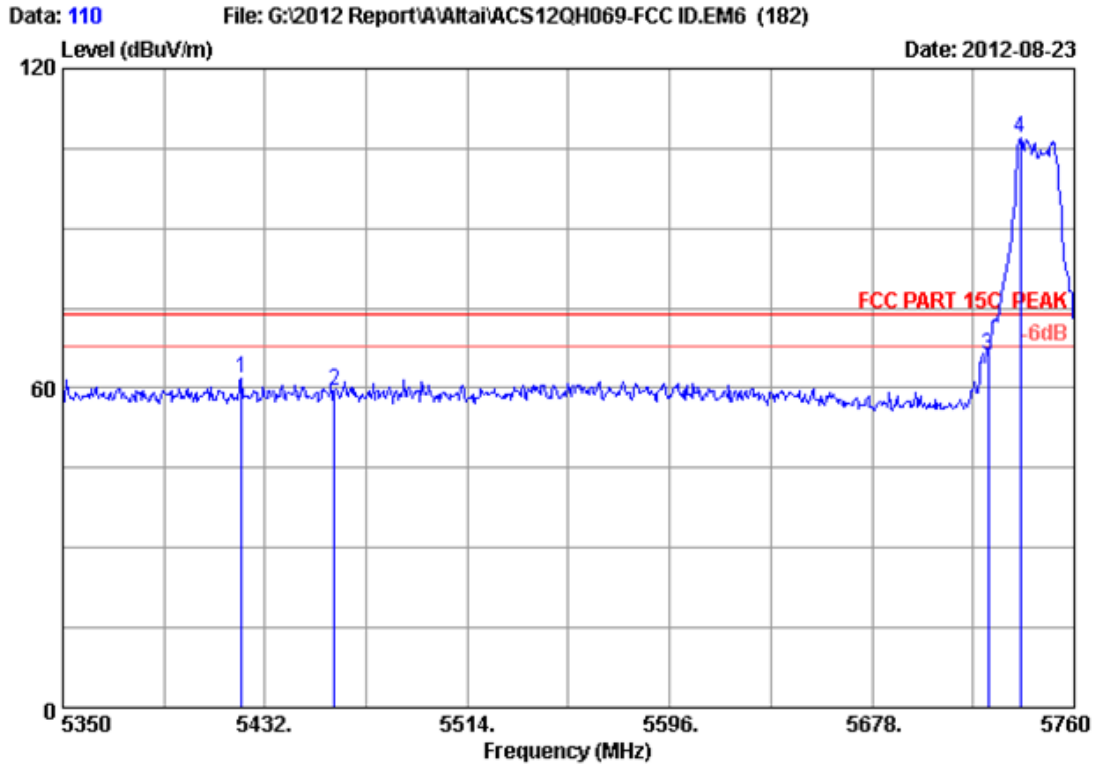


Site no. : 3# Chamber Data no. : 109  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11a CH149 5745MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5460.000	33.83	9.09	34.60	39.41	47.73	54.00	6.27	Average
2	5725.000	34.03	9.30	34.60	44.75	53.48	54.00	0.52	Average
3	5740.320	34.04	9.32	34.60	87.14	95.90	54.00	-41.90	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber  
 Dis. / Ant. : 3m 2011 3115 4580  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56%  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11a CH149 5745MHz Tx  
 M/N : WA8011N

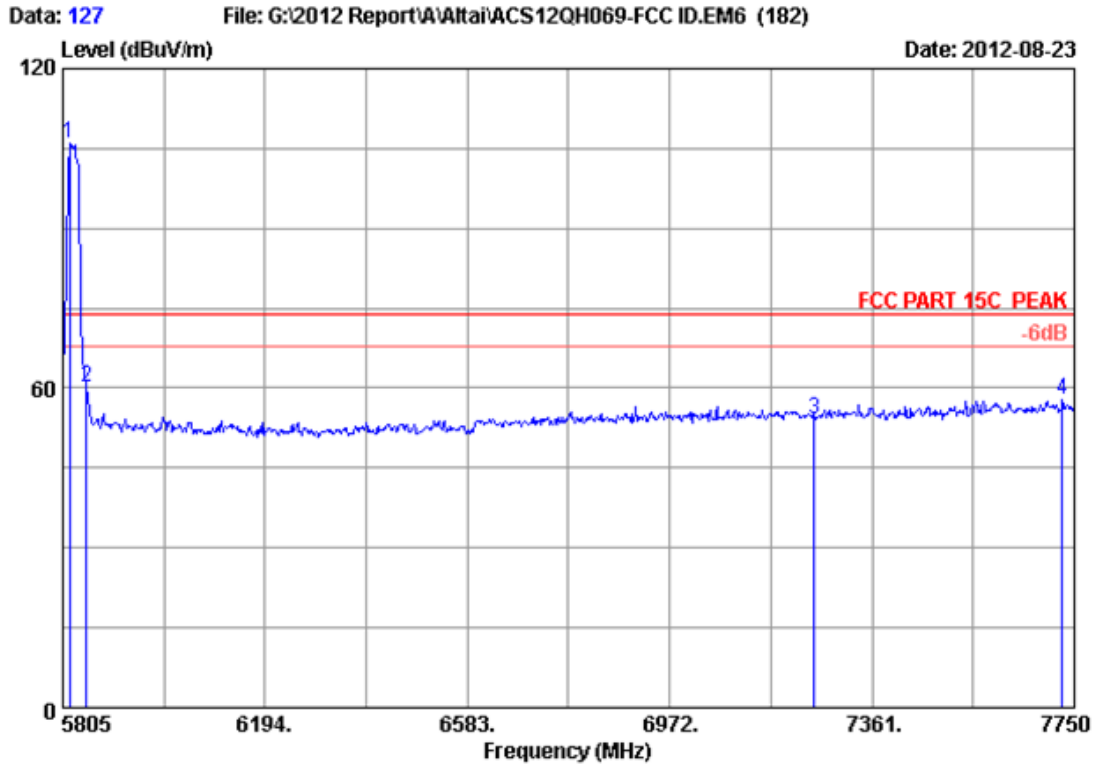
Data no. : 110

Ant. pol. : HORIZONTAL

Engineer : Leo-Li

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5422.570	33.78	9.04	34.60	53.55	61.77	74.00	12.23	Peak
2	5460.000	33.83	9.09	34.60	51.05	59.37	74.00	14.63	Peak
3	5725.000	34.03	9.30	34.60	57.30	66.03	74.00	7.97	Peak
4	5738.270	34.04	9.32	34.60	98.17	106.93	74.00	-32.93	Peak

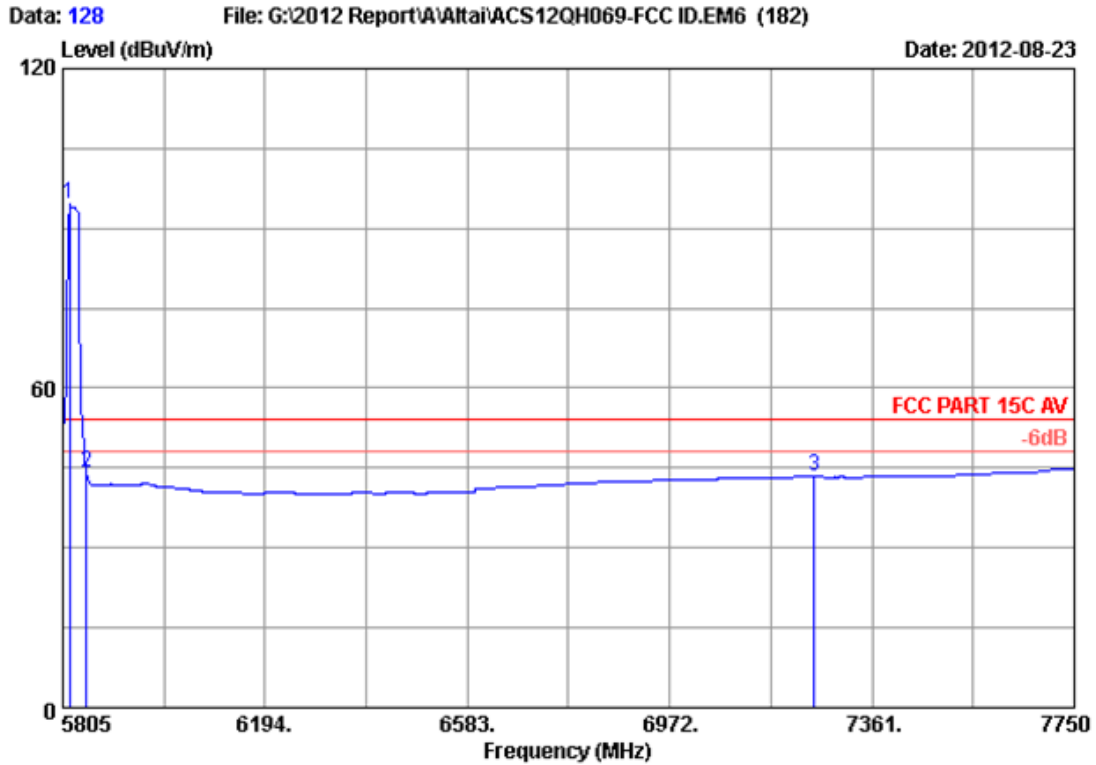
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 127  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11a CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5818.615	34.09	9.40	34.60	96.92	105.81	74.00	-31.81	Peak
2	5850.000	34.11	9.41	34.60	51.26	60.18	74.00	13.82	Peak
3	7250.000	35.87	10.46	34.72	42.66	54.27	74.00	19.73	Peak
4	7726.660	36.73	10.58	34.77	45.16	57.70	74.00	16.30	Peak

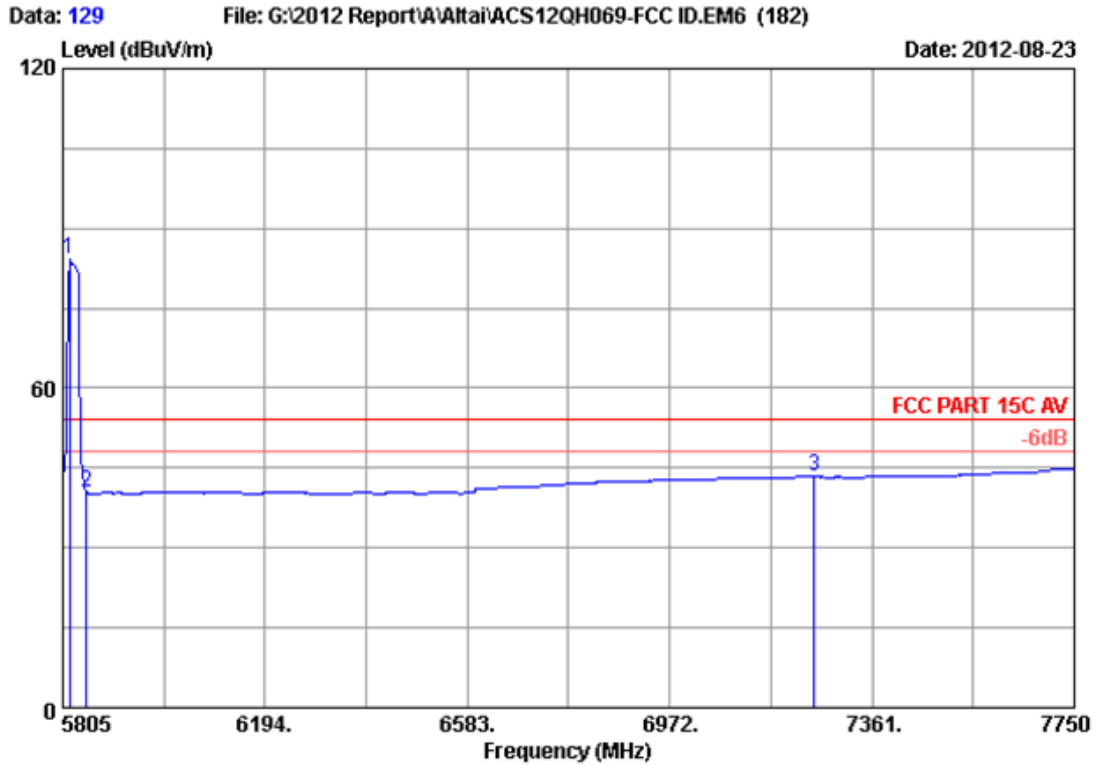
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 128  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11a CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5818.615	34.09	9.40	34.60	85.67	94.56	54.00	-40.56	Average
2	5850.000	34.11	9.41	34.60	35.06	43.98	54.00	10.02	Average
3	7250.000	35.87	10.46	34.72	31.70	43.31	54.00	10.69	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

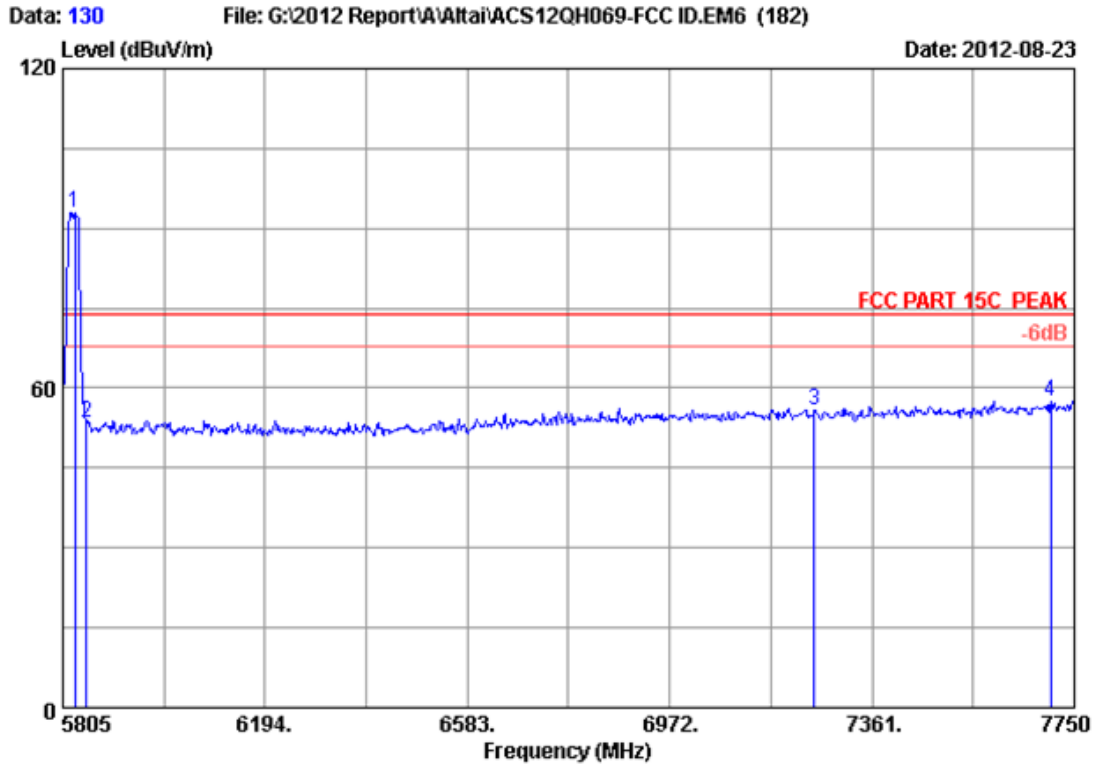


Site no. : 3# Chamber  
 Dis. / Ant. : 3m 2011 3115 4580  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56%  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11a CH165 5825MHz Tx  
 M/N : WA8011N

Data no. : 129  
 Ant. pol. : VERTICAL  
 Engineer : Leo-Li

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5818.615	34.09	9.40	34.60	75.19	84.08	54.00	-30.08	Average
2	5850.000	34.11	9.41	34.60	31.51	40.43	54.00	13.57	Average
3	7250.000	35.87	10.46	34.72	31.69	43.30	54.00	10.70	Average

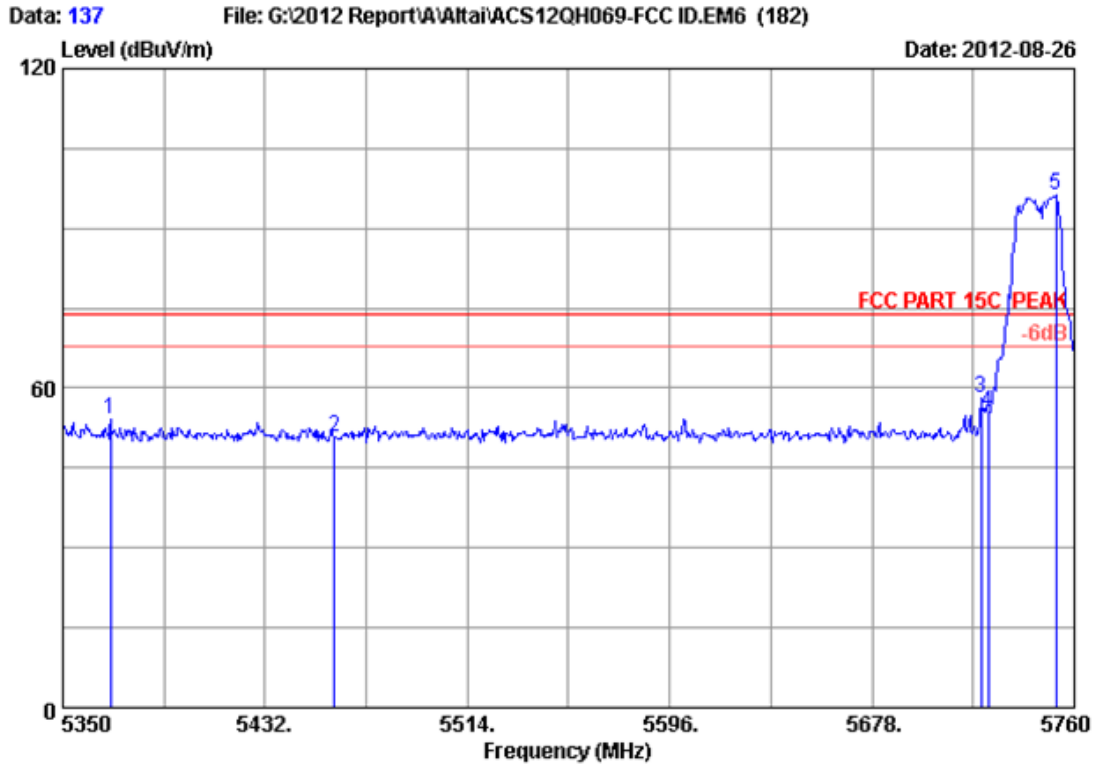
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 130  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11a CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5828.340	34.10	9.40	34.60	84.11	93.01	74.00	-19.01	Peak
2	5850.000	34.11	9.41	34.60	44.50	53.42	74.00	20.58	Peak
3	7250.000	35.87	10.46	34.72	44.23	55.84	74.00	18.16	Peak
4	7705.265	36.70	10.57	34.77	45.04	57.54	74.00	16.46	Peak

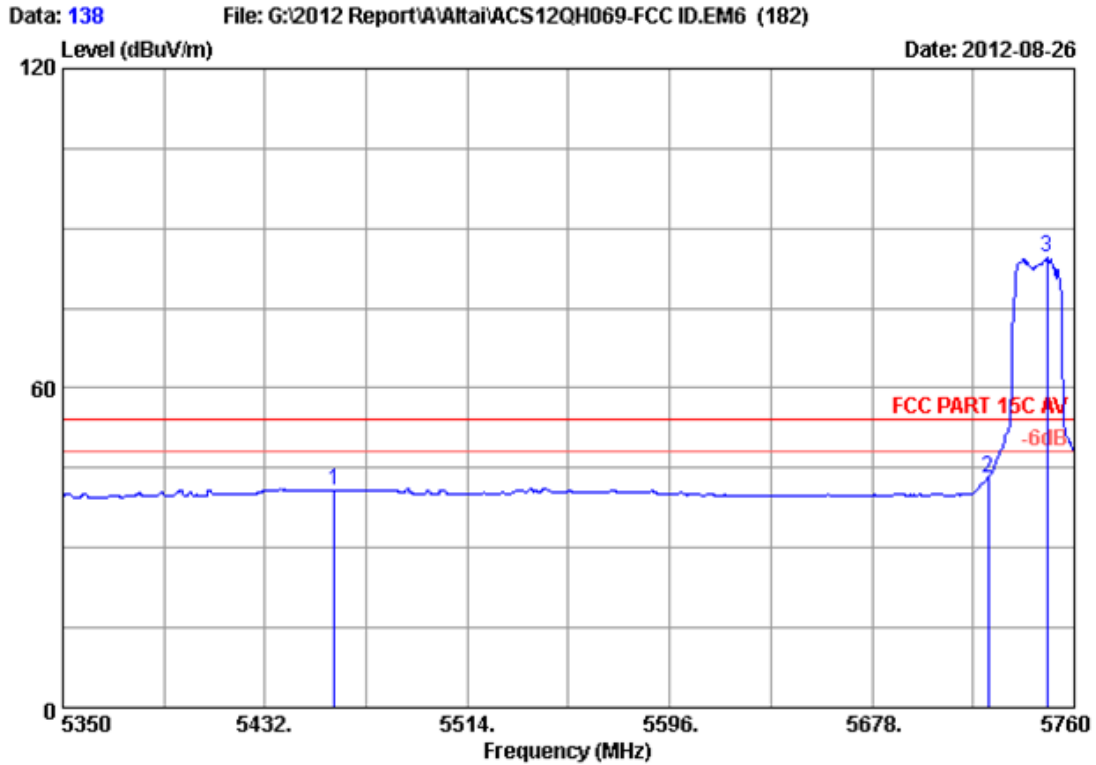
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 137  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5369.270	33.71	9.01	34.60	45.91	54.03	74.00	19.97	Peak
2	5460.000	33.83	9.09	34.60	42.45	50.77	74.00	23.23	Peak
3	5722.280	34.03	9.30	34.60	49.51	58.24	74.00	15.76	Peak
4	5725.000	34.03	9.30	34.60	46.82	55.55	74.00	18.45	Peak
5	5752.620	34.06	9.33	34.60	87.32	96.11	74.00	-22.11	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

