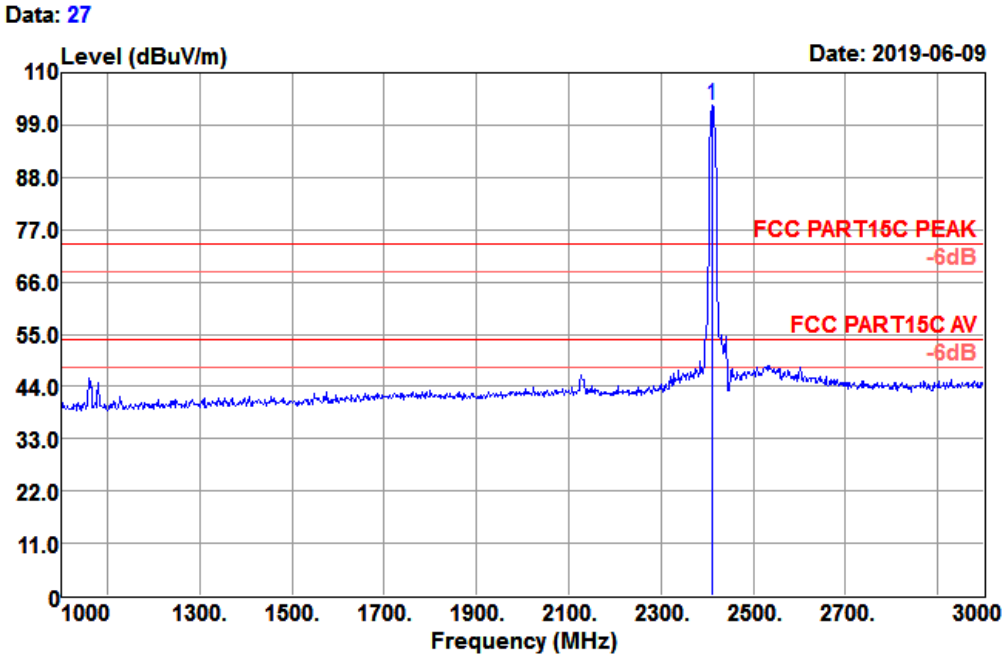
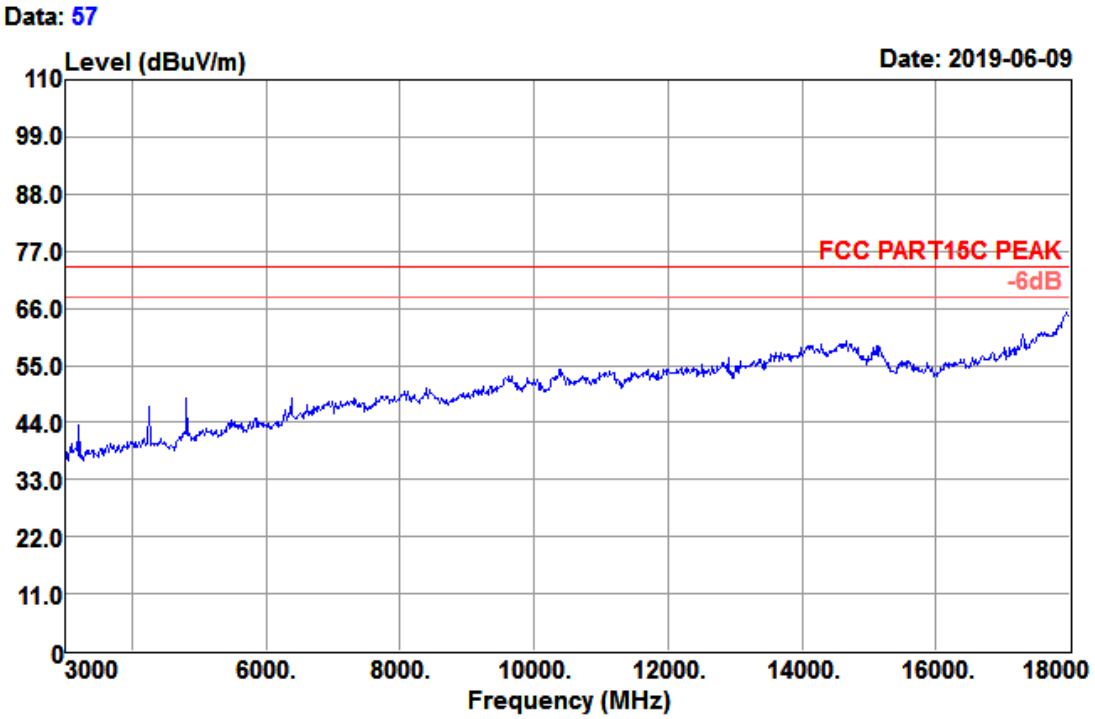
4.5.5 Test Result of Radiated Spurious Emission (1GHz ~ 10th Harmonic)

Test Mode :	802.11b CH01 (2412 MHz)	**Temperature :**	21~23℃
Test Engineer :	Julie Deng	**Relative Humidity :**	63~65%
Frequencey Range	1GHz~3GHz	**Polarization :**	Horizontal

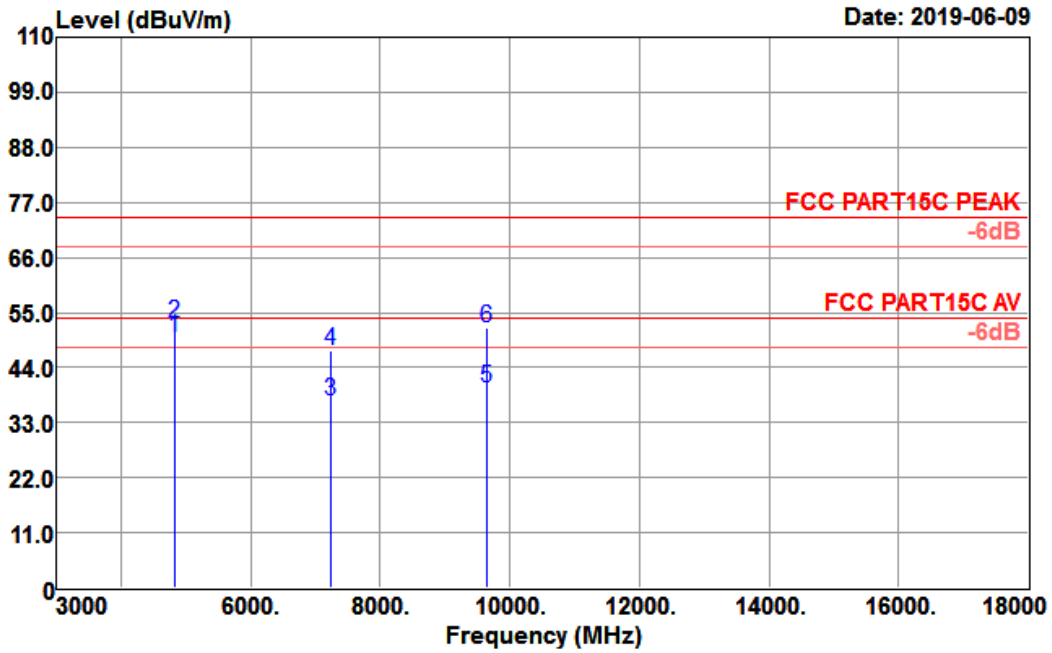


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	108.52	27.17	3.65	36.14	103.20	74.00	29.20	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal



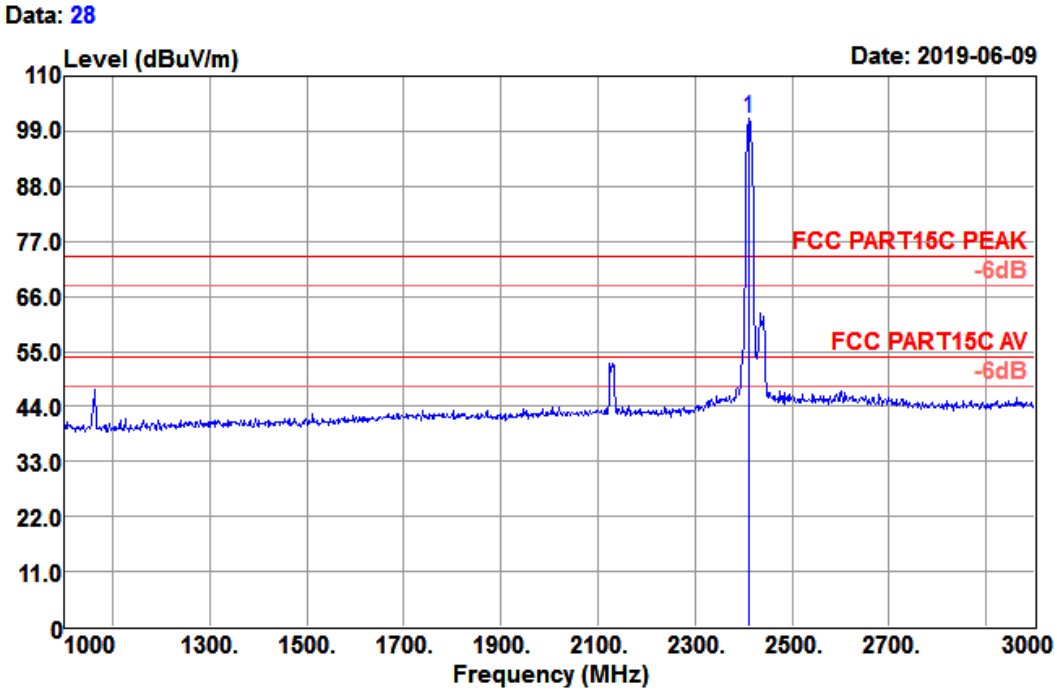
Data: 58



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	49.45	31.28	5.44	36.26	49.91	54.00	-4.09	Average
4824.000	52.39	31.28	5.44	36.26	52.85	74.00	-21.15	Peak
7236.000	28.58	35.94	7.02	34.27	37.27	54.00	-16.73	Average
7236.000	38.69	35.94	7.02	34.27	47.38	74.00	-26.62	Peak
9648.000	28.44	37.87	7.82	34.15	39.98	54.00	-14.02	Average
9648.000	40.36	37.87	7.82	34.15	51.90	74.00	-22.10	Peak

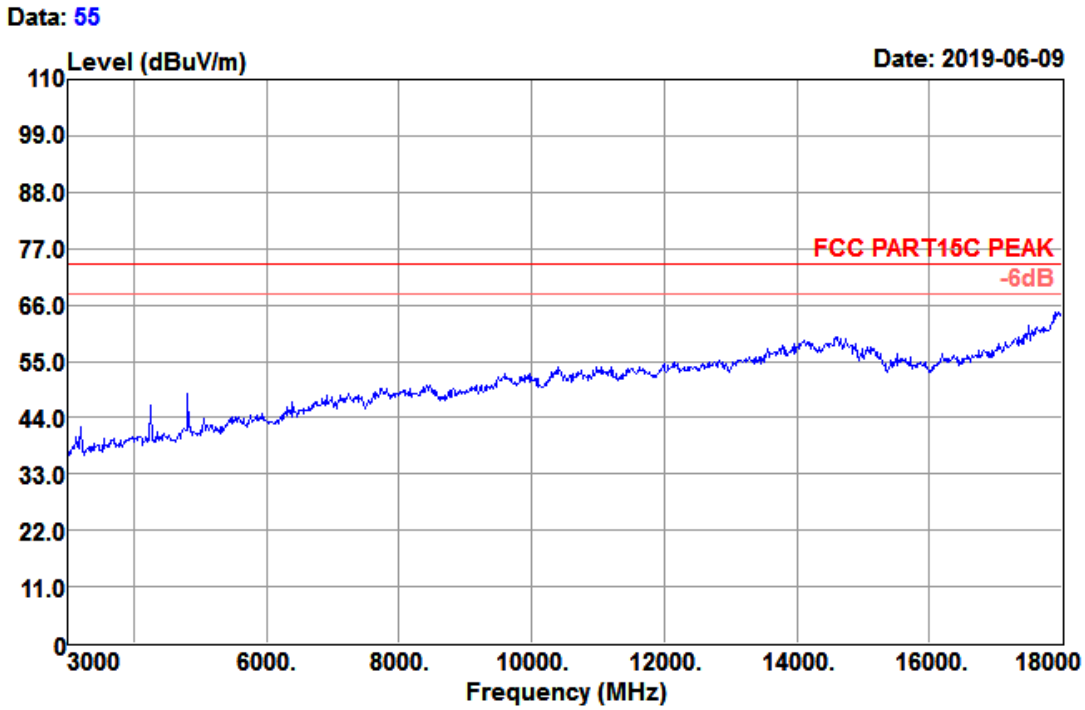
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

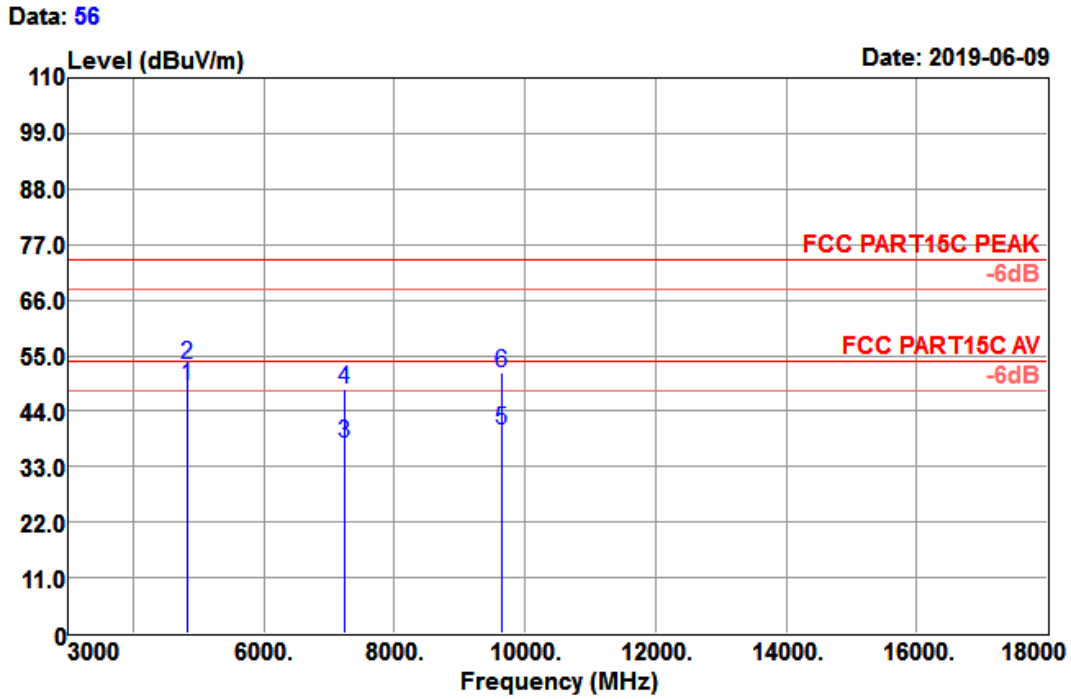
Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	106.74	27.17	3.65	36.14	101.42	74.00	27.42	Peak

Test Mode :	802.11b CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

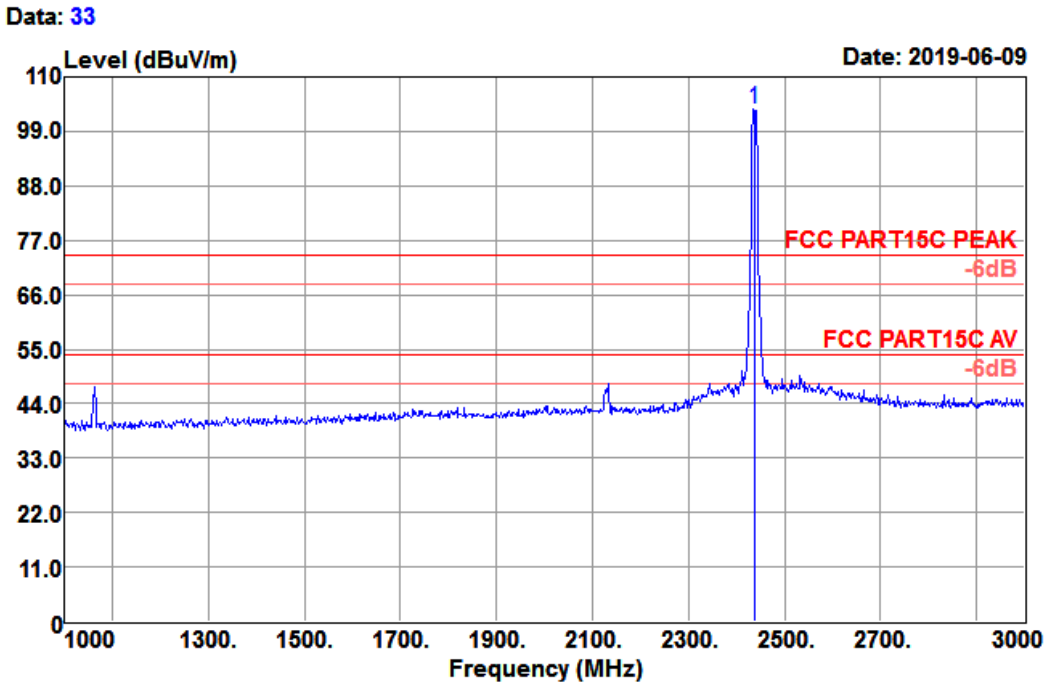




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	48.48	31.28	5.44	36.26	48.94	54.00	-5.06	Average
4824.000	52.90	31.28	5.44	36.26	53.36	74.00	-20.64	Peak
7236.000	29.04	35.94	7.02	34.27	37.73	54.00	-16.27	Average
7236.000	39.55	35.94	7.02	34.27	48.24	74.00	-25.76	Peak
9648.000	28.67	37.87	7.82	34.15	40.21	54.00	-13.79	Average
9648.000	39.93	37.87	7.82	34.15	51.47	74.00	-22.53	Peak

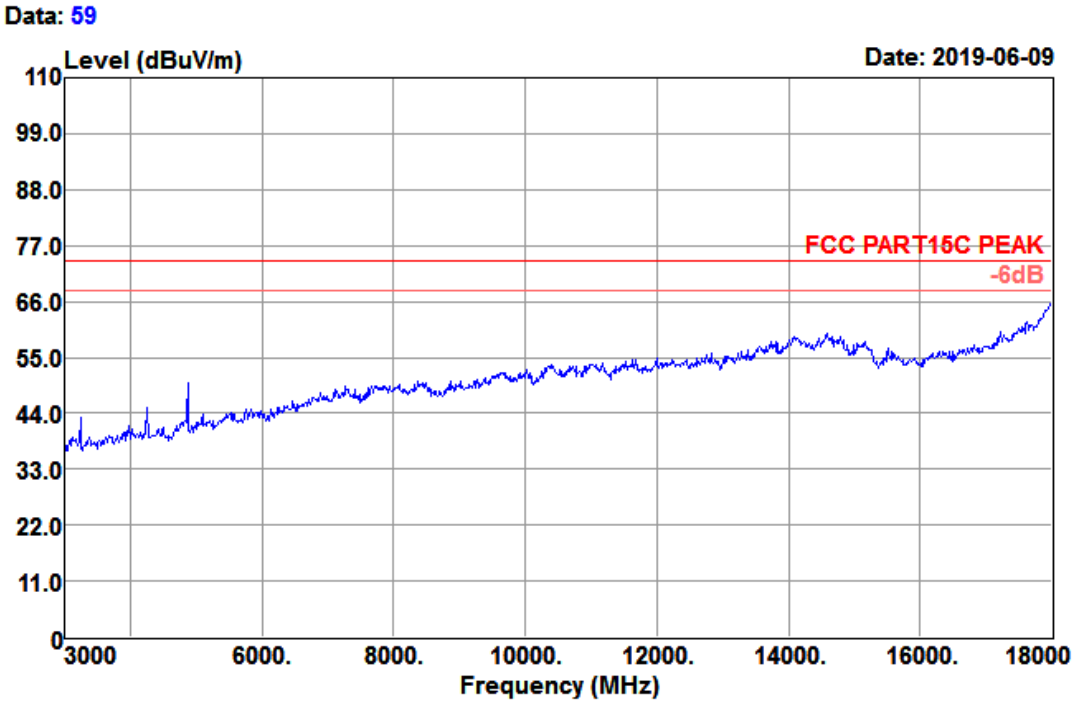
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

