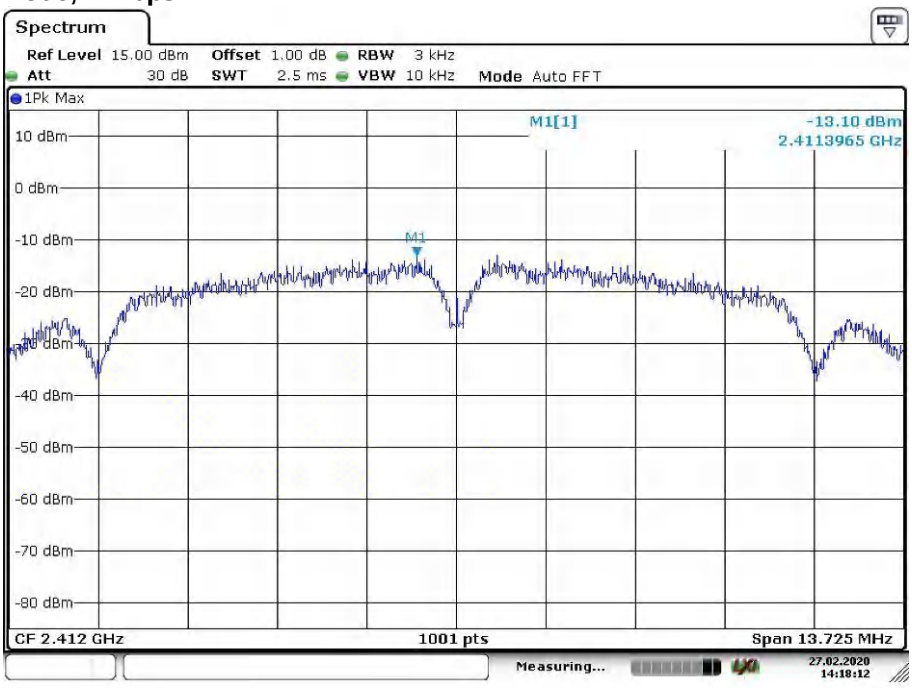
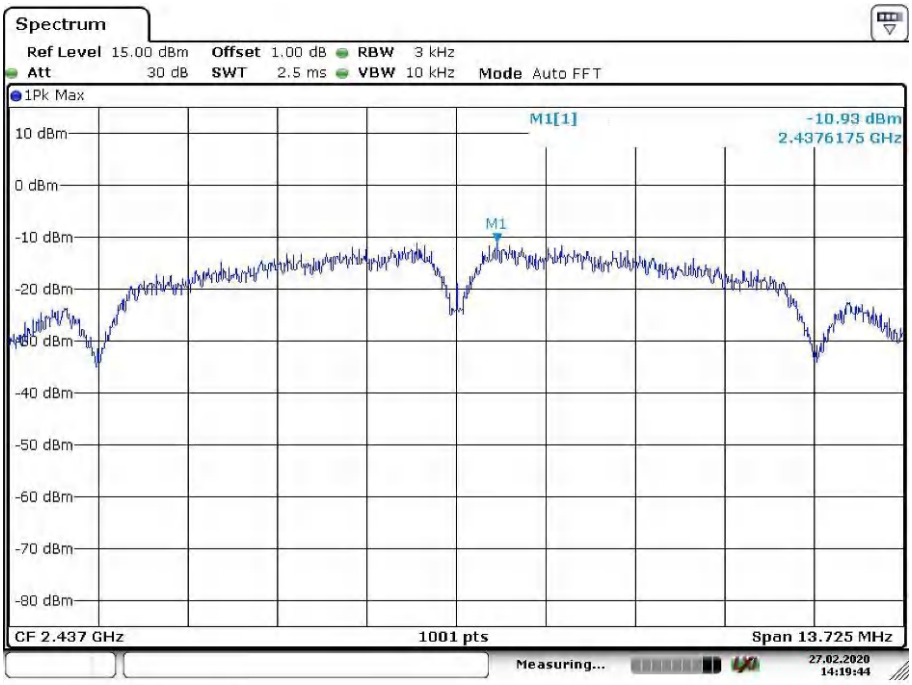
Appendix B: Test Results of Wi-Fi 802.11 b/g/n