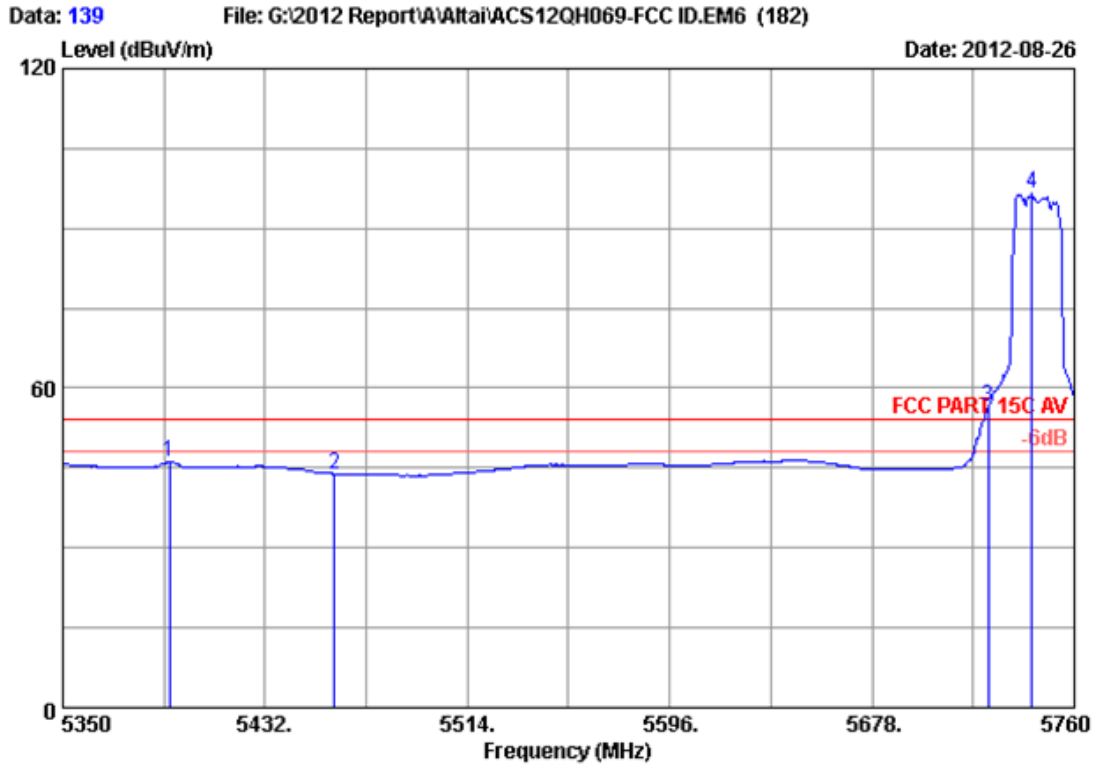


Site no. : 3# Chamber Data no. : 138  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBUV)	Reading (dBUV/m)	Emission Level (dBUV/m)	Limits (dB)	Margin (dB)	Remark
1	5460.000	33.83	9.09	34.60	32.50	40.82	54.00	13.18	Average
2	5725.000	34.03	9.30	34.60	34.44	43.17	54.00	10.83	Average
3	5748.930	34.04	9.33	34.60	75.85	84.62	54.00	-30.62	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

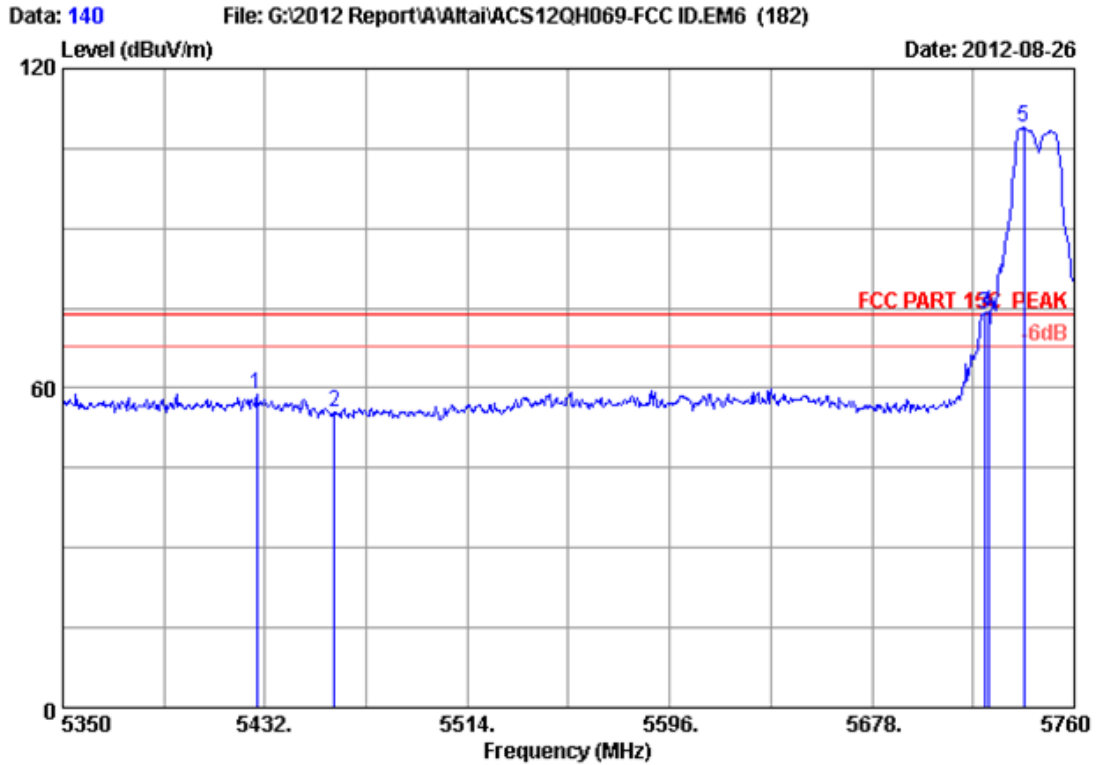




Site no. : 3# Chamber Data no. : 139  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5393.050	33.74	9.02	34.60	37.91	46.07	54.00	7.93	Average
2	5460.000	33.83	9.09	34.60	35.58	43.90	54.00	10.10	Average
3	5725.000	34.03	9.30	34.60	47.70	56.43	54.00	-2.43	Average
4	5742.780	34.04	9.32	34.60	87.71	96.47	54.00	-42.47	Average

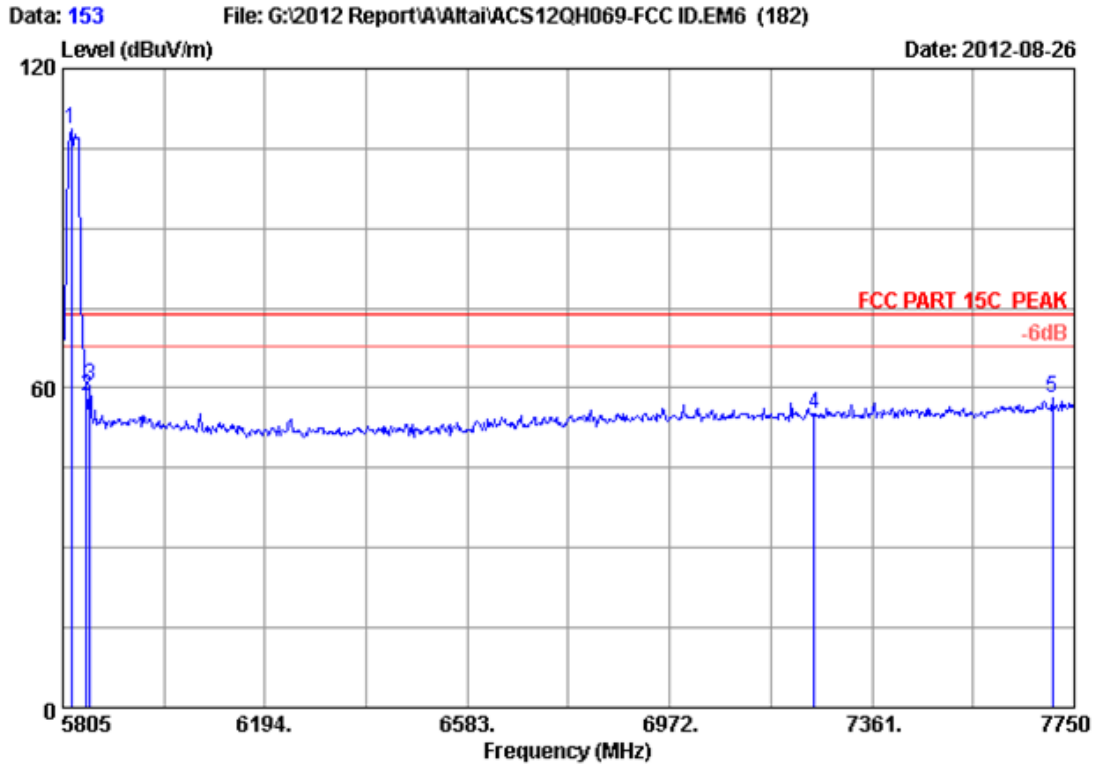
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 140  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH149 5745MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5428.720	33.81	9.06	34.60	50.73	59.00	74.00	15.00	Peak
2	5460.000	33.83	9.09	34.60	47.23	55.55	74.00	18.45	Peak
3	5723.510	34.03	9.30	34.60	65.24	73.97	74.00	0.03	Peak
4	5725.000	34.03	9.30	34.60	65.52	74.25	74.00	-0.25	Peak
5	5739.500	34.04	9.32	34.60	100.12	108.88	74.00	-34.88	Peak

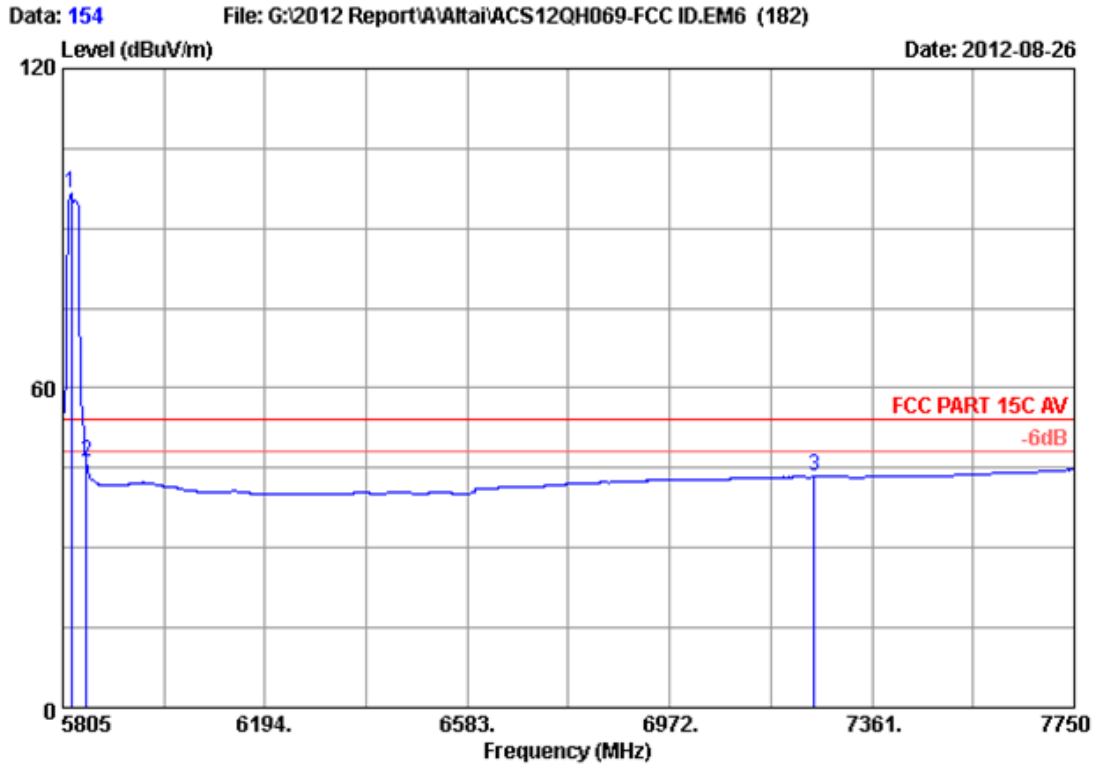
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 153  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5820.560	34.10	9.40	34.60	99.77	108.67	74.00	-34.67	Peak
2	5850.000	34.11	9.41	34.60	49.51	58.43	74.00	15.57	Peak
3	5857.515	34.12	9.43	34.60	51.48	60.43	74.00	13.57	Peak
4	7250.000	35.87	10.46	34.72	43.58	55.19	74.00	18.81	Peak
5	7707.210	36.72	10.57	34.77	45.80	58.32	74.00	15.68	Peak

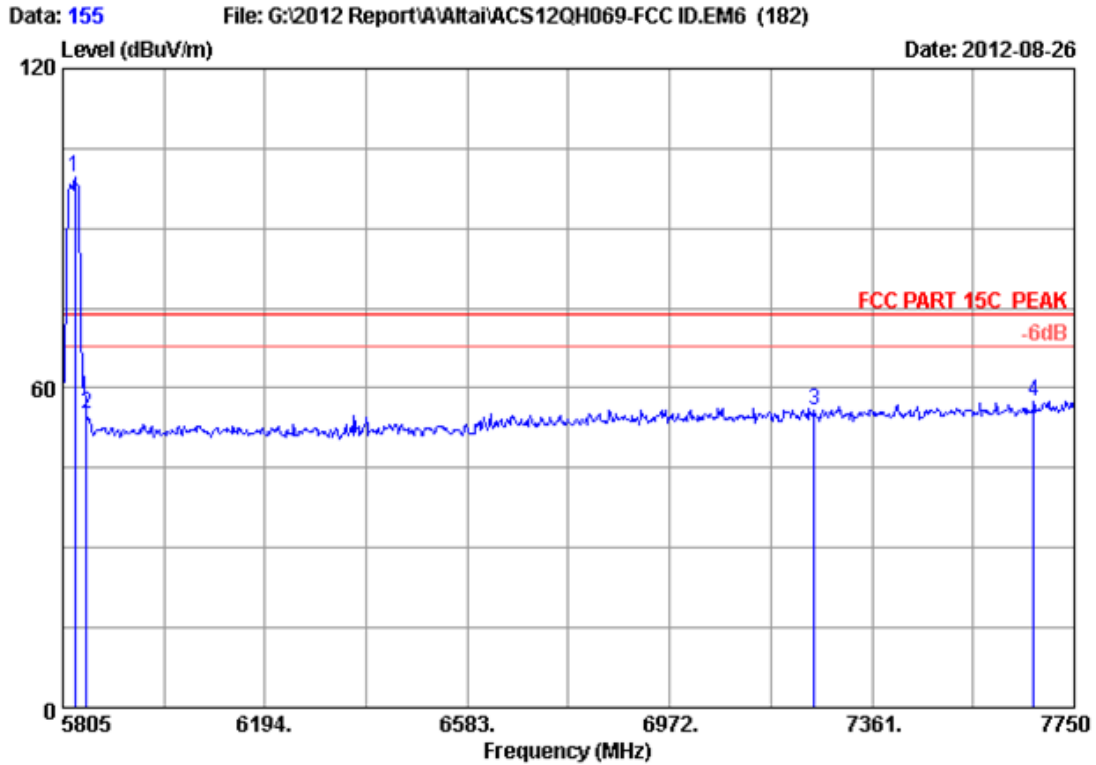
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 154  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5820.560	34.10	9.40	34.60	87.58	96.48	54.00	-42.48	Average
2	5850.000	34.11	9.41	34.60	37.12	46.04	54.00	7.96	Average
3	7250.000	35.87	10.46	34.72	31.69	43.30	54.00	10.70	Average

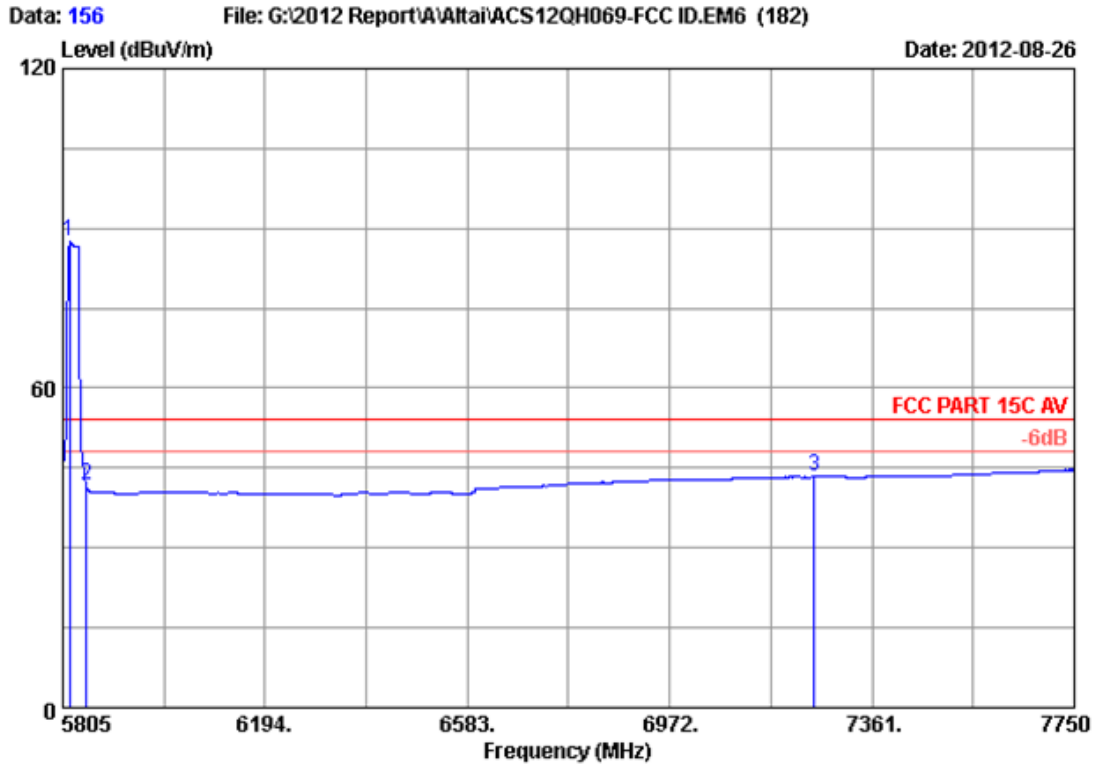
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 155  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5828.340	34.10	9.40	34.60	90.68	99.58	74.00	-25.58	Peak
2	5850.000	34.11	9.41	34.60	46.18	55.10	74.00	18.90	Peak
3	7250.000	35.87	10.46	34.72	44.05	55.66	74.00	18.34	Peak
4	7672.200	36.67	10.57	34.77	45.02	57.49	74.00	16.51	Peak

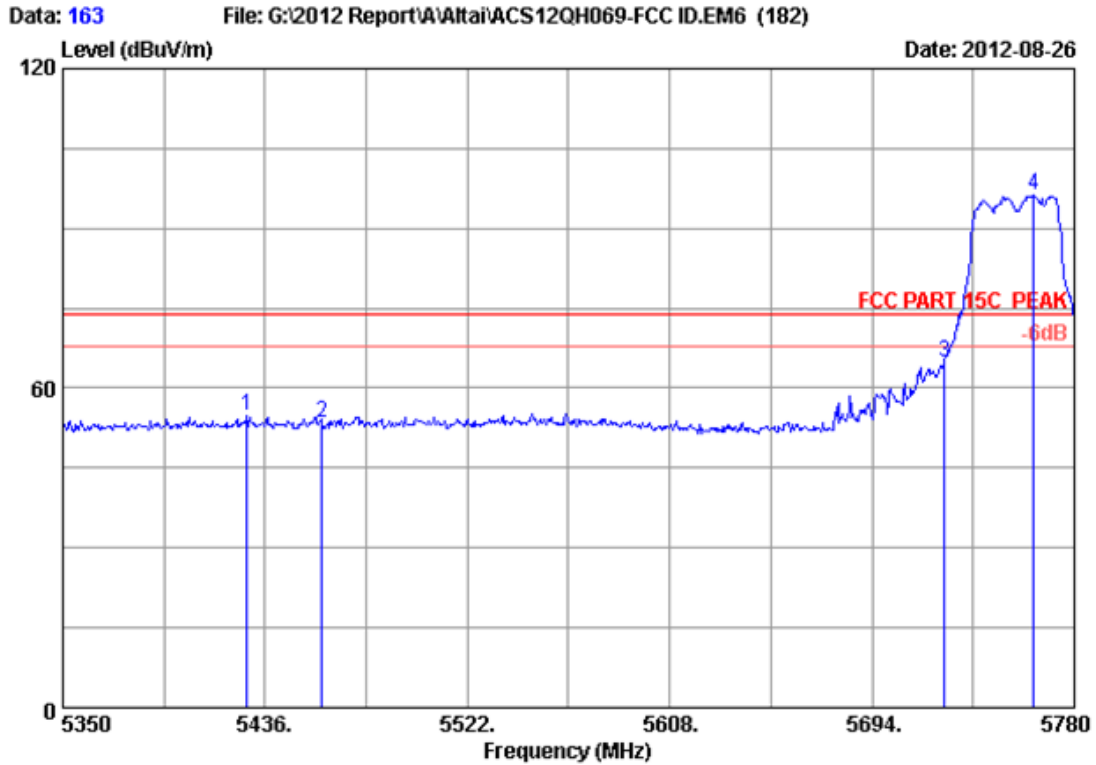
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 156  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 CH165 5825MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5818.615	34.09	9.40	34.60	78.59	87.48	54.00	-33.48	Average
2	5850.000	34.11	9.41	34.60	32.72	41.64	54.00	12.36	Average
3	7250.000	35.87	10.46	34.72	31.71	43.32	54.00	10.68	Average

