



Test Report Serial Number:

**45461626 R1.0**

Test Report Date:

**4 December 2020**

Project Number:

**1510**

## **Appendix D - Occupied Bandwidth Measurement Plots**

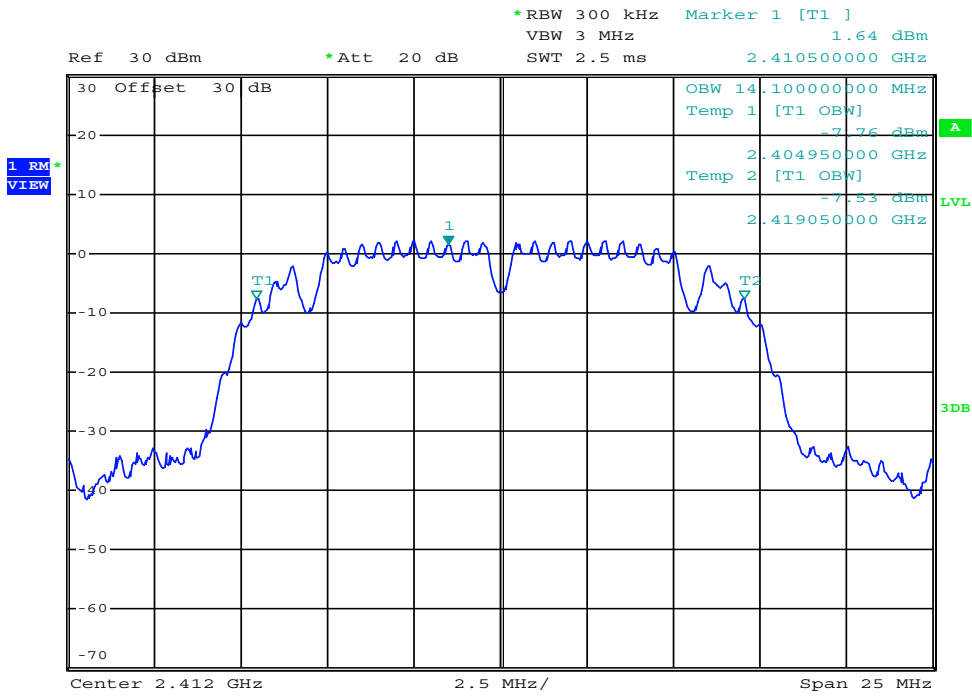
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Occupied Bandwidth Measurement Results (DTS)						
Frequency (MHz)	Modulation	Data Rate (Mbps)	Measured Occupied Bandwidth (MHz)	Minimum Authorized Bandwidth (MHz)	Margin (MHz)	Emission Designator
2412	CCK	1	14.1	0.5	13.6	14M1D1D
2417	CCK	1	14.1		13.6	14M1D1D
2437	CCK	1	14.2		13.7	14M2D1D
2457	CCK	1	14.2		13.7	14M2D1D
2462	CCK	1	14.0		13.5	14M0D1D
2417	CCK	2	14.0		13.5	14M0D1D
2437	CCK	2	14.2		13.7	14M2D1D
2457	CCK	2	14.2		13.7	14M2D1D
2417	DSSS	5.5	13.7		13.2	13M7D1D
2437	DSSS	5.5	13.9		13.4	13M9D1D
2457	DSSS	5.5	13.8		13.3	13M8D1D
2417	DSSS	11	13.8		13.3	13M8D1D
2437	DSSS	11	14.0		13.5	14M0D1D
2457	DSSS	11	13.9		13.4	13M9D1D
2417	OFDM	6	16.8		16.3	16M8D1D
2437	OFDM	6	17.0		16.5	17M0D1D
2457	OFDM	6	16.8		16.3	16M8D1D
2417	OFDM	9	16.8		16.3	16M8D1D
2437	OFDM	9	17.0		16.5	17M0D1D
2457	OFDM	9	16.8		16.3	16M8D1D
2437	OFDM	12	16.9		16.4	16M9D1D
2437	OFDM	18	16.9		16.4	16M9D1D
2437	OFDM	24	16.8		16.3	16M8D1D
2437	OFDM	36	16.8		16.3	16M8D1D
2437	OFDM	48	16.8		16.3	16M8D1D
2437	OFDM	54	16.8		16.3	16M8D1D
2437	MCS0	-	17.9		17.4	17M9D1D
2437	MCS1	-	17.8		17.3	17M8D1D
2437	MCS3	-	17.9		17.4	17M9D1D
2437	MCS7	-	17.9		17.4	17M9D1D
						<b>Complies</b>

Margin = Measured BW - Minimum Authorized BW

# Occupied Bandwidth



Date: 1.DEC.2020 16:44:32

Channel Frequency:

**2412.00 MHz**

DUT Modulation:

**CCK**

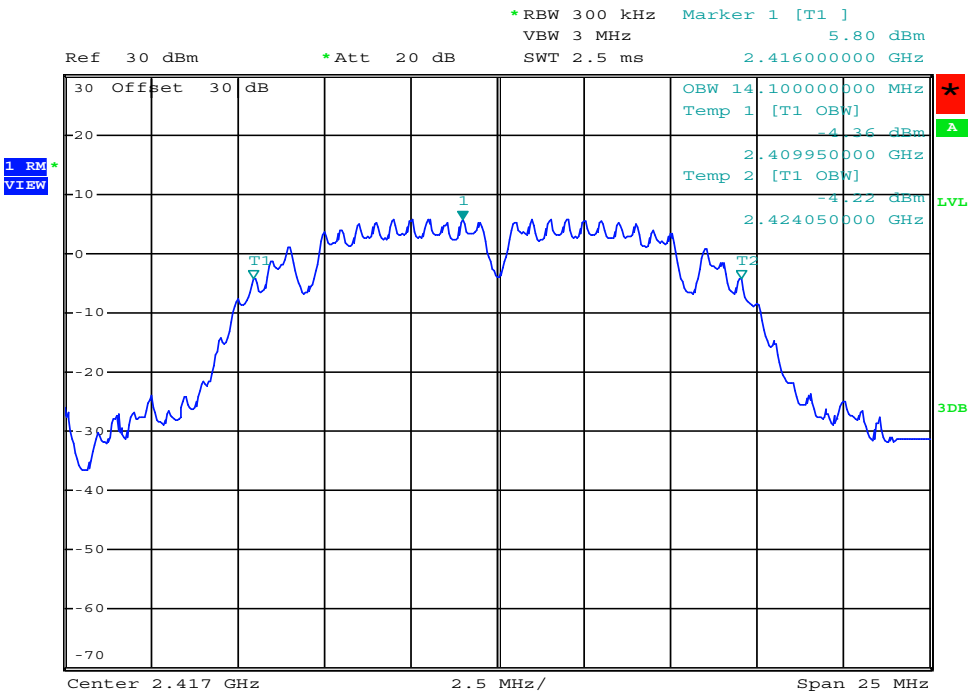
Data Rate:

**1 Mbps**

Measured Occupied Bandwidth:

**14.10 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:46:02

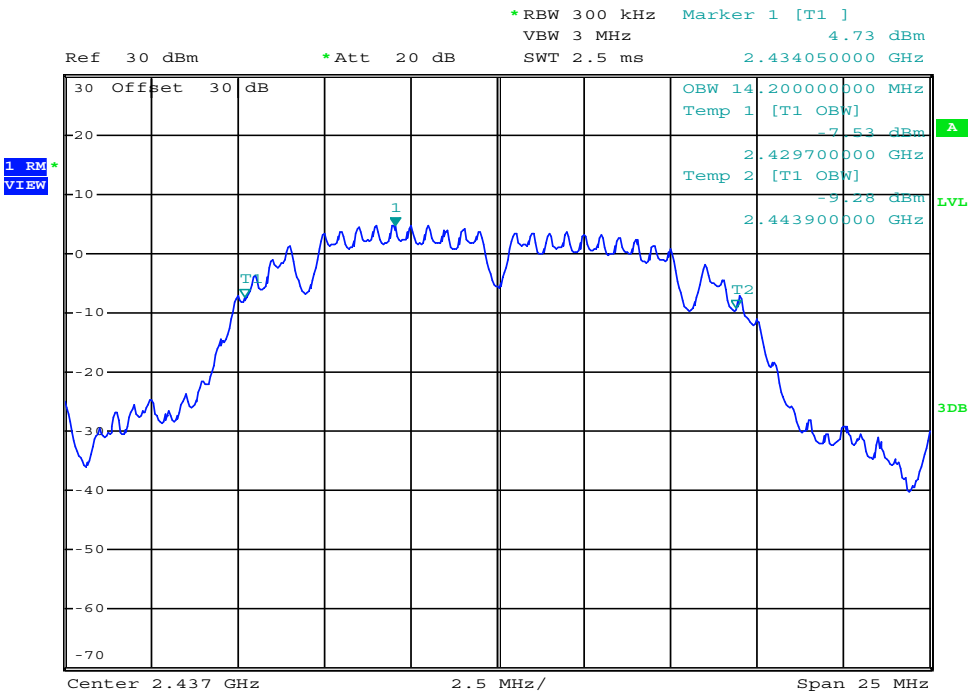
Channel Frequency:  
**2417.00 MHz**

DUT Modulation:  
**CCK**

Data Rate:  
**1 Mbps**

Measured Occupied Bandwidth:  
**14.10 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:47:18

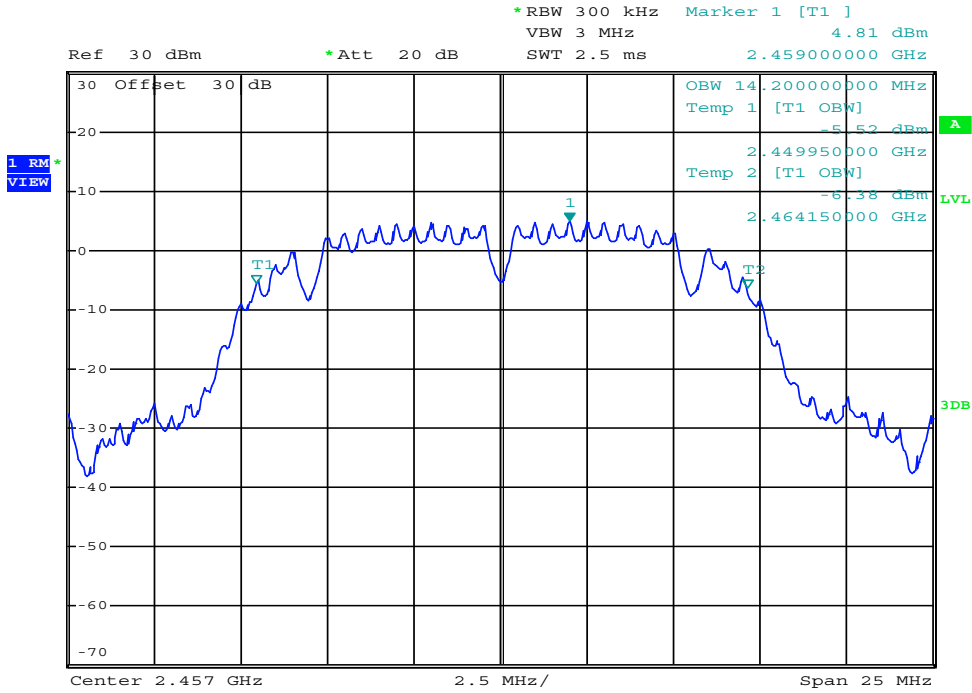
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**CCK**

Data Rate:  
**1 Mbps**

Measured Occupied Bandwidth:  
**14.20 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:48:08

Channel Frequency:

**2457.00 MHz**

DUT Modulation:

**CCK**

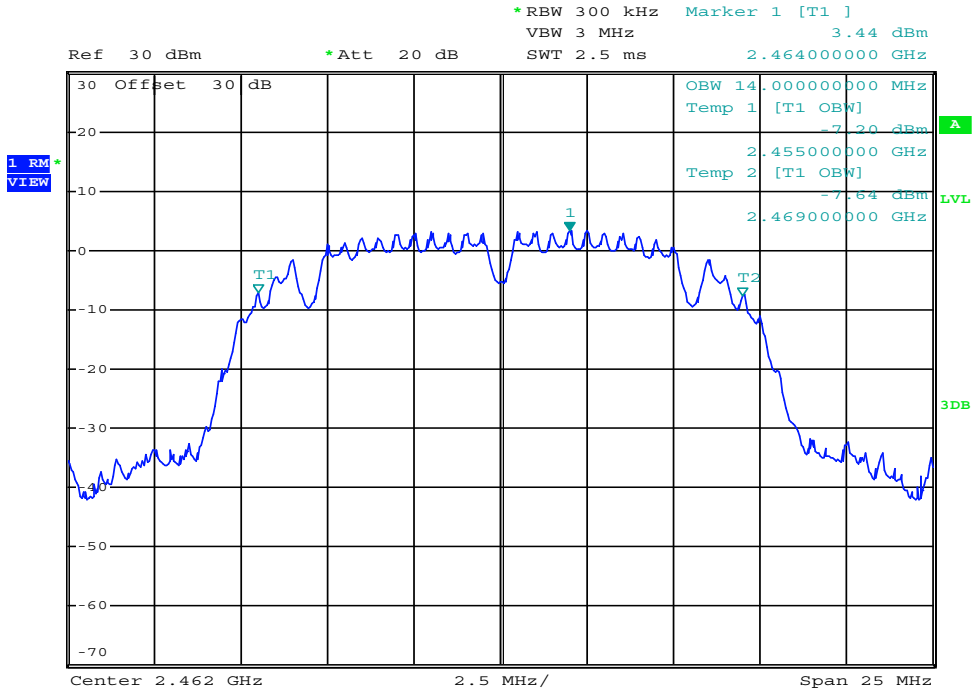
Data Rate:

**1 Mbps**

Measured Occupied Bandwidth:

**14.20 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:48:45

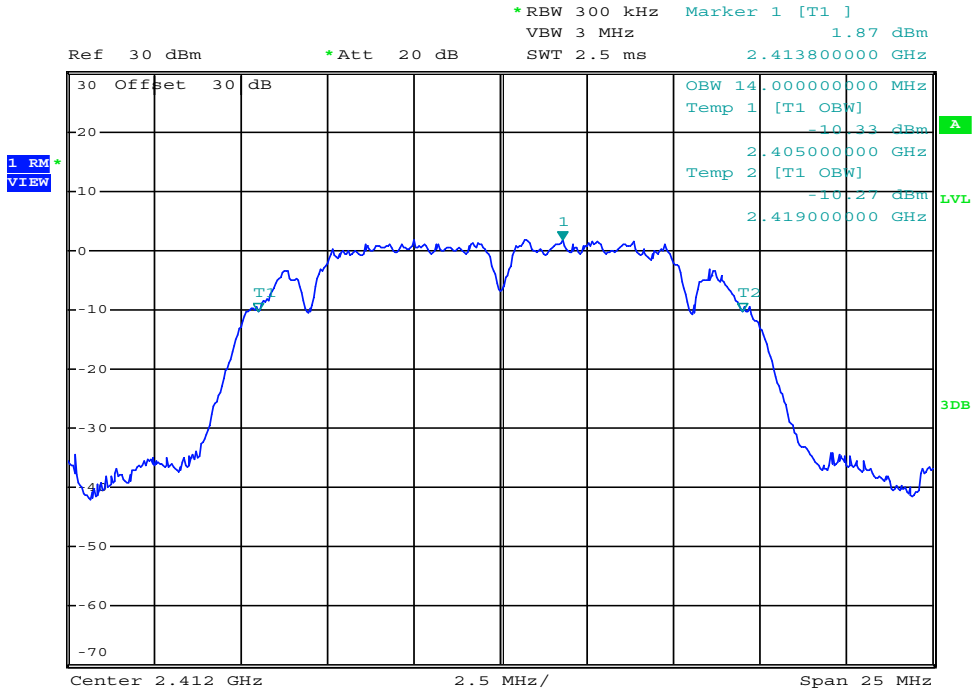
Channel Frequency:  
**2462.00 MHz**

DUT Modulation:  
**CCK**

Data Rate:  
**1 Mbps**

Measured Occupied Bandwidth:  
**14.00 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:53:39

Channel Frequency:  
**2417.00 MHz**

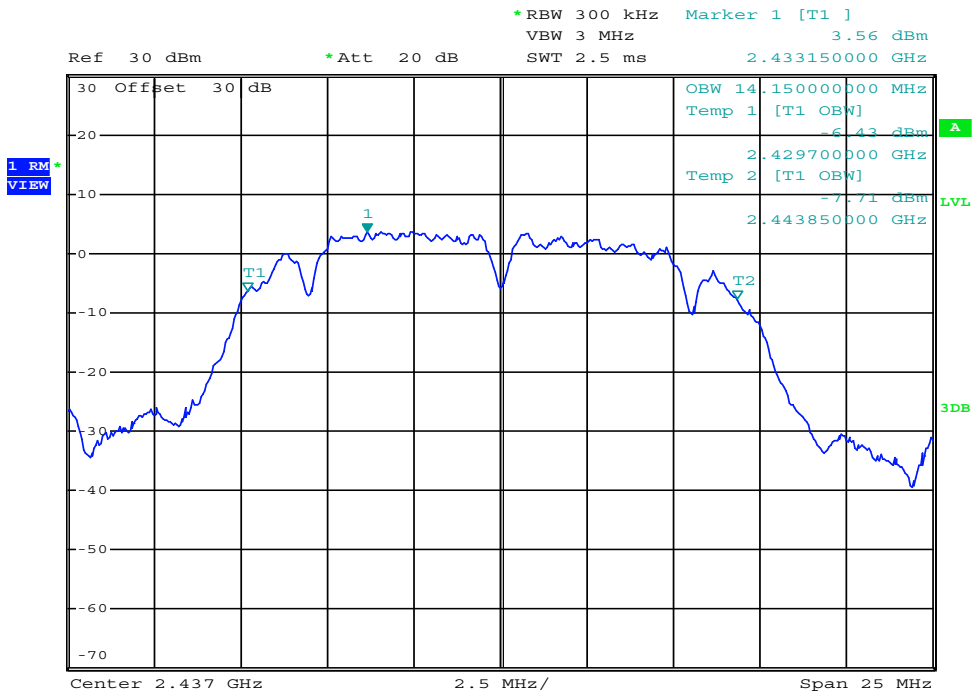
DUT Modulation:  
**CCK**

Data Rate:  
**2 Mbps**

Measured Occupied Bandwidth:  
**14.00 MHz**



# Occupied Bandwidth



Date: 1.DEC.2020 16:52:19

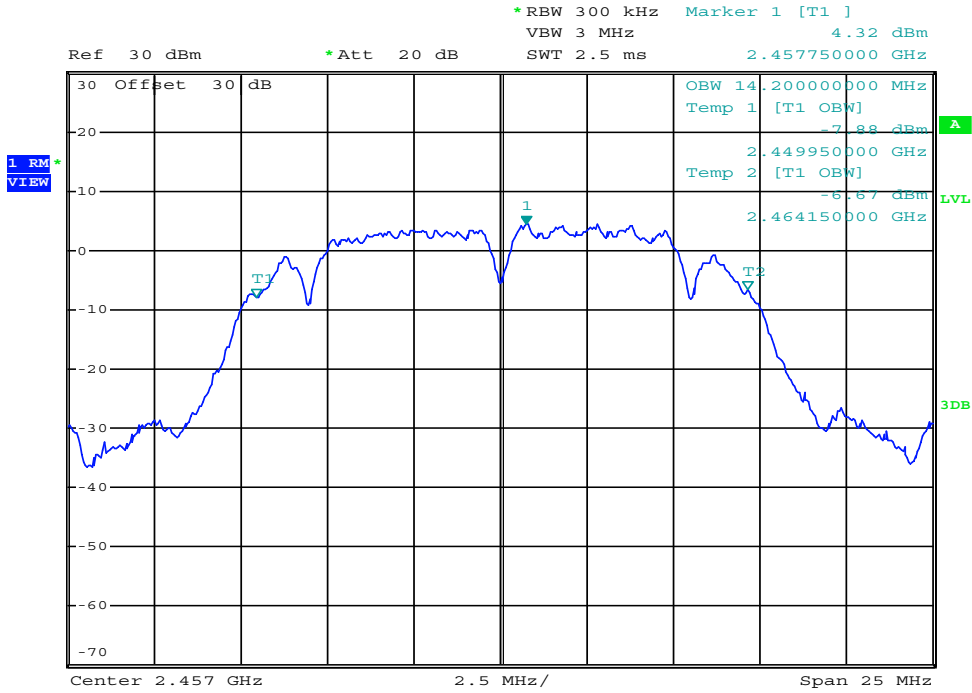
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**CCK**

Data Rate:  
**2 Mbps**

Measured Occupied Bandwidth:  
**14.15 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:51:39

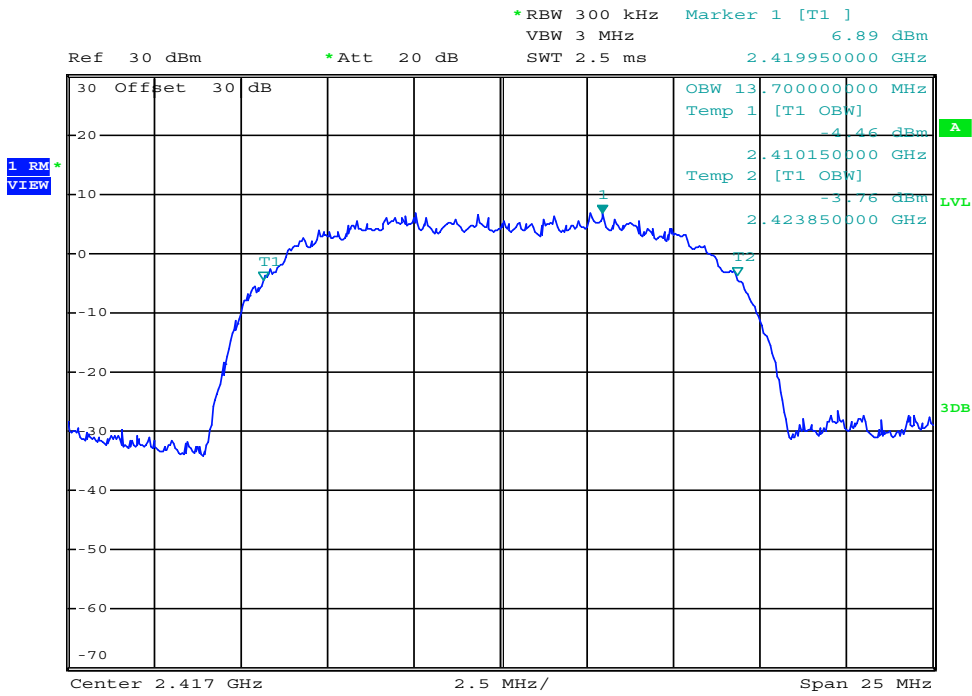
Channel Frequency:  
**2457.00 MHz**

DUT Modulation:  
**CCK**

Data Rate:  
**2 Mbps**

Measured Occupied Bandwidth:  
**14.20 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:55:26

