Appendix 1: For Antenna RD542109NB87-1

The worst case of Radiated Emission

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	5955	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1198	39.18	-13.94	68.2	20.70	Peak	Horizontal
2380.5	43.04	-8.56	68.2	23.68	Peak	Horizontal
7420	51.9	4.16	68.2	15.37	Peak	Horizontal
12405.25	55.55	8.37	68.2	9.39	Peak	Horizontal
1247.5	41.88	-13.76	68.2	19.84	Peak	Vertical
3051.5	44.31	-6.05	68.2	20.54	Peak	Vertical
9432.5	52.84	6.85	68.2	22.59	Peak	Vertical
12301.75	55.42	8.58	68.2	7.62	Peak	Vertical

Note: The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6175	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1220	39.45	-13.86	68.2	28.75	Peak	Horizontal
2787.5	43.49	-6.82	68.2	24.71	Peak	Horizontal
7414.25	51.31	4.2	68.2	16.89	Peak	Horizontal
10381.25	54.01	8.94	68.2	14.19	Peak	Horizontal
1308	39.39	-13.63	68.2	28.81	Peak	Vertical
2556.5	43.32	-7.5	68.2	24.88	Peak	Vertical
10088	54.19	8.79	68.2	14.01	Peak	Vertical
12232.75	56	8.17	68.2	12.2	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6415	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1203.5	39.17	-13.92	68.2	29.03	Peak	Horizontal
2864.5	44.4	-6.78	68.2	23.8	Peak	Horizontal
5735.5	48.65	1.48	68.2	19.55	Peak	Horizontal
12094.75	55.09	7.5	68.2	13.11	Peak	Horizontal
1115.5	41.86	-14.16	68.2	26.34	Peak	Vertical
3178	44.08	-5.78	68.2	24.12	Peak	Vertical
6563.25	51.18	2.77	68.2	17.02	Peak	Vertical
12301.75	55.27	8.58	68.2	12.93	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6435	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1203.5	38.54	-13.92	68.2	29.66	Peak	Horizontal
2864.5	44.23	-6.78	68.2	23.97	Peak	Horizontal
5735.5	45.98	1.48	68.2	22.22	Peak	Horizontal
12094.75	53.16	7.5	68.2	15.04	Peak	Horizontal
1115.5	42.96	-14.16	68.2	25.24	Peak	Vertical
3178	45.87	-5.78	68.2	22.33	Peak	Vertical
6563.25	50.39	2.77	68.2	17.81	Peak	Vertical
12301.75	56.25	8.58	68.2	11.95	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6475	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1225.5	38.78	-13.84	68.2	29.42	Peak	Horizontal
2677.5	43.92	-7.08	68.2	24.28	Peak	Horizontal
7897.25	51.73	3.81	68.2	16.47	Peak	Horizontal
10082.25	54.13	8.77	68.2	14.07	Peak	Horizontal
1121	40.51	-14.15	68.2	27.69	Peak	Vertical
2501.5	43.98	-7.88	68.2	24.22	Peak	Vertical
8570	52.51	4.72	68.2	15.69	Peak	Vertical
10553.75	54.86	8.93	68.2	13.34	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6515	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1055	38.52	-14.29	68.2	29.68	Peak	Horizontal
2743.5	43.6	-7	68.2	24.6	Peak	Horizontal
10099.5	53.74	8.82	68.2	14.46	Peak	Horizontal
12273	54.61	8.34	68.2	13.59	Peak	Horizontal
1115.5	39.91	-14.16	68.2	28.29	Peak	Vertical
2639	43.79	-7.19	68.2	24.41	Peak	Vertical
9398	53.95	7.11	68.2	14.25	Peak	Vertical
11709.5	54.97	8.58	68.2	13.23	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6535	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1132	39.09	-14.13	68.2	29.11	Peak	Horizontal
2595	43.44	-7.48	68.2	24.76	Peak	Horizontal
10283.5	54.73	8.6	68.2	13.47	Peak	Horizontal
12181	55.22	8.09	68.2	12.98	Peak	Horizontal
1126.5	39.07	-14.14	68.2	29.13	Peak	Vertical
2287	43.24	-8.97	68.2	24.96	Peak	Vertical
10093.75	54.04	8.8	68.2	14.16	Peak	Vertical
12549	55.99	7.61	68.2	12.21	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6695	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1385	38.74	-13.55	68.2	29.46	Peak	Horizontal
3073.5	44.15	-6.02	68.2	24.05	Peak	Horizontal
10703.25	54.82	9.32	68.2	13.38	Peak	Horizontal
12140.75	54.7	7.67	68.2	13.5	Peak	Horizontal
1115.5	39.66	-14.16	68.2	28.54	Peak	Vertical
3178	43.33	-5.78	68.2	24.87	Peak	Vertical
10668.75	54.34	9.1	68.2	13.86	Peak	Vertical
11813	55.08	8.31	68.2	13.12	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6855	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1594	39.47	-12.85	68.2	28.73	Peak	Horizontal
2567.5	43.96	-7.49	68.2	24.24	Peak	Horizontal
9501.5	53.32	7.29	68.2	14.88	Peak	Horizontal
11703.75	55.7	8.68	68.2	12.5	Peak	Horizontal
1500.5	41.43	-13.21	68.2	26.77	Peak	Vertical
2683	43.27	-7.08	68.2	24.93	Peak	Vertical
10053.5	54.59	8.69	68.2	13.61	Peak	Vertical
11905	54.85	8.53	68.2	13.35	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6895	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1110	39.29	-14.17	68.2	28.91	Peak	Horizontal
2683	43.59	-7.08	68.2	24.61	Peak	Horizontal
10536.5	55.31	9.04	68.2	12.89	Peak	Horizontal
12284.5	55.79	8.46	68.2	12.41	Peak	Horizontal
1027.5	40.25	-14.34	68.2	27.95	Peak	Vertical
2584	44.04	-7.49	68.2	24.16	Peak	Vertical
10088	53.52	8.79	68.2	14.68	Peak	Vertical
12635.25	55.19	7.71	68.2	13.01	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6995	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1198	38.08	-13.94	68.2	30.12	Peak	Horizontal
2710.5	43.88	-7.05	68.2	24.32	Peak	Horizontal
10111	54.73	8.63	68.2	13.47	Peak	Horizontal
11301.25	55.25	8.76	68.2	12.95	Peak	Horizontal
1121	39.65	-14.15	68.2	28.55	Peak	Vertical
2089	41.65	-10.4	68.2	26.55	Peak	Vertical
9277.25	52.95	6.16	68.2	15.25	Peak	Vertical
12290.25	54.74	8.52	68.2	13.46	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	7115	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1176	38.39	-14.01	68.2	29.81	Peak	Horizontal
2688.5	43.77	-7.07	68.2	24.43	Peak	Horizontal
9438.25	53.84	6.8	68.2	14.36	Peak	Horizontal
11709.5	55.4	8.58	68.2	12.8	Peak	Horizontal
1115.5	39.72	-14.16	68.2	28.48	Peak	Vertical
3090	43.67	-6.01	68.2	24.53	Peak	Vertical
10070.75	54.04	8.74	68.2	14.16	Peak	Vertical
11353	55.01	8.38	68.2	13.19	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

The worst case of Band Edge

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	5955	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Result
5922.8	56.85	39.36	68.2	11.35	160	118	Pk	Horizontal	Pass
5923.56	57.32	39.36	68.2	10.88	160	92	Pk	Vertical	Pass

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	7115	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Result
7125.43	73.95	41.69	88.2	14.25	160	63	Pk	Horizontal	Pass
7125.43	53.24	41.69	68.2	14.96	160	63	Pk	Horizontal	Pass
7131.76	53.04	41.7	68.2	15.16	160	228	Pk	Horizontal	Pass
7125.67	71.21	41.69	88.2	16.99	160	214	Pk	Vertical	Pass
7125.67	50.39	41.69	68.2	17.81	160	214	AV	Vertical	Pass
7139.86	53.58	41.71	68.2	14.62	160	318	Pk	Vertical	Pass

Note: The frequency 7115MHz band edge is use by C63.10-2013 12.7.4.4.3 Integration method to verify.
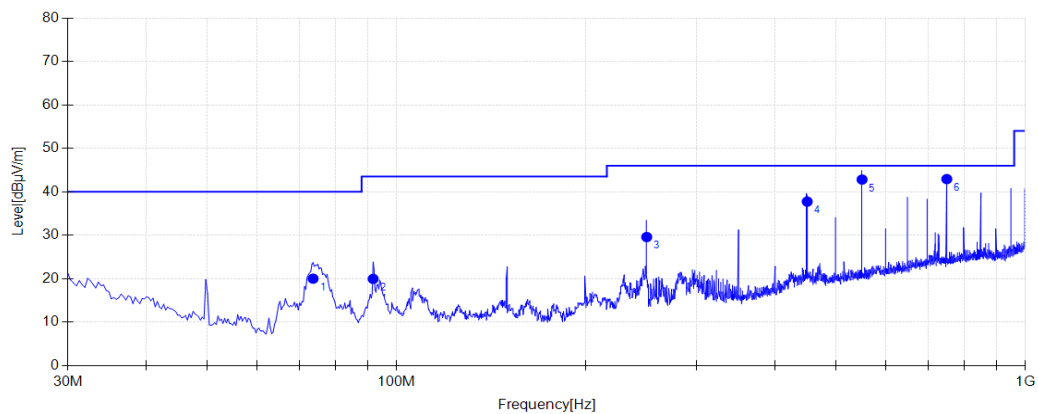
The worst case of Radiated Emission below 1GHz:

30MHz – 1GHz Test Data

For Band Frequency 5925-6425MHz:

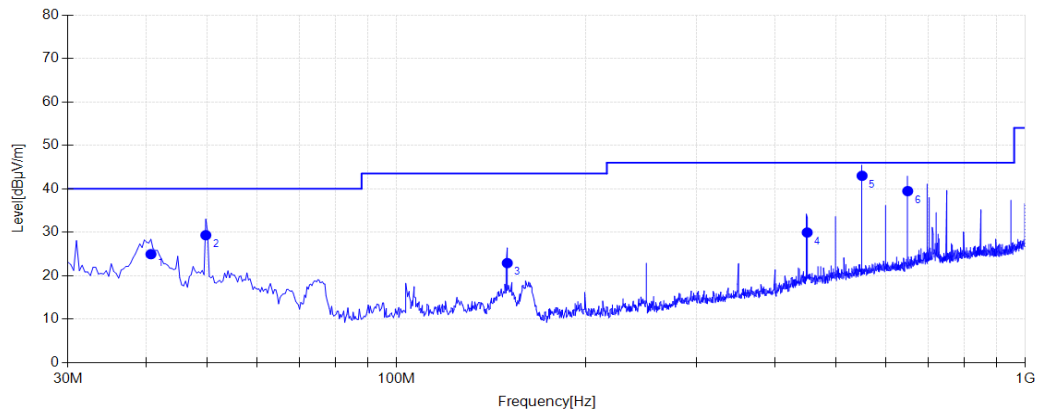| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 5955
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	73.6646	8.88	20.02	40.00	19.98	200	135	Horizonta
2	91.7773	10.18	19.97	43.50	23.53	100	86	Horizonta
3	249.940	11.58	29.60	46.00	16.40	100	51	Horizonta
4	449.826	17.60	37.76	46.00	8.24	100	10	Horizonta
5	549.981	19.65	42.83	46.00	3.17	179	334	Horizonta
6	749.980	22.72	42.94	46.00	3.06	100	121	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

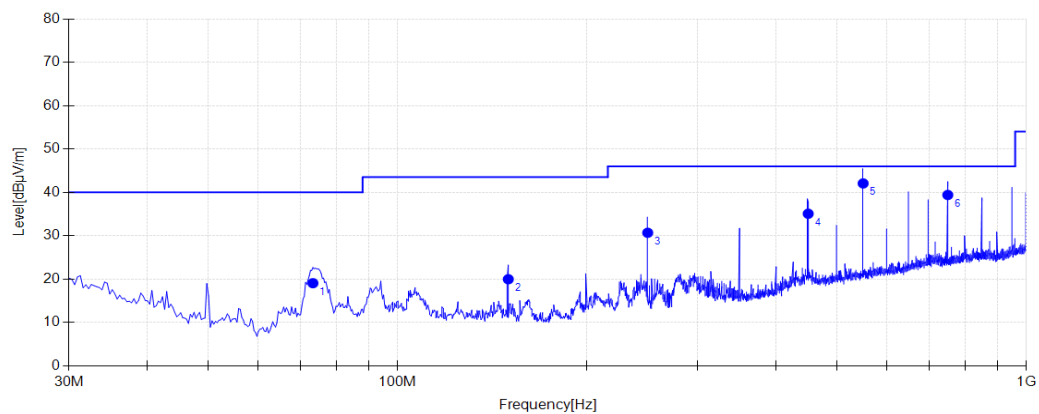| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11n-HT20 at Channel 5955
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.6736	14.06	24.97	40.00	15.03	100	249	Vertical
2	49.7299	9.45	29.34	40.00	10.66	100	357	Vertical
3	149.996	10.81	22.92	43.50	20.58	100	171	Vertical
4	449.826	17.60	29.95	46.00	16.05	200	237	Vertical
5	549.981	19.65	43.00	46.00	3.00	100	180	Vertical
6	650.036	21.09	39.48	46.00	6.52	100	219	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6425-6525MHz:

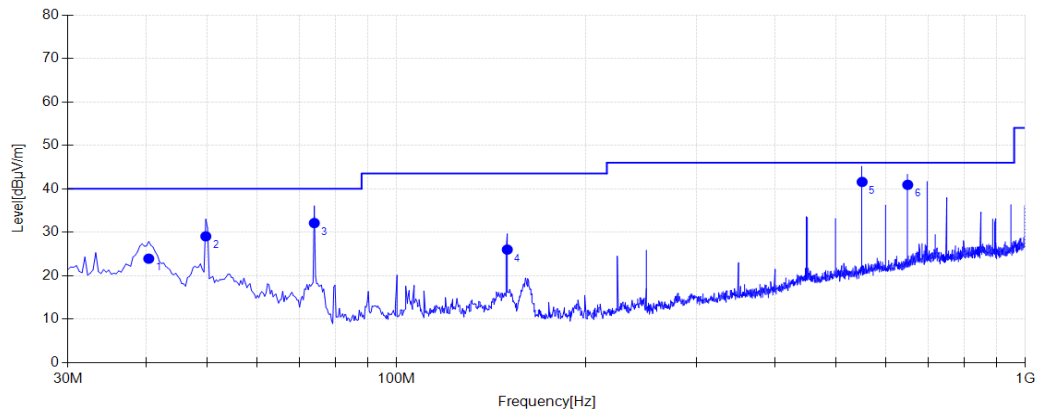| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6435
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	73.3411	8.84	19.07	40.00	20.93	200	140	Horizonta
2	149.996	10.81	19.99	43.50	23.51	100	66	Horizonta
3	249.940	11.58	30.69	46.00	15.31	100	13	Horizonta
4	449.826	17.60	35.09	46.00	10.91	100	24	Horizonta
5	550.093	19.65	42.07	46.00	3.93	200	334	Horizonta
6	749.980	22.72	39.41	46.00	6.59	100	114	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

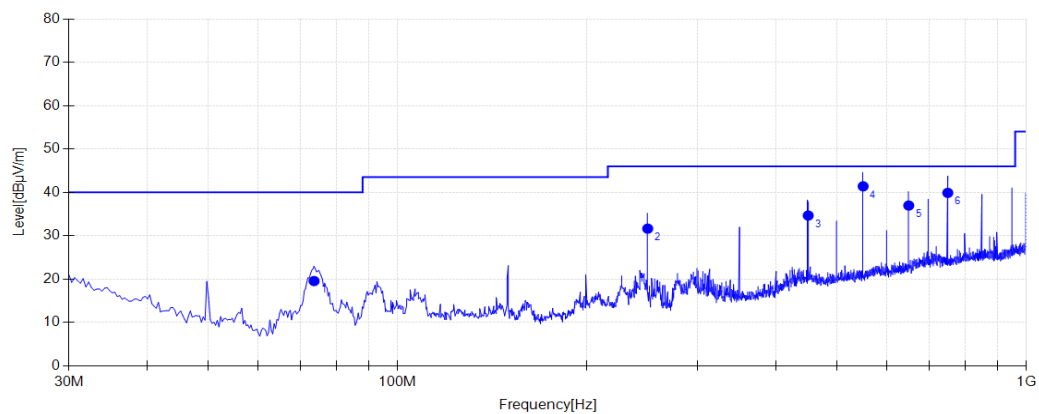| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11n-HT20 at Channel 6435
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.3501	14.22	23.93	40.00	16.07	100	211	Vertical
2	49.7299	9.45	29.07	40.00	10.93	100	348	Vertical
3	73.9880	8.92	32.13	40.00	7.87	100	84	Vertical
4	149.996	10.81	26.02	43.50	17.48	100	84	Vertical
5	550.093	19.65	41.59	46.00	4.41	100	183	Vertical
6	650.036	21.09	40.92	46.00	5.08	100	218	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6525-6875MHz:

EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6535
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

