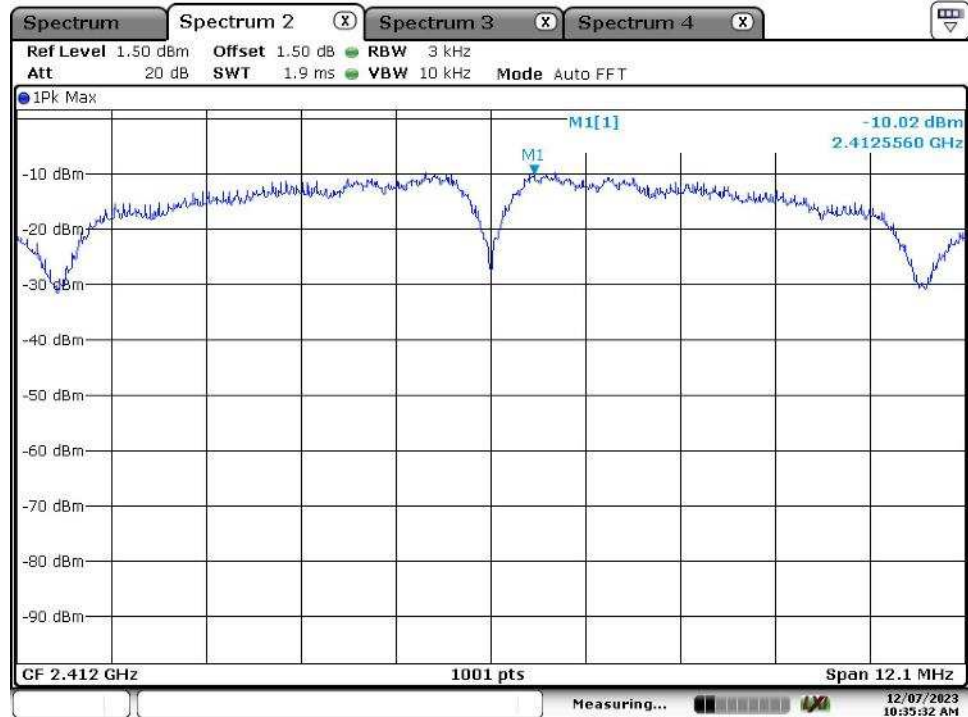


Appendix A: Test Results of 2.4GHz Wi-Fi

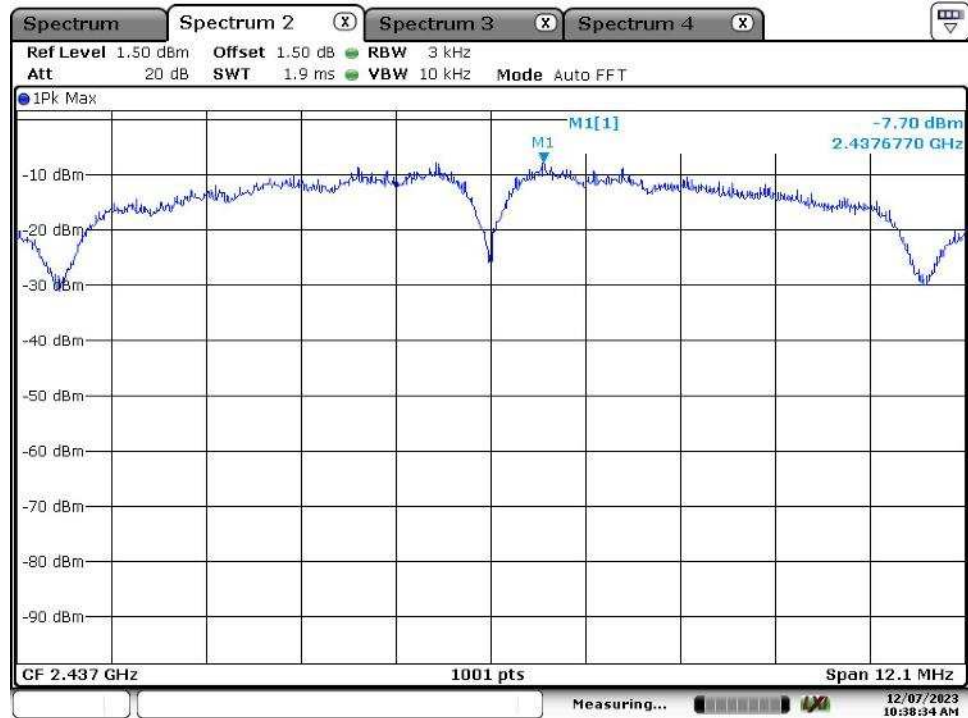
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Appendix A.1: Test Results of Conducted Power Spectral Density

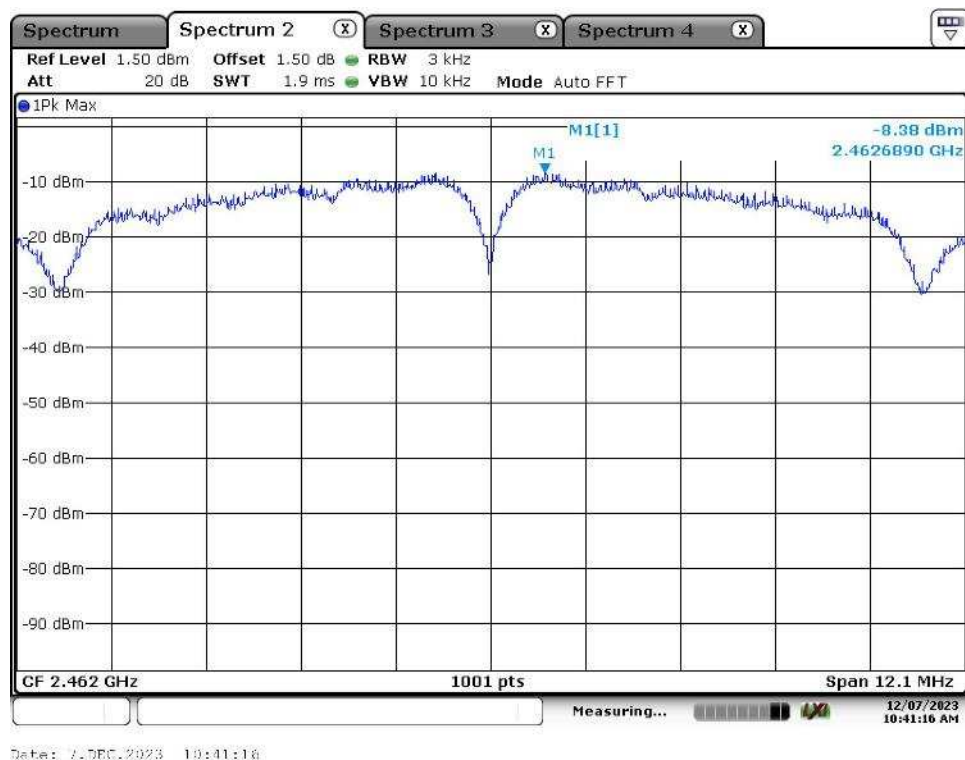
Wi-Fi 802.11 b mode



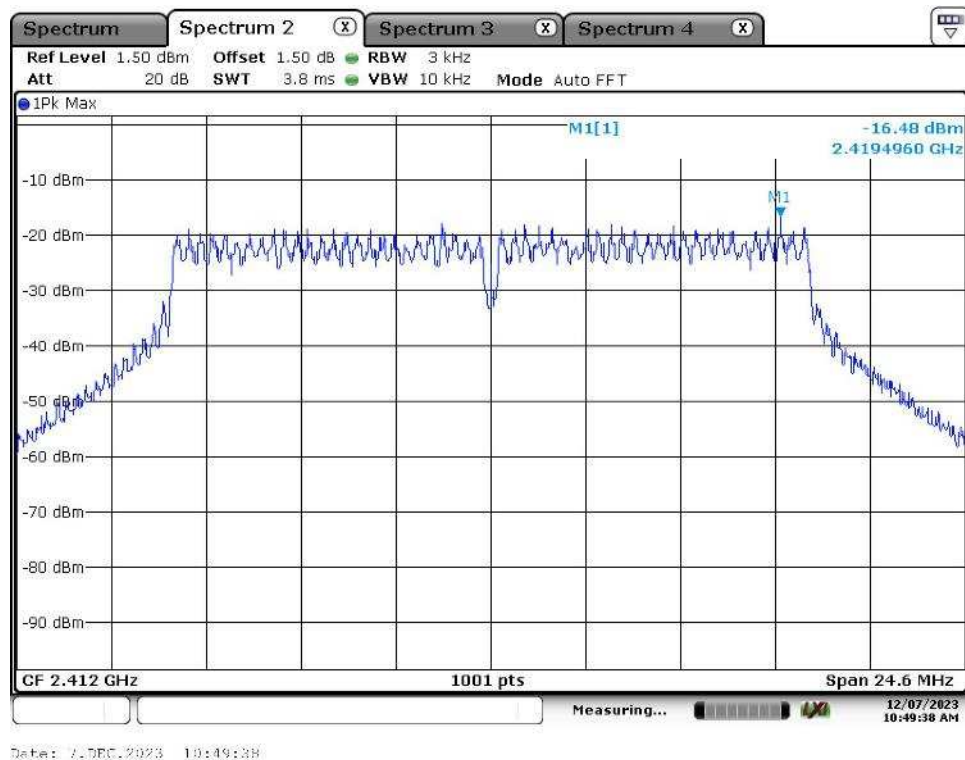
Date: 7. DEC. 2023 10:35:32

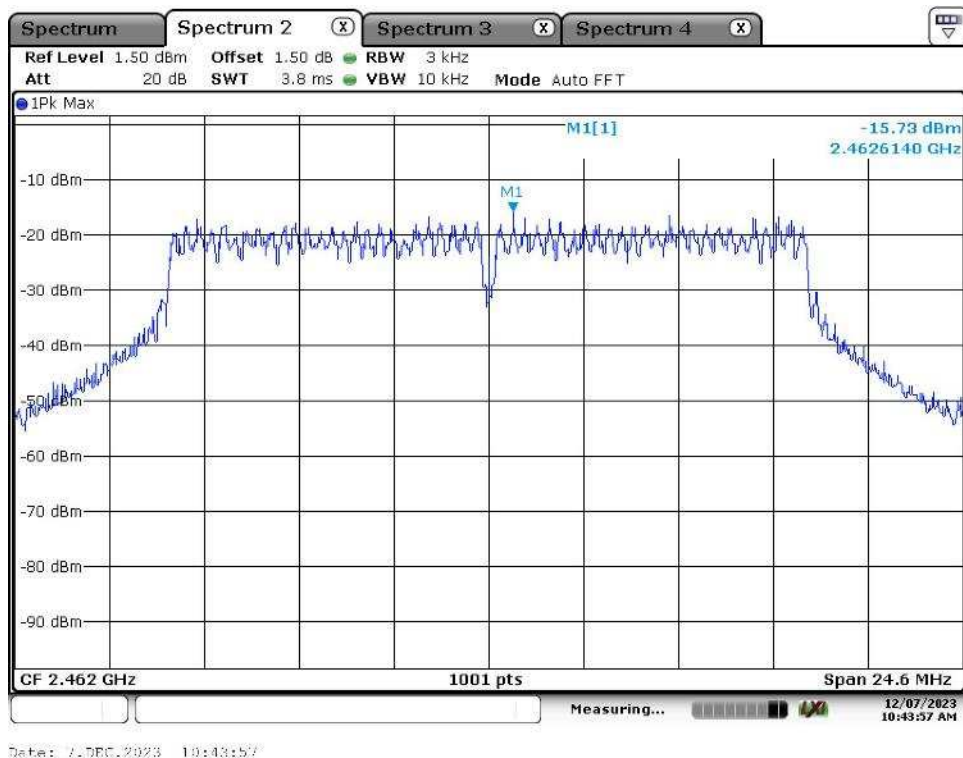
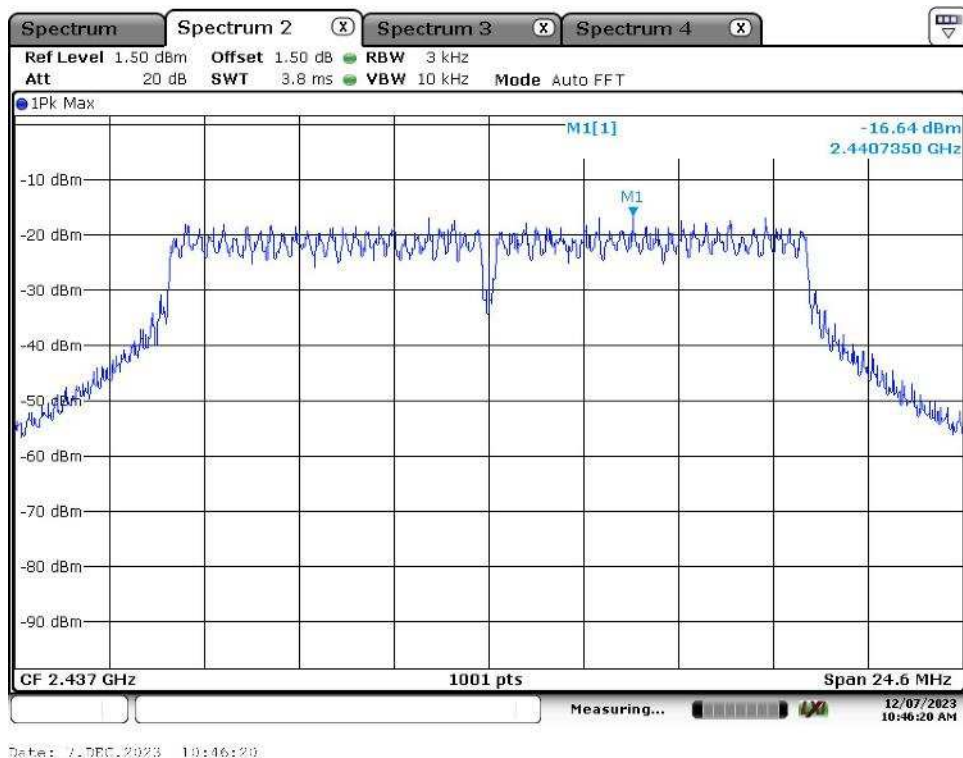


Date: 7. DEC. 2023 10:38:34

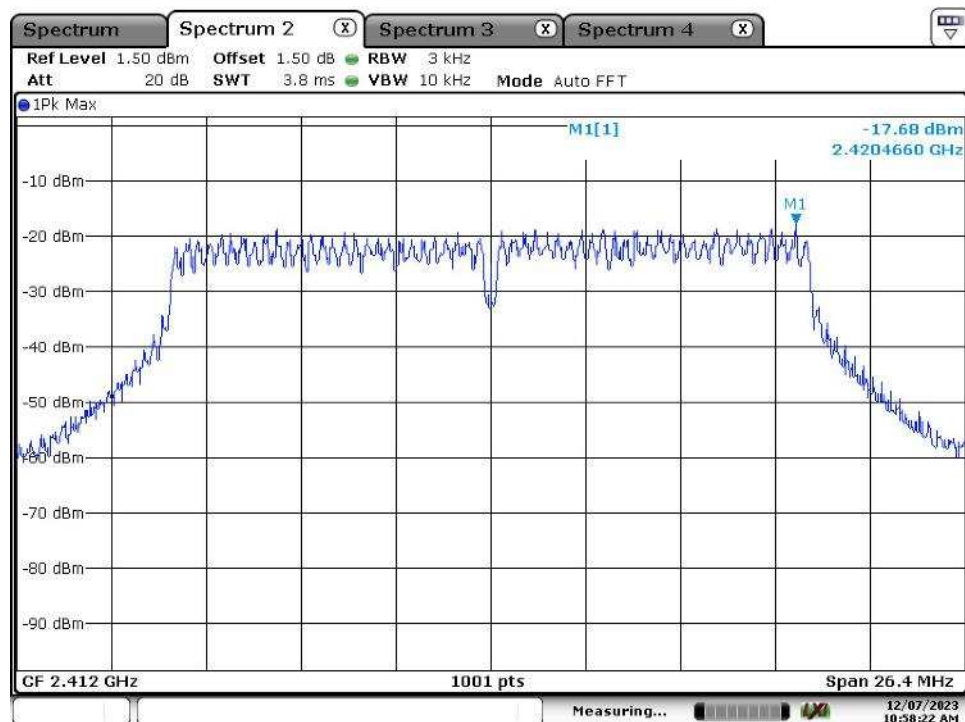


Wi-Fi 802.11 g mode

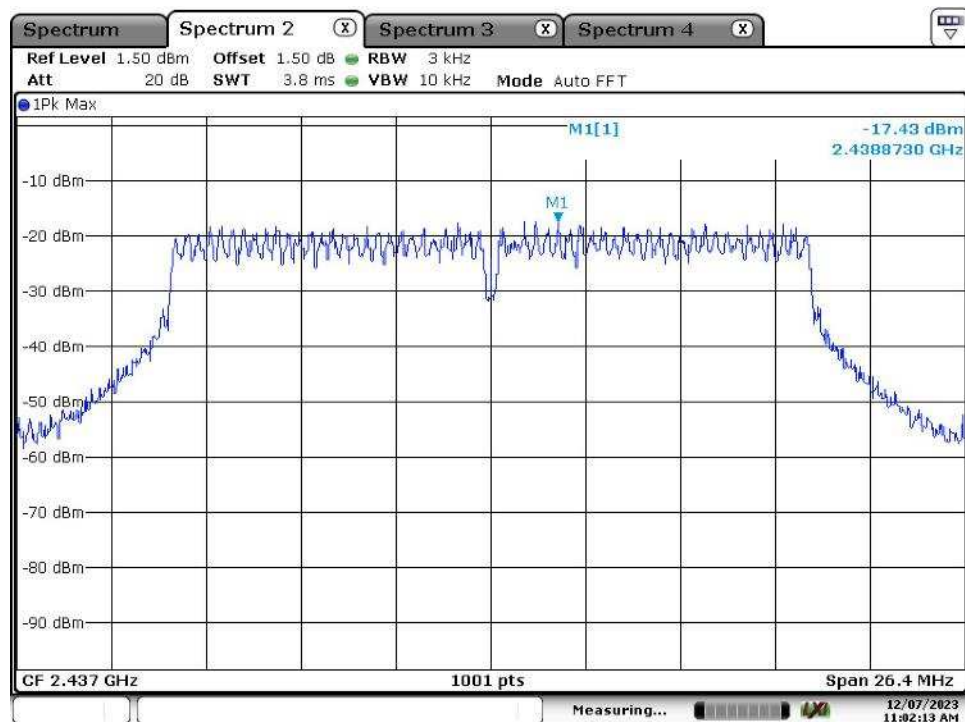




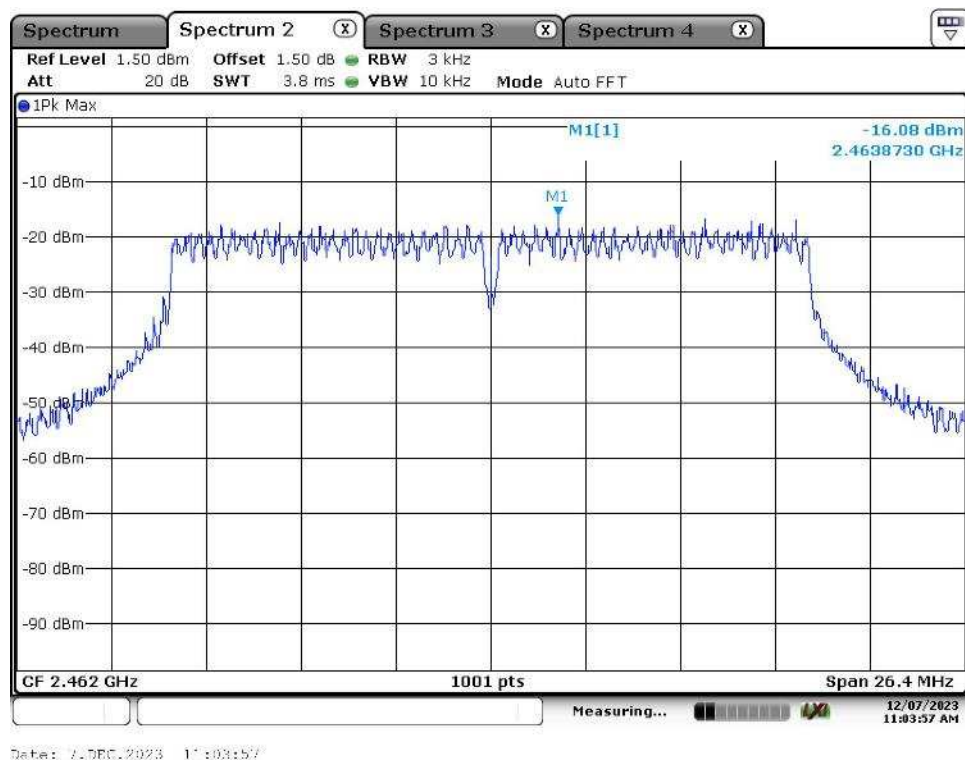
Wi-Fi 802.11 n(HT20) mode



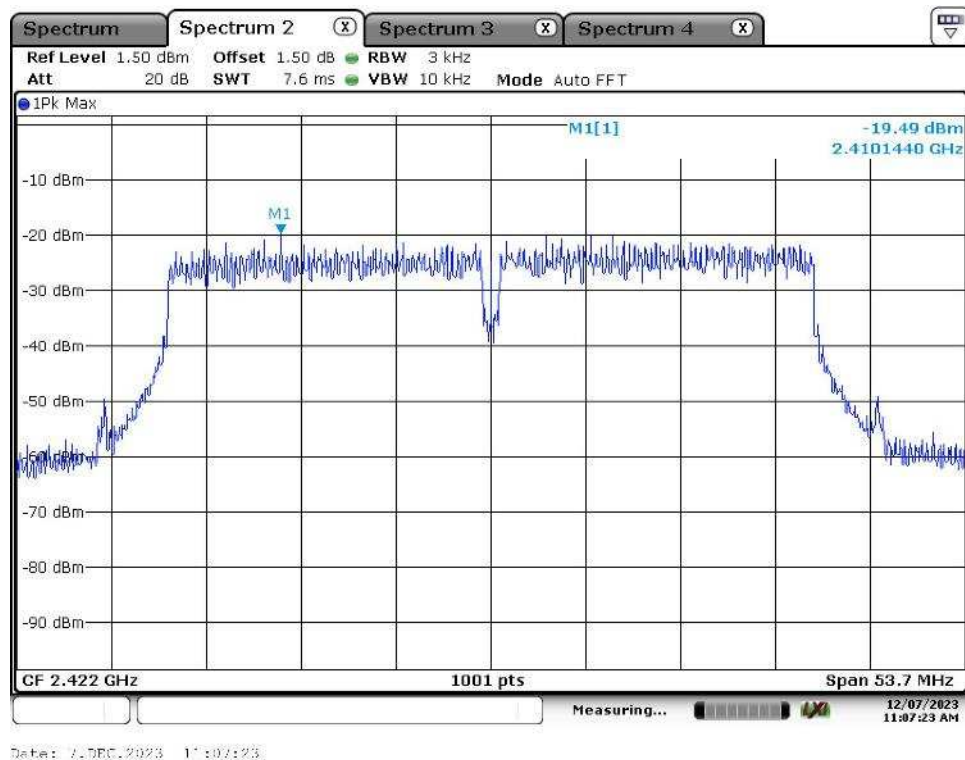
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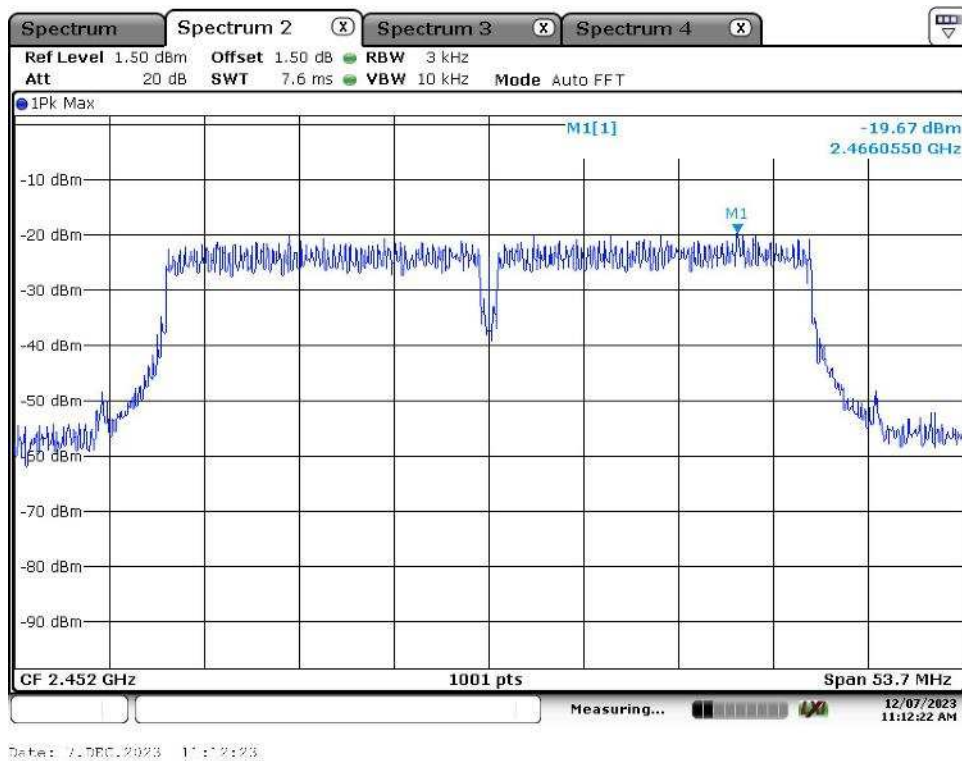
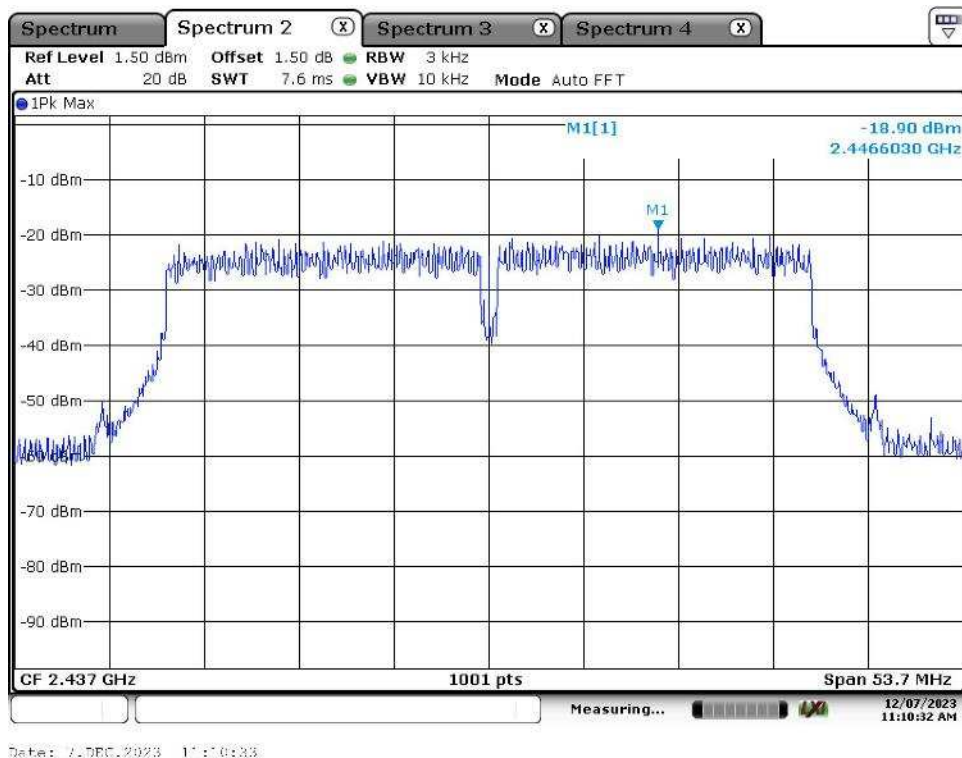


Date: 7. DEC. 2023 11:02:13



Wi-Fi 802.11 n(HT40) mode





Appendix A.2: Test Results of 6dB Bandwidth

Wi-Fi 802.11 b mode

Minimum Emission Bandwidth 6 dB (2412 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))