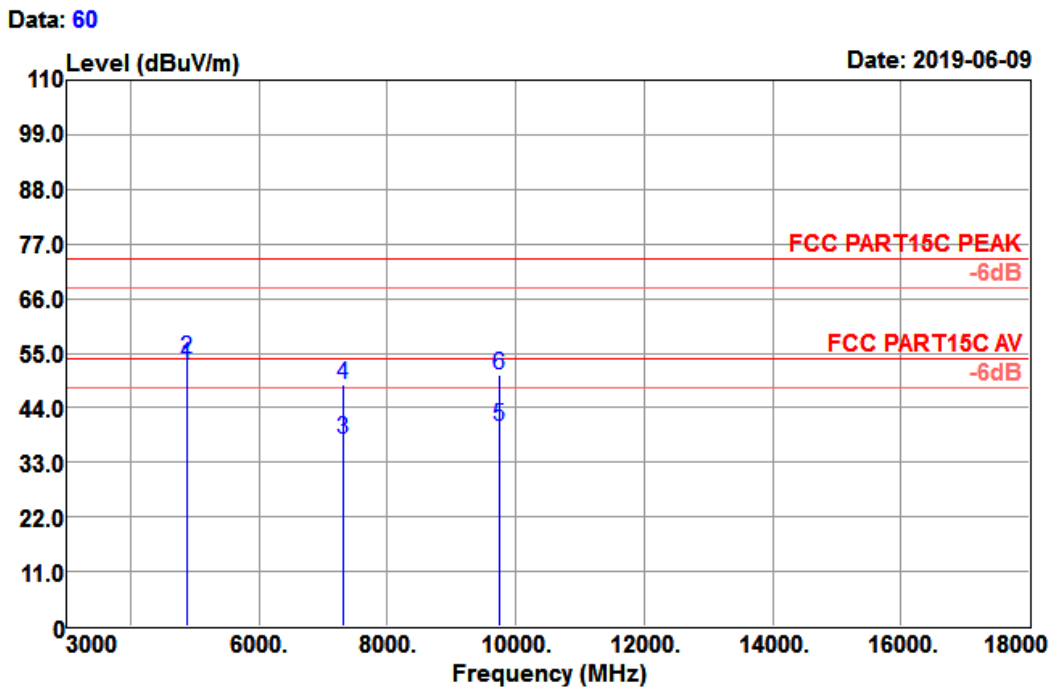
Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2437.000	108.86	27.24	3.66	36.20	103.56	74.00	29.56	Peak

Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

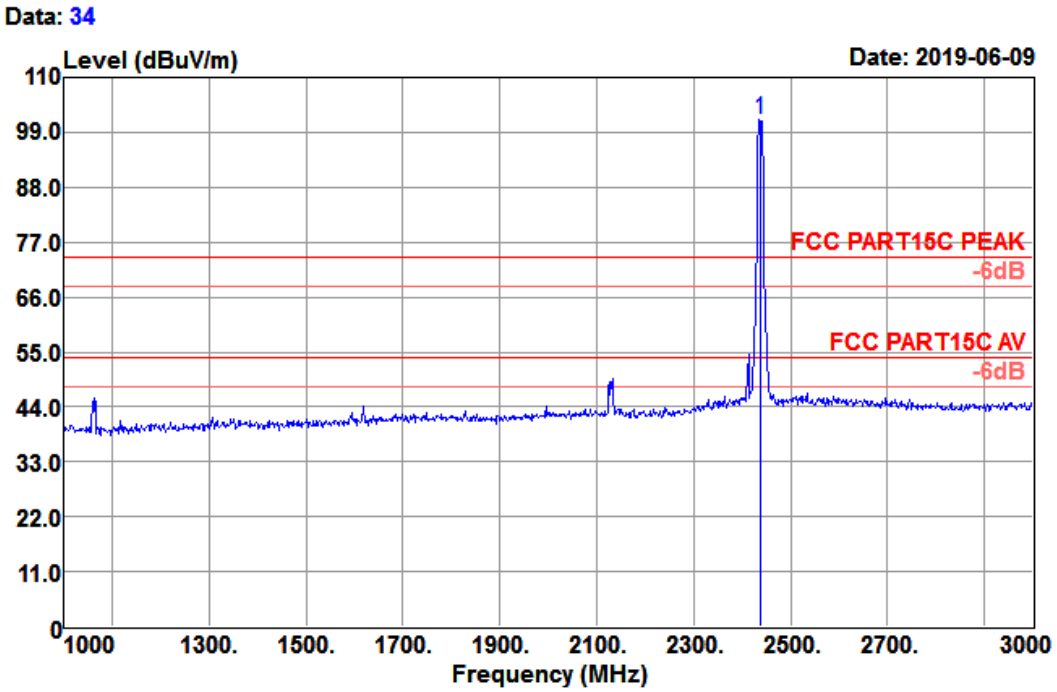




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	51.96	31.40	5.41	36.24	52.53	54.00	-1.47	Average
4874.000	53.27	31.40	5.41	36.24	53.84	74.00	-20.16	Peak
7311.000	28.78	36.12	7.24	34.35	37.79	54.00	-16.21	Average
7311.000	39.80	36.12	7.24	34.35	48.81	74.00	-25.19	Peak
9748.000	28.33	38.05	7.96	34.19	40.15	54.00	-13.85	Average
9748.000	38.92	38.05	7.96	34.19	50.74	74.00	-23.26	Peak

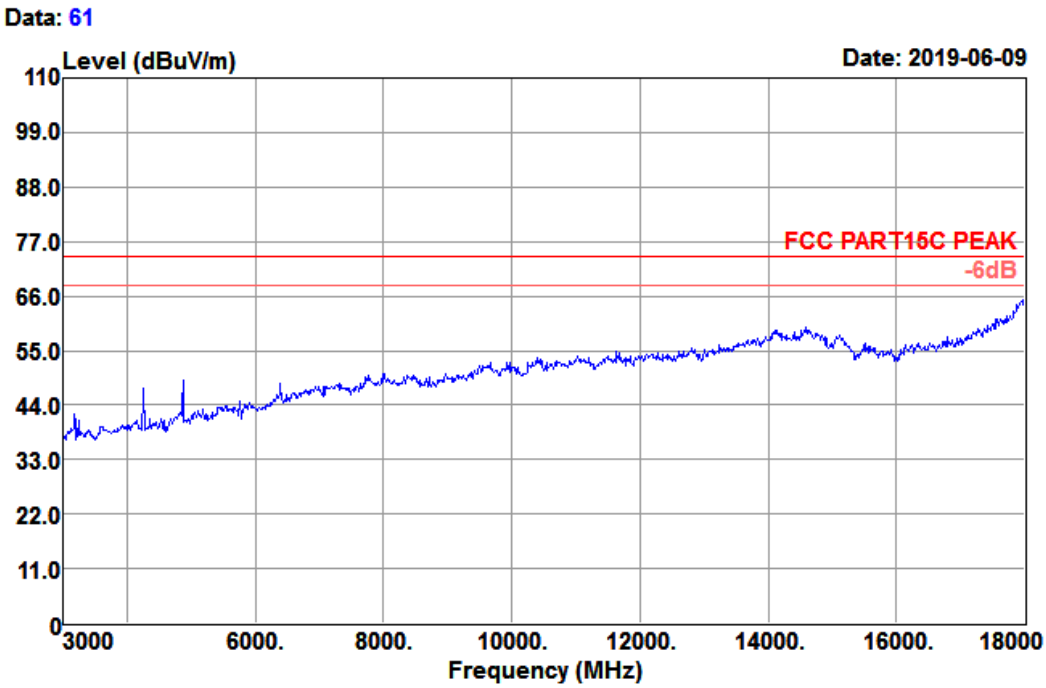
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

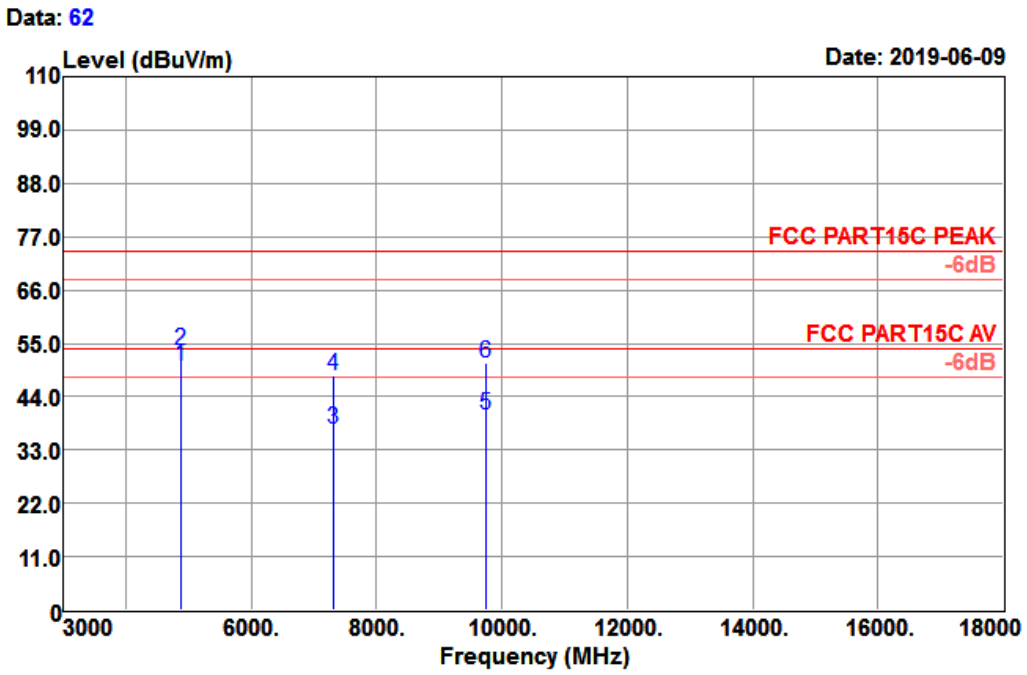
Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2437.000	106.81	27.24	3.66	36.20	101.51	74.00	27.51	Peak

Test Mode :	802.11b CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

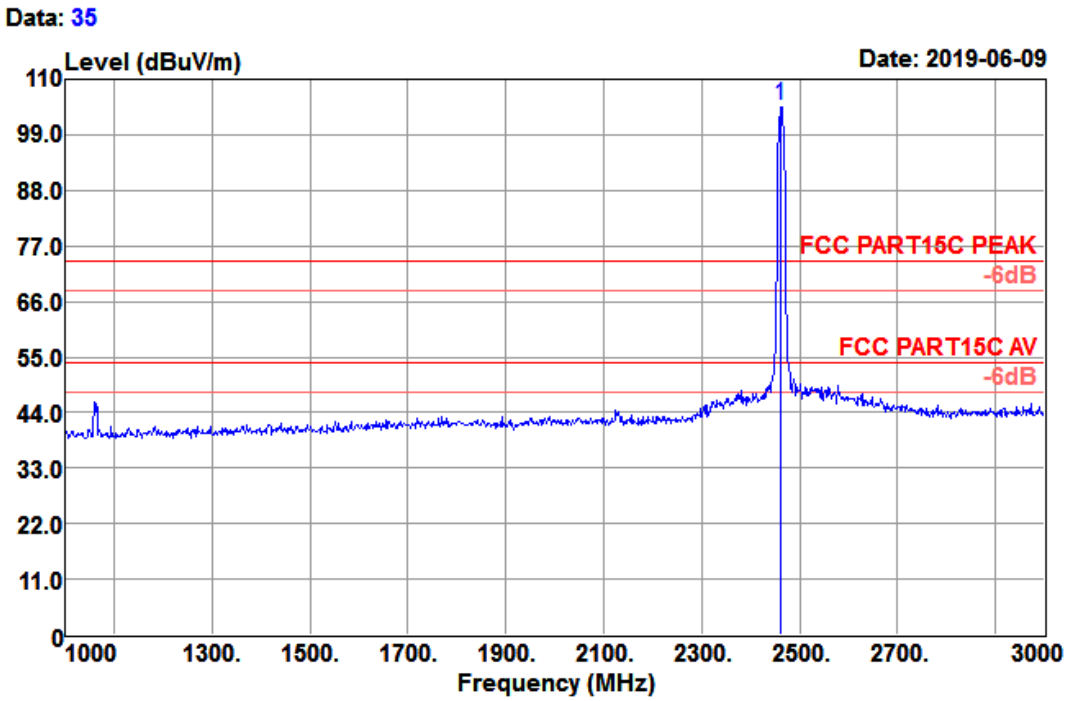




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	49.59	31.40	5.41	36.24	50.16	54.00	-3.84	Average
4874.000	53.13	31.40	5.41	36.24	53.70	74.00	-20.30	Peak
7311.000	28.42	36.12	7.24	34.35	37.43	54.00	-16.57	Average
7311.000	39.37	36.12	7.24	34.35	48.38	74.00	-25.62	Peak
9748.000	28.33	38.05	7.96	34.19	40.15	54.00	-13.85	Average
9748.000	39.25	38.05	7.96	34.19	51.07	74.00	-22.93	Peak

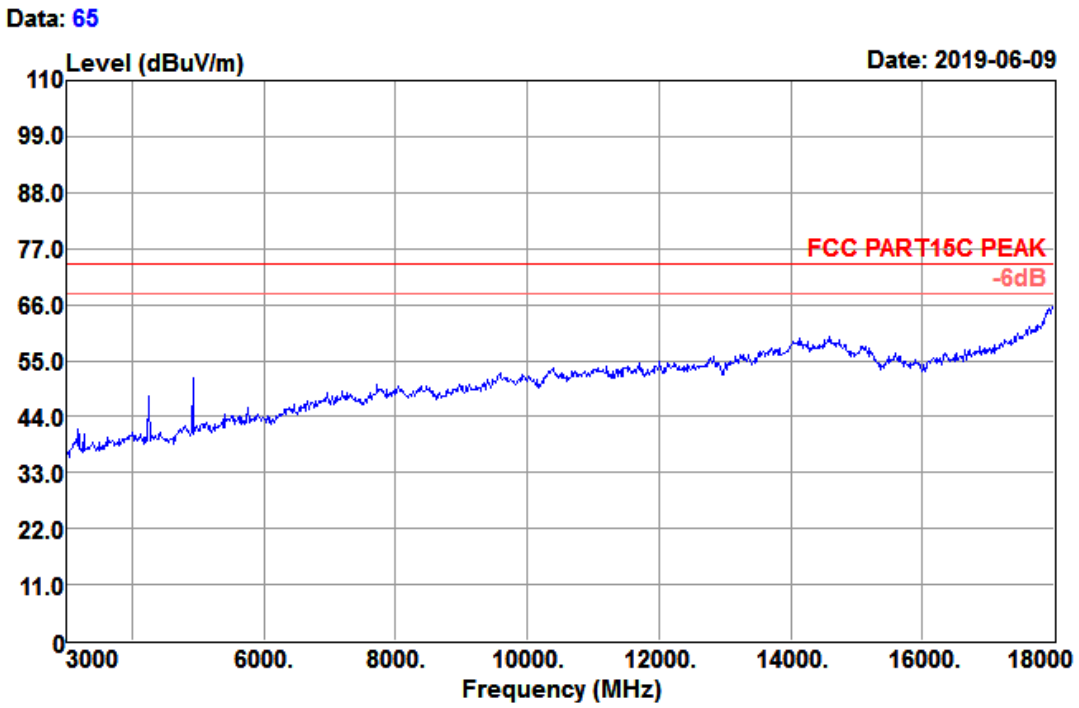
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

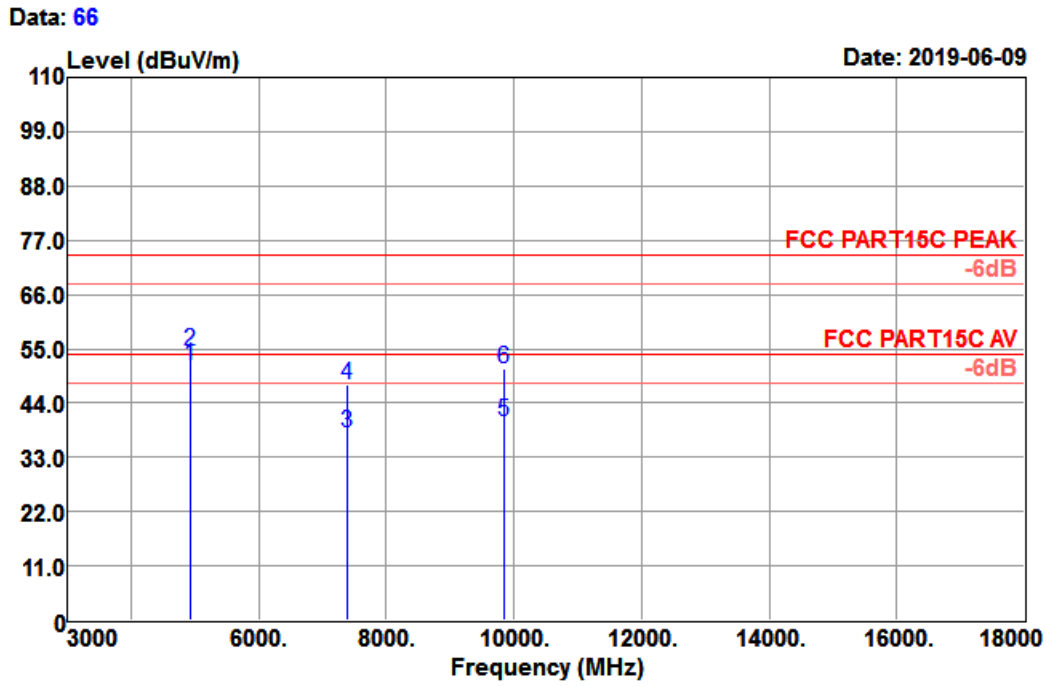
Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.000	109.95	27.30	3.67	36.27	104.65	74.00	30.65	Peak

Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

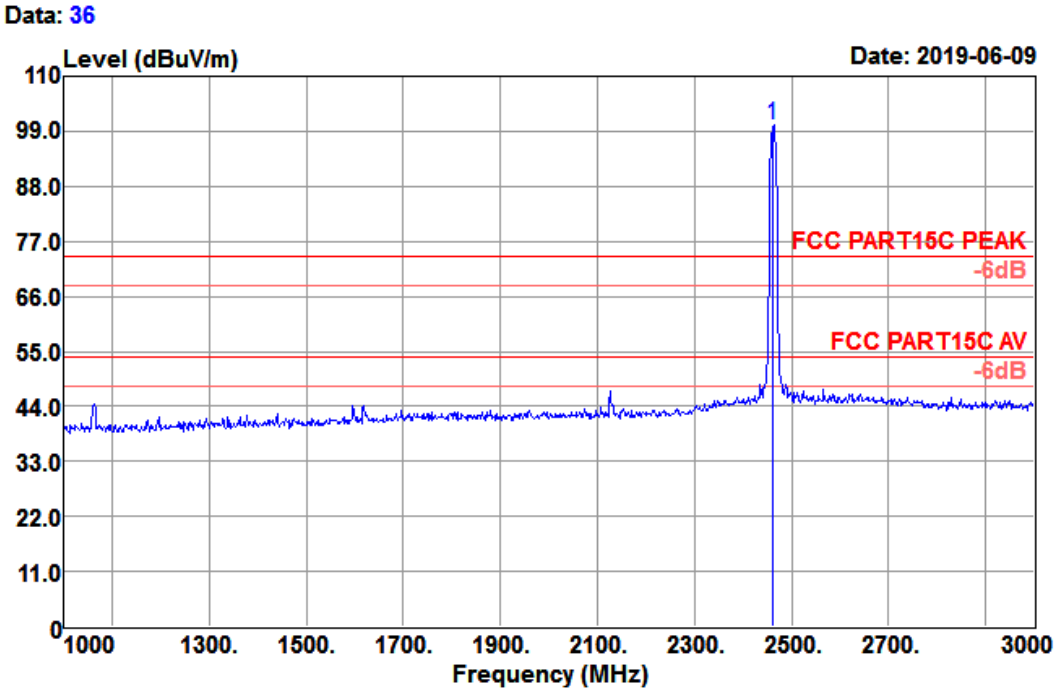




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	51.04	31.52	5.38	36.23	51.71	54.00	-2.29	Average
4924.000	53.72	31.52	5.38	36.23	54.39	74.00	-19.61	Peak
7386.000	28.49	36.29	7.46	34.42	37.82	54.00	-16.18	Average
7386.000	38.38	36.29	7.46	34.42	47.71	74.00	-26.29	Peak
9848.000	28.07	38.23	8.04	34.23	40.11	54.00	-13.89	Average
9848.000	39.00	38.23	8.04	34.23	51.04	74.00	-22.96	Peak

