

A.3 6 dB Bandwidth

Test Data

ANT 0

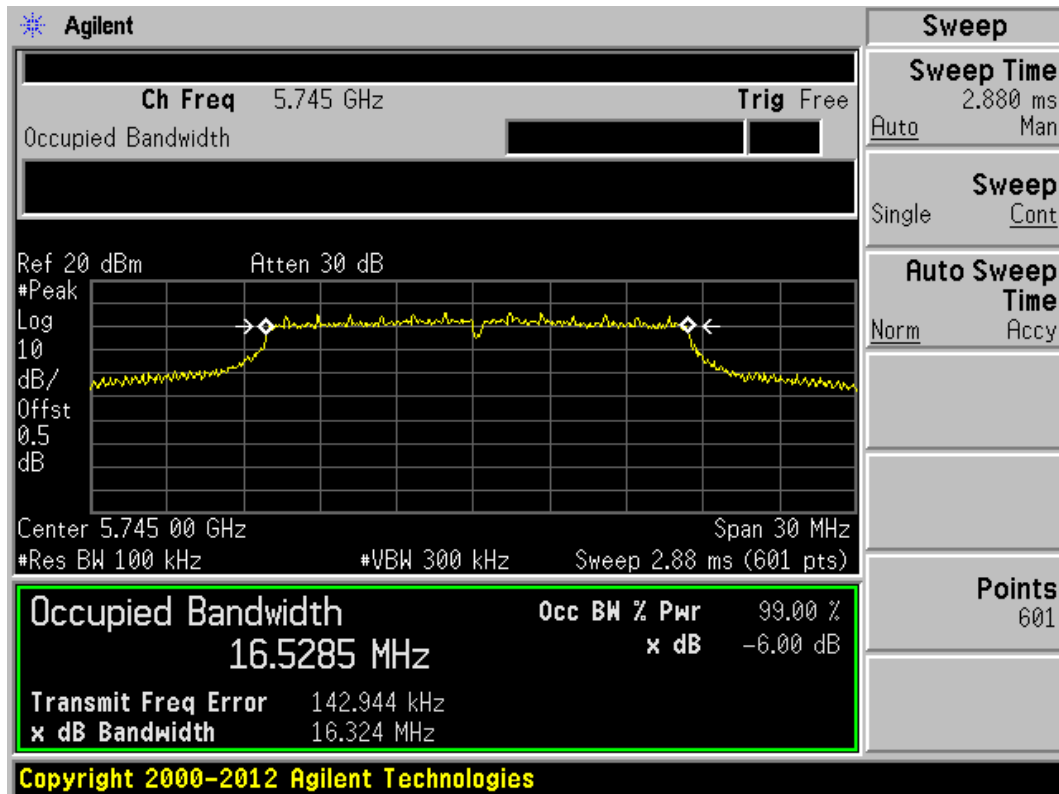
Band IV (5725 - 5850 MHz)					
Mode	Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Verdict
11a	CH149	5745	16.324	0.5	Pass
11a	CH157	5785	16.327	0.5	Pass
11a	CH161	5825	16.344	0.5	Pass
11n (HT20)	CH149	5745	17.050	0.5	Pass
11n (HT20)	CH157	5785	17.055	0.5	Pass
11n (HT20)	CH161	5825	17.077	0.5	Pass
11n (HT40)	CH151	5755	36.284	0.5	Pass
11n (HT40)	CH159	5795	36.004	0.5	Pass
11ac (HT20)	CH149	5745	16.718	0.5	Pass
11ac (HT20)	CH157	5785	16.879	0.5	Pass
11ac (HT20)	CH161	5805	16.677	0.5	Pass
11ac (HT40)	CH151	5755	35.971	0.5	Pass
11ac (HT40)	CH159	5795	35.696	0.5	Pass
11ac (HT80)	CH155	5775	75.229	0.5	Pass

ANT 1

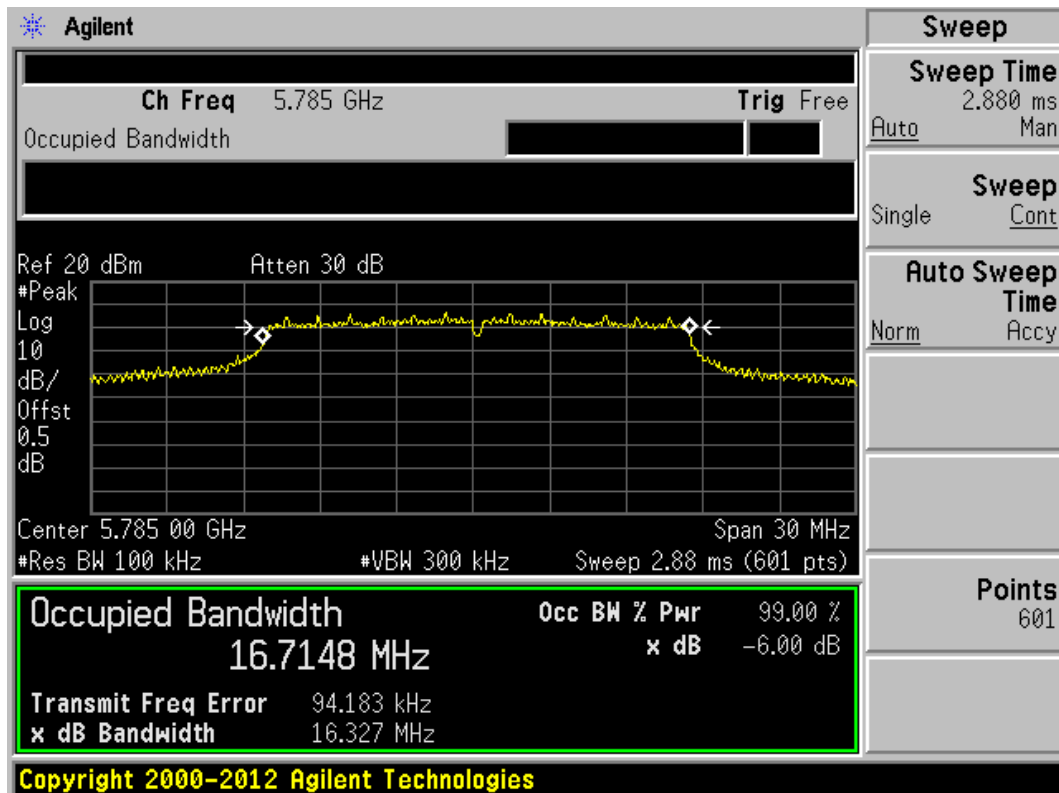
Band IV (5725 - 5850 MHz)					
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11a	CH149	5745	16.419	0.5	Pass
11a	CH157	5785	16.385	0.5	Pass
11a	CH161	5825	16.328	0.5	Pass
11n (HT20)	CH149	5745	17.072	0.5	Pass
11n (HT20)	CH157	5785	17.059	0.5	Pass
11n (HT20)	CH161	5825	17.034	0.5	Pass
11n (HT40)	CH151	5755	36.326	0.5	Pass
11n (HT40)	CH159	5795	36.335	0.5	Pass
11ac (HT20)	CH149	5745	16.948	0.5	Pass
11ac (HT20)	CH157	5785	16.957	0.5	Pass
11ac (HT20)	CH161	5805	16.406	0.5	Pass
11ac (HT40)	CH151	5755	35.690	0.5	Pass
11ac (HT40)	CH159	5795	35.586	0.5	Pass
11ac (HT80)	CH155	5775	75.216	0.5	Pass

