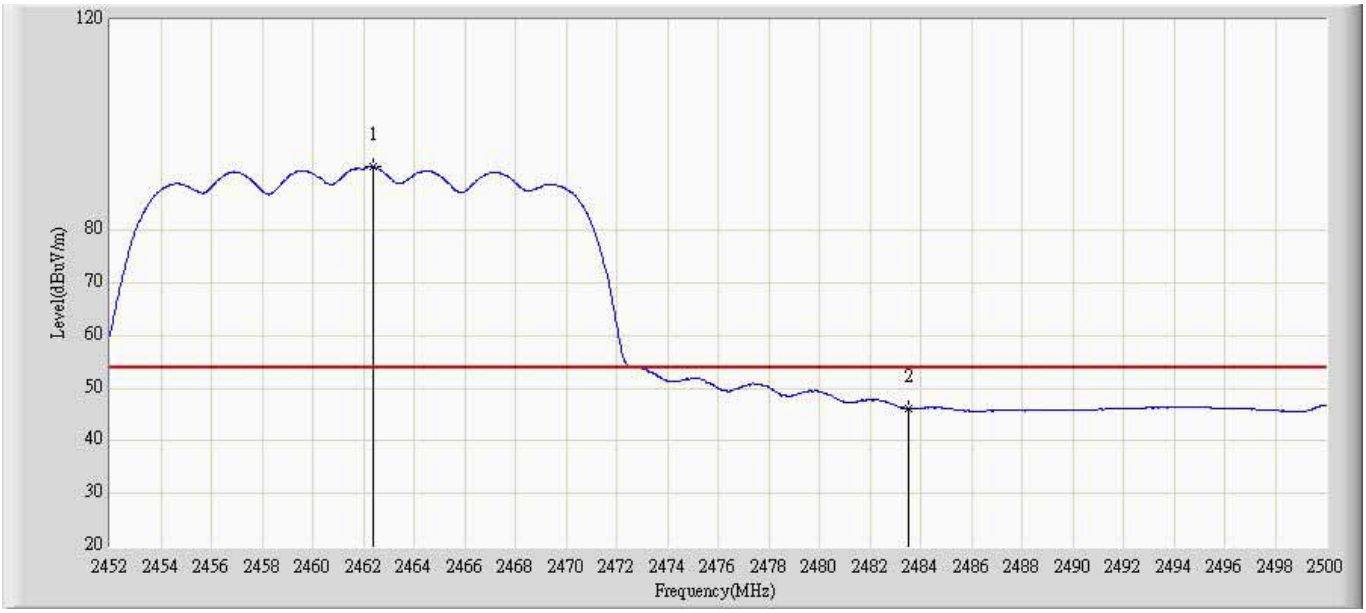
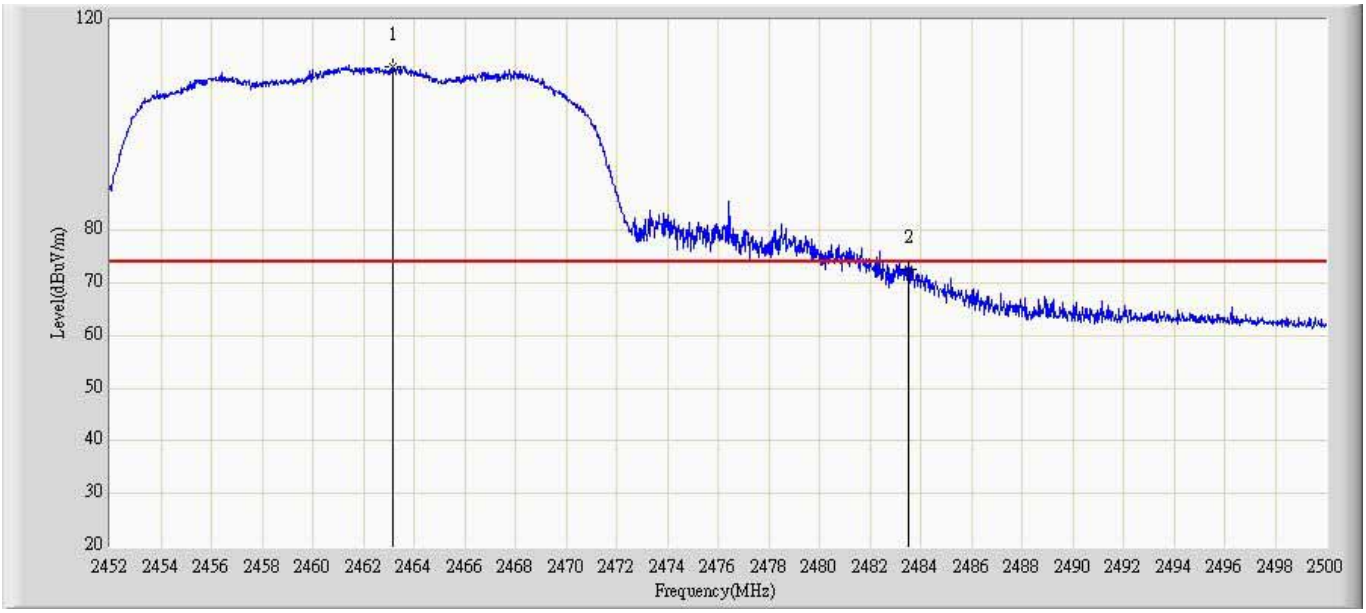
Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 17:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode3: Transmit at channel 2462MHz by 802.11n(20MHz) ant 0+1	



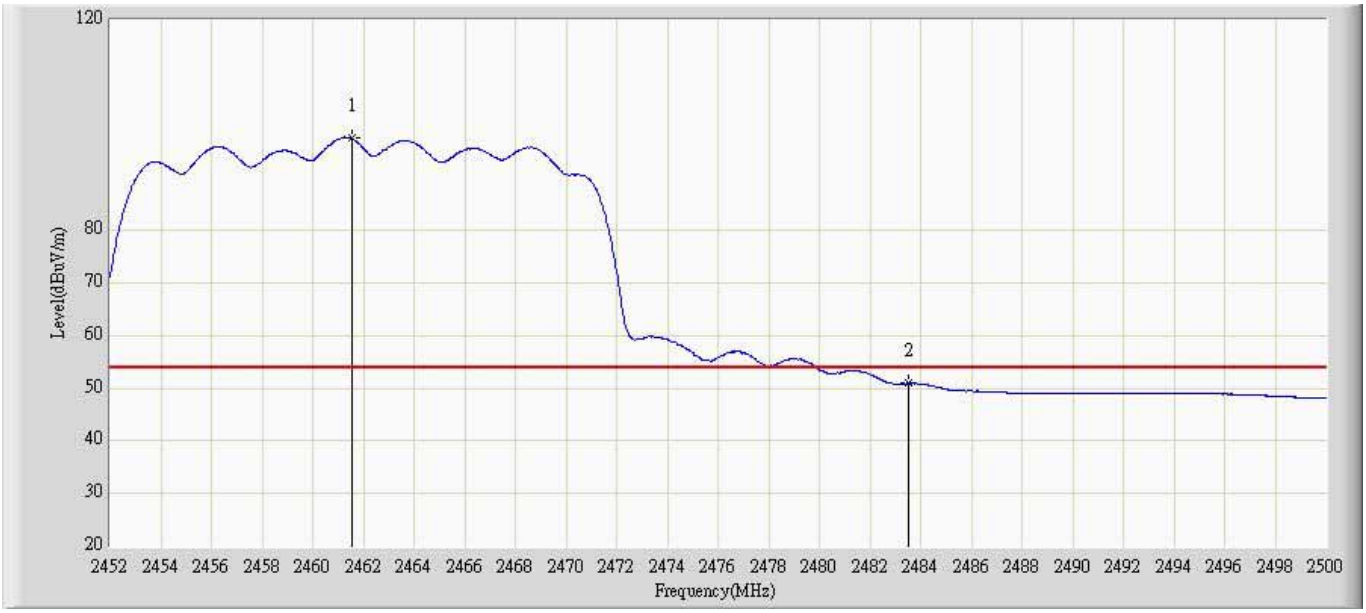
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2462.416	92.064	54.279	N/A	N/A	37.784	AV
2			2483.500	46.181	8.211	-7.819	54.000	37.969	AV

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 17:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode3: Transmit at channel 2462MHz by 802.11n(20MHz) ant 0+1	



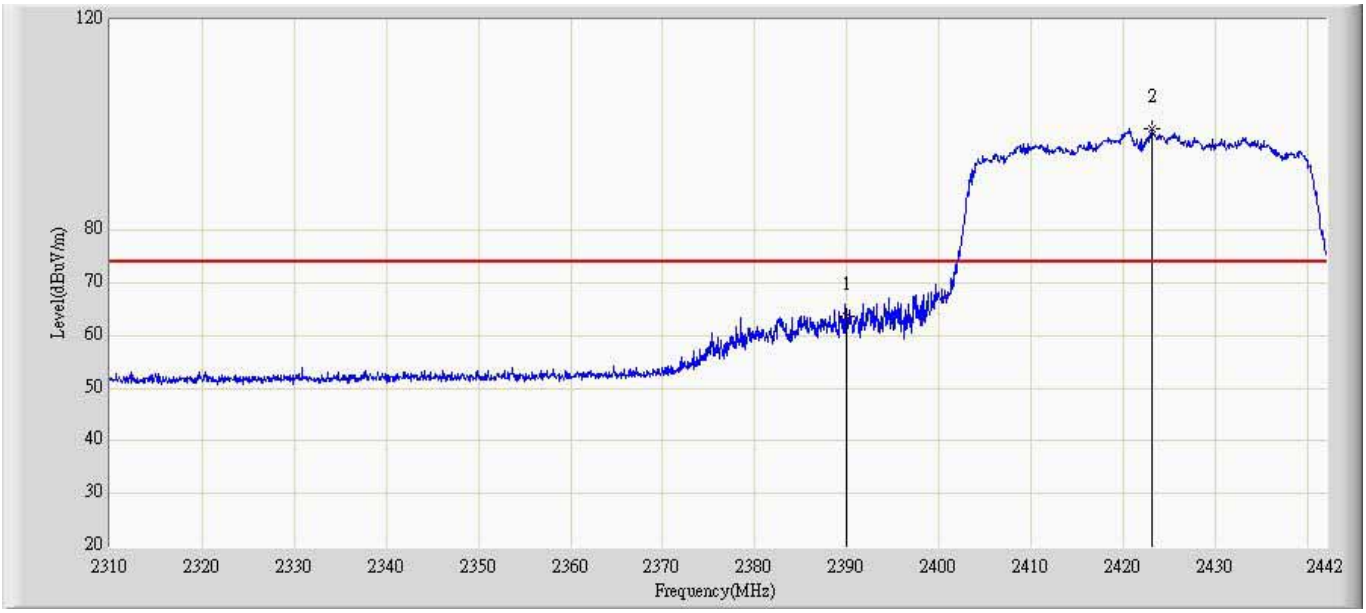
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2463.160	111.201	74.362	N/A	N/A	36.838	PK
2			2483.500	72.690	35.754	-1.310	74.000	36.935	PK

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 17:52
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode3: Transmit at channel 2462MHz by 802.11n(20MHz) ant 0+1	



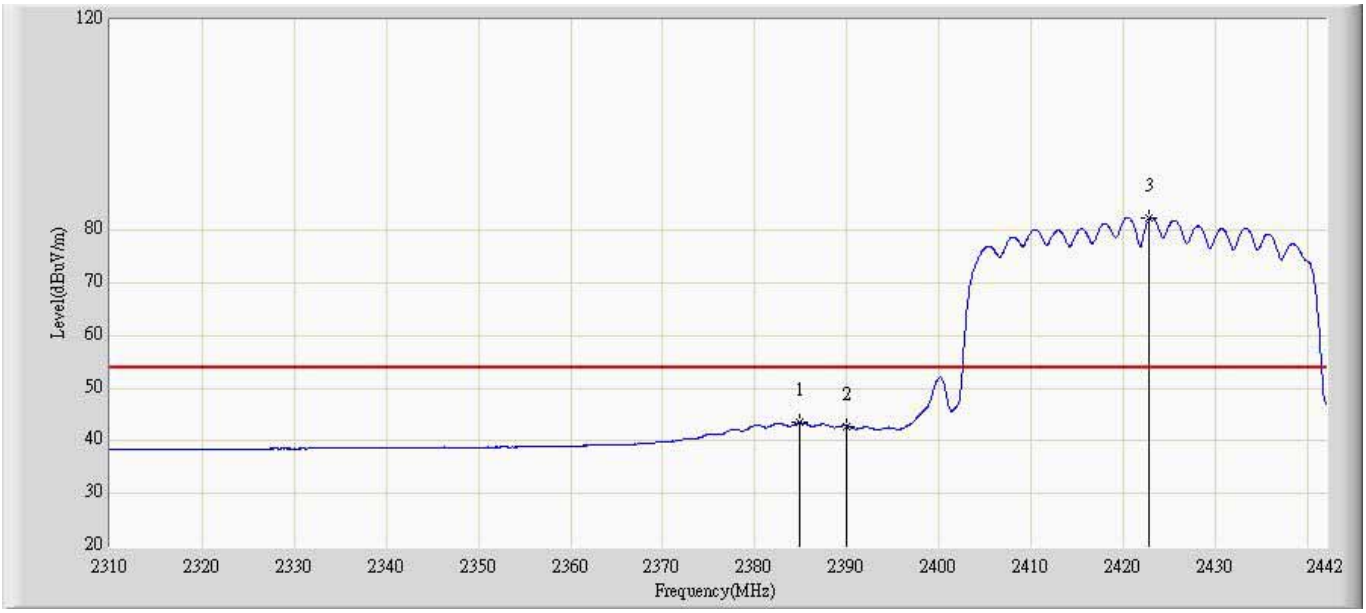
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2461.528	97.496	60.665	N/A	N/A	36.831	AV
2			2483.500	50.903	13.967	-3.097	54.000	36.935	AV

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 17:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2422MHz by 802.11n(40MHz) ant 0+1	



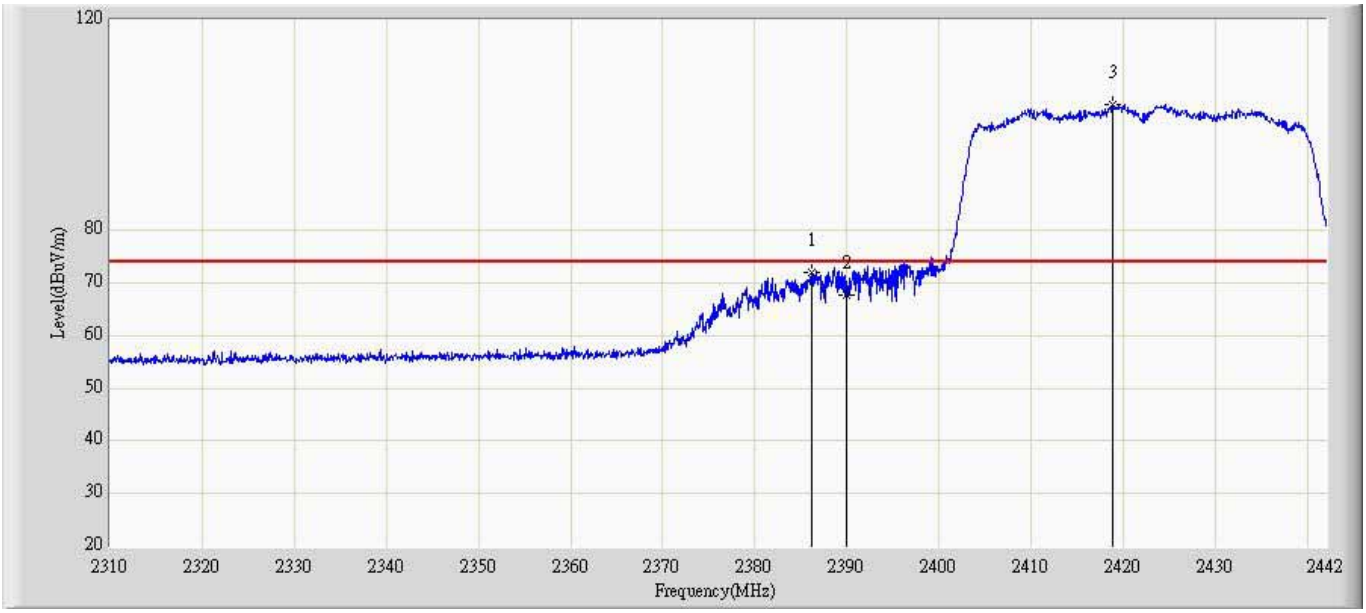
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2390.000	63.767	26.608	-10.233	74.000	37.159	PK
2		*	2423.190	99.390	61.939	N/A	N/A	37.451	PK

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 17:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2422MHz by 802.11n(40MHz) ant 0+1	



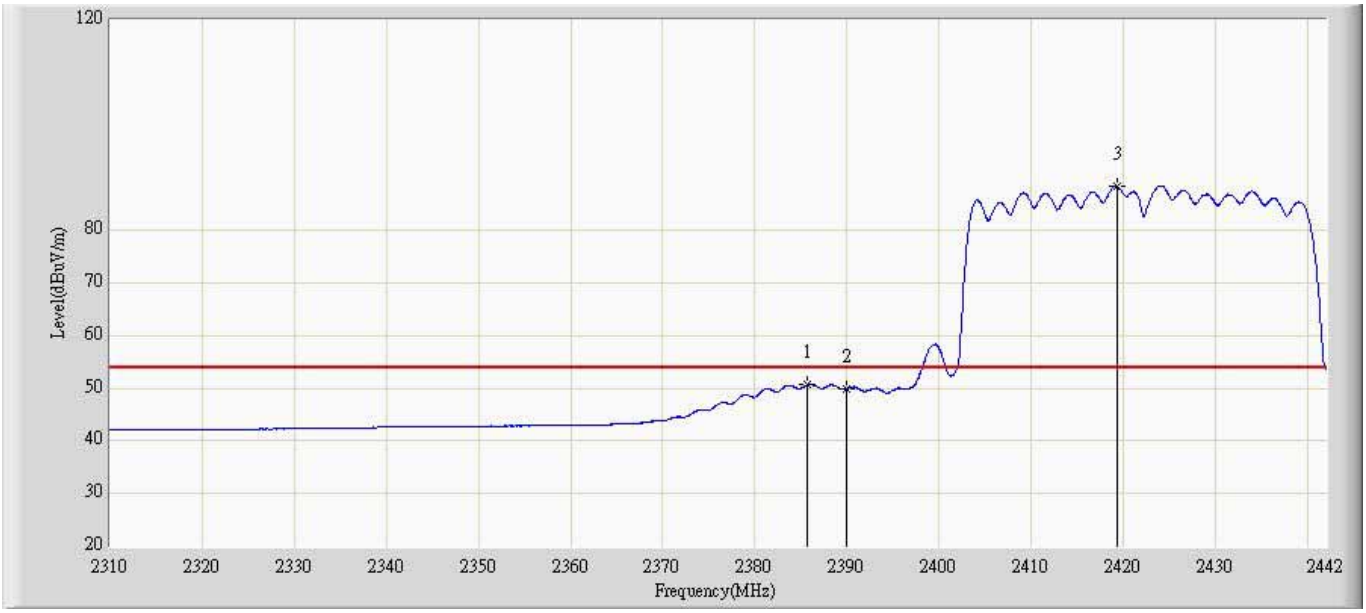
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2384.844	43.468	6.354	-10.532	54.000	37.114	AV
2			2390.000	42.815	5.656	-11.185	54.000	37.159	AV
3		*	2422.860	82.283	44.835	N/A	N/A	37.448	AV

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 17:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2422MHz by 802.11n(40MHz) ant 0+1	



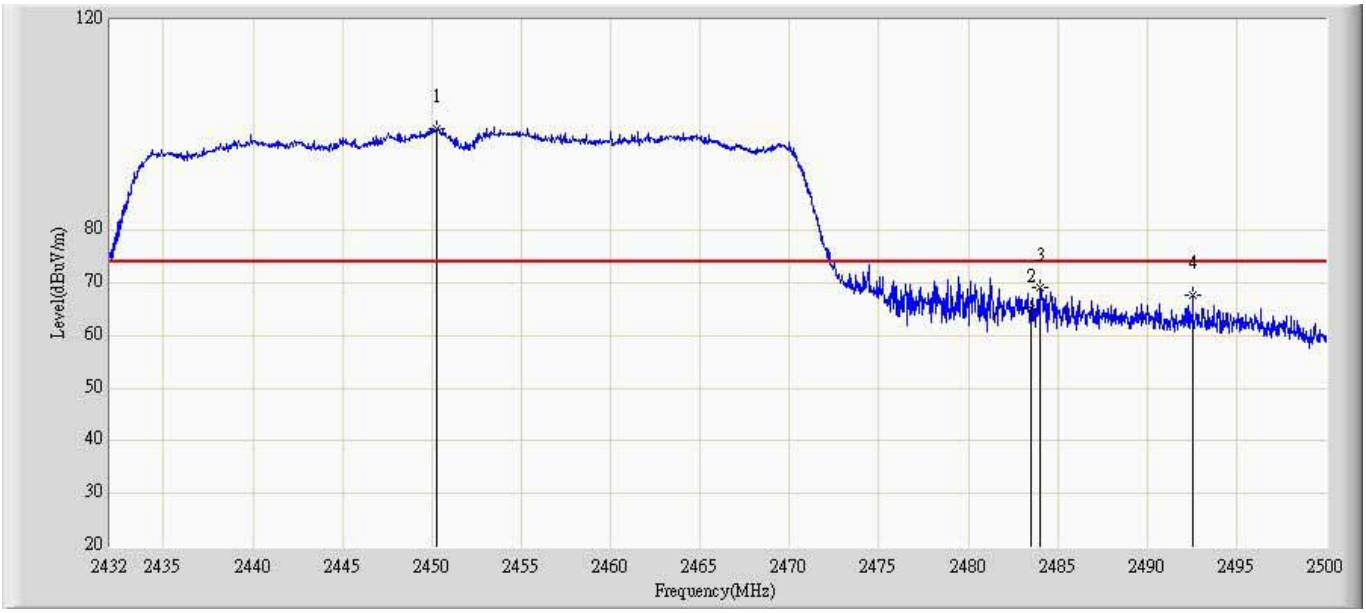
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2386.230	72.150	35.669	-1.850	74.000	36.481	PK
2			2390.000	67.598	31.099	-6.402	74.000	36.499	PK
3		*	2418.900	104.013	67.375	N/A	N/A	36.637	PK

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 18:45
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2422MHz by 802.11n(40MHz) ant 0+1	



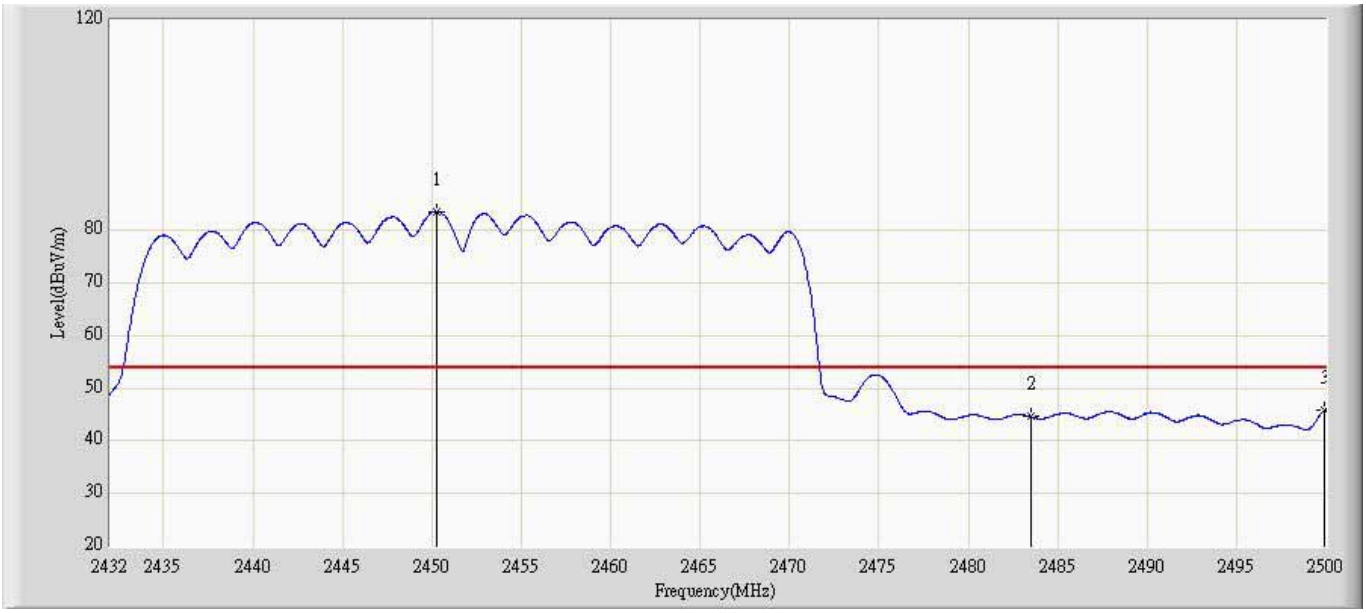
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1			2385.702	50.608	14.130	-3.392	54.000	36.478	AV
2			2390.000	49.932	13.433	-4.068	54.000	36.499	AV
3		*	2419.362	88.250	51.610	N/A	N/A	36.640	AV

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 18:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2452MHz by 802.11n(40MHz) ant 0+1	



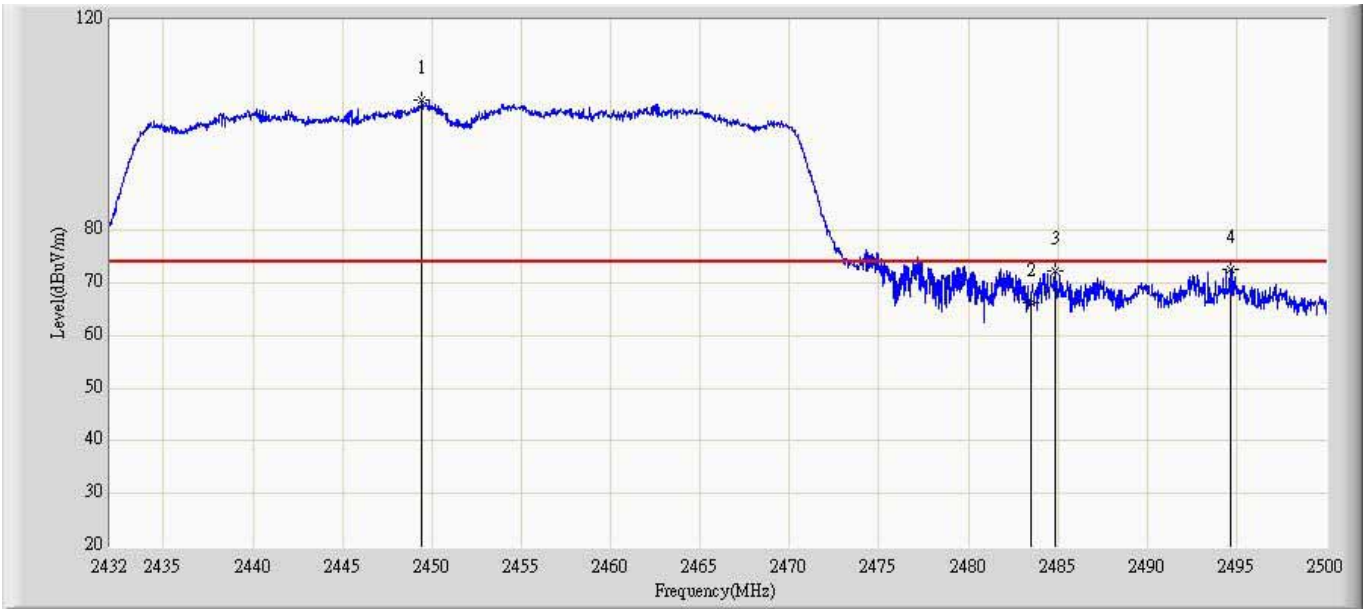
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2450.258	99.430	61.745	N/A	N/A	37.685	PK
2			2483.500	65.089	27.119	-8.911	74.000	37.969	PK
3			2483.986	69.035	31.061	-4.965	74.000	37.974	PK
4			2492.554	67.705	29.655	-6.295	74.000	38.050	PK

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 18:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Horizontal
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2452MHz by 802.11n(40MHz) ant 0+1	



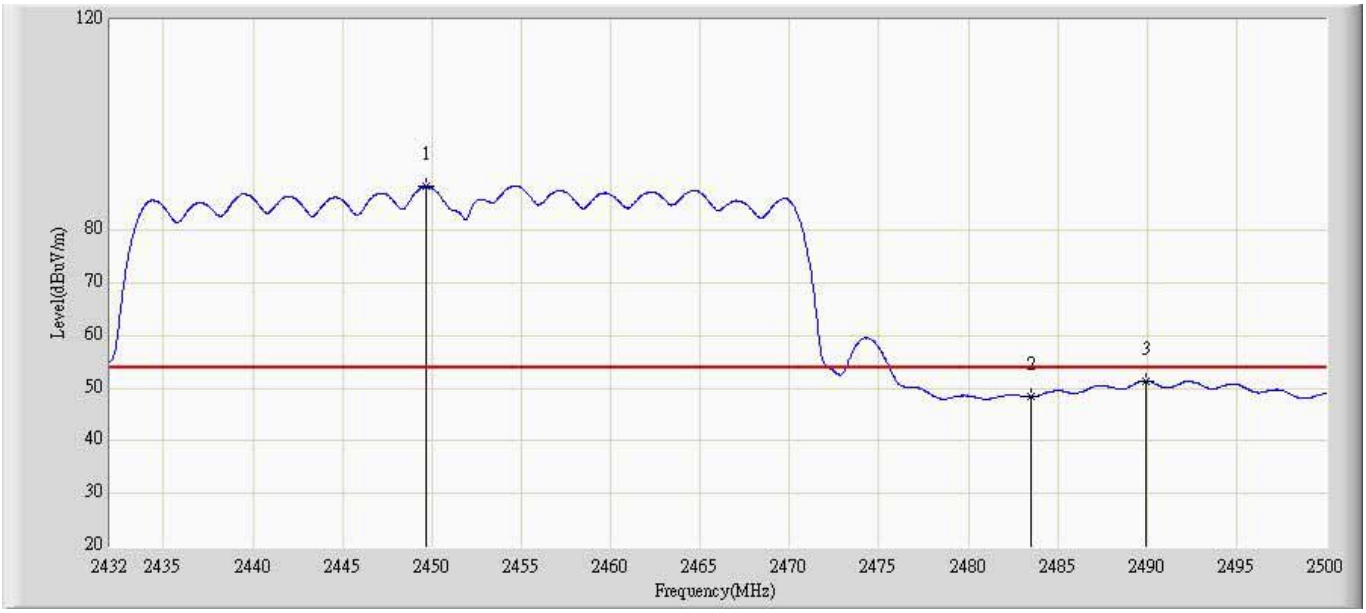
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2450.258	83.612	45.927	N/A	N/A	37.685	AV
2			2483.500	44.614	6.644	-9.386	54.000	37.969	AV
3			2499.898	45.727	7.653	-8.273	54.000	38.074	AV

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 18:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2452MHz by 802.11n(40MHz) ant 0+1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2449.442	104.855	68.074	N/A	N/A	36.781	PK
2			2483.500	66.147	29.211	-7.853	74.000	36.935	PK
3			2484.836	72.396	35.454	-1.604	74.000	36.942	PK
4			2494.662	72.697	35.707	-1.303	74.000	36.989	PK

Engineer: Milo	
Site: AC5	Time: 2013/09/13 - 18:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_988(1-18GHz)	Polarity: Vertical
EUT: Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD	Power: AC 120V/60Hz
Note: Mode4: Transmit at channel 2452MHz by 802.11n(40MHz) ant 0+1	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor	Type
1		*	2449.714	88.361	51.579	N/A	N/A	36.782	AV
2			2483.500	48.366	11.430	-5.634	54.000	36.935	AV
3			2489.902	51.277	14.310	-2.723	54.000	36.967	AV

7. Operation Frequency Range of 20dB Bandwidth

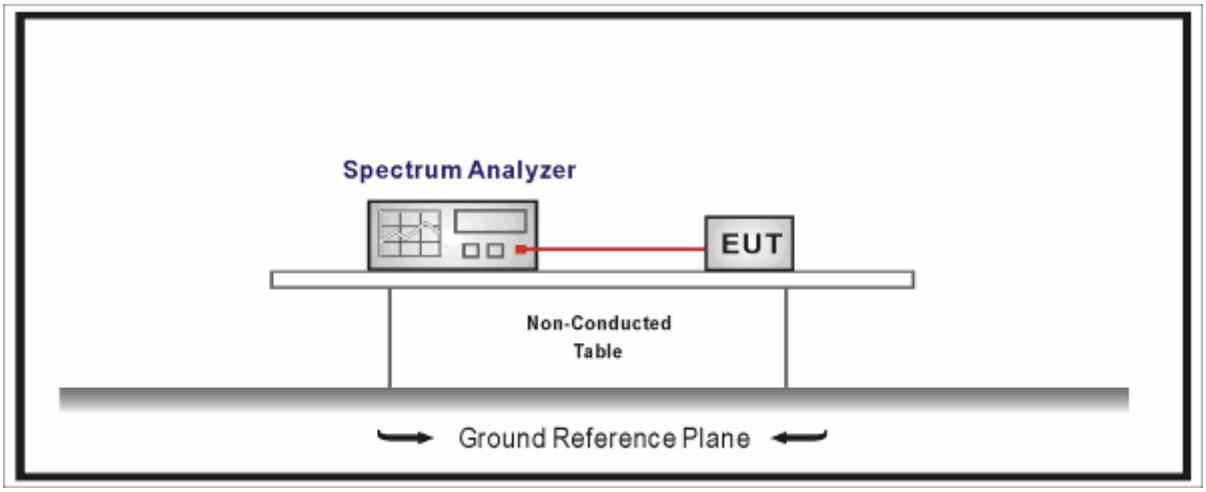
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2014.01.21
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2014.05.07

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Limit

20 dB bandwidth of the emission is contained within the operation frequency band.

7.4. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Span greater than RBW.

7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

7.6. Test Result

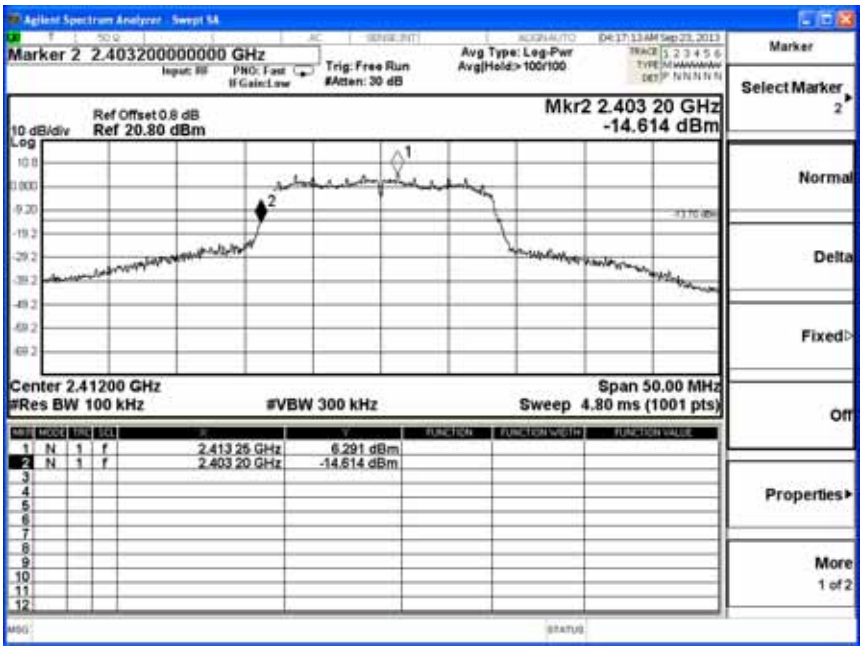
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 0)

Channel 01 (2412MHz)

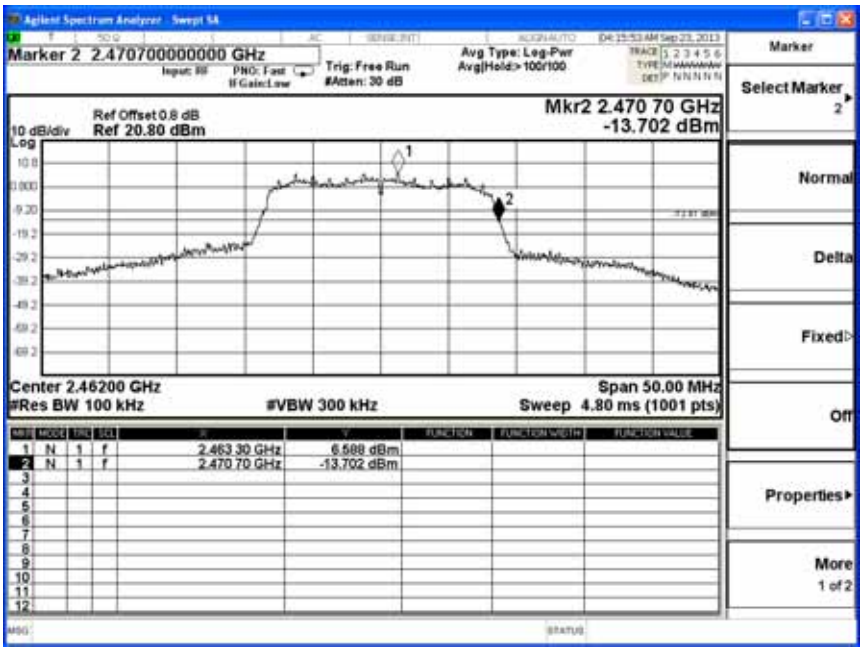
Channel 11 (2462MHz)

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 0)

Channel 01 (2412MHz)



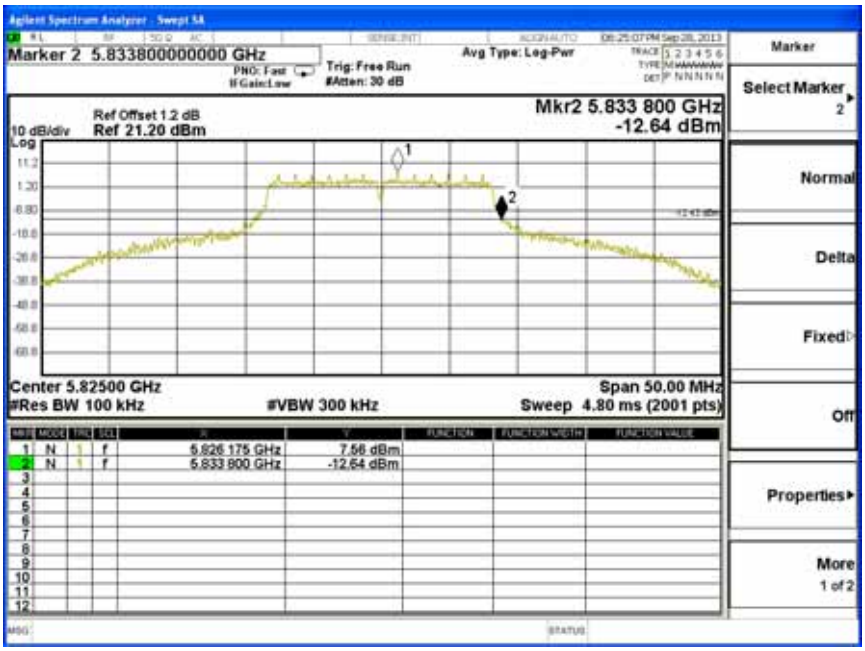
Channel 11 (2462MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 0)

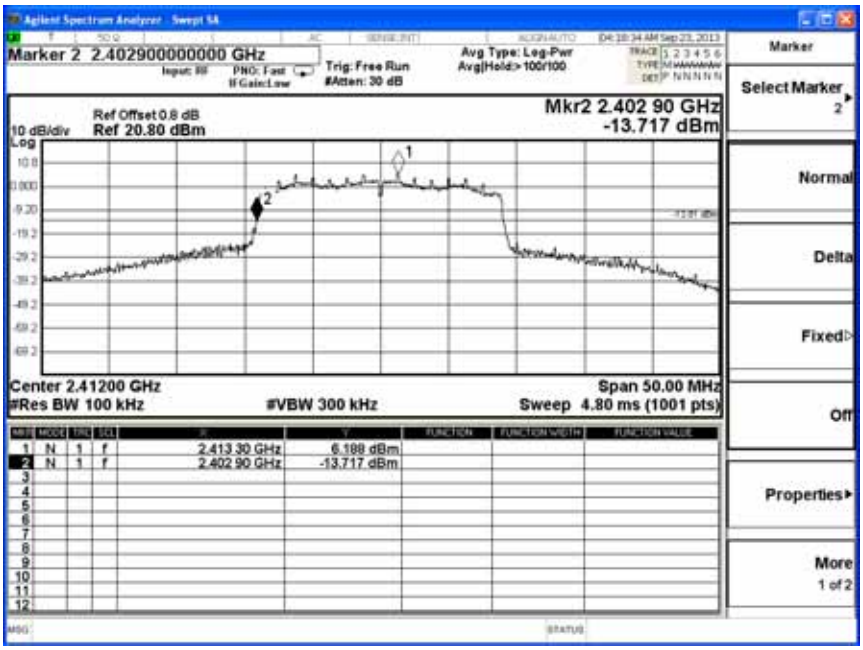
Channel 149 (5745MHz)

Channel 165 (5825MHz)

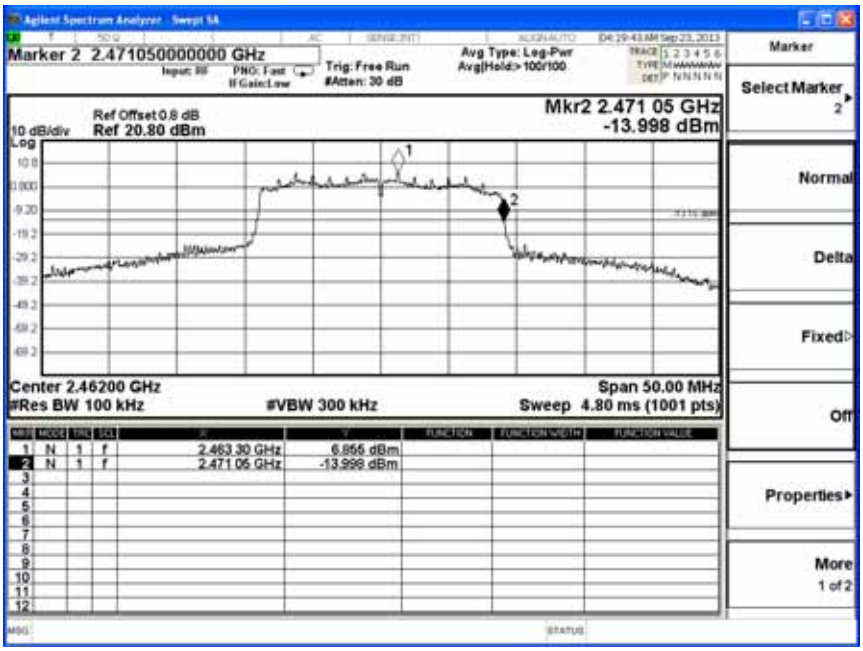


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0)

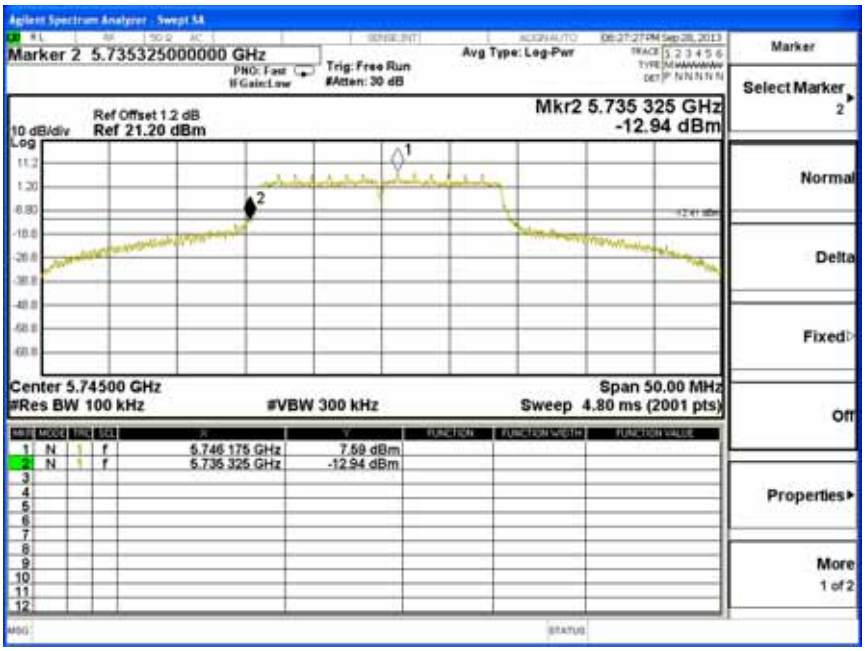
Channel 01 (2412MHz)



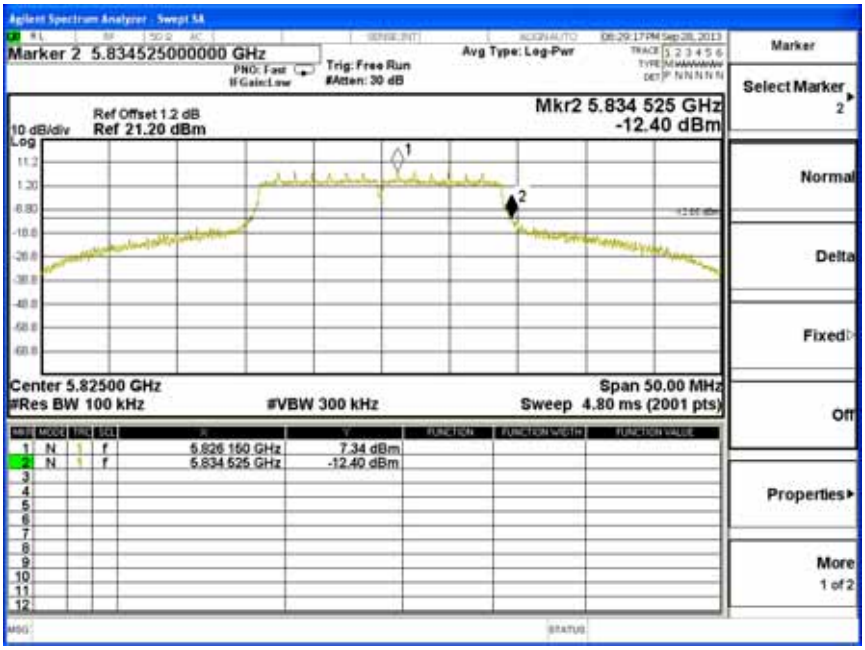
Channel 11 (2462MHz)



Channel 149 (5745MHz)