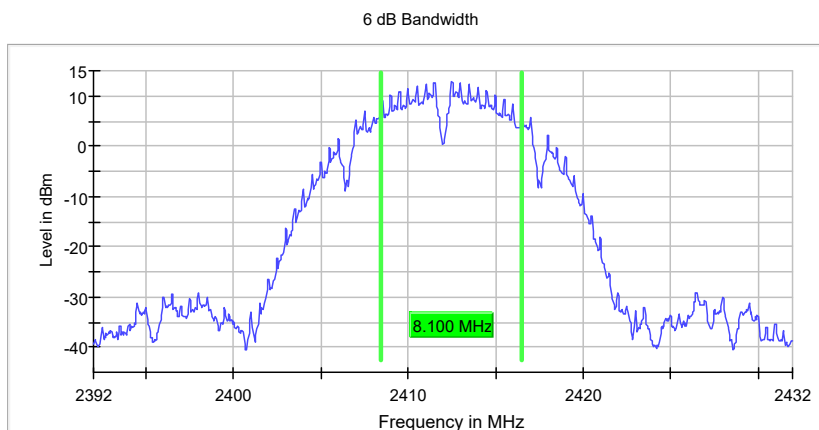
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	8.100000	0.500000	---	2408.425000	2416.525000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	12.8	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.24 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))

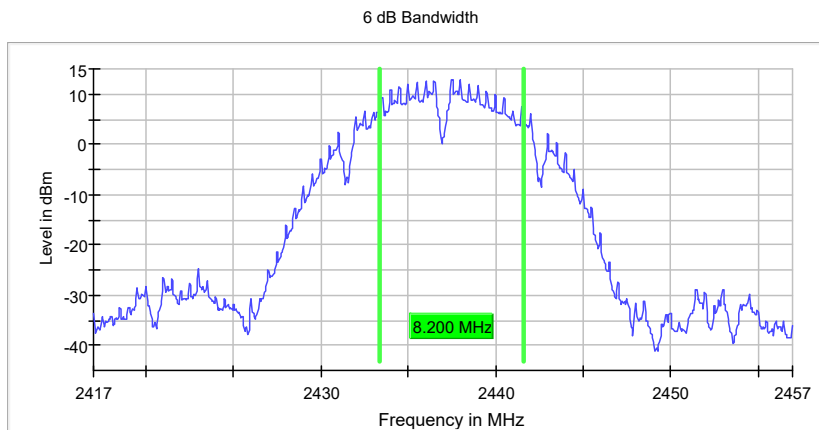
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	8.200000	0.500000	---	2433.375000	2441.575000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	13.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.24 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2462 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))

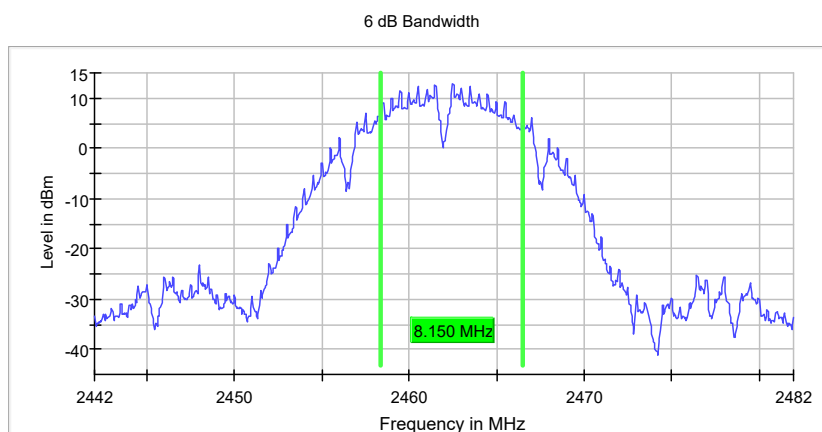
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	8.150000	0.500000	---	2458.375000	2466.525000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	12.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	15 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.22 dB	0.50 dB

Wi-Fi 802.11 g mode

Minimum Emission Bandwidth 6 dB (2412 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

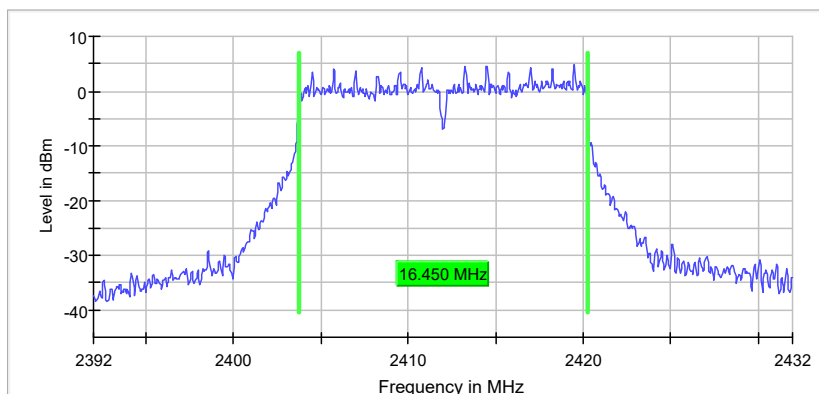
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.450000	0.500000	---	2403.775000	2420.225000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	4.9	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	36 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.23 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))

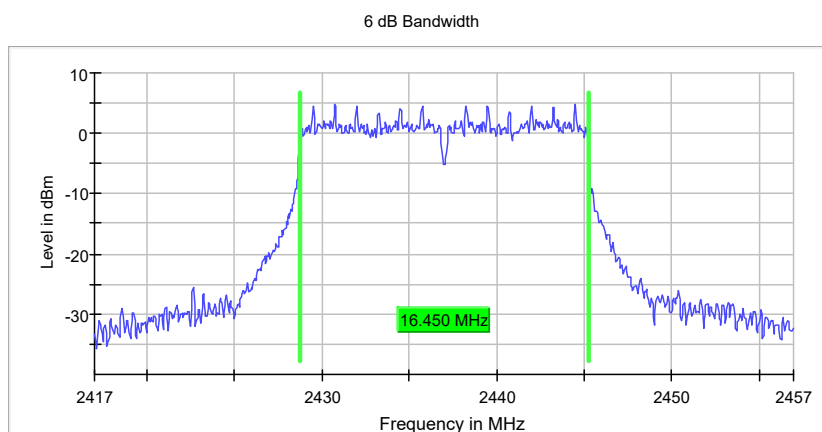
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	16.450000	0.500000	---	2428.775000	2445.225000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	4.9	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	26 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.47 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2462 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))

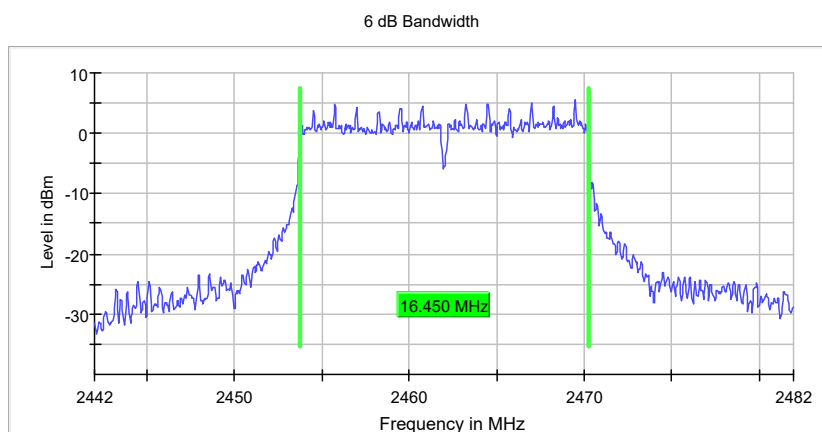
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.450000	0.500000	---	2453.775000	2470.225000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	5.5	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweptime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	18 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.35 dB	0.50 dB

Wi-Fi 802.11 n(HT20) mode

Minimum Emission Bandwidth 6 dB (2412 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

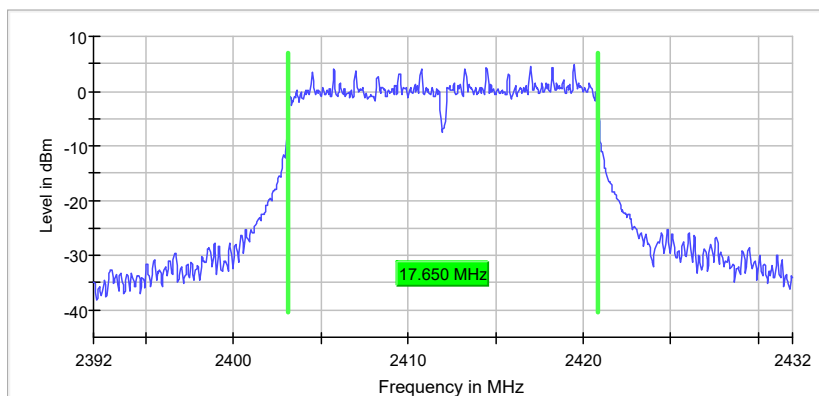
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.650000	0.500000	---	2403.175000	2420.825000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	4.9	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
SweepTime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	23 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.23 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))

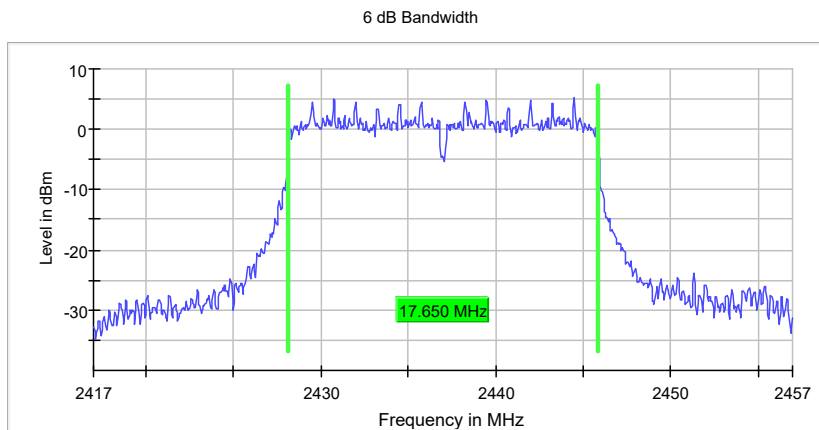
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.650000	0.500000	---	2428.175000	2445.825000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	5.2	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	35 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.50 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2462 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))

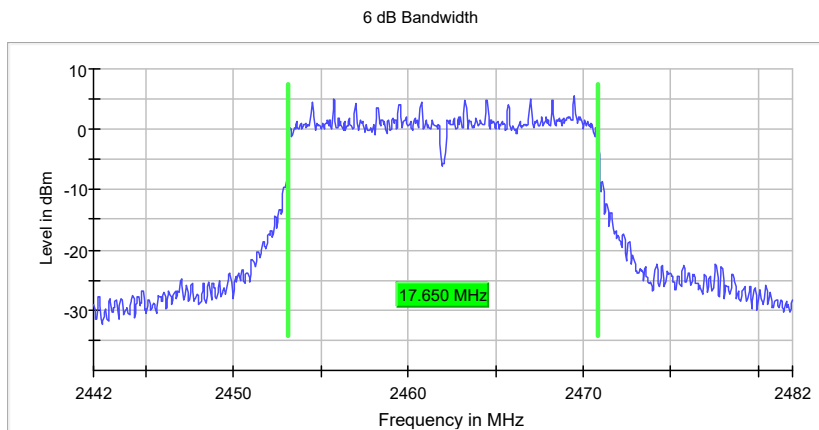
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.650000	0.500000	---	2453.175000	2470.825000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	5.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	800	~ 800
Sweeptime	94.922 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	30 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.11 dB	0.50 dB

Wi-Fi 802.11 n(HT40) mode

Minimum Emission Bandwidth 6 dB (2422 MHz; 30.000 dBm; 11n_40 MHz)

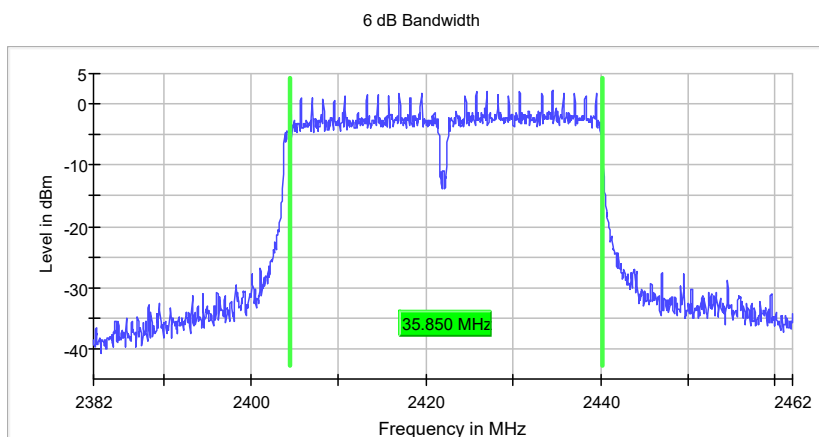
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	35.850000	0.500000	---	2404.375000	2440.225000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2422.000000	2.2	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.38200 GHz	2.38200 GHz
Stop Frequency	2.46200 GHz	2.46200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	1600	~ 1600
SweepTime	1.600 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	28 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.39 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2437 MHz; 30.000 dBm; 11n_40 MHz)

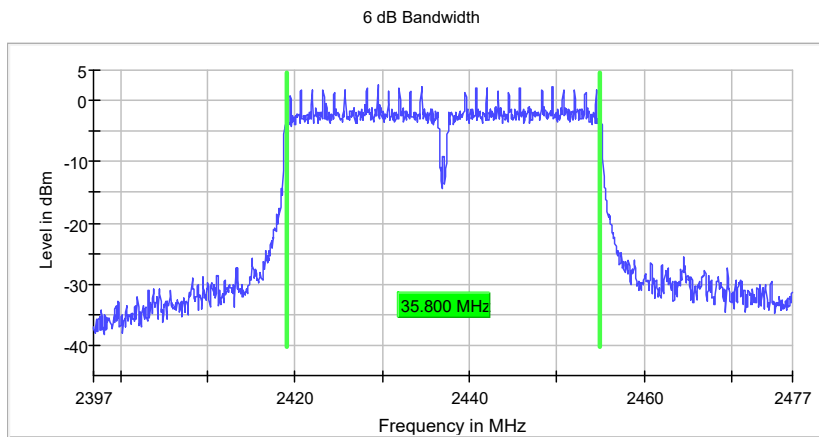
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	35.800000	0.500000	---	2419.175000	2454.975000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	2.6	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.47700 GHz	2.47700 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	1600	~ 1600
SweepTime	1.600 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	30 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.30 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2452 MHz; 30.000 dBm; 11n_40 MHz)

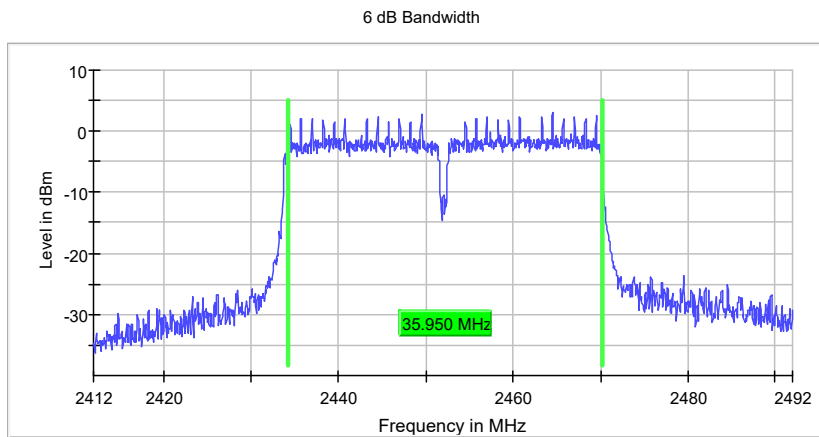
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	35.950000	0.500000	---	2434.225000	2470.175000

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2452.000000	3.0	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41200 GHz	2.41200 GHz
Stop Frequency	2.49200 GHz	2.49200 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	1600	~ 1600
SweepTime	1.600 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	28 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.41 dB	0.50 dB

Appendix A.3: Test Results of 99% Bandwidth

Wi-Fi 802.11 b mode

Occupied Channel Bandwidth 99% (2412 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))

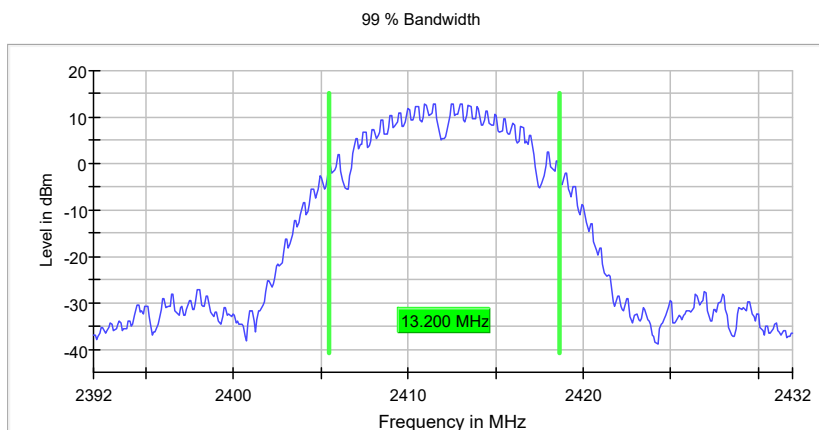
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	13.200000	---	---	2405.450000	2418.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.04 dB	0.30 dB

Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))

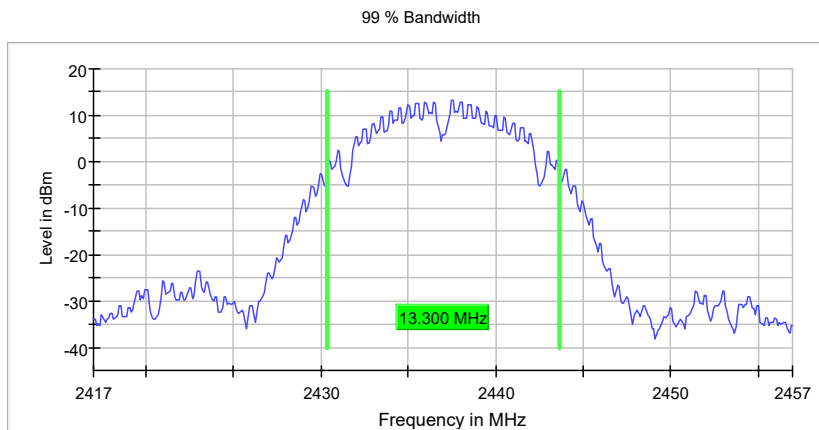
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	13.300000	---	---	2430.350000	2443.650000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.29 dB	0.30 dB

Occupied Channel Bandwidth 99% (2462 MHz; 30.000 dBm; 20 MHz(11b_20Mhz))

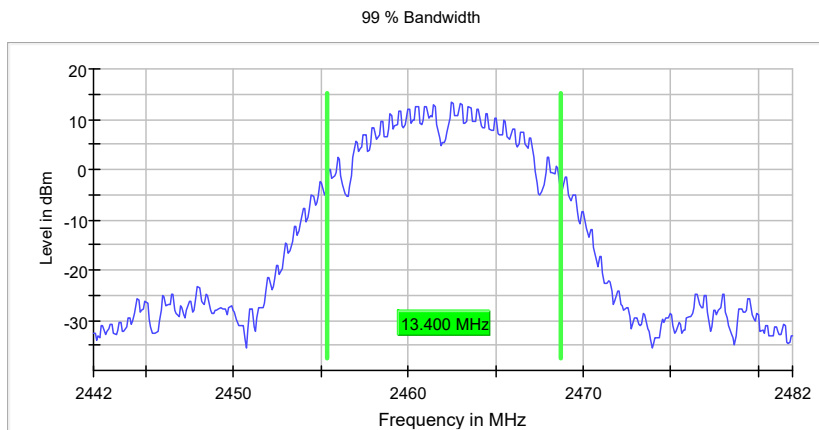
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	13.400000	---	---	2455.350000	2468.750000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.13 dB	0.30 dB

Wi-Fi 802.11 g mode

Occupied Channel Bandwidth 99% (2412 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))

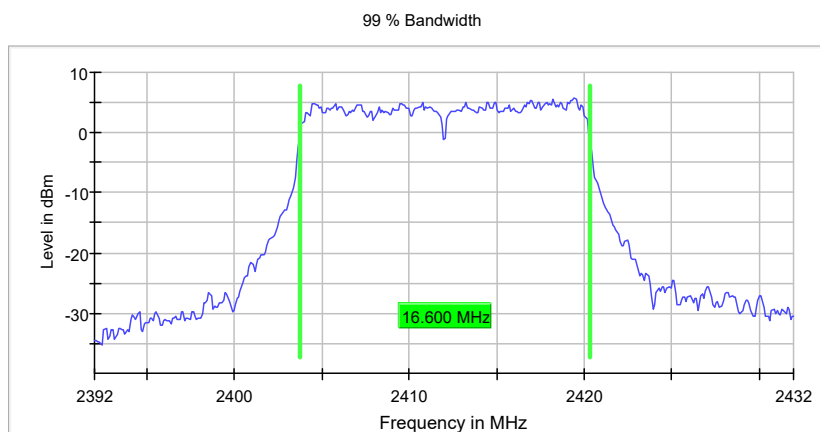
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.600000	---	---	2403.750000	2420.350000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	28 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.18 dB	0.30 dB

Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))

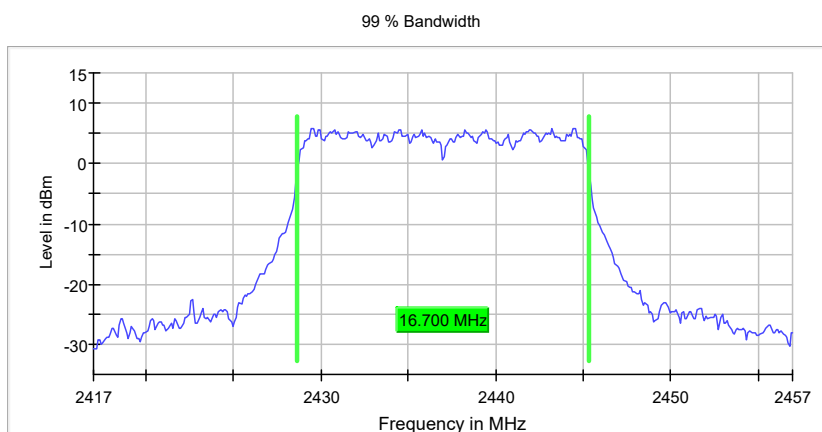
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	16.700000	---	---	2428.650000	2445.350000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	22 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.24 dB	0.30 dB

Occupied Channel Bandwidth 99% (2462 MHz; 30.000 dBm; 20 MHz(11g_20Mhz))

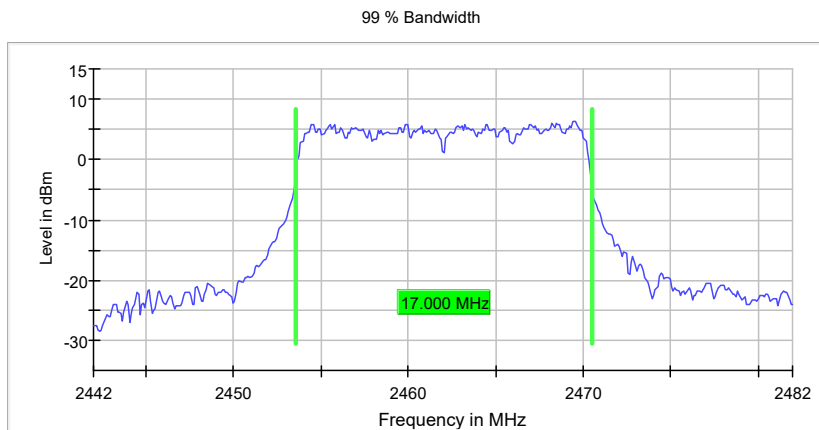
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.000000	---	---	2453.550000	2470.550000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	43 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.20 dB	0.30 dB

Wi-Fi 802.11 n(HT20) mode

Occupied Channel Bandwidth 99% (2412 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))

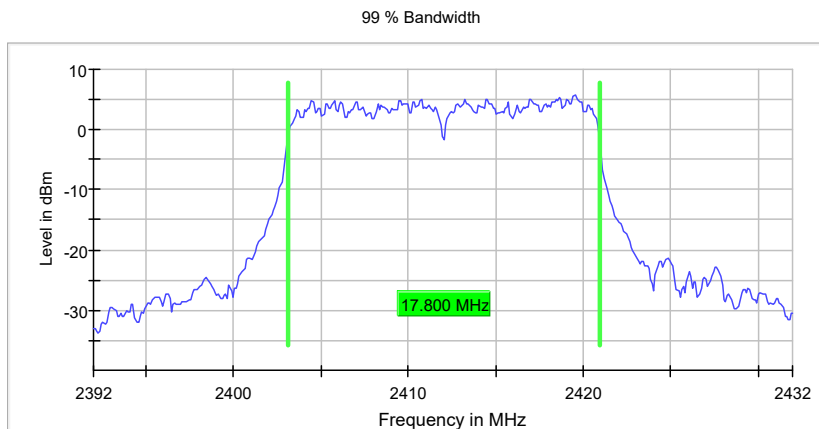
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	17.800000	---	---	2403.150000	2420.950000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2412.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39200 GHz	2.39200 GHz
Stop Frequency	2.43200 GHz	2.43200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	25 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.10 dB	0.30 dB

Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))

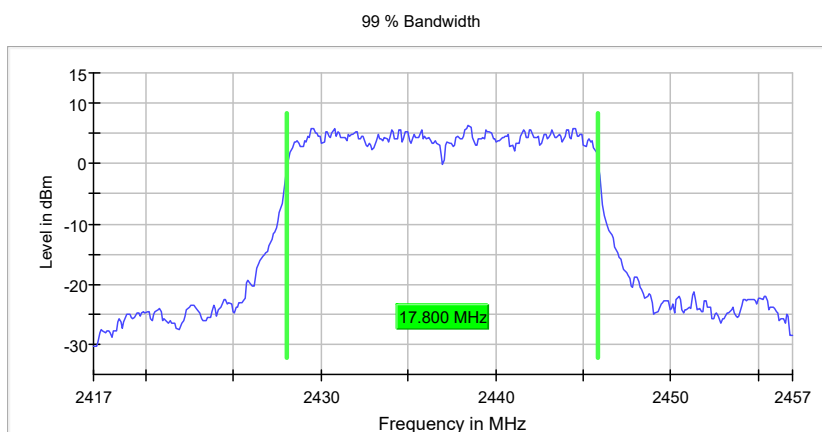
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	17.800000	---	---	2428.050000	2445.850000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41700 GHz	2.41700 GHz
Stop Frequency	2.45700 GHz	2.45700 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	26 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.24 dB	0.30 dB

Occupied Channel Bandwidth 99% (2462 MHz; 30.000 dBm; 20 MHz(11n_20Mhz))

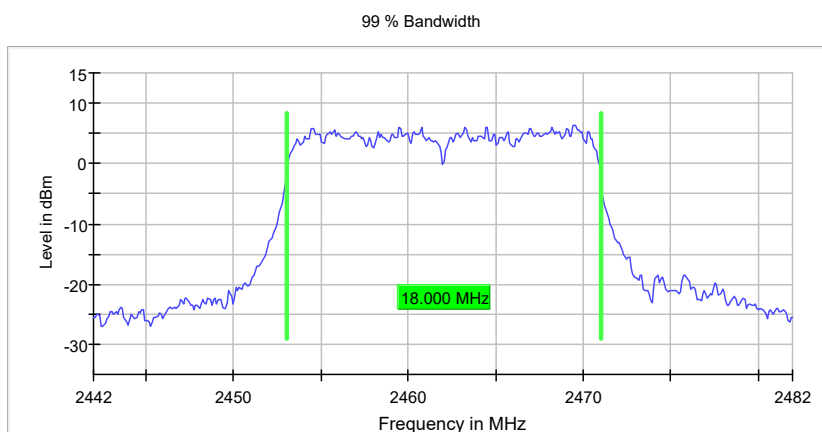
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	18.000000	---	---	2453.050000	2471.050000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2462.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
SweepTime	47.266 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	35 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.30 dB

Wi-Fi 802.11 n(HT40) mode

Occupied Channel Bandwidth 99% (2422 MHz; 30.000 dBm; 11n_40 MHz)