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

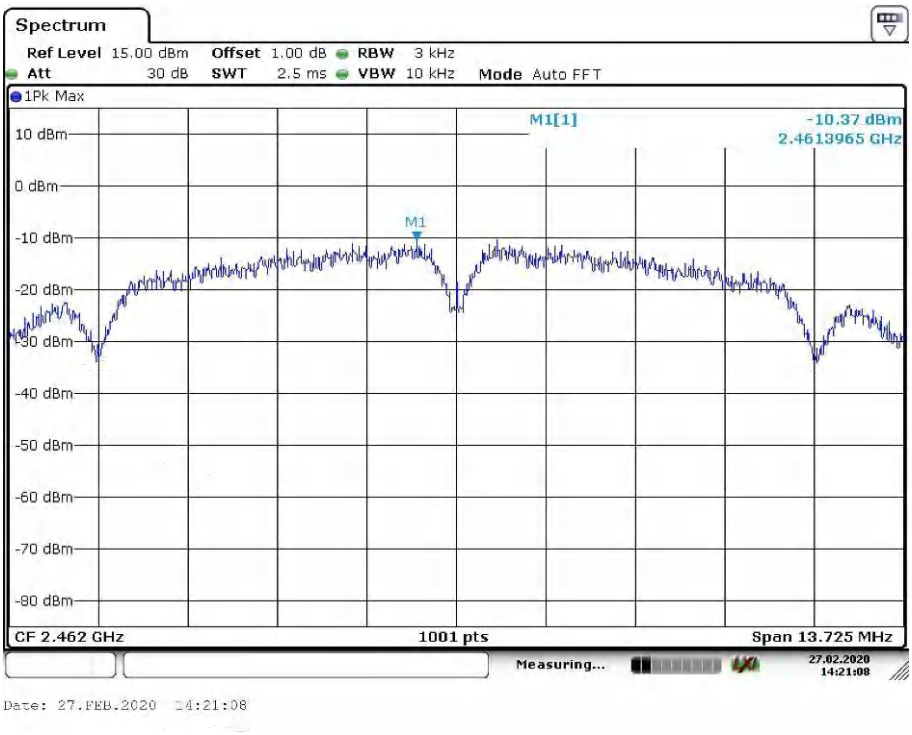
Wi-Fi 802.11 b mode, 1 Mbps



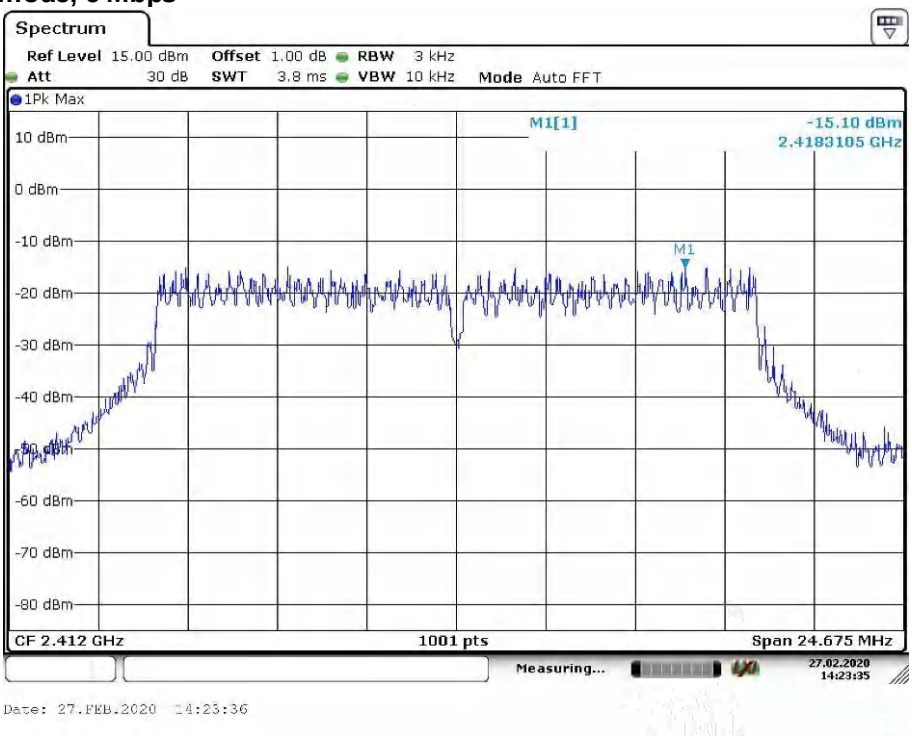
Date: 27.FEB.2020 14:18:13

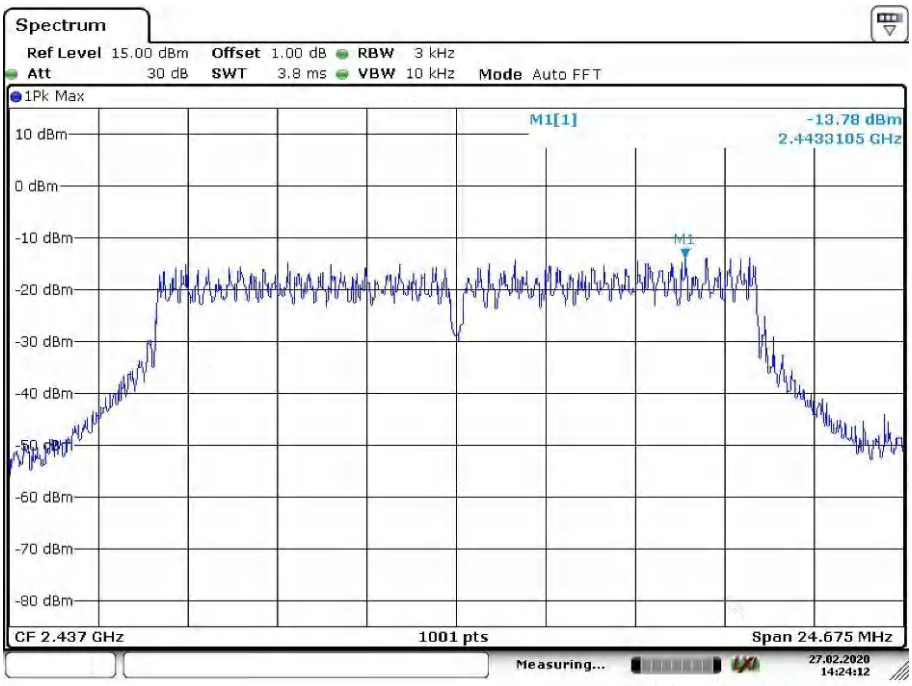


Date: 27.FEB.2020 14:19:45

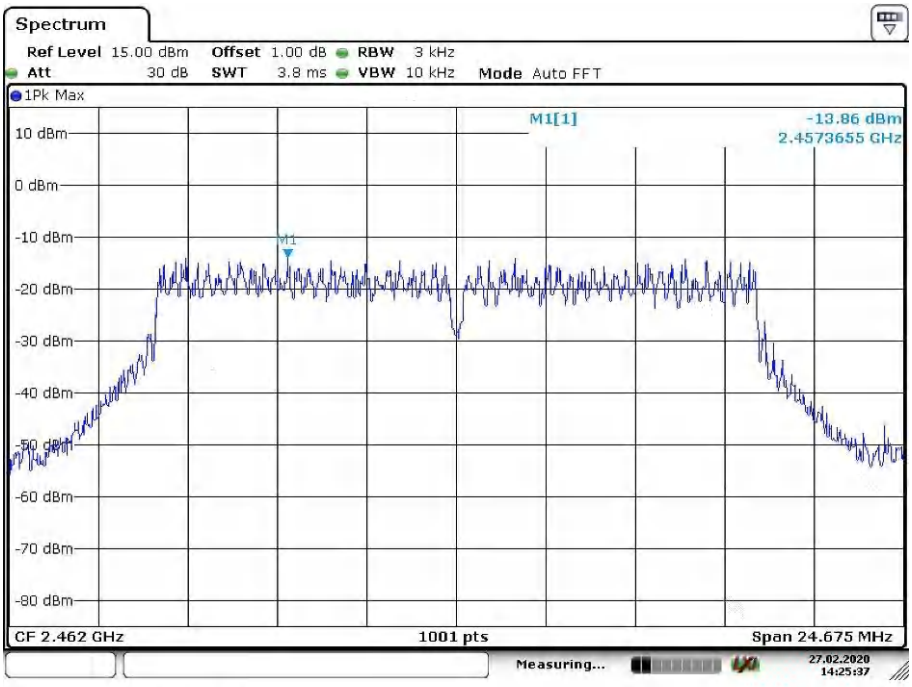


Wi-Fi 802.11 g mode, 6 Mbps



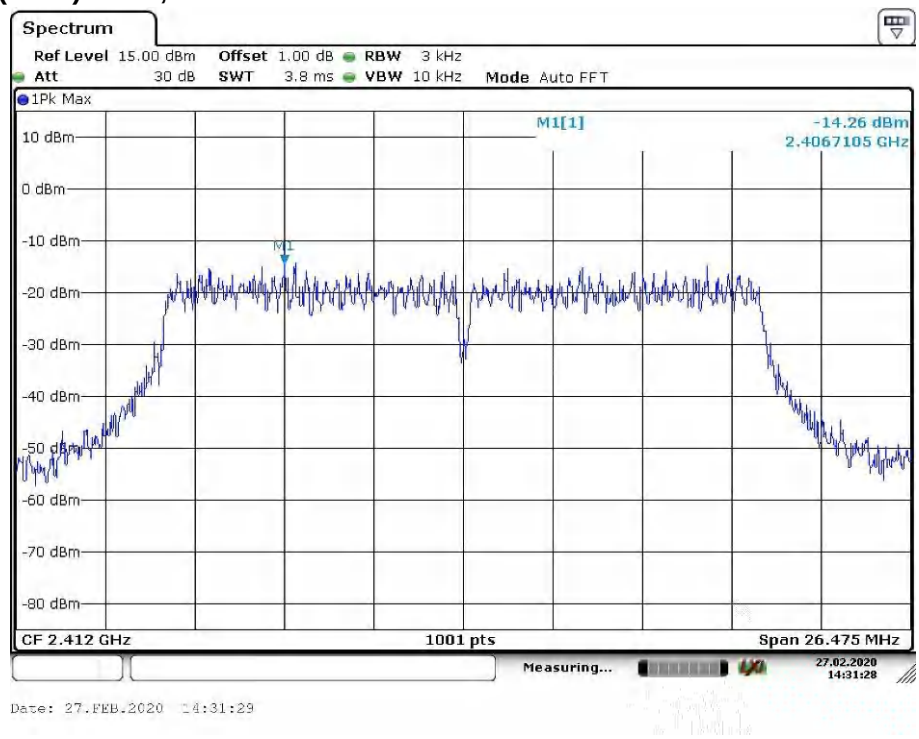


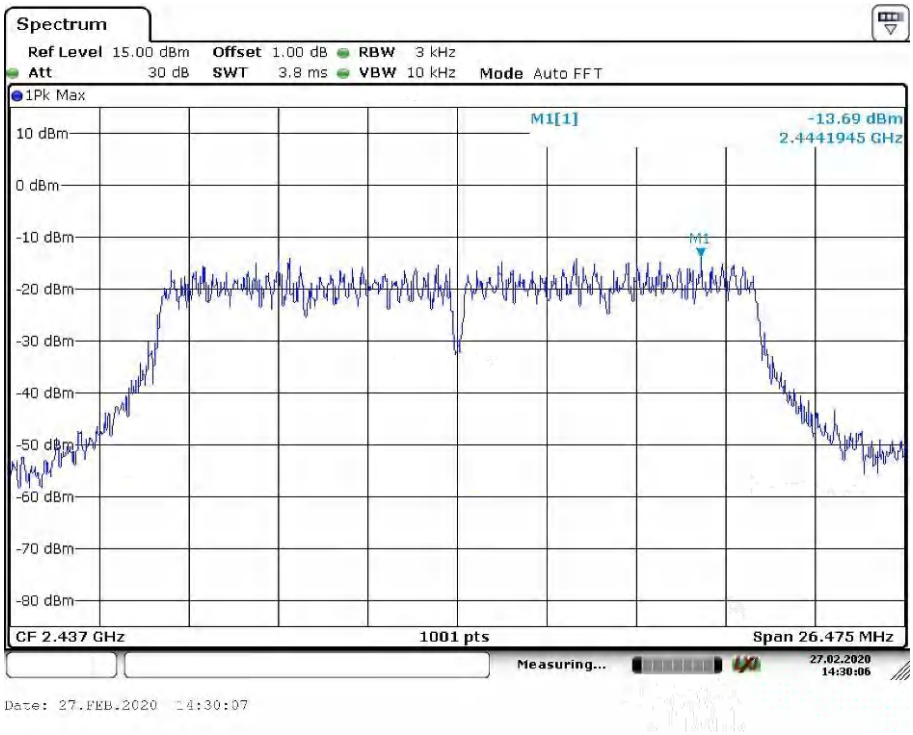
Date: 27.FEB.2020 14:24:13

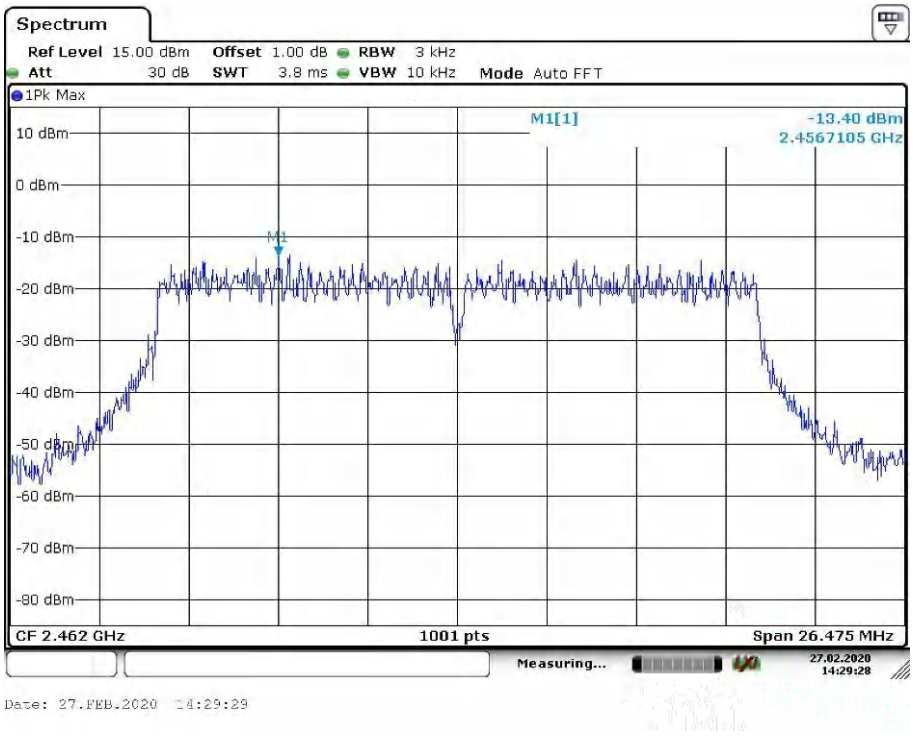


Date: 27.FEB.2020 14:25:37

Wi-Fi 802.11 n(HT20) mode, MCS0






Spectrum
Ref Level 15.00 dBm Offset 1.00 dB RBW 3 kHz
Att 30 dB SWT 3.8 ms VBW 10 kHz Mode Auto FFT
1Pk Max
M1[1]
-13.40 dBm
2.4567105 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
M1
CF 2.462 GHz
1001 pts
Span 26.475 MHz
Measuring...
27.02.2020
14:29:28
Date: 27.FEB.2020 14:29:29

Appendix B.2: Test Results of 6dB Bandwidth

Wi-Fi 802.11 b mode, 1 Mbps

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

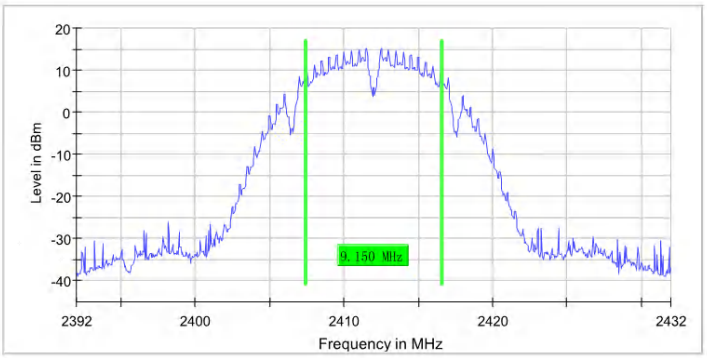
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	9.150000	0.500000	---	2407.425000	2416.575000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2412.000000	15.1	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	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	0.23 dB	0.50 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

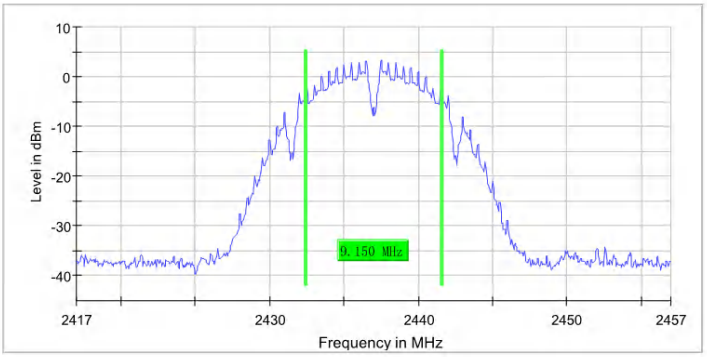
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	9.150000	0.500000	---	2432.425000	2441.575000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2437.000000	3.2	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	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	0.09 dB	0.50 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

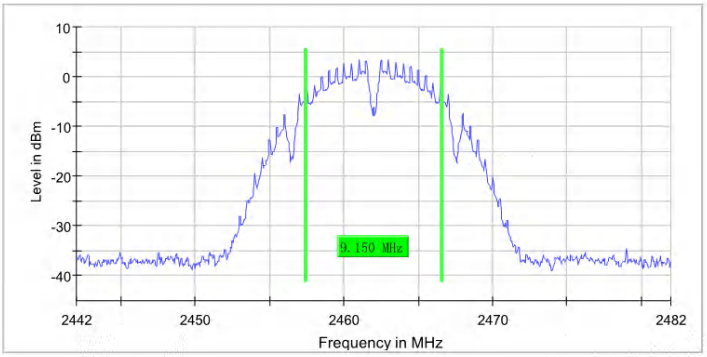
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	9.150000	0.500000	---	2457.425000	2466.575000

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2462.000000	3.4	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.04 dB	0.50 dB

Wi-Fi 802.11 g mode, 6 Mbps

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

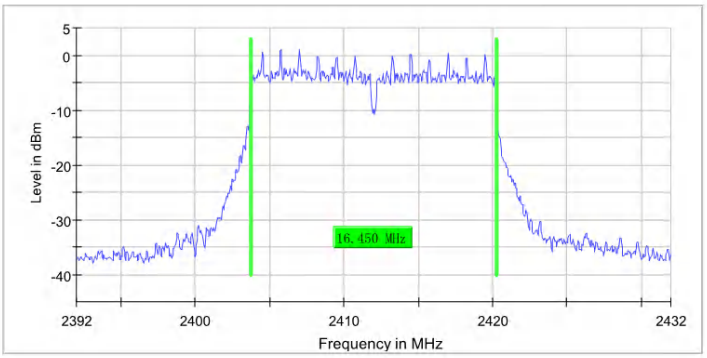
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	1.0	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.13 dB	0.50 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

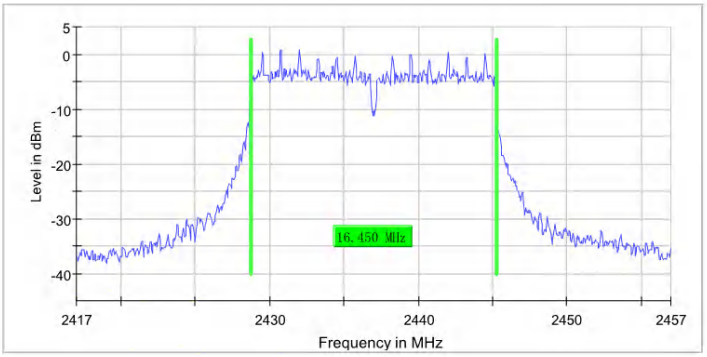
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	0.8	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.22 dB	0.50 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

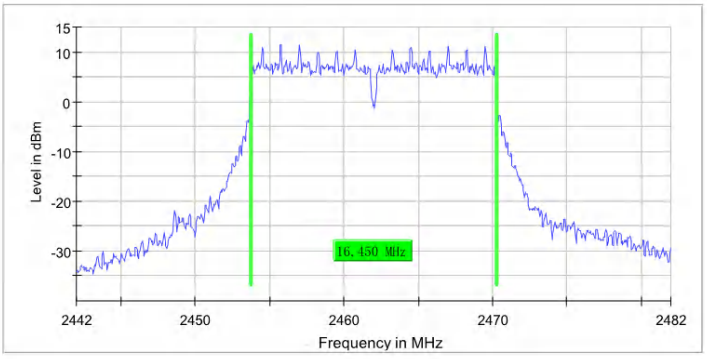
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	11.5	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
Sweeptime	94.922 µs	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.15 dB	0.50 dB

Wi-Fi 802.11 n(HT20) mode, MCS0

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

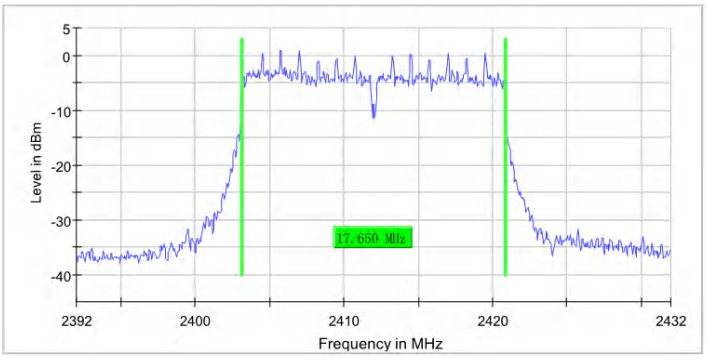
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	0.9	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.46 dB	0.50 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

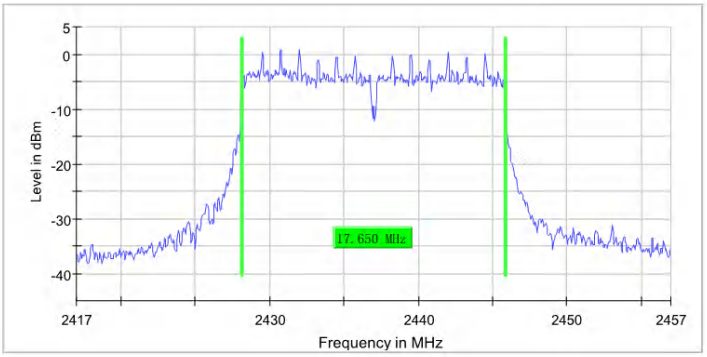
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	0.8	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.15 dB	0.50 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

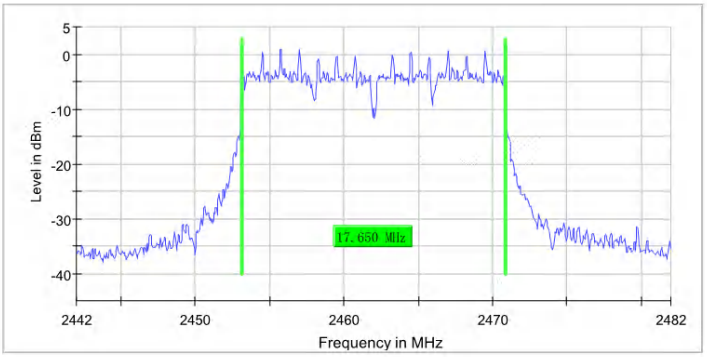
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	0.8	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	37 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.16 dB	0.50 dB

Appendix B.3: Test Results of 99% Bandwidth

Wi-Fi 802.11 b mode, 1 Mbps

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

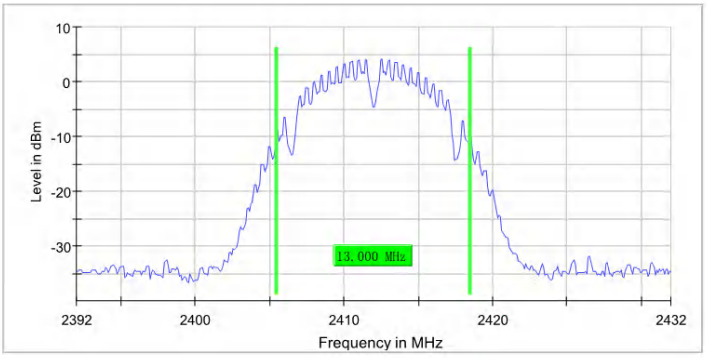
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	13.000000	---	---	2405.450000	2418.450000

(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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	9 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.06 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