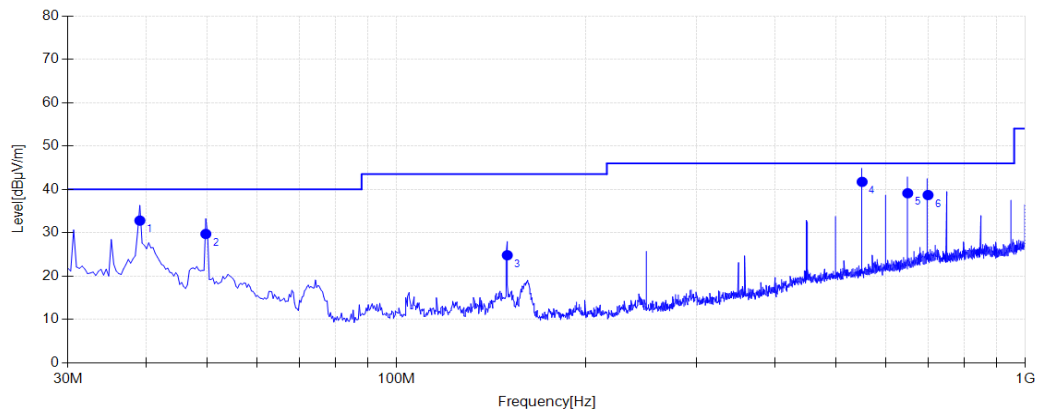**Test Graph**

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	73.6646	8.88	19.57	40.00	20.43	200	162	Horizonta
2	249.940	11.58	31.65	46.00	14.35	100	21	Horizonta
3	449.826	17.60	34.67	46.00	11.33	100	6	Horizonta
4	550.093	19.65	41.40	46.00	4.60	200	329	Horizonta
5	650.036	21.09	36.98	46.00	9.02	100	132	Horizonta
6	749.980	22.72	39.90	46.00	6.10	100	126	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

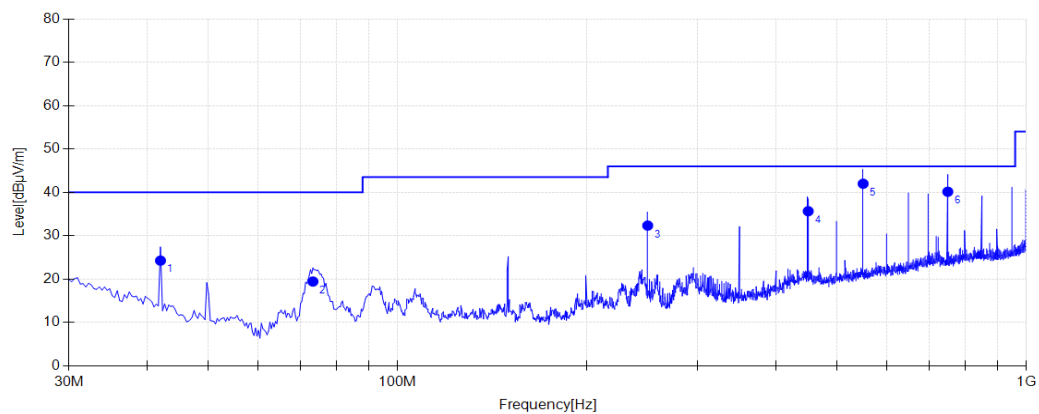| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6535
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.0564	14.88	32.81	40.00	7.19	200	357	Vertical
2	49.7299	9.45	29.73	40.00	10.27	100	170	Vertical
3	149.996	10.81	24.82	43.50	18.68	100	79	Vertical
4	550.093	19.65	41.74	46.00	4.26	100	184	Vertical
5	650.036	21.09	39.11	46.00	6.89	100	225	Vertical
6	700.170	21.81	38.70	46.00	7.30	100	155	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6875-7125MHz:

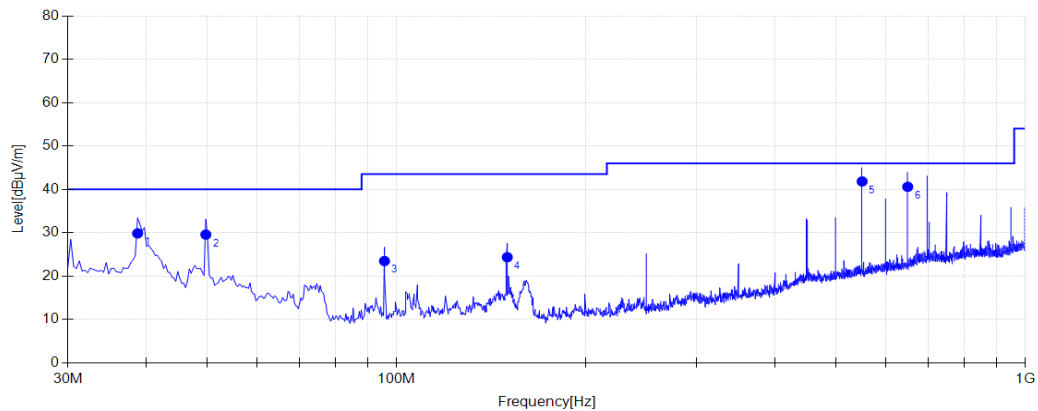| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6895
Environme nt:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	41.9673	13.40	24.28	40.00	15.72	200	105	Horizonta
2	73.3411	8.84	19.45	40.00	20.55	200	146	Horizonta
3	249.940	11.58	32.35	46.00	13.65	100	42	Horizonta
4	449.826	17.60	35.66	46.00	10.34	100	16	Horizonta
5	550.093	19.65	42.00	46.00	4.00	200	334	Horizonta
6	749.980	22.72	40.16	46.00	5.84	100	120	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6895
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	38.7329	15.05	29.87	40.00	10.13	200	356	Vertical
2	49.7299	9.45	29.58	40.00	10.42	100	196	Vertical
3	95.6586	10.66	23.48	43.50	20.02	200	316	Vertical
4	149.996	10.81	24.37	43.50	19.13	100	71	Vertical
5	550.093	19.65	41.84	46.00	4.16	100	181	Vertical
6	650.036	21.09	40.60	46.00	5.40	100	217	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