Channel Frequency:

**2417.00 MHz**

DUT Modulation:

**DSSS**

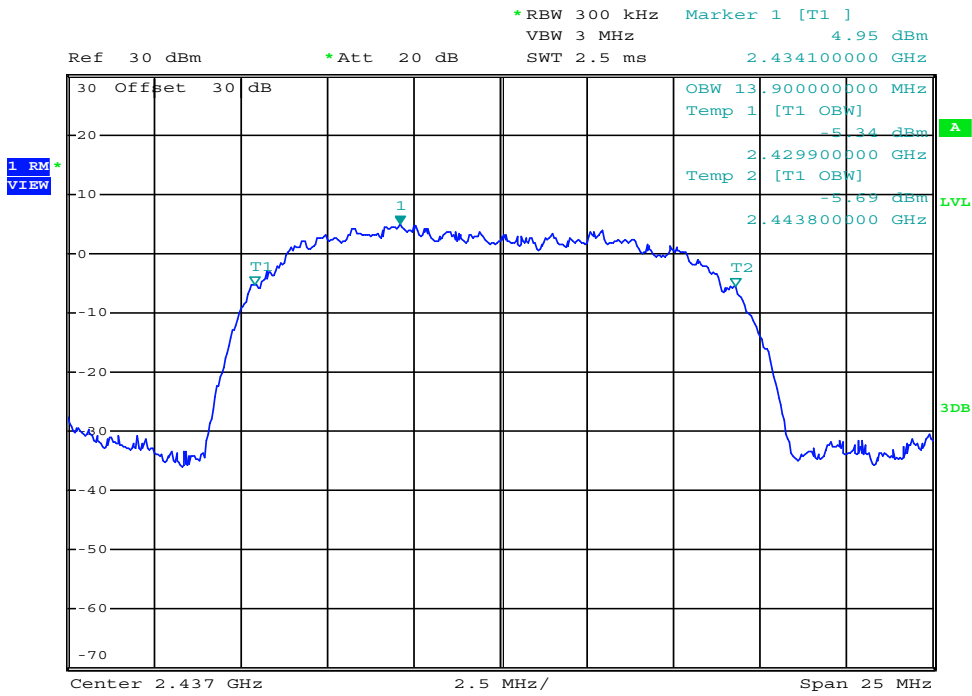
Data Rate:

**5.5 Mbps**

Measured Occupied Bandwidth:

**13.70 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:56:07

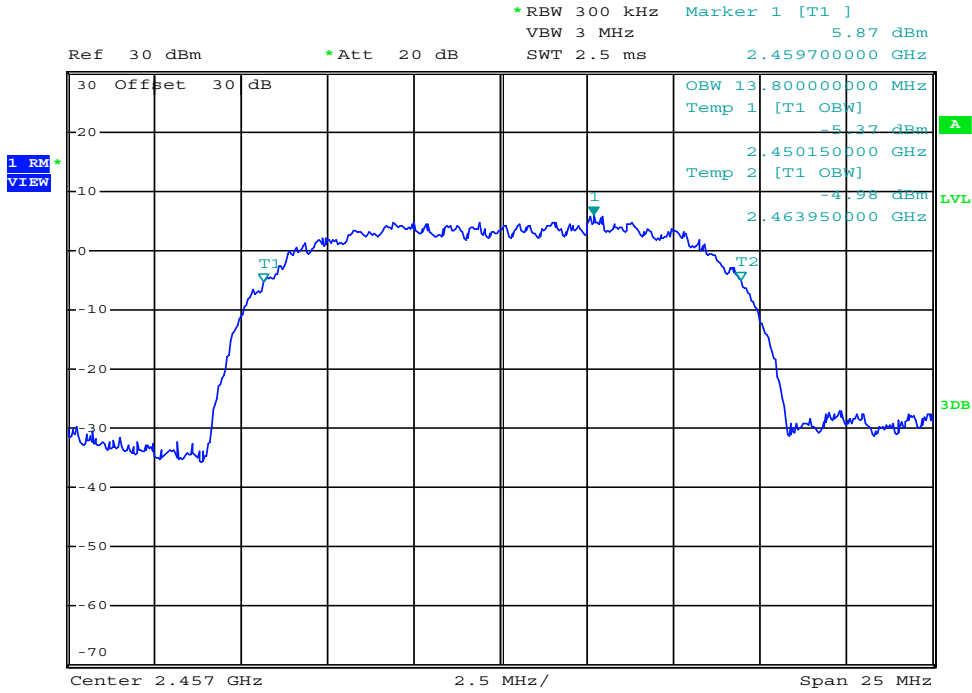
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**DSSS**

Data Rate:  
**5.5 Mbps**

Measured Occupied Bandwidth:  
**13.90 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 16:56:55

Channel Frequency:

**2457.00 MHz**

DUT Modulation:

**DSSS**

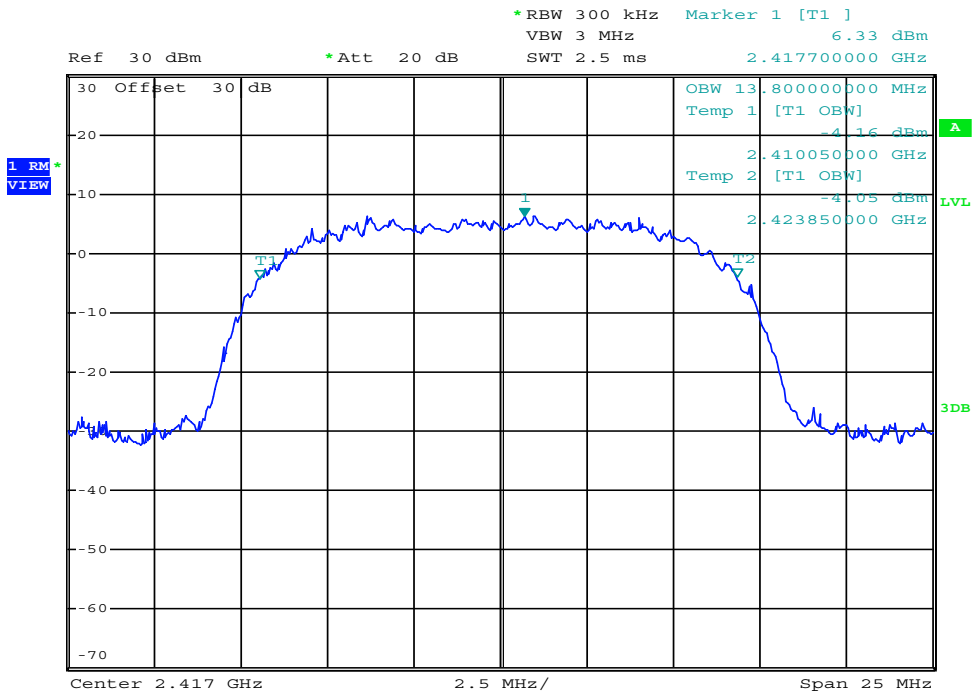
Data Rate:

**5.5 Mbps**

Measured Occupied Bandwidth:

**13.80 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:02:06

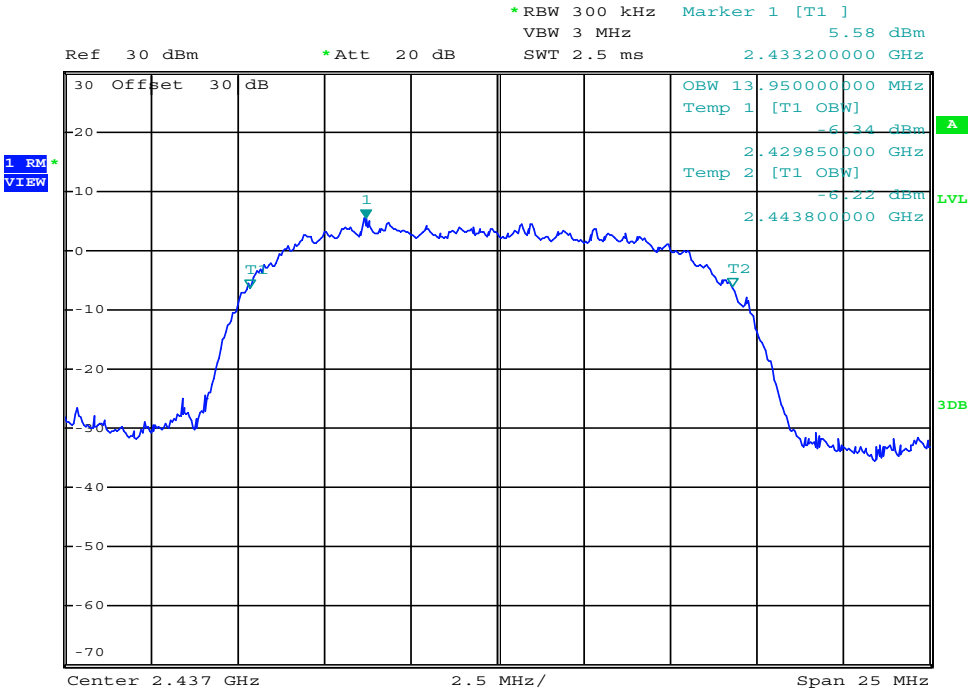
Channel Frequency:  
**2417.00 MHz**

DUT Modulation:  
**DSSS**

Data Rate:  
**11 Mbps**

Measured Occupied Bandwidth:  
**13.80 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:01:24

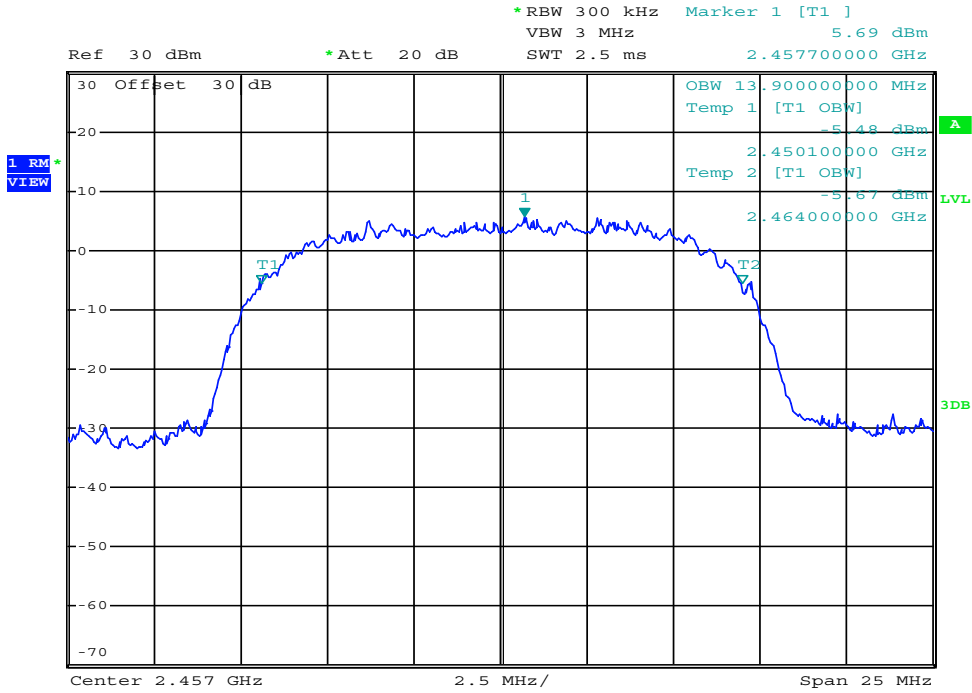
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**DSSS**

Data Rate:  
**11 Mbps**

Measured Occupied Bandwidth:  
**13.95 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:00:40

Channel Frequency:

**2457.00 MHz**

DUT Modulation:

**DSSS**

Data Rate:

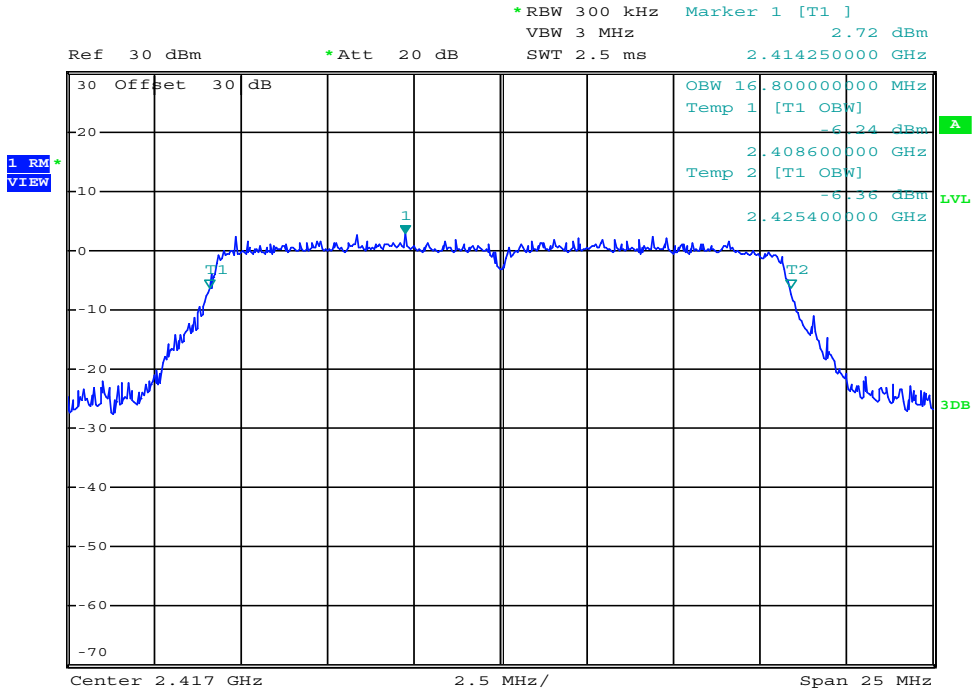
**11 Mbps**

Measured Occupied Bandwidth:

**13.90 MHz**



# Occupied Bandwidth



Date: 1.DEC.2020 17:03:49

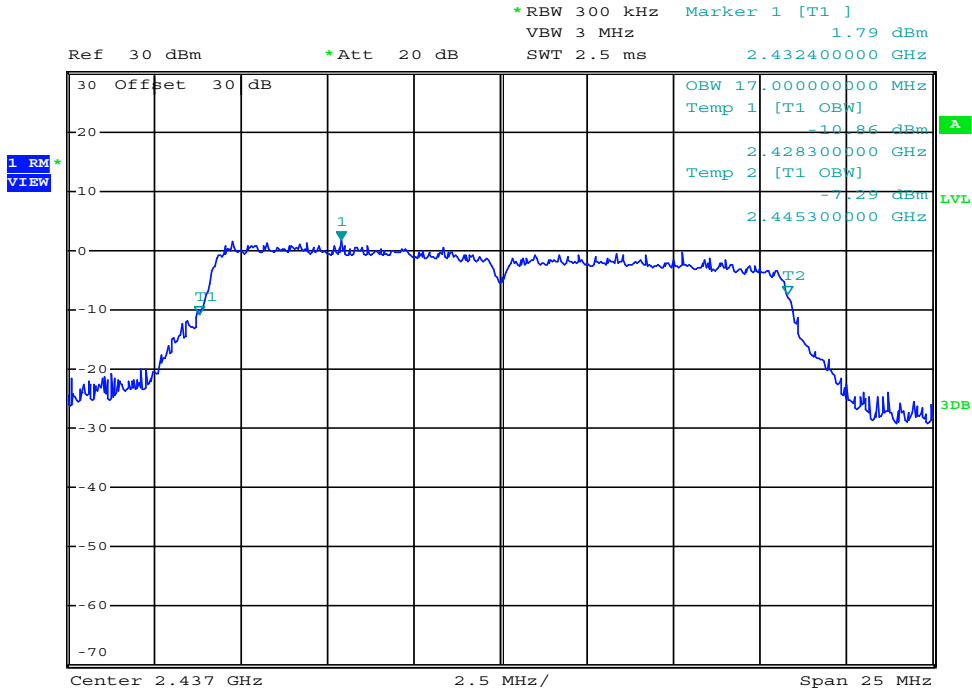
Channel Frequency:  
**2417.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**6 Mbps**

Measured Occupied Bandwidth:  
**16.80 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:05:43

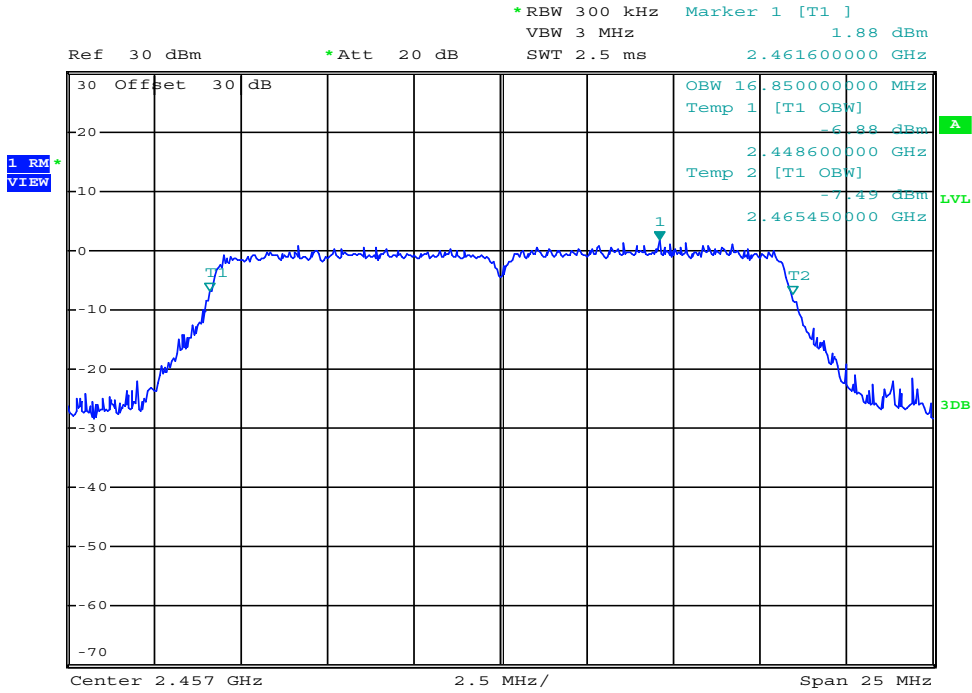
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**6 Mbps**

Measured Occupied Bandwidth:  
**17.00 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:06:23

