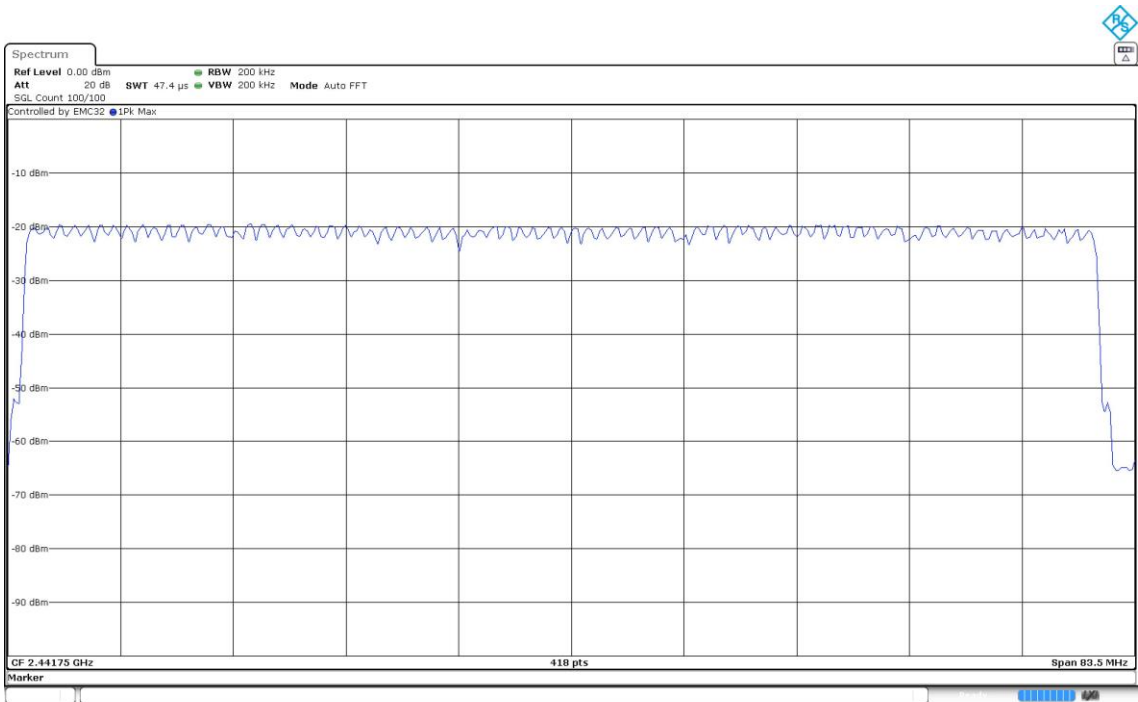
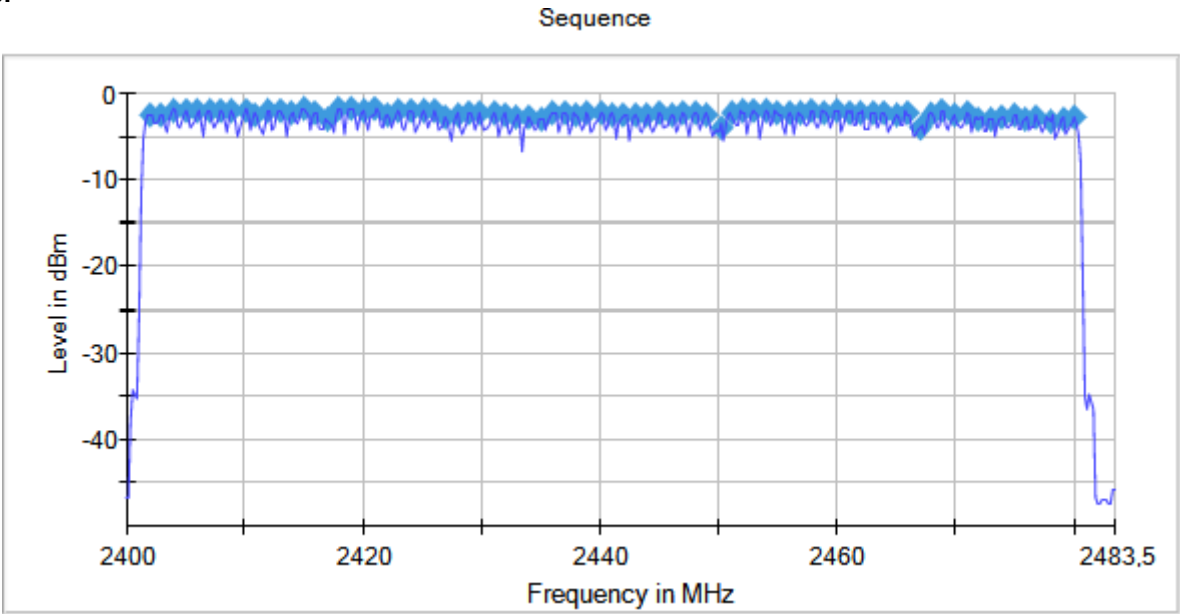


Attachments

Equipment Type = Frequency Hopping Spread Spectrum systems (DSS) Active Port = 3
Modulation = BT (8DPSK 3-DH5)

Images:



RSS-247 5.4 / FCC 15.247 (b) Maximum Peak Conducted Output Power

Limits

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels: 1 watt (30 dBm). The e.i.r.p. shall not exceed 4 W (RSS-247).

Modulation: BT (GFSK 1-DH5)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Peak Power (dBm)	E.I.R.P. (dBm)
[2400, 2483.5]	Frequency Hopping Spread Spectrum systems (DSS)	2402.00000	3	-1.6110	-1.5110
		2441.00000		-1.9700	-1.8700
		2480.00000		-2.3430	-2.2430

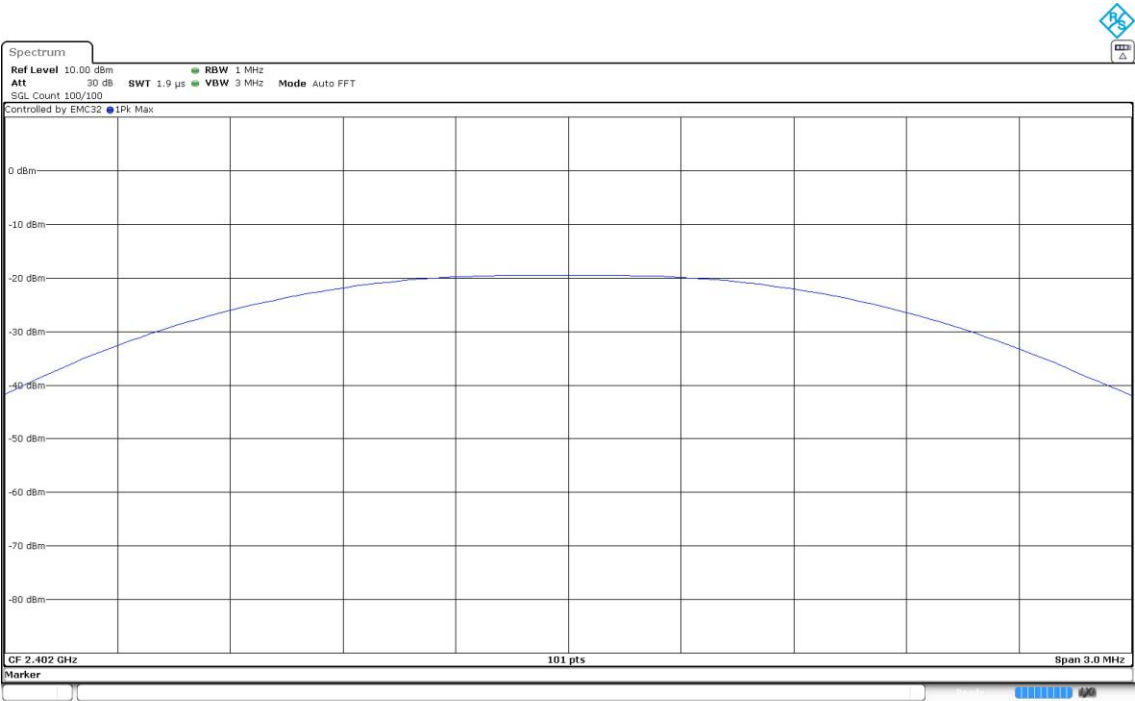
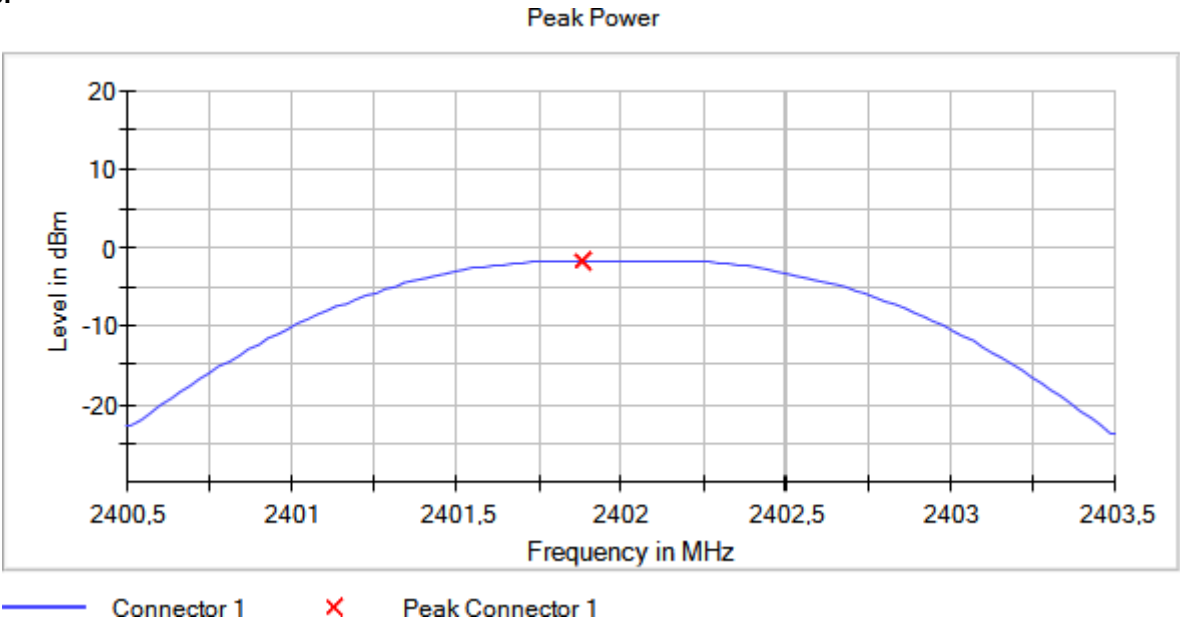
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)
Frequency MHz = 2402.00000 Active Port = 3
Modulation = BT (GFSK 1-DH5)

Images:



Operation Band MHz = [2400,
2483.5]

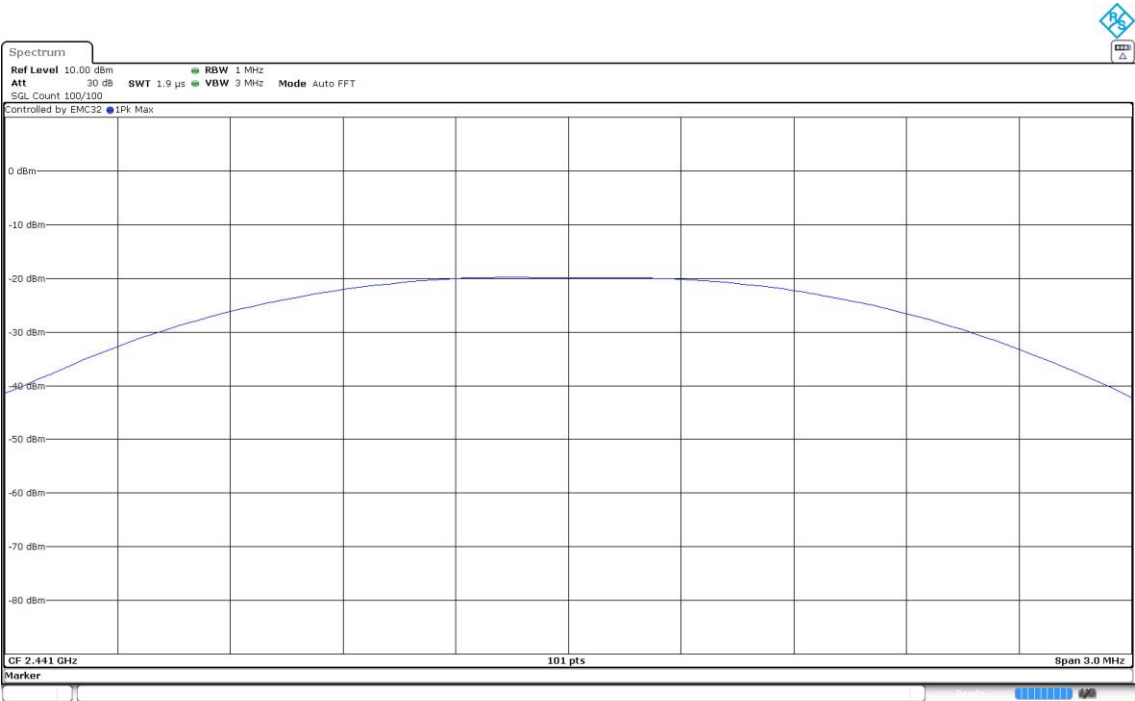
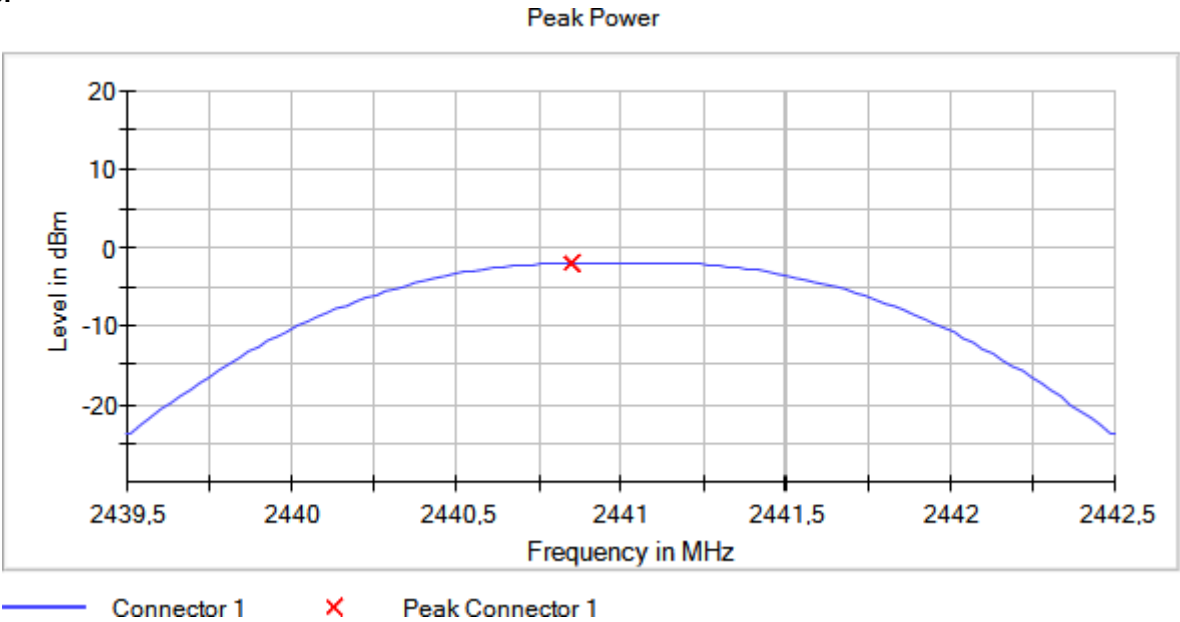
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 2441.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:



Operation Band MHz = [2400,
2483.5]

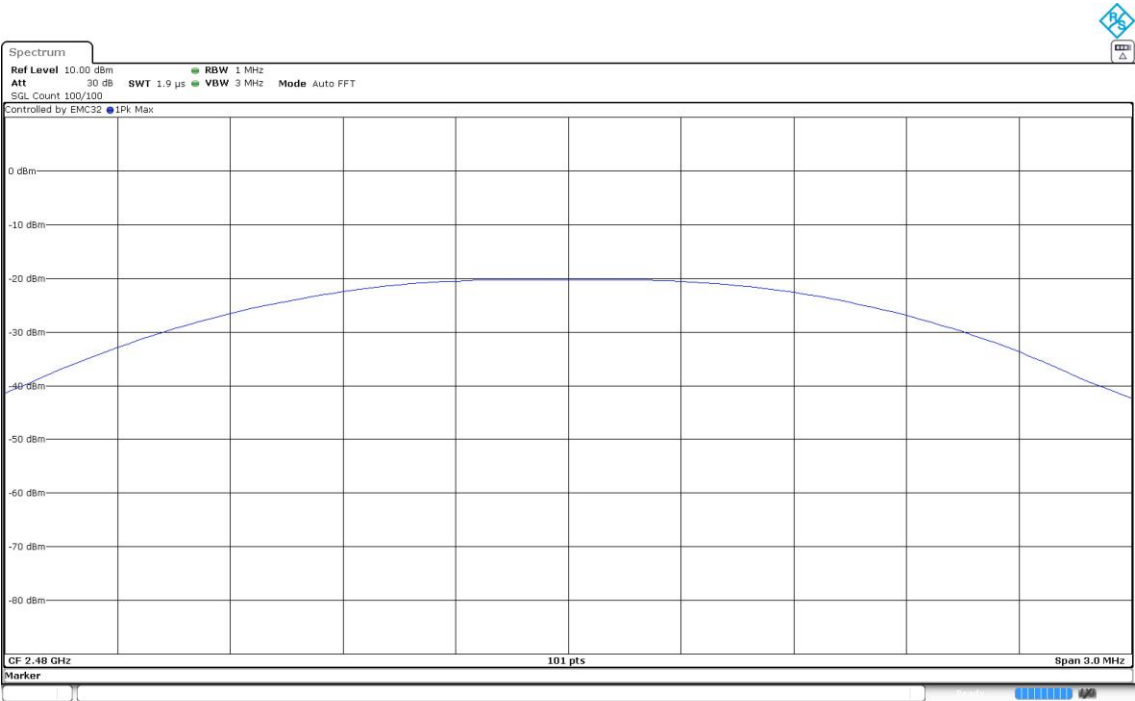
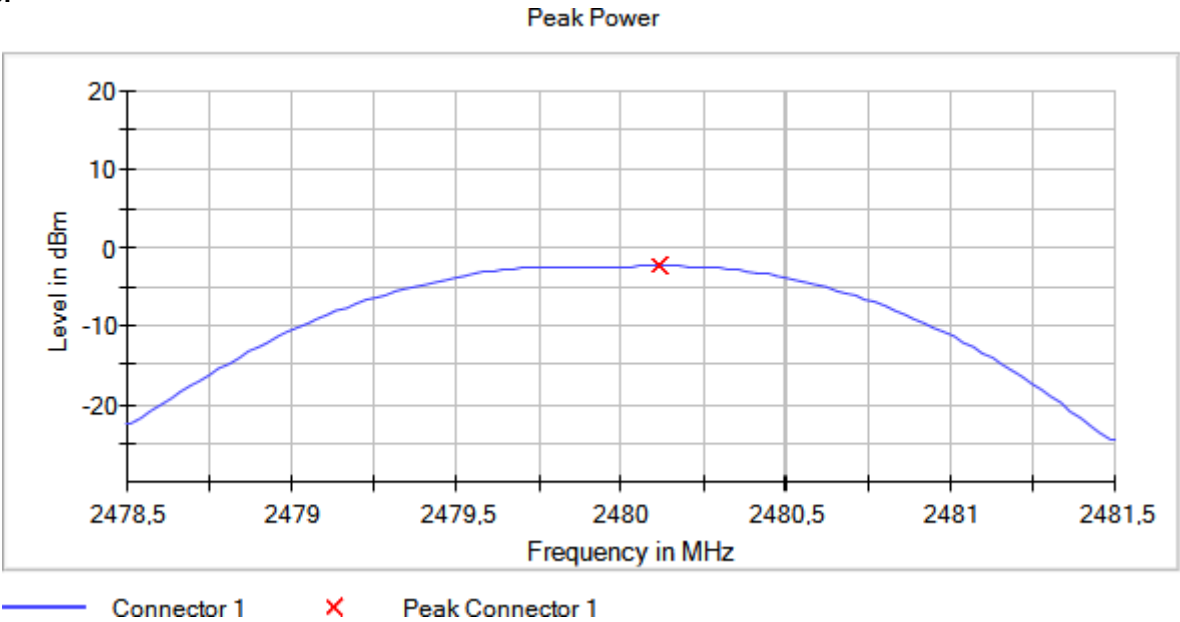
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:



Modulation: BT (PI/4 DQPSK 2-DH5)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Peak Power (dBm)	E.I.R.P. (dBm)
[2400, 2483.5]	Frequency Hopping Spread Spectrum systems (DSS)	2402.00000	3	-0.3320	-0.2320
		2441.00000		-0.7520	-0.6520
		2480.00000		-1.0550	-0.9550

Verdict

Pass

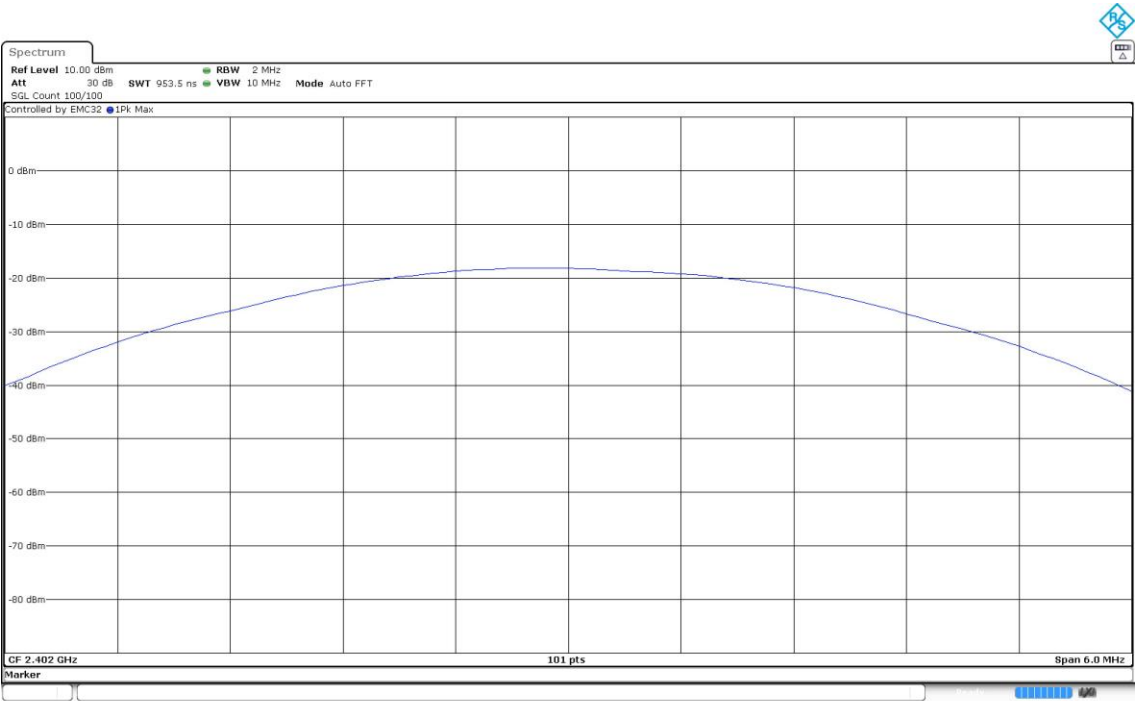
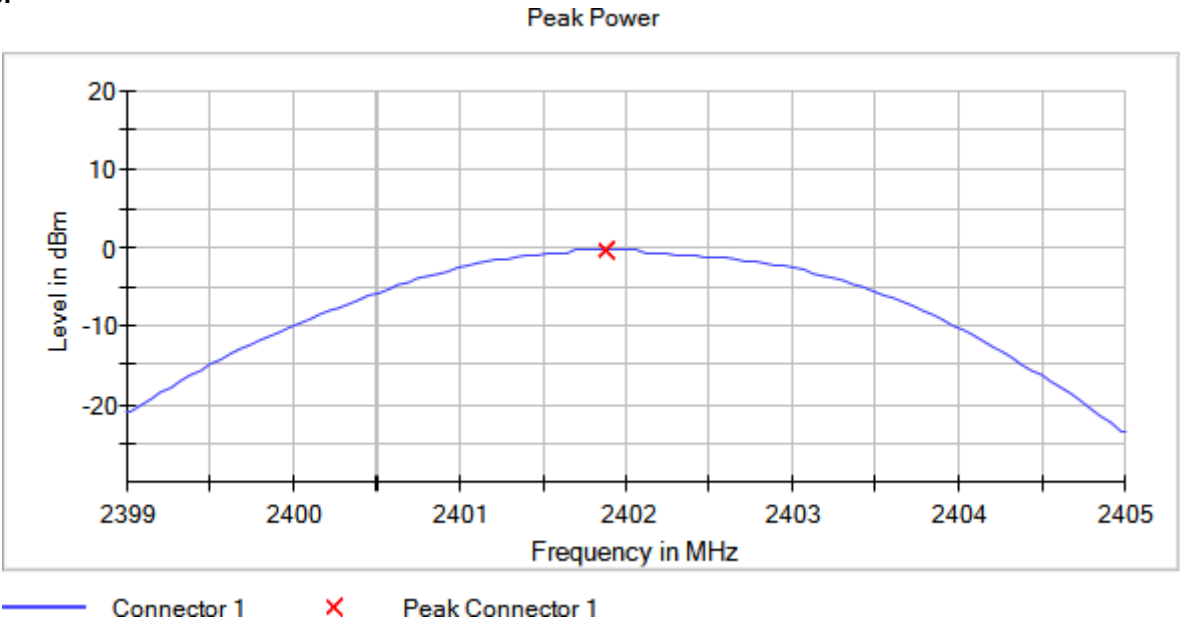
Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 2402.00000 Active Port = 3

Modulation = BT (PI/4 DQPSK 2-DH5)

Images:

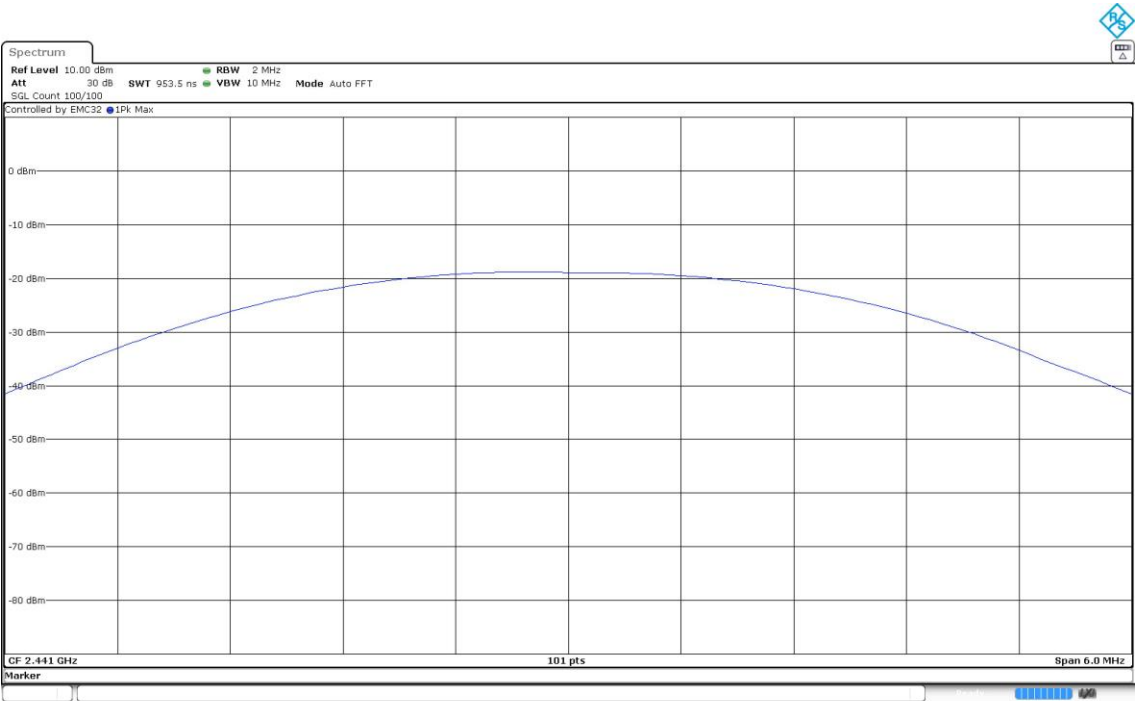
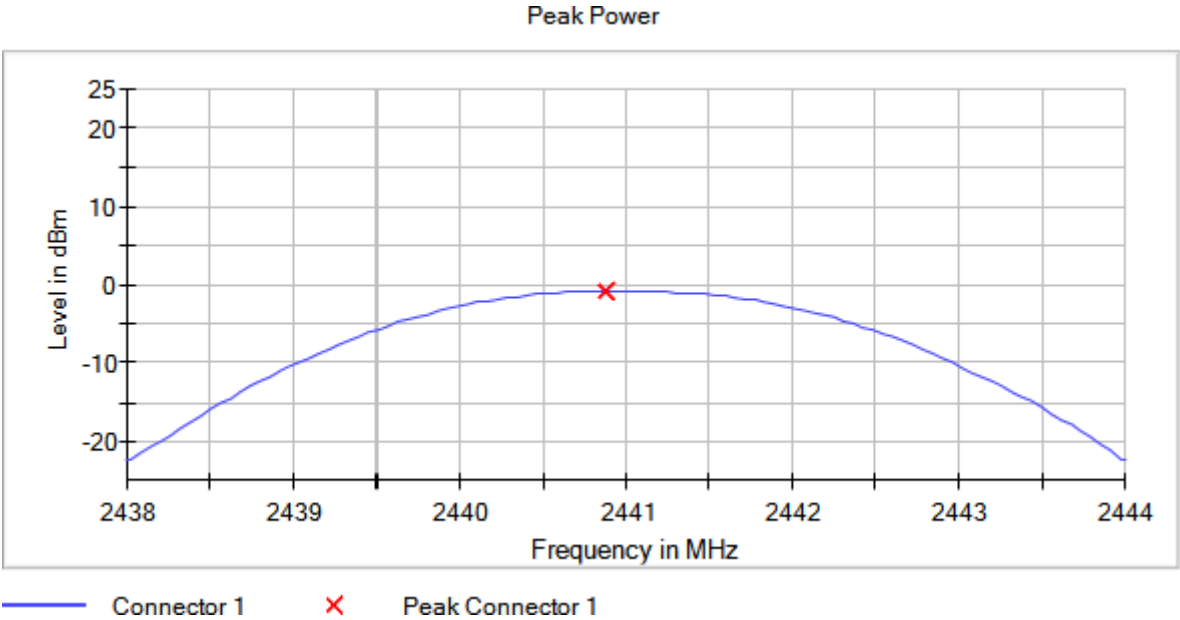


Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 2441.00000 Active Port = 3

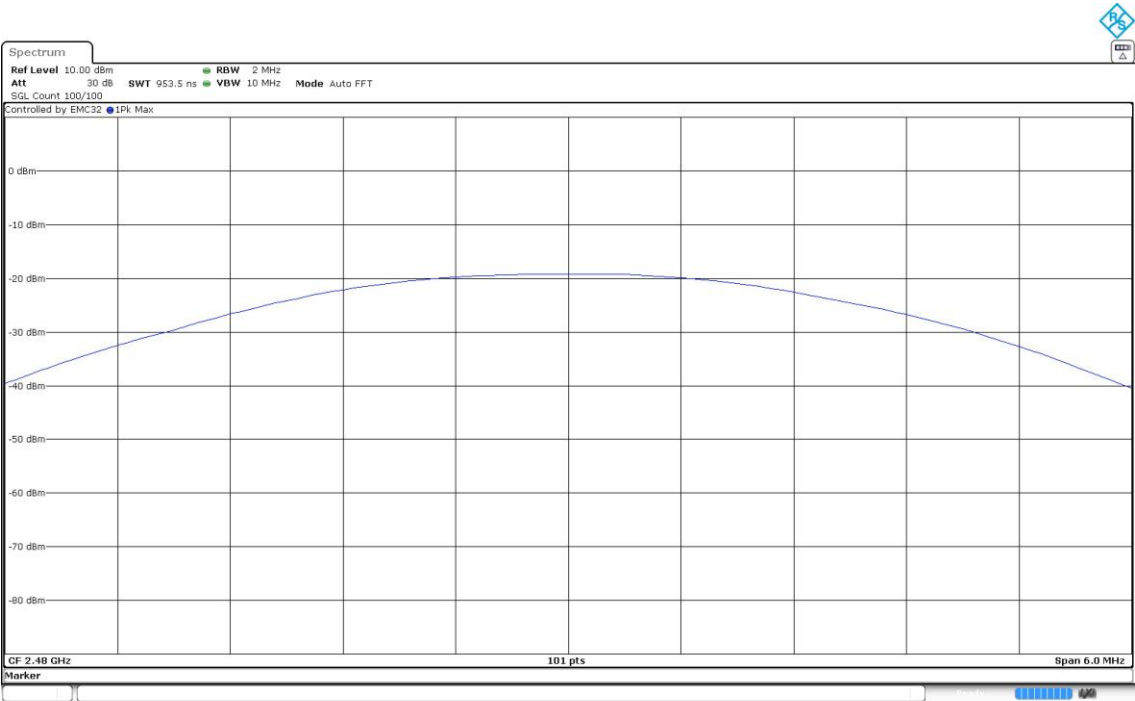
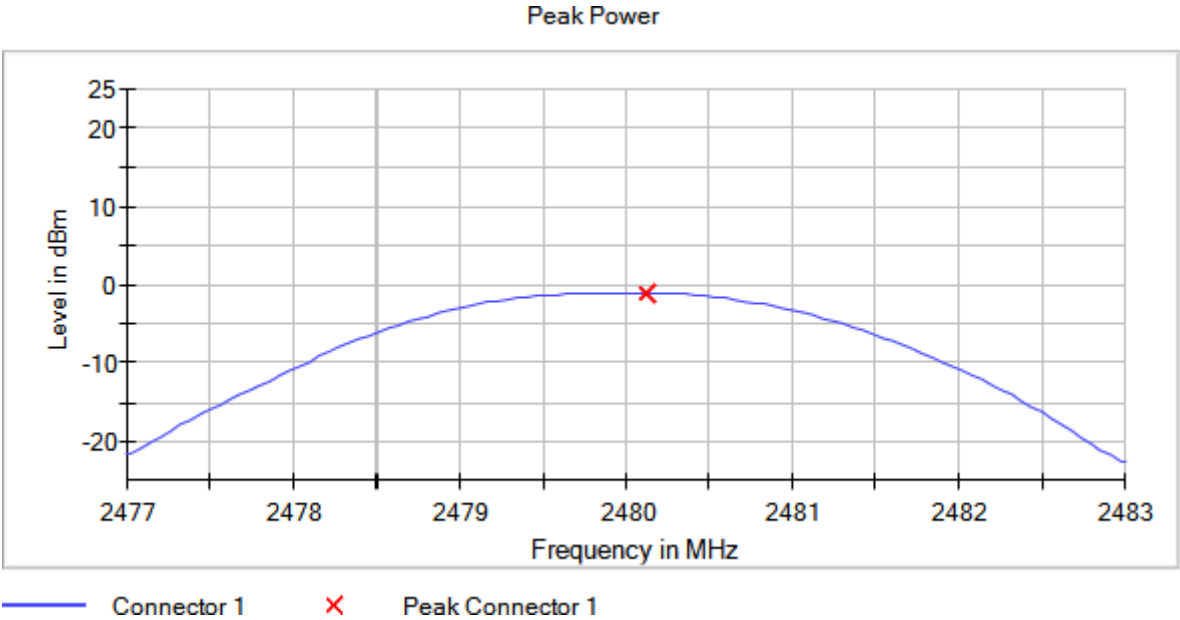
Modulation = BT (PI/4 DQPSK 2-DH5)

Images:



Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)
Frequency MHz = 2480.00000 Active Port = 3
Modulation = BT (PI/4 DQPSK 2-DH5)

Images:



Modulation: BT (8DPSK 3-DH5)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Peak Power (dBm)	E.I.R.P. (dBm)
[2400, 2483.5]	Frequency Hopping Spread Spectrum systems (DSS)	2402.00000	3	-0.3590	-0.2590
		2441.00000		-0.6960	-0.5960
		2480.00000		-1.0010	-0.9010