Test Plots
ANT 0

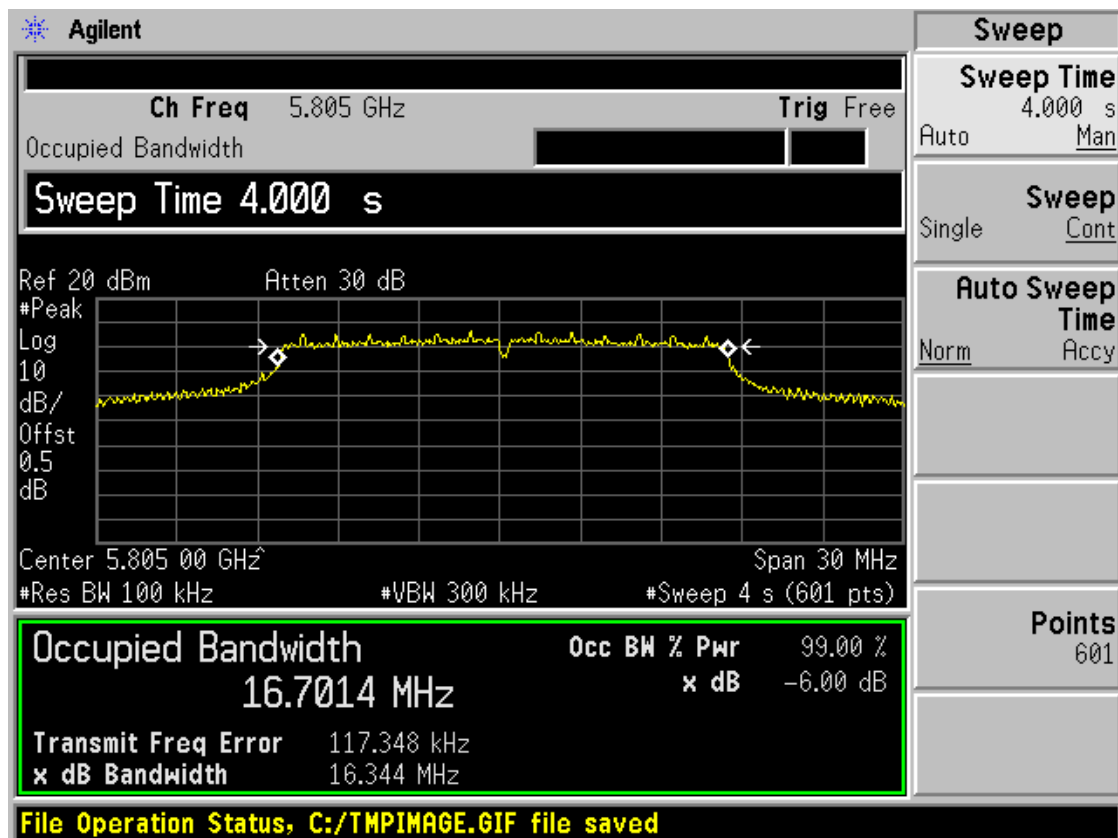
Band IV 11a CH149



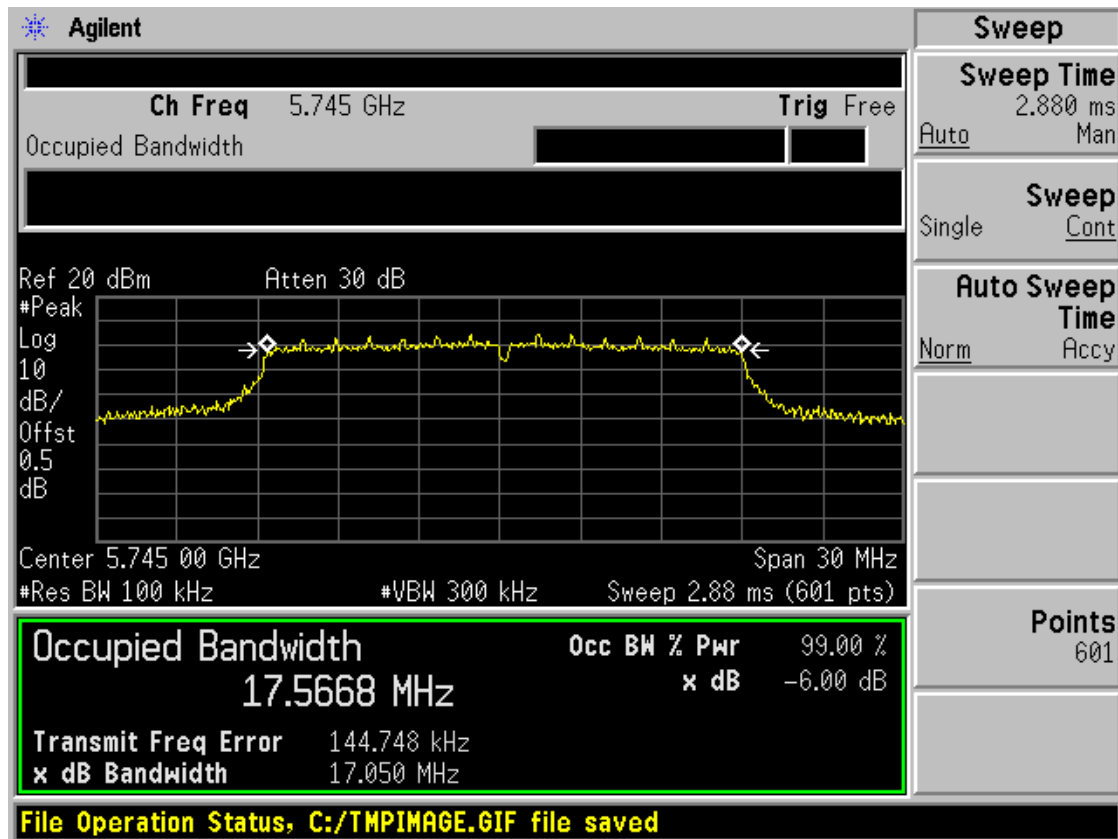
Band IV 11a CH157



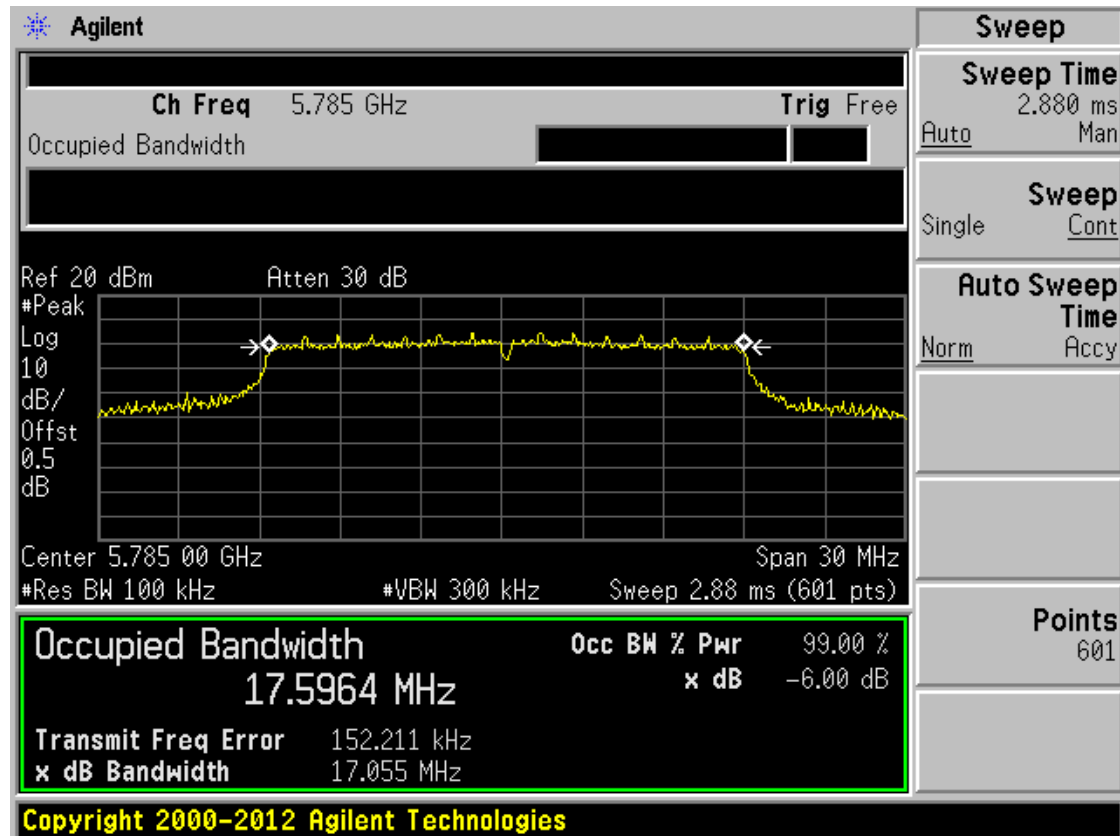
Band IV 11a CH161



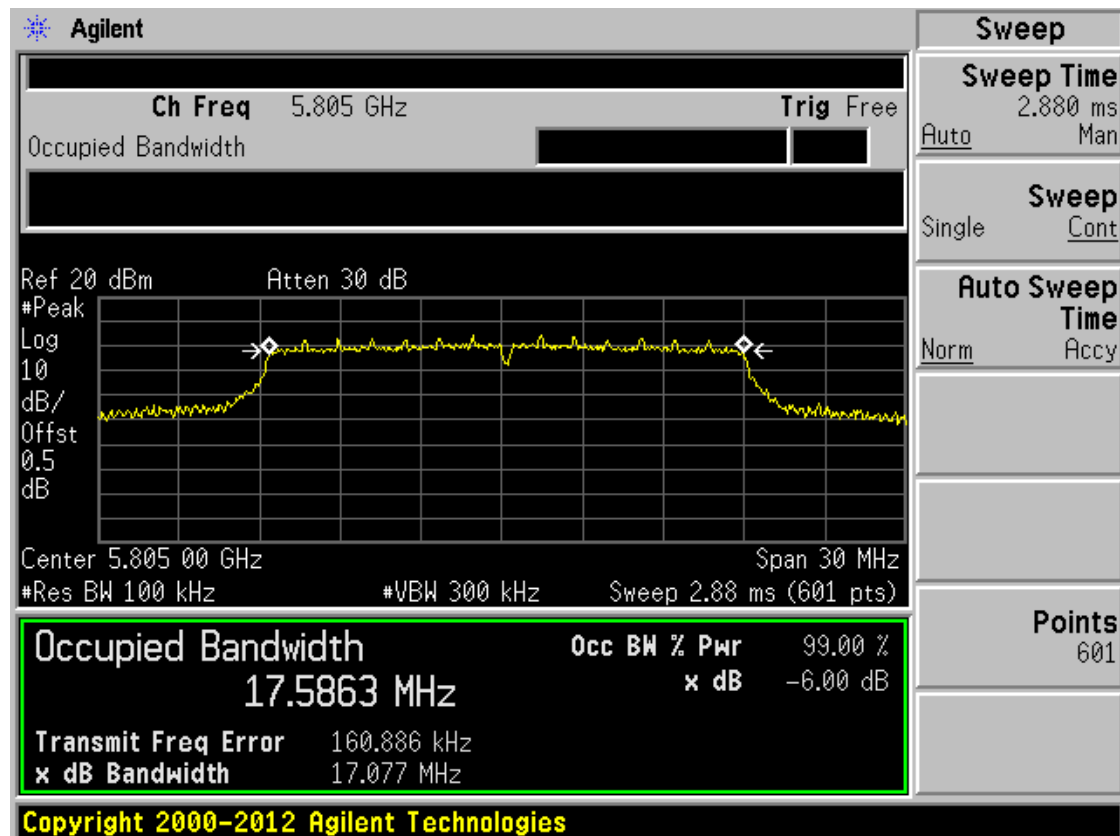
Band IV 11n(HT20) CH149



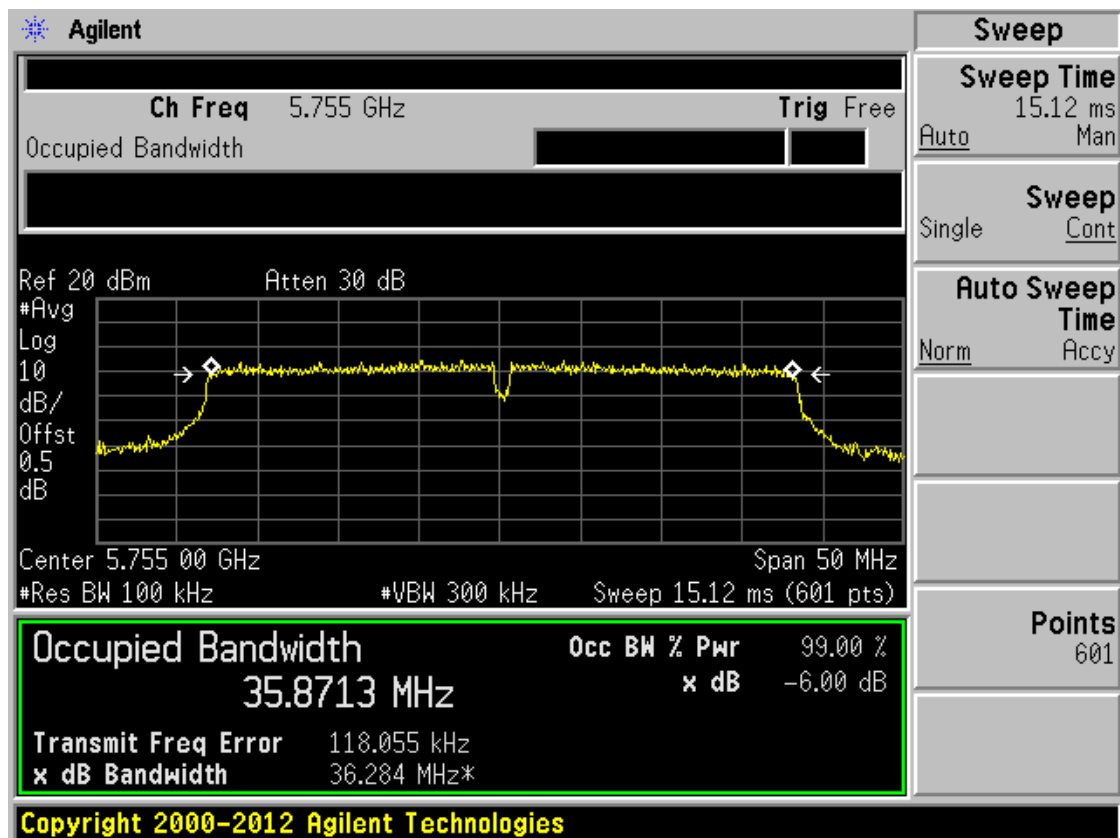
Band IV 11n(HT20) CH157



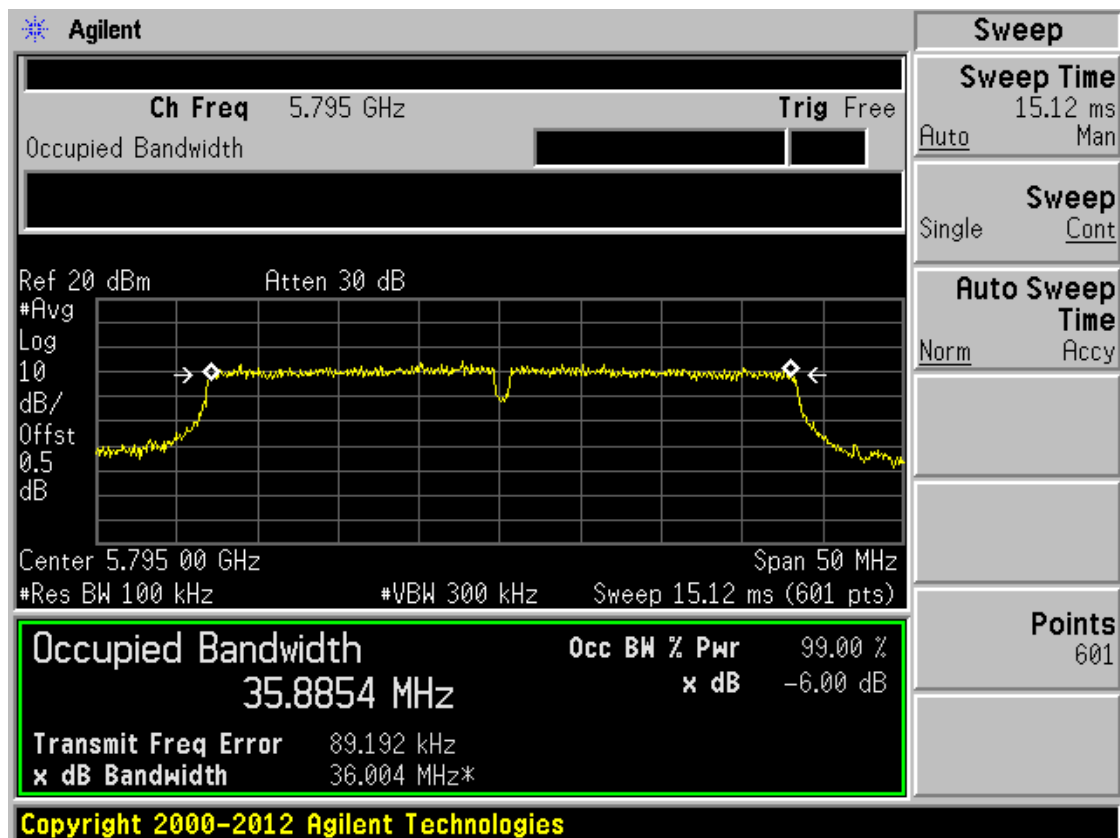
Band IV 11n(HT20) CH161



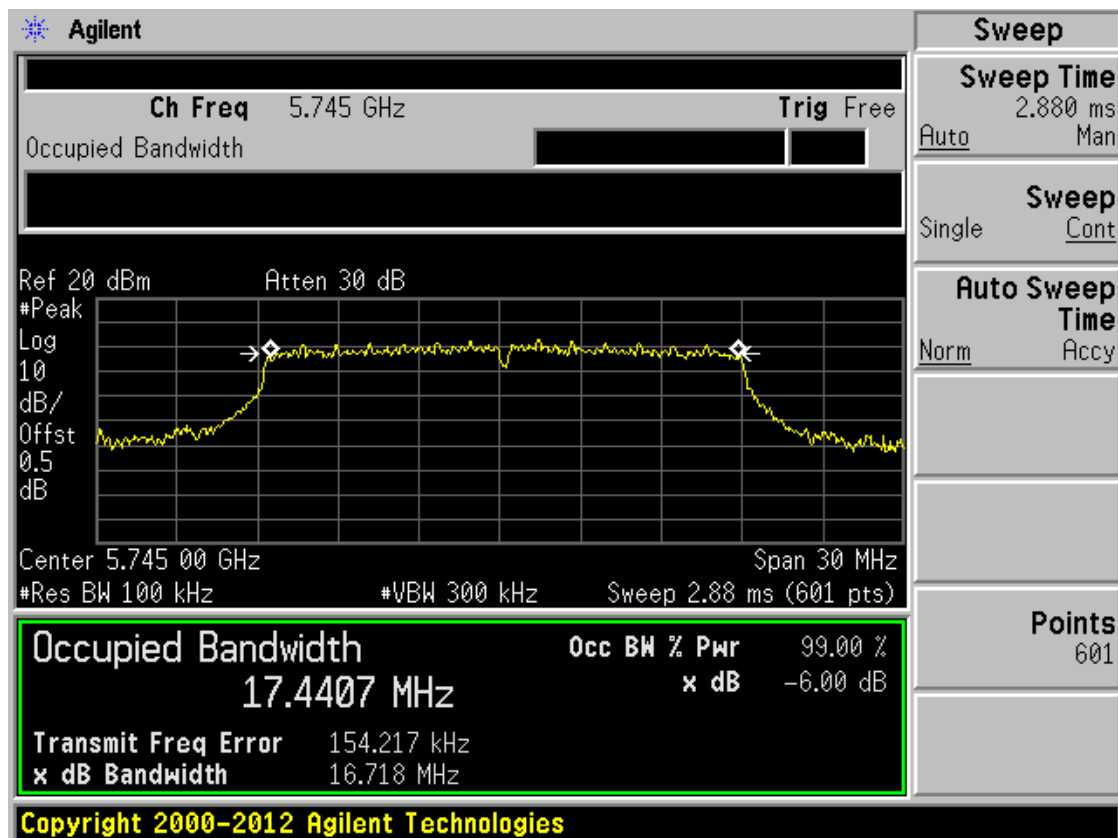
Band IV 11n(HT40) CH151



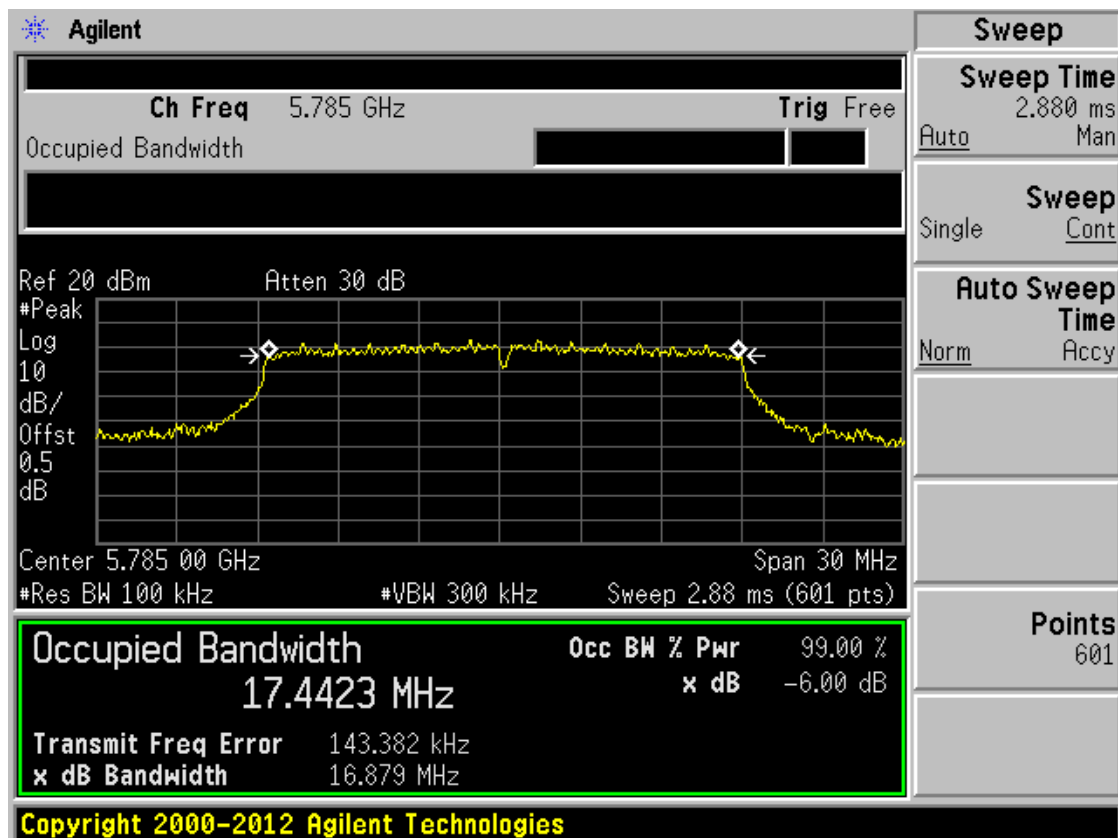
Band IV 11n(HT40) CH159



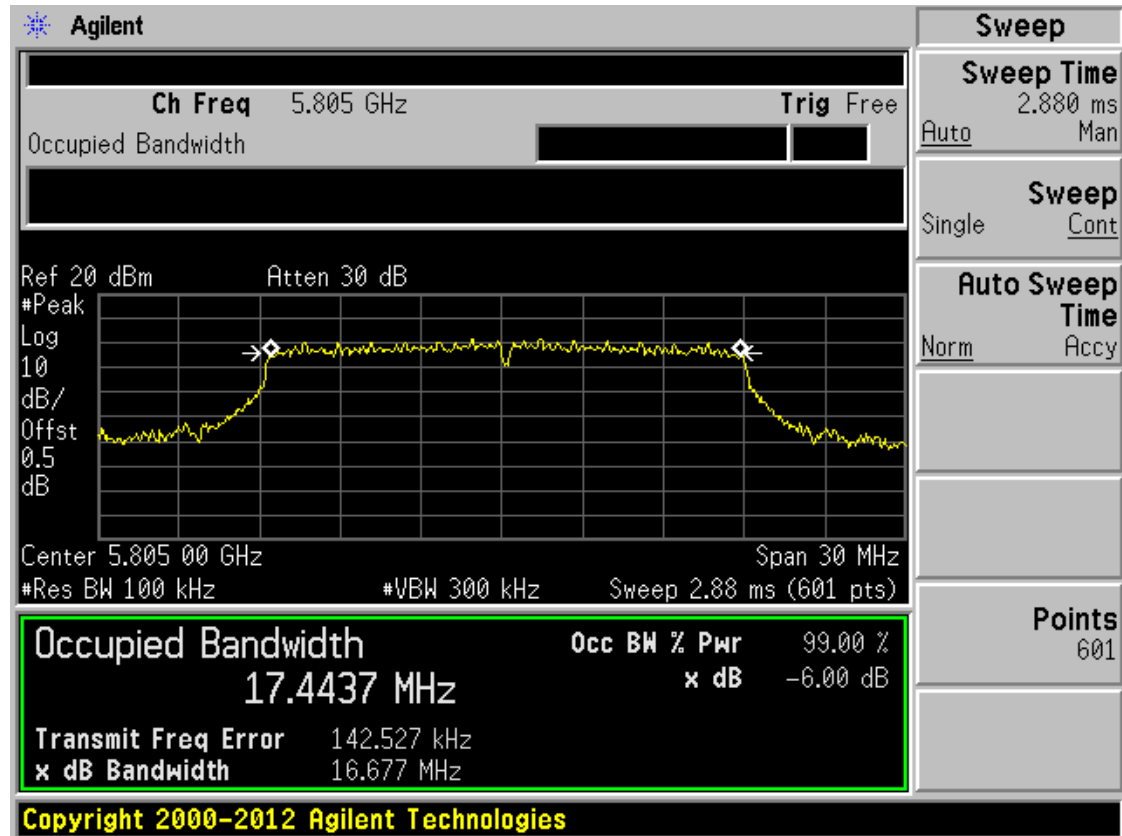
Band IV 11ac(HT20) CH149



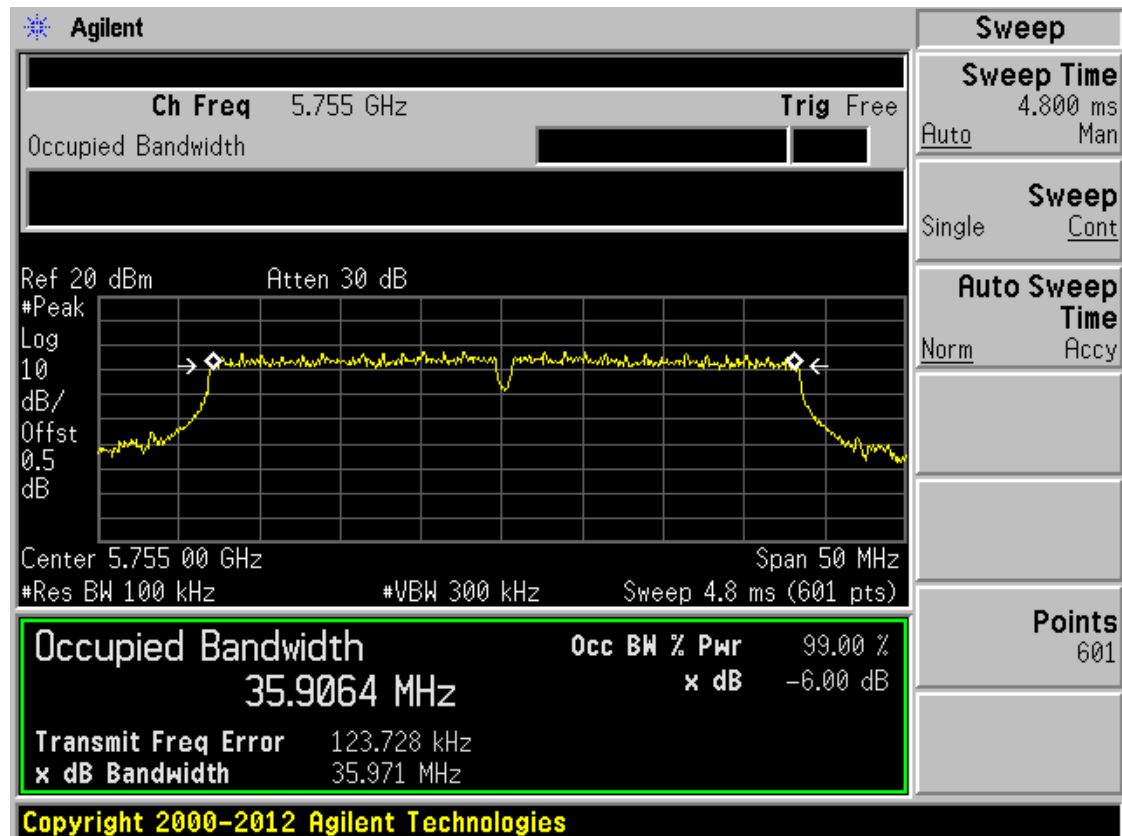
Band IV 11ac(HT20) CH157



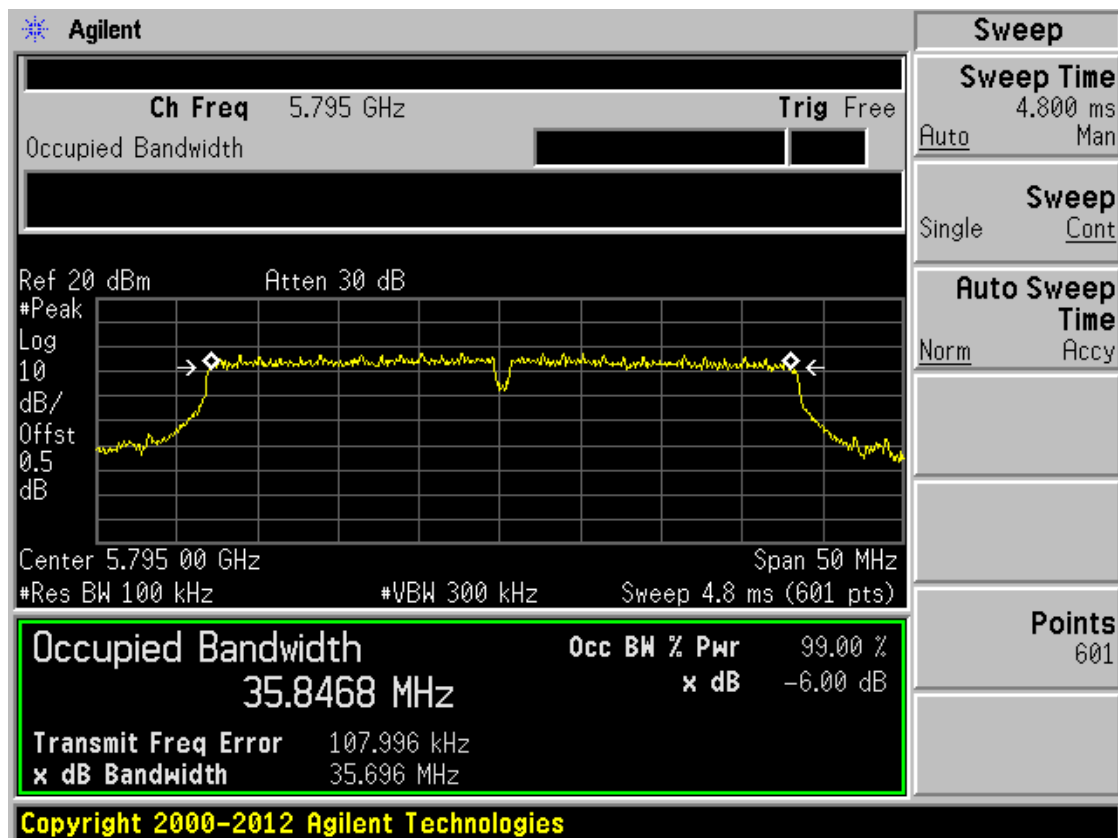
Band IV 11ac(HT20) CH161



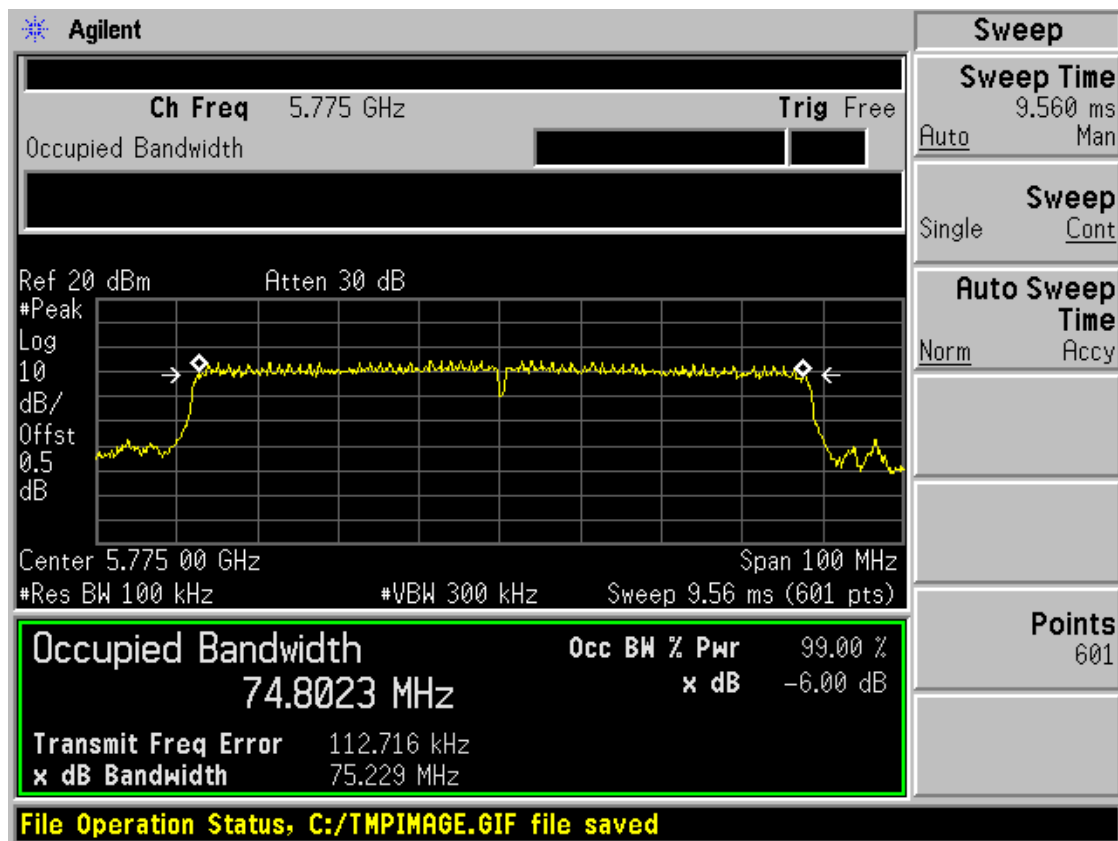
Band IV 11ac(HT40) CH151



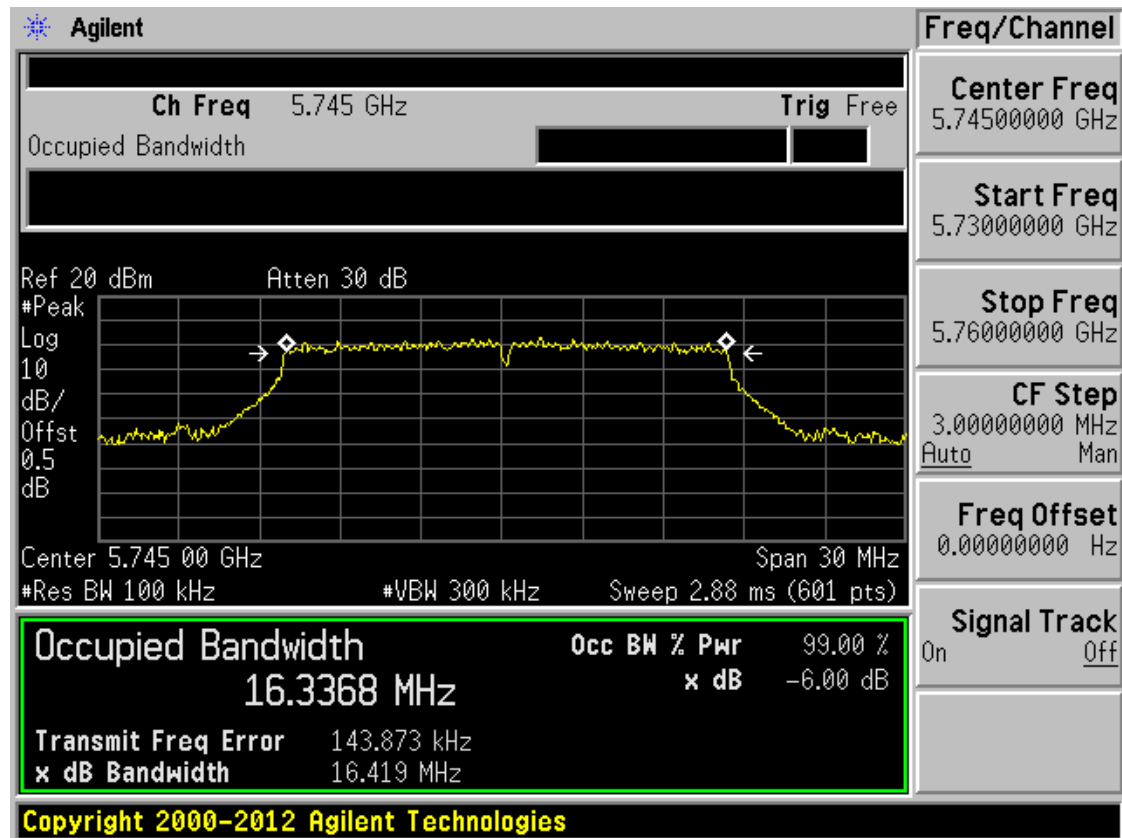
Band IV 11ac(HT40) CH159



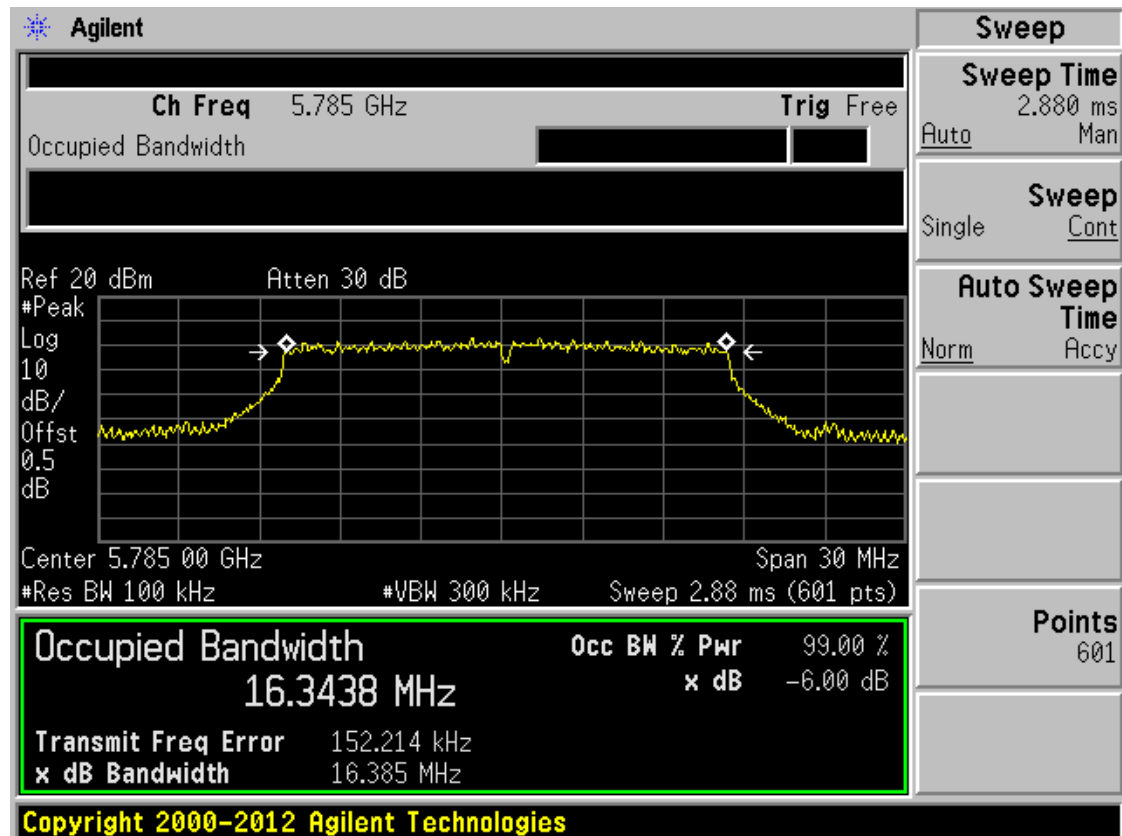
Band IV 11ac(HT80) CH155



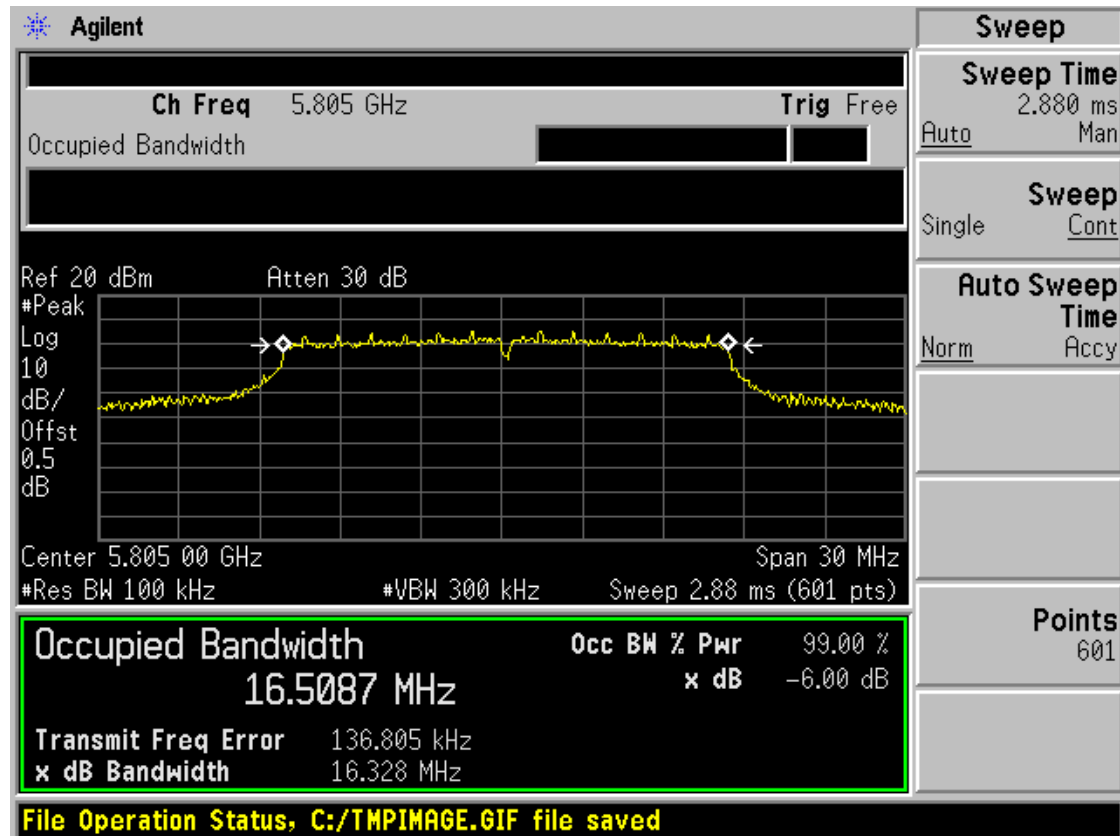
Band IV 11a CH149



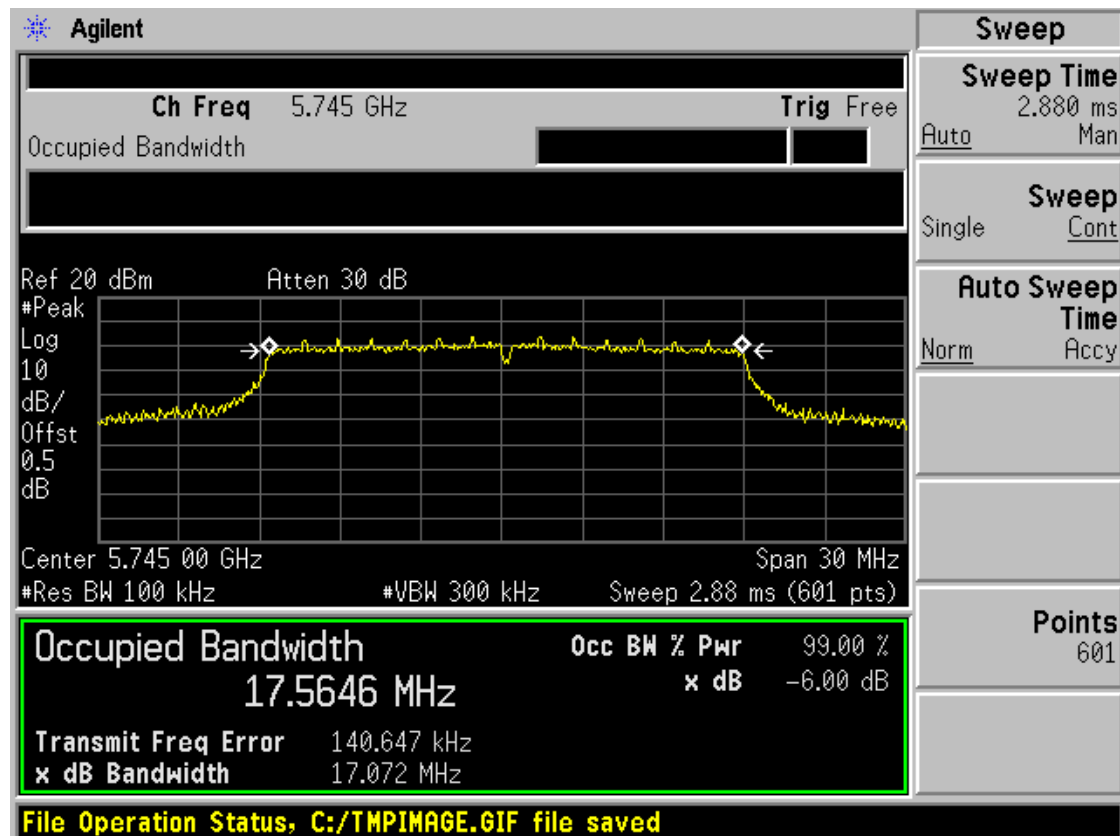
Band IV 11a CH157



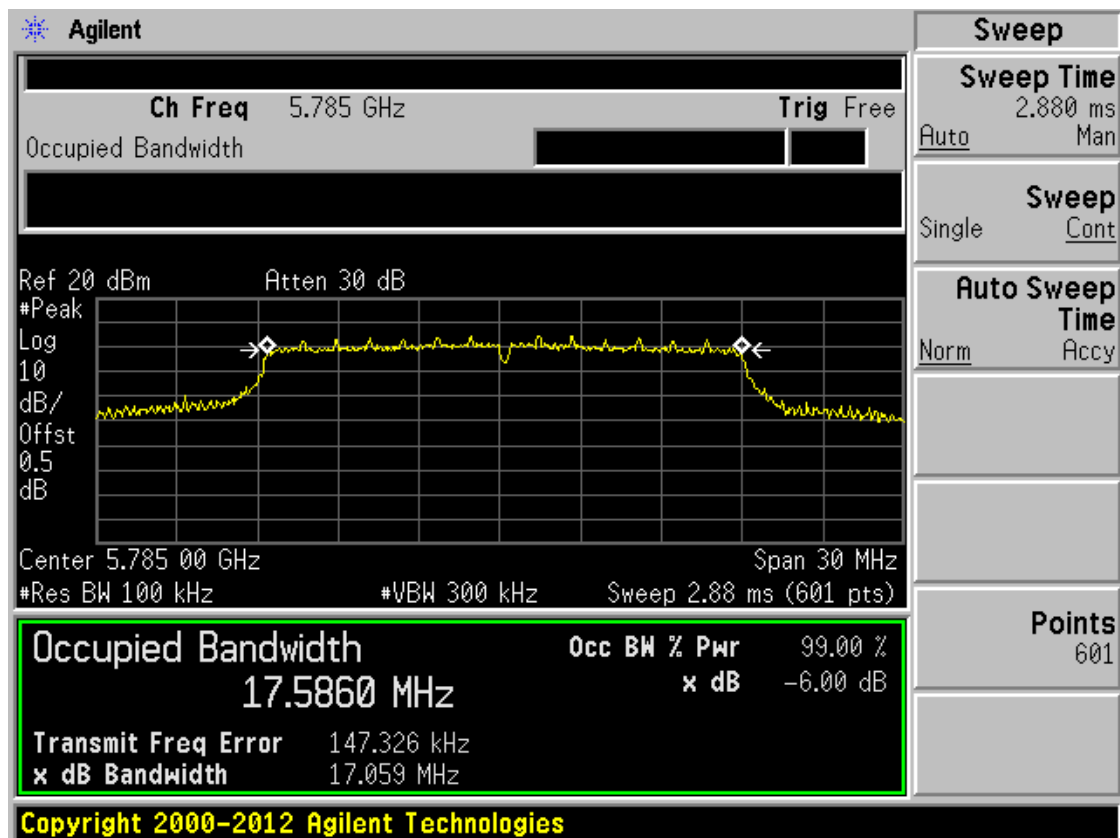
Band IV 11a CH161



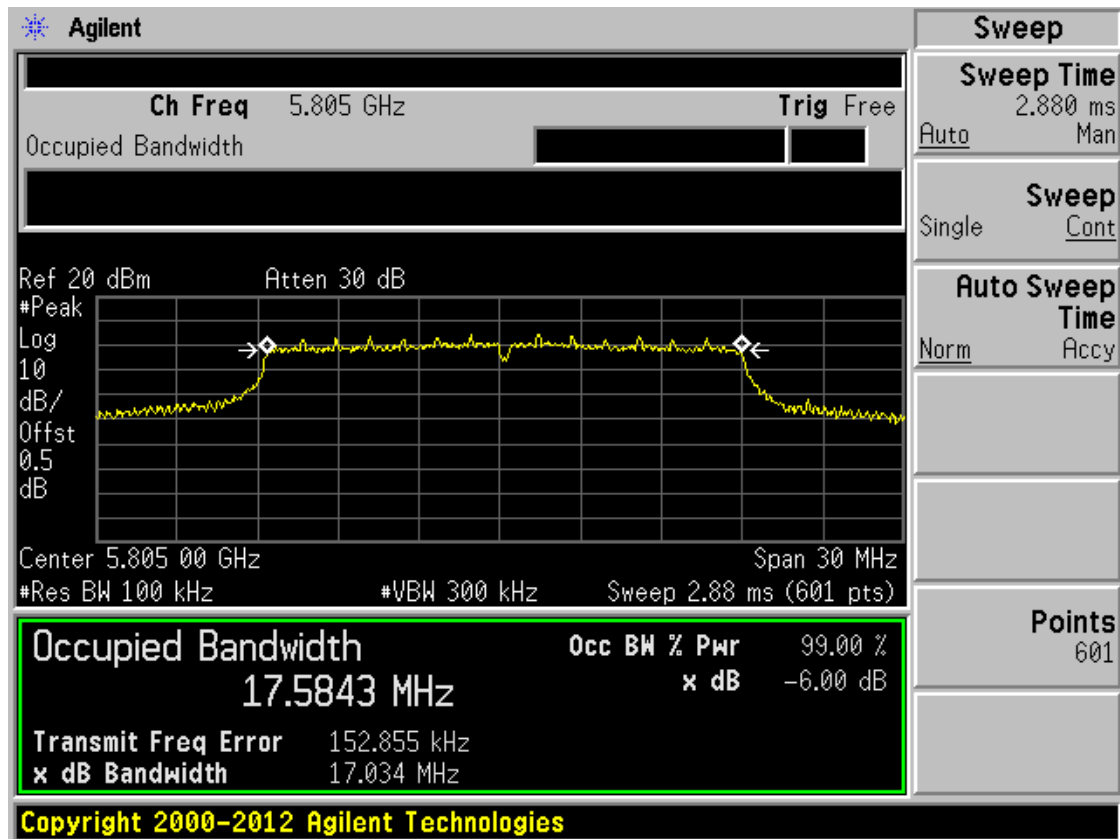
Band IV 11n(HT20) CH149



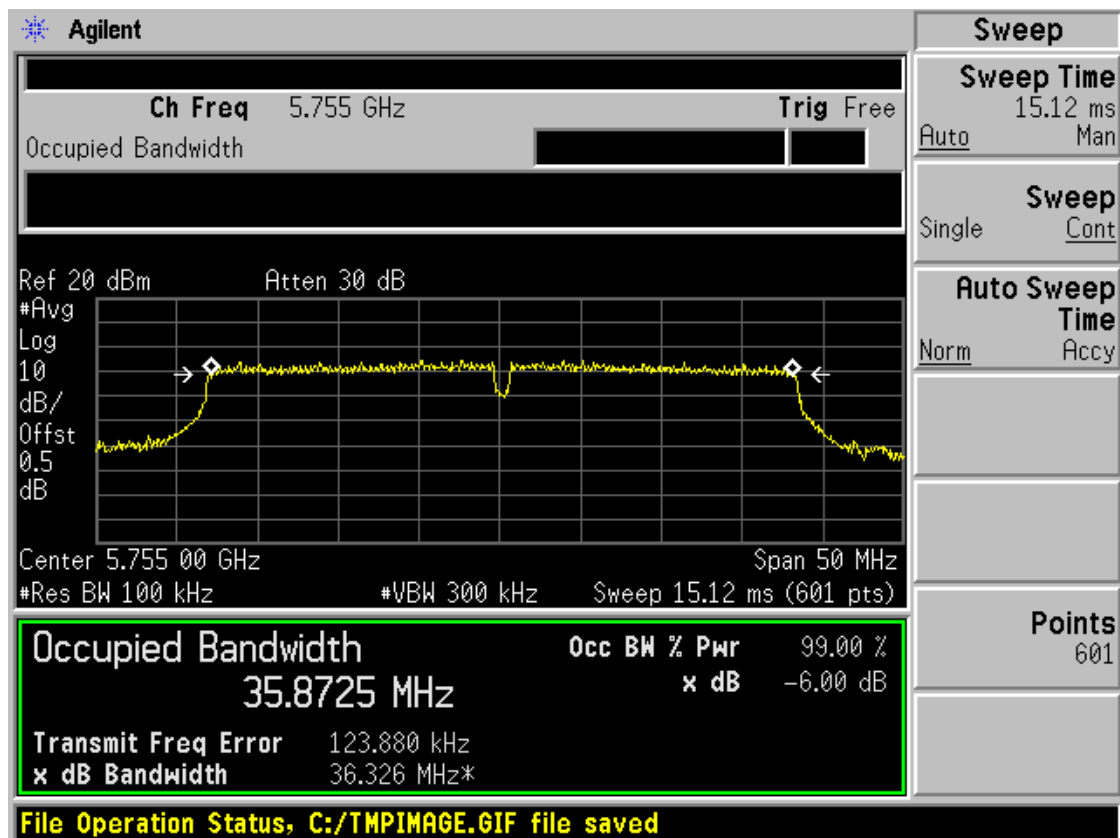
Band IV 11n(HT20) CH157



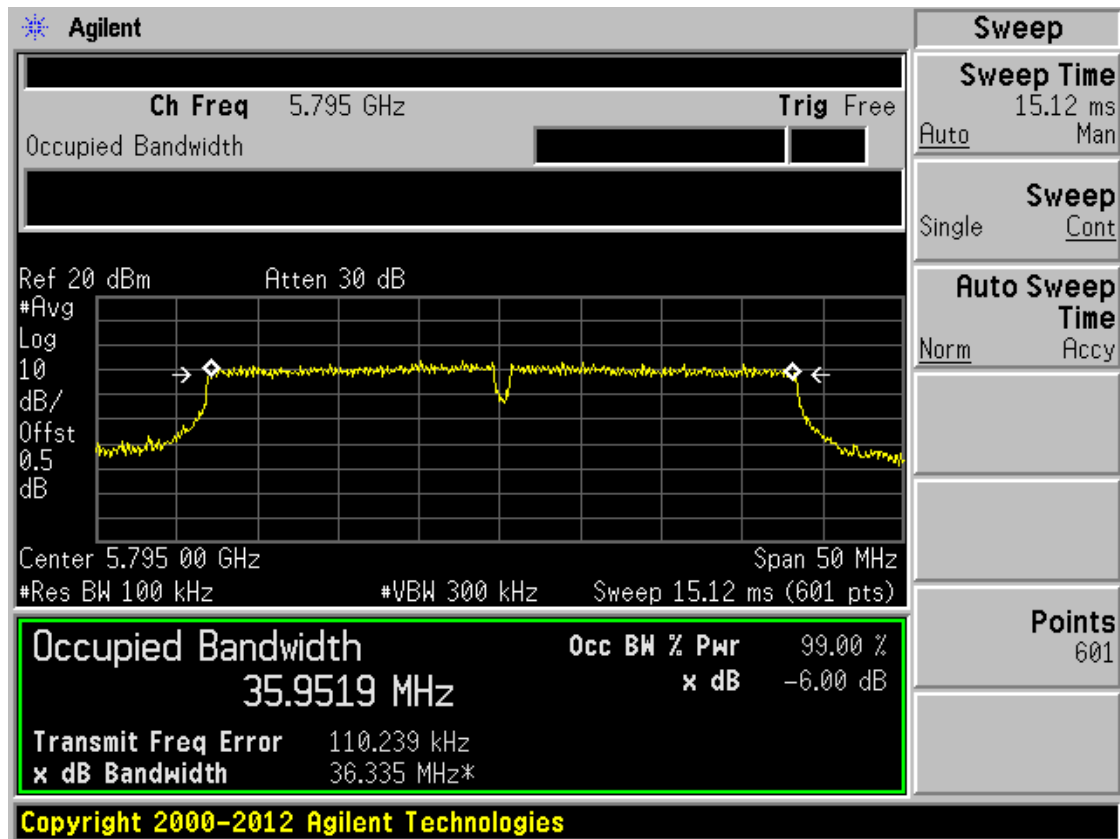
Band IV 11n(HT20) CH161



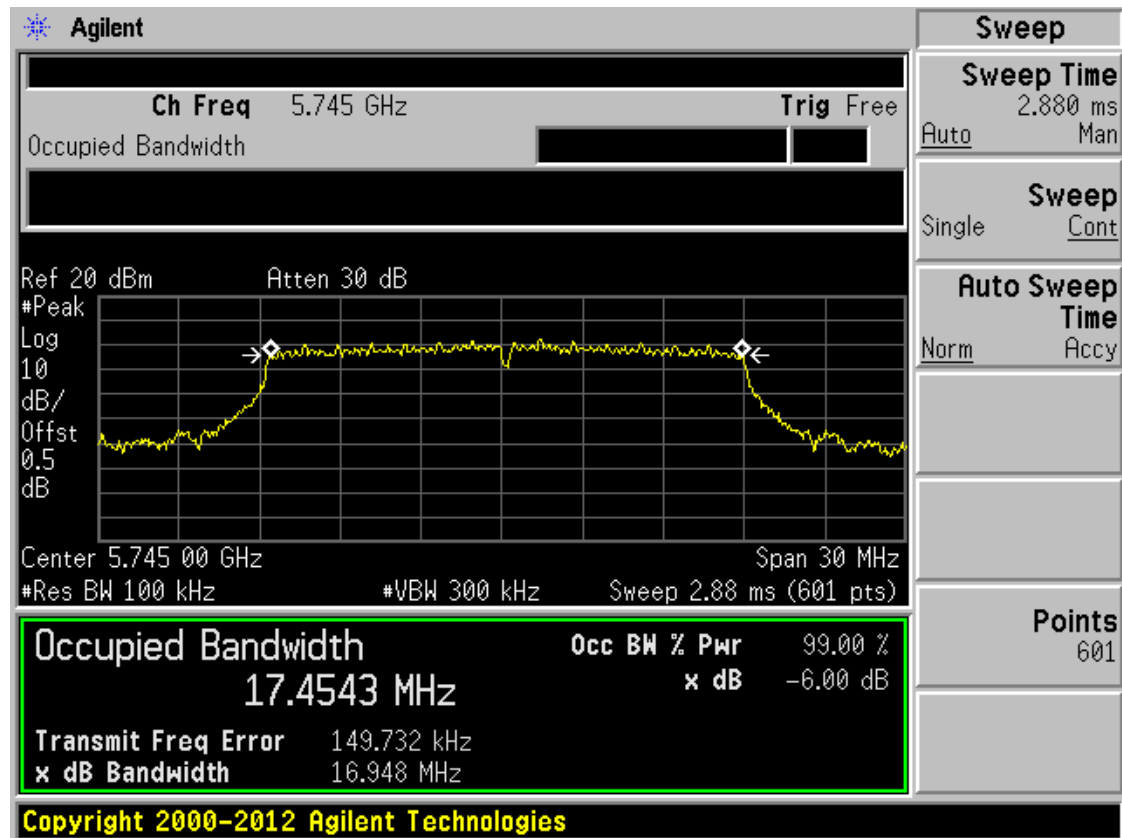
Band IV 11n(HT40) CH151



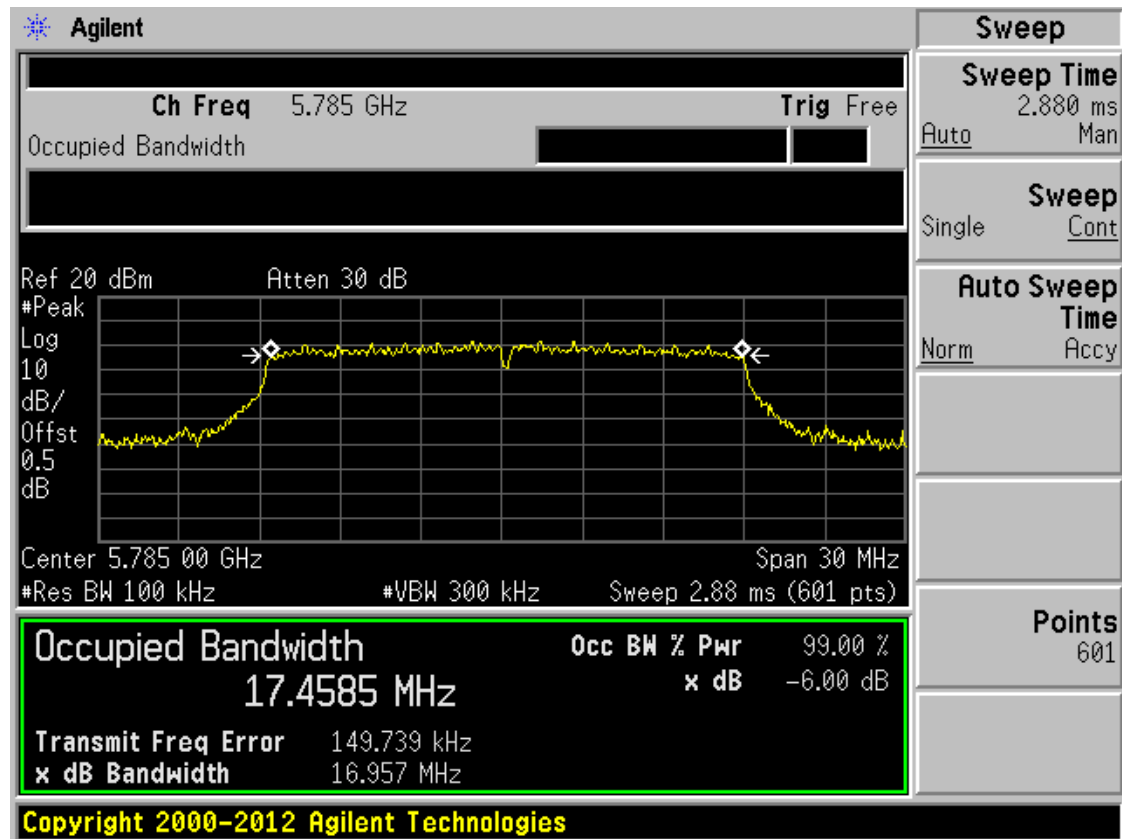
Band IV 11n(HT40) CH159



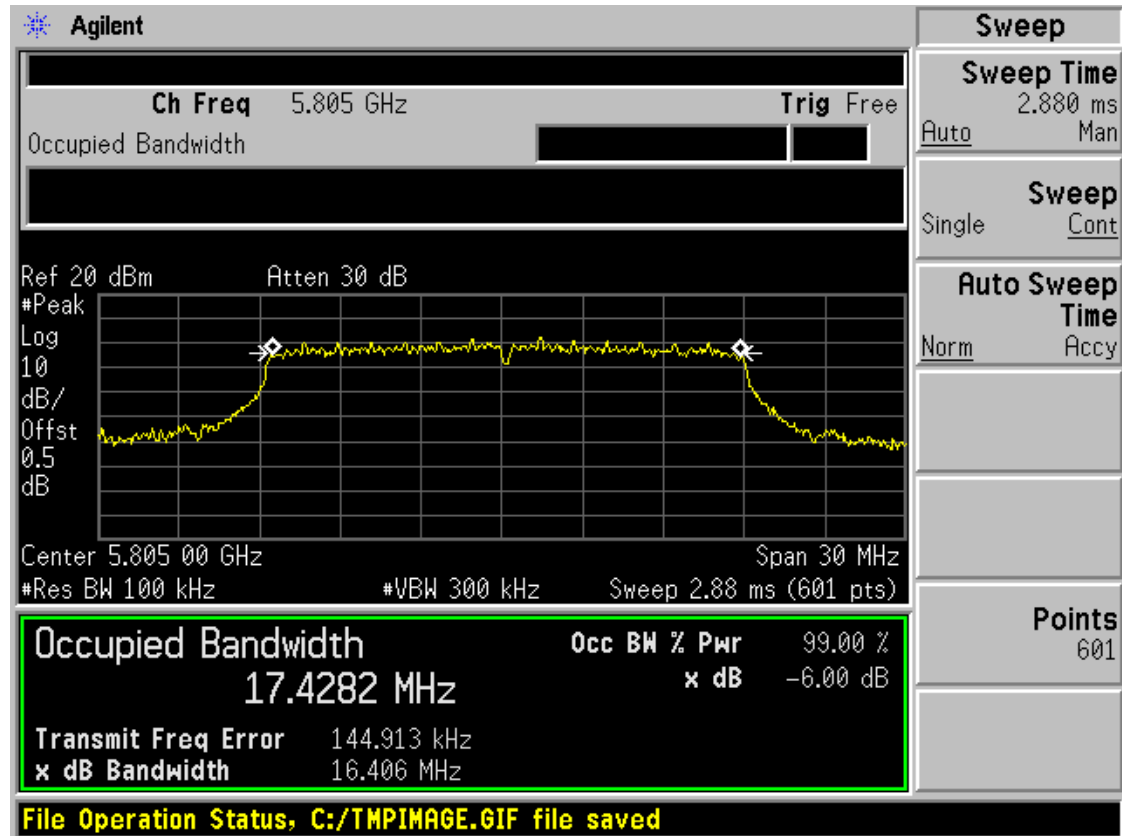
Band IV 11ac(HT20) CH149



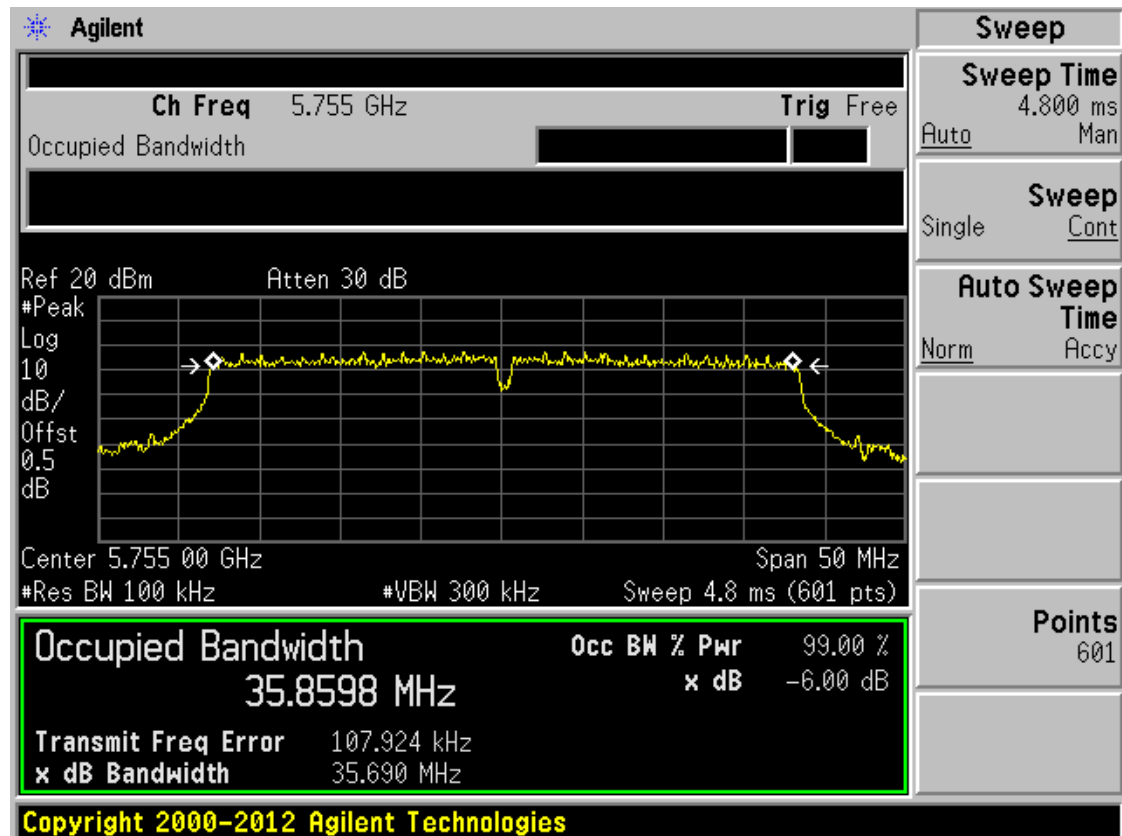
Band IV 11ac(HT20) CH157



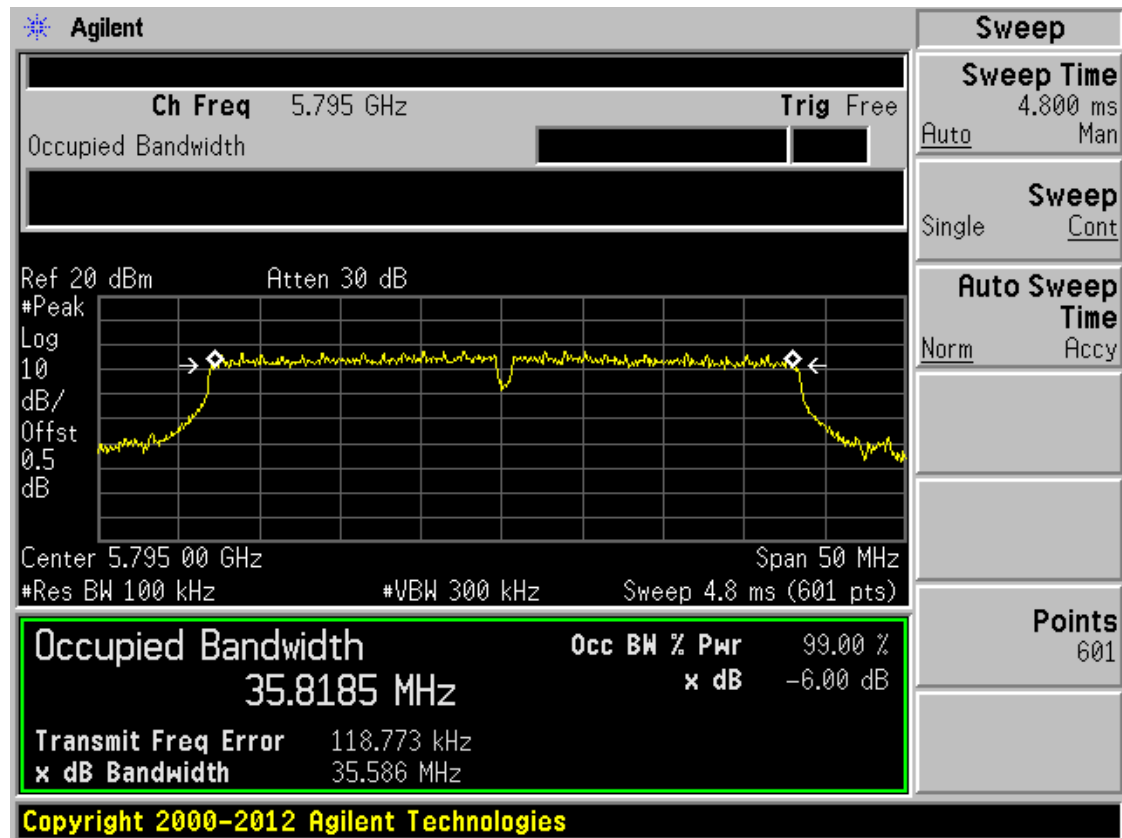
Band IV 11ac(HT20) CH161



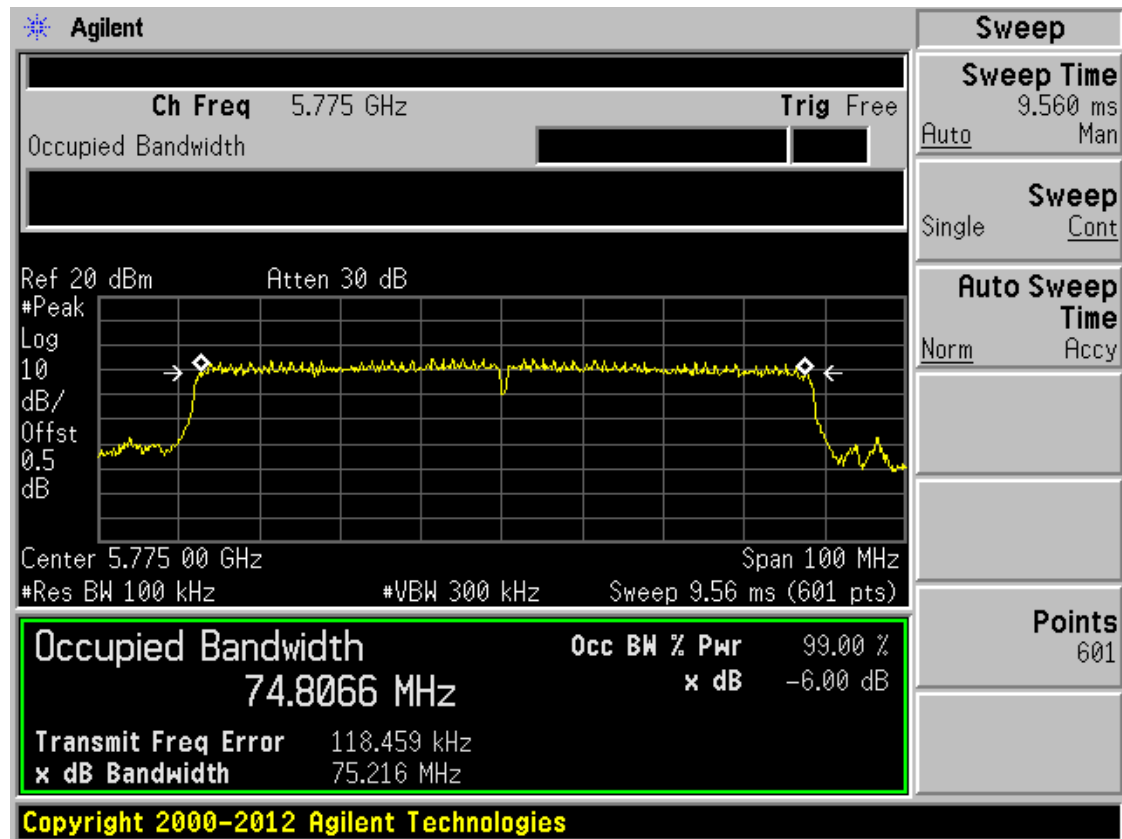
Band IV 11ac(HT40) CH151



Band IV 11ac(HT40) CH159



Band IV 11ac(HT80) CH155



A.4 Power Spectral Density

Test Data

Note 1: The RBW used in Band IV is 1 MHz, and the PSD factor is: $10 \cdot \log(500 \text{ kHz/RBW}) = -3 \text{ dBm}$.

Note 2: For FCC standard, if transmitting antennas of directional gain greater than 6 dBi are used, all band of the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For IC standard, if transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density of band IV (5725 - 5850 MHz) shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Band I (5150 - 5250 MHz)							
Note1: Transmitting antennas of directional gain in Band I(5150 MHz to 5250 MHz) is 6.3 dBi							
Formulas: Directional gain = $G_{\text{ANT}} + \text{Array Gain}$, $\text{Array Gain} = 0$.							
Note2: The total PSD method used the sum spectra maxima across the outputs.							
Mode	Channel	Frequency (MHz)	PSD at ant 0 (dBm/MHz)	PSD at ant 1 (dBm/MHz)	Total PSD (dBm/MHz)	FCC Limit(dB m/MHz)	Verdict
11a	CH36	5180	4.31	4.16	7.25	10.7	Pass
11a	CH44	5220	4.19	4.47	7.34	10.7	Pass
11a	CH48	5240	4.03	4.40	7.23	10.7	Pass
11n (HT20)	CH36	5180	4.34	4.61	7.49	10.7	Pass
11n (HT20)	CH44	5220	4.50	4.44	7.48	10.7	Pass
11n (HT20)	CH48	5240	4.06	4.39	7.24	10.7	Pass
11n (HT40)	CH38	5190	0.47	0.43	3.46	10.7	Pass
11n (HT40)	CH46	5230	2.40	2.67	5.55	10.7	Pass
11ac (HT20)	CH36	5180	5.01	4.89	7.96	10.7	Pass
11ac (HT20)	CH44	5220	4.90	5.22	8.07	10.7	Pass
11ac (HT20)	CH48	5240	5.14	5.09	8.13	10.7	Pass
11ac (HT40)	CH38	5190	3.64	3.56	6.61	10.7	Pass
11ac (HT40)	CH46	5230	4.31	4.66	7.50	10.7	Pass
11ac (HT80)	CH42	5210	0.58	0.46	3.53	10.7	Pass

Band II (5250 - 5350 MHz)								
Note1: Transmitting antennas of directional gain in Band II(5250 MHz to 5350 MHz) is 6.4 dBi								
Formulas: Directional gain = $G_{ANT} + \text{Array Gain}$, $\text{Array Gain} = 0$.								
Note2: The total PSD method used the sum spectra maxima across the outputs.								
Mode	Channel	Frequency (MHz)	PSD at ant 0 (dBm/MHz)	PSD at ant 1 (dBm/MHz)	Total PSD (dBm/MHz)	FCC Limit (dBm/MHz)	IC Limit (dBm/MHz)	Verdict
11a	CH52	5260	4.62	4.62	7.63	10.6	11.0	Pass
11a	CH60	5300	4.14	4.45	7.31	10.6	11.0	Pass
11a	CH64	5320	4.14	4.39	7.28	10.6	11.0	Pass
11n (HT20)	CH52	5260	4.35	4.70	7.54	10.6	11.0	Pass
11n (HT20)	CH60	5300	4.68	4.54	7.62	10.6	11.0	Pass
11n (HT20)	CH64	5320	4.48	4.35	7.43	10.6	11.0	Pass
11n (HT40)	CH54	5270	2.40	2.70	5.56	10.6	11.0	Pass
11n (HT40)	CH62	5310	0.57	0.87	3.73	10.6	11.0	Pass
11ac (HT20)	CH52	5260	4.70	5.12	7.93	10.6	11.0	Pass
11ac (HT20)	CH60	5300	4.94	5.24	8.10	10.6	11.0	Pass
11ac (HT20)	CH64	5320	4.77	5.12	7.96	10.6	11.0	Pass
11ac (HT40)	CH54	5270	4.51	4.37	7.45	10.6	11.0	Pass
11ac (HT40)	CH62	5310	3.83	4.14	7.00	10.6	11.0	Pass
11ac (HT80)	CH58	5290	1.48	1.17	4.34	10.6	11.0	Pass

Band III (5470 - 5725 MHz)							
Note: Transmitting antennas of directional gain in Band III (5470 MHz to 5725 MHz) is 5.3 dBi							
Formulas: Directional gain = $G_{ANT} + \text{Array Gain}$, $\text{Array Gain} = 0$.							
Note2: The total PSD method used the sum spectra maxima across the outputs.							
Mode	Channel	Frequency (MHz)	PSD at ant 0 (dBm/MHz)	PSD at ant 1 (dBm/MHz)	Total PSD (dBm/MHz)	FCC/IC Limit (dBm/MHz)	Verdict
11a	CH100	5500	4.13	4.03	7.09	11	Pass
11a	CH116	5580	4.08	4.42	7.26	11	Pass
11a	CH140	5700	4.04	4.33	7.20	11	Pass
11n (HT20)	CH100	5500	4.29	4.53	7.42	11	Pass
11n (HT20)	CH116	5580	4.48	4.41	7.46	11	Pass
11n (HT20)	CH140	5700	4.52	4.44	7.49	11	Pass
11n (HT40)	CH102	5510	0.61	0.57	3.60	11	Pass
11n (HT40)	CH134	5670	2.30	2.30	5.31	11	Pass
11ac (HT20)	CH100	5500	4.44	4.85	7.66	11	Pass
11ac (HT20)	CH116	5580	5.21	4.70	7.97	11	Pass
11ac (HT20)	CH140	5700	4.57	4.90	7.75	11	Pass
11ac (HT40)	CH102	5510	3.49	3.79	6.65	11	Pass
11ac (HT40)	CH134	5670	4.78	4.76	7.78	11	Pass
11ac (HT80)	CH106	5530	0.72	1.08	3.91	11	Pass

Band IV (5725 - 5850 MHz)							
Note: Transmitting antennas of directional gain in Band III (5470 MHz to 5725 MHz) is 3.7 dBi							
Formulas: Directional gain = $G_{ANT} + \text{Array Gain}$, $\text{Array Gain} = 0$.							
Note2: The total PSD method used the sum spectra maxima across the outputs.							
Mode	Channel	Frequency (MHz)	PSD at ant 0 (dBm/MHz)	PSD at ant 1 (dBm/MHz)	Total PSD (dBm/MHz)	FCC/IC Limit (dBm/MHz)	Verdict
11a	CH149	5745	4.11	4.47	7.30	30	Pass
11a	CH157	5785	4.20	4.12	7.17	30	Pass
11a	CH161	5825	3.74	4.09	6.93	30	Pass
11n (HT20)	CH149	5745	4.23	4.46	7.36	30	Pass
11n (HT20)	CH157	5785	4.64	4.59	7.63	30	Pass
11n (HT20)	CH161	5825	4.04	4.37	7.22	30	Pass
11n (HT40)	CH151	5755	0.17	0.08	3.14	30	Pass
11n (HT40)	CH159	5795	2.23	2.21	5.23	30	Pass
11ac (HT20)	CH149	5745	4.55	4.90	7.74	30	Pass
11ac (HT20)	CH157	5785	4.78	5.12	7.96	30	Pass
11ac (HT20)	CH161	5805	4.55	4.89	7.73	30	Pass
11ac (HT40)	CH151	5755	4.20	4.19	7.21	30	Pass
11ac (HT40)	CH159	5795	4.21	4.14	7.19	30	Pass
11ac (HT80)	CH155	5775	0.99	0.77	3.89	30	Pass

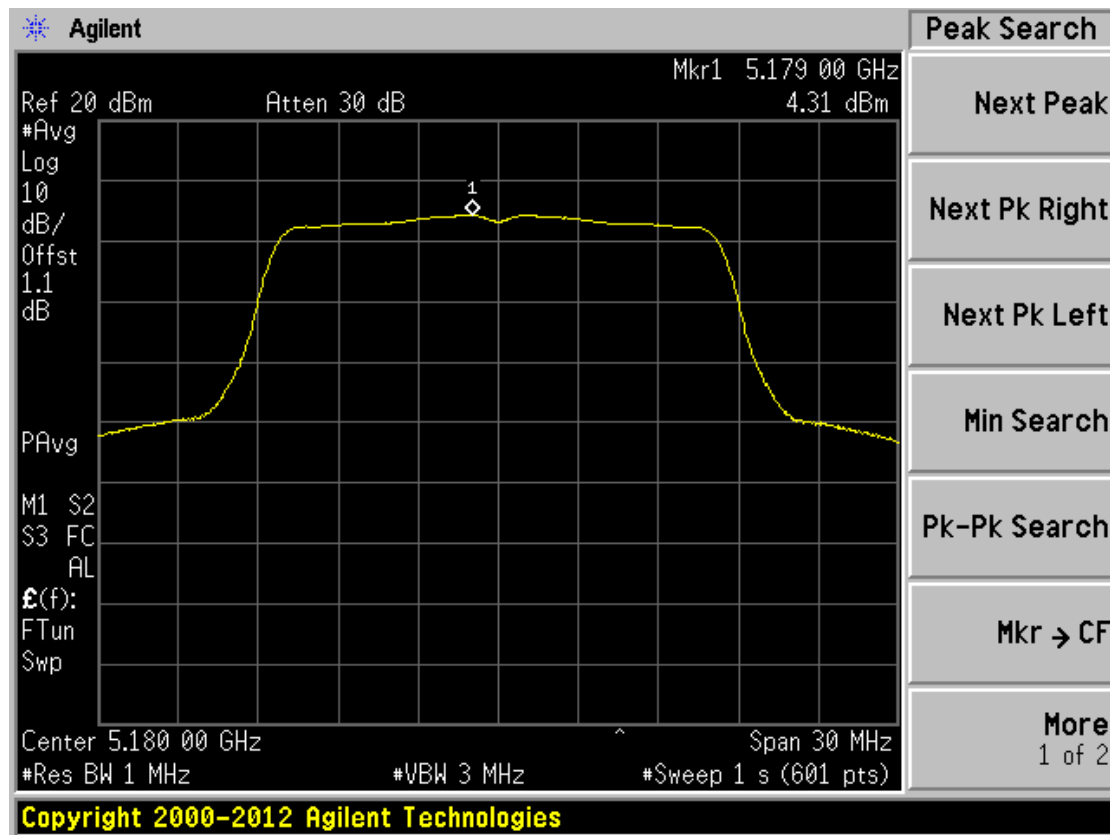
EIRP PSD

Band I (5150 - 5250 MHz)					
Mode	Channel	Frequency (MHz)	PSD (dBm/MHz)	IC Limit (dBm/MHz)	Verdict
11a	CH36	5180	6.93	16	Pass
11a	CH44	5220	6.69	16	Pass
11a	CH48	5240	7.19	16	Pass
11n (HT20)	CH36	5180	5.98	16	Pass
11n (HT20)	CH44	5220	6.76	16	Pass
11n (HT20)	CH48	5240	4.96	16	Pass
11n (HT40)	CH38	5190	0.43	16	Pass
11n (HT40)	CH46	5230	3.82	16	Pass
11ac (HT20)	CH36	5180	4.92	16	Pass
11ac (HT20)	CH44	5220	6.12	16	Pass
11ac (HT20)	CH48	5240	5.37	16	Pass
11ac (HT40)	CH38	5190	3.51	16	Pass
11ac (HT40)	CH46	5230	6.47	16	Pass
11ac (HT80)	CH42	5210	1.49	16	Pass

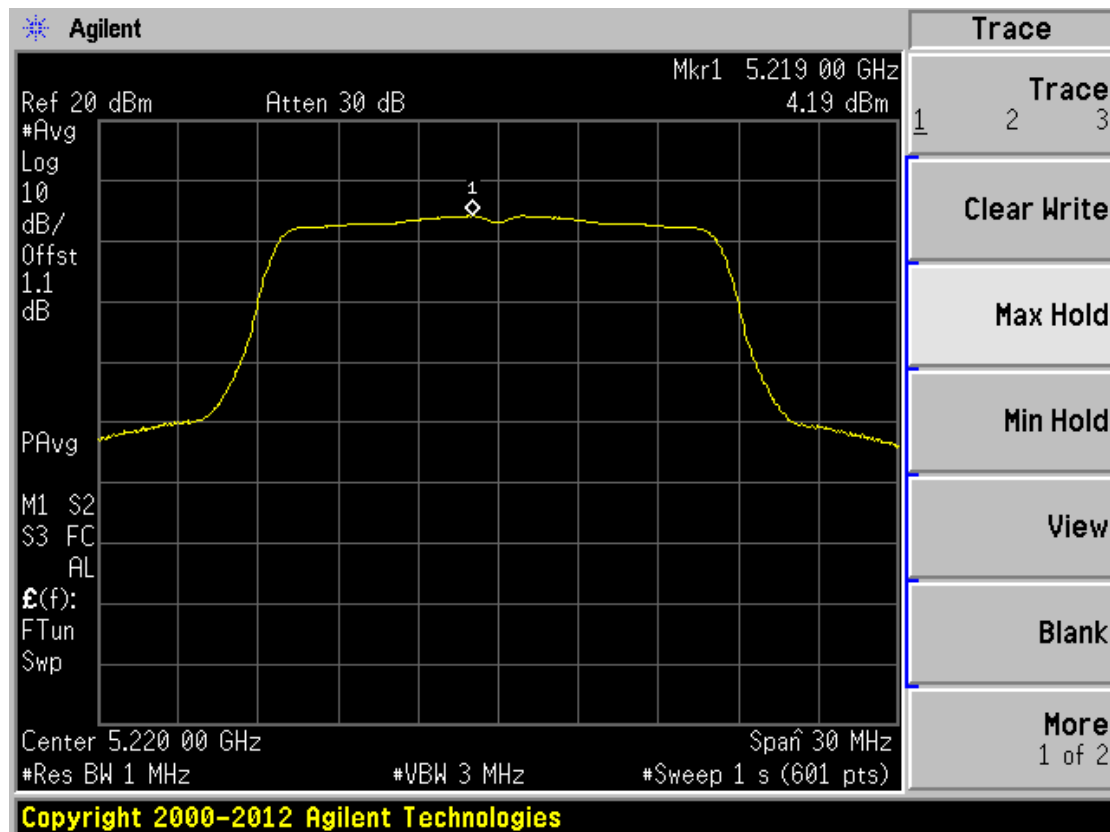
Test Plots (Conducted PSD)