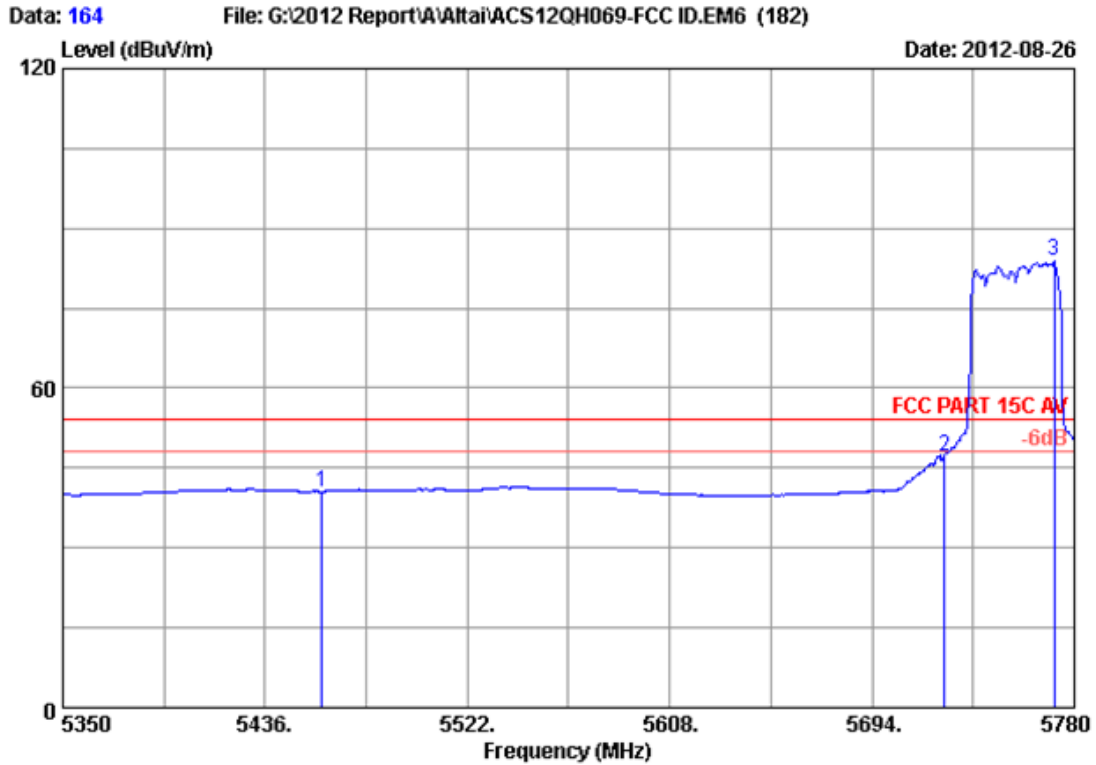
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 163  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5428.260	33.78	9.06	34.60	46.47	54.71	74.00	19.29	Peak
2	5460.000	33.83	9.09	34.60	45.14	53.46	74.00	20.54	Peak
3	5725.000	34.03	9.30	34.60	56.10	64.83	74.00	9.17	Peak
4	5762.800	34.06	9.33	34.60	87.35	96.14	74.00	-22.14	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

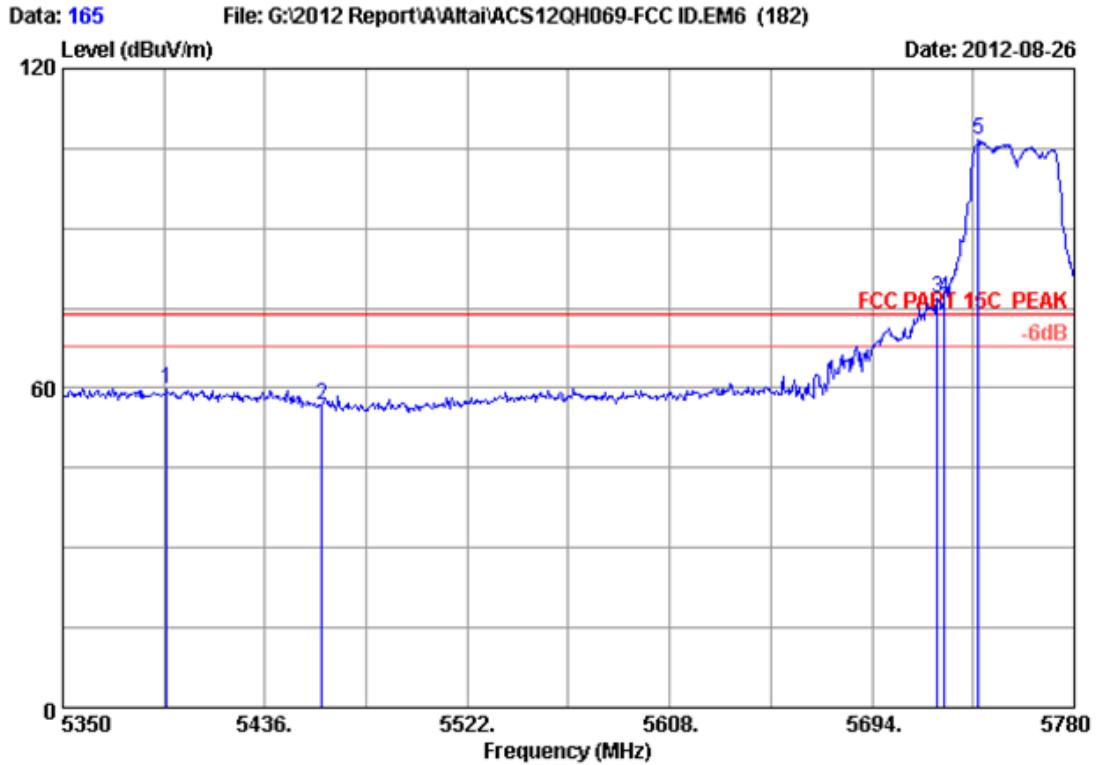


Site no. : 3# Chamber Data no. : 164  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBUV)	Reading (dBUV/m)	Emission Level (dBUV/m)	Limits (dB)	Margin (dB)	Remark
1	5460.000	33.83	9.09	34.60	32.28	40.60	54.00	13.40	Average
2	5725.000	34.03	9.30	34.60	38.40	47.13	54.00	6.87	Average
3	5771.400	34.07	9.35	34.60	75.12	83.94	54.00	-29.94	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

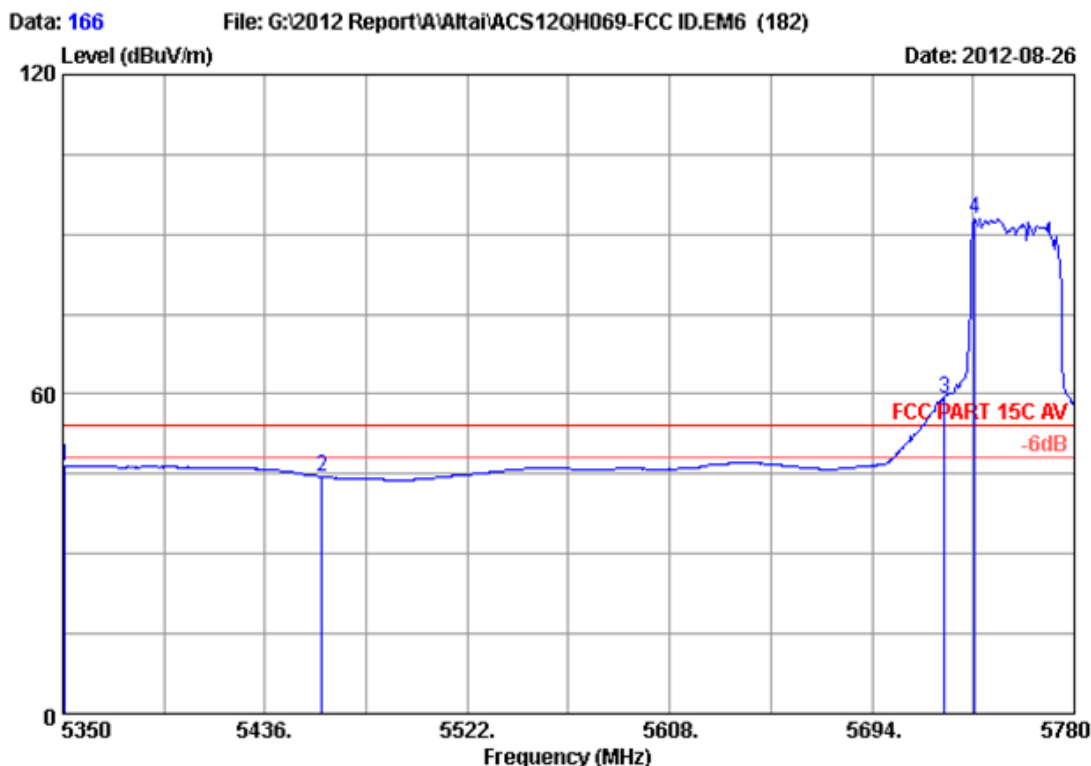




Site no. : 3# Chamber Data no. : 165  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5394.290	33.74	9.02	34.60	51.72	59.88	74.00	14.12	Peak
2	5460.000	33.83	9.09	34.60	48.67	56.99	74.00	17.01	Peak
3	5721.950	34.03	9.30	34.60	68.20	76.93	74.00	-2.93	Peak
4	5725.000	34.03	9.30	34.60	68.13	76.86	74.00	-2.86	Peak
5	5739.150	34.04	9.32	34.60	97.75	106.51	74.00	-32.51	Peak

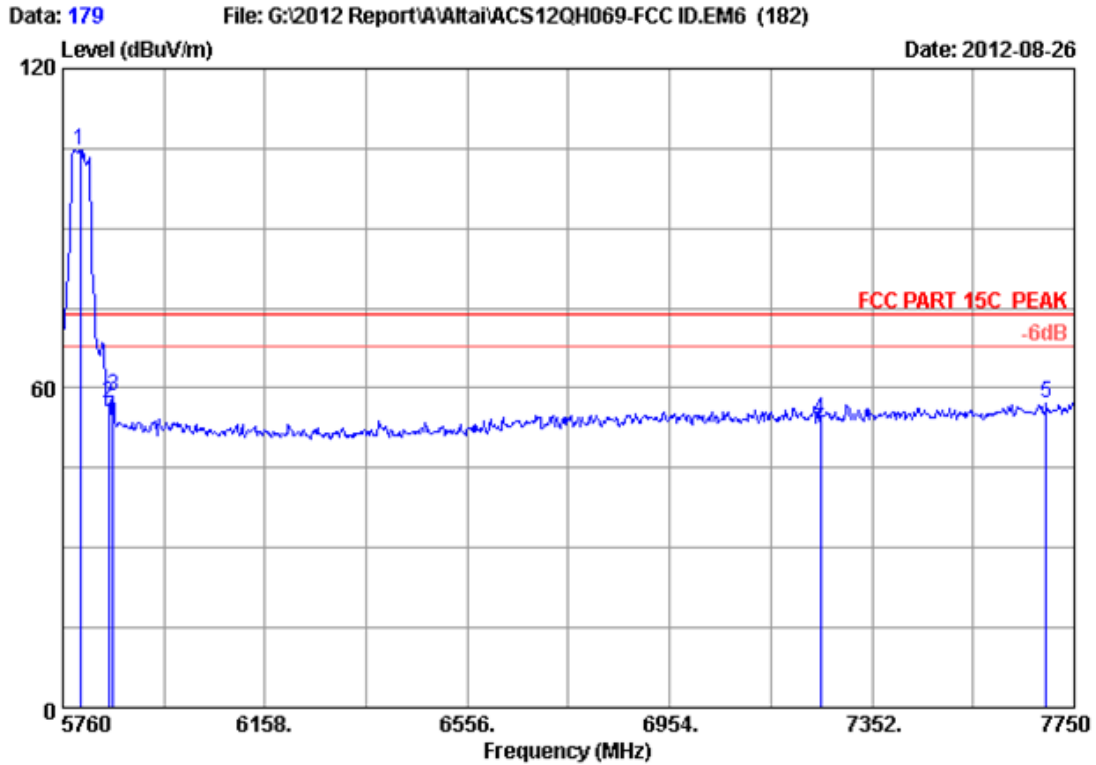
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 166  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH151 5755MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5350.860	33.69	8.98	34.60	38.37	46.44	54.00	7.56	Average
2	5460.000	33.83	9.09	34.60	36.15	44.47	54.00	9.53	Average
3	5725.000	34.03	9.30	34.60	50.49	59.22	54.00	-5.22	Average
4	5737.860	34.04	9.32	34.60	84.27	93.03	54.00	-39.03	Average

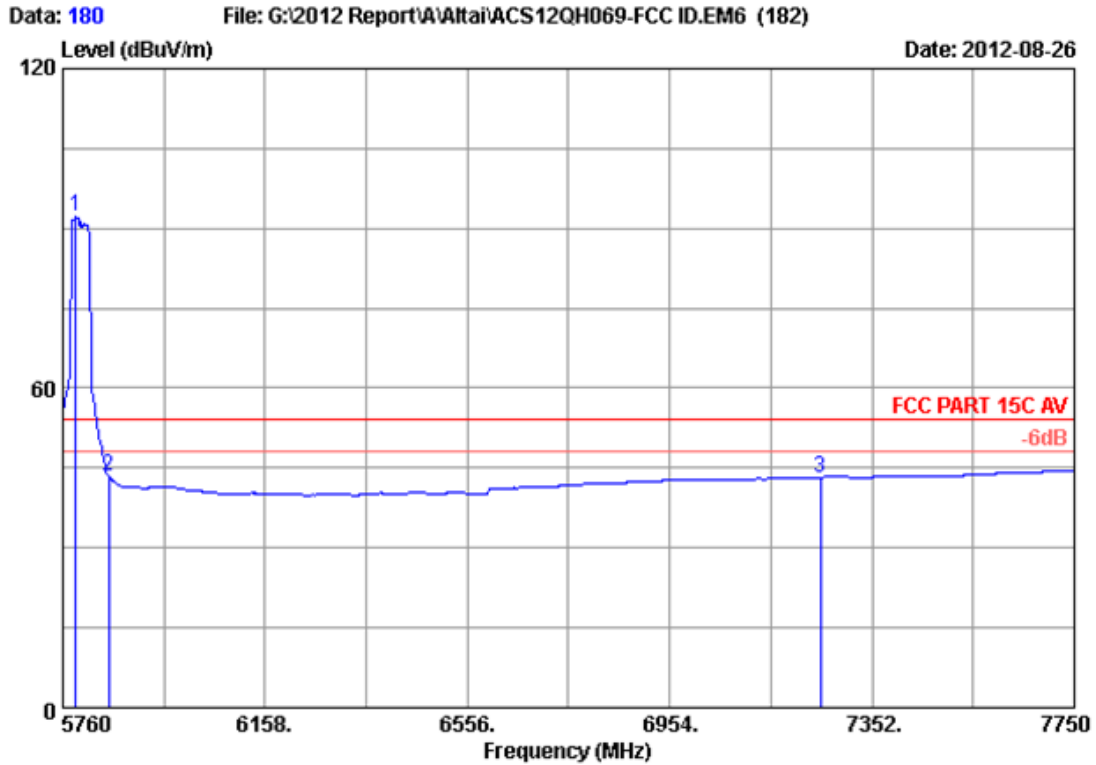
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 179  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5793.830	34.08	9.36	34.60	95.93	104.77	74.00	-30.77	Peak
2	5850.000	34.11	9.41	34.60	48.26	57.18	74.00	16.82	Peak
3	5859.500	34.12	9.43	34.60	49.61	58.56	74.00	15.44	Peak
4	7250.000	35.87	10.46	34.72	42.70	54.31	74.00	19.69	Peak
5	7694.280	36.70	10.57	34.77	44.56	57.06	74.00	16.94	Peak

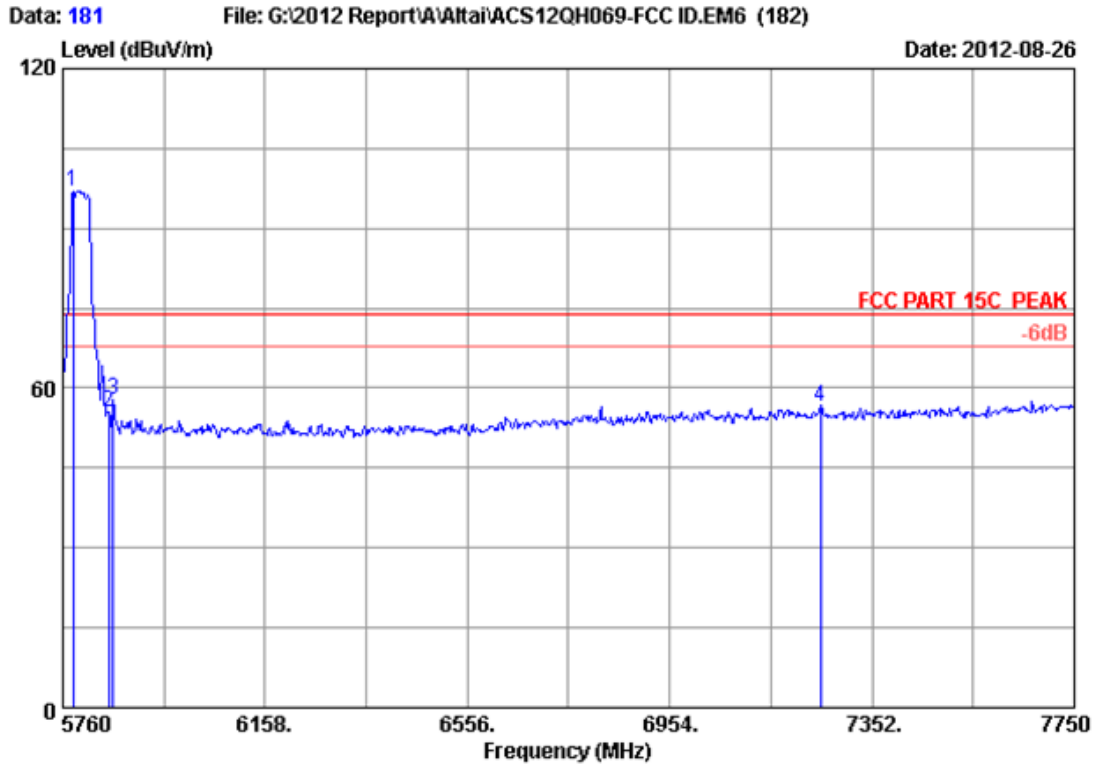
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 180  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5785.870	34.08	9.36	34.60	83.38	92.22	54.00	-38.22	Average
2	5850.000	34.11	9.41	34.60	34.49	43.41	54.00	10.59	Average
3	7250.000	35.87	10.46	34.72	31.62	43.23	54.00	10.77	Average

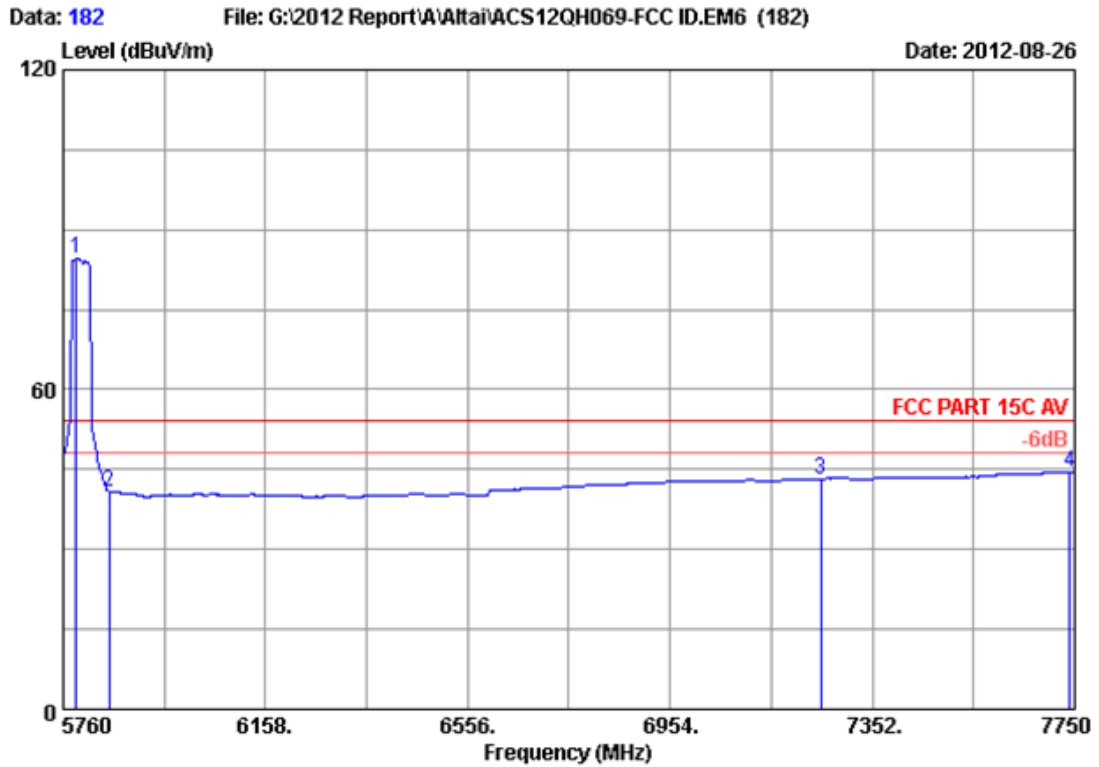
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 181  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5779.900	34.07	9.35	34.60	88.20	97.02	74.00	-23.02	Peak
2	5850.000	34.11	9.41	34.60	46.58	55.50	74.00	18.50	Peak
3	5859.500	34.12	9.43	34.60	48.74	57.69	74.00	16.31	Peak
4	7250.000	35.87	10.46	34.72	44.89	56.50	74.00	17.50	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3# Chamber Data no. : 182  
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 24°C/56% Engineer : Leo-Li  
 EUT : A8-Ein Super WiFi Base Station  
 Power Rating : DC 56V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 CH159 5795MHz Tx  
 M/N : WA8011N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	5785.870	34.08	9.36	34.60	75.77	84.61	54.00	-30.61	Average
2	5850.000	34.11	9.41	34.60	31.98	40.90	54.00	13.10	Average
3	7250.000	35.87	10.46	34.72	31.63	43.24	54.00	10.76	Average
4	7740.050	36.73	10.58	34.77	32.02	44.56	54.00	9.44	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.

