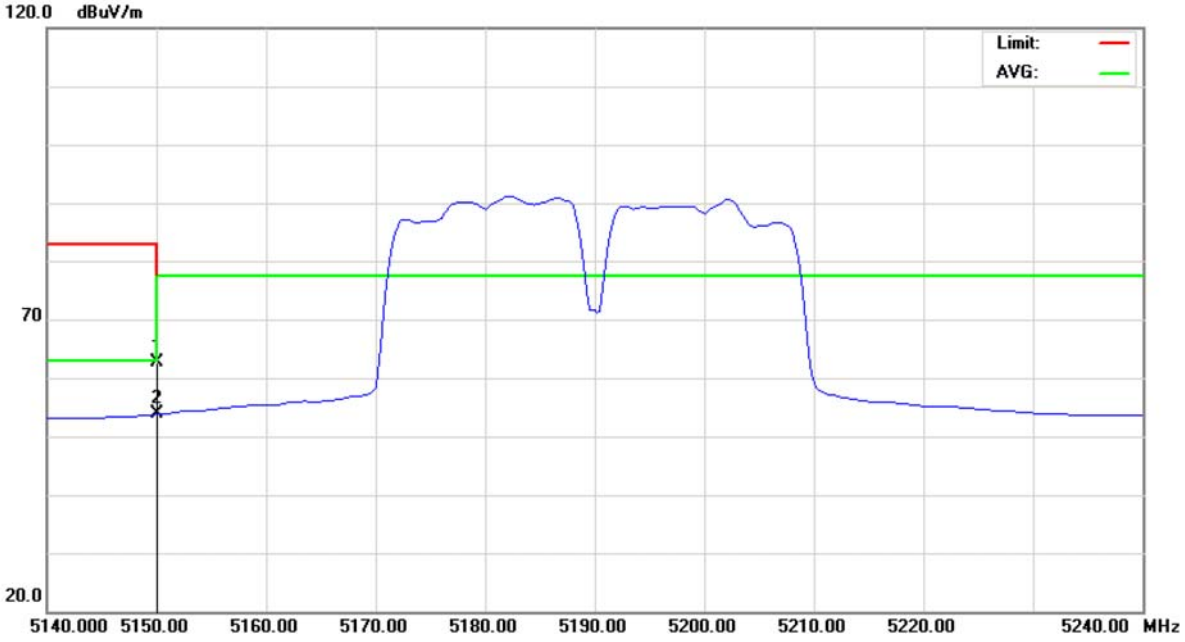
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/5190 MHz		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 4500-5150 MHz.		

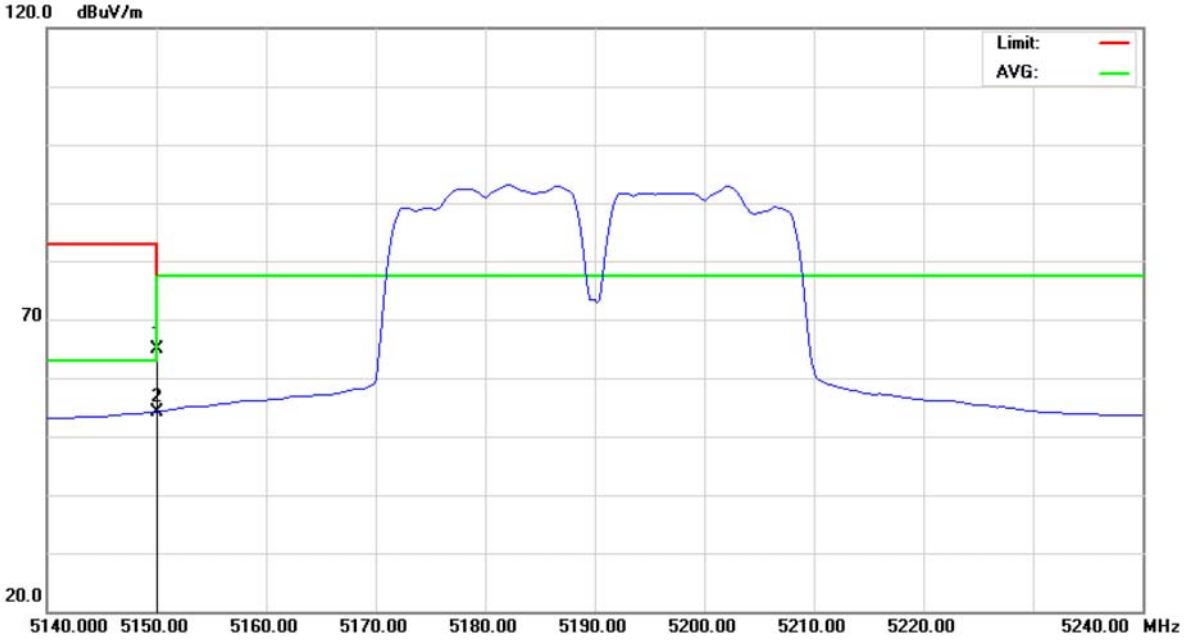
Polarization: Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	21.83	40.92	62.75	77.30	-14.55	peak	
2	*	5150.000	12.87	40.92	53.79	63.00	-9.21	AVG	

E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/5190 MHz		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 4500-5150 MHz.		

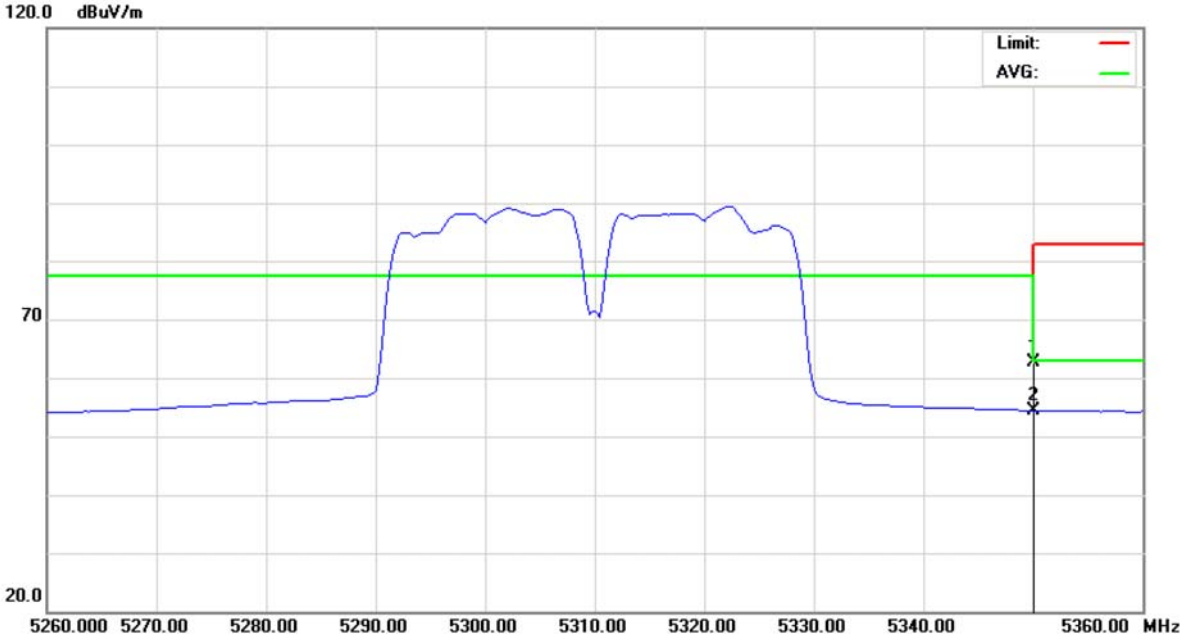
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	24.03	40.92	64.95	77.30	-12.35	peak	
2	*	5150.000	13.31	40.92	54.23	63.00	-8.77	AVG	

E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/5310 MHz		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 5350-5460 MHz.		

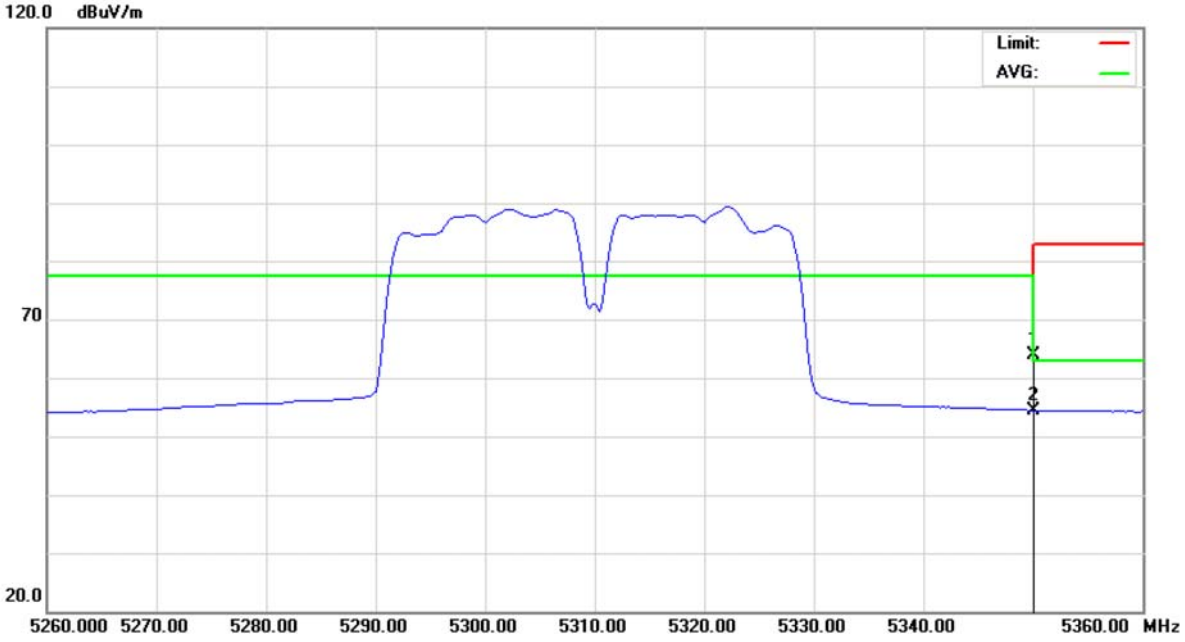
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	21.36	41.24	62.60	77.30	-14.70	peak	
2	*	5350.000	13.25	41.24	54.49	63.00	-8.51	AVG	

E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/5310 MHz		
NOTE	The transmitter was setup to transmit at the highest channel and the field strength was measured at 5350-5460 MHz.		

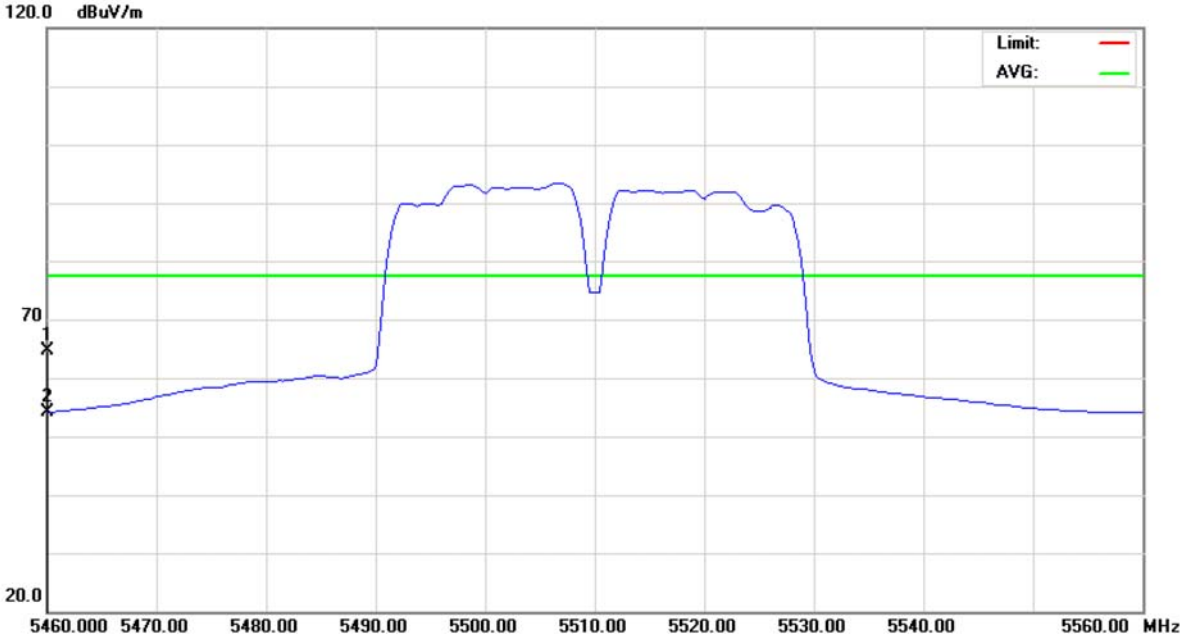
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	22.57	41.24	63.81	77.30	-13.49	peak	
2	*	5350.000	13.24	41.24	54.48	63.00	-8.52	AVG	

E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/5510 MHz		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 5350-5460 MHz.		

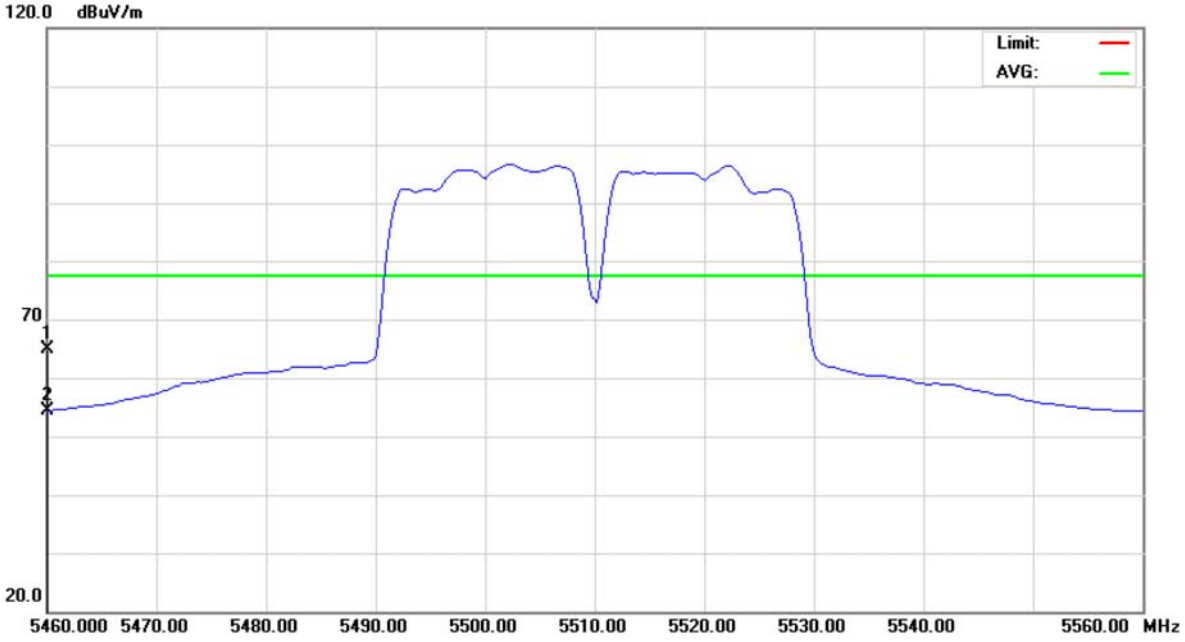
Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5460.000	23.11	41.41	64.52	77.30	-12.78	peak	
2	*	5460.000	12.75	41.41	54.16	63.00	-8.84	AVG	

E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	24°C	Relative Humidity	46%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/5510 MHz		
NOTE	The transmitter was setup to transmit at the lowest channel and the field strength was measured at 5350-5460 MHz.		

Polarization: Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5460.000	23.51	41.41	64.92	77.30	-12.38	peak	
2	*	5460.000	12.94	41.41	54.35	63.00	-8.65	AVG	

10 POWER SPECTRAL DENSITY

10.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Power Spectral Density	5150 - 5250	4 dBm
	5250 - 5350	11 dBm
	5470 - 5725	11 dBm
	5725 - 5825	17 dBm

10.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 06, 2012

NOTE: **N/A**: denotes No Model Name, No Serial No. or No Calibration specified.

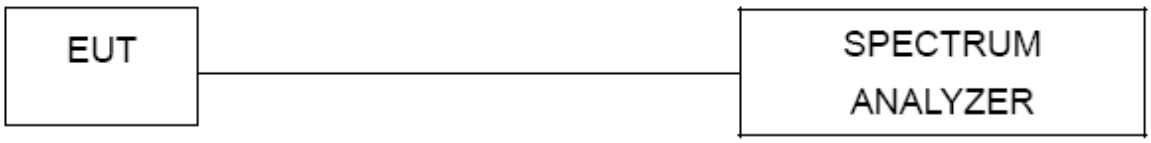
10.3 MEASURING INSTRUMENTS SETTING

Spectrum Analyzer	Parameter Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz
VB	3000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

10.4 TEST PROCEDURES

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

10.5 TEST SETUP LAYOUT



10.6 DEVIATION FROM TEST STANDARD

No deviation

10.7 EUT OPERATING CONDITIONS

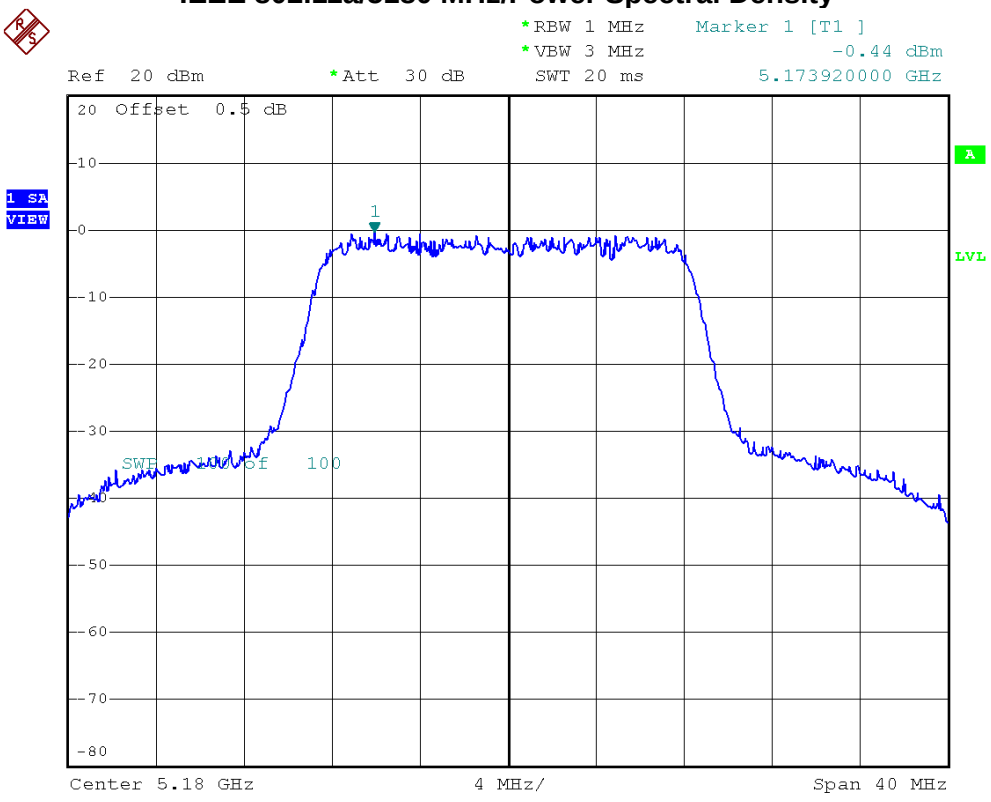
The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

10.8TEST RESULTS - 5150-5250 MHZ

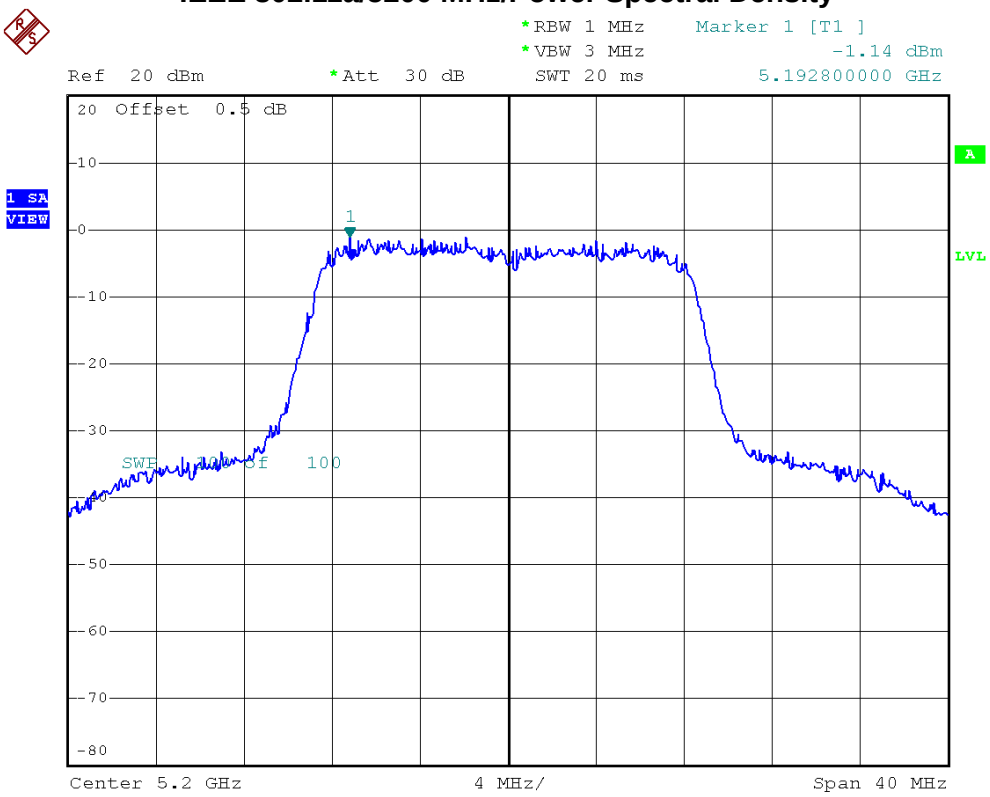
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5180 MHz	-0.44	4.00	PASS
5200 MHz	-1.14	4.00	PASS
5240 MHz	0.35	4.00	PASS

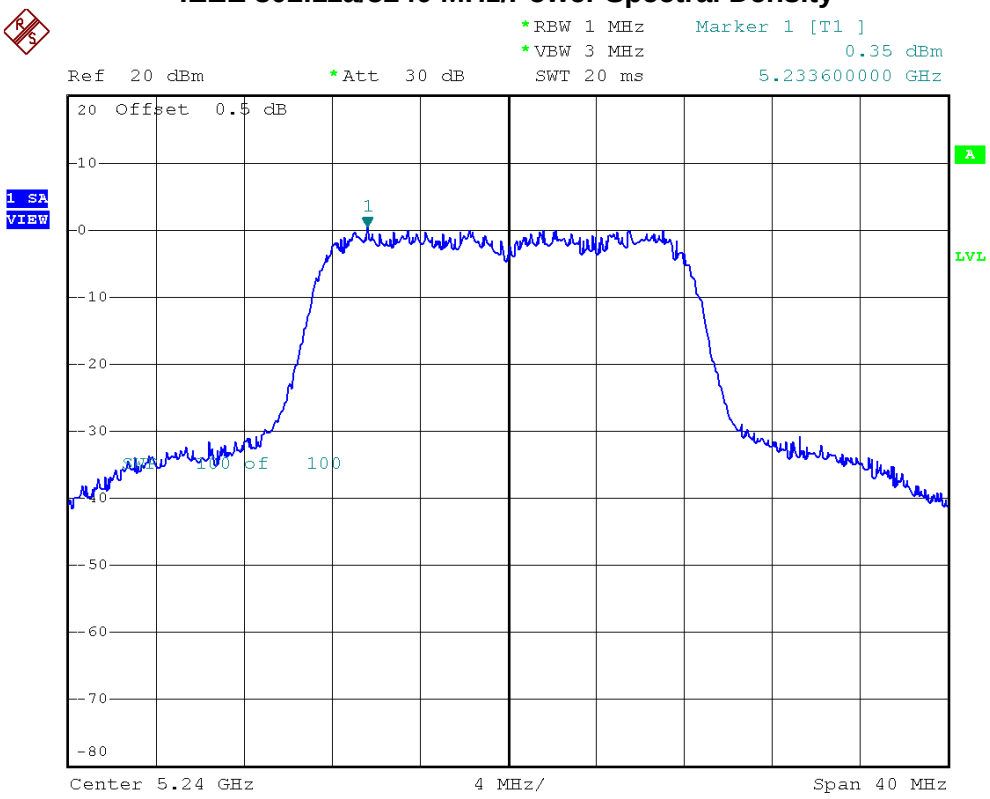
IEEE 802.11a/5180 MHz/Power Spectral Density



IEEE 802.11a/5200 MHz/Power Spectral Density



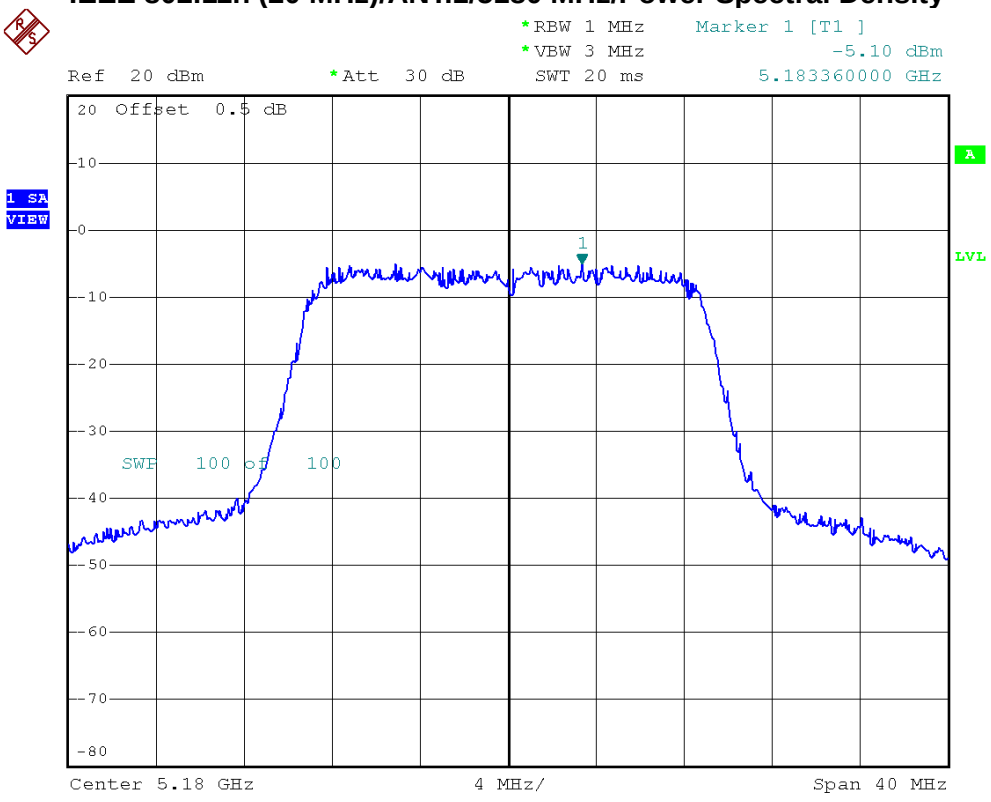
IEEE 802.11a/5240 MHz/Power Spectral Density



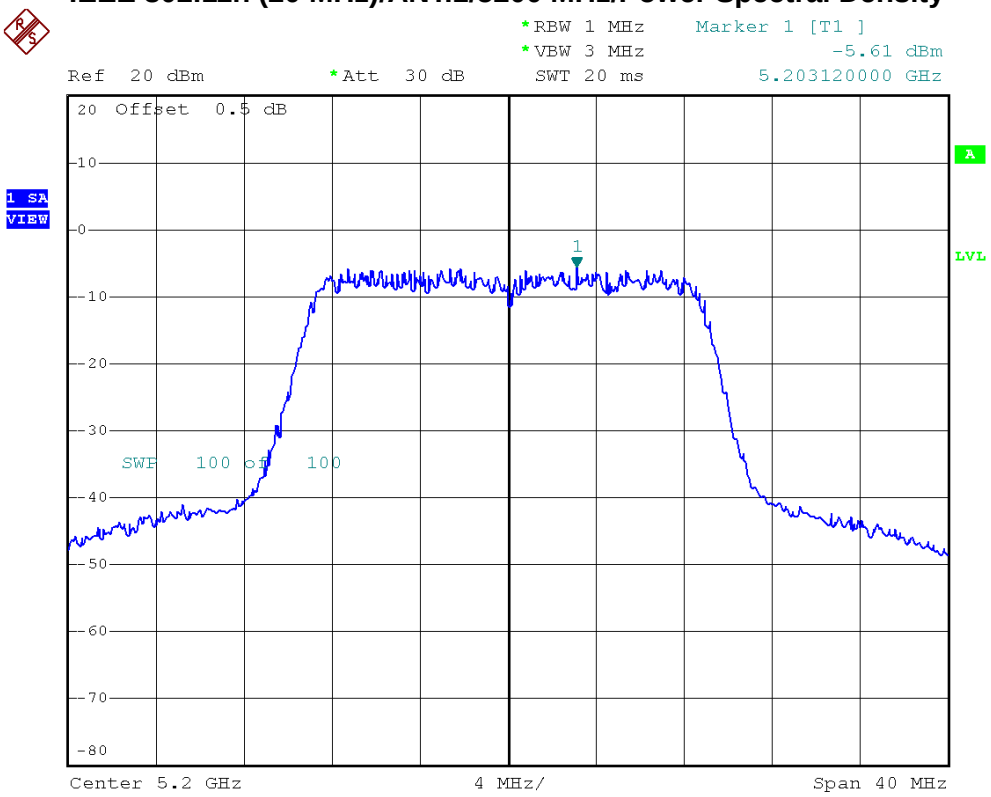
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.1/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5180 MHz	-5.10	4.00	PASS
5200 MHz	-5.61	4.00	PASS
5240 MHz	-4.83	4.00	PASS

