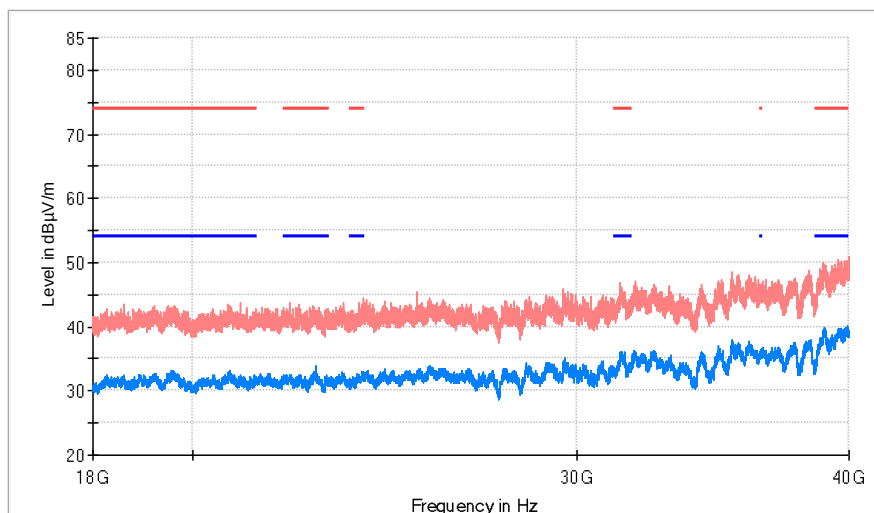


TEST RESULTS (Cont.)	
FREQUENCY RANGE	18 GHz – 40 GHz

High Channel



- AVG_MAXH
- PK+_MAXH
- TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit
- TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit

Appendix E:

Test results 5.725 GHz – 5.85 GHz Band

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DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS	DESCRIPTION
TC#01 ⁽¹⁾ (a mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 3.3 \text{ Vdc}$ <u>Test Frequencies for Conducted/Radiated tests: (20 MHz)</u> Lowest range: 5745 MHz Middle channel: 5785 MHz Highest range: 5825 MHz
TC#02 ⁽¹⁾ (n mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 3.3 \text{ Vdc}$ <u>Test Frequencies for Conducted/Radiated tests: (20 MHz)</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz <u>Test Frequencies for Conducted/Radiated tests: (40 MHz)</u> Lowest channel: 5755 MHz Highest channel: 5795 MHz
TC#03 ⁽¹⁾ (ac mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 3.3 \text{ Vdc}$ <u>Test Frequencies for Conducted/Radiated tests: (20 MHz)</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz <u>Test Frequencies for Conducted/Radiated tests: (40 MHz)</u> Lowest channel: 5755 MHz Highest channel: 5795 MHz <u>Test Frequencies for Conducted/Radiated tests: (80 MHz)</u> Middle channel: 5775 MHz

Note (1): For spurious emissions for OFDM modes 802.11a, 802.11n20/40 and 802.11ac20/40/80 a preliminary scan was performed to determine the worst case.

The data rates of 6Mb/s for 802.11a, MCS 0 for 802.11n, and MCS8 for 802.11ac were selected based on preliminary testing that identified those rates corresponding to the worst cases.

SECTION E.1: 26DB EMISSION BANDWIDTH & OCCUPIED BANDWIDTH

LIMITS:

Product standard:

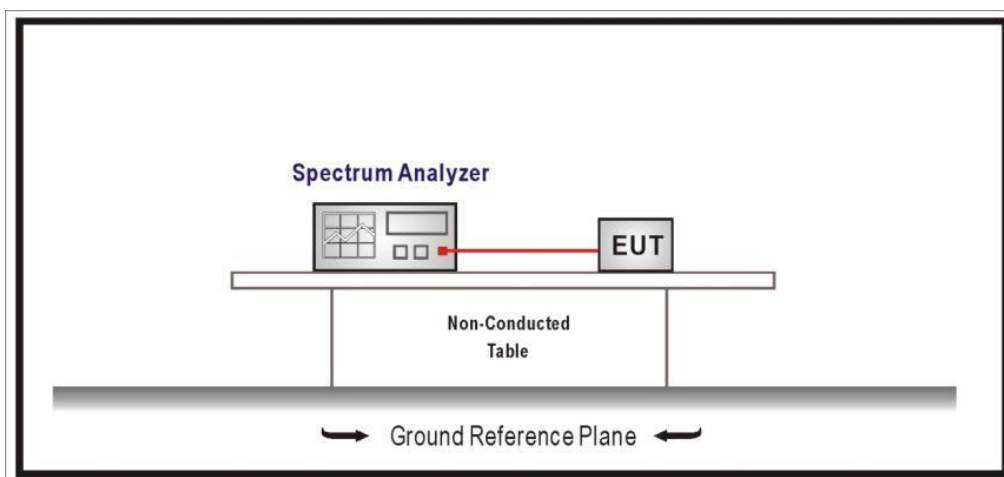
Part 15 Subpart E §15.403 and RSS-247

Test standard:

Part 15 Subpart E §15.403 and RSS-247 6.2.4

No requirements requested

TEST SETUP:



TESTED SAMPLES:

S/01

TESTED CONDITIONS MODES:

TC#01 (a mode)

TEST RESULTS:

PASS

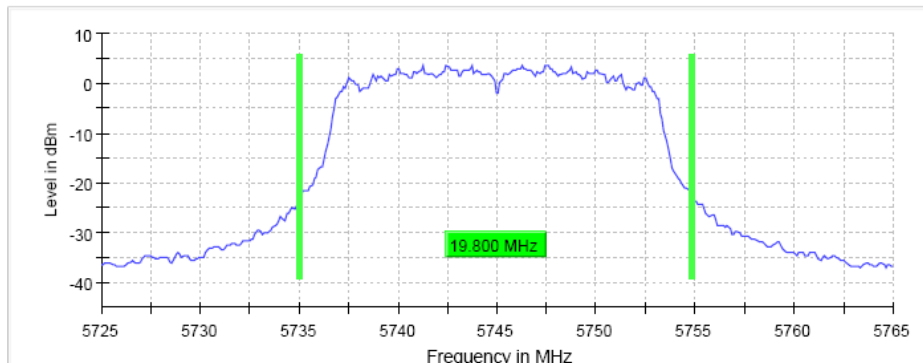
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
26dB Bandwidth (MHz)	19.8	19.5	19.2
Occupied bandwidth (MHz)	16.3	16.3	16.3
Measurement uncertainty (kHz)	<± 8.33		

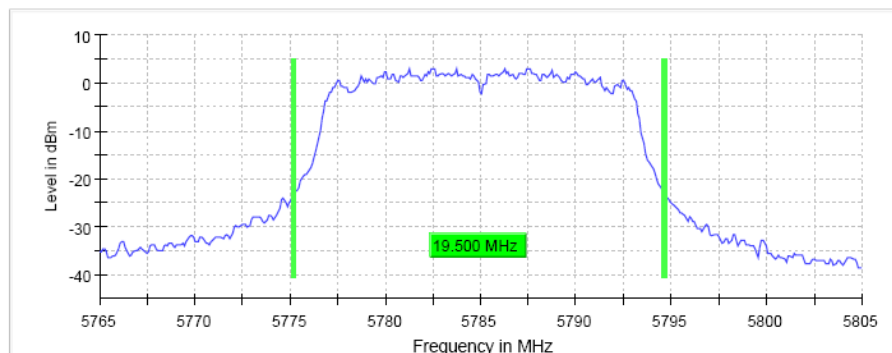
TEST RESULTS (Cont.):

26 dB BANDWIDTH

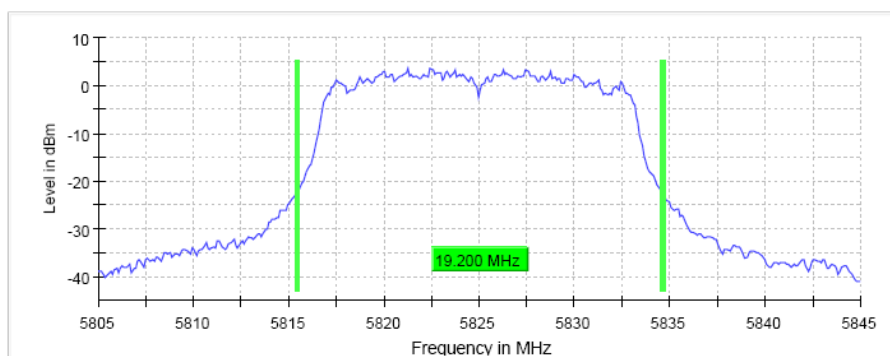
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

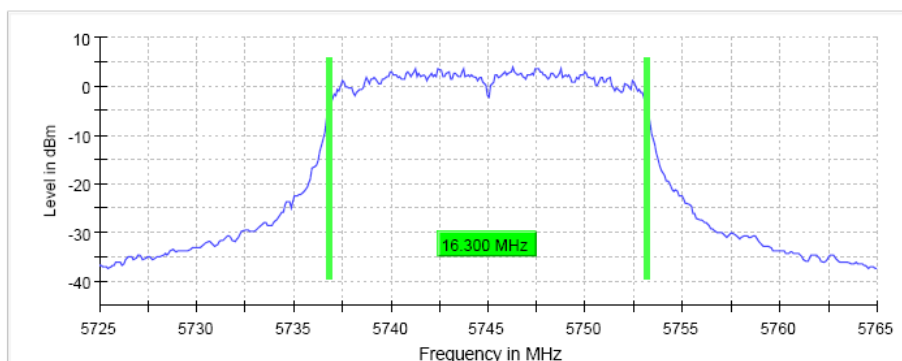
Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
Sweep Points	400	400	400
Sweep time	28.477 μ s	28.477 μ s	28.477 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamplifier	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	50 / max. 150	51 / max. 150	51 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB	0.00 dB

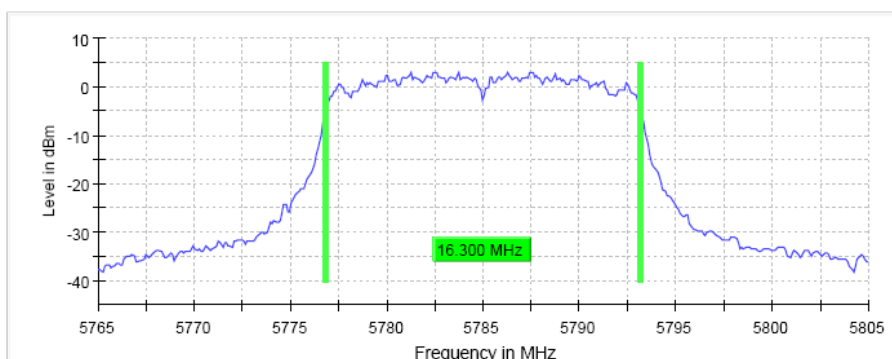
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

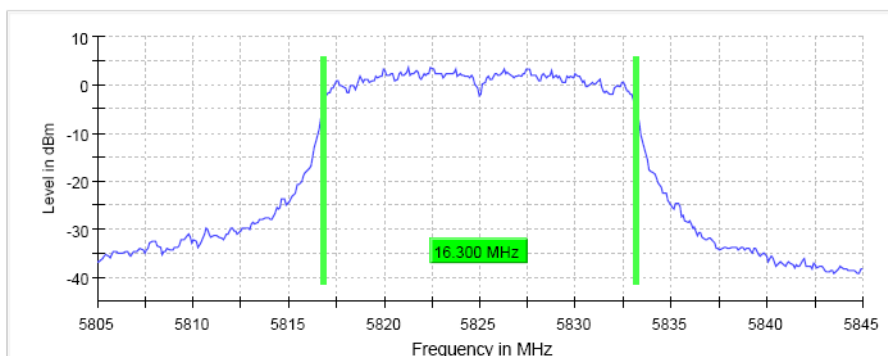
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)			
Measurement			
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
Sweep Points	400	400	400
Sweep time	28.477 μs	28.477 μs	28.477 μs
Reference Level	0.000 dBm	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamp	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	67 / max. 150	78 / max. 150	71 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.15 dB	0.05 dB

TESTED SAMPLES:	S/01
TEST RESULTS (Cont.):	TC#02 (n mode)
TEST RESULTS:	PASS

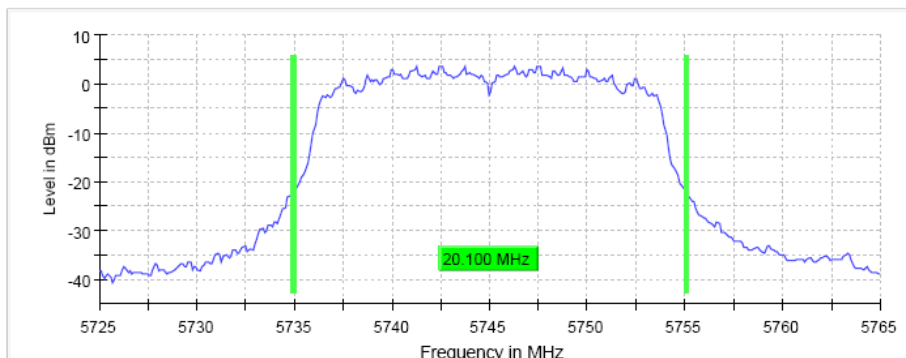
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
26dB Bandwidth (MHz)	20.1	20.0	20.1
Occupied bandwidth (MHz)	17.3	17.4	17.4
Measurement uncertainty (kHz)	<± 8.33		

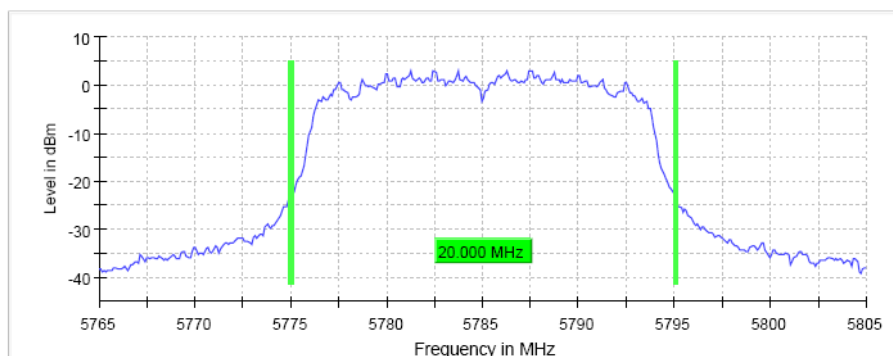
TEST RESULTS (Cont.):

26 dB BANDWIDTH

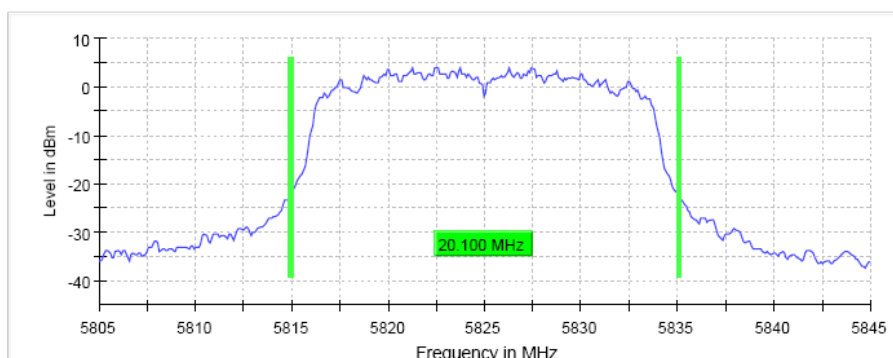
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

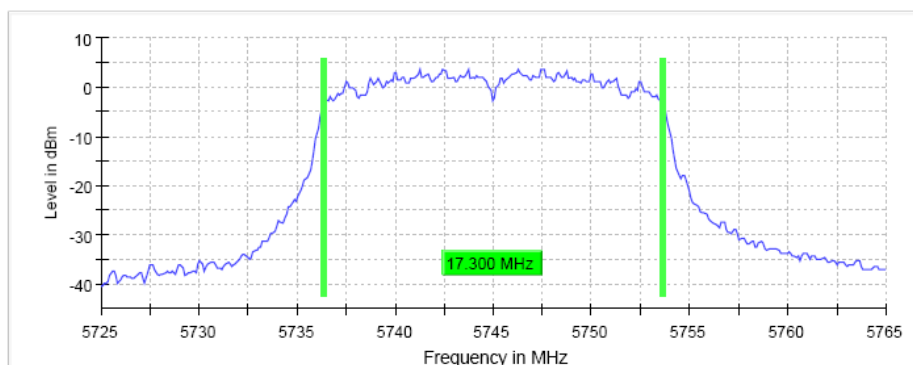
Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
Sweep Points	400	400	400
Sweep time	28.477 μ s	28.477 μ s	28.477 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamplifier	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	59 / max. 150	58 / max. 150	61 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.01 dB	0.28 dB

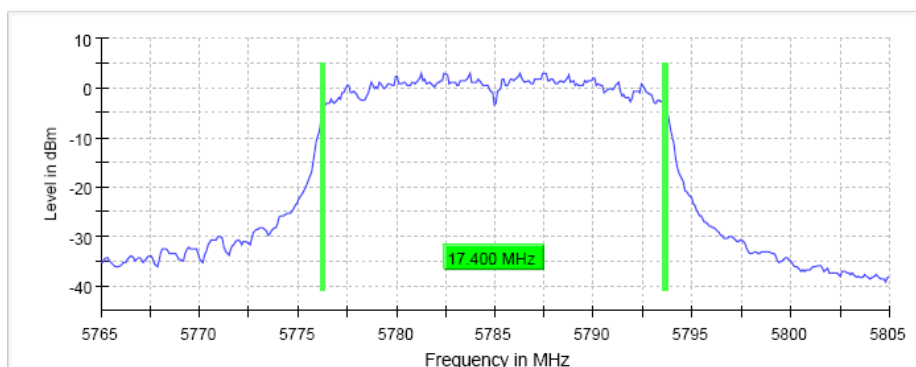
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

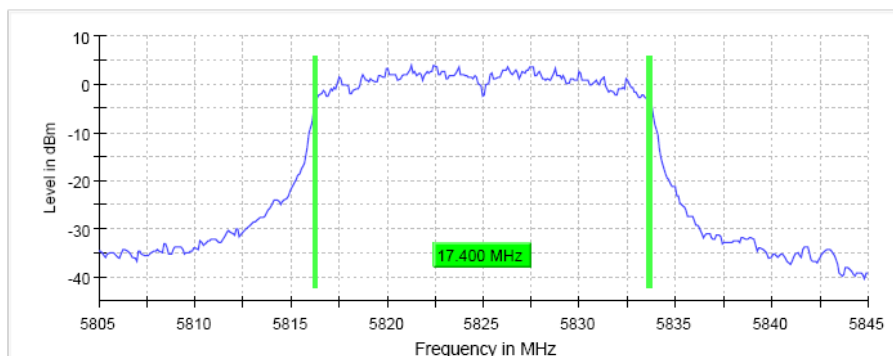
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)			
Measurement			
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
Sweep Points	400	400	400
Sweep time	28.477 μs	28.477 μs	28.477 μs
Reference Level	0.000 dBm	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamp	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	71 / max. 150	62 / max. 150	34 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.28 dB	0.01 dB

TESTED SAMPLES:	S/01
TEST RESULTS (Cont.):	TC#02 (n mode)
TEST RESULTS:	PASS

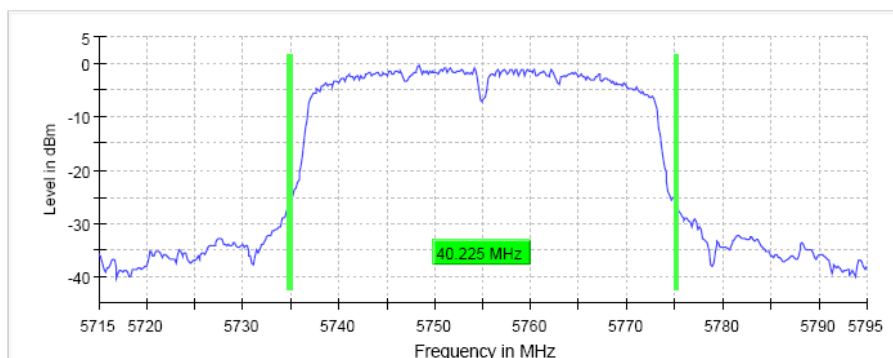
Bandwidth: 40 MHz

	Lowest frequency	Highest frequency
	5755 MHz	5795 MHz
26dB Bandwidth (MHz)	40.225	40.826
Occupied bandwidth (MHz)	36.00	36.25
Measurement uncertainty (kHz)	<± 8.33	

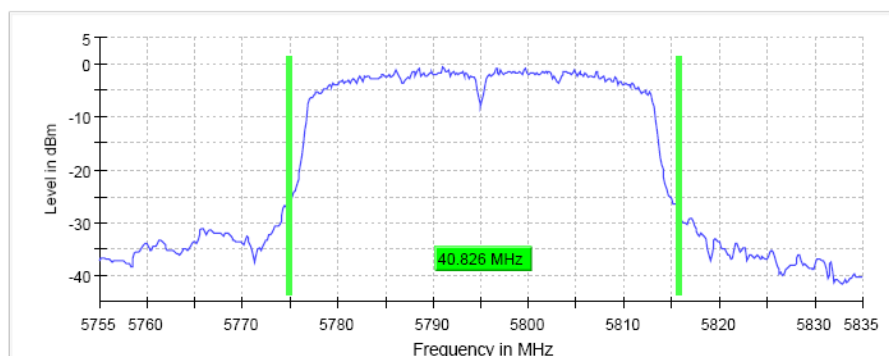
TEST RESULTS (Cont.):

26 dB BANDWIDTH

Lowest Channel



Highest Channel



TEST RESULTS (Cont.)