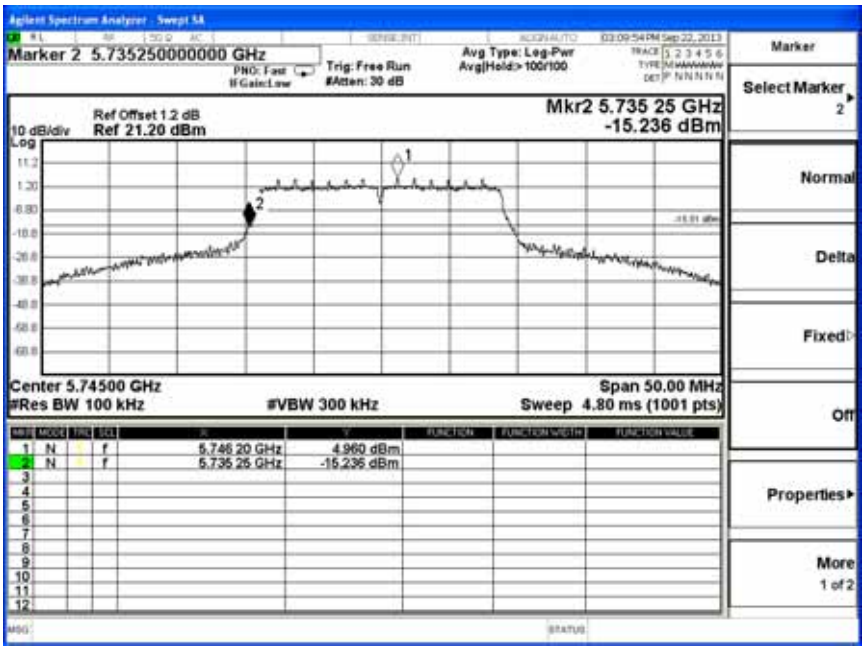


Channel 165 (5825MHz)

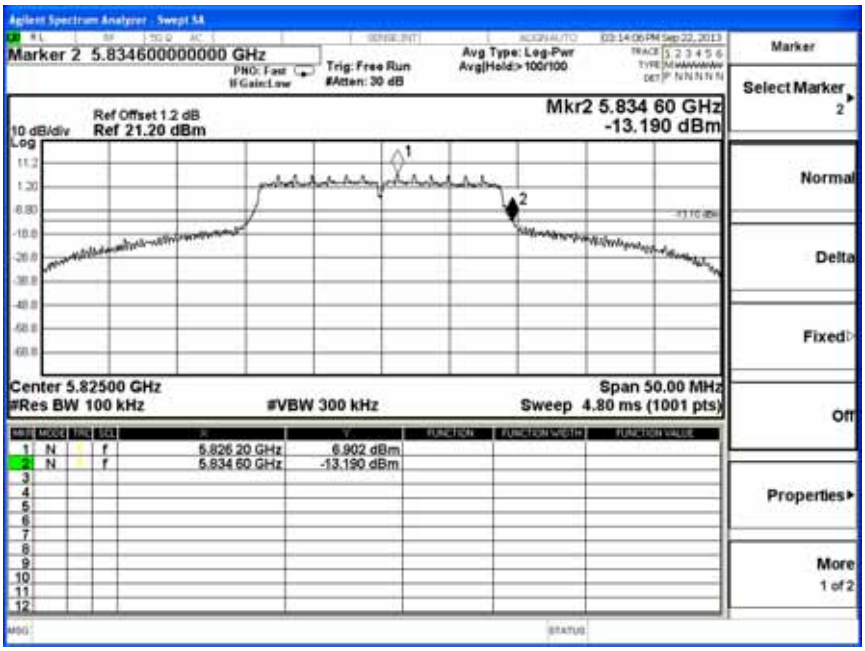


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0)

Channel 149 (5745MHz)

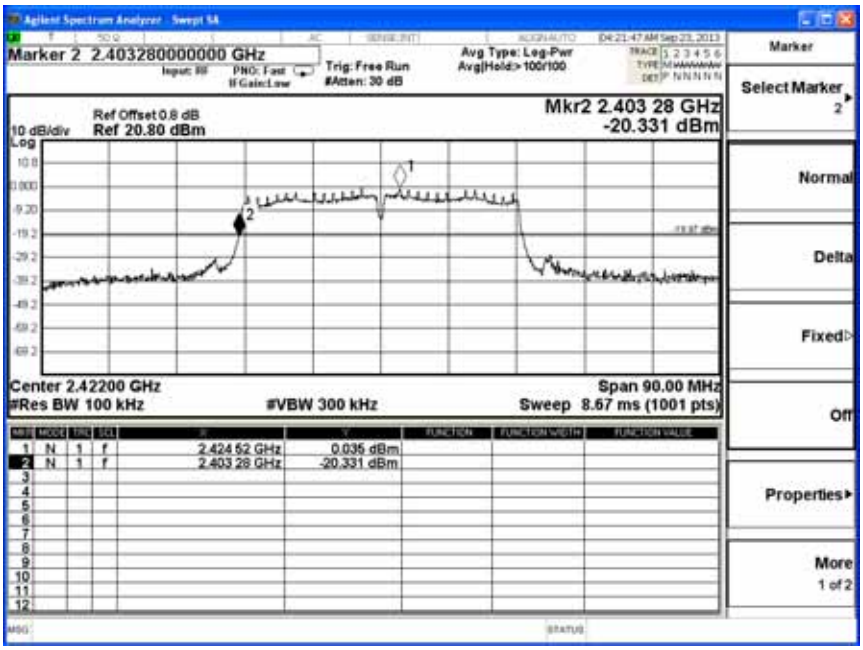


Channel 165 (5825MHz)

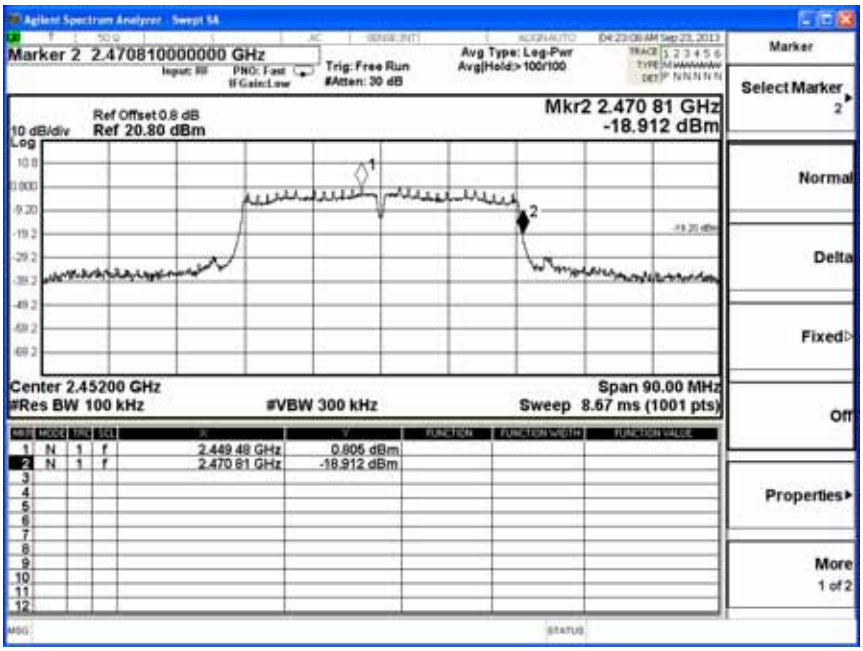


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0)

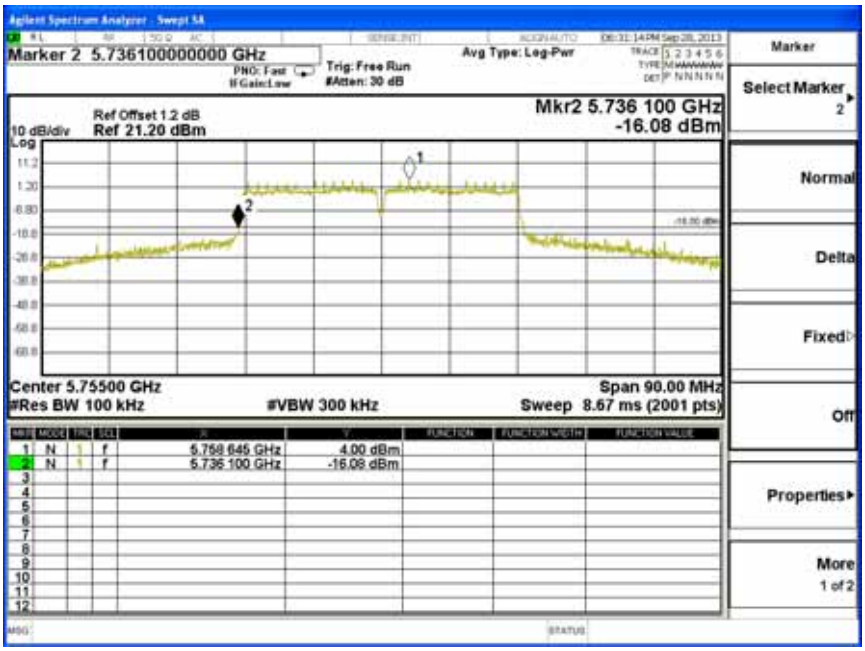
Channel 03 (2422MHz)



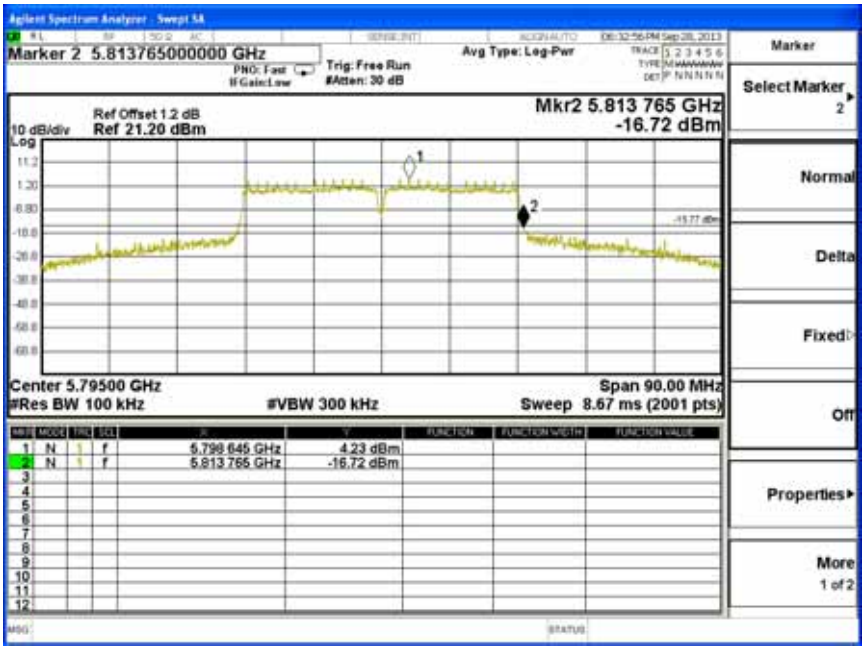
Channel 09 (2452MHz)



Channel 151 (5755MHz)

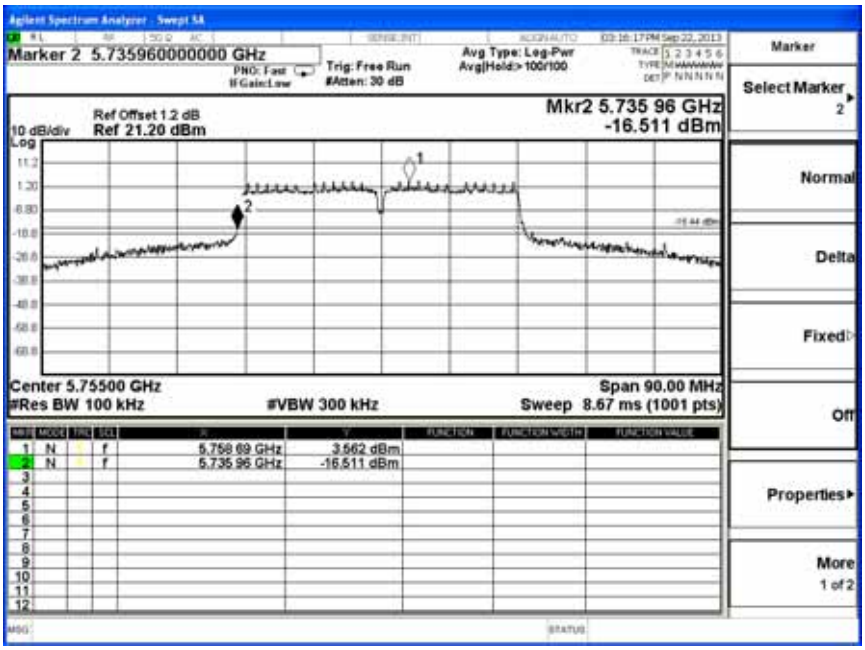


Channel 159 (5795MHz)

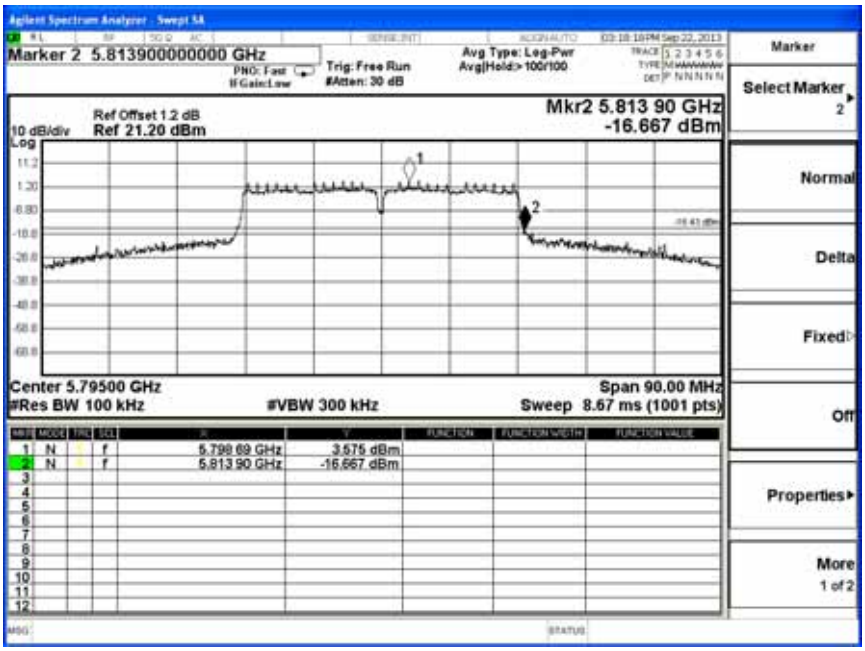


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0)

Channel 151 (5755MHz)

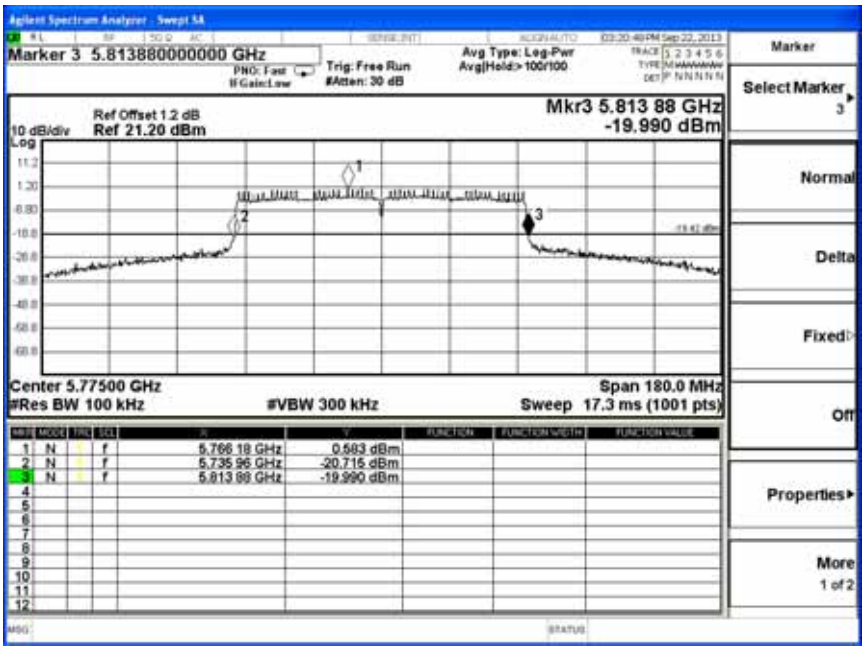


Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0)

Channel 155 (5755MHz)



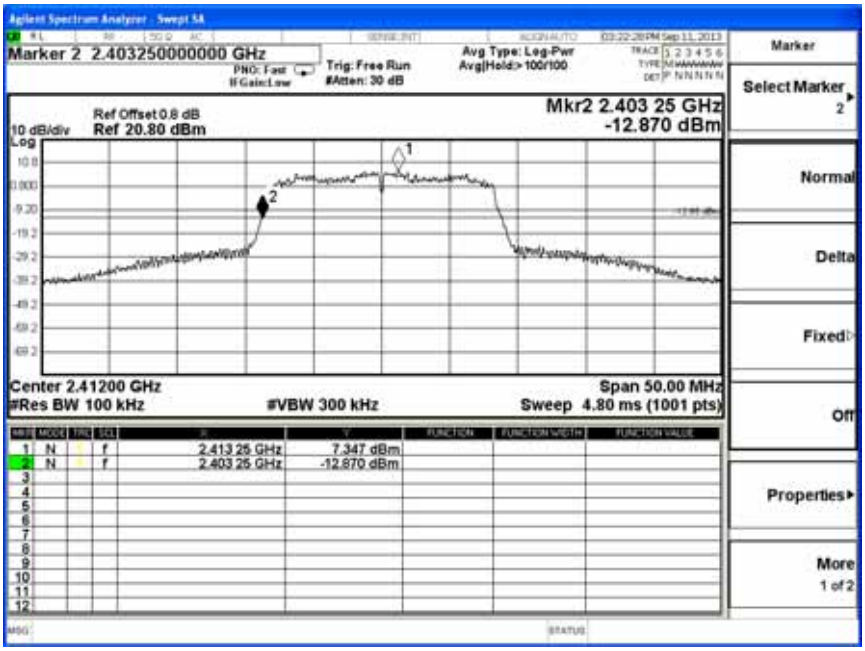
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 1)

Channel 01 (2412MHz)

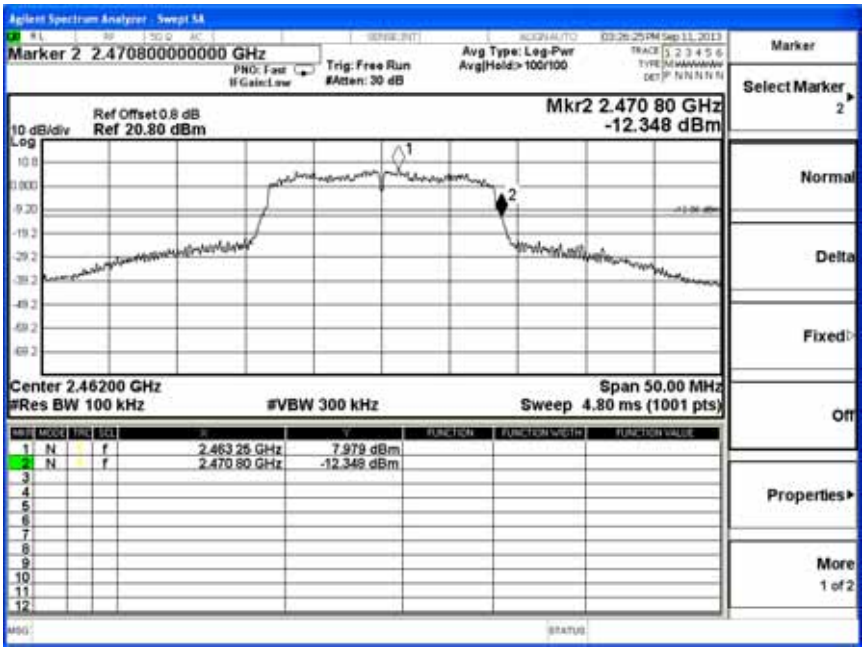
Channel 11 (2462MHz)

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1)

Channel 01 (2412MHz)

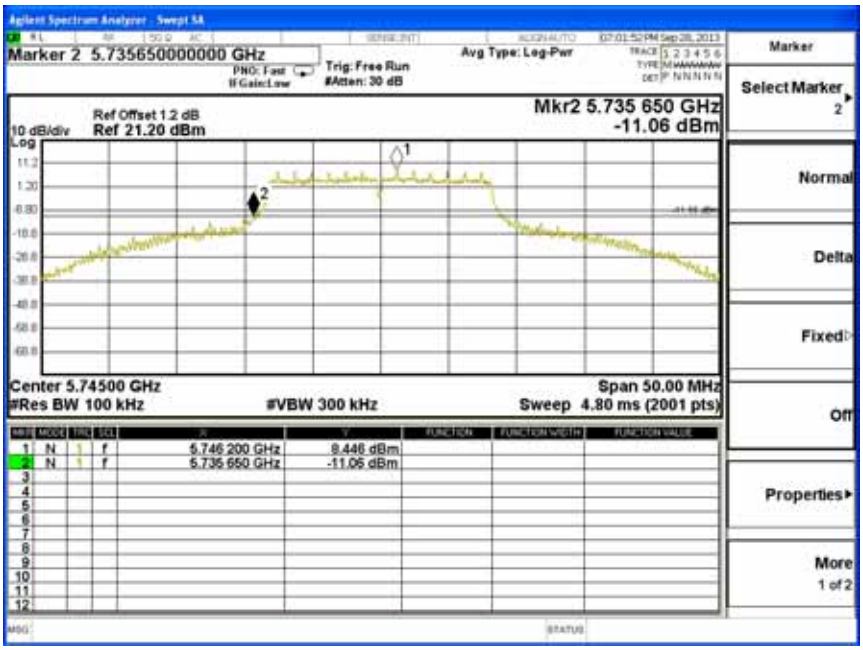


Channel 11 (2462MHz)

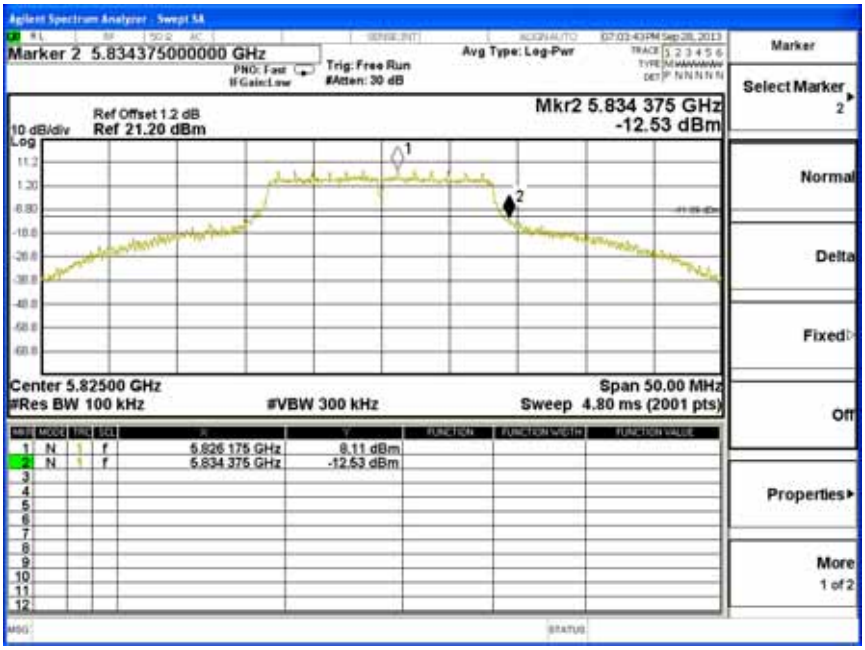


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 1)

Channel 149 (5745MHz)

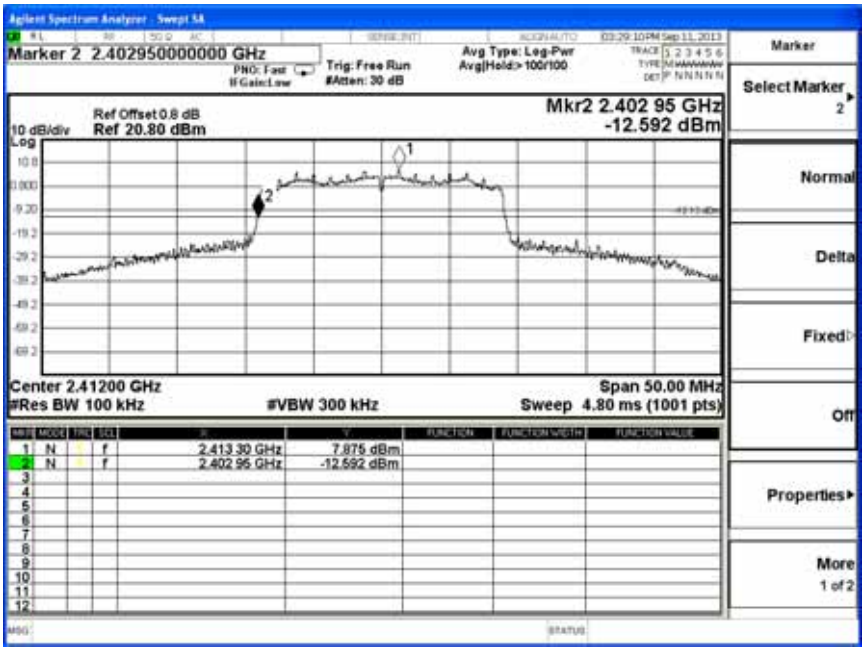


Channel 165 (5825MHz)

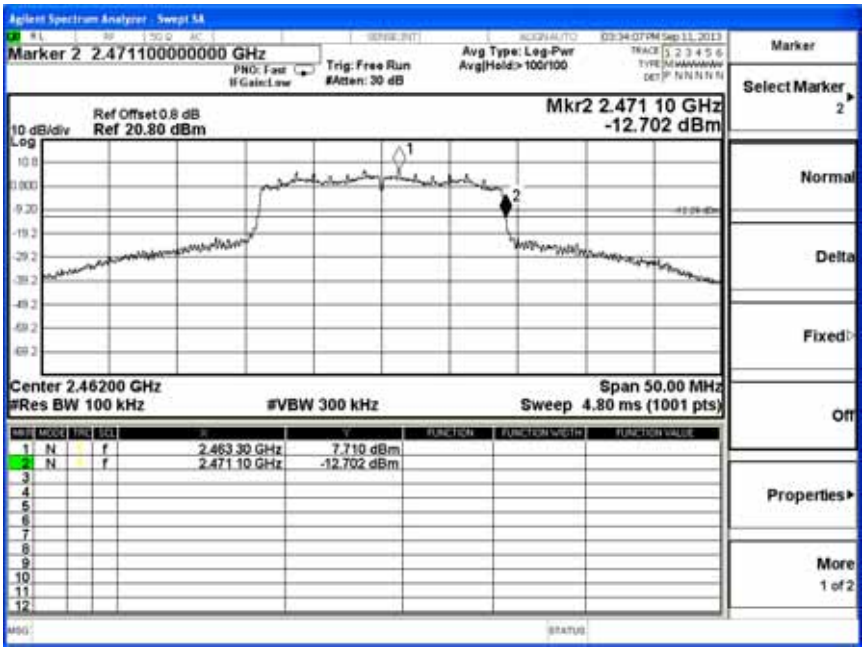


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 1)

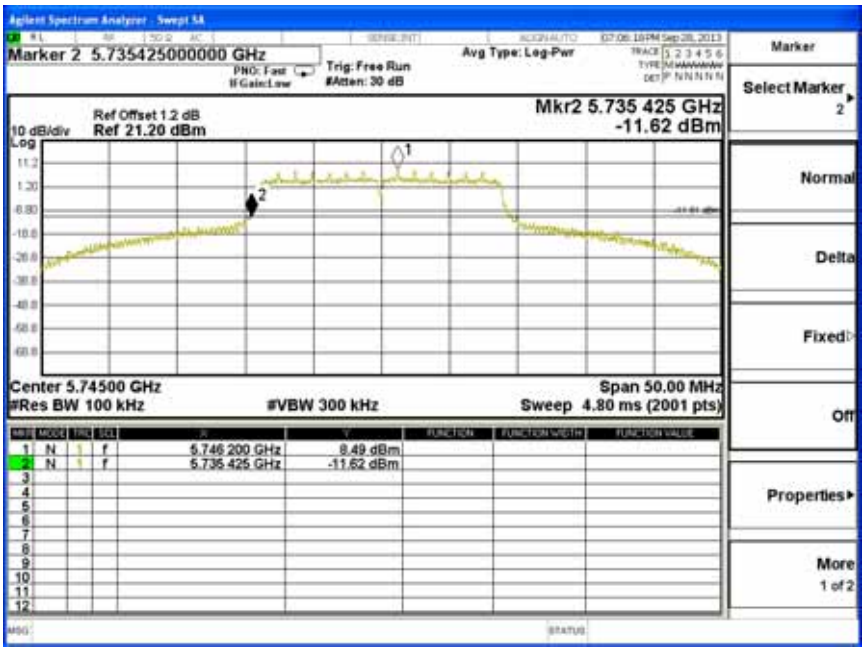
Channel 01 (2412MHz)



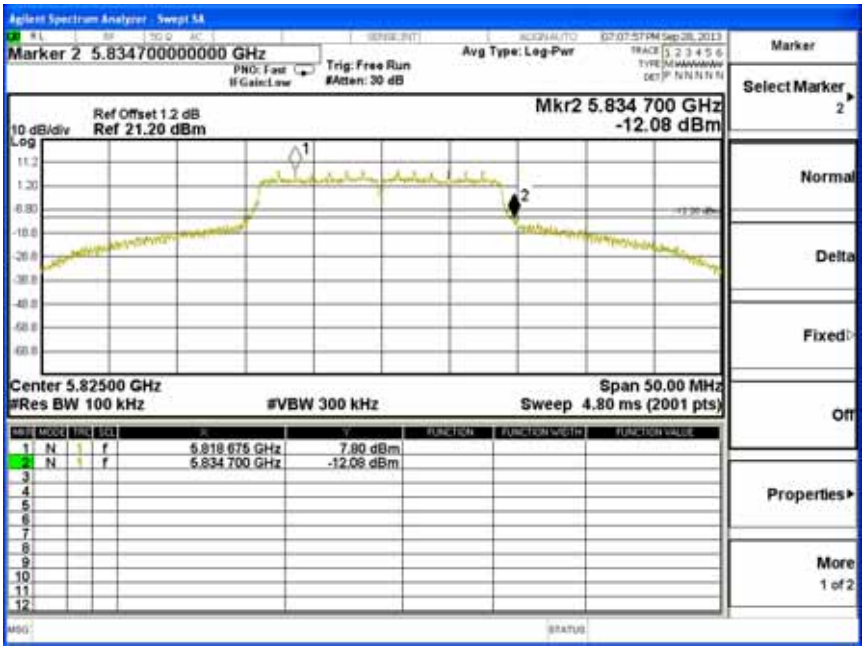
Channel 11 (2462MHz)



Channel 149 (5745MHz)

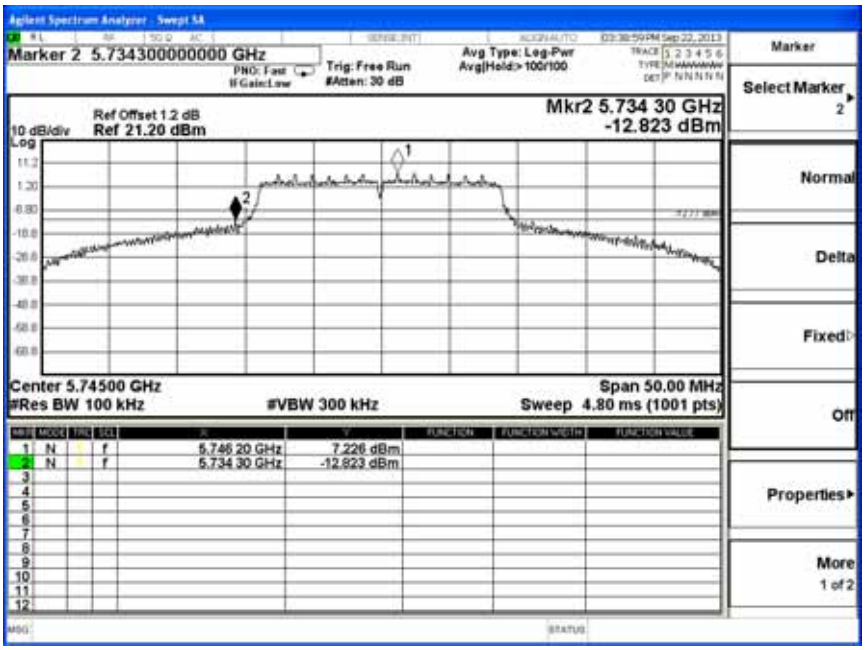


Channel 165 (5825MHz)

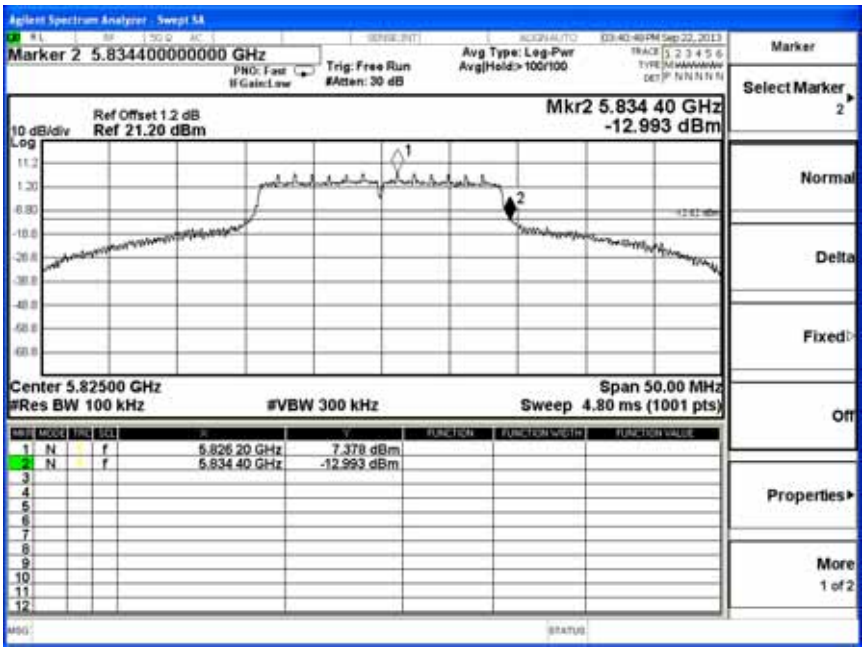


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 1)

Channel 149 (5745MHz)

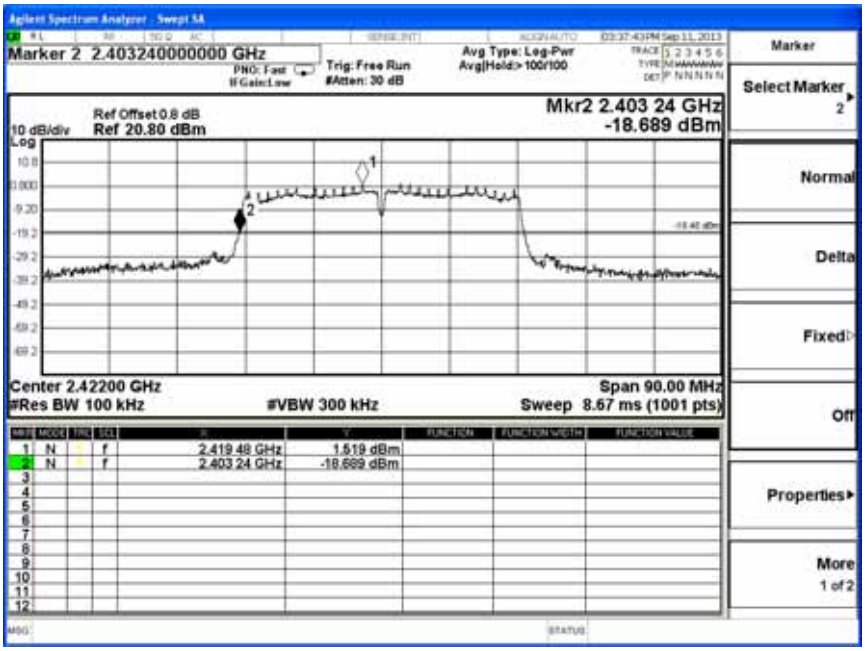


Channel 165 (5825MHz)

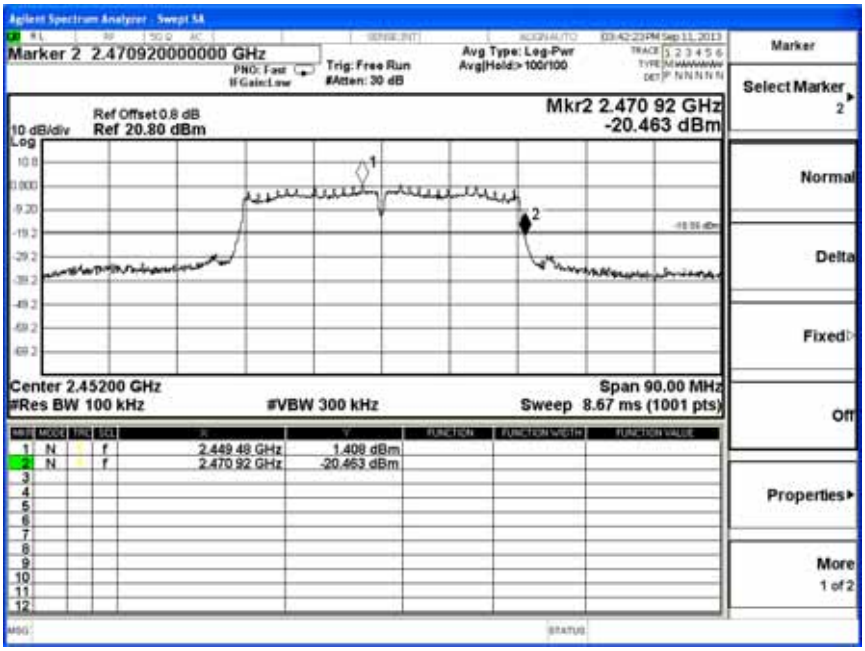


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 1)

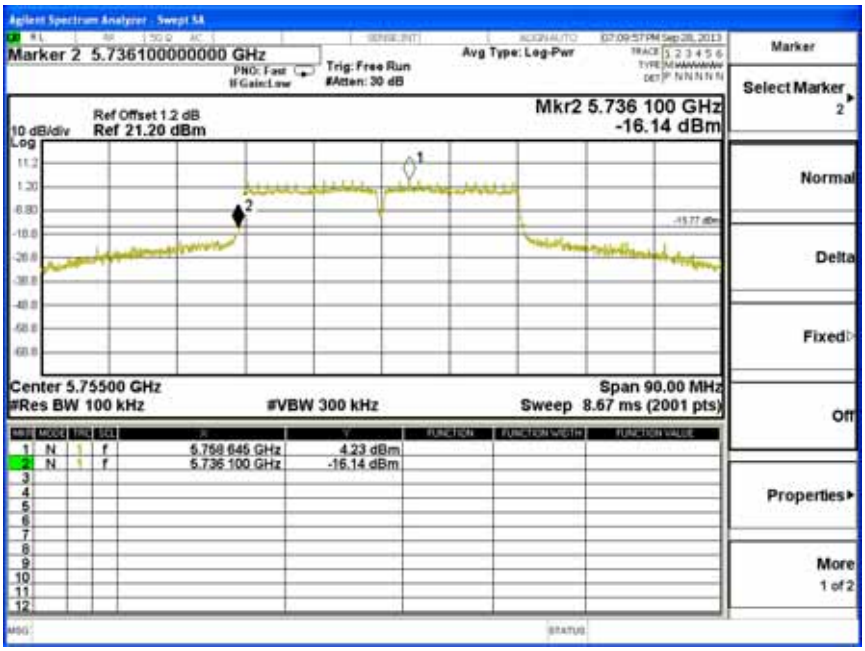
Channel 03 (2422MHz)



Channel 09 (2452MHz)



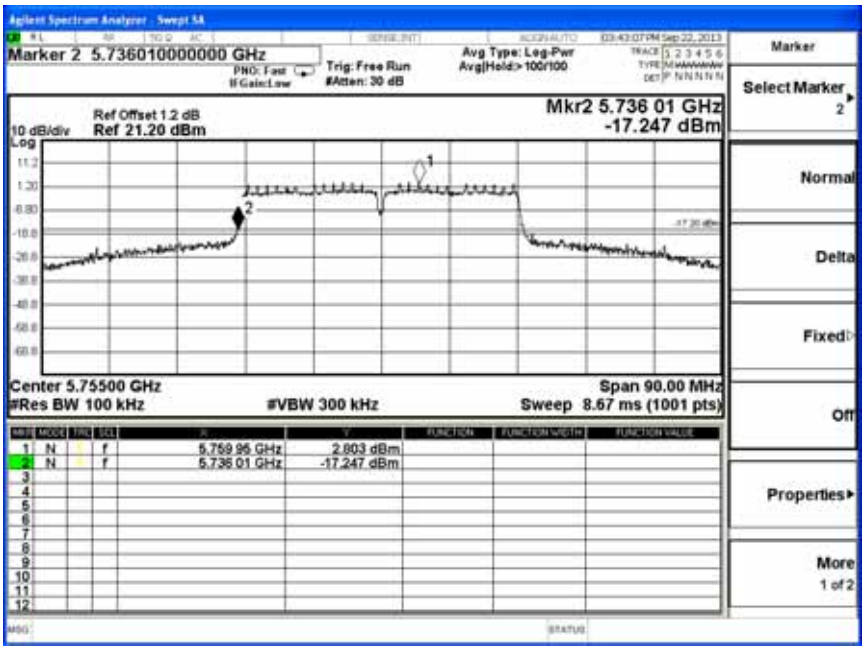
Channel 151 (5755MHz)



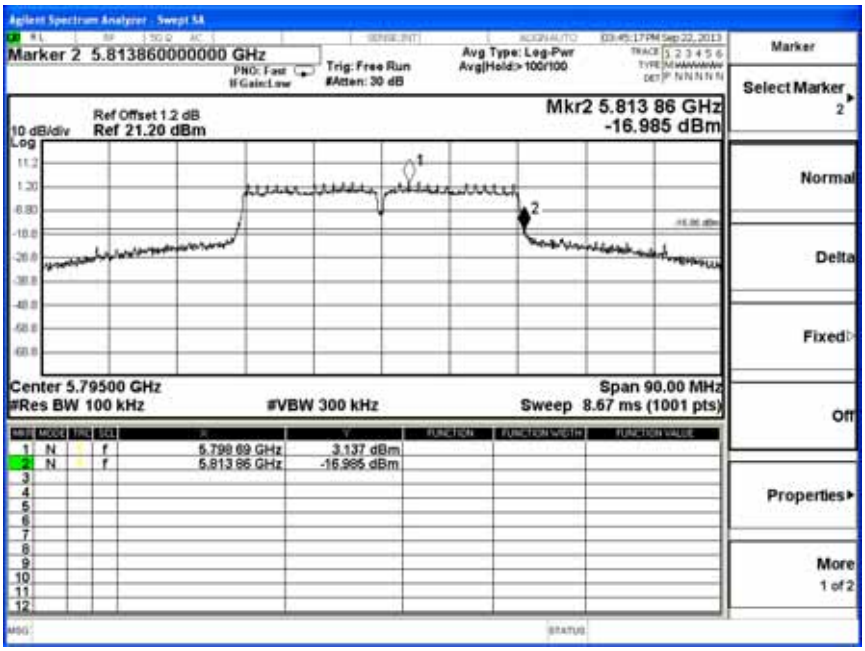
Channel 159 (5795MHz)

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 1)

Channel 151 (5755MHz)

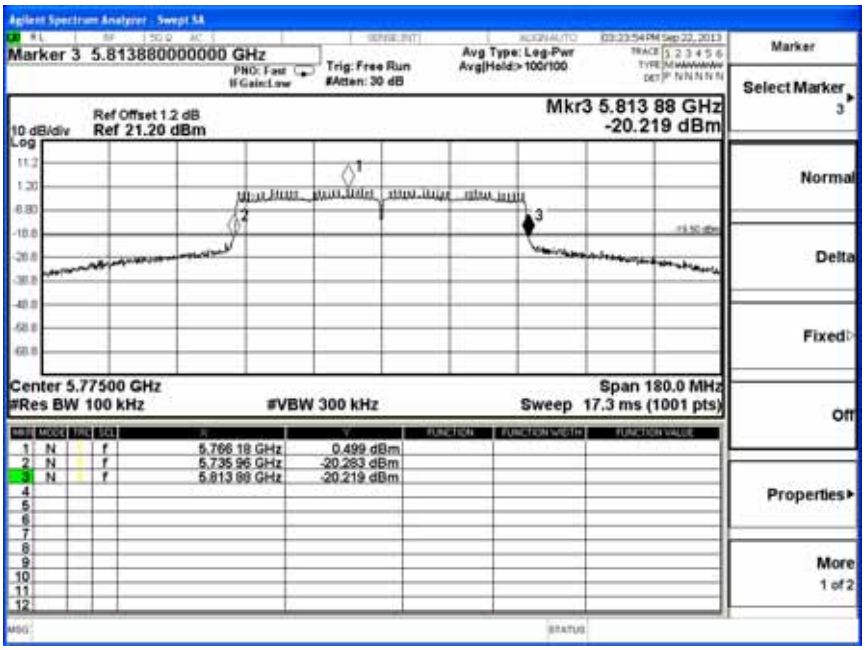


Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 1)

Channel 155 (5755MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 2)

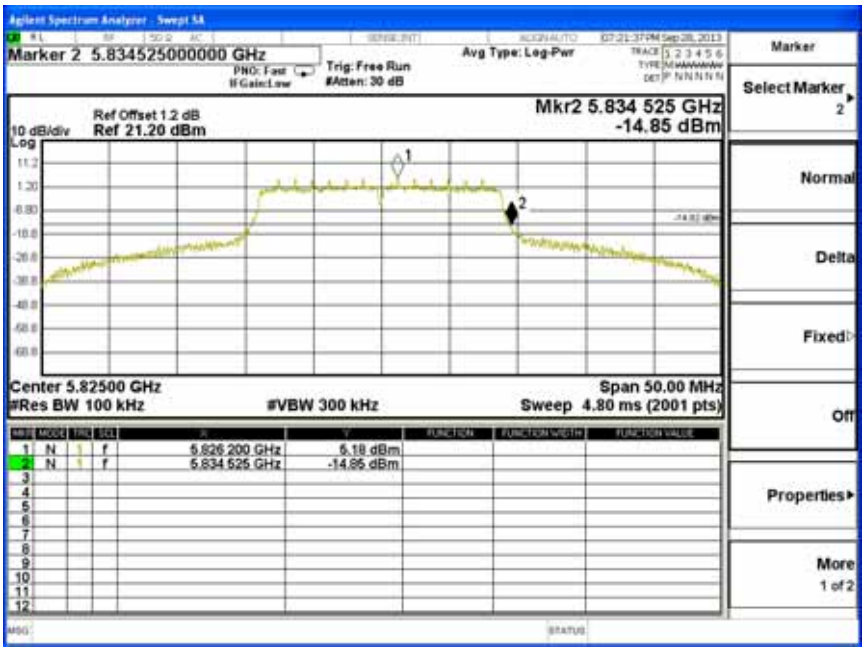
Channel 149 (5745MHz)

Channel 165 (5825MHz)

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 2)