Channel Frequency:  
**2457.00 MHz**

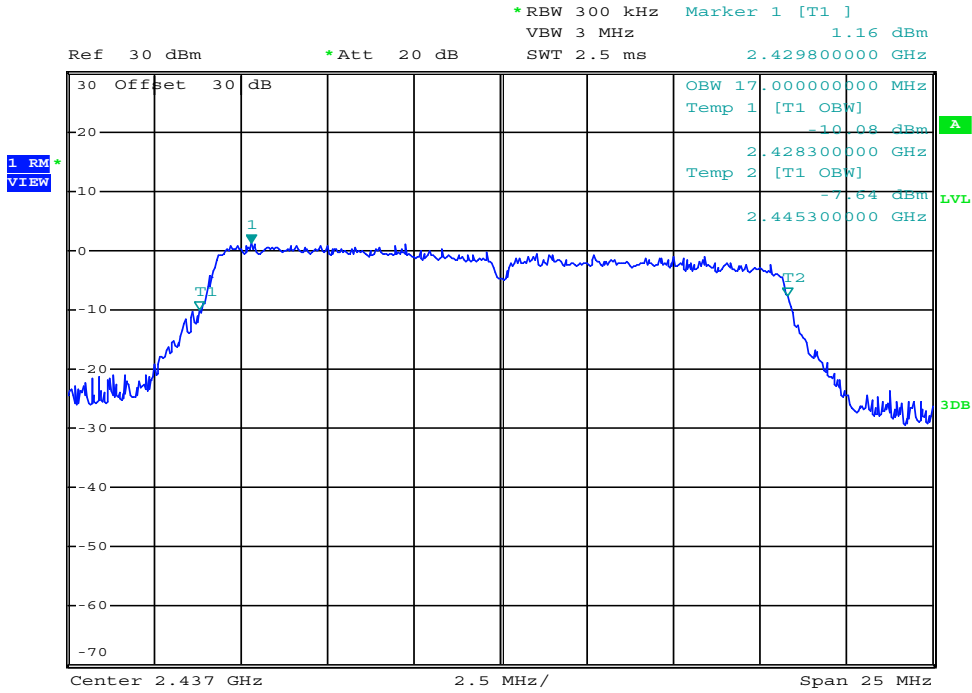
DUT Modulation:  
**OFDM**

Data Rate:  
**6 Mbps**

Measured Occupied Bandwidth:  
**16.85 MHz**



# Occupied Bandwidth



Date: 1.DEC.2020 17:09:35

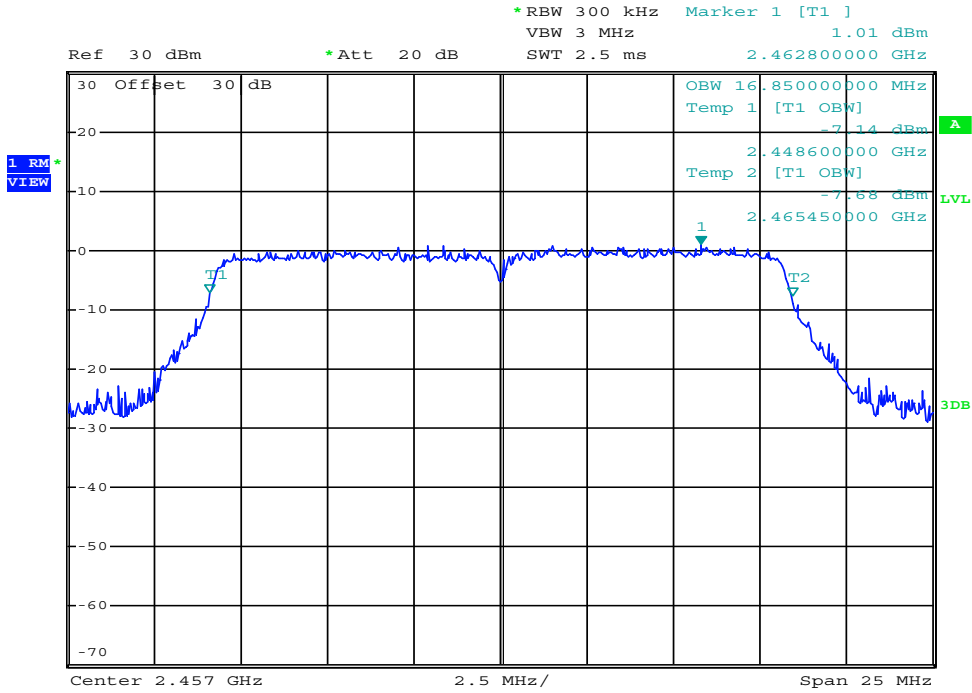
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**9 Mbps**

Measured Occupied Bandwidth:  
**17.00 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:08:57

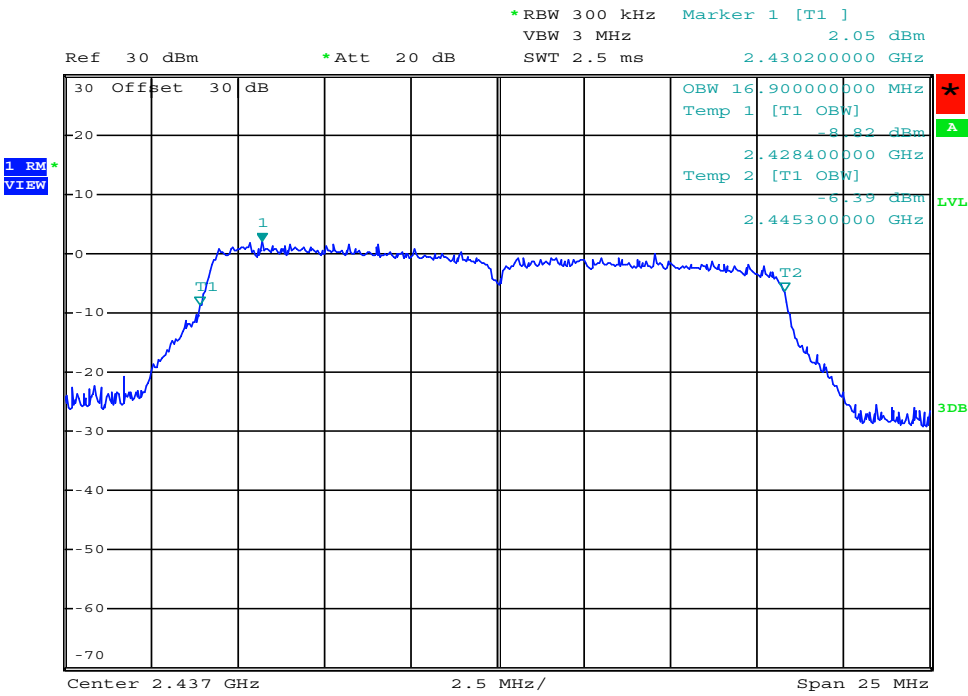
Channel Frequency:  
**2457.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**9 Mbps**

Measured Occupied Bandwidth:  
**16.85 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:11:43

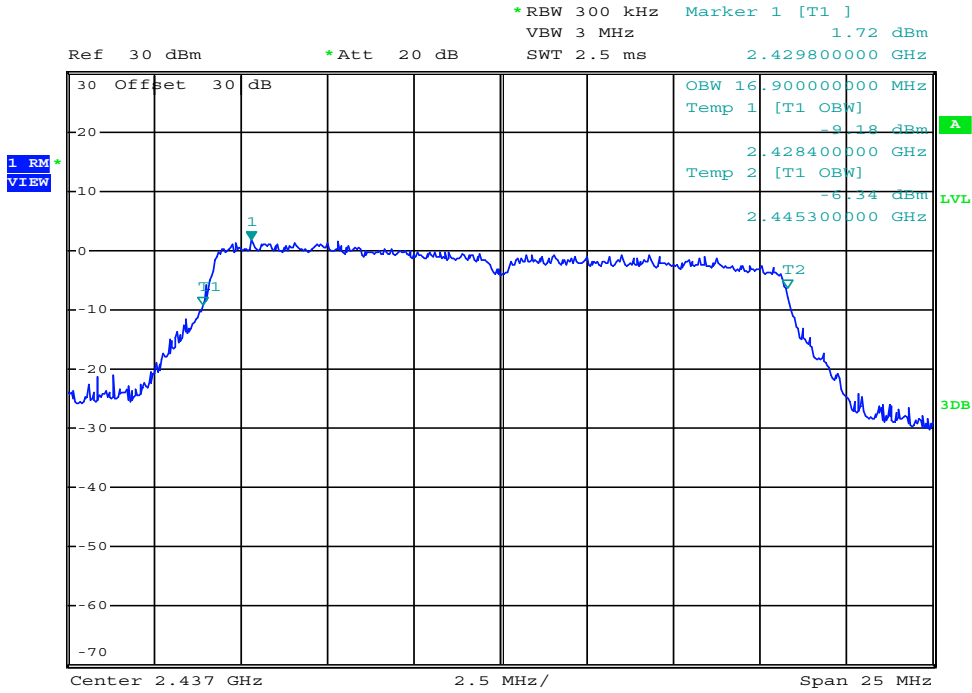
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**12 Mbps**

Measured Occupied Bandwidth:  
**16.90 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:12:39