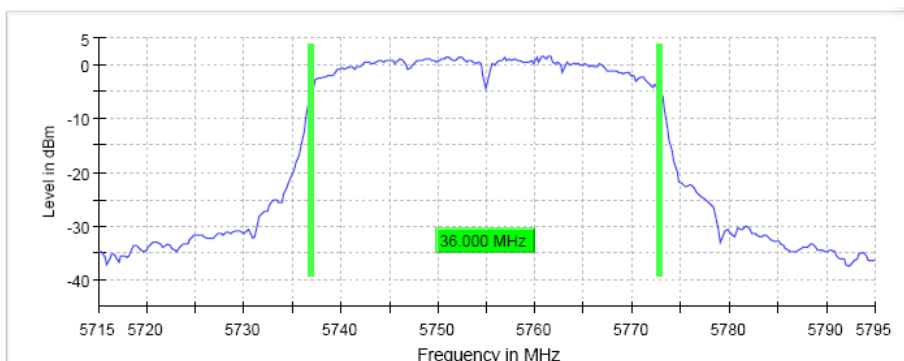
Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.71500 GHz	5.75500 GHz
Stop Frequency	5.79500 GHz	5.83500 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	300.000 kHz
VBW	1.000 MHz	1.000 MHz
Sweep Points	267	267
Sweep time	31.603 μ s	31.603 μ s
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	Max Peak	Max Peak
Sweep Count	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	66 / max. 150	89 / max. 150
Stable	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB

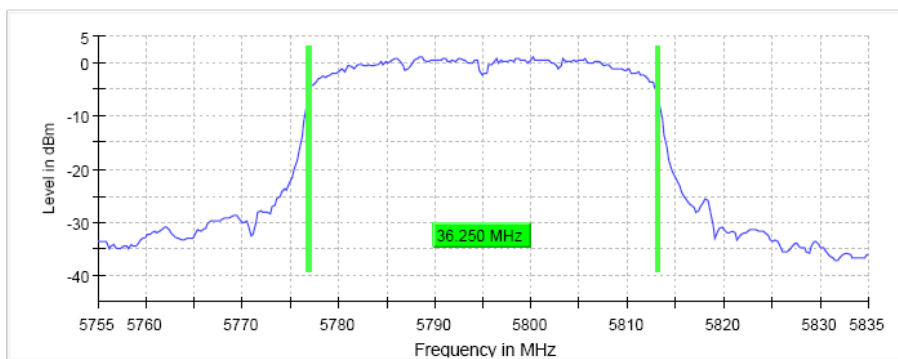
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

Lowest Channel



Highest Channel



TEST RESULTS (Cont.)

Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.71500 GHz	5.75500 GHz
Stop Frequency	5.79500 GHz	5.83500 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	500.000 kHz
VBW	2.000 MHz	2.000 MHz
Sweep Points	320	320
Sweep time	18.906 μ s	18.906 μ s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak
Sweep Count	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	86 / max. 150	82 / max. 150
Stable	5 / 5	5 / 5
Max Stable Difference	0.18 dB	0.21 dB

TESTED SAMPLES:

S/01

TEST RESULTS (Cont.):

TC#03 (ac mode)

TEST RESULTS:

PASS

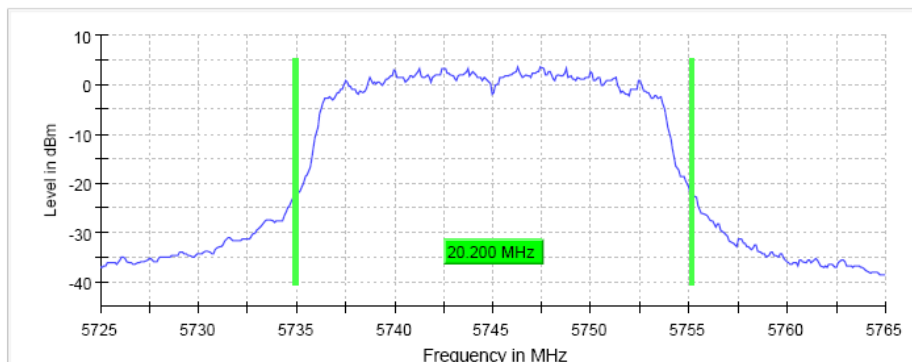
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
26dB Bandwidth (MHz)	20.2	20.1	20.0
Occupied bandwidth (MHz)	17.3	17.4	17.4
Measurement uncertainty (kHz)	< $\pm$ 8.33		

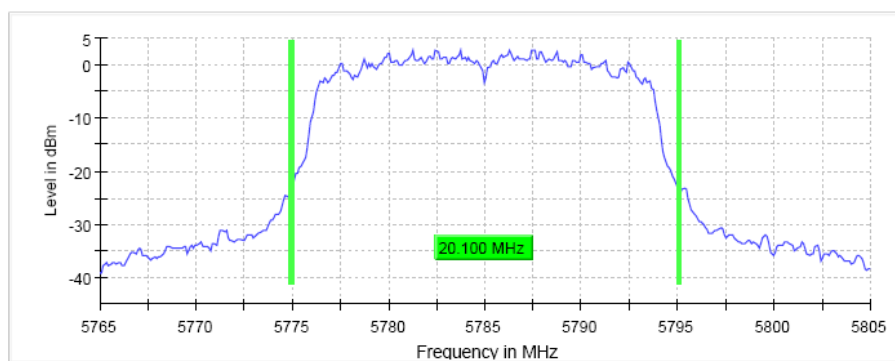
TEST RESULTS (Cont.):

26 dB BANDWIDTH

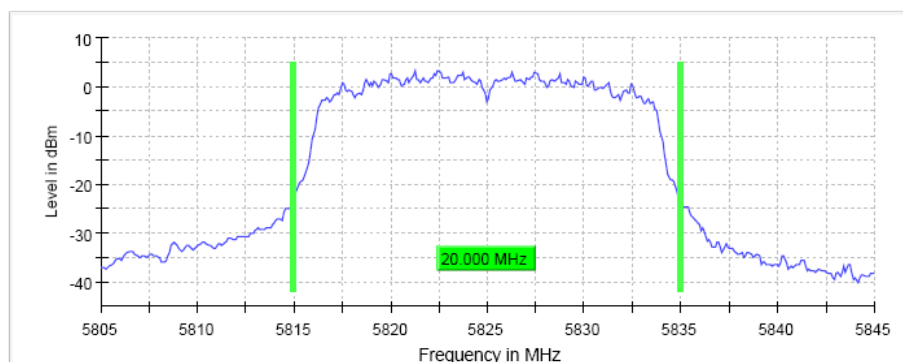
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

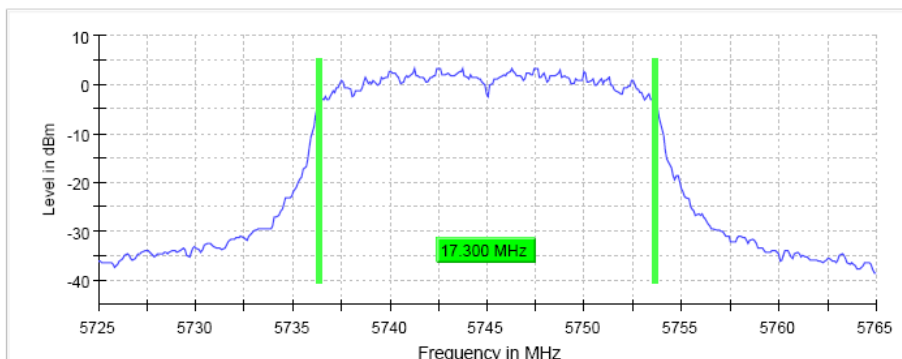
Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
Sweep Points	400	400	400
Sweep time	28.477 μ s	28.477 μ s	28.477 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamplifier	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	44 / max. 150	52 / max. 150	34 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.01 dB	0.28 dB

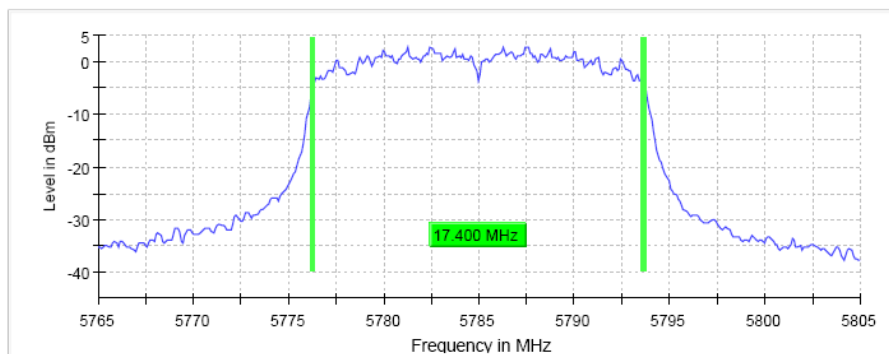
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

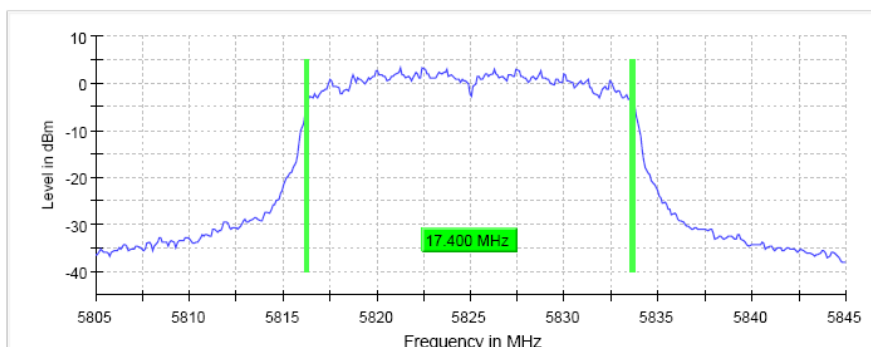
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)			
Measurement			
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
Sweep Points	400	400	400
Sweep time	28.477 μs	28.477 μs	28.477 μs
Reference Level	0.000 dBm	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamp	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	61 / max. 150	56 / max. 150	80 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB	0.00 dB

TESTED SAMPLES:	S/01
TEST RESULTS (Cont.):	TC#03 (ac mode)
TEST RESULTS:	PASS

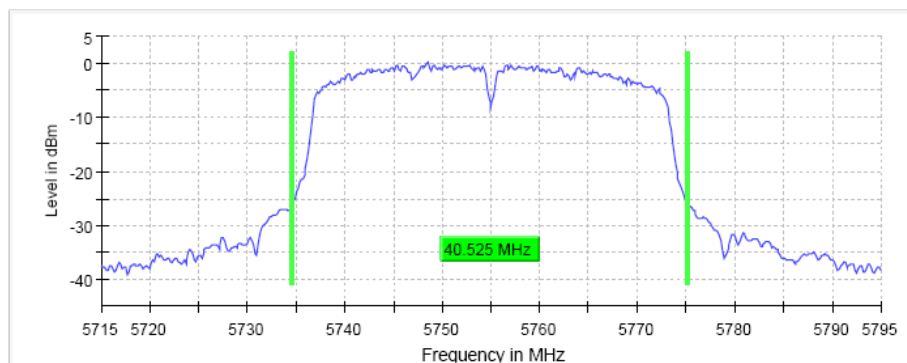
Bandwidth: 40 MHz

	Lowest frequency	Highest frequency
	5755 MHz	5795 MHz
26dB Bandwidth (MHz)	40.525	40.375
Occupied bandwidth (MHz)	36.00	36.25
Measurement uncertainty (kHz)	<± 8.33	

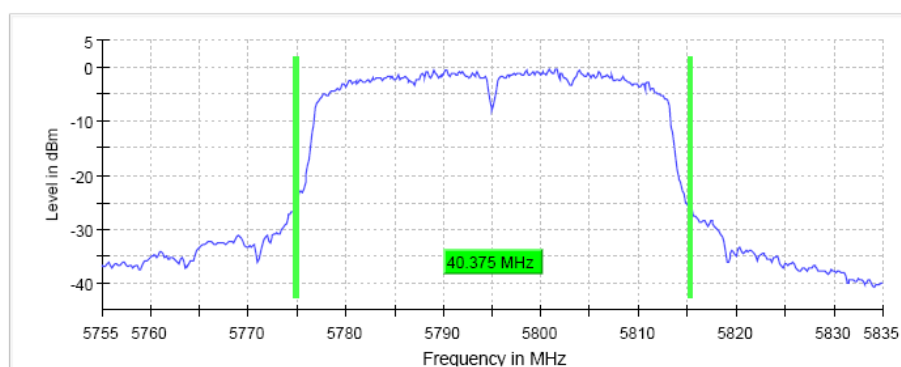
TEST RESULTS (Cont.):

26 dB BANDWIDTH

Lowest Channel



Highest Channel



TEST RESULTS (Cont.):

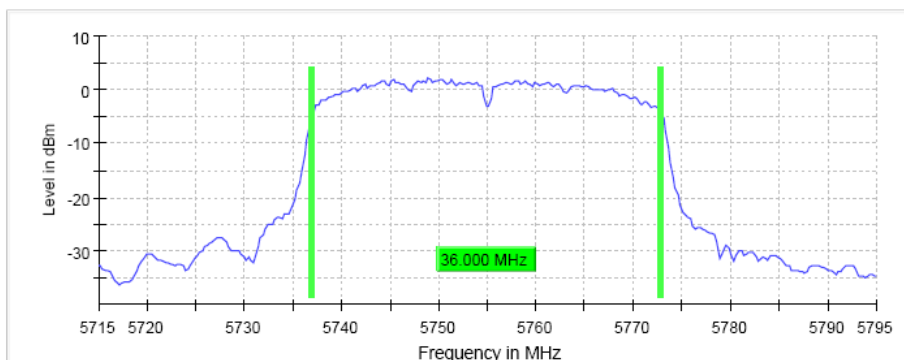
Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.71500 GHz	5.75500 GHz
Stop Frequency	5.79500 GHz	5.83500 GHz
Span	80.000 MHz	80.000 MHz
RBW	300.000 kHz	300.000 kHz
VBW	1.000 MHz	1.000 MHz
Sweep Points	267	267
Sweep time	31.603 μ s	31.603 μ s
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	Max Peak	Max Peak
Sweep Count	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	84 / max. 150	81 / max. 150
Stable	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB

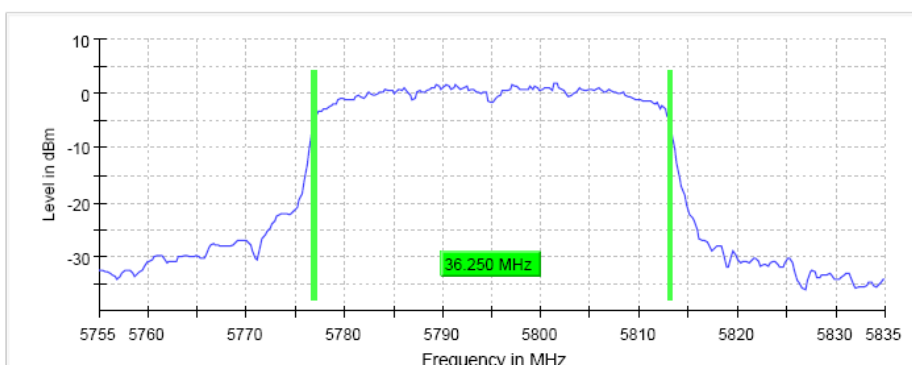
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

Lowest Channel



Highest Channel



Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.71500 GHz	5.75500 GHz
Stop Frequency	5.79500 GHz	5.83500 GHz
Span	80.000 MHz	80.000 MHz
RBW	500.000 kHz	500.000 kHz
VBW	2.000 MHz	2.000 MHz
Sweep Points	320	320
Sweep time	18.906 μ s	18.906 μ s
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak
Sweep Count	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	103 / max. 150	96 / max. 150
Stable	5 / 5	5 / 5
Max Stable Difference	0.23 dB	0.00 dB

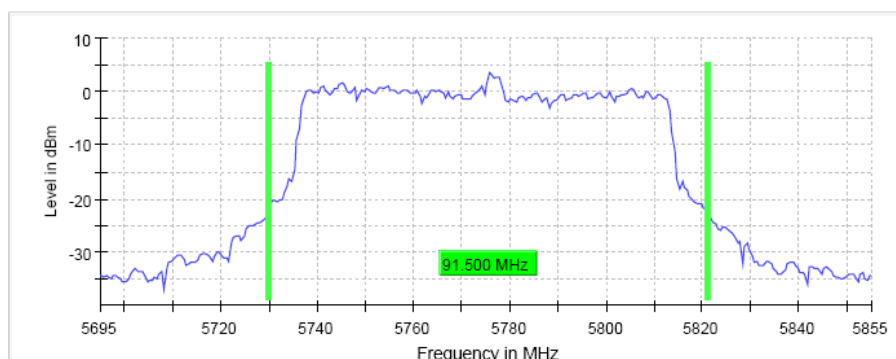
TESTED SAMPLES:	S/01
TEST RESULTS (Cont.):	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 80 MHz

	Middle frequency 5775 MHz
26dB Bandwidth (MHz)	91.5
Occupied bandwidth (MHz)	76.5
Measurement uncertainty (kHz)	<± 8.33

TEST RESULTS (Cont.):	26 dB BANDWIDTH
------------------------------	------------------------

Middle Channel



TEST RESULTS (Cont.):

Measurement

Setting	Instrument Value
Start Frequency	5.69500 GHz
Stop Frequency	5.85500 GHz
Span	160.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
Sweep Points	160
Sweep time	22.754 μ s
Reference Level	10.000 dBm
Attenuation	30.000 dB
Detector	MaxPeak
Sweep Count	200
Filter	3 dB
Trace Mode	Max Hold
Sweep type	FFT
Preamp	off
Stable mode	Trace
Stable value	0.30 dB
Run	87 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

Middle Channel



Measurement

Setting	Instrument Value
Start Frequency	5.69500 GHz
Stop Frequency	5.85500 GHz
Span	160.000 MHz
RBW	1.000 MHz
VBW	3.000 MHz
Sweep Points	320
Sweep time	22.875 μ s
Reference Level	0.000 dBm
Attenuation	20.000 dB
Detector	Max Peak
Sweep Count	200
Filter	3 dB
Trace Mode	Max Hold
Sweep type	FFT
Preamp	off
Stable mode	Trace
Stable value	0.30 dB
Run	104 / max. 150
Stable	5 / 5
Max Stable Difference	0.00 dB

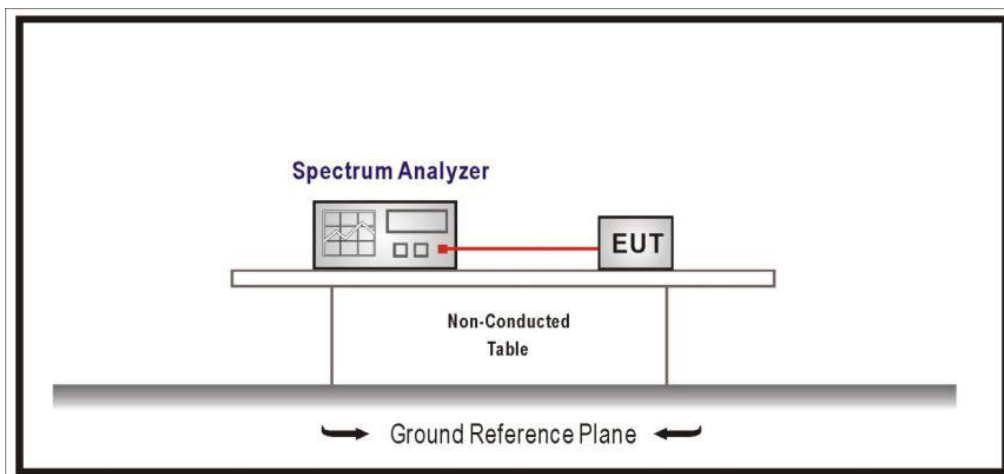
SECTION E.2: 6DB EMISSION BANDWIDTH

LIMITS:	Product standard:	Part 15 Subpart E §15.407 and RSS-247
	Test standard:	Part 15 Subpart E §15.407(e) and RSS-247 6.2.4.1

LIMITS:

Within the 5.725 – 5.85 GHz band, the minimum 6dB bandwidth of U-NII devices shall be at least 500 KHz.

