

8.4 Maximum Power Spectral Density

note1

(3) For the band 5.725 - 5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band.^{note1,note2}

Note1: If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note2: Fixed point - to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

- Peak Power Spectral Density Limit Calculation(FCC)

Band	Limit [dBm]	Antenna Gain (Worst case)	Determined Limit [dBm]
U-NII 1	11	0.48	11
U-NII 2A	11	0.48	11
U-NII 2C	11	0.48	11
U-NII 3	30	1.03	30

RSS-247[6.11]**(1) For band 5150 - 5250 MHz**

The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

(2) For band 5250 - 5350 MHz

The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

(3) For band 5470 - 5600 MHz and 5650 - 5725 MHz

The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

(4) For band 5725 - 5850 MHz

The power spectral density shall not exceed 30 dBm in any 500 kHz band.

- Peak Power Spectral Density Limit Calculation(IC)

Band	Limit [dBm]	ANT Gain [dBi]	Determined Limit [dBm]
U-NII 1	11	0.48	11
U-NII 2A	11	0.48	11
U-NII 2C	11	0.48	11
U-NII 3	30	1.03	30

Multiple Transmit

Mode	Channel	Frequency [MHz]	Reading [dBm]			T.F [dB] Note 1	Test Result [dBm]
			ANT 1	ANT 2	SUM		SUM
802.11n HT20	36	5180	-12.590	-9.810	-7.971	10.120	2.149
	40	5200	-10.130	-8.440	-6.193		3.927
	48	5240	-8.510	-6.230	-4.212		5.908
	52	5260	-8.820	-7.950	-5.353		4.767
	60	5300	-5.150	-4.230	-1.655		8.465
	64	5320	-8.330	-6.880	-4.534		5.586
	100	5500	-2.260	-2.910	0.437		10.557
	116	5580	-2.610	-3.590	-0.062		10.058
	140	5700	-3.370	-3.100	-0.223		9.897
	149	5745	-4.330	-2.900	-0.546	7.110	6.564
	157	5785	-2.740	-3.410	-0.052		7.058
	165	5825	-2.680	-2.310	0.519		7.629
802.11n HT40	38	5190	-13.080	-10.890	-8.838	10.240	1.402
	46	5230	-14.030	-11.680	-9.688		0.552
	54	5270	-13.730	-11.790	-9.642		0.598
	62	5310	-12.160	-11.410	-8.759		1.481
	102	5510	-8.294	-7.600	-4.923		5.317
	110	5550	-6.320	-5.320	-2.781		7.459
	134	5670	-6.120	-5.740	-2.916		7.324
	151	5755	-10.130	-9.510	-6.799	7.220	0.421
	159	5795	-5.570	-6.900	-3.174		4.046
802.11ac VHT80	42	5210	-15.720	-13.210	-11.276	10.430	-0.846
	-	-	-	-	-		-
	58	5290	-17.289	-15.960	-13.564		-3.134
	-	-	-	-	-		-
	106	5530	-14.780	-13.940	-11.329		-0.899
	-	-	-	-	-		-
	-	-	-	-	-		-
	155	5775	-16.509	-16.500	-13.494	7.420	-6.074
	-	-	-	-	-		-

Note 1: "Band 1, 2A, 2C [T.F] = D.C.F"

"Band 3 [T.F] = 10*LOG(500/100) + D.C.F"

For D.C.F., please refer to appendix II.

Note 2: Test Result = Measurement Data + T.F

Single Transmit

Mode		Channel	Frequency [MHz]	Reading [dBm]		T.F [dB] Note 1	Test Result [dBm]	
				ANT 1	ANT 2		ANT 1	ANT 2
802.11ac VHT20	U-NII 2C	144	5720	-6.774	-6.550	10.070	3.296	3.520
	U-NII 3	144	5720	-7.638	-8.266	7.060	-0.578	-1.206
802.11ac VHT40	U-NII 2C	142	5710	-5.376	-6.063	10.120	4.744	4.057
	U-NII 3	142	5710	-9.230	-9.047	7.110	-2.120	-1.937
802.11ac VHT80	U-NII 2C	138	5690	-10.010	-11.392	10.260	0.250	-1.132
	U-NII 3	138	5690	-13.638	-14.653	7.250	-6.388	-7.403

Multiple Transmit

Mode		Channel	Frequency [MHz]	Reading [dBm]			T.F [dB]	Test Result [dBm]
				ANT 1	ANT 2	SUM		
802.11ac VHT20	U-NII 2C	144	5720	-5.455	-4.821	-2.116	10.120	8.004
	U-NII 3	144	5720	-6.384	-5.609	-2.969	7.110	4.141
802.11ac VHT40	U-NII 2C	142	5710	-7.176	-6.757	-3.951	10.240	6.289
	U-NII 3	142	5710	-10.006	-10.551	-7.260	7.230	-0.030
802.11ac VHT80	U-NII 2C	138	5690	-8.819	-8.116	-5.443	10.430	4.987
	U-NII 3	138	5690	-11.815	-12.524	-9.145	7.420	-1.725

Note 1: "Band 1, 2A, 2C [T.F] = D.C.F"

"Band 3 [T.F] = 10*LOG(500/100) + D.C.F"

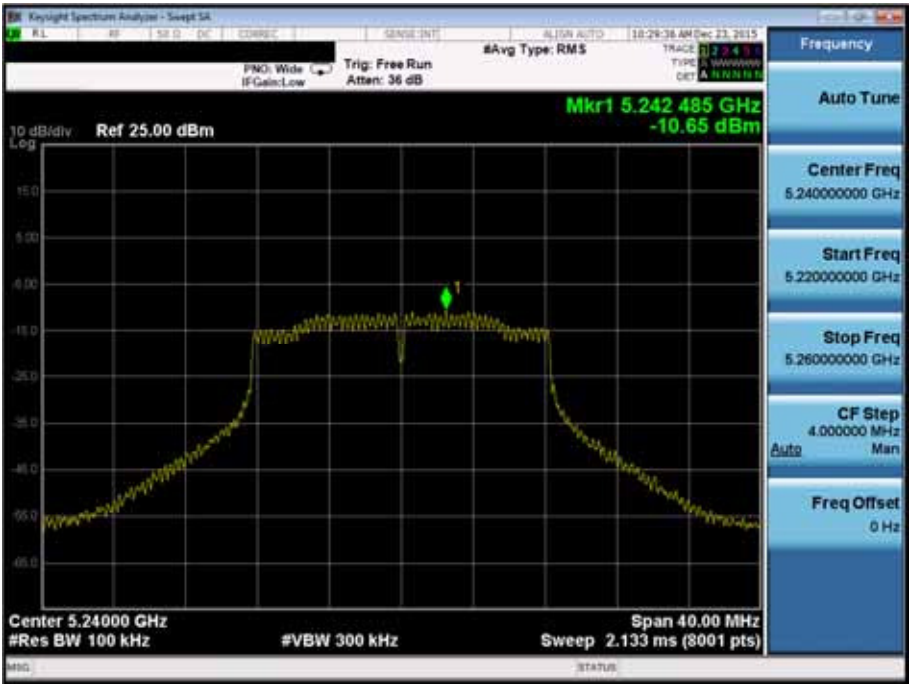
For D.C.F., please refer to appendix II.

Note 2: Test Result = Measurement Data + T.F



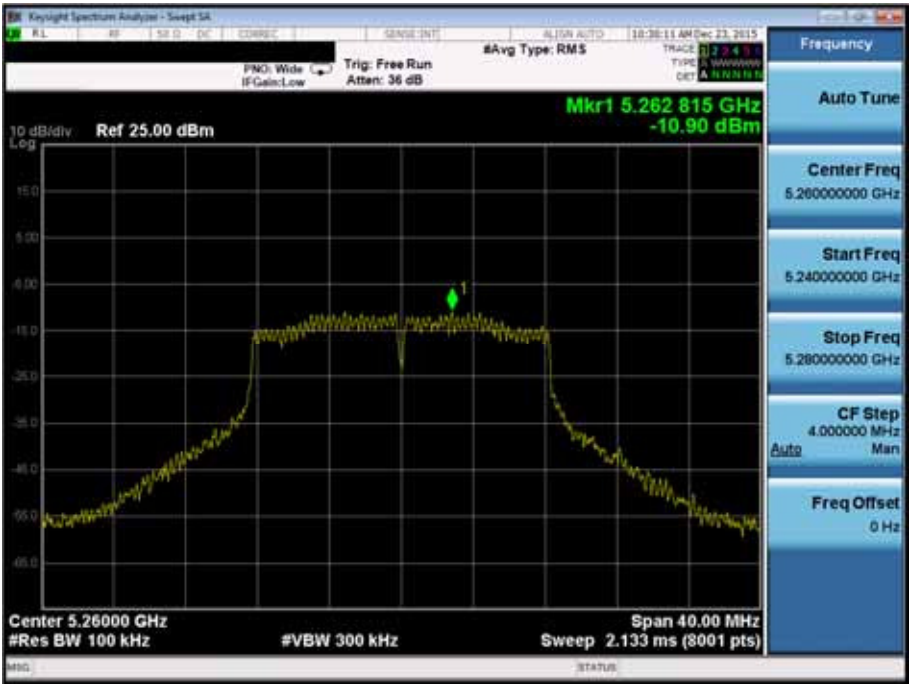
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 1 & Ch.48



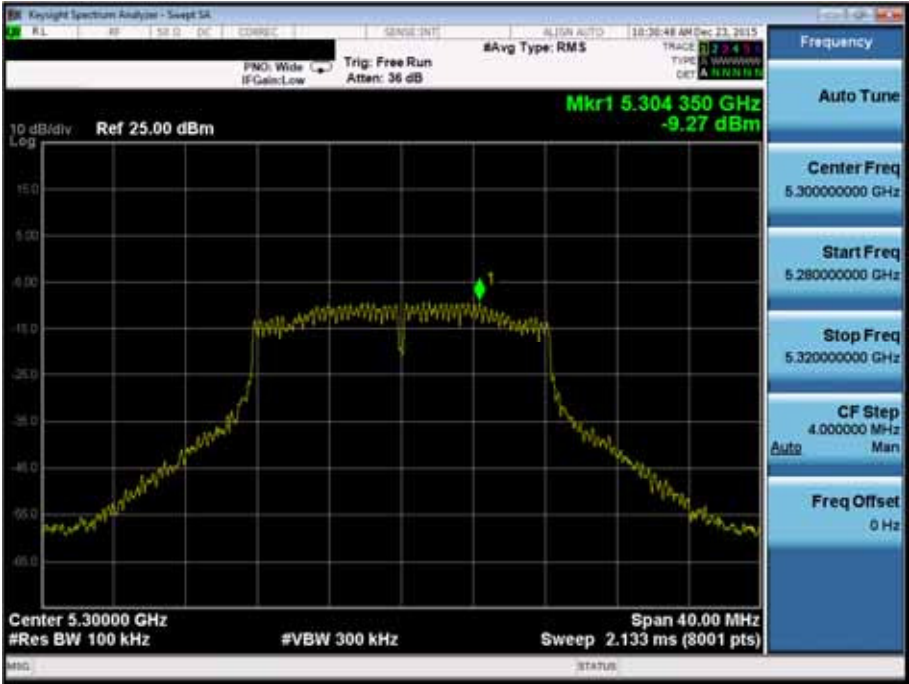
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 1 & Ch.52



Maximum Power Spectral Density

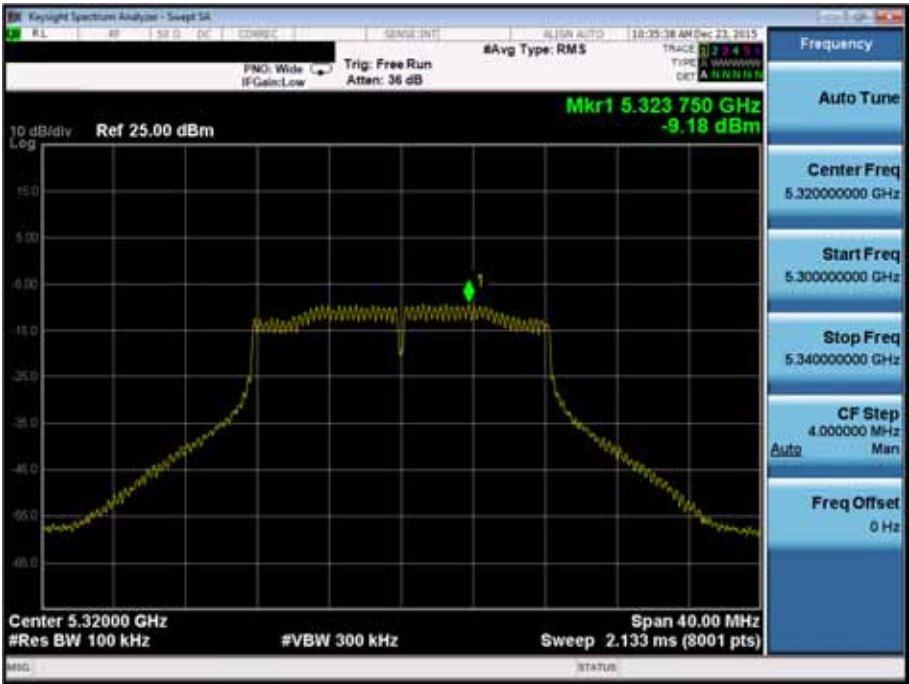
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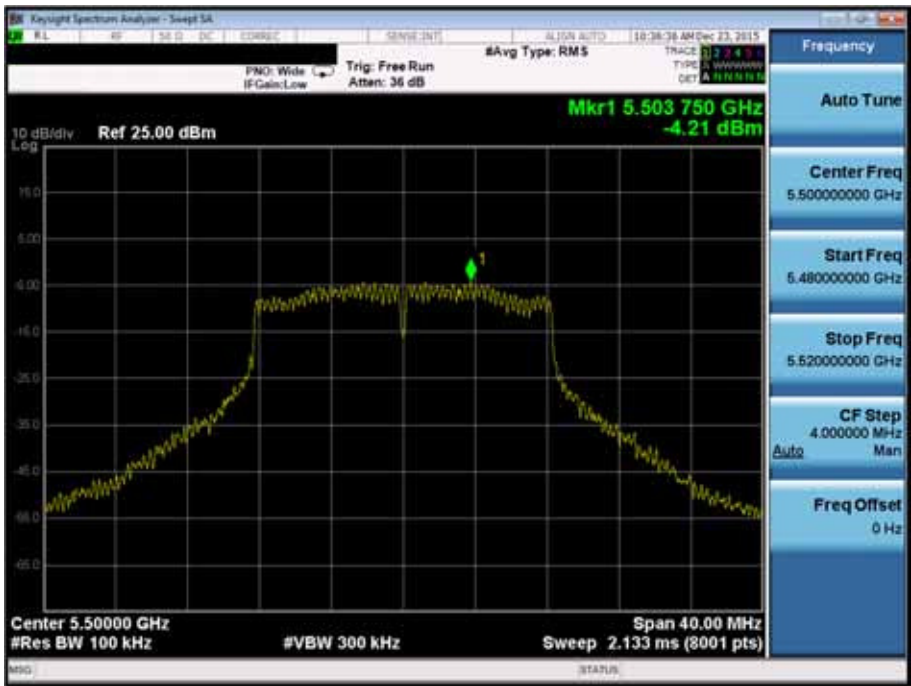
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 1 & Ch.64



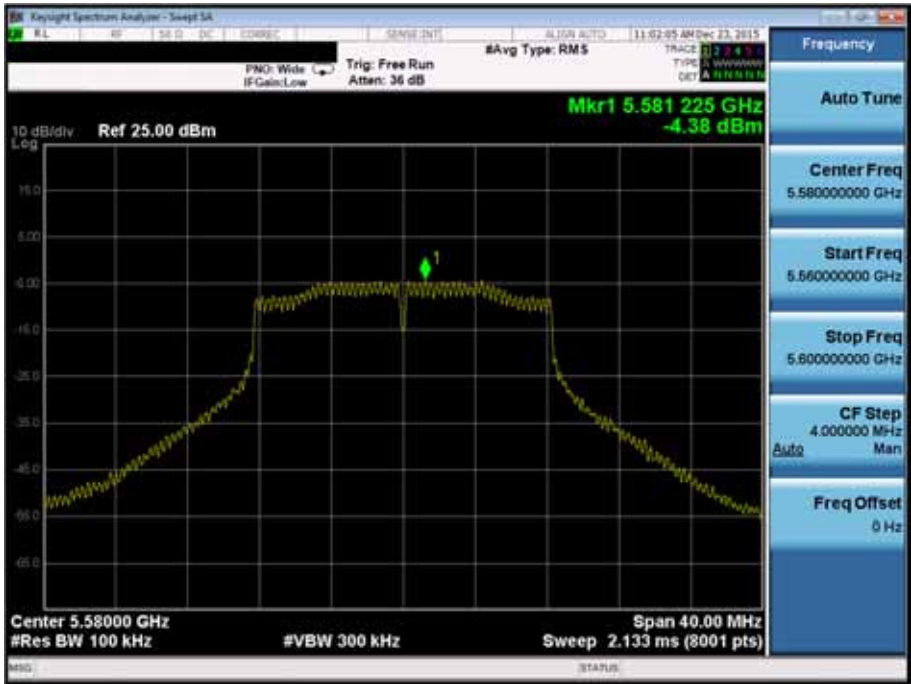
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 1 & Ch.100



Maximum Power Spectral Density

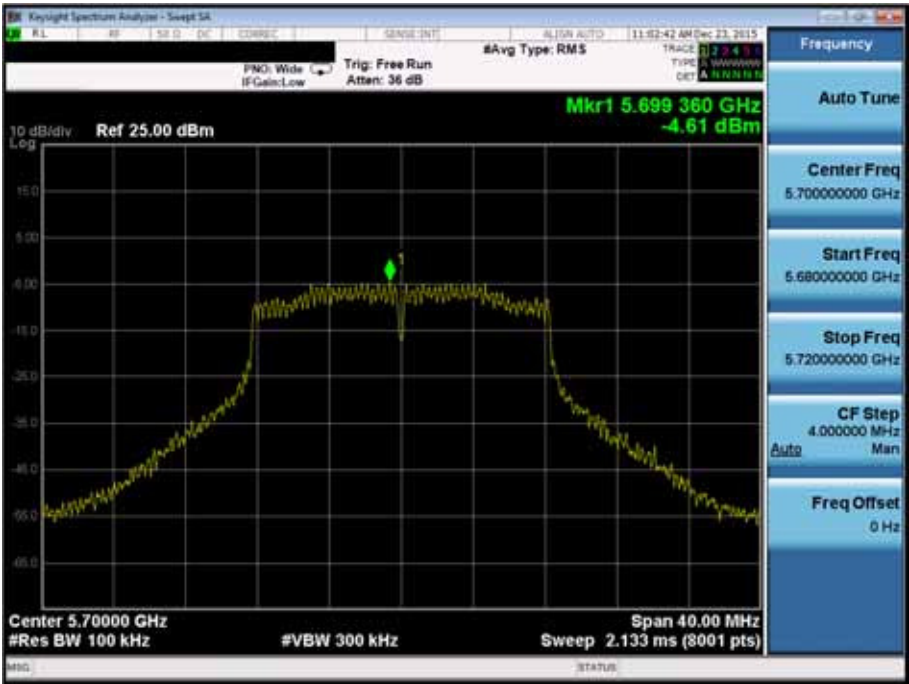
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Maximum Power Spectral Density

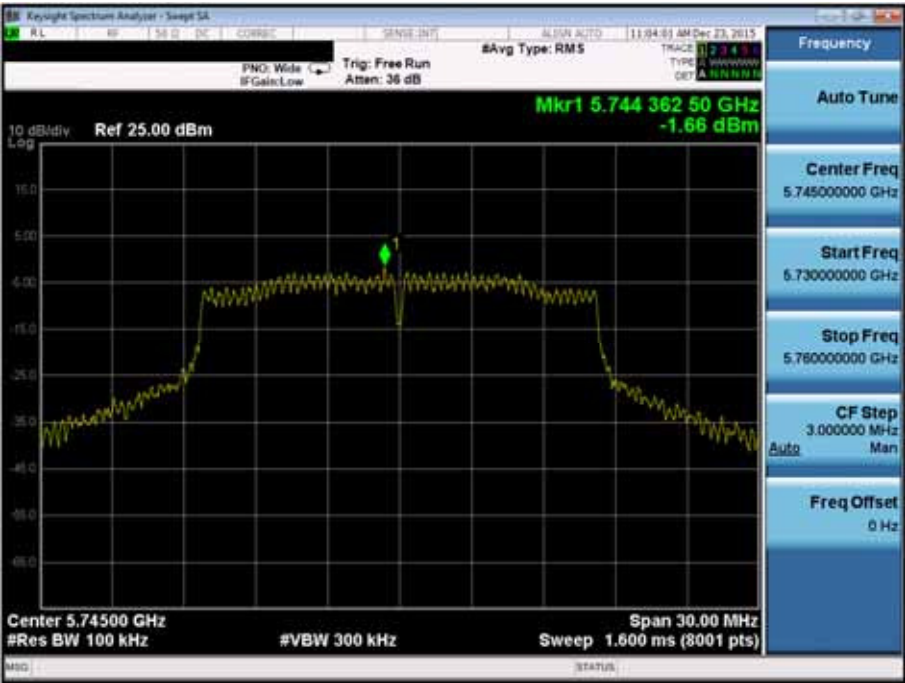
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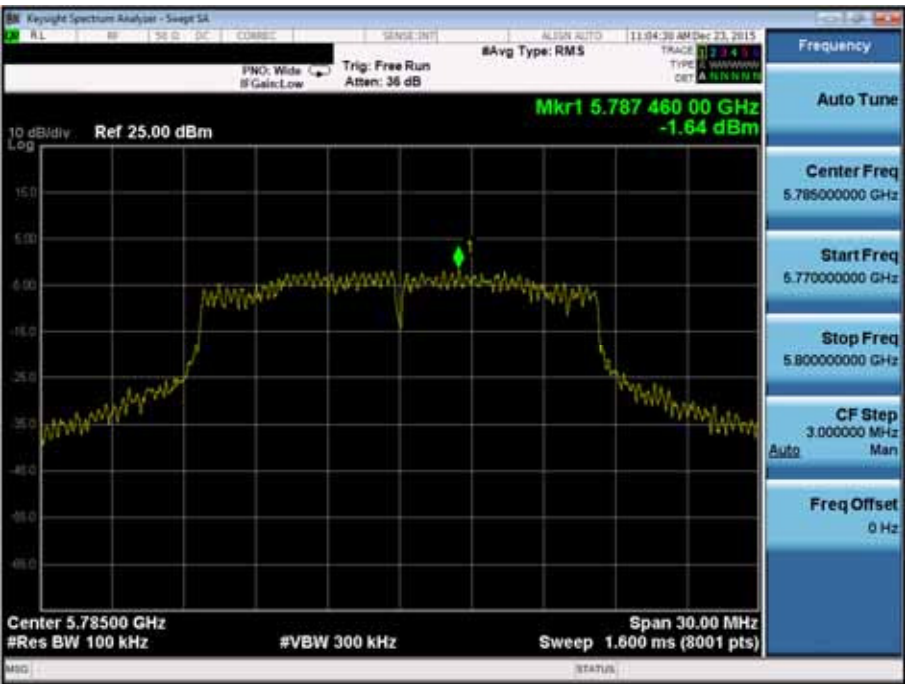
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 1 & Ch.149



Maximum Power Spectral Density

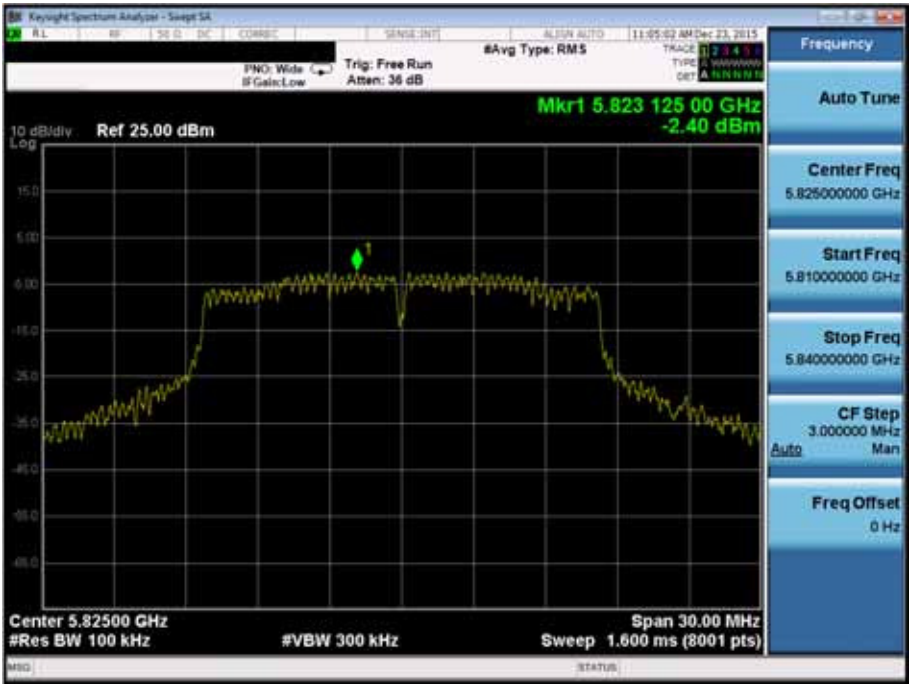
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Maximum Power Spectral Density

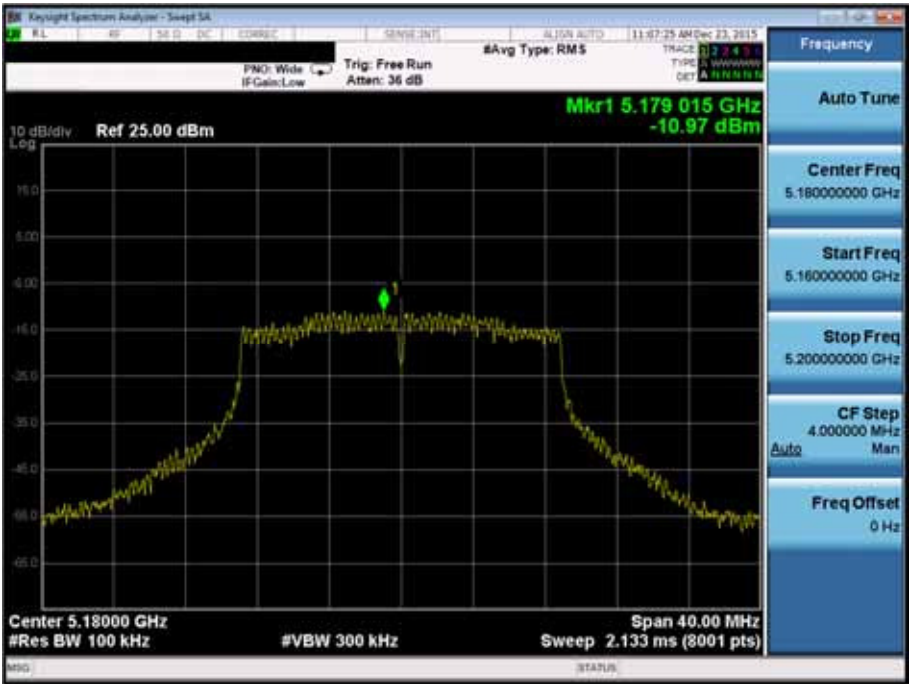
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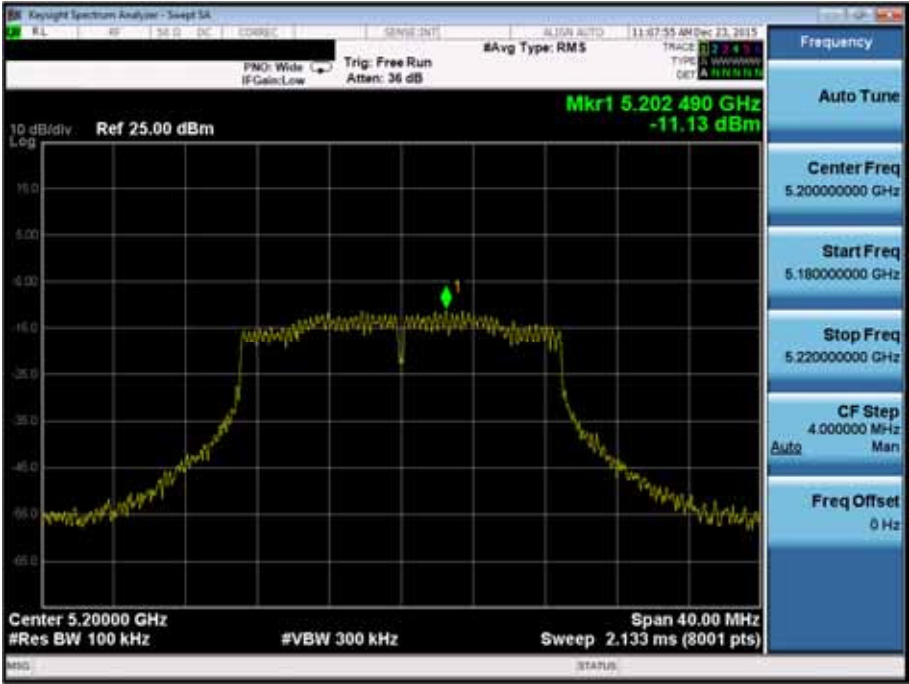
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 1 & Ch.36



Maximum Power Spectral Density

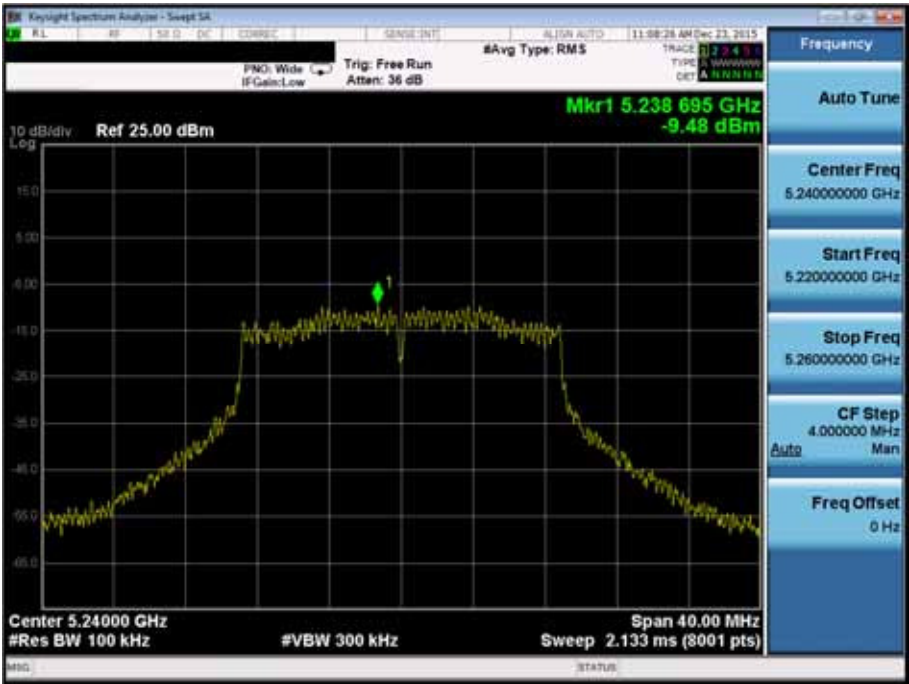
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Maximum Power Spectral Density

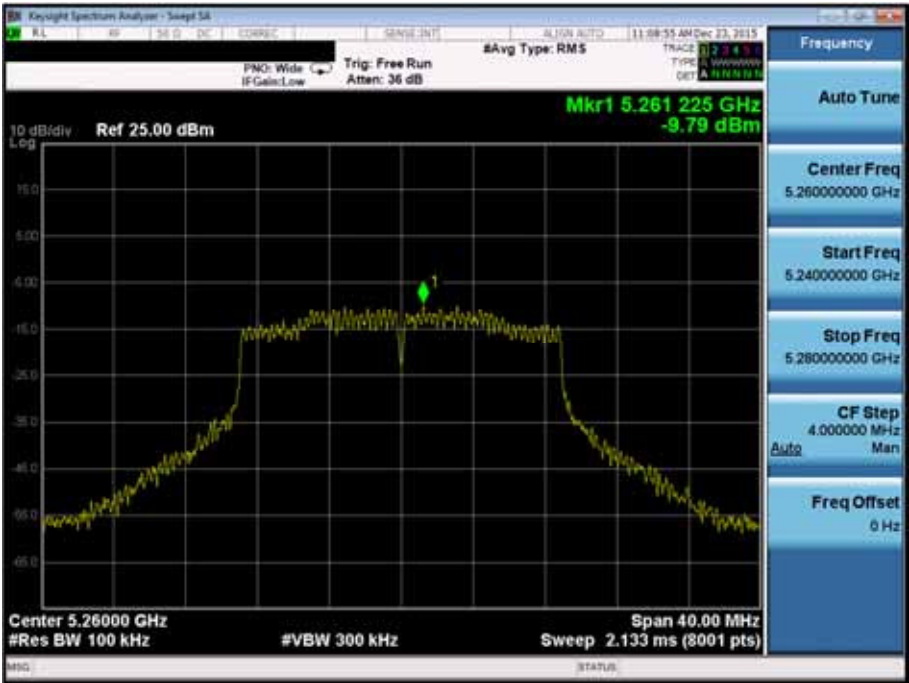
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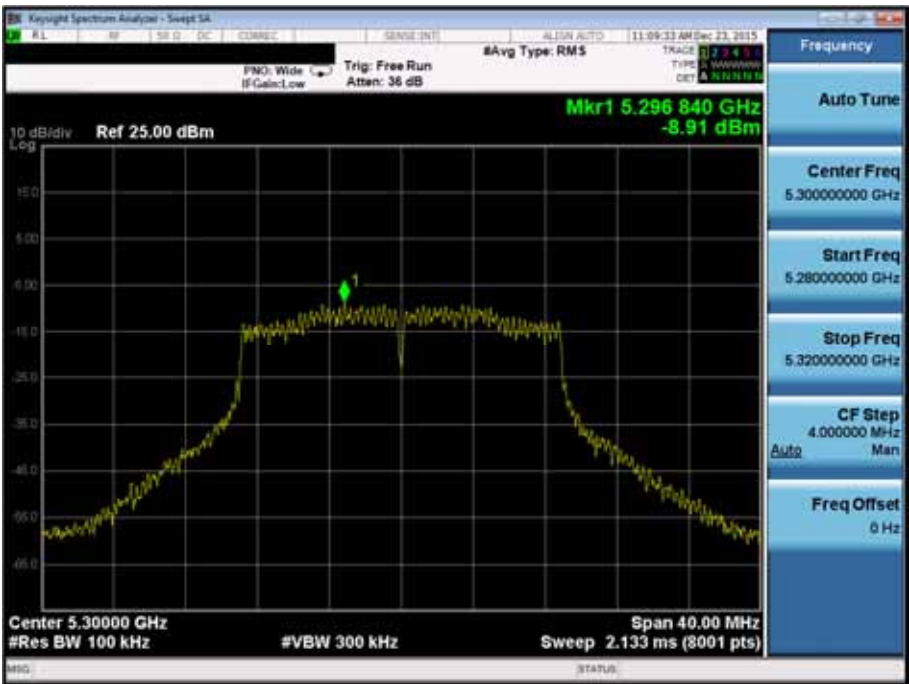
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 1 & Ch.52



