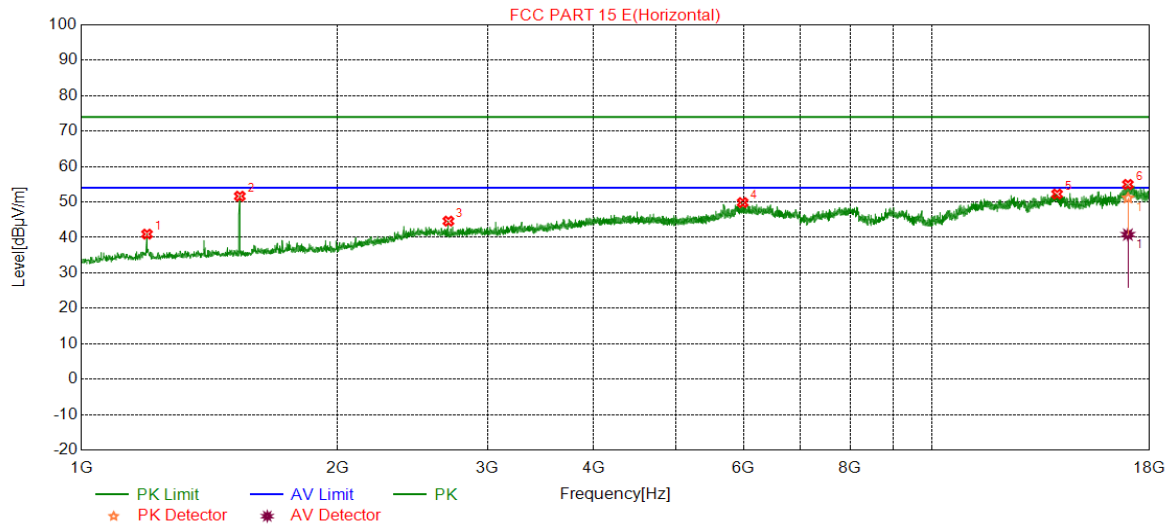


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1196.1994	43.20	-3.54	39.66	74.00	-34.34	peak
2	1535.4226	56.58	-2.72	53.86	74.00	-20.14	peak
3	2395.3992	45.41	2.28	47.69	74.00	-26.31	peak
4	6155.2759	39.58	10.25	49.83	74.00	-24.17	peak
5	14003.0804	36.06	17.67	53.73	74.00	-20.27	peak
6	16899.6490	35.90	18.85	54.75	74.00	-19.25	peak
		23.30	18.85	42.15	54.00	-11.85	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=10 Hz.
 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
11AC 80	5775	Horizontal	PASS

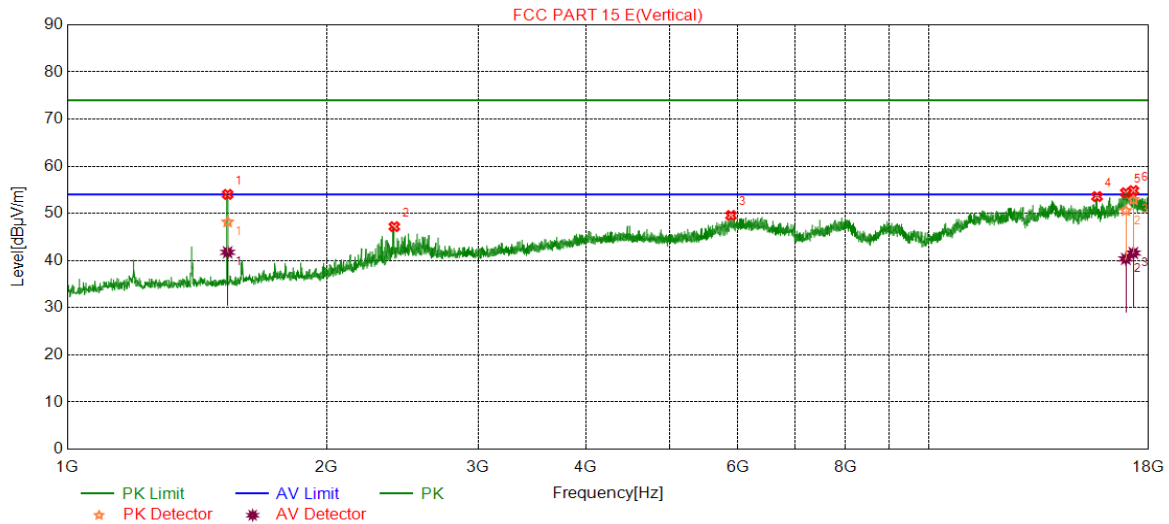


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1194.3657	44.47	-3.54	40.93	74.00	-33.07	peak
2	1535.4226	54.35	-2.72	51.63	74.00	-22.37	peak
3	2699.7833	41.23	3.37	44.60	74.00	-29.40	peak
4	5984.7475	39.56	10.28	49.84	74.00	-24.16	peak
5	14014.5823	34.67	17.57	52.24	74.00	-21.76	peak
6	16972.4945	34.59	20.37	54.96	74.00	-19.04	peak
		20.43	20.37	40.80	54.00	-13.20	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=10 Hz.
 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
11AC 80	5775	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.4226	56.76	-2.72	54.04	74.00	-19.96	peak
		44.47	-2.72	41.75	54.00	-12.25	average
2	2397.2329	44.89	2.30	47.19	74.00	-26.81	peak
3	5895.8160	39.12	10.44	49.56	74.00	-24.44	peak
4	15682.3617	34.92	18.65	53.57	74.00	-20.43	peak
5	16936.0718	34.92	19.46	54.38	74.00	-19.62	peak
		20.89	19.46	40.35	54.00	-13.65	average
6	17281.1296	36.41	18.42	54.83	74.00	-19.17	peak
		23.18	18.42	41.60	54.00	-12.40	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=10 Hz.
 6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