TEST SETUP:	
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TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

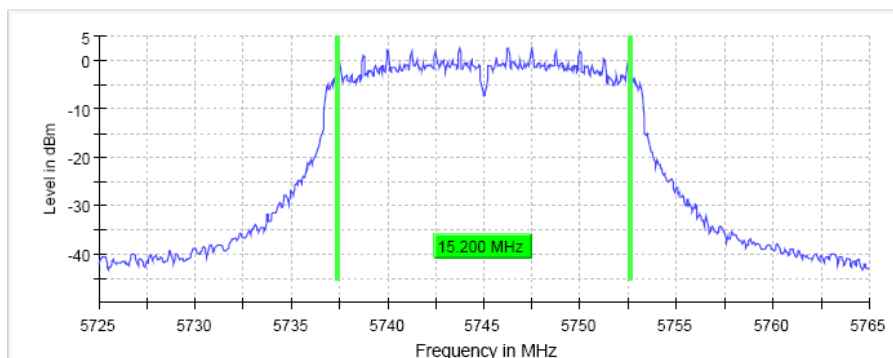
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
6dB Bandwidth (MHz)	15.2	15.2	15.2
Measurement uncertainty (kHz)	<± 8.33		

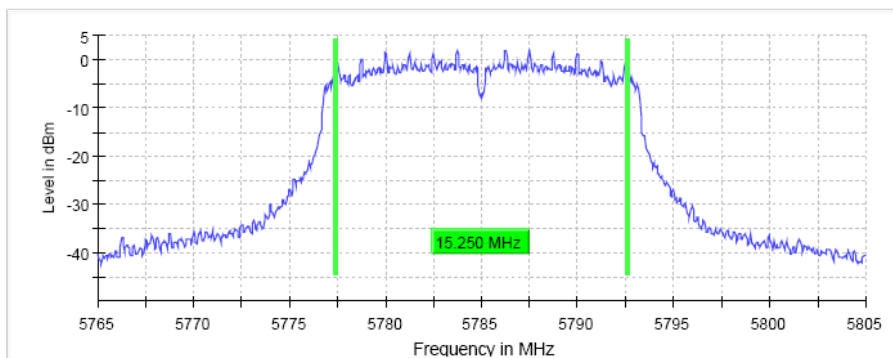
TEST RESULTS (Cont.):

6 dB BANDWIDTH

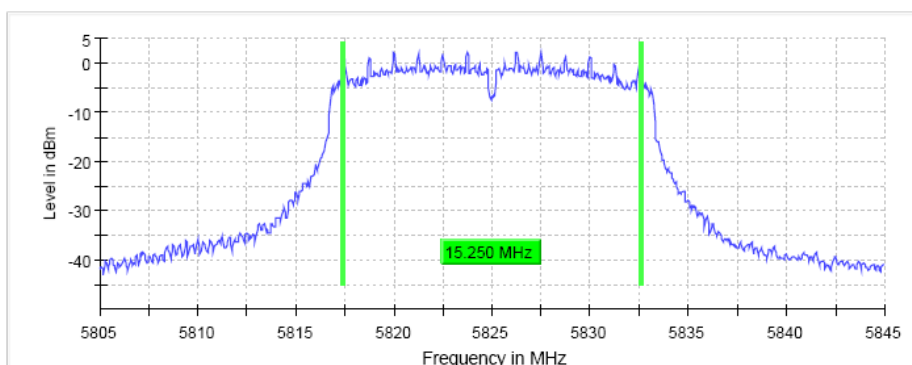
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
Sweep Points	800	800	800
Sweep time	56.836 μ s	56.836 μ s	56.836 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamplifier	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	61 / max. 150	76 / max. 150	50 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.20 dB	0.02 dB	0.15 dB

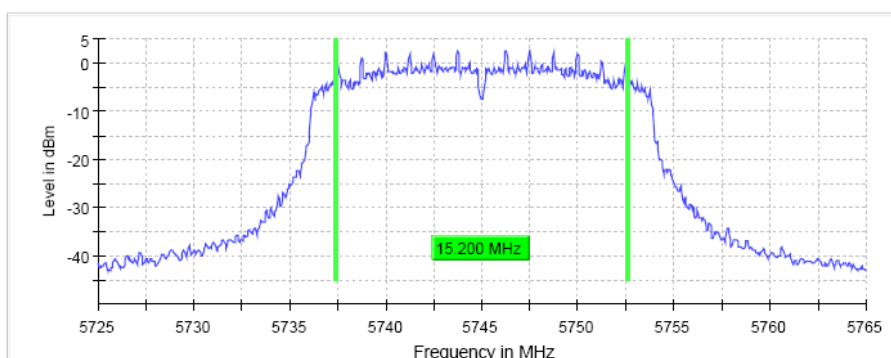
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n Mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

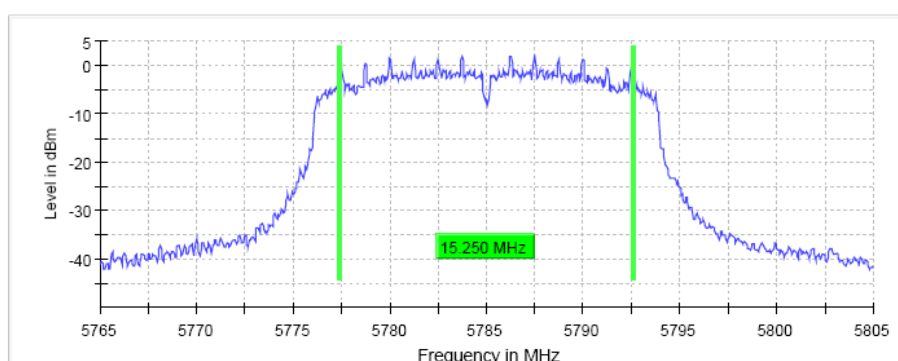
	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
6dB bandwidth (MHz)	15.20	15.25	15.25
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH
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Lowest Channel

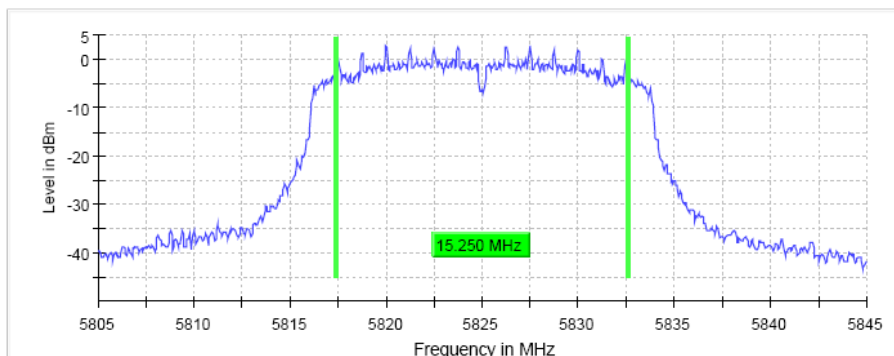


Middle Channel



TEST RESULTS (Cont.):

Highest Channel



Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
Sweep Points	800	800	800
Sweep time	56.836 μ s	56.836 μ s	56.836 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamplifier	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	47 / max. 150	73 / max. 150	69 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.26 dB	0.00 dB	0.12 dB

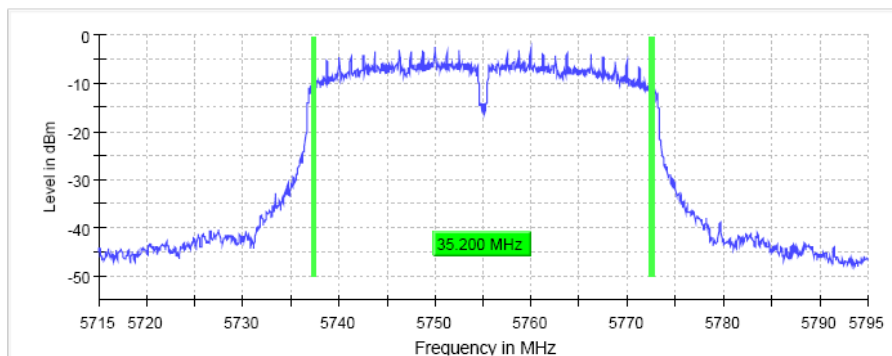
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n Mode)
TEST RESULTS:	PASS

Bandwidth: 40 MHz

	Lowest frequency 5755 MHz	Highest frequency 5795 MHz
6dB bandwidth (MHz)	35.20	35.15
Measurement uncertainty (kHz)	<± 8.33	

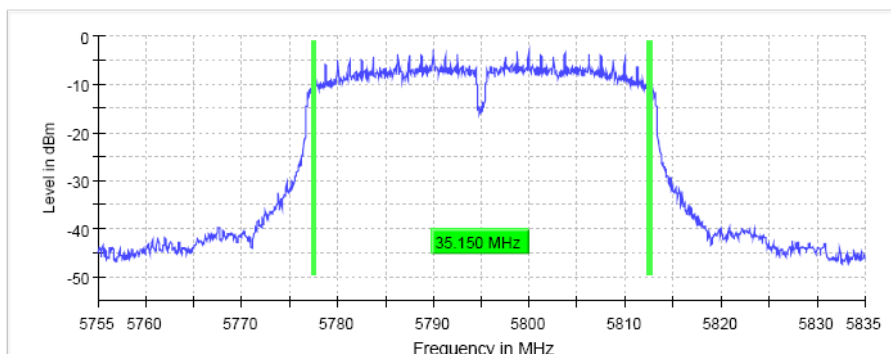
TEST RESULTS (Cont.):	6 dB BANDWIDTH
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Lowest Channel



TEST RESULTS (Cont.):

Highest Channel



Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.71500 GHz	5.75500 GHz
Stop Frequency	5.79500 GHz	5.83500 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz
Sweep Points	800	800
Sweep time	94.810 μ s	94.810 μ s
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	Max Peak	Max Peak
Sweep Count	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamplifier	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	66 / max. 150	61 / max. 150
Stable	5 / 5	5 / 5
Max Stable Difference	0.18 dB	0.10 dB

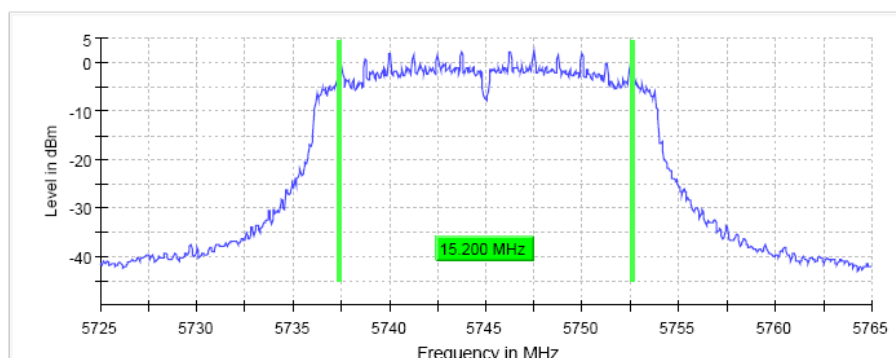
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac Mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

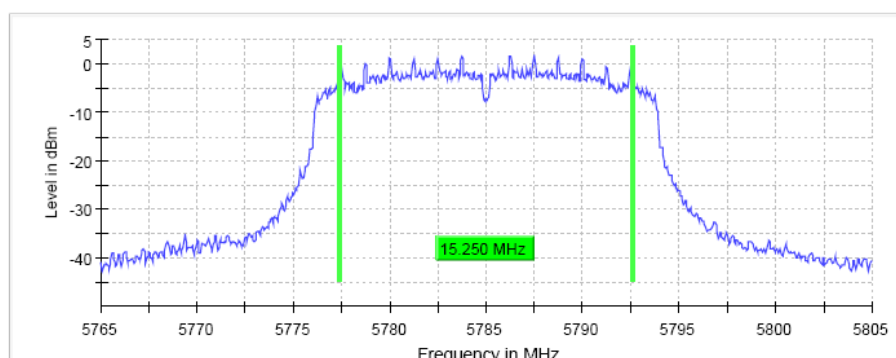
	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
6dB bandwidth (MHz)	15.20	15.25	15.20
Measurement uncertainty (kHz)	<± 8.33		

TEST RESULTS (Cont.):	6 dB BANDWIDTH
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Lowest Channel

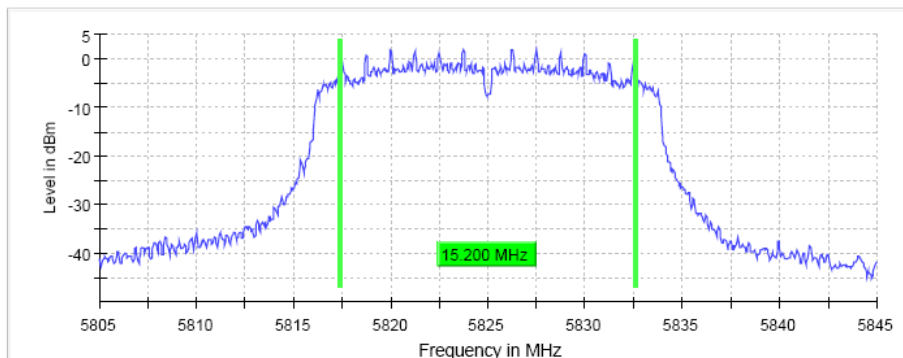


Middle Channel



TEST RESULTS (Cont.):

Highest Channel



Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
Sweep Points	800	800	800
Sweep time	56.836 μ s	56.836 μ s	56.836 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	Max Peak	Max Peak	Max Peak
Sweep Count	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamp	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	72 / max. 150	65 / max. 150	97 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.02 dB	0.22 dB

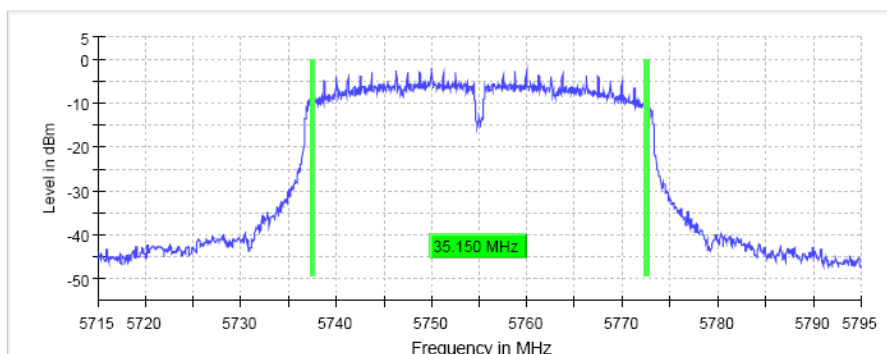
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac Mode)
TEST RESULTS:	PASS

Bandwidth: 40 MHz

	Lowest frequency 5755 MHz	Highest frequency 5795 MHz
6dB bandwidth (MHz)	35.15	35.15
Measurement uncertainty (kHz)	<± 8.33	

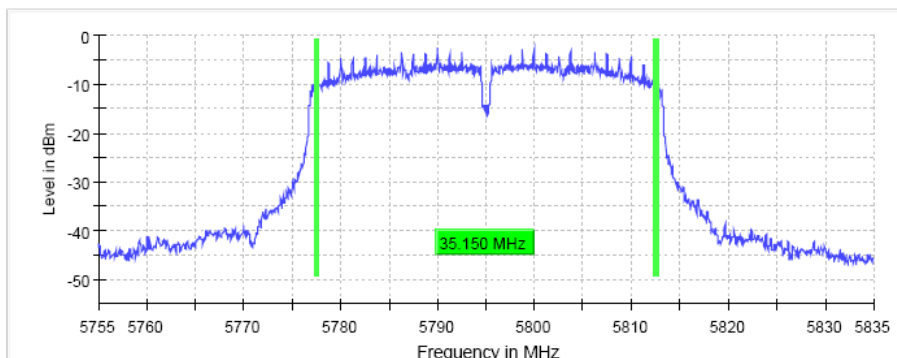
TEST RESULTS (Cont.):	6 dB BANDWIDTH
------------------------------	-----------------------

Lowest Channel



TEST RESULTS (Cont.):

Highest Channel



Measurement

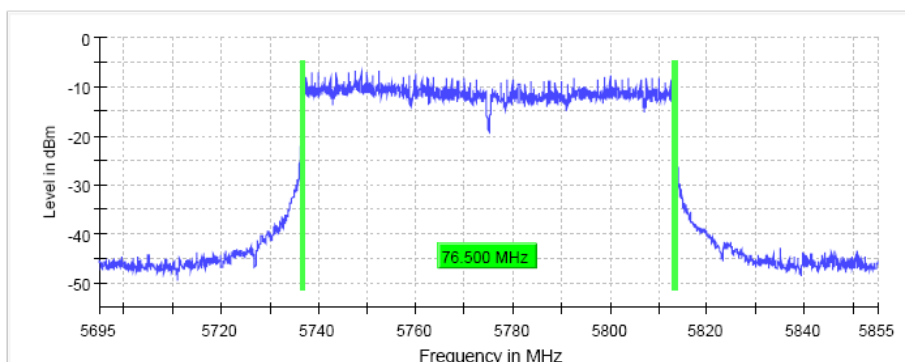
Setting	Instrument Value	Instrument Value
Start Frequency	5.71500 GHz	5.75500 GHz
Stop Frequency	5.79500 GHz	5.83500 GHz
Span	80.000 MHz	80.000 MHz
RBW	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz
Sweep Points	800	800
Sweep time	94.810 μ s	94.810 μ s
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	Max Peak	Max Peak
Sweep Count	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	107 / max. 150	113 / max. 150
Stable	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.04 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac Mode)
TEST RESULTS:	PASS

Bandwidth: 80 MHz

	Middle frequency 5775 MHz
6dB bandwidth (MHz)	76.5
Measurement uncertainty (kHz)	<± 8.33

Middle Channel



Measurement

Setting	Instrument Value
Start Frequency	5.69500 GHz
Stop Frequency	5.85500 GHz
Span	160.000 MHz
RBW	100.000 kHz
VBW	300.000 kHz
Sweep Points	1600
Sweep time	182.620 μ s
Reference Level	10.000 dBm
Attenuation	30.000 dB
Detector	MaxPeak
Sweep Count	200
Filter	3 dB
Trace Mode	Max Hold
Sweep type	FFT
Preamplifier	off
Stable mode	Trace
Stable value	0.30 dB
Run	142 / max. 150
Stable	5 / 5
Max Stable Difference	0.14 dB

SECTION E.3: POWER LIMITS. MAXIMUM OUTPUT POWER

LIMITS:	Product standard:	Part 15 Subpart E §15.407 and RSS-247
	Test standard:	Part 15 Subpart E §15.407(a) (3) (4) and RSS-247 6.2.4.1

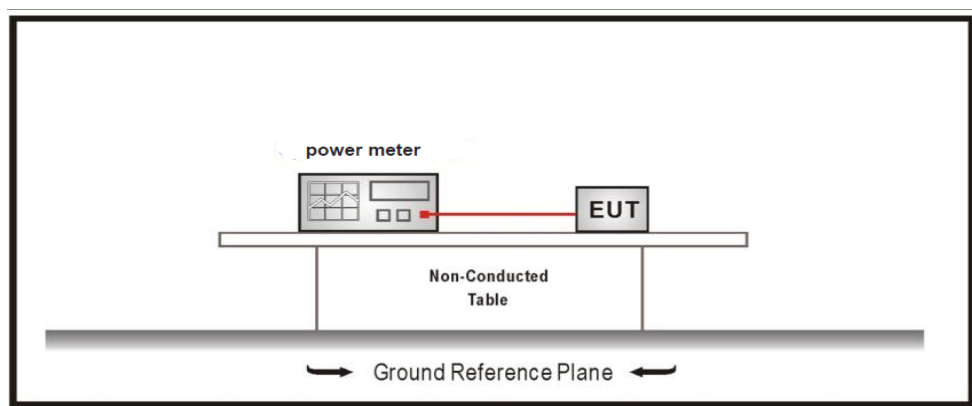
LIMITS

In band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1-megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST SETUP

Measured according to ANSI C63.10, Section 11.9.2.3.2 Method AVGPM-G

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

Maximum declared antenna gain: 4.5 dBi

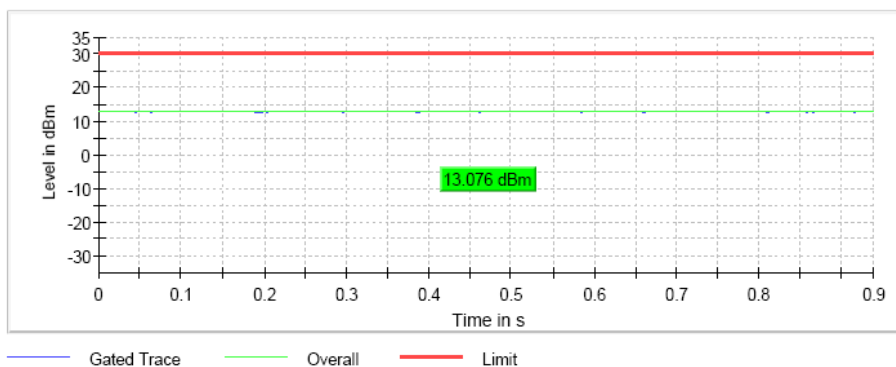
	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Maximum conducted power (dBm)	13.1	12.5	12.6
Maximum EIRP power (dBm)	17.6	17.0	17.1
Measurement uncertainty (dB)	<±0.78		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values

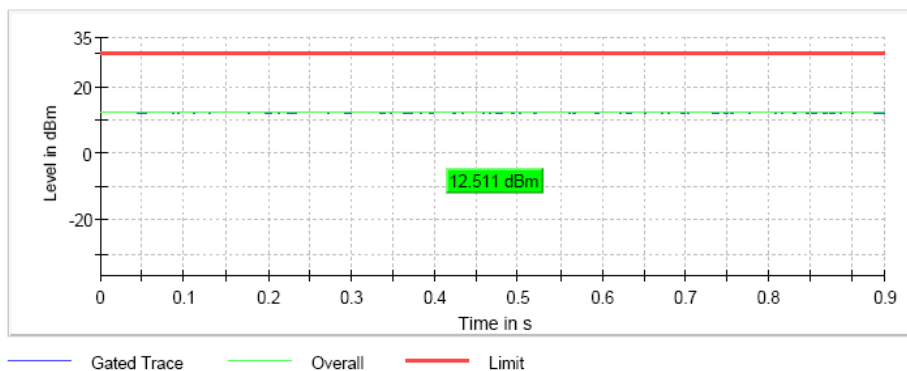
TEST RESULTS (Cont.):

CONDUCTED OUTPUT POWER

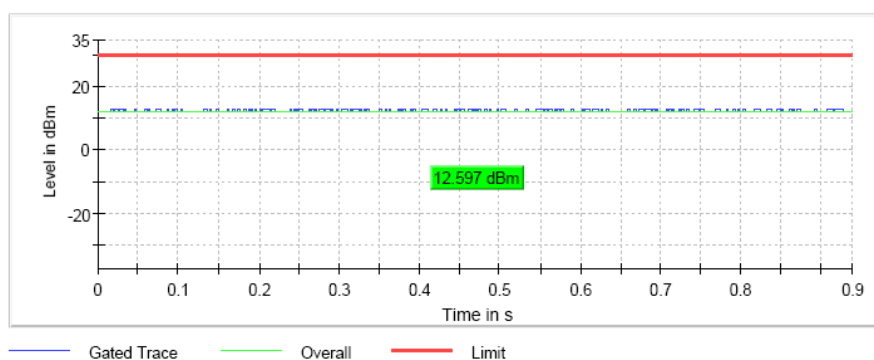
Lowest Channel



Middle Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

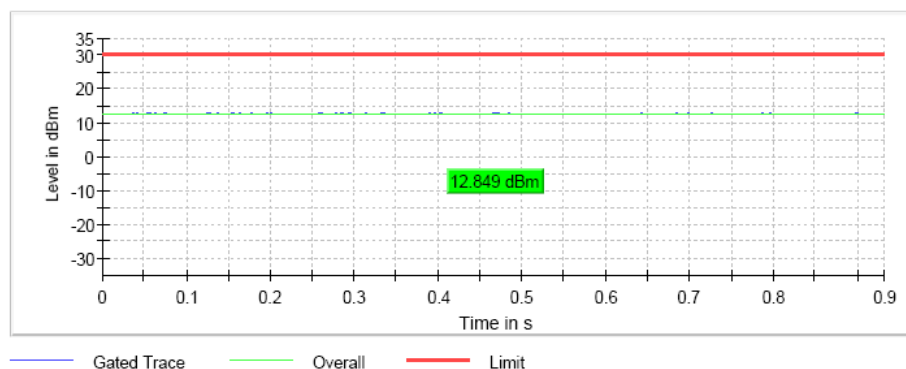
Bandwidth: 20 MHz

Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Maximum conducted power (dBm)	12.8	12.3	12.6
Maximum EIRP power (dBm)	17.3	16.8	17.1
Measurement uncertainty (dB)	<±0.78		

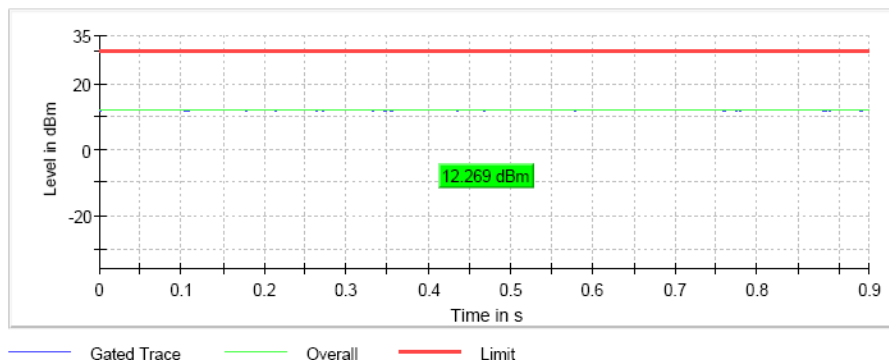
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Lowest Channel

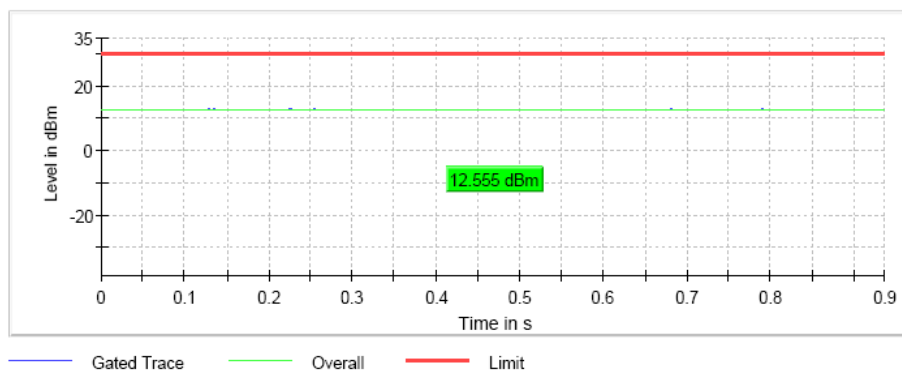


TEST RESULTS (Cont.)