Maximum Power Spectral Density

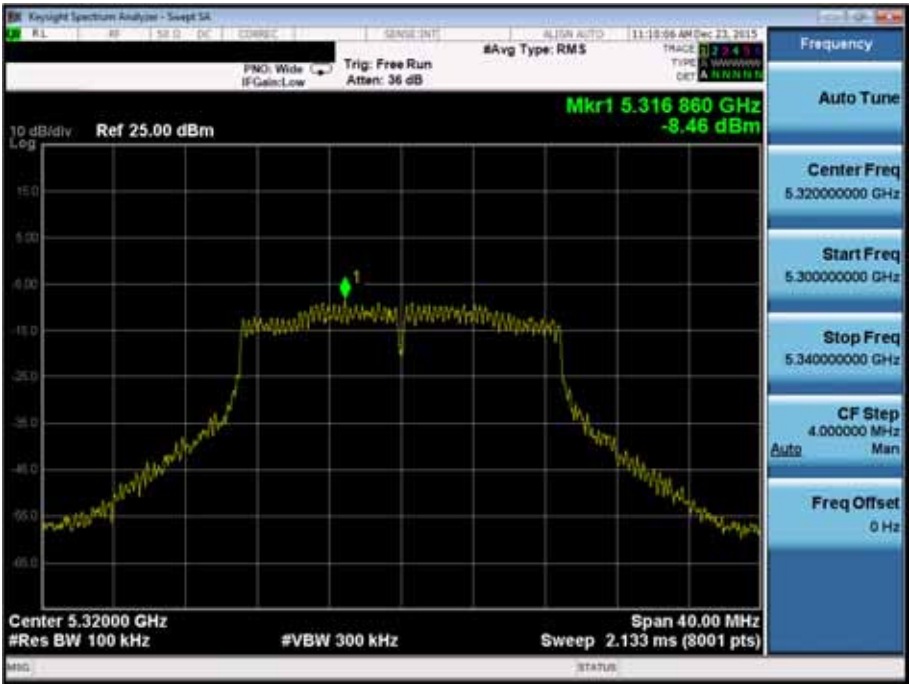
Test Mode: 802.11n HT20 & ANT 1 & Ch.60





Maximum Power Spectral Density

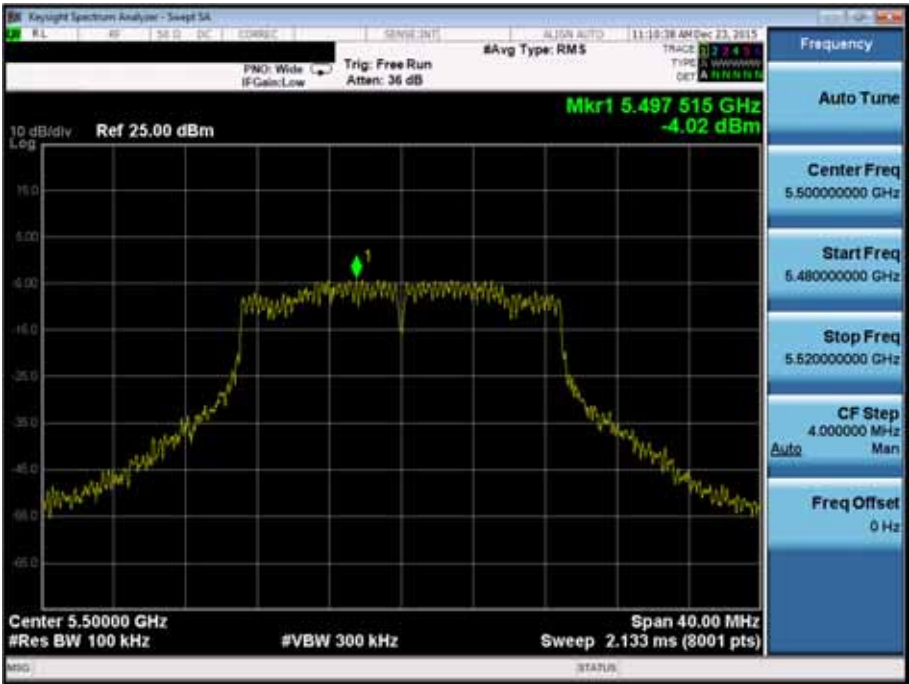
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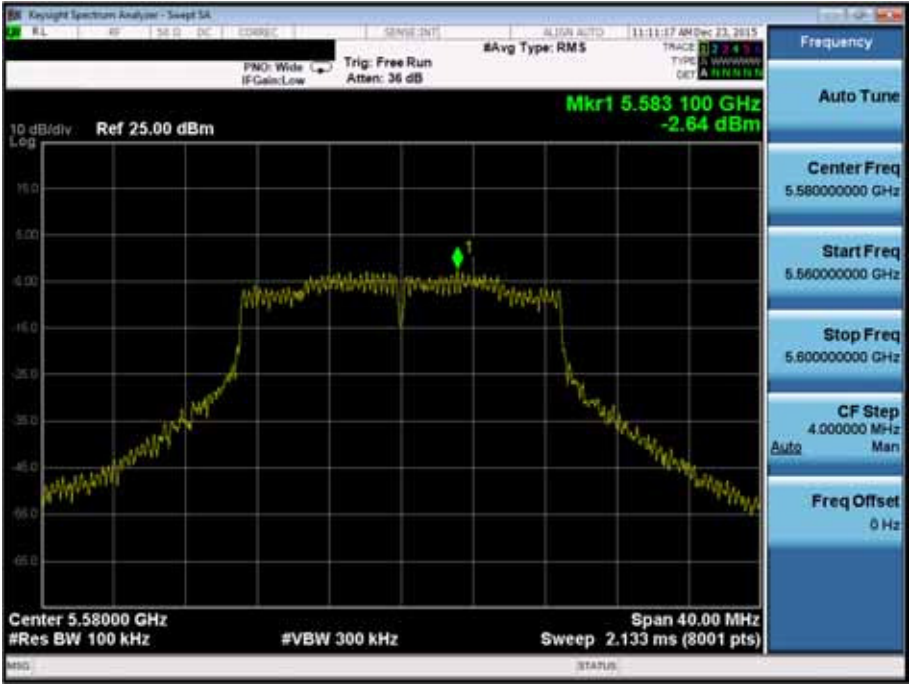
Maximum Power Spectral Density

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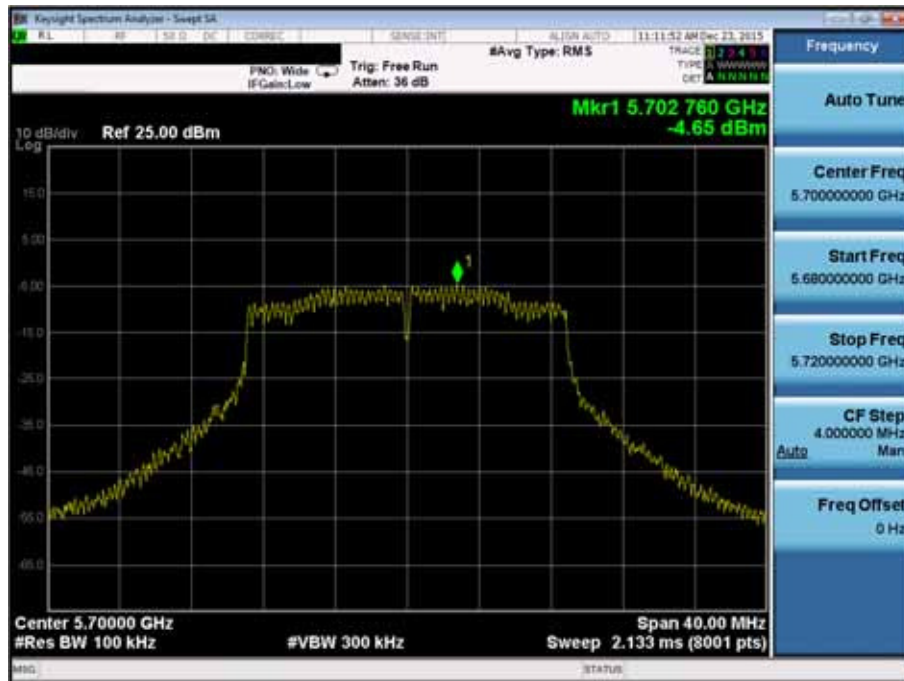


Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 1 & Ch.116



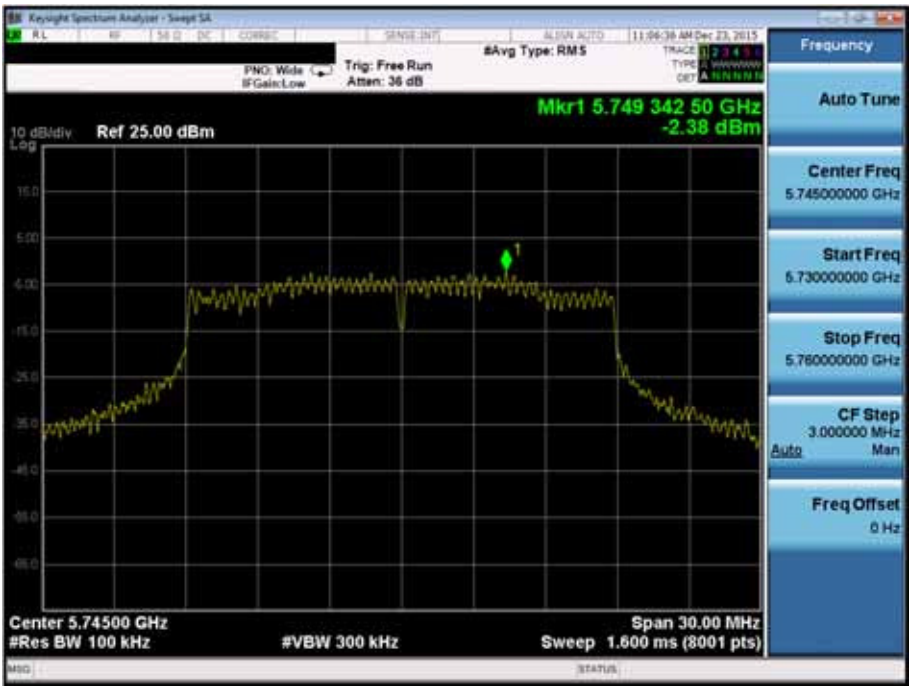
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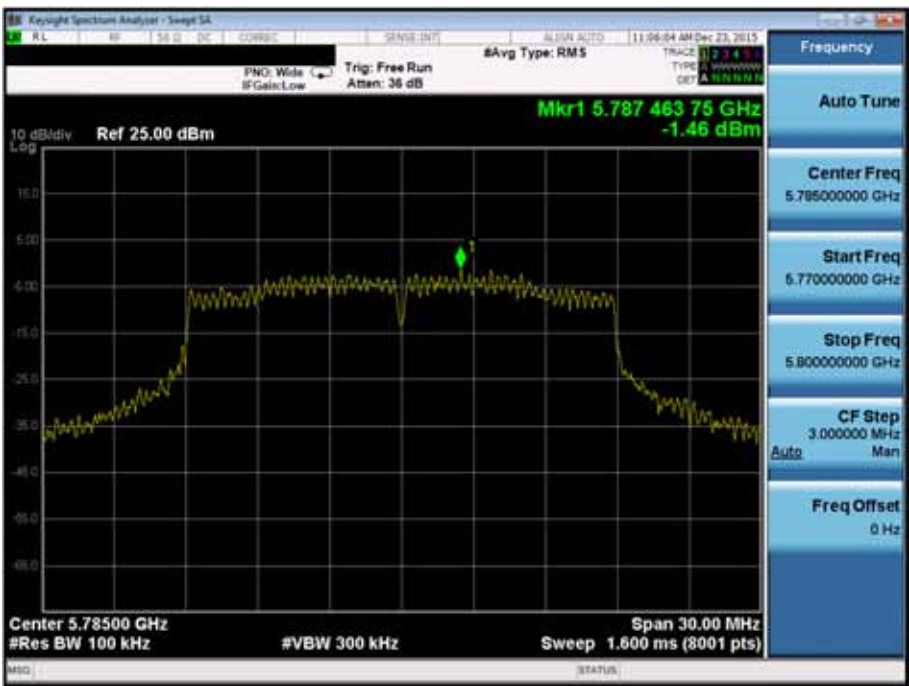
Maximum Power Spectral Density

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Maximum Power Spectral Density

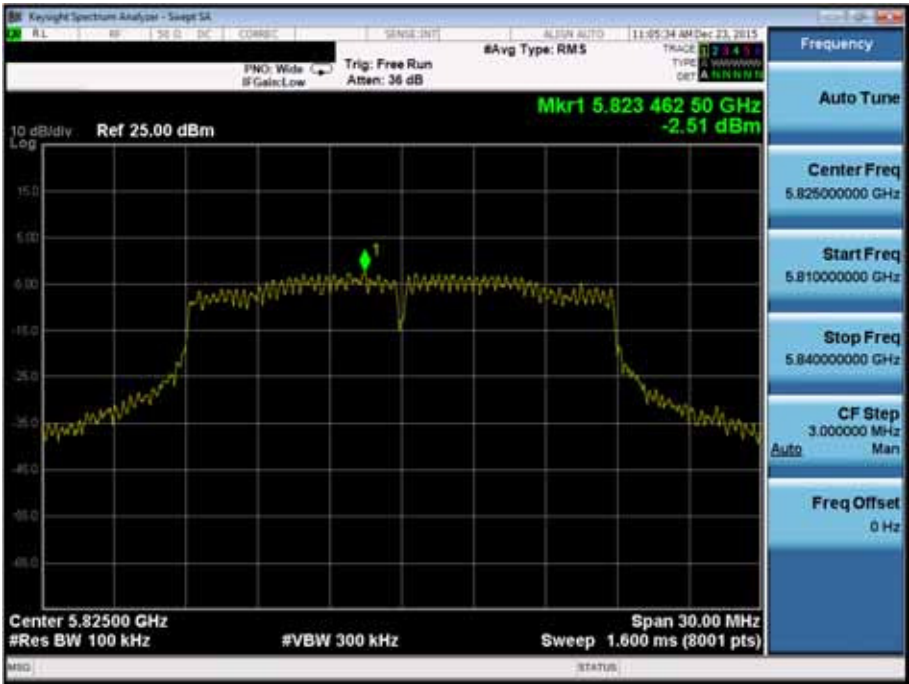
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Maximum Power Spectral Density

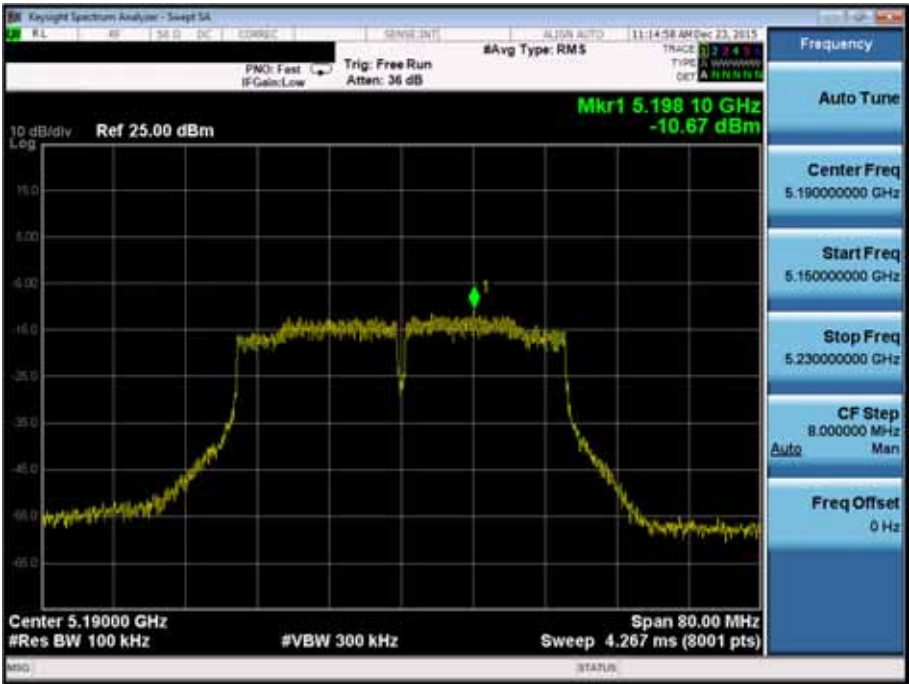
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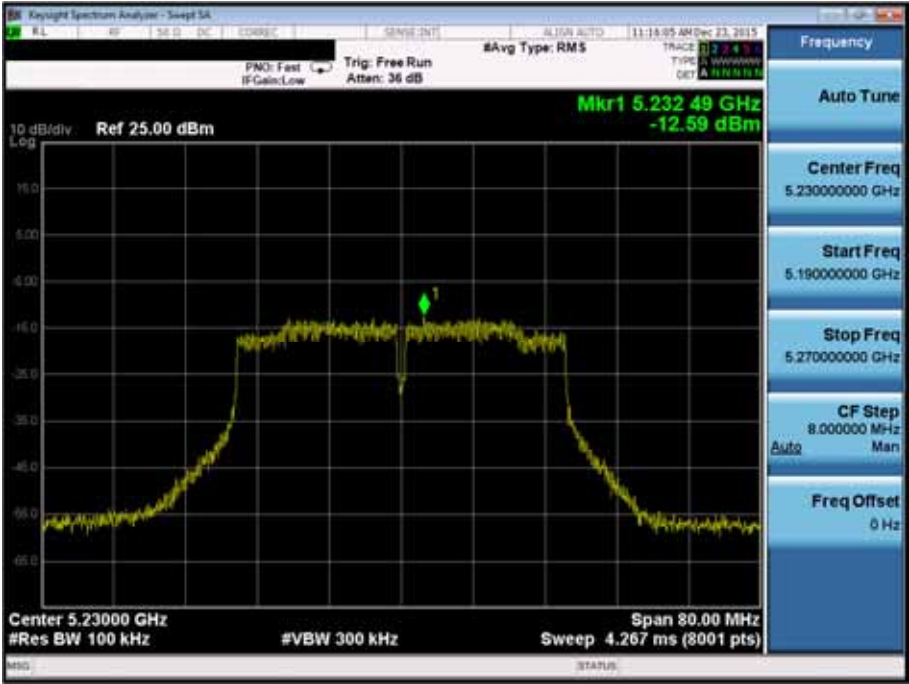
Maximum Power Spectral Density

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Maximum Power Spectral Density

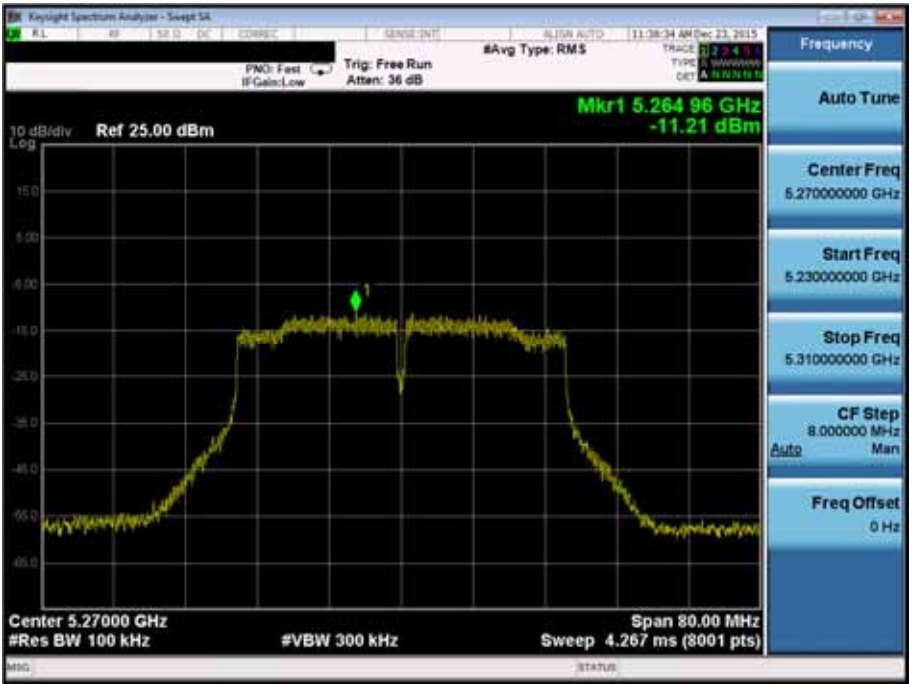
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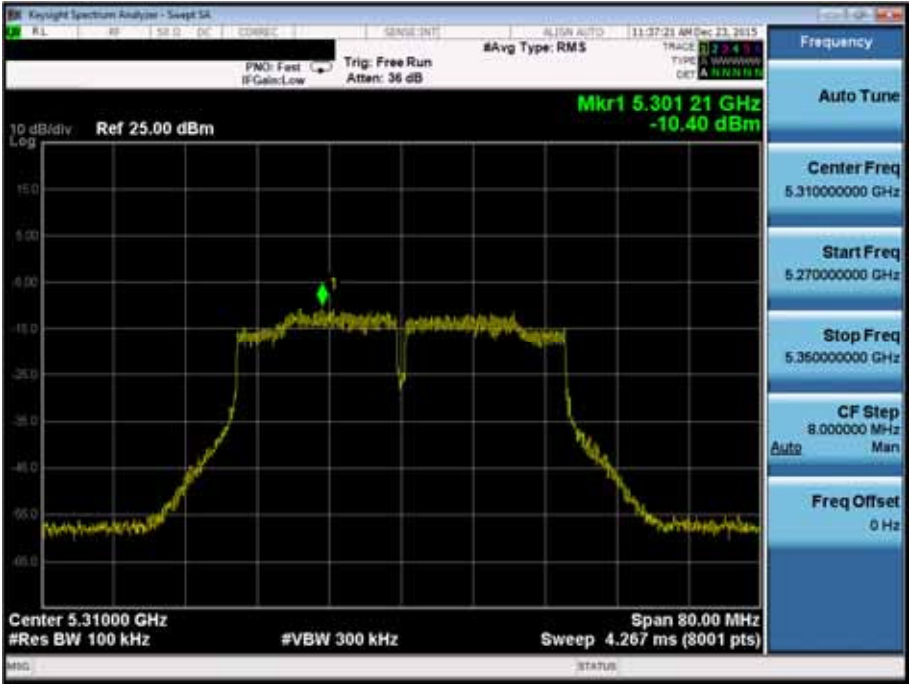
Maximum Power Spectral Density

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Maximum Power Spectral Density

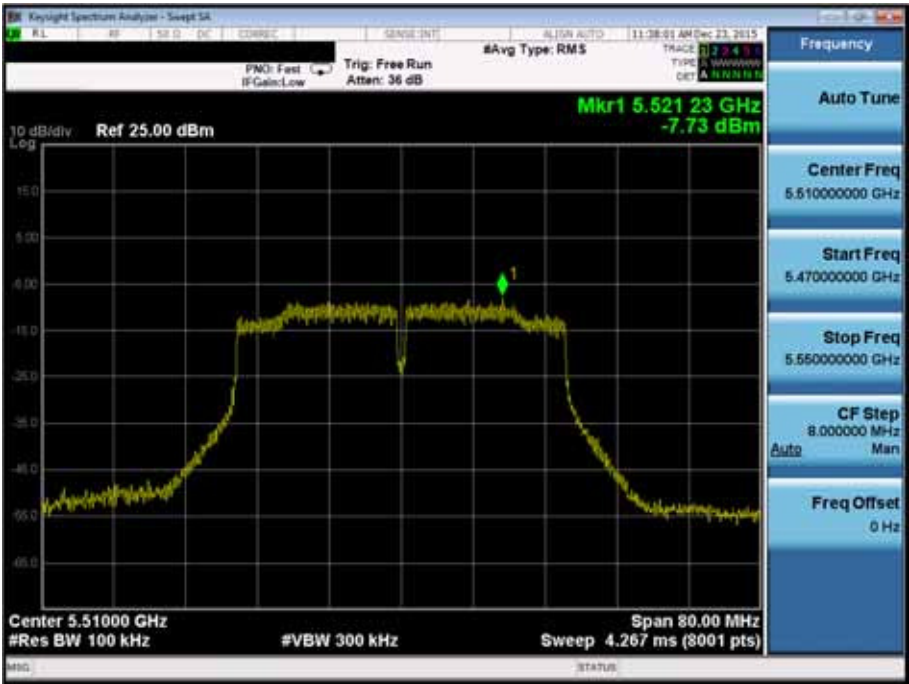
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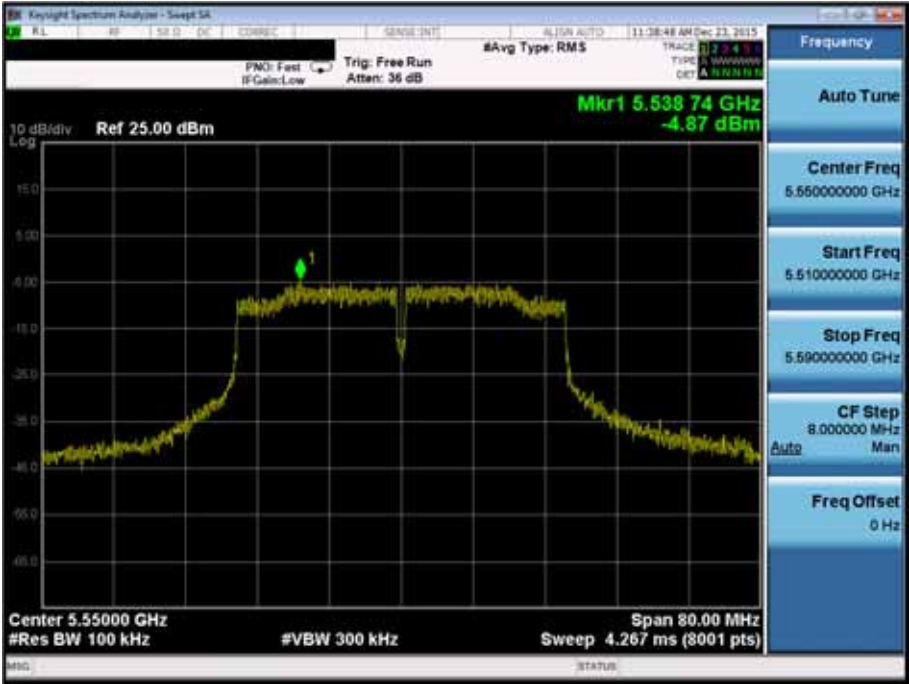
Maximum Power Spectral Density

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Maximum Power Spectral Density

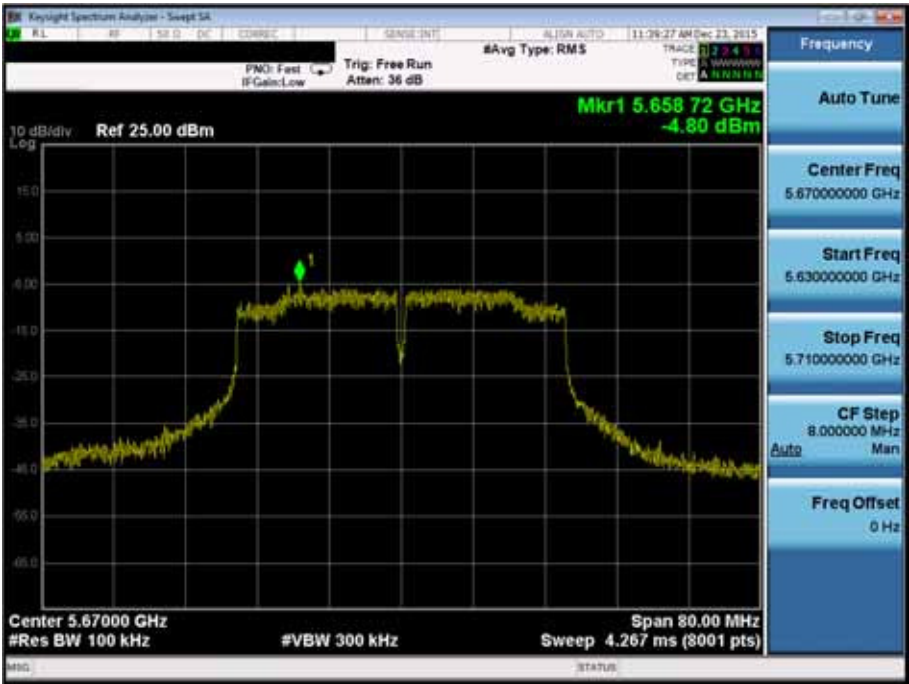
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Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.134





Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.151



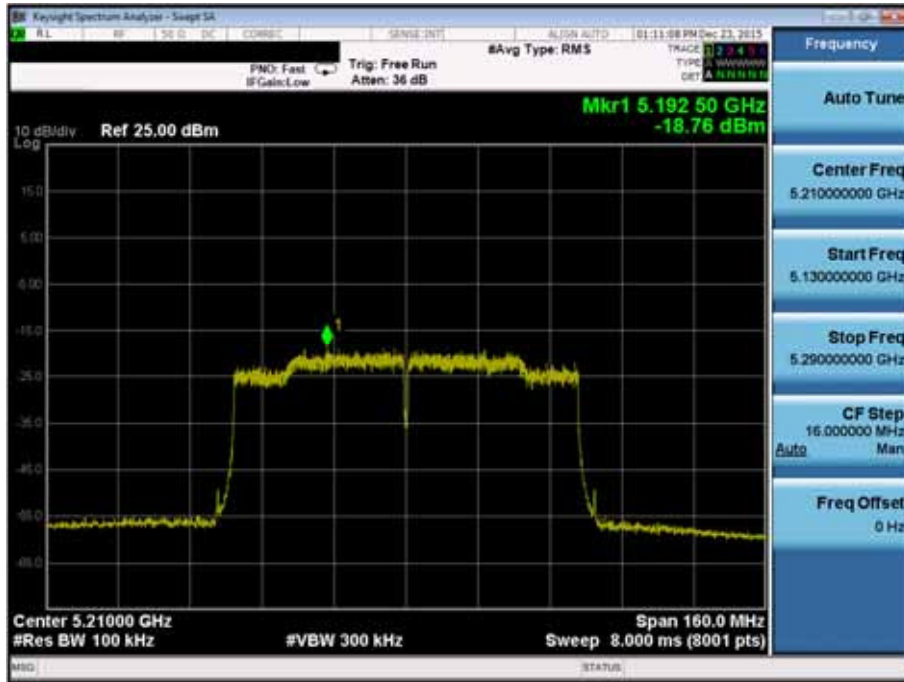
Maximum Power Spectral Density

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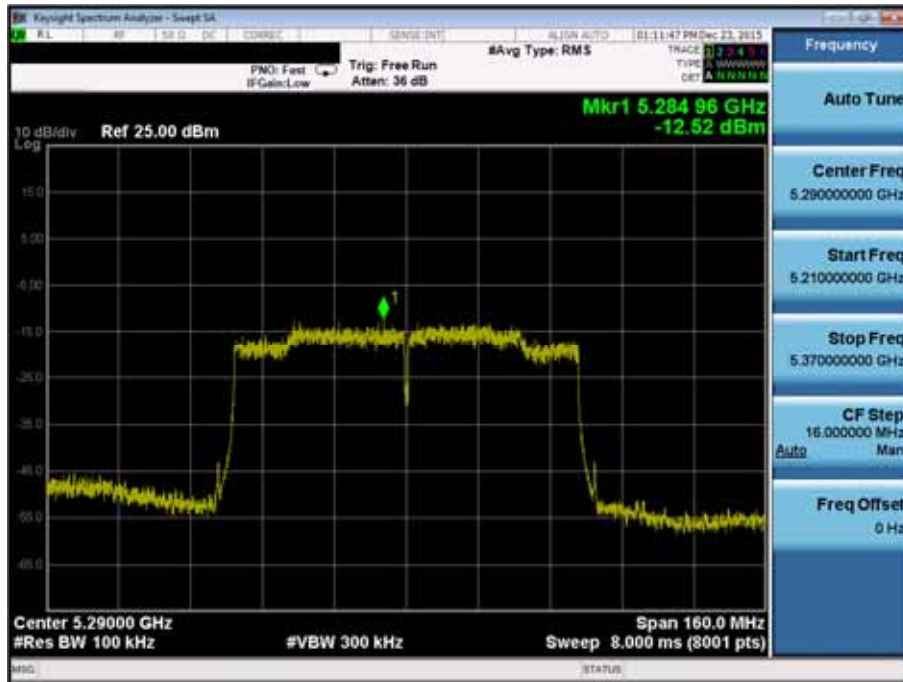
Maximum Power Spectral Density

