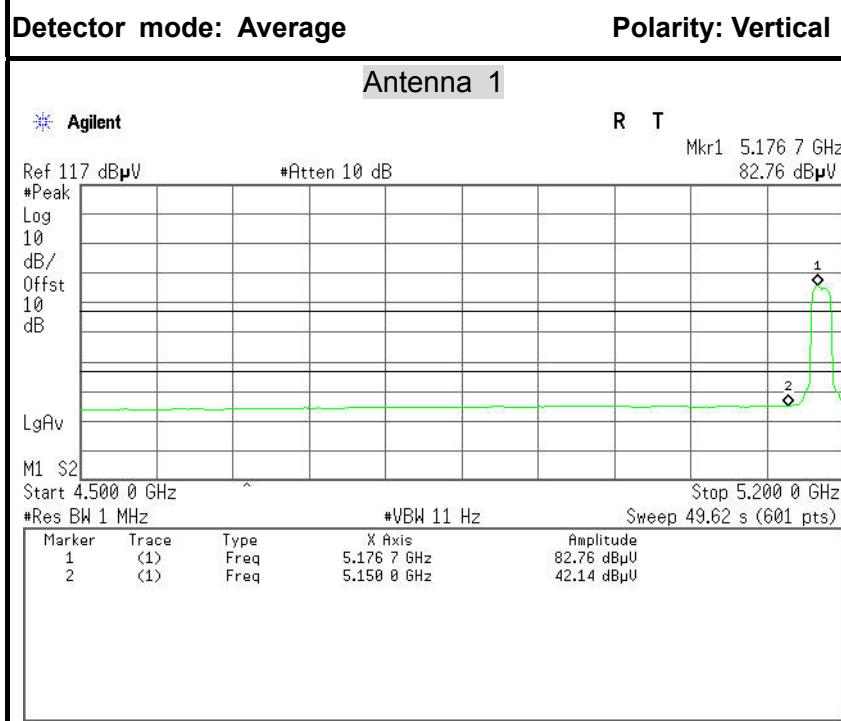
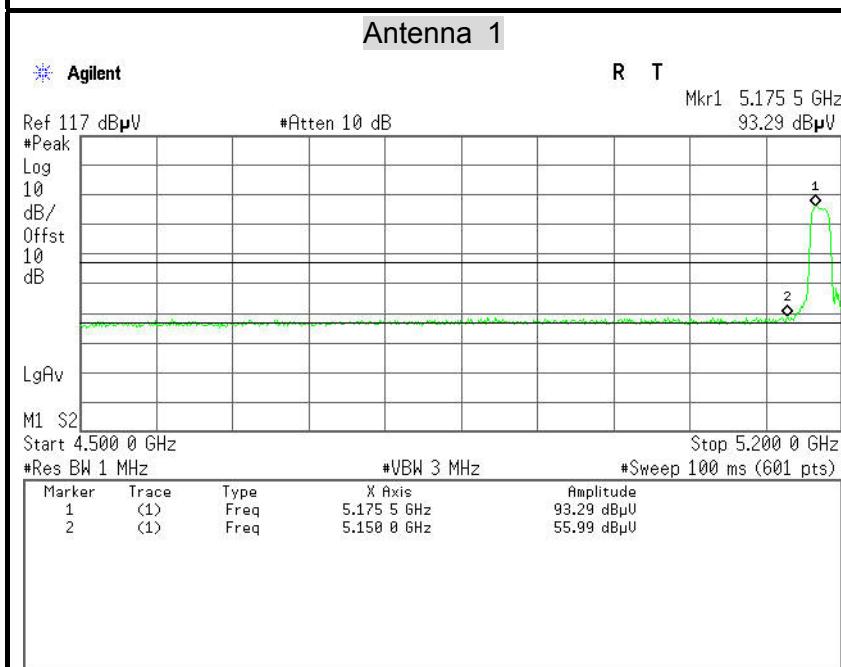




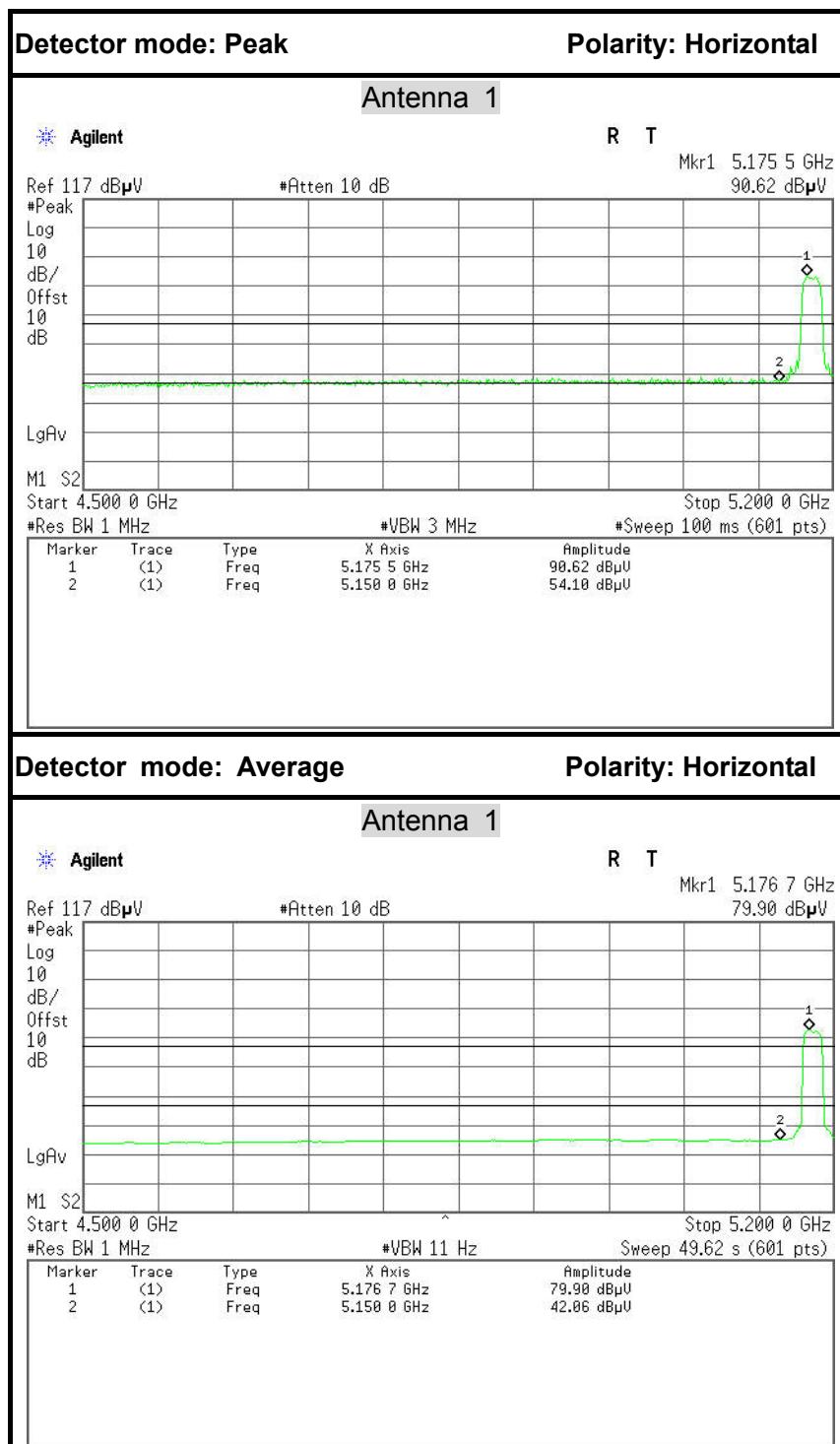
IEEE 802.11a mode / 5180 MHz mode

Band Edges (CH Low)

Detector mode: Peak Polarity: Vertical



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	49.39	-6.60	55.99	74.00	-18.01	Peak	Vertical
2	5150.0000	35.54	-6.60	42.14	54.00	-11.86	Average	Vertical



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	47.50	-6.60	54.10	74.00	-19.90	Peak	Horizontal
2	5150.0000	35.46	-6.60	42.06	54.00	-11.94	Average	Horizontal



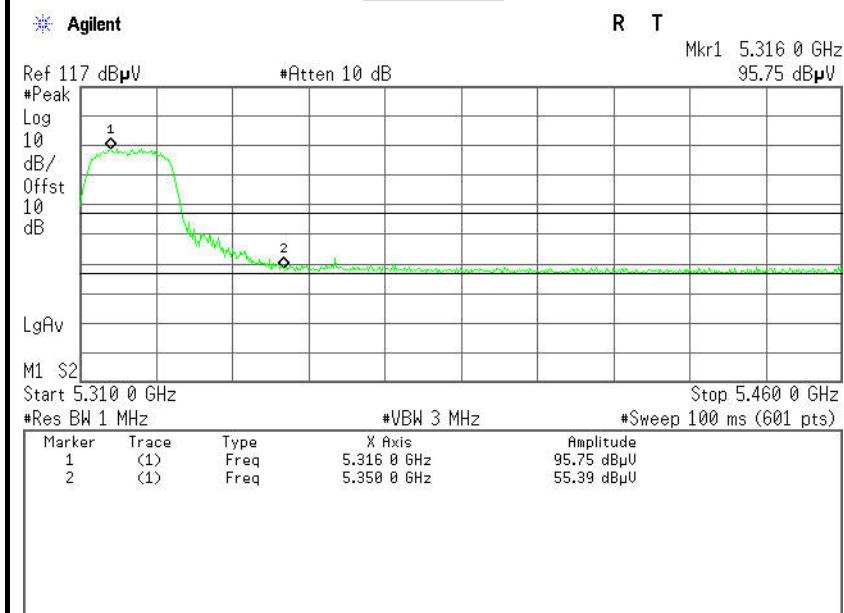
IEEE 802.11a mode / 5320 MHz

Band Edges (CH High)

Detector mode: Peak

Polarity: Vertical

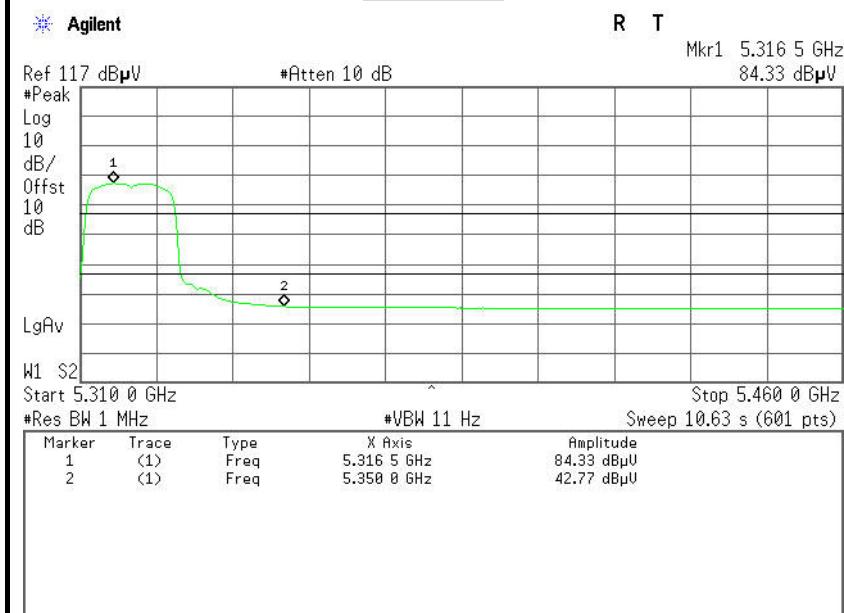
Antenna 1



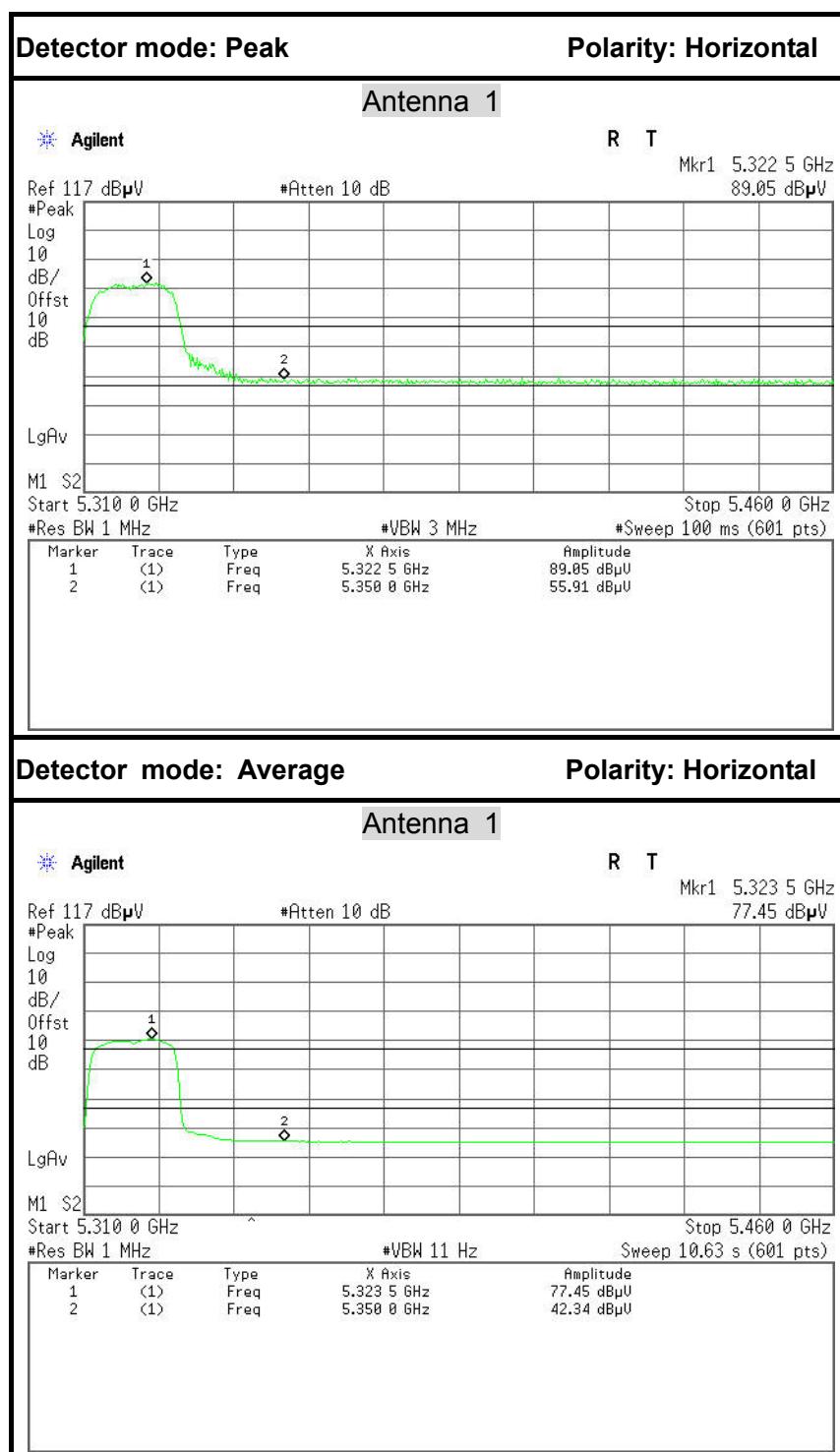
Detector mode: Average

Polarity: Vertical

Antenna 1



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	49.15	-6.24	55.39	74.00	-18.61	Peak	Vertical
2	5350.0000	36.53	-6.24	42.77	54.00	-11.23	Average	Vertical

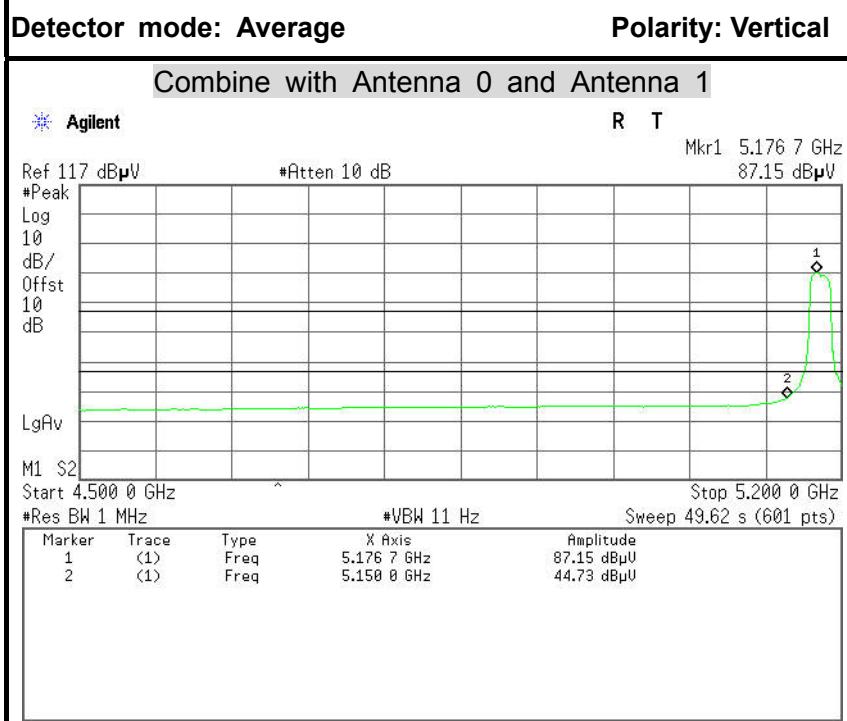
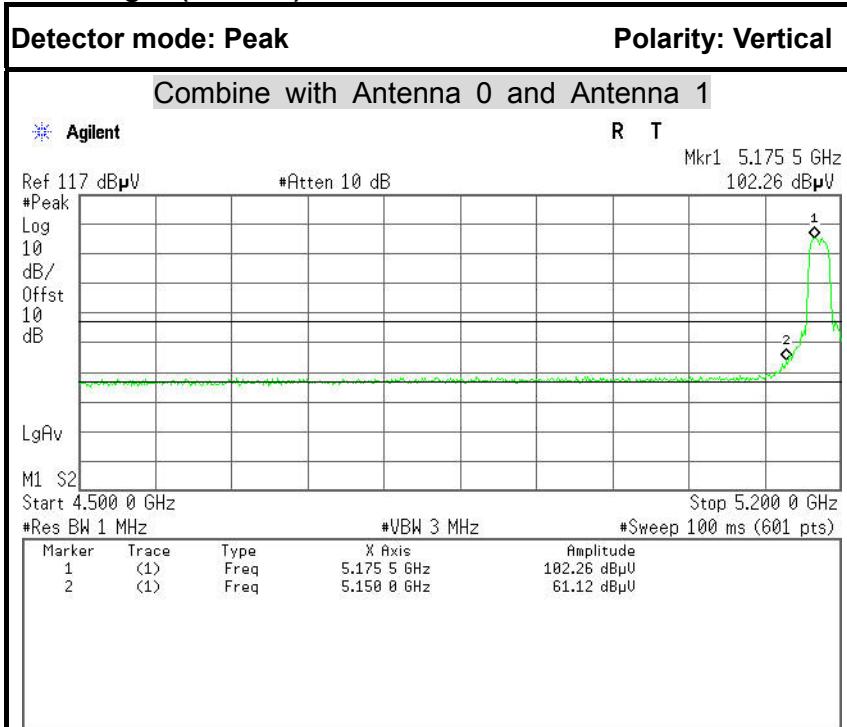


