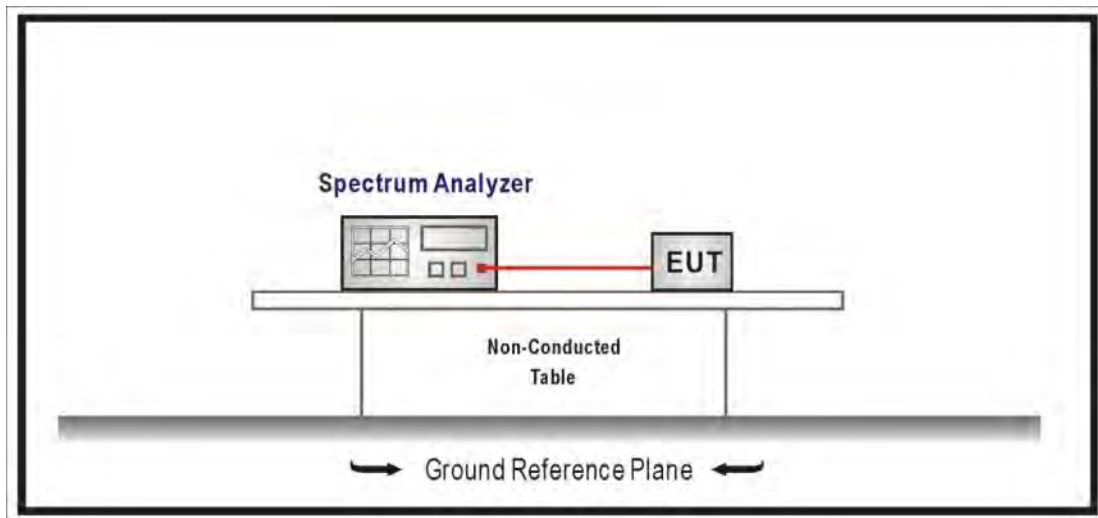


8. Occupied Bandwidth

8.1. Test Setup



8.2. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 1-5% of the OBW, Set the VBW $\geq 3 \times$ RBW, Sweep Time=Auto.

8.3. Limits

N/A

8.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

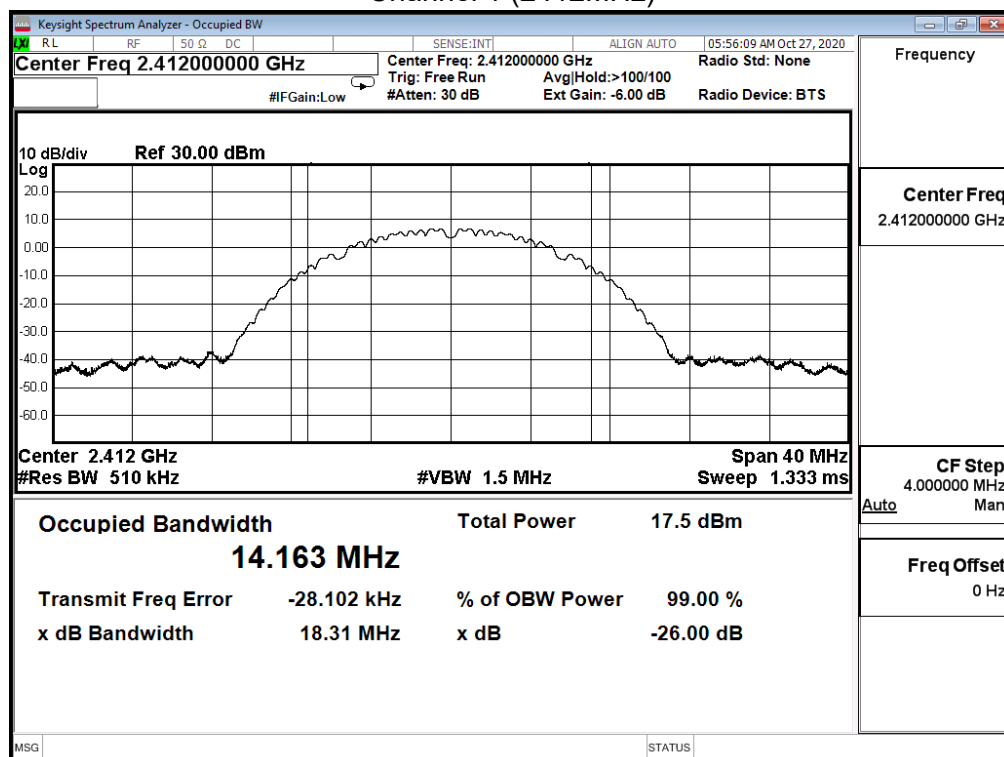
8.5. Test Result

Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode (SISO)		
Date of Test	2020/10/27	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	62

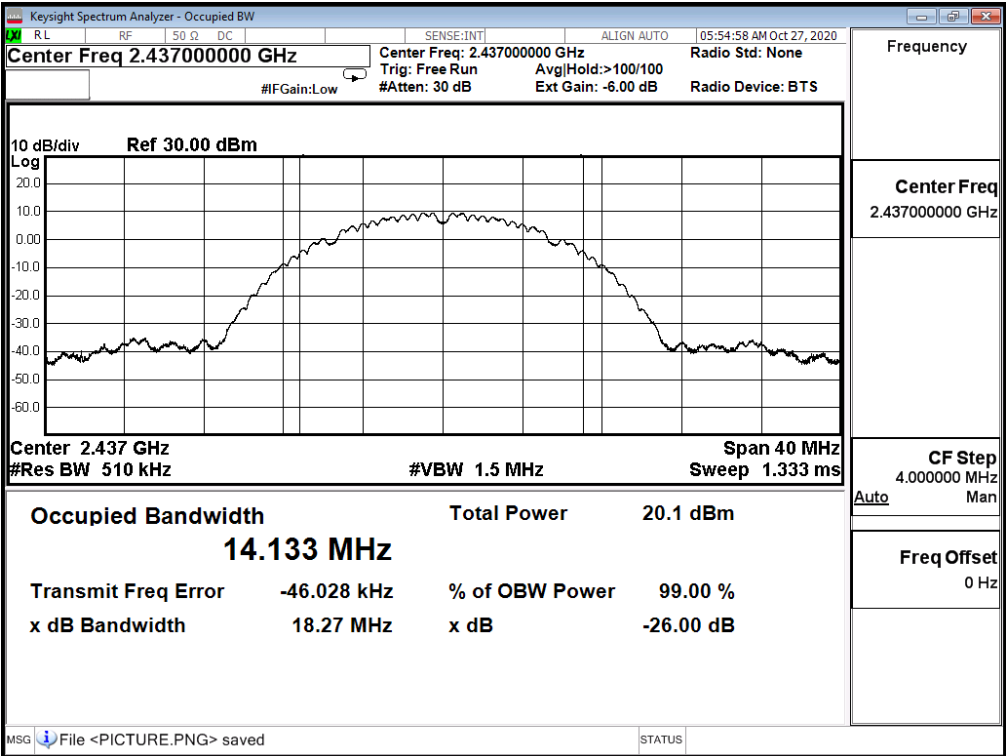
802.11b(ANT 0)

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	14.163	---
6	2437	14.133	---
11	2462	14.150	---

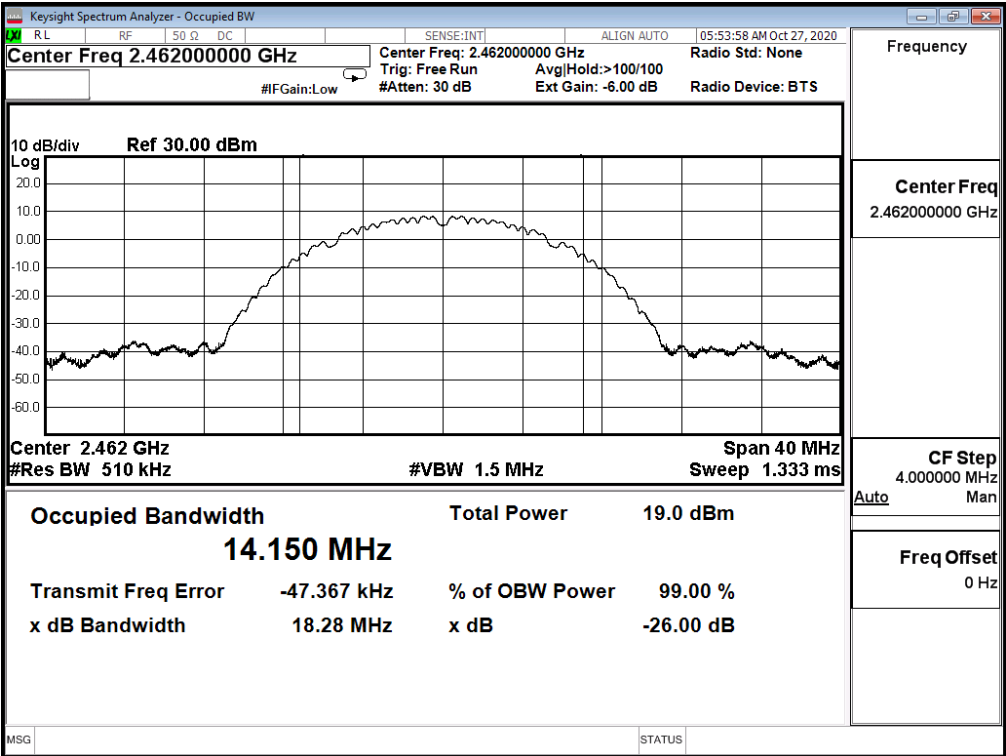
Channel 1 (2412MHz)