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Maximum Power Spectral Density

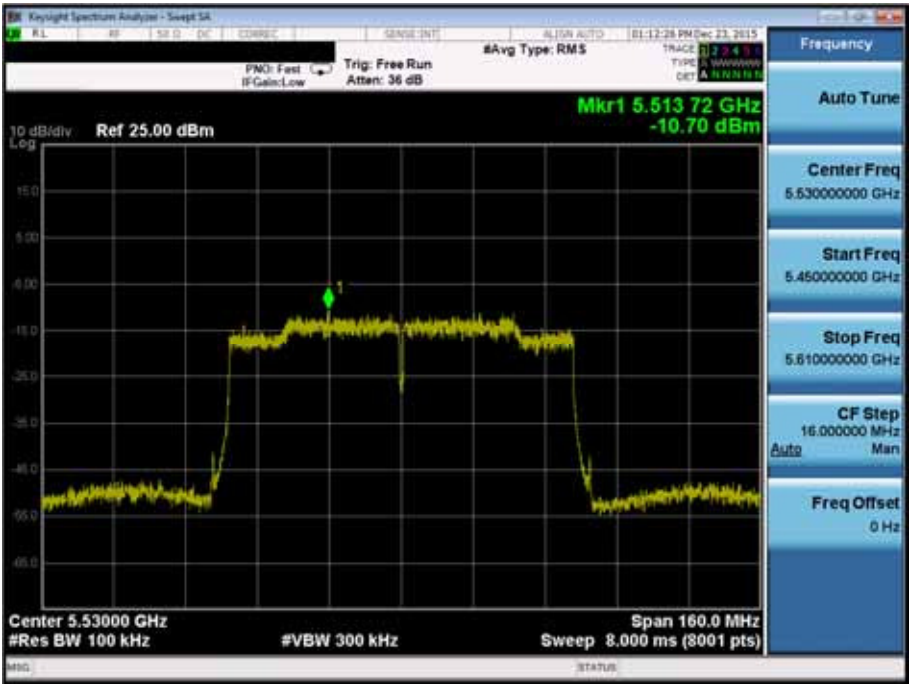
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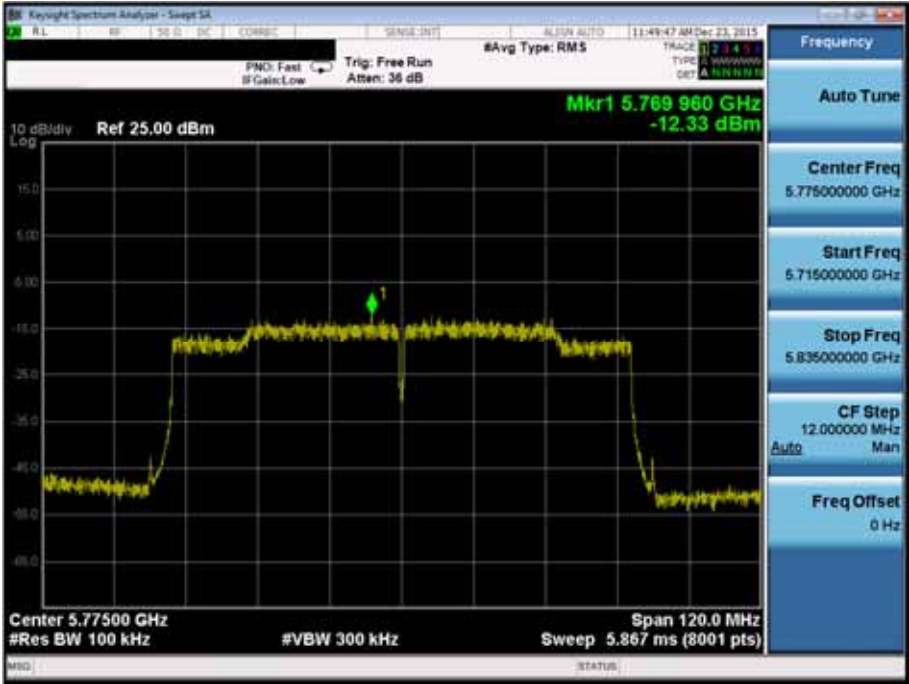
Maximum Power Spectral Density

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Maximum Power Spectral Density

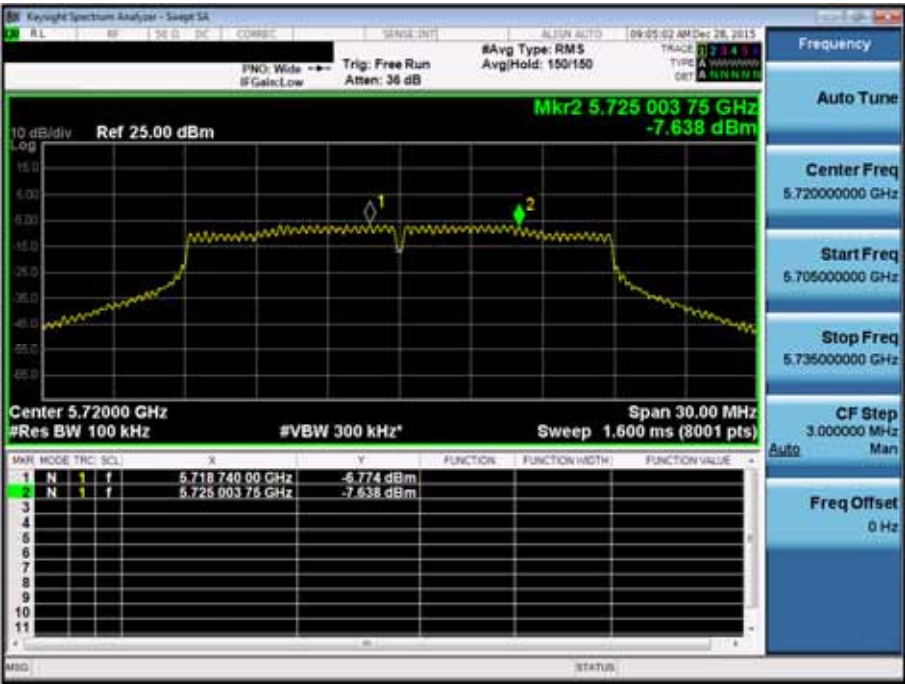
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Maximum Power Spectral Density

Test Mode: 802.11ac VHT20 & ANT 1 & Ch.144



Maximum Power Spectral Density

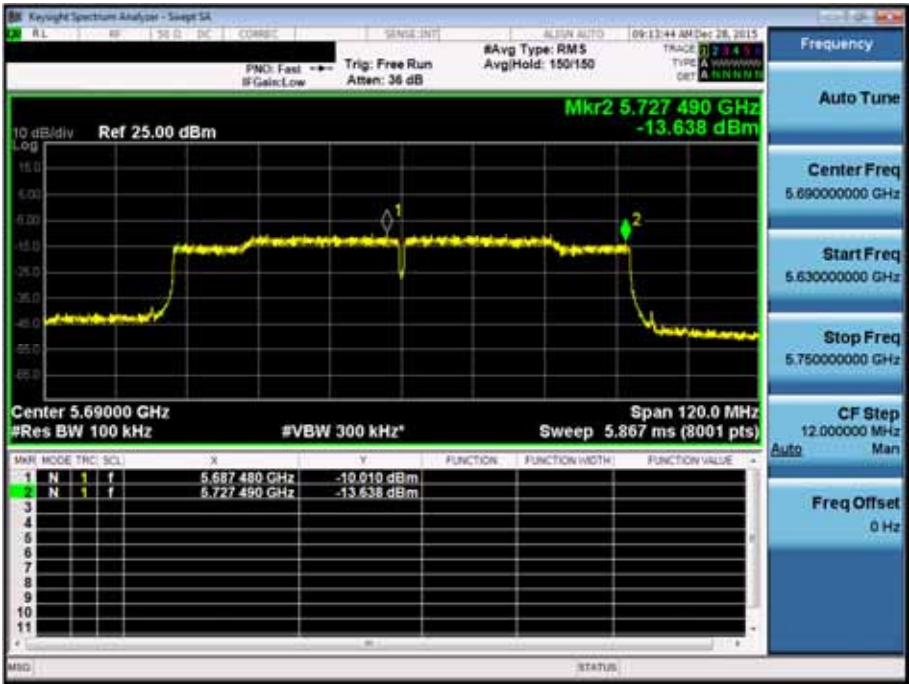
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Maximum Power Spectral Density

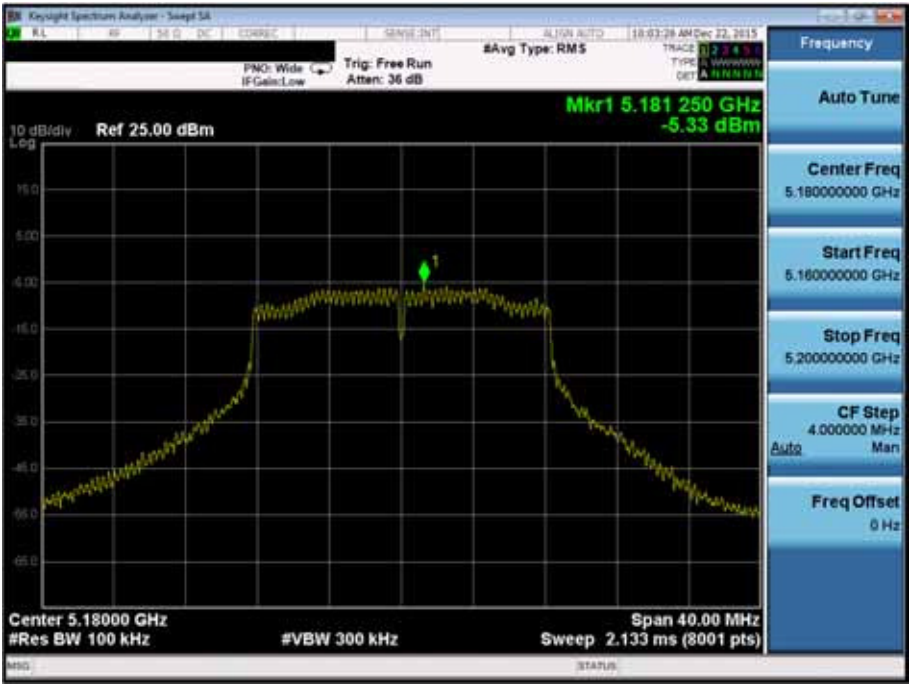
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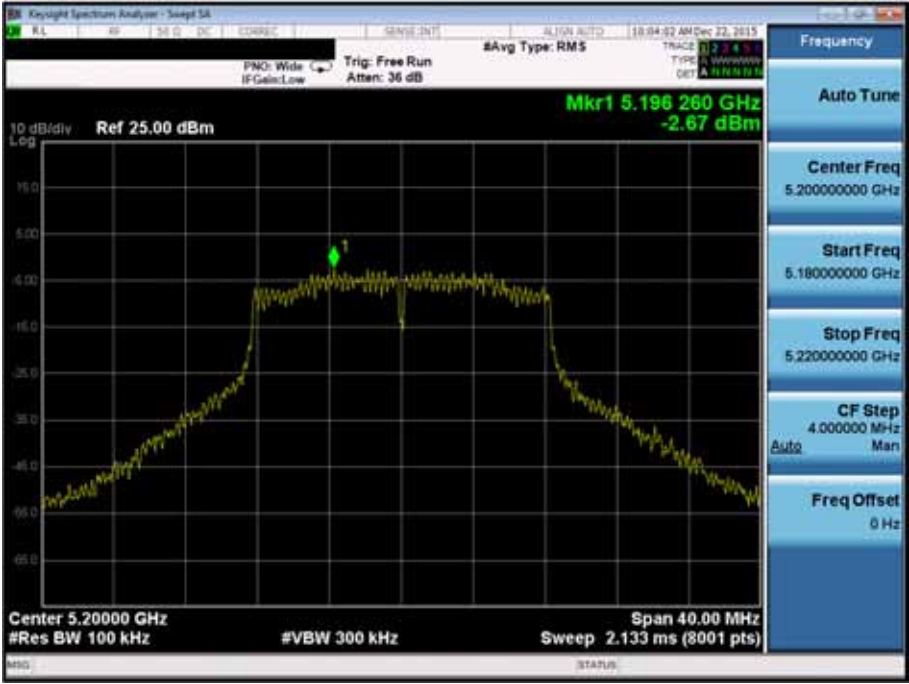
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 2 & Ch.36



Maximum Power Spectral Density

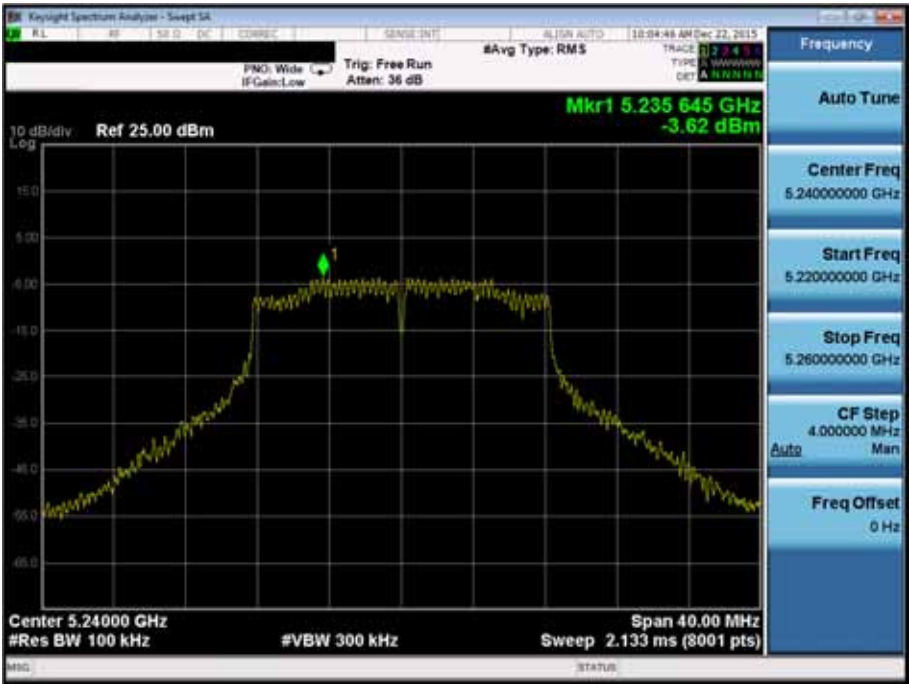
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Maximum Power Spectral Density

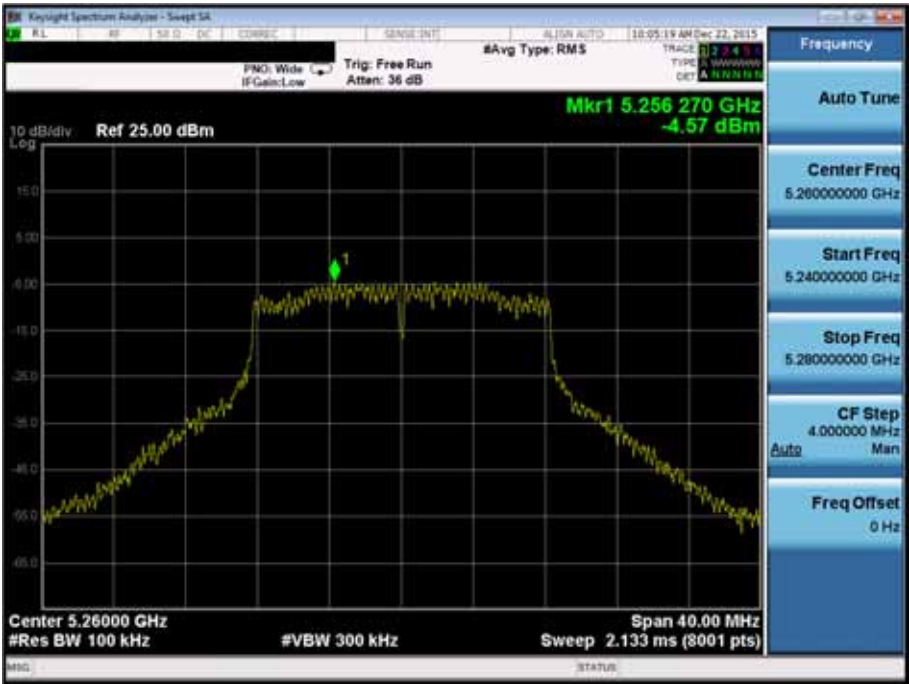
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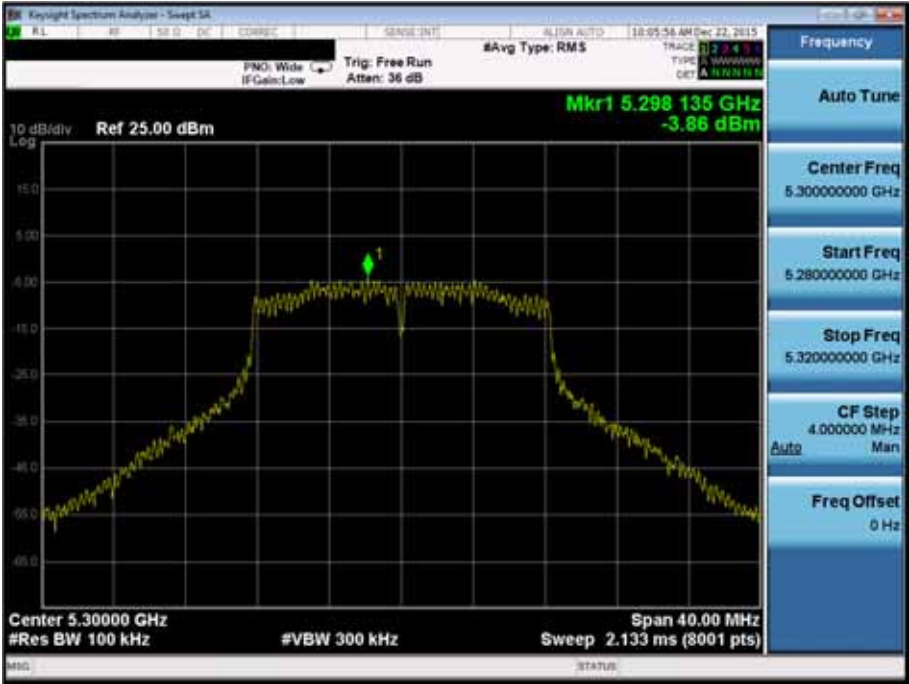
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 2 & Ch.52



Maximum Power Spectral Density

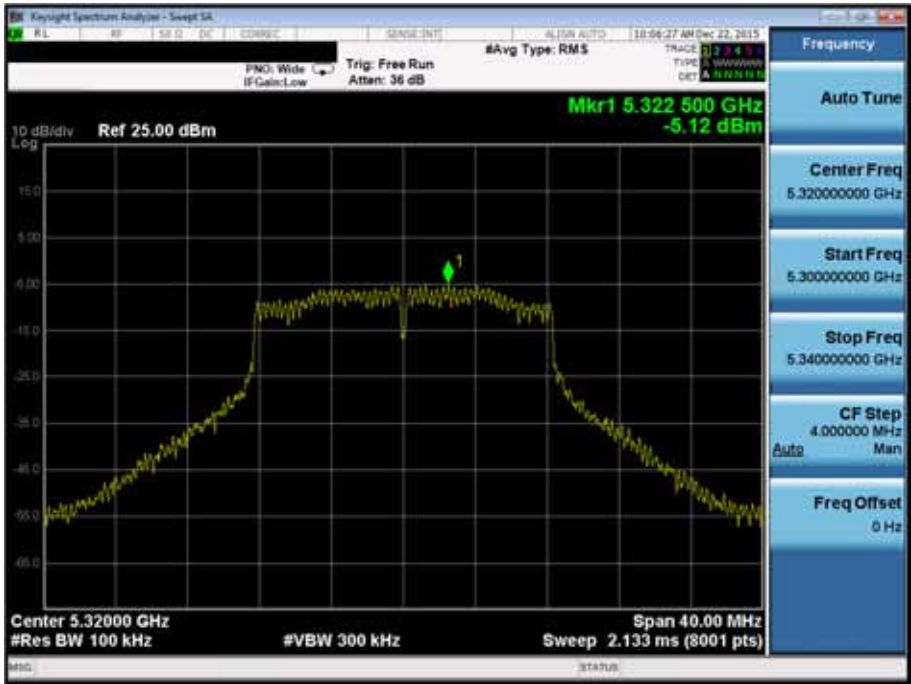
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Maximum Power Spectral Density

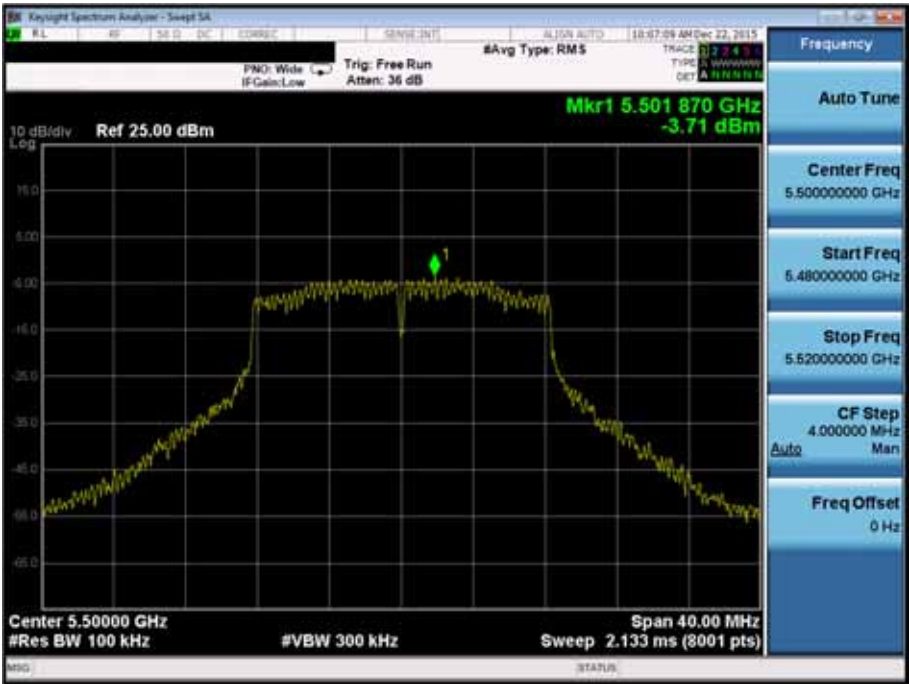
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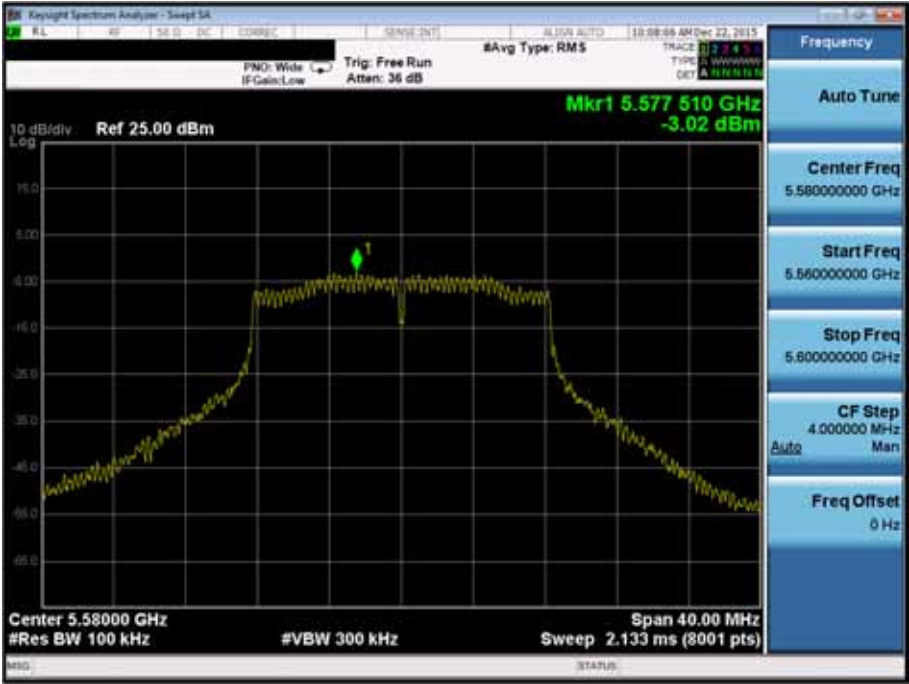
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 2 & Ch.100



Maximum Power Spectral Density

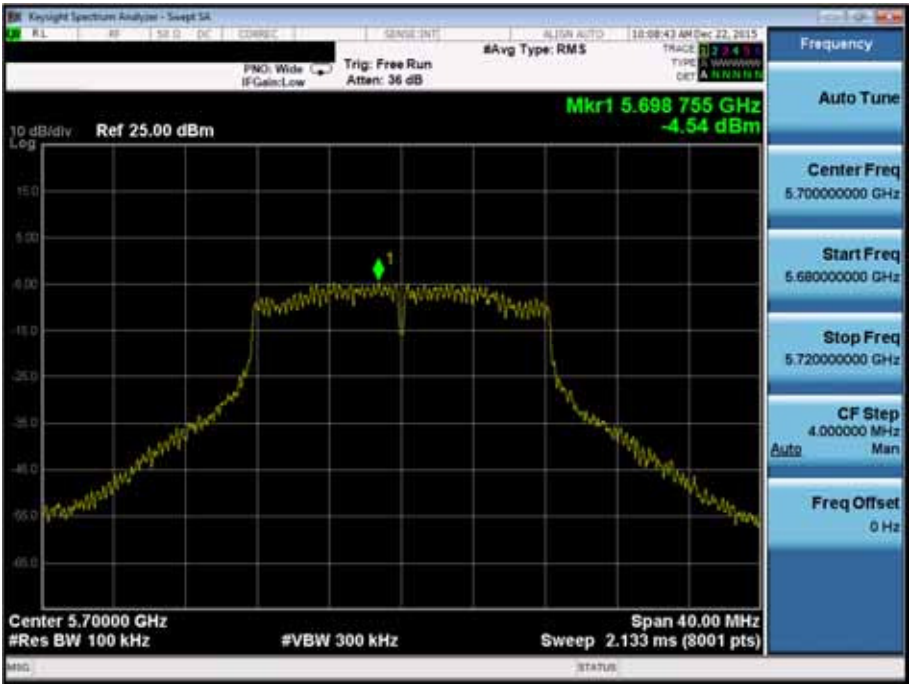
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Maximum Power Spectral Density

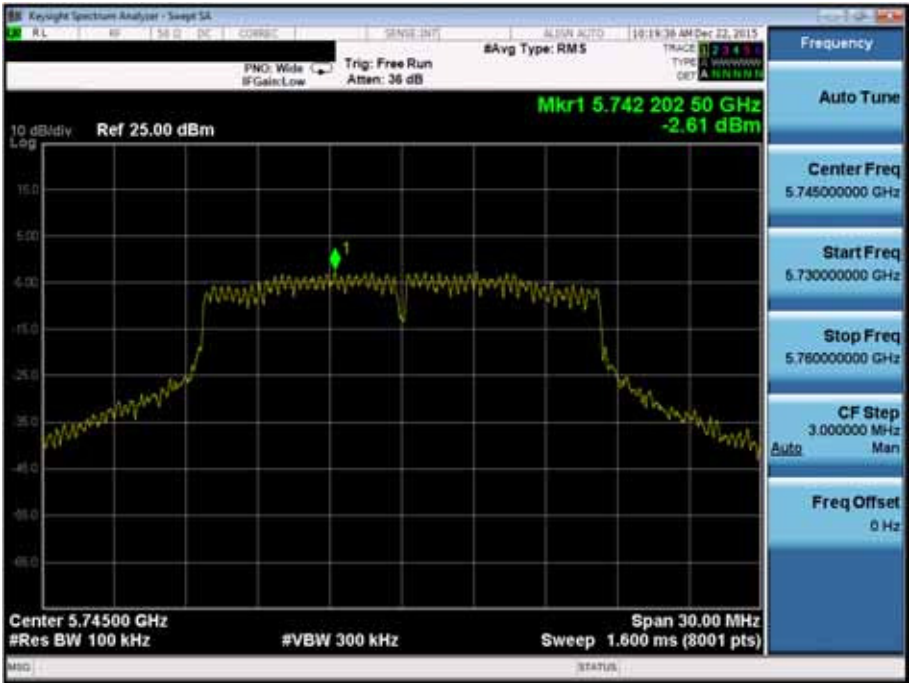
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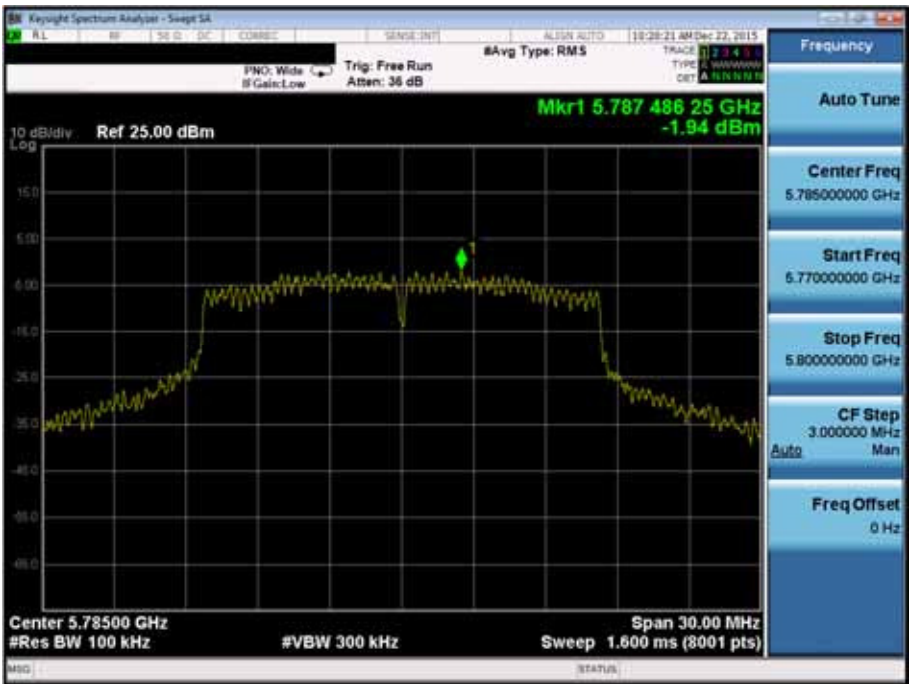
Maximum Power Spectral Density

Test Mode: 802.11a & ANT 2 & Ch.149



Maximum Power Spectral Density

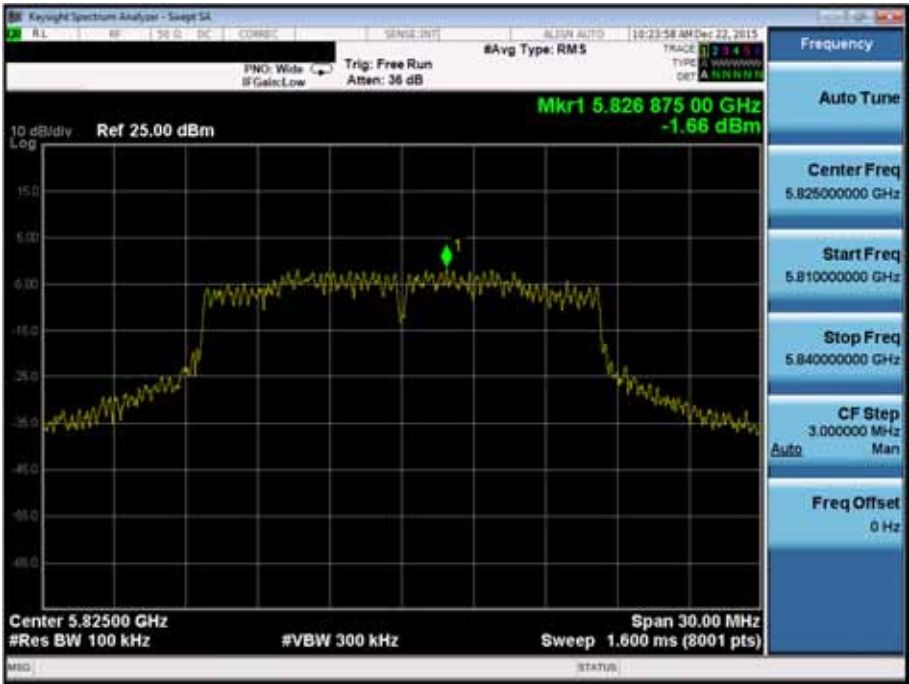
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Maximum Power Spectral Density