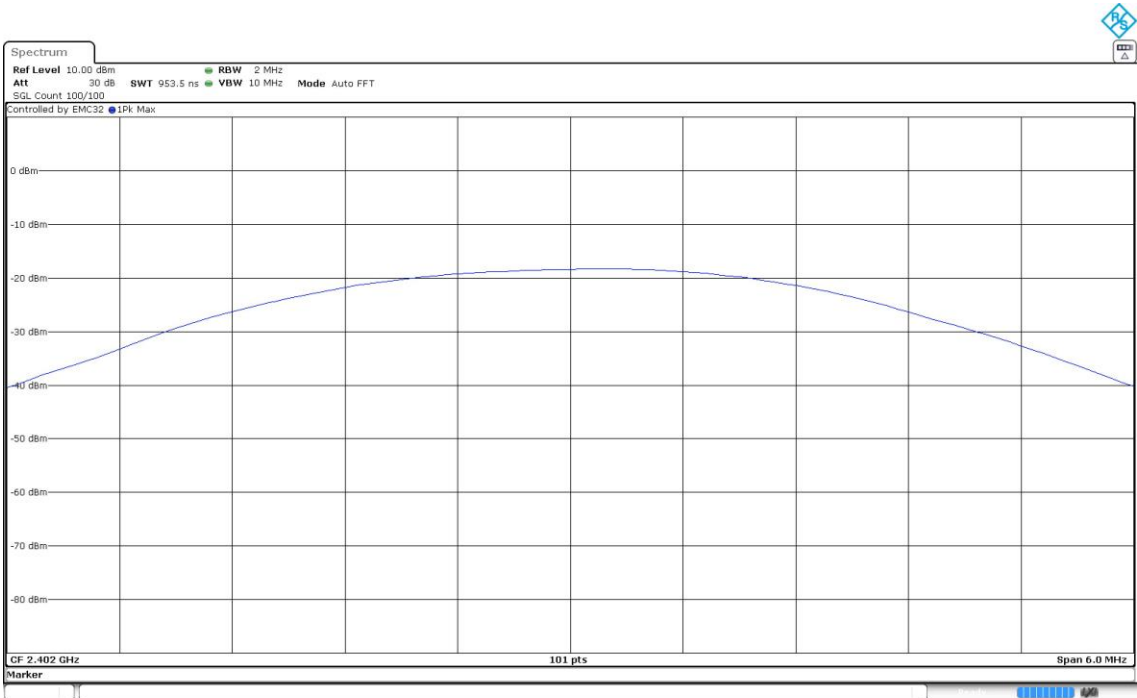
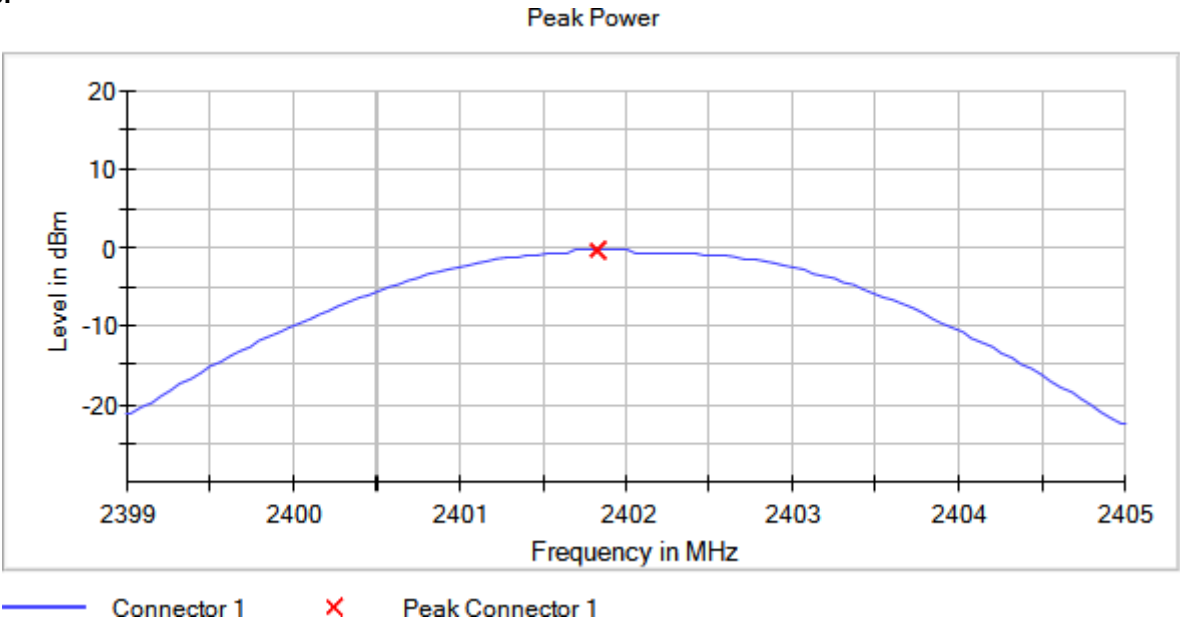
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)
Frequency MHz = 2402.00000 Active Port = 3
Modulation = BT (8DPSK 3-DH5)

Images:



Operation Band MHz = [2400,
2483.5]

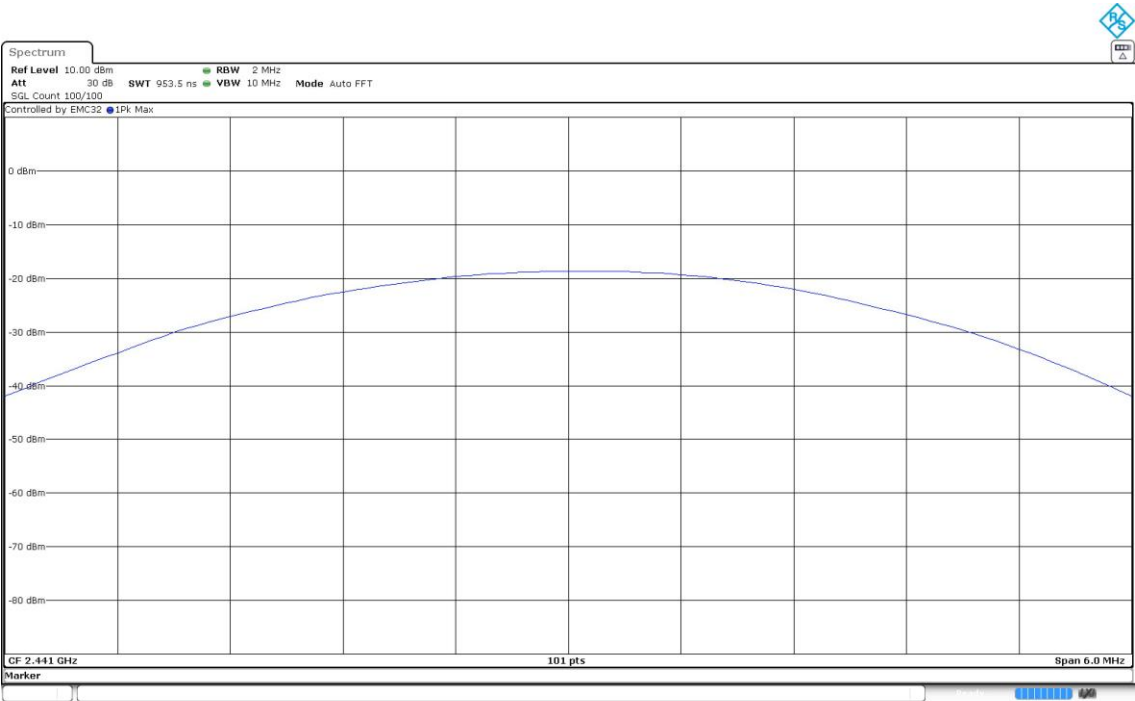
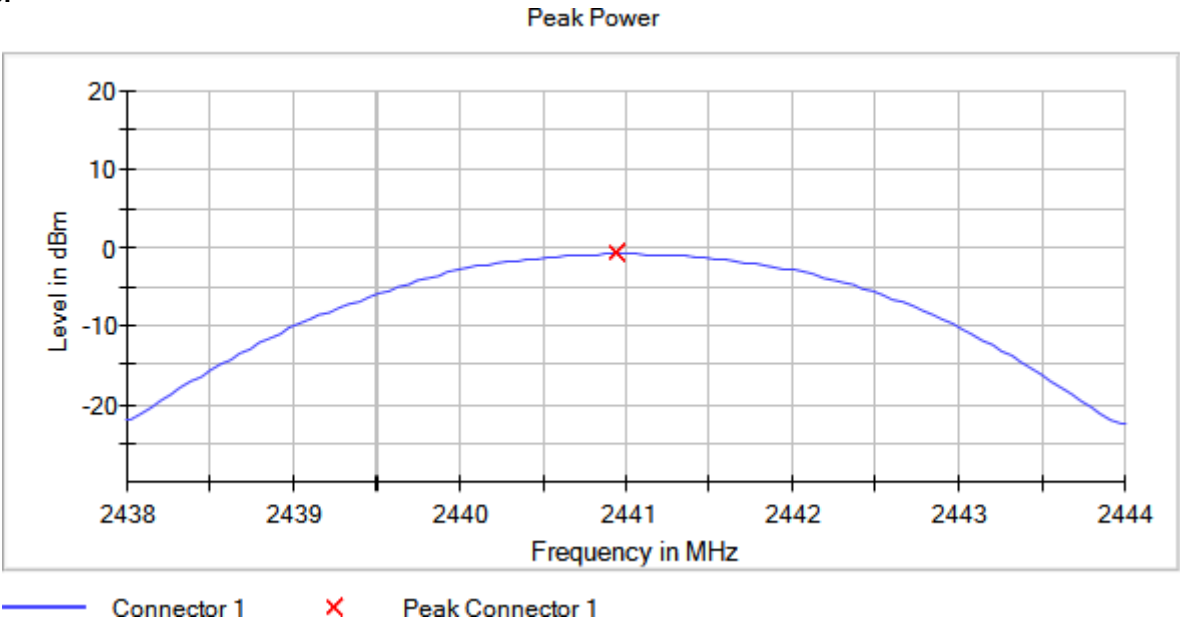
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 2441.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:



Operation Band MHz = [2400,
2483.5]

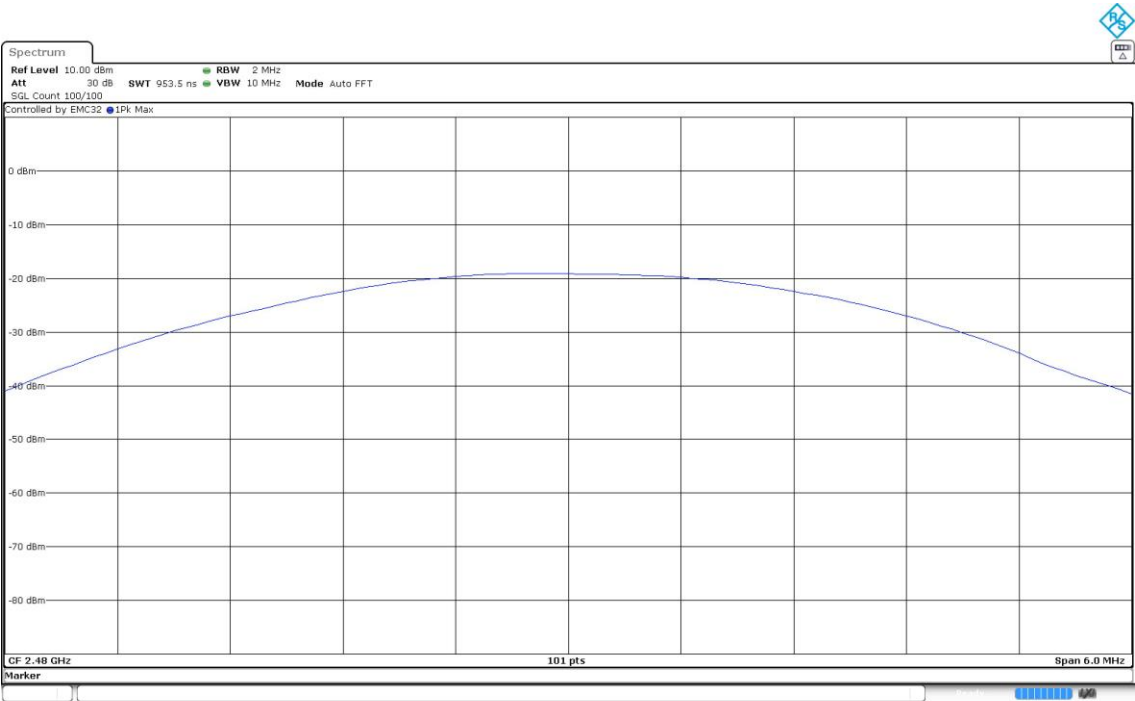
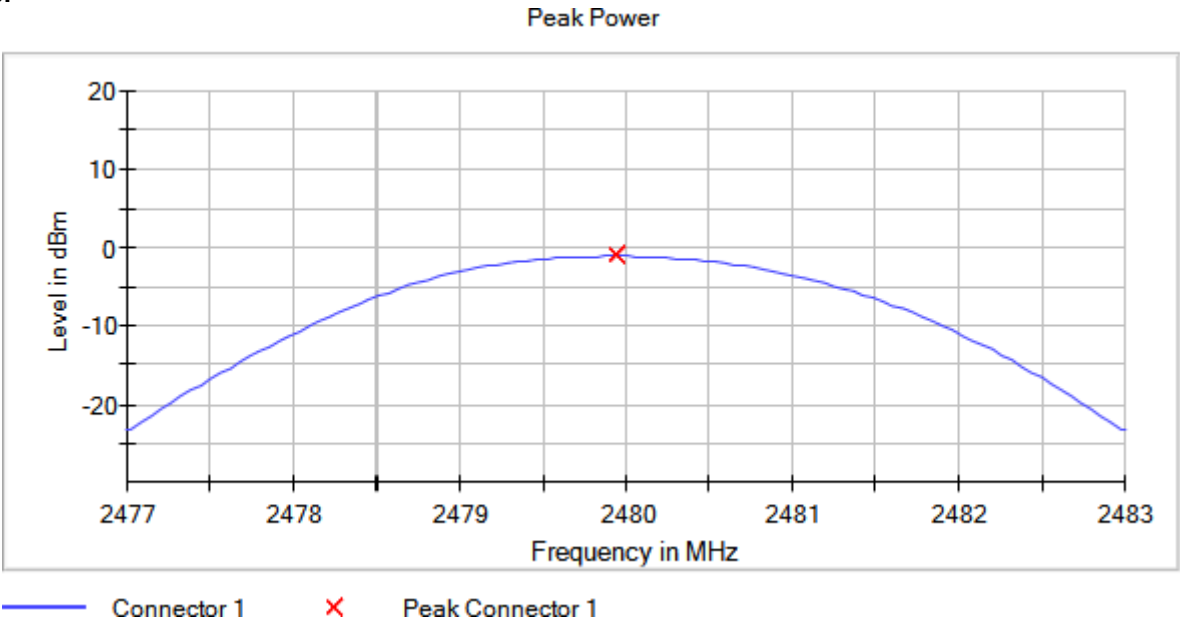
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:



RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter)

Limits

In any 100 kHz bandwidths outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Modulation: BT (GFSK 1-DH5)

Results

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

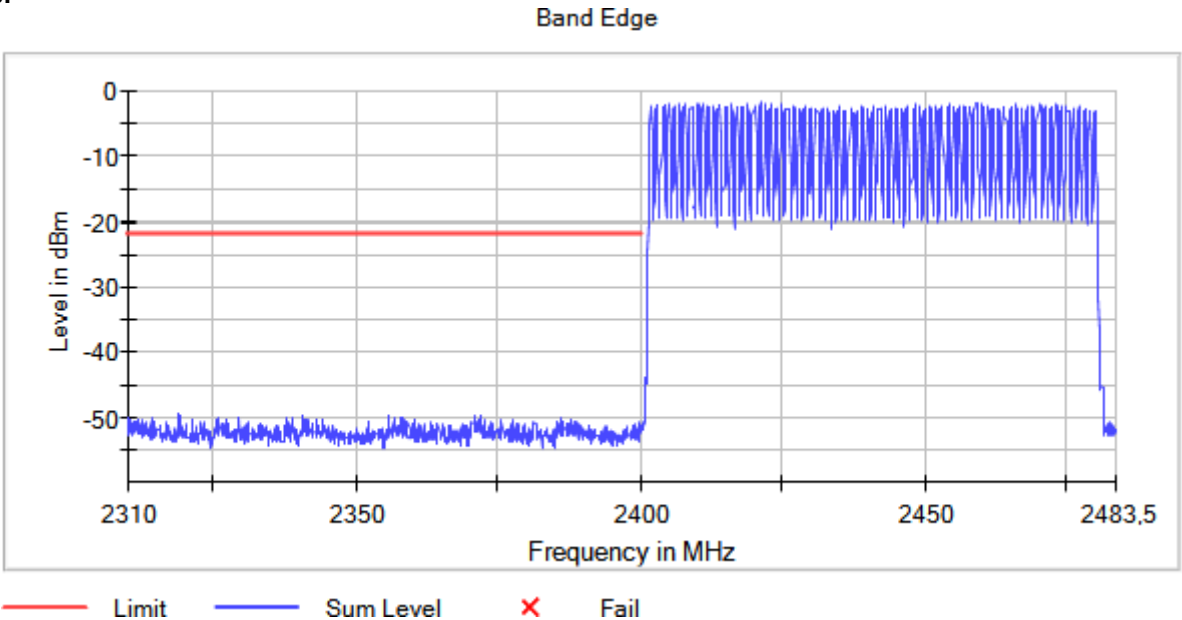
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 0.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	121 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

Operation Band MHz = [2400,
2483.5]

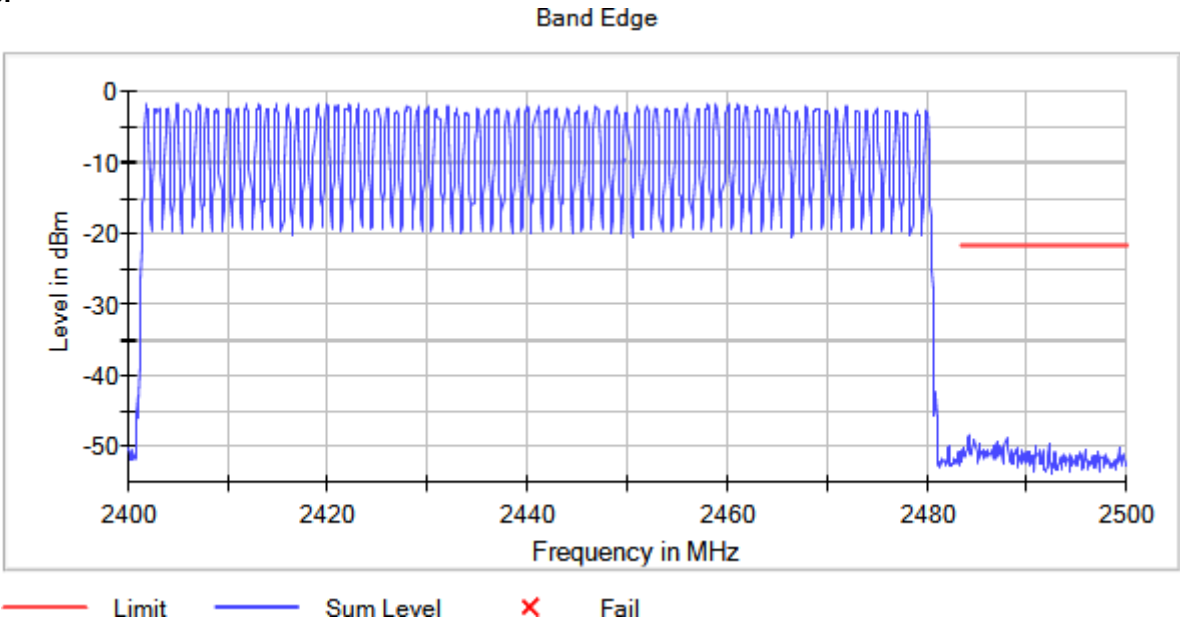
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 0.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	121 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

Operation Band MHz = [2400, 2483.5]

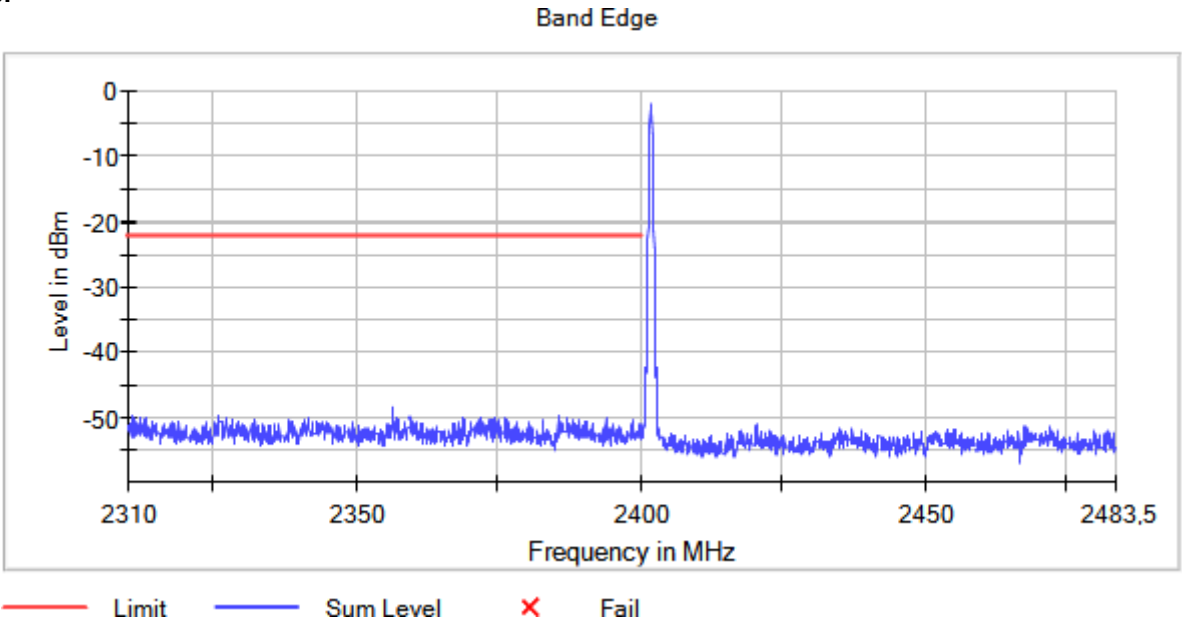
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 2402.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	121 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

Operation Band MHz = [2400,
2483.5]

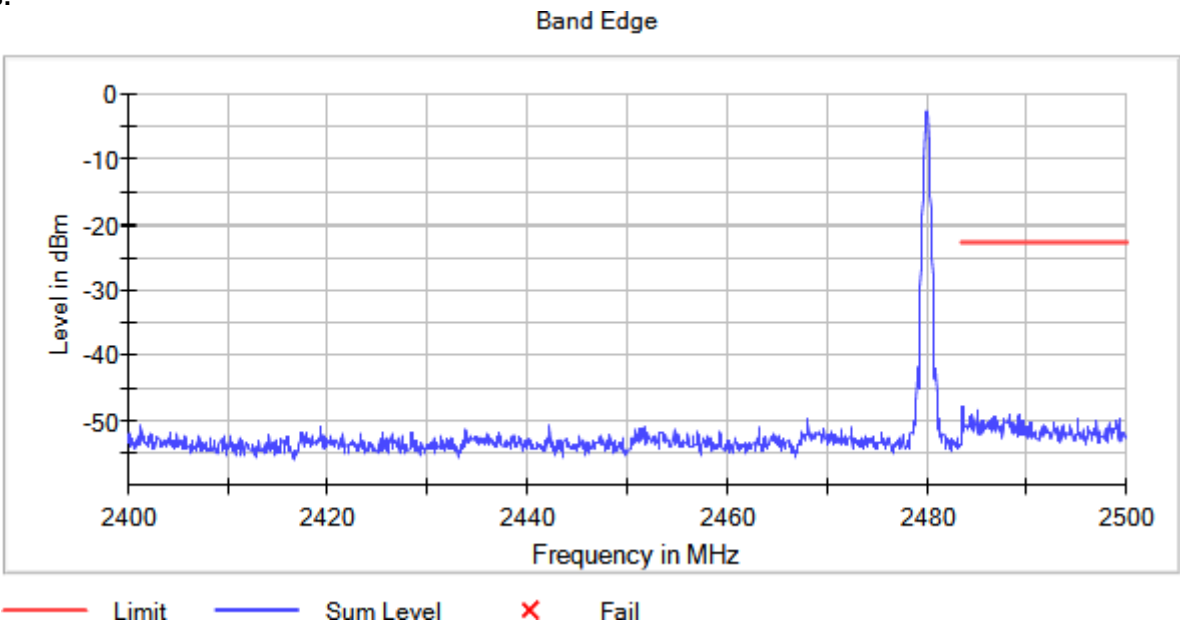
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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	121 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.36 dB	0.50 dB

Modulation: BT (PI/4 DQPSK 2-DH5)

Results

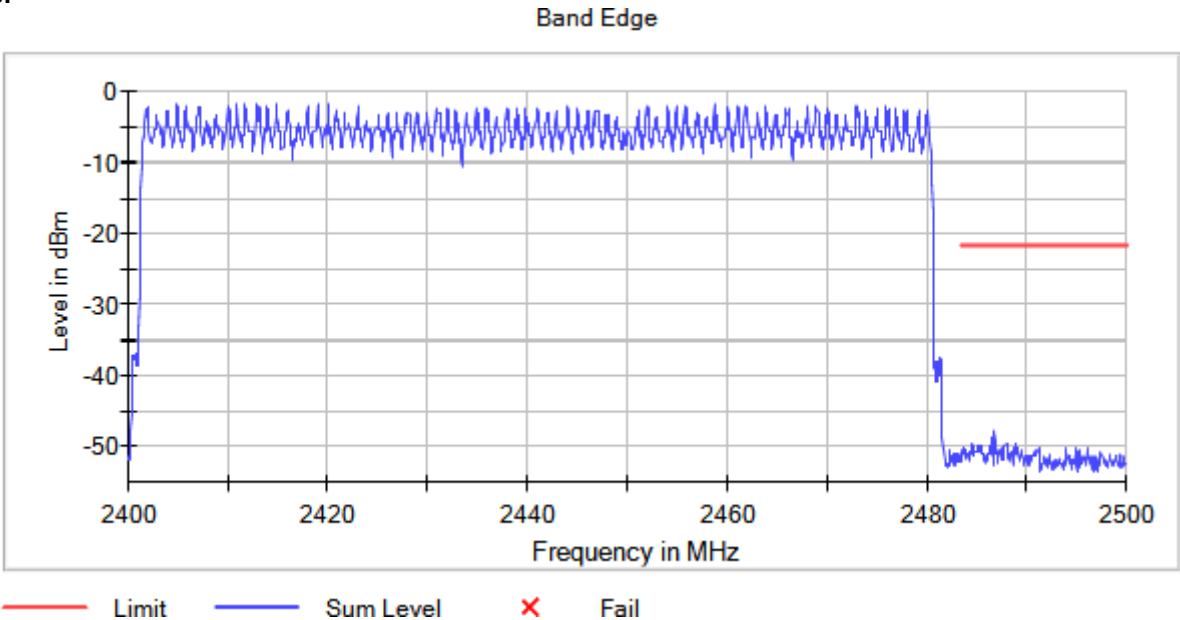
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)
Frequency MHz = 0.00000 Active Port = 3
Modulation = BT (PI/4 DQPSK 2-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

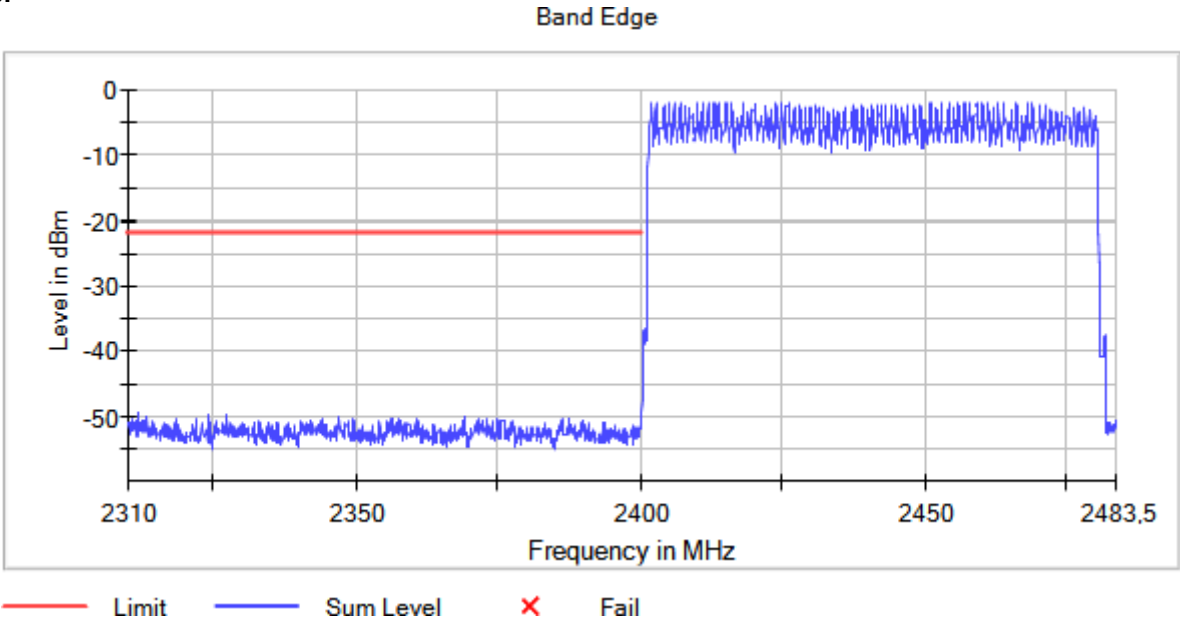
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	143 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 0.00000 Active Port = 3

Modulation = BT (PI/4 DQPSK 2-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

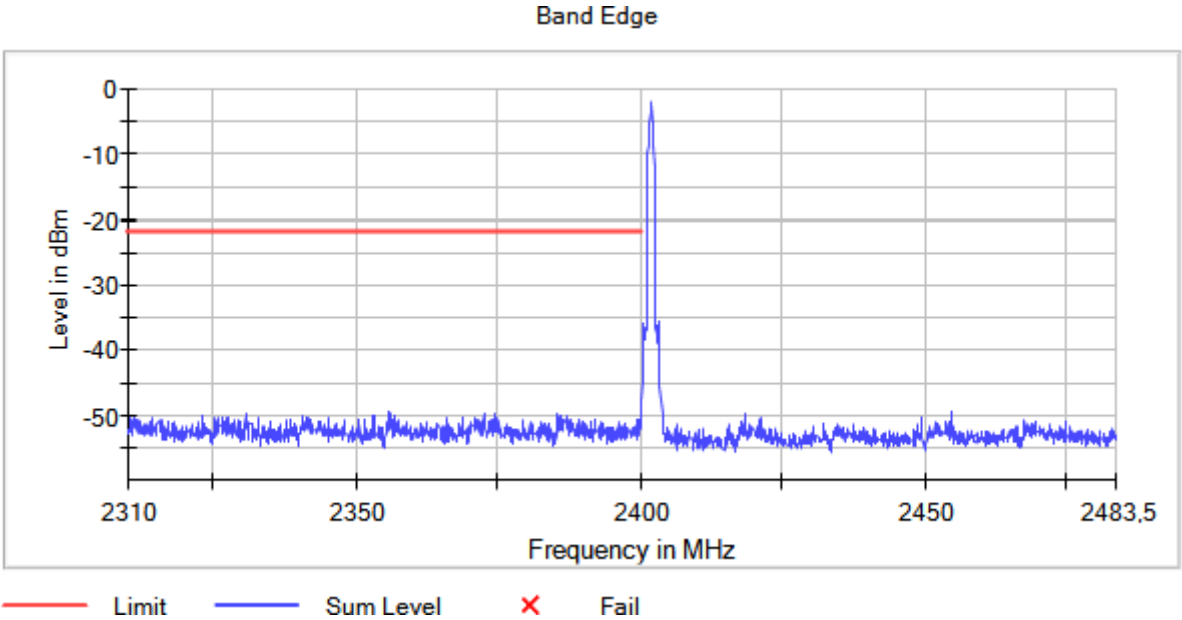
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	143 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 2402.00000 Active Port = 3

Modulation = BT (PI/4 DQPSK 2-DH5)

Images:



Tables:
Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

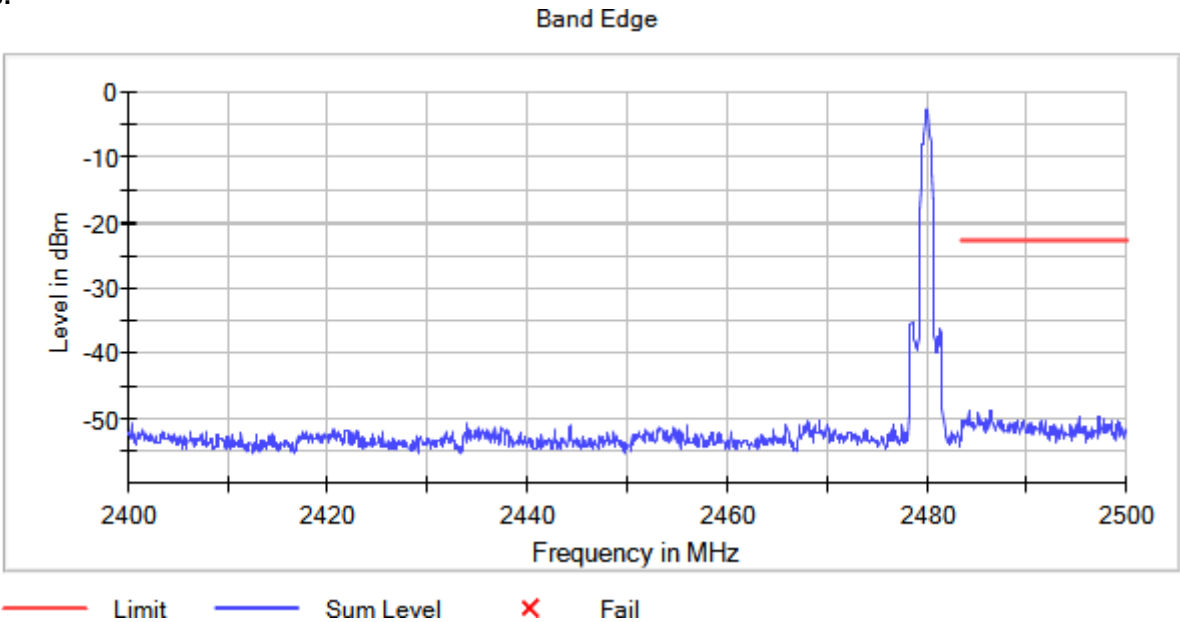
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 µs	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	143 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Operation Band MHz = [2400, 2483.5] Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 2480.00000 Active Port = 3

Modulation = BT (PI/4 DQPSK 2-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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	143 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Modulation: BT (8DPSK 3-DH5)

Results

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

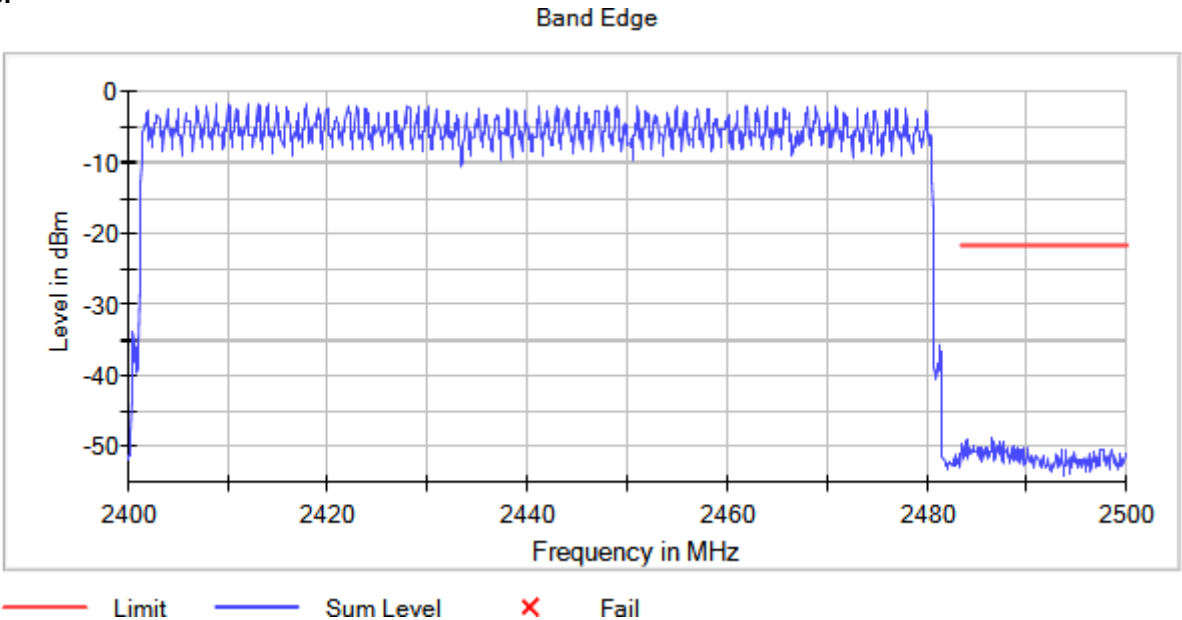
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 0.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
Sweeptime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	140 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Operation Band MHz = [2400, 2483.5]