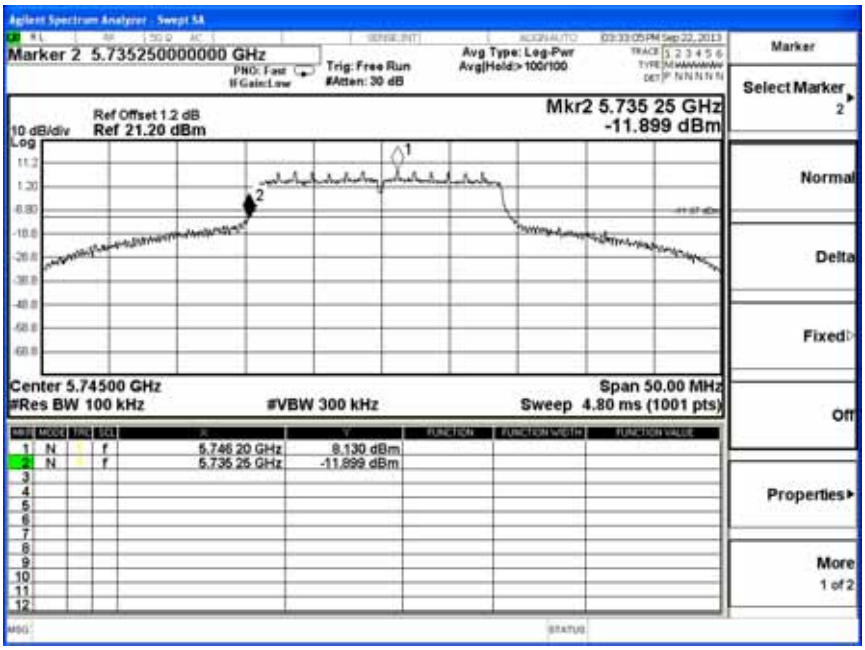
Channel 149 (5745MHz)

Channel 165 (5825MHz)

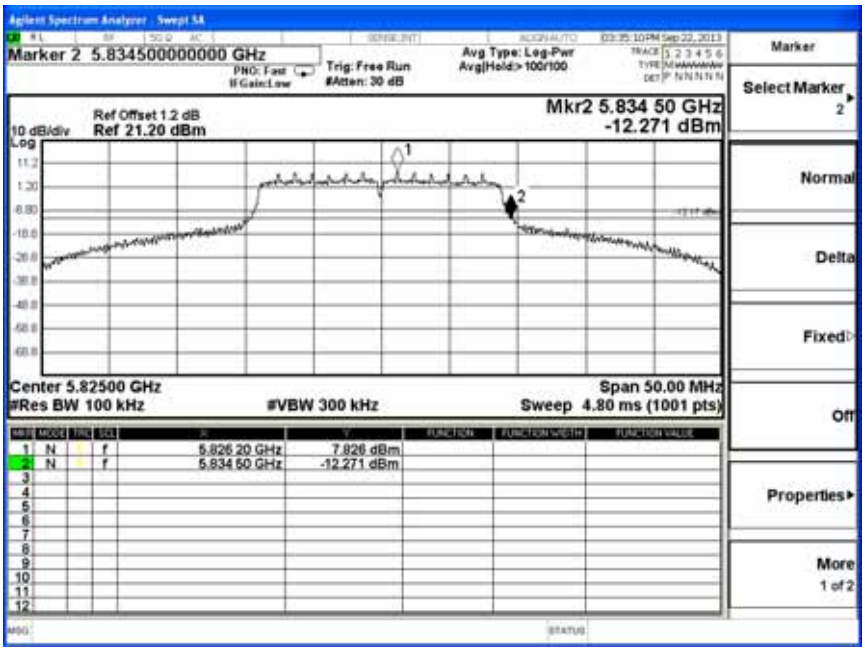


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 2)

Channel 149 (5745MHz)

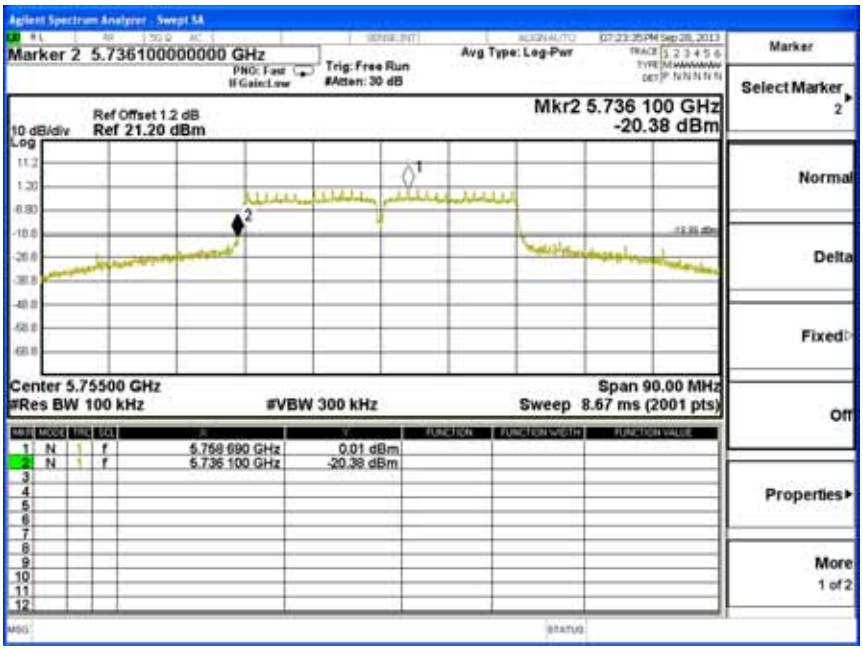


Channel 165 (5825MHz)

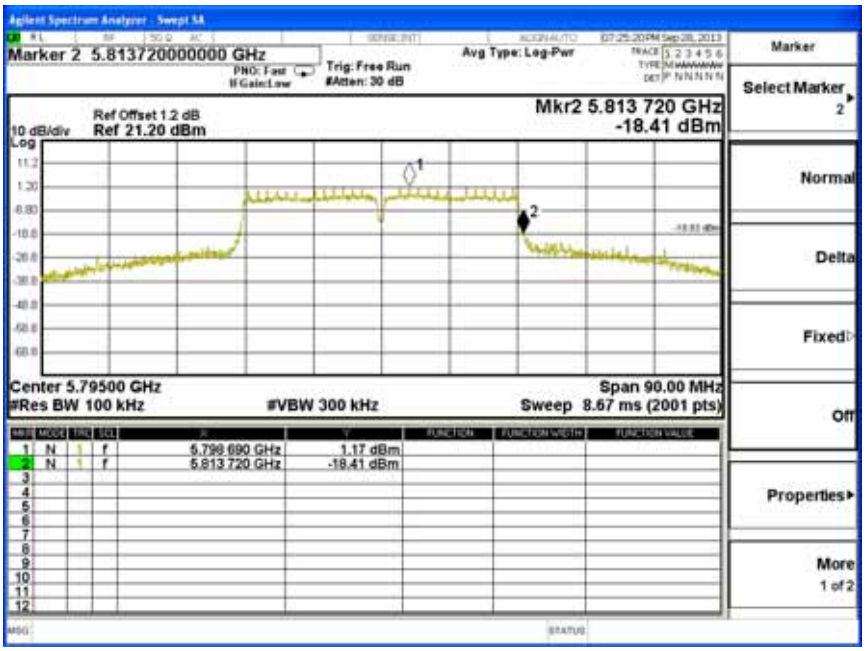


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 2)

Channel 151 (5755MHz)

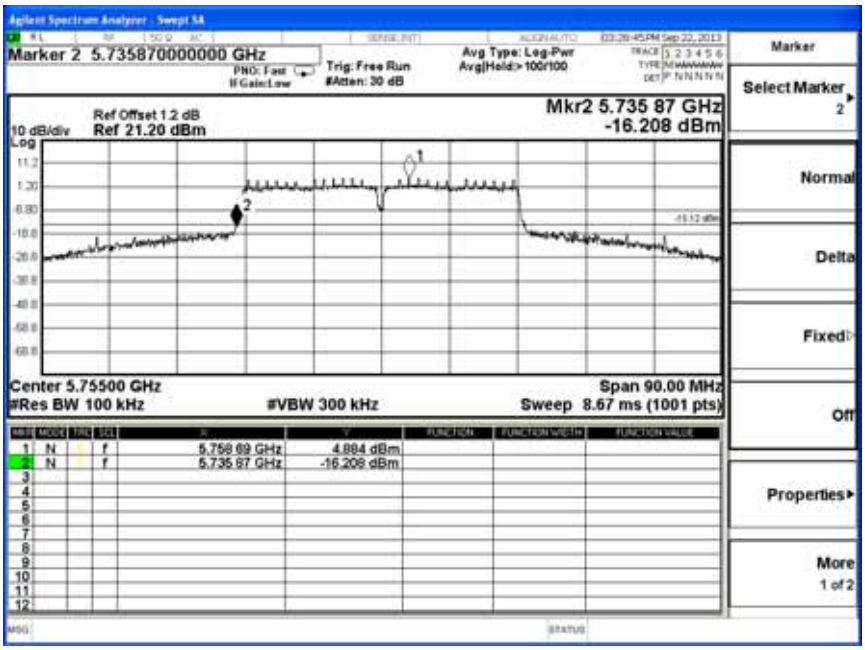


Channel 159 (5795MHz)

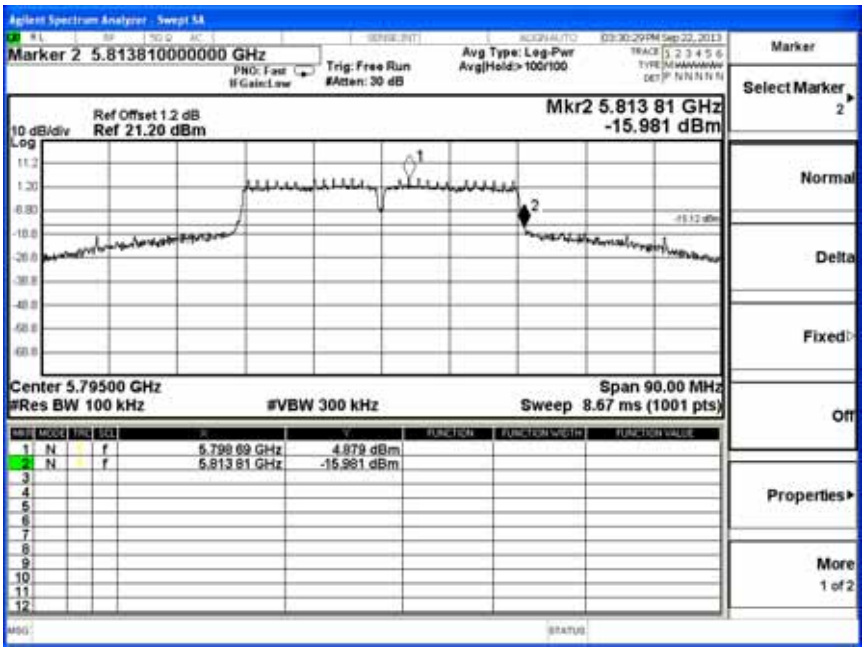


Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 2)

Channel 151 (5755MHz)

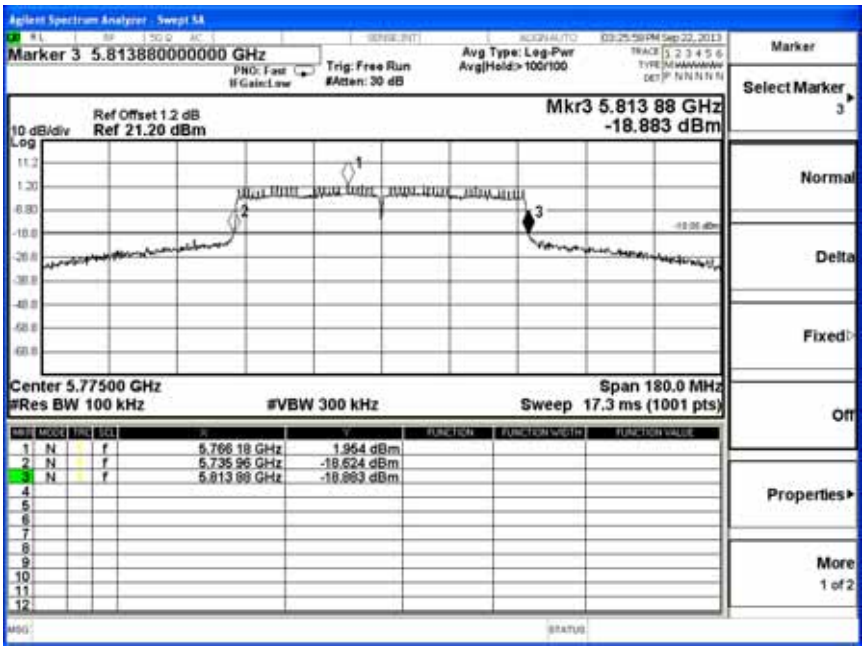


Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Operation Frequency Range of 20dB Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 2)

Channel 155 (5775MHz)



8. Occupied Bandwidth

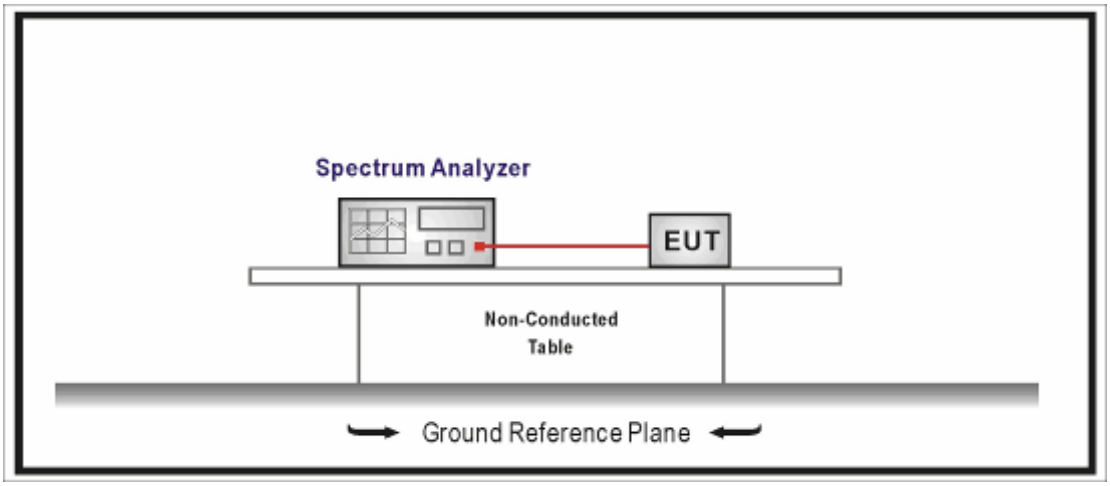
8.1. Test Equipment

Occupied Bandwidth / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2014.01.21
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2014.05.07

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

8.4. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Span greater than RBW.

8.5. Uncertainty

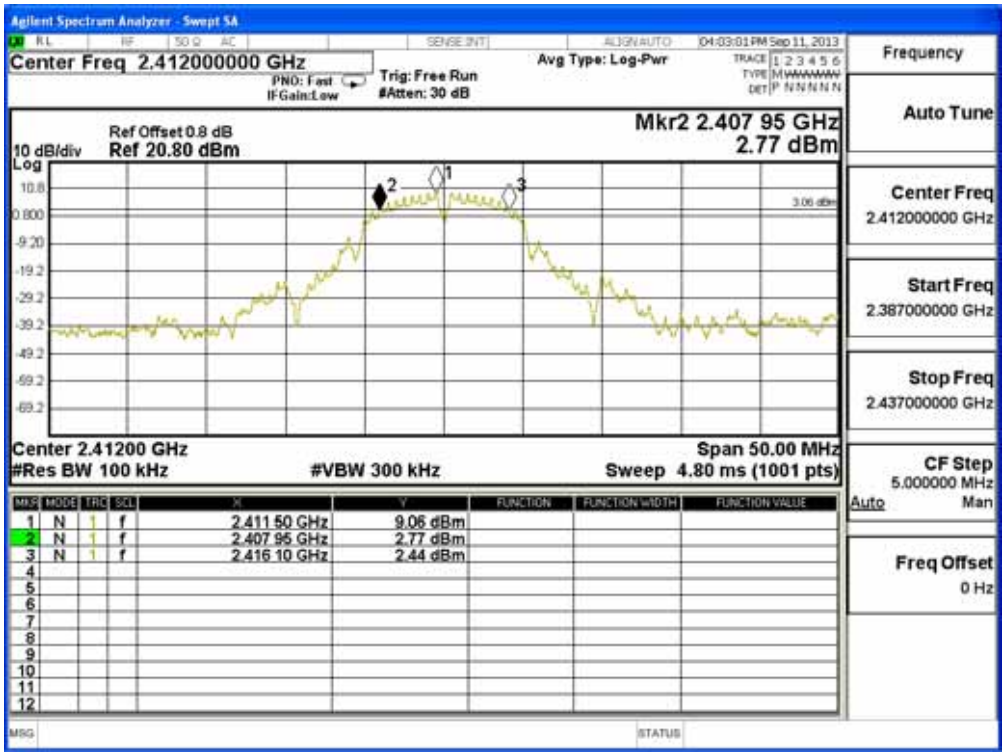
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

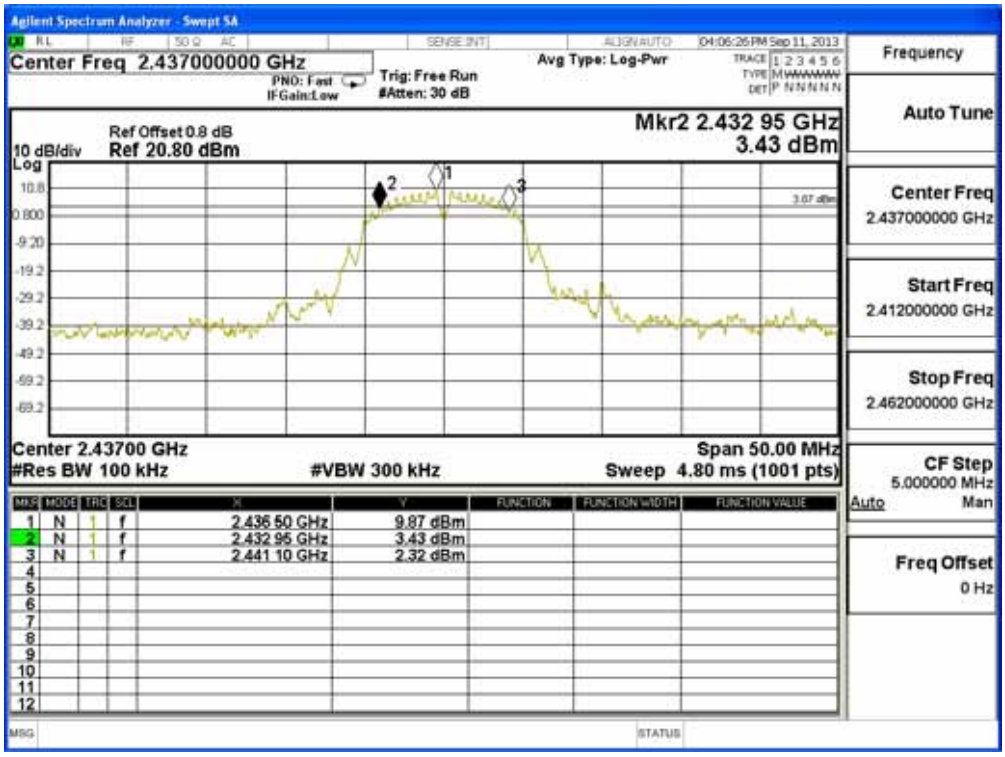
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	8150	500	Pass
06	2437	8150	500	Pass
11	2462	8200	500	Pass

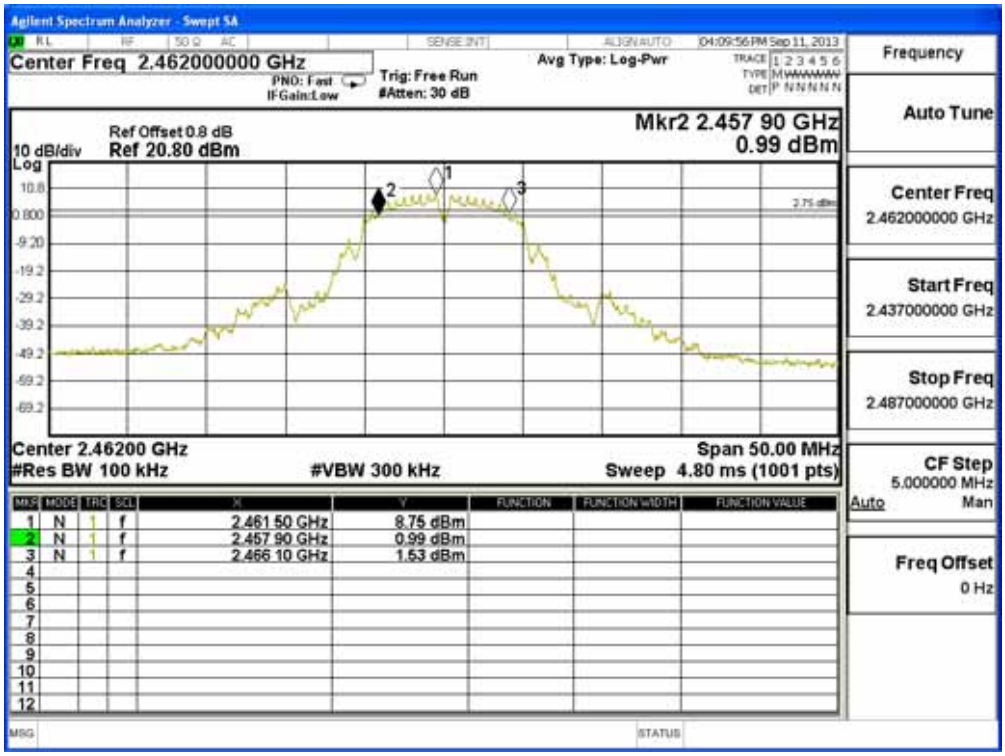
Channel 01 (2412MHz)



Channel 06 (2437MHz)



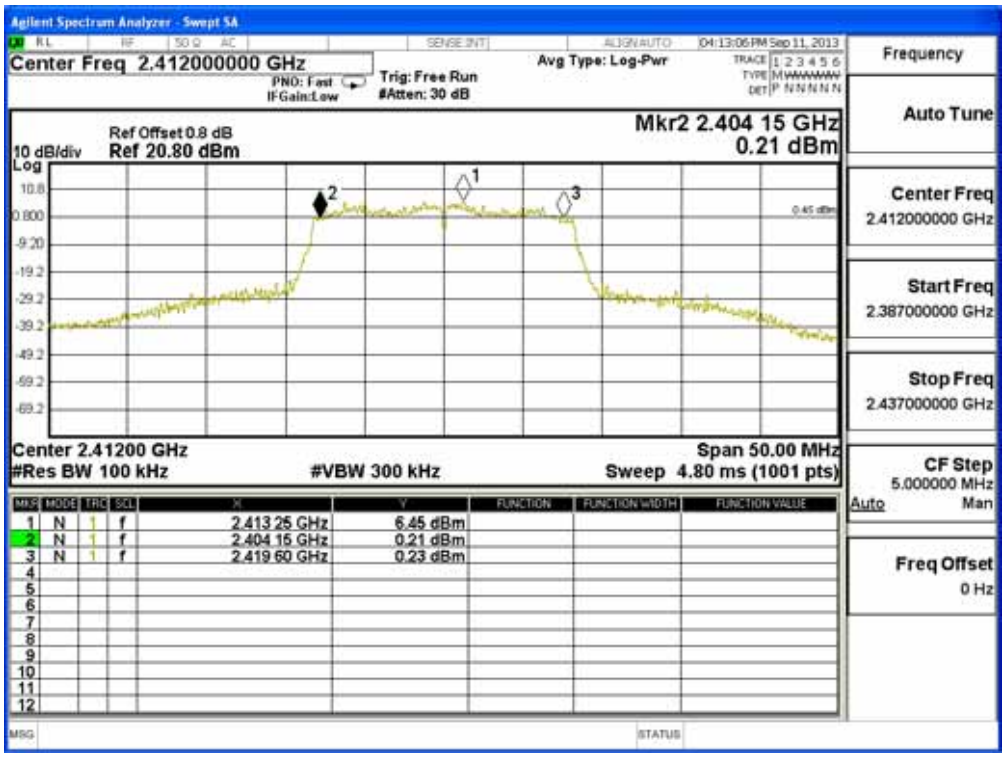
Channel 11 (2462MHz)



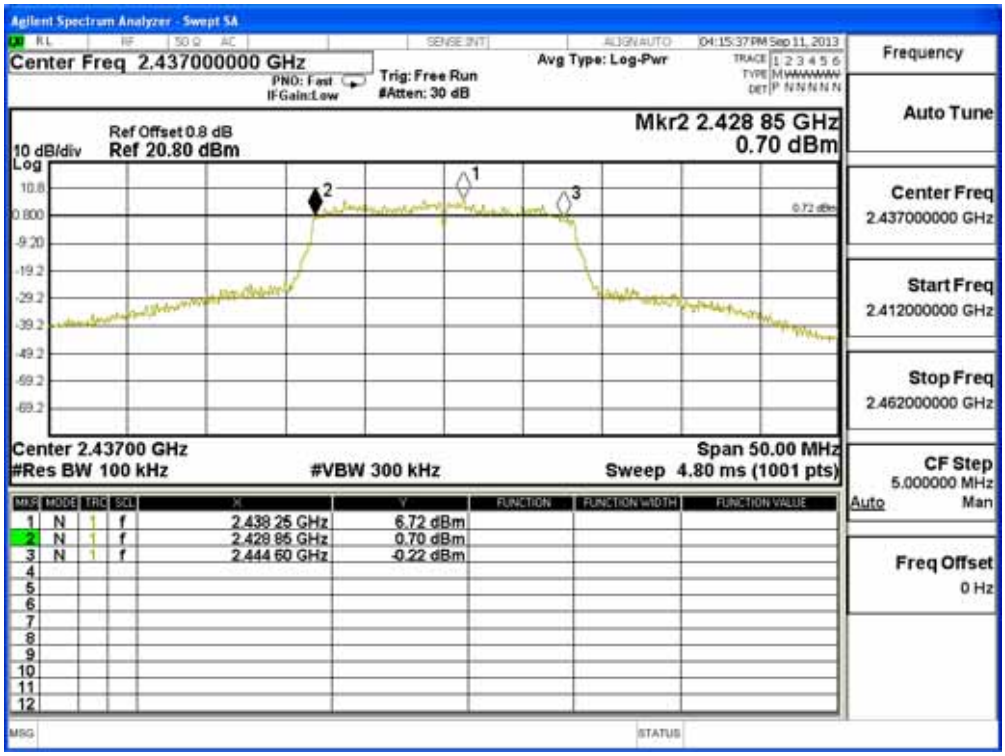
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	15450	500	Pass
06	2437	15750	500	Pass
11	2462	15800	500	Pass

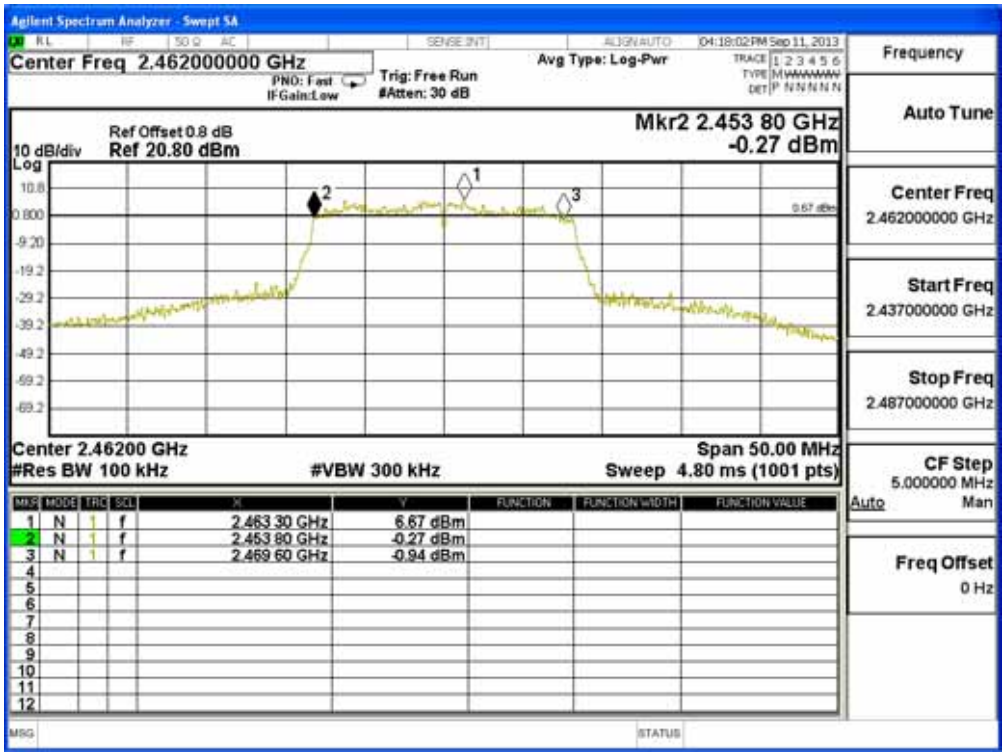
Channel 01 (2412MHz)



Channel 06 (2437MHz)



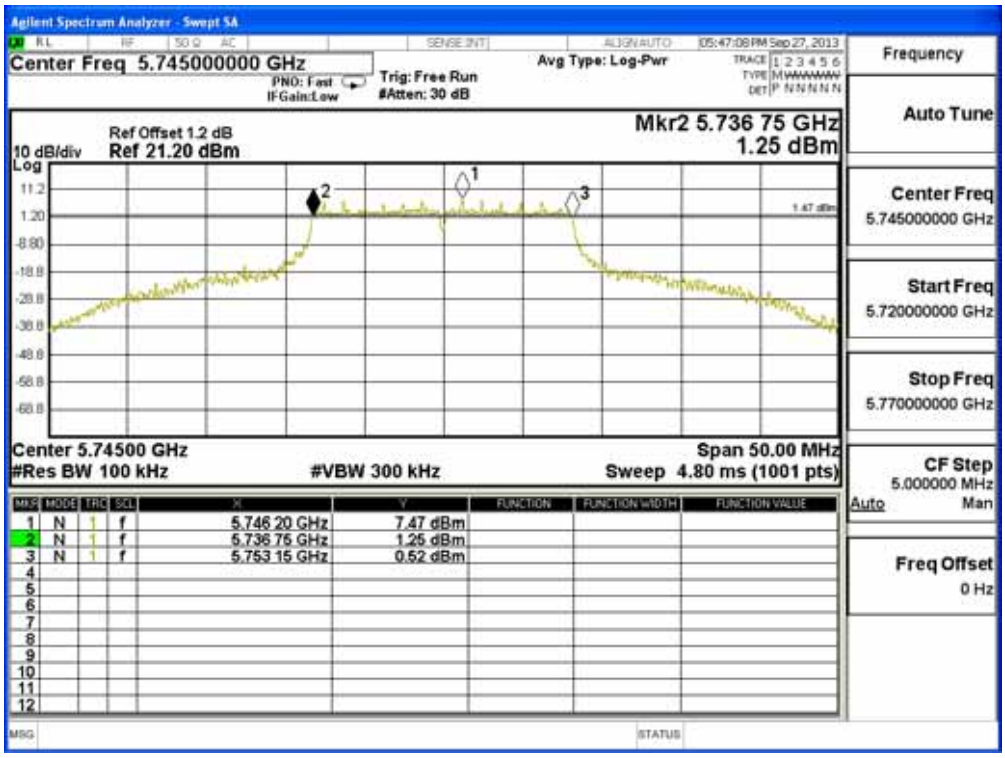
Channel 11 (2462MHz)



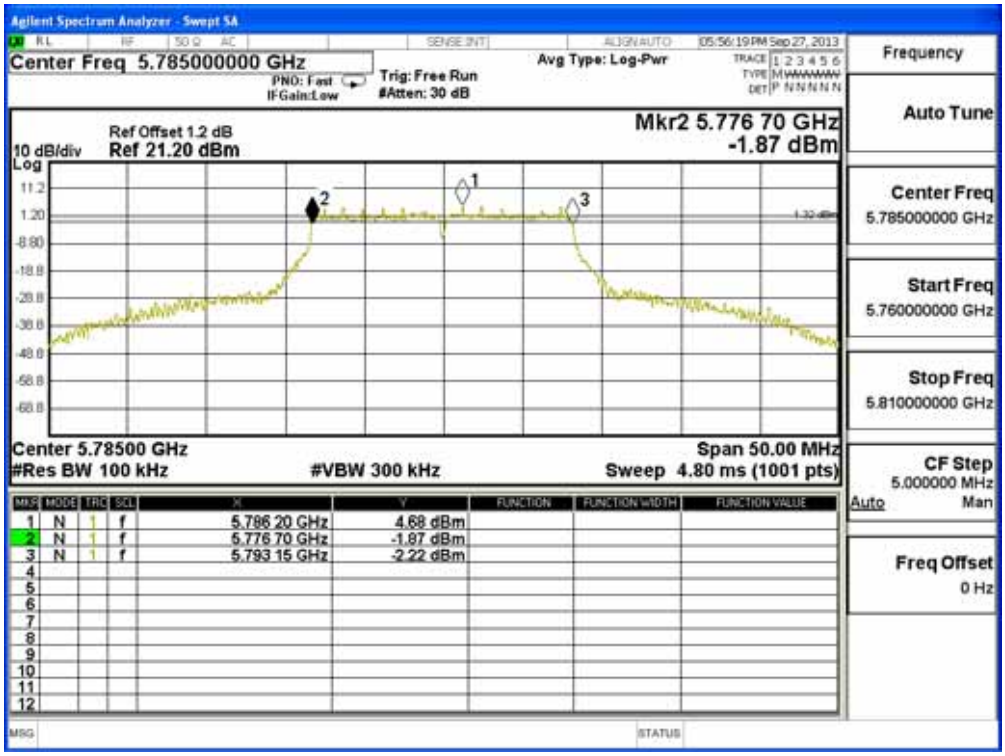
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	16400	500	Pass
157	5785	16450	500	Pass
165	5825	16450	500	Pass

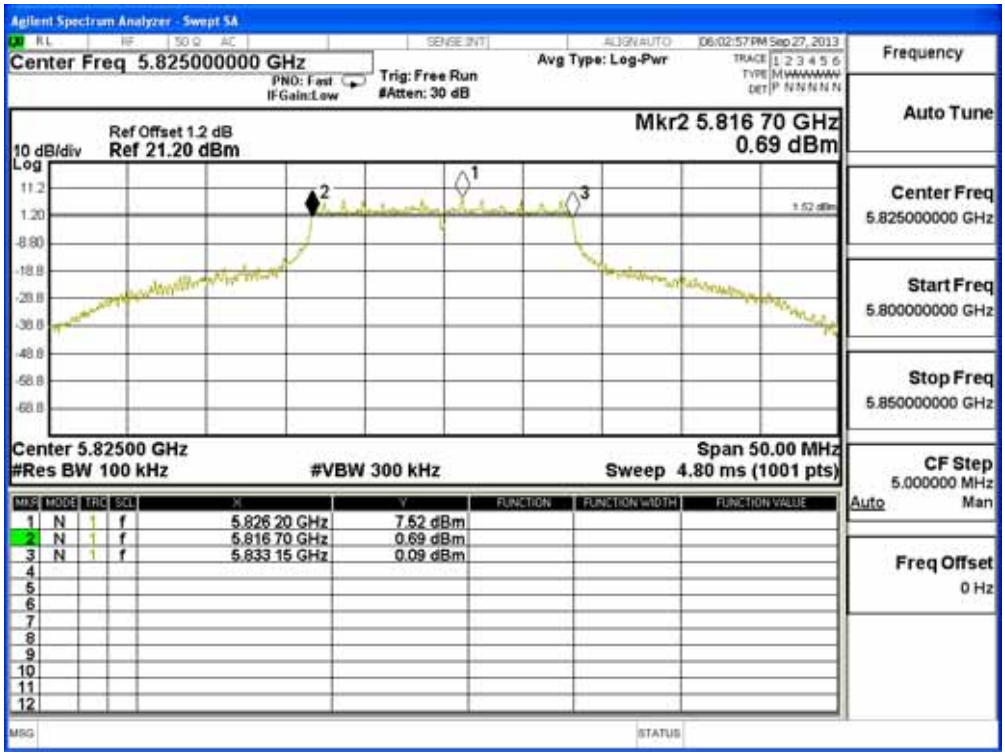
Channel 149 (5745MHz)



Channel 157 (5785MHz)



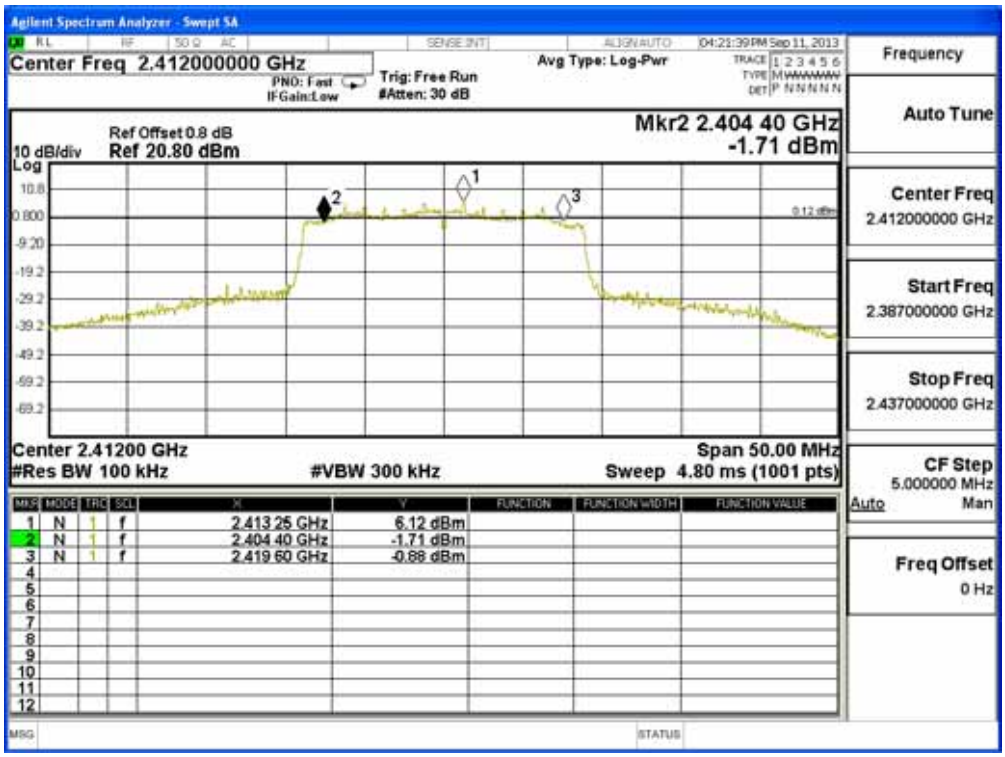
Channel 165 (5825MHz)



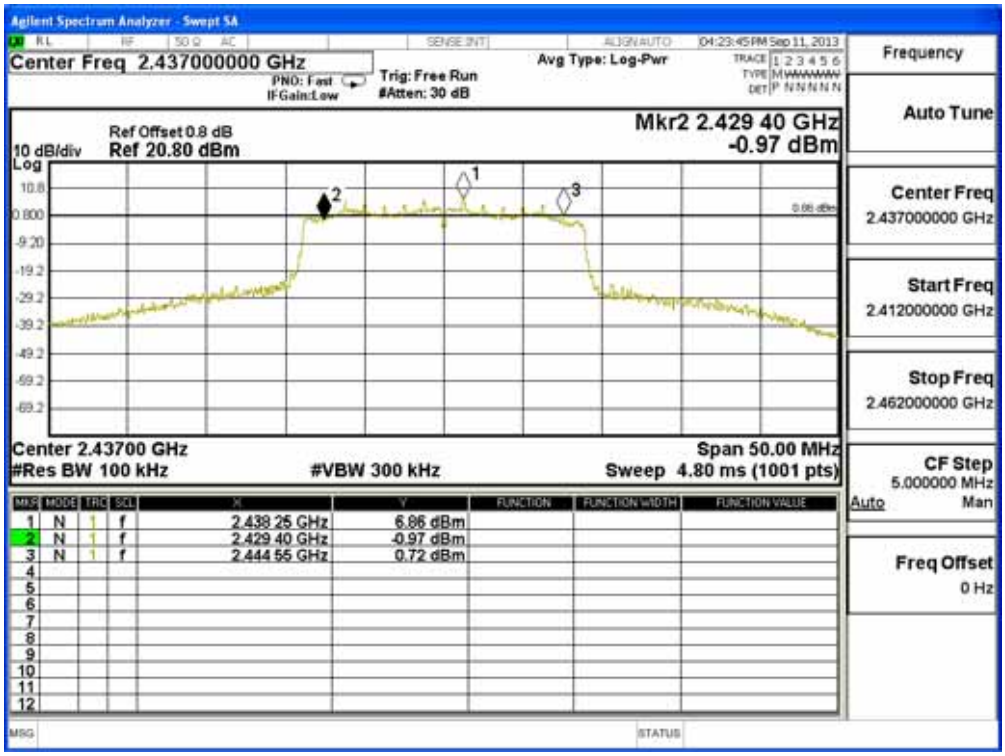
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	15200	500	Pass
06	2437	15150	500	Pass
11	2462	15200	500	Pass
149	5745	17650	500	Pass
157	5785	17650	500	Pass
165	5825	17650	500	Pass

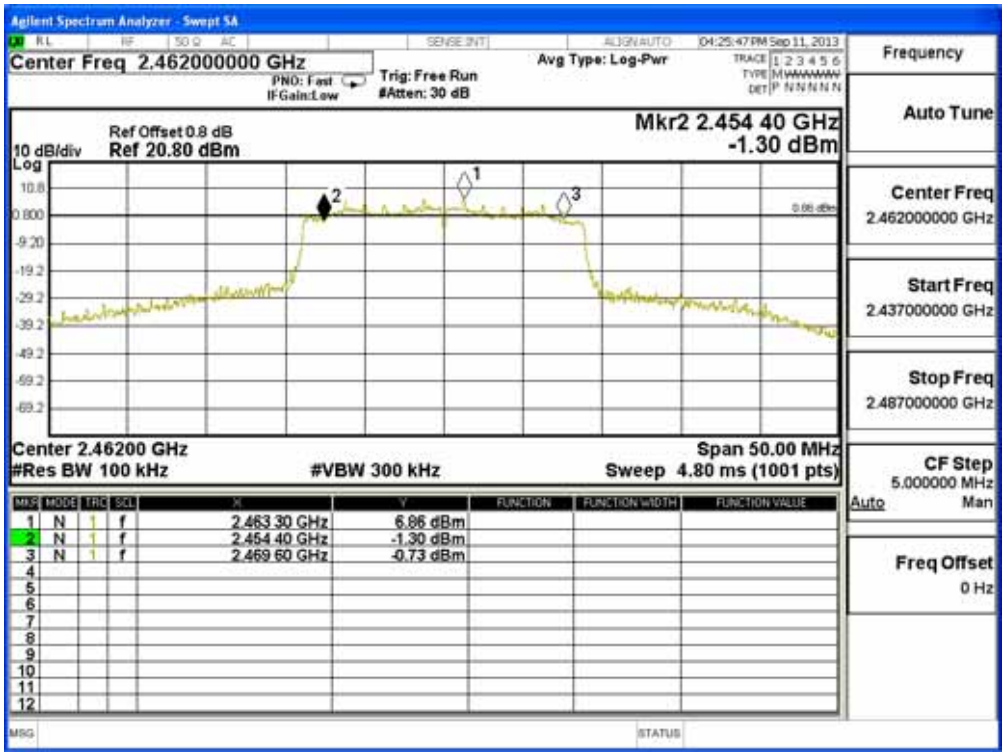
Channel 01 (2412MHz)



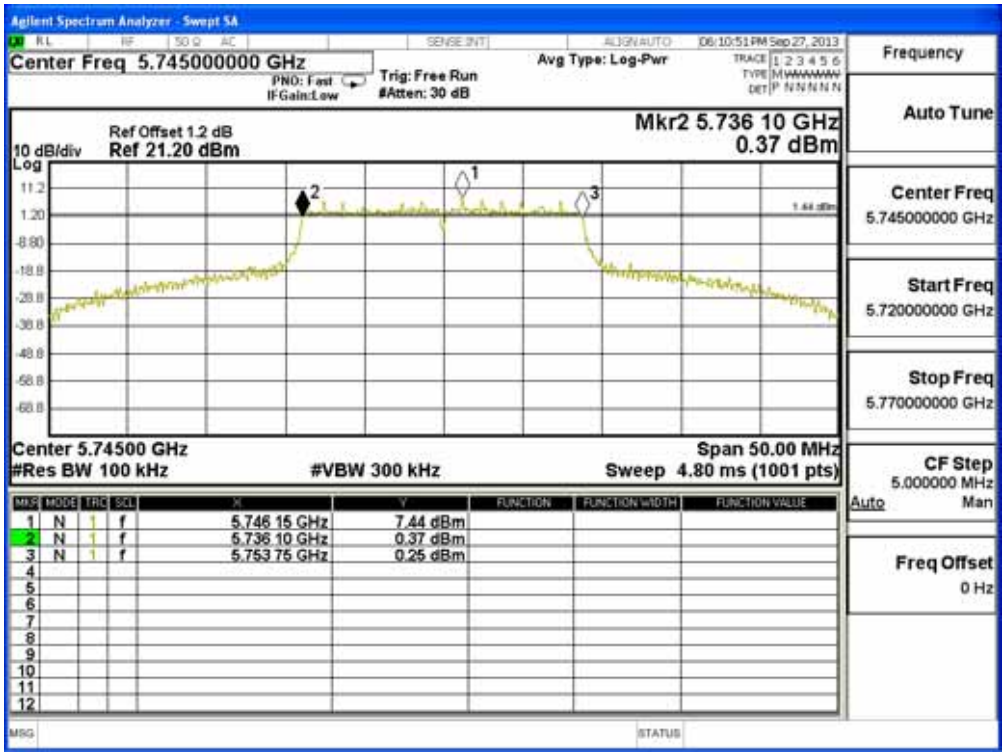
Channel 06 (2437MHz)



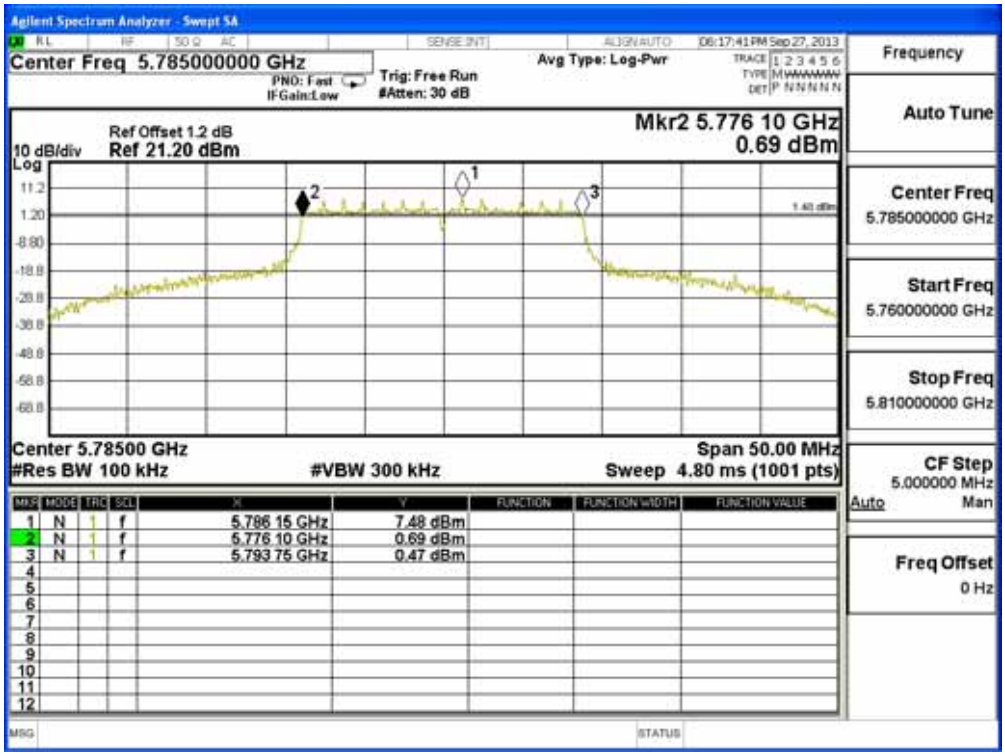
Channel 11 (2462MHz)



