



8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	4 dBm	5150 - 5250	PASS
	11 dBm	5250 - 5350	PASS
	11 dBm	5470 - 5725	PASS
	17 dBm	5725 - 5825	N/A

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Sep. 09, 2010

Remark: " N/A" denotes No Model Name, Serial No. or No Calibration specified.

8.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz
VB	3000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP



8.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

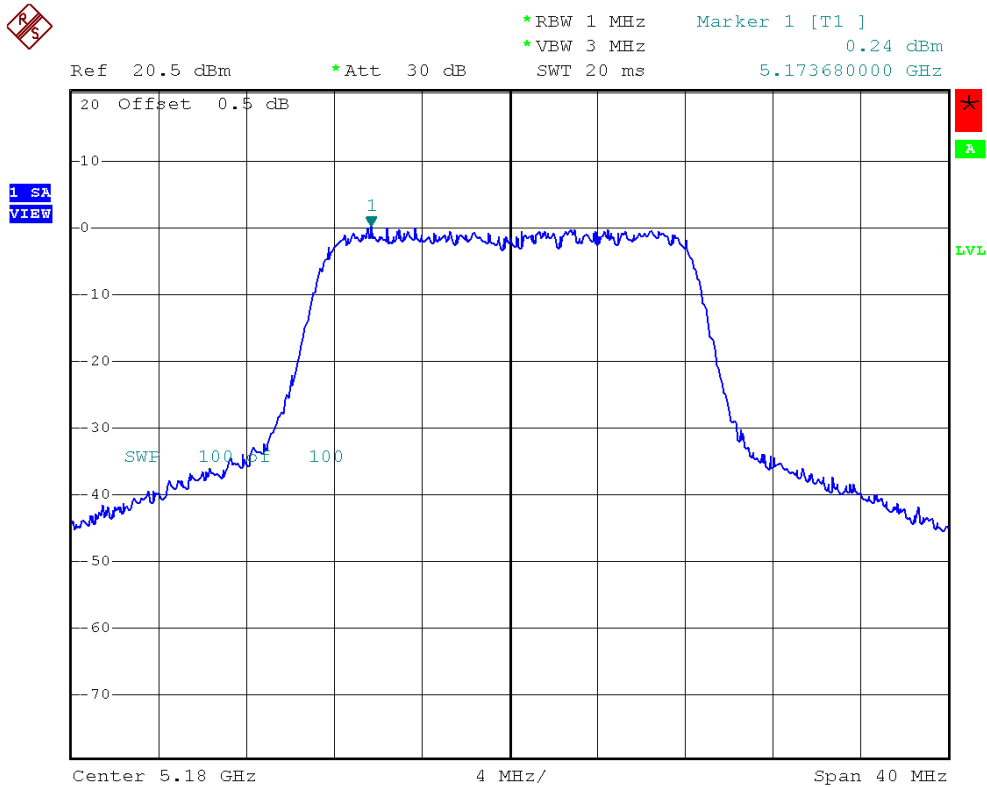


8.1.6 TEST RESULTS - BAND 1

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH36, CH40, CH48 (Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
36	5180	0.24	4.00
40	5200	-2.20	4.00
48	5240	-0.89	4.00

CH36

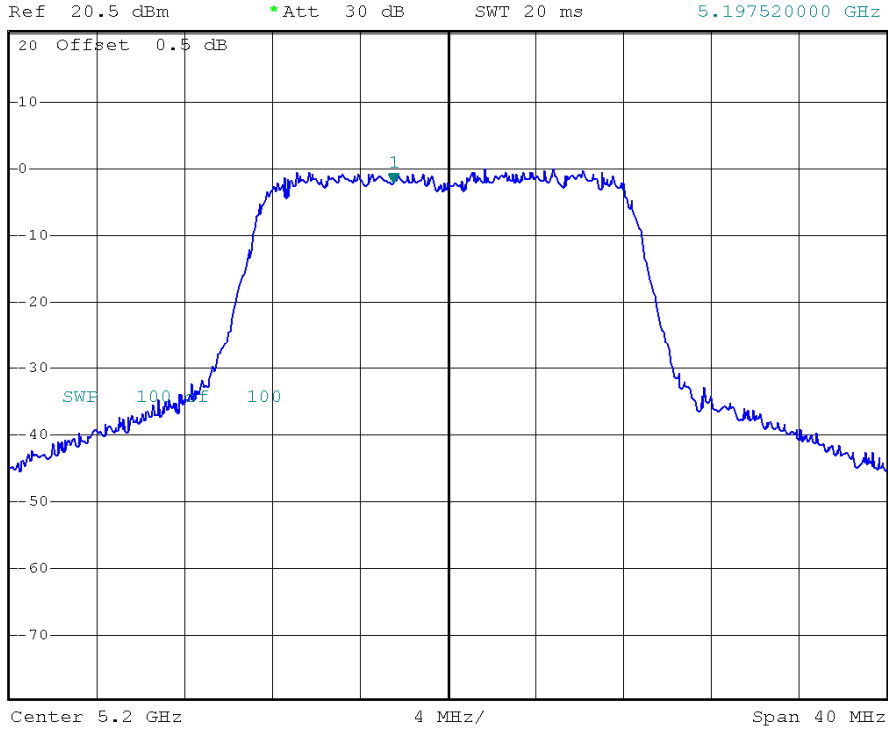




CH40



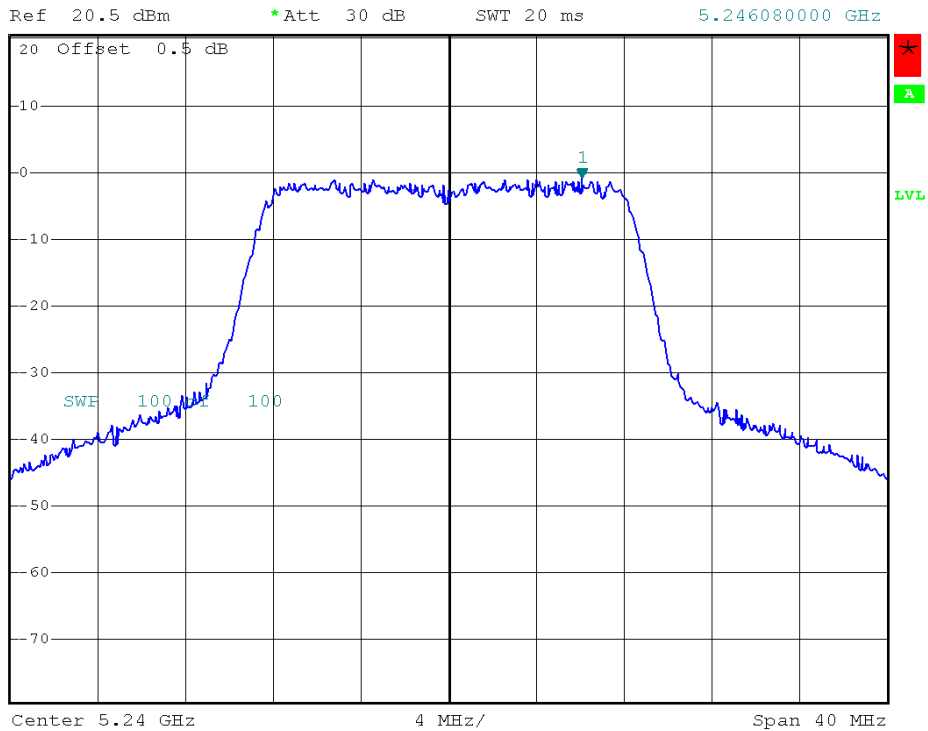
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -2.20 dBm
SWT 20 ms 5.197520000 GHz



CH48



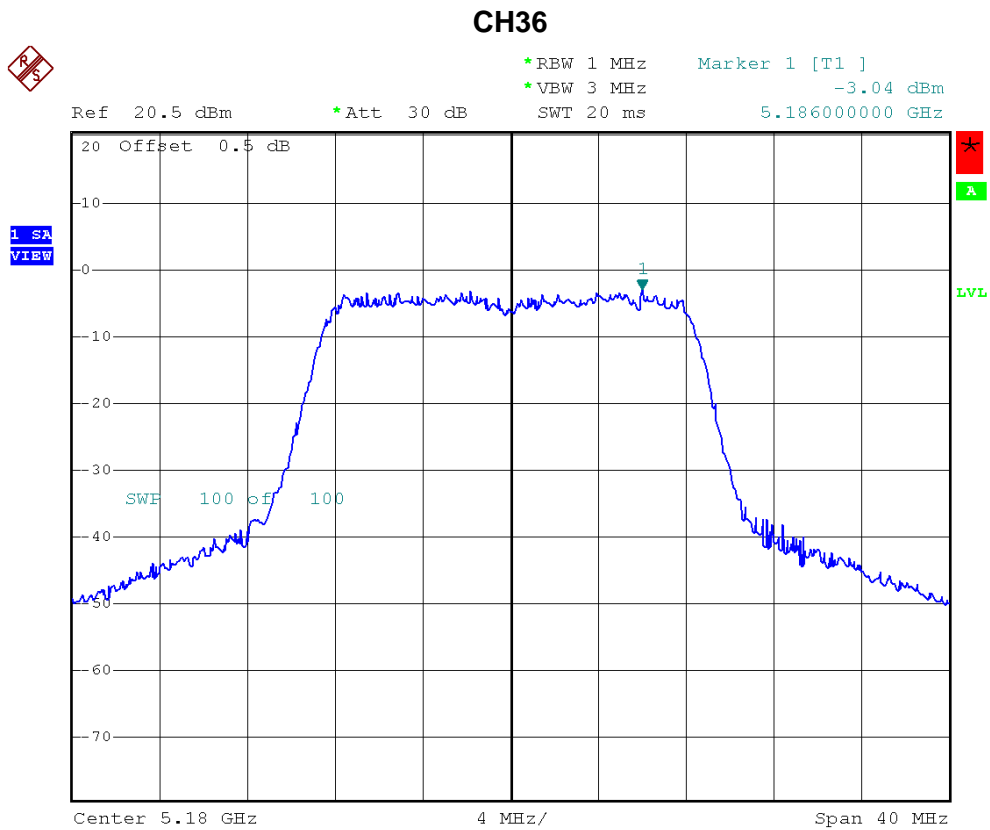
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -0.89 dBm
SWT 20 ms 5.246080000 GHz





EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH36, CH40, CH48(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
36	5180	-3.04	4.00
40	5200	-3.13	4.00
48	5240	-3.47	4.00



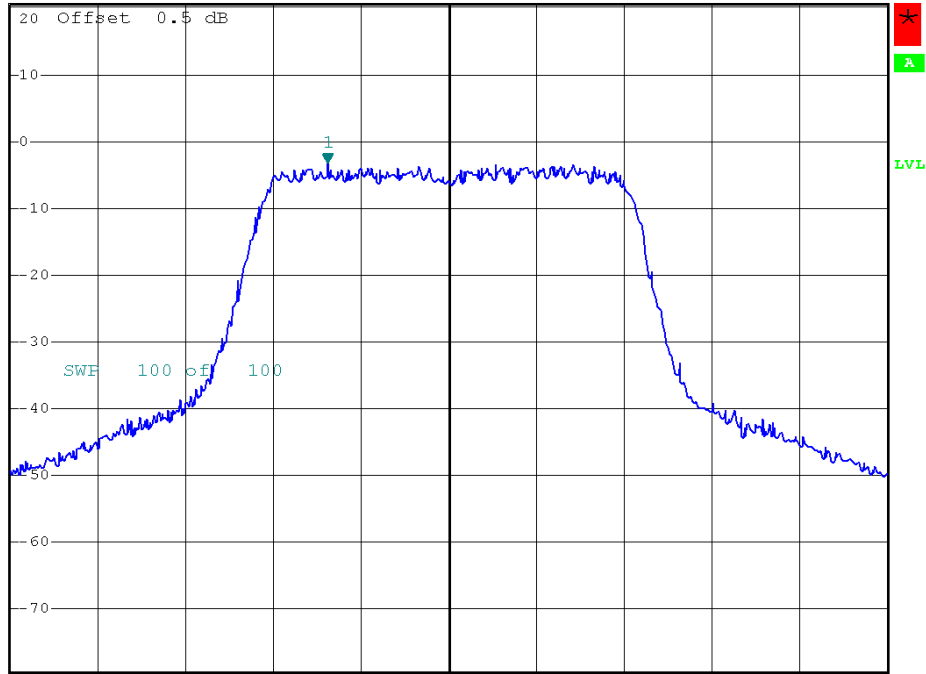


CH40



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.13 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.194480000 GHz

1 SA
VIEW



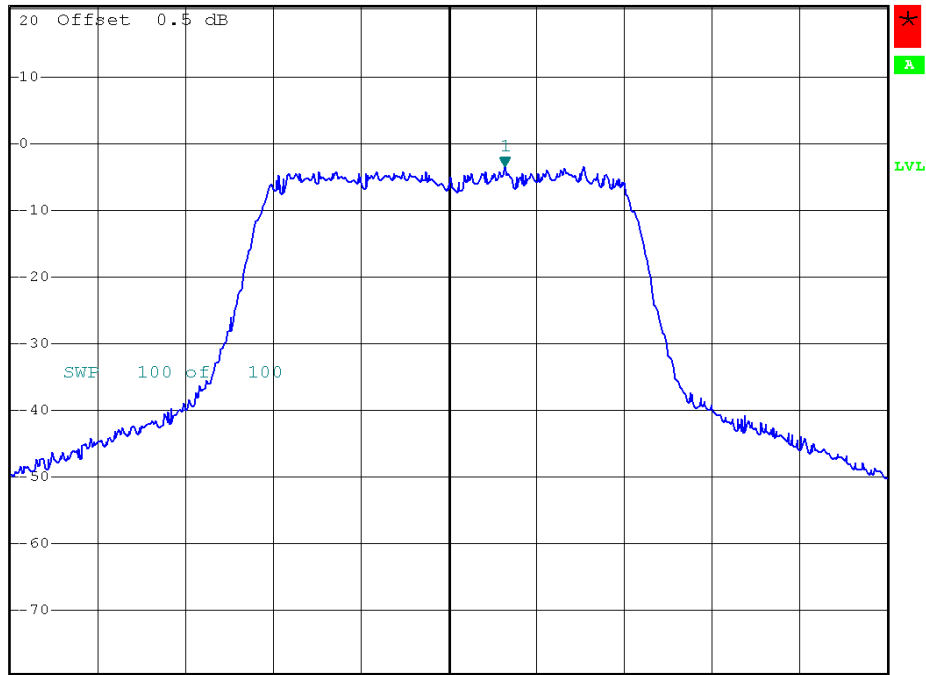
Center 5.2 GHz 4 MHz/ Span 40 MHz

CH48



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.47 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.242560000 GHz

1 SA
VIEW



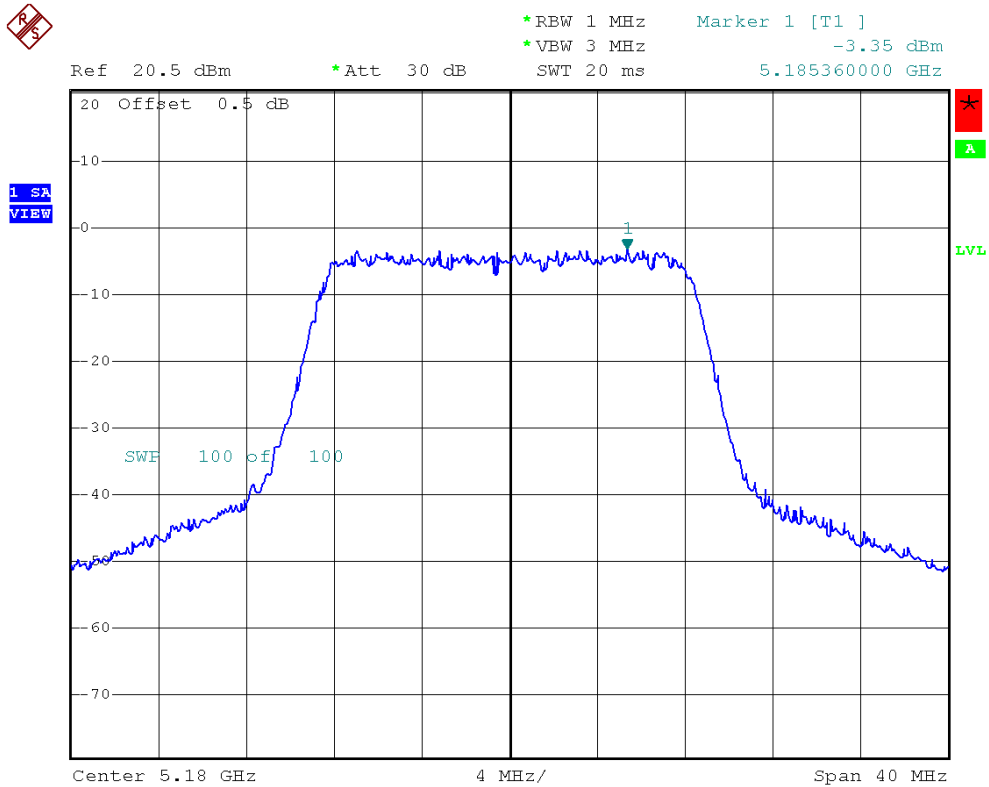
Center 5.24 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH36, CH40, CH48(Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
36	5180	-3.35	4.00
40	5200	-3.10	4.00
48	5240	-3.05	4.00

CH36



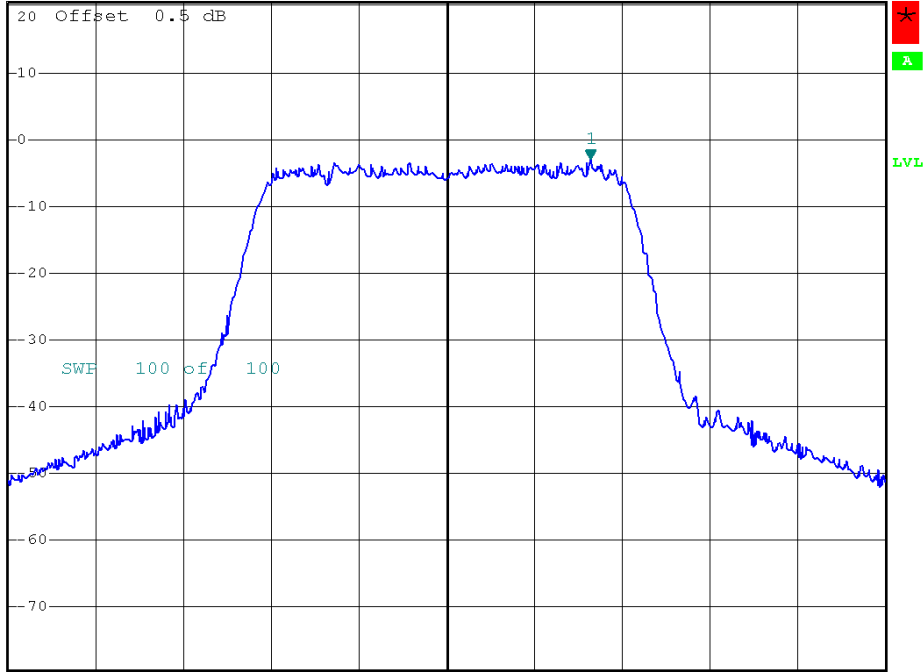


CH40



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.10 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.206560000 GHz

1 SA
VIEW



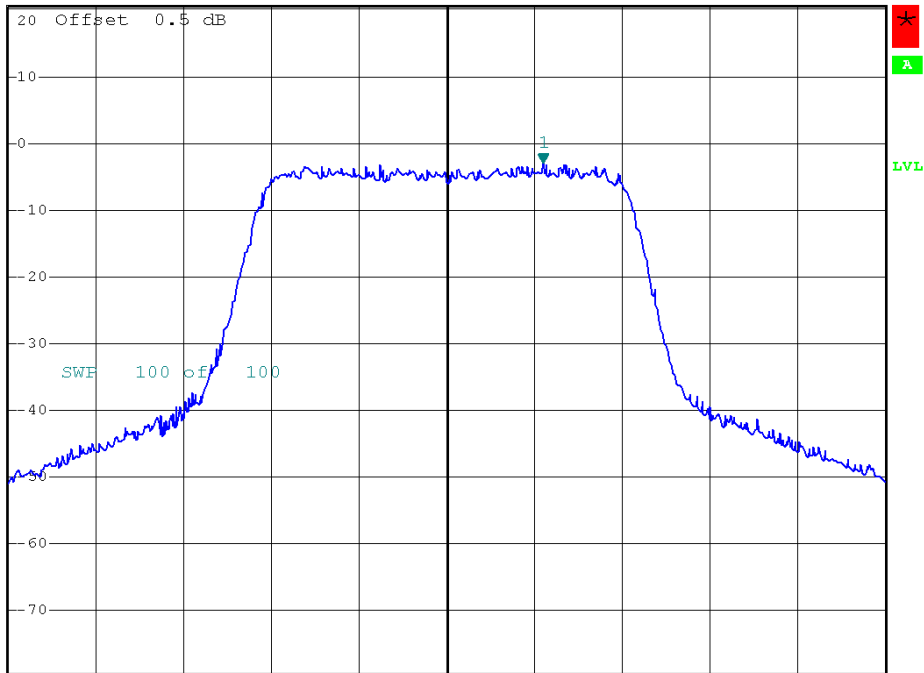
Center 5.2 GHz 4 MHz/ Span 40 MHz

CH48



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.05 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.244400000 GHz

1 SA
VIEW



Center 5.24 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 ° C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH36, CH40, CH48(Port. 0 + Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	Power Density (mW)	LIMIT (dBm)
36	5180	-0.06	0.99	4.00
40	5200	-0.40	0.91	4.00
48	5240	-0.08	0.98	4.00

Remark :

- (1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 $((\text{dBm}/\text{Chain 1})/10^{\text{Log}}) + ((\text{dBm}/\text{Chain 2})/10^{\text{log}}) + ((\text{dBm}/\text{ChainN})/10^{\text{log}}) =$
Combined power density in mW.



Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH38, CH46(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
38	5190	-7.38	4
46	5230	-6.47	4

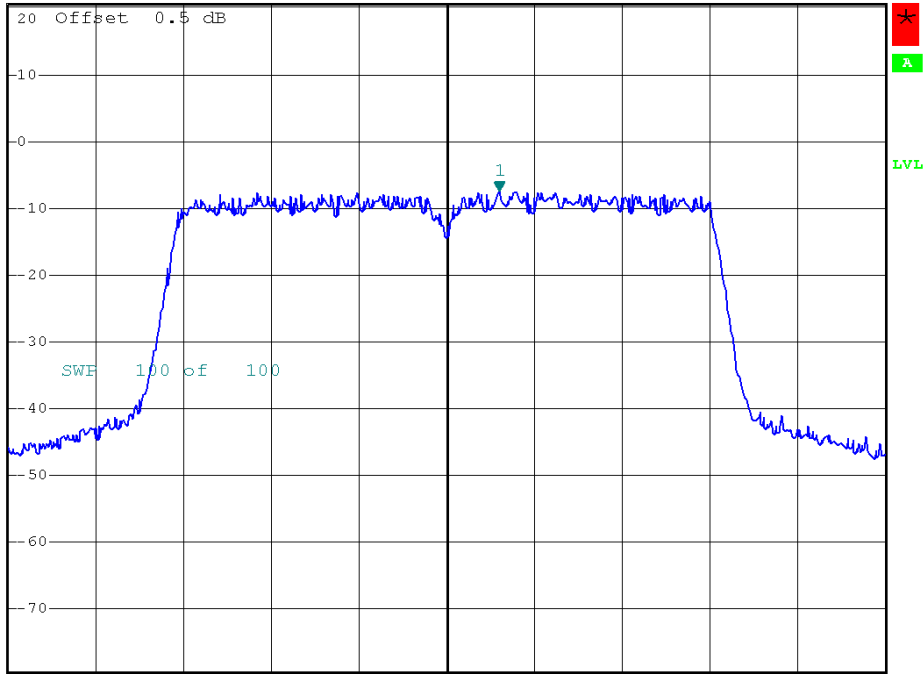


CH38



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -7.38 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.193600000 GHz

1 SA
VIEW



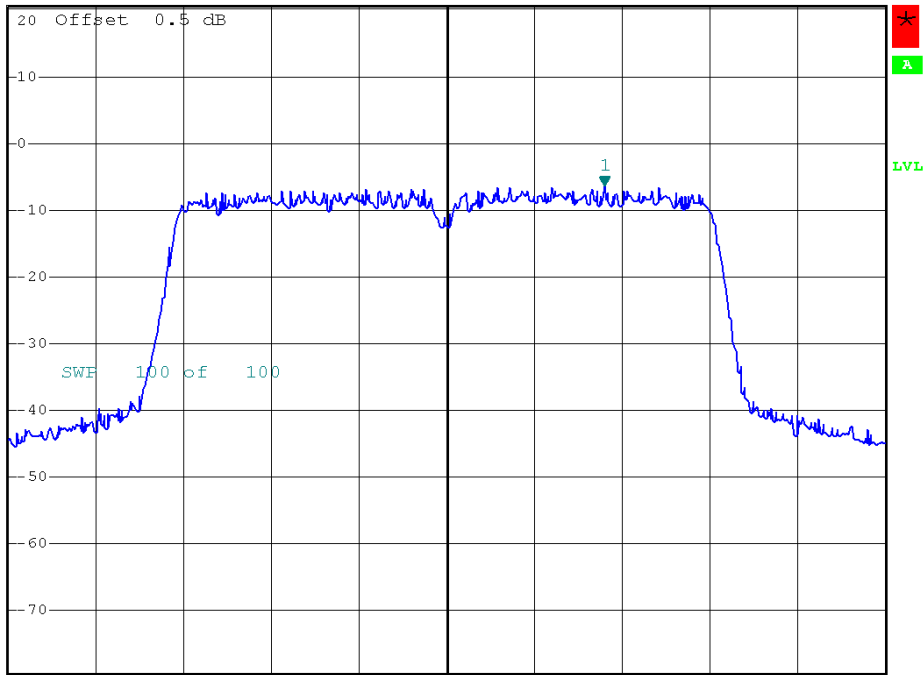
Center 5.19 GHz 6 MHz/ Span 60 MHz

CH46



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -6.47 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.240800000 GHz

1 SA
VIEW



Center 5.23 GHz 6 MHz/ Span 60 MHz



Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH38, CH46(Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
38	5190	-7.10	4
46	5230	-5.86	4

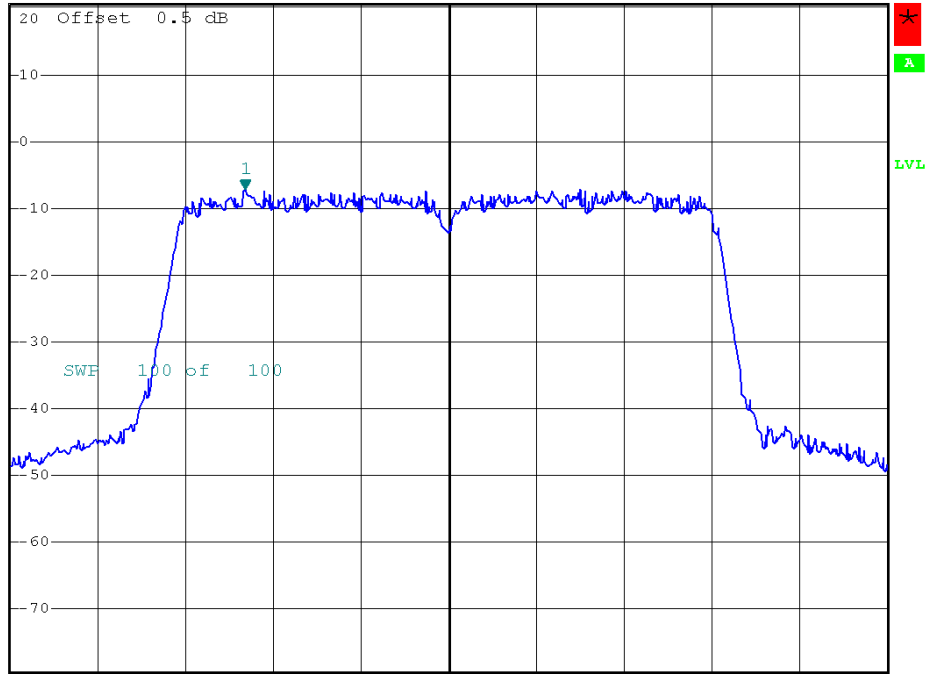


CH38



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -7.10 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.176080000 GHz

1 SA
VIEW



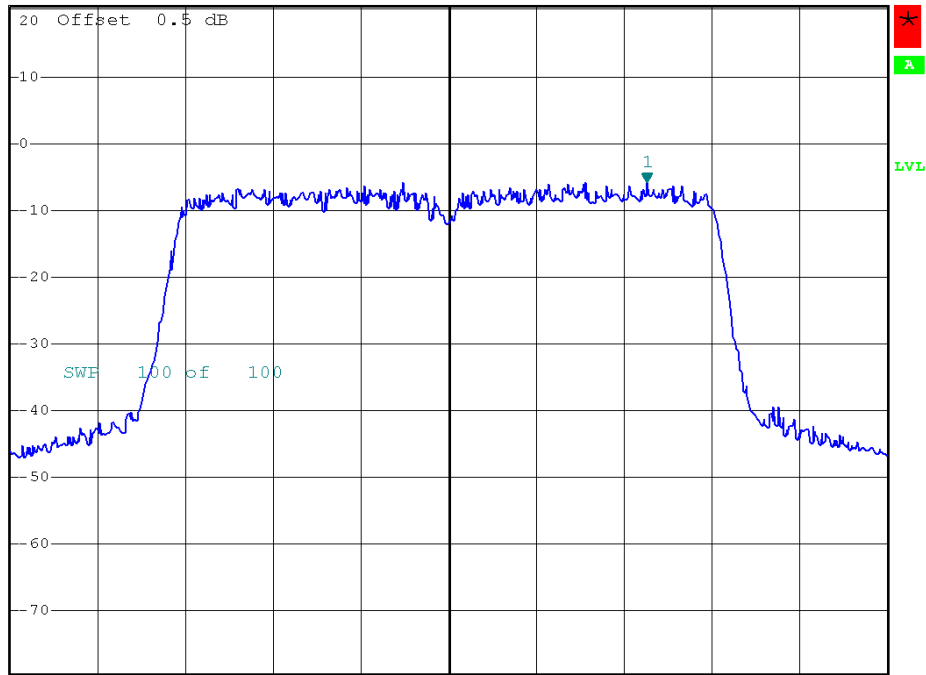
Center 5.19 GHz 6 MHz/ Span 60 MHz

CH46



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -5.86 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.243560000 GHz

1 SA
VIEW



Center 5.23 GHz 6 MHz/ Span 60 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH38, CH46(Port. 0 + Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	Power Density (mW)	LIMIT (dBm)
38	5190	-3.89	0.41	4
46	5230	-3.43	0.45	11

Remark :

- (1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 $((\text{dBm}/\text{Chain 1})/10^{\text{Log}}) + ((\text{dBm}/\text{Chain 2})/10^{\text{log}}) + ((\text{dBm}/\text{ChainN})/10^{\text{log}}) =$
Combined power density in mW.

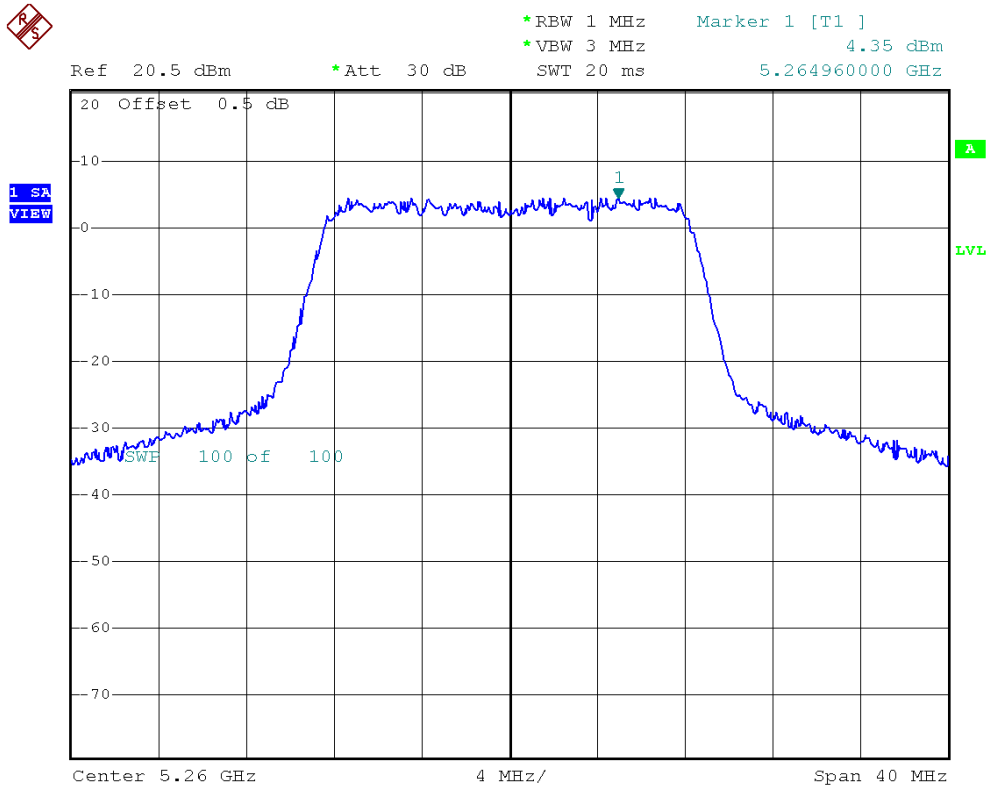


8.1.7 TEST RESULTS - BAND 2

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH52, CH60, CH64(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
52	5260	4.35	11.00
60	5300	5.21	11.00
64	5320	0.90	11.00

CH52



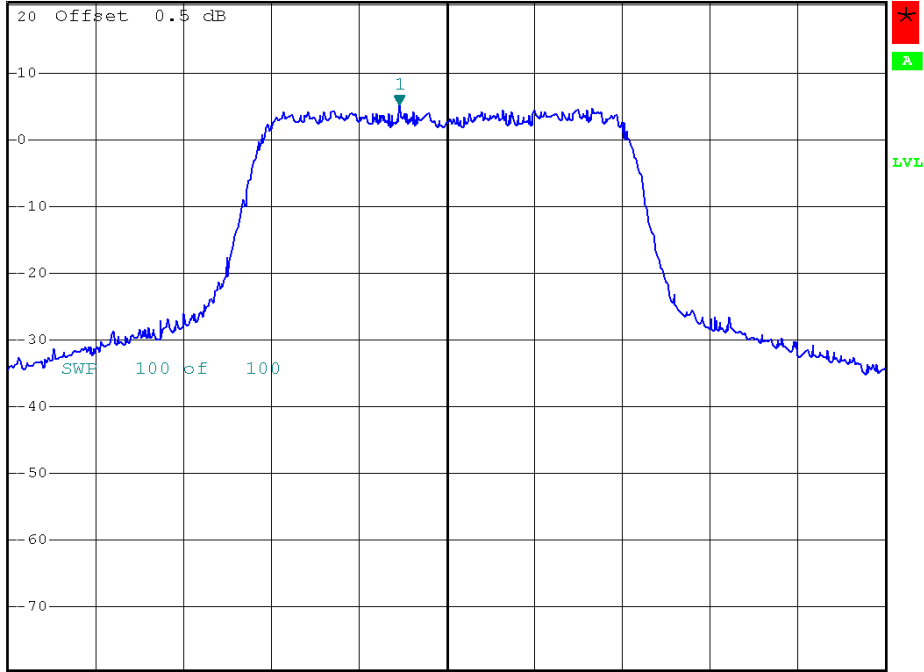


CH60



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 5.21 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.297840000 GHz

1 SA
VIEW



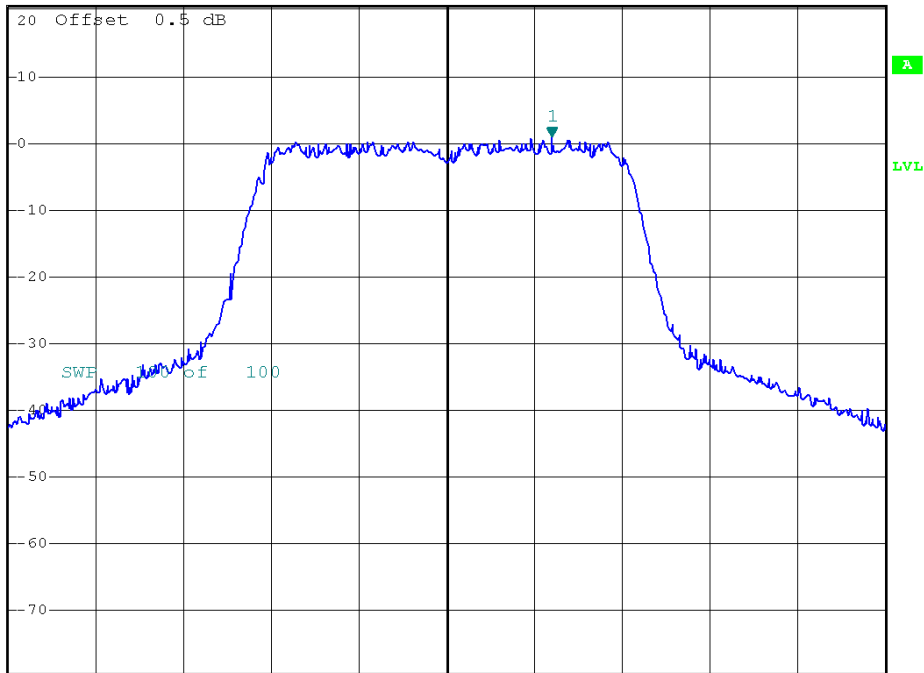
Center 5.3 GHz 4 MHz/ Span 40 MHz

CH64



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 0.90 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.324800000 GHz

1 SA
VIEW

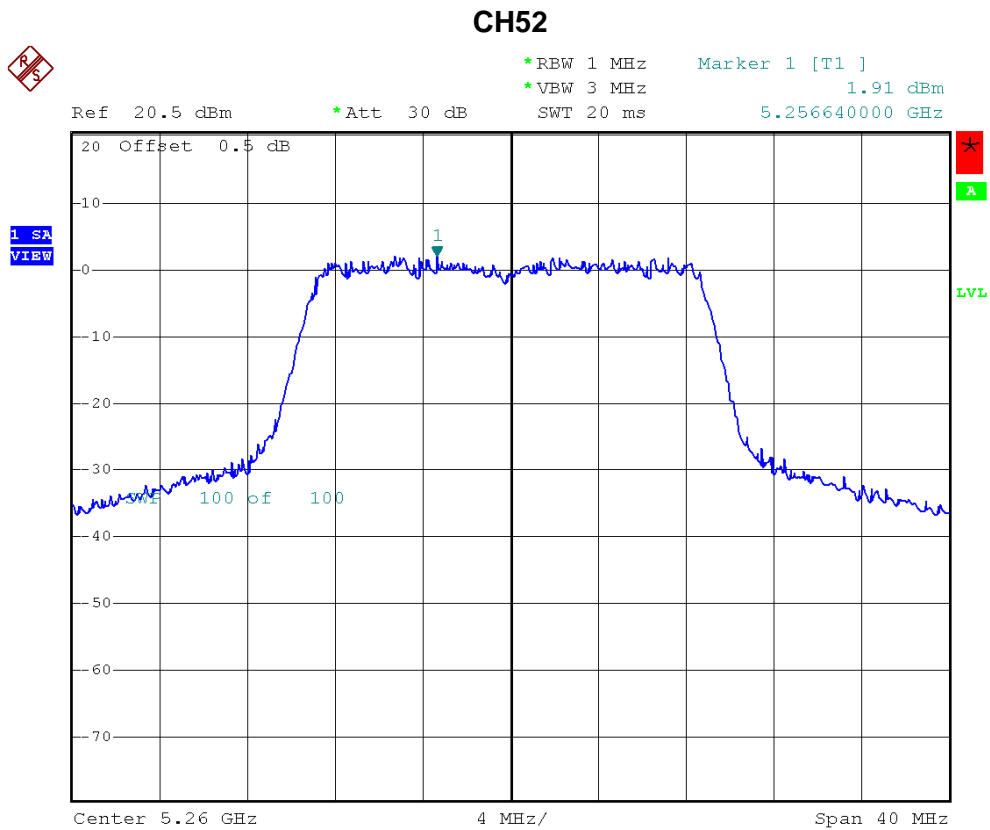


Center 5.32 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH52, CH60, CH64(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
52	5260	1.91	11.00
60	5300	2.02	11.00
64	5320	-2.64	11.00





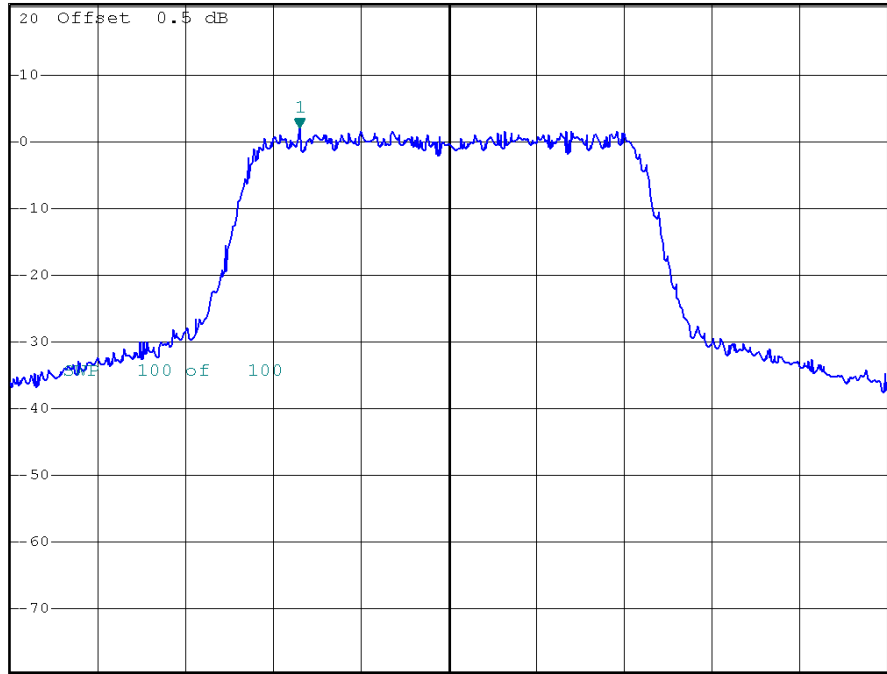
CH60



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 2.02 dBm
SWT 20 ms 5.293200000 GHz

Ref 20.5 dBm *Att 30 dB

1 SA
VIEW



Center 5.3 GHz 4 MHz/ Span 40 MHz

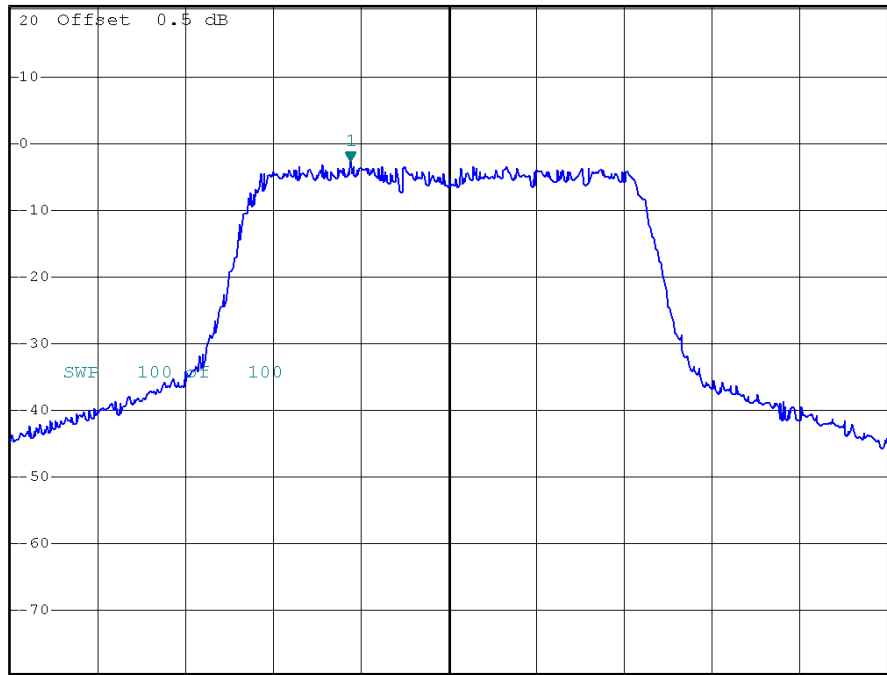
CH64



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -2.64 dBm
SWT 20 ms 5.315520000 GHz

Ref 20.5 dBm *Att 30 dB

1 SA
VIEW

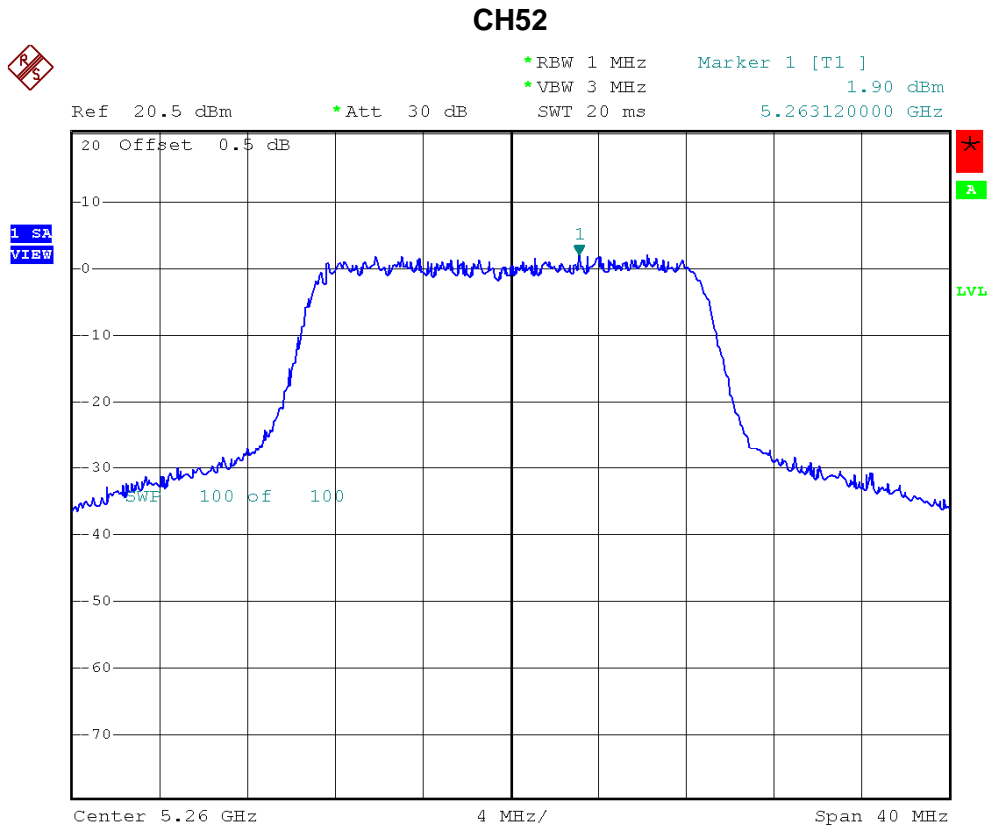


Center 5.32 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH52, CH60, CH64(Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
52	5260	1.90	11.00
60	5300	1.19	11.00
64	5320	-3.52	11.00



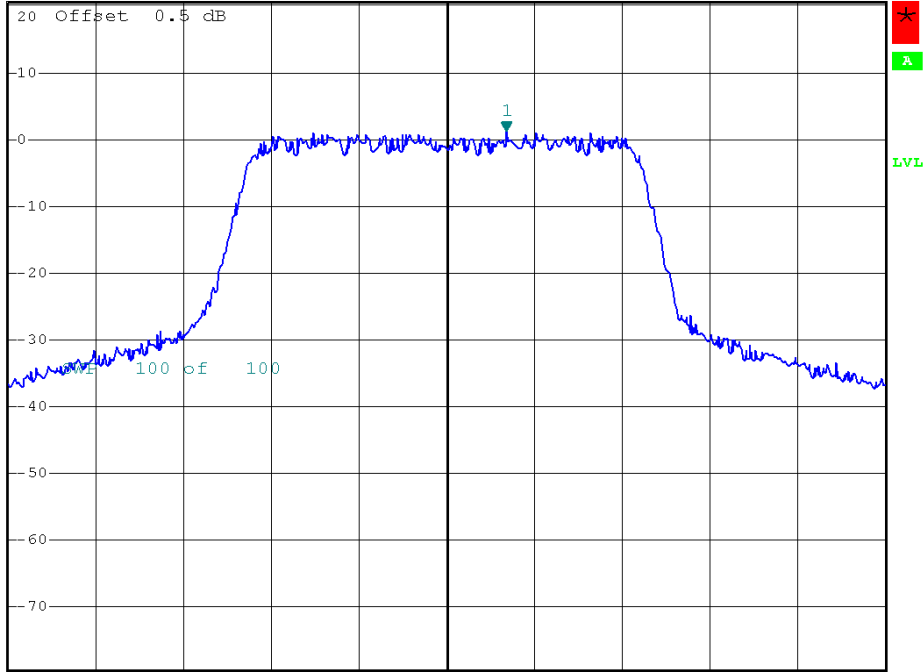


CH60



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 1.19 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.302720000 GHz

1 SA
VIEW



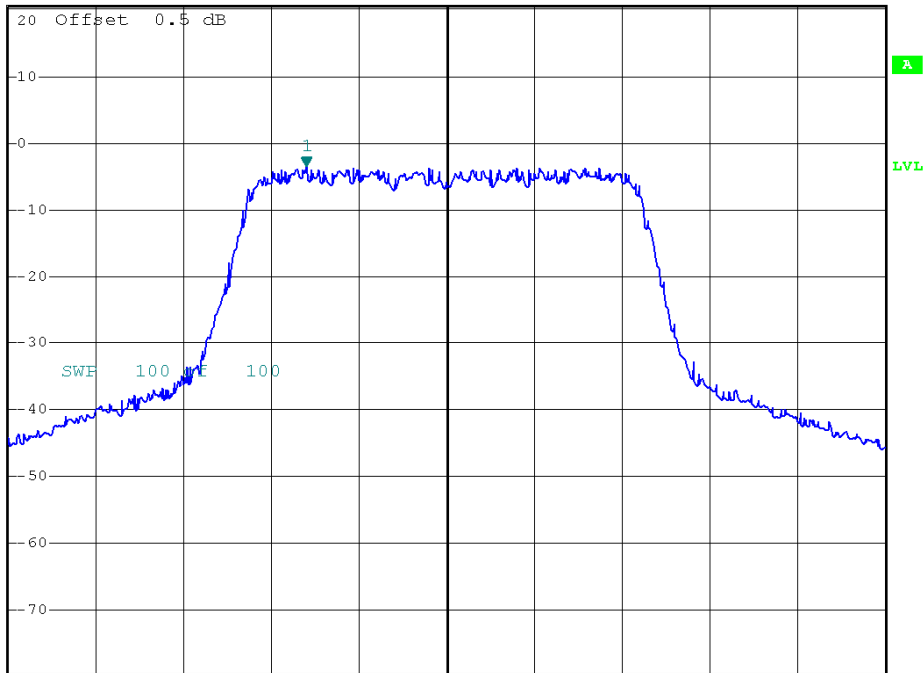
Center 5.3 GHz 4 MHz/ Span 40 MHz

CH64



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.52 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.313600000 GHz

1 SA
VIEW



Center 5.32 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH52, CH60, CH64(Port. 0 + Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	Power Density (mW)	LIMIT (dBm)
52	5260	4.92	3.10	11.00
60	5300	4.64	2.91	11.00
64	5320	-0.05	0.99	11.00

Remark :

- (1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 $((\text{dBm}/\text{Chain 1})/10^{\text{Log}}) + ((\text{dBm}/\text{Chain 2})/10^{\text{log}}) + ((\text{dBm}/\text{ChainN})/10^{\text{log}}) =$
Combined power density in mW.



Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH54, CH62(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
54	5270	0.38	11.00
62	5310	-7.05	11.00

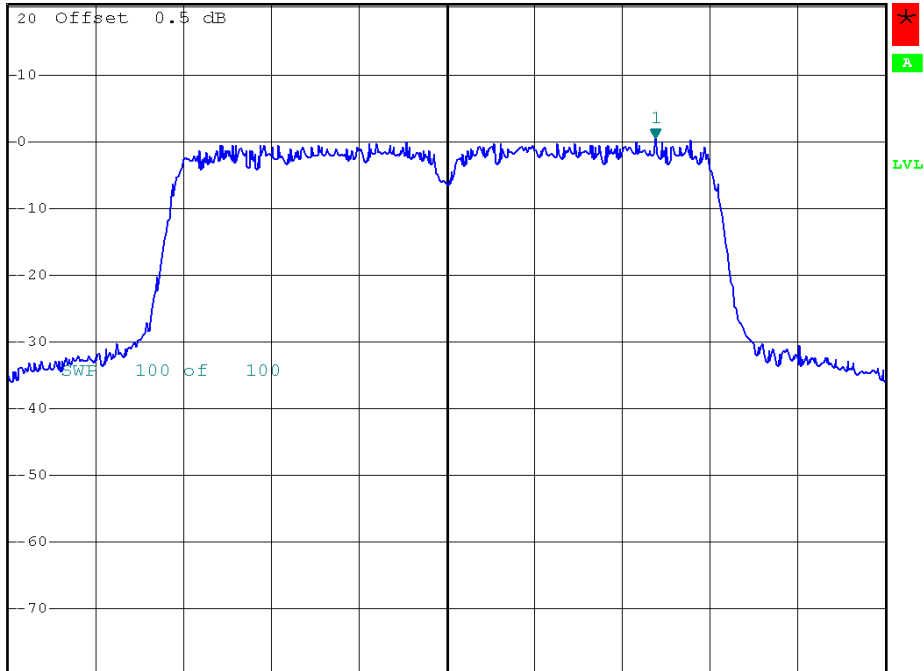


CH54



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 0.38 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.284280000 GHz

1 SA
VIEW



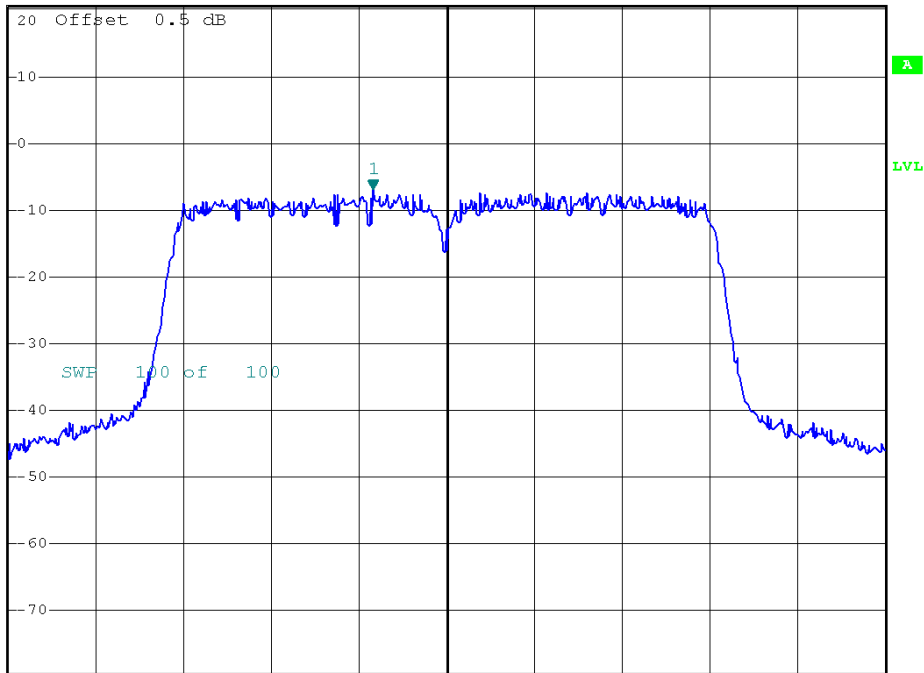
Center 5.27 GHz 6 MHz/ Span 60 MHz

CH62



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -7.05 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.304960000 GHz

1 SA
VIEW



Center 5.31 GHz 6 MHz/ Span 60 MHz



Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH54, CH62(Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
54	5270	0.80	11.00
62	5310	-7.5	11.00

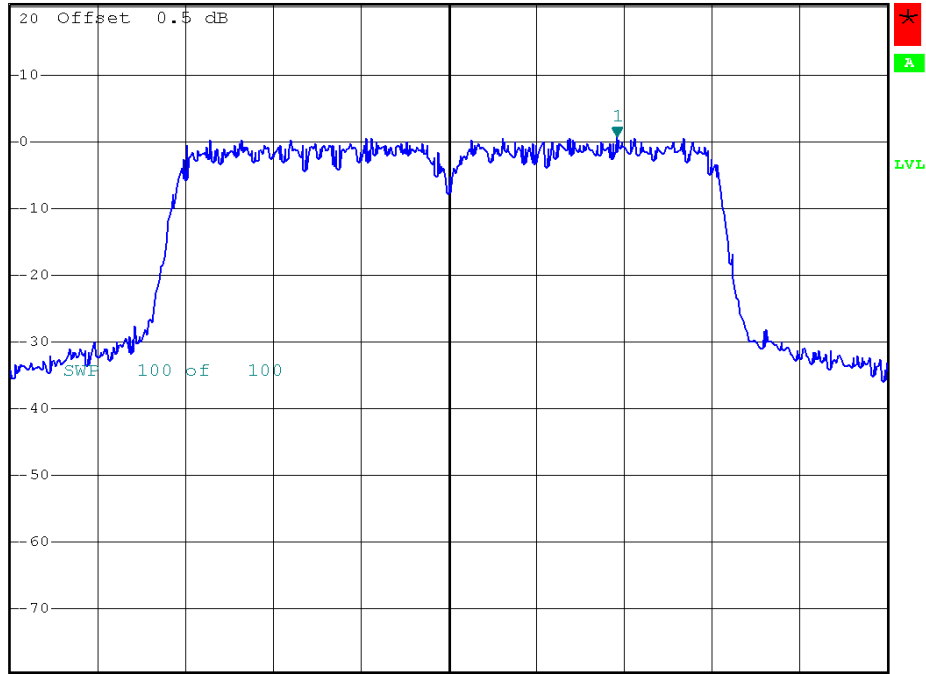


CH54



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 0.80 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.281520000 GHz

1 SA
VIEW



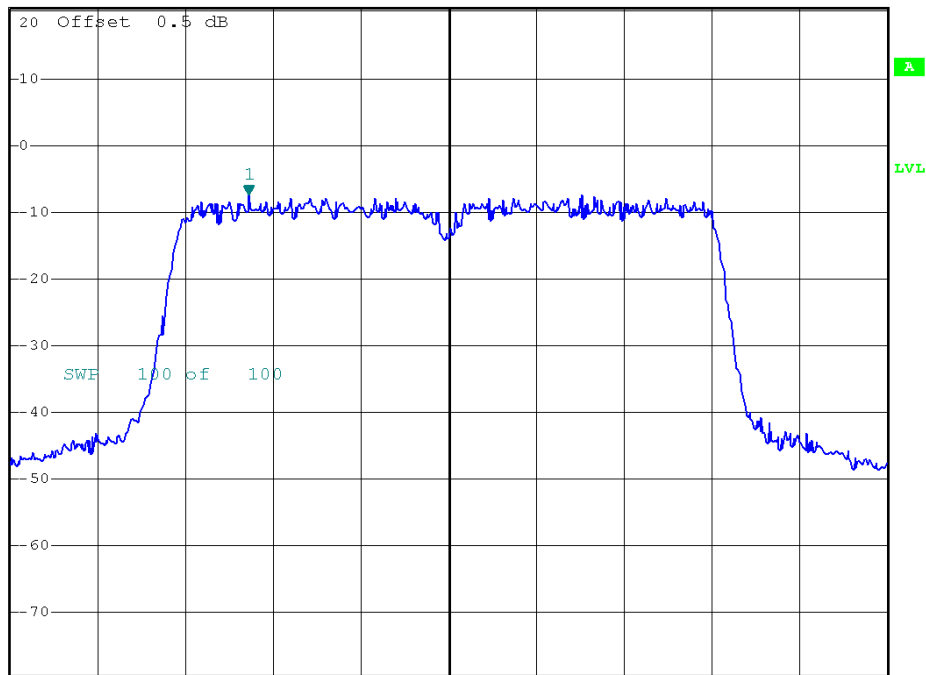
Center 5.27 GHz 6 MHz/ Span 60 MHz

CH62



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -7.50 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.296320000 GHz

1 SA
VIEW



Center 5.31 GHz 6 MHz/ Span 60 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/802.11n/40M/CH54, CH62(Port. 0 + Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	Power Density (mW)	LIMIT (dBm)
54	5270	3.61	2.29	11.00
62	5310	-4.26	0.44	11.00

Remark :

- (1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 $((\text{dBm}/\text{Chain 1})/10^{\text{Log}}) + ((\text{dBm}/\text{Chain 2})/10^{\text{log}}) + ((\text{dBm}/\text{ChainN})/10^{\text{log}}) =$
Combined power density in mW.

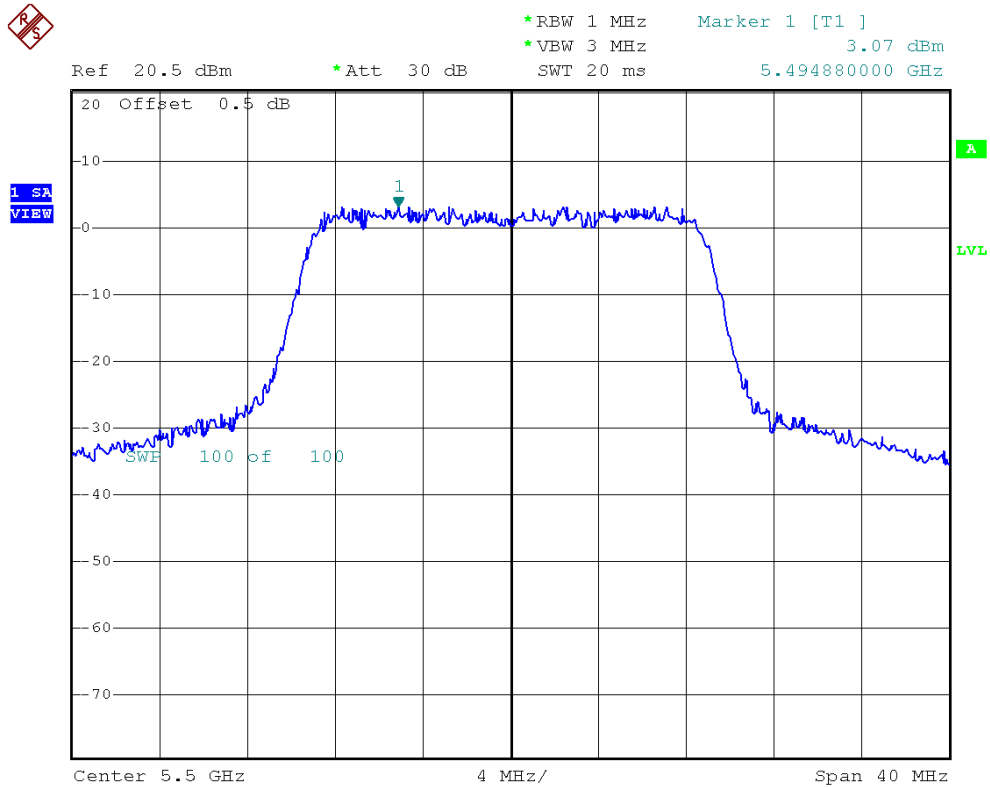


8.1.8 TEST RESULTS - BAND 3

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH100, CH116, CH140 (Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
100	5500	3.07	11.00
116	5580	4.85	11.00
140	5700	-2.53	11.00

CH100





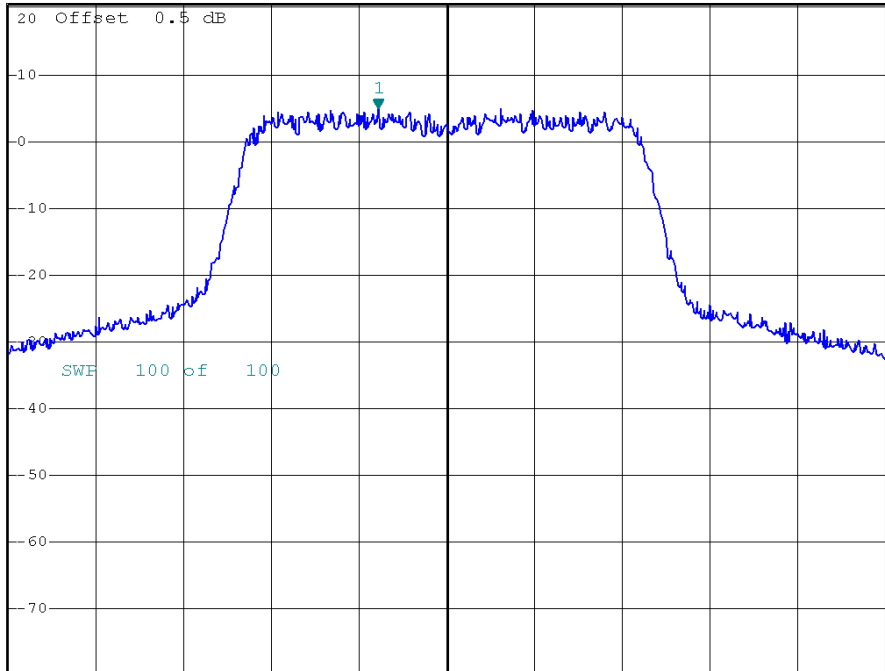
CH116



*RBW 1 MHz Marker 1 [T1] 4.85 dBm
*VBW 3 MHz
SWT 20 ms

Ref 20.5 dBm *Att 30 dB 5.576880000 GHz

1 SA
VIEW



Center 5.58 GHz 4 MHz/ Span 40 MHz

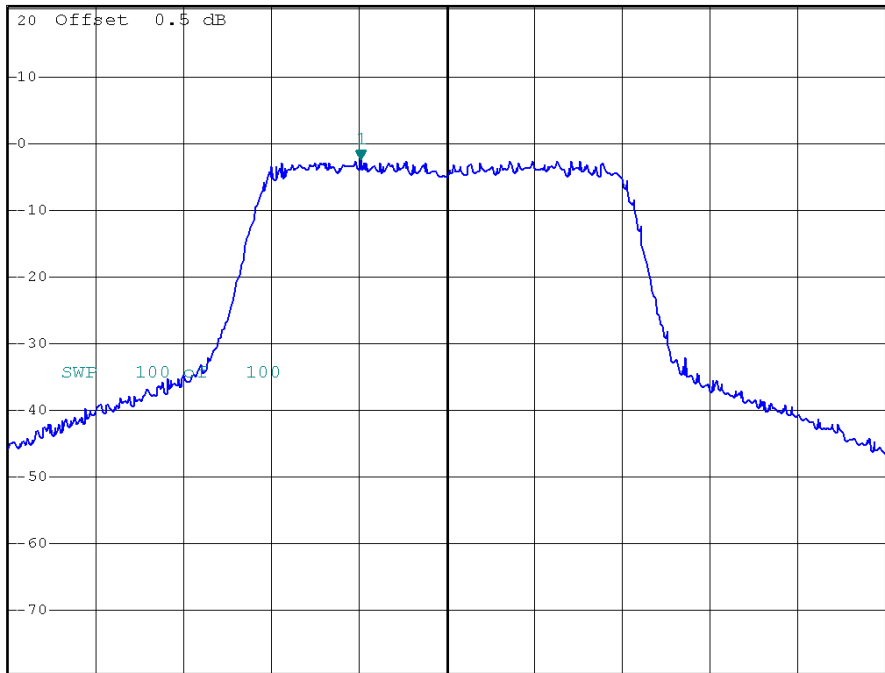
CH140



*RBW 1 MHz Marker 1 [T1] -2.53 dBm
*VBW 3 MHz
SWT 20 ms

Ref 20.5 dBm *Att 30 dB 5.696080000 GHz

1 SA
VIEW



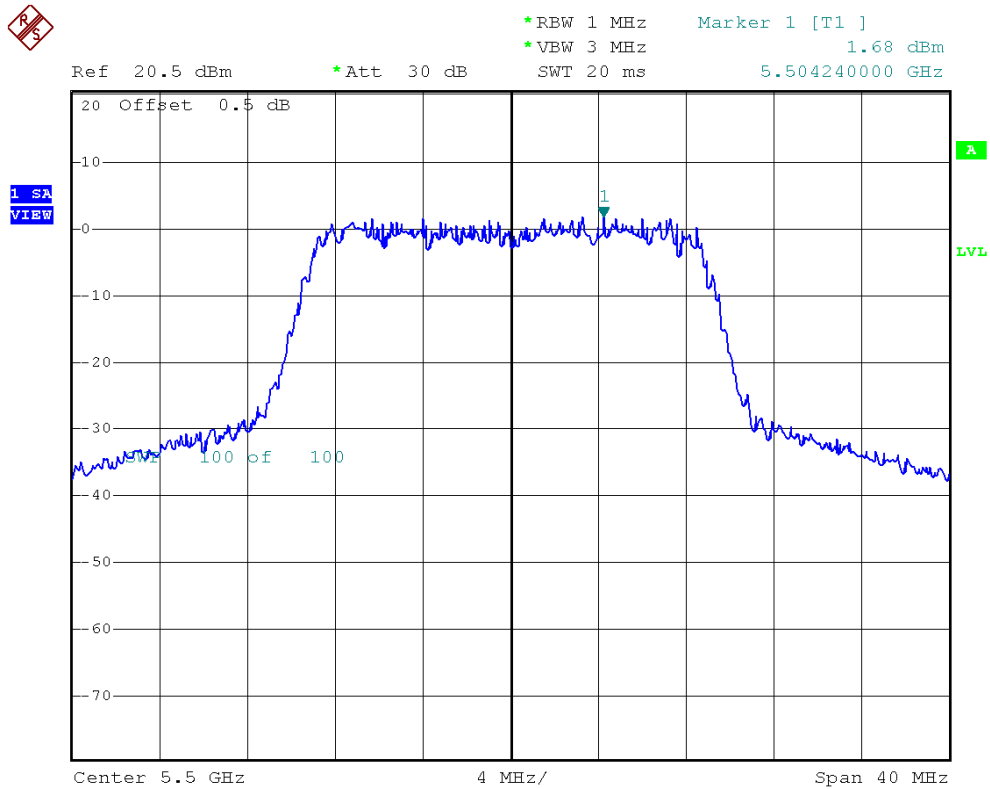
Center 5.7 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH100, CH116, CH140(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
100	5500	1.68	11.00
116	5580	3.56	11.00
140	5700	-2.61	11.00

CH100



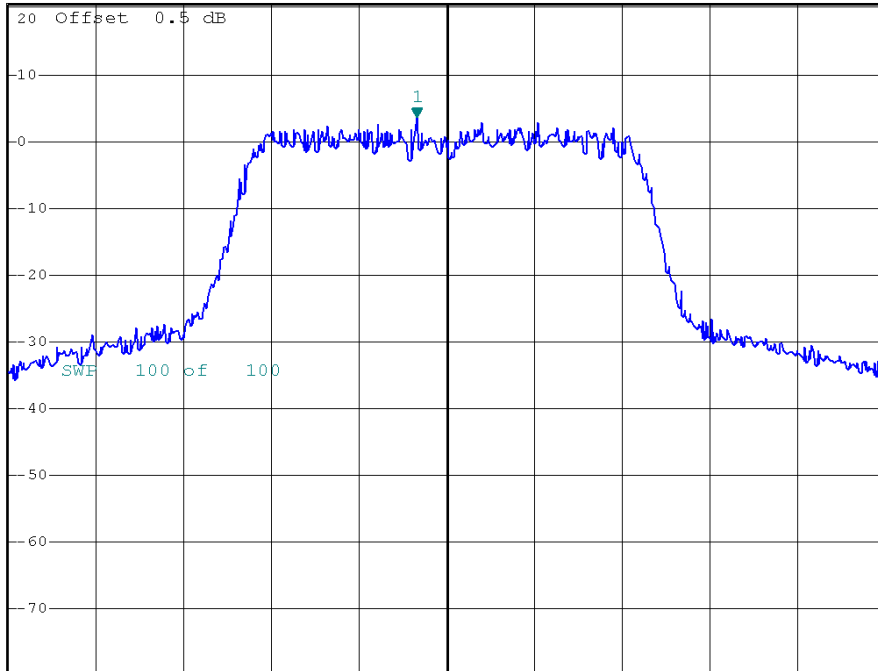


CH116



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 3.56 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.578640000 GHz

1 SA
VIEW



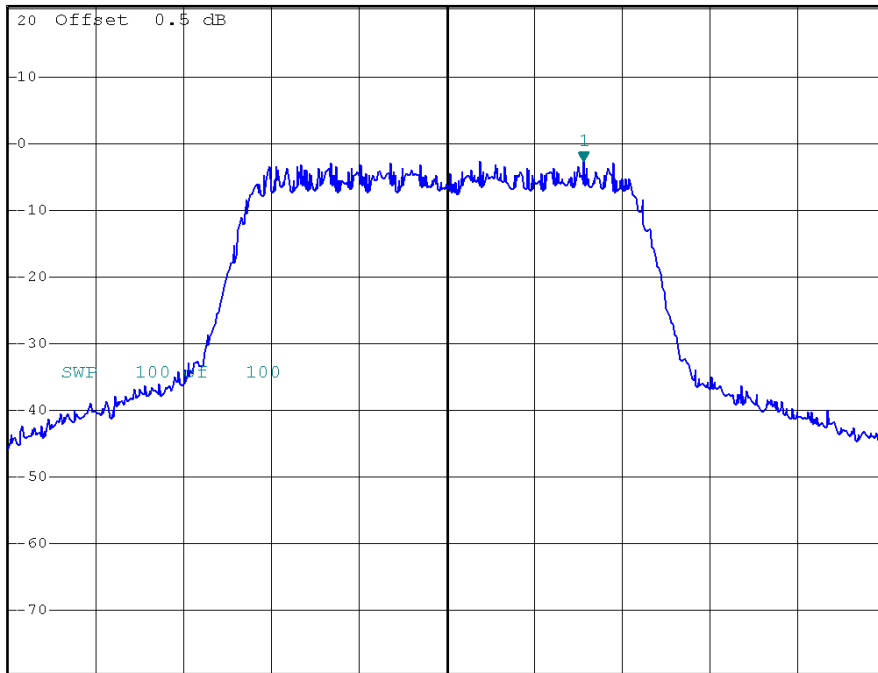
Center 5.58 GHz 4 MHz/ Span 40 MHz

CH140



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -2.61 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.706240000 GHz