Appendix 2: For Antenna RD542109NB87-2

The worst case of Radiated Emission

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	5955	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1231	39.35	-13.82	68.2	28.85	Peak	Horizontal
3040.5	43.79	-6.07	68.2	24.41	Peak	Horizontal
10530.75	53.78	9.08	68.2	14.42	Peak	Horizontal
12244.25	54.99	8.12	68.2	13.21	Peak	Horizontal
1115.5	38.84	-14.16	68.2	29.36	Peak	Vertical
3315.5	43.75	-5.88	68.2	24.45	Peak	Vertical
9076	53.29	5.56	68.2	14.91	Peak	Vertical
11347.25	55.33	8.42	68.2	12.87	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6175	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1121	39.47	-14.15	68.2	28.73	Peak	Horizontal
2259.5	42.77	-9.16	68.2	25.43	Peak	Horizontal
10111	54.44	8.63	68.2	13.76	Peak	Horizontal
12048.75	55.13	8.39	68.2	13.07	Peak	Horizontal
1110	39.81	-14.17	68.2	28.39	Peak	Vertical
2710.5	43.51	-7.05	68.2	24.69	Peak	Vertical
10076.5	54.06	8.76	68.2	14.14	Peak	Vertical
12290.25	55.08	8.52	68.2	13.12	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6415	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1302.5	39.6	-13.63	68.2	28.6	Peak	Horizontal
3057	43.57	-6.04	68.2	24.63	Peak	Horizontal
9501.5	53.31	7.29	68.2	14.89	Peak	Horizontal
11749.75	54.8	7.9	68.2	13.4	Peak	Horizontal
1110	39.23	-14.17	68.2	28.97	Peak	Vertical
2397	43.18	-8.44	68.2	25.02	Peak	Vertical
8529.75	52.87	4.85	68.2	15.33	Peak	Vertical
11795.75	54.92	8.36	68.2	13.28	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6435	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1159.5	39.49	-14.07	68.2	28.71	Peak	Horizontal
2705	43.05	-7.06	68.2	25.15	Peak	Horizontal
7834	52.6	3.91	68.2	15.6	Peak	Horizontal
12077.5	55.7	7.85	68.2	12.5	Peak	Horizontal
1588.5	41.56	-12.86	68.2	26.64	Peak	Vertical
3766.5	44.22	-4.73	68.2	23.98	Peak	Vertical
10082.25	54.04	8.77	68.2	14.16	Peak	Vertical
12871	55.86	7.28	68.2	12.34	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6475	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1627	39.7	-12.67	68.2	28.5	Peak	Horizontal
3057	44.26	-6.04	68.2	23.94	Peak	Horizontal
8213.5	53.36	4.12	68.2	14.84	Peak	Horizontal
11732.5	55.17	8.2	68.2	13.03	Peak	Horizontal
1434.5	39.79	-13.46	68.2	28.41	Peak	Vertical
2677.5	43.63	-7.08	68.2	24.57	Peak	Vertical
8110	52.41	3.82	68.2	15.79	Peak	Vertical
11675	55.33	8.51	68.2	12.87	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6515	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
3167	44.17	-5.87	68.2	24.03	Peak	Horizontal
4701.5	46.25	-1.92	68.2	21.95	Peak	Horizontal
8995.5	53.39	5.82	68.2	14.81	Peak	Horizontal
12934.25	55.2	7.76	68.2	13	Peak	Horizontal
1121	39.42	-14.15	68.2	28.78	Peak	Vertical
2248.5	42.46	-9.23	68.2	25.74	Peak	Vertical
10249	53.93	8.72	68.2	14.27	Peak	Vertical
13026.25	55.96	7.47	68.2	12.24	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6535	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1297	39.88	-13.64	68.2	28.32	Peak	Horizontal
2694	43.63	-7.07	68.2	24.57	Peak	Horizontal
9806.25	53.34	8.33	68.2	14.86	Peak	Horizontal
11910.75	55.16	8.47	68.2	13.04	Peak	Horizontal
1115.5	39.42	-14.16	68.2	28.78	Peak	Vertical
2578.5	44.8	-7.49	68.2	23.4	Peak	Vertical
9018.5	52.93	5.64	68.2	15.27	Peak	Vertical
11692.25	56.2	8.67	68.2	12	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6695	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1594	42.01	-12.85	68.2	26.19	Peak	Horizontal
2666.5	43.72	-7.09	68.2	24.48	Peak	Horizontal
10093.75	53.8	8.8	68.2	14.4	Peak	Horizontal
13704.75	57.88	10.89	68.2	10.32	Peak	Horizontal
1594	41.24	-12.85	68.2	26.96	Peak	Vertical
2771	43.53	-6.89	68.2	24.67	Peak	Vertical
10099.5	54.01	8.82	68.2	14.19	Peak	Vertical
12802	55.61	7.7	68.2	12.59	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6855	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1247.5	39.32	-13.76	68.2	28.88	Peak	Horizontal
2578.5	43.57	-7.49	68.2	24.63	Peak	Horizontal
9001.25	53.19	5.84	68.2	15.01	Peak	Horizontal
11732.5	55.21	8.2	68.2	12.99	Peak	Horizontal
1594	40.69	-12.85	68.2	27.51	Peak	Vertical
2677.5	43.77	-7.08	68.2	24.43	Peak	Vertical
9955.75	53.62	8.11	68.2	14.58	Peak	Vertical
12531.75	55.05	7.6	68.2	13.15	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6895	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1379.5	40.07	-13.57	68.2	28.13	Peak	Horizontal
2567.5	44.29	-7.49	68.2	23.91	Peak	Horizontal
9576.25	53.5	7.61	68.2	14.7	Peak	Horizontal
11226.5	55.49	8.58	68.2	12.71	Peak	Horizontal
1115.5	41.73	-14.16	68.2	26.47	Peak	Vertical
1951.5	42.33	-11.04	68.2	25.87	Peak	Vertical
10082.25	53.65	8.77	68.2	14.55	Peak	Vertical
12261.5	55.42	8.22	68.2	12.78	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6995	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1269.5	39.17	-13.7	68.2	29.03	Peak	Horizontal
2573	43.6	-7.49	68.2	24.6	Peak	Horizontal
10082.25	54.13	8.77	68.2	14.07	Peak	Horizontal
12181	54.9	8.09	68.2	13.3	Peak	Horizontal
1115.5	42.79	-14.16	68.2	25.41	Peak	Vertical
2127.5	44.54	-10.18	68.2	23.66	Peak	Vertical
10088	54.28	8.79	68.2	13.92	Peak	Vertical
11508.25	54.56	8.21	68.2	13.64	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	7115	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1203.5	39.46	-13.92	68.2	28.74	Peak	Horizontal
3563	44.21	-5.42	68.2	23.99	Peak	Horizontal
9766	54.18	7.64	68.2	14.02	Peak	Horizontal
12405.25	55.21	8.37	68.2	12.99	Peak	Horizontal
1599.5	42.59	-12.84	68.2	25.61	Peak	Vertical
3282.5	43.41	-5.93	68.2	24.79	Peak	Vertical
9806.25	53.9	8.33	68.2	14.3	Peak	Vertical
12232.75	55.64	8.17	68.2	12.56	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

The worst case of Band Edge

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	5955	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Result
5924.28	56.74	39.36	68.2	11.46	160	28	Pk	Horizontal	Pass
5921.92	56.33	39.36	68.2	11.87	160	152	Pk	Vertical	Pass

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	7115	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Result
7125.64	72.05	41.69	88.2	16.15	160	344	Pk	Horizontal	Pass
7125.43	51.46	41.69	68.2	16.74	160	329	Pk	Horizontal	Pass
7140.22	53.66	41.72	68.2	14.54	160	217	Pk	Horizontal	Pass
7125.28	68.89	41.69	88.2	19.31	160	226	Pk	Vertical	Pass
7125.67	52.76	41.69	68.2	15.44	160	273	AV	Vertical	Pass
7141.6	54.37	41.72	68.2	13.83	160	129	Pk	Vertical	Pass

Note: The frequency 7115MHz band edge is use by C63.10-2013 12.7.4.4.3 Integration method to verify.
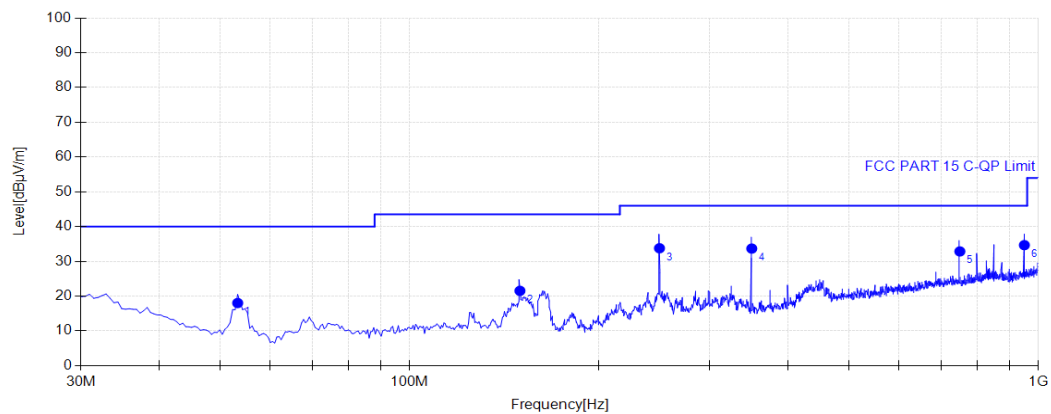
The worst case of Radiated Emission below 1GHz:

30MHz – 1GHz Test Data

For Band Frequency 5925-6425MHz:

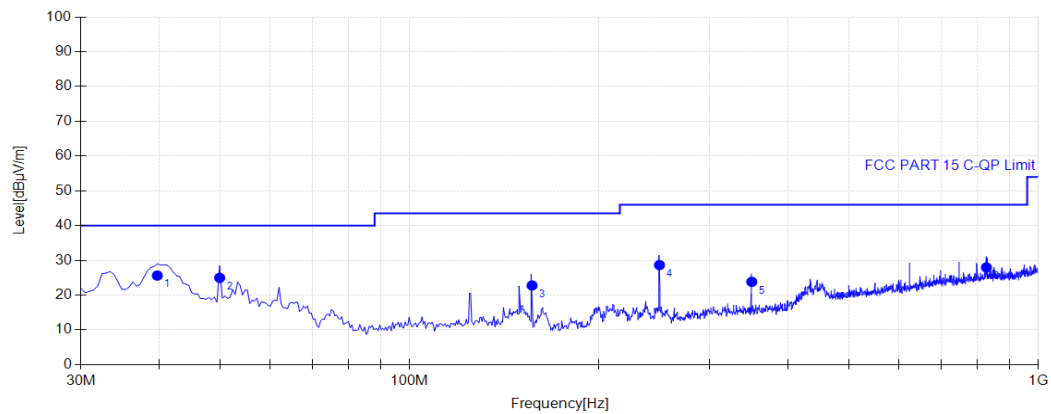| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 5955
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.2800	8.43	18.03	40.00	21.82	100	7	Horizonta
2	149.795	10.82	21.54	43.50	21.06	100	235	Horizonta
3	249.705	11.57	33.78	46.00	10.67	100	166	Horizonta
4	350.100	14.91	33.68	46.00	11.48	100	290	Horizonta
5	750.225	22.72	32.87	46.00	12.10	100	194	Horizonta
6	950.045	24.73	34.67	46.00	10.29	100	119	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