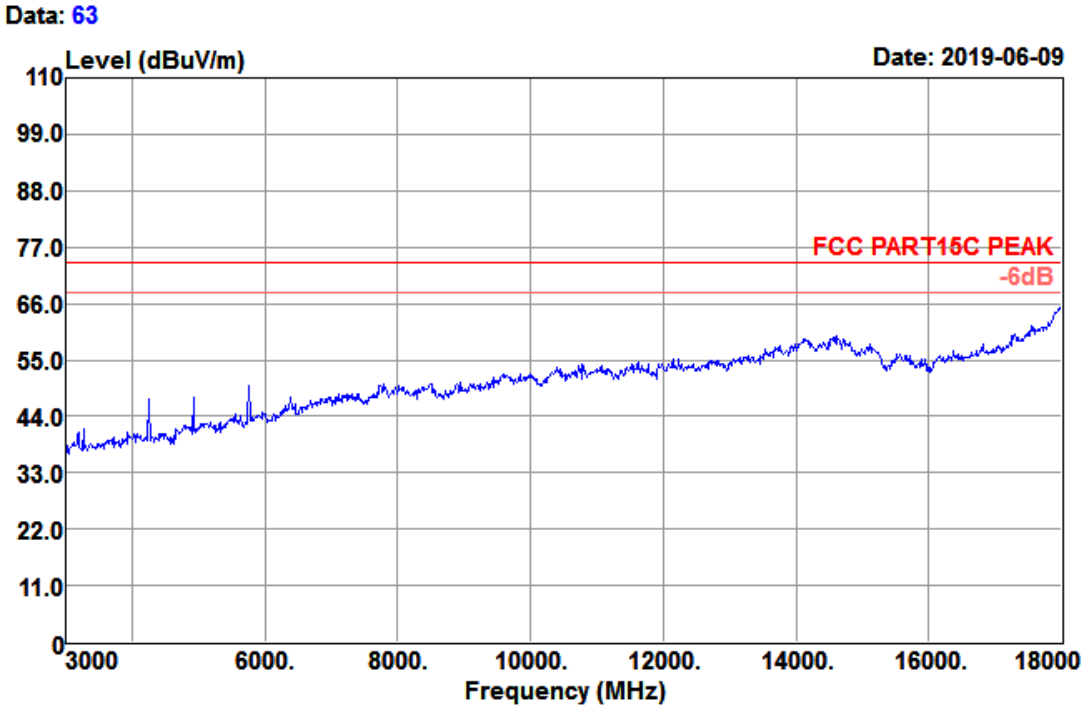
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

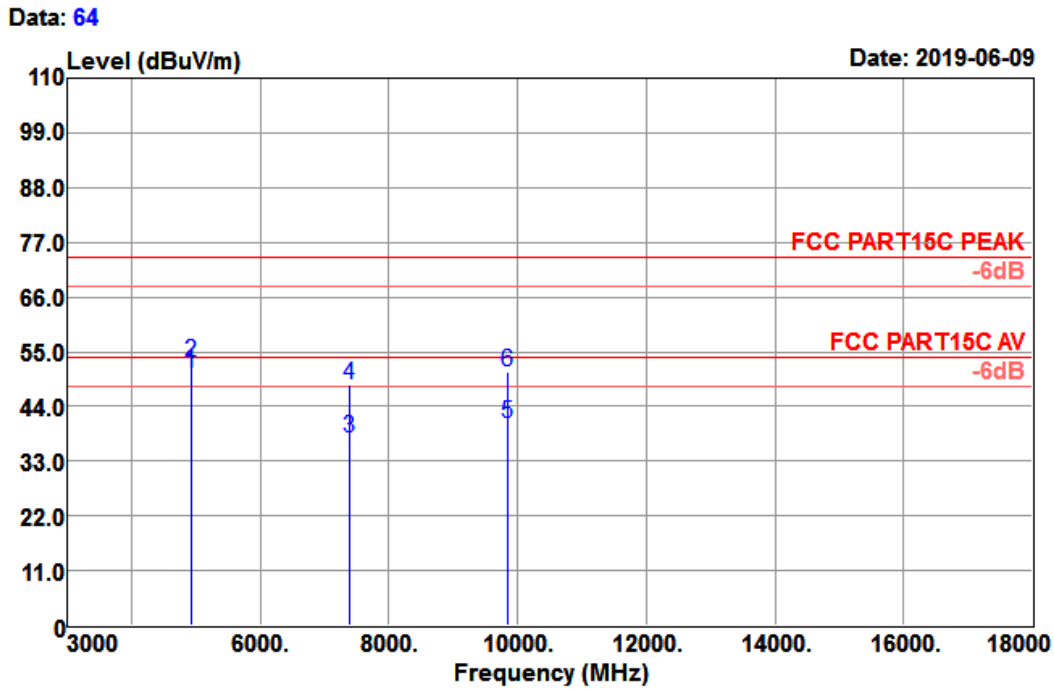
Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2462.000	105.60	27.30	3.67	36.27	100.30	74.00	26.30	Peak

Test Mode :	802.11b CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

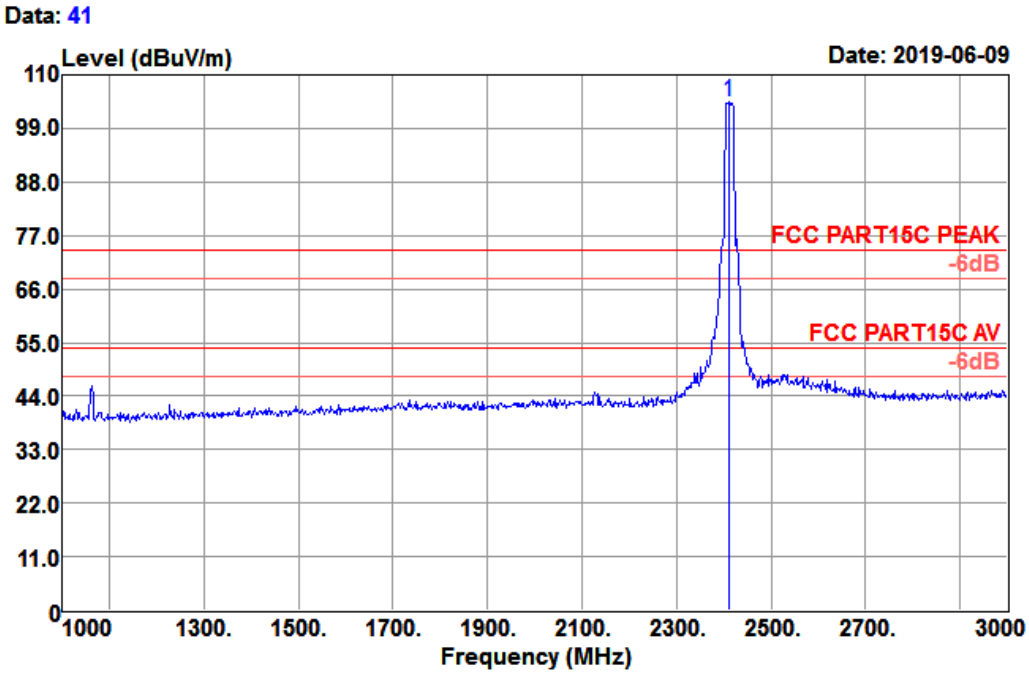




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	49.89	31.52	5.38	36.23	50.56	54.00	-3.44	Average
4924.000	52.18	31.52	5.38	36.23	52.85	74.00	-21.15	Peak
7386.000	28.47	36.29	7.46	34.42	37.80	54.00	-16.20	Average
7386.000	38.95	36.29	7.46	34.42	48.28	74.00	-25.72	Peak
9848.000	28.40	38.23	8.04	34.23	40.44	54.00	-13.56	Average
9848.000	39.03	38.23	8.04	34.23	51.07	74.00	-22.93	Peak

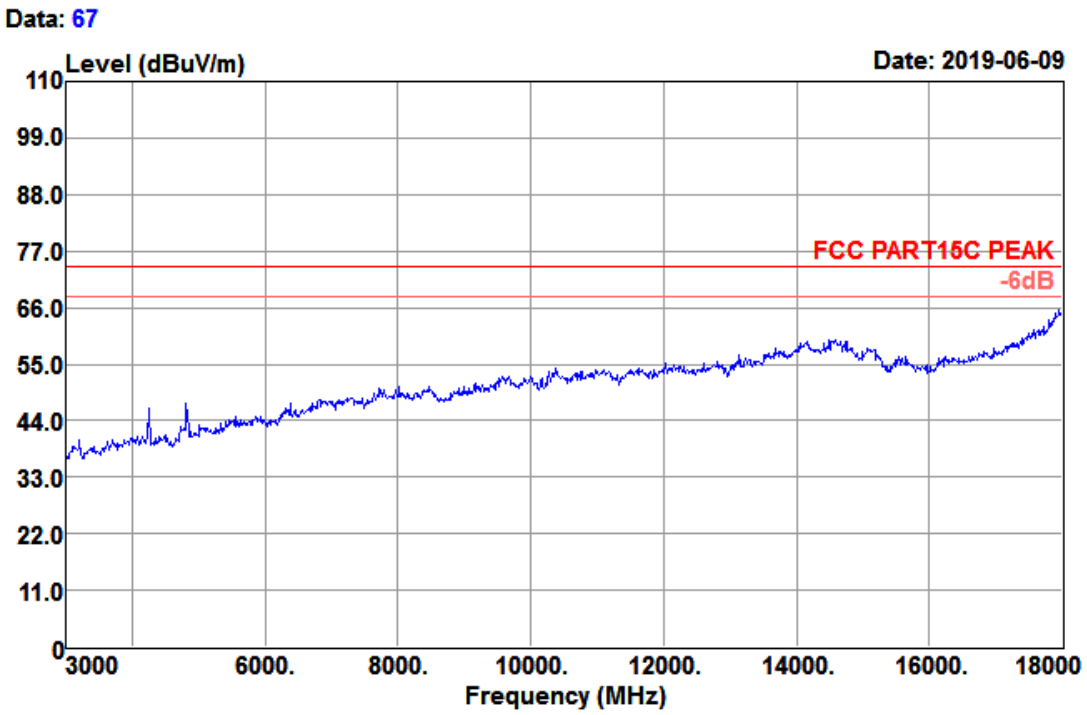
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

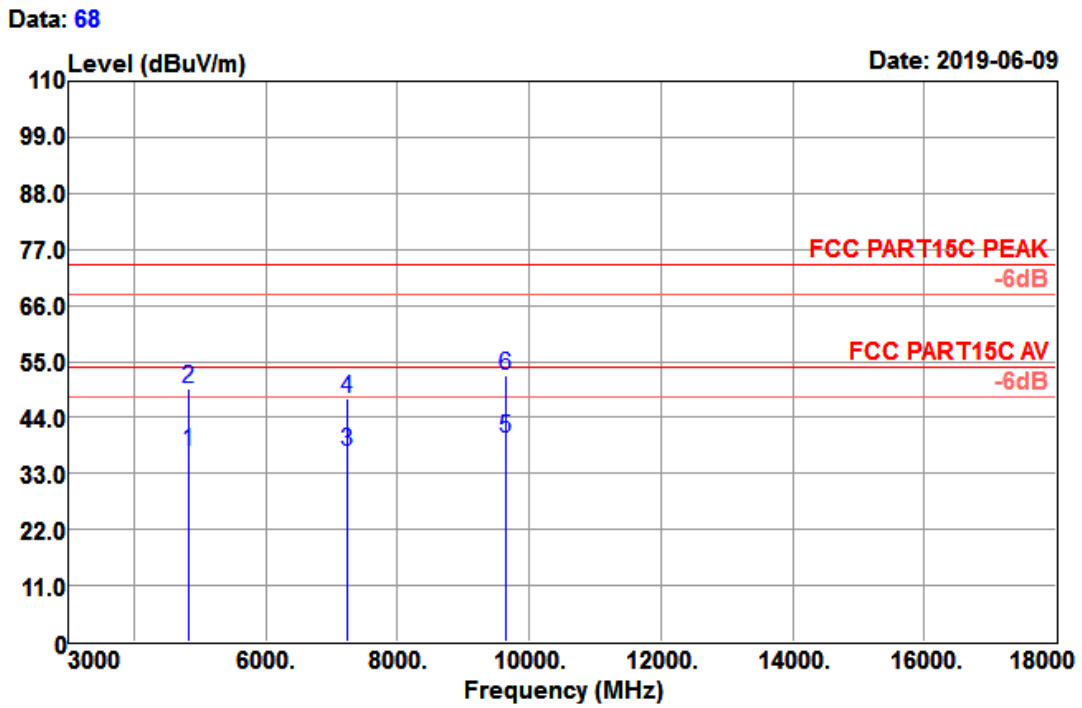
Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	109.83	27.17	3.65	36.14	104.51	74.00	30.51	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

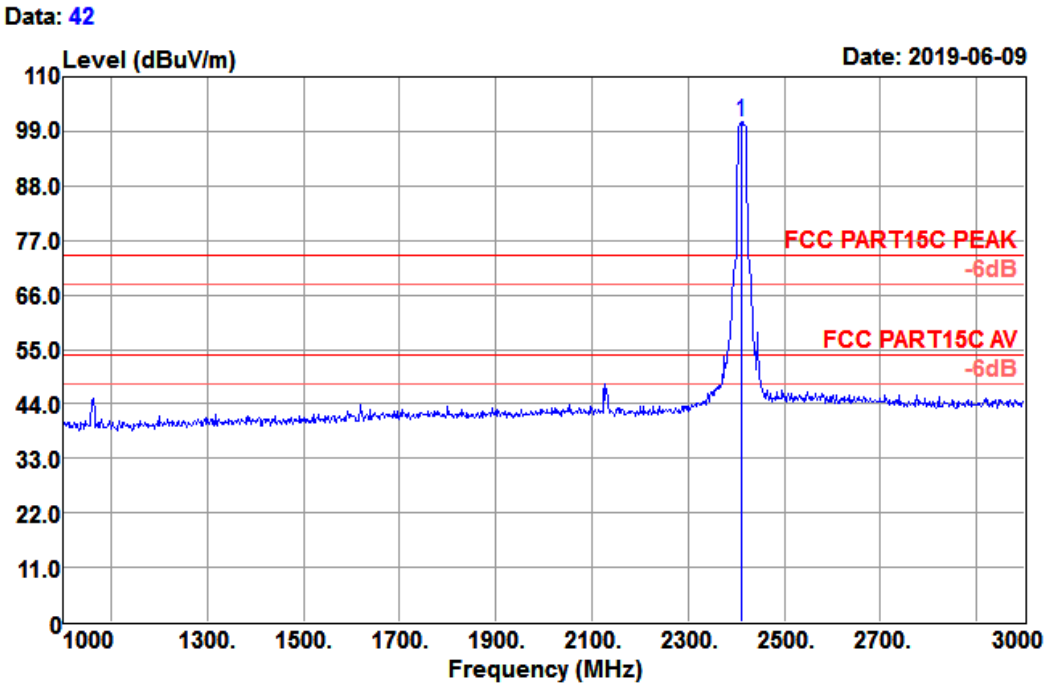




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	36.87	31.28	5.44	36.26	37.33	54.00	-16.67	Average
4824.000	49.32	31.28	5.44	36.26	49.78	74.00	-24.22	Peak
7236.000	28.66	35.94	7.02	34.27	37.35	54.00	-16.65	Average
7236.000	39.04	35.94	7.02	34.27	47.73	74.00	-26.27	Peak
9648.000	28.46	37.87	7.82	34.15	40.00	54.00	-14.00	Average
9648.000	40.56	37.87	7.82	34.15	52.10	74.00	-21.90	Peak

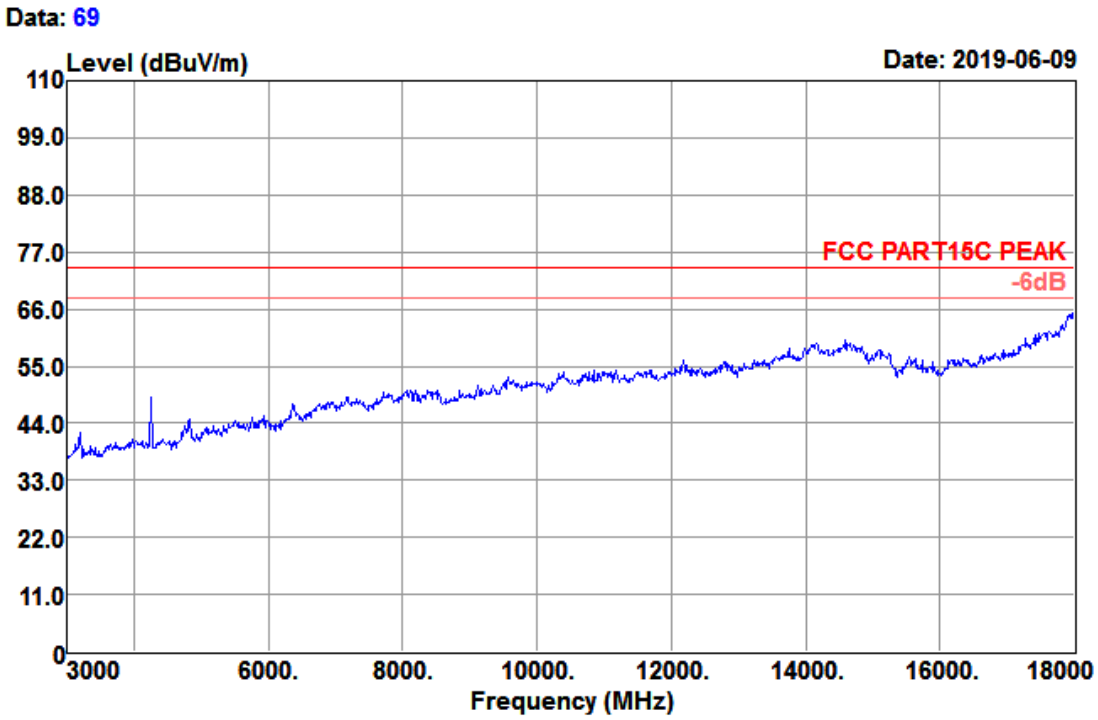
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

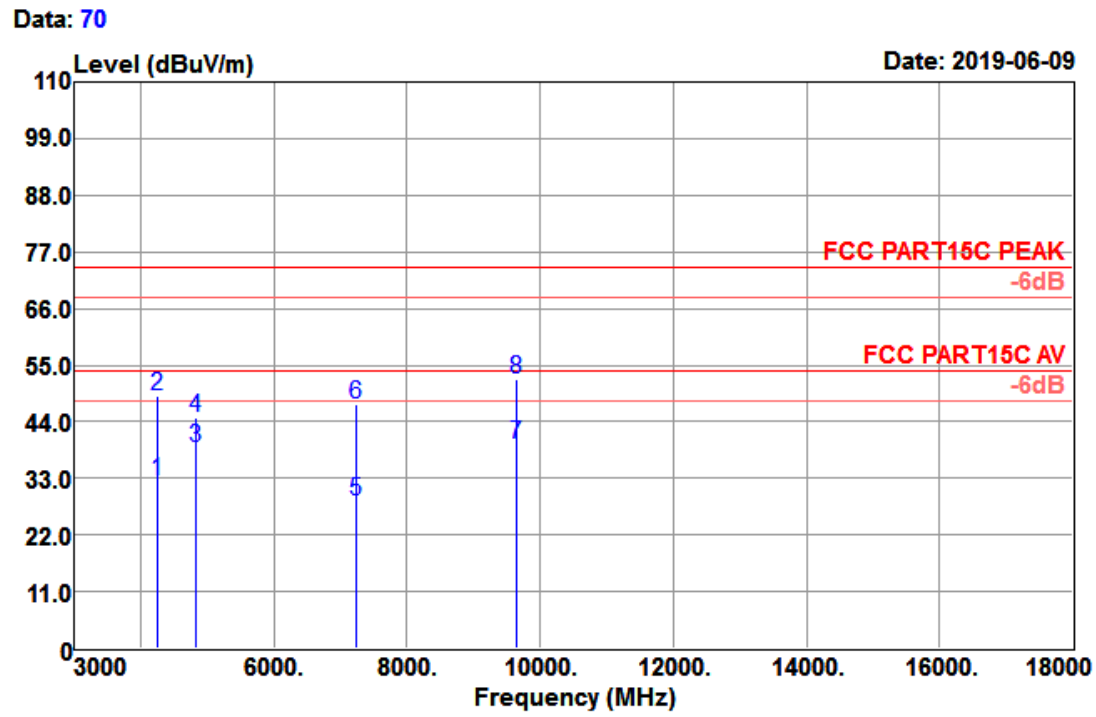
Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	106.32	27.17	3.65	36.14	101.00	74.00	27.00	Peak