7.6. SPURIOUS EMISSIONS 18~26.5GHz

Test Result Table:

Test Mode	Test Antenna	Channel	Puw(dBm)	Verdict
11AC40	Antenna1+Antenna2	LCH	<Limit	PASS

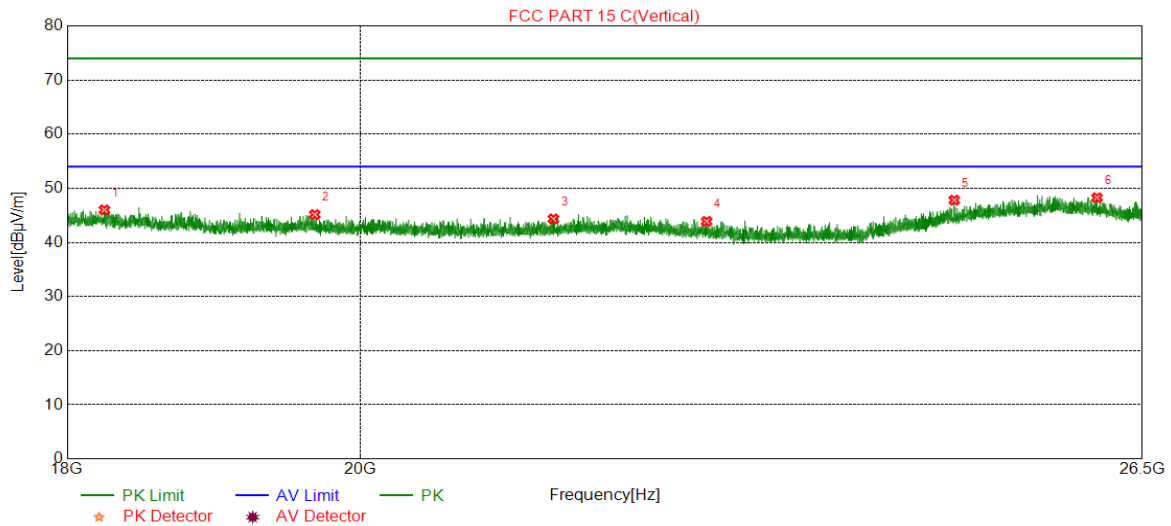
Remark:

- 1) For this product, it has two antennas, antenna1 and antenna2, the 802.11a is use the SISO technical, but the ant1 and ant2 can transmitter in the same time under those modes. The 802.11n and 802.11ac are both use the SISO and MIMO technical.
- 2) EUT support for SISO and CDD MIMO Transmission, only 802.11n/ac supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.
- 3) 11n HT20 mode set the same power level as 11ac HT20 mode, and 11n HT40 mode set the same power level as 11ac HT40 mode, besides the 11ac HT20 mode and 11ac HT40 mode were worse case, so only the 11ac HT20 mode and 11ac HT40 mode were tested in this report.
- 4) Pre-testing all test modes and channels, find the LCH of 802.11AC40 mode of UNII-III band which is the worst case, so only the data of this mode is included in the test report



SPURIOUS EMISSIONS 18GHz TO 26.5GHz UNII-III 802.11AC40 CDD MODE (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11AC40	5755	Horizontal	PASS

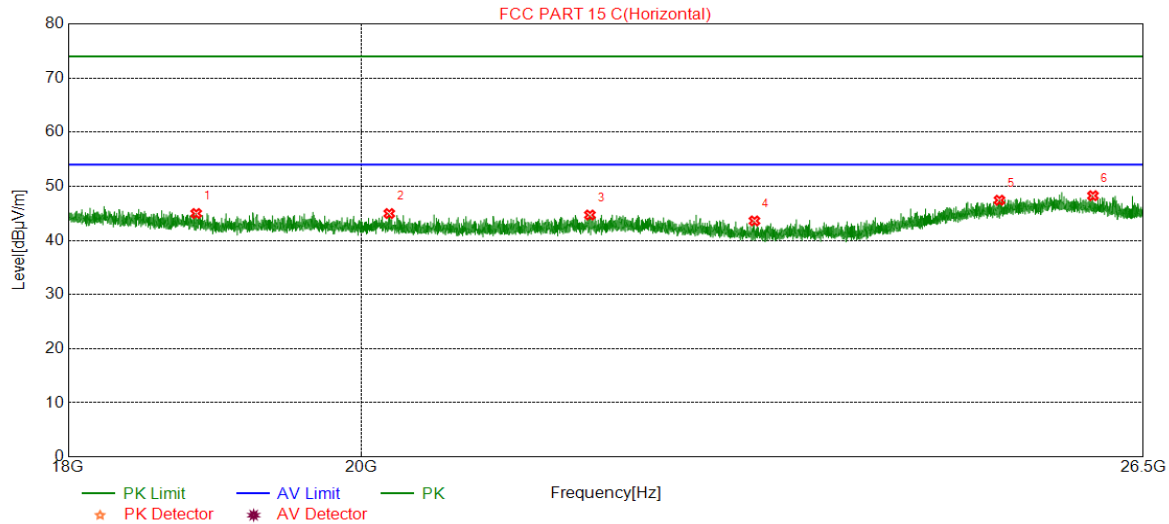


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18242.2742	49.31	-3.31	46.00	74.00	-28.00	peak
2	19677.2177	48.42	-3.29	45.13	74.00	-28.87	peak
3	21441.1441	47.66	-3.32	44.34	74.00	-29.66	peak
4	22656.7657	47.52	-3.65	43.87	74.00	-30.13	peak
5	24768.3768	49.17	-1.37	47.80	74.00	-26.20	peak
6	26074.1074	47.27	0.98	48.25	74.00	-25.75	peak

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. For duty cycle, please refer to clause 6.1.
 4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands, so all the test point were deemed to comply with the limits list in the standard.