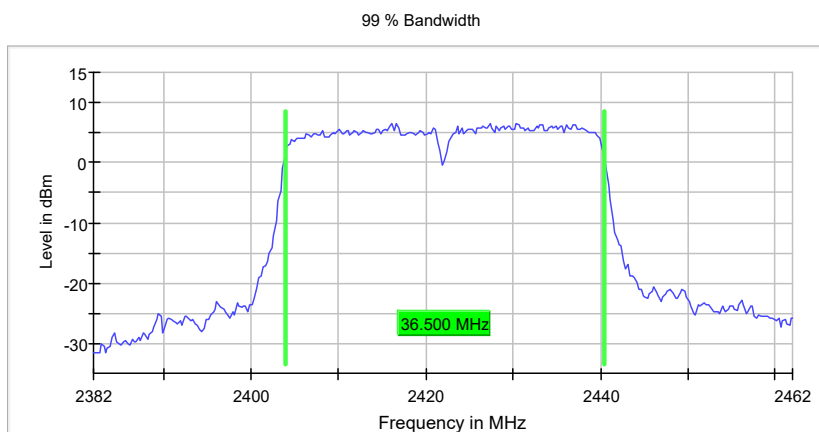
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2422.000000	36.500000	---	---	2403.875000	2440.375000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2422.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.38200 GHz	2.38200 GHz
Stop Frequency	2.46200 GHz	2.46200 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	>= 400.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	320	~ 320
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	14 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.28 dB	0.30 dB

Occupied Channel Bandwidth 99% (2437 MHz; 30.000 dBm; 11n_40 MHz)

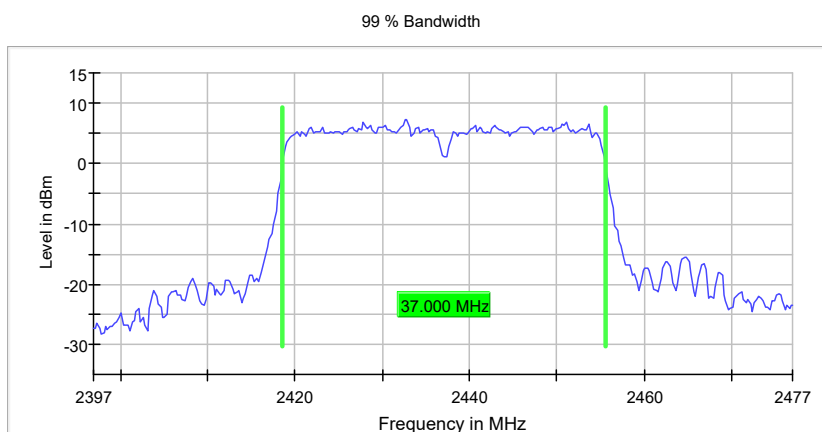
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	37.000000	---	---	2418.625000	2455.625000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2437.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.39700 GHz	2.39700 GHz
Stop Frequency	2.47700 GHz	2.47700 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	>= 400.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	320	~ 320
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	18 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.30 dB

Occupied Channel Bandwidth 99% (2452 MHz; 30.000 dBm; 11n_40 MHz)

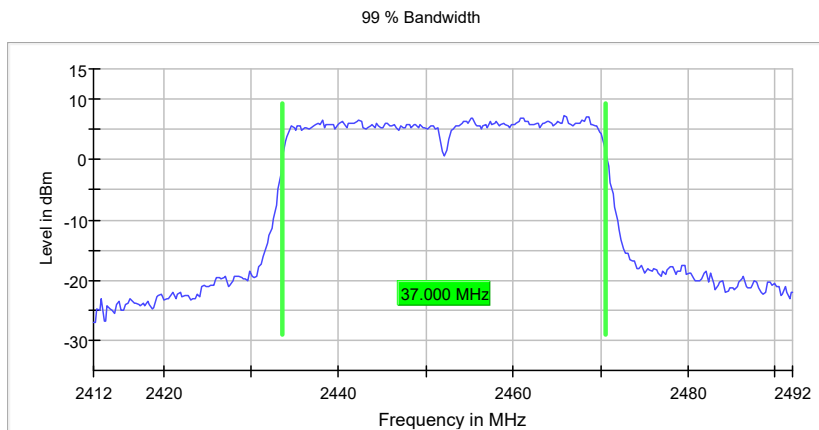
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2452.000000	37.000000	---	---	2433.625000	2470.625000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2452.000000	PASS



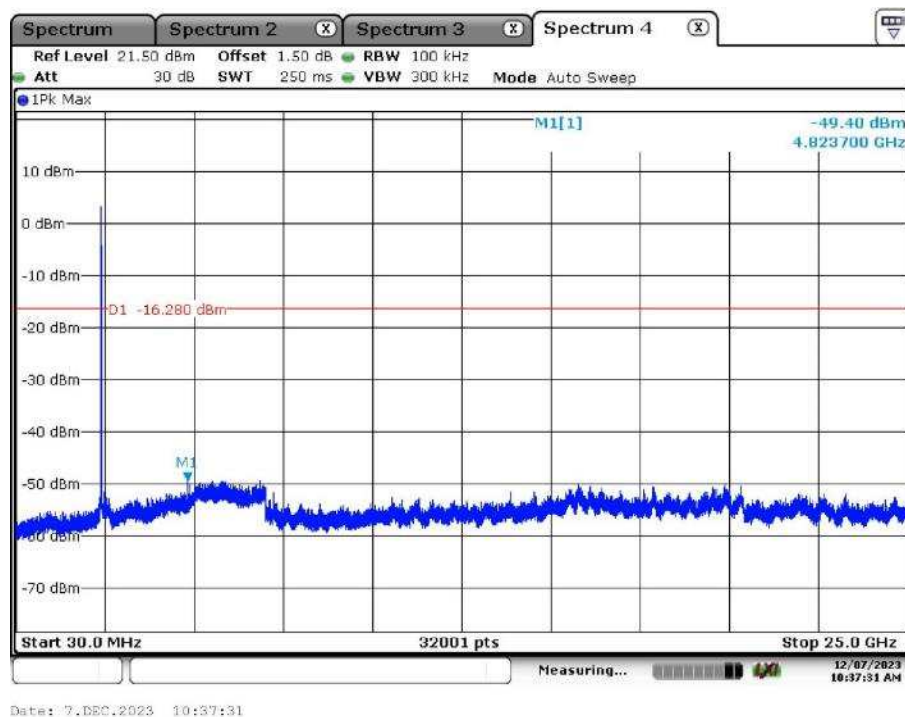
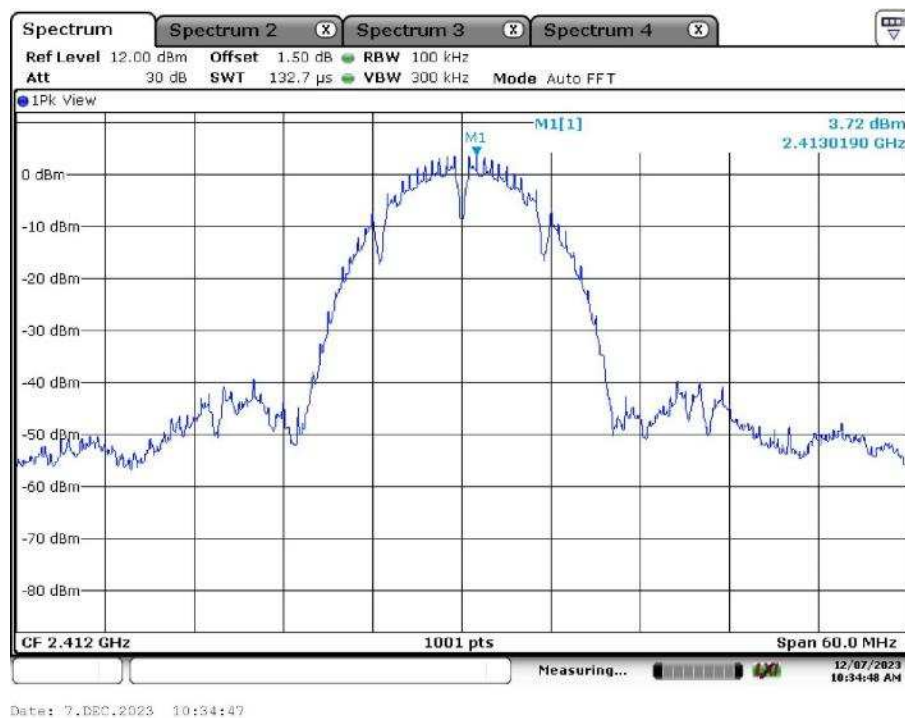
Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.41200 GHz	2.41200 GHz
Stop Frequency	2.49200 GHz	2.49200 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	>= 400.000 kHz
VBW	2.000 MHz	>= 1.500 MHz
SweepPoints	320	~ 320
SweepTime	1.000 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	25 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.30 dB

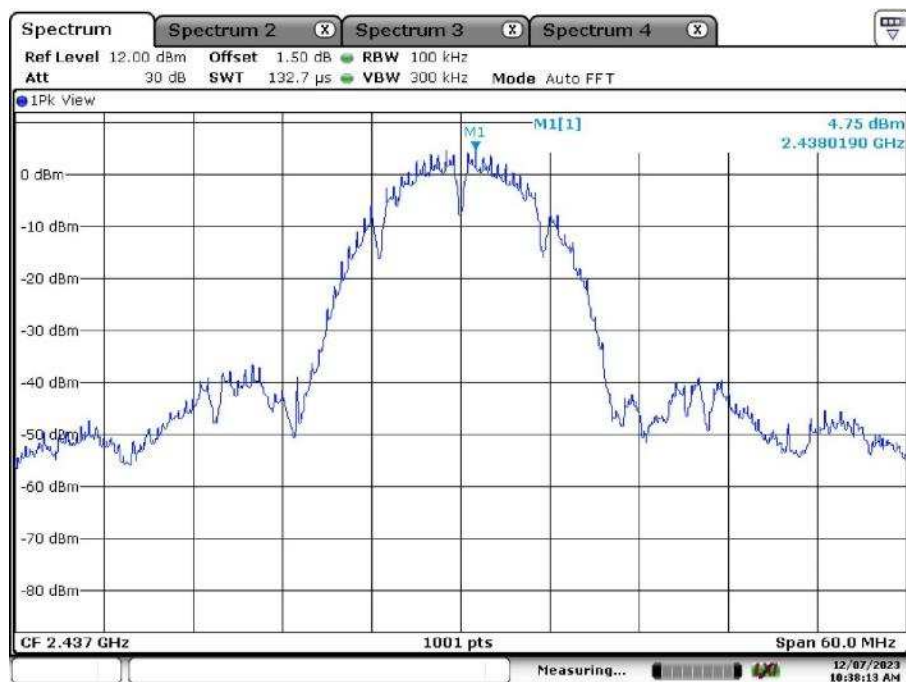
Appendix A.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Wi-Fi 802.11 b mode, Conducted Spurious Emission

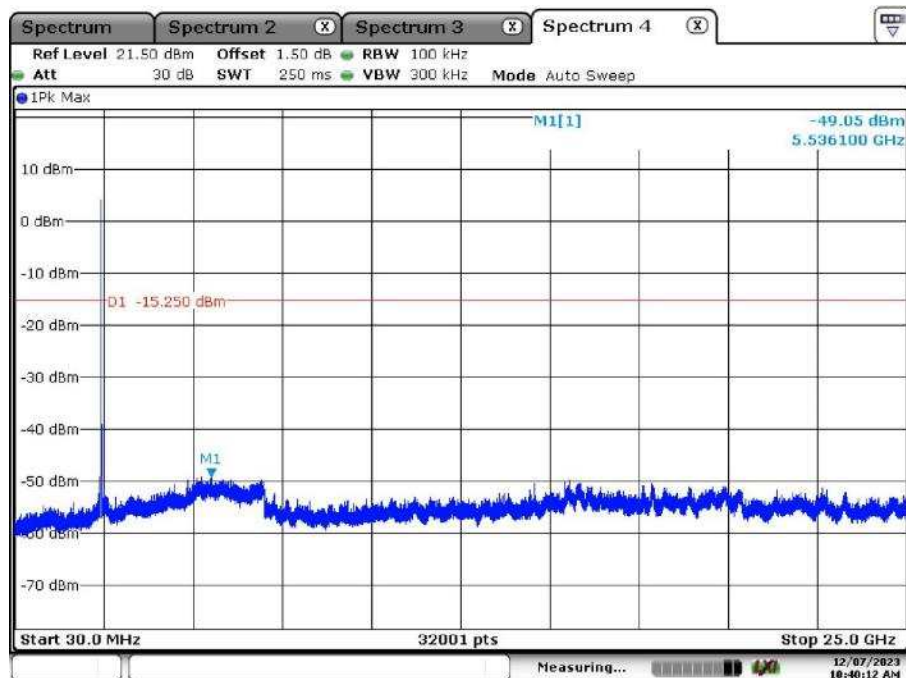
Low Channel:



Middle Channel:

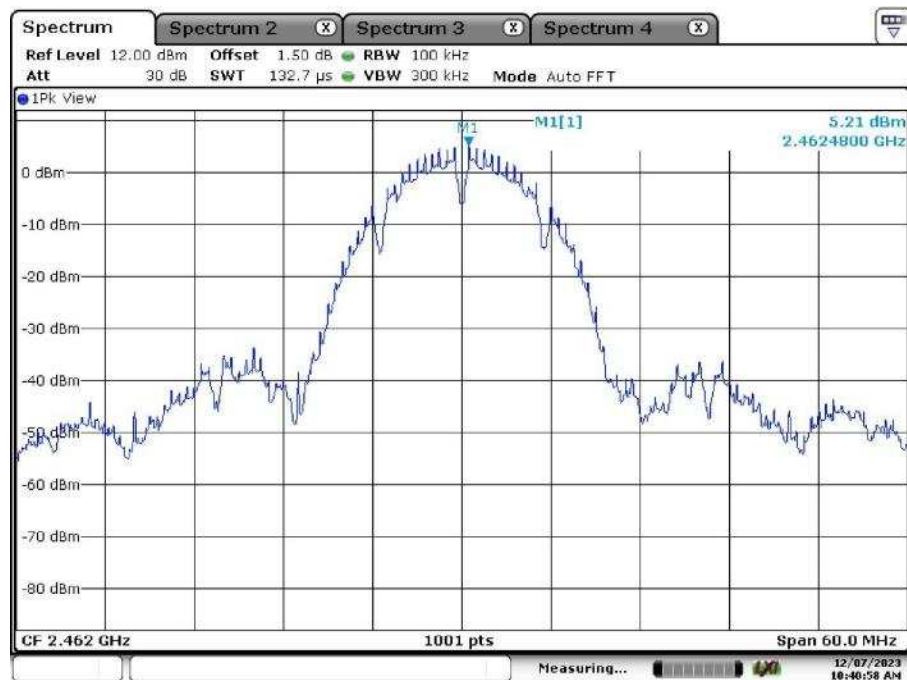


Date: 7.DEC.2023 10:38:13

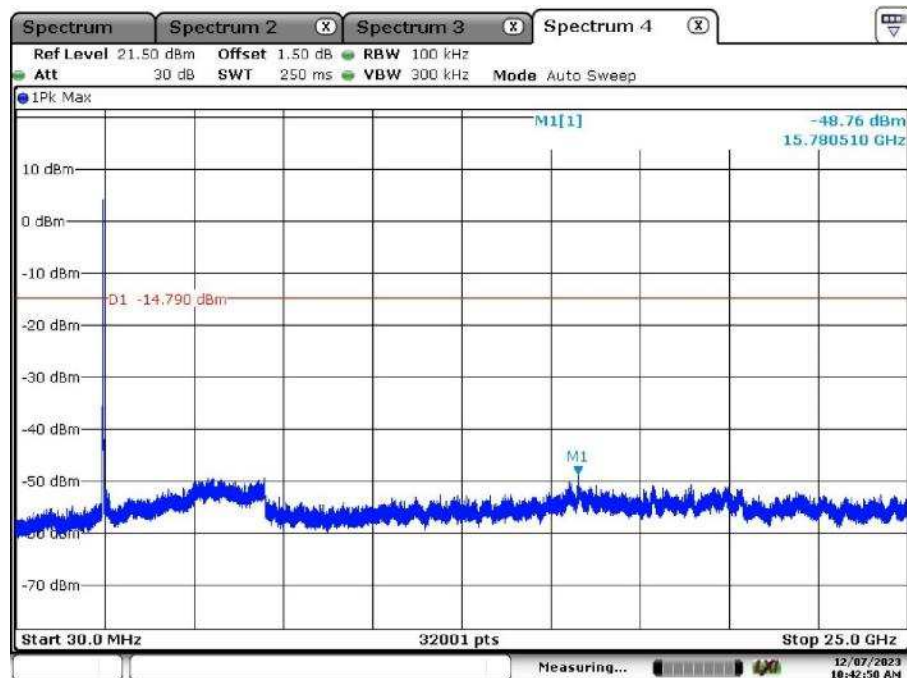


Date: 7.DEC.2023 10:40:12

High Channel:



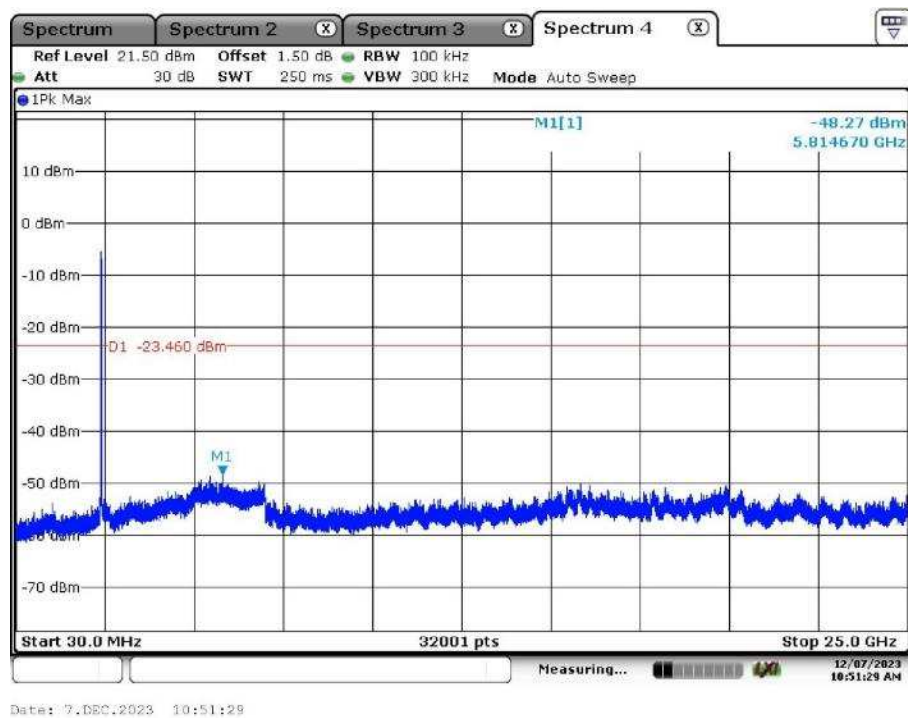
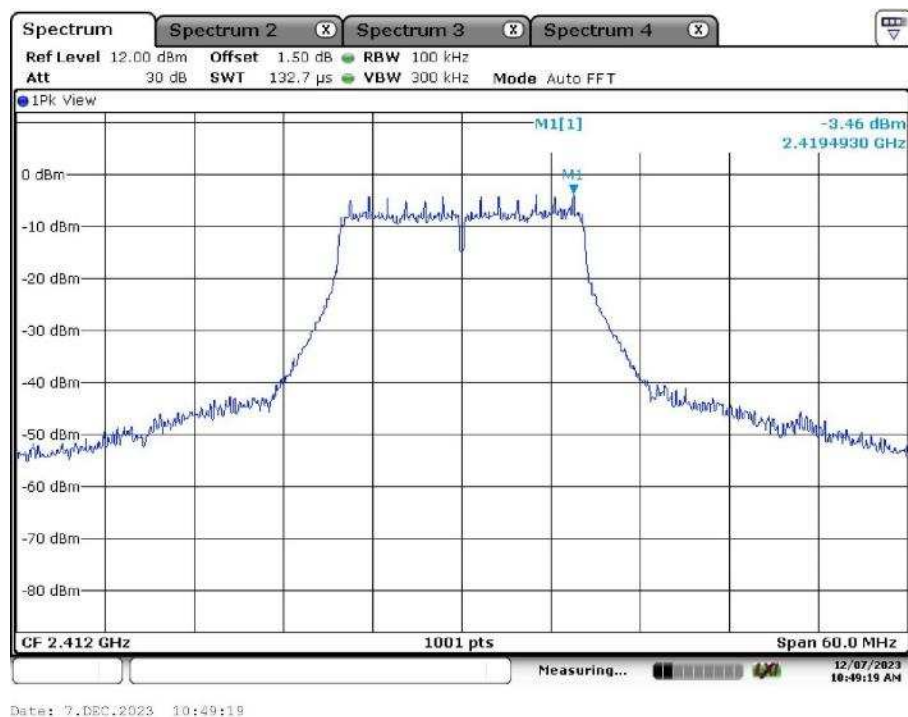
Date: 7.DEC.2023 10:40:58



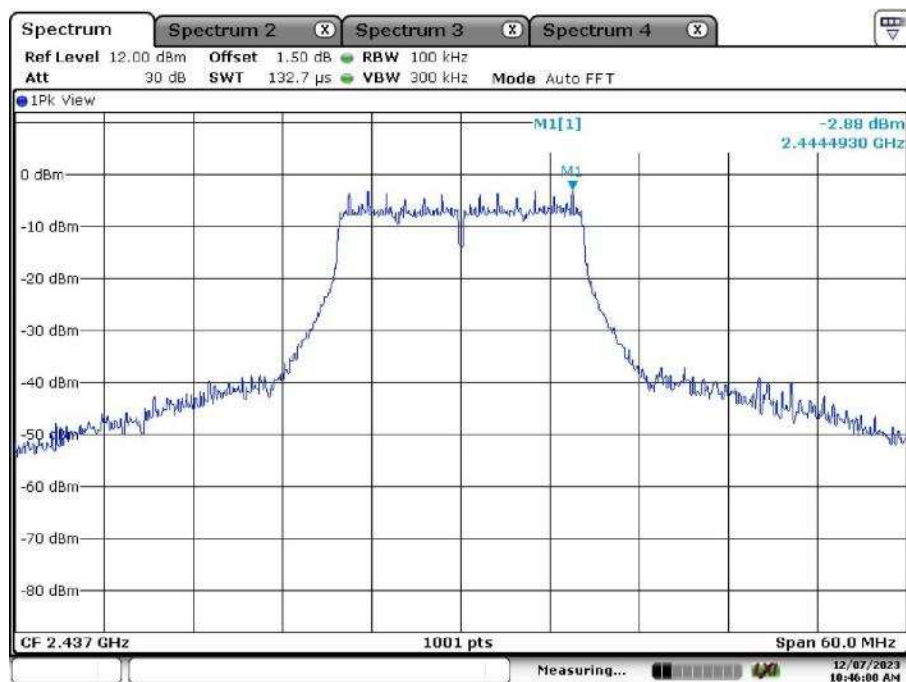
Date: 7.DEC.2023 10:42:50

Wi-Fi 802.11 g mode, Conducted Spurious Emission

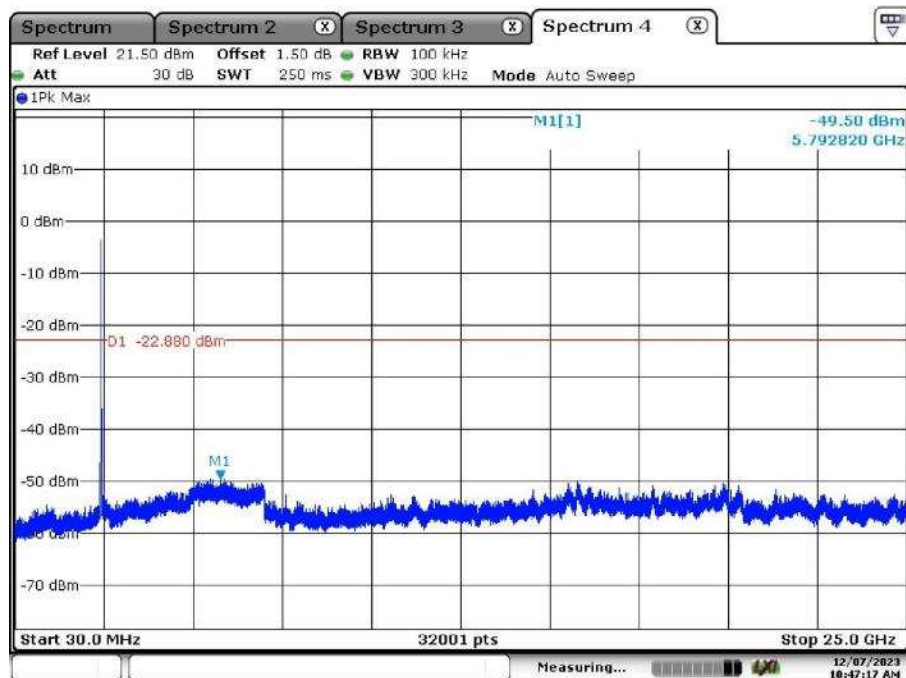
Low Channel:



Middle Channel:

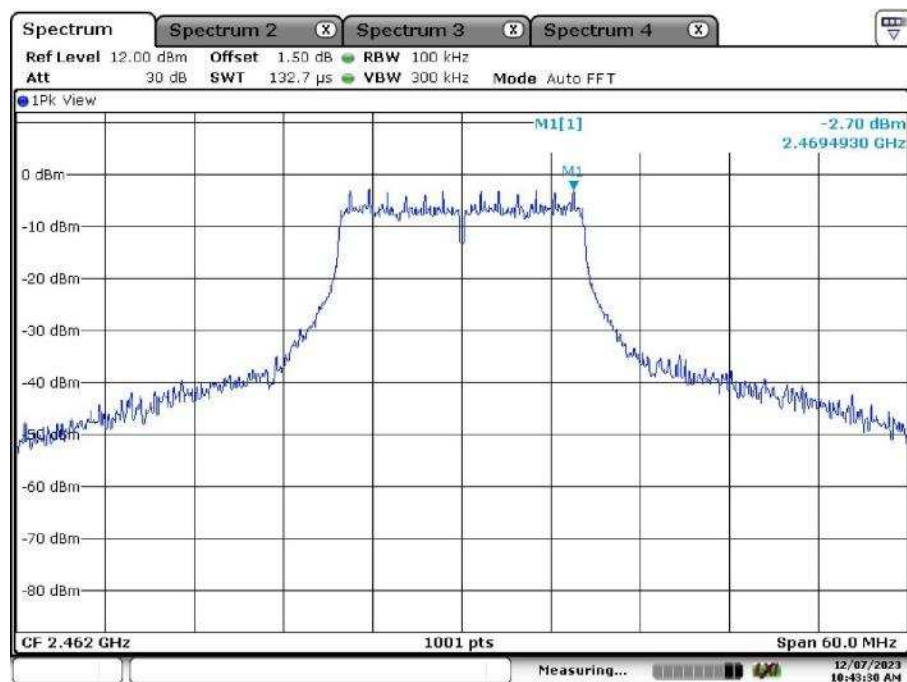


Date: 7.DEC.2023 10:46:00

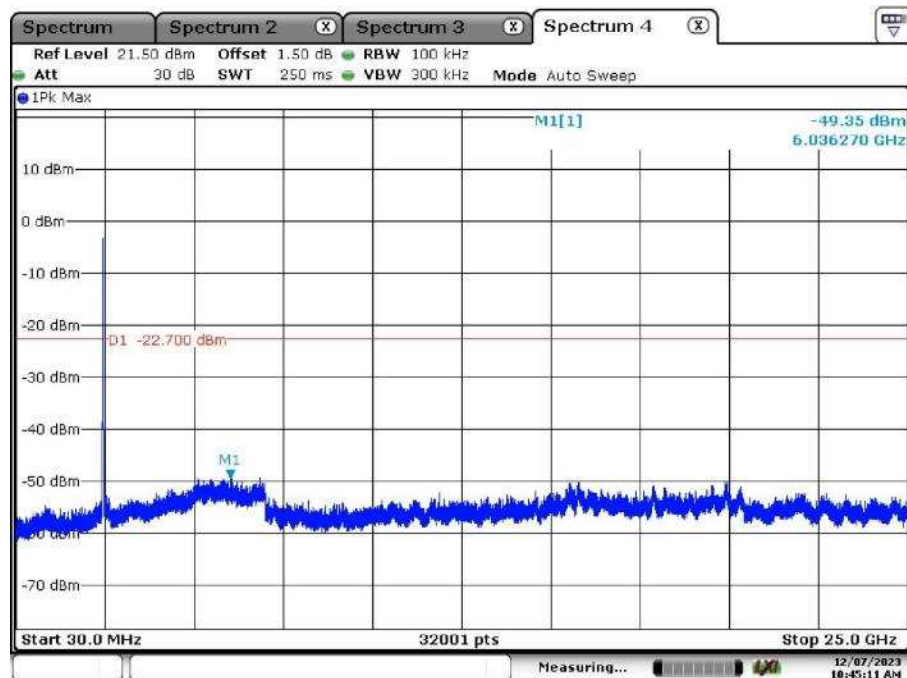


Date: 7.DEC.2023 10:47:17

High Channel:



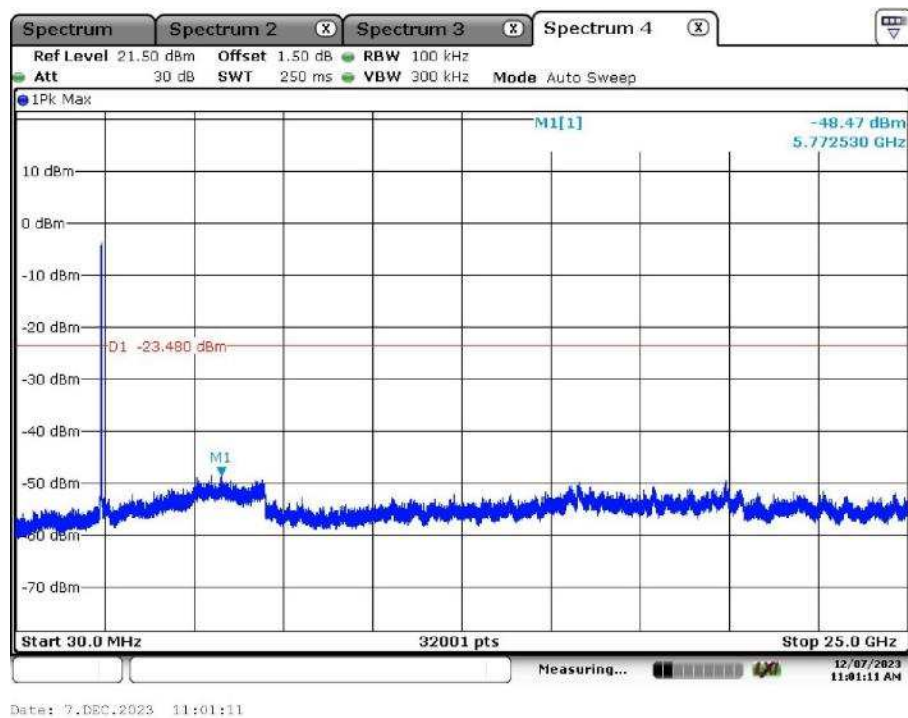
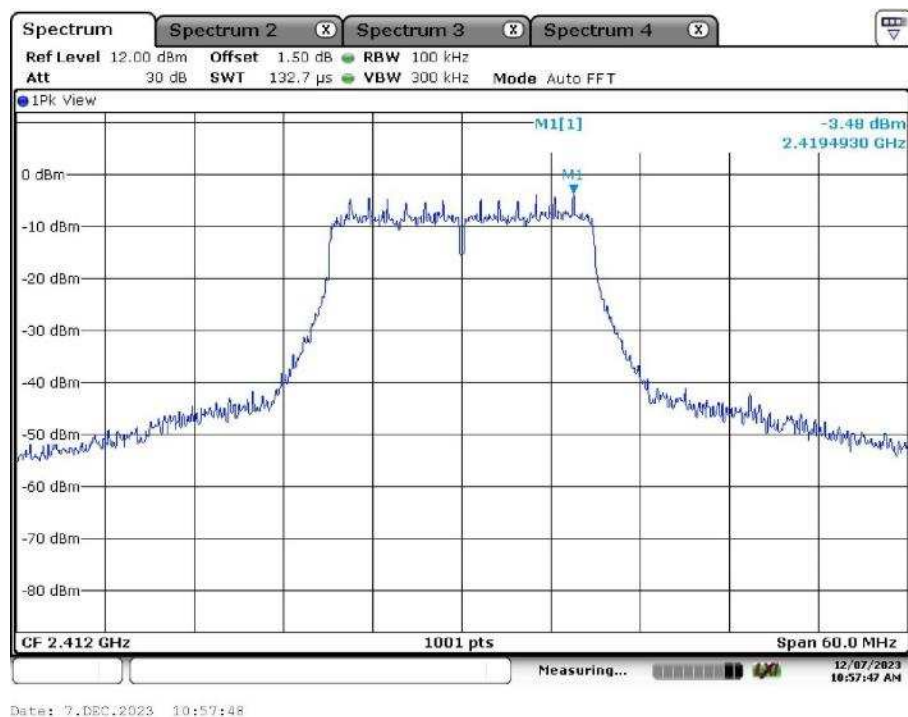
Date: 7.DEC.2023 10:43:30



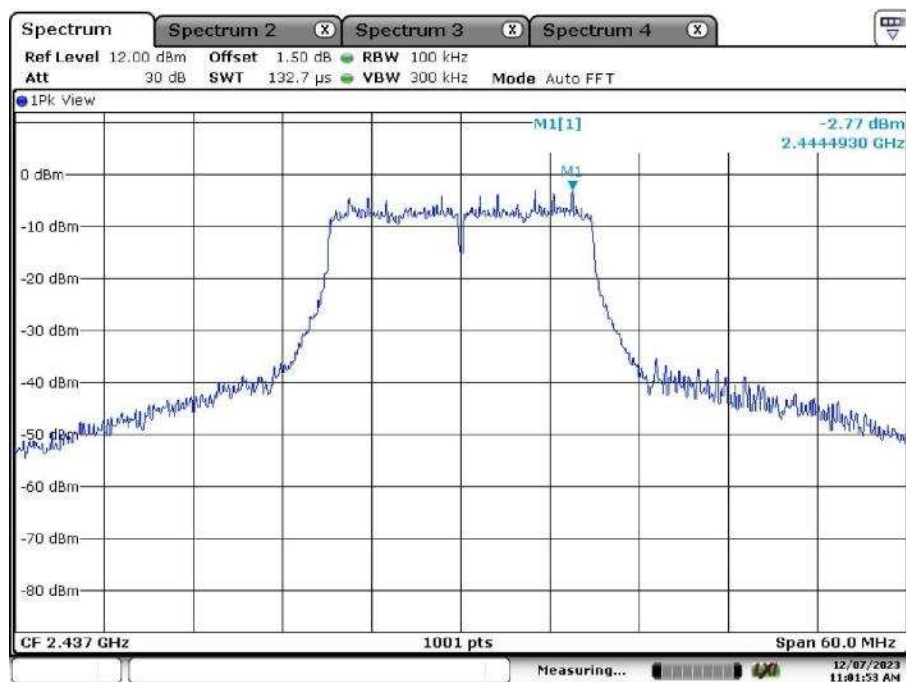
Date: 7.DEC.2023 10:45:11

Wi-Fi 802.11 n(HT20) mode, Conducted Spurious Emission

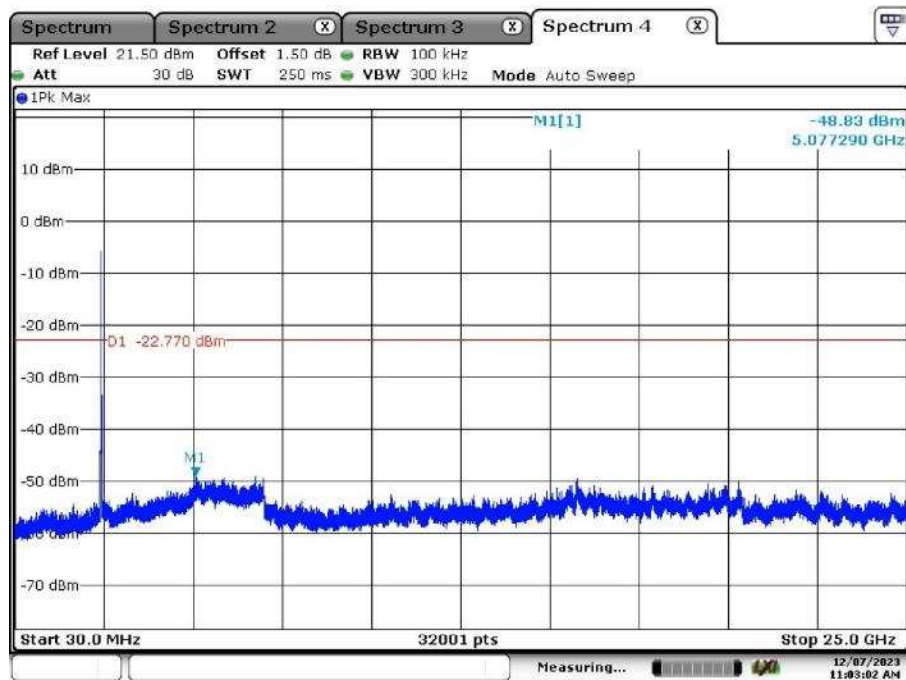
Low Channel:



Middle Channel:

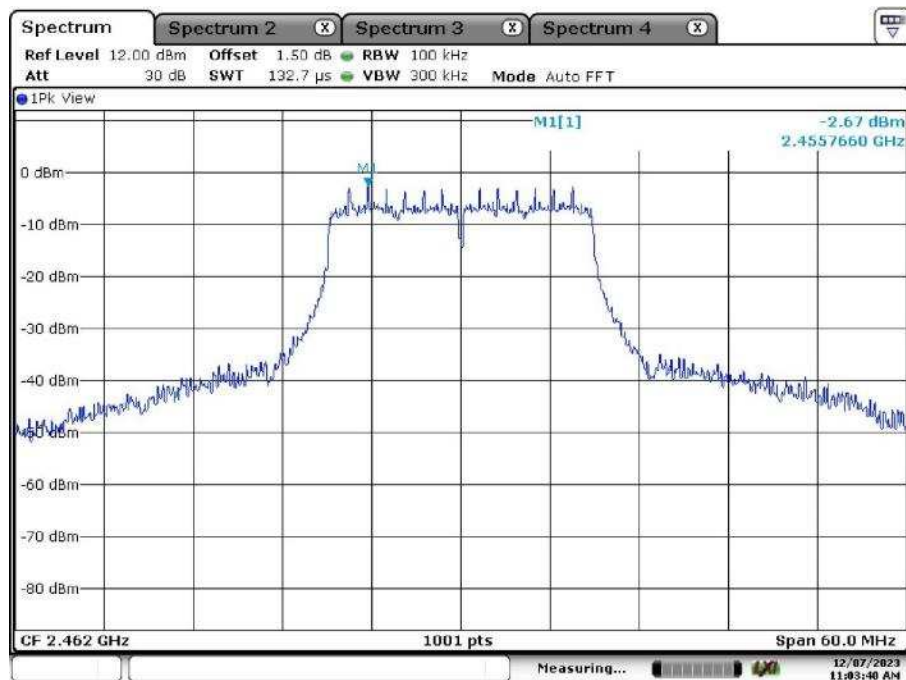


Date: 7.DEC.2023 11:01:54

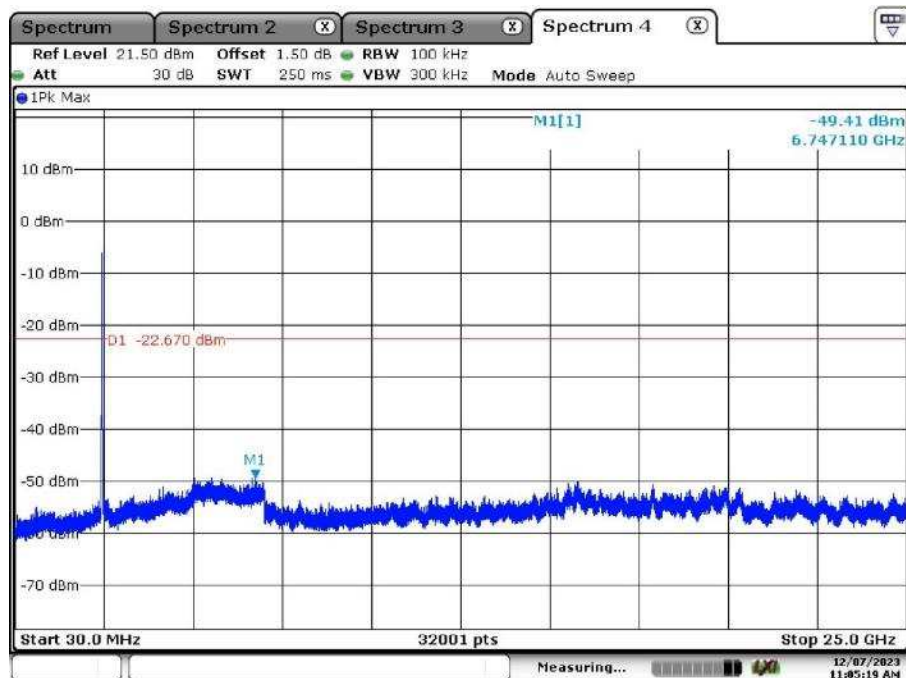


Date: 7.DEC.2023 11:03:02

High Channel:



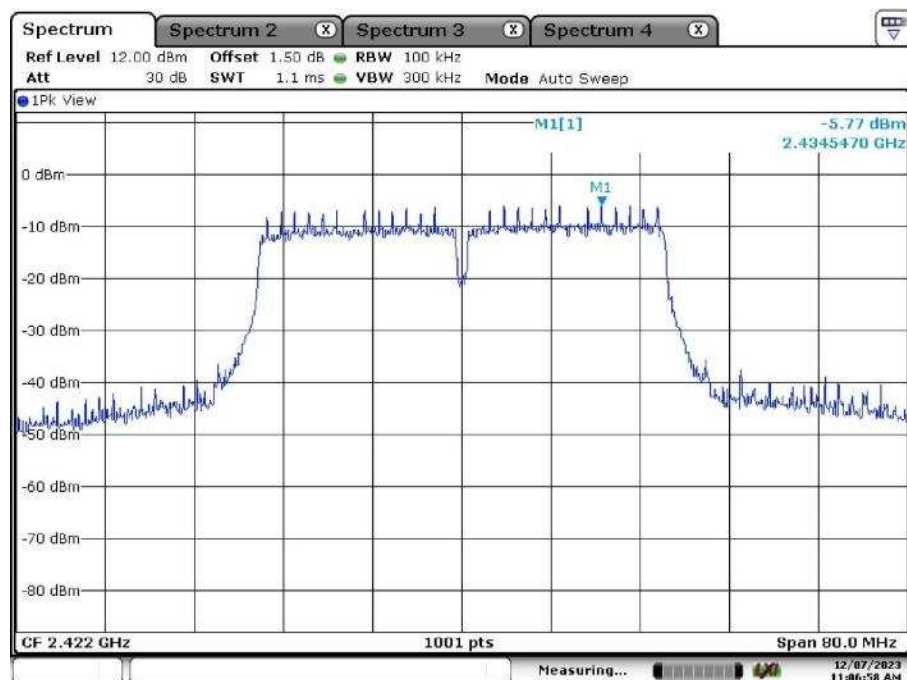
Date: 7.DEC.2023 11:03:40



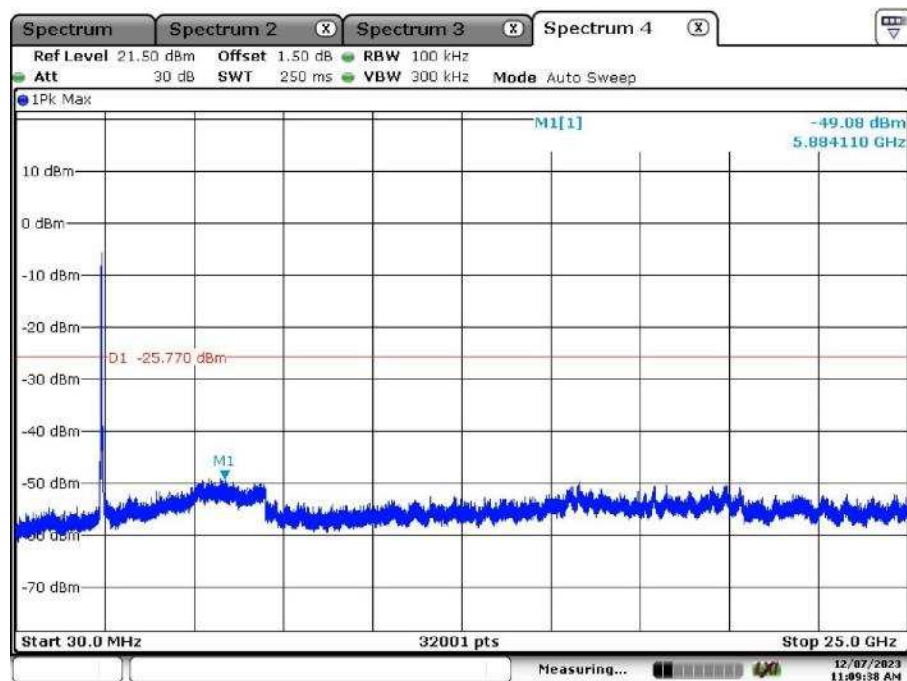
Date: 7.DEC.2023 11:05:20

Wi-Fi 802.11 n(HT40) mode, Conducted Spurious Emission

Low Channel:

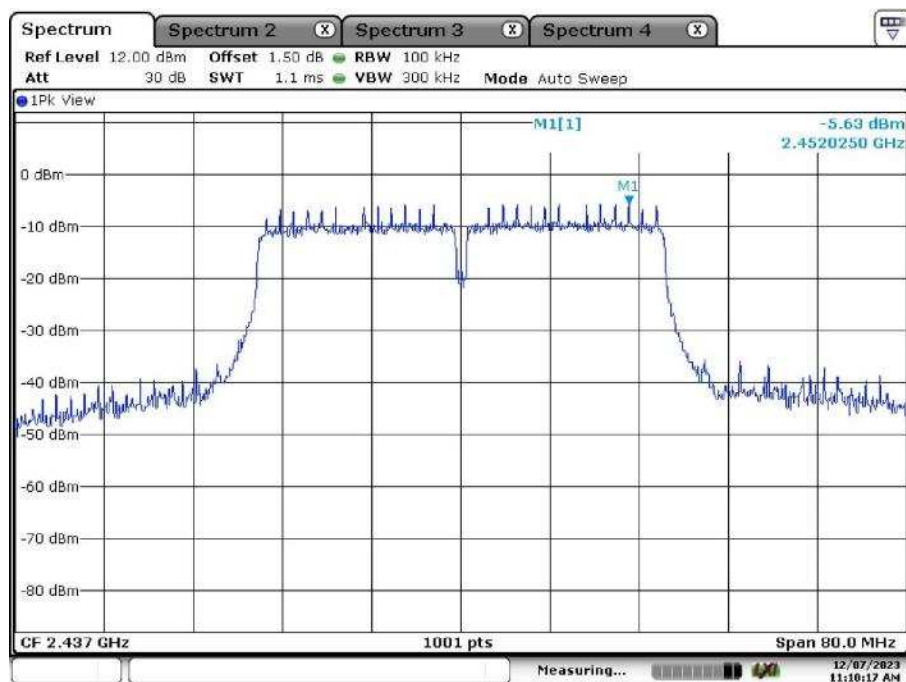


Date: 7.DEC.2023 11:06:58

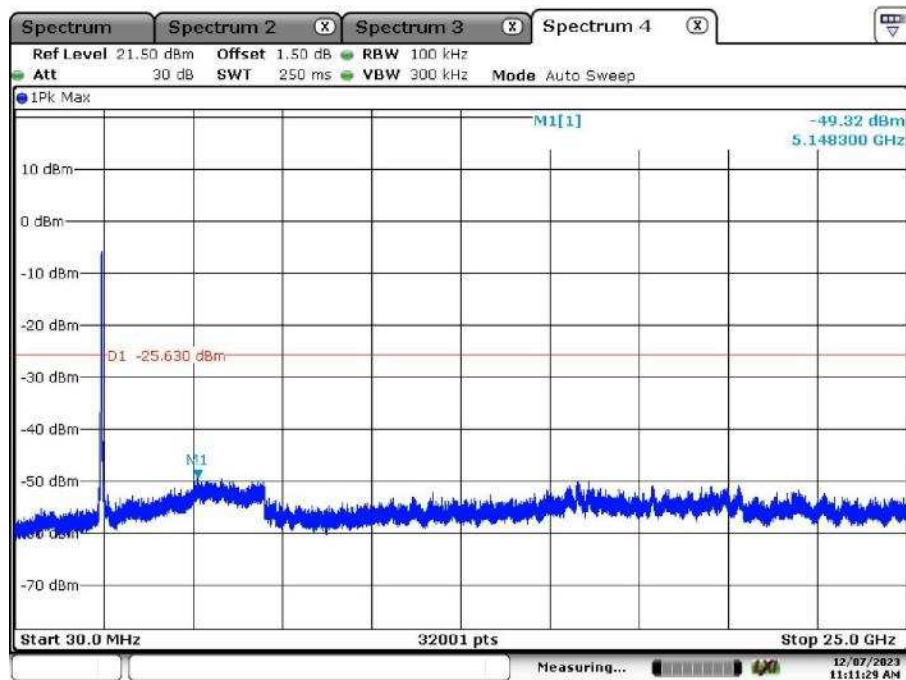


Date: 7.DEC.2023 11:09:38

Middle Channel:

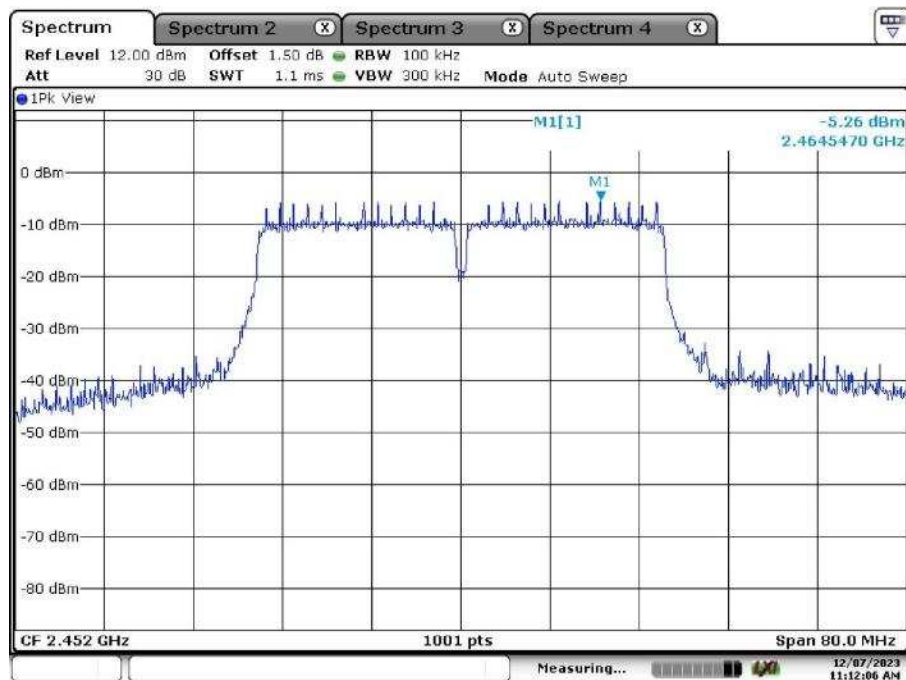


Date: 7.DEC.2023 11:10:17

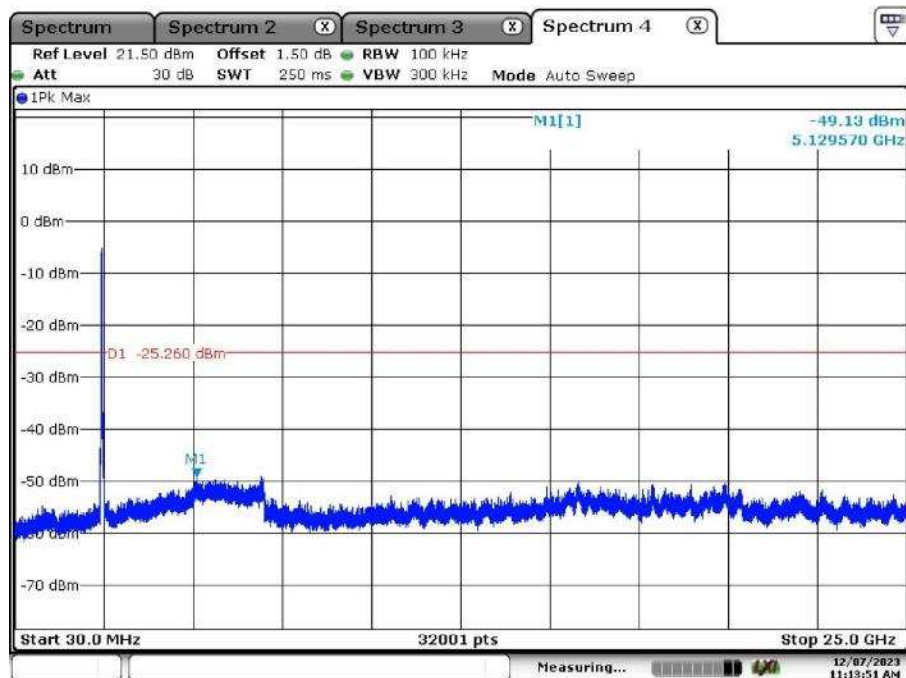


Date: 7.DEC.2023 11:11:30

High Channel:



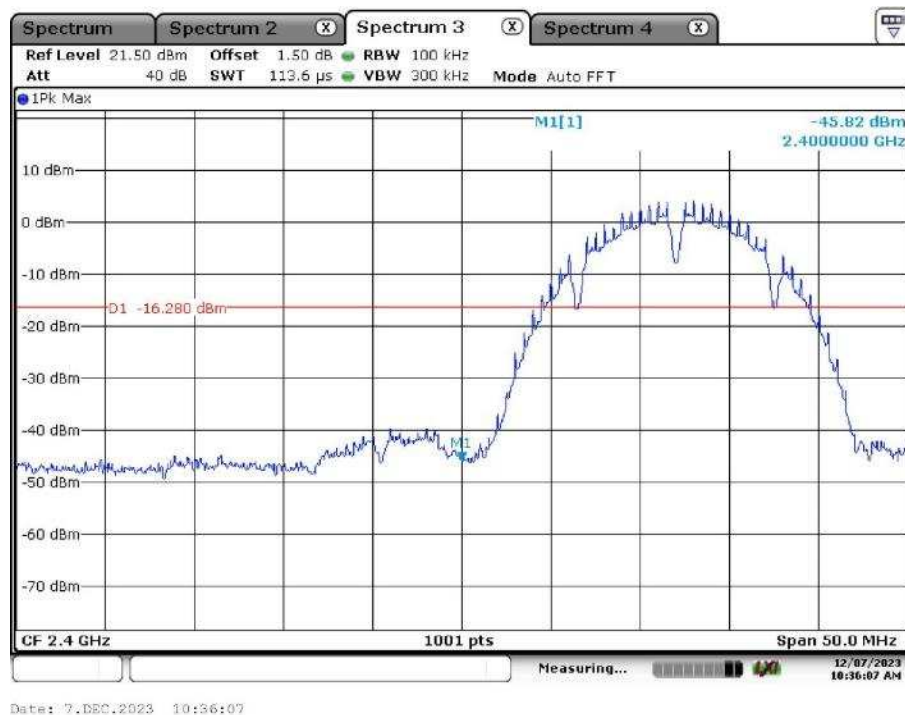
Date: 7.DEC.2023 11:12:07



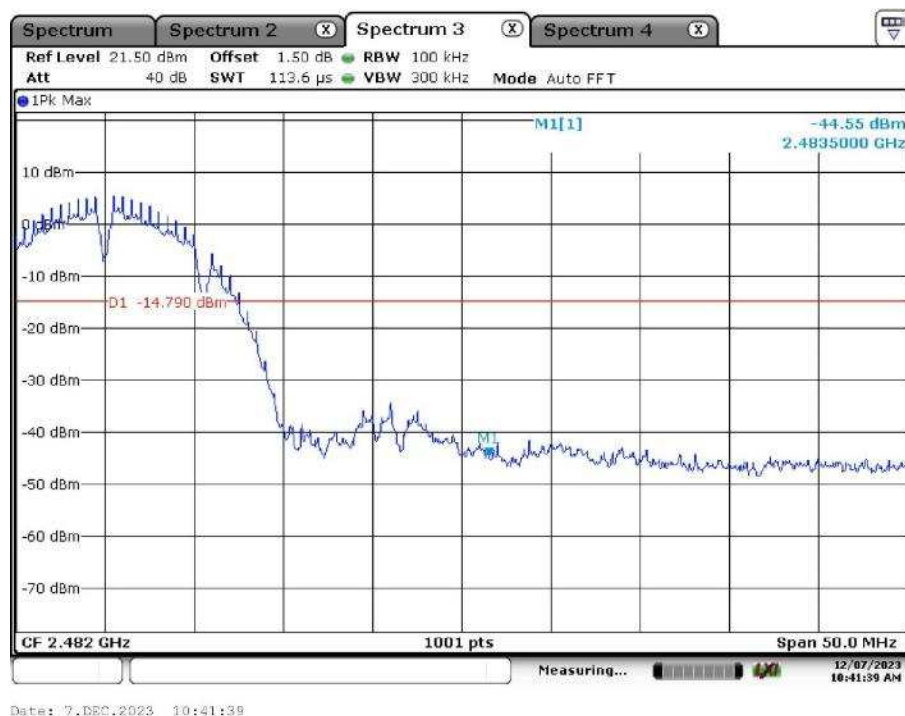
Date: 7.DEC.2023 11:13:52

Wi-Fi 802.11 b mode, Band Edge

Low Channel:

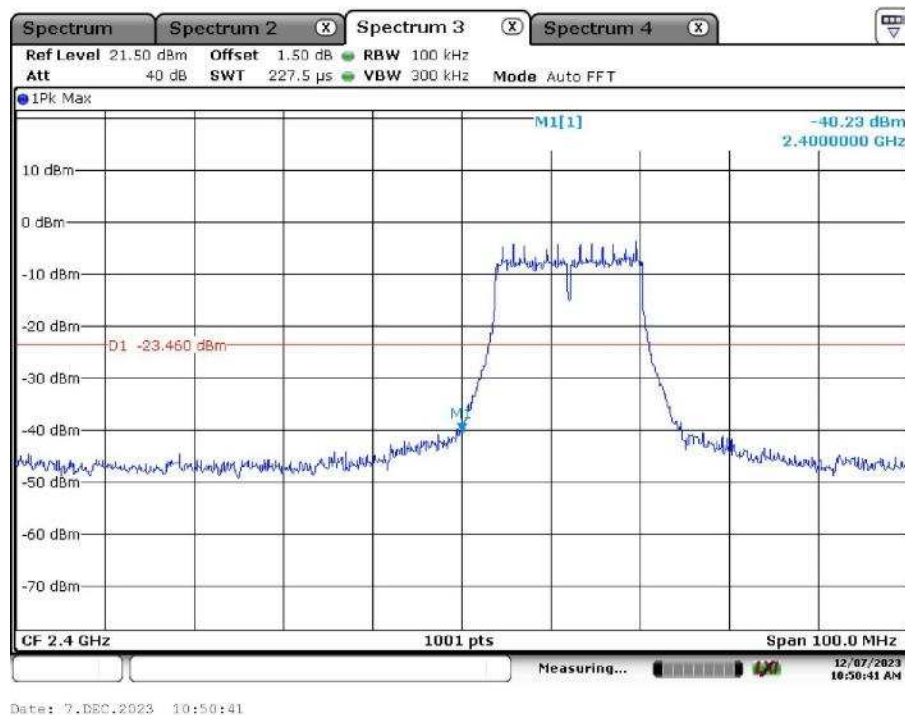


High Channel:

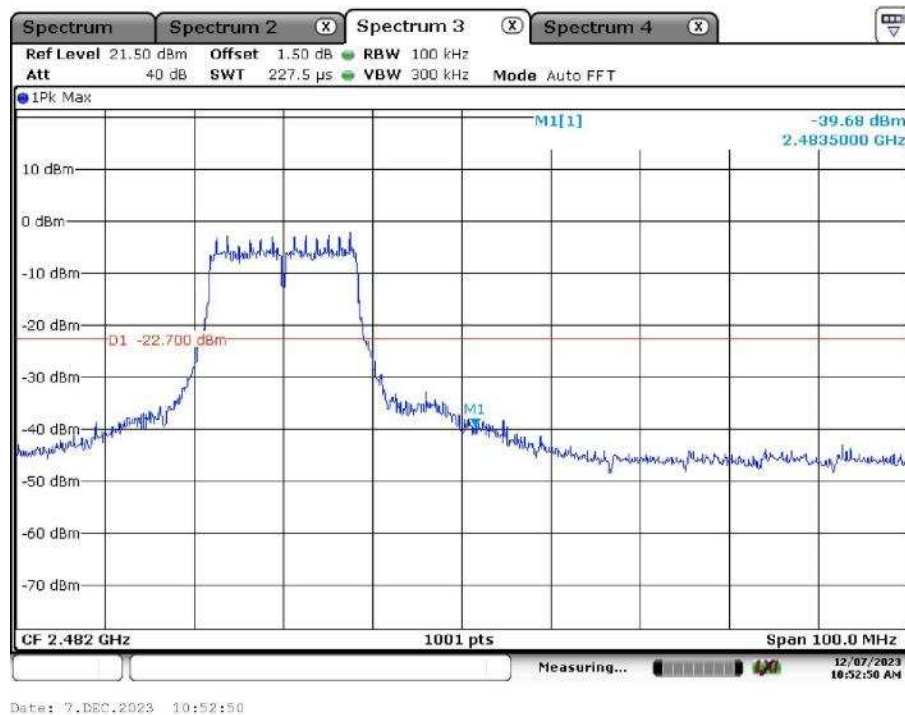


Wi-Fi 802.11 g mode, Band Edge

Low Channel:

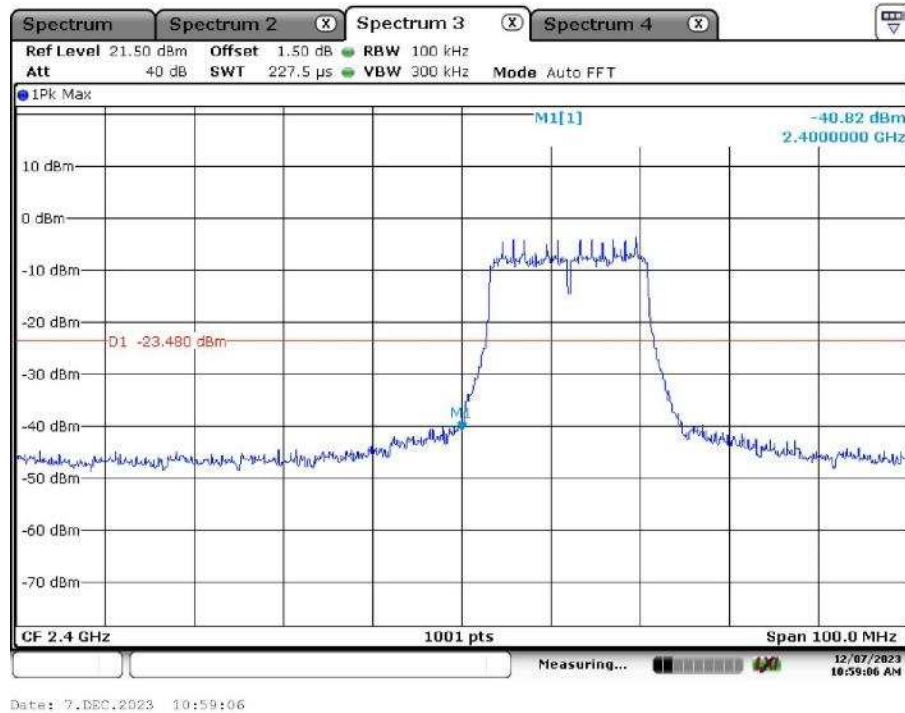


High Channel:

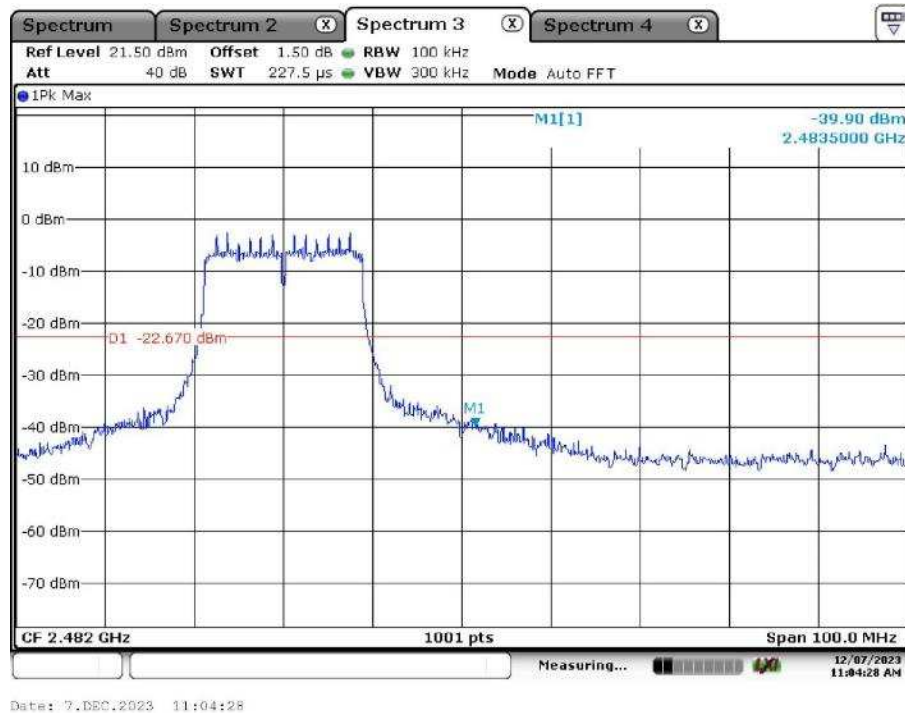


Wi-Fi 802.11 n(HT20) mode, Band Edge

Low Channel:

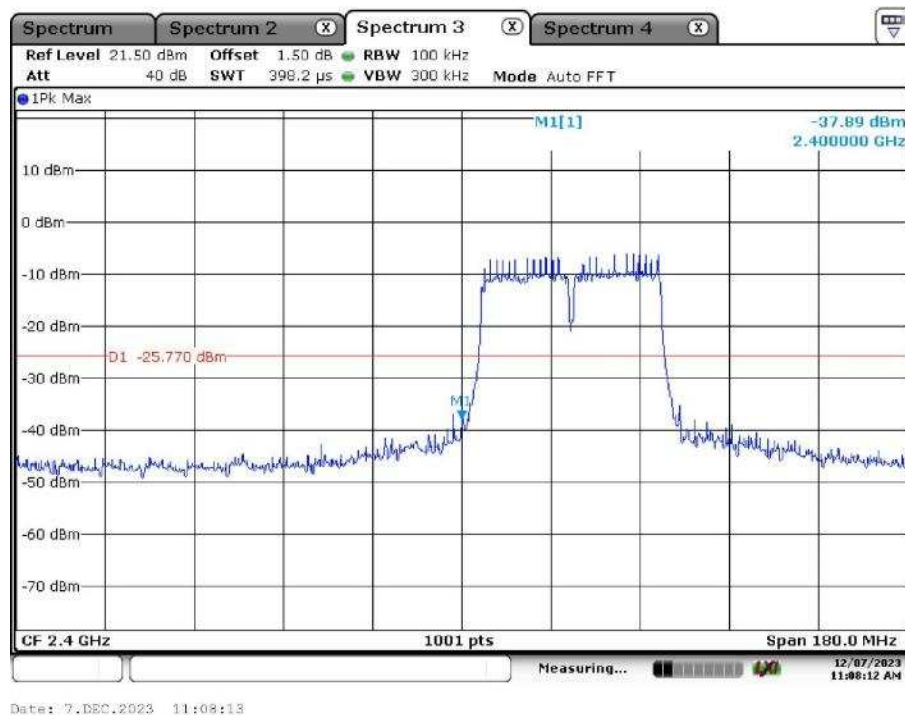


High Channel:

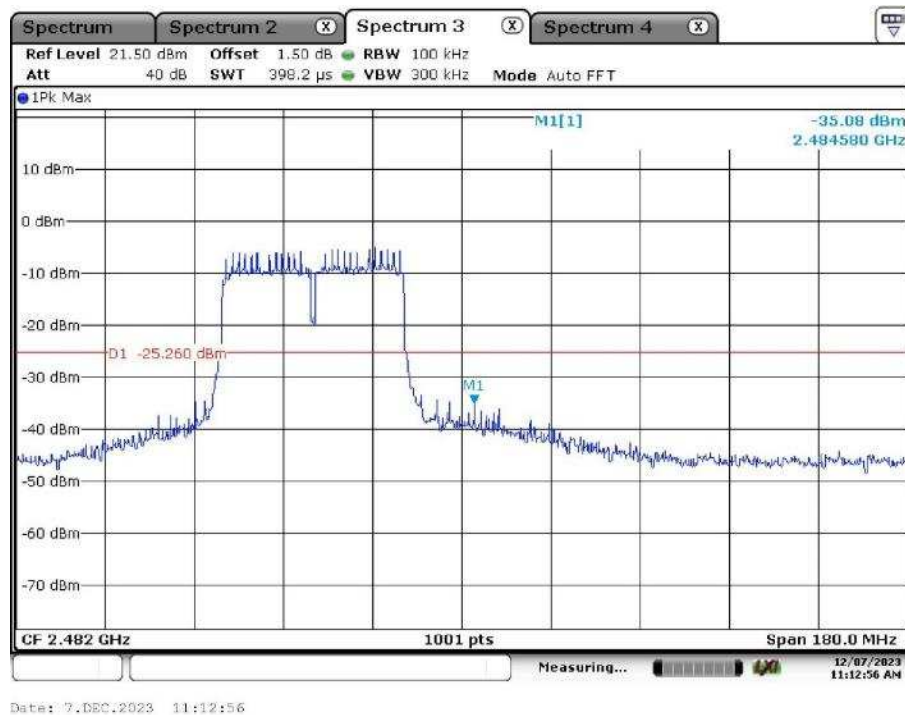


Wi-Fi 802.11 n(HT40) mode, Band Edge

Low Channel:



High Channel:



Appendix A.5: Test Results of Radiated Spurious Emissions

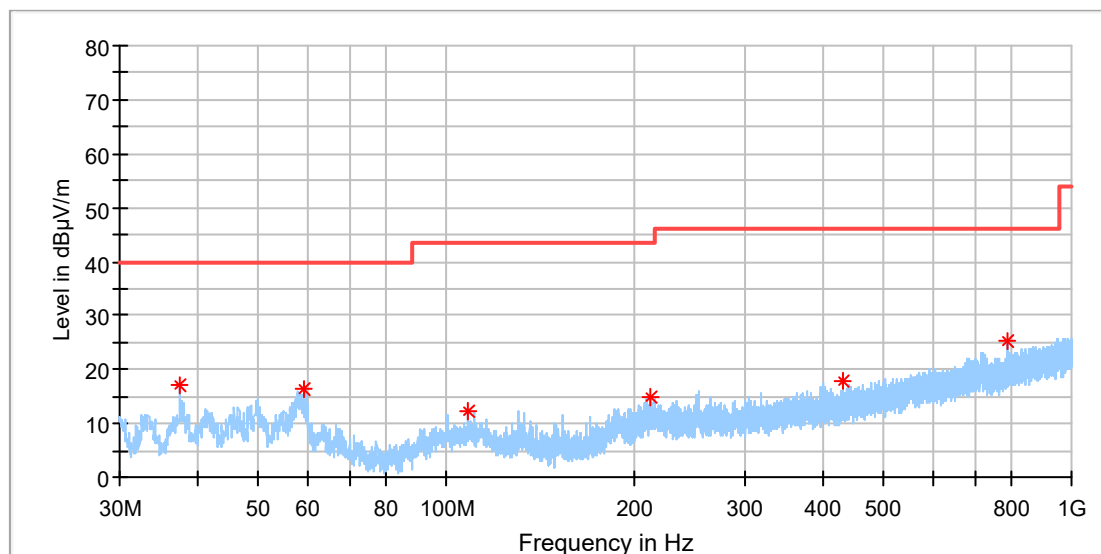
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

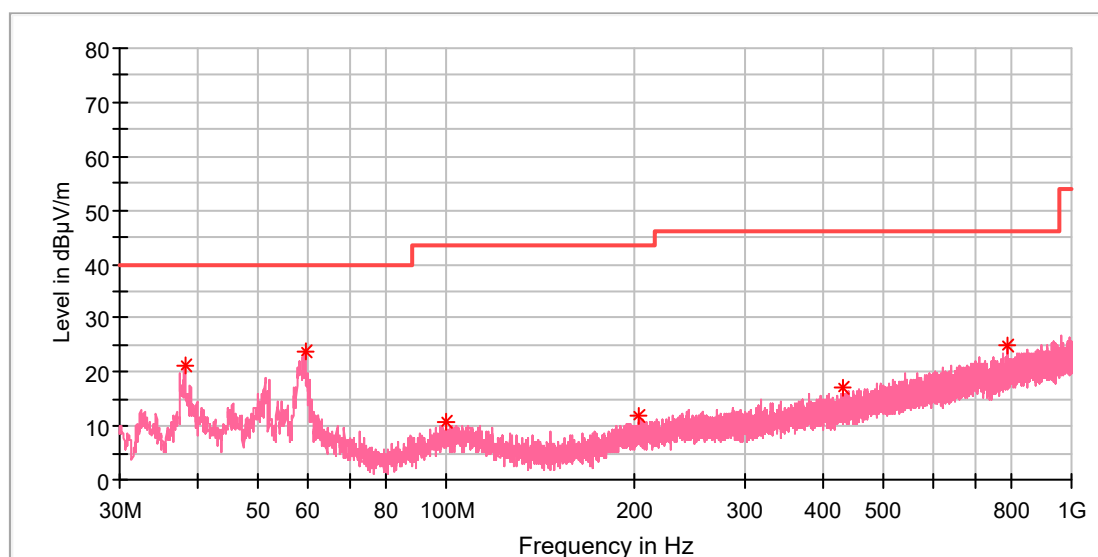
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.498846	17.07	40.00	22.93	100.0	H	92.0	-21.2
59.361154	16.49	40.00	23.51	100.0	H	0.0	-19.2
108.644615	12.17	43.50	31.33	100.0	H	254.0	-19.3
212.845000	15.06	43.50	28.44	100.0	H	68.0	-19.1
430.871154	17.87	46.00	28.13	100.0	H	179.0	-13.6
791.972308	25.33	46.00	20.67	100.0	H	144.0	-6.9

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
38.170385	21.03	40.00	18.97	100.0	V	0.0	-21.0
59.398462	23.94	40.00	16.06	100.0	V	87.0	-19.2
99.989231	10.63	43.50	32.87	100.0	V	87.0	-19.3
202.883846	12.07	43.50	31.43	100.0	V	135.0	-19.3
430.908462	17.13	46.00	28.87	100.0	V	0.0	-13.6
790.927692	24.89	46.00	21.11	100.0	V	0.0	-6.9

Final_Result

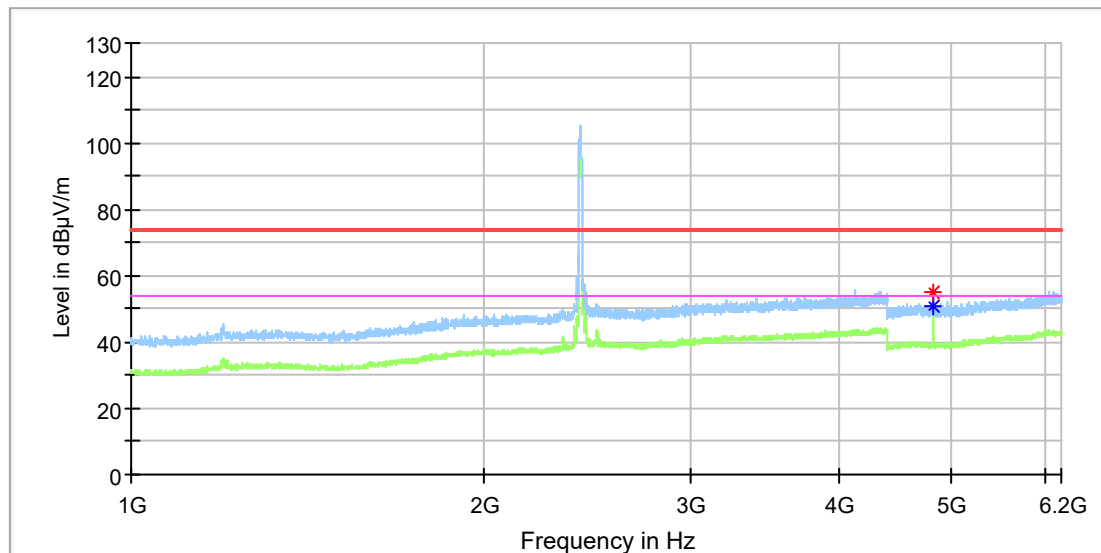
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Wi-Fi Fundamental.

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

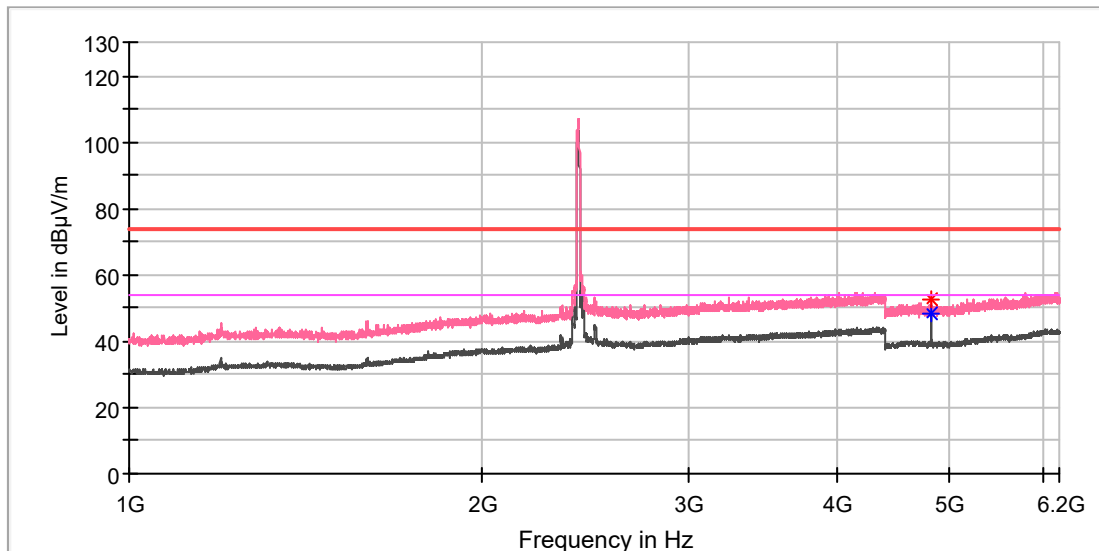
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	---	50.84	54.00	3.16	150.0	H	264.0	11.8
4824.000000	55.24	---	74.00	18.76	150.0	H	264.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

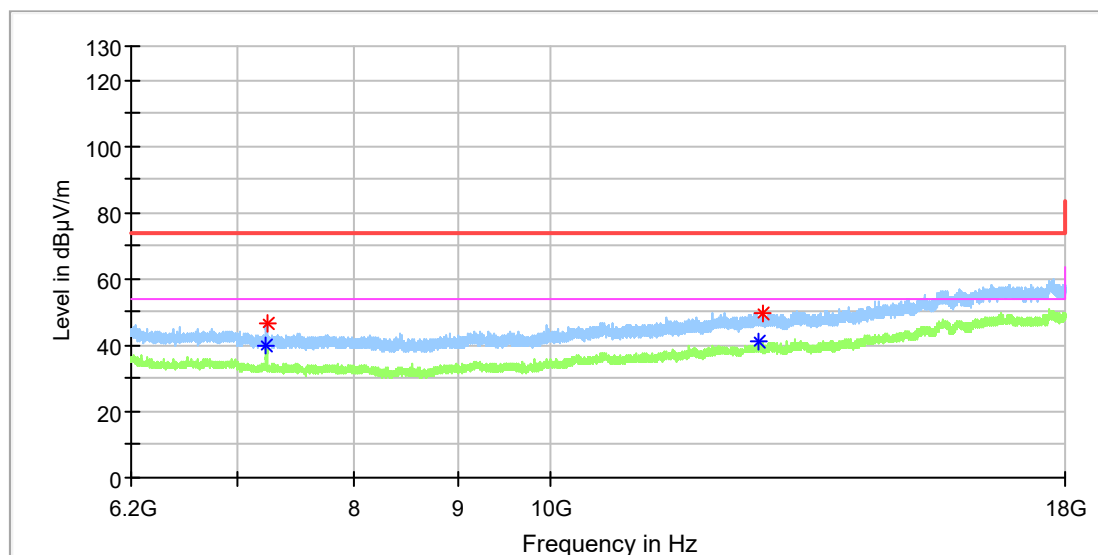
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	---	48.15	54.00	5.85	150.0	V	256.0	11.8
4824.000000	52.77	---	74.00	21.23	150.0	V	256.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

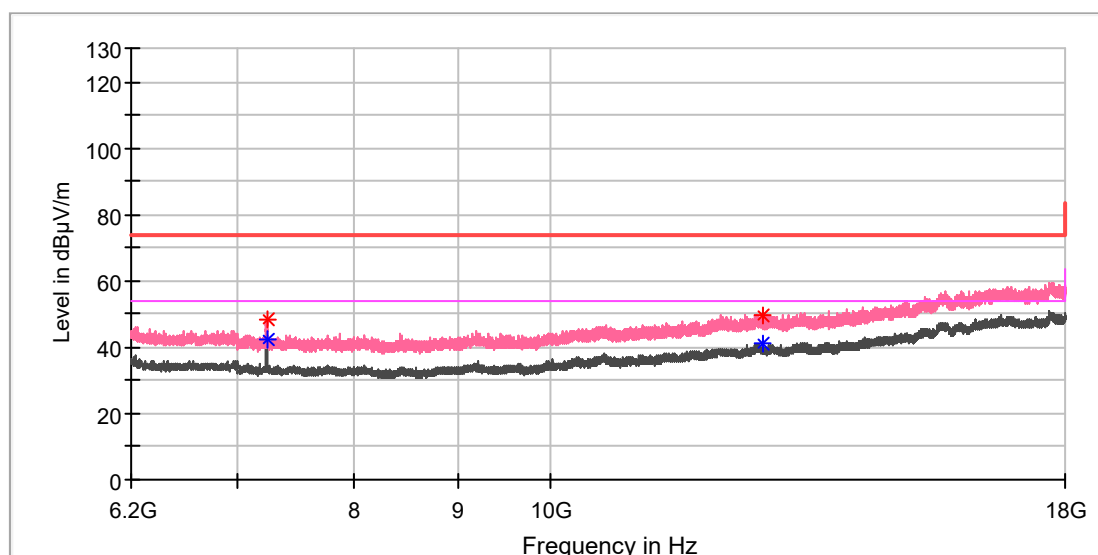
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.958333	---	40.00	54.00	14.00	150.0	H	219.0	8.6
7237.416667	46.45	---	74.00	27.55	150.0	H	71.0	8.6
12697.866667	---	40.92	54.00	13.08	150.0	H	157.0	15.1
12730.316667	49.81	---	74.00	24.19	150.0	H	133.0	15.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