ANT 0

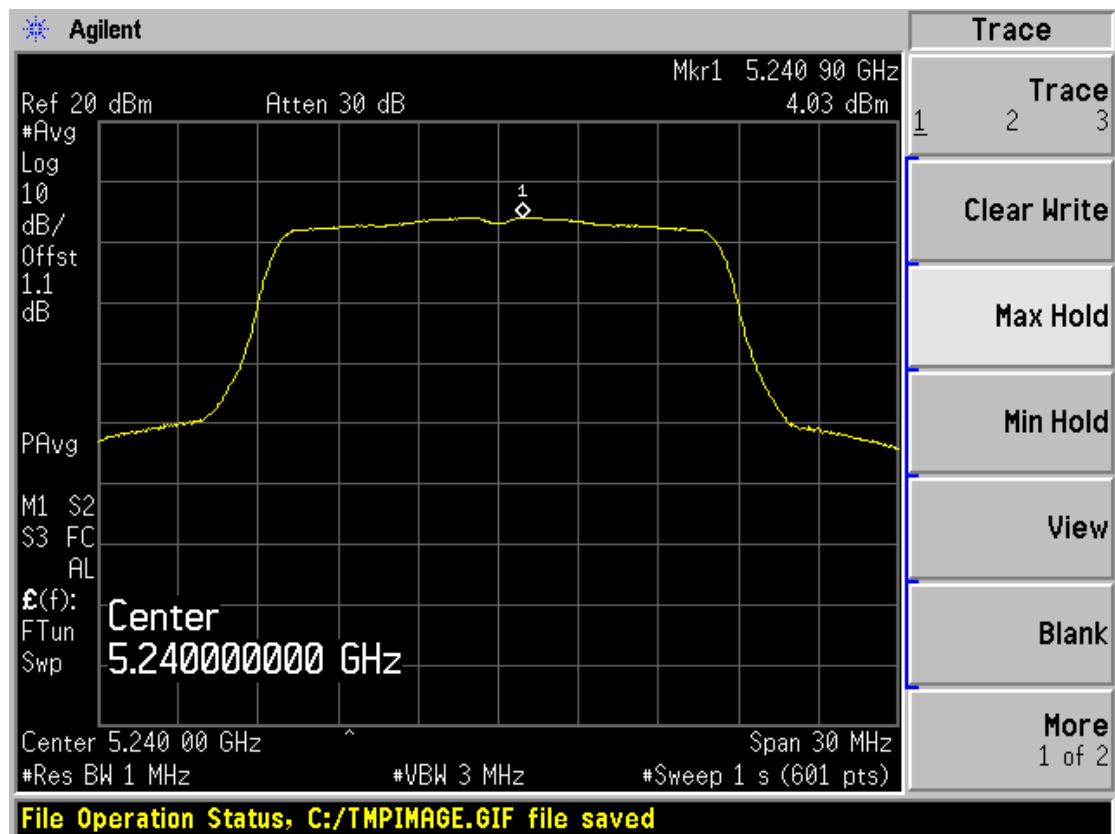
Band I 11a CH36



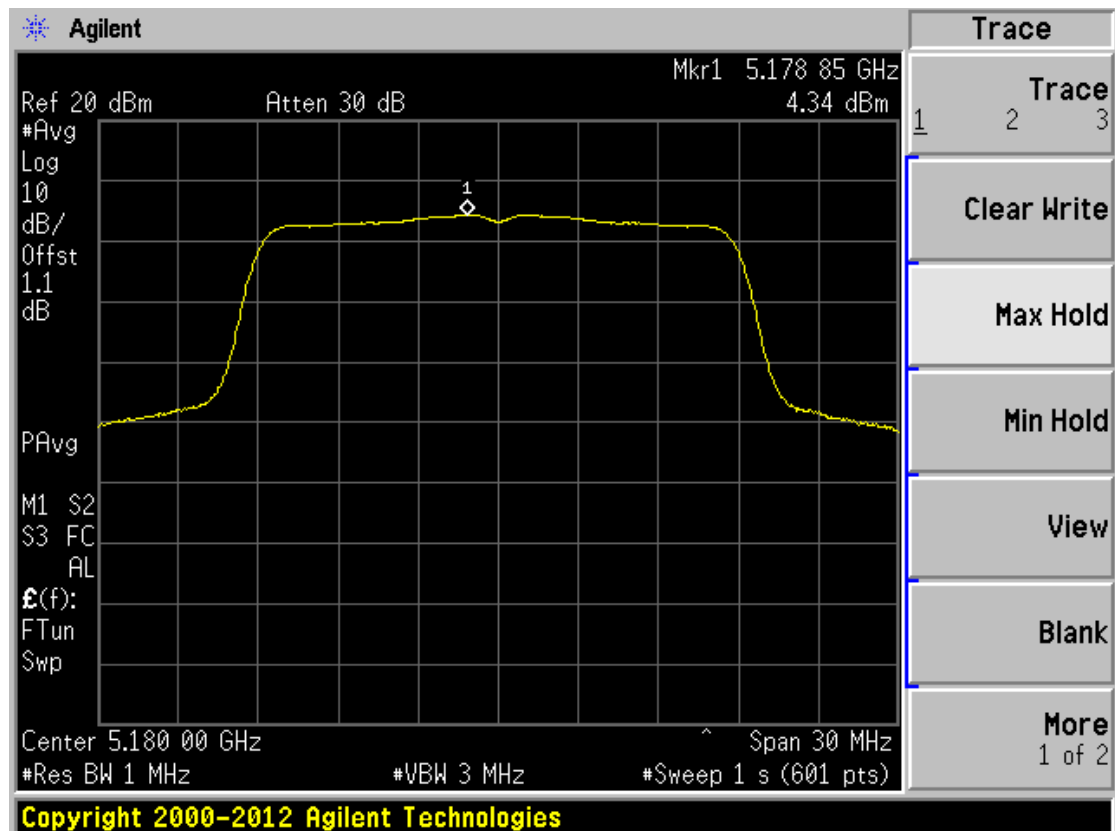
Band I 11a CH44



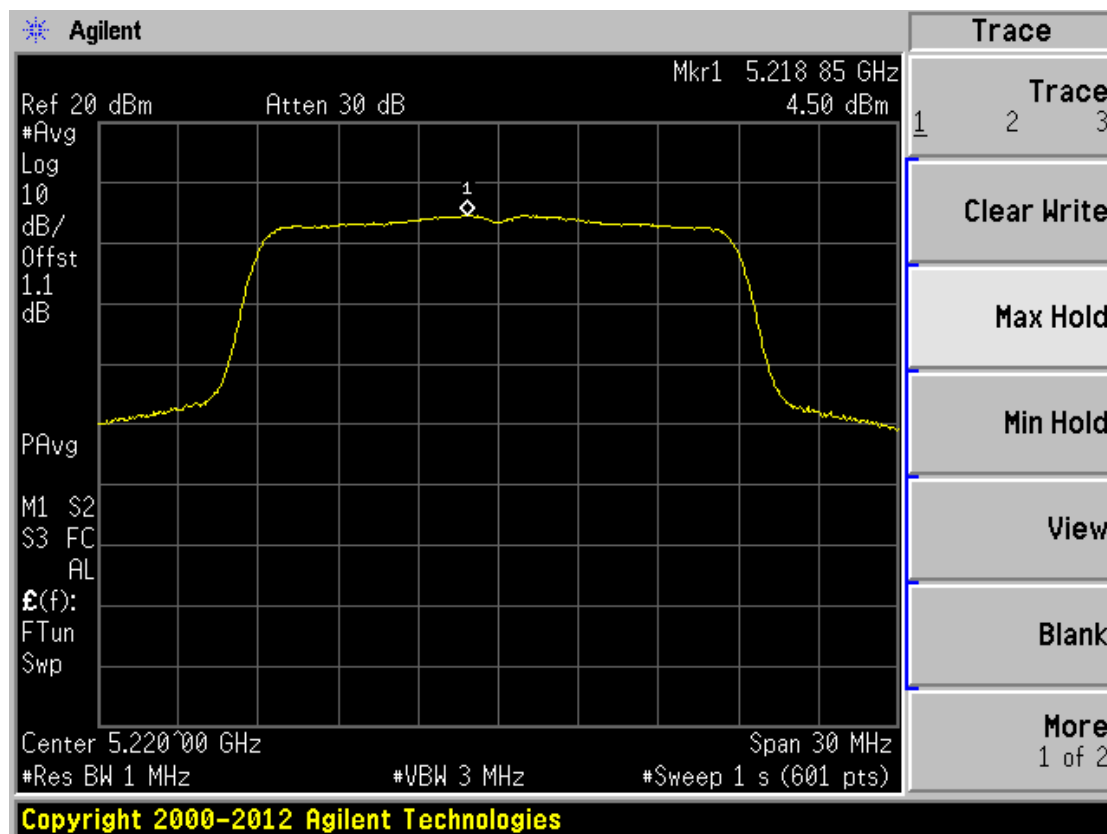
Band I 11a CH48



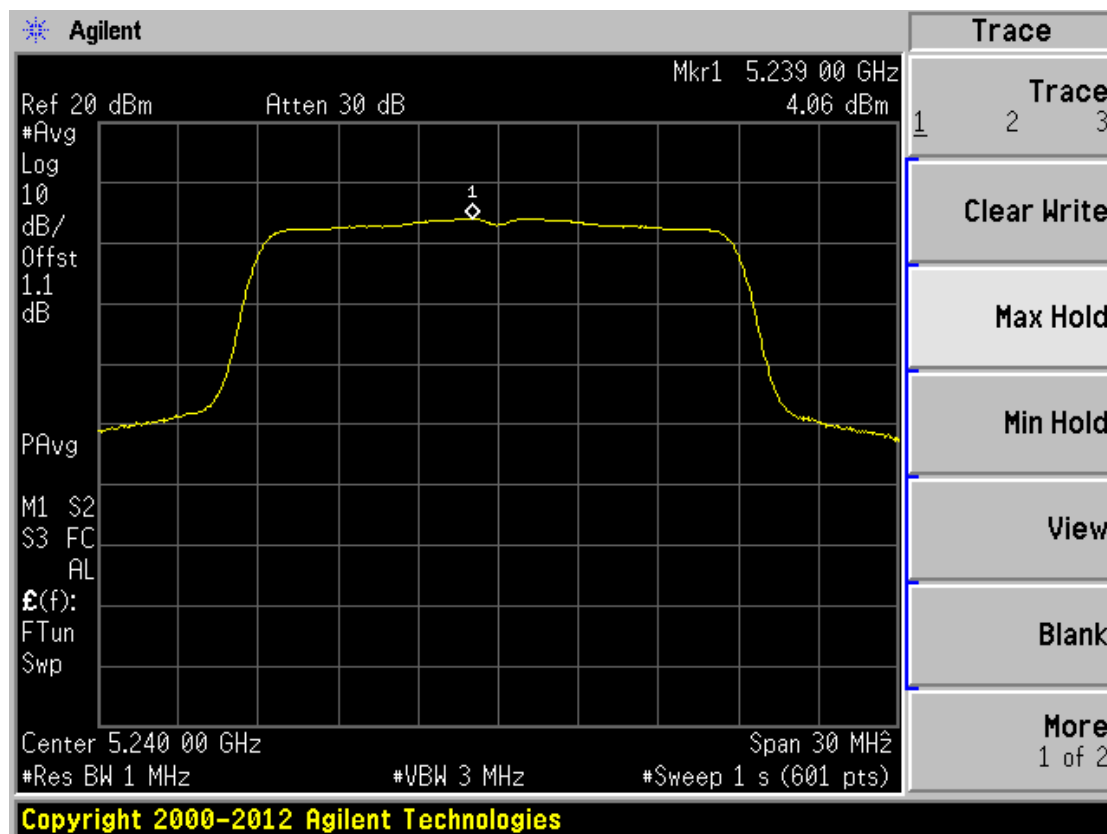
Band I 11n(HT20) CH36



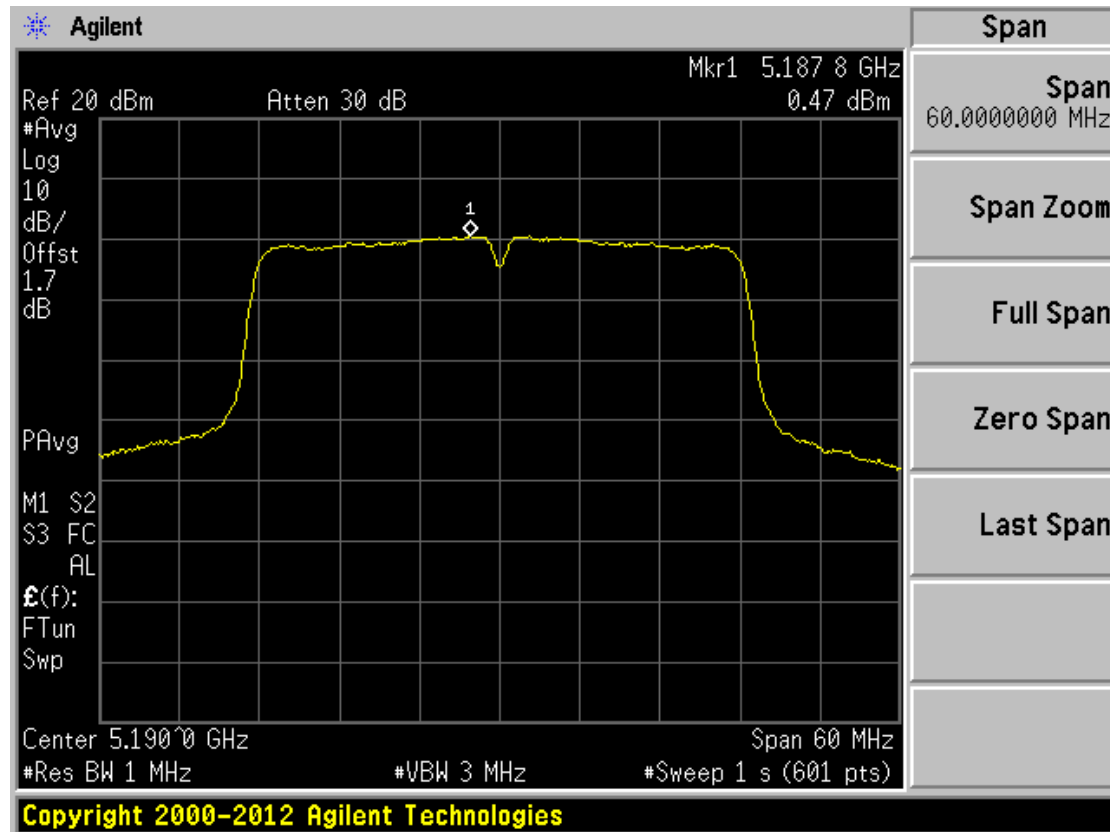
Band I 11n(HT20) CH44



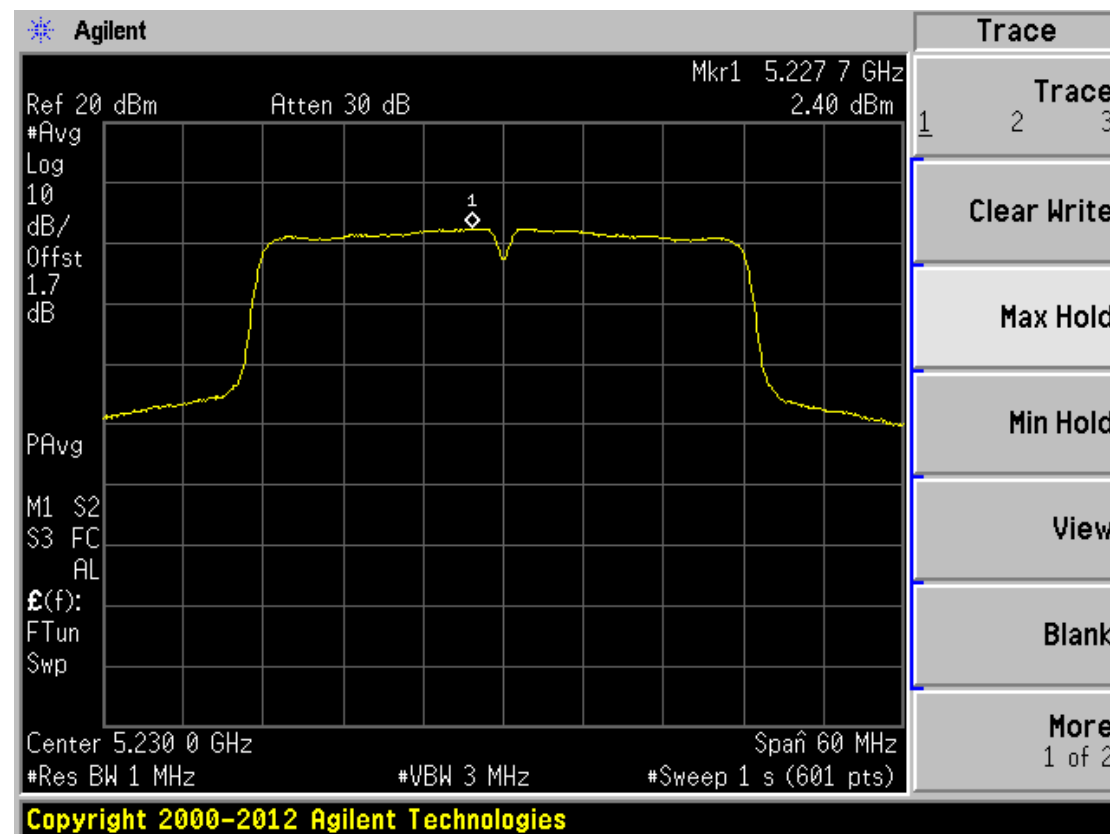
Band I 11n(HT20) CH48



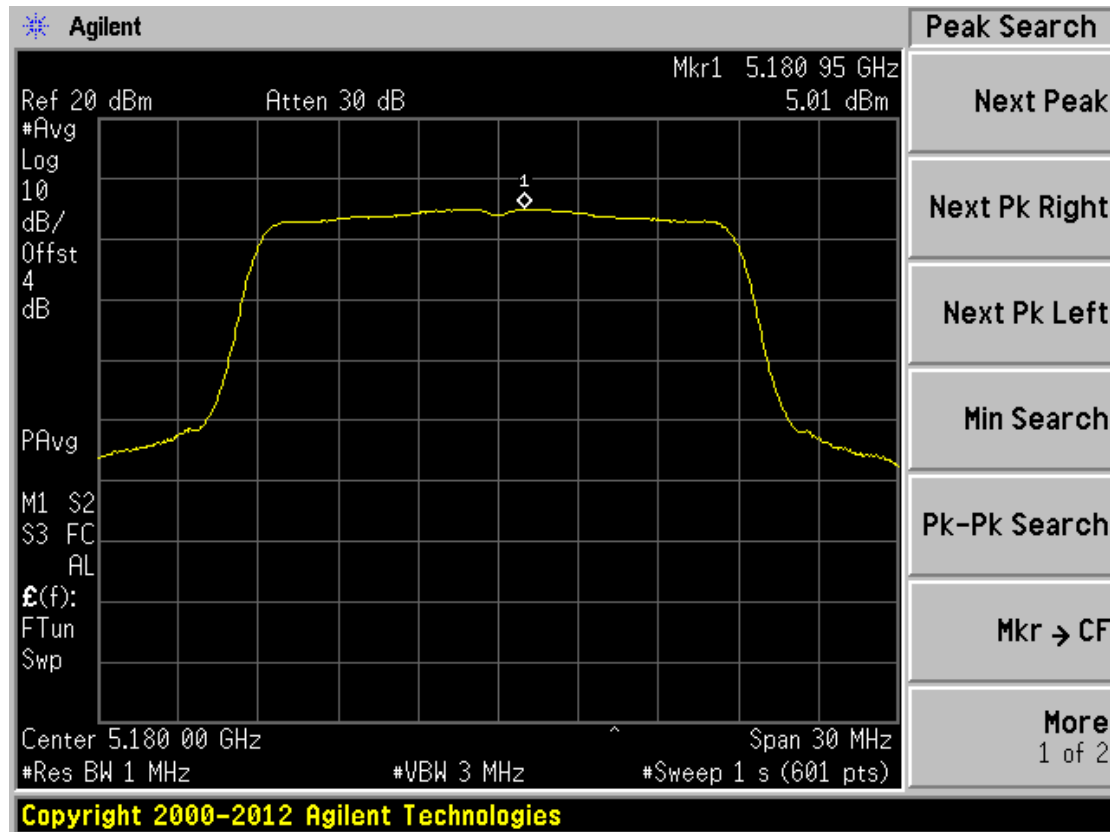
Band I 11n(HT40) CH38



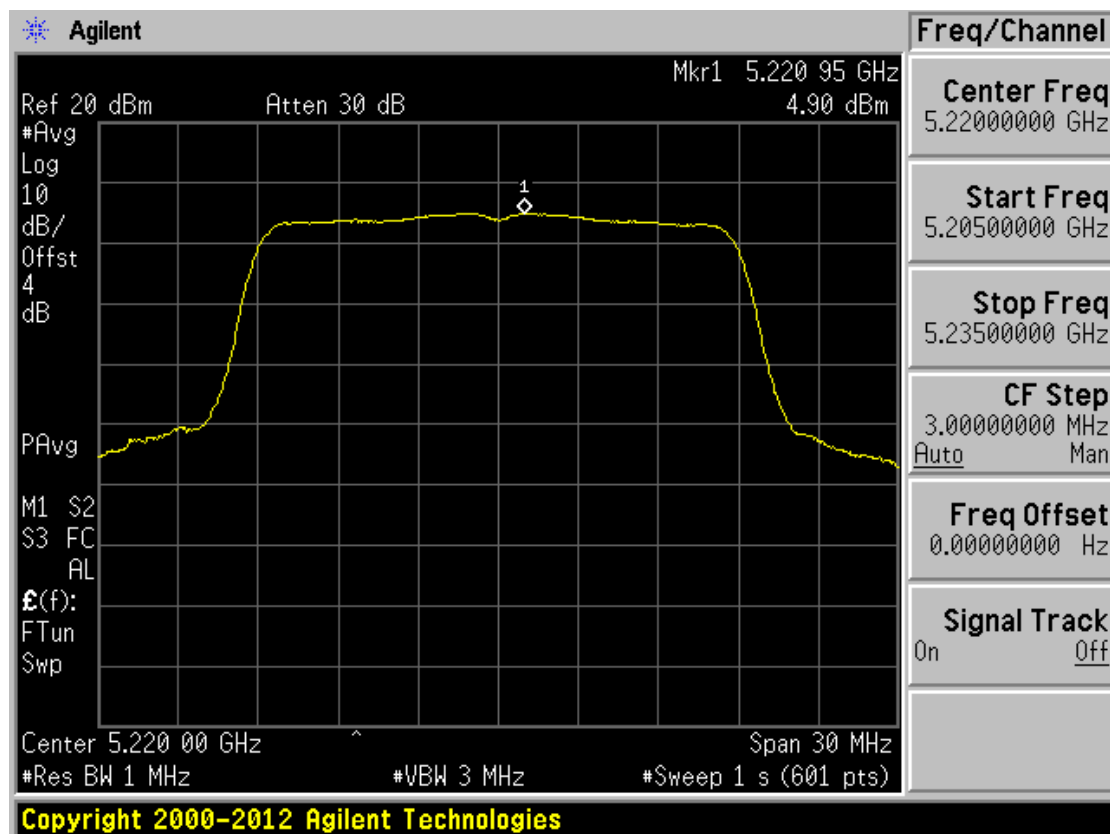
Band I 11n(HT40) CH46



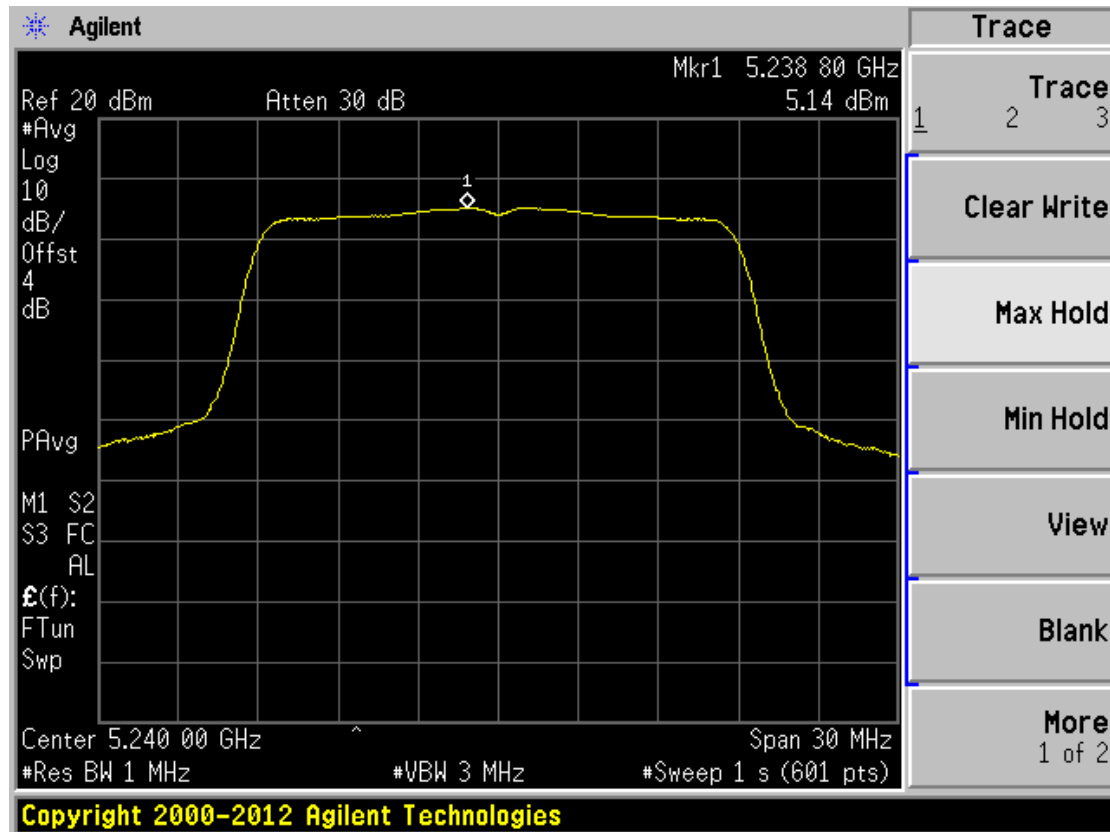
Band I 11ac(HT20) CH36



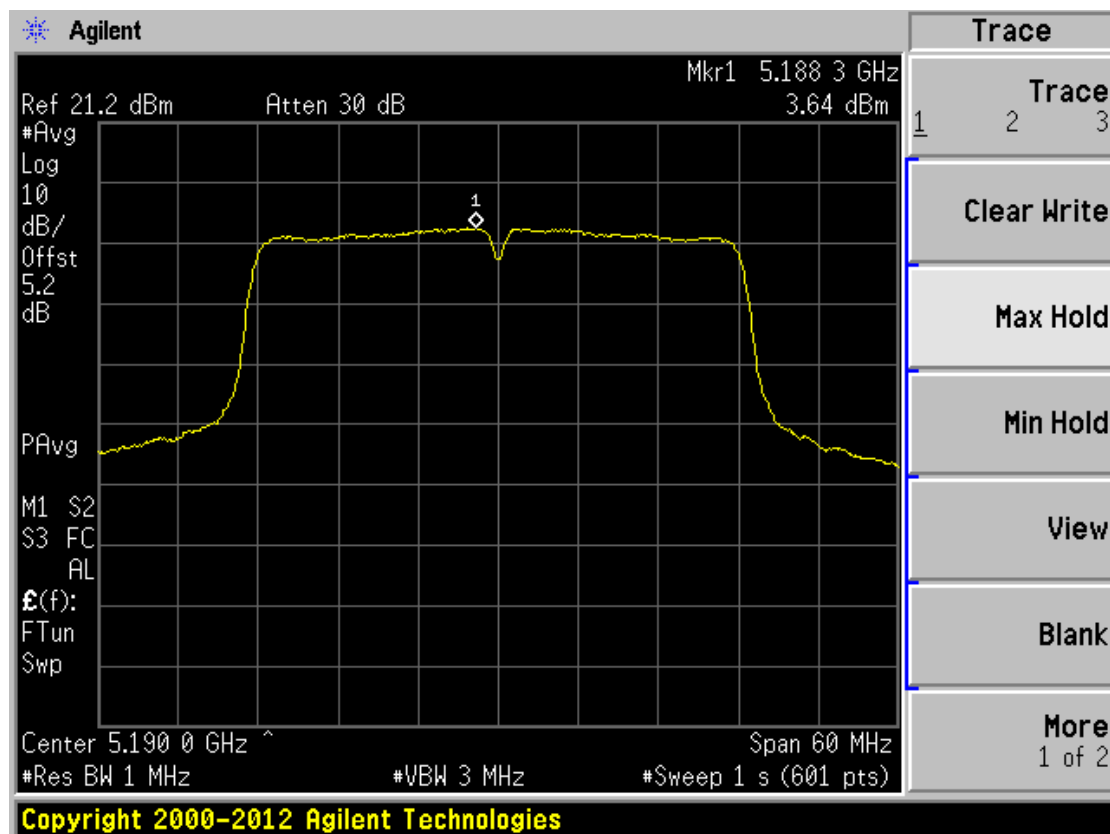
Band I 11ac(HT20) CH44



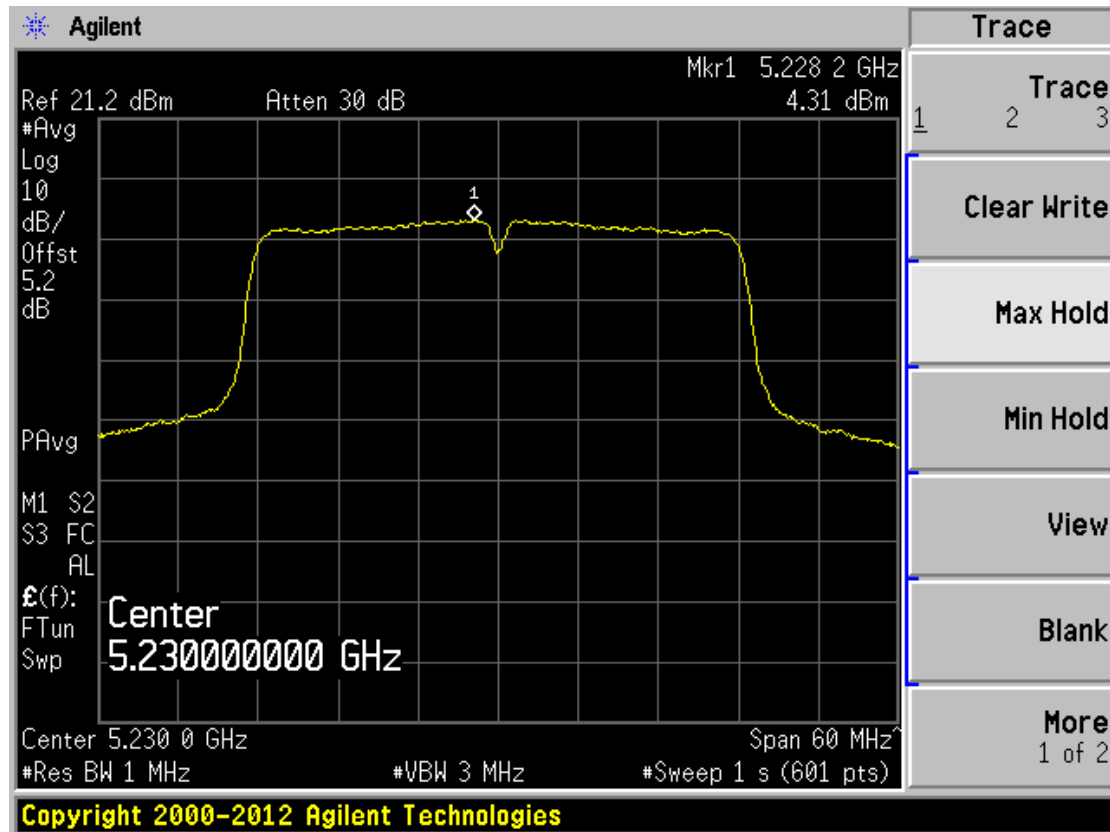
Band I 11ac(HT20) CH48



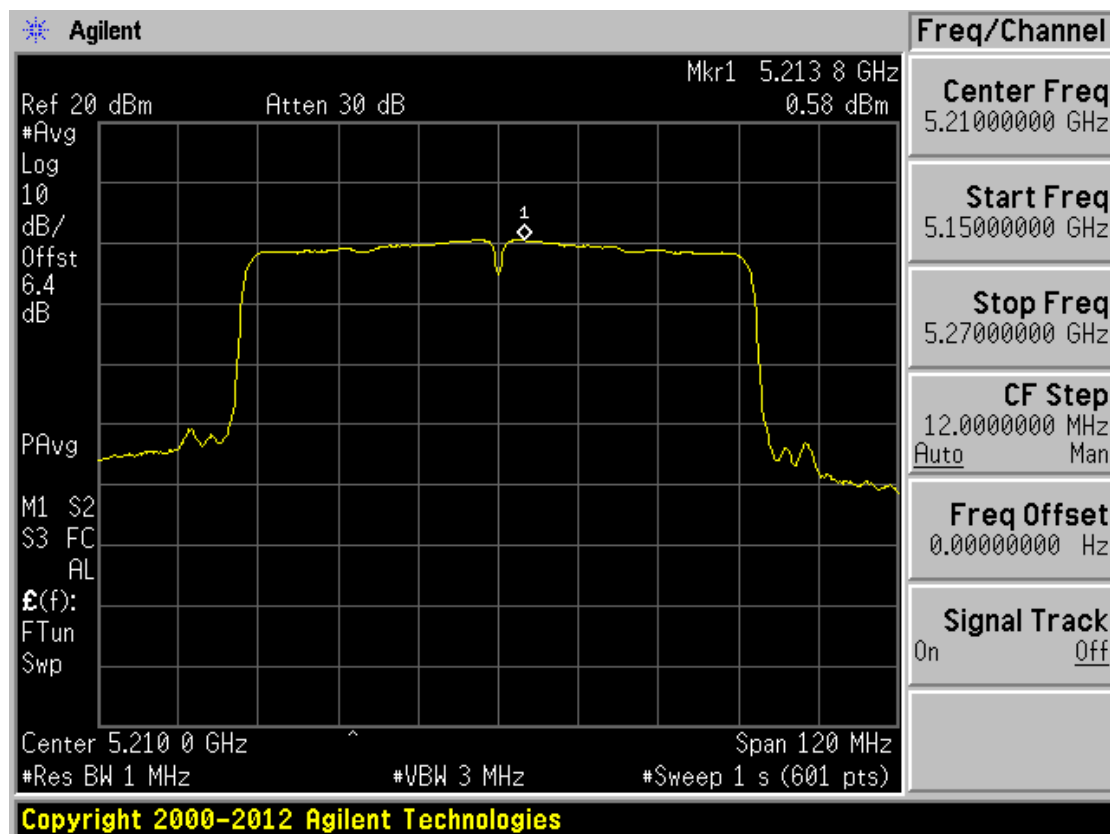
Band I 11ac(HT40) CH38



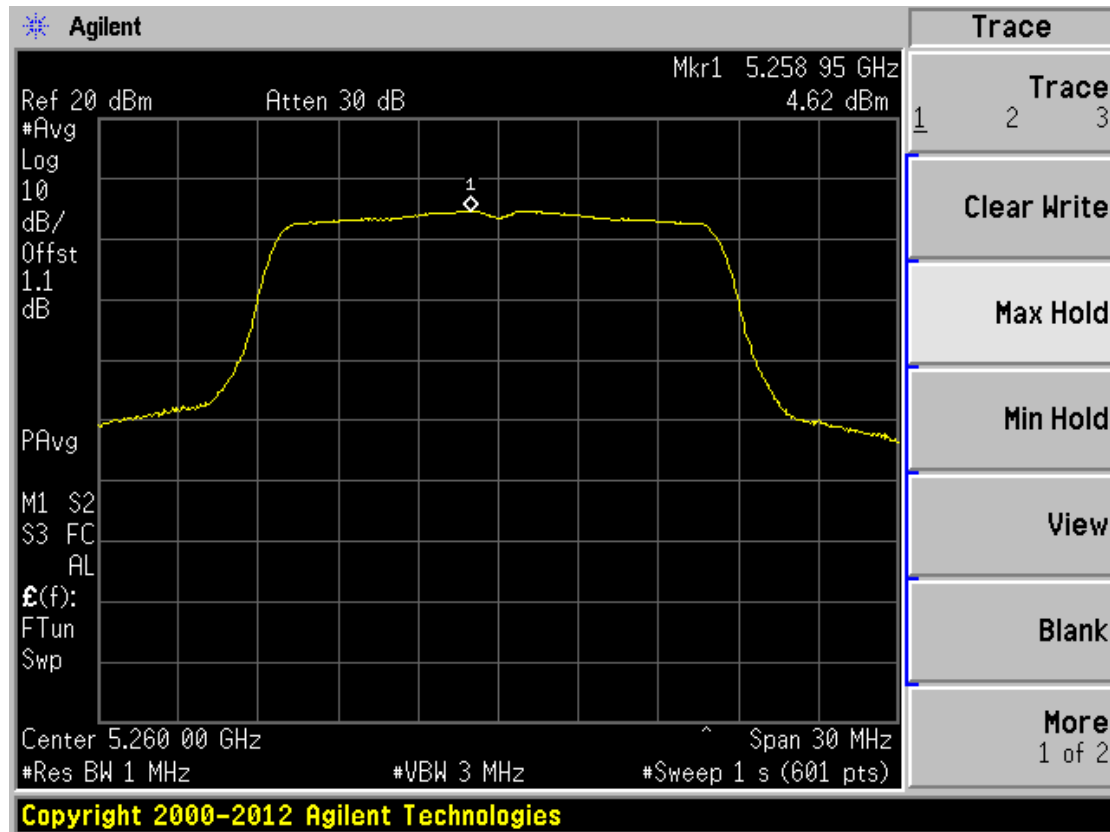
Band I 11ac(HT40) CH46



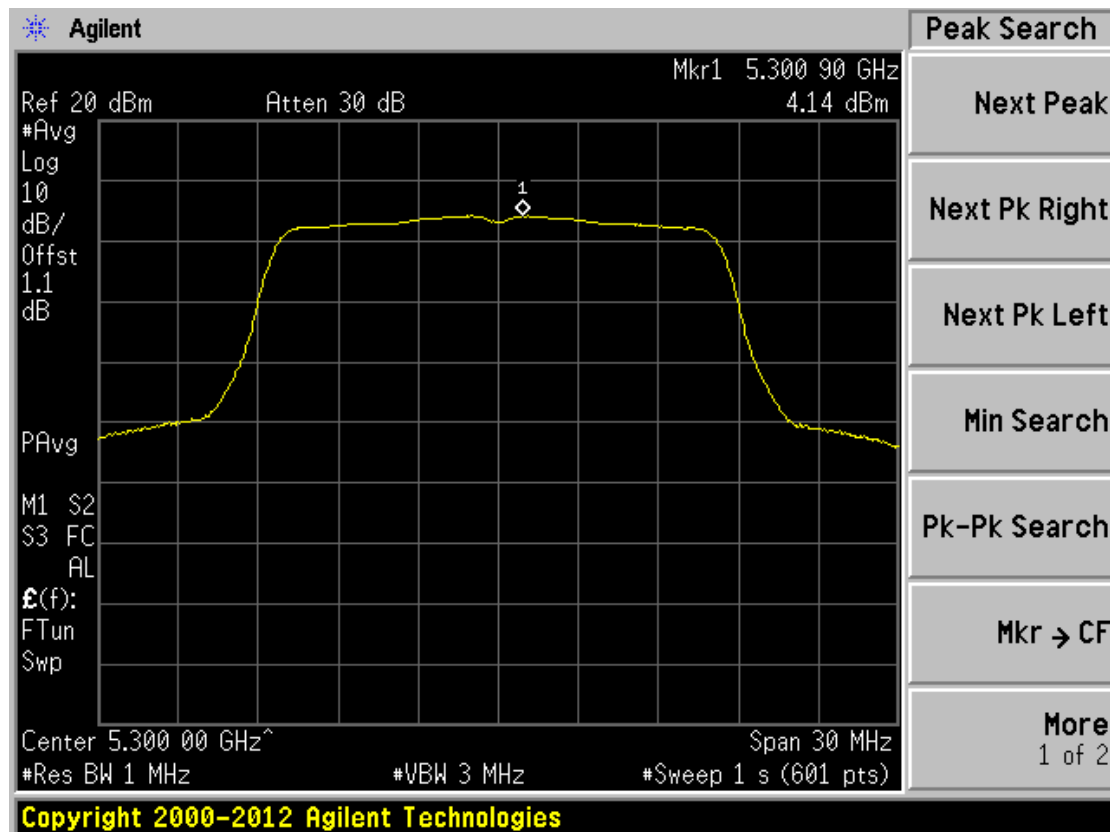
Band I 11ac(HT80) CH42



Band II 11a CH52

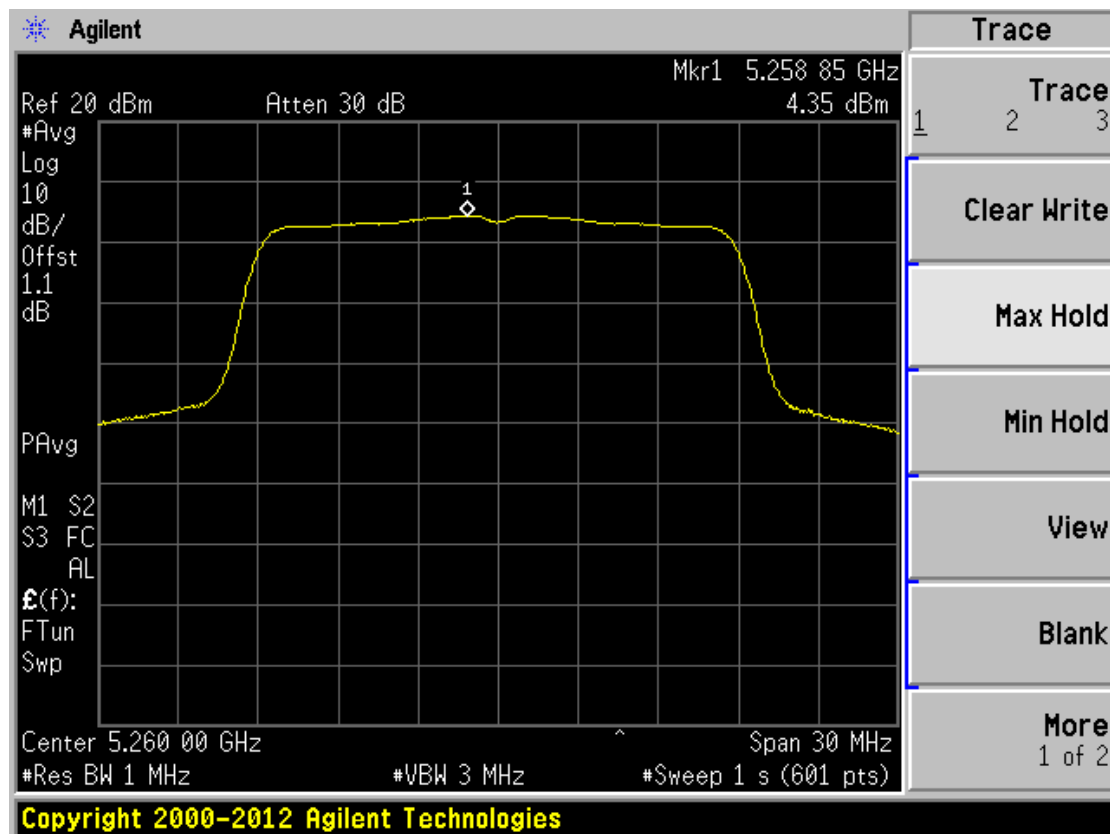


Band II 11a CH60

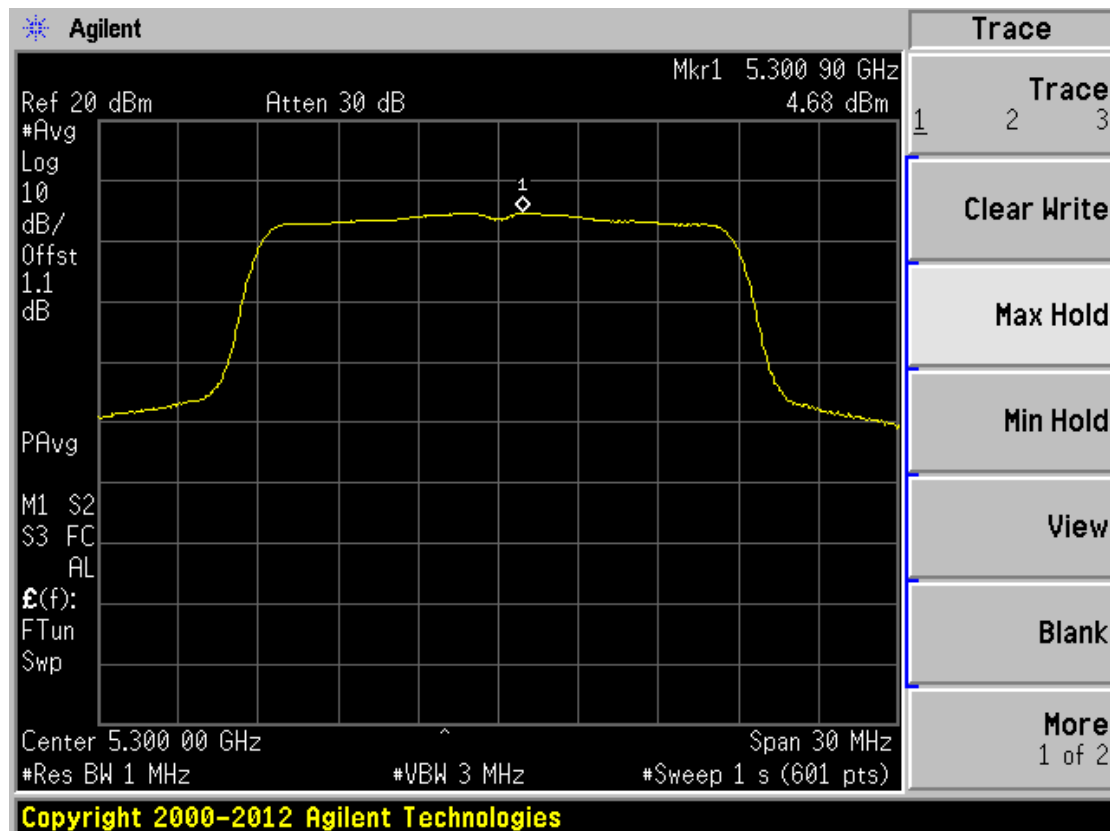


Band II 11a CH64

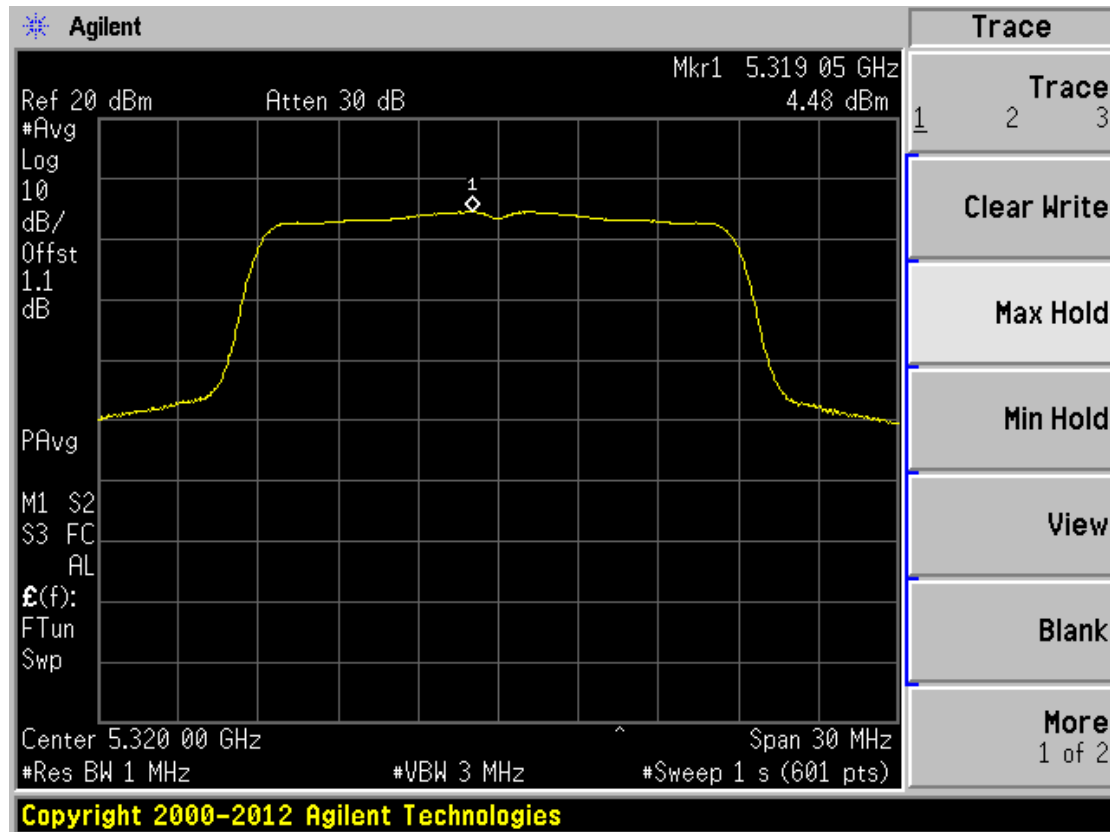
Band II 11n(HT20) CH52



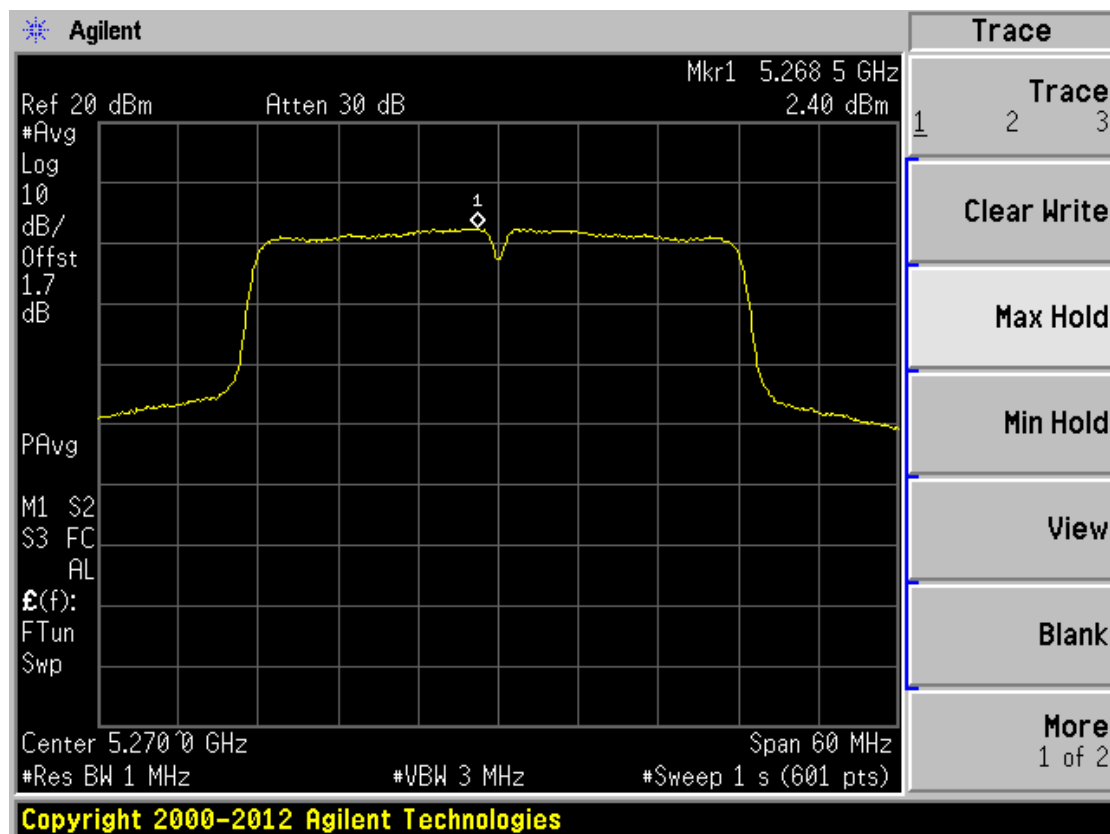
Band II 11n(HT20) CH60



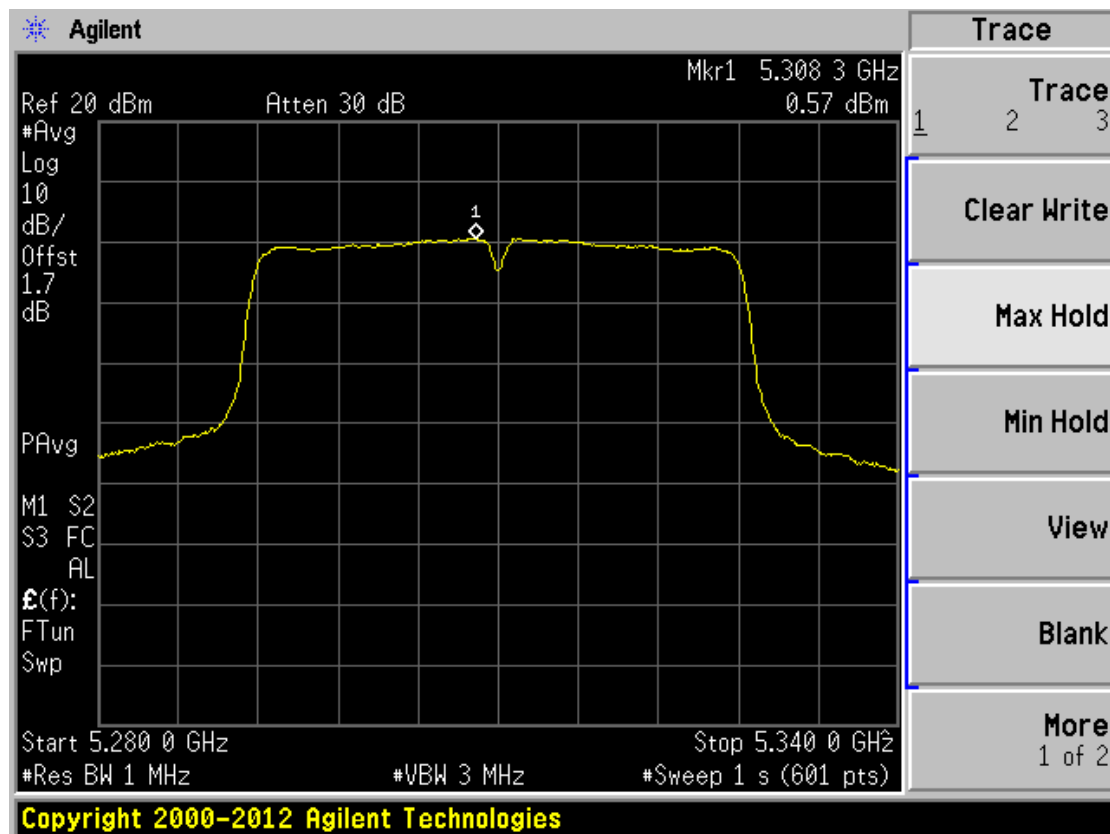
Band II 11n(HT20) CH64



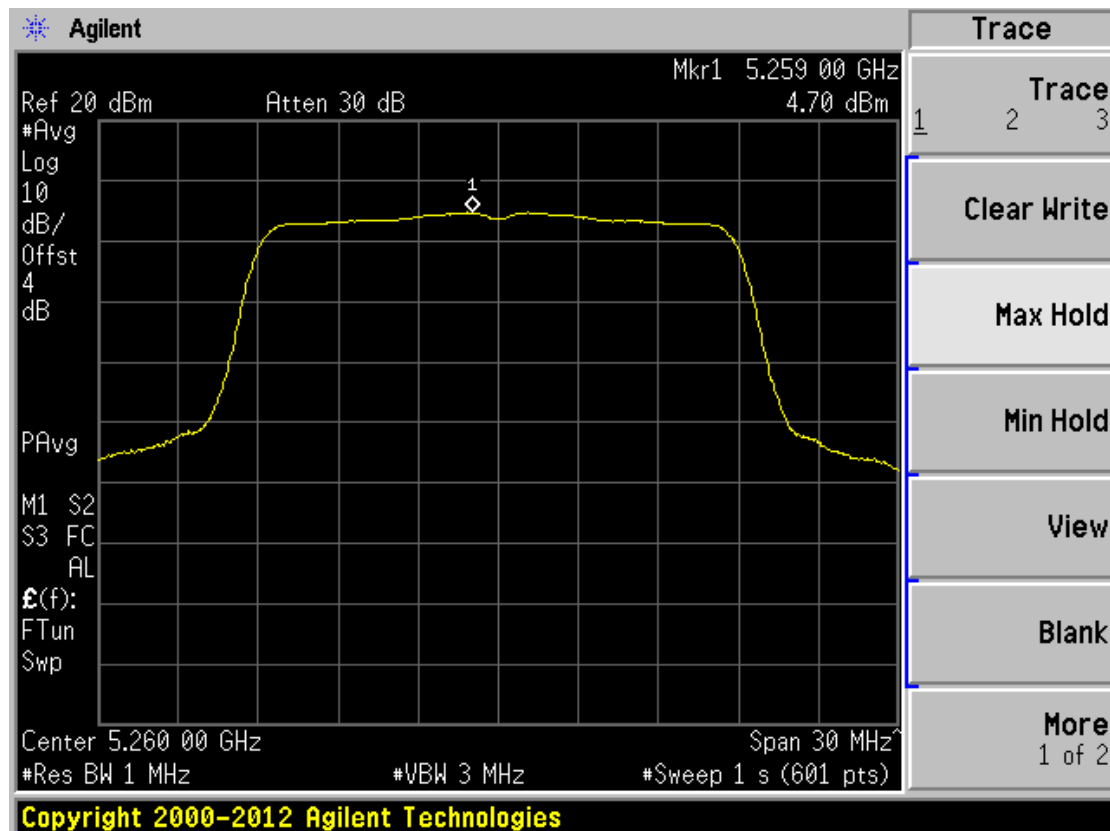
Band II 11n(HT40) CH54



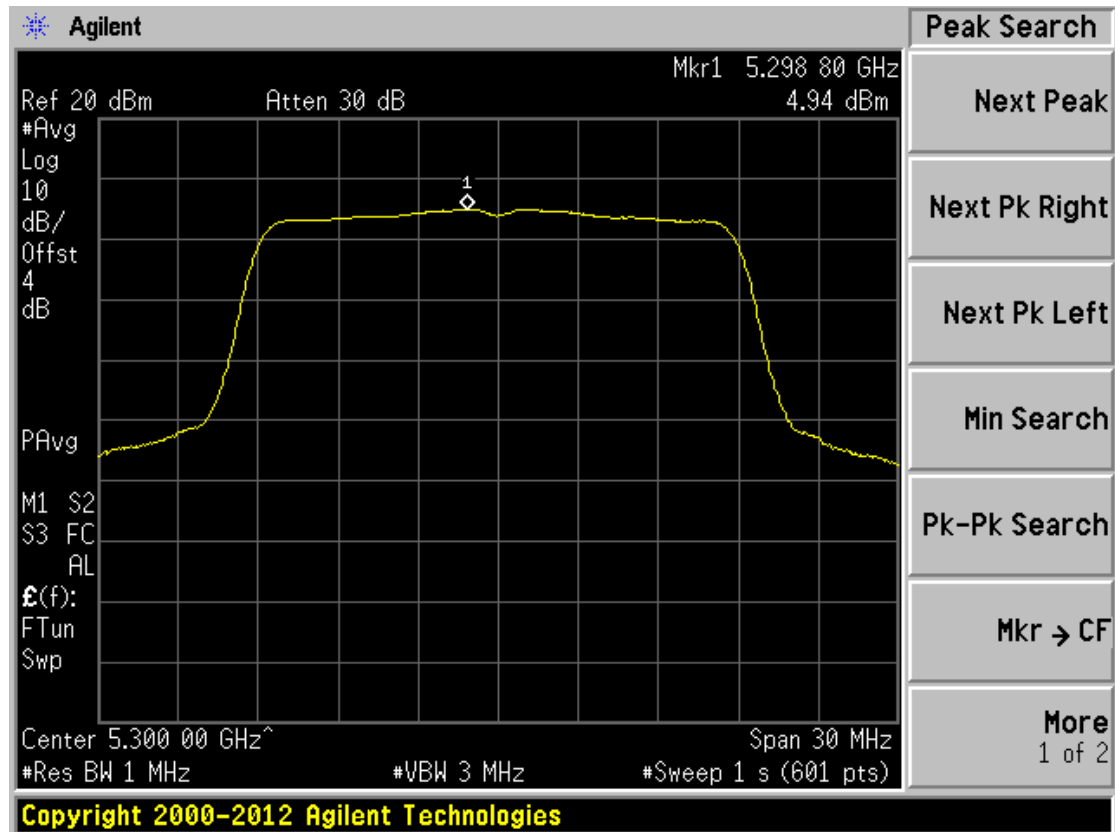
Band II 11n(HT40) CH62



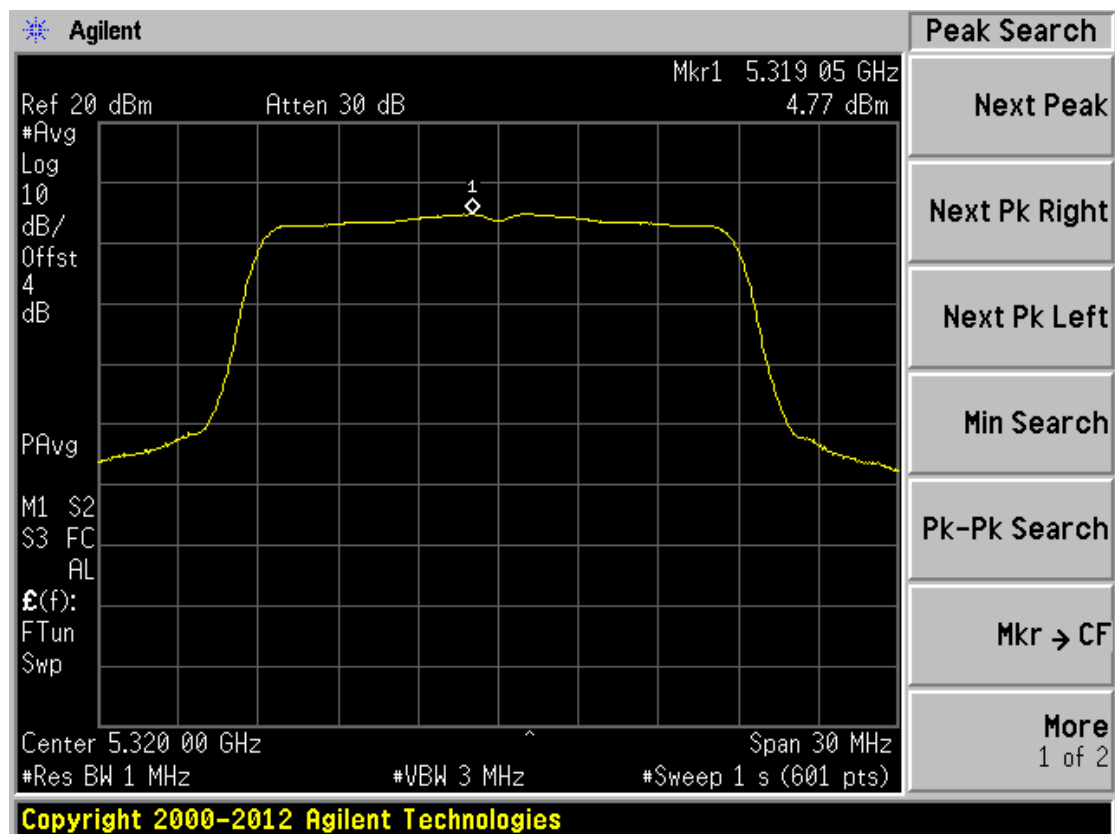
Band II 11ac(HT20) CH52



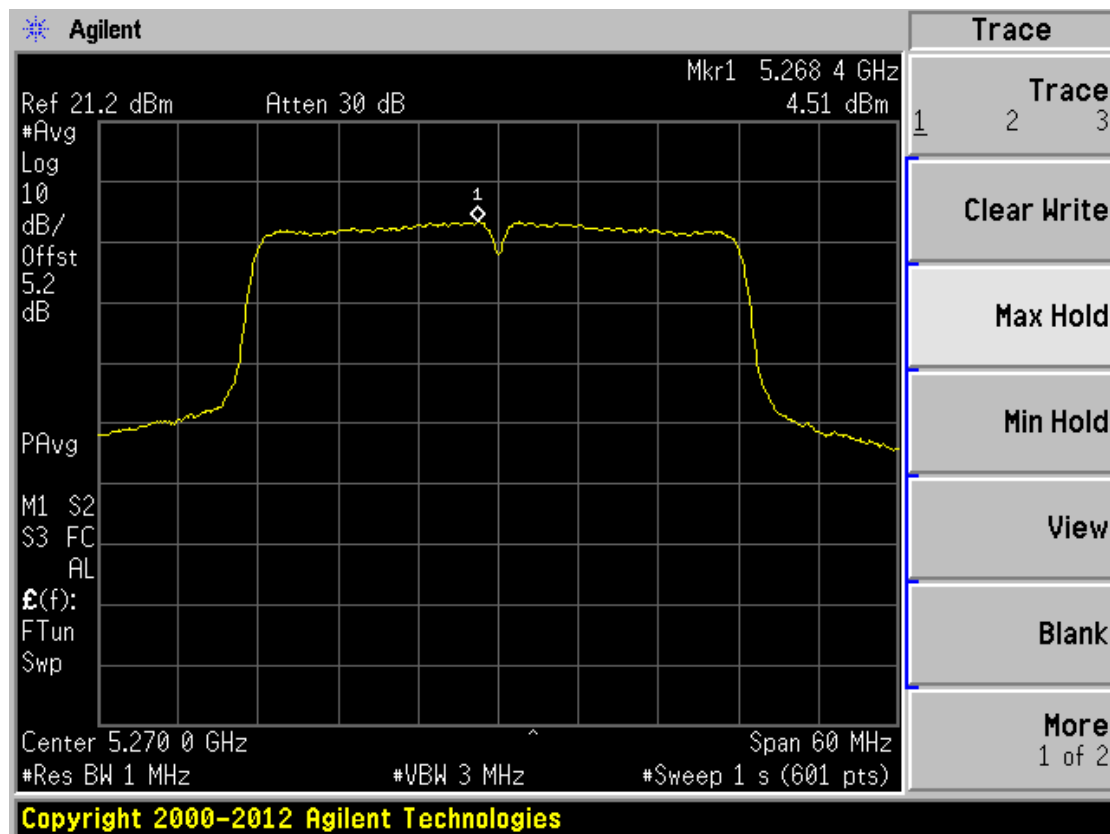
Band II 11ac(HT20) CH60



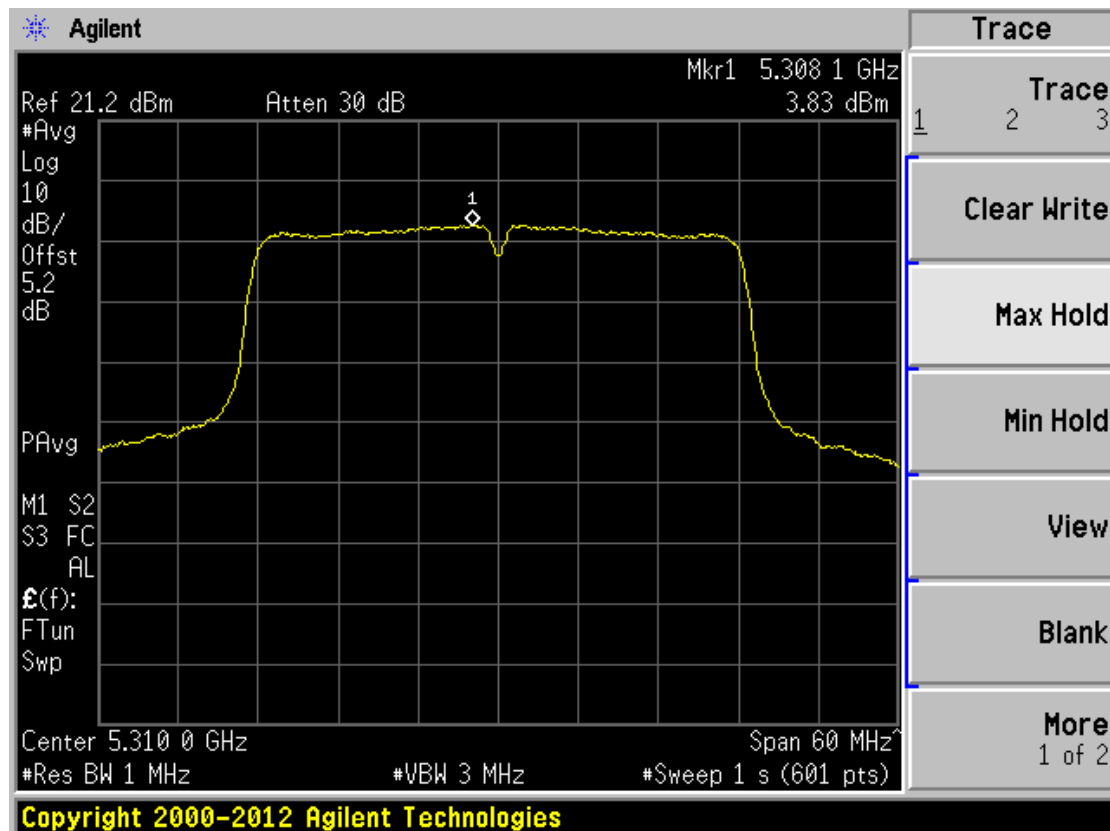
Band II 11ac(HT20) CH64



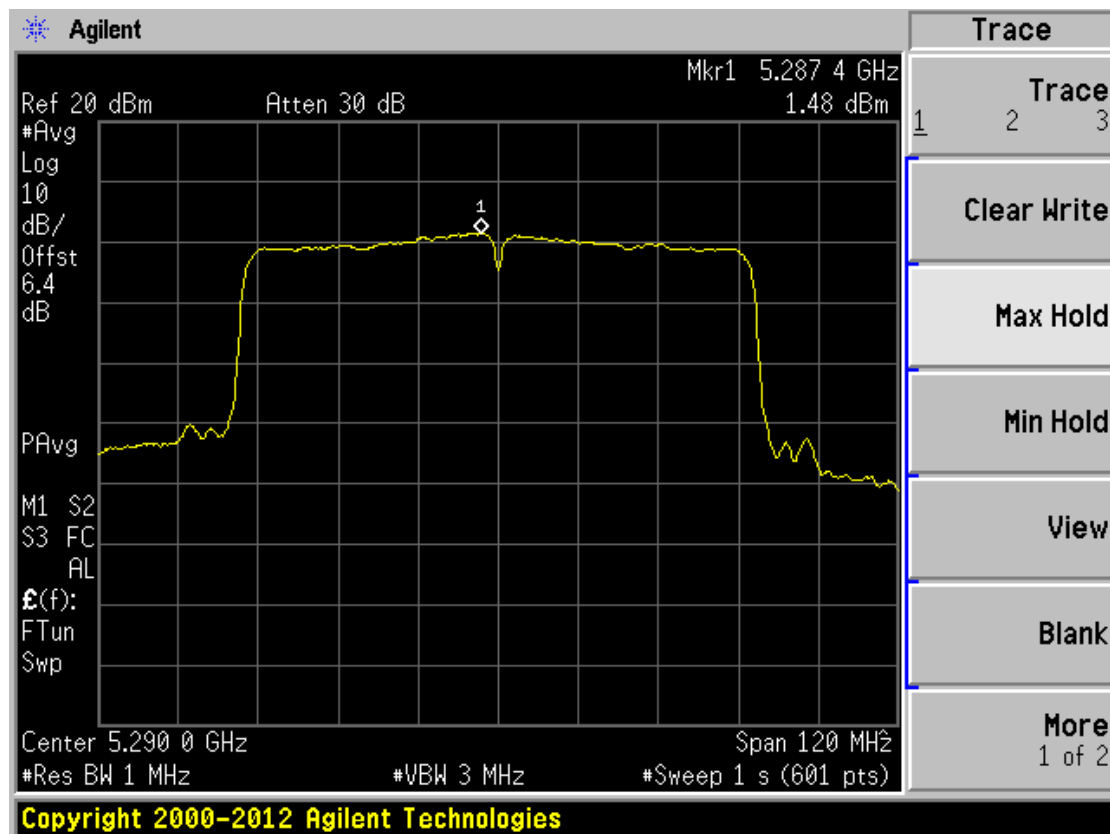
Band II 11ac(HT40) CH54



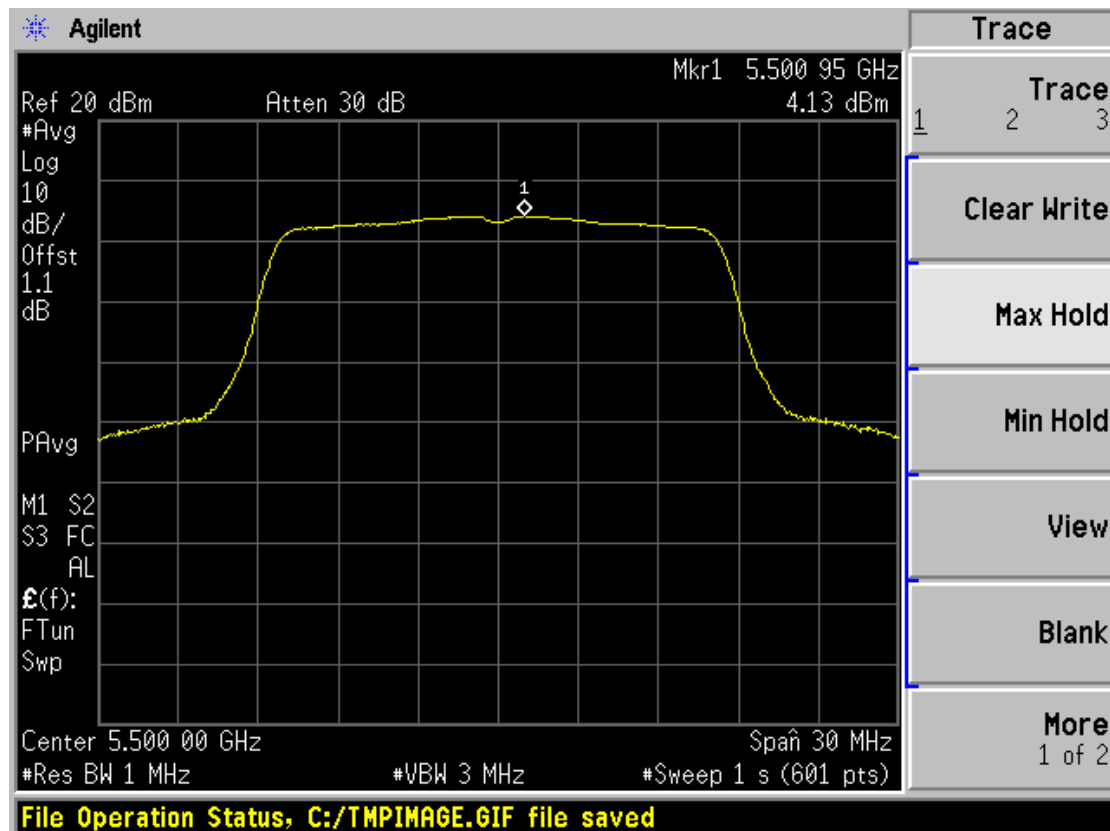
Band II 11ac(HT40) CH62



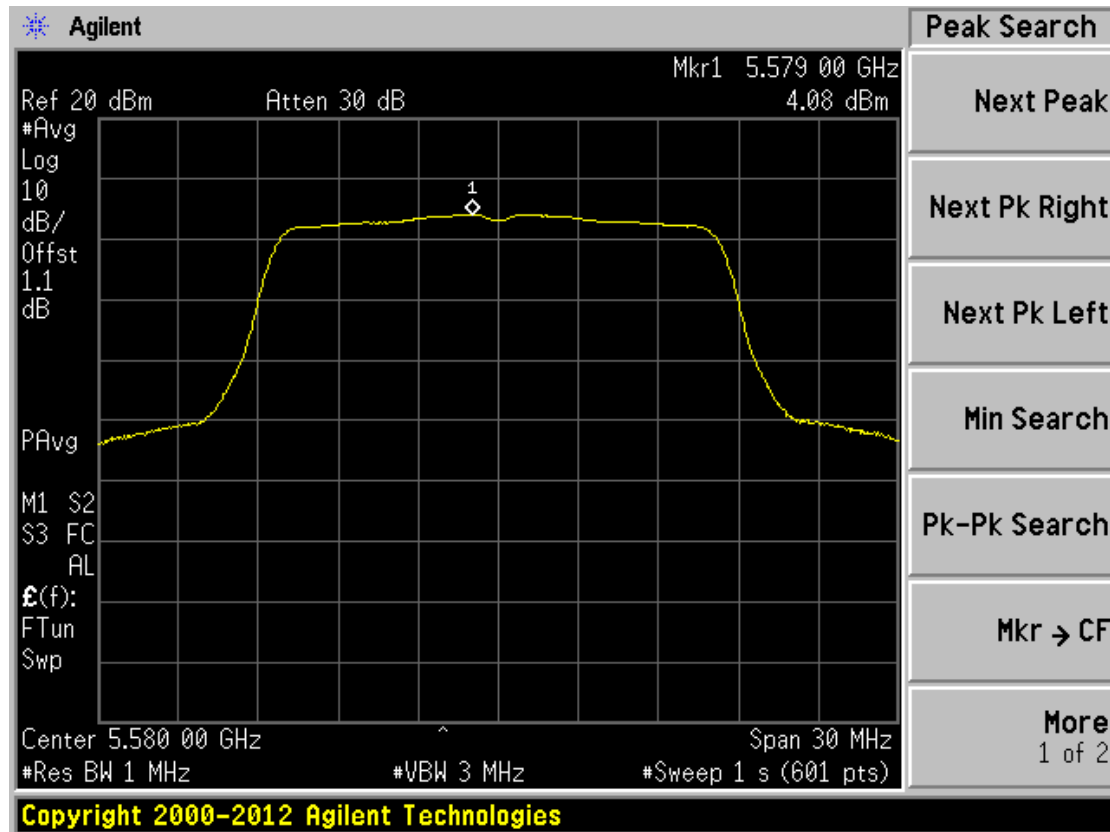
Band II 11ac(HT80) CH58



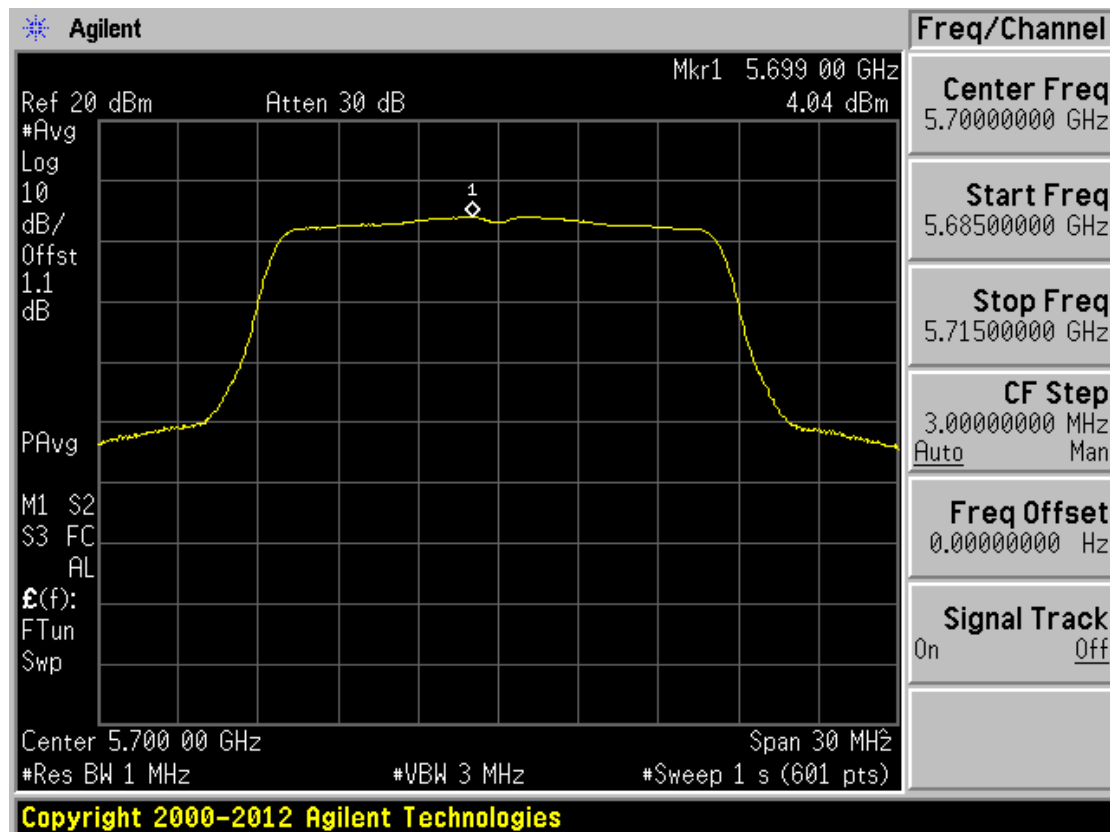
Band III 11a CH100



Band III 11a CH116

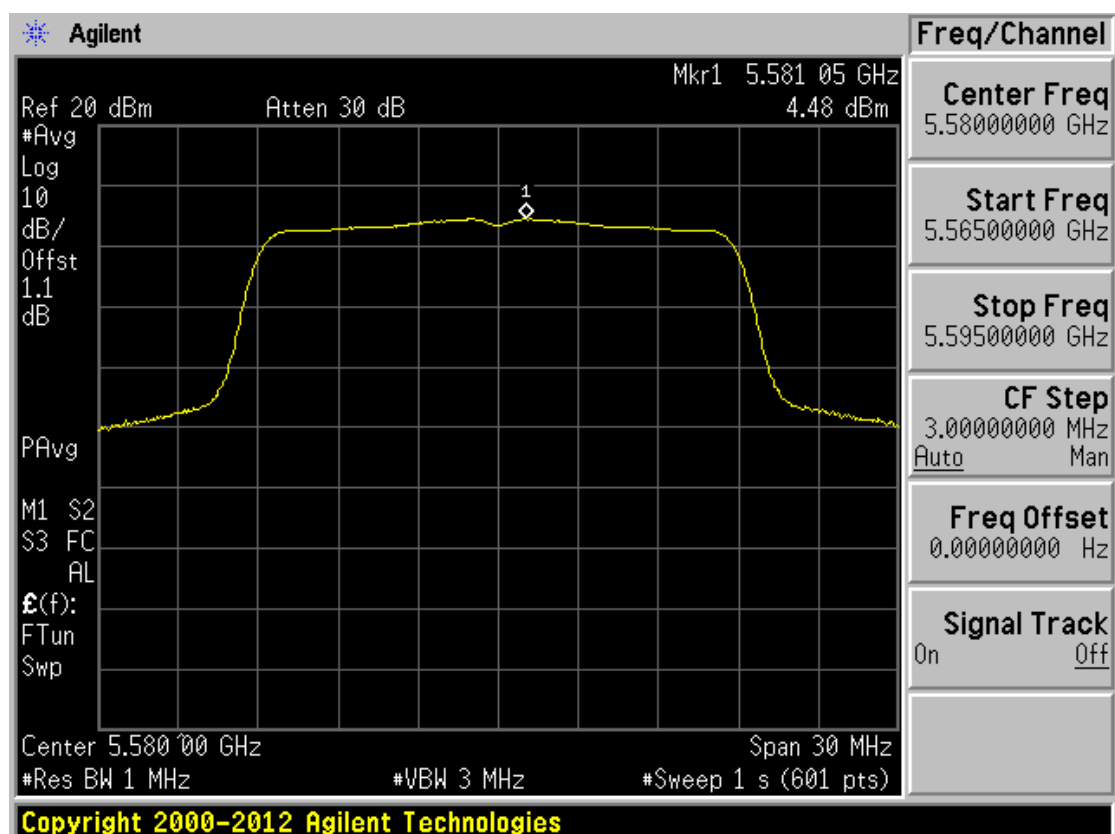


Band III 11a CH140

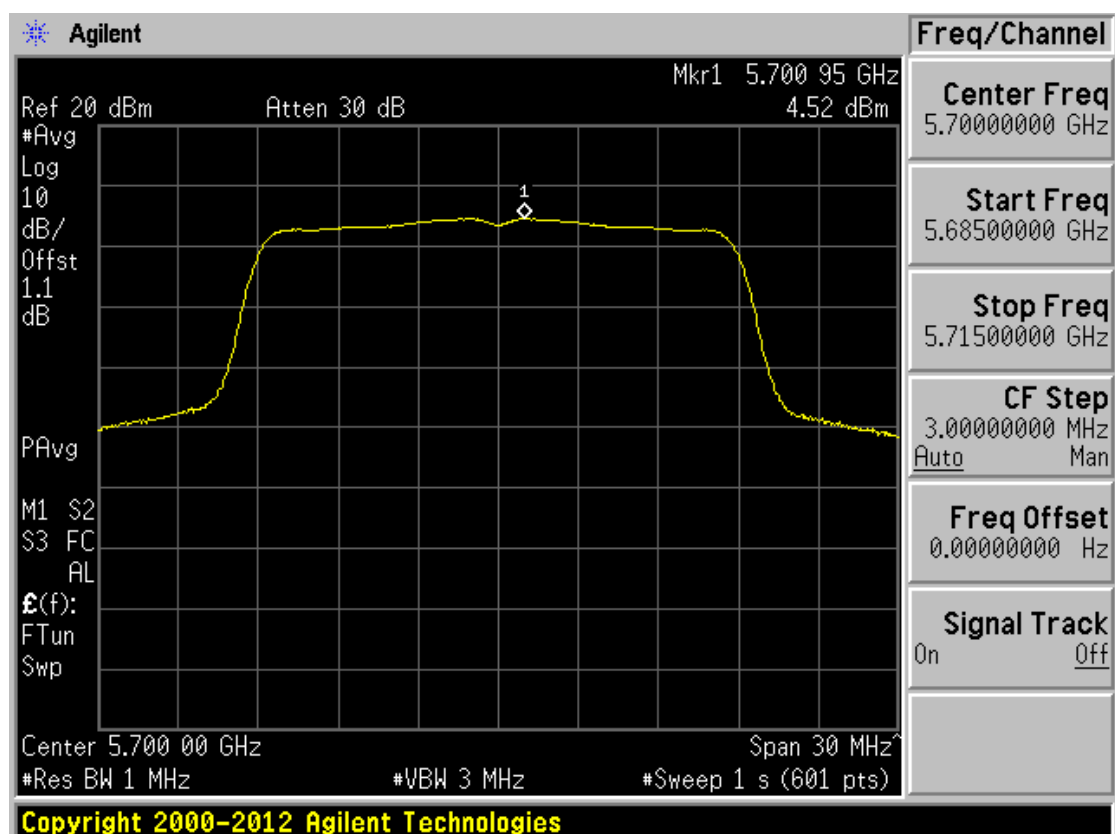


Band III 11n(HT20) CH100

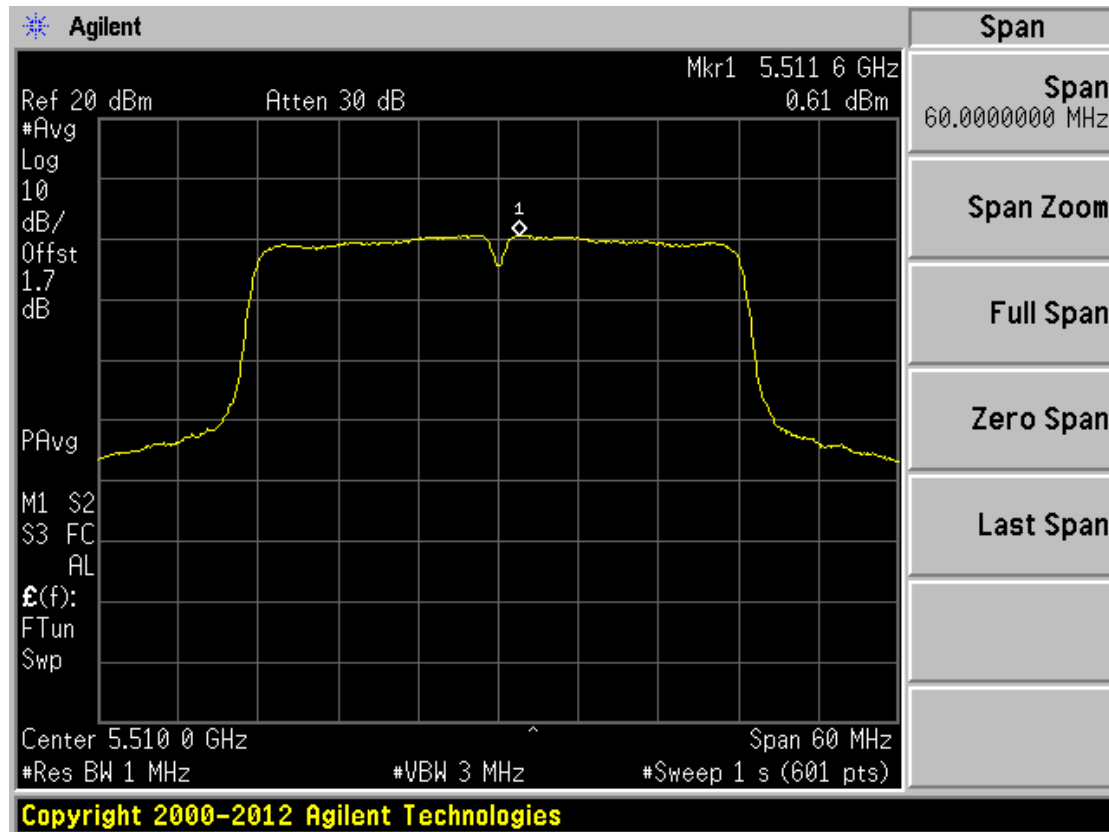