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	52.81	-6.24	59.05	74.00	-14.95	Peak	Horizontal
2	5350.0000	36.10	-6.24	42.34	54.00	-11.66	Average	Horizontal

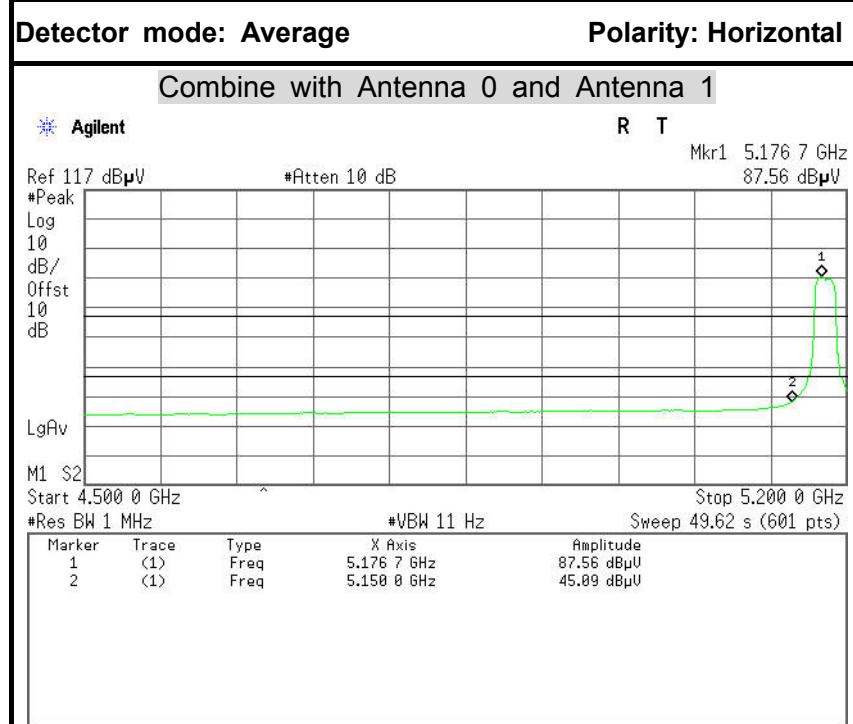
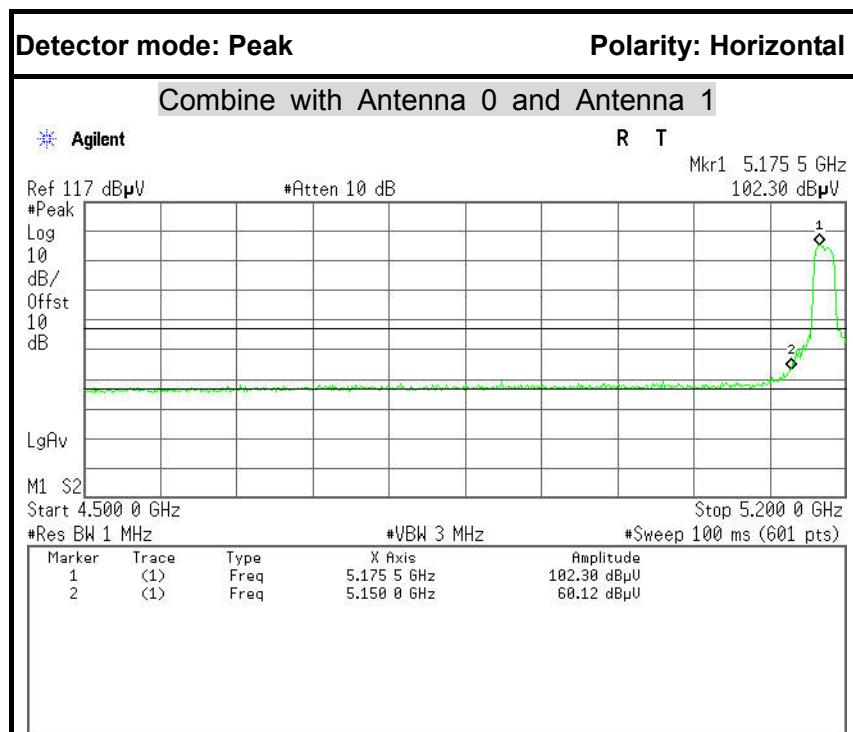


IEEE 802.11n HT 20 MHz mode / 5180 MHz

Band Edges (CH Low)



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	54.52	-6.60	61.12	74.00	-12.88	Peak	Vertical
2	5150.0000	38.13	-6.60	44.73	54.00	-9.27	Average	Vertical

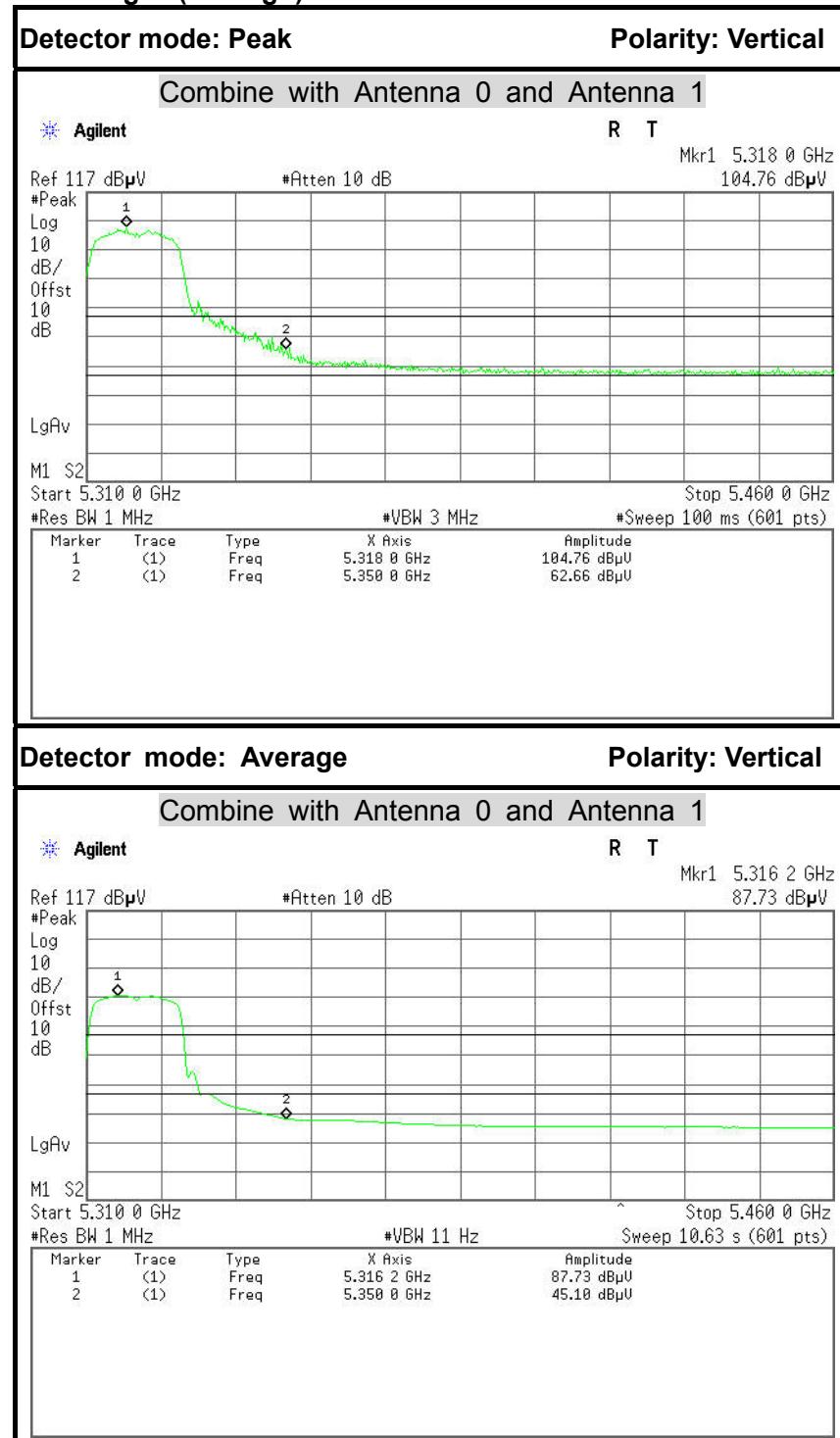


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	53.52	-6.60	60.12	74.00	-13.88	Peak	Horizontal
2	5150.0000	38.49	-6.60	45.09	54.00	-8.91	Average	Horizontal

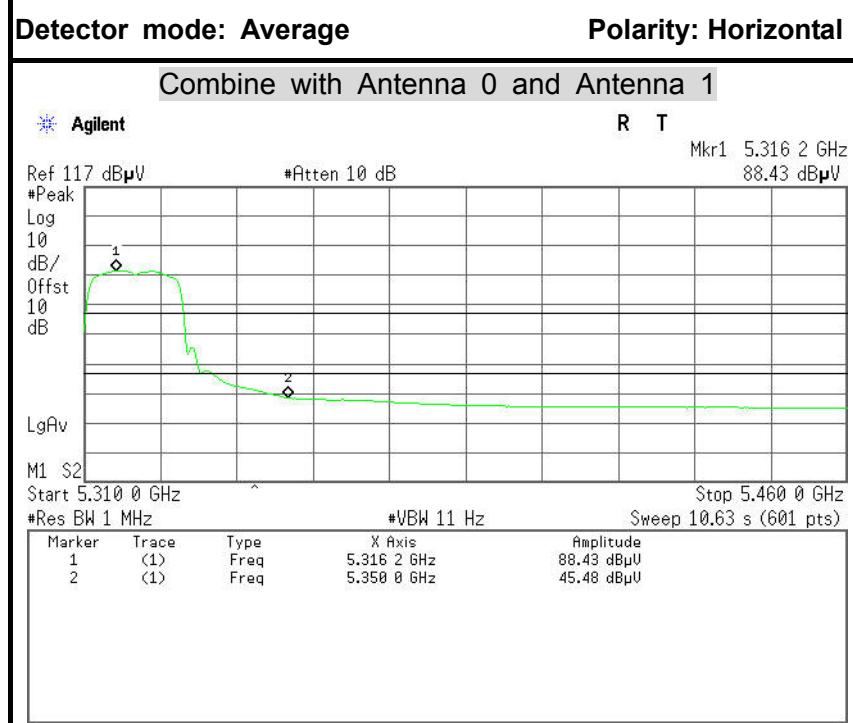
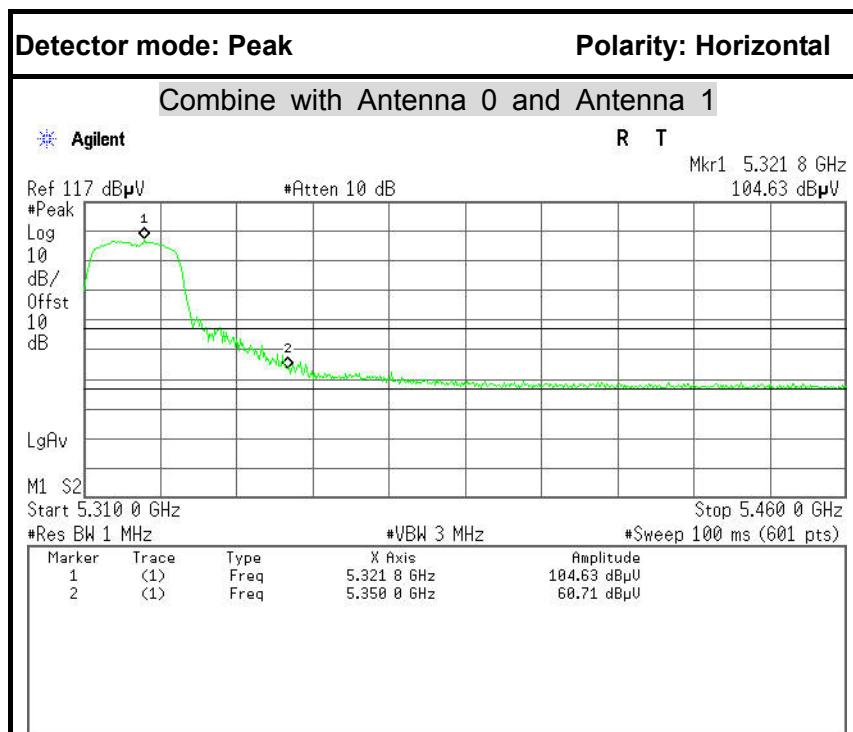


IEEE 802.11n HT 20 MHz mode / 5320 MHz

Band Edges (CH High)



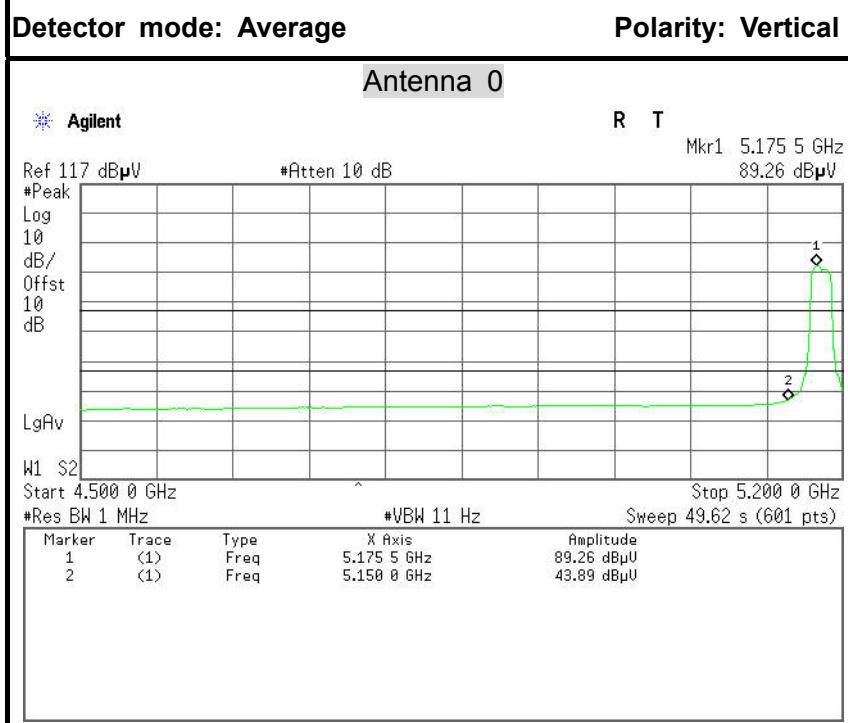
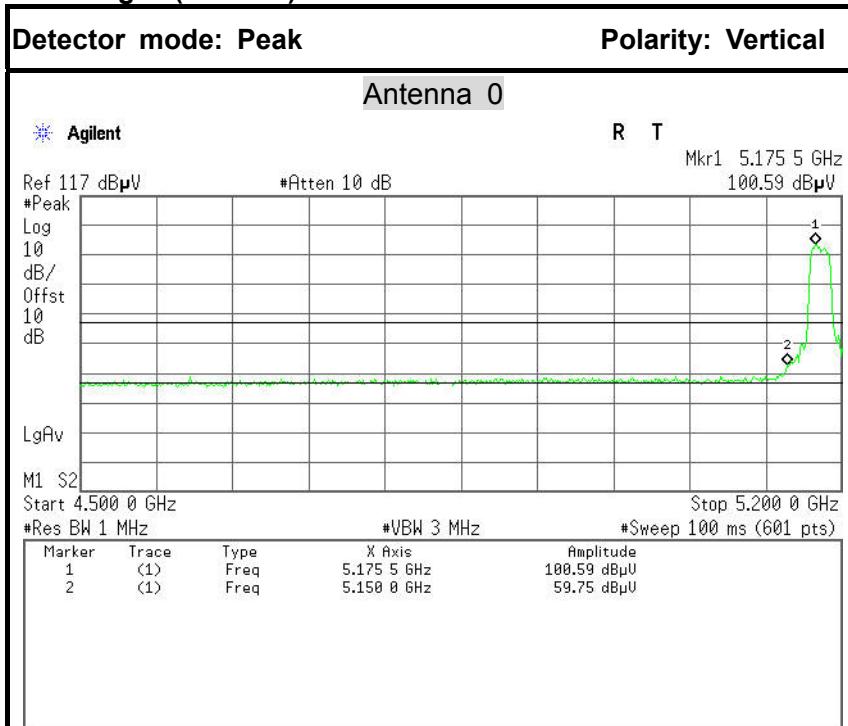
No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	56.42	-6.24	62.66	74.00	-11.34	Peak	Vertical
2	5350.0000	38.86	-6.24	45.10	54.00	-8.90	Average	Vertical