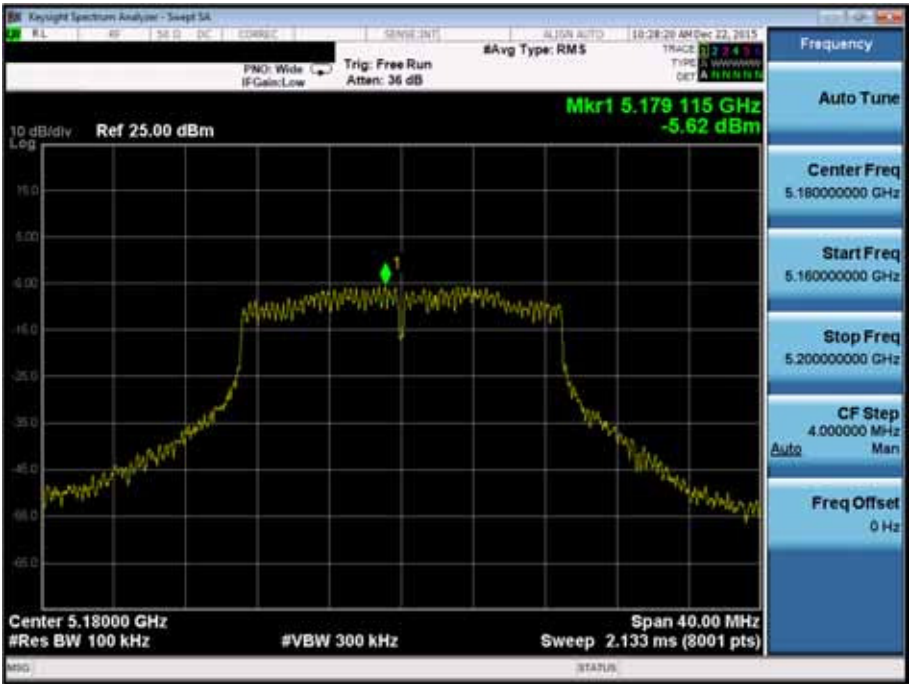
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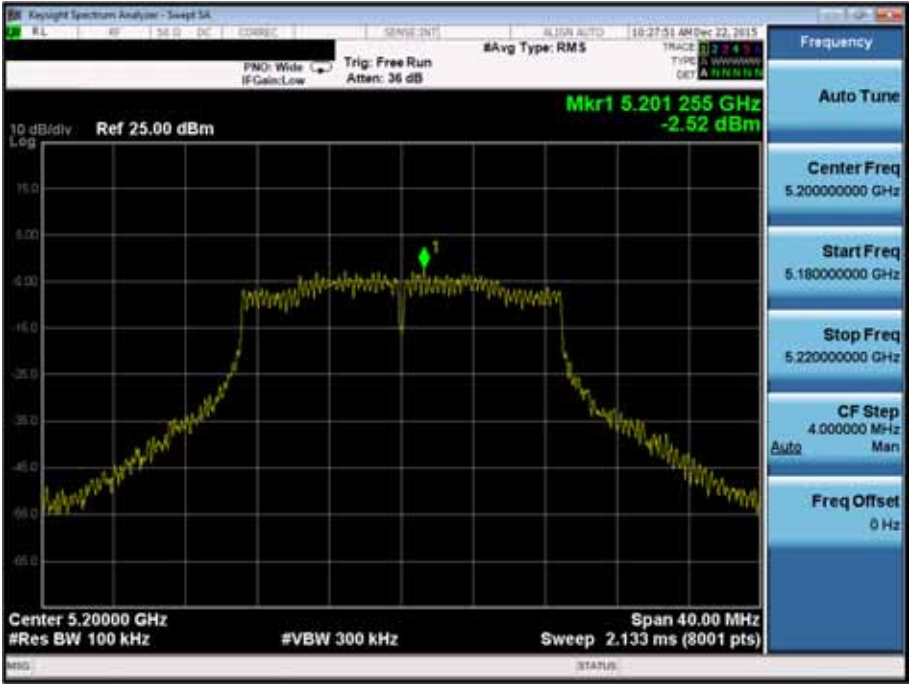
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.36



Maximum Power Spectral Density

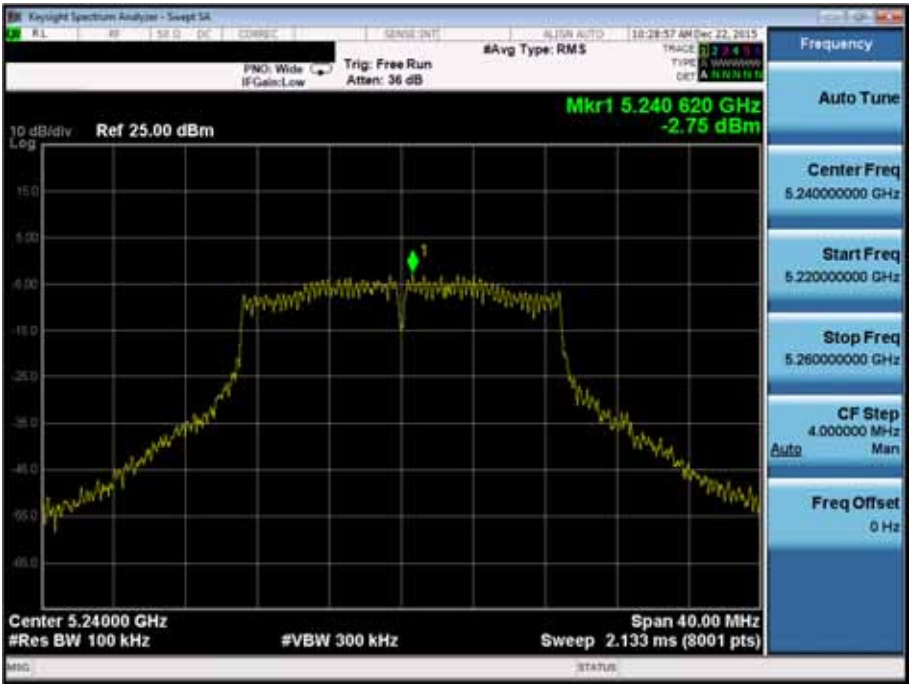
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Maximum Power Spectral Density

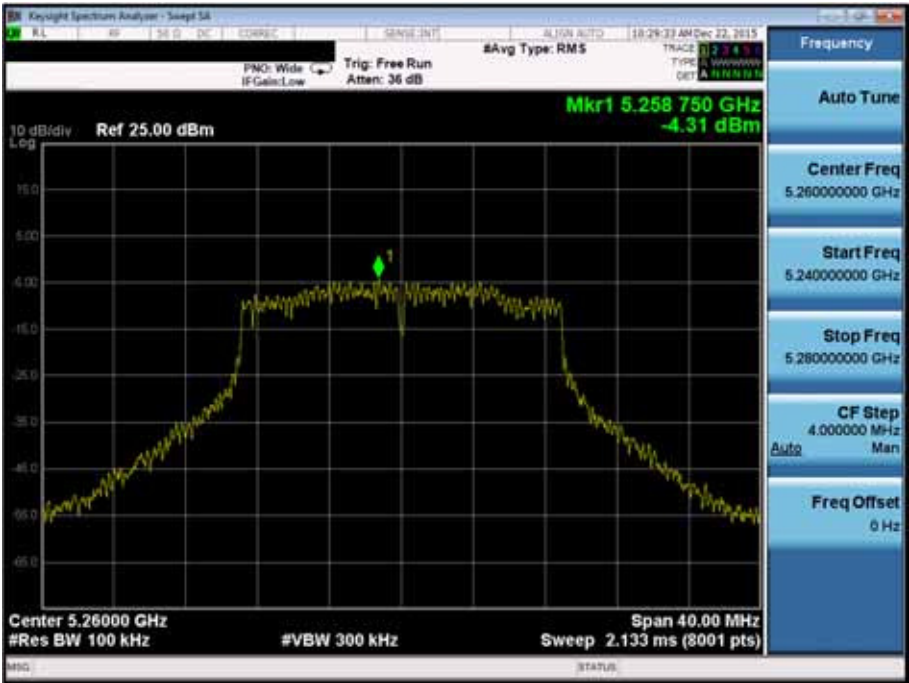
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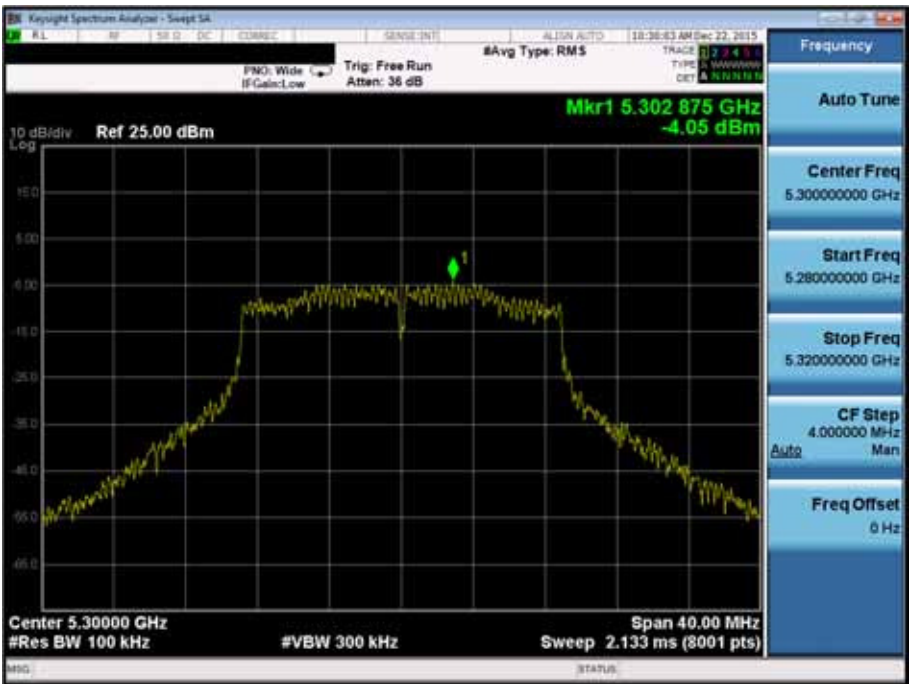
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.52



Maximum Power Spectral Density

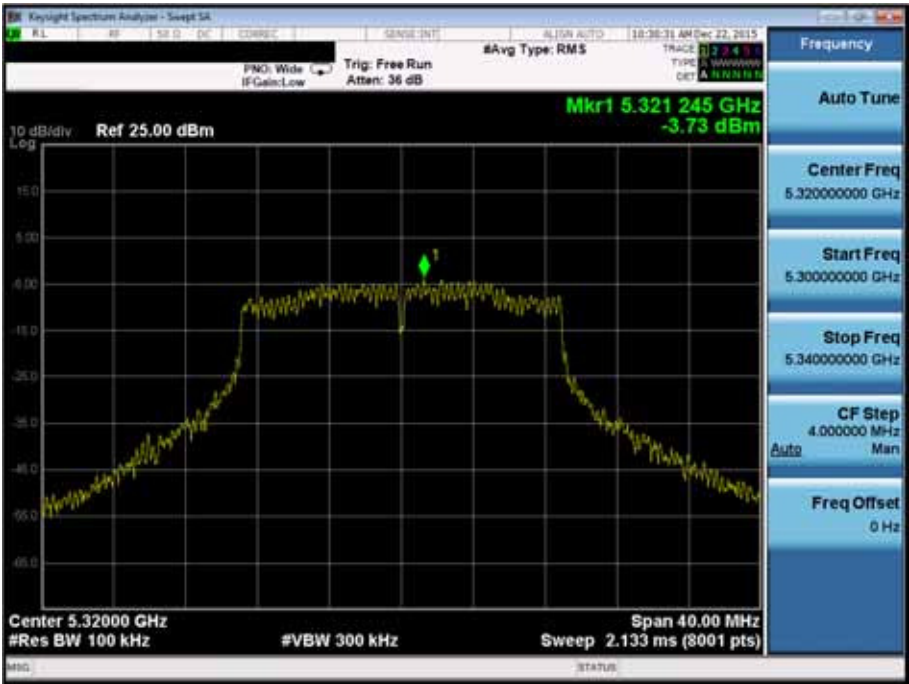
Test Mode: 802.11n HT20 & ANT 2 & Ch.60





Maximum Power Spectral Density

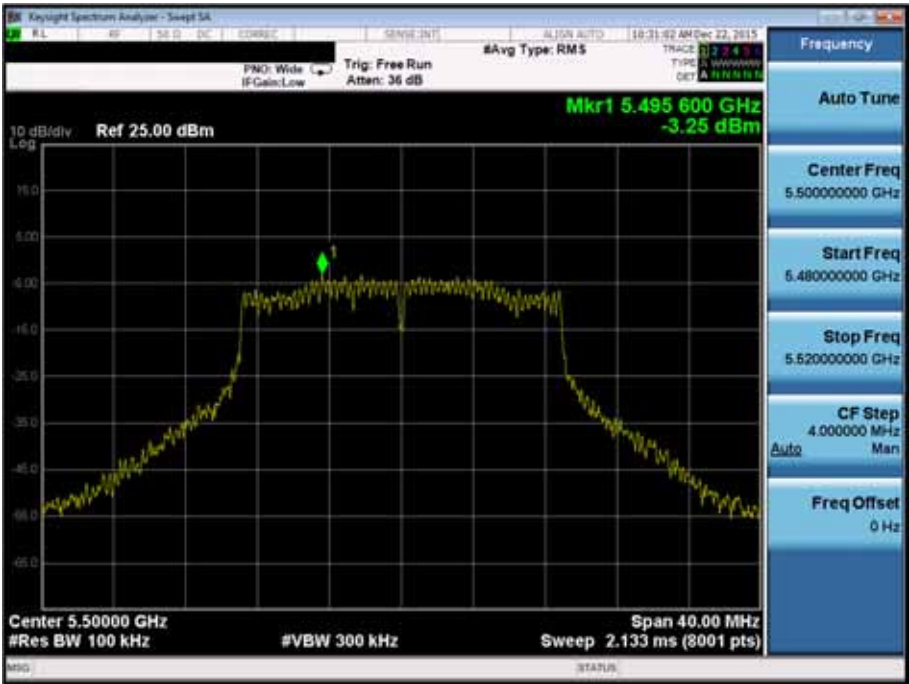
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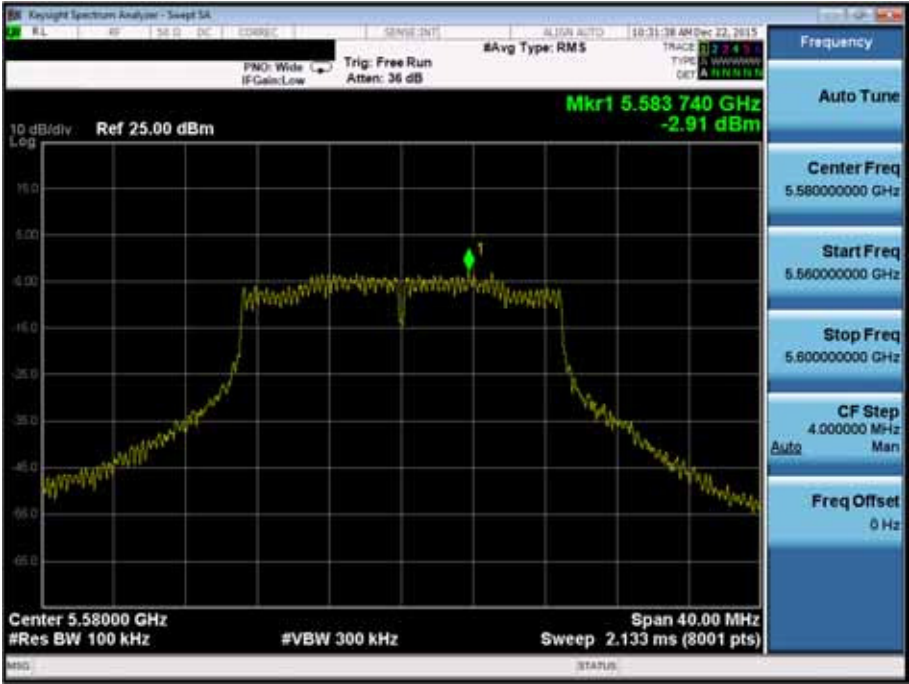
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.100



Maximum Power Spectral Density

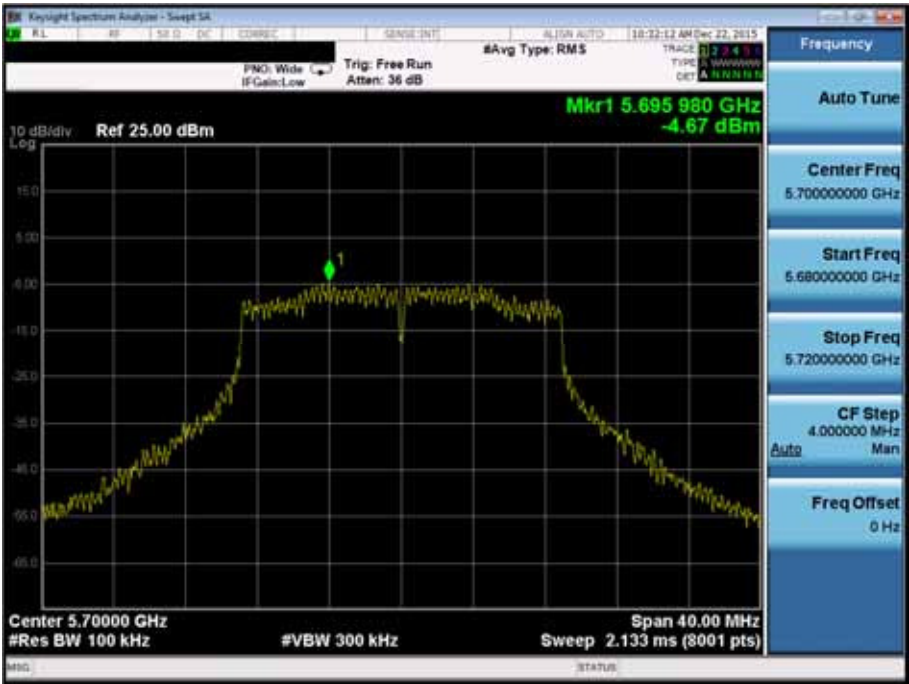
Test Mode: 802.11n HT20 & ANT 2 & Ch.116





Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.140





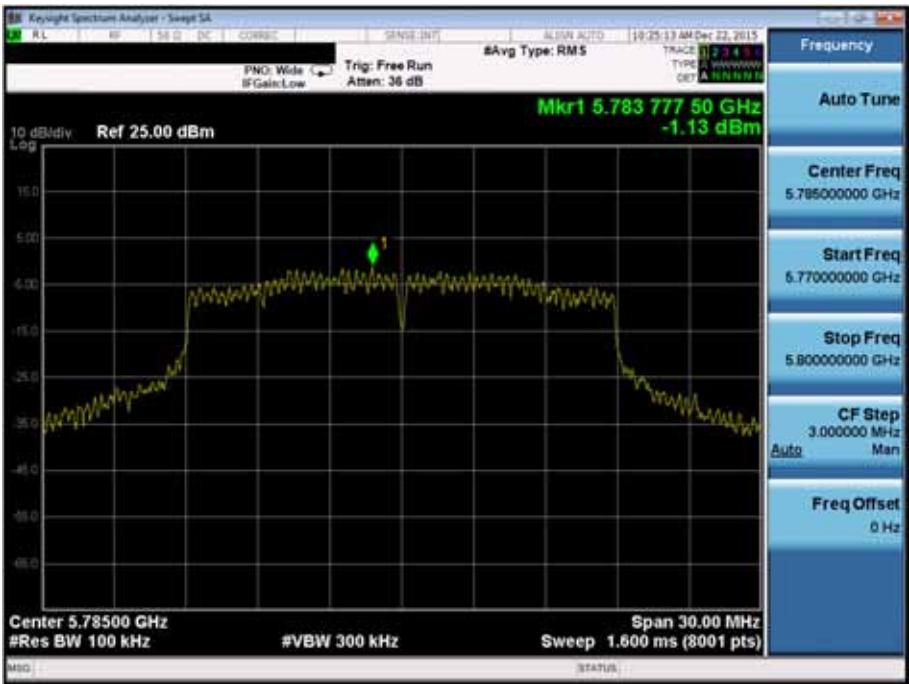
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.149



Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.157





Maximum Power Spectral Density

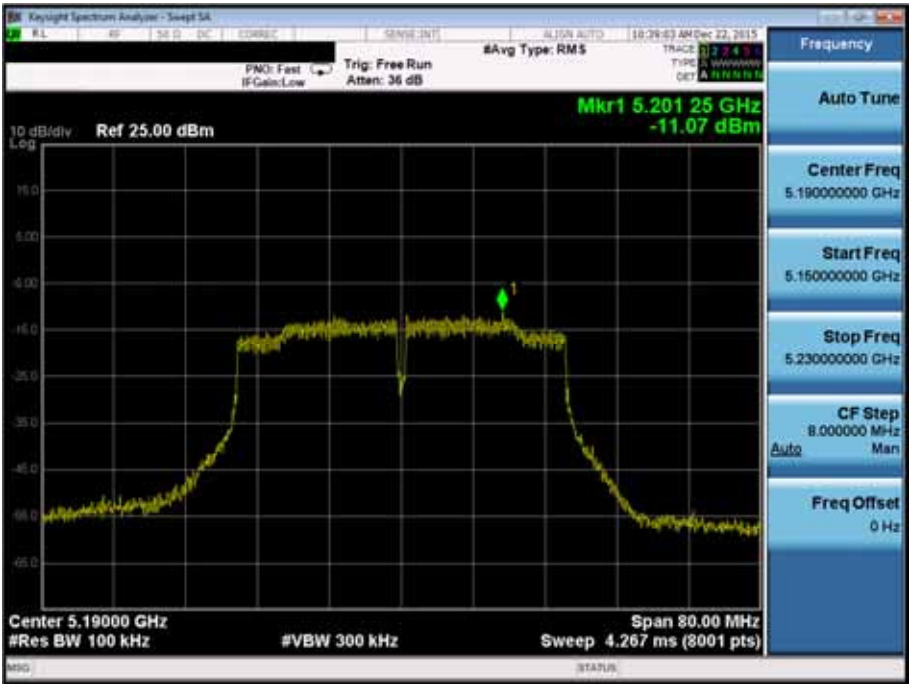
Test Mode: 802.11n(HT20) & ANT 2 & Ch.165





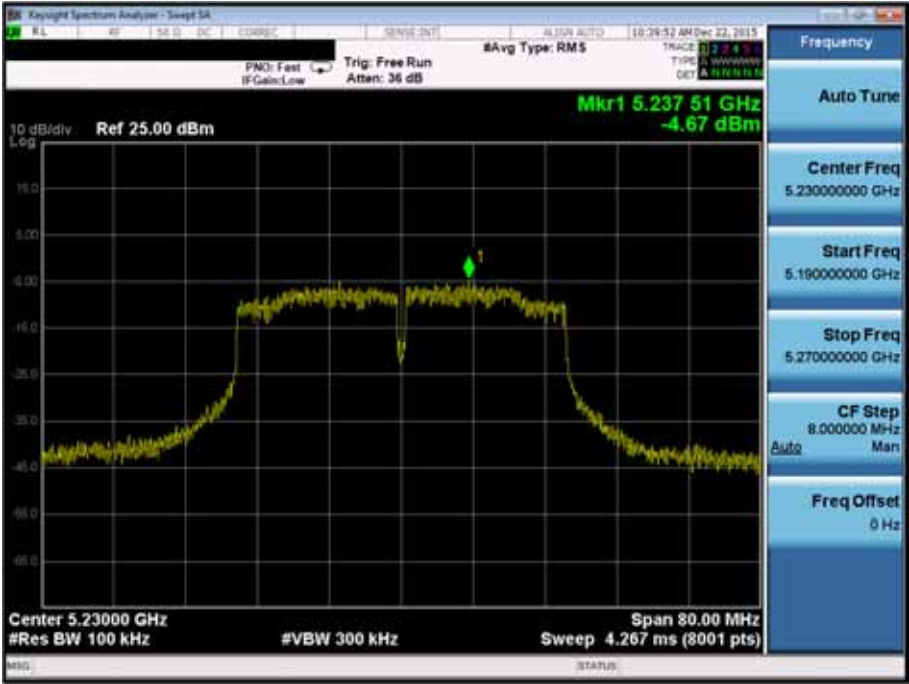
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.38



Maximum Power Spectral Density

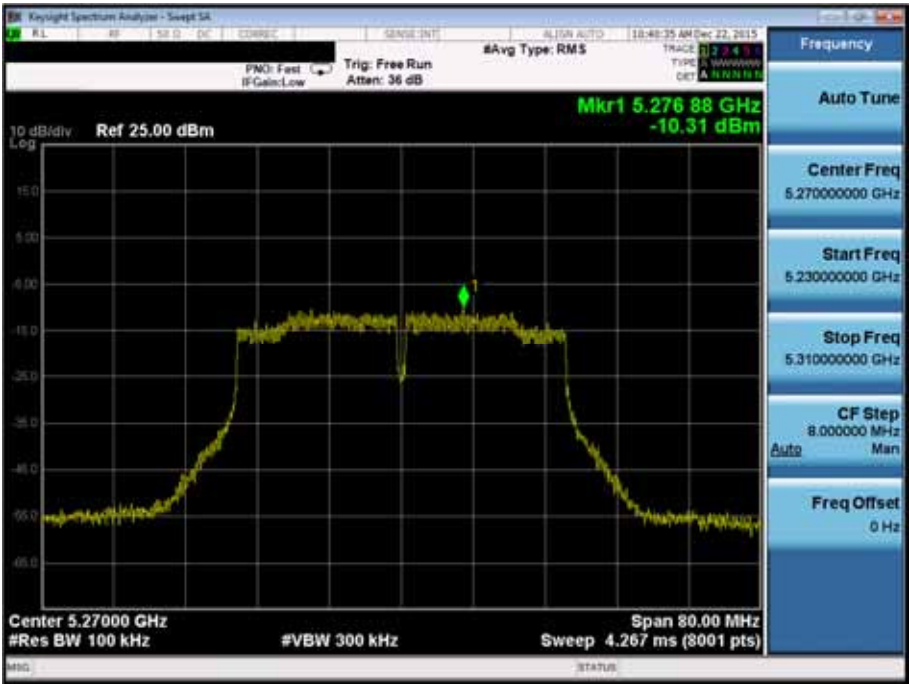
Test Mode: 802.11n HT40 & ANT 2 & Ch.46





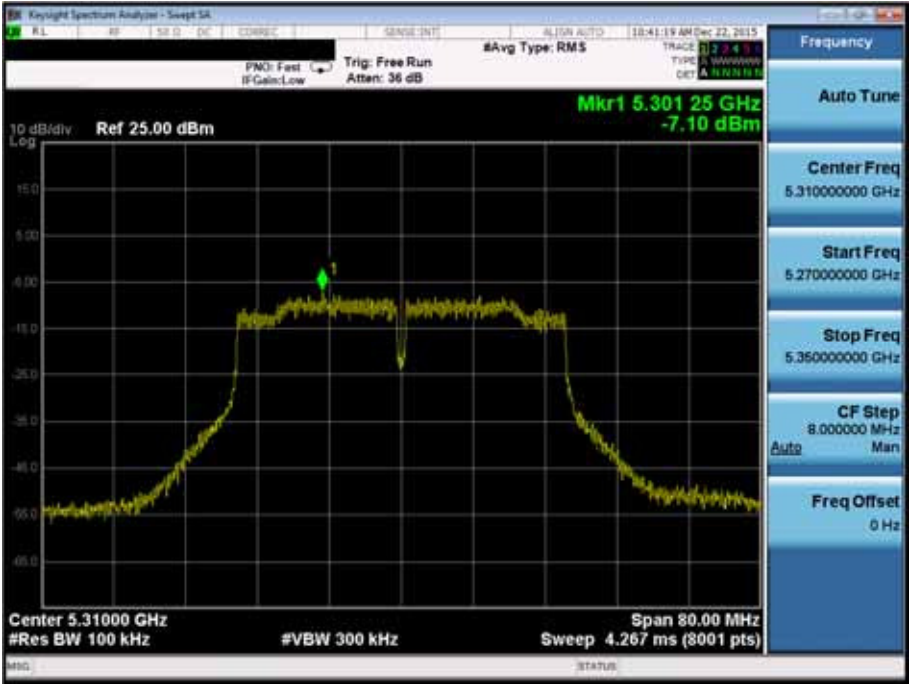
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.54



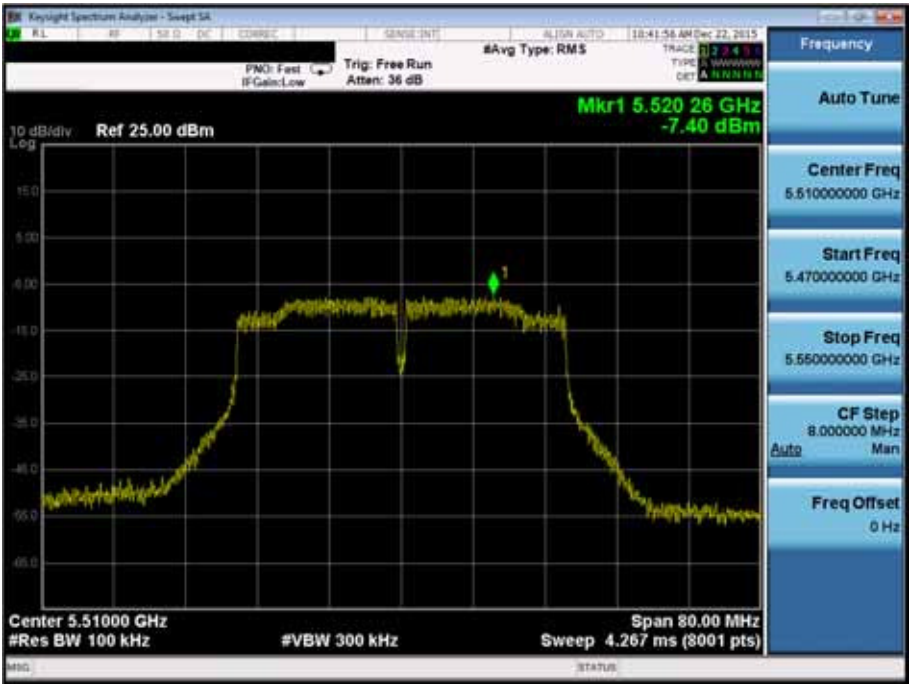
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.62



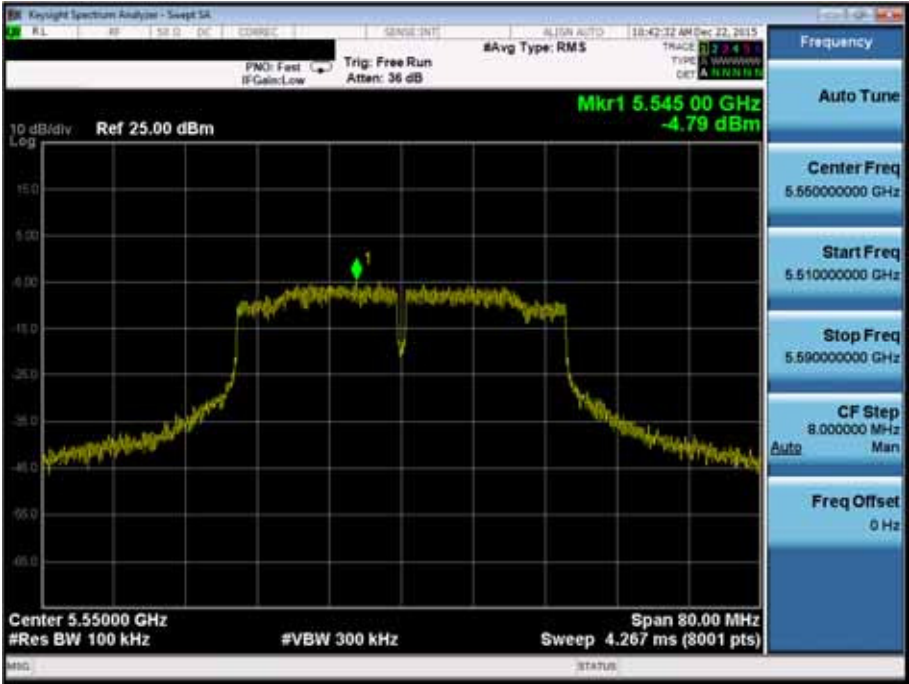
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.102



Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.110





Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.151



Maximum Power Spectral Density

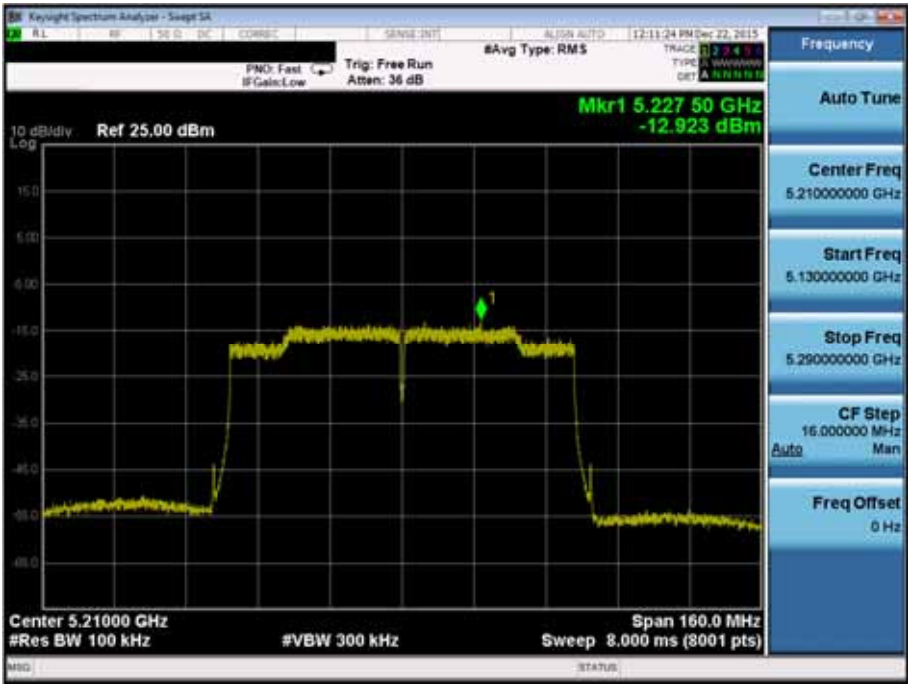
Test Mode: 802.11n HT40 & ANT 2 & Ch.159