Channel 6 (2437MHz)



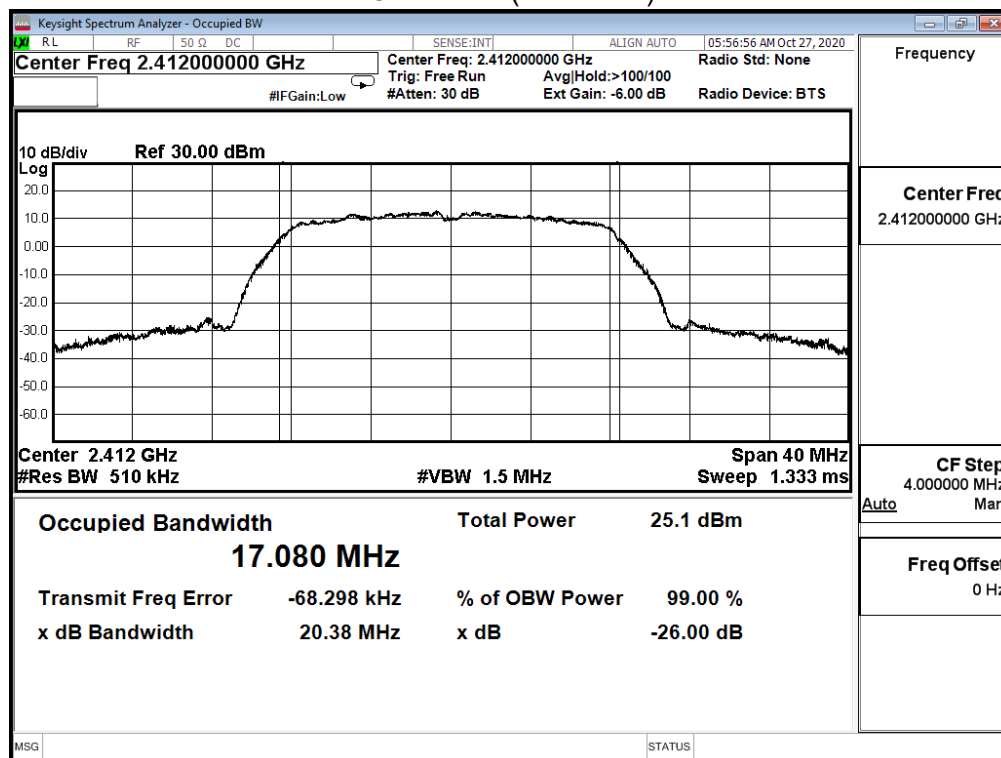
Channel 11 (2462MHz)



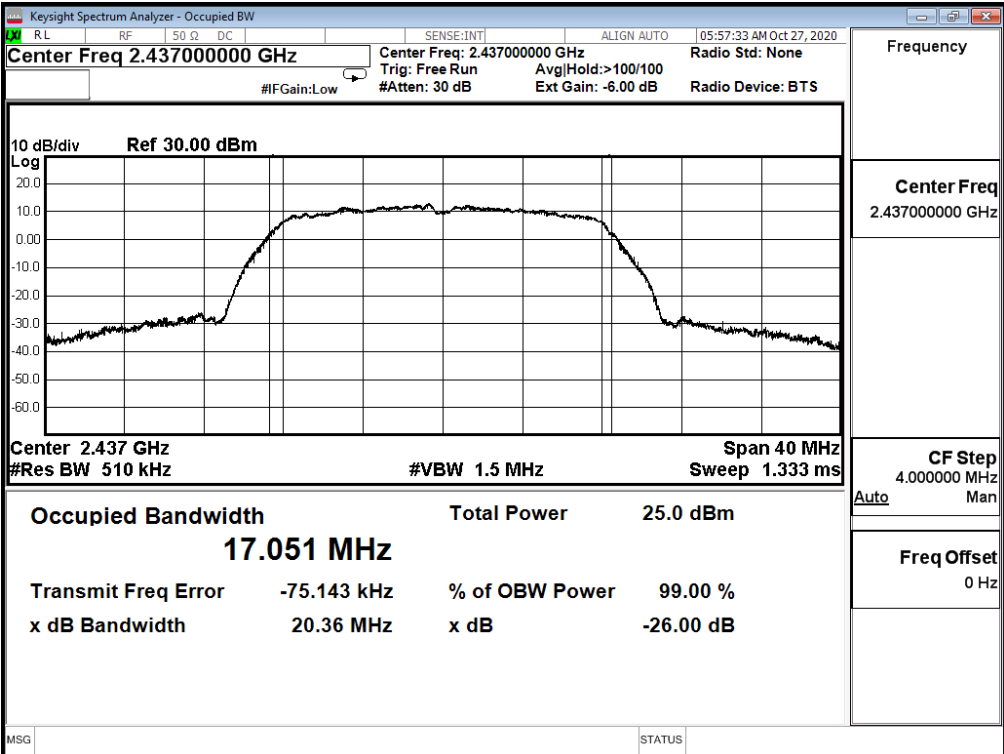
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode (SISO)		
Date of Test	2020/10/27	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	62

802.11g(ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	17.080	---
6	2437	17.051	---
11	2462	17.018	---

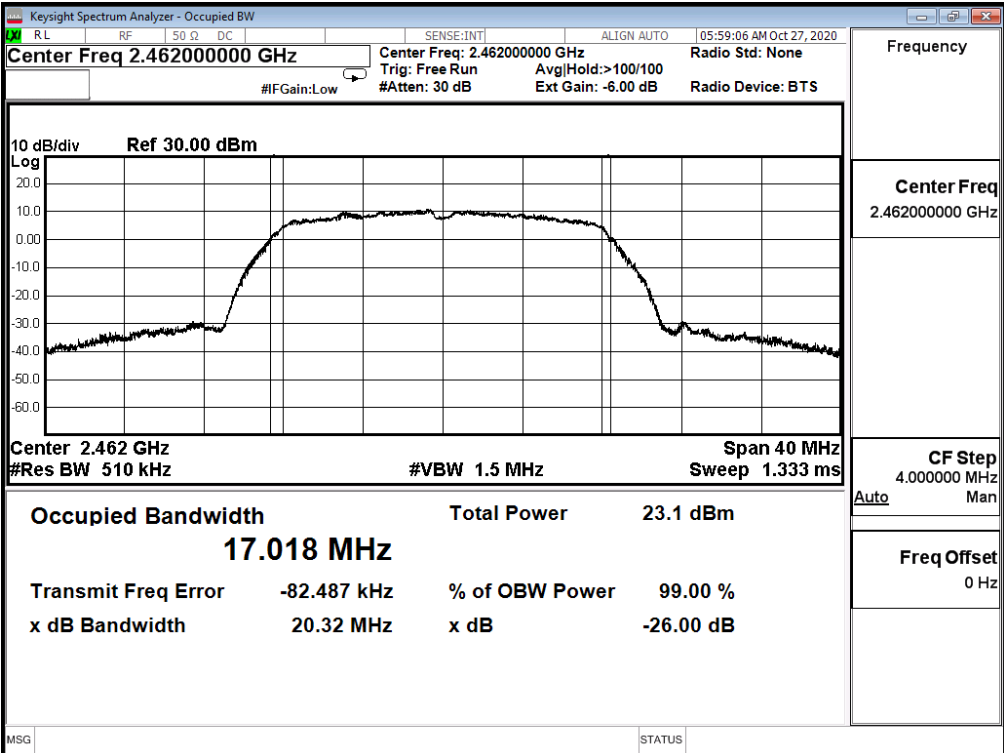
Channel 1 (2412MHz)



Channel 6 (2437MHz)