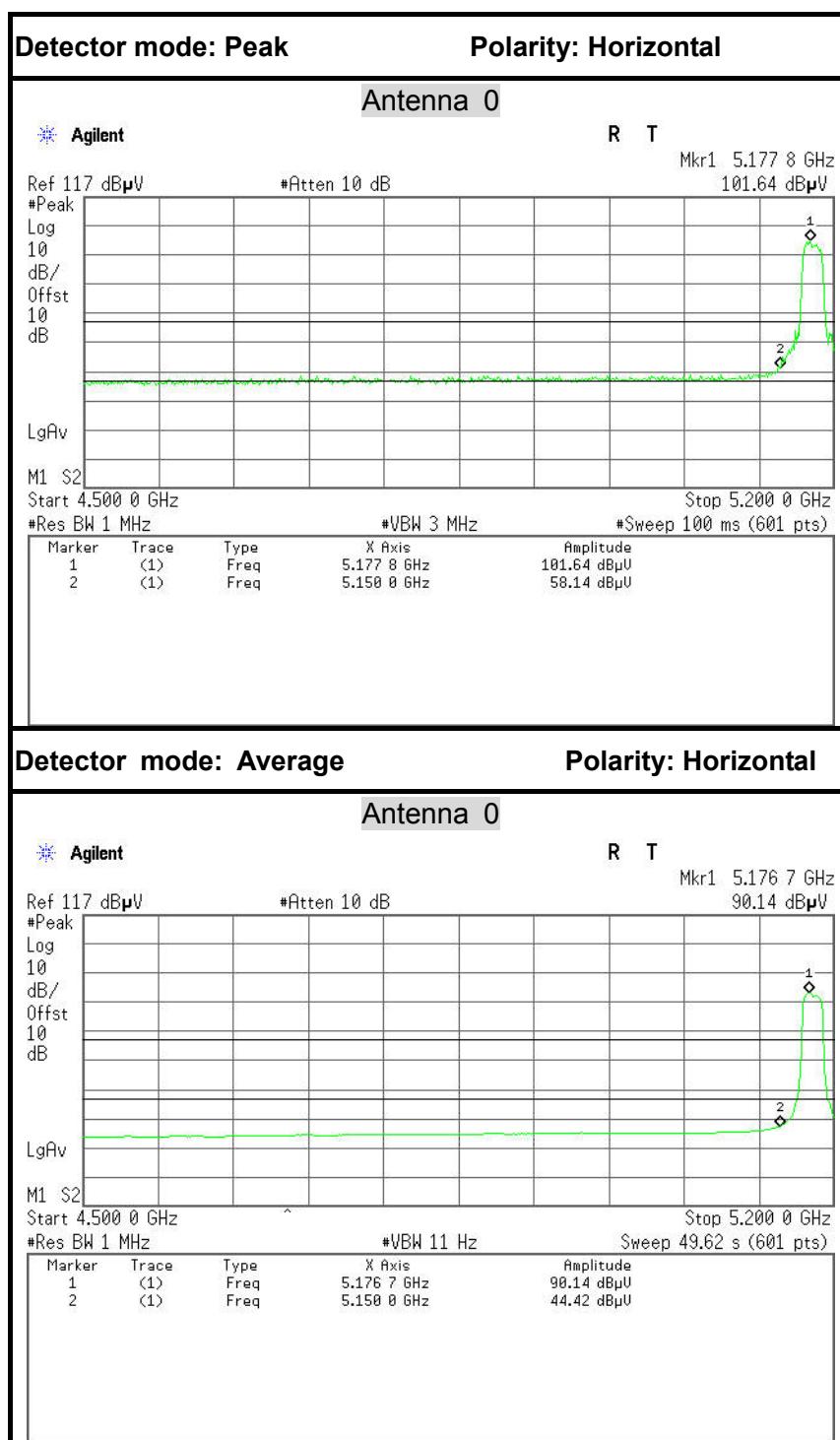
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	54.47	-6.24	60.71	74.00	-13.29	Peak	Horizontal
2	5350.0000	39.24	-6.24	45.48	54.00	-8.52	Average	Horizontal



**IEEE 802.11n HT 20 MHz SISO mode / 5180 MHz mode
Band Edges (CH Low)**



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	53.15	-6.60	59.75	74.00	-14.25	Peak	Vertical
2	5150.0000	37.29	-6.60	43.89	54.00	-10.11	Average	Vertical



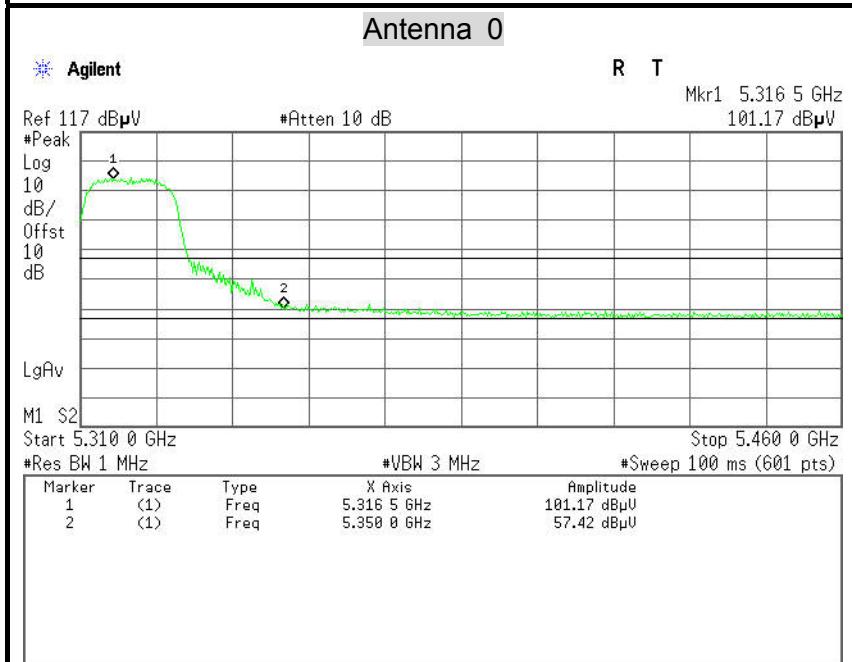
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	51.54	-6.60	58.14	74.00	-15.86	Peak	Horizontal
2	5150.0000	37.82	-6.60	44.42	54.00	-9.58	Average	Horizontal



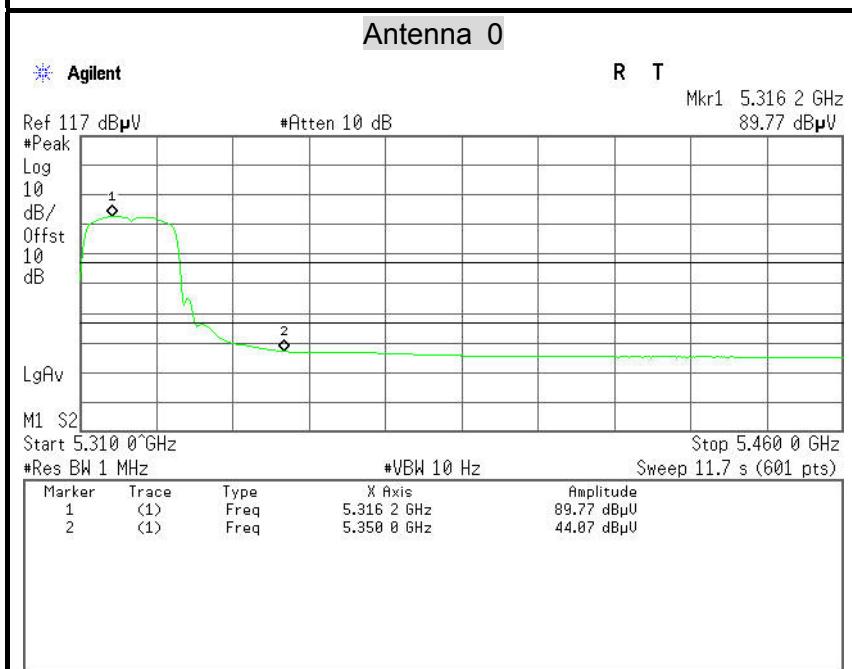
IEEE 802.11n HT 20 MHz SISO mode / 5320 MHz mode

Band Edges (CH High)

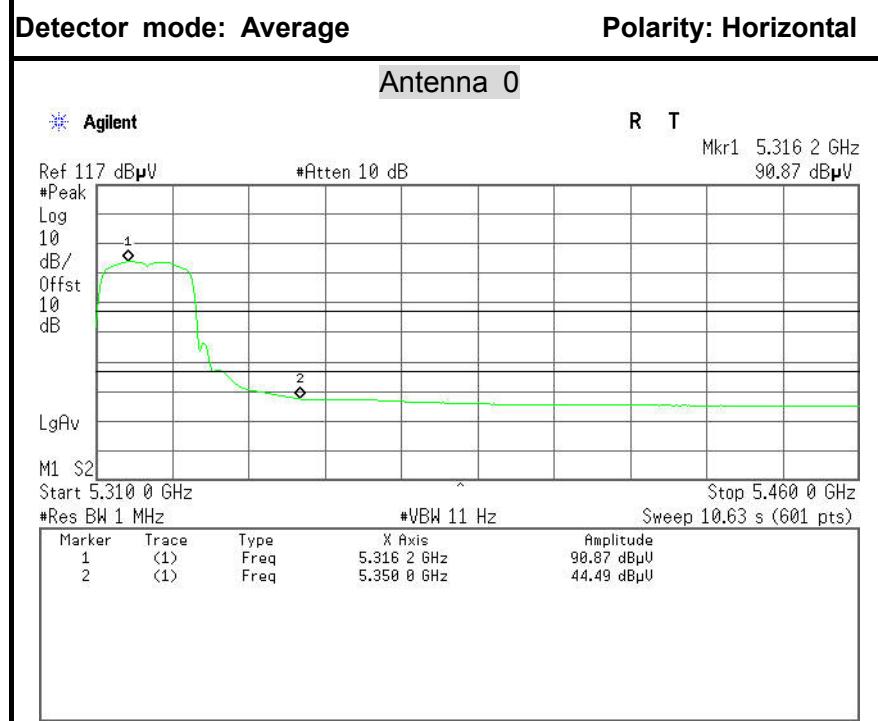
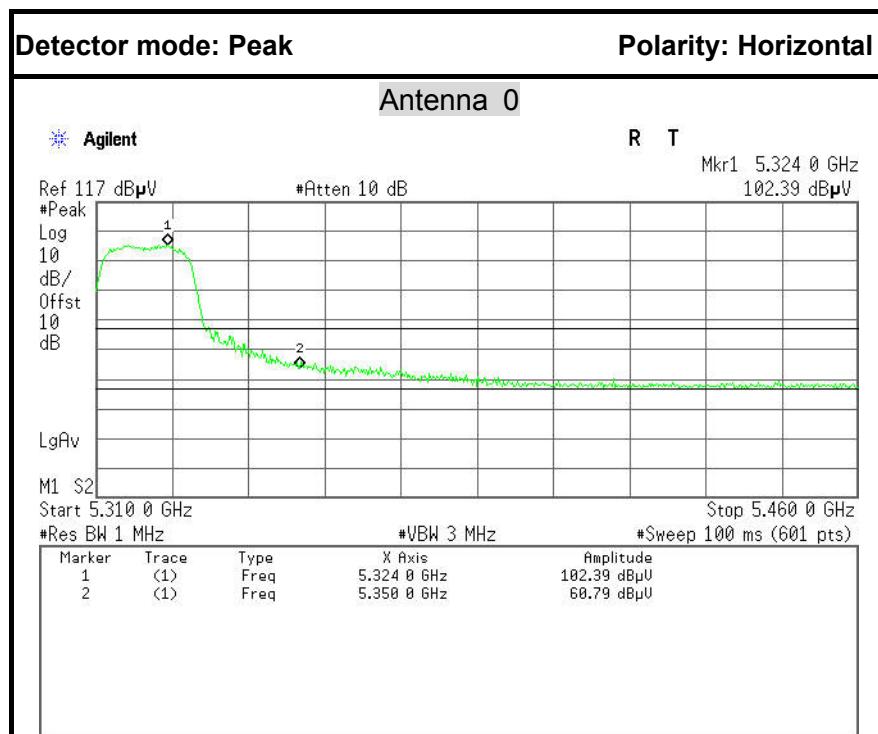
Detector mode: Peak **Polarity: Vertical**



Detector mode: Average **Polarity: Vertical**



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	51.18	-6.24	57.42	74.00	-16.58	Peak	Vertical
2	5350.0000	37.83	-6.24	44.07	54.00	-9.93	Average	Vertical

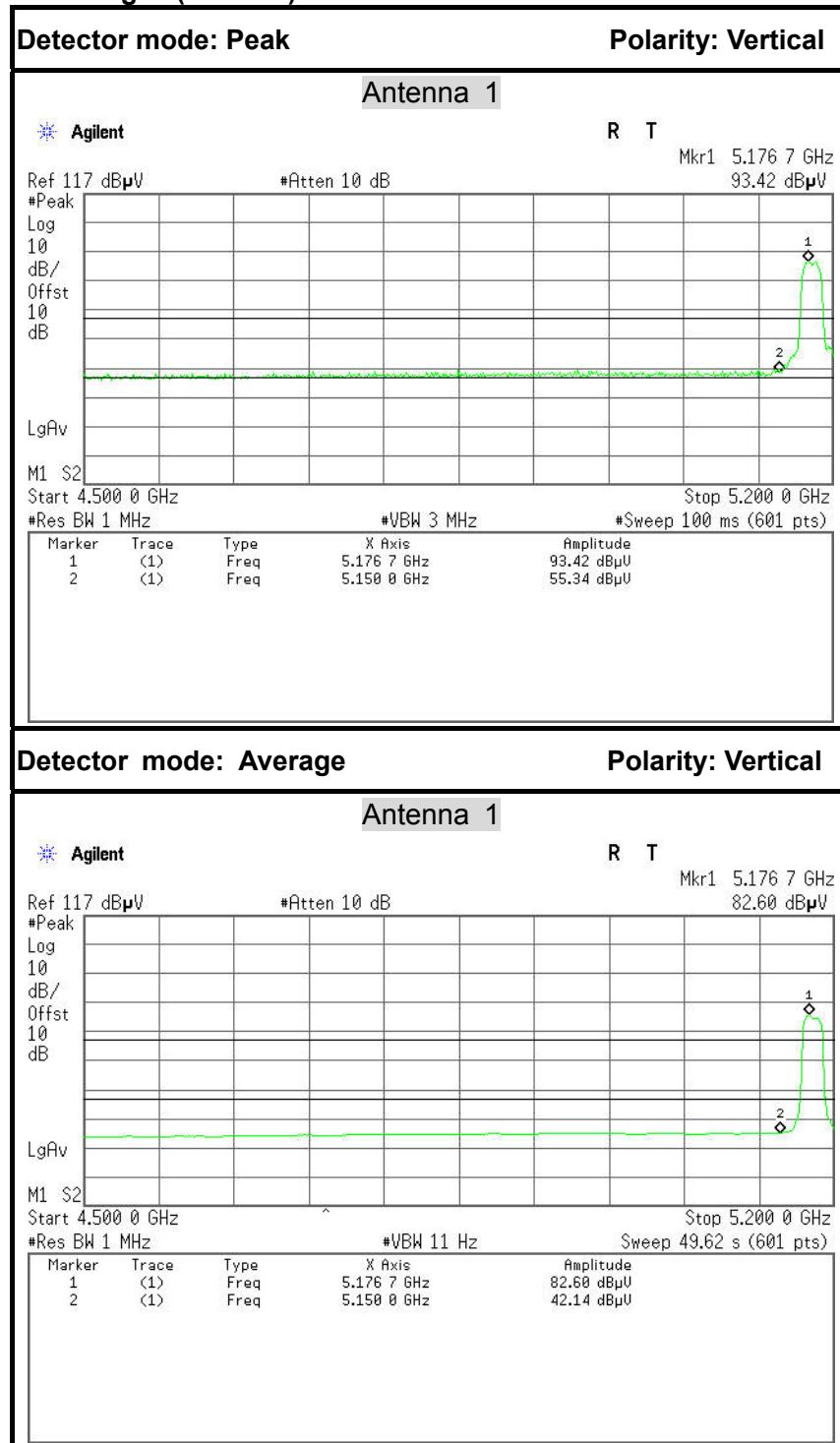


No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	54.55	-6.24	60.79	74.00	-13.21	Peak	Horizontal
2	5350.0000	38.25	-6.24	44.49	54.00	-9.51	Average	Horizontal

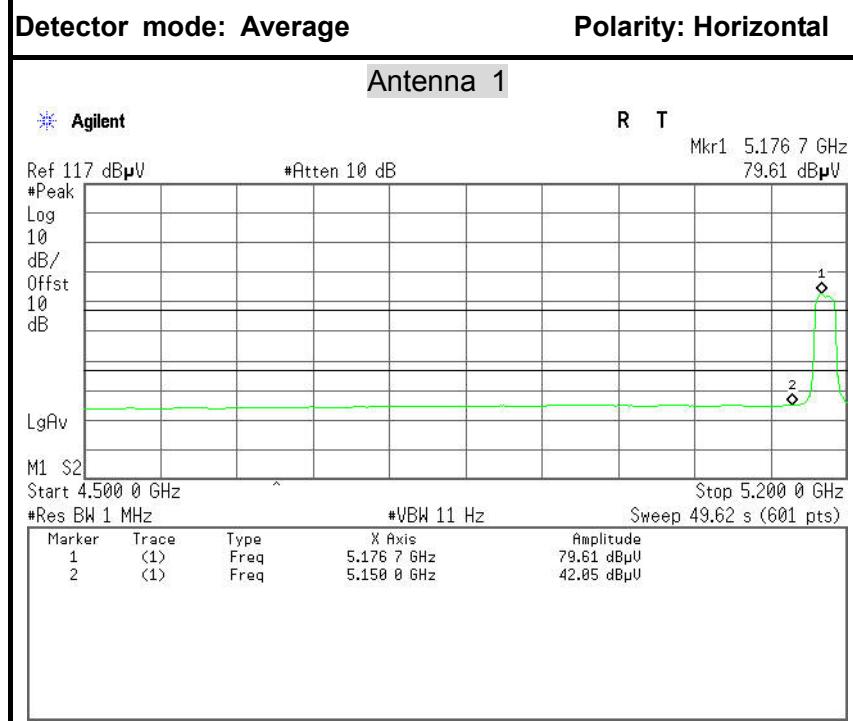
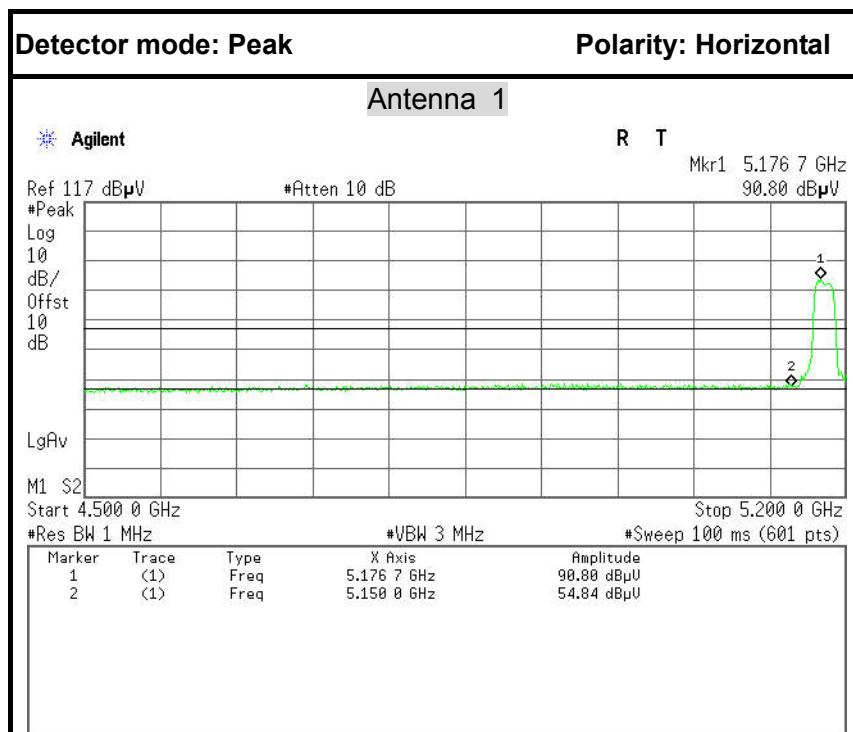