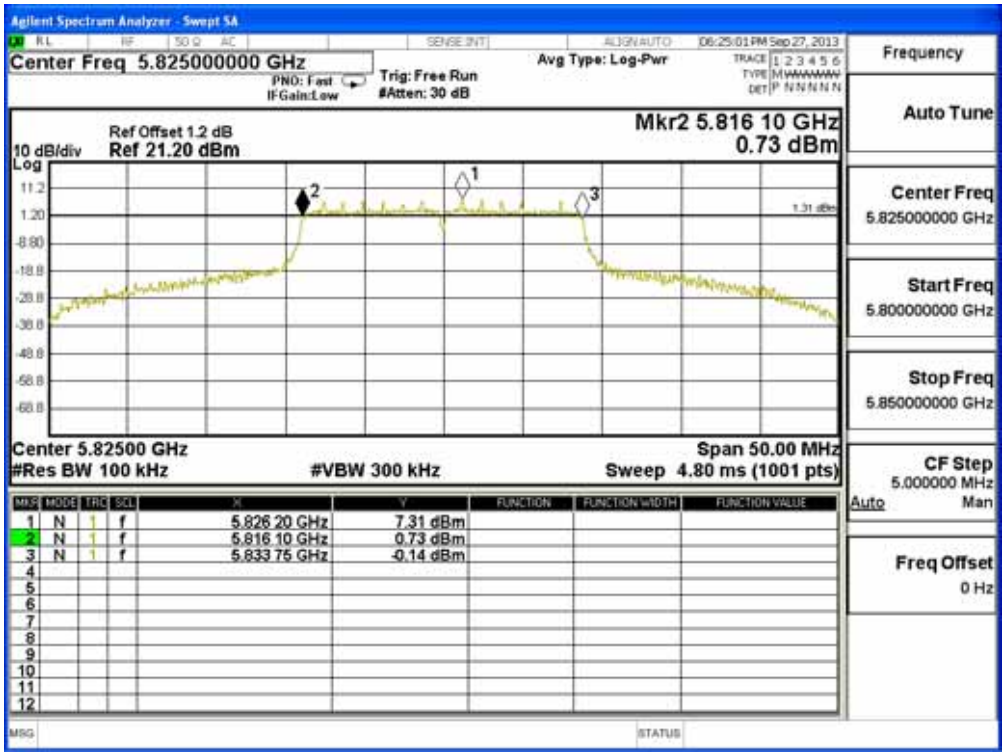
Channel 149 (5745MHz)



Channel 157 (5785MHz)



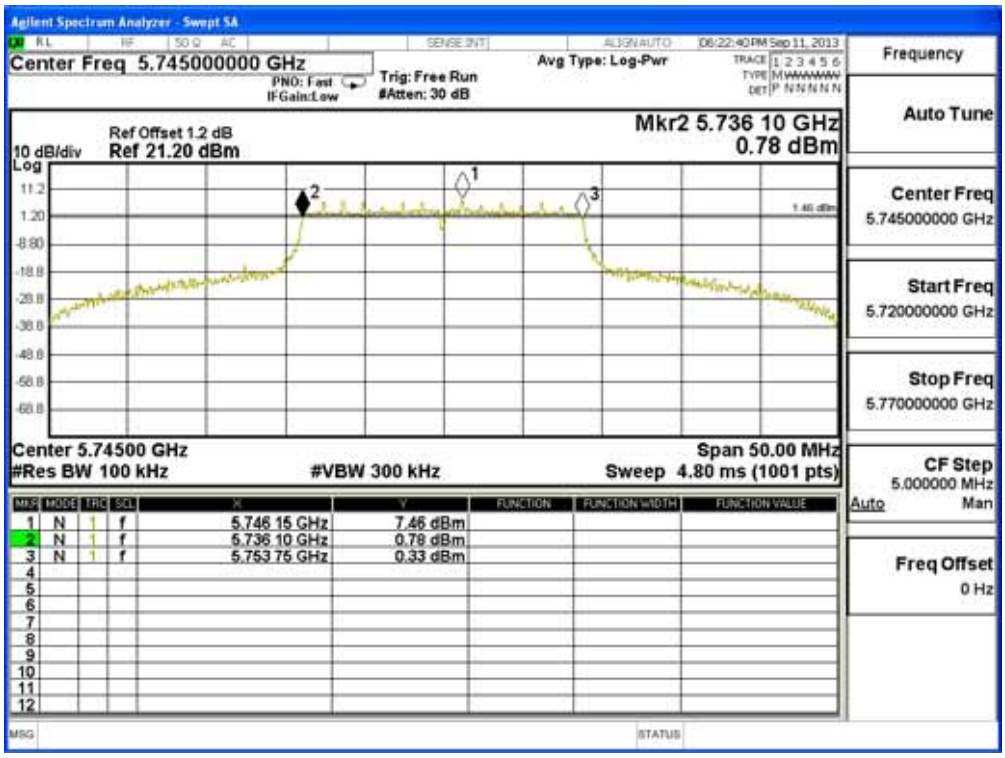
Channel 165 (5825MHz)



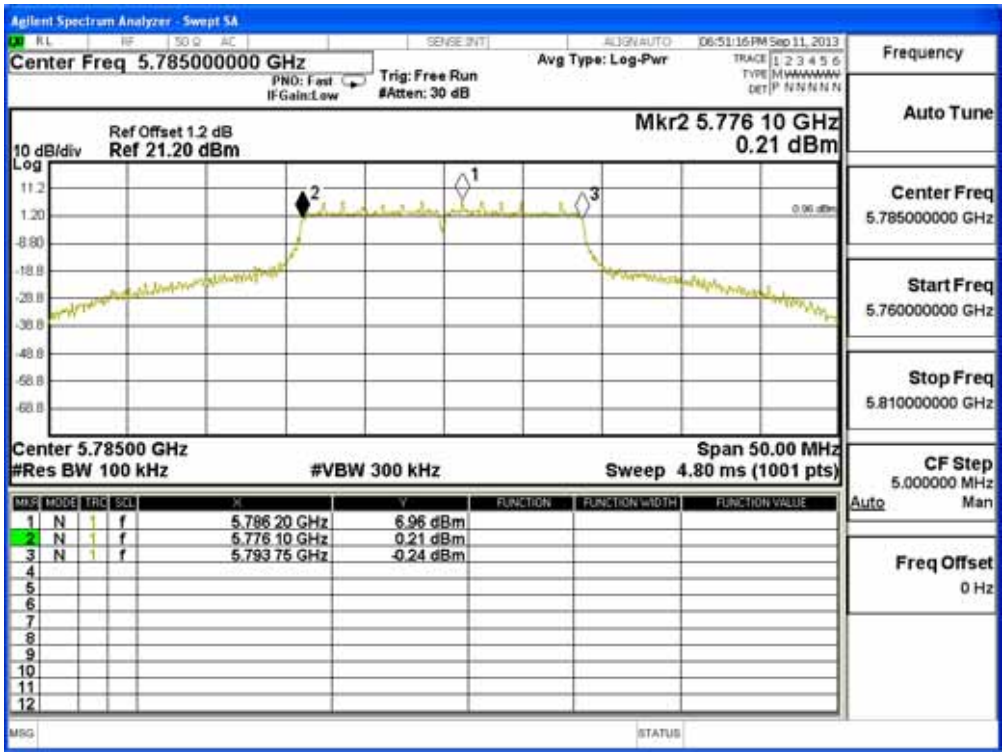
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	17650	500	Pass
157	5785	17650	500	Pass
165	5825	17650	500	Pass

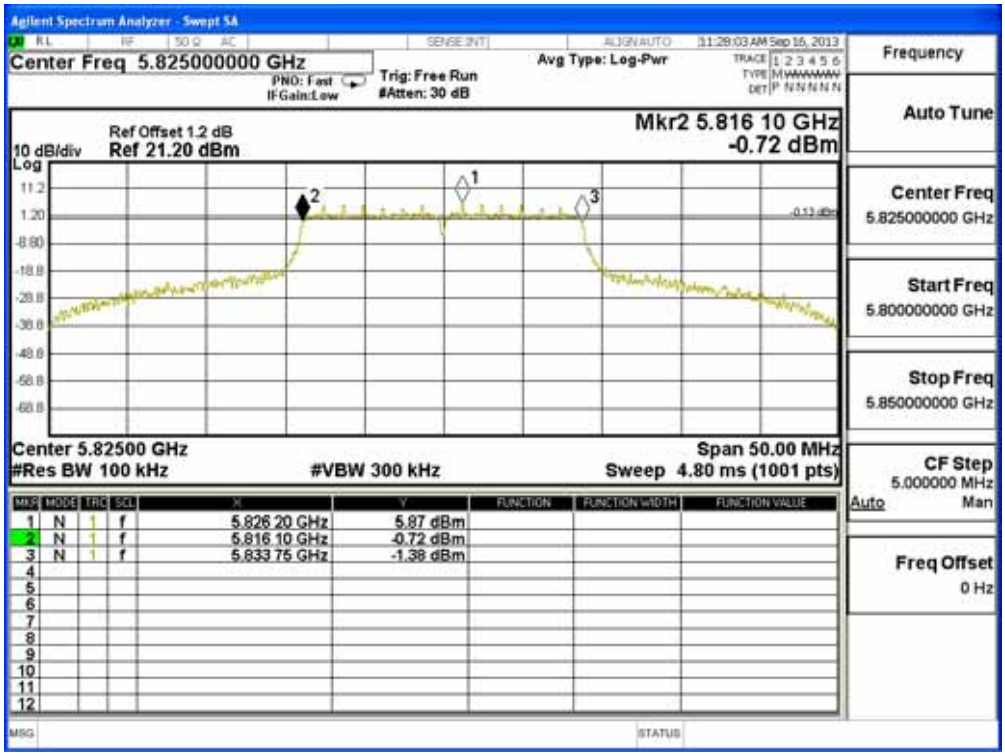
Channel 149 (5745MHz)



Channel 157 (5785MHz)



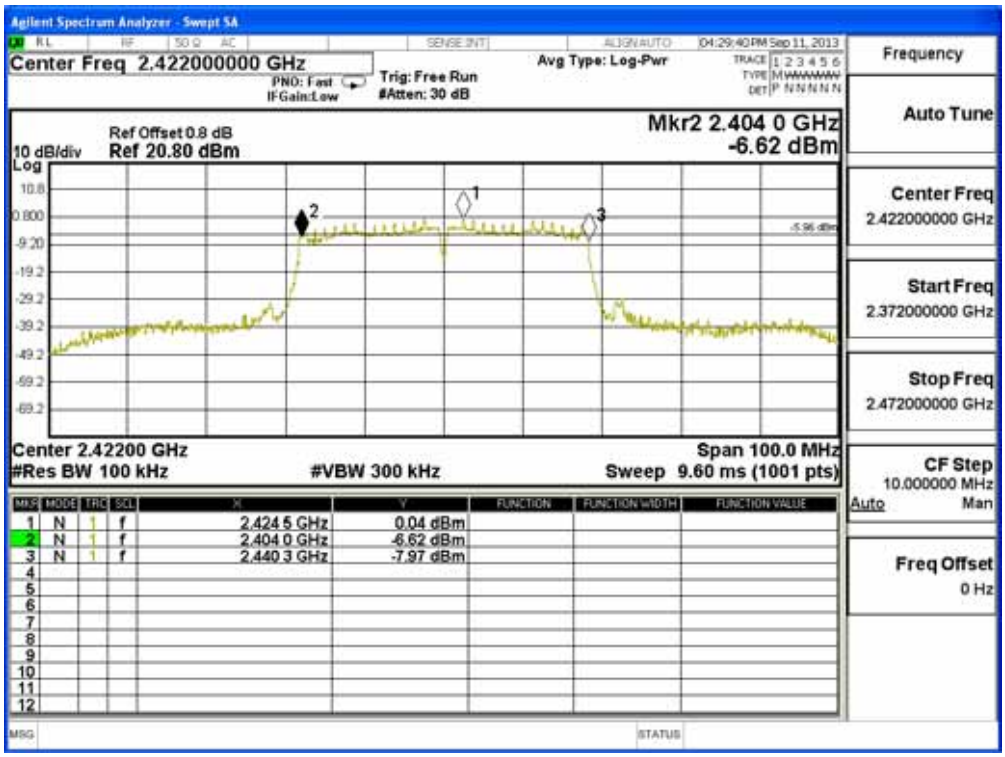
Channel 165 (5825MHz)



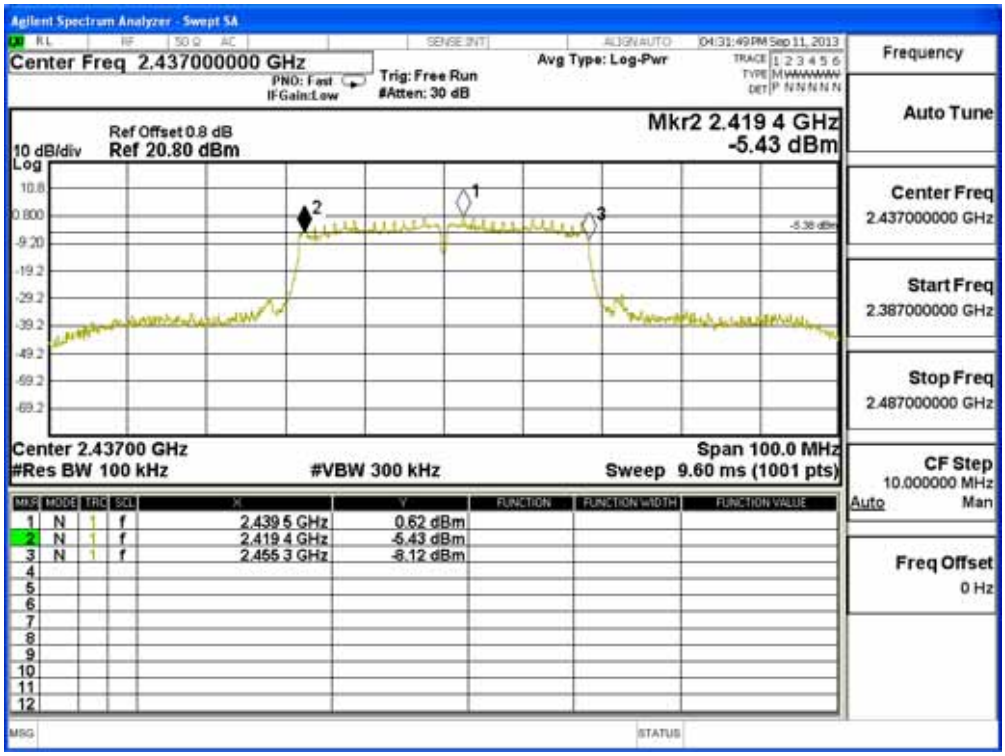
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	36300	500	Pass
06	2437	35900	500	Pass
09	2452	35500	500	Pass
151	5755	36500	500	Pass
159	5795	36500	500	Pass

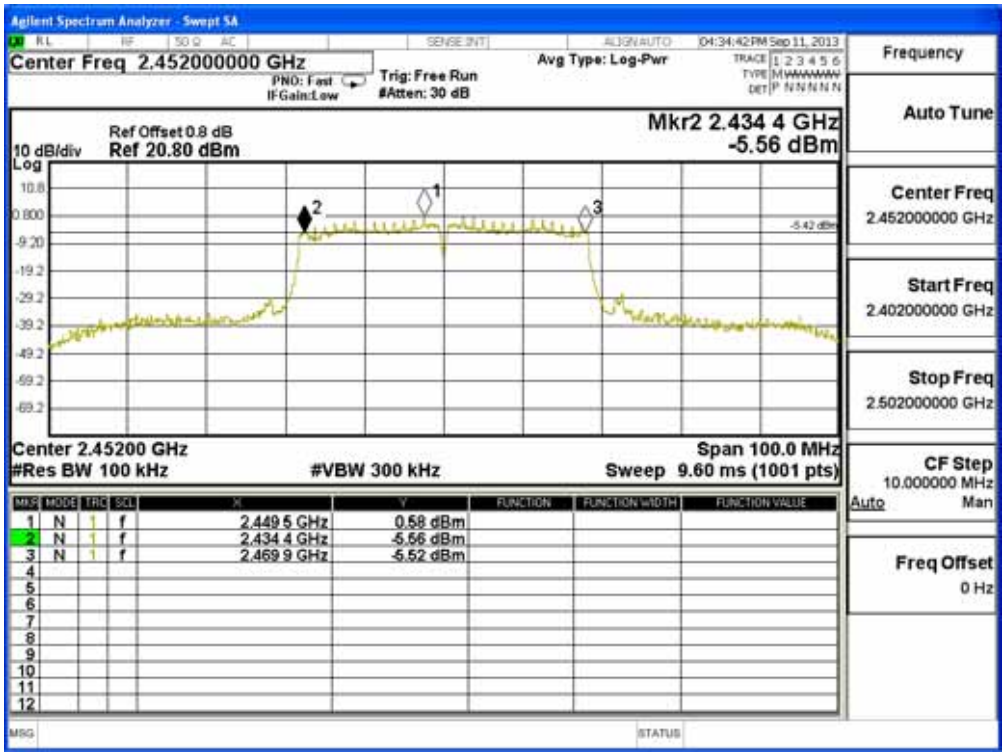
Channel 03 (2422MHz)



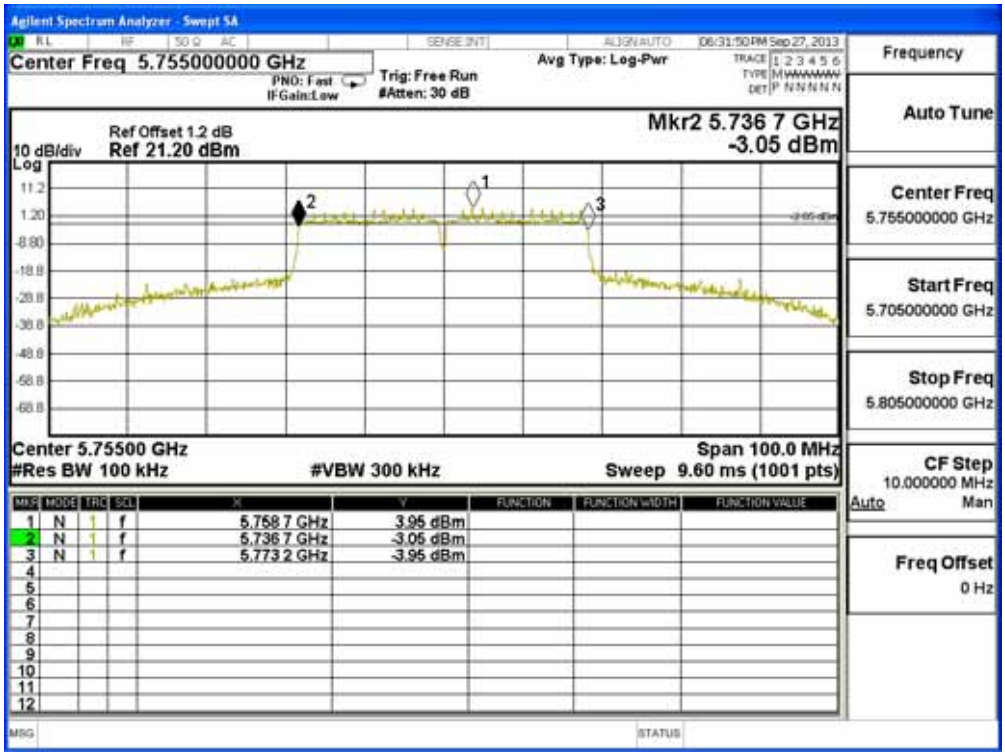
Channel 06 (2437MHz)



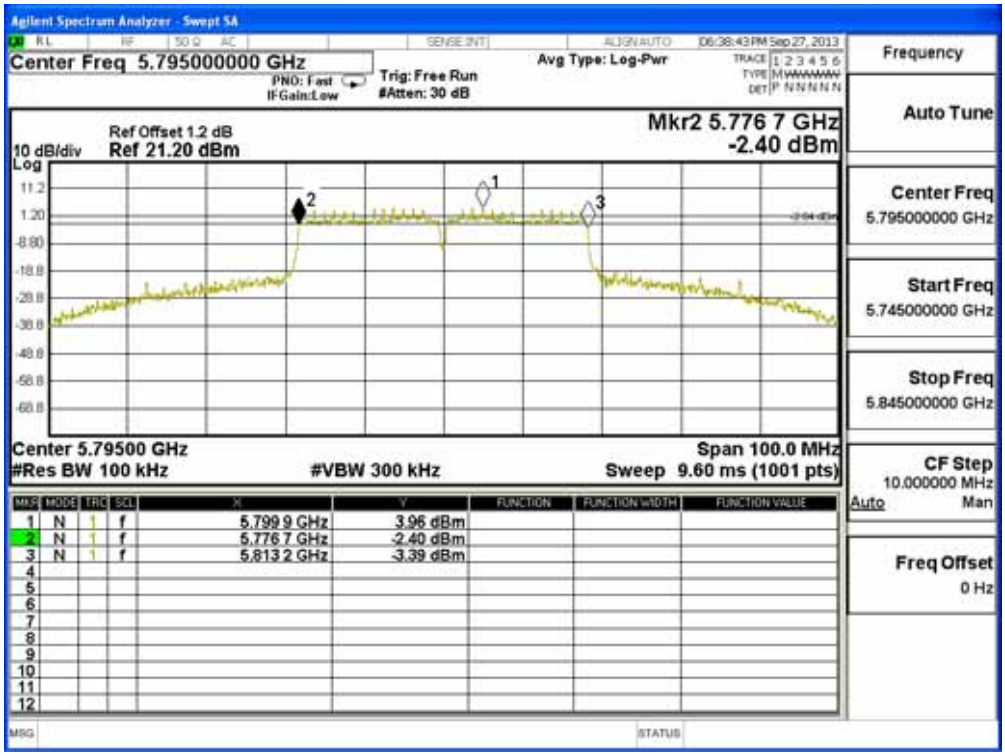
Channel 09 (2452MHz)



Channel 151 (5755MHz)



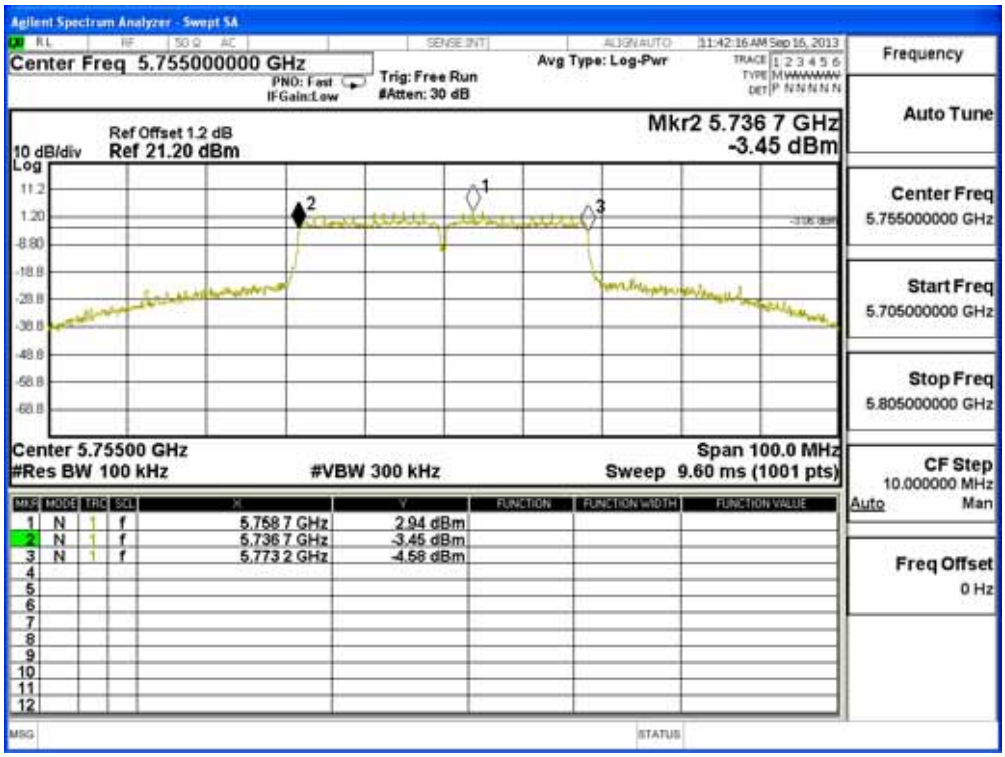
Channel 159 (5795MHz)



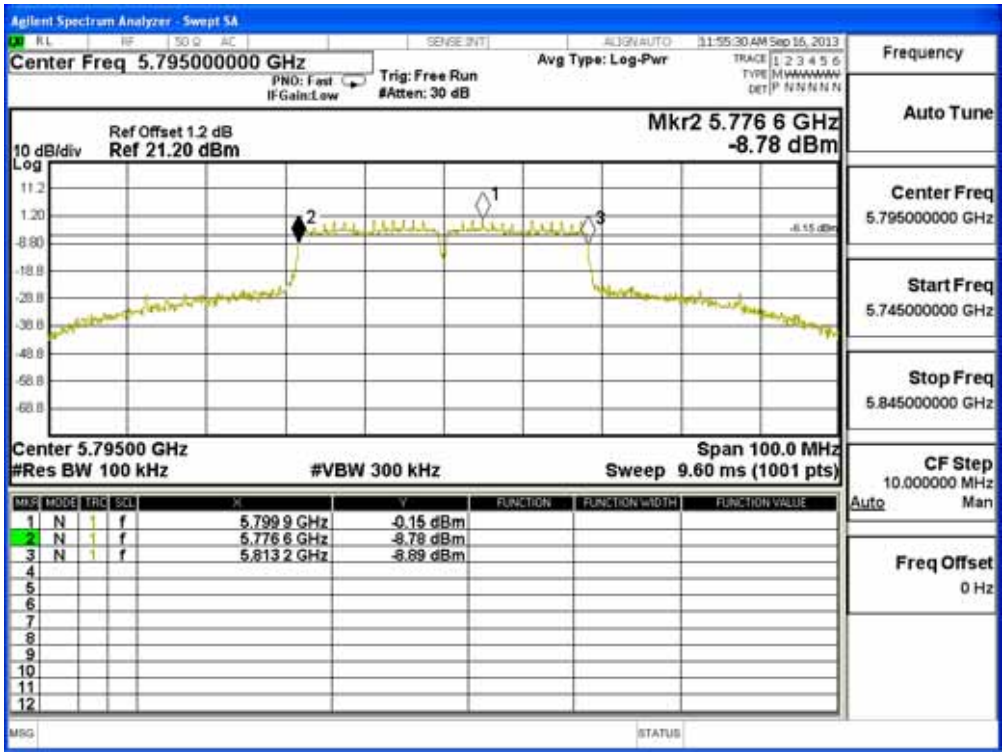
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
151	5755	36500	500	Pass
159	5795	36600	500	Pass

Channel 151 (5755MHz)



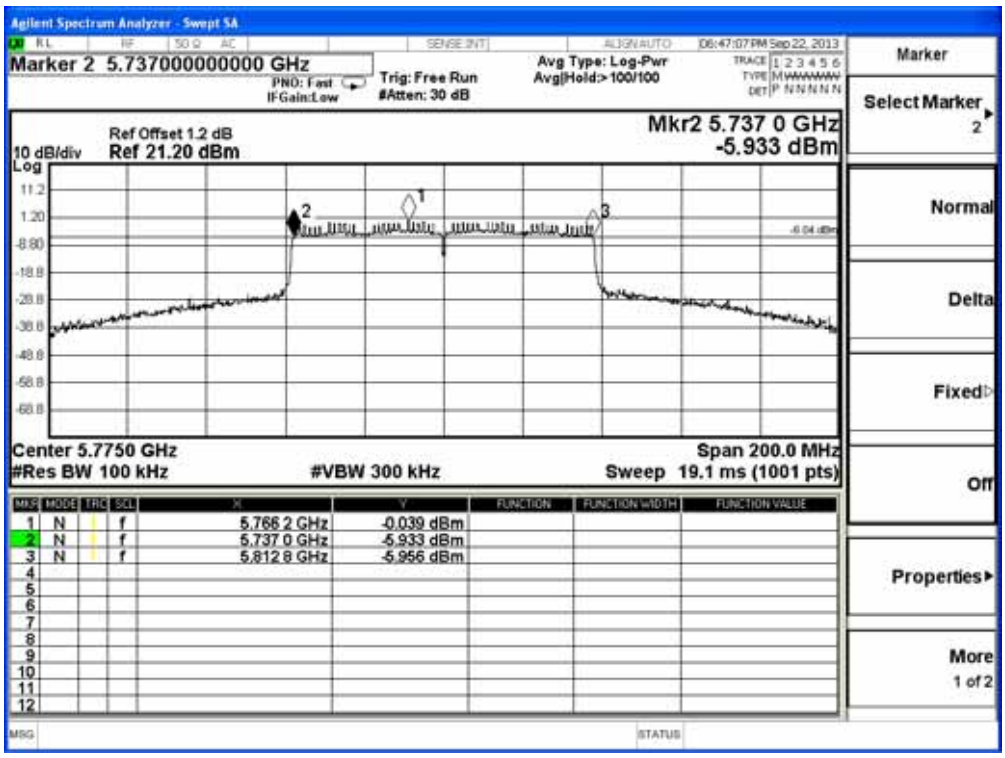
Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
155	5775	75800	500	Pass

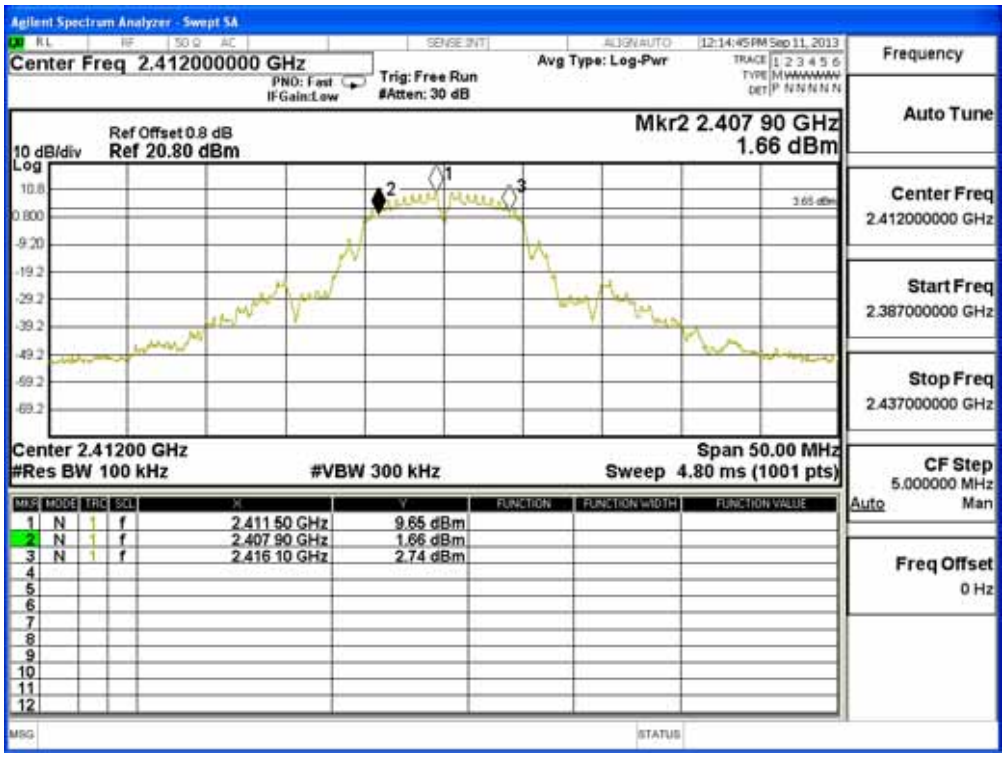
Channel 155 (5775MHz)



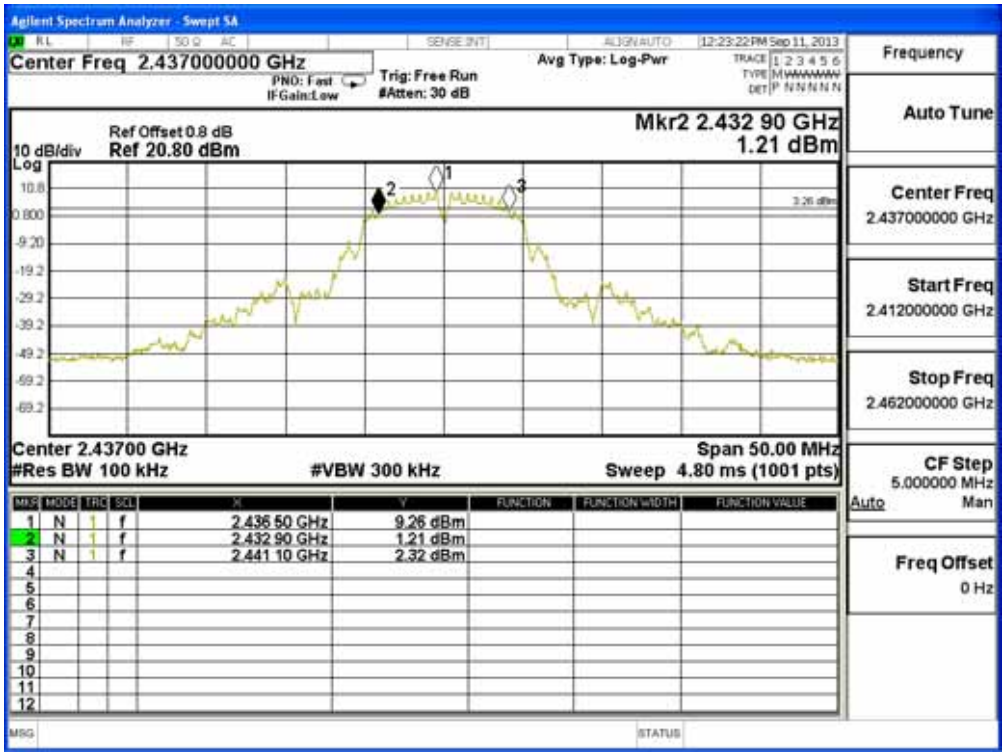
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	8200	500	Pass
06	2437	8200	500	Pass
11	2462	8200	500	Pass

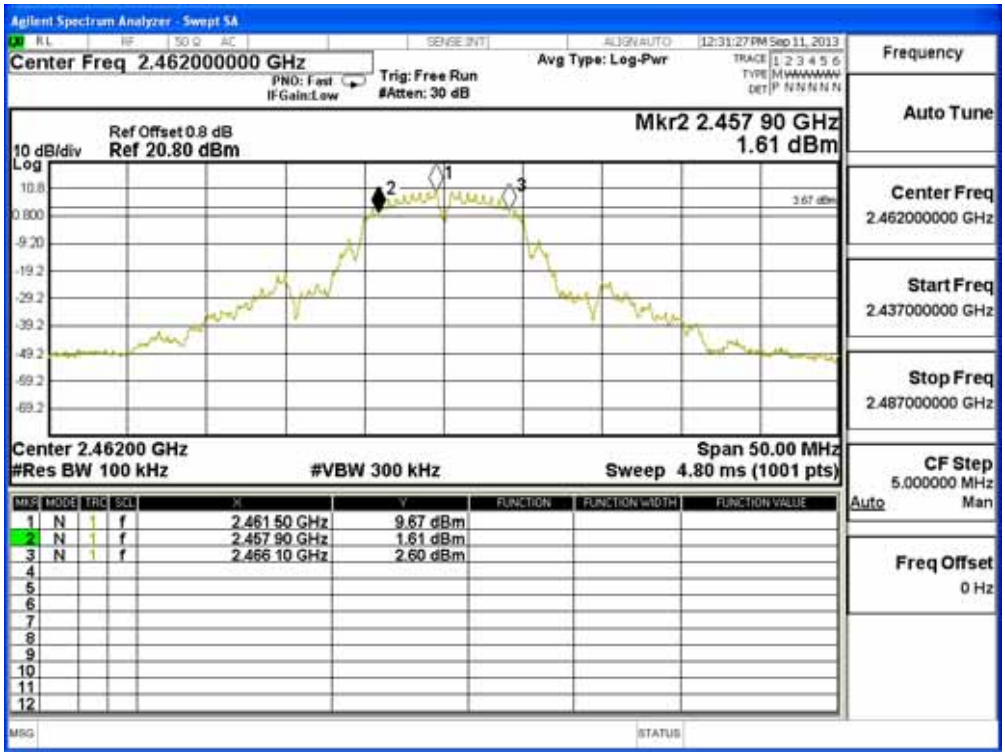
Channel 01 (2412MHz)



Channel 06 (2437MHz)



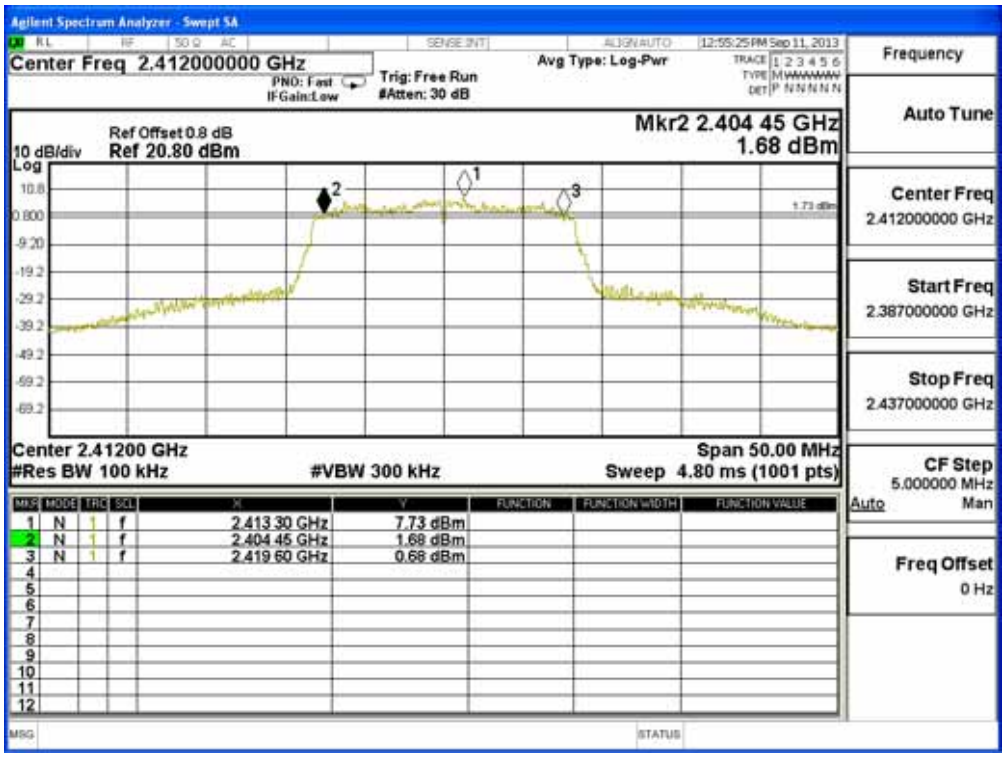
Channel 11 (2462MHz)



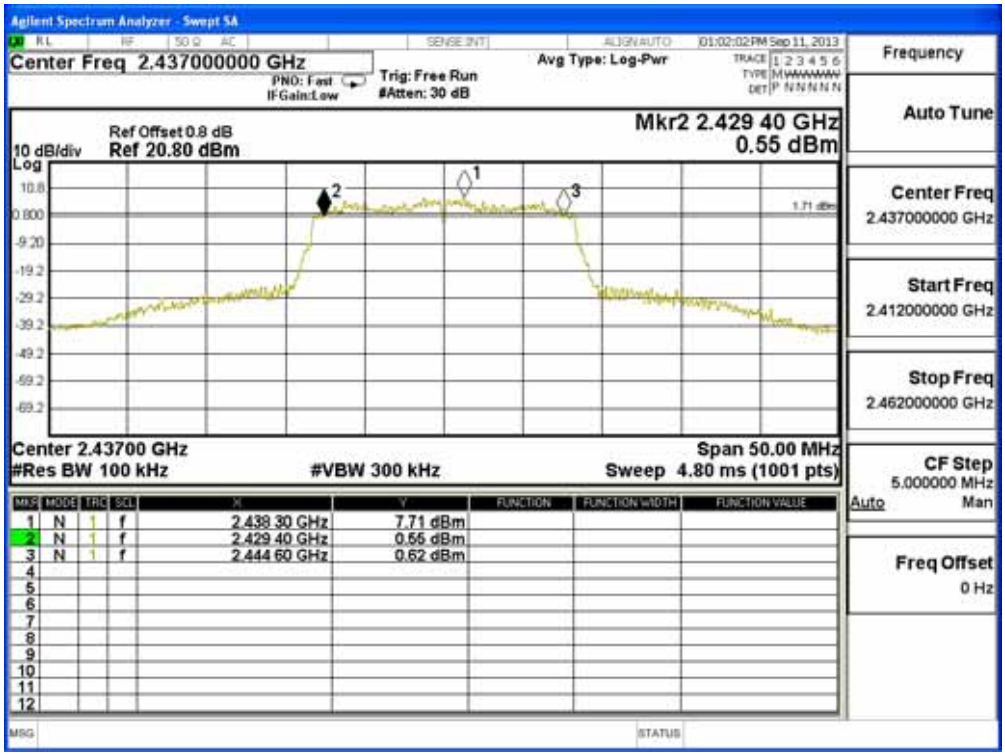
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	15150	500	Pass
06	2437	15200	500	Pass
11	2462	15450	500	Pass

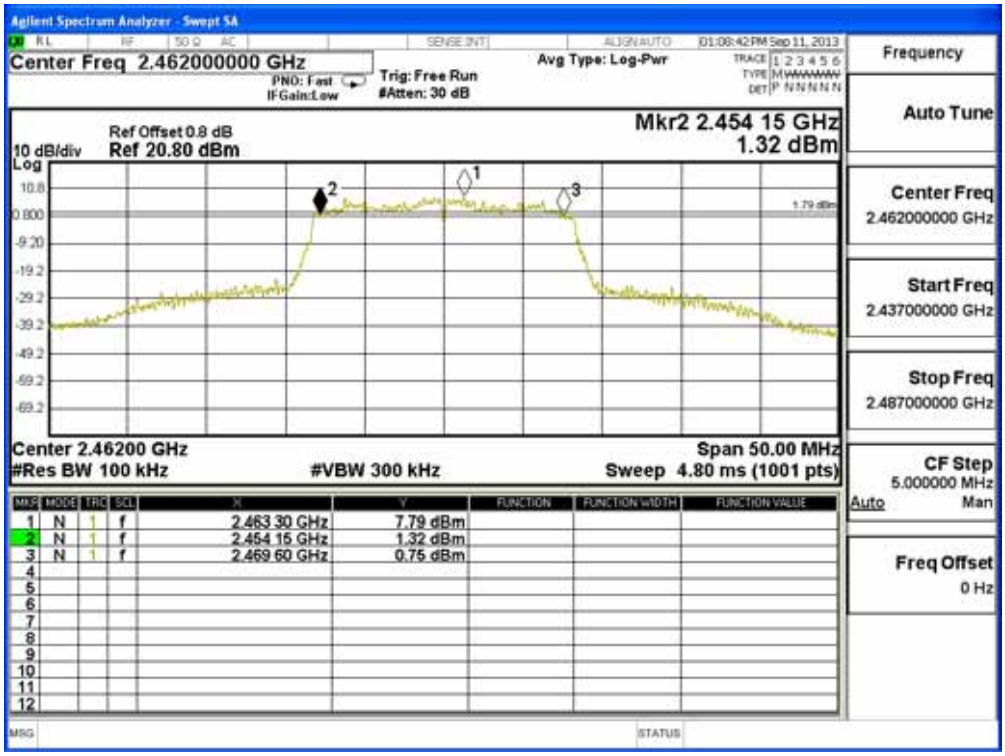
Channel 01 (2412MHz)



Channel 06 (2437MHz)



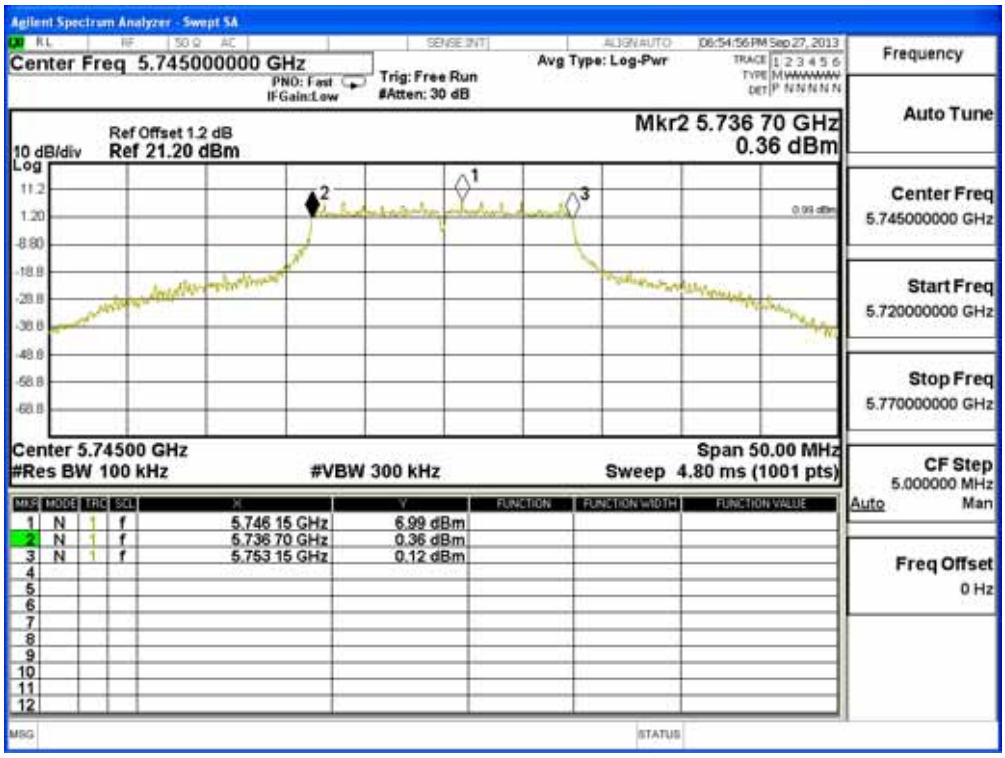
Channel 11 (2462MHz)



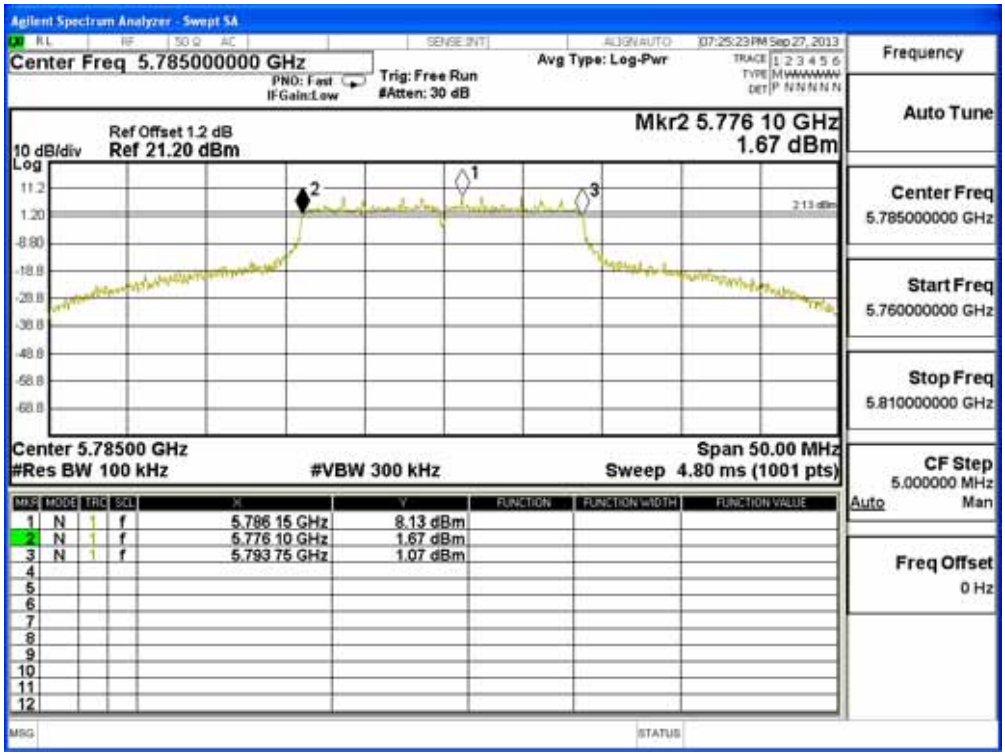
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	16450	500	Pass
157	5785	17650	500	Pass
165	5825	16450	500	Pass