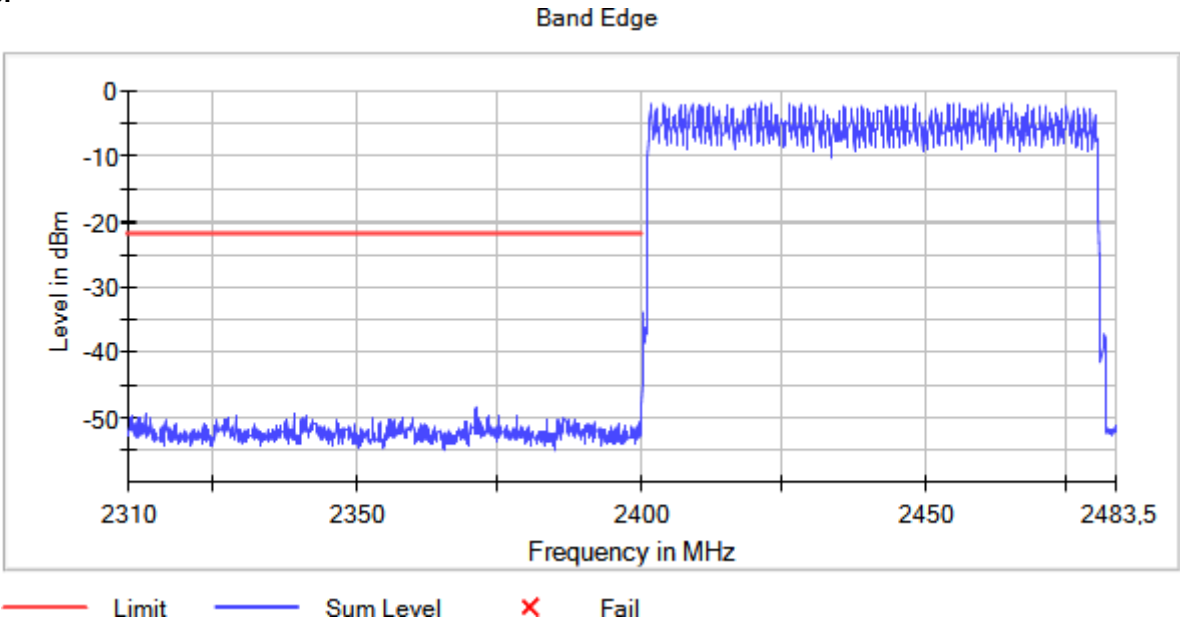
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 0.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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	140 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Operation Band MHz = [2400, 2483.5]

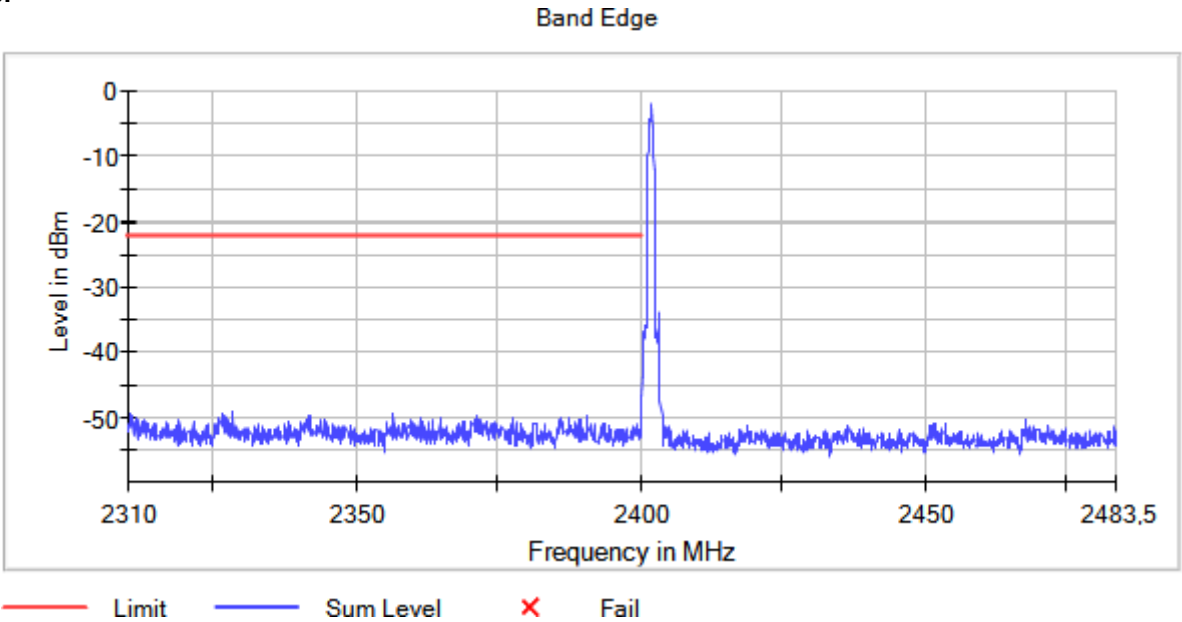
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

Frequency MHz = 2402.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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	140 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Operation Band MHz = [2400,
2483.5]

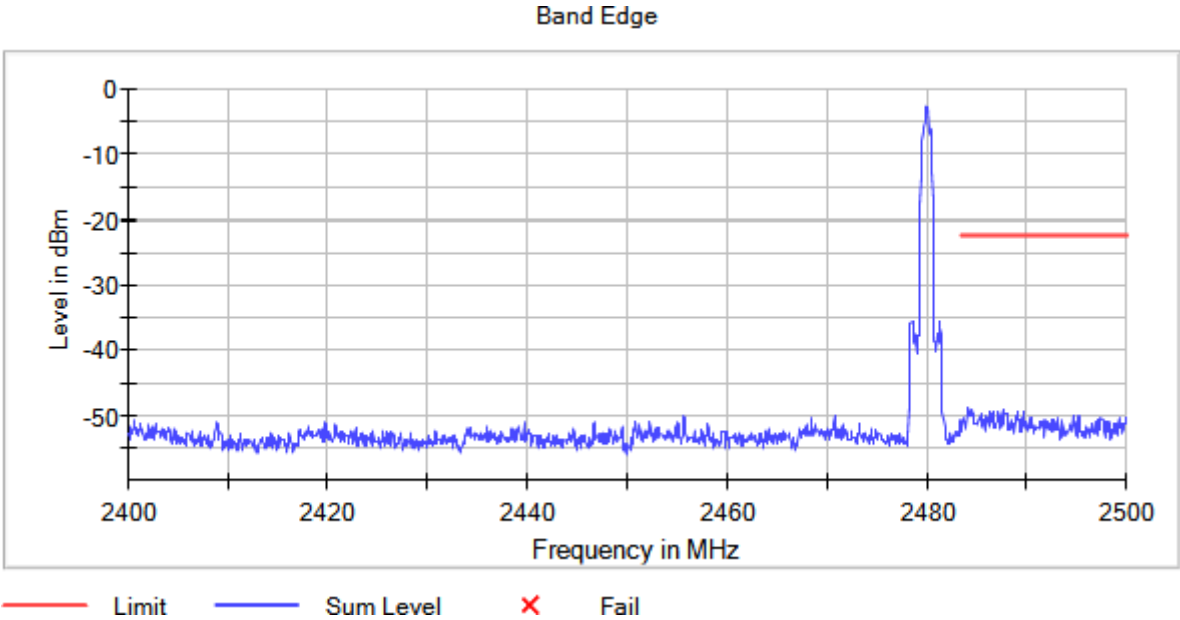
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:



Tables:

Spectrum Analyzer Parameters 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 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
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Spectrum Analyzer Parameters 2

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 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	140 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

RSS-247 5.5 / FCC 15.247 (d) Emission limitations radiated (Transmitter)

Limits

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)/RSS-Gen):

Frequency Range (MHz)	Field strength ($\mu\text{V/m}$)	Field strength ($\text{dB}\mu\text{V/m}$)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	30
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function.

RSS-247: Attenuation below the general field strength limits specified in RSS-Gen is not required.

Frequency range tested for Radiated emissions:

Start frequency: no radiofrequency signal generated in the device found below 10th sub-harmonic, no further investigation required.

Stop frequency: it has been performed the radiated spurious emissions until 10th harmonic.

Modulation: BT (GFSK 1-DH5)

Results

Freq Rng (GHz)	Operation Band (MHz)	Equipment	Freq (MHz)	Port	Unwanted Freq (MHz)	Unwanted Lvl (dBµV/m)	Pol	Detector
[0.03, 1]	[2400, 2483.5]	Frequency Hopping Spread Spectrum systems (DSS)	2402.00000	3	79.809	22.83	V	QP
					79.809	25.87	V	PK
					506.803	25.04	H	PK
					506.803	19.20	H	QP
					875.015	35.81	H	PK
					875.015	32.83	H	QP

Modulation: BT (Pi/4 DQPSK 2-DH5)

Results

No spurious frequencies detected at less than 20 dB below the limit.

Modulation: BT (8DPSK 3-DH5)

Results

No spurious frequencies detected at less than 20 dB below the limit.

Verdict

Pass

Attachments

Frequency Range GHz = [0.03, 1]

Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

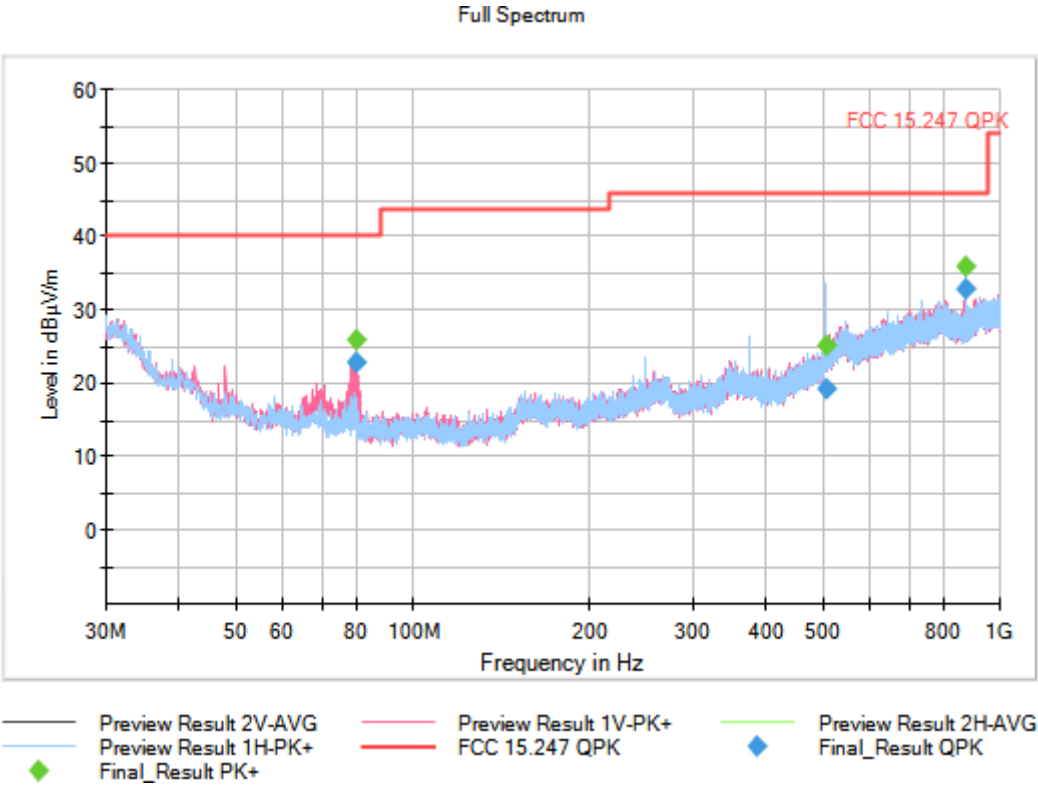
Active Port = 3

Operation Band MHz = [2400, 2483.5]

Frequency MHz = The spurious frequencies detected do not depend on the operating channel.

Modulation = The spurious frequencies detected do not depend on the modulation.

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	48,5 kHz	PK+	100 kHz	1 s	0 dB

Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

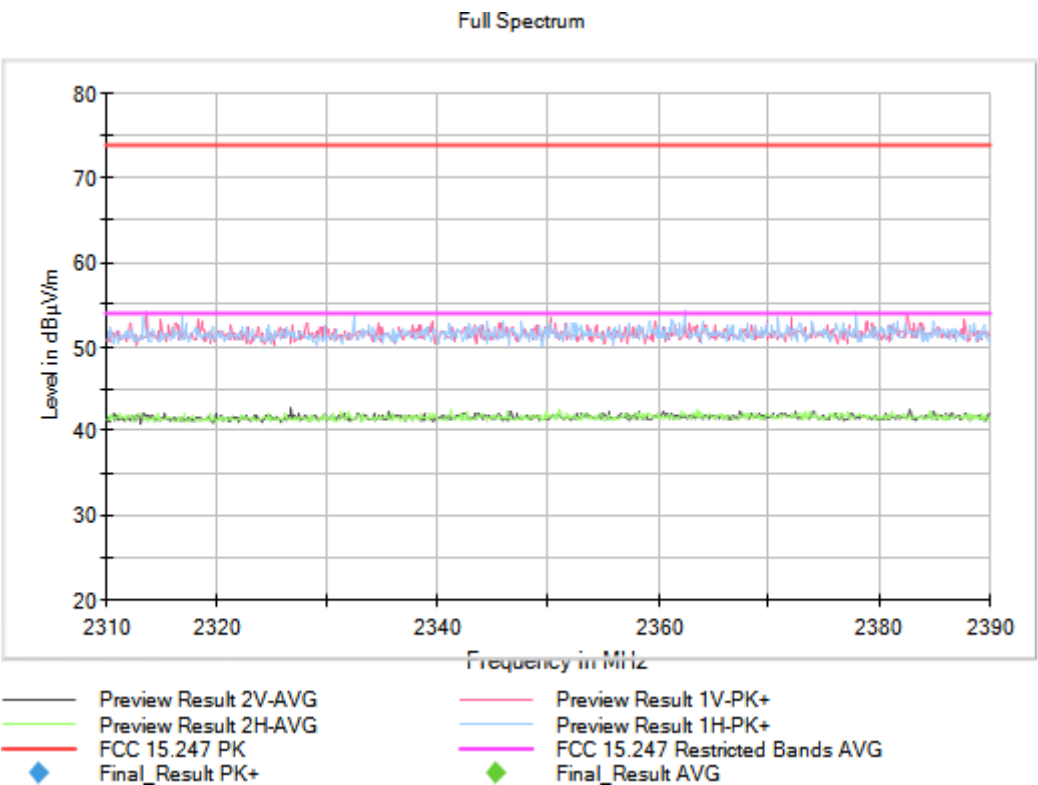
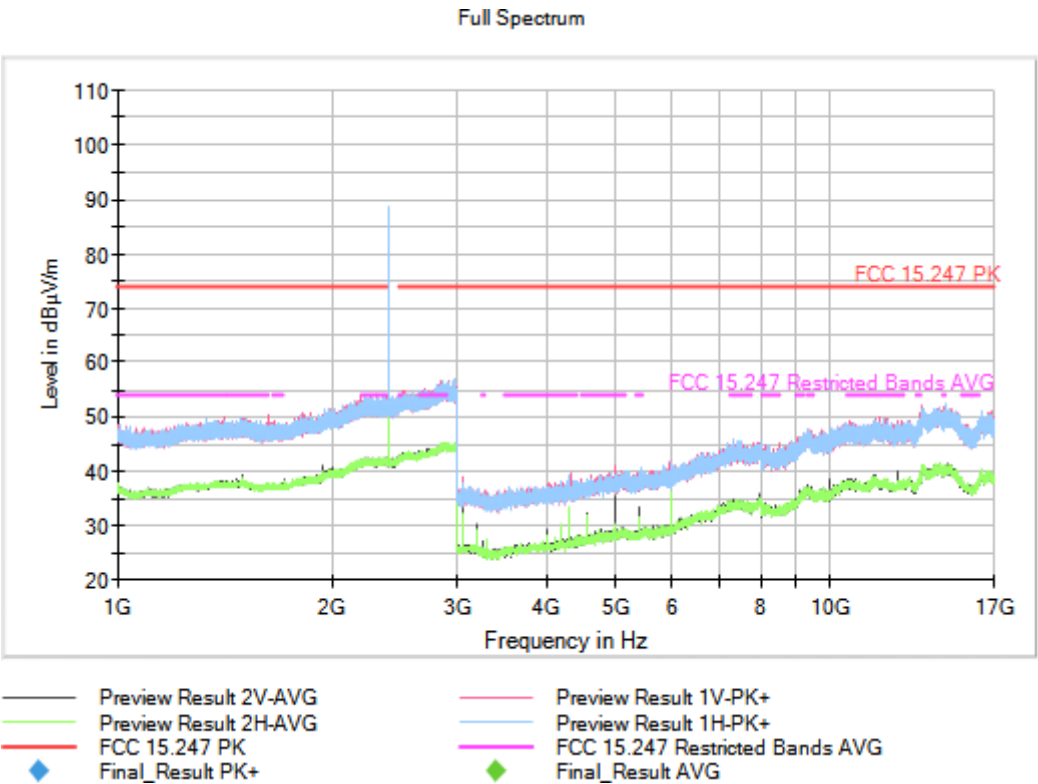
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

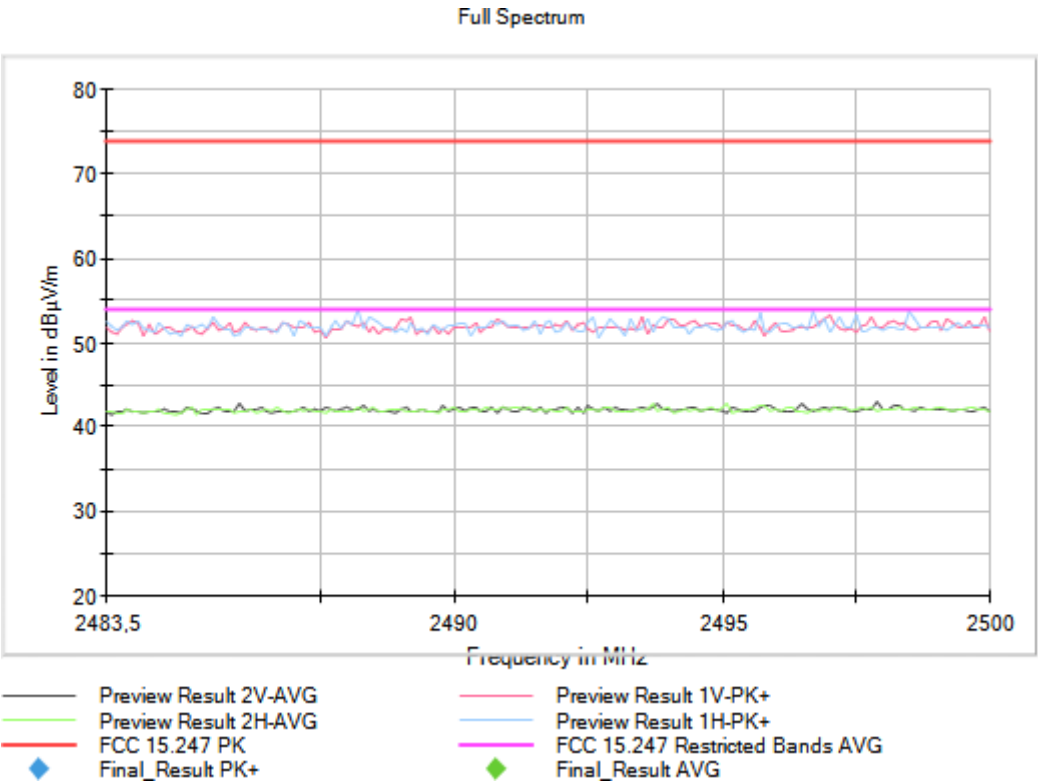
Frequency MHz = 2402.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

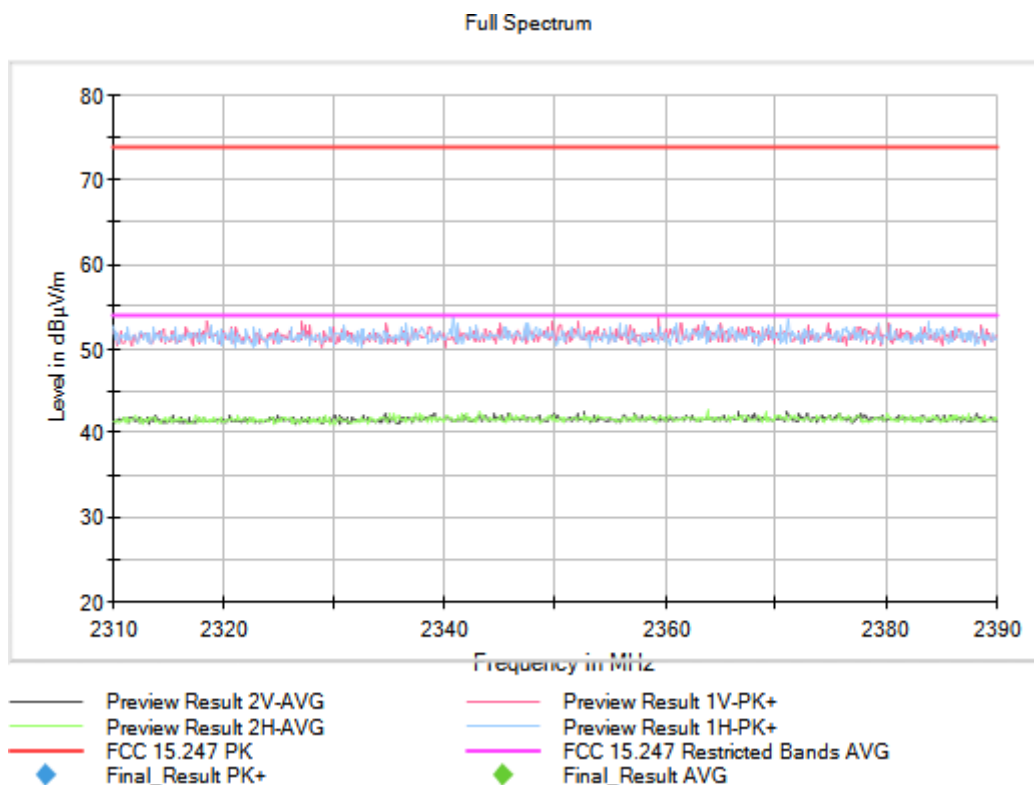
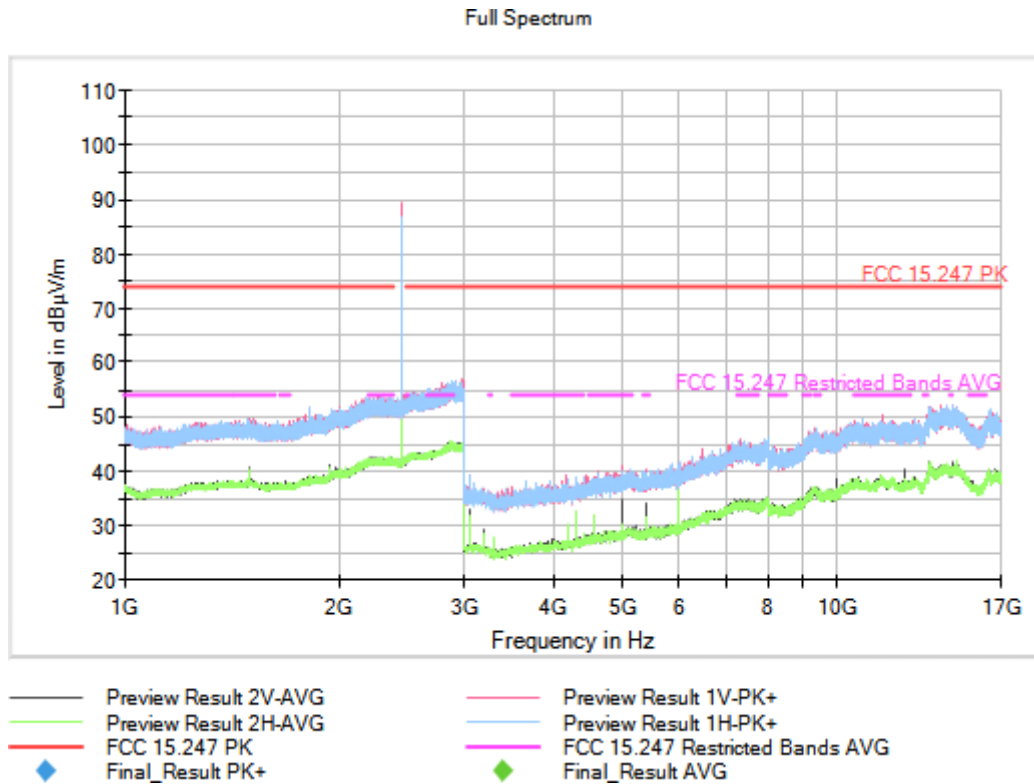
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

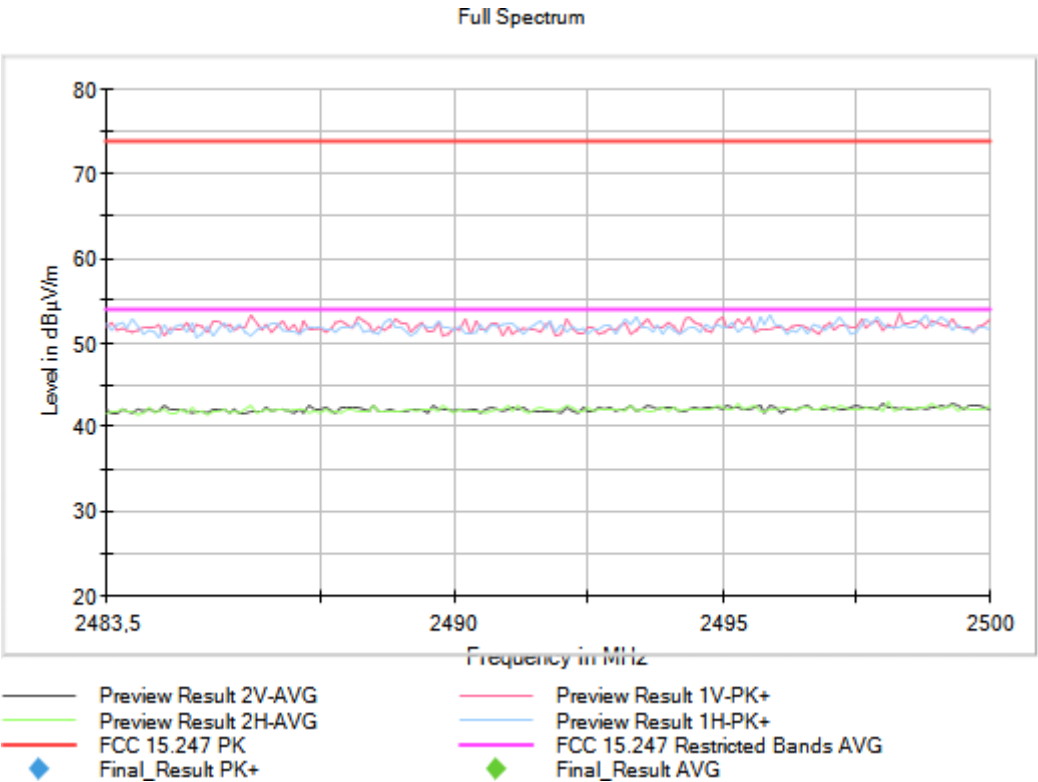
Frequency MHz = 2441.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

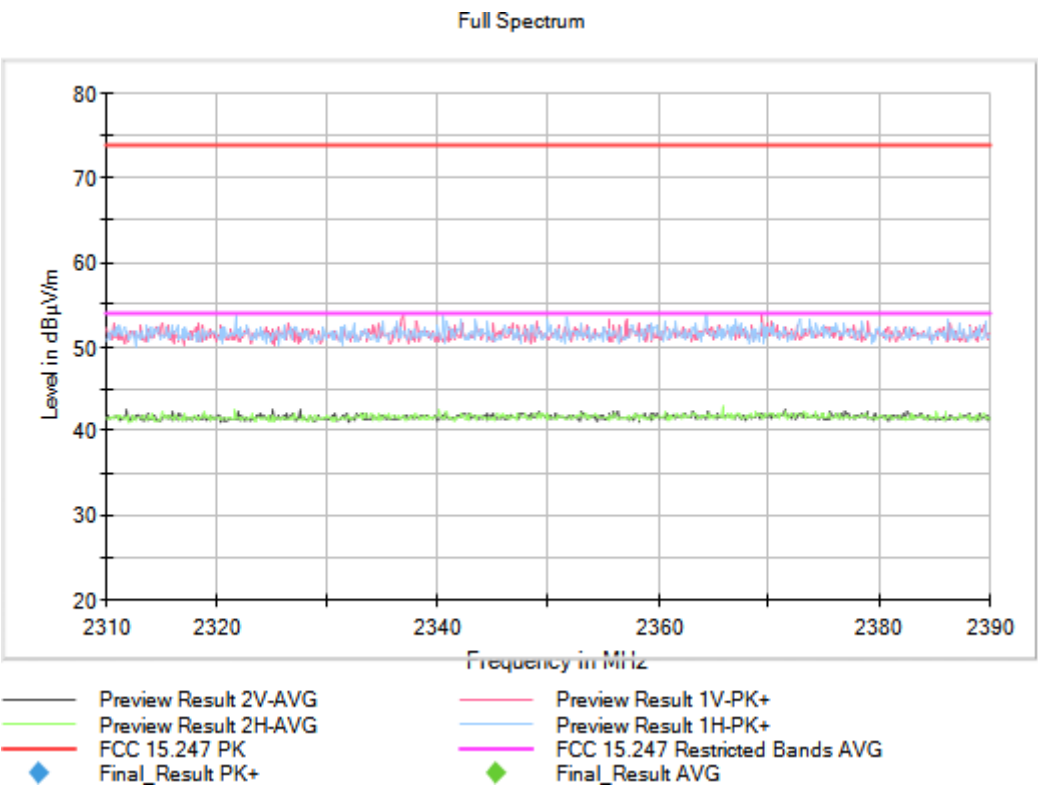
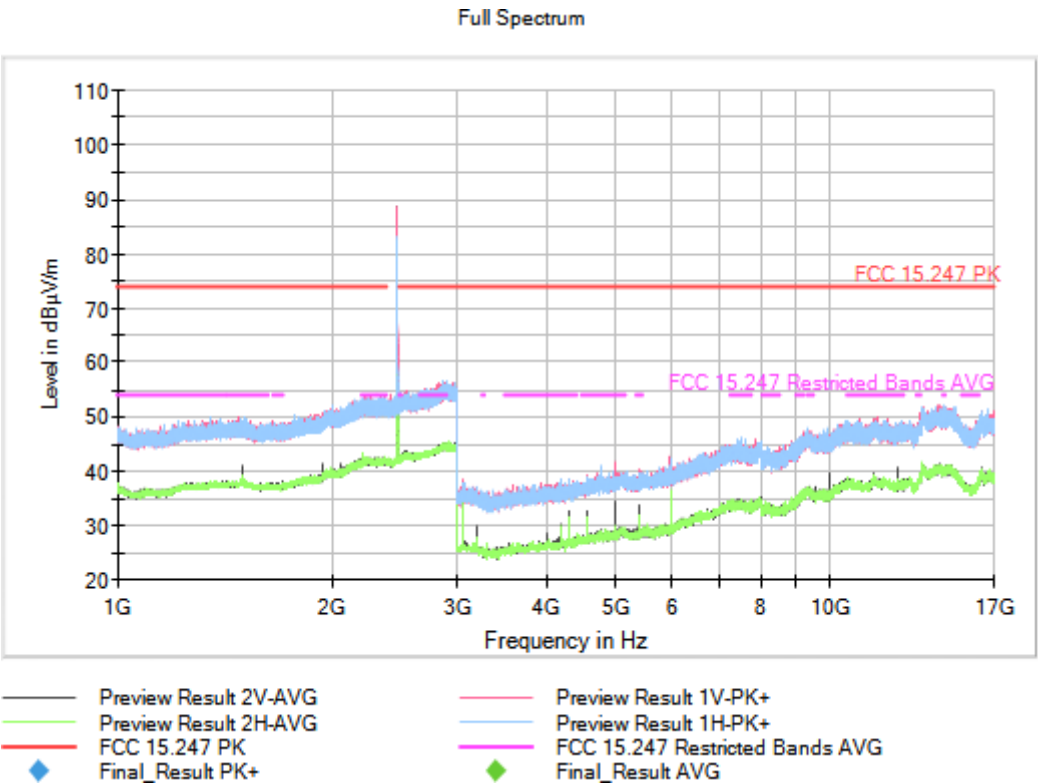
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

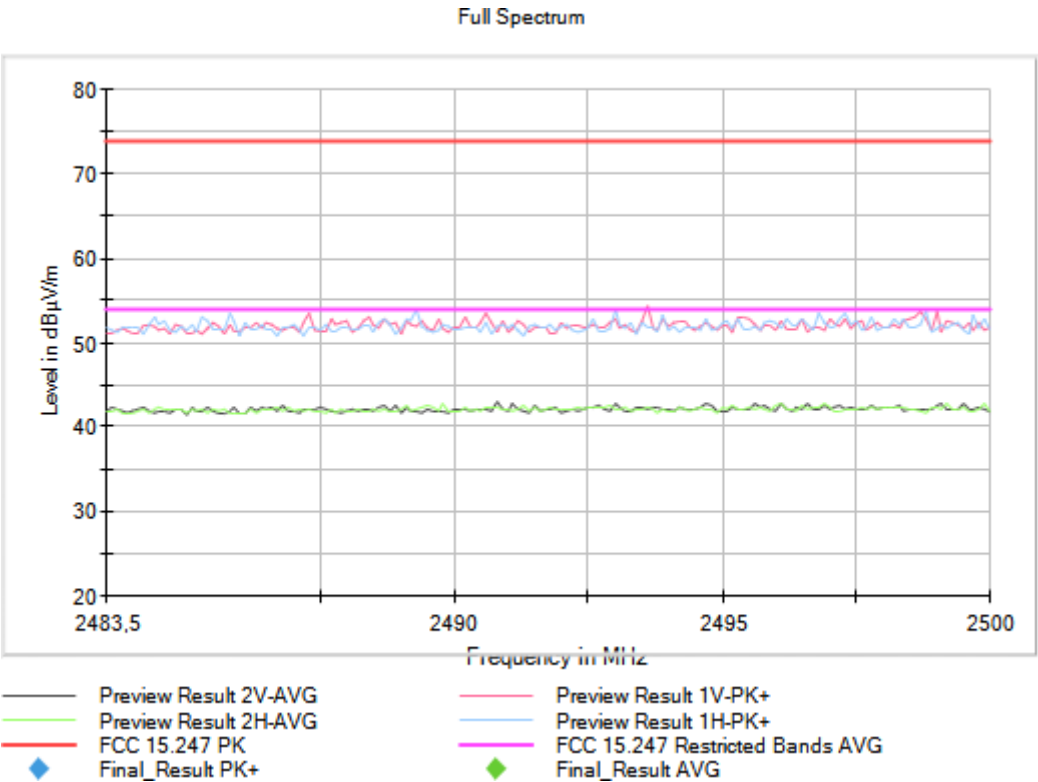
Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (GFSK 1-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

