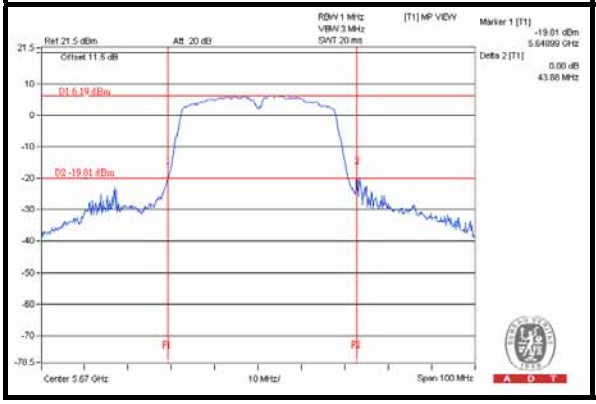
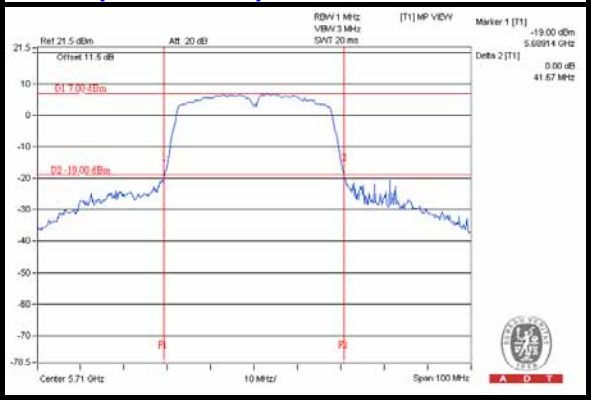
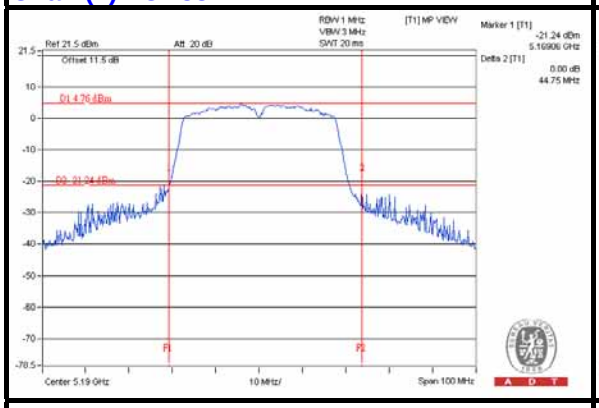
Chain(0) : CH134	Chain(0) : CH142 (UNII-2c Band) / Chain(0) : CH142 (UNII-3 Band)
	

NOTE:

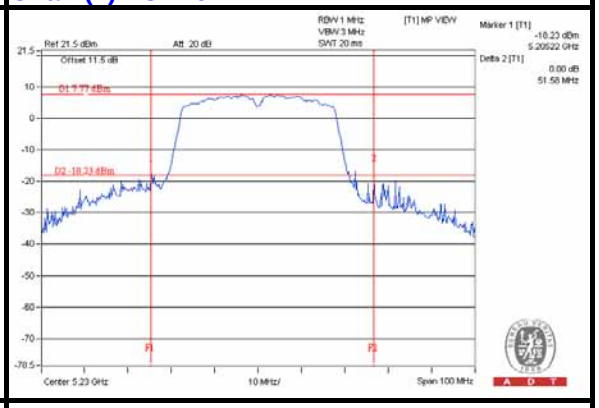
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

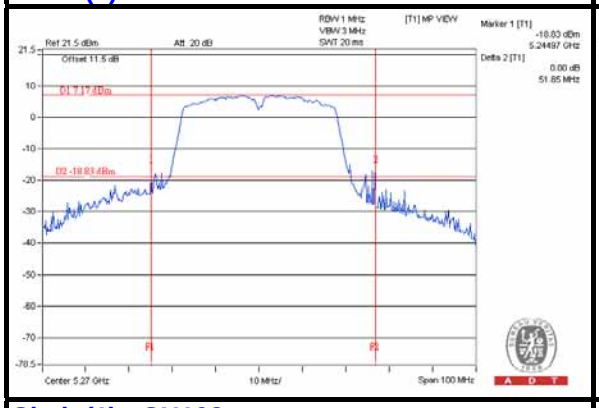
Chain(1) : CH38



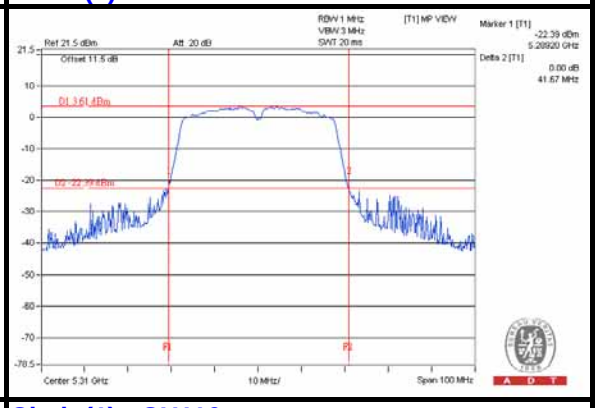
Chain(1) : CH46



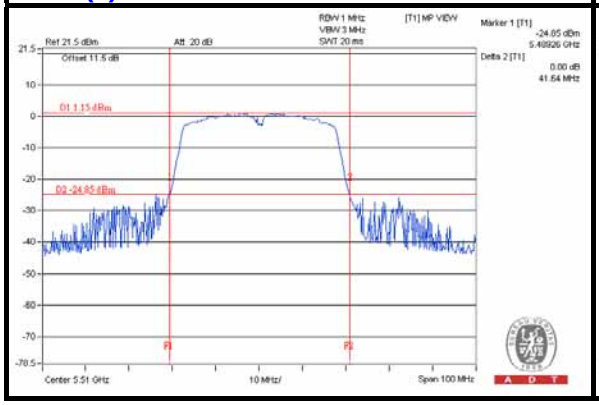
Chain(1) : CH54



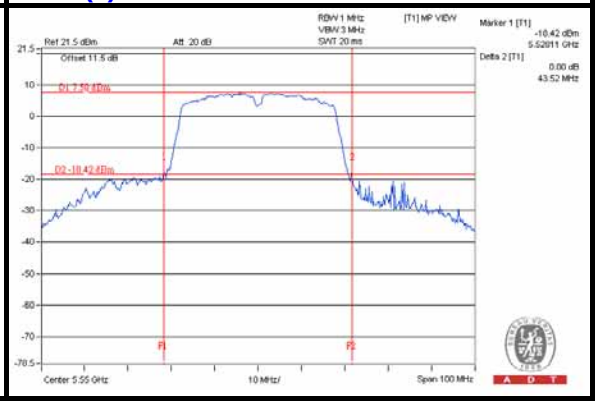
Chain(1) : CH62

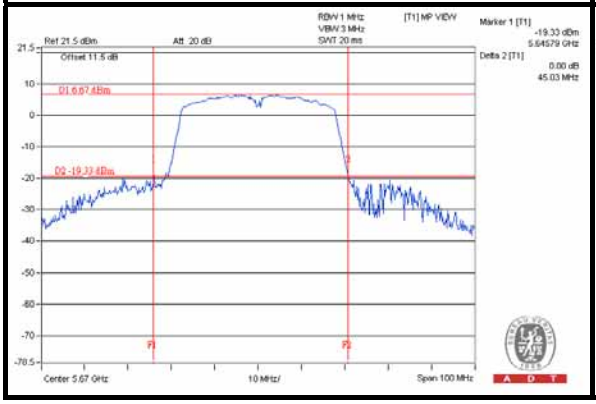
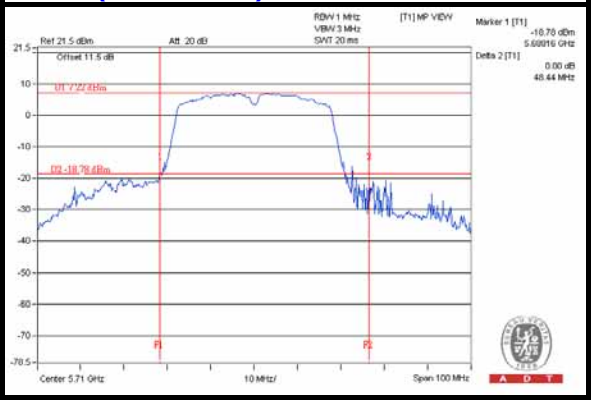


Chain(1) : CH102



Chain(1) : CH110



Chain(1) : CH134	Chain(1) : CH142 (UNII-2c Band) / Chain(1) : CH142 (UNII-3 Band)
	

NOTE:

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

802.11ac (VHT20)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	8.93	10.43	18.857	12.75	16.91	PASS
40	5200	12.18	13.46	38.702	15.88	16.91	PASS
48	5240	12.14	13.37	38.095	15.81	16.91	PASS
52	5260	14.56	15.76	66.246	18.21	23.91	PASS
60	5300	14.57	15.83	66.924	18.26	23.91	PASS
64	5320	7.63	8.24	12.462	10.96	23.91	PASS
100	5500	6.73	7.24	10.007	10.00	22.23	PASS
116	5580	14.53	14.63	57.419	17.59	22.23	PASS
132	5660	14.45	14.24	54.407	17.36	22.23	PASS
140	5700	6.81	6.93	9.729	9.88	22.23	PASS
144 (UNII-2c Band)	5720	11.75	12.33	32.062	15.25	21.06	PASS
144 (UNII-3 Band)	5720	3.69	4.63	5.243	7.39	22.28	PASS

Note:

5150~5250MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

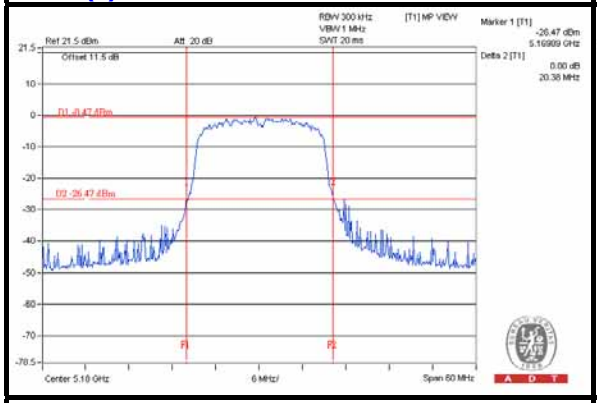
802.11ac (VHT20)
26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	20.38	21.06
40	5200	20.04	20.47
48	5240	20.01	20.40
52	5260	21.17	21.82
60	5300	20.88	21.45
64	5320	20.03	20.29
100	5500	20.02	21.64
116	5580	20.51	21.11
132	5660	20.32	20.92
140	5700	19.98	20.75
144 (UNII-2c Band)	5720	15.36	15.26
144 (UNII-3 Band)	5720	5.70	5.07

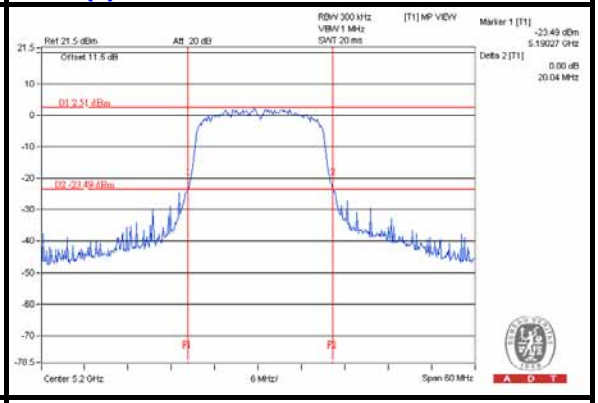
Note: For FCC output power limitation is determined based on 26dB bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
36	5180	20.38	17.09 > 17
40	5200	20.04	17.01 > 17
48	5240	20.01	17.01 > 17
Power Limit = 11dBm + 10logB < Band 2~3>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.17	24.25 > 24
60	5300	20.88	24.19 > 24
64	5320	20.03	24.01 > 24
100	5500	20.02	24.01 > 24
116	5580	20.51	24.11 > 24
132	5660	20.32	24.07 > 24
140	5700	19.98	24 = 24
144 (UNII-2c Band)	5720	15.26	22.83 < 24
144 (UNII-3 Band)	5720	5.07	24.05 > 30

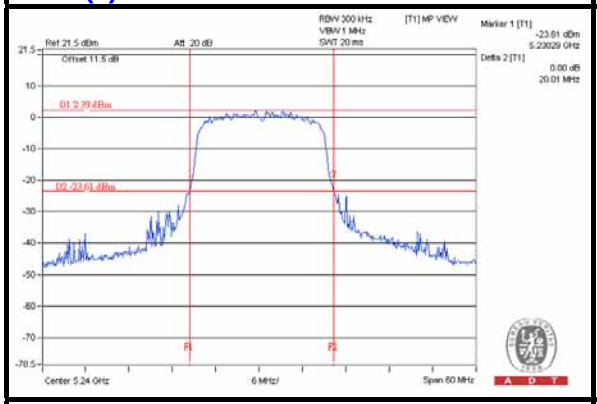
Chain(0) : CH36



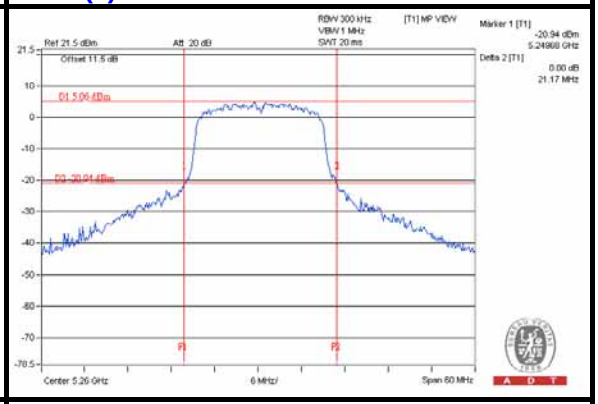
Chain(0) : CH40



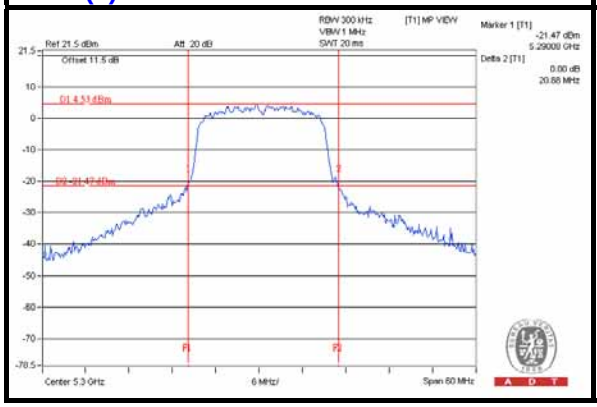
Chain(0) : CH48



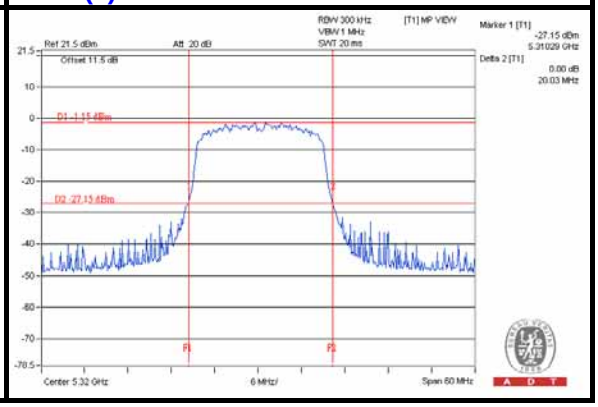
Chain(0) : CH52

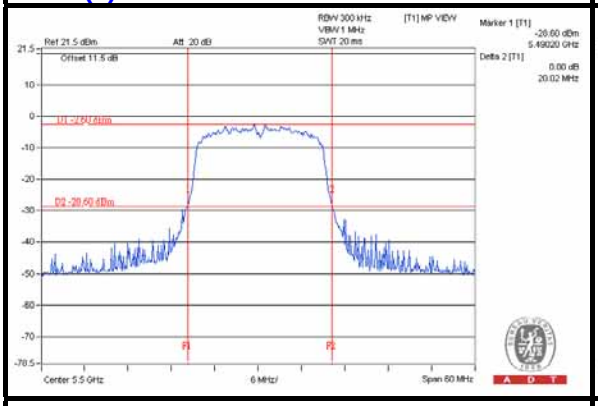
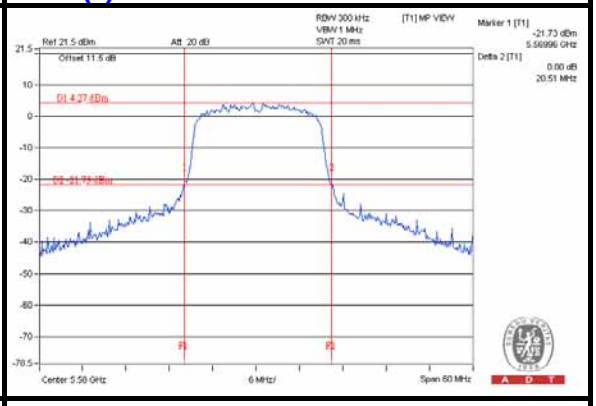
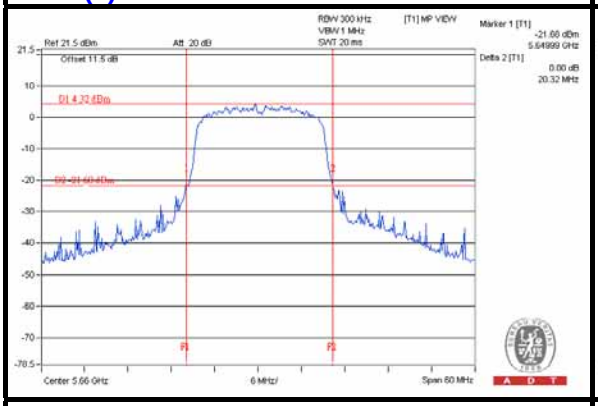
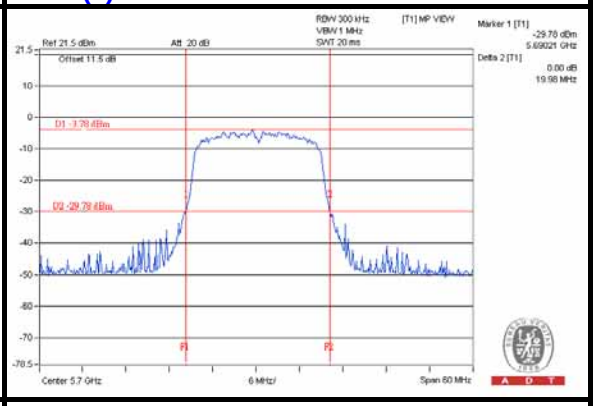
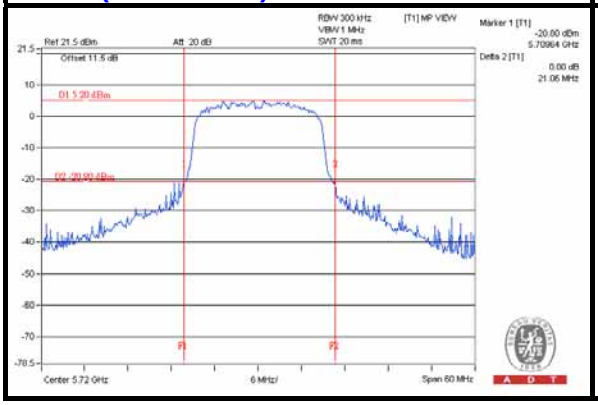


Chain(0) : CH60



Chain(0) : CH64



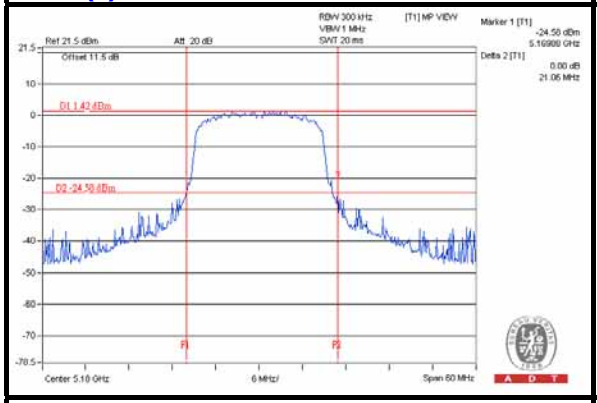
Chain(0) : CH100	Chain(0) : CH116
	
Chain(0) : CH132	**Chain(0) : CH140**
	
Chain(0) : CH144 (UNII-2c Band) / Chain(0) : CH144 (UNII-3 Band)	
	

NOTE:

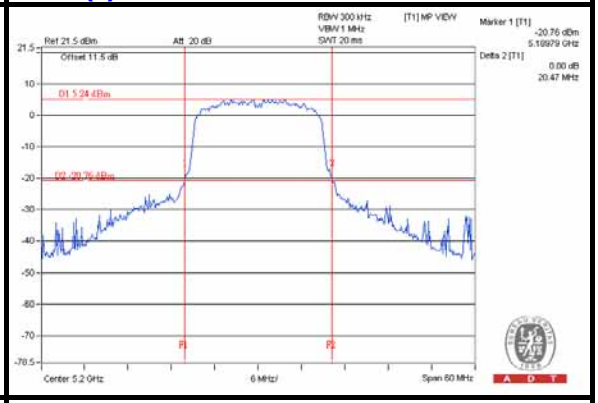
For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

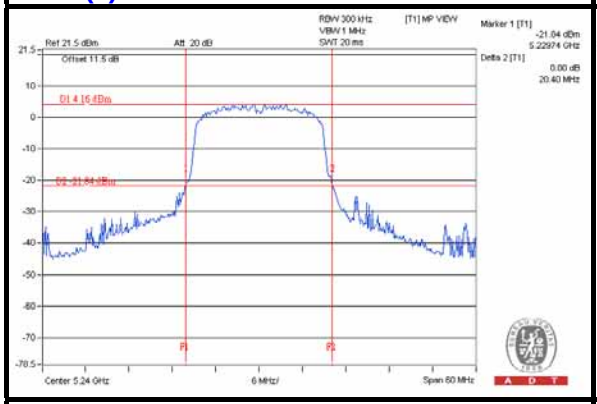
Chain(1) : CH36



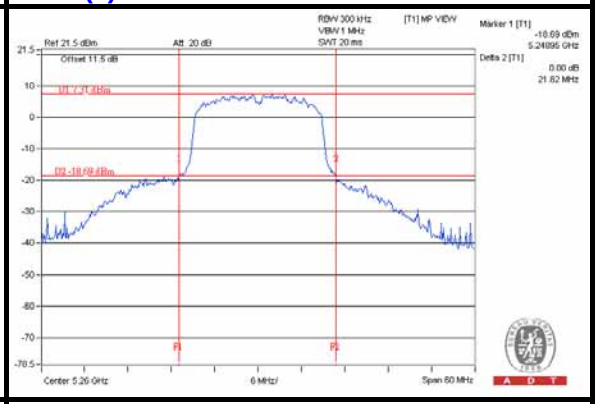
Chain(1) : CH40



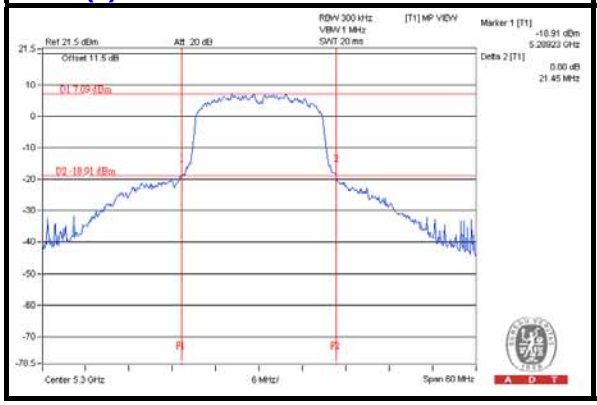
Chain(1) : CH48



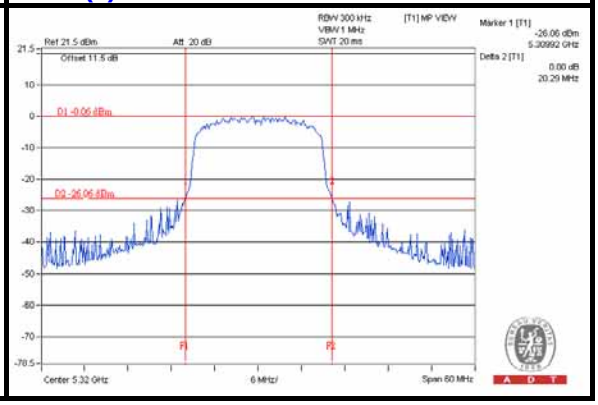
Chain(1) : CH52

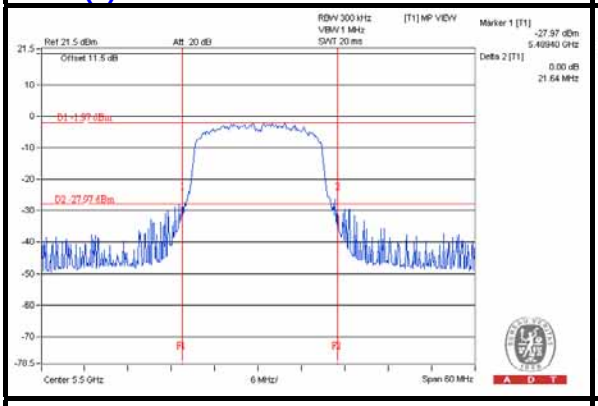
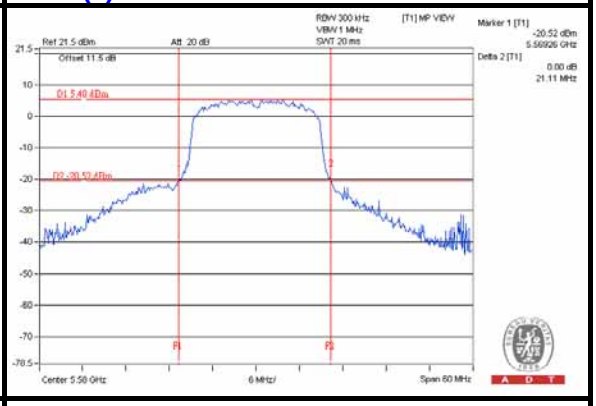
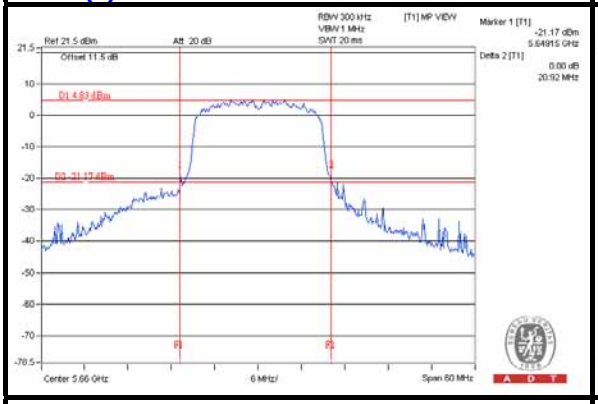
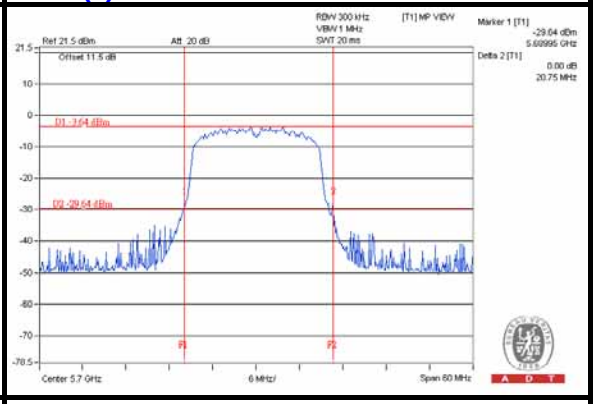
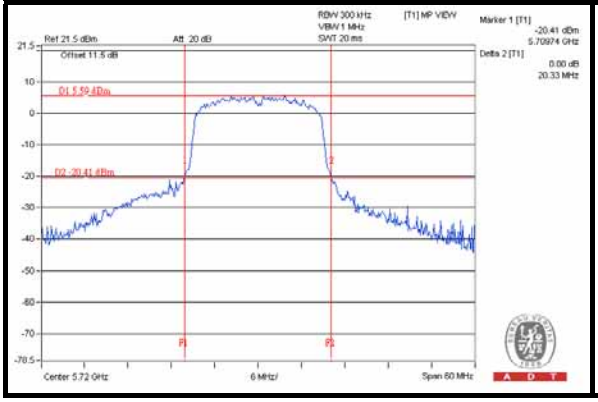


Chain(1) : CH60



Chain(1) : CH64



Chain(1) : CH100	Chain(1) : CH116
	
Chain(1) : CH132	**Chain(1) : CH140**
	
Chain(1) : CH144 (UNII-2c Band) / Chain(1) : CH144 (UNII-3 Band)	
	

NOTE:

For CH144 (UNII-2c Band) = 5725 - Market 1

For CH144 (UNII-3 Band) = Delta 2 - CH144 (UNII-2c Band) BW

802.11ac (VHT40)

POWER OUTPUT

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	9.64	10.74	21.062	13.23	16.91	PASS
46	5230	12.02	13.57	38.673	15.87	16.91	PASS
54	5270	13.16	14.07	46.228	16.65	23.91	PASS
62	5310	9.59	10.09	19.308	12.86	23.91	PASS
102	5510	7.32	7.62	11.176	10.48	22.23	PASS
110	5550	13.26	13.38	42.961	16.33	22.23	PASS
134	5670	13.15	13.24	41.740	16.21	22.23	PASS
142 (UNII-2c Band)	5710	10.96	11.39	26.809	14.28	22.23	PASS
142 (UNII-3 Band)	5710	-1.05	-0.90	1.6323	2.13	22.87	PASS

Note:

5150~5250MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

For CH142: Total power (dBm)= Average power <Chain 0 +1>(dBm) + Duty Factor (0.09dB)

802.11ac (VHT40)

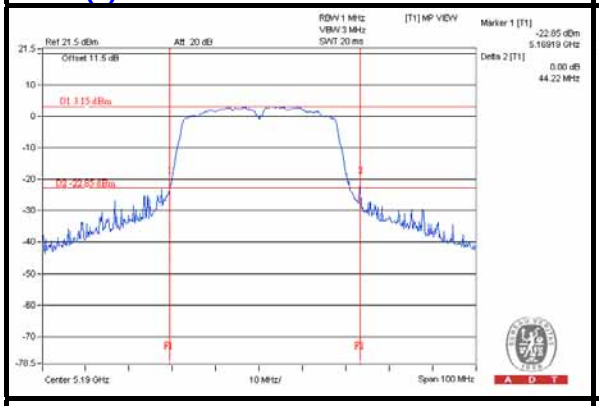
26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
38	5190	44.22	44.75
46	5230	41.98	51.58
54	5270	41.84	51.85
62	5310	48.87	41.67
102	5510	41.86	41.64
110	5550	51.05	43.52
134	5670	43.88	45.03
142 (UNII-2c Band)	5710	35.86	36.84
142 (UNII-3 Band)	5710	5.81	11.60

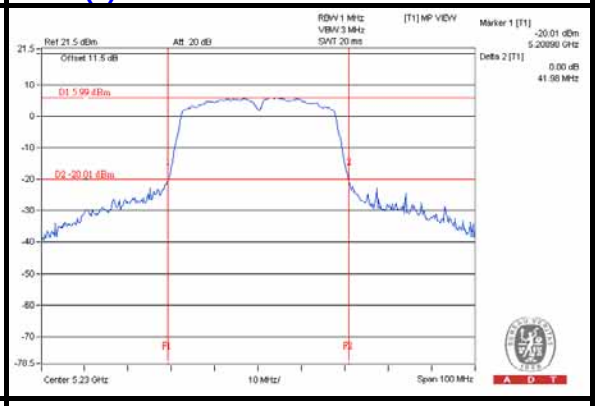
Note: For FCC output power limitation is determined based on 26dB bandwidth.

Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
38	5190	44.22	21.11 > 17
46	5230	41.98	21.43 > 17
Power Limit = 11dBm + 10logB < Band 2~3>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	41.84	27.21 > 24
62	5310	41.67	27.19 > 24
102	5510	41.64	27.19 > 24
110	5550	43.52	27.38 > 24
134	5670	43.88	27.42 > 24
142 (UNII-2c Band)	5710	35.86	26.54 > 24
142 (UNII-3 Band)	5710	5.81	24.64 < 30

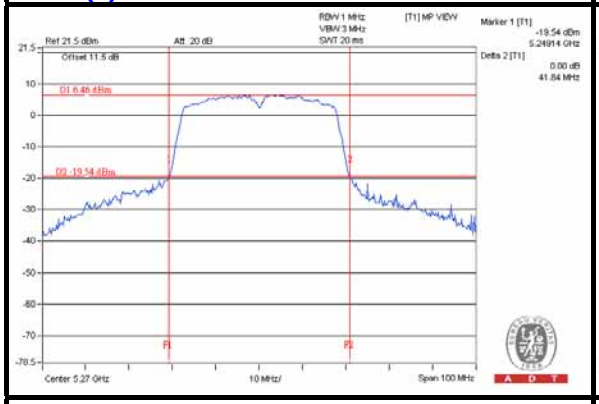
Chain(0) : CH38



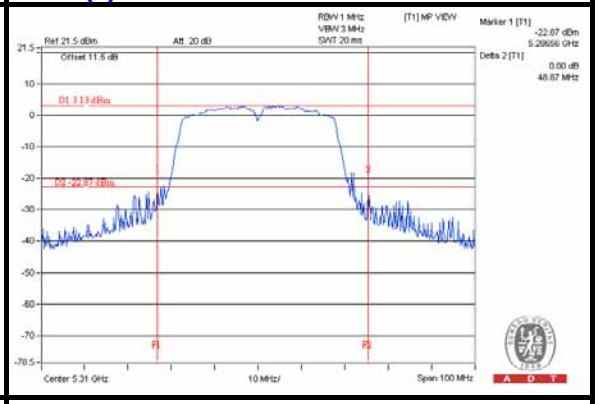
Chain(0) : CH46



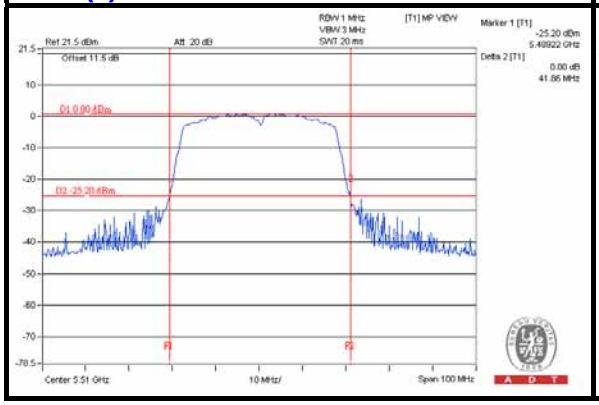
Chain(0) : CH54



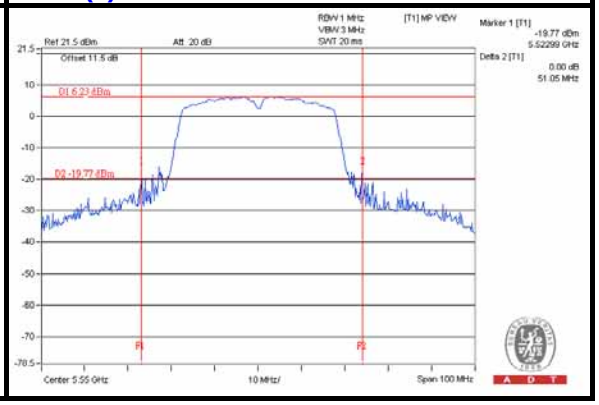
Chain(0) : CH62

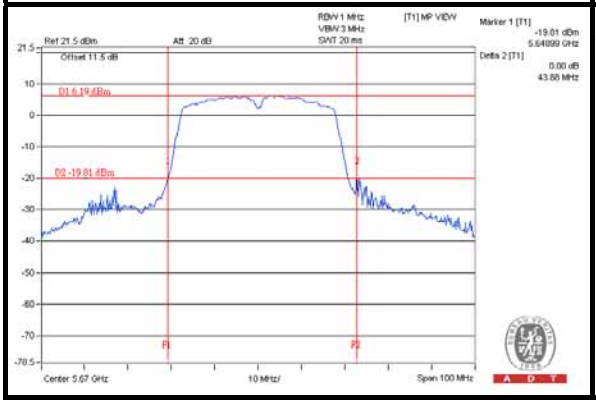
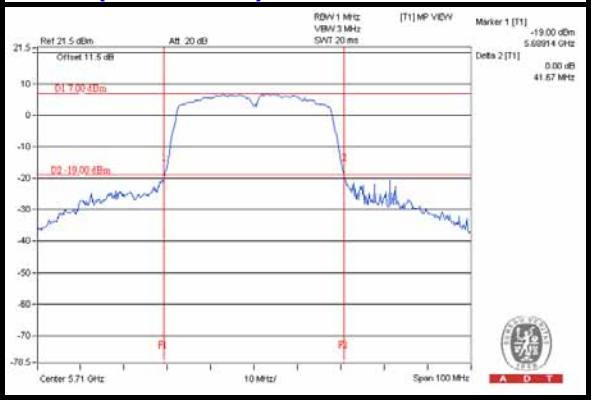


Chain(0) : CH102



Chain(0) : CH110



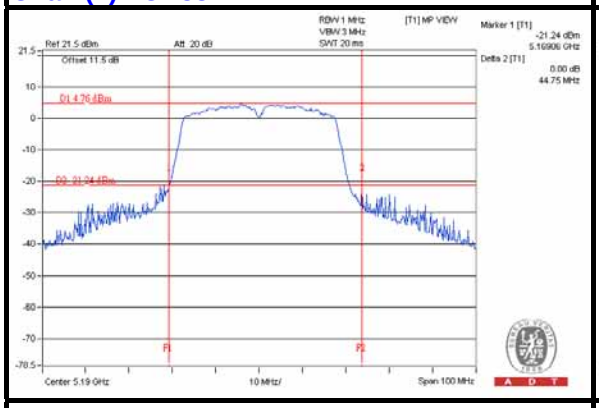
Chain(0) : CH134	Chain(0) : CH142 (UNII-2c Band) / Chain(0) : CH142 (UNII-3 Band)
	

NOTE:

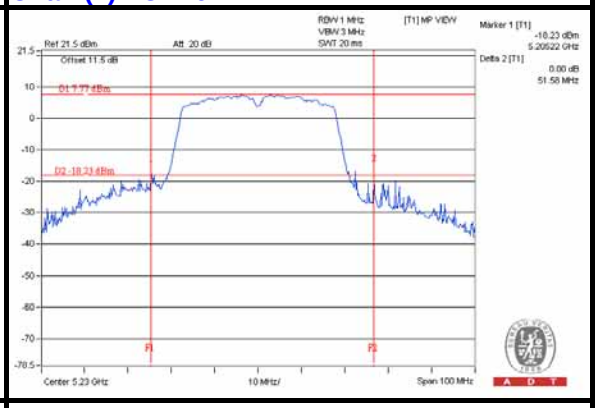
For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

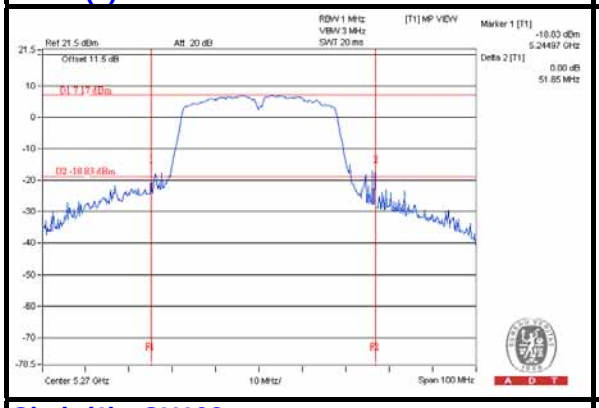
Chain(1) : CH38



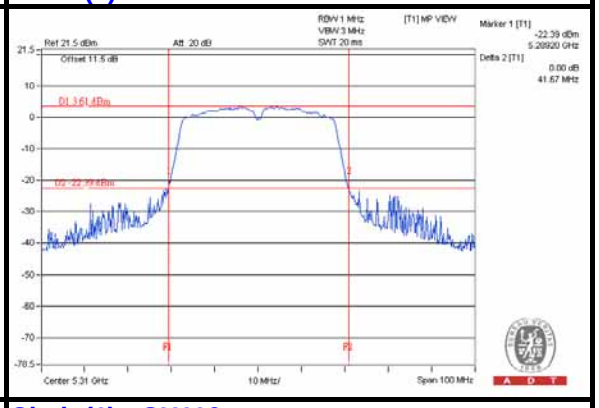
Chain(1) : CH46



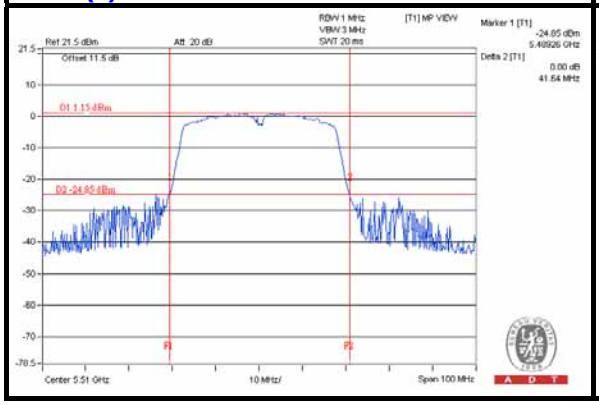
Chain(1) : CH54



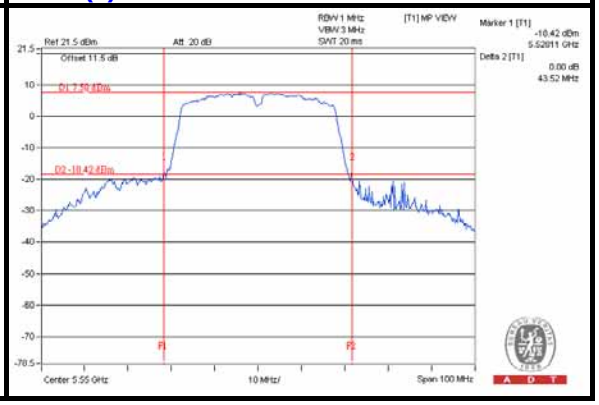
Chain(1) : CH62

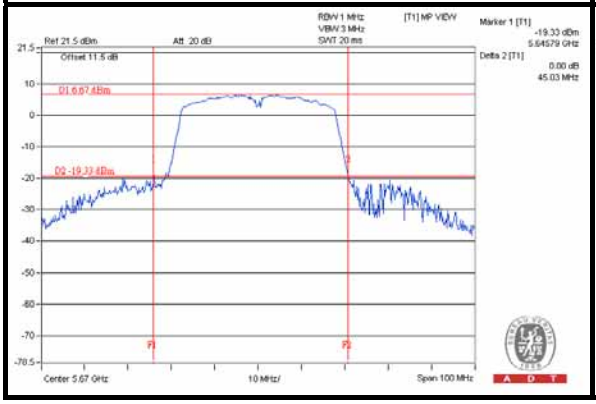
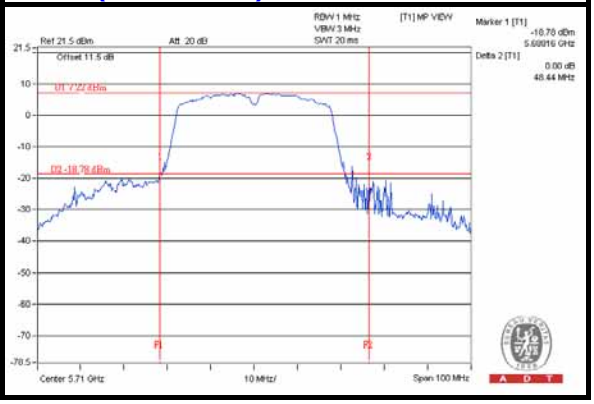


Chain(1) : CH102



Chain(1) : CH110



Chain(1) : CH134	Chain(1) : CH142 (UNII-2c Band) / Chain(1) : CH142 (UNII-3 Band)
	

NOTE:

For CH142 (UNII-2c Band) = 5725 - Market 1

For CH142 (UNII-3 Band) = Delta 2 - CH142 (UNII-2c Band) BW

802.11ac (VHT80)

POWER OUTPUT

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
42	5210	8.56	9.70	16.511	12.18	16.91	PASS
58	5290	9.24	10.10	18.628	12.70	23.91	PASS
106	5530	9.85	10.83	21.767	13.38	22.23	PASS
138 (UNII-2c Band)	5690	8.57	8.92	15.666	11.95	22.23	PASS
138 (UNII-3 Band)	5690	-8.14	-7.64	0.3403	-4.68	22.84	PASS

Note:

5150~5250MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

For CH138: Total power (dBm)= Average power <Chain 0 +1>(dBm) + Duty Factor (0.19dB)

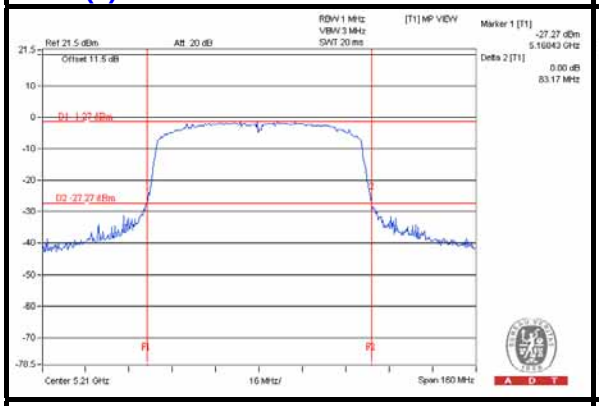
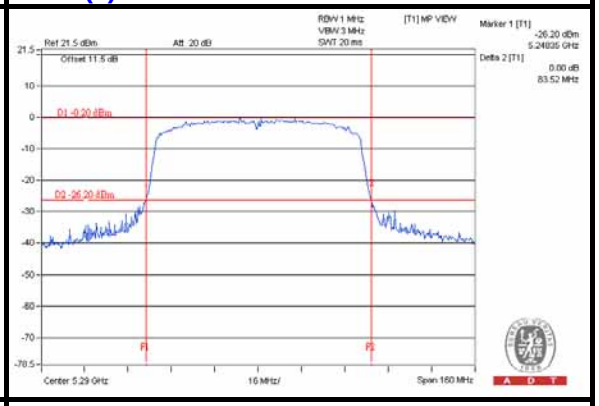
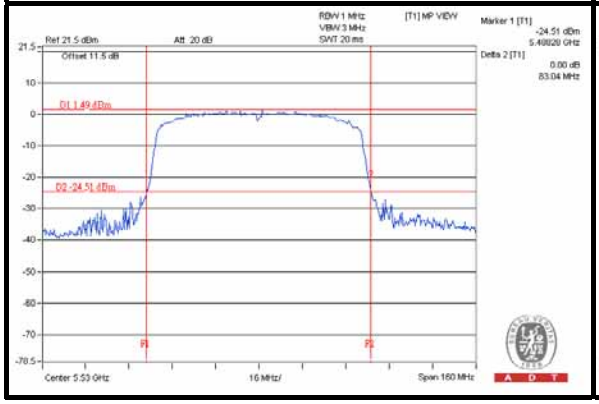
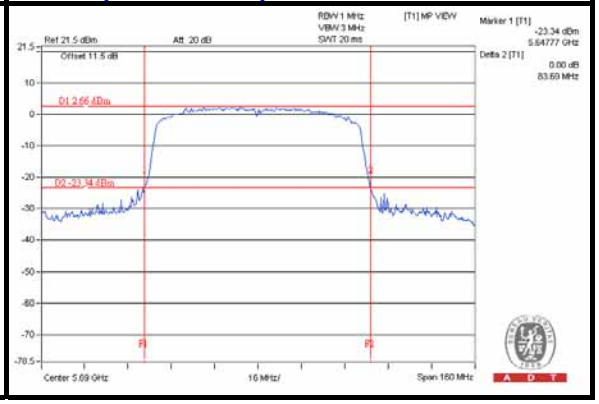
802.11ac (VHT80)

26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
42	5210	83.17	83.70
58	5290	83.52	82.28
106	5530	83.04	84.32
138 (UNII-2c Band)	5690	77.23	80.45
138 (UNII-3 Band)	5690	6.46	5.77

Note: For FCC output power limitation is determined based on 26dB bandwidth.

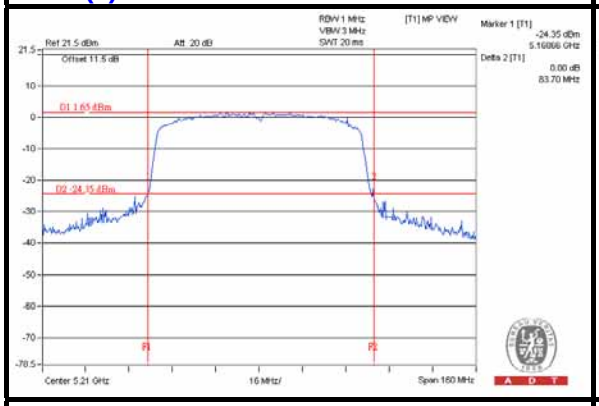
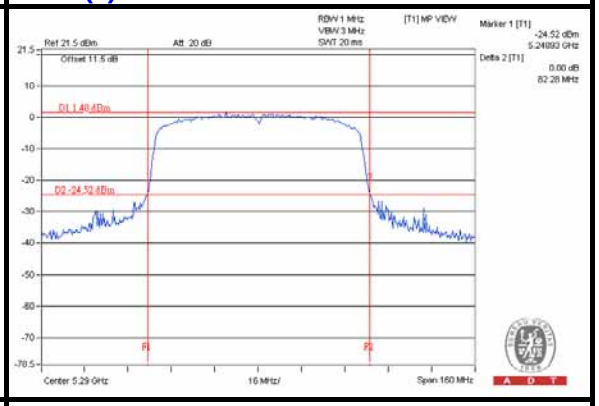
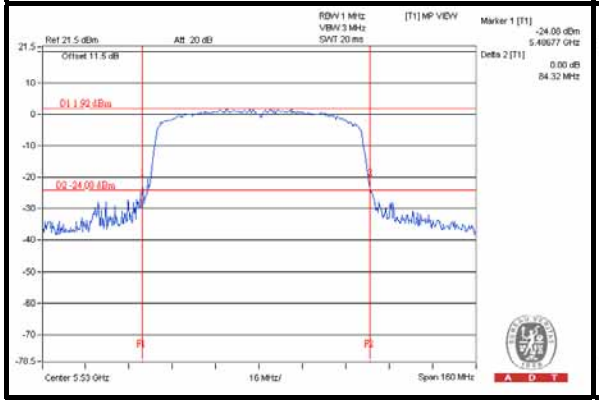
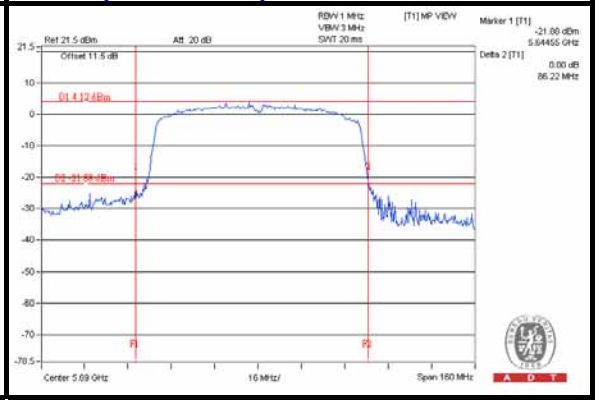
Power Limit = 4dBm + 10logB < Band 1>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
42	5210	83.17	23.19 > 17
Power Limit = 11dBm + 10logB < Band 2~3>			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	82.28	30.15 > 24
106	5530	83.04	30.19 > 24
138 (UNII-2c Band)	5690	77.23	29.87 > 24
138 (UNII-3 Band)	5690	5.77	24.61 < 30

Chain(0) : CH42	Chain(0) : CH58
	
Chain(0) : CH106	**Chain(0) : CH138 (UNII-2c Band) / Chain(0) : CH138 (UNII-3 Band)**
	

NOTE:

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 - CH138 (UNII-2c Band) BW

Chain(1) : CH42	Chain(1) : CH58
	
Chain(1) : CH106	**Chain(1) : CH138 (UNII-2c Band) / Chain(1) : CH138 (UNII-3 Band)**
	

NOTE:

For CH138 (UNII-2c Band) = 5725 - Market 1

For CH138 (UNII-3 Band) = Delta 2 - CH138 (UNII-2c Band) BW

For RSS-210 A9.2

5.18~5.24GHz

802.11a

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
36	5180	9.83	11.24	22.921	13.60
40	5200	12.13	13.51	38.770	15.88
48	5240	12.24	13.54	39.343	15.95

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
36	5180	93.161	19.69	22.12	PASS
40	5200	157.578	21.97	22.12	PASS
48	5240	159.907	22.04	22.12	PASS

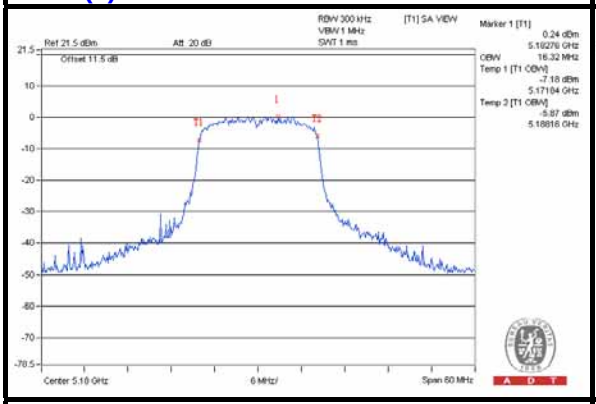
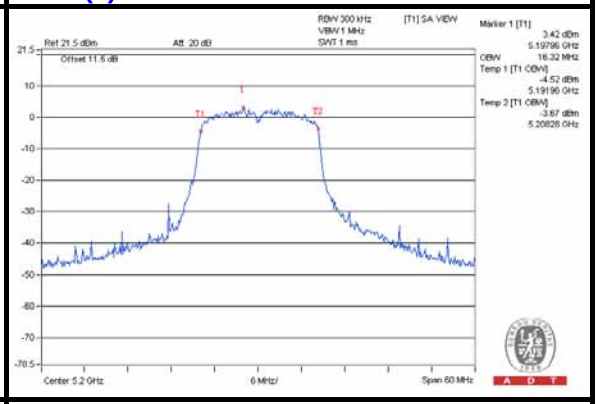
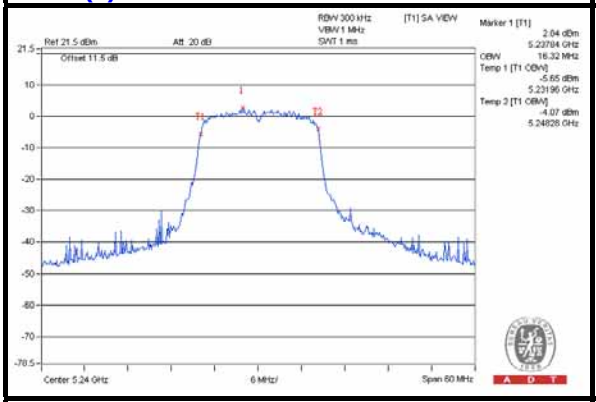
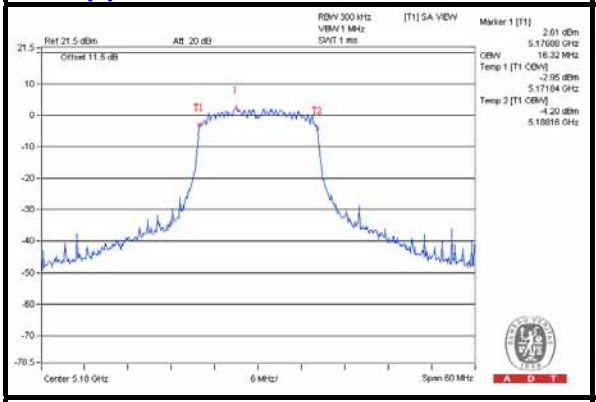
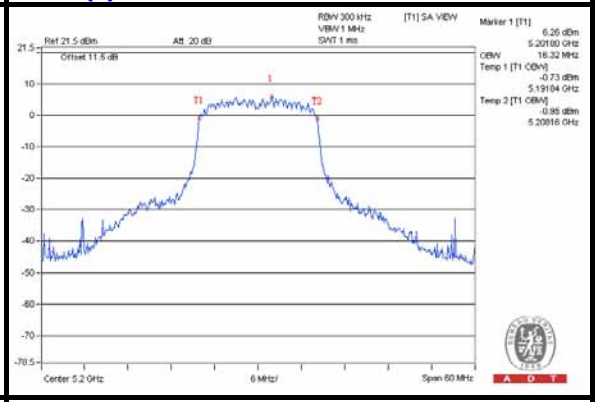
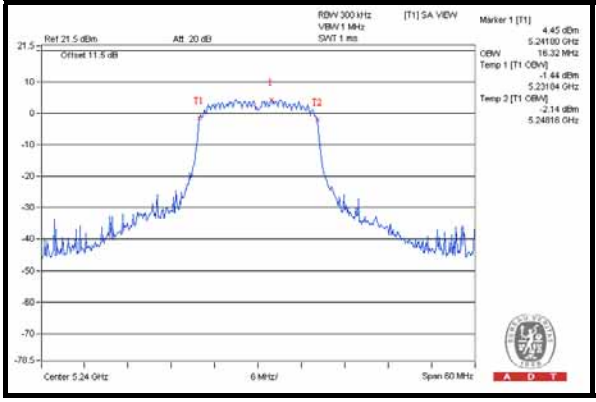
802.11a

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	16.32	16.32
40	5200	16.32	16.32
48	5240	16.32	16.32

Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 10dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined EIRP Limit (dBm)
36	5180	16.32	22.12 < 23
40	5200	16.32	22.12 < 23
48	5240	16.32	22.12 < 23

Chain(0) : CH36	Chain(0) : CH40
	
Chain(0) : CH48	
	
Chain(1) : CH36	**Chain(1) : CH40**
	
Chain(1) : CH48	
	

5.26~5.32GHz, 5.50~5.58GHz & 5.66GHz~5.70GHz
802.11a
CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	14.32	15.72	64.365	18.09	23.03	PASS
60	5300	14.63	15.83	67.322	18.28	23.03	PASS
64	5320	8.94	9.93	17.674	12.47	23.03	PASS
100	5500	8.14	8.23	13.169	11.20	21.35	PASS
116	5580	14.61	14.92	59.953	17.78	21.35	PASS
132	5660	14.43	14.82	58.072	17.64	21.35	PASS
140	5700	6.93	7.04	9.990	10.00	21.35	PASS
144 (UNII-2c Band)	5720	11.81	11.90	30.659	14.87	20.42	PASS
144 (UNII-3 Band)	5720	4.43	4.17	5.385	7.31	20.22	PASS

Note:

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

802.11a
EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
52	5260	261.607	24.18	29.12	PASS
60	5300	273.626	24.37	29.12	PASS
64	5320	71.835	18.56	29.12	PASS
100	5500	78.805	18.97	29.12	PASS
116	5580	358.766	25.55	29.12	PASS
132	5660	347.510	25.41	29.12	PASS
140	5700	59.781	17.77	29.12	PASS
144 (UNII-2c Band)	5720	183.467	22.64	28.19	PASS
144 (UNII-3 Band)	5720	32.224	15.08	27.99	PASS

802.11a

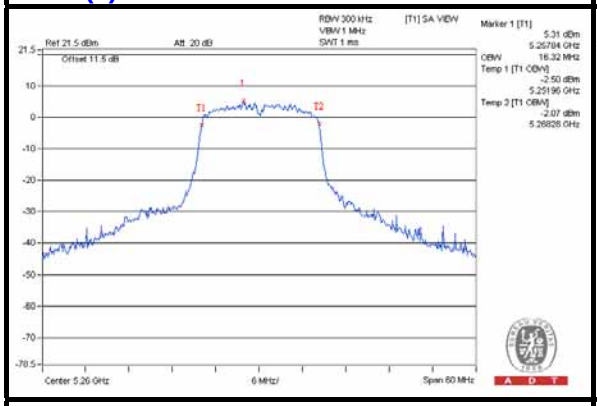
99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
52	5260	16.32	16.32
60	5300	16.52	16.32
64	5320	16.32	16.32
100	5500	16.32	16.32
116	5580	16.32	16.44
132	5660	16.32	16.44
140	5700	16.32	16.32
144 (UNII-2c Band)	5720	13.16	13.16
144 (UNII-3 Band)	5720	3.16	3.16

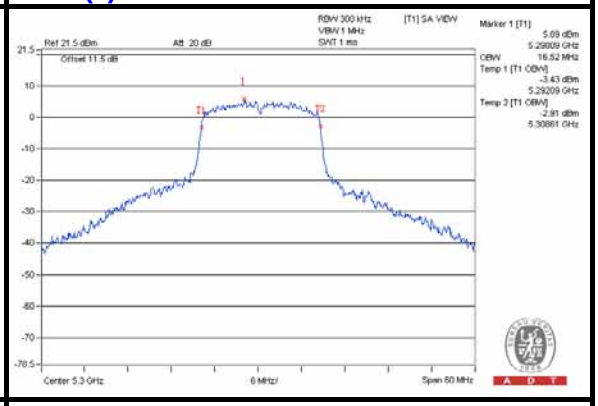
Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	Determined EIRP Limit (dBm)
52	5260	16.32	23.12 < 24	29.12 < 30
60	5300	16.32	23.12 < 24	29.12 < 30
64	5320	16.32	23.12 < 24	29.12 < 30
100	5500	16.32	23.12 < 24	29.12 < 30
116	5580	16.32	23.12 < 24	29.12 < 30
132	5660	16.32	23.12 < 24	29.12 < 30
140	5700	16.32	23.12 < 24	29.12 < 30
144 (UNII-2c Band)	5720	13.16	22.19 < 24	28.19 < 30
144 (UNII-3 Band)	5720	3.16	21.99 < 30	27.99 < 36

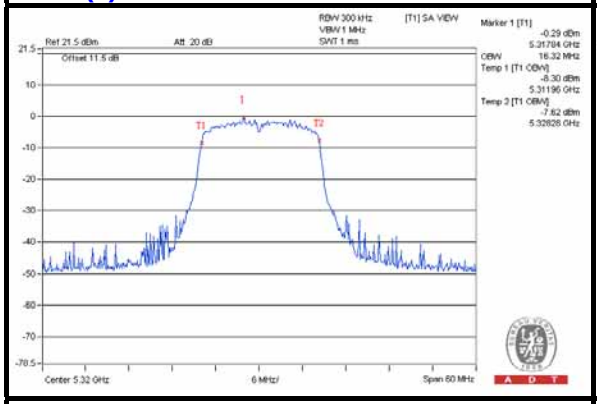
Chain(0) : CH52



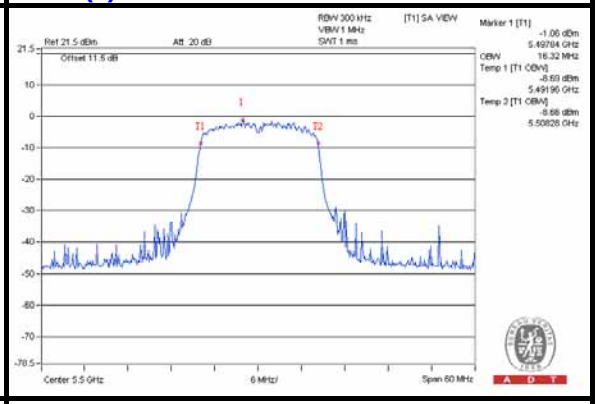
Chain(0) : CH60



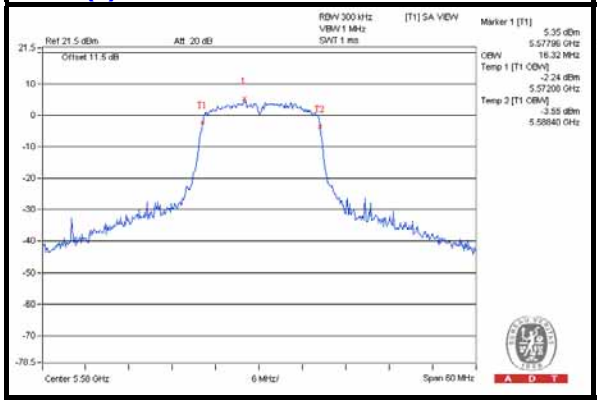
Chain(0) : CH64



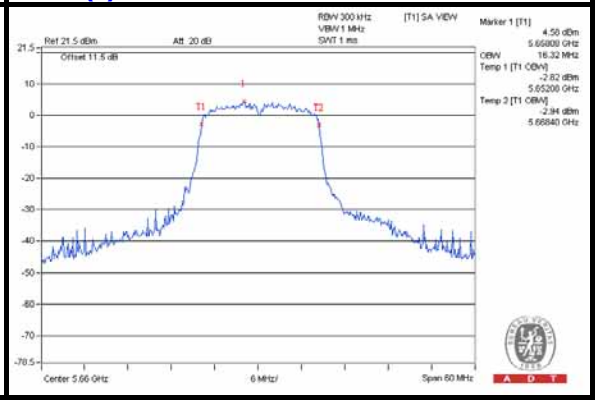
Chain(0) : CH100

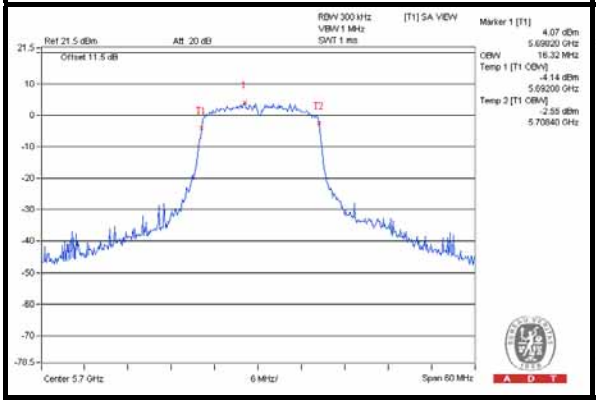
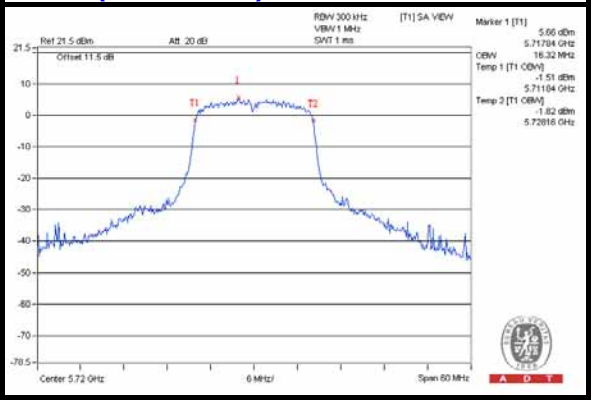


Chain(0) : CH116



Chain(0) : CH132



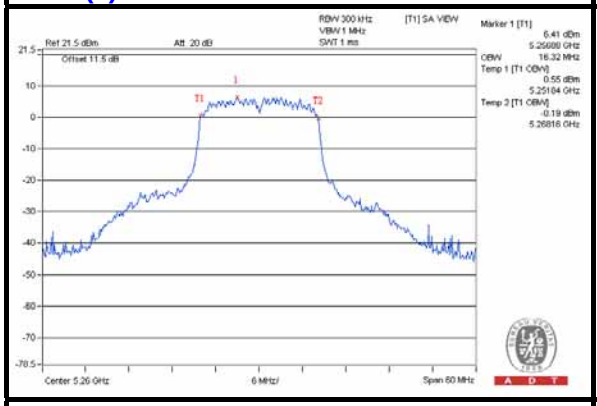
Chain(0) : CH140	Chain(0) : CH144 (UNII-2c Band) / Chain(0) : CH144 (UNII-3 Band)
	

NOTE:

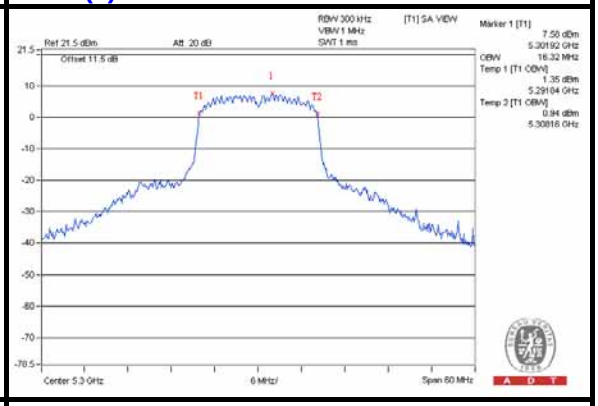
For CH144 (UNII-2c Band) = 5725 - Temp 1