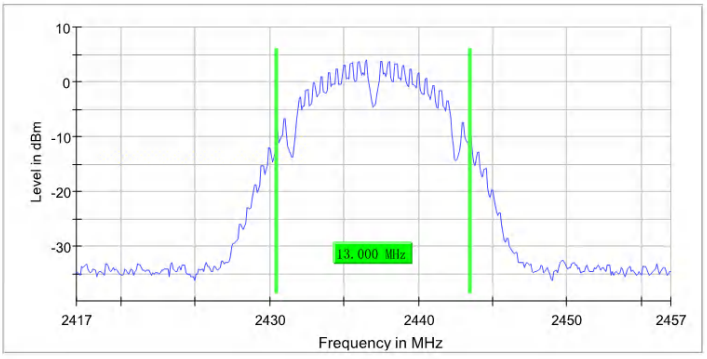
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2437.000000	13.000000	---	---	2430.450000	2443.450000

(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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	13 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.09 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

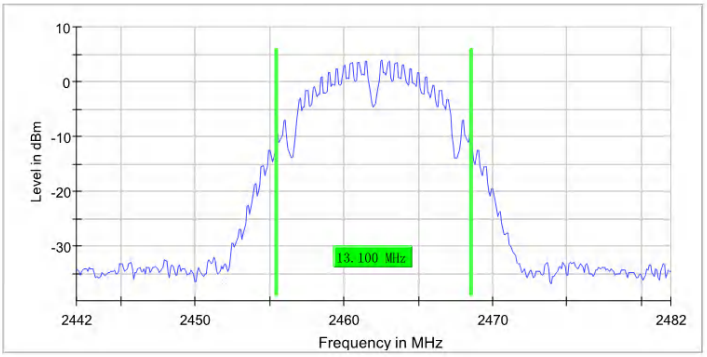
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	13.100000	---	---	2455.450000	2468.550000

(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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.15 dB	0.30 dB

Wi-Fi 802.11 g mode, 6 Mbps

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

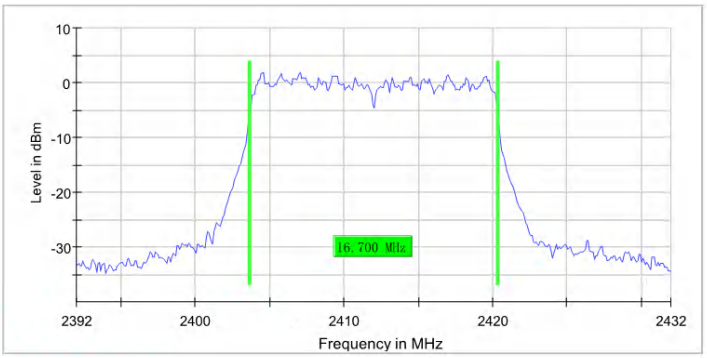
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2412.000000	16.700000	---	---	2403.650000	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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	30 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.21 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

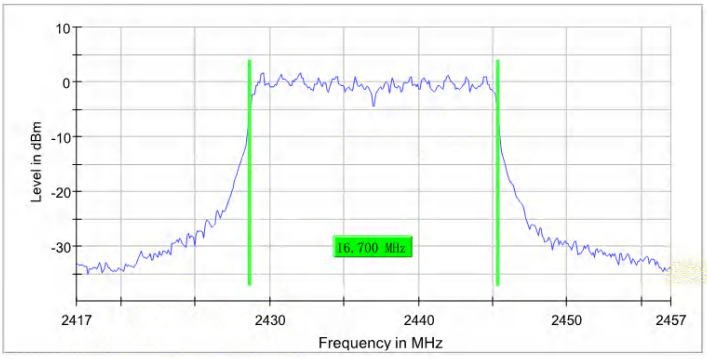
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	20 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.13 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

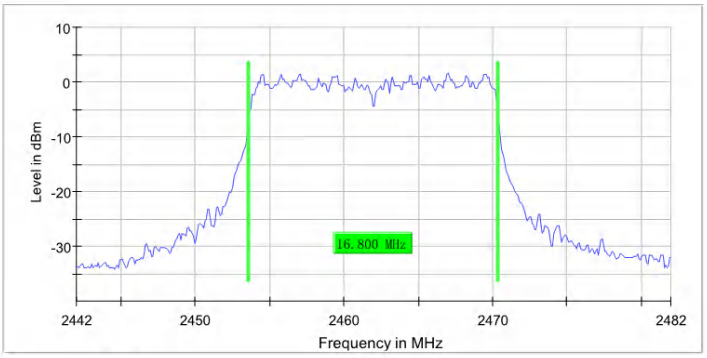
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	16.800000	---	---	2453.550000	2470.350000

(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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	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	0.26 dB	0.30 dB

Wi-Fi 802.11 n(HT20) mode, MCS0

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

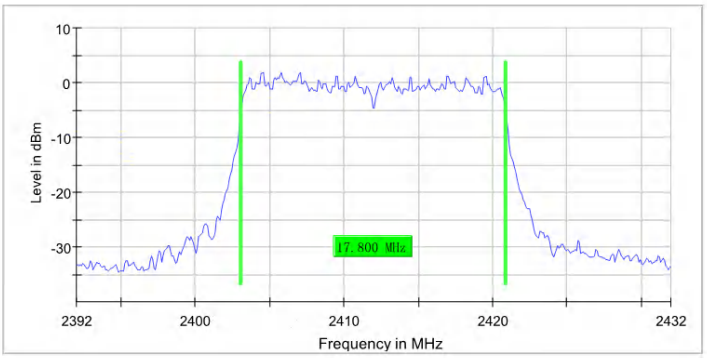
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	---	---	2403.050000	2420.850000

(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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	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	0.13 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

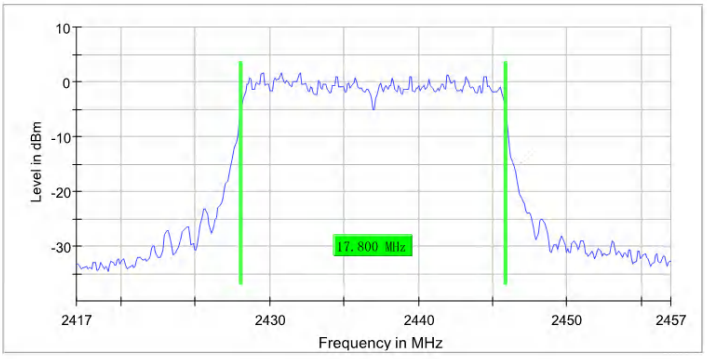
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

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	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	20 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.06 dB	0.30 dB

FCC Part 47 §15.247 2400-2483.5 MHz 2017

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

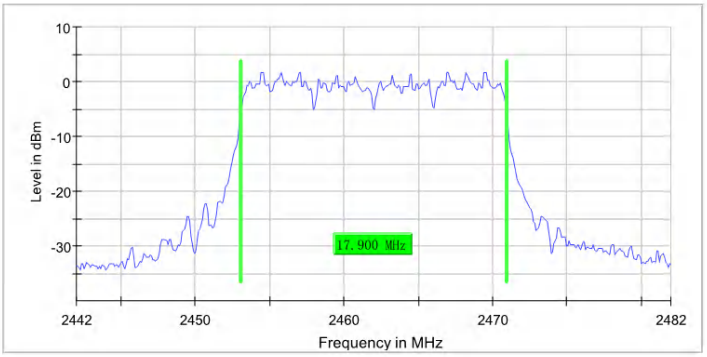
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2462.000000	17.900000	---	---	2453.050000	2470.950000

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

DUT Frequency (MHz)	Result
2462.000000	PASS

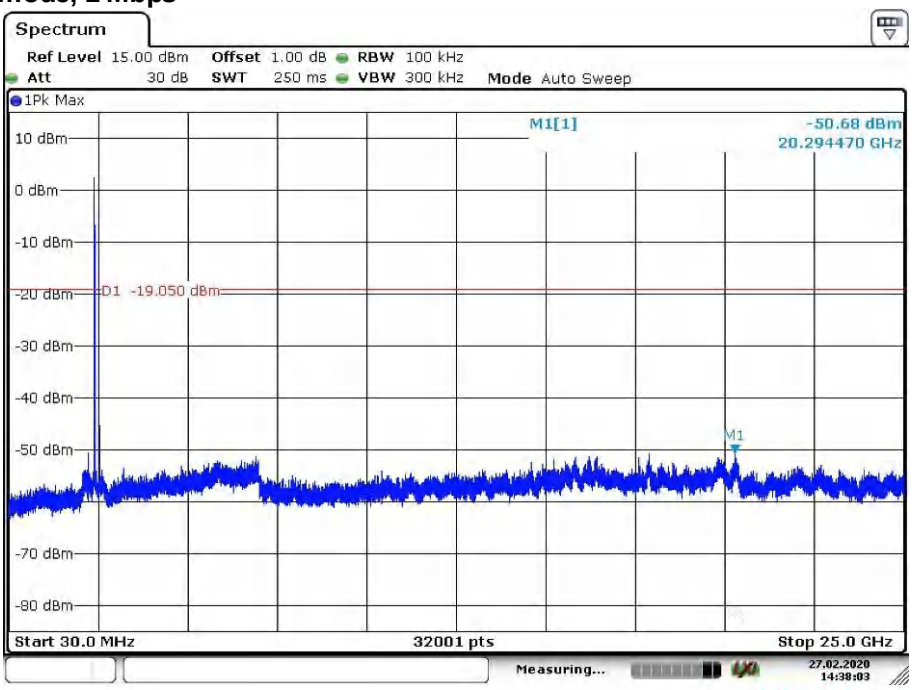


Measurement

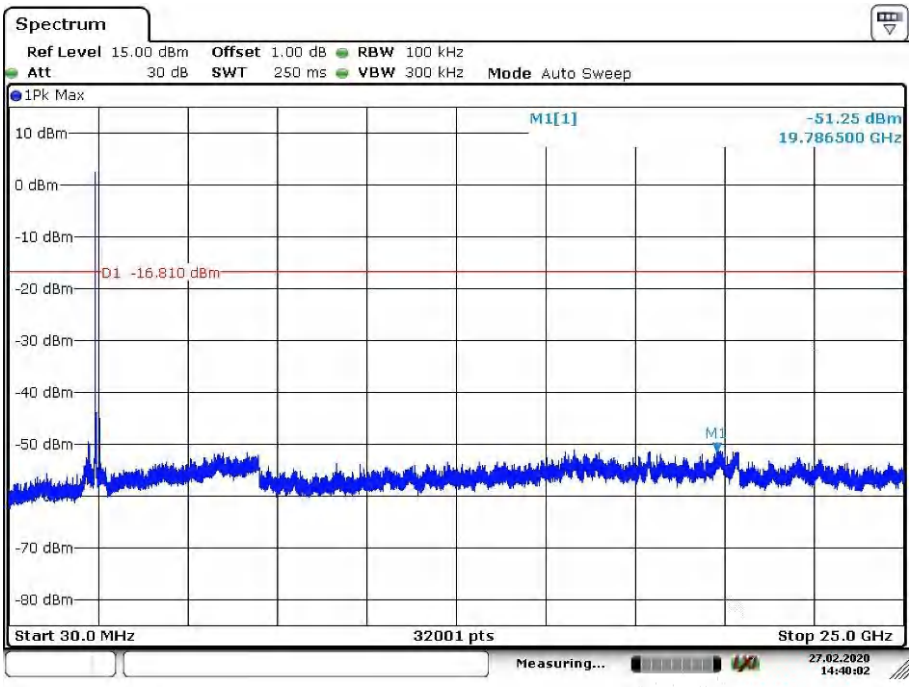
Setting	Instrument Value	Target Value
Start Frequency	2.44200 GHz	2.44200 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	40.000 MHz	40.000 MHz
RBW	200.000 kHz	>= 200.000 kHz
VBW	1.000 MHz	>= 600.000 kHz
SweepPoints	400	~ 400
Sweeptime	47.266 µs	AUTO
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	50 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.30 dB