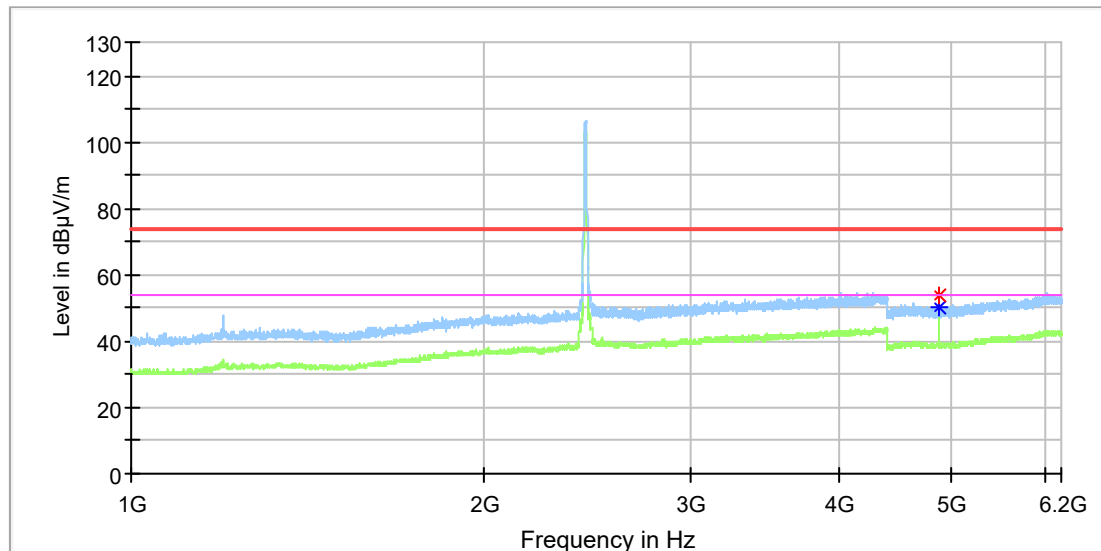
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7236.925000	48.40	---	74.00	25.60	150.0	V	12.0	8.6
7236.925000	---	42.30	54.00	11.70	150.0	V	12.0	8.6
12733.266667	---	40.85	54.00	13.15	150.0	V	73.0	15.2
12737.691667	49.80	---	74.00	24.20	150.0	V	157.0	15.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

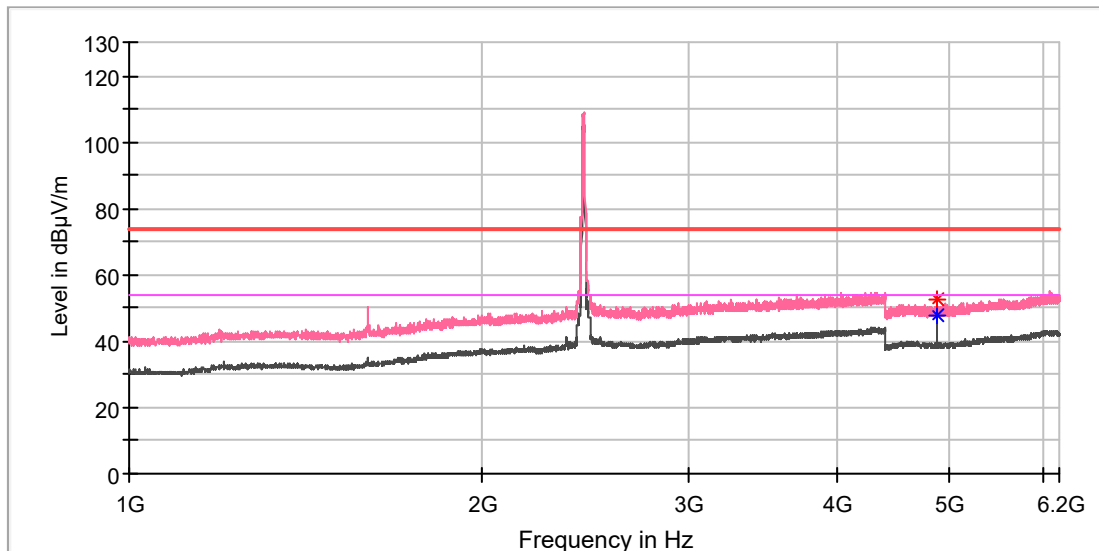
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.000000	---	50.27	54.00	3.73	150.0	H	270.0	11.8
4874.000000	53.72	---	74.00	20.28	150.0	H	270.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

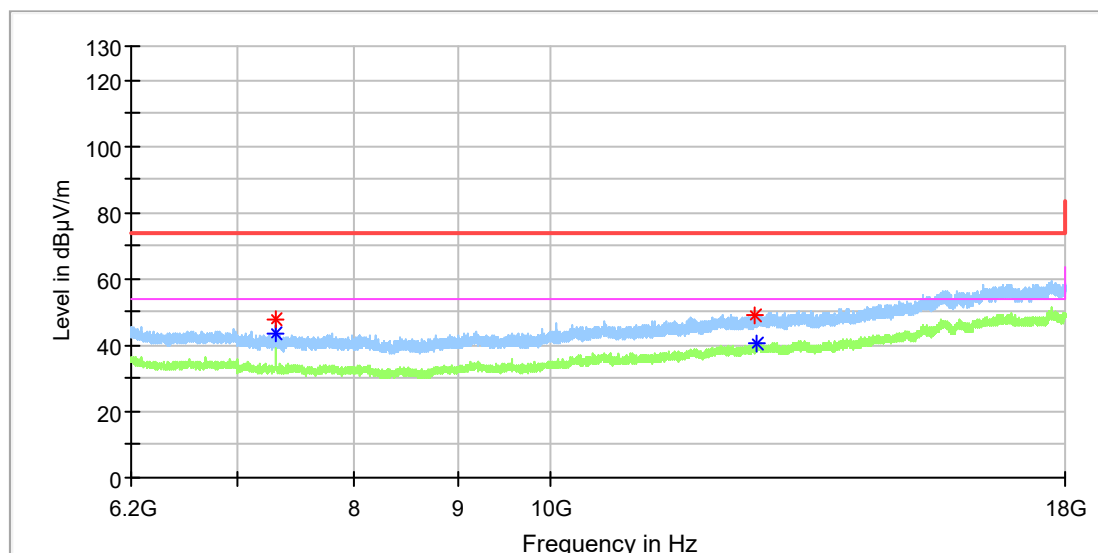
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.500000	52.33	---	74.00	21.67	150.0	V	130.0	11.8
4874.000000	---	47.89	54.00	6.11	150.0	V	163.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

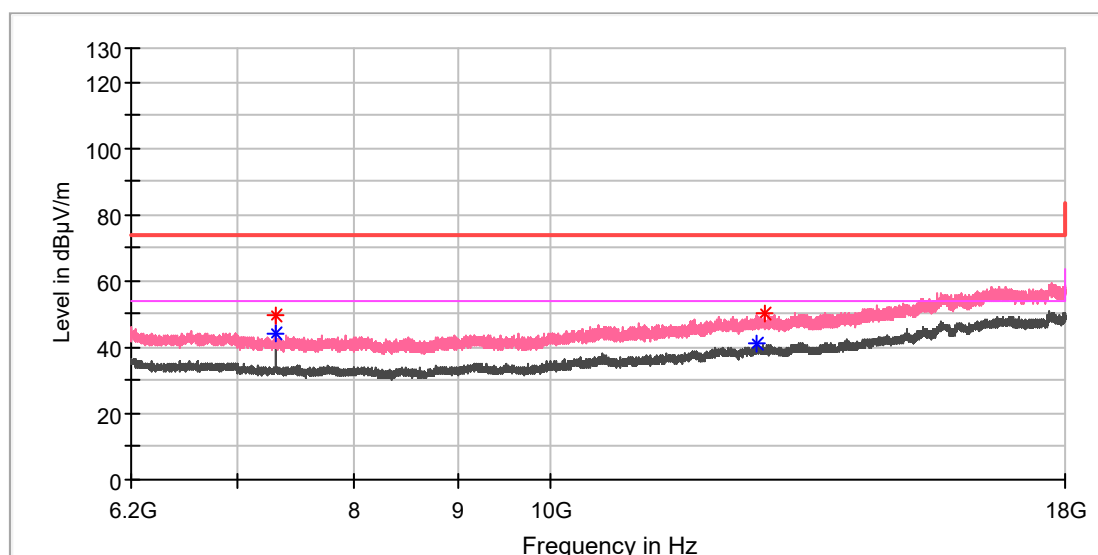
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7311.658333	47.82	---	74.00	26.18	150.0	H	217.0	8.2
7311.658333	---	43.41	54.00	10.59	150.0	H	217.0	8.2
12637.883333	49.20	---	74.00	24.80	150.0	H	358.0	15.0
12654.600000	---	40.59	54.00	13.41	150.0	H	31.0	15.0

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

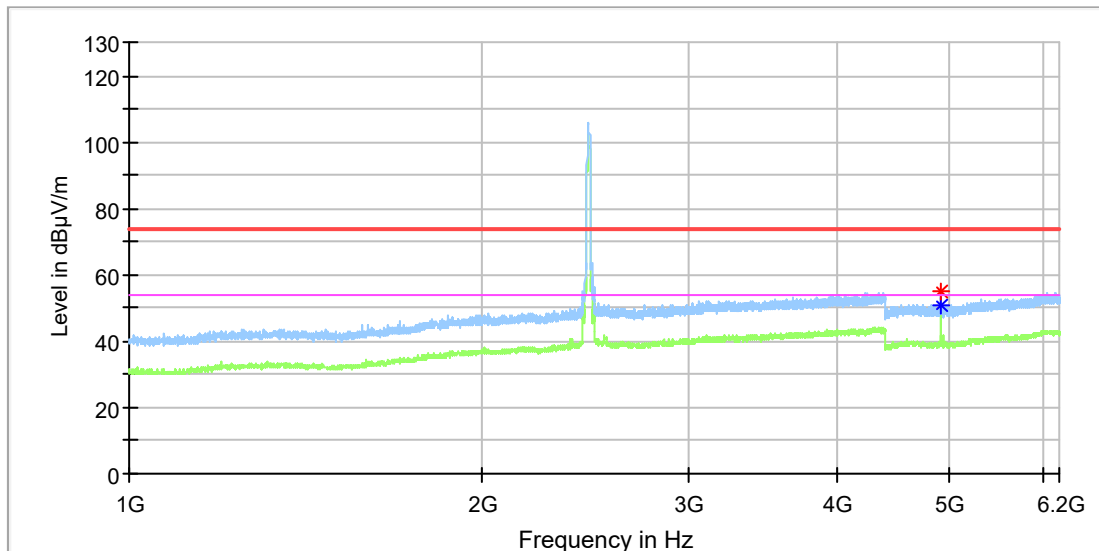
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7309.200000	---	44.30	54.00	9.70	150.0	V	0.0	8.2
7311.658333	49.56	---	74.00	24.44	150.0	V	1.0	8.2
12653.616667	---	40.94	54.00	13.06	150.0	V	78.0	15.0
12761.783333	49.88	---	74.00	24.12	150.0	V	211.0	15.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

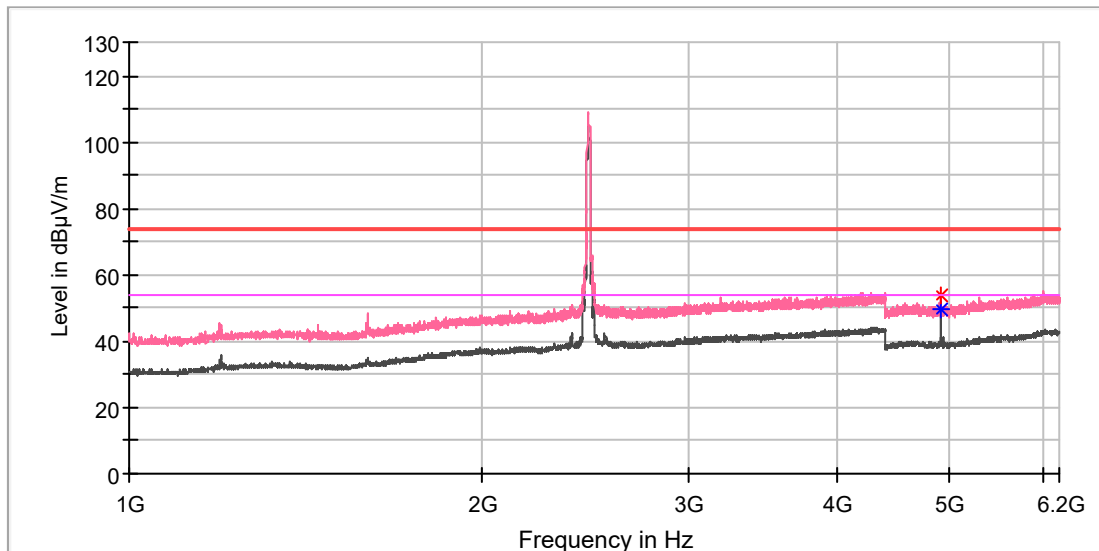
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	---	50.96	54.00	3.04	150.0	H	272.0	11.8
4924.000000	54.91	---	74.00	19.09	150.0	H	272.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

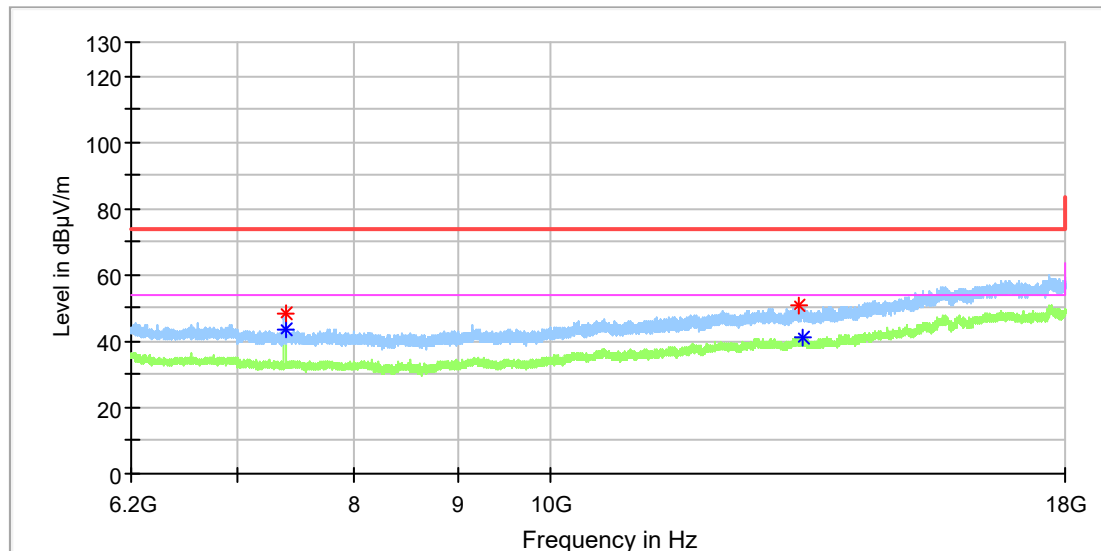
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4923.500000	54.08	---	74.00	19.92	150.0	V	2.0	11.8
4924.000000	---	49.79	54.00	4.22	150.0	V	356.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

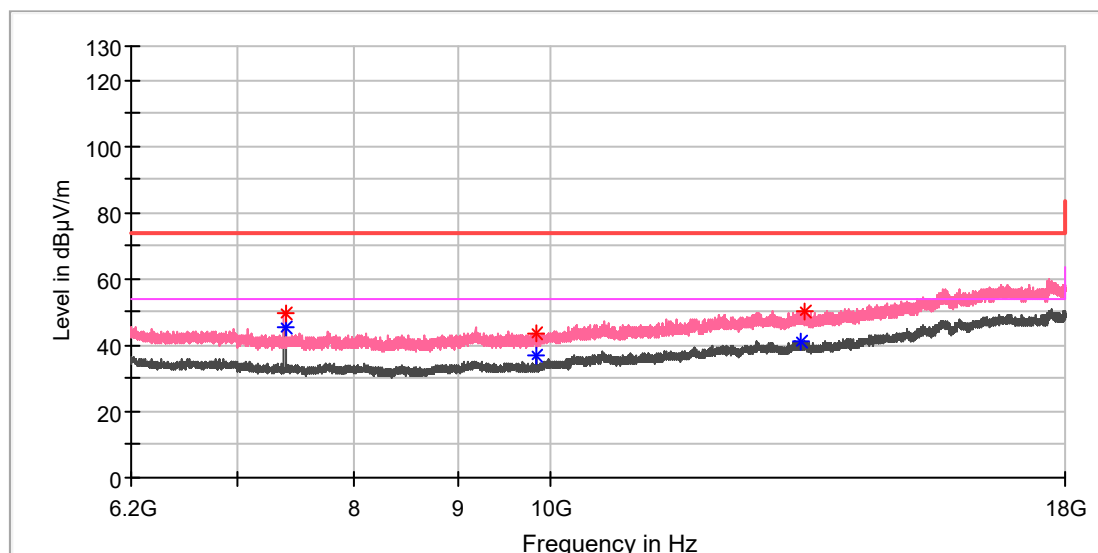
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7386.391667	---	43.48	54.00	10.52	150.0	H	69.0	8.2
7387.375000	48.44	---	74.00	25.56	150.0	H	69.0	8.2
13277.541667	50.83	---	74.00	23.17	150.0	H	163.0	15.5
13346.866667	---	41.09	54.00	12.91	150.0	H	127.0	15.5

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

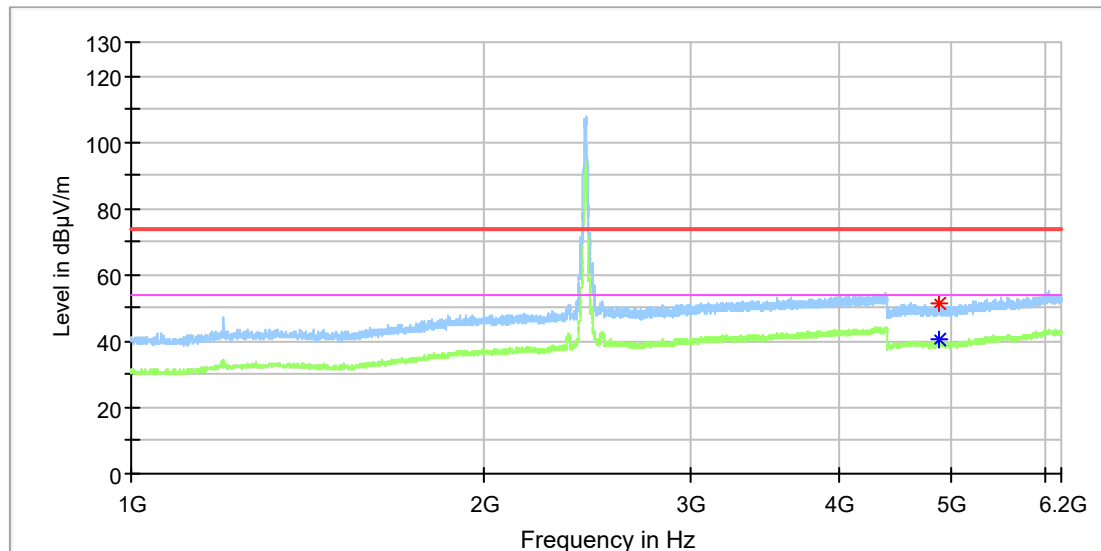
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7385.900000	49.82	---	74.00	24.18	150.0	V	7.0	8.2
7386.883333	---	45.28	54.00	8.72	150.0	V	7.0	8.2
9847.675000	43.54	---	74.00	30.46	150.0	V	36.0	10.6
9847.675000	---	36.76	54.00	17.24	150.0	V	36.0	10.6
13309.991667	---	41.21	54.00	12.79	150.0	V	209.0	15.5
13371.941667	50.07	---	74.00	23.93	150.0	V	172.0	15.5

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

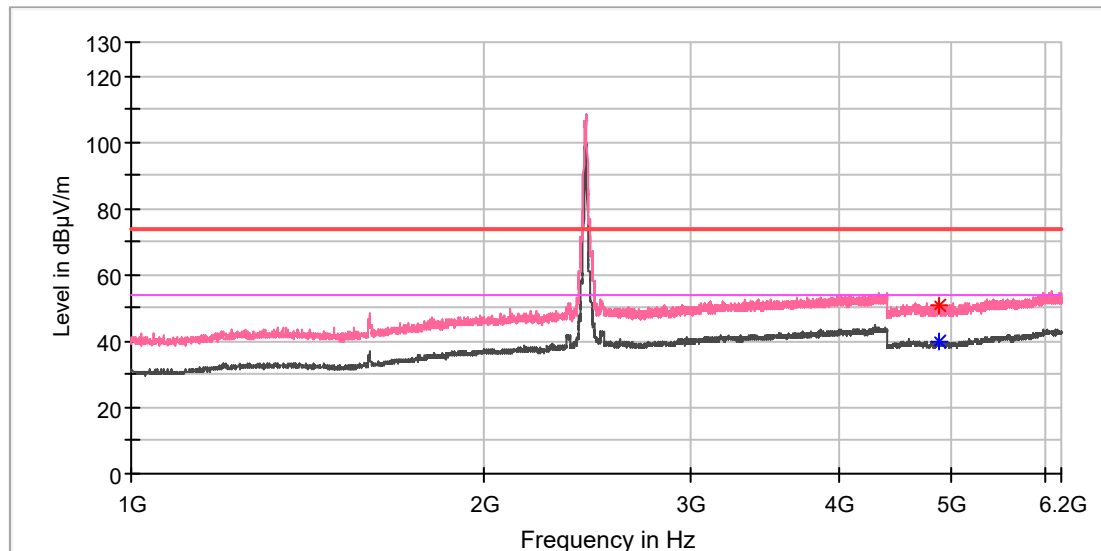
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4871.000000	51.42	---	74.00	22.58	150.0	H	266.0	11.8
4873.500000	---	40.69	54.00	13.31	150.0	H	266.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

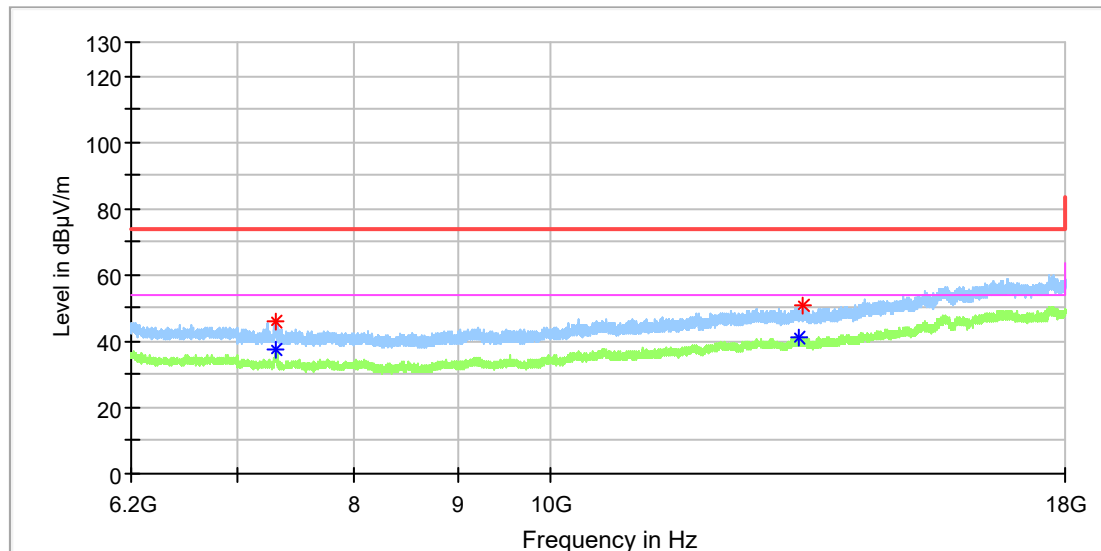
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4878.000000	---	39.92	54.00	14.08	150.0	V	109.0	11.8
4883.500000	50.63	---	74.00	23.37	150.0	V	180.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

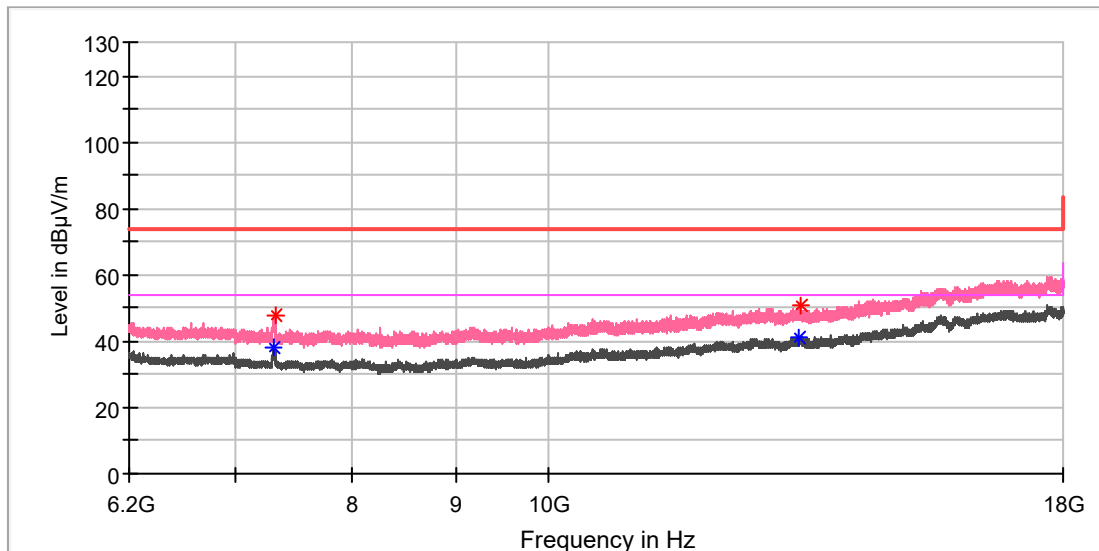
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7315.100000	---	37.56	54.00	16.44	150.0	H	101.0	8.2
7317.558333	46.12	---	74.00	27.88	150.0	H	101.0	8.2
13292.291667	---	41.08	54.00	12.92	150.0	H	16.0	15.5
13325.725000	50.91	---	74.00	23.09	150.0	H	0.0	15.5

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

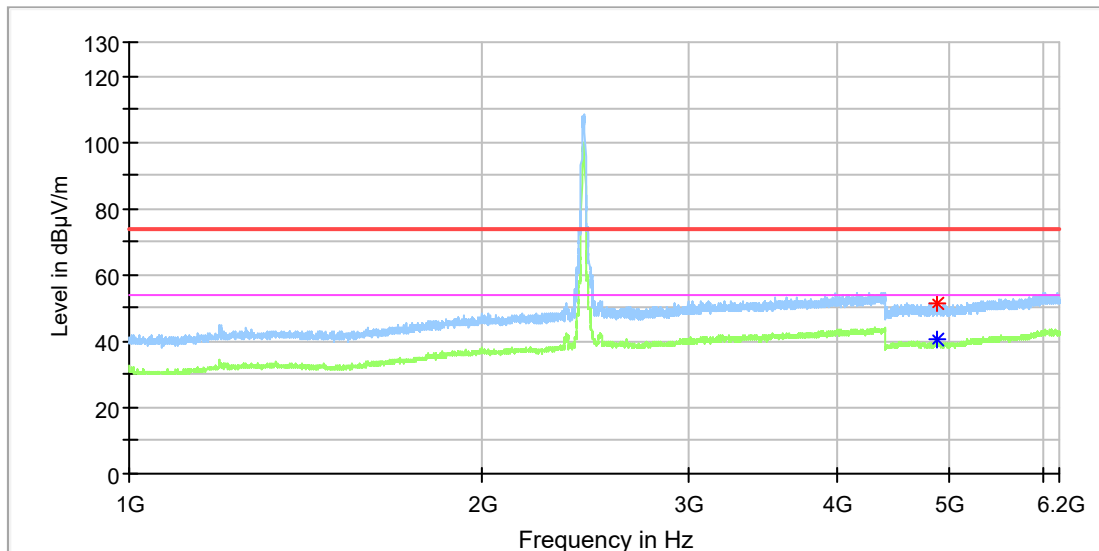
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7317.066667	---	38.03	54.00	15.97	150.0	V	340.0	8.2
7319.033333	47.61	---	74.00	26.39	150.0	V	0.0	8.2
13303.108333	---	41.12	54.00	12.88	150.0	V	340.0	15.5
13344.900000	50.68	---	74.00	23.32	150.0	V	31.0	15.5