## 7. 6dB Bandwidth Test

### 7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Dct.31.12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	June.05, 12	1Year
4.	HF Cable	Hubersuhner	Sucoflex104	-	May.08, 12	1 Year

### 7.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 7.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

### 7.4. Test Results

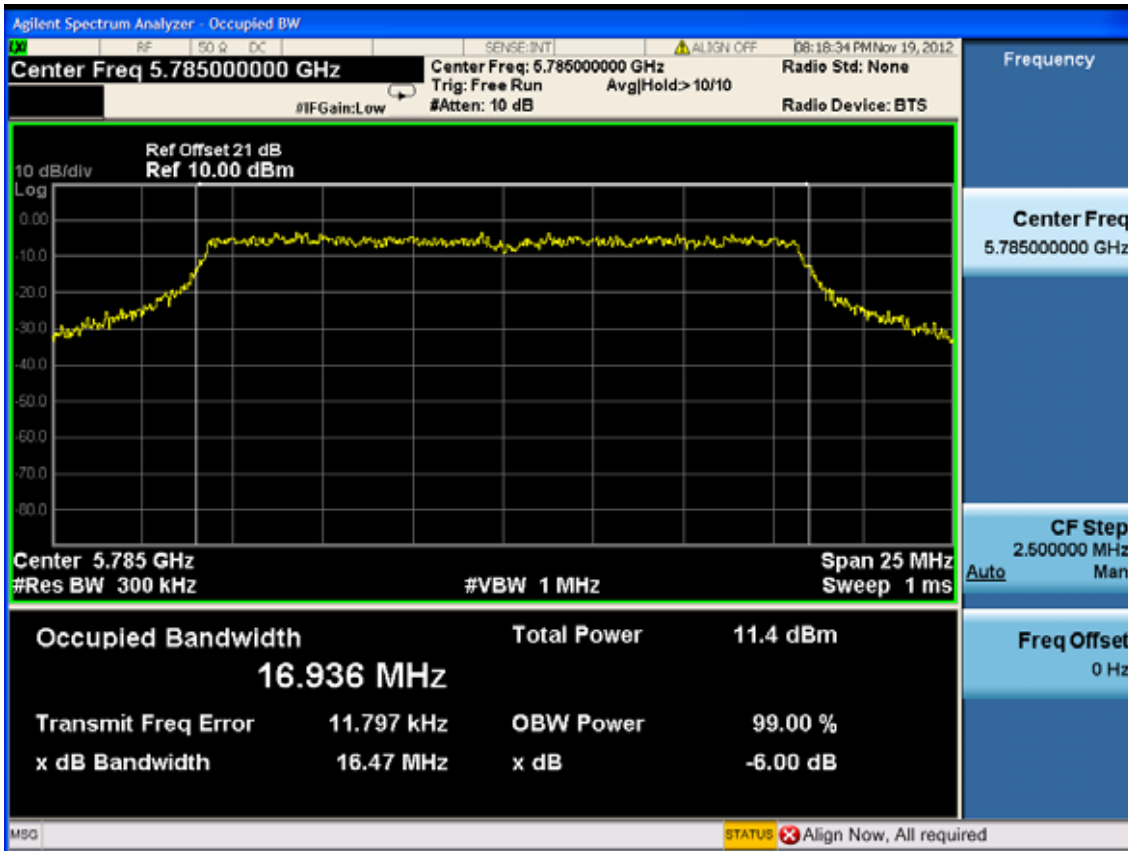
EUT: A8-Ein Super WiFi Base Station		
M/N: WA8011N		
Test date: 2012-11-24	Pressure: 101.4±1.0 kpa	Humidity: 54.5±3.0%
Tested by: Leo-Li	Test site: RF Site	Temperature : 22.6±0.6 °C

Cable loss: 1 dB		Attenuator loss: 20 dB		
Test Mode	CH	6dB bandwidth (MHz)		Limit (KHz)
		ANT 0	ANT 1	
11a	CH149	16.54	16.63	>500
	CH157	16.47	16.46	>500
	CH165	16.44	16.48	>500
11n HT20	CH149	17.71	17.64	>500
	CH157	17.71	17.66	>500
	CH165	17.71	17.70	>500
11n HT40	CH151	36.54	36.47	>500
	CH155	36.56	36.44	>500
	CH159	36.32	36.34	>500
Conclusion : PASS				