1 SA
VIEW



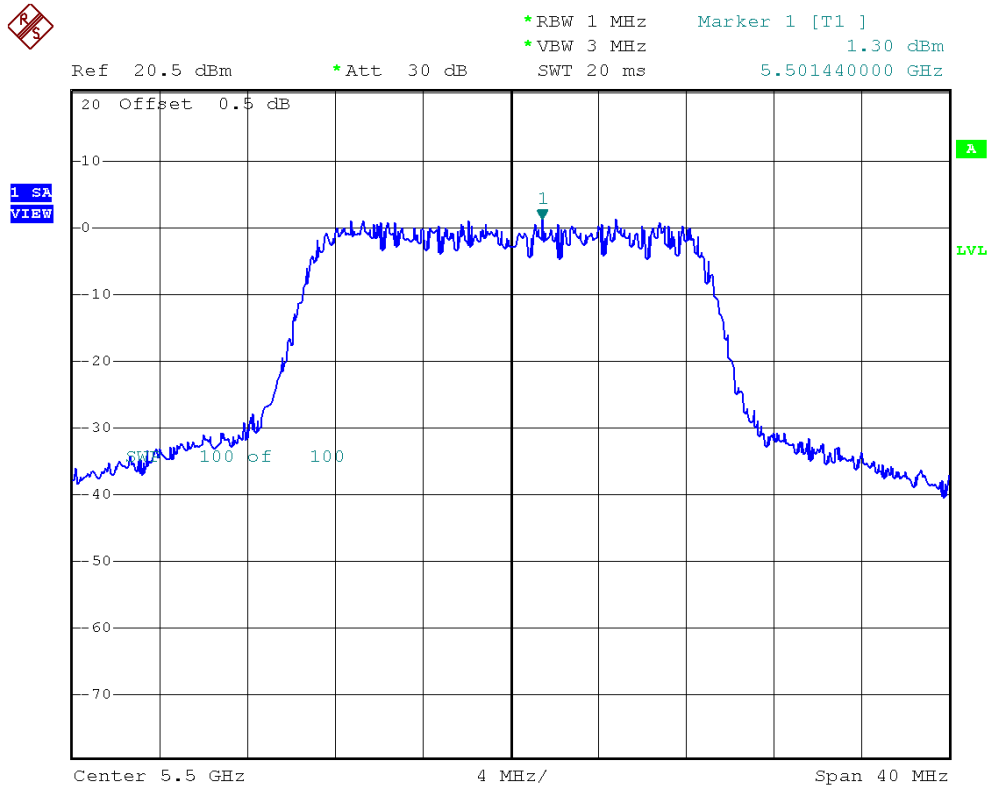
Center 5.7 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH100, CH116, CH140(Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
100	5500	1.30	11.00
116	5580	3.46	11.00
140	5700	-1.87	11.00

CH100



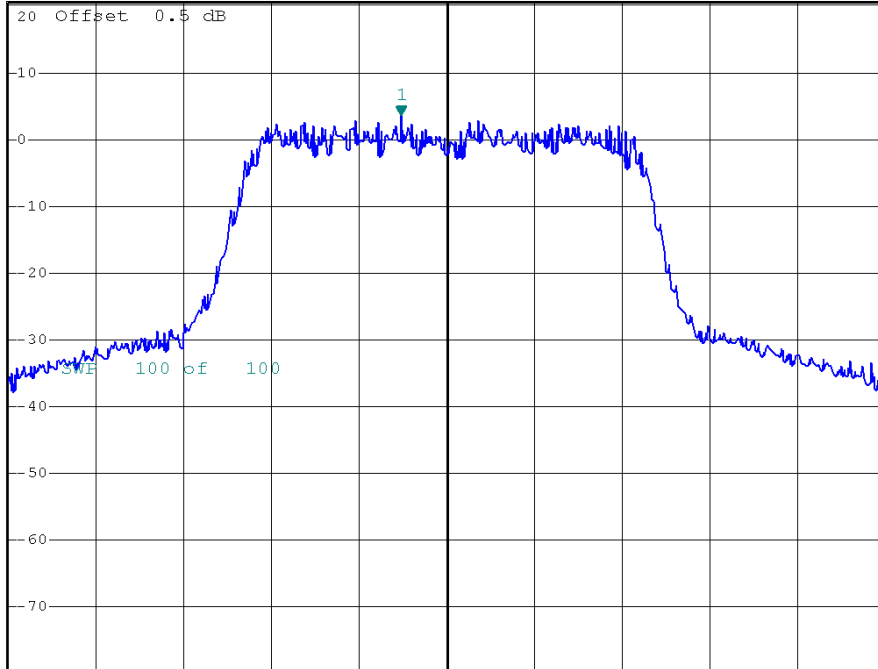


CH116



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 3.46 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.577920000 GHz

1 SA
VIEW



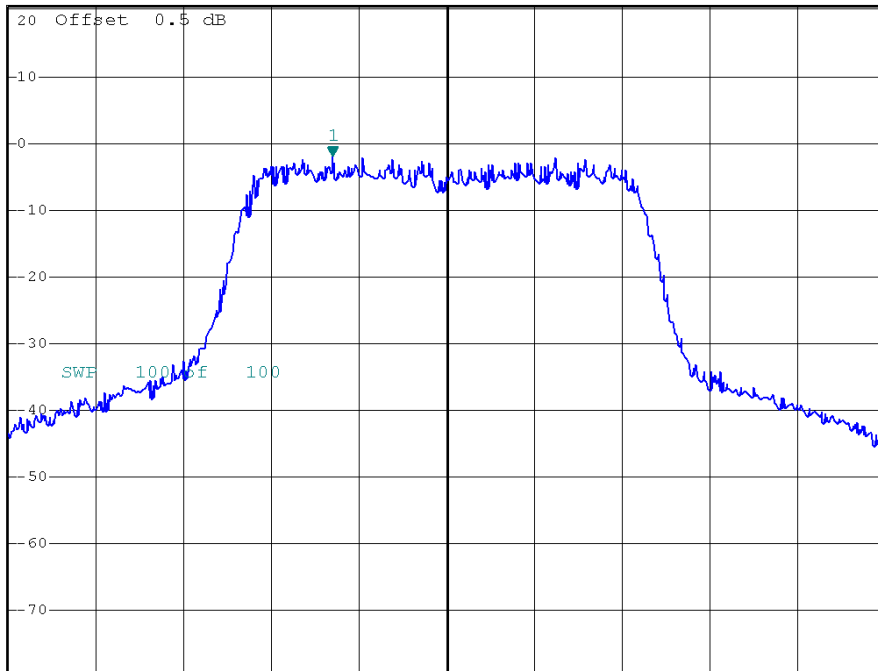
Center 5.58 GHz 4 MHz/ Span 40 MHz

CH140



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -1.87 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.694800000 GHz

1 SA
VIEW



Center 5.7 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH100, CH116, CH140(Port. 0 + Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	Power Density (mW)	LIMIT (dBm)
100	5500	4.50	2.82	11.00
116	5580	6.52	4.49	11.00
140	5700	0.79	1.20	11.00

Remark :

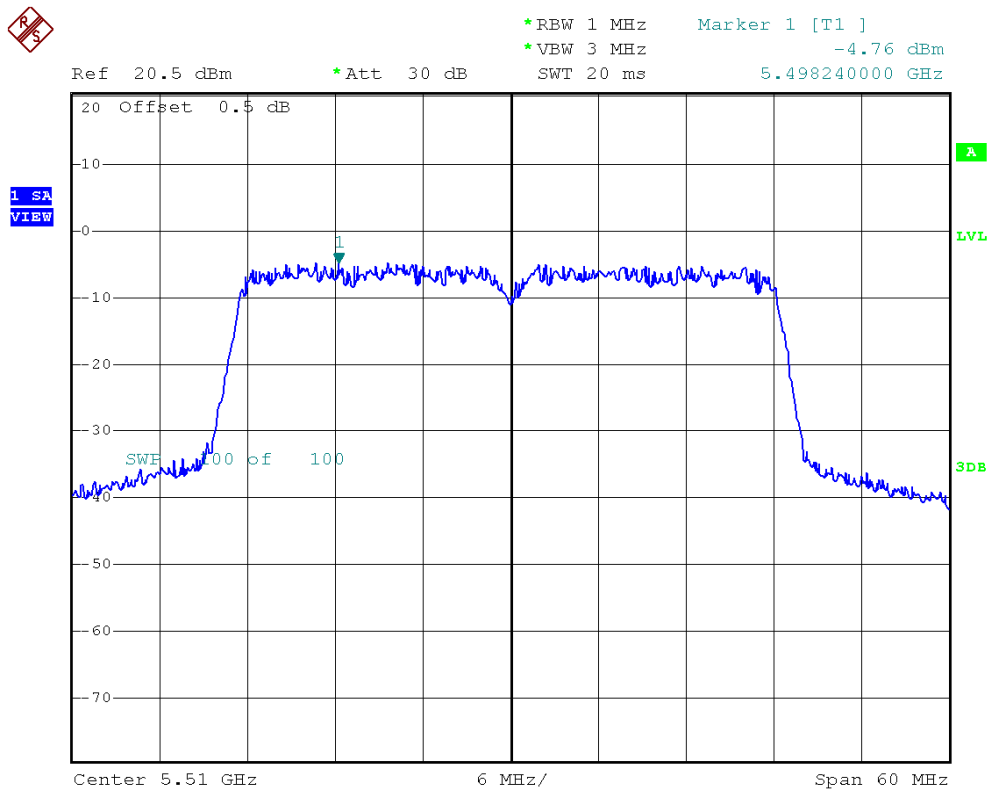
- (1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 $((\text{dBm}/\text{Chain 1})/10^{\text{Log}}) + ((\text{dBm}/\text{Chain 2})/10^{\text{log}}) + ((\text{dBm}/\text{ChainN})/10^{\text{log}}) =$
Combined power density in mW.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH102, CH110, CH134(Port. 0)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
102	5510	-4.76	11.00
110	5550	-0.06	11.00
134	5670	-3.37	11.00

CH102



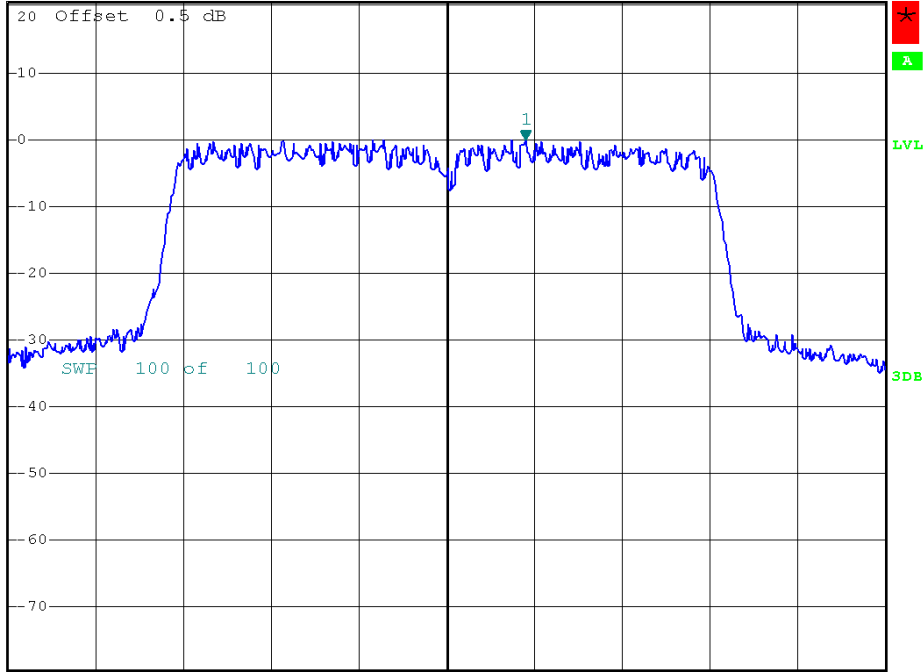


CH110



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -0.06 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.555400000 GHz

1 SA
VIEW



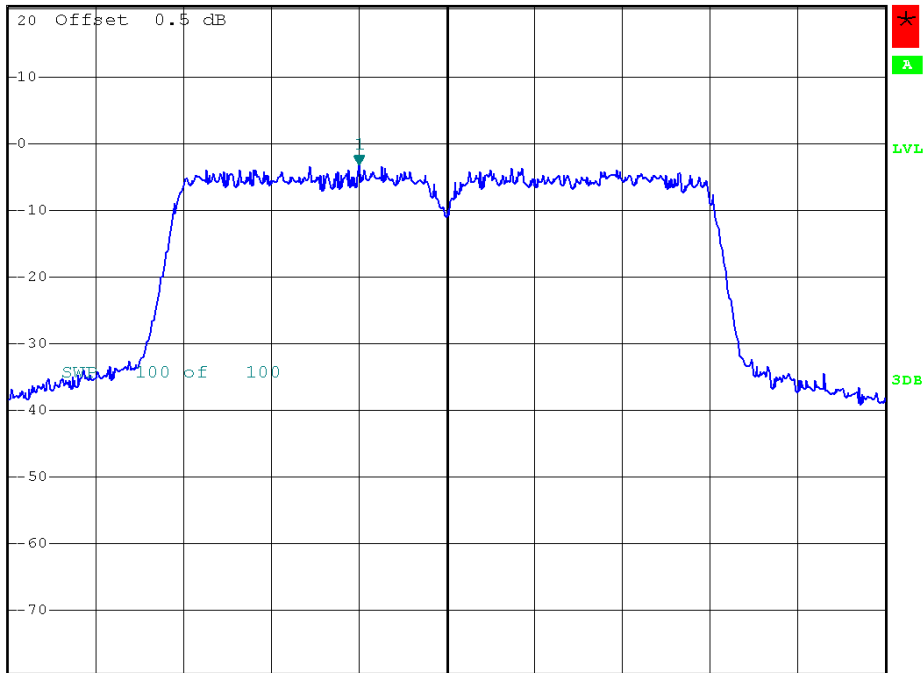
Center 5.55 GHz 6 MHz/ Span 60 MHz

CH134



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -3.37 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.664000000 GHz

1 SA
VIEW



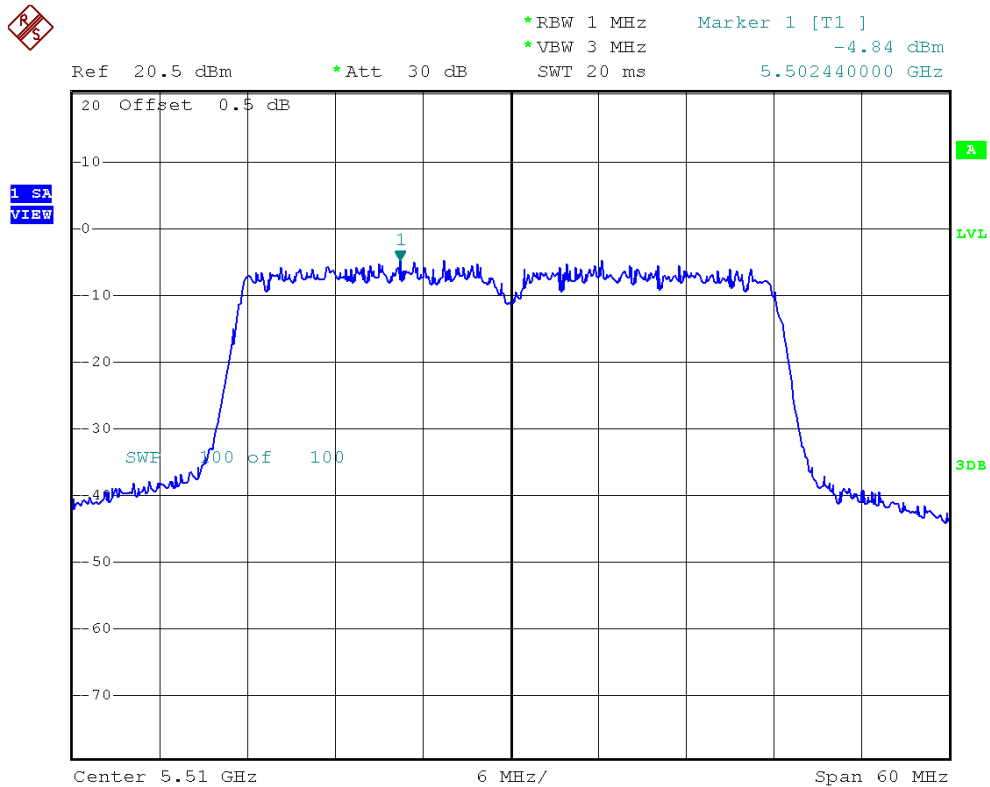
Center 5.67 GHz 6 MHz/ Span 60 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH102, CH110, CH134(Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
102	5510	-4.84	11.00
110	5550	-0.36	11.00
134	5670	-2.99	11.00

CH102

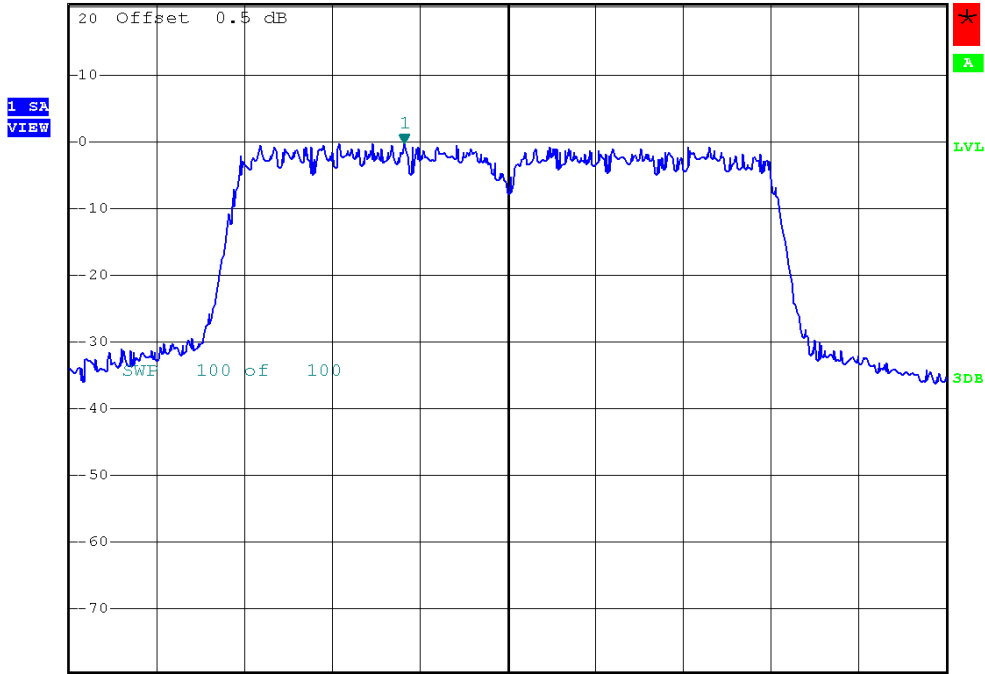




CH110



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -0.36 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.542920000 GHz

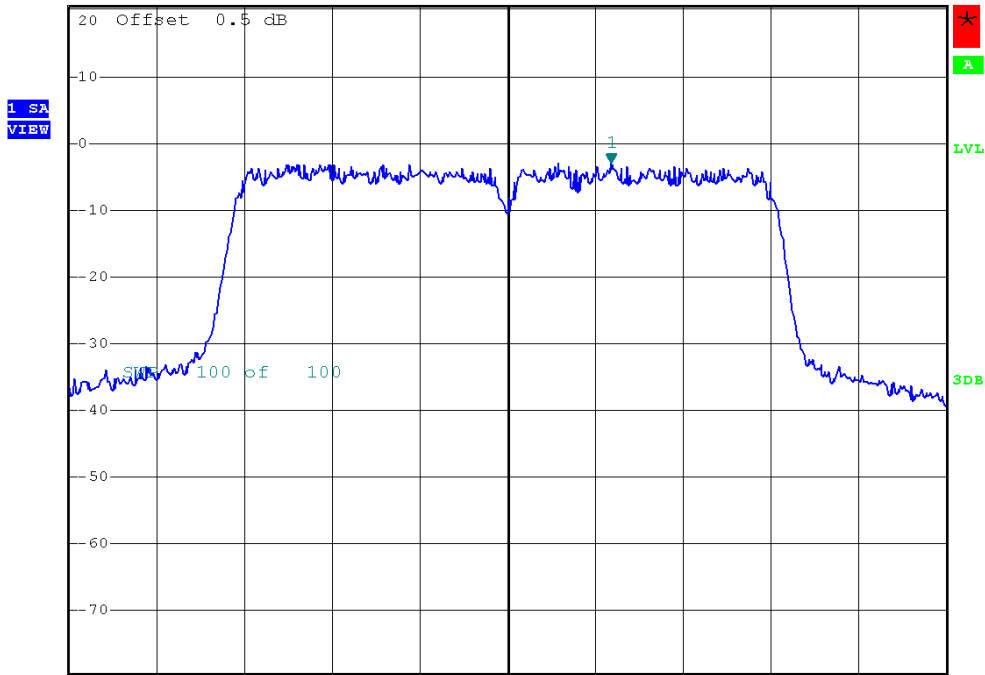


Center 5.55 GHz 6 MHz/ Span 60 MHz

CH134



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -2.99 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.677080000 GHz



Center 5.67 GHz 6 MHz/ Span 60 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH102, CH110, CH134 (Port. 0 + Port. 1)		

Test Channel	Frequency (MHz)	Power Density (dBm)	Power Density (mW)	LIMIT (dBm)
102	5510	-1.79	0.66	11.00
110	5550	2.80	1.91	11.00
134	5670	-0.17	0.96	11.00

Remark :

- (1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 $((\text{dBm}/\text{Chain 1})/10^{\text{Log}}) + ((\text{dBm}/\text{Chain 2})/10^{\text{log}}) + ((\text{dBm}/\text{ChainN})/10^{\text{log}}) =$
Combined power density in mW.



9. Peak Excursion Measurement

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C			
Test Item	Limit	Frequency Range (MHz)	Result
Peak Excursion Measurement	13 dB	5150 - 5250	PASS
		5250 - 5350	PASS
		5470 - 5725	PASS
		5725 - 5825	N/A

9.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Sep. 09, 2010

Remark: " N/A" denotes No Model Name, Serial No. or No Calibration specified.

9.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 300 kHz (Average Trace)
Detector	Peak (Peak Trace) / Sample (Average Trace)
Trace	Max Hold
Sweep Time	60s

c. Peak Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and maxhold settings.

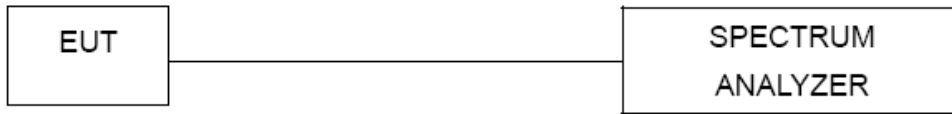
d. Average Trace: Method #3—video averaging with max hold--and sum power across the band. Set span to encompass the entire emissions bandwidth (EBW) of the signal. Set sweep trigger to "free run". Set RBW = 1 MHz. Set VBW ≥ 1/T (IEEE 802.11a VBW = 300kHz ≥ 1/4μs). Use sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW. Otherwise use peak detector mode. Set max hold. Allow max hold to run for 60 seconds.

9.1.3 DEVIATION FROM STANDARD

No deviation.