Band III 11n(HT20) CH116



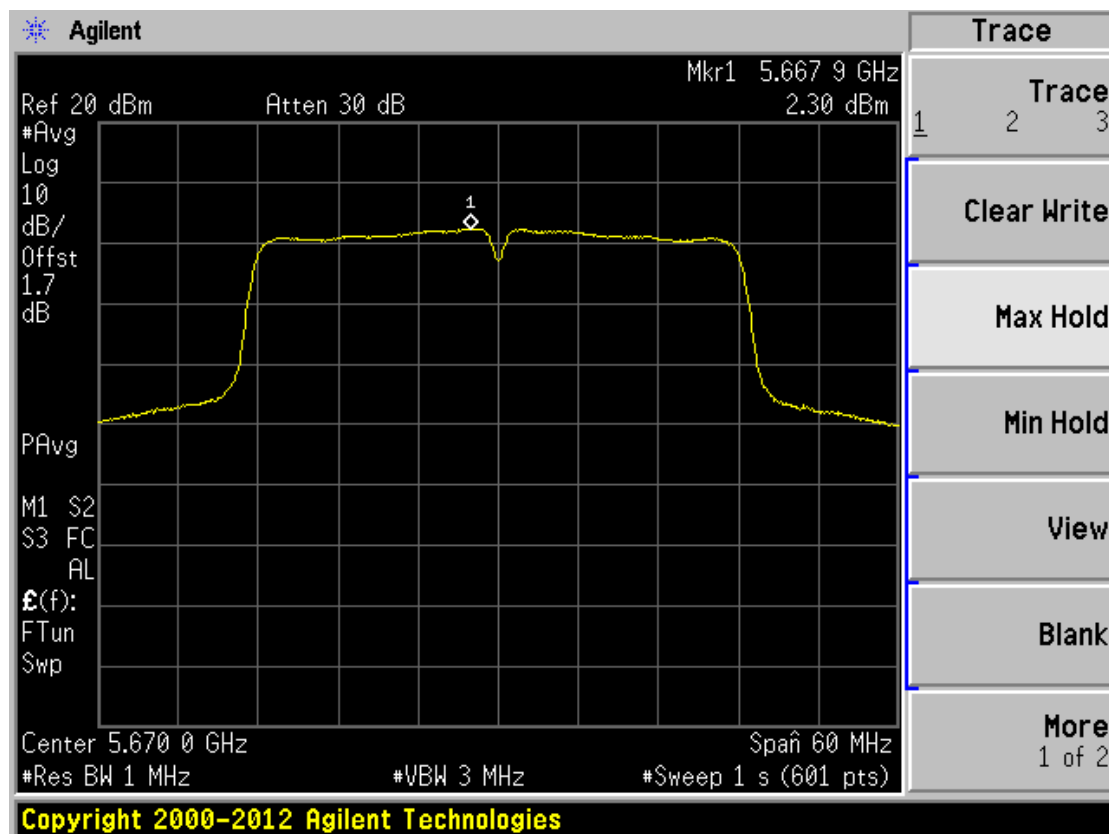
Band III 11n(HT20) CH140



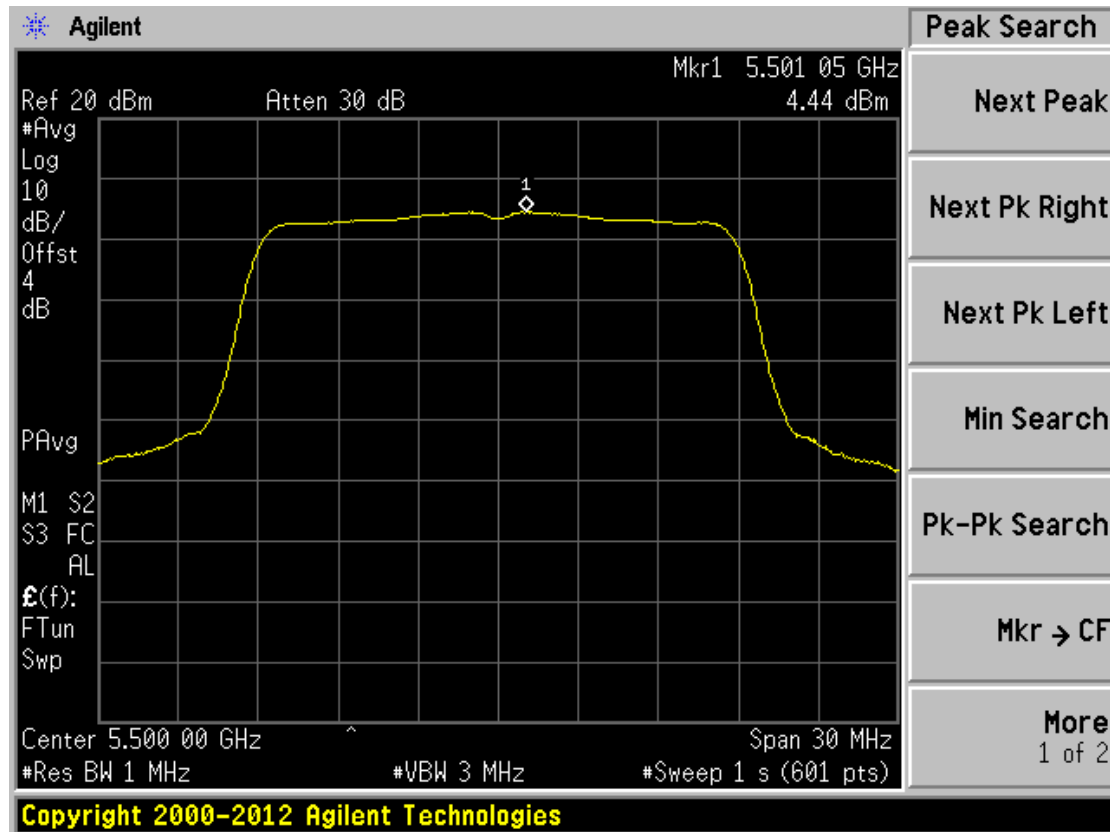
Band III 11n(HT40) CH102



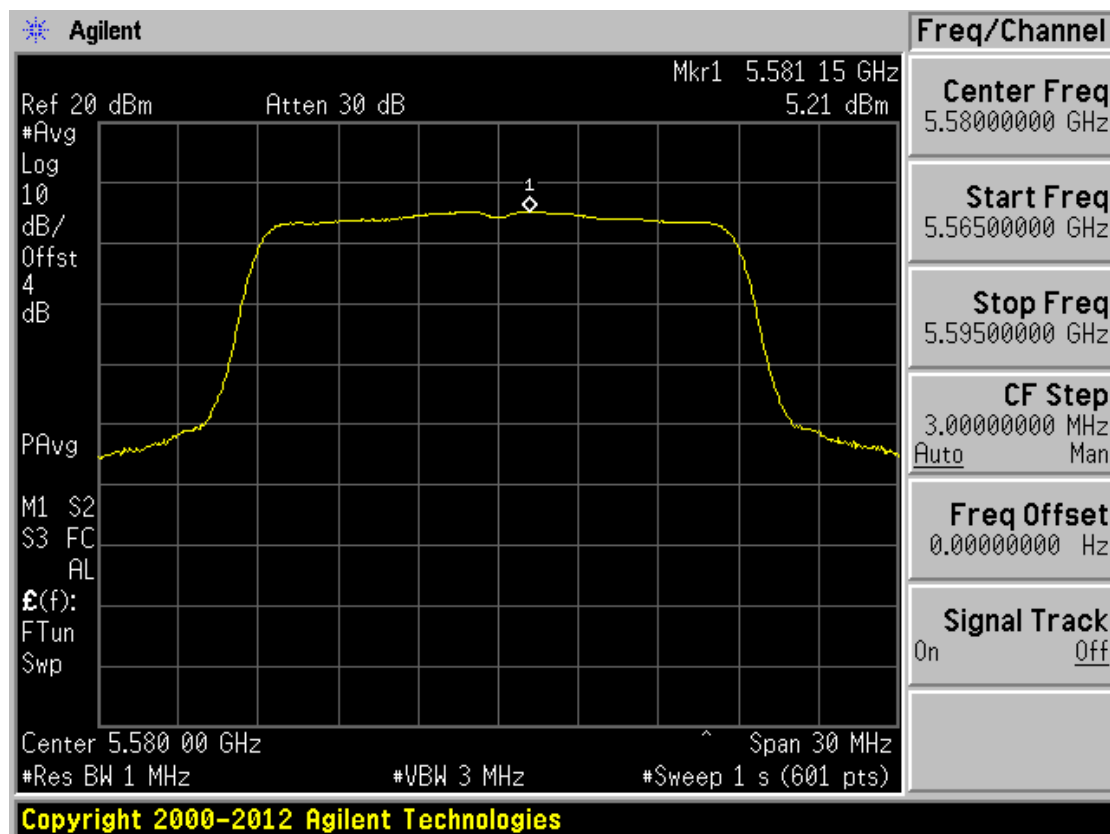
Band III 11n(HT40) CH134



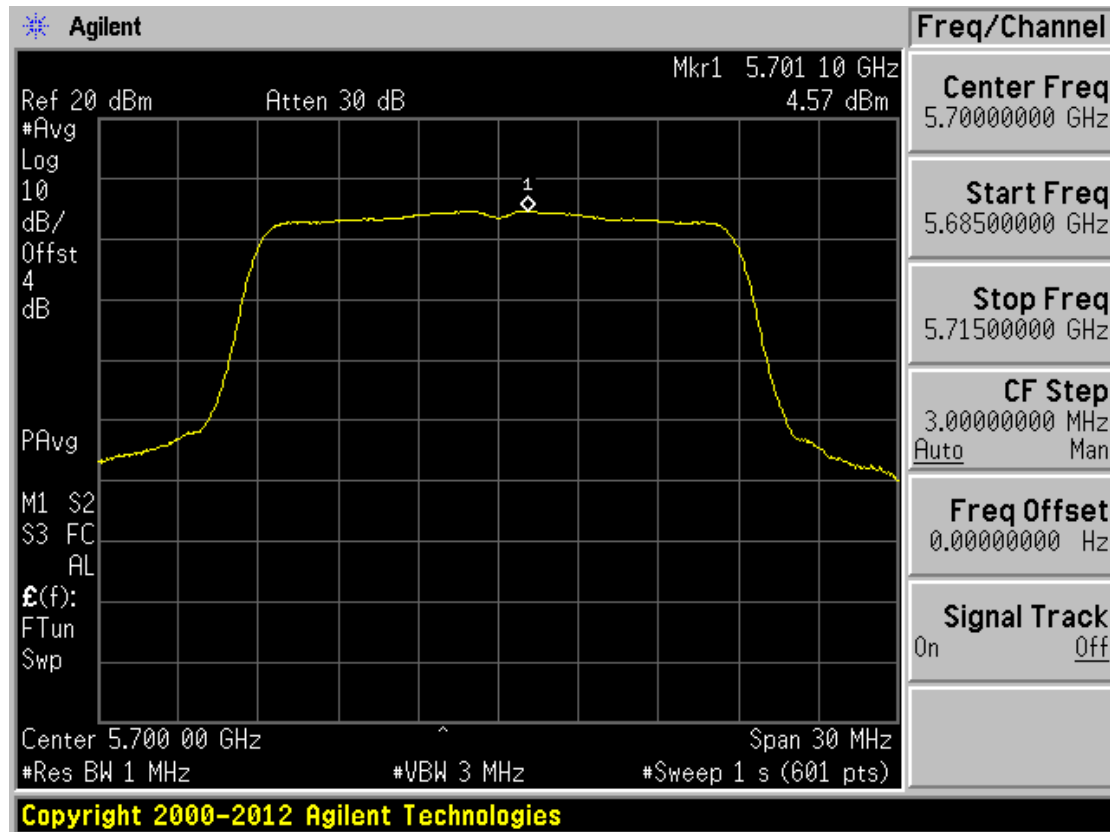
Band III 11ac(HT20) CH100



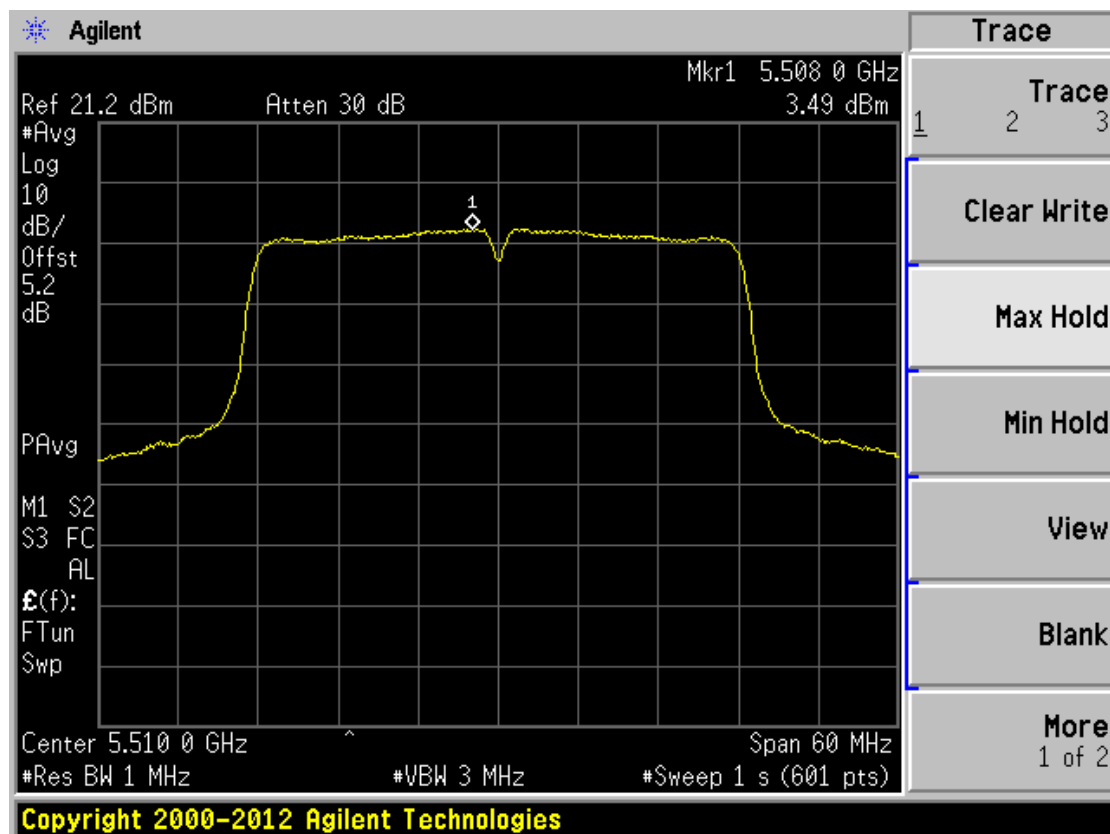
Band III 11ac(HT20) CH116



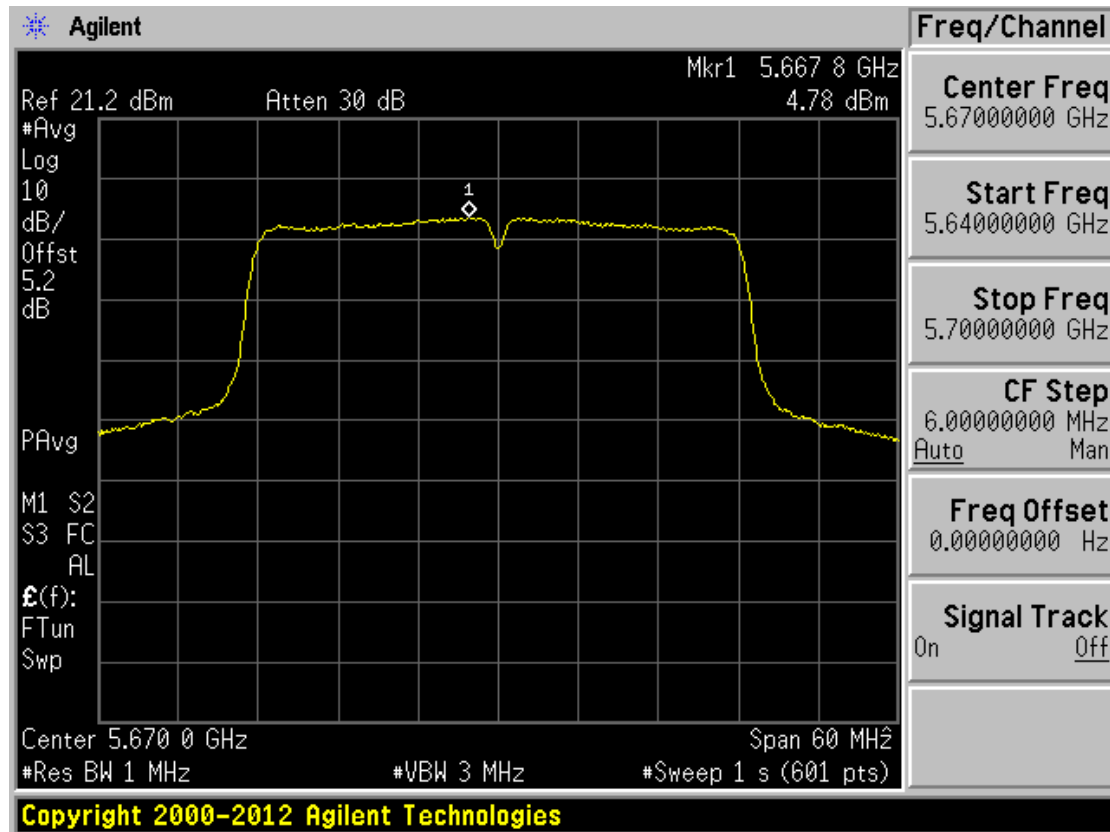
Band III 11ac(HT20) CH140



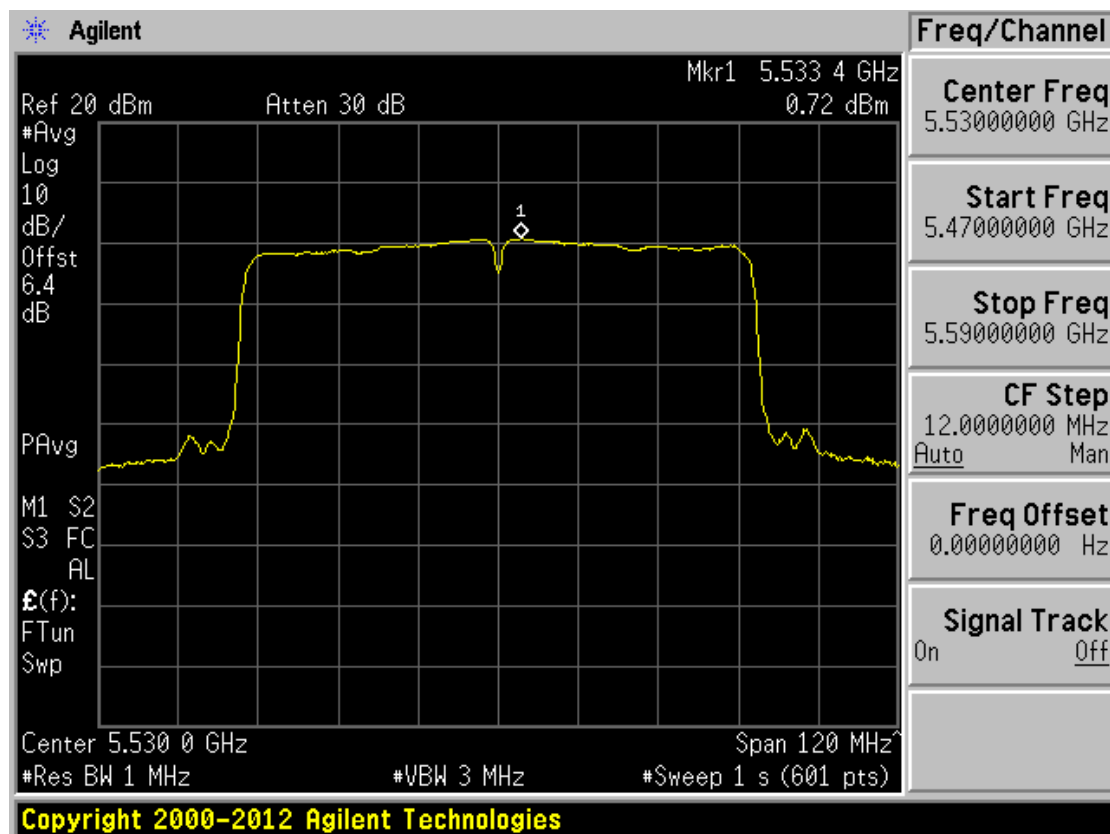
Band III 11ac(HT40) CH102



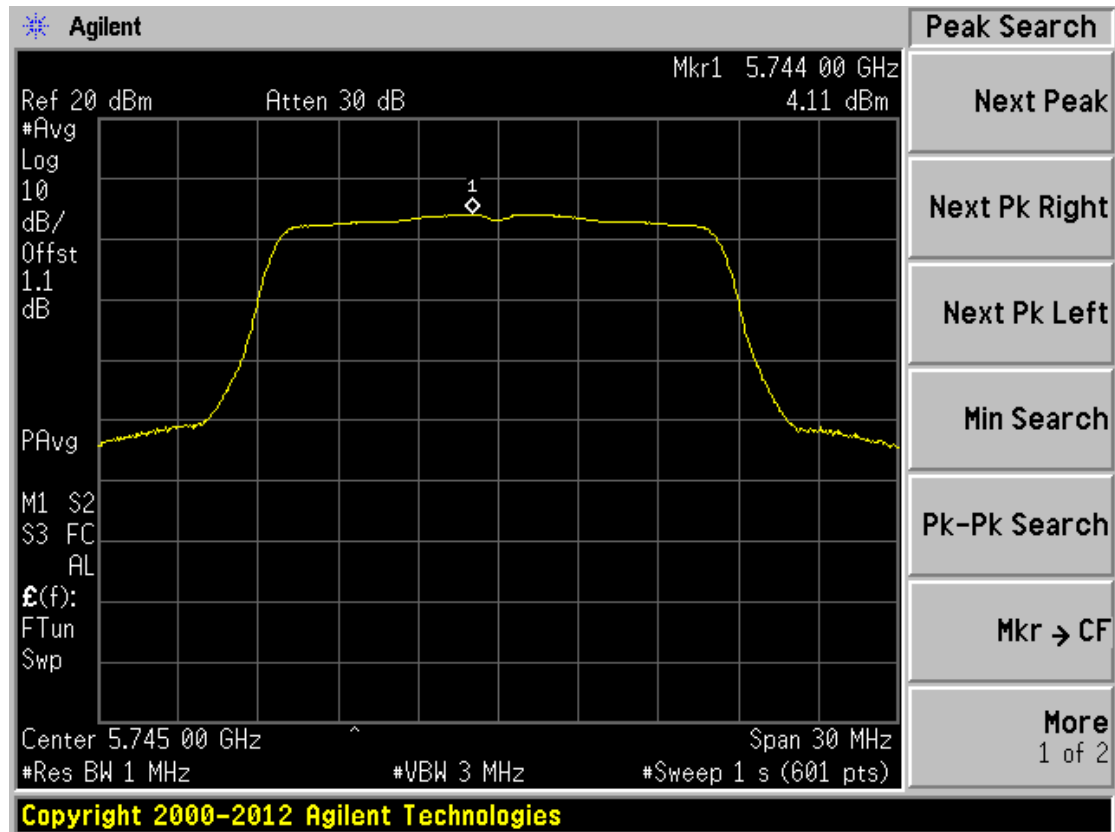
Band III 11ac(HT40) CH134



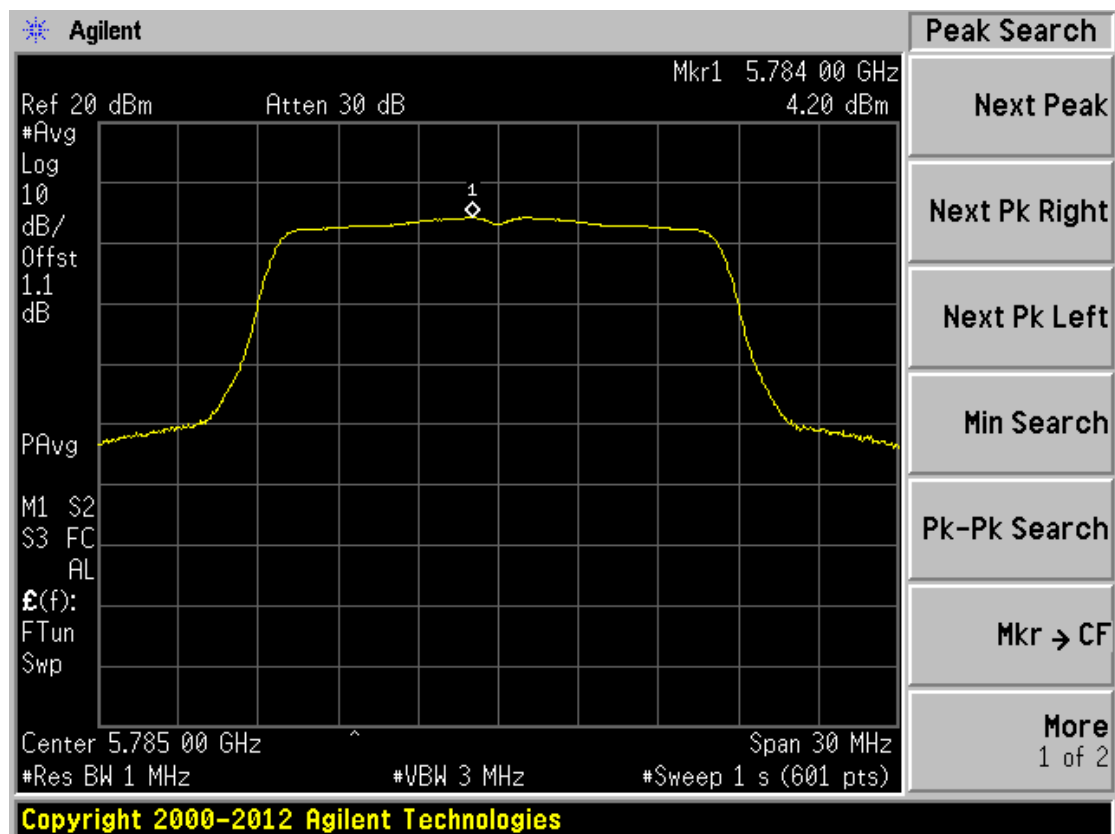
Band III 11ac(HT80) CH106



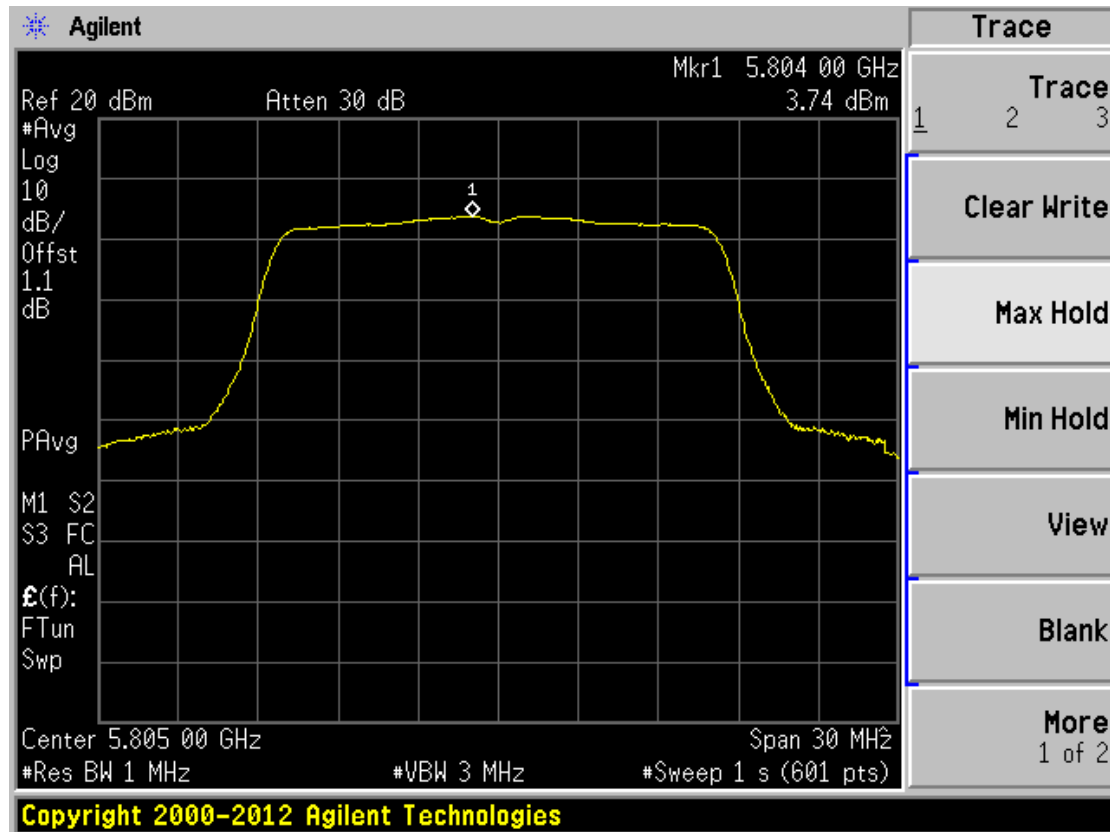
Band IV 11a CH149



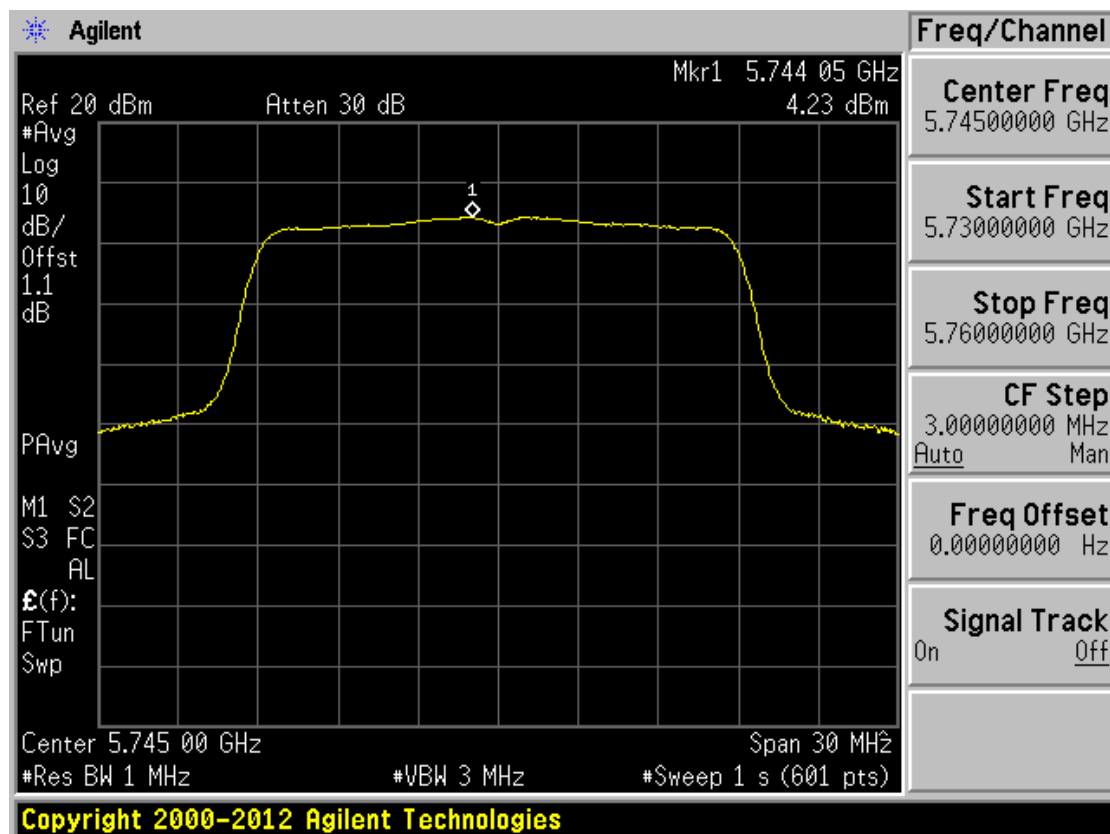
Band IV 11a CH157



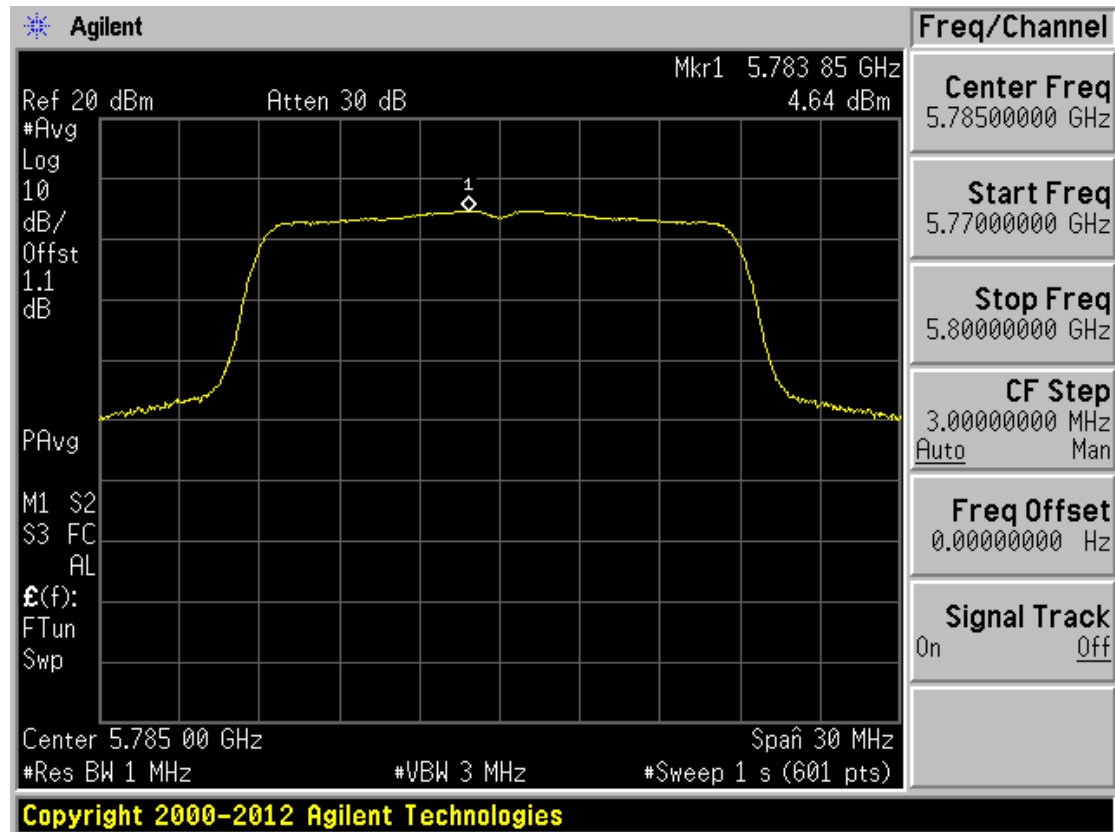
Band IV 11a CH161



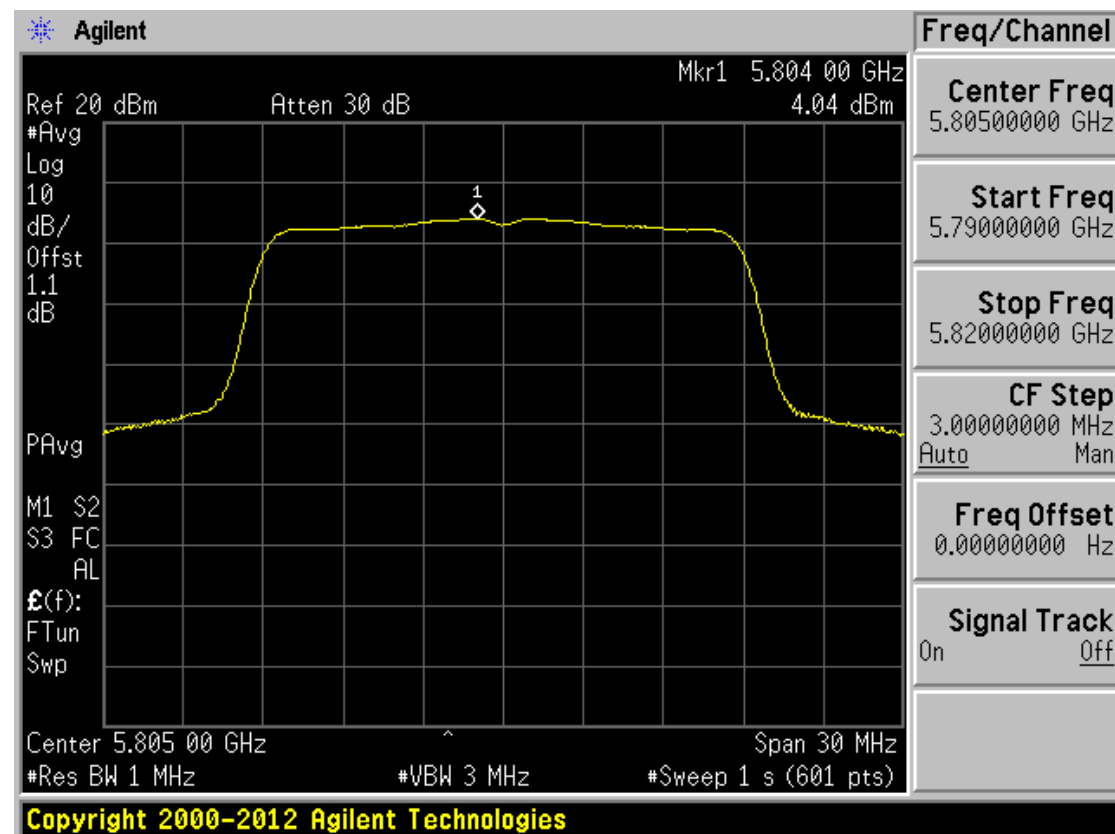
Band IV 11n(HT20) CH149



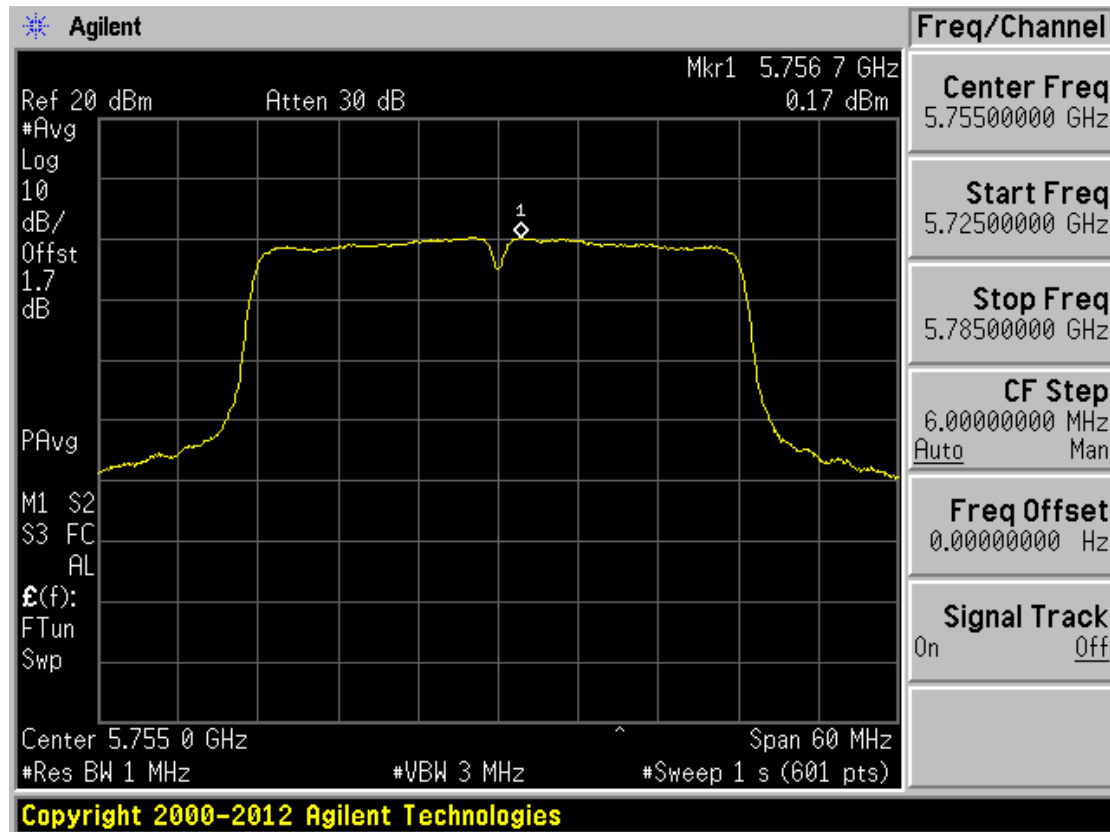
Band IV 11n(HT20) CH157



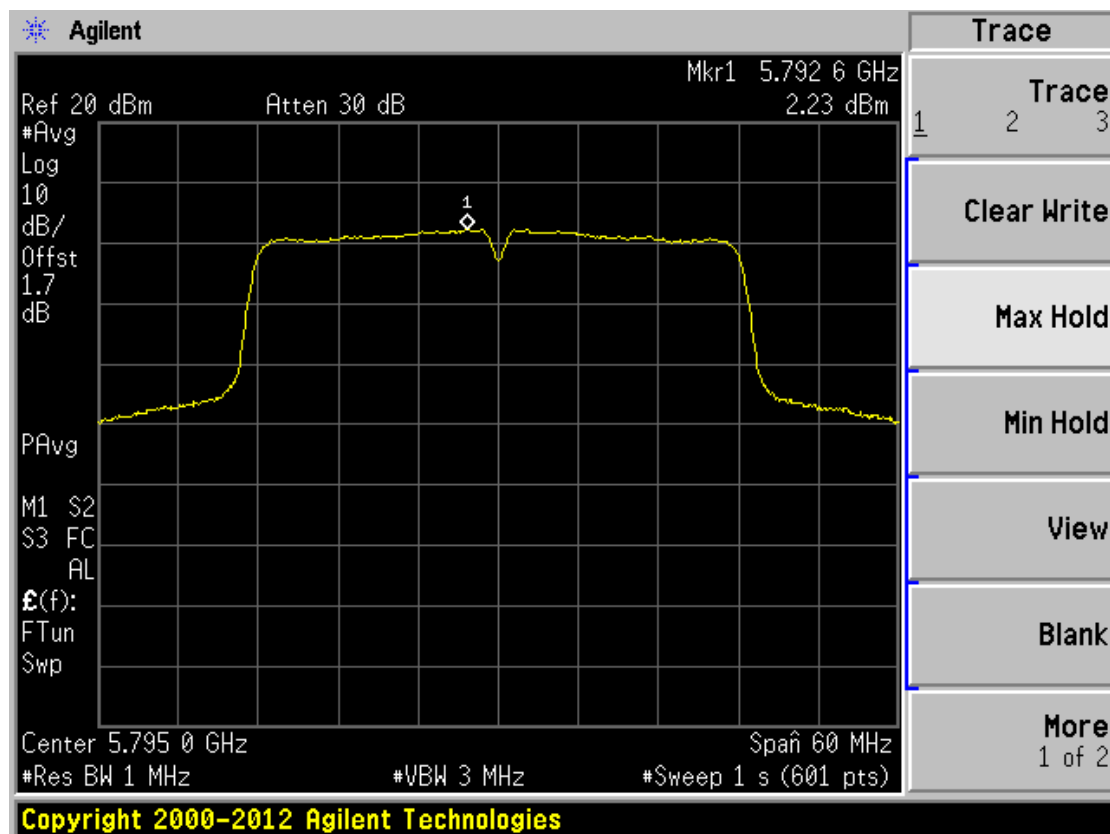
Band IV 11n(HT20) CH161



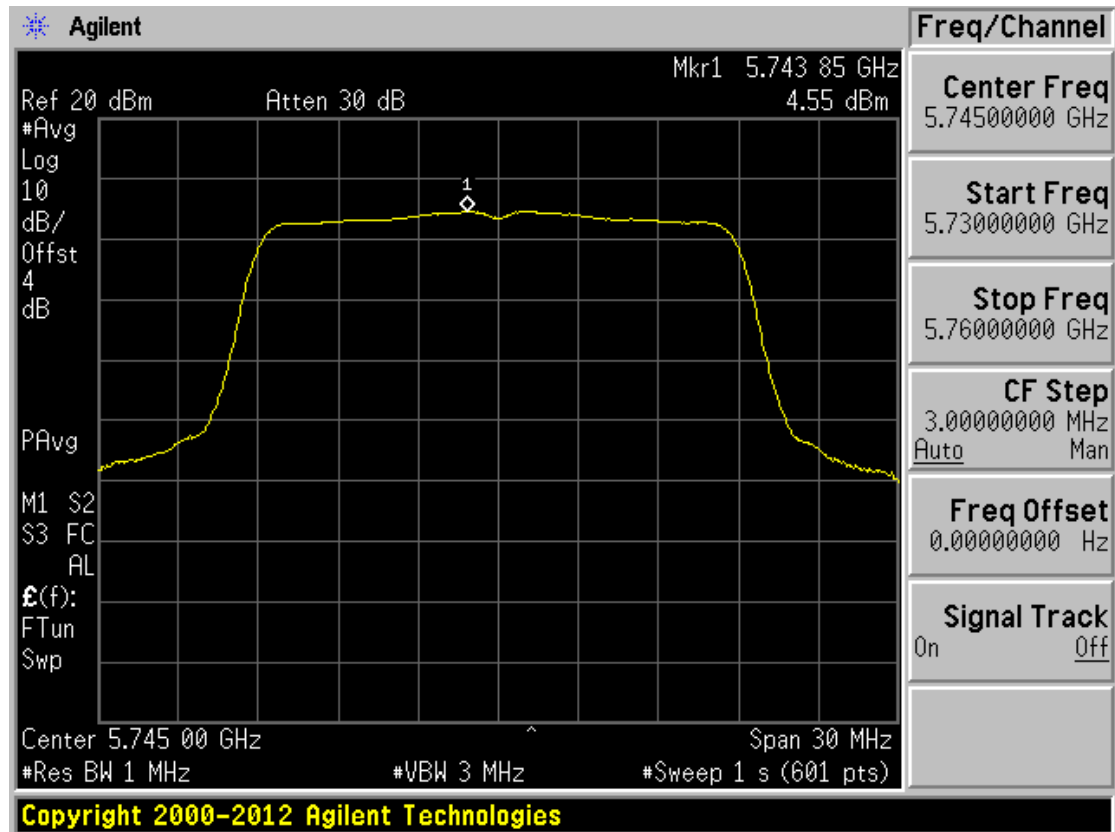
Band IV 11n(HT40) CH151



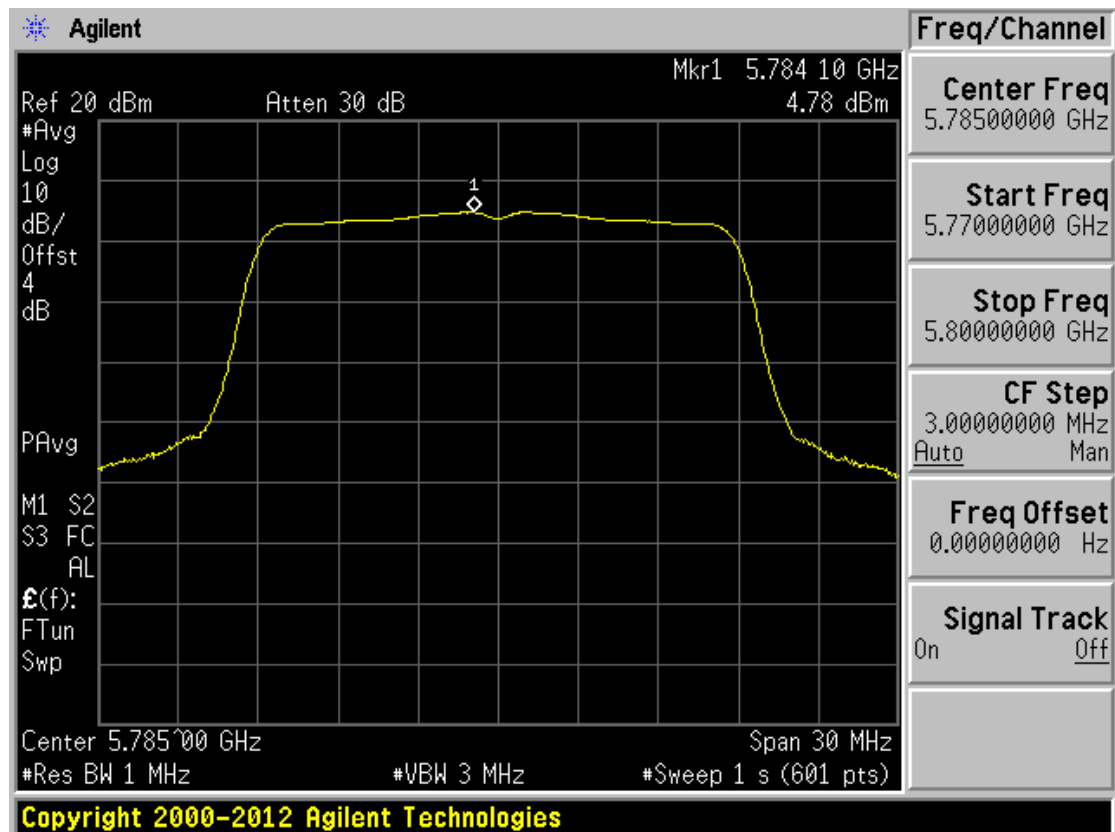
Band IV 11n(HT40) CH159



Band IV 11ac(HT20) CH149



Band IV 11ac(HT20) CH157



The screenshot shows an Agilent Spectrum Analyzer interface. The main display area features a grid with a yellow trace representing a signal. A marker labeled '1' is placed on the trace at a frequency of 5.80585 GHz, indicating a power level of 4.55 dBm. The reference level is set to 20 dBm, and the attenuation is 30 dB. The span is 30 MHz, and the resolution bandwidth is 1 MHz. The sweep time is 1 second with 601 points. The display also shows the center frequency, span, and various other parameters like #Avg, Log, 10, dB/Offst, 4, dB, PAvg, M1 S2, S3 FC, AL, £(f): FTun, Swp, and #VBW 3 MHz.

Agilent

Ref 21.2 dBm Atten 30 dB Mkr1 5.756 9 GHz 4.20 dBm

#Avg Log 10 dB/ Offst 5.2 dB

PAvg

M1 S2 S3 FC AL

£(f): FTun Swp

Center 5.755 0 GHz Span 60 MHz

#Res BW 1 MHz #VBW 3 MHz #Sweep 1 s (601 pts)