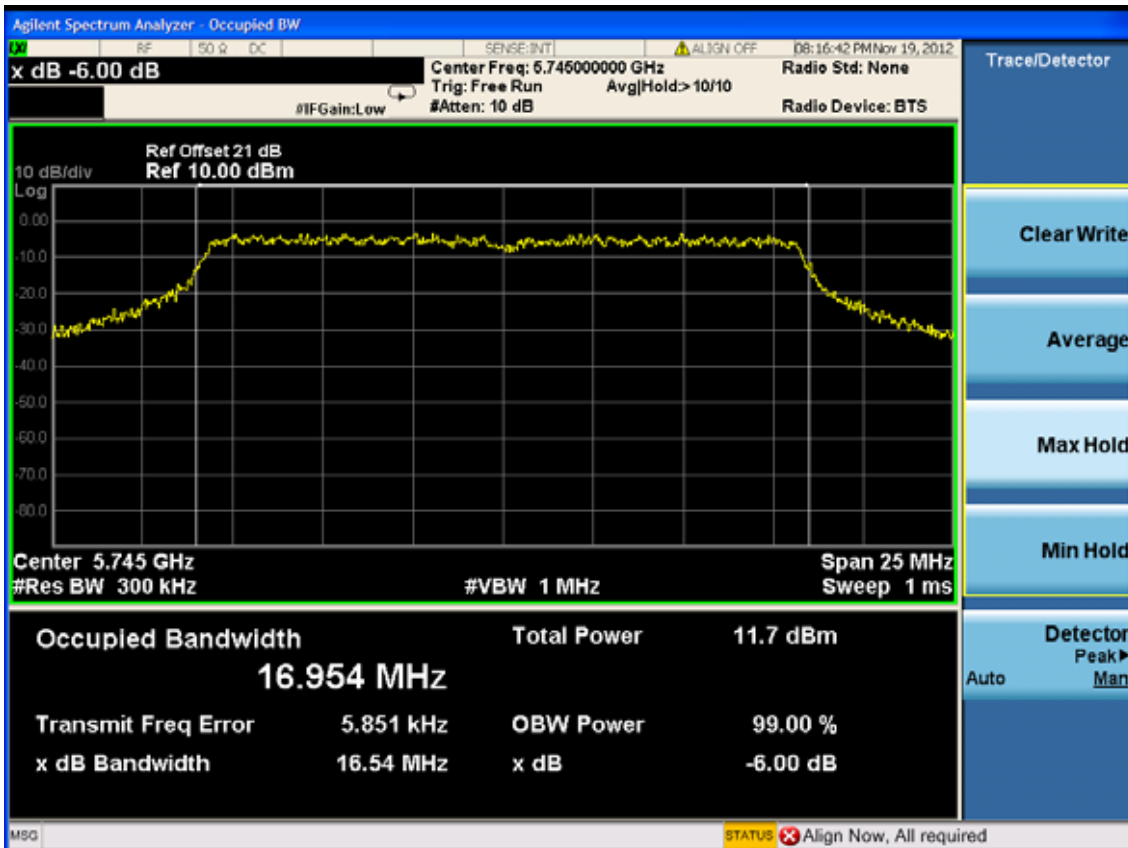
ANT 0

Test Mode: IEEE 802.11a

CH149:5745MHz

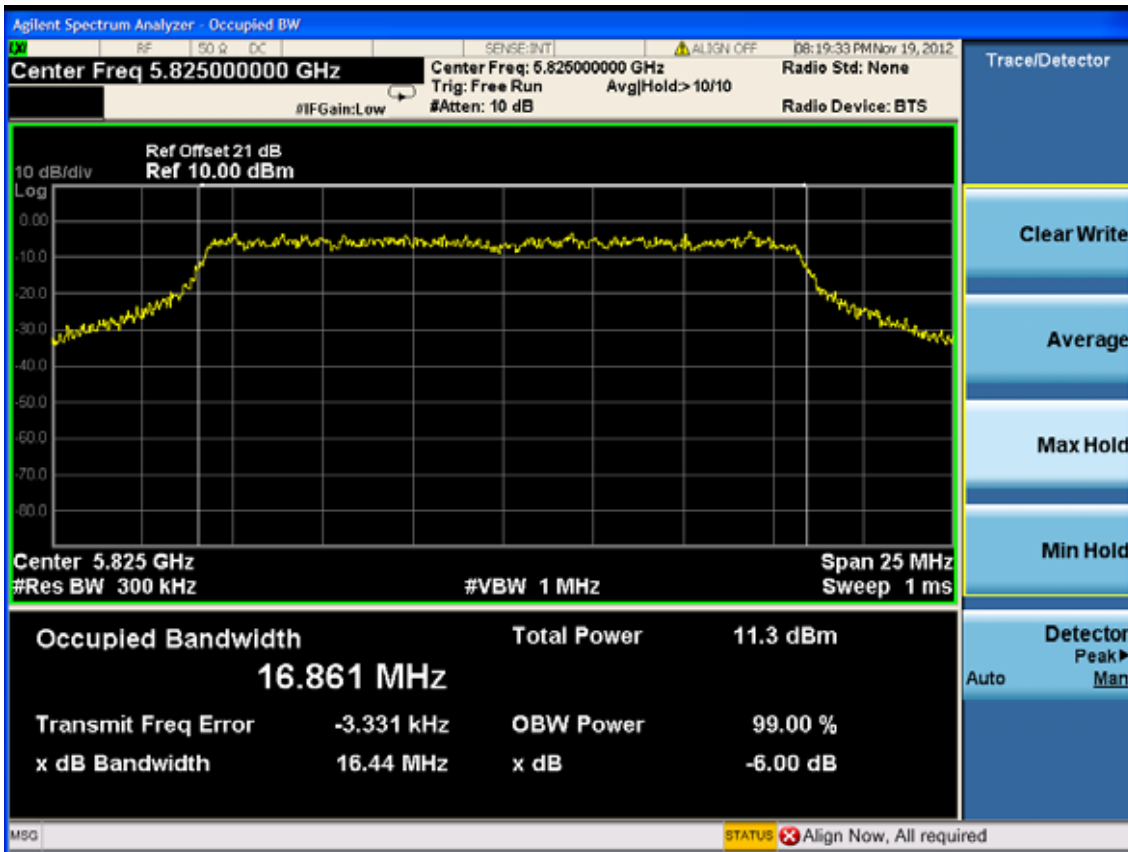


CH157:5785MHz



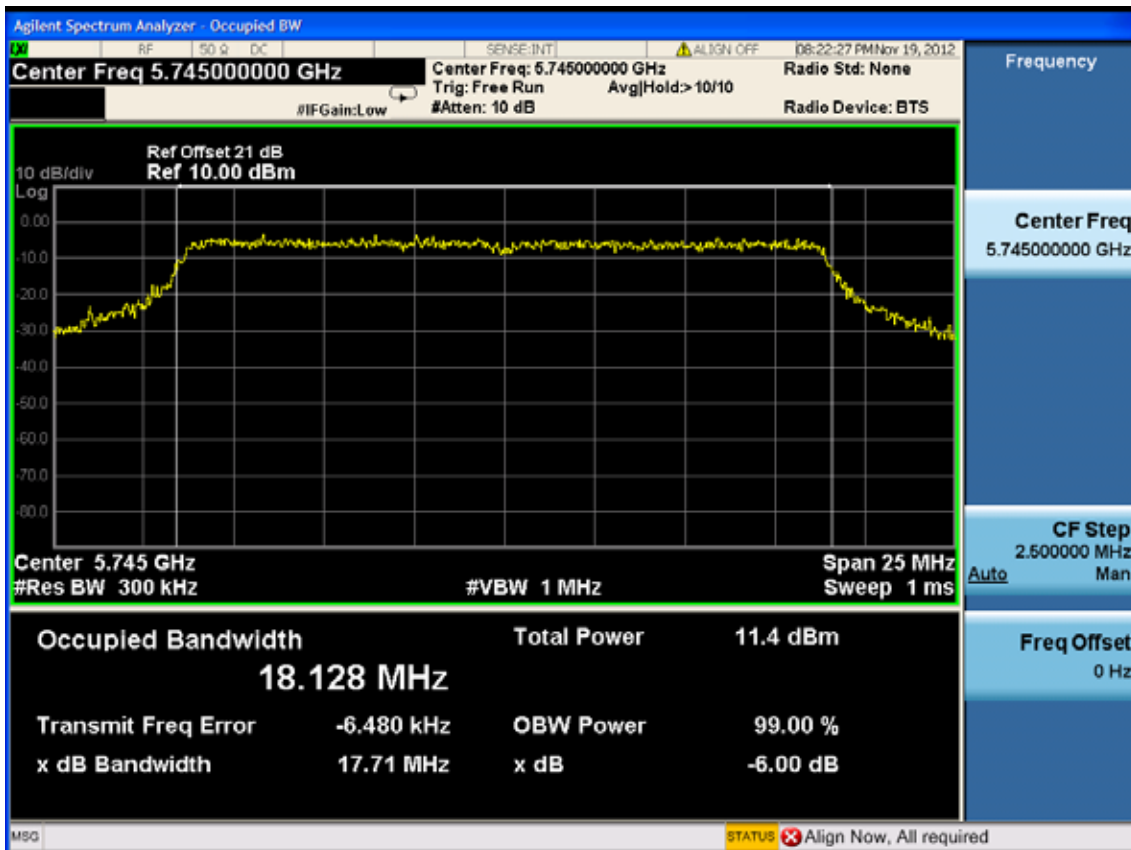


CH165:5825MHz

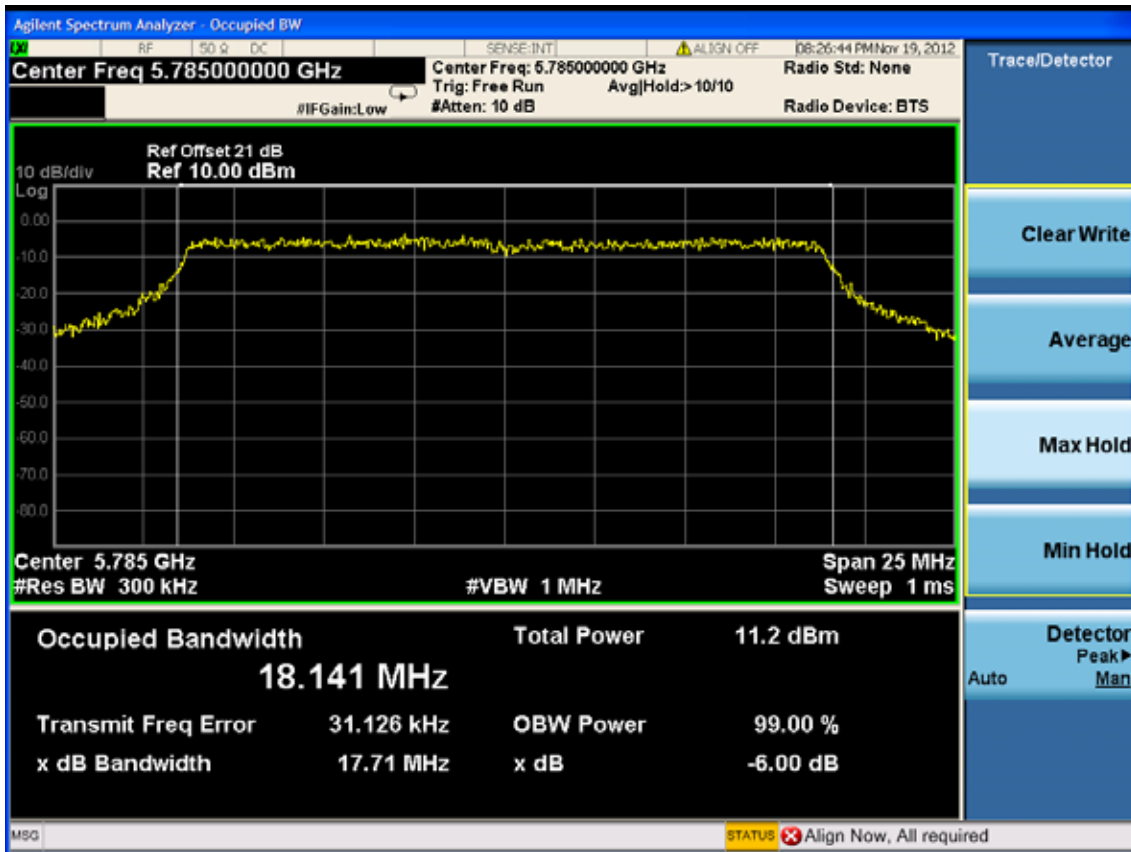


Test Mode: IEEE 802.11n HT20

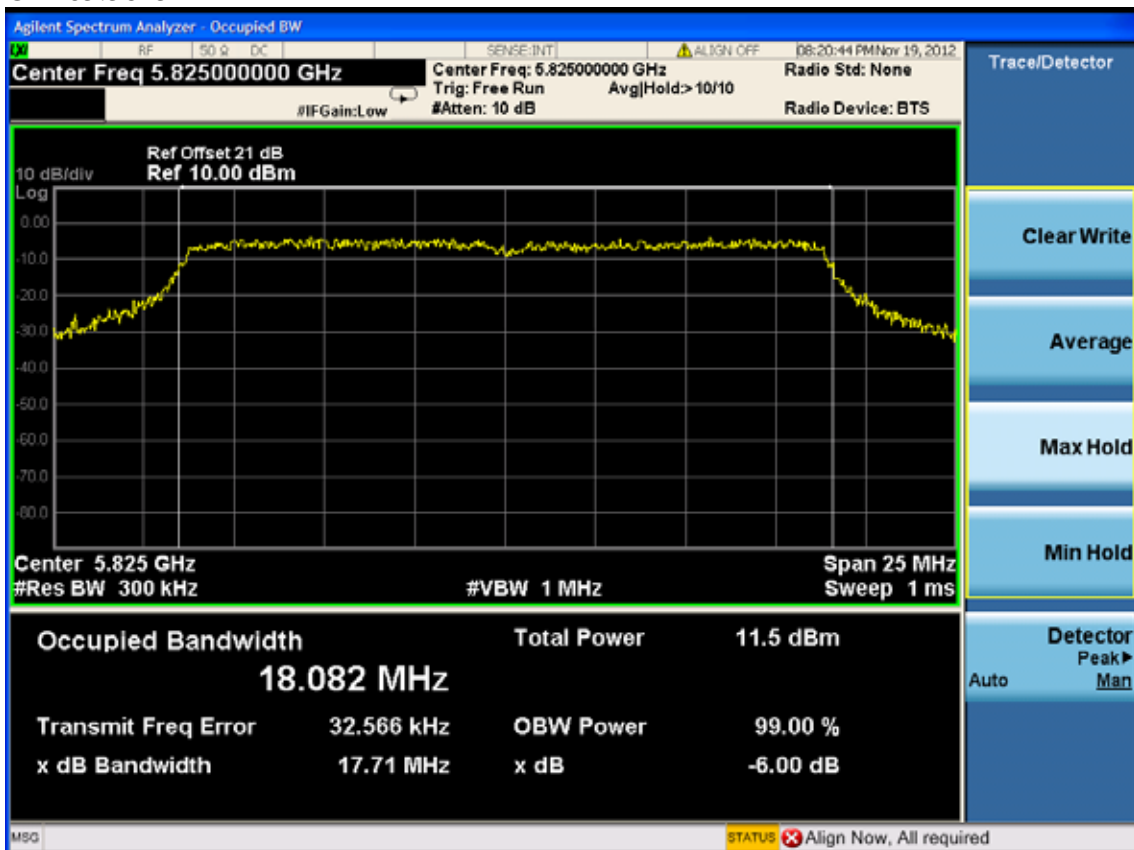
CH149:5745MHz



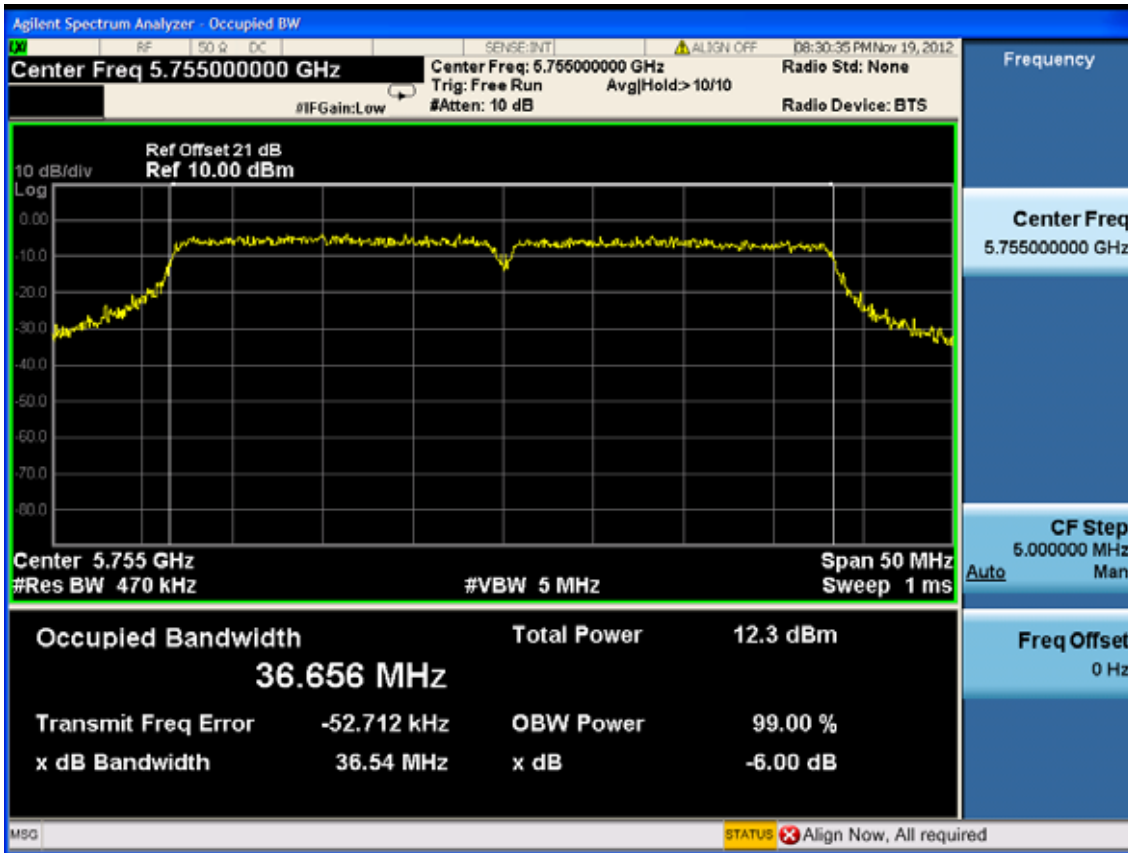
CH157:5785MHz



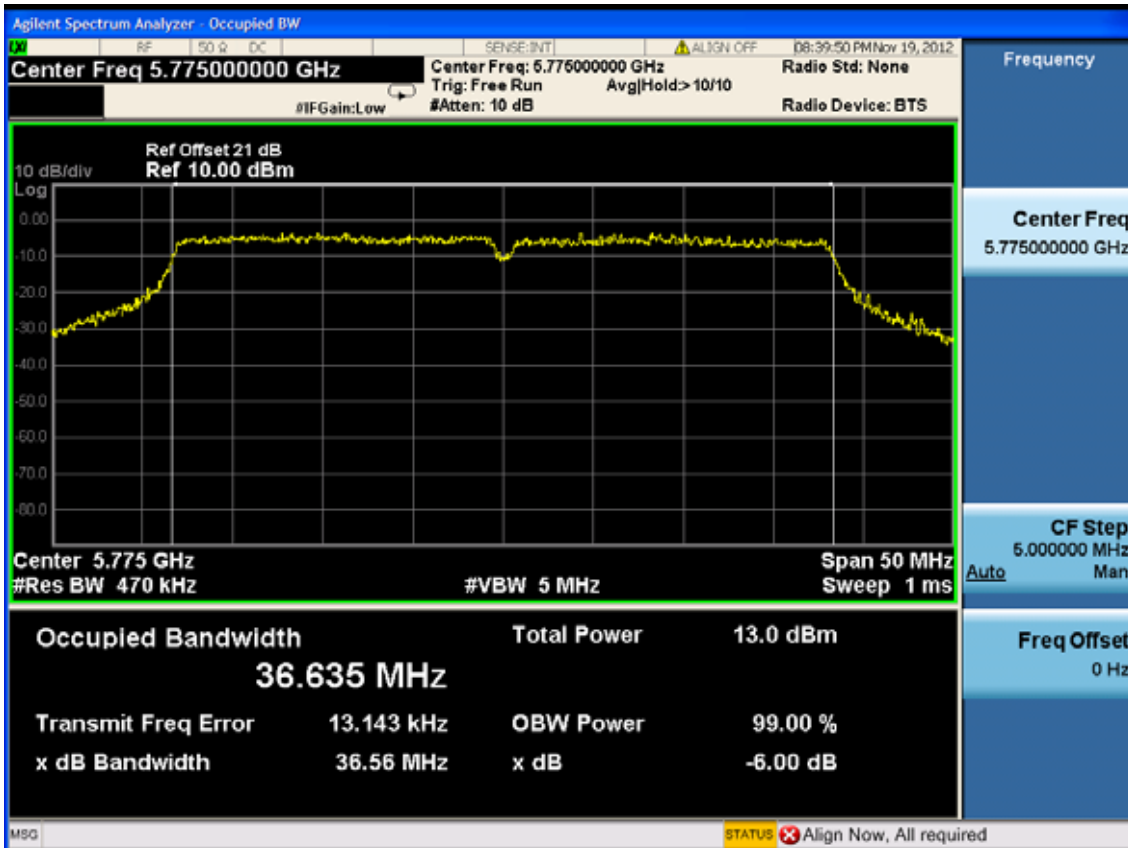
CH165:5825MHz



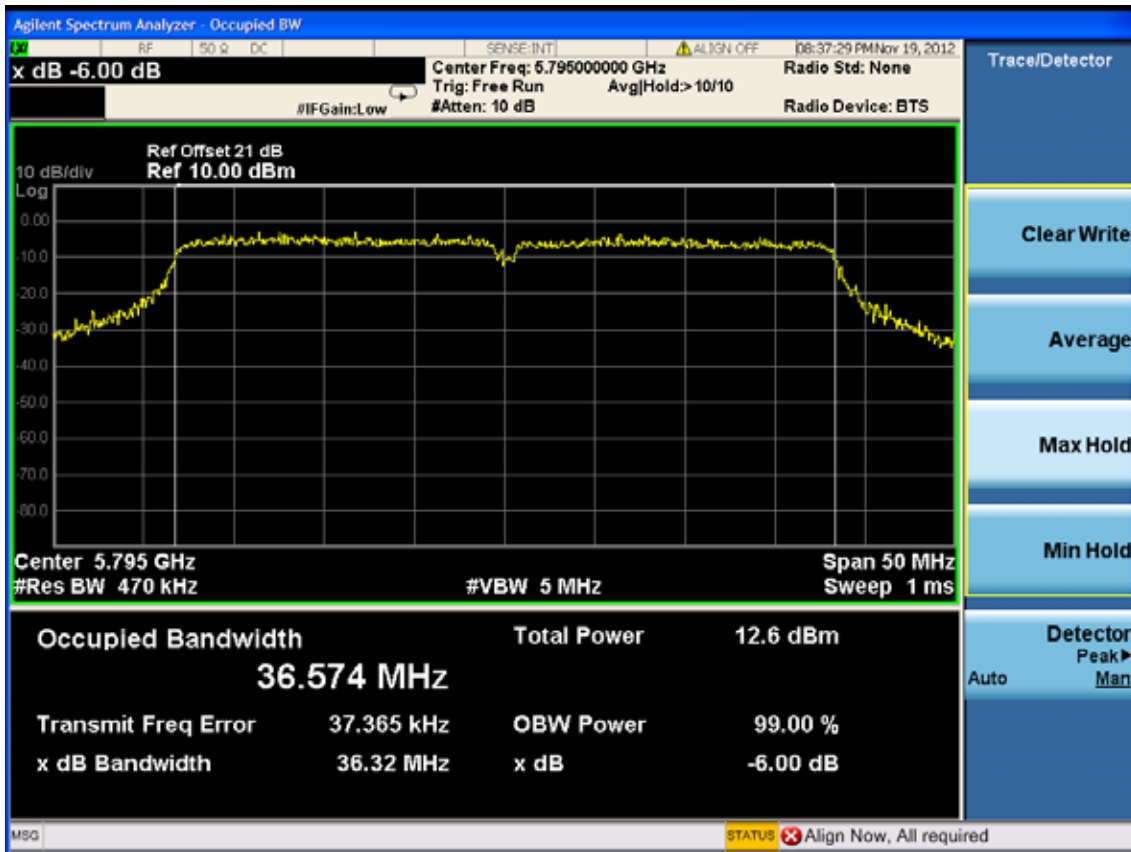
Test Mode: IEEE 802.11n HT40  
 Test CH151: 5755MHz



Test CH155: 5755MHz



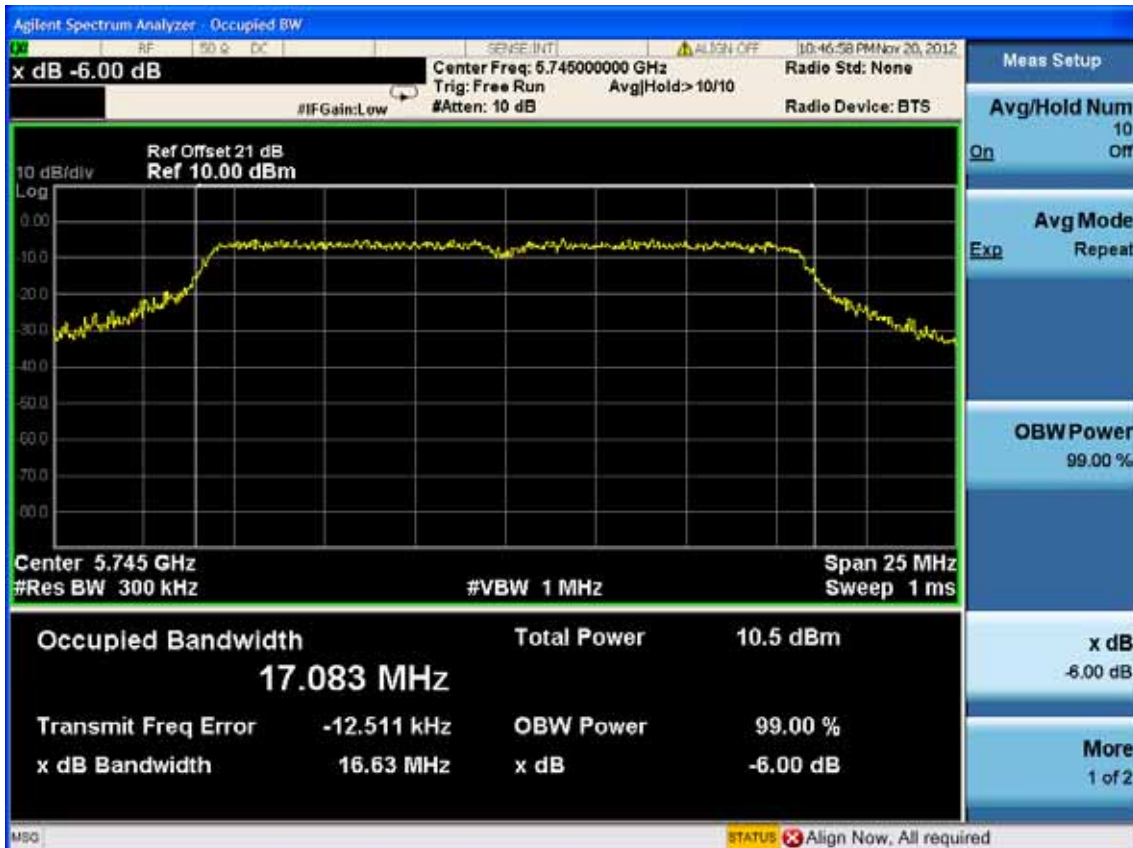
Test CH159: 5795MHz



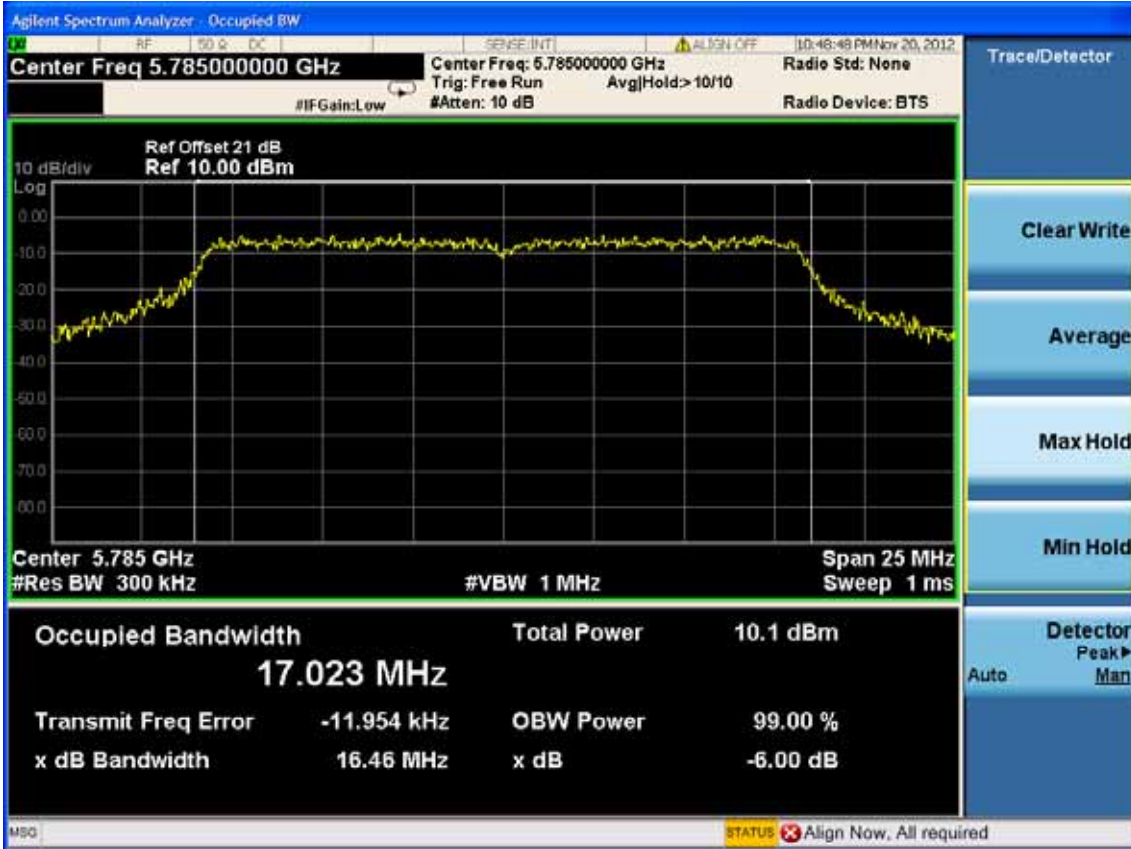
ANT 1

Test Mode: IEEE 802.11a

CH149:5745MHz



CH157:5785MHz



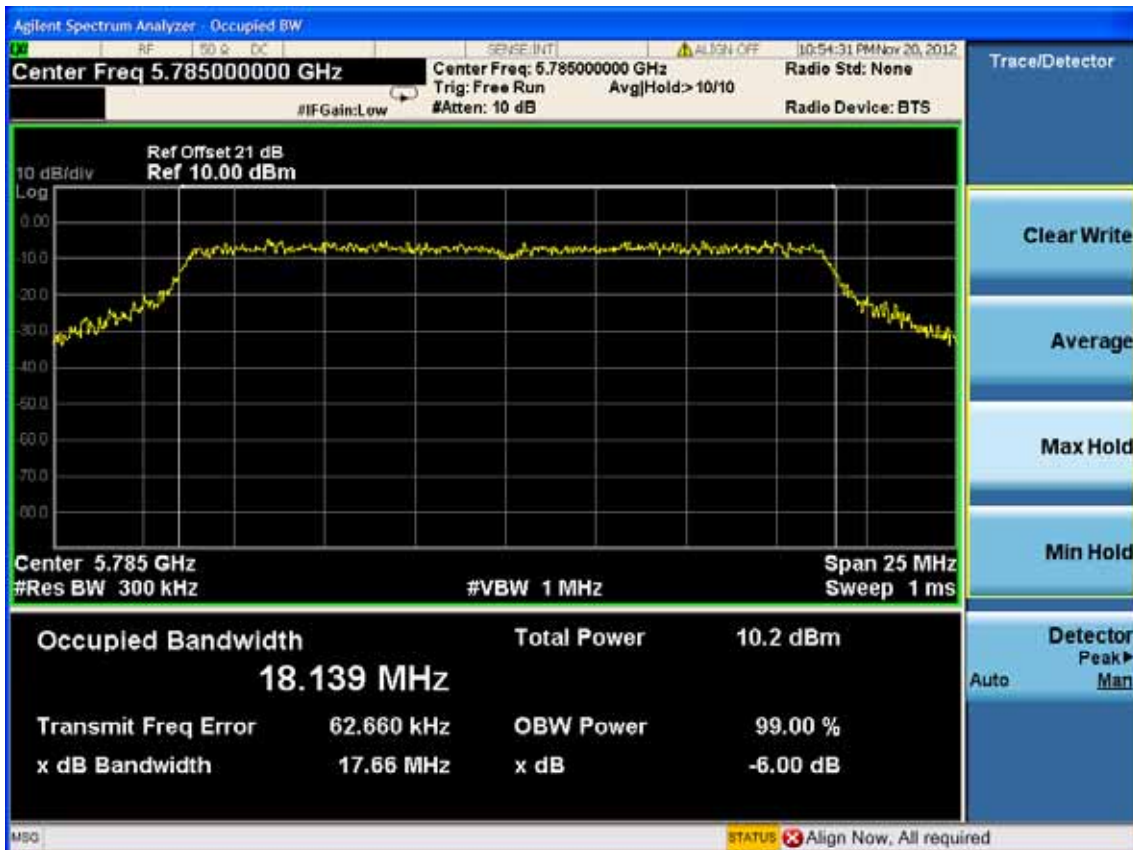
CH165:5825MHz



Test Mode: IEEE 802.11n HT20  
 CH149:5745MHz



CH157:5785MHz

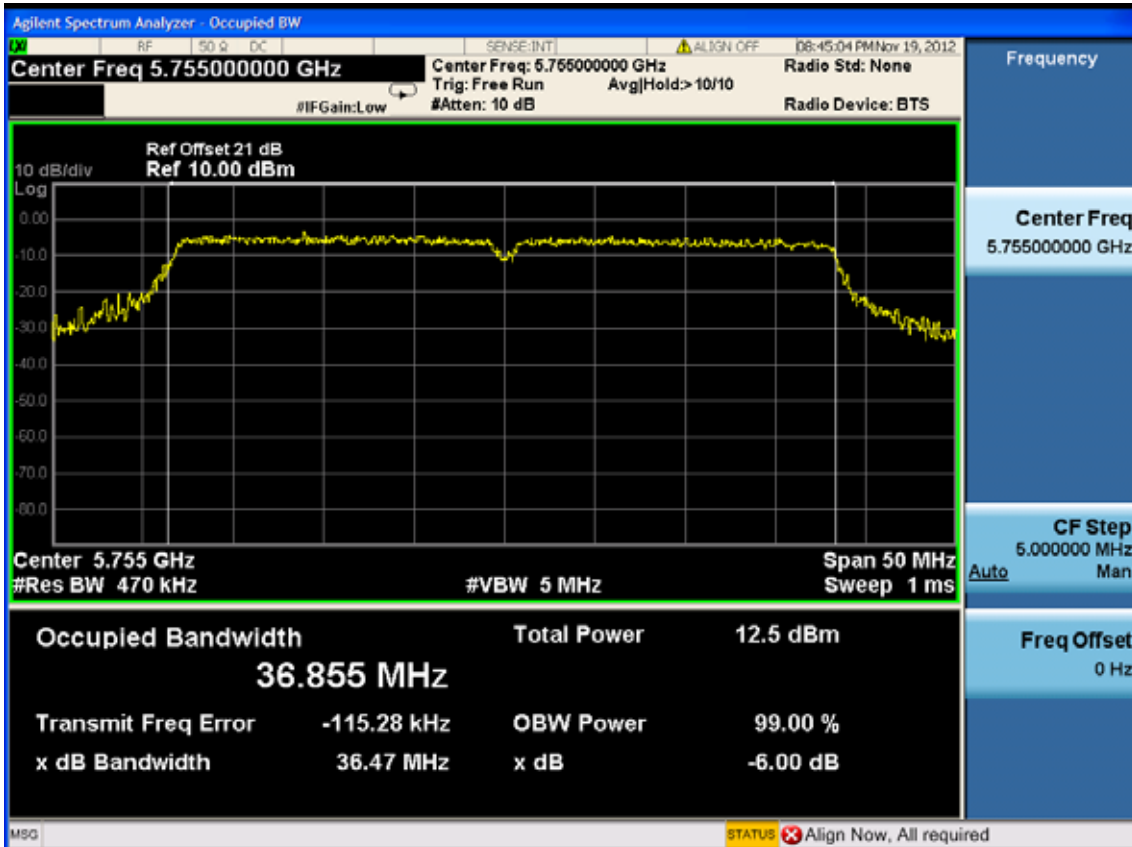


CH165:5825MHz

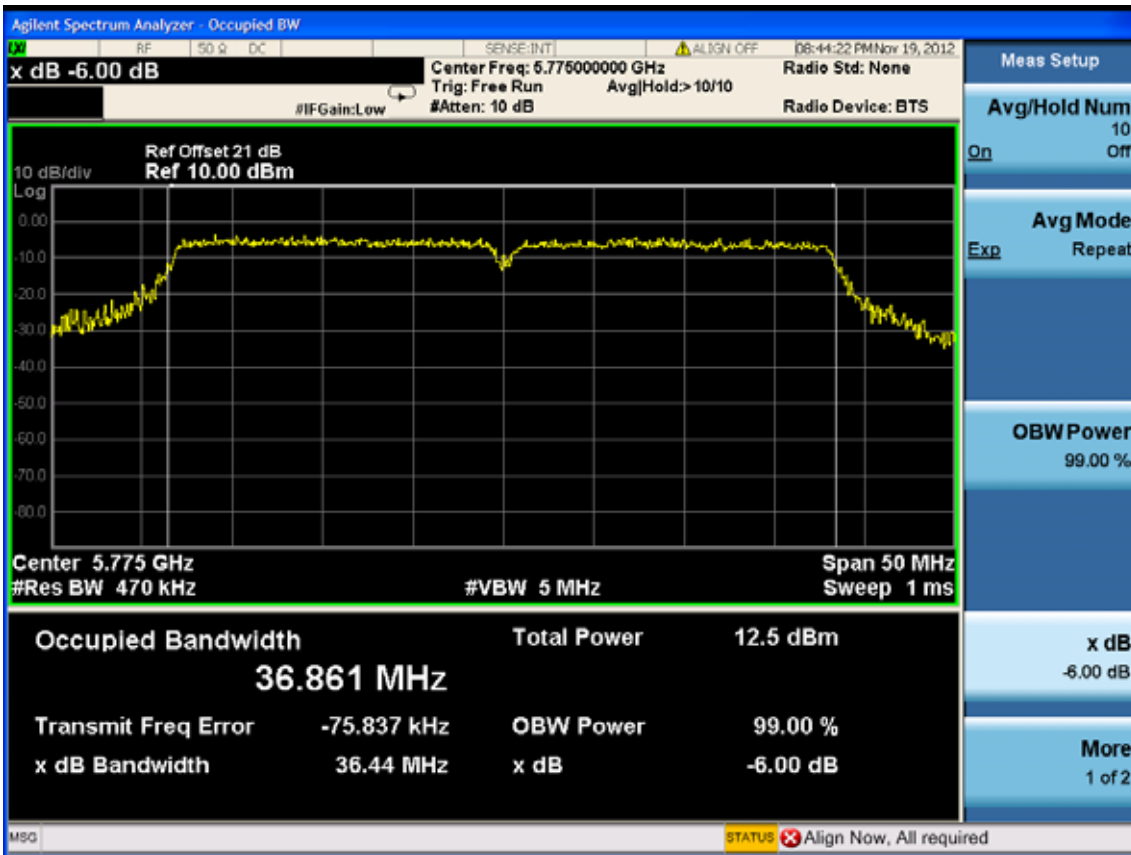


Test Mode: IEEE 802.11n HT40

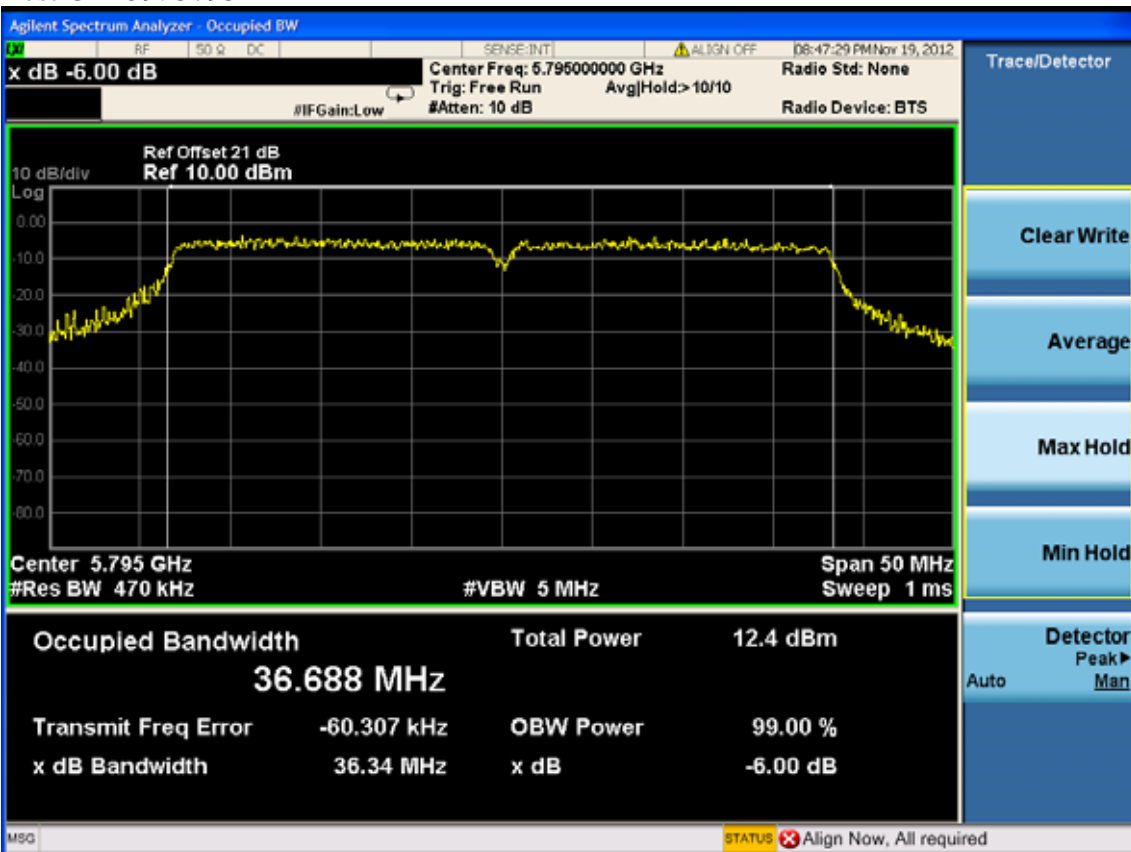
Test CH151: 5755MHz



Test CH155: 5775MHz



Test CH159: 5795MHz





## 8. OUTPUT POWER TEST

### 8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Dct.31.12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 12	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year
5.	Power Meter	Anritsu	ML2487A	6K00002472	May.08, 12	1Year
6.	Power Sensor	Anritsu	MA2491A	033005	May.08, 12	1Year