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

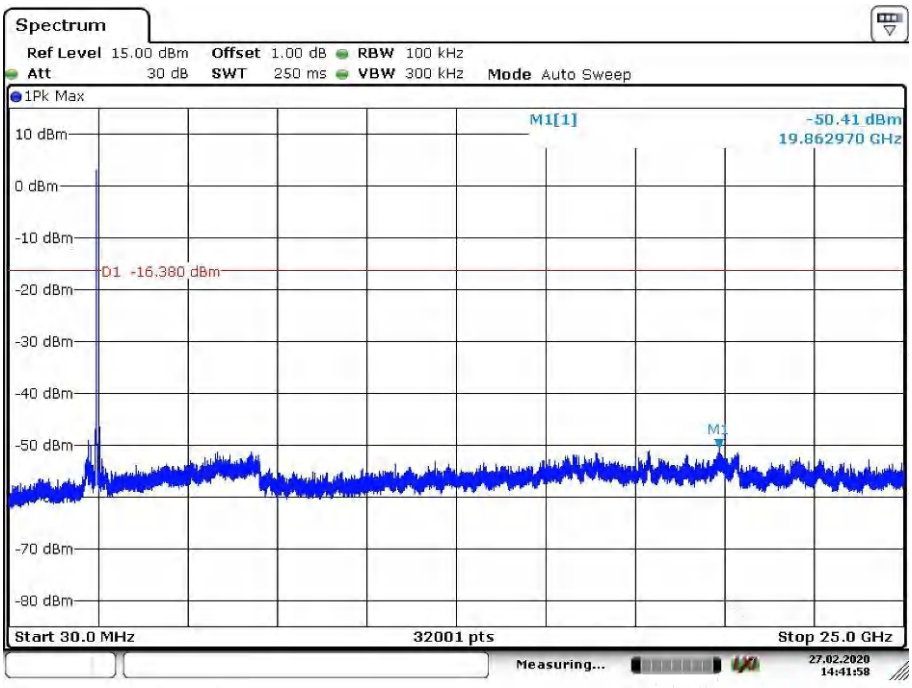
Wi-Fi 802.11 b mode, 1 Mbps



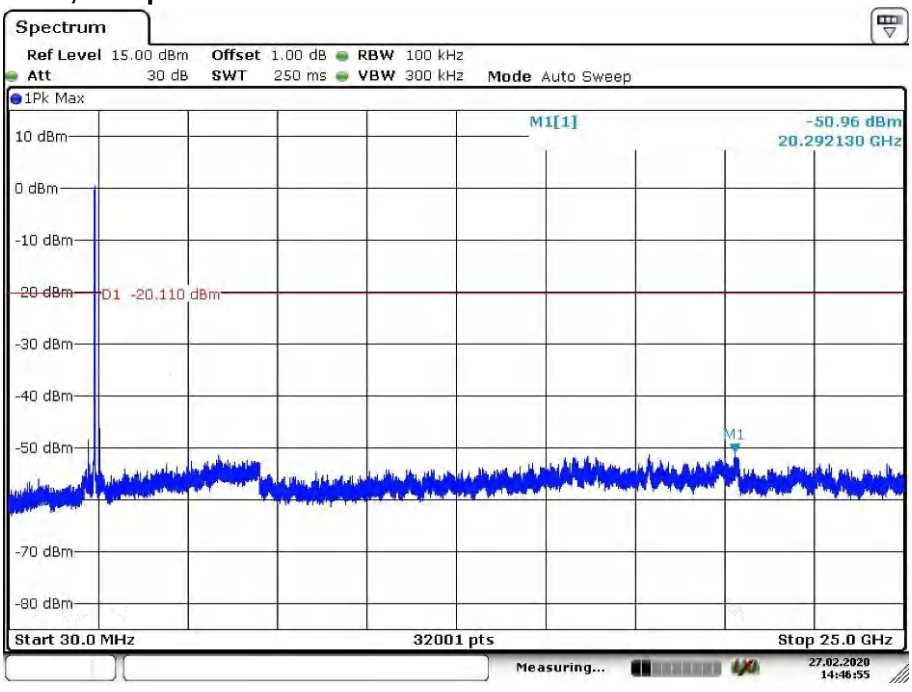
Date: 27.FEB.2020 14:38:04

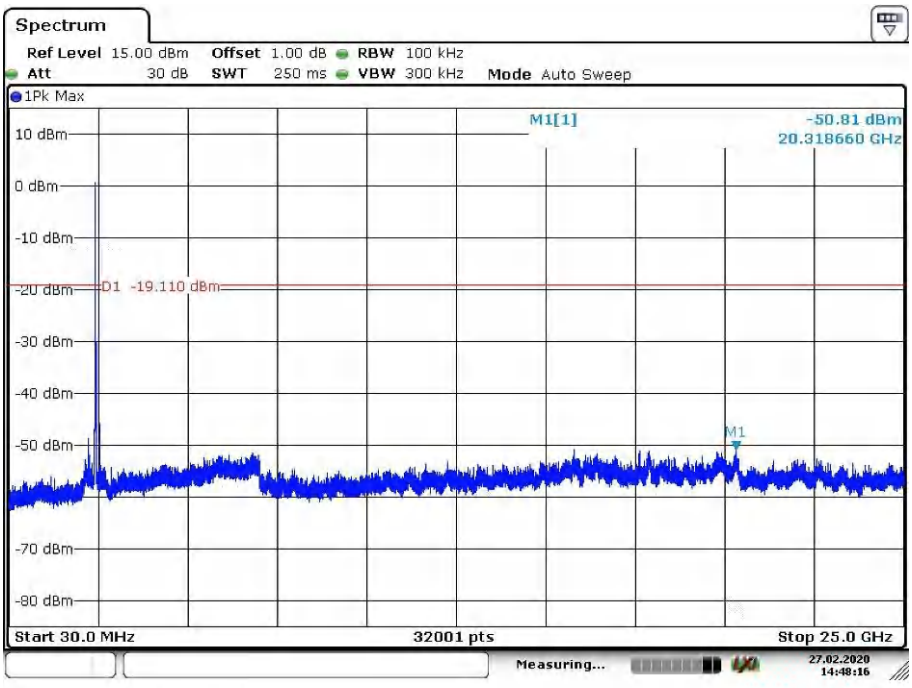


Date: 27.FEB.2020 14:40:03

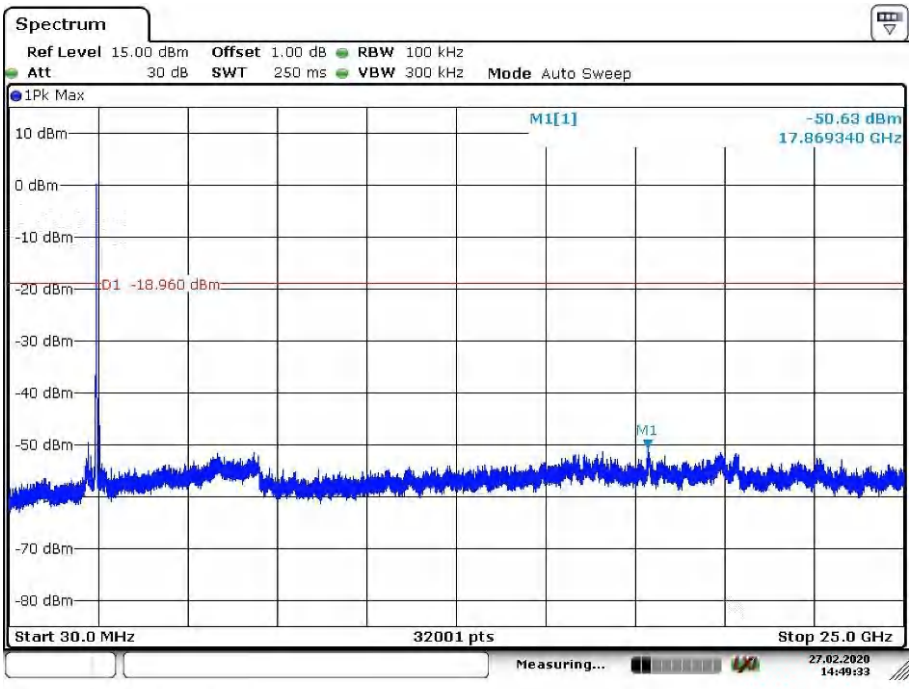


Wi-Fi 802.11 g mode, 6 Mbps



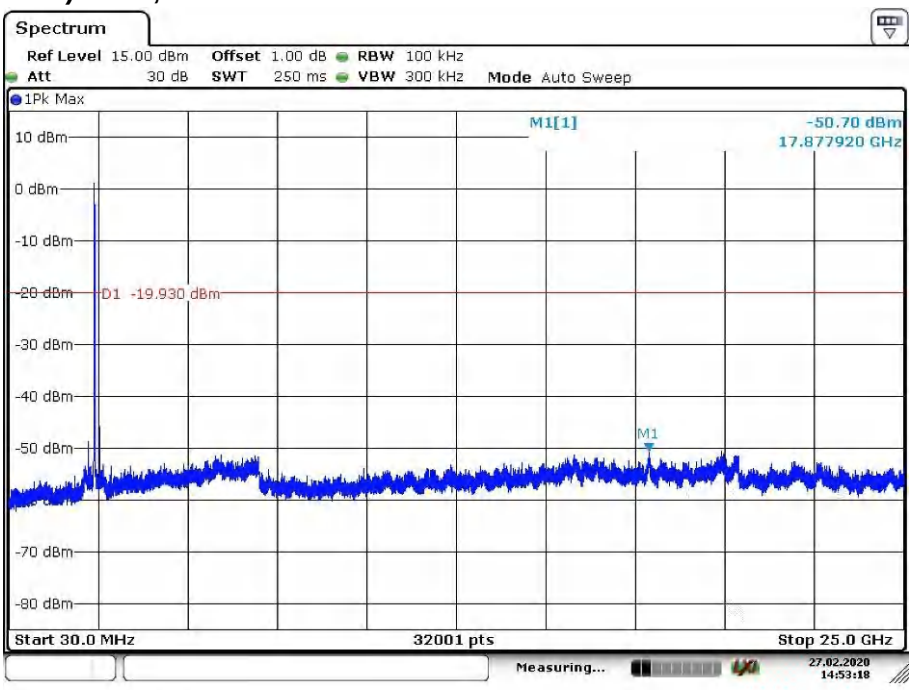


Date: 27.FEB.2020 14:48:17

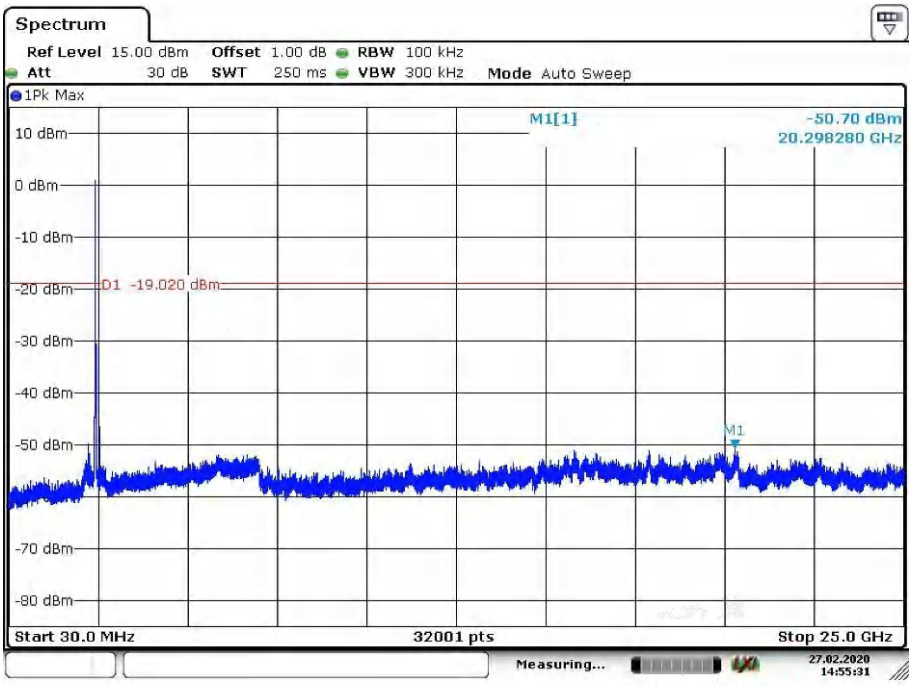


Date: 27.FEB.2020 14:49:34

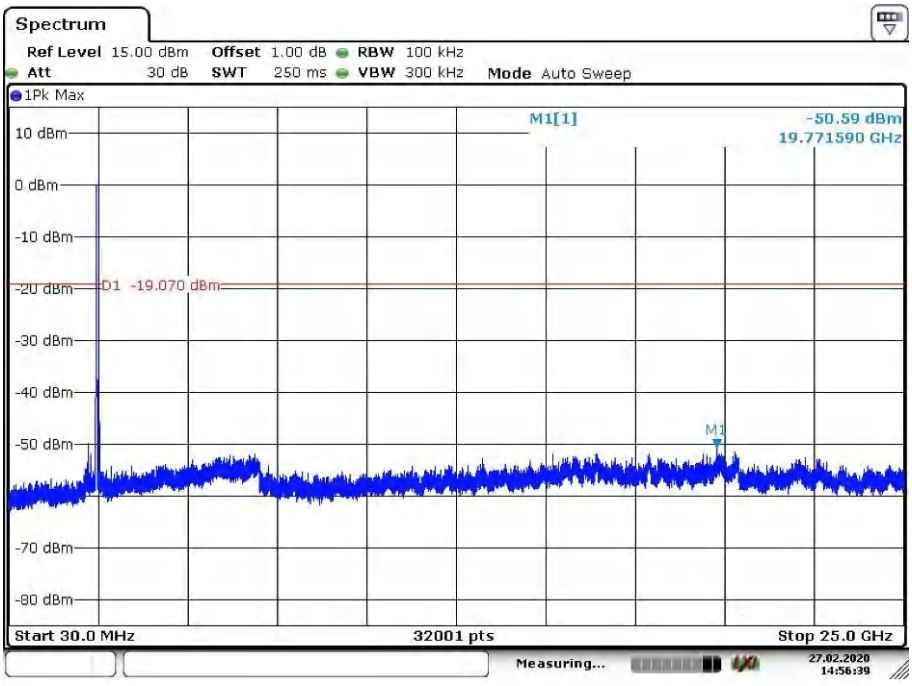
Wi-Fi 802.11 n(HT20) mode, MCS0



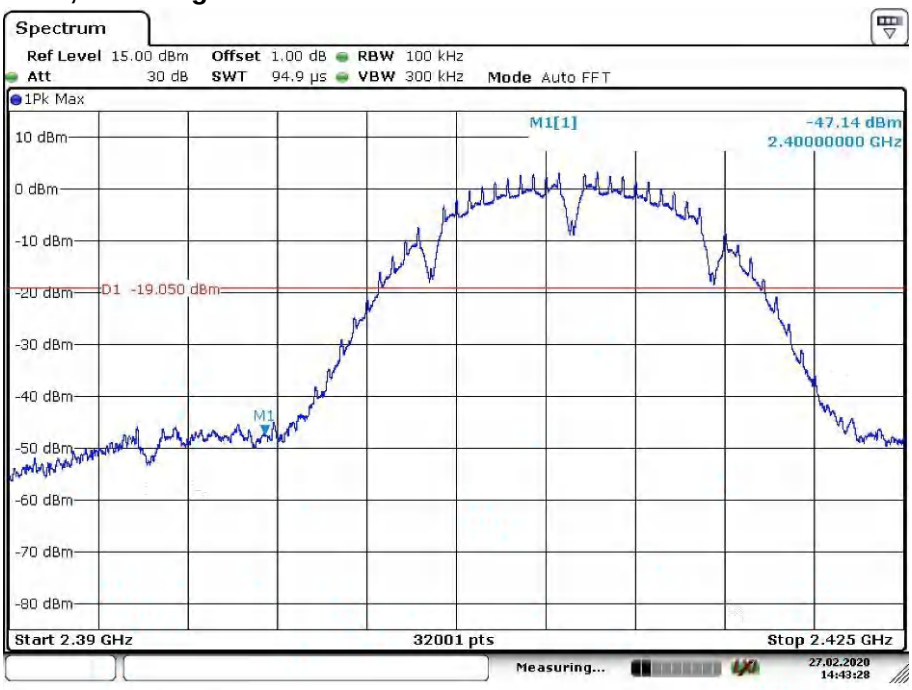
Date: 27.FEB.2020 14:53:19



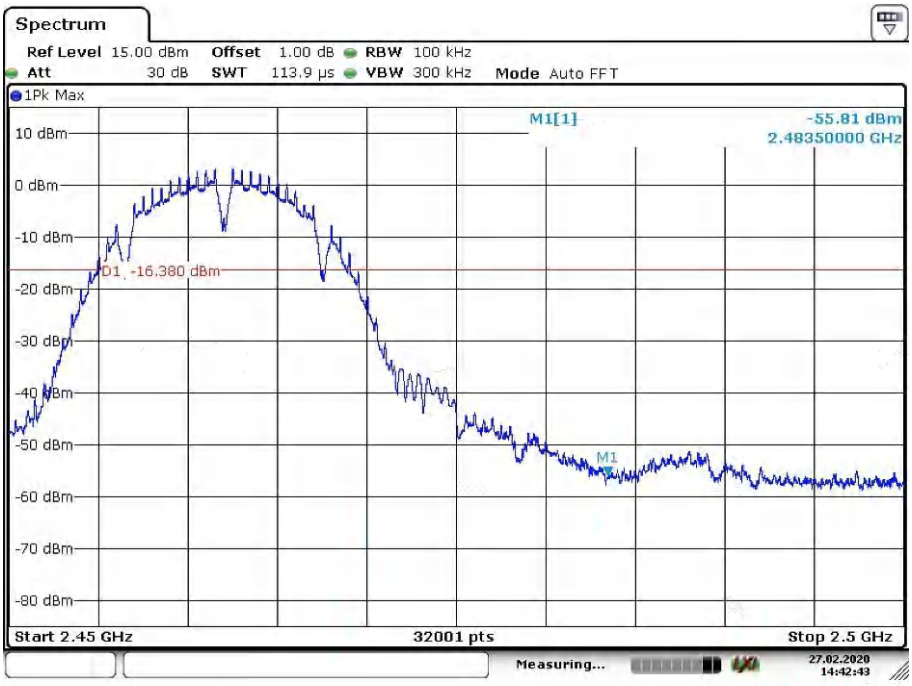
Date: 27.FEB.2020 14:55:31


Spectrum
Ref Level 15.00 dBm Offset 1.00 dB RBW 100 kHz
Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep
1Pk Max
M1[1] -50.59 dBm
19.771590 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
D1 -19.070 dBm
-30 dBm
-40 dBm
-50 dBm
-70 dBm
-80 dBm
M1
Start 30.0 MHz
32001 pts
Stop 25.0 GHz
Measuring...
27.02.2020
14:56:39
Date: 27.FEB.2020 14:56:38