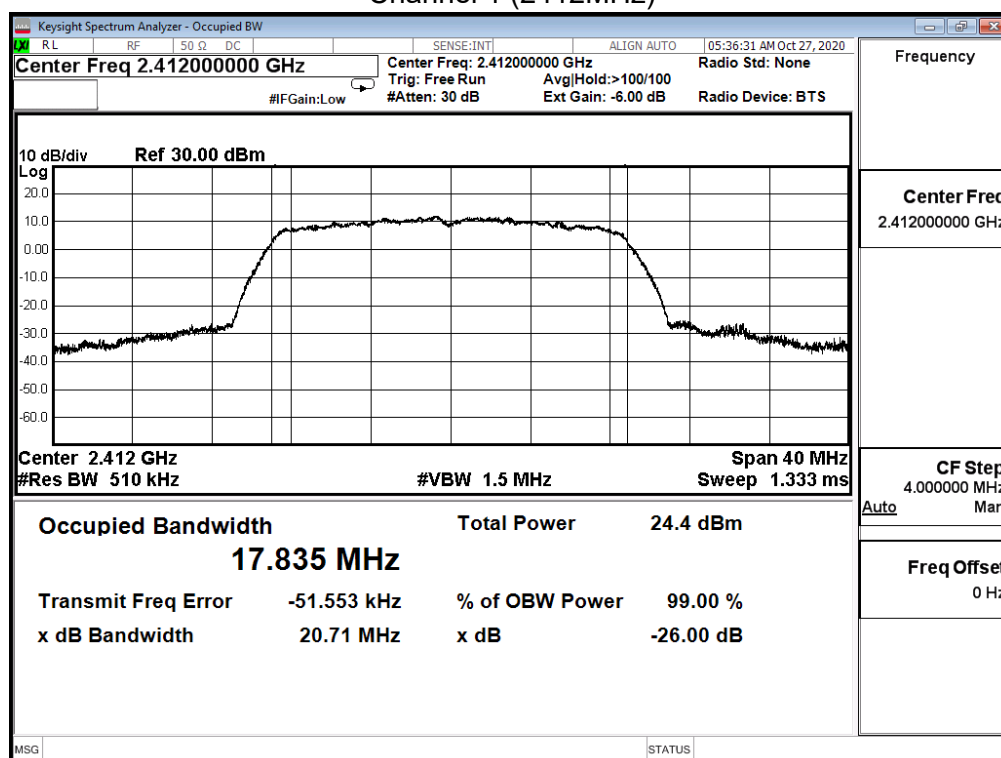
Channel 11 (2462MHz)



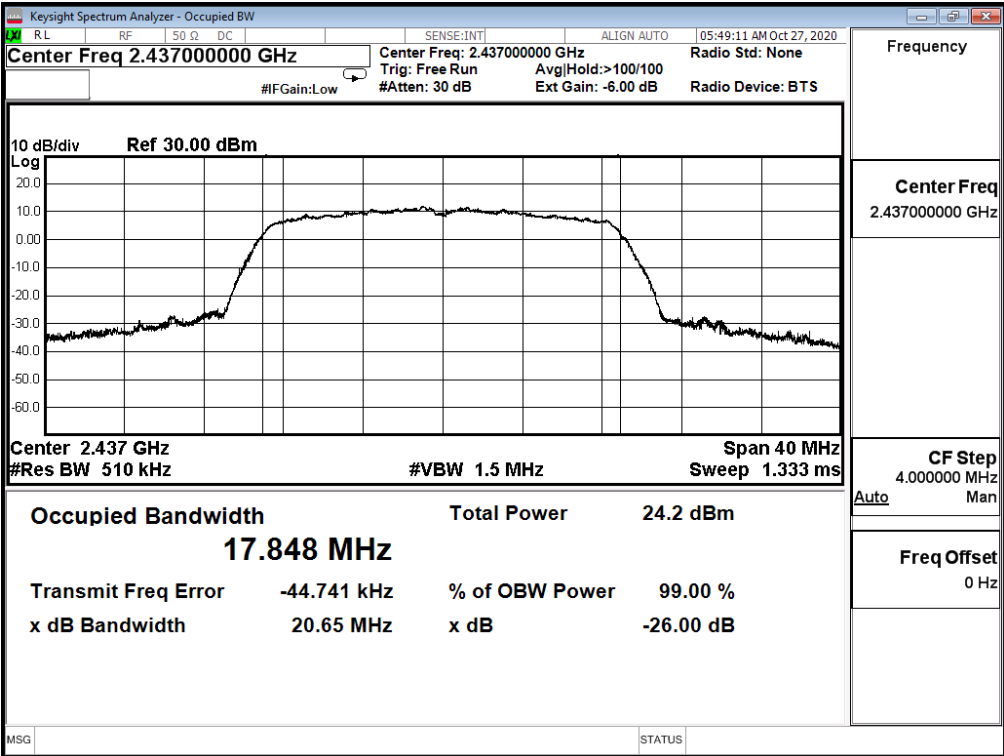
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode (MIMO)		
Date of Test	2020/10/27	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	62

IEEE 802.11n(20M)(ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	17.835	---
6	2437	17.848	---
11	2462	17.822	---

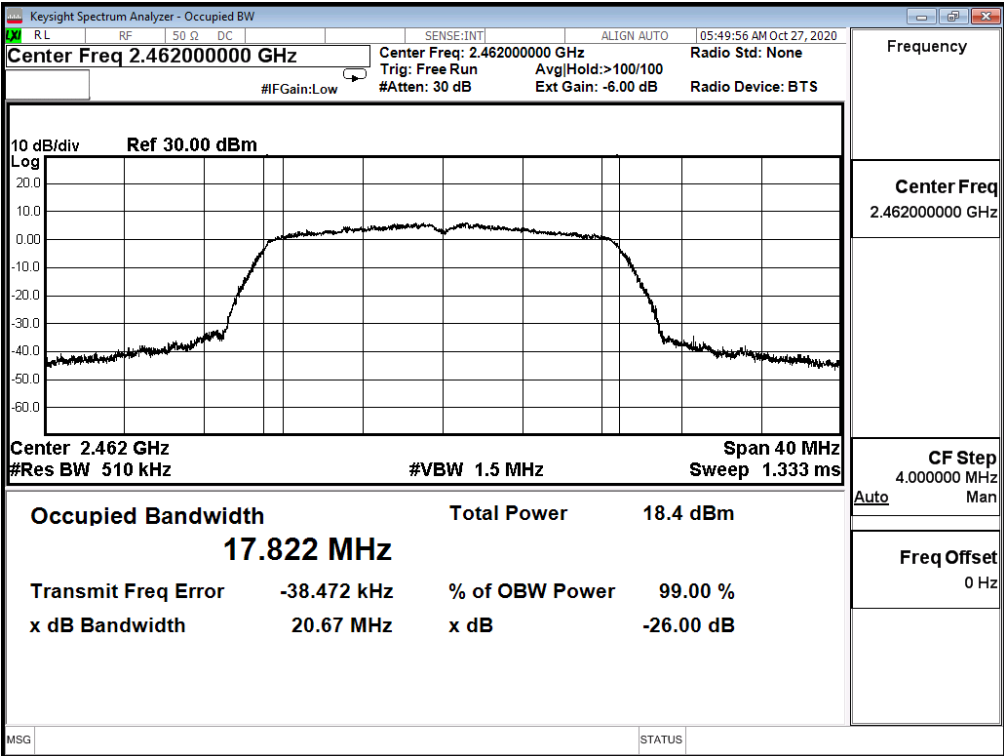
Channel 1 (2412MHz)



Channel 6 (2437MHz)



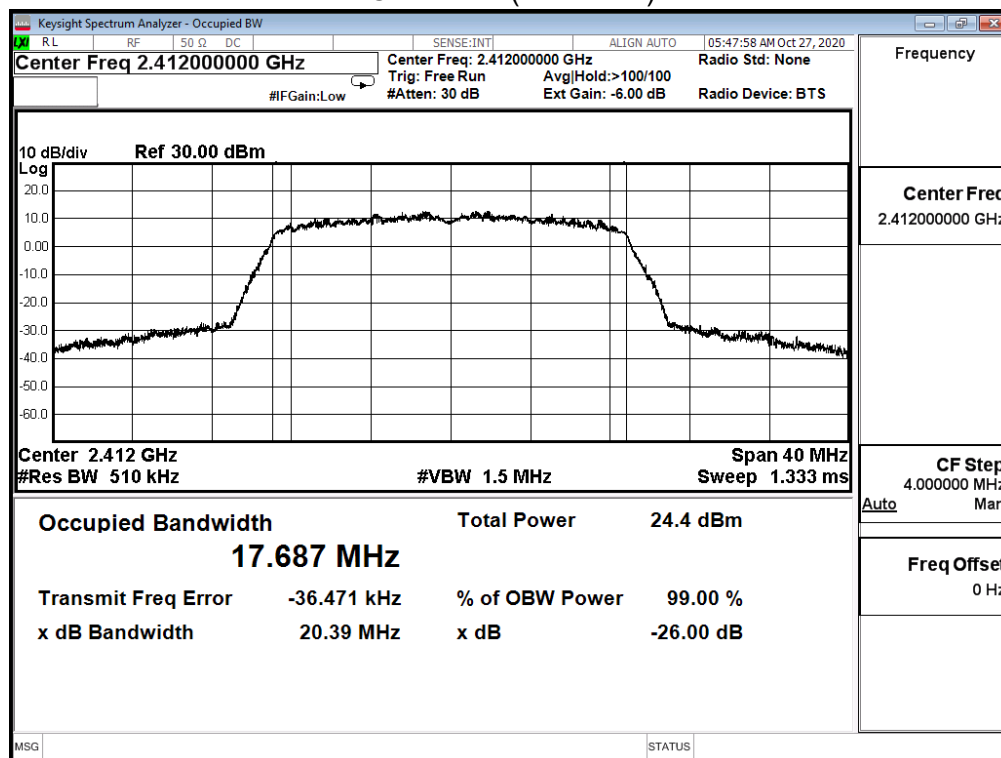
Channel 11 (2462MHz)