Center Freq 5.75500000 GHz

Start Freq 5.72500000 GHz

Stop Freq 5.78500000 GHz

CF Step 6.00000000 MHz

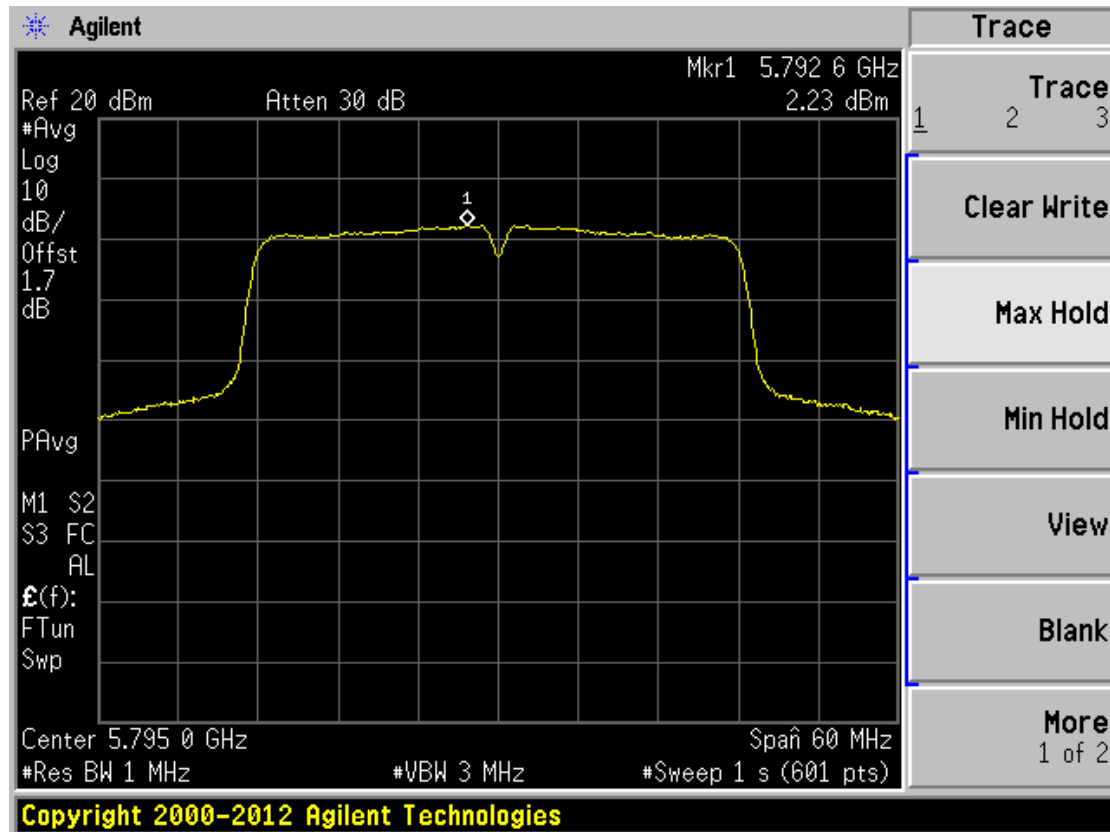
Auto Man

Freq Offset 0.00000000 Hz

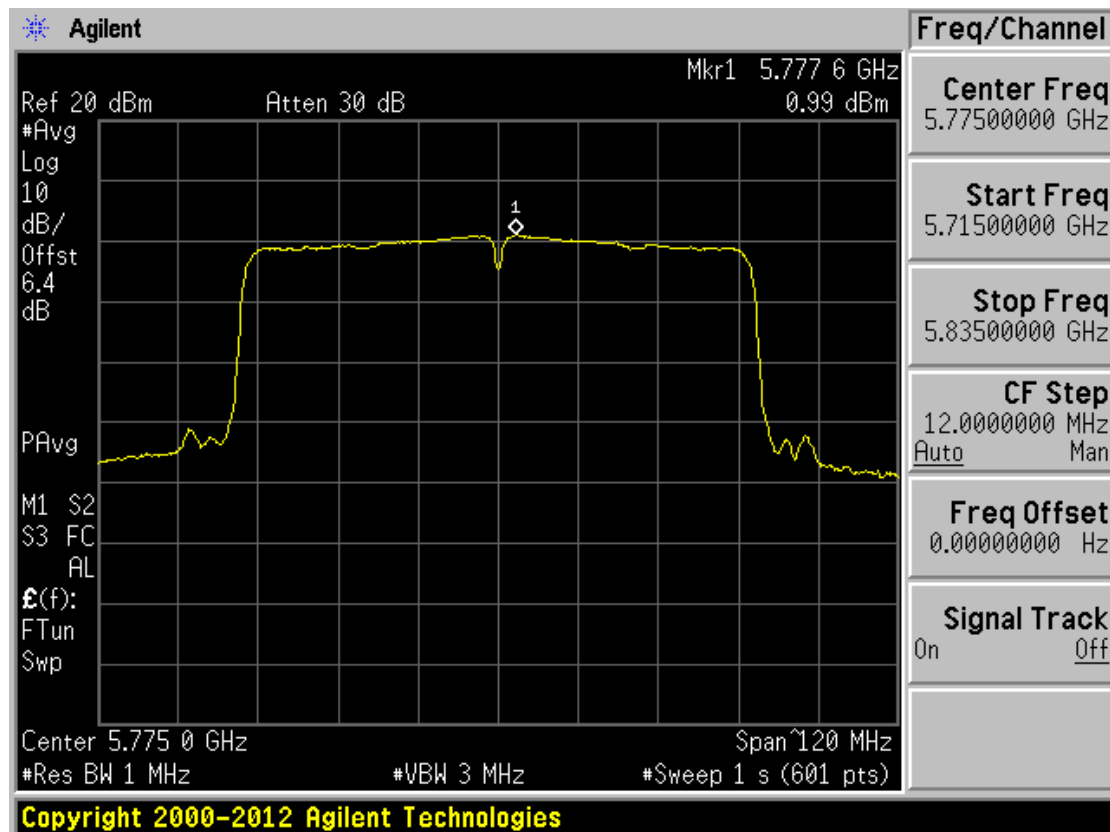
Signal Track On Off

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Band IV 11ac(HT40) CH159

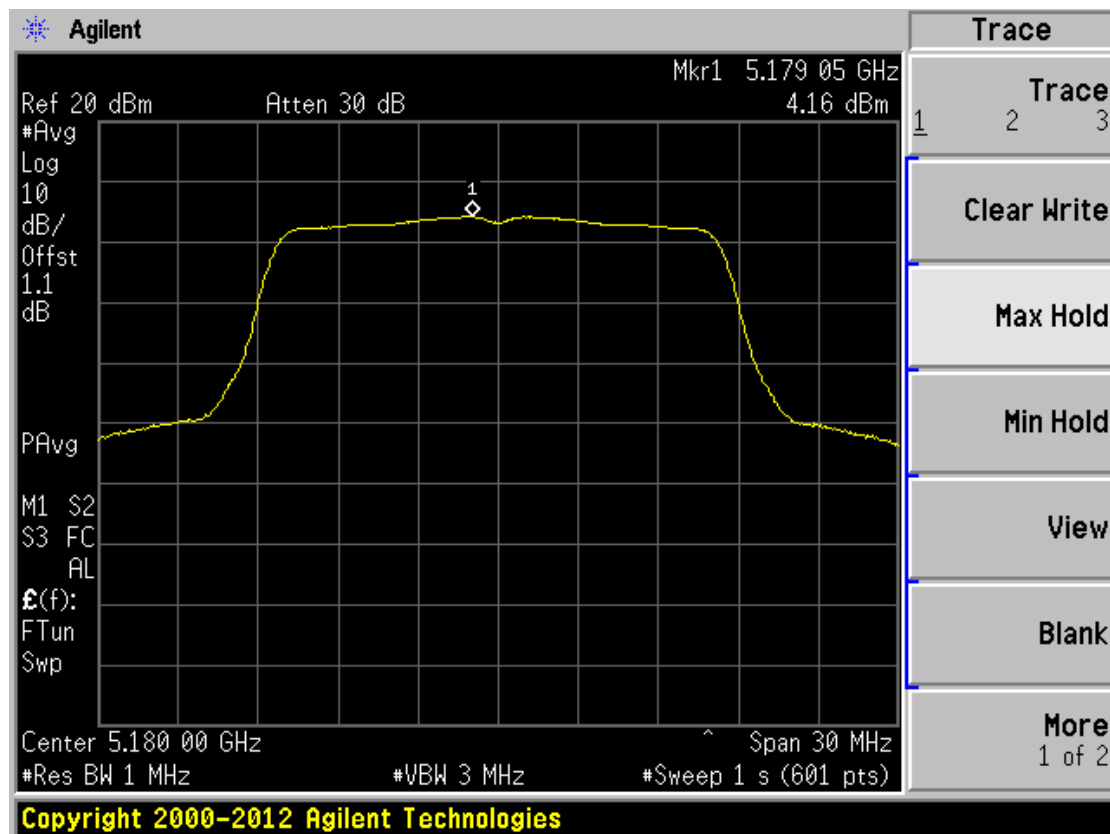


Band IV 11ac(HT80) CH155

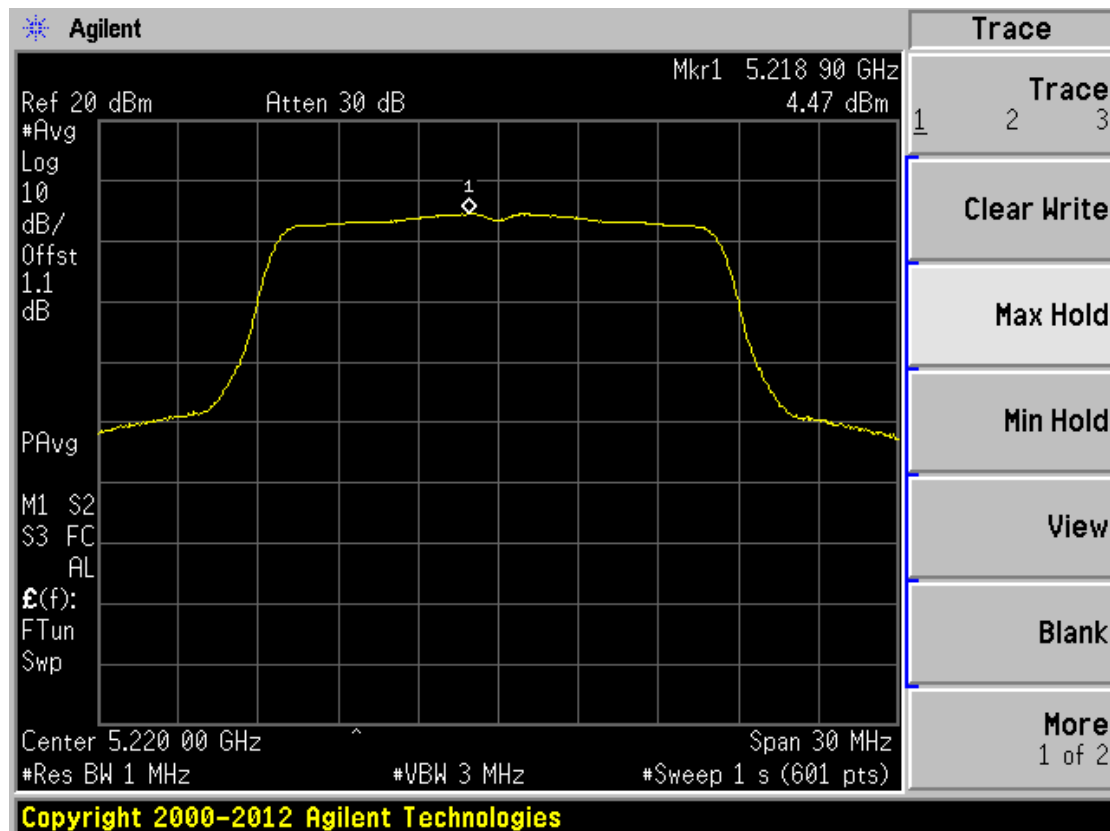


ANT 1

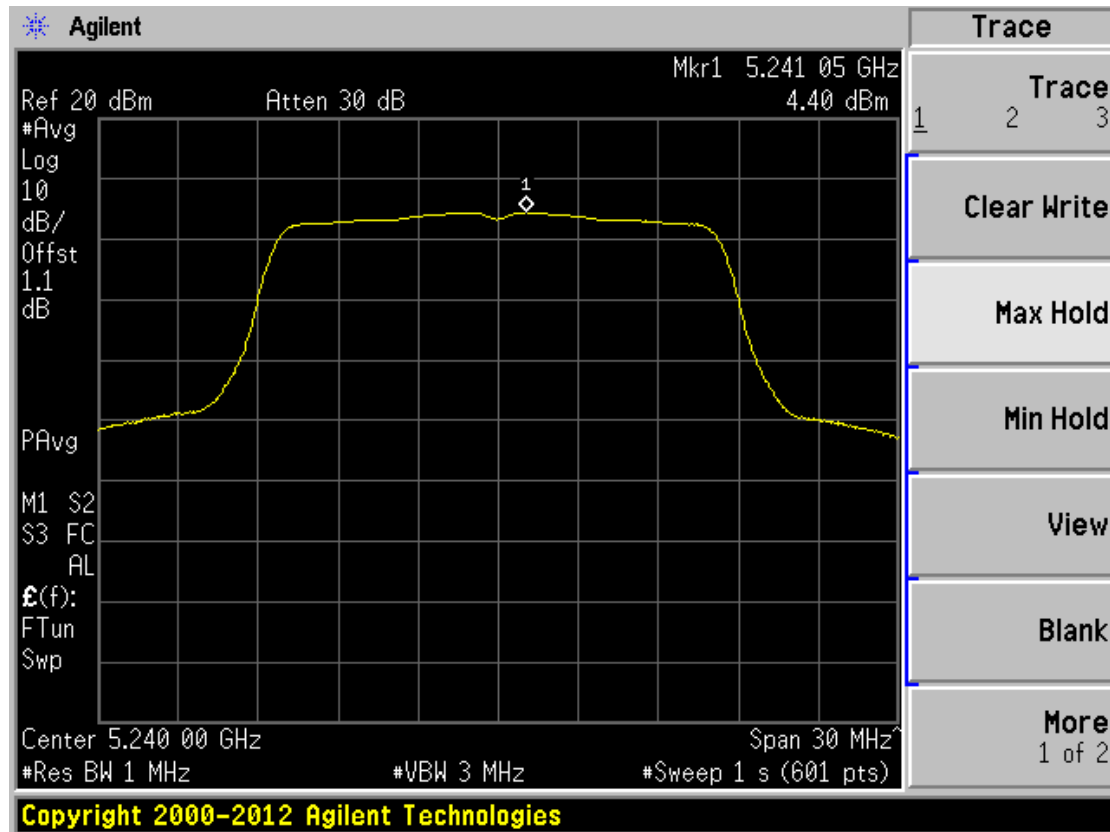
Band I 11a CH36



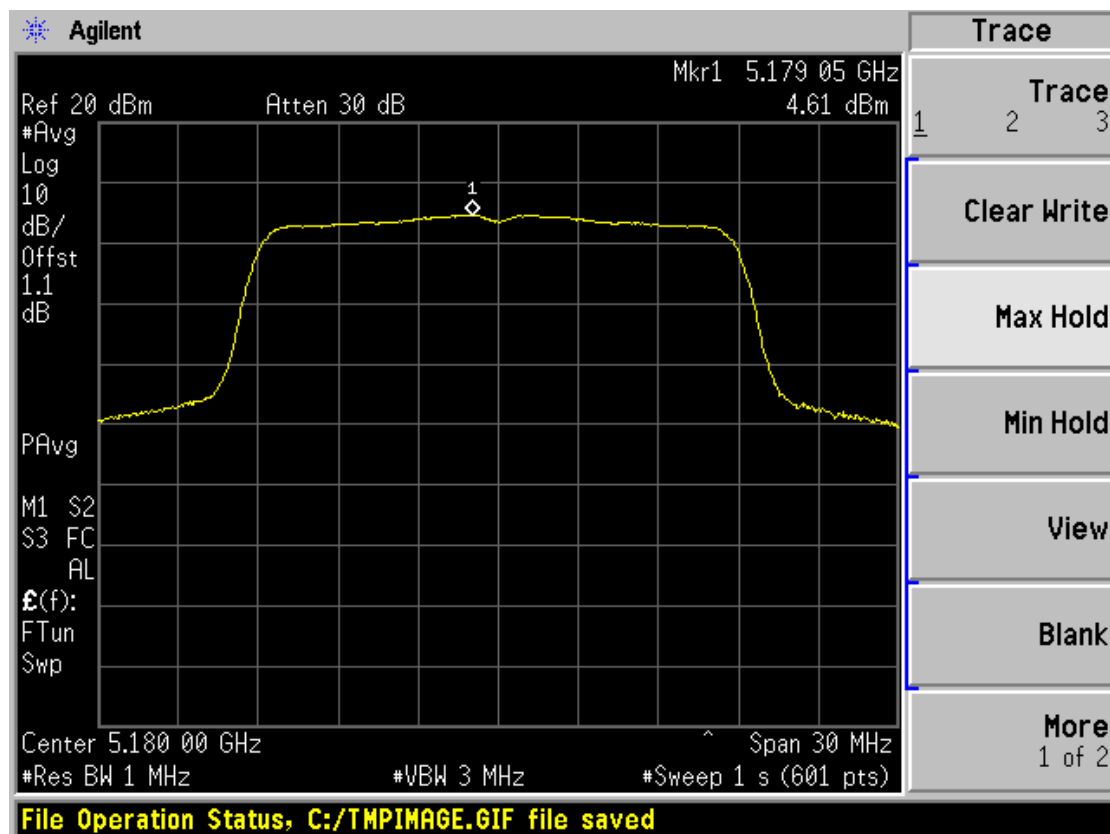
Band I 11a CH44



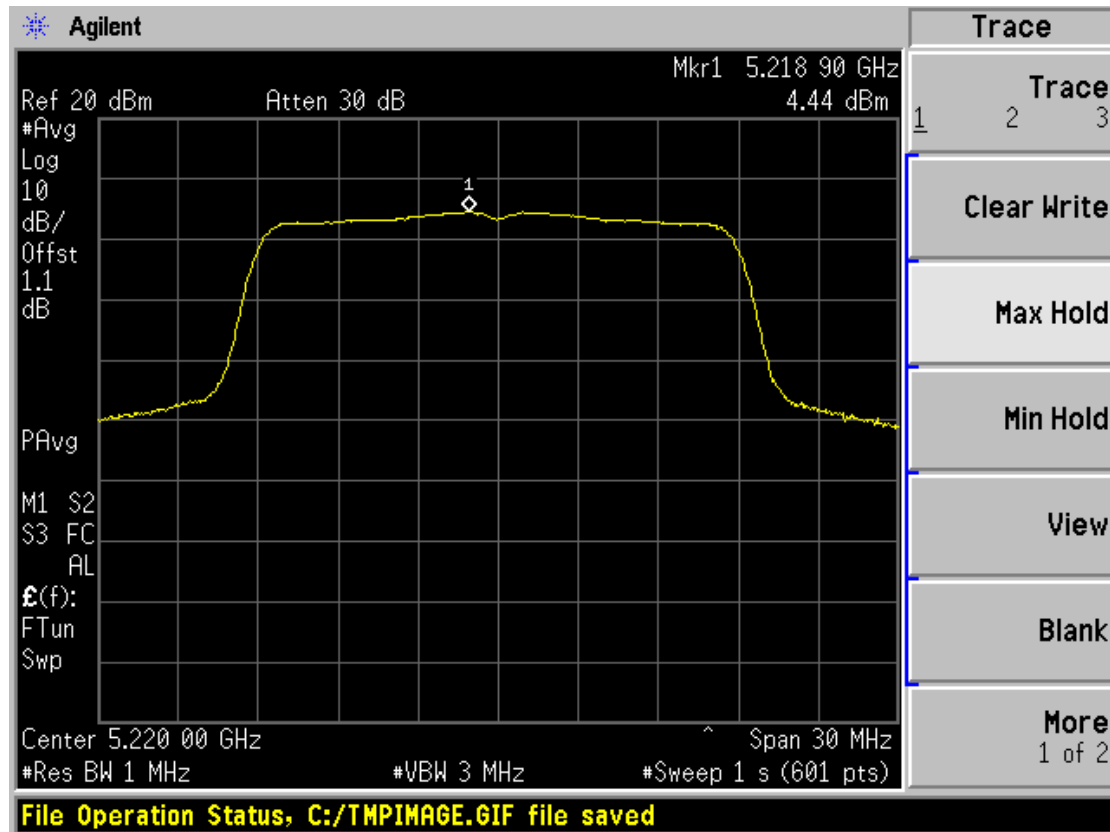
Band I 11a CH48



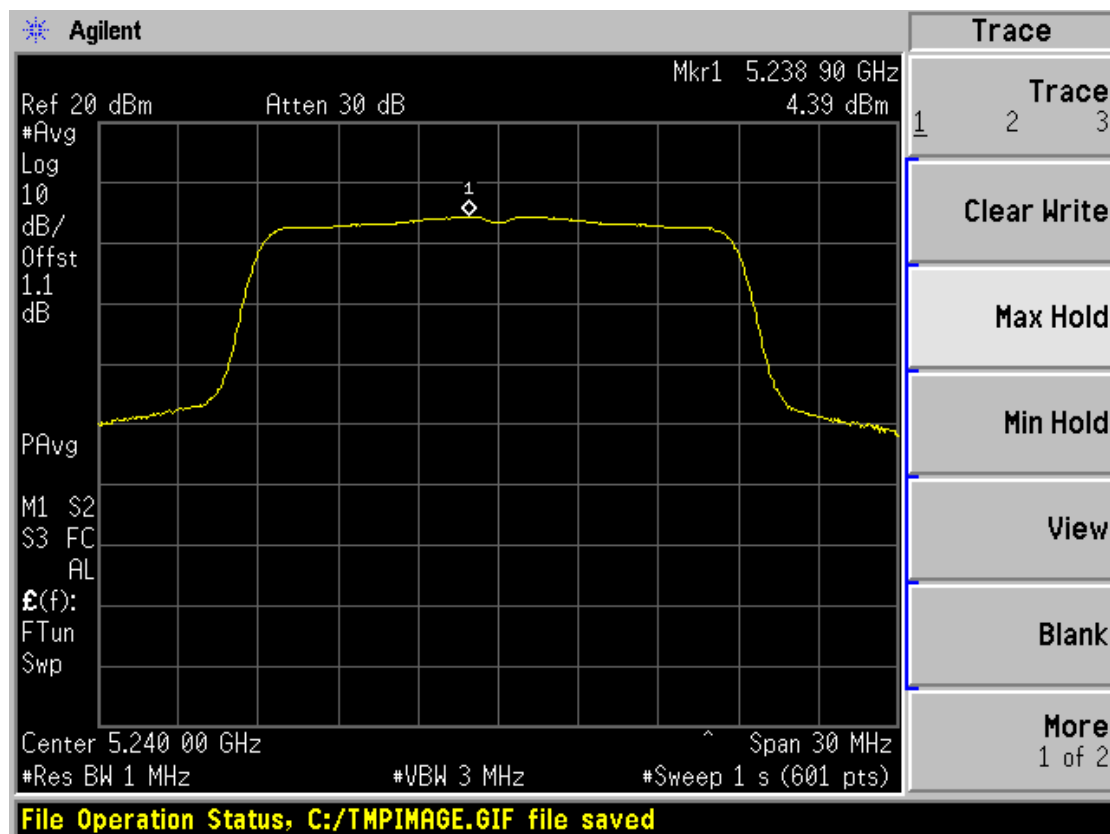
Band I 11n(HT20) CH36



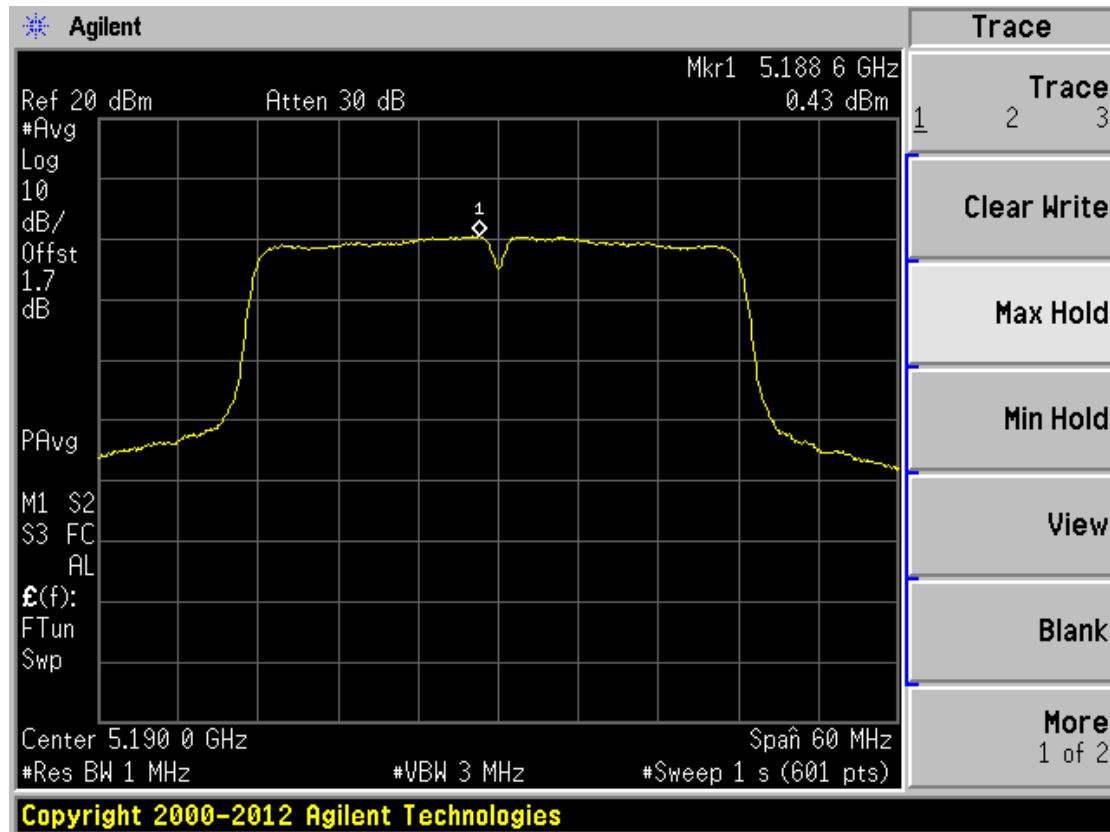
Band I 11n(HT20) CH44



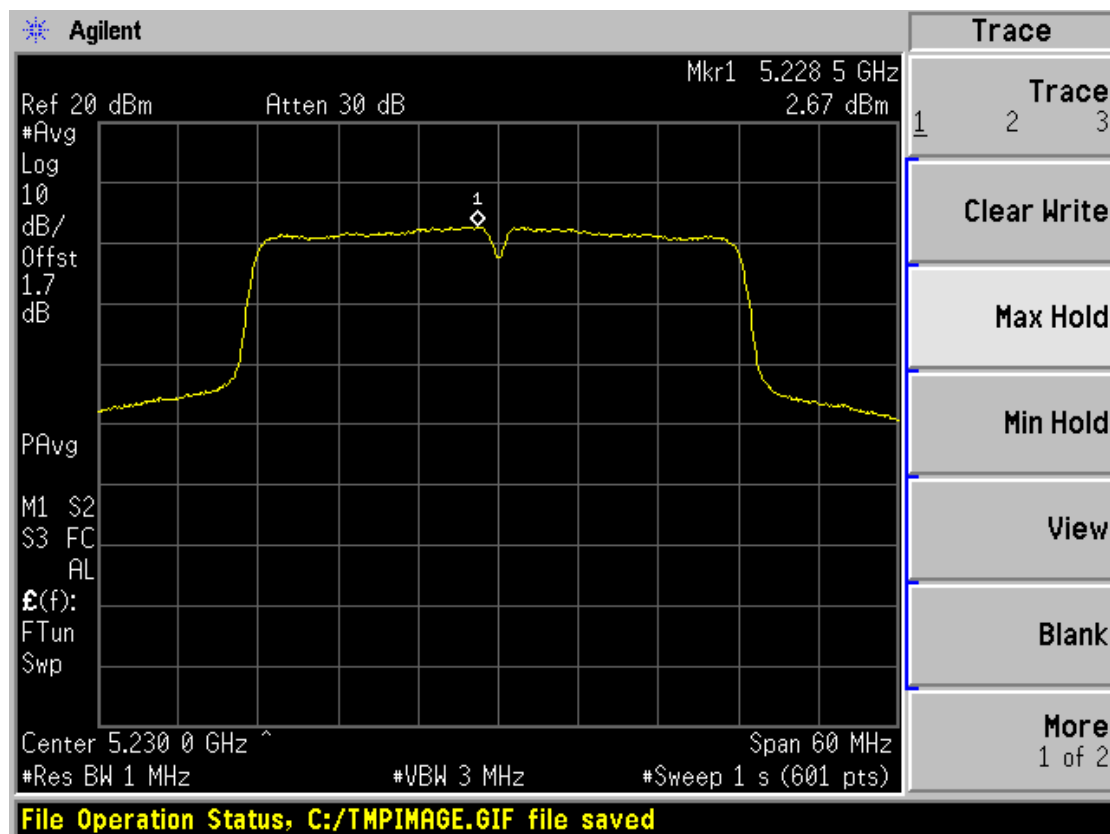
Band I 11n(HT20) CH48



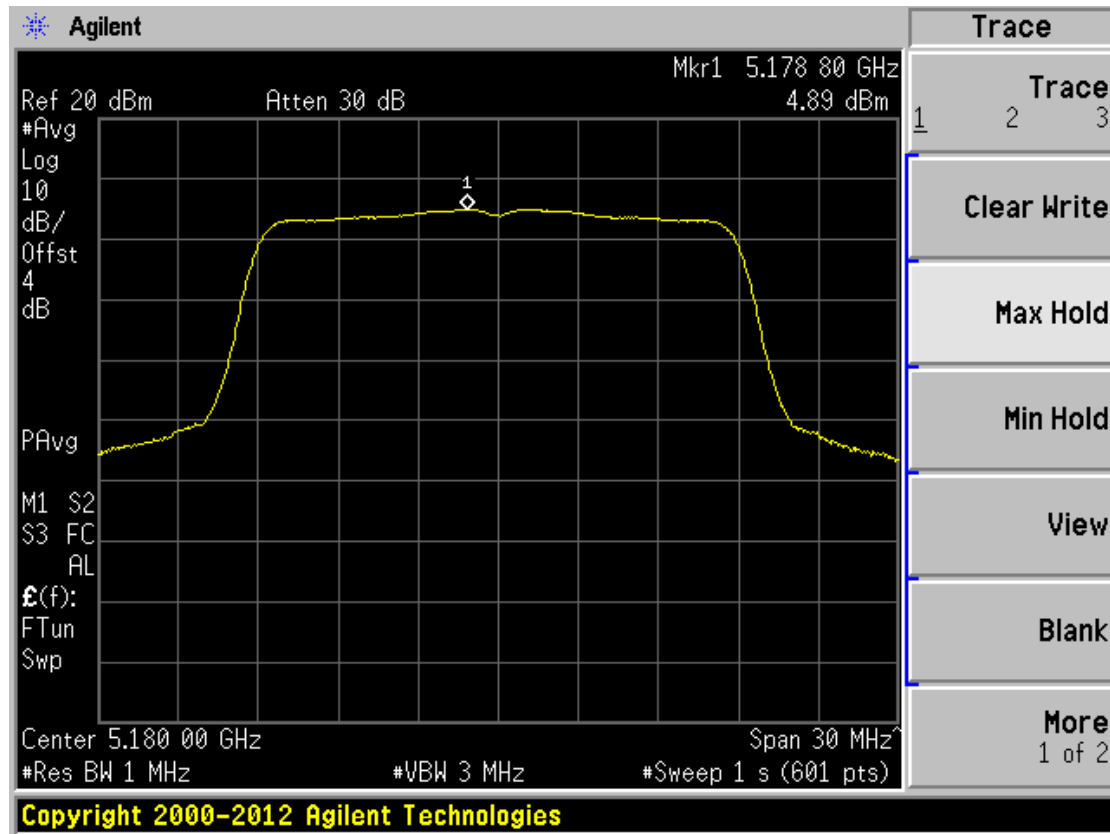
Band I 11n(HT40) CH38



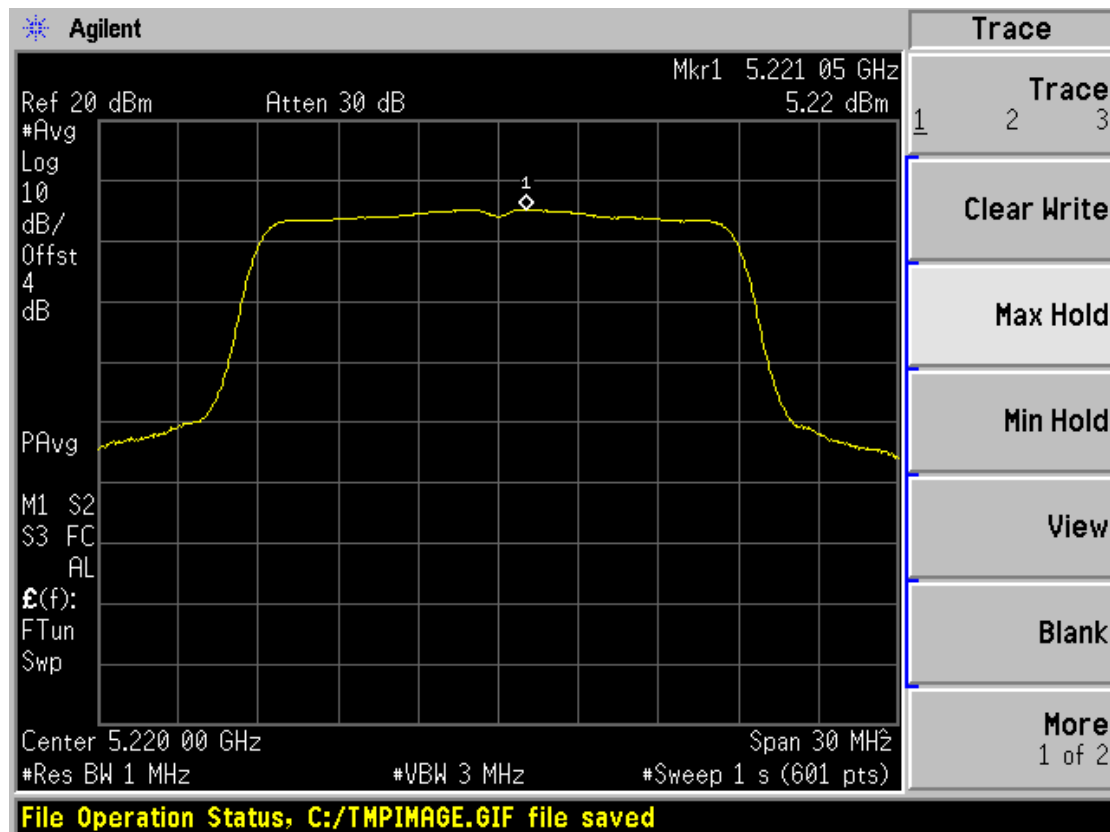
Band I 11n(HT40) CH46



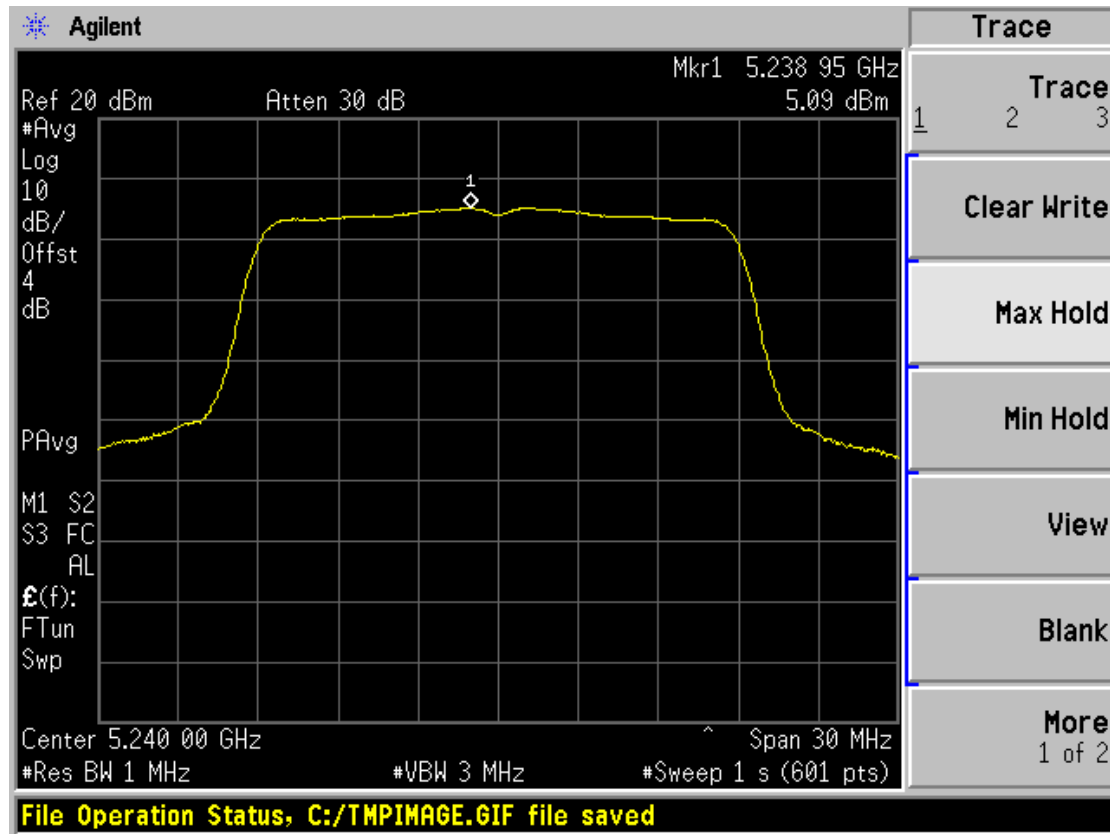
Band I 11ac(HT20) CH36



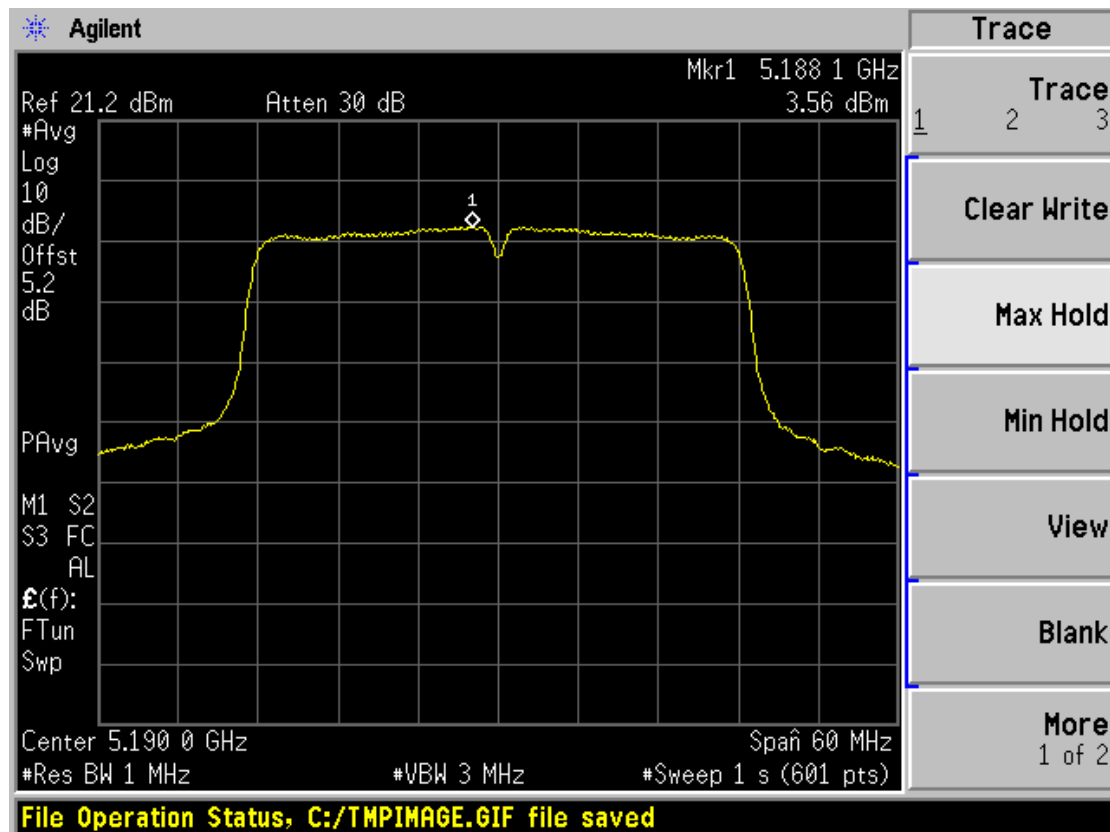
Band I 11ac(HT20) CH44



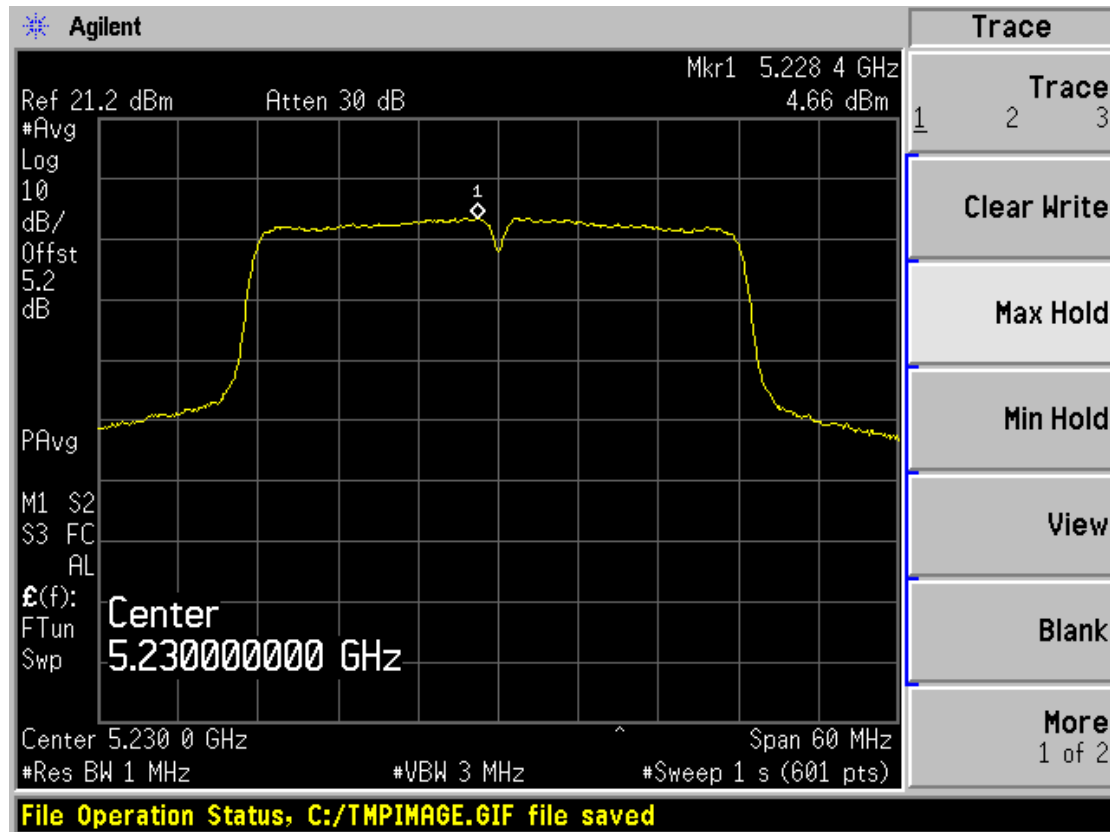
Band I 11ac(HT20) CH48



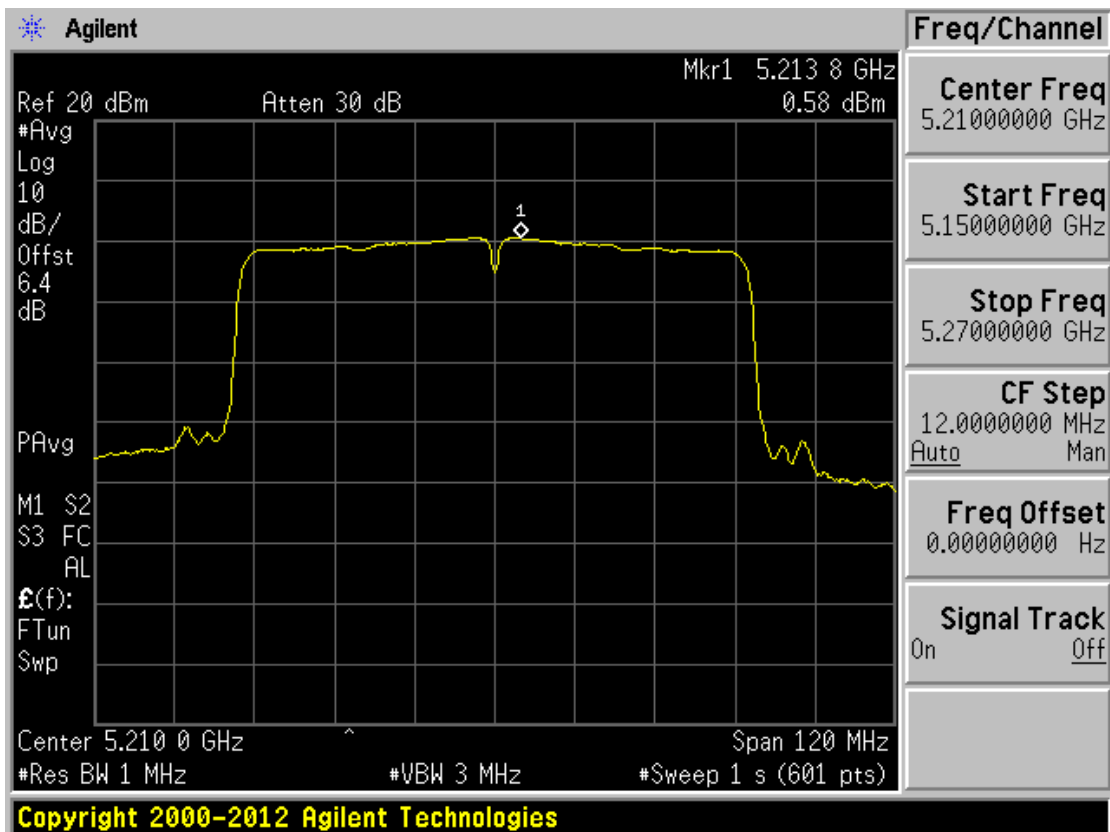
Band I 11ac(HT40) CH38



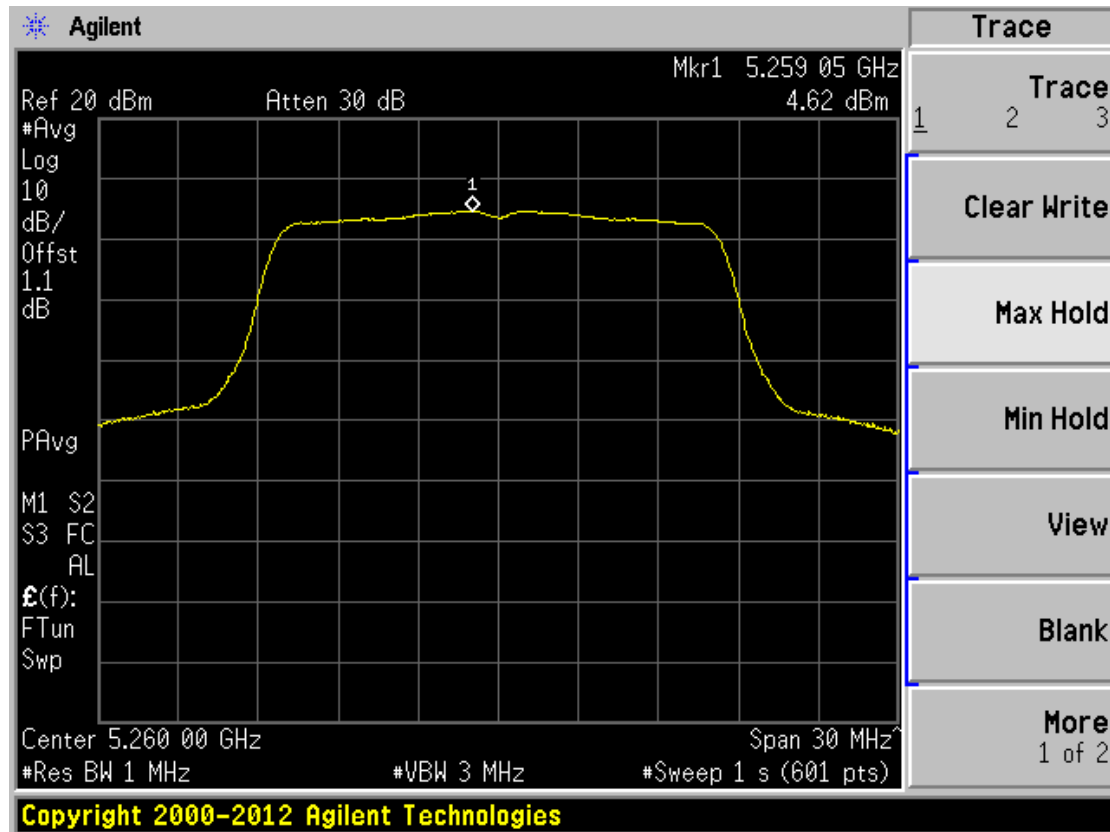
Band I 11ac(HT40) CH46



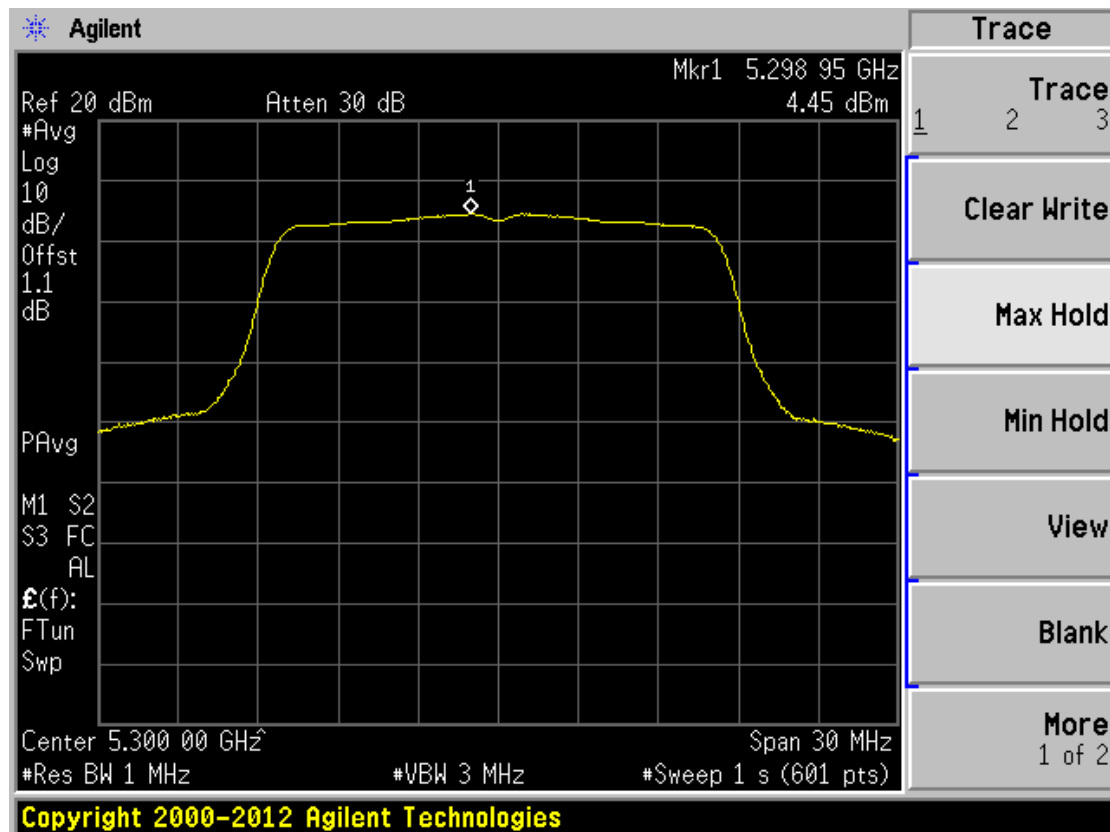
Band I 11ac(HT80) CH42



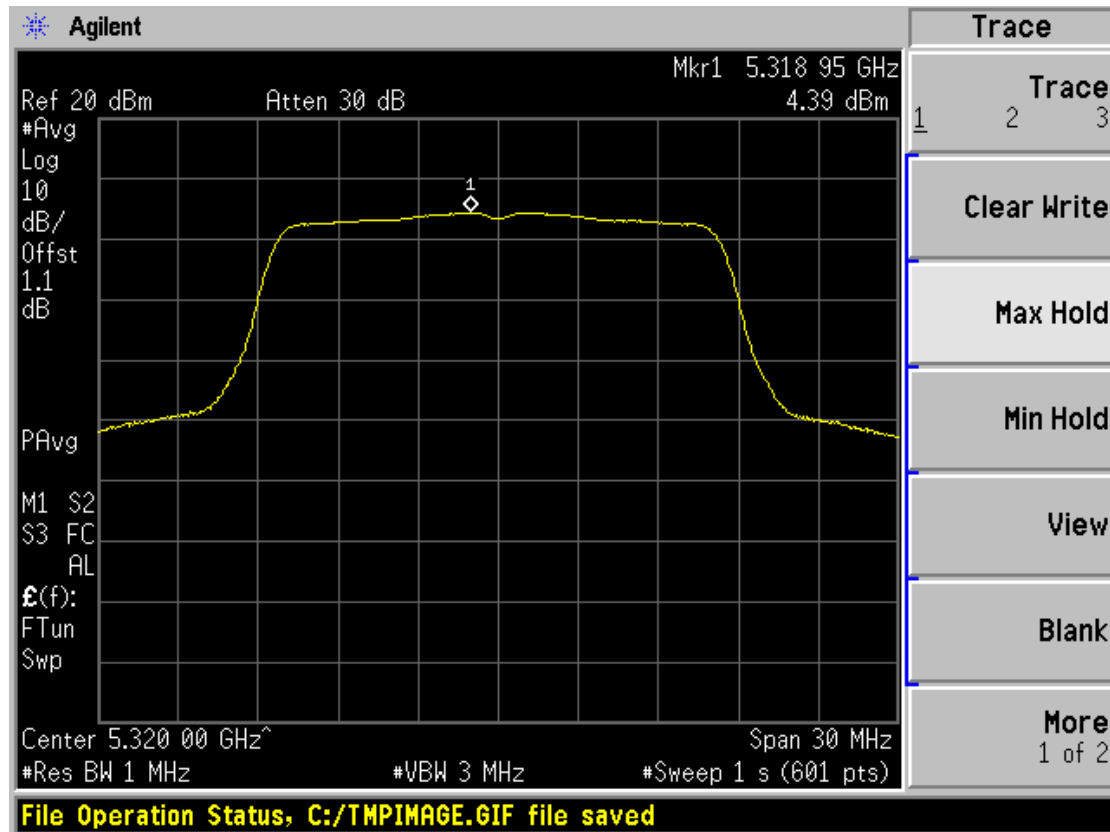
Band II 11a CH52



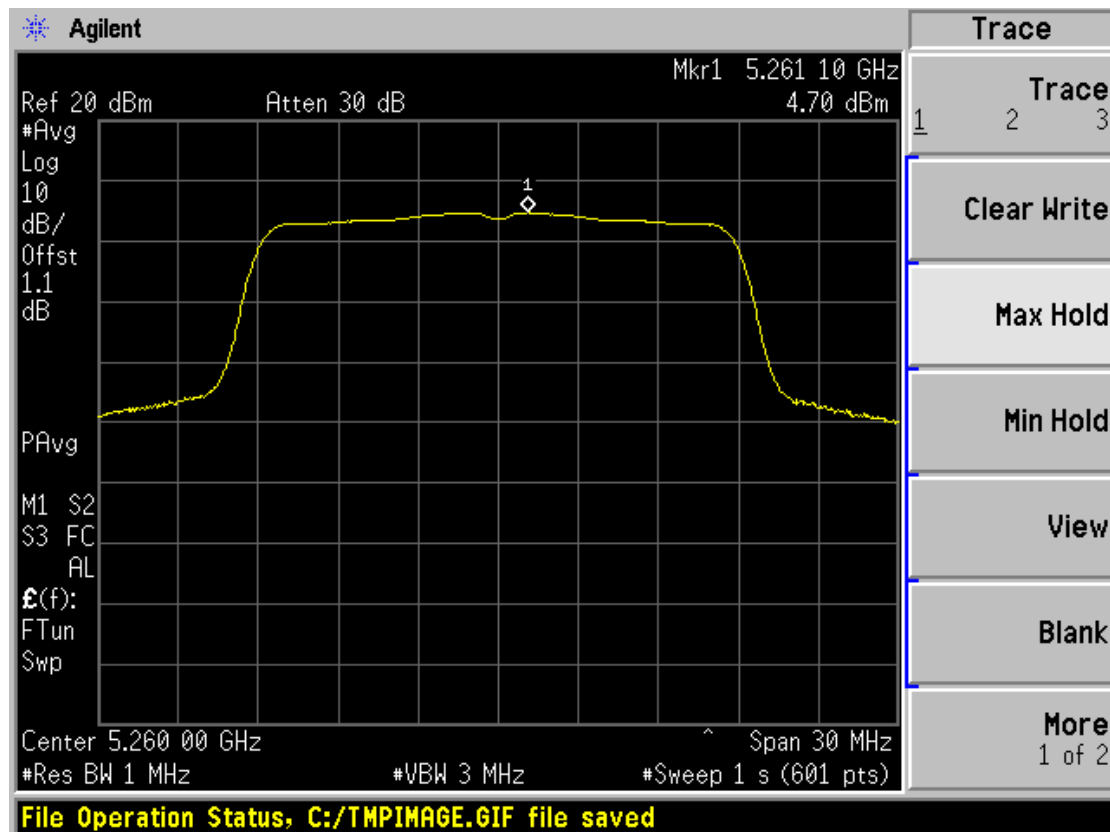
Band II 11a CH60



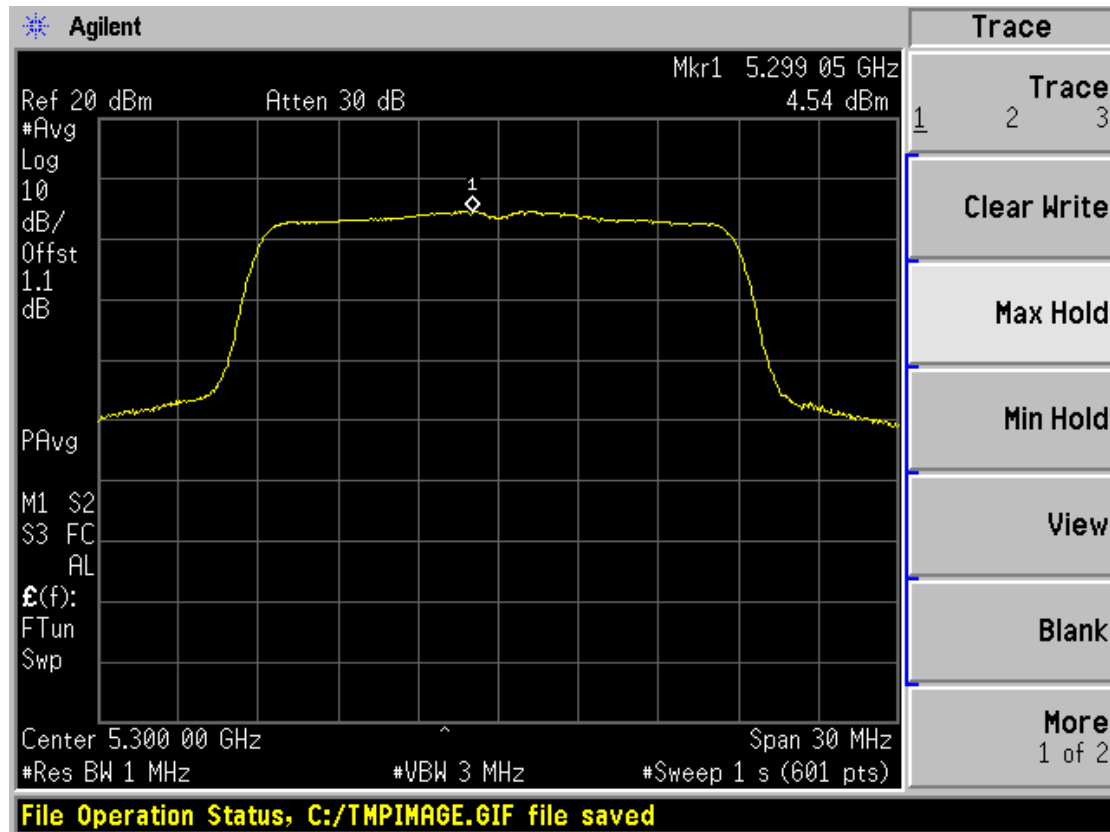
Band II 11a CH64



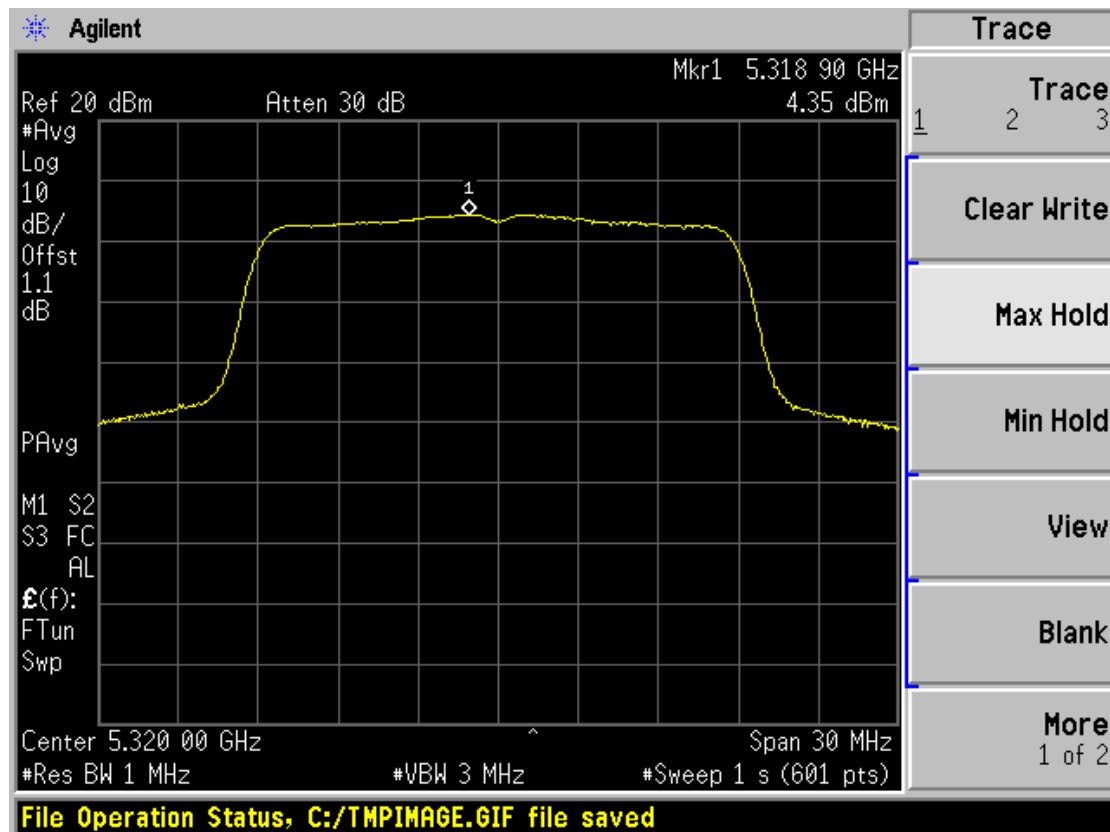
Band II 11n(HT20) CH52



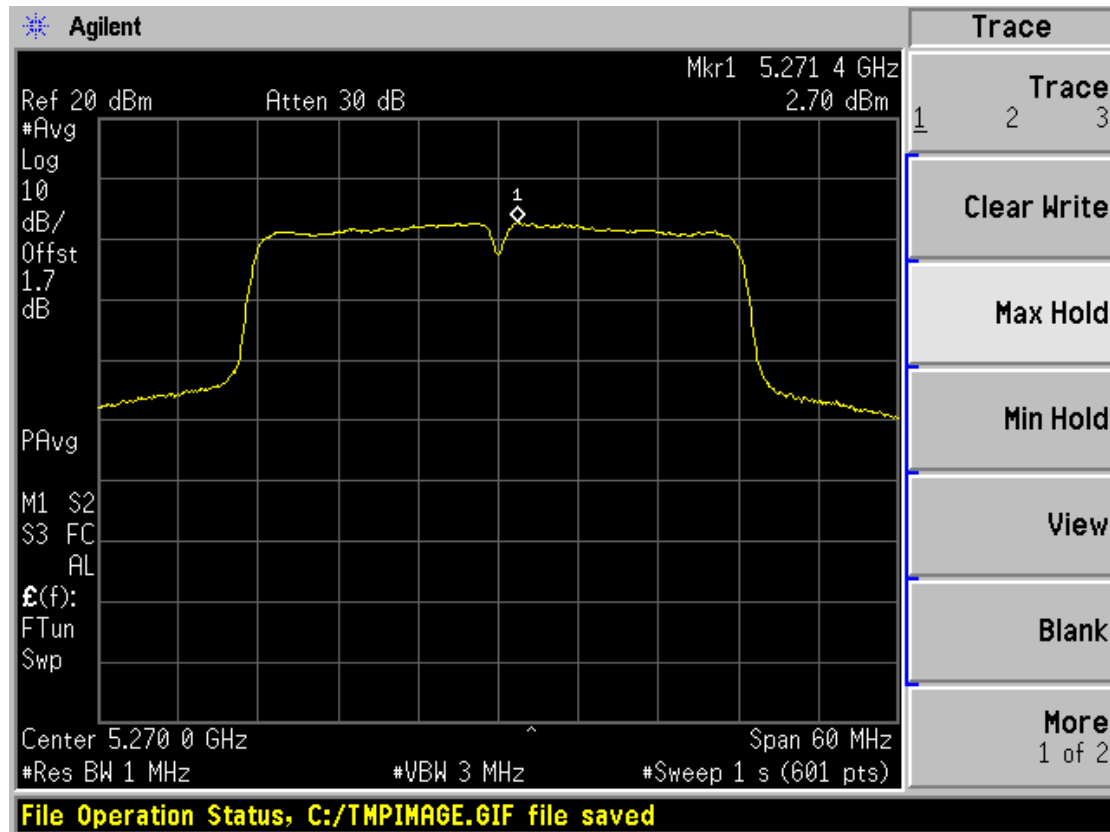
Band II 11n(HT20) CH60



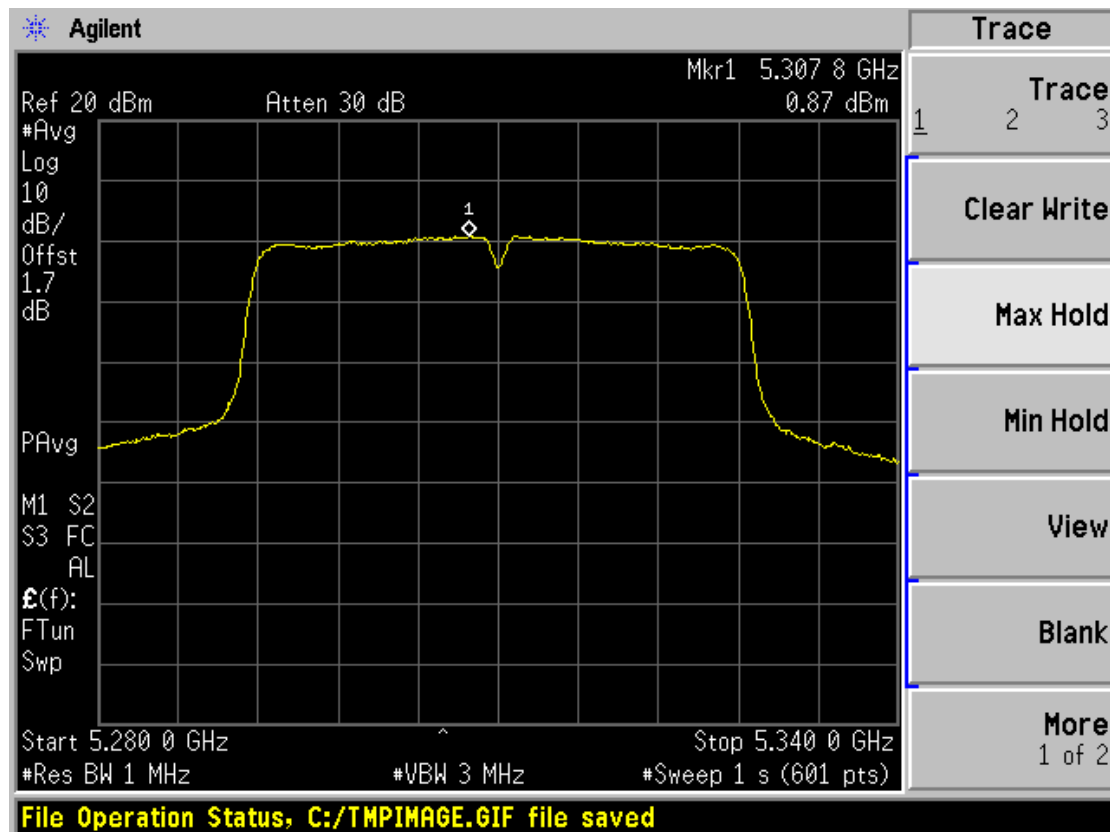
Band II 11n(HT20) CH64



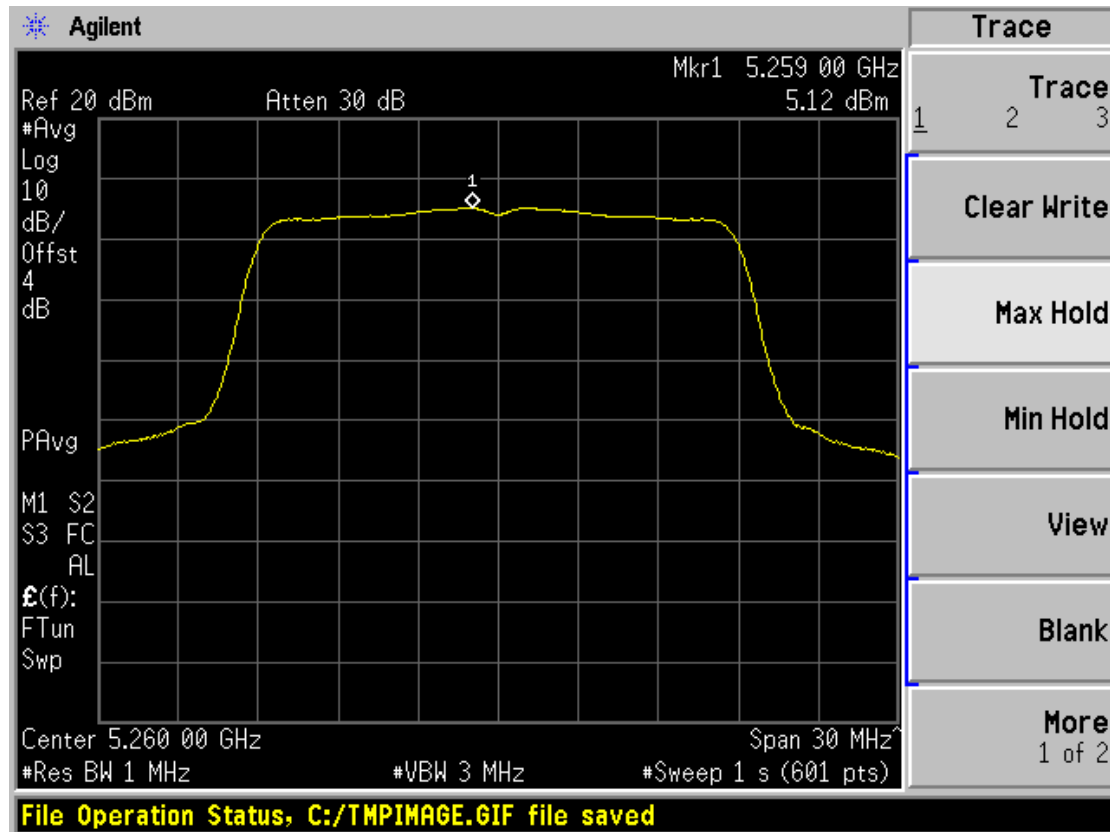
Band II 11n(HT40) CH54



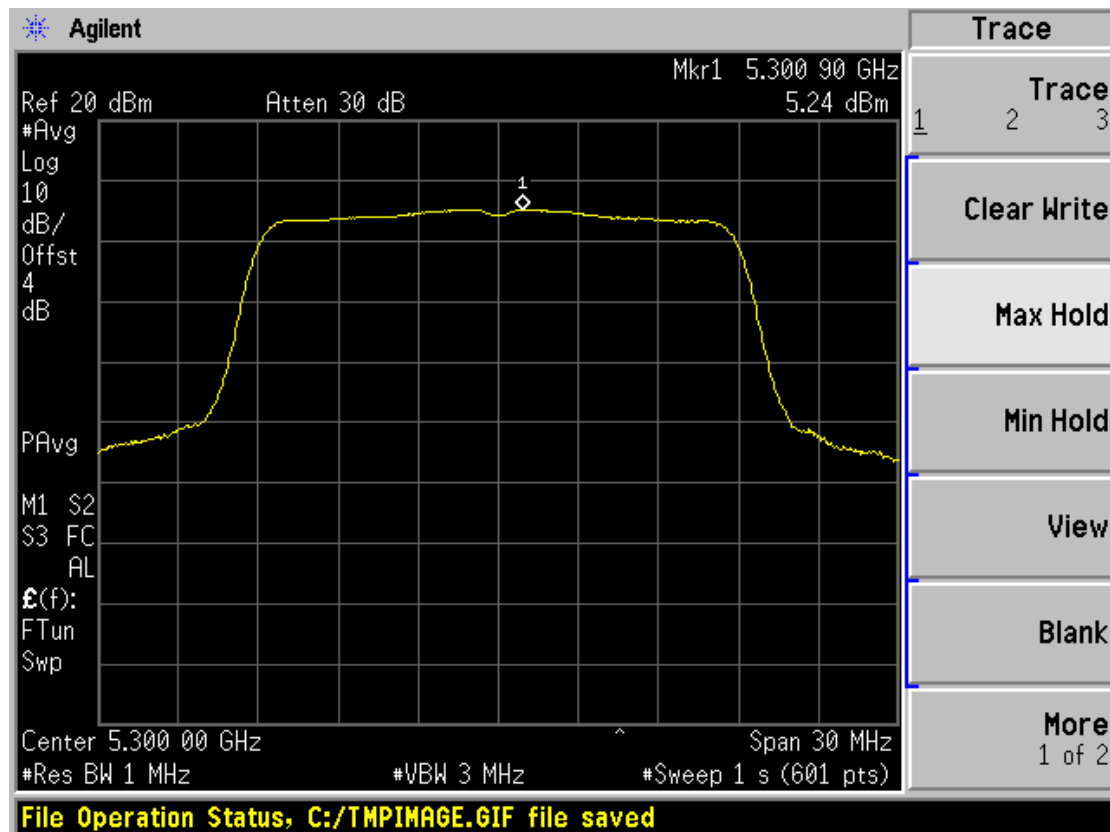
Band II 11n(HT40) CH62



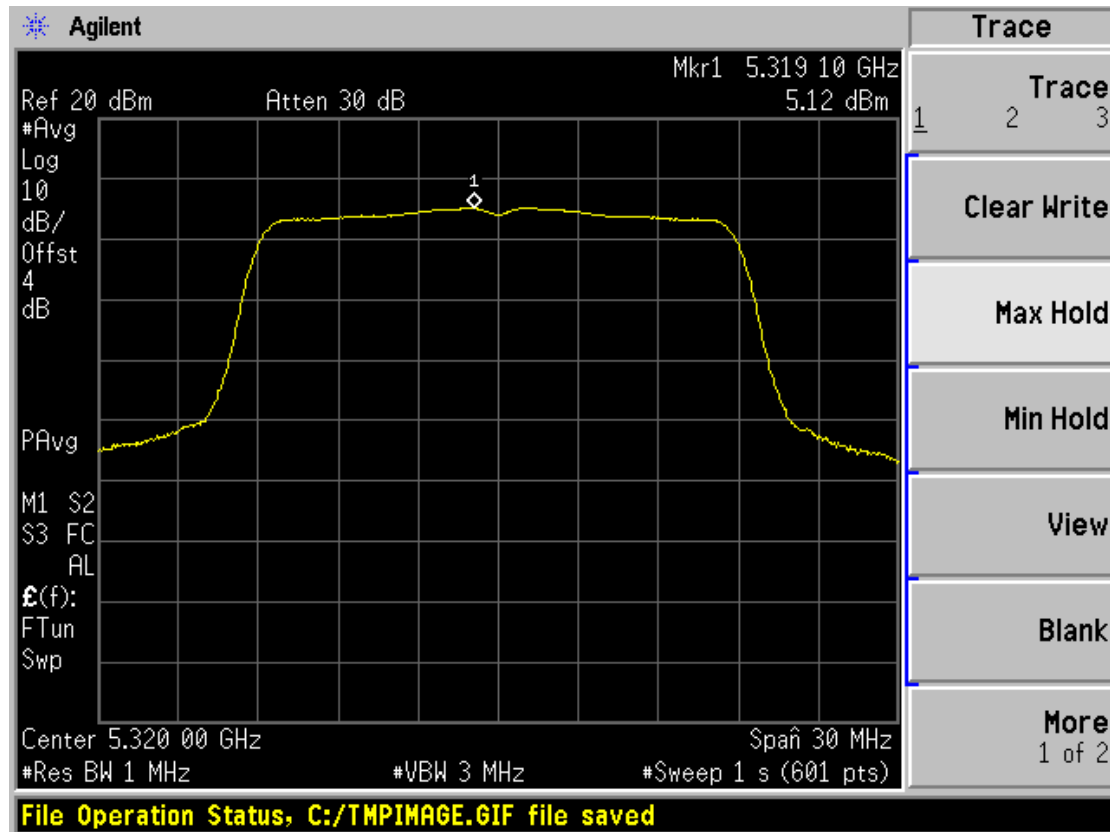
Band II 11ac(HT20) CH52



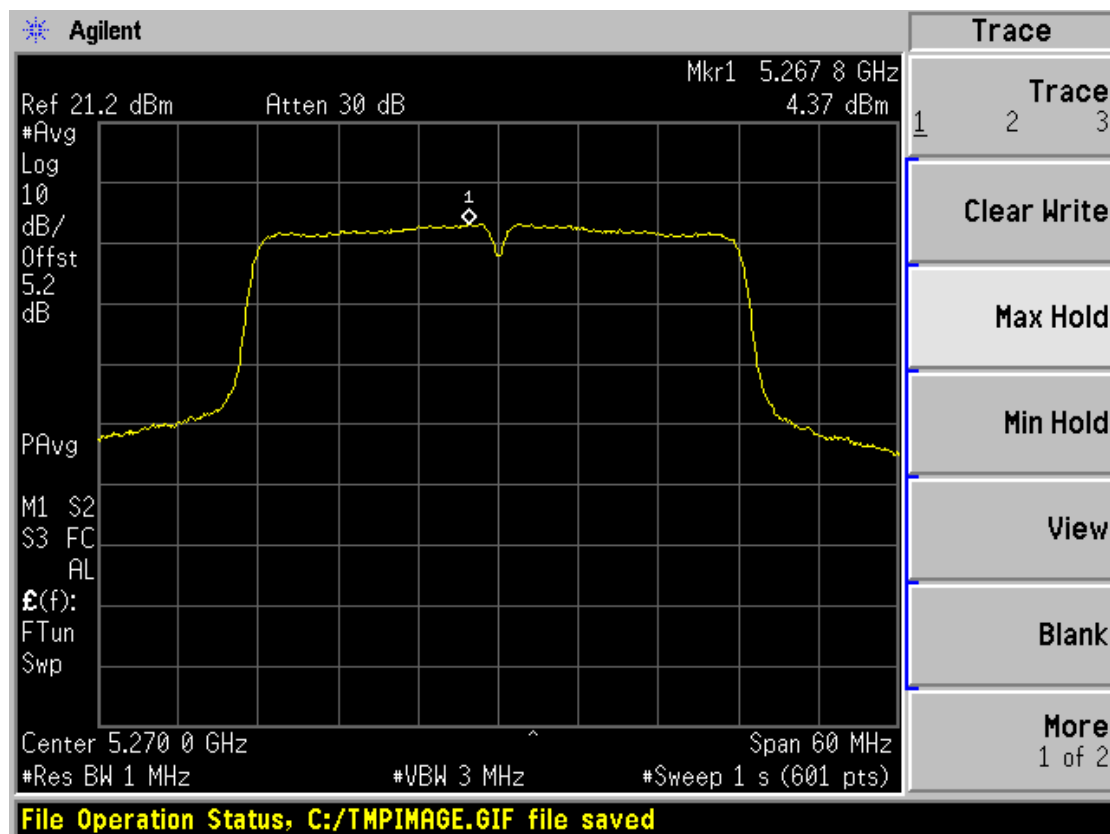
Band II 11ac(HT20) CH60



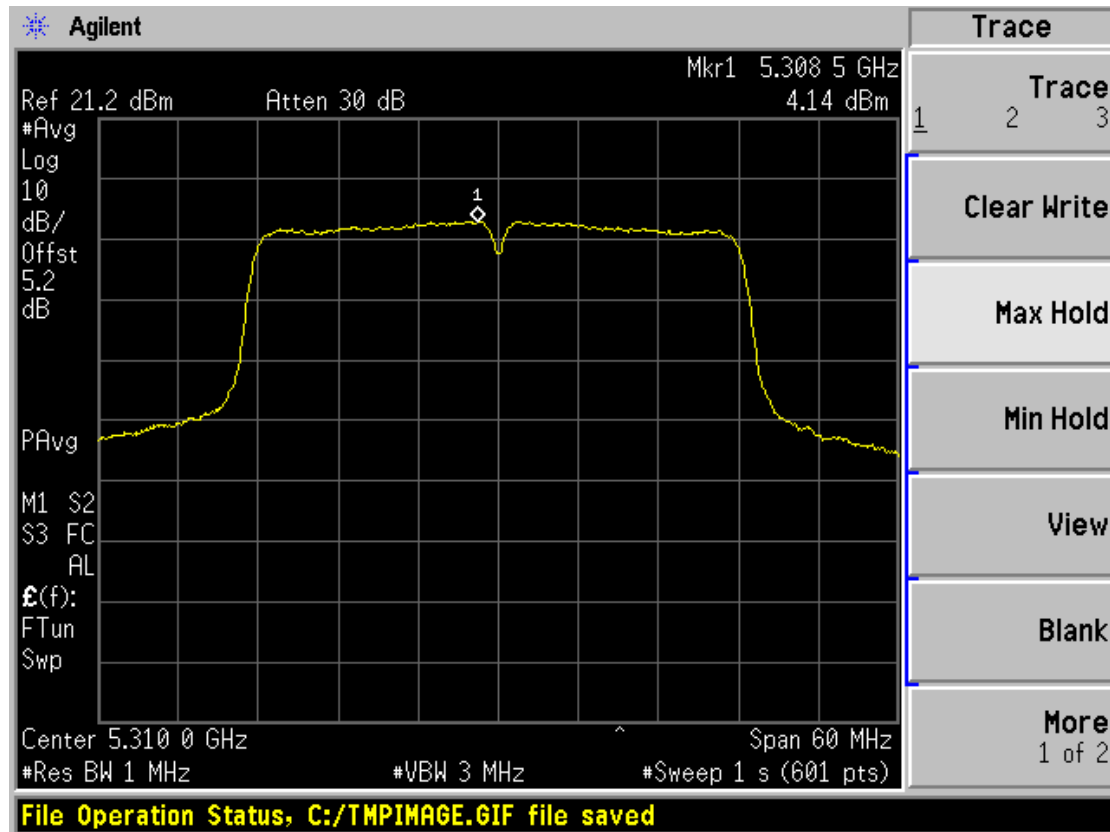
Band II 11ac(HT20) CH64



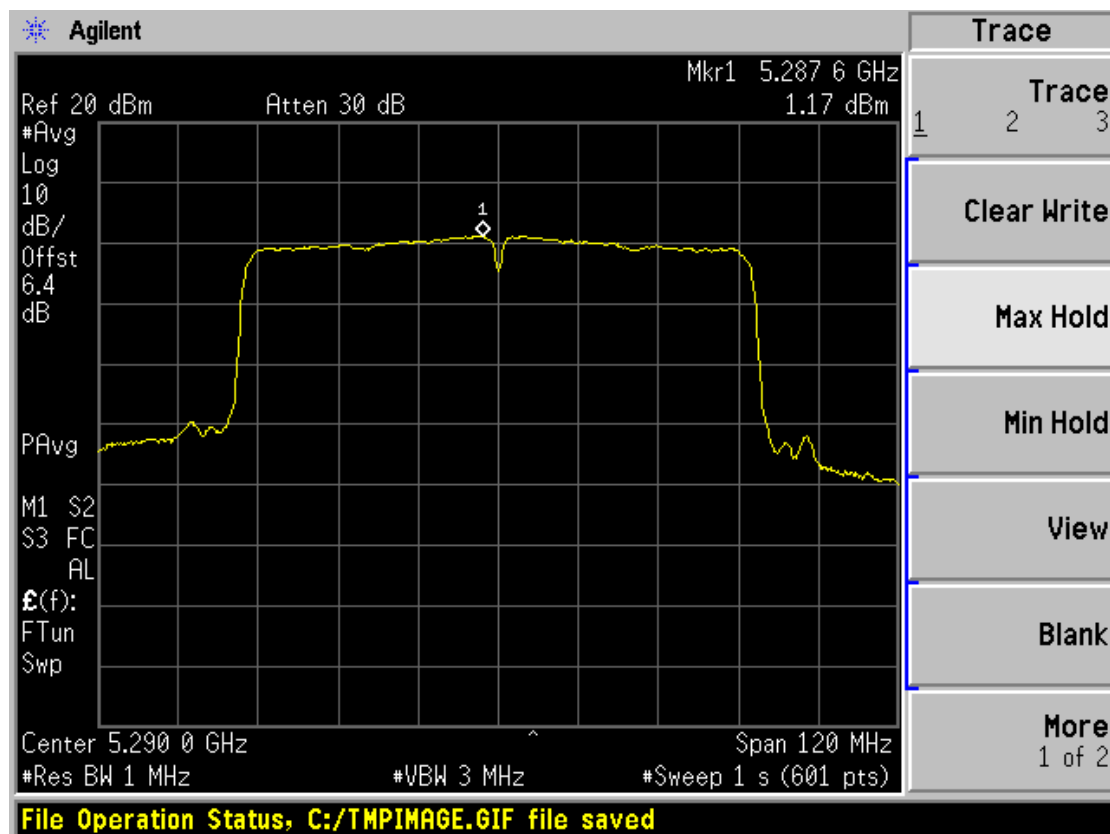
Band II 11ac(HT40) CH54



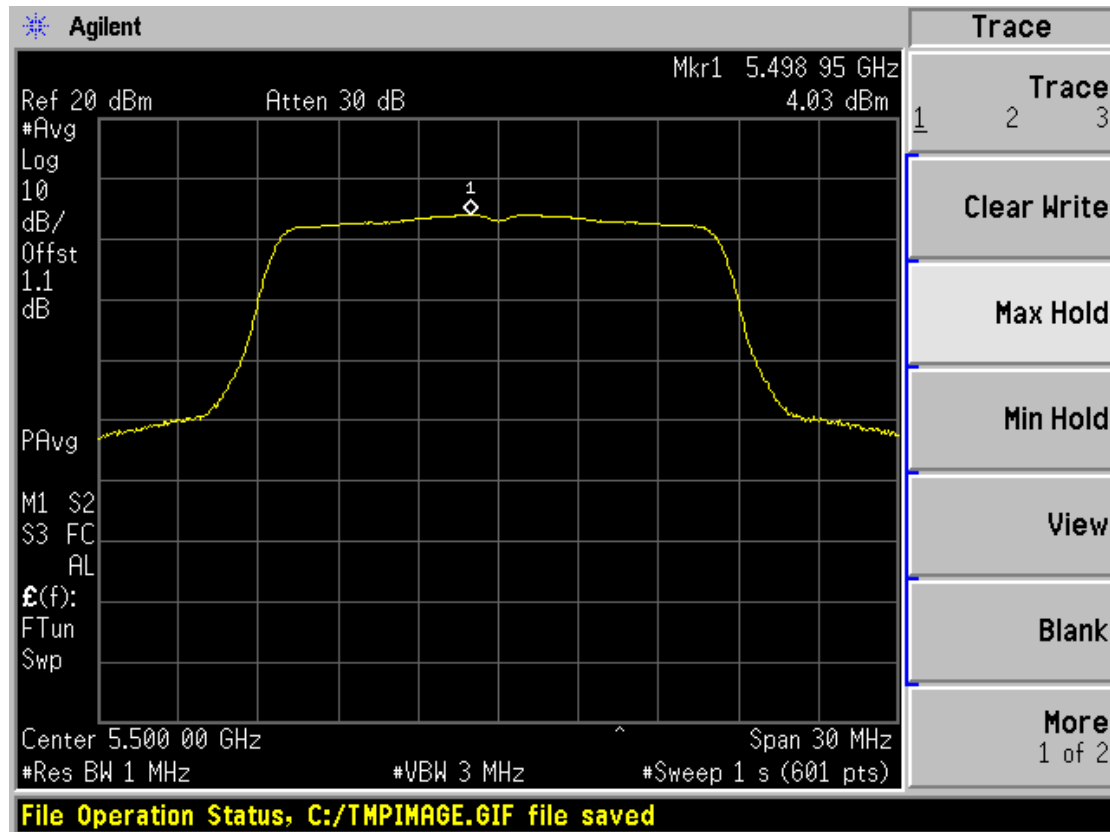
Band II 11ac(HT40) CH62



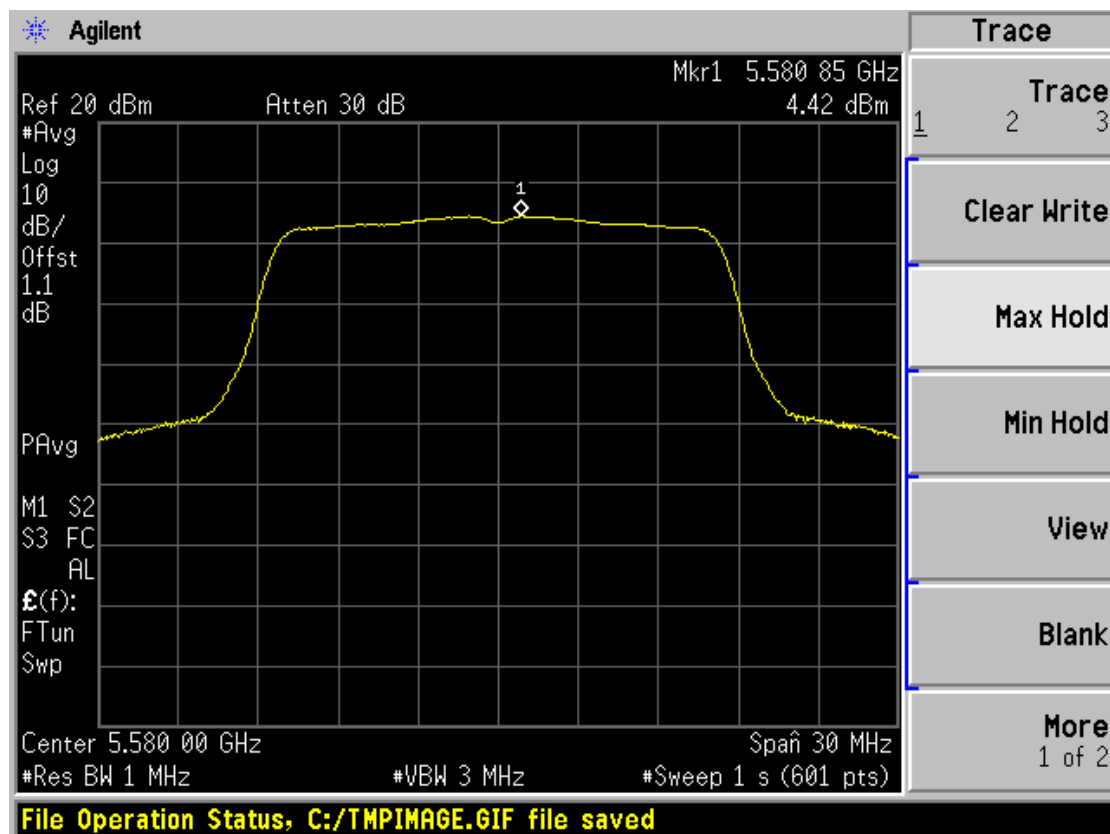
Band II 11ac(HT80) CH58



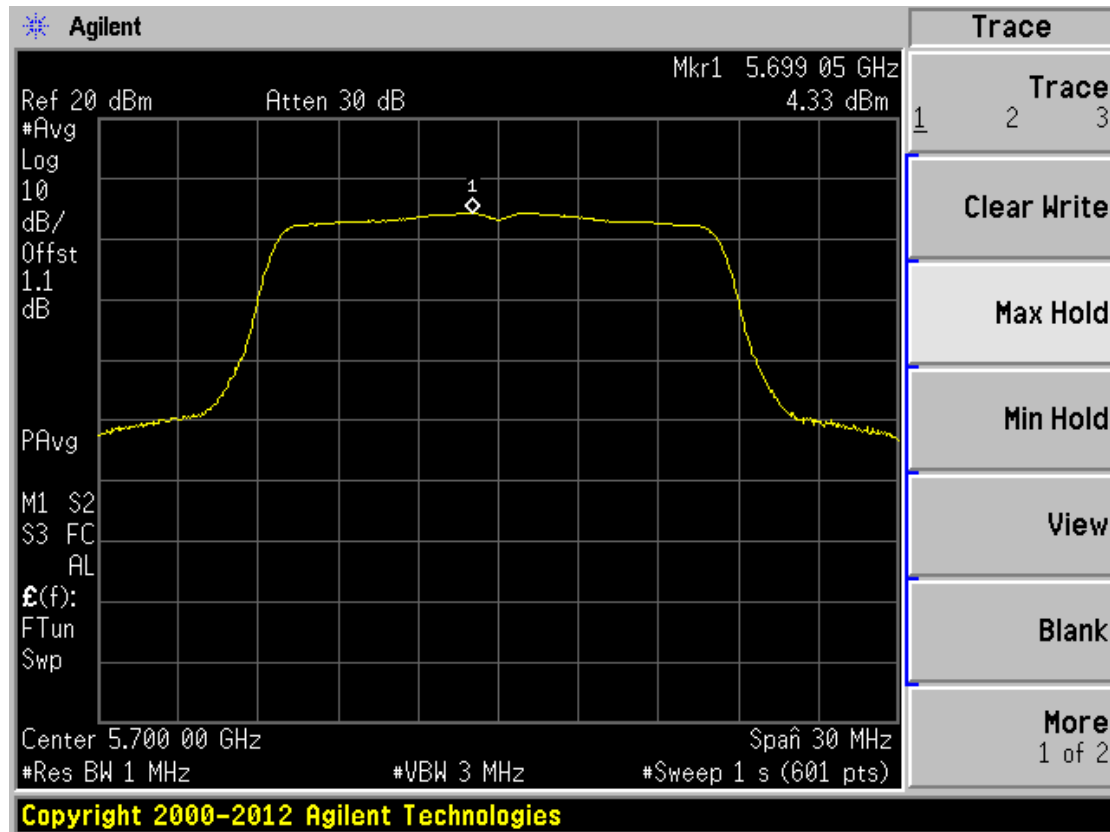
Band III 11a CH100



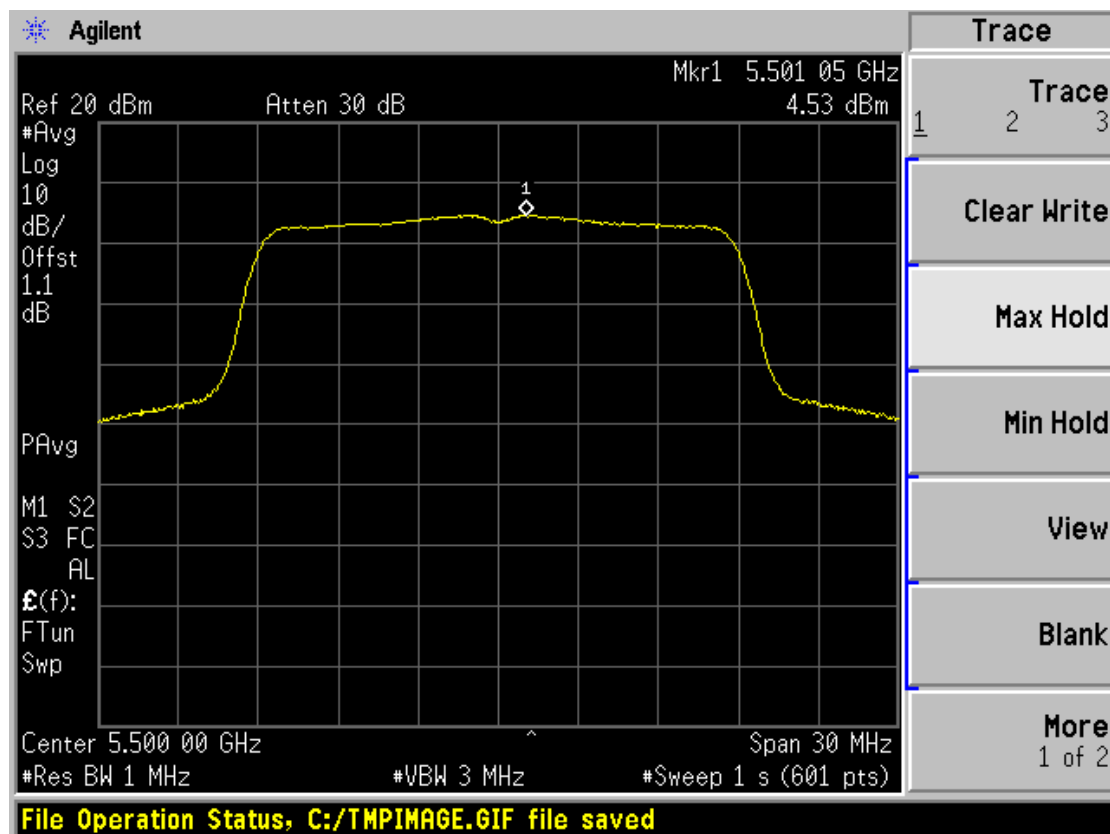
Band III 11a CH116



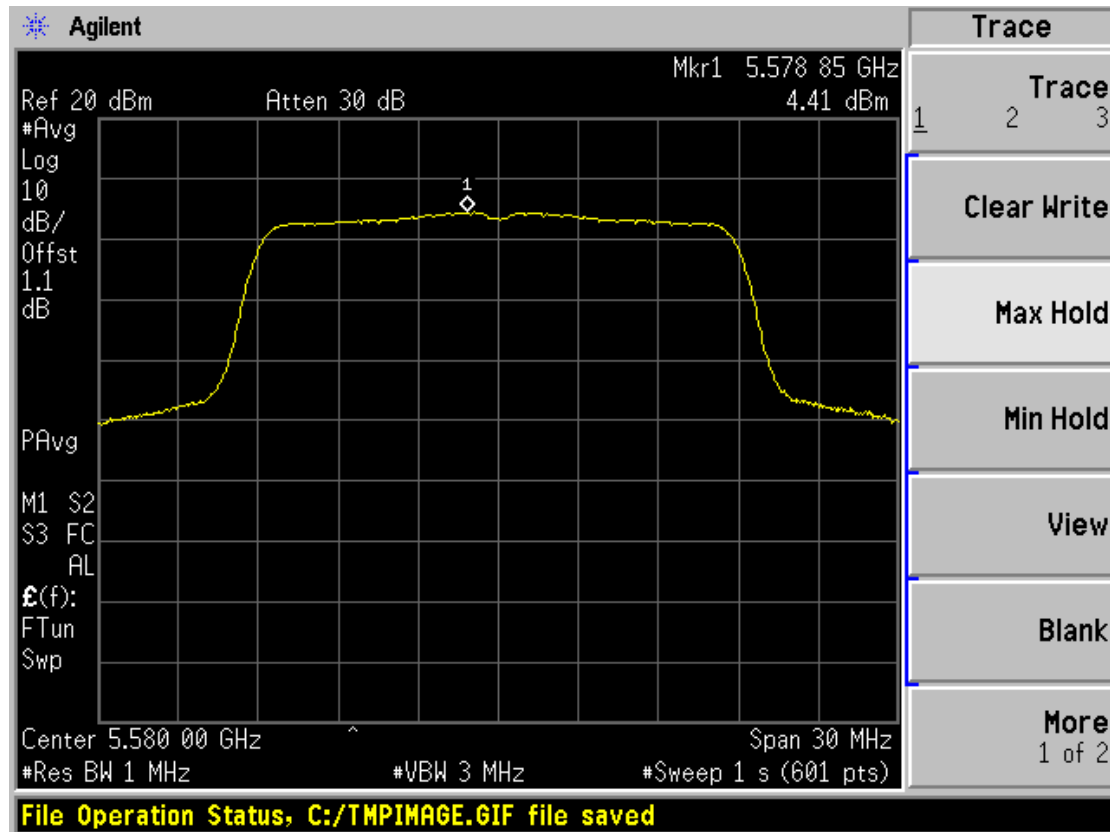
Band III 11a CH140



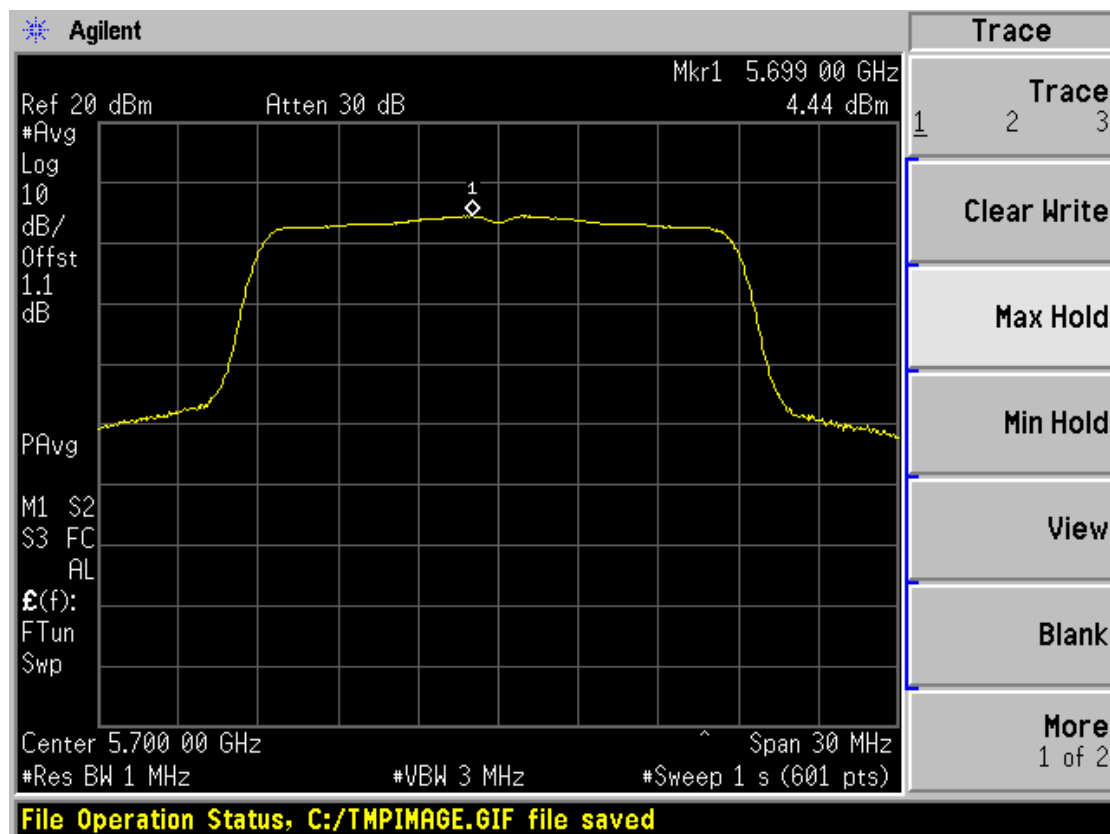
Band III 11n(HT20) CH100



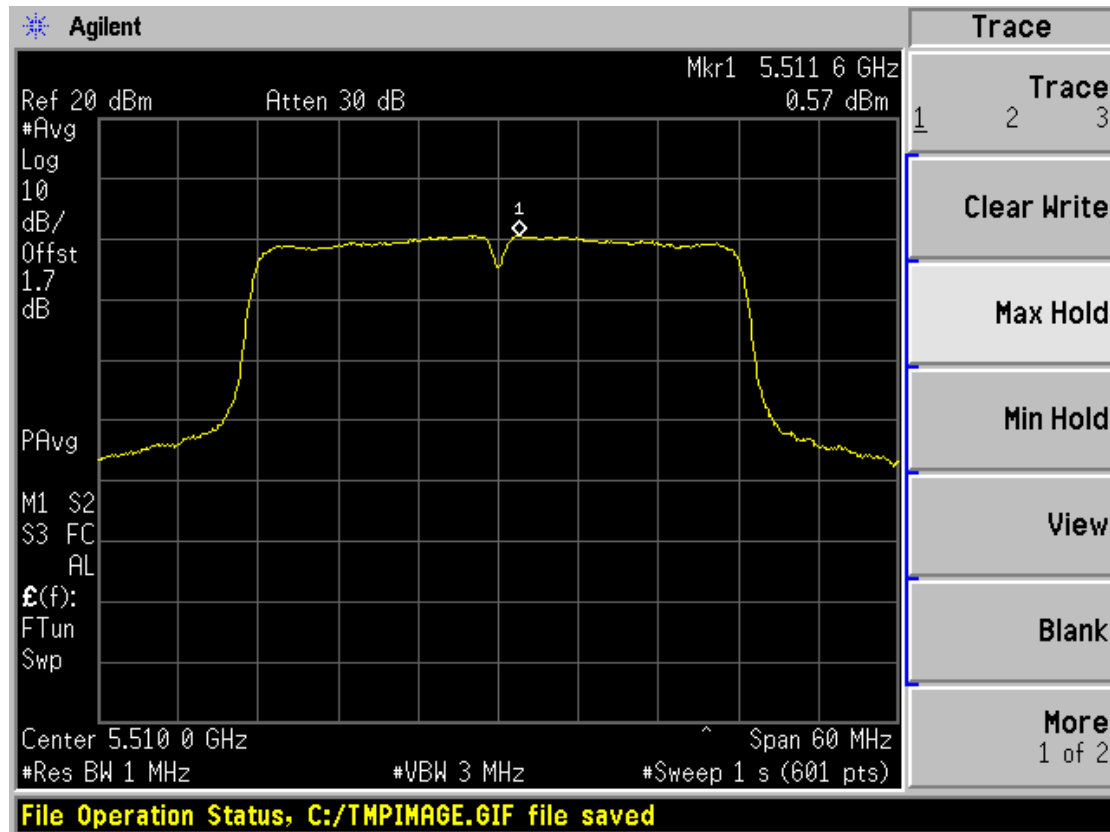
Band III 11n(HT20) CH116



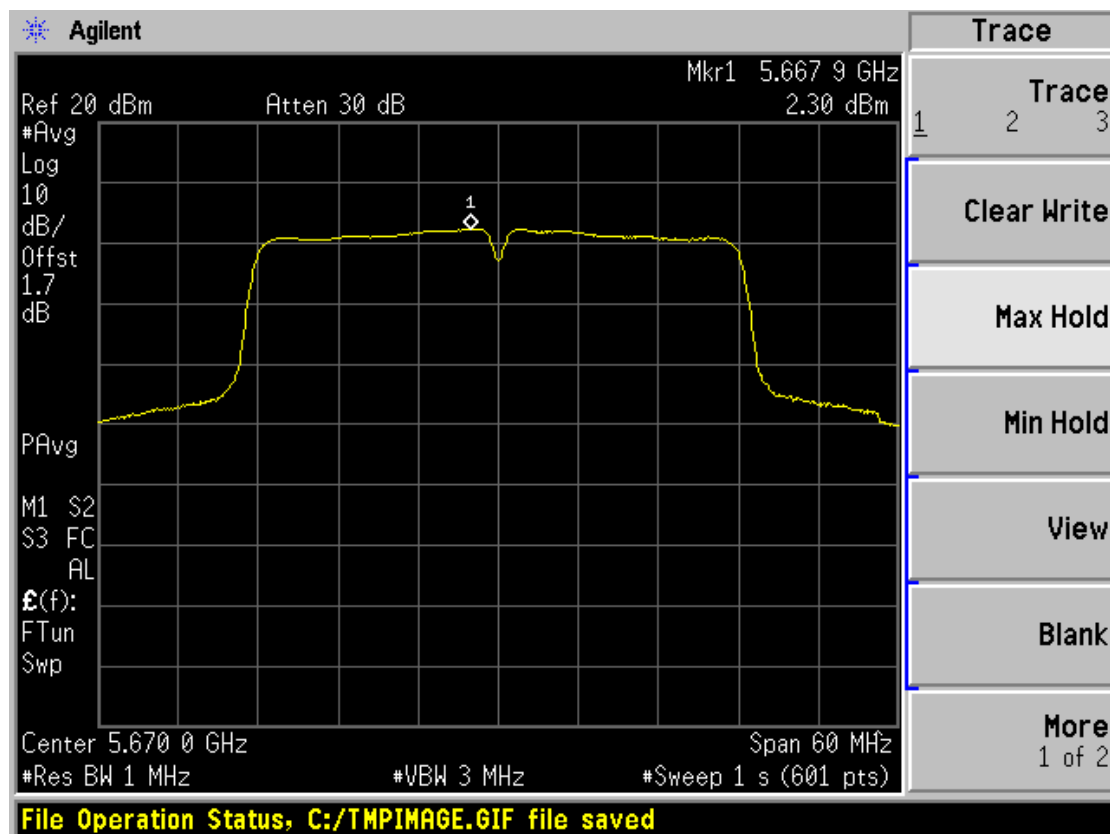
Band III 11n(HT20) CH140



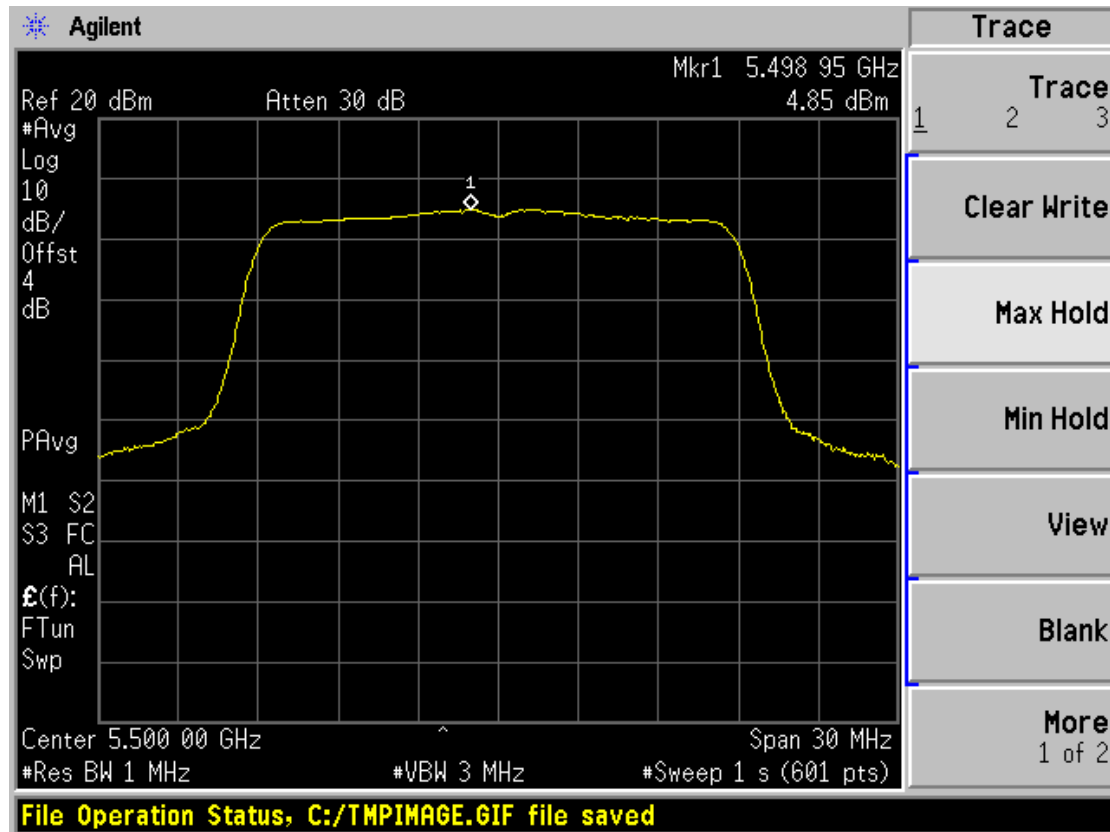
Band III 11n(HT40) CH102



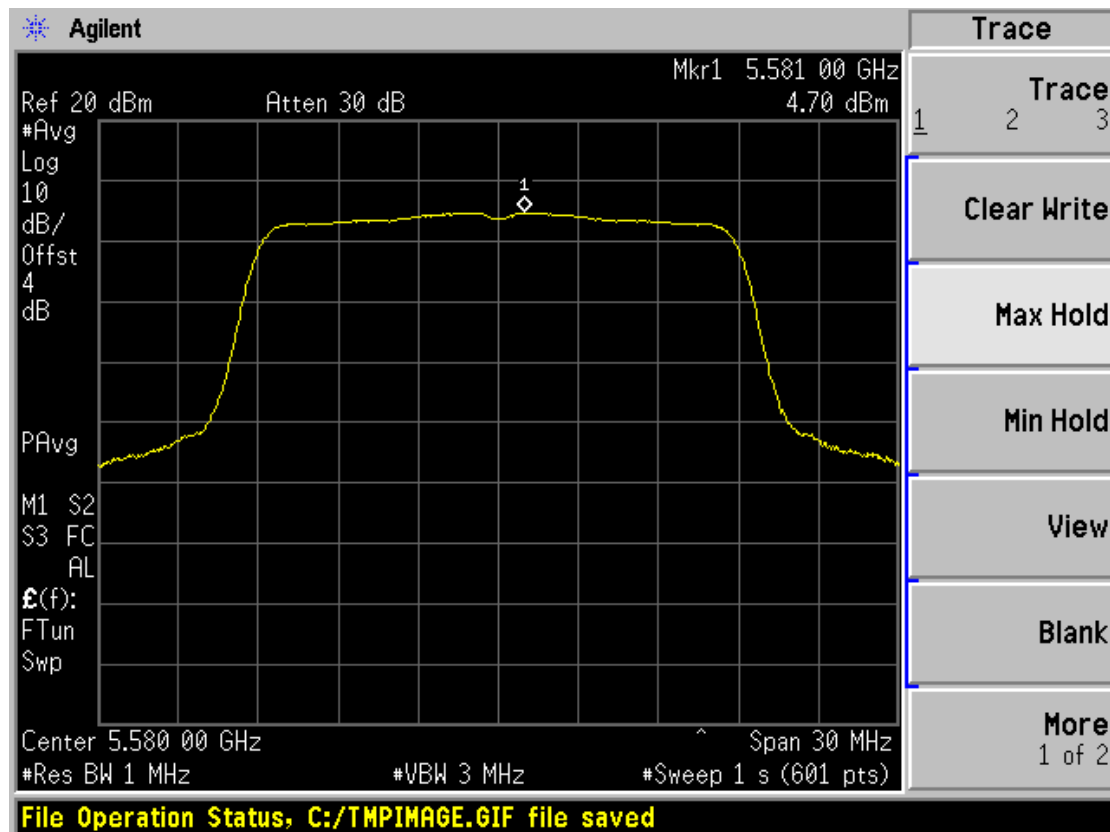
Band III 11n(HT40) CH134



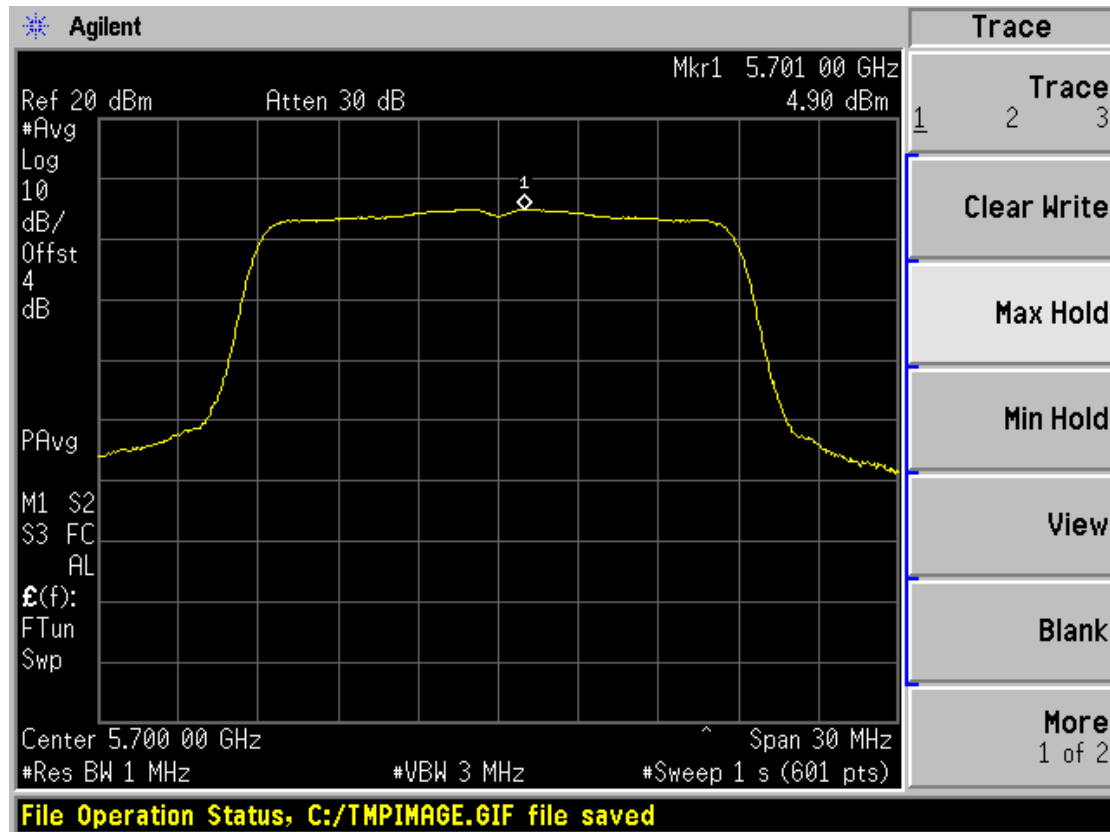
Band III 11ac(HT20) CH100



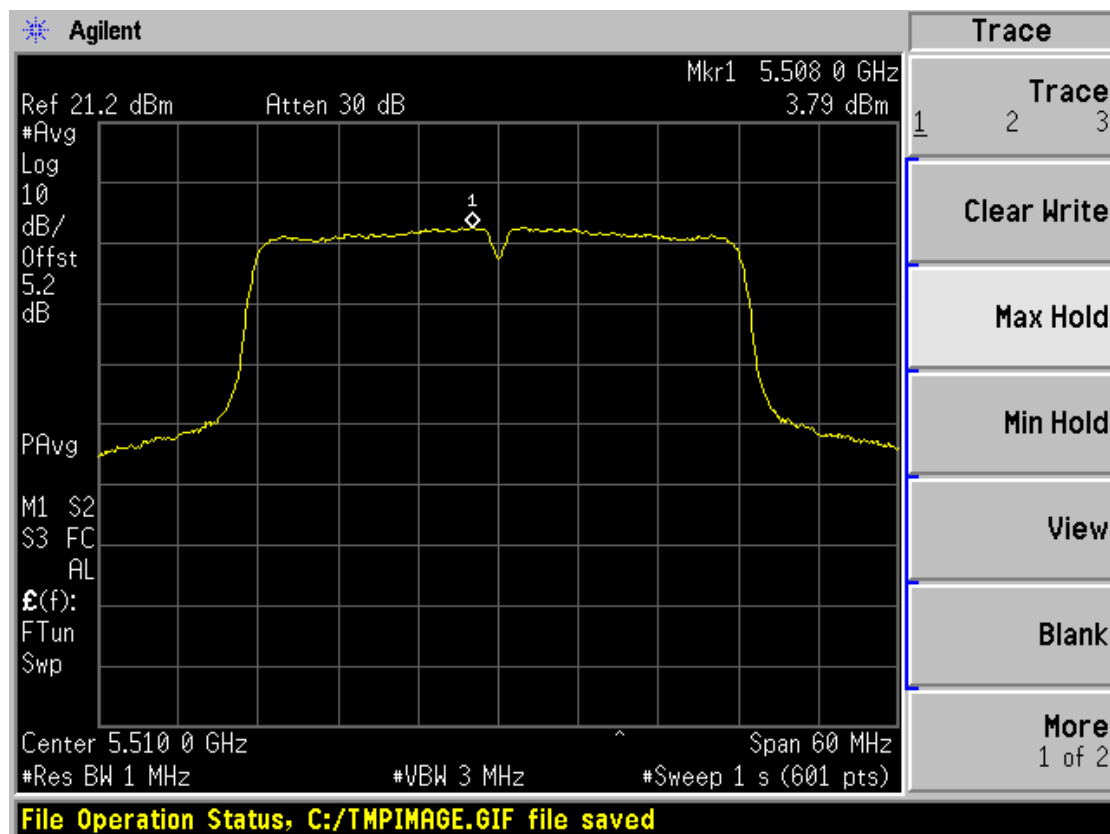
Band III 11ac(HT20) CH116



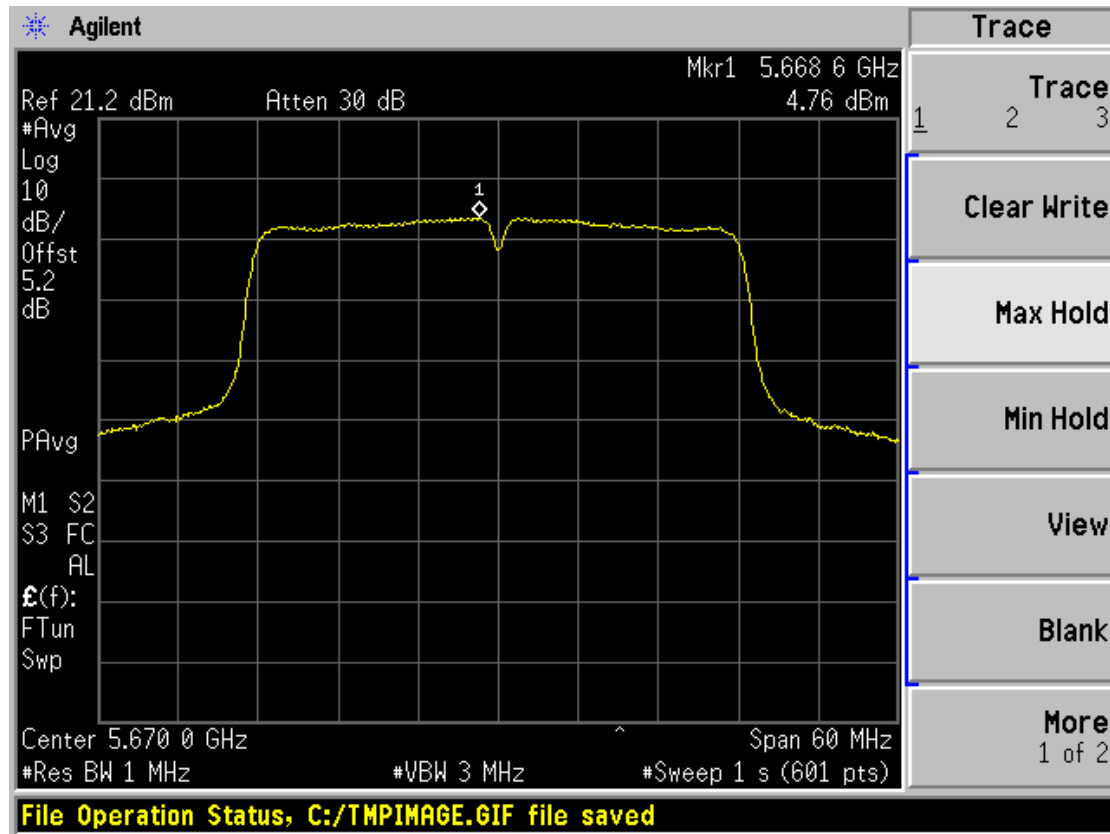
Band III 11ac(HT20) CH140



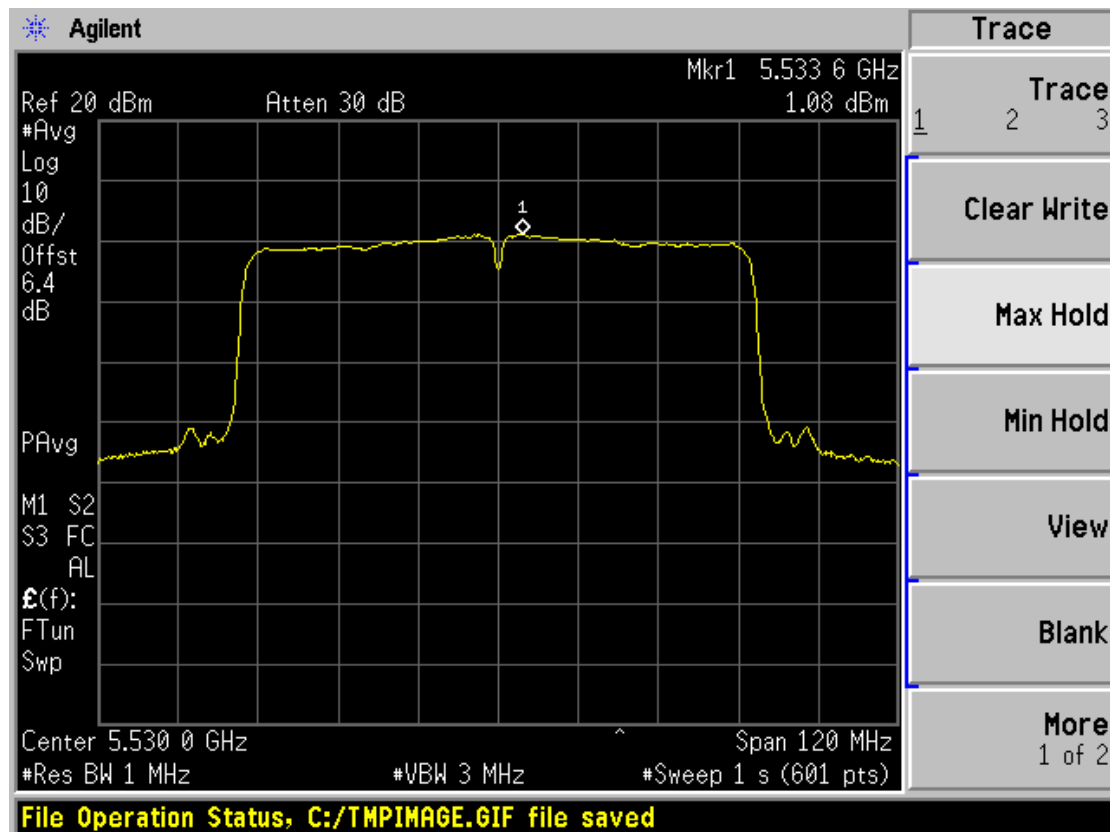
Band III 11ac(HT40) CH102



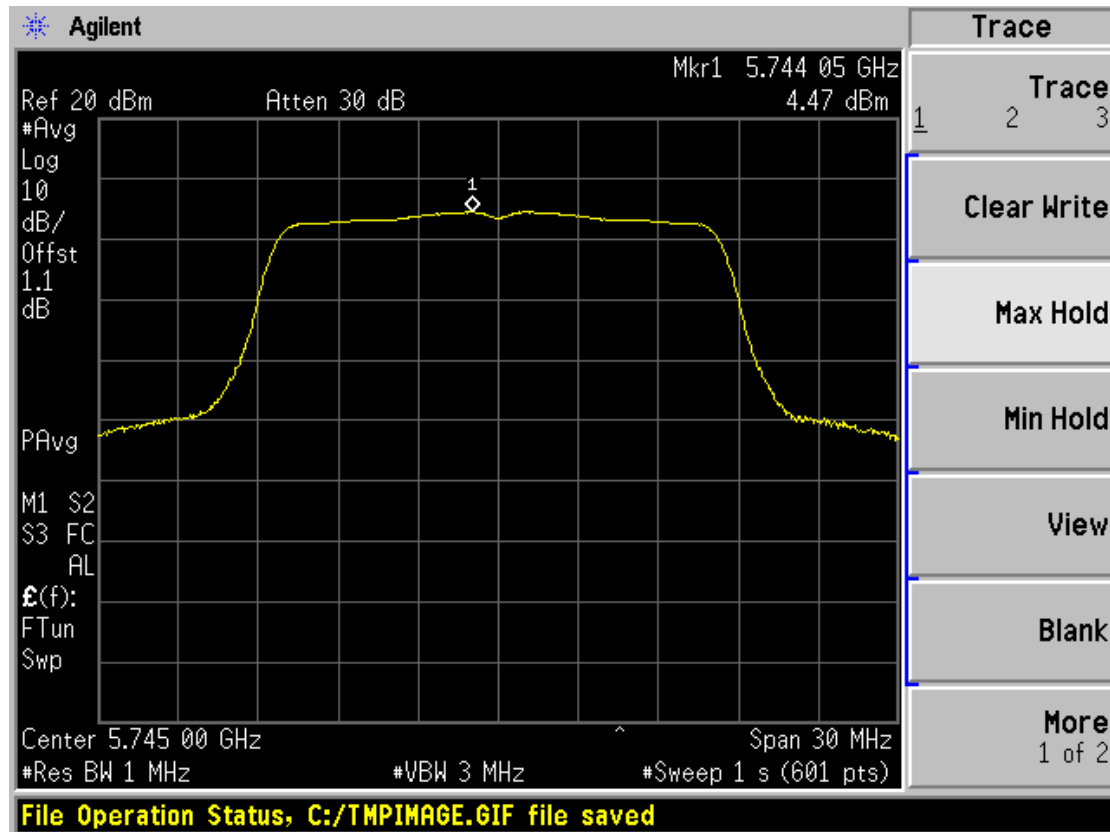
Band III 11ac(HT40) CH134



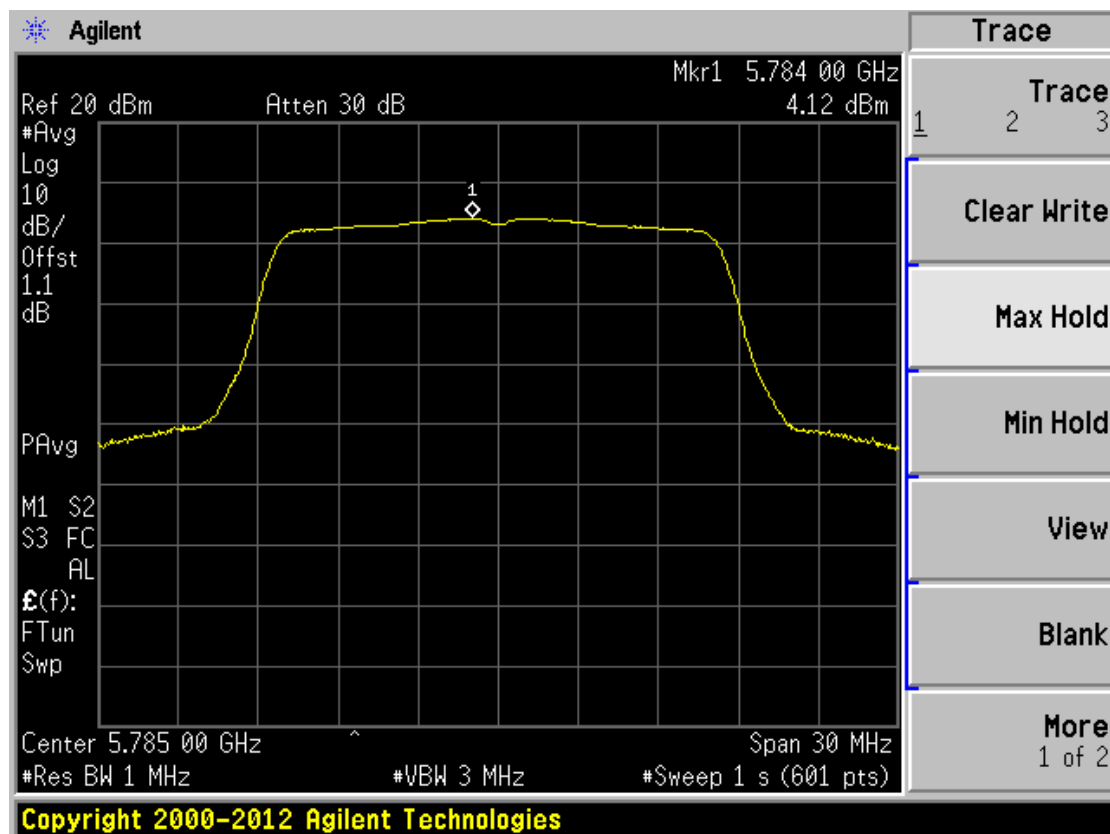
Band III 11ac(HT80) CH106



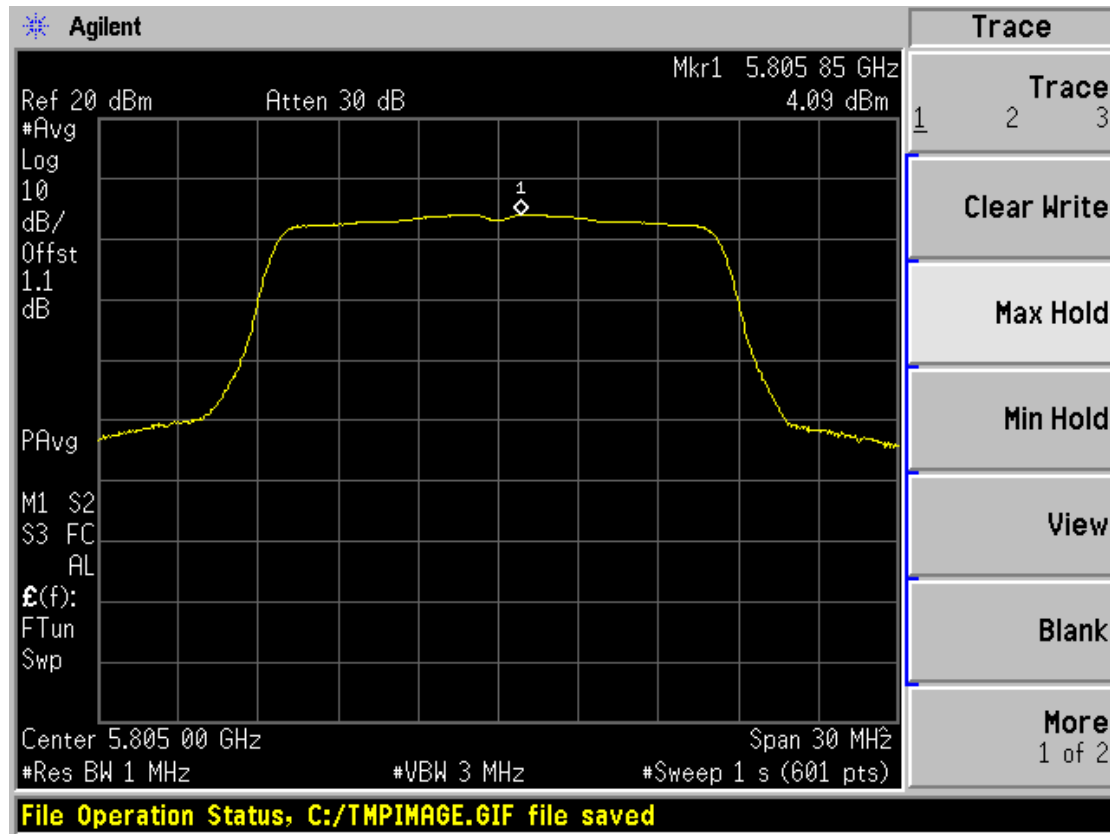
Band IV 11a CH149



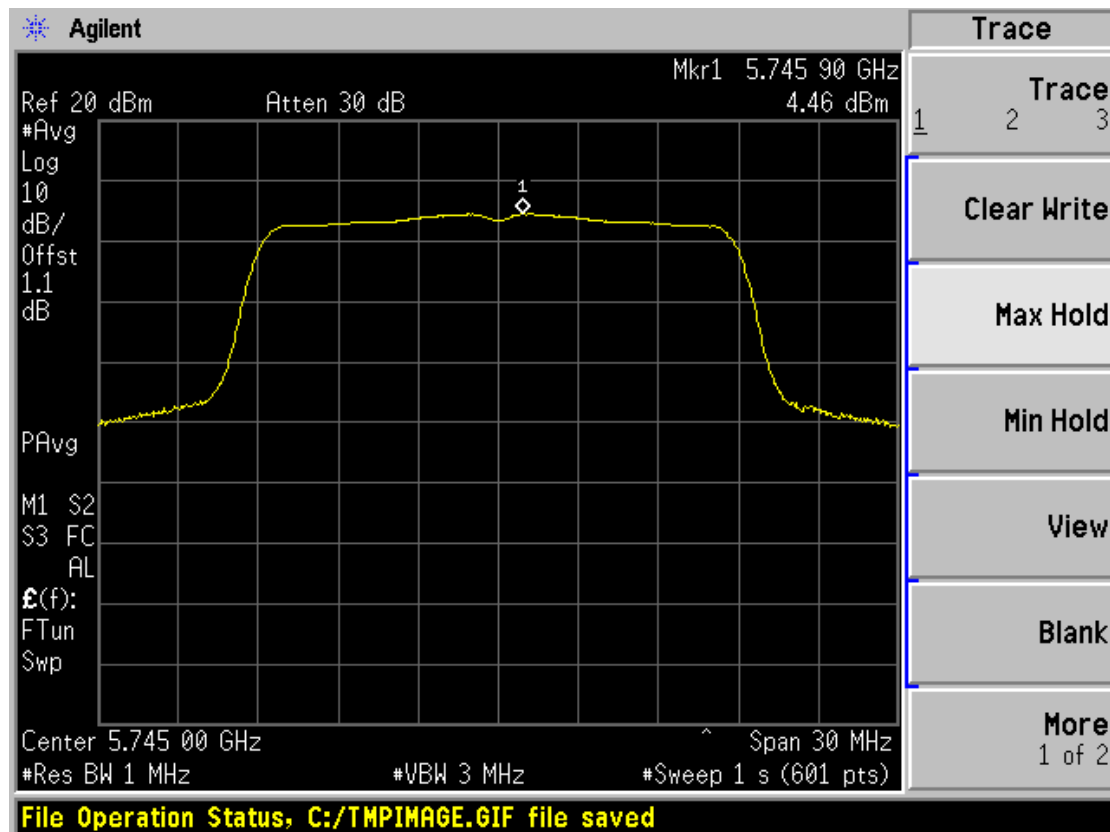
Band IV 11a CH157



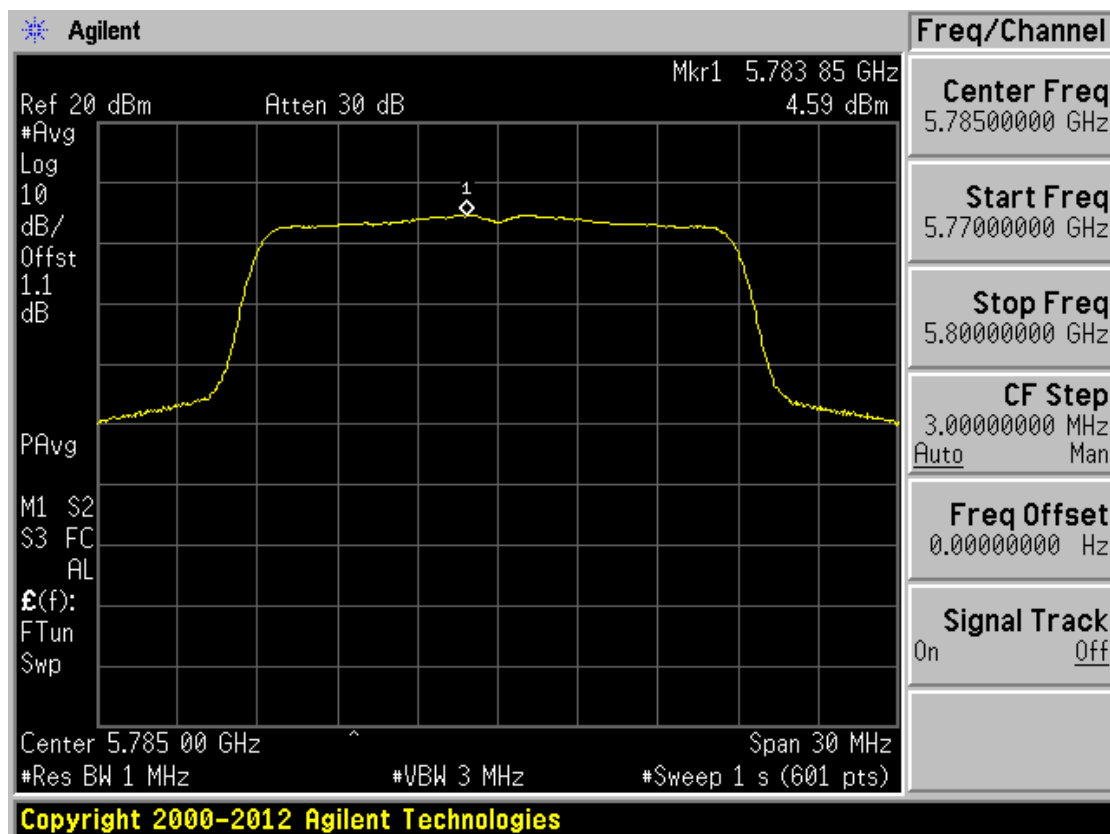
Band IV 11a CH161



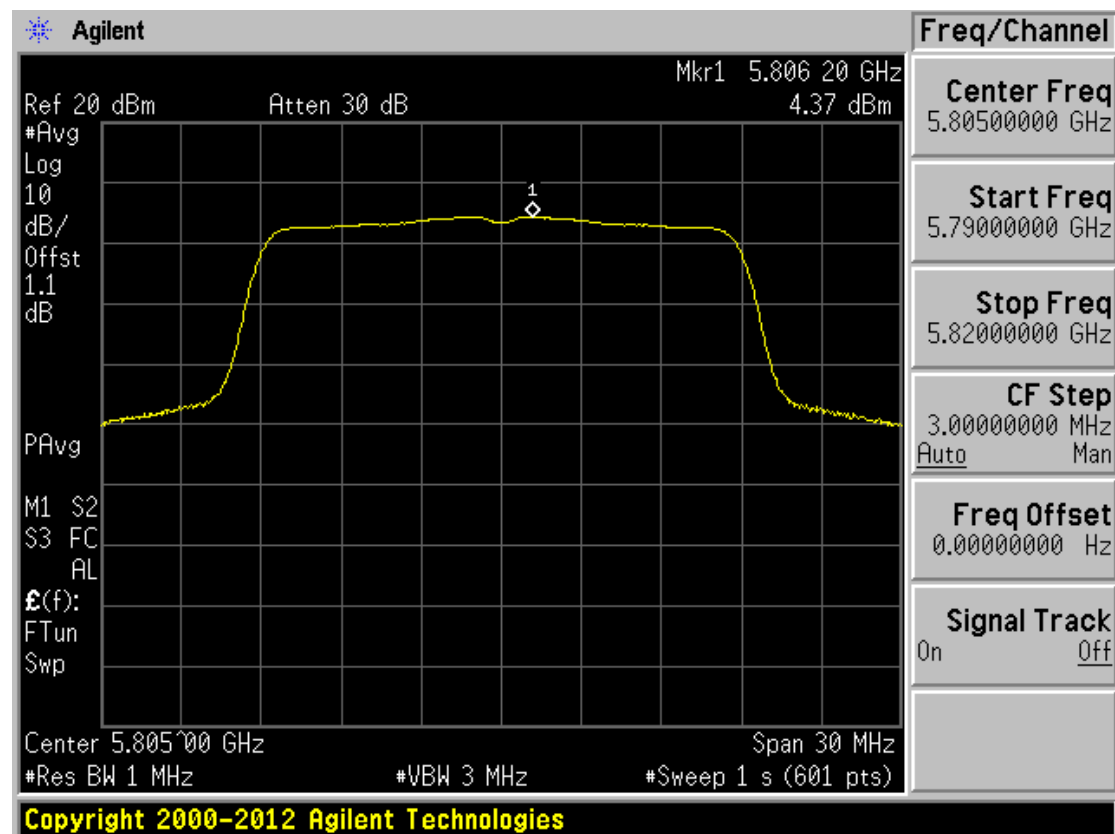
Band IV 11n(HT20) CH149



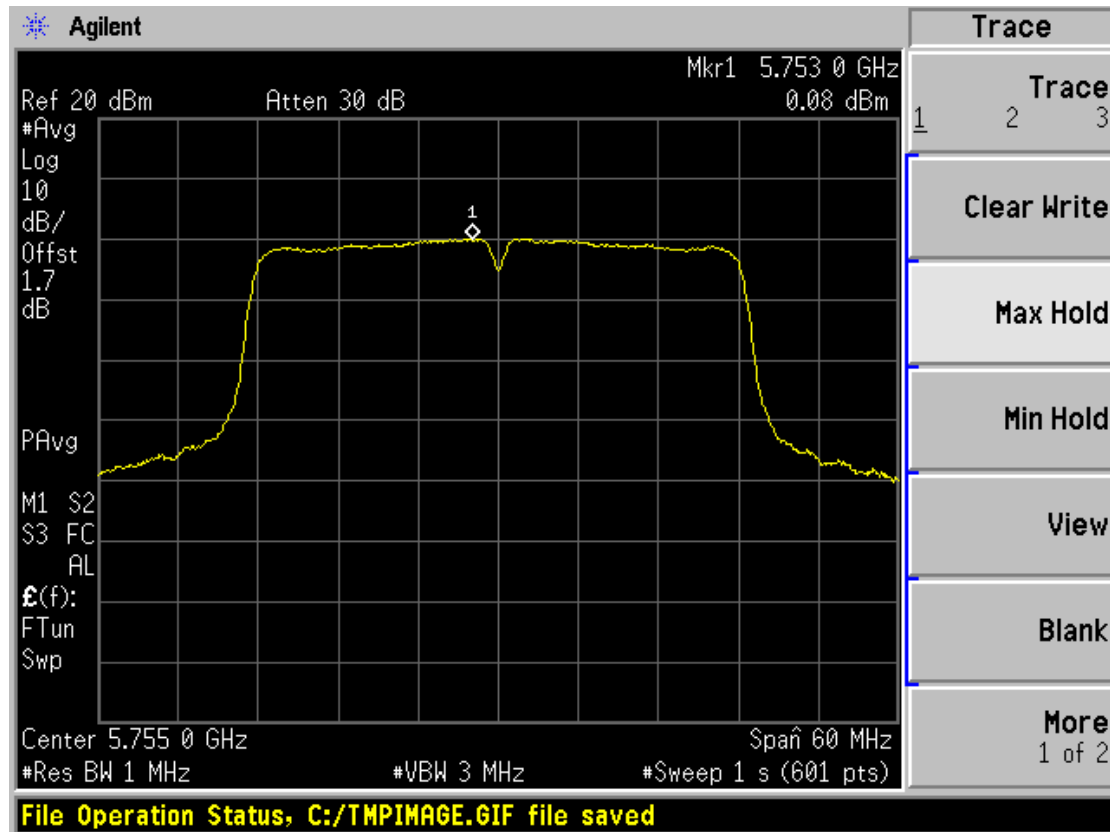
Band IV 11n(HT20) CH157



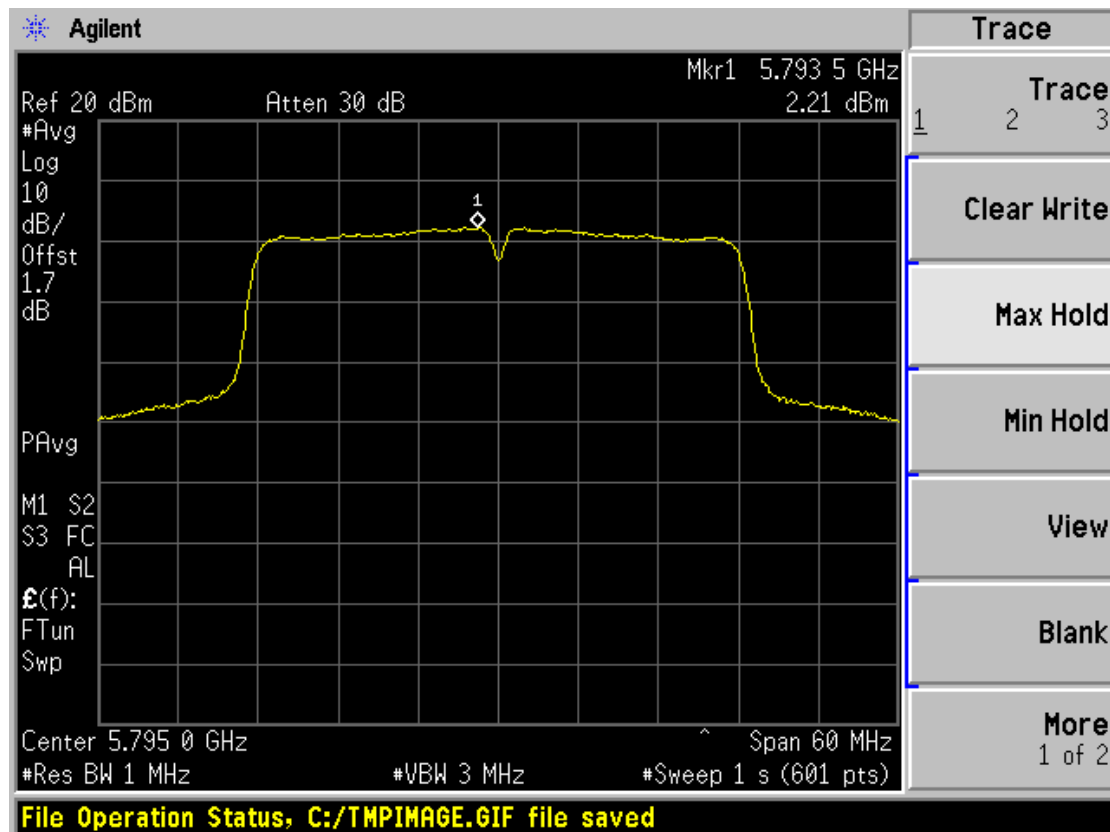
Band IV 11n(HT20) CH161



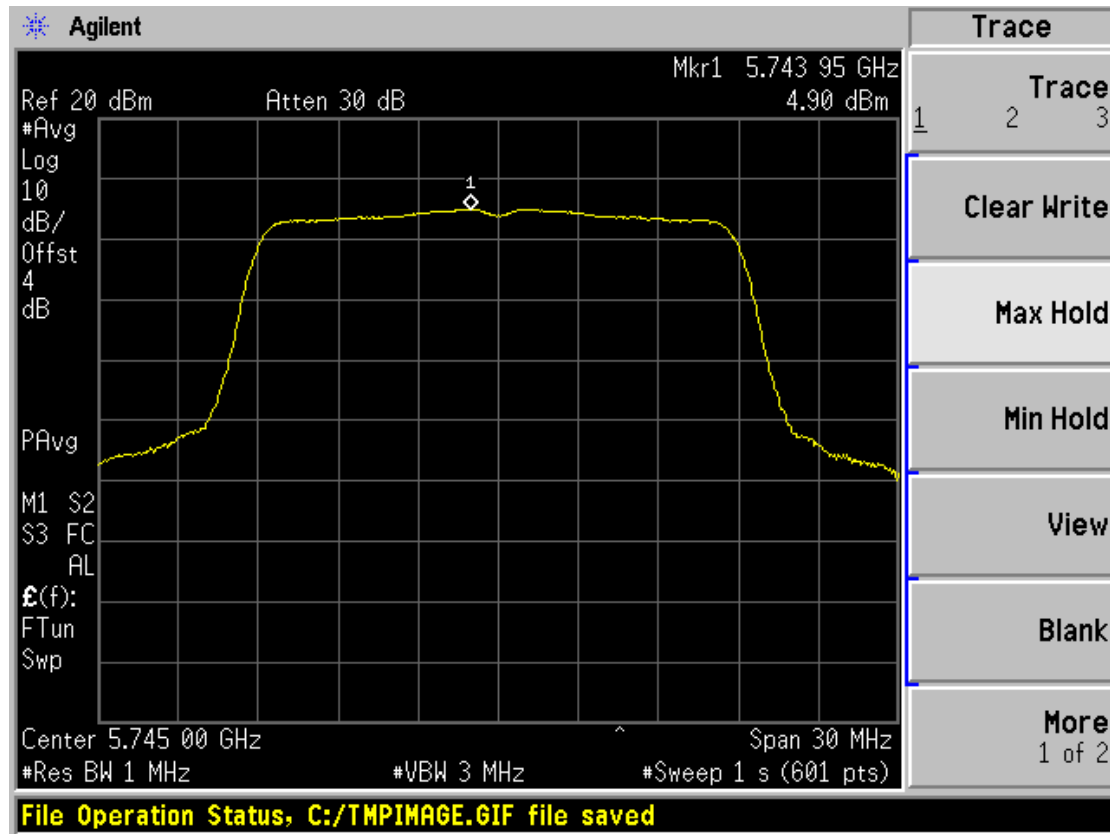
Band IV 11n(HT40) CH151



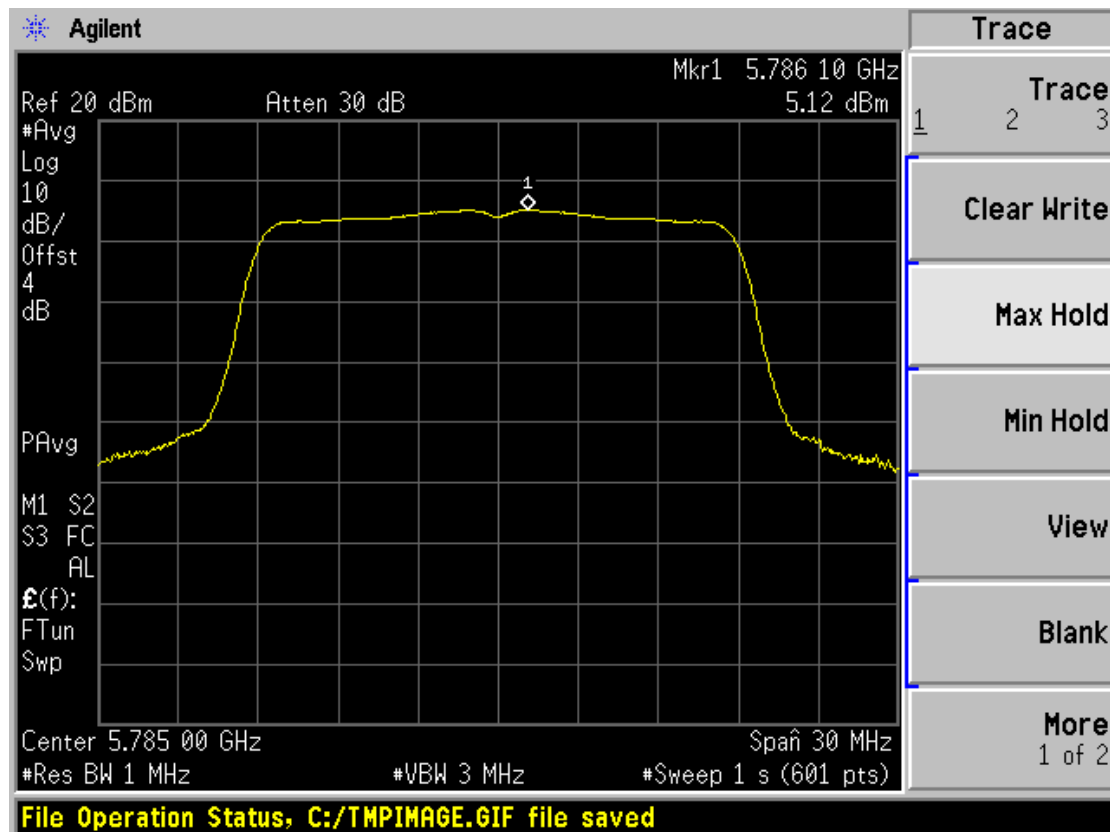
Band IV 11n(HT40) CH159



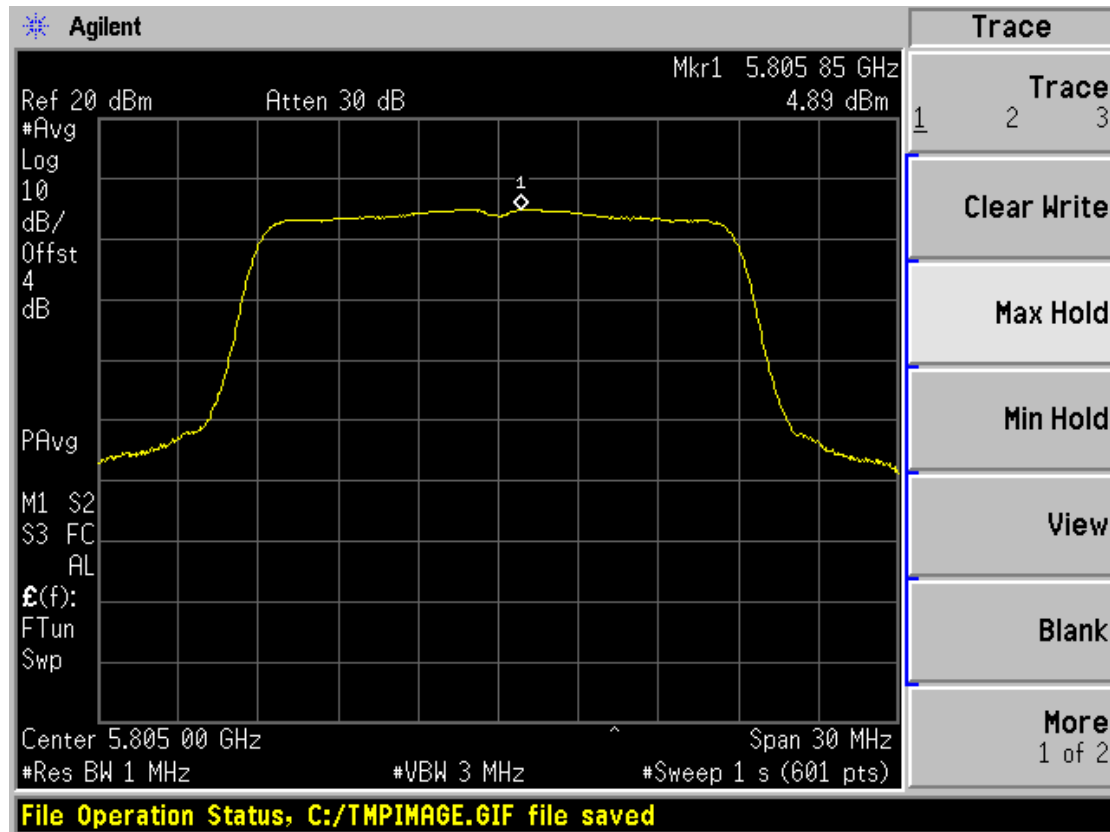
Band IV 11ac(HT20) CH149



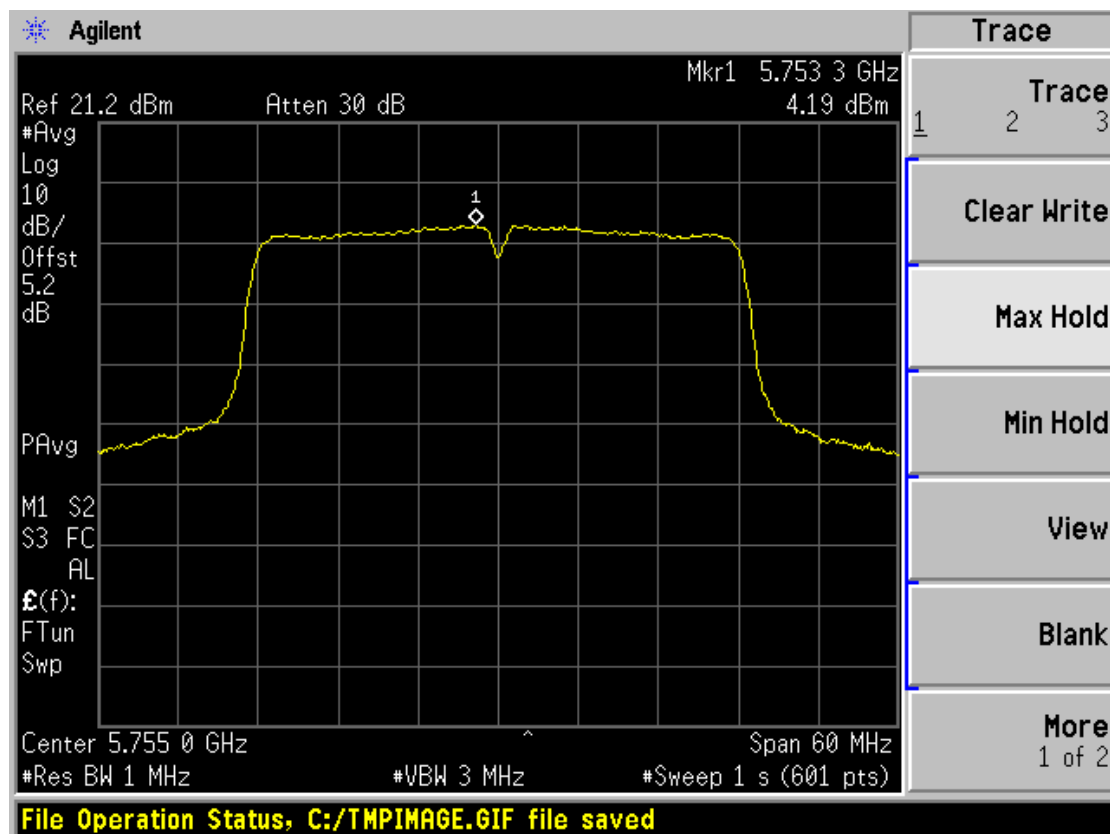
Band IV 11ac(HT20) CH157



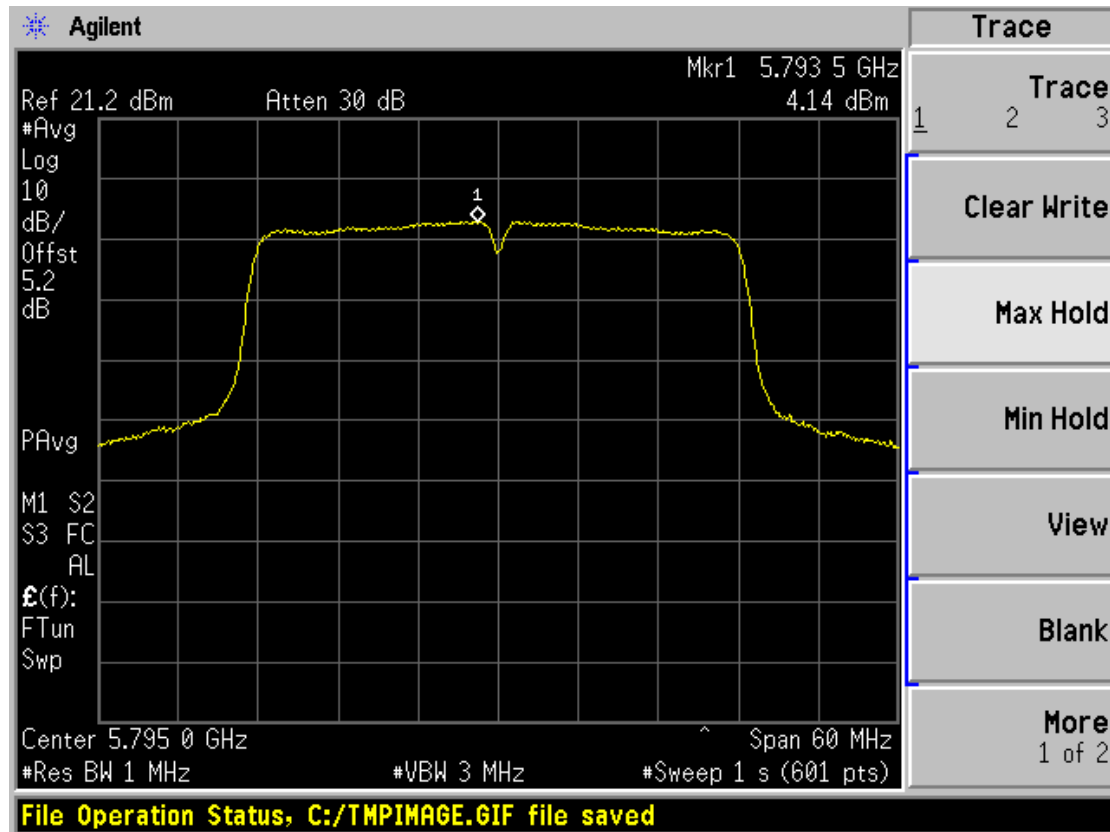
Band IV 11ac(HT20) CH161



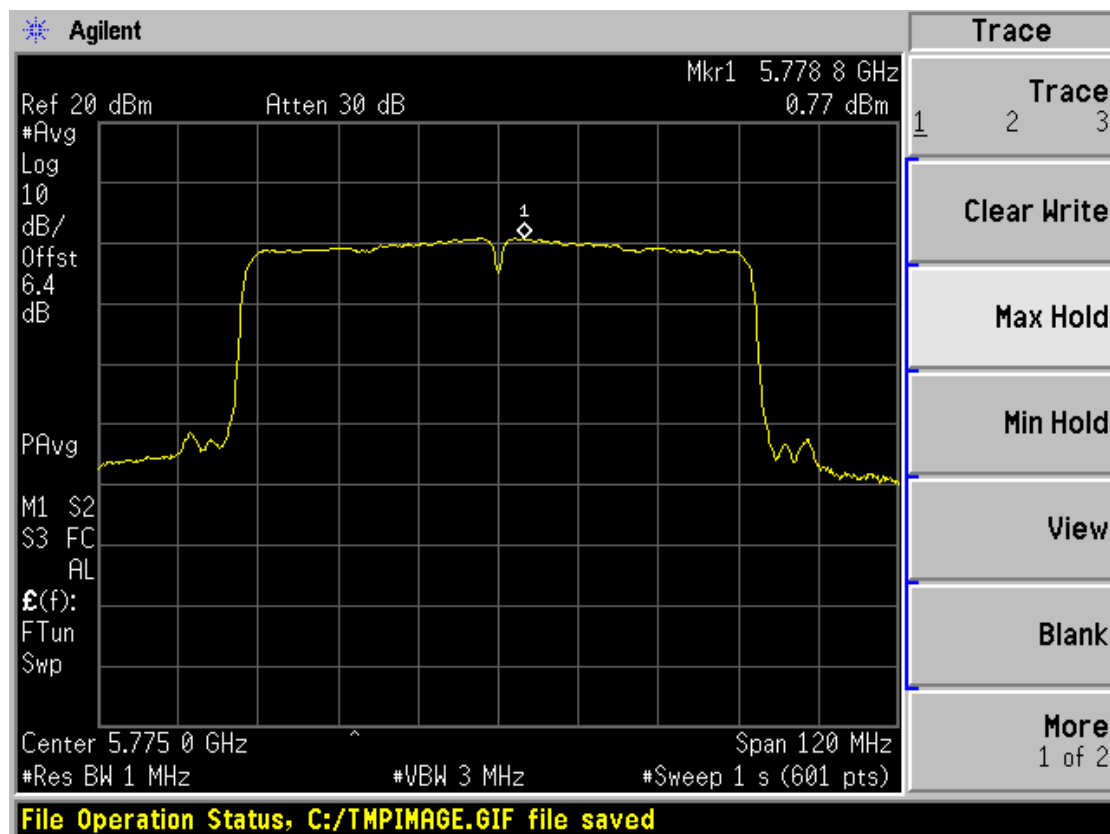
Band IV 11ac(HT40) CH151



Band IV 11ac(HT40) CH159