For CH144 (UNII-3 Band) = 5725 + OBW - CH144 (UNII-2c Band) BW

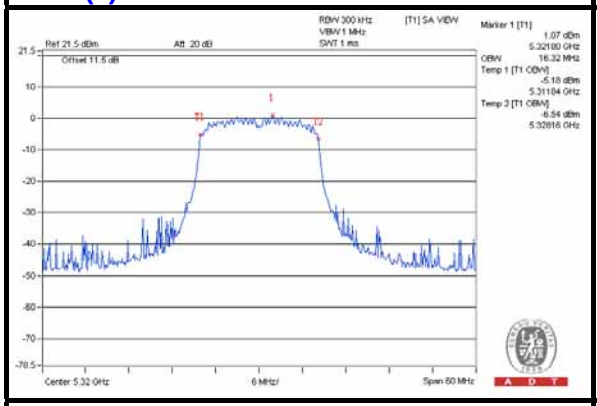
Chain(1) : CH52



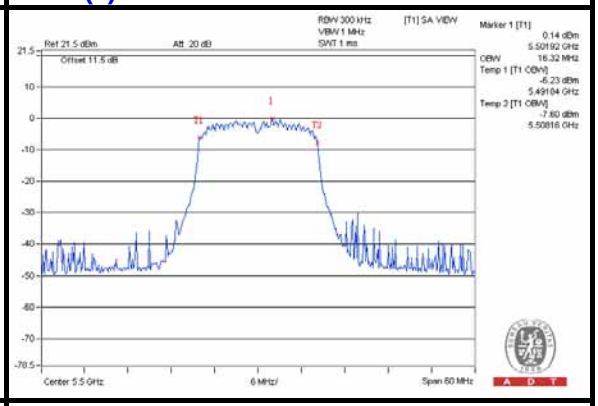
Chain(1) : CH60



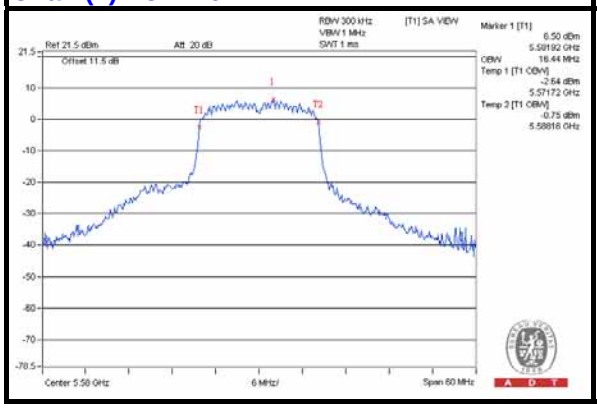
Chain(1) : CH64



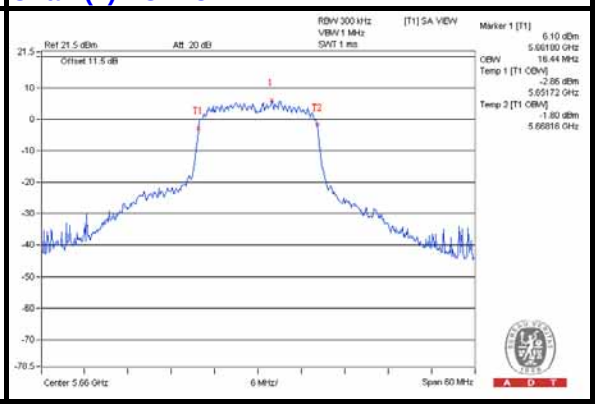
Chain(1) : CH100

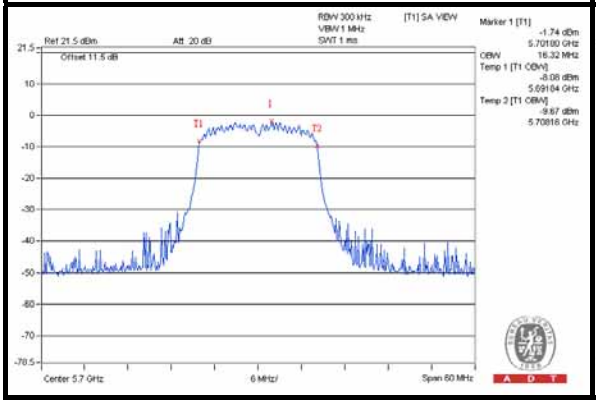
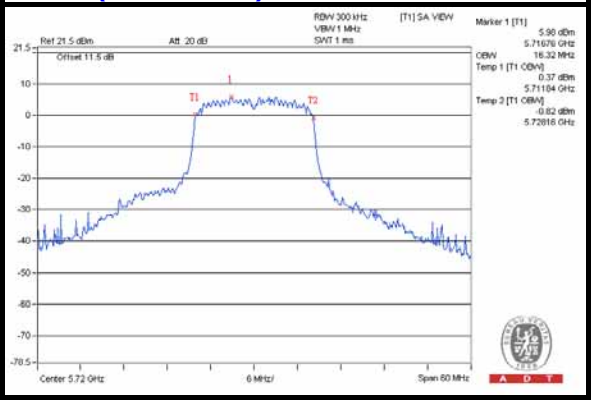


Chain(1) : CH116



Chain(1) : CH132



Chain(1) : CH140	Chain(1) : CH144 (UNII-2c Band) / Chain(1) : CH144 (UNII-3 Band)
	

NOTE:

For CH144 (UNII-2c Band) = 5725 - Temp 1

For CH144 (UNII-3 Band) = 5725 + OBW - CH144 (UNII-2c Band) BW

802.11n (HT20)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
36	5180	10.83	12.24	28.855	14.60
40	5200	12.14	13.41	38.296	15.83
48	5240	12.23	13.32	38.189	15.82

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
36	5180	117.279	20.69	22.40	PASS
40	5200	155.652	21.92	22.40	PASS
48	5240	155.217	21.91	22.40	PASS

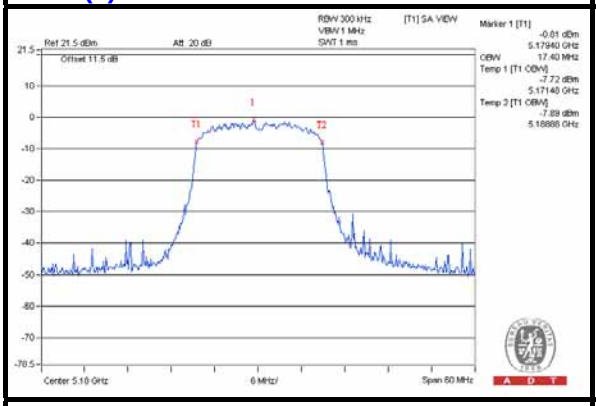
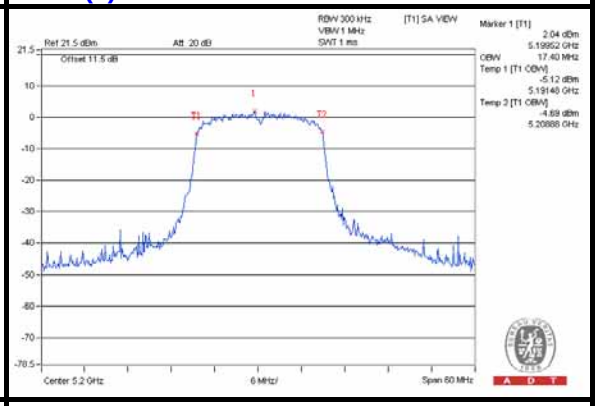
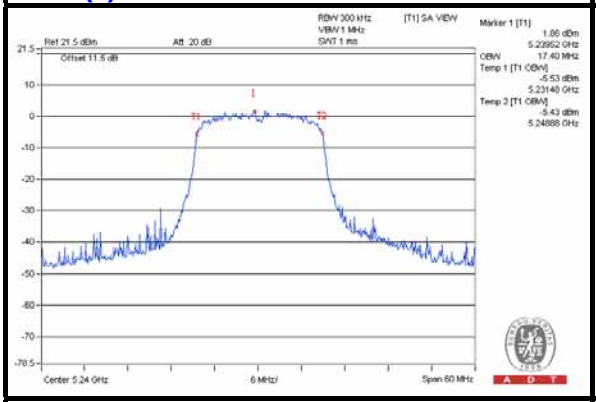
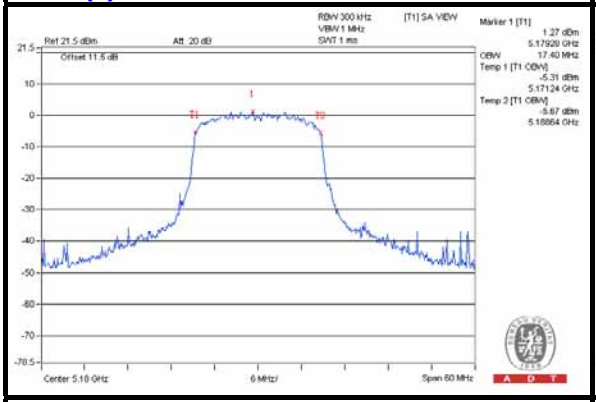
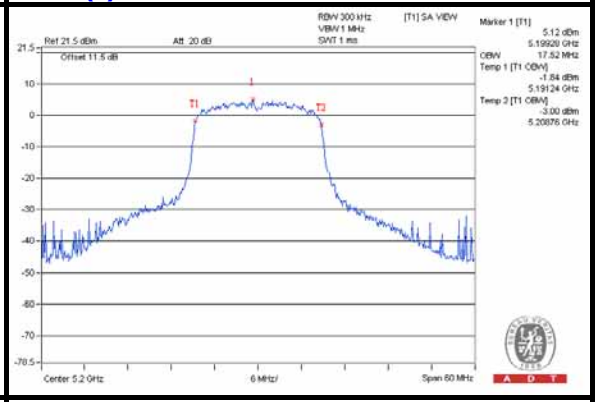
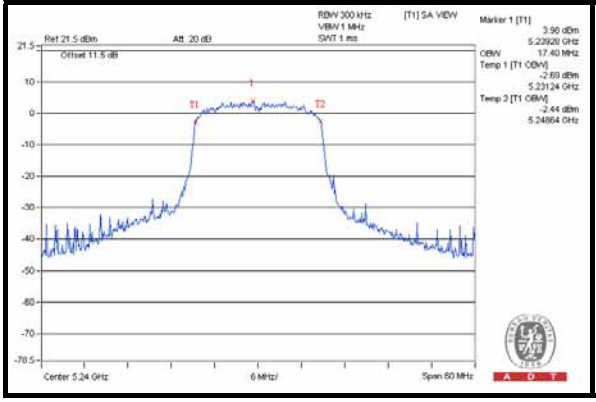
802.11n (HT20)

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	17.40	17.40
40	5200	17.40	17.52
48	5240	17.40	17.40

Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 10dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined EIRP Limit (dBm)
36	5180	17.40	22.40 < 23
40	5200	17.40	22.40 < 23
48	5240	17.40	22.40 < 23

Chain(0) : CH36	Chain(0) : CH40
	
Chain(0) : CH48	
	
Chain(1) : CH36	**Chain(1) : CH40**
	
Chain(1) : CH48	
	

5.26~5.32GHz, 5.50~5.58GHz & 5.66GHz~5.70GHz

802.11n (HT20)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	14.54	15.75	66.029	18.20	23.31	PASS
60	5300	14.53	15.71	65.618	18.17	23.31	PASS
64	5320	9.83	10.42	20.631	13.15	23.31	PASS
100	5500	7.22	7.34	10.692	10.29	21.63	PASS
116	5580	14.41	14.83	58.015	17.64	21.63	PASS
132	5660	14.43	14.84	58.212	17.65	21.63	PASS
140	5700	6.70	6.94	9.620	9.83	21.63	PASS
144 (UNII-2c Band)	5720	11.17	12.31	30.114	14.79	20.57	PASS
144 (UNII-3 Band)	5720	4.71	4.90	6.048	7.82	20.84	PASS

Note:

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

802.11n (HT20)

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
52	5260	268.370	24.29	29.40	PASS
60	5300	266.700	24.26	29.40	PASS
64	5320	83.853	19.24	29.40	PASS
100	5500	63.982	18.06	29.40	PASS
116	5580	347.168	25.41	29.40	PASS
132	5660	348.347	25.42	29.40	PASS
140	5700	57.567	17.60	29.40	PASS
144 (UNII-2c Band)	5720	180.206	22.56	28.34	PASS
144 (UNII-3 Band)	5720	36.192	15.59	28.61	PASS

802.11n (HT20)

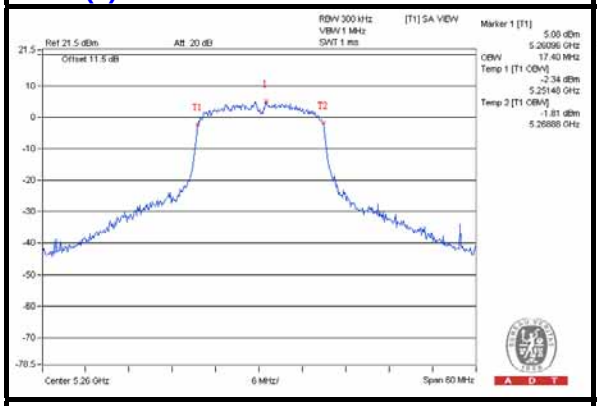
99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
52	5260	17.40	17.52
60	5300	17.40	17.40
64	5320	17.40	17.40
100	5500	17.40	17.40
116	5580	17.52	17.40
132	5660	17.40	17.40
140	5700	17.40	17.40
144 (UNII-2c Band)	5720	13.64	13.76
144 (UNII-3 Band)	5720	3.76	3.64

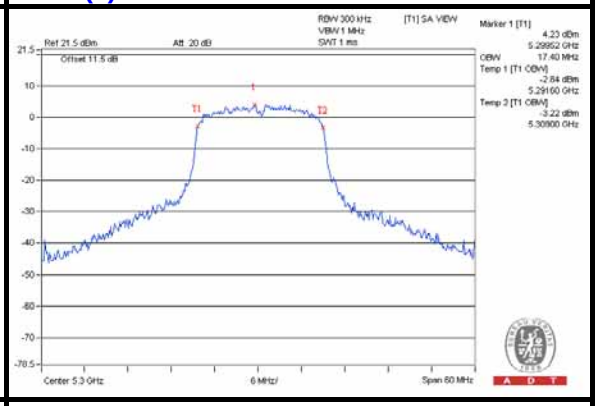
Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	Determined EIRP Limit (dBm)
52	5260	17.40	23.40 < 24	29.40 < 30
60	5300	17.40	23.40 < 24	29.40 < 30
64	5320	17.40	23.40 < 24	29.40 < 30
100	5500	17.40	23.40 < 24	29.40 < 30
116	5580	17.40	23.40 < 24	29.40 < 30
132	5660	17.40	23.40 < 24	29.40 < 30
140	5700	17.40	23.40 < 24	29.40 < 30
144 (UNII-2c Band)	5720	13.64	22.34 < 24	28.34 < 30
144 (UNII-3 Band)	5720	3.64	22.61 < 30	28.61 < 36

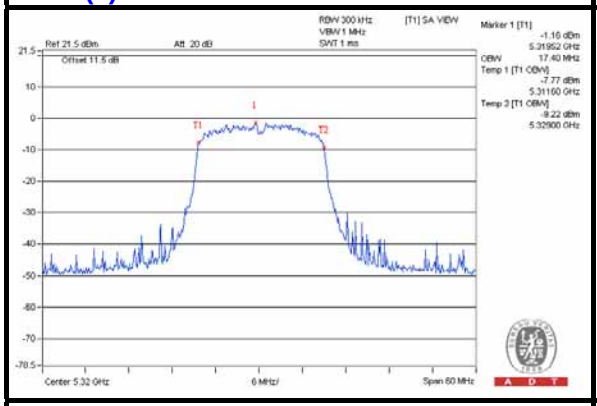
Chain(0) : CH52



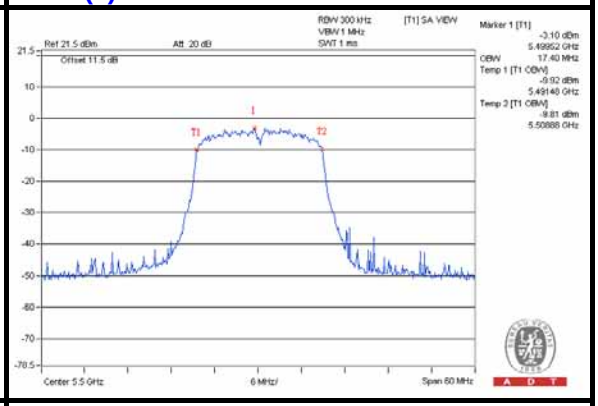
Chain(0) : CH60



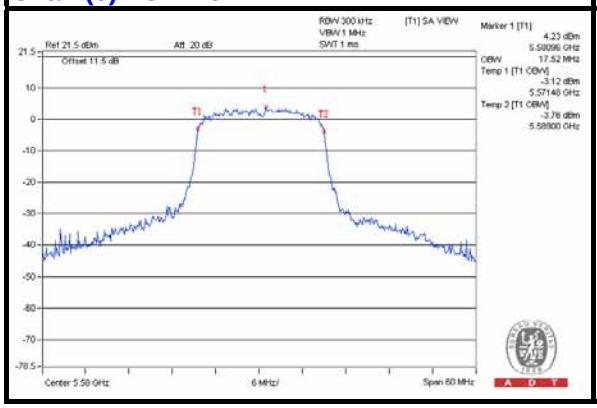
Chain(0) : CH64



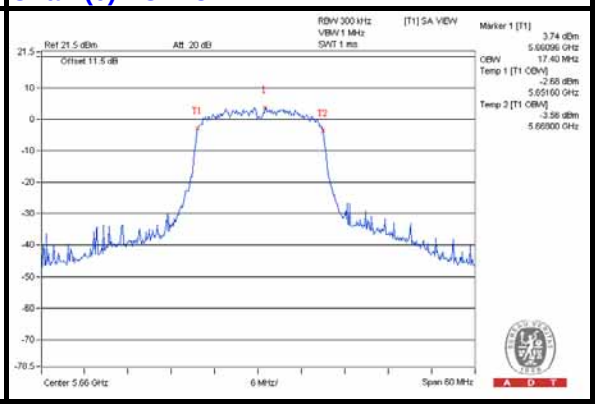
Chain(0) : CH100

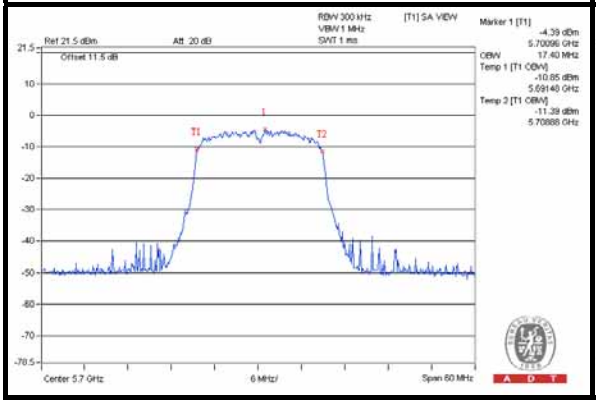
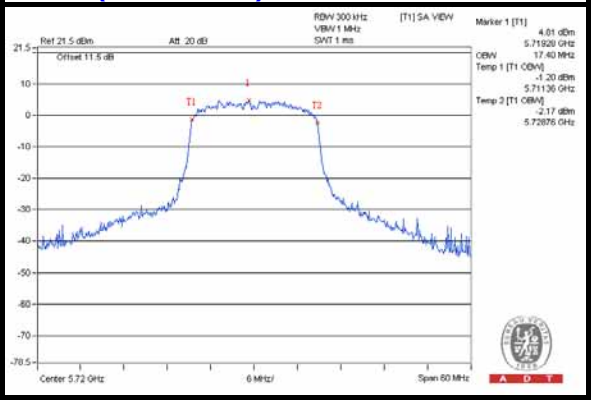


Chain(0) : CH116



Chain(0) : CH132



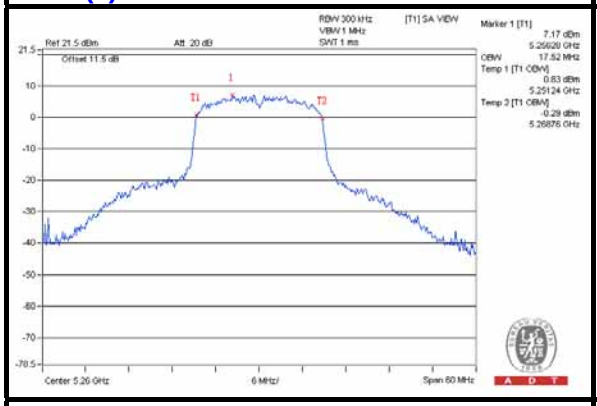
Chain(0) : CH140	Chain(0) : CH144 (UNII-2c Band) / Chain(0) : CH144 (UNII-3 Band)
	

NOTE:

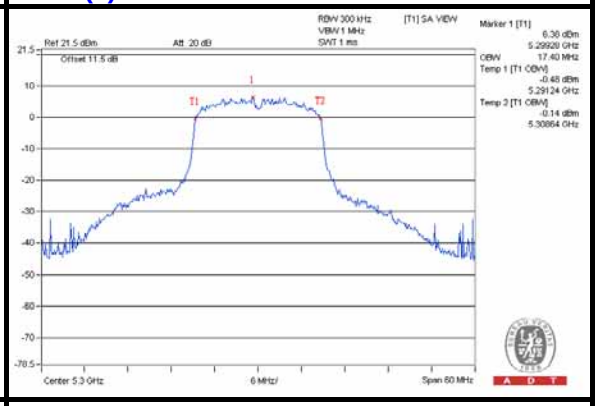
For CH144 (UNII-2c Band) = 5725 - Temp 1

For CH144 (UNII-3 Band) = 5725 + OBW - CH144 (UNII-2c Band) BW

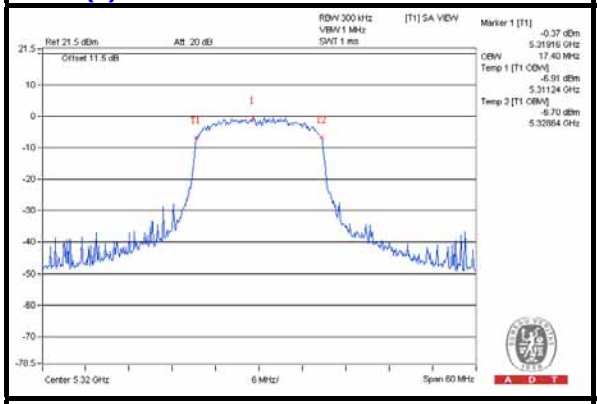
Chain(1) : CH52



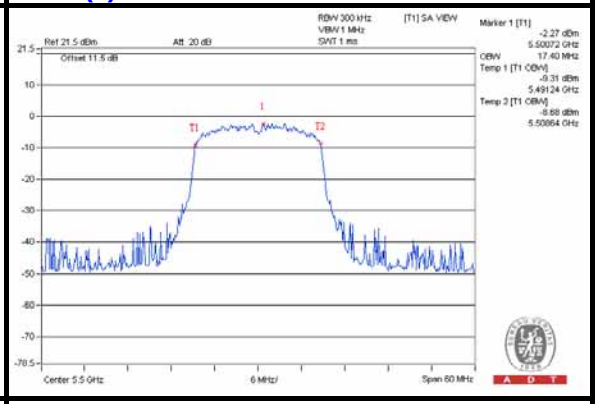
Chain(1) : CH60



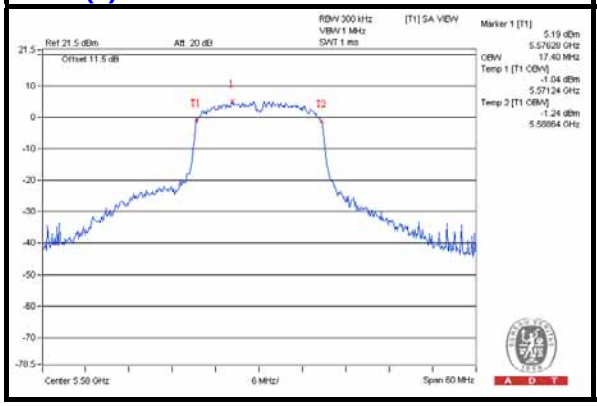
Chain(1) : CH64



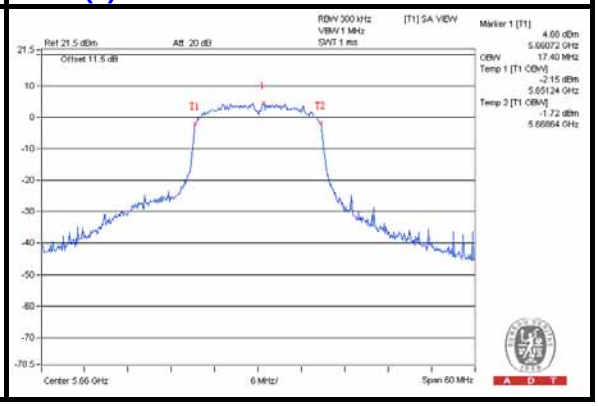
Chain(1) : CH100

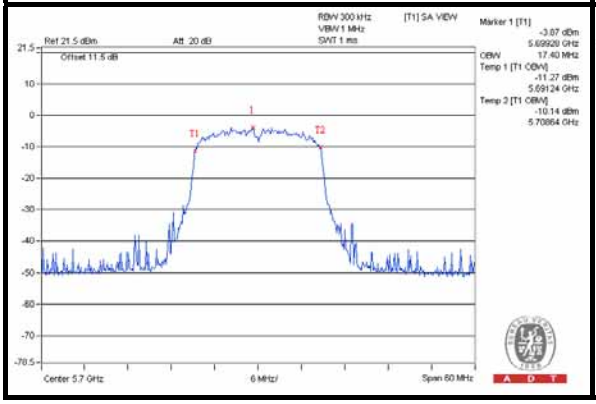
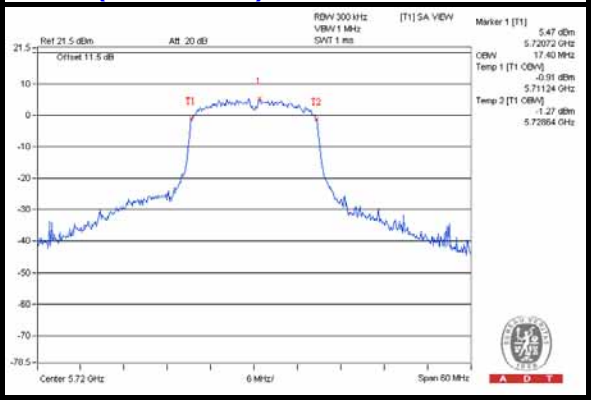


Chain(1) : CH116



Chain(1) : CH132



Chain(1) : CH140	Chain(1) : CH144 (UNII-2c Band) / Chain(1) : CH144 (UNII-3 Band)
	

NOTE:

For CH144 (UNII-2c Band) = 5725 - Temp 1

For CH144 (UNII-3 Band) = 5725 + OBW - CH144 (UNII-2c Band) BW

802.11n (HT40)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
38	5190	9.34	10.83	20.696	13.16
46	5230	12.02	13.53	38.464	15.85

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
38	5190	84.118	19.25	23.00	PASS
46	5230	156.334	21.94	23.00	PASS

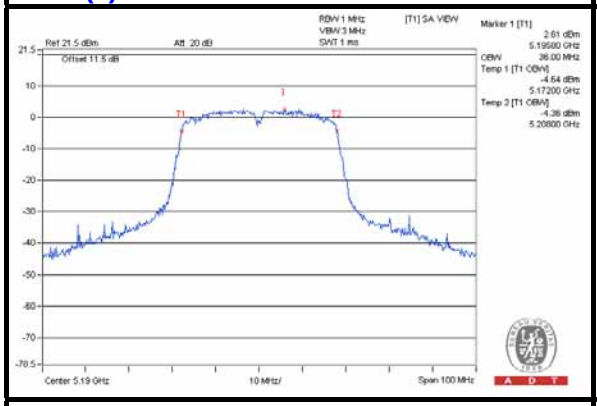
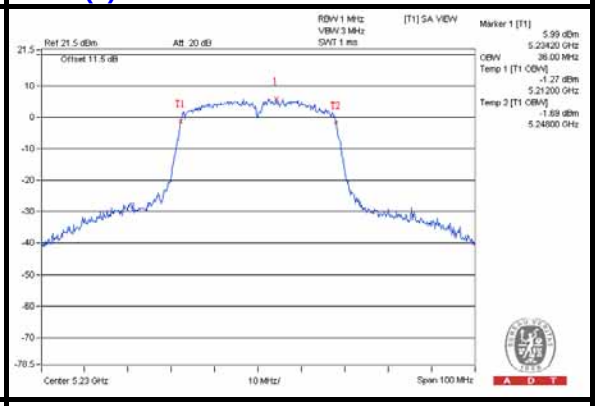
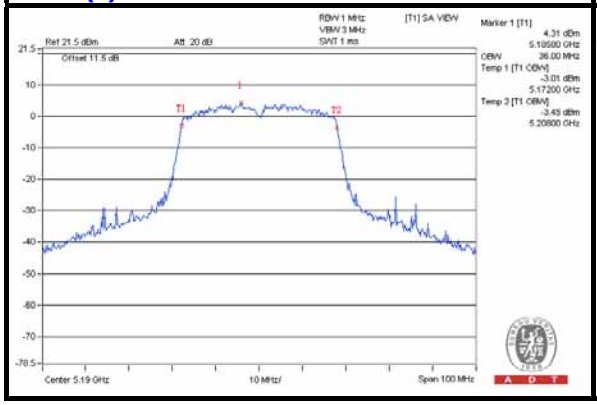
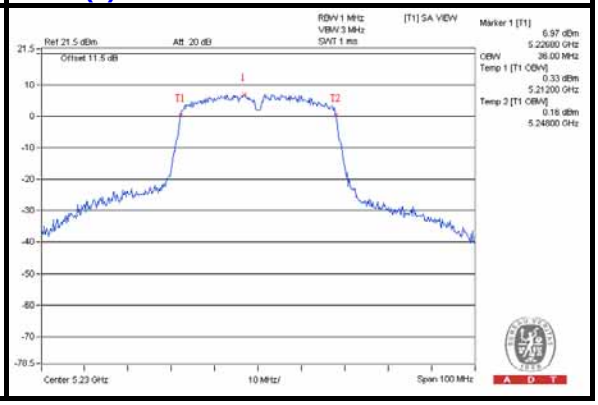
802.11n (HT40)

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
38	5190	36.00	36.00
46	5230	36.00	36.00

Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 10dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined EIRP Limit (dBm)
38	5190	36.00	25.56 < 23
46	5230	36.00	25.56 < 23

Chain(0) : CH38	Chain(0) : CH46
	
Chain(1) : CH38	**Chain(1) : CH46**
	

5.26~5.32GHz, 5.50~5.58GHz & 5.66GHz~5.70GHz

802.11n (HT40)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
54	5270	13.12	14.11	46.275	16.65	23.91	PASS
62	5310	9.42	10.24	19.318	12.86	23.91	PASS
102	5510	8.33	8.74	14.290	11.55	22.23	PASS
110	5550	13.12	13.51	42.951	16.33	22.23	PASS
134	5670	13.06	13.27	41.462	16.18	22.23	PASS
142 (UNII-2c Band)	5710	10.48	10.81	23.717	13.75	22.23	PASS
142 (UNII-3 Band)	5710	-2.05	-1.50	1.3602	1.34	20.00	PASS

Note:

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
54	5270	188.082	22.74	30.00	PASS
62	5310	78.517	18.95	30.00	PASS
102	5510	85.513	19.32	30.00	PASS
110	5550	257.024	24.10	30.00	PASS
134	5670	248.113	23.95	30.00	PASS
142 (UNII-2c Band)	5710	141.925	21.52	30.00	PASS
142 (UNII-3 Band)	5710	8.140	9.11	27.77	PASS

For CH142: Total power (dBm)= Average power <Chain 0 +1>(dBm) + Duty Factor (0.09dB)

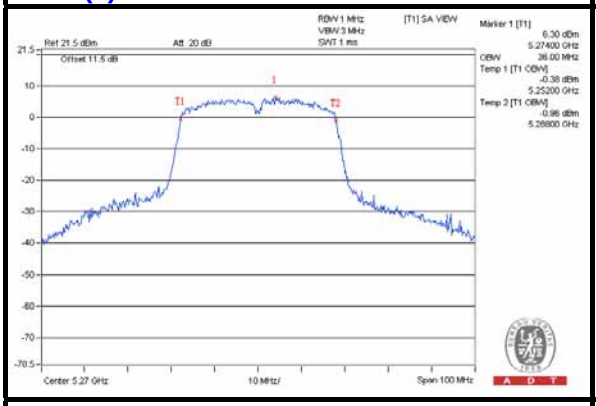
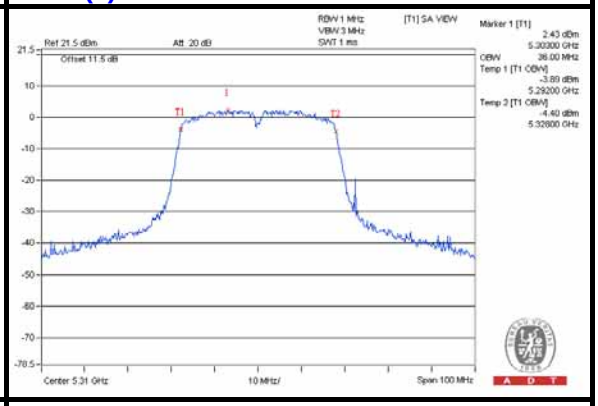
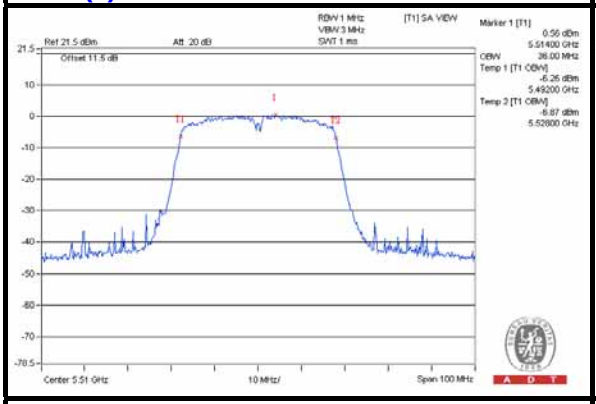
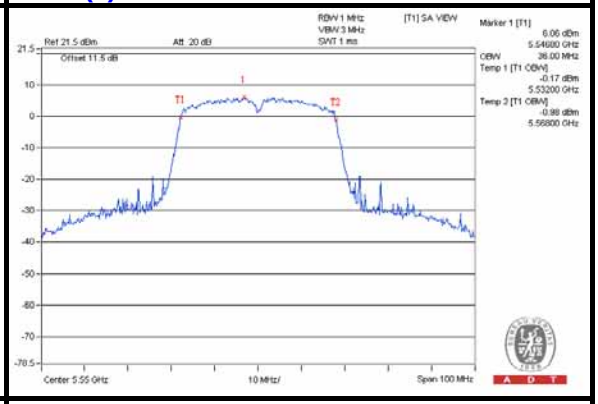
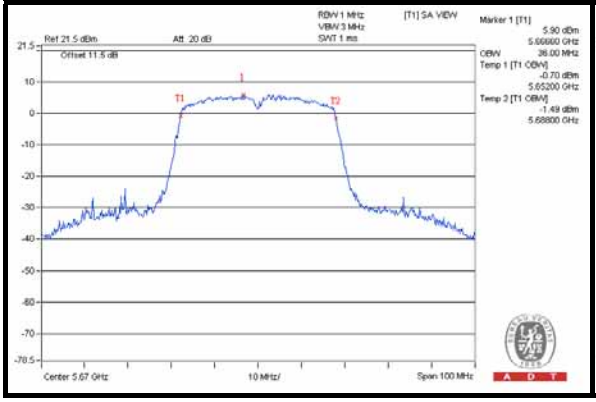
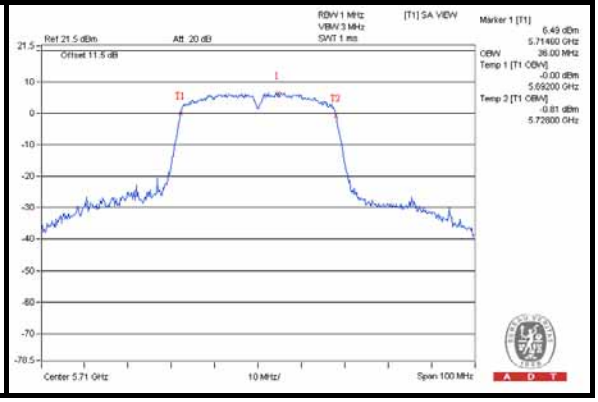
802.11n (HT40)

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
54	5270	36.00	36.00
62	5310	36.00	36.00
102	5510	36.00	36.00
110	5550	36.00	36.20
134	5670	36.00	35.80
142 (UNII-2c Band)	5710	33.00	33.00
142 (UNII-3 Band)	5710	3.00	3.00

Note: For output power limitation is determined based on 99% bandwidth.