Middle Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

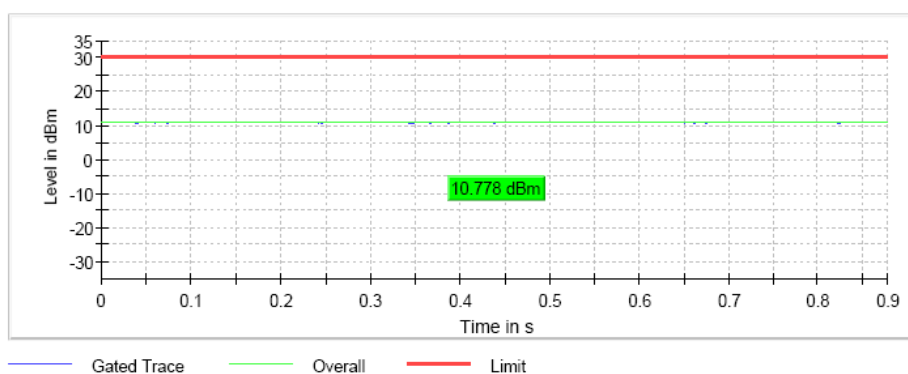
Bandwidth: 40 MHz

Maximum declared antenna gain: 4.5 dBi

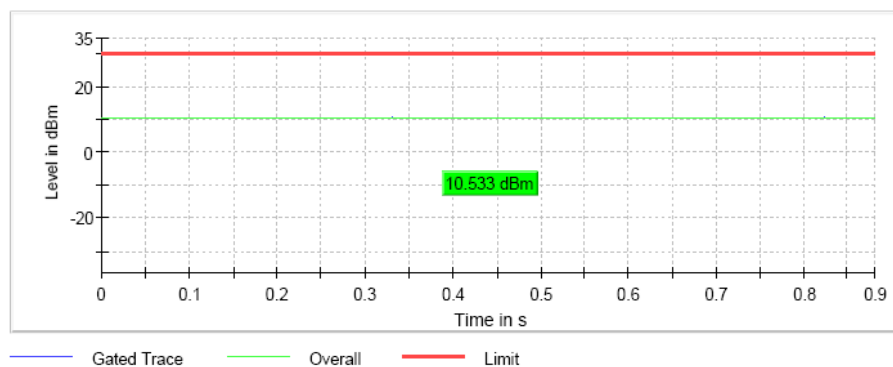
	Lowest frequency 5755 MHz	Highest frequency 5795 MHz
Maximum conducted power (dBm)	10.8	10.5
Maximum EIRP power (dBm)	15.3	15.0
Measurement uncertainty (dB)	<±0.78	

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Lowest Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

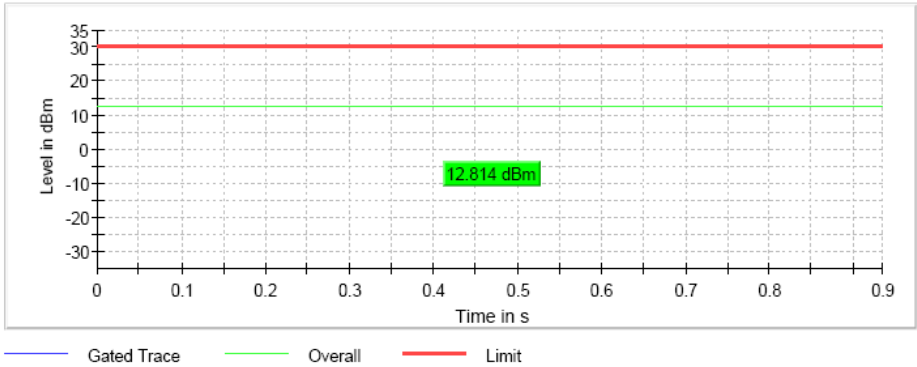
Bandwidth: 20 MHz

Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Maximum conducted power (dBm)	12.8	12.2	12.3
Maximum EIRP power (dBm)	17.3	16.7	16.8
Measurement uncertainty (dB)	<±0.78		

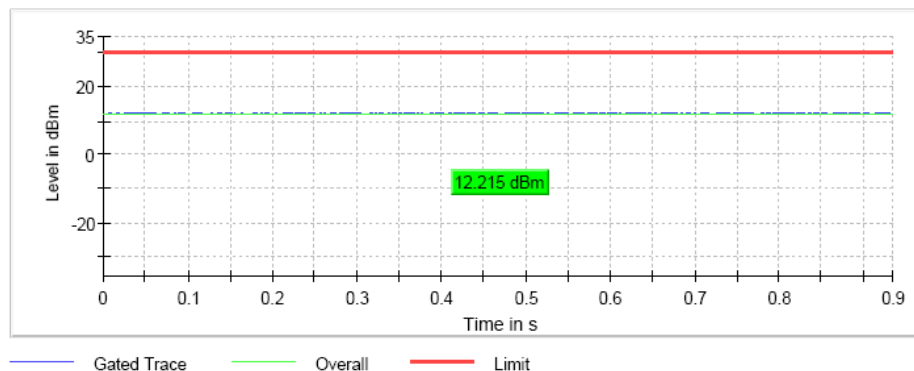
The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Lowest Channel

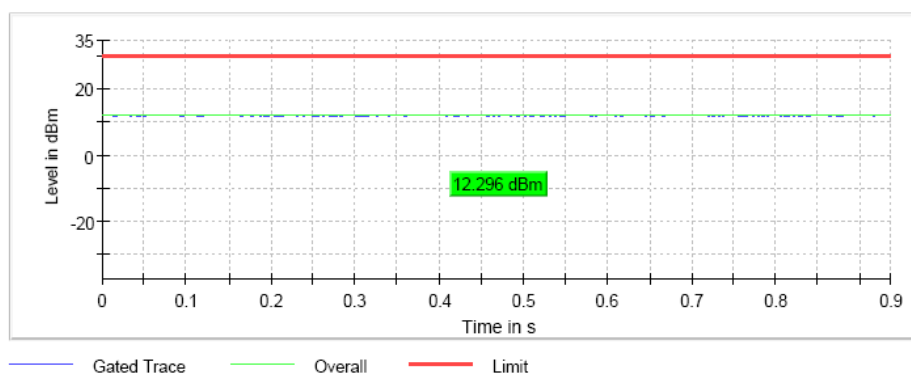


TEST RESULTS (Cont.)

Middle Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

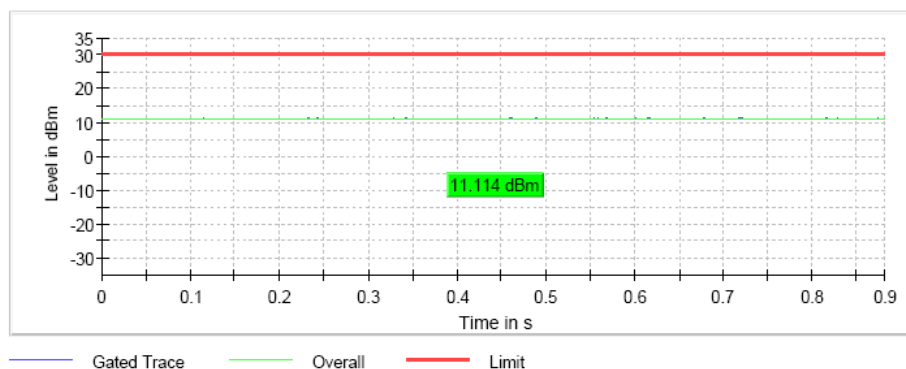
Bandwidth: 40 MHz

Maximum declared antenna gain: 4.5 dBi

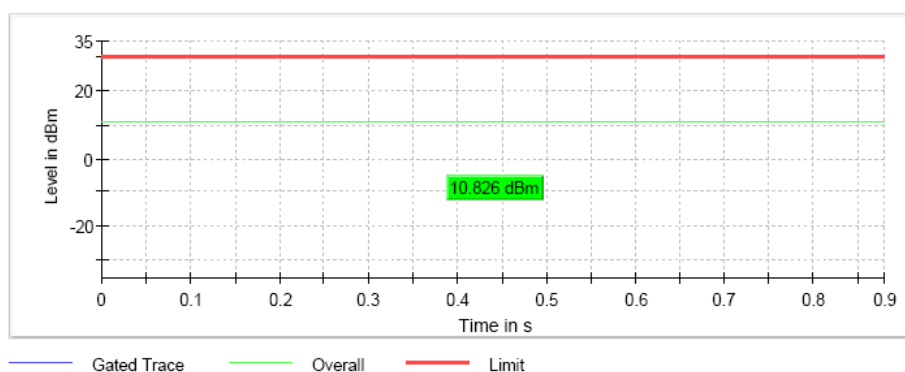
	Lowest frequency 5755 MHz	Highest frequency 5795 MHz
Maximum conducted power (dBm)	11.1	10.8
Maximum EIRP power (dBm)	15.6	15.3
Measurement uncertainty (dB)	<±0.78	

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Lowest Channel



Highest Channel



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

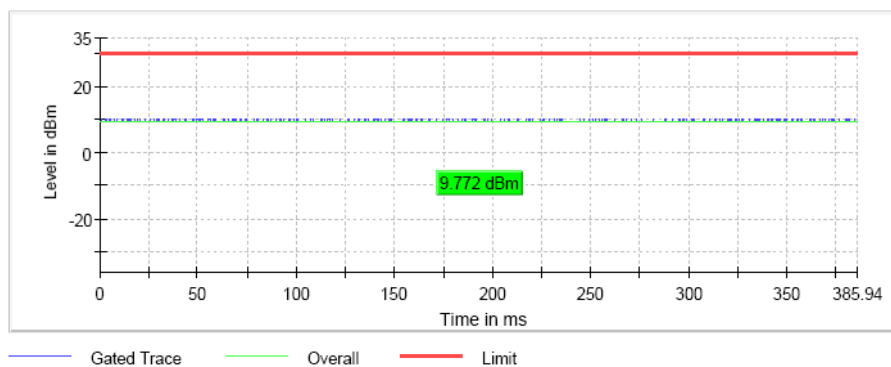
Bandwidth: 80 MHz

Maximum declared antenna gain: 4.5 dBi

	Middle frequency 5775 MHz
Maximum conducted power (dBm)	9.8
Maximum EIRP power (dBm)	14.3
Measurement uncertainty (dB)	<±0.78

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

Middle Channel



SECTION E.4: POWER SPECTRAL DENSITY

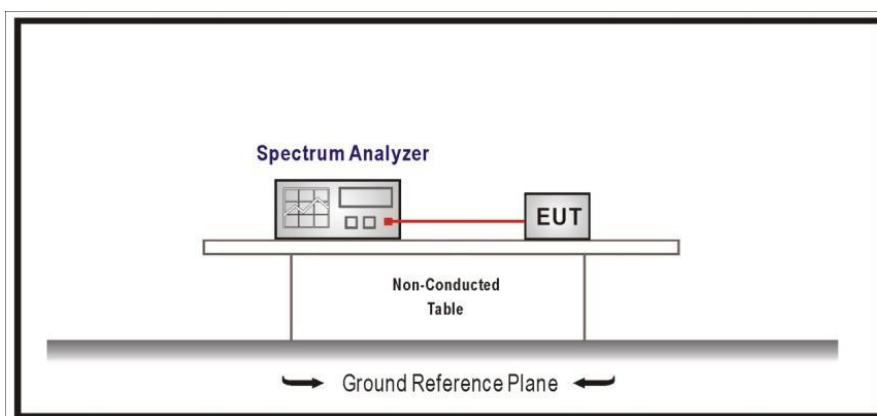
LIMITS:	Product standard:	Part 15 Subpart E §15.407 and RSS-247
	Test standard:	Part 15 Subpart E §15.407(a) (3) (5) and RSS-247 6.2.4.1

LIMITS

In the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1-megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST SETUP

For all modes, the maximum power spectral density level in the fundamental emission was measured using the method according to point F) (Method SA-1) of Guidance 789033 D02 General UNII Test Procedures New Rules v01.



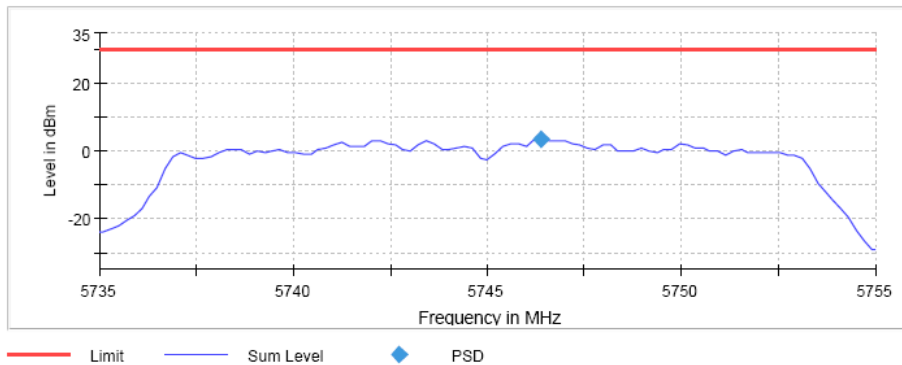
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

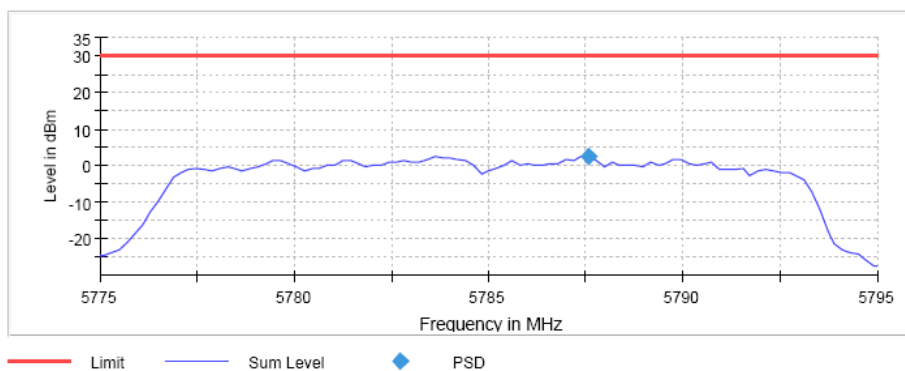
	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Power spectral density (dBm)	3.394	2.419	2.807
Measurement uncertainty (dB)	<±0.78		

TEST RESULTS (Cont.):

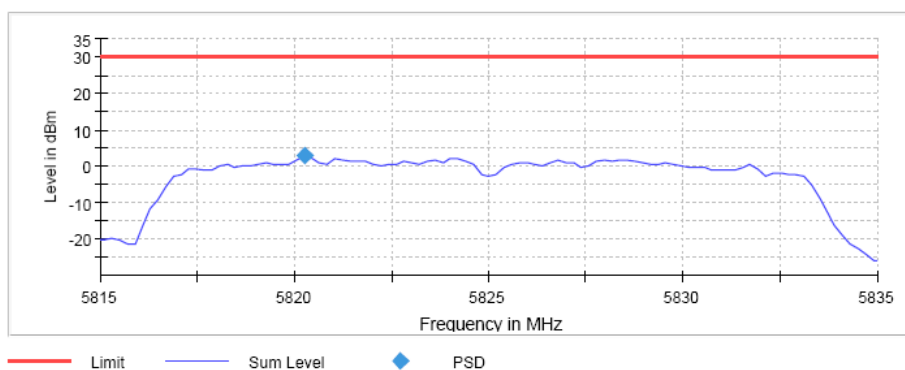
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.):

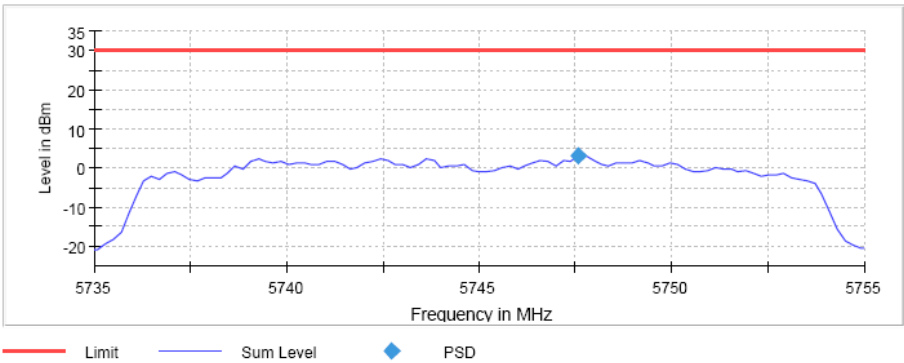
Measurement			
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500GHz	5.81500 GHz
Stop Frequency	5.75500 GHz	5.79500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz	20.000 MHz
RBW	500.00 KHz	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
Sweep Points	101	101	101
Sweep time	2.020 s	2.020 s	2.020 s
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	RMS	RMS	RMS
Sweep Count	29703	29703	29703
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamplifier	off	off	off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3	3 / 3
Max Stable Difference	0.05 dB	0.01 dB	0.02 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

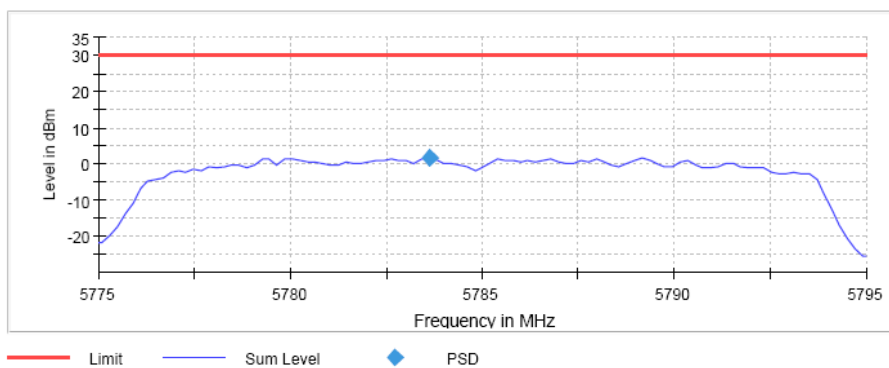
	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Power spectral density (dBm)	3.096	1.881	3.577
Measurement uncertainty (dB)	<±0.78		

Lowest Channel

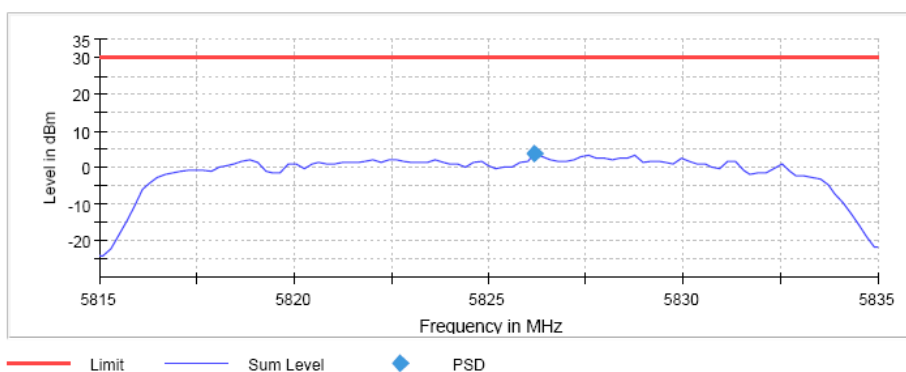


TEST RESULTS (Cont.):

Middle Channel



Highest Channel



TEST RESULTS (Cont.):

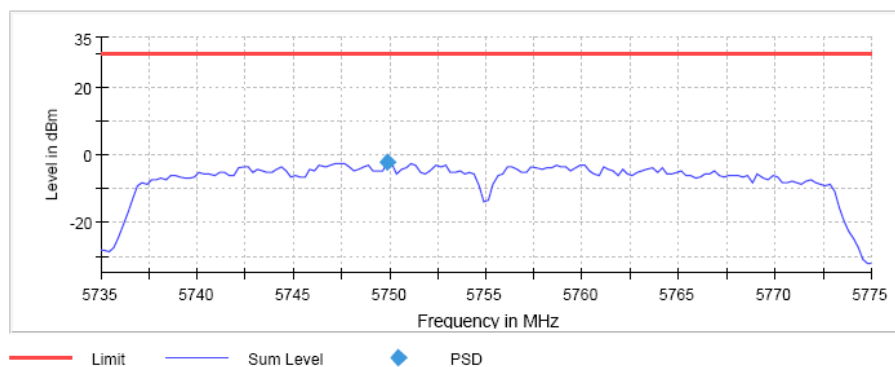
Measurement			
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500 GHz	5.81500 GHz
Stop Frequency	5.75500 GHz	5.79500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz	20.000 MHz
RBW	500.00 KHz	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
Sweep Points	101	101	101
Sweep time	2.020 s	2.020 s	2.020 s
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	RMS	RMS	RMS
Sweep Count	29703	29703	29703
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamp	off	Off	Off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3	3 / 3
Max Stable Difference	0.02 dB	0.02 dB	0.05 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

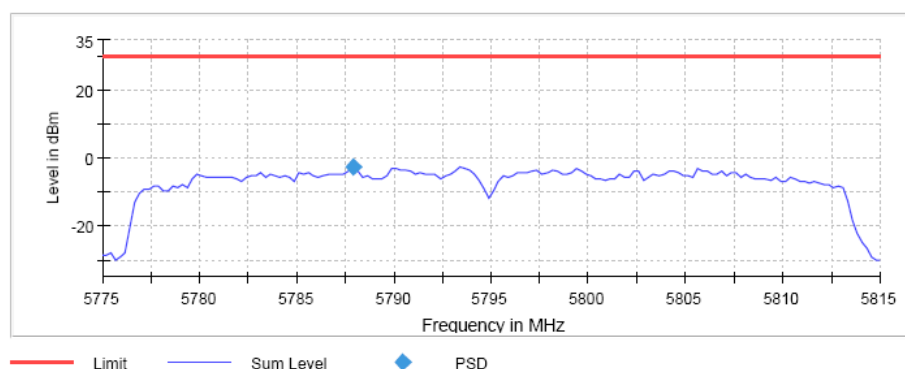
Bandwidth: 40 MHz

	Lowest frequency 5755 MHz	Highest frequency 5795 MHz
Power spectral density (dBm)	-2.365	-2.519
Measurement uncertainty (dB)	<±0.78	