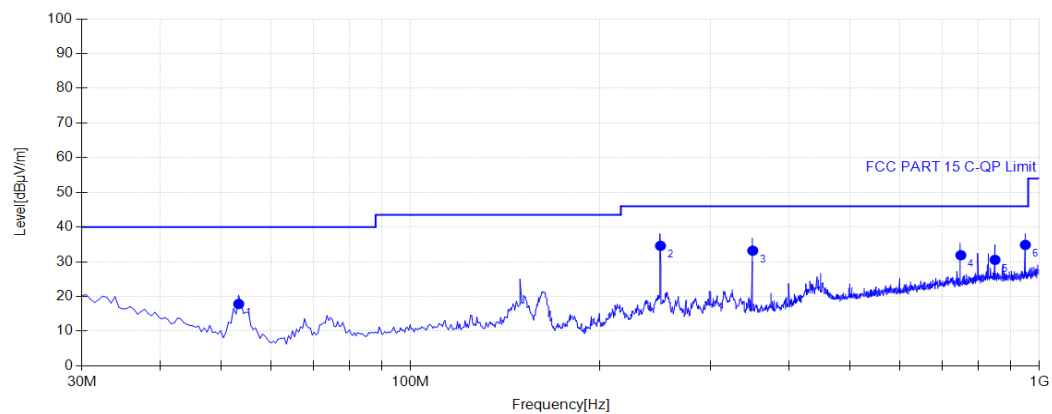| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11n-HT20 at Channel 5955
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.7000	14.55	25.64	40.00	13.54	100	168	Vertical
2	49.8850	9.37	24.98	40.00	13.76	100	271	Vertical
3	156.585	10.48	22.79	43.50	19.75	100	276	Vertical
4	249.705	11.57	28.65	46.00	16.88	100	106	Vertical
5	350.100	14.91	23.84	46.00	22.22	100	271	Vertical
6	826.855	23.73	27.97	46.00	17.28	100	360	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6425-6525MHz:

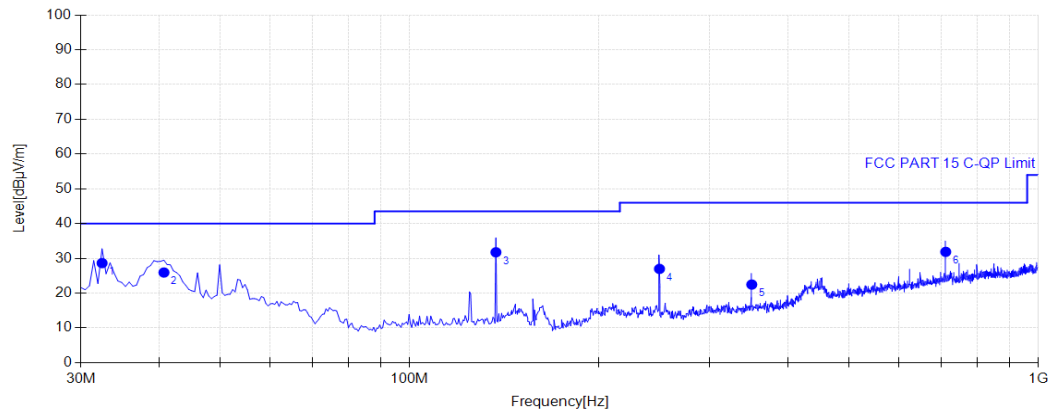| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6435
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.2800	8.43	17.85	40.00	21.75	100	95	Horizonta
2	249.705	11.57	34.59	46.00	10.08	100	158	Horizonta
3	350.100	14.91	33.21	46.00	11.92	100	295	Horizonta
4	750.225	22.72	31.89	46.00	13.42	100	185	Horizonta
5	850.135	23.81	30.56	46.00	14.02	100	124	Horizonta
6	950.045	24.73	34.87	46.00	10.84	100	124	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

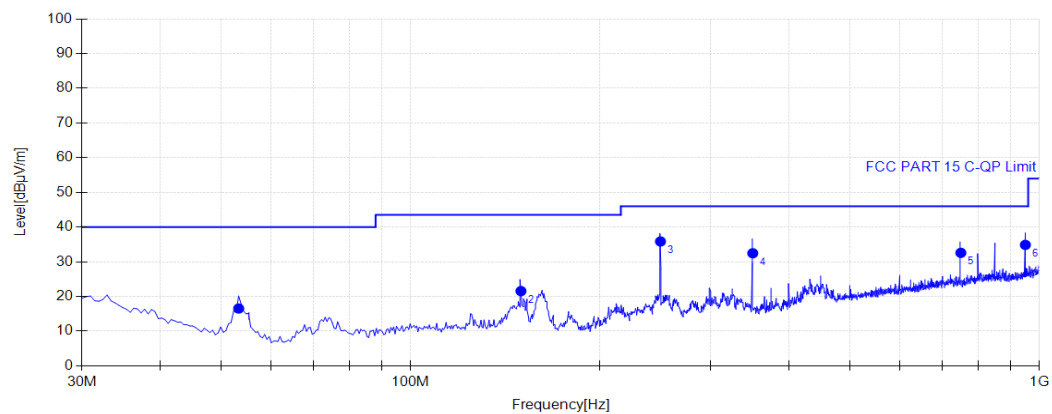| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11n-HT20 at Channel 6435
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.4250	18.26	28.64	40.00	10.23	100	269	Vertical
2	40.6700	14.06	25.94	40.00	13.15	100	269	Vertical
3	137.185	11.35	31.75	43.50	10.23	100	3	Vertical
4	249.705	11.57	26.98	46.00	17.65	100	119	Vertical
5	350.100	14.91	22.48	46.00	22.58	100	262	Vertical
6	712.395	22.03	31.87	46.00	13.25	100	201	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6525-6875MHz:

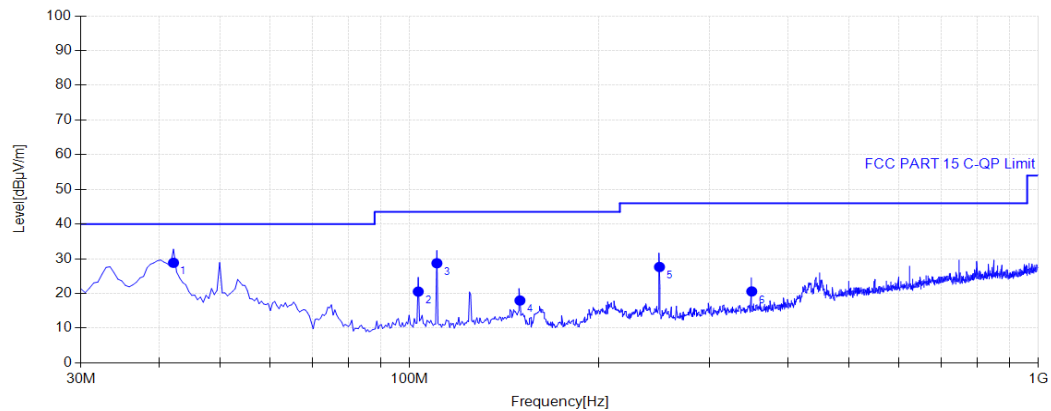| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6535
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.2800	8.43	16.54	40.00	22.75	100	344	Horizonta
2	149.795	10.82	21.57	43.50	20.68	100	281	Horizonta
3	249.705	11.57	35.86	46.00	9.93	100	164	Horizonta
4	350.100	14.91	32.46	46.00	12.05	100	294	Horizonta
5	750.225	22.72	32.59	46.00	12.94	100	205	Horizonta
6	950.045	24.73	34.87	46.00	10.01	100	122	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6535
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

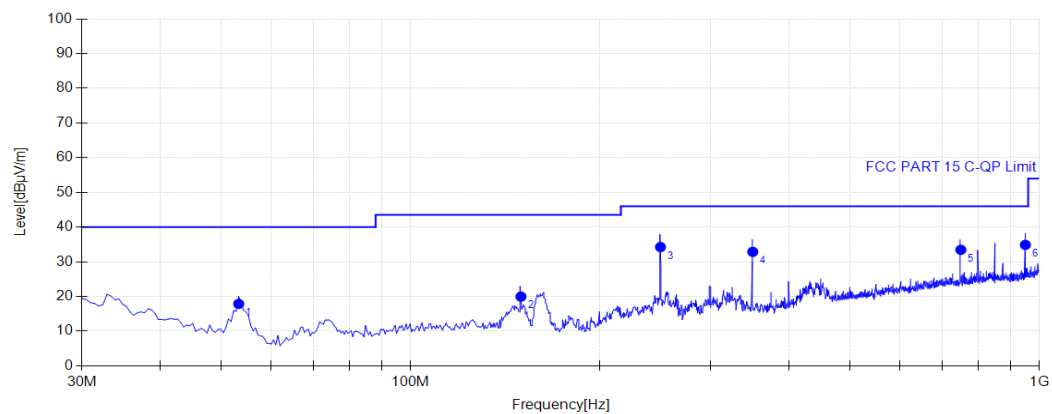| Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	42.1250	13.32	28.85	40.00	10.14	100	214	Vertical
2	103.235	11.27	20.54	43.50	21.76	100	234	Vertical
3	110.510	11.42	28.73	43.50	13.68	100	234	Vertical
4	149.795	10.82	17.98	43.50	24.64	100	167	Vertical
5	249.705	11.57	27.64	46.00	16.91	100	111	Vertical
6	350.100	14.91	20.59	46.00	24.16	100	275	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6875-7125MHz:

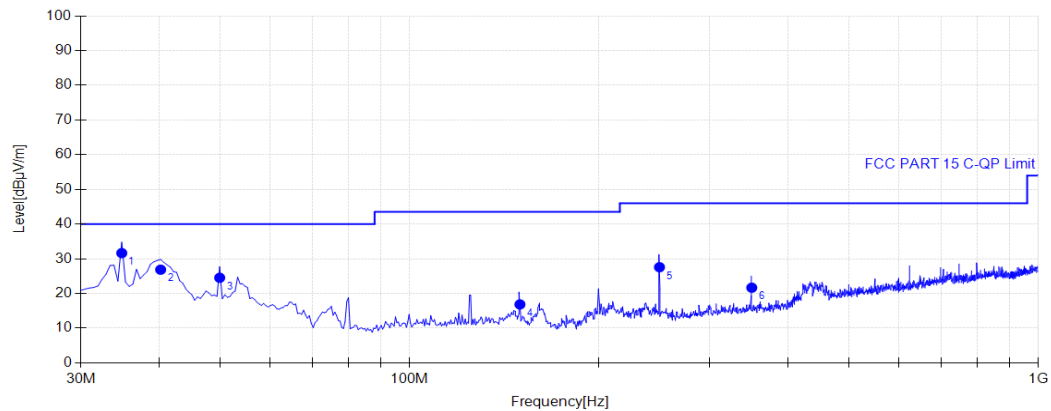| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6895
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.2800	8.43	17.87	40.00	21.97	100	357	Horizonta
2	149.795	10.82	19.98	43.50	23.24	100	252	Horizonta
3	249.705	11.57	34.26	46.00	10.79	100	171	Horizonta
4	350.100	14.91	32.87	46.00	12.19	100	302	Horizonta
5	750.225	22.72	33.46	46.00	11.95	100	206	Horizonta
6	950.045	24.73	34.87	46.00	10.09	100	130	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6895
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	34.8500	17.03	31.64	40.00	7.23	100	270	Vertical
2	40.1850	14.31	26.87	40.00	12.87	100	161	Vertical
3	49.8850	9.37	24.53	40.00	14.94	100	106	Vertical
4	149.795	10.82	16.85	43.50	25.78	100	127	Vertical
5	249.705	11.57	27.58	46.00	17.08	100	120	Vertical
6	350.100	14.91	21.68	46.00	23.27	100	263	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

Appendix 3: For Antenna RD542109NB87-3

The worst case of Radiated Emission

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	5955	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1110	40.4	-14.17	68.2	27.8	Peak	Horizontal
2699.5	44.12	-7.06	68.2	24.08	Peak	Horizontal
8202	51.67	4.06	68.2	16.53	Peak	Horizontal
11318.5	53.84	8.63	68.2	14.36	Peak	Horizontal
1121	40.7	-14.15	68.2	27.5	Peak	Vertical
2595	44.5	-7.48	68.2	23.7	Peak	Vertical
7839.75	51.77	3.94	68.2	16.43	Peak	Vertical
10082.25	53.83	8.77	68.2	14.37	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6175	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1594	42.43	-12.85	68.2	25.77	Peak	Horizontal
4399	46.01	-2.18	68.2	22.19	Peak	Horizontal
8719.5	53.03	5.34	68.2	15.17	Peak	Horizontal
11715.25	54.84	8.49	68.2	13.36	Peak	Horizontal
1121	39.51	-14.15	68.2	28.69	Peak	Vertical
2127.5	44.07	-10.18	68.2	24.13	Peak	Vertical
10047.75	54.09	8.65	68.2	14.11	Peak	Vertical
11899.25	54.81	8.58	68.2	13.39	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6415	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1115.5	39.02	-14.16	68.2	29.18	Peak	Horizontal
2567.5	43.5	-7.49	68.2	24.7	Peak	Horizontal
8984	53.28	5.71	68.2	14.92	Peak	Horizontal
10111	54.94	8.63	68.2	13.26	Peak	Horizontal
1330	40.97	-13.65	68.2	27.23	Peak	Vertical
2496	43.85	-7.9	68.2	24.35	Peak	Vertical
9806.25	54.46	8.33	68.2	13.74	Peak	Vertical
12836.5	59.71	7.38	68.2	8.49	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6435	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1115.5	39.63	-14.16	68.2	28.57	Peak	Horizontal
2881	43.44	-6.68	68.2	24.76	Peak	Horizontal
9421	52.63	6.95	68.2	15.57	Peak	Horizontal
11905	54.73	8.53	68.2	13.47	Peak	Horizontal
1121	41.92	-14.15	68.2	26.28	Peak	Vertical
3057	44.04	-6.04	68.2	24.16	Peak	Vertical
9507.25	53.52	7.26	68.2	14.68	Peak	Vertical
12865.25	57.05	7.27	68.2	11.15	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6475	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1093.5	39.33	-14.2	68.2	28.87	Peak	Horizontal
2463	43.76	-7.94	68.2	24.44	Peak	Horizontal
10082.25	53.81	8.77	68.2	14.39	Peak	Horizontal
12209.75	56.36	8.27	68.2	11.84	Peak	Horizontal
1594	40.51	-12.85	68.2	27.69	Peak	Vertical
3387	43.96	-5.83	68.2	24.24	Peak	Vertical
9858	53.48	8.63	68.2	14.72	Peak	Vertical
12209.75	55.29	8.27	68.2	12.91	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6515	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1467.5	39.55	-13.36	68.2	28.65	Peak	Horizontal
2441	43.03	-8.04	68.2	25.17	Peak	Horizontal
9616.5	53.35	8.02	68.2	14.85	Peak	Horizontal
11830.25	55.25	8.17	68.2	12.95	Peak	Horizontal
1335.5	39.27	-13.65	68.2	28.93	Peak	Vertical
2127.5	42.78	-10.18	68.2	25.42	Peak	Vertical
9352	53.44	6.35	68.2	14.76	Peak	Vertical
13026.25	57.04	7.47	68.2	11.16	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6535	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1060.5	39.7	-14.28	68.2	28.5	Peak	Horizontal
2578.5	43.11	-7.49	68.2	25.09	Peak	Horizontal
10065	54.16	8.73	68.2	14.04	Peak	Horizontal
11882	55.87	8.38	68.2	12.33	Peak	Horizontal
1214.5	39.24	-13.88	68.2	28.96	Peak	Vertical
2573	44.22	-7.49	68.2	23.98	Peak	Vertical
9024.25	53	5.57	68.2	15.2	Peak	Vertical
11703.75	55.56	8.68	68.2	12.64	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of －27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6695	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1121	38.74	-14.15	68.2	29.46	Peak	Horizontal
2567.5	44.48	-7.49	68.2	23.72	Peak	Horizontal
10053.5	53.59	8.69	68.2	14.61	Peak	Horizontal
11376	54.51	8.23	68.2	13.69	Peak	Horizontal
1110	39.05	-14.17	68.2	29.15	Peak	Vertical
2127.5	42.24	-10.18	68.2	25.96	Peak	Vertical
9530.25	53.33	7.17	68.2	14.87	Peak	Vertical
11876.25	55.28	8.32	68.2	12.92	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6855	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1236.5	39.81	-13.8	68.2	28.39	Peak	Horizontal
2567.5	43.92	-7.49	68.2	24.28	Peak	Horizontal
8725.25	52	5.29	68.2	16.2	Peak	Horizontal
10502	55.04	9.26	68.2	13.16	Peak	Horizontal
1594	41.95	-12.85	68.2	26.25	Peak	Vertical
2567.5	44.12	-7.49	68.2	24.08	Peak	Vertical
9001.25	52.32	5.84	68.2	15.88	Peak	Vertical
11272.5	55.71	8.63	68.2	12.49	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6895	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1214.5	38.94	-13.88	68.2	29.26	Peak	Horizontal
2694	43.54	-7.07	68.2	24.66	Peak	Horizontal
8949.5	52.17	5.38	68.2	16.03	Peak	Horizontal
10410	55.67	8.94	68.2	12.53	Peak	Horizontal
1594	39.77	-12.85	68.2	28.43	Peak	Vertical
2776.5	43.62	-6.87	68.2	24.58	Peak	Vertical
10076.5	54.15	8.76	68.2	14.05	Peak	Vertical
11882	55.05	8.38	68.2	13.15	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	6995	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
1258.5	38.67	-13.73	68.2	29.53	Peak	Horizontal
2677.5	43.63	-7.08	68.2	24.57	Peak	Horizontal
9817.75	54.22	8.43	68.2	13.98	Peak	Horizontal
11801.5	55.15	8.39	68.2	13.05	Peak	Horizontal
1291.5	39.33	-13.65	68.2	28.87	Peak	Vertical
3073.5	43.92	-6.02	68.2	24.28	Peak	Vertical
9415.25	53.4	7	68.2	14.8	Peak	Vertical
11795.75	55.24	8.36	68.2	12.96	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	7115	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Frequency (MHz)	Level (dBµV/m)	Factor (dB)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
1594	40.74	-12.85	68.2	27.46	Peak	Horizontal
2457.5	43.79	-7.95	68.2	24.41	Peak	Horizontal
8667.75	52.19	4.9	68.2	16.01	Peak	Horizontal
11692.25	54.82	8.67	68.2	13.38	Peak	Horizontal
1594	42	-12.85	68.2	26.2	Peak	Vertical
2798.5	43.79	-6.77	68.2	24.41	Peak	Vertical
8777	53.02	5.4	68.2	15.18	Peak	Vertical
11301.25	54.32	8.76	68.2	13.88	Peak	Vertical

Note:The emissions outside limit shall not exceed an e.i.r.p. of −27 dBm/MHz.