Test Mode :	802.11g CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

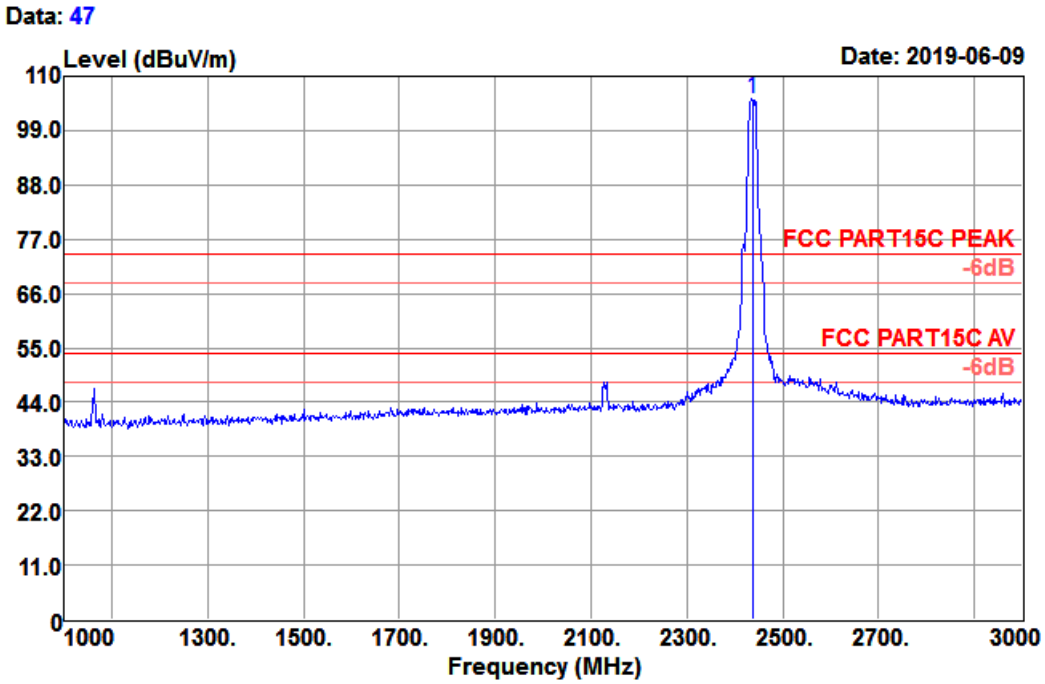




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4245.000	33.54	29.89	5.35	36.46	32.32	54.00	-21.68	Average
4245.000	50.15	29.89	5.35	36.46	48.93	74.00	-25.07	Peak
4824.000	38.54	31.28	5.44	36.26	39.00	54.00	-15.00	Average
4824.000	44.25	31.28	5.44	36.26	44.71	74.00	-29.29	Peak
7236.000	19.82	35.94	7.02	34.27	28.51	54.00	-25.49	Average
7236.000	38.76	35.94	7.02	34.27	47.45	74.00	-26.55	Peak
9648.000	28.18	37.87	7.82	34.15	39.72	54.00	-14.28	Average
9648.000	40.73	37.87	7.82	34.15	52.27	74.00	-21.73	Peak

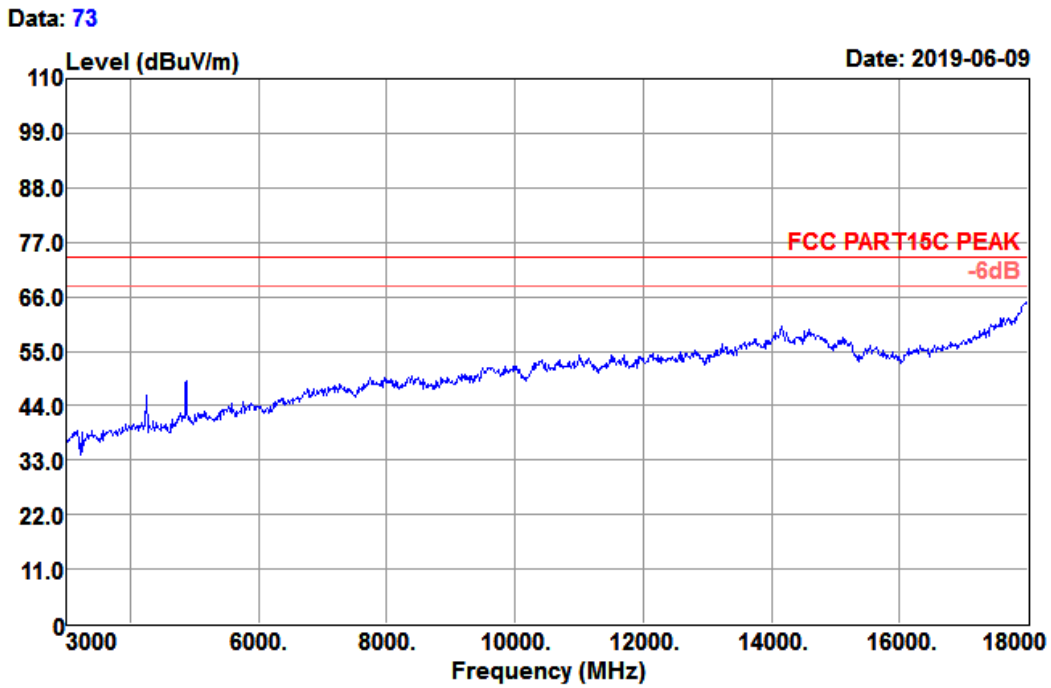
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

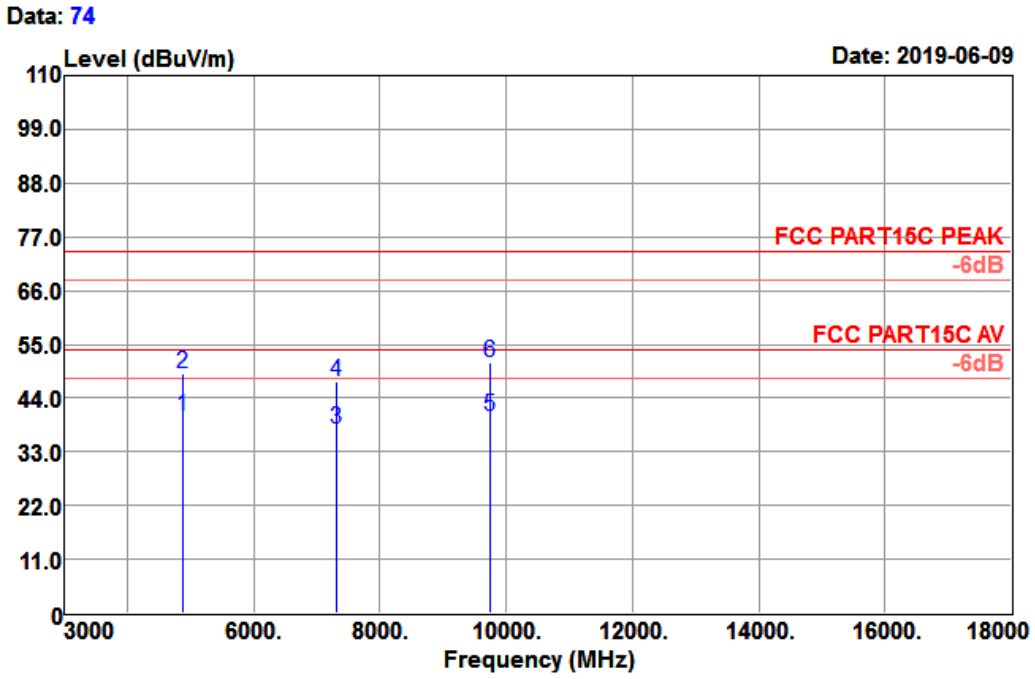
Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2437.000	110.71	27.24	3.66	36.20	105.41	74.00	31.41	Peak

Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

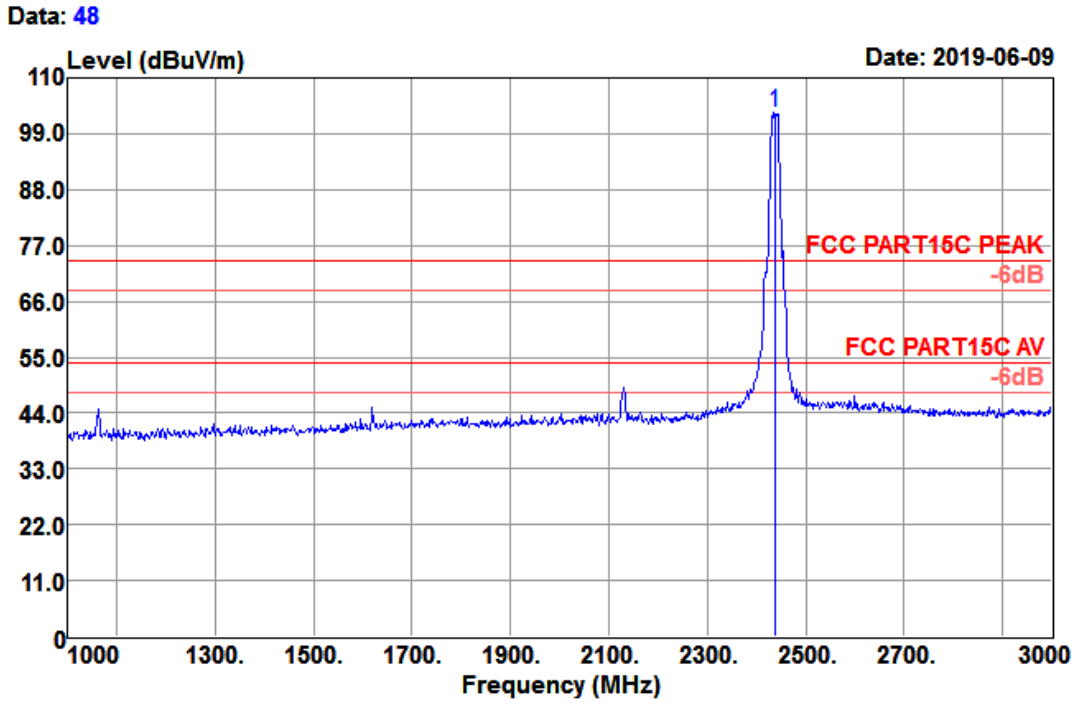




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	39.73	31.40	5.41	36.24	40.30	54.00	-13.70	Average
4874.000	48.56	31.40	5.41	36.24	49.13	74.00	-24.87	Peak
7311.000	28.53	36.12	7.24	34.35	37.54	54.00	-16.46	Average
7311.000	38.51	36.12	7.24	34.35	47.52	74.00	-26.48	Peak
9748.000	28.32	38.05	7.96	34.19	40.14	54.00	-13.86	Average
9748.000	39.38	38.05	7.96	34.19	51.20	74.00	-22.80	Peak

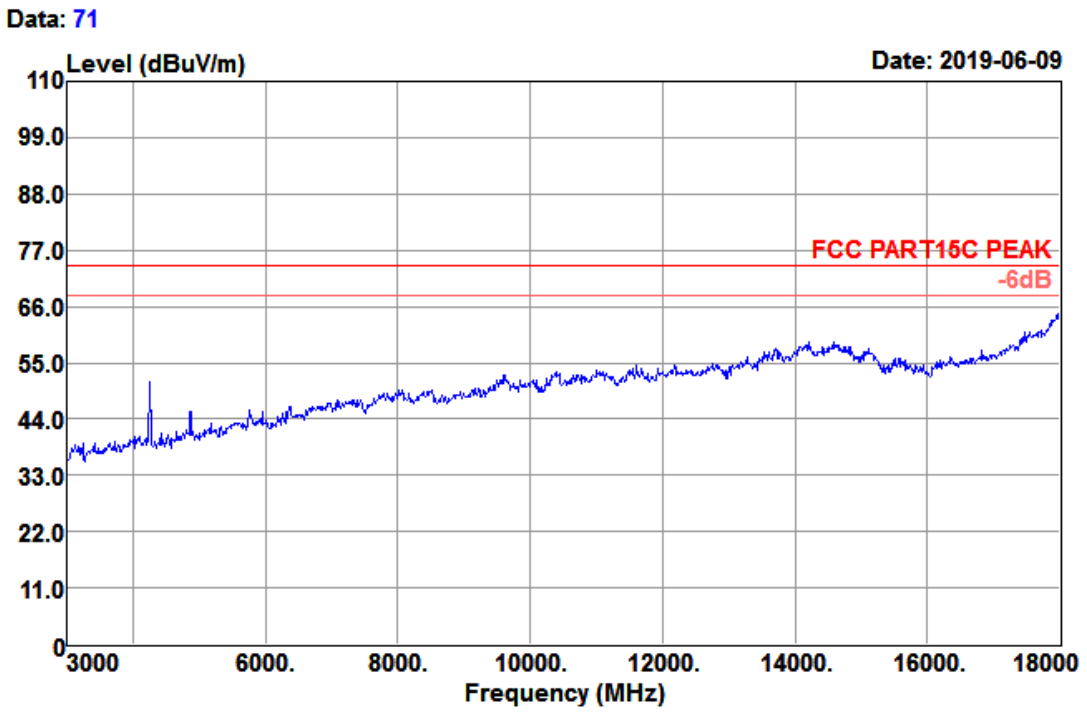
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

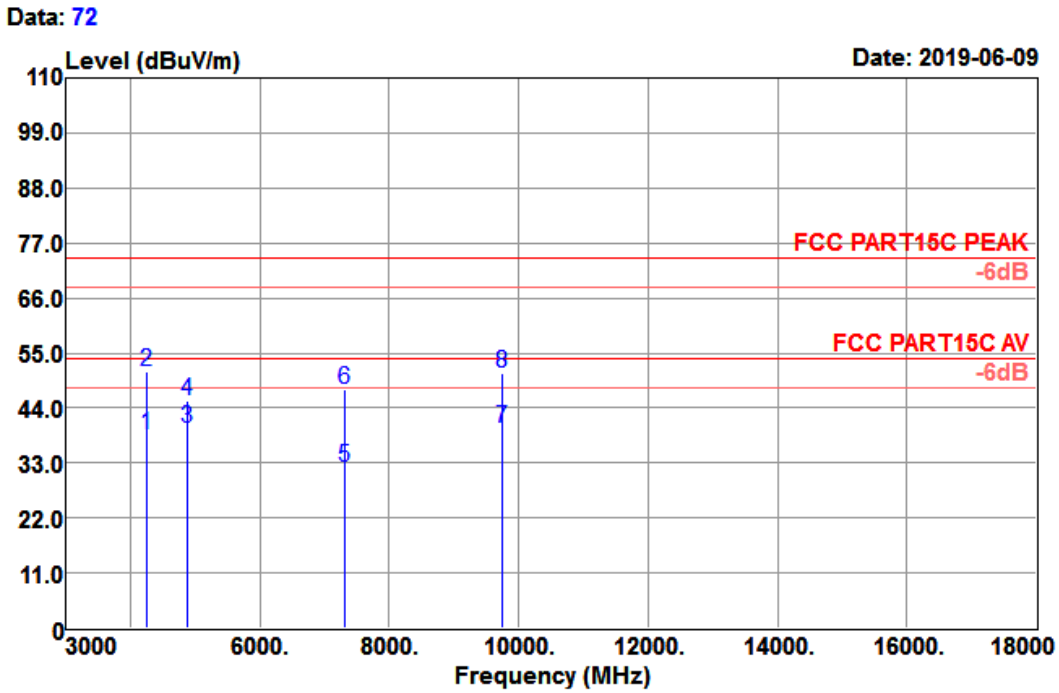
Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2437.000	108.58	27.24	3.66	36.20	103.28	74.00	29.28	Peak

Test Mode :	802.11g CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

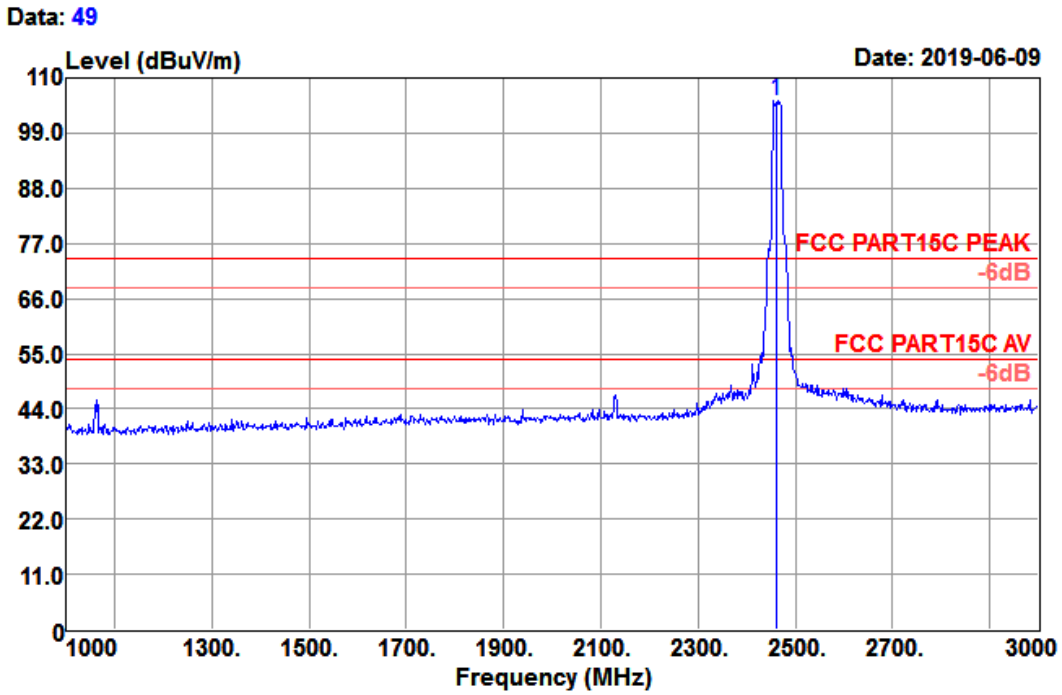




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4260.000	39.90	29.92	5.35	36.46	38.71	54.00	-15.29	Average
4260.000	52.49	29.92	5.35	36.46	51.30	74.00	-22.70	Peak
4874.000	39.37	31.40	5.41	36.24	39.94	54.00	-14.06	Average
4874.000	44.75	31.40	5.41	36.24	45.32	74.00	-28.68	Peak
7311.000	23.12	36.12	7.24	34.35	32.13	54.00	-21.87	Average
7311.000	38.70	36.12	7.24	34.35	47.71	74.00	-26.29	Peak
9748.000	28.20	38.05	7.96	34.19	40.02	54.00	-13.98	Average
9748.000	39.03	38.05	7.96	34.19	50.85	74.00	-23.15	Peak