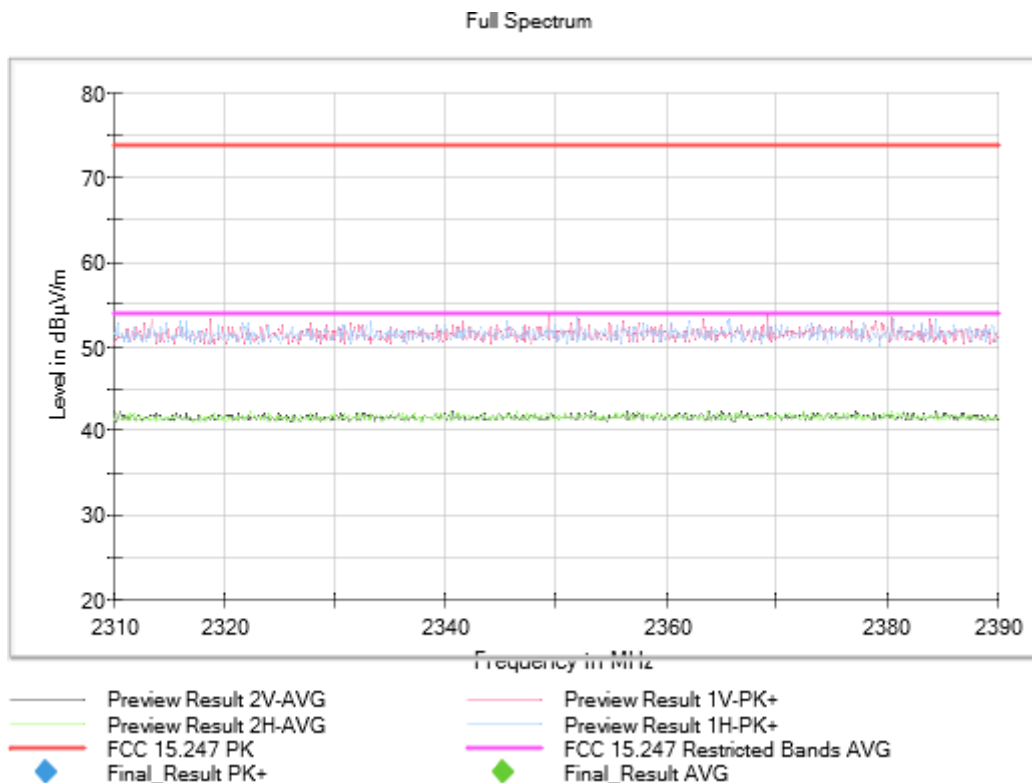
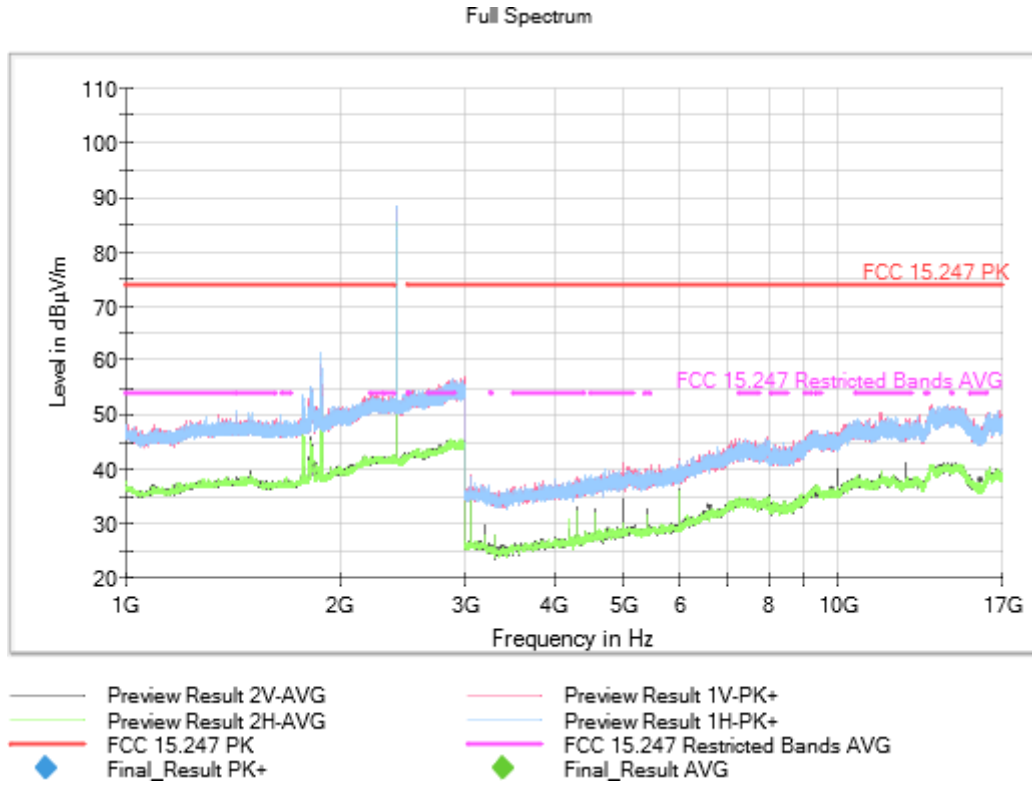
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

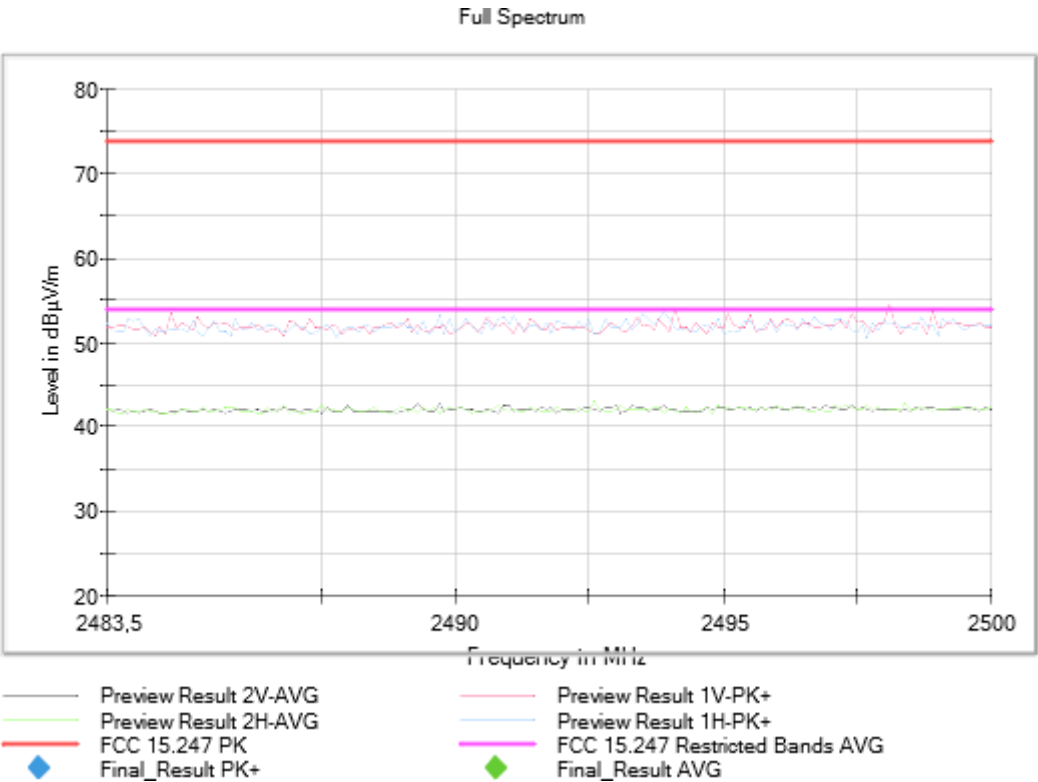
Frequency MHz = 2402.00000

Active Port = 3

Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

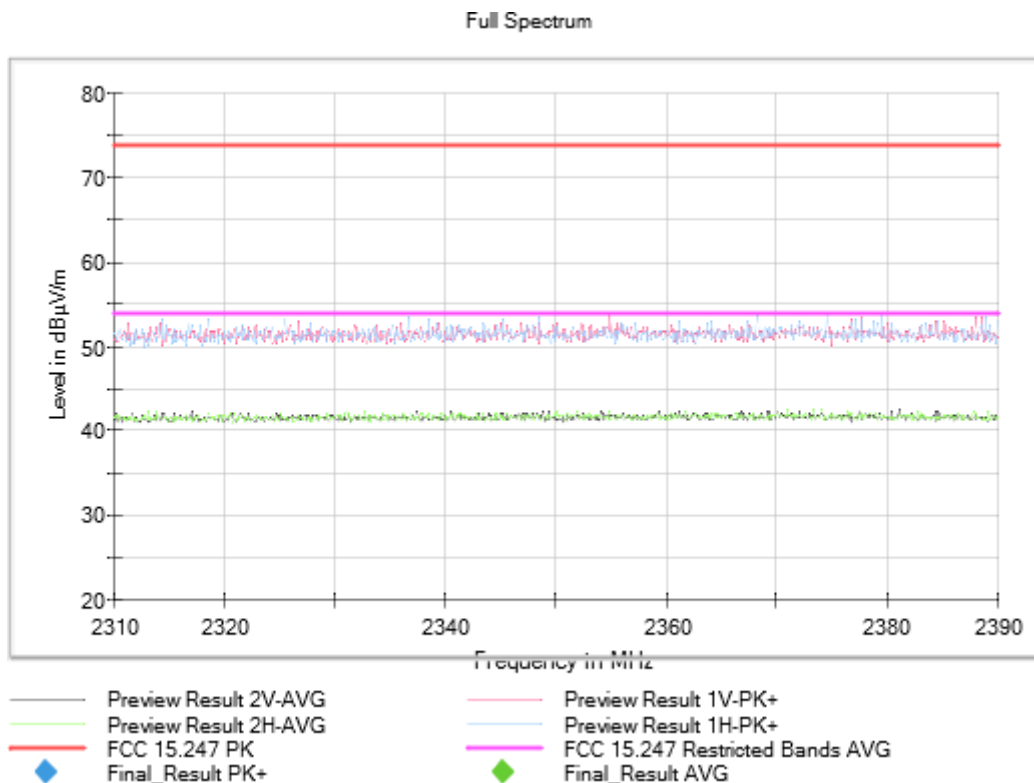
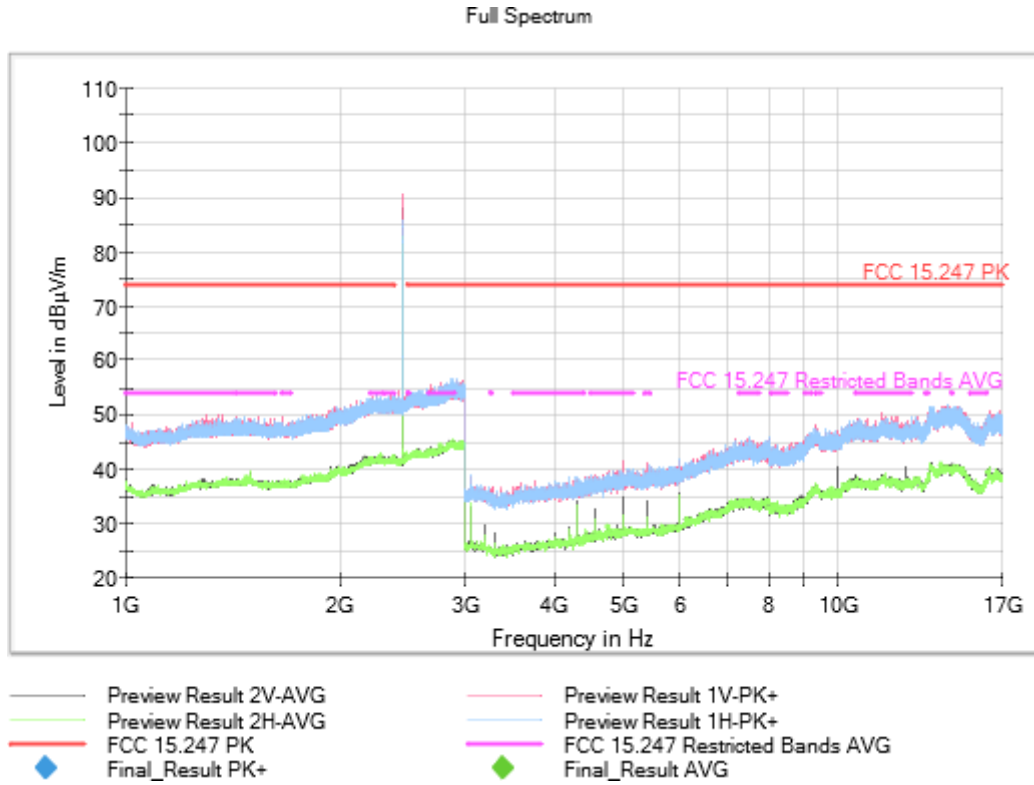
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

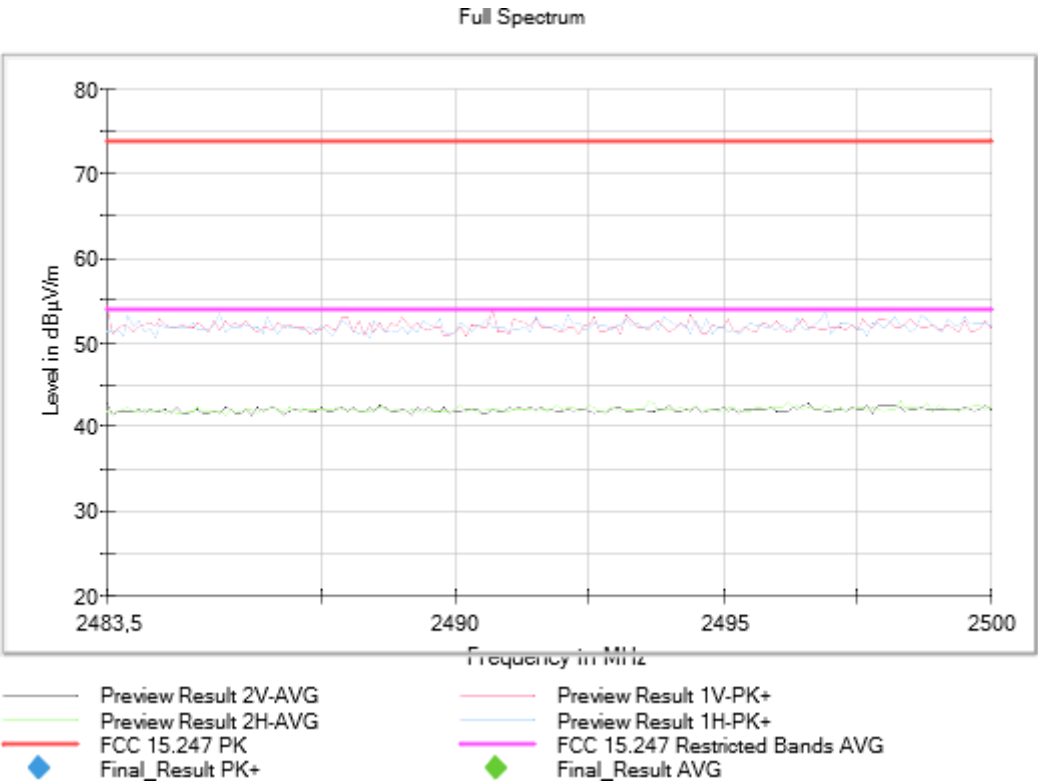
Frequency MHz = 2441.00000

Active Port = 3

Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

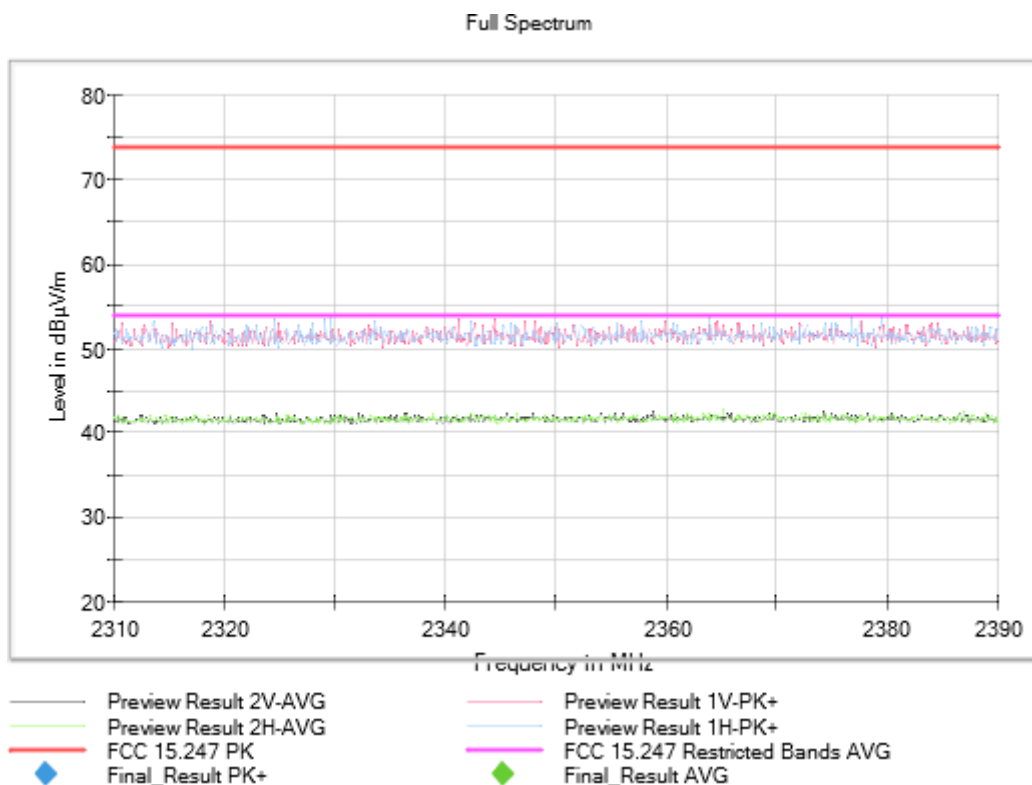
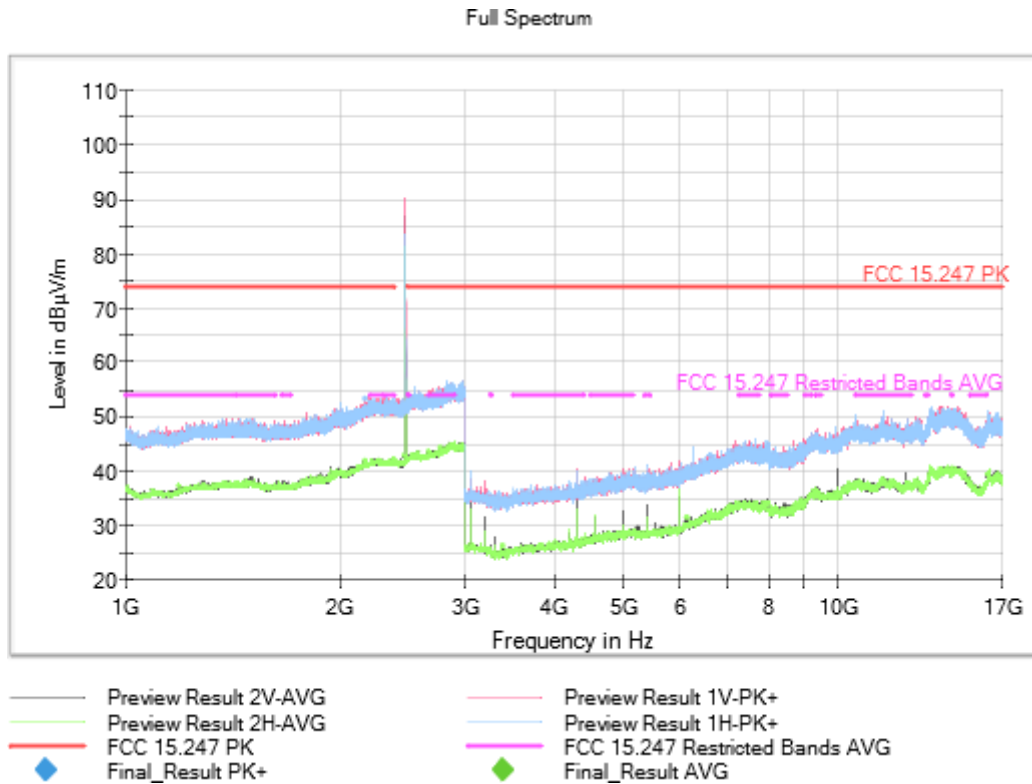
Equipment Type = Frequency Hopping Spread Spectrum systems
(DSS)

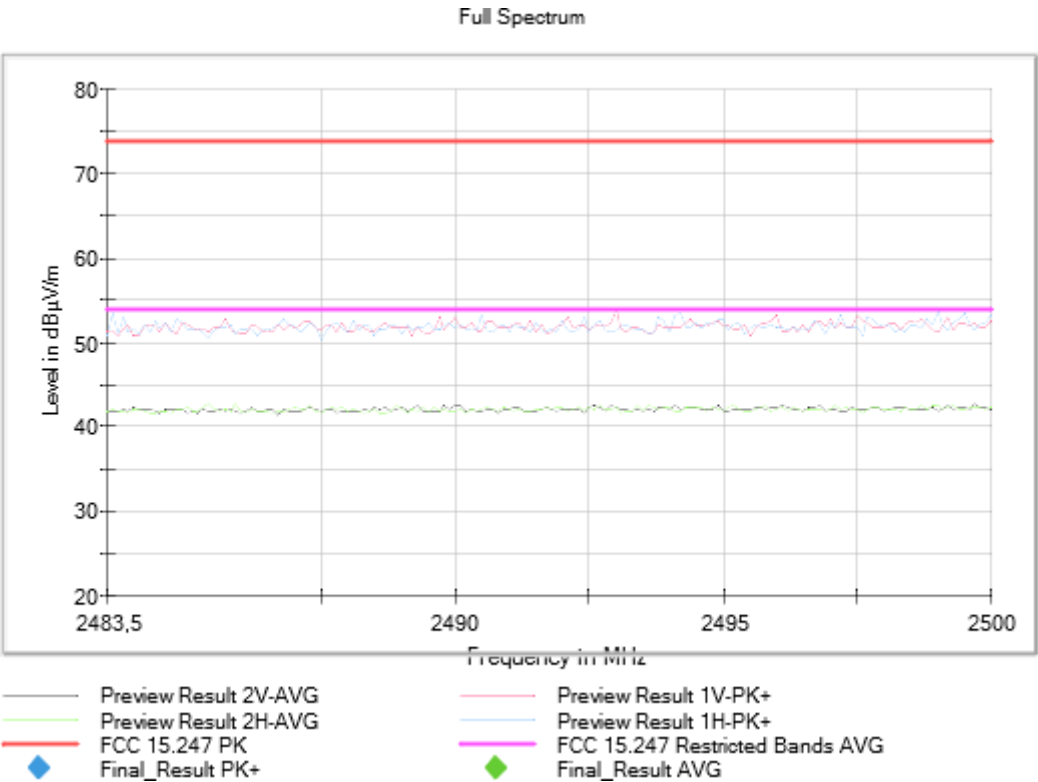
Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (Pi/4 DQPSK 2-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

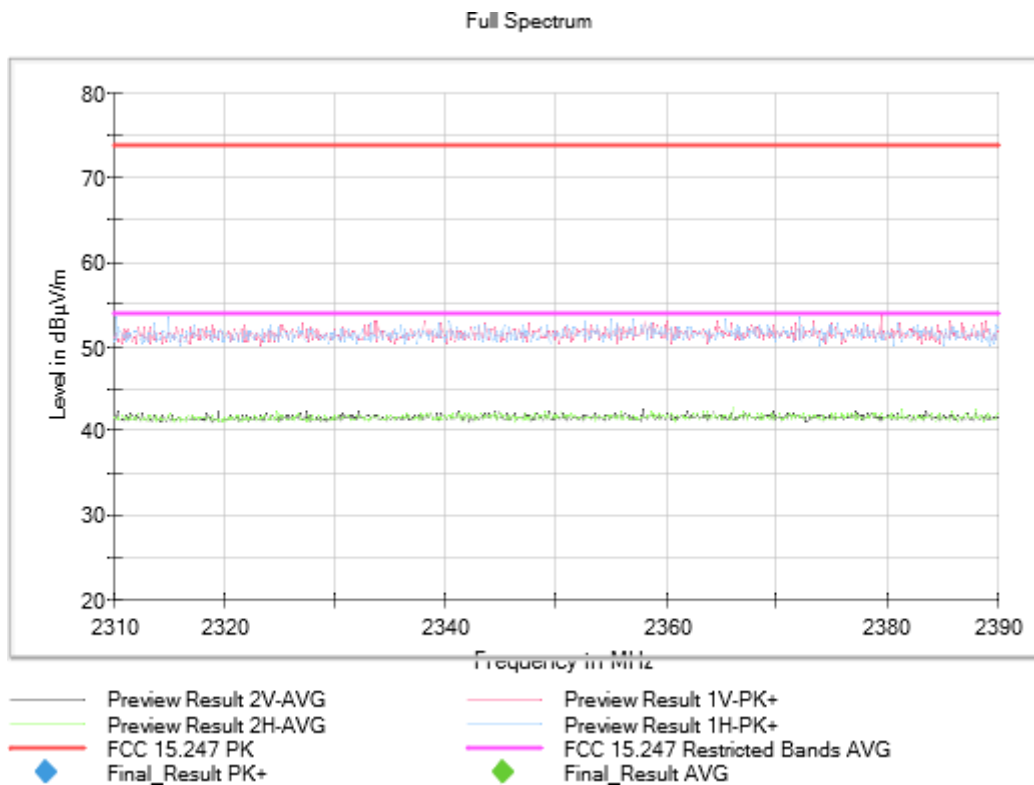
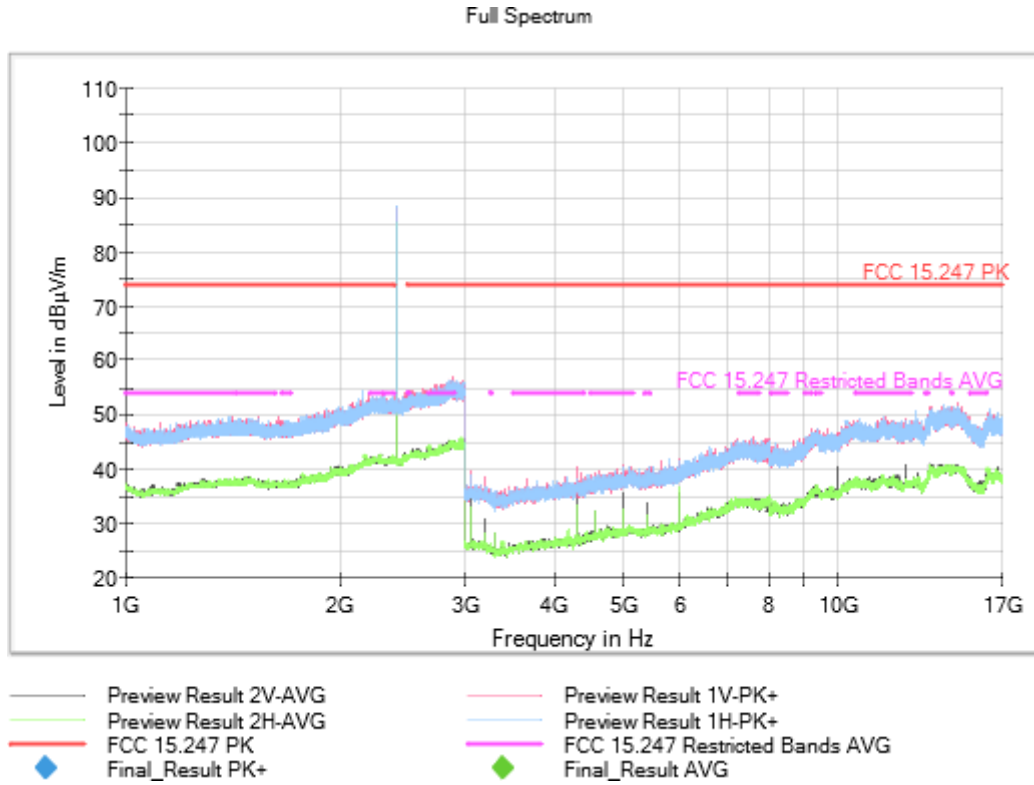
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

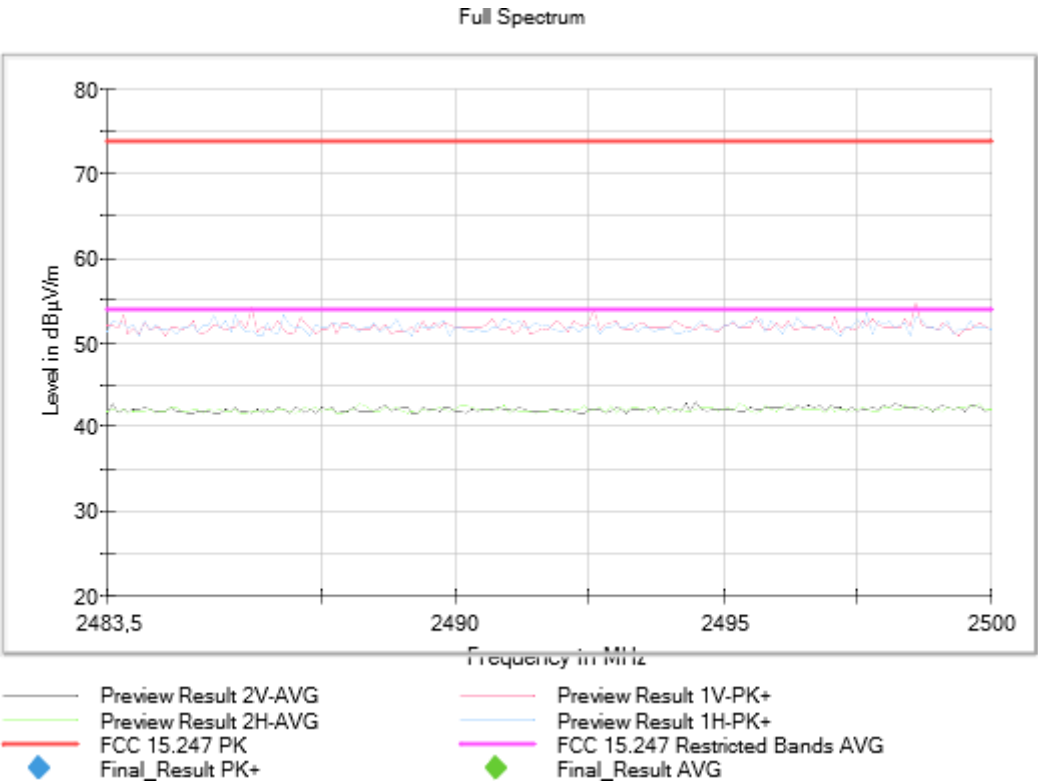
Frequency MHz = 2402.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

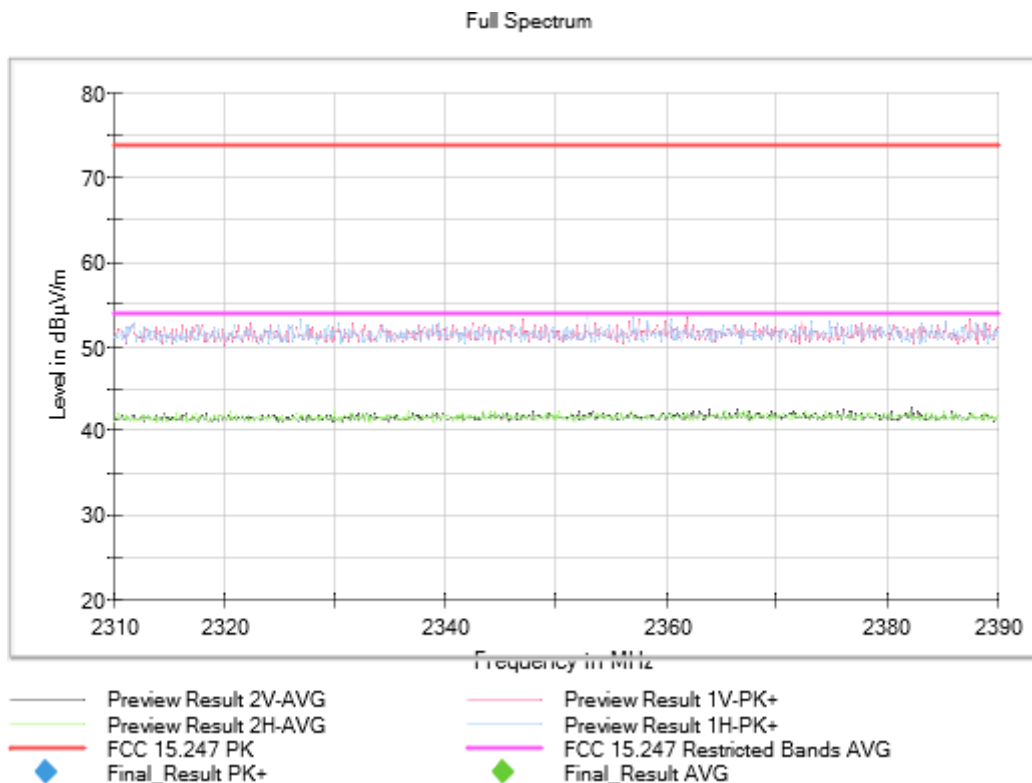
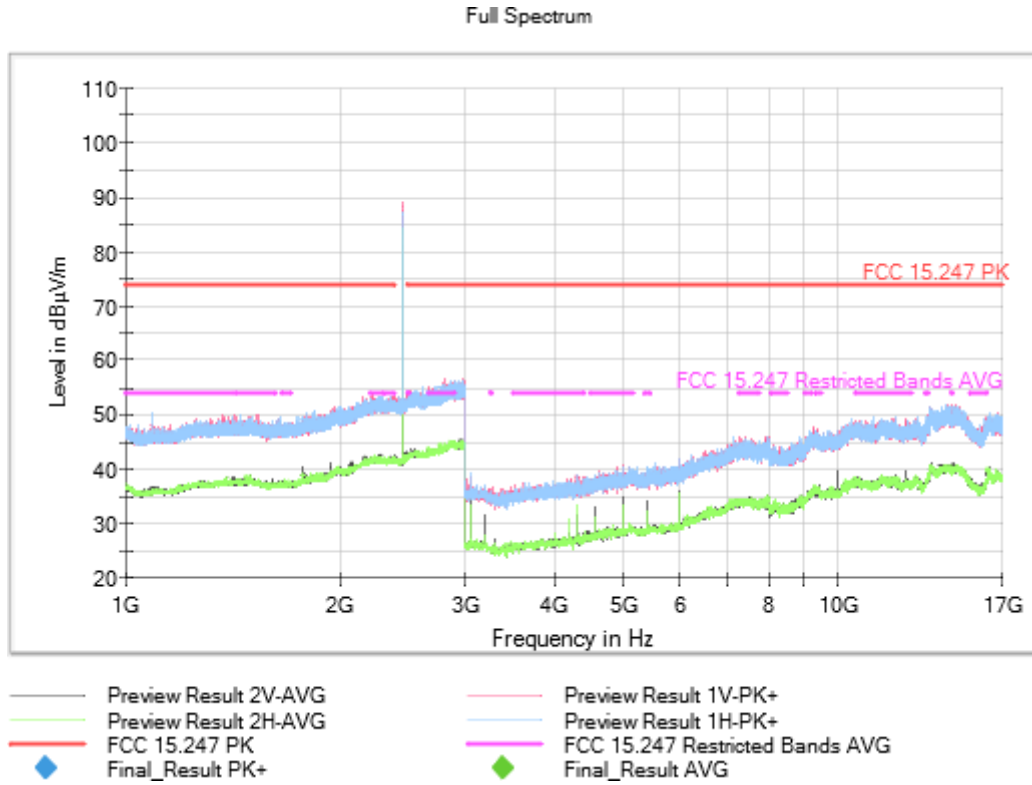
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

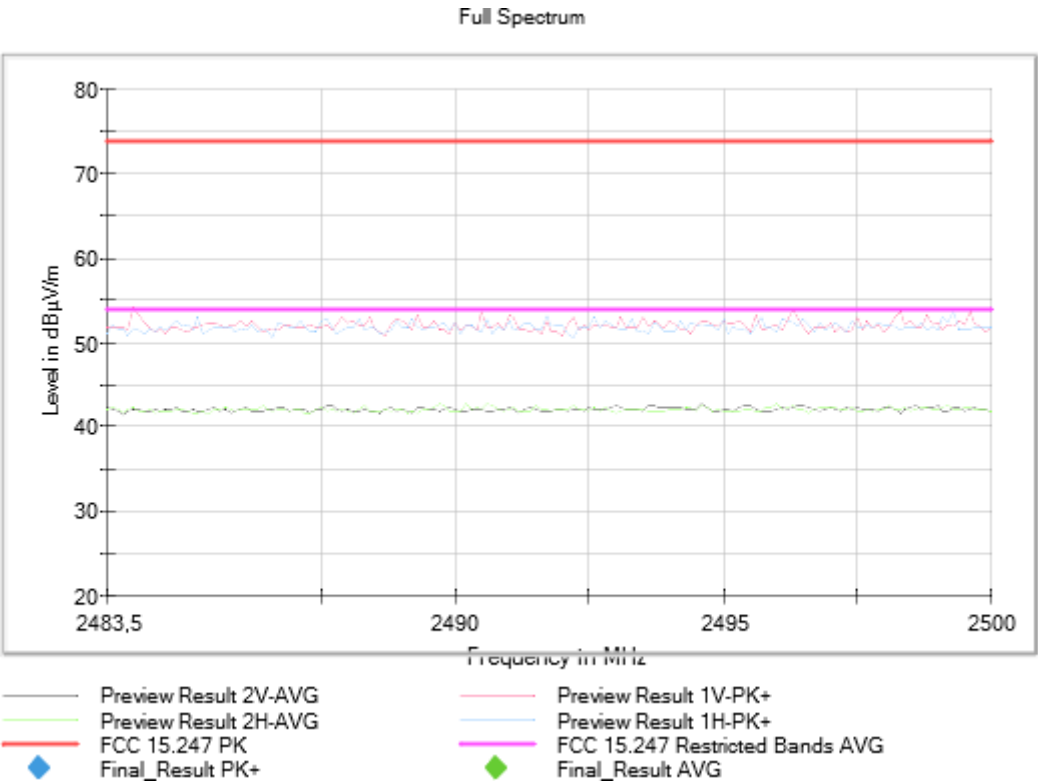
Frequency MHz = 2441.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:





Frequency Range GHz = [1, 17]

Operation Band MHz = [2400, 2483.5]