Test Mode	Channel	Polarization	Verdict
11AC40	5755	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18848.3848	48.83	-3.86	44.97	74.00	-29.03	peak
2	20204.2704	48.12	-3.16	44.96	74.00	-29.04	peak
3	21717.4217	47.82	-3.13	44.69	74.00	-29.31	peak
4	23041.8542	47.62	-4.02	43.60	74.00	-30.40	peak
5	25165.3665	47.83	-0.41	47.42	74.00	-26.58	peak
6	26026.5027	47.25	1.00	48.25	74.00	-25.75	peak

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 2. Peak: Peak detector.
 3. For duty cycle, please refer to clause 6.1.
 4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands, so all the test point were deemed to comply with the limits list in the standard.



7.7. SPURIOUS EMISSIONS 26.5~40GHz

Test Result Table:

Test Mode	Test Antenna	Channel	P _{uw} (dBm)	Verdict
11AC40	Antenna1+Antenna2	LCH	<Limit	PASS

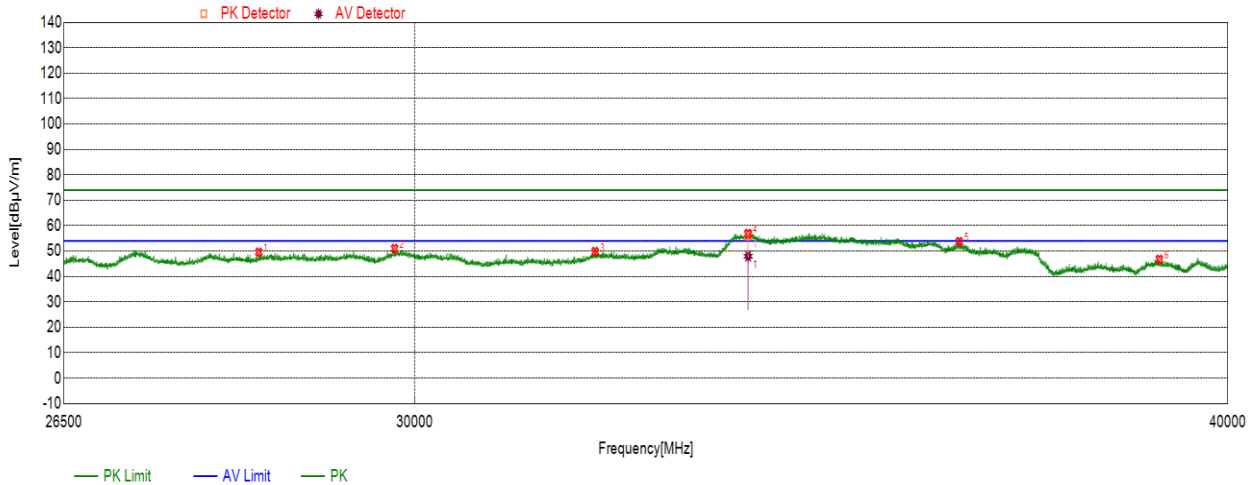
Remark:

- 1) For this product, it has two antennas, antenna1 and antenna2, the 802.11a is use the SISO technical, but the ant1 and ant2 can transmitter in the same time under those modes. The 802.11n and 802.11ac are both use the SISO and MIMO technical.
- 2) EUT support for SISO and CDD MIMO Transmission, only 802.11n/ac supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.
- 3) 11n HT20 mode set the same power level as 11ac HT20 mode, and 11n HT40 mode set the same power level as 11ac HT40 mode, besides the 11ac HT20 mode and 11ac HT40 mode were worse case, so only the 11ac HT20 mode and 11ac HT40 mode were tested in this report.
- 4) Pre-testing all test modes and channels, find the LCH of 802.11AC40 mode of UNII-III band which is the worst case, so only the data of this mode is included in the test report



SPURIOUS EMISSIONS 26.5GHZ TO 40GHZ UNII-III 802.11AC40 CDD MODE (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11AC40	5755	Horizontal	PASS



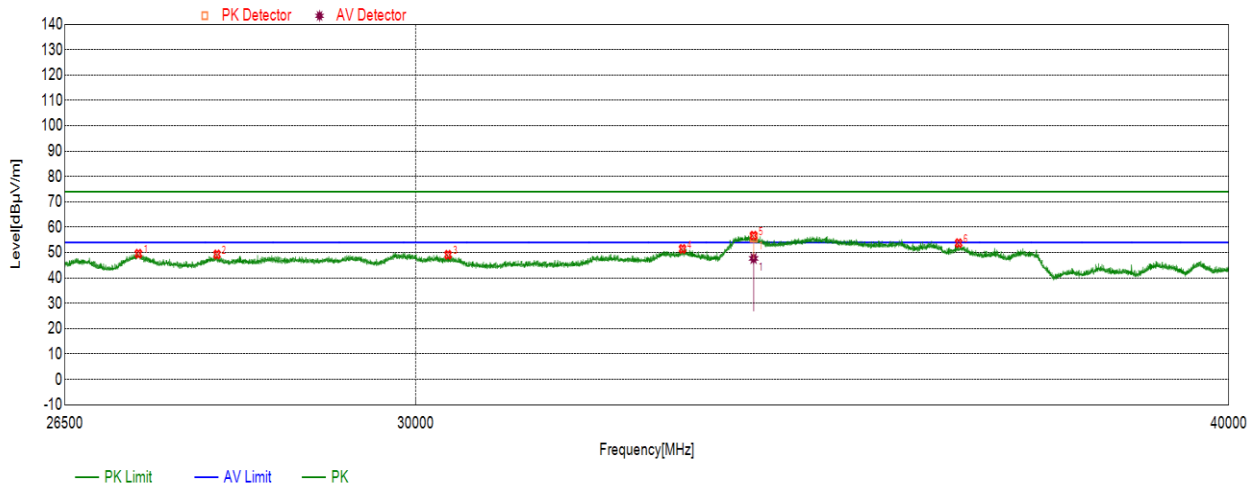
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
1	28391.5392	63.21	-13.69	49.52	74.00	-24.48	peak
2	29788.9289	63.65	-12.67	50.98	74.00	-23.02	peak
3	31978.8479	63.76	-13.94	49.82	74.00	-24.18	peak
4	33758.3258	62.39	-5.53	56.86	74.00	-17.14	peak
		53.49	-5.53	47.96	54.00	-6.04	Average
5	36374.8875	58.85	-5.12	53.73	74.00	-20.27	peak
6	39044.1044	55.15	-8.42	46.73	74.00	-27.27	peak