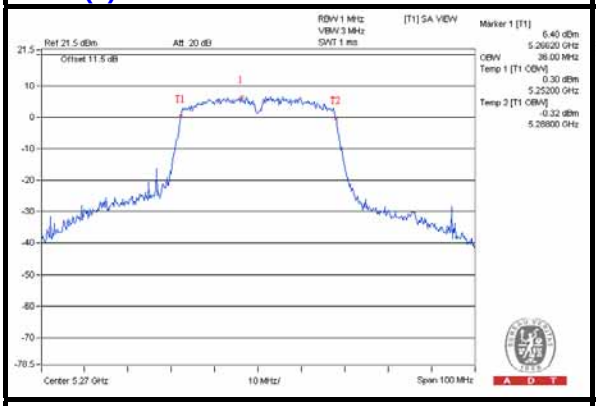
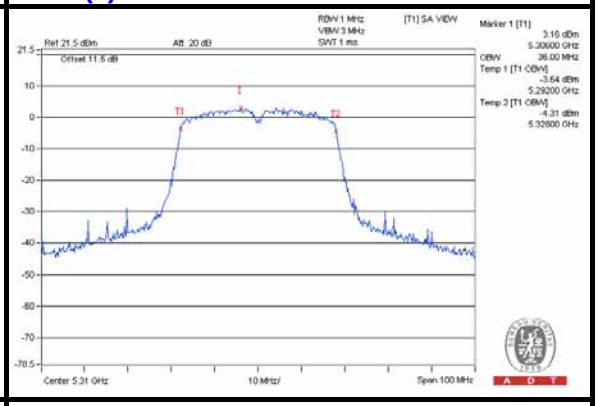
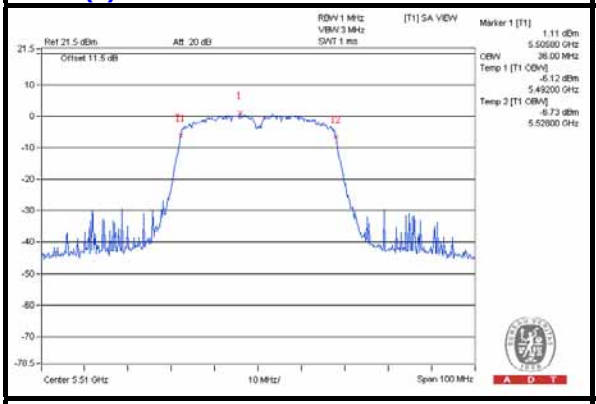
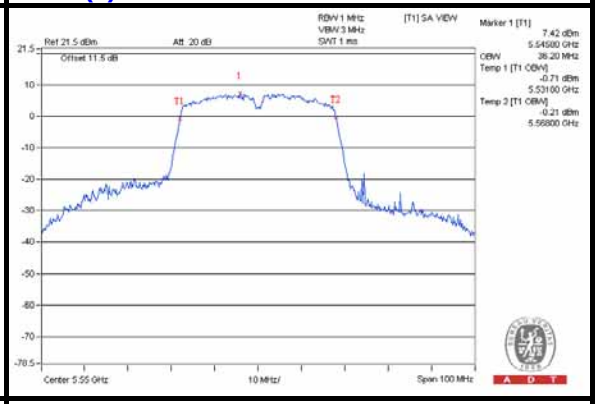
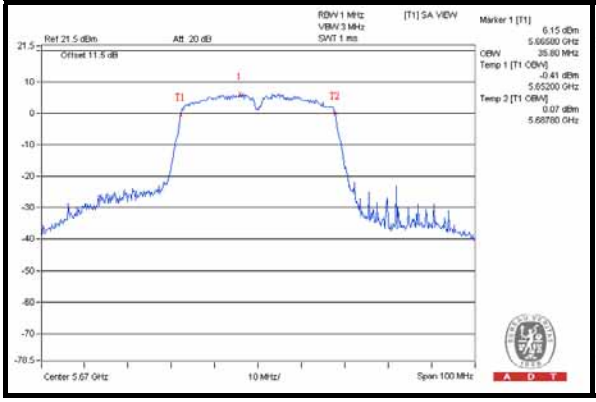
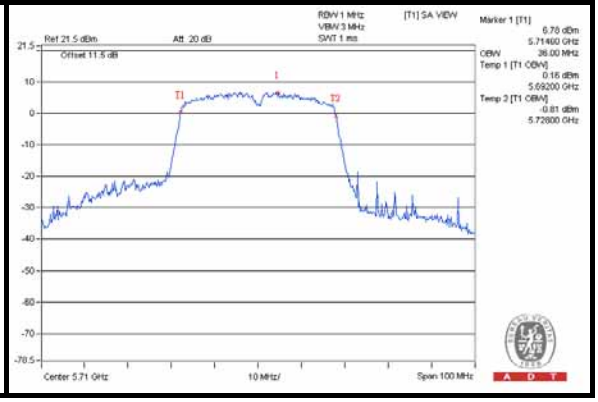
Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	Determined EIRP Limit (dBm)
54	5270	36.00	26.56 > 24	26.56 > 30
62	5310	36.00	26.56 > 24	26.56 > 30
102	5510	36.00	26.56 > 24	26.56 > 30
110	5550	36.00	26.56 > 24	26.56 > 30
134	5670	35.80	26.53 > 24	26.53 > 30
142 (UNII-2c Band)	5710	33.00	26.18 > 24	26.18 > 30
142 (UNII-3 Band)	5710	3.00	21.77 < 30	21.77 < 36

Chain(0) : CH54	Chain(0) : CH62
	
Chain(0) : CH102	**Chain(0) : CH110**
	
Chain(0) : CH134	**Chain(0) : CH142 (UNII-2c Band) / Chain(0) : CH142 (UNII-3 Band)**
	

NOTE:

For CH142 (UNII-2c Band) = 5725 - Temp 1

For CH142 (UNII-3 Band) = 5725 + OBW - CH142 (UNII-2c Band) BW

Chain(1) : CH54	Chain(1) : CH62
	
Chain(1) : CH102	**Chain(1) : CH110**
	
Chain(1) : CH134	**Chain(1) : CH142 (UNII-2c Band) / Chain(1) : CH142 (UNII-3 Band)**
	

NOTE:

For CH142 (UNII-2c Band) = 5725 - Temp 1

For CH142 (UNII-3 Band) = 5725 + OBW - CH142 (UNII-2c Band) BW

802.11ac (VHT20)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
36	5180	8.93	10.43	18.857	12.75
40	5200	12.18	13.46	38.702	15.88
48	5240	12.14	13.37	38.095	15.81

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
36	5180	76.643	18.84	22.40	PASS
40	5200	157.302	21.97	22.40	PASS
48	5240	154.835	21.90	22.40	PASS

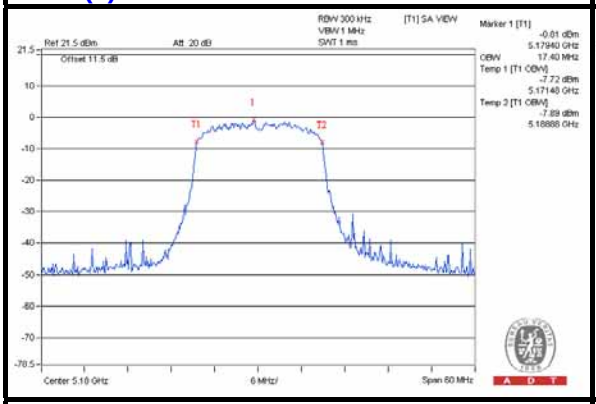
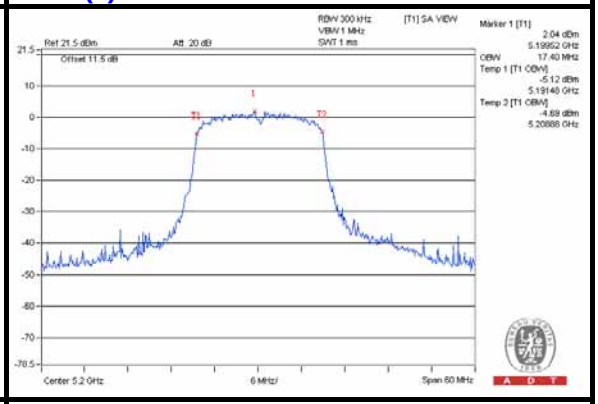
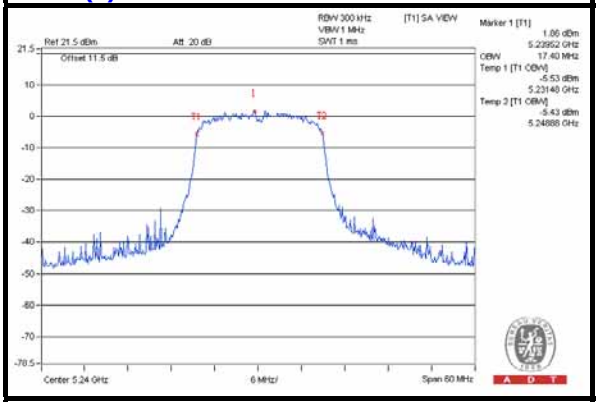
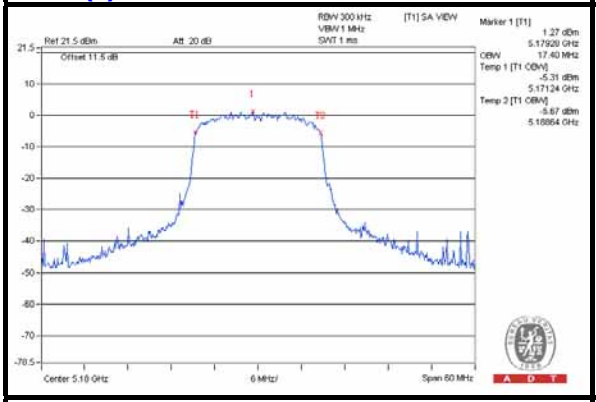
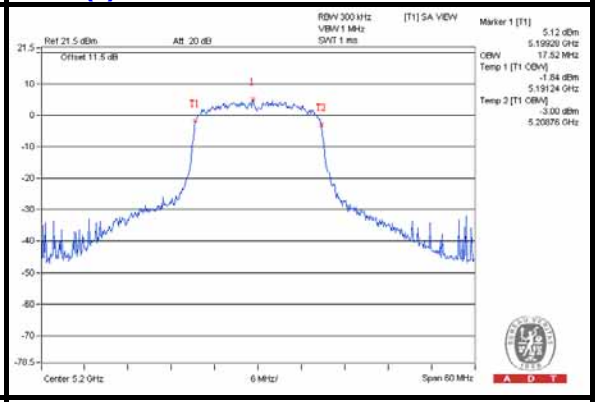
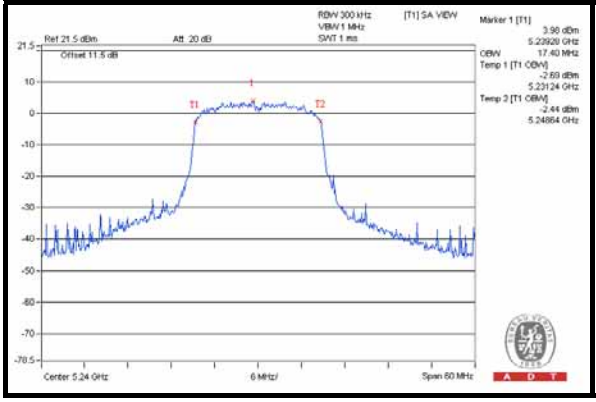
802.11ac (VHT20)

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	17.40	17.40
40	5200	17.40	17.52
48	5240	17.40	17.40

Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 10dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined EIRP Limit (dBm)
36	5180	17.40	22.40 < 23
40	5200	17.40	22.40 < 23
48	5240	17.40	22.40 < 23

Chain(0) : CH36	Chain(0) : CH40
	
Chain(0) : CH48	
	
Chain(1) : CH36	**Chain(1) : CH40**
	
Chain(1) : CH48	
	

5.26~5.32GHz, 5.50~5.58GHz & 5.66GHz~5.70GHz
802.11ac (VHT20)
CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
52	5260	14.56	15.76	66.246	18.21	23.31	PASS
60	5300	14.57	15.83	66.924	18.26	23.31	PASS
64	5320	7.63	8.24	12.462	10.96	23.31	PASS
100	5500	6.73	7.24	10.007	10.00	21.63	PASS
116	5580	14.53	14.63	57.419	17.59	21.63	PASS
132	5660	14.45	14.24	54.407	17.36	21.63	PASS
140	5700	6.81	6.93	9.729	9.88	21.63	PASS
144 (UNII-2c Band)	5720	11.88	12.44	32.956	15.37	20.57	PASS
144 (UNII-3 Band)	5720	4.66	5.35	6.352	8.22	20.84	PASS

Note:

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

802.11ac (VHT20)

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
52	5260	269.252	24.30	29.40	PASS
60	5300	272.008	24.35	29.40	PASS
64	5320	50.651	17.05	29.40	PASS
100	5500	59.883	17.77	29.40	PASS
116	5580	343.602	25.36	29.40	PASS
132	5660	325.578	25.13	29.40	PASS
140	5700	58.219	17.65	29.40	PASS
144 (UNII-2c Band)	5720	197.213	22.95	28.34	PASS
144 (UNII-3 Band)	5720	38.011	15.80	28.61	PASS

802.11ac (VHT20)

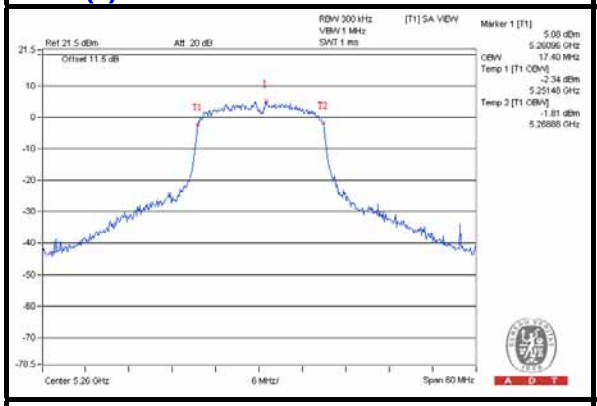
99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
52	5260	17.40	17.52
60	5300	17.40	17.40
64	5320	17.40	17.40
100	5500	17.40	17.40
116	5580	17.52	17.40
132	5660	17.40	17.40
140	5700	17.40	17.40
144 (UNII-2c Band)	5720	13.64	13.76
144 (UNII-3 Band)	5720	3.76	3.64

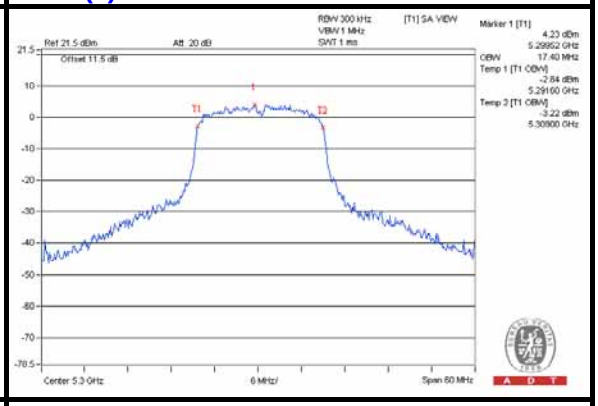
Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	Determined EIRP Limit (dBm)
52	5260	17.40	23.40 < 24	29.40 < 30
60	5300	17.40	23.40 < 24	29.40 < 30
64	5320	17.40	23.40 < 24	29.40 < 30
100	5500	17.40	23.40 < 24	29.40 < 30
116	5580	17.40	23.40 < 24	29.40 < 30
132	5660	17.40	23.40 < 24	29.40 < 30
140	5700	17.40	23.40 < 24	29.40 < 30
144 (UNII-2c Band)	5720	13.64	22.34 < 24	28.34 < 30
144 (UNII-3 Band)	5720	3.64	22.61 < 30	28.61 < 36

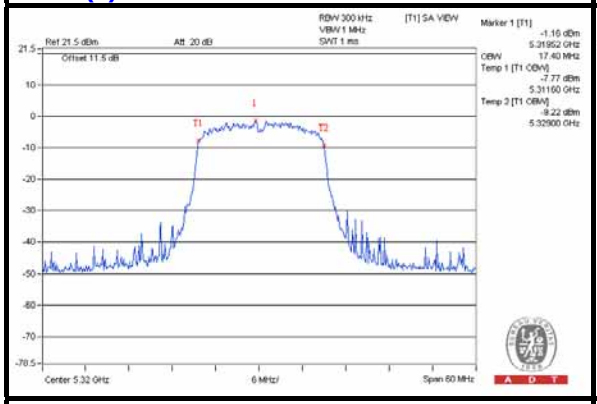
Chain(0) : CH52



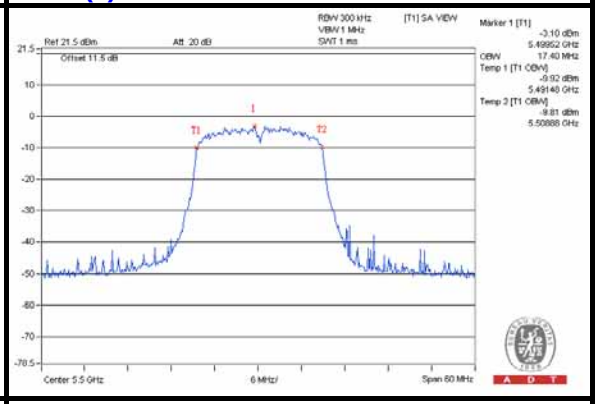
Chain(0) : CH60



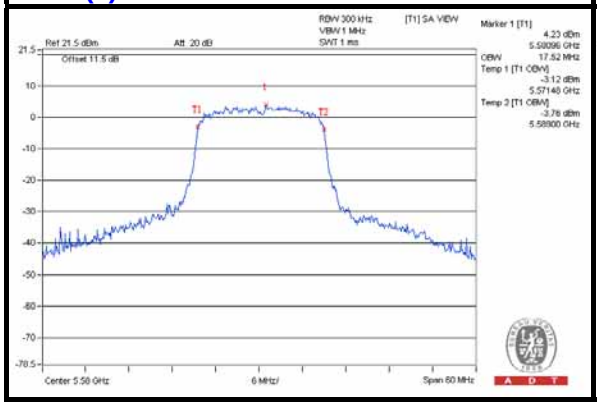
Chain(0) : CH64



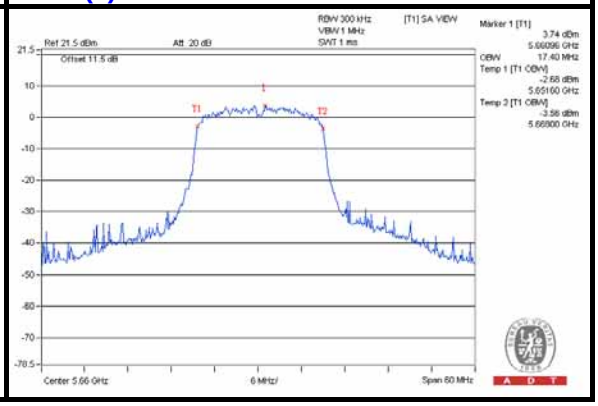
Chain(0) : CH100

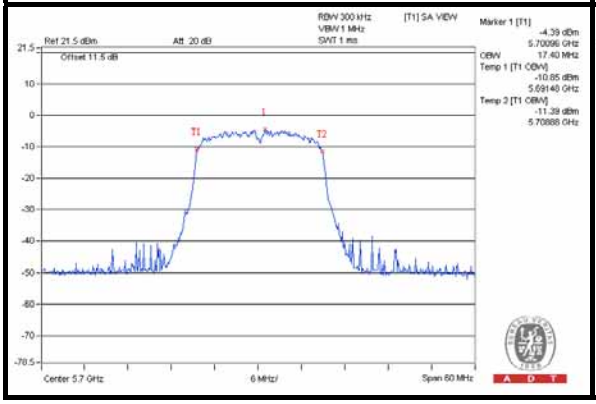
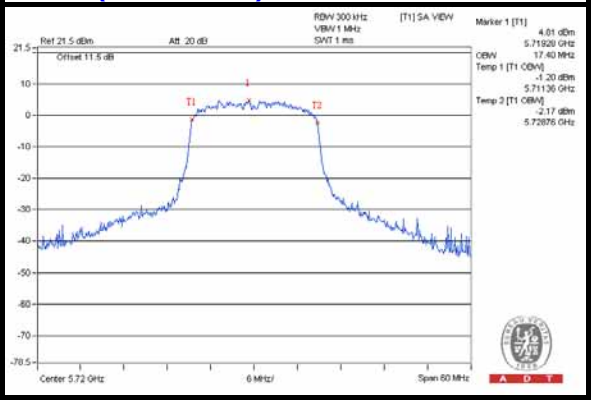


Chain(0) : CH116



Chain(0) : CH132



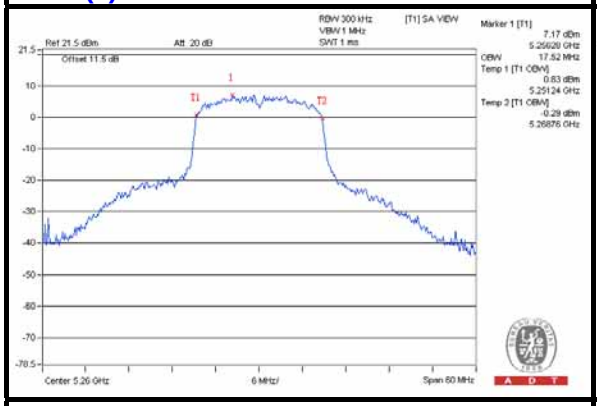
Chain(0) : CH140	Chain(0) : CH144 (UNII-2c Band) / Chain(0) : CH144 (UNII-3 Band)
	

NOTE:

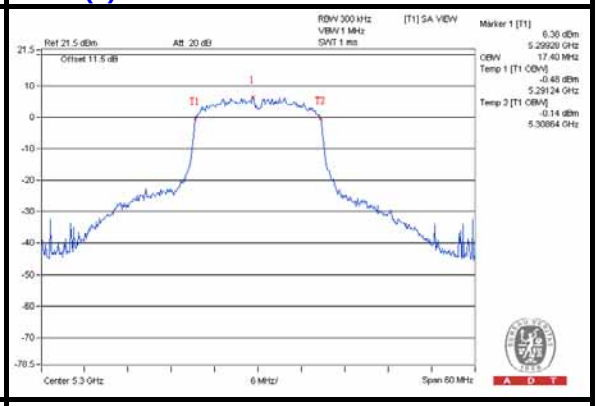
For CH144 (UNII-2c Band) = 5725 - Temp 1

For CH144 (UNII-3 Band) = 5725 + OBW - CH144 (UNII-2c Band) BW

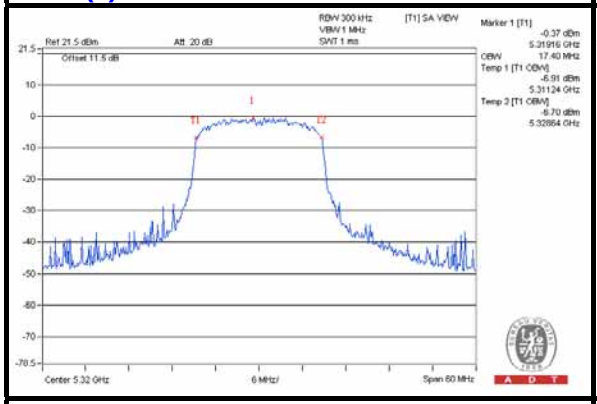
Chain(1) : CH52



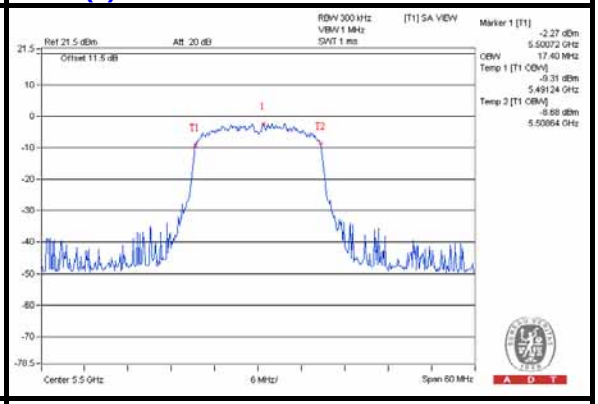
Chain(1) : CH60



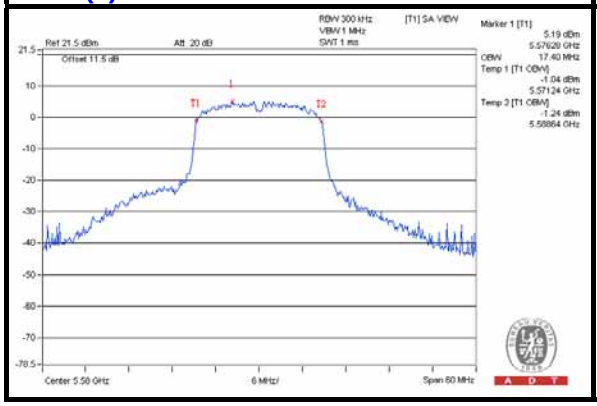
Chain(1) : CH64



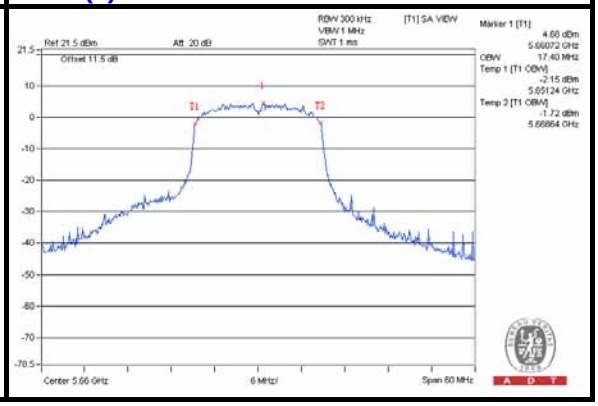
Chain(1) : CH100

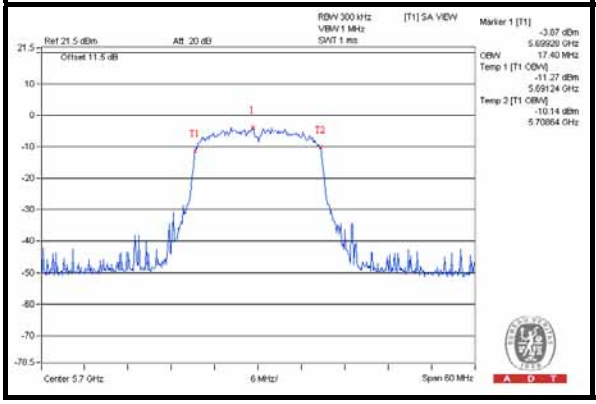
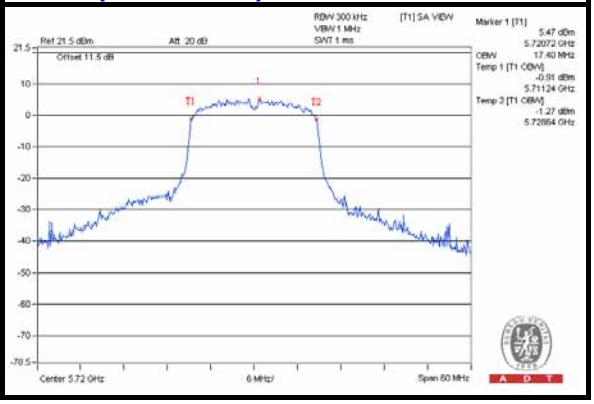


Chain(1) : CH116



Chain(1) : CH132



Chain(1) : CH140	Chain(1) : CH144 (UNII-2c Band) / Chain(1) : CH144 (UNII-3 Band)
	

NOTE:

For CH144 (UNII-2c Band) = 5725 - Temp 1

For CH144 (UNII-3 Band) = 5725 + OBW - CH144 (UNII-2c Band) BW

802.11ac (VHT40)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
38	5190	9.64	10.74	21.062	13.23
46	5230	12.02	13.57	38.673	15.87

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
38	5190	85.605	19.32	23.00	PASS
46	5230	157.184	21.96	23.00	PASS

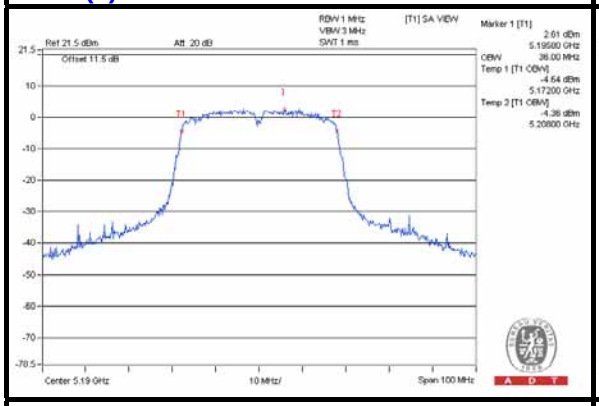
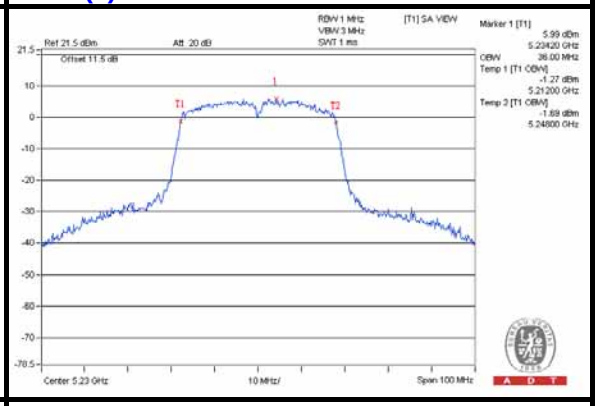
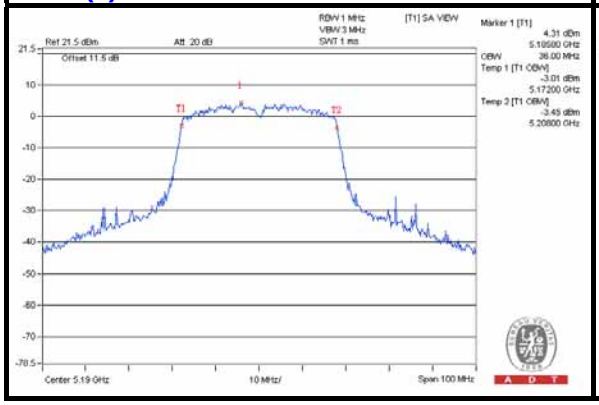
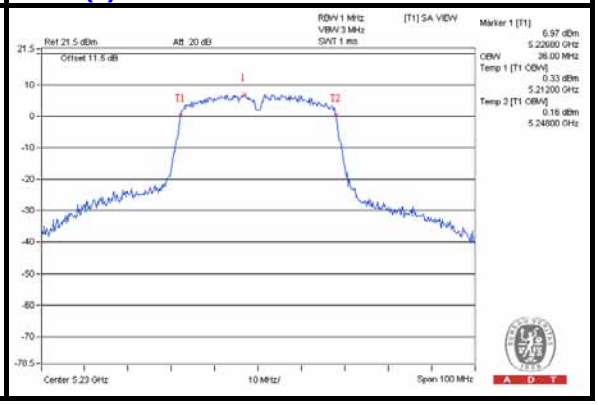
802.11ac (VHT40)

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
38	5190	36.00	36.00
46	5230	36.00	36.00

Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 10dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined EIRP Limit (dBm)
38	5190	36.00	25.56 < 23
46	5230	36.00	25.56 < 23

Chain(0) : CH38	Chain(0) : CH46
	
Chain(1) : CH38	**Chain(1) : CH46**
	

5.26~5.32GHz, 5.50~5.58GHz & 5.66GHz~5.70GHz
802.11ac (VHT40)
CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
54	5270	13.16	14.07	46.228	16.65	23.91	PASS
62	5310	9.59	10.09	19.308	12.86	23.91	PASS
102	5510	7.32	7.62	11.176	10.48	22.23	PASS
110	5550	13.26	13.38	42.961	16.33	22.23	PASS
134	5670	13.15	13.24	41.740	16.21	22.23	PASS
142 (UNII-2c Band)	5710	10.92	10.67	24.542	13.90	22.23	PASS
142 (UNII-3 Band)	5710	-2.53	-2.03	1.2105	0.83	20.00	PASS

Note:

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
54	5270	187.891	22.74	30.00	PASS
62	5310	78.476	18.95	30.00	PASS
102	5510	66.878	18.25	30.00	PASS
110	5550	257.084	24.10	30.00	PASS
134	5670	249.777	23.98	30.00	PASS
142 (UNII-2c Band)	5710	146.862	21.67	30.00	PASS
142 (UNII-3 Band)	5710	7.244	8.60	27.77	PASS

For CH142: Total power (dBm)= Average power <Chain 0 +1>(dBm) + Duty Factor (0.09dB)

802.11ac (VHT40)

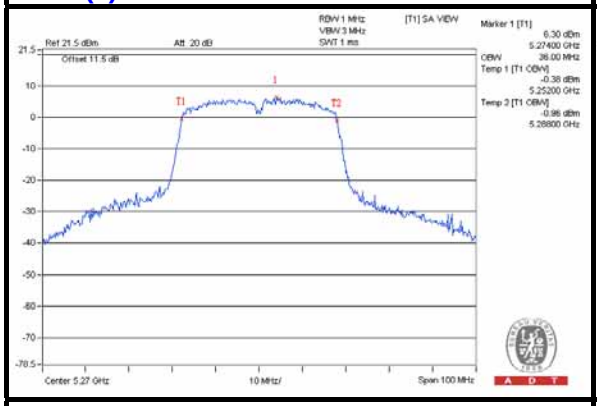
99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
54	5270	36.00	36.00
62	5310	36.00	36.00
102	5510	36.00	36.00
110	5550	36.00	36.20
134	5670	36.00	35.80
142 (UNII-2c Band)	5710	33.00	33.00
142 (UNII-3 Band)	5710	3.00	3.00

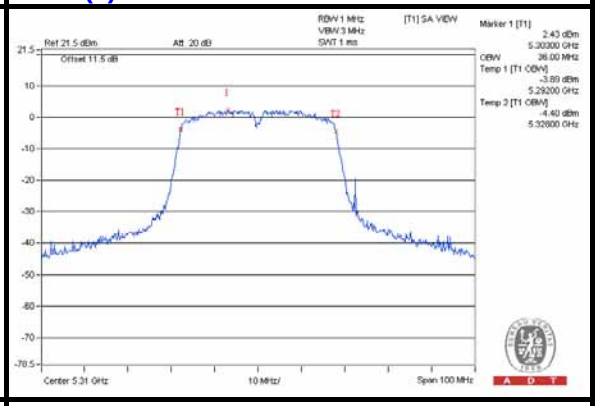
Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	Determined EIRP Limit (dBm)
54	5270	36.00	26.56 > 24	26.56 > 30
62	5310	36.00	26.56 > 24	26.56 > 30
102	5510	36.00	26.56 > 24	26.56 > 30
110	5550	36.00	26.56 > 24	26.56 > 30
134	5670	35.80	26.53 > 24	26.53 > 30
142 (UNII-2c Band)	5710	33.00	26.18 > 24	26.18 > 30
142 (UNII-3 Band)	5710	3.00	21.77 < 30	21.77 < 36

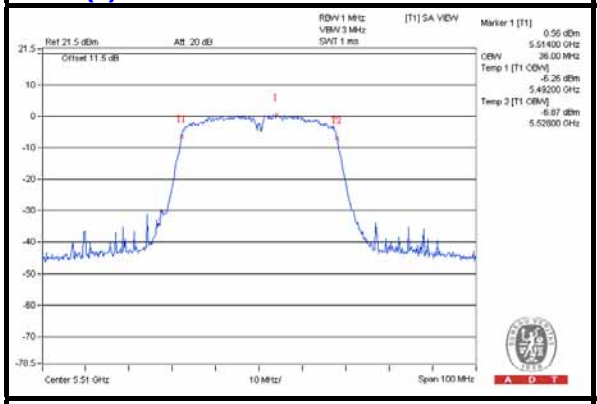
Chain(0) : CH54



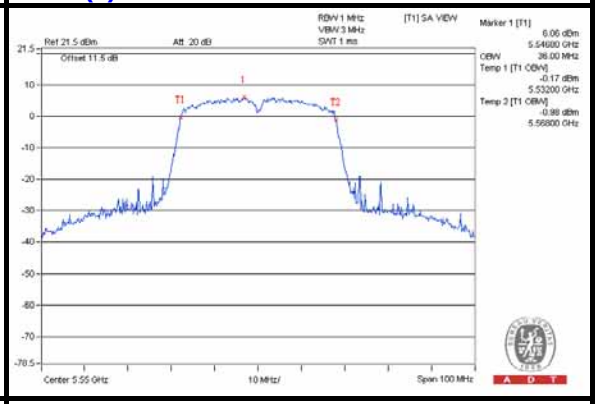
Chain(0) : CH62



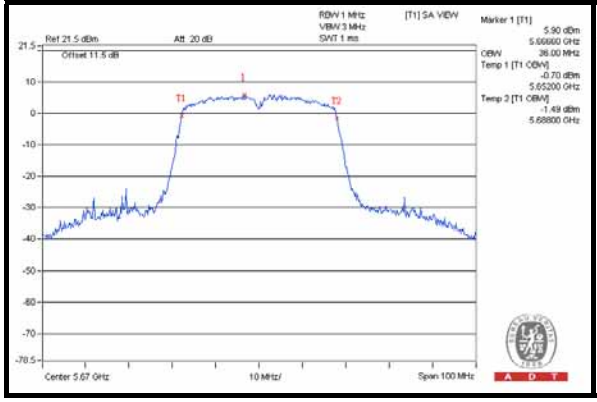
Chain(0) : CH102



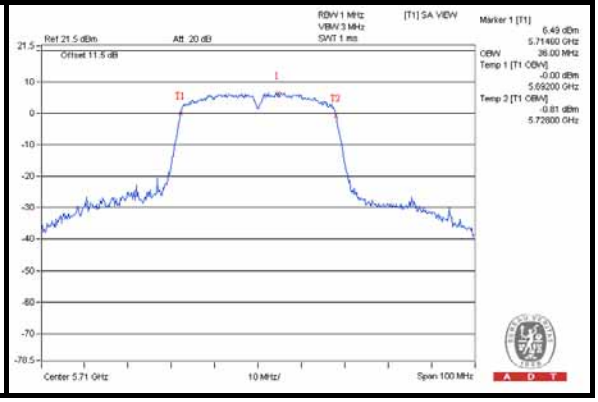
Chain(0) : CH110



Chain(0) : CH134



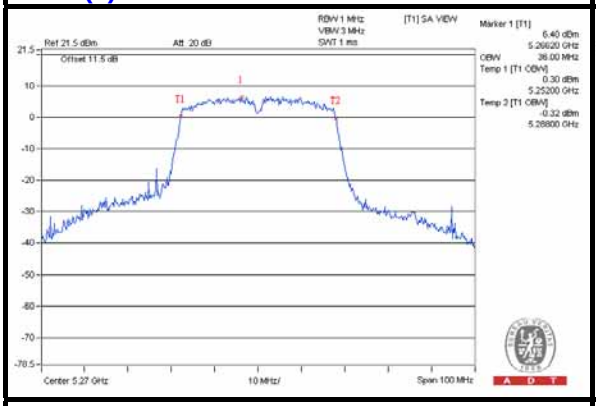
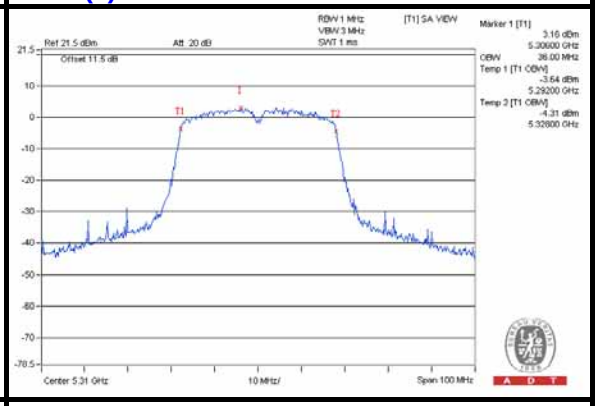
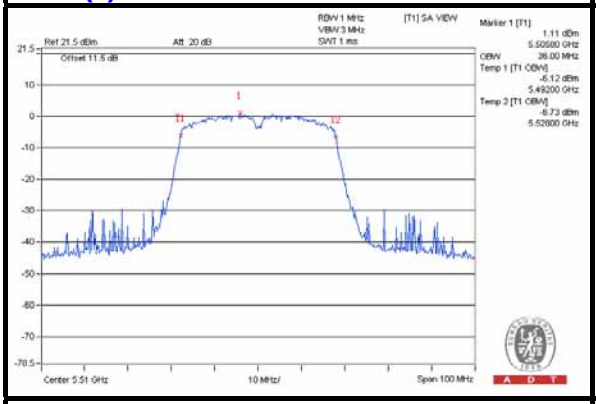
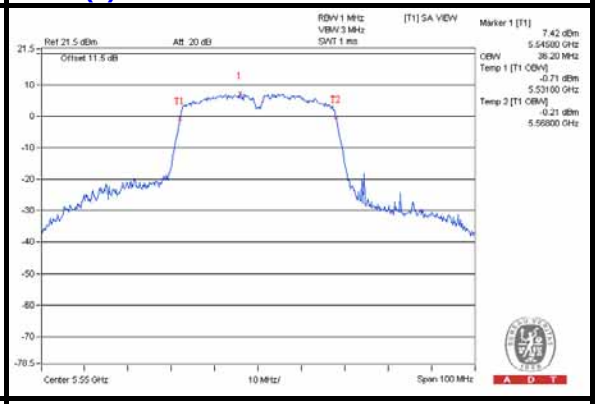
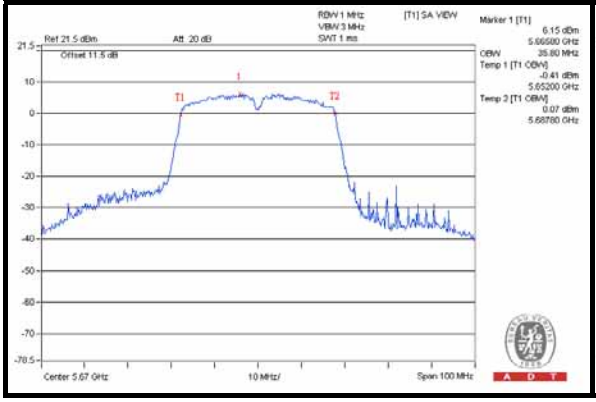
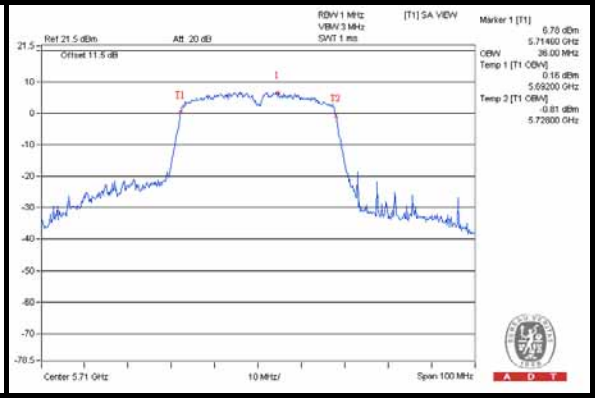
Chain(0) : CH142 (UNII-2c Band) / Chain(0) : CH142 (UNII-3 Band)



NOTE:

For CH142 (UNII-2c Band) = 5725 - Temp 1

For CH142 (UNII-3 Band) = 5725 + OBW - CH142 (UNII-2c Band) BW

Chain(1) : CH54	Chain(1) : CH62
	
Chain(1) : CH102	**Chain(1) : CH110**
	
Chain(1) : CH134	**Chain(1) : CH142 (UNII-2c Band) / Chain(1) : CH142 (UNII-3 Band)**
	

NOTE:

For CH142 (UNII-2c Band) = 5725 - Temp 1

For CH142 (UNII-3 Band) = 5725 + OBW - CH142 (UNII-2c Band) BW

802.11ac (VHT80)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)
		CHAIN 0	CHAIN 1		
42	5210	8.56	9.70	16.511	12.18

EIRP POWER:

CHANNEL	CHANNEL FREQUENCY (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	67.108	18.27	23.00	PASS

802.11ac (VHT80)

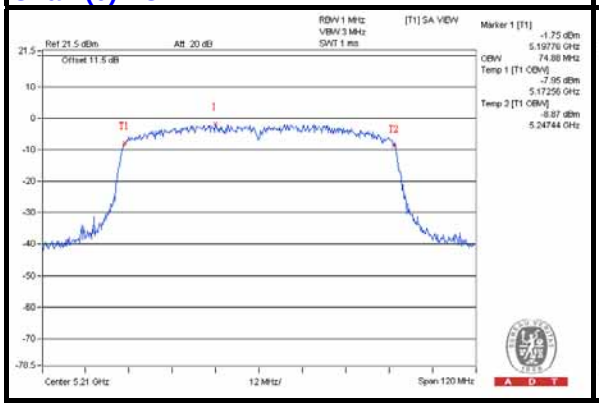
99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
42	5210	74.88	74.88

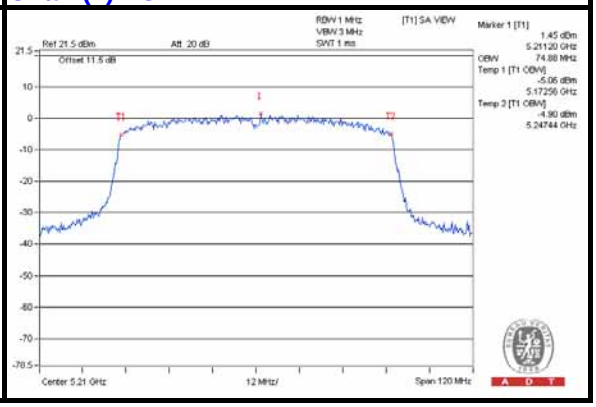
Note: For output power limitation is determined based on 99% bandwidth.

Power Limit = 10dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined EIRP Limit (dBm)
42	5210	74.88	28.74 > 23

Chain(0) : CH42



Chain(1) : CH42



5.26~5.32GHz, 5.50~5.58GHz & 5.66GHz~5.70GHz

802.11ac (VHT80)

CONDUCTED POWER:

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
58	5290	9.24	10.10	18.628	12.70	23.91	PASS
106	5530	9.85	10.83	21.767	13.38	22.23	PASS
138 (UNII-2c Band)	5690	8.85	9.01	16.339	12.13	22.23	PASS
138 (UNII-3 Band)	5690	-9.12	-9.53	0.2444	-6.12	19.10	PASS

Note:

5250~5350MHz: The directional gain is 6.09dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(6.09-6)”.

5470~5725MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

5725~5825MHz: The directional gain is 7.77dBi > 6dBi, therefore the limit needs to reduce, so the power limit shall be reduced to “Determined Conducted Limit-(7.77-6)”.

EIRP POWER:

CHAN.	CHAN. FREQ. (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
58	5290	75.712	18.79	30.00	PASS
106	5530	130.256	21.15	30.00	PASS
138 (UNII-2c Band)	5690	97.774	19.90	30.00	PASS
138 (UNII-3 Band)	5690	1.463	1.65	26.87	PASS

For CH138: Total power (dBm)= Average power <Chain 0 +1>(dBm) + Duty Factor (0.19dB)

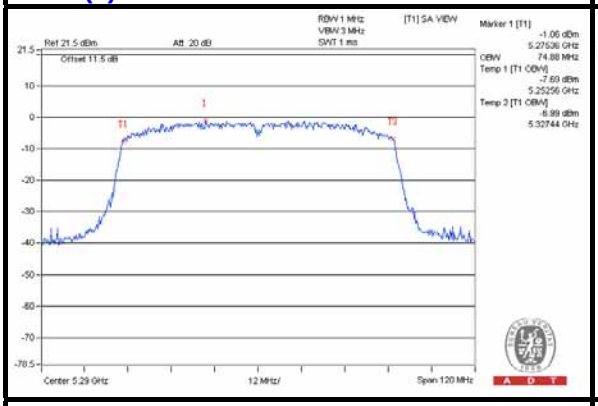
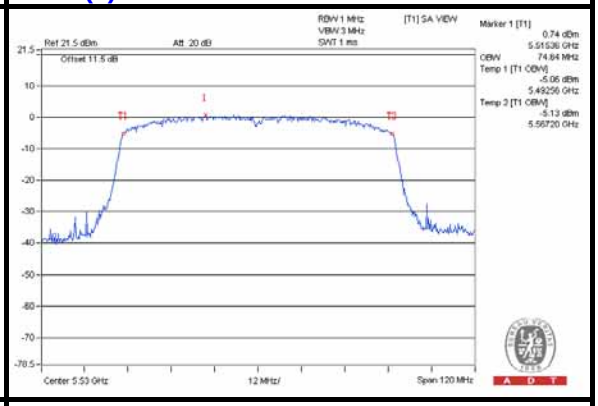
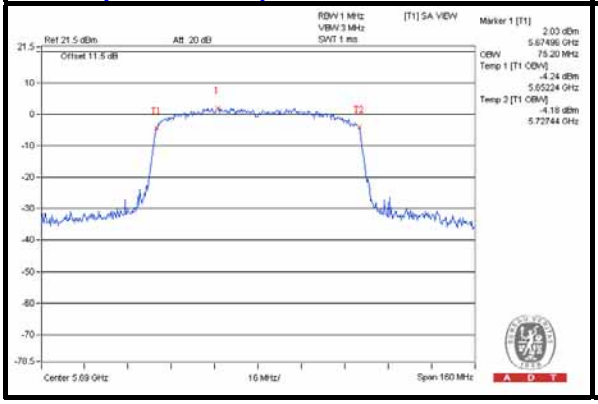
802.11ac (VHT80)

99% OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	OCCUPIED BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
58	5290	74.88	74.88
106	5530	74.64	74.64
138 (UNII-2c Band)	5690	72.76	72.76
138 (UNII-3 Band)	5690	2.44	2.44

Note: For output power limitation is determined based on 99% bandwidth.

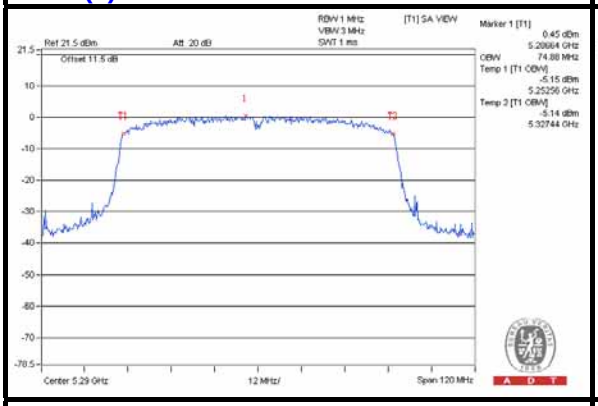
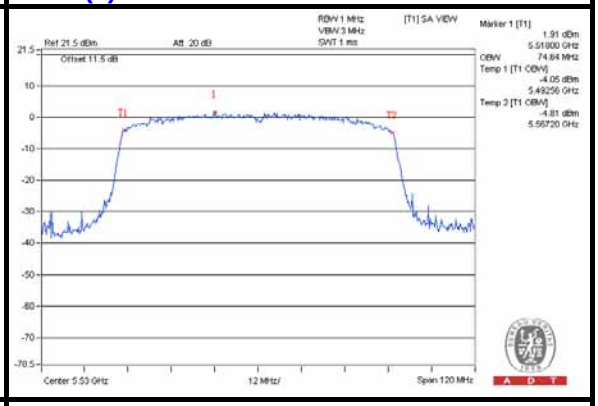
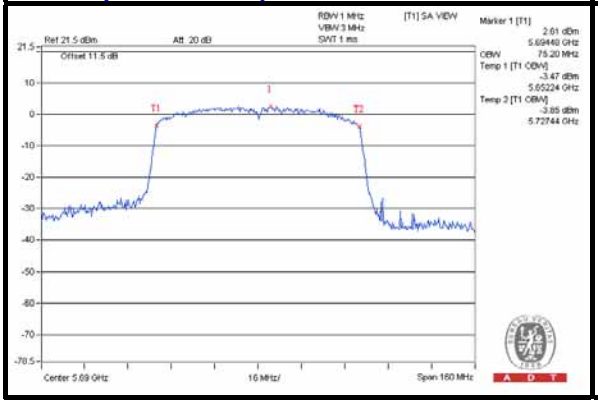
Power Limit = 11dBm + 10logB < UNII Band 2~3>				
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)	Determined EIRP Limit (dBm)
58	5290	74.88	29.74 > 24	35.74 > 30
106	5530	74.64	29.72 > 24	35.72 > 30
138 (UNII-2c Band)	5690	72.76	29.61 > 24	35.61 > 30
138 (UNII-3 Band)	5690	2.44	20.87 < 30	26.87 < 36

Chain(0) : CH58	Chain(0) : CH106
	
Chain(0) : CH138 (UNII-2c Band) / Chain(0) : CH138 (UNII-3 Band)	
	

NOTE:

For CH138 (UNII-2c Band) = 5725 - Temp 1

For CH138 (UNII-3 Band) = 5725 + OBW - CH138 (UNII-2c Band) BW

Chain(1) : CH58	Chain(1) : CH106
	
Chain(1) : CH138 (UNII-2c Band) / Chain(1) : CH138 (UNII-3 Band)	
	

NOTE:

For CH138 (UNII-2c Band) = 5725 - Temp 1

For CH138 (UNII-3 Band) = 5725 + OBW - CH138 (UNII-2c Band) BW

4.2 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.2.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 ~ 5.25GHz	4dBm
5.25 ~ 5.35GHz	11dBm
5.47 – 5.725GHz	11dBm
5.725 ~ 5.825GHz	17dBm

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSV 40	100964	July 15, 2013	July 14, 2014

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : May 09, 2014

4.2.3 TEST PROCEDURES

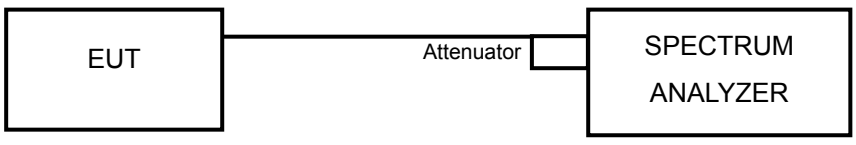
For 802.11a, 802.11ac (VHT20) test
Using method SA-1
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 30 KHz, Set VBW ≥ 1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value

For 802.11ac (VHT40) , 802.11ac (VHT80) test
Using method SA-2
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3) Sweep time = auto, trigger set to “free run”.
4) Trace average at least 100 traces in power averaging mode.
5) Record the max value and add 10 log (1/duty cycle)

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



4.2.6 EUT OPERATING CONDITIONS

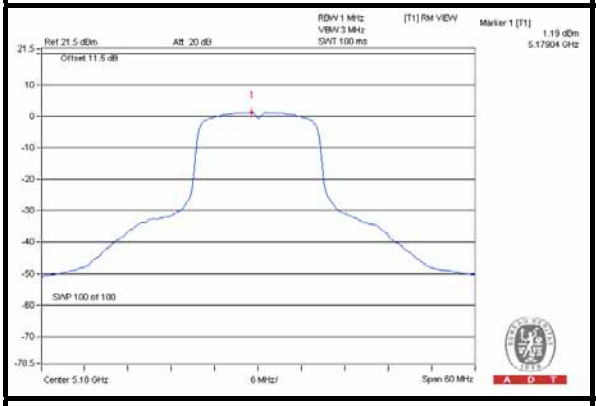
Same as the 4.1.6

4.2.7 TEST RESULTS (MODE 1)

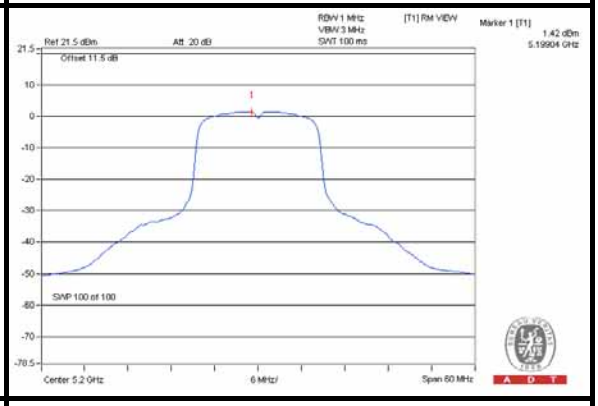
802.11a

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	1.19	4	PASS
40	5200	1.42	4	PASS
48	5240	1.08	4	PASS
56	5280	0.63	11	PASS
60	5300	0.76	11	PASS
64	5320	0.82	11	PASS
100	5500	-0.41	11	PASS
116	5580	0.45	11	PASS
132	5660	0.02	11	PASS
140	5700	-2.18	11	PASS
144 (UNII-2c Band)	5720	1.07	11	PASS
144 (UNII-3 Band)	5720	0.27	17	PASS

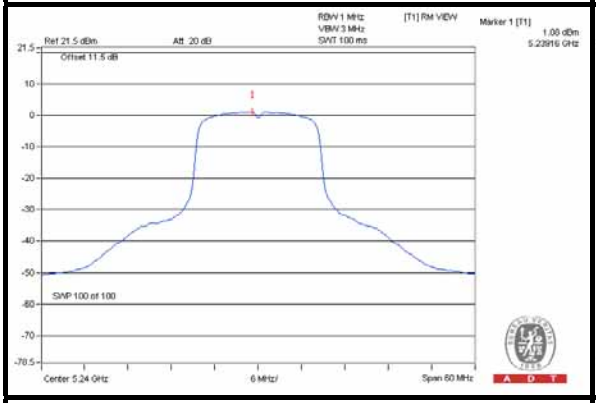
CH36



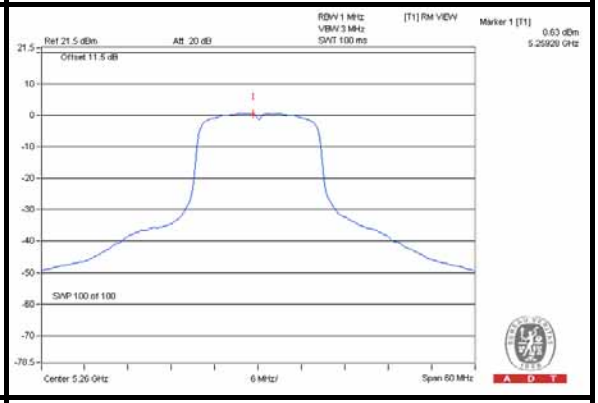
CH40



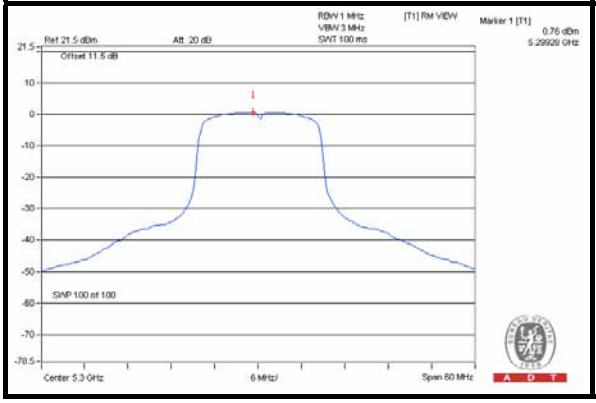
CH48



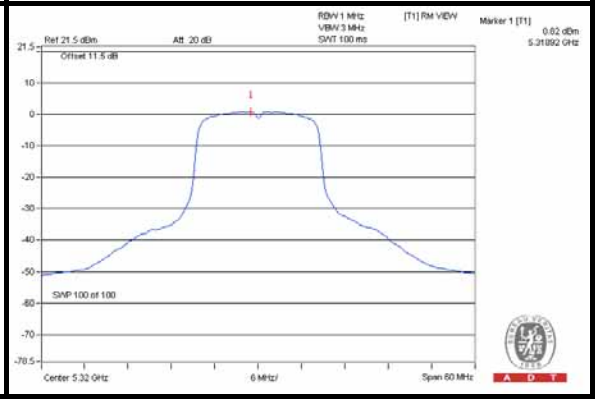
CH52

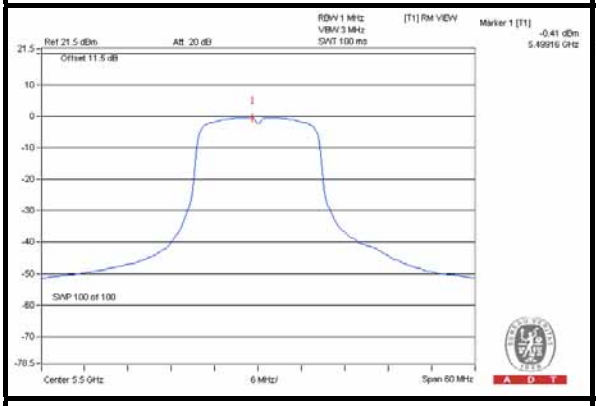
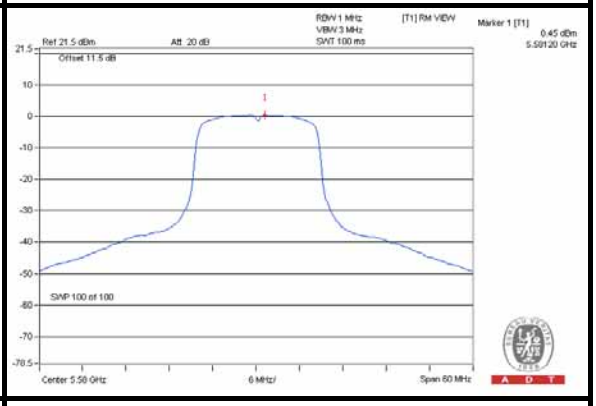
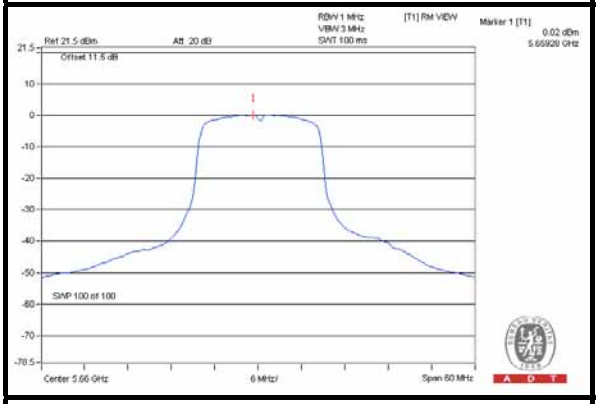
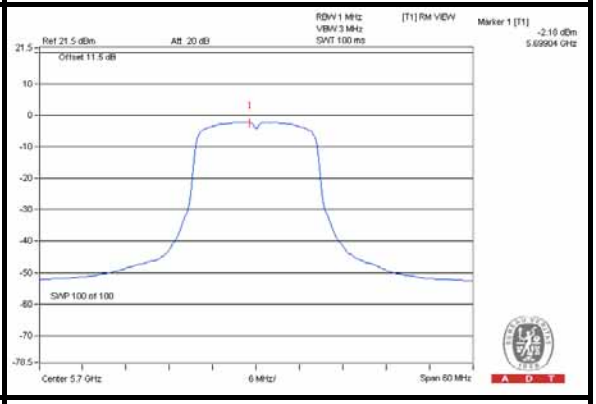
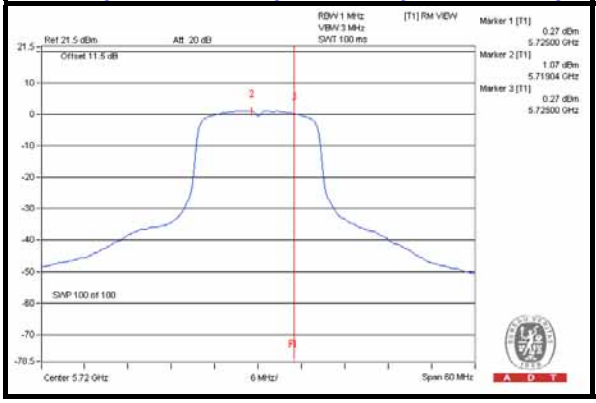


CH60



CH64

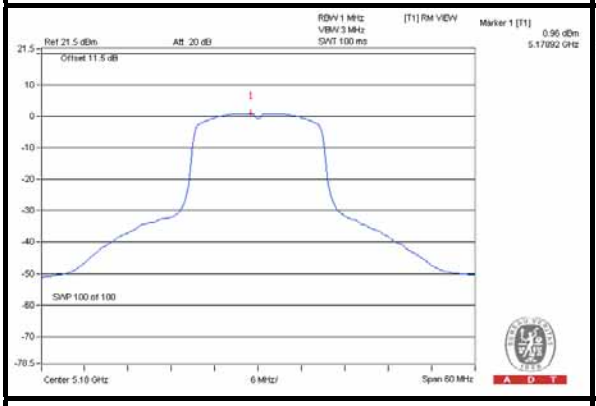


CH100	CH116
	
CH132	**CH140**
	
CH144 (UNII-2c Band) / CH144 (UNII-3 Band)	
	

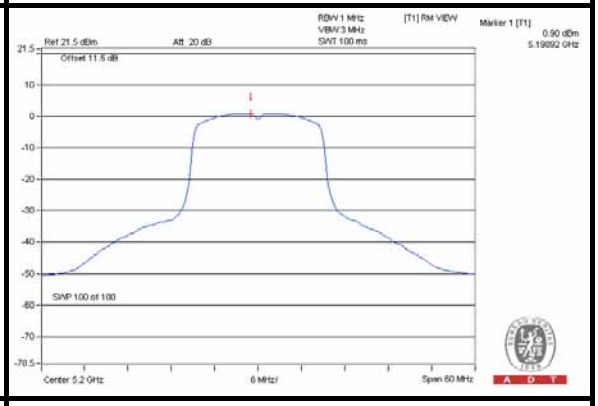
802.11ac (VHT20)

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	0.96	4	PASS
40	5200	0.90	4	PASS
48	5240	0.52	4	PASS
56	5280	0.73	11	PASS
60	5300	-0.01	11	PASS
64	5320	1.25	11	PASS
100	5500	-0.92	11	PASS
116	5580	-0.11	11	PASS
132	5660	-0.48	11	PASS
140	5700	-2.46	11	PASS
144 (UNII-2c Band)	5720	0.74	11	PASS
144 (UNII-3 Band)	5720	0.04	17	PASS