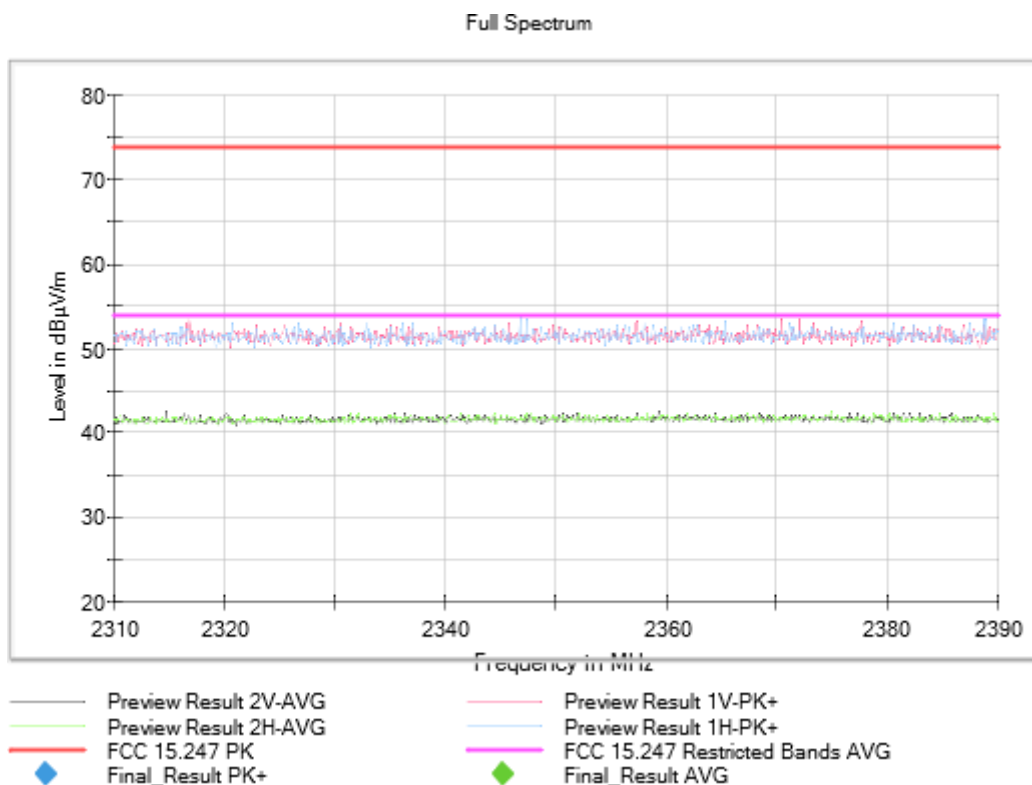
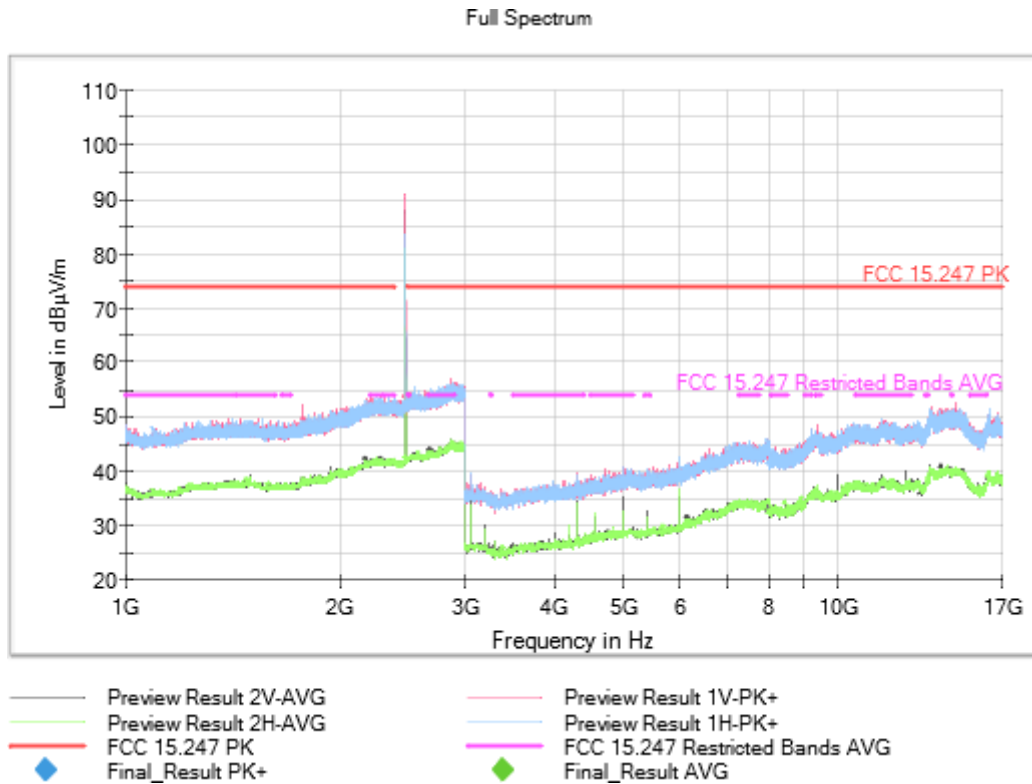
Equipment Type = Frequency Hopping Spread Spectrum systems (DSS)

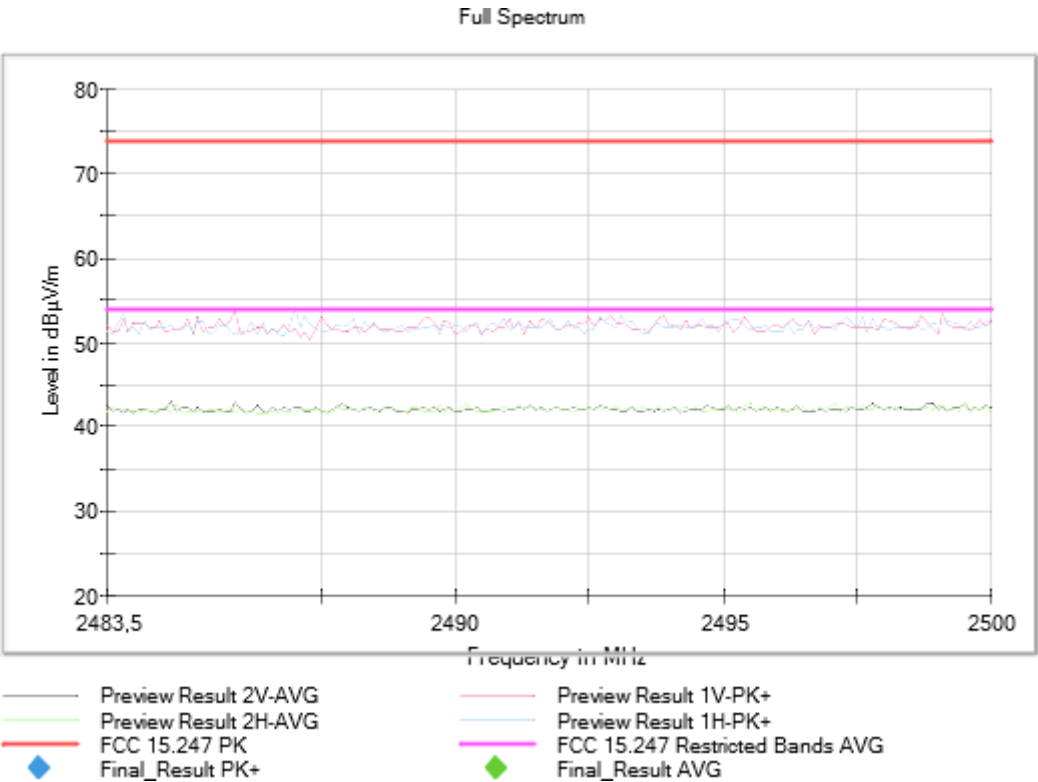
Frequency MHz = 2480.00000

Active Port = 3

Modulation = BT (8DPSK 3-DH5)

Images:





Tables:
Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1 GHz - 2,39 GHz	400 kHz	PK+	1 MHz	0,01 s	0 dB
2,39 GHz - 2,484 GHz	40 kHz	PK+	100 kHz	0,01 s	0 dB
2,484 GHz - 3 GHz	400 kHz	PK+	1 MHz	0,01 s	0 dB
3 GHz - 17 GHz	400 kHz	PK+	1 MHz	0,01 s	0 dB

Frequency Range GHz = [17, 26]

Equipment Type = Digital Transmission
System (DTS)

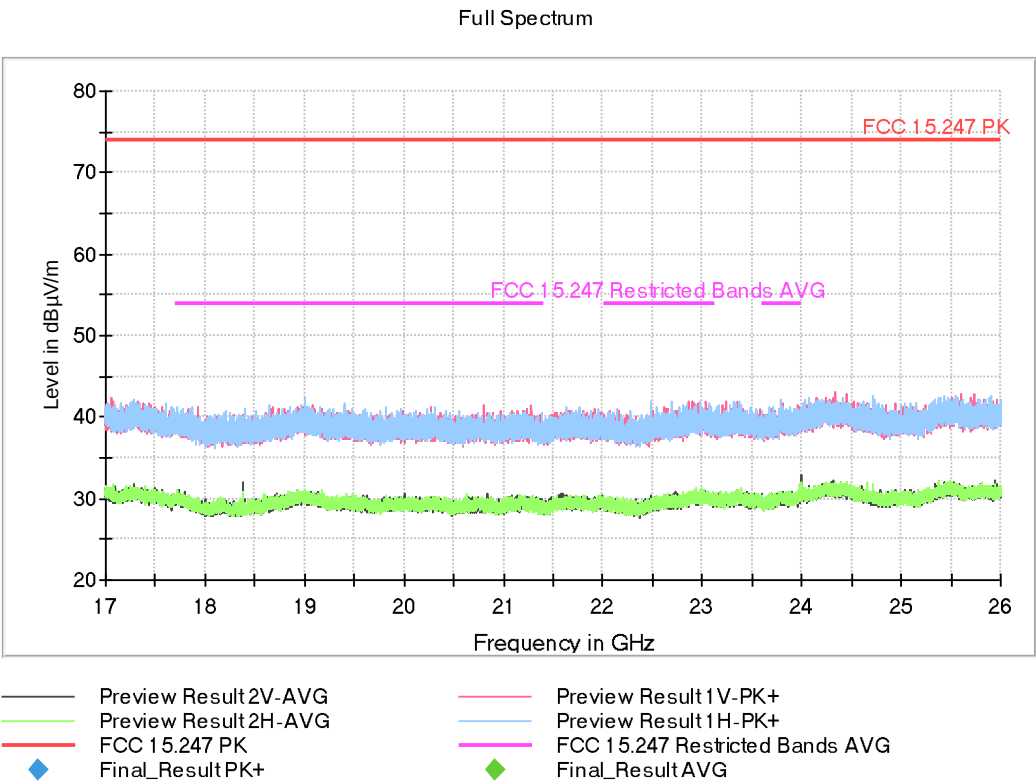
Active Port = 3

Operation Band MHz = [2400, 2483.5]

Frequency MHz = The spurious frequencies detected do not depend on the operating channel.

Modulation = The spurious frequencies detected do not depend on the modulation.

Images:



Tables:

Spectrum Analyzer Parameters

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
17 GHz - 26 GHz	400 kHz	PK+	1 MHz	0,01 s	0 dB

Appendix E: Test results. CHIPSET 004 802.11 B/G/NAX 2x2 MIMO

TEST CONDITIONS	368
TEST CASES DETAILS	371
FCC 47 CFR PART 15.247 / RSS-247	371
<i>Occupied Channel Bandwidth 99%</i>	<i>371</i>
<i>RSS-247 5.2 (a) / FCC 15.247 (a) (2) 6 dB Bandwidth</i>	<i>391</i>
<i>RSS-247 5.4 / FCC 15.247 (b) Maximum Average Conducted Output Power</i>	<i>411</i>
<i>RSS-247 5.2 (b) / FCC 15.247 (e) Power spectral density</i>	<i>413</i>
<i>RSS-247 5.5 / FCC 15.247 (d) Band-edge emissions compliance (Transmitter)</i>	<i>433</i>
<i>RSS-247 5.5 / FCC 15.247 (d) Emission limitations radiated (Transmitter).....</i>	<i>458</i>

TEST CONDITIONS

(*): Data provided by the client.

POWER SUPPLY (*):

Vnominal: 12 Vdc
Type of Power Supply: Battery

ANTENNA (*):

Technology	Antenna Gain	Type	Test Case
WLAN 2G4	+3.11 dBi	External	PSD
WLAN 2G4	+0.1 dBi	External	All tests except PSD

For CDD transmissions, directional gain is calculated as follows, if all antennas have the same gain:

Antenna Gain for MIMO PSD:

$$\begin{aligned} \text{Directional Gain} &= G_{ANT} + \text{Array Gain} \\ \text{Array Gain} &= 10 \log(N_{ANT}/N_{SS}) = 10 \log(2/1) = 3.01 \text{ dB} \\ \text{Directional Gain} &= 0.1 + 3.01 = 3.11 \text{ dBi} \end{aligned}$$

TEST FREQUENCIES (*):

Modulation	Data rates	Low Channel	Middle Channel	High Channel
802.11b:	1 Mbit/s	2412 MHz	2437 MHz	2462 MHz
802.11g:	6 Mbit/s	2412 MHz	2437 MHz	2462 MHz
802.11n:	HT20 MCS0 6.5 Mbit/s	2412 MHz	2437 MHz	2462 MHz
802.11ax20:	OFDM – SU Full-channel allocation	2412 MHz	2437 MHz	2462 MHz
802.11ax20:	OFDMA – RU Subcarrier allocation	2412 MHz	2437 MHz	2462 MHz

The measured RU offset is indicated in the following table:

Offset ChLow: 0
Offset ChMid: 4
Offset ChHigh: 8

During transmitter test the EUT was controlled by a SW tool provided by the client to operate in a continuous transmit mode on the modulation schemes and test channels as required.

CONDUCTED MEASUREMENTS:

The equipment under test was set up in a shielded room and it is connected to the TS8997 using a low loss RF cable. The reading of the spectrum analyser is corrected taking into account the cable loss.



RADIATED MEASUREMENTS:

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna (Bilog antenna for the range between 30 MHz to 1000 MHz and 1 GHz-17 GHz Double ridge horn antenna) is situated at a distance of 3 m and at a distance of 1.5 m for the frequency range 17 GHz-26 GHz (17 GHz-40 GHz horn antenna).

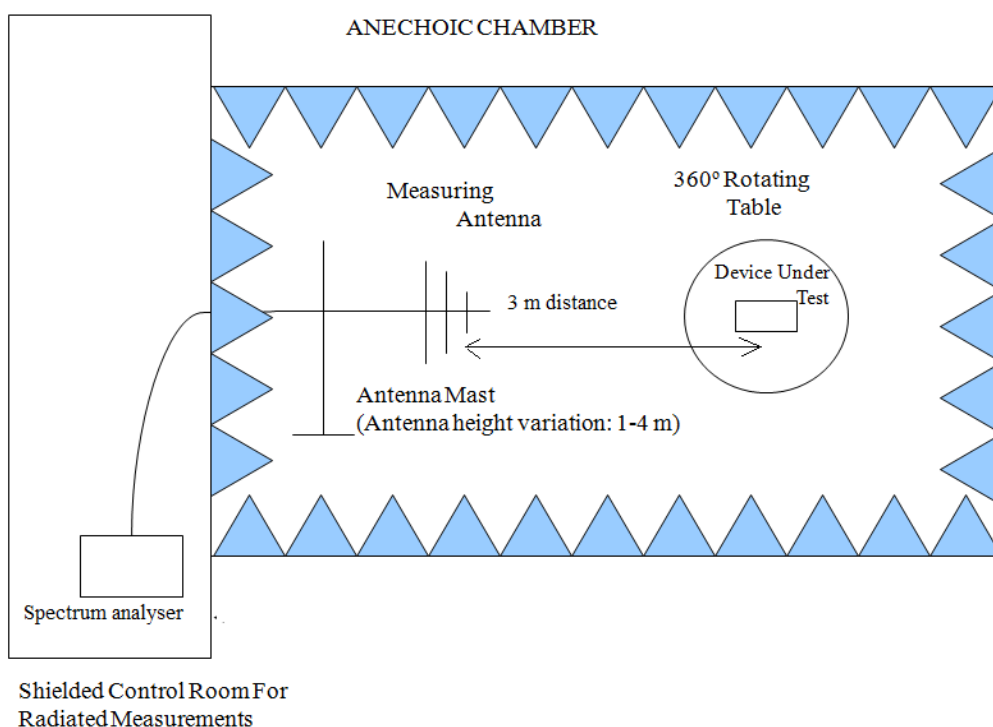
For radiated emissions in the range 17 GHz-26 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height (Bilog antenna and Double ridge horn antenna) was varied from 1 to 4 meters to find the maximum radiated emission.

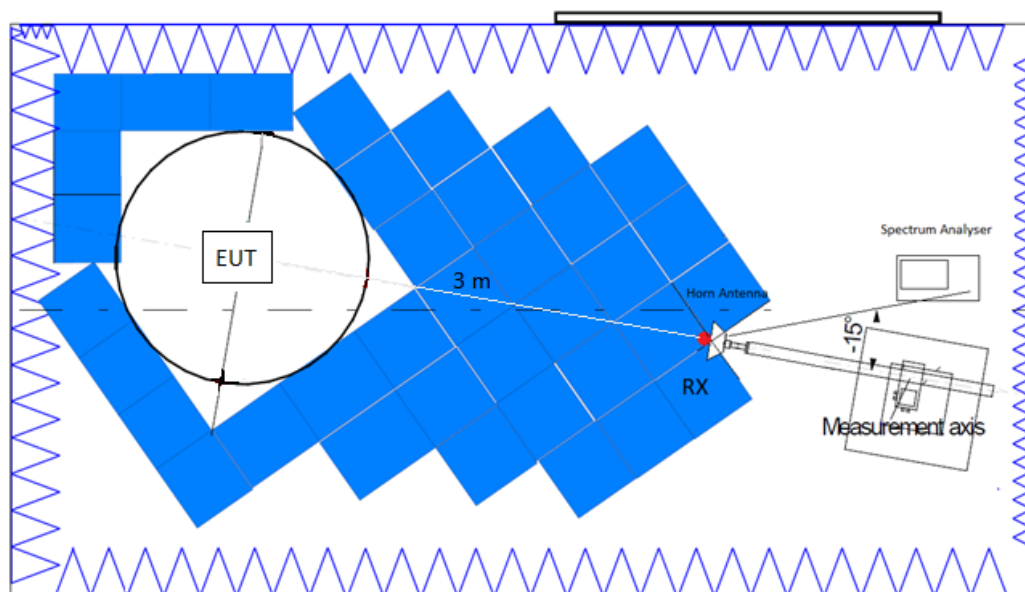
Measurements were made in both horizontal and vertical planes of polarization.

A resolution bandwidth/video bandwidth of 100 kHz / 300 kHz was used for frequencies below 1 GHz and 1 MHz / 3 MHz for frequencies above 1 GHz.

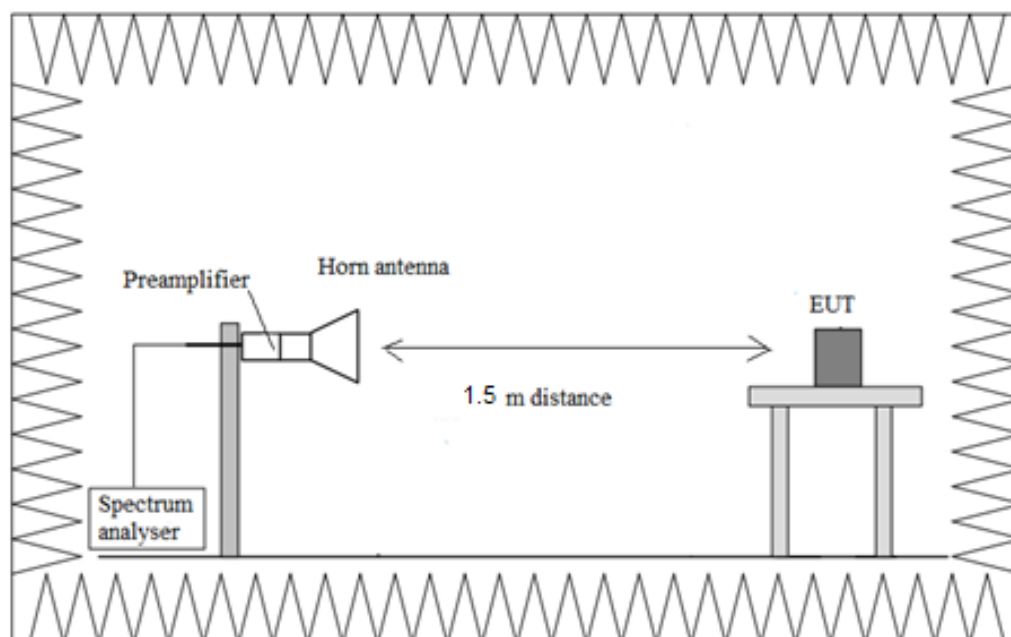
Radiated measurements setup from 30 MHz to 1 GHz:



Radiated measurements setup from 1 GHz to 17 GHz:



Radiated measurements setup $f > 17$ GHz:



TEST CASES DETAILS

FCC 47 CFR Part 15.247 / RSS-247 Occupied Channel Bandwidth 99%

Limits

RSS-Gen 6.7 / FCC 2.1049 - Occupied Channel Bandwidth 99%

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained.

Modulation: 802.11b (DSSS 1 Mbit/s)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Occ Ch BW (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	13.100
		2437.00000		13.100
		2462.00000		13.100

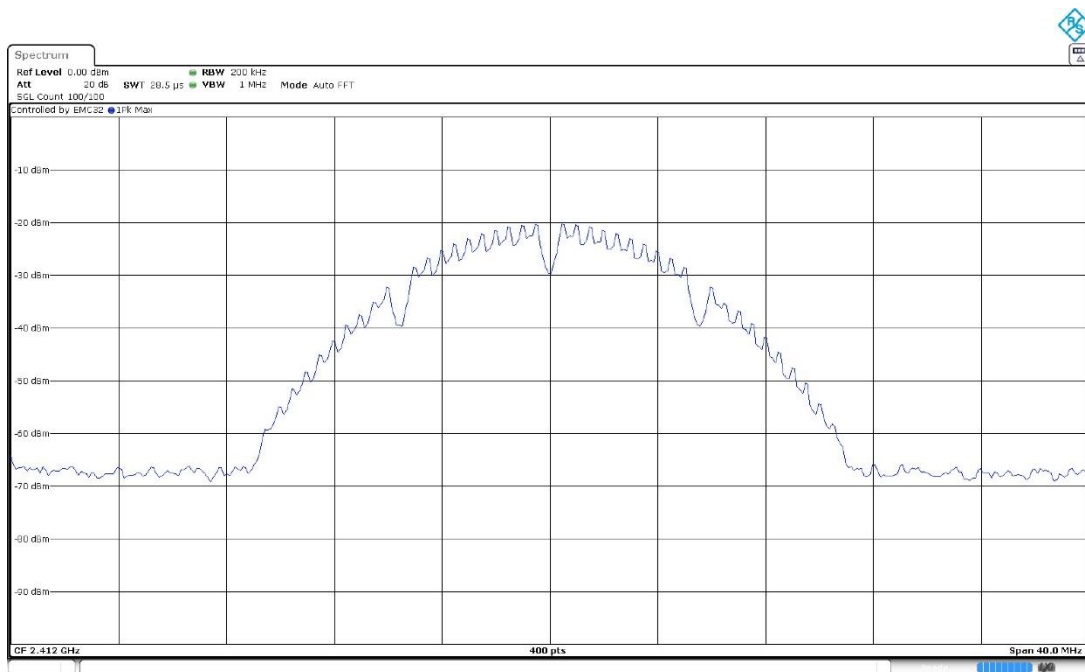
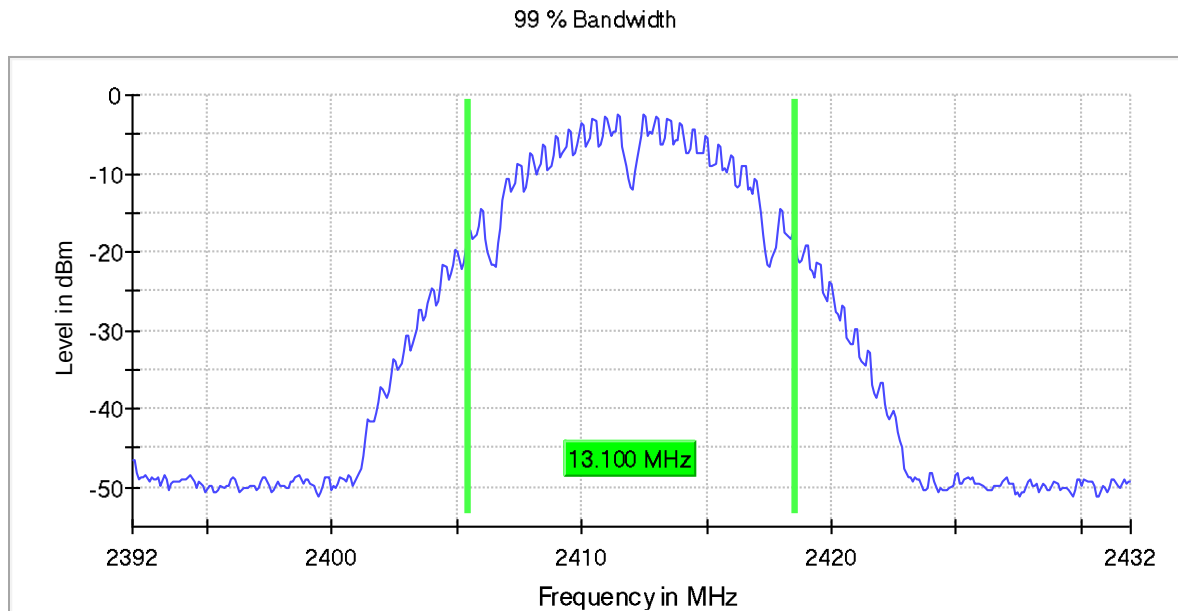
Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2412.00000 Active Port = 2+4

Modulation = 802.11b (DSSS 1 Mbit/s)

Images:

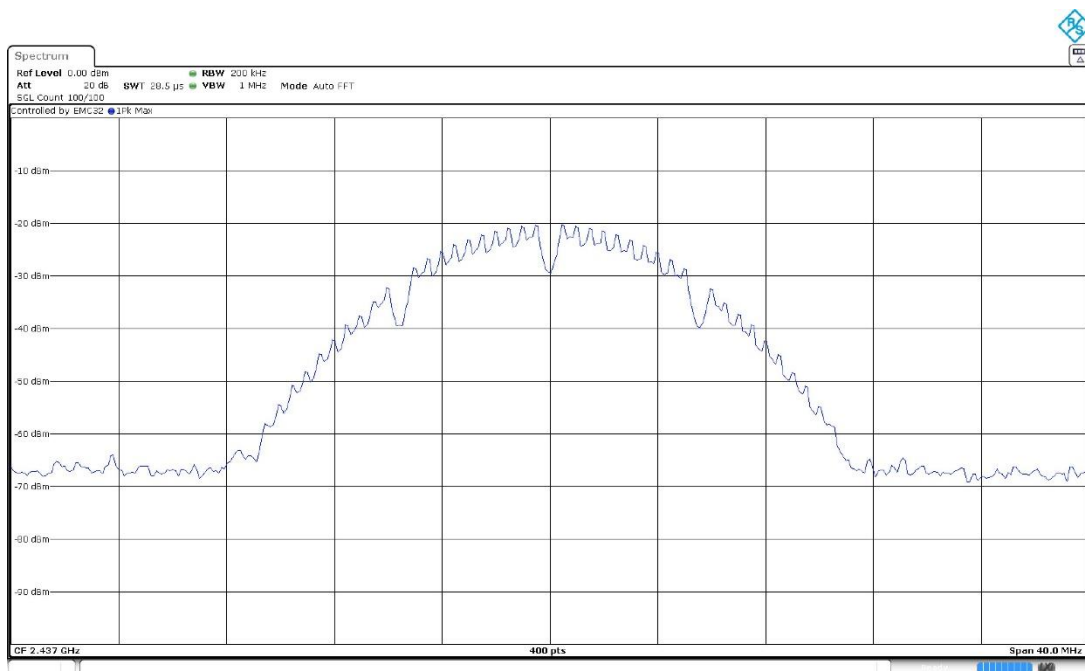
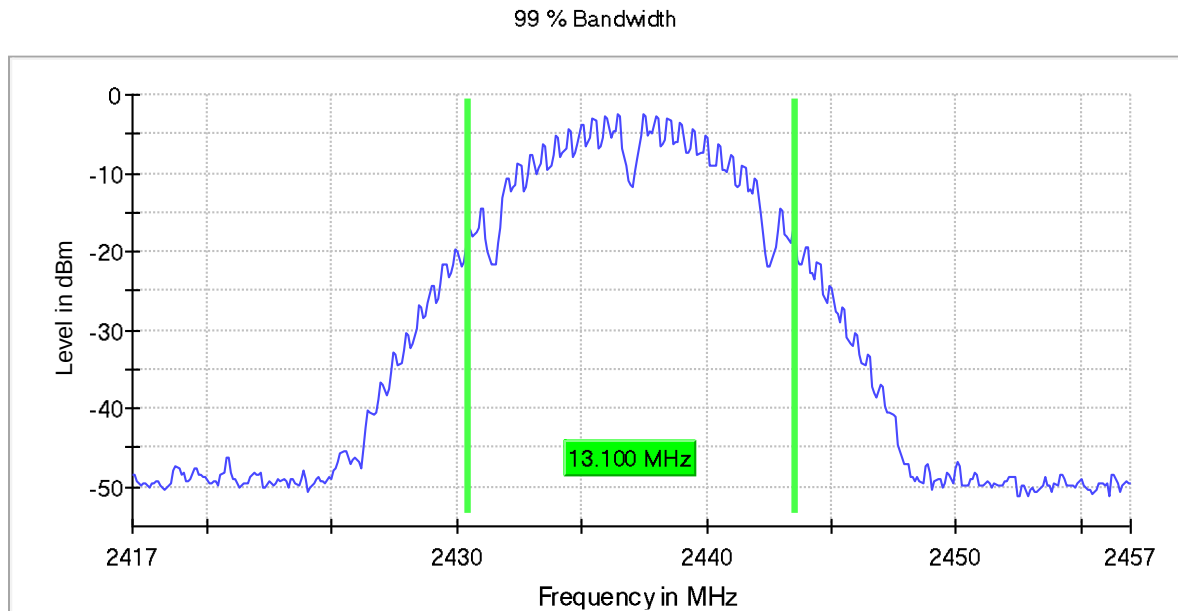


Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2437.00000 Active Port = 2+4

Modulation = 802.11b (DSSS 1 Mbit/s)

Images:

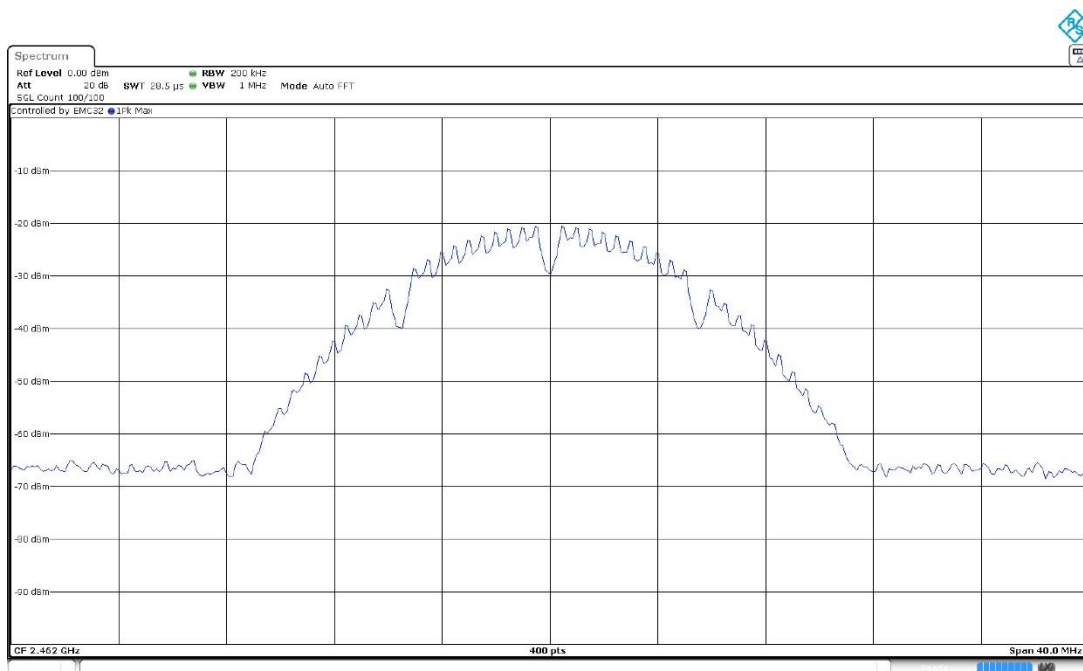
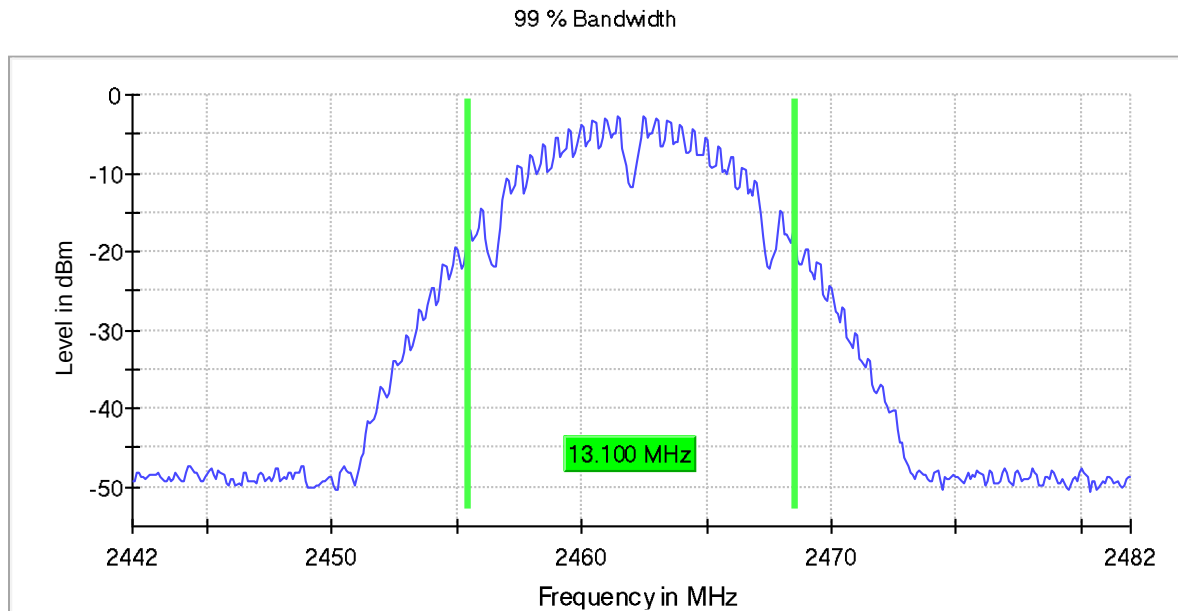


Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2462.00000 Active Port = 2+4

Modulation = 802.11b (DSSS 1 Mbit/s)

Images:



Modulation: 802.11g (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Occ Ch BW (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	16.400
		2437.00000		16.400
		2462.00000		16.400