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

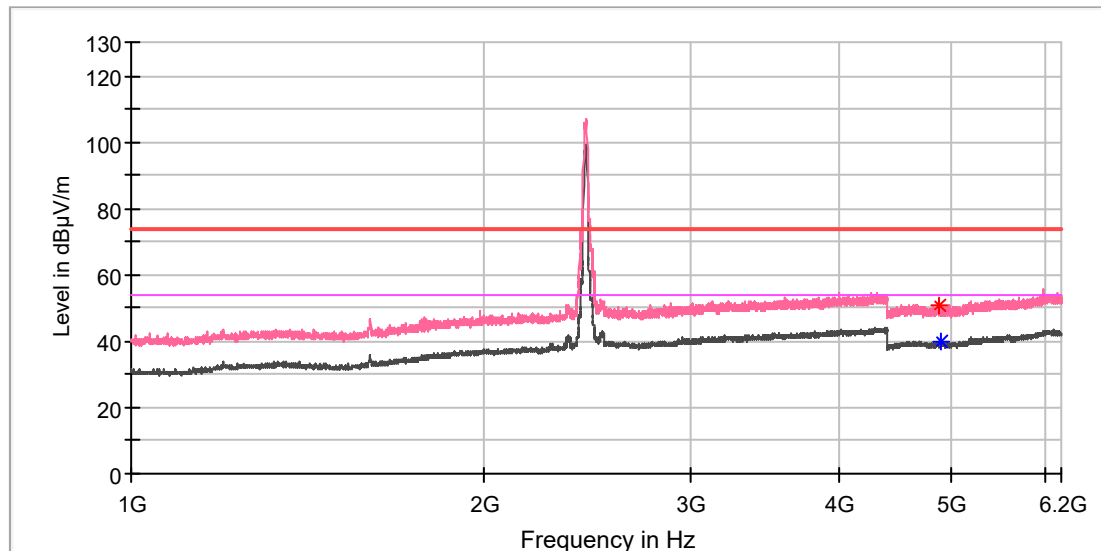
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.500000	51.15	---	74.00	22.85	150.0	H	269.0	11.8
4874.500000	---	40.61	54.00	13.39	150.0	H	269.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

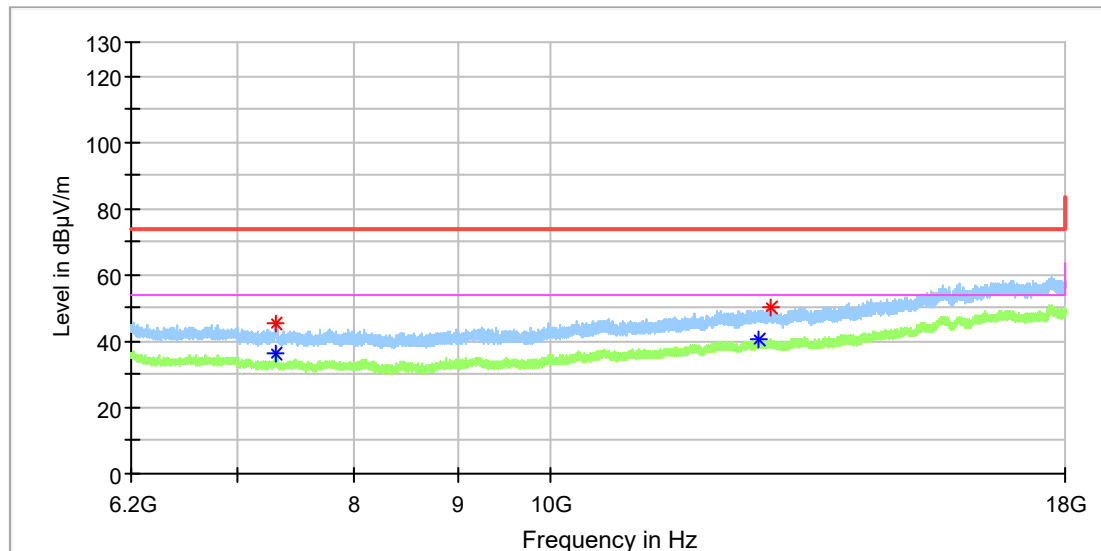
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4876.000000	50.90	---	74.00	23.10	150.0	V	224.0	11.8
4897.000000	---	39.96	54.00	14.04	150.0	V	349.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

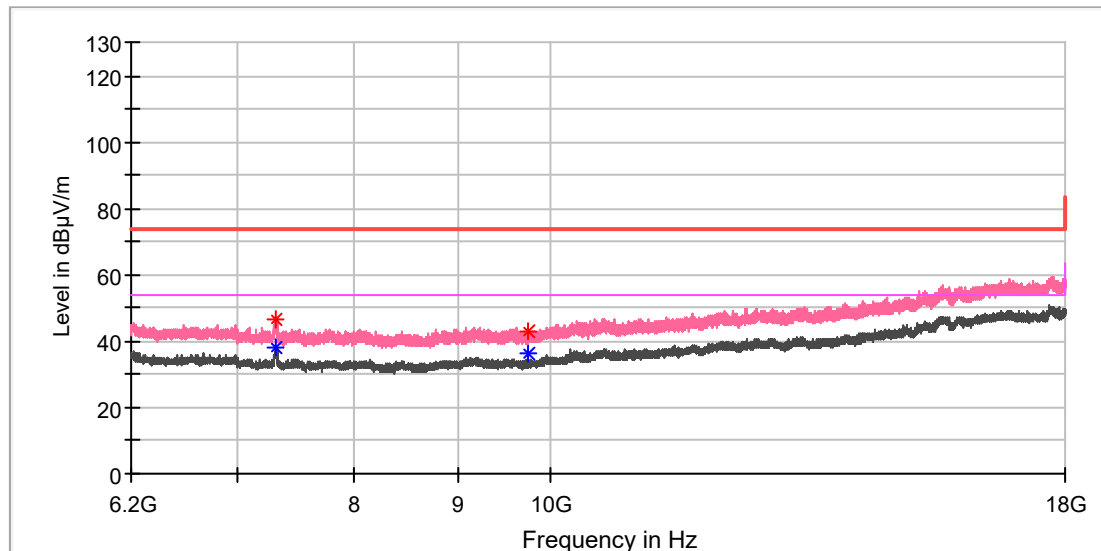
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7305.758333	45.57	---	74.00	28.43	150.0	H	71.0	8.3
7311.166667	---	36.31	54.00	17.69	150.0	H	218.0	8.2
12686.066667	---	40.61	54.00	13.39	150.0	H	131.0	15.1
12865.033333	50.43	---	74.00	23.57	150.0	H	303.0	15.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

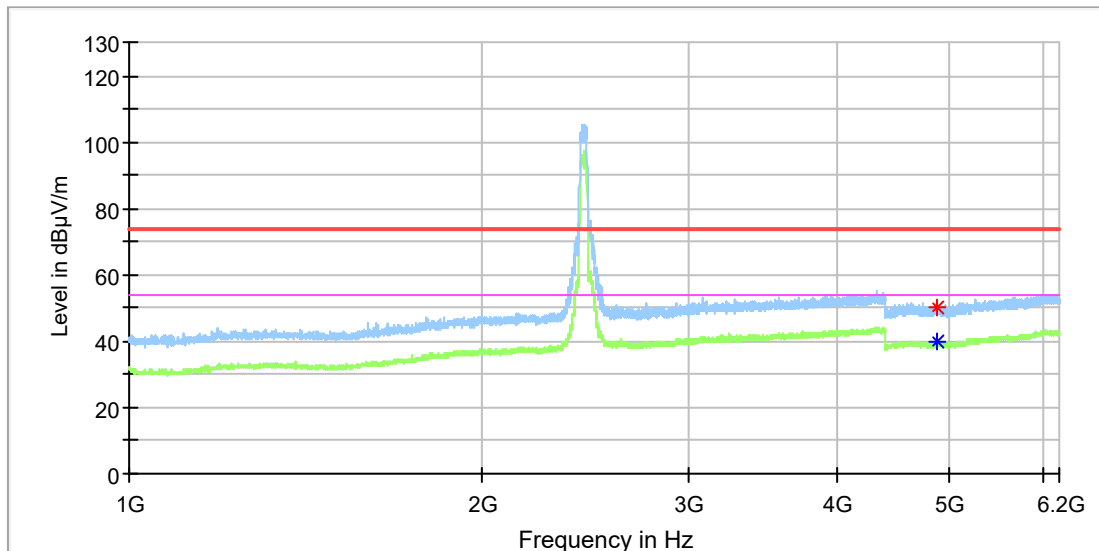
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7310.675000	---	38.29	54.00	15.71	150.0	V	0.0	8.2
7315.100000	46.39	---	74.00	27.61	150.0	V	0.0	8.2
9745.408333	42.89	---	74.00	31.11	150.0	V	287.0	10.4
9747.866667	---	36.46	54.00	17.54	150.0	V	1.0	10.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

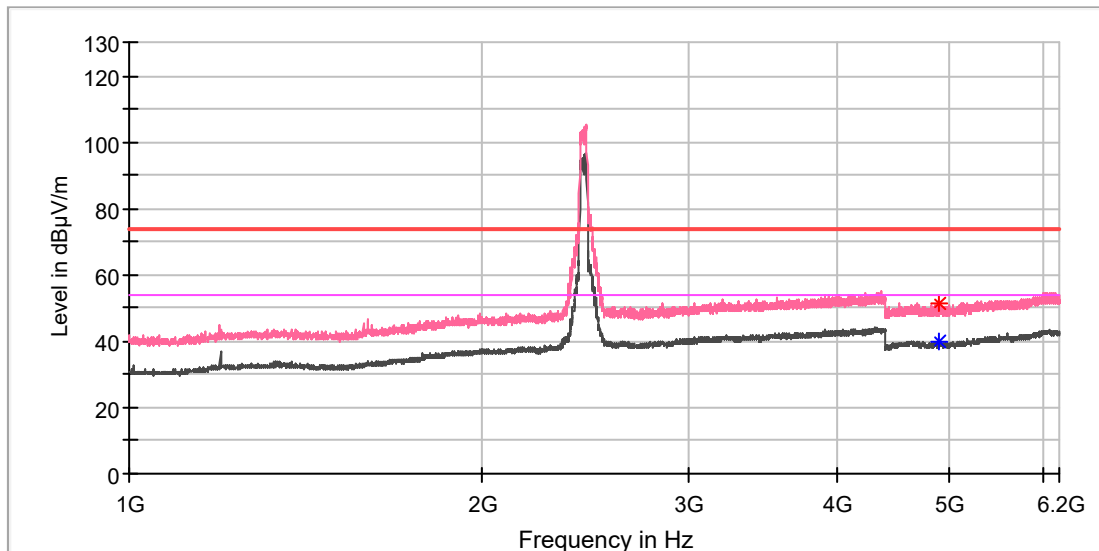
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.500000	50.06	---	74.00	23.94	150.0	H	271.0	11.8
4874.500000	---	39.87	54.00	14.13	150.0	H	271.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

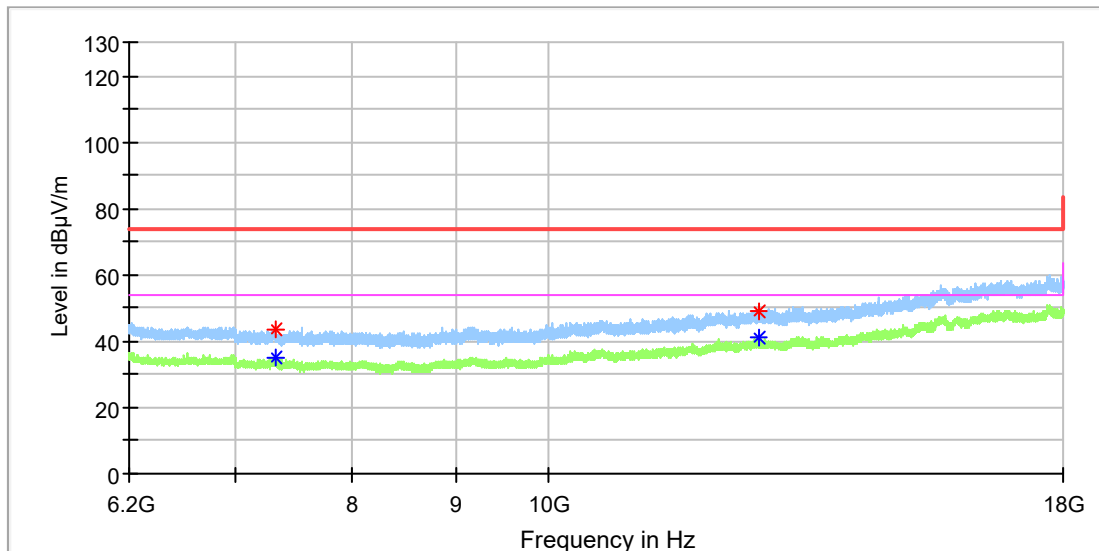
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4896.000000	51.27	---	74.00	22.73	150.0	V	271.0	11.8
4905.500000	---	39.68	54.00	14.32	150.0	V	204.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

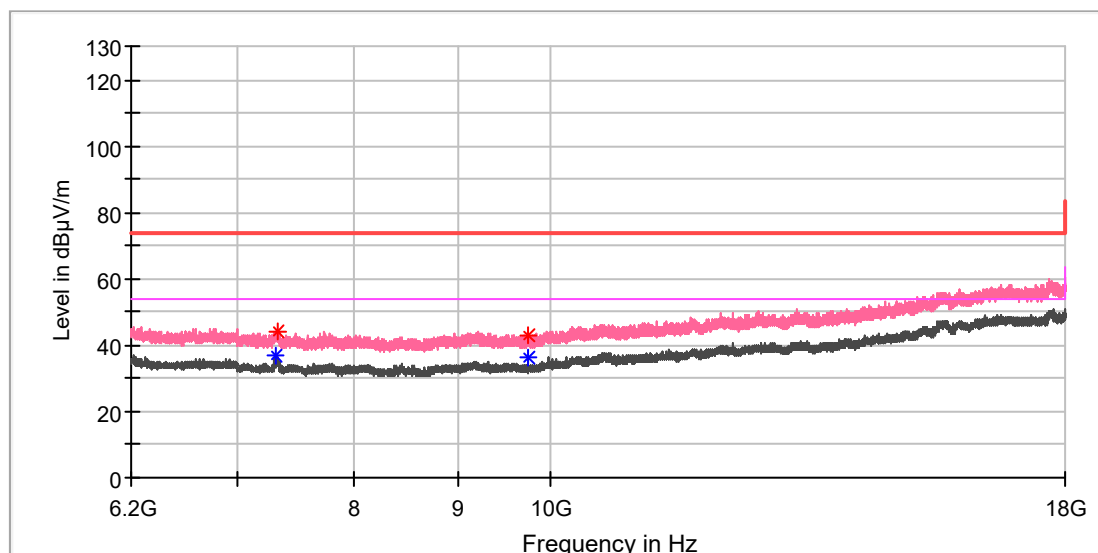
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7325.425000	---	35.19	54.00	18.81	150.0	H	104.0	8.2
7332.800000	43.58	---	74.00	30.42	150.0	H	31.0	8.1
12719.500000	---	40.86	54.00	13.14	150.0	H	235.0	15.1
12726.875000	49.13	---	74.00	24.87	150.0	H	188.0	15.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7314.608333	---	36.91	54.00	17.09	150.0	V	0.0	8.2
7320.016667	44.33	---	74.00	29.67	150.0	V	340.0	8.2
9747.866667	43.15	---	74.00	30.85	150.0	V	58.0	10.4
9747.866667	---	36.51	54.00	17.49	150.0	V	58.0	10.4

Final_Result

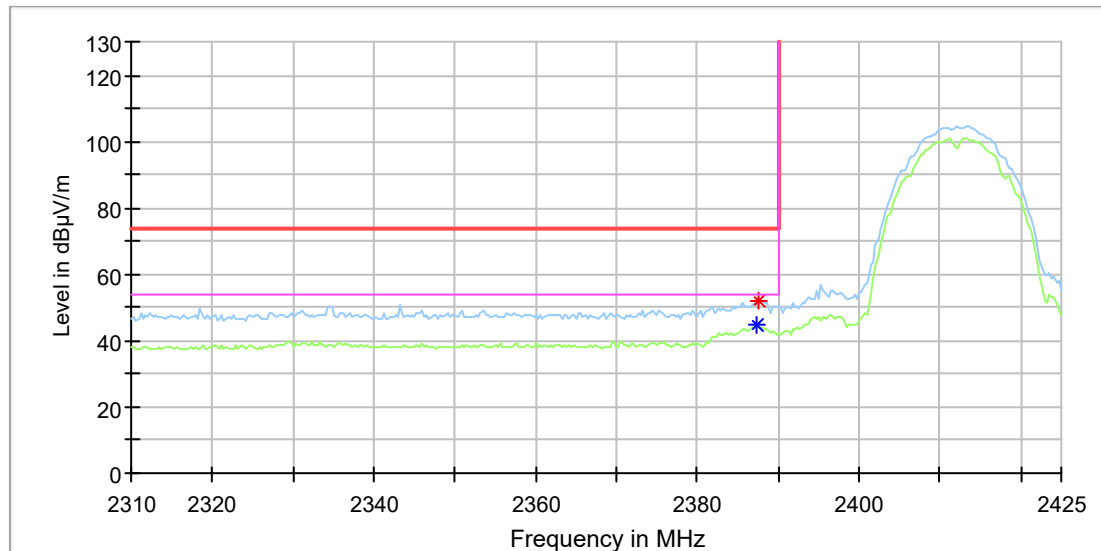
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix A.6: Test Results of Radiated Emissions in Restricted Bands

Wi-Fi 802.11 b mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

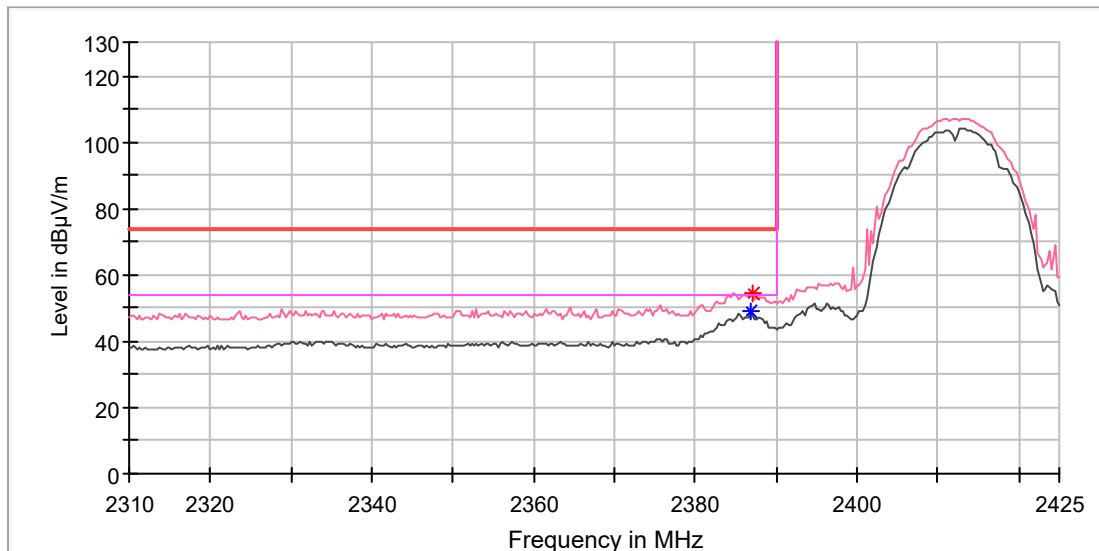
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.352941	---	44.91	54.00	9.09	150.0	H	306.0	7.0
2387.647059	52.00	---	74.00	22.00	150.0	H	306.0	7.0

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

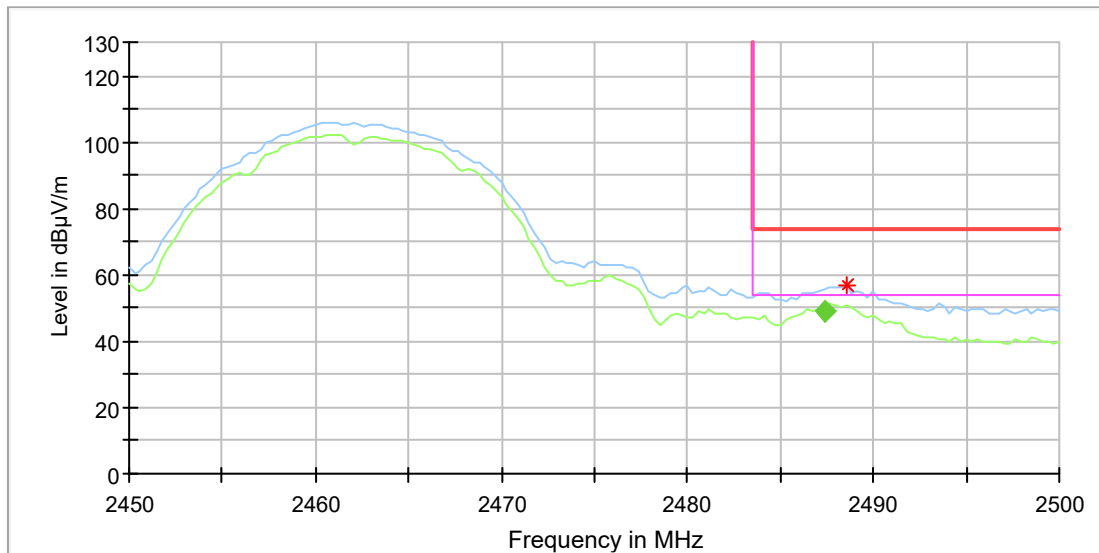
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2386.764706	---	48.88	54.00	5.12	150.0	V	352.0	7.0
2387.058824	54.12	---	74.00	19.88	150.0	V	352.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

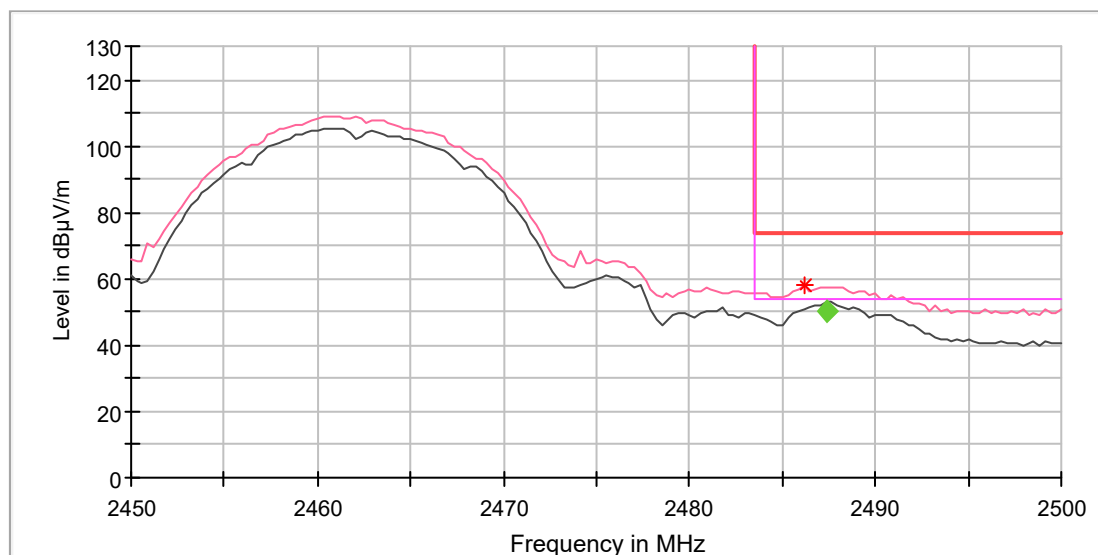
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2488.529412	56.92	---	74.00	17.08	150.0	H	245.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.352941	49.14	54.00	4.86	148.0	H	244.0	7.4

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.176471	58.33	---	74.00	15.67	150.0	V	358.0	7.4

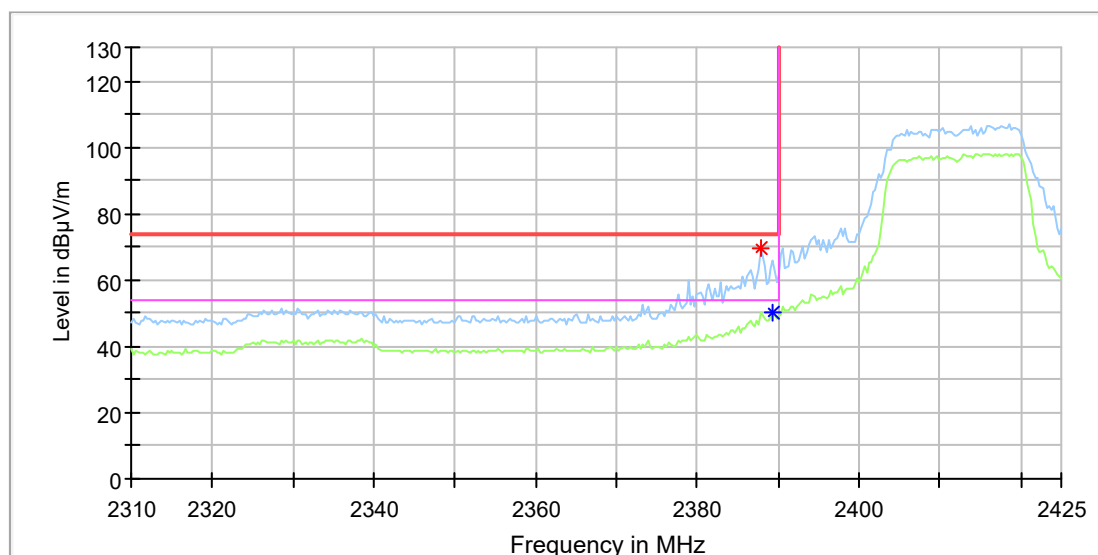
Final_Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.352941	50.24	54.00	3.76	145.0	V	50.0	7.4

Wi-Fi 802.11 g mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11g_Ch1
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

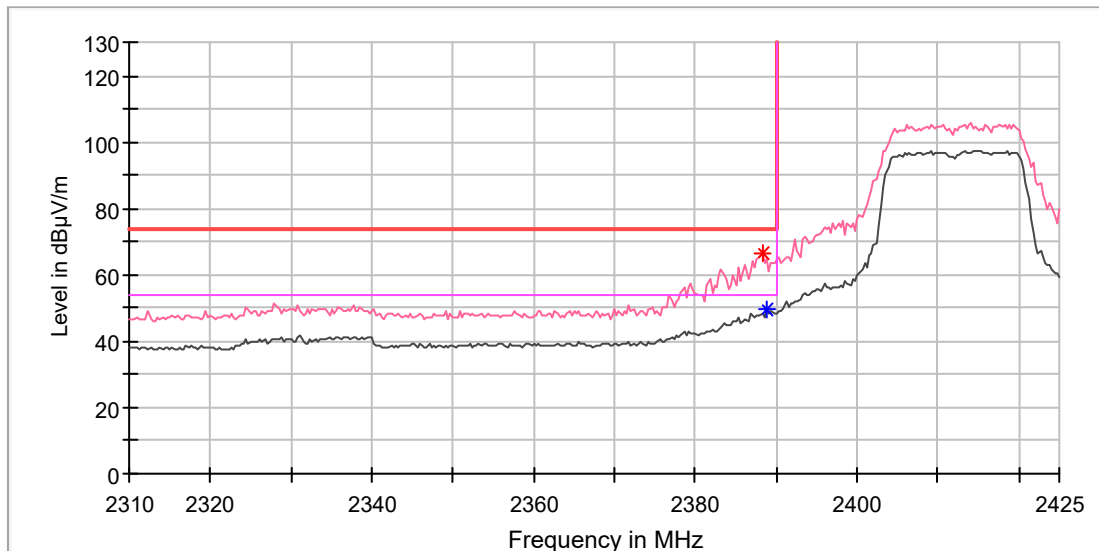
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.411765	---	50.46	54.00	3.54	150.0	H	292.0	7.0
2387.941177	69.44	---	74.00	4.56	150.0	H	299.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch1
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