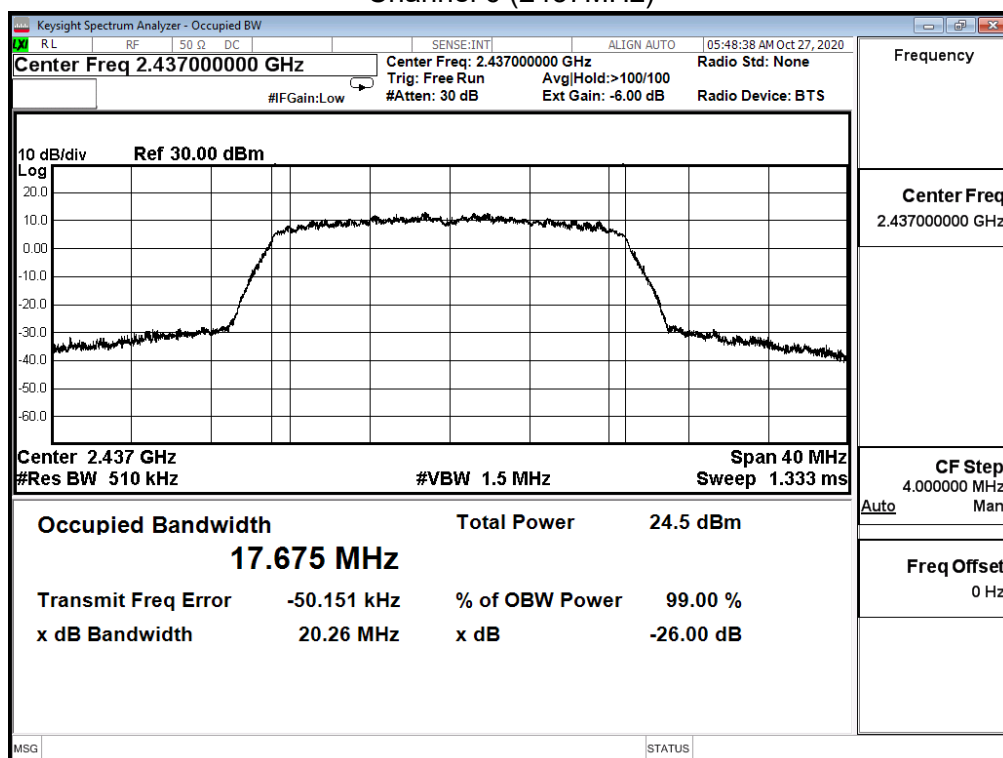
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode (MIMO)		
Date of Test	2020/10/27	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	62

IEEE 802.11n(20M)(ANT 1)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1	2412	17.687	---
6	2437	17.675	---
11	2462	17.670	---

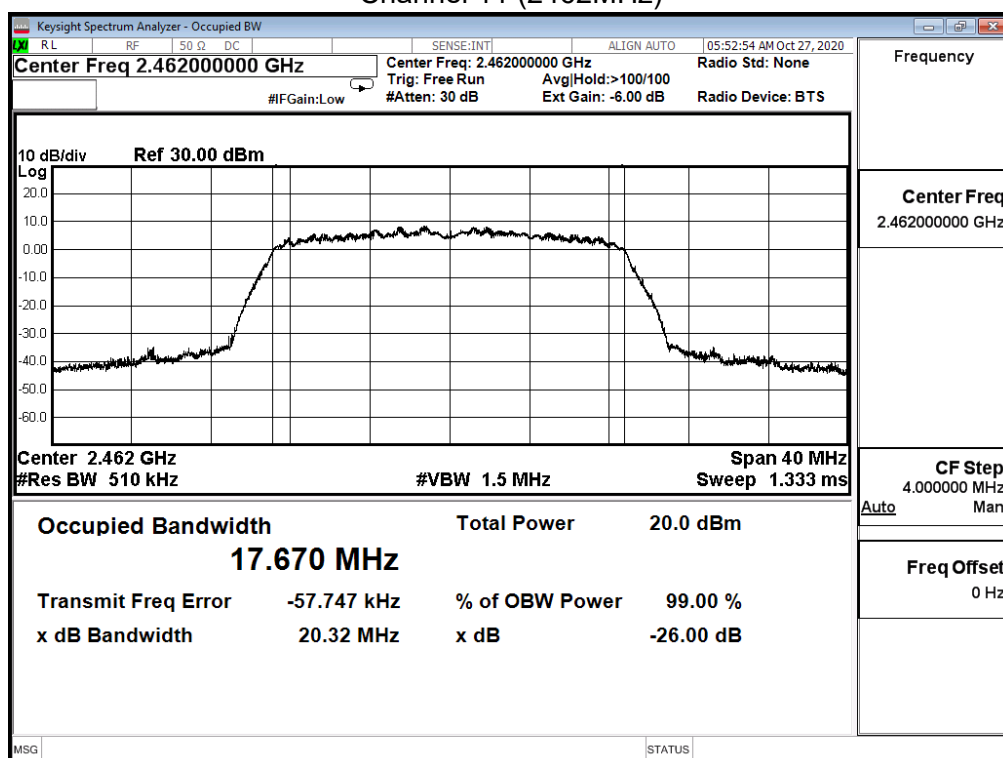
Channel 1 (2412MHz)



Channel 6 (2437MHz)



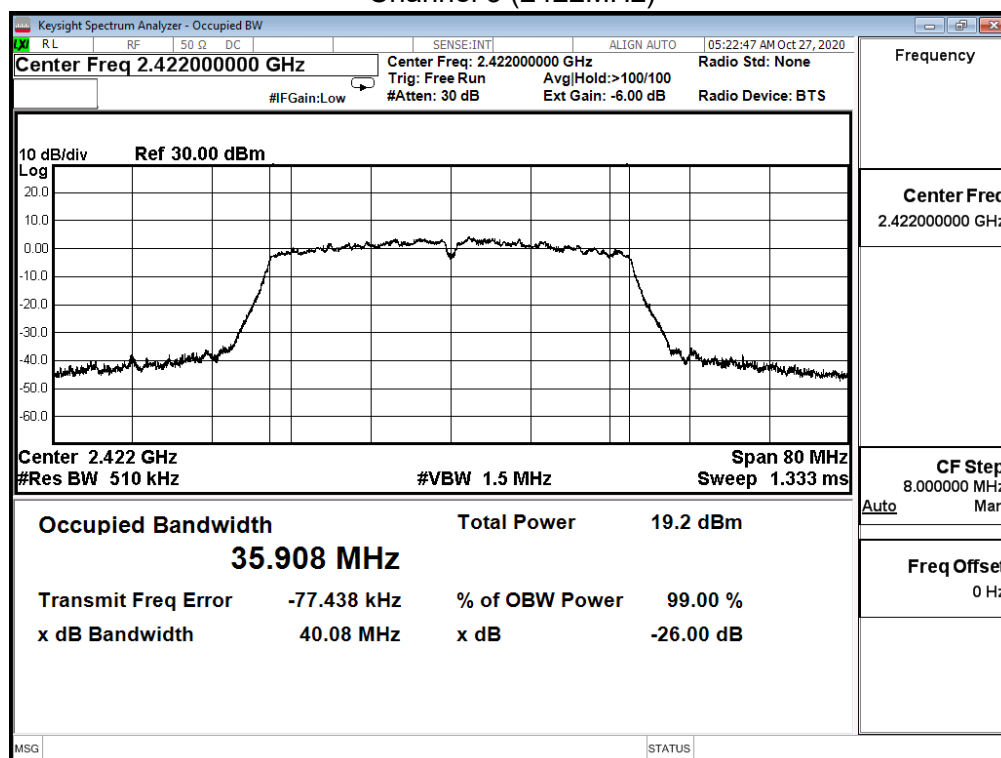
Channel 11 (2462MHz)