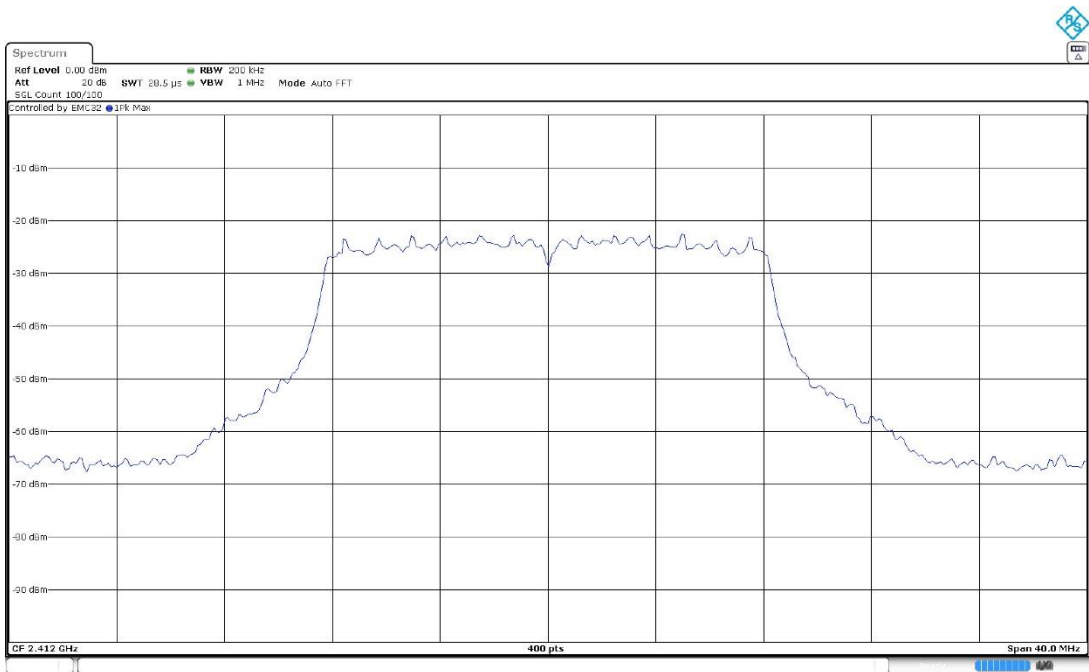
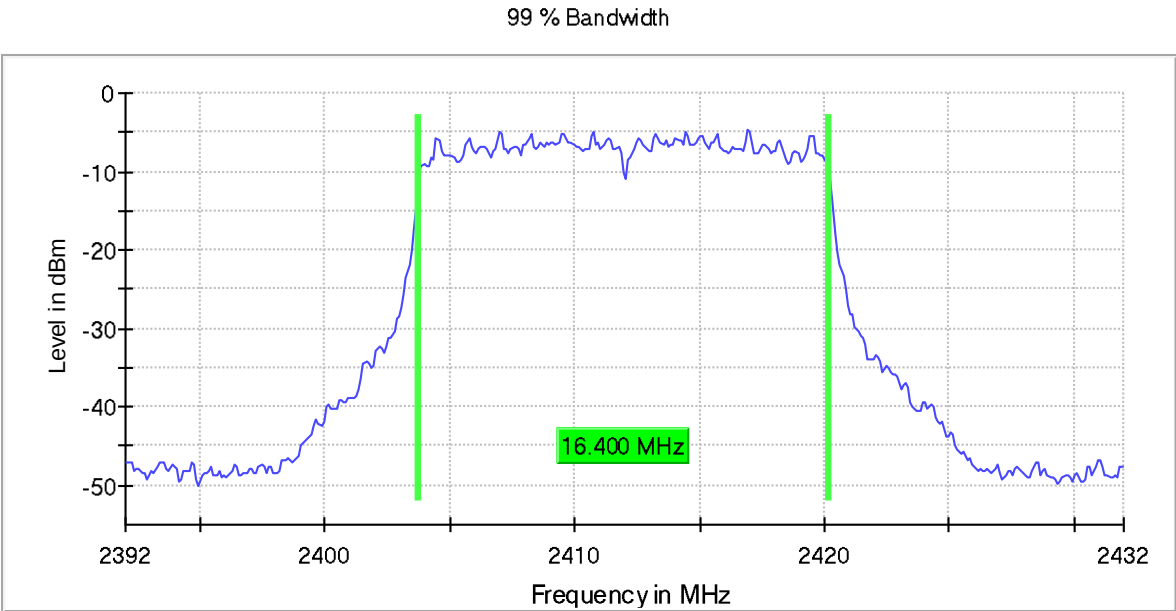
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2412.00000 Active Port = 2+4
Modulation = 802.11g (OFDM 6 Mbit/s)

Images:



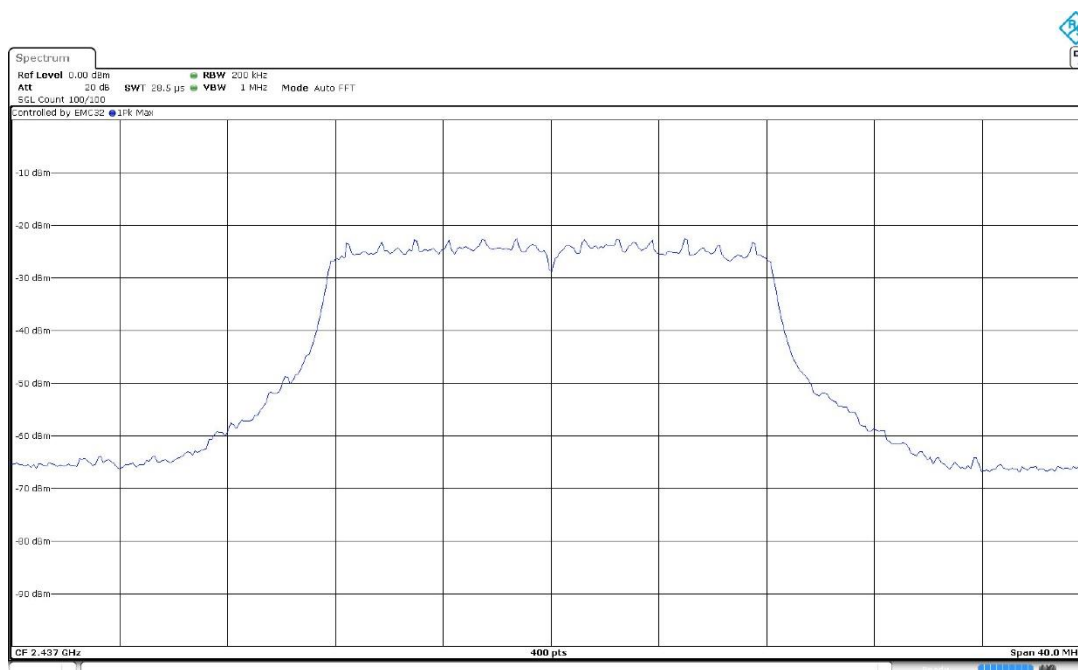
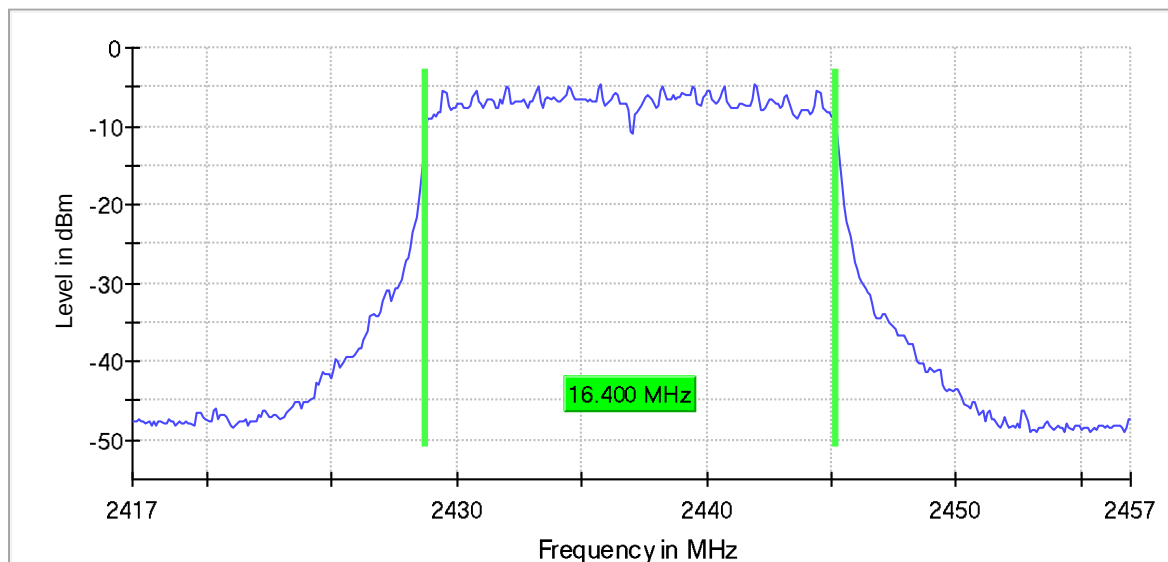
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2437.00000 Active Port = 2+4

Modulation = 802.11g (OFDM 6 Mbit/s)

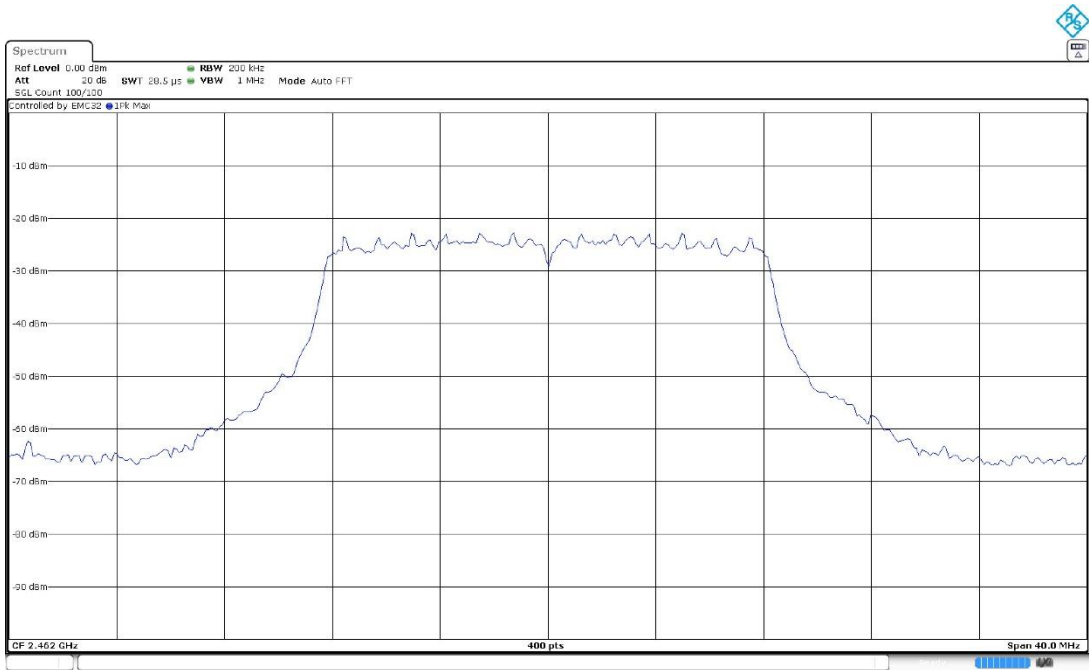
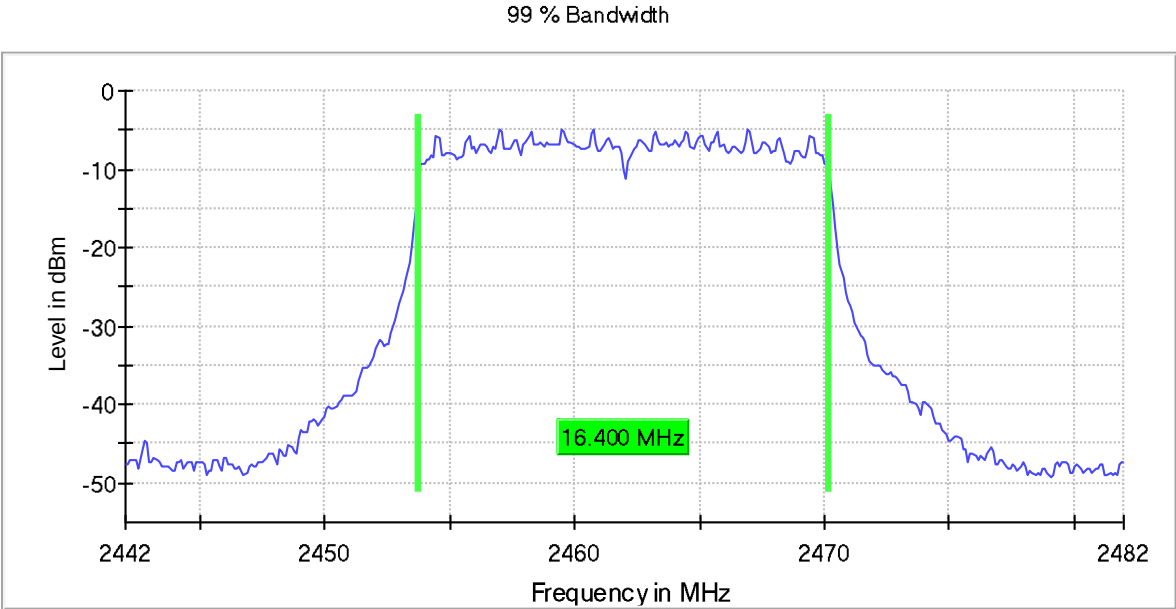
Images:

99 % Bandwidth



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2462.00000 Active Port = 2+4
Modulation = 802.11g (OFDM 6 Mbit/s)

Images:



Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Occ Ch BW (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	17.500
		2437.00000		17.600
		2462.00000		17.500

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

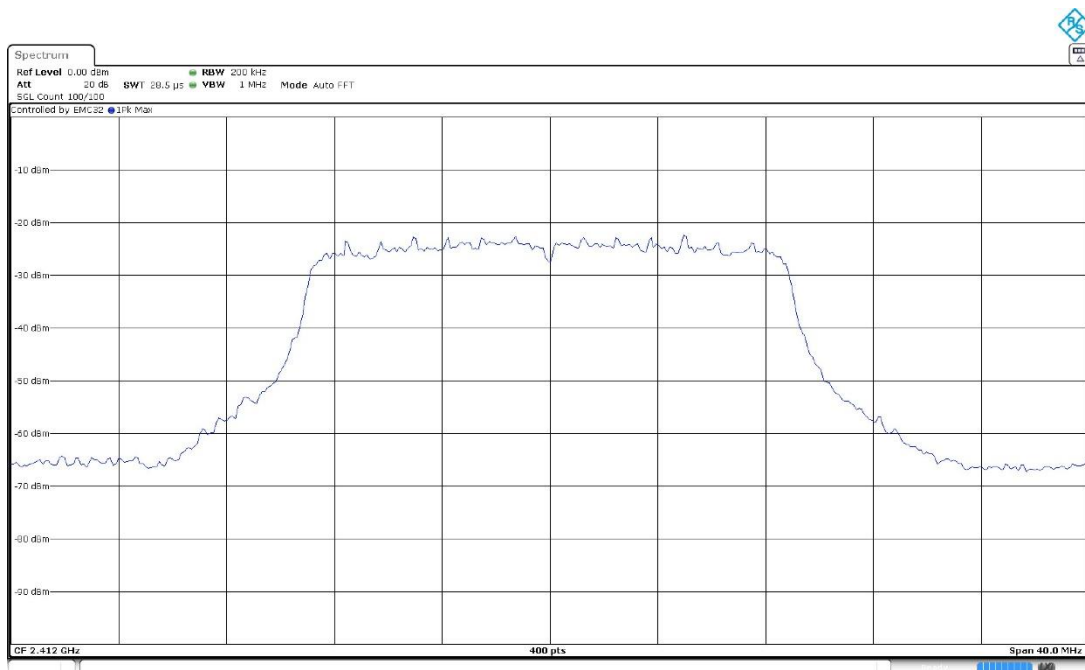
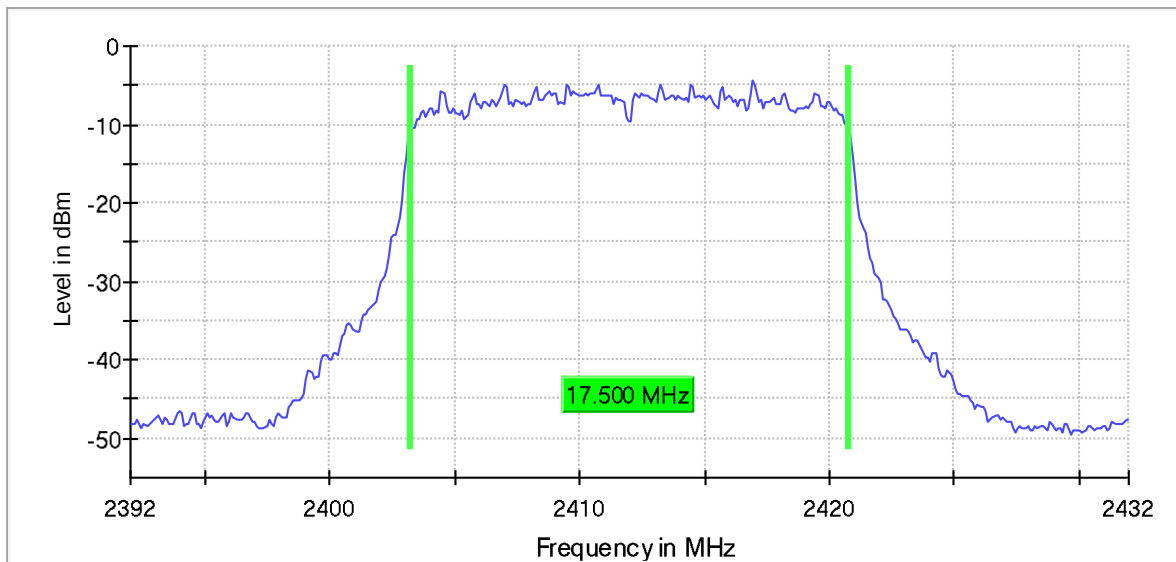
Frequency MHz = 2412.00000

Active Port = 2+4

Modulation = 802.11n HT20 (OFDM MCS0)

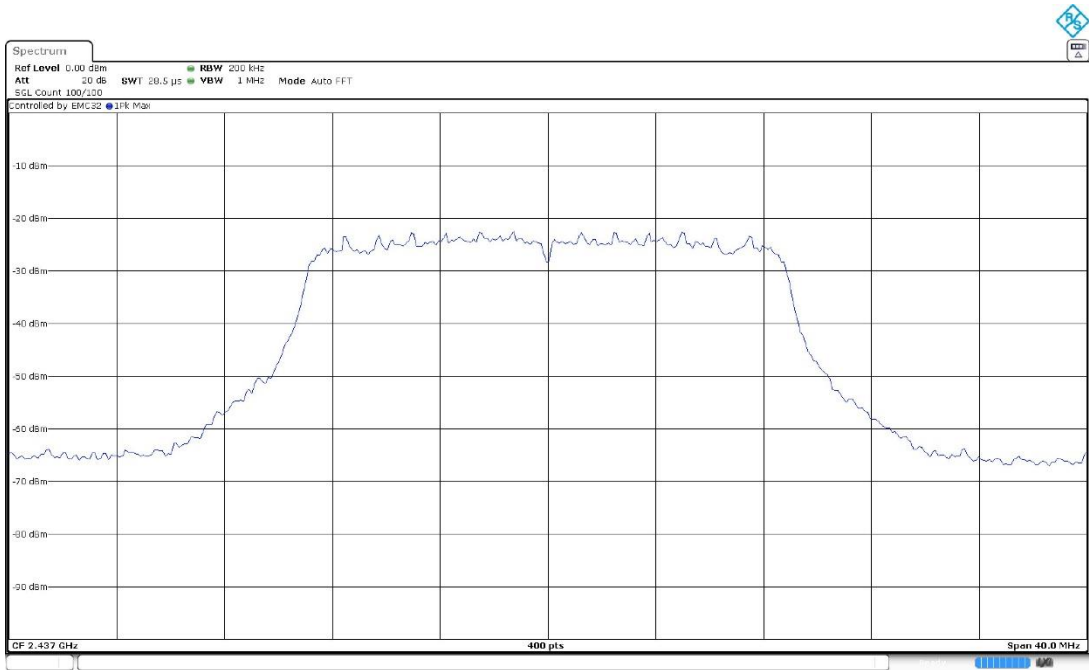
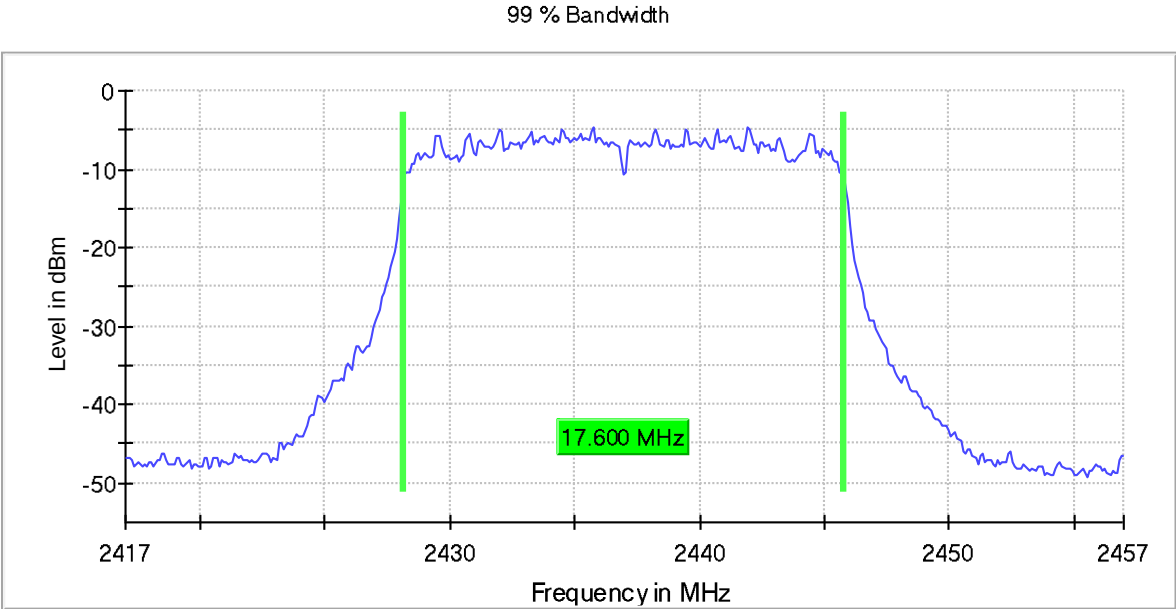
Images:

99 % Bandwidth



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000 Active Port = 2+4
Modulation = 802.11n HT20 (OFDM MCS0)

Images:



Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

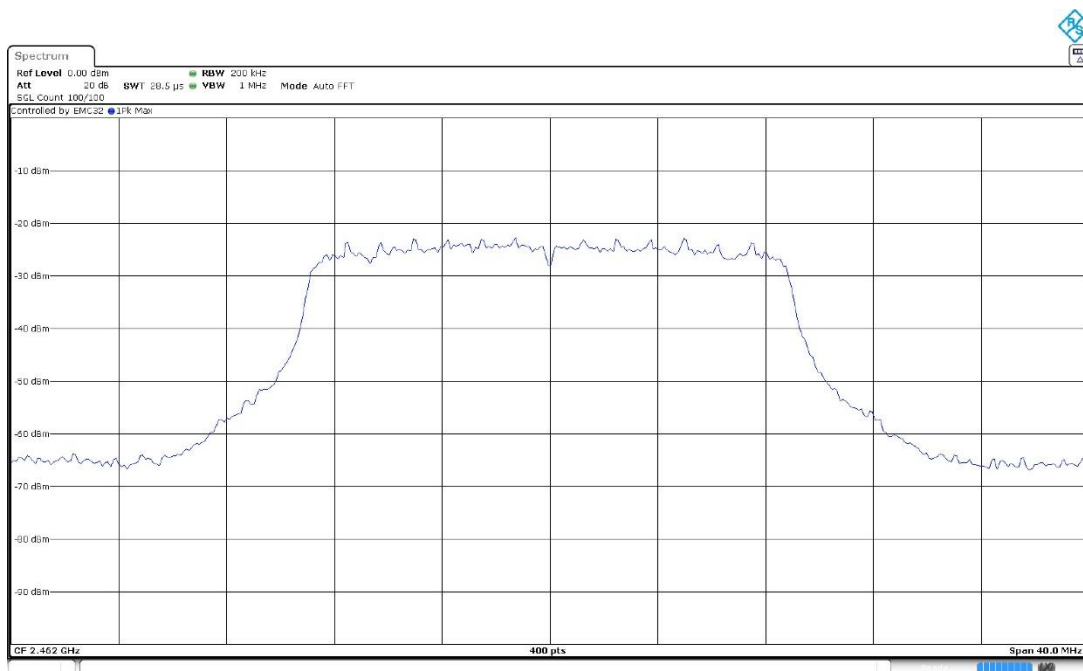
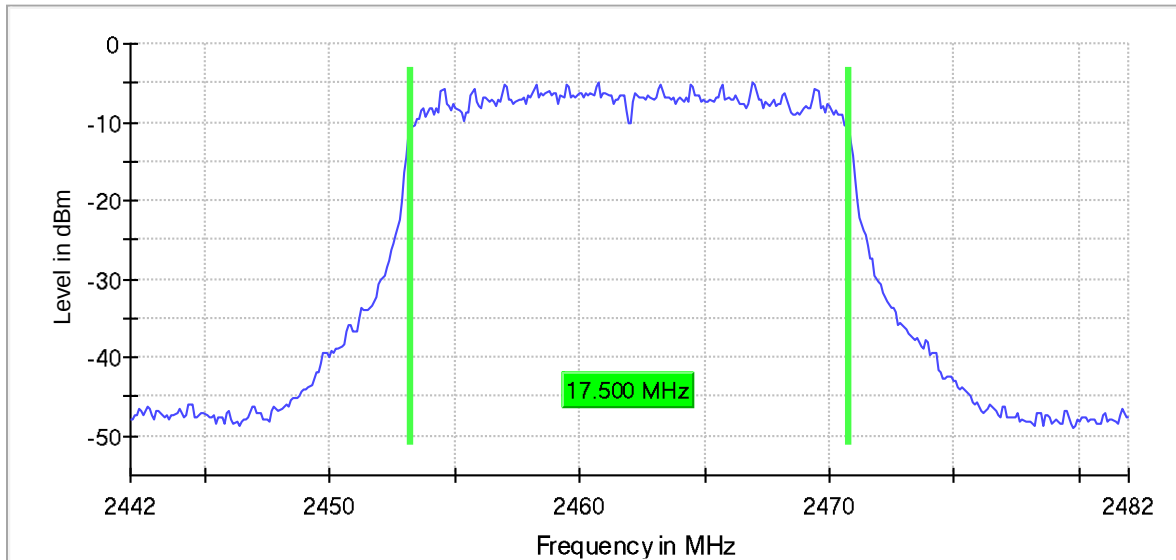
Frequency MHz = 2462.00000

Active Port = 2+4

Modulation = 802.11n HT20 (OFDM MCS0)

Images:

99 % Bandwidth



Modulation: 802.11ax HE20 (OFDMA MCS0) SU

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Occ Ch BW (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	18.900
		2437.00000		18.900
		2462.00000		18.900

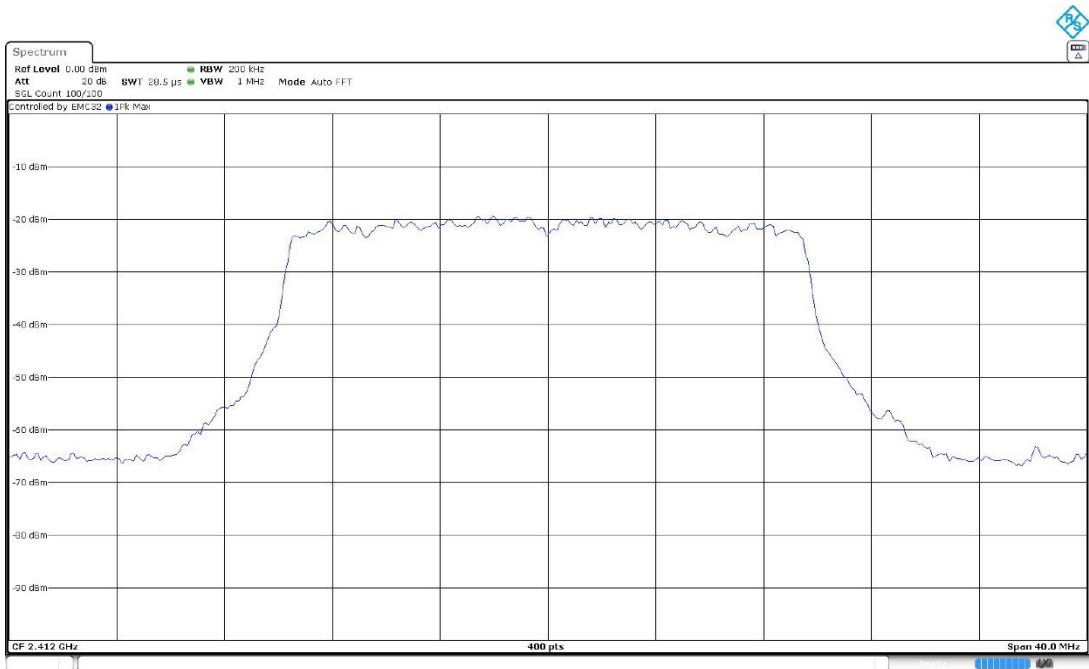
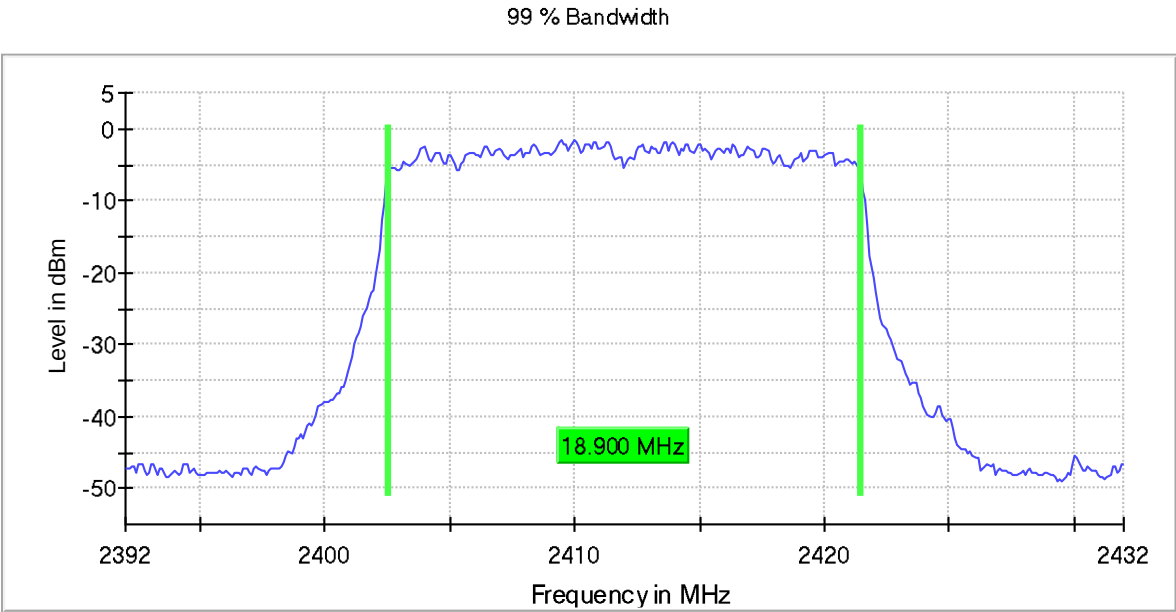
Verdict

Pass

Attachments

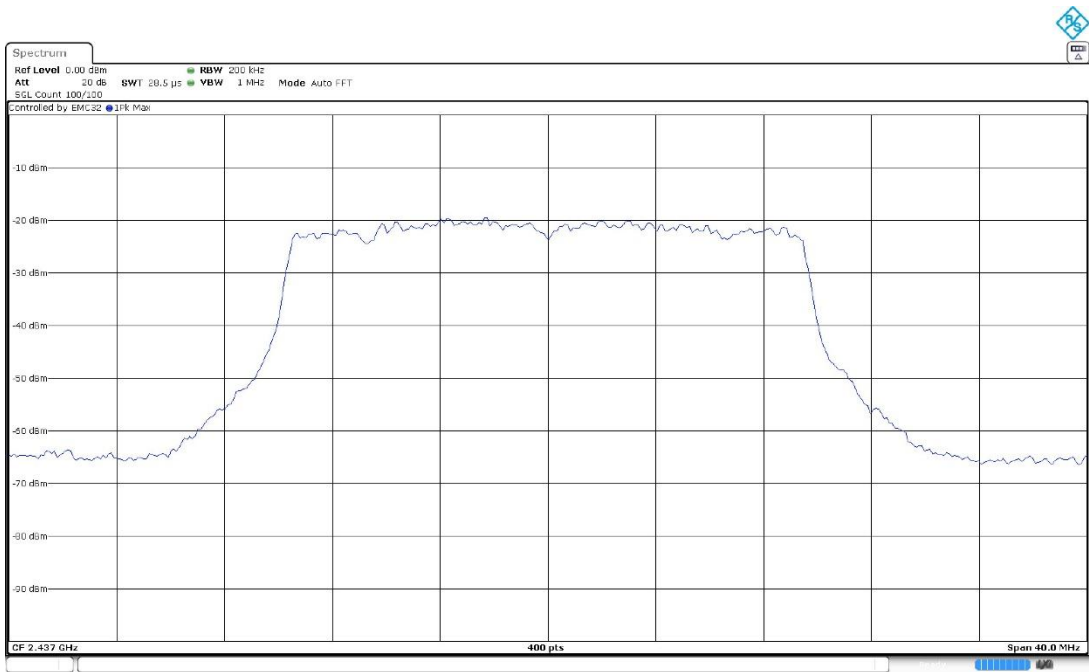
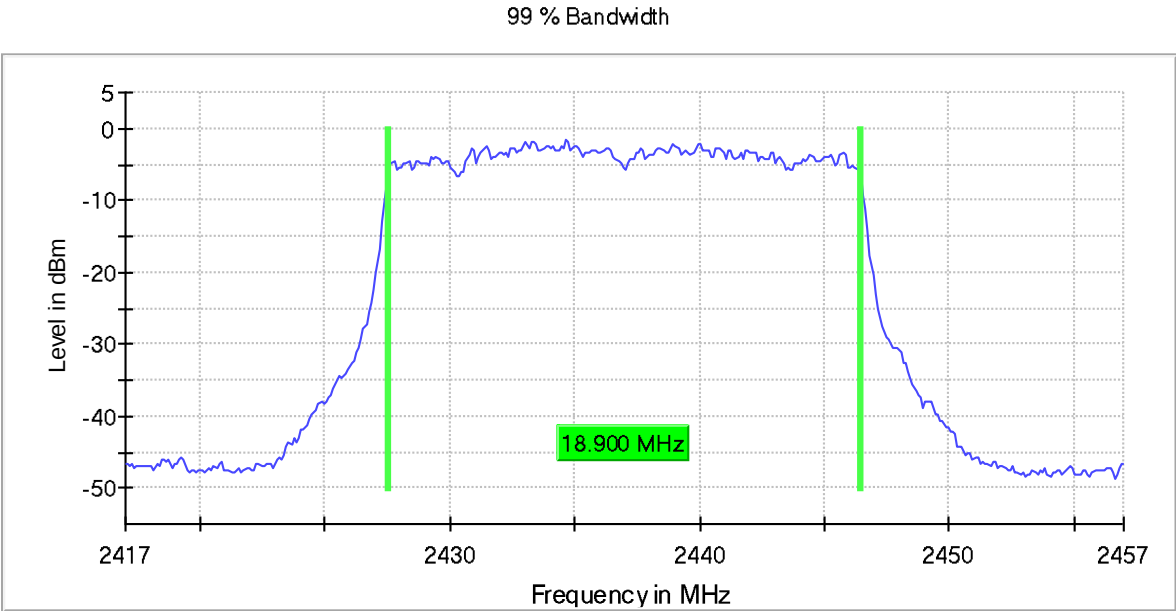
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2412.00000 Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) SU

Images:



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000 Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) SU

Images:



Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

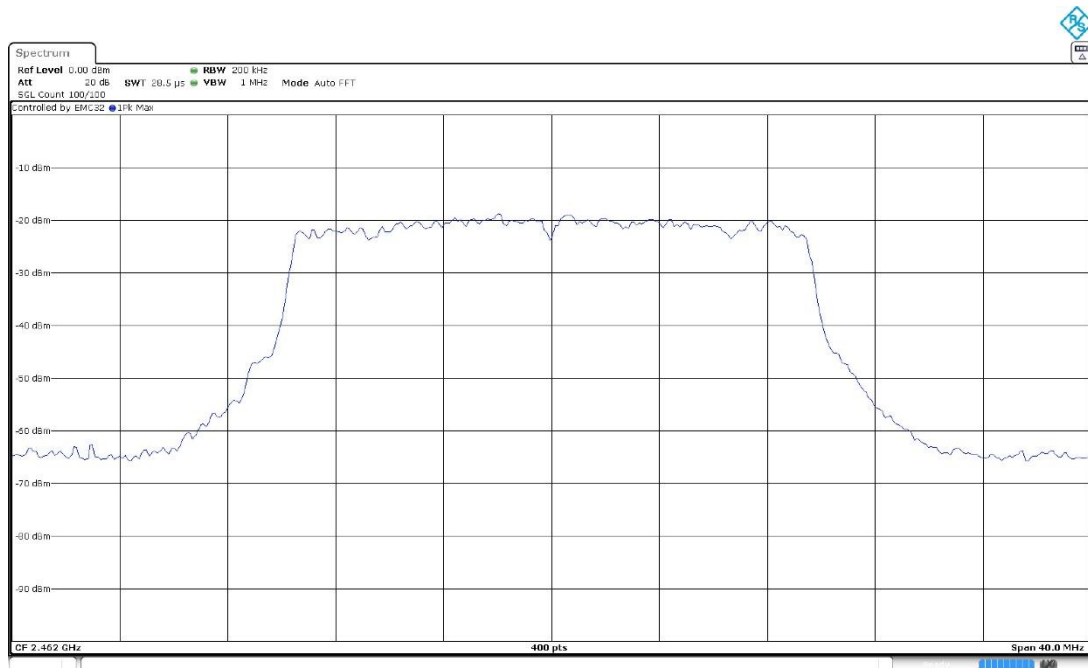
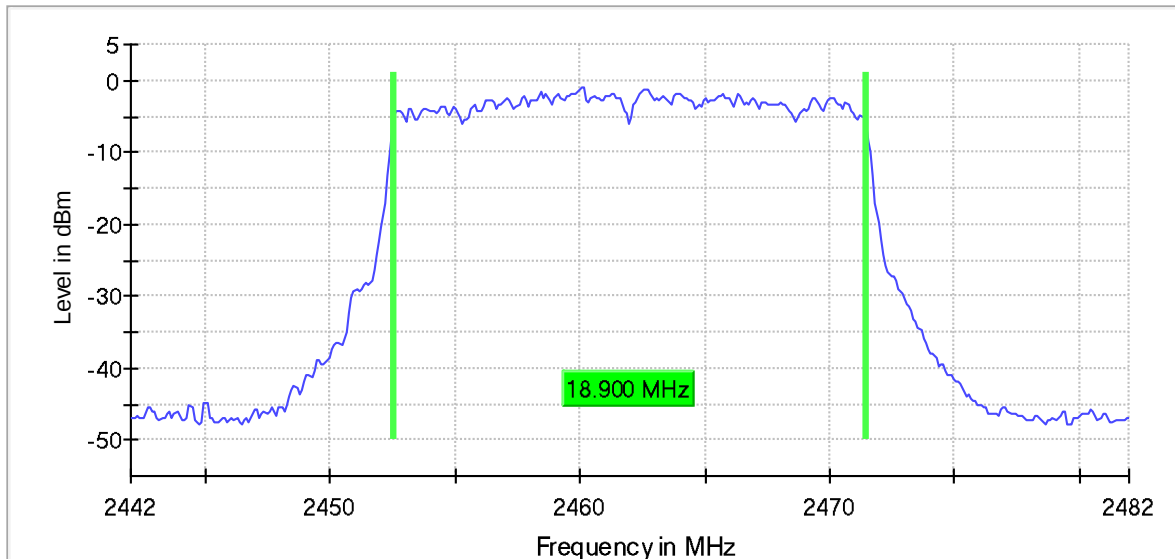
Frequency MHz = 2462.00000