Wi-Fi 802.11 b mode, Band Edge

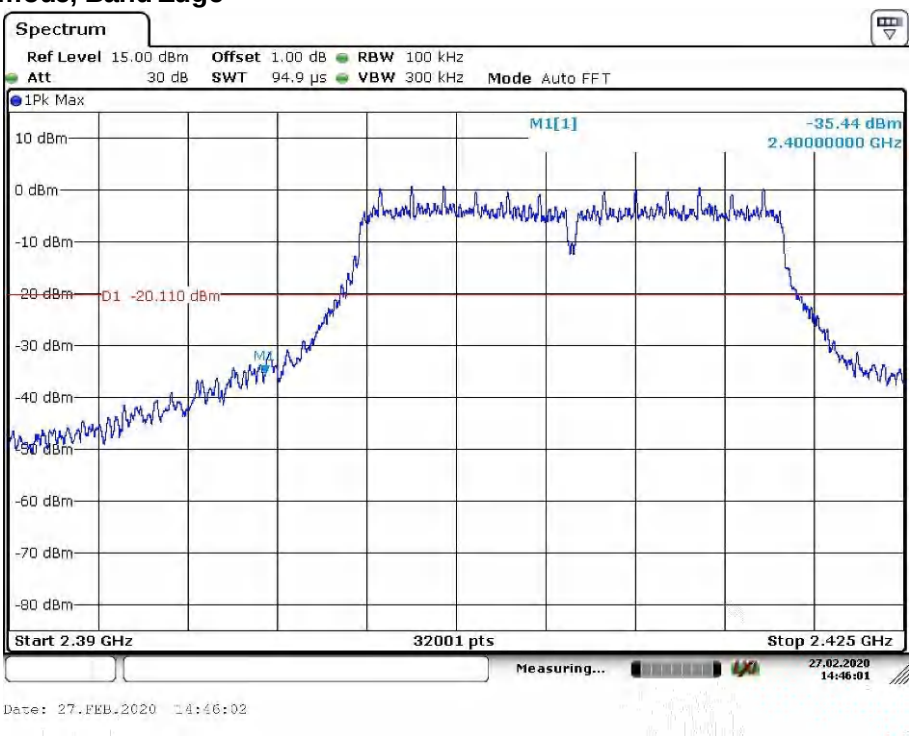


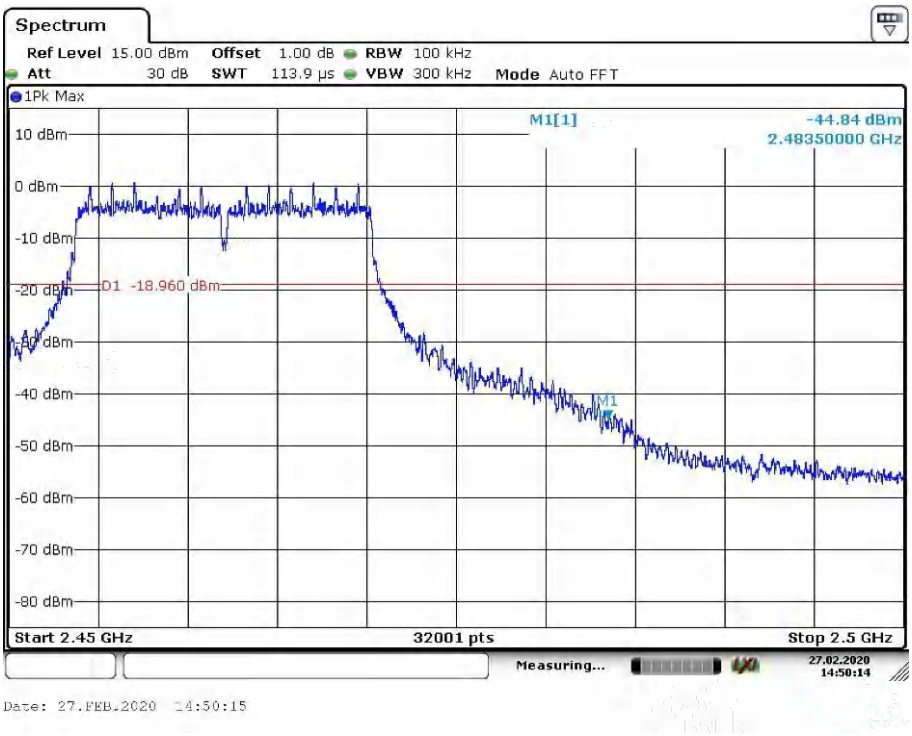
Date: 27.FEB.2020 14:43:29



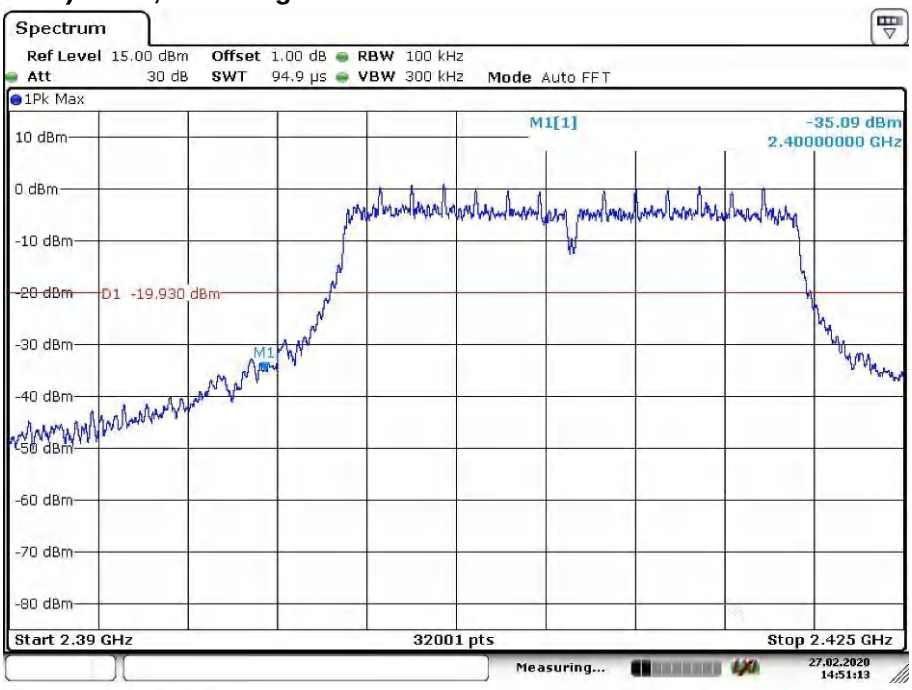
Date: 27.FEB.2020 14:42:44

Wi-Fi 802.11 g mode, Band Edge

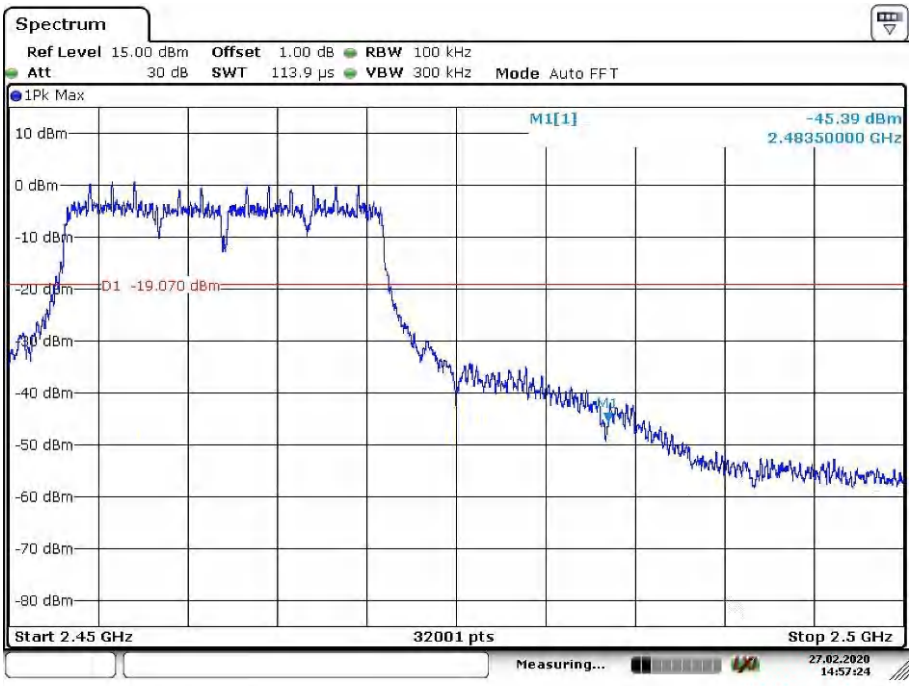




Wi-Fi 802.11 n(HT20) mode, Band Edge



Date: 27.FEB.2020 14:51:13



Date: 27.FEB.2020 14:57:24

Note: 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.

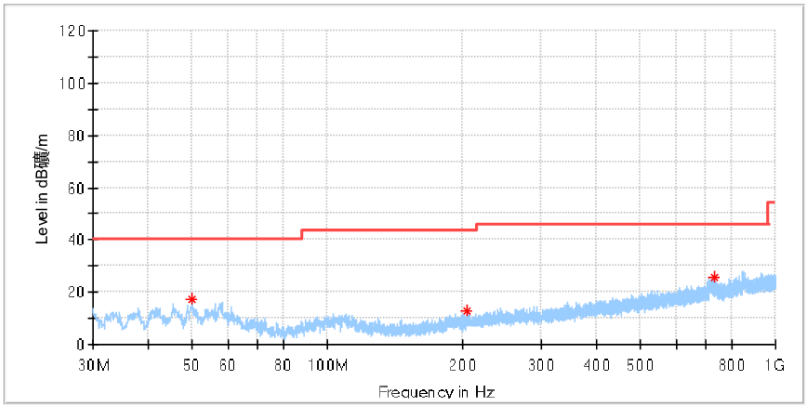
Appendix B.5: Test Results of Radiated Spurious Emissions
30MHz - 1GHz (Worst case)
Wi-Fi 802.11 b mode, 1 Mbps

Test 1 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

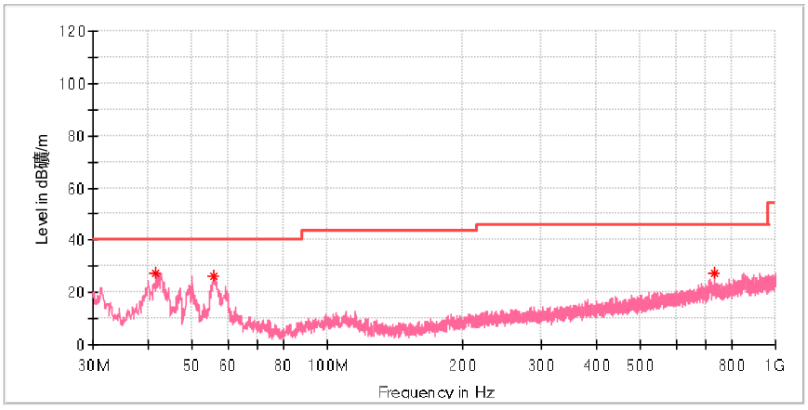
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.982000	17.05	---	40.00	22.95	100.0	H	0.0	-18.6
205.036500	12.61	---	43.50	30.89	100.0	H	195.0	-19.2
728.885000	25.41	---	46.00	20.59	100.0	H	104.0	-7.9

Test 2 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

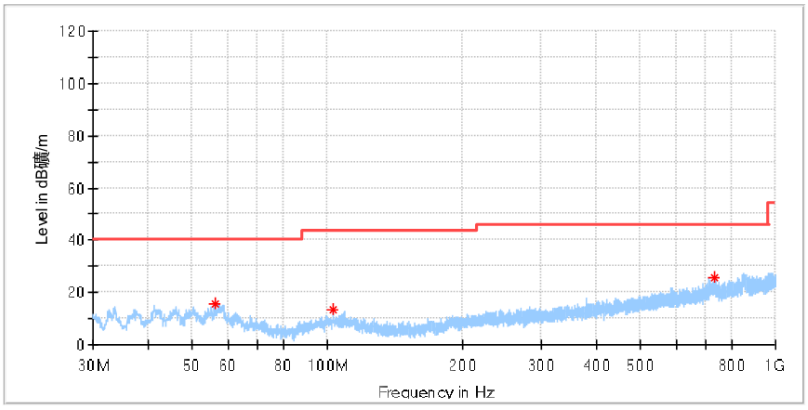
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
41.494500	27.22	---	40.00	12.78	100.0	V	321.0	-20.0
55.656500	26.06	---	40.00	13.94	100.0	V	143.0	-18.8
728.642500	27.30	---	46.00	18.70	100.0	V	118.0	-7.9

Test 3 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

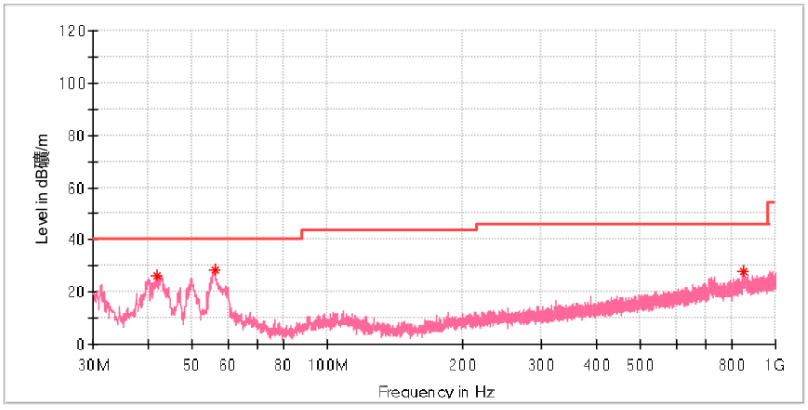
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
56.238500	15.69	---	40.00	24.31	100.0	H	61.0	-18.9
103.089500	13.31	---	43.50	30.19	100.0	H	12.0	-19.2
728.885000	25.58	---	46.00	20.42	100.0	H	184.0	-7.9