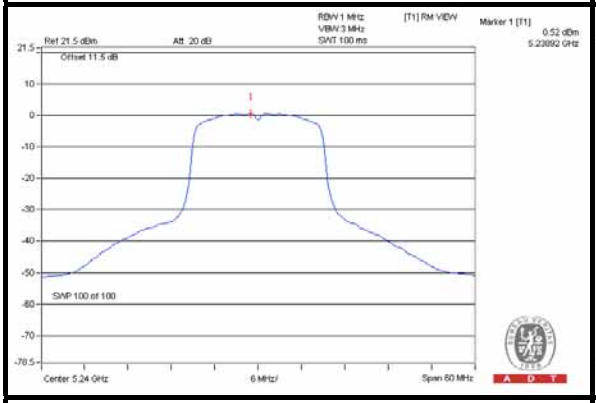
CH36



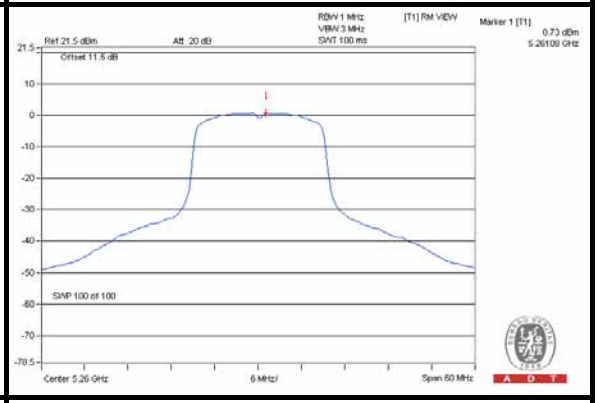
CH40



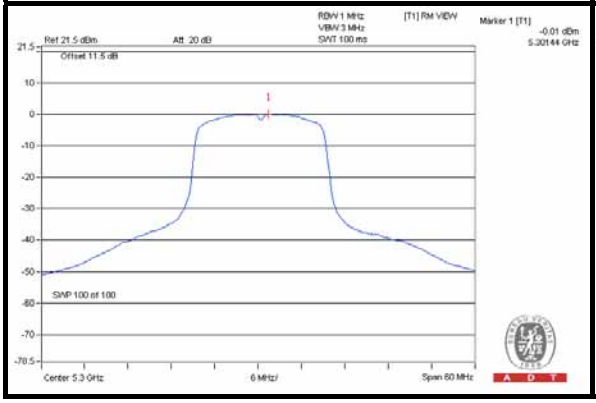
CH48



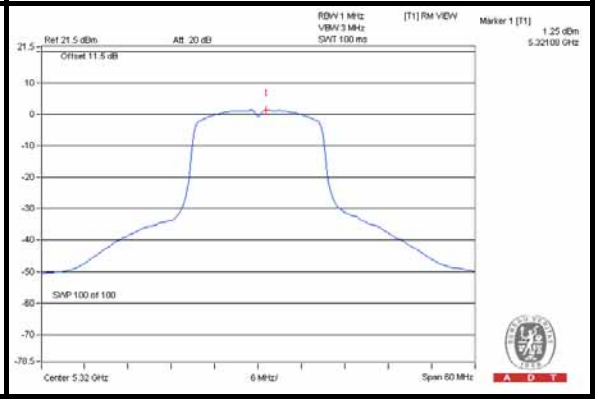
CH52

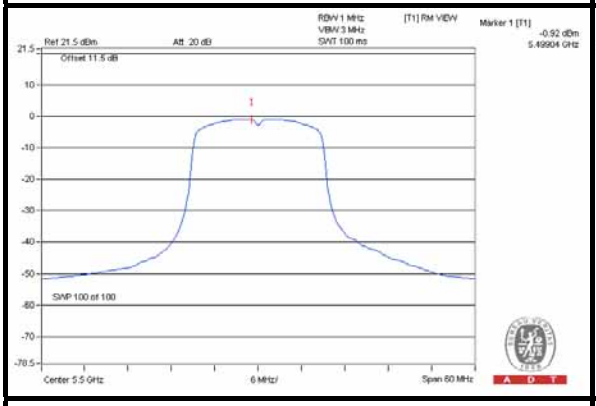
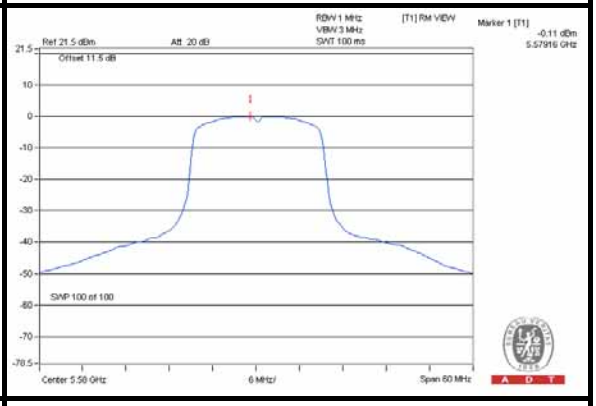
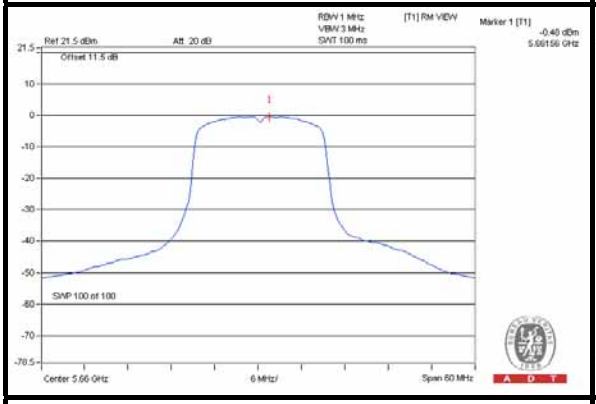
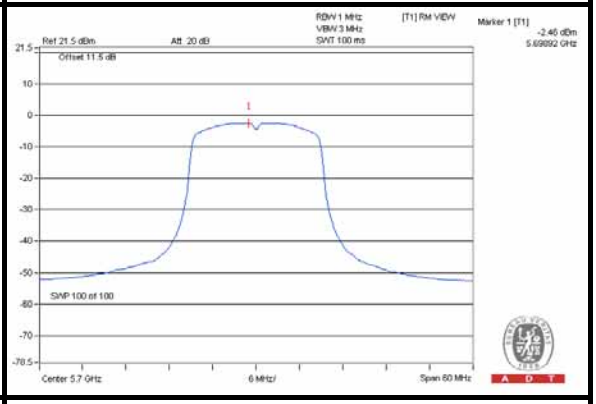
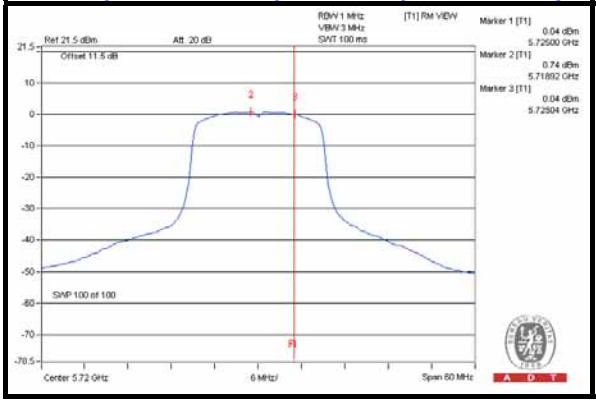


CH60



CH64



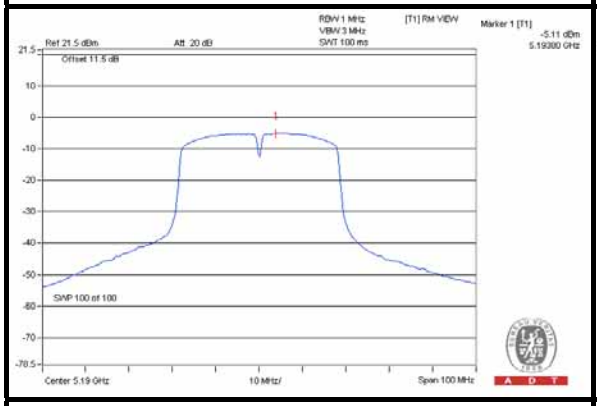
CH100	CH116
	
CH132	**CH140**
	
CH144 (UNII-2c Band) / CH144 (UNII-3 Band)	
	

802.11ac (VHT40)

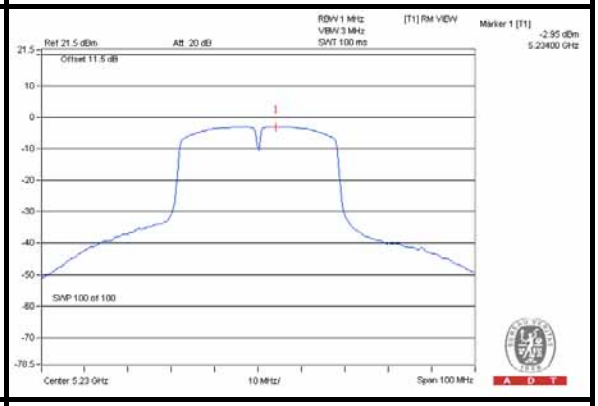
CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
38	5190	-5.11	0.09	-5.02	4	PASS
46	5230	-2.95	0.09	-2.86	4	PASS
54	5270	-3.66	0.09	-3.57	11	PASS
62	5310	-4.13	0.09	-4.04	11	PASS
102	5510	-4.06	0.09	-3.97	11	PASS
110	5550	-3.84	0.09	-3.75	11	PASS
134	5670	-3.92	0.09	-3.83	11	PASS
142 (UNII-2c Band)	5710	-3.32	0.09	-3.23	11	PASS
142 (UNII-3 Band)	5710	-5.72	0.09	-5.63	17	PASS

NOTE: 1. Refer to section 3.5 for duty cycle spectrum plot.

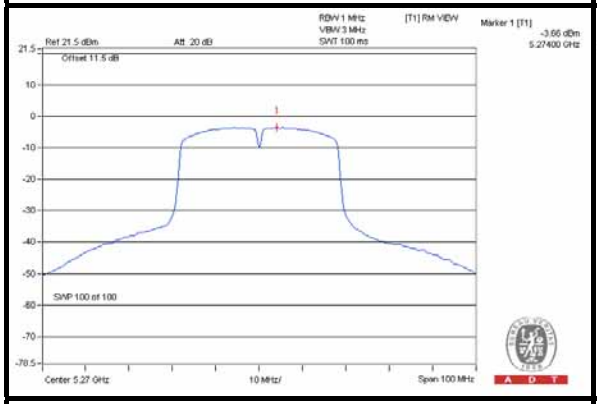
CH38



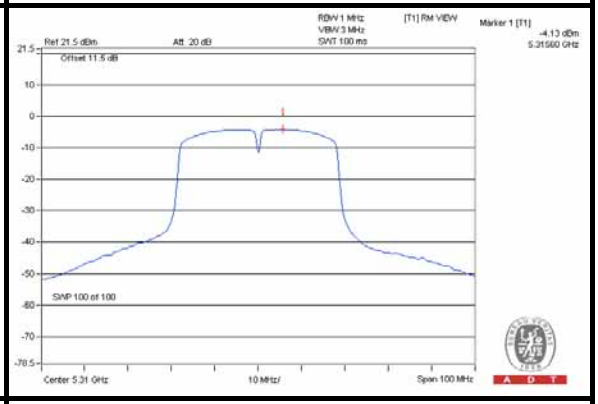
CH46



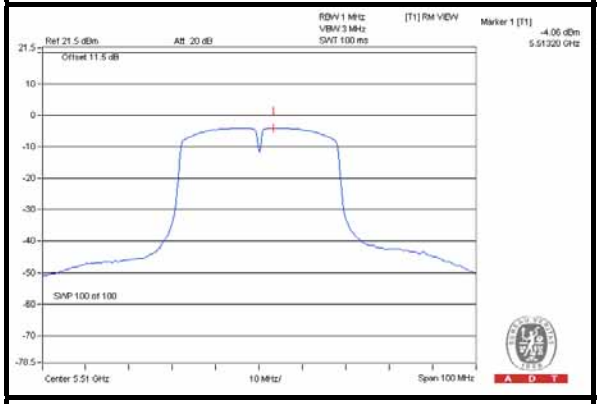
CH54



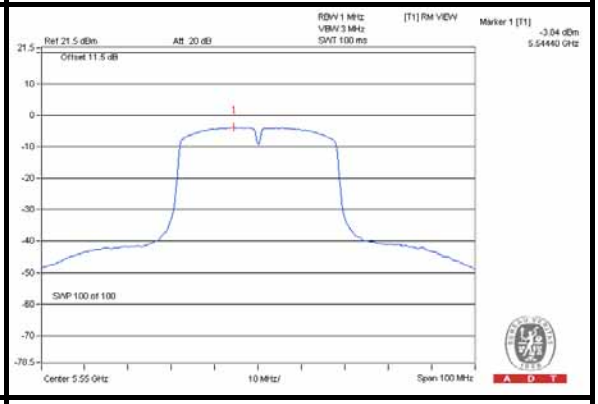
CH62



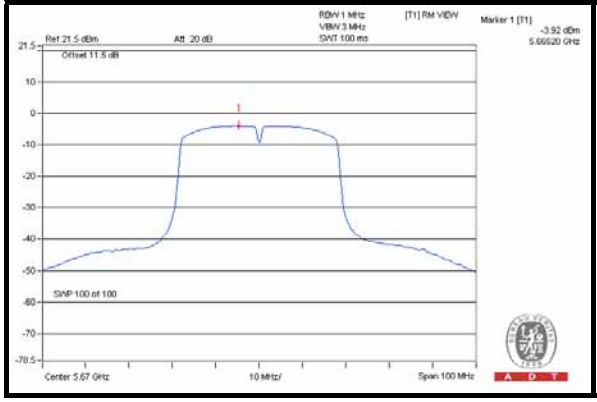
CH102



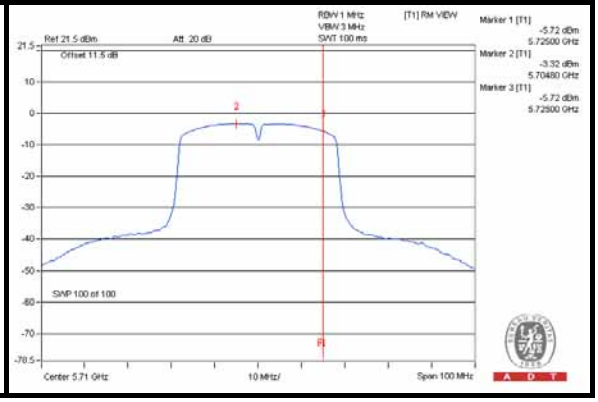
CH110



CH134



CH142 (UNII-2c Band) / CH142 (UNII-3 Band)

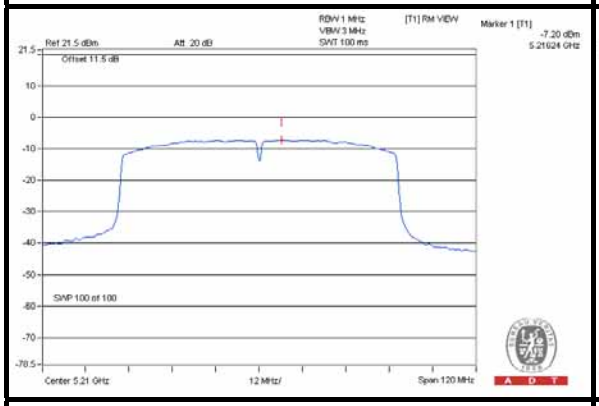


802.11ac (VHT80)

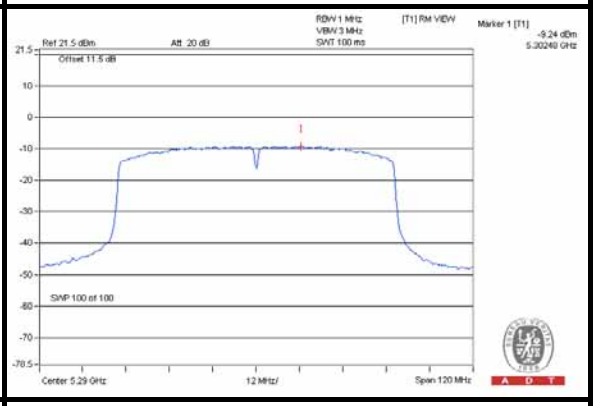
CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
42	5210	-7.20	0.19	-7.01	4	PASS
58	5290	-9.24	0.19	-9.05	4	PASS
106	5530	-6.89	0.19	-6.70	11	PASS
138 (UNII-2c Band)	5690	-8.24	0.19	-8.05	11	PASS
138 (UNII-3 Band)	5510	-12.19	0.19	-12.00	17	PASS

NOTE: 1. Refer to section 3.5 for duty cycle spectrum plot.

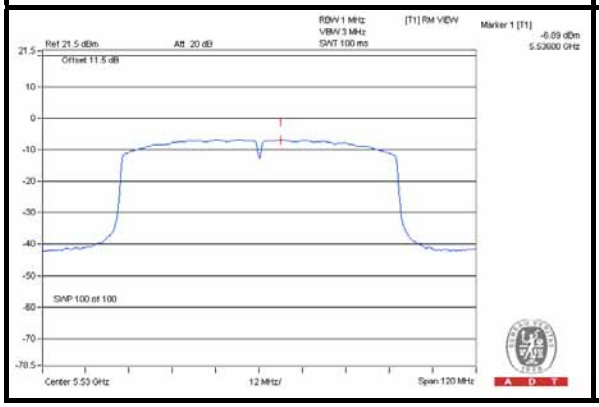
CH42



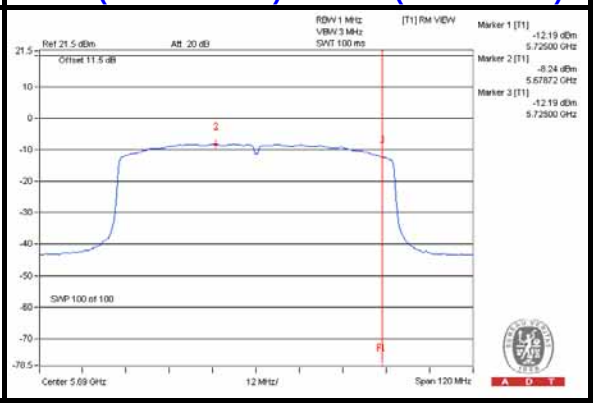
CH58



CH106



CH138 (UNII-2c Band) / CH138 (UNII-3 Band)



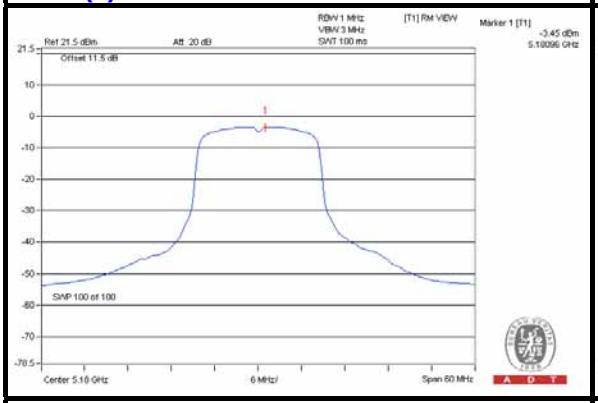
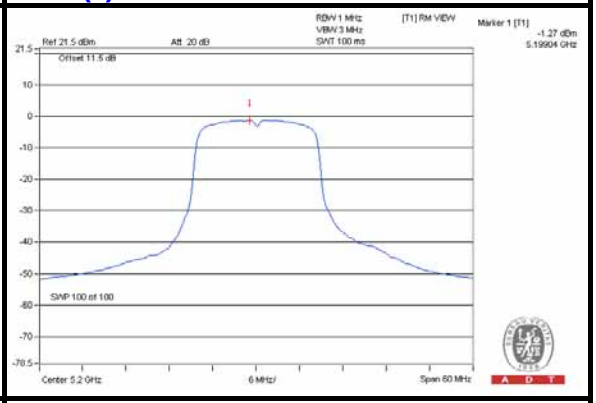
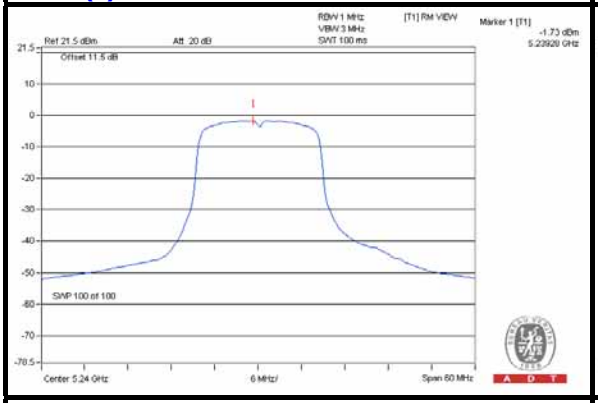
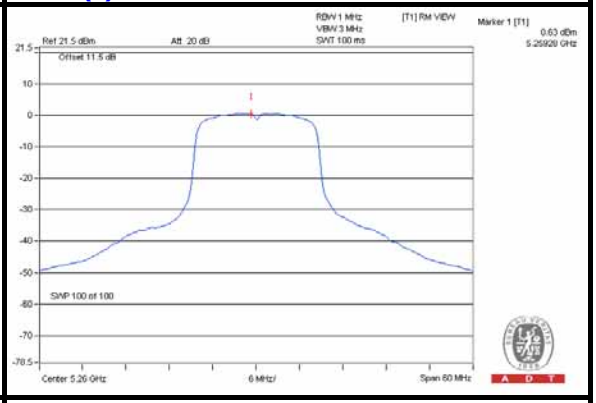
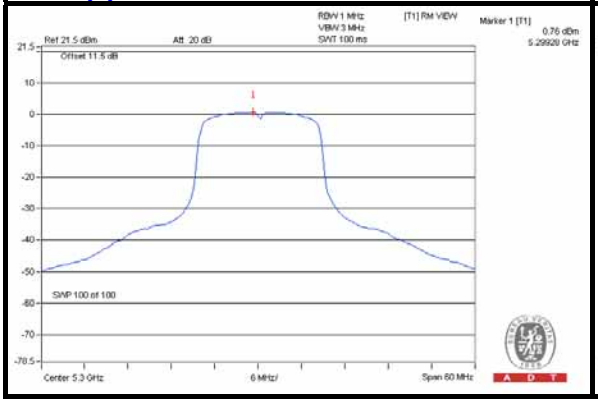
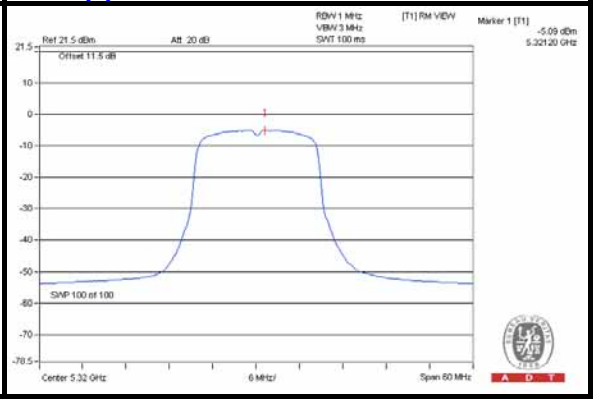
4.2.8 TEST RESULTS (MODE 2)

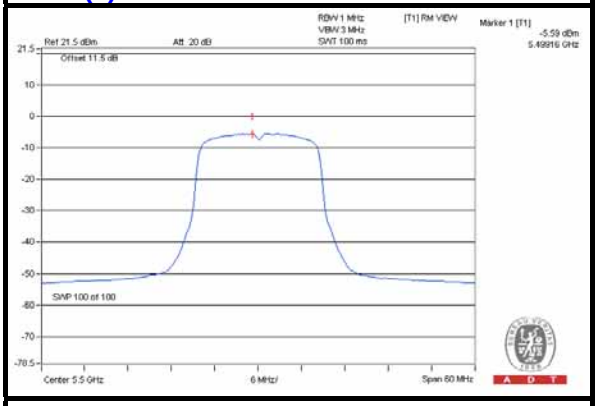
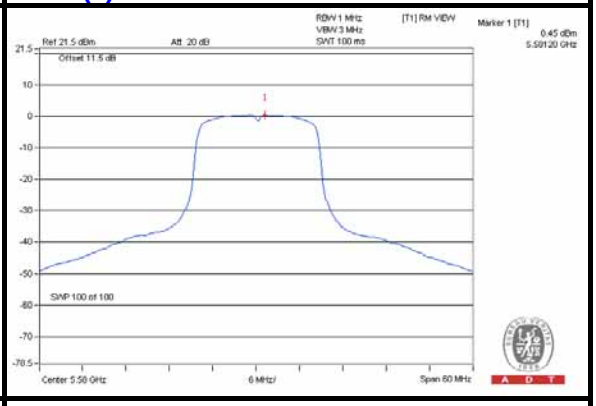
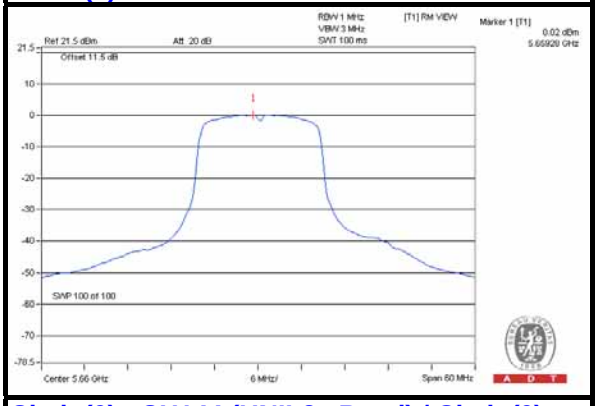
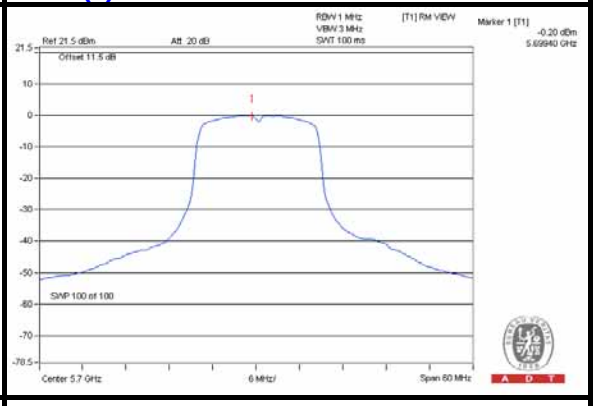
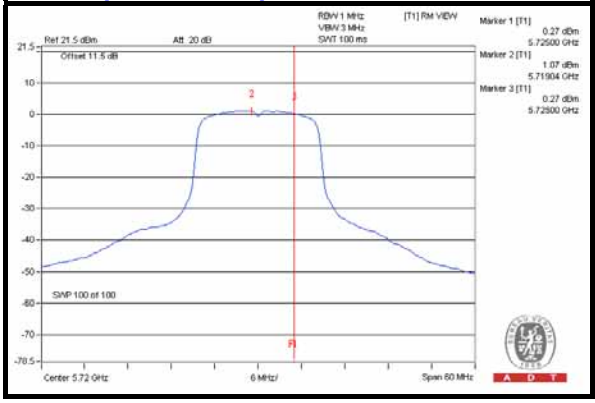
802.11a

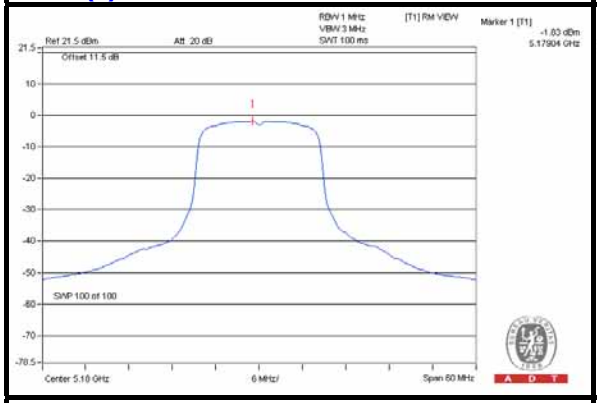
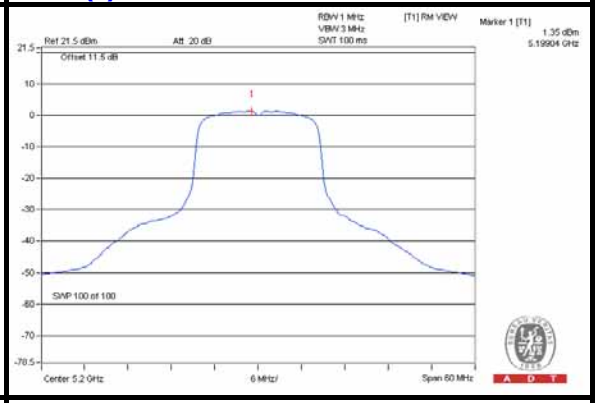
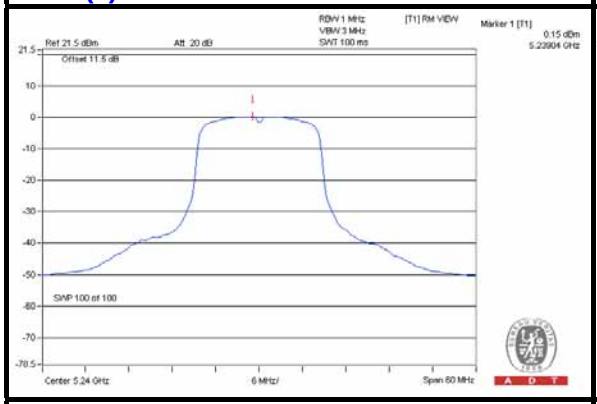
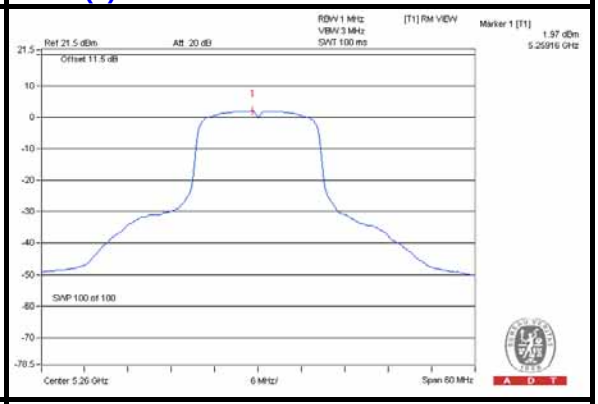
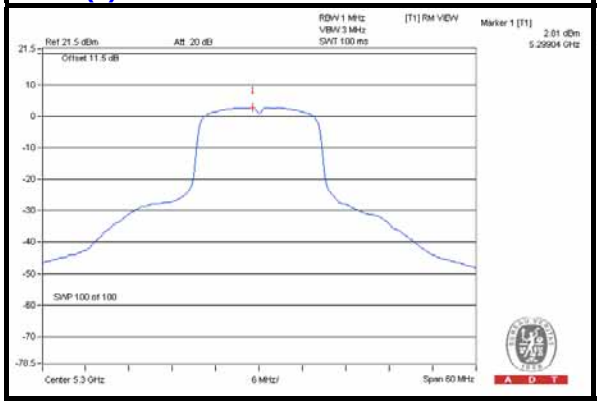
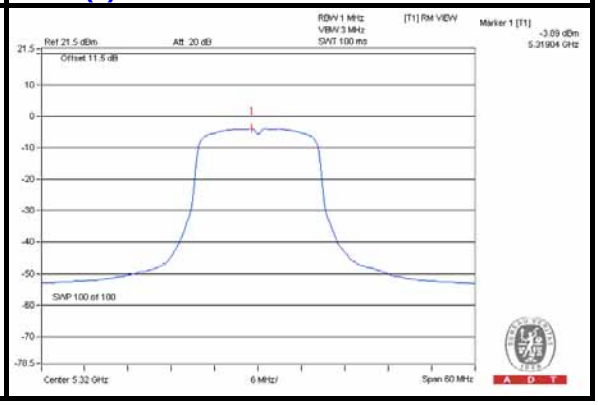
CHAN.	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
36	5180	-3.46	-1.83	0.44	3.91	PASS
40	5200	-1.27	1.35	3.24	3.91	PASS
48	5240	-1.77	0.15	2.31	3.91	PASS
52	5260	0.60	1.97	4.35	10.91	PASS
60	5300	0.68	2.81	4.88	10.91	PASS
64	5320	-5.13	-3.89	-1.46	10.91	PASS
100	5500	-5.59	-4.90	-2.22	9.23	PASS
116	5580	0.41	1.43	3.96	9.23	PASS
132	5660	-0.04	1.25	3.66	9.23	PASS
140	5700	-0.23	-6.84	0.63	9.23	PASS
144 (UNII-2c Band)	5720	1.04	1.64	4.36	9.23	PASS
144 (UNII-3 Band)	5720	0.25	0.78	3.53	15.23	PASS

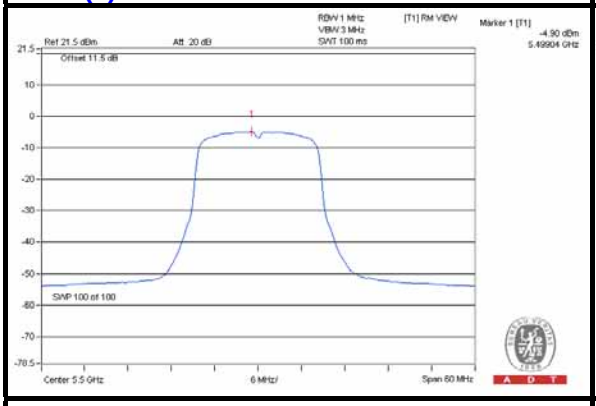
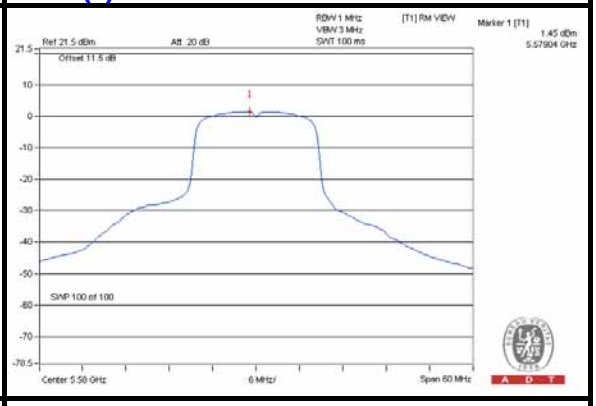
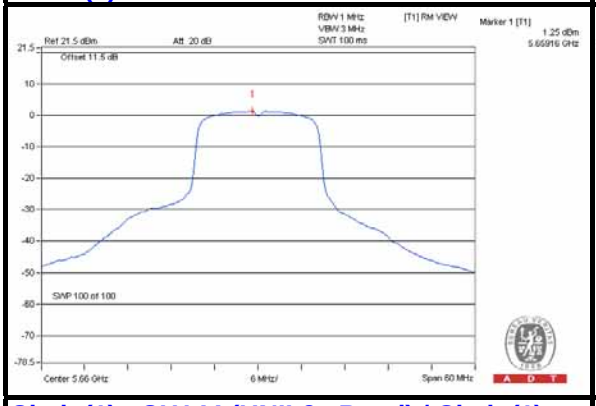
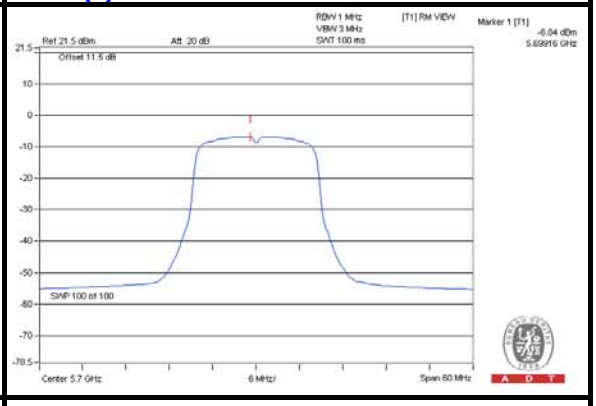
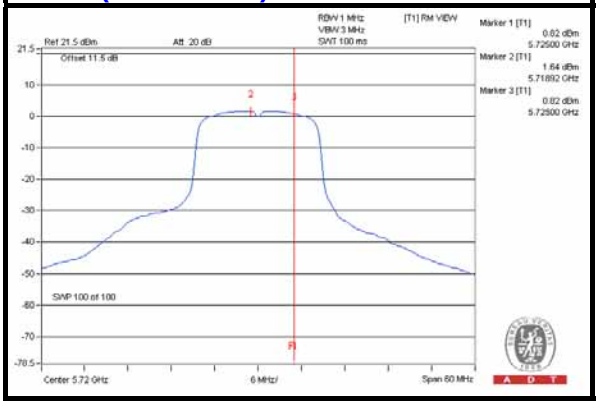
NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. 5150~5250MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi , so the power density limit shall be reduced to 4-(6.09-6) = 3.91dBm.
3. 5250~5350MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi, so the power density limit shall be reduced to 11-(6.09-6) = 10.91dBm.
4. 5470~5725MHz (Except for UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 11-(7.77-6) = 9.23dBm.
5. 5725~5825MHz (For UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 17-(7.77-6) = 15.23dBm.