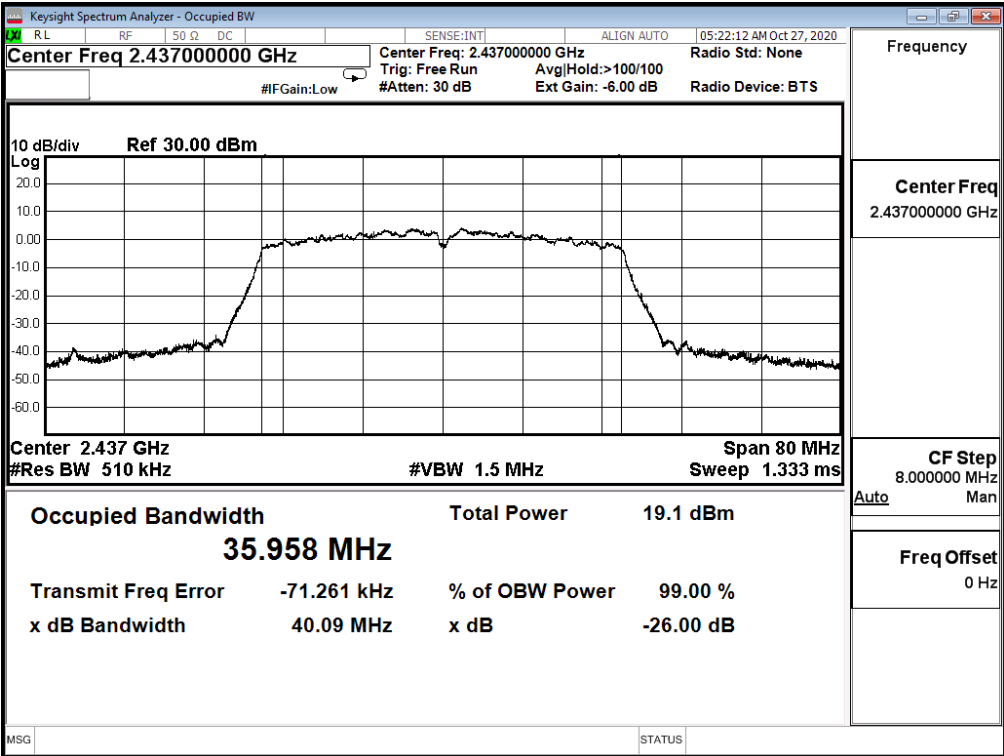
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode (MIMO)		
Date of Test	2020/10/27	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	62

IEEE 802.11n(40M)(ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
3	2422	35.908	---
6	2437	35.958	---
9	2452	36.074	---

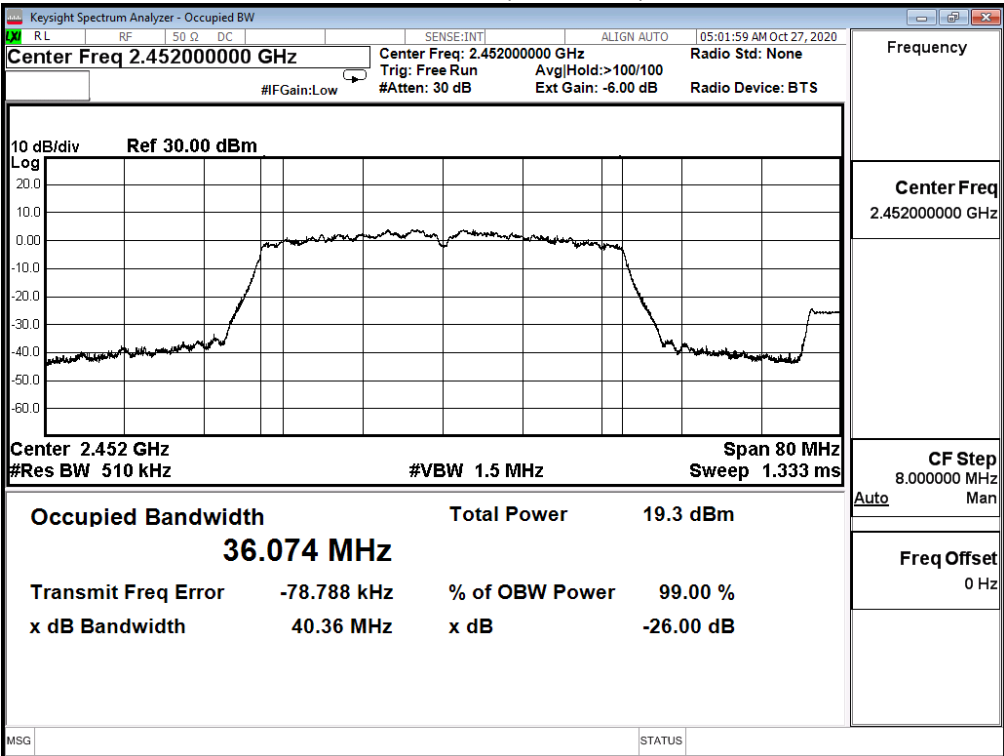
Channel 3 (2422MHz)



Channel 6 (2437MHz)



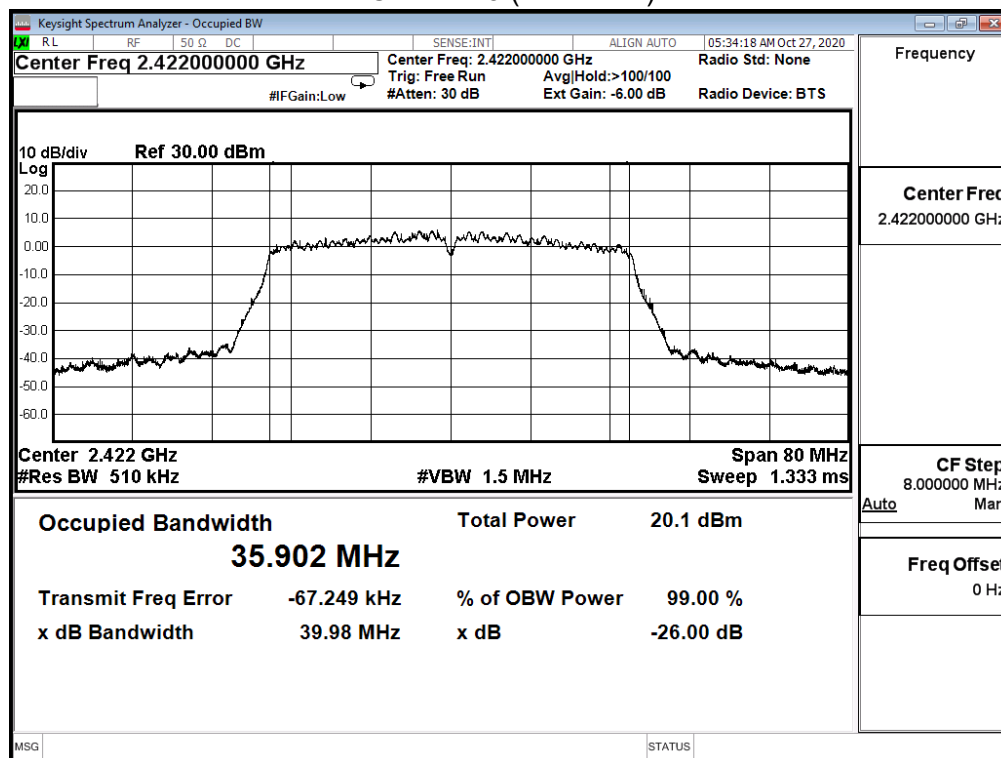
Channel 9 (2452MHz)