IEEE 802.11n HT 20 MHz SISO mode / 5180 MHz mode

Band Edges (CH Low)



No.	Frequency (MHz)	Reading (dBuV)	Corrected (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	48.74	-6.60	55.34	74.00	-18.66	Peak	Vertical
2	5150.0000	35.54	-6.60	42.14	54.00	-11.86	Average	Vertical



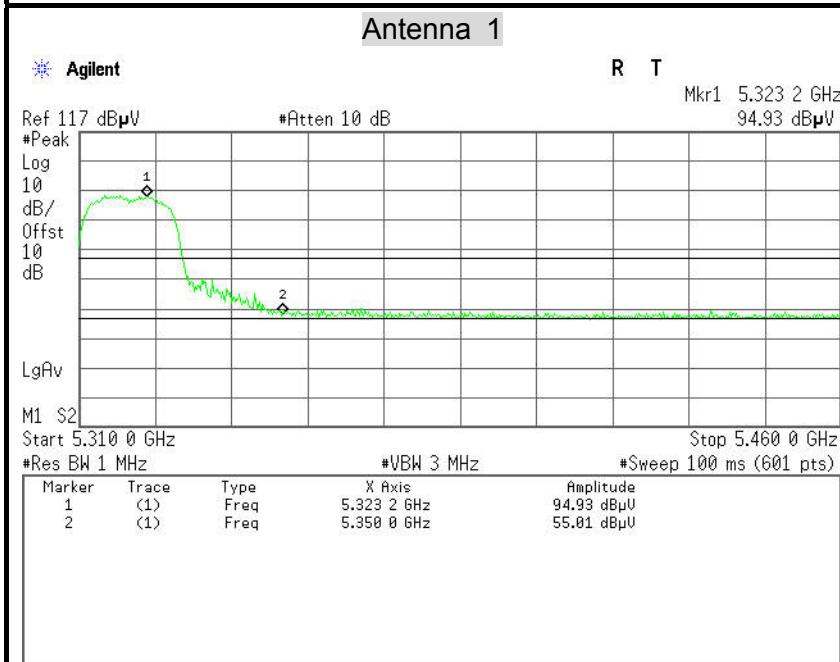
No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5150.0000	48.24	-6.60	54.84	74.00	-19.16	Peak	Horizontal
2	5150.0000	35.45	-6.60	42.05	54.00	-11.95	Average	Horizontal



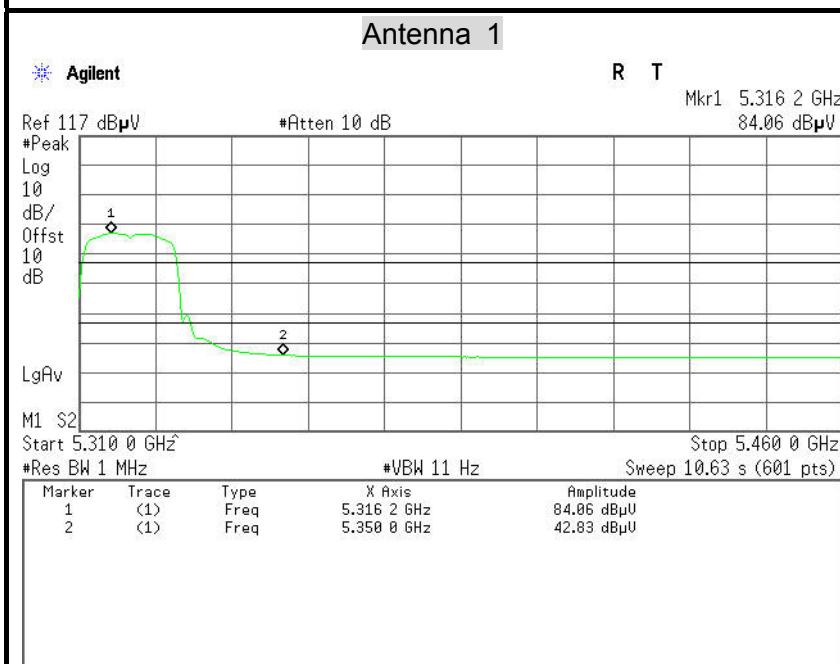
IEEE 802.11n HT 20 MHz SISO mode / 5320 MHz

Band Edges (CH High)

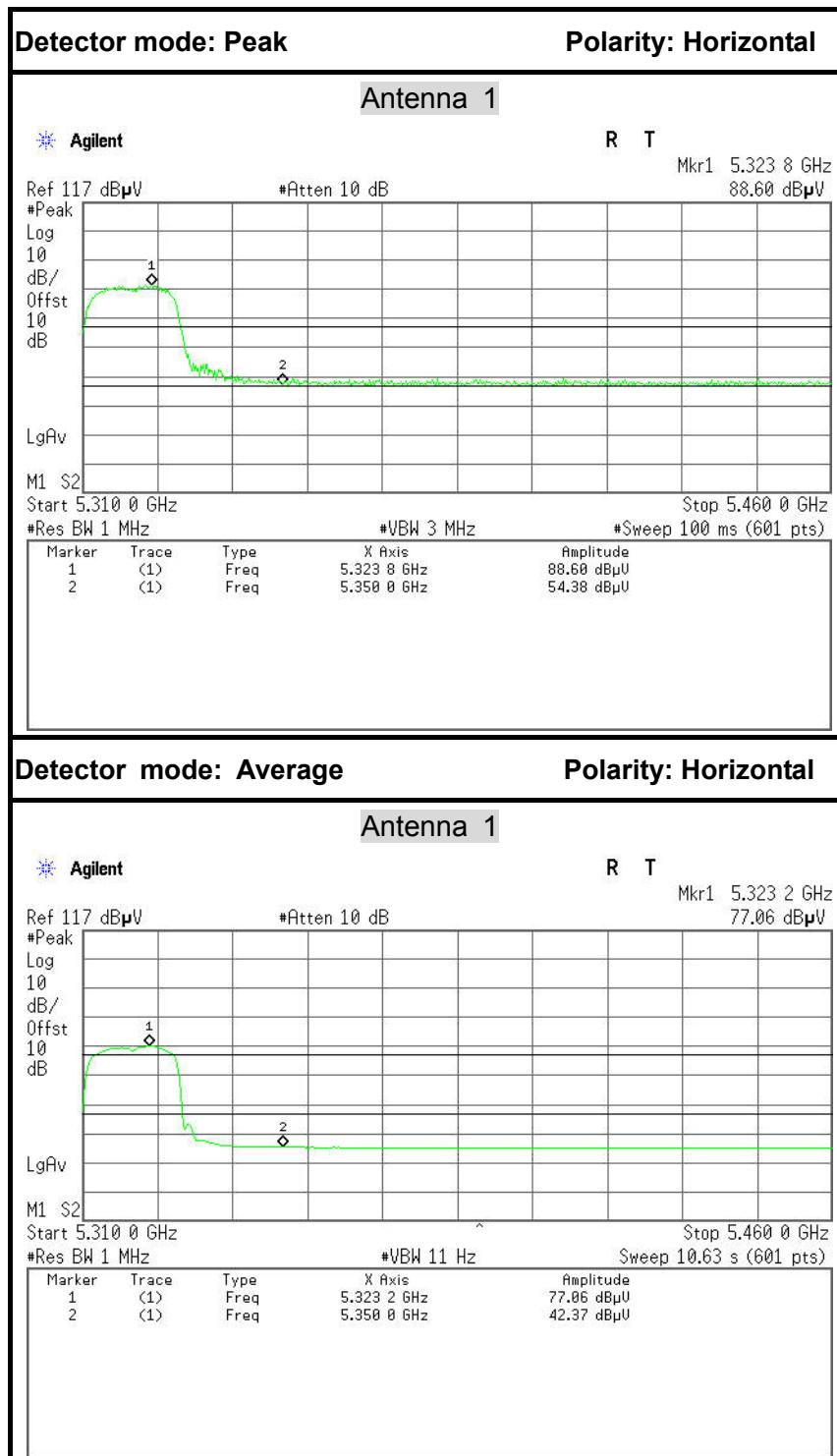
Detector mode: Peak **Polarity: Vertical**



Detector mode: Average **Polarity: Vertical**



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	48.77	-6.24	55.01	74.00	-18.99	Peak	Vertical
2	5350.0000	36.59	-6.24	42.83	54.00	-11.17	Average	Vertical



No.	Frequency (MHz)	Reading (dB μ V)	Corrected (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector	Antenna Pole
1	5350.0000	48.14	-6.24	54.38	74.00	-19.62	Peak	Horizontal
2	5350.0000	36.13	-6.24	42.37	54.00	-11.63	Average	Horizontal



7.5 PEAK POWER SPECTRAL DENSITY

7.5.1 LIMIT

According to §15.407(a)

- (1) For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4dBm in any 1MHz band.
- (2) For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11dBm in any 1MHz band.
- (3) For the band 5.725–5.825 GHz, the peak power spectral density shall not exceed 17 dBm in any 1MHz band.

According to RSS-210 §A9.2,

- (1) For the band 5150-5250 MHz, the e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.
- (2) For the band 5250-5350 MHz and 5470-5725 MHz, the power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
- (3) For the band 5725-5825 MHz, the power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

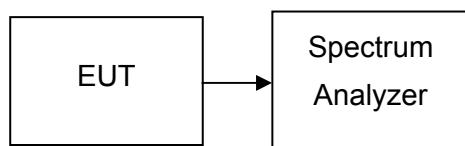
If transmitting antennas of directional gain greater than 6dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

7.5.2 MEASUREMENT EQUIPMENT USED

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	E4446A	US44300399	03/01/2014	03/01/2015

Remark: Each piece of equipment is scheduled for calibration once a year.

7.5.3 TEST CONFIGURATION



7.5.4 TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span = Sweep= AUTO
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed



7.5.5 TEST RESULTS

Test Data

Test mode: IEEE 802.11a mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5180	-2.867	-3.186	4	-6.867	-7.186	PASS
Mid	5220	-2.183	-0.916		-6.183	-4.916	PASS
High	5240	-2.796	-1.226		-6.796	-5.226	PASS

Test mode: IEEE 802.11a mode / 5260 ~ 5320MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5260	-1.262	-3.187	11	-12.262	-14.187	PASS
Mid	5280	-3.153	-1.851		-14.153	-12.851	PASS
High	5320	-2.278	-2.227		-13.278	-13.227	PASS

Test mode: IEEE 802.11a mode / 5500 ~ 5700MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5500	-1.885	-1.313	11	-12.885	-12.313	PASS
Mid	5580	-1.651	-0.992		-12.651	-11.992	PASS
High	5700	-3.370	-2.736		-14.370	-13.736	PASS

Test mode: IEEE 802.11a mode / 5745 ~ 5805MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5745	-3.982	-2.537	17	-20.982	-19.537	PASS
Mid	5785	-3.097	-1.963		-20.097	-18.963	PASS
High	5805	-4.141	-4.604		-21.141	-21.604	PASS



Test mode: IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	PPSD (dBm)		Total (dBm)	Limit (dBm)	Margin	Result
		Antenna 0	Antenna 1				
Low	5180	-3.201	-2.878	-0.026	4	-4.026	PASS
Mid	5220	-2.151	-2.729	0.580		-3.420	PASS
High	5240	-2.195	-2.585	0.625		-3.375	PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz

Channel	Frequency (MHz)	PPSD (dBm)		Total (dBm)	Limit (dBm)	Margin	Result
		Antenna 0	Antenna 1				
Low	5260	-3.585	-1.018	0.896	11	-10.104	PASS
Mid	5280	-2.085	-0.768	1.634		-9.366	PASS
High	5320	-2.732	-3.278	0.014		-10.986	PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz

Channel	Frequency (MHz)	PPSD (dBm)		Total (dBm)	Limit (dBm)	Margin	Result
		Antenna 0	Antenna 1				
Low	5500	-2.398	-1.528	1.069	11	-9.931	PASS
Mid	5580	-1.683	-1.335	1.505		-9.495	PASS
High	5700	-5.069	-2.943	-0.867		-11.867	PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5745 ~ 5805MHz

Channel	Frequency (MHz)	PPSD (dBm)		Total (dBm)	Limit (dBm)	Margin	Result
		Antenna 0	Antenna 1				
Low	5745	-4.503	-3.222	-0.805	17	-17.805	PASS
Mid	5785	-4.414	-3.676	-1.019		-18.019	PASS
High	5805	-3.803	-3.512	-0.645		-17.645	PASS



Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5180	-3.924	-7.347	4	-7.924	-11.347	PASS
Mid	5220	5.159	-3.652		1.159	-7.652	PASS
High	5240	-5.837	-5.173		-9.837	-9.173	PASS

Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5260 ~ 5320MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5260	-2.753	-6.935	11	-13.753	-17.935	PASS
Mid	5280	-3.303	-5.546		-14.303	-16.546	PASS
High	5320	-5.058	-6.715		-16.058	-17.715	PASS

Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5500 ~ 5700MHz

Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5500	-3.067	-4.759	11	-14.067	-15.759	PASS
Mid	5580	-3.269	-7.119		-14.269	-18.119	PASS
High	5700	-5.034	-6.203		-16.034	-17.203	PASS

Test mode: IEEE 802.11n HT 20 MHz SISO mode / 5745 ~ 5805MHz

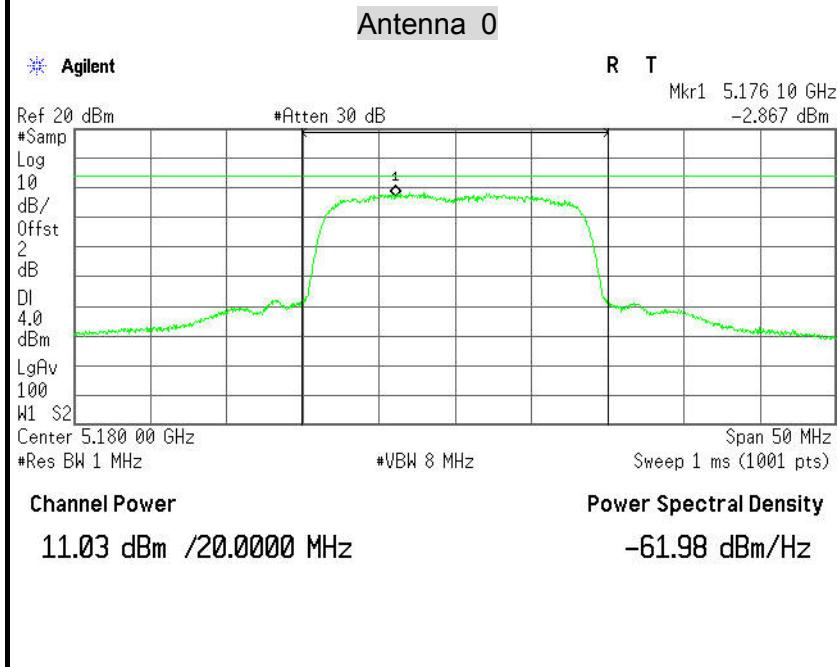
Channel	Frequency (MHz)	PPSD (dBm)		Limit (dBm)	Margin		Result
		Antenna 0	Antenna 1		Antenna 0	Antenna 1	
Low	5745	-8.793	-6.727	17	-25.793	-23.727	PASS
Mid	5785	-6.301	-5.007		-23.301	-22.007	PASS
High	5805	8.999	-7.322		-8.001	-24.322	PASS



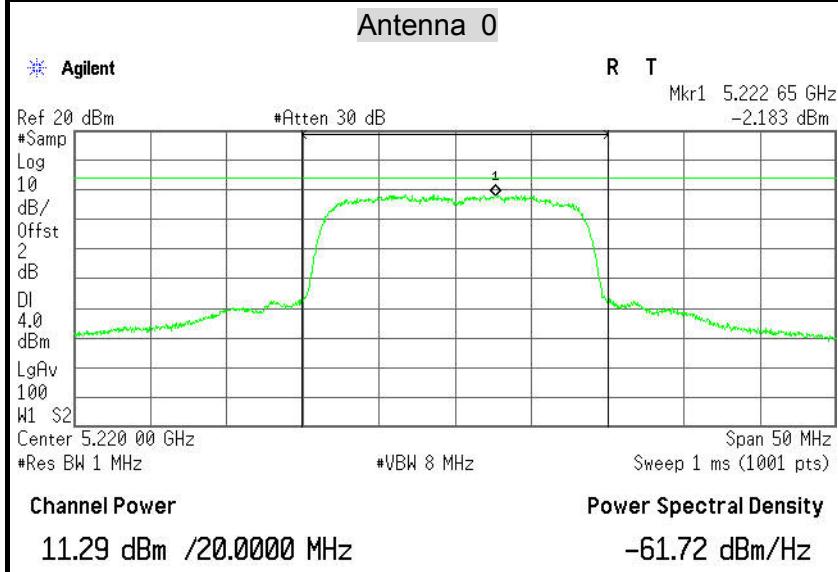
Test Plot

IEEE 802.11a mode / 5180 ~ 5240MHz

PPSD (CH Low)