Note:

1. Peak: Peak detector.
2. For duty cycle, please refer to clause 6.1.
3. Owing to the highest peak level lower more than 15 dBm with the Highest limit(74 dBµV/m) of unwanted emission out of the restricted bands, so all the test point were deemed to comply with the limits list in the standard.



Test Mode	Channel	Polarization	Verdict
11AC40	5755	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	27198.0198	60.73	-11.17	49.56	74.00	-24.44	peak
2	27964.8965	63.25	-13.99	49.26	74.00	-24.74	peak
3	30346.5347	62.33	-13.19	49.14	74.00	-24.86	peak
4	32971.1971	63.17	-11.73	51.44	74.00	-22.56	peak
5	33810.9811	62.29	-5.62	56.67	74.00	-17.33	peak
		59.43	-11.73	47.70	54.00	-6.30	Average
6	36354.6355	58.84	-5.13	53.71	74.00	-20.29	peak

Note:

1. Peak: Peak detector.
2. For duty cycle, please refer to clause 6.1.
3. Owing to the highest peak level lower more than 15 dBm with the Highest limit(74 dBuV/m) of unwanted emission out of the restricted bands, so all the test point were deemed to comply with the limits list in the standard.



7.8. SPURIOUS EMISSIONS 30M ~ 1 GHz

Test Result Table:

Test Mode	Test Antenna	Channel	P _{uw} (dBm)	Verdict
11AC40	Antenna1+Antenna2	LCH	<Limit	PASS

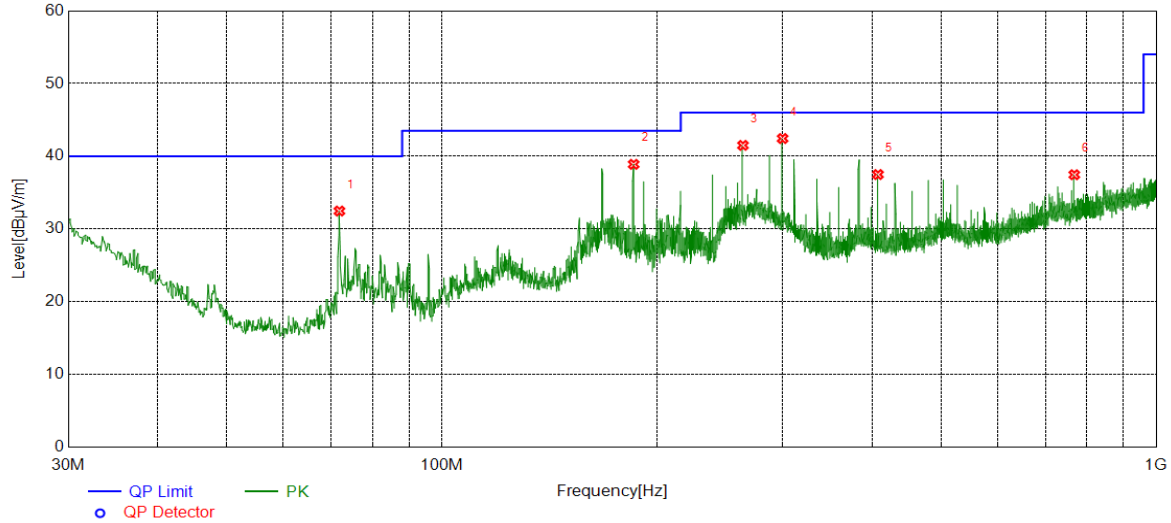
Remark:

- 1) For this product, it has two antennas, antenna1 and antenna2, the 802.11a is use the SISO technical, but the ant1 and ant2 can transmitter in the same time under those modes. The 802.11n and 802.11ac are both use the SISO and MIMO technical.
- 2) EUT support for SISO and CDD MIMO Transmission, only 802.11n/ac supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.
- 3) 11n HT20 mode set the same power level as 11ac HT20 mode, and 11n HT40 mode set the same power level as 11ac HT40 mode, besides the 11ac HT20 mode and 11ac HT40 mode were worse case, so only the 11ac HT20 mode and 11ac HT40 mode were tested in this report.
- 4) Pre-testing all test modes and channels, find the LCH of 802.11AC40 mode of UNII-III band which is the worst case, so only the data of this mode is included in the test report



SPURIOUS EMISSIONS 26.5GHz TO 40GHz UNII-III 802.11AC40 CDD MODE (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11AC40	5755	Horizontal	PASS