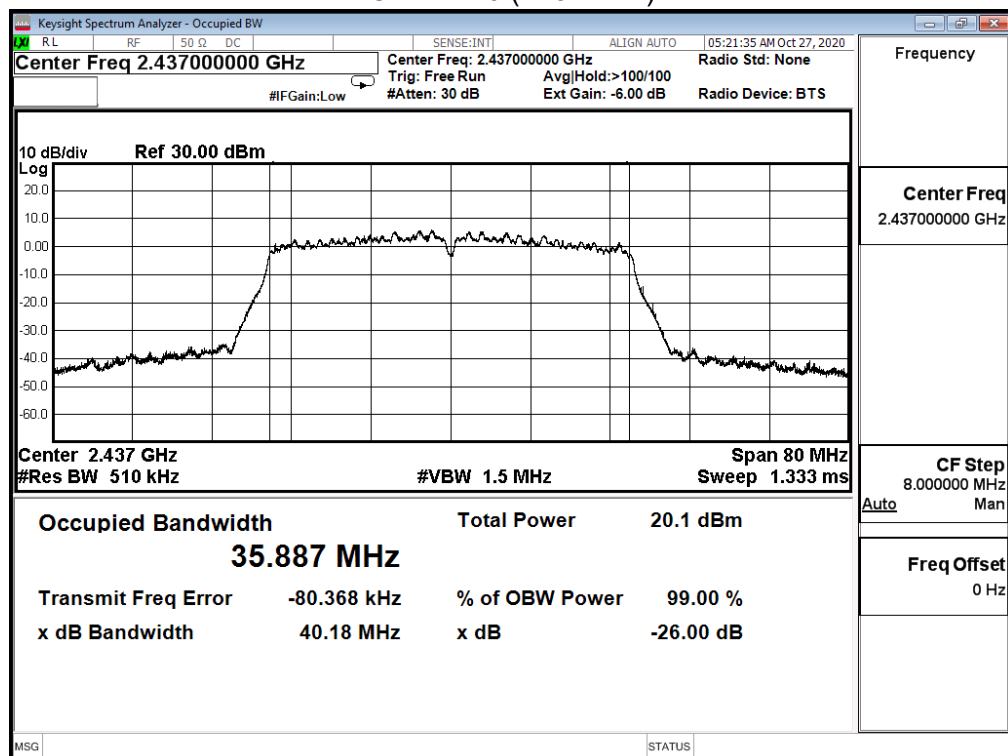
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit Mode (MIMO)		
Date of Test	2020/10/27	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	62

IEEE 802.11n(40M)(ANT 1)			
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
3	2422	35.902	---
6	2437	35.887	---
9	2452	35.866	---

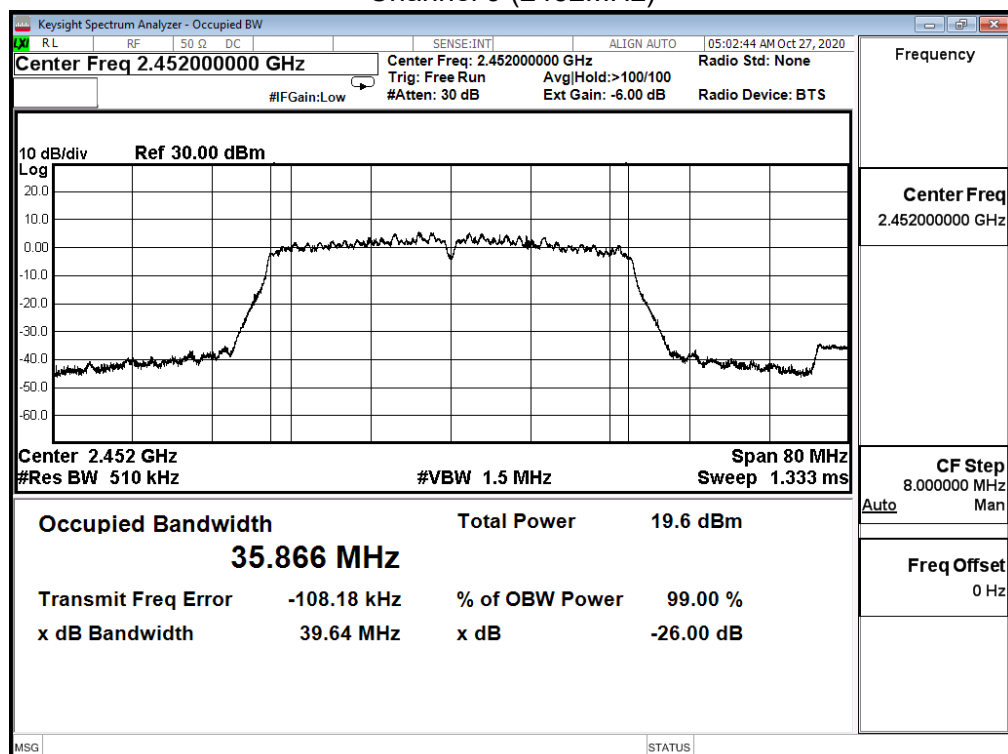
Channel 3 (2422MHz)



Channel 6 (2437MHz)

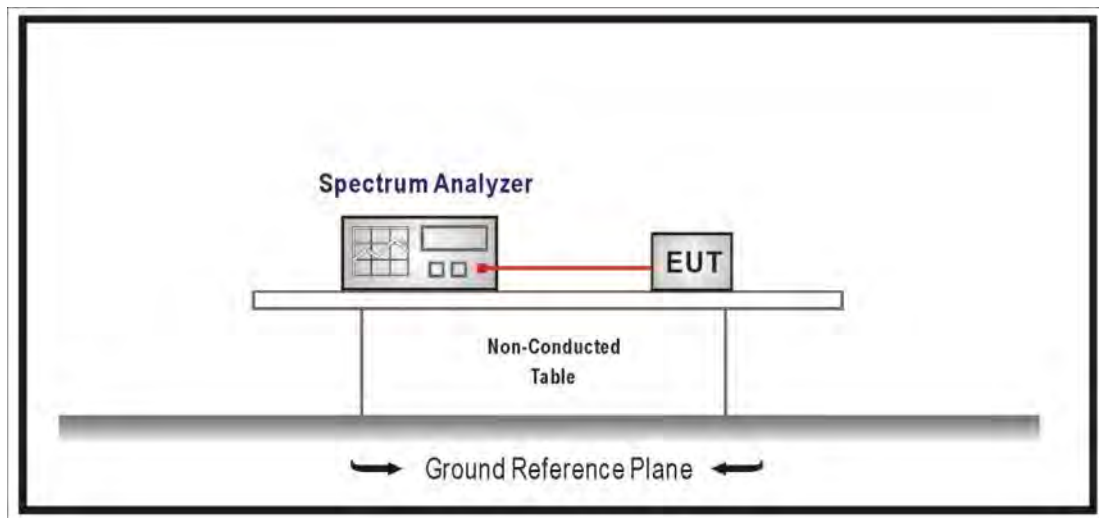


Channel 9 (2452MHz)



9. Power Density

9.1. Test Setup



9.2. Limits

The peak 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.

9.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure section 10.2 of KDB 558074 D01 v05r02 for compliance to FCC 47CFR 15.247 requirements.

Set 3KHz $\leq$ RBW $\leq$ 100 kHz, Set VBW $\geq$ 3xRBW, Sweep time=Auto, Set Peak detector.

9.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2019

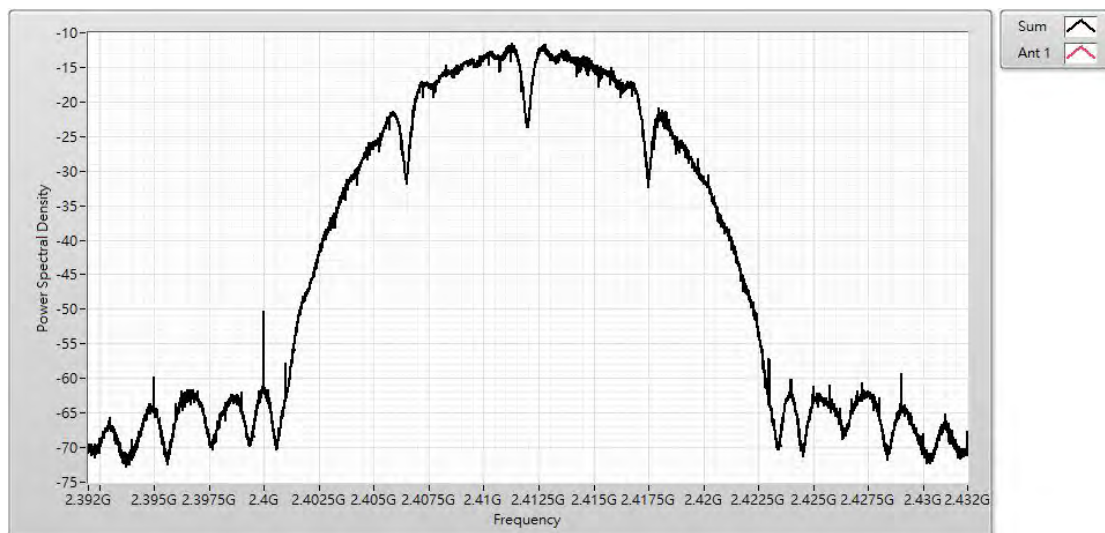
9.5. Test Result

Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode (SISO)		
Date of Test	2020/10/23	Test Site	SR12-H
Temperature(°C)	22	Humidity (%RH)	55