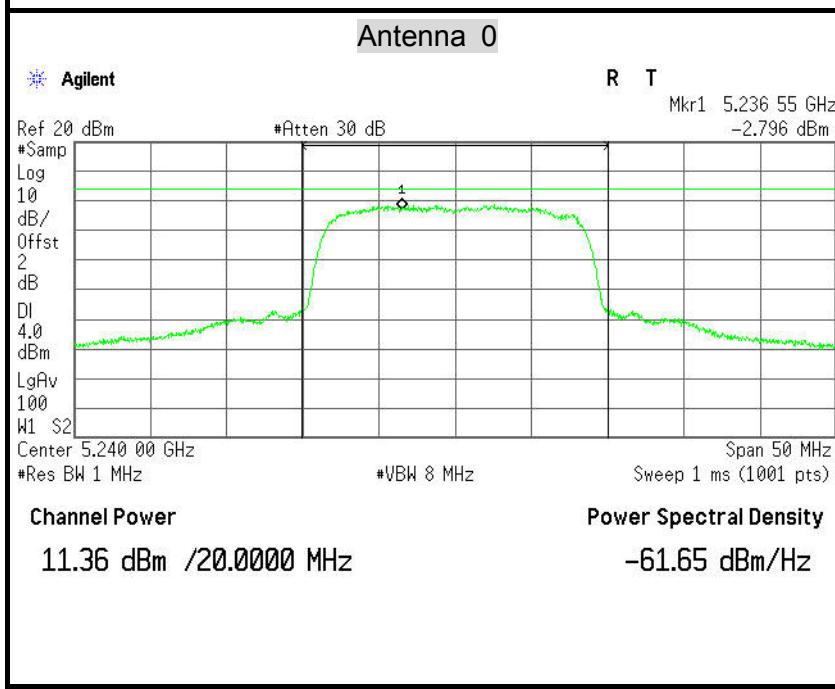


PPSD (CH Mid)



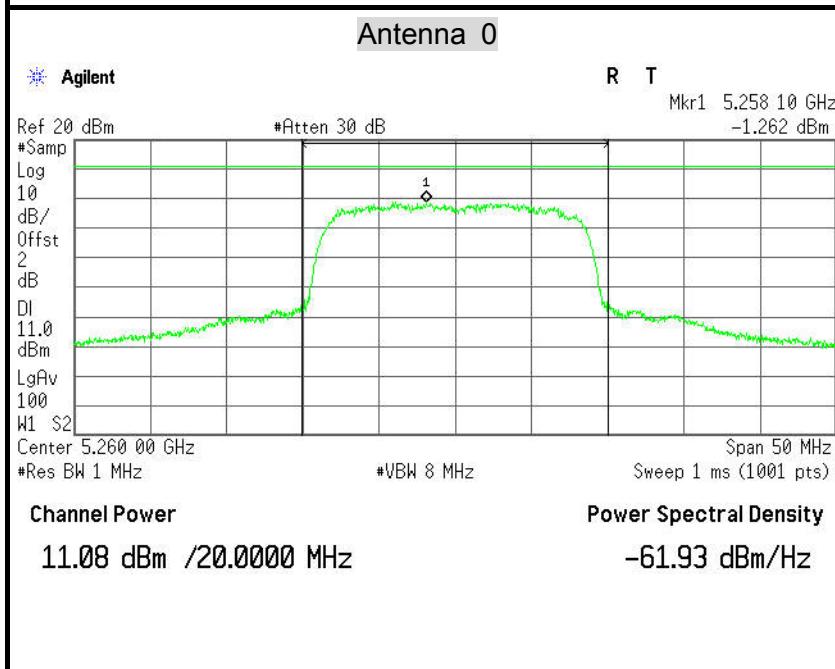


PPSD (CH High)



IEEE 802.11a mode / 5260 ~ 5320MHz

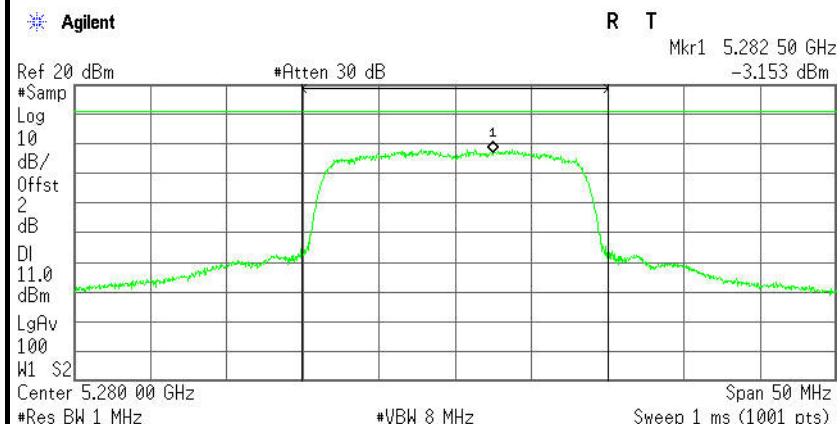
PPSD (CH Low)





PPSD (CH Mid)

Antenna 0



Channel Power

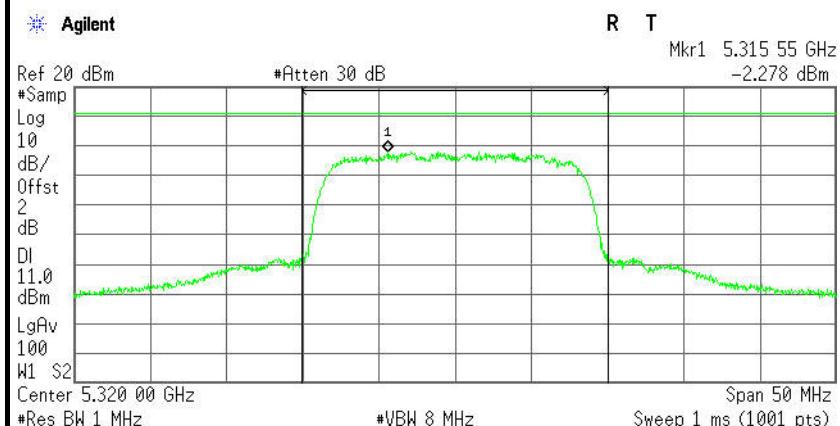
10.75 dBm /20.0000 MHz

Power Spectral Density

-62.26 dBm/Hz

PPSD (CH High)

Antenna 0



Channel Power

10.83 dBm /20.0000 MHz

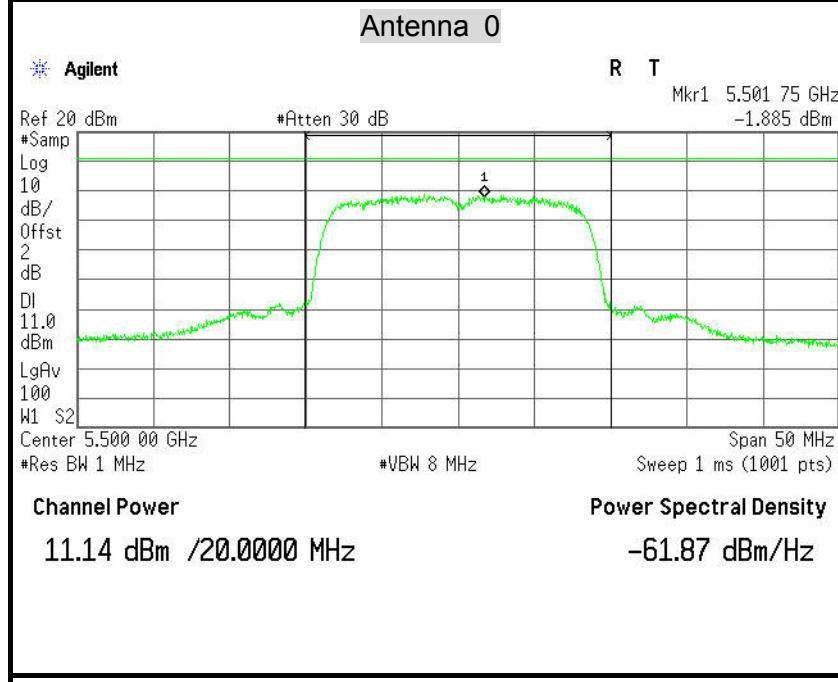
Power Spectral Density

-62.18 dBm/Hz

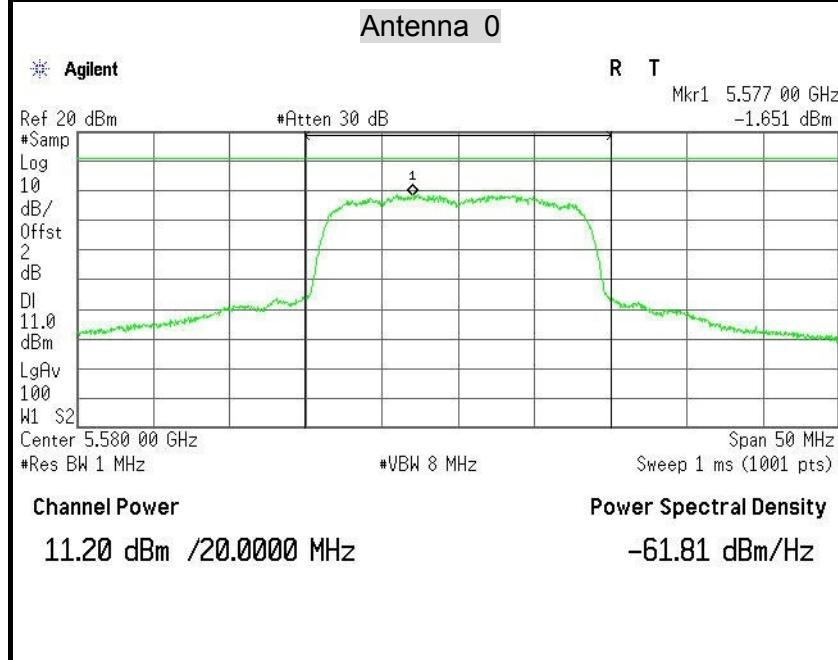


IEEE 802.11a mode / 5500 ~ 5700MHz

PPSD (CH Low)

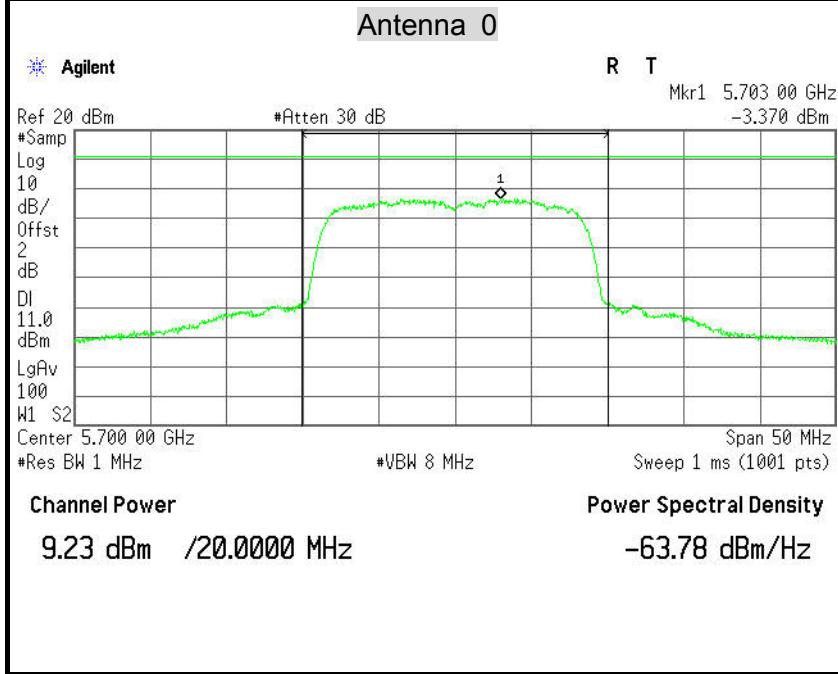


PPSD (CH Mid)



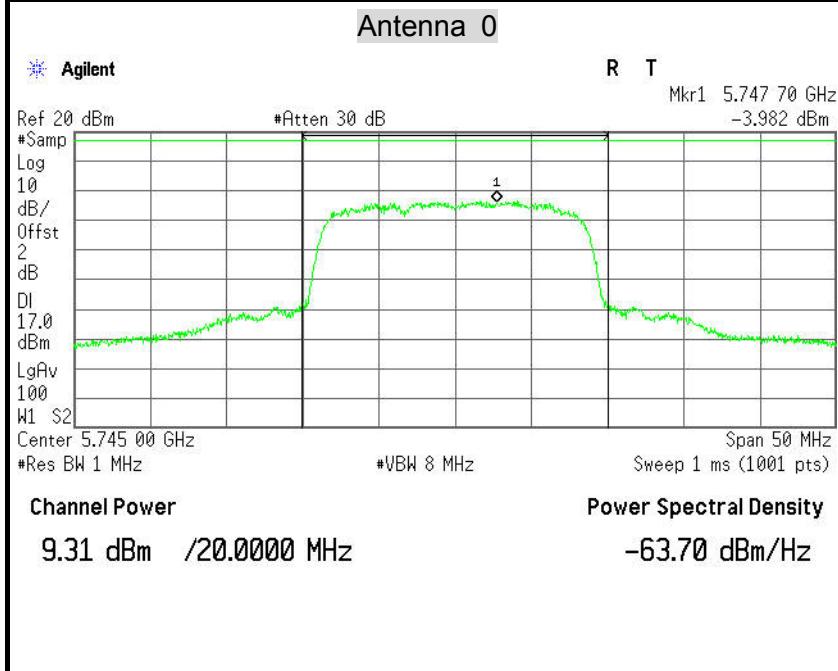


PPSD (CH High)



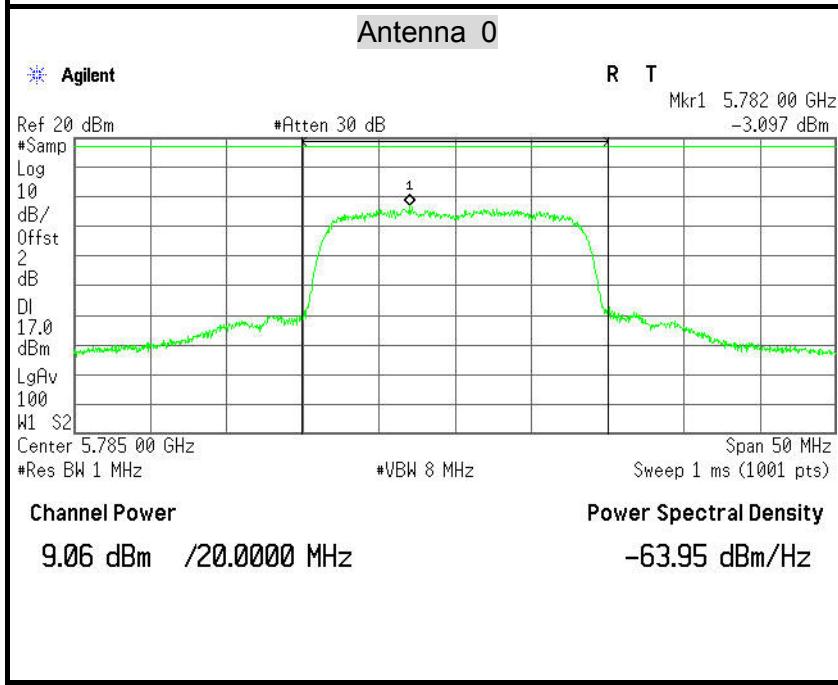
IEEE 802.11a mode / 5745 ~ 5805MHz

PPSD (CH Low)

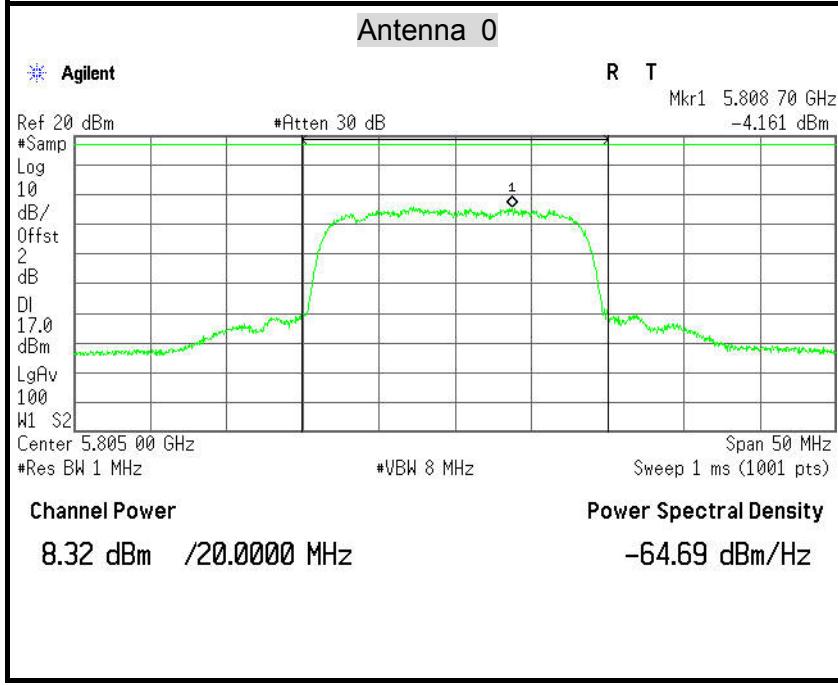




PPSD (CH Mid)



PPSD (CH High)