Lowest Channel



Highest Channel



TEST RESULTS (Cont.):

Measurement

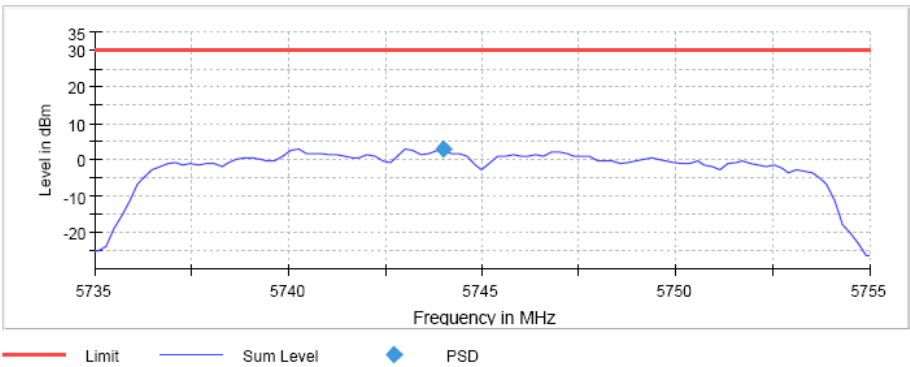
Setting	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500 GHz
Stop Frequency	5.77500 GHz	5.81500 GHz
Span	40.000 MHz	40.000 MHz
RBW	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz
Sweep Points	160	160
Sweep time	3.200 s	3.200 s
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	RMS	RMS
Sweep Count	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamplifier	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3
Max Stable Difference	0.03 dB	0.06 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

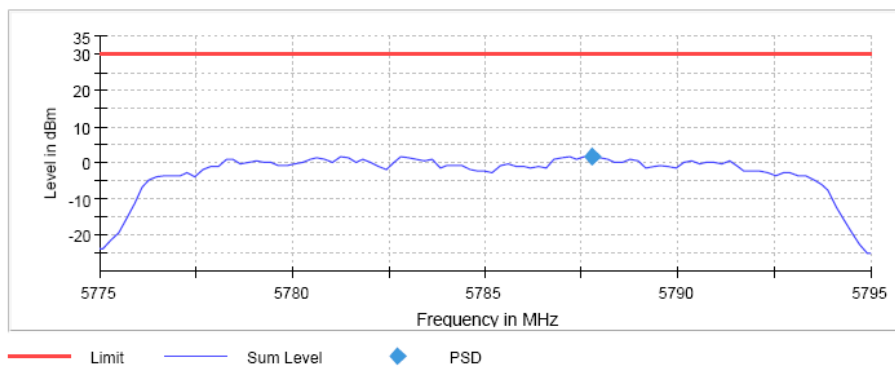
	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Power spectral density (dBm)	2.940	1.170	1.987
Measurement uncertainty (dB)	<±0.78		

Lowest Channel

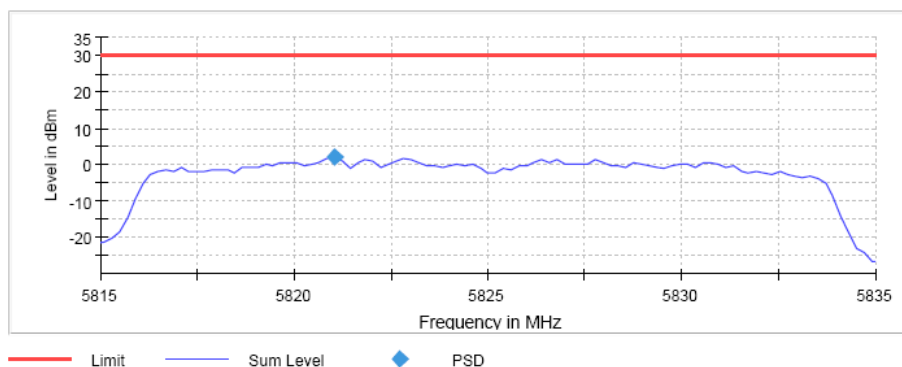


TEST RESULTS (Cont.):

Middle Channel



Highest Channel



TEST RESULTS (Cont.):

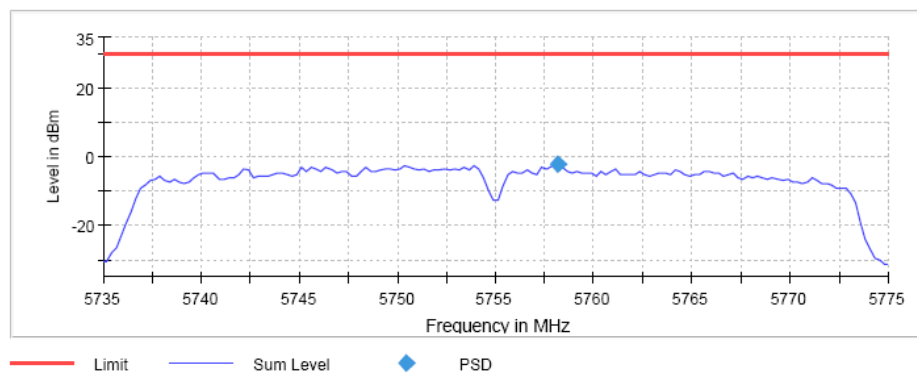
Measurement			
Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500 GHz	5.81500 GHz
Stop Frequency	5.75500 GHz	5.79500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz	20.000 MHz
RBW	500.00 KHz	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
Sweep Points	101	101	101
Sweep time	2.020 s	2.020 s	2.020 s
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	RMS	RMS	RMS
Sweep Count	29703	29703	29703
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweep type	FFT	FFT	FFT
Preamp	off	Off	Off
Stable mode	Trace	Trace	Trace
Stable value	0.30 dB	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3	3 / 3
Max Stable Difference	0.04 dB	0.04 dB	0.05 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

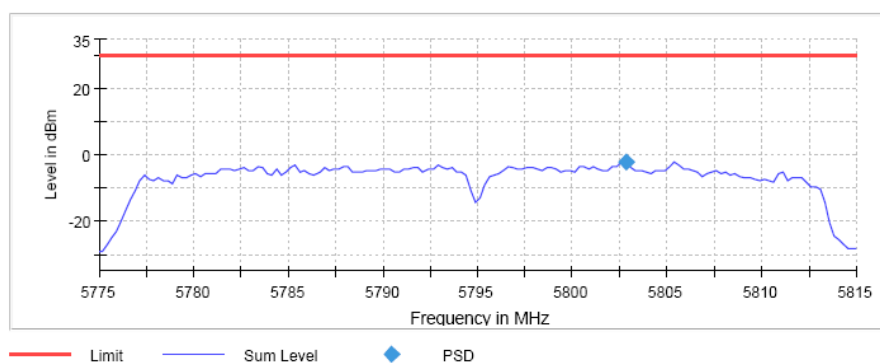
Bandwidth: 40 MHz

	Lowest frequency 5755 MHz	Highest frequency 5795 MHz
Power spectral density (dBm)	-2.063	-2.227
Measurement uncertainty (dB)	<±0.78	

Lowest Channel



Highest Channel



TEST RESULTS (Cont.):

Measurement

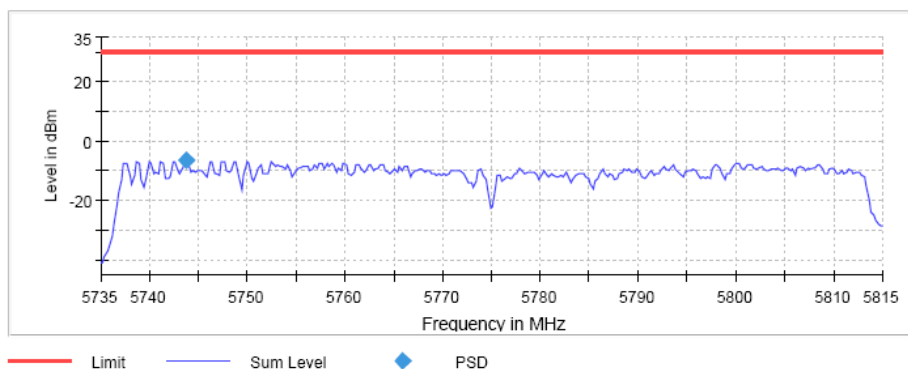
Setting	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500 GHz
Stop Frequency	5.77500 GHz	5.81500 GHz
Span	40.000 MHz	40.000 MHz
RBW	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz
Sweep Points	160	160
Sweep time	3.200 s	3.200 s
Reference Level	20.000 dBm	20.000 dBm
Attenuation	40.000 dB	40.000 dB
Detector	RMS	RMS
Sweep Count	3	3
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	FFT	FFT
Preamplifier	off	off
Stable mode	Trace	Trace
Stable value	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3
Max Stable Difference	0.10 dB	0.30 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 80 MHz

	Middle frequency 5775 MHz
Power spectral density (dBm)	-6.619
Measurement uncertainty (dB)	<±0.78

Middle Channel



Measurement

Setting	Instrument Value
Start Frequency	5.73500 GHz
Stop Frequency	5.81500 GHz
Span	80.000 MHz
RBW	500.00 KHz
VBW	2.000 MHz
Sweep Points	320
Sweep time	6.400 s
Reference Level	10.000 dBm
Attenuation	30.000 dB
Detector	RMS
Sweep Count	3
Filter	3 dB
Trace Mode	Max Hold
Sweep type	FFT
Preamplifier	off
Stable mode	Trace
Stable value	0.30 dB
Run	4 / max. 15
Stable	3 / 3
Max Stable Difference	0.12 dB

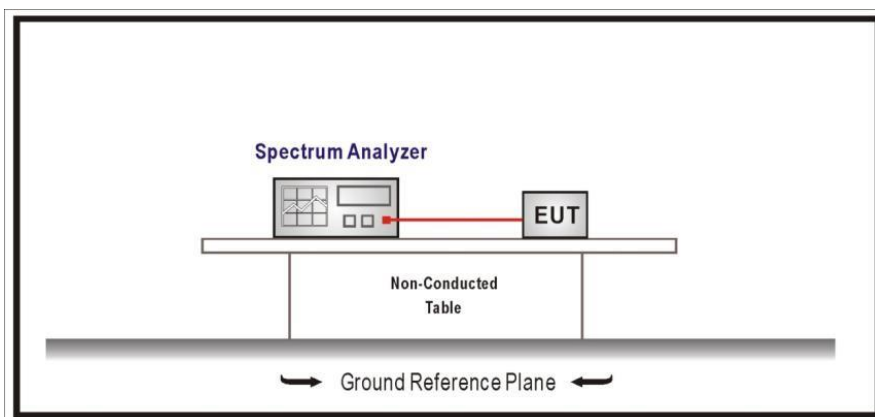
TEST E.5: BAND-EDGE EMISSIONS COMPLIANCE (TRANSMITTER)

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(b)(1) and RSS-247 6.2.1.2

LIMITS

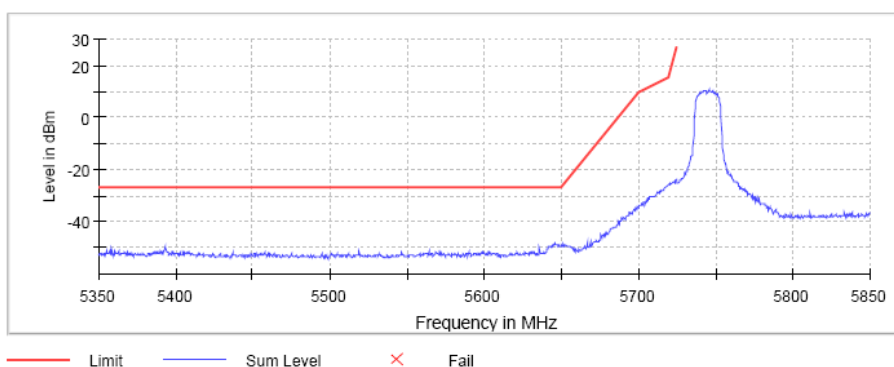
For transmitters operating in the 5.15 – 5.25 GHz band: all emissions outside the frequency band shall not exceed an EIRP of -27 dBm /MHz

TEST SETUP



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

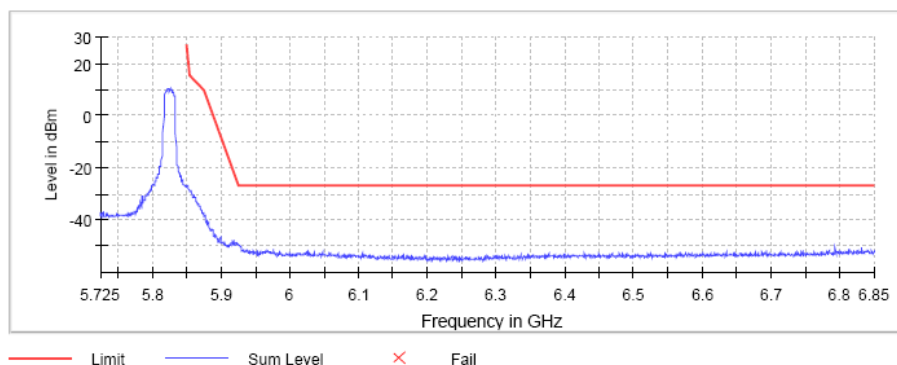
Lowest Channel



Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5645.250000	-48.4	21.4	-27.0	PASS
5646.250000	-48.6	21.6	-27.0	PASS
5647.250000	-48.6	21.6	-27.0	PASS
5645.750000	-48.6	21.6	-27.0	PASS
5646.750000	-48.8	21.8	-27.0	PASS
5650.750000	-48.2	21.8	-26.4	PASS
5647.750000	-48.8	21.8	-27.0	PASS
5644.250000	-48.8	21.8	-27.0	PASS
5648.750000	-49.0	22.0	-27.0	PASS
5648.250000	-49.1	22.1	-27.0	PASS
5643.750000	-49.1	22.1	-27.0	PASS
5392.750000	-49.1	22.1	-27.0	PASS
5649.750000	-49.2	22.2	-27.0	PASS
5642.750000	-49.2	22.2	-27.0	PASS
5644.750000	-49.3	22.3	-27.0	PASS

TEST RESULTS (Cont.):

Highest Channel

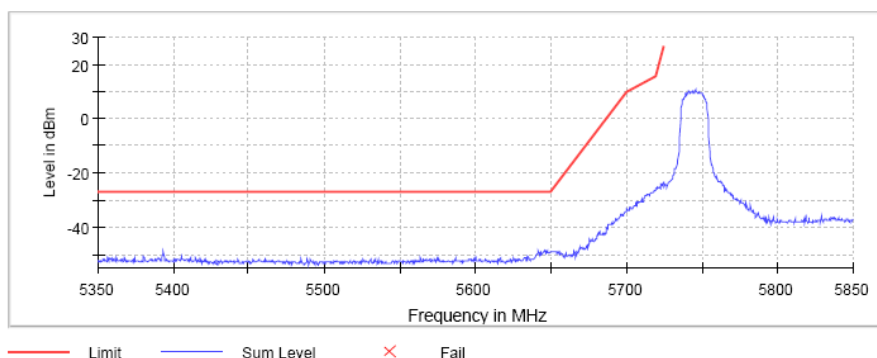


Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5926.250000	-49.1	22.1	-27.0	PASS
5925.250000	-49.2	22.2	-27.0	PASS
5924.250000	-49.0	22.5	-26.4	PASS
5924.750000	-49.4	22.6	-26.8	PASS
5927.250000	-49.6	22.6	-27.0	PASS
5926.750000	-49.8	22.8	-27.0	PASS
5925.750000	-49.8	22.8	-27.0	PASS
5927.750000	-49.8	22.8	-27.0	PASS
5928.750000	-49.9	22.9	-27.0	PASS
5923.750000	-49.0	22.9	-26.1	PASS
5923.250000	-48.9	23.1	-25.7	PASS
5928.250000	-50.3	23.3	-27.0	PASS
6831.750000	-50.3	23.3	-27.0	PASS
6793.250000	-50.4	23.4	-27.0	PASS
5929.250000	-50.5	23.5	-27.0	PASS

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

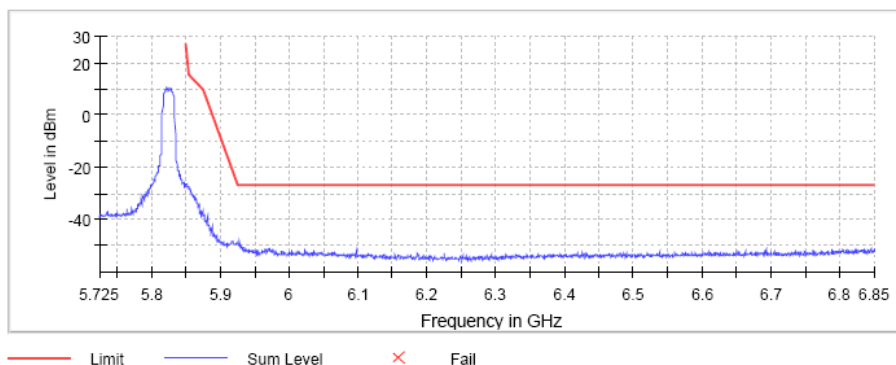
Lowest Channel



Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5641.750000	-48.7	21.7	-27.0	PASS
5645.250000	-48.8	21.8	-27.0	PASS
5646.250000	-48.8	21.8	-27.0	PASS
5647.250000	-48.9	21.9	-27.0	PASS
5645.750000	-48.9	21.9	-27.0	PASS
5650.250000	-48.9	22.1	-26.8	PASS
5393.250000	-49.2	22.2	-27.0	PASS
5648.250000	-49.3	22.3	-27.0	PASS
5649.750000	-49.3	22.3	-27.0	PASS
5643.250000	-49.4	22.4	-27.0	PASS
5649.250000	-49.5	22.5	-27.0	PASS
5646.750000	-49.5	22.5	-27.0	PASS
5392.750000	-49.5	22.5	-27.0	PASS
5647.750000	-49.5	22.5	-27.0	PASS
5650.750000	-49.0	22.6	-26.4	PASS

TEST RESULTS (Cont.):

Highest Channel

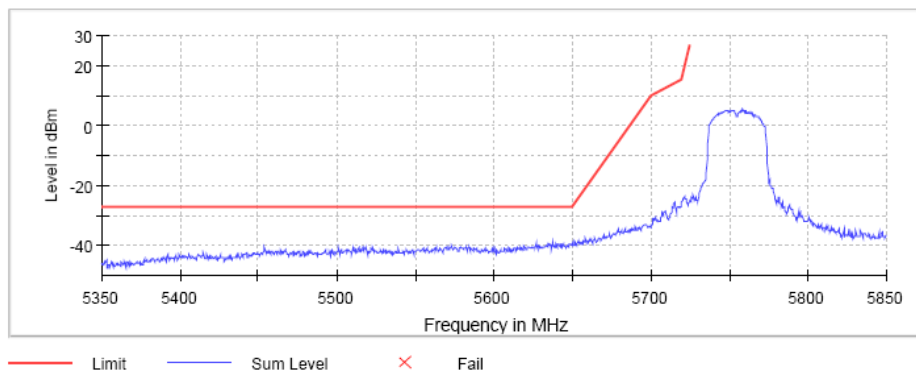


Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5925.750000	-48.0	21.0	-27.0	PASS
5928.750000	-48.4	21.4	-27.0	PASS
5926.250000	-49.3	22.3	-27.0	PASS
5925.250000	-49.3	22.3	-27.0	PASS
5924.250000	-49.1	22.7	-26.4	PASS
5924.750000	-49.5	22.7	-26.8	PASS
5926.750000	-49.8	22.8	-27.0	PASS
5928.250000	-50.0	23.0	-27.0	PASS
5923.750000	-49.1	23.0	-26.1	PASS
5927.750000	-50.0	23.0	-27.0	PASS
5931.250000	-50.1	23.1	-27.0	PASS
5927.250000	-50.2	23.2	-27.0	PASS
5929.250000	-50.2	23.2	-27.0	PASS
5934.750000	-50.4	23.4	-27.0	PASS
5922.750000	-48.8	23.4	-25.3	PASS

TEST RESULTS (Cont.):

n Mode (40 MHz)

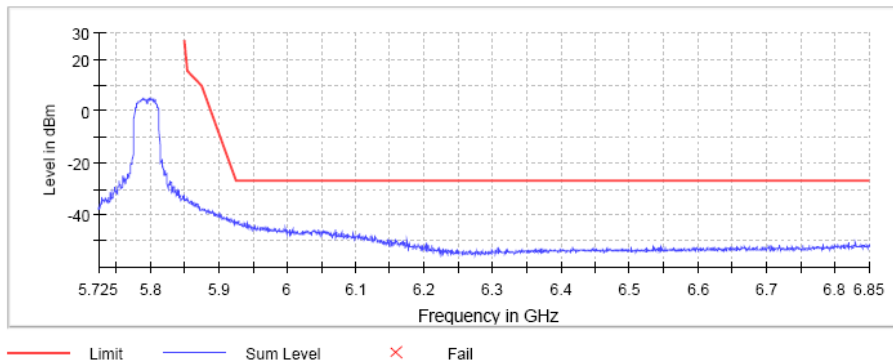
Lowest Channel



Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5650.750000	-38.4	11.9	-26.4	PASS
5626.750000	-39.0	12.0	-27.0	PASS
5637.250000	-39.1	12.1	-27.0	PASS
5644.250000	-39.3	12.3	-27.0	PASS
5641.250000	-39.3	12.3	-27.0	PASS
5642.750000	-39.4	12.4	-27.0	PASS
5635.750000	-39.4	12.4	-27.0	PASS
5640.750000	-39.4	12.4	-27.0	PASS
5649.250000	-39.5	12.5	-27.0	PASS
5648.250000	-39.5	12.5	-27.0	PASS
5648.750000	-39.6	12.6	-27.0	PASS
5643.250000	-39.6	12.6	-27.0	PASS
5634.750000	-39.7	12.7	-27.0	PASS
5639.750000	-39.7	12.7	-27.0	PASS
5650.250000	-39.6	12.8	-26.8	PASS

TEST RESULTS (Cont.):