Test 4 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
41.543000	26.08	---	40.00	13.92	100.0	V	218.0	-20.0
56.093000	28.43	---	40.00	11.57	100.0	V	0.0	-18.9
848.098000	27.93	---	46.00	18.07	100.0	V	29.0	-5.9

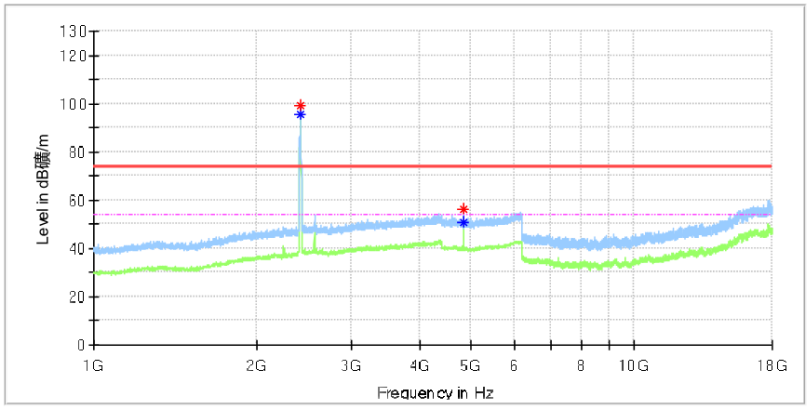
1GHz - 18GHz
Wi-Fi 802.11 b mode, 1 Mbps

Test 1 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
4823.500000	---	50.85	54.00	3.15	100.0	H	303.0	13.5
4824.000000	56.52	---	74.00	17.48	100.0	H	313.0	13.5

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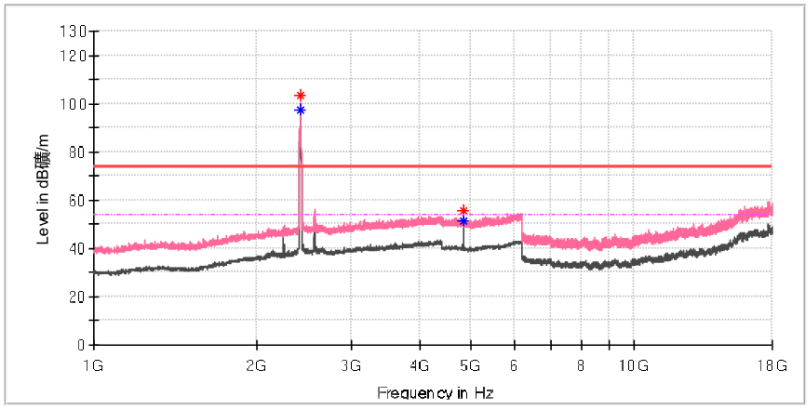
Note: The highest waveform in the figure is Wi-Fi Fundamental.

Test 2 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

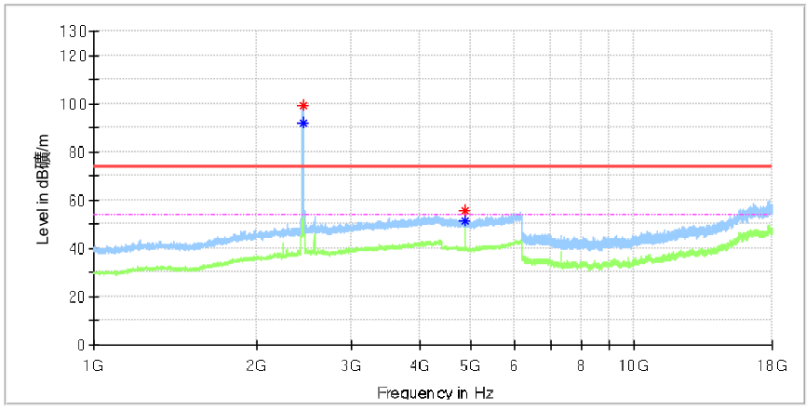
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4823.500000	---	50.21	54.00	3.79	100.0	V	35.0	13.5
4823.500000	55.71	---	74.00	18.29	100.0	V	35.0	13.5

Test 3 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Mid
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

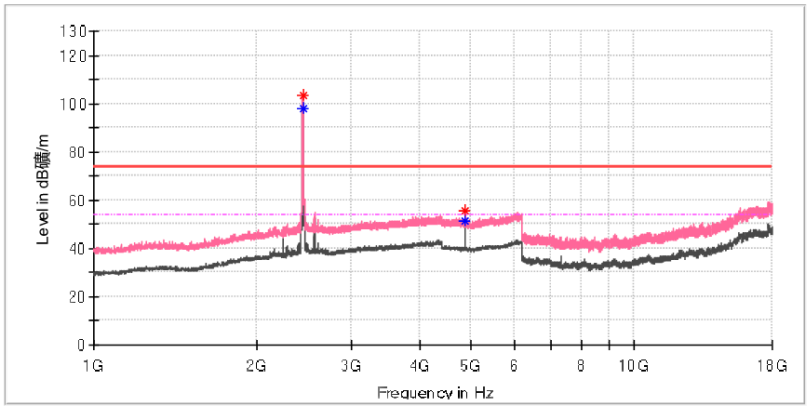
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.000000	---	50.99	54.00	3.01	100.0	H	165.0	13.4
4874.000000	55.77	---	74.00	18.23	100.0	H	165.0	13.4

Test 4 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Mid
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

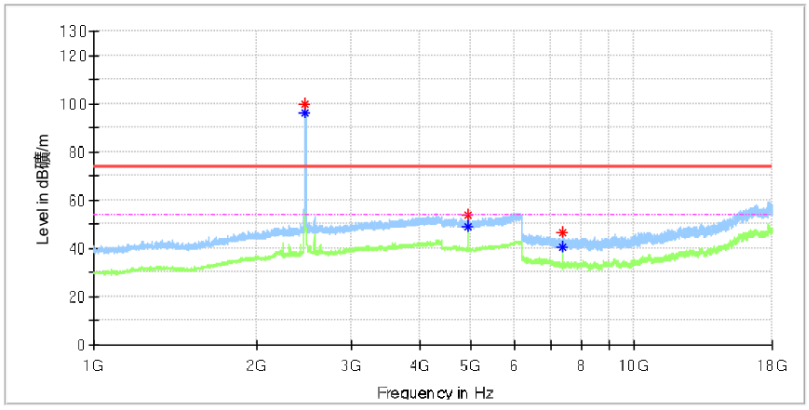
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.000000	---	50.84	54.00	3.16	100.0	V	37.0	13.4
4874.000000	55.58	---	74.00	18.42	100.0	V	37.0	13.4

Test 5 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

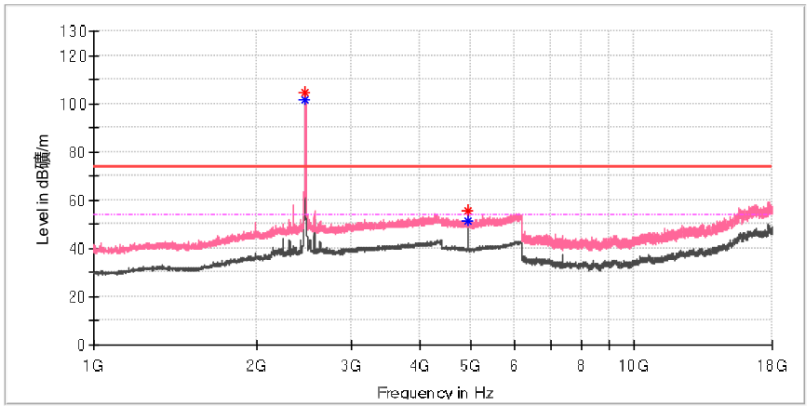
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	---	49.01	54.00	4.99	100.0	H	114.0	13.3
4924.000000	53.53	---	74.00	20.47	100.0	H	114.0	13.3
7386.883333	---	40.29	54.00	13.71	100.0	H	353.0	8.2
7387.375000	46.42	---	74.00	27.58	100.0	H	353.0	8.2

Test 6 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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	---	50.44	54.00	3.56	100.0	V	18.0	13.3
4924.000000	55.91	---	74.00	18.09	100.0	V	18.0	13.3

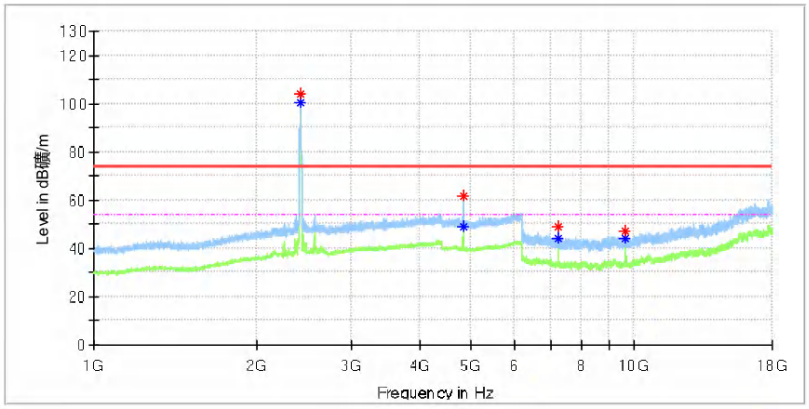
Wi-Fi 802.11 g mode, 6 Mbps

Test 1 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
4821.000000	---	48.69	54.00	5.31	100.0	H	162.0	13.5
4824.000000	61.51	---	74.00	12.49	100.0	H	162.0	13.5
7234.958333	---	43.91	54.00	10.09	100.0	H	355.0	8.6
7236.925000	48.95	---	74.00	25.05	100.0	H	355.0	8.6
9647.566667	47.43	---	74.00	26.57	100.0	H	229.0	10.4
9648.058333	---	44.21	54.00	9.79	100.0	H	209.0	10.4

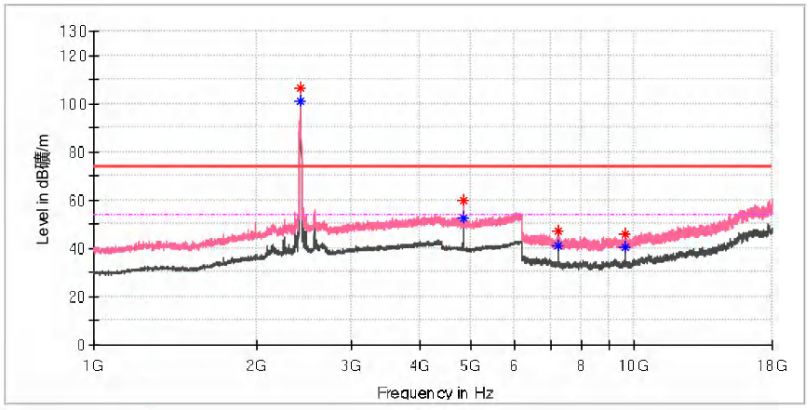
28/2/2020 12:31:50 PM

Test 2 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

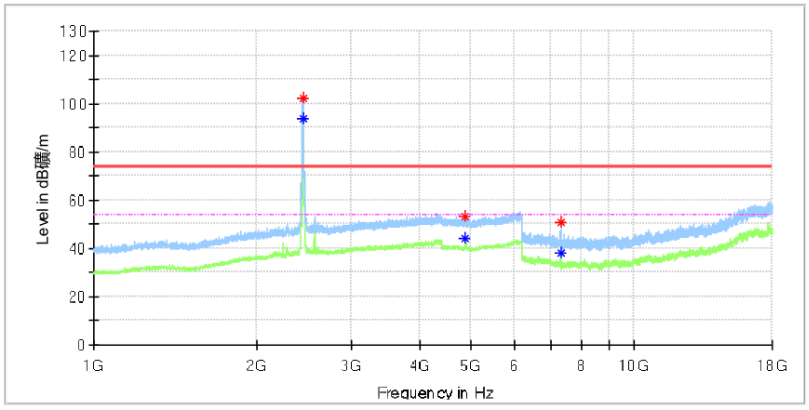
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	59.73	---	74.00	14.27	100.0	V	38.0	13.5
4824.500000	---	52.66	54.00	1.34	100.0	V	38.0	13.5
7235.941667	47.22	---	74.00	26.78	100.0	V	269.0	8.6
7236.925000	---	41.04	54.00	12.96	100.0	V	147.0	8.6
9648.058333	---	40.31	54.00	13.69	100.0	V	346.0	10.4
9648.550000	46.13	---	74.00	27.87	100.0	V	346.0	10.4

Test 3 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_Mid
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

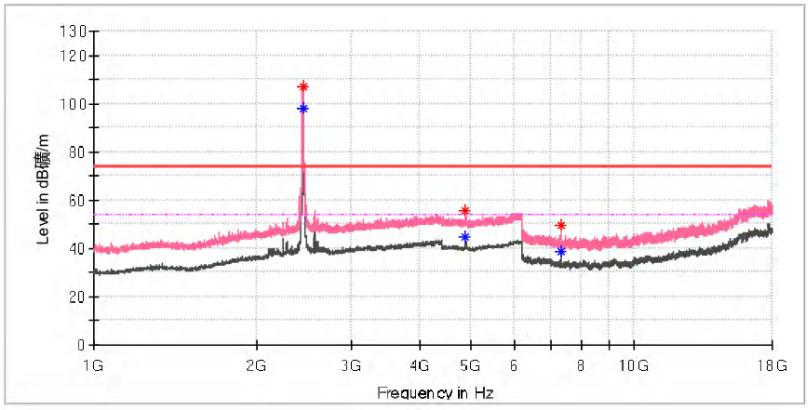
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4862.000000	53.36	---	74.00	20.64	100.0	H	154.0	13.4
4868.500000	---	44.01	54.00	9.99	100.0	H	286.0	13.4
7314.608333	---	38.39	54.00	15.61	100.0	H	356.0	8.2
7318.050000	51.01	---	74.00	22.99	100.0	H	356.0	8.2

Test 4 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_Mid
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

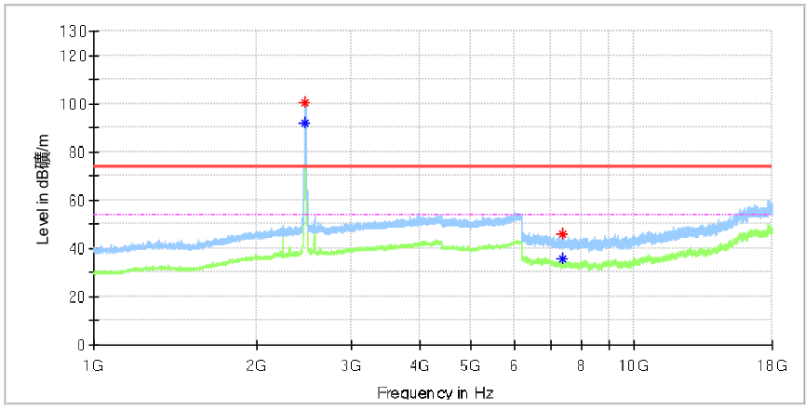
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.500000	---	44.82	54.00	9.18	100.0	V	11.0	13.4
4875.500000	55.62	---	74.00	18.38	100.0	V	342.0	13.4
7313.625000	---	38.72	54.00	15.28	100.0	V	173.0	8.2
7317.066667	49.38	---	74.00	24.62	100.0	V	173.0	8.2