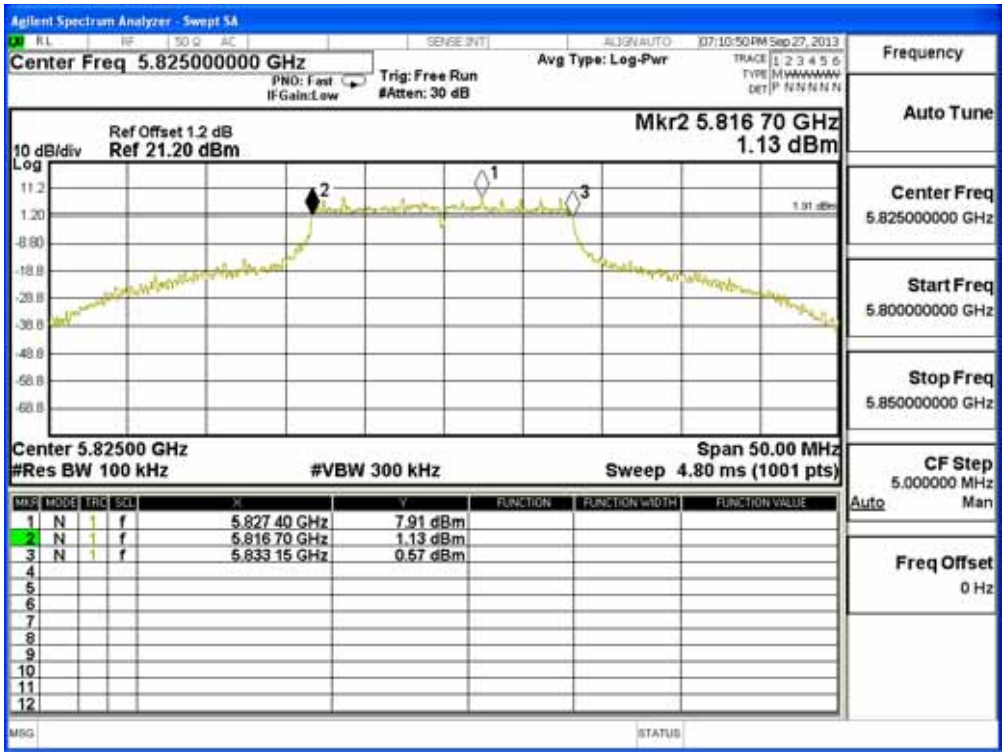
Channel 149 (5745MHz)



Channel 157 (5785MHz)



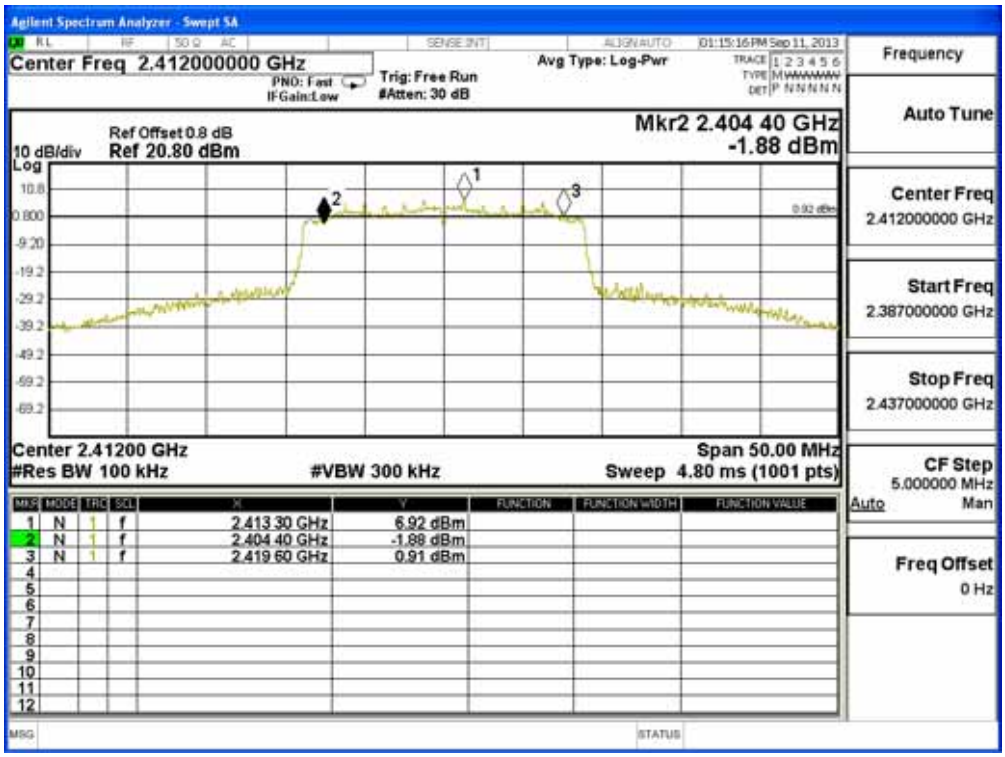
Channel 165 (5825MHz)



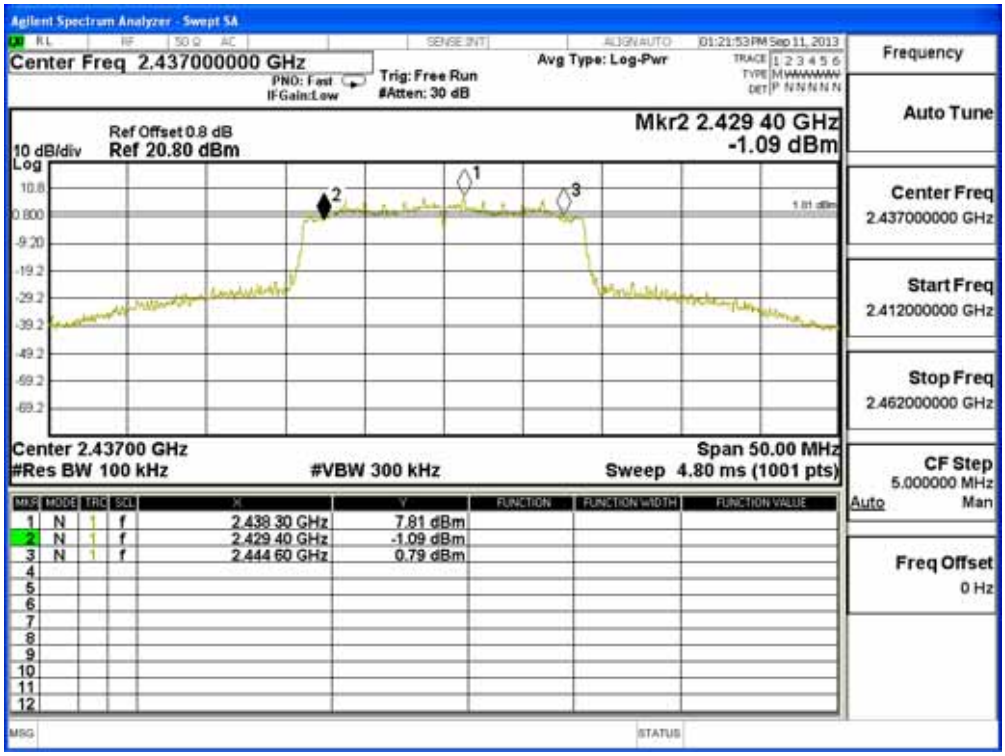
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
01	2412	15200	500	Pass
06	2437	15200	500	Pass
11	2462	15200	500	Pass
149	5745	17700	500	Pass
157	5785	17650	500	Pass
165	5825	17650	500	Pass

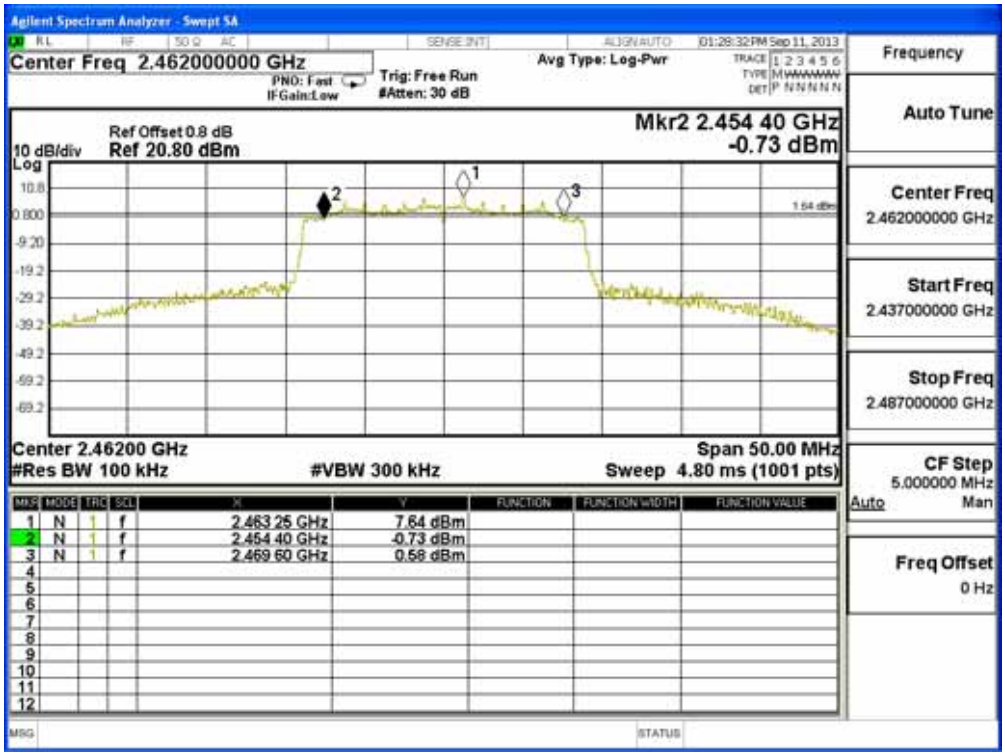
Channel 01 (2412MHz)



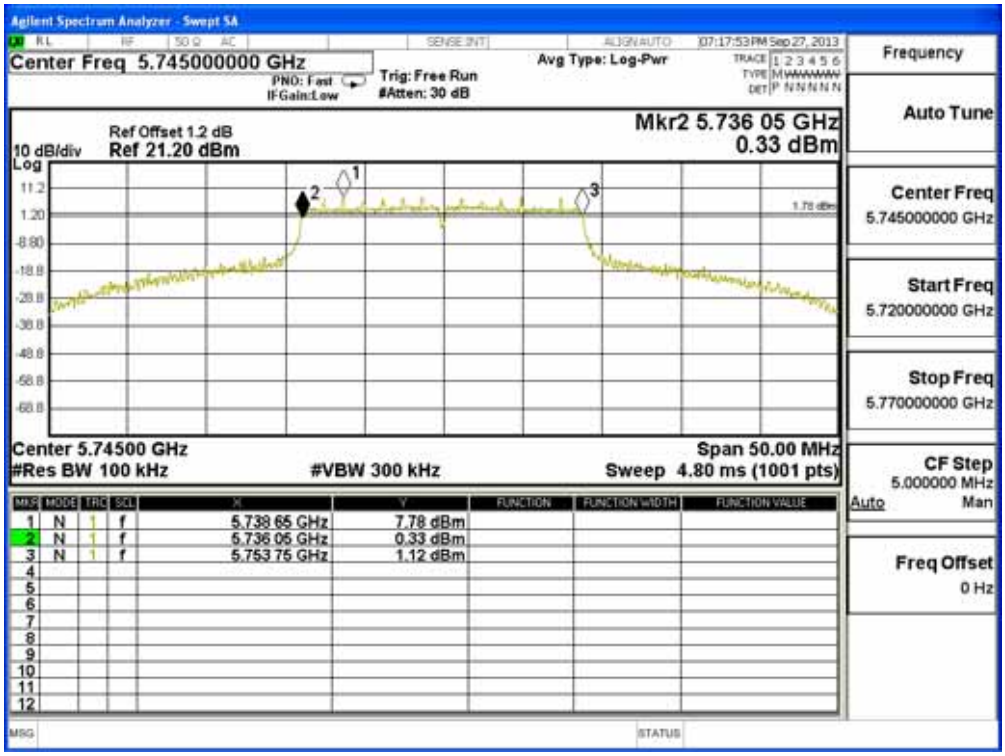
Channel 06 (2437MHz)



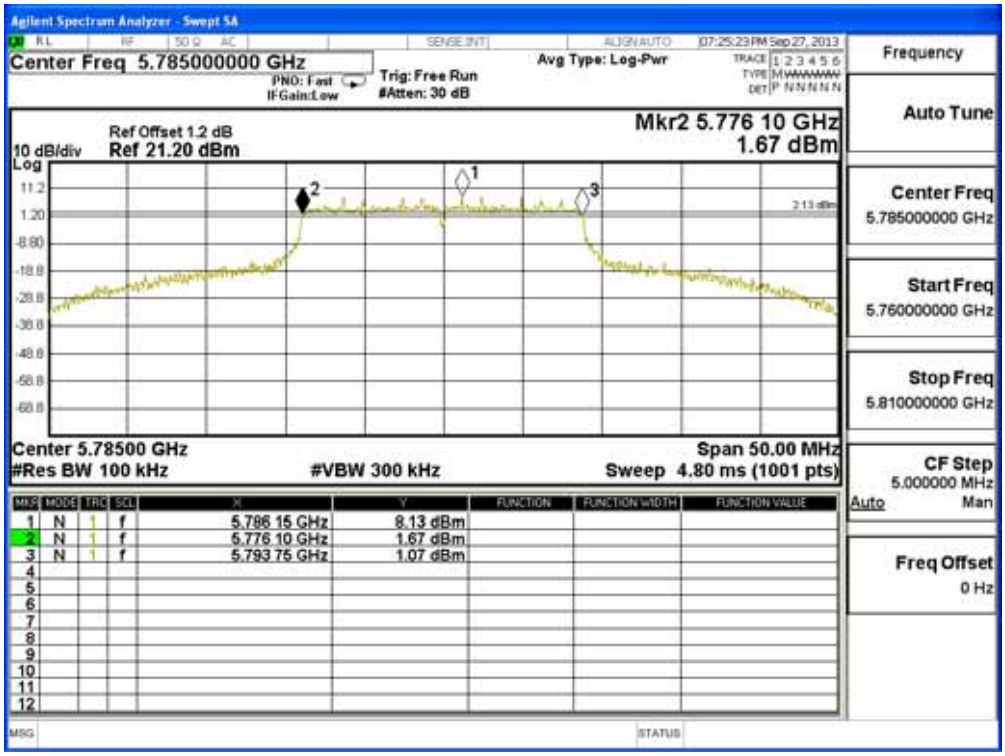
Channel 11 (2462MHz)



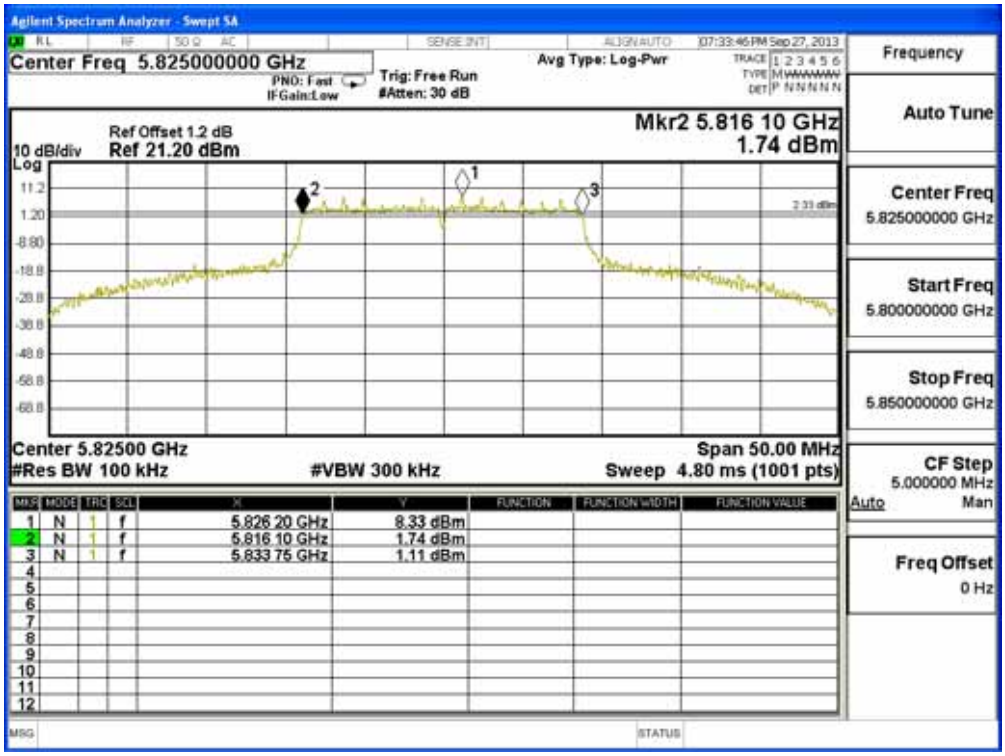
Channel 149 (5745MHz)



Channel 157 (5785MHz)



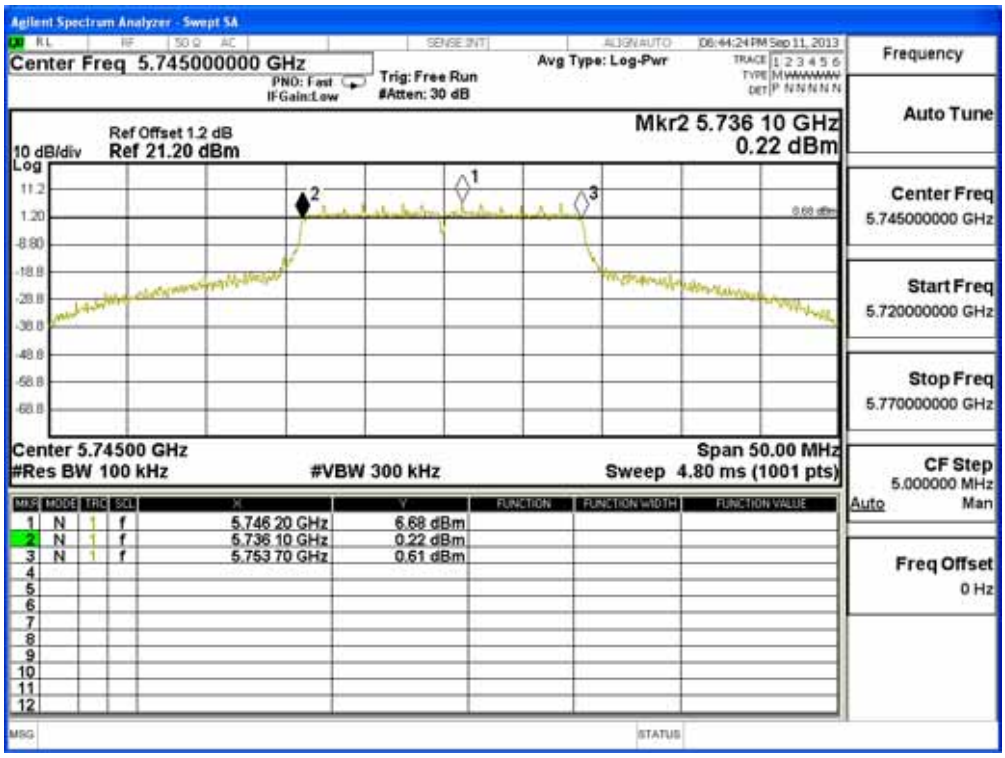
Channel 165 (5825MHz)



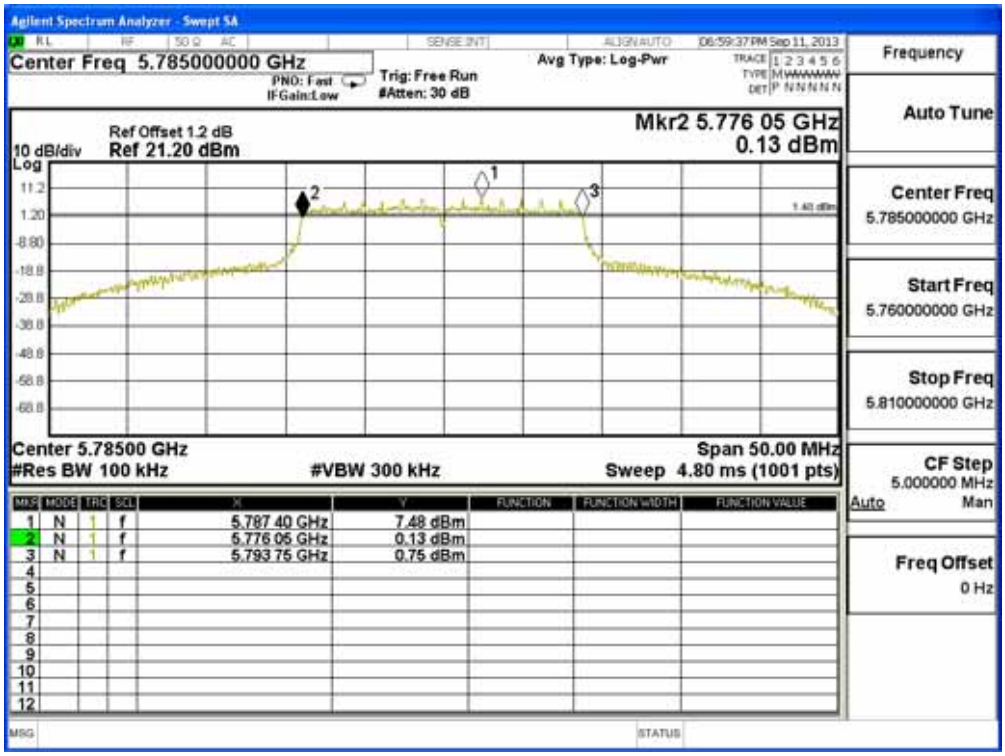
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	17600	500	Pass
157	5785	17700	500	Pass
165	5825	17650	500	Pass

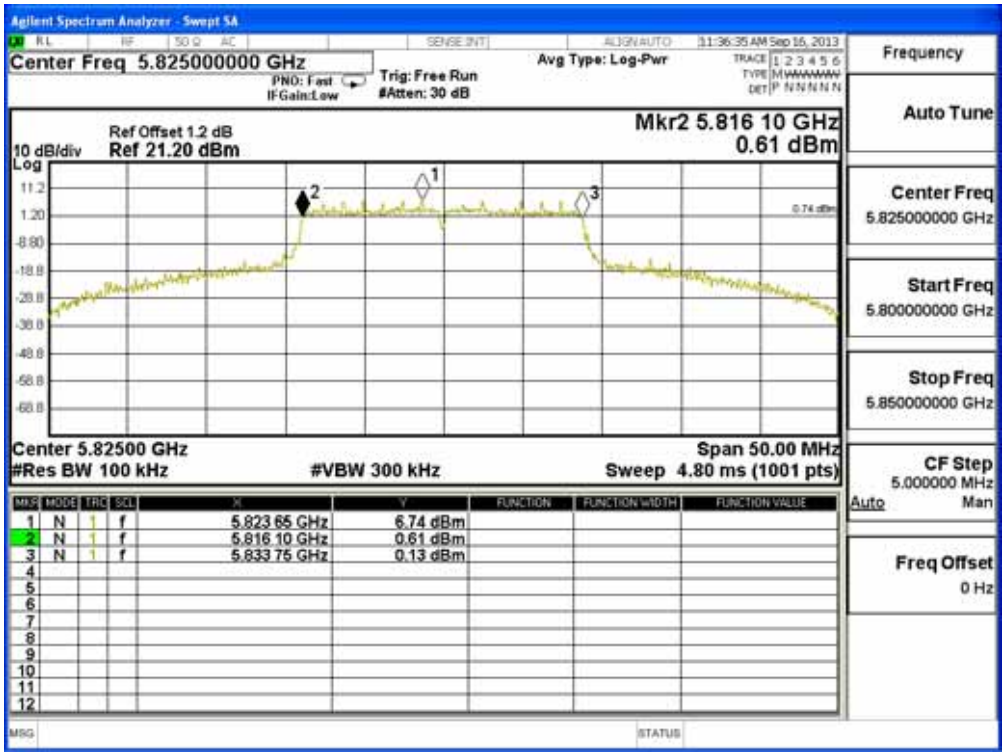
Channel 149 (5745MHz)



Channel 157 (5785MHz)



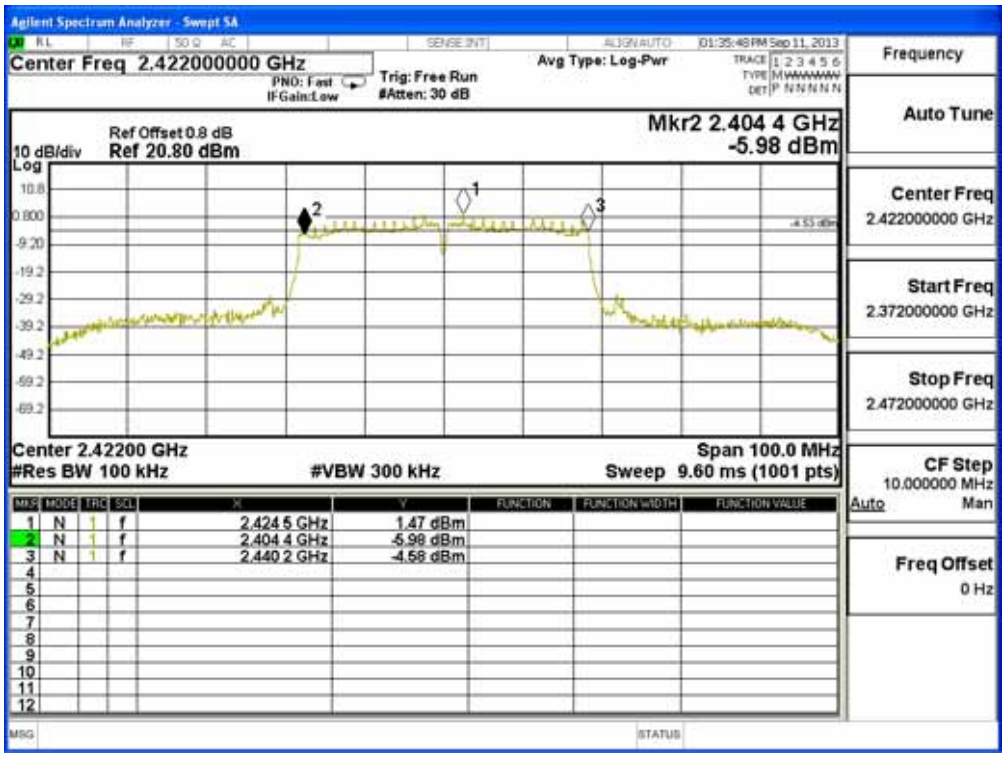
Channel 165 (5825MHz)



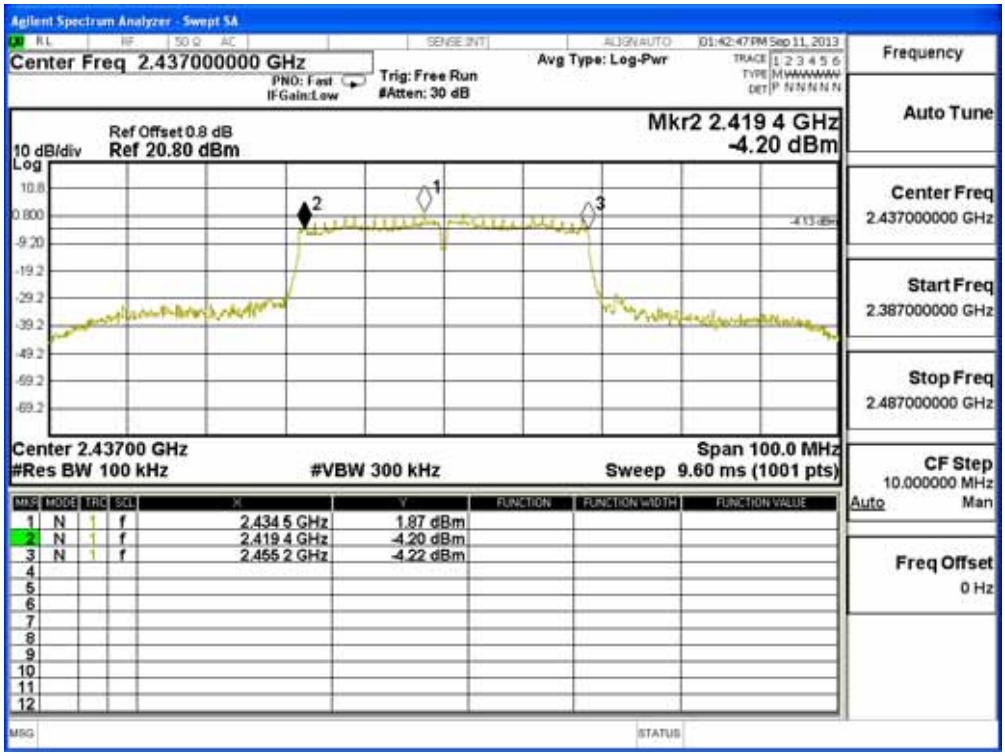
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
03	2422	35800	500	Pass
06	2437	35800	500	Pass
09	2452	36500	500	Pass
151	5755	36500	500	Pass
159	5795	36500	500	Pass

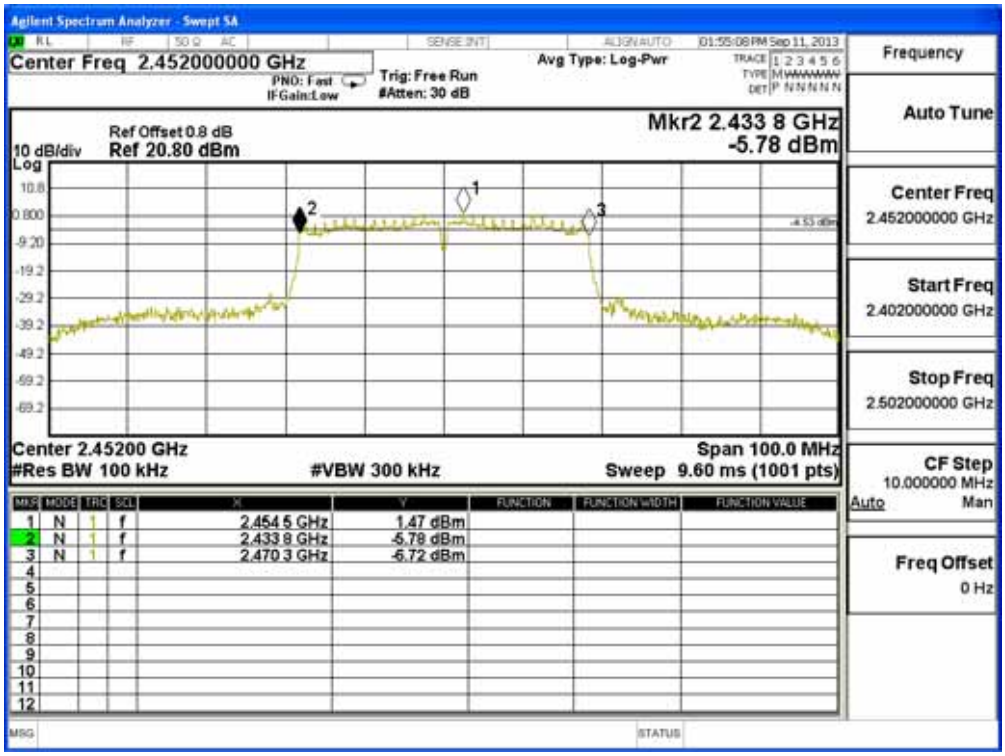
Channel 03 (2422MHz)



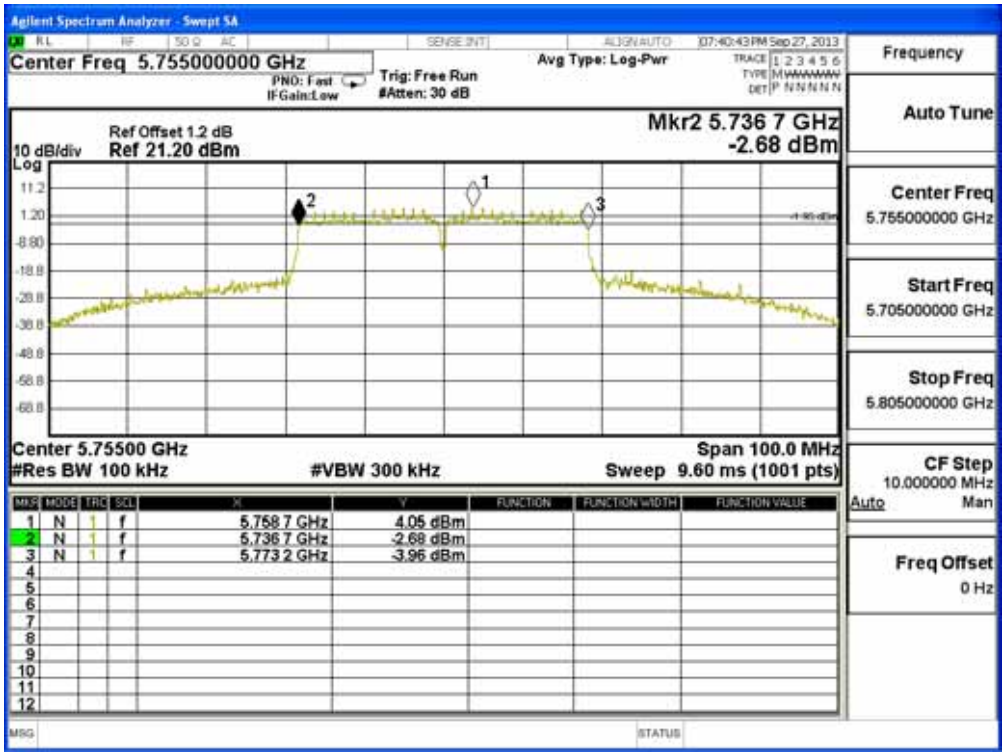
Channel 06 (2437MHz)



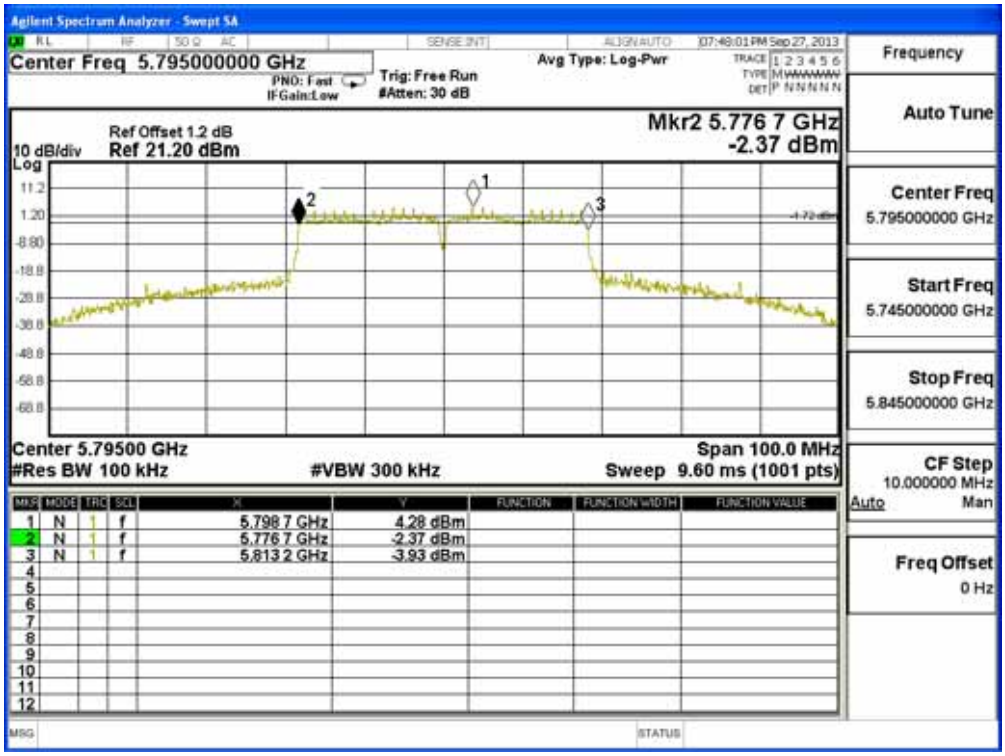
Channel 09 (2452MHz)



Channel 151 (5755MHz)



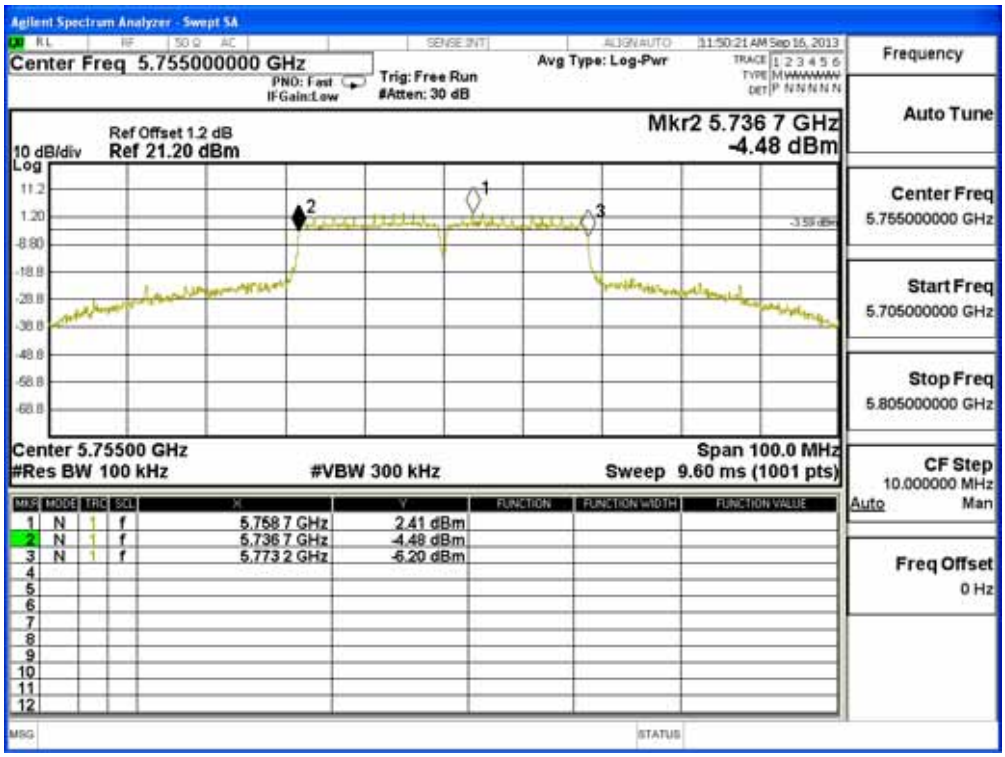
Channel 159 (5795MHz)



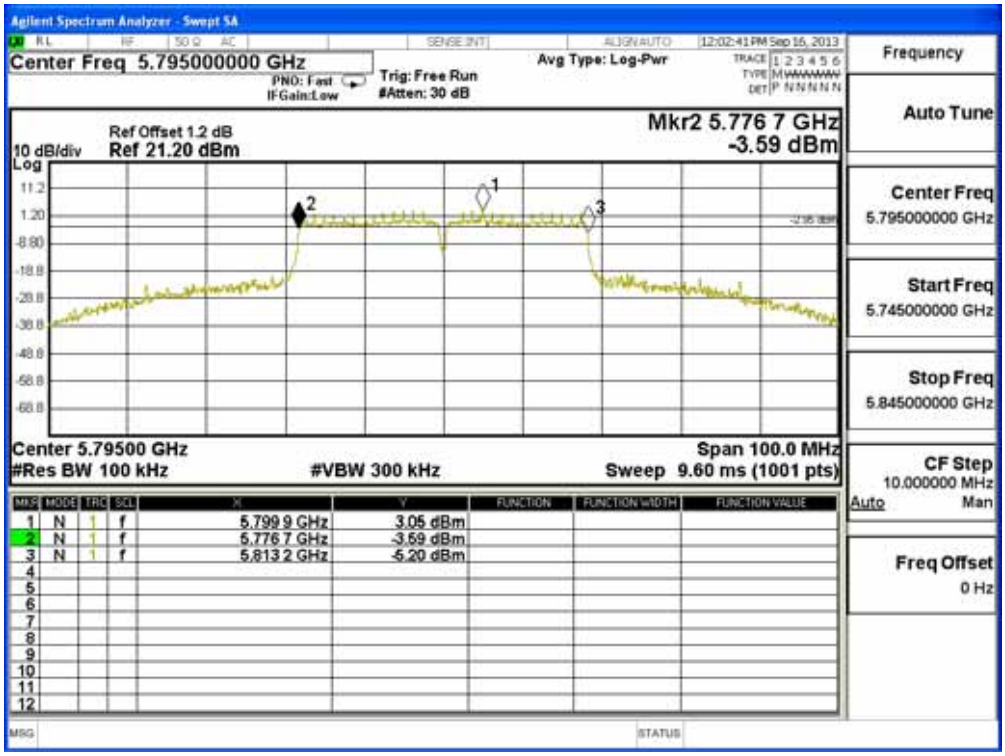
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
151	5755	36500	500	Pass
159	5795	36500	500	Pass

Channel 151 (5755MHz)



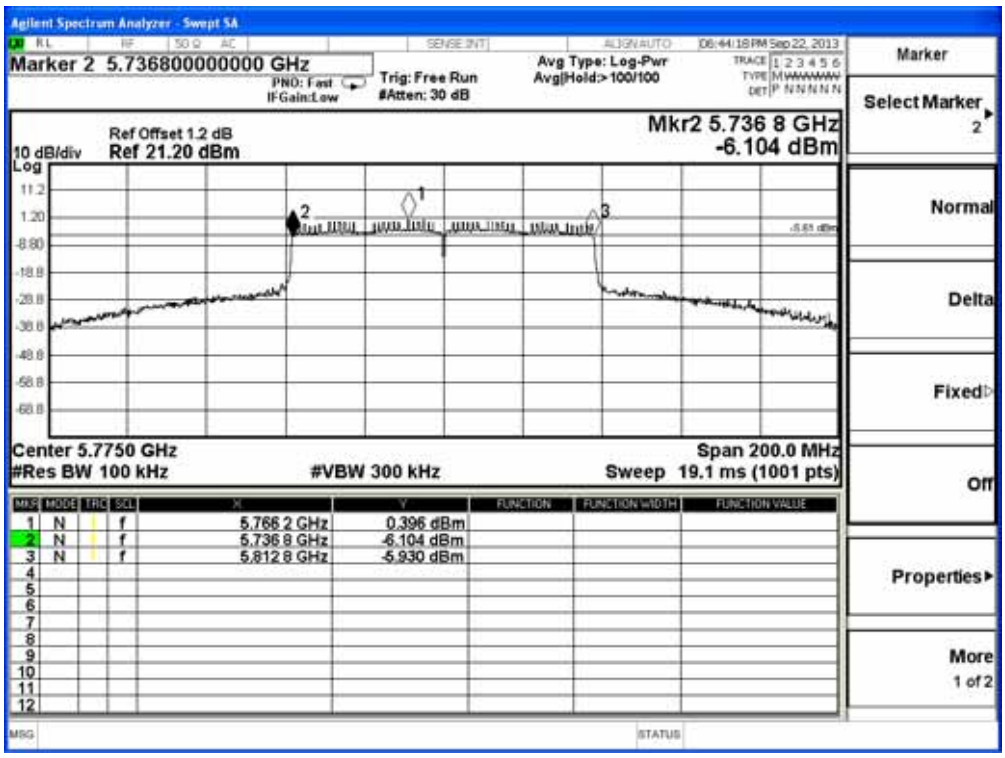
Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 1)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
155	5775	76000	500	Pass

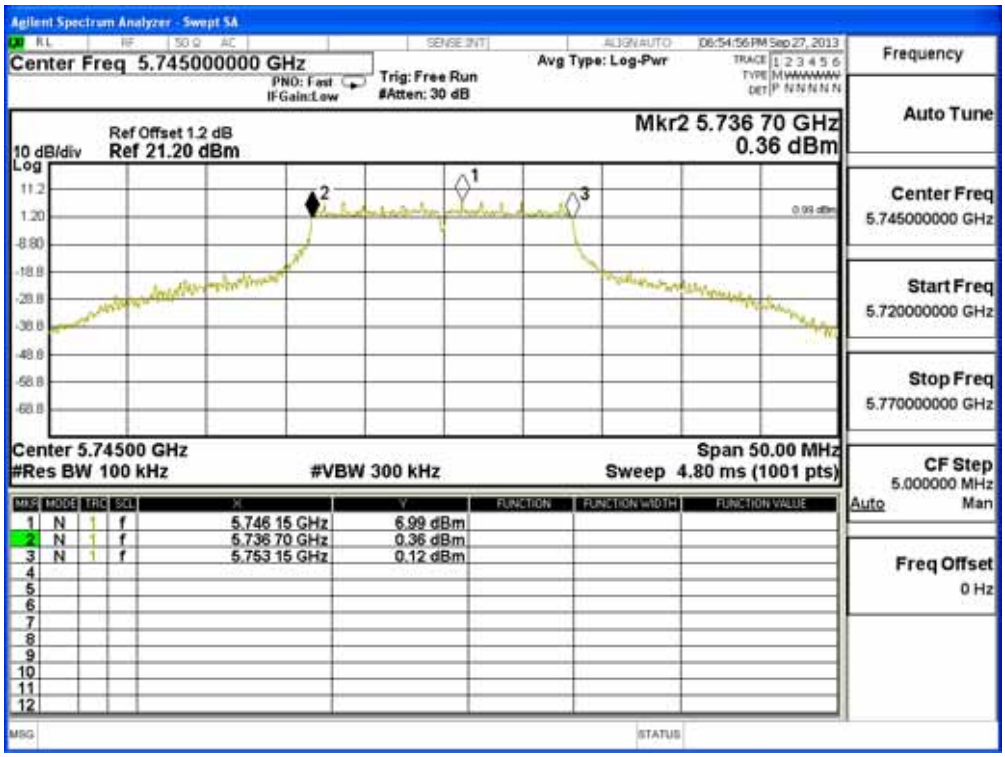
Channel 155 (5775MHz)