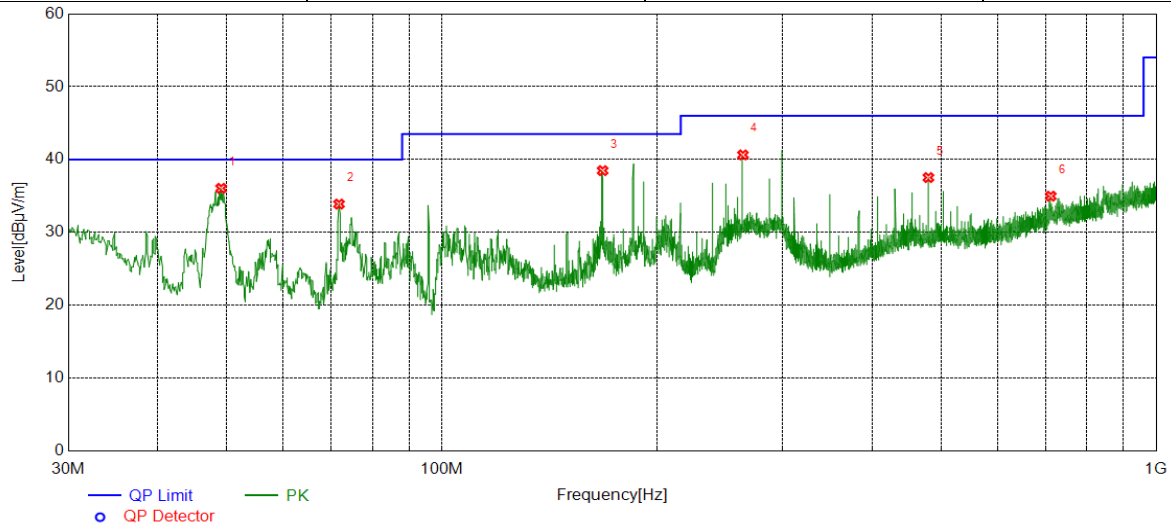


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	71.9082	17.80	14.67	32.47	40.00	-7.53	peak
2	185.6036	20.70	18.19	38.89	43.50	-4.61	peak
3	263.9874	22.15	19.35	41.50	46.00	-4.50	peak
4	299.9780	22.02	20.42	42.44	46.00	-3.56	peak
5	407.9498	14.37	23.12	37.49	46.00	-8.51	peak
6	767.9528	8.09	29.37	37.46	46.00	-8.54	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
11AC40	5755	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	49.1109	20.95	15.10	36.05	40.00	-3.95	peak
2	71.8112	19.22	14.67	33.89	40.00	-6.11	peak
3	167.9478	20.12	18.36	38.48	43.50	-5.02	peak
4	263.9874	21.29	19.35	40.64	46.00	-5.36	peak
5	479.9310	12.38	25.15	37.53	46.00	-8.47	peak
6	711.8812	6.31	28.67	34.98	46.00	-11.02	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.



7.9. SPURIOUS EMISSIONS BELOW 30M (WORST-CASE CONFIGURATION)

Test Result Table:

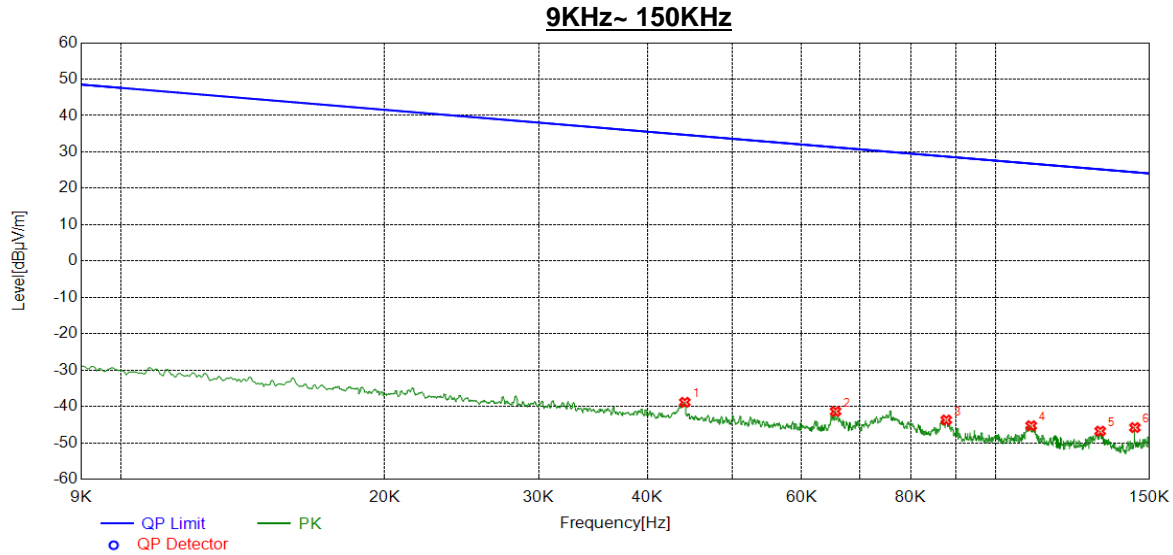
Test Mode	Test Antenna	Channel	P _{uw} (dBm)	Verdict
11AC40	Antenna1+Antenna2	LCH	<Limit	PASS

Remark:

- 1) For this product, it has two antennas, antenna1 and antenna2, the 802.11a is use the SISO technical, but the ant1 and ant2 can transmitter in the same time under those modes. The 802.11n and 802.11ac are both use the SISO and MIMO technical.
- 2) EUT support for SISO and CDD MIMO Transmission, only 802.11n/ac supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.
- 3) 11n HT20 mode set the same power level as 11ac HT20 mode, and 11n HT40 mode set the same power level as 11ac HT40 mode, besides the 11ac HT20 mode and 11ac HT40 mode were worse case, so only the 11ac HT20 mode and 11ac HT40 mode were tested in this report.
- 4) Pre-testing all test modes and channels, find the LCH of 802.11AC40 mode of UNII-III band which is the worst case, so only the data of this mode is included in the test report