Test 5 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

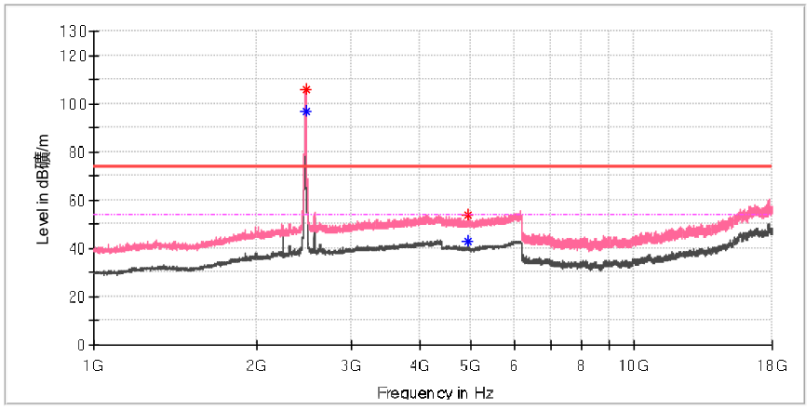
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7382.458333	45.92	---	74.00	28.08	100.0	H	348.0	8.2
7384.916667	---	35.47	54.00	18.53	100.0	H	348.0	8.2

Test 6 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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	54.06	---	74.00	19.94	100.0	V	348.0	13.3
4924.000000	---	42.72	54.00	11.28	100.0	V	359.0	13.3

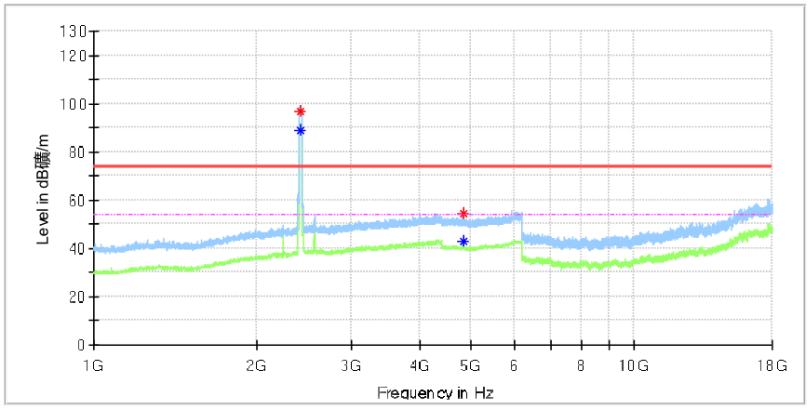
Wi-Fi 802.11 n(HT20) mode, MCS0

Test 1 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
4823.500000	---	43.06	54.00	10.94	100.0	H	151.0	13.5
4824.000000	54.15	---	74.00	19.85	100.0	H	151.0	13.5

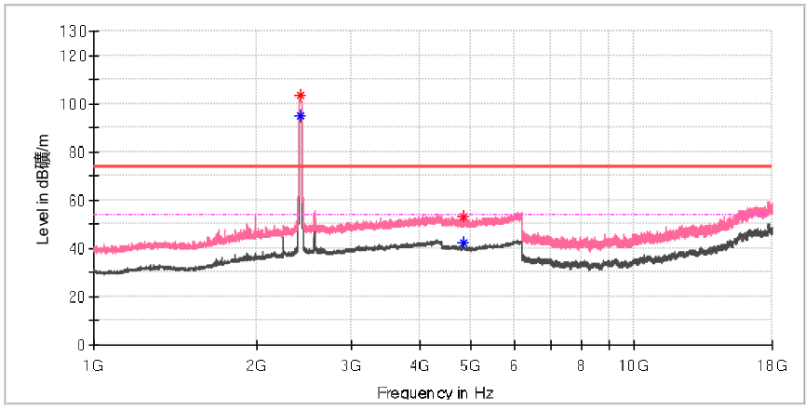
28/2/2020 4:48:20 PM

Test 2 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

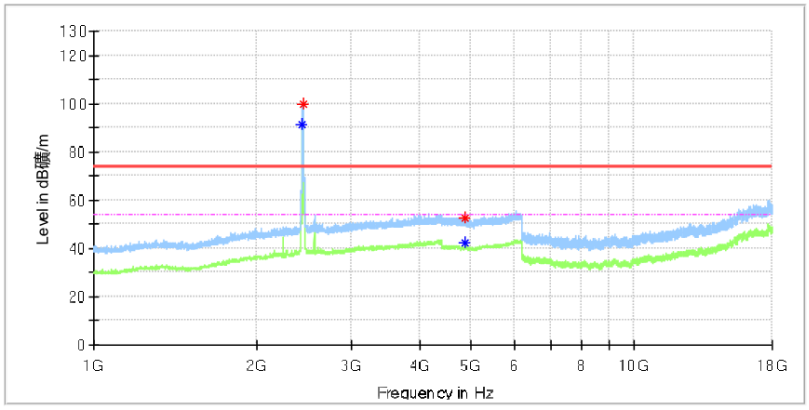
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4818.500000	---	42.19	54.00	11.81	100.0	V	3.0	13.5
4823.500000	53.13	---	74.00	20.87	100.0	V	36.0	13.5

Test 3 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_Mid
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

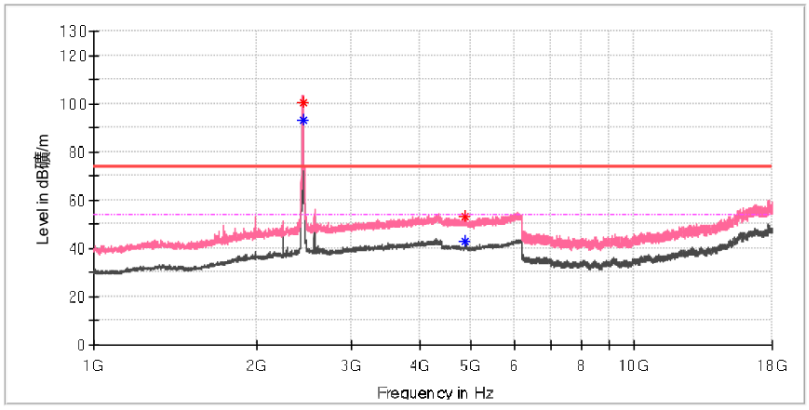
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.500000	52.75	---	74.00	21.25	100.0	H	148.0	13.4
4876.500000	---	42.44	54.00	11.56	100.0	H	344.0	13.4

Test 4 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_Mid
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

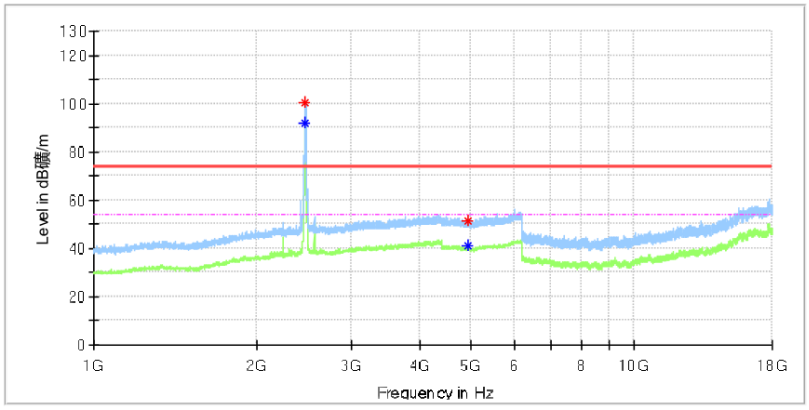
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4871.000000	53.51	---	74.00	20.49	100.0	V	32.0	13.4
4874.500000	---	42.77	54.00	11.23	100.0	V	1.0	13.4

Test 5 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

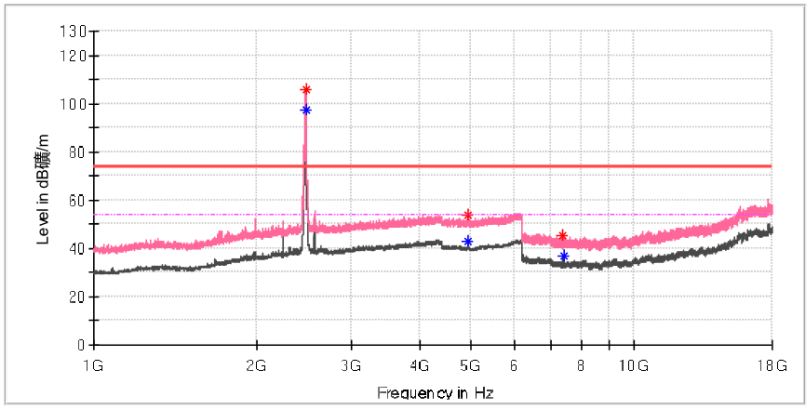
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4925.500000	51.31	---	74.00	22.69	100.0	H	309.0	13.3
4926.000000	---	41.10	54.00	12.90	100.0	H	259.0	13.3

Test 6 / 6

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
4920.500000	53.95	---	74.00	20.05	100.0	V	25.0	13.3
4924.000000	---	42.88	54.00	11.12	100.0	V	43.0	13.3
7386.883333	45.34	---	74.00	28.66	100.0	V	221.0	8.2
7392.783333	---	37.15	54.00	16.85	100.0	V	221.0	8.3

28/2/2020 4:48:20 PM

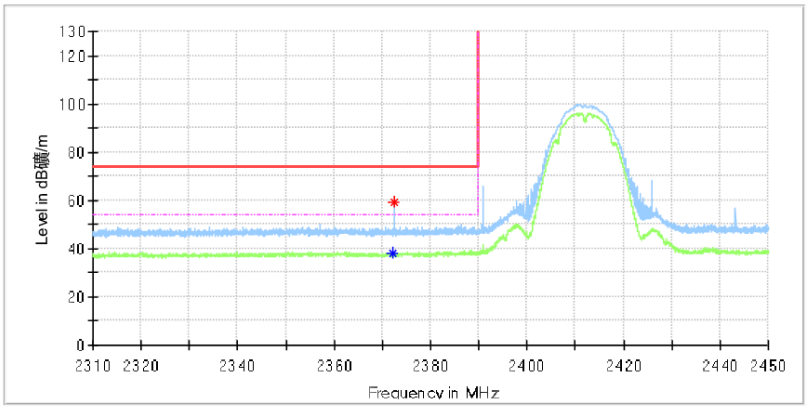
Appendix B.6: Test Results of Radiated Emissions in Restricted Bands
Wi-Fi 802.11 b mode, 1 Mbps

Test 1 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

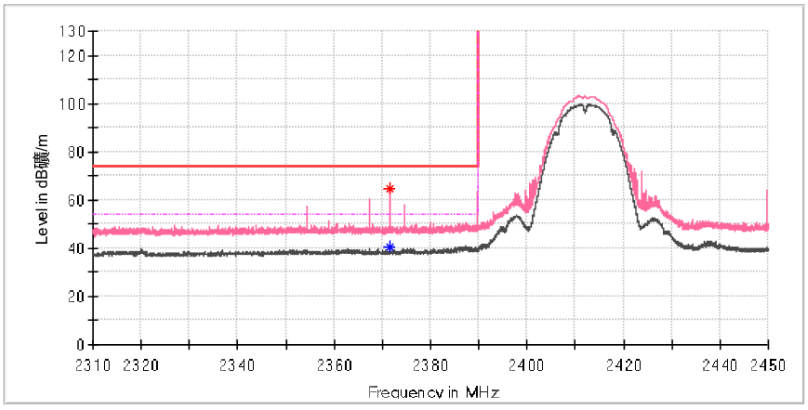
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2372.238235	---	37.81	54.00	16.19	100.0	H	133.0	6.9
2372.361765	59.32	---	74.00	14.68	100.0	H	284.0	6.9

Test 2 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

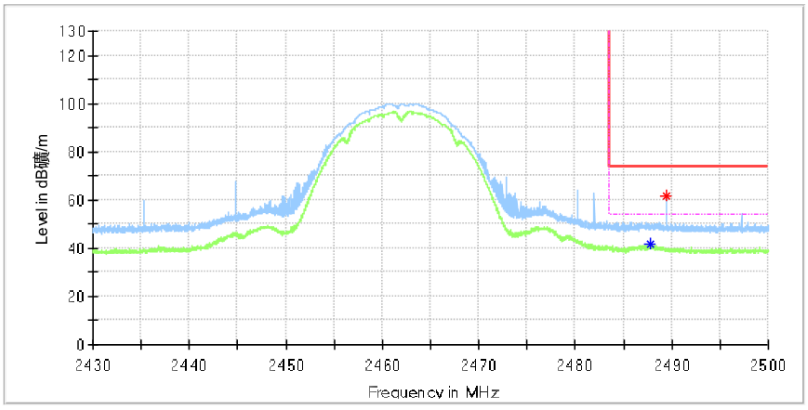
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2371.455882	---	40.60	54.00	13.40	100.0	V	248.0	6.9
2371.455882	64.94	---	74.00	9.06	100.0	V	248.0	6.9

Test 3 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

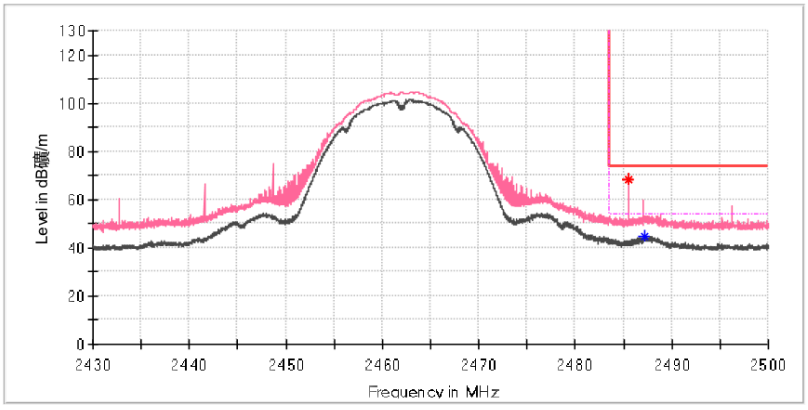
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.750000	---	41.77	54.00	12.23	100.0	H	307.0	7.4
2489.489706	61.55	---	74.00	12.45	100.0	H	127.0	7.4