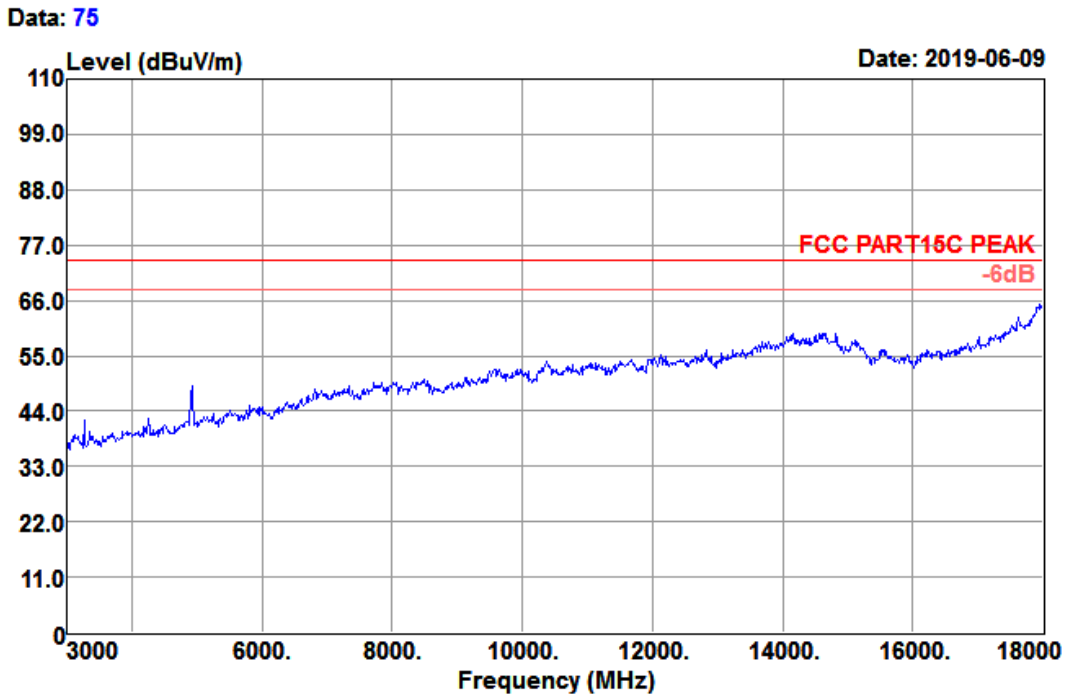
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

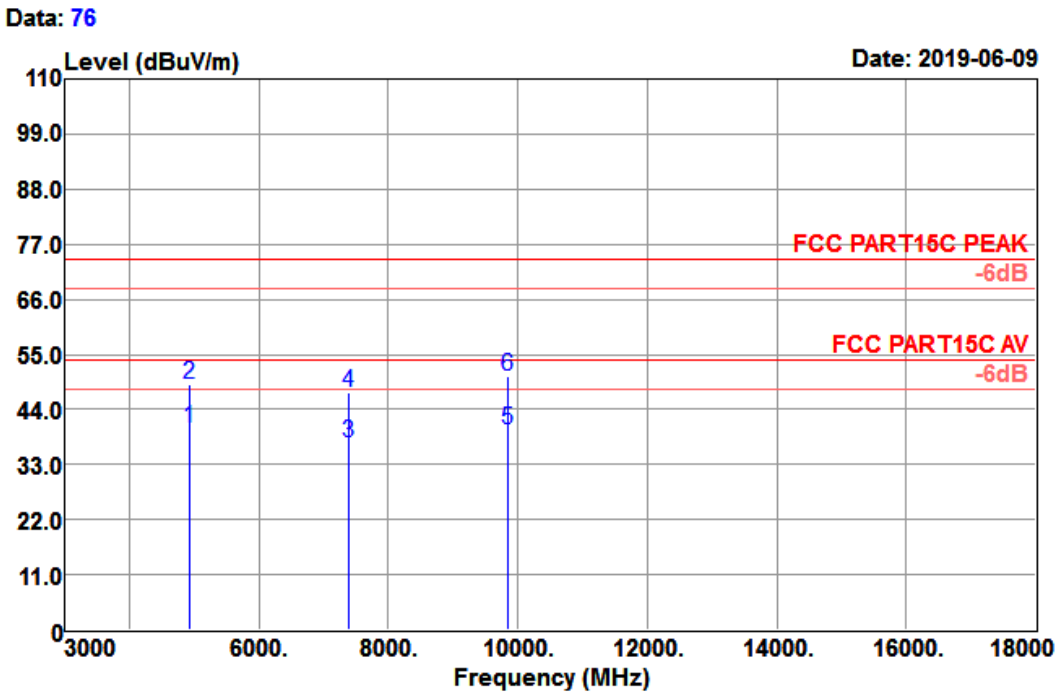
Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.000	110.70	27.30	3.67	36.27	105.40	74.00	31.40	Peak

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

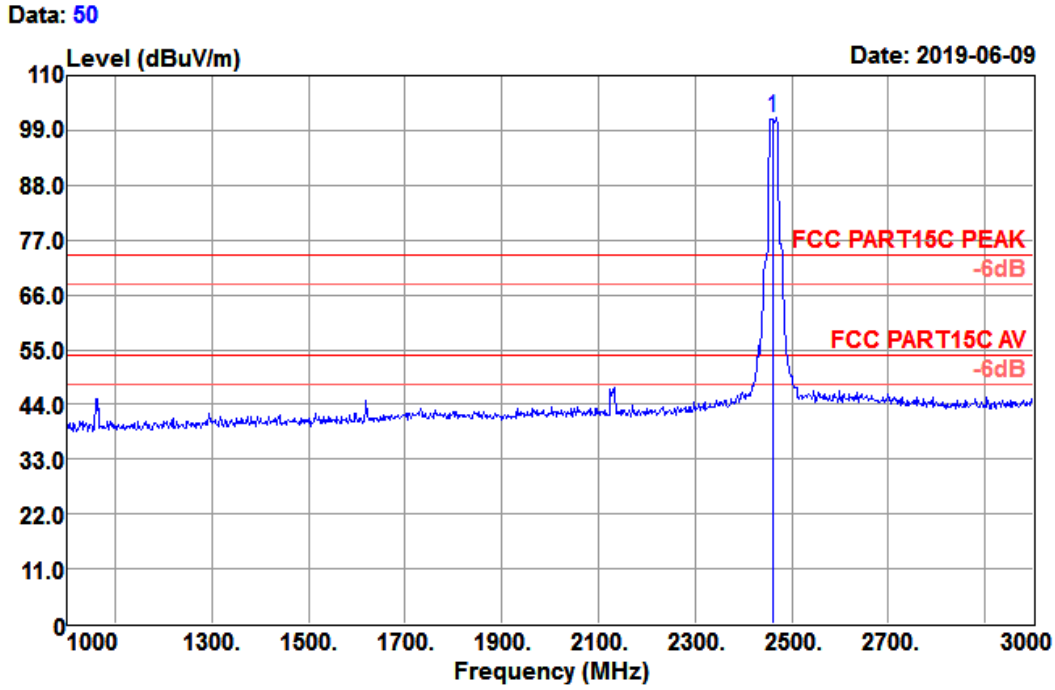




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	39.72	31.52	5.38	36.23	40.39	54.00	-13.61	Average
4924.000	48.19	31.52	5.38	36.23	48.86	74.00	-25.14	Peak
7386.000	27.95	36.29	7.46	34.42	37.28	54.00	-16.72	Average
7386.000	37.97	36.29	7.46	34.42	47.30	74.00	-26.70	Peak
9848.000	27.83	38.23	8.04	34.23	39.87	54.00	-14.13	Average
9848.000	38.43	38.23	8.04	34.23	50.47	74.00	-23.53	Peak

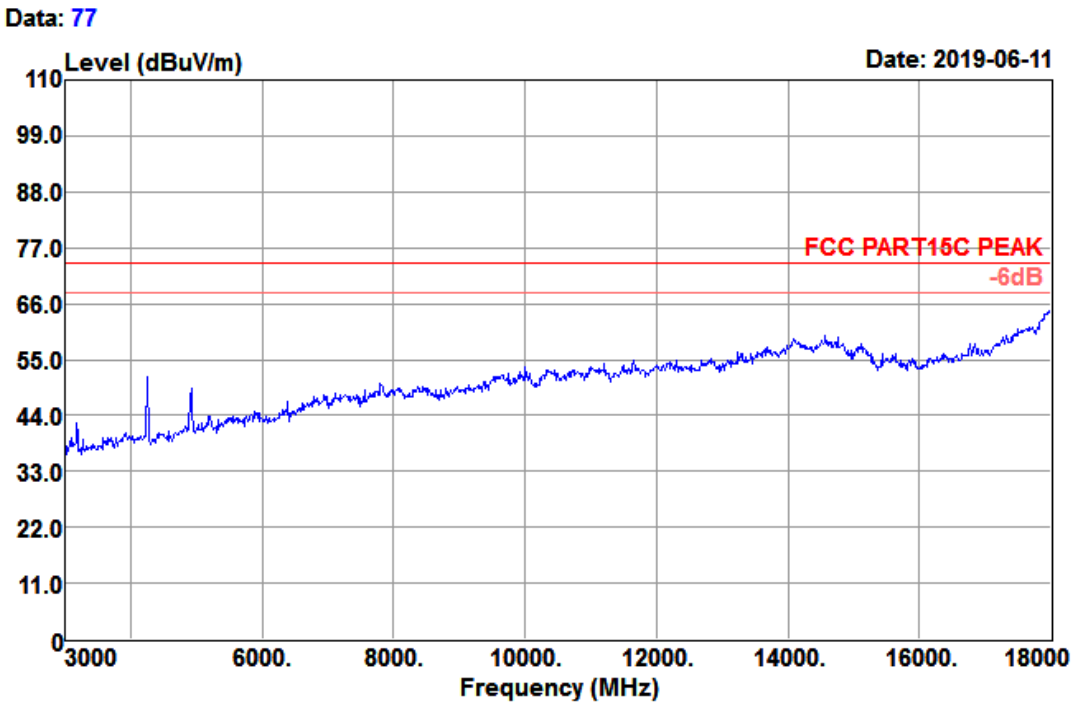
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

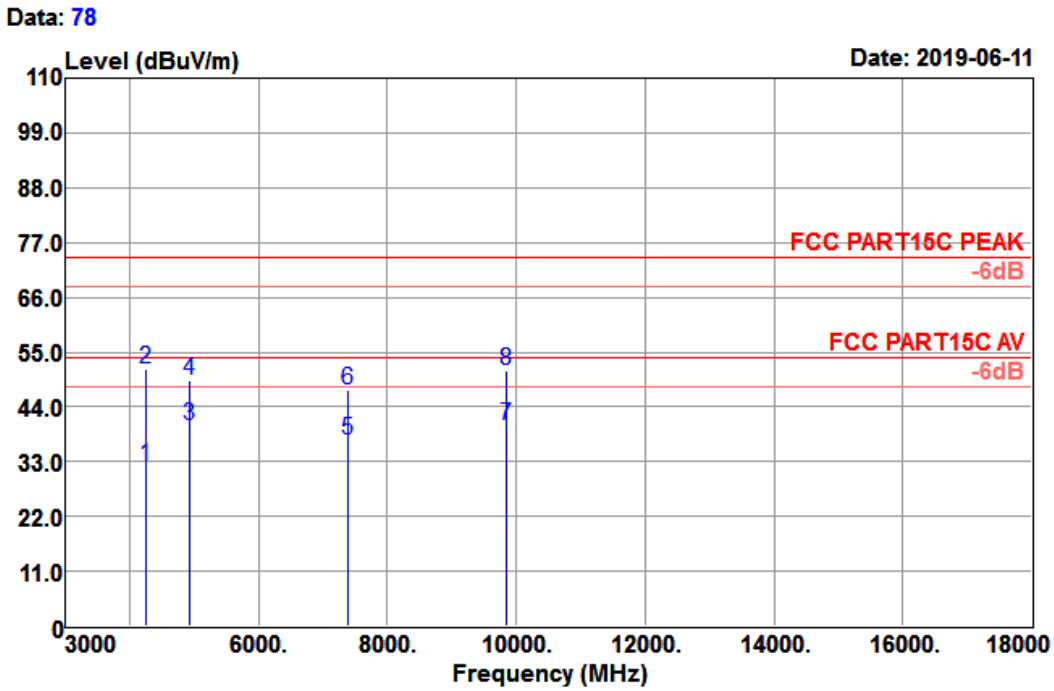
Test Mode :	802.11g CH11 (2462MHz)	**Temperature :**	21~23℃
Test Engineer :	Julie Deng	**Relative Humidity :**	63~65%
Frequencey Range	1GHz~3GHz	**Polarization :**	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.000	106.98	27.30	3.67	36.27	101.68	74.00	27.68	Peak

Test Mode :	802.11g CH11 (2462MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

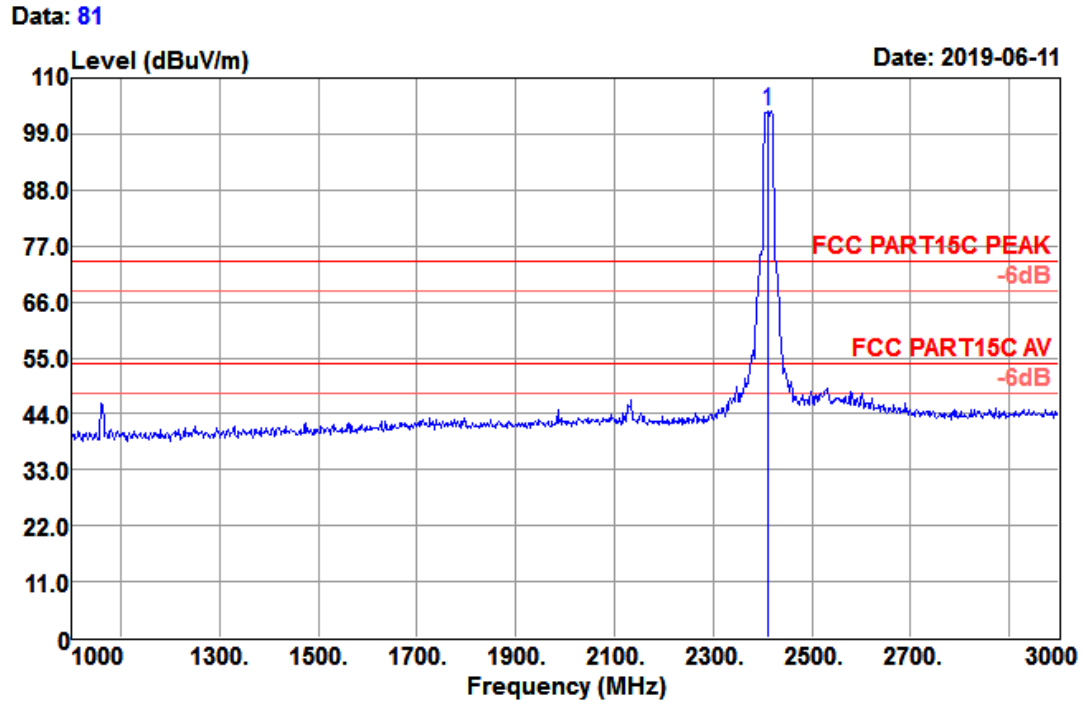




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4245.000	33.48	29.89	5.35	36.46	32.26	54.00	-21.74	Average
4245.000	52.81	29.89	5.35	36.46	51.59	74.00	-22.41	Peak
4924.000	39.59	31.52	5.38	36.23	40.26	54.00	-13.74	Average
4924.000	48.73	31.52	5.38	36.23	49.40	74.00	-24.60	Peak
7386.000	28.07	36.29	7.46	34.42	37.40	54.00	-16.60	Average
7386.000	38.06	36.29	7.46	34.42	47.39	74.00	-26.61	Peak
9848.000	28.21	38.23	8.04	34.23	40.25	54.00	-13.75	Average
9848.000	39.09	38.23	8.04	34.23	51.13	74.00	-22.87	Peak

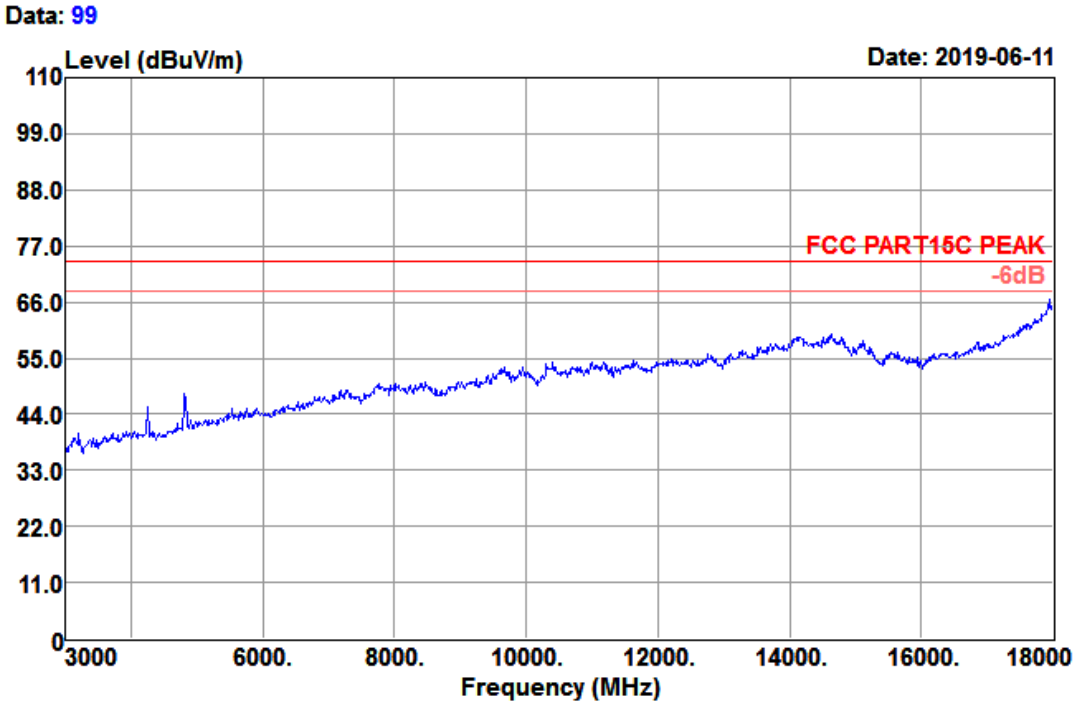
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

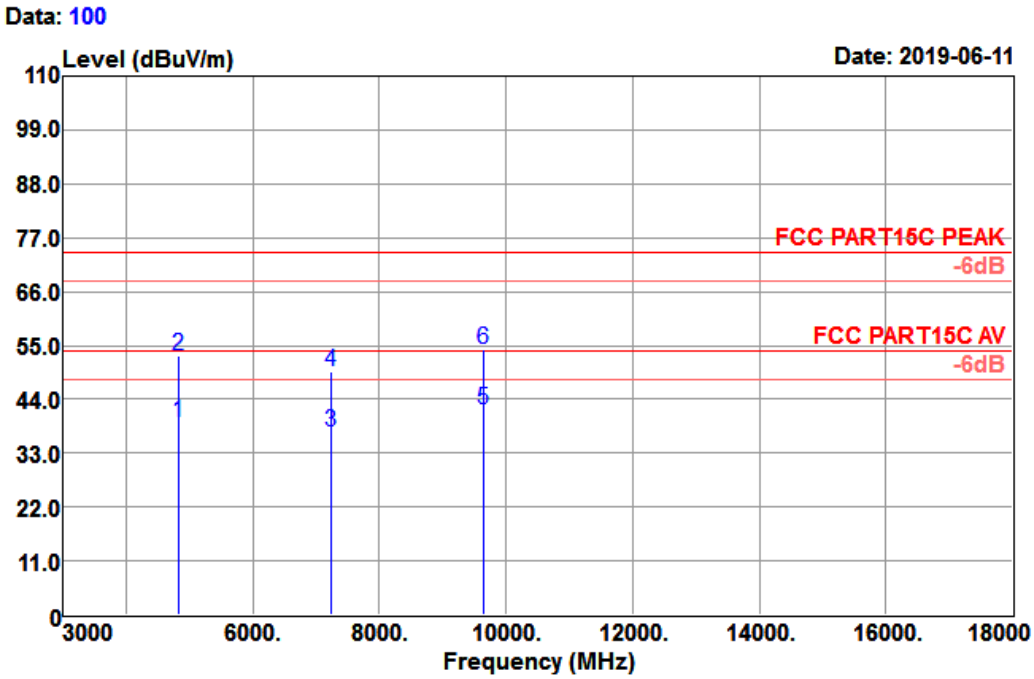
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	108.86	27.17	3.65	36.14	103.54	74.00	29.54	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