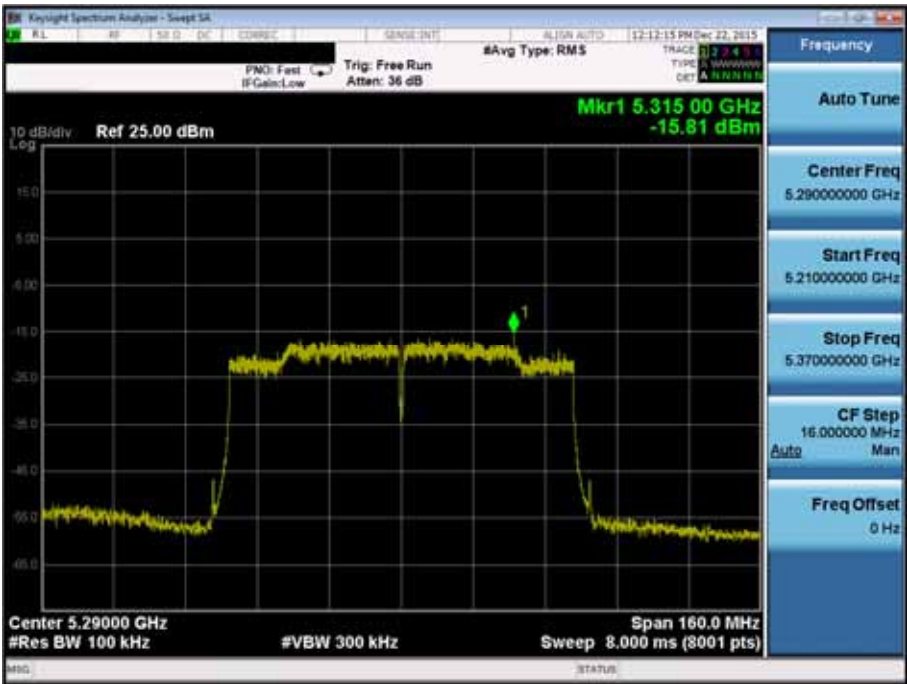
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 2 & Ch.42



Maximum Power Spectral Density

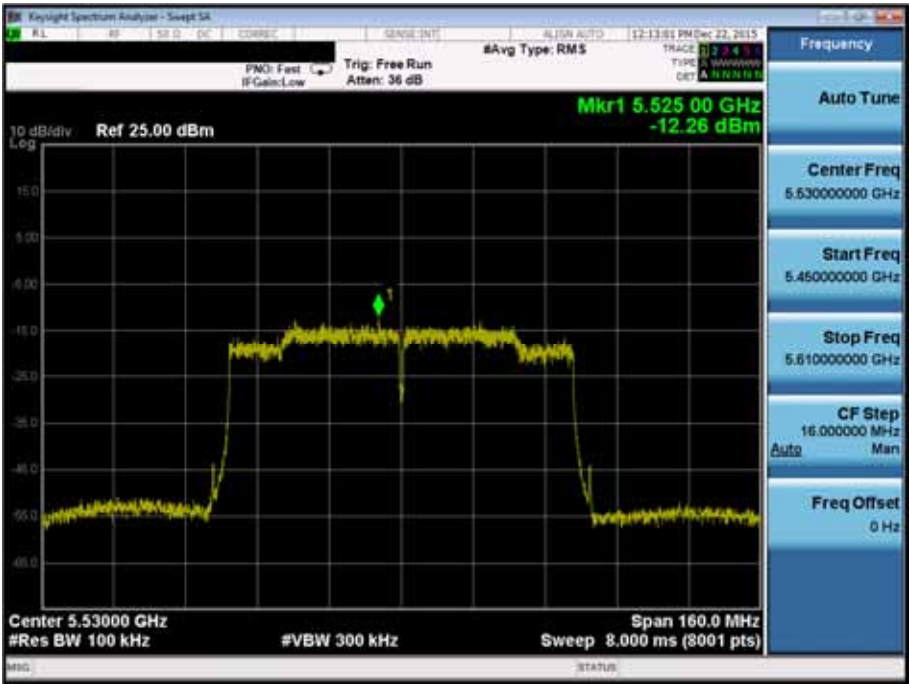
Test Mode: 802.11ac VHT80 & ANT 2 & Ch.58





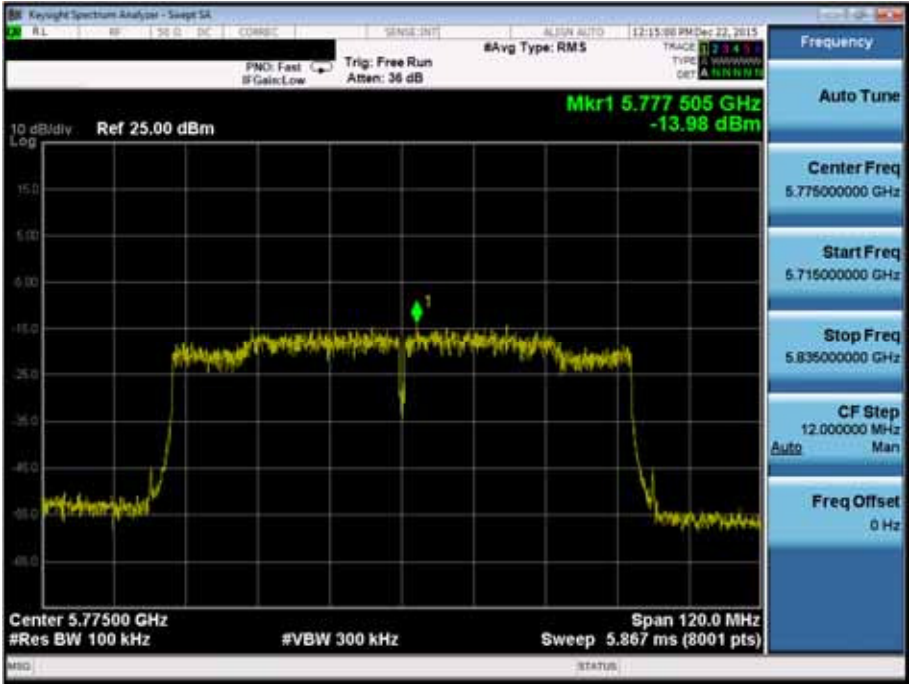
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 2 & Ch.106



Maximum Power Spectral Density

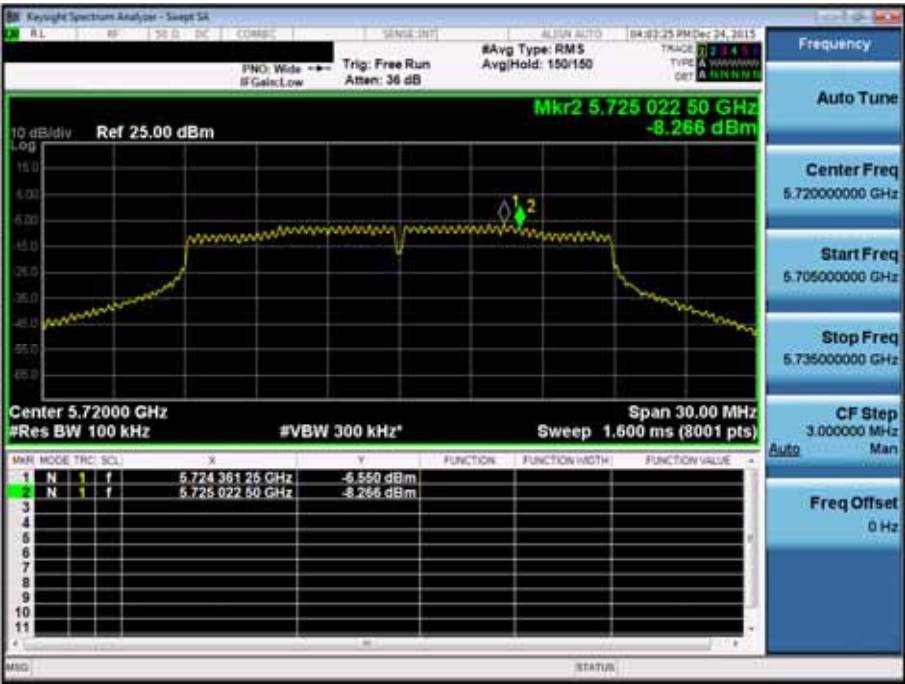
Test Mode: 802.11ac VHT80 & ANT 2 & Ch.155





Maximum Power Spectral Density

Test Mode: 802.11ac VHT20 & ANT 2 & Ch.144



Maximum Power Spectral Density

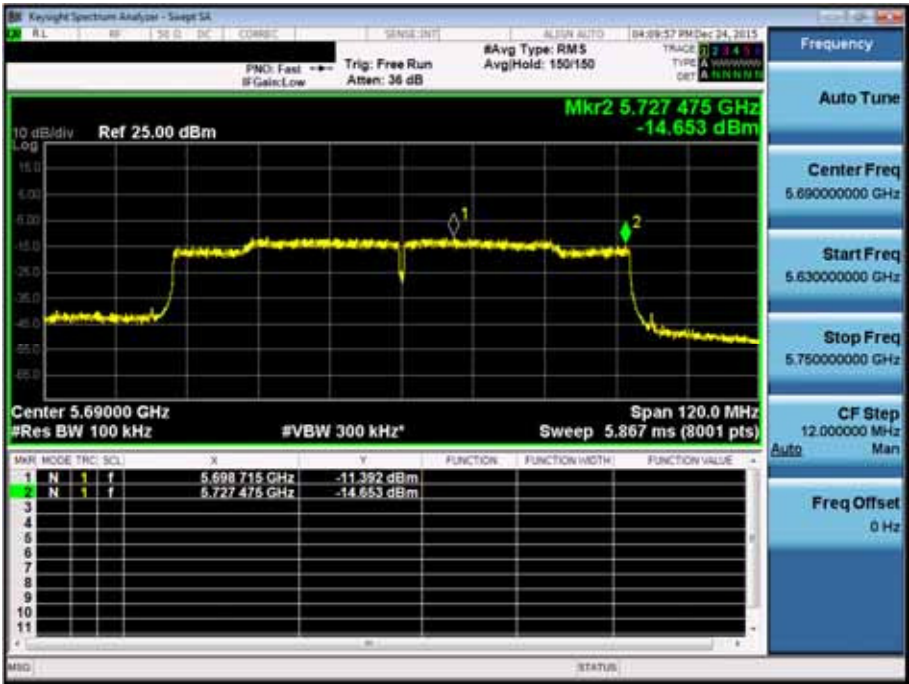
Test Mode: 802.11ac VHT40 & ANT 2 & Ch.142





Maximum Power Spectral Density

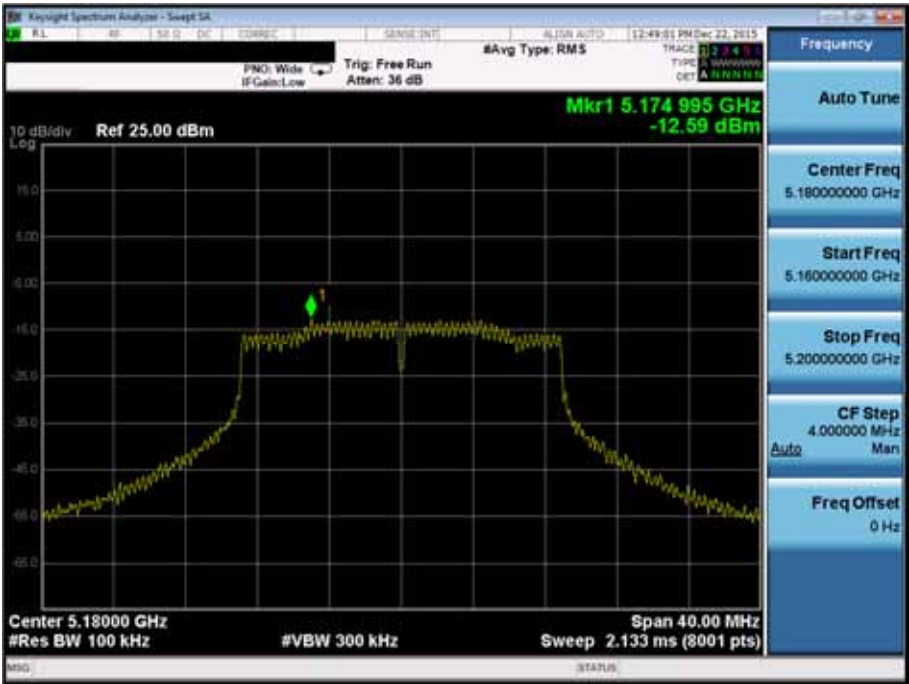
Test Mode: 802.11ac VHT80 & ANT 2 & Ch.138



Multiple Transmit

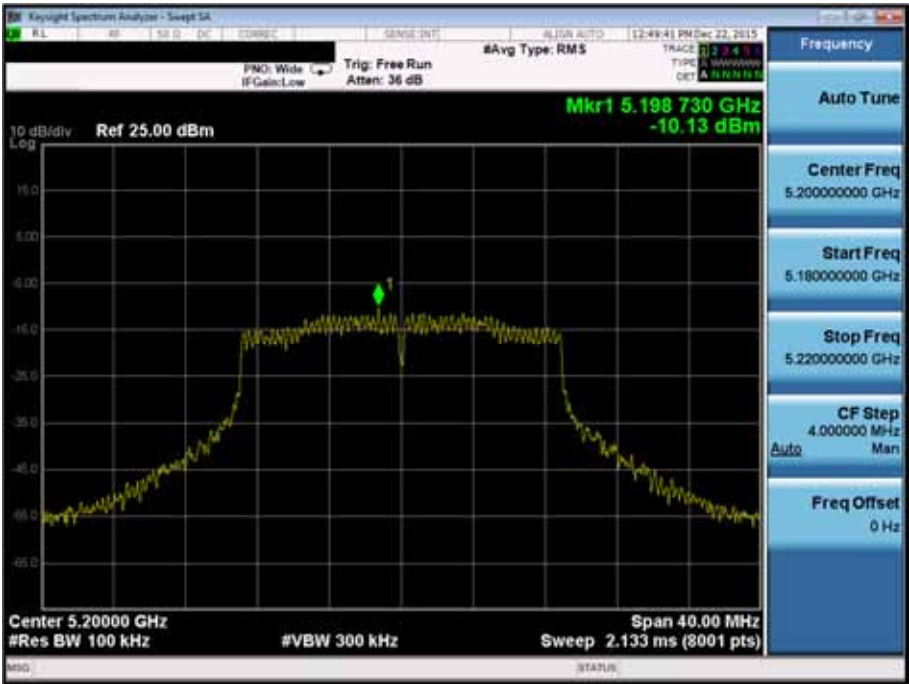
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 1 & Ch.36



Maximum Power Spectral Density

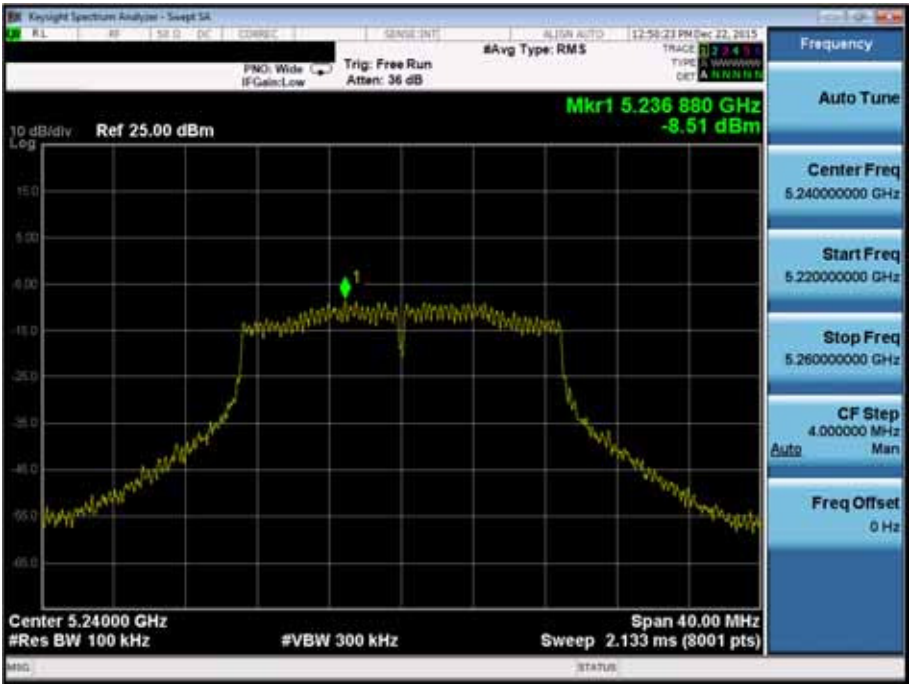
Test Mode: 802.11n(HT20) & ANT 1 & Ch.40





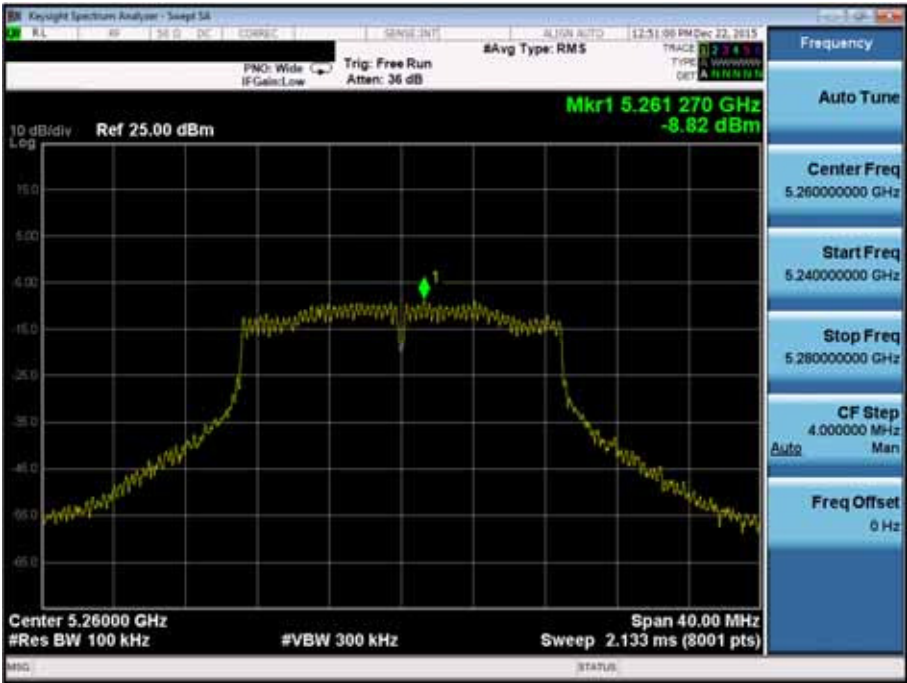
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 1 & Ch.48



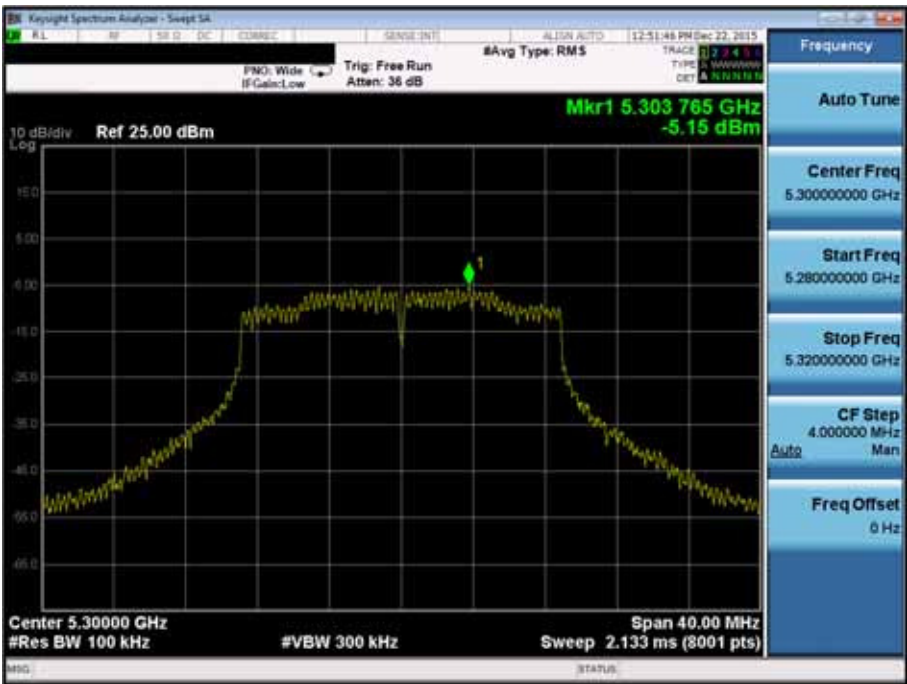
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 1 & Ch.52



Maximum Power Spectral Density

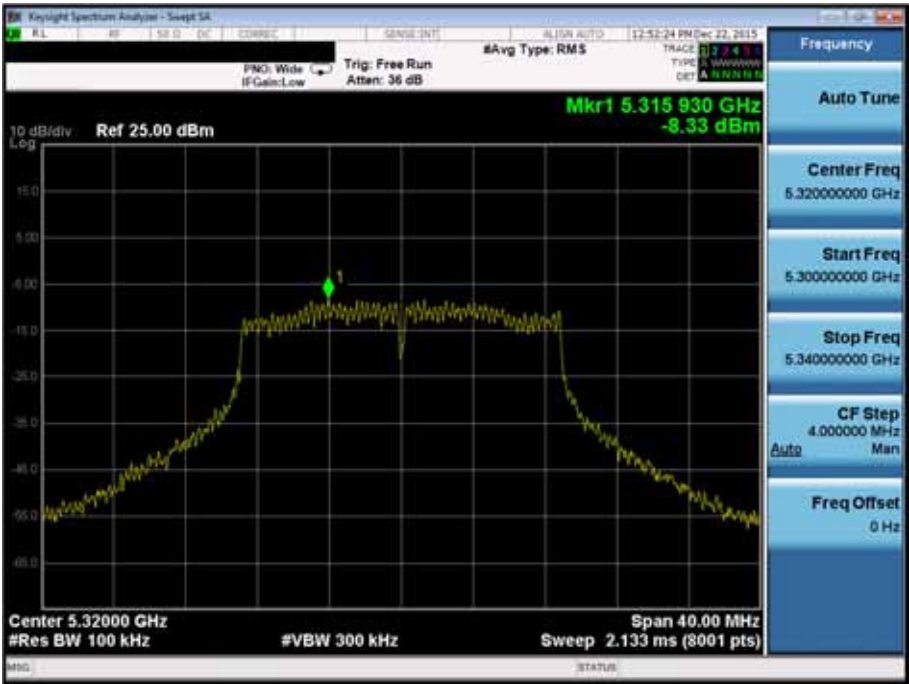
Test Mode: 802.11n HT20 & ANT 1 & Ch.60





Maximum Power Spectral Density

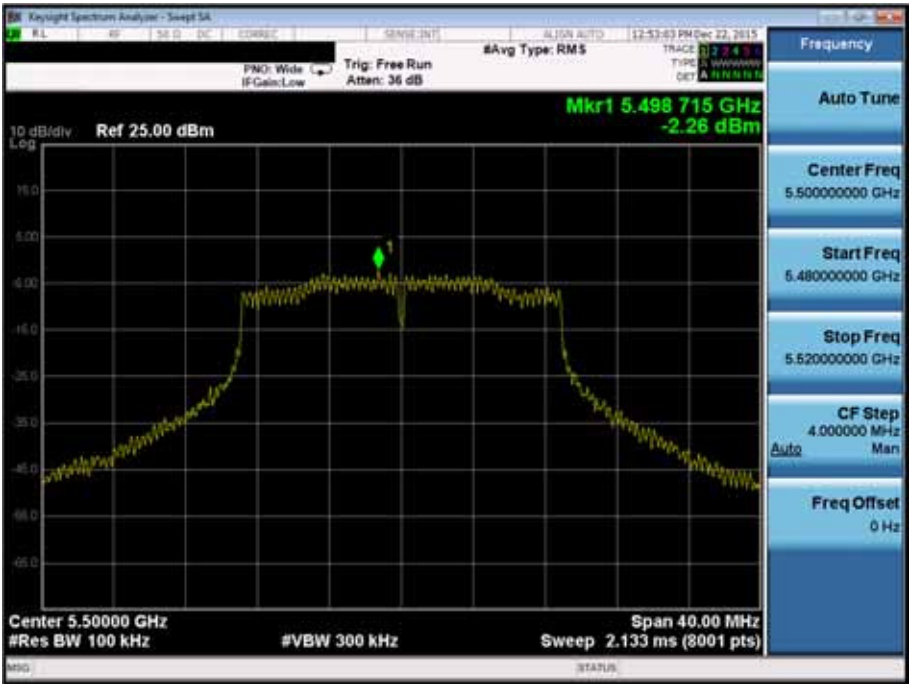
Test Mode: 802.11n HT20 & ANT 1 & Ch.64





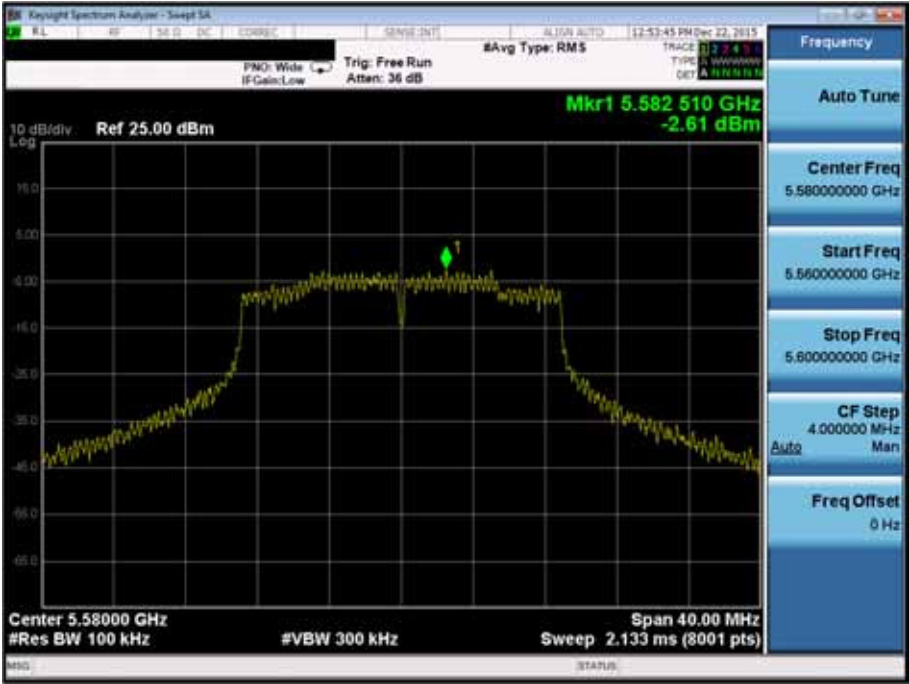
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 1 & Ch.100



Maximum Power Spectral Density

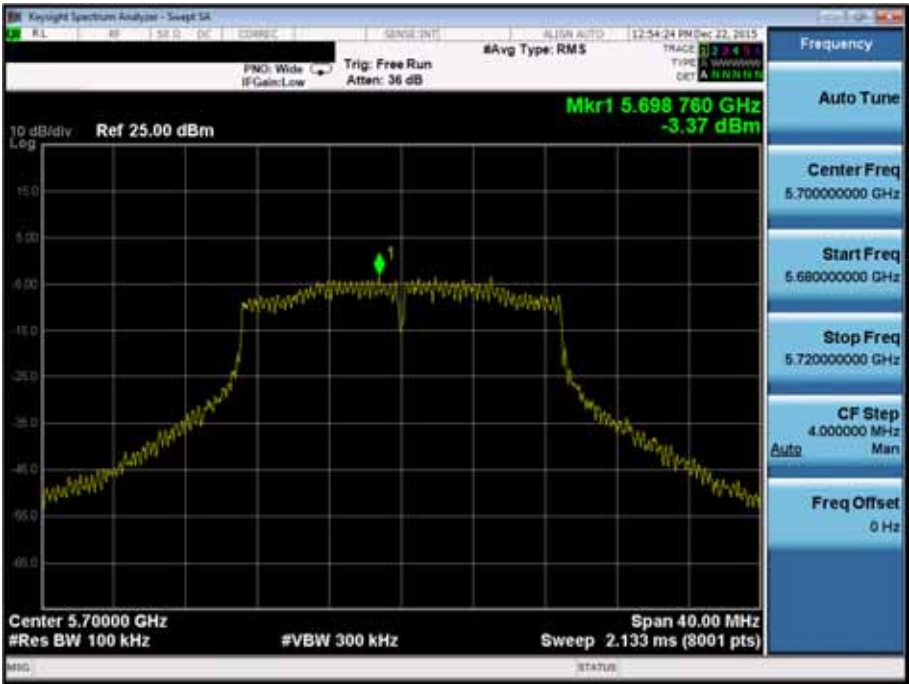
Test Mode: 802.11n HT20 & ANT 1 & Ch.116





Maximum Power Spectral Density

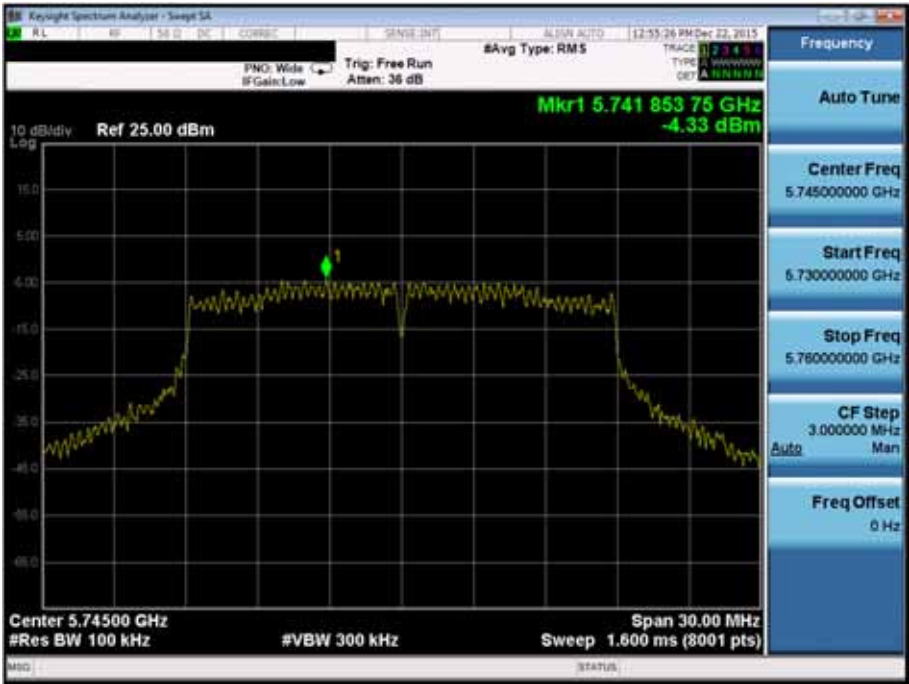
Test Mode: 802.11n HT20 & ANT 1 & Ch.140





Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 1 & Ch.149



Maximum Power Spectral Density

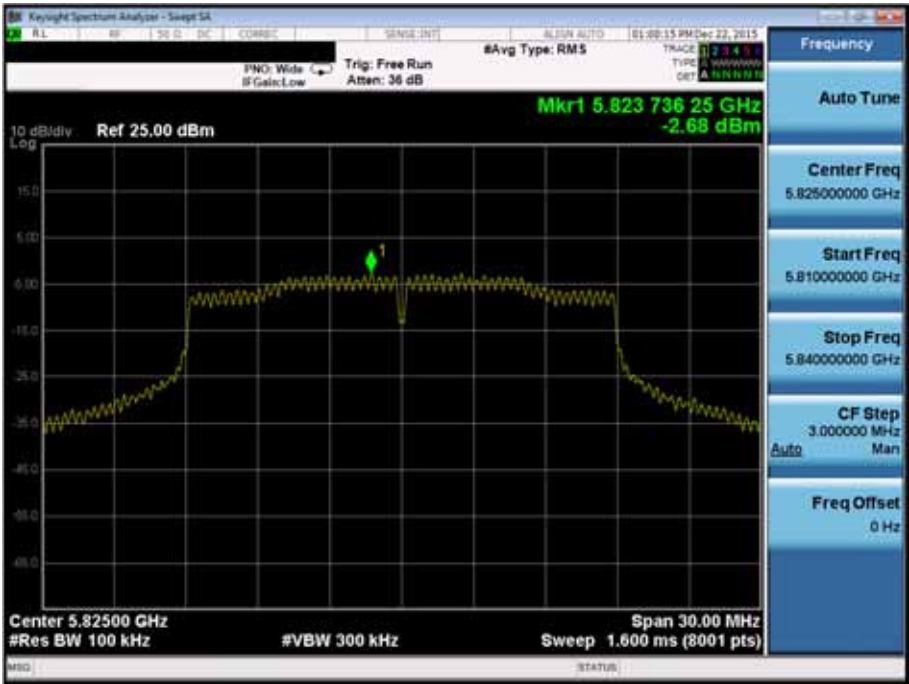
Test Mode: 802.11n(HT20) & ANT 1 & Ch.157





Maximum Power Spectral Density

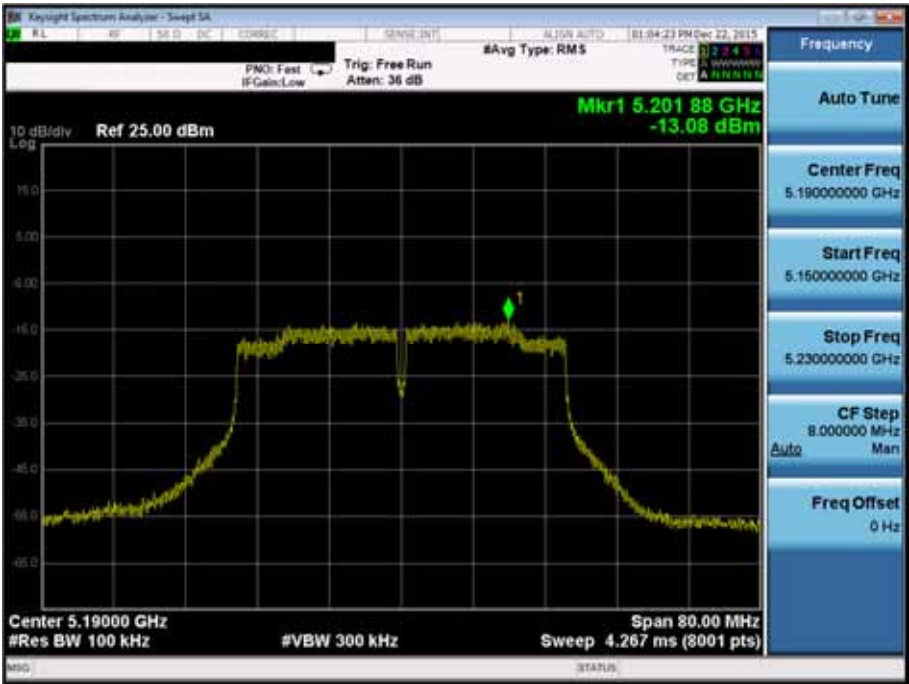
Test Mode: 802.11n(HT20) & ANT 1 & Ch.165