Test 4 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11b_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
2485.505882	68.30	---	74.00	5.70	100.0	V	261.0	7.4
2487.152941	---	44.64	54.00	9.36	100.0	V	203.0	7.4

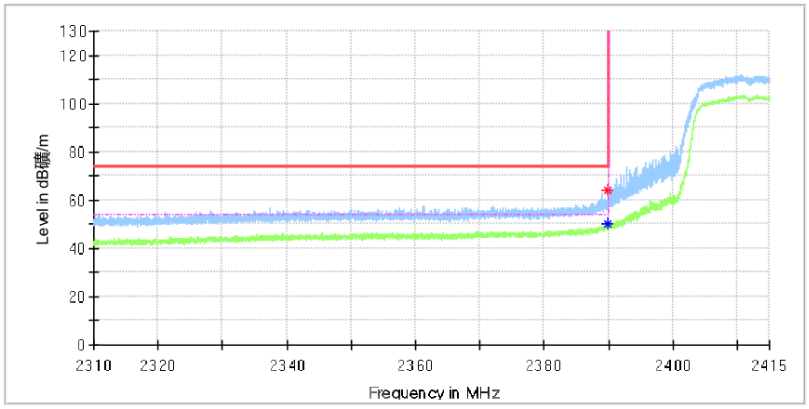
Wi-Fi 802.11 g mode, 6 Mbps

Test 1 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

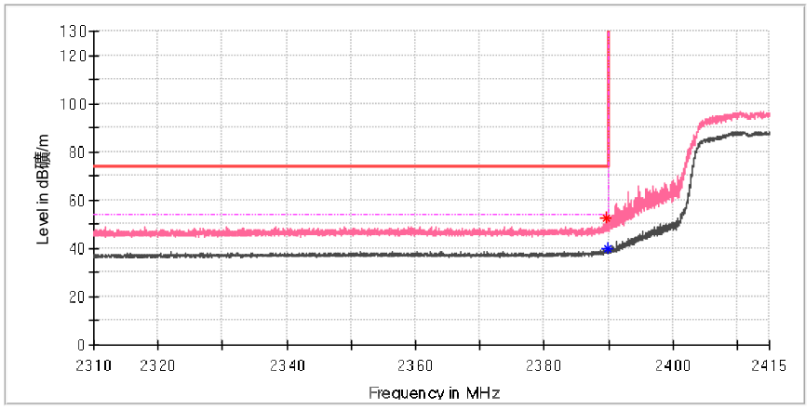
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.815441	63.87	---	74.00	10.13	100.0	H	60.0	7.0
2389.846324	---	49.90	54.00	4.10	100.0	H	68.0	7.0

Test 2 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

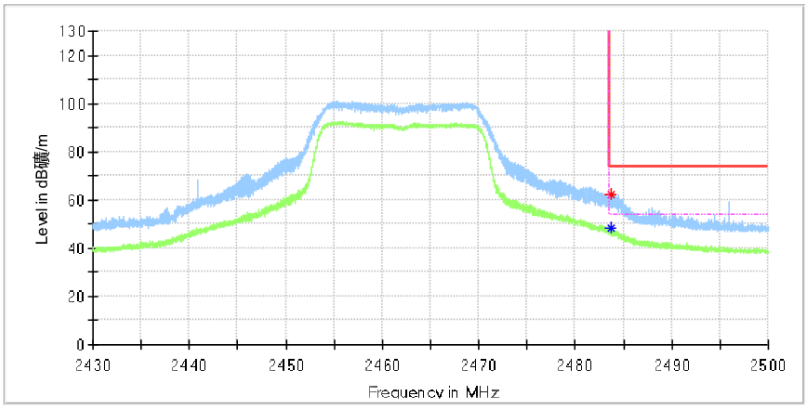
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.738235	52.90	---	74.00	21.10	100.0	V	144.0	7.0
2389.877206	---	40.18	54.00	13.82	100.0	V	136.0	7.0

Test 3 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

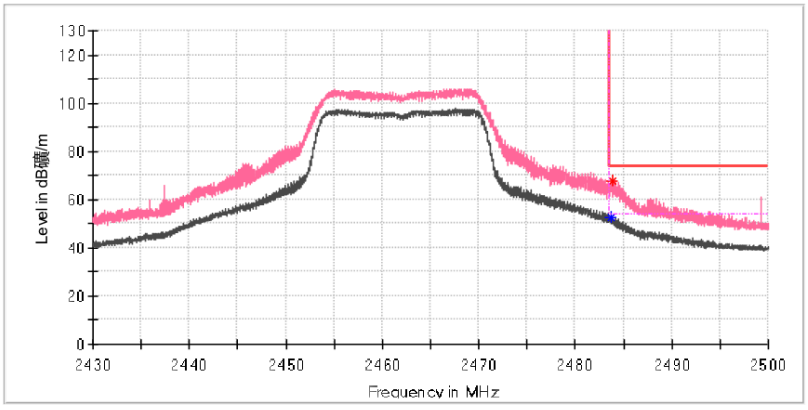
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.663235	---	48.34	54.00	5.66	100.0	H	52.0	7.4
2483.694118	62.53	---	74.00	11.47	100.0	H	52.0	7.4

Test 4 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11g_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
2483.776471	---	52.87	54.00	1.13	100.0	V	199.0	7.4
2483.807353	67.81	---	74.00	6.19	100.0	V	199.0	7.4

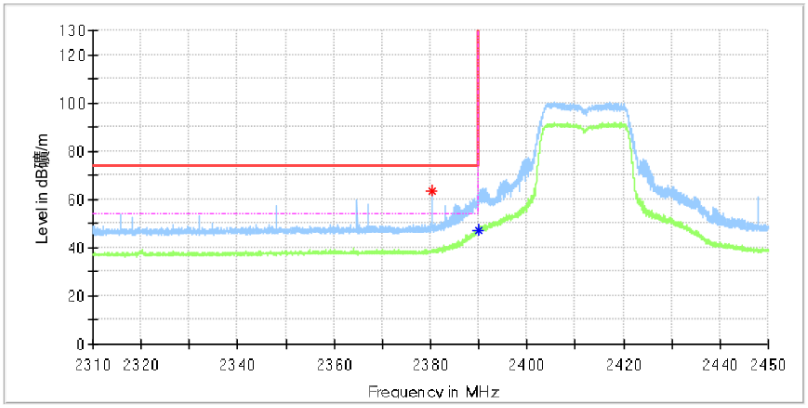
Wi-Fi 802.11 n(HT20) mode, MCS0

Test 1 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

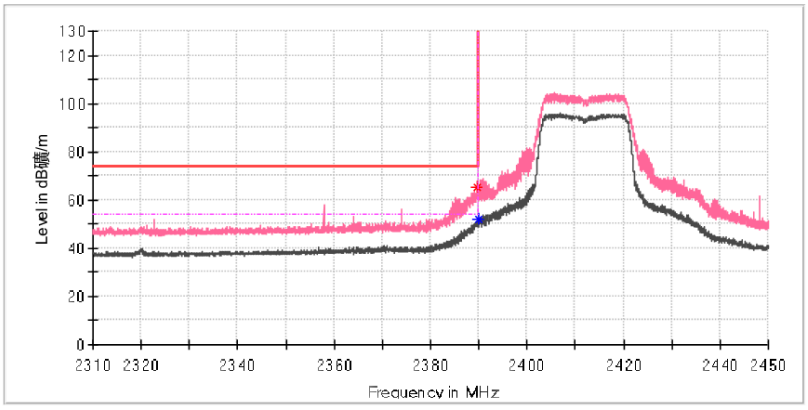
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2380.391177	63.77	---	74.00	10.23	100.0	H	6.0	7.0
2389.820588	---	47.27	54.00	6.73	100.0	H	0.0	7.0

Test 2 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_Low
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

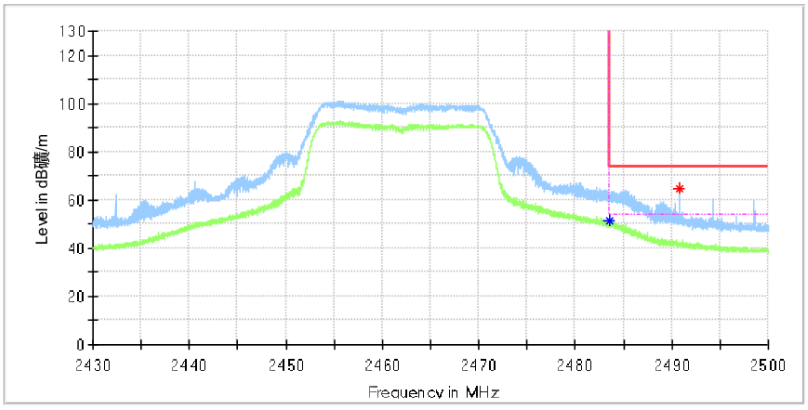
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.614706	65.13	---	74.00	8.87	100.0	V	194.0	7.0
2389.882353	---	52.05	54.00	1.95	100.0	V	186.0	7.0

Test 3 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

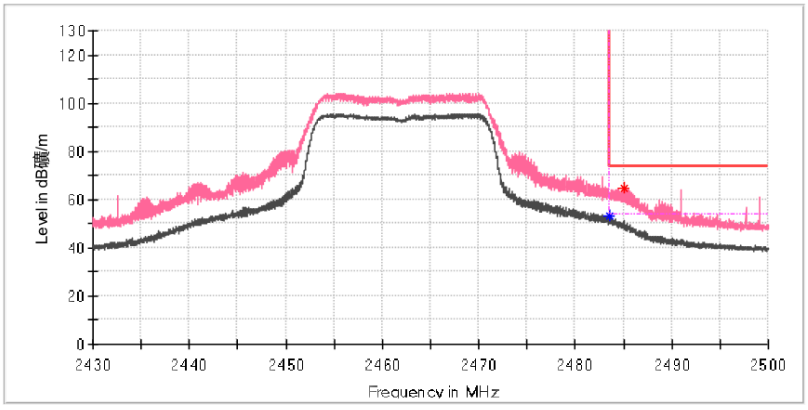
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.550000	---	51.34	54.00	2.66	100.0	H	56.0	7.4
2490.776471	64.67	---	74.00	9.33	100.0	H	42.0	7.4

Test 4 / 4

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Test Mode:	Wi-Fi 2.4G 11n_TX_High
Test Voltage::	120V/60Hz
Remark:	Temp 23 Humi:47%
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)
2483.601471	---	52.98	54.00	1.02	100.0	V	192.0	7.4
2484.991177	64.55	---	74.00	9.45	100.0	V	200.0	7.4

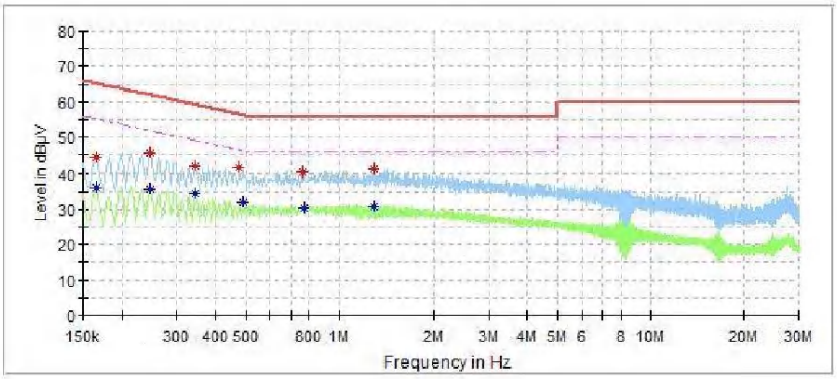
Appendix B.7: Test Results of Conducted Emission on AC Mains

Wi-Fi connecting mode

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	Wi-Fi connecting mode
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15C



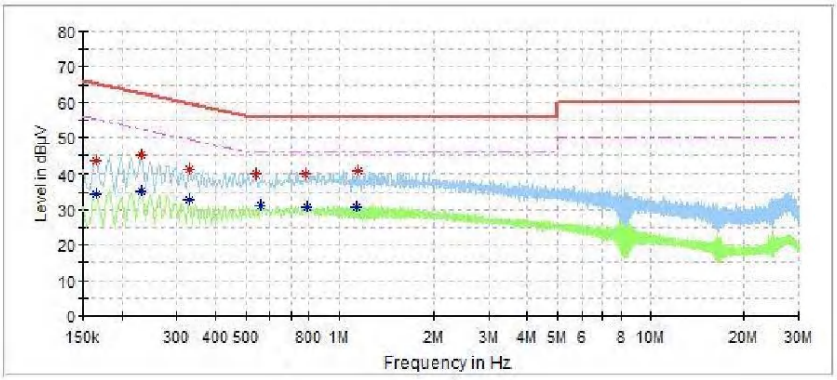
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	44.15	---	65.16	21.01	---	---	L1	9.6
0.166000	---	36.05	55.16	19.11	---	---	L1	9.6
0.246000	45.49	---	61.89	16.40	---	---	L1	9.6
0.246000	---	35.75	51.89	16.14	---	---	L1	9.6
0.346000	---	34.45	49.06	14.60	---	---	L1	9.7
0.346000	41.98	---	59.06	17.08	---	---	L1	9.7
0.478000	41.45	---	56.37	14.92	---	---	L1	9.7
0.494000	---	31.86	46.10	14.24	---	---	L1	9.7
0.764000	40.25	---	56.00	15.75	---	---	L1	9.7
0.772000	---	30.47	46.00	15.53	---	---	L1	9.7
1.300000	41.11	---	56.00	14.89	---	---	L1	9.7
1.300000	---	30.78	46.00	15.22	---	---	L1	9.7

Test Report

EUT Information

EUT Name:	Smart Air Purifier
Model:	VAP1
Order No.:	168148278(70)
Test Mode:	Wi-Fi connecting mode
Test Voltage:	AC 120V/60Hz
Test By:	Tom Guo
Review By:	Gary Chen
Remark:	FCC Part 15C



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.166000	43.67	---	65.16	21.48	---	---	N	9.6
0.166000	---	34.64	55.16	20.52	---	---	N	9.6
0.230000	45.09	---	62.45	17.36	---	---	N	9.6
0.230000	---	35.15	52.45	17.30	---	---	N	9.6
0.330000	41.09	---	59.45	18.36	---	---	N	9.7
0.330000	---	32.81	49.45	16.64	---	---	N	9.7
0.540000	39.77	---	56.00	16.23	---	---	N	9.7
0.560000	---	31.31	46.00	14.69	---	---	N	9.7
0.780000	39.59	---	56.00	16.41	---	---	N	9.7
0.788000	---	30.73	46.00	15.27	---	---	N	9.7
1.136000	---	30.73	46.00	15.27	---	---	N	9.7
1.152000	40.71	---	56.00	15.29	---	---	N	9.7