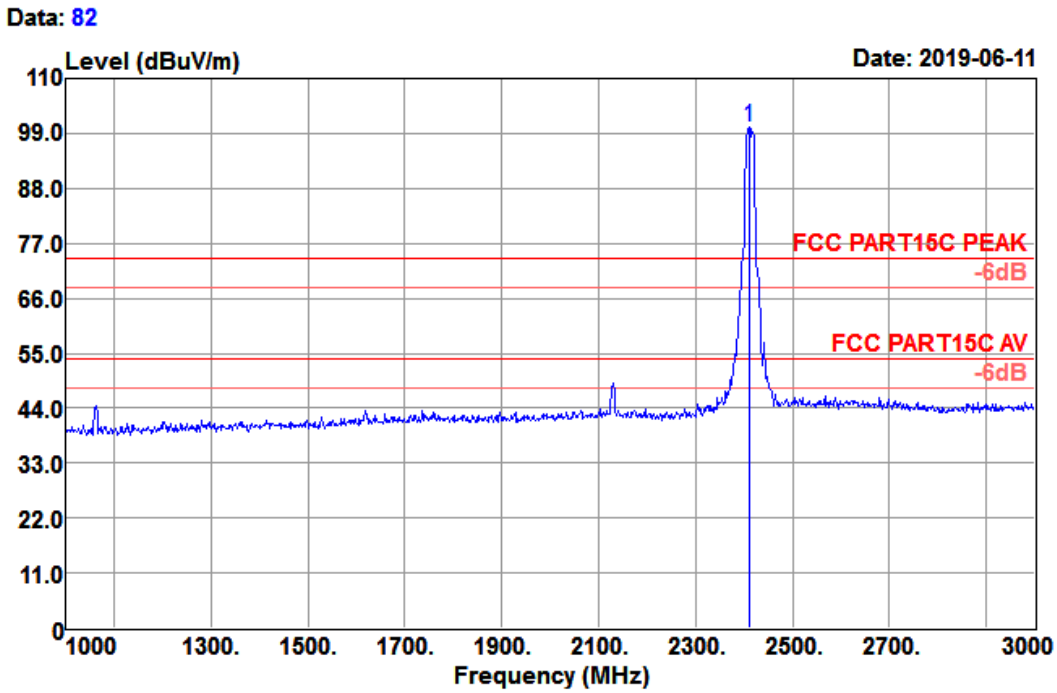




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	38.70	31.28	5.44	36.26	39.16	54.00	-14.84	Average
4824.000	52.56	31.28	5.44	36.26	53.02	74.00	-20.98	Peak
7236.000	28.64	35.94	7.02	34.27	37.33	54.00	-16.67	Average
7236.000	40.96	35.94	7.02	34.27	49.65	74.00	-24.35	Peak
9648.000	30.27	37.87	7.82	34.15	41.81	54.00	-12.19	Average
9648.000	42.74	37.87	7.82	34.15	54.28	74.00	-19.72	Peak

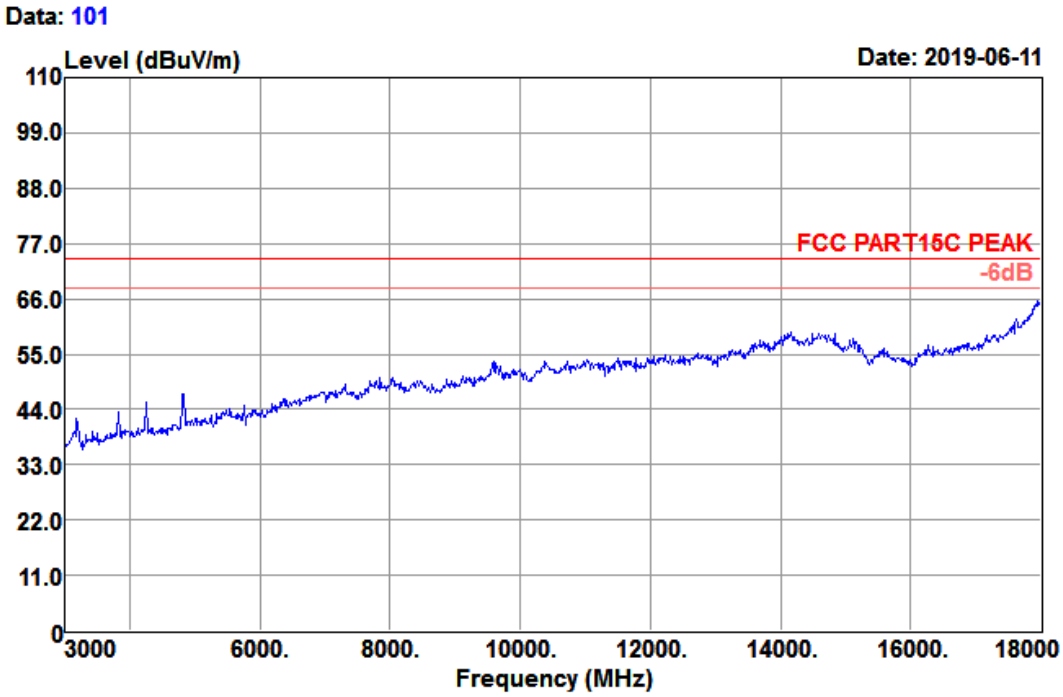
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

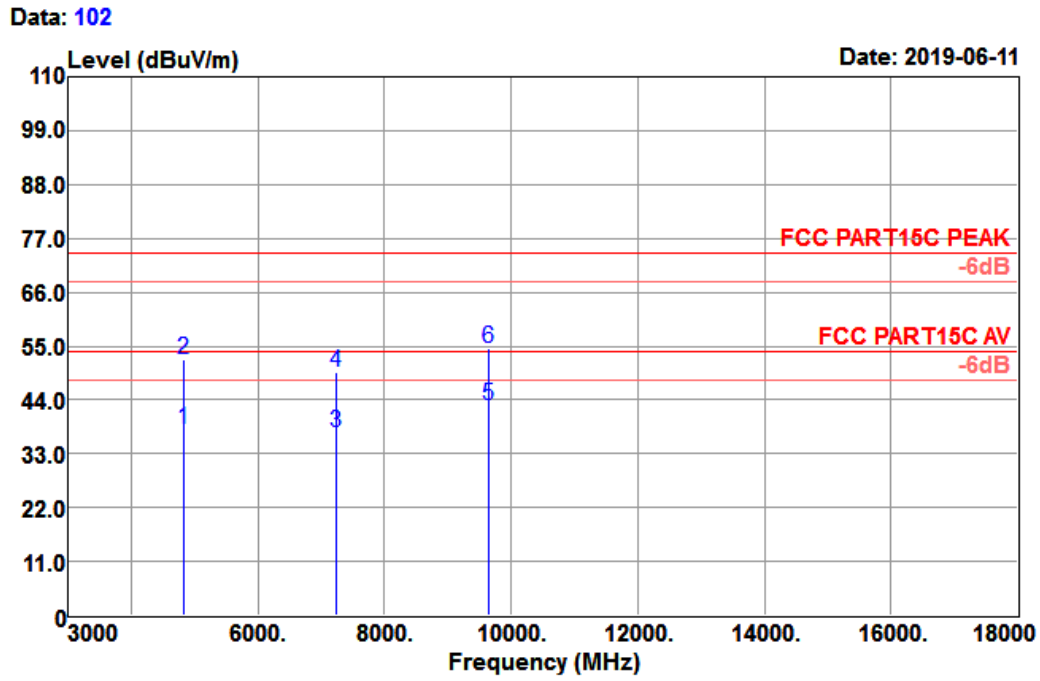
Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2412.000	105.49	27.17	3.65	36.14	100.17	74.00	26.17	Peak

Test Mode :	802.11n HT20 CH01 (2412 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

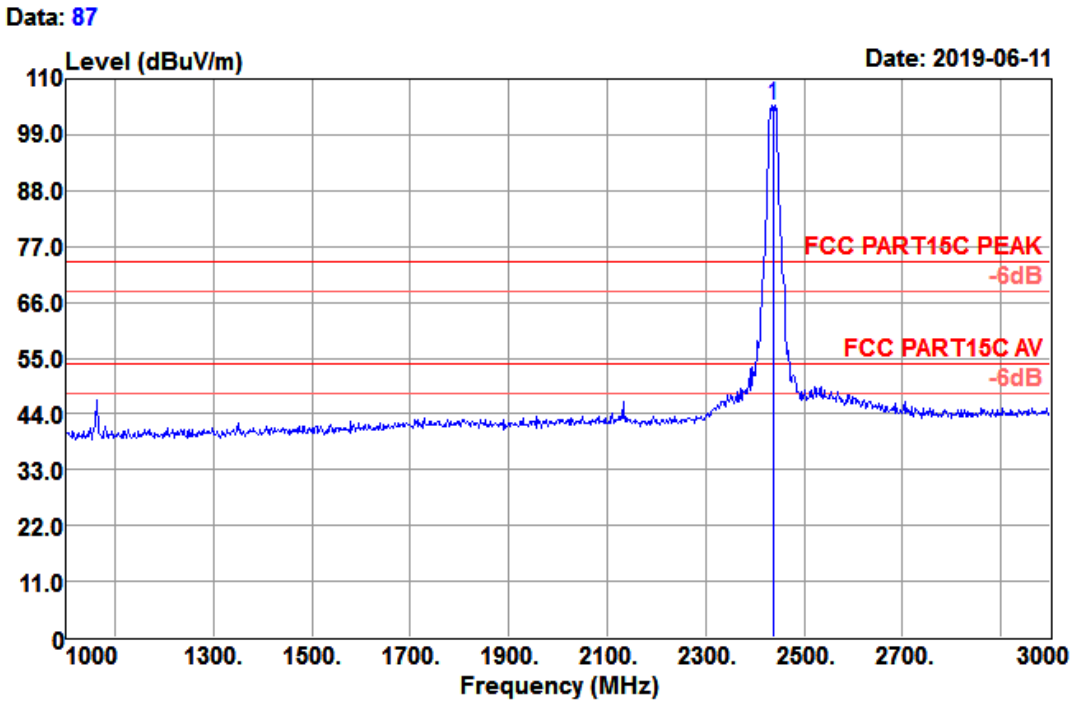




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	37.49	31.28	5.44	36.26	37.95	54.00	-16.05	Average
4824.000	51.84	31.28	5.44	36.26	52.30	74.00	-21.70	Peak
7236.000	28.69	35.94	7.02	34.27	37.38	54.00	-16.62	Average
7236.000	40.82	35.94	7.02	34.27	49.51	74.00	-24.49	Peak
9648.000	31.26	37.87	7.82	34.15	42.80	54.00	-11.20	Average
9648.000	43.11	37.87	7.82	34.15	54.65	74.00	-19.35	Peak

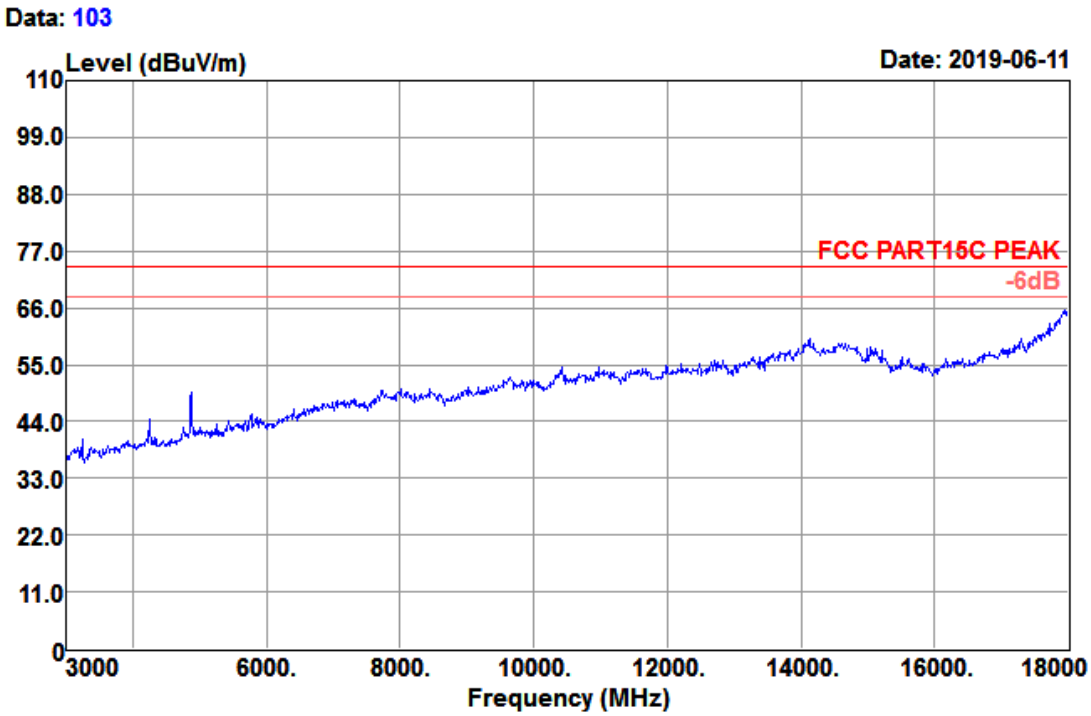
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

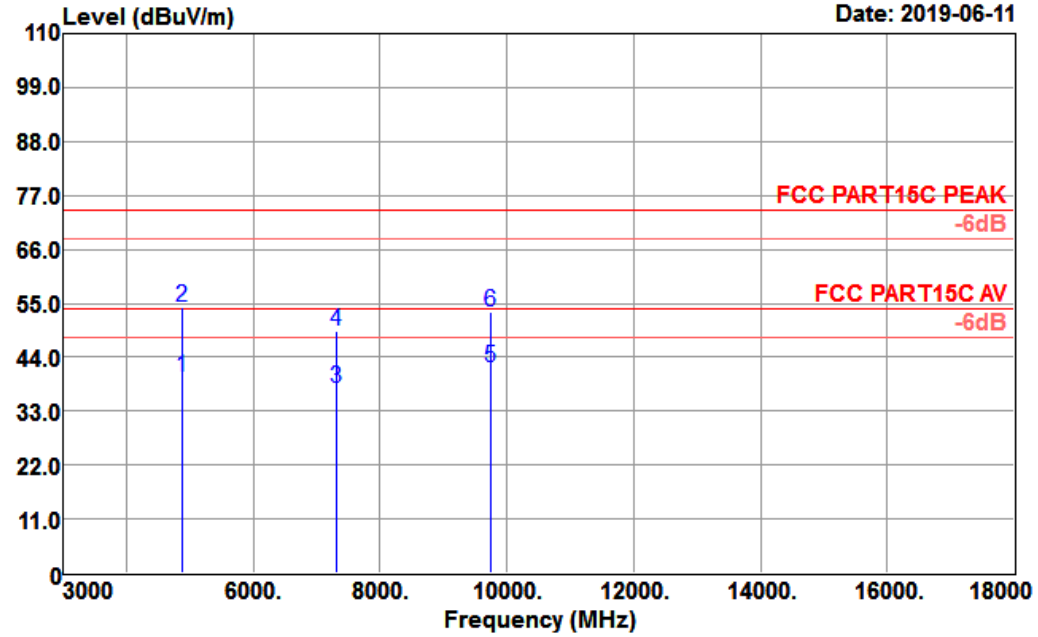
Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2437.000	110.24	27.24	3.66	36.20	104.94	74.00	30.94	Peak

Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

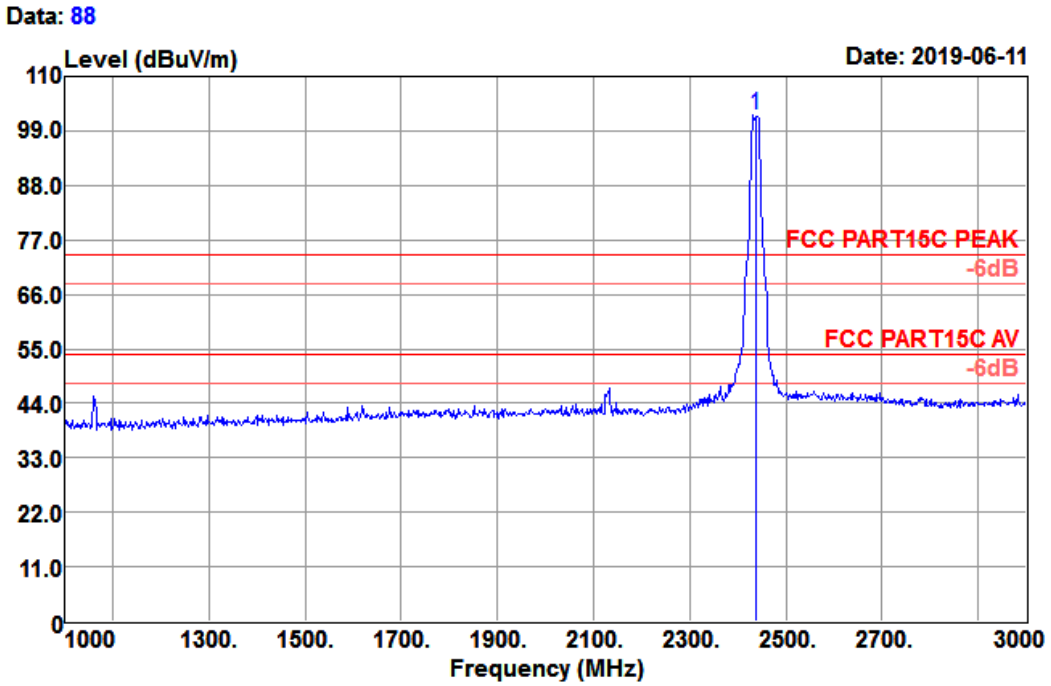




Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	39.41	31.40	5.41	36.24	39.98	54.00	-14.02	Average
4874.000	53.63	31.40	5.41	36.24	54.20	74.00	-19.80	Peak
7311.000	28.62	36.12	7.24	34.35	37.63	54.00	-16.37	Average
7311.000	40.31	36.12	7.24	34.35	49.32	74.00	-24.68	Peak
9748.000	30.12	38.05	7.96	34.19	41.94	54.00	-12.06	Average
9748.000	41.29	38.05	7.96	34.19	53.11	74.00	-20.89	Peak

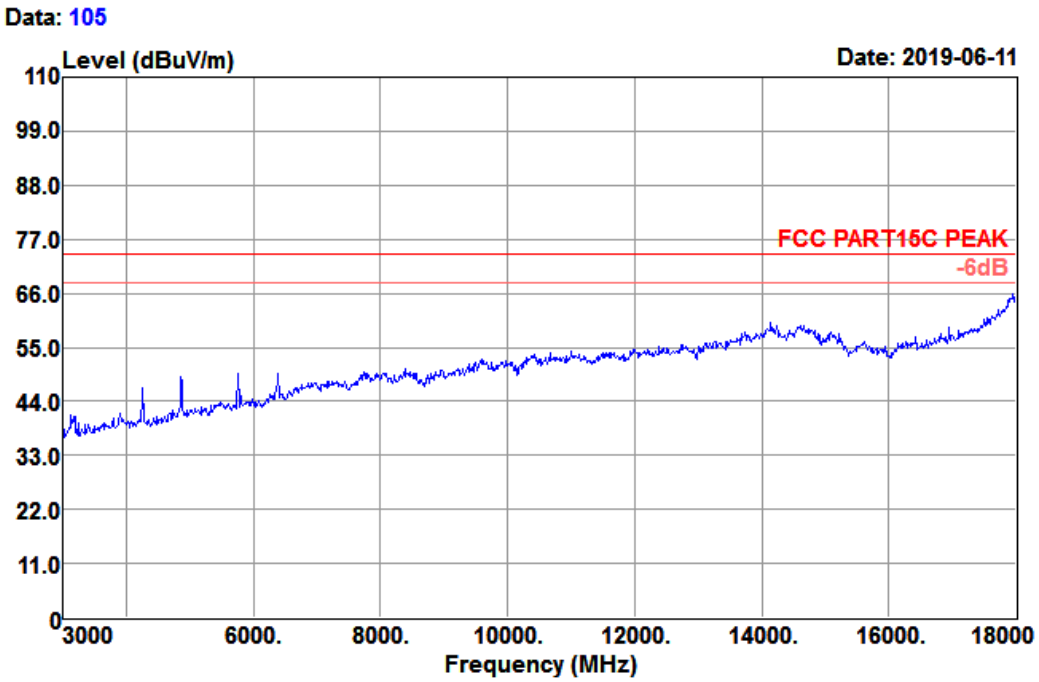
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