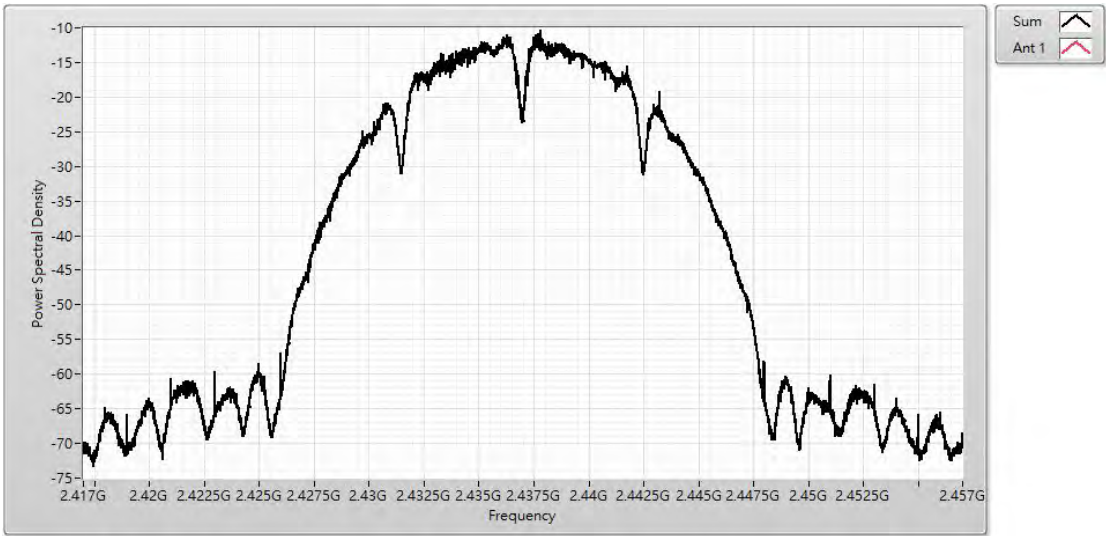
IEEE 802.11b (ANT 0)

Channel No.	Frequency (MHz)	Measure Value (dBm/10kHz)	Limit (dBm/3kHz)	Result
1	2412	-11.550	≤ 8	Pass
6	2437	-10.330	≤ 8	Pass
11	2462	-9.910	≤ 8	Pass

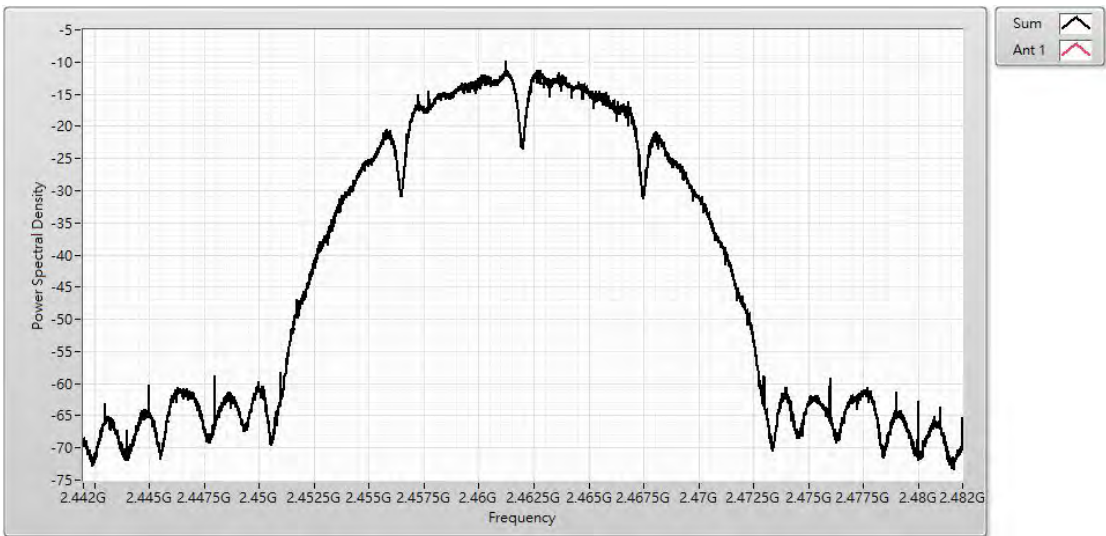
Channel 1 (2412MHz)



Channel 6 (2437MHz)



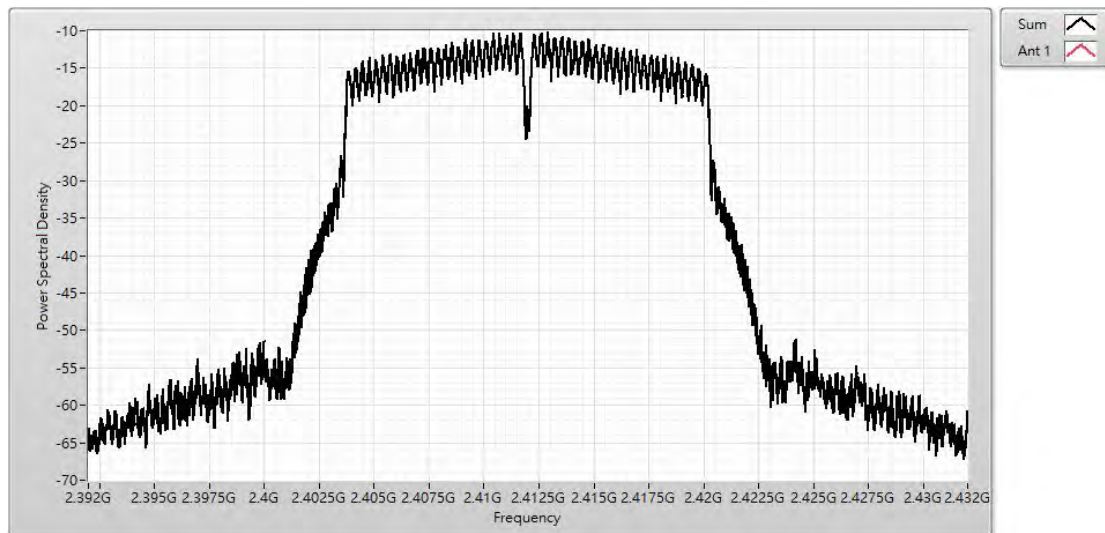
Channel 11 (2462MHz)



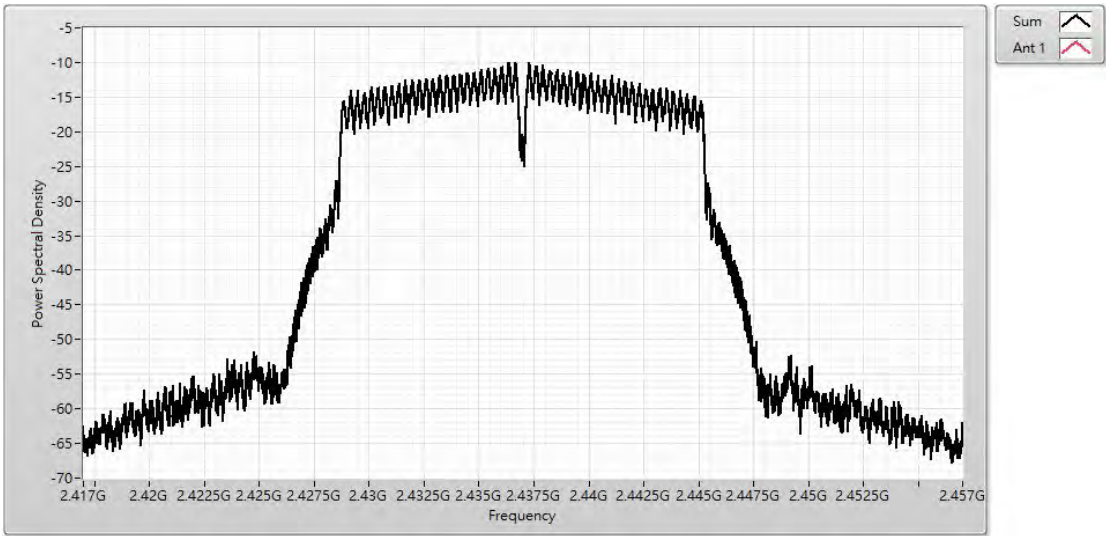
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode (SISO)		
Date of Test	2020/10/23	Test Site	SR12-H
Temperature(°C)	22	Humidity (%RH)	55

IEEE 802.11g (ANT 0)				
Channel No.	Frequency (MHz)	Measure Value (dBm/10kHz)	Limit (dBm/3kHz)	Result
1	2412	-10.140	≤ 8	Pass
6	2437	-9.960	≤ 8	Pass
11	2462	-12.050	≤ 8	Pass