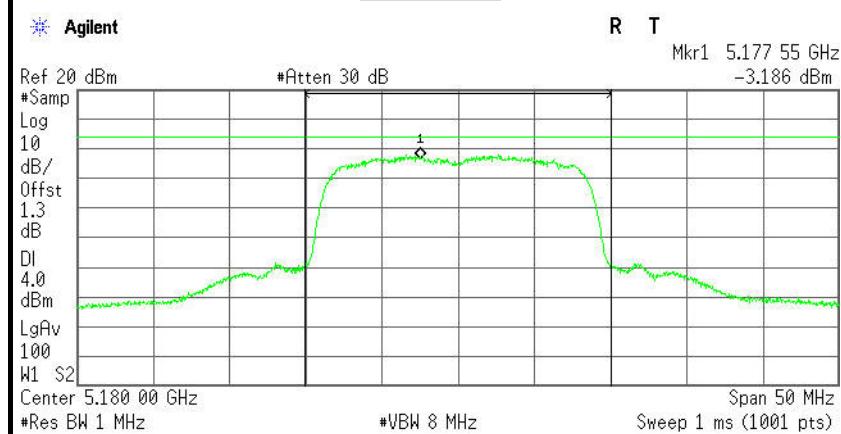




IEEE 802.11a mode / 5180 ~ 5240MHz

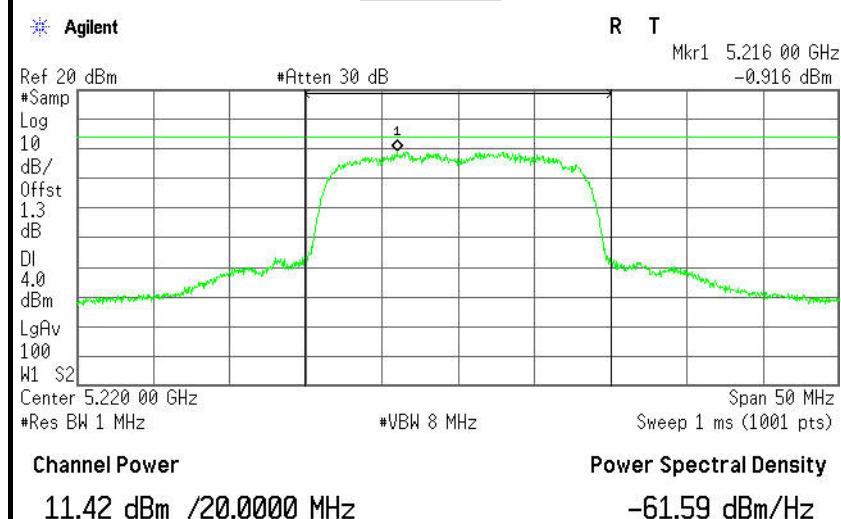
PPSD (CH Low)

Antenna 1



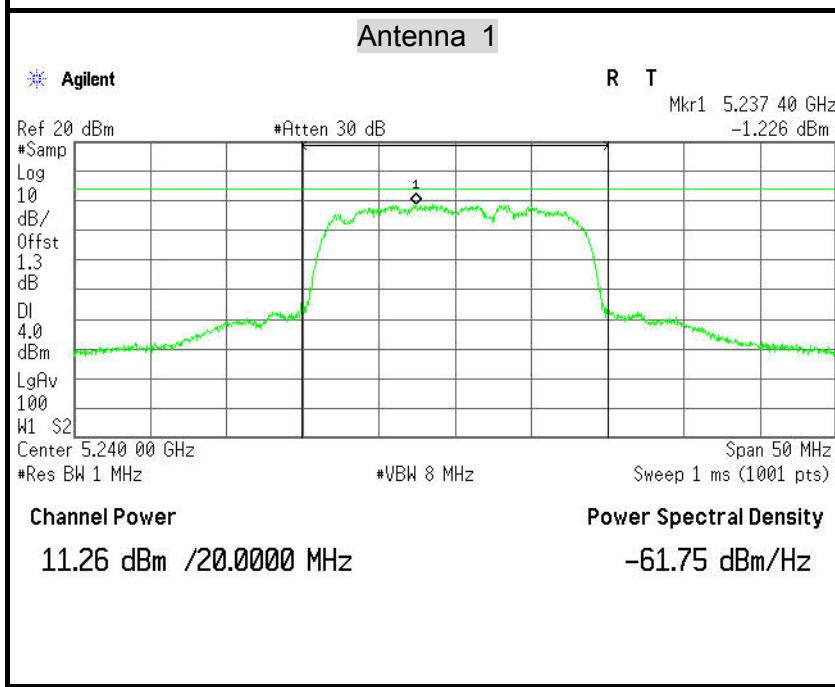
PPSD (CH Mid)

Antenna 1



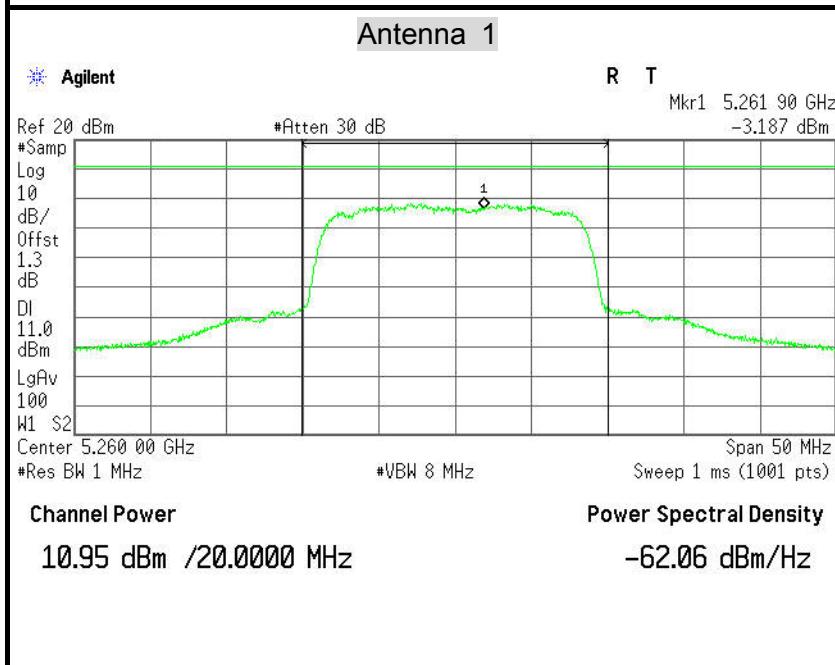


PPSD (CH High)



IEEE 802.11a mode / 5260 ~ 5320MHz

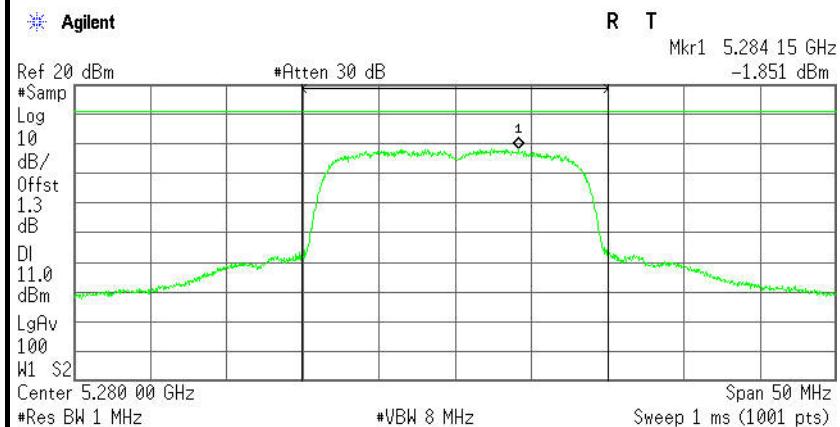
PPSD (CH Low)





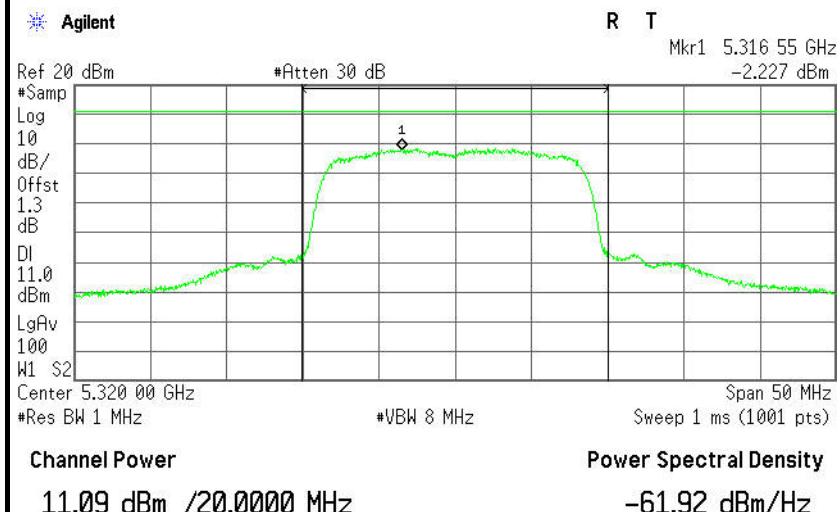
PPSD (CH Mid)

Antenna 1



PPSD (CH High)

Antenna 1

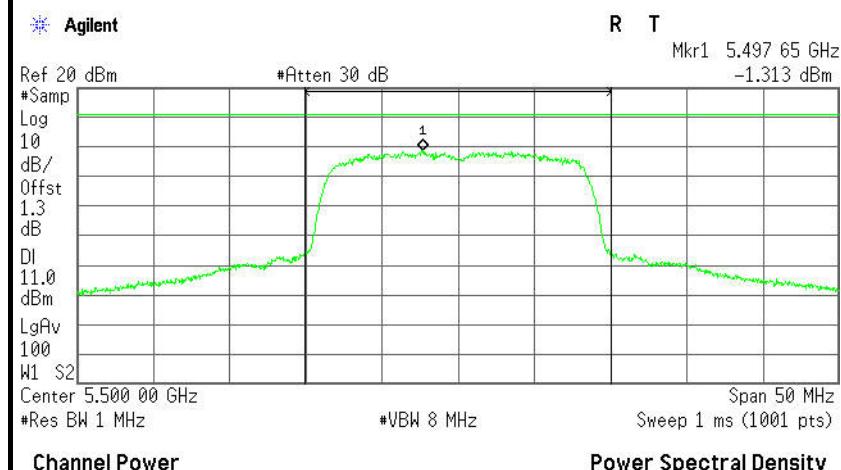




IEEE 802.11a mode / 5500 ~ 5700MHz

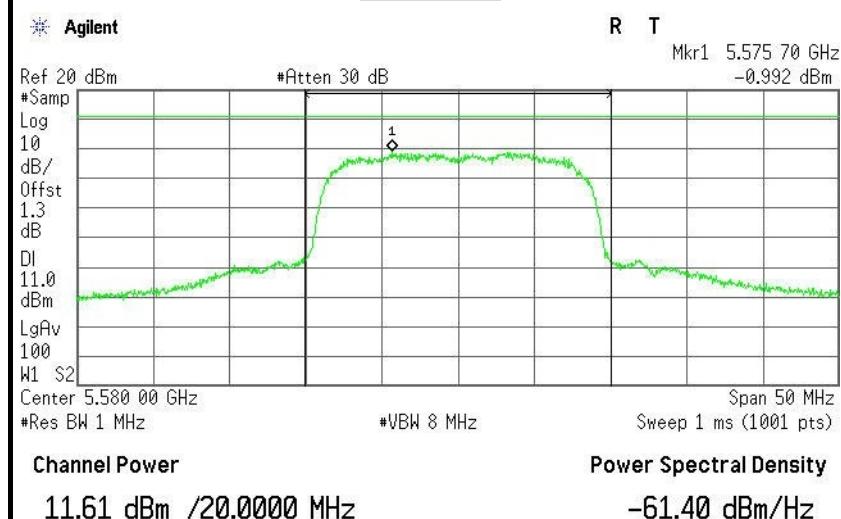
PPSD (CH Low)

Antenna 1



PPSD (CH Mid)

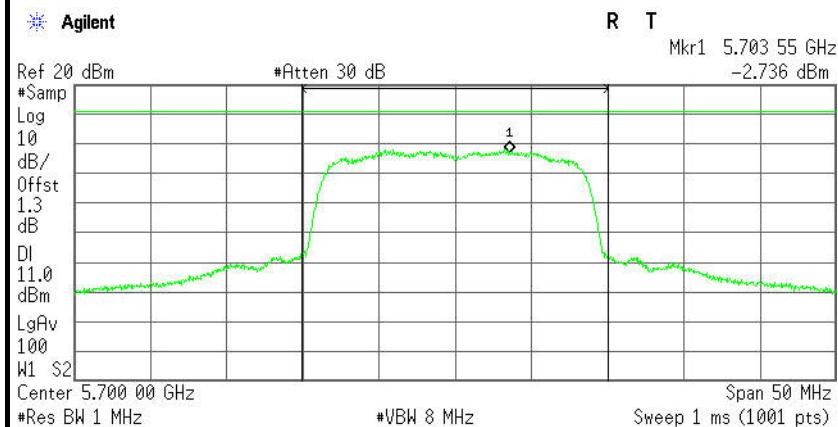
Antenna 1





PPSD (CH High)

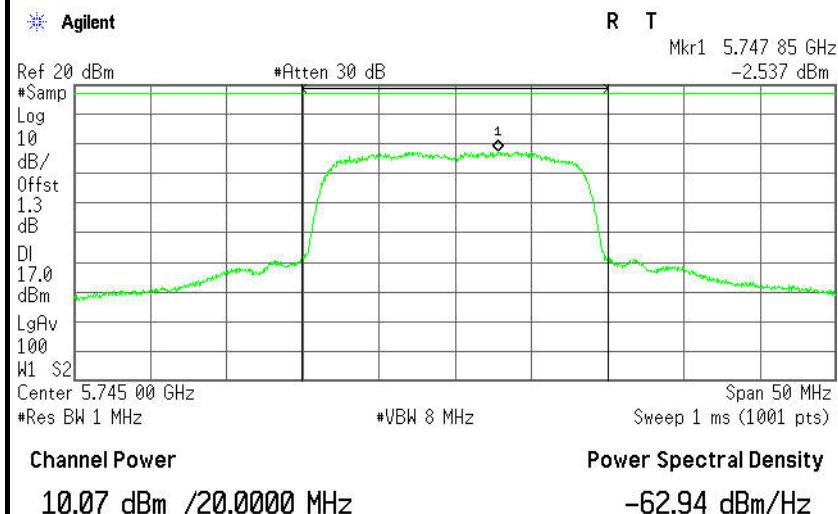
Antenna 1



IEEE 802.11a mode / 5745 ~ 5805MHz

PPSD (CH Low)

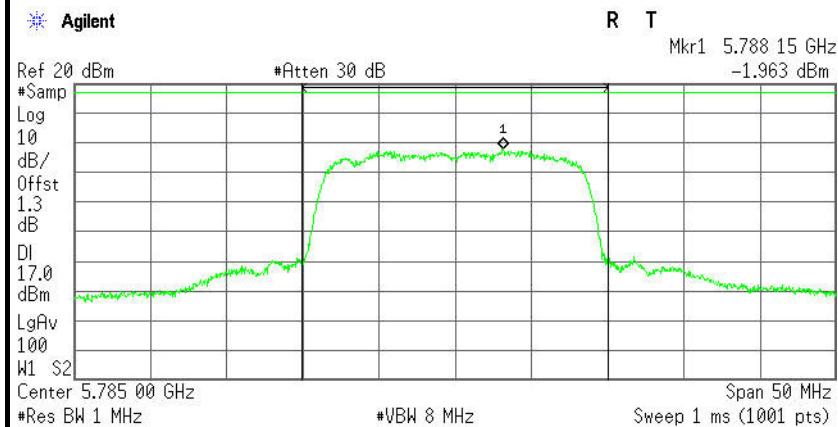
Antenna 1





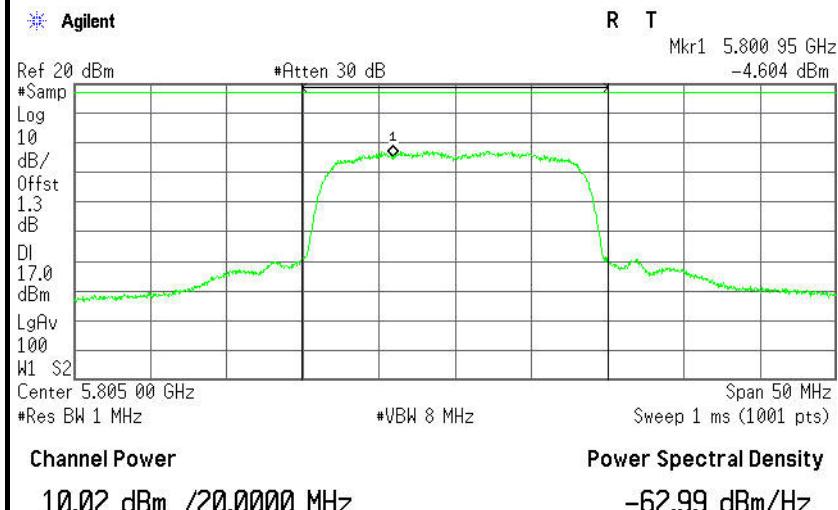
PPSD (CH Mid)

Antenna 1



PPSD (CH High)

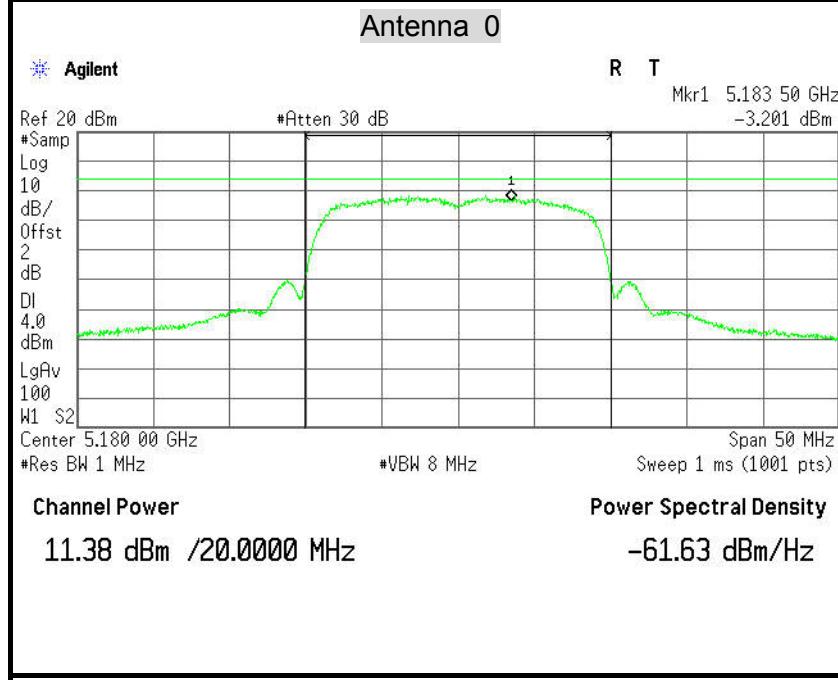
Antenna 1



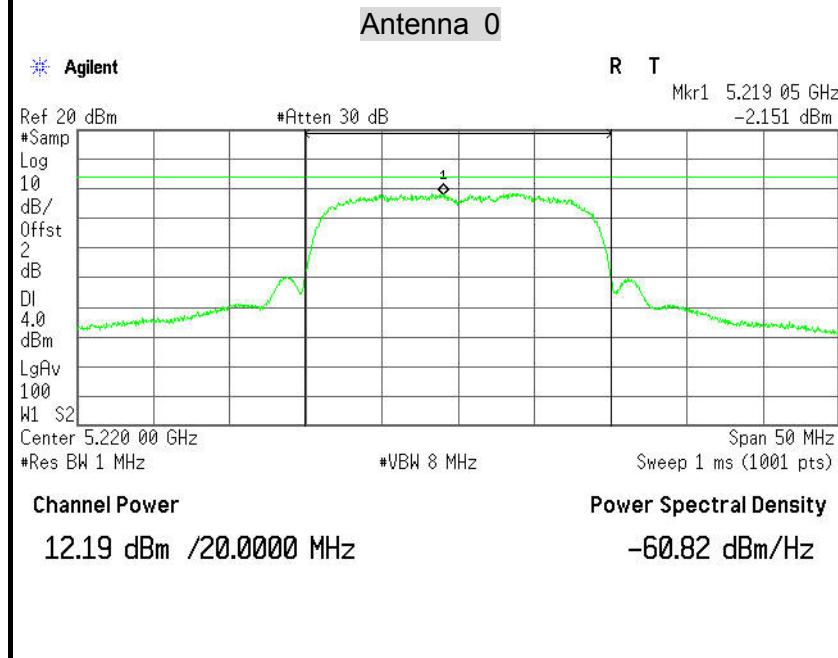


IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

PPSD (CH Low)