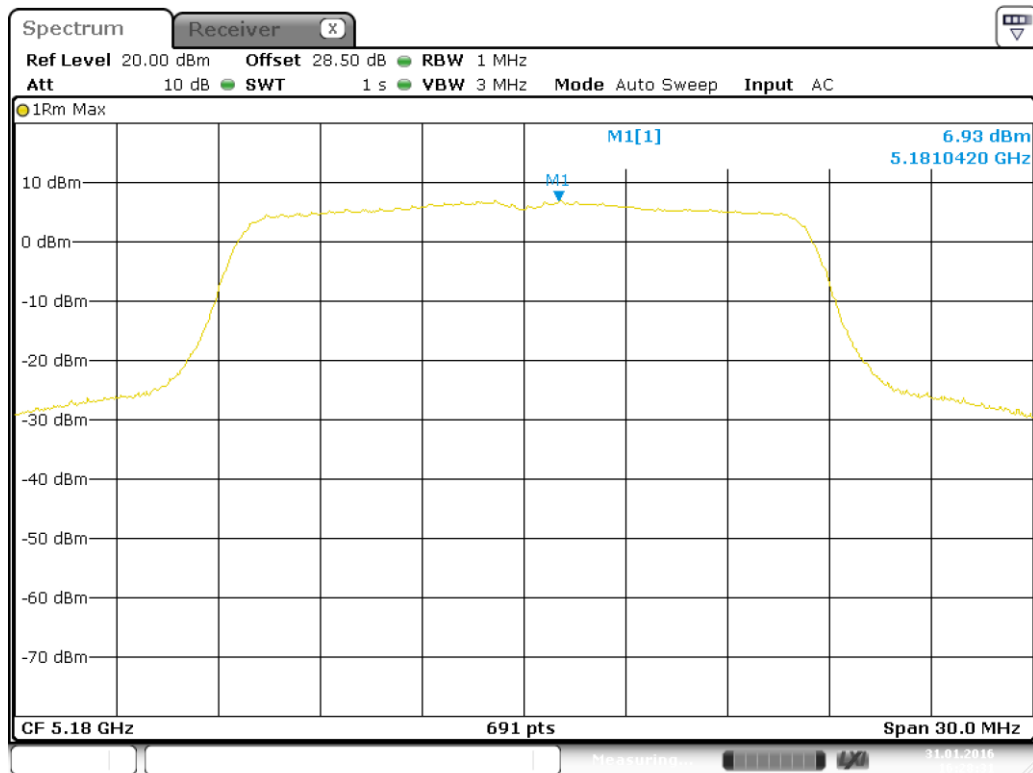


Band IV 11ac(HT80) CH155



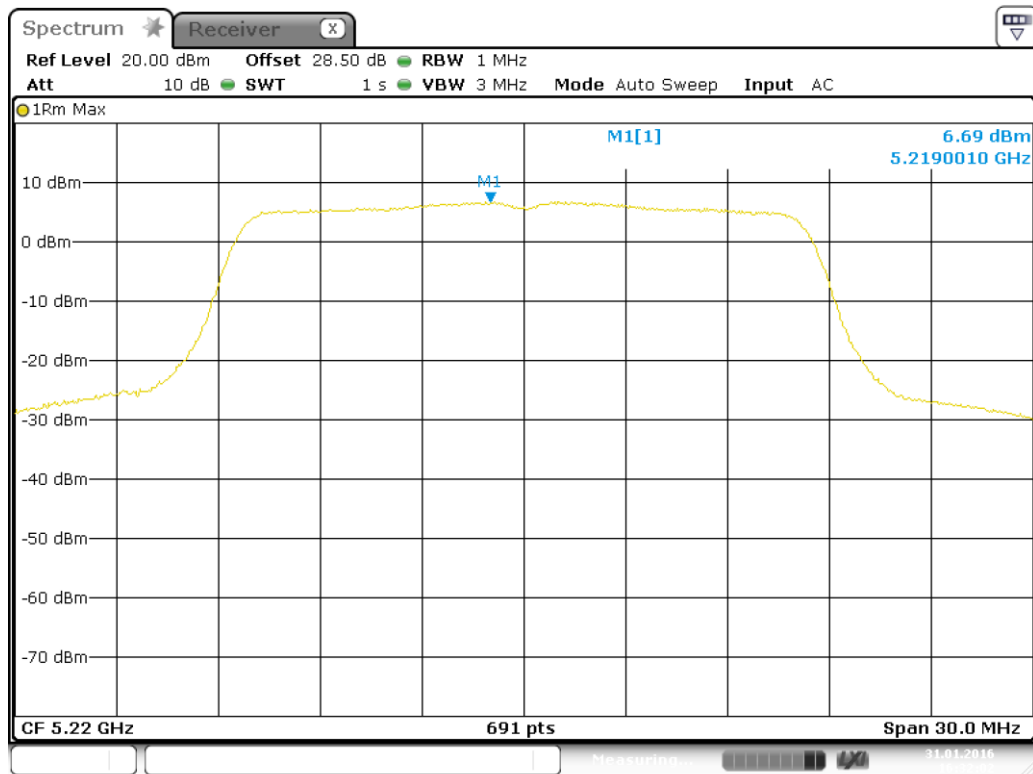
Test Plots (Radiated PSD)

Band I 11a CH36



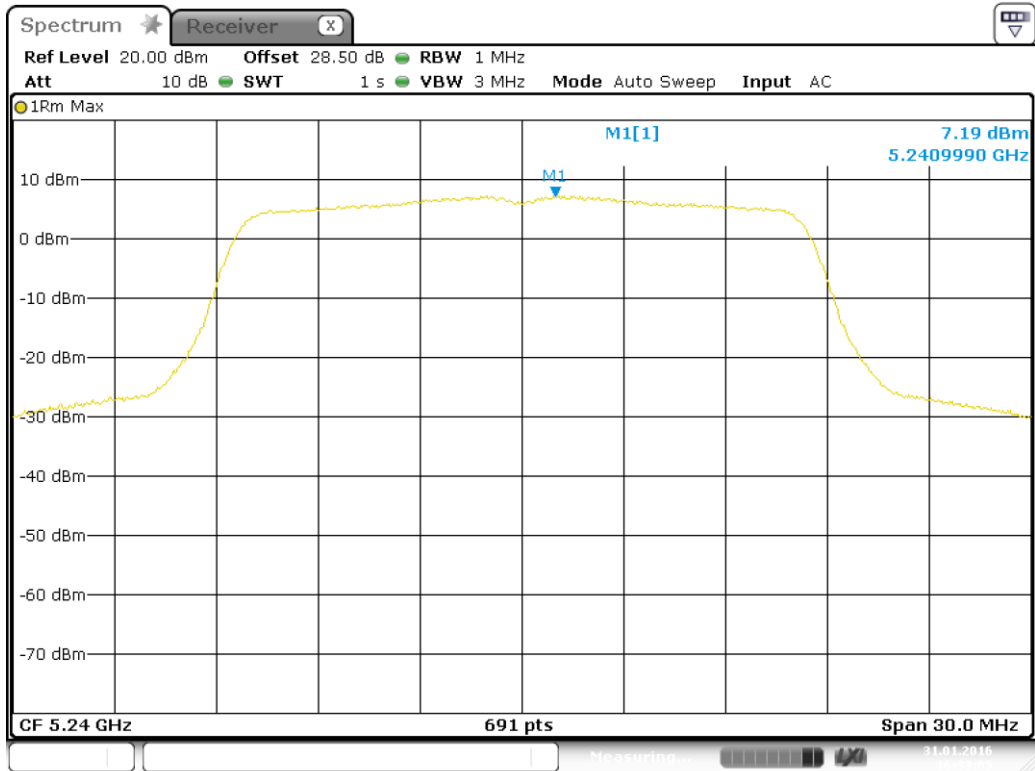
Date: 31.JAN.2016 16:28:32

Band I 11a CH44



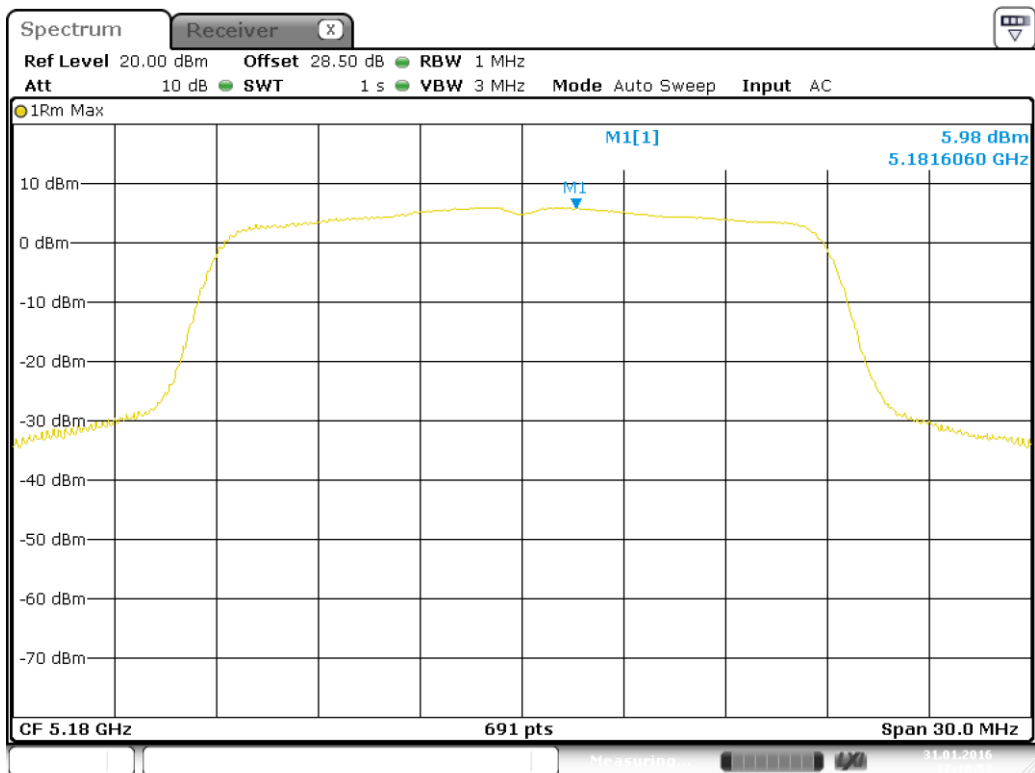
Date: 31.JAN.2016 16:32:02

Band I 11a CH48



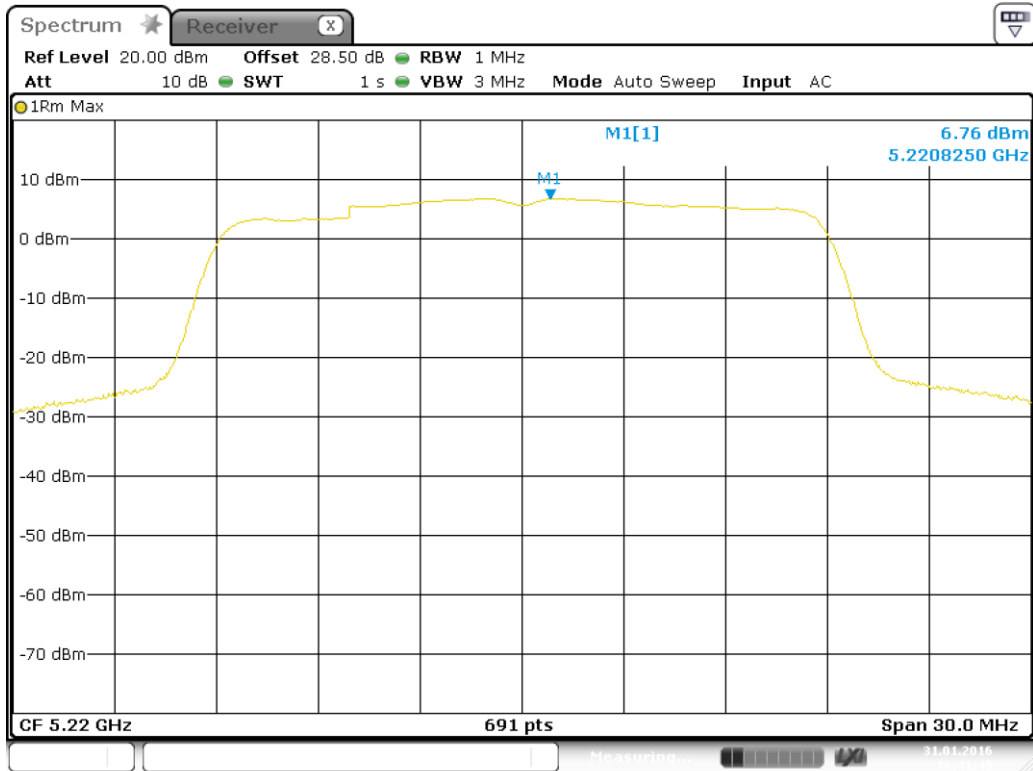
Date: 31.JAN.2016 16:33:05

Band I 11 n(HT20) CH36



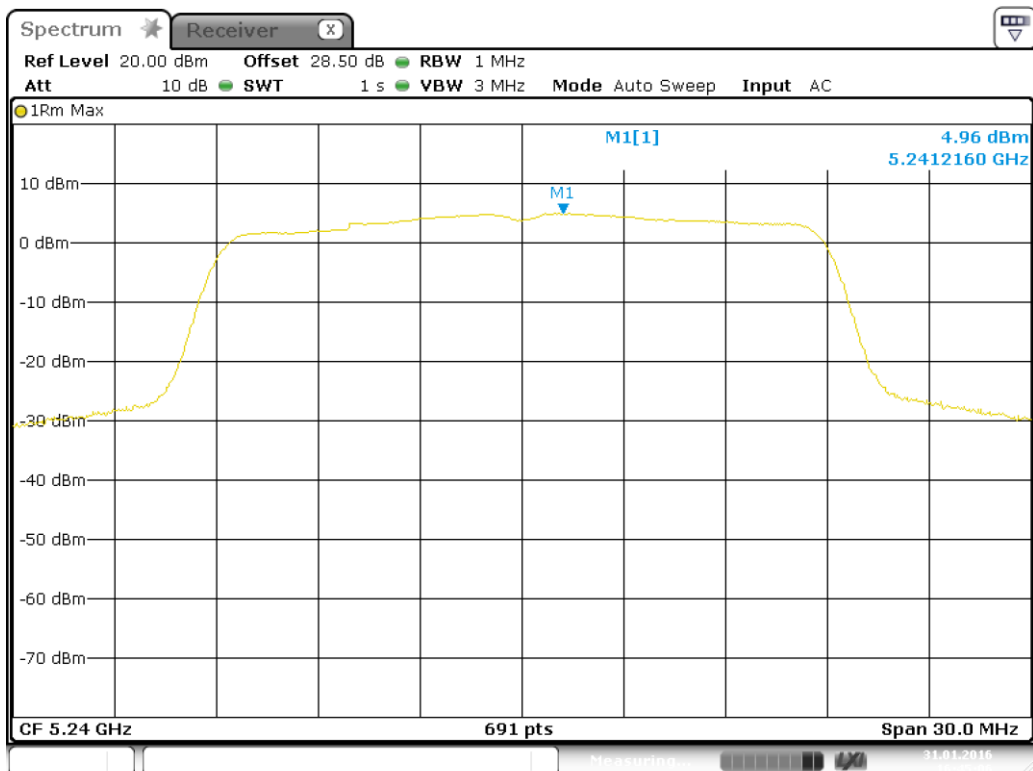
Date: 31.JAN.2016 17:10:53

Band I 11 n(HT20) CH44



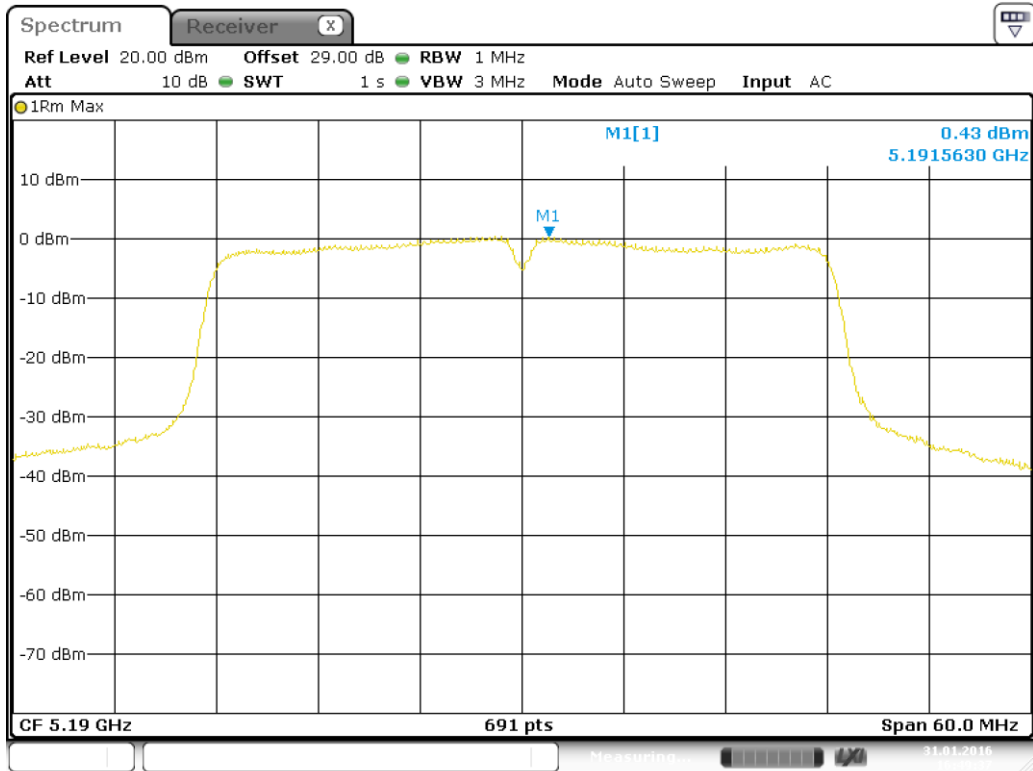
Date: 31.JAN.2016 16:41:49

Band I 11 n(HT20) CH48



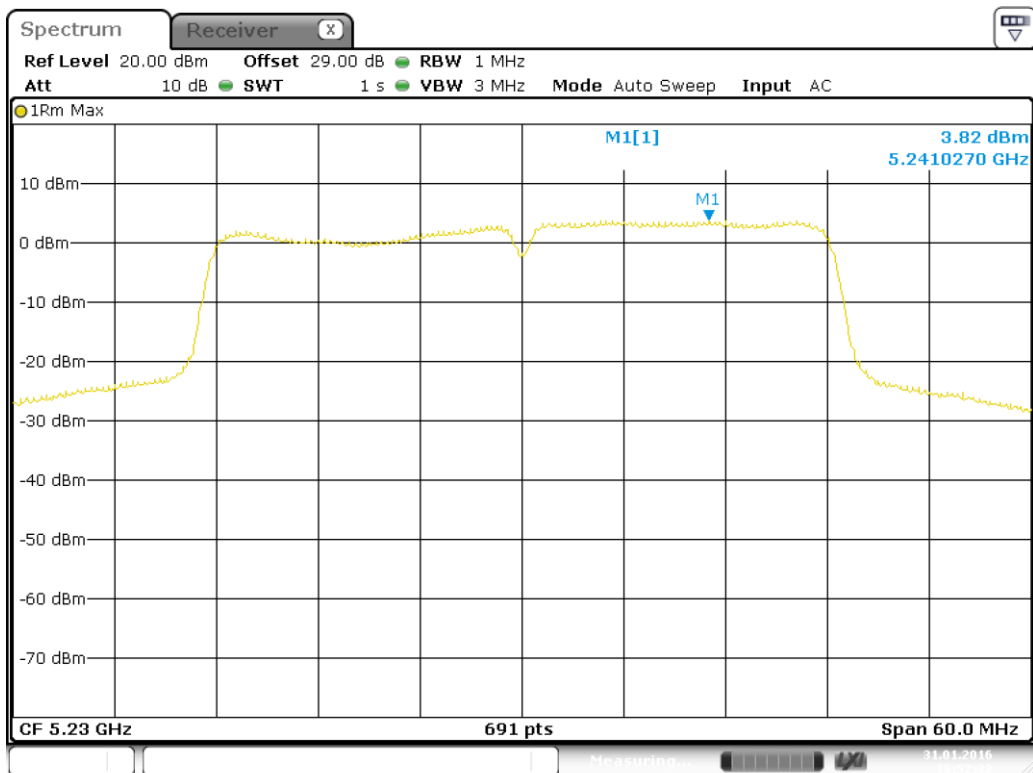
Date: 31.JAN.2016 16:45:07

Band I 11 n(HT40) CH38



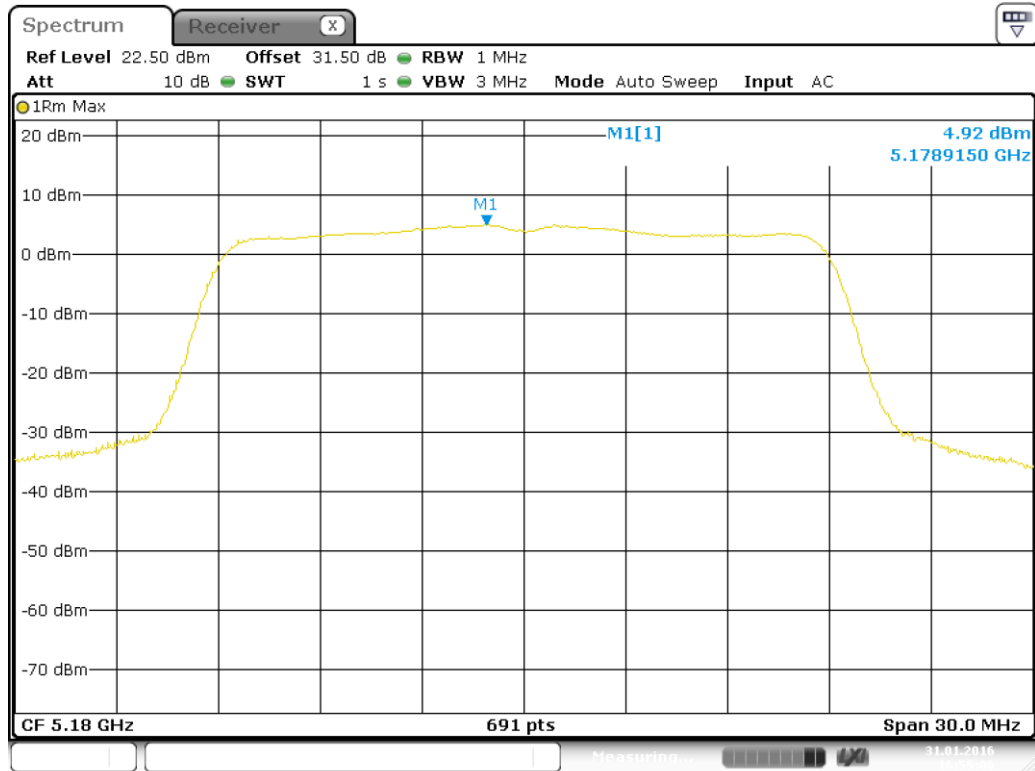
Date: 31.JAN.2016 16:49:37

Band I 11 n(HT40) CH46



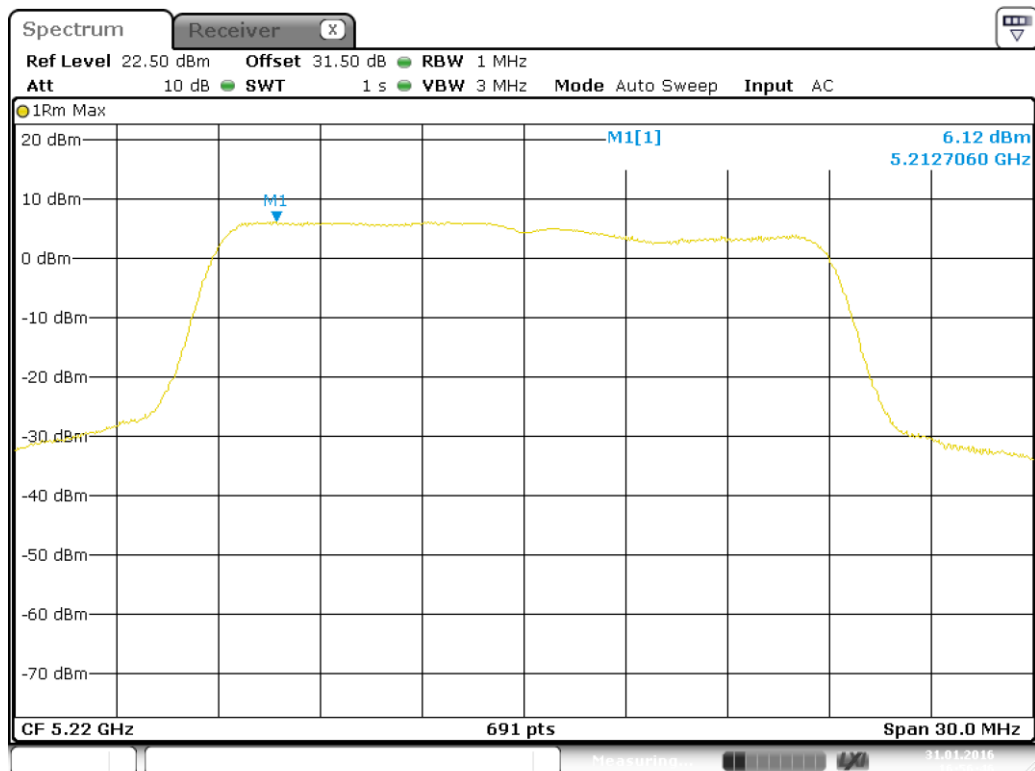
Date: 31.JAN.2016 16:52:32

Band I 11ac CH36



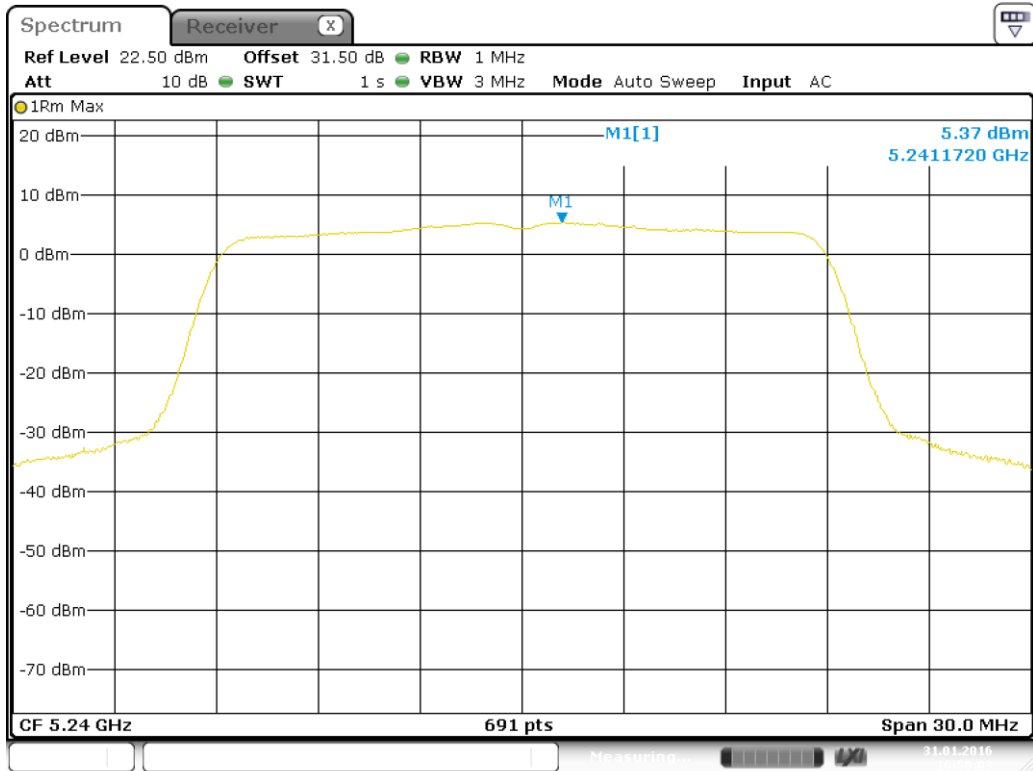
Date: 31.JAN.2016 16:55:07

Band I 11ac CH44



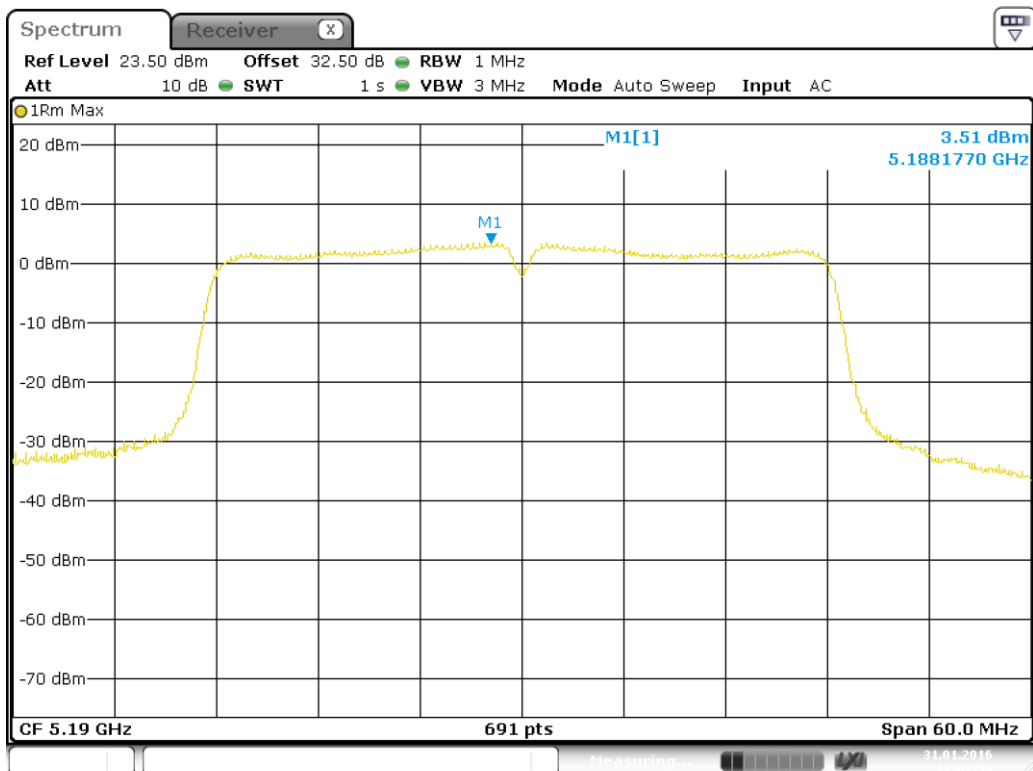
Date: 31.JAN.2016 16:56:46

Band I 11ac CH48



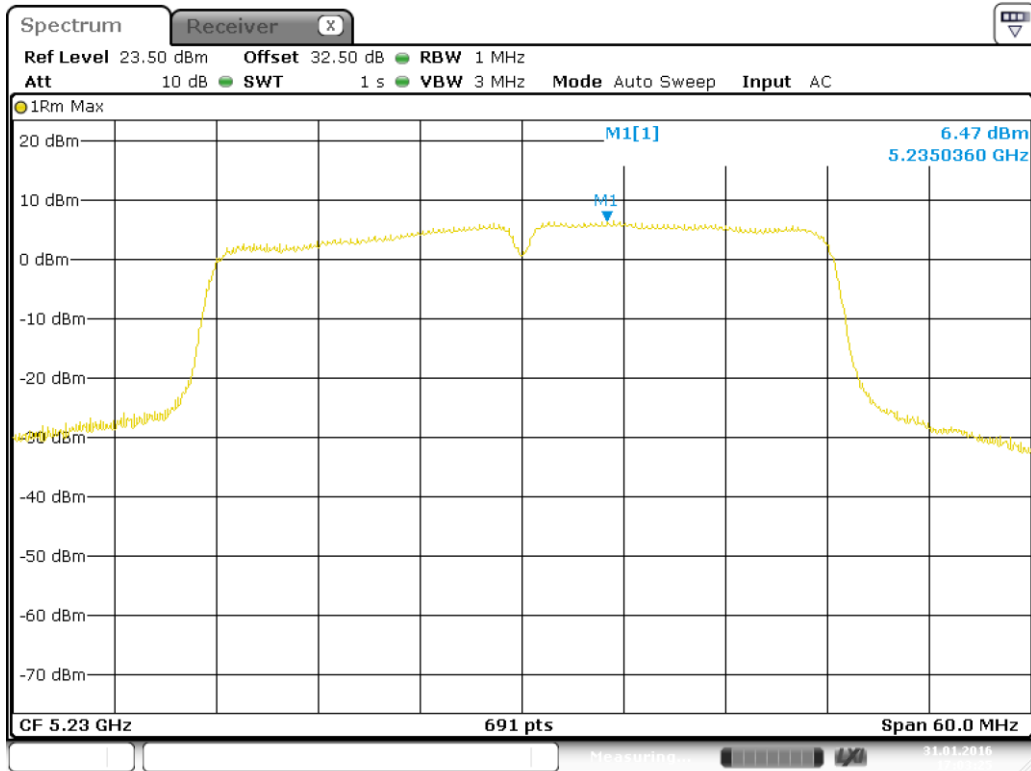
Date: 31.JAN.2016 16:58:03

Band I 11ac(HT40) CH38



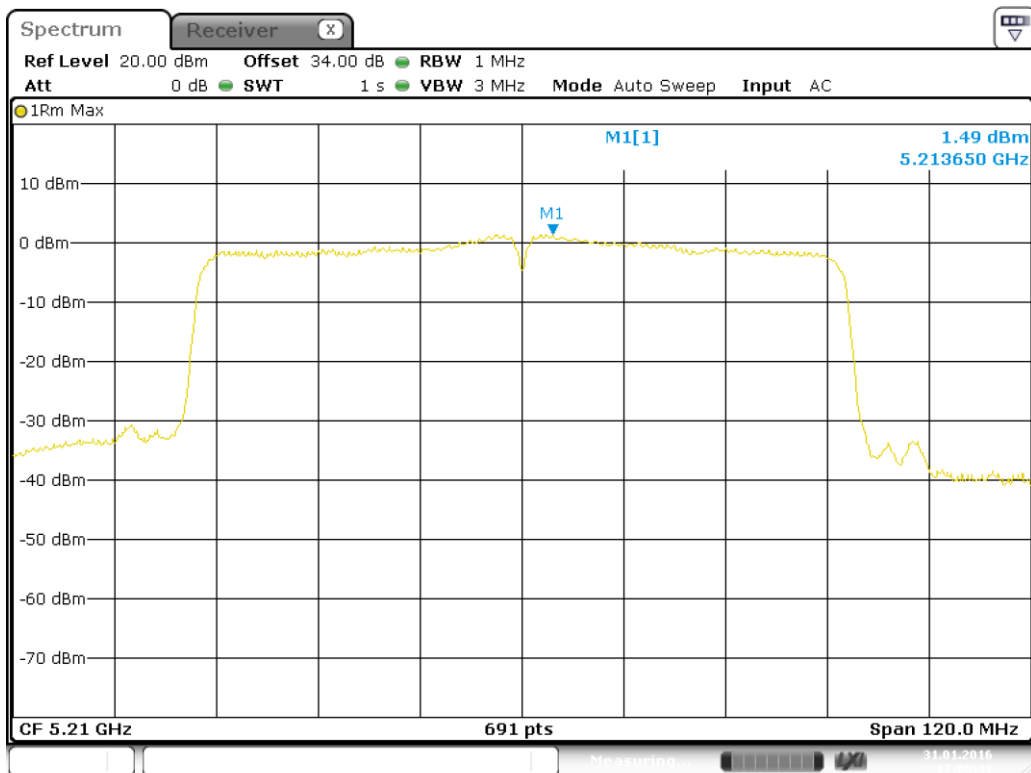
Date: 31.JAN.2016 17:01:59

Band I 11ac(HT40) CH46



Date: 31.JAN.2016 17:03:25

Band I 11ac(HT80) CH42



Date: 31.JAN.2016 17:06:42