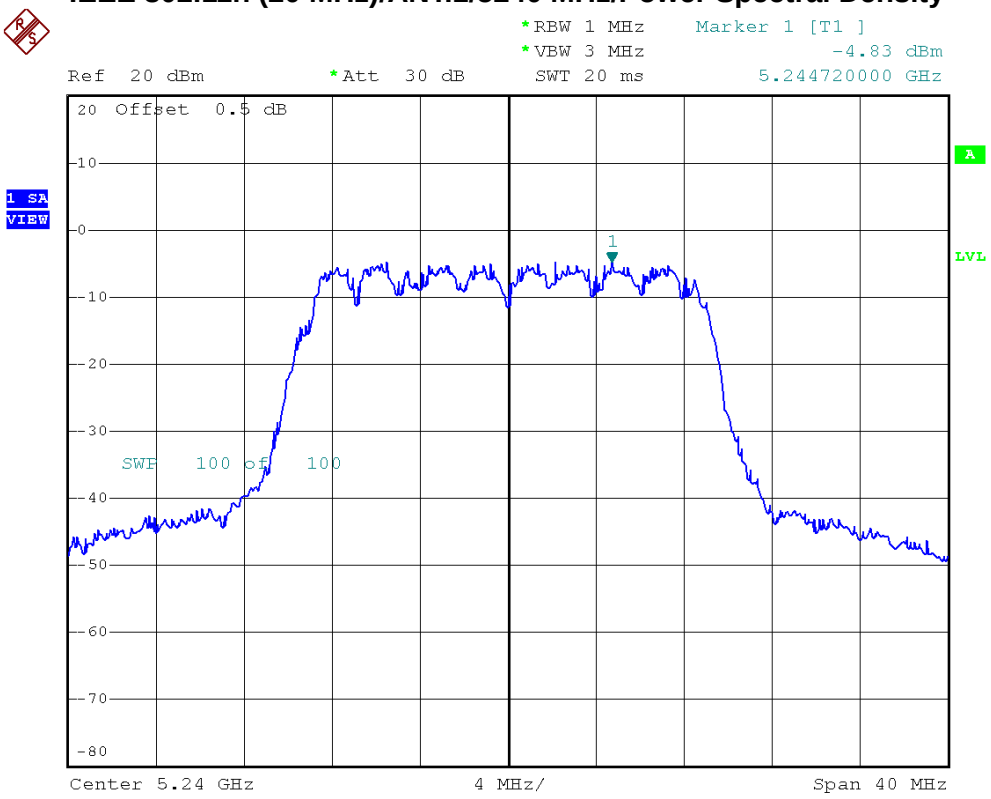
IEEE 802.11n (20 MHz)/ANT.1/5180 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.1/5200 MHz/Power Spectral Density



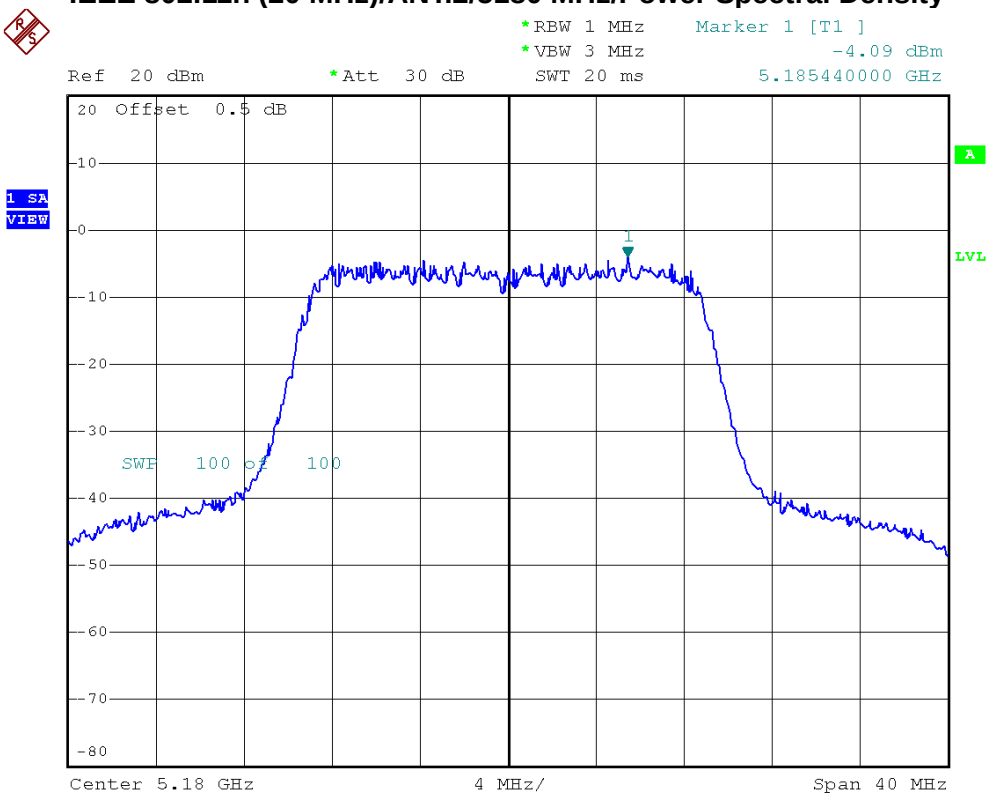
IEEE 802.11n (20 MHz)/ANT.1/5240 MHz/Power Spectral Density



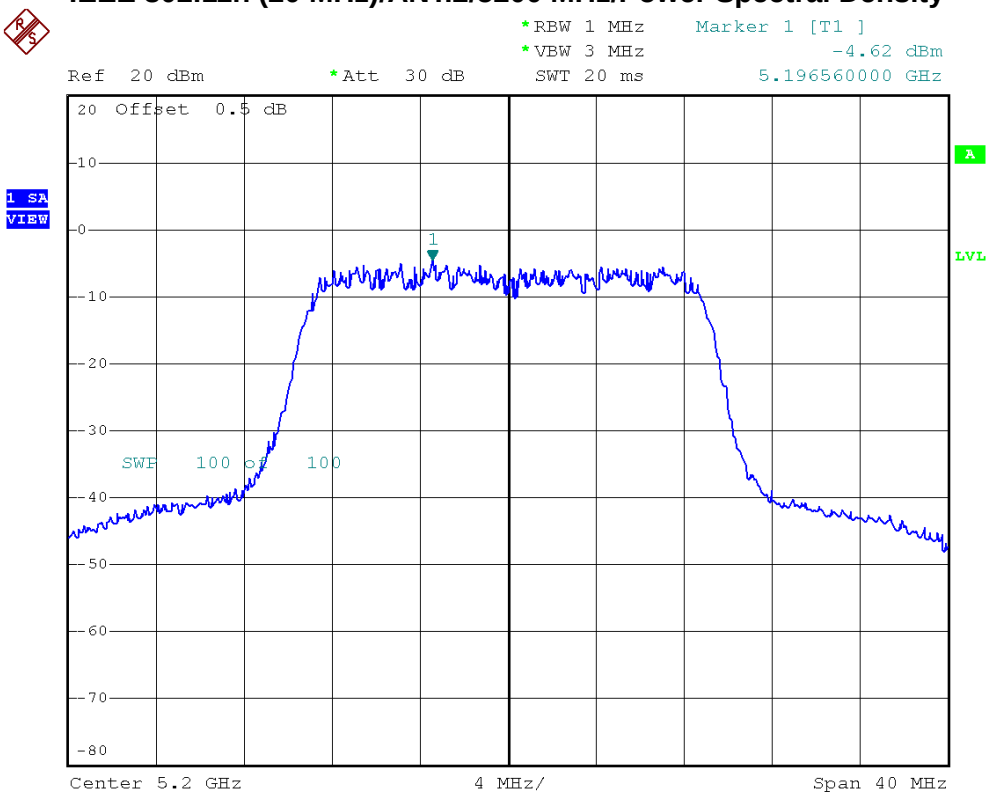
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.2/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5180 MHz	-4.09	4.00	PASS
5200 MHz	-4.62	4.00	PASS
5240 MHz	-4.76	4.00	PASS

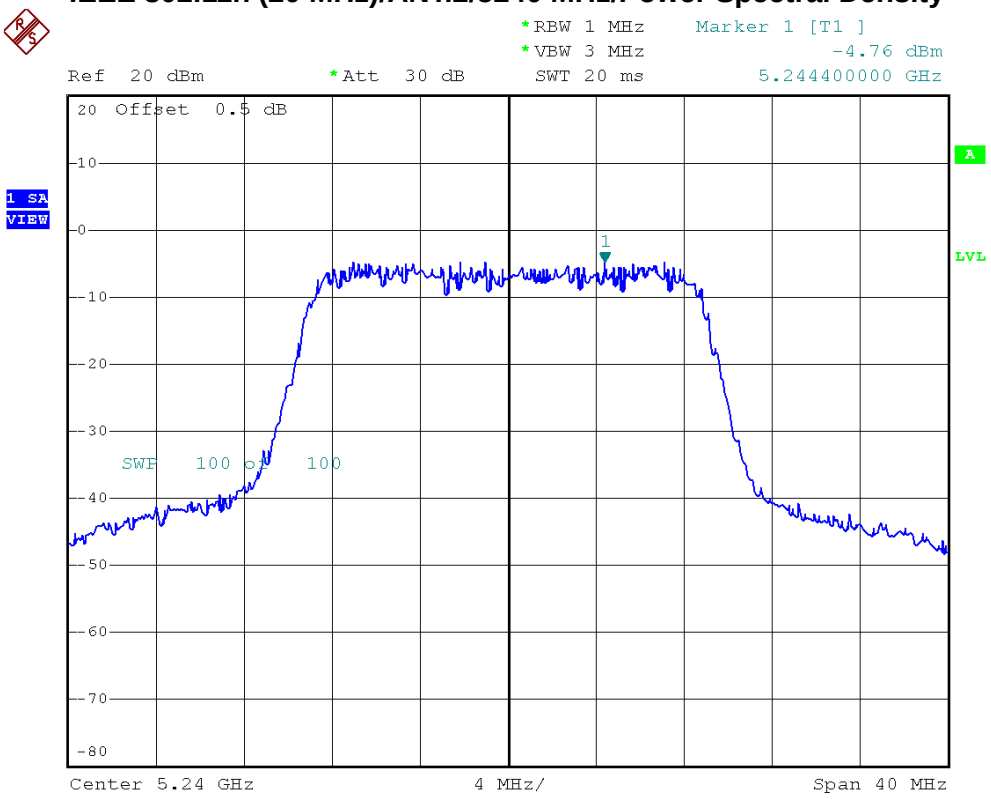
IEEE 802.11n (20 MHz)/ANT.2/5180 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.2/5200 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.2/5240 MHz/Power Spectral Density



E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.Total/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Power Spectral Density		Limit (dBm)	Result
	(dBm)	(mW)		
5180 MHz	-1.56	0.70	4.00	PASS
5200 MHz	-2.08	0.62	4.00	PASS
5240 MHz	-1.78	0.66	4.00	PASS

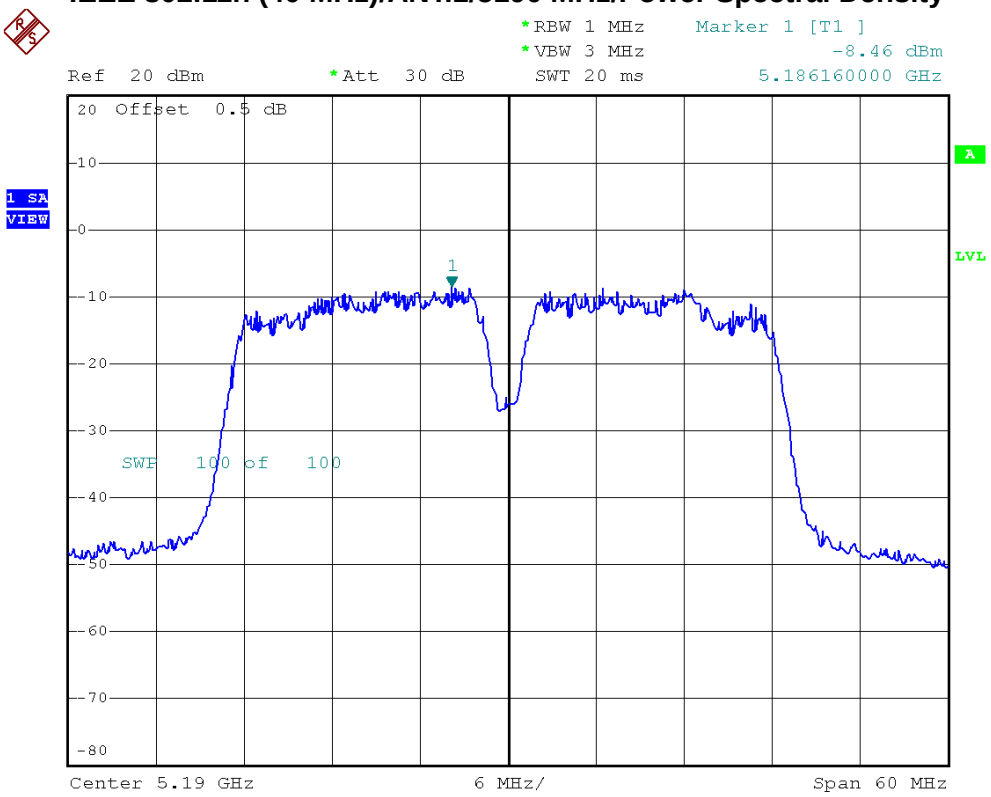
NOTE:

1. The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.
   And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
   ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

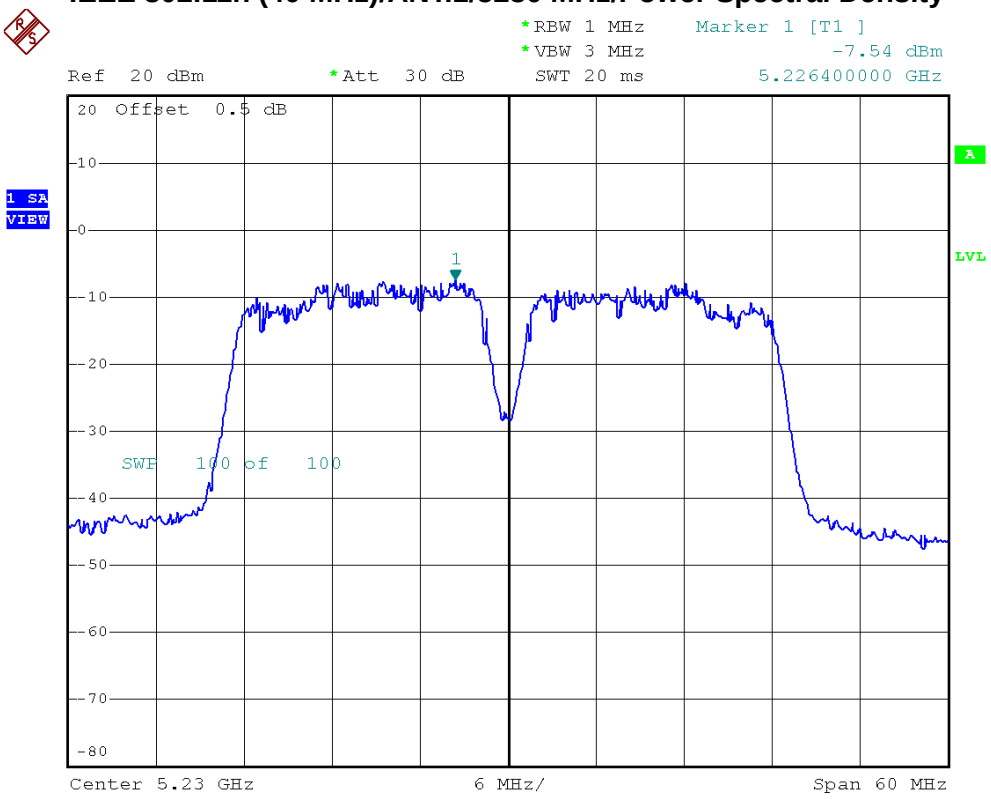
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.1/5190 MHz, 5230 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5190 MHz	-8.46	4.00	PASS
5230 MHz	-7.54	4.00	PASS

IEEE 802.11n (40 MHz)/ANT.1/5190 MHz/Power Spectral Density



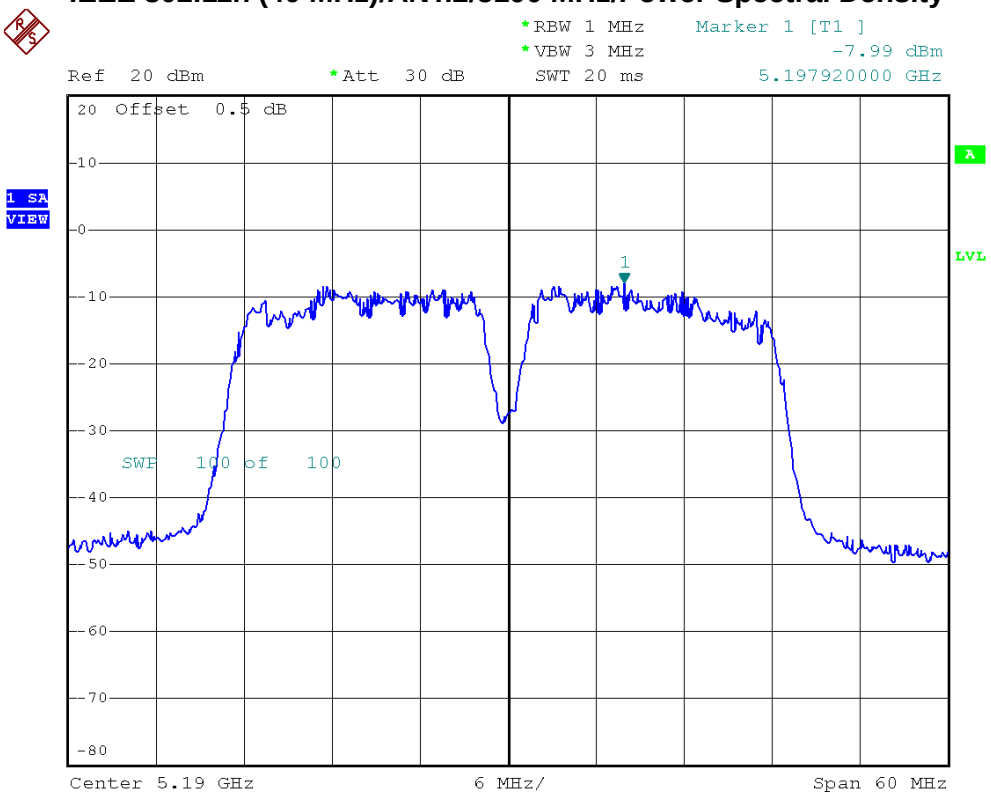
IEEE 802.11n (40 MHz)/ANT.1/5230 MHz/Power Spectral Density



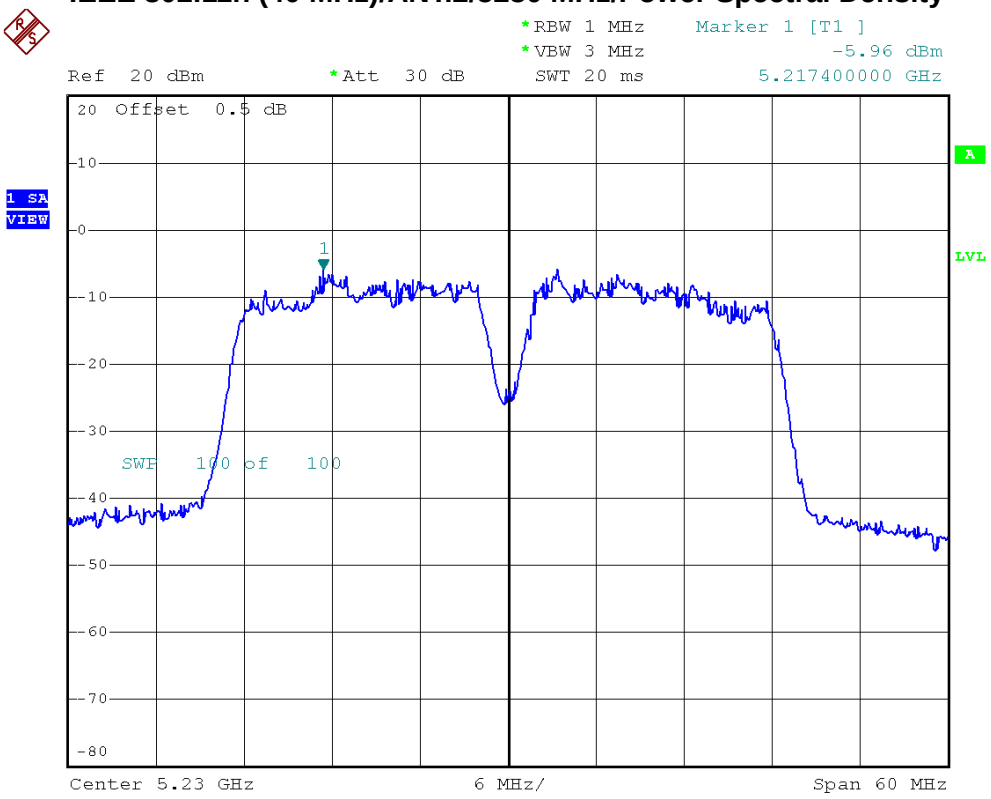
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.2/5190 MHz, 5230 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5190 MHz	-7.99	4.00	PASS
5230 MHz	-5.96	4.00	PASS

IEEE 802.11n (40 MHz)/ANT.2/5190 MHz/Power Spectral Density



IEEE 802.11n (40 MHz)/ANT.2/5230 MHz/Power Spectral Density



E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.Total/5190 MHz, 5230 MHz		

Frequency	Power Spectral Density		Limit (dBm)	Result
	(dBm)	(mW)		
5190 MHz	-5.21	0.3014	4.00	PASS
5230 MHz	-3.67	0.4297	4.00	PASS

NOTE:

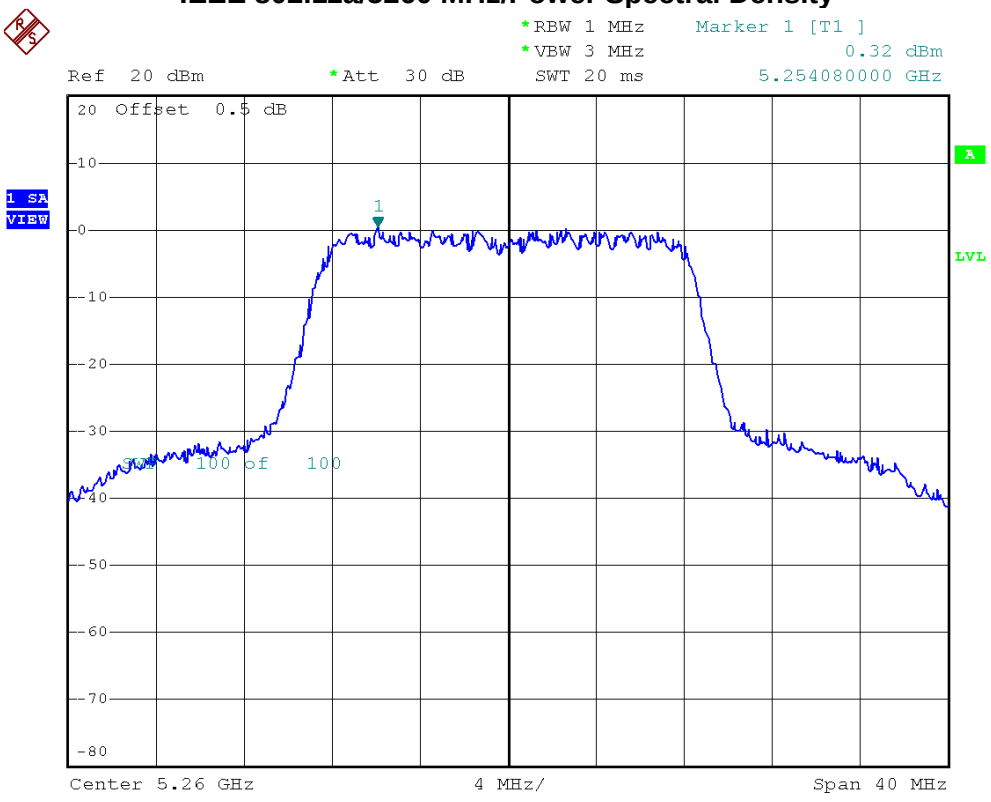
1. The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.
   And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
   ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

10.9TEST RESULTS - 5250-5350 MHZ

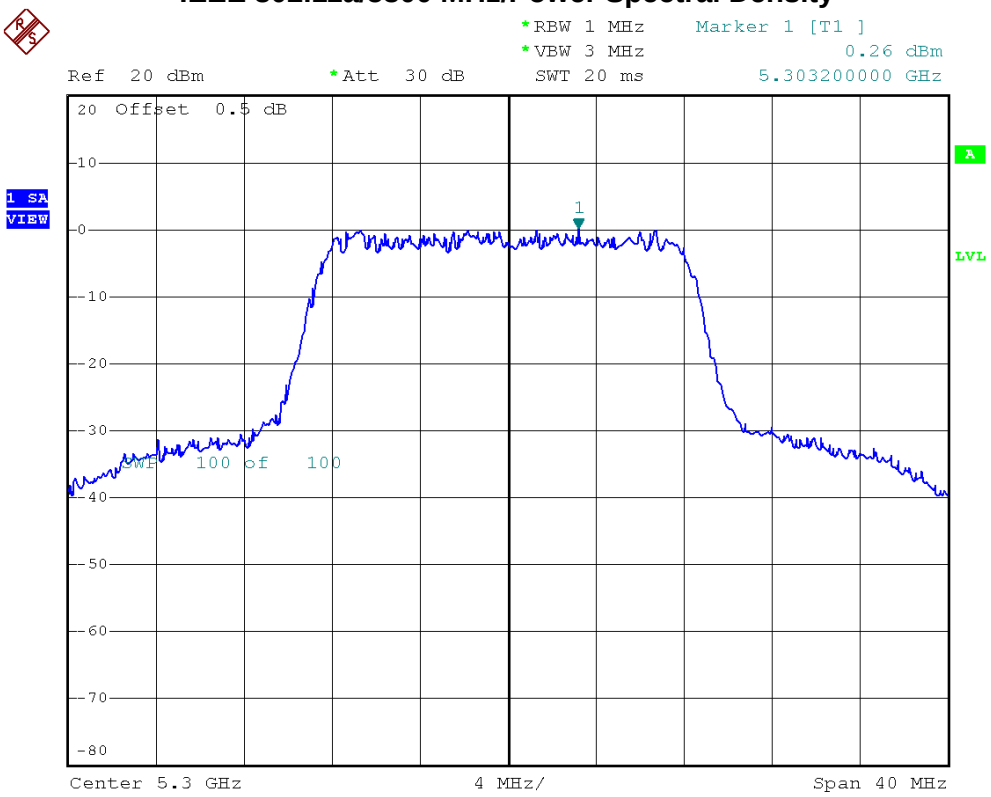
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5260 MHz	0.32	11.00	PASS
5300 MHz	0.26	11.00	PASS
5320 MHz	0.91	11.00	PASS

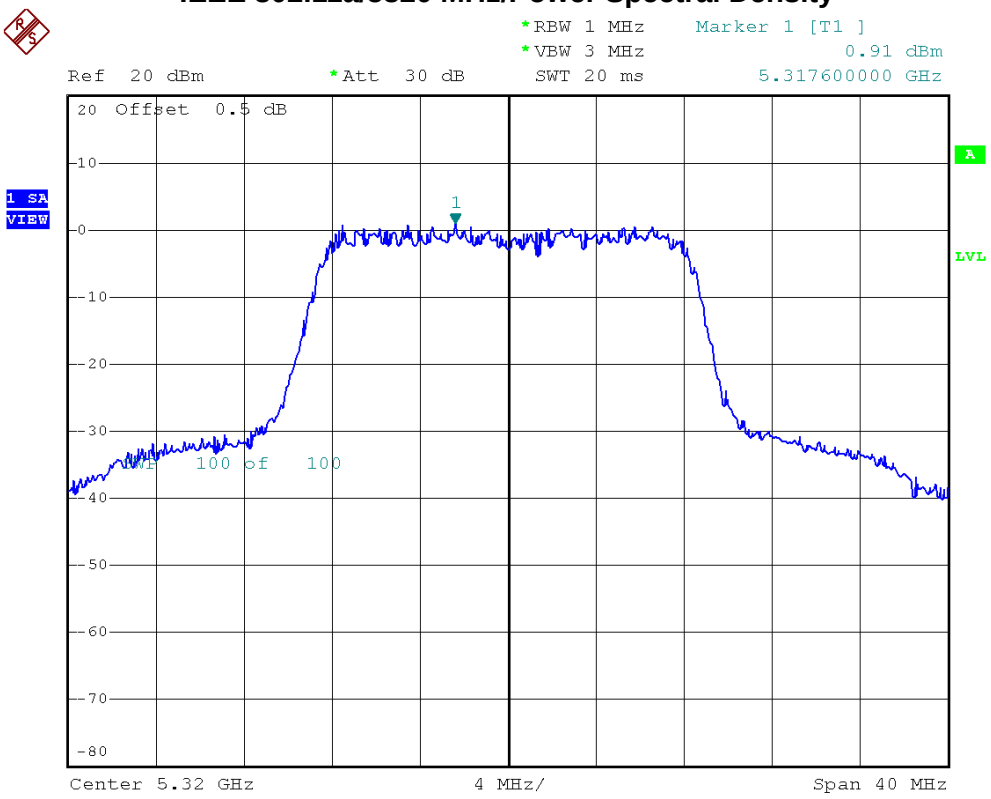
IEEE 802.11a/5260 MHz/Power Spectral Density