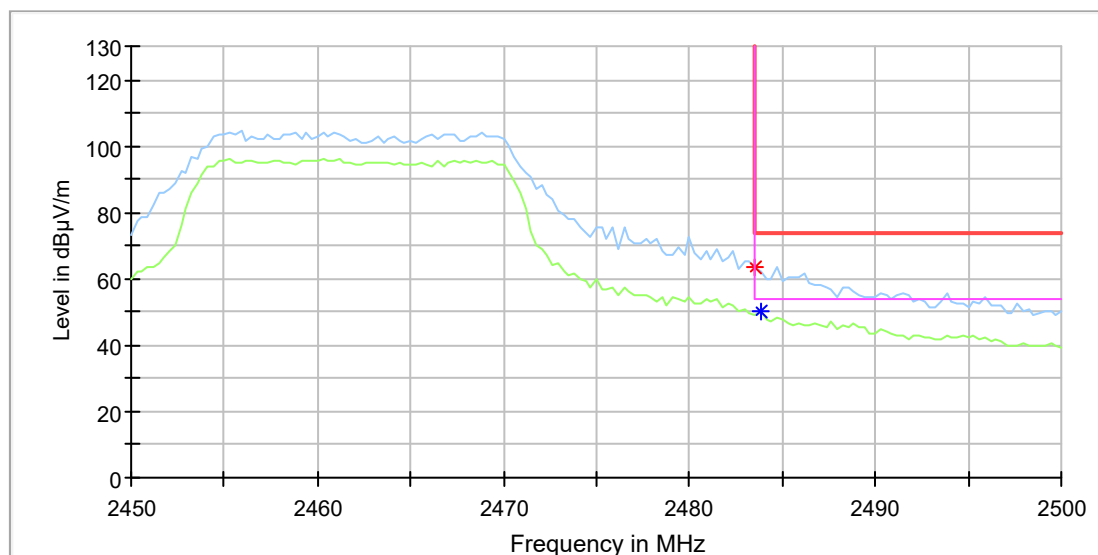
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.235294	66.58	---	74.00	7.42	150.0	V	330.0	7.0
2388.823529	---	49.32	54.00	4.68	150.0	V	0.0	7.0

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

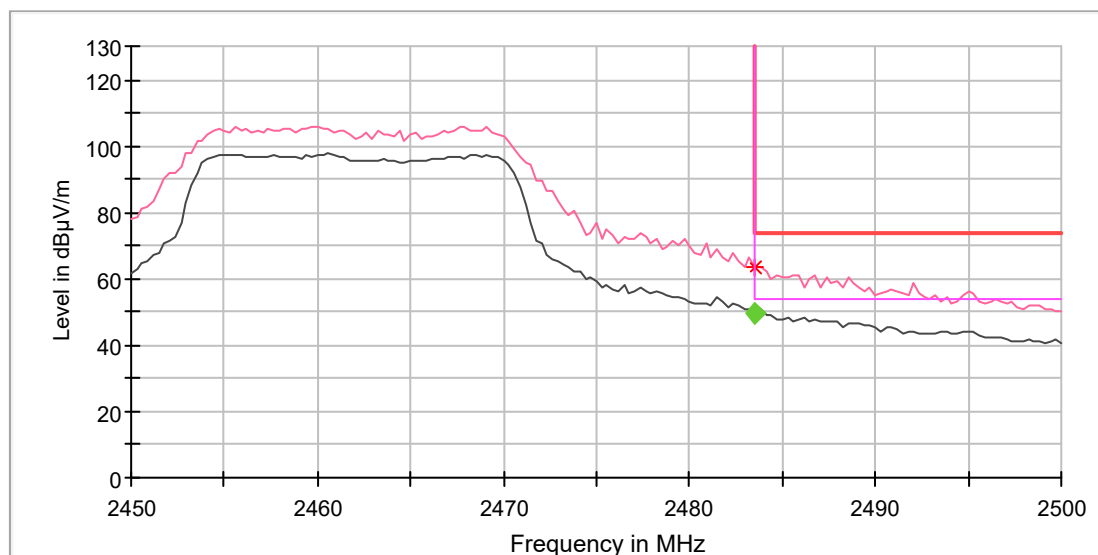
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	63.45	---	74.00	10.55	150.0	H	266.0	7.4
2483.823529	---	50.11	54.00	3.89	150.0	H	273.0	7.4

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11g_Ch11
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	63.28	---	74.00	10.72	150.0	V	333.0	7.4

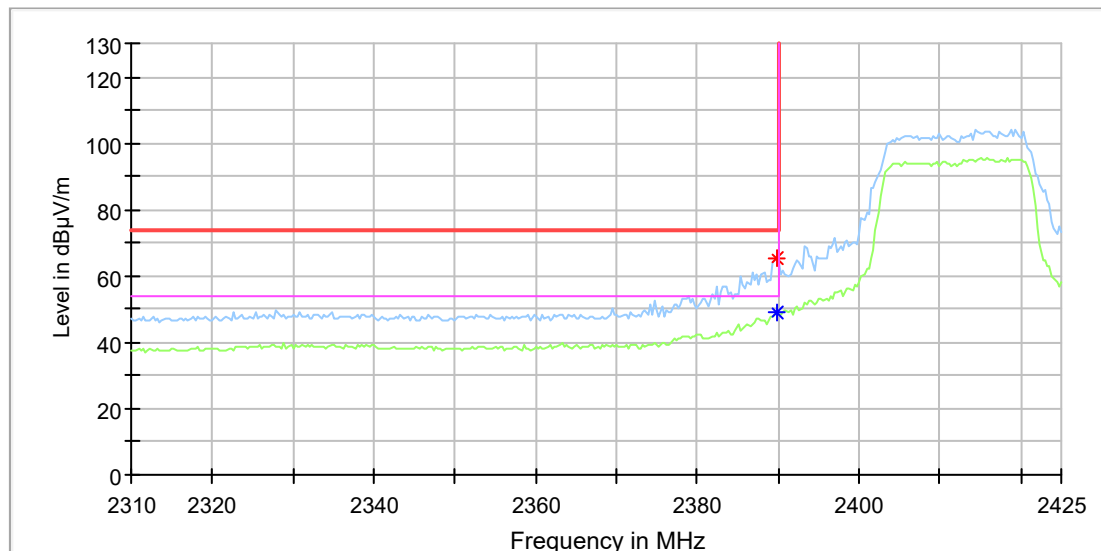
Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.531618	49.33	54.00	4.67	147.0	V	328.0	7.4

Wi-Fi 802.11 n(HT20) mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11n20_Ch1
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

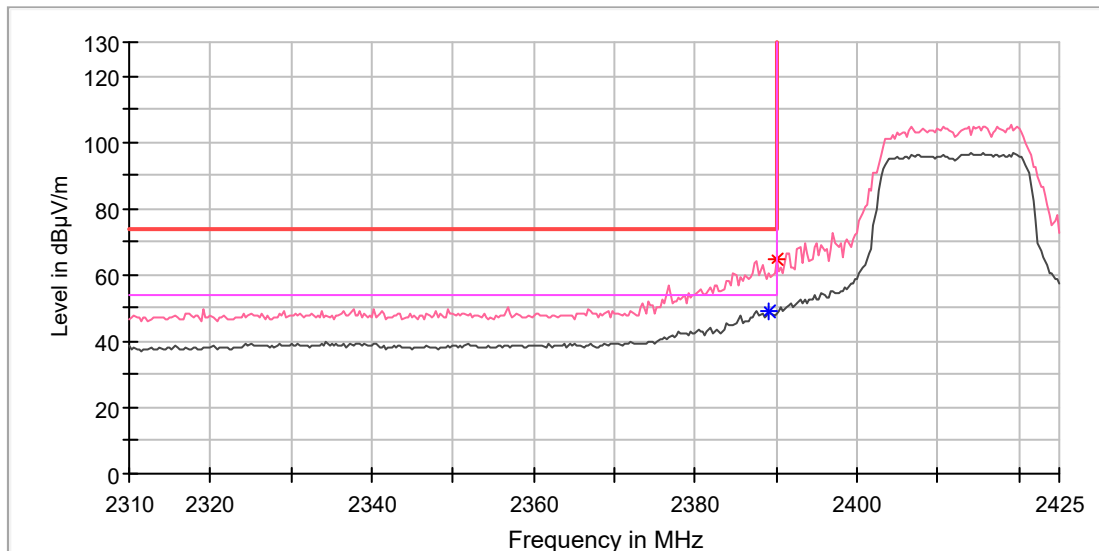
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.705882	65.24	---	74.00	8.76	150.0	H	207.0	7.0
2389.705882	---	49.02	54.00	4.98	150.0	H	207.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11n20_Ch1
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

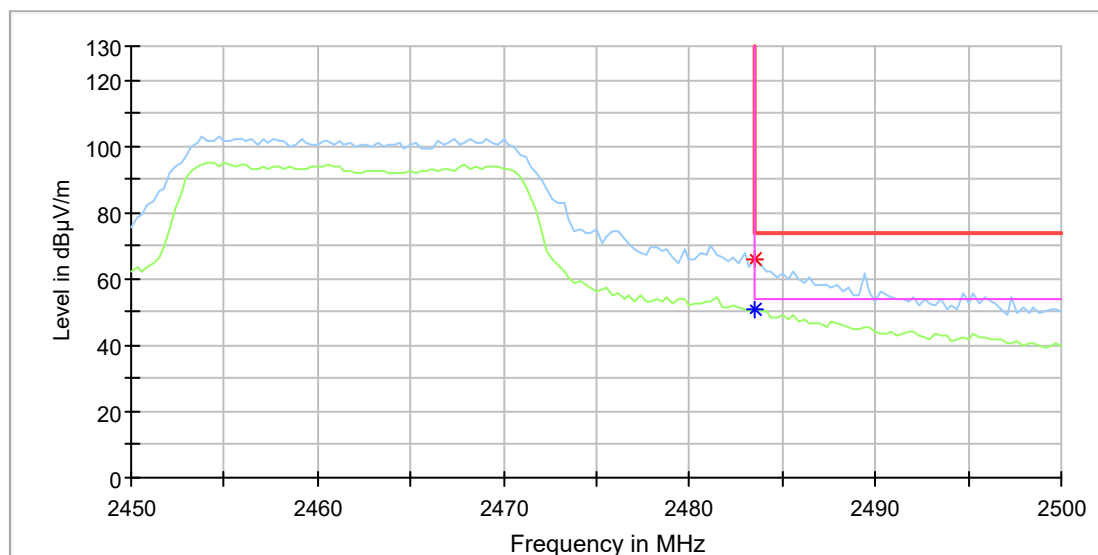
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.117647	---	49.24	54.00	4.76	150.0	V	349.0	7.0
2390.000000	64.86	---	74.00	9.14	150.0	V	355.0	7.0

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11n20_Ch11
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

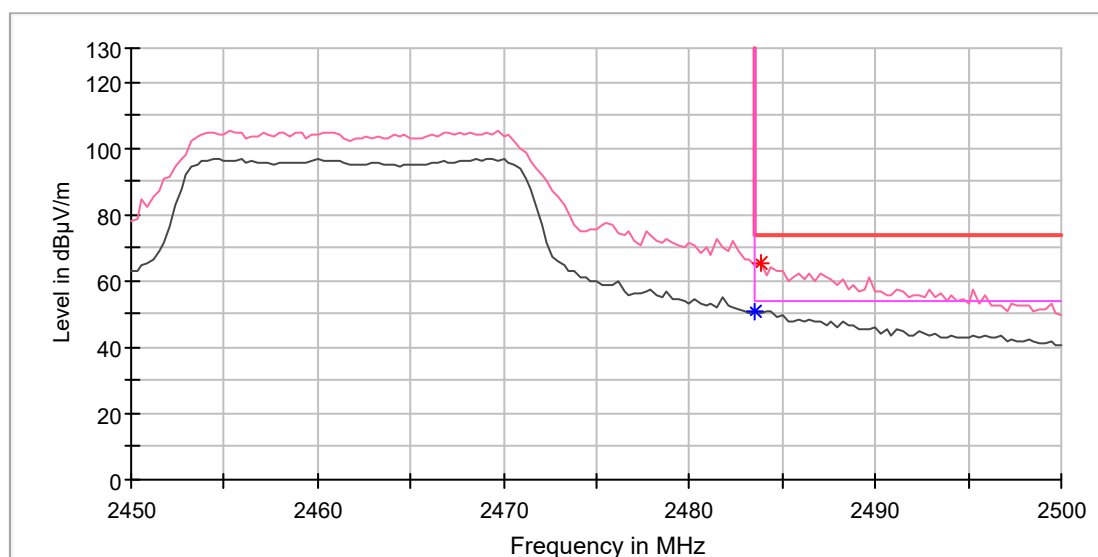
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	66.20	---	74.00	7.80	150.0	H	294.0	7.4
2483.529412	---	50.84	54.00	3.16	150.0	H	294.0	7.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: Robotic Vacuum Cleaner
 Model: S83USC
 Test Mode: WIFI 2.4G_11n20_Ch11
 Order No/Sample No: 168453635/A003610364-002
 Test Voltage: Battery
 Remark: Temp 22 Humi:52%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	---	50.80	54.00	3.20	150.0	V	3.0	7.4
2483.823529	65.04	---	74.00	8.97	150.0	V	30.0	7.4

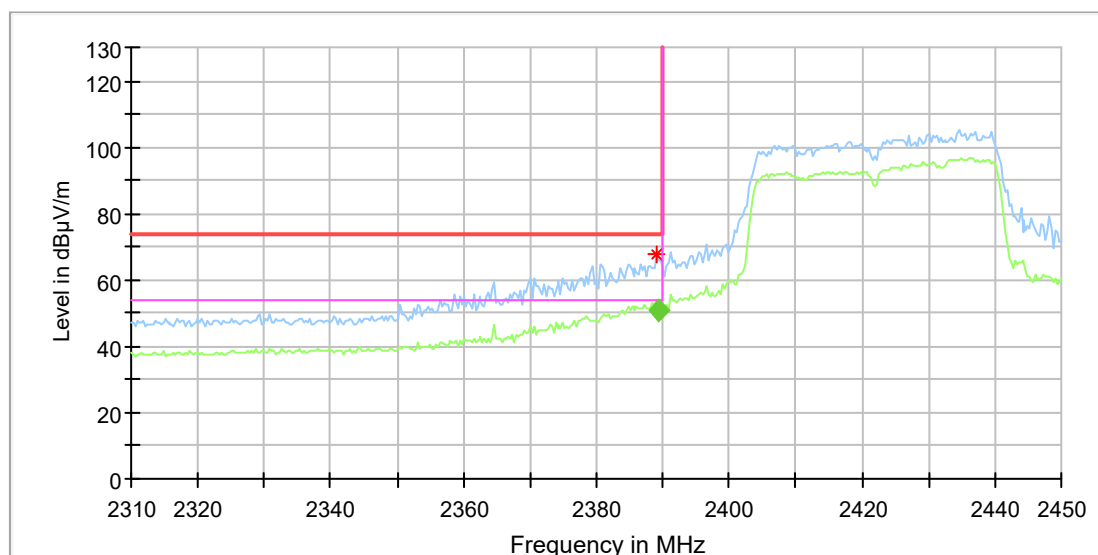
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Wi-Fi 802.11 n(HT40) mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11n40_Ch3
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

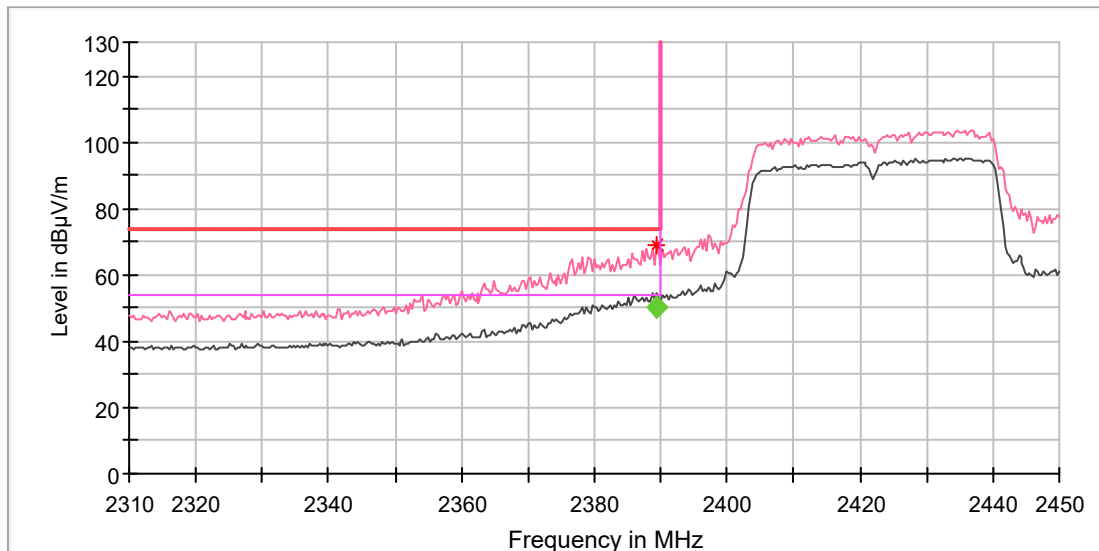
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.117647	67.95	---	74.00	6.05	150.0	H	213.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.408971	50.55	54.00	3.45	147.0	H	208.0	7.0

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n40_Ch3
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

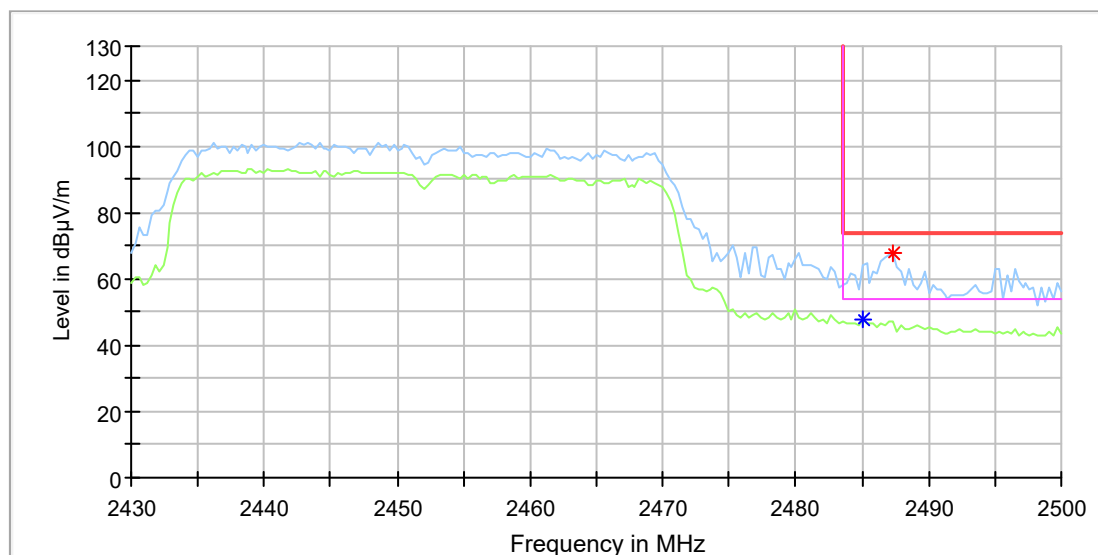
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.411765	68.74	---	74.00	5.26	150.0	V	43.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.429265	50.32	54.00	3.68	151.0	V	42.0	7.0

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: WIFI 2.4G_11n40_Ch9
Order No/Sample No: 168453635/A003610364-002
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

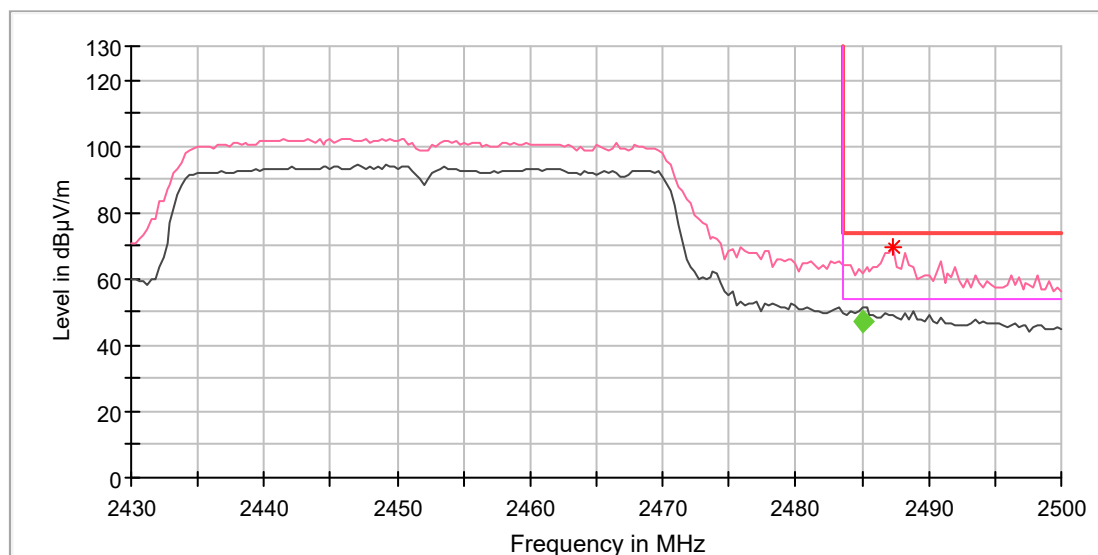
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.000000	---	47.47	54.00	6.53	150.0	H	250.0	7.4
2487.352941	67.56	---	74.00	6.44	150.0	H	277.0	7.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S83USC
Test Mode:	WIFI 2.4G_11n40_Ch9
Order No/Sample No:	168453635/A003610364-002
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.352941	69.49	---	74.00	4.51	150.0	V	356.0	7.4

Final_Result

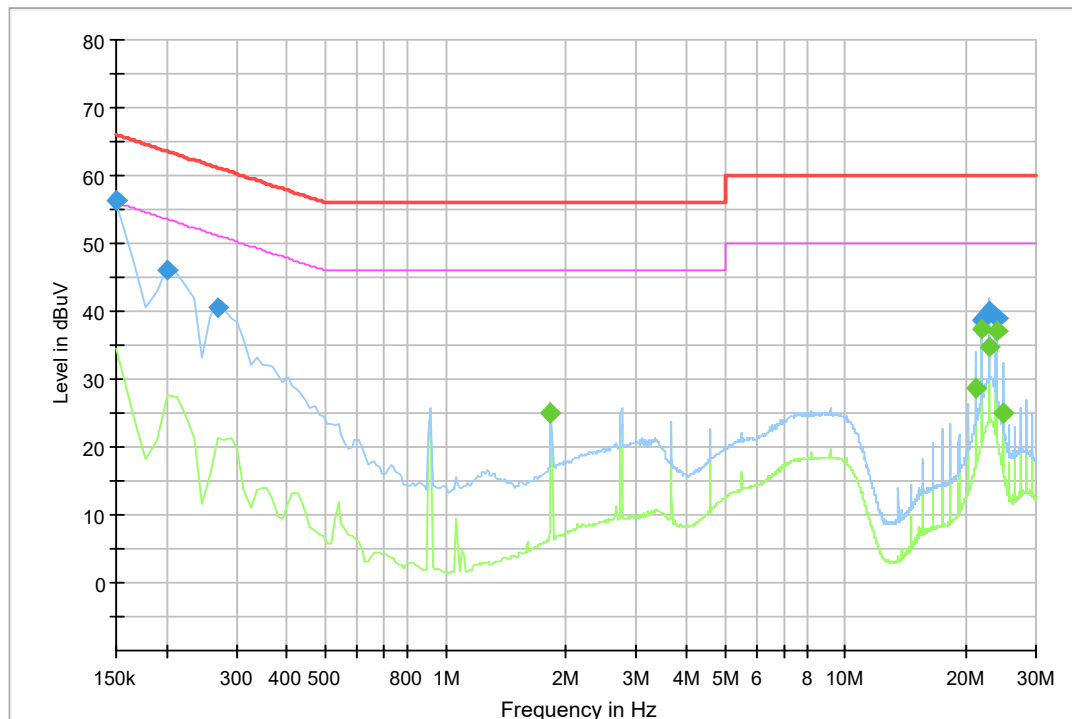
Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.081177	47.30	54.00	6.70	150.0	V	44.0	7.4

Appendix A.7: Test Results of Conducted Emission

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: On, Charging and Wi-Fi Link
Order No/Sample No: A003609598-001,003
Test Voltage: AC 120V 60Hz
Remark: Temp 20.3 Humi:32.6%
Test Standard: FCC Part 15.207(a), RSS-Gen Clause 8.8
Tested By: Yicheng Chen

Full Spectrum



Final Result QPK

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	56.25	66.00	9.75	1000.0	9.000	L1	10.4
0.200625	46.01	63.59	17.58	1000.0	9.000	L1	10.4
0.268125	40.51	61.18	20.67	1000.0	9.000	L1	10.4
21.991875	38.79	60.00	21.21	1000.0	9.000	L1	11.2
22.914375	39.99	60.00	20.01	1000.0	9.000	L1	11.2
23.825625	38.99	60.00	21.01	1000.0	9.000	L1	11.3

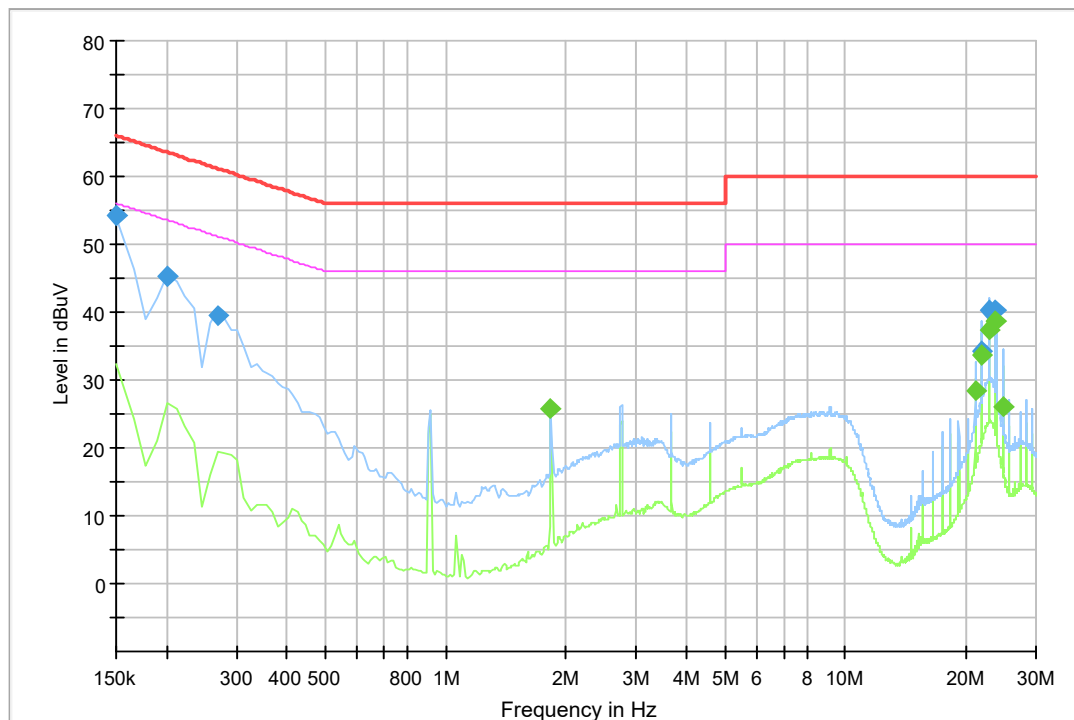
Final Result CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
1.831875	25.01	46.00	20.99	1000.0	9.000	L1	10.3
21.080625	28.78	50.00	21.22	1000.0	9.000	L1	11.2
21.991875	37.44	50.00	12.56	1000.0	9.000	L1	11.2
22.914375	34.63	50.00	15.37	1000.0	9.000	L1	11.2
23.825625	37.13	50.00	12.87	1000.0	9.000	L1	11.3
24.748125	25.05	50.00	24.95	1000.0	9.000	L1	11.3

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: S83USC
Test Mode: On, Charging and Wi-Fi Link
Order No/Sample No: A003609598-001,003
Test Voltage: AC 120V 60Hz
Remark: Temp 20.3 Humi:32.6%
Test Standard: FCC Part 15.207(a), RSS-Gen Clause 8.8
Tested By: Yicheng Chen

Full Spectrum



Final Result QPK

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	54.24	66.00	11.76	1000.0	9.000	N	10.4
0.200625	45.36	63.59	18.22	1000.0	9.000	N	11.0
0.268125	39.41	61.18	21.77	1000.0	9.000	N	10.8
21.991875	34.15	60.00	25.85	1000.0	9.000	N	11.5
22.903125	40.29	60.00	19.71	1000.0	9.000	N	11.5
23.814375	40.29	60.00	19.71	1000.0	9.000	N	11.6

Final Result CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
1.831875	25.81	46.00	20.19	1000.0	9.000	N	10.7
21.069375	28.48	50.00	21.52	1000.0	9.000	N	11.4
21.980625	33.79	50.00	16.21	1000.0	9.000	N	11.5
22.903125	37.41	50.00	12.59	1000.0	9.000	N	11.5
23.814375	38.72	50.00	11.28	1000.0	9.000	N	11.6
24.736875	26.18	50.00	23.82	1000.0	9.000	N	11.6