Highest Channel

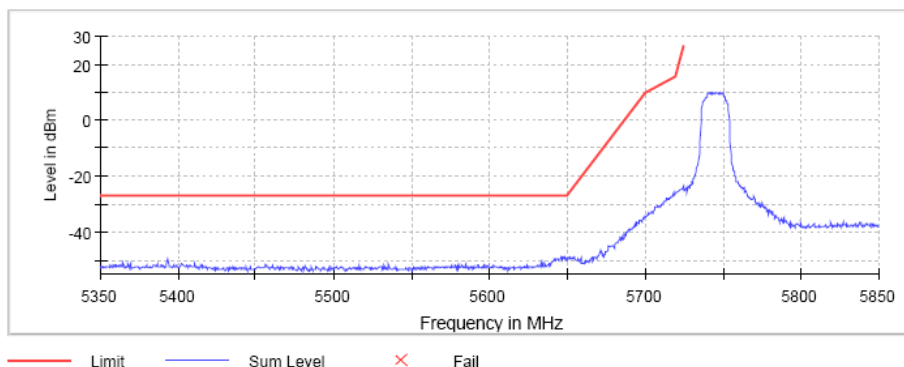


Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5926.750000	-42.3	15.3	-27.0	PASS
5924.250000	-42.0	15.5	-26.4	PASS
5929.250000	-42.7	15.7	-27.0	PASS
5925.250000	-42.7	15.7	-27.0	PASS
5928.750000	-42.9	15.9	-27.0	PASS
5926.250000	-42.9	15.9	-27.0	PASS
5927.250000	-42.9	15.9	-27.0	PASS
5939.750000	-43.0	16.0	-27.0	PASS
5930.250000	-43.1	16.1	-27.0	PASS
5932.250000	-43.1	16.1	-27.0	PASS
5925.750000	-43.1	16.1	-27.0	PASS
5932.750000	-43.2	16.2	-27.0	PASS
5927.750000	-43.2	16.2	-27.0	PASS
5930.750000	-43.3	16.3	-27.0	PASS
5937.750000	-43.3	16.3	-27.0	PASS

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mdoe)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

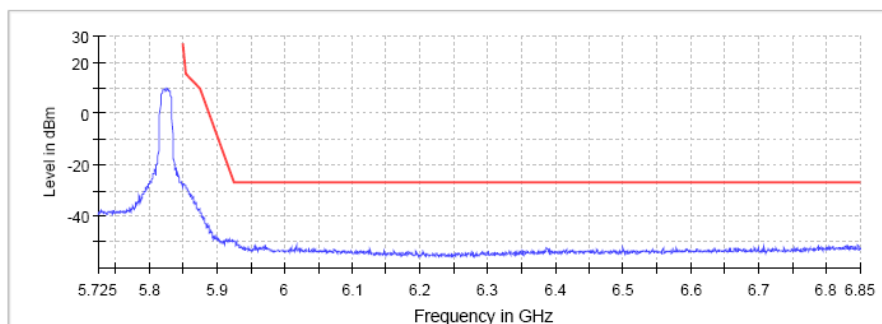
Lowest Channel:



Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5646.750000	-49.0	22.0	-27.0	PASS
5648.250000	-49.3	22.3	-27.0	PASS
5649.250000	-49.3	22.3	-27.0	PASS
5645.750000	-49.4	22.4	-27.0	PASS
5643.250000	-49.5	22.5	-27.0	PASS
5643.750000	-49.5	22.5	-27.0	PASS
5644.750000	-49.5	22.5	-27.0	PASS
5648.750000	-49.6	22.6	-27.0	PASS
5647.250000	-49.6	22.6	-27.0	PASS
5647.750000	-49.7	22.7	-27.0	PASS
5645.250000	-49.7	22.7	-27.0	PASS
5641.750000	-49.7	22.7	-27.0	PASS
5642.750000	-49.7	22.7	-27.0	PASS
5393.250000	-49.8	22.8	-27.0	PASS
5650.750000	-49.3	22.8	-26.4	PASS

TEST RESULTS (Cont.):

Highest Channel



— Limit — Sum Level × Fail

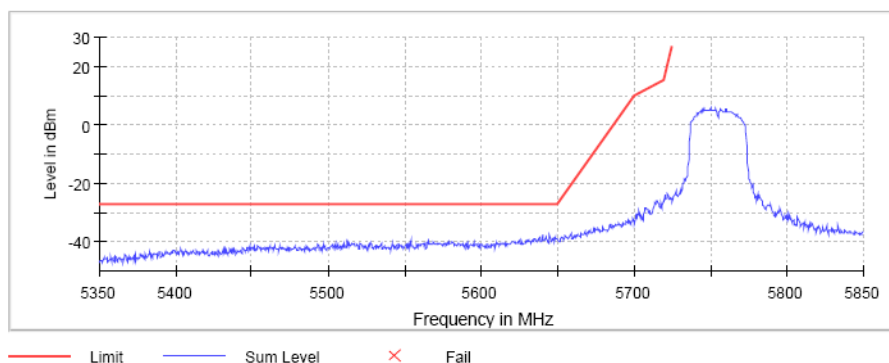
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5925.750000	-49.2	22.2	-27.0	PASS
5925.250000	-49.4	22.4	-27.0	PASS
5924.750000	-49.6	22.8	-26.8	PASS
5926.250000	-49.9	22.9	-27.0	PASS
5929.250000	-49.9	22.9	-27.0	PASS
5926.750000	-50.1	23.1	-27.0	PASS
5927.750000	-50.2	23.2	-27.0	PASS
5927.250000	-50.3	23.3	-27.0	PASS
5922.750000	-48.8	23.4	-25.3	PASS
5924.250000	-49.9	23.4	-26.4	PASS
5928.250000	-50.5	23.5	-27.0	PASS
5928.750000	-50.8	23.8	-27.0	PASS
5923.750000	-50.0	23.9	-26.1	PASS
6846.250000	-50.9	23.9	-27.0	PASS
5931.250000	-50.9	23.9	-27.0	PASS

TEST RESULTS (Cont.):

ac mode (40 MHz)

Bandwidth: 40 MHz

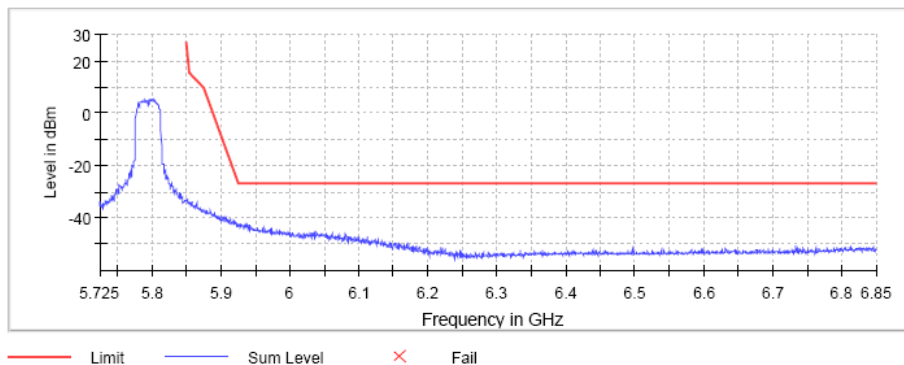
Lowest Channel



Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5644.750000	-37.5	10.5	-27.0	PASS
5640.250000	-37.6	10.6	-27.0	PASS
5648.750000	-38.4	11.4	-27.0	PASS
5638.250000	-38.6	11.6	-27.0	PASS
5647.750000	-38.6	11.6	-27.0	PASS
5642.250000	-38.7	11.7	-27.0	PASS
5634.750000	-38.9	11.9	-27.0	PASS
5646.750000	-38.9	11.9	-27.0	PASS
5635.250000	-39.0	12.0	-27.0	PASS
5649.750000	-39.0	12.0	-27.0	PASS
5637.750000	-39.0	12.0	-27.0	PASS
5649.250000	-39.0	12.0	-27.0	PASS
5642.750000	-39.2	12.2	-27.0	PASS
5565.250000	-39.3	12.3	-27.0	PASS
5633.250000	-39.3	12.3	-27.0	PASS

TEST RESULTS (Cont.):

Highest Channel



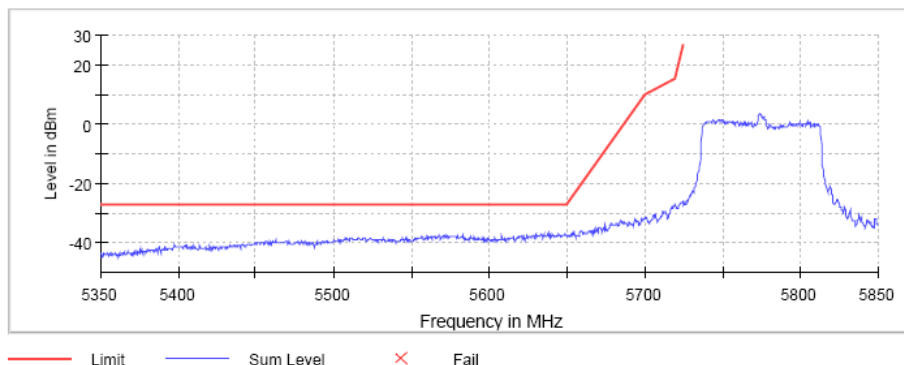
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5927.750000	-42.0	15.0	-27.0	PASS
5925.750000	-42.3	15.3	-27.0	PASS
5928.250000	-42.3	15.3	-27.0	PASS
5930.250000	-42.4	15.4	-27.0	PASS
5941.250000	-42.4	15.4	-27.0	PASS
5933.750000	-42.4	15.4	-27.0	PASS
5930.750000	-42.5	15.5	-27.0	PASS
5939.750000	-42.5	15.5	-27.0	PASS
5926.750000	-42.6	15.6	-27.0	PASS
5929.750000	-42.7	15.7	-27.0	PASS
5931.250000	-42.8	15.8	-27.0	PASS
5936.250000	-42.8	15.8	-27.0	PASS
5925.250000	-43.0	16.0	-27.0	PASS
5937.750000	-43.0	16.0	-27.0	PASS
5932.750000	-43.0	16.0	-27.0	PASS

TEST RESULTS (Cont.):

ac mode (80 MHz)

Bandwidth: 80 MHz

Lowest Channel



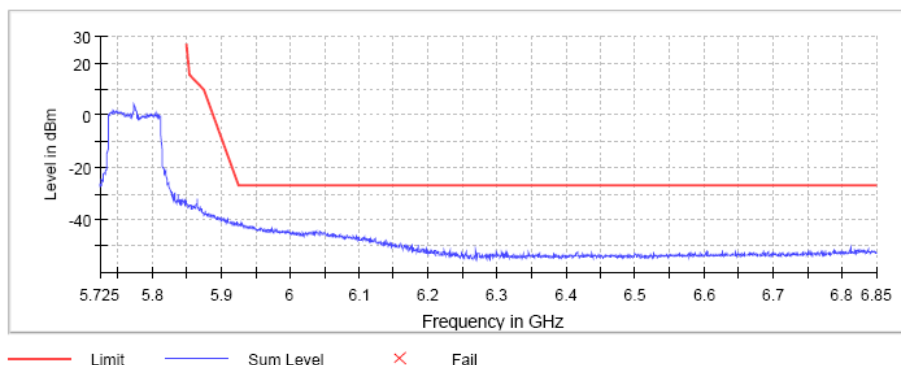
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5638.750000	-36.7	9.7	-27.0	PASS
5630.250000	-36.8	9.8	-27.0	PASS
5644.750000	-36.8	9.8	-27.0	PASS
5633.250000	-37.0	10.0	-27.0	PASS
5635.250000	-37.1	10.1	-27.0	PASS
5649.250000	-37.1	10.1	-27.0	PASS
5640.750000	-37.1	10.1	-27.0	PASS
5637.750000	-37.2	10.2	-27.0	PASS
5633.750000	-37.2	10.2	-27.0	PASS
5607.750000	-37.3	10.3	-27.0	PASS
5647.750000	-37.3	10.3	-27.0	PASS
5648.750000	-37.4	10.4	-27.0	PASS
5641.750000	-37.4	10.4	-27.0	PASS
5583.250000	-37.4	10.4	-27.0	PASS
5648.250000	-37.4	10.4	-27.0	PASS

TEST RESULTS (Cont.):

ac mode (80 MHz)

Bandwidth: 80 MHz

Highest Channel



Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
5931.250000	-41.1	14.1	-27.0	PASS
5929.750000	-41.4	14.4	-27.0	PASS
5924.250000	-40.9	14.4	-26.4	PASS
5926.750000	-41.5	14.5	-27.0	PASS
5928.750000	-41.7	14.7	-27.0	PASS
5924.750000	-41.6	14.8	-26.8	PASS
5928.250000	-41.8	14.8	-27.0	PASS
5930.250000	-41.8	14.8	-27.0	PASS
5933.250000	-41.9	14.9	-27.0	PASS
5929.250000	-41.9	14.9	-27.0	PASS
5932.750000	-42.0	15.0	-27.0	PASS
5926.250000	-42.1	15.1	-27.0	PASS
5925.750000	-42.1	15.1	-27.0	PASS
5933.750000	-42.1	15.1	-27.0	PASS
5935.250000	-42.2	15.2	-27.0	PASS

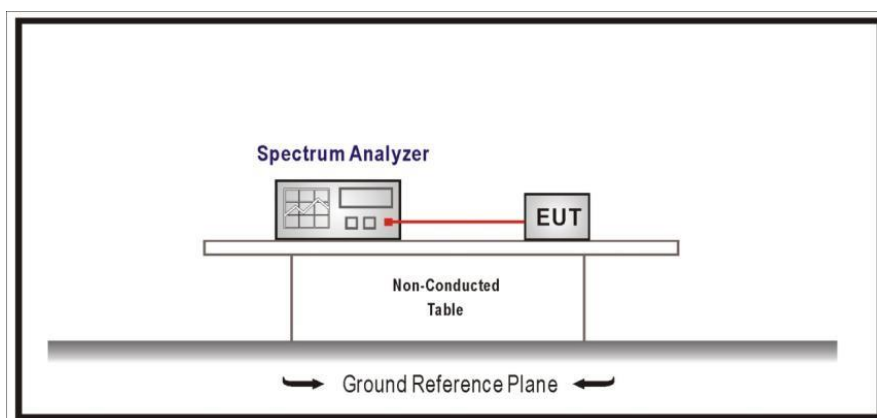
TEST E.6: EMISSION LIMITATIONS CONDUCTED (TRANSMITTER)

LIMITS:	Product standard:	Part 15 Subpart C §15.407, 15.207 and RSS-Gen
	Test standard:	Part 15 Subpart C §15.407(b)(6), 15.207 and RSS-Gen 8.8

LIMITS

In any 100 kHz bandwidth outside the frequency band in which the digitally modulated 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB instead of 20 dB.

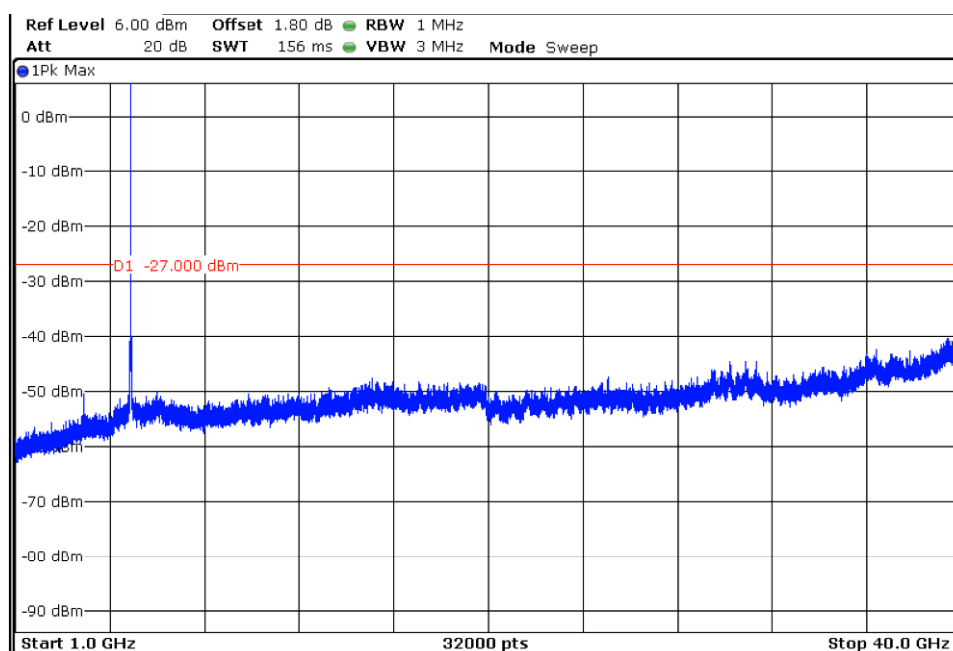
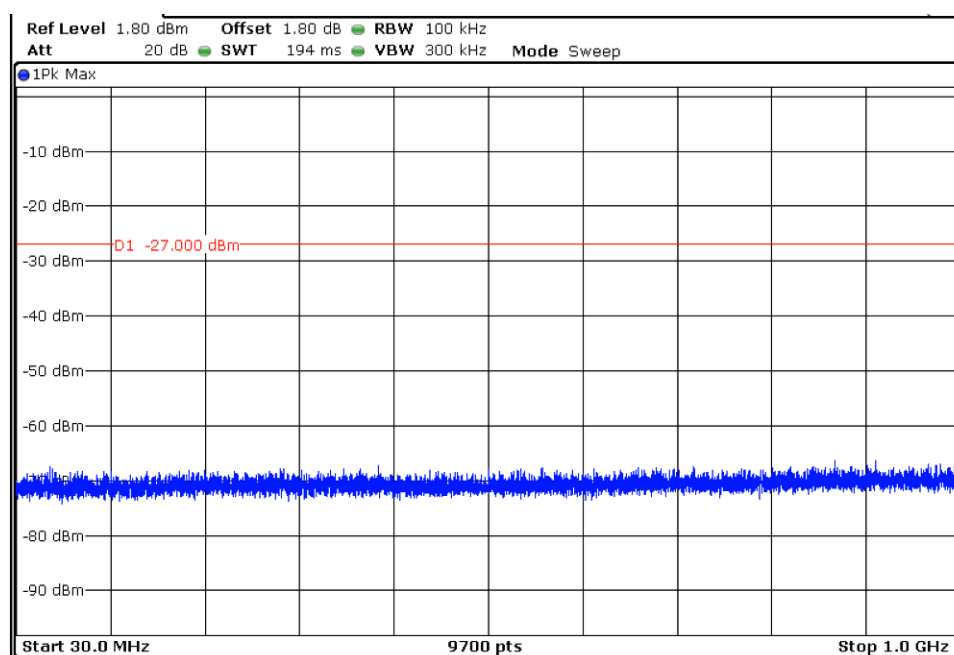
TEST SETUP



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Low channel

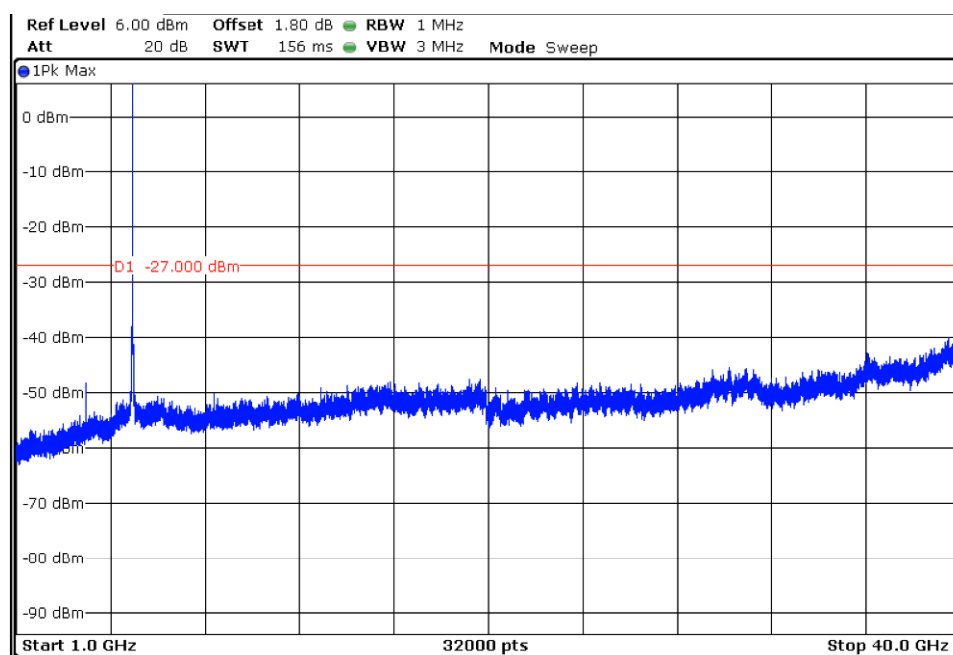
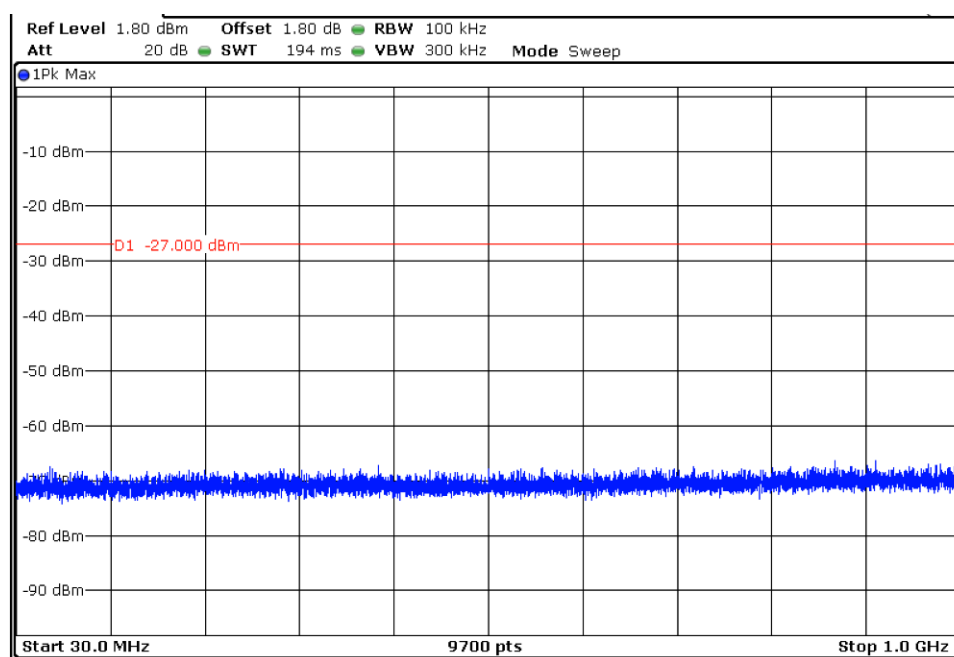
No spurious signal was detected at 20dB below the limit or above for the channel.