IEEE 802.11a/5300 MHz/Power Spectral Density



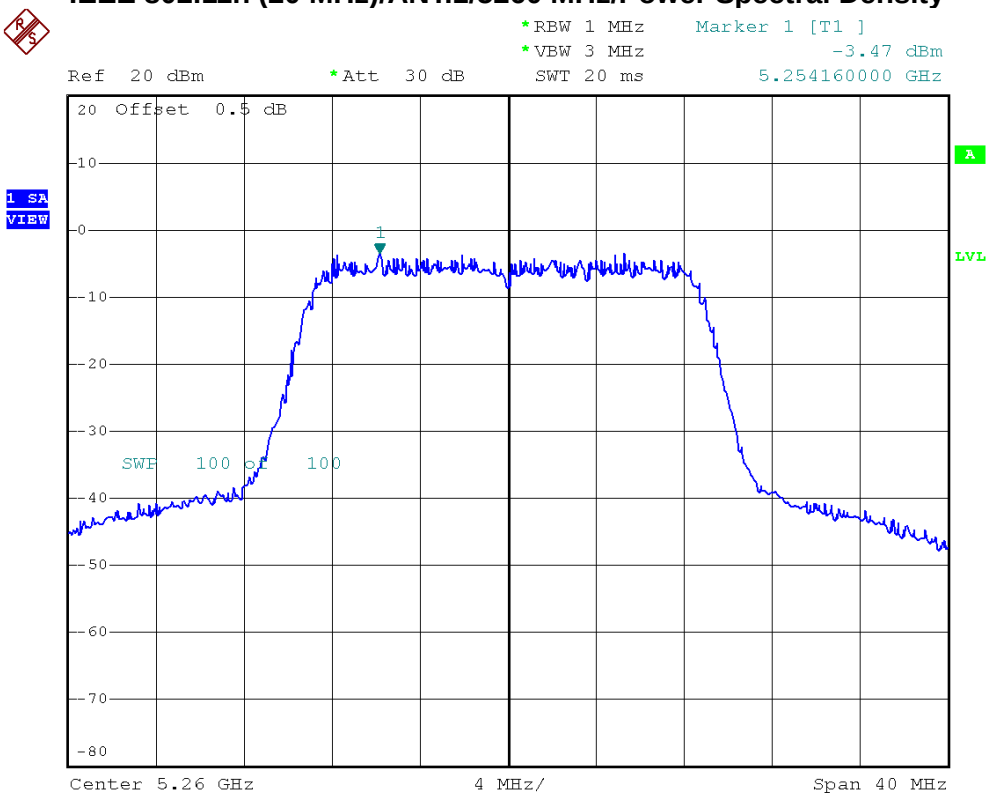
IEEE 802.11a/5320 MHz/Power Spectral Density



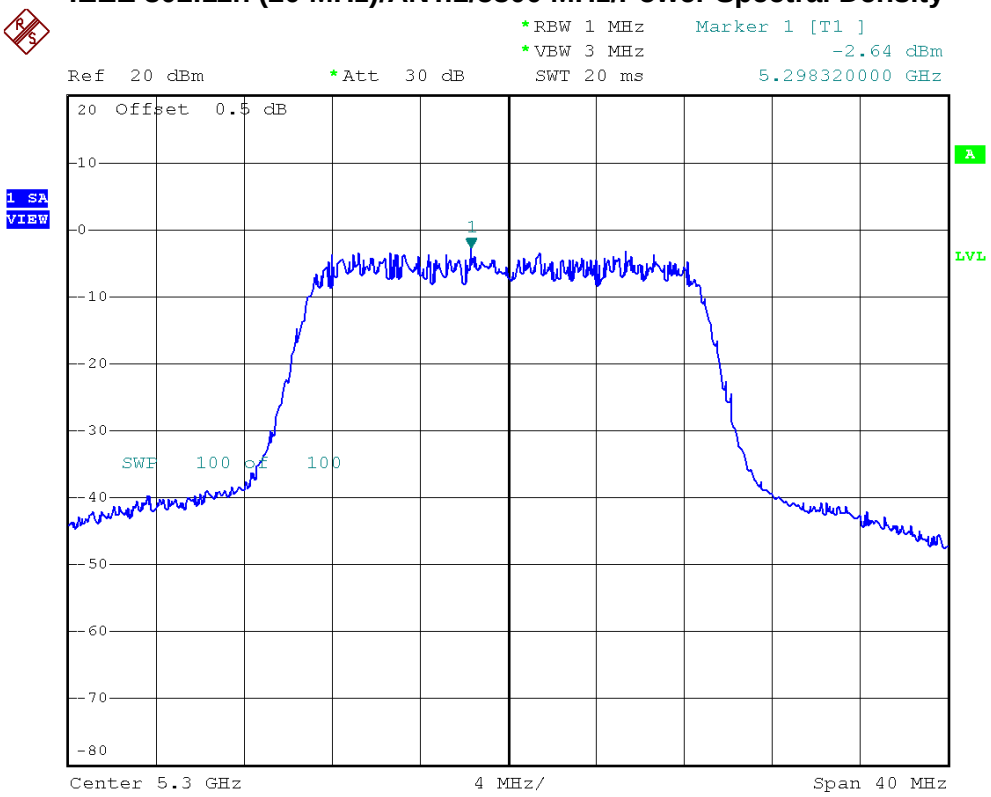
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.1/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5260 MHz	-3.47	11.00	PASS
5300 MHz	-2.64	11.00	PASS
5320 MHz	-3.27	11.00	PASS

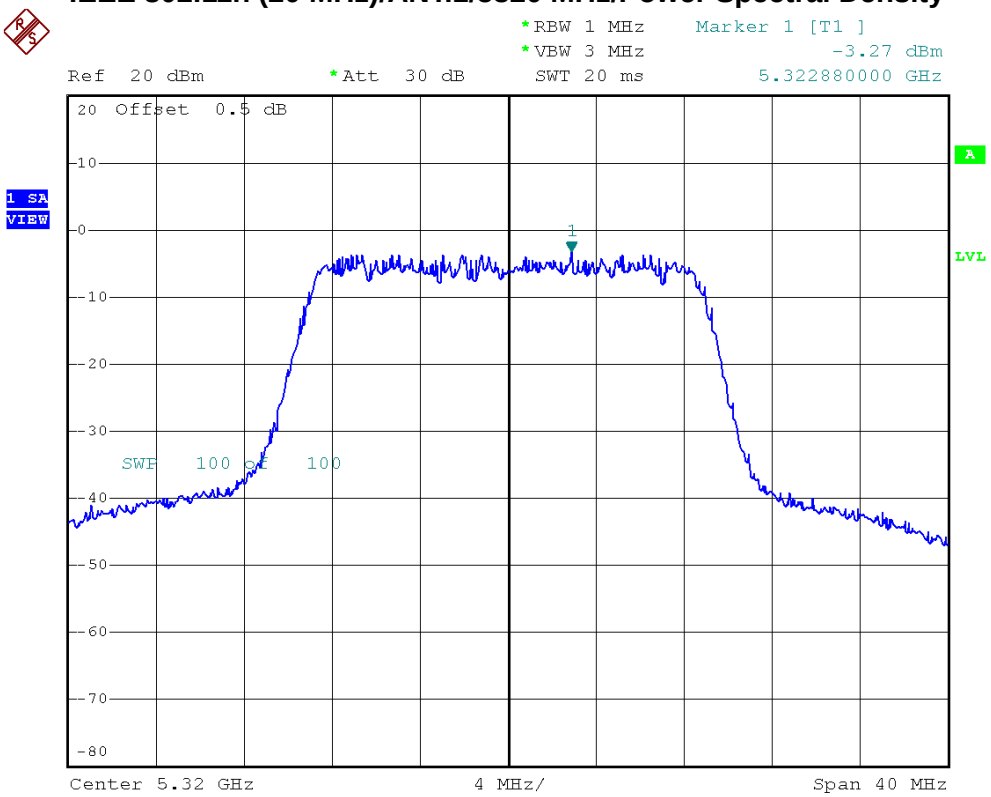
IEEE 802.11n (20 MHz)/ANT.1/5260 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.1/5300 MHz/Power Spectral Density



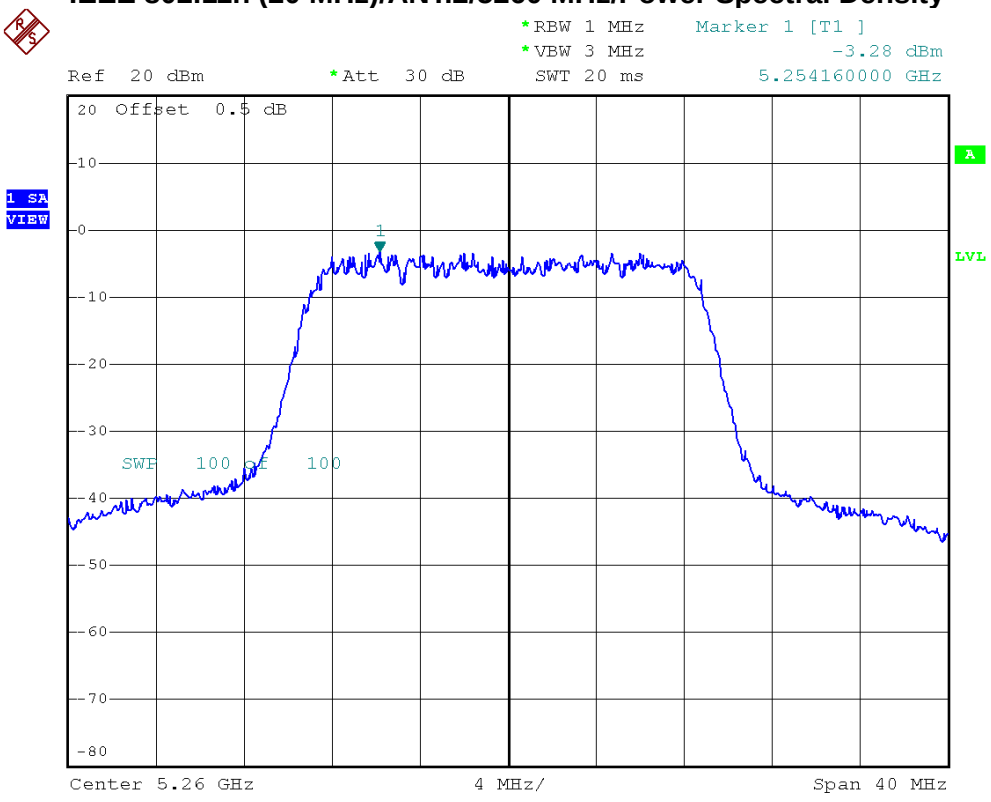
IEEE 802.11n (20 MHz)/ANT.1/5320 MHz/Power Spectral Density



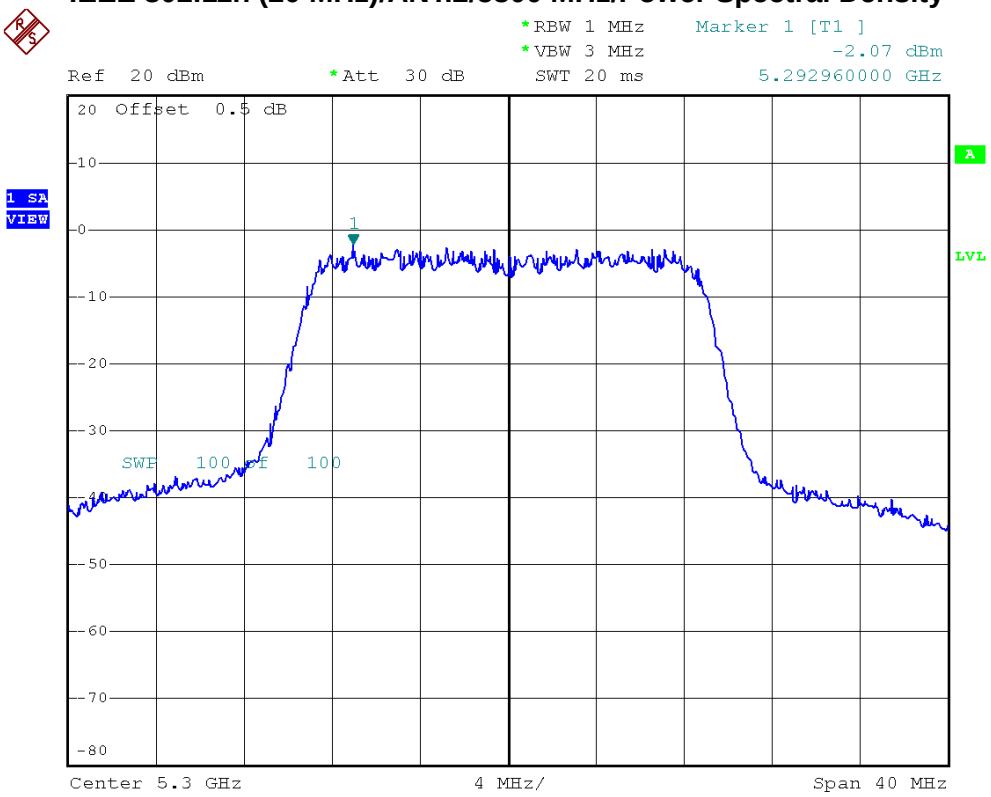
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.2/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5260 MHz	-3.28	11.00	PASS
5300 MHz	-2.07	11.00	PASS
5320 MHz	-2.34	11.00	PASS

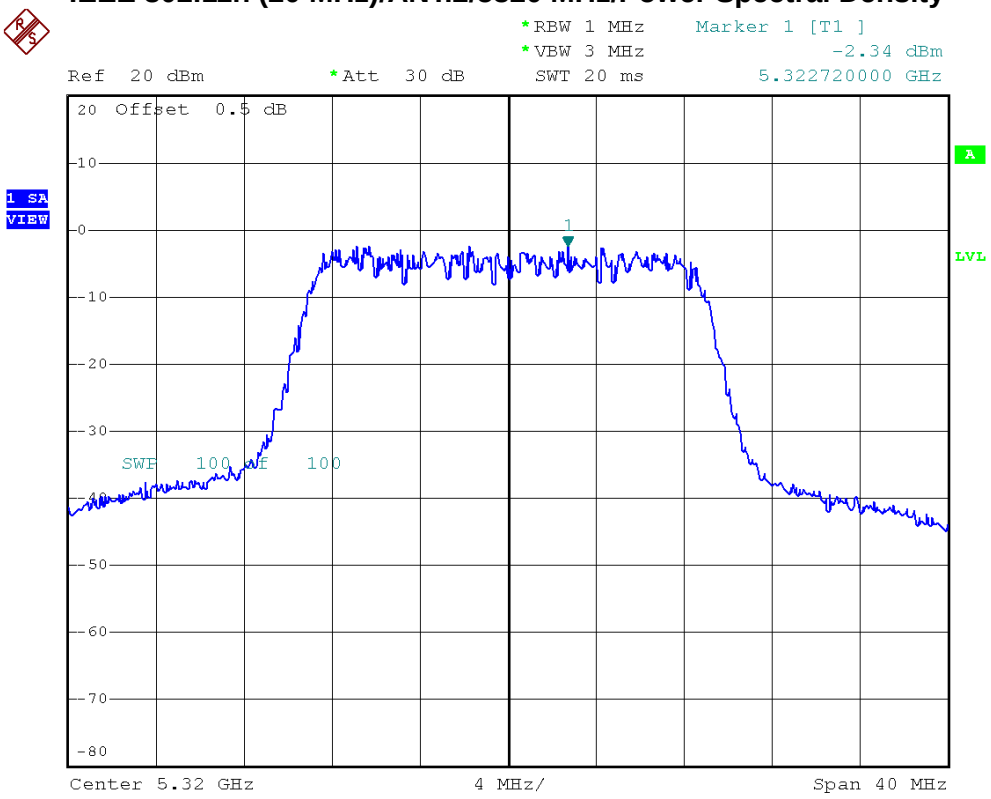
IEEE 802.11n (20 MHz)/ANT.2/5260 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.2/5300 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.2/5320 MHz/Power Spectral Density



E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.Total/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Power Spectral Density		Limit (dBm)	Result
	(dBm)	(mW)		
5260 MHz	-0.36	0.92	11.00	PASS
5300 MHz	0.66	1.17	11.00	PASS
5320 MHz	0.23	1.05	11.00	PASS

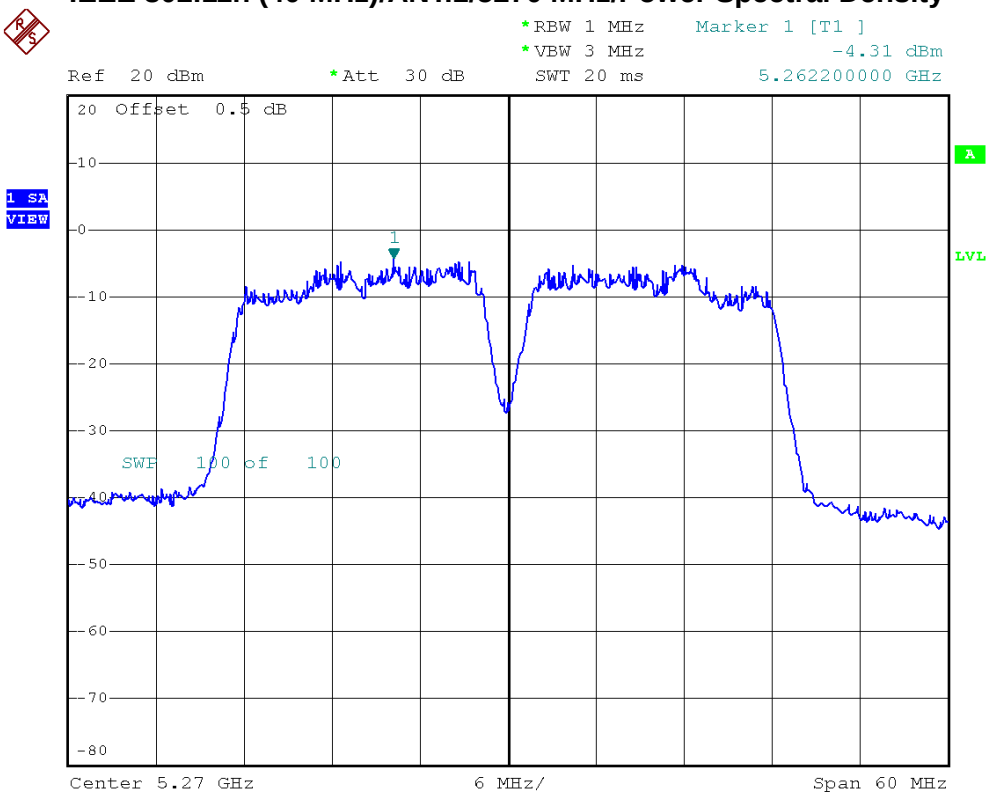
NOTE:

1. The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.
   And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
   ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

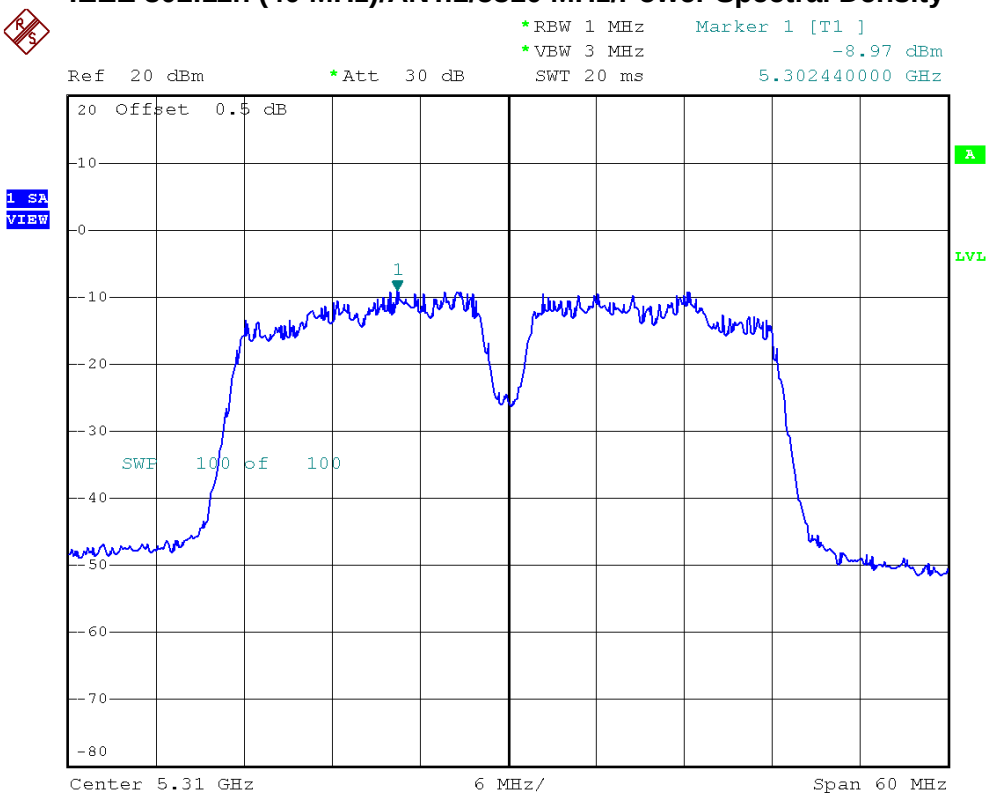
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.1/5270 MHz, 5310 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5270 MHz	-4.31	11.00	PASS
5310 MHz	-8.97	11.00	PASS

IEEE 802.11n (40 MHz)/ANT.1/5270 MHz/Power Spectral Density



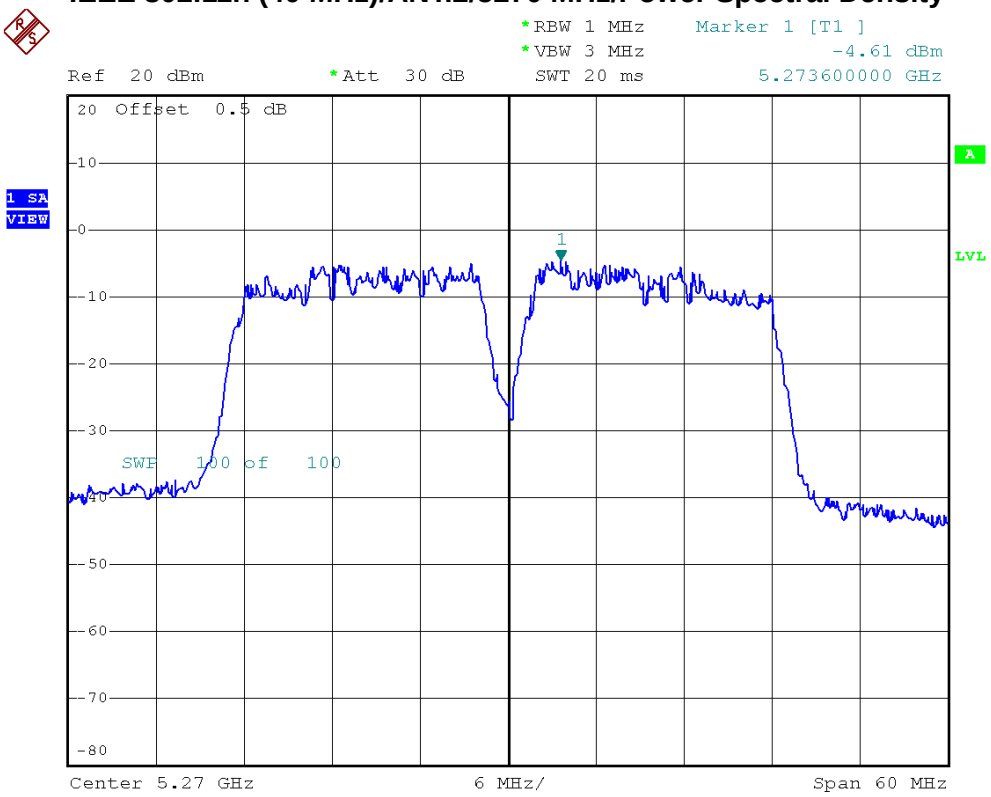
IEEE 802.11n (40 MHz)/ANT.1/5310 MHz/Power Spectral Density



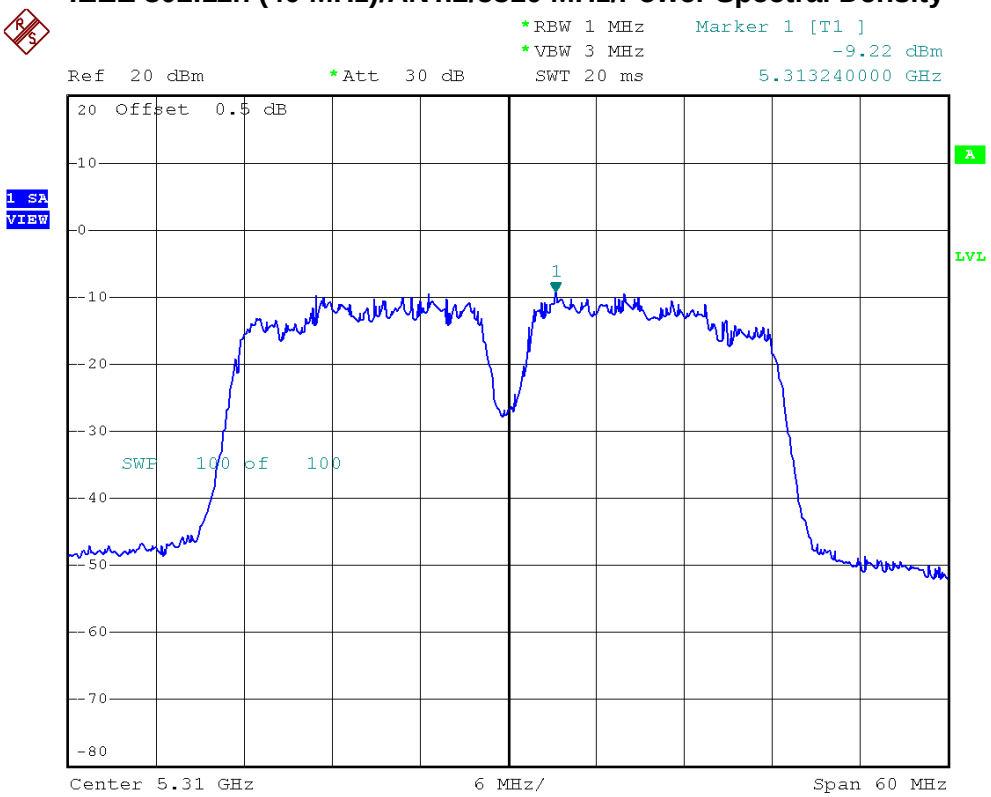
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.2/5270 MHz, 5310 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5270 MHz	-4.61	11.00	PASS
5310 MHz	-9.22	11.00	PASS

IEEE 802.11n (40 MHz)/ANT.2/5270 MHz/Power Spectral Density



IEEE 802.11n (40 MHz)/ANT.2/5310 MHz/Power Spectral Density



E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.Total/5270 MHz, 5310 MHz		

Frequency	Power Spectral Density		Limit (dBm)	Result
	(dBm)	(mW)		
5270 MHz	-1.45	0.7166	11.00	PASS
5310 MHz	-6.08	0.2464	11.00	PASS

NOTE:

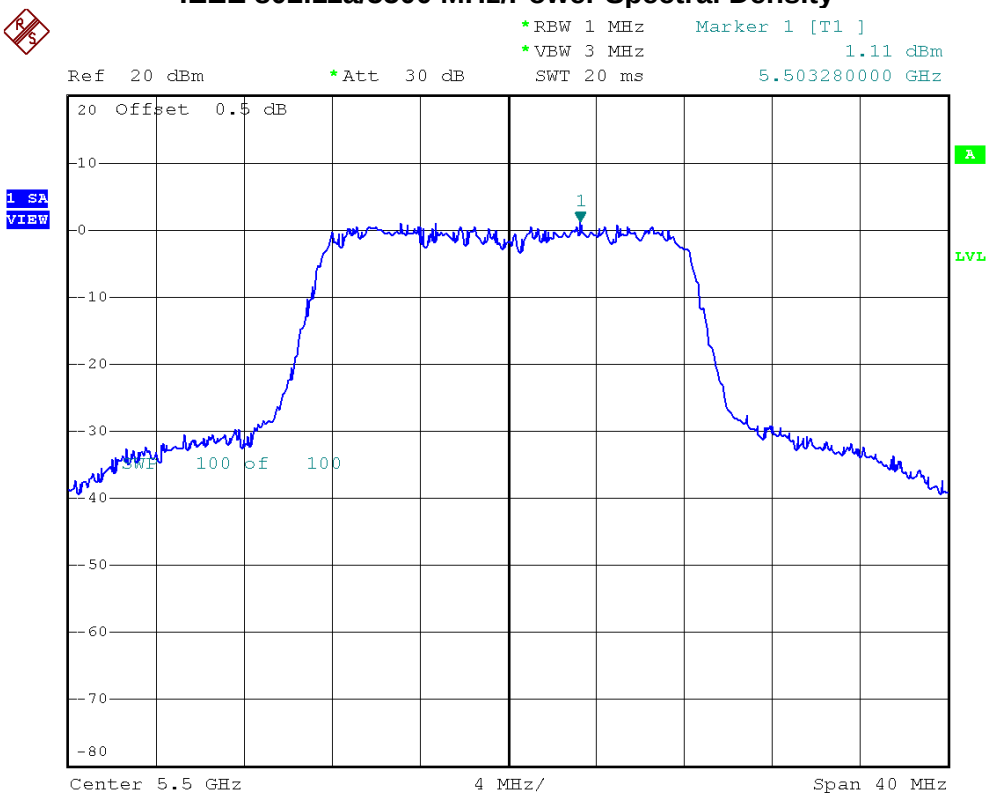
1. The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.
   And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
   ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