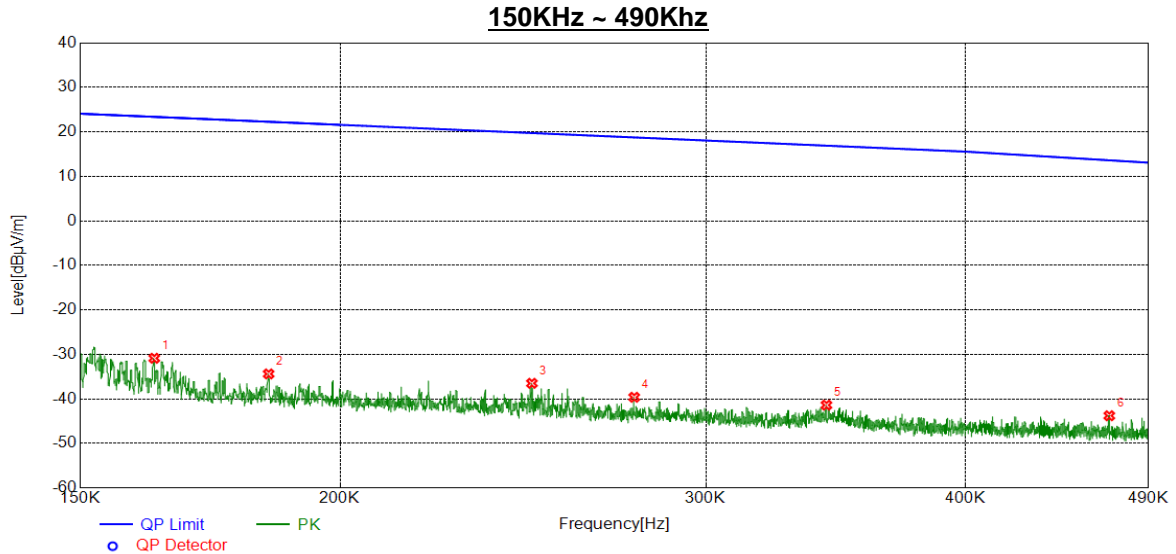


SPURIOUS EMISSIONS 9KHz TO 30MHz UNII-III 802.11AC40 CDD MODE (WORST-CASE CONFIGURATION-FACE ON)



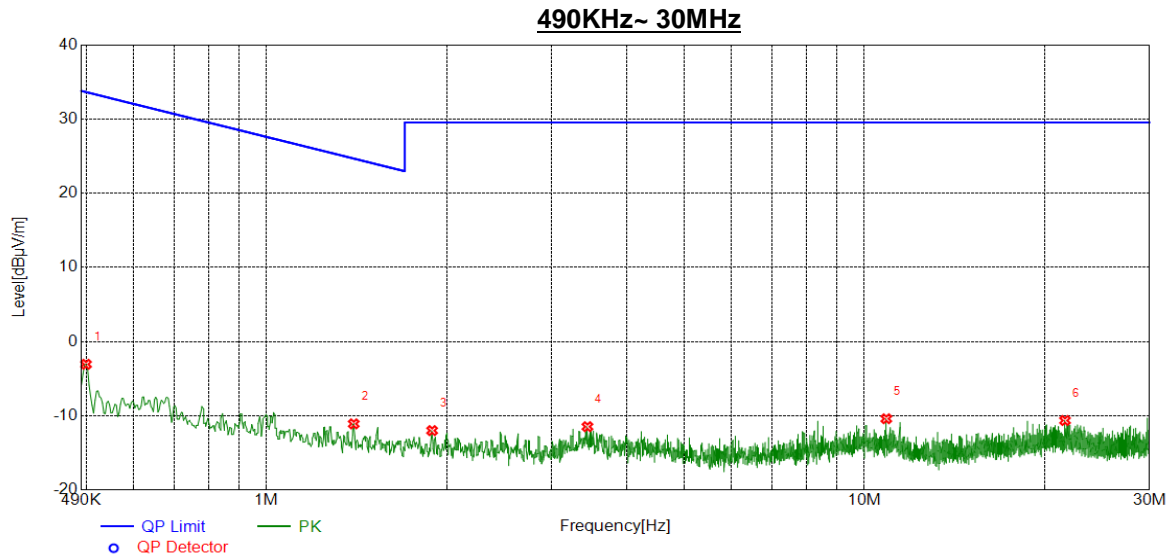
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0441	22.27	-61.12	-38.85	34.71	73.56	peak
2	0.0656	20.03	-61.40	-41.37	31.27	72.64	peak
3	0.0878	17.47	-61.19	-43.72	28.73	72.45	peak
4	0.1098	15.67	-60.97	-45.30	26.80	72.10	peak
5	0.1317	14.45	-61.23	-46.78	25.22	72.00	peak
6	0.1443	15.58	-61.38	-45.80	24.42	70.22	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



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1628	30.53	-61.39	-30.86	23.37	54.23	peak
2	0.1848	26.89	-61.27	-34.38	22.27	56.65	peak
3	0.2474	24.47	-60.96	-36.49	19.74	56.23	peak
4	0.2771	21.29	-60.92	-39.63	18.75	58.38	peak
5	0.3429	19.47	-60.86	-41.39	16.90	58.29	peak
6	0.4691	16.98	-60.75	-43.77	13.61	57.38	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



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.4989	17.67	-20.73	-3.06	33.64	36.70	peak
2	1.3990	9.34	-20.43	-11.09	24.69	35.78	peak
3	1.8919	8.35	-20.35	-12.00	29.54	41.54	peak
4	3.4413	8.93	-20.40	-11.47	29.54	41.01	peak
5	10.8815	8.65	-19.05	-10.40	29.54	39.94	peak
6	21.6567	7.04	-17.68	-10.64	29.54	40.18	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. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation

TEST SETUP AND PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

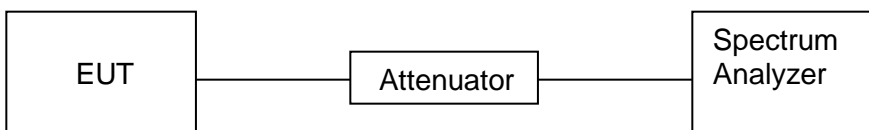
Center Frequency	The center frequency of the channel under test
Detector	PEAK
RBW	10kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

The extreme temperature is -10°C ~ 45°C .

TEST SETUP





TEST RESULTS

1) For UNII-I

Frequency Error vs. Voltage									
802.11ac80:5210MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5210.0121	2.32	5210.0117	2.25	5210.0077	1.48	5210.0137	2.63
TN	VN	5210.0105	2.02	5210.0203	3.90	5210.0119	2.28	5210.0208	3.99
TN	VH	5210.0096	1.84	5210.0146	2.80	5210.0086	1.65	5210.0109	2.09

Frequency Error vs. Temperature									
802.11ac80:5210MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
45	VN	5210.0187	3.59	5210.0140	2.69	5210.0179	3.44	5210.0138	2.65
30	VN	5210.0106	2.03	5210.0127	2.44	5210.0168	3.22	5210.0194	3.72
20	VN	5210.0203	3.90	5210.0168	3.22	5210.0154	2.96	5210.0129	2.48
10	VN	5210.0095	1.82	5210.0145	2.78	5210.0192	3.69	5210.0108	2.08
0	VN	5210.0123	2.36	5210.0121	2.32	5210.0209	4.01	5210.0099	1.90
-10	VN	5210.0107	2.05	5210.0196	3.76	5210.0211	4.05	5210.0201	3.86

Note : All the modulation and channels had been tested, but only the worst data recorded in the report.



2) For UNII-III

Frequency Error vs. Voltage									
802.11ac80:5775MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5775.0246	4.26	5775.0156	2.70	5775.0100	1.73	5775.0231	4.00
TN	VN	5775.0203	3.52	5775.0178	3.08	5775.0202	3.50	5775.0228	3.95
TN	VH	5775.0255	4.42	5775.0166	2.87	5775.0241	4.17	5775.0223	3.86

Frequency Error vs. Temperature									
802.11ac80:5775MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
45	VN	5775.0104	1.800	5775.0114	1.97	5775.0179	3.10	5775.0224	3.88
30	VN	5775.0201	3.48	5775.0162	2.81	5775.0197	3.41	5775.0264	4.57
20	VN	5775.0236	4.09	5775.0135	2.34	5775.0165	2.86	5775.0209	3.62
10	VN	5775.0251	4.35	5775.0124	2.15	5775.0134	2.32	5775.0201	3.48
0	VN	5775.0107	1.85	5775.0133	2.30	5775.0205	3.55	5775.0194	3.36
-10	VN	5775.0111	1.92	5775.0141	2.44	5775.0213	3.69	5775.0147	2.55

Note : All the modulation and channels had been tested, but only the worst data recorded in the report.

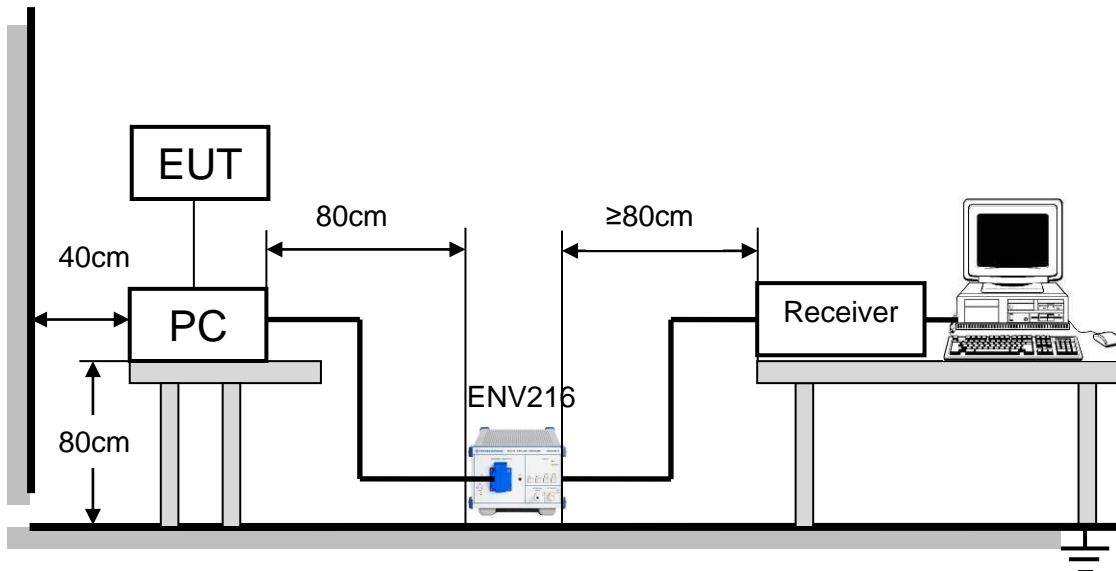
9. AC POWER LINE CONDUCTED EMISSIONS

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 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 7 and 13 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 RESULT(WORST-CASE CONFIGURATION)

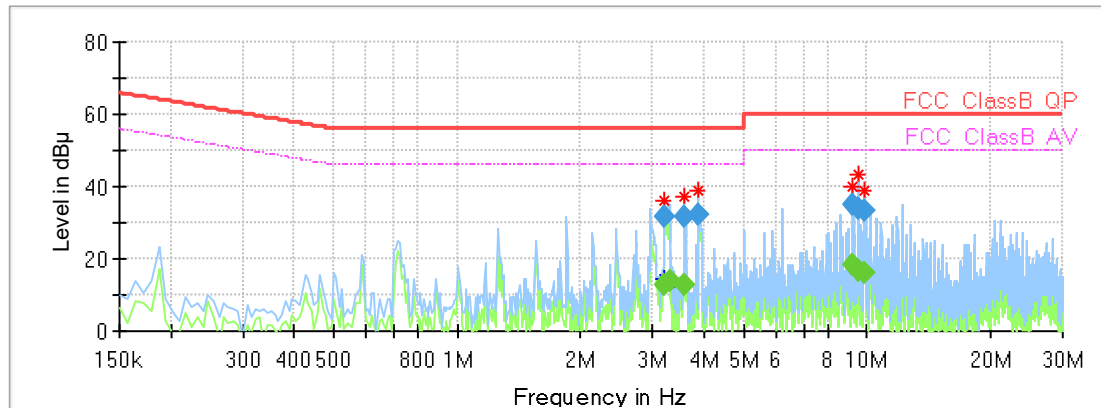
Test Mode	Test Antenna	Channel	Puw(dBm)	Verdict
11AC40	Antenna1+Antenna2	LCH	<Limit	PASS