The worst case of Band Edge

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	5955	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Result
5920.04	57.09	39.36	68.2	11.11	160	118	Pk	Horizontal	Pass
5915.32	57.06	39.36	68.2	11.14	160	92	Pk	Vertical	Pass

Test Mode:	802.11ax-HE20-MIMO	Test Date:	2023-11-04
Test Channel:	7115	Test Engineer:	Stone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit.		

Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Polarity	Result
7125.52	69.5	41.69	88.2	18.7	160	324	Pk	Horizontal	Pass
7125.43	50.87	41.69	68.2	17.33	160	289	Pk	Horizontal	Pass
7134.13	53.58	41.71	68.2	14.62	160	165	Pk	Horizontal	Pass
7125.46	72.15	41.69	88.2	16.05	160	319	Pk	Vertical	Pass
7125.67	53.89	41.69	68.2	14.31	160	261	AV	Vertical	Pass
7137.52	53.69	41.71	68.2	14.51	160	184	Pk	Vertical	Pass

Note: The frequency 7115MHz band edge is use by C63.10-2013 12.7.4.4.3 Integration method to verify.
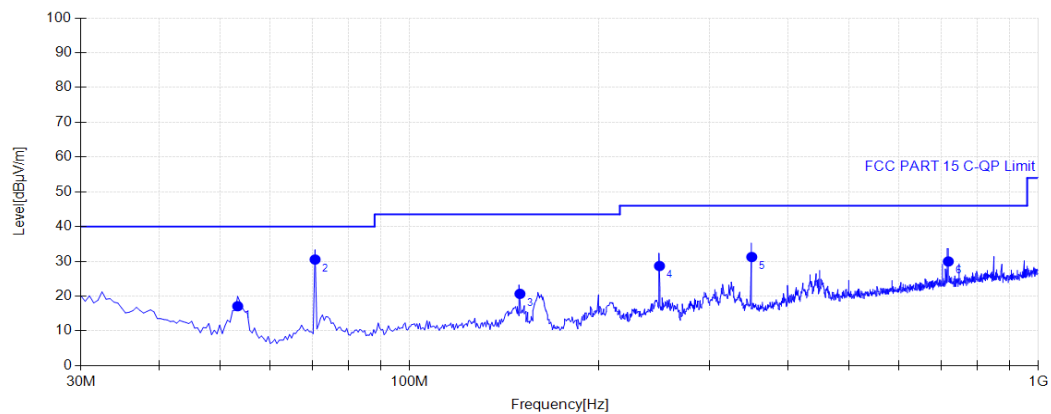
The worst case of Radiated Emission below 1GHz:

30MHz – 1GHz Test Data

For Band Frequency 5925-6425MHz:

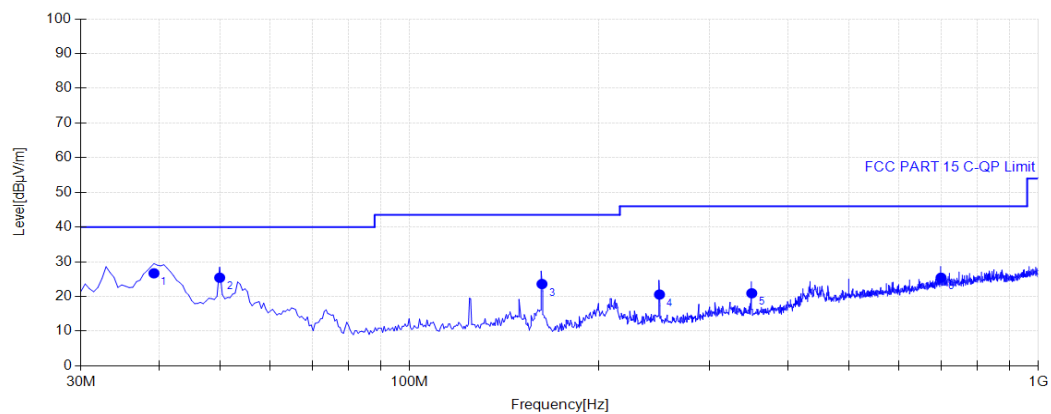| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 5955
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.2800	8.43	17.12	40.00	22.74	100	268	Horizonta
2	70.7400	8.52	30.54	40.00	8.99	100	172	Horizonta
3	149.795	10.82	20.67	43.50	22.62	100	261	Horizonta
4	249.705	11.57	28.67	46.00	16.62	100	158	Horizonta
5	350.100	14.91	31.26	46.00	13.67	100	192	Horizonta
6	719.185	22.16	29.98	46.00	15.29	100	302	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

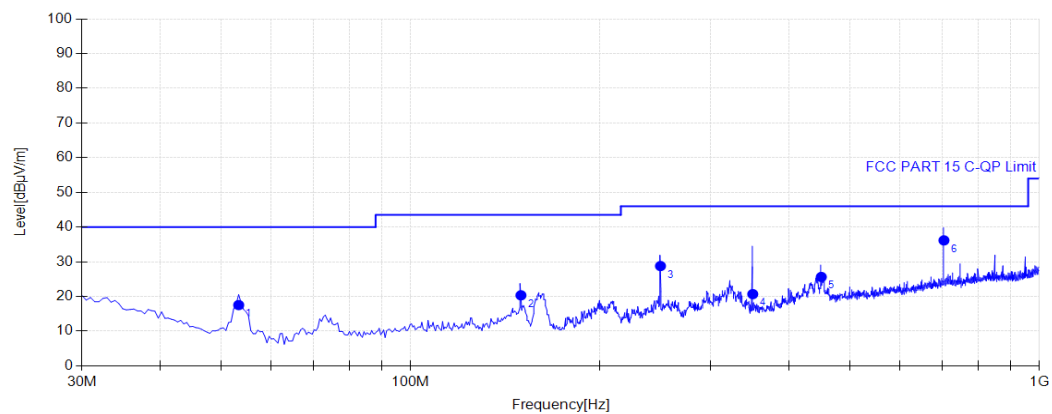| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 5955
Environme nt:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.2150	14.80	26.68	40.00	12.87	100	118	Vertical
2	49.8850	9.37	25.42	40.00	13.90	100	228	Vertical
3	162.405	10.36	23.61	43.50	19.17	100	3	Vertical
4	249.705	11.57	20.57	46.00	24.31	100	98	Vertical
5	350.100	14.91	20.93	46.00	24.32	100	138	Vertical
6	700.270	21.81	25.42	46.00	19.96	100	111	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6425-6525MHz:

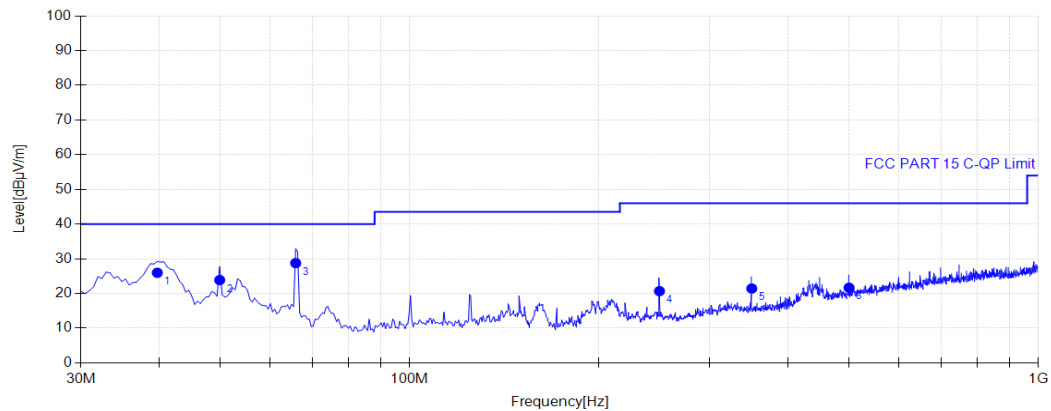| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6435
Environme nt:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	53.2800	8.43	17.54	40.00	22.30	100	49	Horizonta
2	149.795	10.82	20.35	43.50	21.78	100	260	Horizonta
3	249.705	11.57	28.79	46.00	16.12	100	158	Horizonta
4	350.100	14.91	20.68	46.00	14.13	100	198	Horizonta
5	450.010	17.61	25.63	46.00	19.55	100	178	Horizonta
6	705.120	21.90	36.17	46.00	8.80	100	274	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