### 8.2. Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

### 8.3. Test Procedure

- 1, Connected the EUT's antenna port to measure device by 26dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 26dB bandwidth of signal to measure out each test modes' PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
  - 1) Set the RBW=3MHz and VBW =8MHz
  - 2) Turn averaging off
  - 3) Set sweep to automatic
  - 4) Set the span just large enough to capture the emission
  - 5) Use a peak detector on max hold
  - 6) Record the measured power
  - 7) Calculate Output power of EUT use the formula:

Peak output power =measured power+ 10log[(26dB bandwidth of emission)/(analyzer RBW)]

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

**8.4. Test Results**

EUT: A8-Ein Super WiFi Base Station					
M/N: WA8011N					
Test date: 2012-11-23		Pressure: 101.4±1.0 kpa		Humidity: 53.4±3.0%	
Tested by: Leo-Li		Test site: RF Site		Temperature : 22.7±0.6°C	
Cable loss: 1 dB		Attenuator loss: 20 dB		Antenna Gain : 20dBi	
Test Mode	CH (MHz)	Peak output Power (dBm)			Limit (dBm)
		ANT 0	ANT 1	Total	
11a	CH149	12.42	11.63	15.05	16
	CH157	12.37	11.48	14.96	16
	CH165	12.48	11.38	14.98	16
11n HT20	CH149	11.83	11.47	14.66	16
	CH157	11.88	11.44	14.68	16
	CH165	11.94	11.29	14.64	16

Test Mode	CH	Result					Limit (dBm)
		Measured power(dBm)/3MHz		PK Output power (dBm)			
		ANT 0	ANT 1	ANT 0	ANT 1	Total	
11n HT40	CH151	0.004	-0.299	12.144	11.881	15.02	16
	CH155	0.138	-0.347	12.278	11.833	15.07	16
	CH159	0.023	-0.265	12.163	11.915	15.05	16
ANT 0:26dB Bandwidth for 11n HT40: 49.06MHz							
ANT 1:26dB Bandwidth for 11n HT40: 49.57MHz							
ANT 0:BW correction factor = 10log[(49.06MHz)/(3MHz)] = 12.14dB							
ANT 1:BW correction factor = 10log[(49.57MHz)/(3MHz)] = 12.18dB							
Conclusion: PASS							

Test Mode: IEEE 802.11n HT40  
ANT 0





ANT 1



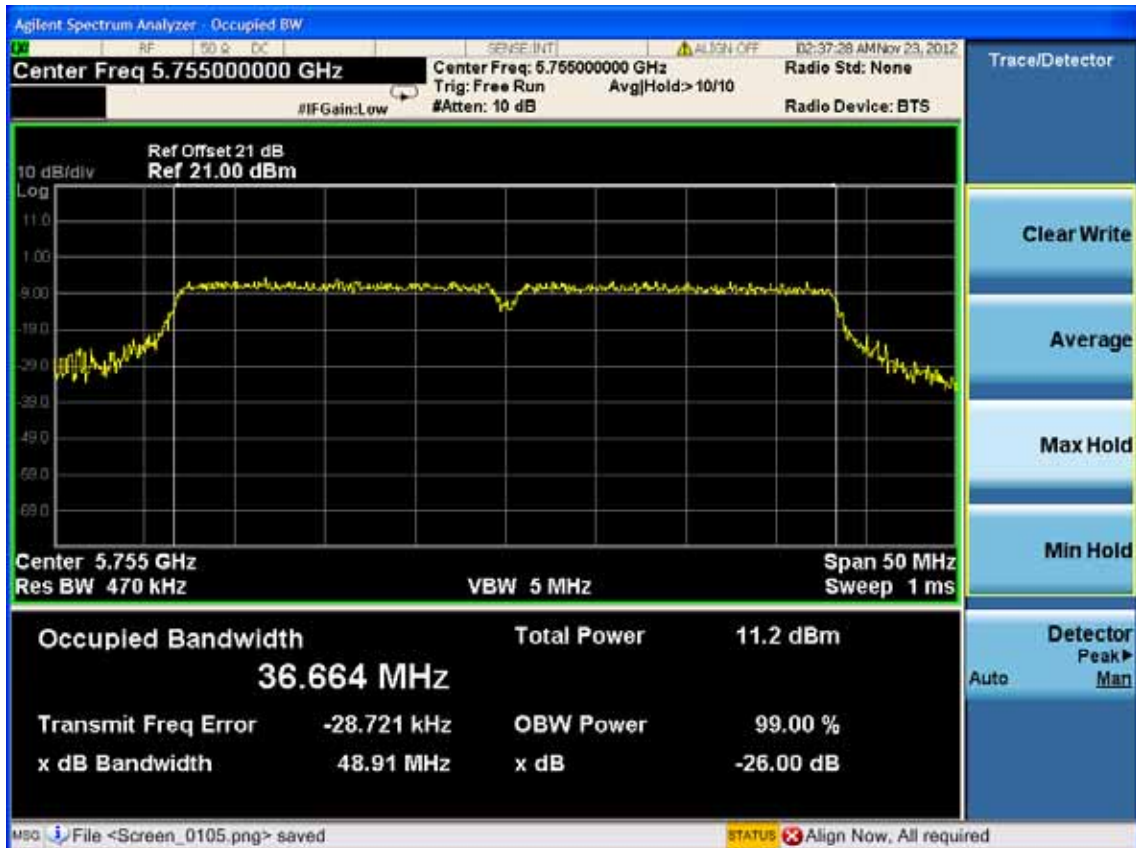


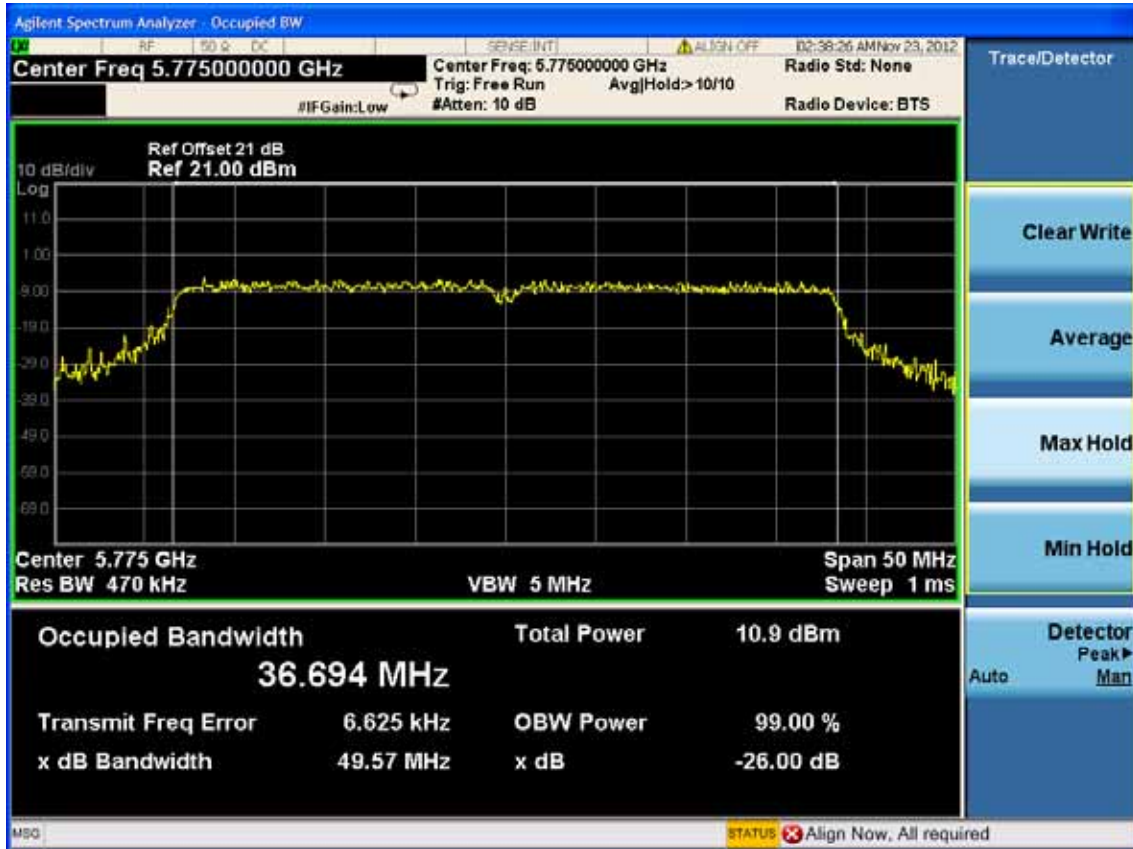
26dB Bandwidth  
ANT 0





ANT 1







## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Dct.31.12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.31, 12	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year

### 9.2. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

### 9.3. Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
2. Set the test frequency as center frequency, Set RBW=100KHz, VBW=300KHz, Span to 5-30 % greater than the EBW, Read out maximum peak level of the test frequency.
- 3, adjusting (reducing) the measured power in step 2 by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(3 \text{ kHz}/100 \text{ kHz} = -15.2 \text{ dB})$

Note: The cable loss and attenuator loss were offset into measure device as an amplitude

9.4. Test Results

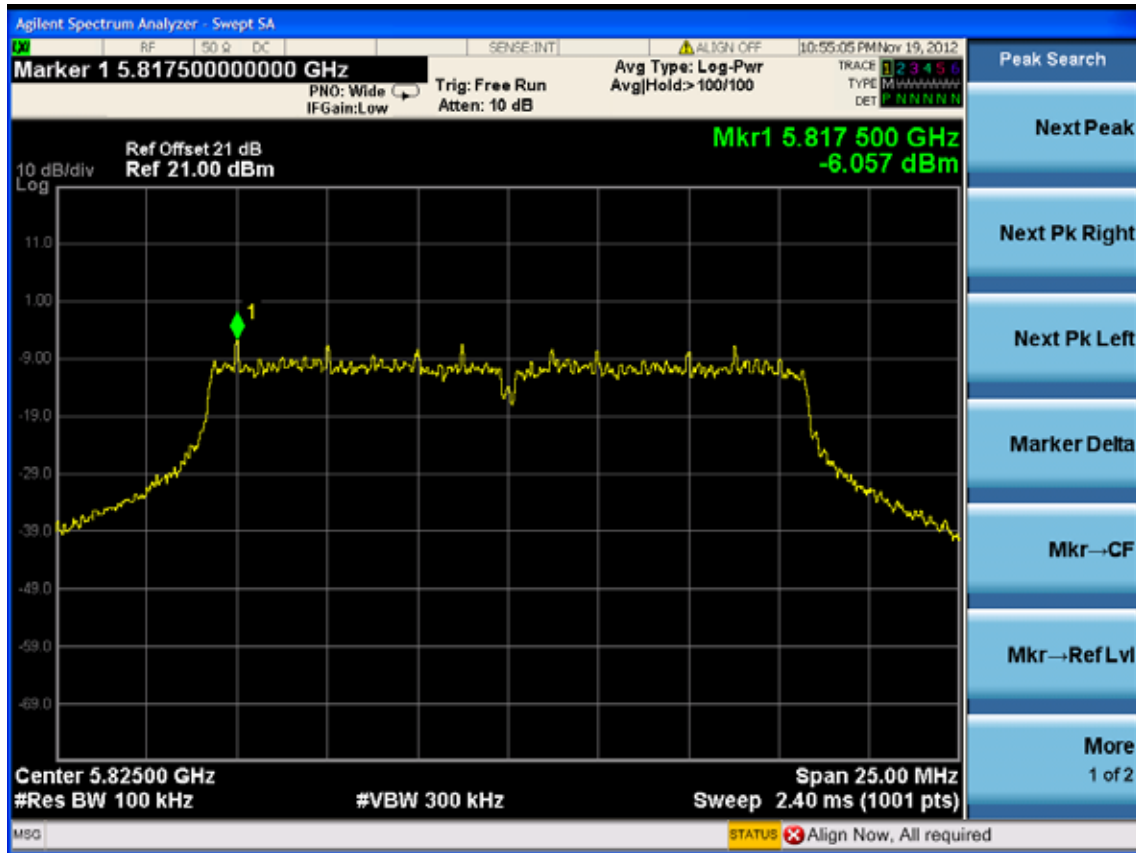
EUT: A8-Ein Super WiFi Base Station		
M/N: WA8011N		
Test date: 2012-11-25	Pressure: 101.2±1.0 kpa	Humidity: 53.6±3.0%
Tested by: Leo-Li	Test site: RF Site	Temperature : 22.5±0.6°C

Cable loss: 1 dB		Attenuator loss: 20 dB				
Test Mode	CH	Power density (dBm/100KHz)			Power density (dBm/3KHz)	Limit (dBm/3KHz)
		ANT 0	ANT1	Total	Total	
11a	CH149	-5.935	-5.700	-2.81	-18.01	8
	CH157	-5.851	-6.825	-3.30	-18.50	8
	CH165	-6.057	-6.388	-3.21	-18.41	8
11n HT20	CH149	-5.621	-6.144	-2.86	-18.06	8
	CH157	-8.375	-6.964	-4.60	-19.80	8
	CH165	-5.960	-6.820	-3.36	-18.56	8
11n HT40	CH149	-7.084	-7.946	-4.48	-19.68	8
	CH157	-7.372	-7.702	-4.52	-19.72	8
	CH165	-7.577	-8.154	-4.85	-20.05	8
BW correction factor = 10log[(3/100KHz)] = -15.2						
Conclusion : PASS						