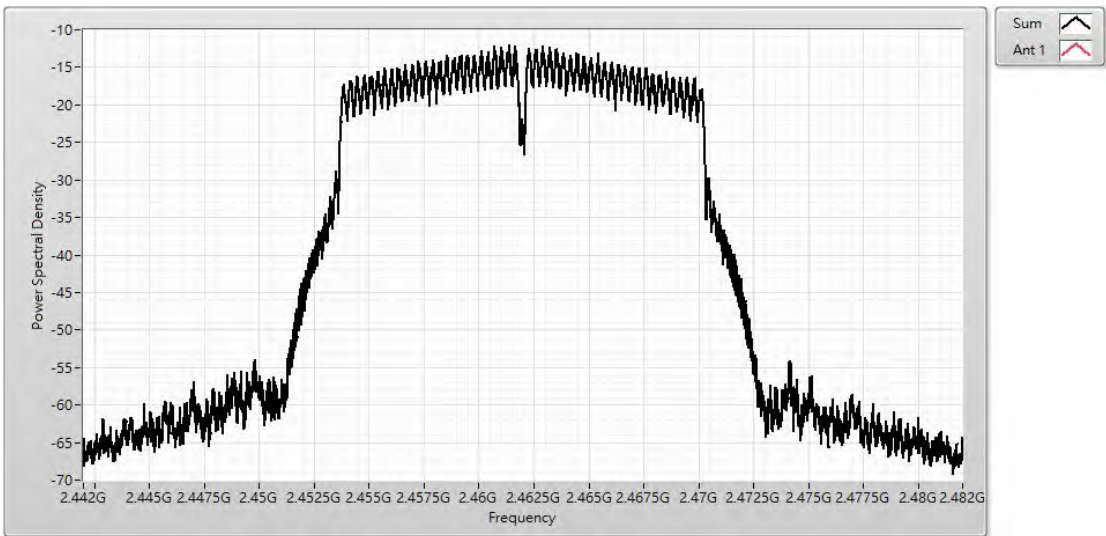
Channel 1 (2412MHz)



Channel 6 (2437MHz)



Channel 11 (2462MHz)



Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode (MIMO)		
Date of Test	2020/10/23	Test Site	SR12-H
Temperature(°C)	22	Humidity (%RH)	55

IEEE 802.11n(20M)(ANT 0+1)				
Channel No.	Frequency (MHz)	Measure Value (dBm/10kHz)	Limit (dBm/3kHz)	Result
1	2412	-7.565	≤ 8	Pass
6	2437	-7.343	≤ 8	Pass
11	2462	-12.776	≤ 8	Pass

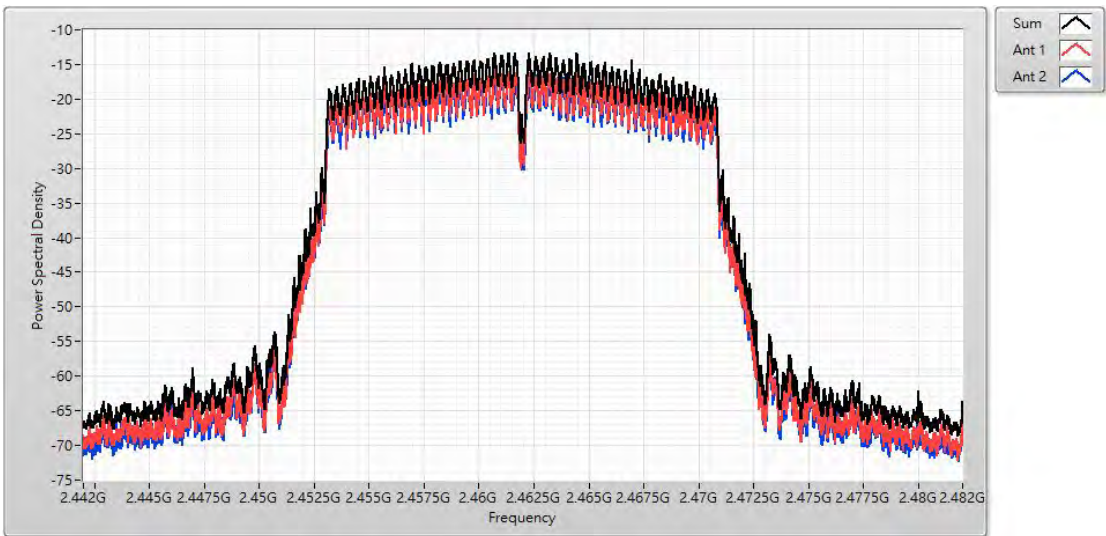
Channel 1 (2412MHz)



Channel 6 (2437MHz)



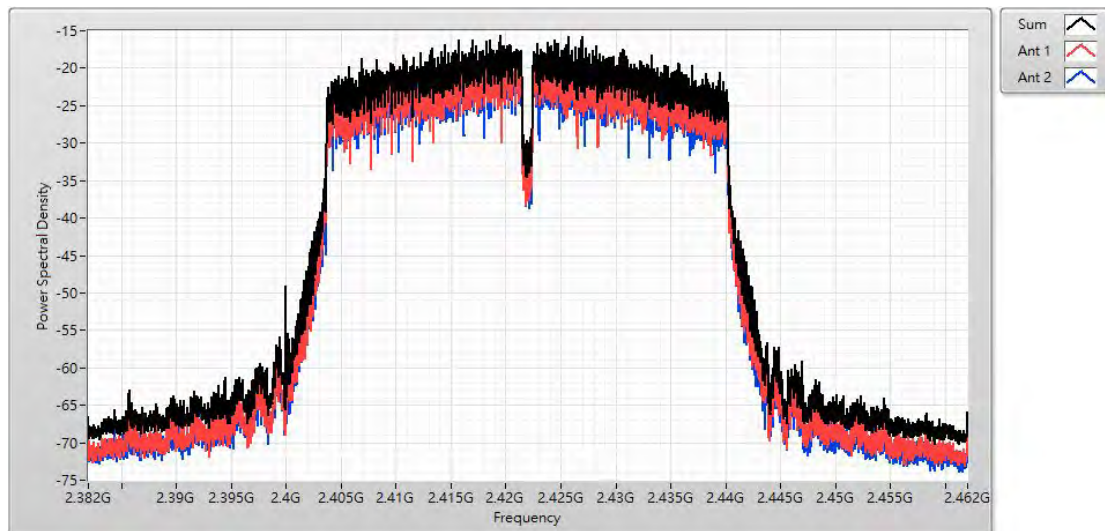
Channel 11 (2462MHz)



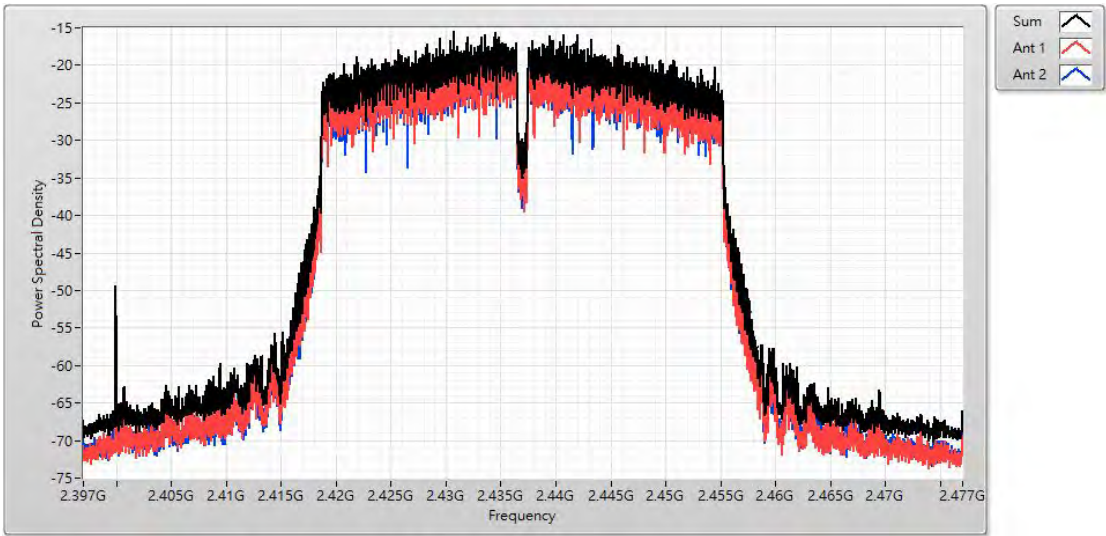
Product	Active Ethernet Fiber 802.11ac Gateway with VoIP		
Test Item	Power Density		
Test Mode	Mode 1: Transmit Mode (MIMO)		
Date of Test	2020/10/23	Test Site	SR12-H
Temperature(°C)	22	Humidity (%RH)	55

IEEE 802.11n(40M)(ANT 0+1)				
Channel No.	Frequency (MHz)	Measure Value (dBm/10kHz)	Limit (dBm/3kHz)	Result
3	2422	-14.952	≤ 8	Pass
6	2437	-15.143	≤ 8	Pass
9	2452	-15.351	≤ 8	Pass

Channel 3 (2422MHz)



Channel 6 (2437MHz)



Channel 9 (2452MHz)