10.10 TEST RESULTS - 5470-5725 MHZ

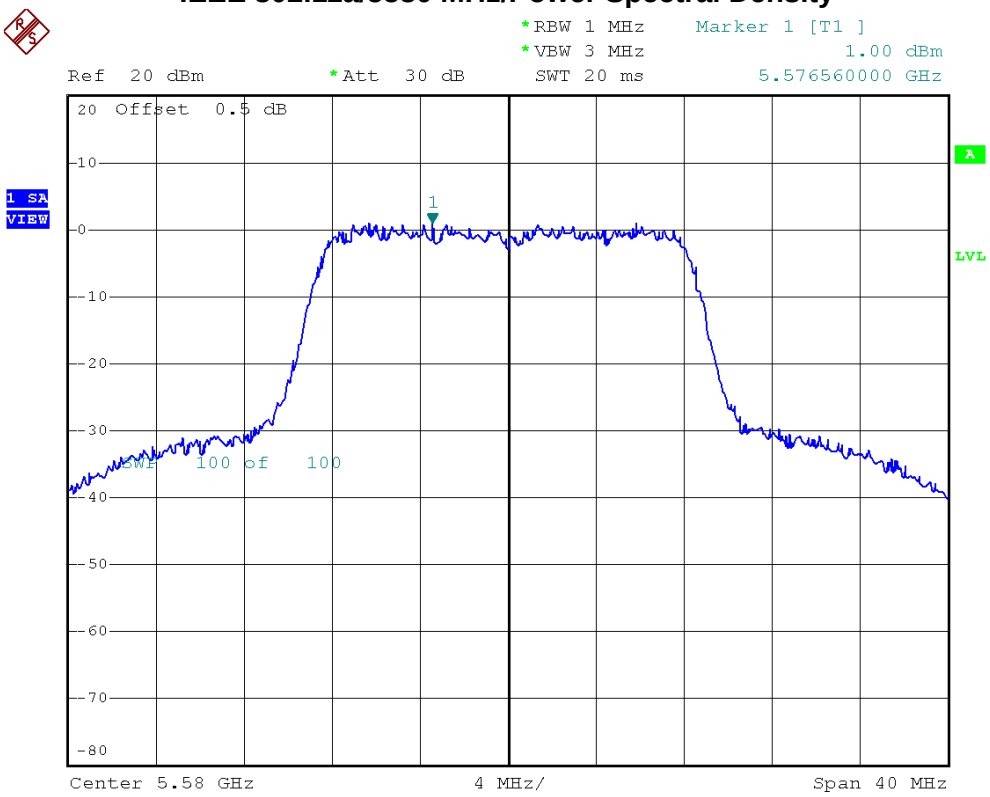
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5500 MHz	1.11	11.00	PASS
5580 MHz	1.00	11.00	PASS
5700 MHz	-0.07	11.00	PASS

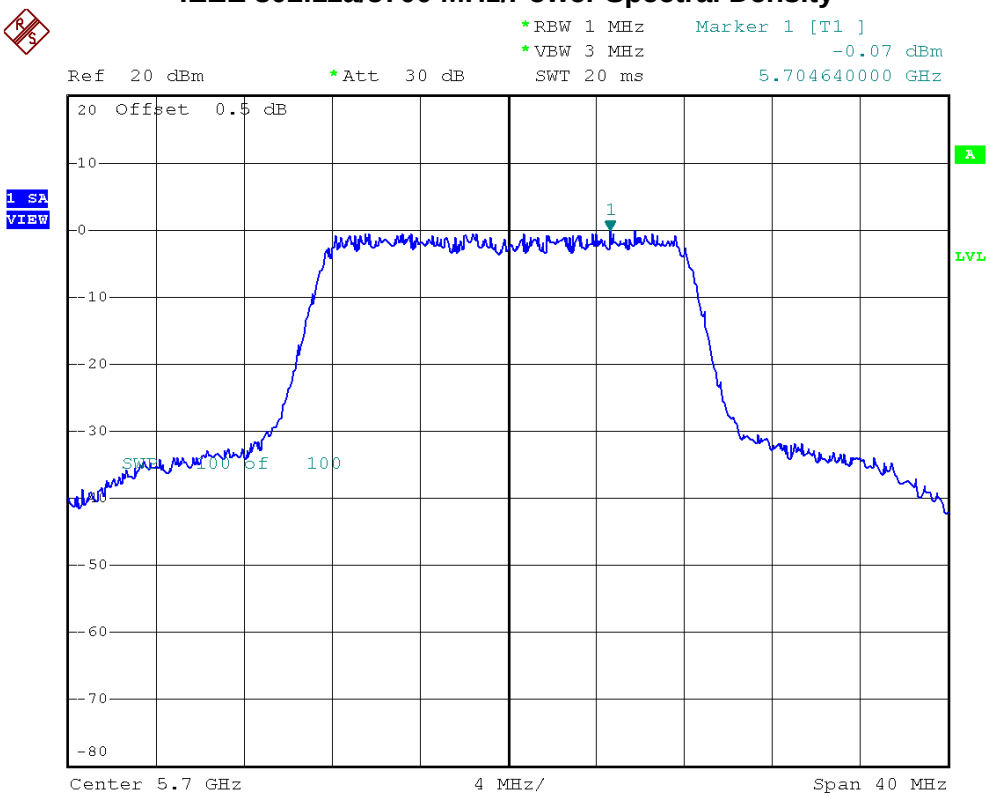
IEEE 802.11a/5500 MHz/Power Spectral Density



IEEE 802.11a/5580 MHz/Power Spectral Density



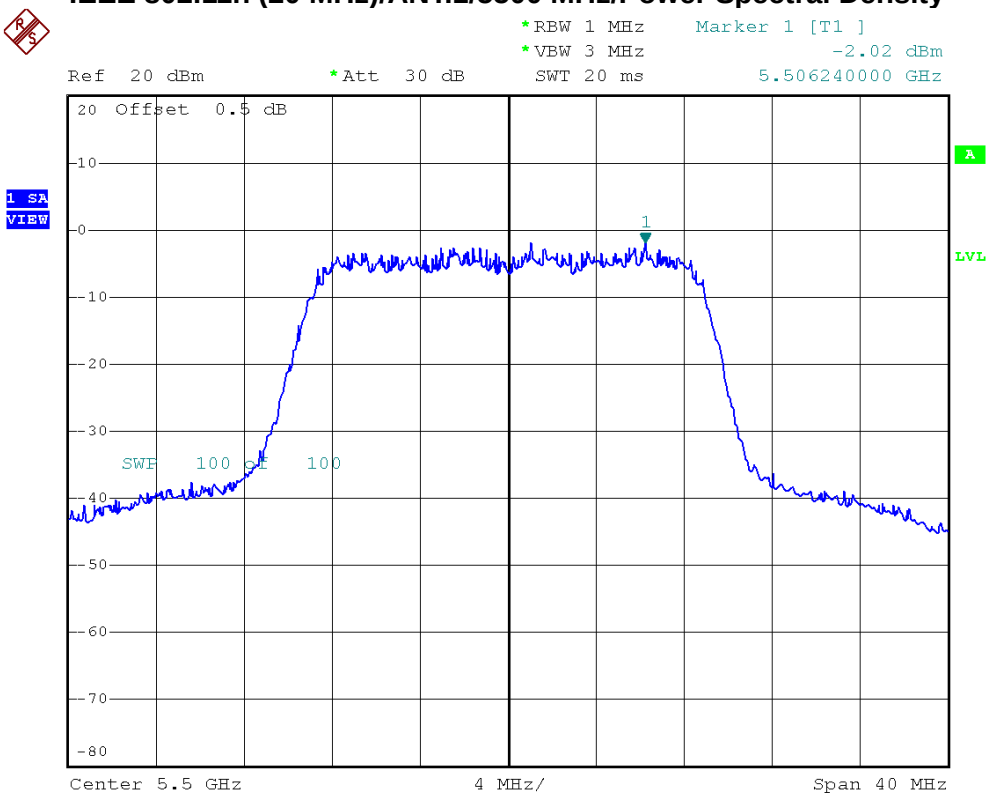
IEEE 802.11a/5700 MHz/Power Spectral Density



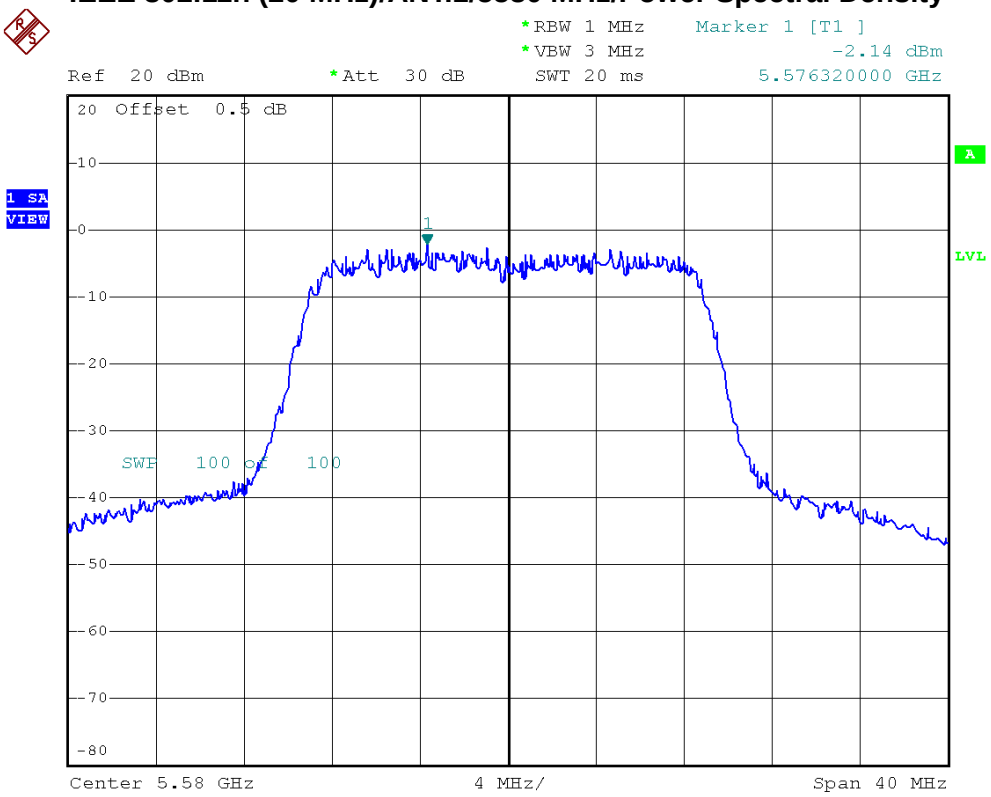
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.1/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5500 MHz	-2.02	11.00	PASS
5580 MHz	-2.14	11.00	PASS
5700 MHz	-3.13	11.00	PASS

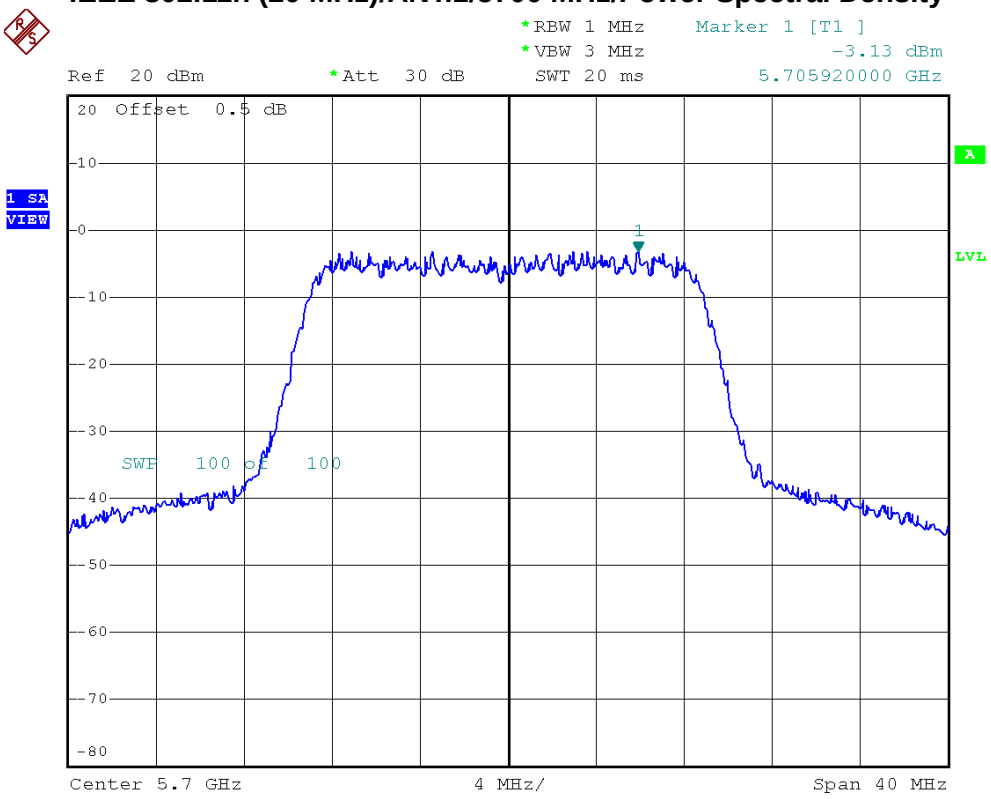
IEEE 802.11n (20 MHz)/ANT.1/5500 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.1/5580 MHz/Power Spectral Density



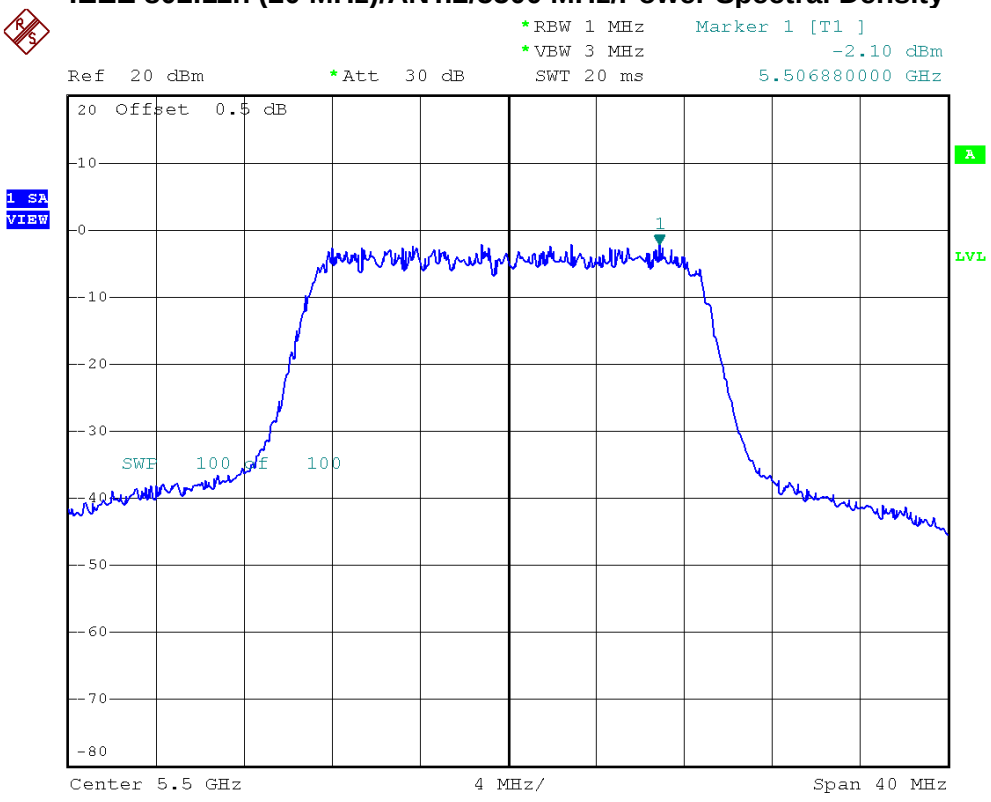
IEEE 802.11n (20 MHz)/ANT.1/5700 MHz/Power Spectral Density



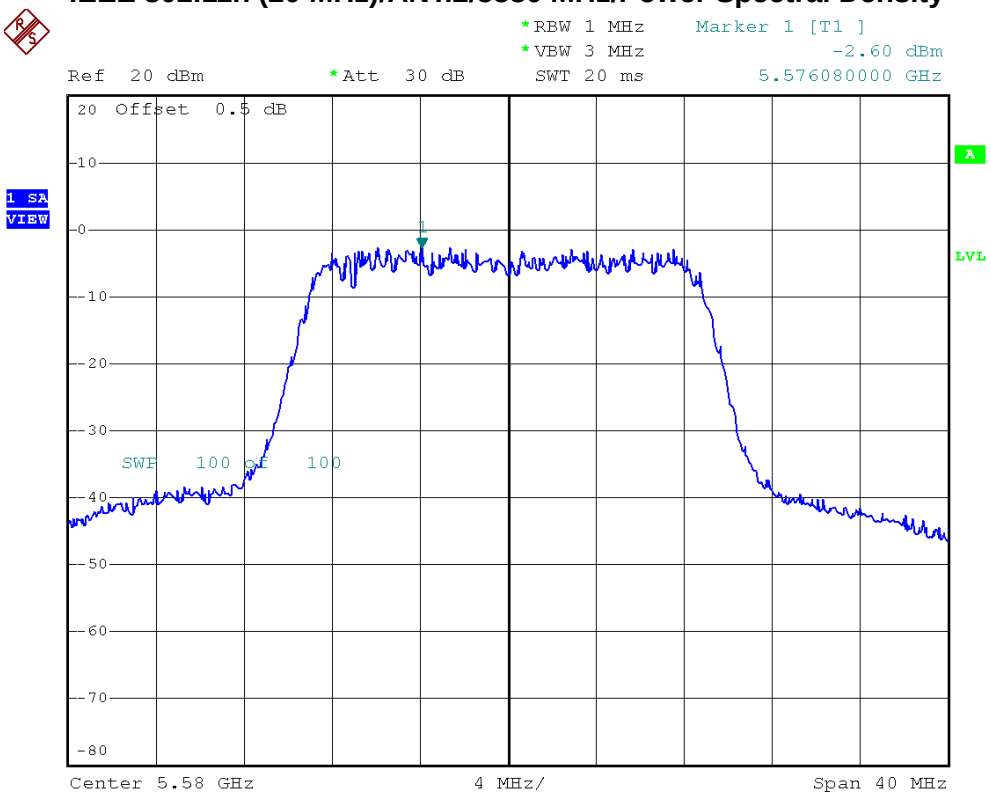
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.2/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5500 MHz	-2.10	11.00	PASS
5580 MHz	-2.60	11.00	PASS
5700 MHz	-2.97	11.00	PASS

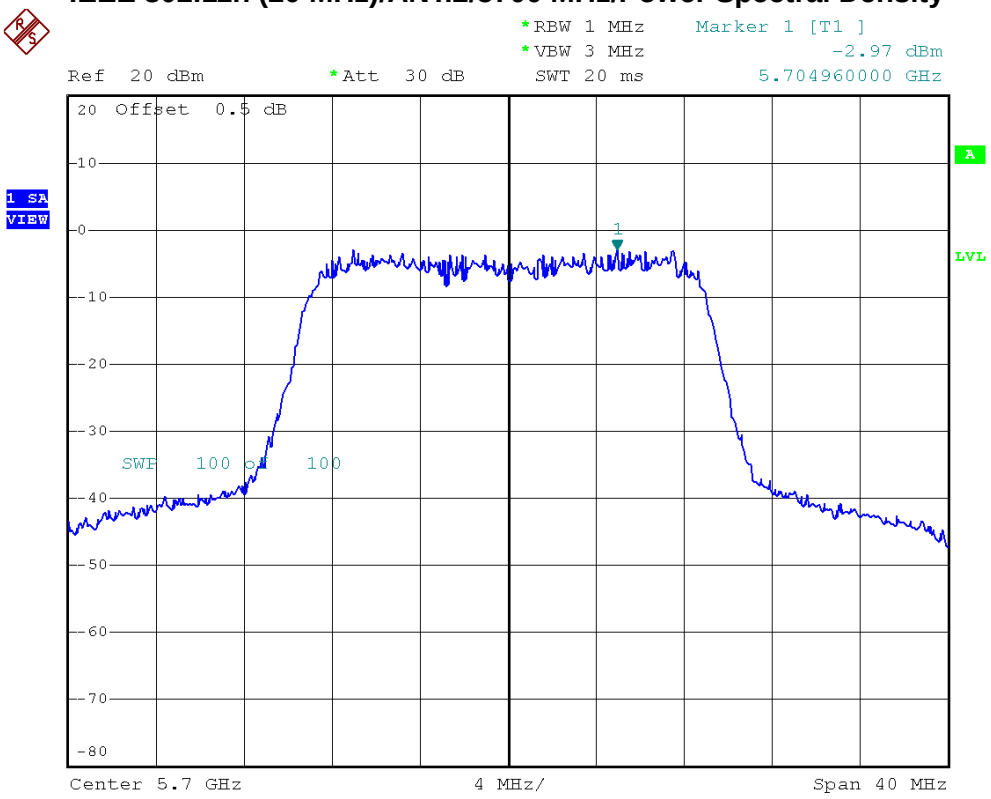
IEEE 802.11n (20 MHz)/ANT.2/5500 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.2/5580 MHz/Power Spectral Density



IEEE 802.11n (20 MHz)/ANT.2/5700 MHz/Power Spectral Density



E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.Total/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Power Spectral Density		Limit (dBm)	Result
	(dBm)	(mW)		
5500 MHz	0.95	1.24	11.00	PASS
5580 MHz	0.65	1.16	11.00	PASS
5700 MHz	-0.04	0.99	11.00	PASS

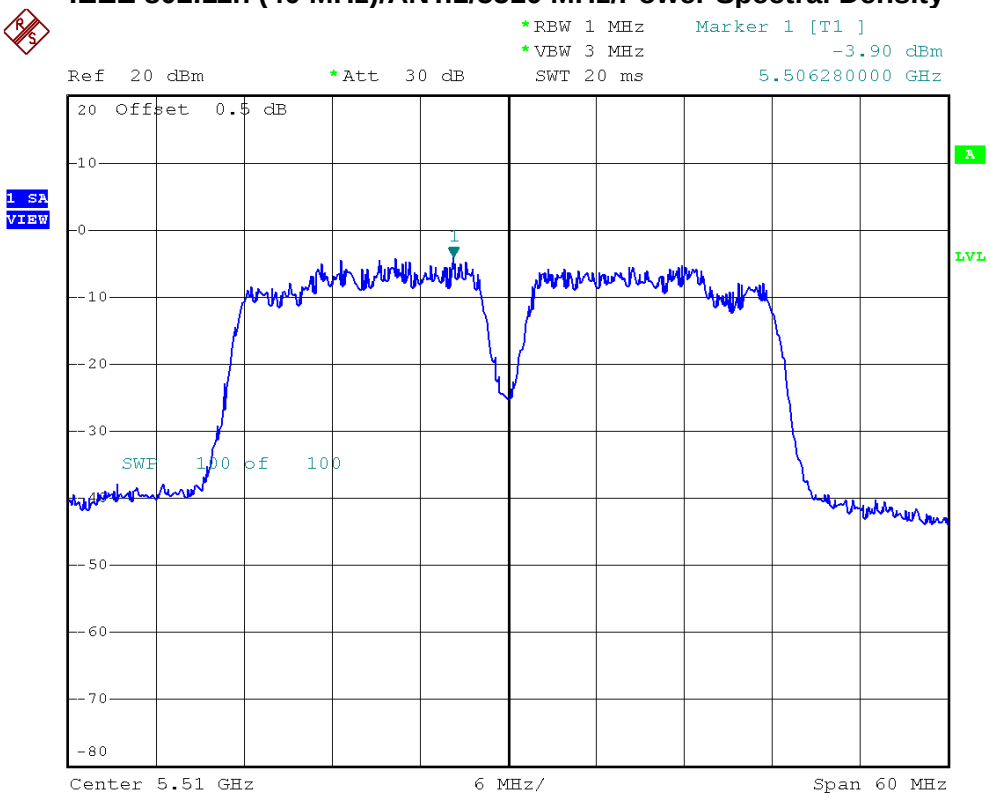
NOTE:

1. The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.
   And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
   ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

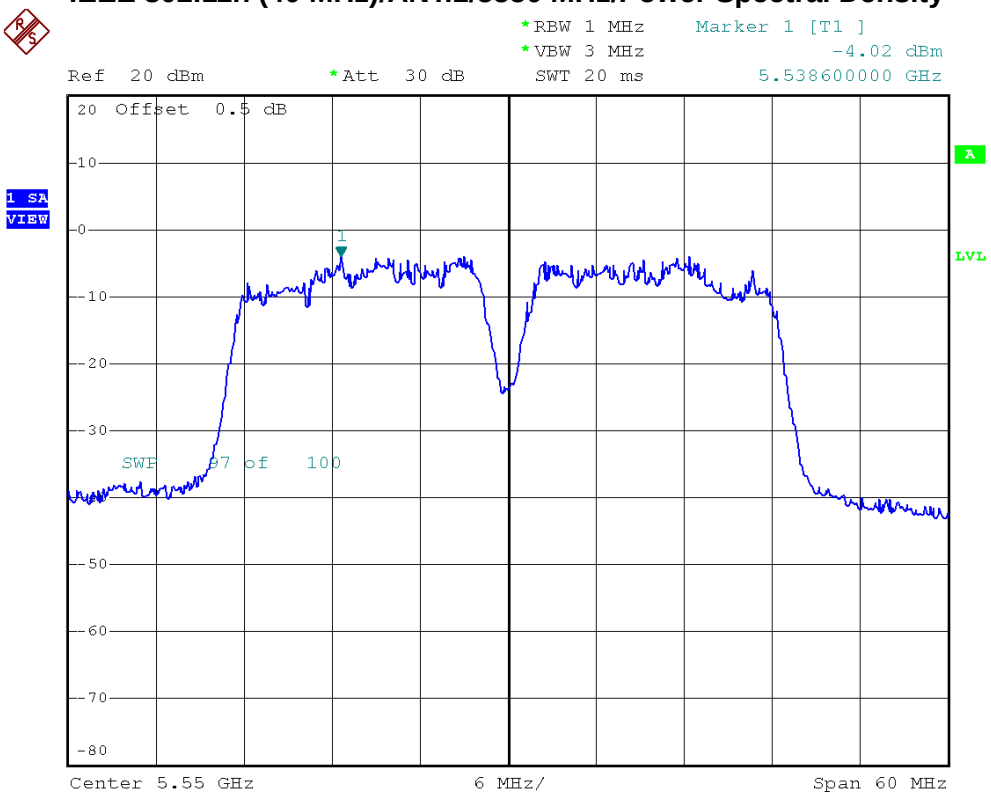
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.1/5510 MHz, 5550 MHz, 5670 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5510 MHz	-3.90	11.00	PASS
5550 MHz	-4.02	11.00	PASS
5670 MHz	-3.96	11.00	PASS

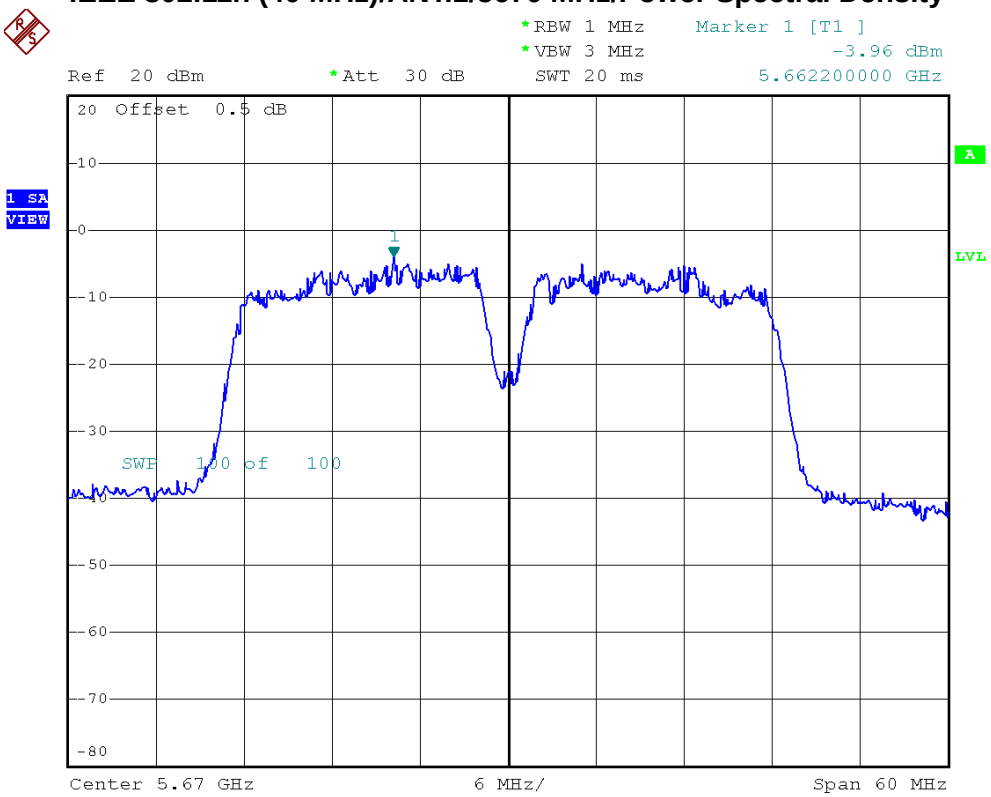
IEEE 802.11n (40 MHz)/ANT.1/5510 MHz/Power Spectral Density



IEEE 802.11n (40 MHz)/ANT.1/5550 MHz/Power Spectral Density



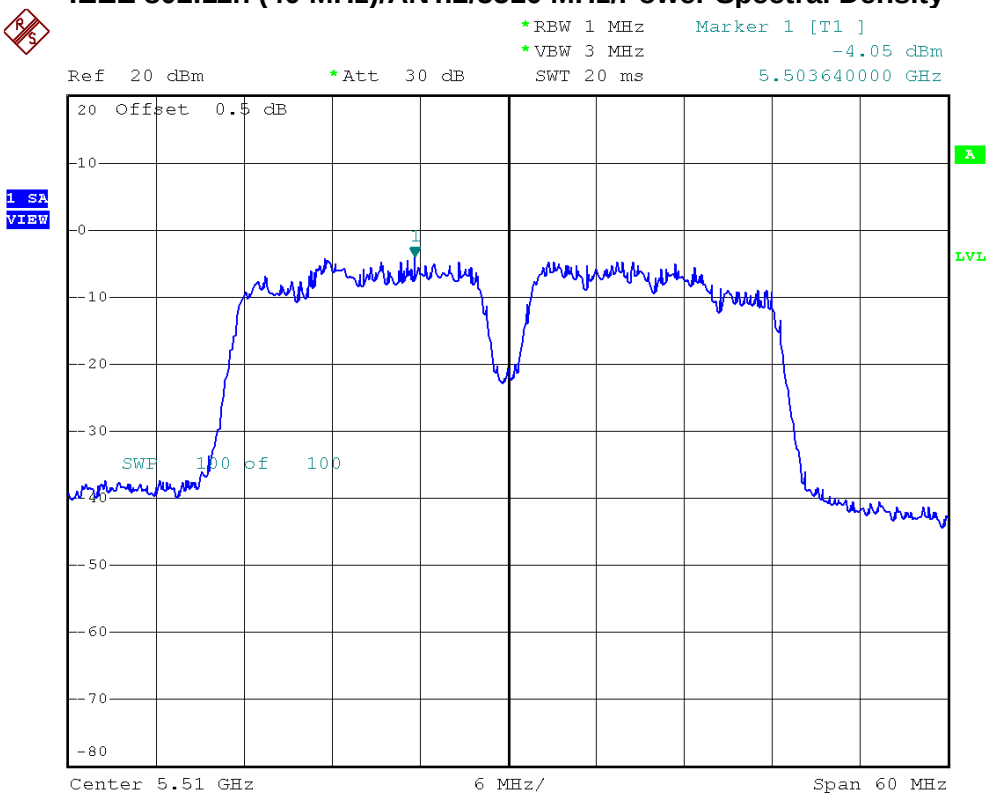
IEEE 802.11n (40 MHz)/ANT.1/5670 MHz/Power Spectral Density