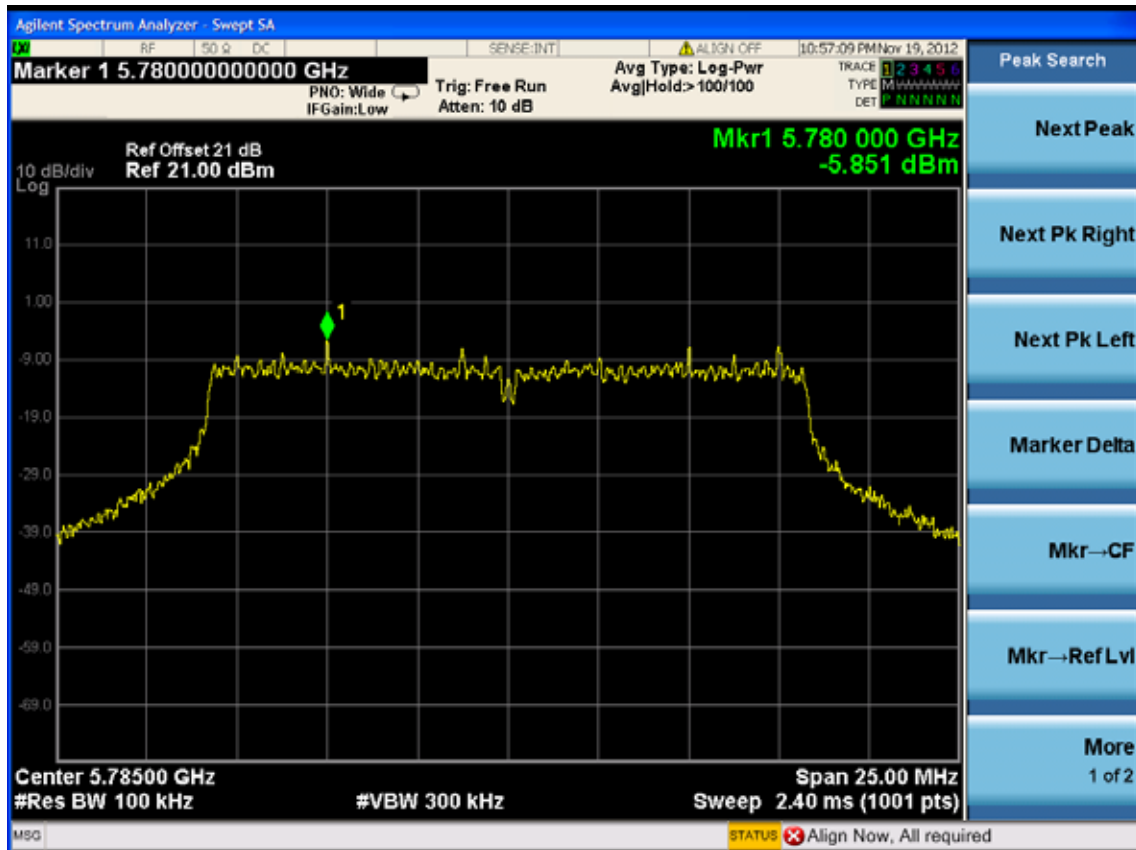
ANT 0

Test Mode: IEEE 802.11a

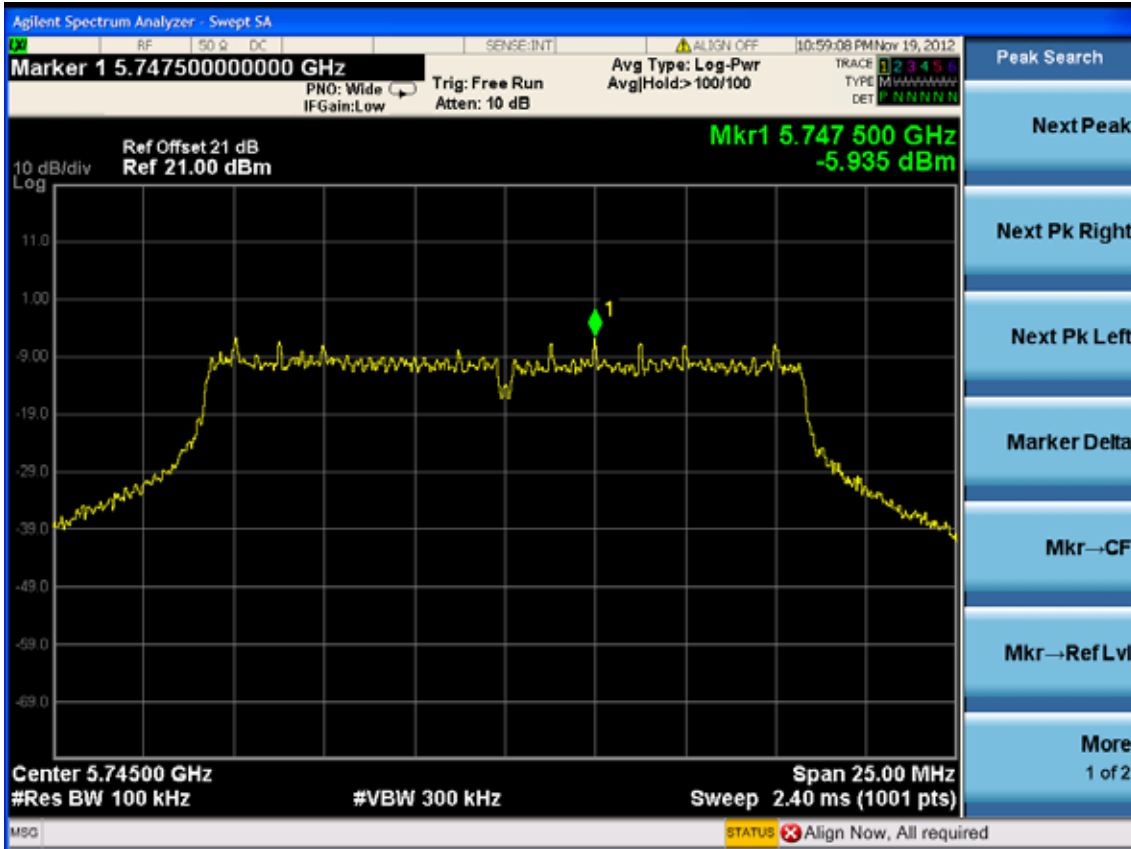
CH149:5745MHz



CH157:5785MHz

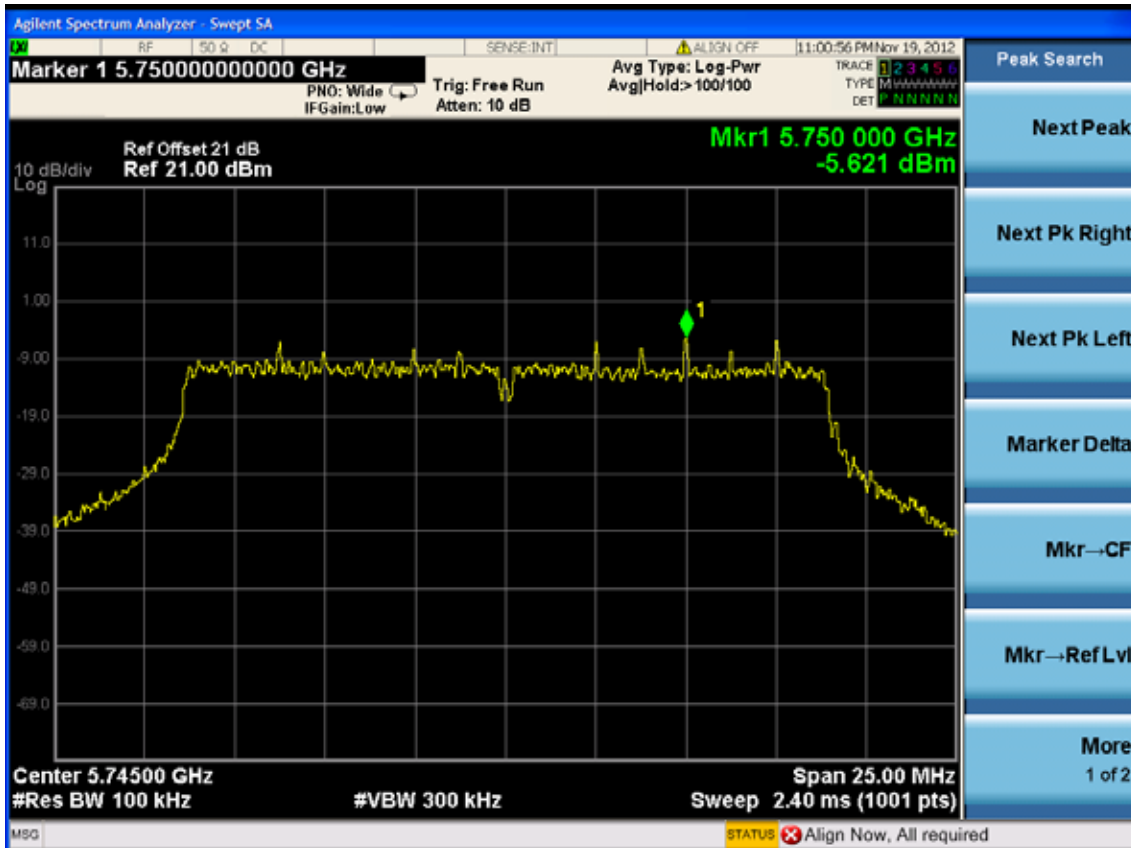


CH165:5825MHz

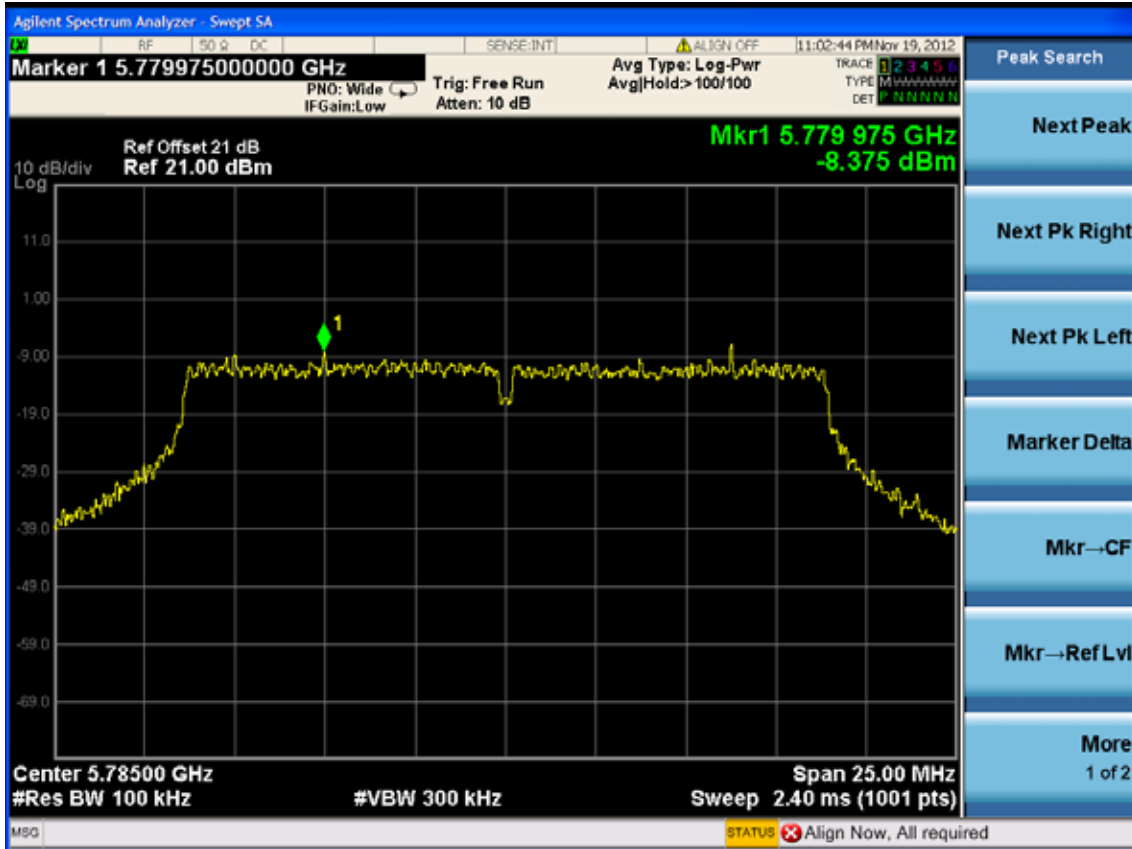


Test Mode: IEEE 802.11n HT20

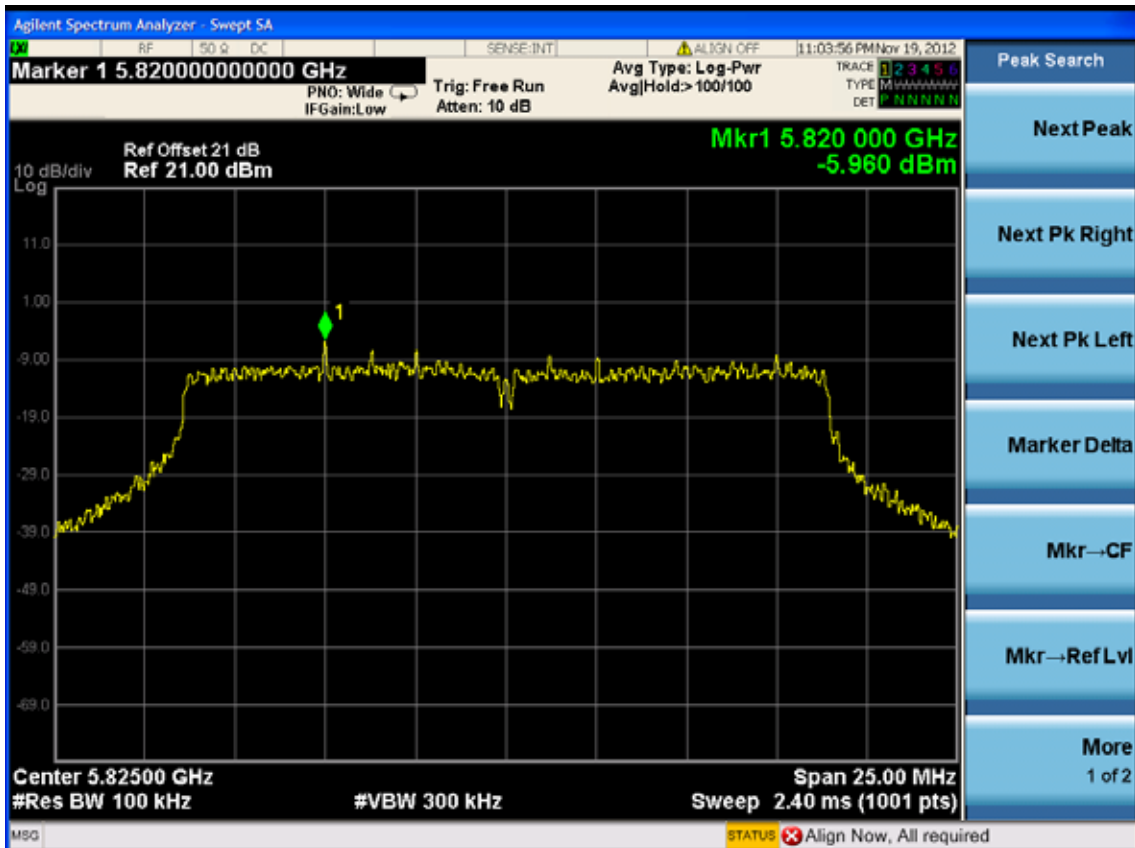
CH149:5745MHz



CH157:5785MHz



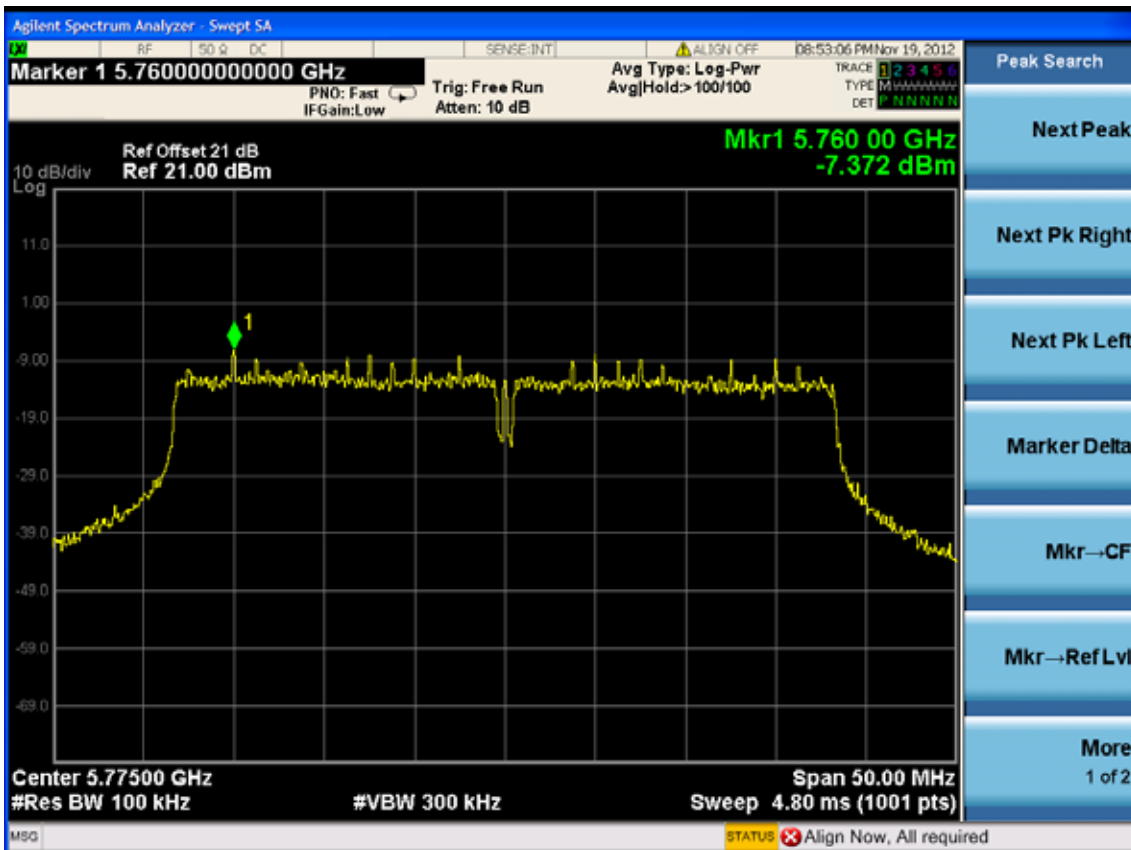
CH165:5825MHz



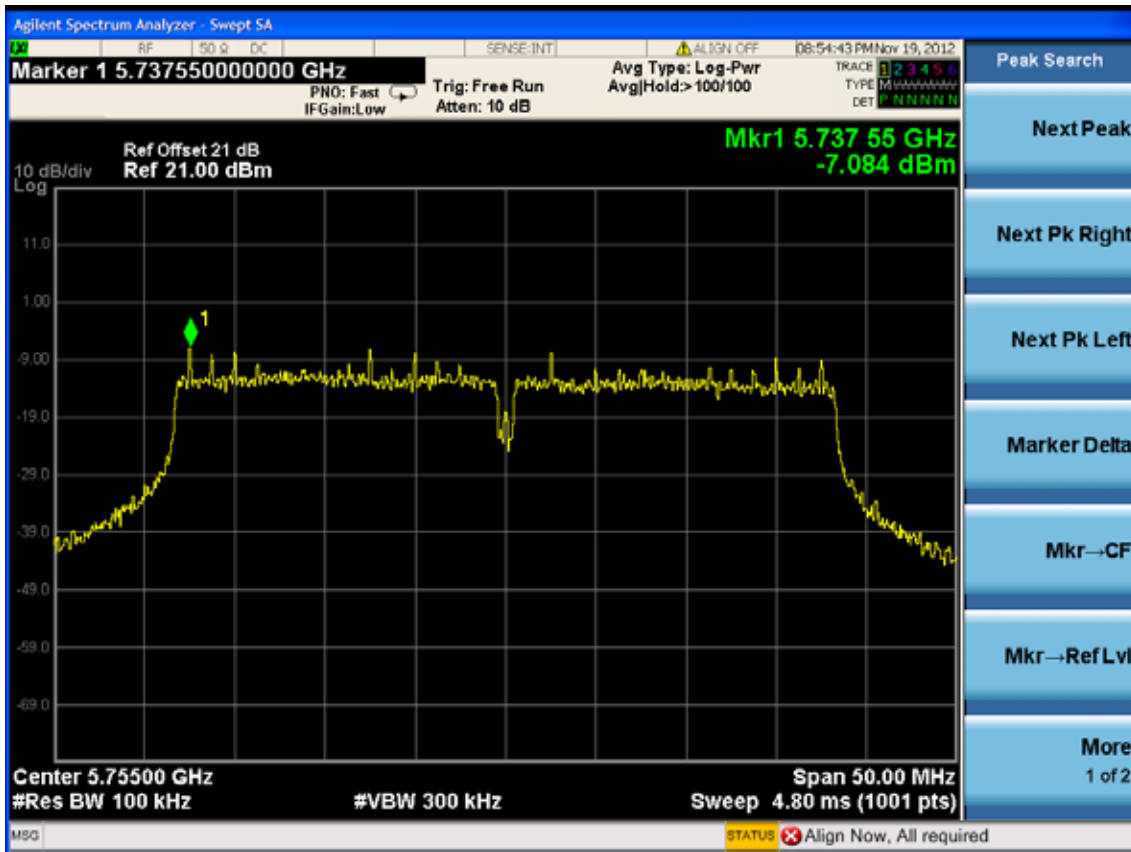
Test Mode: IEEE 802.11n HT40  
 Test CH151: 5755MHz