9.1.4 TEST SETUP



9.1.5 EUT OPERATION CONDITIONS

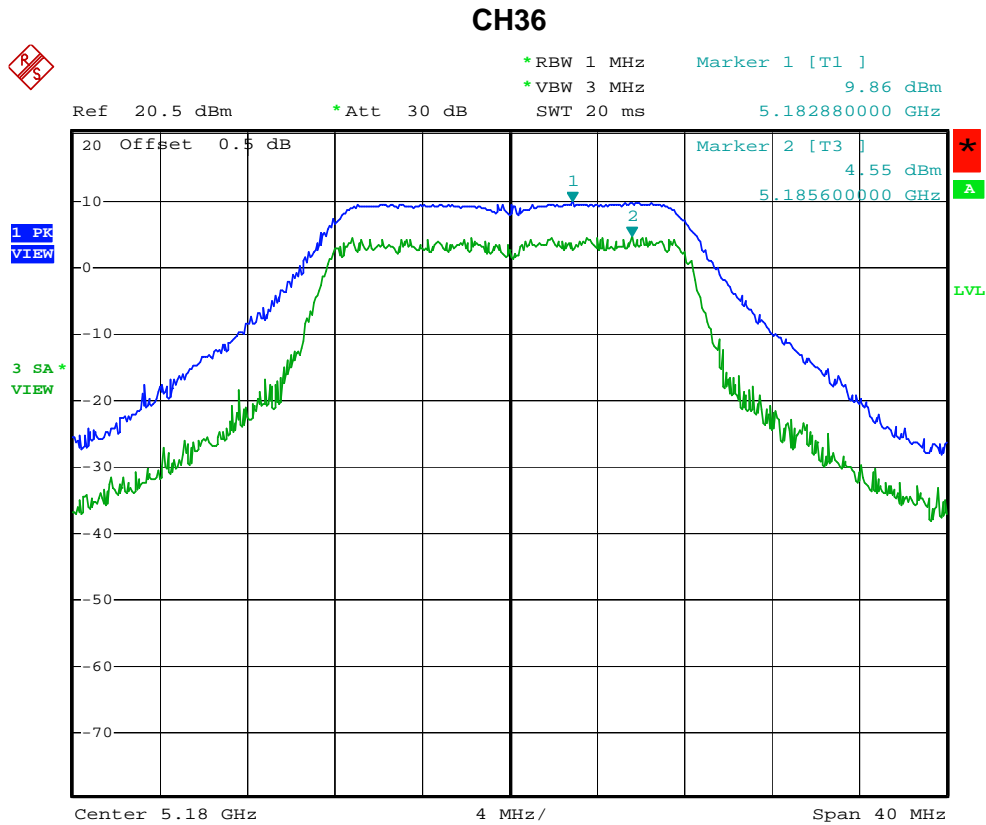
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



9.1.6 TEST RESULTS - BAND 1

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH36, CH40, CH48		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH36	5180	5.28	13
CH40	5200	5.08	13
CH48	5240	4.64	13

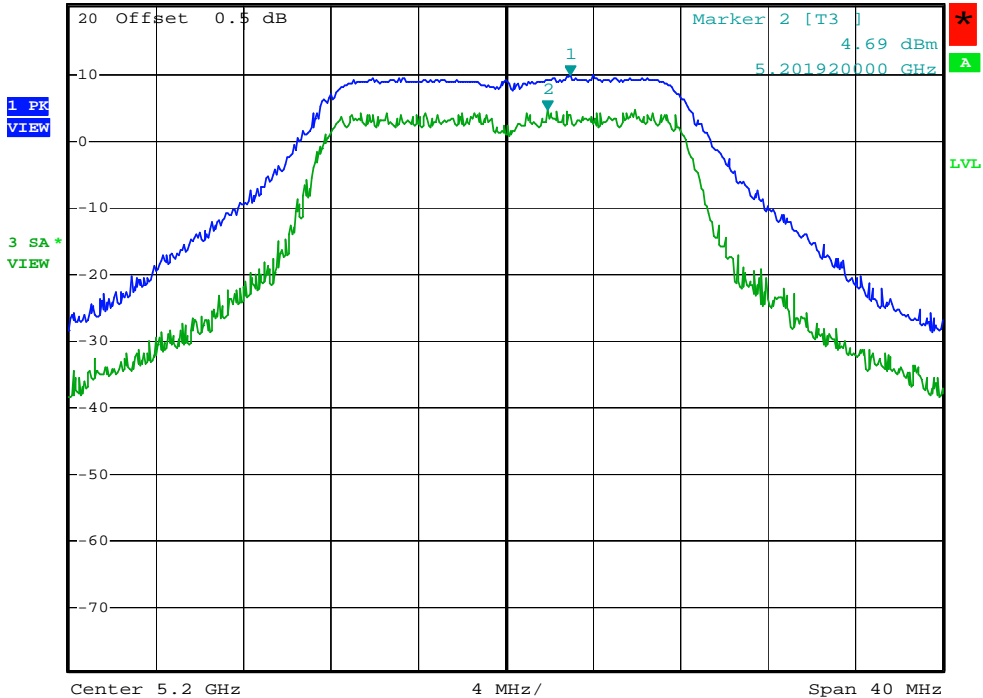




CH40



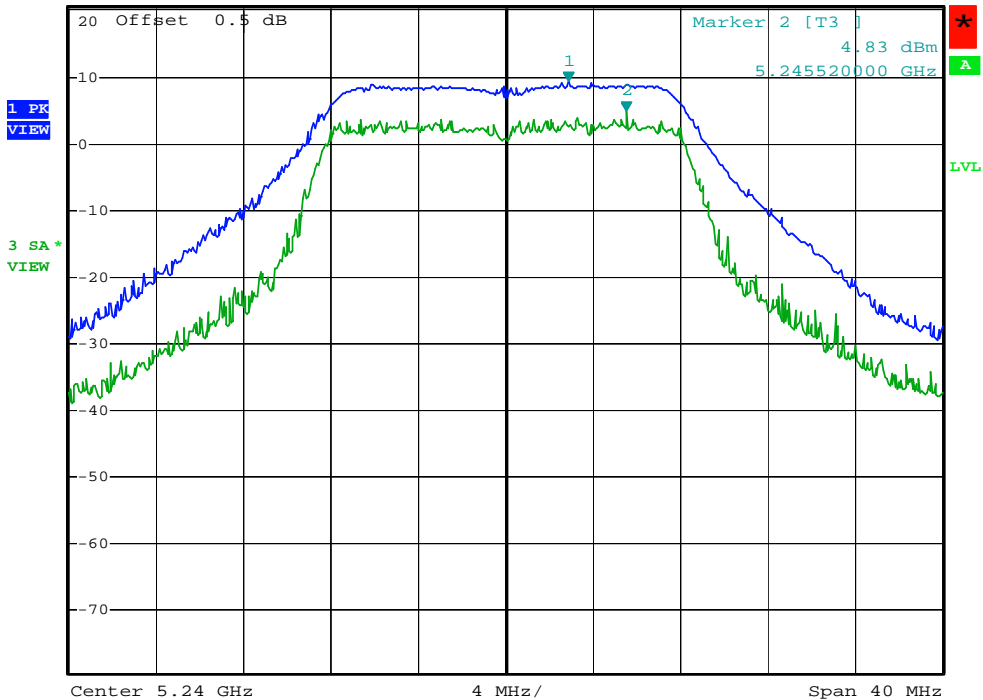
*RBW 1 MHz Marker 1 [T1] 9.77 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.202960000 GHz



CH48



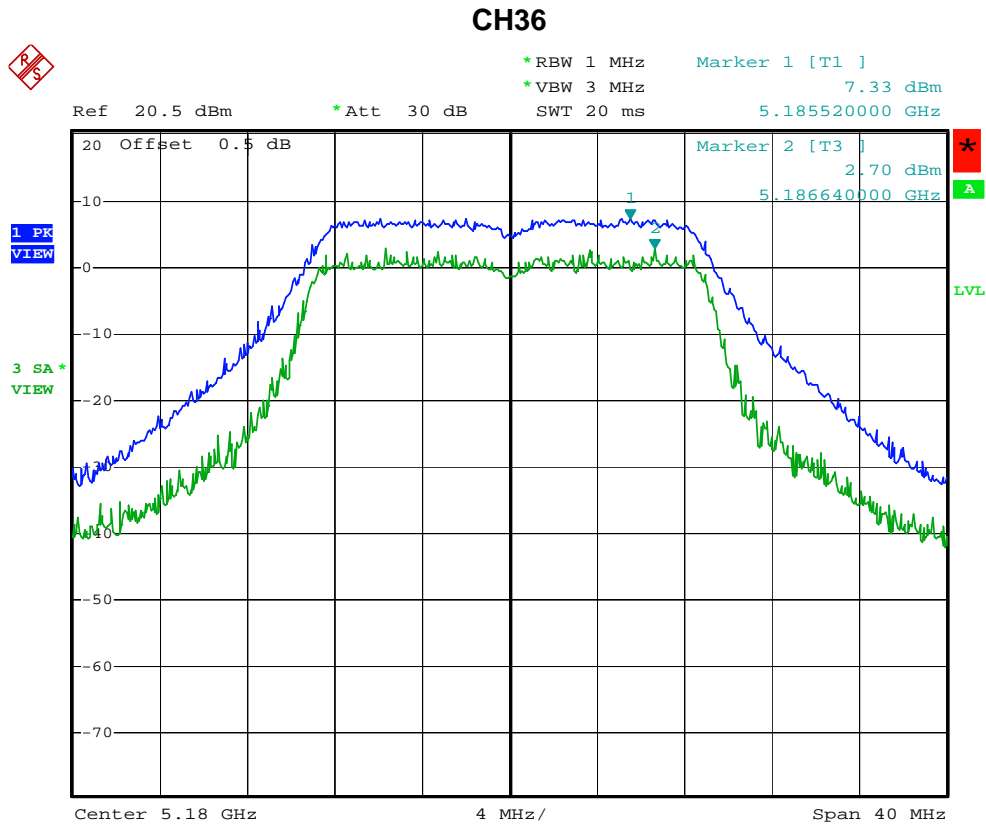
*RBW 1 MHz Marker 1 [T1] 9.47 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.242880000 GHz





EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH36, CH40, CH48(Port. 0)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH36	5180	4.63	13
CH40	5200	4.65	13
CH48	5240	4.77	13

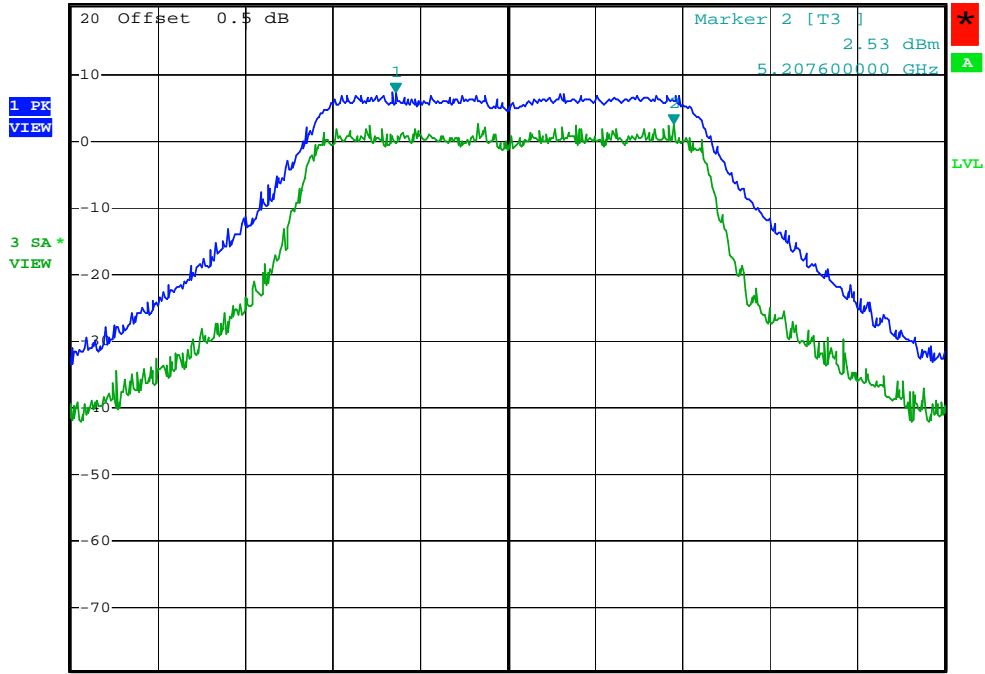




CH40



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 7.18 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.194880000 GHz

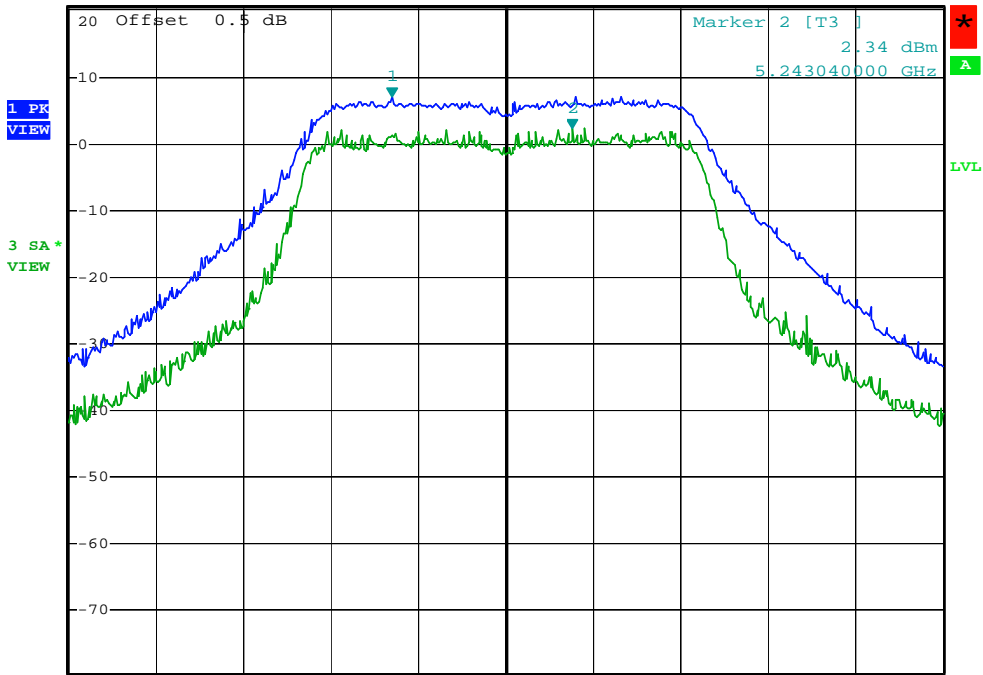


Center 5.2 GHz 4 MHz/ Span 40 MHz

CH48



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 7.11 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.234800000 GHz

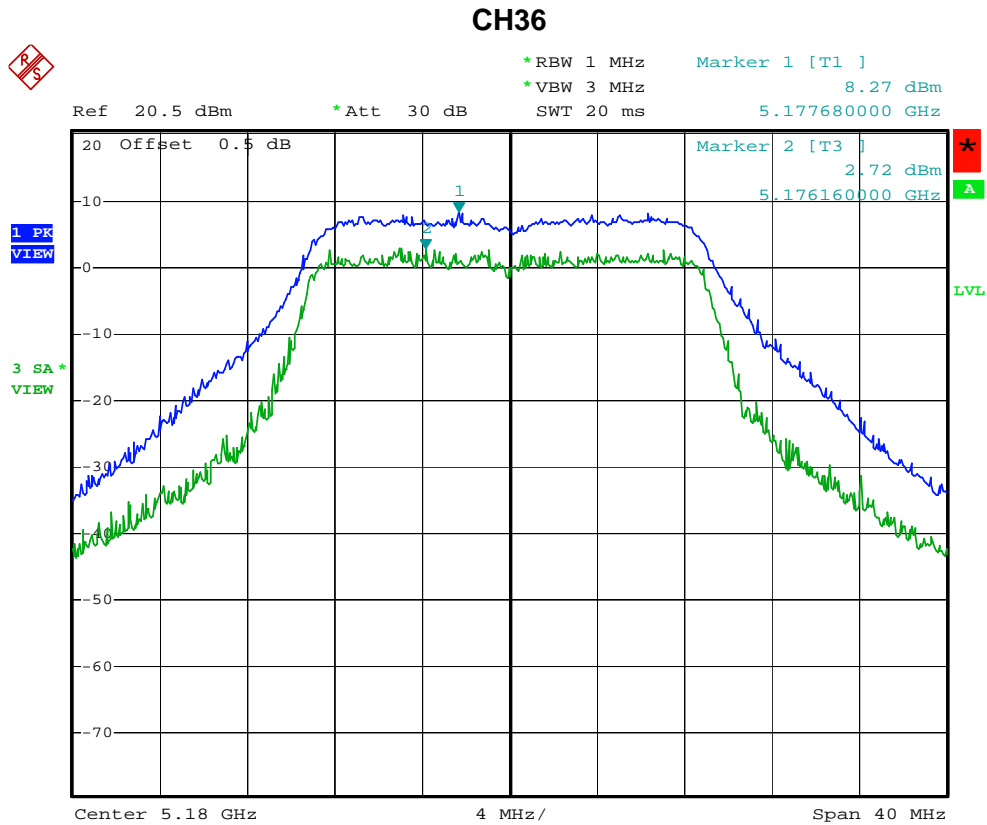


Center 5.24 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH36, CH40, CH48(Port. 1)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH36	5180	5.55	13
CH40	5200	4.11	13
CH48	5240	3.73	13

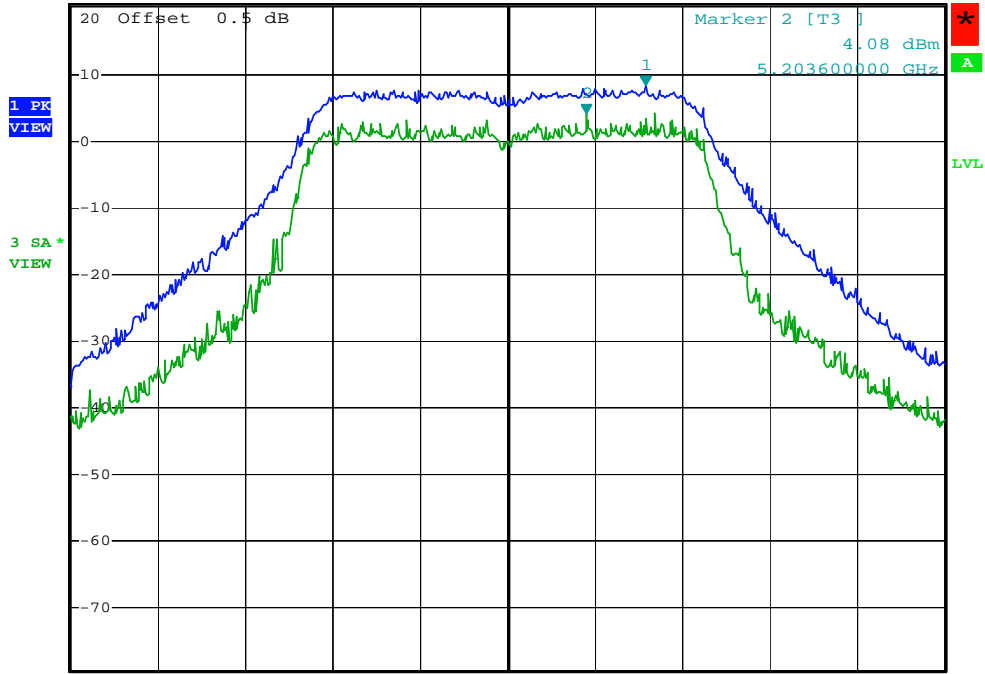




CH40



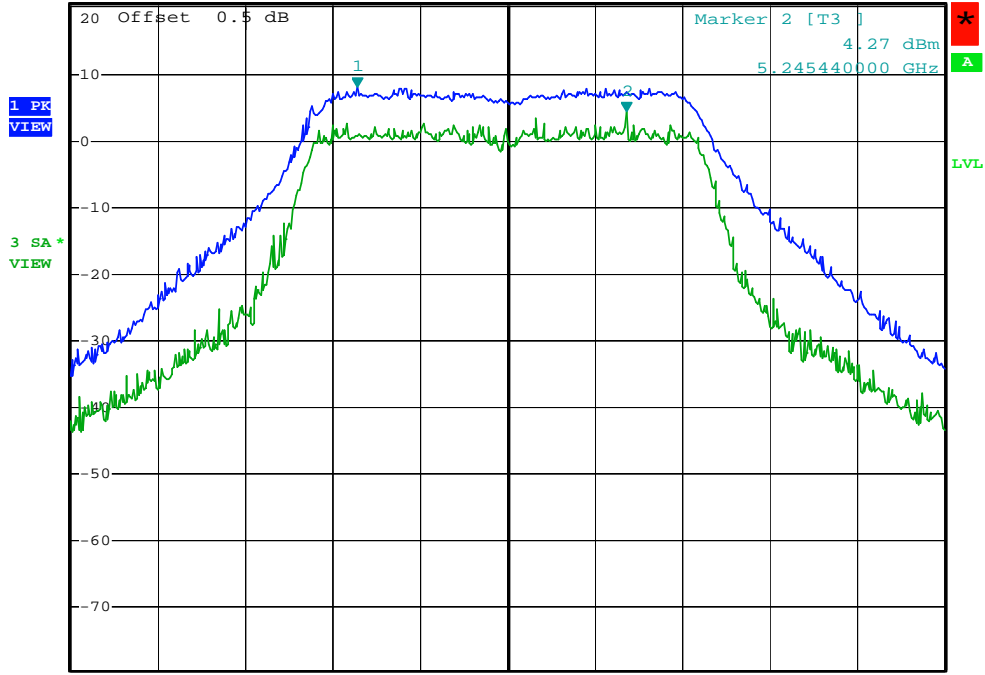
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 8.19 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.206320000 GHz



CH48



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 8.00 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.233120000 GHz





Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH38, CH46(Port. 0)		

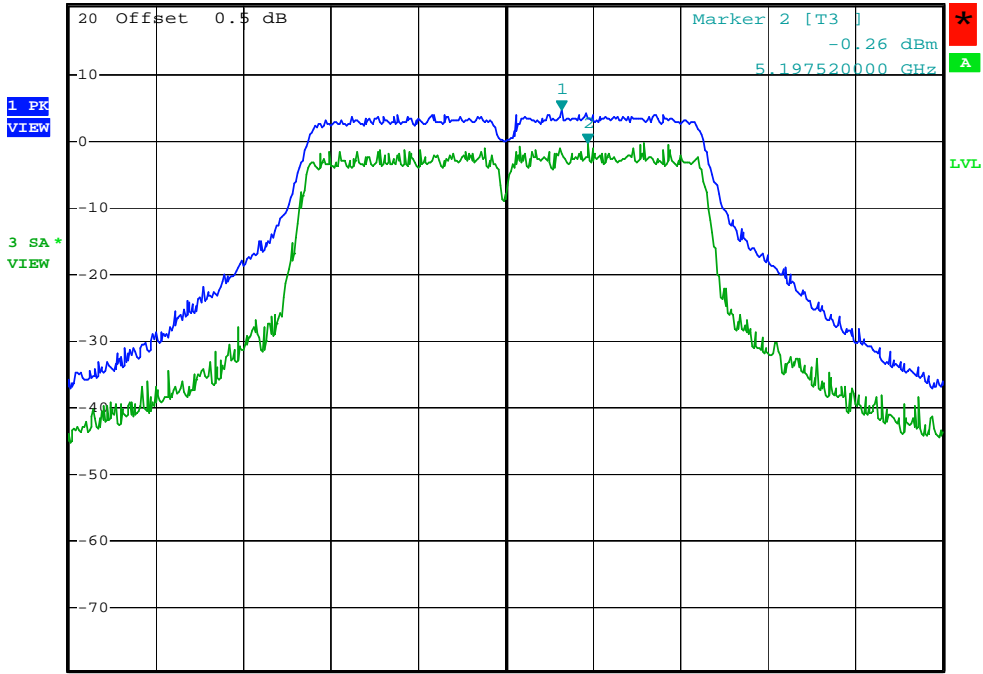
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH38	5190	4.81	13
CH46	5230	3.96	13



CH38



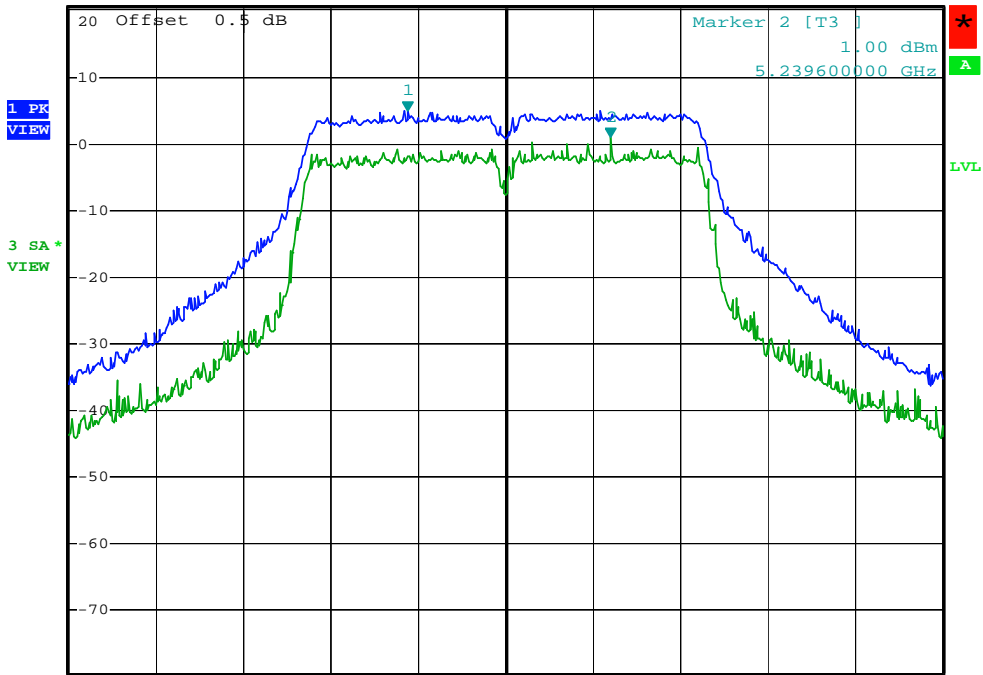
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 4.55 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.195120000 GHz



CH46



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 4.96 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.221040000 GHz





Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH38, CH46(Port. 1)		

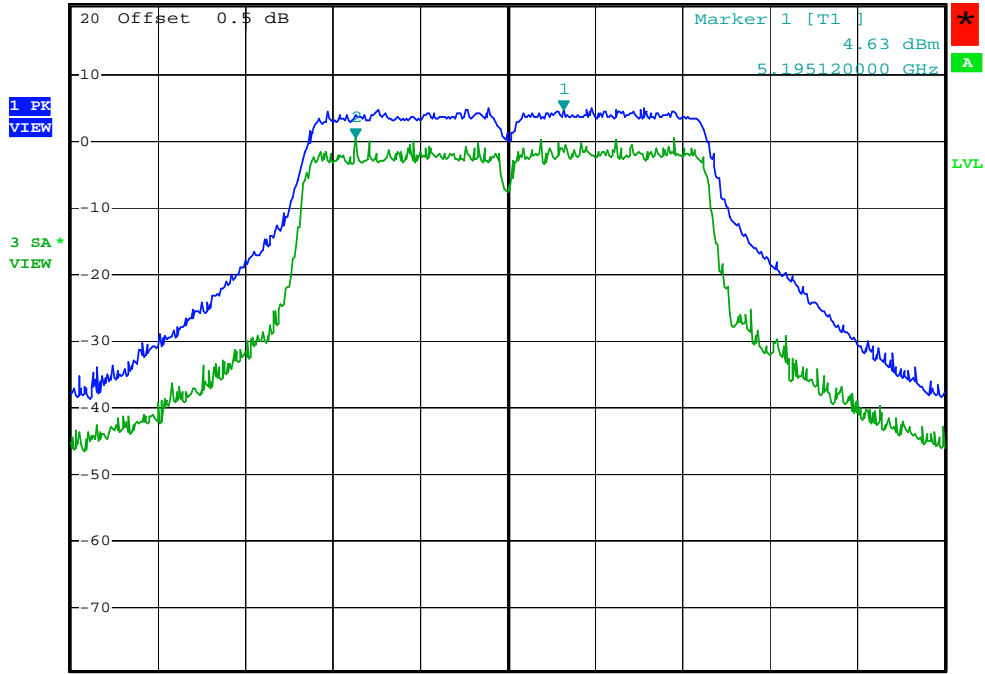
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH38	5190	4.13	13
CH46	5230	4.66	13



CH38



*RBW 1 MHz Marker 2 [T3]
*VBW 3 MHz 0.50 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.176080000 GHz

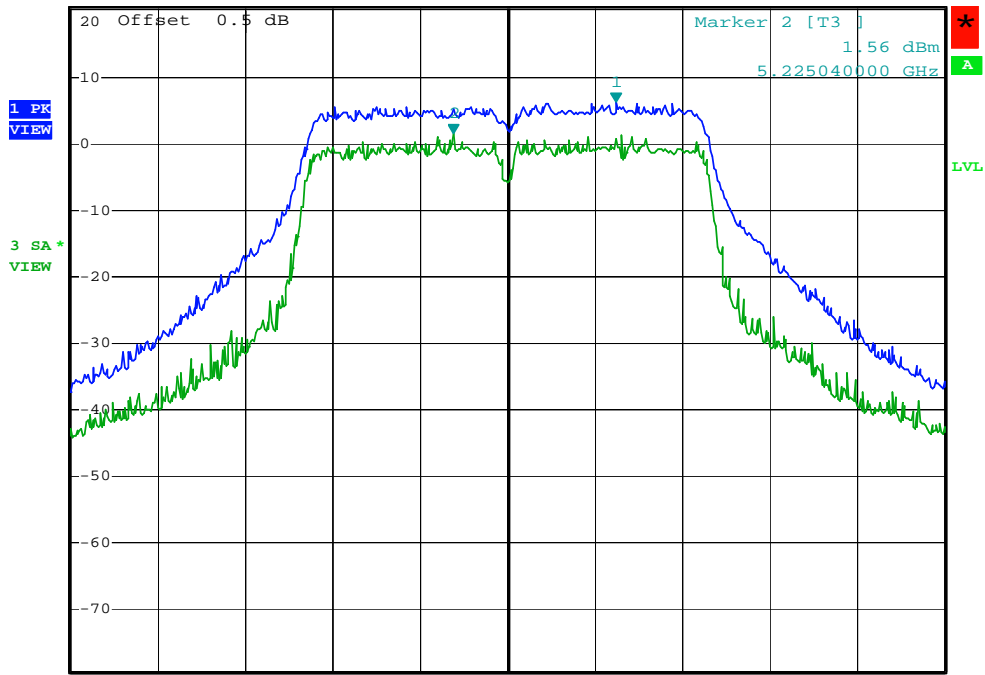


Center 5.19 GHz 8 MHz/ Span 80 MHz

CH46



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 6.22 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.239920000 GHz



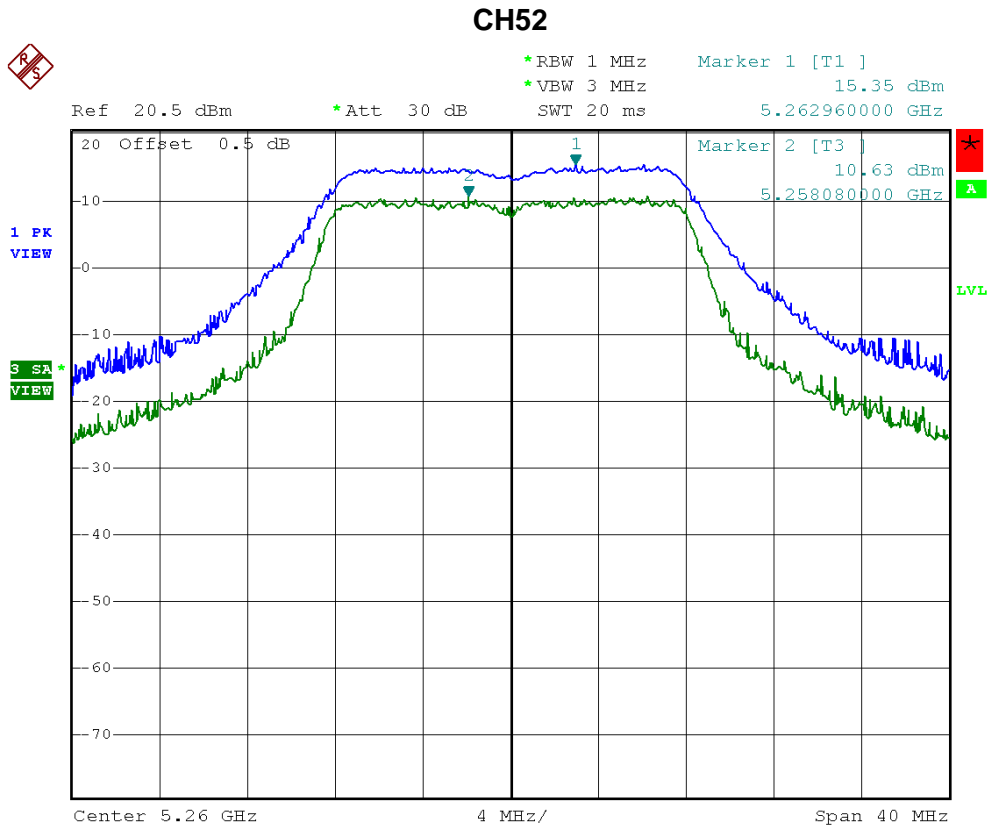
Center 5.23 GHz 8 MHz/ Span 80 MHz



9.1.7 TEST RESULTS - BAND 2

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH52, CH60, CH64		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
52	5260	4.72	13
60	5300	4.87	13
64	5320	6.64	13

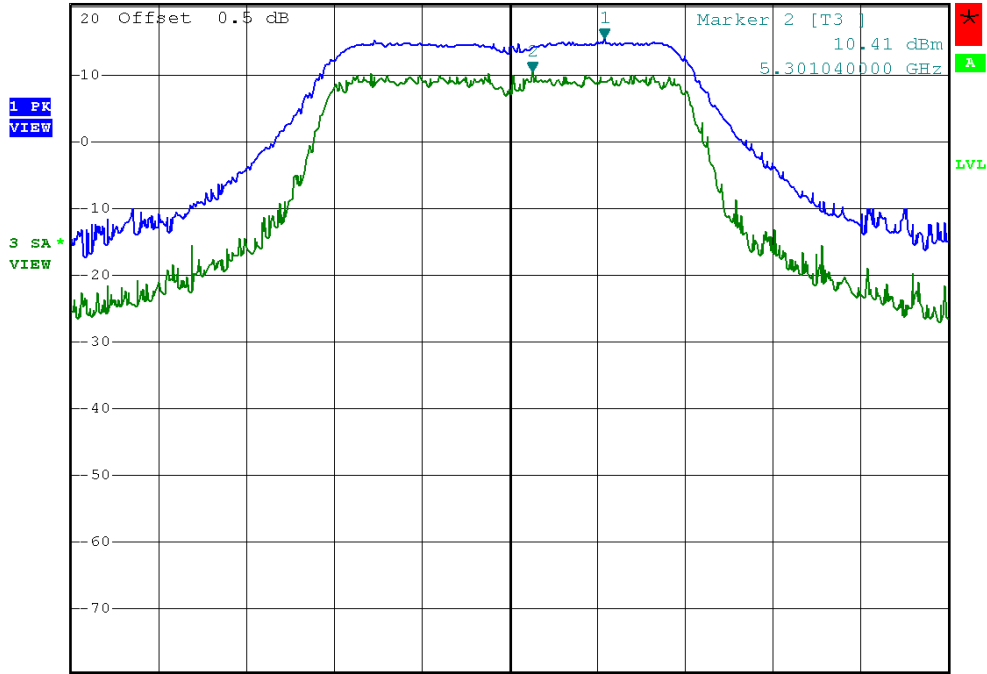




CH60



*RBW 1 MHz Marker 1 [T1] 15.28 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.304320000 GHz

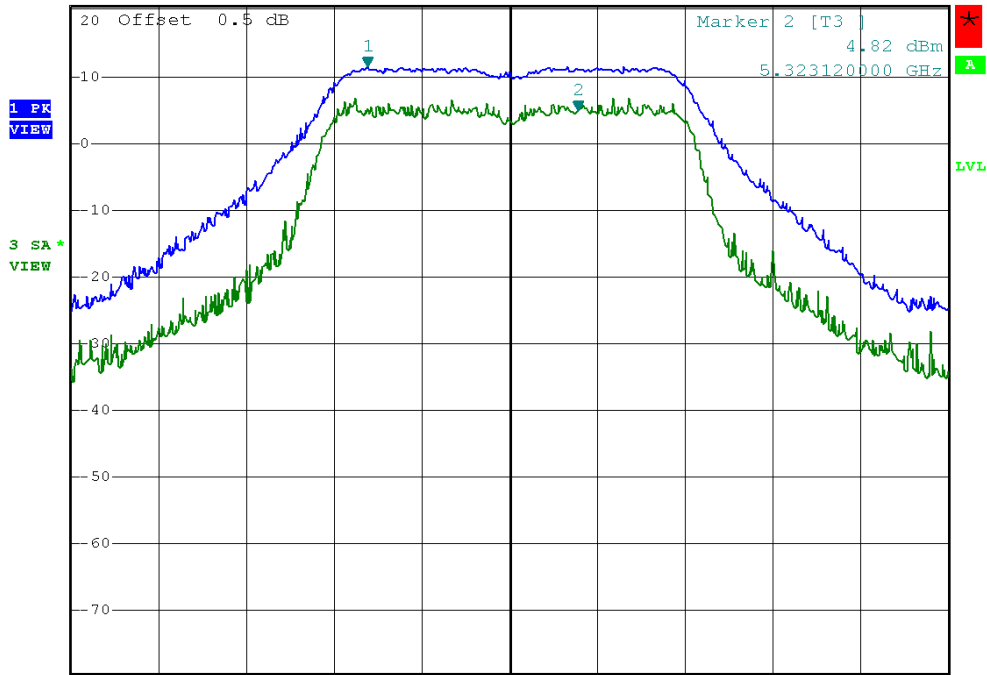


Center 5.3 GHz 4 MHz/ Span 40 MHz

CH64



*RBW 1 MHz Marker 1 [T1] 11.46 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.313520000 GHz



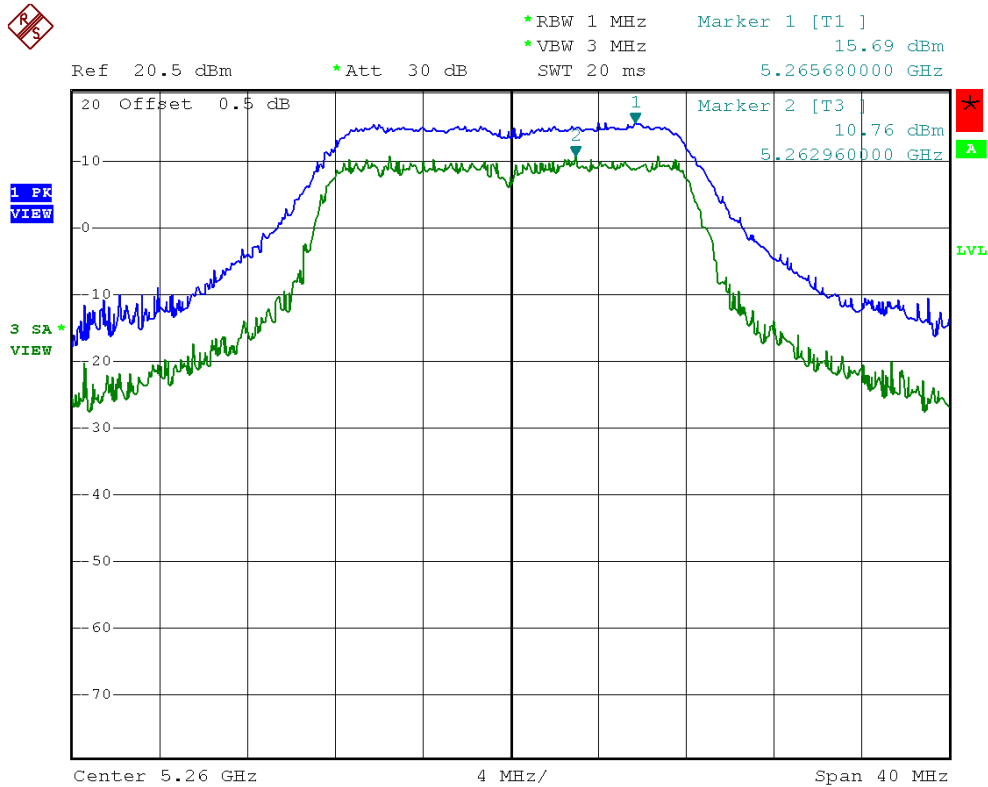
Center 5.32 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH52, CH60, CH64(Port. 0)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
52	5260	4.93	13
60	5300	4.92	13
64	5320	5.01	13

CH52

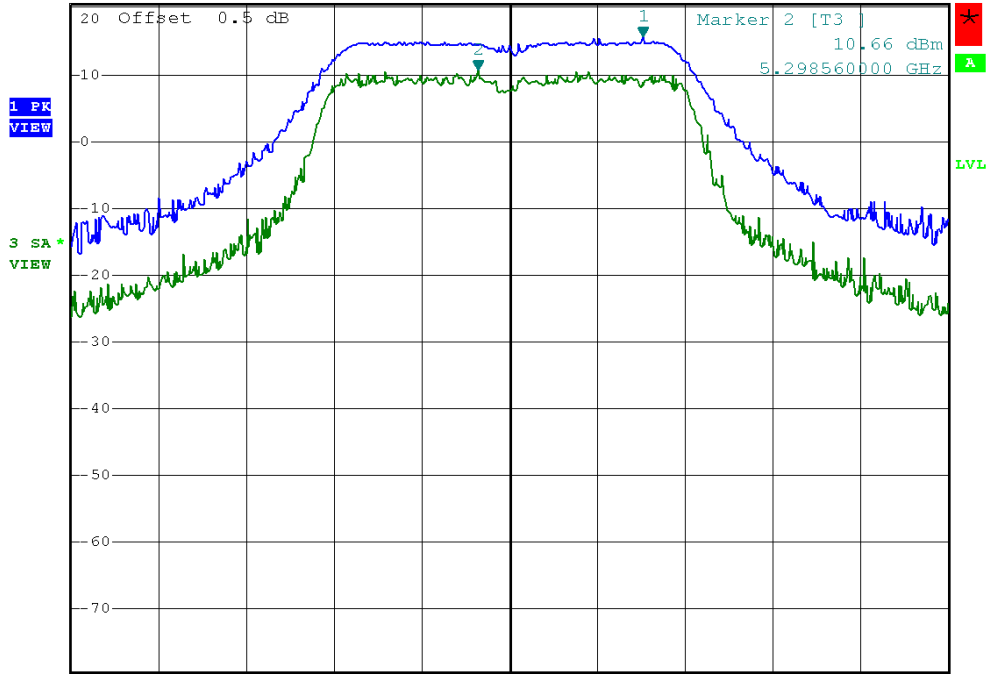




CH60



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 15.58 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.306080000 GHz

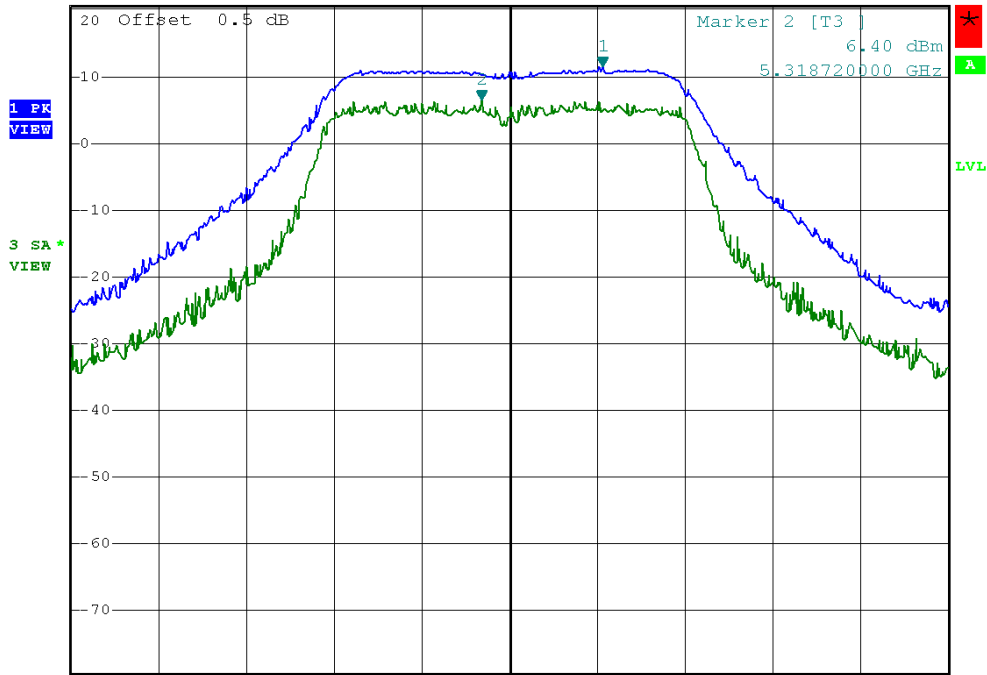


Center 5.3 GHz 4 MHz/ Span 40 MHz

CH64



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 11.41 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.324240000 GHz



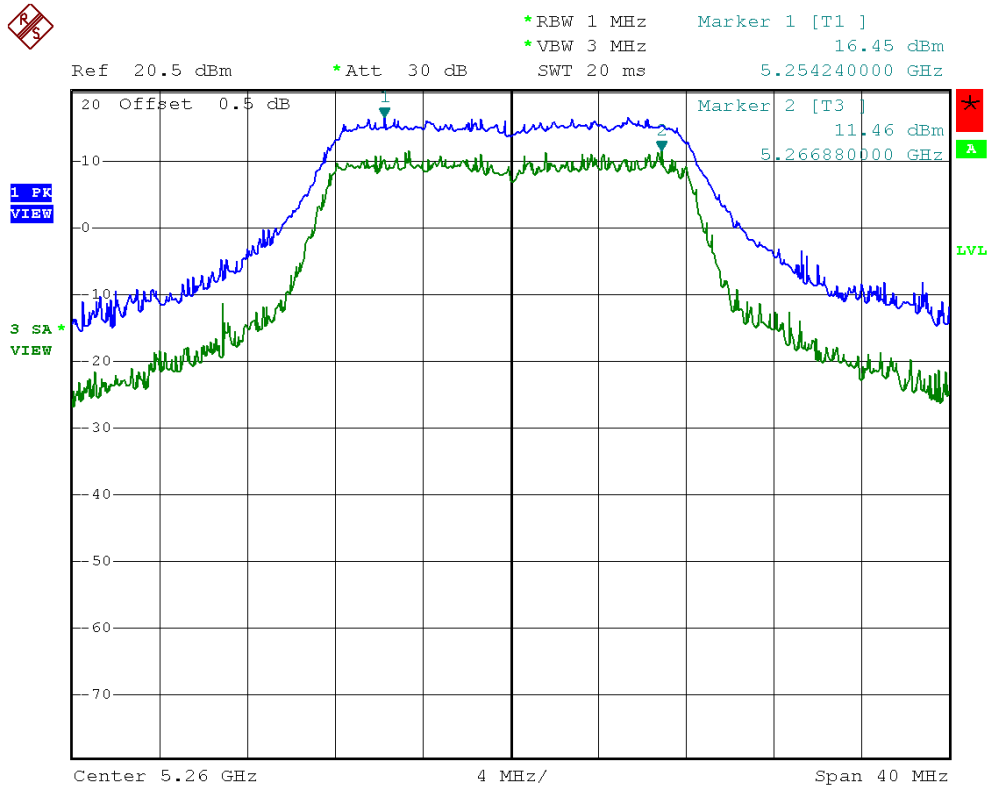
Center 5.32 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH52, CH60, CH64(Port. 1)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
52	5260	4.99	13
60	5300	5.07	13
64	5320	5.27	13

CH52

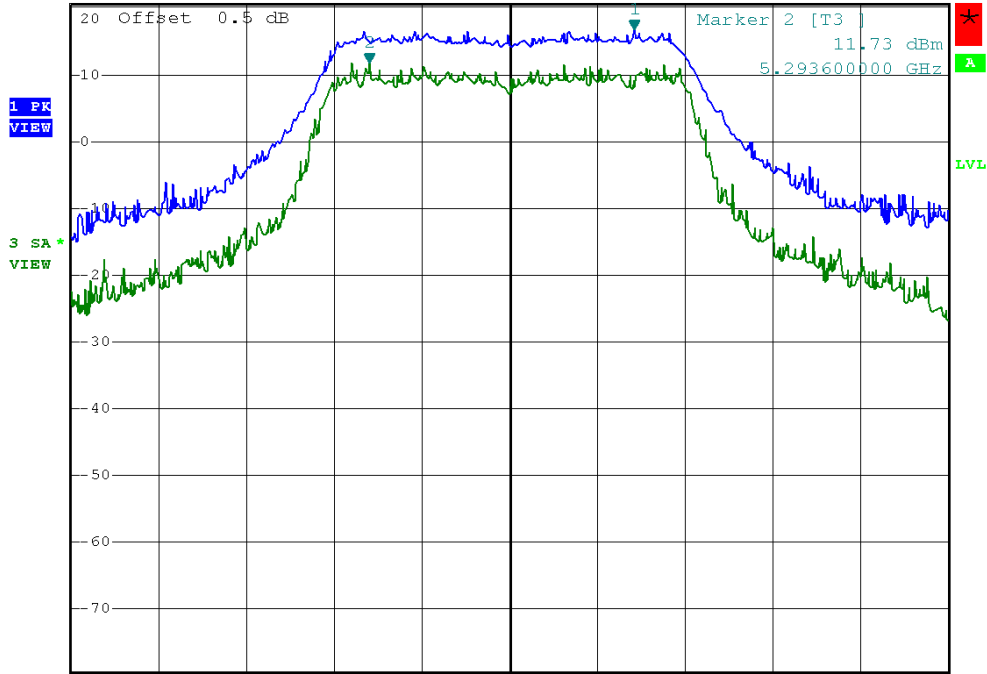




CH60



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 16.80 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.305680000 GHz

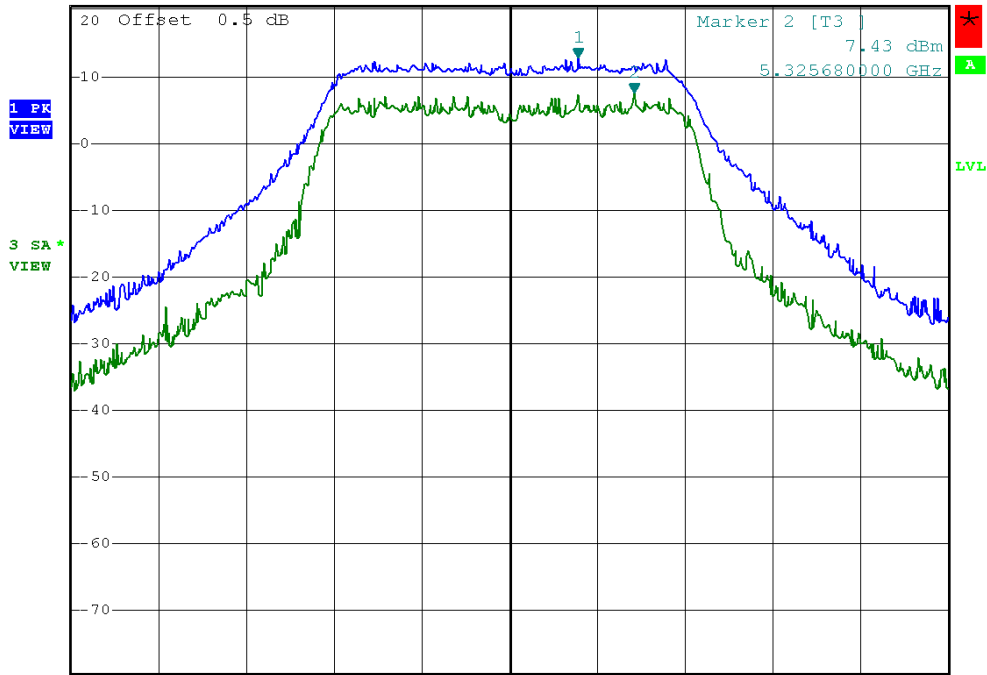


Center 5.3 GHz 4 MHz/ Span 40 MHz

CH64



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 12.70 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.323120000 GHz



Center 5.32 GHz 4 MHz/ Span 40 MHz



Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH54, CH62(Port. 0)		

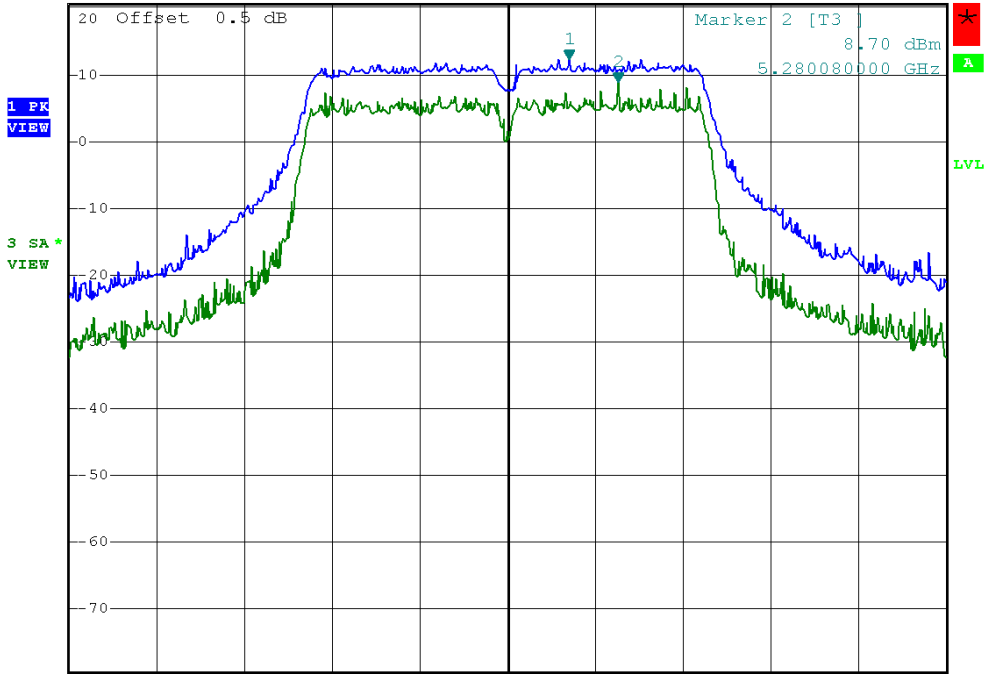
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
54	5270	3.64	13
62	5310	4.53	13



CH54



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 12.34 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.275600000 GHz

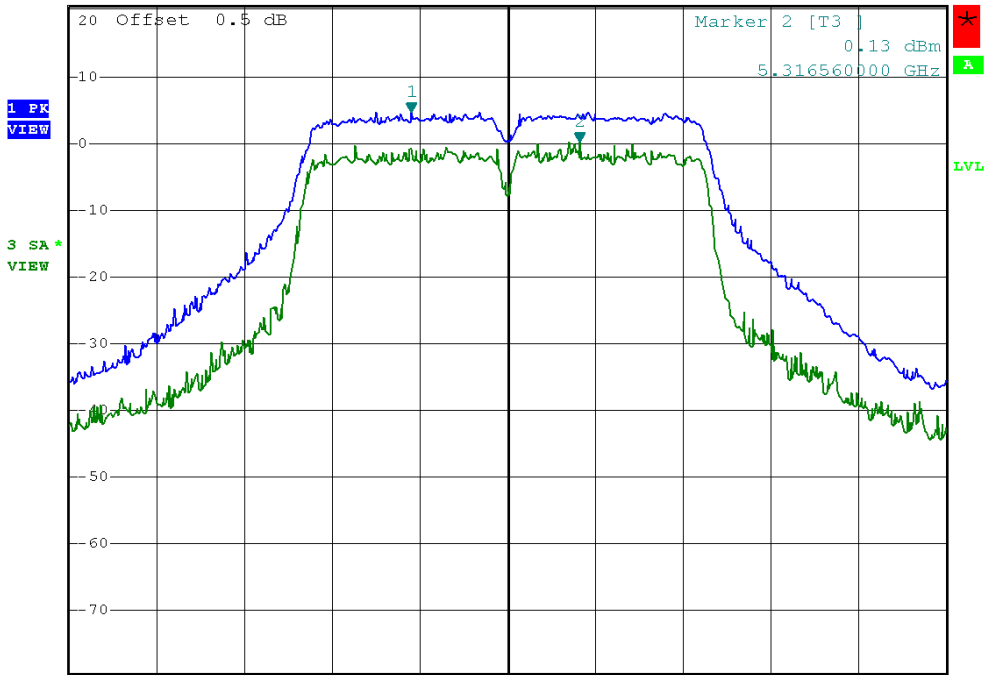


Center 5.27 GHz 8 MHz/ Span 80 MHz

CH62



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 4.66 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.301200000 GHz



Center 5.31 GHz 8 MHz/ Span 80 MHz



Neutron Engineering Inc.

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH54, CH62(Port. 1)		

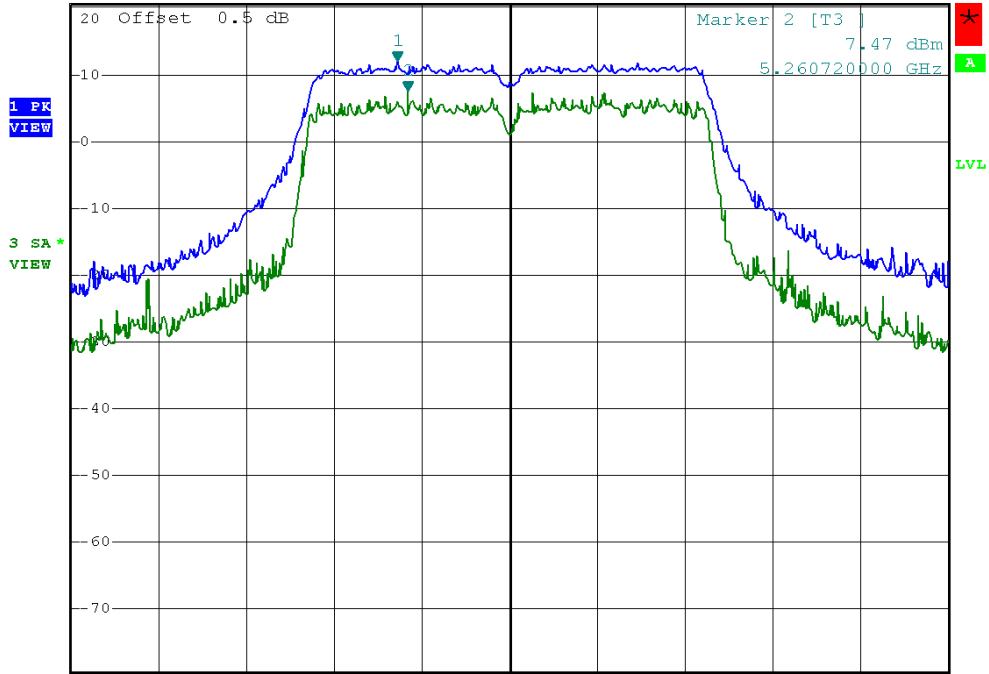
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
54	5270	4.40	13
62	5310	4.88	13



CH54



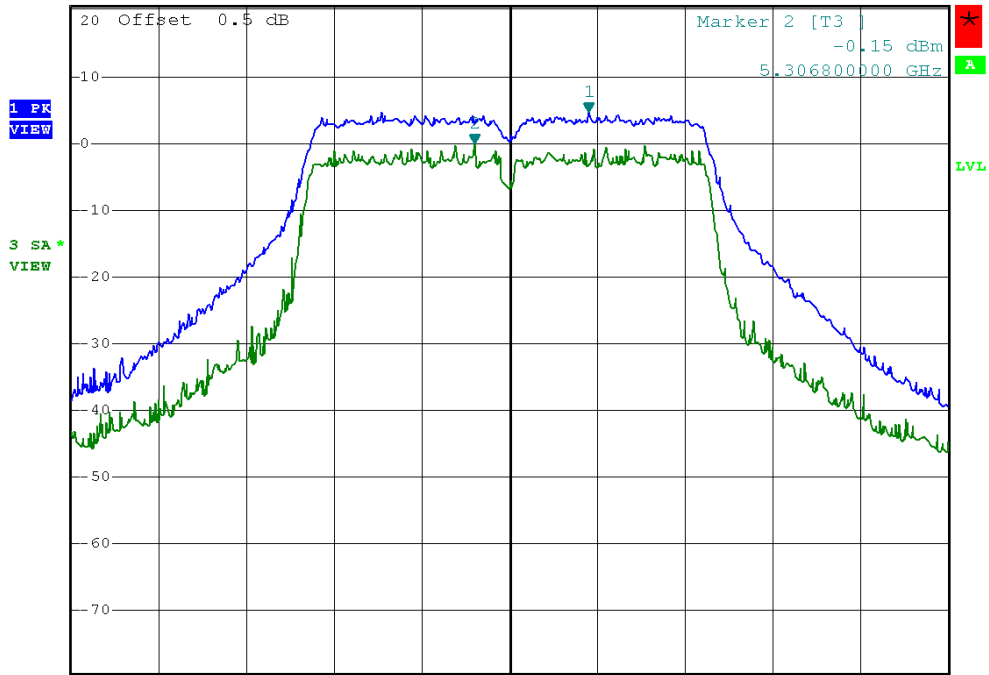
*RBW 1 MHz Marker 1 [T1] 11.87 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.259760000 GHz



CH62



*RBW 1 MHz Marker 1 [T1] 4.73 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.317200000 GHz



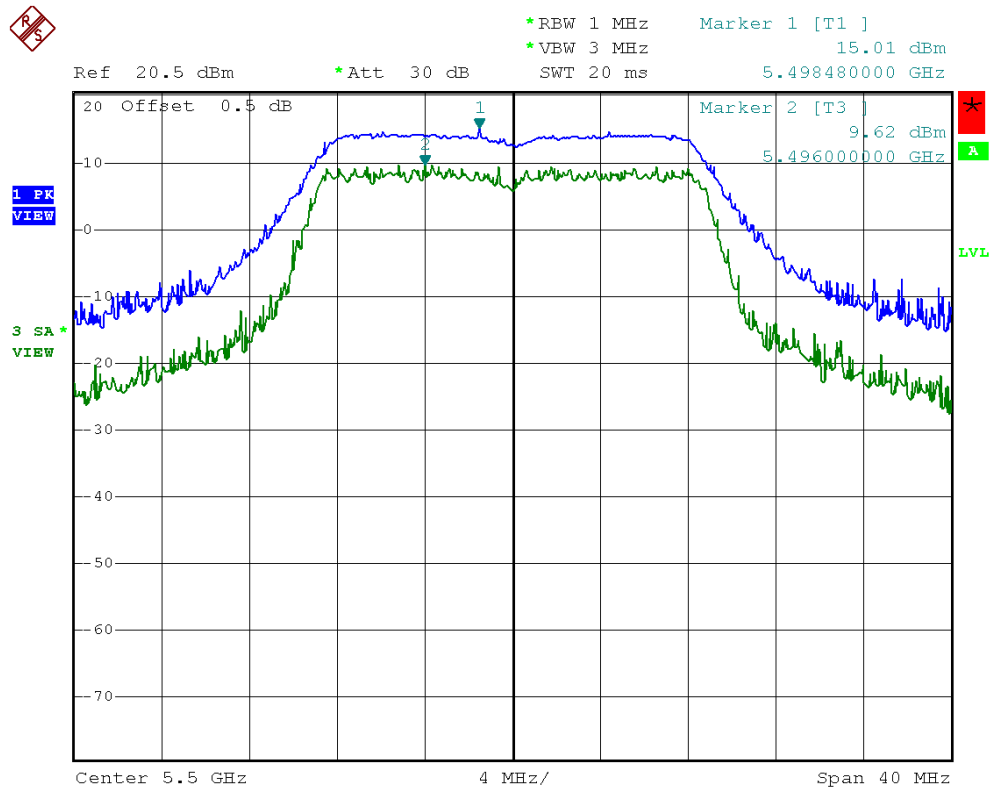


9.1.8 TEST RESULTS - BAND 3

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH100, CH116, CH140		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
100	5500	5.39	13
116	5580	4.84	13
140	5700	5.14	13

CH100

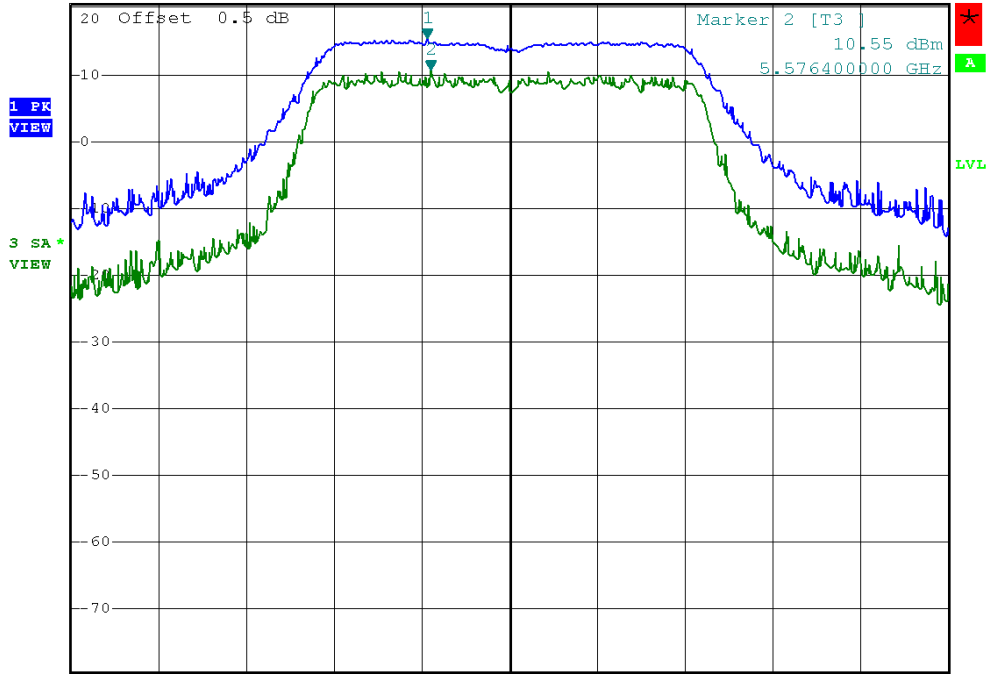




CH116



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 15.39 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.576240000 GHz

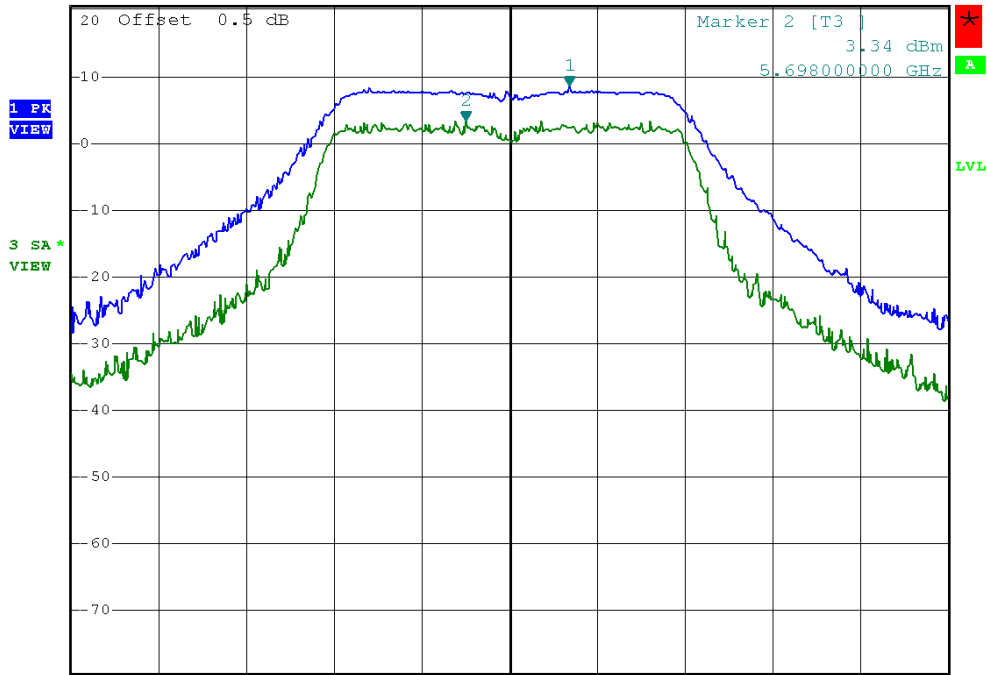


Center 5.58 GHz 4 MHz/ Span 40 MHz

CH140



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 8.48 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.702720000 GHz



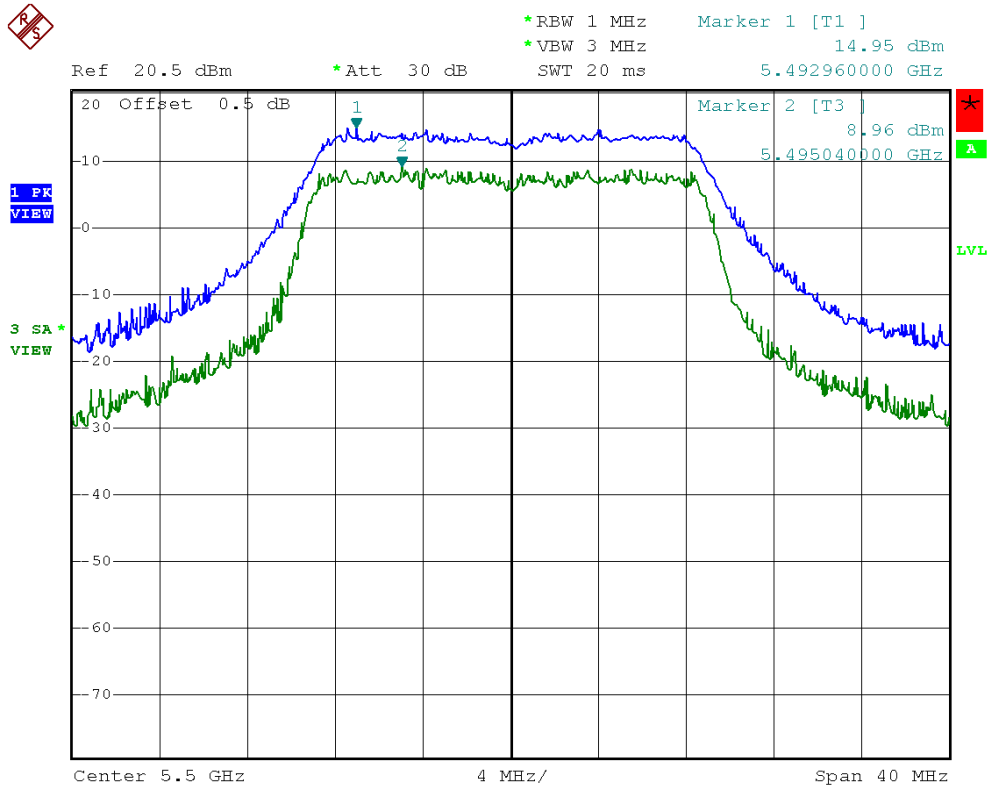
Center 5.7 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH100, CH116, CH140(Port. 0)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
100	5500	5.99	13
116	5580	4.13	13
140	5700	4.89	13

CH100

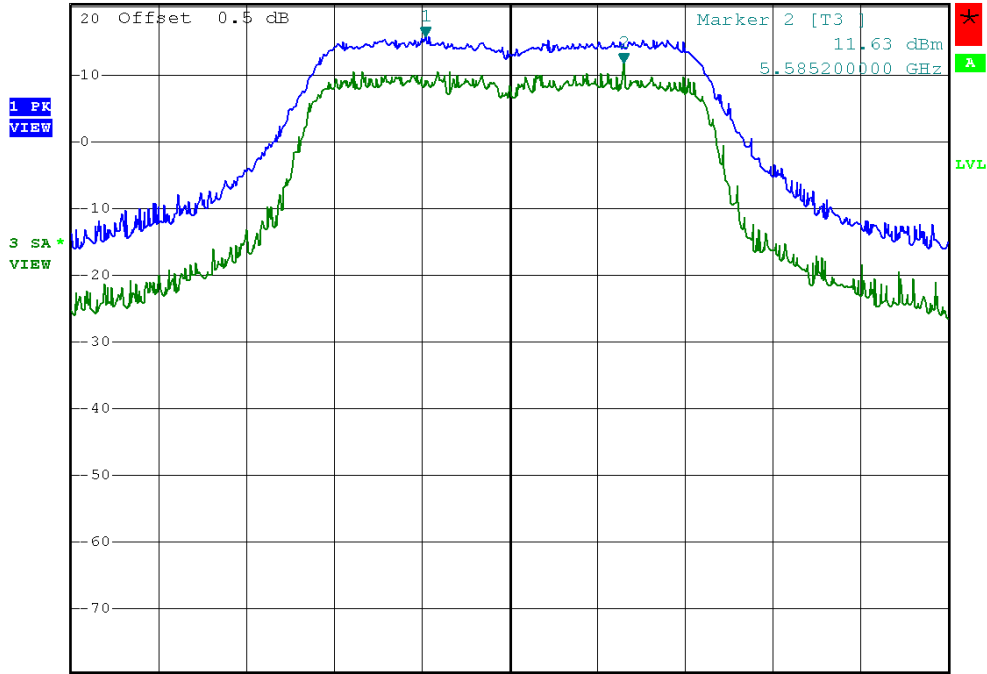




CH116



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 15.76 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.576160000 GHz

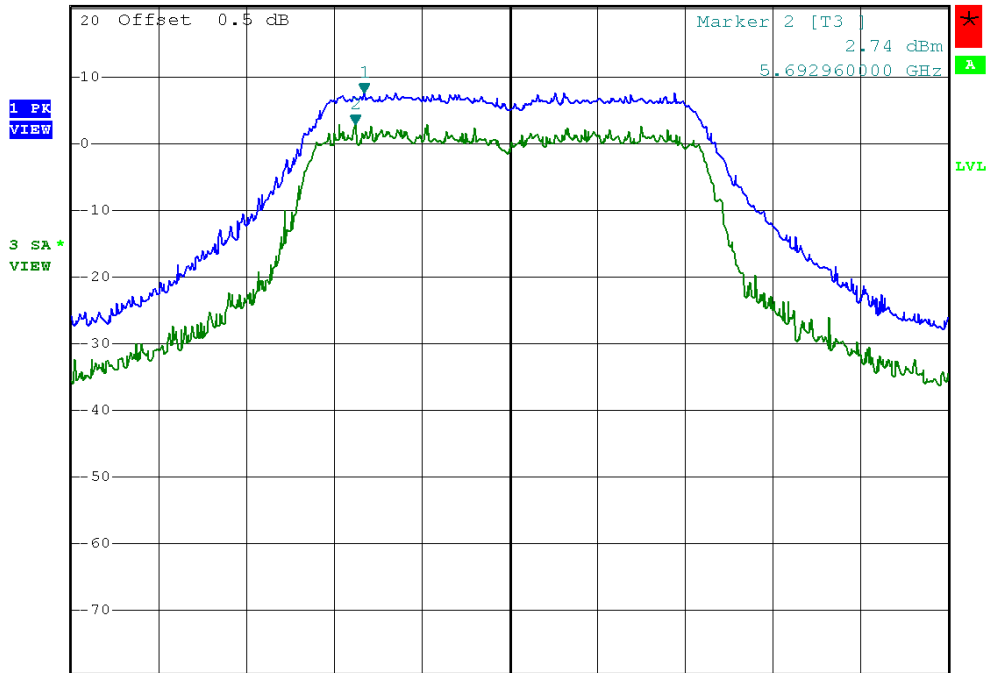


Center 5.58 GHz 4 MHz/ Span 40 MHz

CH140



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 7.63 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.693360000 GHz



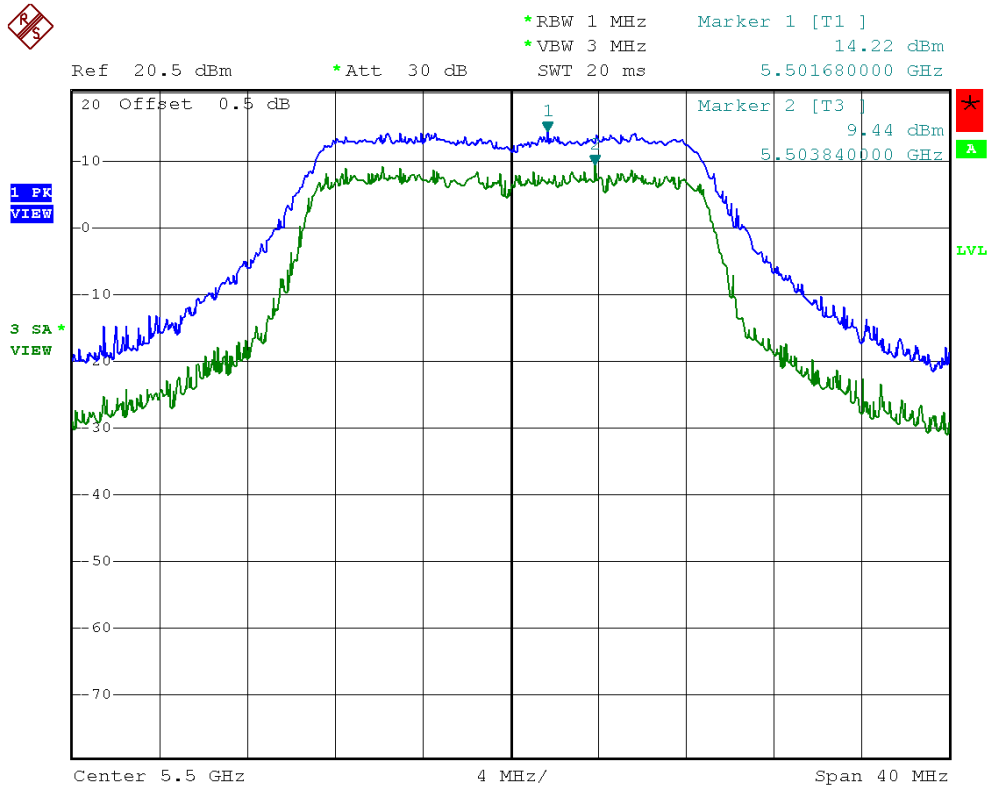
Center 5.7 GHz 4 MHz/ Span 40 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/20M/CH100, CH116, CH140 (Port. 1)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
100	5500	4.78	13
116	5580	5.18	13
140	5700	3.72	13

CH100

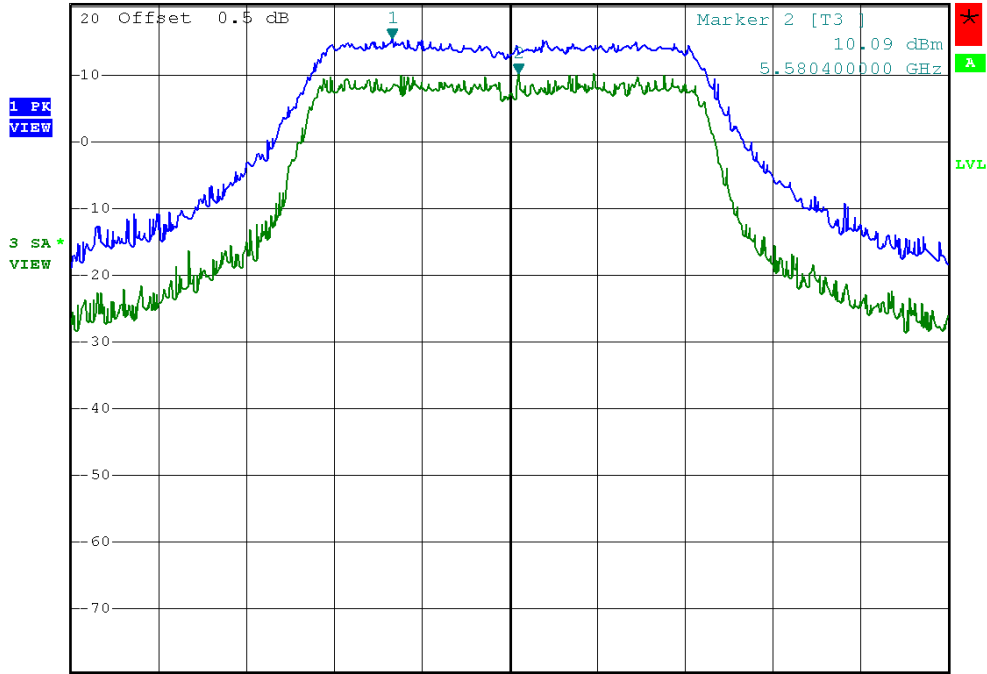




CH116



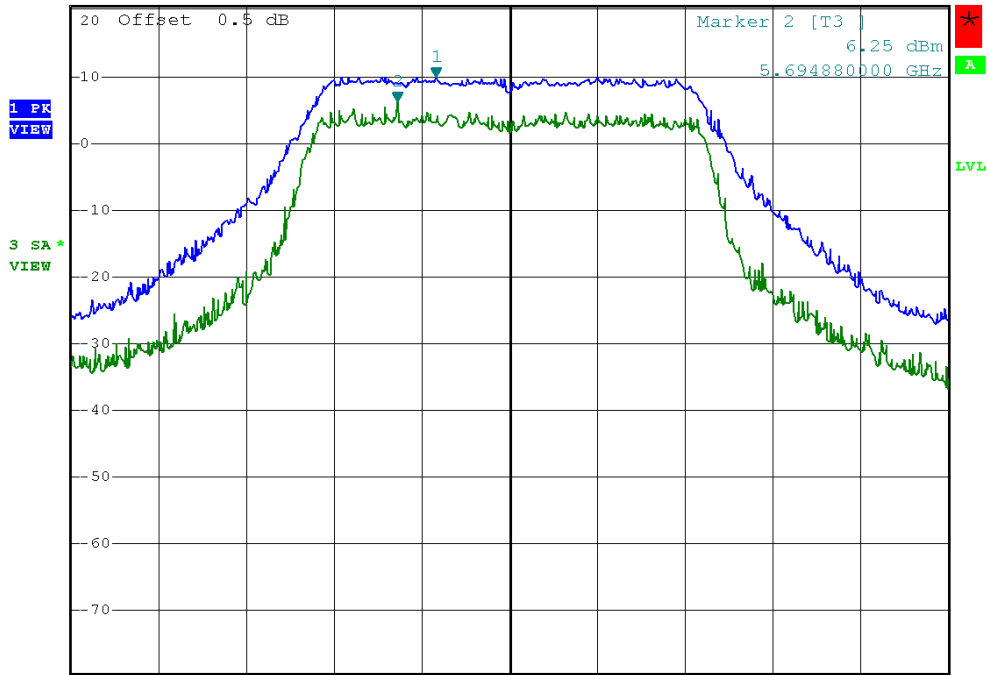
*RBW 1 MHz Marker 1 [T1] 15.27 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.574640000 GHz



CH140



*RBW 1 MHz Marker 1 [T1] 9.97 dBm
*VBW 3 MHz
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.696640000 GHz

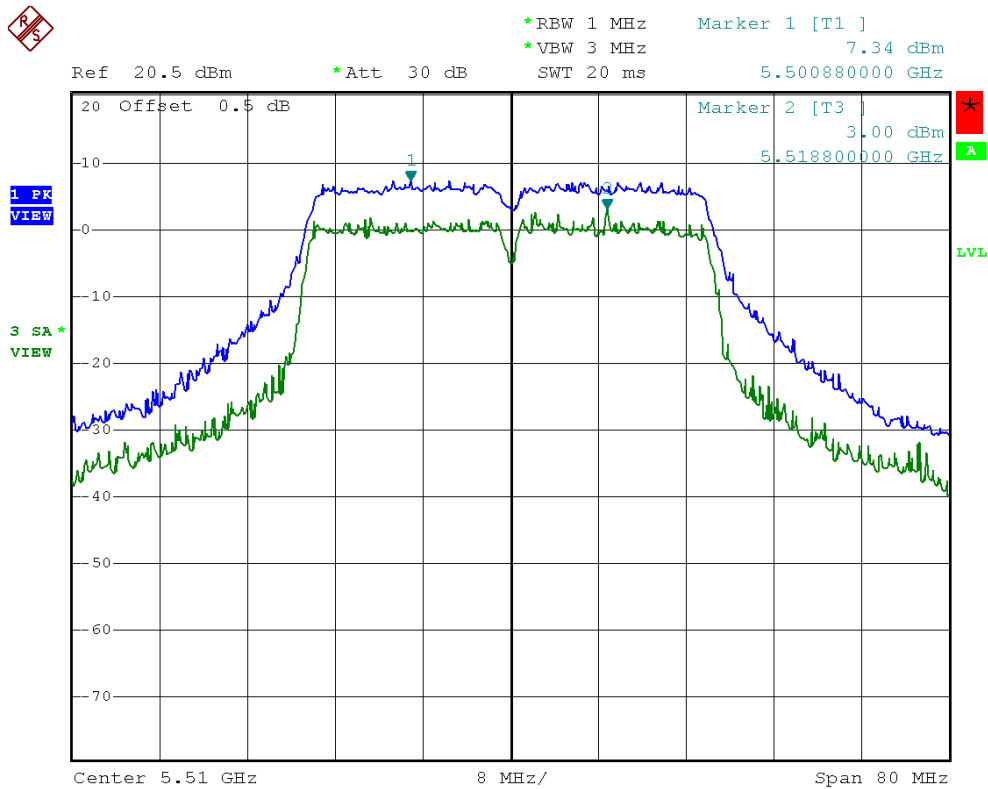




EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH102, CH110, CH134(Port. 0)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
102	5510	4.34	13
110	5550	5.45	13
134	5670	4.63	13

CH102

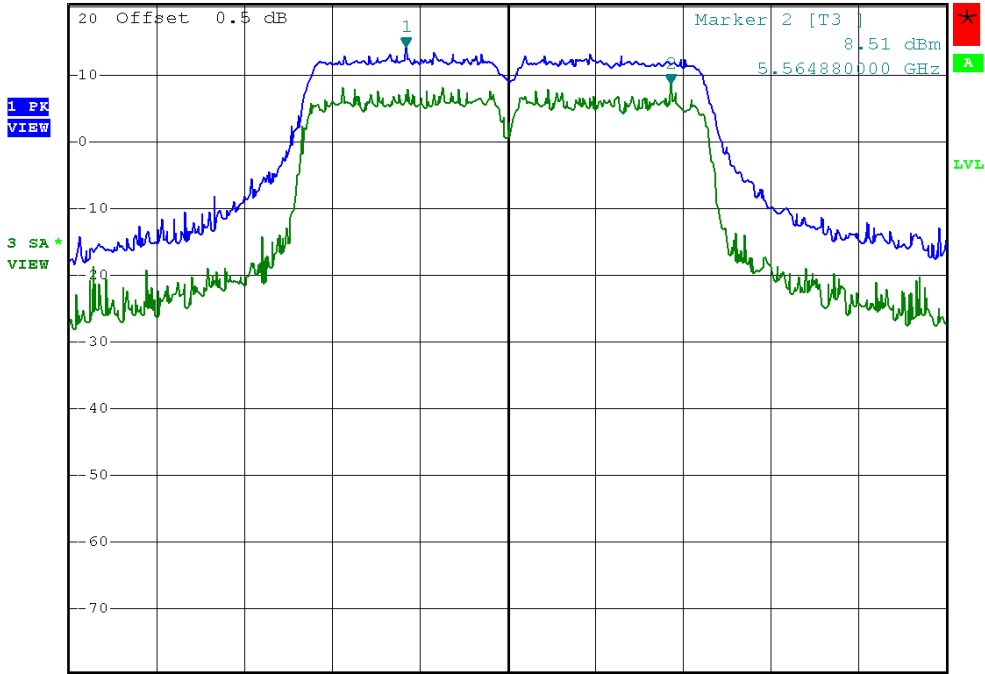




CH110



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 13.96 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.540720000 GHz

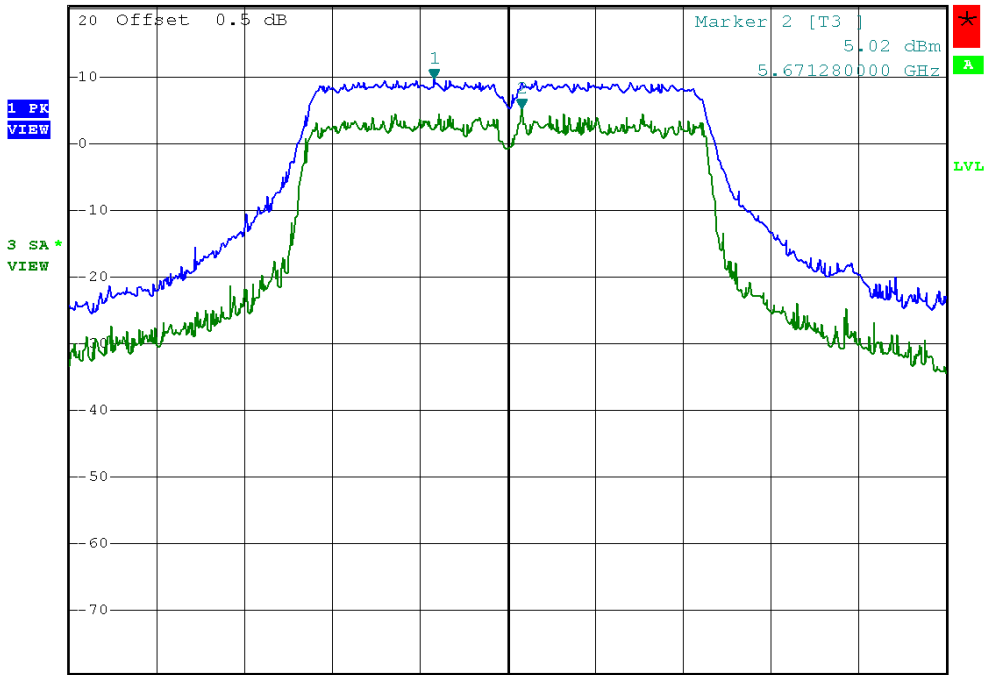


Center 5.55 GHz 8 MHz/ Span 80 MHz

CH134



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 9.65 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.663280000 GHz



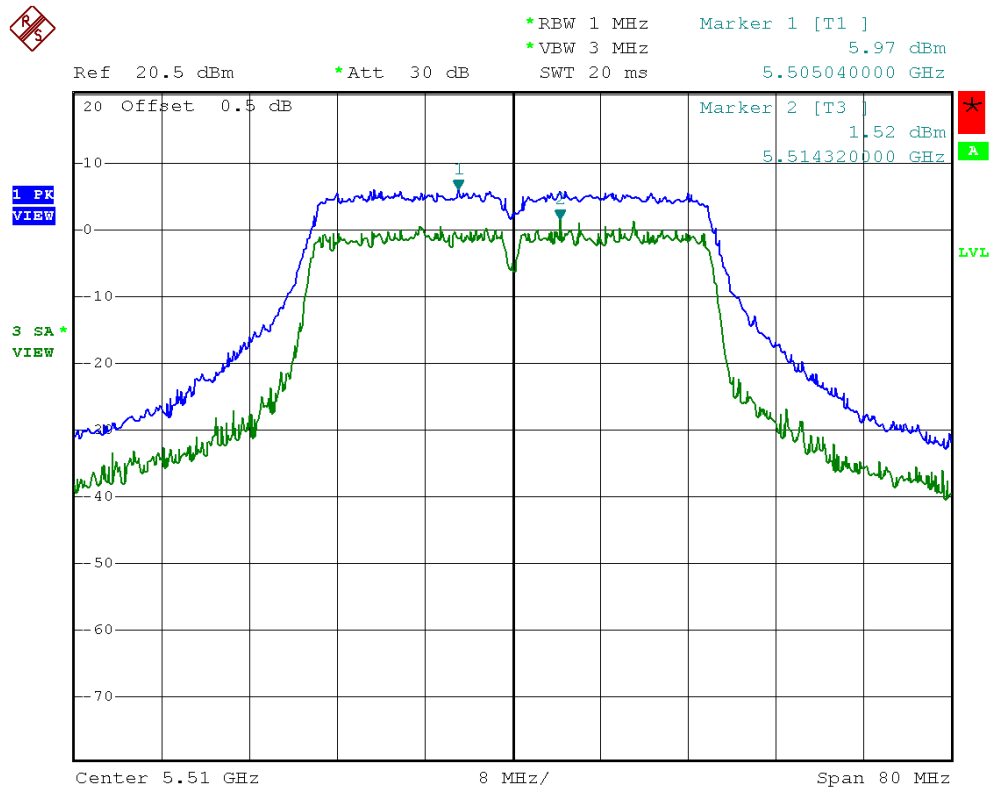
Center 5.67 GHz 8 MHz/ Span 80 MHz



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n/40M/CH102, CH110, CH134(Port. 1)		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
102	5510	4.45	13
110	5550	4.70	13
134	5670	3.36	13

CH102

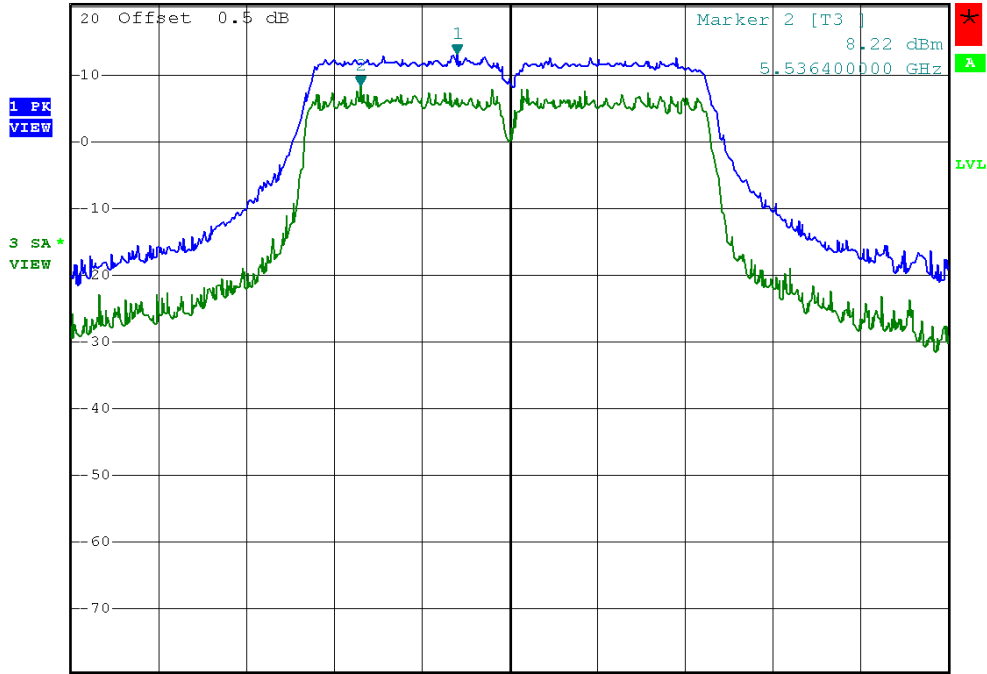




CH110



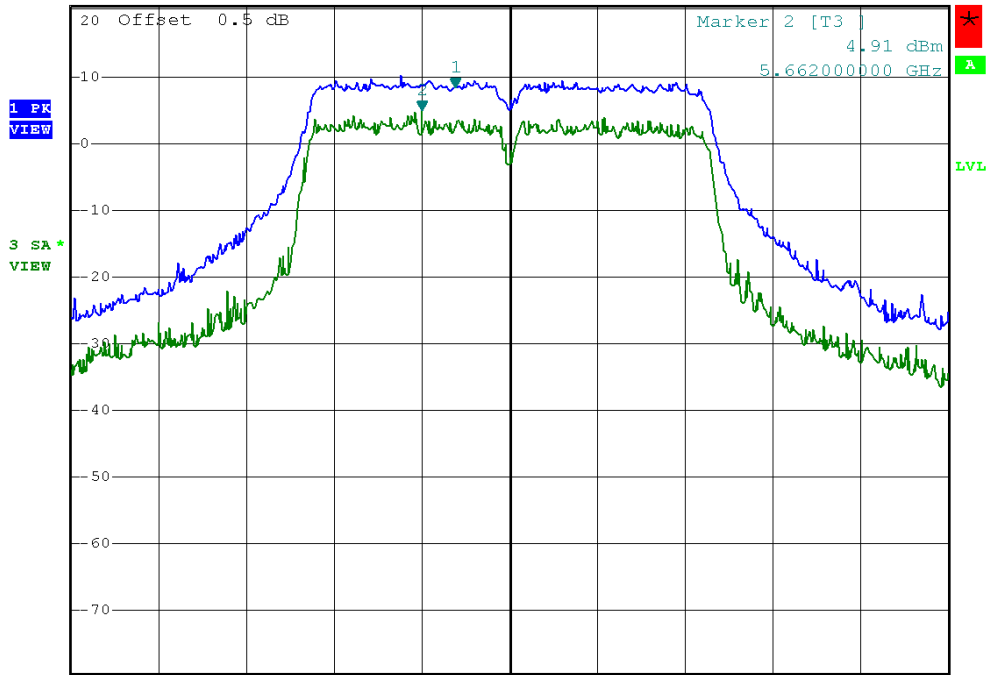
*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 12.92 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.545200000 GHz



CH134



*RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz 8.27 dBm
Ref 20.5 dBm *Att 30 dB SWT 20 ms 5.665040000 GHz





10. Frequency Stability Measurement

10.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C			
Test Item	Limit	Frequency Range (MHz)	Result
Frequency Stability	specified in the user's manual or $\pm 20\text{ppm}$ (IEEE 802.11a specification)	5150 - 5250	PASS
		5250 - 5350	PASS
		5470 - 5725	PASS
		5725 - 5825	N/A

10.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Sep. 09, 2010
2	Precision Oven Tester	HOLINK	H-T-1F-D	BA03101701	May. 14, 2010

Remark: " N/A" denotes No Model Name, Serial No. or No Calibration specified.

10.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

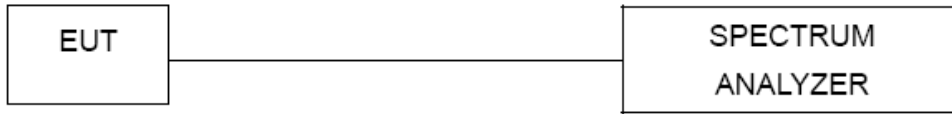
d. Extreme temperature rule is $-30^{\circ}\text{C} \sim 50^{\circ}\text{C}$.

10.1.3 DEVIATION FROM STANDARD

No deviation.



10.1.4 TEST SETUP



10.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



10.1.6 TEST RESULTS

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a/CH36, CH40, CH48		

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)	
	5200	-
126.50	5200.004123	
110.00	5200.004214	
93.50	5200.004167	
Max. Deviation (MHz)	0.004214	
Max. Deviation (ppm)	0.81	

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)	
	5200	-
-30	5200.074740	
-20	5200.069340	
-10	5200.064460	
0	5200.050400	
10	5200.025800	
20	5200.004140	
30	5199.982200	
40	5199.967600	
50	5199.961440	
Max. Deviation (MHz)	0.074740	
Max. Deviation (ppm)	14.37	



11. RF EXPOSURE TEST

11.1 APPLIED PROCEDURES / LIMIT

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

11.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Sep. 09, 2010

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

11.1.2 MPE CALCULATION METHOD

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

- E** = Electric field (V/m)
- P** = Peak RF output power (W)
- G** = EUT Antenna numeric gain (numeric)
- d** = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained



11.1.3 DEVIATION FROM STANDARD

No deviation.

11.1.4 TEST SETUP



11.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



11.1.6 TEST RESULTS - BAND 1

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5180	2.67	1.8493	16.3100	42.7563	0.015738	1
5200	2.67	1.8493	16.3500	43.1519	0.015884	1
5240	2.67	1.8493	15.5500	35.8922	0.013211	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Single TX Port. 0		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5180	2.67	1.8493	13.9000	24.5471	0.009035	1
5200	2.67	1.8493	13.8900	24.4906	0.009015	1
5240	2.67	1.8493	13.7300	23.6048	0.008689	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Single TX Port. 1		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5180	1.80	1.5136	13.8900	24.4906	0.007378	1
5200	1.80	1.5136	13.8500	24.2661	0.007311	1
5240	1.80	1.5136	14.0000	25.1189	0.007567	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Dual TX (Port. 0 + Port. 1)		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5180	4.47	2.7990	16.9053	49.0377	0.027320	1
5200	4.47	2.7990	16.8803	48.7567	0.027163	1
5240	4.47	2.7990	16.8774	48.7236	0.027145	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Single TX Port. 0		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5190	2.67	1.8493	13.2700	21.2324	0.007815	1
5230	2.67	1.8493	14.0500	25.4097	0.009353	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Single TX Port. 1		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5190	1.80	1.5136	13.2800	21.2814	0.006411	1
5230	1.80	1.5136	13.9100	24.6037	0.007412	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Dual TX (Port. 0 + Port. 1)		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5190	4.47	2.7990	16.2853	42.5138	0.023685	1
5230	4.47	2.7990	16.9909	50.0134	0.027864	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



11.1.7 TEST RESULTS - BAND 2

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5260	2.67	1.8493	21.2000	131.8257	0.048523	1
5300	2.67	1.8493	21.0200	126.4736	0.046553	1
5320	2.67	1.8493	17.0500	50.6991	0.018662	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Single TX Port. 0		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5260	2.67	1.8493	19.0000	79.4328	0.029238	1
5300	2.67	1.8493	19.0300	79.9834	0.029441	1
5320	2.67	1.8493	14.0500	25.4097	0.009353	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Single TX Port. 1		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5260	1.80	1.5136	19.5200	89.5365	0.026974	1
5300	1.80	1.5136	19.1700	82.6038	0.024886	1
5320	1.80	1.5136	14.3900	27.4789	0.008278	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Dual TX (Port. 0 + Port. 1)		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5260	4.47	2.7990	22.2781	168.9693	0.094137	1
5300	4.47	2.7990	22.1109	162.5872	0.090581	1
5320	4.47	2.7990	17.2336	52.8887	0.029465	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Single TX Port. 0		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5270	2.67	1.8493	20.0500	101.1579	0.037235	1
5310	2.67	1.8493	13.4800	22.2844	0.008203	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Single TX Port. 1		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5270	1.80	1.5136	20.6900	117.2195	0.035314	1
5310	1.80	1.5136	13.2900	21.3304	0.006426	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Dual TX (Port. 0 + Port. 1)		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5270	4.47	2.7990	23.3921	218.3775	0.121663	1
5310	4.47	2.7990	16.3963	43.6148	0.024299	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



11.1.8 TEST RESULTS - BAND 3

EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11a		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5500	2.67	1.8493	19.7700	94.8418	0.034910	1
5580	2.67	1.8493	21.3800	137.4042	0.050577	1
5700	2.67	1.8493	13.8700	24.3781	0.008973	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Single TX Port. 0		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5500	2.67	1.8493	19.1200	81.6582	0.030057	1
5580	2.67	1.8493	20.4500	110.9175	0.040827	1
5700	2.67	1.8493	15.1100	32.4340	0.011939	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Single TX Port. 1		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5500	1.80	1.5136	19.0600	80.5378	0.024263	1
5580	1.80	1.5136	20.5000	112.2018	0.033803	1
5700	1.80	1.5136	14.9800	31.4775	0.009483	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT20 Dual TX (Port. 0 + Port. 1)		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5500	4.47	2.7990	22.1004	162.1961	0.090363	1
5580	4.47	2.7990	23.4854	223.1193	0.124305	1
5700	4.47	2.7990	18.0558	63.9114	0.035606	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Single TX Port. 0		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5510	2.67	1.8493	15.5700	36.0579	0.013272	1
5550	2.67	1.8493	20.5700	114.0250	0.041971	1
5670	2.67	1.8493	17.9600	62.5173	0.023012	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Single TX Port. 1		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5510	1.80	1.5136	15.6400	36.6438	0.011040	1
5550	1.80	1.5136	20.6000	114.8154	0.034590	1
5670	1.80	1.5136	18.2200	66.3743	0.019996	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.



EUT :	Wireless 11n AP	Model Name :	AN0100
Temperature :	13 °C	Relative Humidity :	64 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	802.11n HT40 Dual TX (Port. 0 + Port. 1)		

Frequency (MHz)	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
5510	4.47	2.7990	18.6154	72.7016	0.040504	1
5550	4.47	2.7990	23.5953	228.8403	0.127492	1
5670	4.47	2.7990	21.1022	128.8916	0.071808	1

Remark :

- (1) The MIMO test requirement, MPE shall measure by using the total sum power of each transmitter chain.