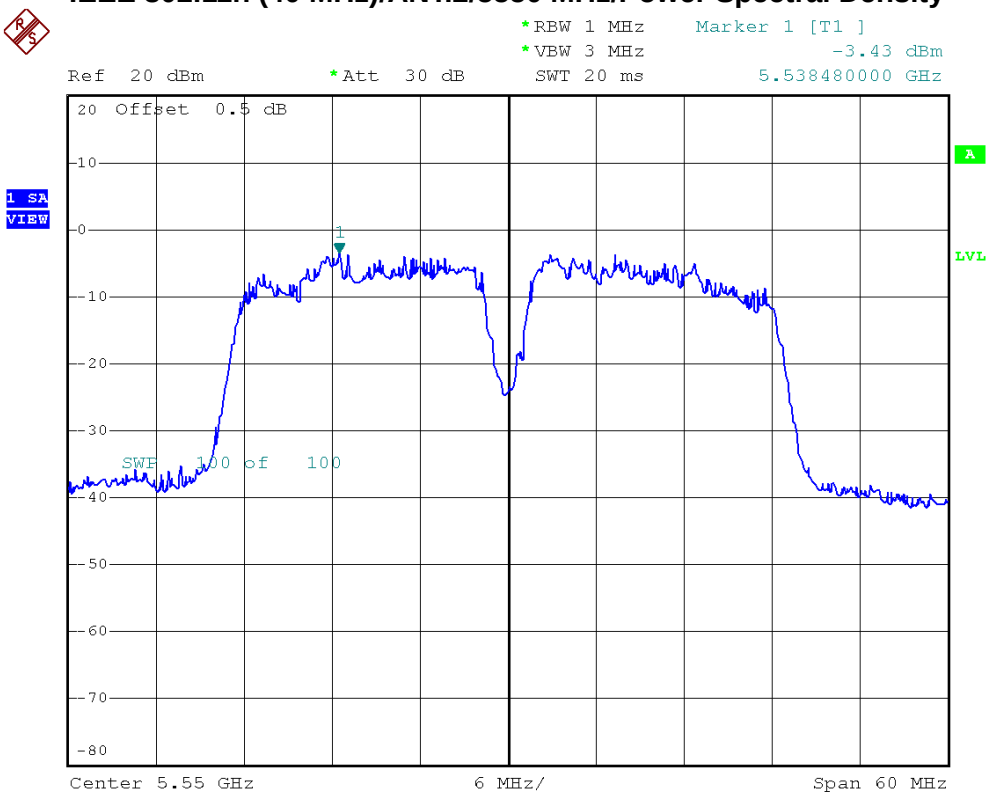
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.2/5510 MHz, 5550 MHz, 5670 MHz		

Frequency	Power Spectral Density (dBm)	Limit (dBm)	Result
5510 MHz	-4.05	11.00	PASS
5550 MHz	-3.43	11.00	PASS
5670 MHz	-4.67	11.00	PASS

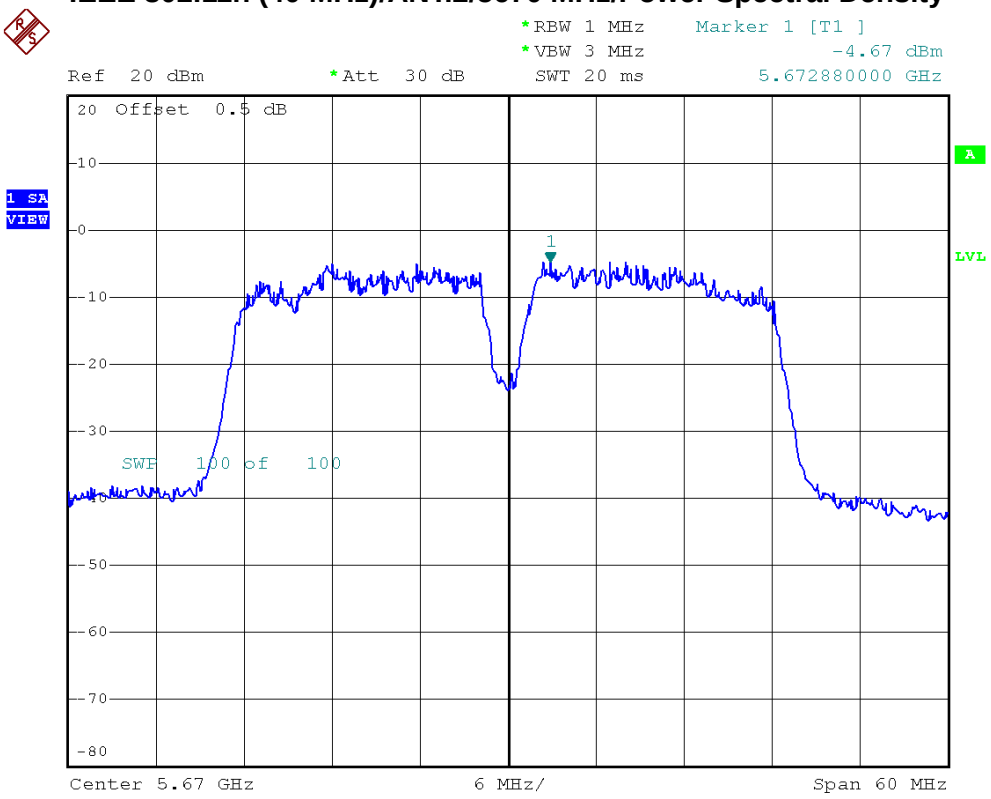
IEEE 802.11n (40 MHz)/ANT.2/5510 MHz/Power Spectral Density



IEEE 802.11n (40 MHz)/ANT.2/5550 MHz/Power Spectral Density



IEEE 802.11n (40 MHz)/ANT.2/5670 MHz/Power Spectral Density



E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.Total/5510 MHz, 5550 MHz, 5670 MHz		

Frequency	Power Spectral Density		Limit (dBm)	Result
	(dBm)	(mW)		
5510 MHz	-0.96	0.8009	11.00	PASS
5550 MHz	-0.70	0.8502	11.00	PASS
5670 MHz	-1.29	0.7430	11.00	PASS

NOTE:

1. The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.
   And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
   ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

11 PEAK EXCURSION

11.1LIMIT

Test Item	Frequency Range (MHz)	Limit
Peak Excursion	5150 - 5250	13 dB
	5250 - 5350	
	5470 - 5725	
	5725 - 5825	

11.2MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 06, 2012

NOTE: **N/A**: denotes No Model Name, No Serial No. or No Calibration specified.

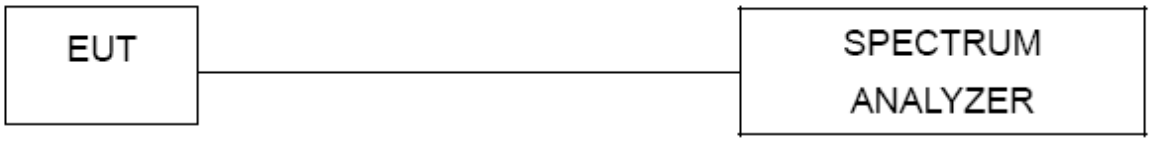
11.3MEASURING INSTRUMENTS SETTING

Spectrum Analyzer	Parameter Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 300 kHz (Average Trace)
Detector	Peak (Peak Trace) / Sample (Average Trace)
Trace	Max Hold
Sweep Time	60s

11.4TEST PROCEDURES

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Peak Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and maxhold settings.
c. Average Trace: Method #3—video averaging with max hold--and sum power across the band. Set span to encompass the entire emissions bandwidth (EBW) of the signal. Set sweep trigger to “free run”. Set RBW = 1 MHz. Set VBW ≥ 1/T (IEEE 802.11a VBW = 300kHz ≥ 1/4μs). Use sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW. Otherwise use peak detector mode. Set max hold. Allow max hold to run for 60 seconds.

11.5TEST SETUP LAYOUT



11.6 DEVIATION FROM TEST STANDARD

No deviation

11.7 EUT OPERATING CONDITIONS

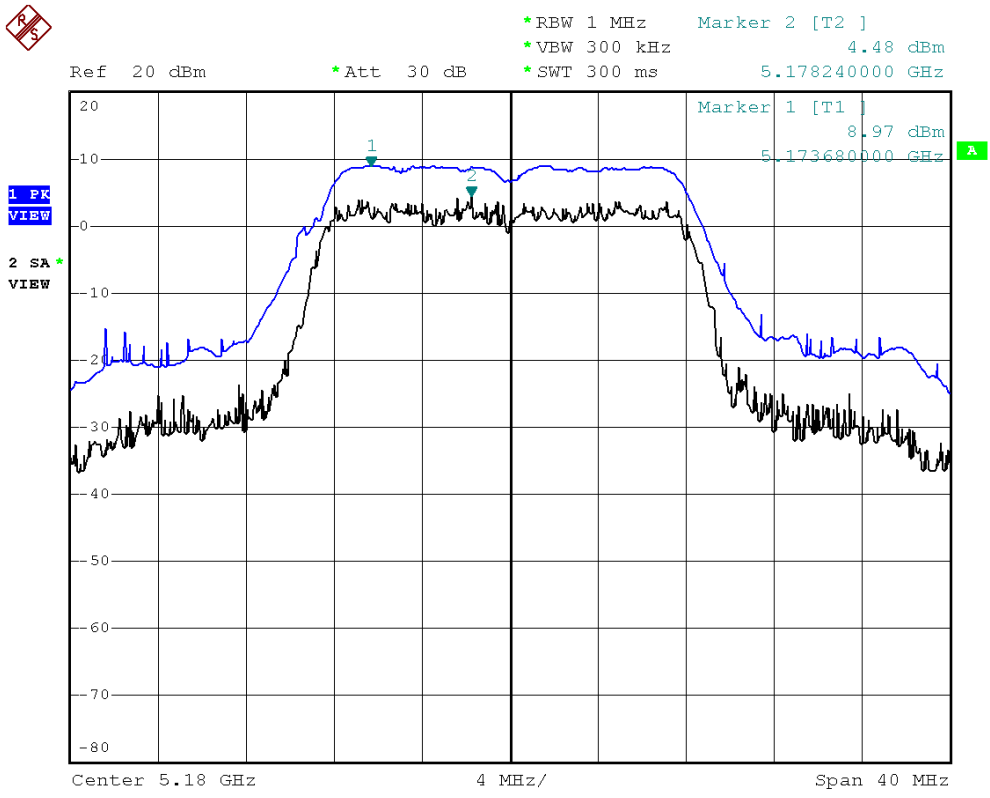
The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

11.8TEST RESULTS - 5150-5250 MHZ

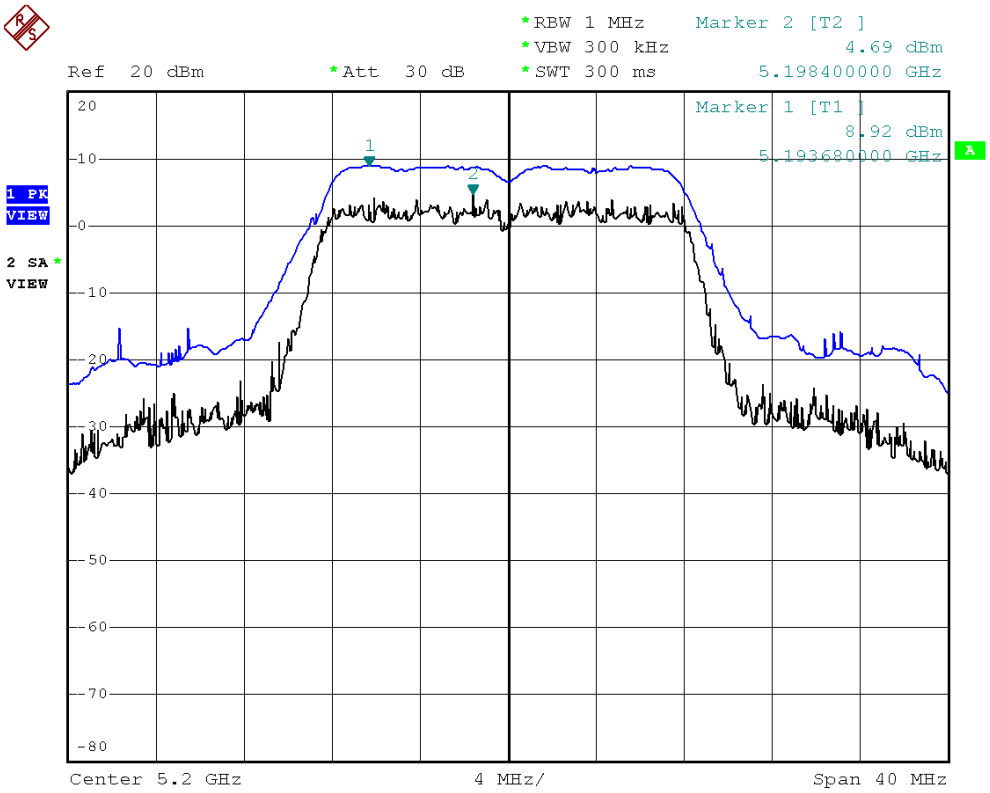
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5180 MHz	4.49	13	PASS
5200 MHz	4.23	13	PASS
5240 MHz	4.51	13	PASS

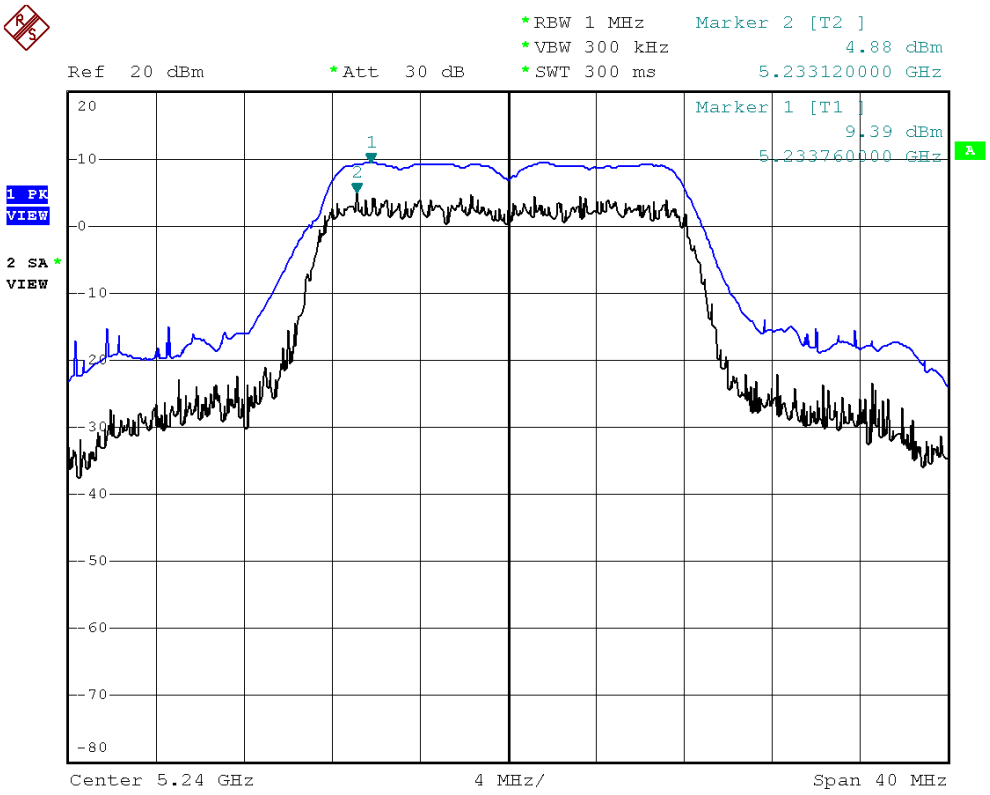
IEEE 802.11a/5180 MHz/Peak Excursion



IEEE 802.11a/5200 MHz/Peak Excursion



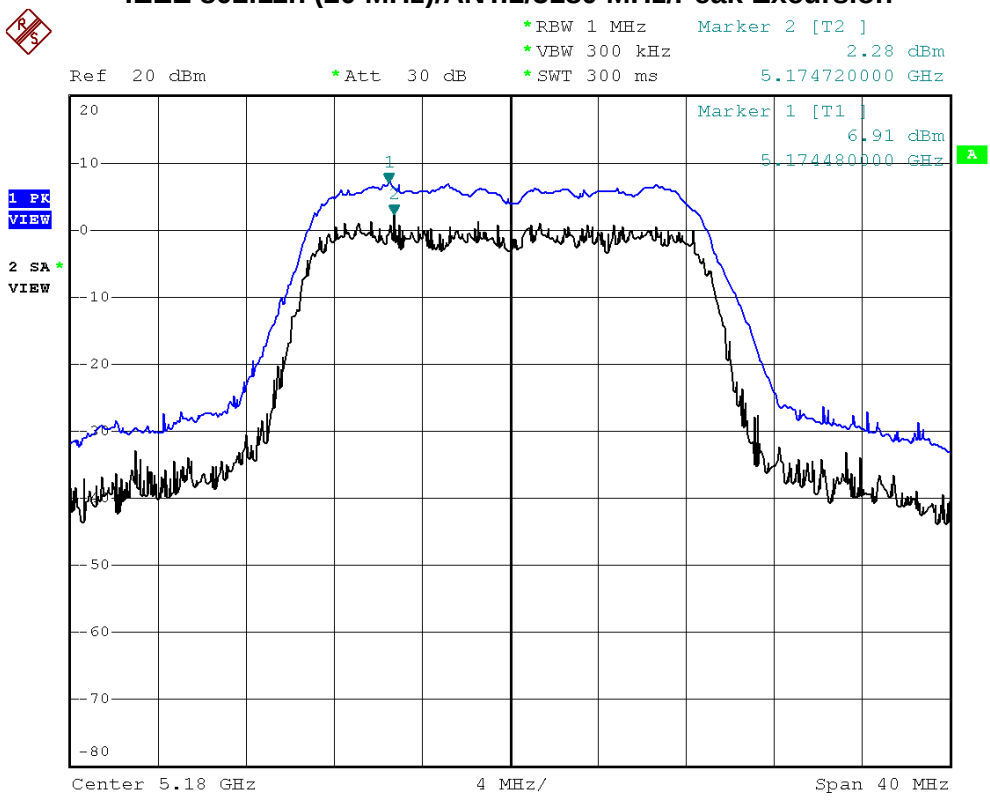
IEEE 802.11a/5240 MHz/Peak Excursion



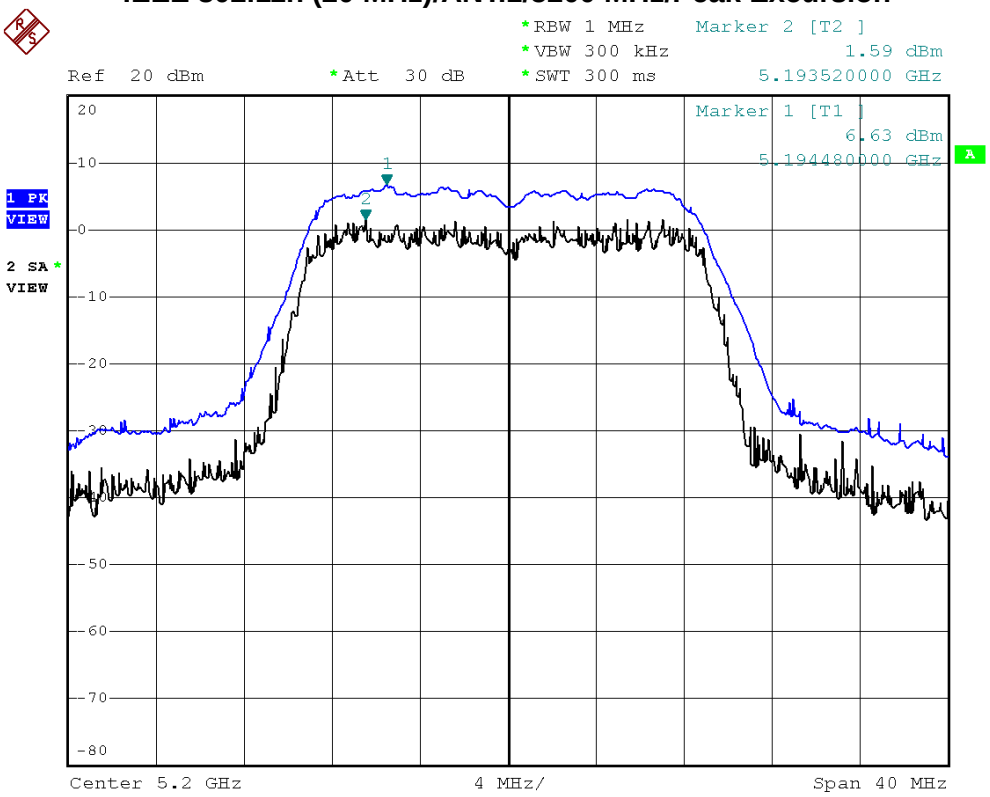
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.1/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5180 MHz	4.63	13	PASS
5200 MHz	5.04	13	PASS
5240 MHz	5.86	13	PASS

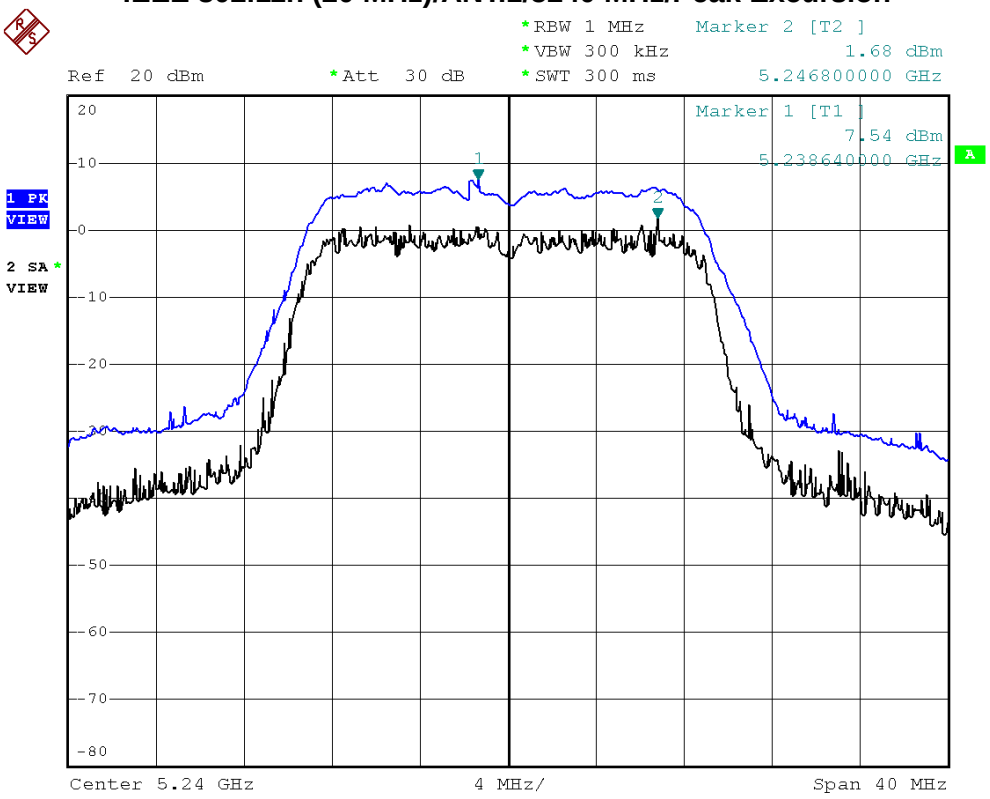
IEEE 802.11n (20 MHz)/ANT.1/5180 MHz/Peak Excursion



IEEE 802.11n (20 MHz)/ANT.1/5200 MHz/Peak Excursion



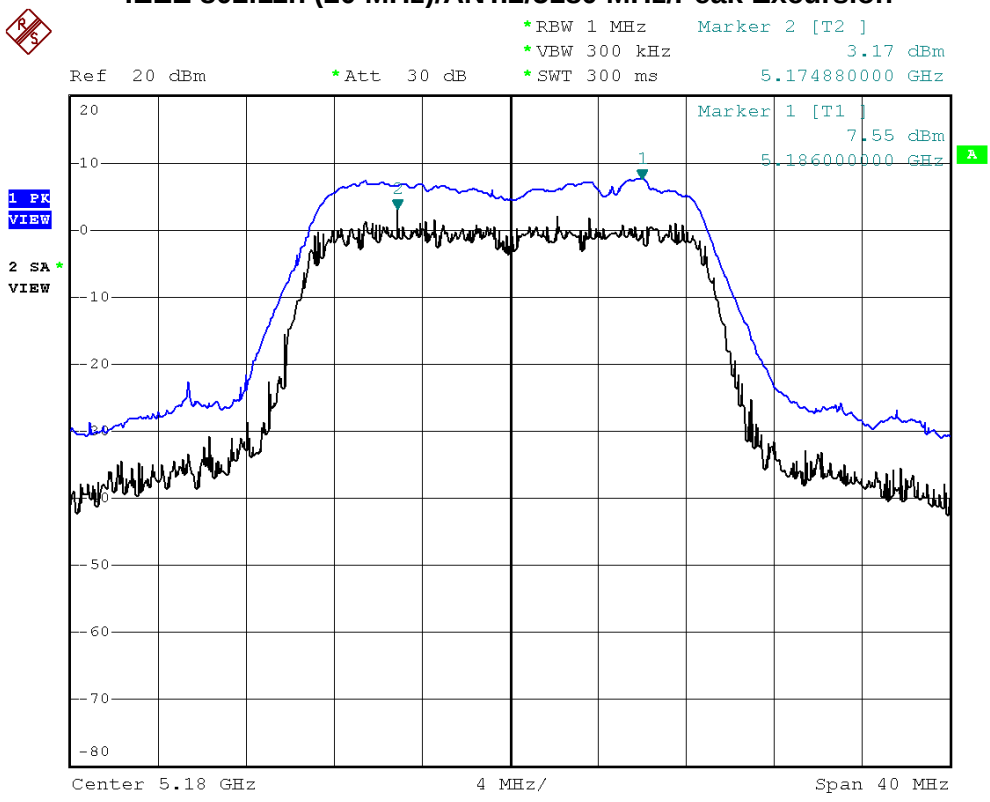
IEEE 802.11n (20 MHz)/ANT.1/5240 MHz/Peak Excursion



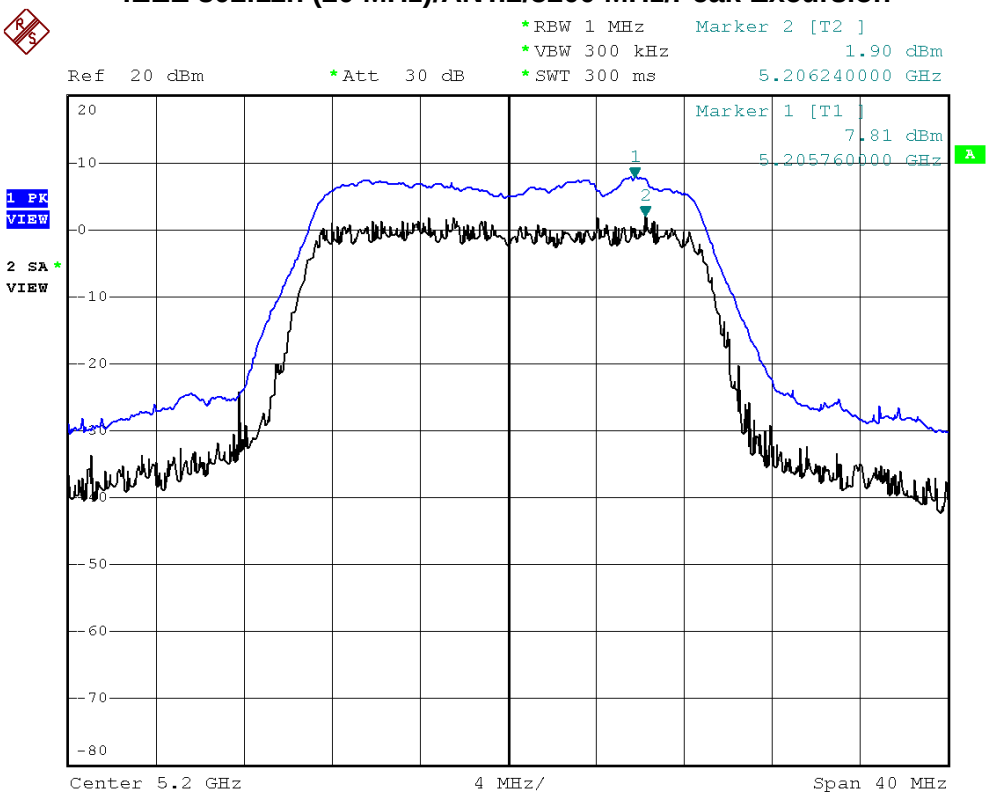
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.2/5180 MHz, 5200 MHz, 5240 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5180 MHz	4.38	13	PASS
5200 MHz	5.91	13	PASS
5240 MHz	5.55	13	PASS