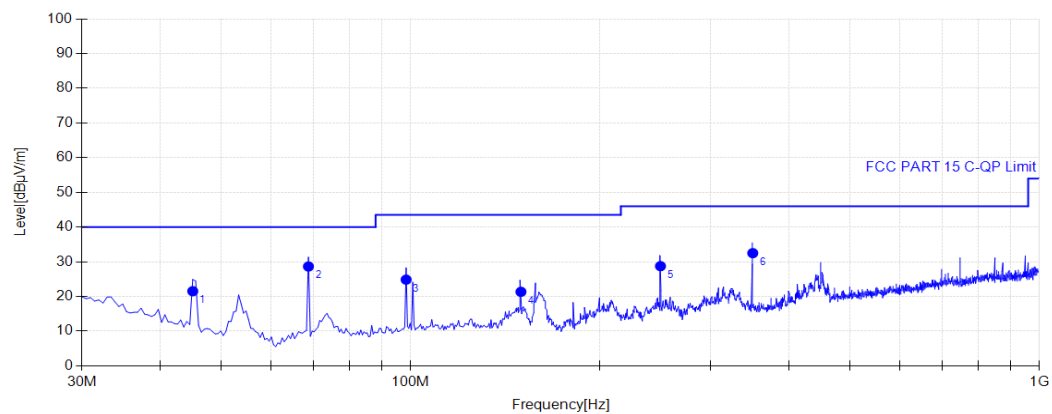| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6435
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.7000	14.55	25.98	40.00	13.07	100	104	Vertical
2	49.8850	9.37	23.87	40.00	15.16	100	200	Vertical
3	65.8900	7.69	28.76	40.00	10.04	100	4	Vertical
4	249.705	11.57	20.69	46.00	24.05	100	111	Vertical
5	350.100	14.91	21.45	46.00	23.75	100	353	Vertical
6	499.965	18.93	21.68	46.00	23.36	100	214	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6525-6875MHz:

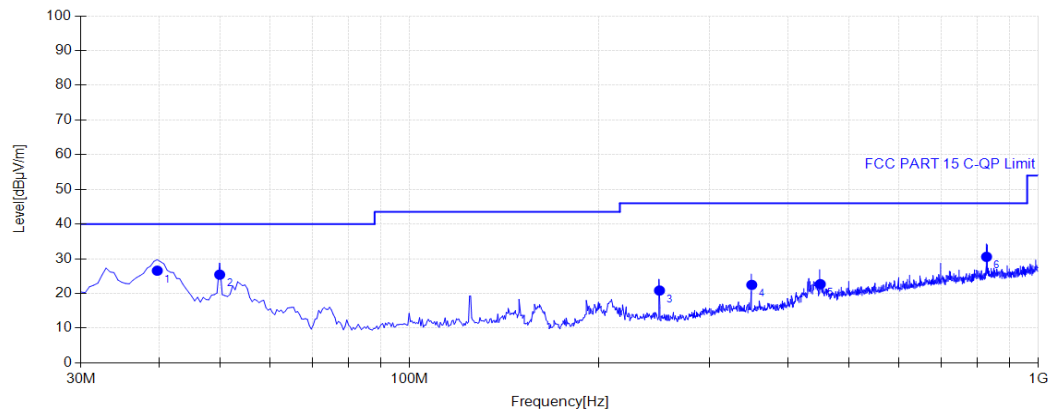| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6535
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	45.0350	11.84	21.54	40.00	17.31	100	193	Horizonta
2	68.8000	8.21	28.64	40.00	10.88	100	220	Horizonta
3	98.3850	11.01	24.86	43.50	17.61	100	220	Horizonta
4	149.795	10.82	21.35	43.50	21.19	100	261	Horizonta
5	249.705	11.57	28.75	46.00	16.57	100	152	Horizonta
6	350.100	14.91	32.49	46.00	12.54	100	180	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

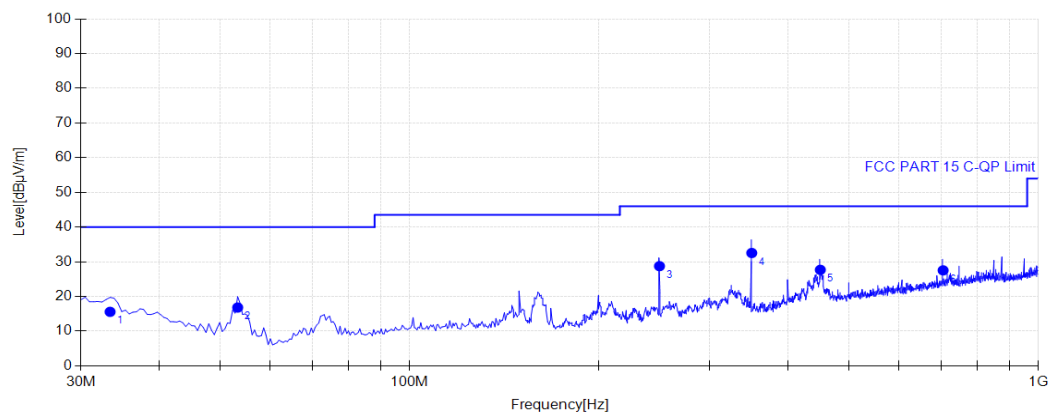| EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6535
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.7000	14.55	26.57	40.00	12.41	100	125	Vertical
2	49.8850	9.37	25.43	40.00	13.36	100	146	Vertical
3	249.705	11.57	20.86	46.00	24.21	100	110	Vertical
4	350.100	14.91	22.48	46.00	22.71	100	353	Vertical
5	450.010	17.61	22.69	46.00	22.08	100	276	Vertical
6	827.340	23.73	30.57	46.00	14.62	100	356	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

For Band Frequency 6875-7125MHz:

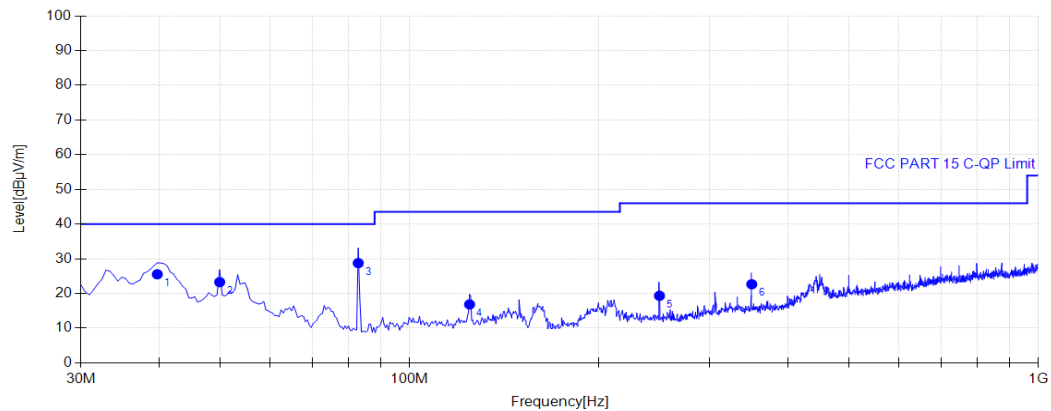| EUT:	WiFi module	Polarity:	Horizontal
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6895
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.3950	17.77	15.59	40.00	23.15	100	11	Horizonta
2	53.2800	8.43	16.83	40.00	22.11	100	117	Horizonta
3	249.705	11.57	28.76	46.00	16.92	100	158	Horizonta
4	350.100	14.91	32.54	46.00	12.31	100	192	Horizonta
5	450.010	17.61	27.69	46.00	17.97	100	185	Horizonta
6	705.605	21.91	27.53	46.00	17.95	100	226	Horizonta

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

EUT:	WiFi module	Polarity:	Vertical
Model:	WXT5CM2803	Mode:	Transmit by 802.11ax-HE20-MIMO at Channel 6895
Environment:	Temp: 24℃; Humi:41%	Engineer:	Stone Zhang

Test Graph

Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.7000	14.55	25.54	40.00	13.82	100	112	Vertical
2	49.8850	9.37	23.29	40.00	15.44	100	57	Vertical
3	82.8650	9.74	28.76	40.00	9.22	100	181	Vertical
4	124.575	11.54	16.85	43.50	26.03	100	181	Vertical
5	249.705	11.57	19.34	46.00	25.72	100	119	Vertical
6	350.100	14.91	22.67	46.00	22.99	100	338	Vertical

Note 1: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.