Chain(0) : CH36	Chain(0) : CH40
	
Chain(0) : CH48	**Chain(0) : CH52**
	
Chain(0) : CH60	**Chain(0) : CH64**
	

Chain(0) : CH100	Chain(0) : CH116
	
Chain(0) : CH132	**Chain(0) : CH140**
	
Chain(0) : CH144 (UNII-2c Band) / Chain(0) : CH144 (UNII-3 Band)	
	

Chain(1) : CH36	Chain(1) : CH40
	
Chain(1) : CH48	**Chain(1) : CH52**
	
Chain(1) : CH60	**Chain(1) : CH64**
	

Chain(1) : CH100	Chain(1) : CH116
	
Chain(1) : CH132	**Chain(1) : CH140**
	
Chain(1) : CH144 (UNII-2c Band) / Chain(1) : CH144 (UNII-3 Band)	
	

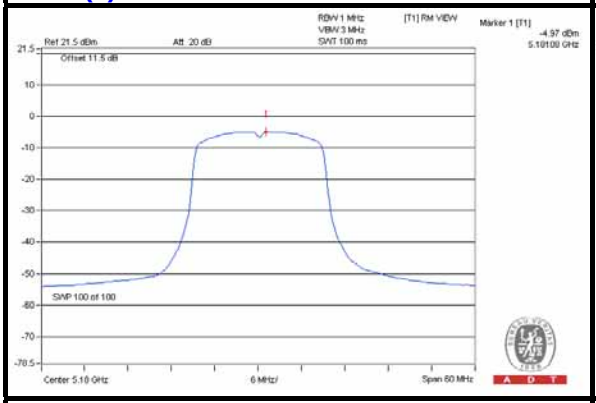
802.11ac (VHT20)

CHAN.	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1			
36	5180	-4.97	-2.83	-0.76	3.91	PASS
40	5200	-1.97	0.88	2.69	3.91	PASS
48	5240	-2.39	-0.24	1.83	3.91	PASS
52	5260	0.73	2.46	4.69	10.91	PASS
60	5300	-0.01	2.09	4.18	10.91	PASS
64	5320	-5.81	-4.34	-2.00	10.91	PASS
100	5500	-7.32	-6.40	-3.82	9.23	PASS
116	5580	-0.11	1.15	3.58	9.23	PASS
132	5660	-0.48	0.58	3.09	9.23	PASS
140	5700	-8.52	-8.11	-5.30	9.23	PASS
144 (UNII-2c Band)	5720	0.74	1.26	4.02	9.23	PASS
144 (UNII-3 Band)	5720	0.04	0.57	3.32	15.23	PASS

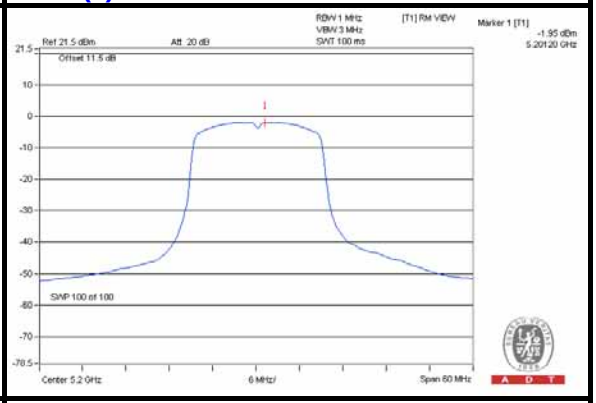
NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. 5150~5250MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi , so the power density limit shall be reduced to 4-(6.09-6) = 3.91dBm.
3. 5250~5350MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi, so the power density limit shall be reduced to 11-(6.09-6) = 10.91dBm.
4. 5470~5725MHz (Except for UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 11-(7.77-6) = 9.23dBm.
5. 5725~5825MHz (For UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 17-(7.77-6) = 15.23dBm.

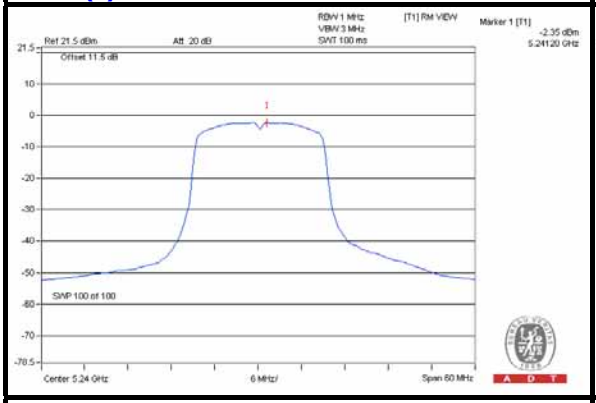
Chain(0) : CH36



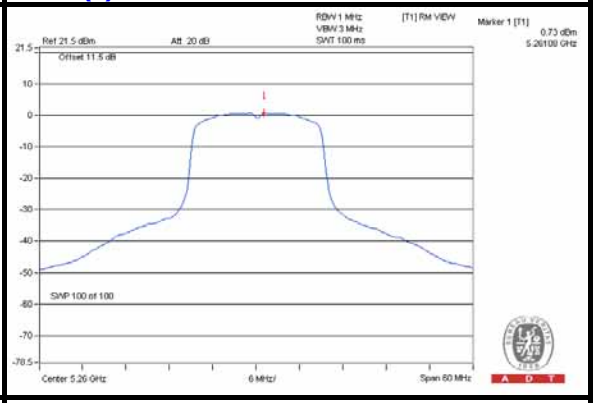
Chain(0) : CH40



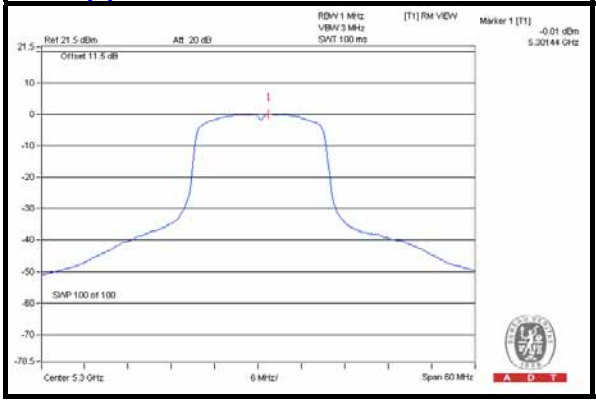
Chain(0) : CH48



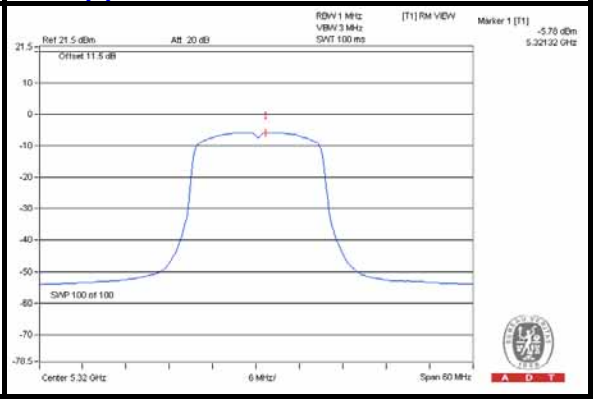
Chain(0) : CH52

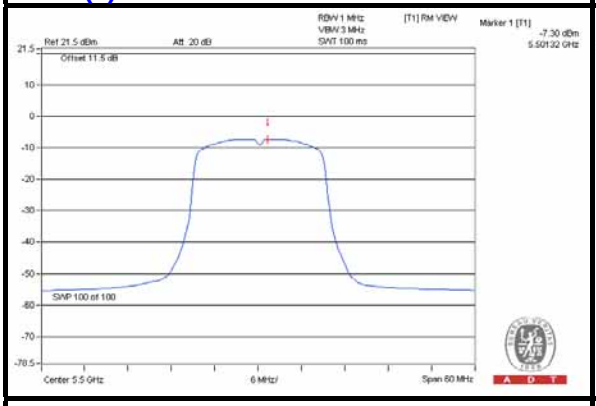
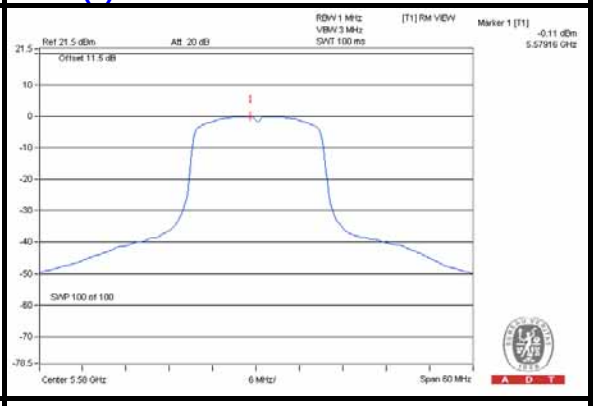
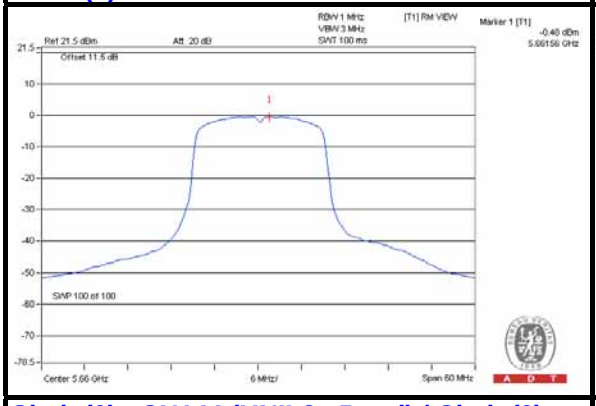
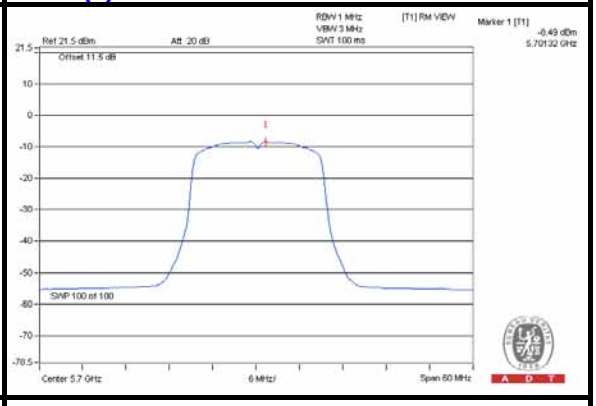
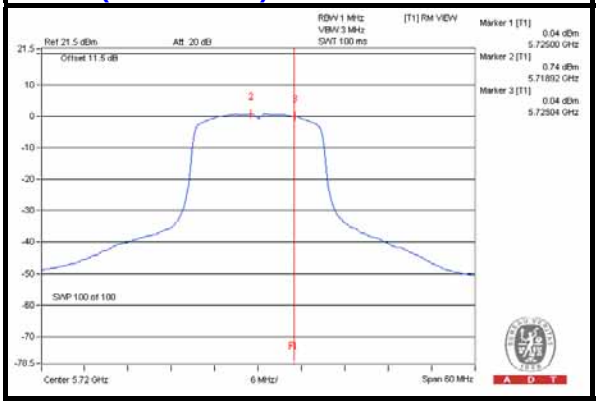


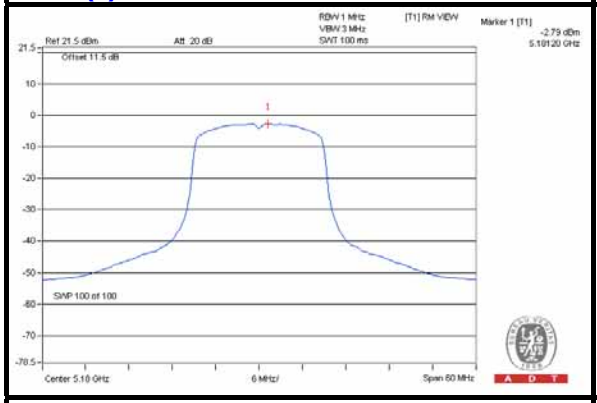
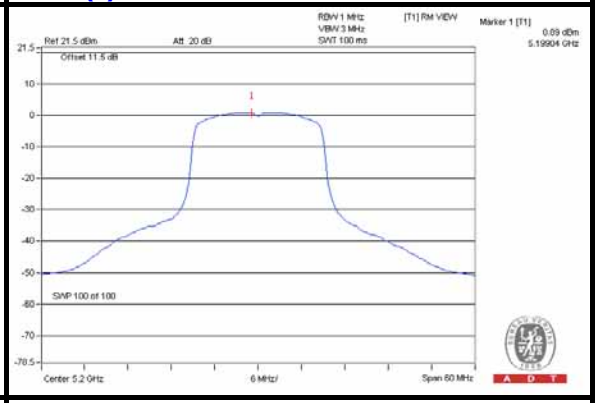
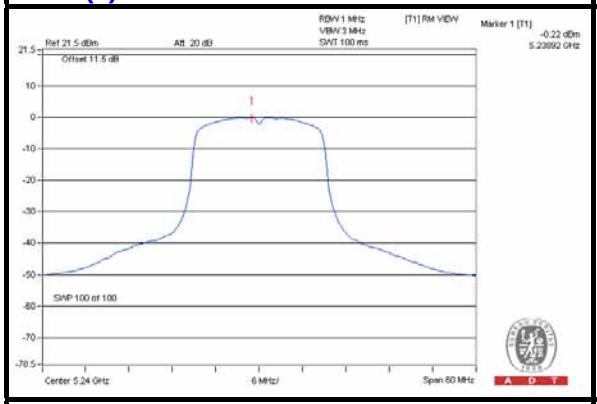
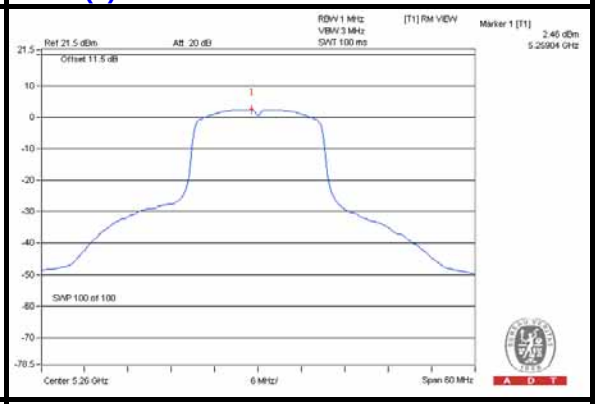
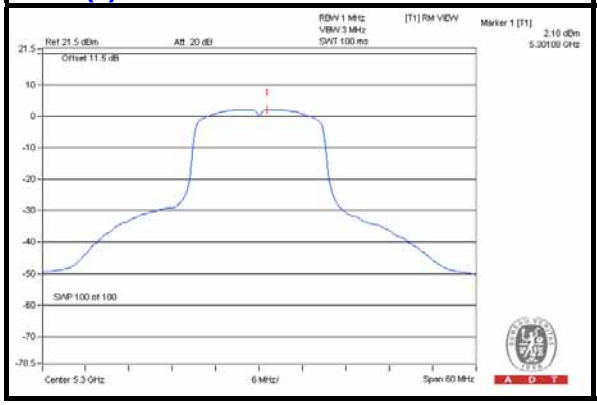
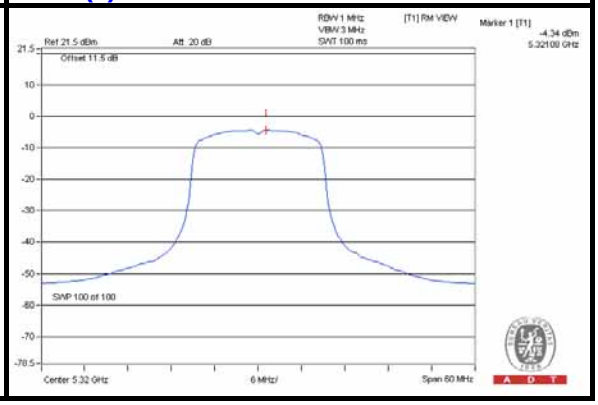
Chain(0) : CH60

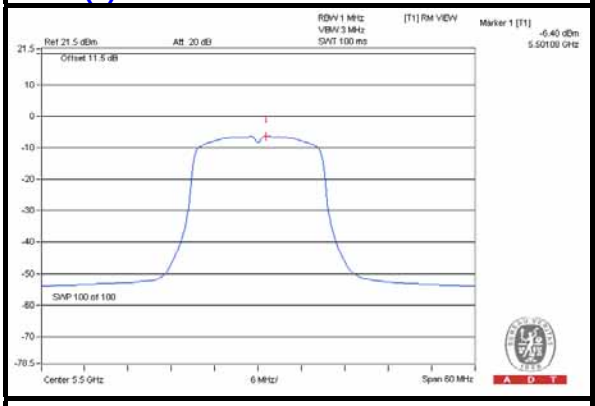
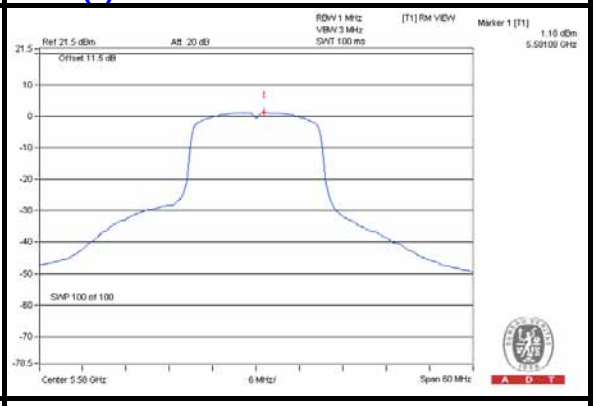
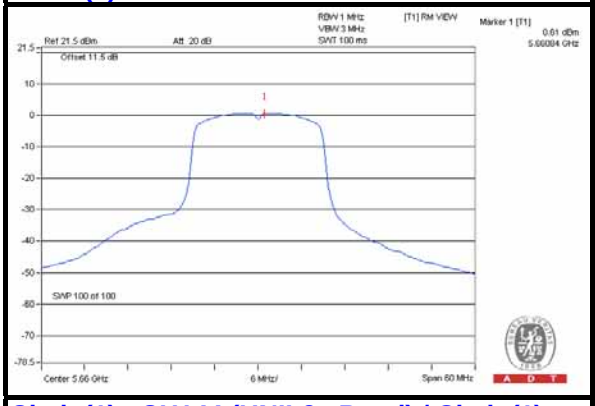
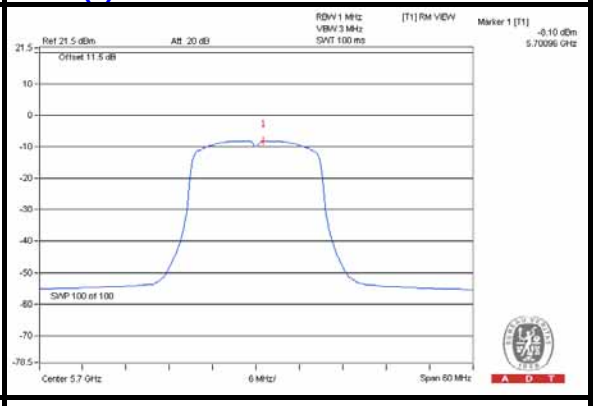
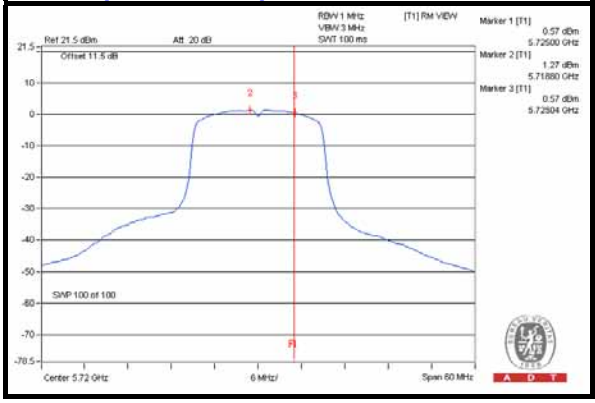


Chain(0) : CH64



Chain(0) : CH100	Chain(0) : CH116
	
Chain(0) : CH132	**Chain(0) : CH140**
	
Chain(0) : CH144 (UNII-2c Band) / Chain(0) : CH144 (UNII-3 Band)	
	

Chain(1) : CH36	Chain(1) : CH40
	
Chain(1) : CH48	**Chain(1) : CH52**
	
Chain(1) : CH60	**Chain(1) : CH64**
	

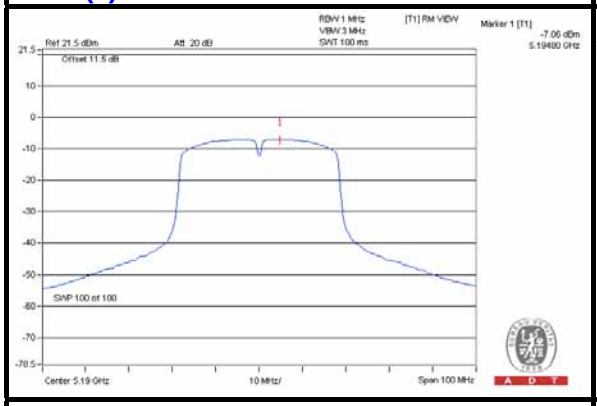
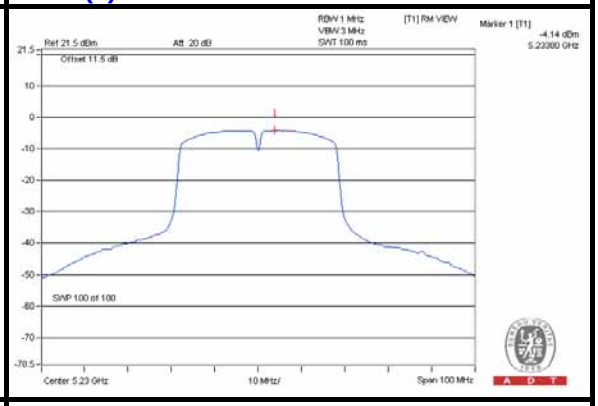
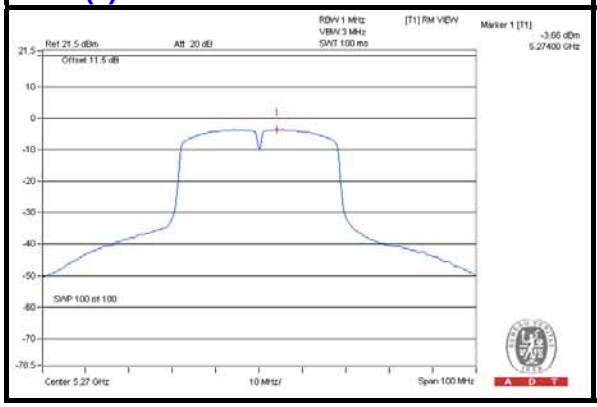
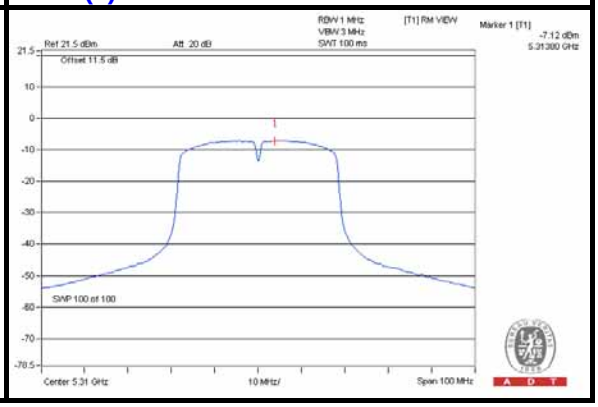
Chain(1) : CH100	Chain(1) : CH116
	
Chain(1) : CH132	**Chain(1) : CH140**
	
Chain(1) : CH144 (UNII-2c Band) / Chain(1) : CH144 (UNII-3 Band)	
	

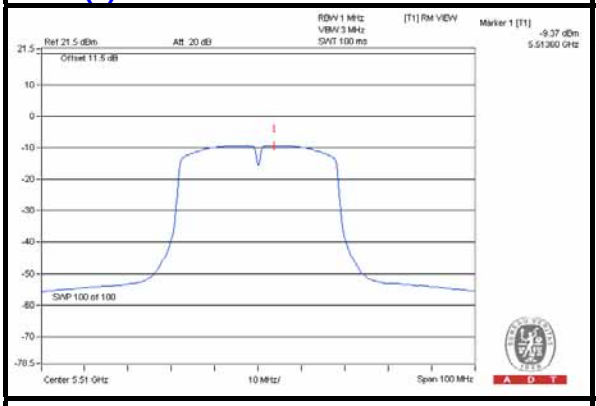
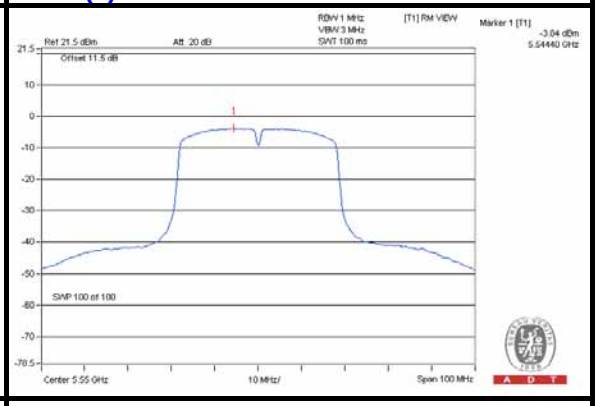
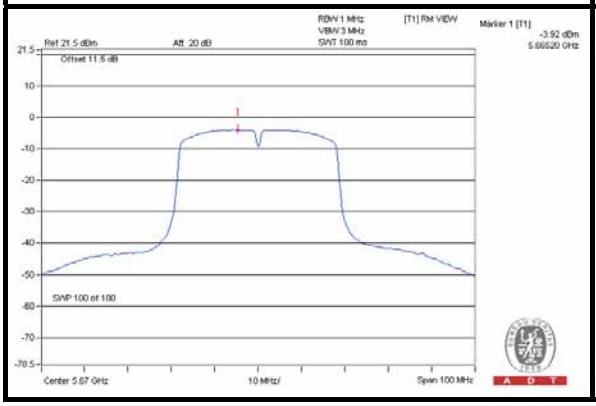
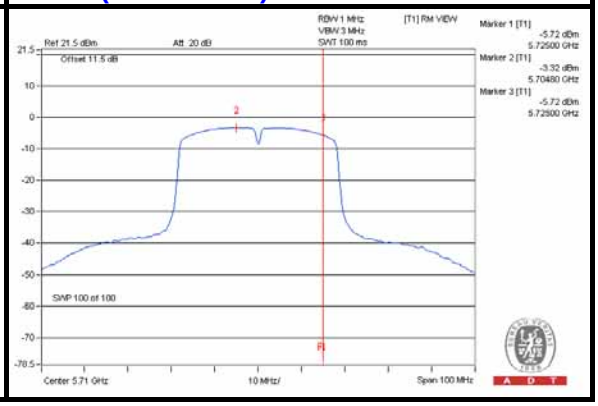
802.11ac (VHT40)

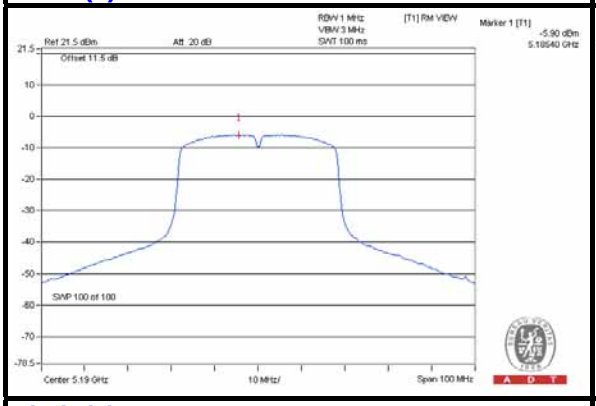
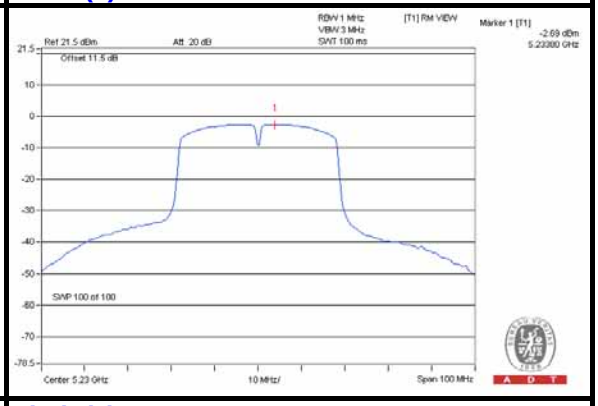
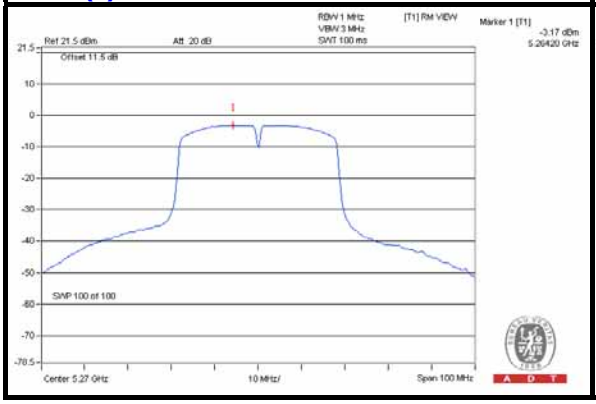
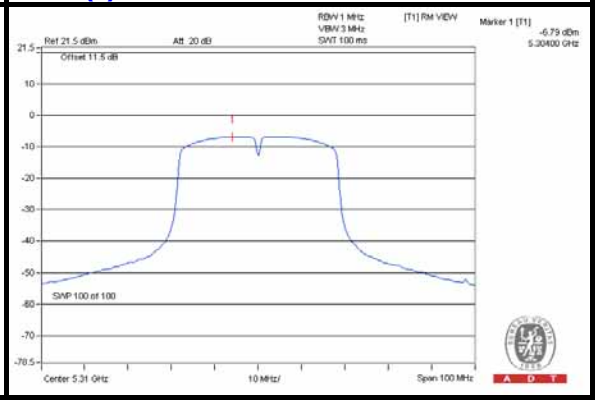
CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)		DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	-7.09	-5.90	0.09	-3.35	3.91	PASS
46	5230	-4.14	-2.69	0.09	-0.25	3.91	PASS
54	5270	-3.71	-3.17	0.09	-0.33	10.91	PASS
62	5310	-7.17	-6.80	0.09	-3.88	10.91	PASS
102	5510	-9.37	-9.32	0.09	-6.25	9.23	PASS
110	5550	-3.84	-2.72	0.09	-0.14	9.23	PASS
134	5670	-3.94	-3.85	0.09	-0.79	9.23	PASS
142 (UNII-2c Band)	5710	-3.35	-2.94	0.09	-0.04	9.23	PASS
142 (UNII-3 Band)	5710	-5.72	-5.38	0.09	-2.45	15.23	PASS

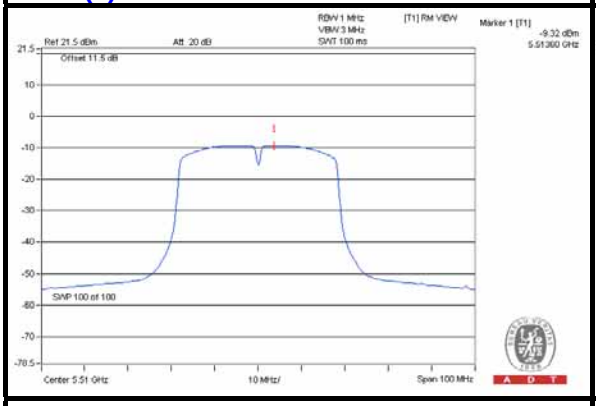
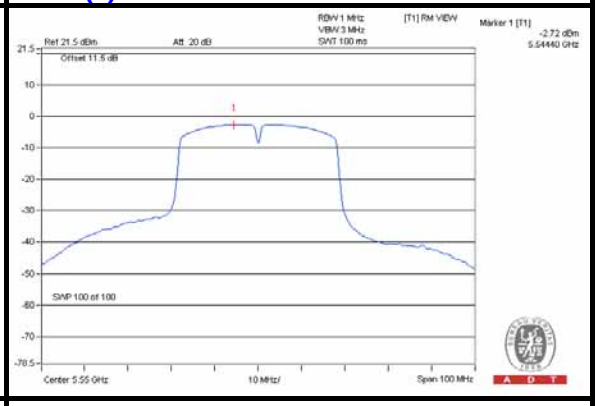
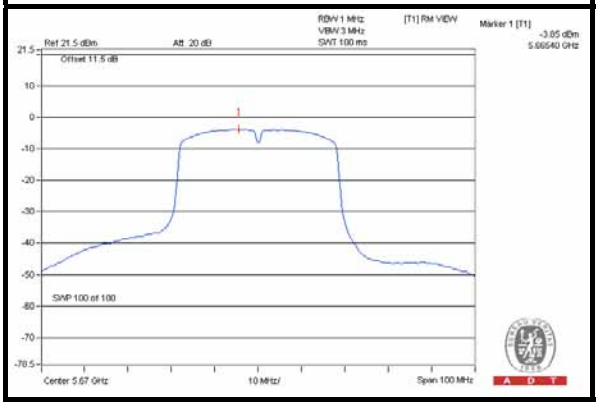
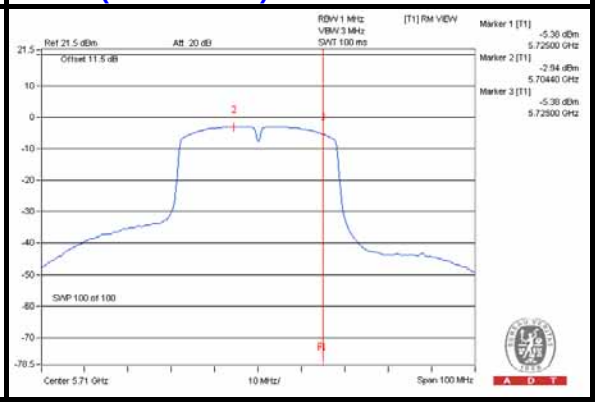
NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. 5150~5250MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi , so the power density limit shall be reduced to 4-(6.09-6) = 3.91dBm.
3. 5250~5350MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi, so the power density limit shall be reduced to 11-(6.09-6) = 10.91dBm.
4. 5470~5725MHz (Except for UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 11-(7.77-6) = 9.23dBm.
5. 5725~5825MHz (For UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 17-(7.77-6) = 15.23dBm.
6. Refer to section 3.5 for duty cycle spectrum plot.