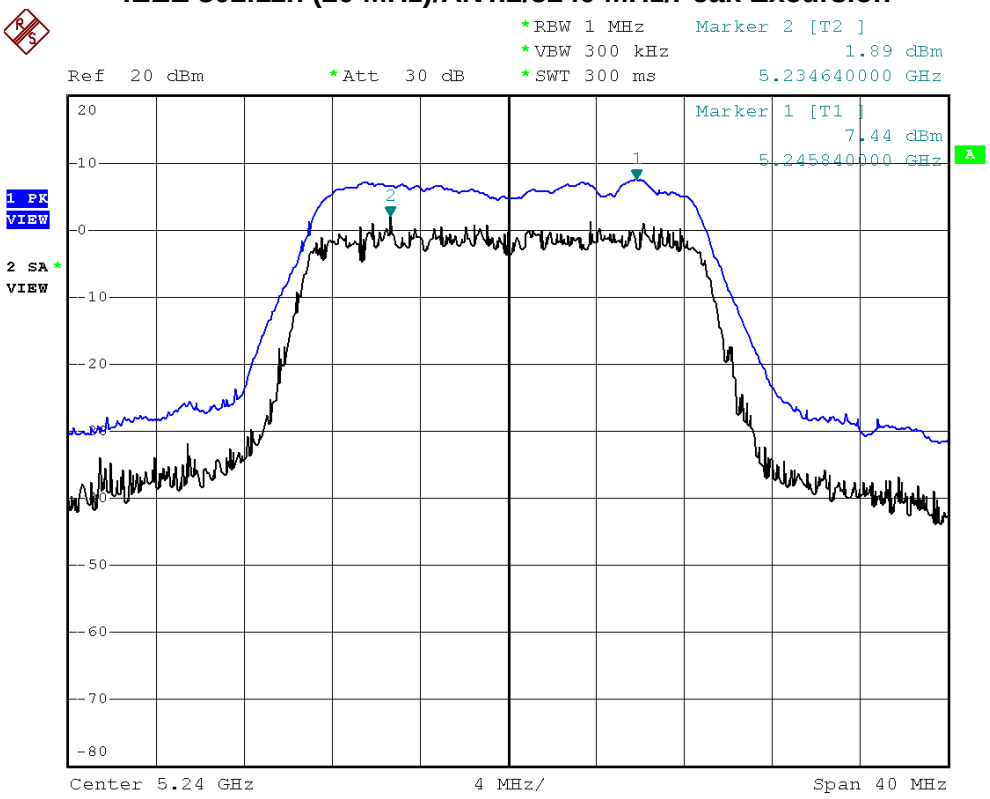
IEEE 802.11n (20 MHz)/ANT.2/5180 MHz/Peak Excursion



IEEE 802.11n (20 MHz)/ANT.2/5200 MHz/Peak Excursion



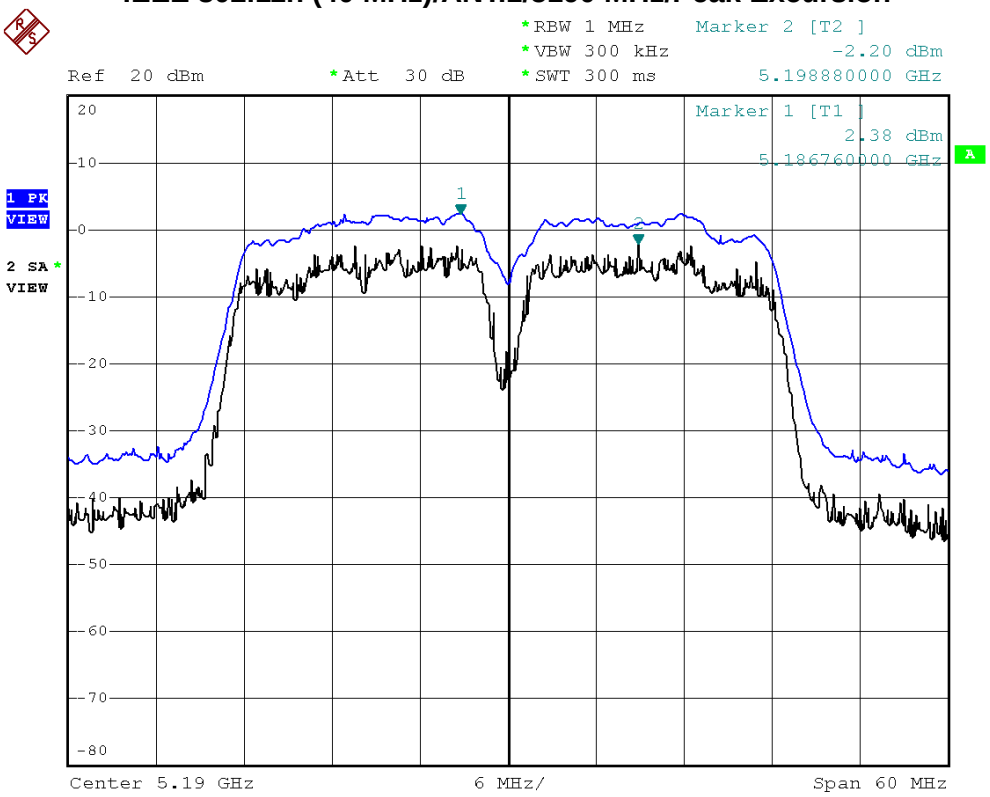
IEEE 802.11n (20 MHz)/ANT.2/5240 MHz/Peak Excursion



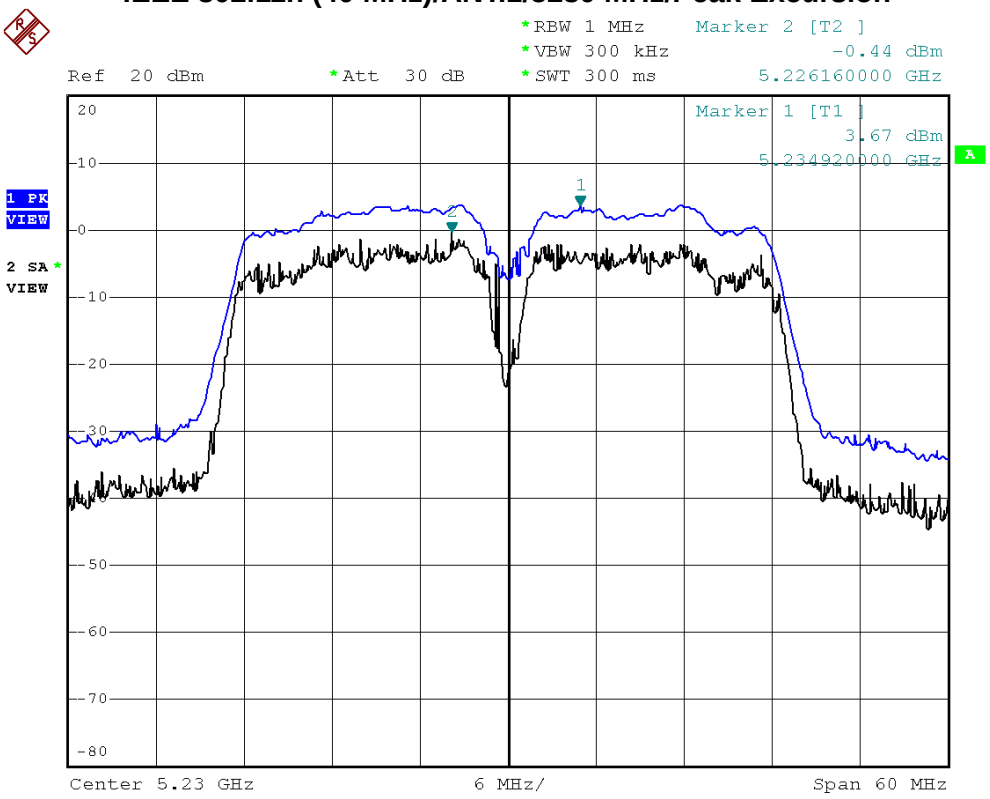
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.1/5190 MHz, 5230 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5190 MHz	4.58	13	PASS
5230 MHz	4.11	13	PASS

IEEE 802.11n (40 MHz)/ANT.1/5190 MHz/Peak Excursion



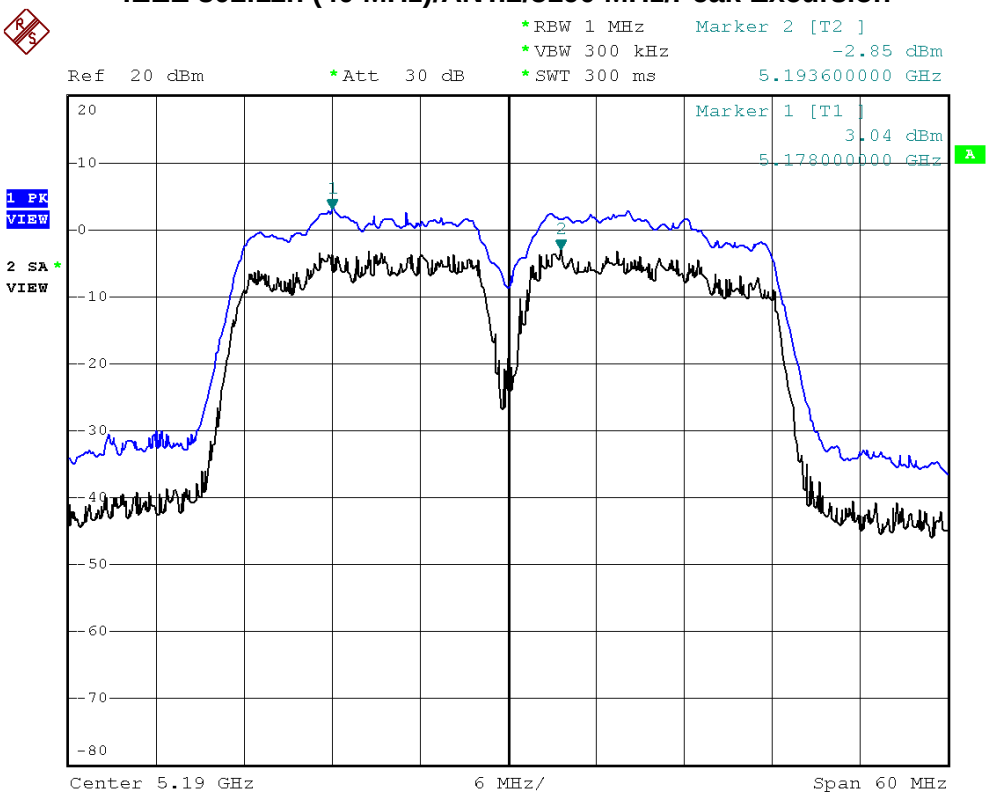
IEEE 802.11n (40 MHz)/ANT.1/5230 MHz/Peak Excursion



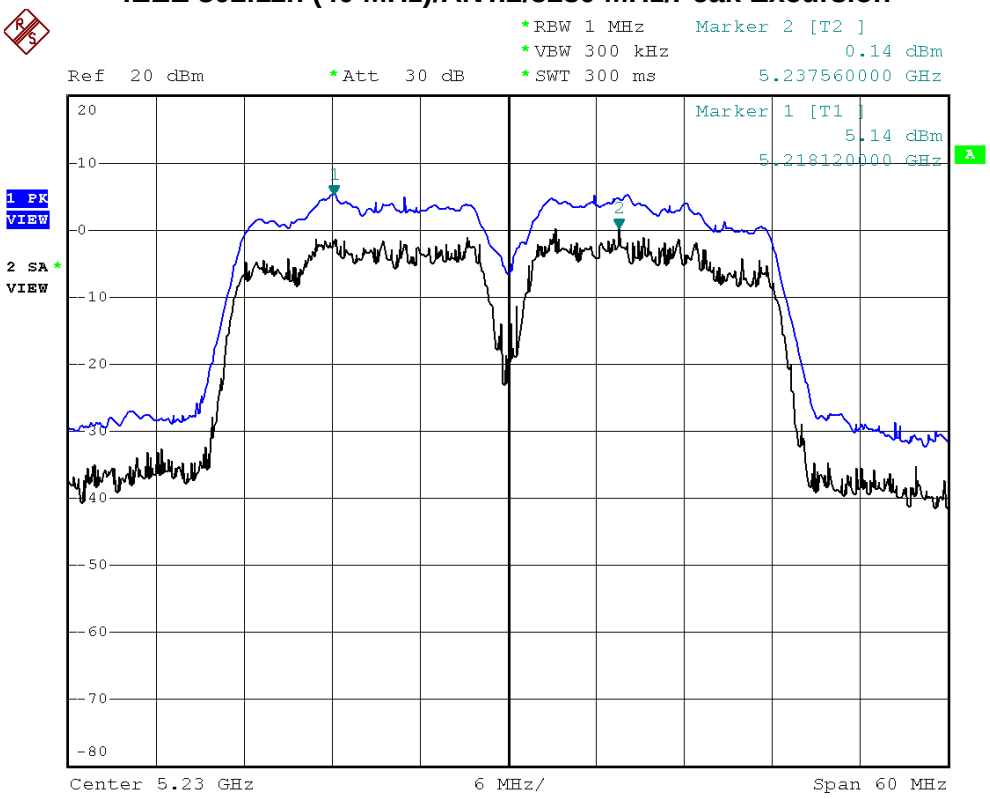
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.2/5190 MHz, 5230 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5190 MHz	5.89	13	PASS
5230 MHz	5.00	13	PASS

IEEE 802.11n (40 MHz)/ANT.2/5190 MHz/Peak Excursion



IEEE 802.11n (40 MHz)/ANT.2/5230 MHz/Peak Excursion

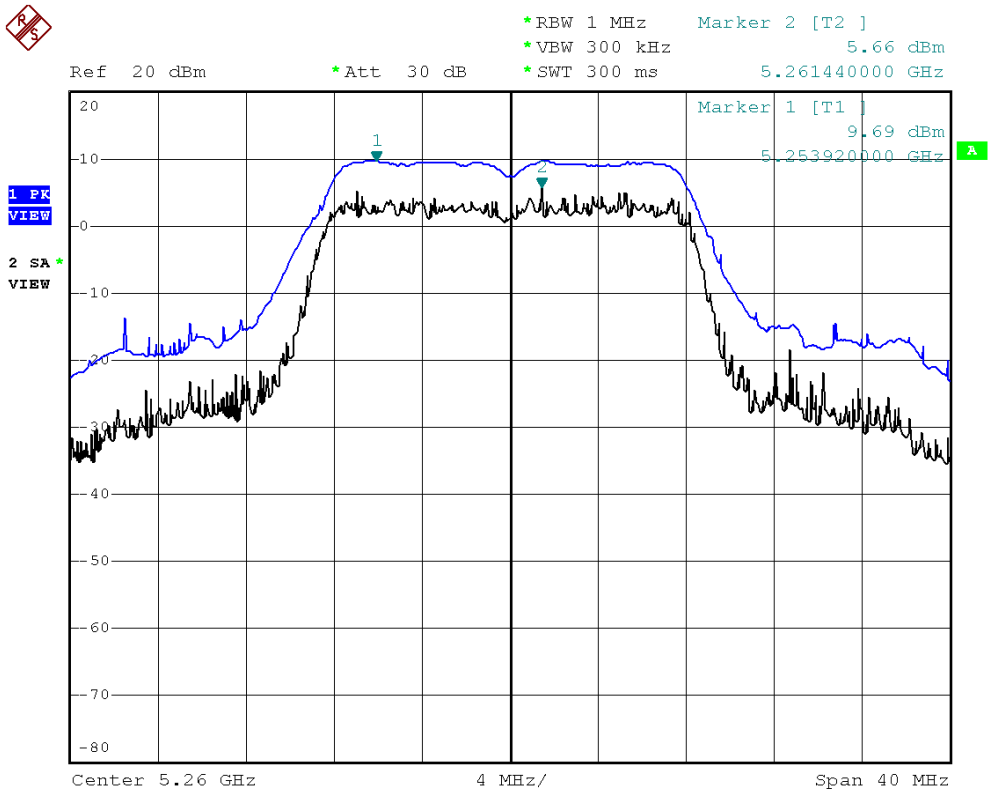


11.9TEST RESULTS - 5250-5350 MHZ

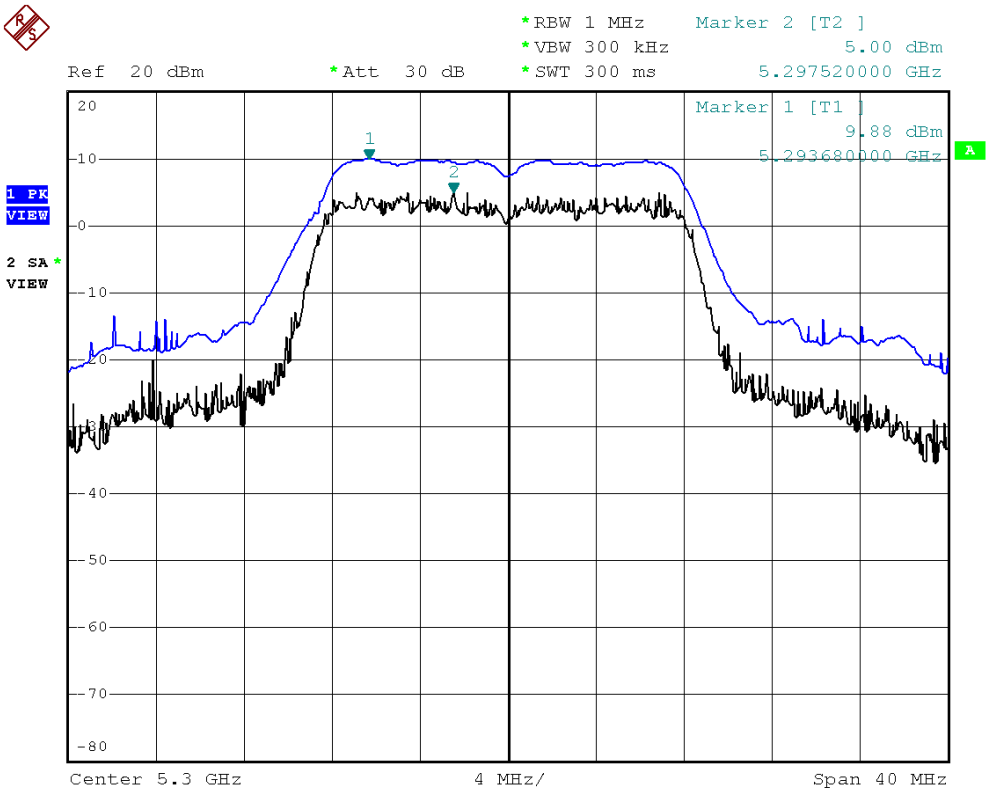
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5260 MHz	4.03	13	PASS
5300 MHz	4.88	13	PASS
5320 MHz	4.42	13	PASS

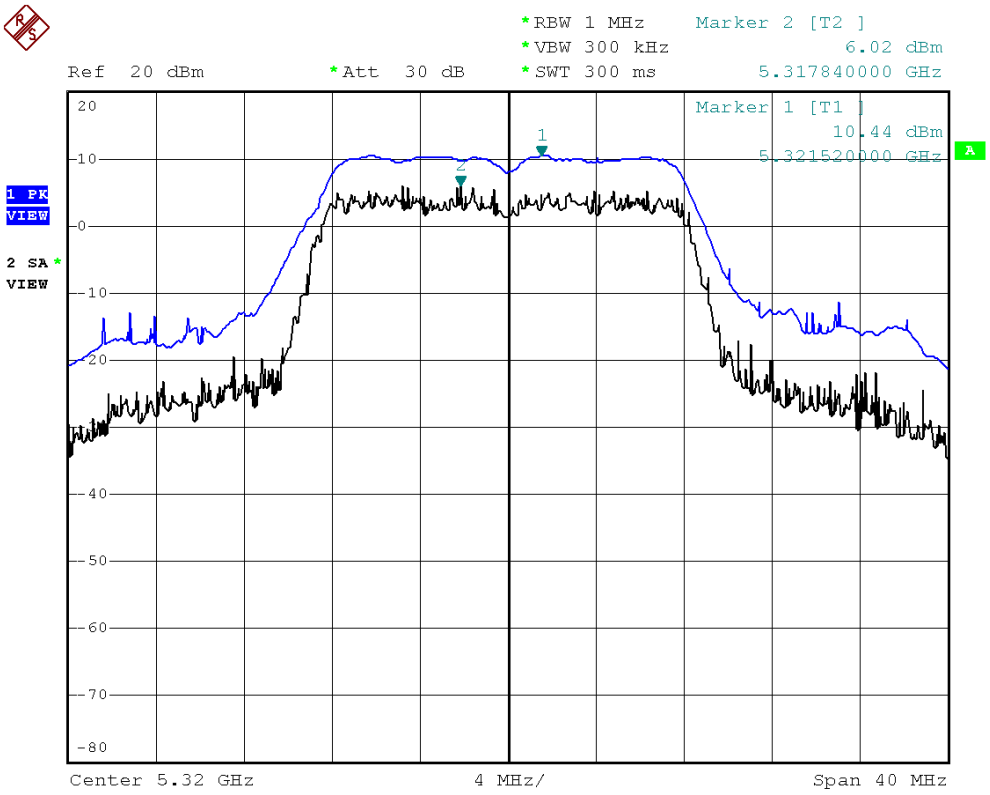
IEEE 802.11a/5260 MHz/Peak Excursion



IEEE 802.11a/5300 MHz/Peak Excursion



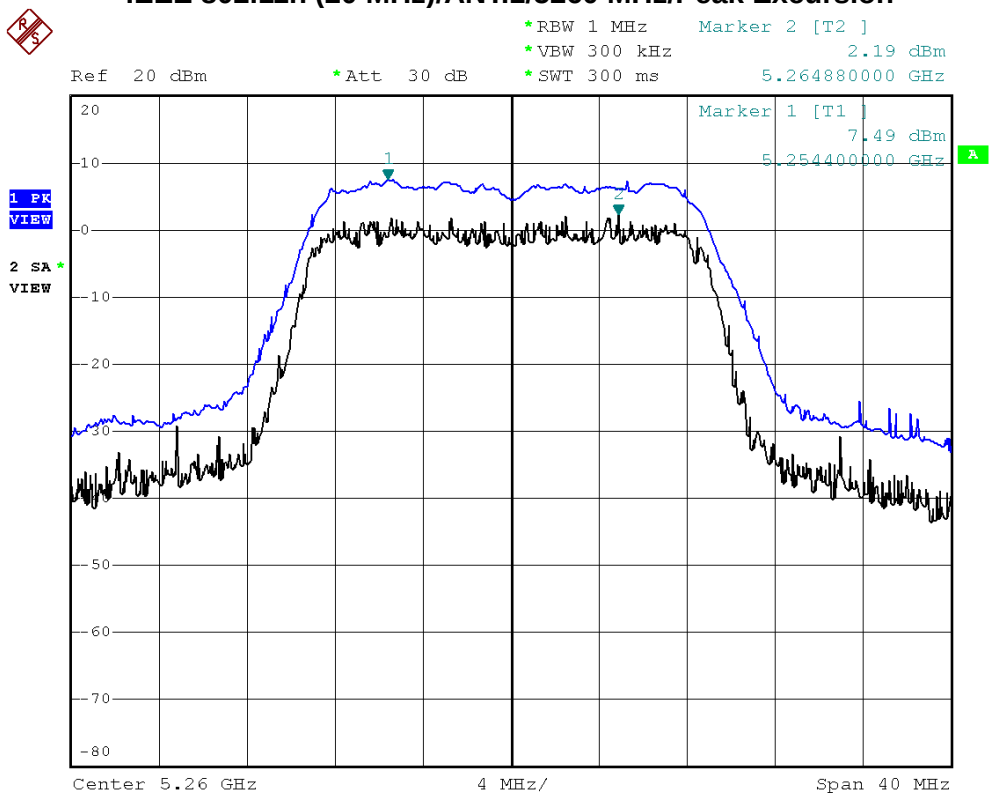
IEEE 802.11a/5320 MHz/Peak Excursion



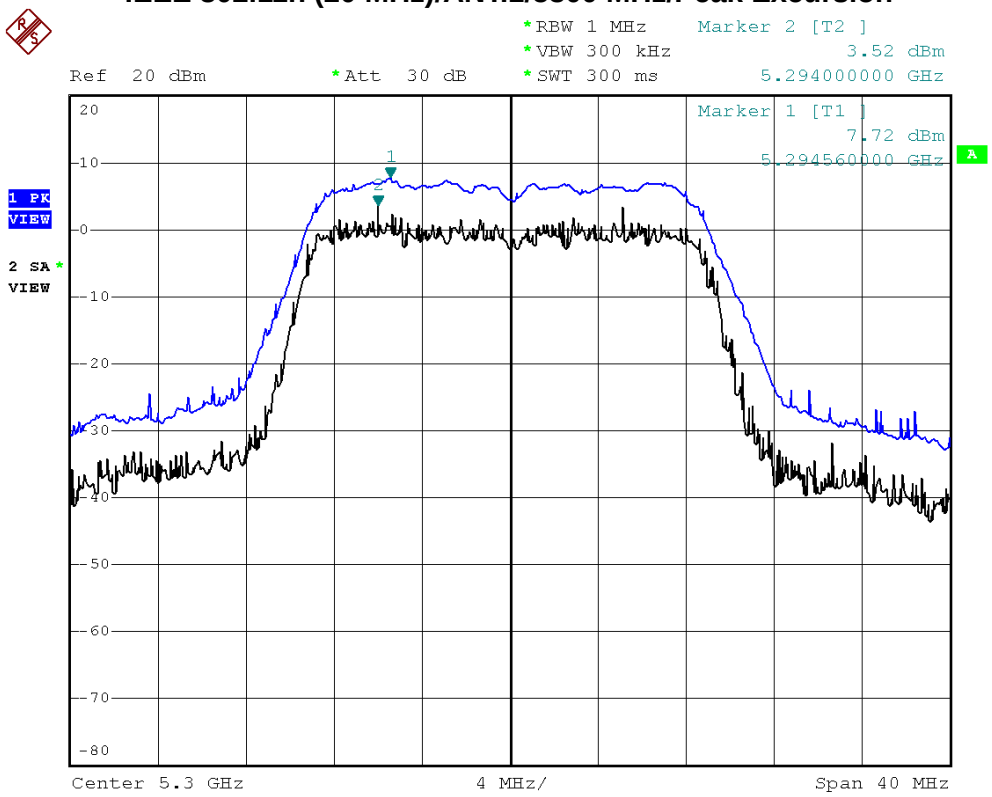
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.1/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5260 MHz	5.30	13	PASS
5300 MHz	4.20	13	PASS
5320 MHz	5.45	13	PASS

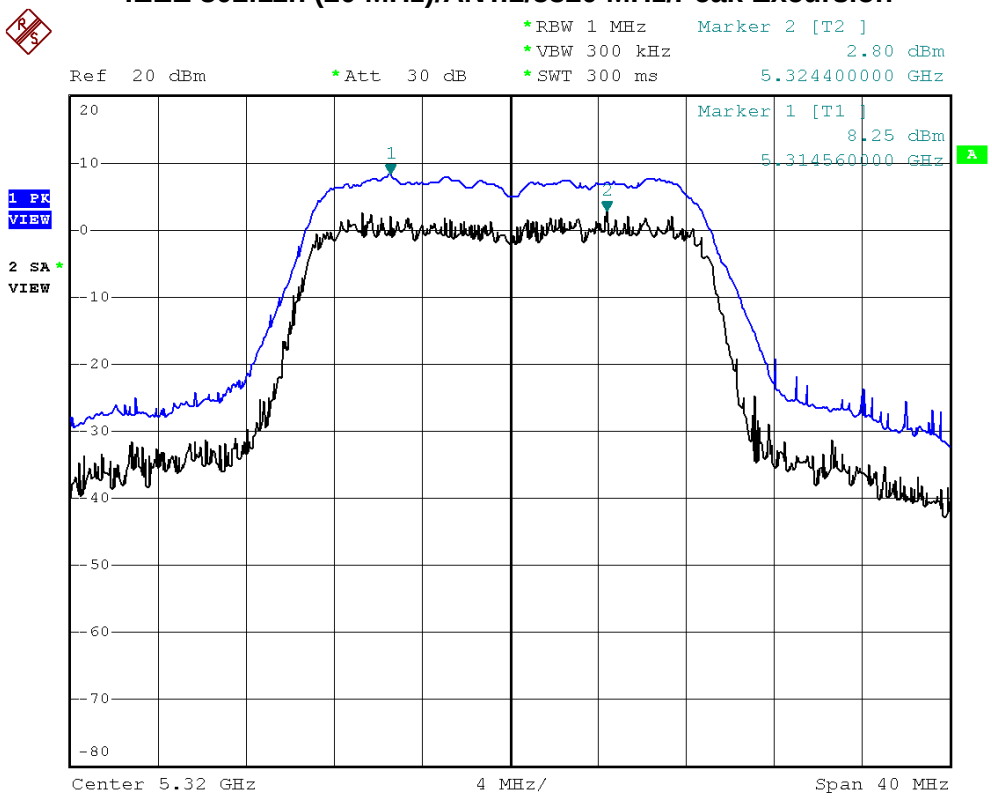
IEEE 802.11n (20 MHz)/ANT.1/5260 MHz/Peak Excursion



IEEE 802.11n (20 MHz)/ANT.1/5300 MHz/Peak Excursion



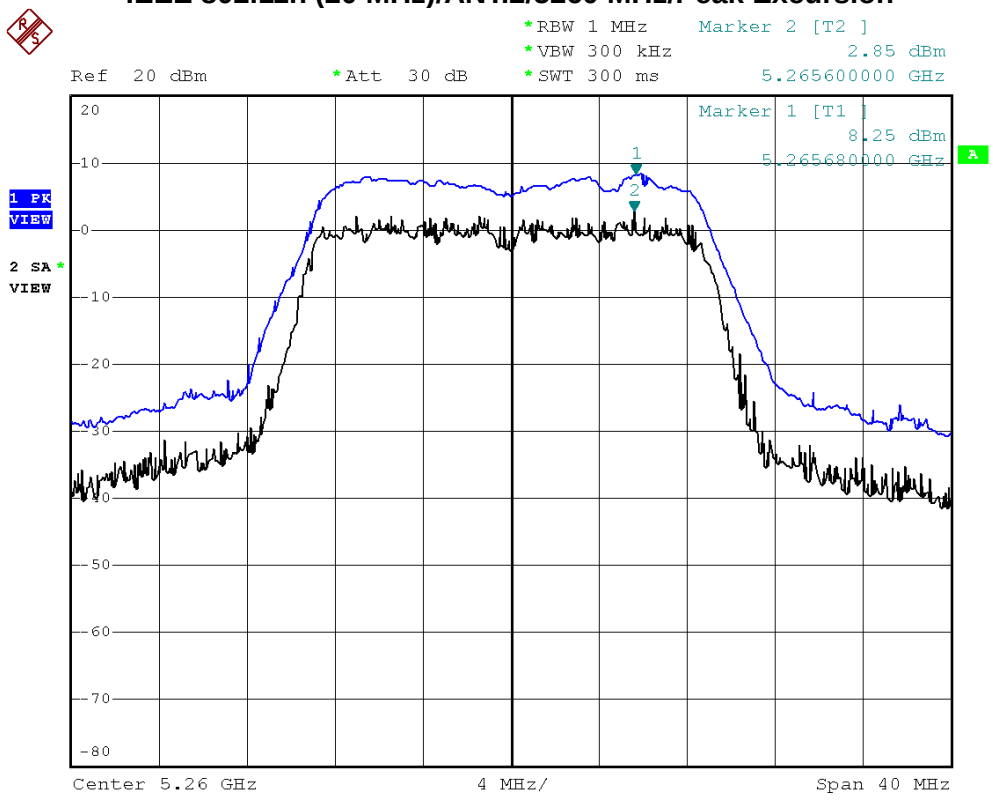
IEEE 802.11n (20 MHz)/ANT.1/5320 MHz/Peak Excursion



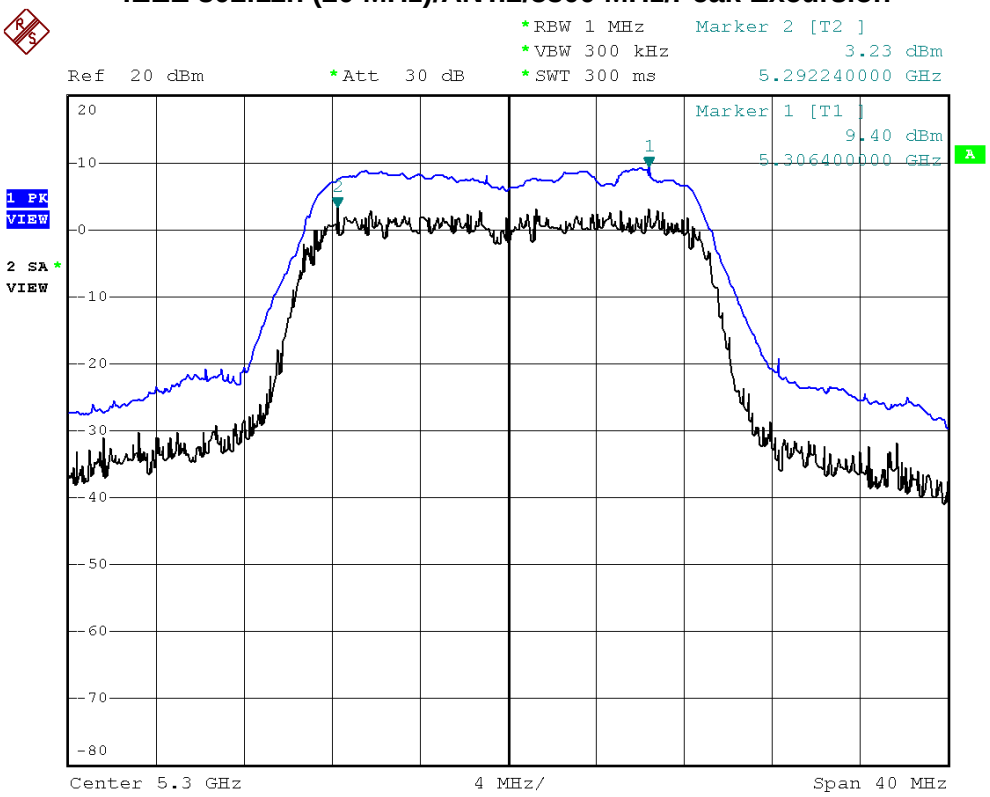
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.2/5260 MHz, 5300 MHz, 5320 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5260 MHz	5.40	13	PASS
5300 MHz	6.17	13	PASS
5320 MHz	5.19	13	PASS

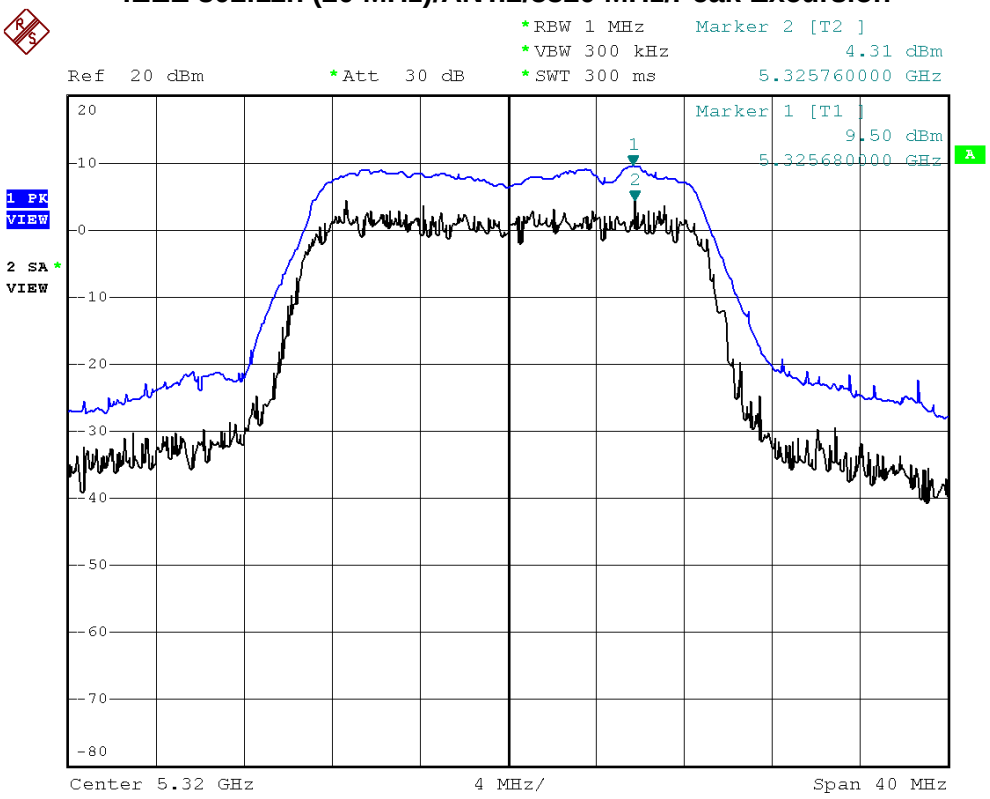
IEEE 802.11n (20 MHz)/ANT.2/5260 MHz/Peak Excursion



IEEE 802.11n (20 MHz)/ANT.2/5300 MHz/Peak Excursion



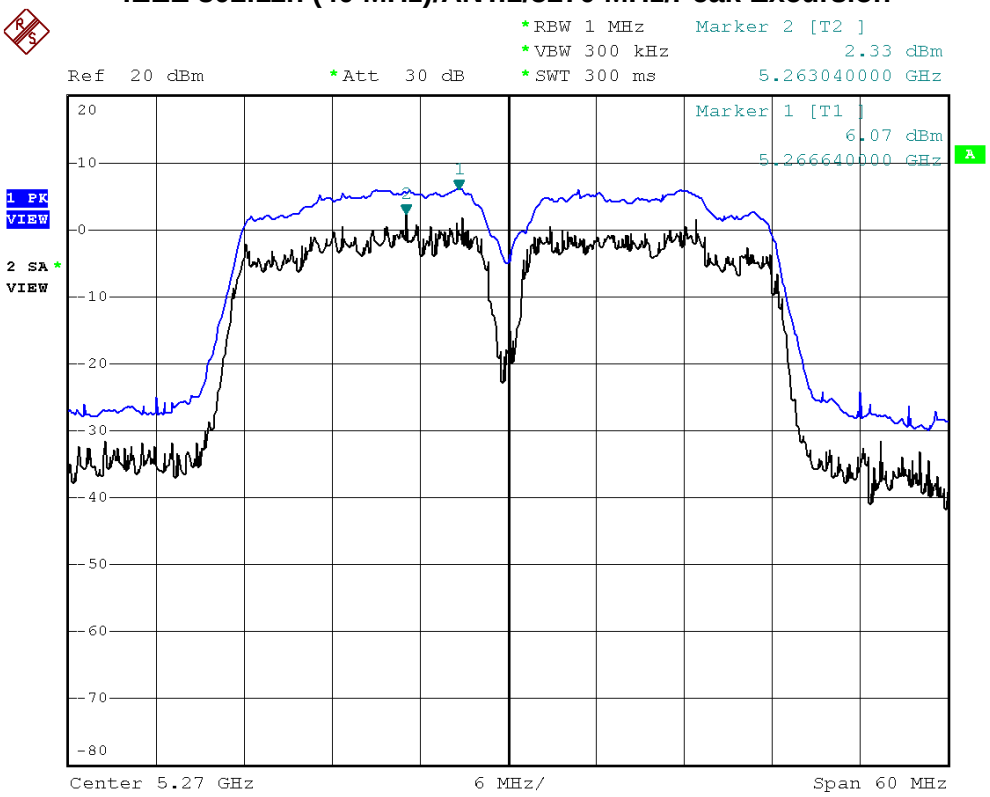
IEEE 802.11n (20 MHz)/ANT.2/5320 MHz/Peak Excursion



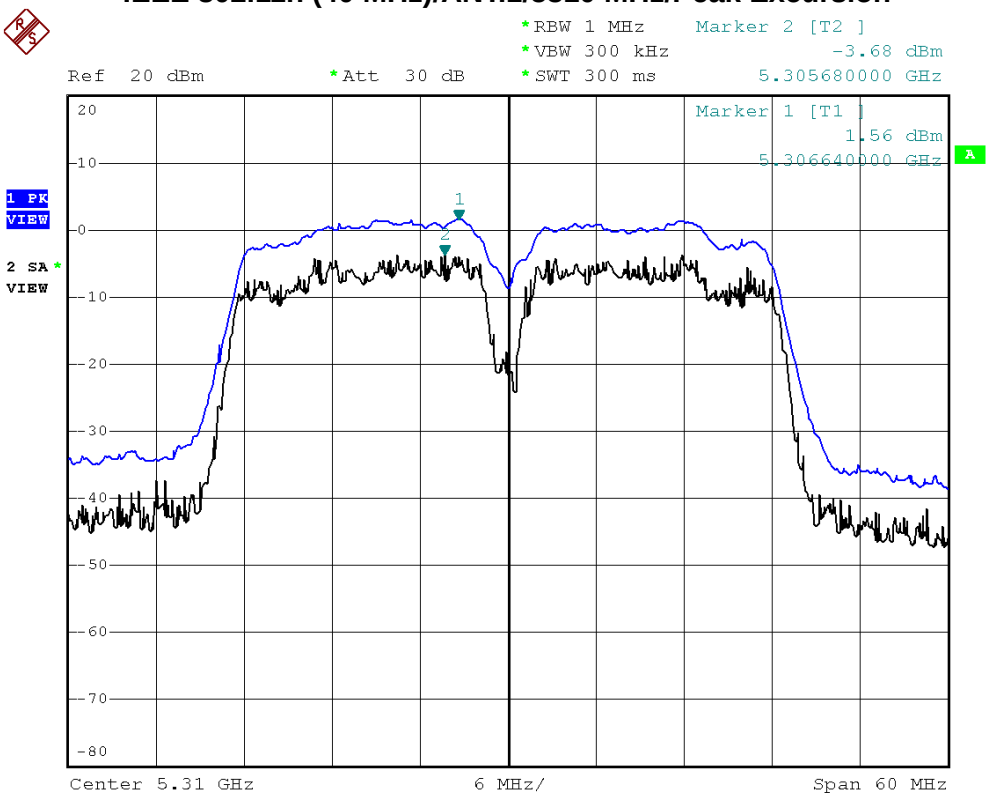
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.1/5270 MHz, 5310 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5270 MHz	3.74	13	PASS
5310 MHz	5.24	13	PASS

IEEE 802.11n (40 MHz)/ANT.1/5270 MHz/Peak Excursion



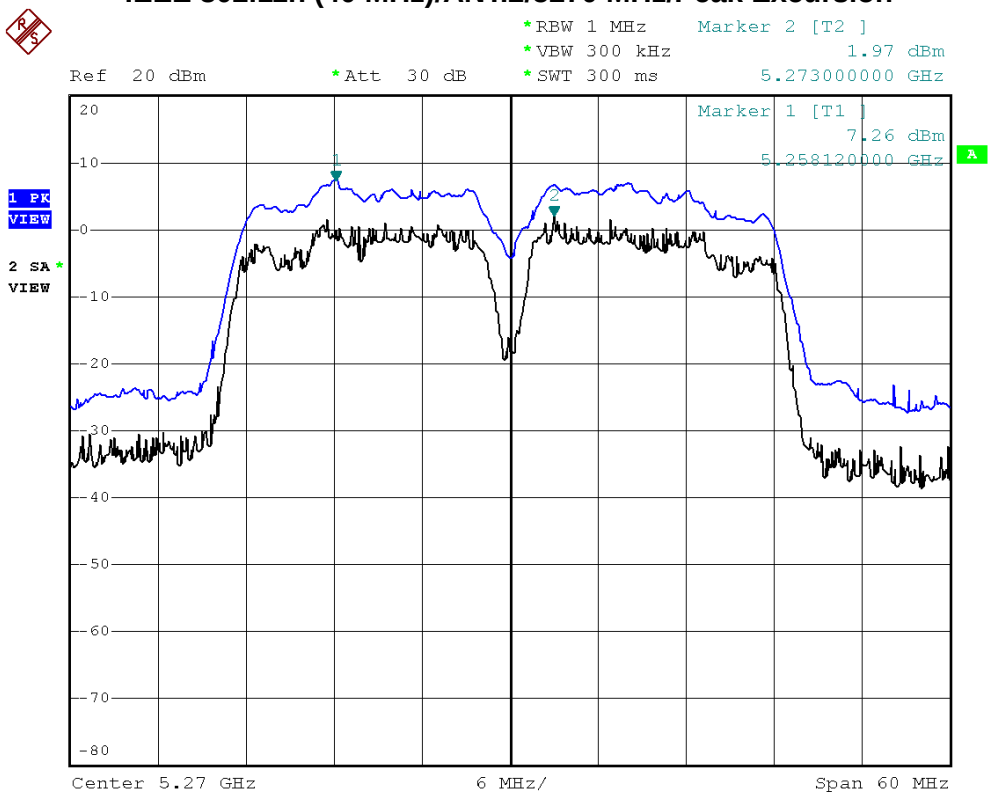
IEEE 802.11n (40 MHz)/ANT.1/5310 MHz/Peak Excursion



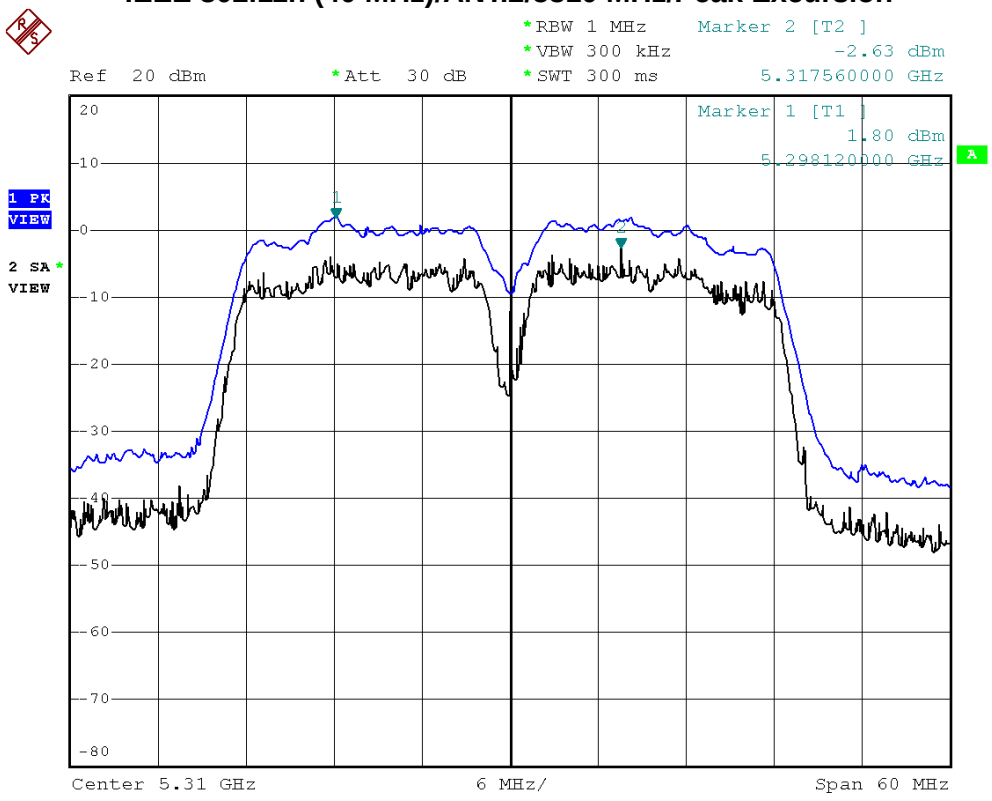
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.2/5270 MHz, 5310 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5270 MHz	5.29	13	PASS
5310 MHz	4.43	13	PASS

IEEE 802.11n (40 MHz)/ANT.2/5270 MHz/Peak Excursion



IEEE 802.11n (40 MHz)/ANT.2/5310 MHz/Peak Excursion

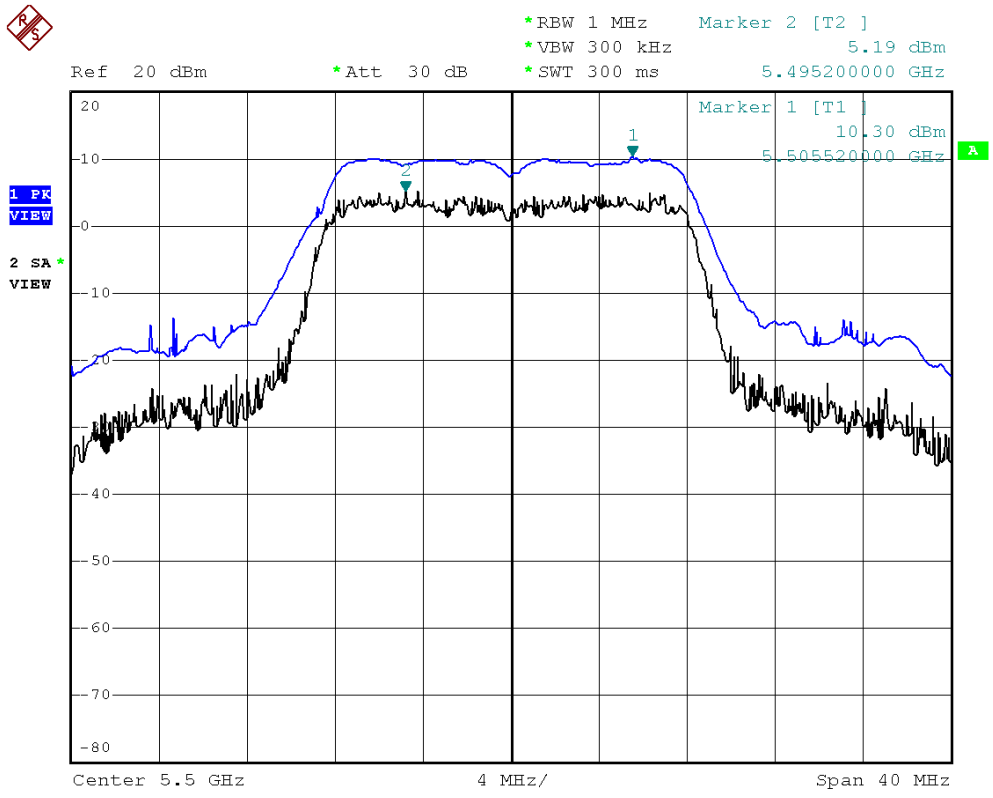


11.10 TEST RESULTS - 5470-5725 MHZ

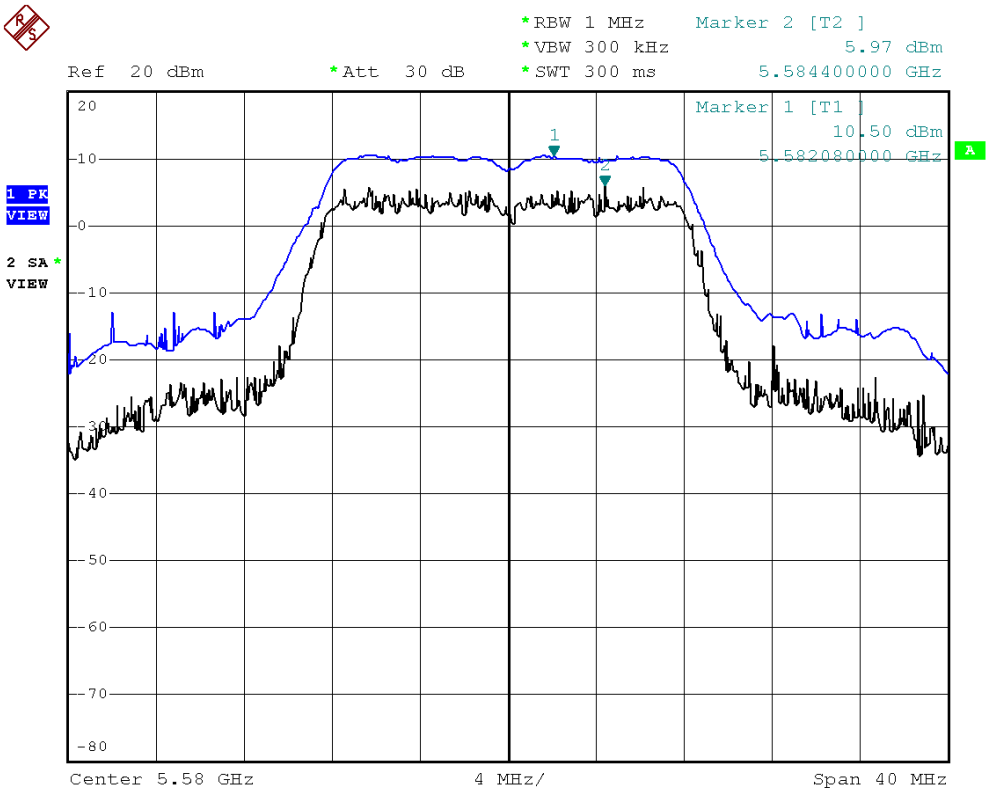
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5500 MHz	5.11	13	PASS
5580 MHz	4.53	13	PASS
5700 MHz	4.63	13	PASS

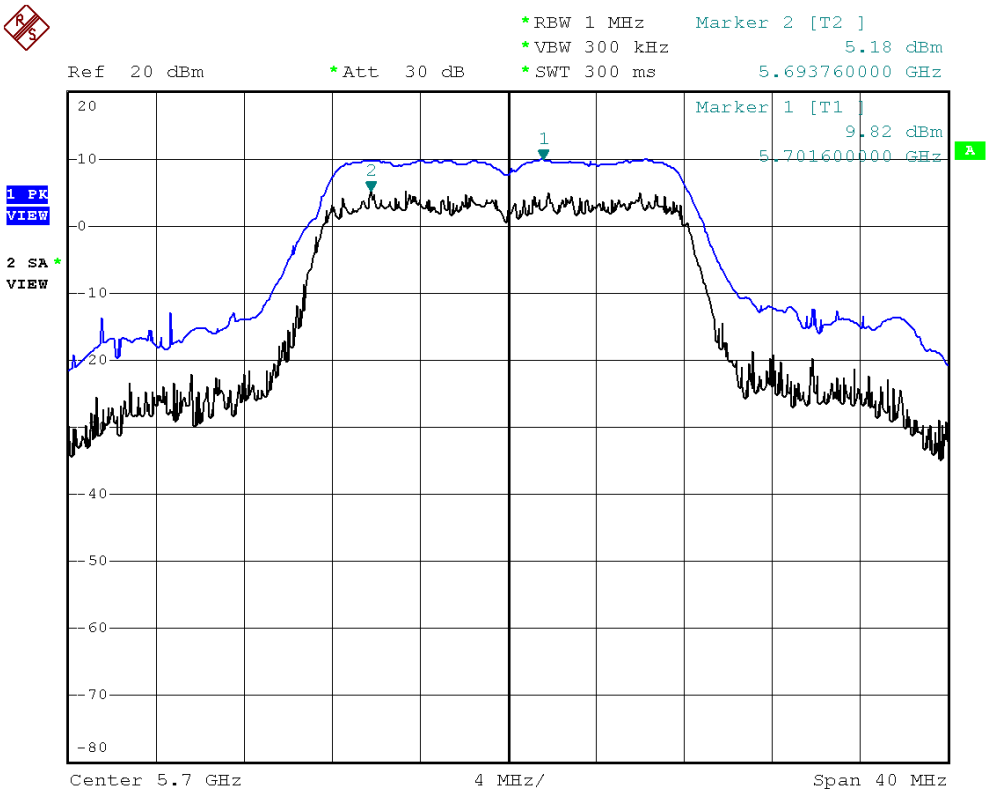
IEEE 802.11a/5500 MHz/Peak Excursion



IEEE 802.11a/5580 MHz/Peak Excursion



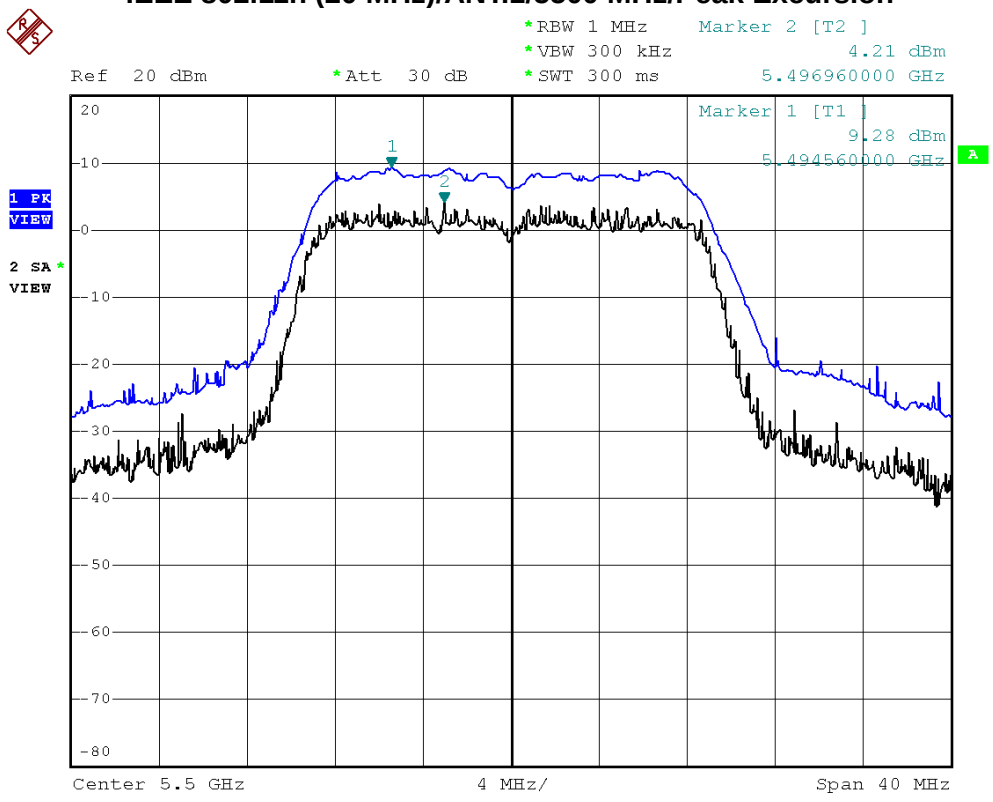
IEEE 802.11a/5700 MHz/Peak Excursion



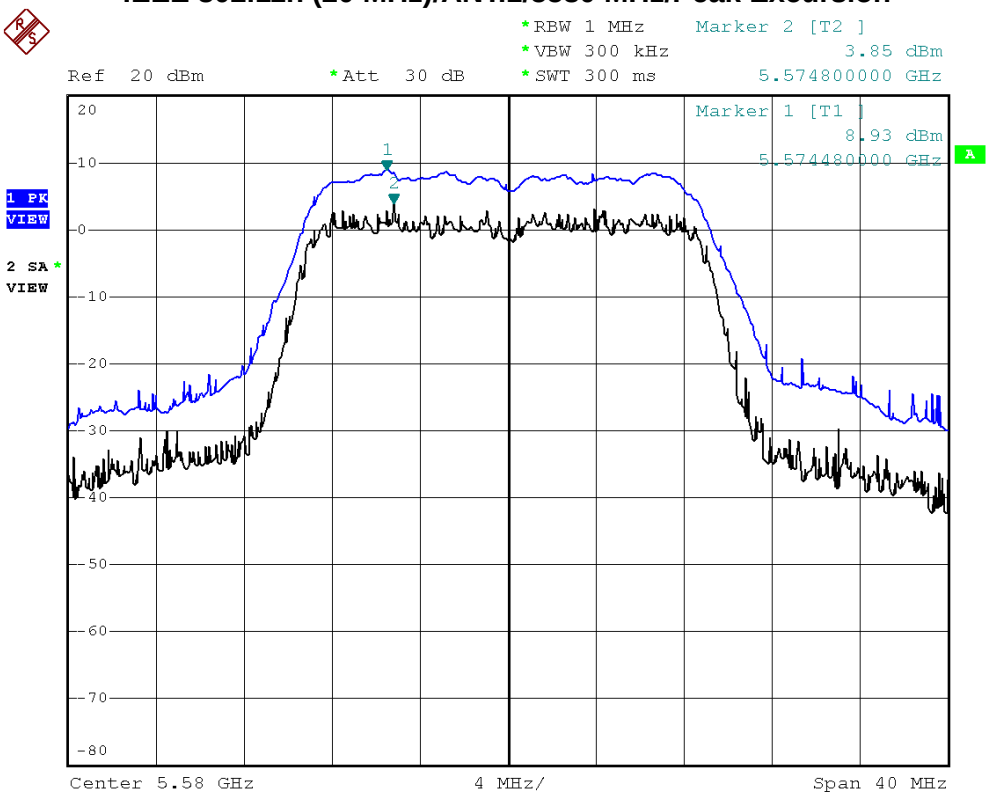
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.1/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5500 MHz	5.07	13	PASS
5580 MHz	5.08	13	PASS
5700 MHz	5.31	13	PASS

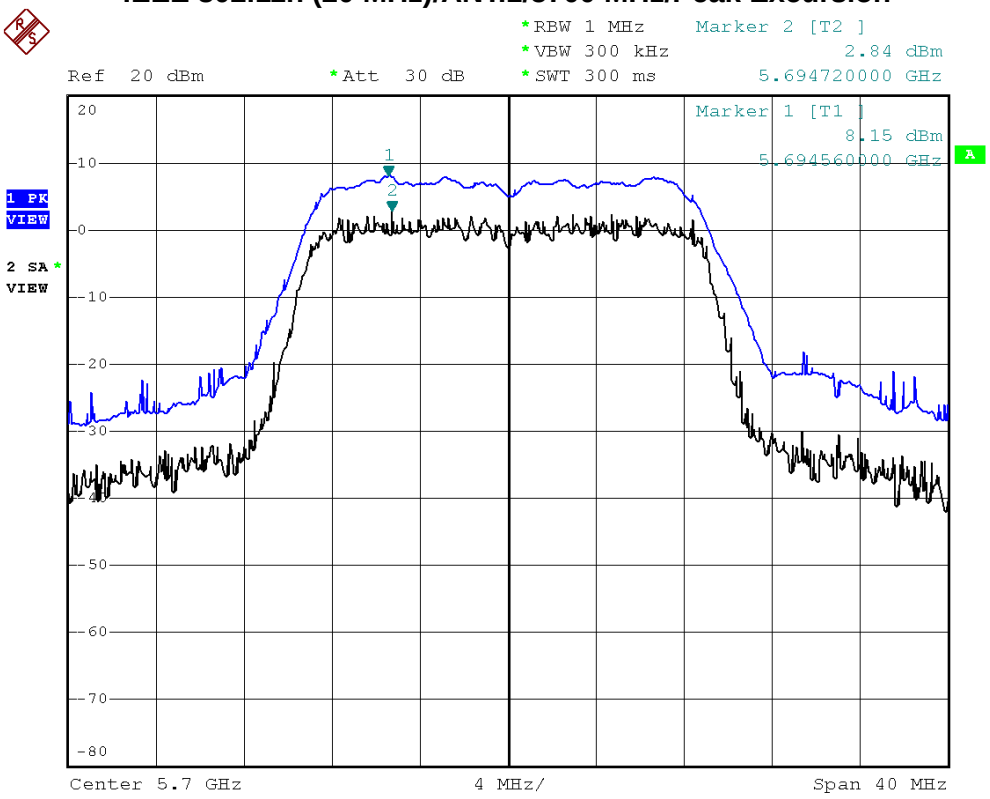
IEEE 802.11n (20 MHz)/ANT.1/5500 MHz/Peak Excursion



IEEE 802.11n (20 MHz)/ANT.1/5580 MHz/Peak Excursion



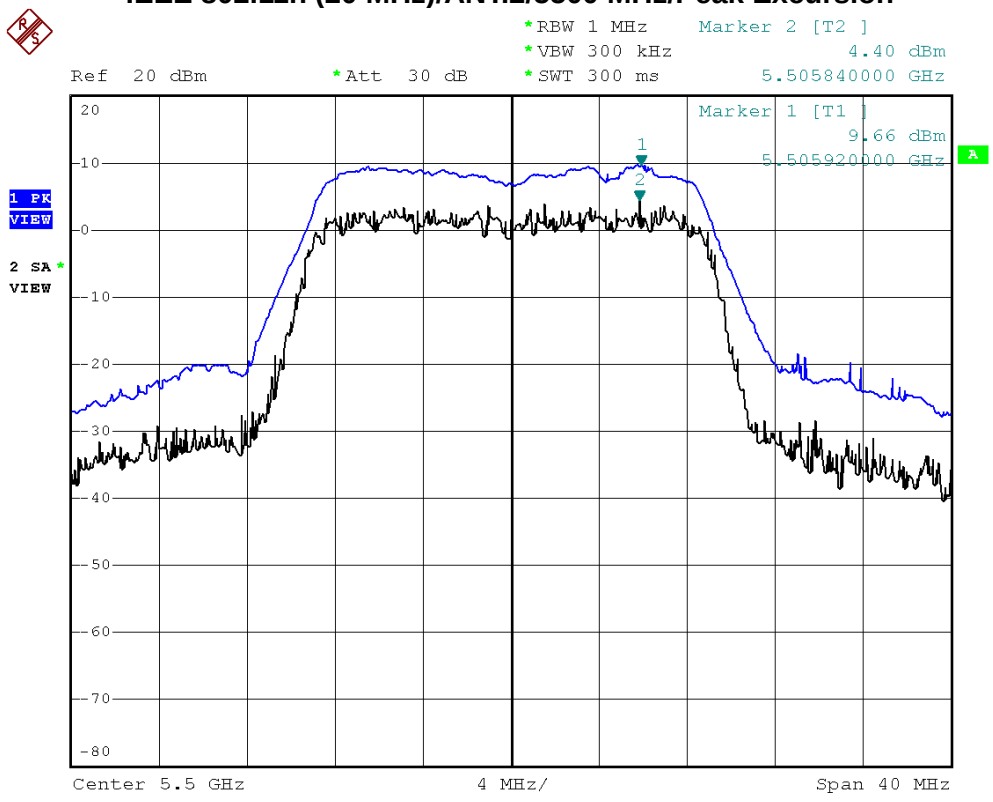
IEEE 802.11n (20 MHz)/ANT.1/5700 MHz/Peak Excursion



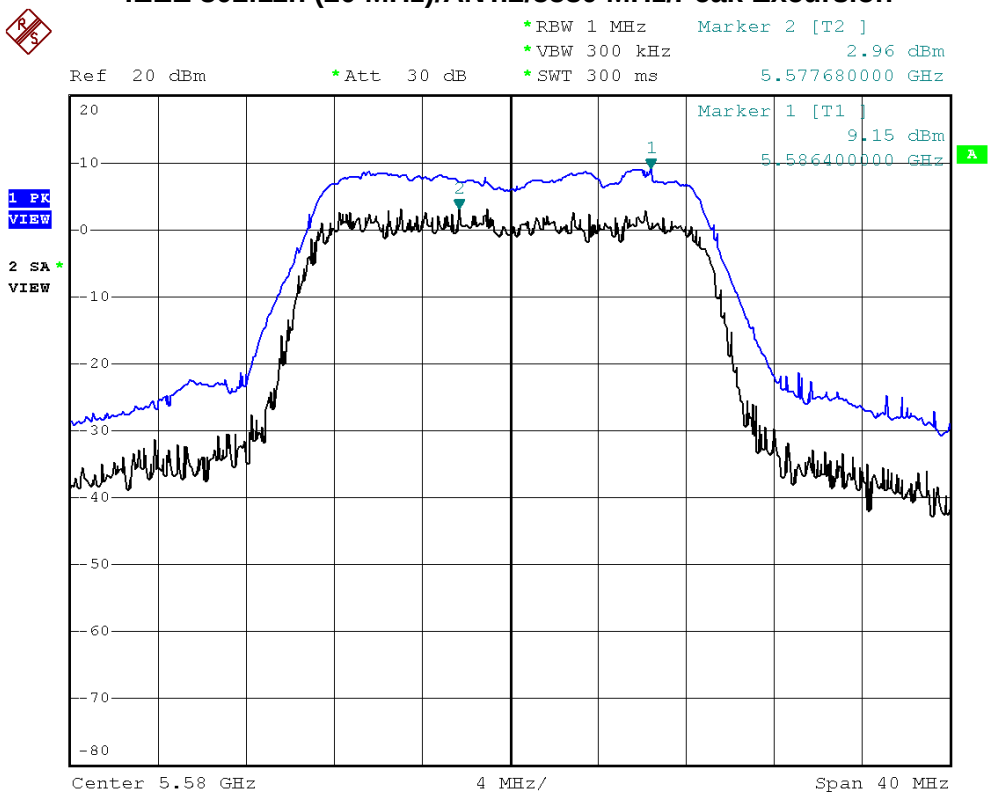
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (20 MHz)/ANT.2/5500 MHz, 5580 MHz, 5700 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5500 MHz	5.26	13	PASS
5580 MHz	6.19	13	PASS
5700 MHz	5.66	13	PASS

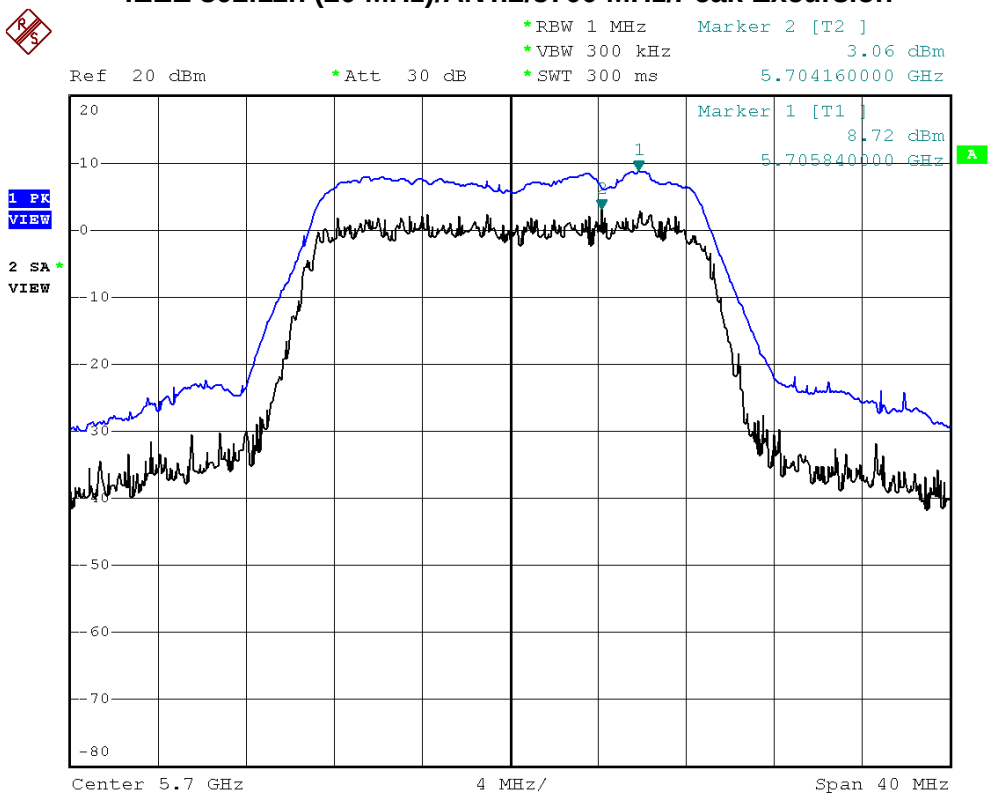
IEEE 802.11n (20 MHz)/ANT.2/5500 MHz/Peak Excursion



IEEE 802.11n (20 MHz)/ANT.2/5580 MHz/Peak Excursion



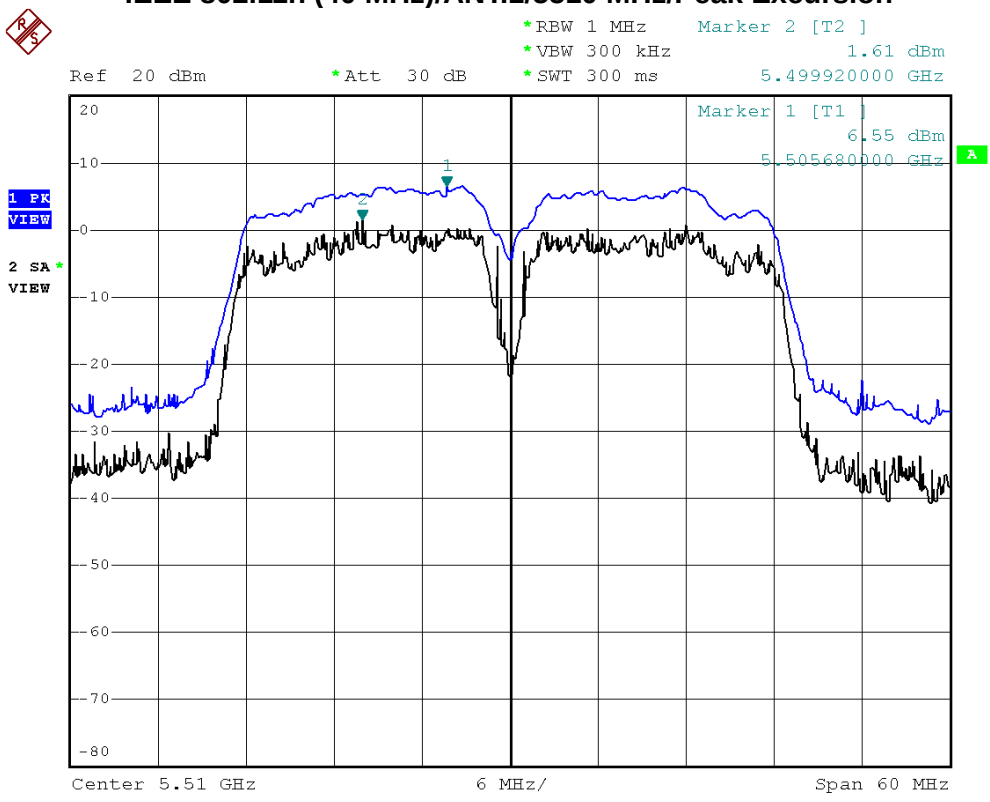
IEEE 802.11n (20 MHz)/ANT.2/5700 MHz/Peak Excursion



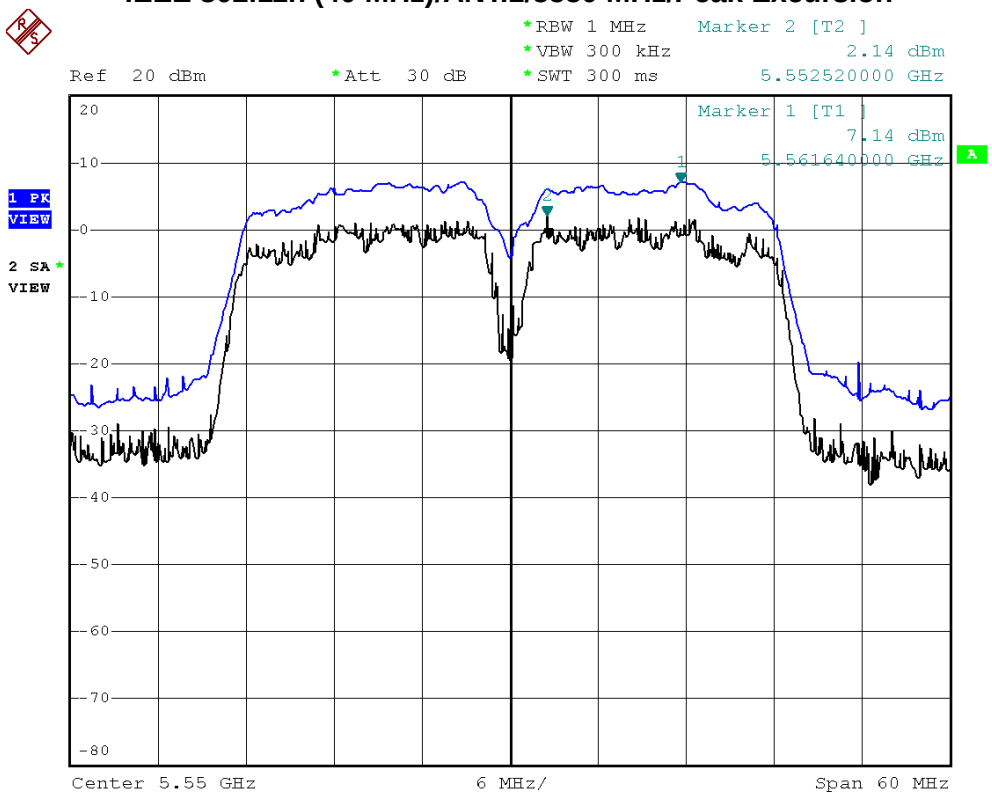
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.1/5510 MHz, 5550 MHz, 5670 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5510 MHz	3.96	13	PASS
5550 MHz	5.00	13	PASS
5670 MHz	4.94	13	PASS

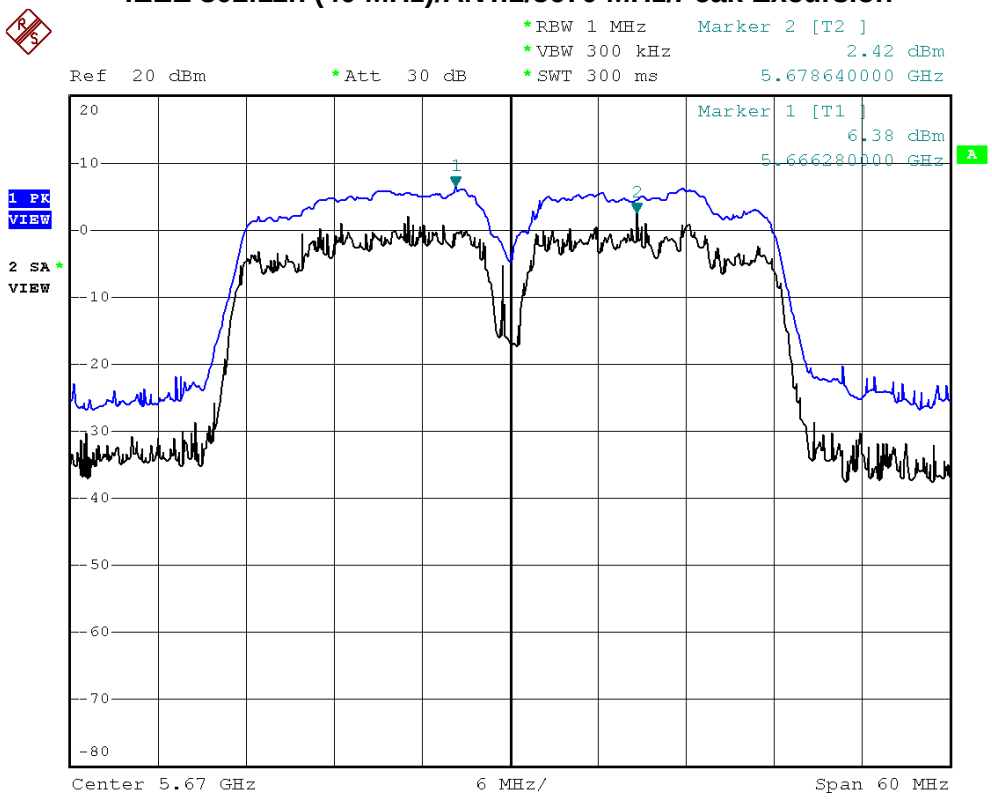
IEEE 802.11n (40 MHz)/ANT.1/5510 MHz/Peak Excursion



IEEE 802.11n (40 MHz)/ANT.1/5550 MHz/Peak Excursion



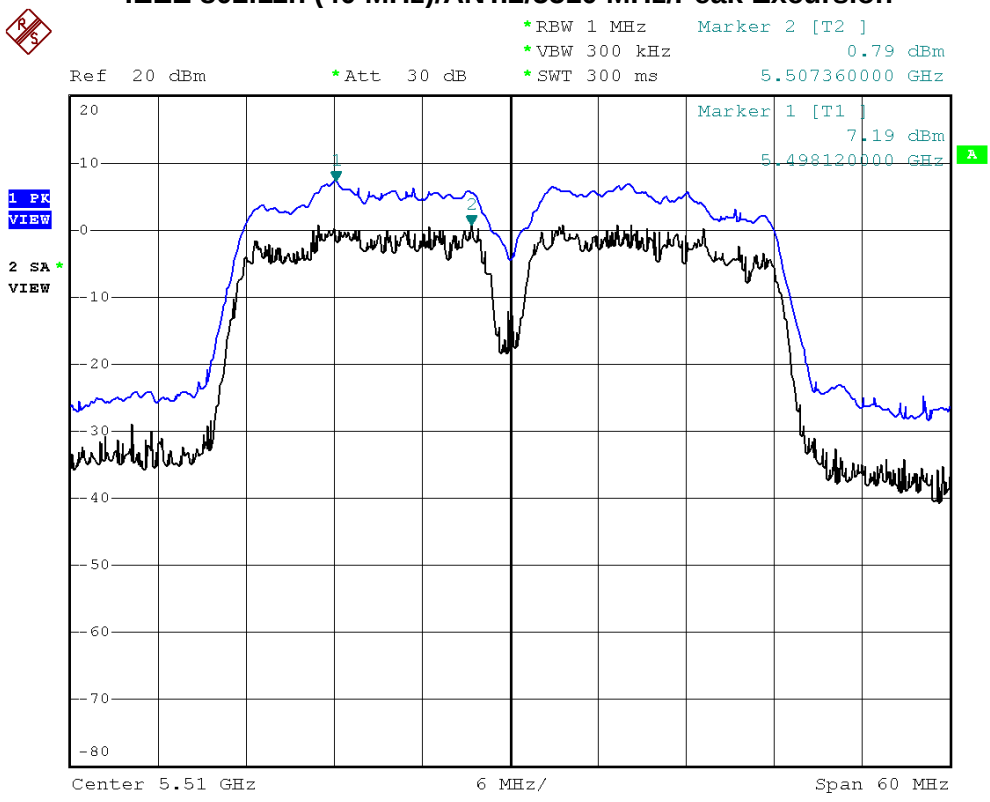
IEEE 802.11n (40 MHz)/ANT.1/5670 MHz/Peak Excursion



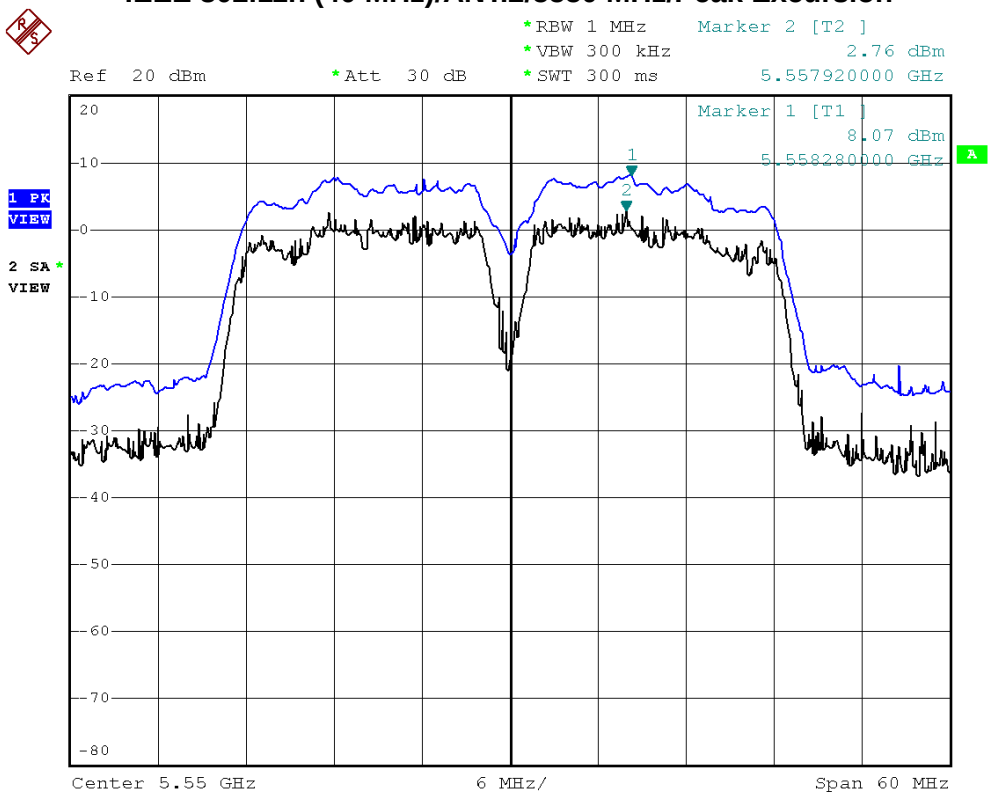
E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11n (40 MHz)/ANT.2/5510 MHz, 5550 MHz, 5670 MHz		

Frequency	Peak Excursion (dB)	Limit (dB)	Result
5510 MHz	6.40	13	PASS
5550 MHz	5.31	13	PASS
5670 MHz	5.36	13	PASS

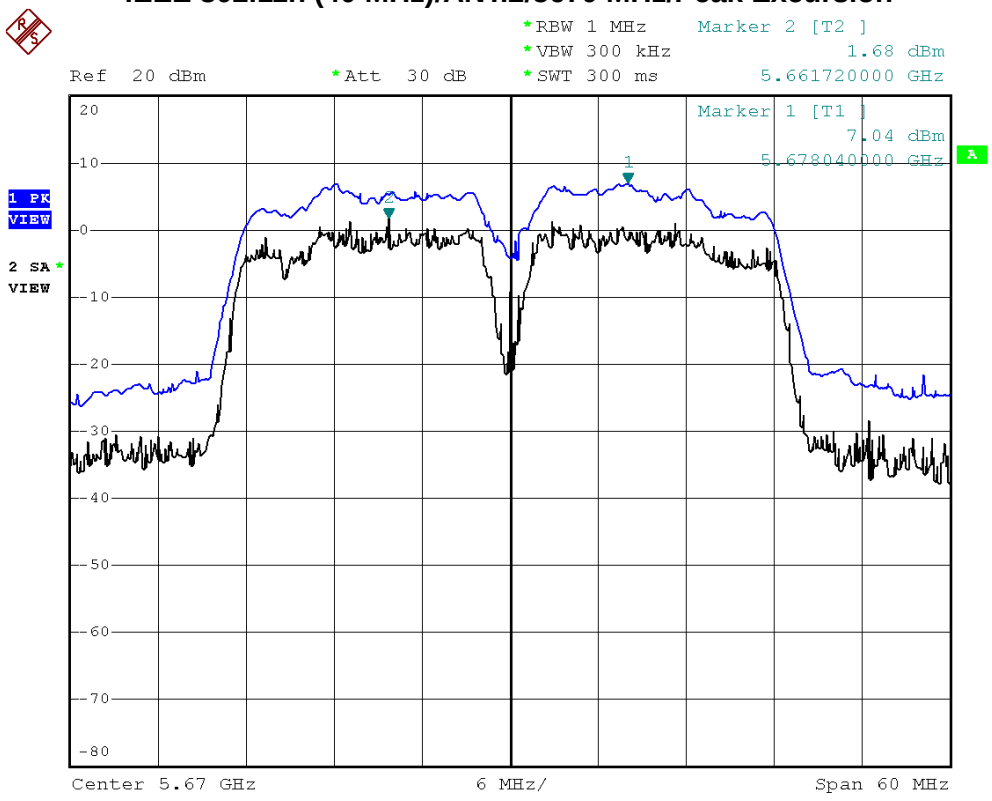
IEEE 802.11n (40 MHz)/ANT.2/5510 MHz/Peak Excursion



IEEE 802.11n (40 MHz)/ANT.2/5550 MHz/Peak Excursion



IEEE 802.11n (40 MHz)/ANT.2/5670 MHz/Peak Excursion



12 FREQUENCY STABILITY

12.1 LIMIT

Test Item	Frequency Range (MHz)	Limit
Frequency Stability	5150 - 5250	specified in the user's manual or ±20ppm (IEEE 802.11a specification)
	5250 - 5350	
	5470 – 5725	
	5725 - 5825	

12.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TEMPERAURE AND HUMIDITY CHAMBER	HOLINK	CHOLINK/ H-T-1F-D	BA03101701	May. 20, 2013
2	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 06, 2012

NOTE: **N/A**: denotes No Model Name, No Serial No. or No Calibration specified.

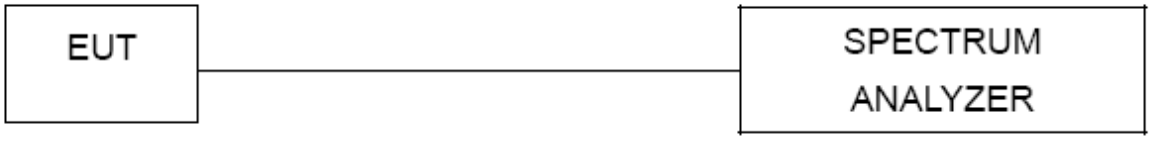
12.3 MEASURING INSTRUMENTS SETTING

Spectrum Analyzer	Parameter Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

12.4 TEST PROCEDURES

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
c. Extreme temperature rule is -30°C~50°C.

12.5 TEST SETUP LAYOUT



12.6 DEVIATION FROM TEST STANDARD

No deviation

12.7 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 5.6 Unless otherwise a special operating condition is specified in the follows during the testing.

12.8TEST RESULTS

E.U.T	MONDOCENTER	Model Name	INF-MCENTER
Temperature	26°C	Relative Humidity	60%
Test Voltage	AC 120V/60Hz		
Test Mode	IEEE 802.11a/5200 MHz		

Voltage vs. Frequency Stability		
Voltage	**Measurement Frequency (MHz)**	
(V)	5200	-
126.5	5199.937600	
110	5199.940600	
93.5	5199.941200	
Max. Deviation (MHz)	0.062400	
Max. Deviation (ppm)	12.00	

Temperature vs. Frequency Stability		
Temperature	**Measurement Frequency (MHz)**	
(˚C)	5200	-
-30	5199.910000	
-20	5199.923000	
-10	5199.925600	
0	5199.928200	
10	5199.932400	
20	5199.937600	
30	5199.943000	
40	5199.949200	
50	5199.951000	
Max. Deviation (MHz)	0.090000	
Max. Deviation (ppm)	17.31	