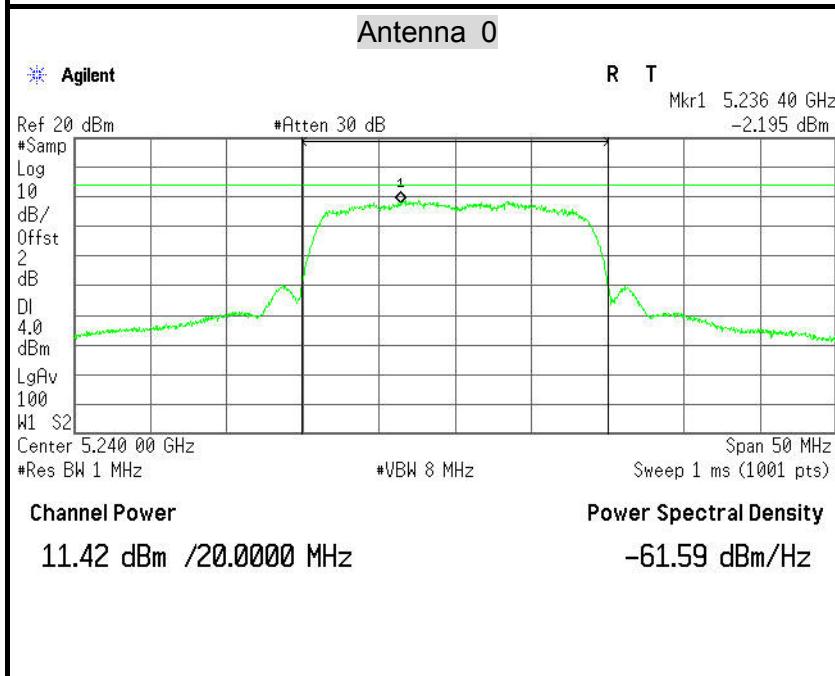


PPSD (CH Mid)



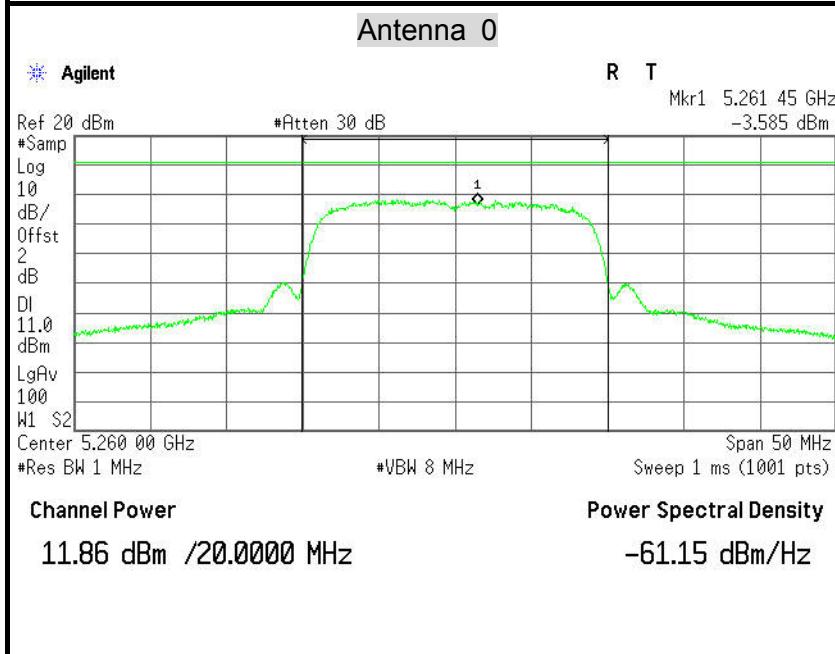


PPSD (CH High)



IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz

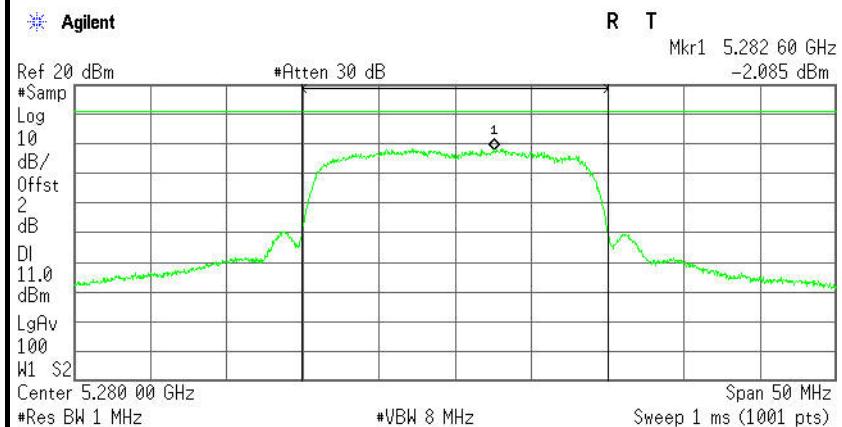
PPSD (CH Low)





PPSD (CH Mid)

Antenna 0



Channel Power

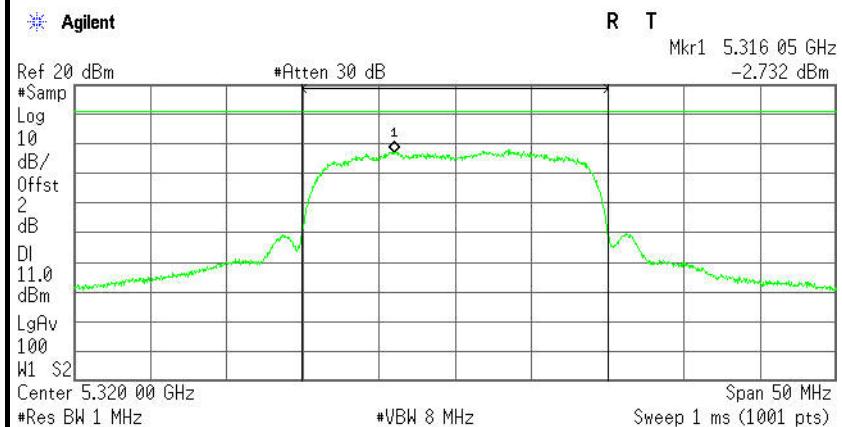
11.60 dBm /20.0000 MHz

Power Spectral Density

-61.41 dBm/Hz

PPSD (CH High)

Antenna 0



Channel Power

11.17 dBm /20.0000 MHz

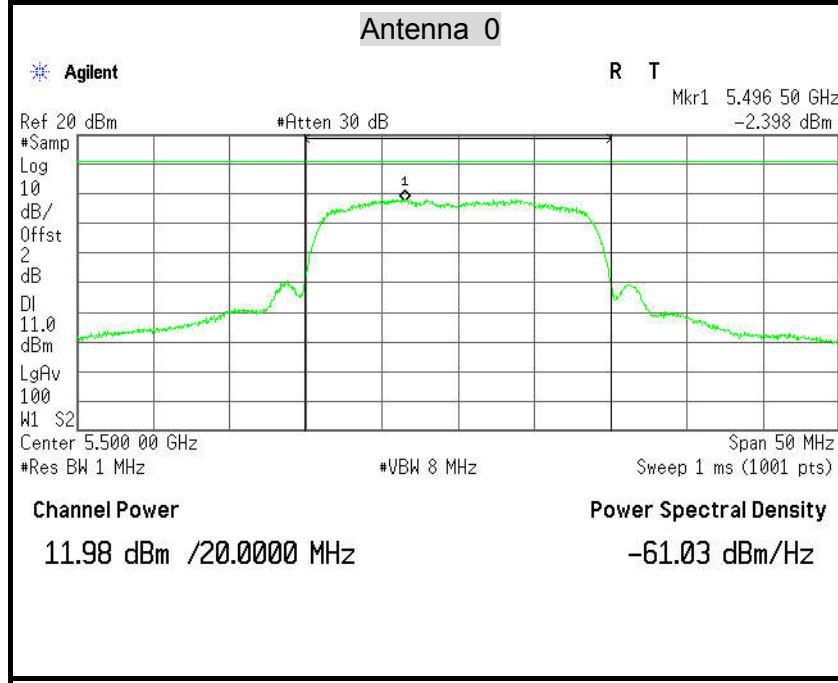
Power Spectral Density

-61.84 dBm/Hz

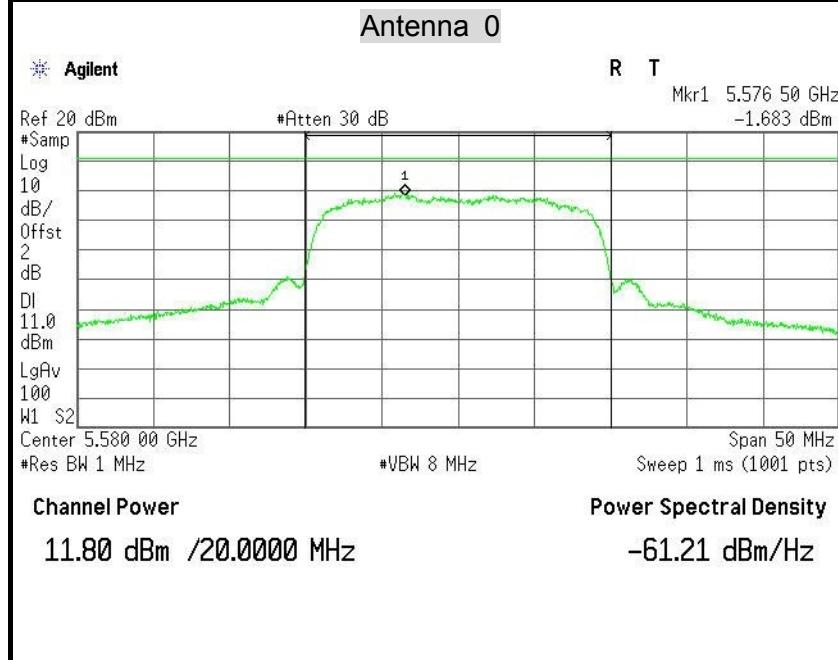


IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz

PPSD (CH Low)



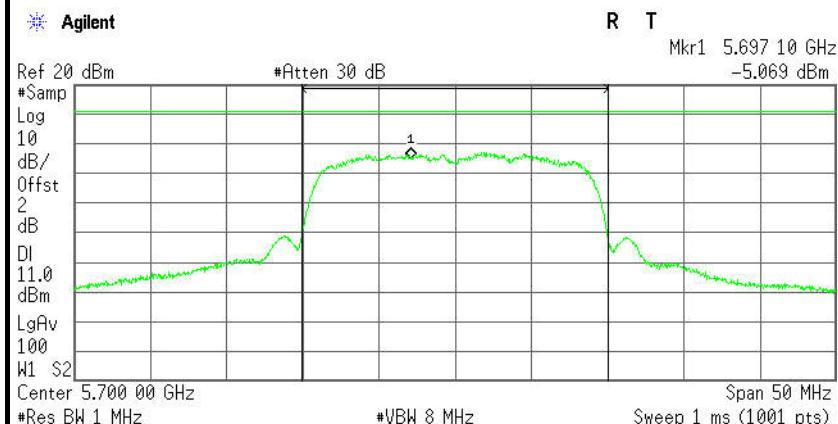
PPSD (CH Mid)





PPSD (CH High)

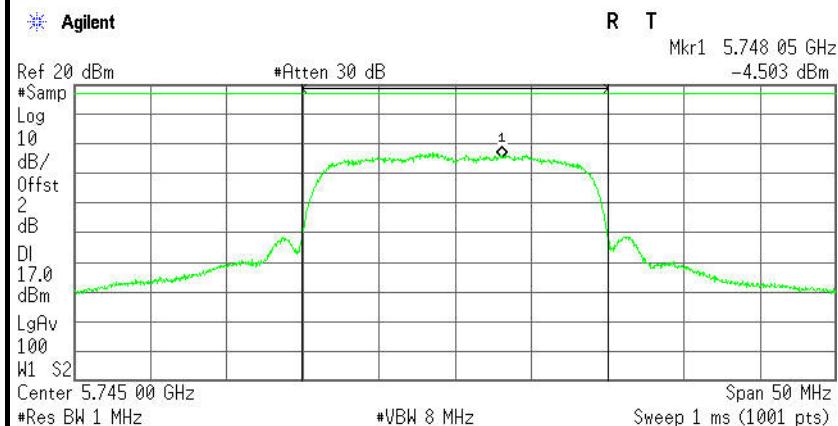
Antenna 0



IEEE 802.11n HT 20 MHz mode / 5745 ~ 5805MHz

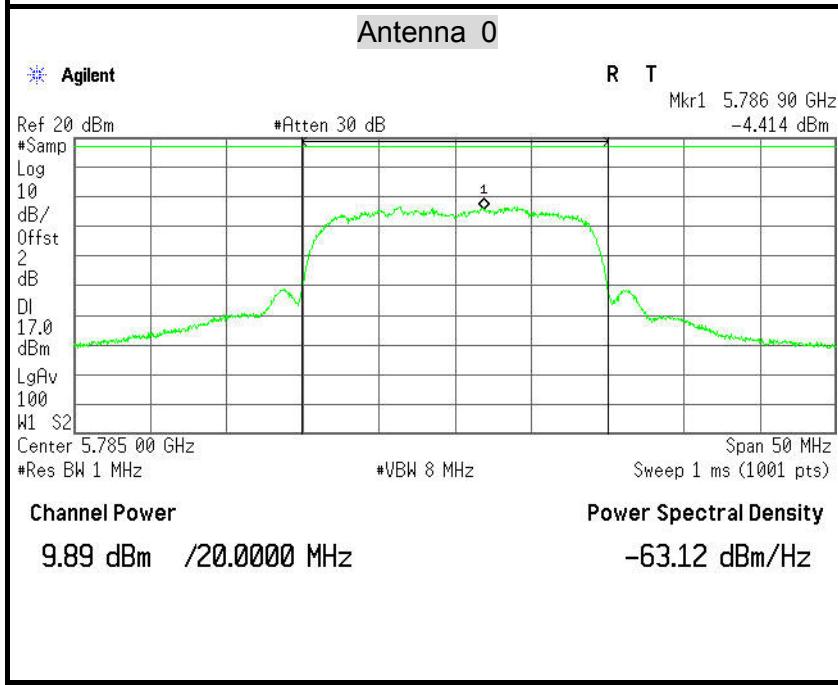
PPSD (CH Low)

Antenna 0

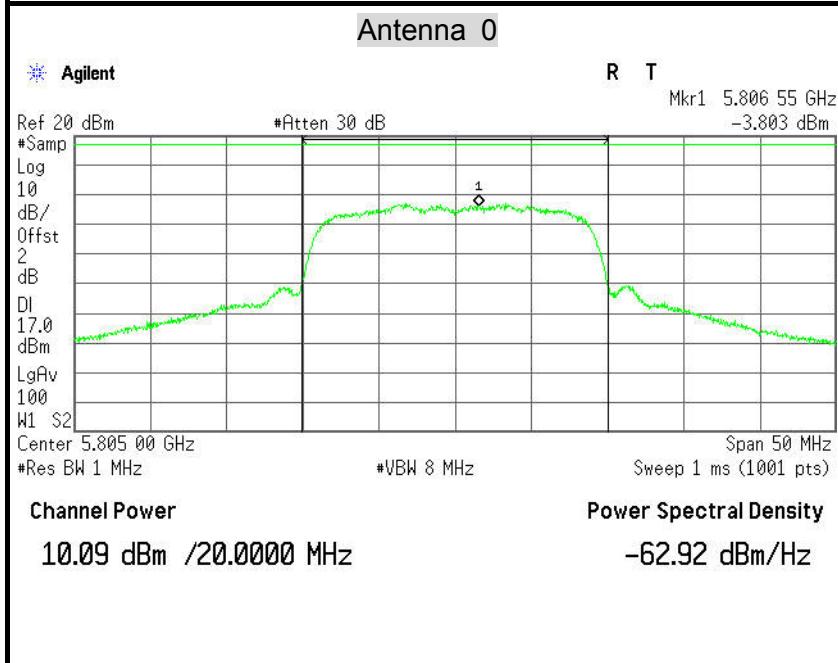




PPSD (CH Mid)



PPSD (CH High)