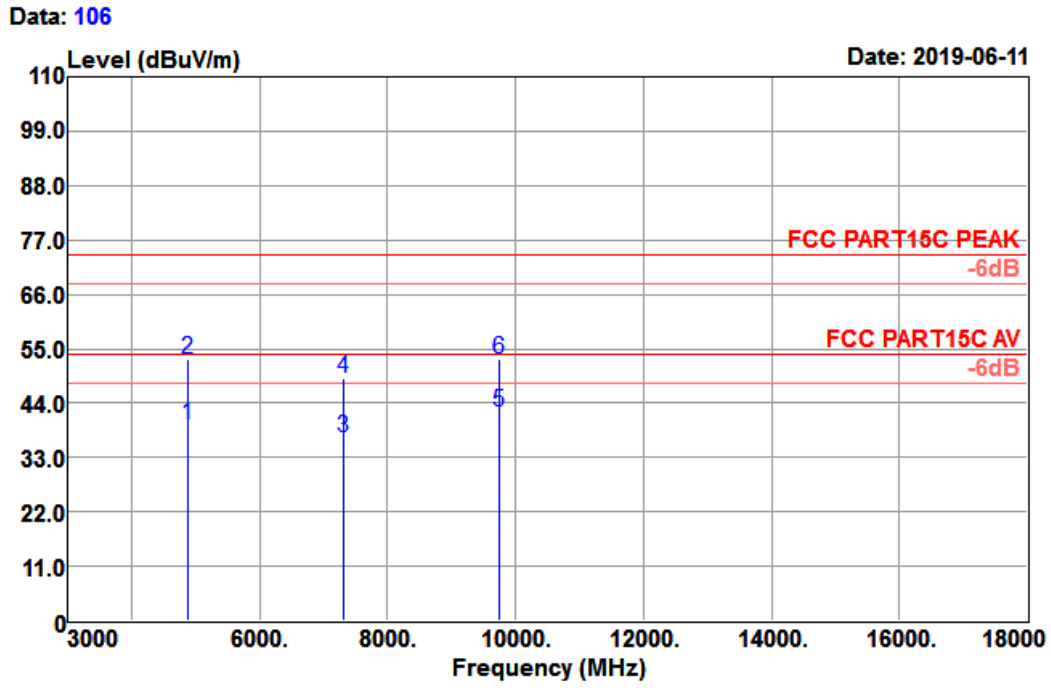
Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2437.000	107.57	27.24	3.66	36.20	102.27	74.00	28.27	Peak

Test Mode :	802.11n HT20 CH06 (2437MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical

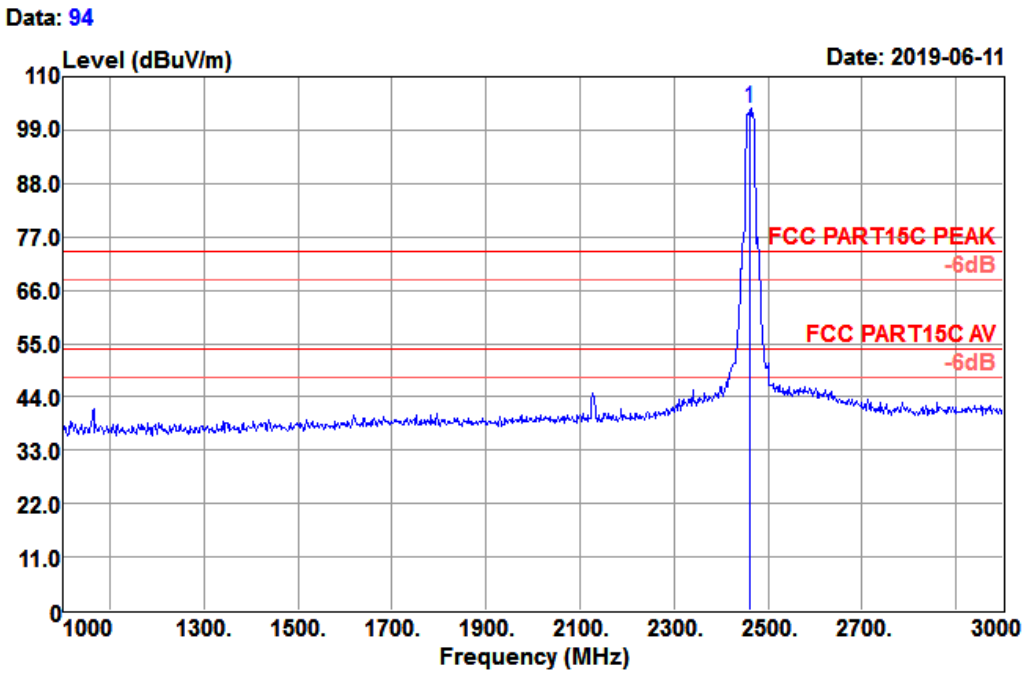




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	38.91	31.40	5.41	36.24	39.48	54.00	-14.52	Average
4874.000	52.44	31.40	5.41	36.24	53.01	74.00	-20.99	Peak
7311.000	28.10	36.12	7.24	34.35	37.11	54.00	-16.89	Average
7311.000	39.90	36.12	7.24	34.35	48.91	74.00	-25.09	Peak
9748.000	30.25	38.05	7.96	34.19	42.07	54.00	-11.93	Average
9748.000	41.07	38.05	7.96	34.19	52.89	74.00	-21.11	Peak

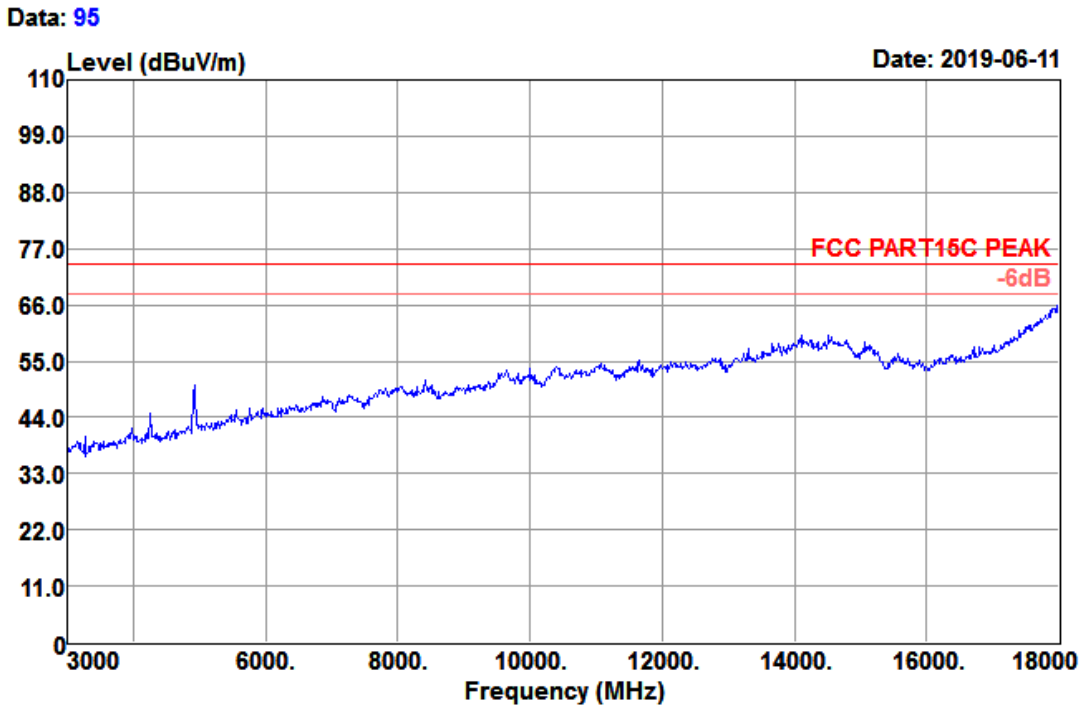
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

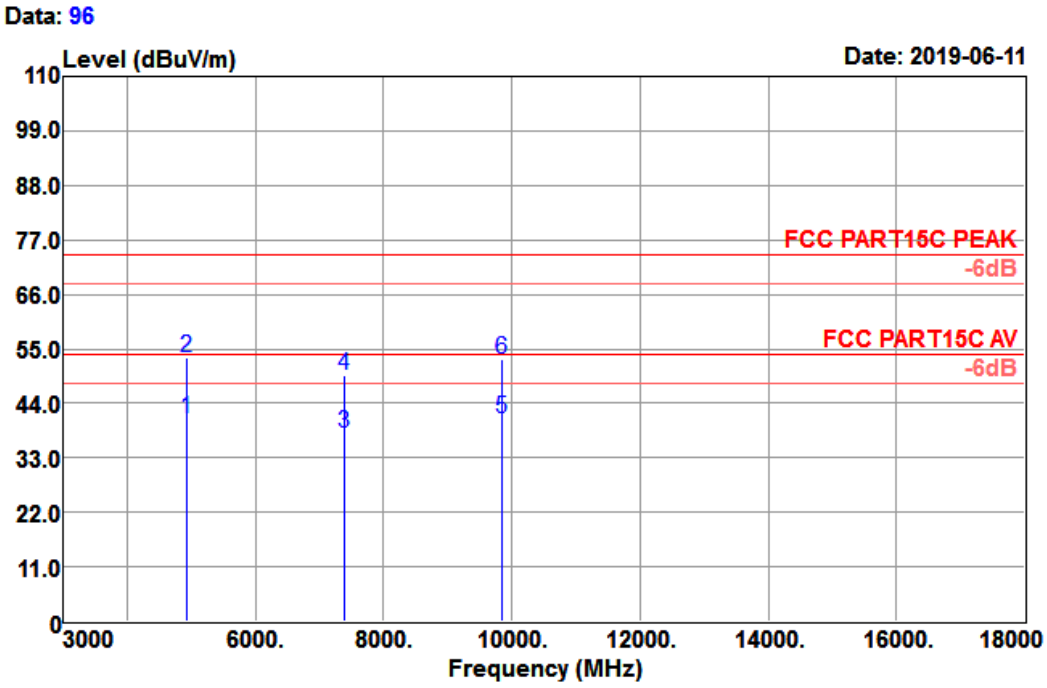
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Horizontal



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.000	108.73	27.30	3.67	36.27	103.43	74.00	29.43	Peak

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Horizontal

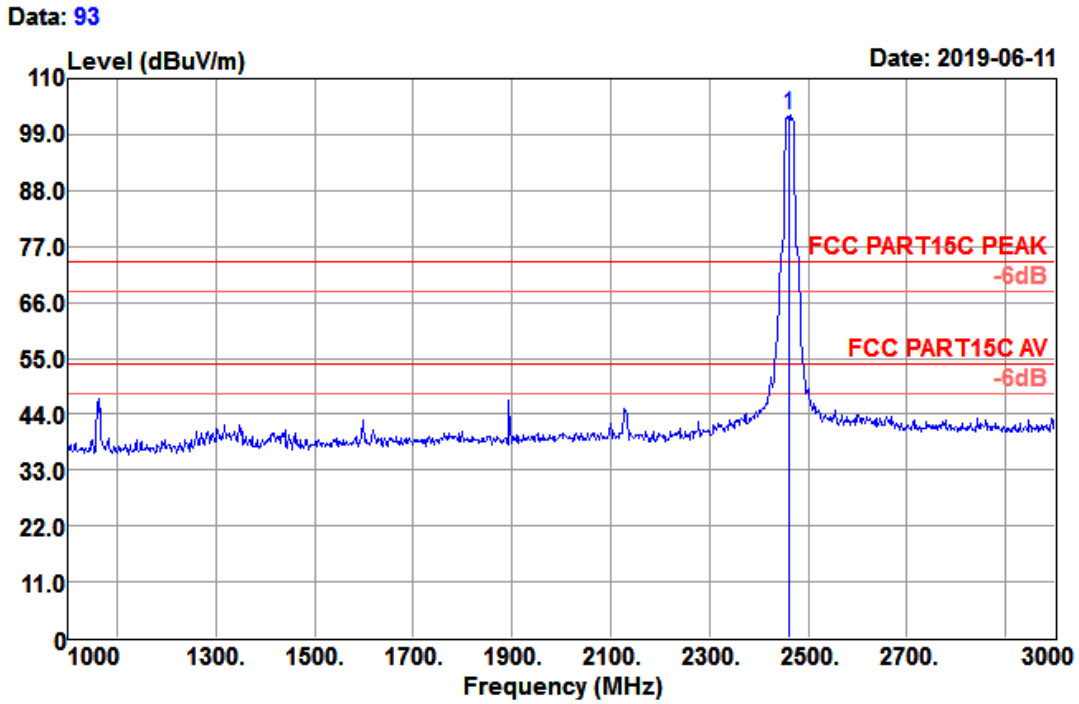




Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	40.33	31.52	5.38	36.23	41.00	54.00	-13.00	Average
4924.000	52.67	31.52	5.38	36.23	53.34	74.00	-20.66	Peak
7386.000	28.77	36.29	7.46	34.42	38.10	54.00	-15.90	Average
7386.000	40.26	36.29	7.46	34.42	49.59	74.00	-24.41	Peak
9848.000	28.95	38.23	8.04	34.23	40.99	54.00	-13.01	Average
9848.000	40.73	38.23	8.04	34.23	52.77	74.00	-21.23	Peak

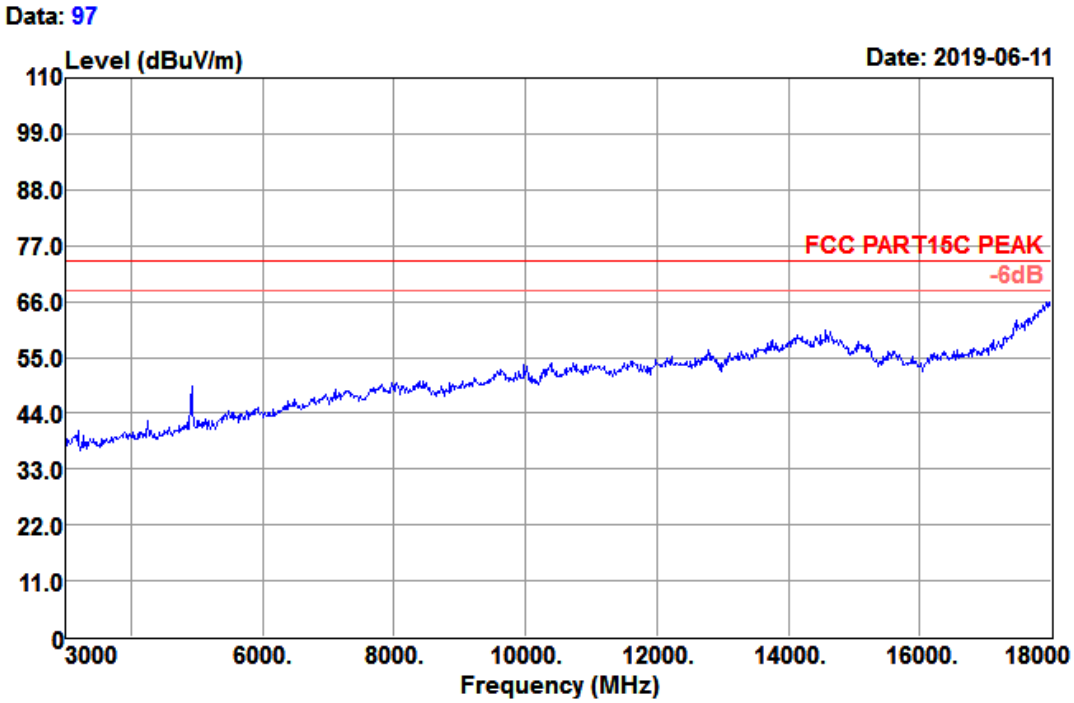
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

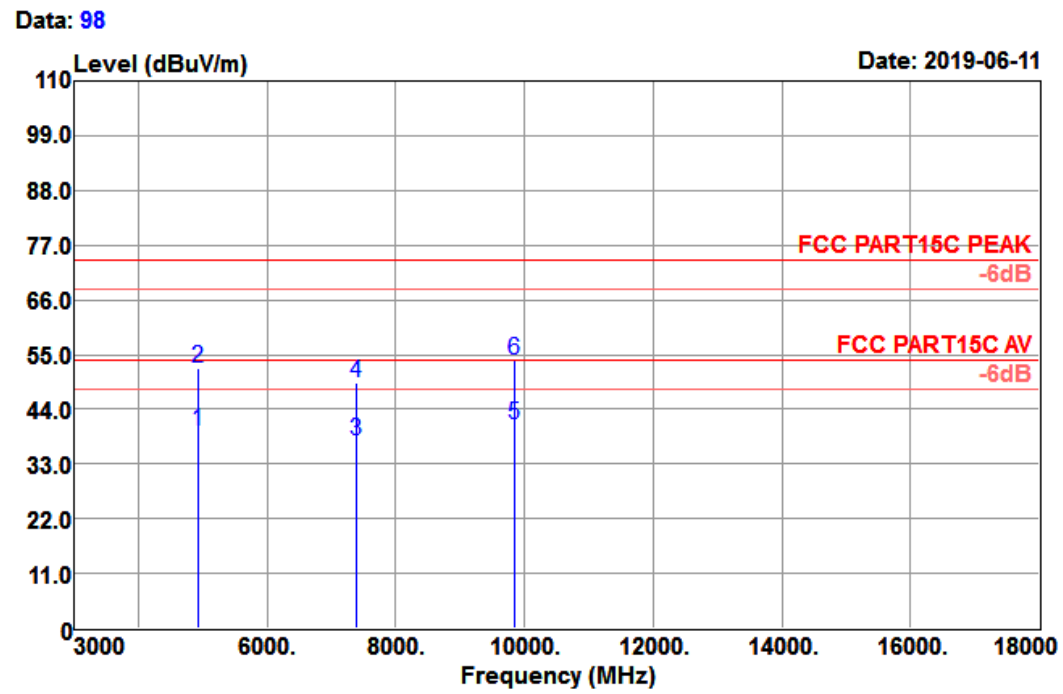
Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	1GHz~3GHz	Polarization :	Vertical



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2462.000	108.15	27.30	3.67	36.27	102.85	74.00	28.85	Peak

Test Mode :	802.11n HT20 CH11 (2462 MHz)	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	3GHz~18GHz	Polarization :	Vertical



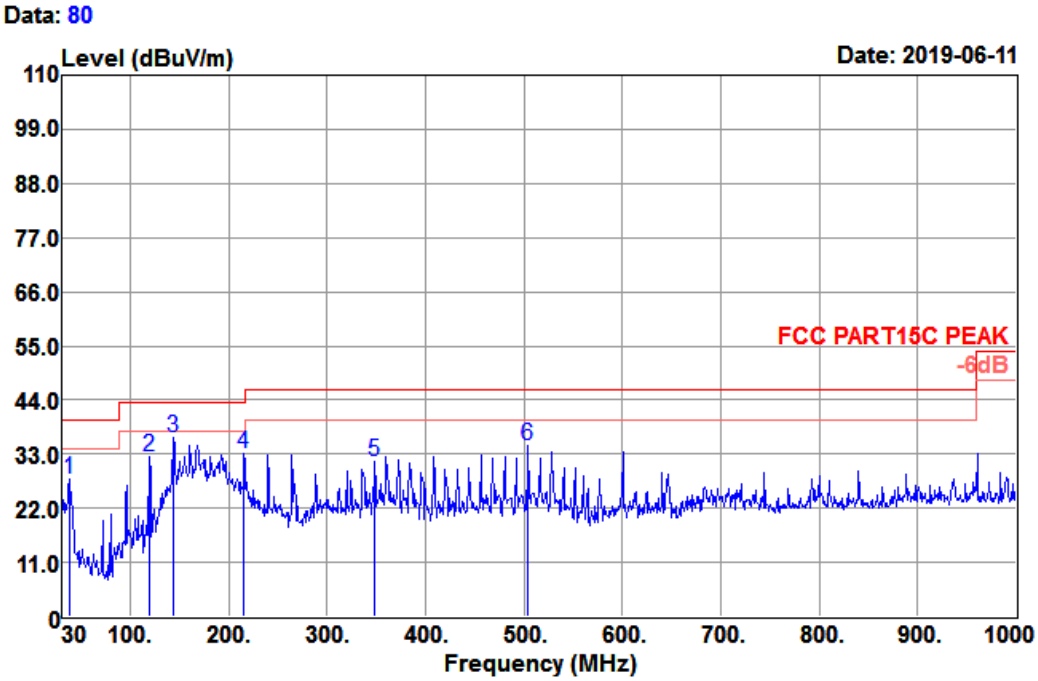


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	39.08	31.52	5.38	36.23	39.75	54.00	-14.25	Average
4924.000	51.64	31.52	5.38	36.23	52.31	74.00	-21.69	Peak
7386.000	28.21	36.29	7.46	34.42	37.54	54.00	-16.46	Average
7386.000	40.03	36.29	7.46	34.42	49.36	74.00	-24.64	Peak
9848.000	29.00	38.23	8.04	34.23	41.04	54.00	-12.96	Average
9848.000	41.78	38.23	8.04	34.23	53.82	74.00	-20.18	Peak