Test CH155: 5755MHz



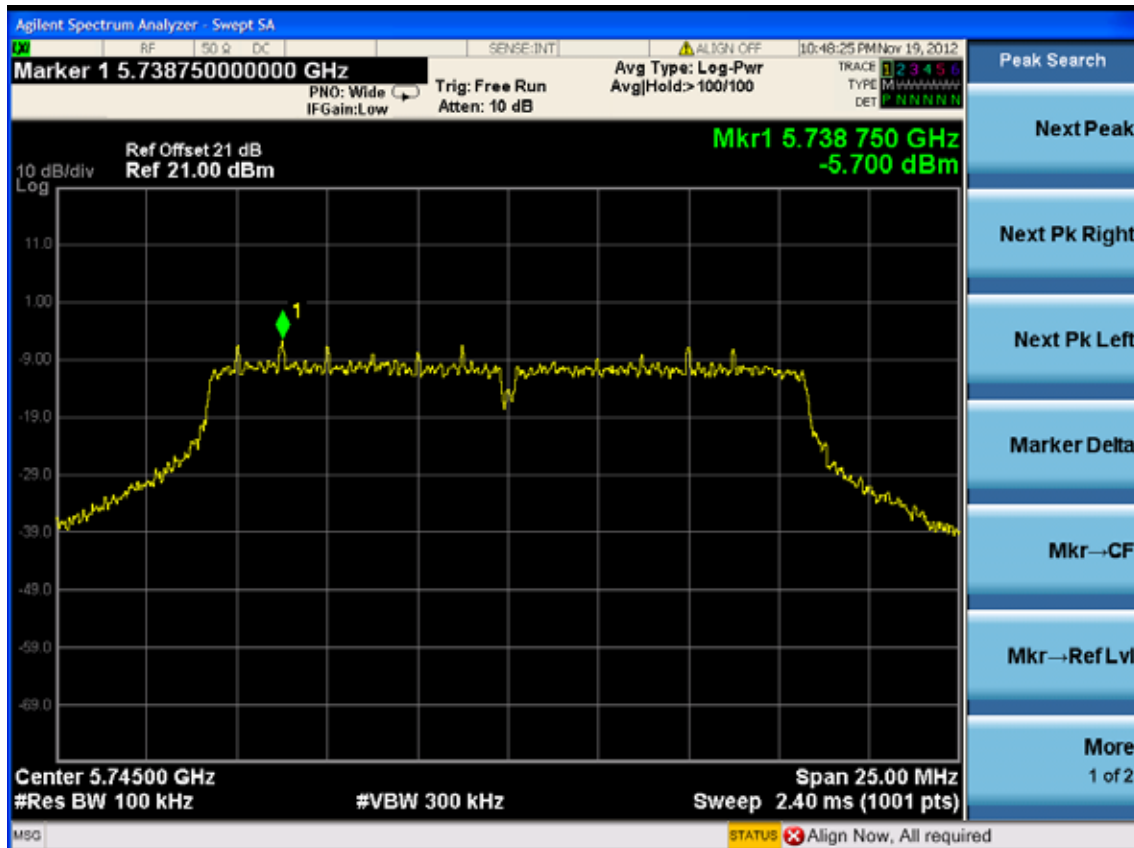
Test CH159: 5795MHz



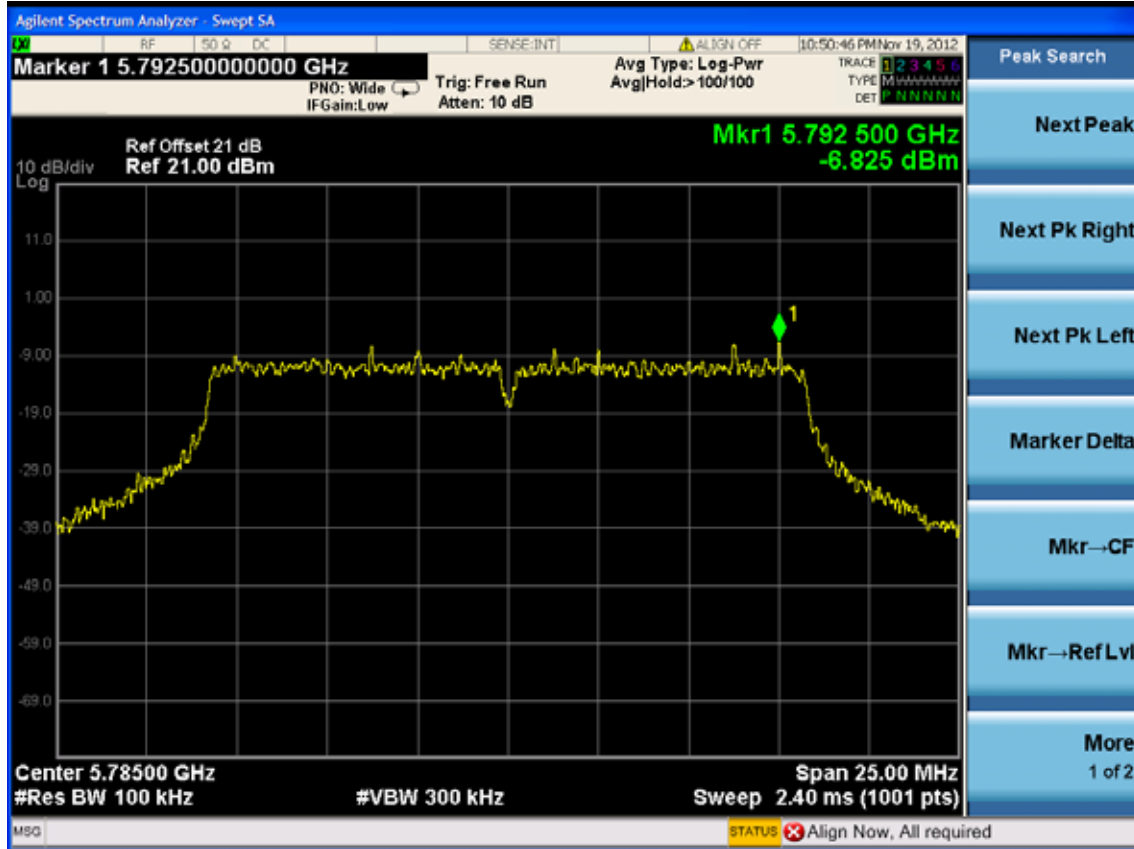
ANT 1

Test Mode: IEEE 802.11a

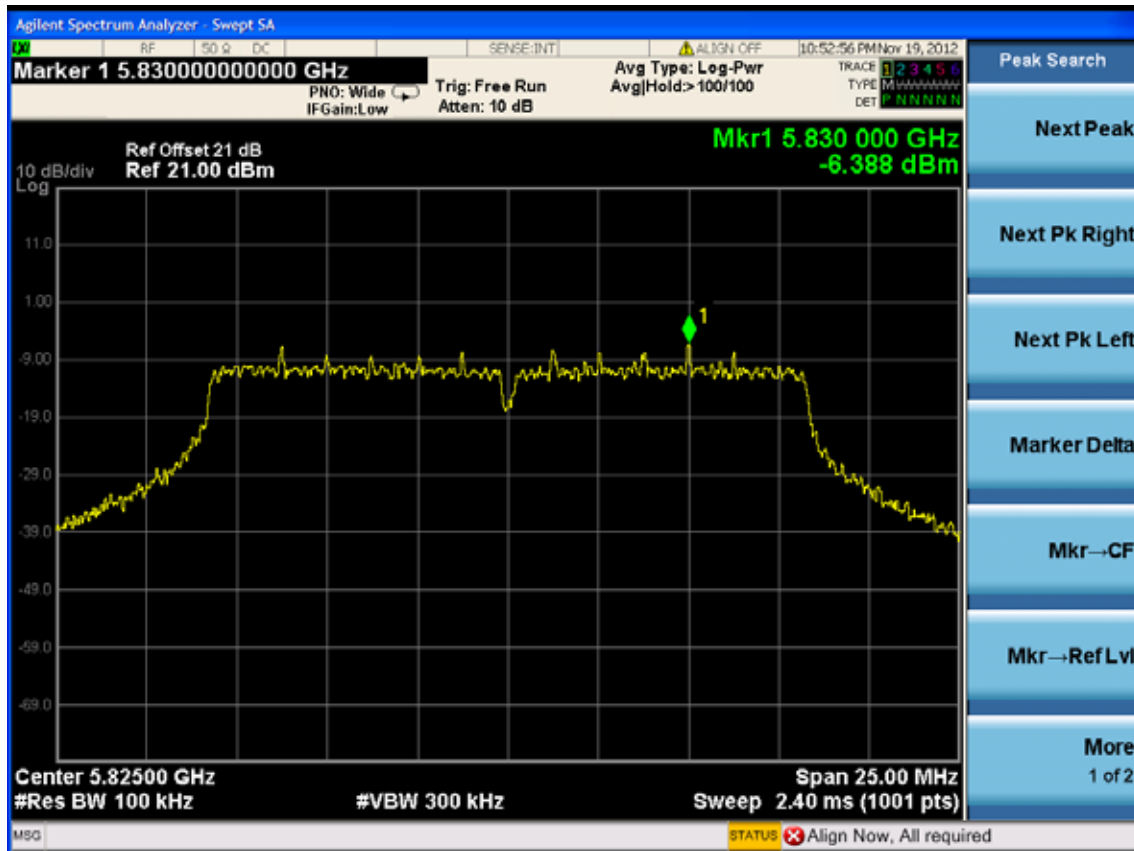
CH149:5745MHz



CH157:5785MHz

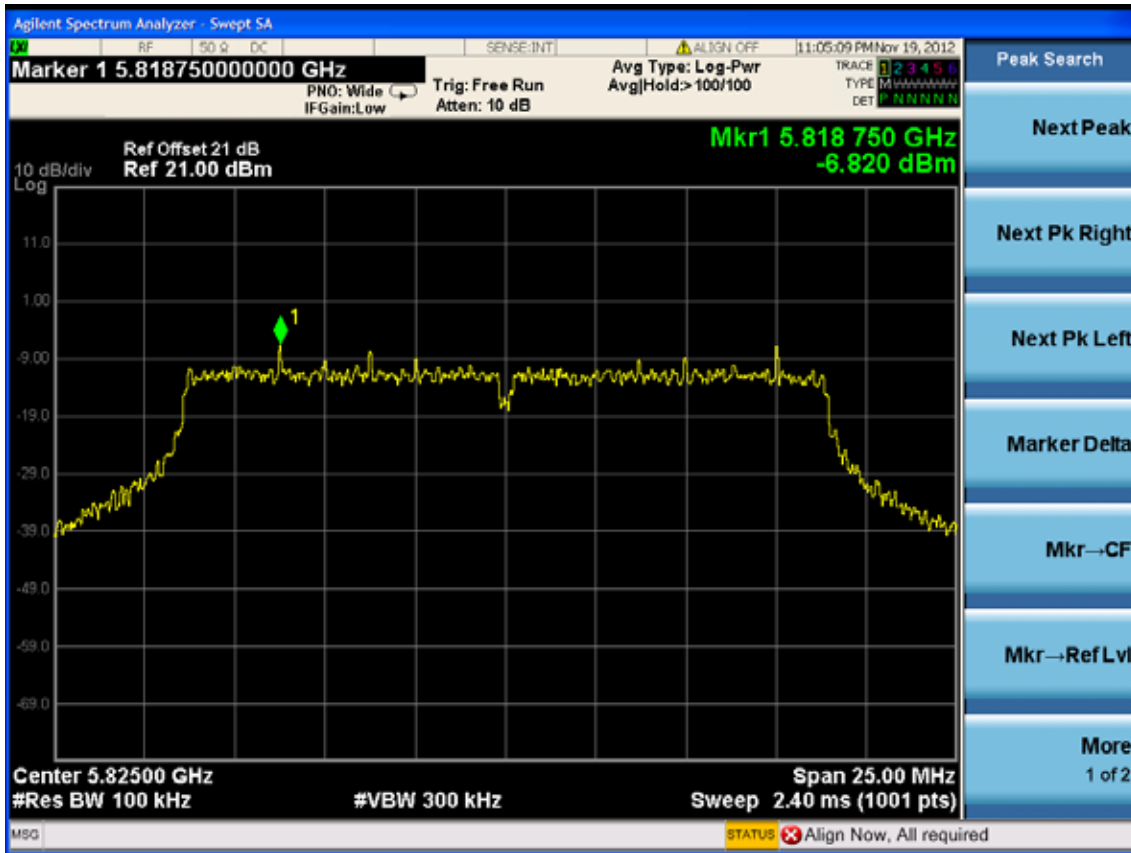


CH165:5825MHz

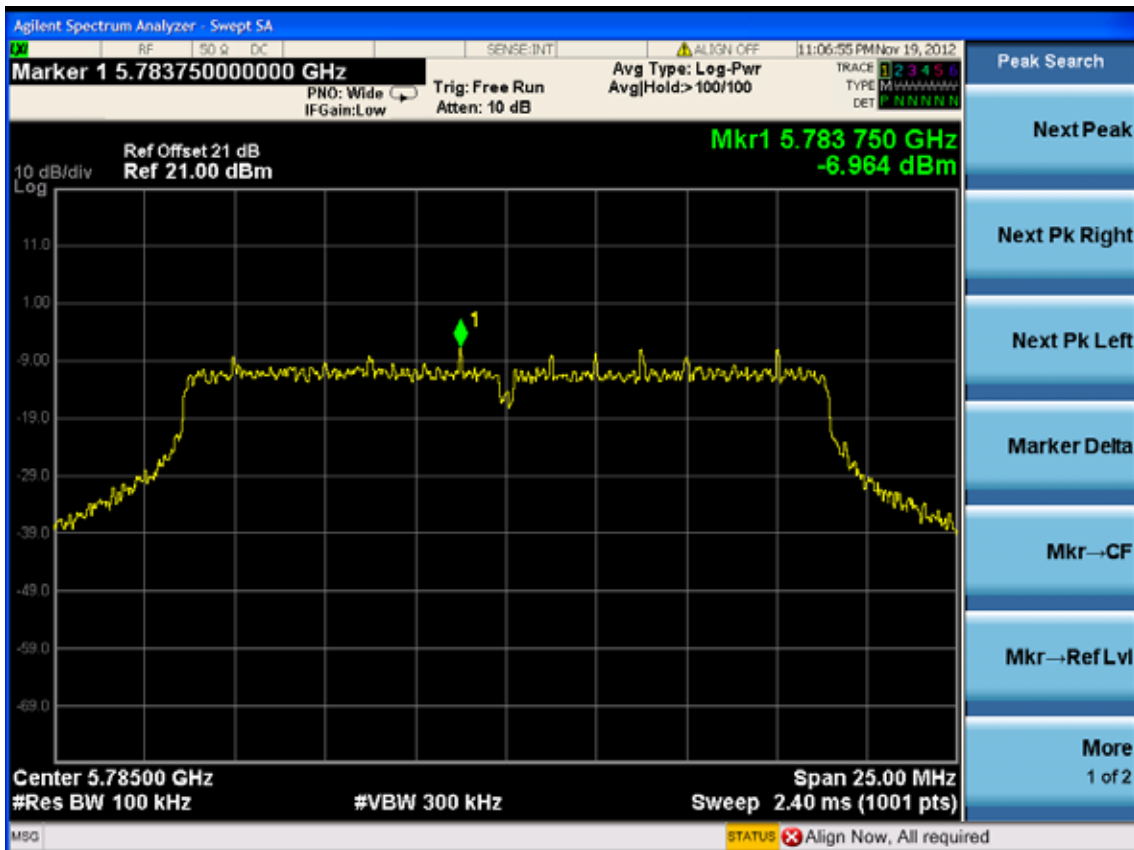




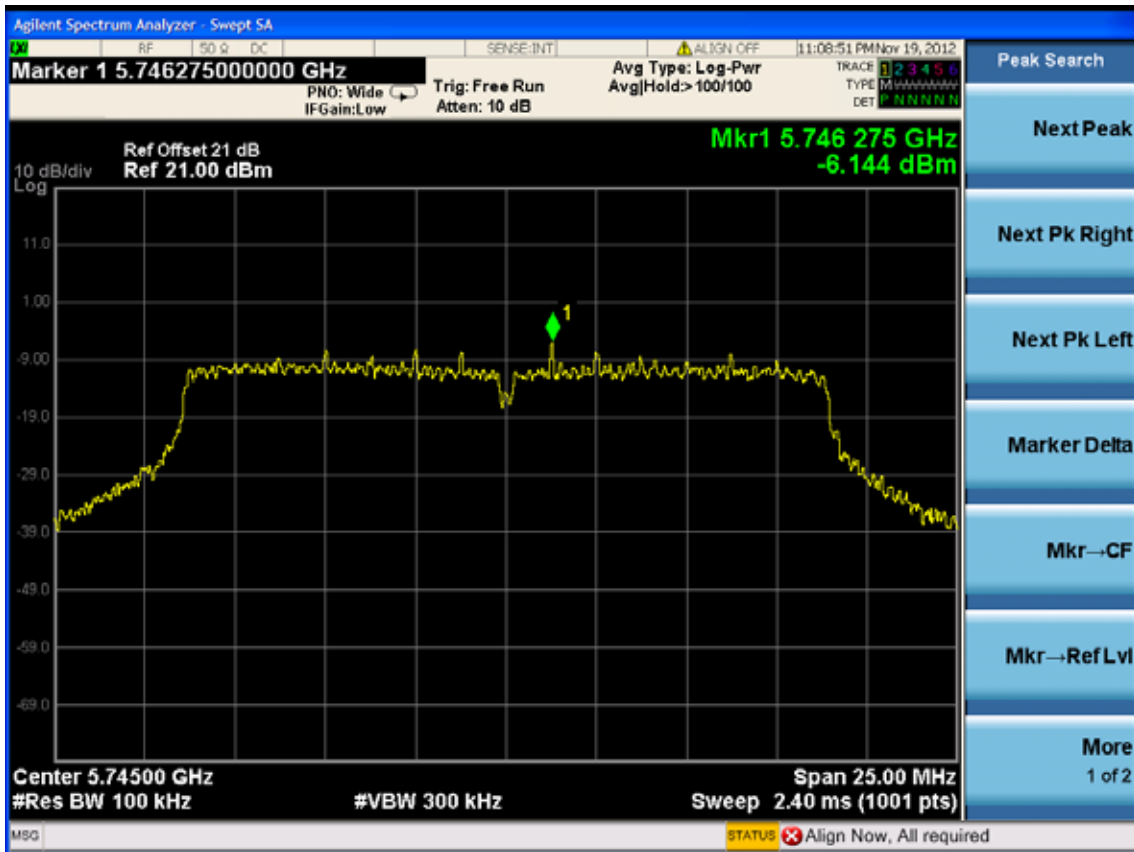
Test Mode: IEEE 802.11n HT20  
 CH149:5745MHz



CH157:5785MHz

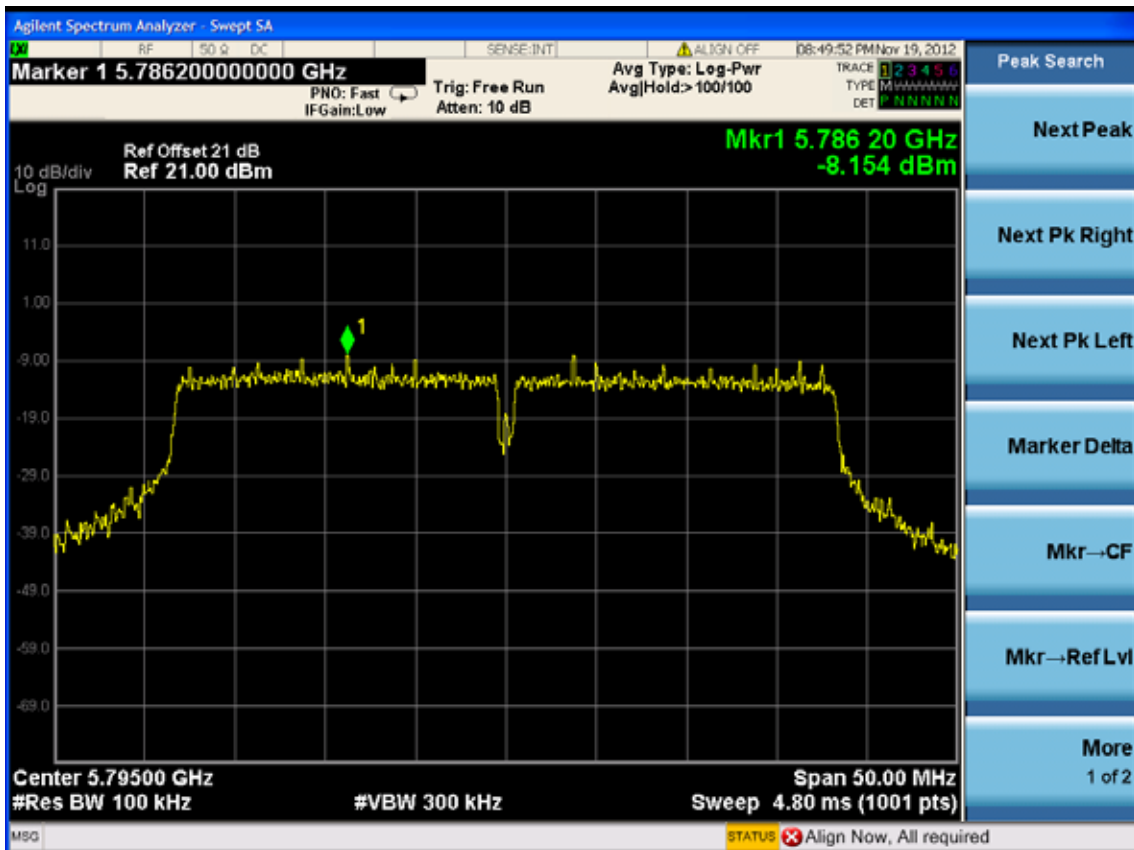


CH165:5825MHz

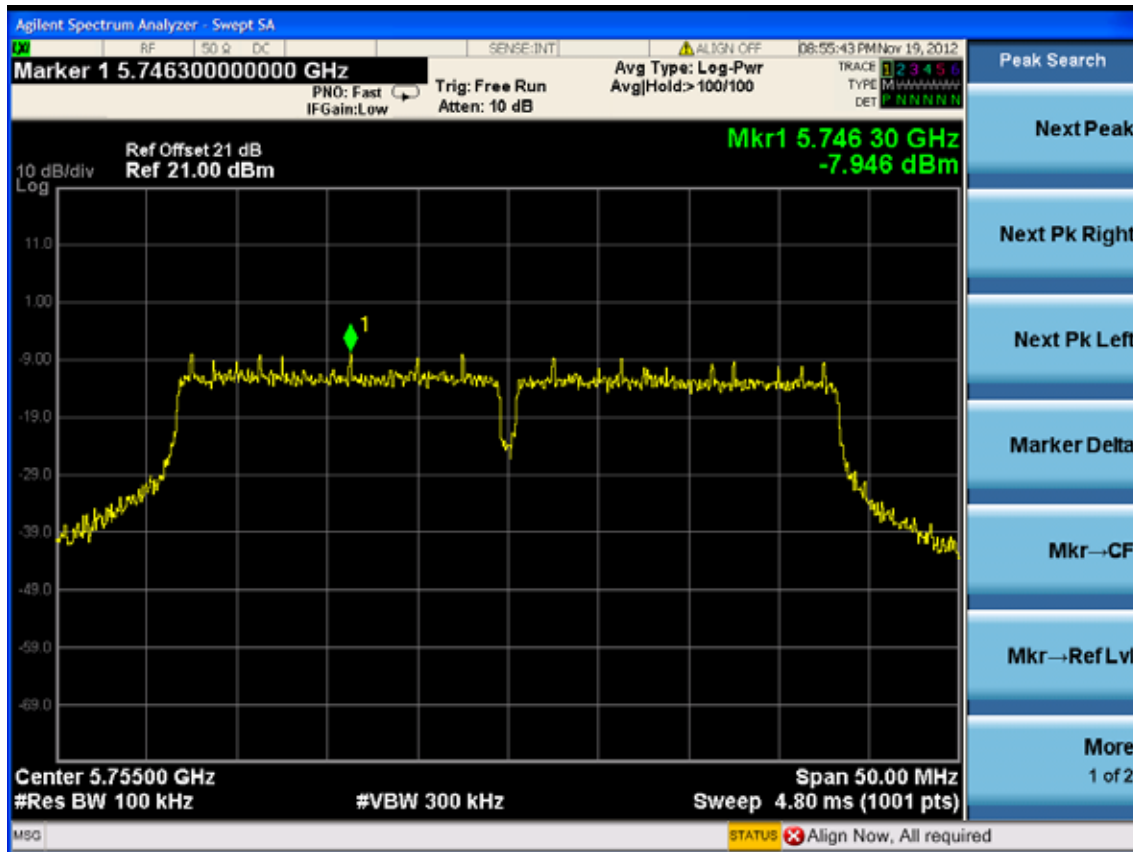


Test Mode: IEEE 802.11n HT40

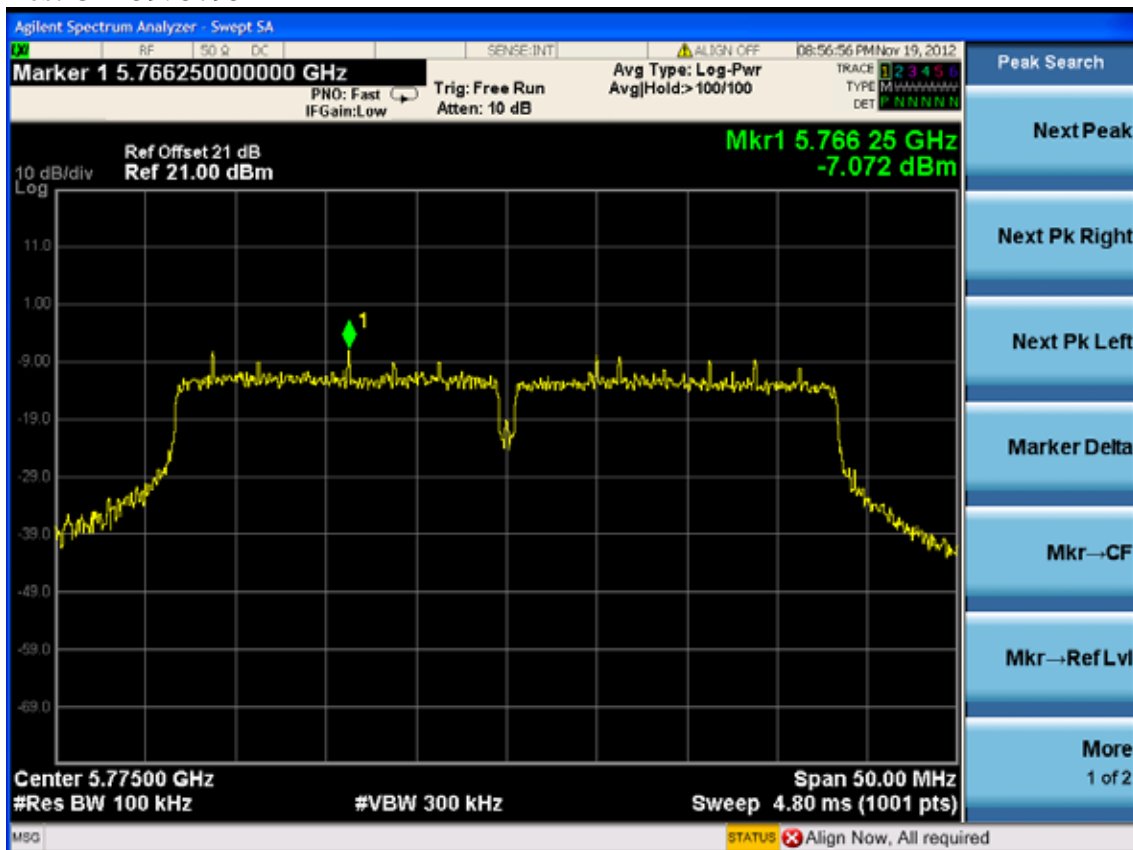
Test CH151: 5755MHz



Test CH155: 5775MHz



Test CH159: 5795MHz



## **10. ANTENNA REQUIREMENT**

### **10.1. STANDARD APPLICABLE**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### **10.2. ANTENNA CONNECTED CONSTRUCTION**

The antennas used for this product are Dipole antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 20dBi.