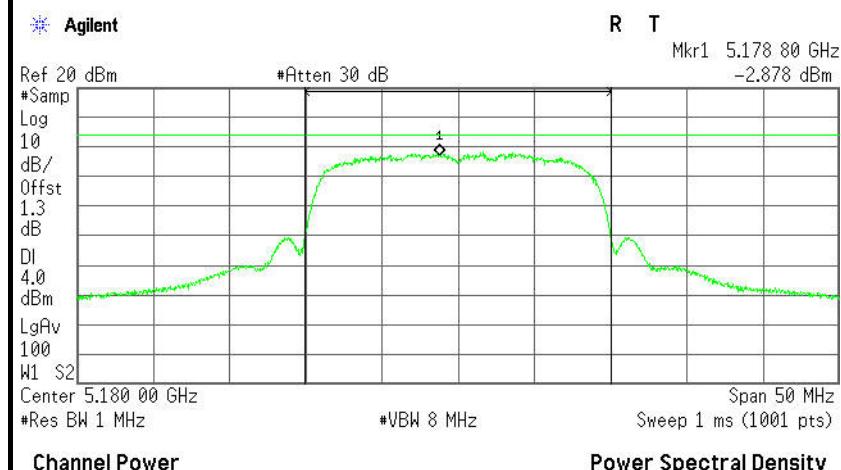




IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

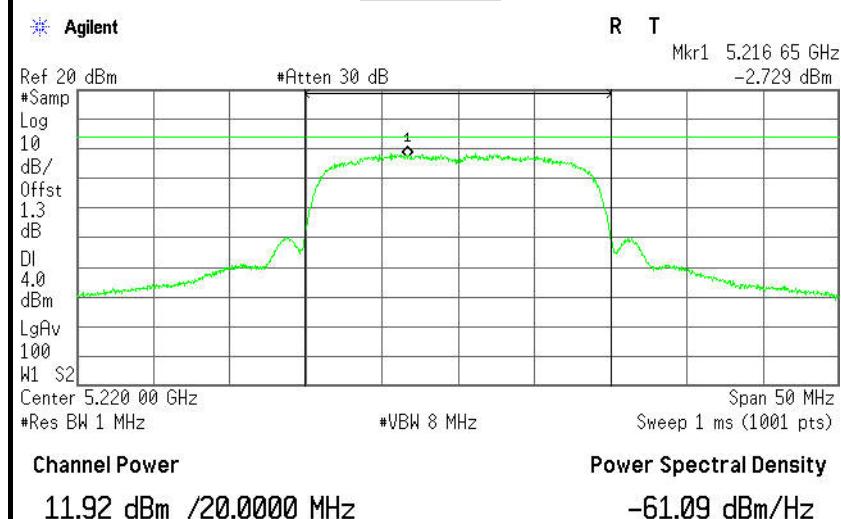
PPSD (CH Low)

Antenna 1



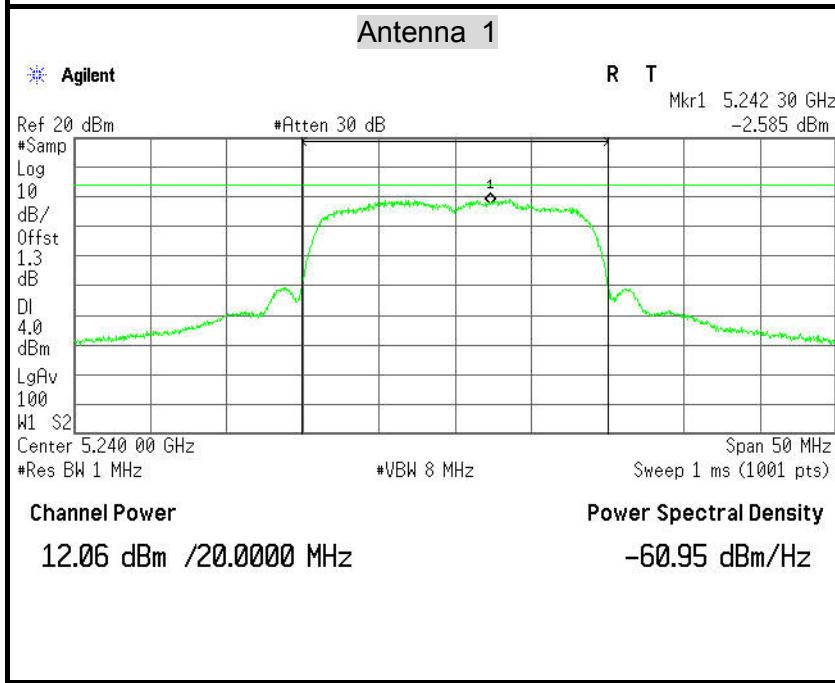
PPSD (CH Mid)

Antenna 1



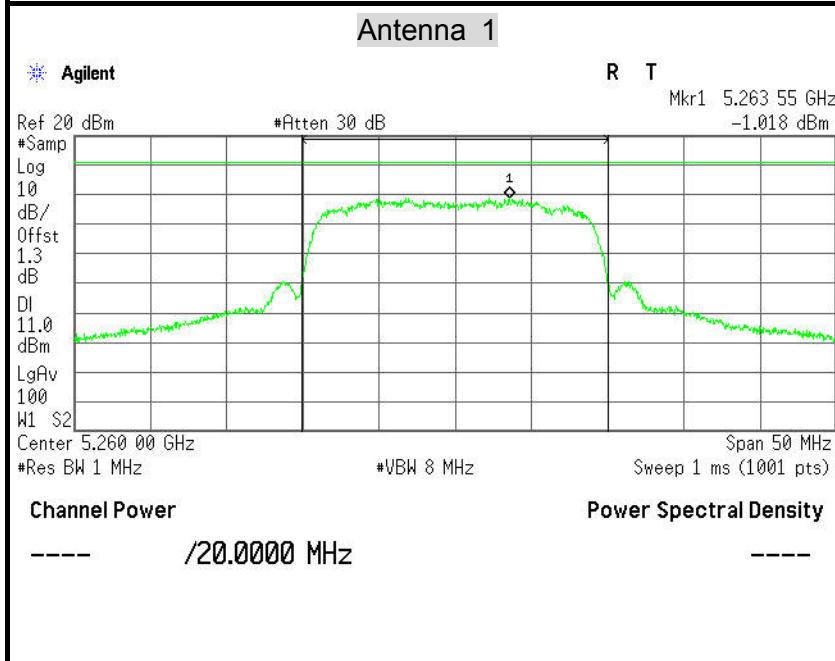


PPSD (CH High)



IEEE 802.11n HT 20 MHz mode / 5260 ~ 5320MHz

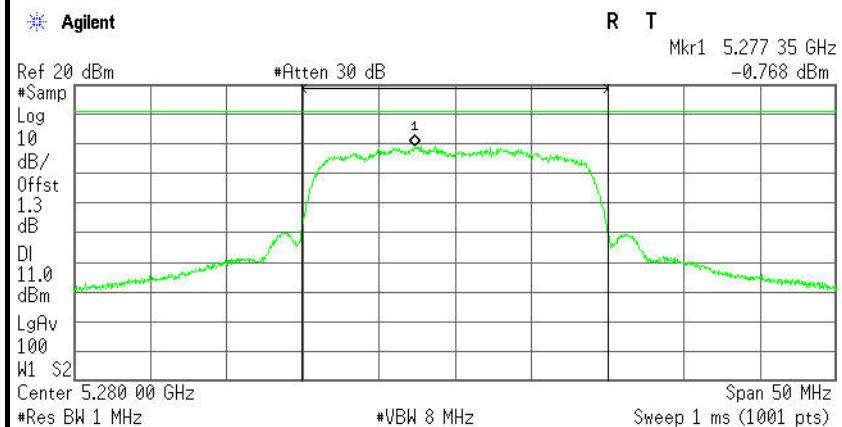
PPSD (CH Low)





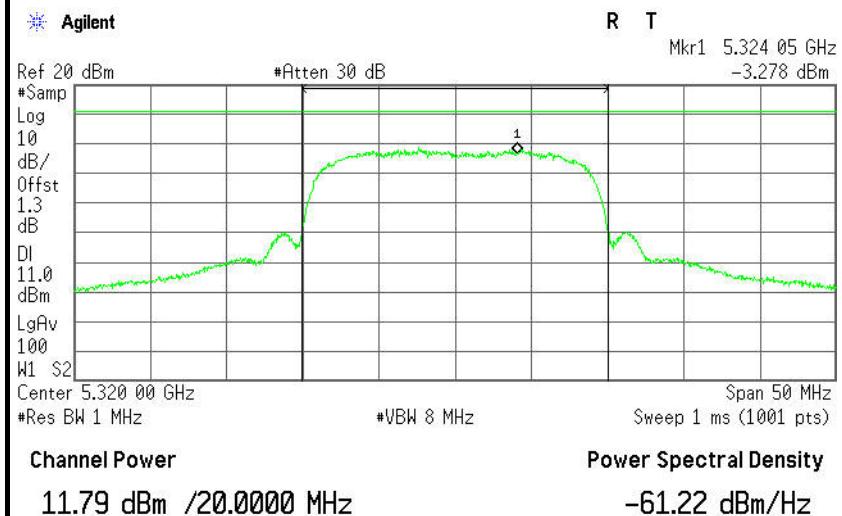
PPSD (CH Mid)

Antenna 1



PPSD (CH High)

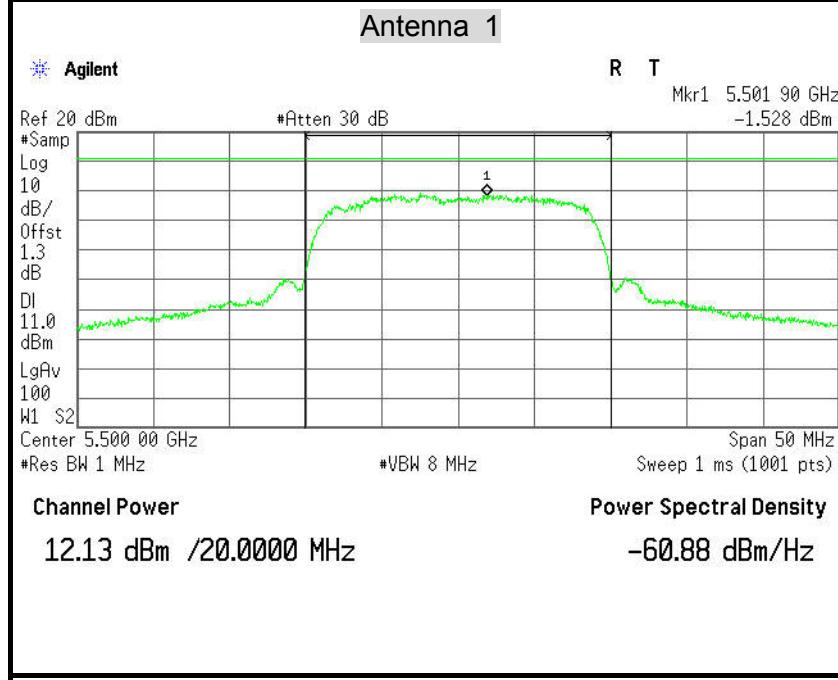
Antenna 1



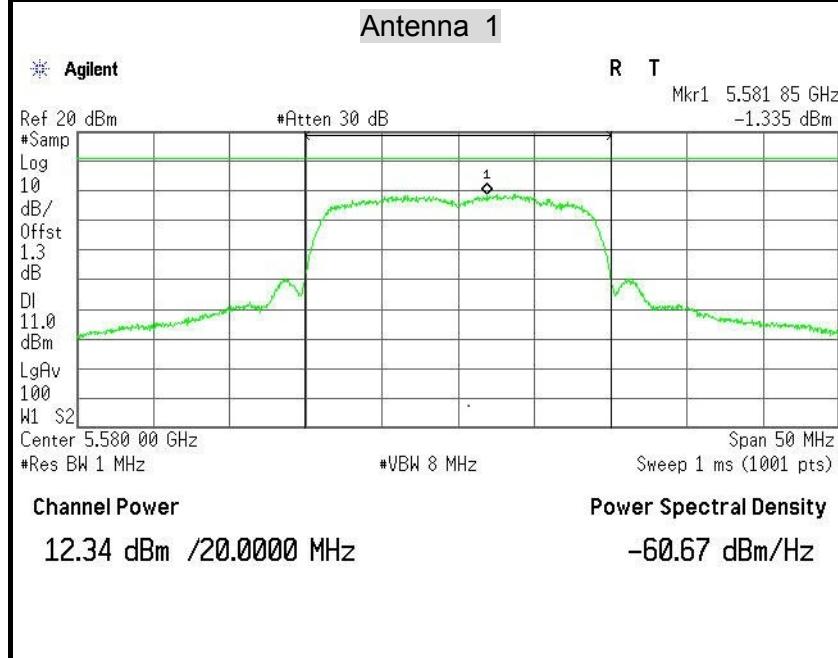


IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz

PPSD (CH Low)



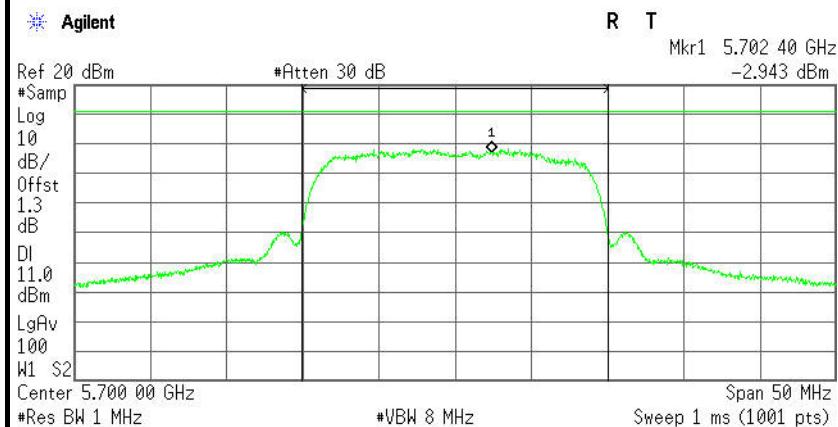
PPSD (CH Mid)





PPSD (CH High)

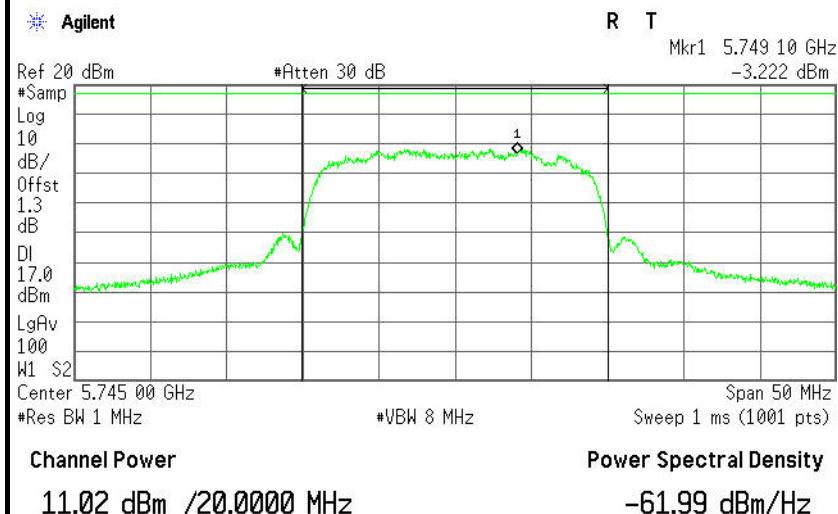
Antenna 1



IEEE 802.11n HT 20 MHz mode / 5745 ~ 5805MHz

PPSD (CH Low)

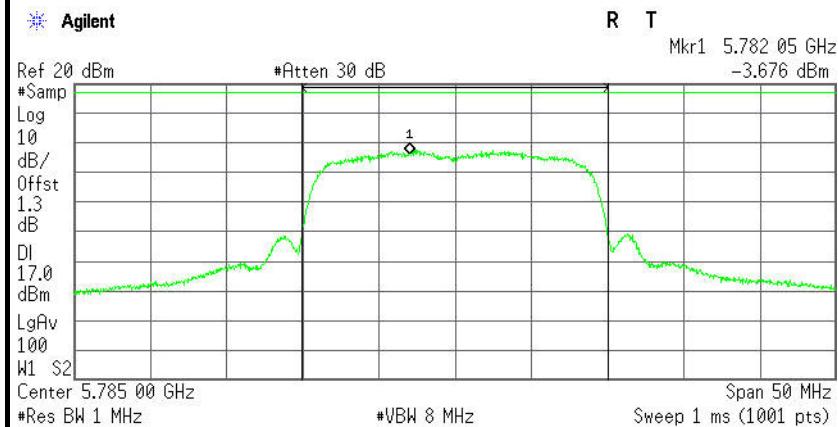
Antenna 1





PPSD (CH Mid)

Antenna 1



PPSD (CH High)

Antenna 1



Channel Power
10.33 dBm /20.0000 MHz

Power Spectral Density
-62.68 dBm/Hz

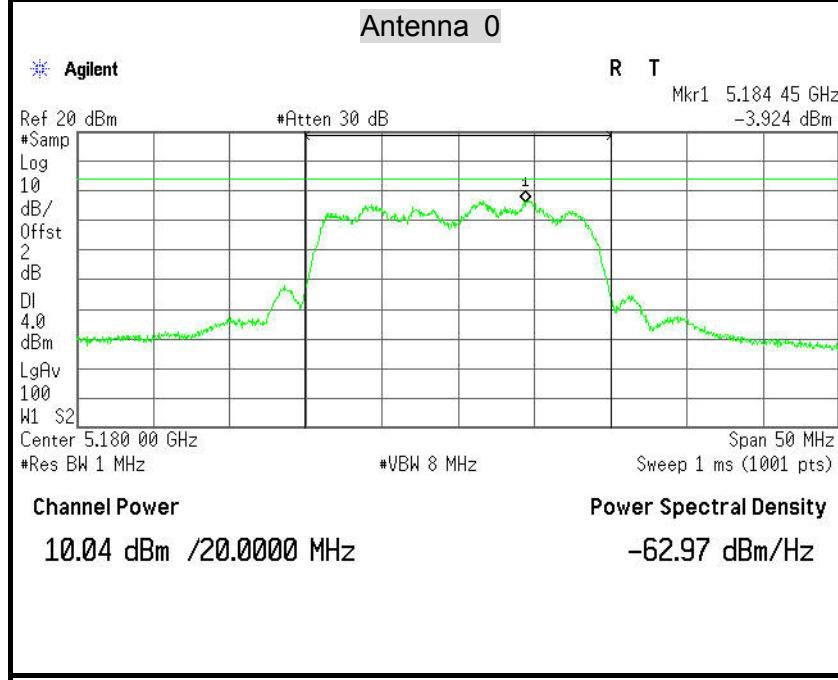
Channel Power
11.03 dBm /20.0000 MHz

Power Spectral Density
-61.98 dBm/Hz



IEEE 802.11n HT 20 MHz SISO mode / 5180 ~ 5240MHz

PPSD (CH Low)



PPSD (CH Mid)