Chain(0) : CH38	Chain(0) : CH46
	
Chain(0) : CH54	**Chain(0) : CH62**
	

Chain(0) : CH102	Chain(0) : CH110
	
Chain(0) : CH134	**Chain(0) : CH142 (UNII-2c Band) / Chain(0) : CH142 (UNII-3 Band)**
	

Chain(1) : CH38	Chain(1) : CH46
	
Chain(1) : CH54	**Chain(1) : CH62**
	

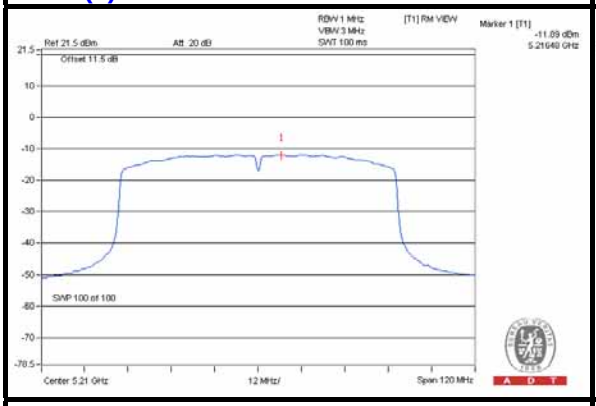
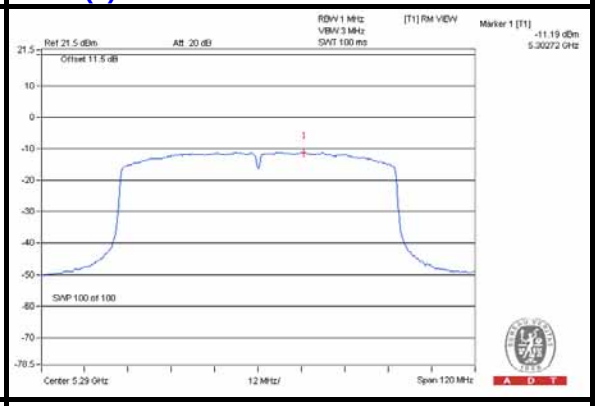
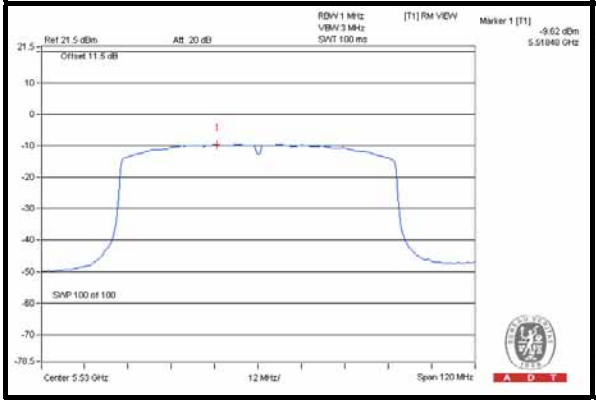
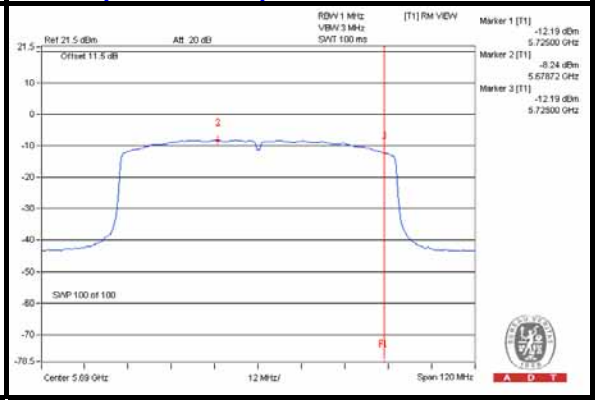
Chain(1) : CH102	Chain(1) : CH110
	
Chain(1) : CH134	**Chain(1) : CH142 (UNII-2c Band) / Chain(1) : CH142 (UNII-3 Band)**
	

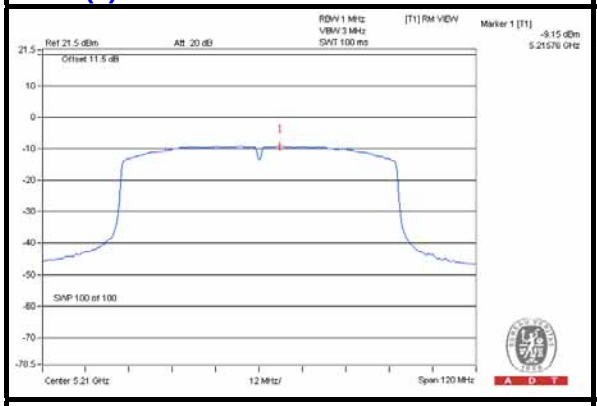
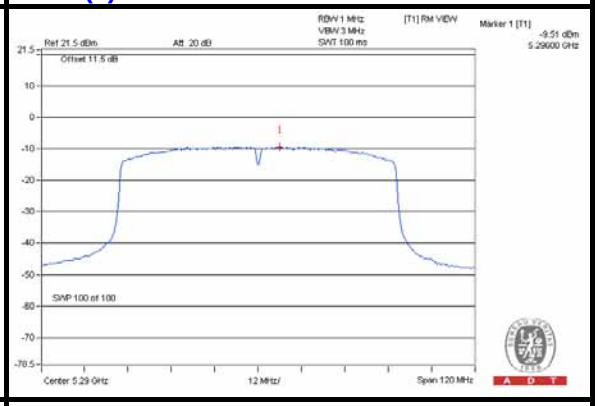
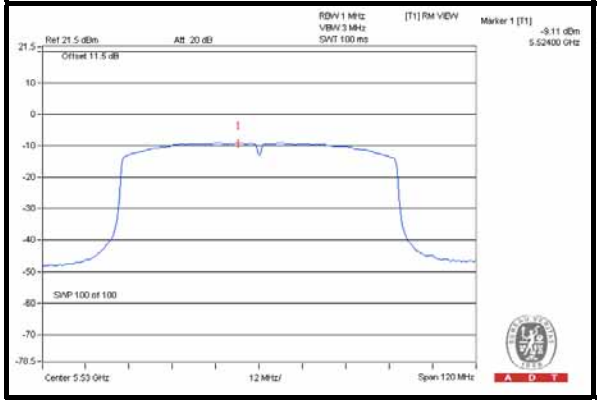
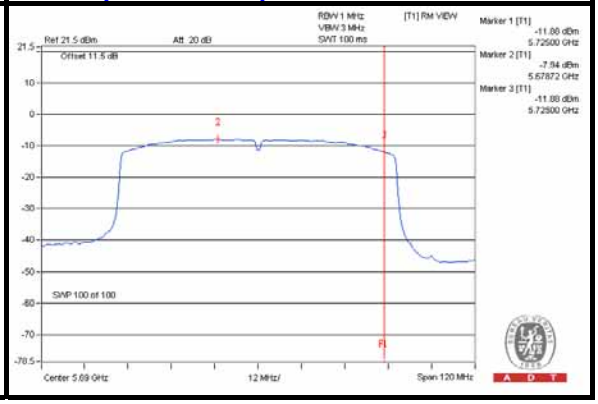
802.11ac (VHT80)

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)		DUTY FACTOR (dB)	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
42	5210	-11.90	-9.15	0.19	-7.11	3.91	PASS
58	5290	-11.27	-9.54	0.19	-7.12	10.91	PASS
106	5530	-9.65	-9.11	0.19	-6.17	9.23	PASS
138 (UNII-2c Band)	5690	-8.24	-7.94	0.19	-4.89	9.23	PASS
138 (UNII-3 Band)	5690	-12.20	-11.88	0.19	-8.83	15.23	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. 5150~5250MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi , so the power density limit shall be reduced to 4-(6.09-6) = 3.91dBm.
3. 5250~5350MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi, so the power density limit shall be reduced to 11-(6.09-6) = 10.91dBm.
4. 5470~5725MHz (Except for UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 11-(7.77-6) = 9.23dBm.
5. 5725~5825MHz (For UNII-3 Band): Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dB, so the power density limit shall be reduced to 17-(7.77-6) = 15.23dBm.
6. Refer to section 3.5 for duty cycle spectrum plot.

Chain(0) : CH42	Chain(0) : CH58
	
Chain(0) : CH106	**Chain(0) : CH138 (UNII-2c Band) / Chain(0) : CH138 (UNII-3 Band)**
	

Chain(1) : CH42	Chain(1) : CH58
	
Chain(1) : CH106	**Chain(1) : CH138 (UNII-2c Band) / Chain(1) : CH138 (UNII-3 Band)**
	

4.3 PEAK POWER EXCURSION MEASUREMENT

4.3.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB.

4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSV 40	100964	July 15, 2013	July 14, 2014

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : May 09, 2014

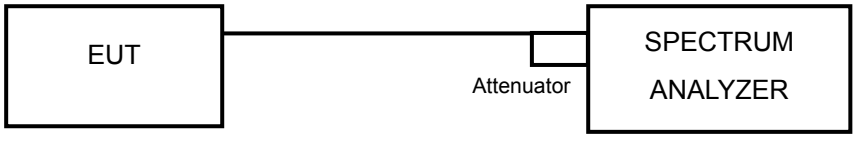
4.3.3 TEST PROCEDURE

1. Set RBW = 1 MHz, VBW ≥ 3 MHz, Detector = peak.
2. Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak search function to find the peak of the spectrum.
4. Measure the PPSD.
5. Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

The software(QCRT Version3.0 22.0) provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

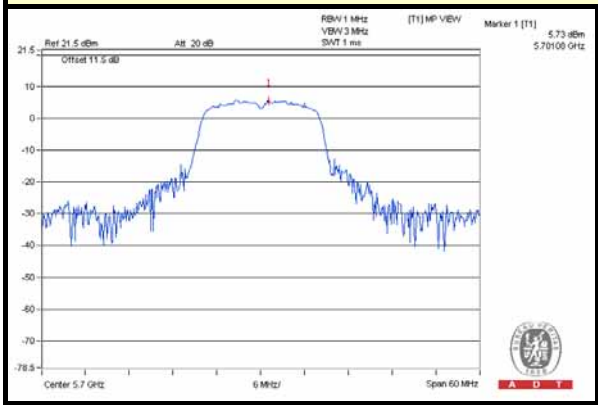
4.3.7 TEST RESULTS

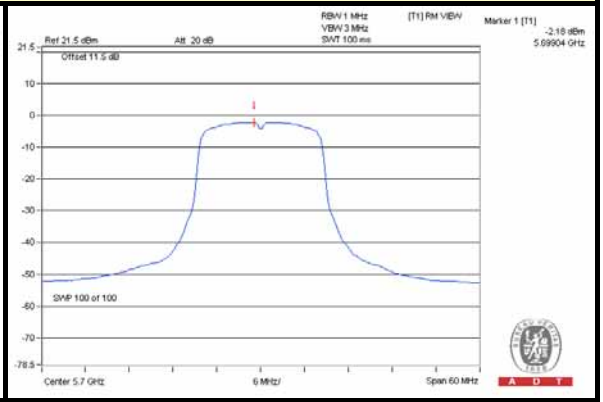
MODULATION MODE	MODULATION TYPE	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/ FAIL
802.11a	BPSK	5700	5.73	-2.18	7.91	13	PASS
802.11ac (VHT20)	BPSK	5700	5.71	-2.46	8.17	13	PASS

MODULATION MODE	MODULATION TYPE	CHAN. FREQ. (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS /FAIL
802.11a	QPSK	5700	6.93	-2.29	-2.20	9.13	13	PASS
	16QAM		6.33	-2.58	-2.39	8.72	13	PASS
	64QAM		6.99	-2.63	-2.33	9.32	13	PASS
802.11ac (VHT20)	QPSK	5700	5.85	-2.80	-2.68	8.53	13	PASS
	16QAM		5.86	-2.90	-2.73	8.59	13	PASS
	64QAM		7.59	-3.01	-2.70	10.29	13	PASS
	256QAM		6.36	-3.22	-2.76	9.12	13	PASS
802.11ac (VHT40)	BPSK	5670	4.02	-3.92	-3.83	7.85	13	PASS
	QPSK		5.16	-3.93	-3.75	8.91	13	PASS
	16QAM		5.32	-4.08	-3.73	9.05	13	PASS
	64QAM		6.17	-4.23	-3.62	9.79	13	PASS
	256QAM		6.35	-4.51	-3.65	10.00	13	PASS
802.11ac (VHT80)	BPSK	5530	2.53	-6.89	-6.70	9.23	13	PASS
	QPSK		2.62	-7.12	-6.78	9.40	13	PASS
	16QAM		5.14	-6.84	-6.20	11.34	13	PASS
	64QAM		4.74	-7.11	-5.92	10.66	13	PASS
	256QAM		3.70	-7.29	-5.82	9.52	13	PASS

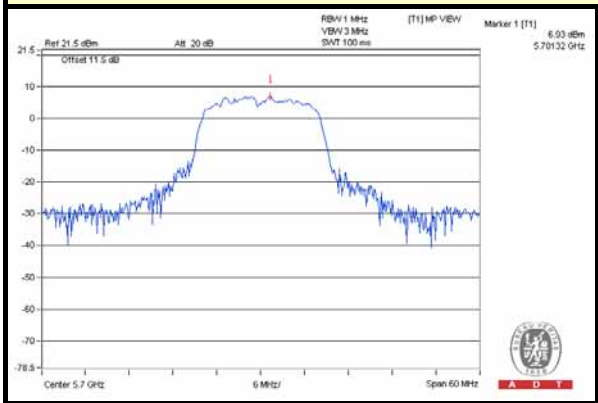
SPECTRUM PLOT OF WORST VALUE

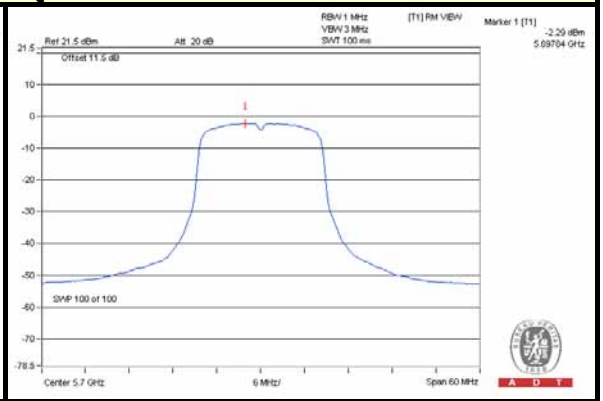
802.11a / BPSK



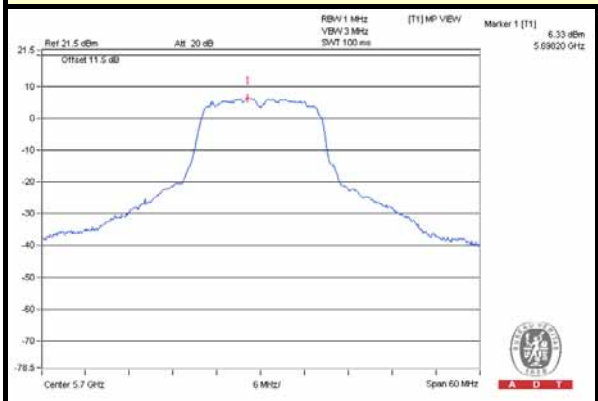


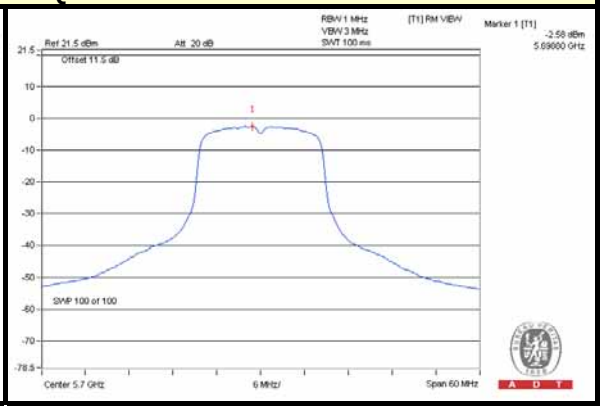
802.11a / QPSK



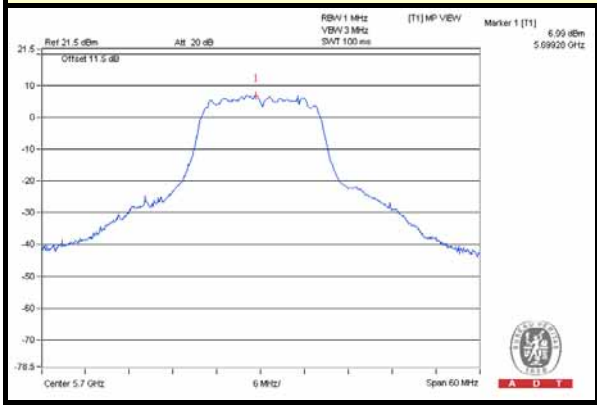


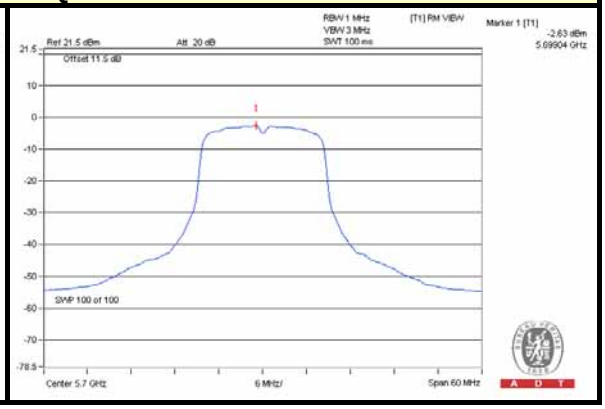
802.11a / 16QAM





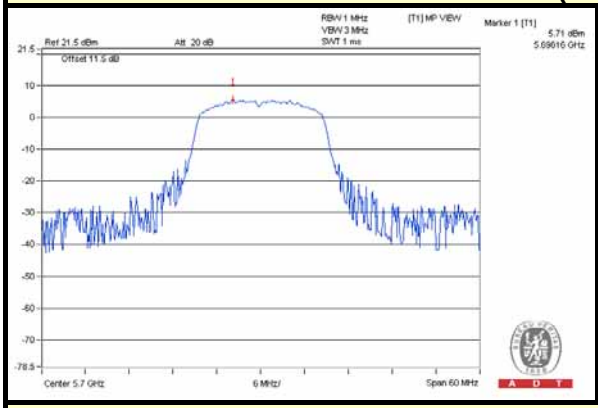
SPECTRUM PLOT OF WORST VALUE
802.11a / 64QAM

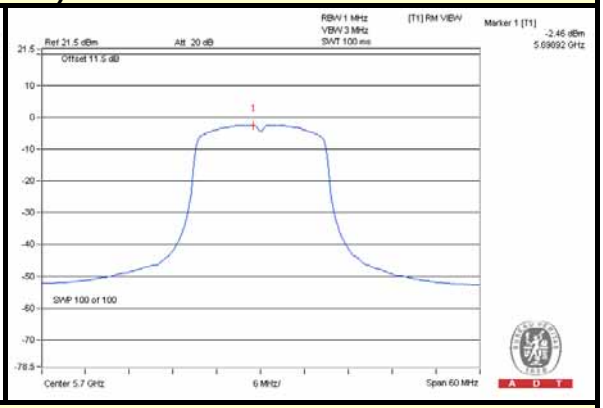




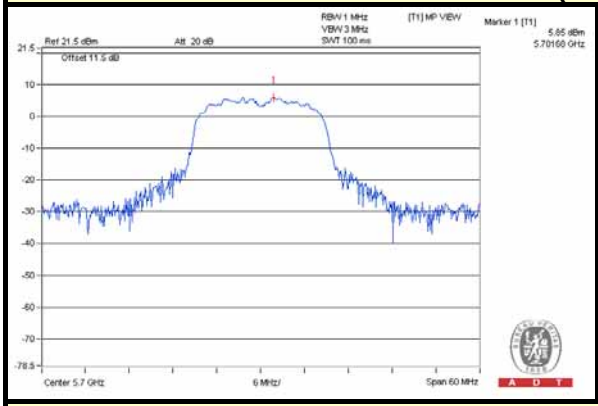
SPECTRUM PLOT OF WORST VALUE

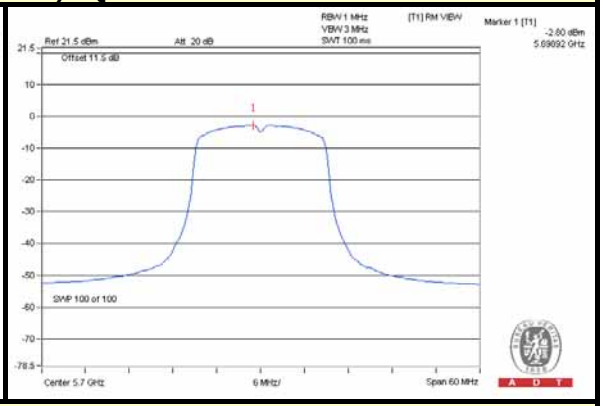
802.11ac (VHT20) / BPSK



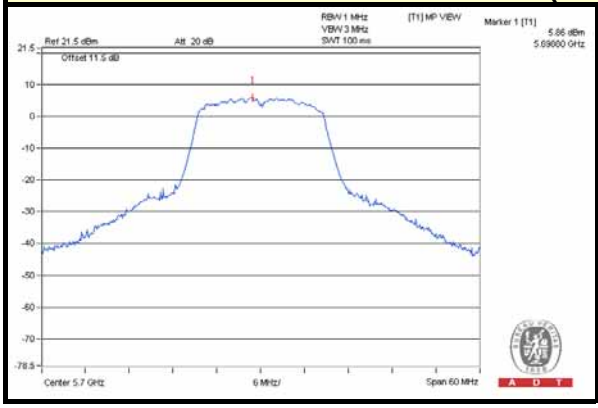


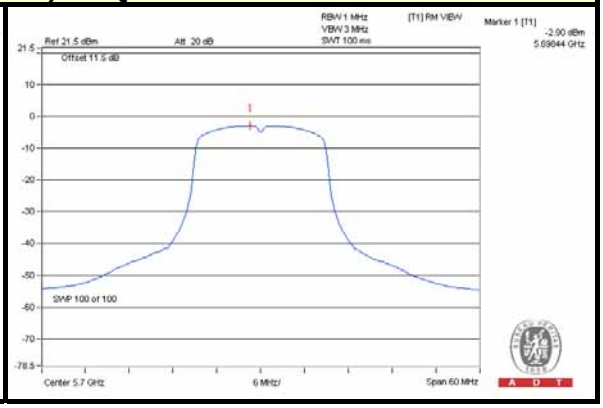
802.11ac (VHT20) / QPSK

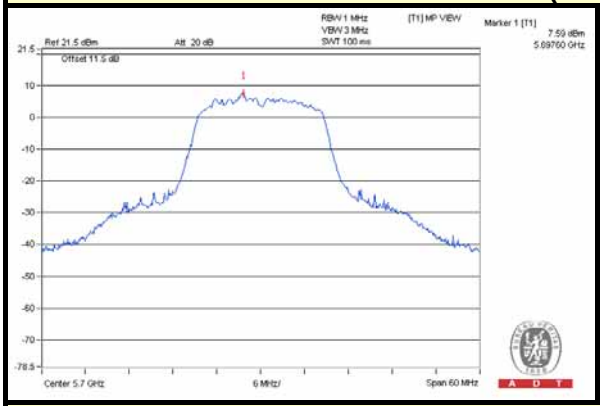
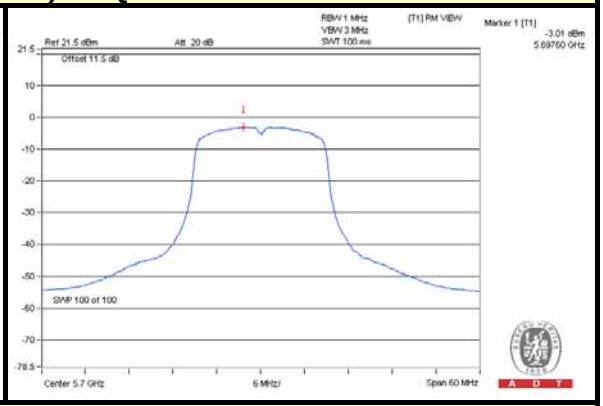
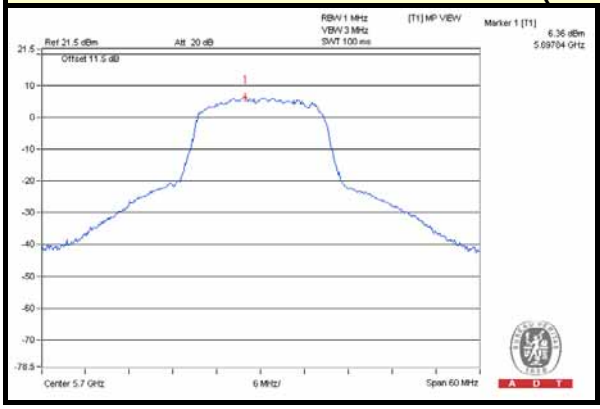
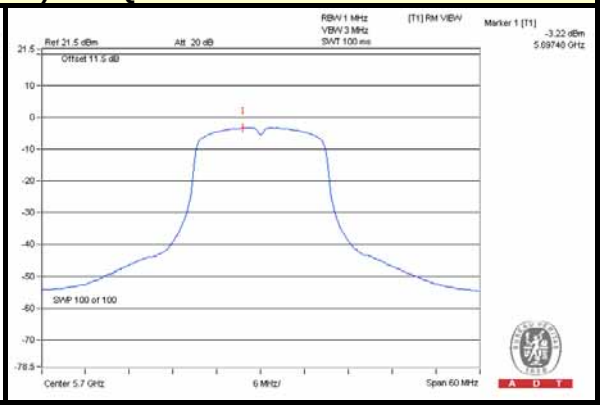




802.11ac (VHT20) / 16QAM

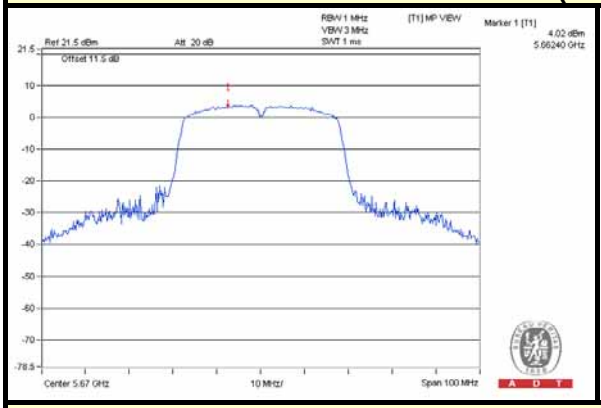


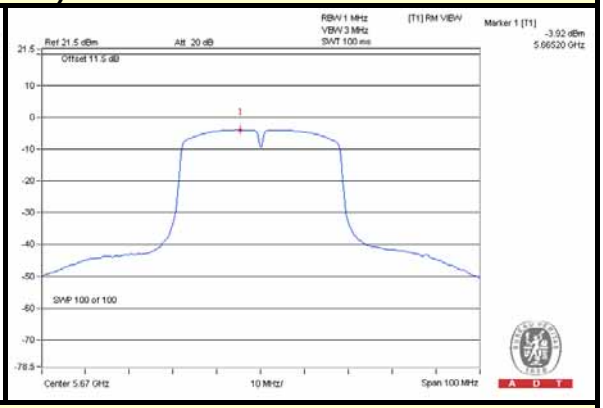


SPECTRUM PLOT OF WORST VALUE	
802.11ac (VHT20) / 64QAM	
	
802.11ac (VHT20) / 256QAM	
	

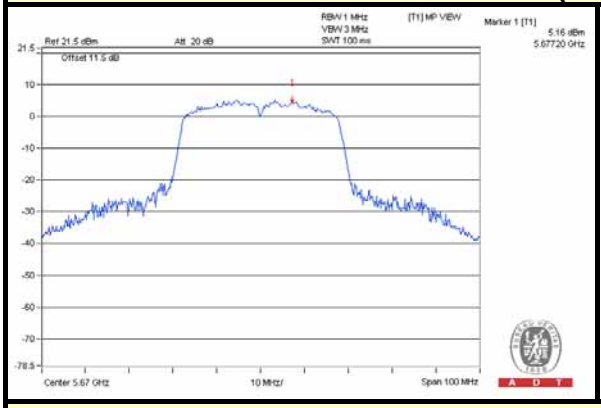
SPECTRUM PLOT OF WORST VALUE

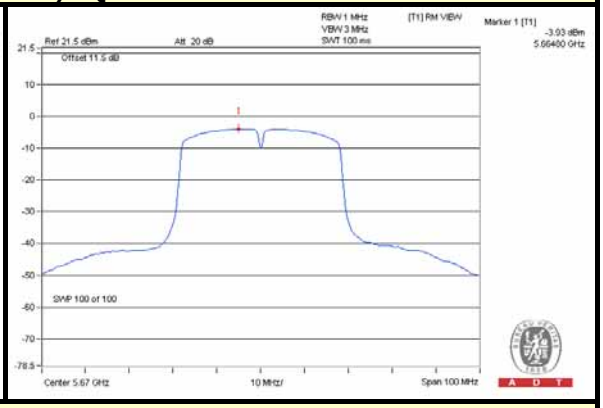
802.11ac (VHT40) / BPSK



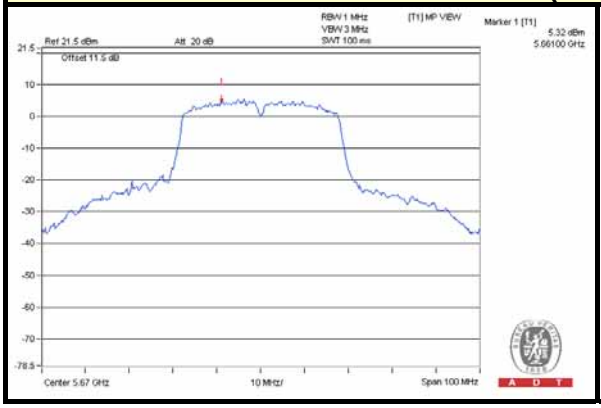


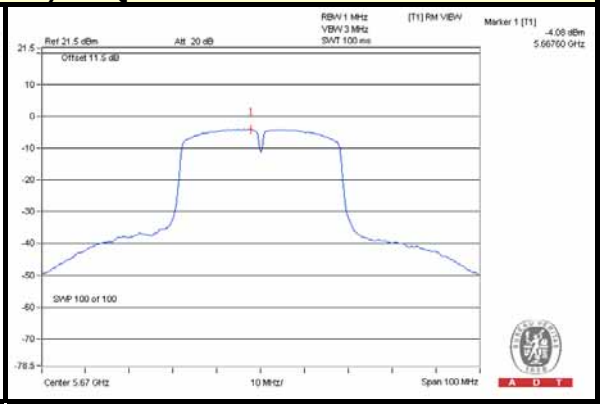
802.11ac (VHT40) / QPSK

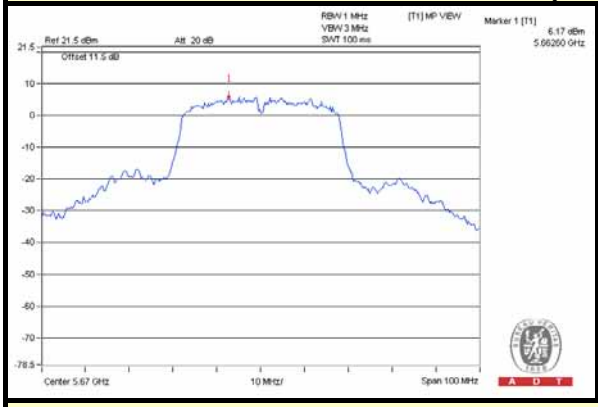
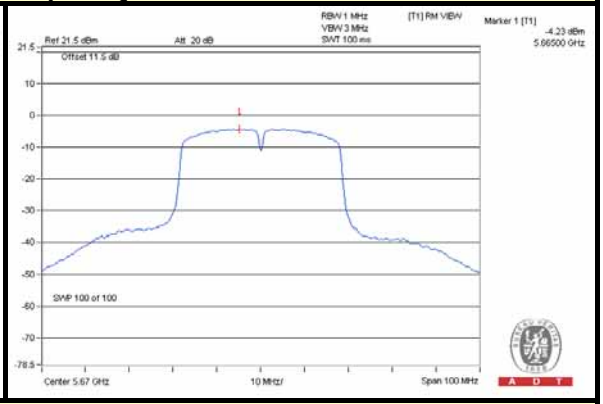




802.11ac (VHT40) / 16QAM





SPECTRUM PLOT OF WORST VALUE	
802.11ac (VHT40) / 64QAM	
	
802.11ac (VHT40) / 256QAM