Remark:

- 1) For this product, it has two antennas, antenna1 and antenna2, the 802.11a is use the SISO technical, but the ant1 and ant2 can transmitter in the same time under those modes. The 802.11n and 802.11ac are both use the SISO and MIMO technical.
- 2) EUT support for SISO and CDD MIMO Transmission, only 802.11n/ac supports CDD MIMO Mode, SISO mode sets the same power level as MIMO mode, so MIMO mode is the worst case.
- 3) 11n HT20 mode set the same power level as 11ac HT20 mode, and 11n HT40 mode set the same power level as 11ac HT40 mode, besides the 11ac HT20 mode and 11ac HT40 mode were worse case, so only the 11ac HT20 mode and 11ac HT40 mode were tested in this report.
- 4) Pre-testing all test modes and channels, find the LCH of 802.11AC40 mode of UNII-III band which is the worst case, so only the data of this mode is included in the test report



LINE L RESULTS (LOW CHANNEL)

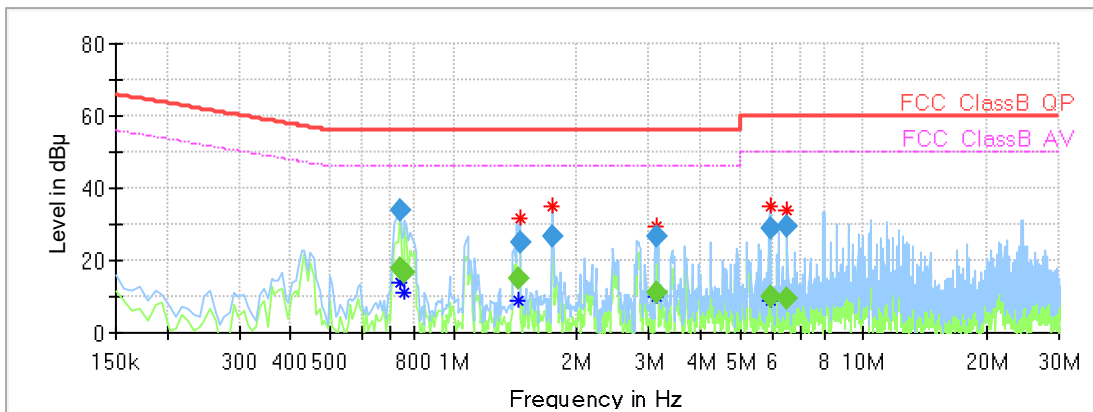


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
3.209625	---	12.86	46.00	33.14	1000.0	9.000	L1	OFF	9.7
3.209625	31.45	---	56.00	24.55	1000.0	9.000	L1	OFF	9.7
3.291713	---	14.06	46.00	31.94	1000.0	9.000	L1	OFF	9.7
3.575288	31.79	---	56.00	24.21	1000.0	9.000	L1	OFF	9.7
3.575288	---	12.86	46.00	33.14	1000.0	9.000	L1	OFF	9.7
3.873788	32.44	---	56.00	23.56	1000.0	9.000	L1	OFF	9.7
9.224400	35.10	---	60.00	24.90	1000.0	9.000	L1	OFF	9.9
9.231863	---	18.24	50.00	31.76	1000.0	9.000	L1	OFF	9.9
9.500513	33.85	---	60.00	26.15	1000.0	9.000	L1	OFF	9.9
9.500513	---	16.69	50.00	33.31	1000.0	9.000	L1	OFF	9.9
9.836325	33.38	---	60.00	26.62	1000.0	9.000	L1	OFF	10.0
9.858713	---	16.19	50.00	33.81	1000.0	9.000	L1	OFF	10.0

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.

LINE N RESULTS (LOW CHANNEL)



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.739538	---	17.61	46.00	28.39	1000.0	9.000	N	OFF	9.6
0.739538	33.66	---	56.00	22.34	1000.0	9.000	N	OFF	9.6
0.761925	---	16.66	46.00	29.34	1000.0	9.000	N	OFF	9.6
1.433550	---	15.08	46.00	30.92	1000.0	9.000	N	OFF	9.6
1.448475	25.05	---	56.00	30.95	1000.0	9.000	N	OFF	9.6
1.739513	26.68	---	56.00	29.32	1000.0	9.000	N	OFF	9.6
3.120075	26.41	---	56.00	29.59	1000.0	9.000	N	OFF	9.7
3.120075	---	10.97	46.00	35.03	1000.0	9.000	N	OFF	9.7
5.911050	28.68	---	60.00	31.32	1000.0	9.000	N	OFF	9.8
5.911050	---	10.28	50.00	39.72	1000.0	9.000	N	OFF	9.8
6.522975	---	9.50	50.00	40.50	1000.0	9.000	N	OFF	9.8
6.522975	29.26	---	60.00	30.74	1000.0	9.000	N	OFF	9.8

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.



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 CONNECTOR

EUT has a EUT with two PCB Antennas.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi, but the 1) For Band I, Directional gain = $10\log [(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}] = 6.28 > 6\text{dBi}$, and 2) For Band III, Directional gain = $10\log [(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}] = 7.83 > 6\text{dBi}$ where the N_{ANT} is the numbers of antenna. So the power and power density limit shall be reduced amount in dB that the directional gain of the antenna exceeds 6dBi.

END OF REPORT