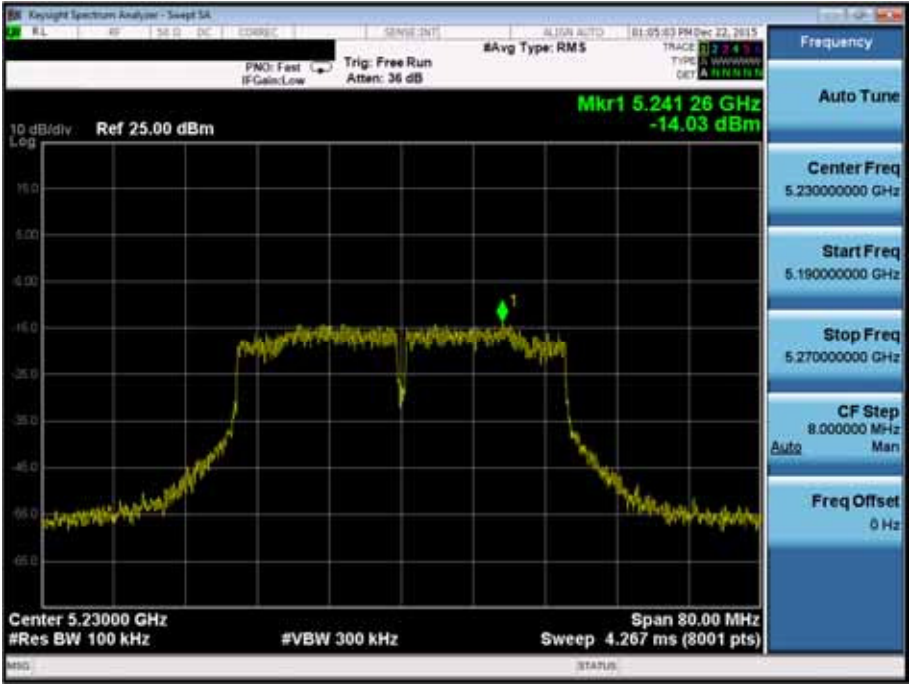
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.38



Maximum Power Spectral Density

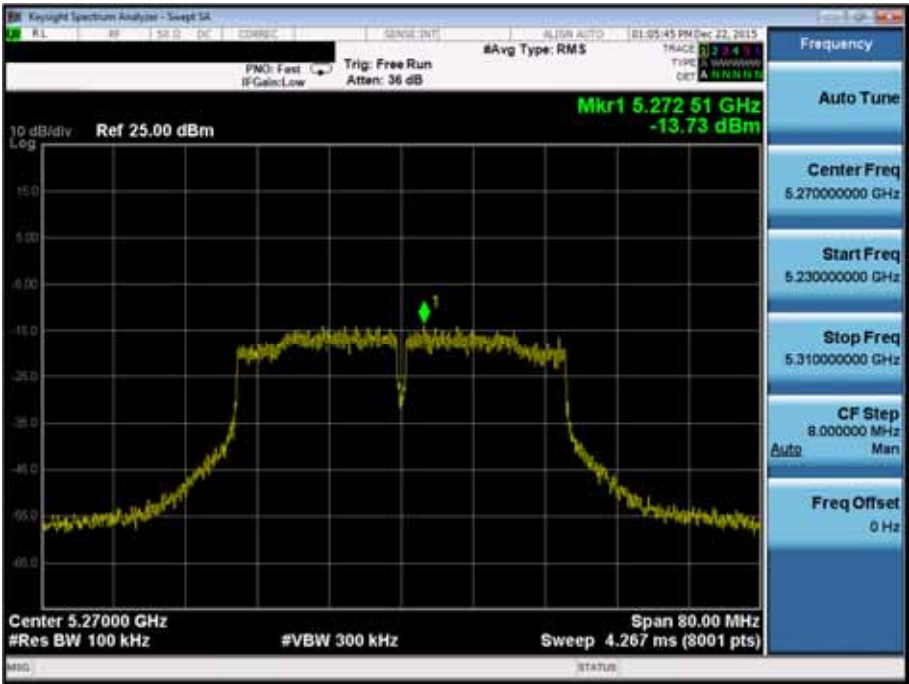
Test Mode: 802.11n HT40 & ANT 1 & Ch.46





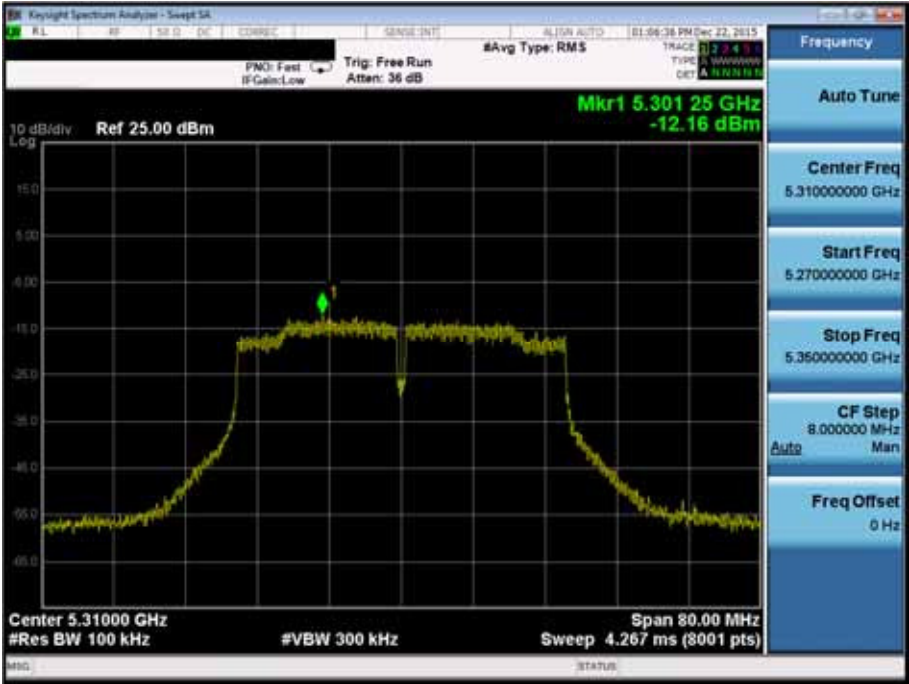
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.54



Maximum Power Spectral Density

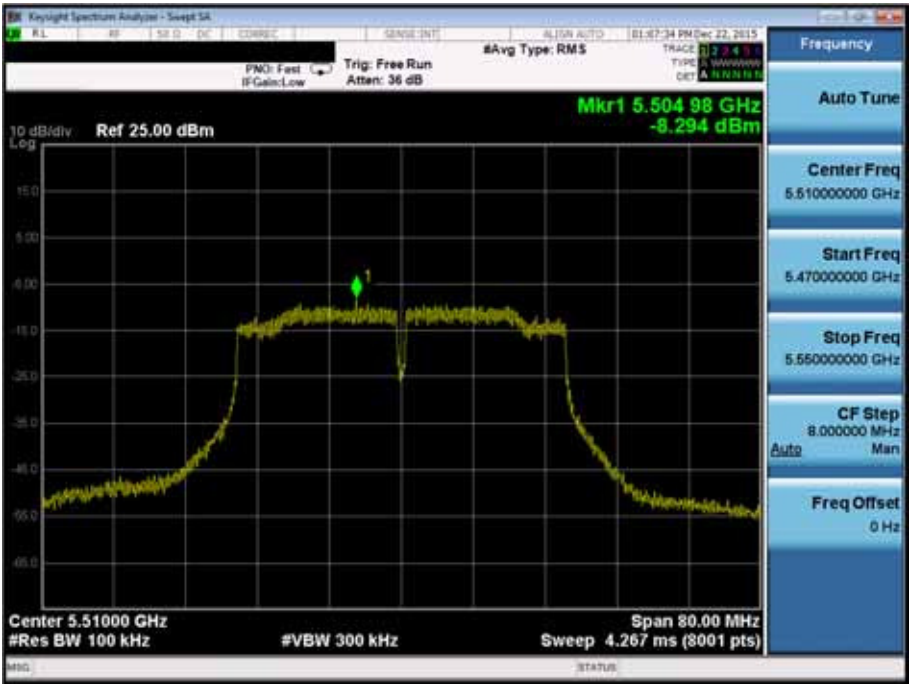
Test Mode: 802.11n HT40 & ANT 1 & Ch.62





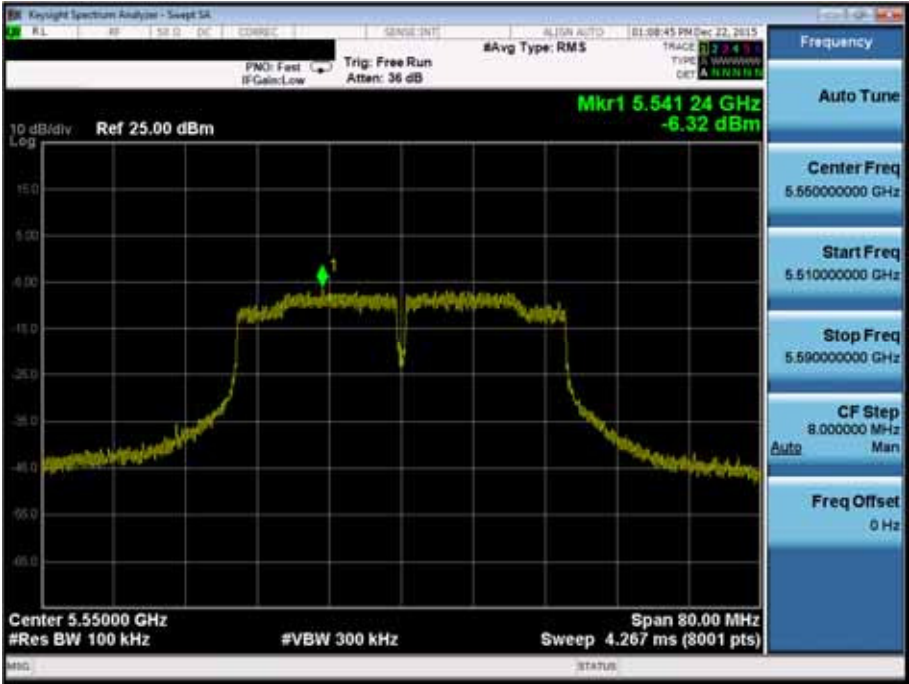
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.102



Maximum Power Spectral Density

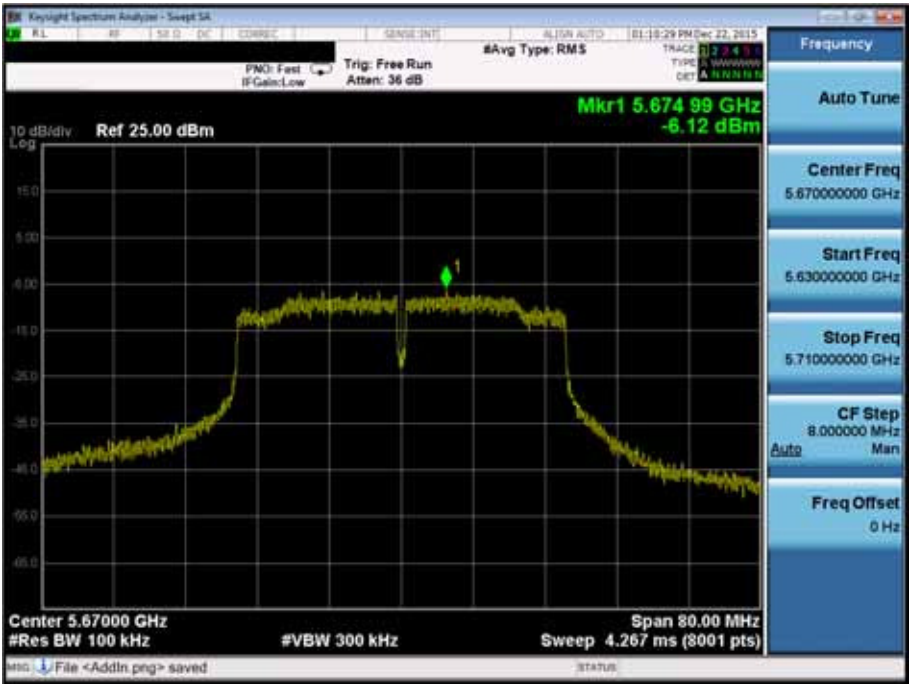
Test Mode: 802.11n HT40 & ANT 1 & Ch.110





Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.134





Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 1 & Ch.151



Maximum Power Spectral Density

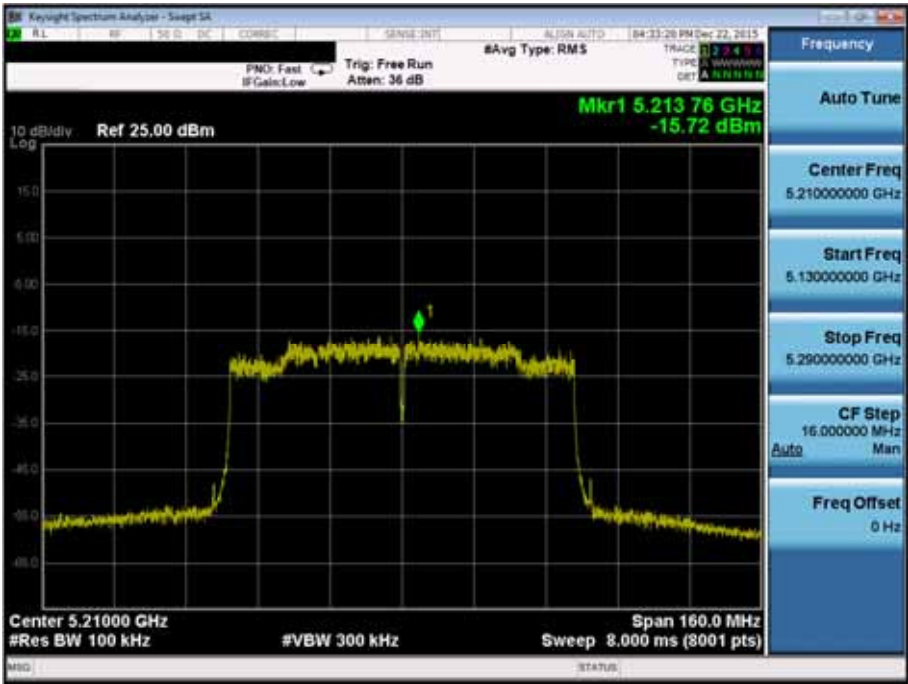
Test Mode: 802.11n HT40 & ANT 1 & Ch.159





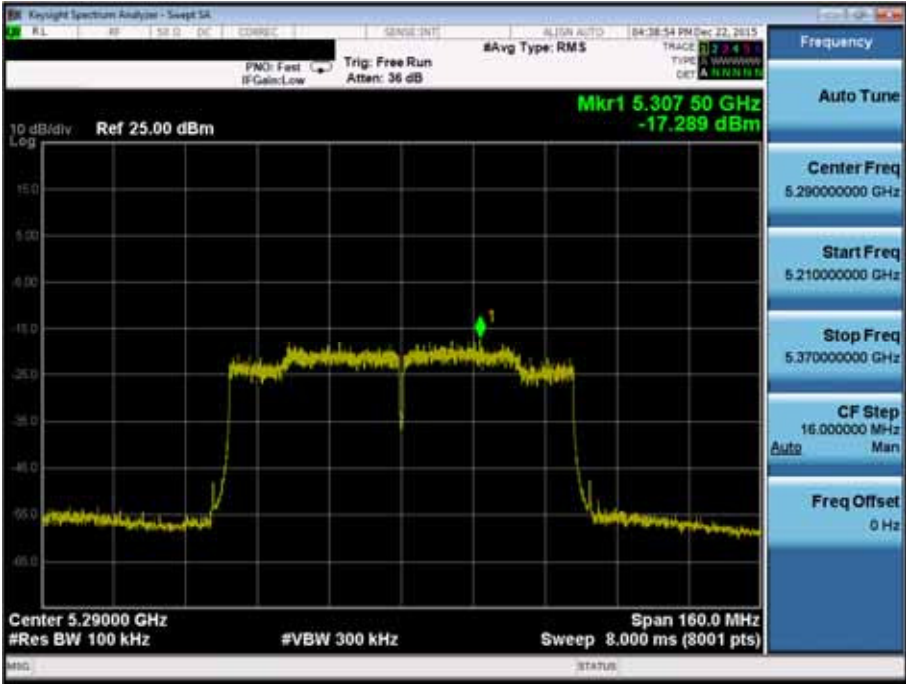
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 1 & Ch.42



Maximum Power Spectral Density

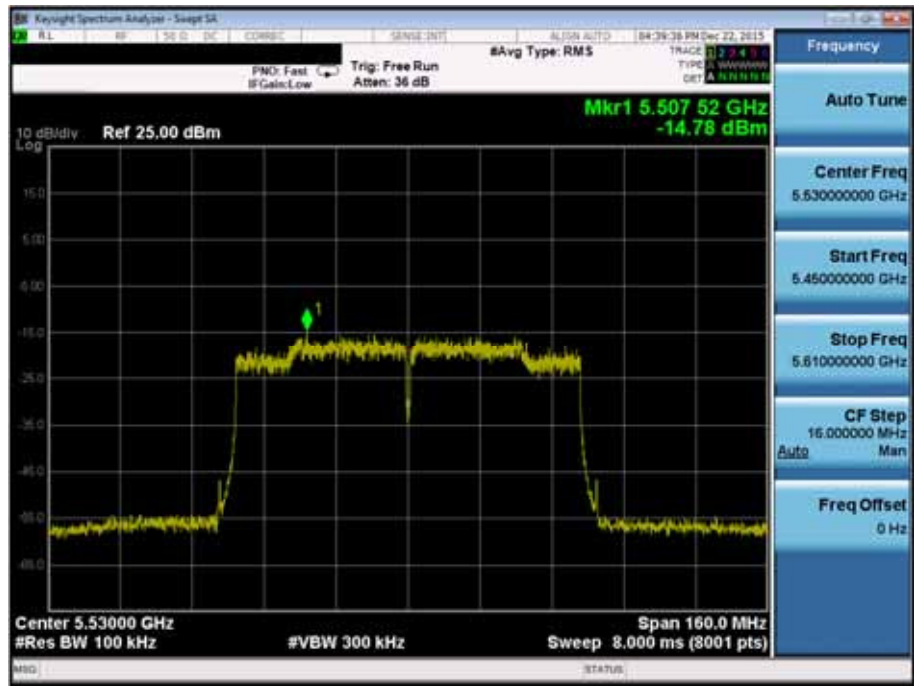
Test Mode: 802.11ac VHT80 & ANT 1 & Ch.58





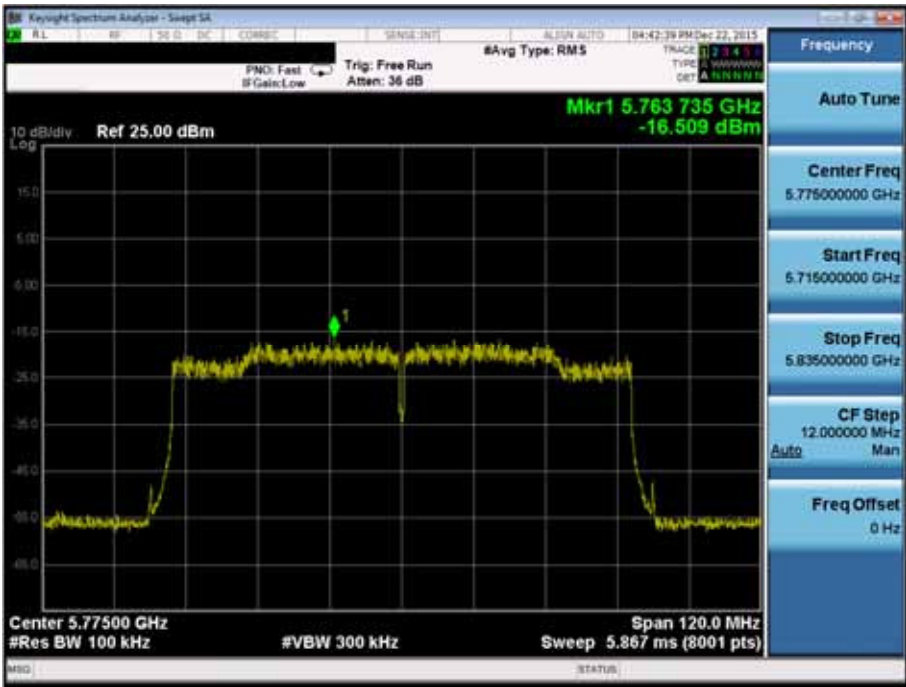
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 1 & Ch.106



Maximum Power Spectral Density

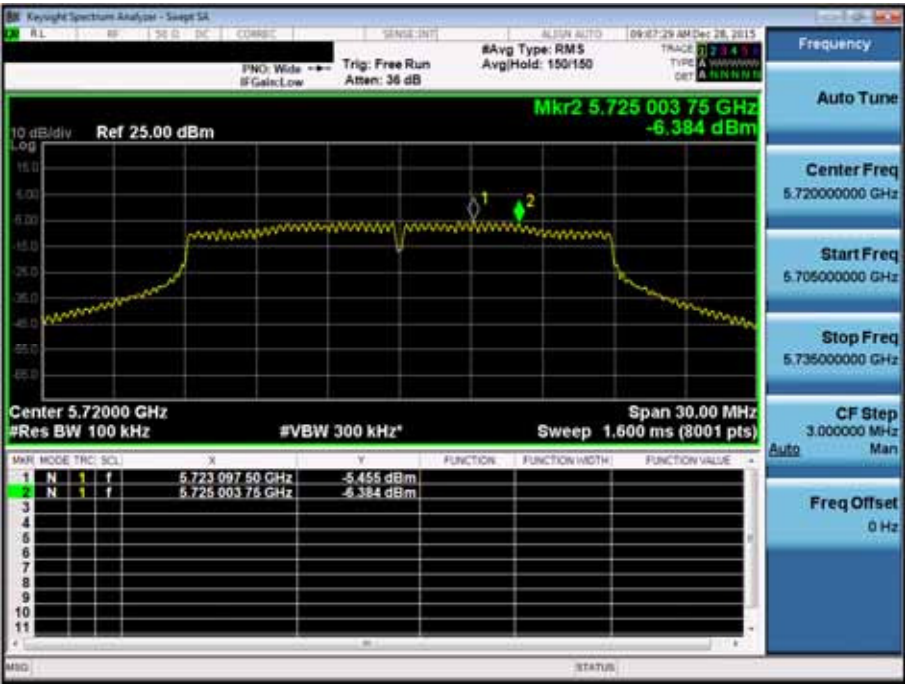
Test Mode: 802.11ac VHT80 & ANT 1 & Ch.155





Maximum Power Spectral Density

Test Mode: 802.11ac VHT20 & ANT 1 & Ch.144



Maximum Power Spectral Density

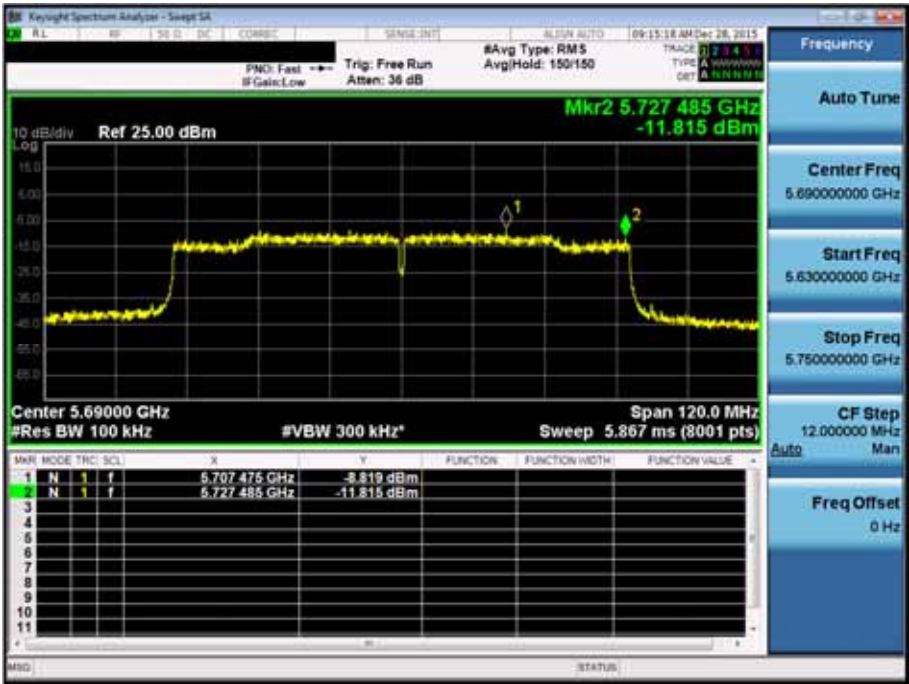
Test Mode: 802.11ac VHT40 & ANT 1 & Ch.142





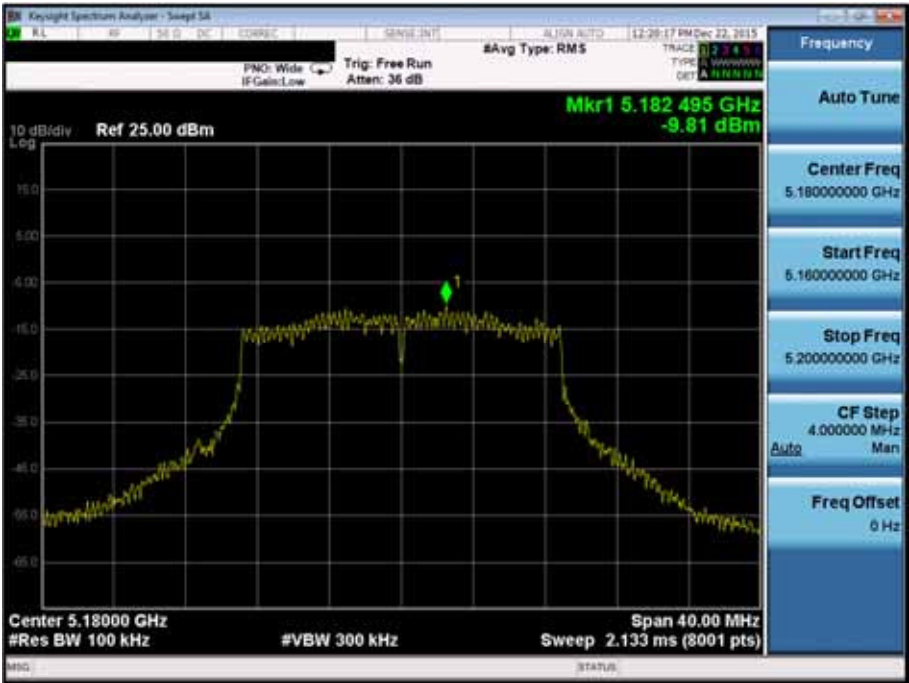
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 1 & Ch.138



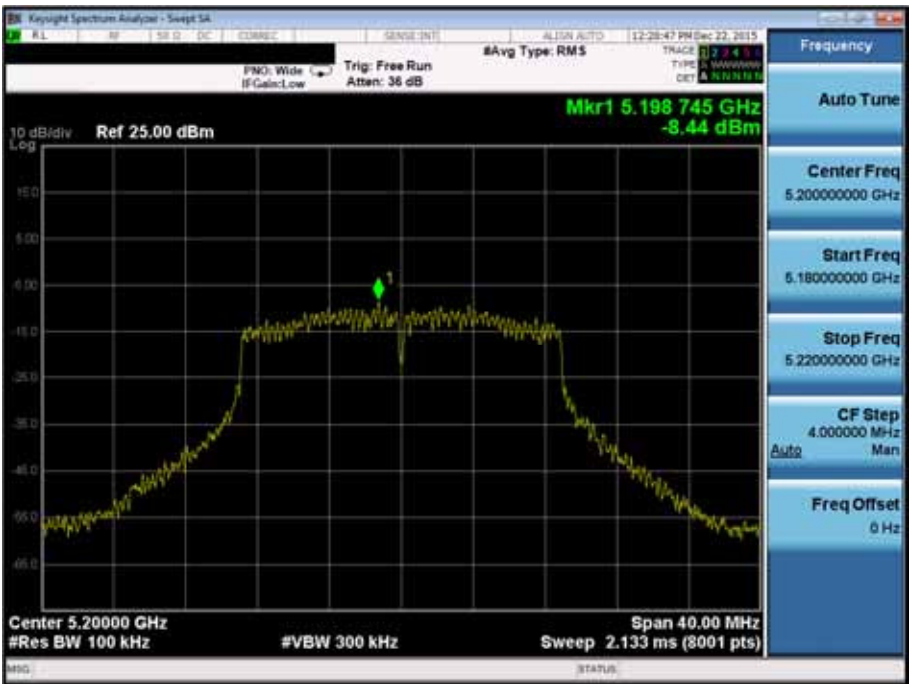
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.36



Maximum Power Spectral Density

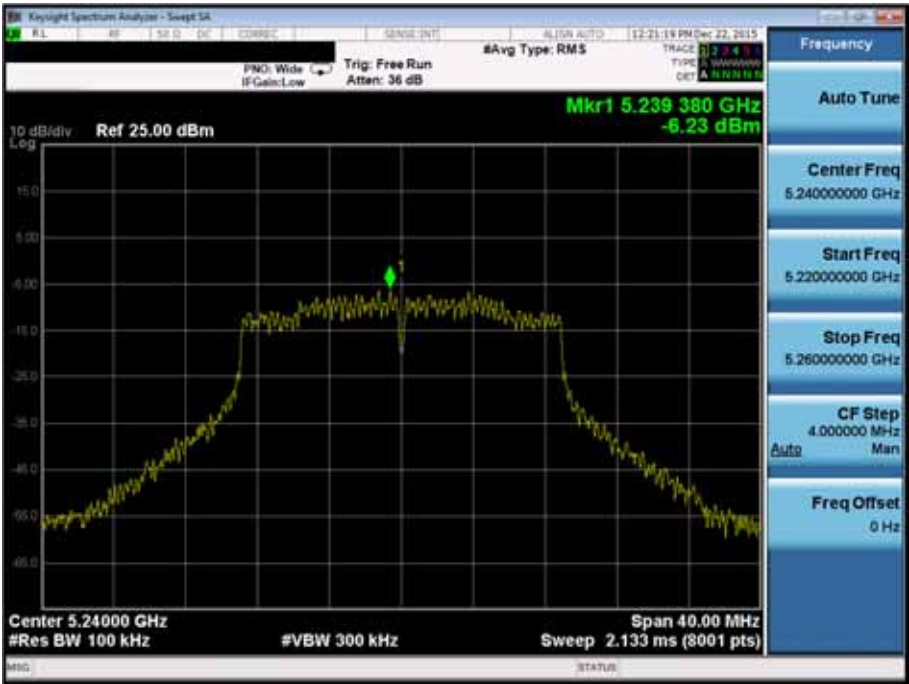
Test Mode: 802.11n(HT20) & ANT 2 & Ch.40





Maximum Power Spectral Density

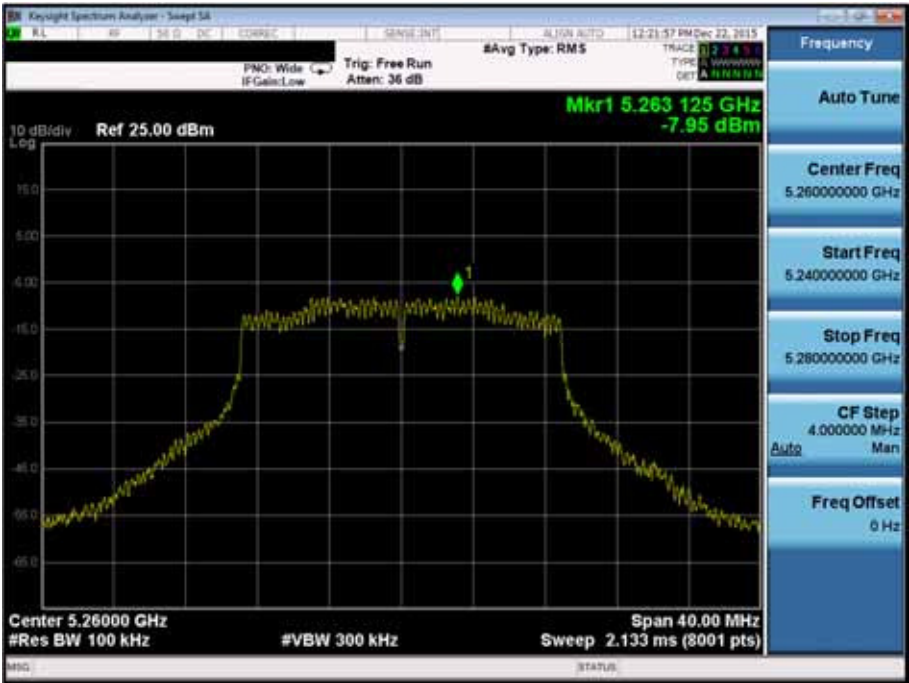
Test Mode: 802.11n(HT20) & ANT 2 & Ch.48