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

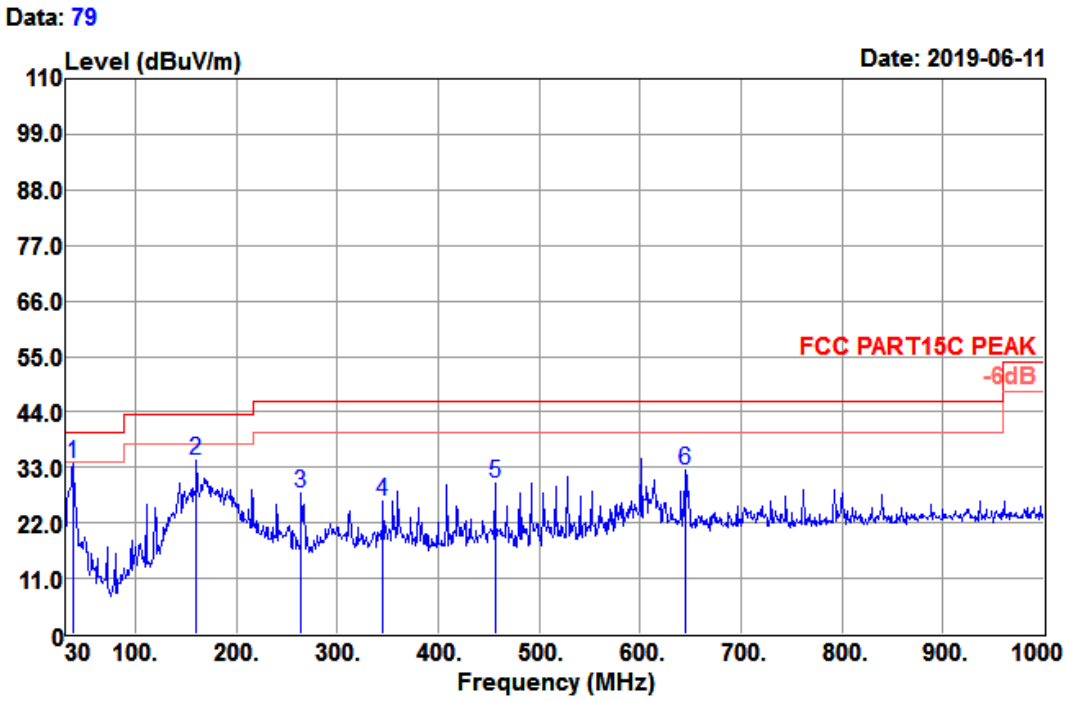
4.5.6 Test Result of Radiated Spurious Emission (30MHz ~ 1GHz)

Test Mode :	802.11b CH01	**Temperature :**	21~23℃
Test Engineer :	Julie Deng	**Relative Humidity :**	63~65%
Frequencey Range	30MHz~1GHz	**Polarization :**	Horizontal



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
37.760	45.56	13.79	1.14	32.56	27.93	40.00	-12.07	Peak
119.240	50.89	12.12	2.11	32.61	32.51	43.50	-10.99	Peak
143.490	52.72	13.74	2.36	32.62	36.20	43.50	-7.30	Peak
215.270	52.49	10.36	2.91	32.66	33.10	43.50	-10.40	Peak
348.160	46.63	13.82	3.82	32.75	31.52	46.00	-14.48	Peak
504.330	46.43	16.58	4.51	32.89	34.63	46.00	-11.37	Peak

Test Mode :	802.11b CH01	Temperature :	21~23℃
Test Engineer :	Julie Deng	Relative Humidity :	63~65%
Frequencey Range	30MHz~1GHz	Polarization :	Vertical



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
37.760	51.47	13.79	1.14	32.56	33.84	40.00	-6.16	Peak
159.980	50.36	14.20	2.48	32.63	34.41	43.50	-9.09	Peak
263.770	45.63	11.81	3.25	32.68	28.01	46.00	-17.99	Peak
345.250	41.48	13.76	3.79	32.75	26.28	46.00	-19.72	Peak
455.830	42.56	15.75	4.34	32.86	29.79	46.00	-16.21	Peak
644.010	40.95	18.97	5.15	32.47	32.60	46.00	-13.40	Peak

4.6 AC Conducted Emission Measurement

4.6.1 Limit of AC Conducted Emission

FCC §15.207

IC RSS-GEN 8.8

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

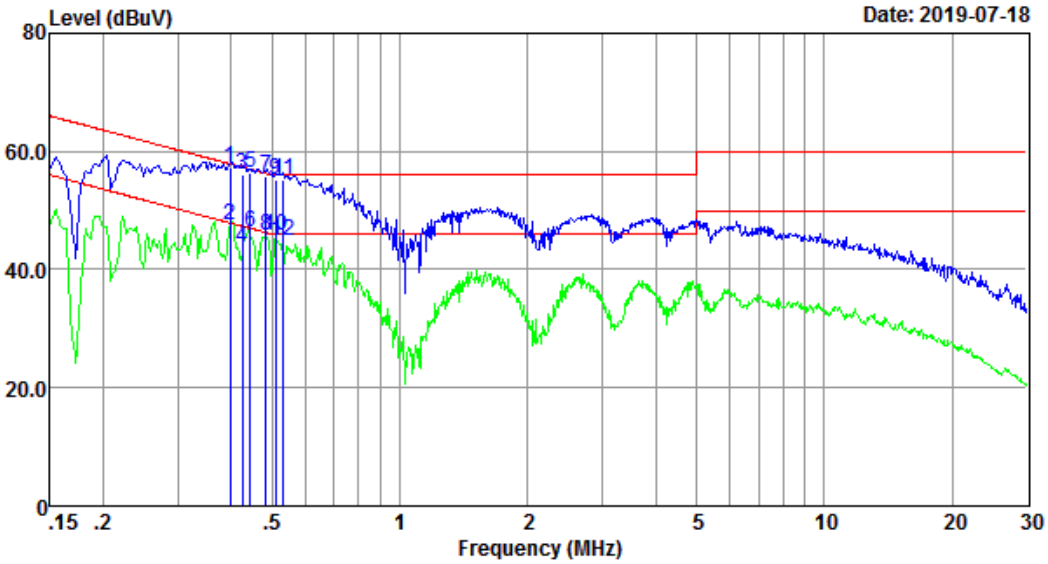
*Decreases with the logarithm of the frequency.

4.6.2 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

4.6.3 Test Result of AC Conducted Emission

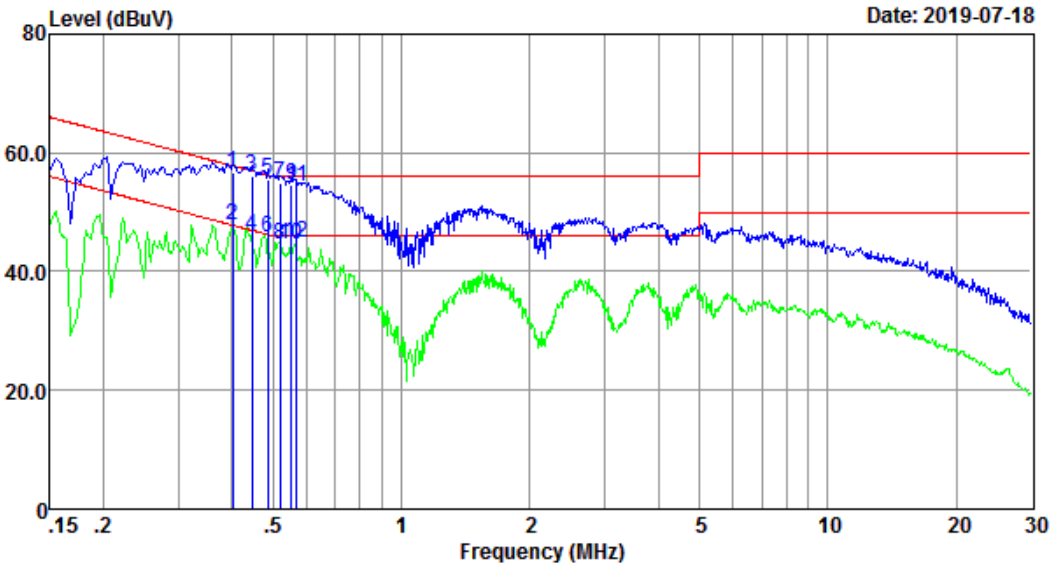
Test Mode :	Mode 1	**Temperature :**	20℃
Test Engineer :	Damon zhang	**Relative Humidity :**	64%
Test Voltage :	125Vac / 60Hz	**Phase :**	Line
Function Type :	Power Supply + WLAN Link + Lamp		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.398	47.50	9.70	0.04	57.24	57.90	-0.66	QP
0.398	37.70	9.70	0.04	47.44	57.90	-10.46	Average
0.425	46.40	9.70	0.04	56.14	57.35	-1.21	QP
0.425	34.00	9.70	0.04	43.74	57.35	-13.61	Average
0.444	46.70	9.71	0.04	56.45	56.98	-0.53	QP
0.444	36.60	9.71	0.04	46.35	56.98	-10.63	Average
0.484	45.90	9.72	0.04	55.66	56.27	-0.61	QP
0.484	36.10	9.72	0.04	45.86	56.27	-10.41	Average
0.510	45.50	9.72	0.04	55.26	56.00	-0.74	QP
0.510	35.90	9.72	0.04	45.66	56.00	-10.34	Average
0.532	45.50	9.73	0.04	55.27	56.00	-0.73	QP
0.532	35.10	9.73	0.04	44.87	56.00	-11.13	Average

Result Level= Reading Level + LISN Factor + Cable Loss

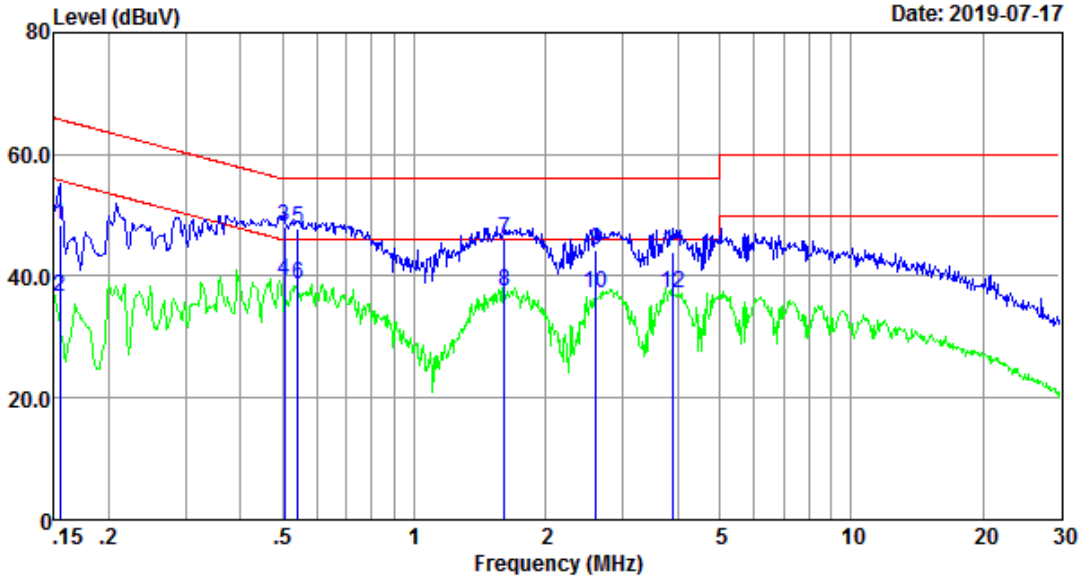
Test Mode :	Mode 1	Temperature :	20℃
Test Engineer :	Damon zhang	Relative Humidity :	64%
Test Voltage :	125Vac / 60Hz	Phase :	NEUTRAL
Function Type :	Power Supply + WLAN Link + Lamp		



Freq	Reading level	LISN/ISN factor	Cable loss	Result level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.402	46.90	9.62	0.04	56.56	57.81	-1.25	QP
0.402	38.30	9.62	0.04	47.96	57.81	-9.85	Average
0.447	46.50	9.63	0.04	56.17	56.93	-0.76	QP
0.447	36.30	9.63	0.04	45.97	56.93	-10.96	Average
0.486	45.80	9.64	0.04	55.48	56.24	-0.76	QP
0.486	36.00	9.64	0.04	45.68	56.24	-10.56	Average
0.518	45.20	9.64	0.04	54.88	56.00	-1.12	QP
0.518	35.00	9.64	0.04	44.68	56.00	-11.32	Average
0.553	44.80	9.65	0.04	54.49	56.00	-1.51	QP
0.553	34.90	9.65	0.04	44.59	56.00	-11.41	Average
0.567	44.70	9.65	0.04	54.39	56.00	-1.61	QP
0.567	35.10	9.65	0.04	44.79	56.00	-11.21	Average

Result Level= Reading Level + LISN Factor + Cable Loss

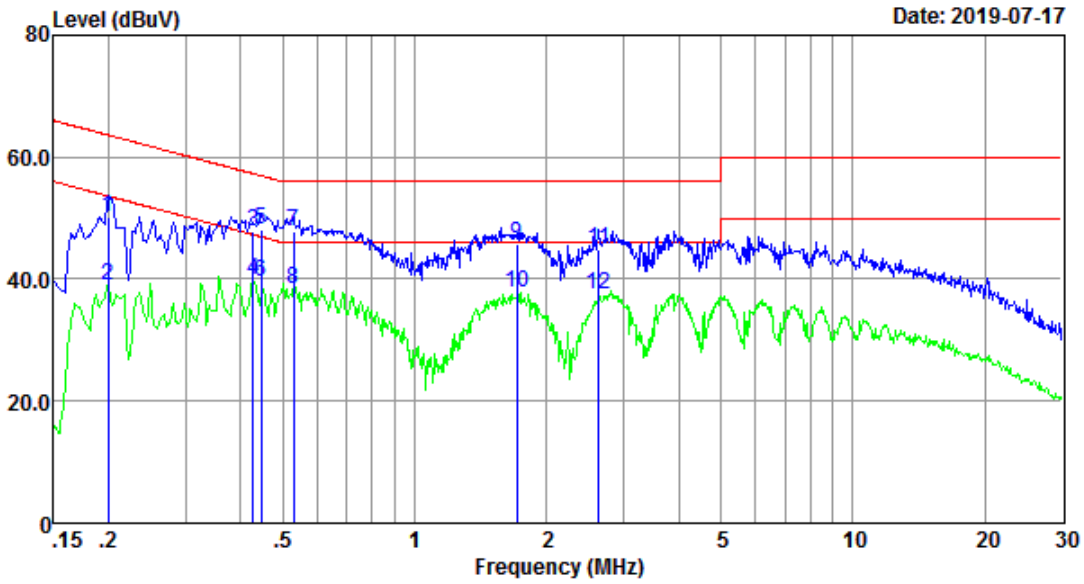
Test Mode :	Mode 1	Temperature :	20℃
Test Engineer :	Damon zhang	Relative Humidity :	64%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Power Supply + WLAN Link + Lamp		



Freq	Reading level	LISN/ISN factor	Cable loss	Result level	Limit level	Over limit	Remark
MHz	dBuV	dB	dB	dBuV	dBuV	dB	
0.155	38.80	9.63	0.04	48.47	65.74	-17.27	QP
0.155	26.90	9.63	0.04	36.57	65.74	-29.17	Average
0.505	38.30	9.72	0.04	48.06	56.00	-7.94	QP
0.505	29.40	9.72	0.04	39.16	56.00	-16.84	Average
0.541	38.20	9.73	0.04	47.97	56.00	-8.03	QP
0.541	28.80	9.73	0.04	38.57	56.00	-17.43	Average
1.610	36.30	9.84	0.06	46.20	56.00	-9.80	QP
1.610	27.60	9.84	0.06	37.50	56.00	-18.50	Average
2.608	34.50	9.82	0.06	44.38	56.00	-11.62	QP
2.608	27.20	9.82	0.06	37.08	56.00	-18.92	Average
3.922	34.00	9.84	0.07	43.91	56.00	-12.09	QP
3.922	27.30	9.84	0.07	37.21	56.00	-18.79	Average

Result Level= Reading Level + LISN Factor + Cable Loss

Test Mode :	Mode 1	Temperature :	20℃
Test Engineer :	Damon zhang	Relative Humidity :	64%
Test Voltage :	120Vac / 60Hz	Phase :	NEUTRAL
Function Type :	Power Supply + WLAN Link + Lamp		



Freq MHz	Reading level dBuV	LISN/ISN factor dB	Cable loss dB	Result level dBuV	Limit level dBuV	Over limit dB	Remark
0.200	40.50	9.61	0.04	50.15	63.62	-13.47	QP
0.200	29.40	9.61	0.04	39.05	63.62	-24.57	Average
0.427	38.20	9.63	0.04	47.87	57.31	-9.44	QP
0.427	30.20	9.63	0.04	39.87	57.31	-17.44	Average
0.446	38.50	9.63	0.04	48.17	56.95	-8.78	QP
0.446	29.80	9.63	0.04	39.47	56.95	-17.48	Average
0.529	38.20	9.65	0.04	47.89	56.00	-8.11	QP
0.529	28.80	9.65	0.04	38.49	56.00	-17.51	Average
1.710	36.00	9.73	0.06	45.79	56.00	-10.21	QP
1.710	28.10	9.73	0.06	37.89	56.00	-18.11	Average
2.636	34.90	9.76	0.06	44.72	56.00	-11.28	QP
2.636	27.70	9.76	0.06	37.52	56.00	-18.48	Average

Result Level= Reading Level + LISN Factor + Cable Loss

4.7 Antenna Requirements

4.7.1 Standard Applicable

According to antenna requirement of §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 re-placed by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded..

And according to §15.247(4)(1), system operating in the 2400-2483.5MHz bands that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 Antenna Connected Construction

An embedded-in antenna design is used.

4.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	Keysight	N9010A	MY56070788	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY56510025	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY57030005	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY56510018	2019-01-23	2020-01-22	Conducted
Power Sensor	Keysight	U2021XA	MY56480002	2019-01-23	2020-01-22	Conducted
Thermal Chamber	Sanmtest	SMC-408-CD	2435	2019-05-09	2020-05-08	Conducted
Base Station	R&S	CMW 270	101231	2019-01-23	2020-01-22	Conducted
Signal Generator (Interferer)	Keysight	N5182B	MY56200384	2019-05-19	2020-05-18	Conducted
Signal Generator (Blocker)	Keysight	N5171B	MY56200661	2019-01-23	2020-01-22	Conducted

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV 40	101433	2019-02-18	2020-02-17	Radiation
Amplifier	Sonoma	310	363917	2019-01-22	2020-01-21	Radiation
Amplifier	Schwarzbeck	BBV 9718	327	2019-01-22	2020-01-21	Radiation
Amplifier	Narda	TTA1840-35-HG	2034380	2019-05-15	2020-05-14	Radiation
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	2017/3/3	2020/3/2	Radiation
Broadband Antenna	Schwarzbeck	VULB 9168	9168-757	2017-03-03	2020-03-02	Radiation
Horn Antenna	Schwarzbeck	BBHA 9120 D	1677	2017-03-03	2020-03-02	Radiation
Horn Antenna	COM-POWER	AH-1840	101117	2018-06-20	2021-06-19	Radiation
Test Software	Auidx	E3	6.111221a	N/A	N/A	Radiation
Filter	Micro-Tronics	BRM 50702	G266	N/A	N/A	Radiation

N/A: No Calibration Required

6 Uncertainty of Evaluation

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.67dB
Radiated emissions	30MHz ~ 1GMHz	5.05dB
	1GHz ~ 18GHz	5.06 dB
	18GHz ~ 40GHz	3.65dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.