Active Port = 2+4

Modulation = 802.11ax HE20 (OFDMA MCS0) SU

Images:

99 % Bandwidth



Modulation: 802.11ax HE20 (OFDMA MCS0) RU26

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Occ Ch BW (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	18.500
		2437.00000		16.900
		2462.00000		18.400

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

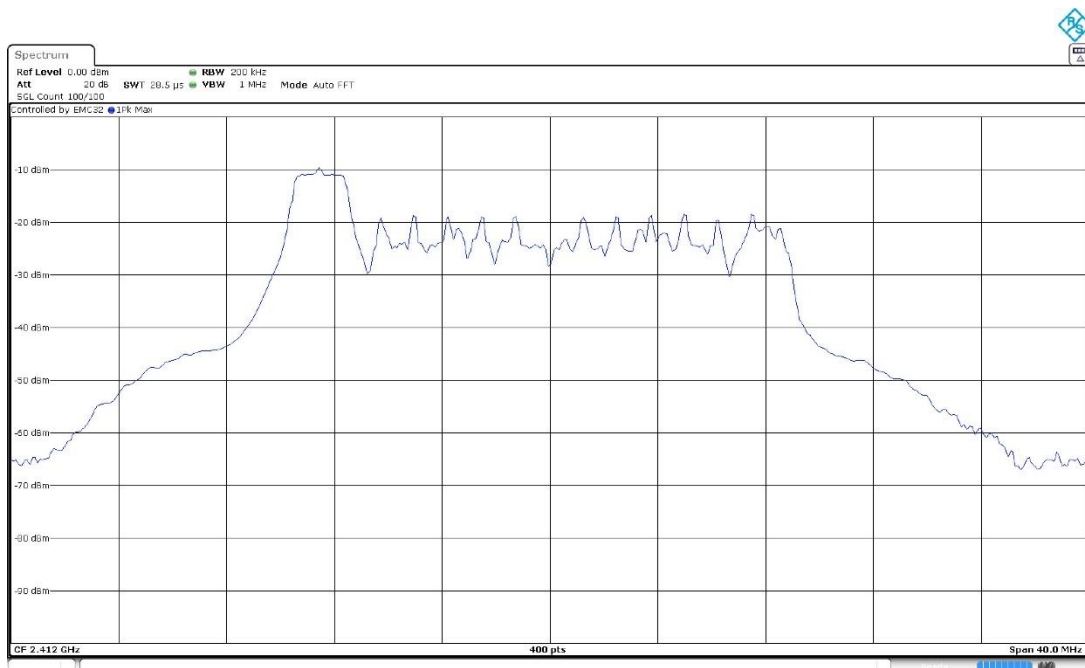
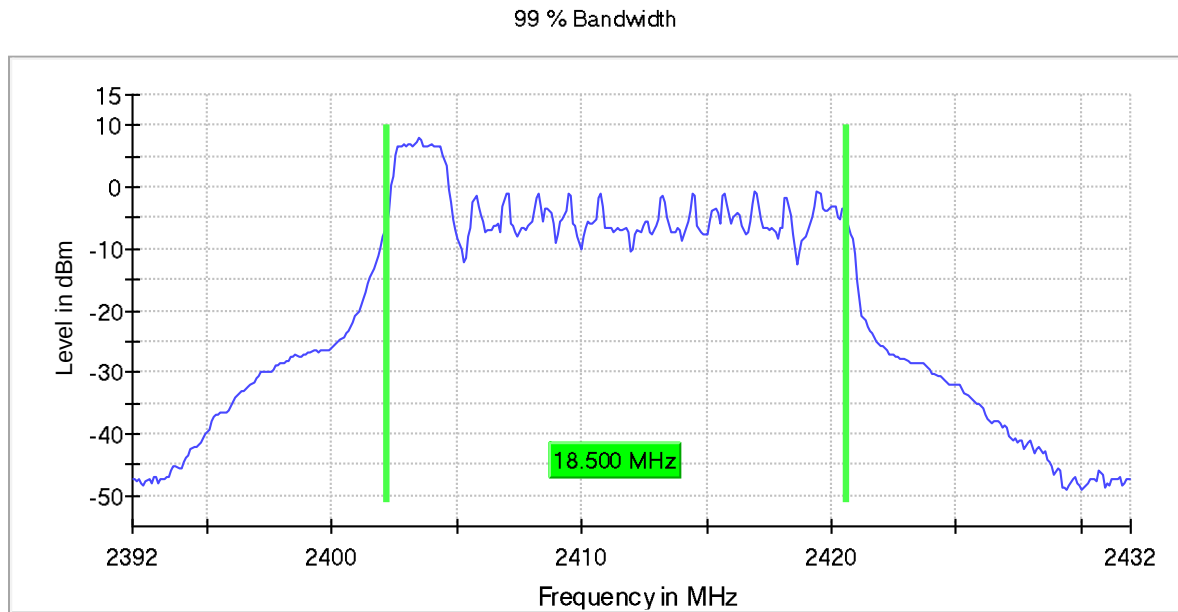
Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2412.00000

Active Port = 2+4

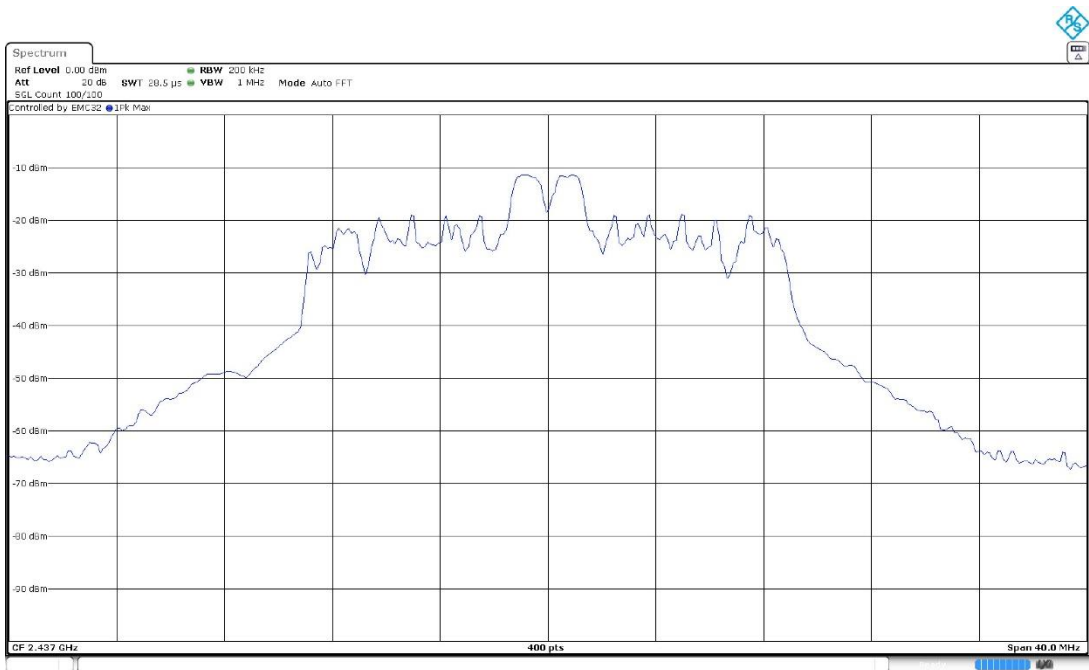
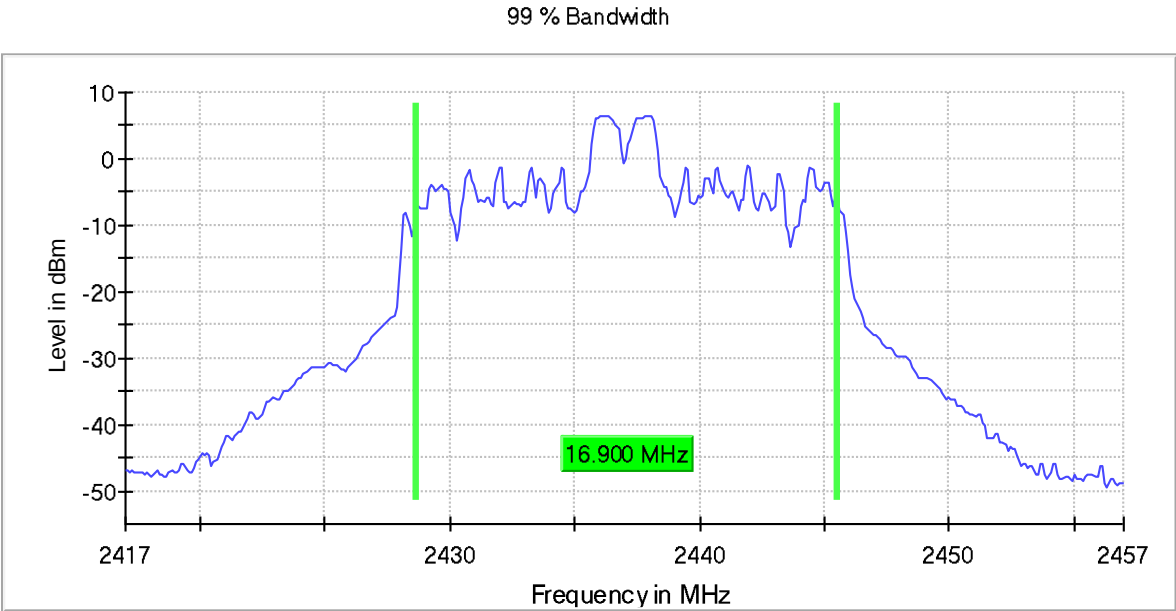
Modulation = 802.11ax HE20 (OFDMA MCS0) RU26

Images:



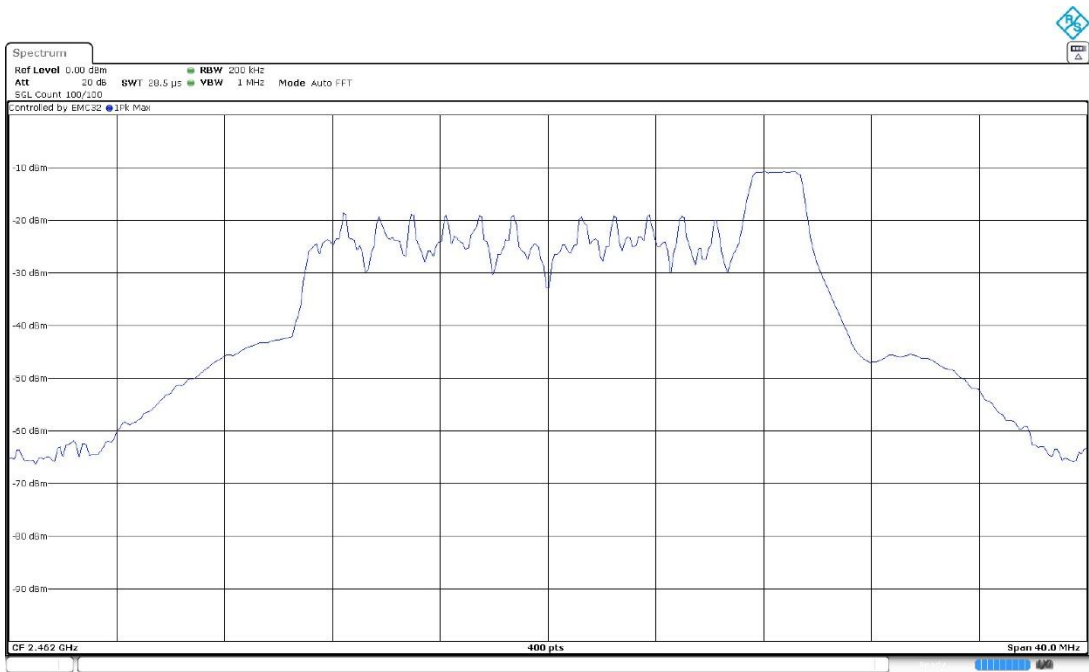
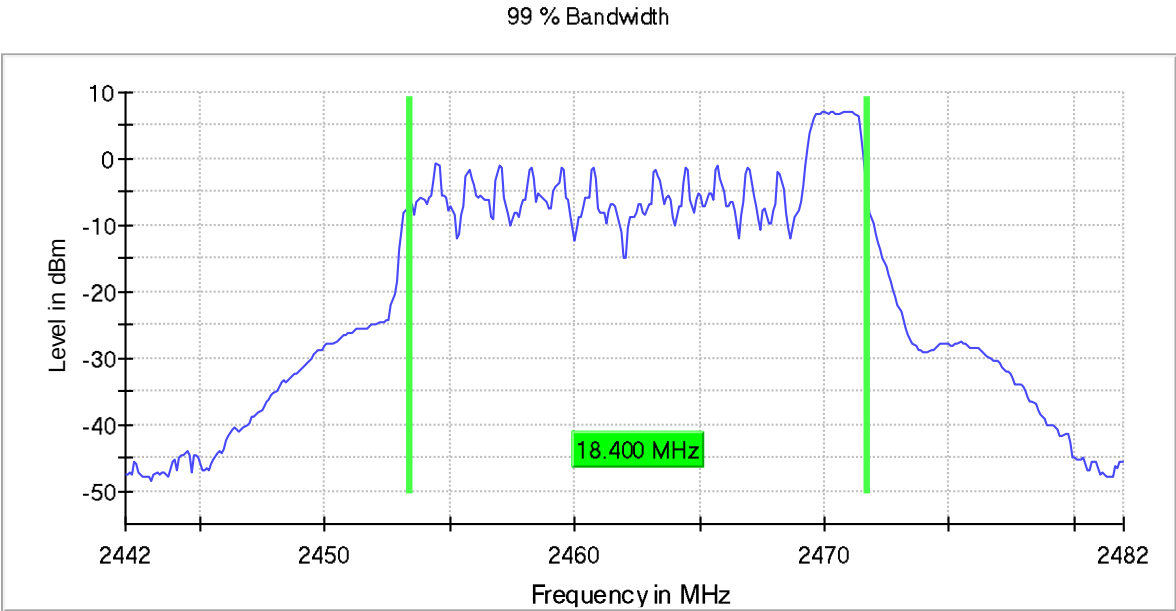
Operation Band MHz = [2400, 2483.5]
Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000
Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) RU26

Images:



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2462.00000 Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) RU26

Images:



RSS-247 5.2 (a) / FCC 15.247 (a) (2) 6 dB Bandwidth

Limits

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Modulation: 802.11b (DSSS 1 Mbit/s)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Ebw (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	7.200
		2437.00000		7.200
		2462.00000		7.200

Verdict

Pass

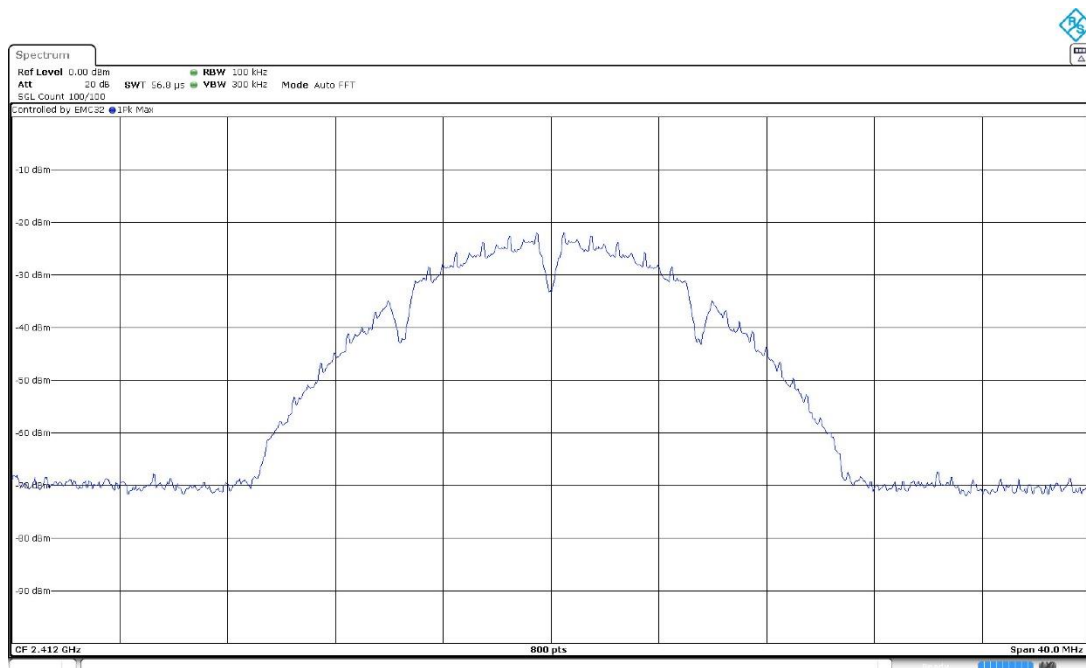
Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2412.00000 Active Port = 2+4

Modulation = 802.11b (DSSS 1 Mbit/s)

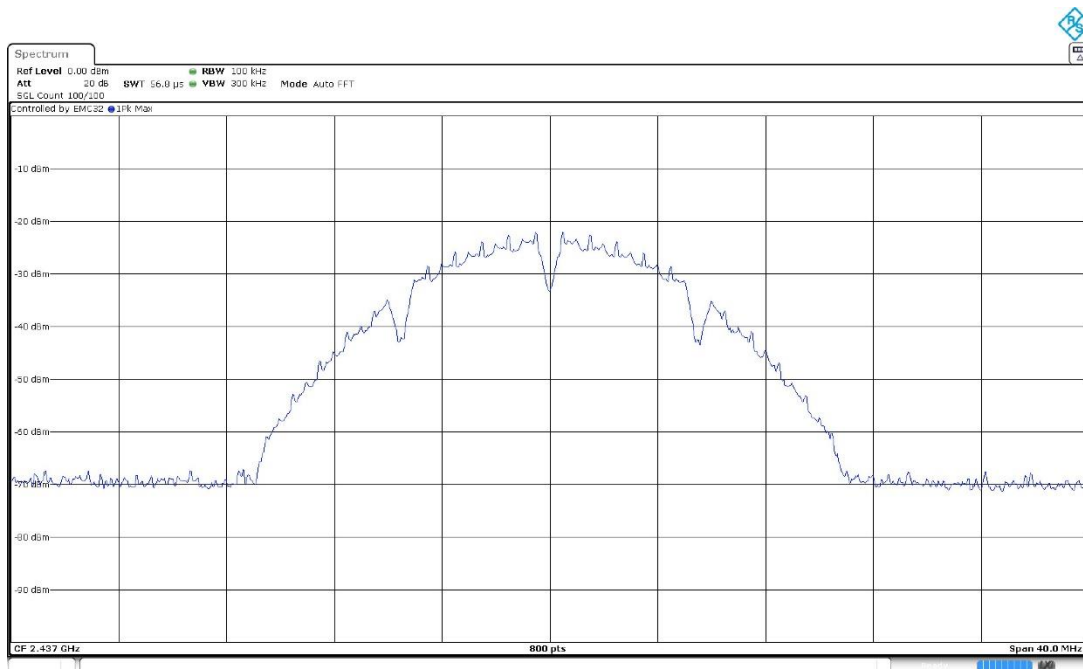
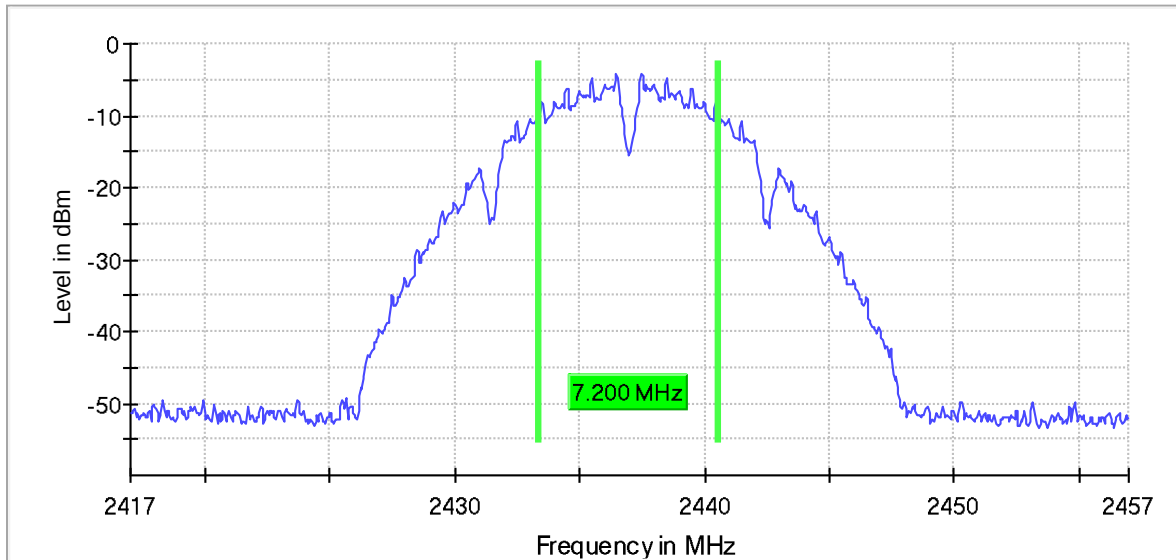
Images:



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000 Active Port = 2+4
Modulation = 802.11b (DSSS 1 Mbit/s)

Images:

6 dB Bandwidth



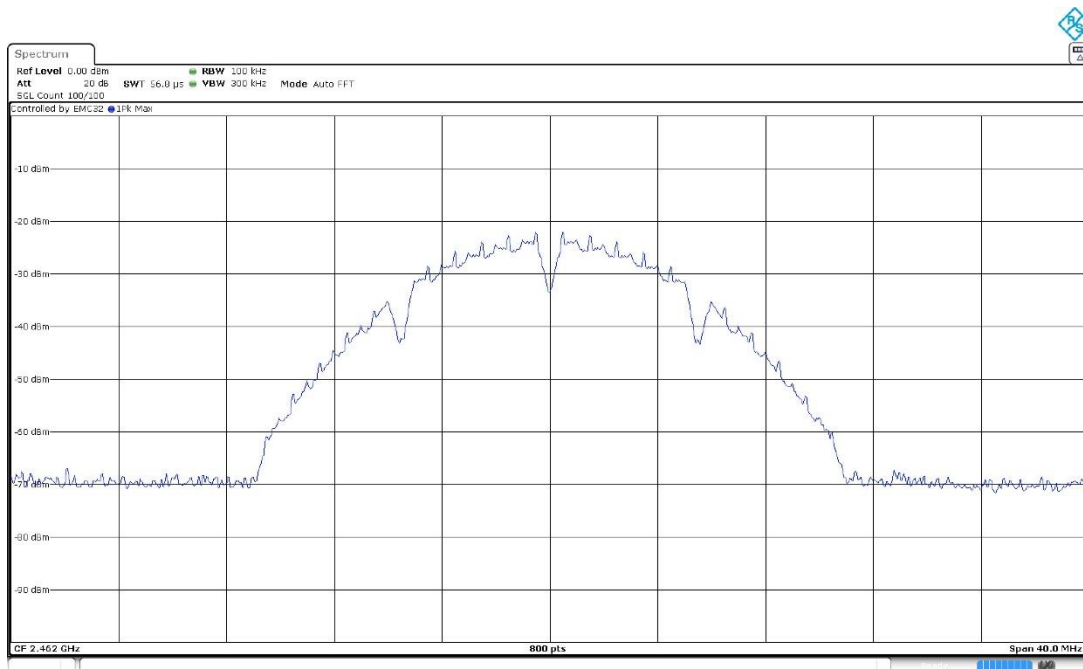
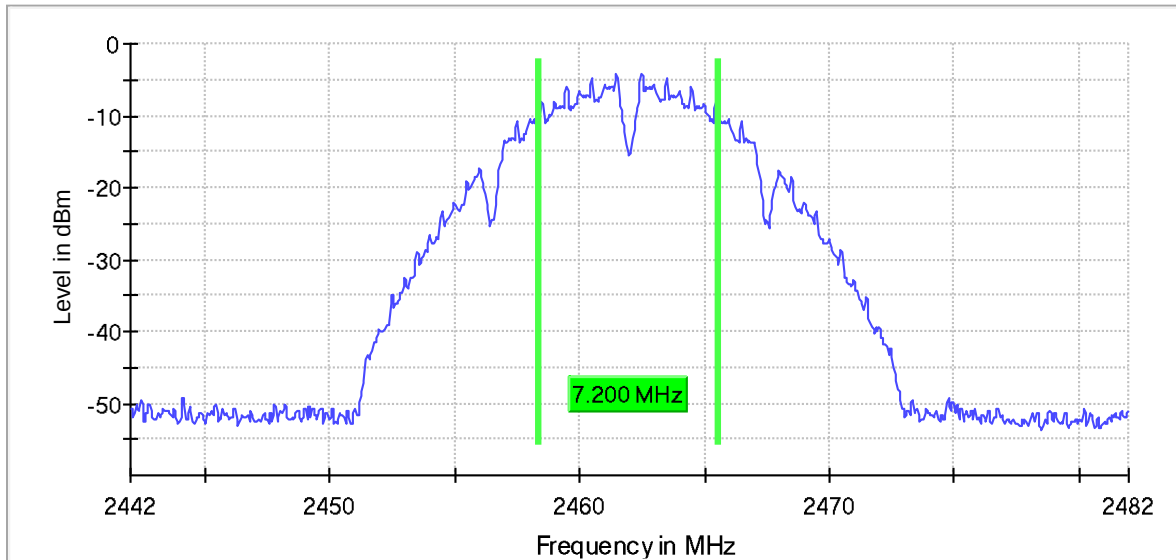
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2462.00000 Active Port = 2+4

Modulation = 802.11b (DSSS 1 Mbit/s)

Images:

6 dB Bandwidth



Modulation: 802.11g (OFDM 6 Mbit/s)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Ebw (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	16.400
		2437.00000		16.400
		2462.00000		16.400

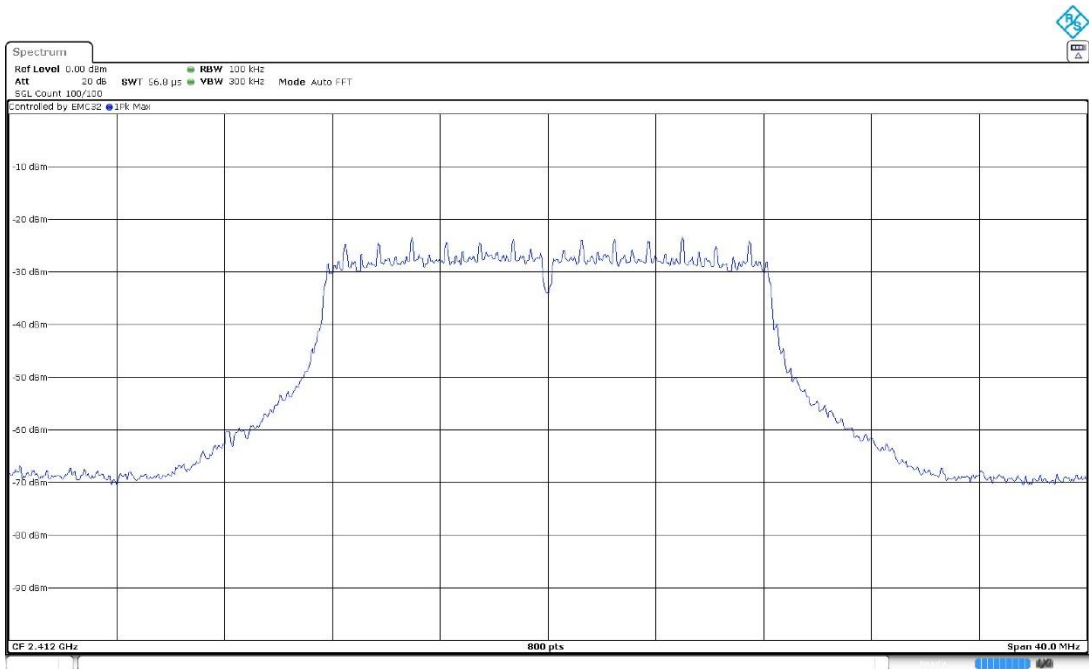
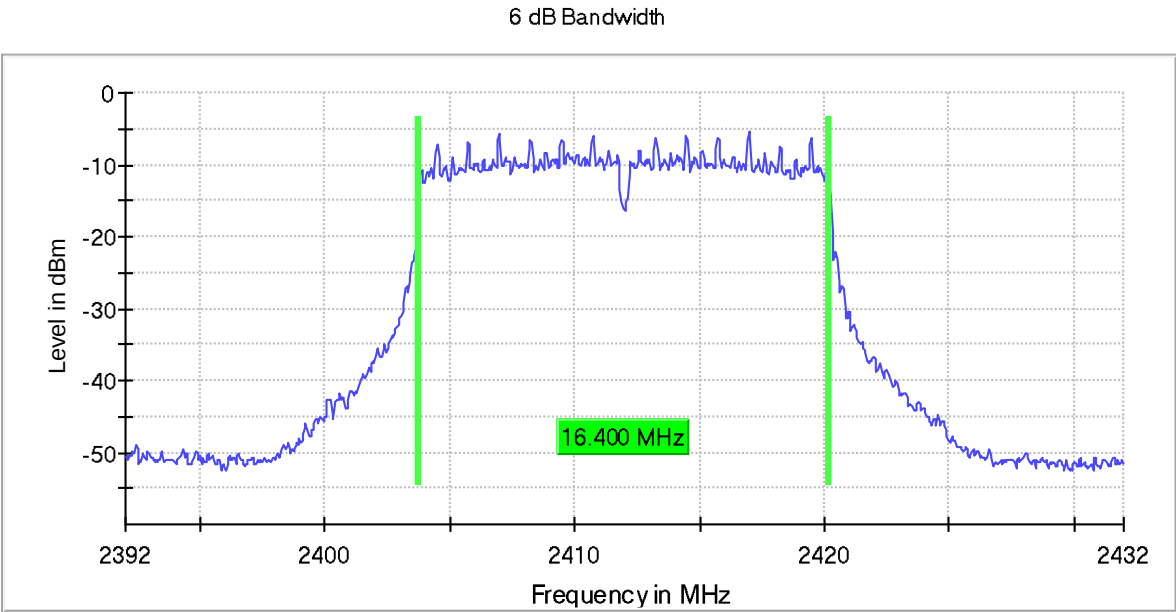
Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2412.00000 Active Port = 2+4
Modulation = 802.11g (OFDM 6 Mbit/s)

Images:



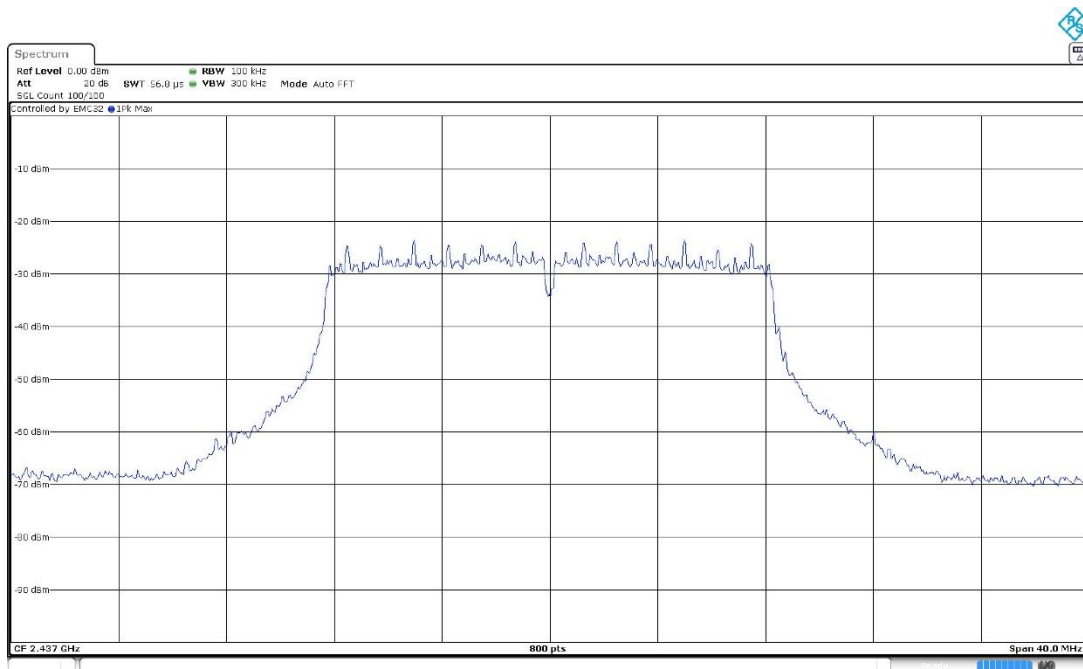
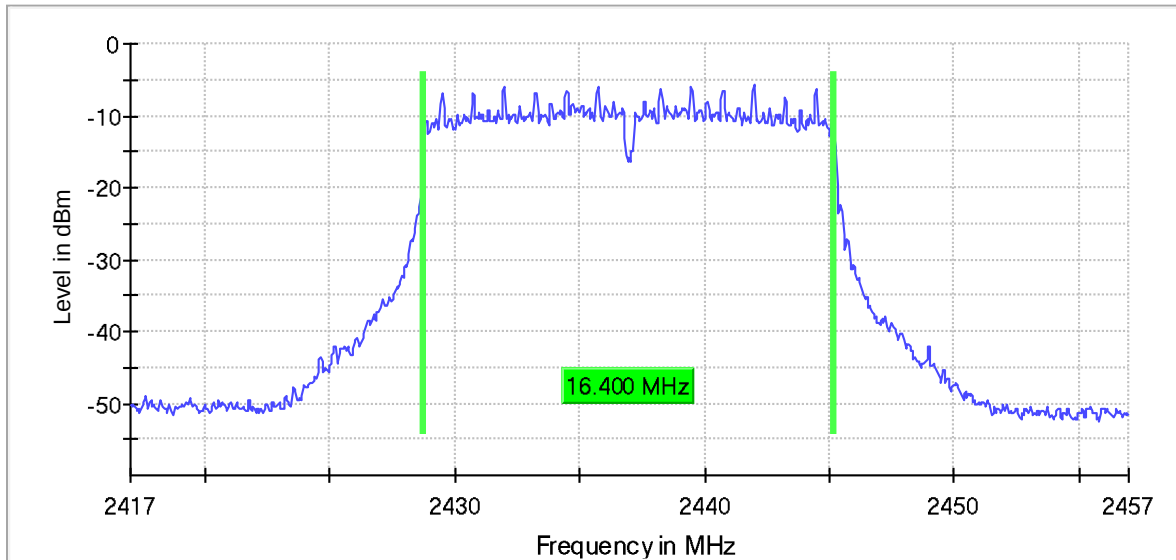
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)

Frequency MHz = 2437.00000 Active Port = 2+4

Modulation = 802.11g (OFDM 6 Mbit/s)