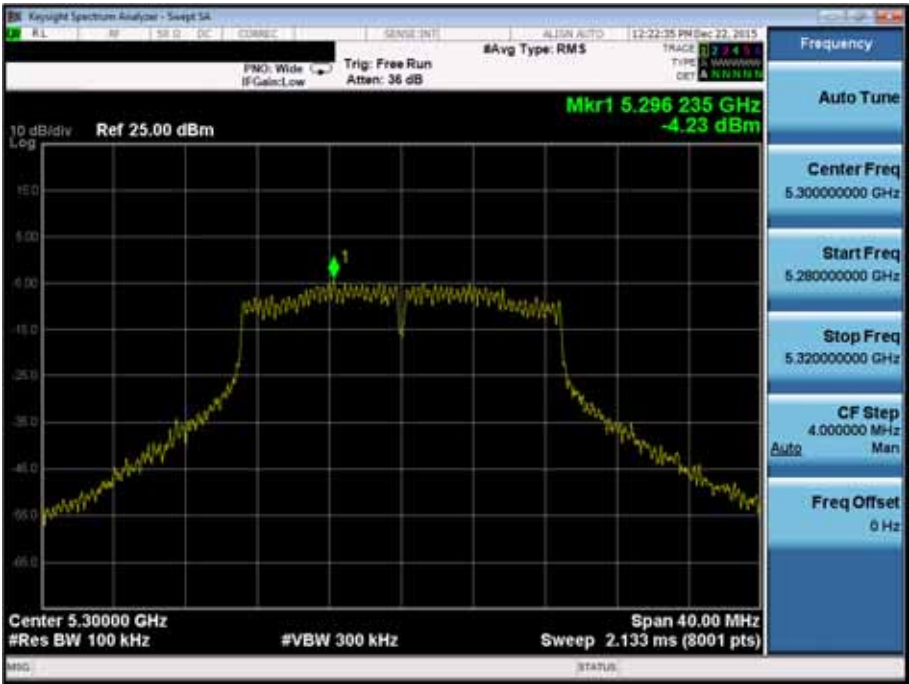
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.52



Maximum Power Spectral Density

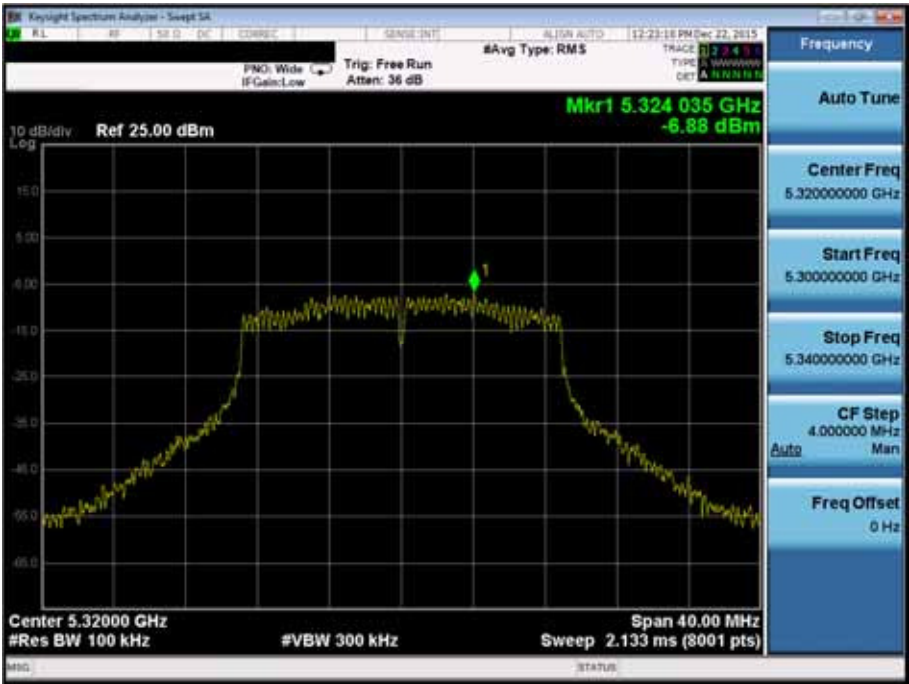
Test Mode: 802.11n HT20 & ANT 2 & Ch.60





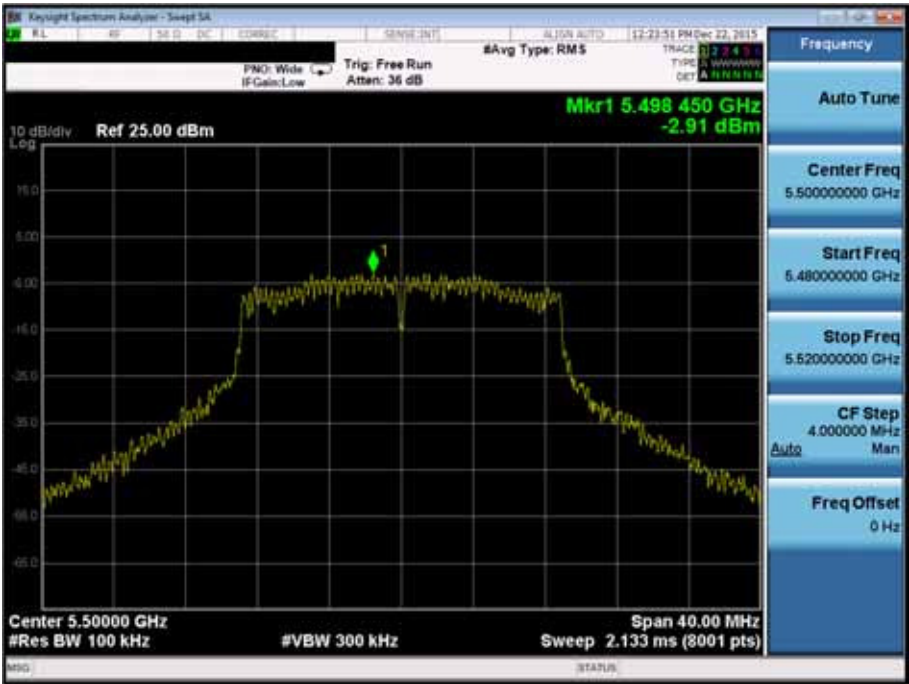
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.64



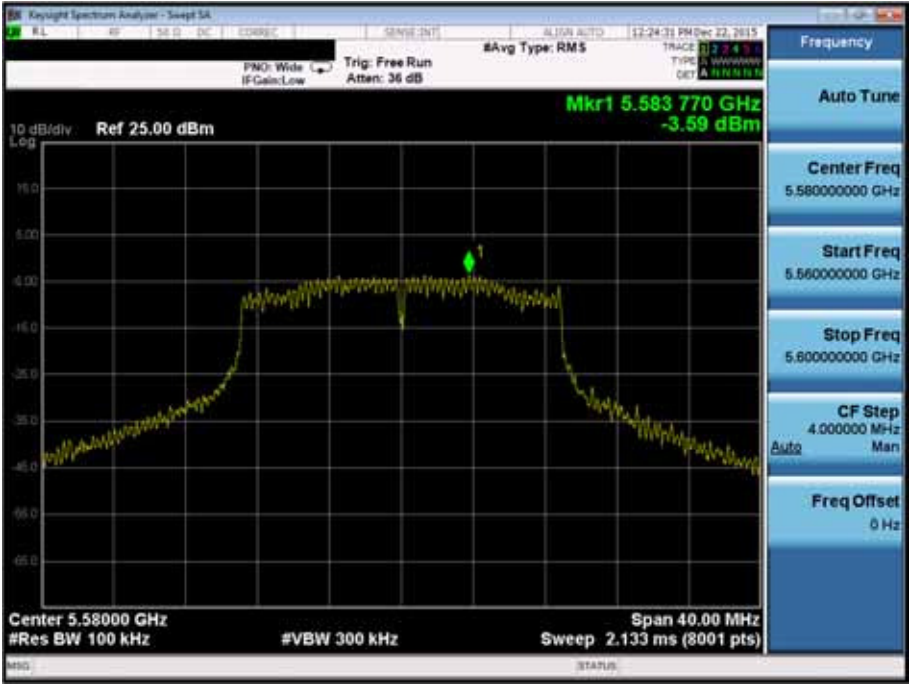
Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.100



Maximum Power Spectral Density

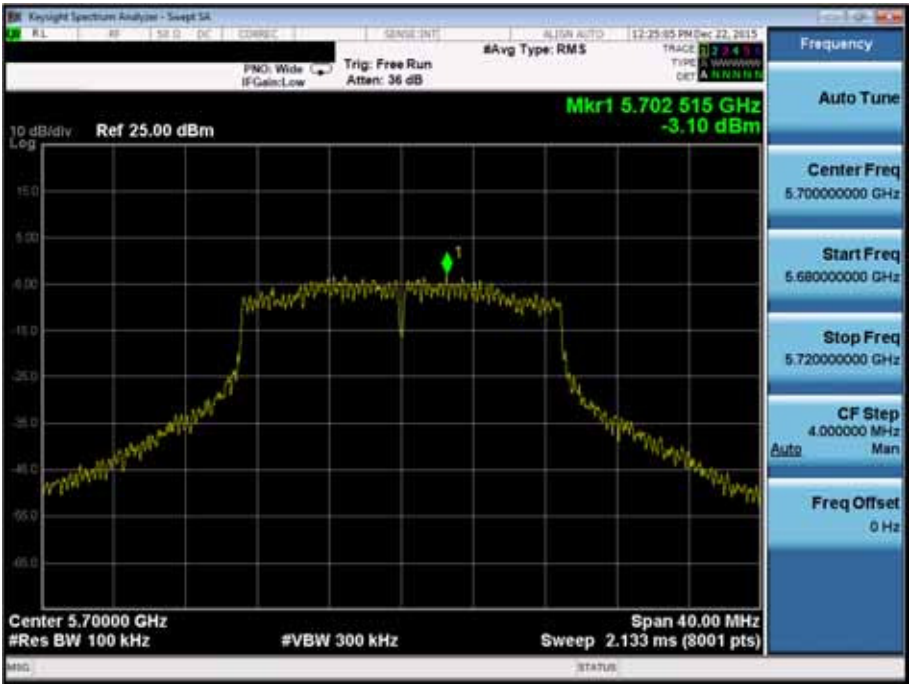
Test Mode: 802.11n HT20 & ANT 2 & Ch.116





Maximum Power Spectral Density

Test Mode: 802.11n HT20 & ANT 2 & Ch.140





Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.149



Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.157





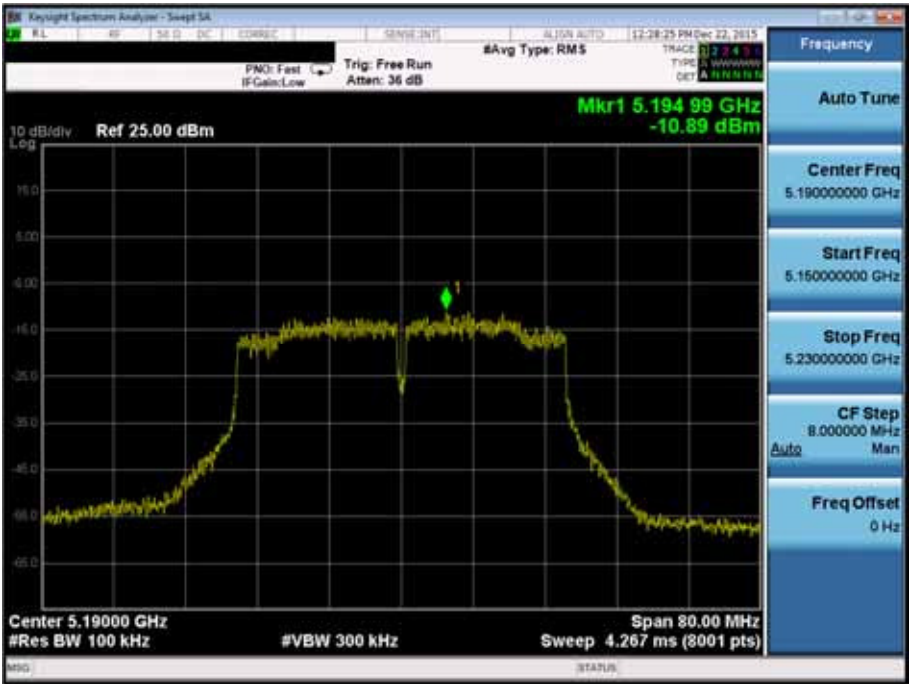
Maximum Power Spectral Density

Test Mode: 802.11n(HT20) & ANT 2 & Ch.165



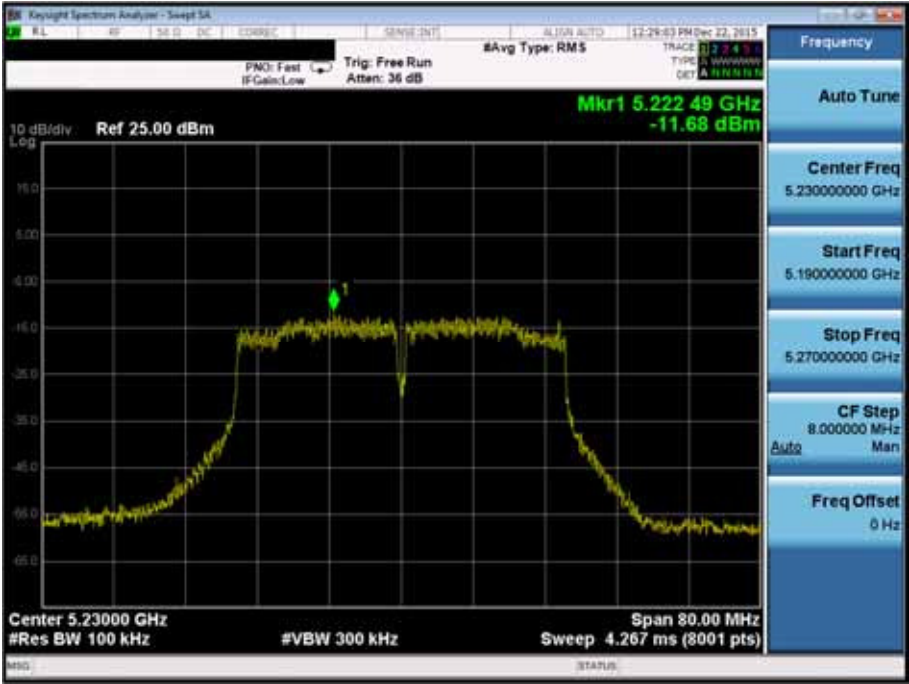
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.38



Maximum Power Spectral Density

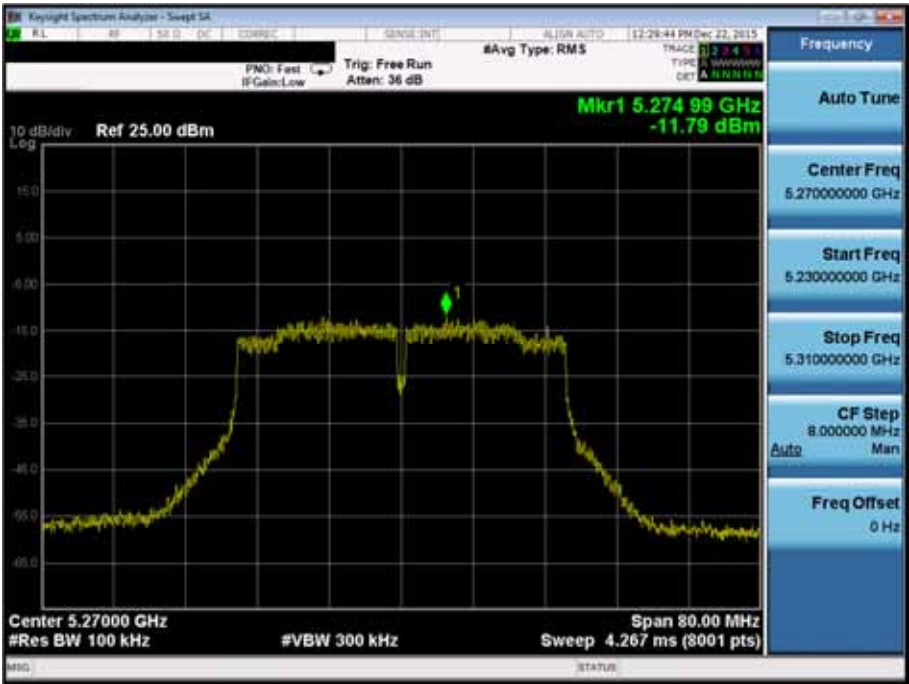
Test Mode: 802.11n HT40 & ANT 2 & Ch.46





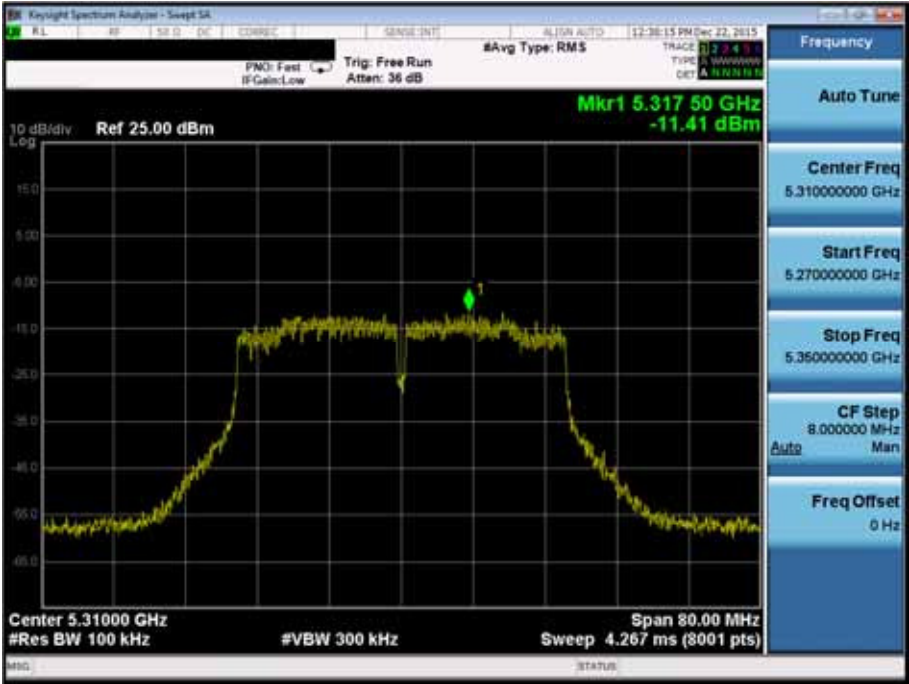
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.54



Maximum Power Spectral Density

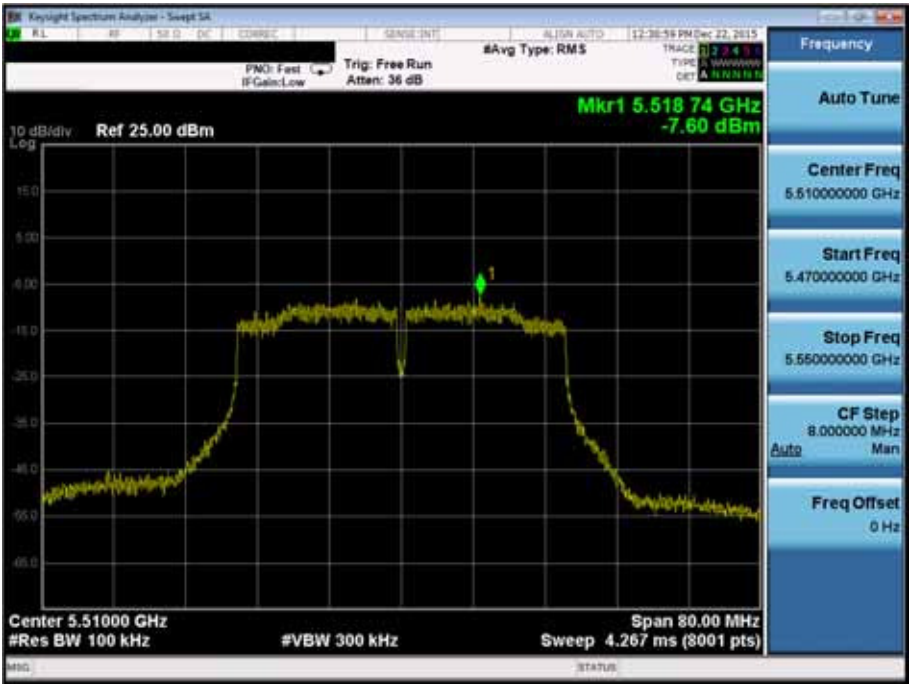
Test Mode: 802.11n HT40 & ANT 2 & Ch.62





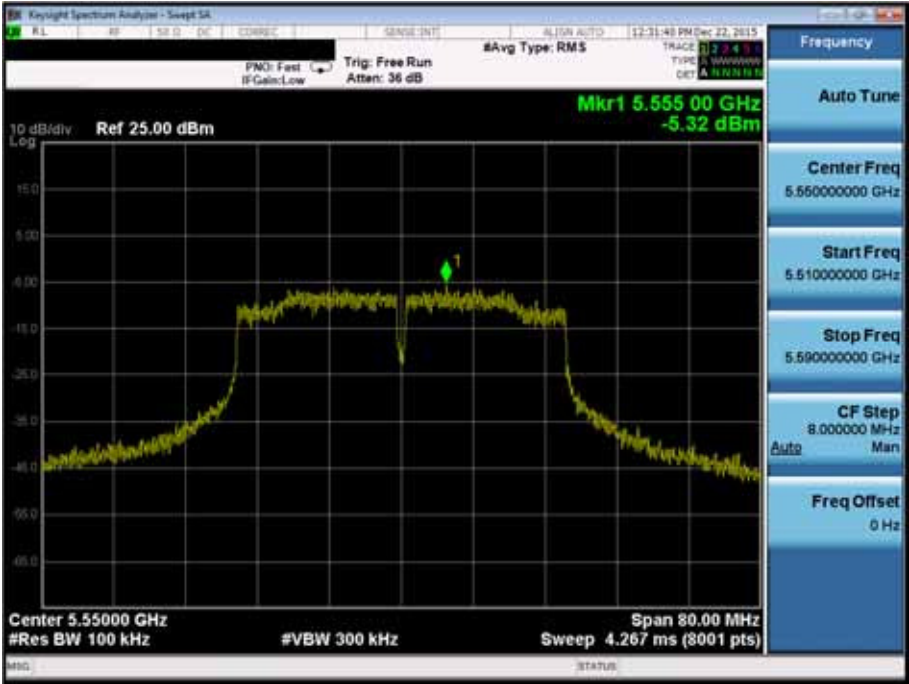
Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.102



Maximum Power Spectral Density

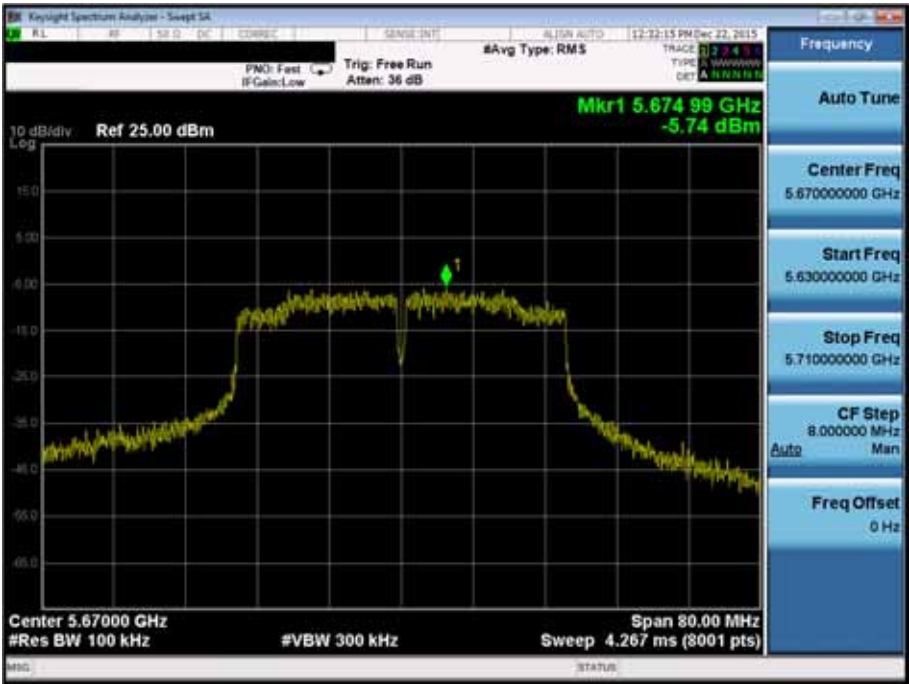
Test Mode: 802.11n HT40 & ANT 2 & Ch.110





Maximum Power Spectral Density

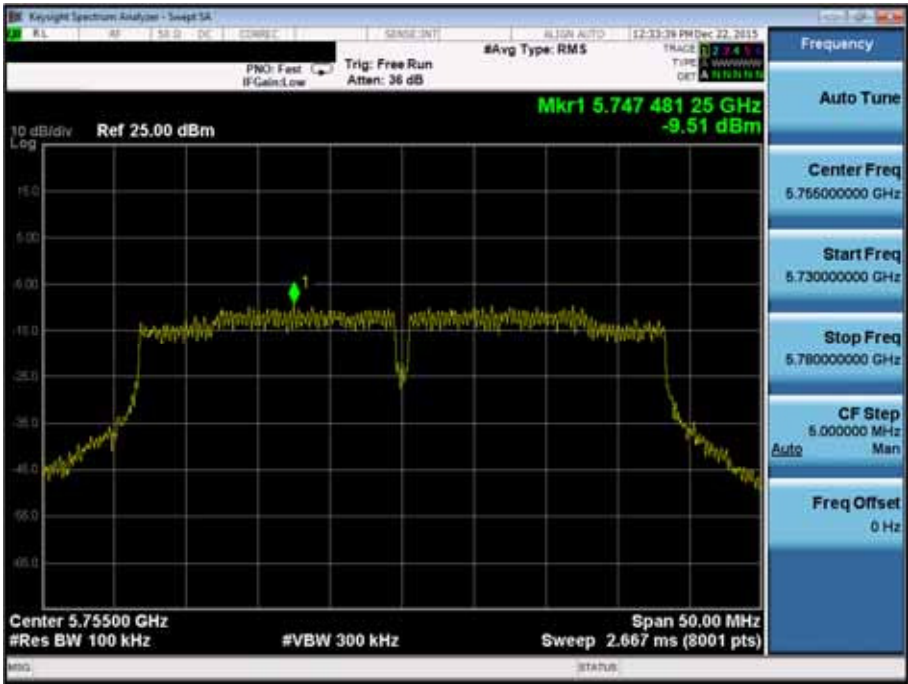
Test Mode: 802.11n HT40 & ANT 2 & Ch.134





Maximum Power Spectral Density

Test Mode: 802.11n HT40 & ANT 2 & Ch.151



Maximum Power Spectral Density

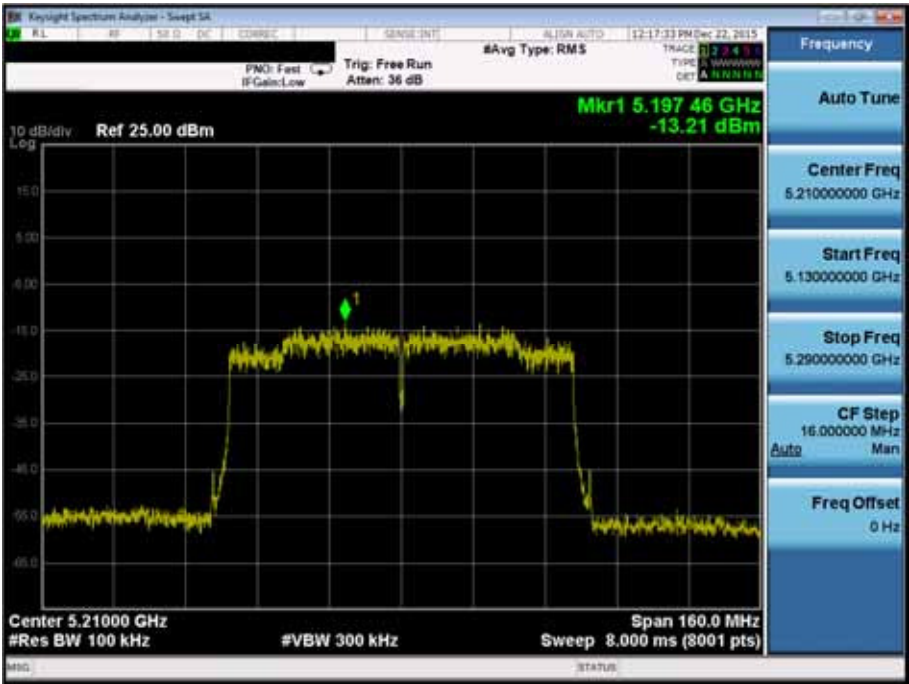
Test Mode: 802.11n HT40 & ANT 2 & Ch.159





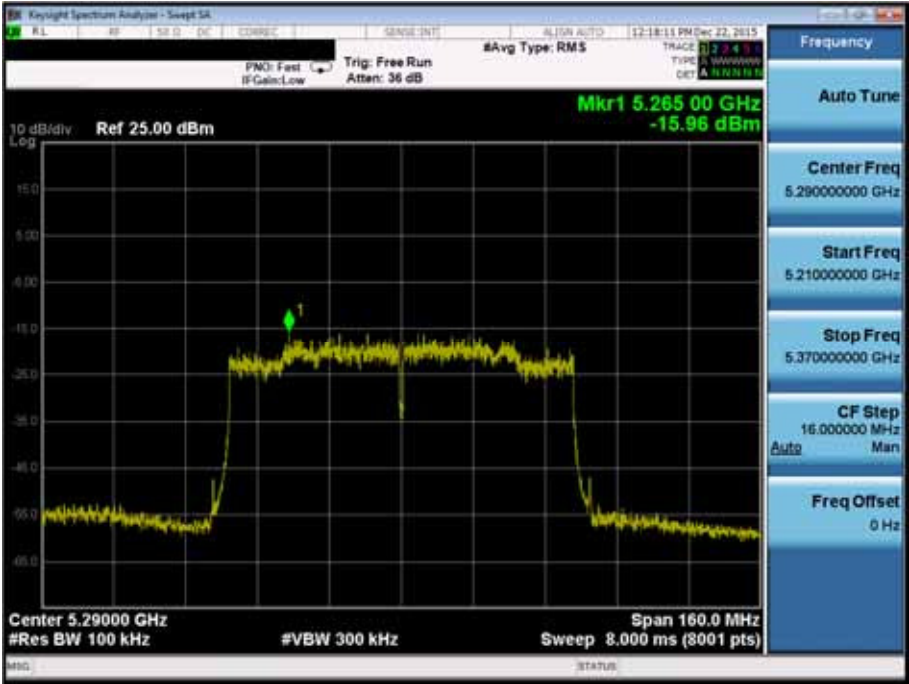
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 2 & Ch.42



Maximum Power Spectral Density

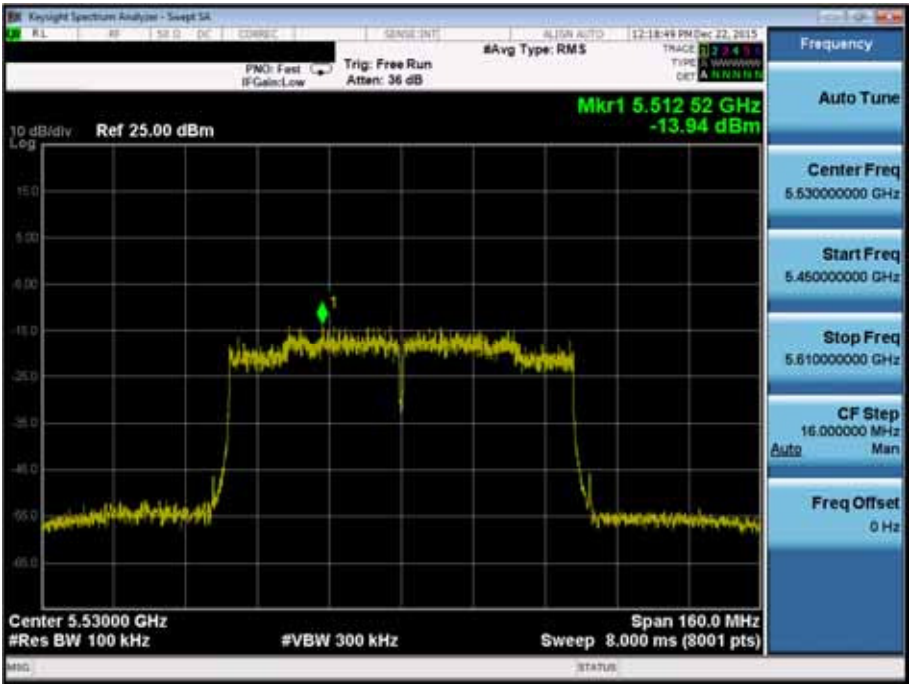
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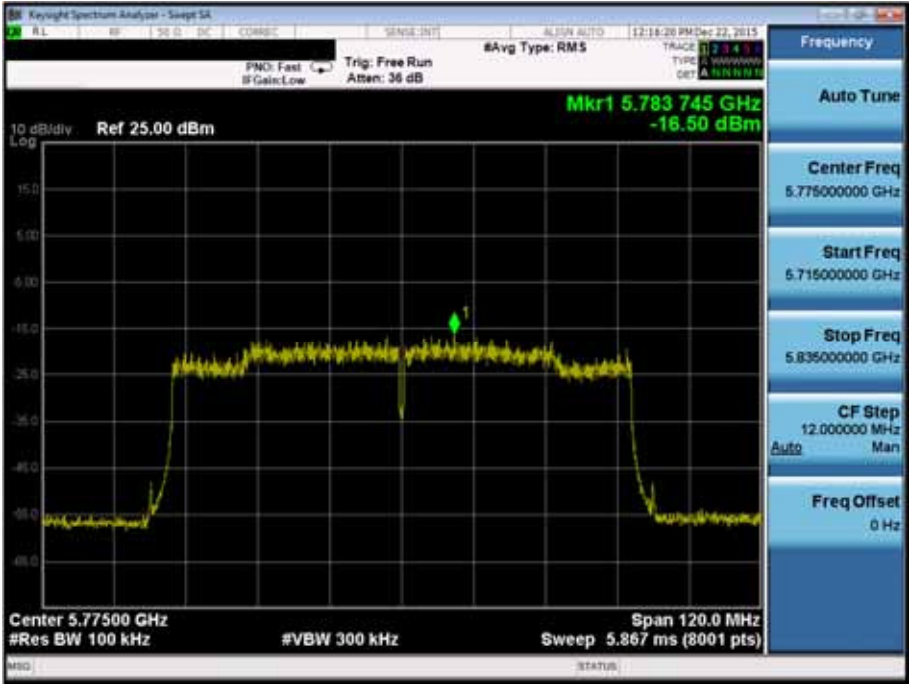
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 2 & Ch.106