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Mid channel

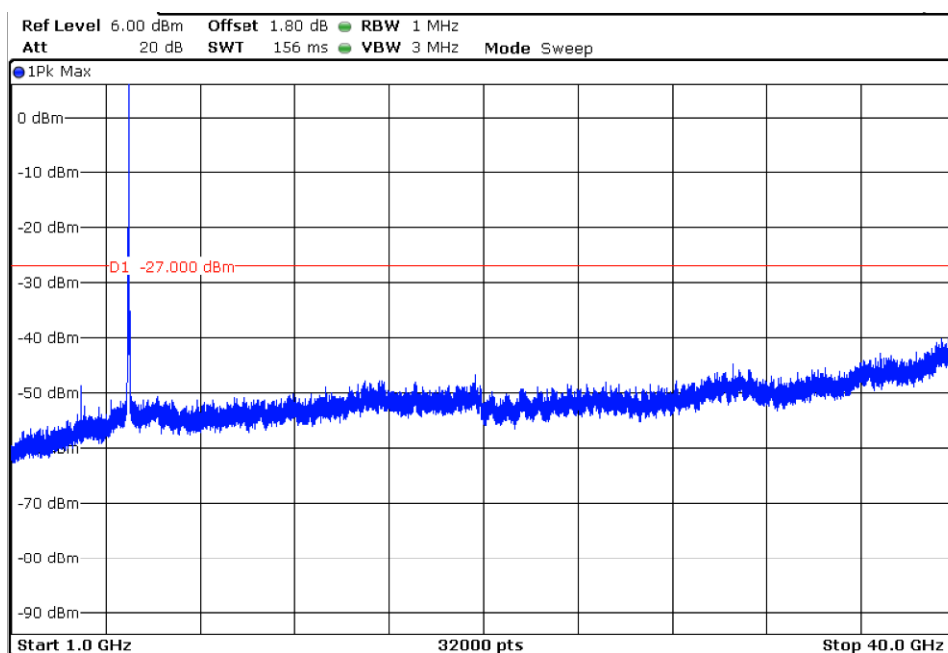
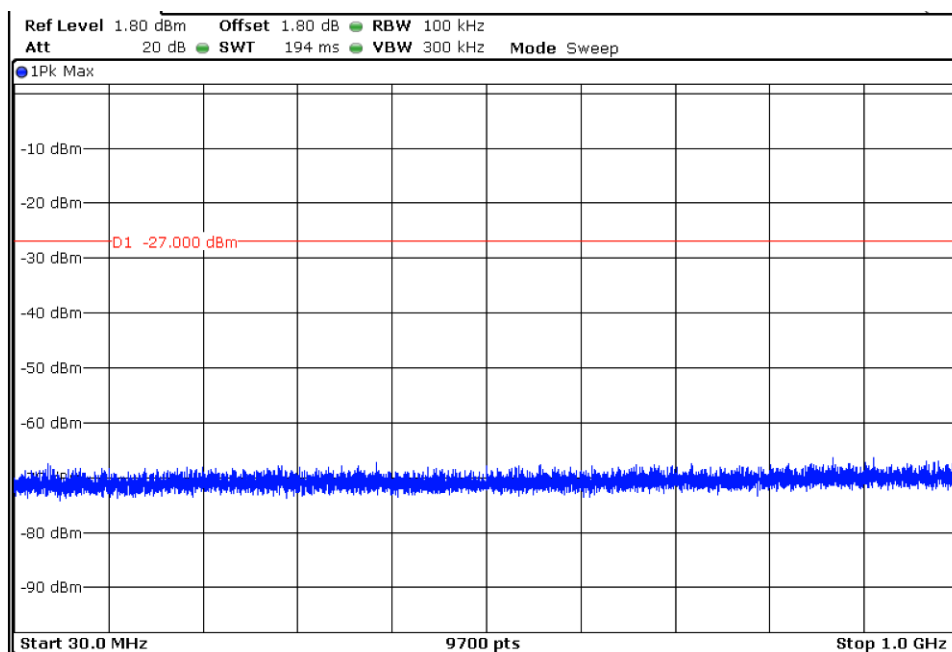
No spurious signal was detected at 20dB below the limit or above for the channel.



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

High channel

No spurious signal was detected at 20dB below the limit or above for the channel.

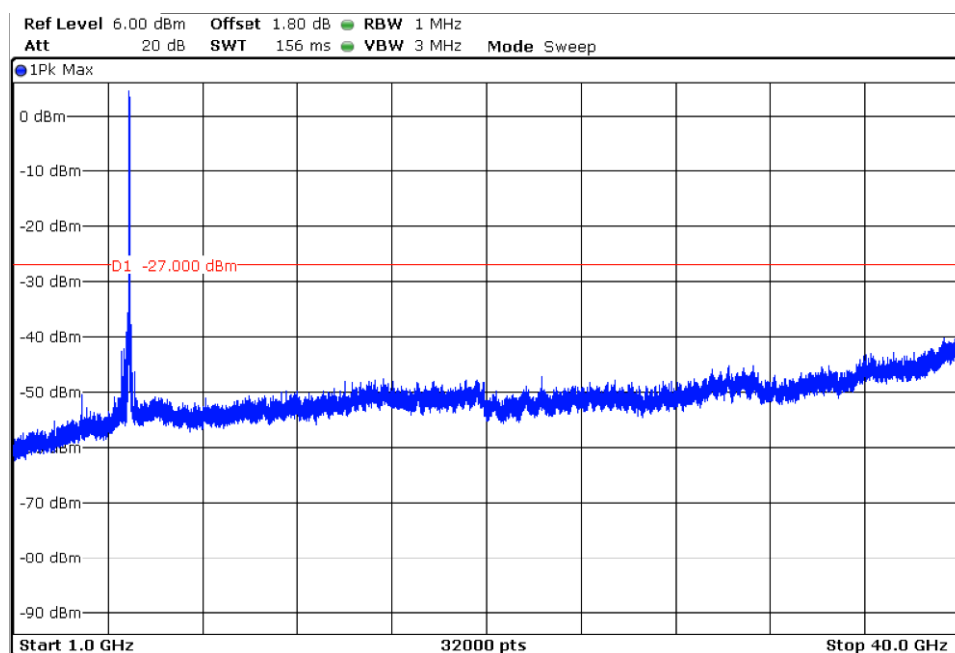
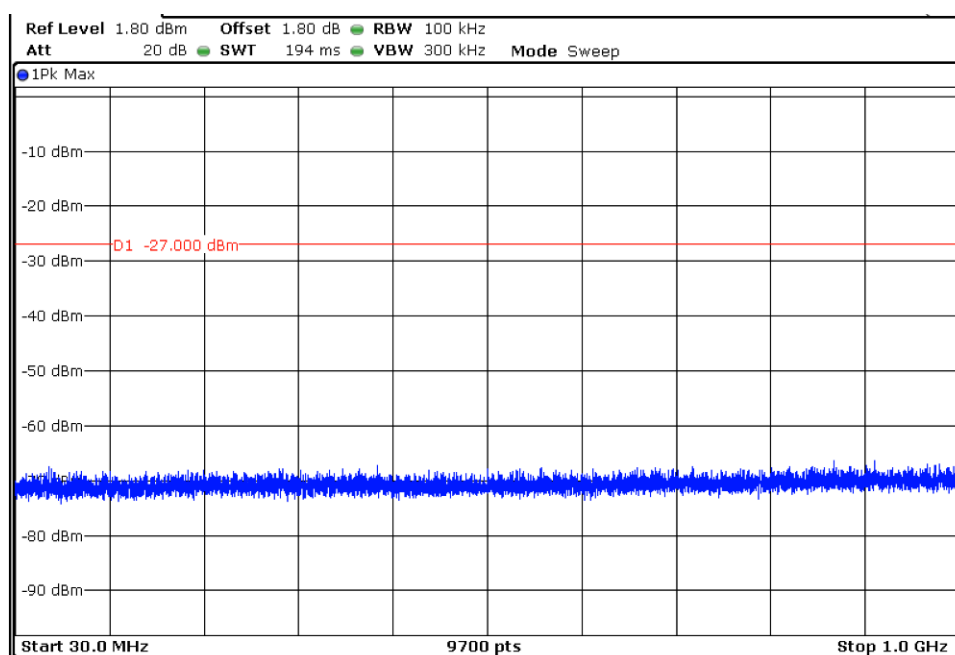


TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 40 MHz

Low channel

No spurious signal was detected at 20dB below the limit or above for the channel.

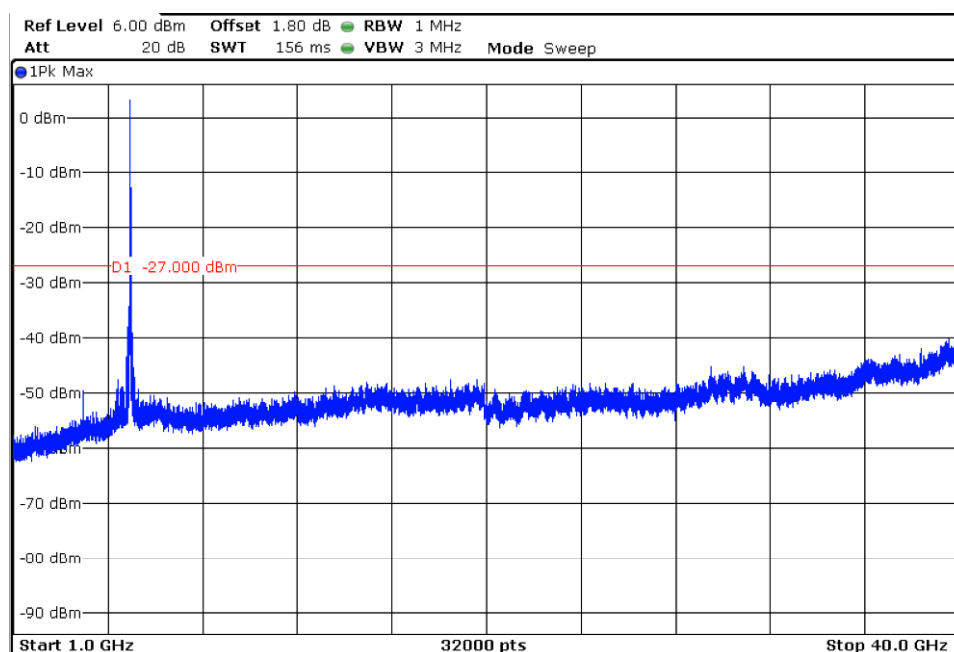
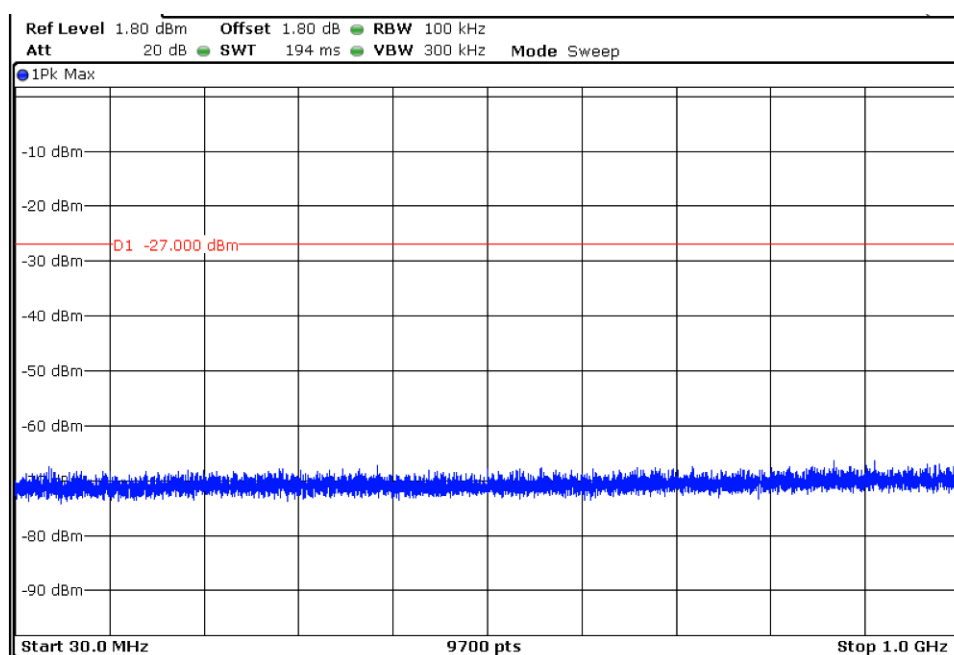


TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 40 MHz

High channel

No spurious signal was detected at 20dB below the limit or above for the channel.

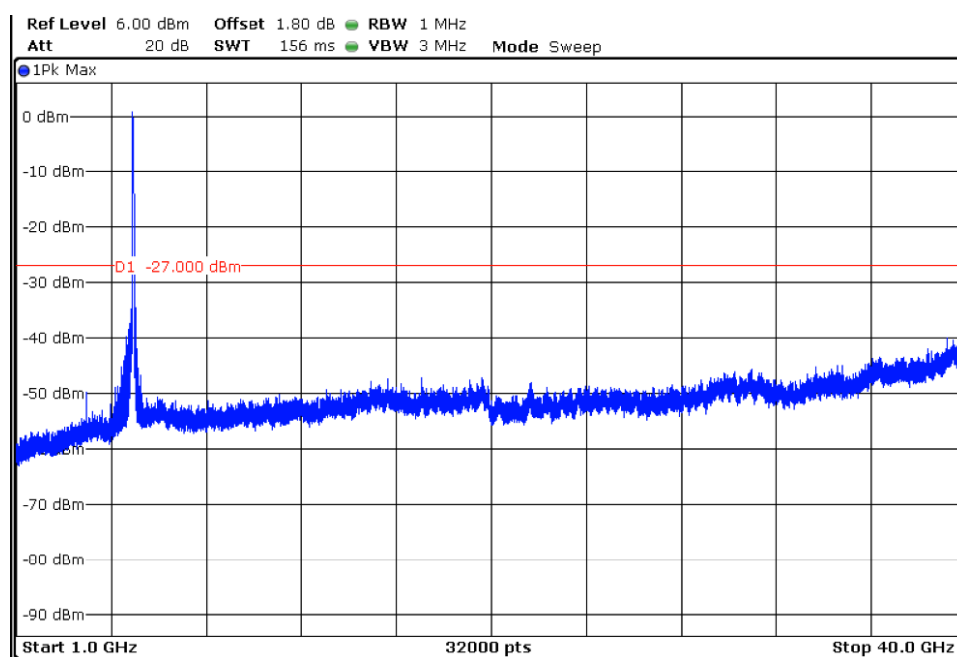
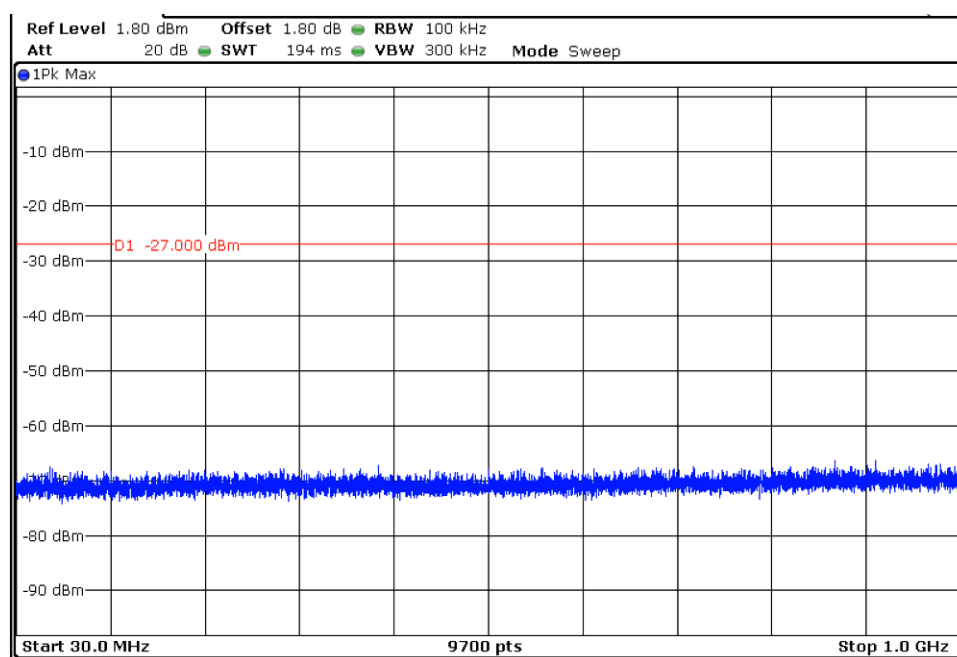


TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Bandwidth: 80 MHz

Low channel

No spurious signal was detected at 20dB below the limit or above for the channel.



TEST E.7: UNDESIRABLE RADIATED EMISSIONS (TRANSMITTER)

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(b) (1)(6)(7) and RSS-247 6.2.1.2

LIMITS

For transmitters operating in the 5.15 – 5.25 GHz band: all emissions outside of the 5.15 – 5.25 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.23 dBμ V/m at 3m distance).

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

Frequency Range (MHz)	Field strength (μV/m)	Field strength (dBμV/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
960 - 25000	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

TEST SETUP

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at 3 m for the frequency range 30-1000 MHz (Bilog antenna) and at 1m for the frequency range 1-40 GHz (1 GHz-18 GHz and 18 GHz-40 GHz Double ridge horn antennas).

For radiated emissions in the range 1-40 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.

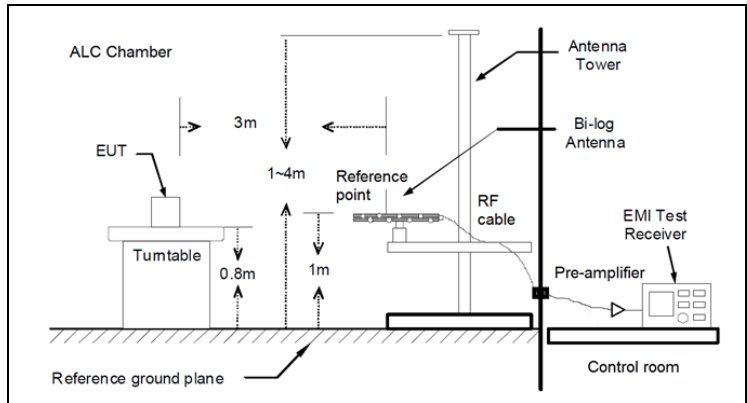
The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

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

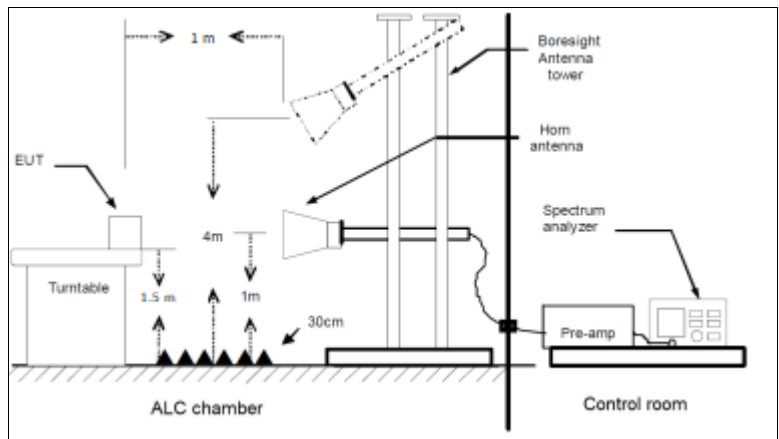
The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

TEST SETUP (CONT.)

Radiated measurements Setup $f < 1$ GHz



Radiated measurements setup $f > 1$ GHz



TESTED SAMPLES:

S/02

TESTED CONDITIONS MODES:

TC#01 (a mode)

TEST RESULTS:

PASS

Frequency range 30 MHz – 1000 MHz

The spurious emissions below 1 GHz do not depend on the operating channel selected in the EUT. See worst operation mode selected for all the ranges (a mode 20 MHz and Mid channel) as a worst case.

Frequency range 1 GHz – 40 GHz

The results and plots below show the maximum measured levels in the 1- 40 GHz range.

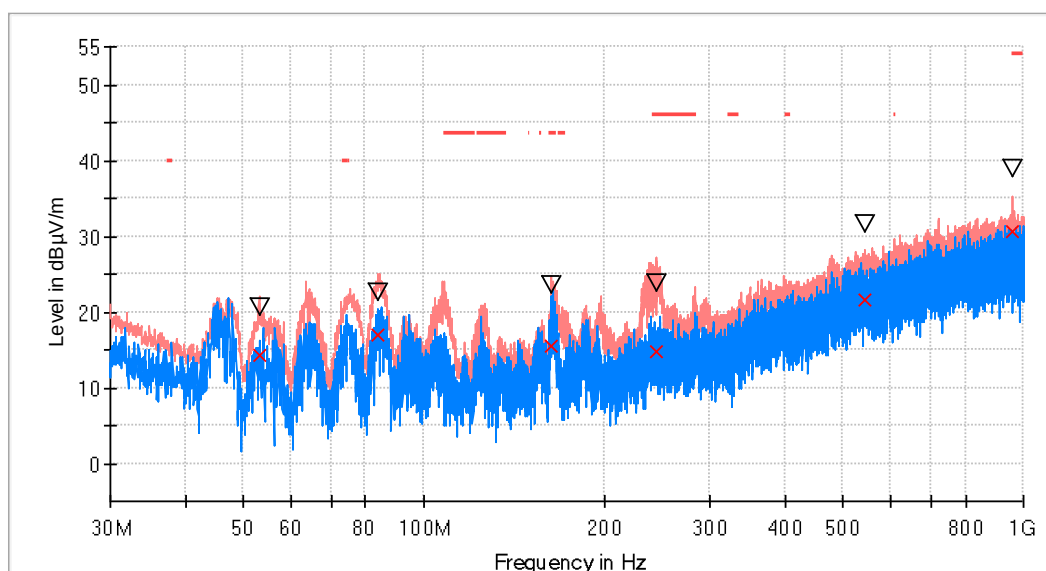
TEST RESULTS (Cont.)

FREQUENCY RANGE

30 MHz – 1 GHz

Mid Channel

RF_FCC_15.407_E Field_30MHz_1GHz



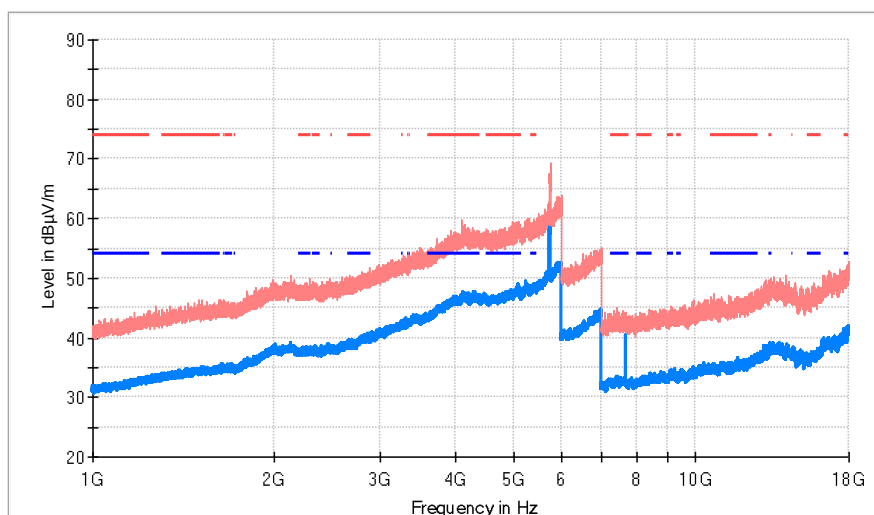
- PK+_MAXH
- PK+_CLRWR
- TX limits to Spurious Emission FCC15.407 (30MHz to 1GHz) Restricted Bands QPK Limit
- ▽ MaxPeak-PK+ (Single)
- × QuasiPeak-QPK (Single)

Frequency (MHz)	MaxPeak (dBμV/m)	QuasiPeak (dBμV/m)	Pol
53.086000	20.7	14.2	V
83.980500	22.6	17.0	V
162.938500	23.5	15.5	V
244.418500	23.9	14.7	H
544.003000	31.7	21.7	H
960.036000	39.0	30.7	H

TEST RESULTS (Cont.)

FREQUENCY RANGE 1 GHz – 18 GHz

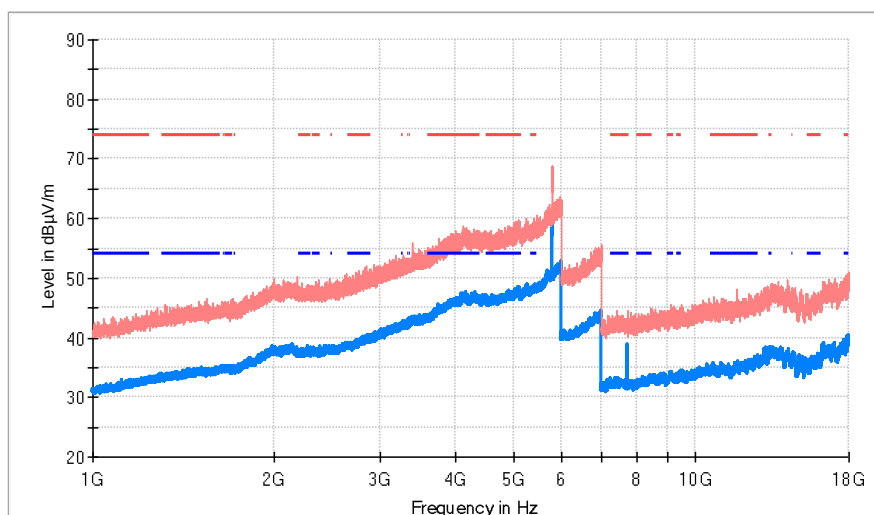
Low Channel



AVG_MAXH
 PK+_MAXH
 TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit
 TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit

Frequency (MHz)	PK+_MAXH (dBμV/m)	AVG_MAXH (dBμV/m)	Pol	Comment
5743.409091	67.0	59.4	V	Fundamental
7659.818182	44.3	40.4	V	

Middle Channel

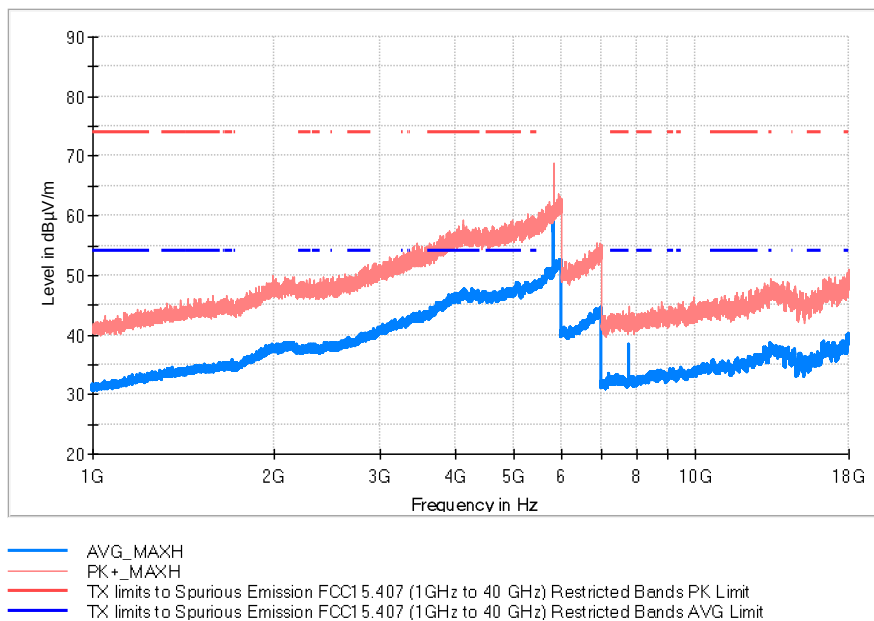


AVG_MAXH
 PK+_MAXH
 TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit
 TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit

Frequency (MHz)	PK+_MAXH (dBμV/m)	AVG_MAXH (dBμV/m)	Pol	Comment
5782.045455	68.7	59.6	V	Fundamental
7713.272727	43.9	38.7	V	

TEST RESULTS (Cont.)

High Channel

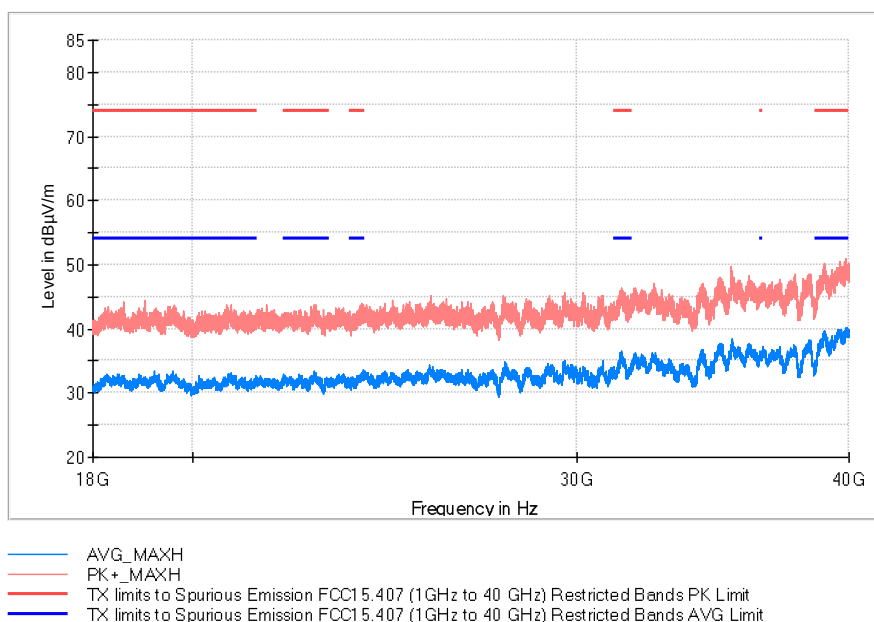


Frequency (MHz)	PK+_MAXH (dBμV/m)	AVG_MAXH (dBμV/m)	Pol	Comment
5822.272727	68.4	59.4	V	Fundamental
7766.181818	44.8	38.4	V	

FREQUENCY RANGE

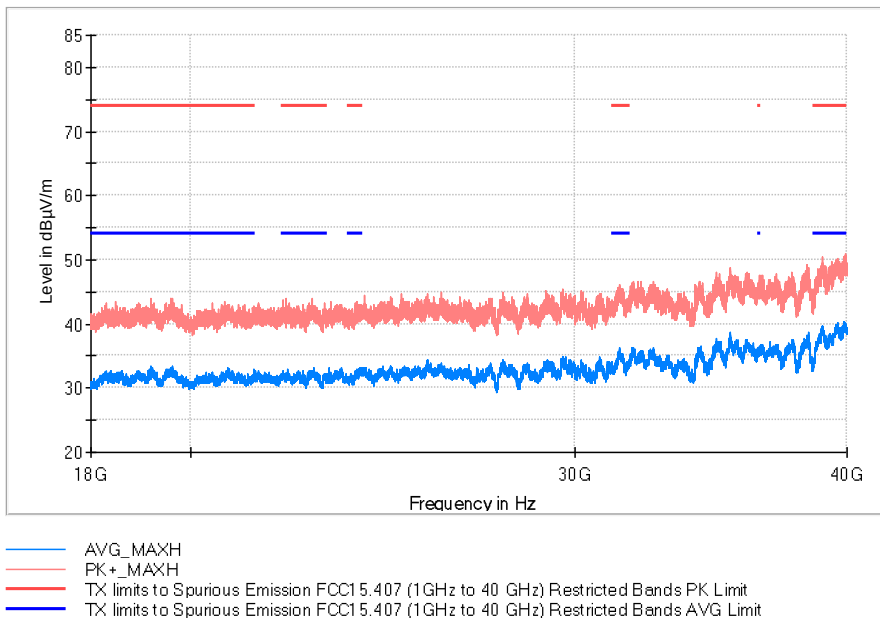
18 GHz – 40 GHz

Low Channel

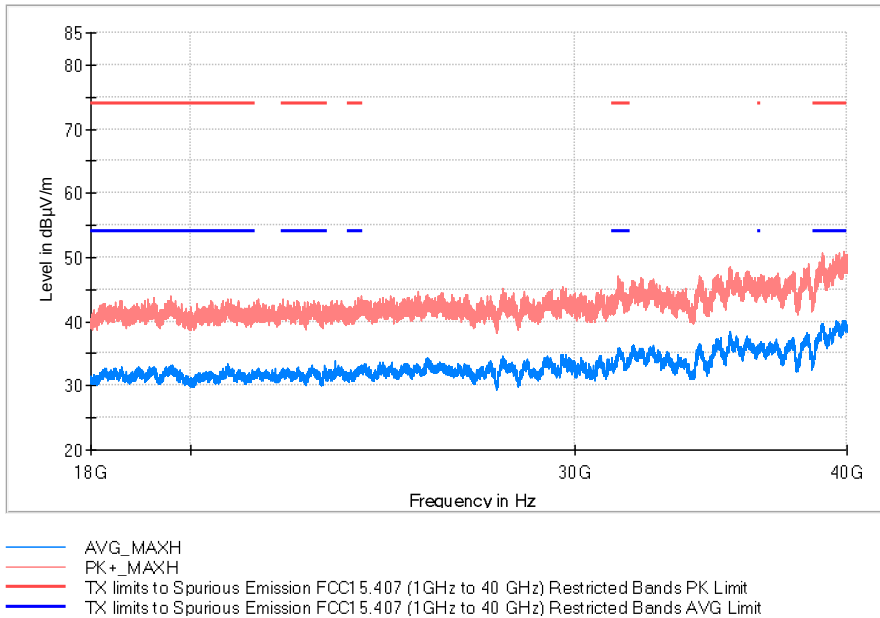


TEST RESULTS (Cont.)

Middle Channel



High Channel



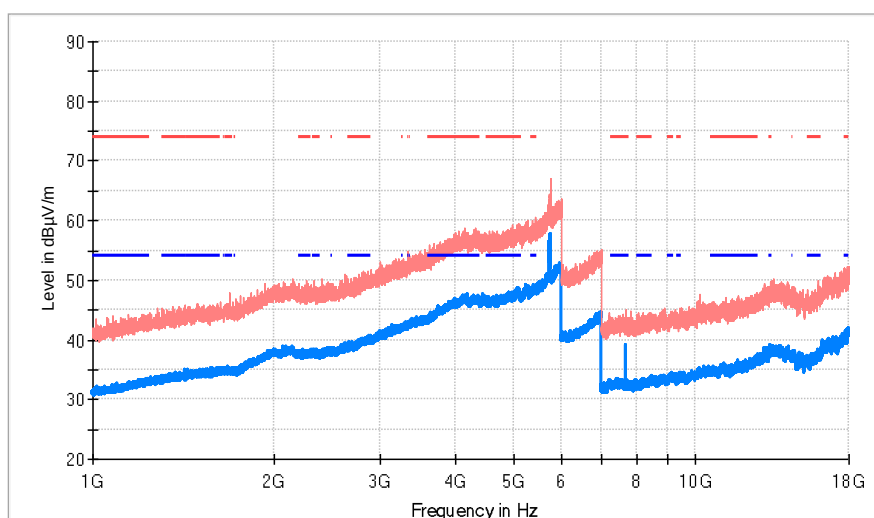
TESTED SAMPLES:	S/02
TESTED CONDITIONS MODES:	TC#03 (ac mode 40 MHz)
TEST RESULTS:	PASS

Frequency range 1 GHz – 40 GHz

The results and plots below show the maximum measured levels in the 1- 40 GHz range.

FREQUENCY RANGE	1 GHz – 18 GHz
------------------------	-----------------------

Low Channel



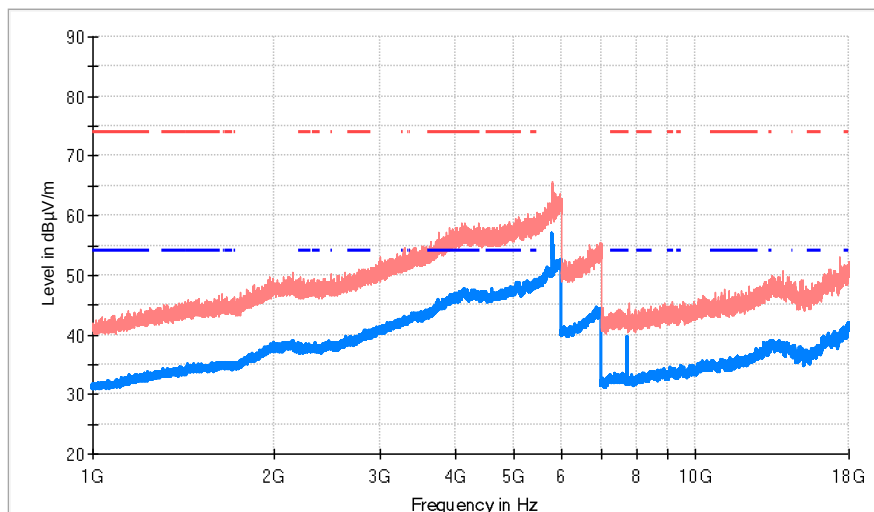
— AVG_ _MAXH
 — PK+ _MAXH
 — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit
 — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit

Maximizations

Frequency (MHz)	PK+ _MAXH (dBuV/m)	AVG_ _MAXH (dBuV/m)	Pol	Comment
5757.045455	63.9	57.7	V	Fundamental
7672.909091	44.2	39.1	V	

TEST RESULTS (Cont.)

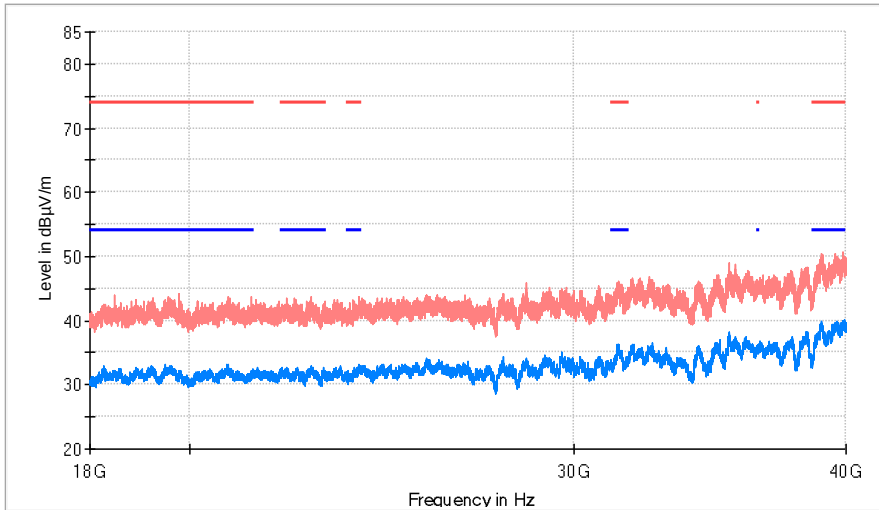
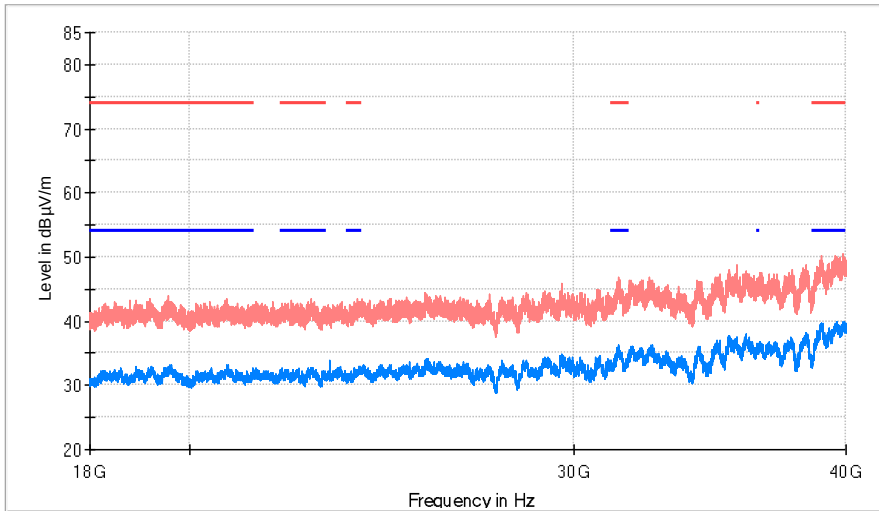
High Channel



— AVG_MAXH
 — PK+ MAXH
 — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit
 — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit

Maximizations

Frequency (MHz)	PK+ MAXH (dBμV/m)	AVG_MAXH (dBμV/m)	Pol	Comments
5792.045455	63.9	57.0	V	Fundamental
7726.363636	44.3	39.5	V	

TEST RESULTS (Cont.)	
FREQUENCY RANGE	18 GHz – 40 GHz
Low Channel  — AVG_MAXH — PK+_MAXH — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit High Channel  — AVG_MAXH — PK+_MAXH — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit	

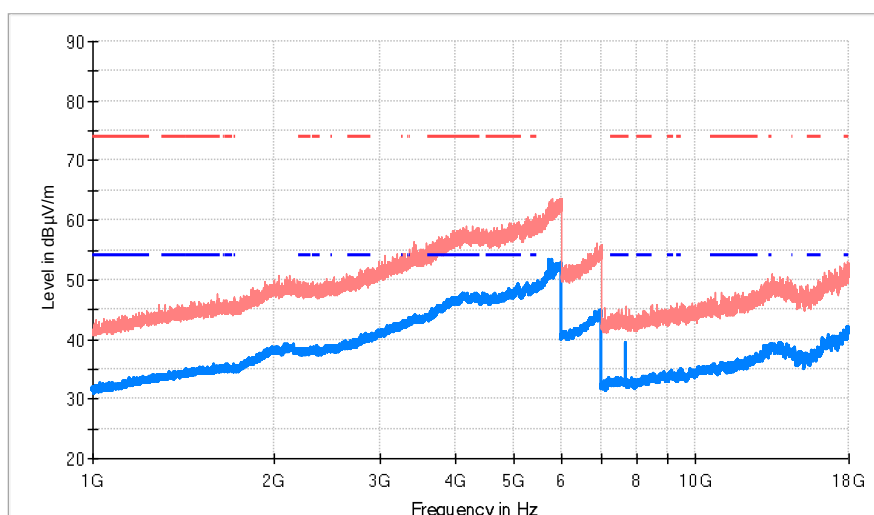
TESTED SAMPLES:	S/02
TESTED CONDITIONS MODES:	TC#03 (ac mode)
TEST RESULTS:	PASS

Frequency range 1 GHz – 40 GHz

The results and plots below show the maximum measured levels in the 1- 40 GHz range.

TEST RESULTS (Cont.)	ac mode (80 MHz)
FREQUENCY RANGE	1 GHz – 18 GHz

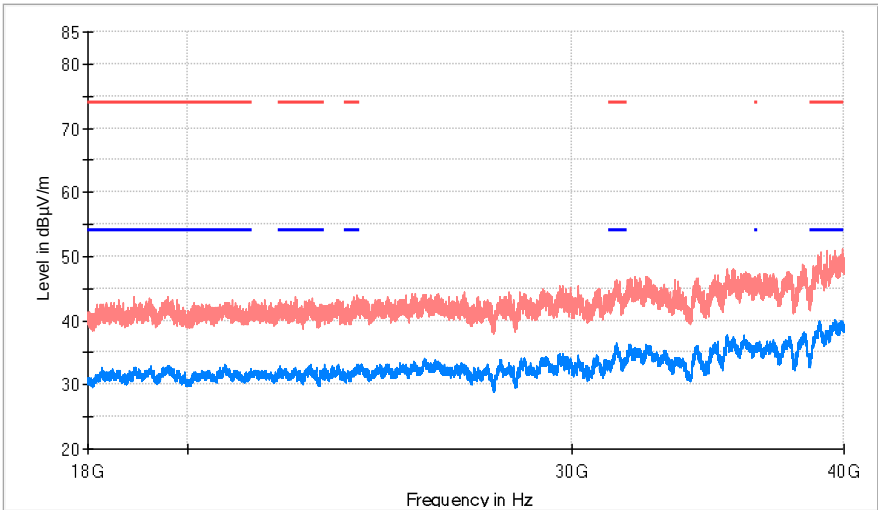
Low Channel



— AVG_MAXH
 — PK+ MAXH
 — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit
 — TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit

Maximizations

Frequency (MHz)	PK+ MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comments
5762.727273	62.3	53.2	V	Fundamental
7699.636364	45.4	39.4	V	

TEST RESULTS (Cont.)	
FREQUENCY RANGE	18 GHz – 40 GHz
Low Channel  — AVG_MAXH — PK+_MAXH --- TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands PK Limit --- TX limits to Spurious Emission FCC15.407 (1GHz to 40 GHz) Restricted Bands AVG Limit	