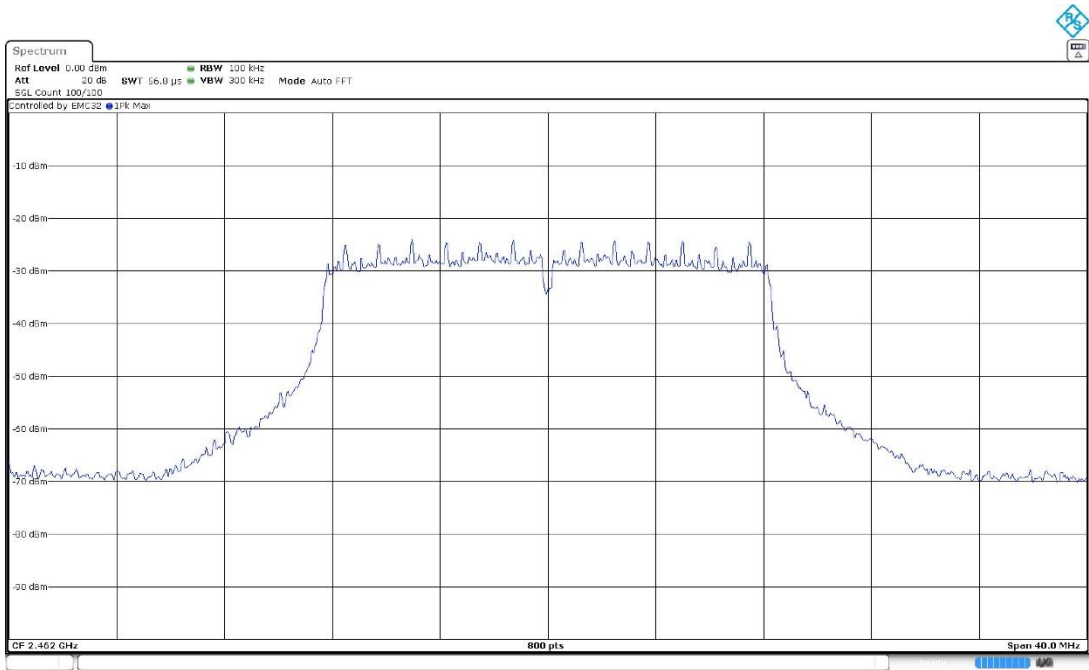
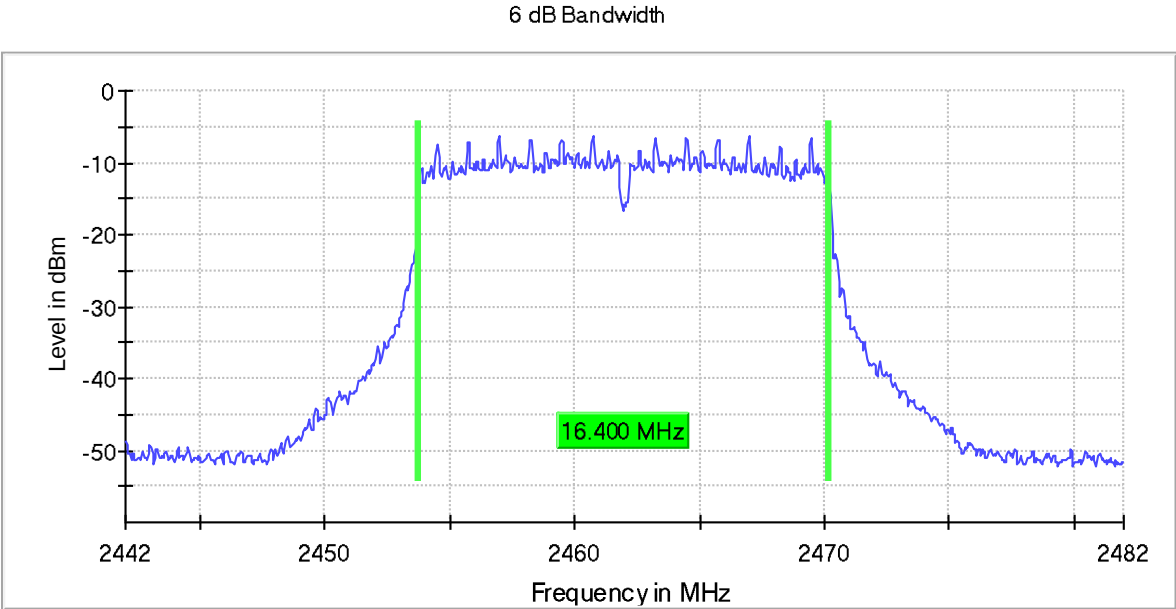
Images:

6 dB Bandwidth



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2462.00000 Active Port = 2+4
Modulation = 802.11g (OFDM 6 Mbit/s)

Images:



Modulation: 802.11n HT20 (OFDM MCS0)

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Ebw (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	17.600
		2437.00000		17.600
		2462.00000		17.600

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

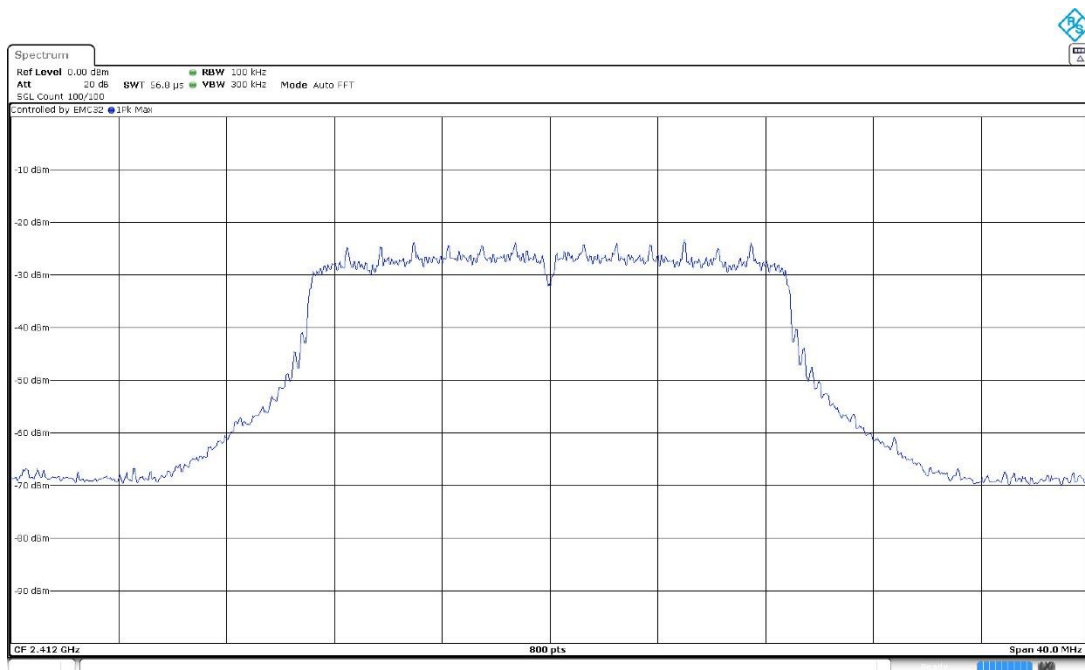
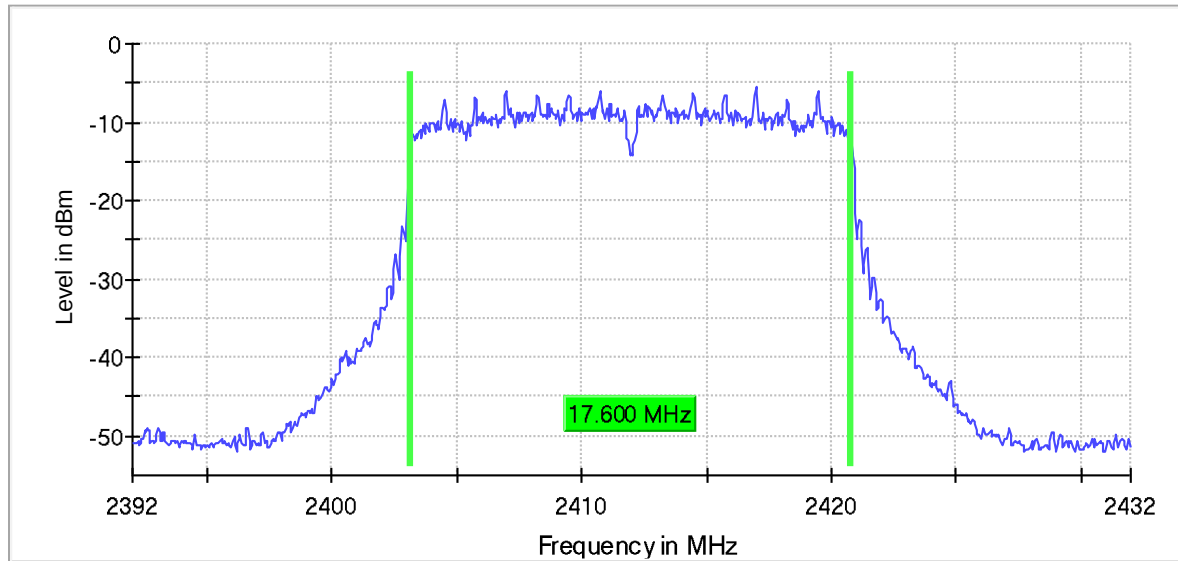
Frequency MHz = 2412.00000

Active Port = 2+4

Modulation = 802.11n HT20 (OFDM MCS0)

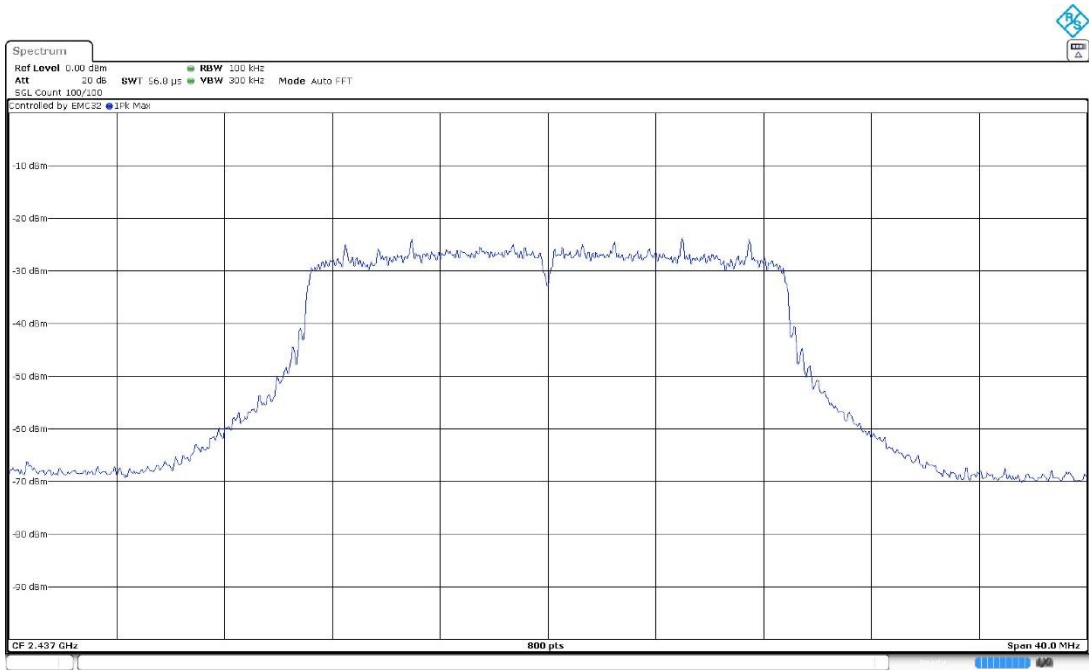
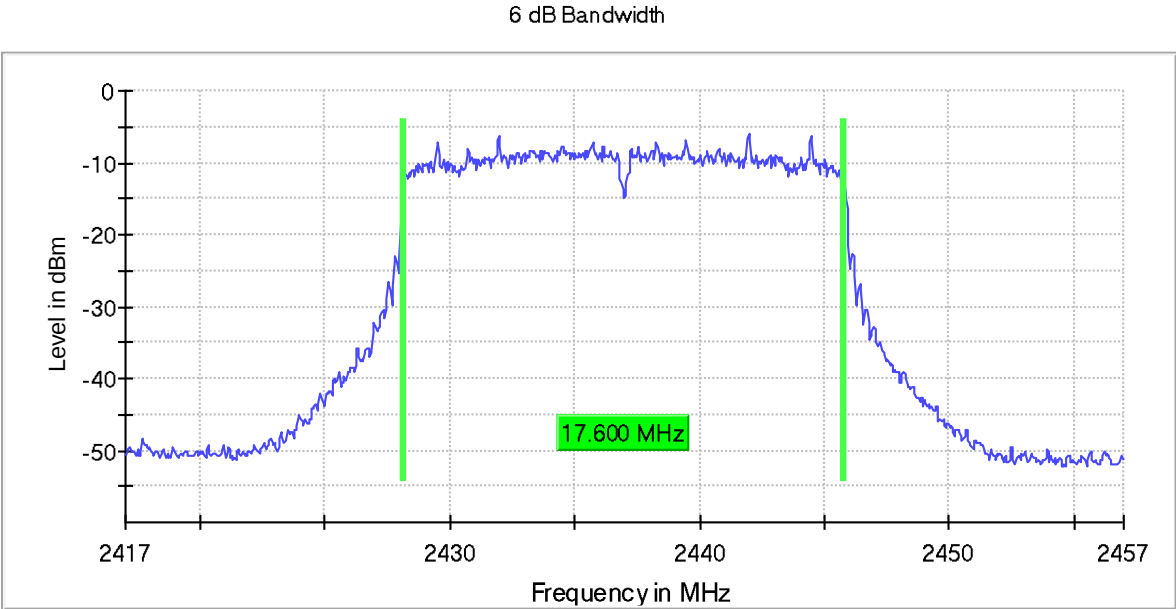
Images:

6 dB Bandwidth



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000 Active Port = 2+4
Modulation = 802.11n HT20 (OFDM MCS0)

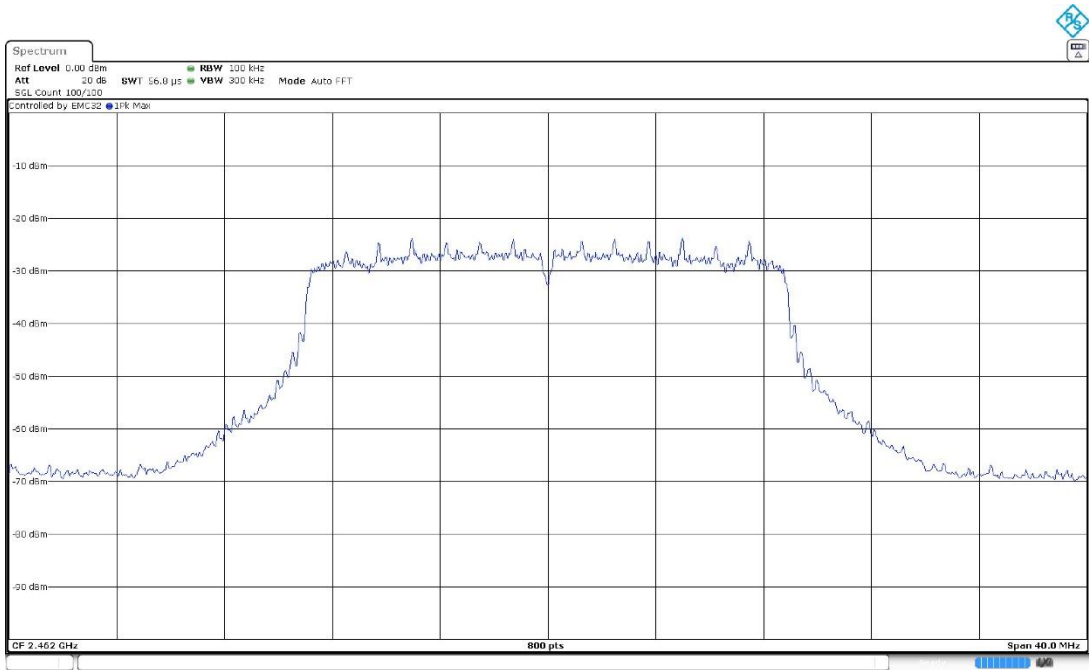
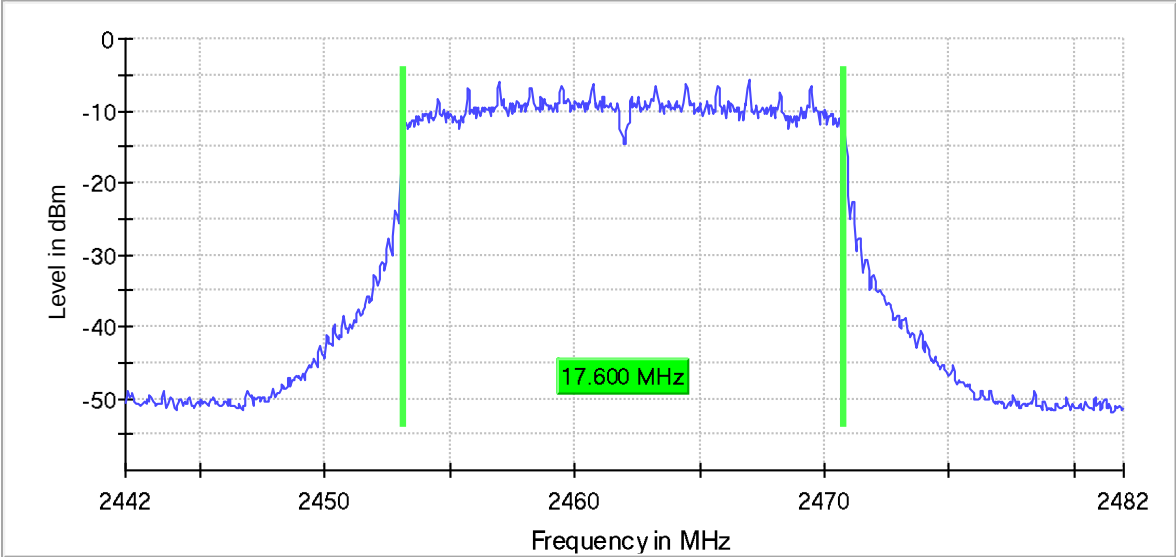
Images:



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2462.00000 Active Port = 2+4
Modulation = 802.11n HT20 (OFDM MCS0)

Images:

6 dB Bandwidth



Modulation: 802.11ax HE20 (OFDMA MCS0) SU

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Ebw (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	18.850
		2437.00000		18.850
		2462.00000		18.800

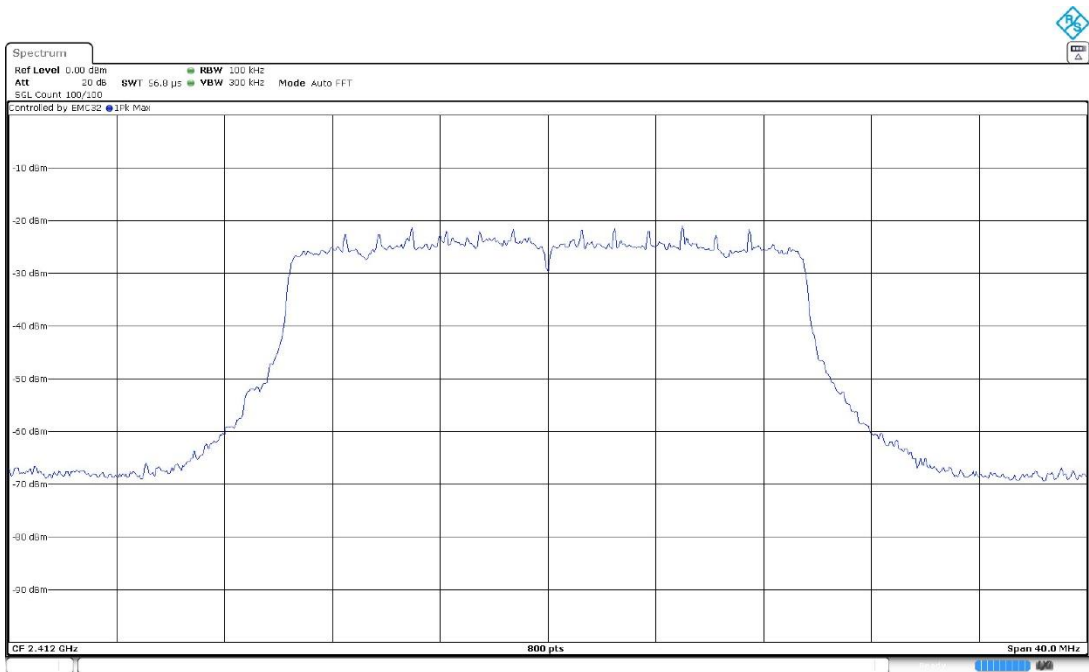
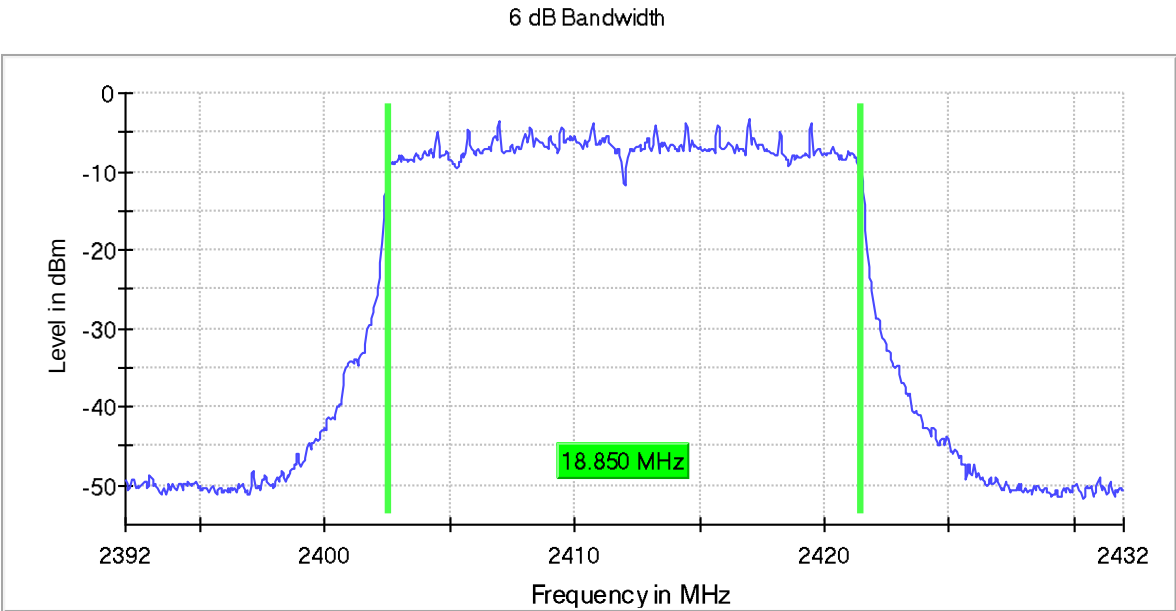
Verdict

Pass

Attachments

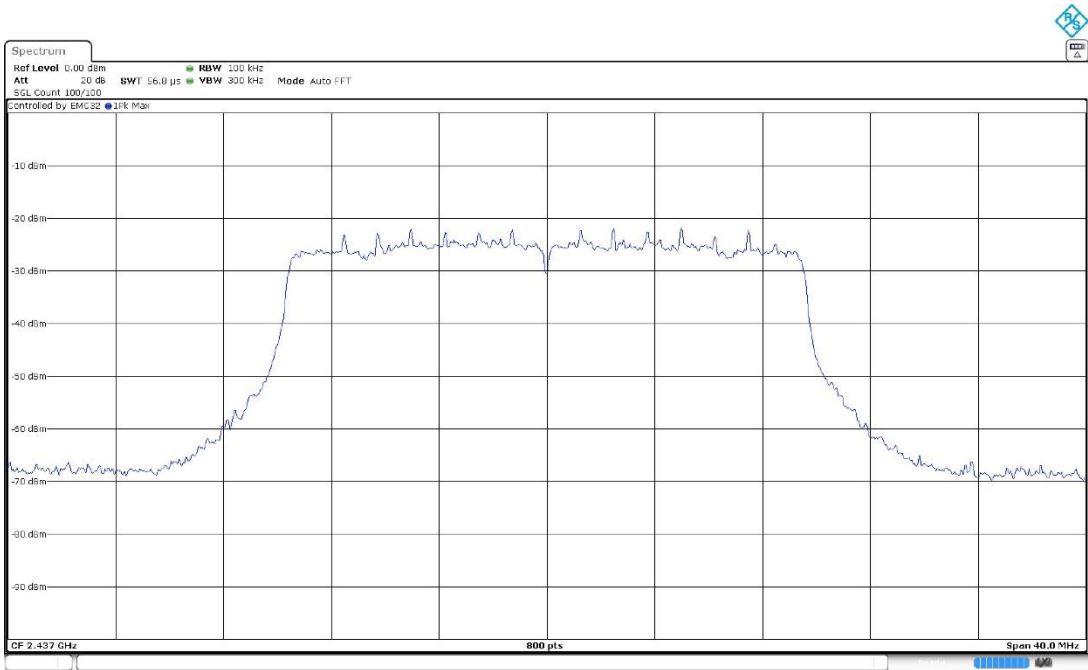
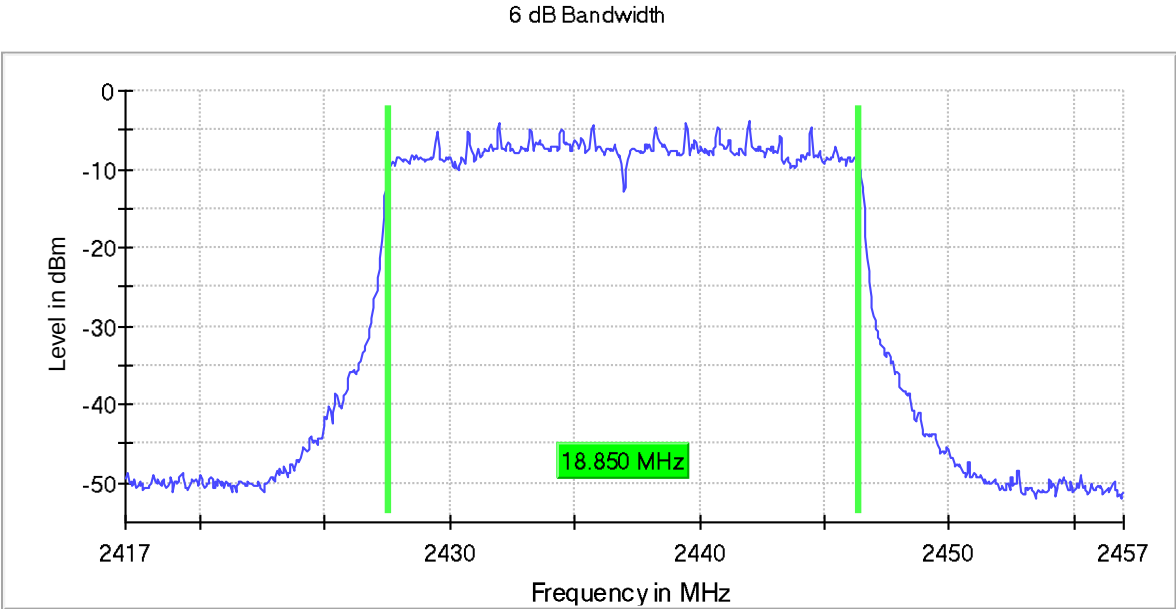
Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2412.00000 Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) SU

Images:



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000 Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) SU

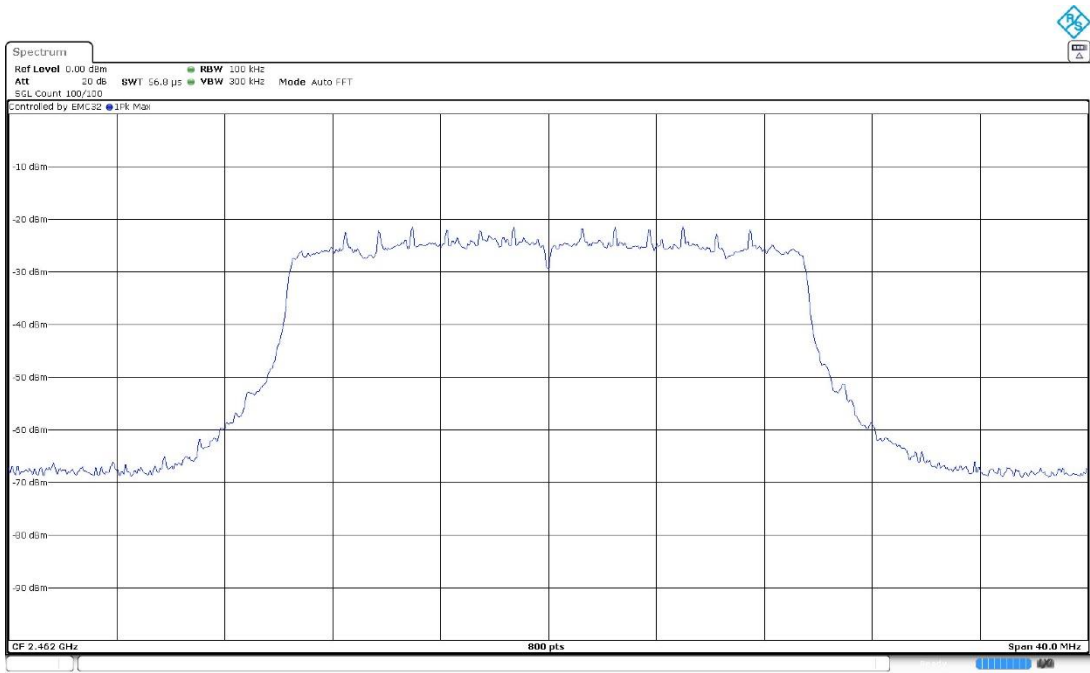
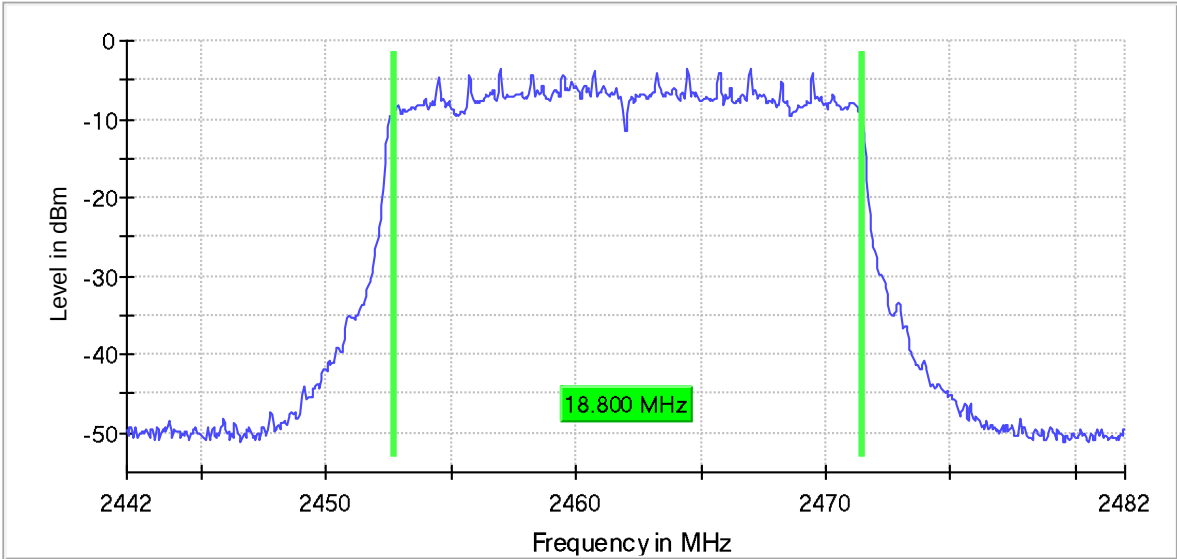
Images:



Operation Band MHz = [2400, 2483.5]
Frequency MHz = 2462.00000
Modulation = 802.11ax HE20 (OFDMA MCS0) SU
Equipment Type = Digital Transmission System (DTS)
Active Port = 2+4

Images:

6 dB Bandwidth



Modulation: 802.11ax HE20 (OFDMA MCS0) RU26

Results

Operation Band (MHz)	Equipment	Freq (MHz)	Port	Ebw (MHz)
[2400, 2483.5]	Digital Transmission System (DTS)	2412.00000	2+4	2.150
		2437.00000		8.900
		2462.00000		2.150

Verdict

Pass

Attachments

Operation Band MHz = [2400, 2483.5]

Equipment Type = Digital Transmission System (DTS)

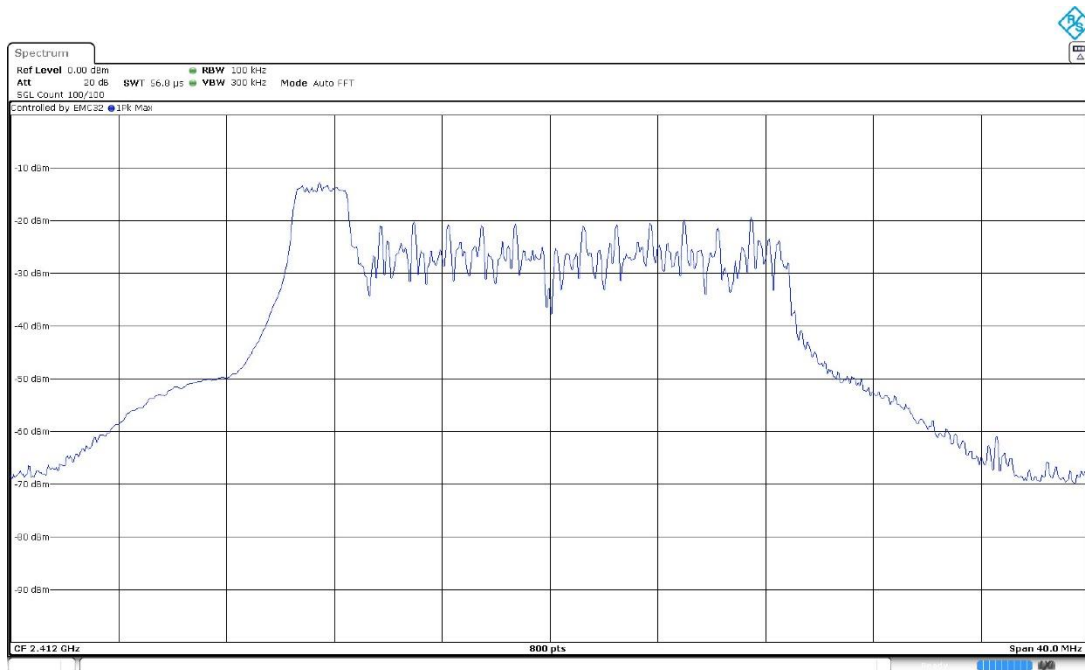
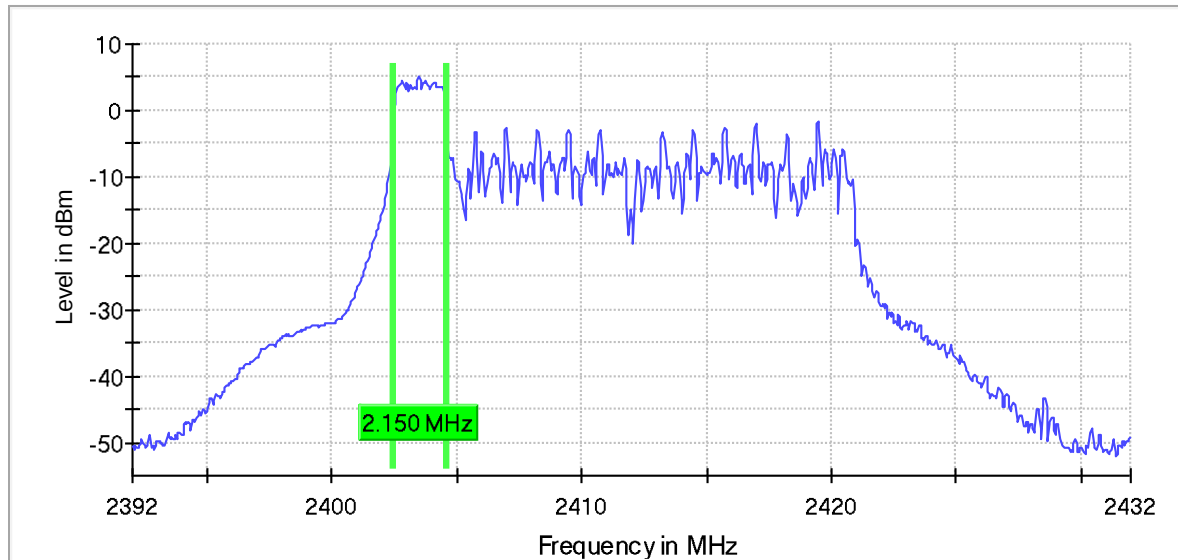
Frequency MHz = 2412.00000

Active Port = 2+4

Modulation = 802.11ax HE20 (OFDMA MCS0) RU26

Images:

6 dB Bandwidth



Operation Band MHz = [2400, 2483.5] Equipment Type = Digital Transmission System (DTS)
Frequency MHz = 2437.00000 Active Port = 2+4
Modulation = 802.11ax HE20 (OFDMA MCS0) RU26

Images:

