

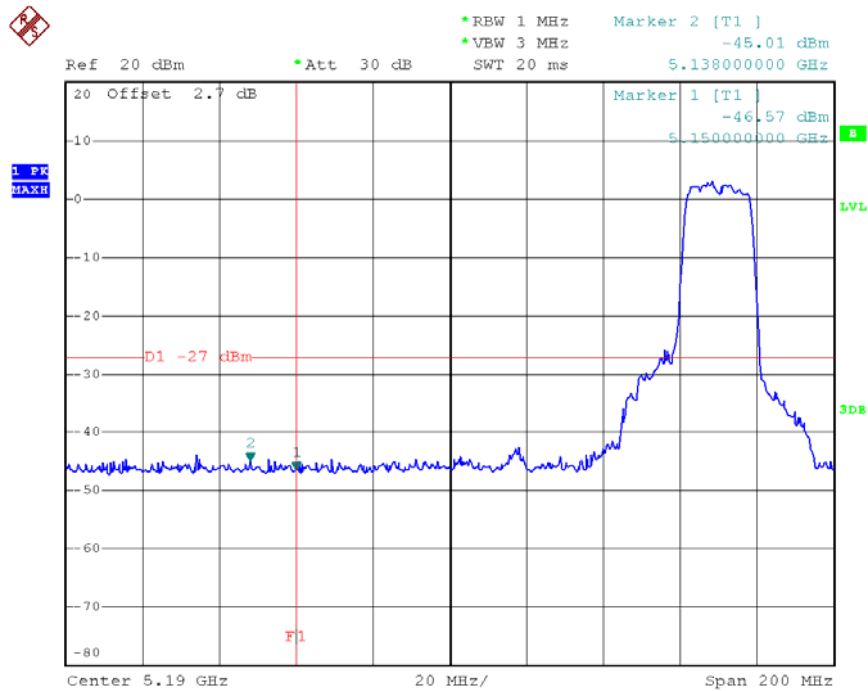


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/ CH52, CH56 , CH64 – ANT 1		

Channel of Worst Data: CH52			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5138.00	-45.01	5372.40	-45.03
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

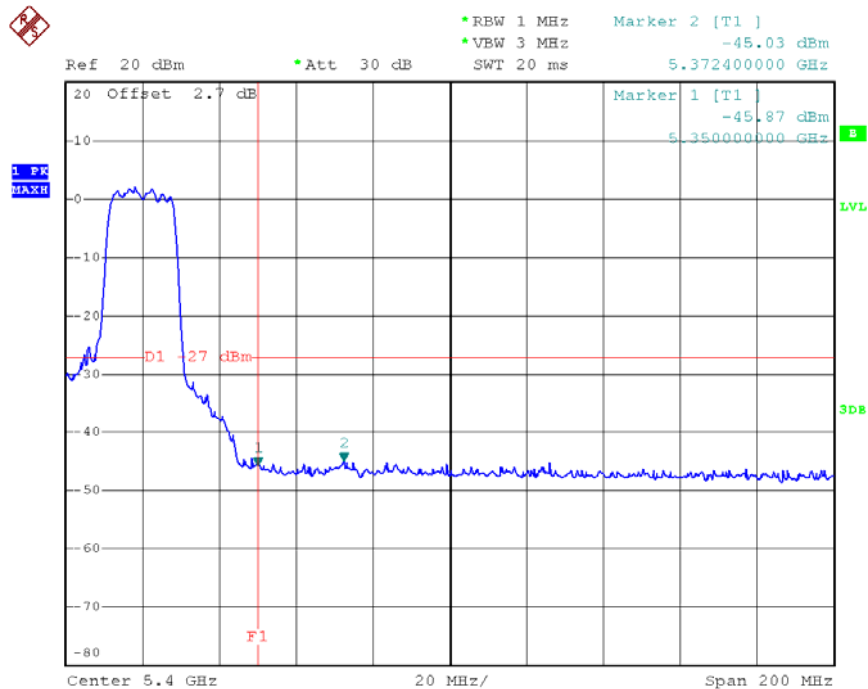


TX mode CH52



Date: 10.NOV.2013 14:38:44

TX mode CH64



Date: 10.NOV.2013 14:39:40

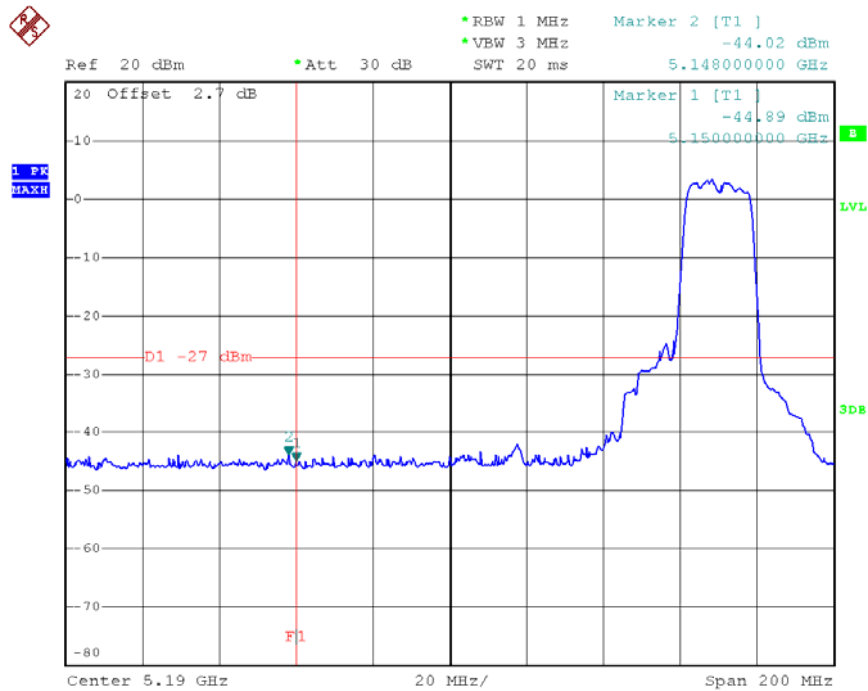


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/ CH52, CH56 , CH64 – ANT 2		

Channel of Worst Data: CH52			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5148.00	-44.02	5370.80	-44.12
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

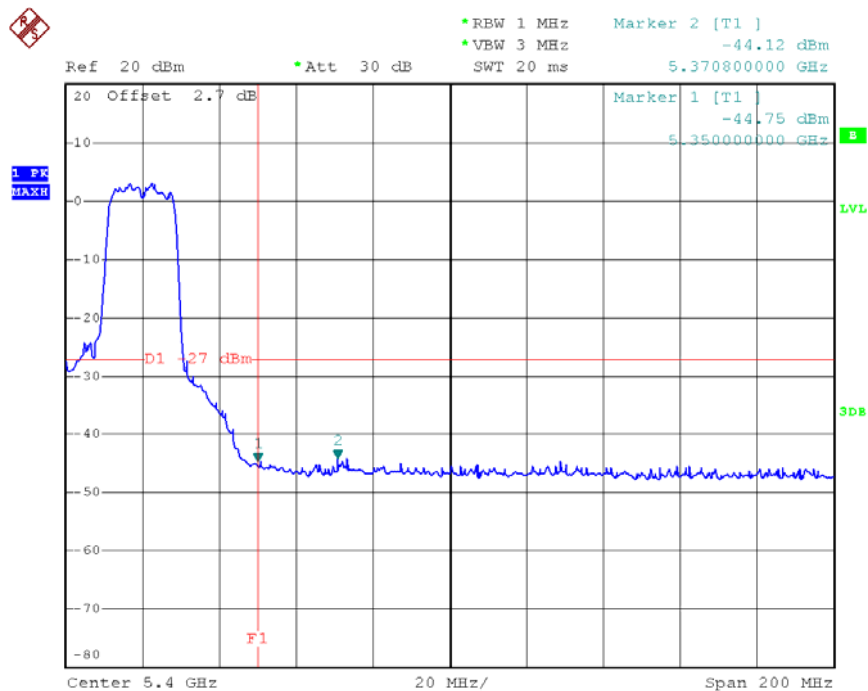


TX mode CH52



Date: 10.NOV.2013 14:38:35

TX mode CH64



Date: 10.NOV.2013 14:39:28

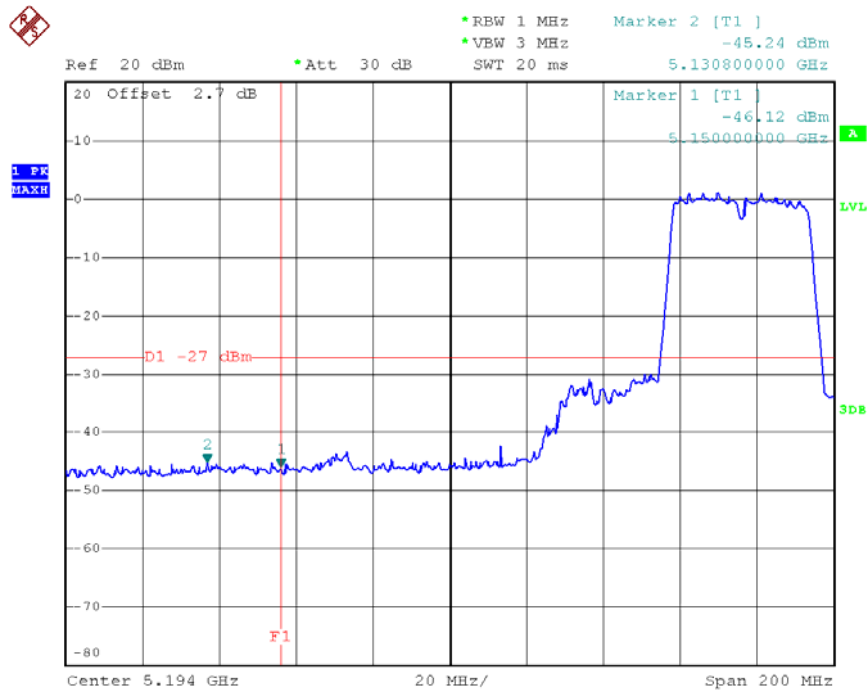


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/ CH64, CH62 –ANT 1		

Channel of Worst Data: CH54			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5130.80	-45.24	5354.80	-33.43
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

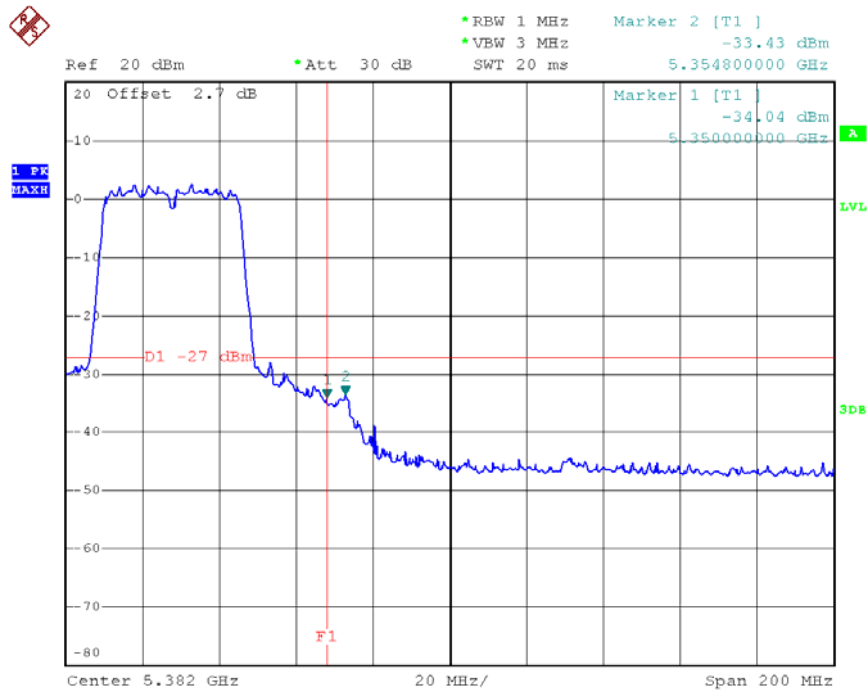


TX mode CH54



Date: 12.NOV.2013 01:44:24

TX mode CH62



Date: 12.NOV.2013 01:43:00

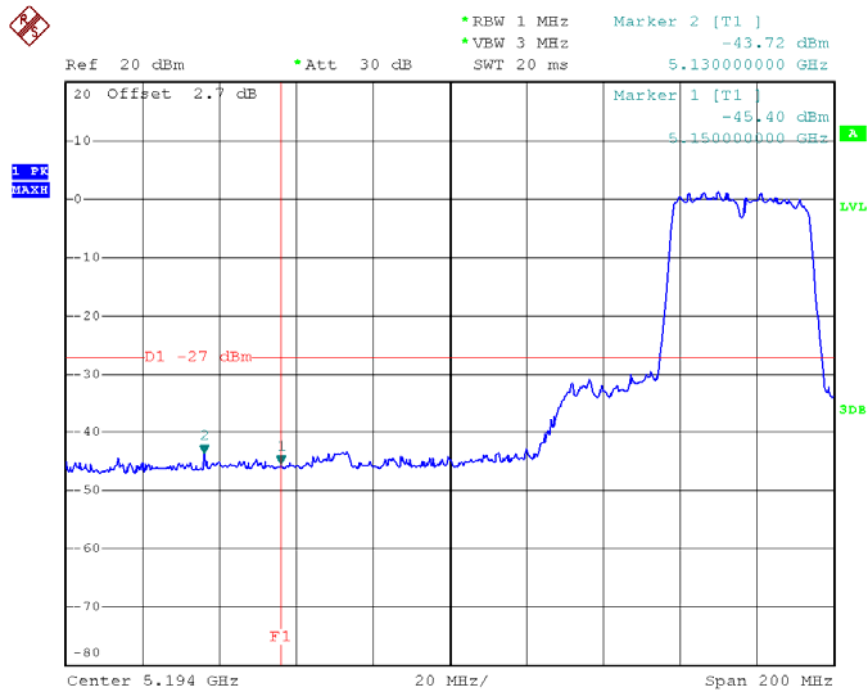


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/ CH64, CH62 –ANT 2		

Channel of Worst Data: CH54			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5130.00	-43.72	5352.80	-33.77
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

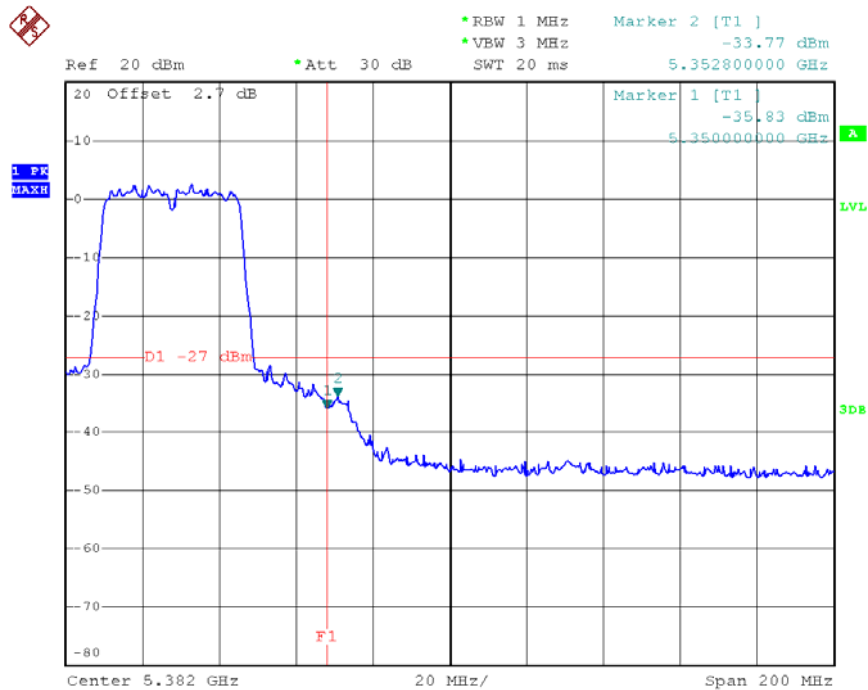


TX mode CH54



Date: 12.NOV.2013 01:44:16

TX mode CH62



Date: 12.NOV.2013 01:43:11

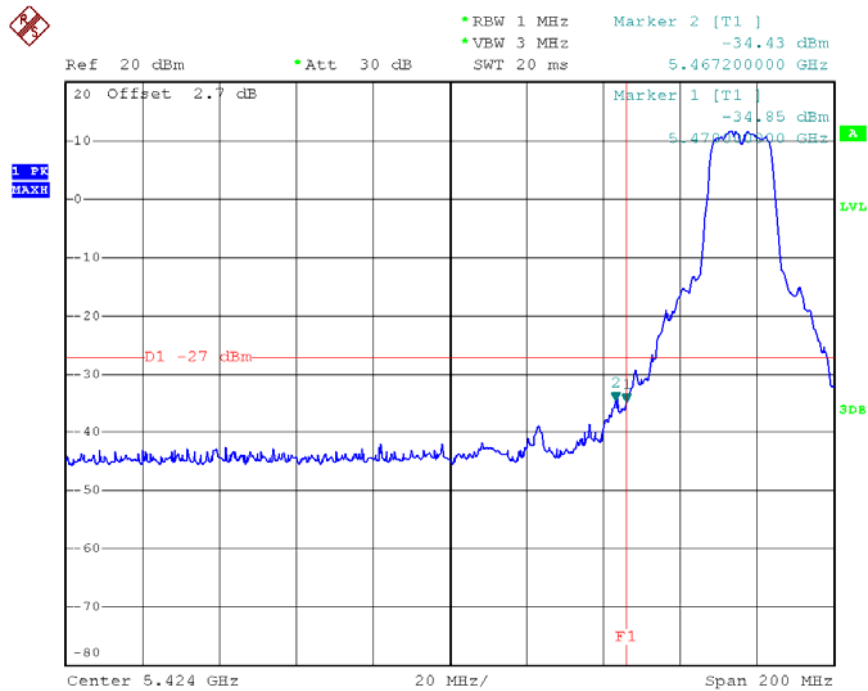


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/ CH100, CH116 , CH140 – ANT 1		

Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5467.20	-34.43	5726.40	-32.75
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

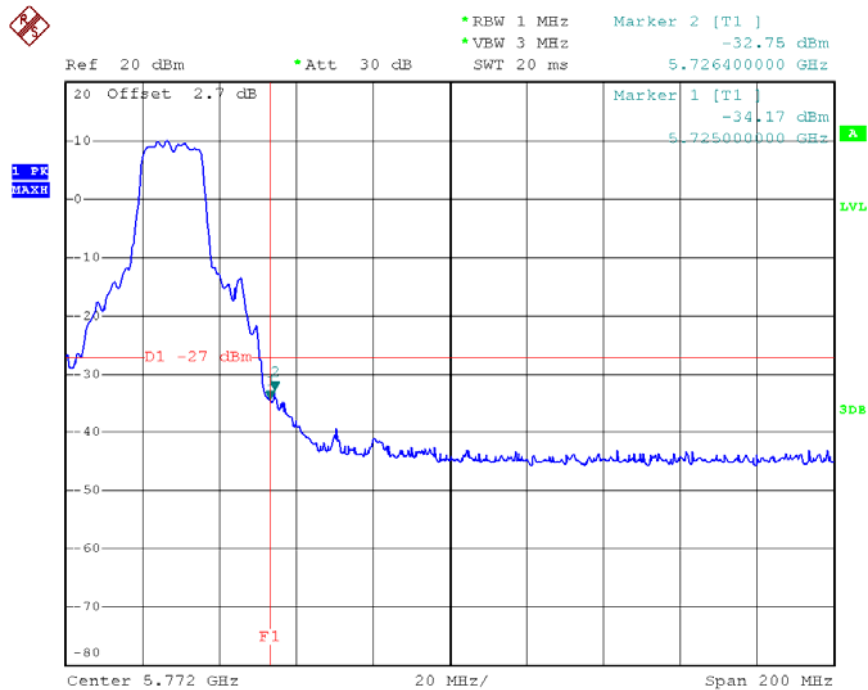


TX mode CH100



Date: 12.NOV.2013 01:55:33

TX mode CH140



Date: 12.NOV.2013 01:58:49

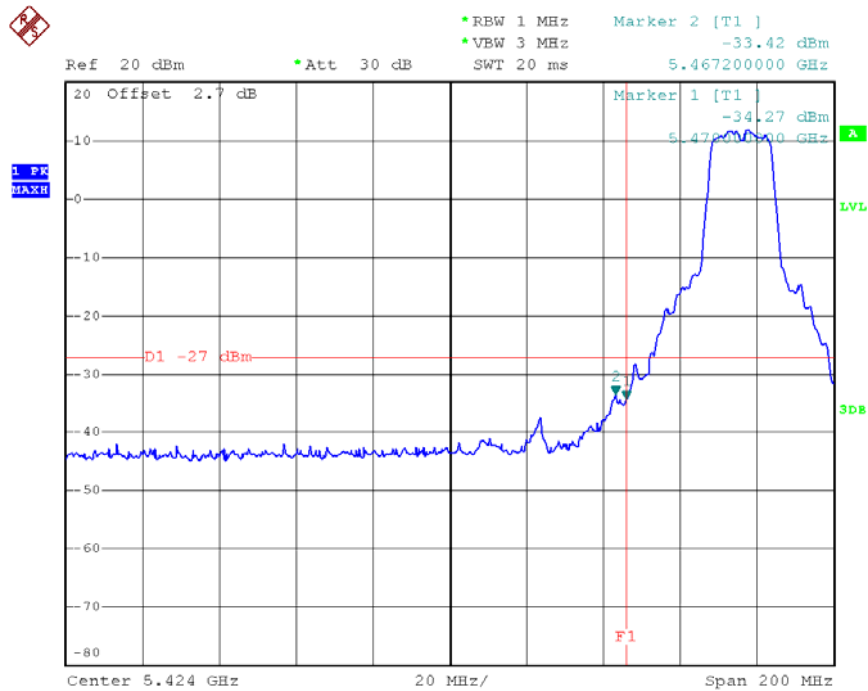


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/ CH100, CH116 , CH140 – ANT 2		

Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5467.20	-33.42	5725.00	-34.17
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

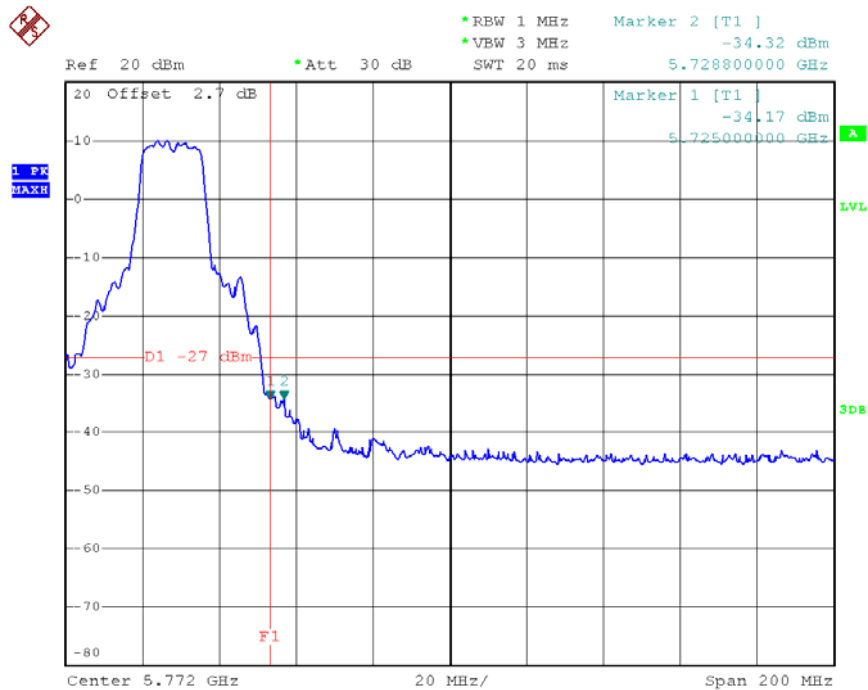


TX mode CH100



Date: 12.NOV.2013 01:55:27

TX mode CH140



Date: 12.NOV.2013 01:58:41

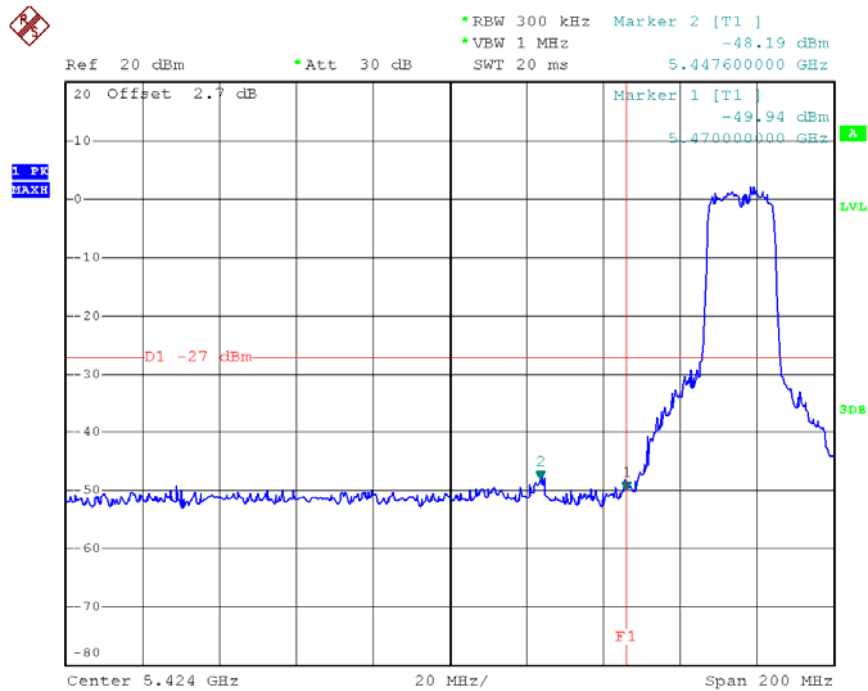


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/ CH100, CH116 , CH140 – ANT 1		

Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5447.60	-48.19	5751.60	-48.41
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

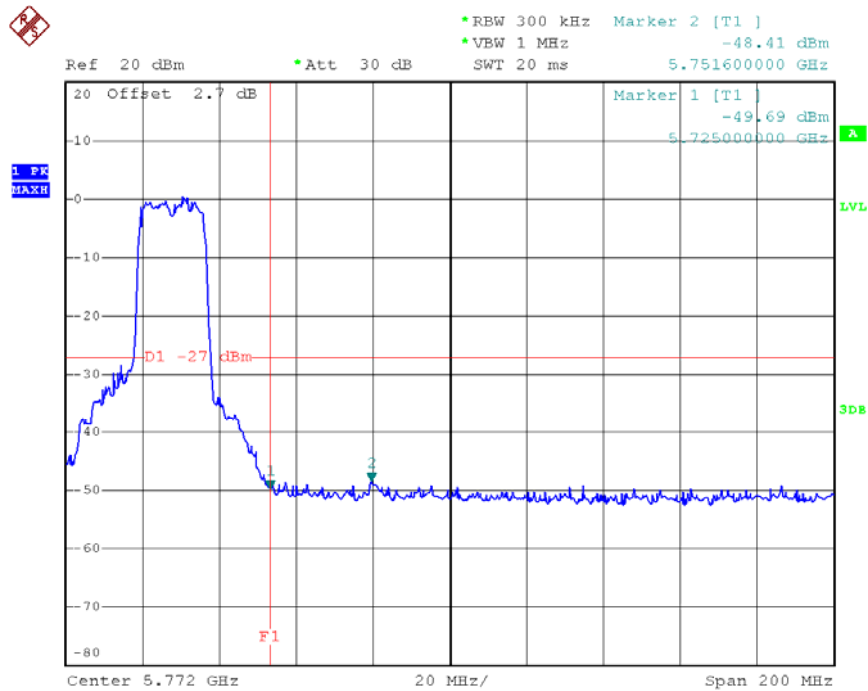


TX mode CH100



Date: 12.NOV.2013 02:19:35

TX mode CH140



Date: 12.NOV.2013 02:17:12

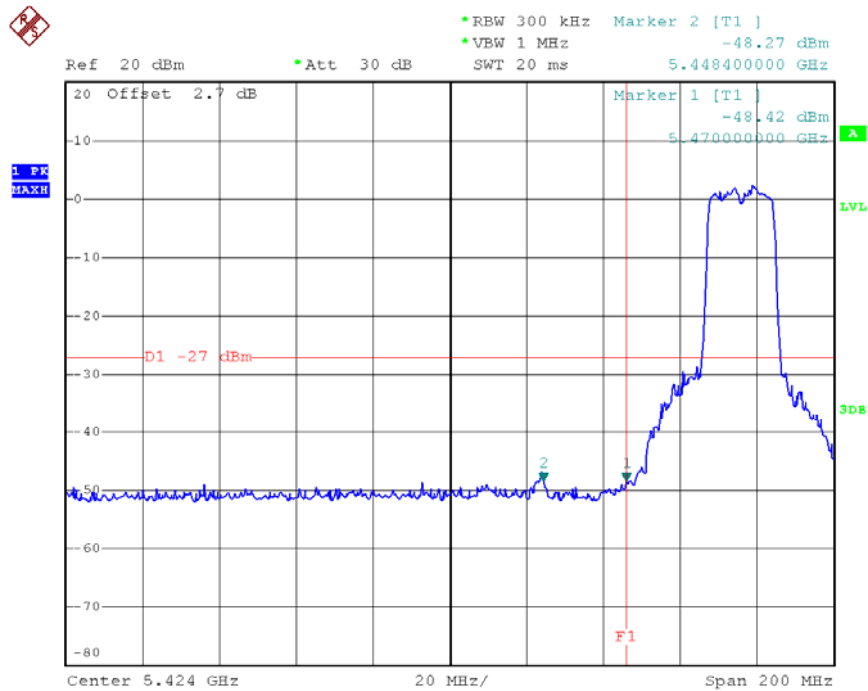


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/ CH100, CH116 , CH140 – ANT 2		

Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5448.40	-48.27	5751.60	-47.12
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

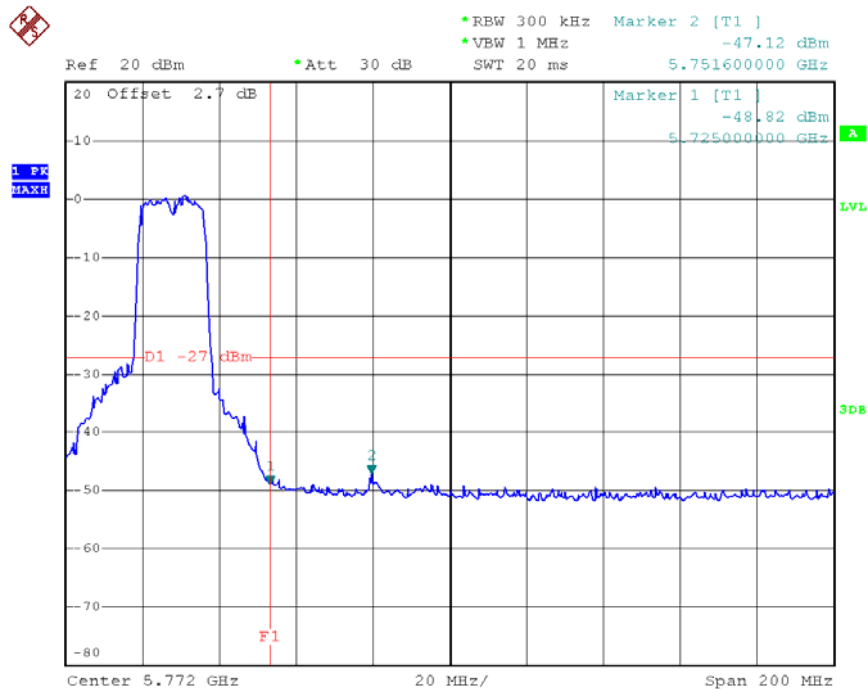


TX mode CH100



Date: 12.NOV.2013 02:19:28

TX mode CH140



Date: 12.NOV.2013 02:17:03

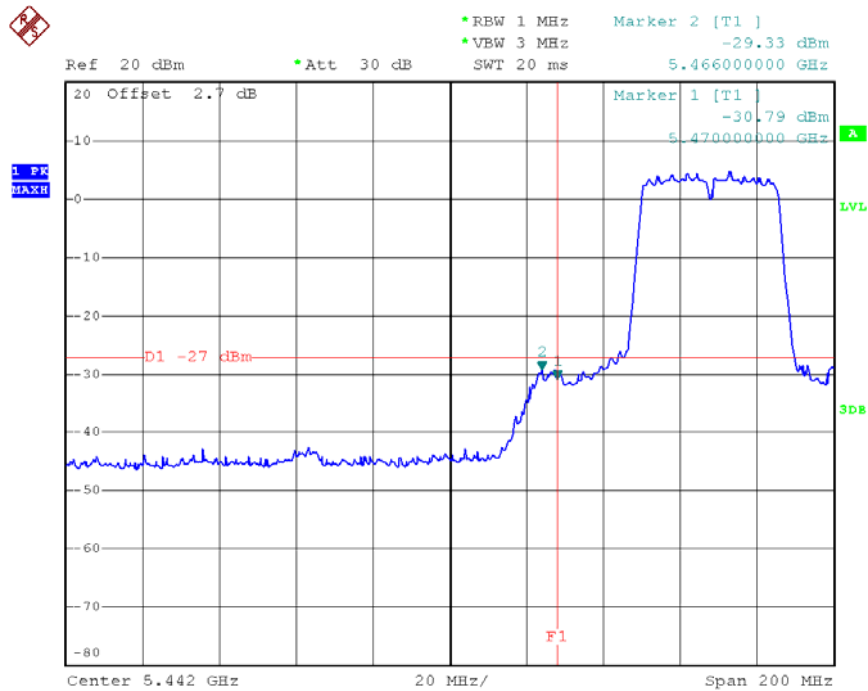


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/ CH102, CH110,CH134 – ANT 1		

Channel of Worst Data: CH102			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5466.00	-29.33	5730.00	-40.92
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

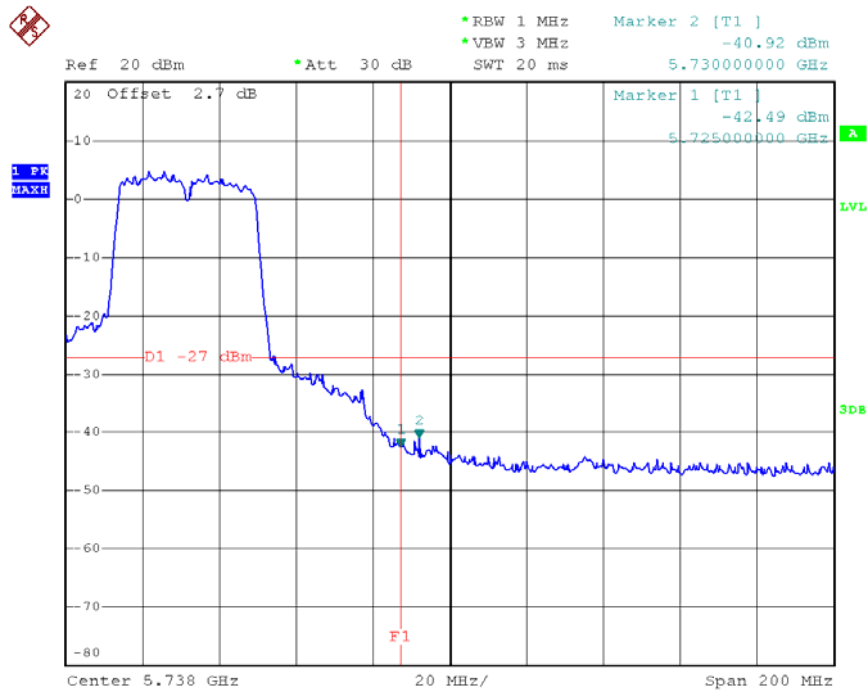


TX mode CH102



Date: 12.NOV.2013 03:41:40

TX mode CH134



Date: 12.NOV.2013 03:40:23

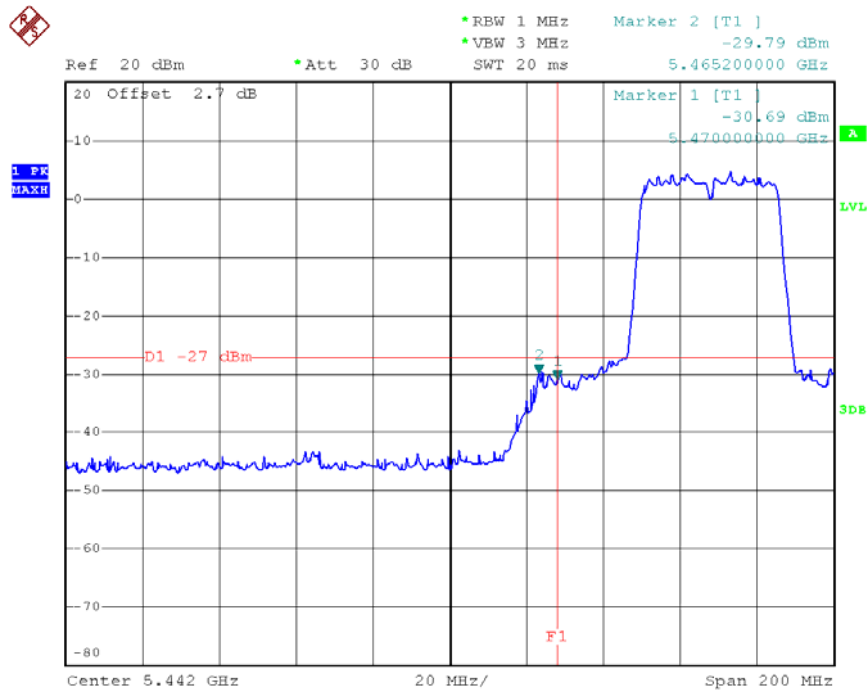


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/ CH102, CH110,CH134 – ANT 2		

Channel of Worst Data: CH102			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5465.20	-29.79	5725.00	-41.11
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

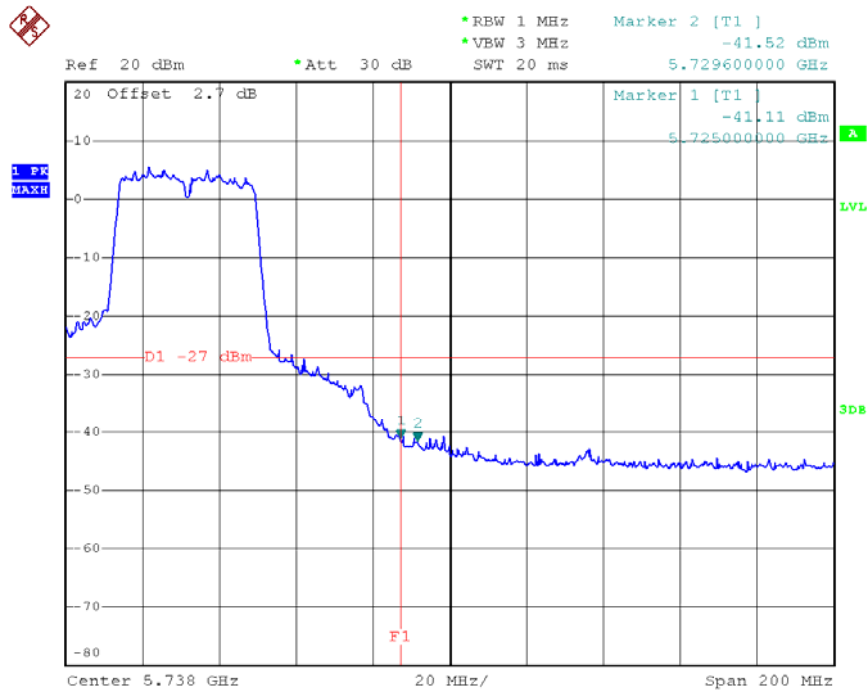


TX mode CH102



Date: 12.NOV.2013 03:41:47

TX mode CH134



Date: 12.NOV.2013 03:40:15

**8. POWER SPECTRAL DENSITY TEST****8.1 APPLIED PROCEDURES / LIMIT**

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

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2012	Nov.26.2013

Remark: "N/A" denotes no model name, serial no. or 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	= 1 MHz.
VB	$\geq$ 3 MHz.
Detector	RMS
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**

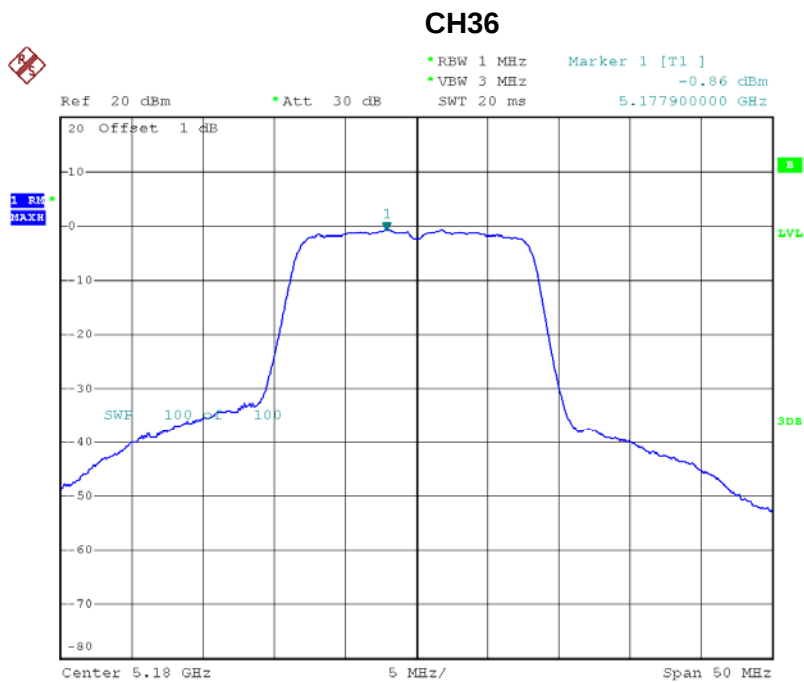
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



8.1.6 TEST RESULTS

EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX A Mode/CH36, CH40, CH48 – ANT 1		

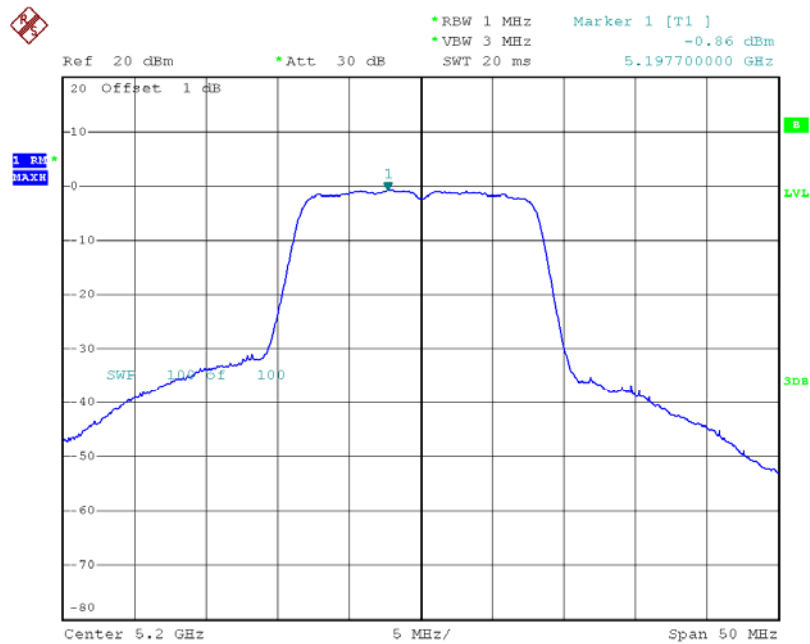
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	-0.86	4.00
CH40	5200	-0.86	4.00
CH48	5240	-1.32	4.00



Date: 12.NOV.2013 04:05:39

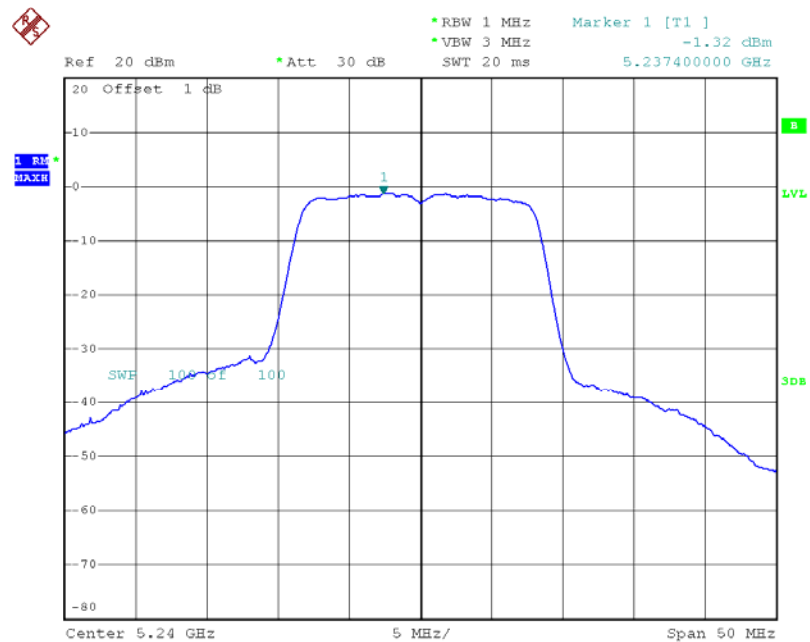


CH40



Date: 12.NOV.2013 04:07:13

CH48

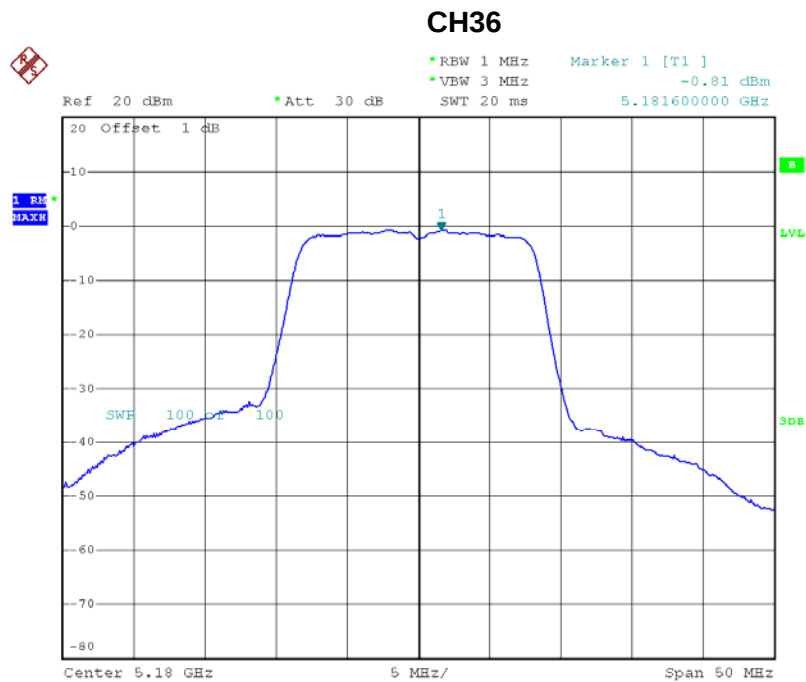


Date: 12.NOV.2013 04:08:56



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX A Mode/CH36, CH40, CH48 – ANT 2		

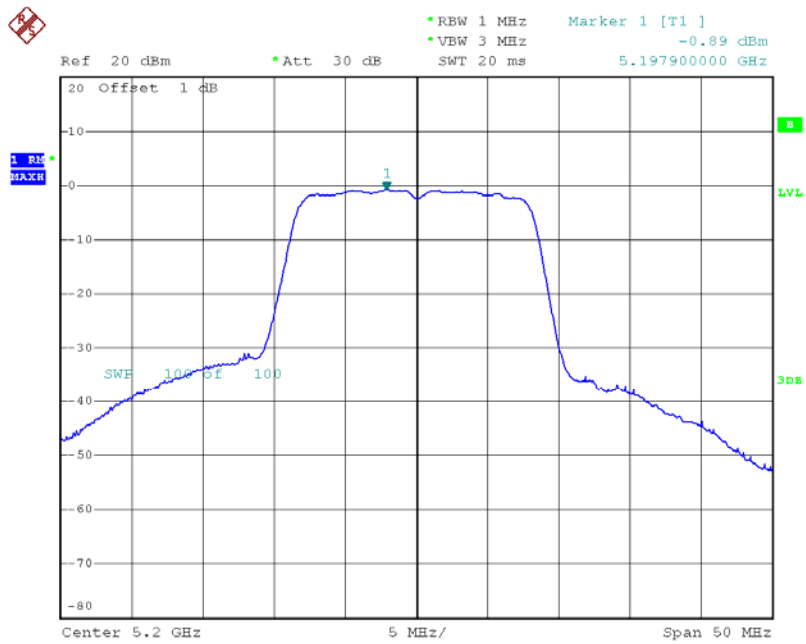
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	-0.81	4.00
CH40	5200	-0.89	4.00
CH48	5240	-1.18	4.00



Date: 12.NOV.2013 04:05:31

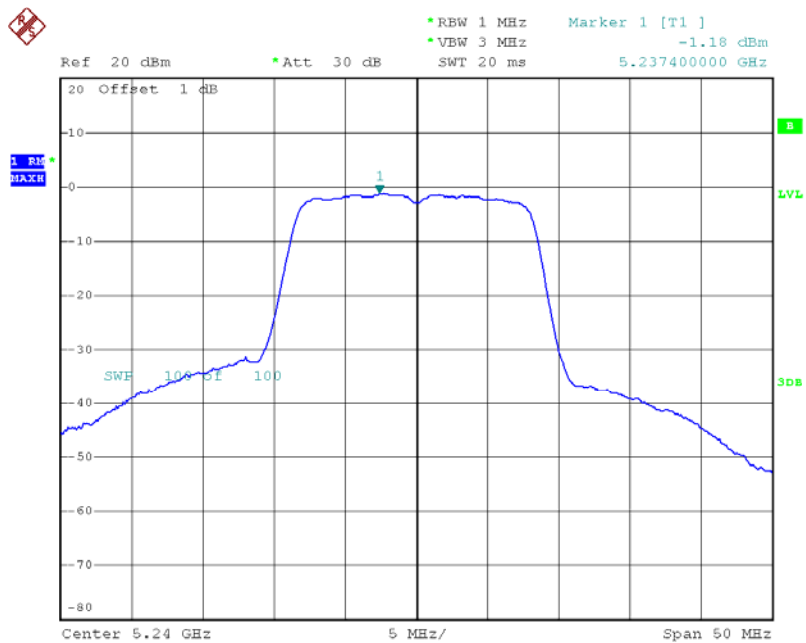


CH40



Date: 12.NOV.2013 04:07:05

CH48



Date: 12.NOV.2013 04:08:47



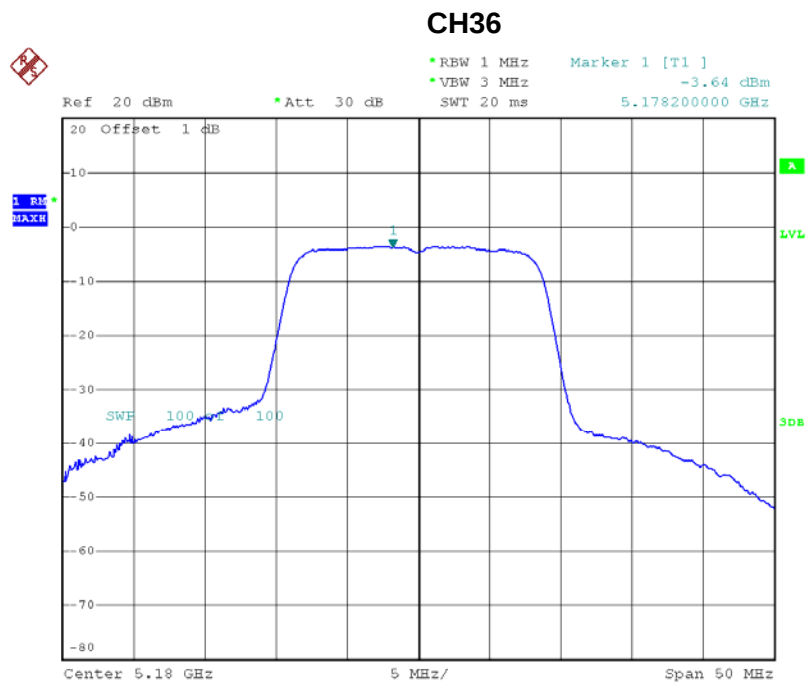
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX A Mode/CH36, CH40, CH48 – ANT 1+ ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	2.17	4.00
CH40	5200	2.13	4.00
CH48	5240	1.76	4.00



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N20 Mode/CH36, CH40, CH48 – ANT 1		

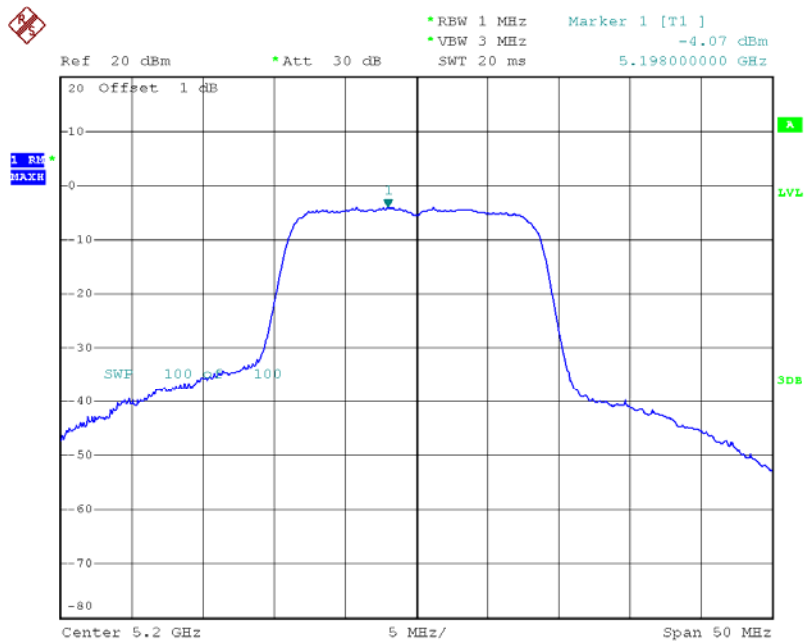
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	-3.64	4.00
CH40	5200	-4.07	4.00
CH48	5240	-6.11	4.00



Date: 10.NOV.2013 13:09:44

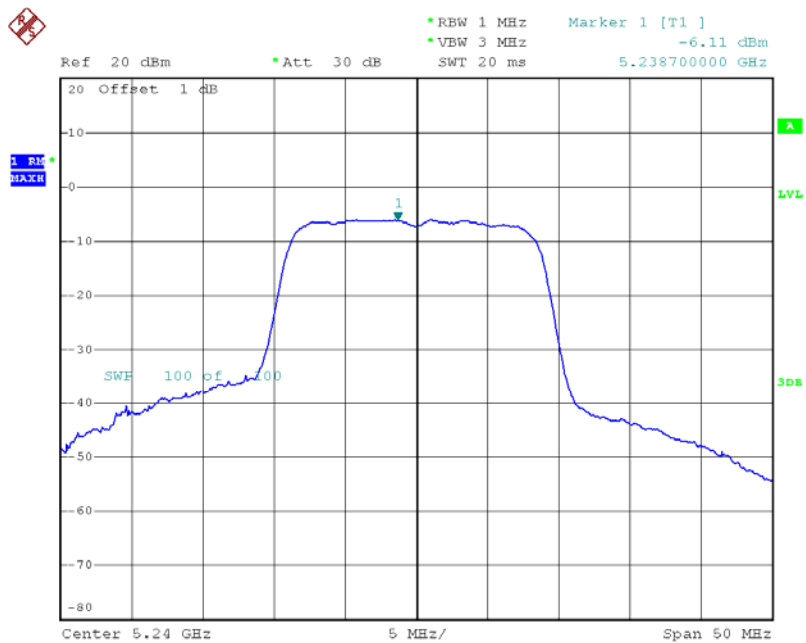


CH40



Date: 10.NOV.2013 13:10:51

CH48

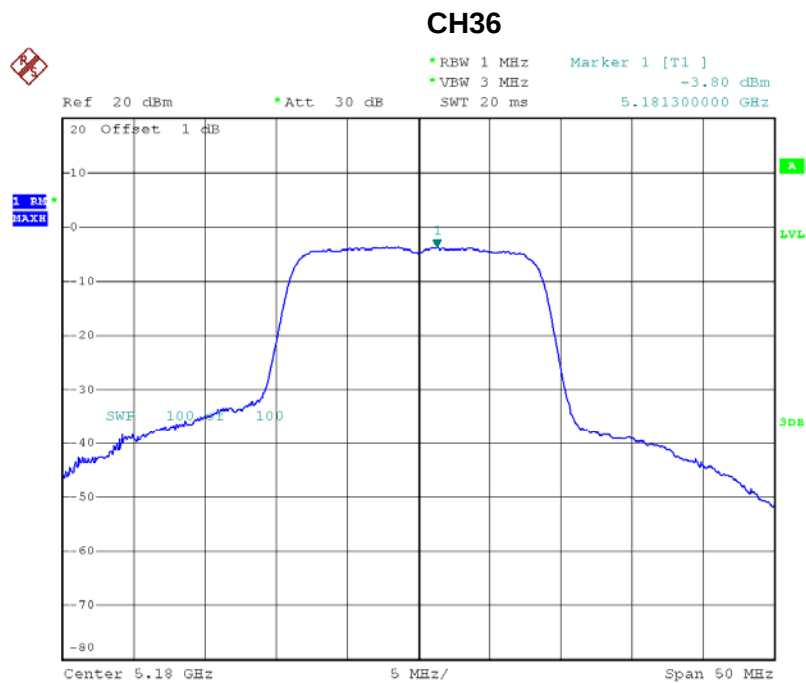


Date: 10.NOV.2013 13:11:56



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N20 Mode/CH36, CH40, CH48 – ANT 2		

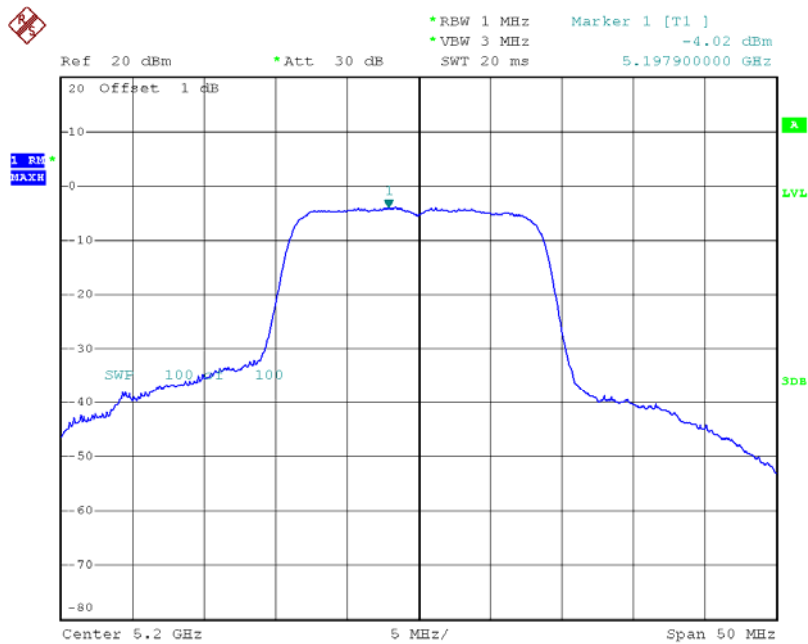
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	-3.80	4.00
CH40	5200	-4.02	4.00
CH48	5240	-5.92	4.00



Date: 10.NOV.2013 13:07:12

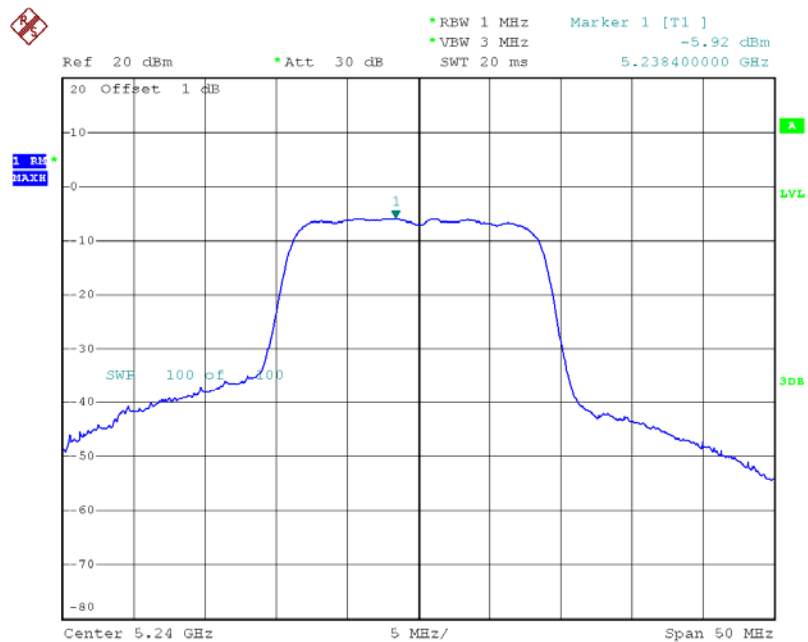


CH40



Date: 10.NOV.2013 13:06:09

CH48



Date: 10.NOV.2013 13:04:59



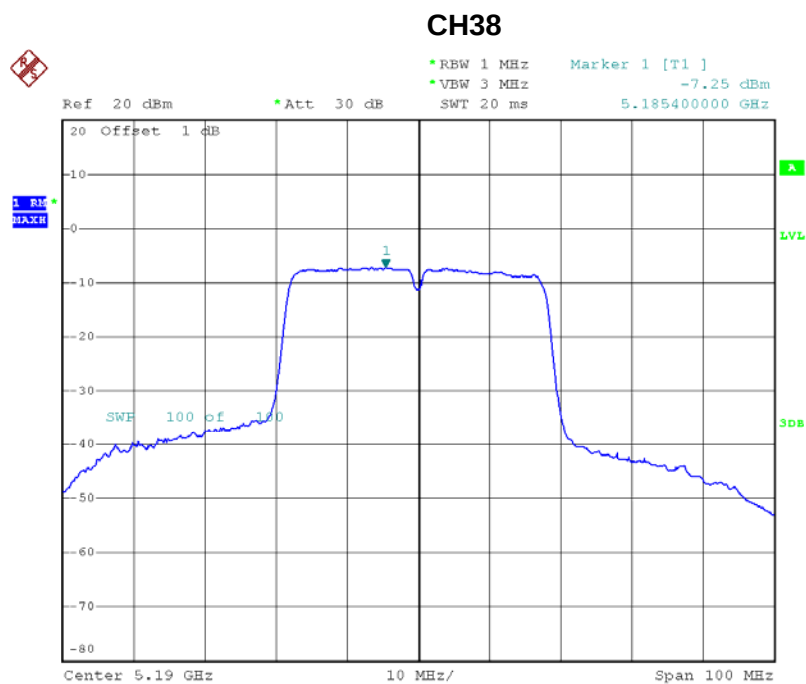
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N20 Mode/CH36, CH40, CH48 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH36	5180	-0.71	4.00
CH40	5200	-1.03	4.00
CH48	5240	-3.00	4.00



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N40 Mode/CH38, CH46 – ANT 1		

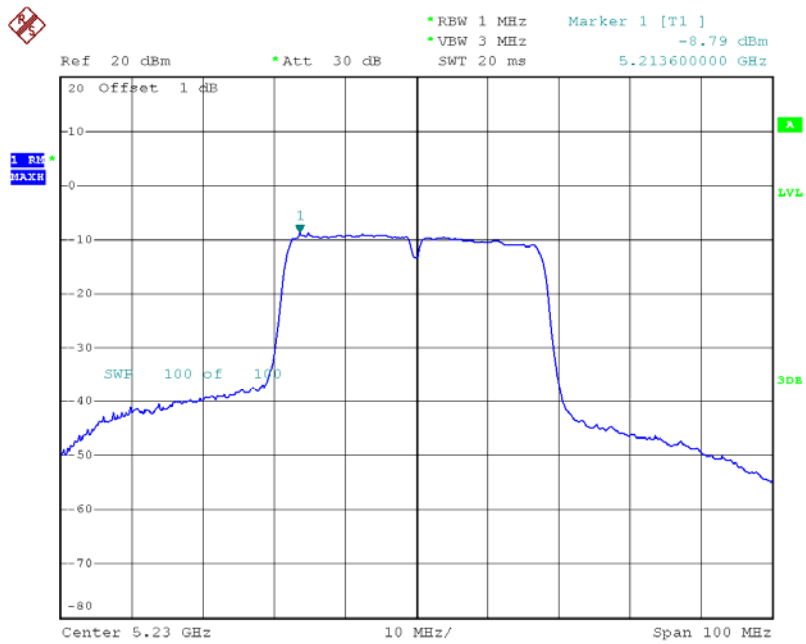
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH38	5190	-7.25	4.00
CH46	5230	-8.79	4.00



Date: 10.NOV.2013 13:56:35



CH46

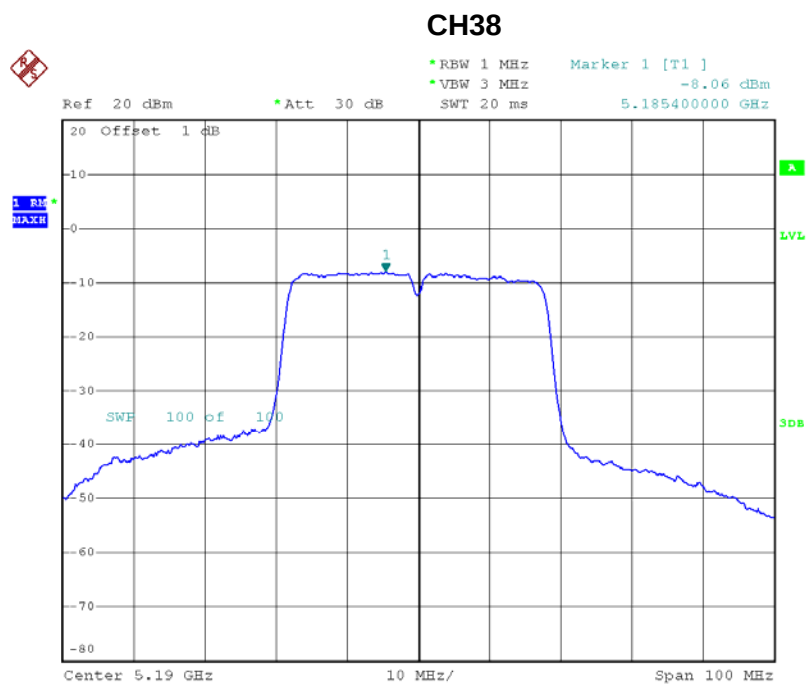


Date: 10.NOV.2013 13:55:08

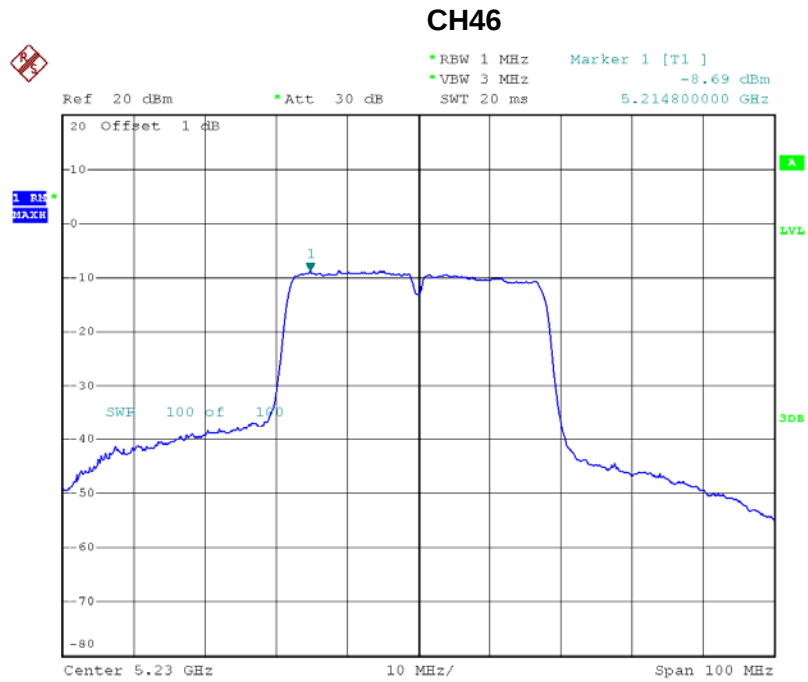


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N40 Mode/CH38, CH46 – ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH38	5190	-8.06	4.00
CH46	5230	-8.69	4.00



Date: 10.NOV.2013 13:57:49



Date: 10.NOV.2013 13:58:57



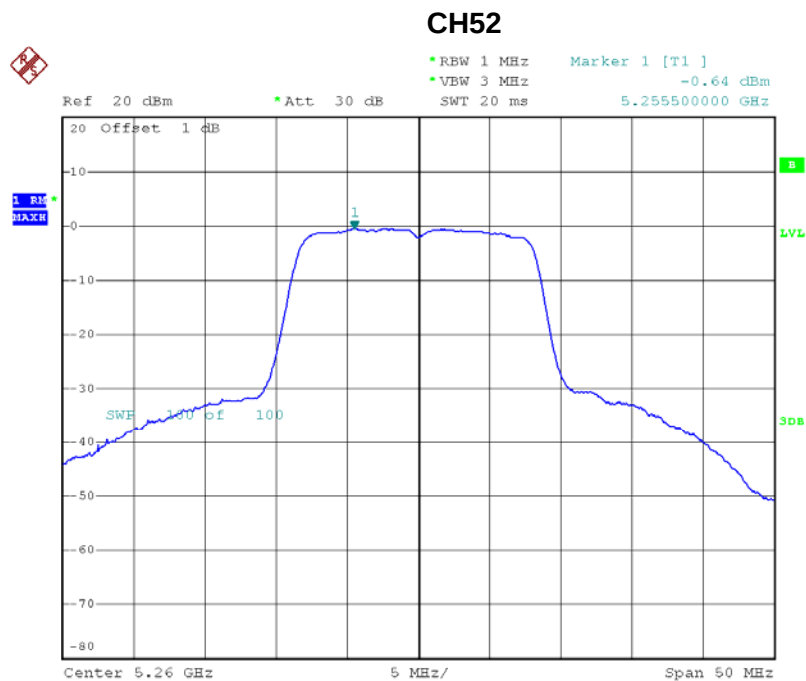
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N40 Mode/CH38, CH46 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH38	5190	-4.63	4.00
CH46	5230	-5.73	4.00



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64 – ANT 1		

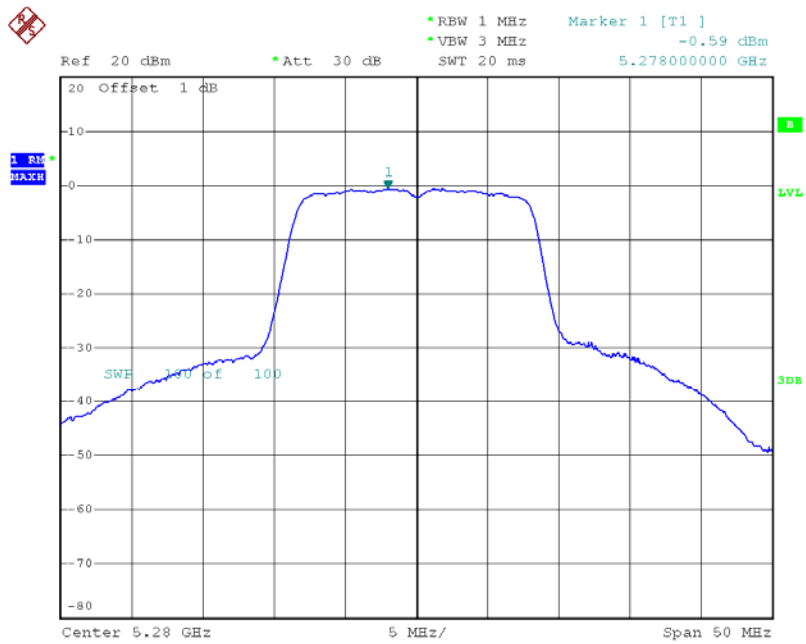
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	-0.64	11
CH56	5280	-0.59	11
CH64	5320	3.66	11



Date: 12.NOV.2013 04:00:57

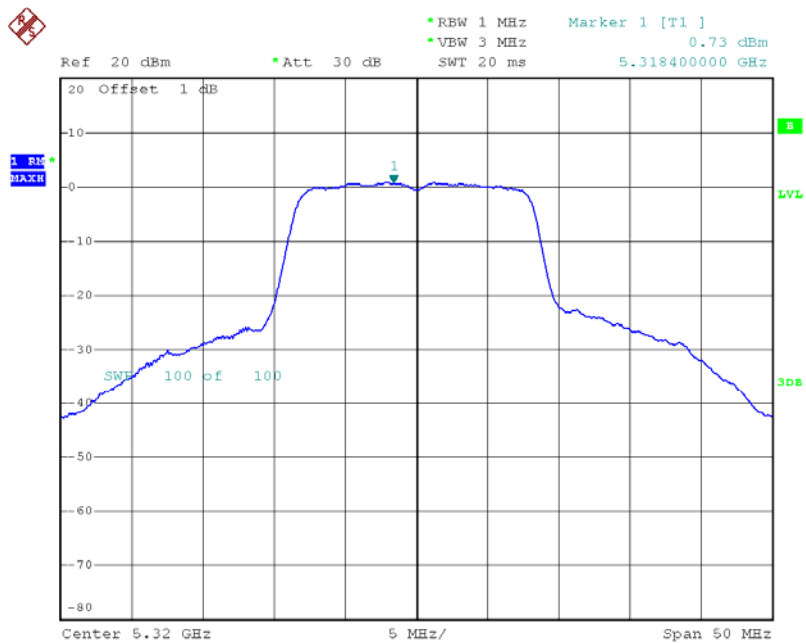


CH56



Date: 12.NOV.2013 03:59:10

CH64

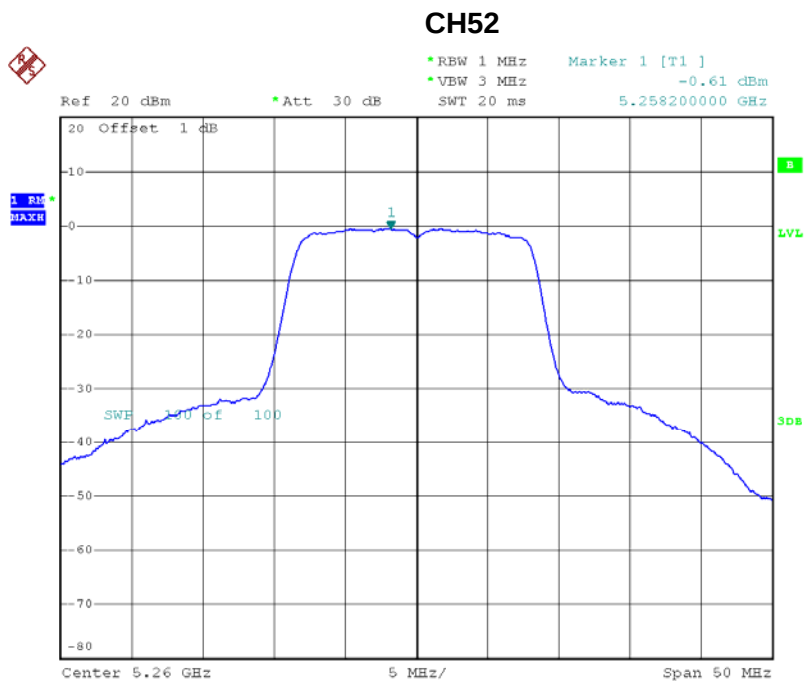


Date: 12.NOV.2013 03:55:59



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64 – ANT 2		

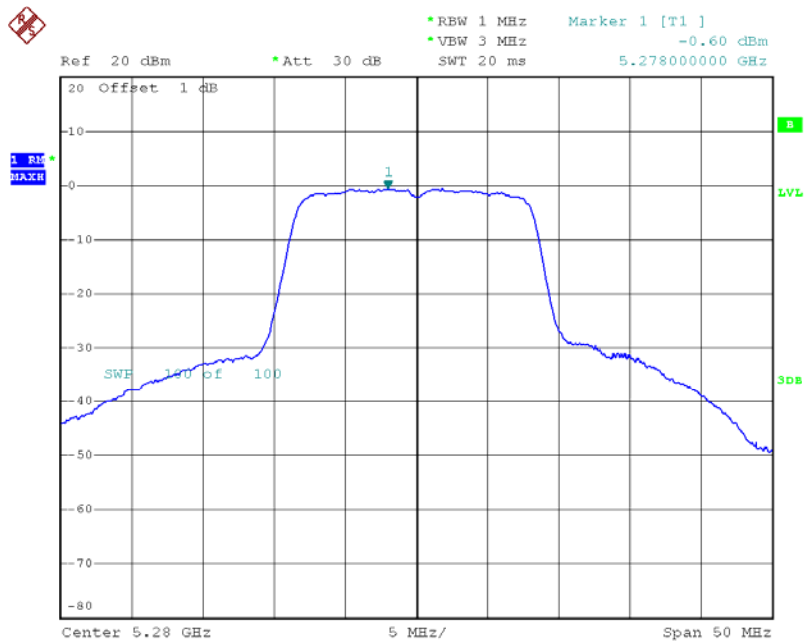
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	-0.61	11
CH56	5280	-0.60	11
CH64	5320	0.58	11



Date: 12.NOV.2013 04:00:49

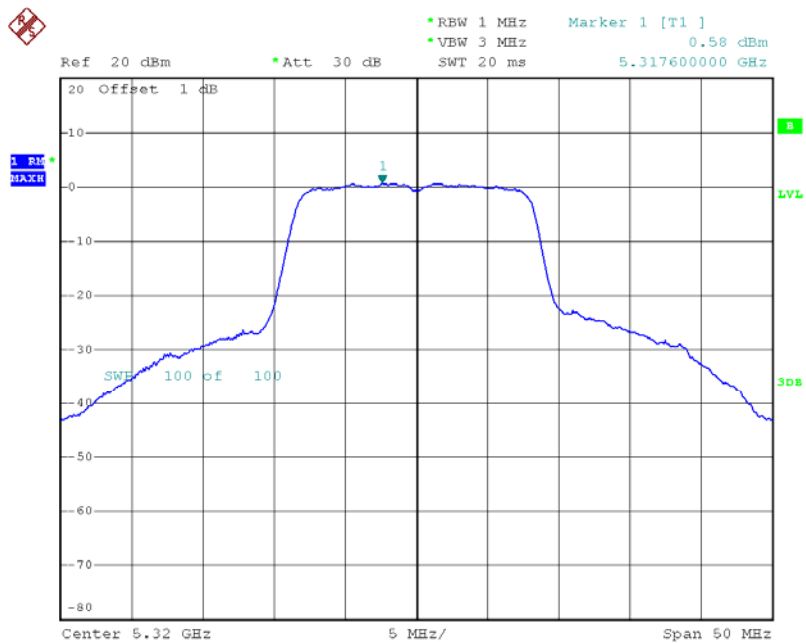


CH56



Date: 12.NOV.2013 03:59:17

CH64



Date: 12.NOV.2013 03:56:07



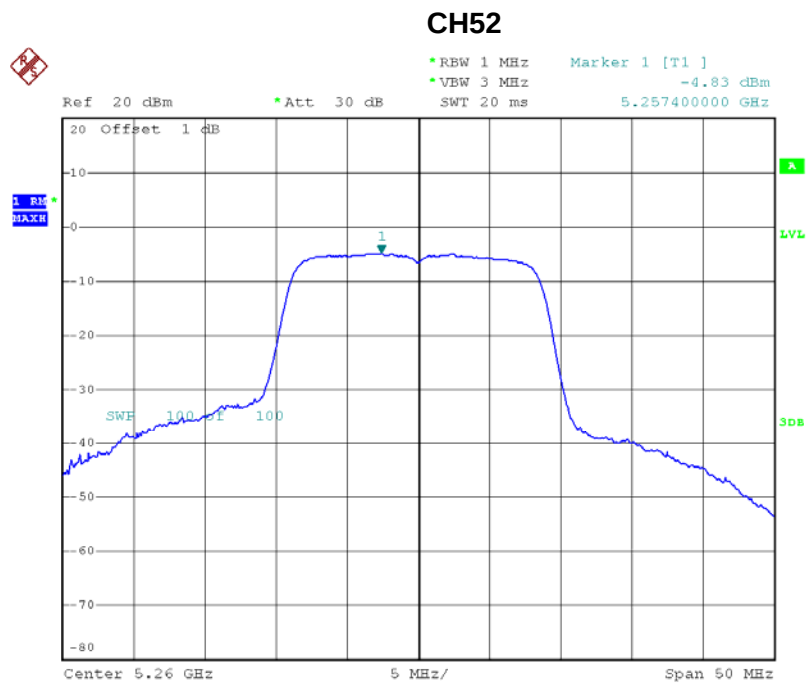
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	2.38	11
CH56	5280	2.41	11
CH64	5320	3.66	11



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64 – ANT 1		

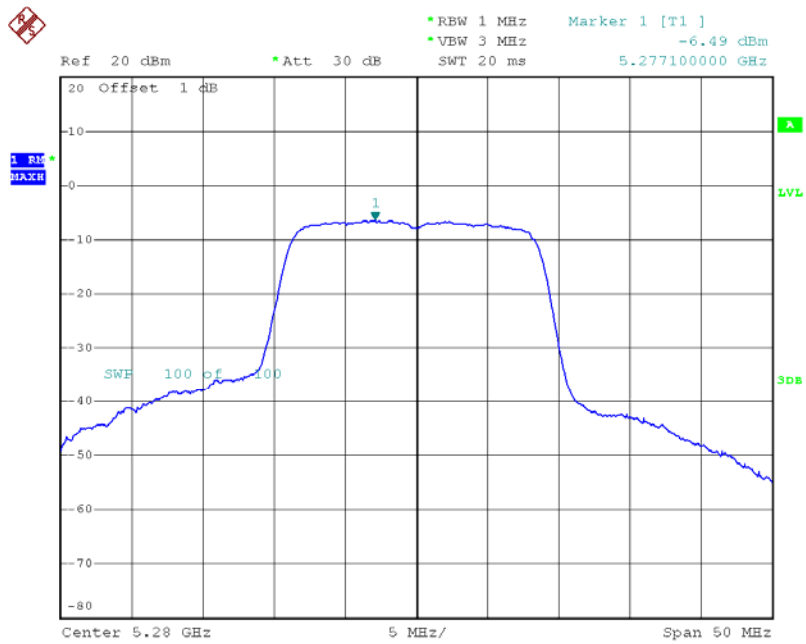
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	-4.83	11
CH56	5280	-6.49	11
CH64	5320	-7.69	11



Date: 10.NOV.2013 14:58:09

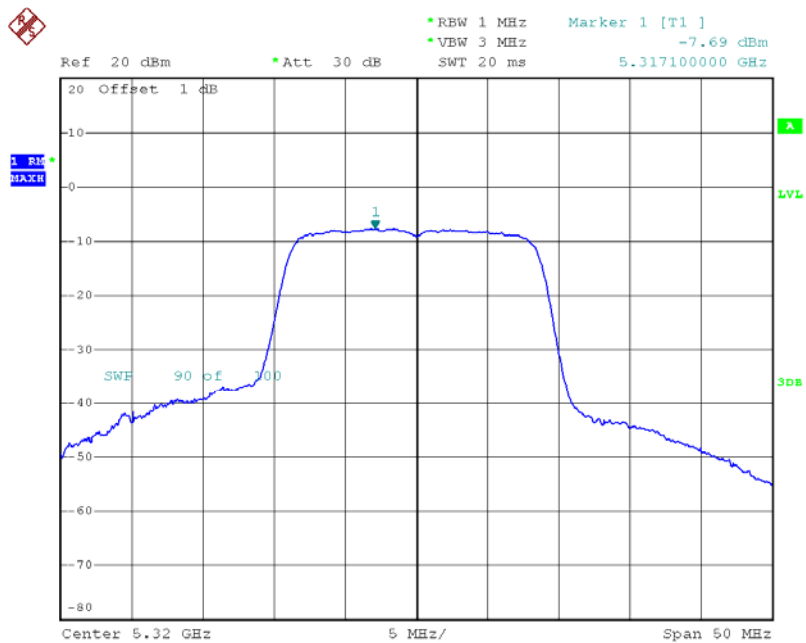


CH56



Date: 10.NOV.2013 15:00:19

CH64

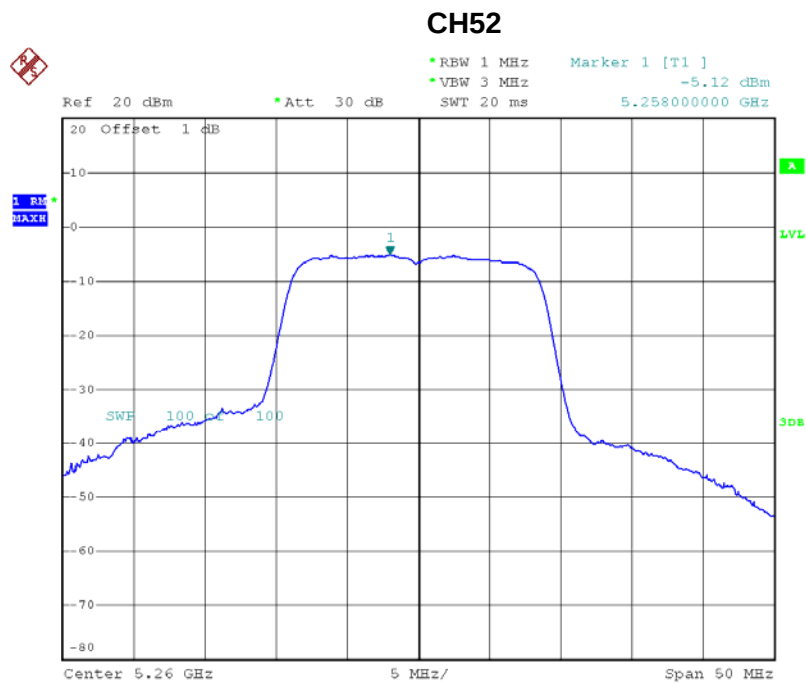


Date: 10.NOV.2013 15:03:36



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64 – ANT 2		

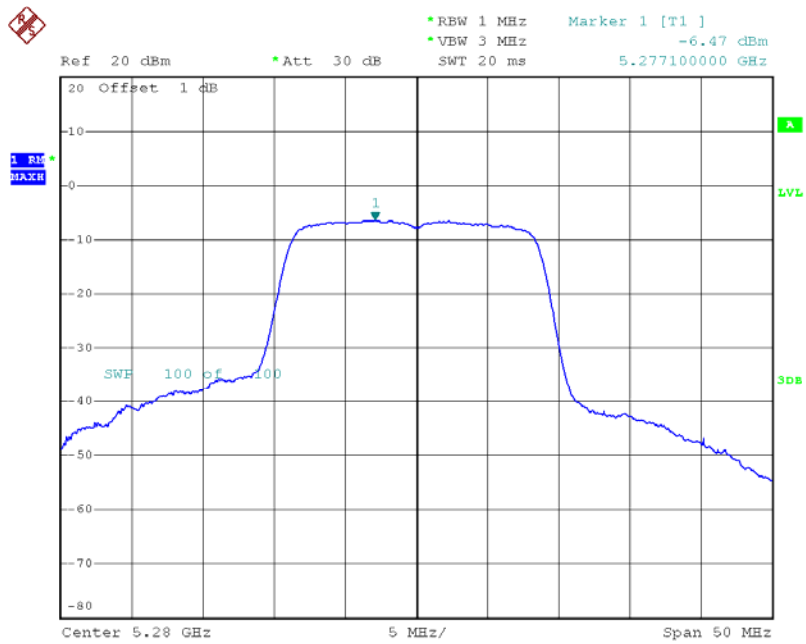
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	-5.12	11
CH56	5280	-6.47	11
CH64	5320	-8.19	11



Date: 10.NOV.2013 14:57:59

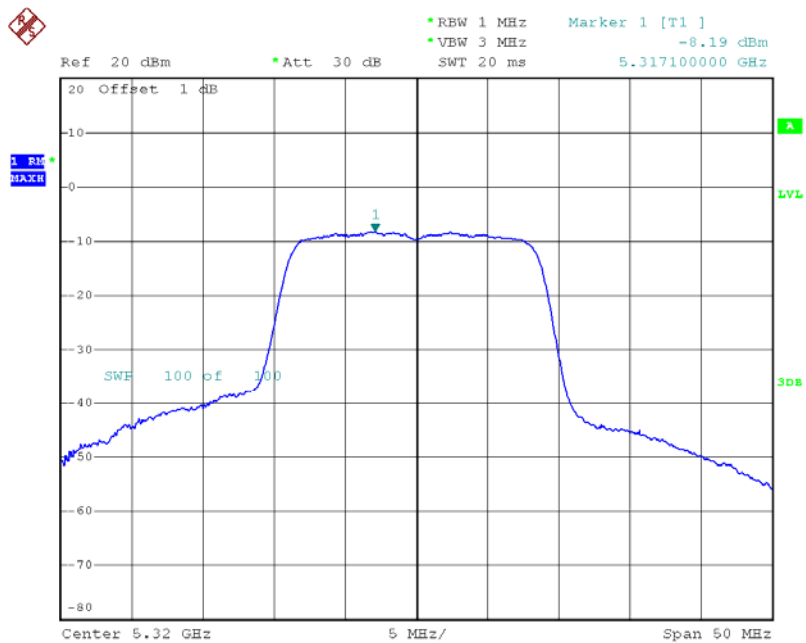


CH56



Date: 10.NOV.2013 15:00:12

CH64



Date: 10.NOV.2013 15:03:24



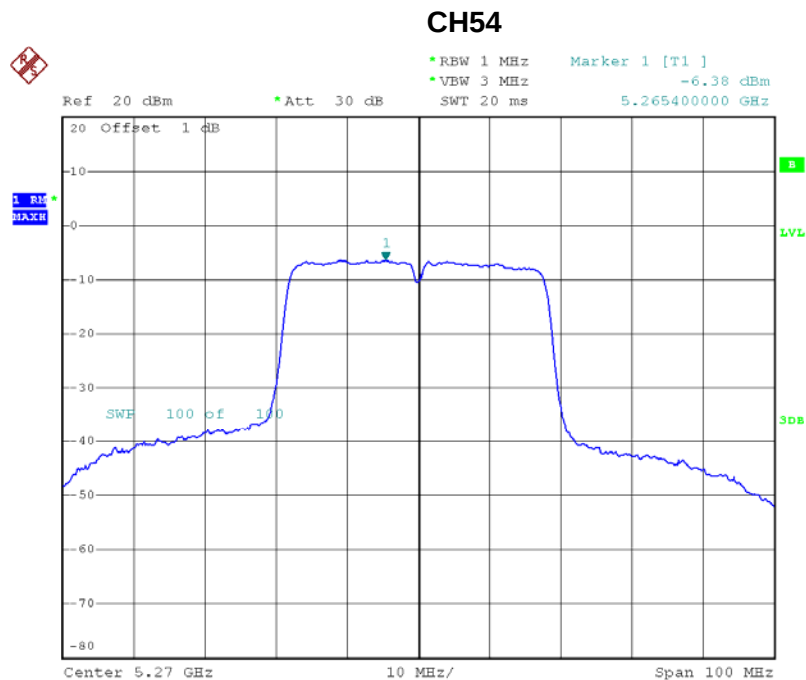
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	-1.96	11
CH56	5280	-3.47	11
CH64	5320	-4.92	11

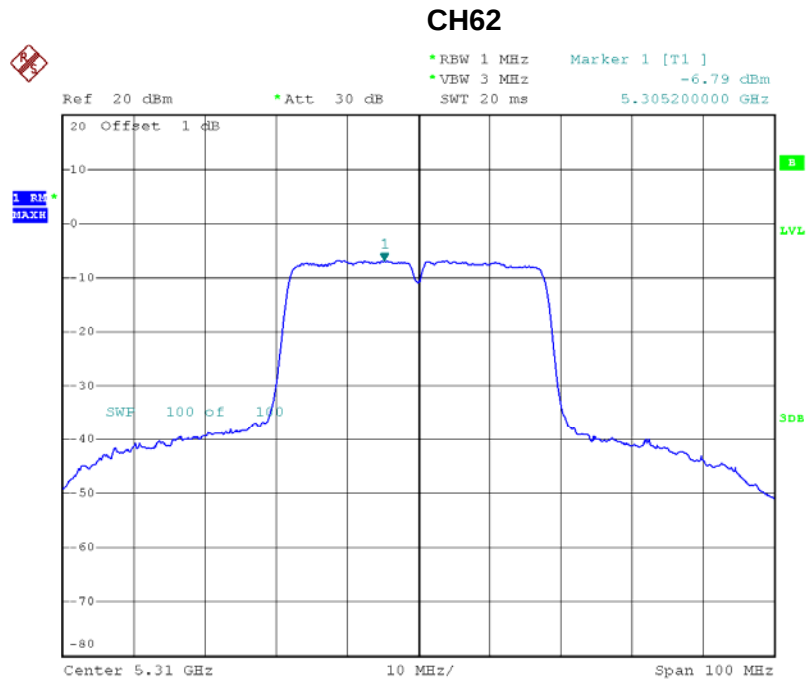


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/CH54, CH62 – ANT 1		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	-6.38	11
CH62	5310	-6.79	11



Date: 12.NOV.2013 01:29:23

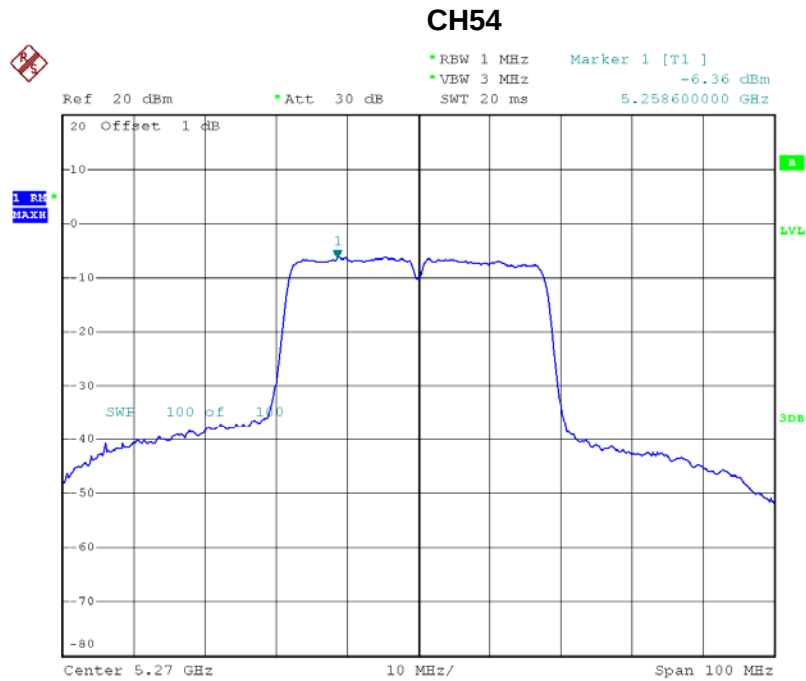


Date: 12.NOV.2013 01:31:12

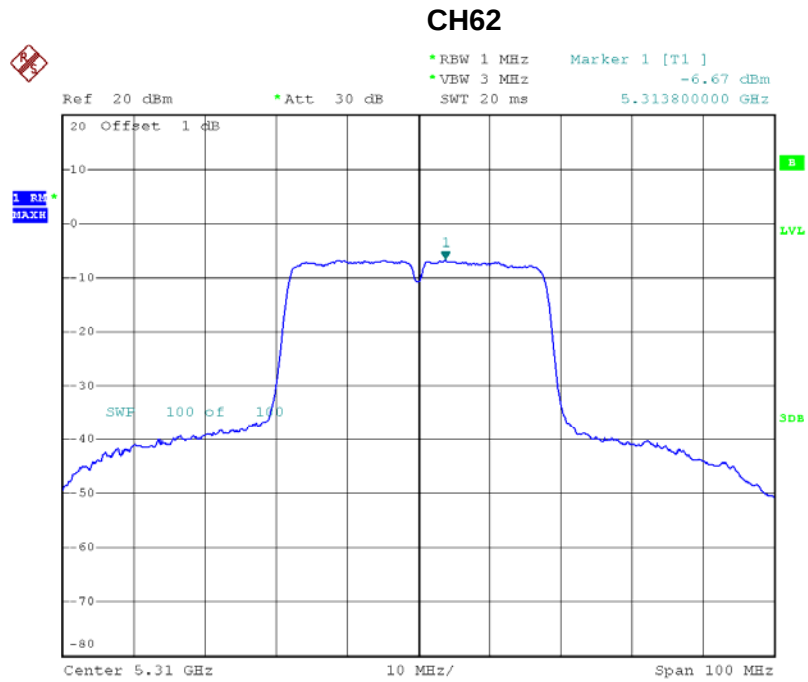


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/CH54, CH62 – ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	-6.36	11
CH62	5310	-6.67	11



Date: 12.NOV.2013 01:28:40



Date: 12.NOV.2013 01:30:40



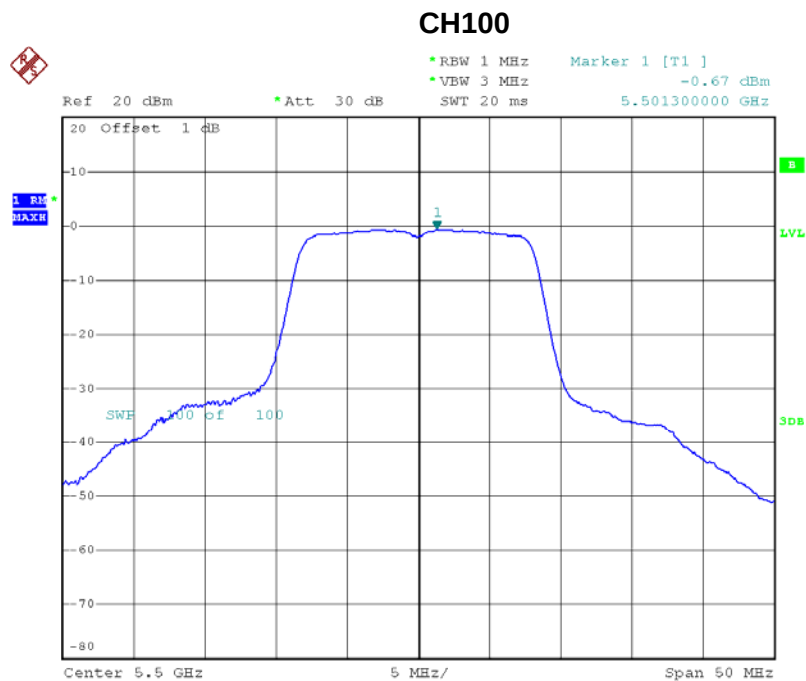
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/CH54, CH62 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	-3.36	11
CH62	5310	-3.72	11



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/CH100, CH116, CH140 – ANT 1		

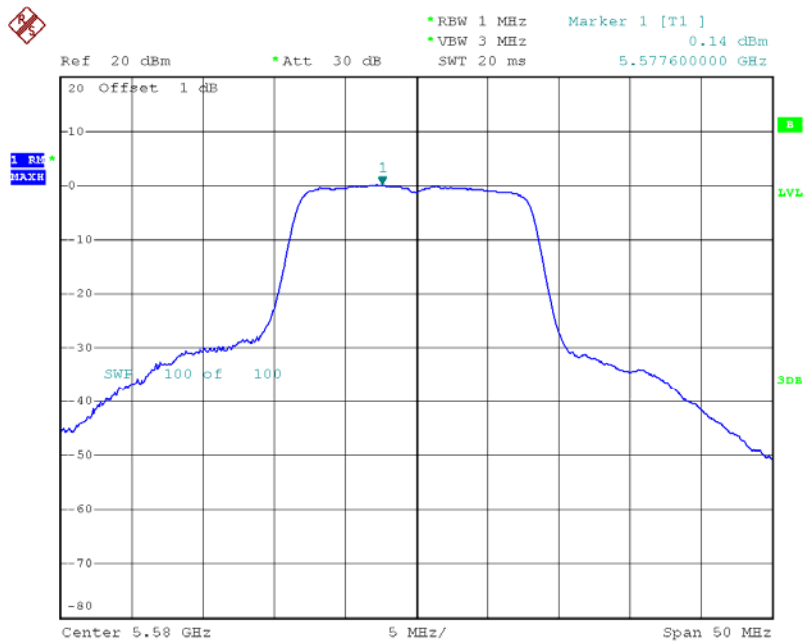
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	-0.61	11
CH116	5580	0.14	11
CH140	5700	0.28	11



Date: 12.NOV.2013 02:06:46

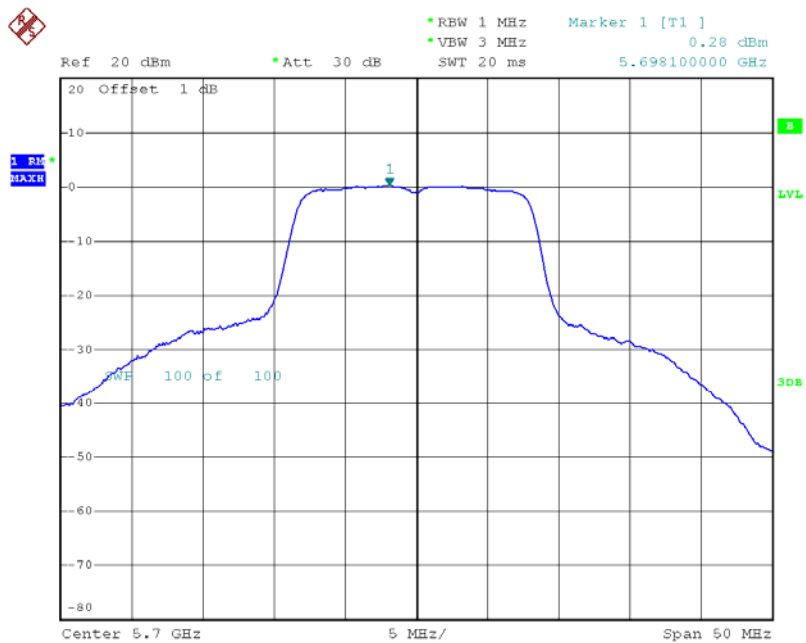


CH116



Date: 12.NOV.2013 02:04:48

CH140

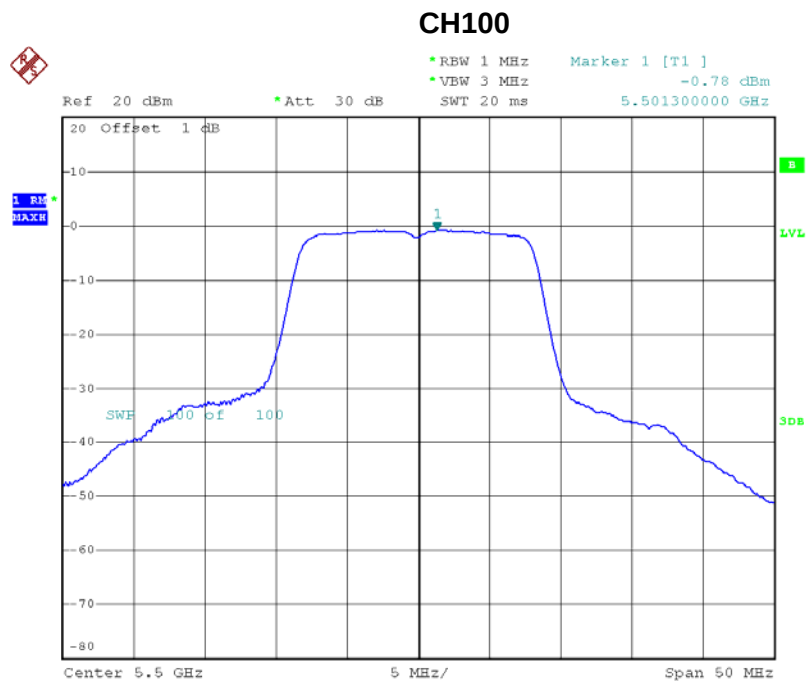


Date: 12.NOV.2013 02:03:03



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/CH100, CH116, CH140 – ANT 2		

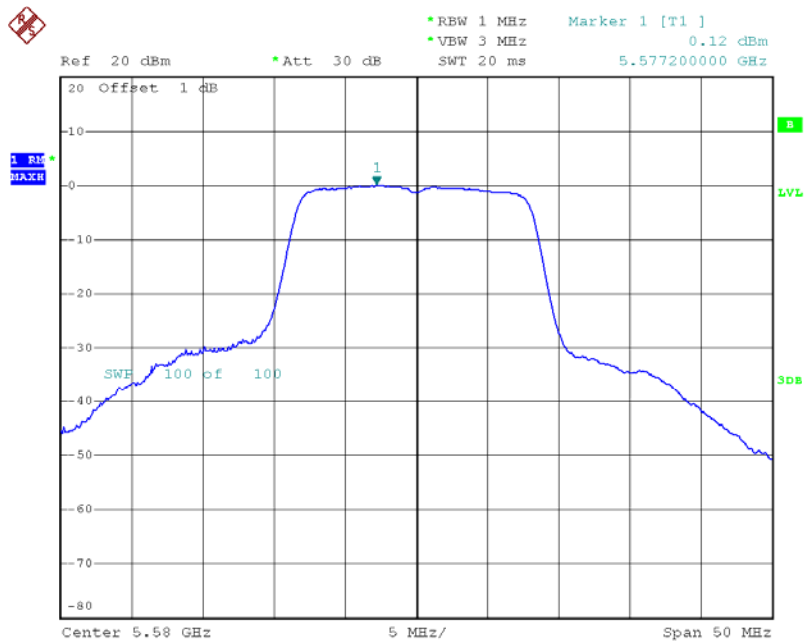
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	-0.78	11
CH116	5580	0.12	11
CH140	5700	0.26	11



Date: 12.NOV.2013 02:07:21

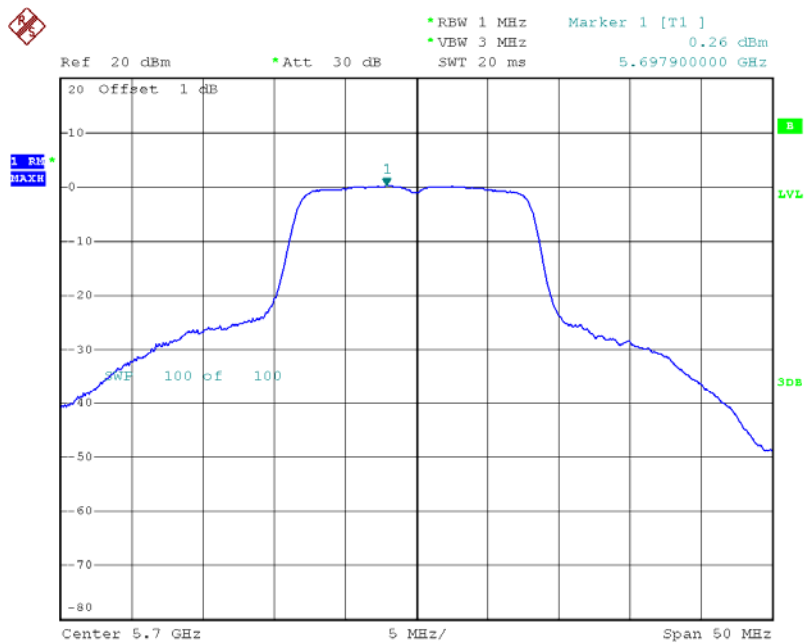


CH116



Date: 12.NOV.2013 02:05:24

CH140



Date: 12.NOV.2013 02:03:11



Neutron Engineering Inc.

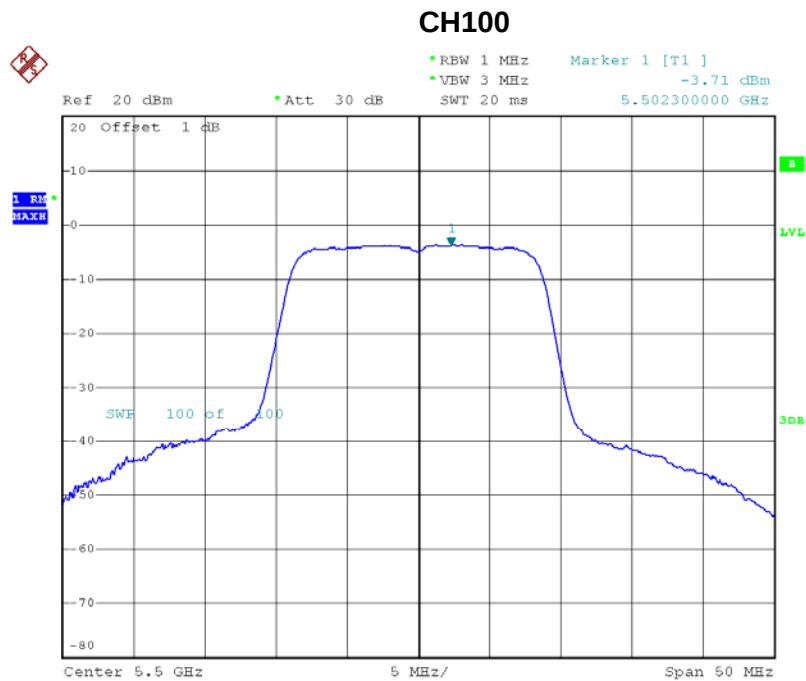
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/CH100, CH116, CH140 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	2.28	11
CH116	5580	0.12	11
CH140	5700	3.28	11



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH100, CH116, CH140 – ANT 1		

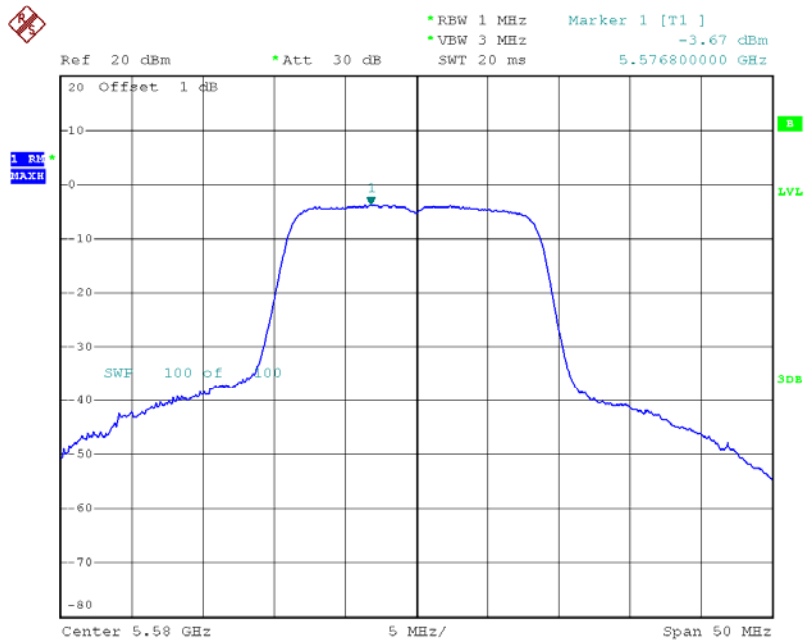
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	-3.71	11
CH116	5580	-3.67	11
CH140	5700	-4.35	11



Date: 12.NOV.2013 02:10:33

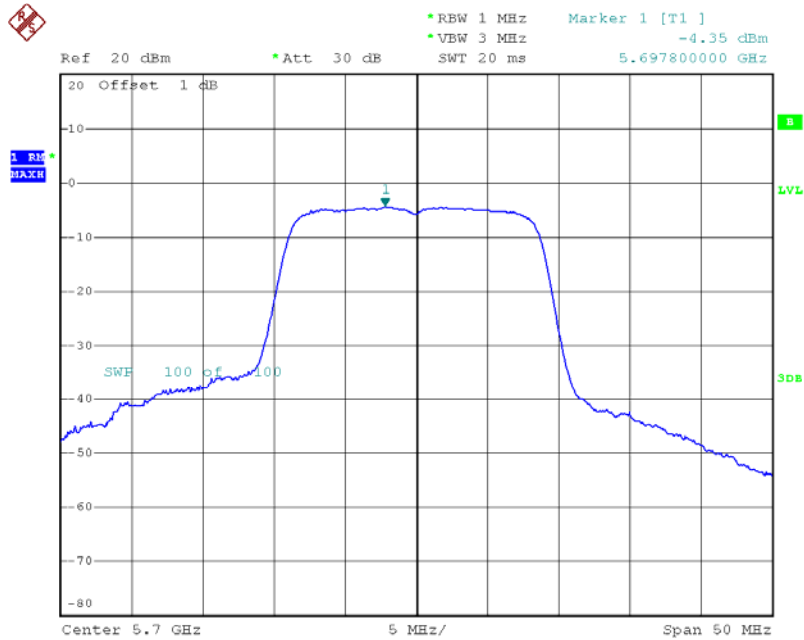


CH116



Date: 12.NOV.2013 02:12:12

CH140

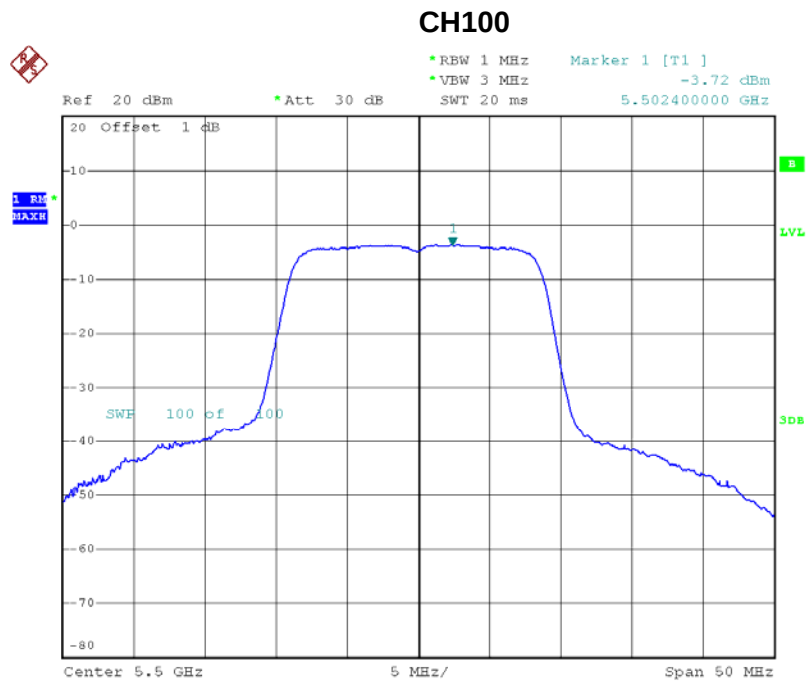


Date: 12.NOV.2013 02:13:59



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH100, CH116, CH140 – ANT 2		

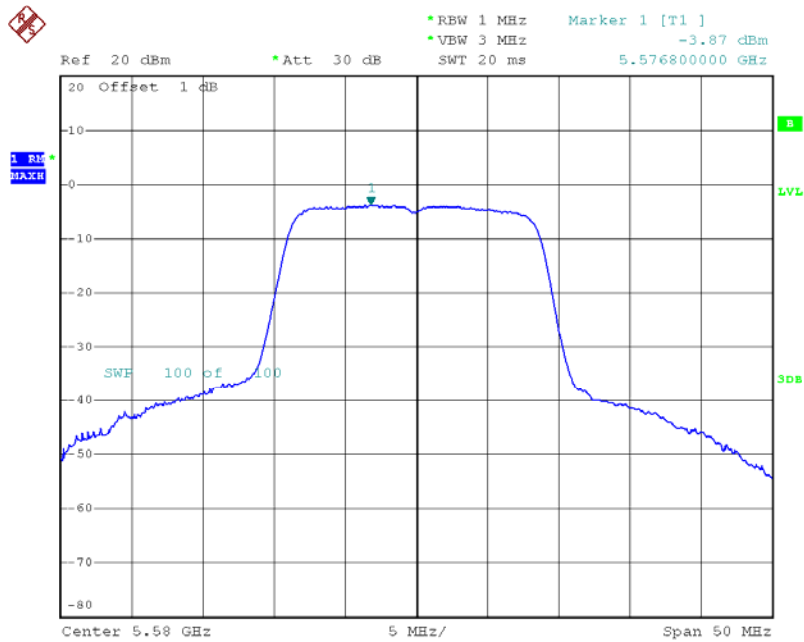
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	-3.72	11
CH116	5580	-3.87	11
CH140	5700	-4.36	11



Date: 12.NOV.2013 02:10:42

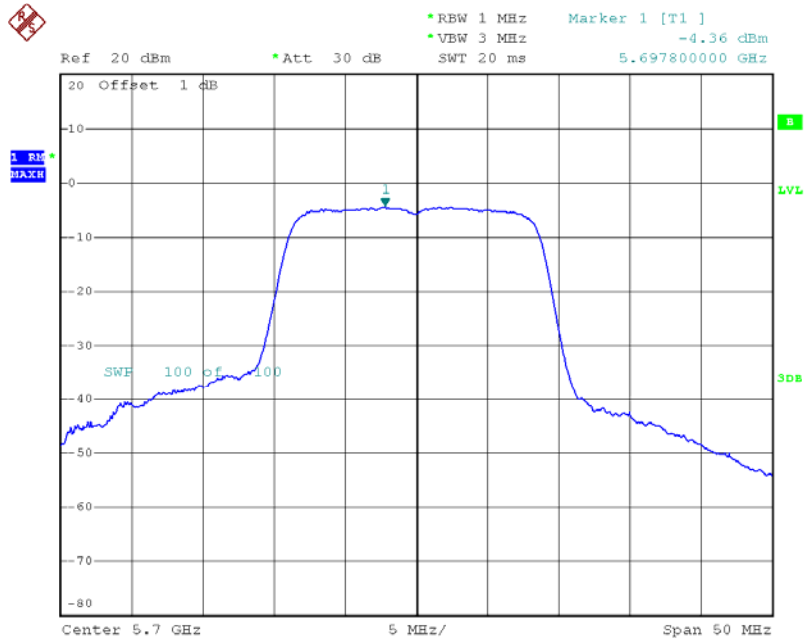


CH116



Date: 12.NOV.2013 02:12:19

CH140



Date: 12.NOV.2013 02:14:06



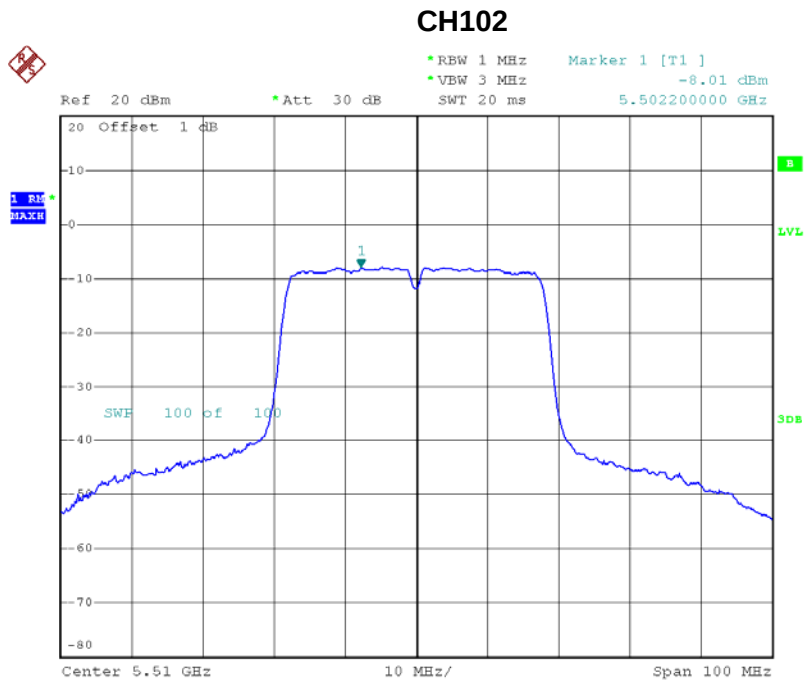
EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH100, CH116, CH140 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	-0.70	11
CH116	5580	-0.76	11
CH140	5700	-1.34	11



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/CH102, CH110,CH134 – ANT 1		

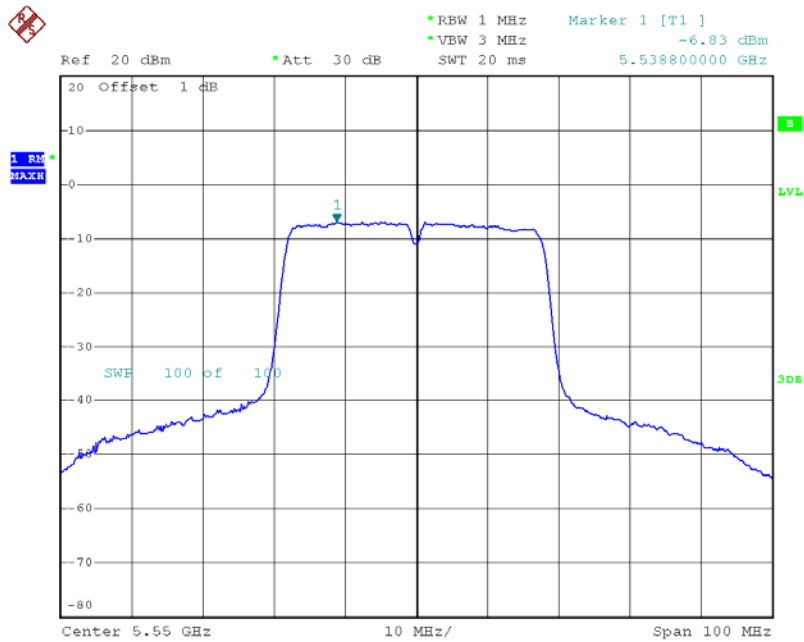
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	-8.01	11
CH110	5550	-6.83	11
CH134	5670	-6.31	11



Date: 12.NOV.2013 03:33:03

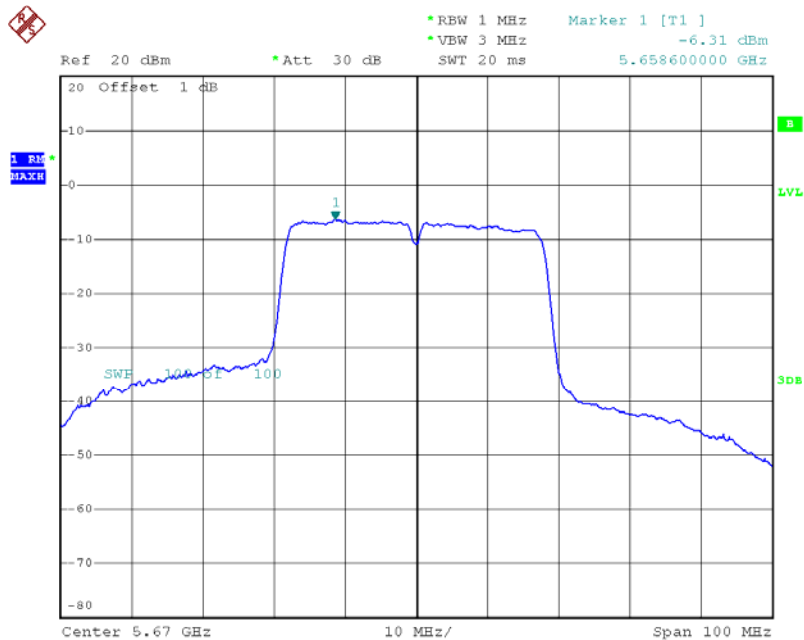


CH110



Date: 14.NOV.2013 03:12:29

CH134

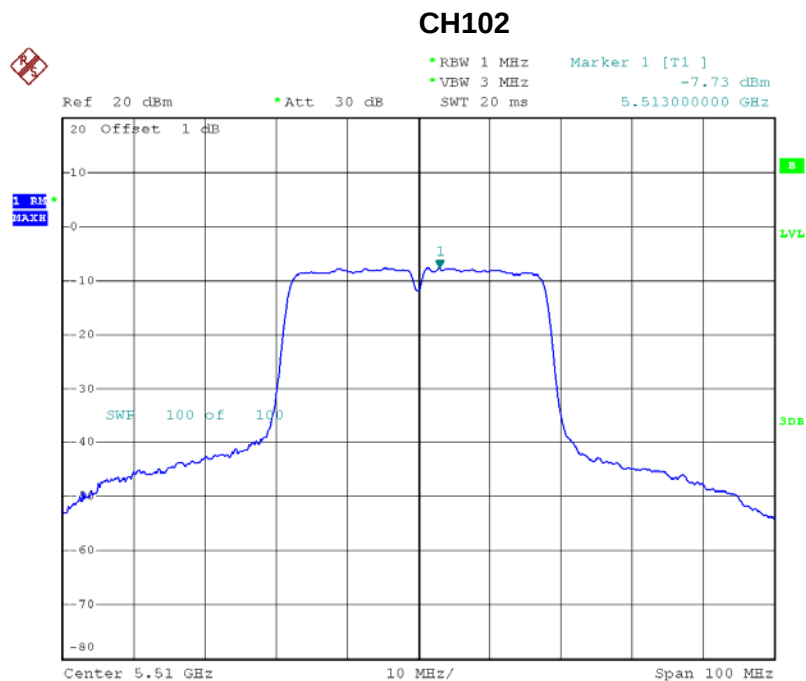


Date: 12.NOV.2013 03:35:33



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/CH102, CH110,CH134 – ANT 2		

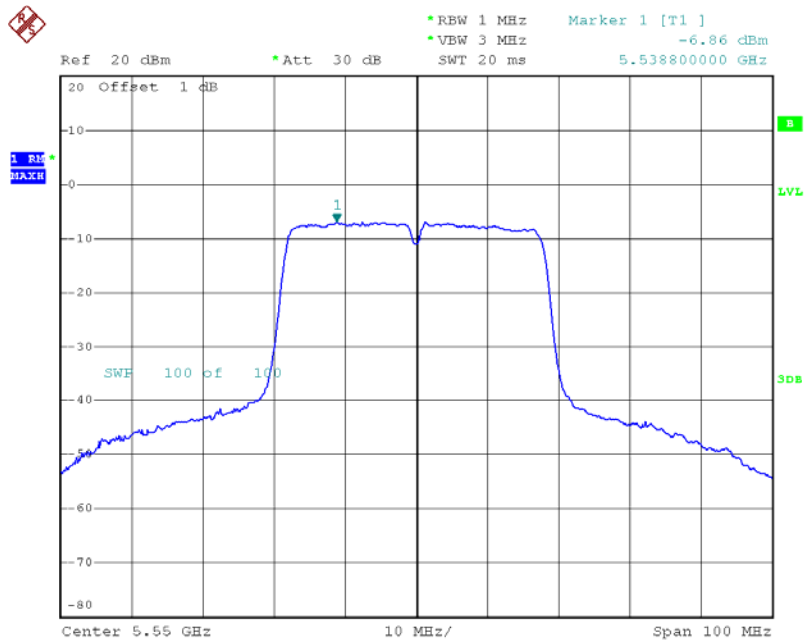
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	-7.73	11
CH110	5550	-6.86	11
CH134	5670	-6.28	11



Date: 12.NOV.2013 03:32:54

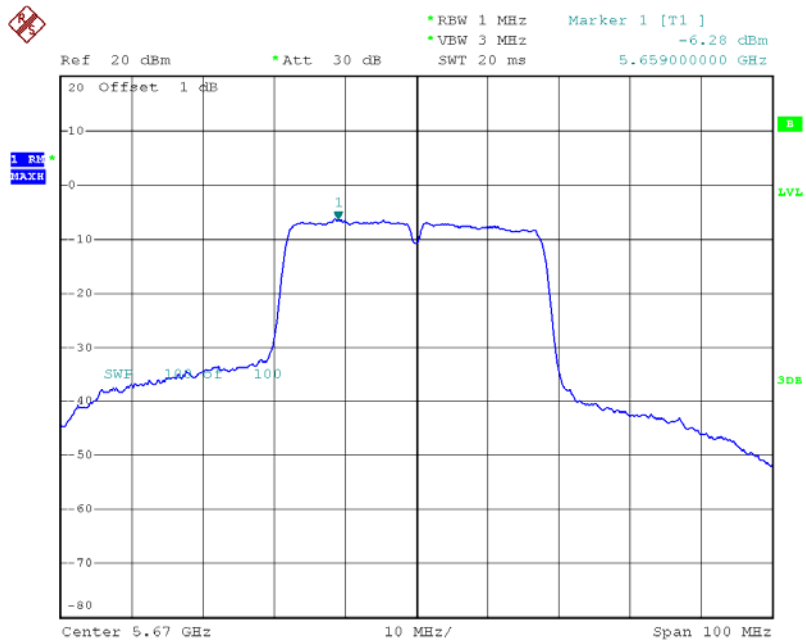


CH110



Date: 14.NOV.2013 03:12:38

CH134



Date: 12.NOV.2013 03:35:24



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 ° C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/CH102, CH110,CH134 – ANT 1 + ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	-4.86	11
CH110	5550	-3.83	11
CH134	5670	-3.28	11



9. PEAK EXCURSION MEASUREMENT

9.1 APPLIED PROCEDURES / LIMIT

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

9.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2012	Nov.26.2013

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

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) / 3000 kHz (Average Trace)
Detector	Peak (Peak Trace) / RMS (Average Trace)
Trace	Max Hold
Sweep Time	60s

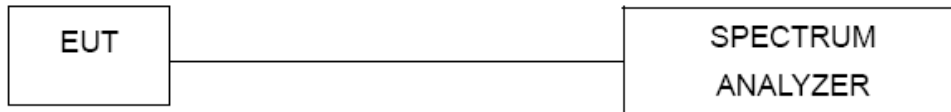
- c. Peak Trace: Set RBW = 1 MHz, VBW $\geq$ 3 MHz with peak detector and maxhold settings.
d. Average Trace: set RBW = 1 MHz, VBW = 3 MHz with RMS detector and trace average across 100 traces in power averaging mode.

9.1.3 DEVIATION FROM STANDARD

No deviation.



9.1.4 TEST SETUP



9.1.5 EUT OPERATION CONDITIONS

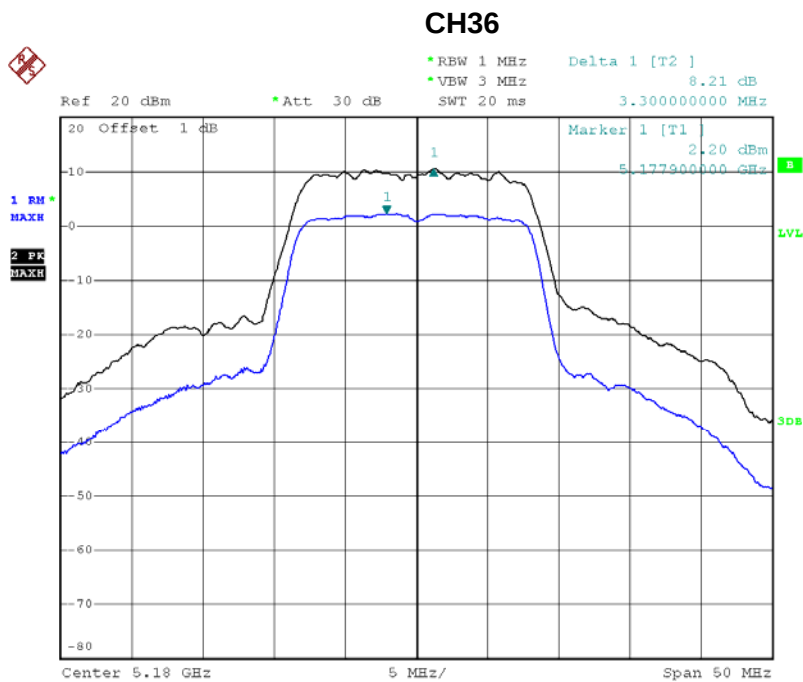
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



9.1.6 TEST RESULTS

EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX A Mode/CH36, CH40, CH48		

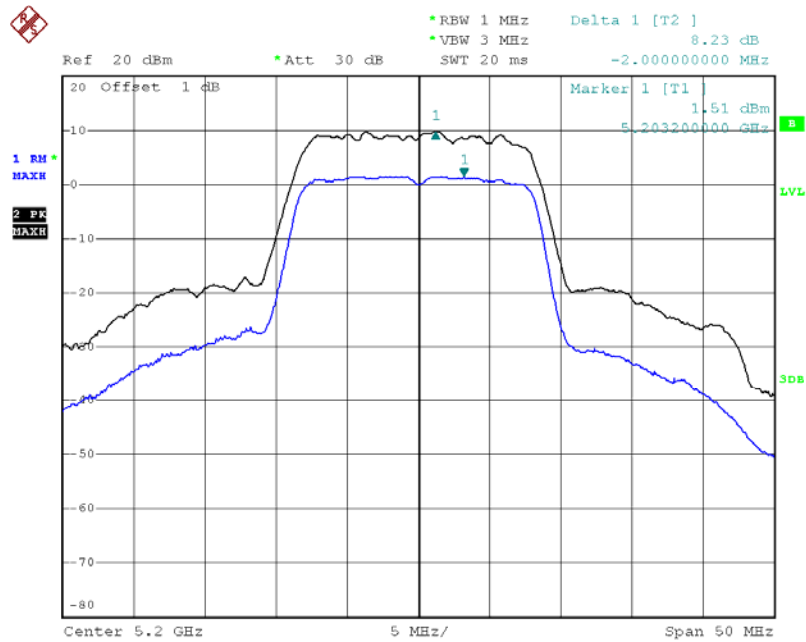
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH36	5180	8.21	13
CH40	5200	8.23	13
CH48	5240	7.90	13



Date: 12.NOV.2013 03:47:26

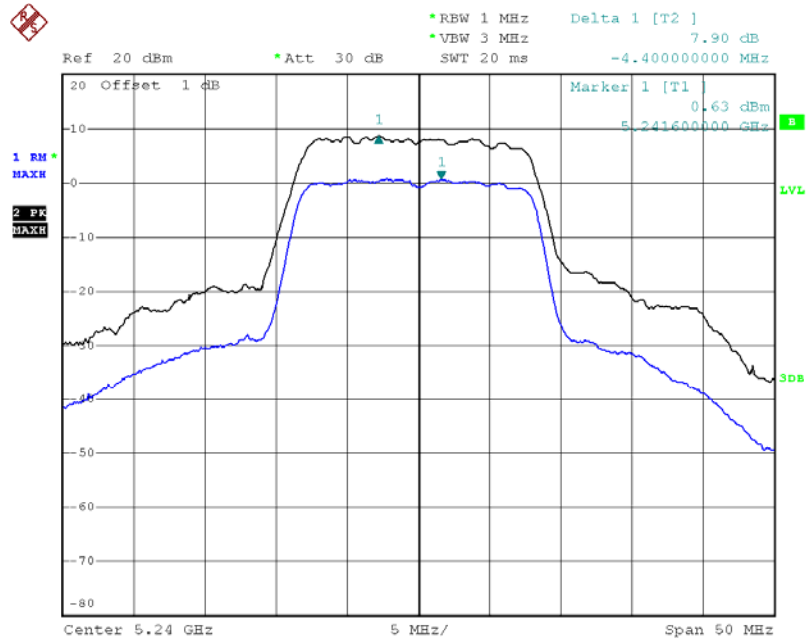


CH40



Date: 12.NOV.2013 03:48:33

CH48

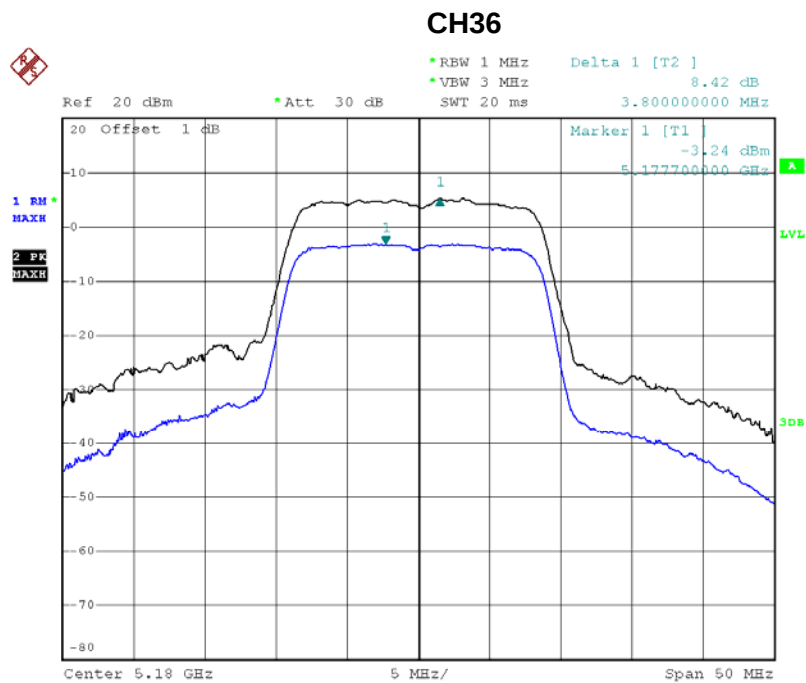


Date: 12.NOV.2013 03:49:08



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N20 Mode/CH36, CH40, CH48		

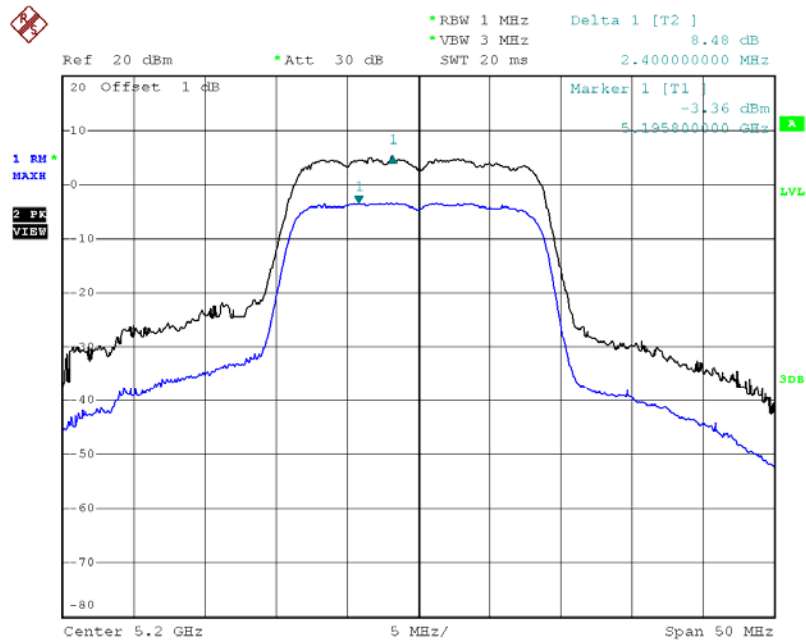
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH36	5180	8.42	13
CH40	5200	8.48	13
CH48	5240	8.53	13



Date: 10.NOV.2013 13:38:45

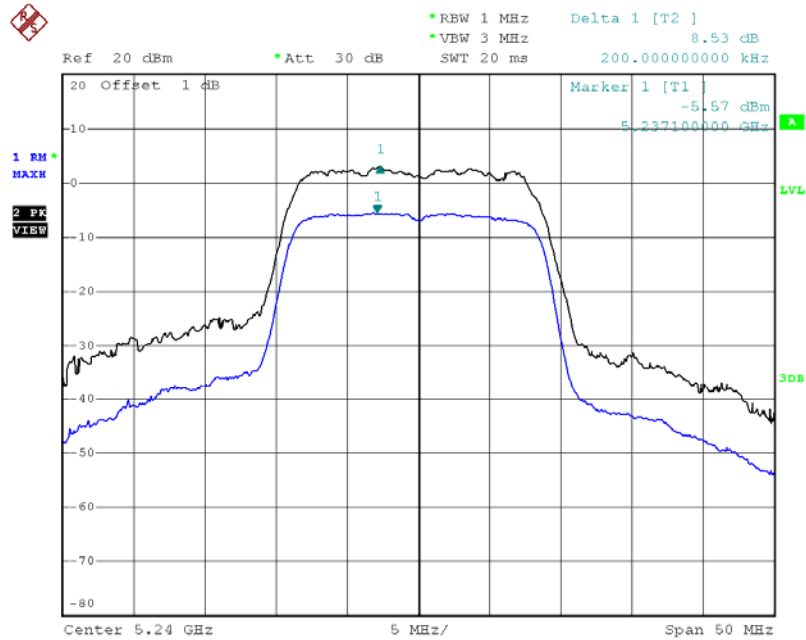


CH40



Date: 10.NOV.2013 13:39:26

CH48

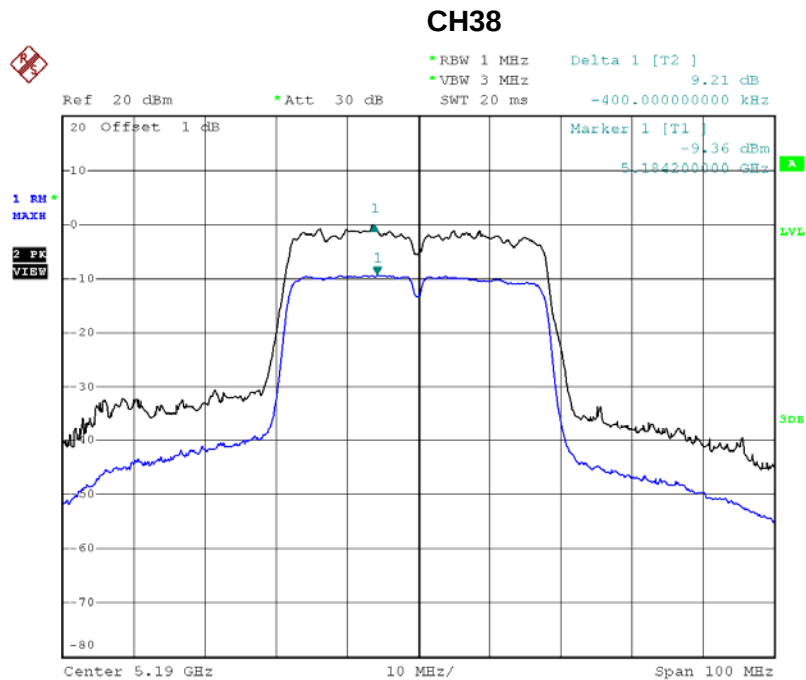


Date: 10.NOV.2013 13:39:57

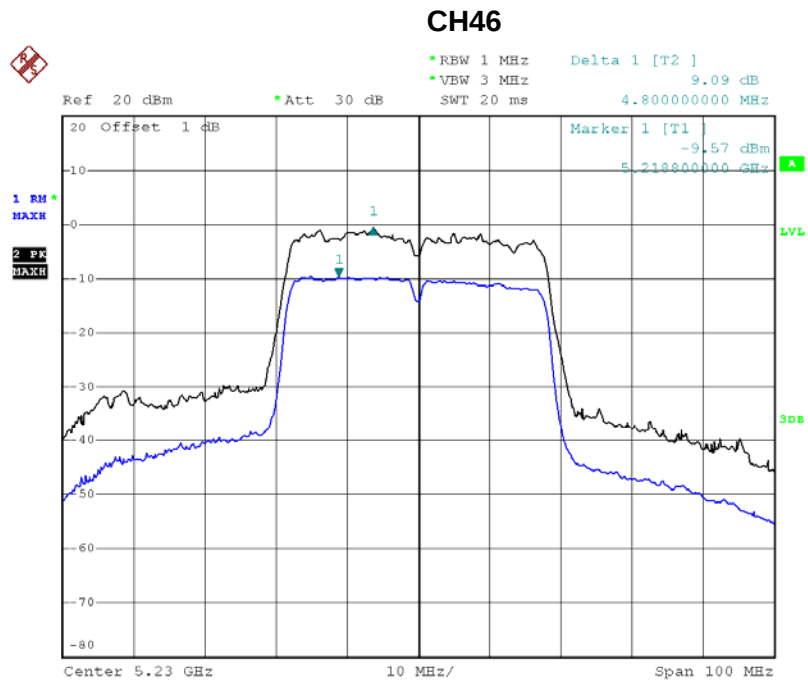


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1/TX N40 Mode/CH38, CH46		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH38	5190	9.21	13
CH46	5230	9.09	13



Date: 10.NOV.2013 13:46:21

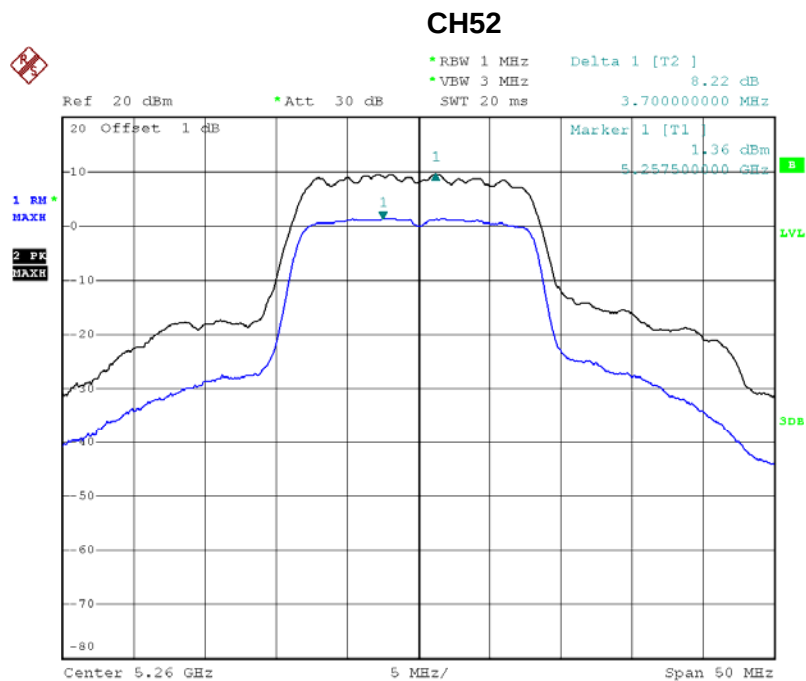


Date: 10.NOV.2013 13:48:34



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64		

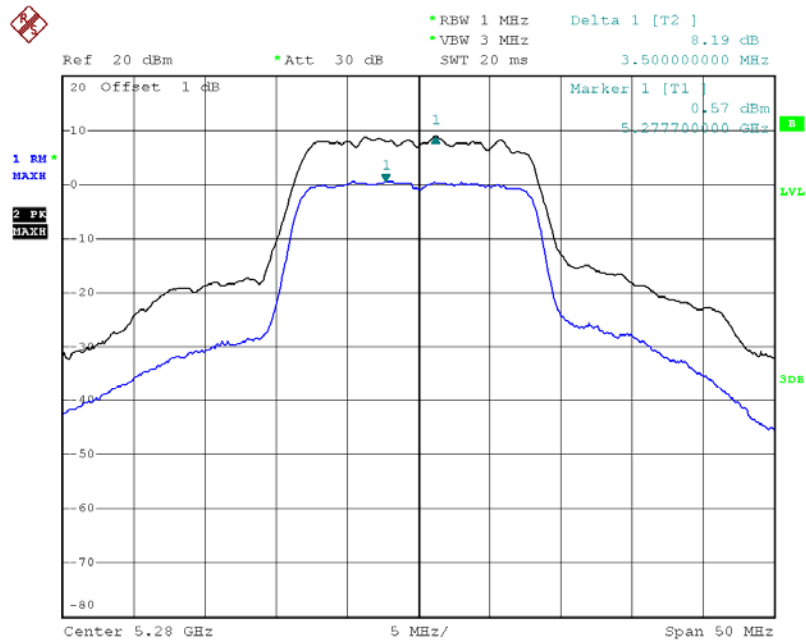
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH52	5260	8.22	13
CH56	5280	8.19	13
CH64	5320	7.92	13



Date: 12.NOV.2013 03:52:18

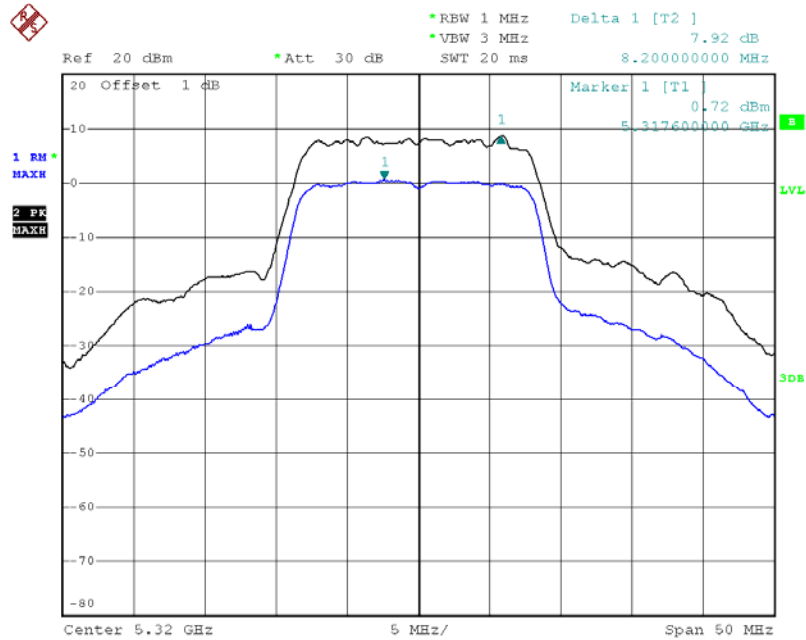


CH56



Date: 12.NOV.2013 03:53:13

CH64

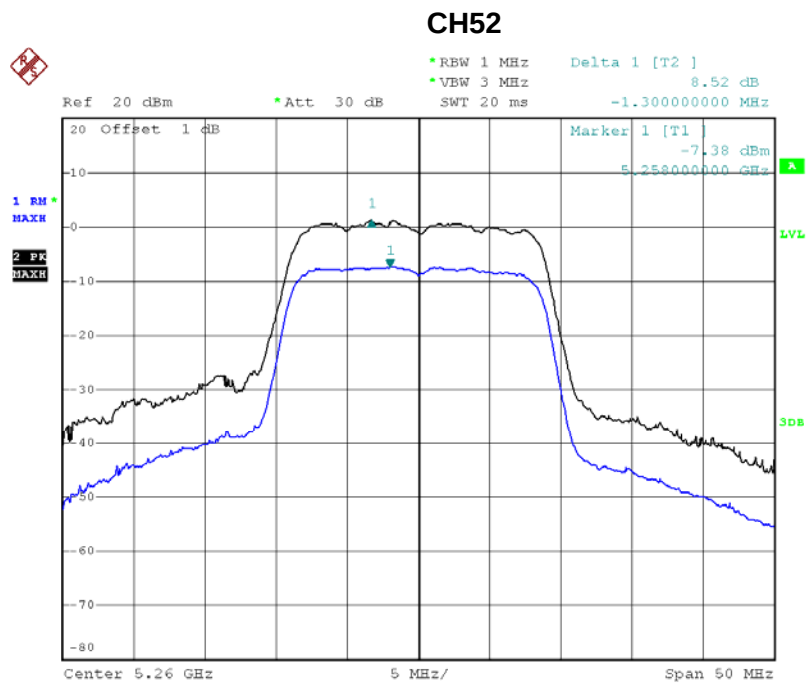


Date: 12.NOV.2013 03:53:51



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64		

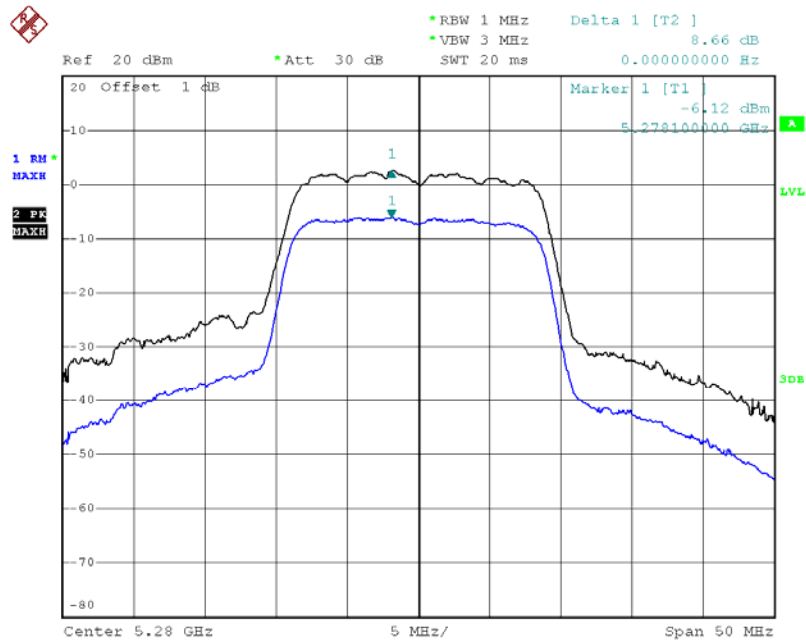
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH52	5260	8.52	13
CH56	5280	8.66	13
CH64	5320	8.79	13



Date: 10.NOV.2013 14:30:49

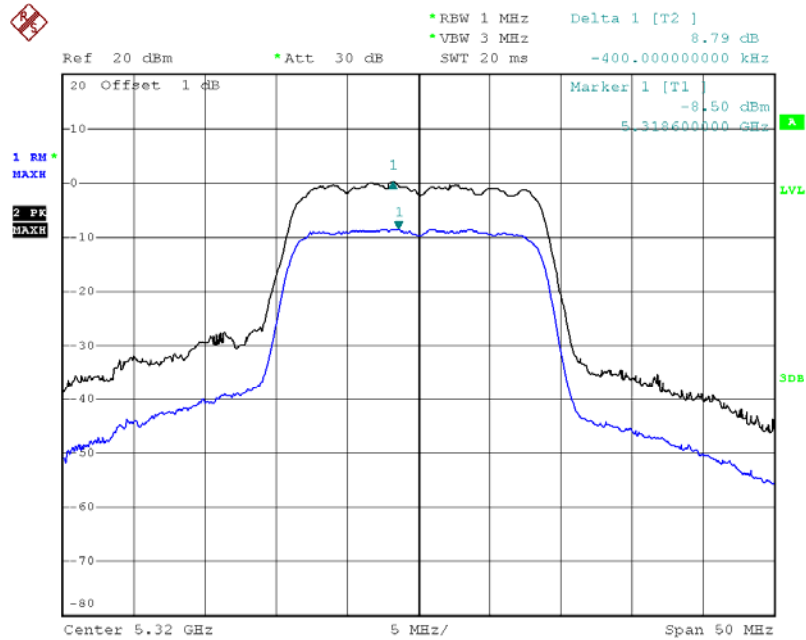


CH56



Date: 10.NOV.2013 14:29:07

CH64

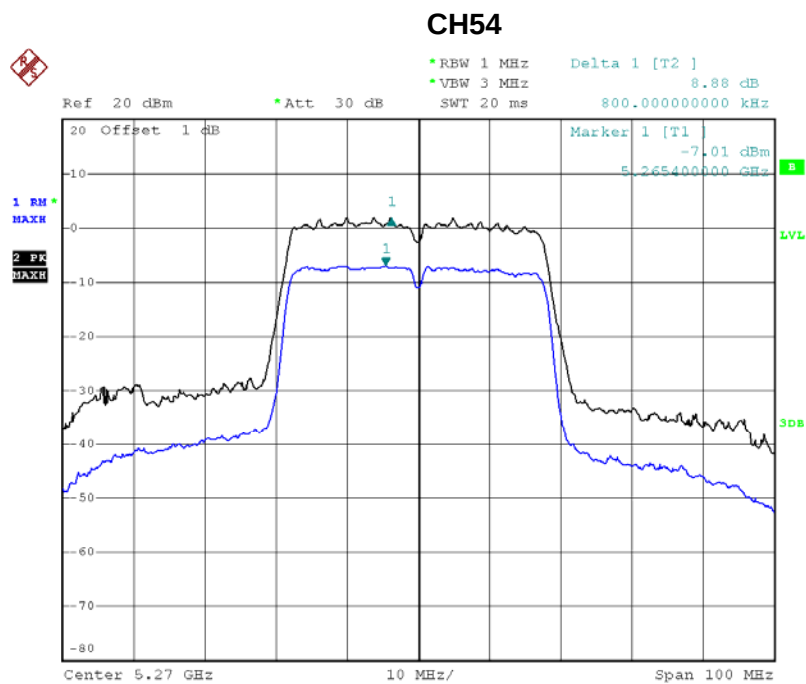


Date: 10.NOV.2013 14:28:31

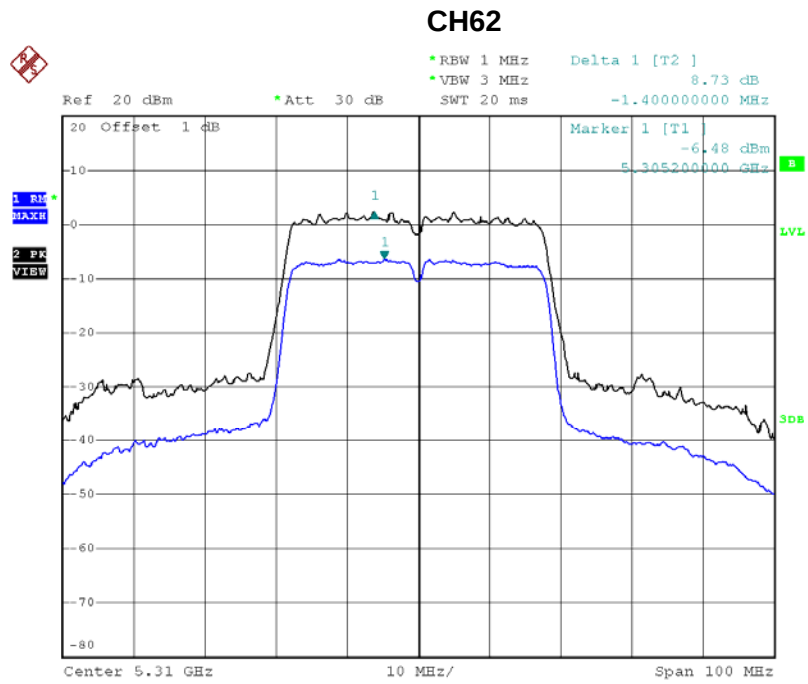


EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/CH54, CH62		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH54	5270	8.88	13
CH62	5310	8.73	13



Date: 12.NOV.2013 01:36:46

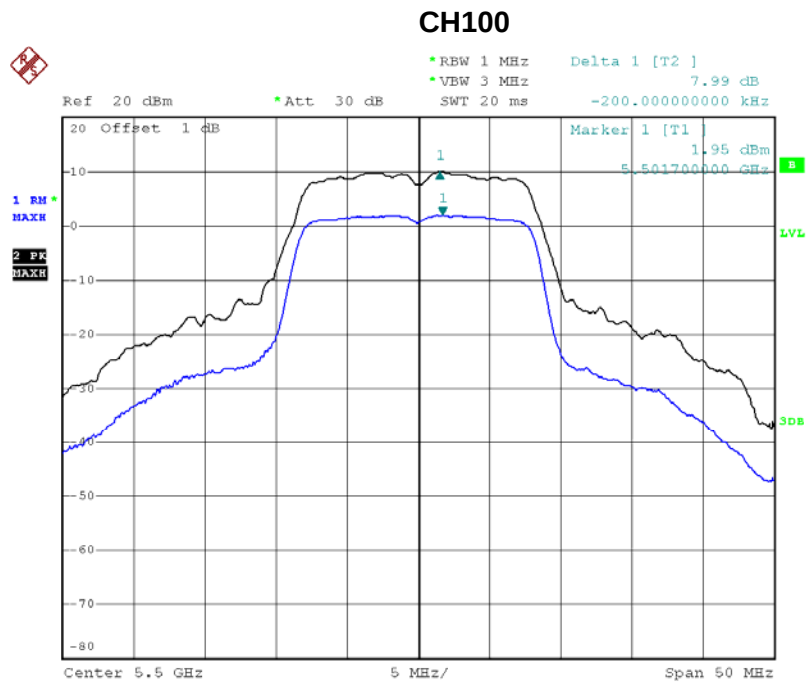


Date: 12.NOV.2013 01:34:24



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/CH100, CH116, CH140		

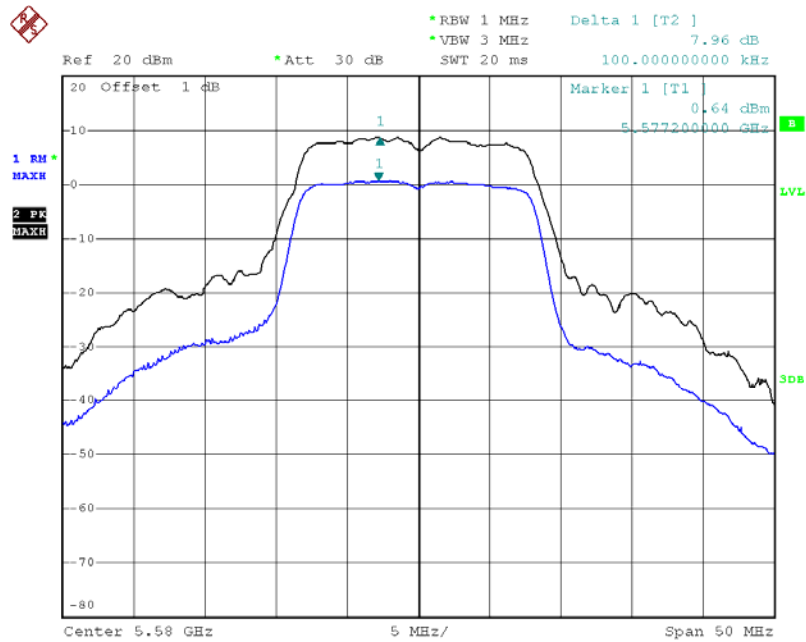
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH100	5500	7.99	13
CH116	5580	7.96	13
CH140	5700	7.83	13



Date: 12.NOV.2013 01:54:37

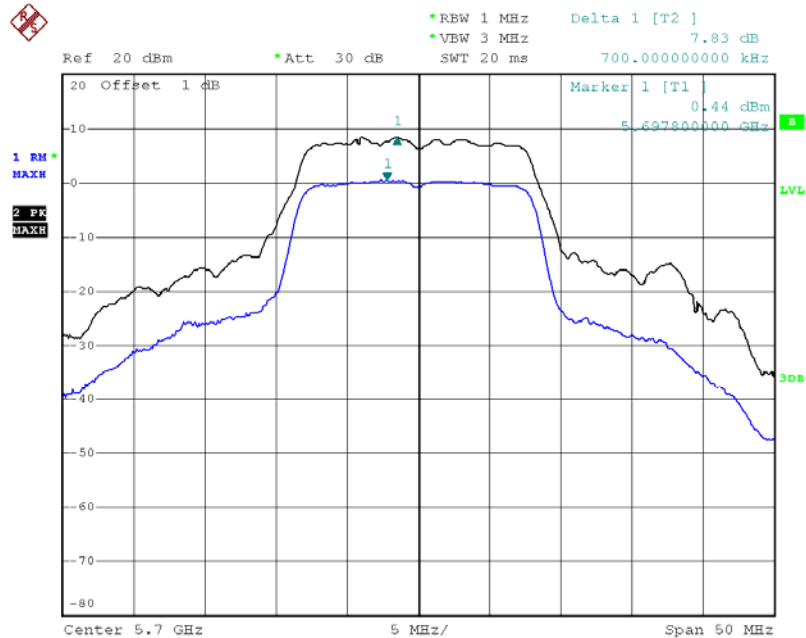


CH116



Date: 12.NOV.2013 01:57:08

CH140

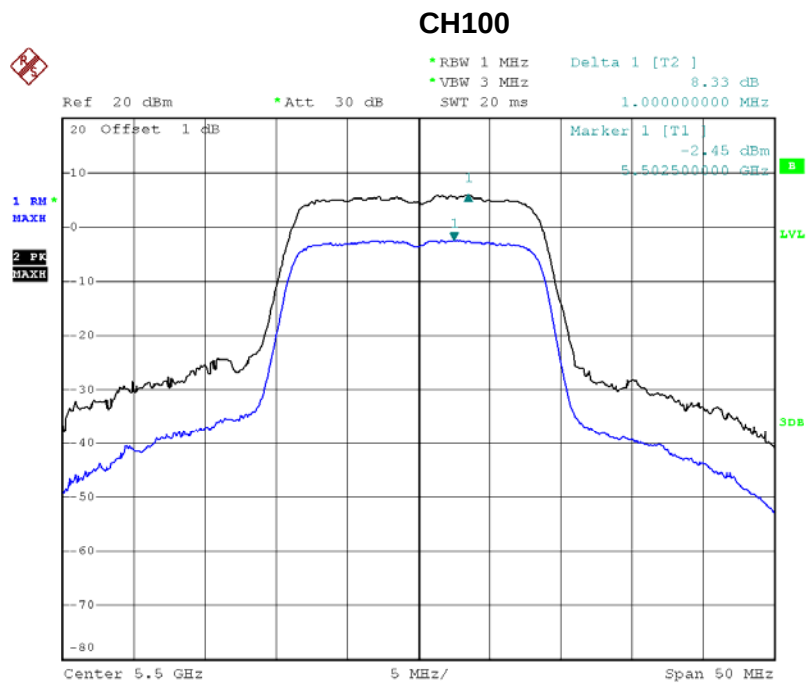


Date: 12.NOV.2013 01:58:31



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH52, CH56, CH64		

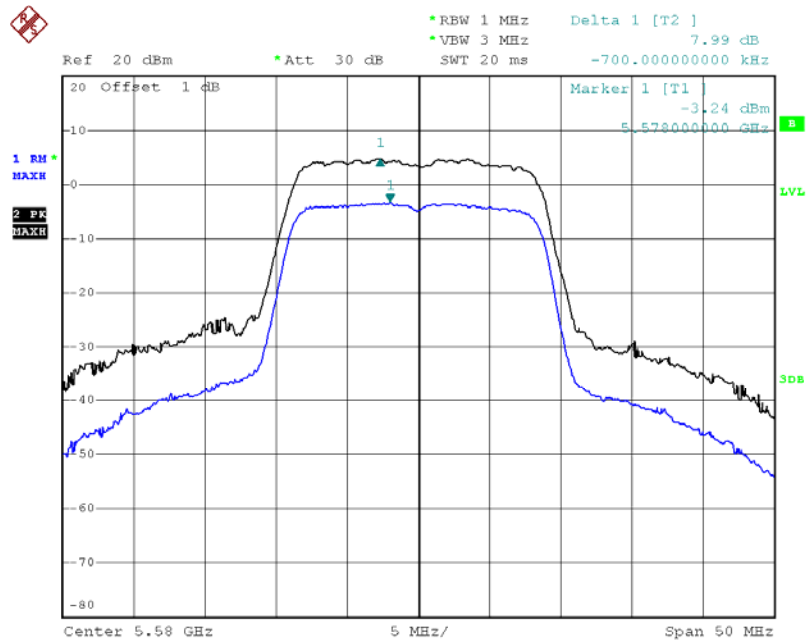
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH100	5500	8.33	13
CH116	5580	7.99	13
CH140	5700	8.12	13



Date: 12.NOV.2013 02:19:16

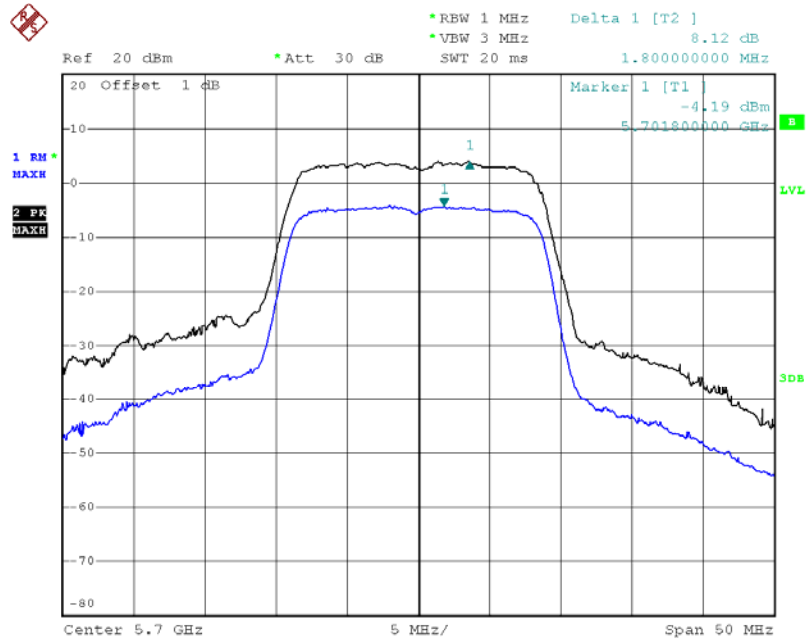


CH116



Date: 12.NOV.2013 02:18:02

CH140

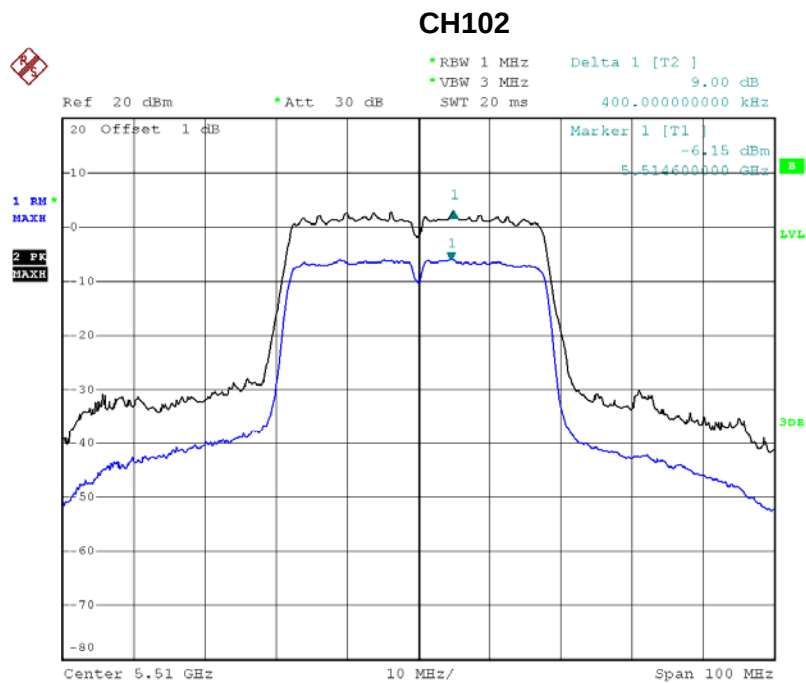


Date: 12.NOV.2013 02:17:29



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/CH102, CH110,CH134		

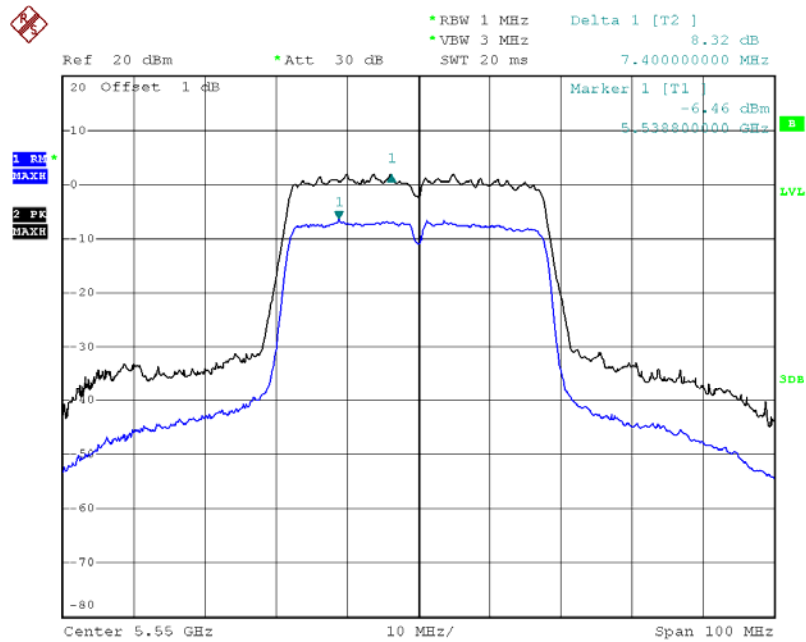
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH102	5510	9.00	13
CH110	5550	8.23	13
CH134	5670	8.68	13



Date: 12.NOV.2013 03:41:59

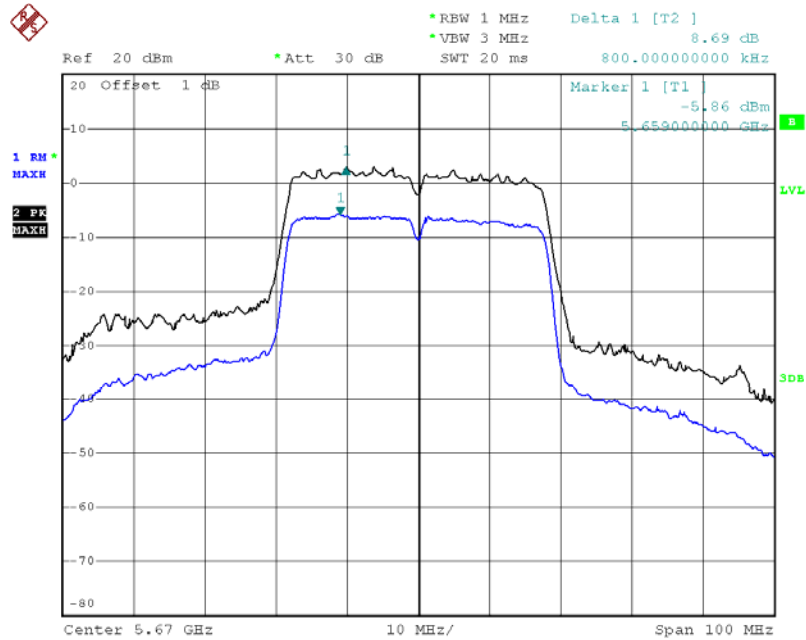


CH110



Date: 14.NOV.2013 03:13:18

CH134



Date: 12.NOV.2013 03:37:21



10. FREQUENCY STABILITY MEASUREMENT

10.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E 15.407(g)			
Test Item	Limit	Frequency Range (MHz)	Result
Frequency Stability	specified in the user's manual	5150 – 5250	PASS
		5250 – 5350	PASS
		5470 – 5725	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	Nov. 26.2013
2	Precision Oven Tester	HOLINK	H-T-1F-D	BA03101701	May.10.2014

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of Equipment List is One Year.

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

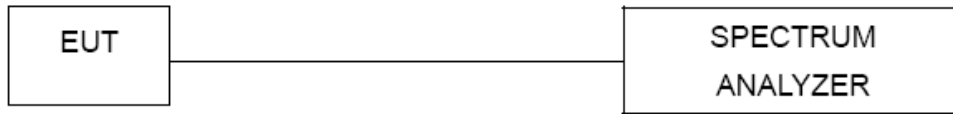
- c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- d. user manual temperature is -10°C~55°C.

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 :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 1		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5180
132	5180.001300
120	5180.002600
108	5180.003100
Max. Deviation (MHz)	0.003100
Max. Deviation (ppm)	0.60

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5180
0	5180.002100
10	5180.002200
20	5180.001900
30	5180.002600
40	5180.002600
50	5180.001900
60	5180.002000
Max. Deviation (MHz)	0.002600
Max. Deviation (ppm)	0.50



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5320
132	5180.001300
120	5180.002600
108	5180.003100
Max. Deviation (MHz)	0.003100
Max. Deviation (ppm)	0.60

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5320
0	5180.002100
10	5180.002200
20	5180.001900
30	5180.002600
40	5180.002600
50	5180.001900
60	5180.002000
Max. Deviation (MHz)	0.002600
Max. Deviation (ppm)	0.50



EUT :	WLAN Module	Model Name :	T77H479.00
Temperature :	25 °C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5700
132	5700.002300
120	5700.002100
108	5700.001900
Max. Deviation (MHz)	0.002300
Max. Deviation (ppm)	0.60

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5700
0	5700.002300
10	5700.002100
20	5700.002100
30	5700.001900
40	5700.002000
50	5700.001900
60	5700.002800
Max. Deviation (MHz)	0.002600
Max. Deviation (ppm)	0.4912



11. EUT TEST PHOTO

Conducted Measurement Photos





**Radiated Measurement Photos
30MHz-1GHz**





**Radiated Measurement Photos
Above 1GHz**