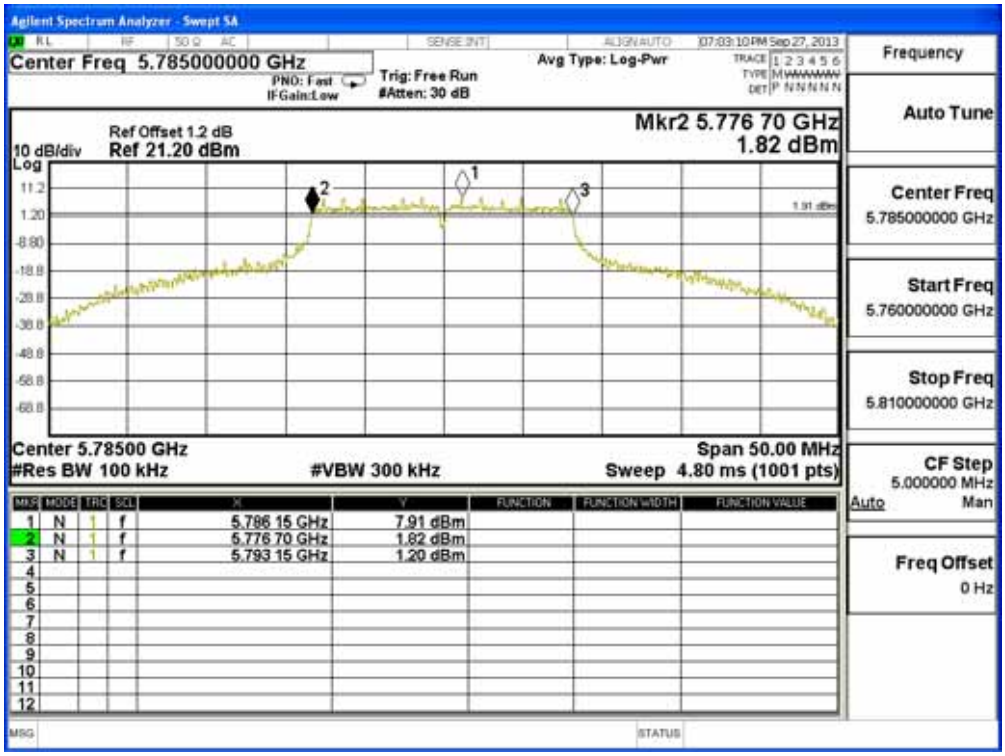
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 2)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	16450	500	Pass
157	5785	16450	500	Pass
165	5825	16450	500	Pass

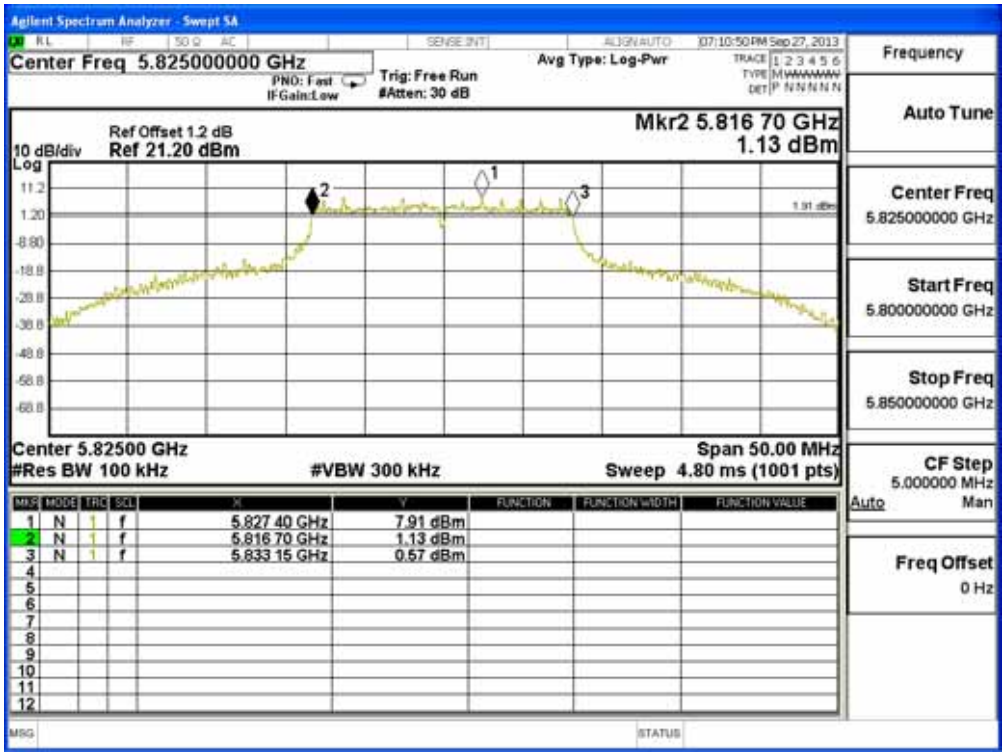
Channel 149 (5745MHz)



Channel 157 (5785MHz)



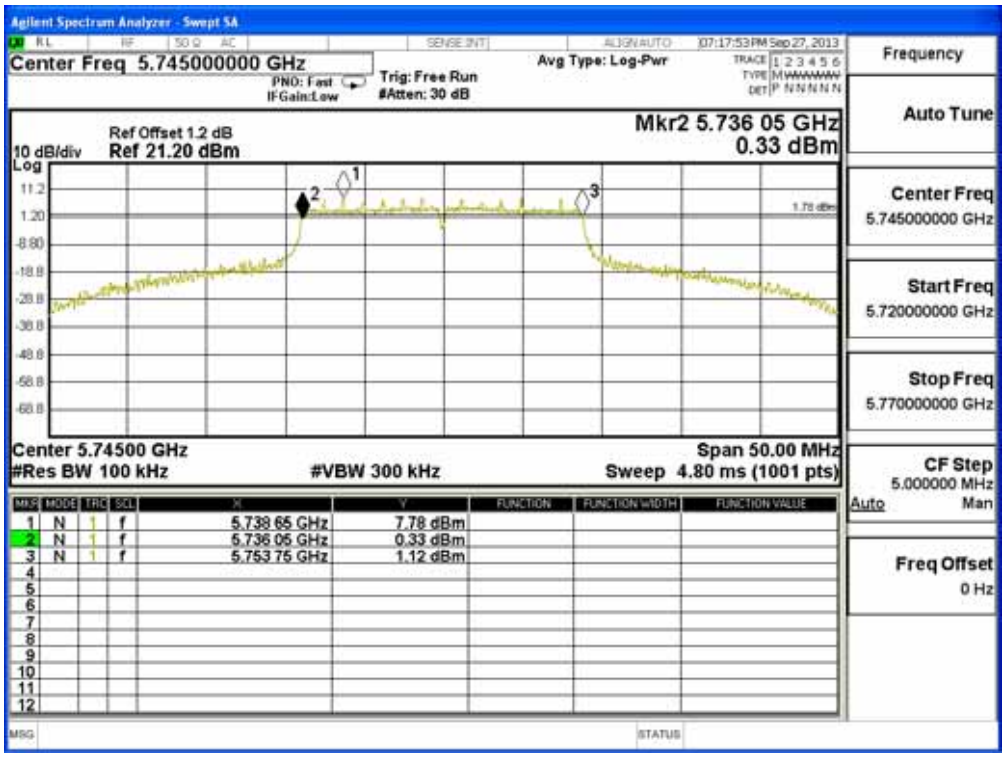
Channel 165 (5825MHz)



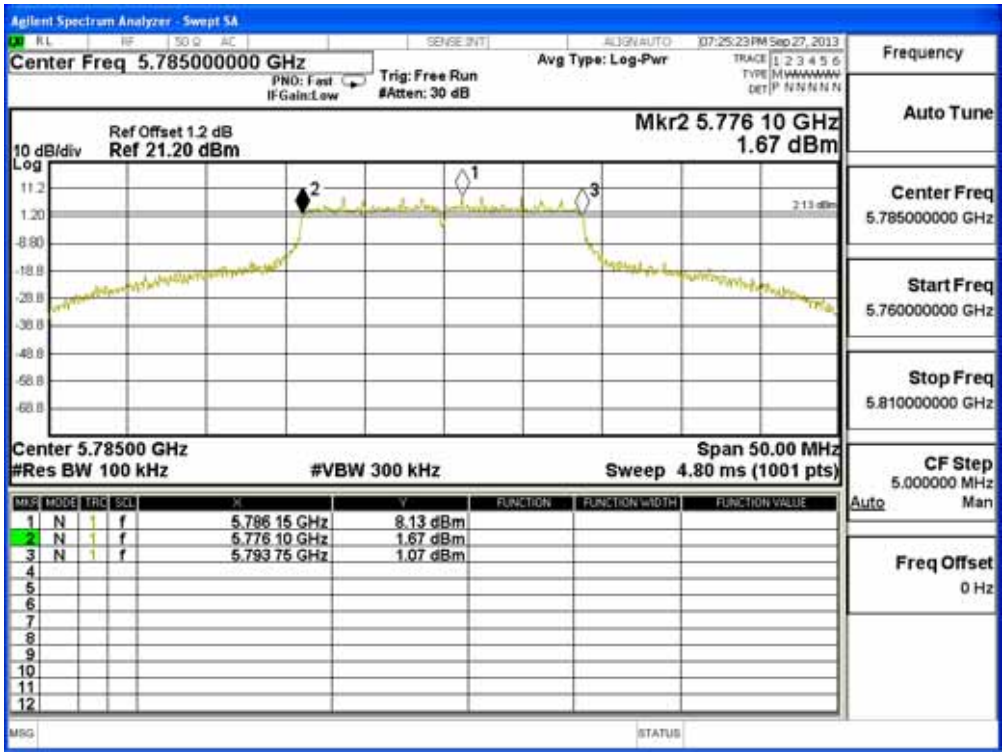
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	17700	500	Pass
157	5785	17650	500	Pass
165	5825	17650	500	Pass

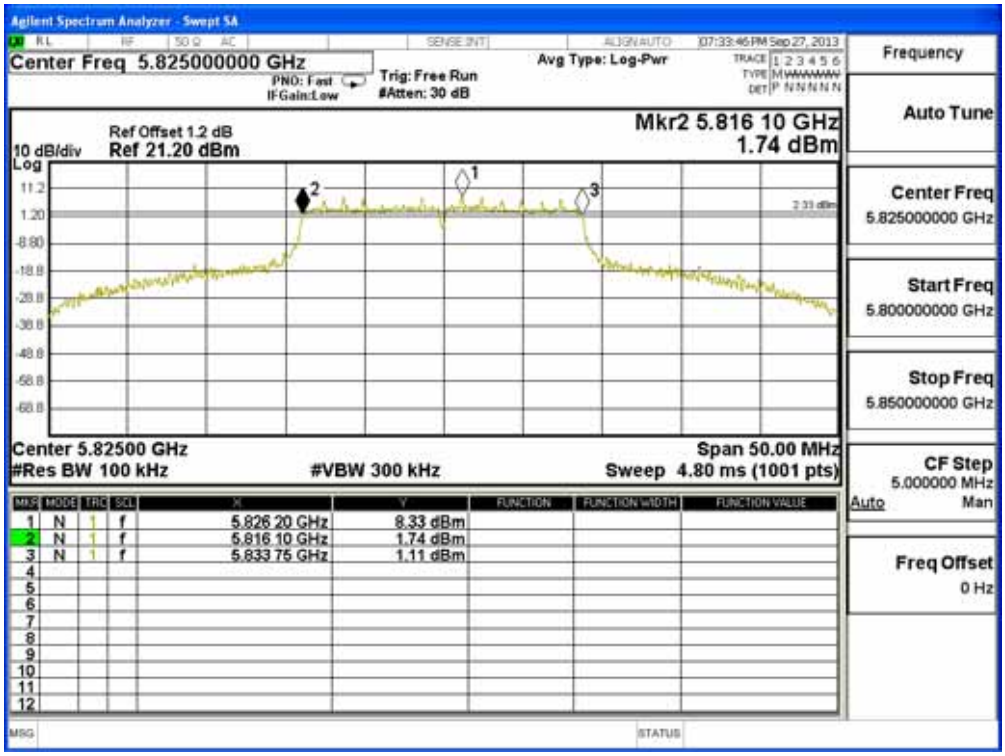
Channel 149 (5745MHz)



Channel 157 (5785MHz)



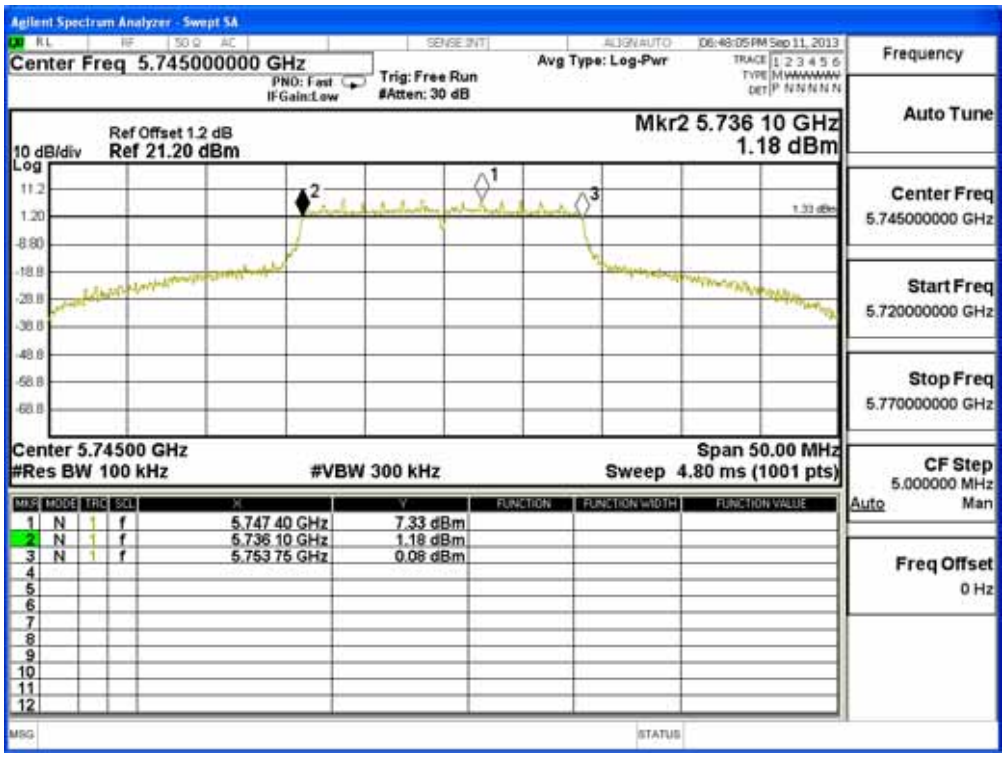
Channel 165 (5825MHz)



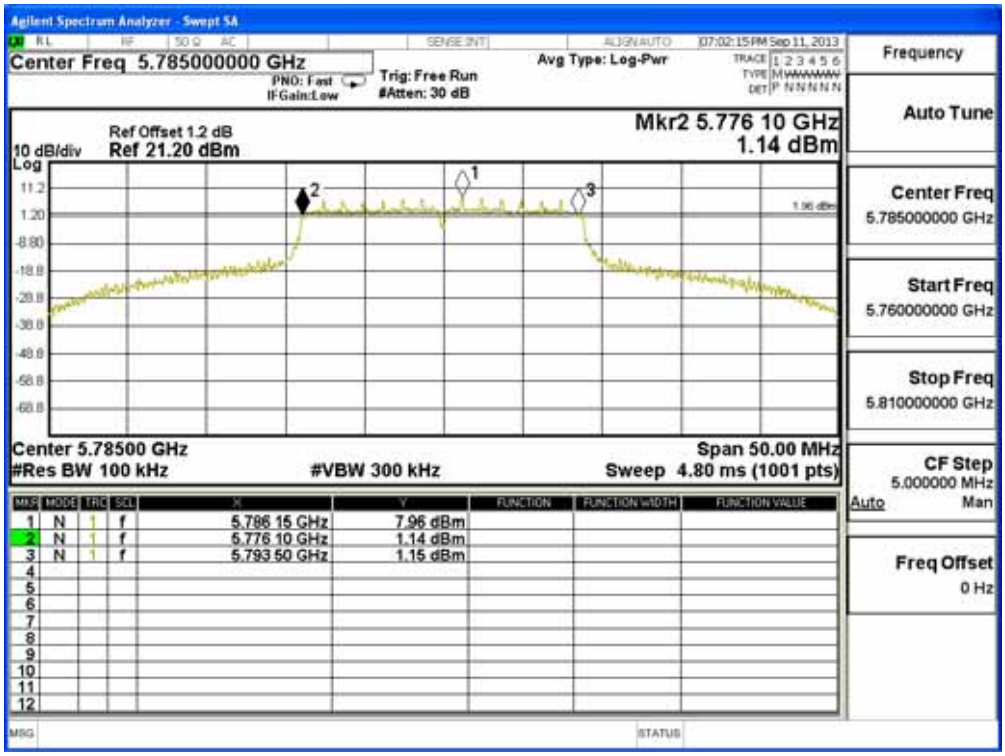
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
149	5745	17650	500	Pass
157	5785	17400	500	Pass
165	5825	17650	500	Pass

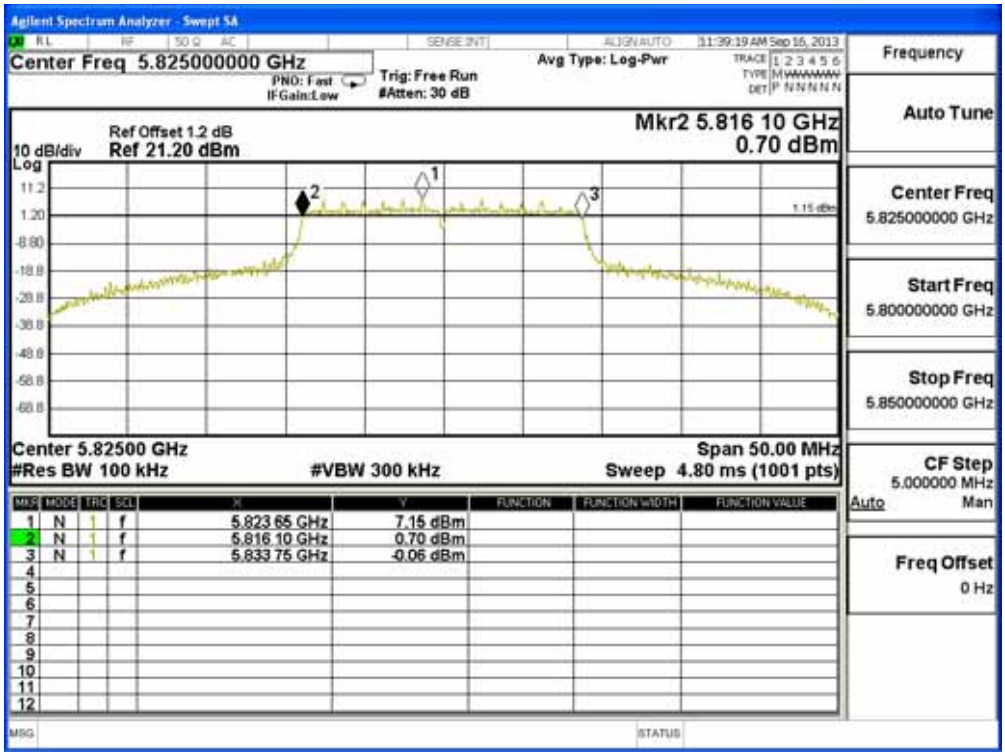
Channel 149 (5745MHz)



Channel 157 (5785MHz)



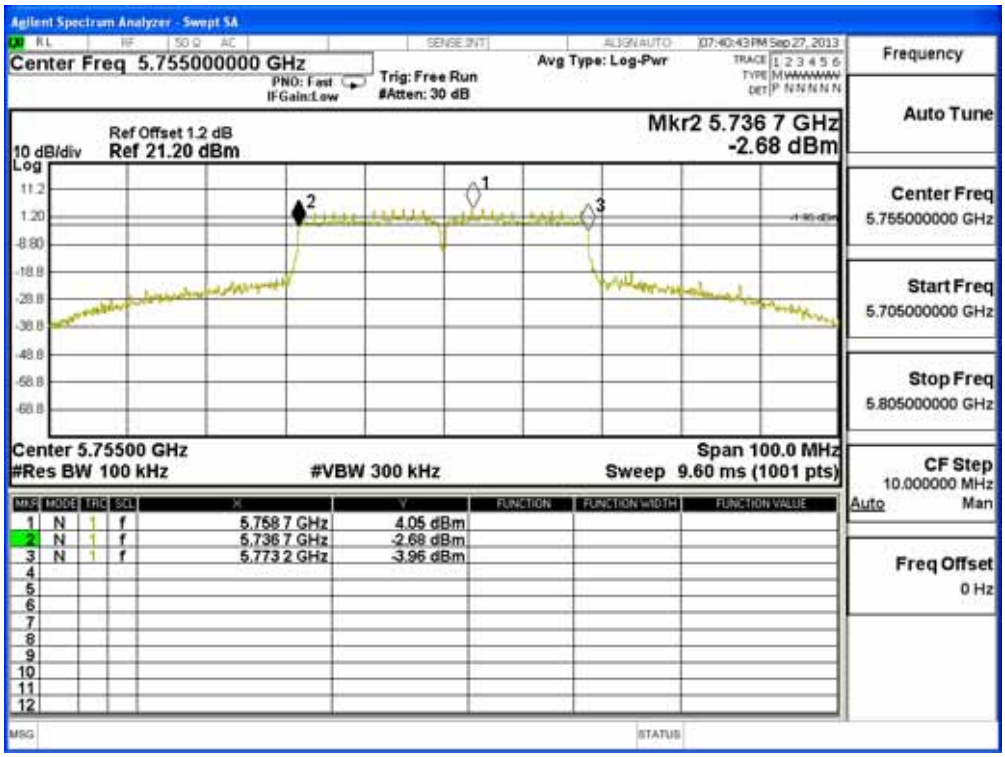
Channel 165 (5825MHz)



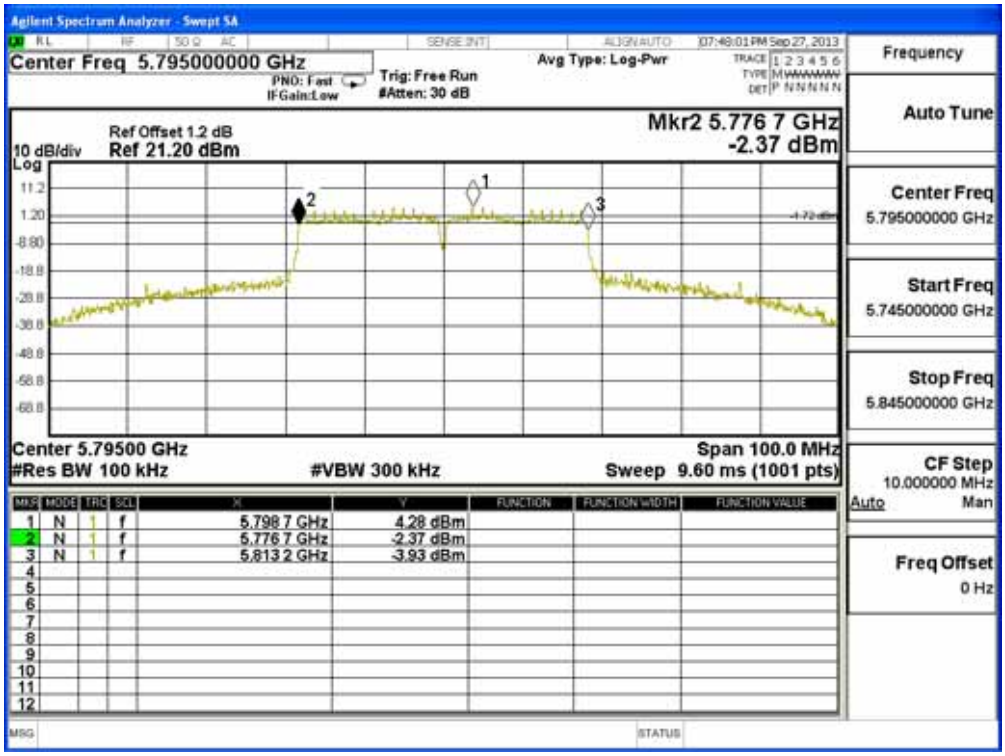
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
151	5755	36500	500	Pass
159	5795	36500	500	Pass

Channel 151 (5755MHz)



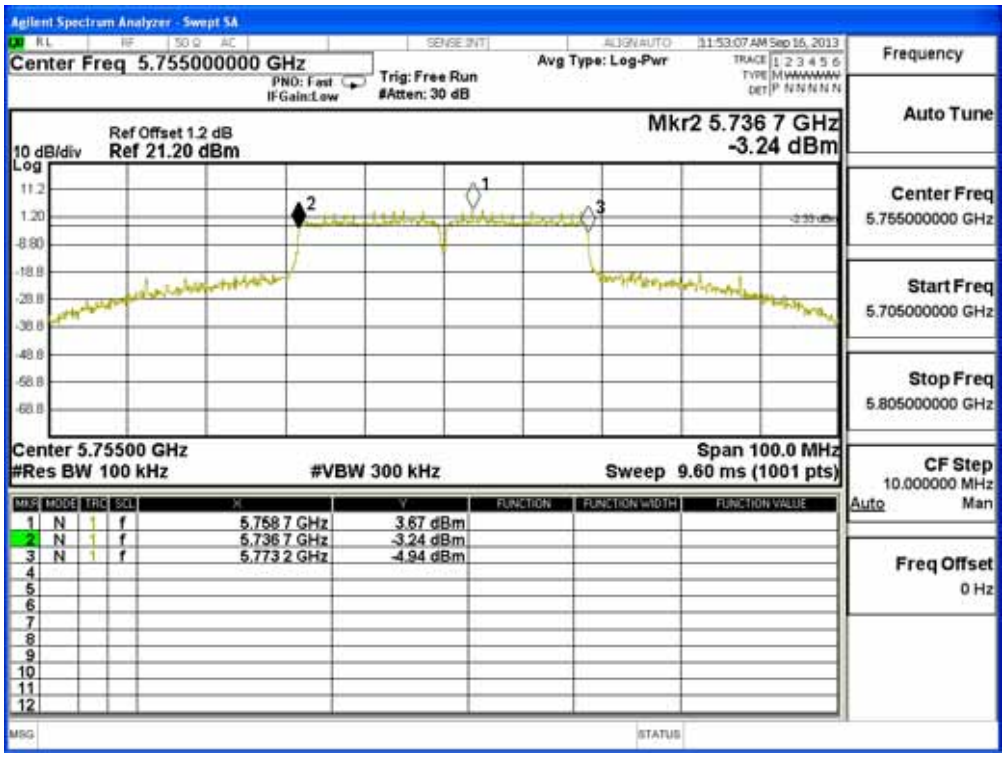
Channel 159 (5795MHz)



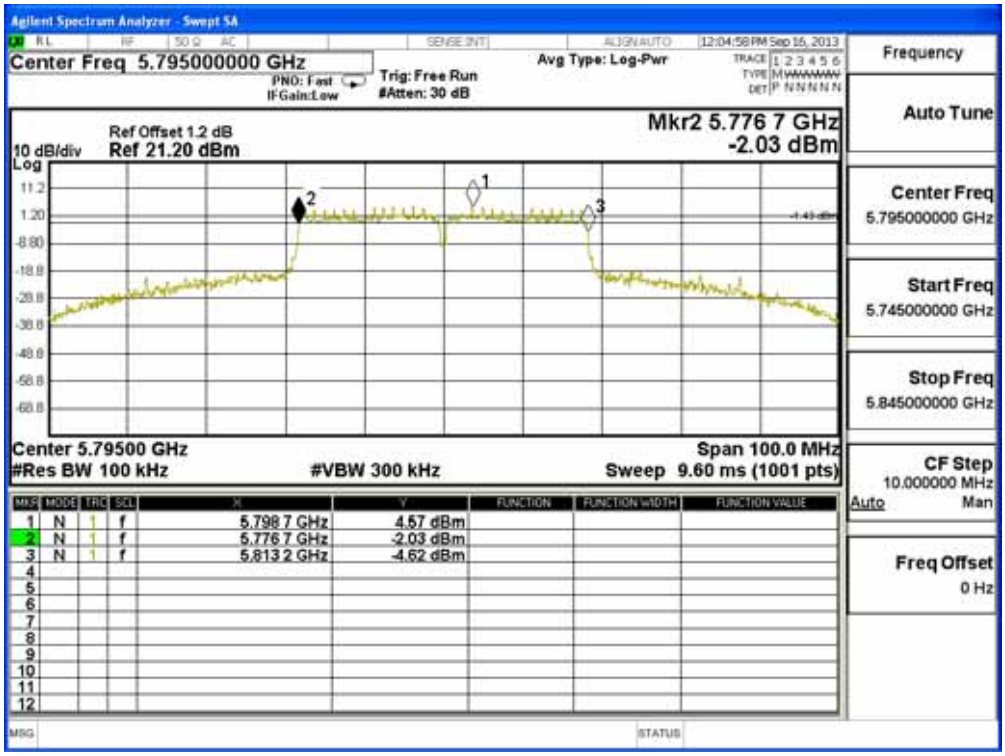
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
151	5755	36500	500	Pass
159	5795	36500	500	Pass

Channel 151 (5755MHz)



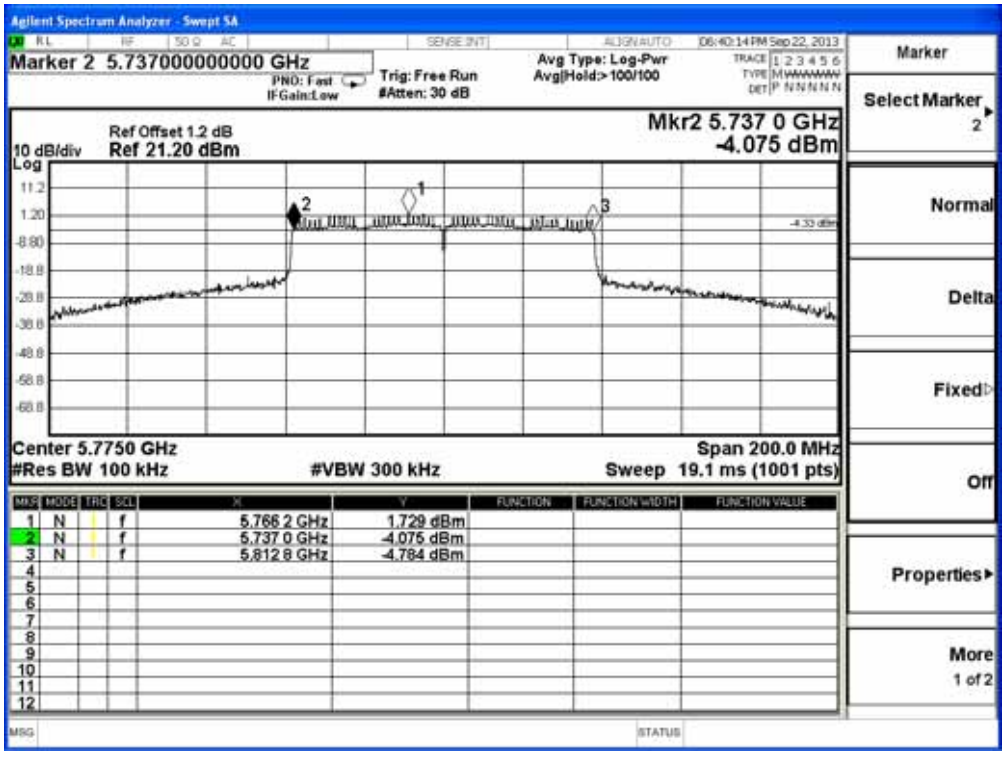
Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	6dB Occupied Bandwidth
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 2)

Channel No.	Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result
155	5775	75800	500	Pass

Channel 155 (5775MHz)



9. Power Output

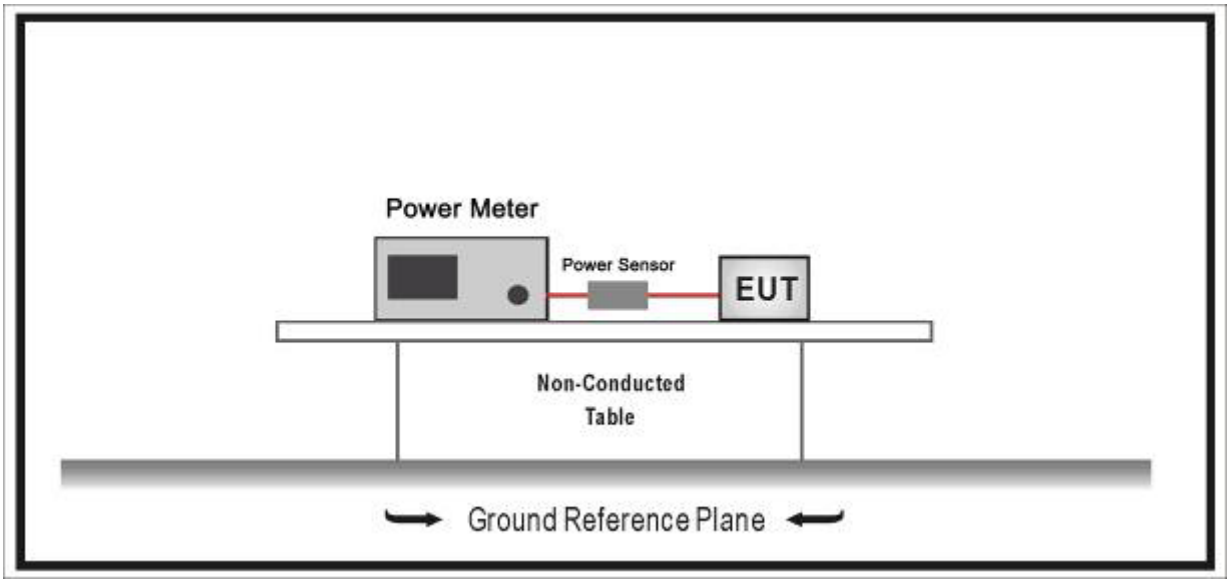
9.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2013.11.10
Power Sensor	Anritsu	MA2411B	0846014	2013.11.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2014.05.07

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

9.4. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

Use the broadband peak RF power meter to test peak power and record the result.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

MCS Index for 802.11n	Spatial Streams	Data Rate (Mbps)						
		802.11b	802.11g	802.11a	20MHz Bandwidth		40MHz Bandwidth	
					800ns GI	400ns GI	800ns GI	400ns GI
0	1	1	6	6	6.5	7.2	13.5	15.0
1	1	2	9	9	13.0	14.4	27.0	30.0
2	1	5.5	12	12	19.5	21.7	40.5	45.0
3	1	11	18	18	26.0	28.9	54.0	60.0
4	1	---	24	24	39.0	43.3	81.0	90.0
5	1	---	36	36	52.0	57.8	108.0	120.0
6	1	---	48	48	58.5	65.0	121.5	135.0
7	1	---	54	54	65.0	72.2	135.0	150.0
8	2	---	---	---	13.0	14.4	27.0	30.0
9	2	---	---	---	26.0	28.9	54.0	60.0
10	2	---	---	---	39.0	43.3	81.0	90.0
11	2	---	---	---	52.0	57.8	108.0	120.0
12	2	---	---	---	78.0	86.7	162.0	180.0
13	2	---	---	---	104.0	115.6	216.0	240.0
14	2	---	---	---	117.0	130.0	243.0	270.0
15	2	---	---	---	130.0	144.0	270.0	300.0

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)							
				20MHz		40MHz		80MHz		160MHz	
				Guard Interval		Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5	58.5	65
	1	QPSK	1/2	13	14.4	27	30	58.5	65	117	130
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5	175.5	195
	3	16-QAM	1/2	26	28.9	54	60	117	130	234	260
	4	16-QAM	3/4	39	43.3	81	90	175.5	195	351	390
	5	64-QAM	2/3	52	57.8	108	120	234	260	468	520
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5	526.5	585
	7	64-QAM	5/6	65	72.2	135	150	292.5	325	585	650
	8	256-QAM	3/4	78	86.7	162	180	351	390	702	780

	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3	780	866.7
2	0	BPSK	1/2	13	14.4	27	30	58.6	65	117	130
	1	QPSK	1/2	26	28.8	54	60	117	130	234	260
	2	QPSK	3/4	39	43.4	81	90	175.6	195	351	390
	3	16-QAM	1/2	52	57.8	108	120	234	260	468	520
	4	16-QAM	3/4	78	86.6	162	180	351	390	702	780
	5	64-QAM	2/3	104	115.6	216	240	468	520	936	1040
	6	64-QAM	3/4	117	130	243	270	526.6	585	1053	1170
	7	64-QAM	5/6	130	144.4	270	300	585	650	1170	1300
	8	256-QAM	3/4	156	173.4	324	360	702	780	1404	1560
	9	256-QAM	5/6	N/A	N/A	360	400	780	866.6	1560	1733.4
3	0	BPSK	1/2	19.5	21.6	40.5	45	87.9	97.5	175.5	195
	1	QPSK	1/2	39	43.2	81	90	175.5	195	351	390
	2	QPSK	3/4	58.5	65.1	121.5	135	263.4	292.5	526.5	585
	3	16-QAM	1/2	78	86.7	162	180	351	390	702	780
	4	16-QAM	3/4	117	129.9	243	270	526.5	585	1053	1170
	5	64-QAM	2/3	156	173.4	324	360	702	780	1404	1560
	6	64-QAM	3/4	175.5	195	364.5	405	789.9	877.5	1579.5	1755
	7	64-QAM	5/6	195	216.6	405	450	877.5	975	1755	1950
	8	256-QAM	3/4	234	260.1	486	540	1053	1170	2106	2340
	9	256-QAM	5/6	N/A	N/A	540	600	1170	1299.9	2340	2600.1

Power output at various data rates:

Test Mode	Bandwidth	Frequency (MHz)	Channel	Data Rate	Peak Power (dBm)
802.11b(Ant 0)	20	2437	6	1	20.34
				5.5	20.03
				11	20.18
802.11g(Ant 0)	20	2437	6	6	23.83
				24	23.85
				54	23.93
802.11a(Ant 0)	20	5785	157	6	24.24
				24	23.78
				54	22.23
802.11n (Ant 0)	20	2437	6	MCS0	23.83
				MCS4	23.82
				MCS7	23.82
		5785	157	MCS0	24.30
				MCS4	23.47
				MCS7	21.89
802.11ac(Ant 0)	20	5785	157	MCS0NSS1	23.83
				MCS5NSS1	23.01
				MCS8NSS1	20.54
802.11n (Ant 0)	40	2437	6	MCS0	22.66
				MCS4	22.45
				MCS7	22.57
		5755	151	MCS0	24.22
				MCS4	23.44
				MCS7	22.00
802.11ac(Ant 0)	40	5755	151	MCS0NSS1	23.69
				MCS5NSS1	22.98
				MCS9NSS1	20.28
802.11ac(Ant 0)	80	5775	155	MCS0NSS1	23.22
				MCS5NSS1	22.28
				MCS9NSS1	18.52

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
1	2412	20.41	N/A	20.41	30.00	Pass
6	2437	20.34	N/A	20.34	30.00	Pass
11	2462	20.29	N/A	20.29	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
1	2412	N/A	21.36	21.36	30.00	Pass
6	2437	N/A	21.12	21.12	30.00	Pass
11	2462	N/A	21.46	21.46	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
1	2412	23.63	N/A	23.63	30.00	Pass
6	2437	23.93	N/A	23.93	30.00	Pass
11	2462	24.51	N/A	24.51	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)		Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
1	2412	N/A	25.33	25.33	30.00	Pass
6	2437	N/A	25.36	25.36	30.00	Pass
11	2462	N/A	25.45	25.45	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	24.29	N/A	N/A	24.29	30.00	Pass
157	5785	24.24	N/A	N/A	24.24	30.00	Pass
165	5825	23.94	N/A	N/A	23.94	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	24.76	N/A	24.76	30.00	Pass
157	5785	N/A	24.66	N/A	24.66	30.00	Pass
165	5825	N/A	24.50	N/A	24.50	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	N/A	23.63	23.63	30.00	Pass
157	5785	N/A	N/A	23.70	23.70	30.00	Pass
165	5825	N/A	N/A	23.87	23.87	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
1	2412	23.16	N/A	-	23.16	30.00	Pass
6	2437	23.83	N/A	-	23.83	30.00	Pass
11	2462	23.24	N/A	-	23.24	30.00	Pass
149	5745	24.35	N/A	N/A	24.35	30.00	Pass
157	5785	24.30	N/A	N/A	24.30	30.00	Pass
165	5825	23.98	N/A	N/A	23.98	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
1	2412	N/A	25.58	-	25.58	30.00	Pass
6	2437	N/A	25.38	-	25.38	30.00	Pass
11	2462	N/A	24.41	-	24.41	30.00	Pass
149	5745	N/A	24.73	N/A	24.73	30.00	Pass
157	5785	N/A	24.69	N/A	24.69	30.00	Pass
165	5825	N/A	24.56	N/A	24.56	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	N/A	23.69	23.69	30.00	Pass
157	5785	N/A	N/A	23.75	23.75	30.00	Pass
165	5825	N/A	N/A	23.91	23.91	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0+1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
1	2412	22.25	22.86	-	25.58	30.00	Pass
6	2437	22.34	23.2	-	25.80	30.00	Pass
11	2462	22.12	23.28	-	25.75	30.00	Pass
149	5745	22.81	23.31	N/A	26.08	30.00	Pass
157	5785	22.65	23.26	N/A	25.98	30.00	Pass
165	5825	22.37	23.20	N/A	25.82	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	23.34	21.93	25.70	30.00	Pass
157	5785	N/A	23.23	22.01	25.67	30.00	Pass
165	5825	N/A	23.18	22.12	25.69	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	22.76	N/A	22.16	25.48	30.00	Pass
157	5785	22.61	N/A	22.13	25.39	30.00	Pass
165	5825	22.41	N/A	22.21	25.32	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0+1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	21.79	21.99	21.68	26.59	30.00	Pass
157	5785	21.62	22.38	21.52	26.63	30.00	Pass
165	5825	21.37	22.29	21.46	26.50	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	23.62	N/A	N/A	23.62	30.00	Pass
157	5785	23.83	N/A	N/A	23.83	30.00	Pass
165	5825	23.42	N/A	N/A	23.42	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	23.81	N/A	23.81	30.00	Pass
157	5785	N/A	23.54	N/A	23.54	30.00	Pass
165	5825	N/A	23.48	N/A	23.48	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	N/A	24.52	24.52	30.00	Pass
157	5785	N/A	N/A	24.69	24.69	30.00	Pass
165	5825	N/A	N/A	24.76	24.76	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0+1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	21.96	23.32	N/A	25.70	30.00	Pass
157	5785	21.14	22.87	N/A	25.10	30.00	Pass
165	5825	21.12	23.27	N/A	25.34	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	23.17	22.38	25.80	30.00	Pass
157	5785	N/A	21.23	22.55	24.95	30.00	Pass
165	5825	N/A	22.50	22.71	25.62	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	22.26	N/A	22.63	25.46	30.00	Pass
157	5785	22.18	N/A	22.72	25.47	30.00	Pass
165	5825	21.61	N/A	22.70	25.20	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0+1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	20.53	21.05	21.82	25.94	30.00	Pass
157	5785	20.03	21.73	21.59	25.95	30.00	Pass
165	5825	19.99	21.14	21.67	25.76	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
3	2422	21.63	N/A	-	21.63	30.00	Pass
6	2437	22.66	N/A	-	22.66	30.00	Pass
9	2452	20.21	N/A	-	20.21	30.00	Pass
151	5755	24.22	N/A	N/A	24.22	30.00	Pass
159	5795	24.08	N/A	N/A	24.08	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
3	2422	N/A	23.16	-	23.16	30.00	Pass
6	2437	N/A	23.28	-	23.28	30.00	Pass
9	2452	N/A	22.80	-	22.80	30.00	Pass
151	5755	N/A	24.48	N/A	24.48	30.00	Pass
159	5795	N/A	24.33	N/A	24.33	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	N/A	N/A	23.65	23.65	30.00	Pass
159	5795	N/A	N/A	23.74	23.74	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0+1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
3	2422	19.83	22.18	-	24.17	30.00	Pass
6	2437	22.67	23.18	-	25.94	30.00	Pass
9	2452	20.48	21.57	-	24.07	30.00	Pass
151	5755	23.19	23.21	N/A	26.21	30.00	Pass
159	5795	23.08	23.18	N/A	26.14	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	N/A	23.31	22.63	25.99	30.00	Pass
159	5795	N/A	23.19	22.80	26.01	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	N/A	23.17	22.86	26.03	30.00	Pass
159	5795	N/A	23.06	22.82	25.95	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0+1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	22.78	22.92	22.49	27.50	30.00	Pass
159	5795	22.66	22.88	22.43	27.43	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	23.69	N/A	N/A	23.69	30.00	Pass
159	5795	23.39	N/A	N/A	23.39	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	N/A	23.43	N/A	23.43	30.00	Pass
159	5795	N/A	23.23	N/A	23.23	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	N/A	N/A	24.51	24.51	30.00	Pass
159	5795	N/A	N/A	24.63	24.63	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0+1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	22.83	22.99	N/A	25.92	30.00	Pass
159	5795	22.81	23.30	N/A	26.07	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	N/A	23.34	24.34	26.88	30.00	Pass
159	5795	N/A	22.74	24.45	26.69	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	23.17	N/A	24.25	26.75	30.00	Pass
159	5795	23.89	N/A	24.33	27.13	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0+1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	21.39	22.54	22.64	27.00	30.00	Pass
159	5795	21.08	22.45	22.60	26.87	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	23.22	N/A	N/A	23.22	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	N/A	22.96	N/A	22.96	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	N/A	N/A	24.2	24.2	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0+1)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	23.62	23.04	N/A	26.35	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	N/A	23.12	24.09	26.64	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	22.75	N/A	24.17	26.53	30.00	Pass

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0+1+2)

Channel No.	Frequency (MHz)	Measurement Power Output (dBm)			Total Power (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	22.88	22.84	24.15	28.11	30.00	Pass

10. Power Spectral Density

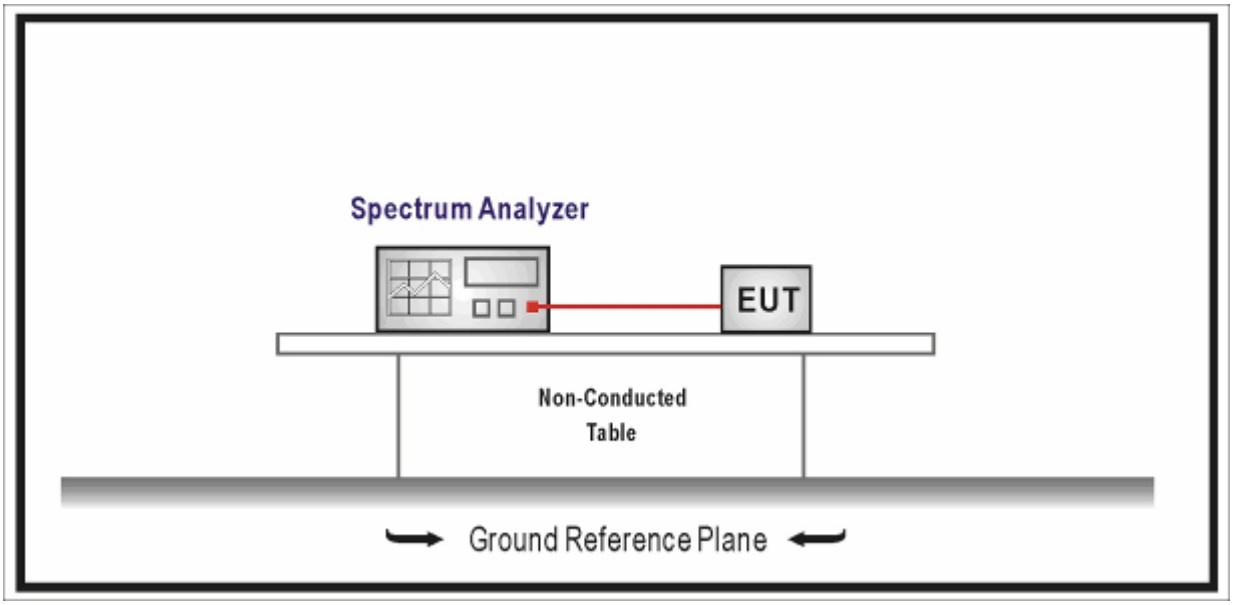
10.1. Test Equipment

Power Spectral Density / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2014.01.21
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2014.05.07

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



10.3. Limit

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

10.4. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
Set analyzer center frequency to DTS channel center frequency, the span to 1.5 times the DTS channel bandwidth, Set 100 kHz ≧RBW ≧ 3 kHz, Set VBW ≧ 3 * RBW, Sweep time = auto couple, Detector = peak, Trace mode = max hold, Allow trace to fully stabilize, use the peak marker function to determine the maximum amplitude level. If measured value exceed limit reduce RBW (no less than 3kHz) and repeat.