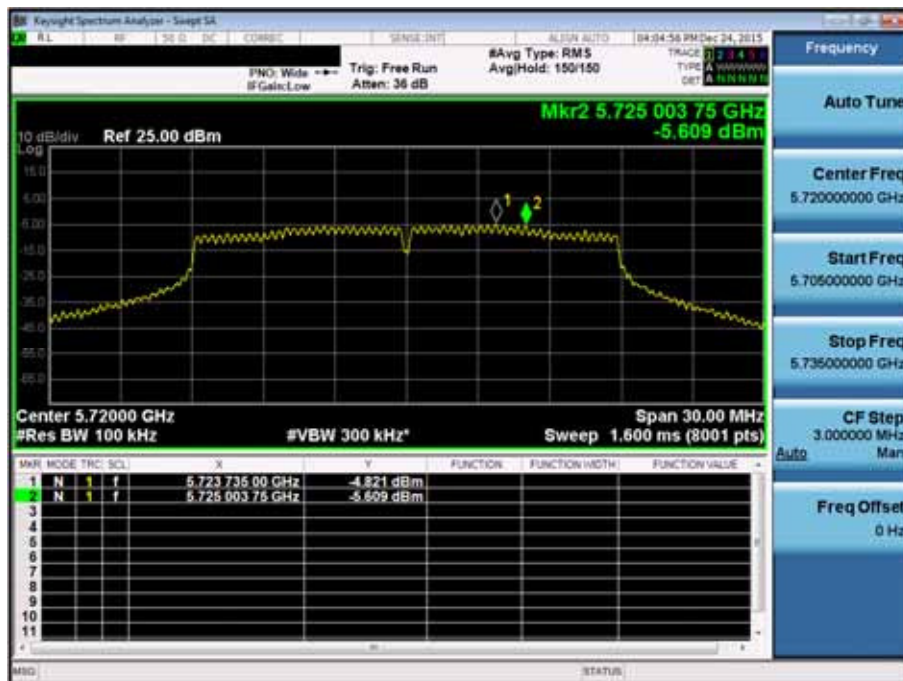
Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 2 & Ch.155



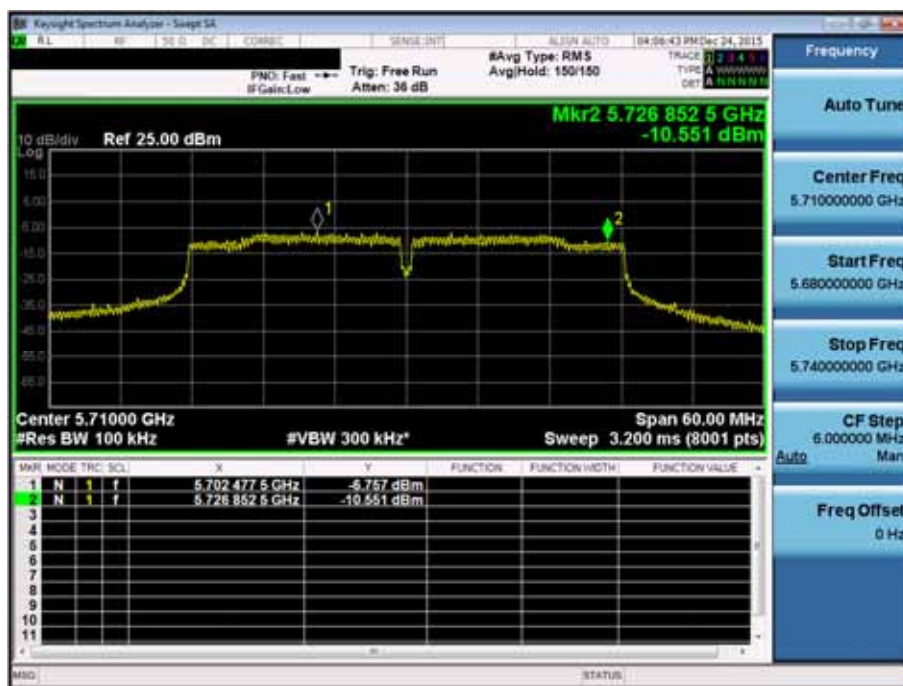
Maximum Power Spectral Density

Test Mode: 802.11ac VHT20 & ANT 2 & Ch.144



Maximum Power Spectral Density

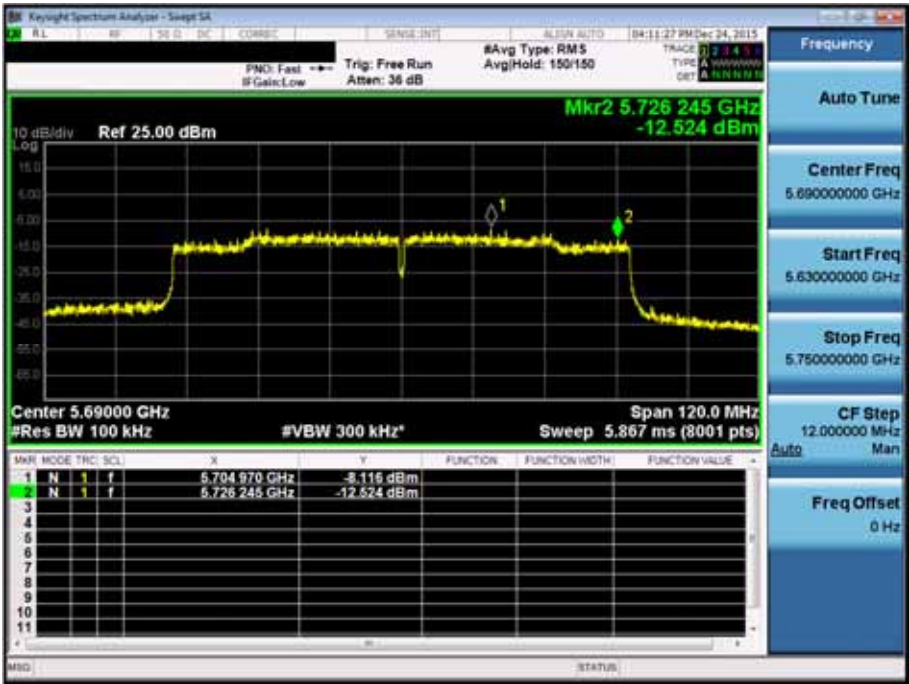
Test Mode: 802.11ac VHT40 & ANT 2 & Ch.142





Maximum Power Spectral Density

Test Mode: 802.11ac VHT80 & ANT 2 & Ch.138



8.5 Frequency Stability



U-NII-2C : (5470 MHz ~ 5725 MHz)_ANT 1

26 dB Bandwidth Reference	
Low edge	High edge
5489.537500	5710.462500

Supply Voltage (V AC)	TEMP (
--------------------------	-----------



U-NII-3 : (5725 MHz ~ 5850 MHz)_ANT 1

6 dB Bandwidth Reference Note 1	
Low edge	High edge
5737.075000	5832.743750

Supply Voltage (V AC)	TEMP (
--------------------------	-----------



U-NII-1 & U-NII-2A : (5150 MHz ~ 5350 MHz)_ANT 2

26 dB Bandwidth Reference	
Low edge(MHz)	High edge(MHz)
5168.937500	5330.331250

Supply Voltage (V AC)	TEMP (
--------------------------	-----------



U-NII-2C : (5470 MHz ~ 5725 MHz)_ANT 2

26 dB Bandwidth Reference	
Low edge	High edge
5489.187500	5710.156250

Supply Voltage (V AC)	TEMP (
--------------------------	-----------



U-NII-3 : (5725 MHz ~ 5850 MHz)_ANT 2

6 dB Bandwidth Reference Note 1	
Low edge	High edge
5737.062500	5833.006250

Supply Voltage (V AC)	TEMP (
--------------------------	-----------

8.6 Radiated Spurious Emission Measurements

► **Measurements Above 1000 MHz (Peak)**

- a) Follow the requirements in section II.G.3, "General Requirements for Unwanted Emissions Measurements".
- b) Peak emission levels are measured by setting the analyzer as follows:
 - (i) **RBW = 1 MHz.**
 - (ii) **VBW $\geq$ 3 MHz.**
 - (iii) **Detector = Peak.**
 - (iv) Sweep time = Auto.
 - (v) Trace mode = Max hold.
 - (vi) Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately $1/x$, where x is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

► **Measurements Above 1000 MHz (Method AD)**

- (i) **RBW = 1 MHz.**
- (ii) **VBW $\geq$ 3 MHz.**
- (iii) **Detector = RMS**, if $\text{span} / (\# \text{ of points in sweep}) \leq \text{RBW} / 2$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, the detector mode shall be set to peak.
- (iv) Averaging type = power (i.e., RMS)
 - As an alternative, the detector and averaging type may be set for linear voltage averaging. Some analyzers require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
- (v) Sweep time = Auto.
- (vi) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, the number of traces shall be increased by a factor of $1/x$, where x is the duty cycle. For example, with 50 percent duty cycle, at least 200 traces shall be averaged.
- (vii) If tests are performed with the EUT transmitting at a duty cycle less than 98 percent, a correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:
 - **If power averaging (RMS) mode was used in step (iv) above, the correction factor is $10 \log(1/x)$, where x is the duty cycle.**

For example, if the transmit duty cycle was 50 percent, then 3 dB must be added to the measured emission levels.

 - If linear voltage averaging mode was used in step (iv) above, the correction factor is $20 \log(1/x)$, where x is the duty cycle. For example, if the transmit duty cycle was 50 percent, then 6 dB must be added to the measured emission levels.
 - If a specific emission is demonstrated to be continuous (100 percent duty cycle) rather than turning on and off with the transmit cycle, no duty cycle correction is required for that emission.

Please refer to Appendix II for the duty correction factor

8.7 AC Conducted Emissions

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 1 & 802.11a & ANT 1 & 5200 MHz

Results of Conducted Emission

DTNC

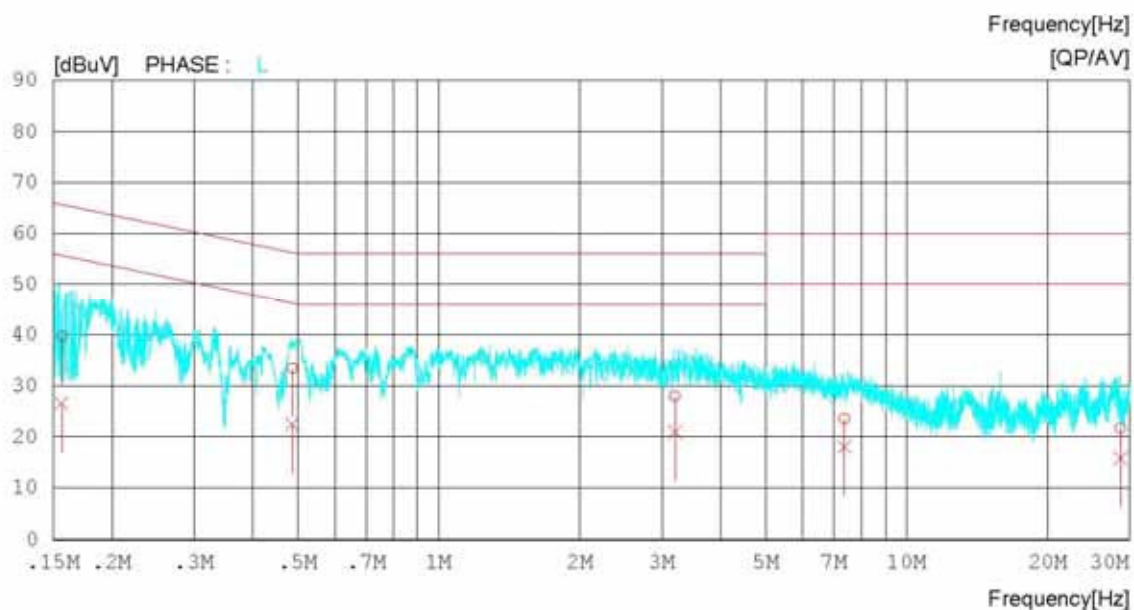
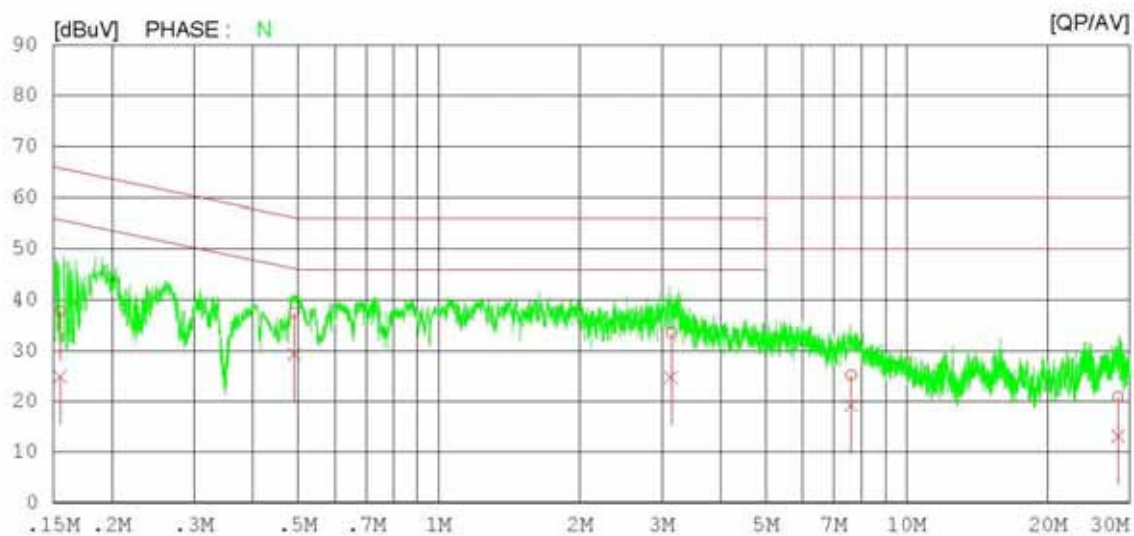
Date : 2015-12-11

Order No. :
Model No. : LG15Z96
Serial No. : Identical prototype
Test Condition : 802.11a / 5200MHz

Reference No. :
Power Supply : 120V / 60Hz
Temp/Humi. : 21 'C / 42 % R.H.
Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 1 & 802.11a & ANT 1 & 5200 MHz

Results of Conducted Emission

DTNC

Date : 2015-12-11

Order No. :
 Model No. : LG15Z96
 Serial No. : Identical prototype
 Test Condition : 802.11a / 5200MHz

Reference No. :
 Power Supply : 120V / 60Hz
 Temp/Humi. : 21 'C / 42 % R.H.
 Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15509	27.7	14.9	10.1	37.8	25.0	65.7	55.7	27.9	30.7	N
2	0.49069	27.4	19.2	10.1	37.5	29.3	56.2	46.2	18.7	16.9	N
3	3.14040	23.3	14.5	10.2	33.5	24.7	56.0	46.0	22.5	21.3	N
4	7.60660	14.9	8.8	10.4	25.3	19.2	60.0	50.0	34.7	30.8	N
5	28.36140	10.2	2.3	10.8	21.0	13.1	60.0	50.0	39.0	36.9	N
6	0.15650	29.5	16.4	10.1	39.6	26.5	65.6	55.6	26.0	29.1	L
7	0.48616	23.3	12.3	10.1	33.4	22.4	56.2	46.2	22.8	23.8	L
8	3.20040	17.7	10.7	10.2	27.9	20.9	56.0	46.0	28.1	25.1	L
9	7.36100	13.1	7.6	10.4	23.5	18.0	60.0	50.0	36.5	32.0	L
10	28.67020	10.4	4.5	11.2	21.6	15.7	60.0	50.0	38.4	34.3	L

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 2A & 802.11a & ANT 1 & 5300 MHz

Results of Conducted Emission

DTNC

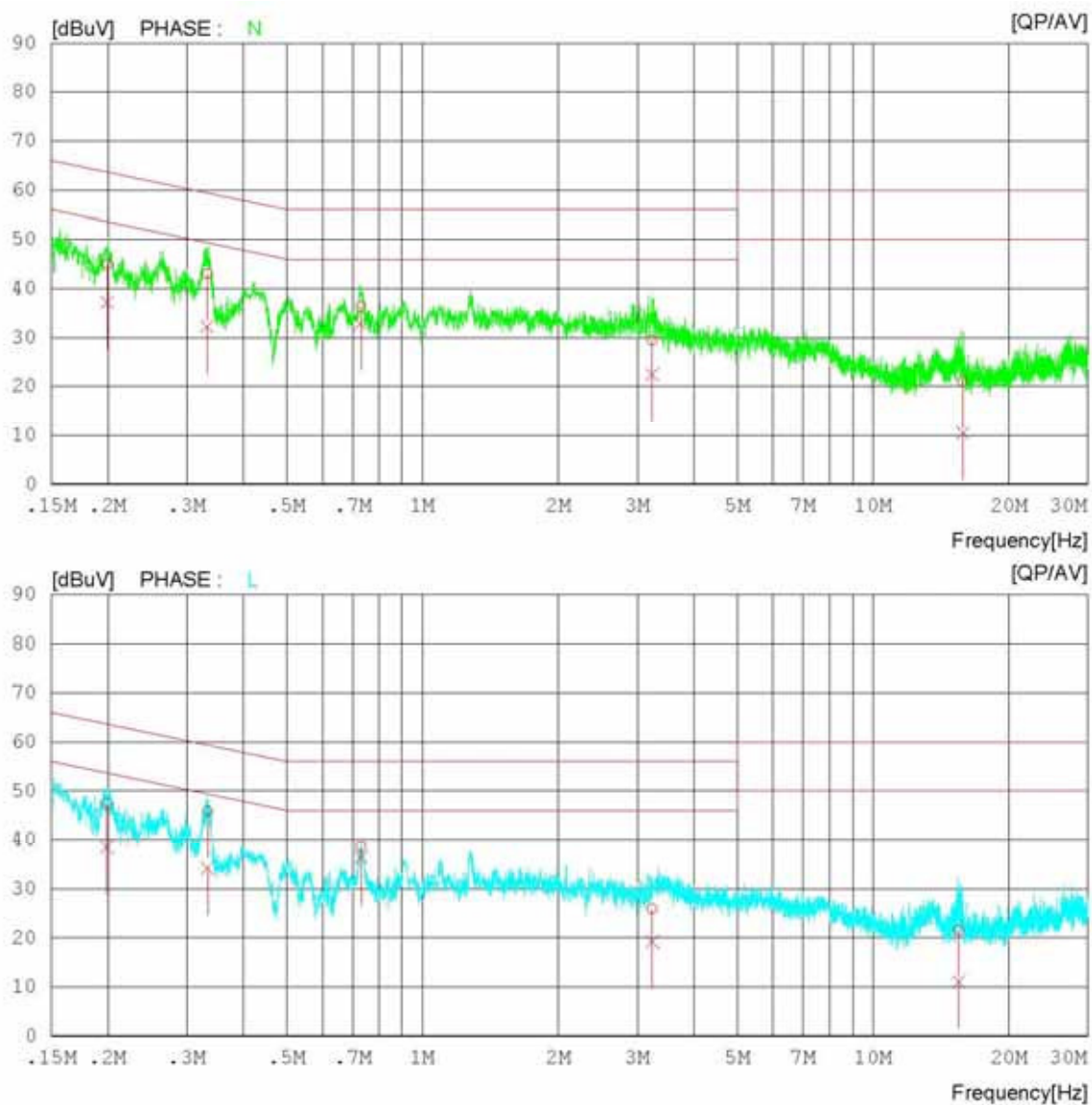
Date : 2015-12-11

Order No. :
Model No. : LG15Z96
Serial No. : Identical prototype
Test Condition : 802.11a / 5300MHz

Reference No. :
Power Supply : 120V / 60Hz
Temp/Humi. : 21 °C / 42 % R.H.
Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 2A & 802.11a & ANT 1 & 5300 MHz

Results of Conducted Emission

DTNC

Date : 2015-12-11

Order No. :
 Model No. : LG15Z96
 Serial No. : Identical prototype
 Test Condition : 802.11a / 5300MHz

Reference No. :
 Power Supply : 120V / 60Hz
 Temp/Humi. : 21 'C / 42 % R.H.
 Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.19977	34.9	27.1	10.1	45.0	37.2	63.6	53.6	18.6	16.4	N
2	0.33262	32.9	22.2	10.1	43.0	32.3	59.4	49.4	16.4	17.1	N
3	0.72892	26.2	22.8	10.1	36.3	32.9	56.0	46.0	19.7	13.1	N
4	3.23440	19.2	12.2	10.2	29.4	22.4	56.0	46.0	26.6	23.6	N
5	15.83980	10.5	-0.1	10.6	21.1	10.5	60.0	50.0	38.9	39.5	N
6	0.19922	37.3	28.3	10.1	47.4	38.4	63.6	53.6	16.2	15.2	L
7	0.33333	35.7	24.1	10.1	45.8	34.2	59.4	49.4	13.6	15.2	L
8	0.73023	28.4	26.3	10.1	38.5	36.4	56.0	46.0	17.5	9.6	L
9	3.23560	15.7	9.1	10.2	25.9	19.3	56.0	46.0	30.1	26.7	L
10	15.50260	10.6	0.2	10.8	21.4	11.0	60.0	50.0	38.6	39.0	L

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 2C & 802.11a & ANT 1 & 5580 MHz

Results of Conducted Emission

DTNC

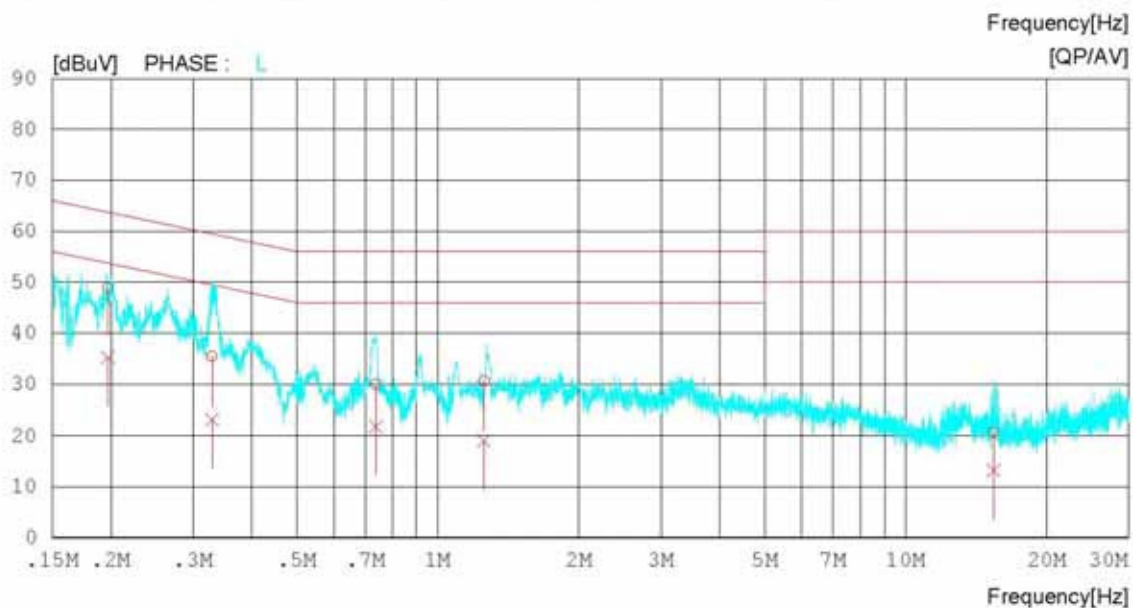
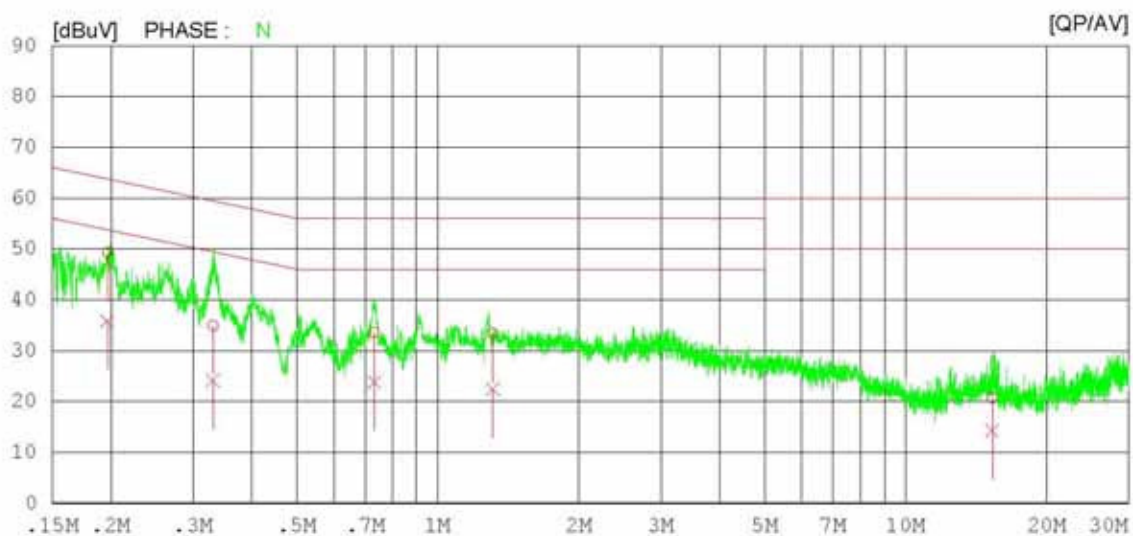
Date : 2016-01-05

Order No. :
Model No. : LG15Z96
Serial No. : Identical prototype
Test Condition : 802.11a / 5580MHz

Reference No. :
Power Supply : 120V / 60Hz
Temp/Humi. : 21 °C / 42 % R.H.
Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 2C & 802.11a & ANT 1 & 5580 MHz

Results of Conducted Emission

DTNC

Date : 2016-01-05

Order No. :
 Model No. : LG15Z96
 Serial No. : Identical prototype
 Test Condition : 802.11a / 5580MHz

Reference No. :
 Power Supply : 120V / 60Hz
 Temp/Humi. : 21 °C / 42 % R.H.
 Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.19666	39.1	25.7	10.1	49.2	35.8	63.8	53.8	14.6	18.0	N
2	0.33079	24.8	14.0	10.1	34.9	24.1	59.4	49.4	24.5	25.3	N
3	0.73080	23.4	13.8	10.1	33.5	23.9	56.0	46.0	22.5	22.1	N
4	1.31160	23.2	12.2	10.2	33.4	22.4	56.0	46.0	22.6	23.6	N
5	15.32400	10.0	3.7	10.6	20.6	14.3	60.0	50.0	39.4	35.7	N
6	0.19728	38.8	25.1	10.1	48.9	35.2	63.7	53.7	14.8	18.5	L
7	0.32913	25.3	13.0	10.1	35.4	23.1	59.5	49.5	24.1	26.4	L
8	0.73692	19.9	11.7	10.1	30.0	21.8	56.0	46.0	26.0	24.2	L
9	1.25520	20.3	8.8	10.2	30.5	19.0	56.0	46.0	25.5	27.0	L
10	15.43500	9.8	2.3	10.8	20.6	13.1	60.0	50.0	39.4	36.9	L

AC Line Conducted Emissions (Graph)

Test Mode: U-NII 3 & 802.11a & ANT 1 & 5785 MHz

Results of Conducted Emission

DTNC

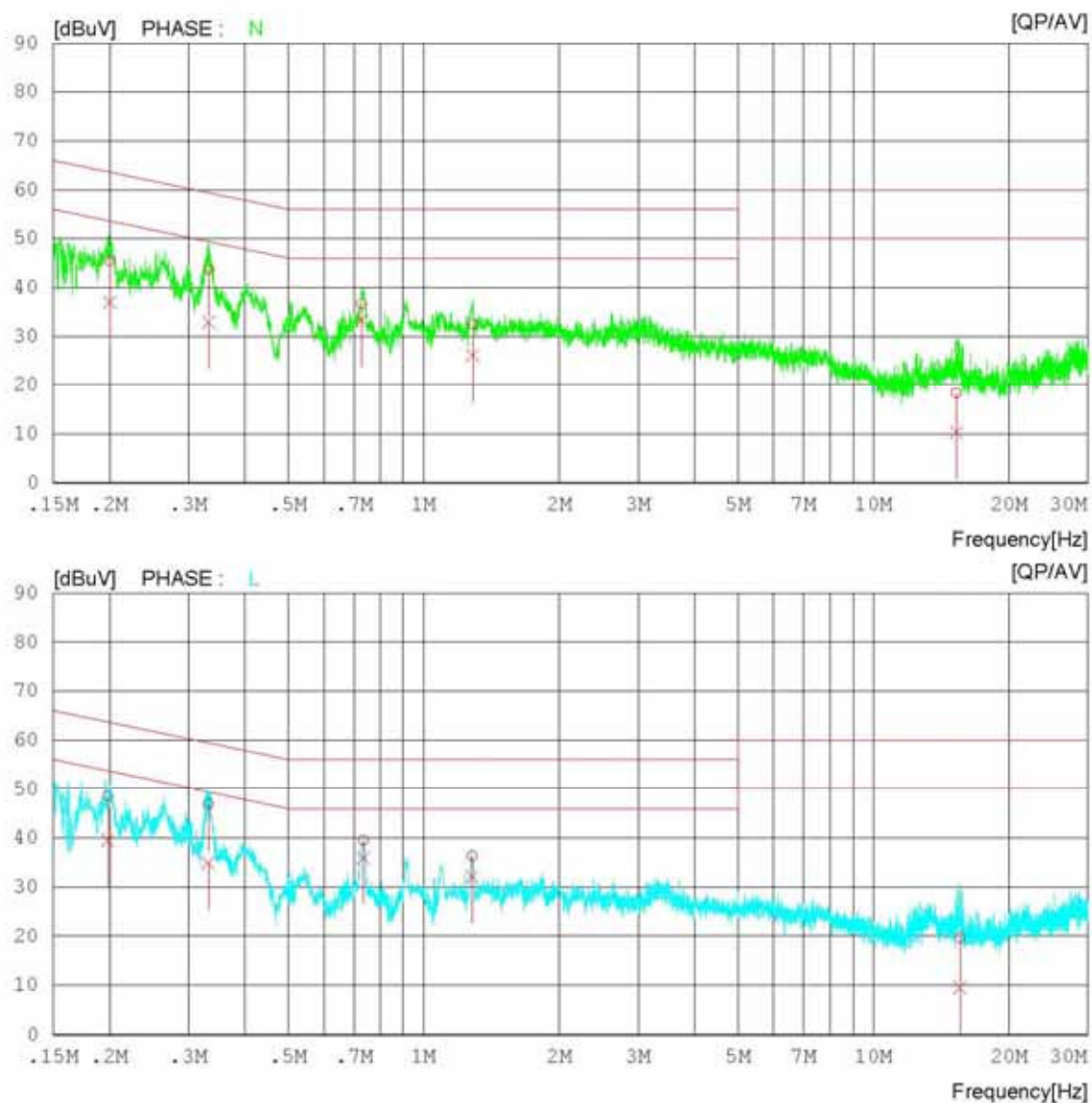
Date : 2015-12-11

Order No. :
Model No. : LG15Z96
Serial No. : Identical prototype
Test Condition : 802.11a / 5785MHz

Reference No. :
Power Supply : 120V / 60Hz
Temp/Humi. : 21 'C / 42 % R.H.
Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV



AC Line Conducted Emissions (Data List)

Test Mode: U-NII 3 & 802.11a & ANT 1 & 5785 MHz

Results of Conducted Emission

DTNC

Date : 2015-12-11

Order No. :
 Model No. : LG15Z96
 Serial No. : Identical prototype
 Test Condition : 802.11a / 5785MHz

Reference No. :
 Power Supply : 120V / 60Hz
 Temp/Humi. : 21 'C / 42 % R.H.
 Operator : I.H.BAE

Memo :

LIMIT : CISPR22_B QP
 CISPR22_B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.20032	35.3	26.9	10.1	45.4	37.0	63.6	53.6	18.2	16.6	N
2	0.33230	33.5	22.8	10.1	43.6	32.9	59.4	49.4	15.8	16.5	N
3	0.72790	26.5	23.2	10.1	36.6	33.3	56.0	46.0	19.4	12.7	N
4	1.28560	22.3	15.9	10.2	32.5	26.1	56.0	46.0	23.5	19.9	N
5	15.29640	7.8	-0.3	10.6	18.4	10.3	60.0	50.0	41.6	39.7	N
6	0.19821	38.4	29.3	10.1	48.5	39.4	63.7	53.7	15.2	14.3	L
7	0.33128	36.8	24.8	10.1	46.9	34.9	59.4	49.4	12.5	14.5	L
8	0.73453	29.4	25.8	10.1	39.5	35.9	56.0	46.0	16.5	10.1	L
9	1.28080	26.0	21.9	10.2	36.2	32.1	56.0	46.0	19.8	13.9	L
10	15.57700	8.8	-1.4	10.8	19.6	9.4	60.0	50.0	40.4	40.6	L