10.5. Uncertainty

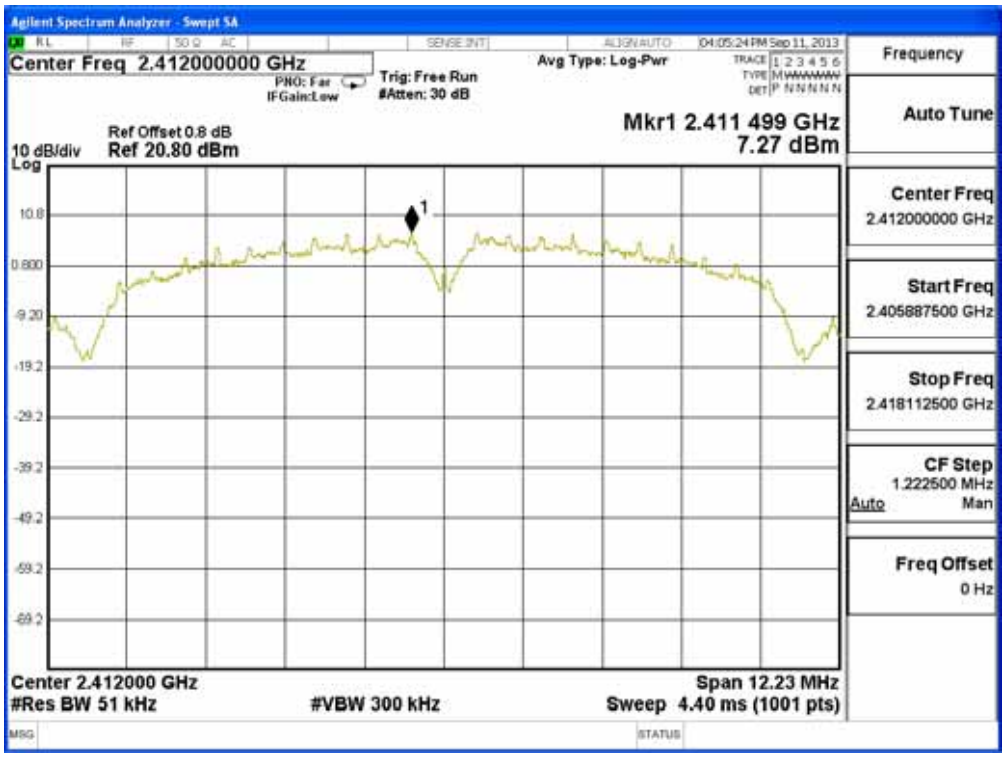
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 0)

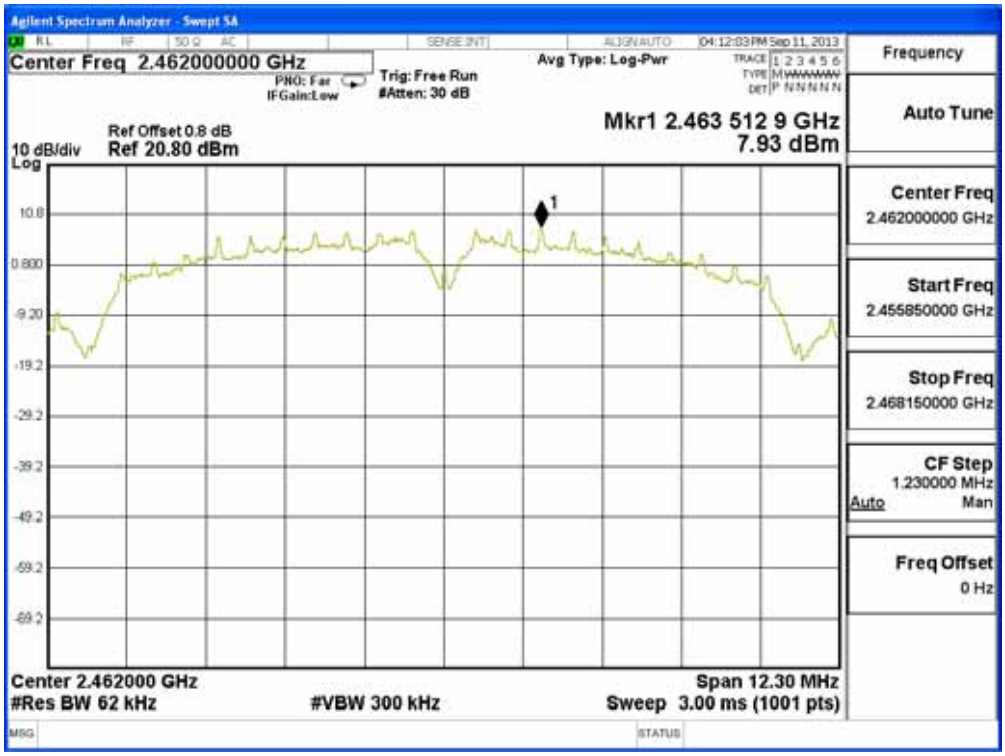
Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
01	2412	7.270	N/A	7.270	8	Pass
06	2437	7.870	N/A	7.870	8	Pass
11	2462	7.930	N/A	7.930	8	Pass

Channel 01 (2412MHz)



Channel 06 (2437MHz)

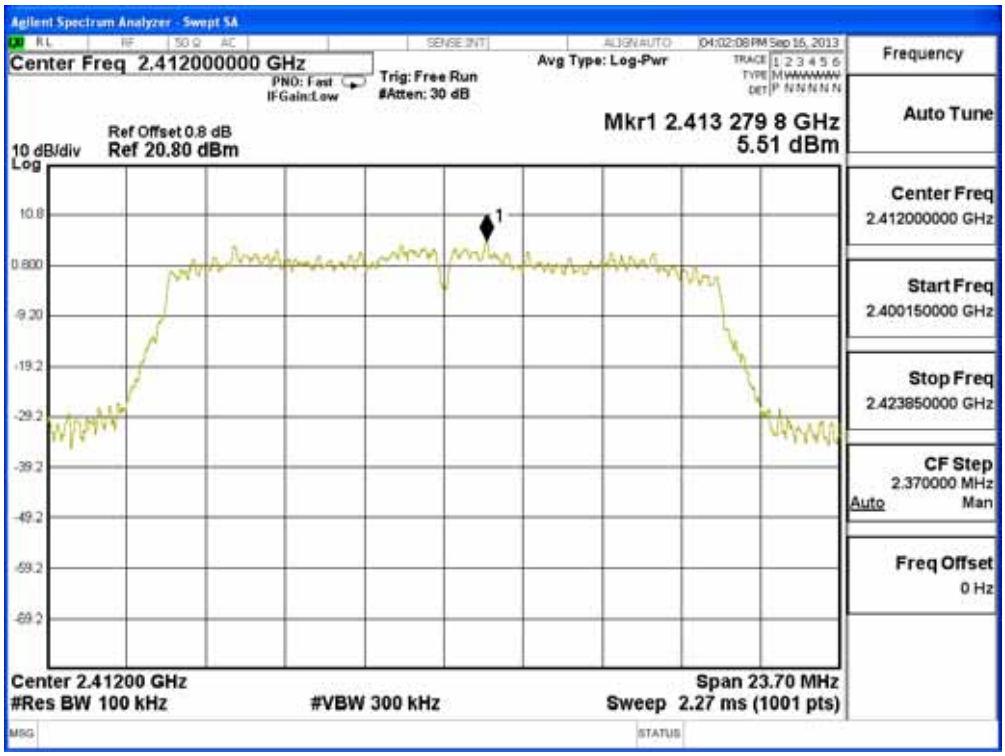
Channel 11 (2462MHz)



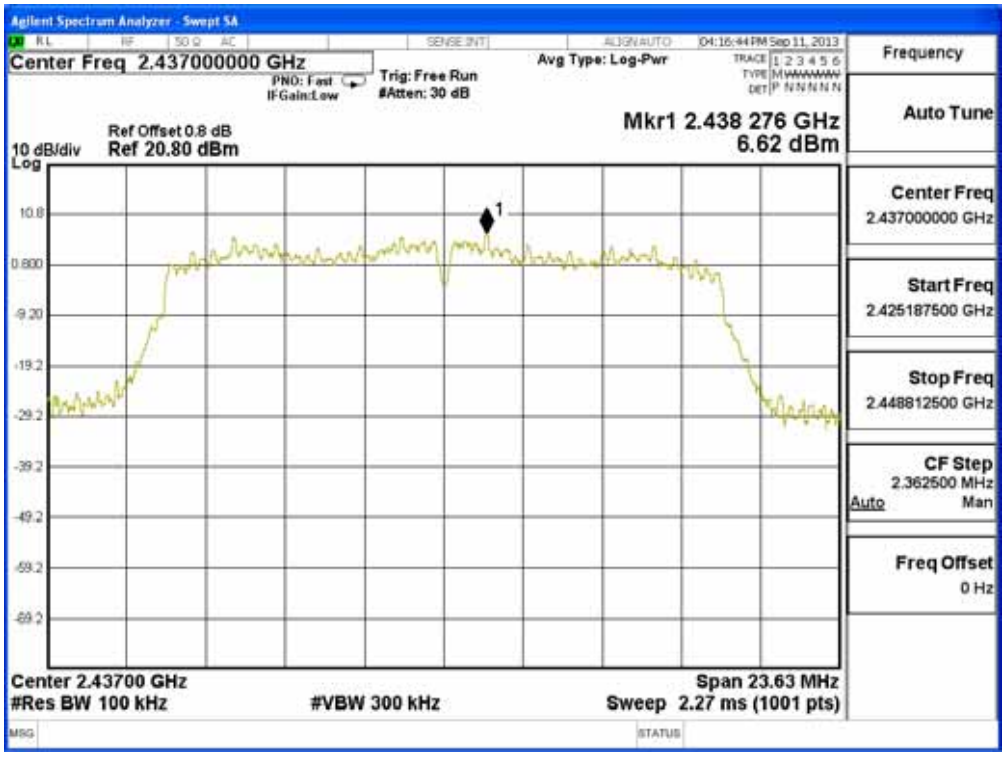
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
01	2412	5.510	N/A	5.510	8	Pass
06	2437	6.620	N/A	6.620	8	Pass
11	2462	6.280	N/A	6.280	8	Pass

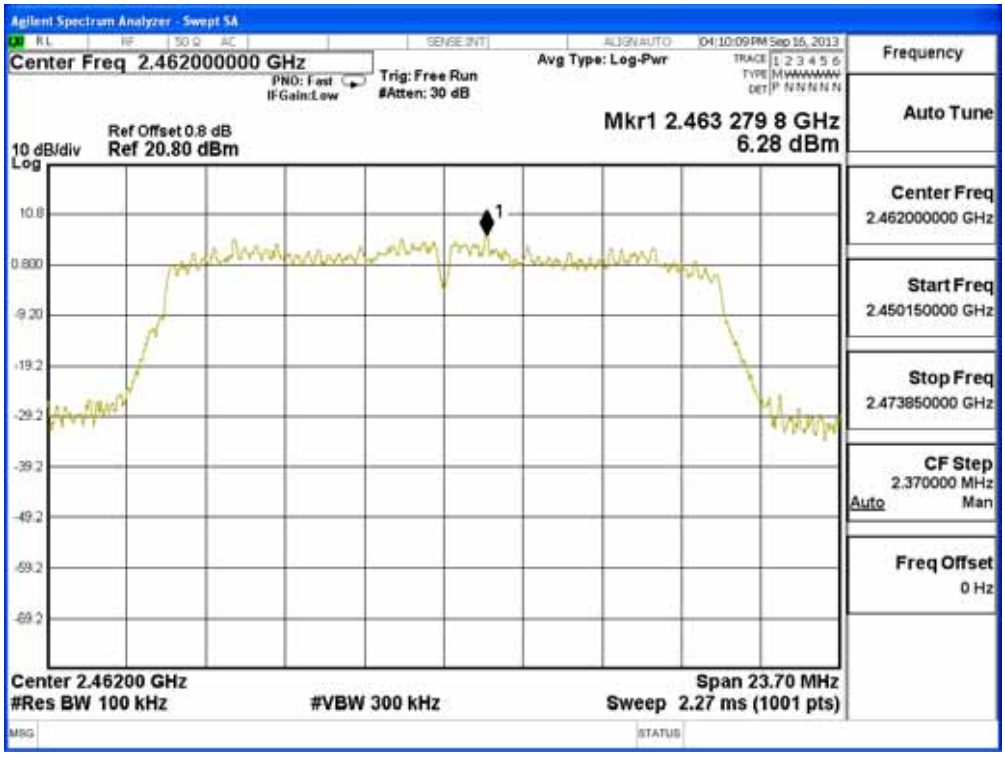
Channel 01 (2412MHz)



Channel 06 (2437MHz)



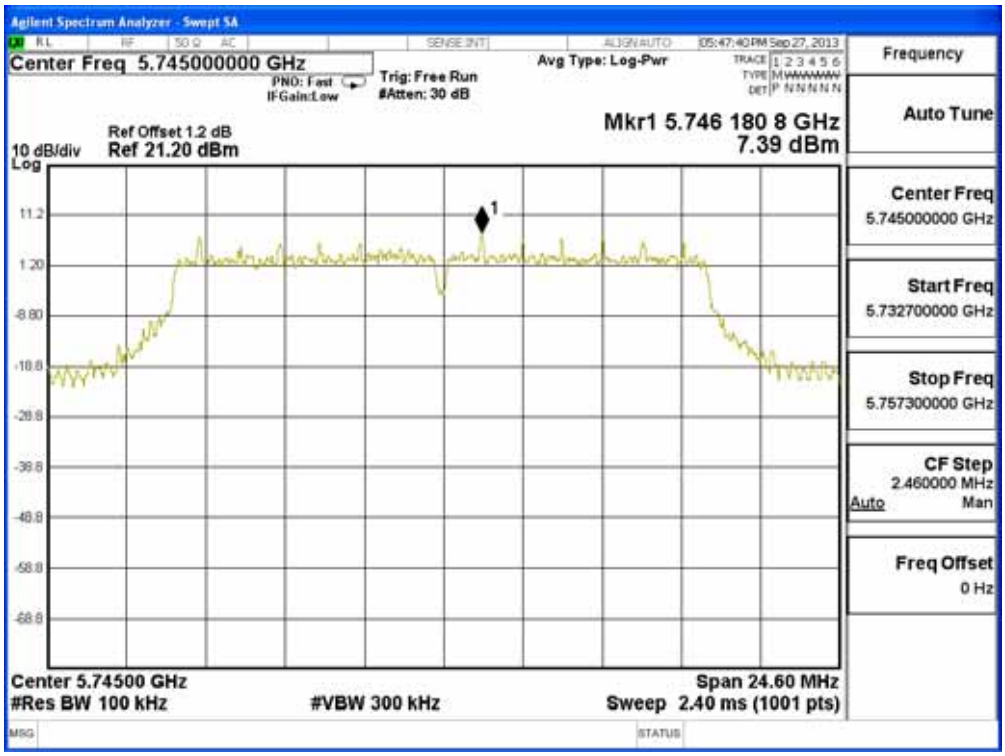
Channel 11 (2462MHz)



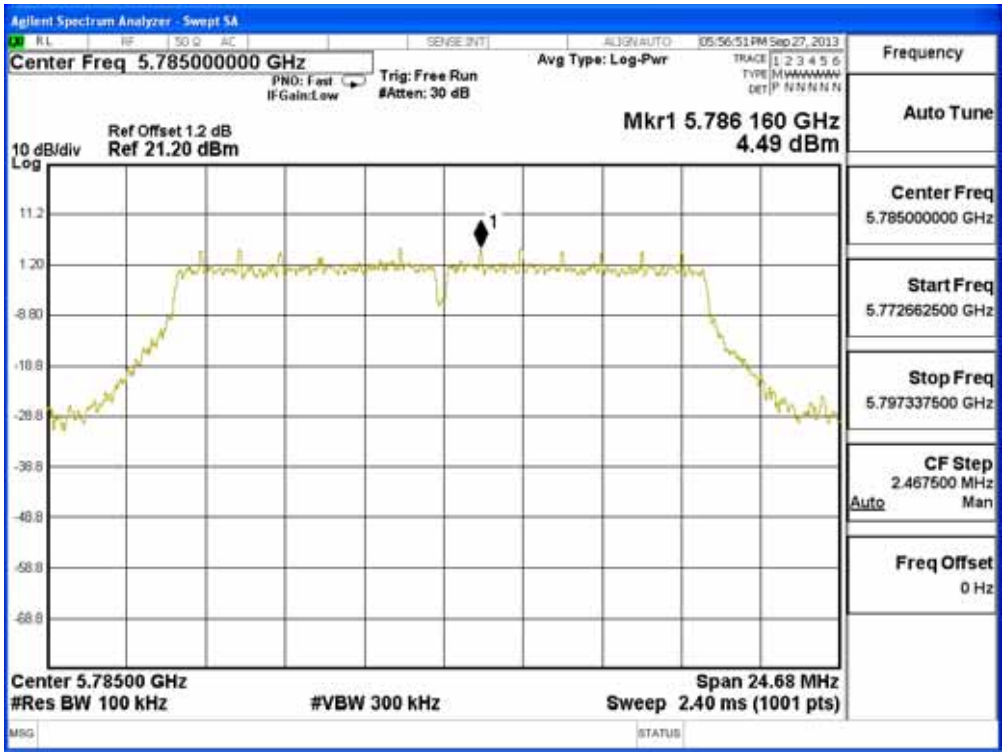
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	7.390	N/A	N/A	7.390	8	Pass
157	5785	4.490	N/A	N/A	4.490	8	Pass
165	5825	7.240	N/A	N/A	7.240	8	Pass

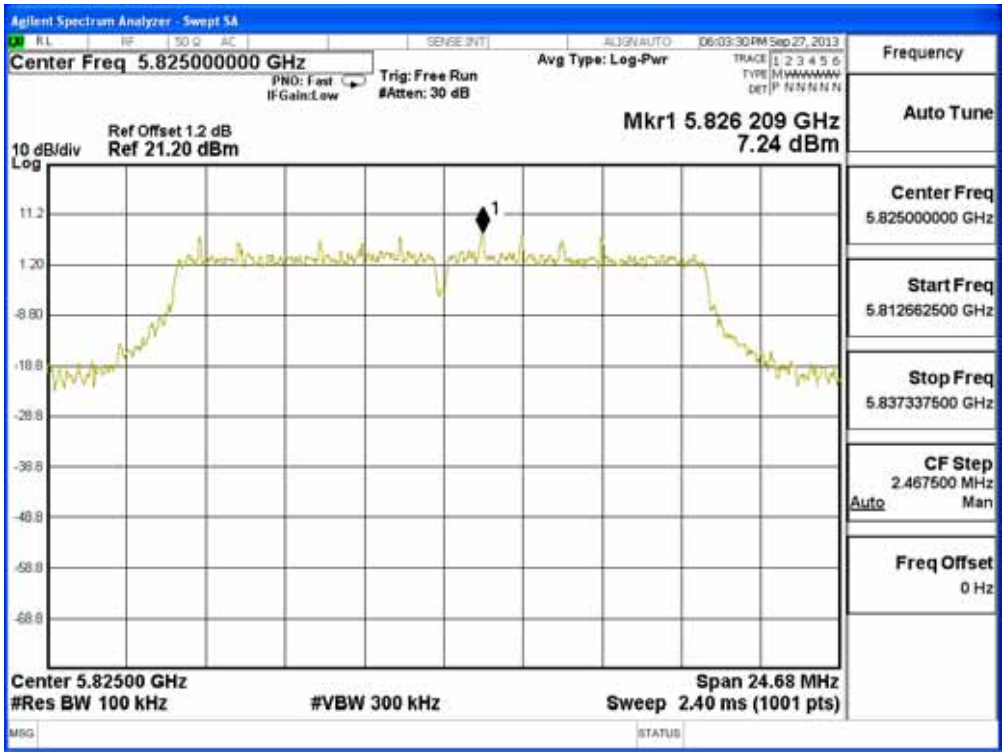
Channel 149 (5745MHz)



Channel 157 (5785MHz)



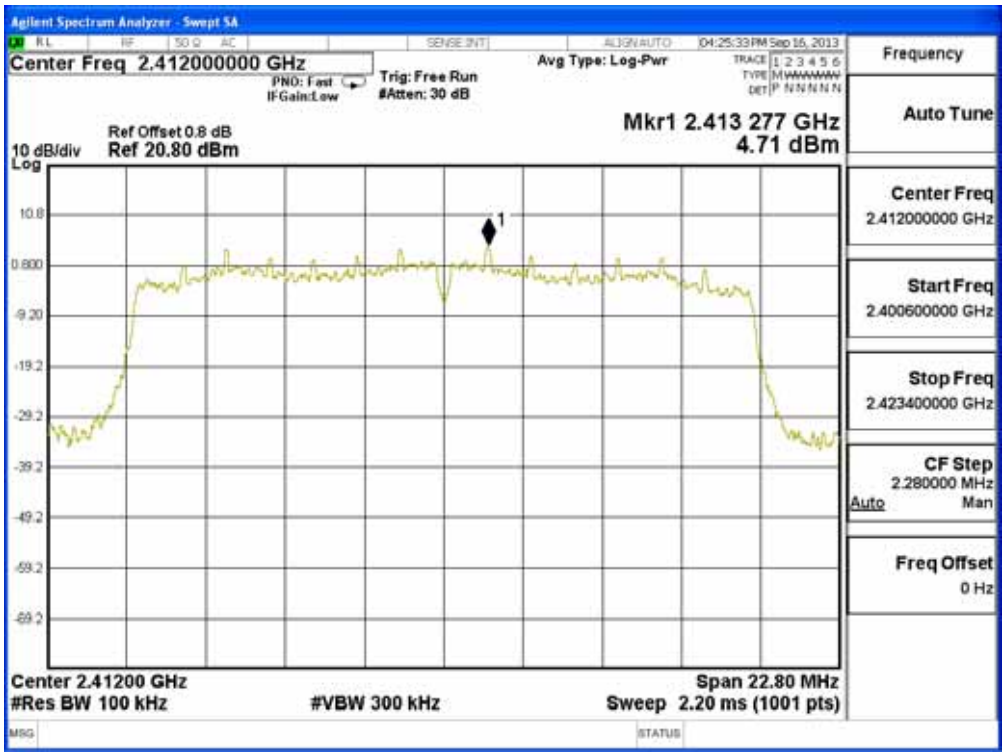
Channel 165 (5825MHz)



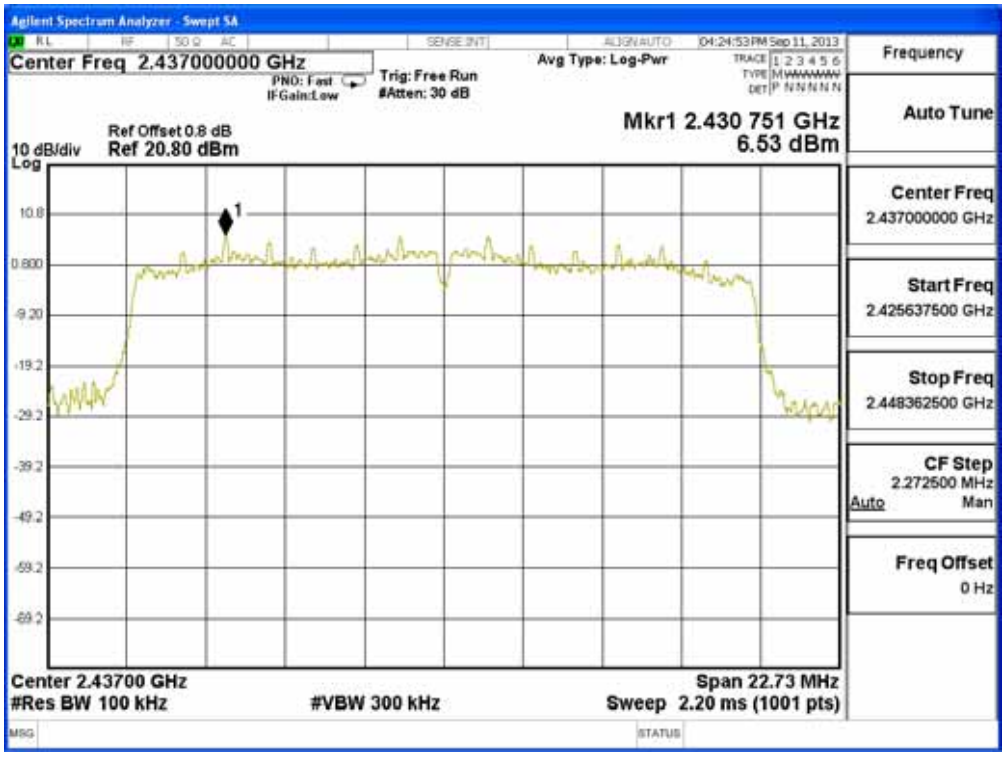
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
01	2412	4.710	N/A	-	4.710	8	Pass
06	2437	6.530	N/A	-	6.530	8	Pass
11	2462	4.510	N/A	-	4.510	8	Pass
149	5745	7.450	N/A	N/A	7.450	8	Pass
157	5785	7.420	N/A	N/A	7.420	8	Pass
165	5825	7.320	N/A	N/A	7.320	8	Pass

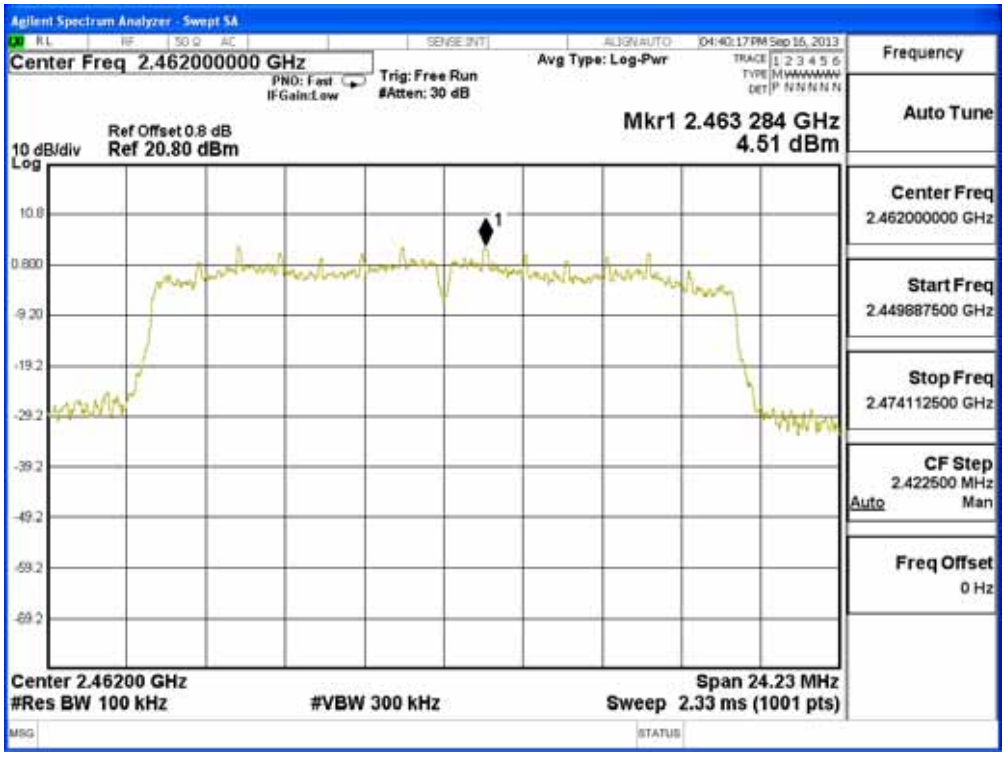
Channel 01 (2412MHz)



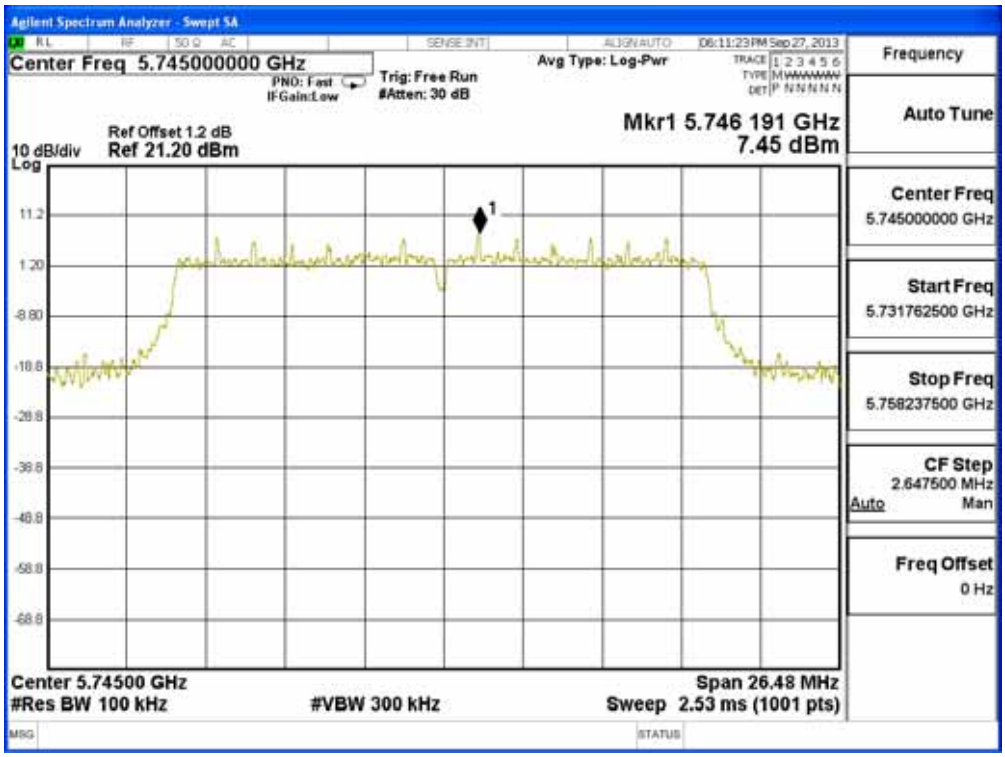
Channel 06 (2437MHz)



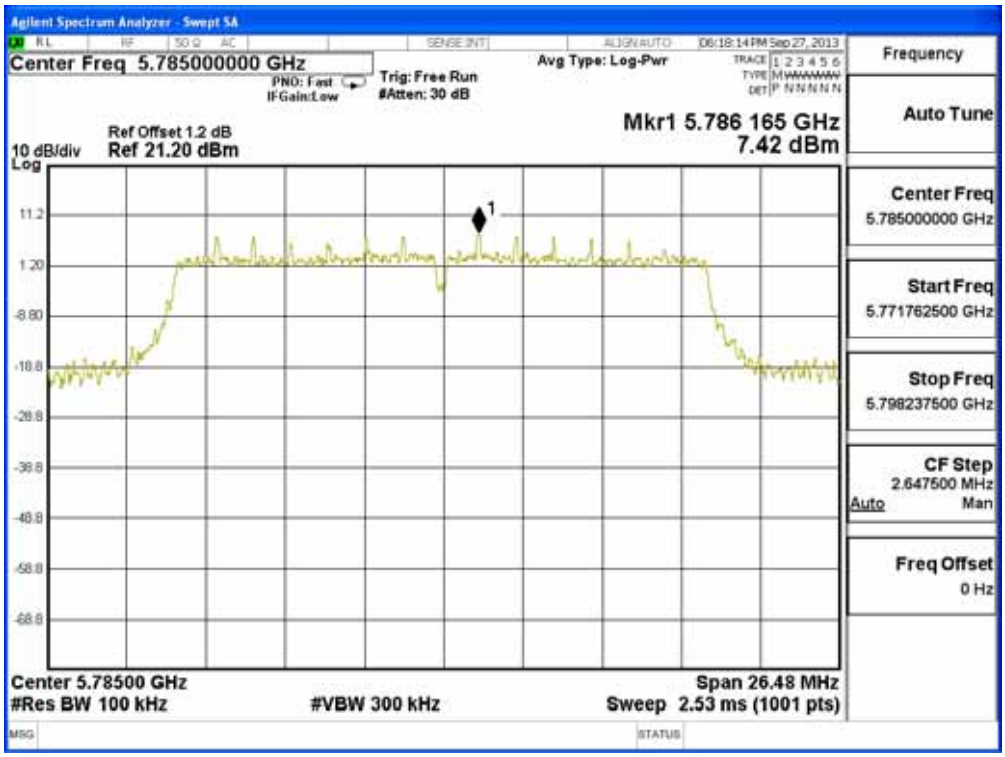
Channel 11 (2462MHz)



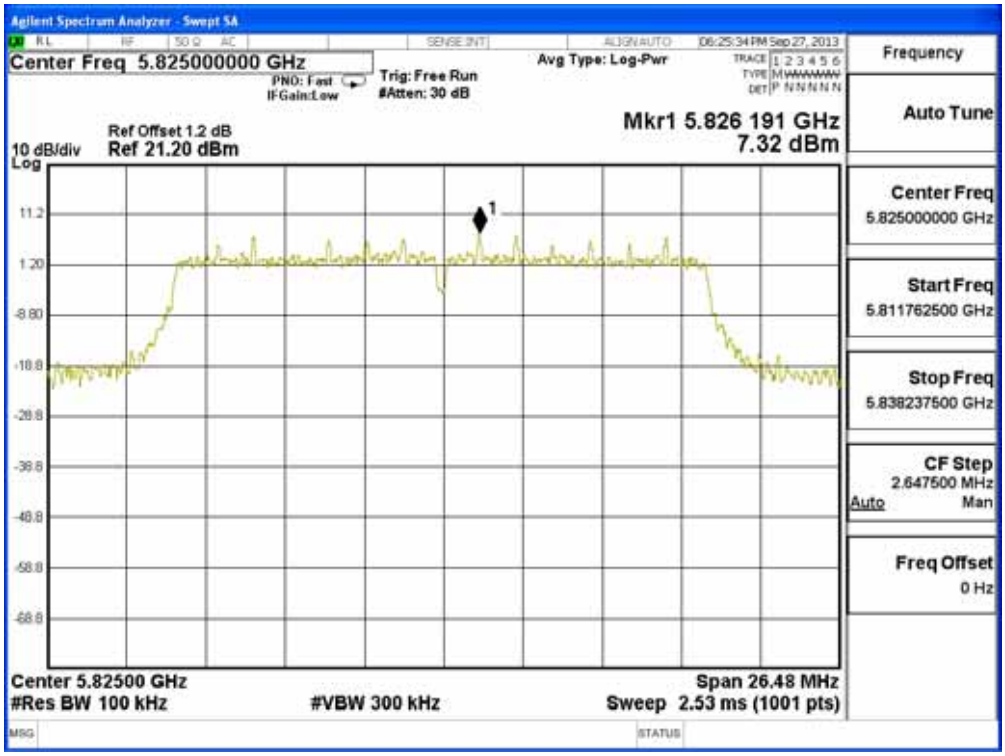
Channel 149 (5745MHz)



Channel 157 (5785MHz)



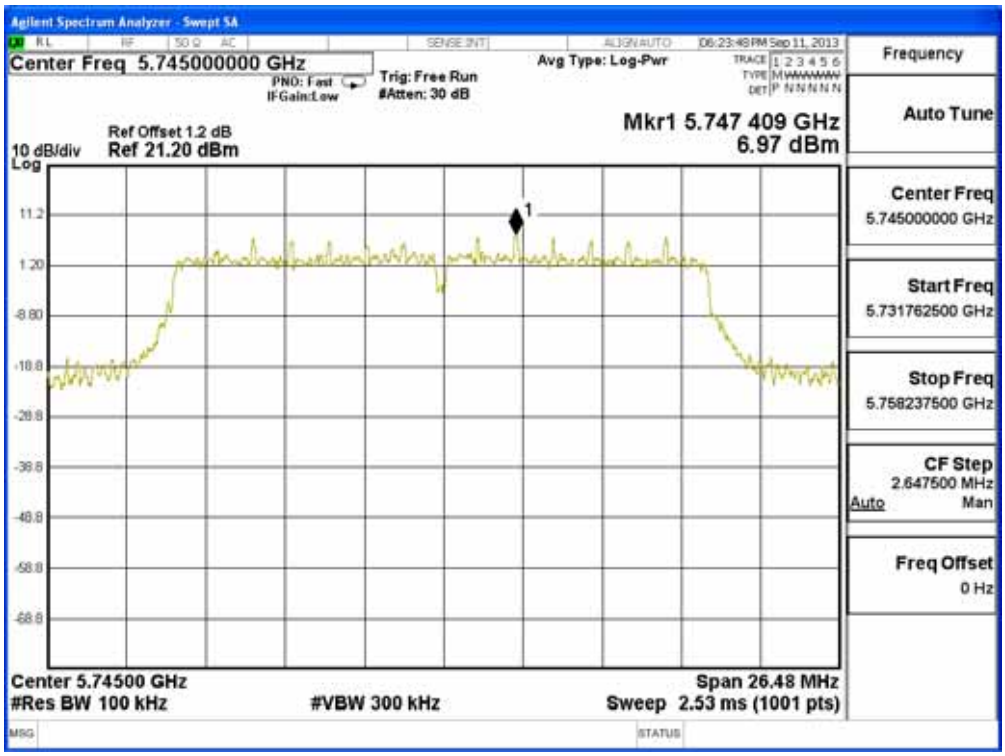
Channel 165 (5825MHz)



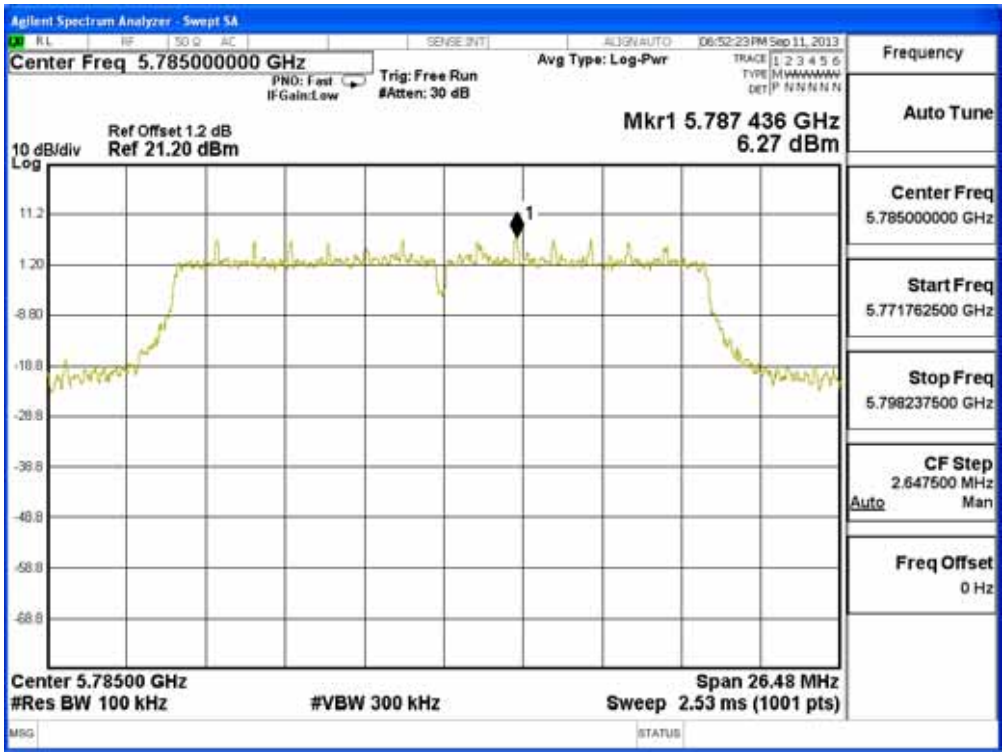
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 5: Transmit by 802.11ac(20MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	6.970	N/A	N/A	6.970	8	Pass
157	5785	6.270	N/A	N/A	6.270	8	Pass
165	5825	5.830	N/A	N/A	5.830	8	Pass

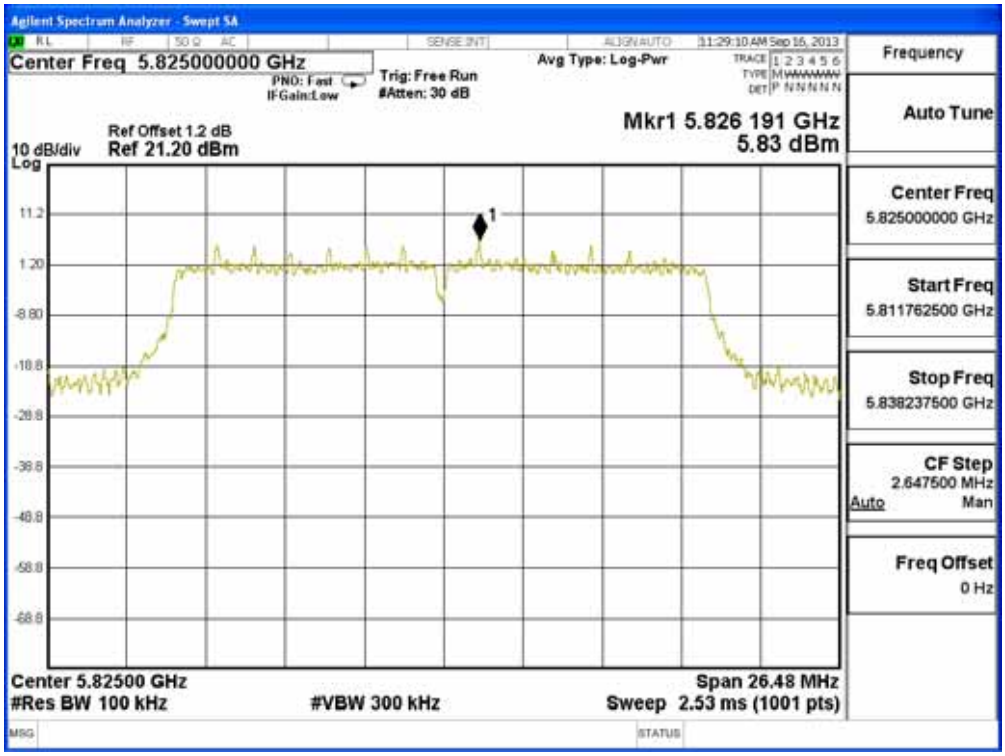
Channel 149 (5745MHz)



Channel 157 (5785MHz)



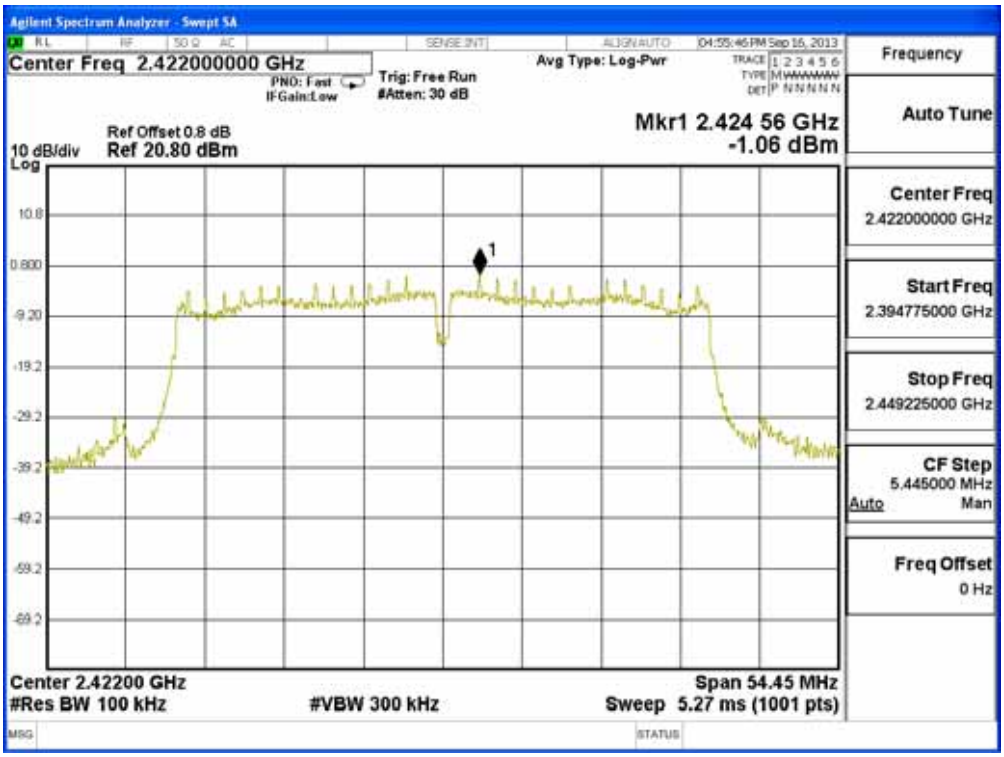
Channel 165 (5825MHz)



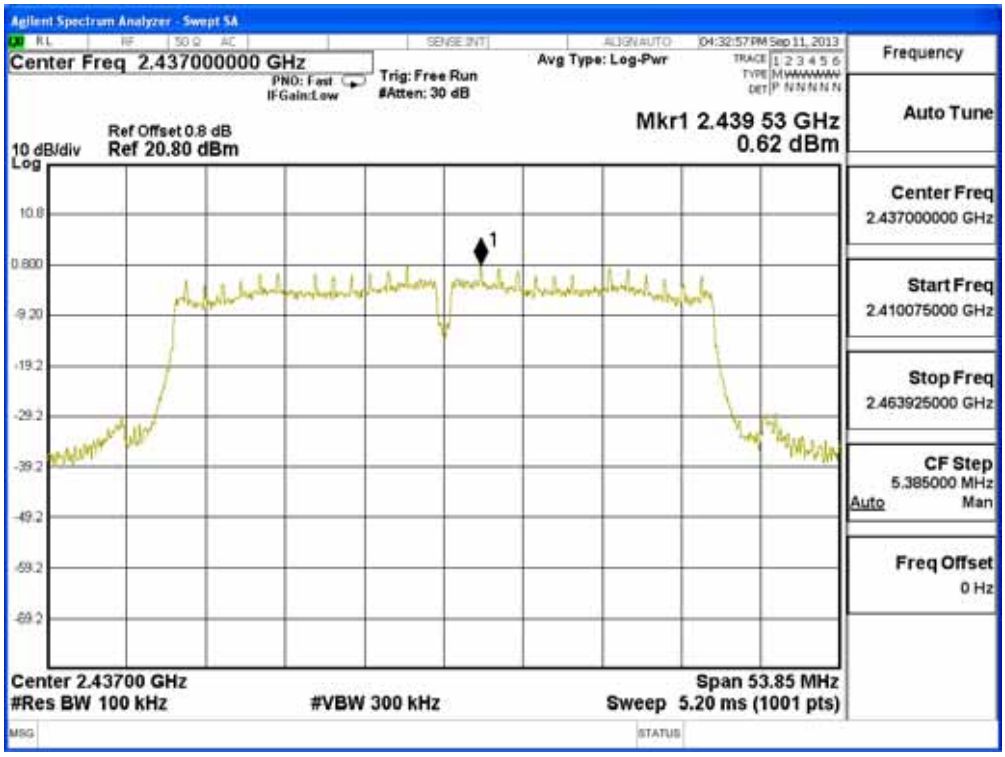
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 6: Transmit by 802.11n(40MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
03	2422	-1.060	N/A	-	-1.060	8	Pass
06	2437	0.620	N/A	-	0.620	8	Pass
09	2452	-2.420	N/A	-	-2.420	8	Pass
151	5755	3.920	N/A	N/A	3.920	8	Pass
159	5795	4.070	N/A	N/A	4.070	8	Pass

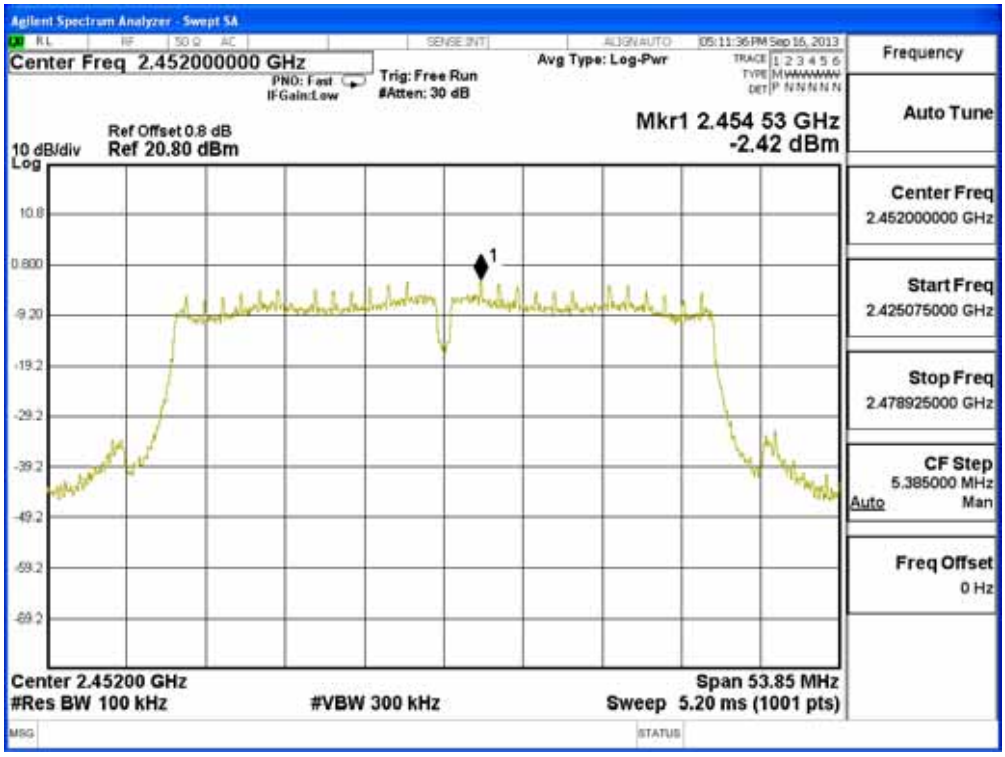
Channel 03 (2422MHz)



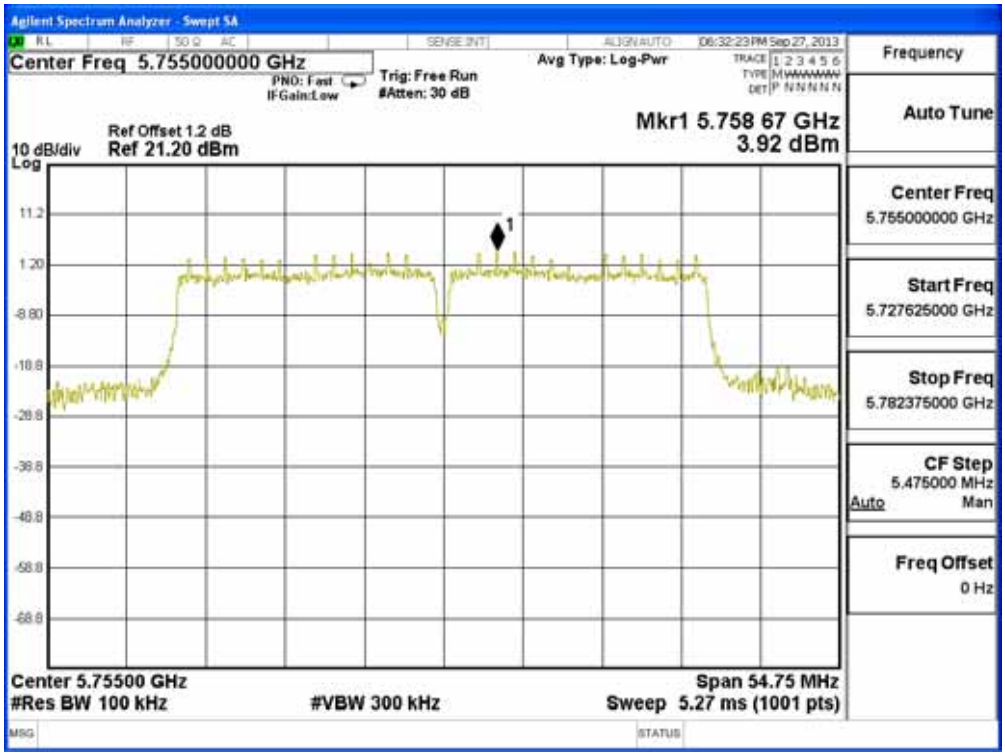
Channel 06 (2437MHz)



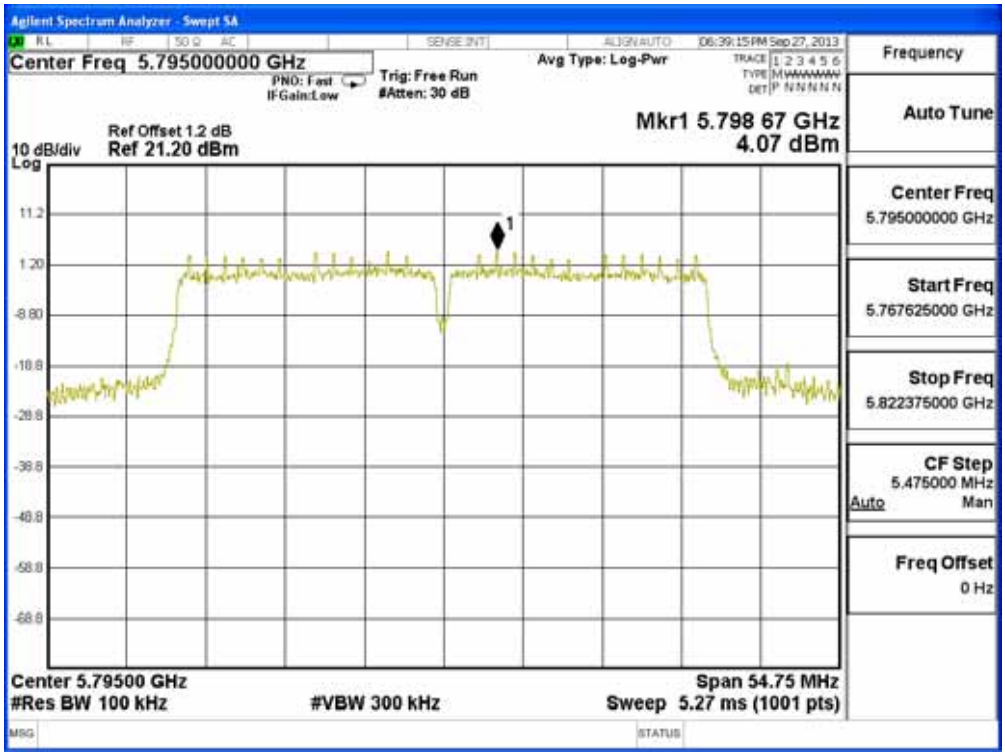
Channel 09 (2452MHz)



Channel 151 (5755MHz)



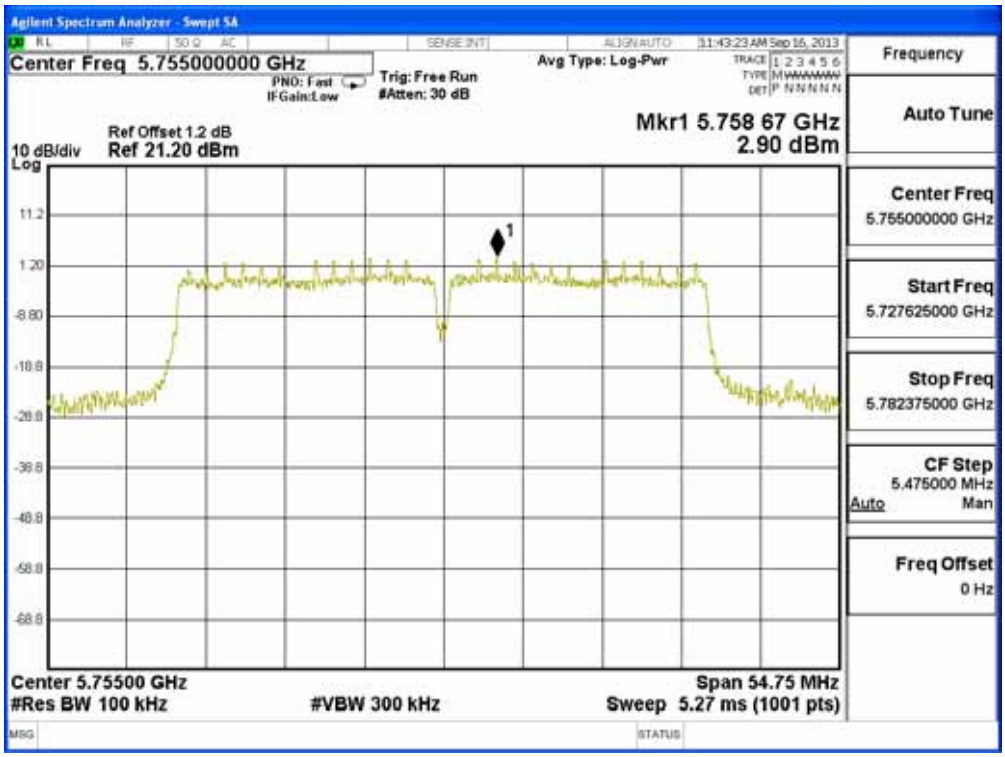
Channel 159 (5795MHz)



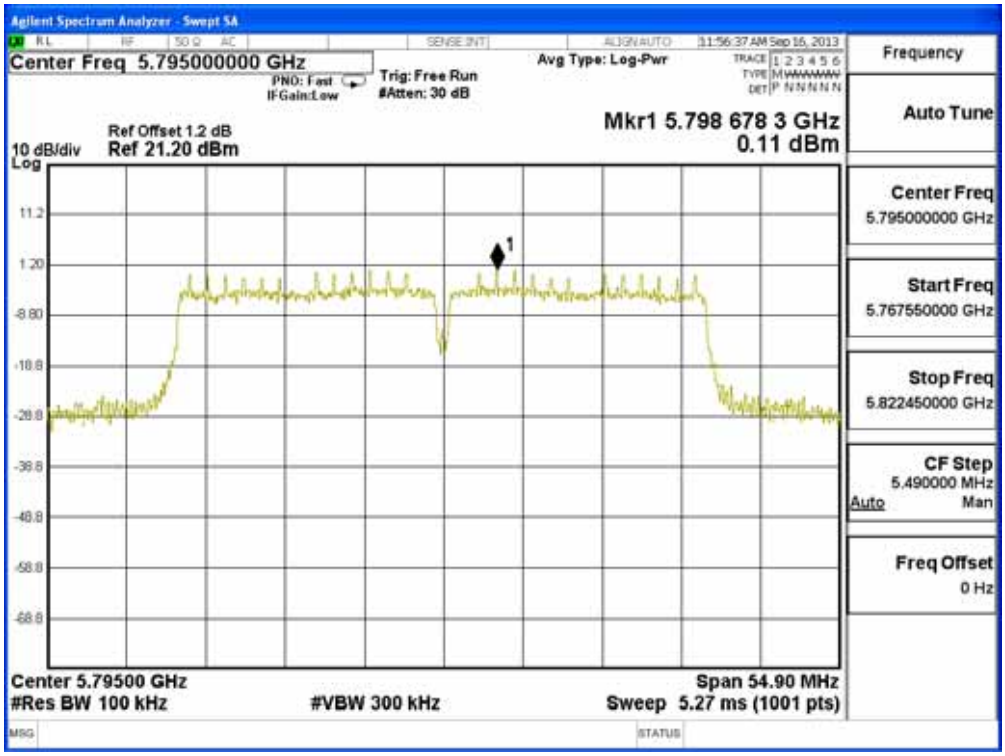
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 7: Transmit by 802.11ac(40MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
151	5755	2.900	N/A	N/A	2.900	8	Pass
159	5795	0.110	N/A	N/A	0.110	8	Pass

Channel 151 (5755MHz)



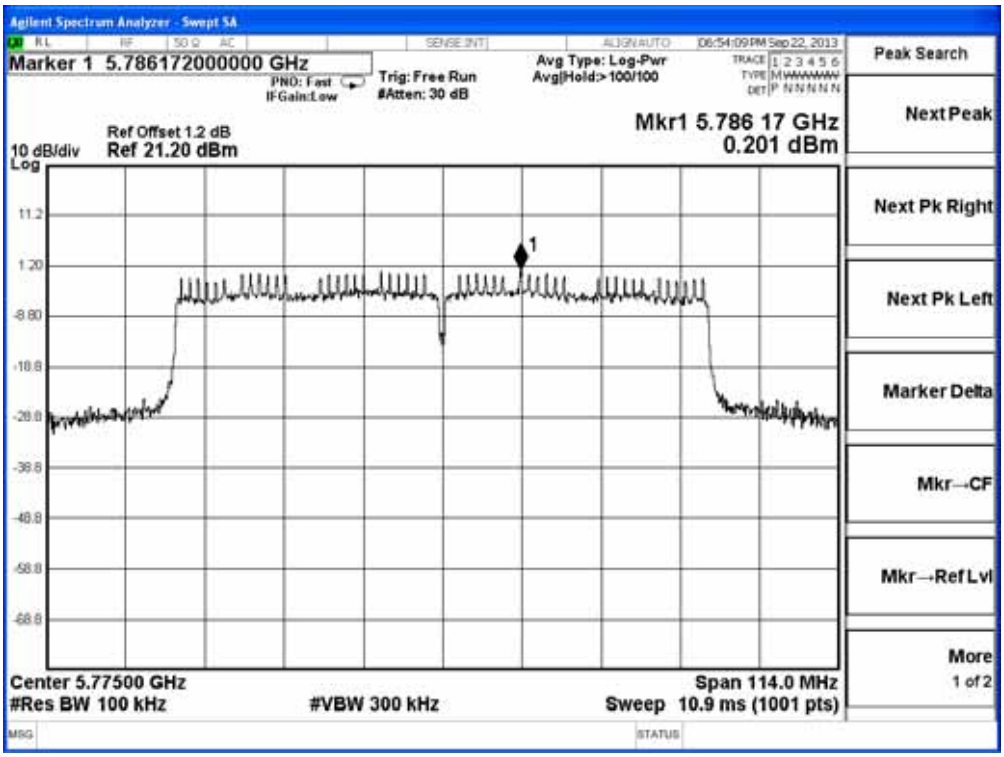
Channel 159 (5795MHz)



Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 8: Transmit by 802.11ac(80MHz) (Ant 0)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
155	5775	0.201	N/A	N/A	0.201	8	Pass

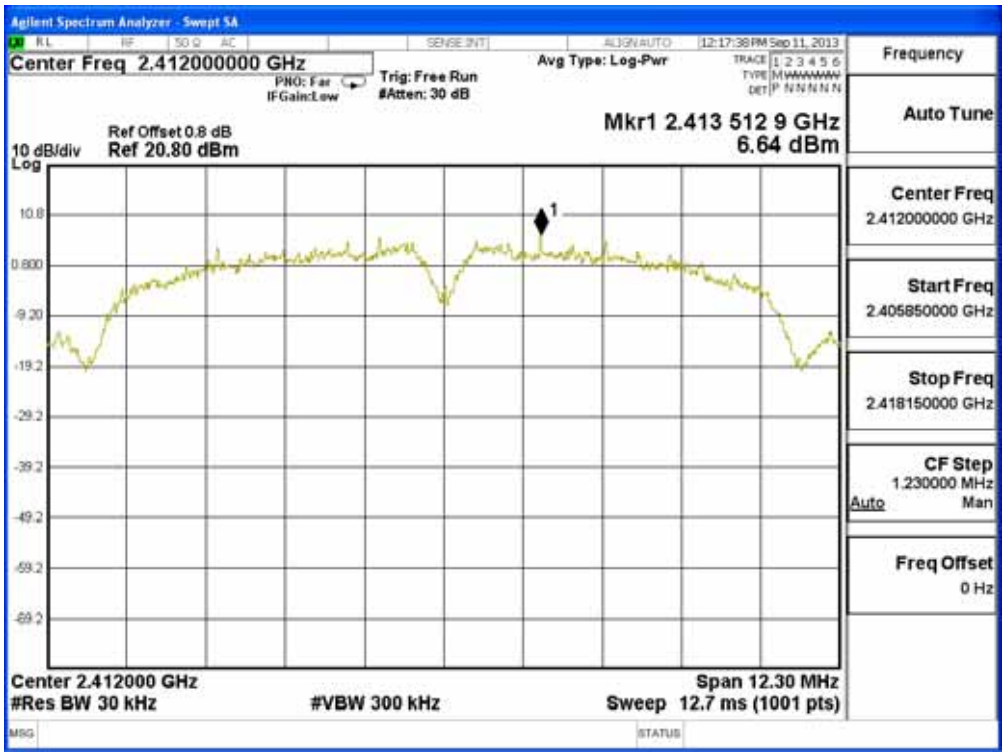
Channel 155 (5775MHz)



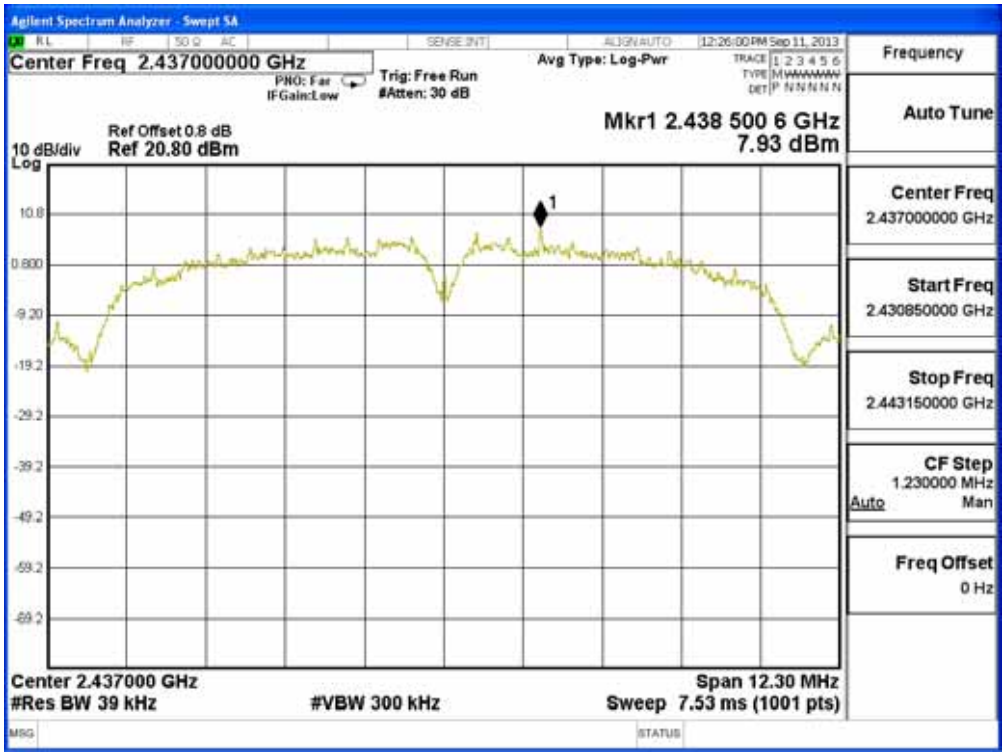
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 1: Transmit by 802.11b (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)		Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1			
01	2412	N/A	6.640	6.640	8	Pass
06	2437	N/A	7.930	7.930	8	Pass
11	2462	N/A	6.590	6.590	8	Pass

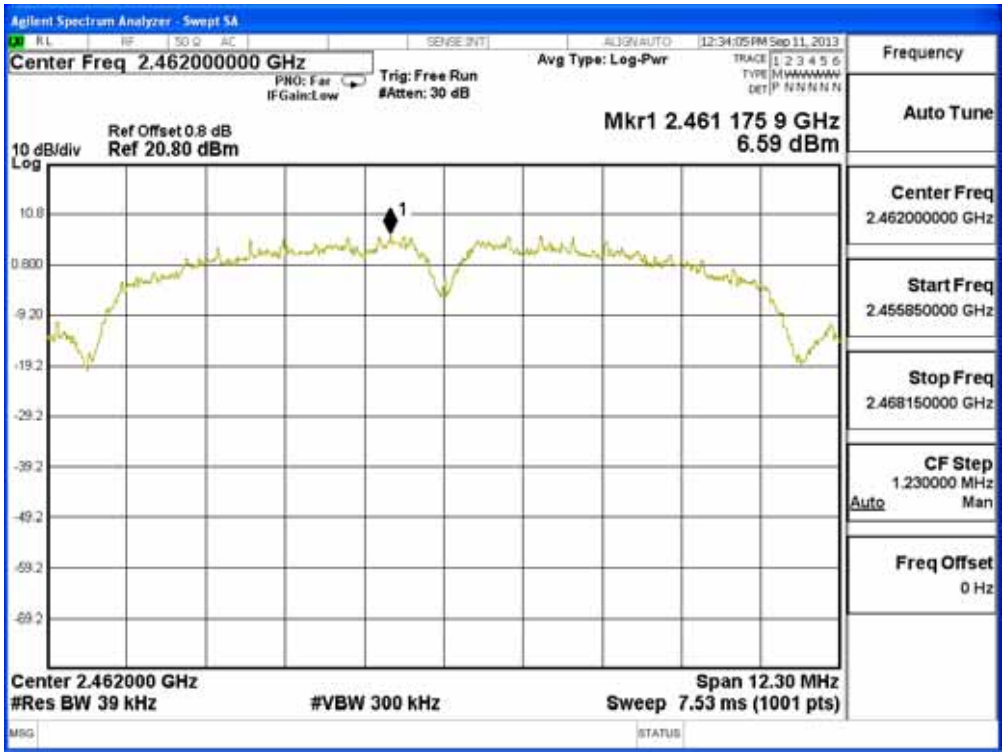
Channel 01 (2412MHz)



Channel 06 (2437MHz)



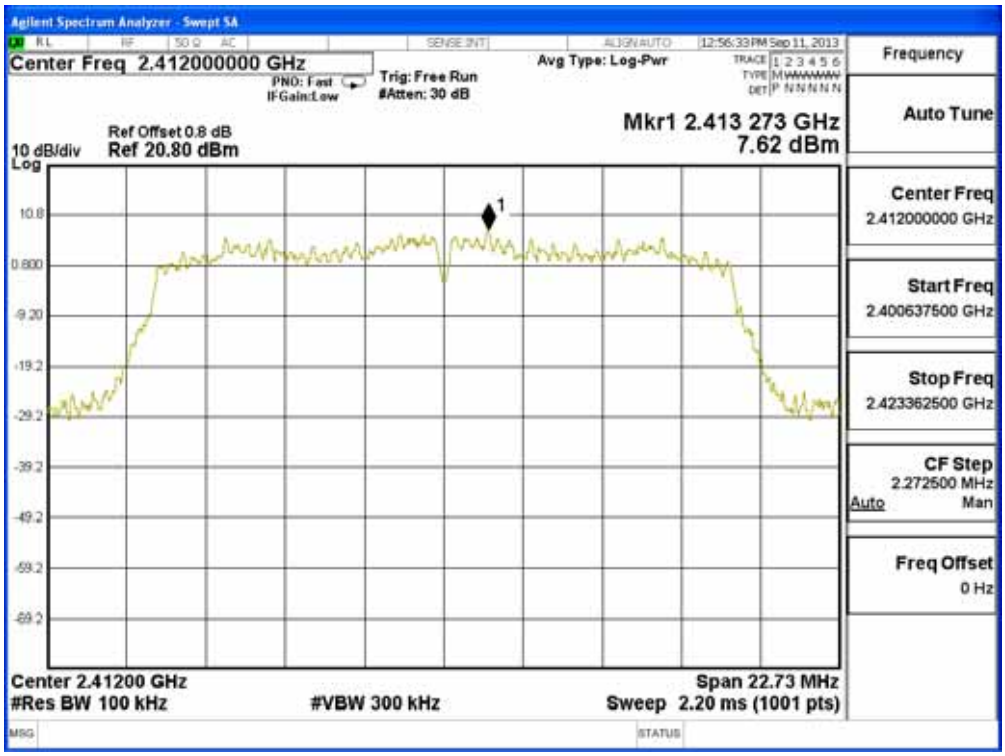
Channel 11 (2462MHz)



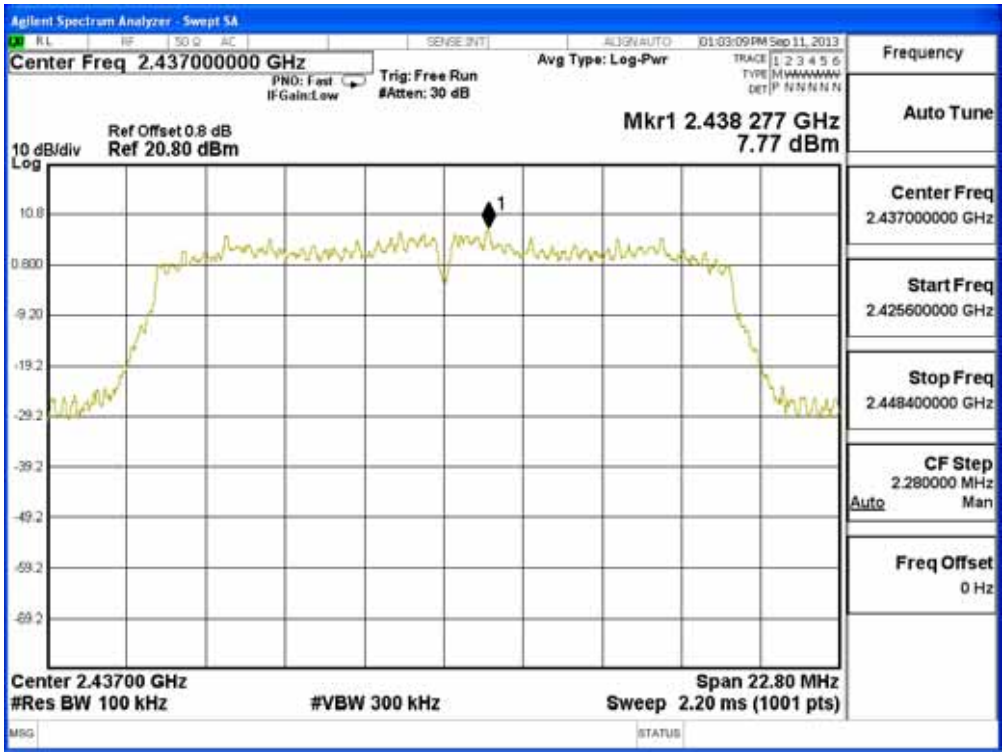
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 2: Transmit by 802.11g (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
01	2412	N/A	7.620	N/A	7.620	8	Pass
06	2437	N/A	7.770	N/A	7.770	8	Pass
11	2462	N/A	7.770	N/A	7.770	8	Pass

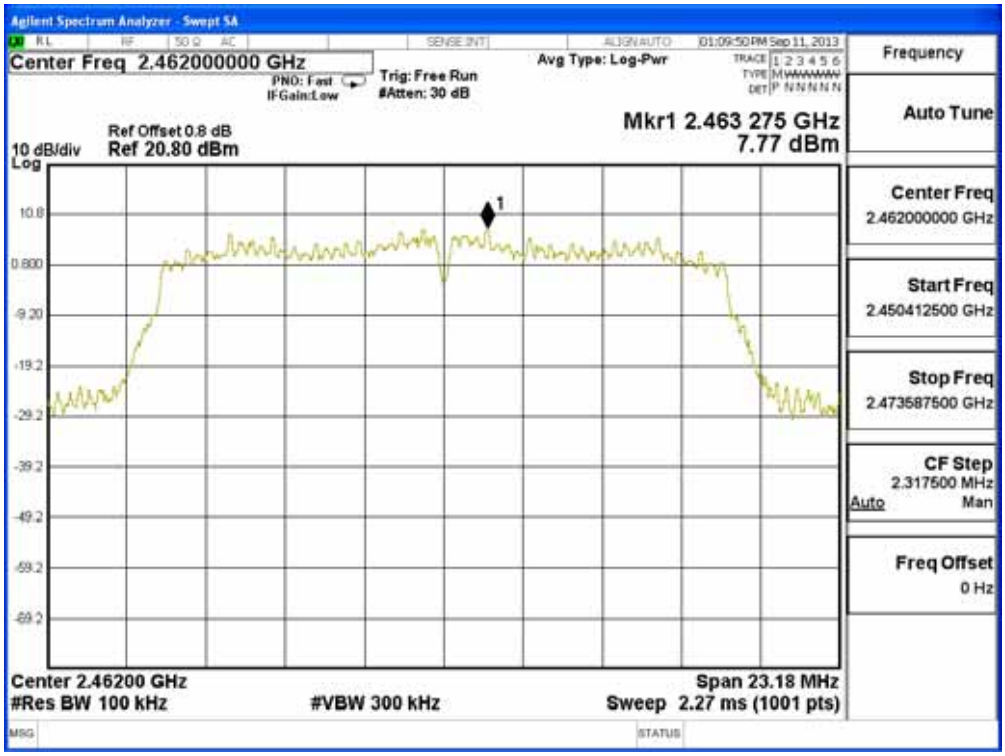
Channel 01 (2412MHz)



Channel 06 (2437MHz)



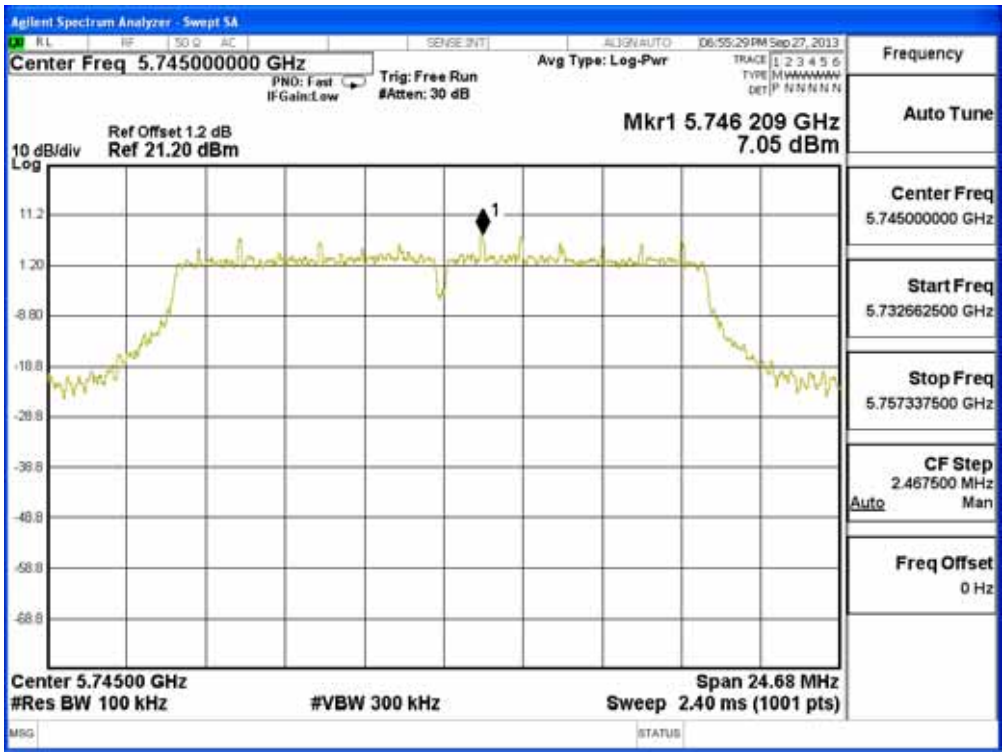
Channel 11 (2462MHz)



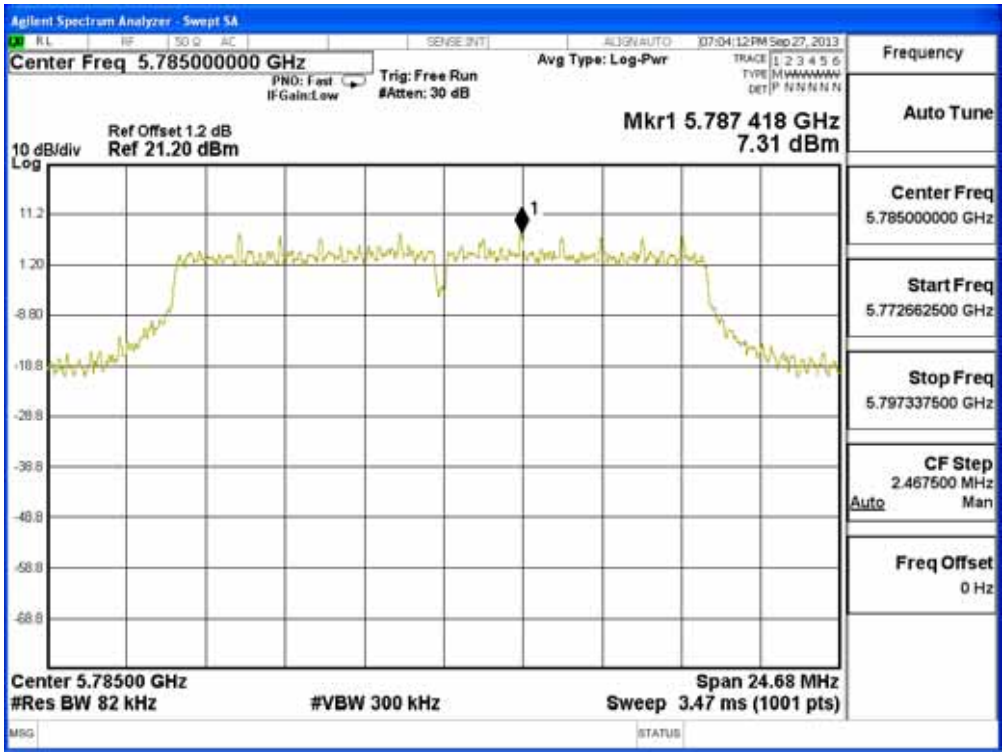
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 3: Transmit by 802.11a (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
149	5745	N/A	7.050	N/A	7.050	8	Pass
157	5785	N/A	7.310	N/A	7.310	8	Pass
165	5825	N/A	7.850	N/A	7.850	8	Pass

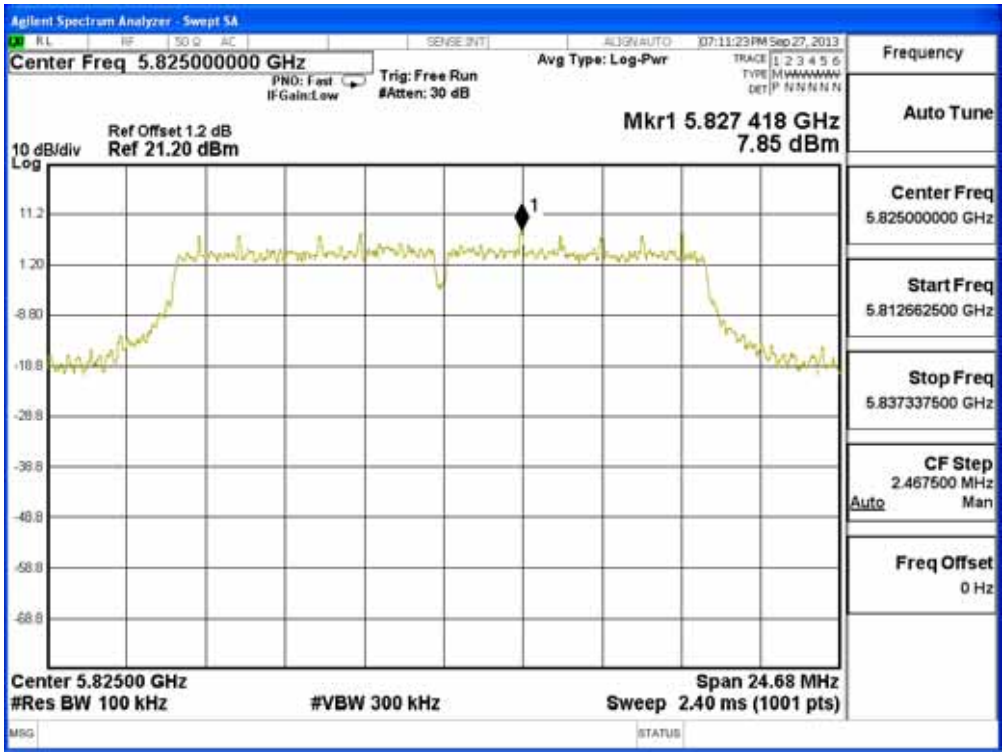
Channel 149 (5745MHz)



Channel 157 (5785MHz)



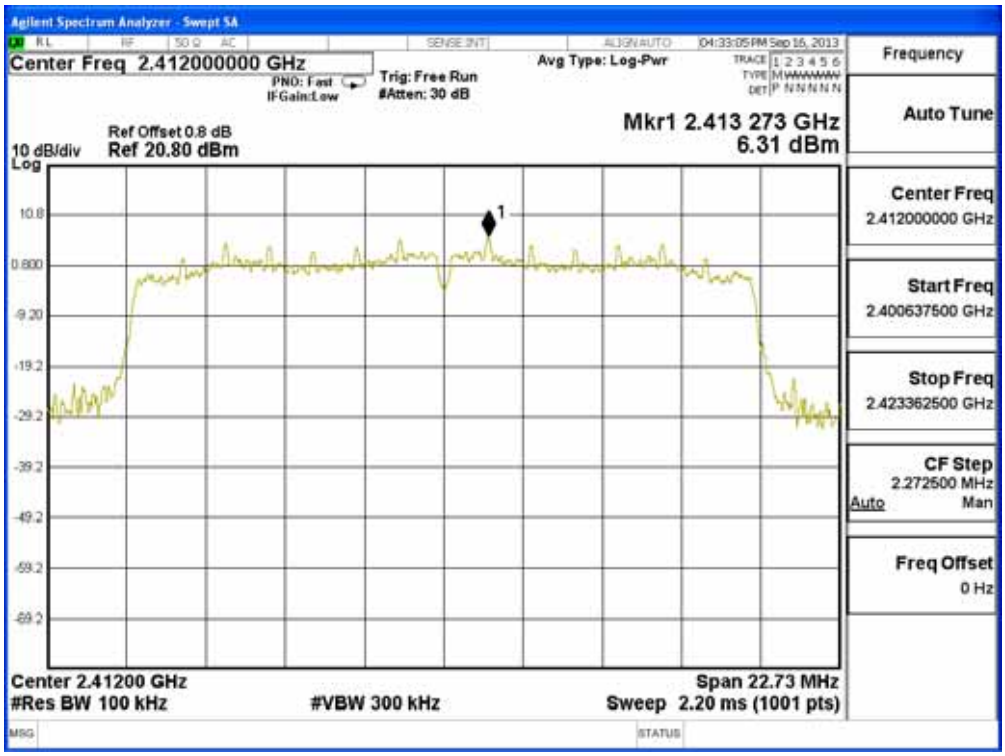
Channel 165 (5825MHz)



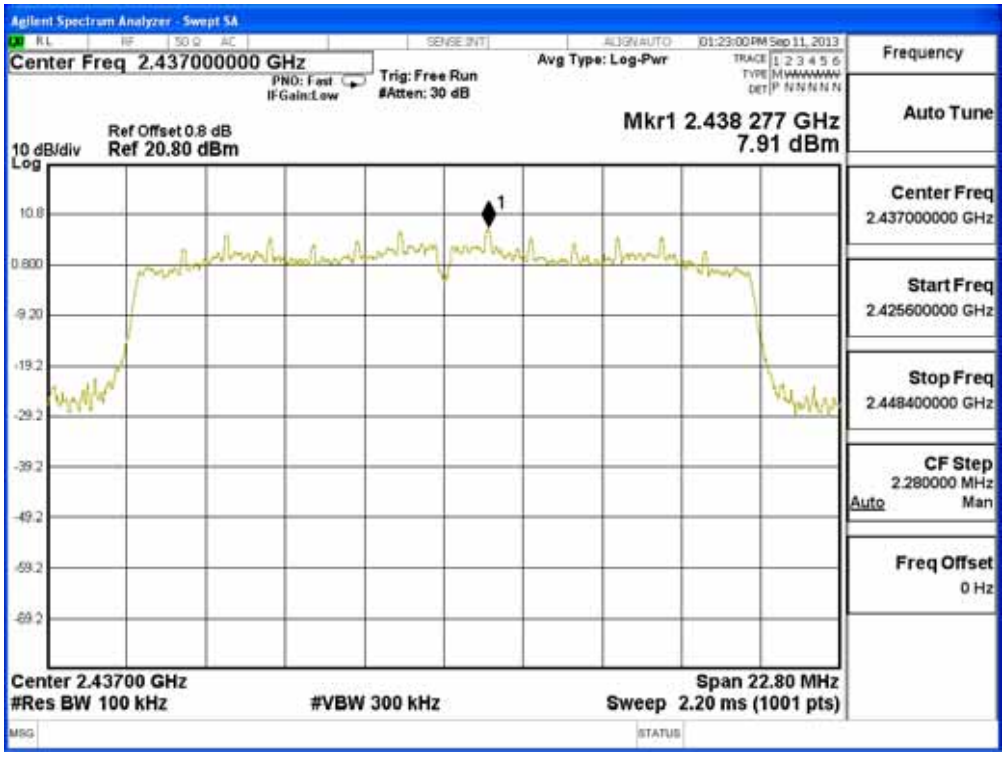
Product	:	Dual Band Wireless AC/N VDSL2 VoIP Combo WAN Gigabit IAD
Test Item	:	Power Spectral Density
Test Site	:	TR-8
Test Mode	:	Mode 4: Transmit by 802.11n(20MHz) (Ant 1)

Channel No.	Frequency (MHz)	Measurement PPSD (dBm)			Total PPSD (dBm)	Limit (dBm)	Result
		Ant 0	Ant 1	Ant 2			
01	2412	N/A	6.310	-	6.310	8	Pass
06	2437	N/A	7.910	-	7.910	8	Pass
11	2462	N/A	5.430	-	5.430	8	Pass
149	5745	N/A	7.770	N/A	7.770	8	Pass
157	5785	N/A	7.650	N/A	7.650	8	Pass
165	5825	N/A	7.830	N/A	7.830	8	Pass

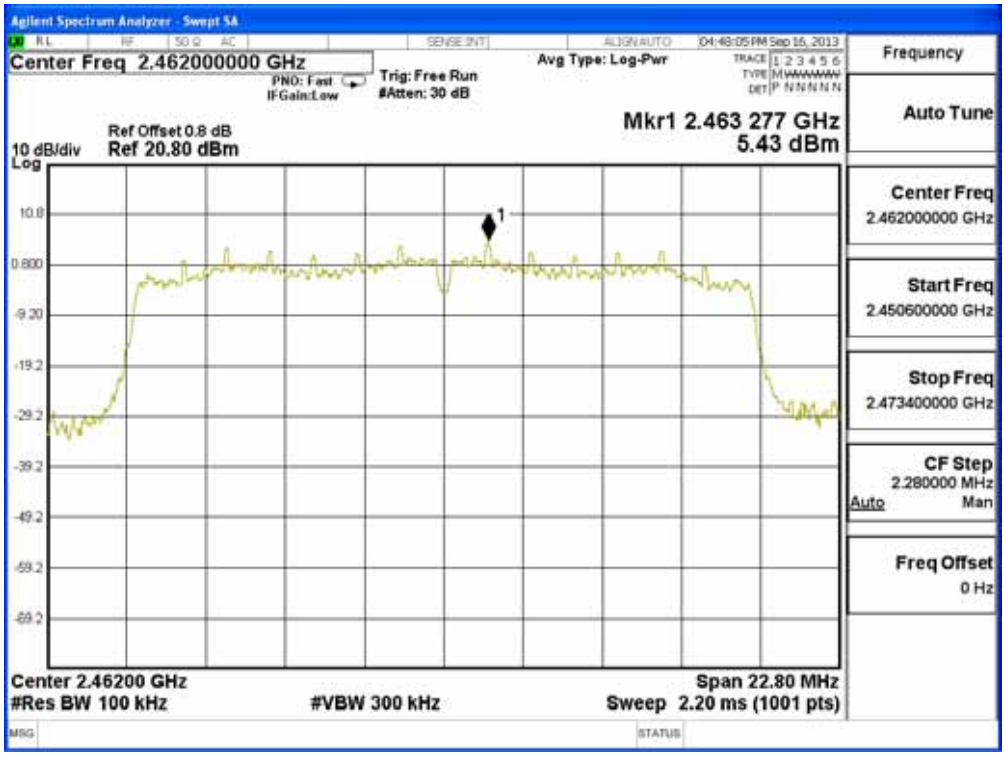
Channel 01 (2412MHz)



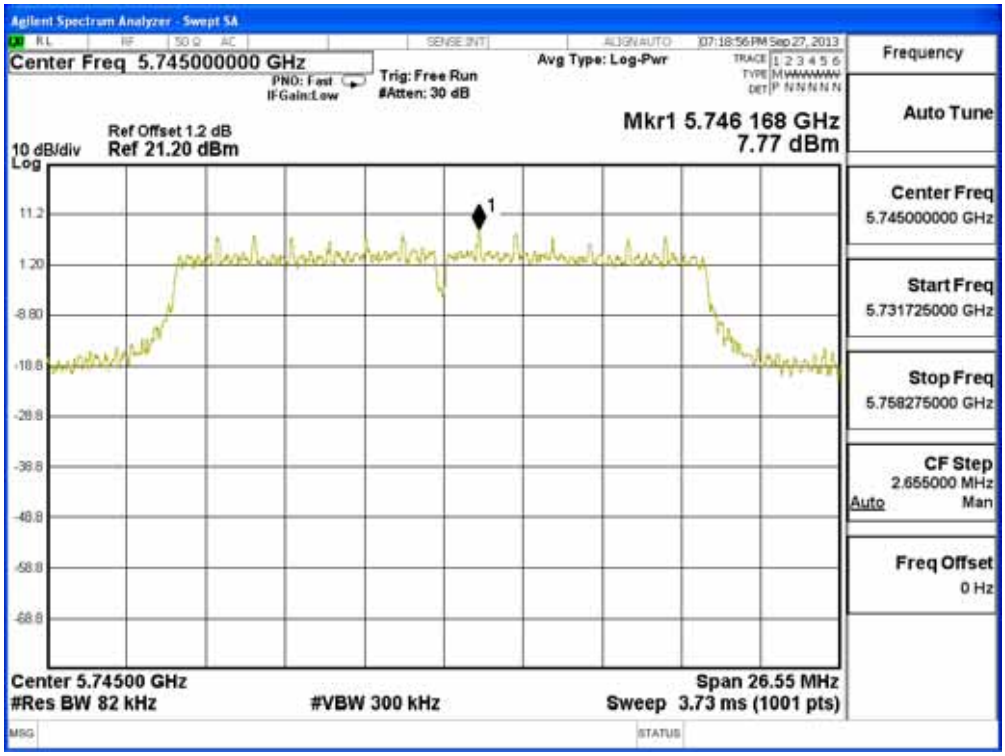
Channel 06 (2437MHz)



Channel 11 (2462MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)