Channel Frequency:  
**2437.00 MHz**

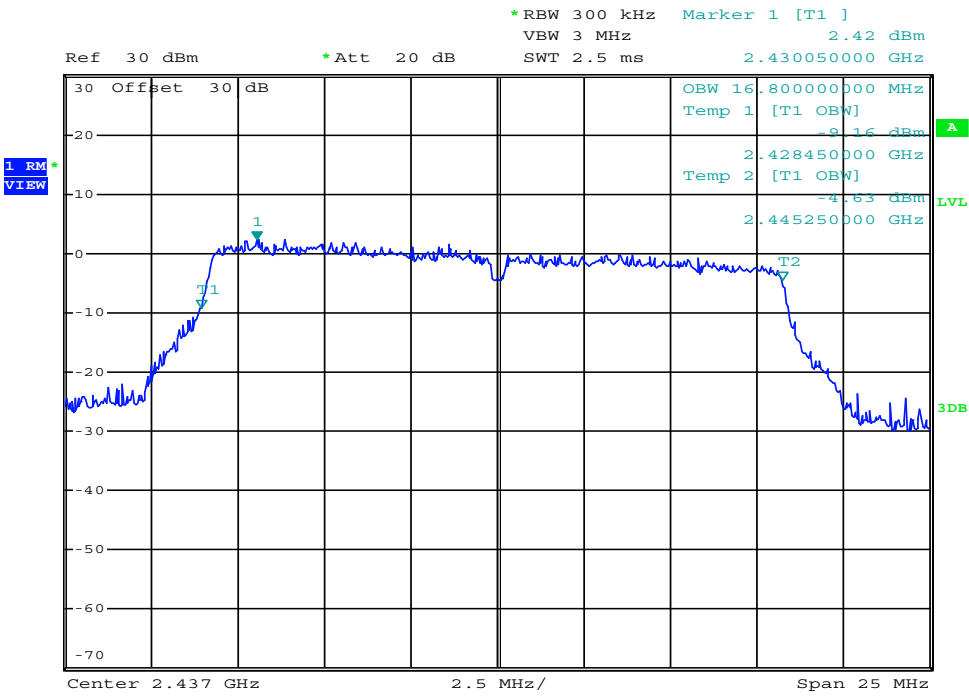
DUT Modulation:  
**OFDM**

Data Rate:  
**18 Mbps**

Measured Occupied Bandwidth:  
**16.90 MHz**



# Occupied Bandwidth



Date: 1.DEC.2020 17:13:14

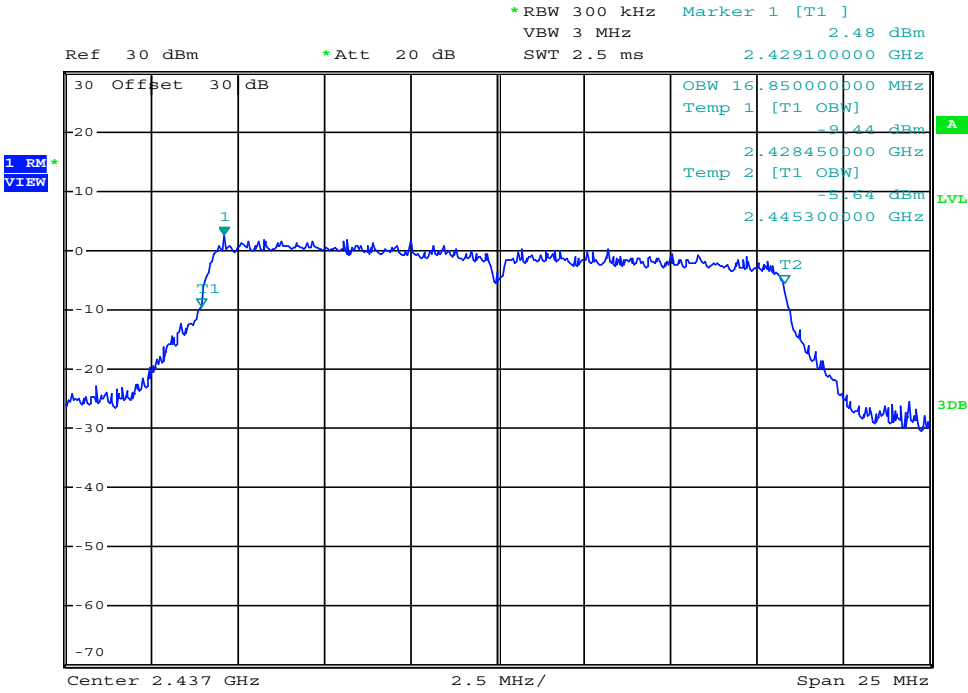
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**24 Mbps**

Measured Occupied Bandwidth:  
**16.80 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:13:53

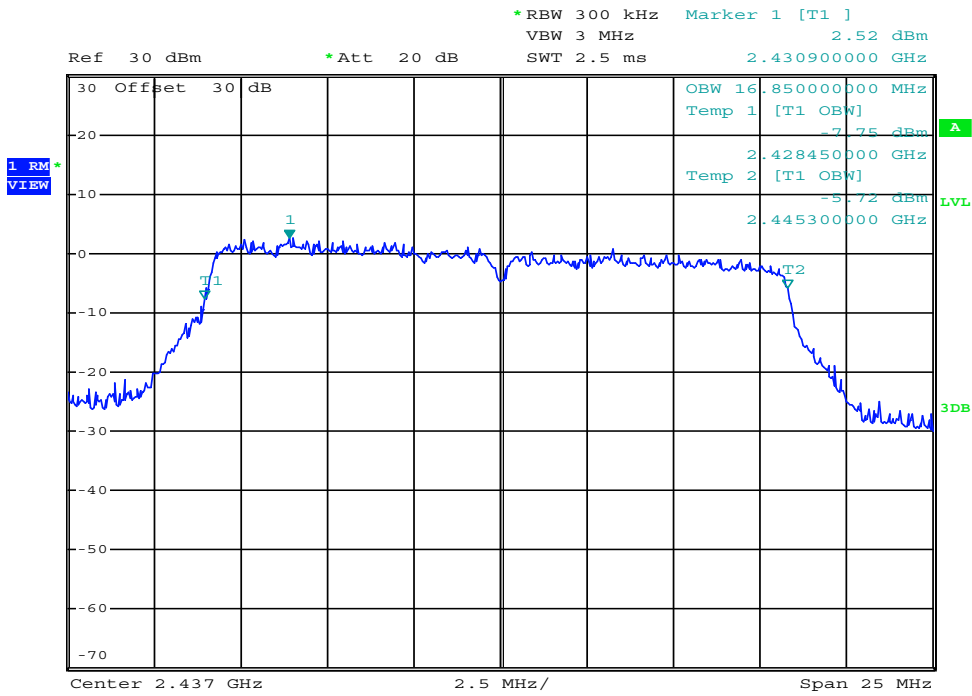
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**36 Mbps**

Measured Occupied Bandwidth:  
**16.85 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:14:35

Channel Frequency:

**2437.00 MHz**

DUT Modulation:

**OFDM**

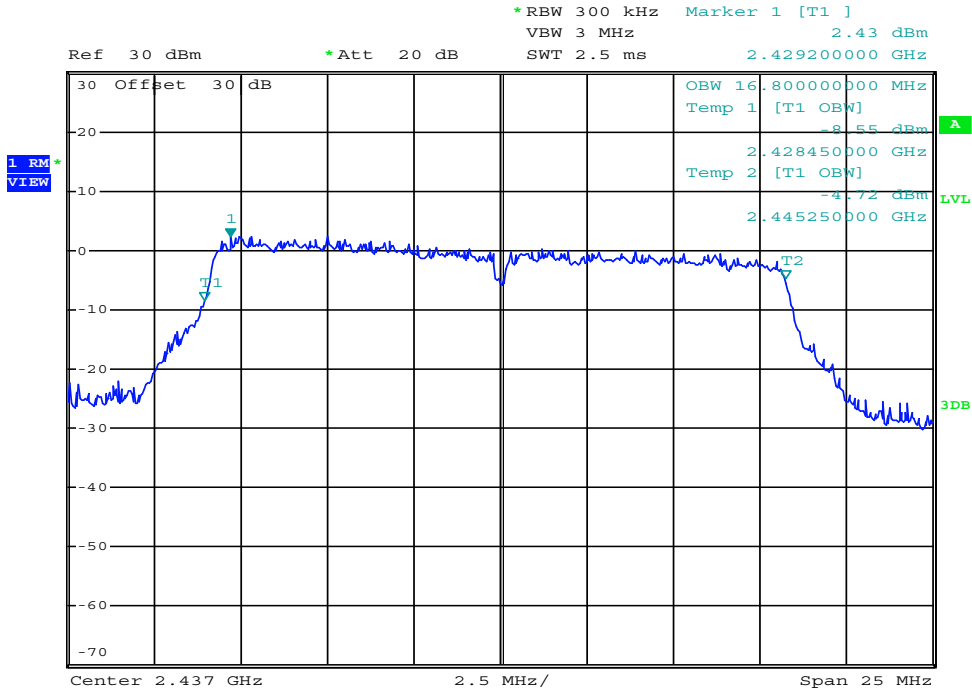
Data Rate:

**48 Mbps**

Measured Occupied Bandwidth:

**16.85 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:15:13

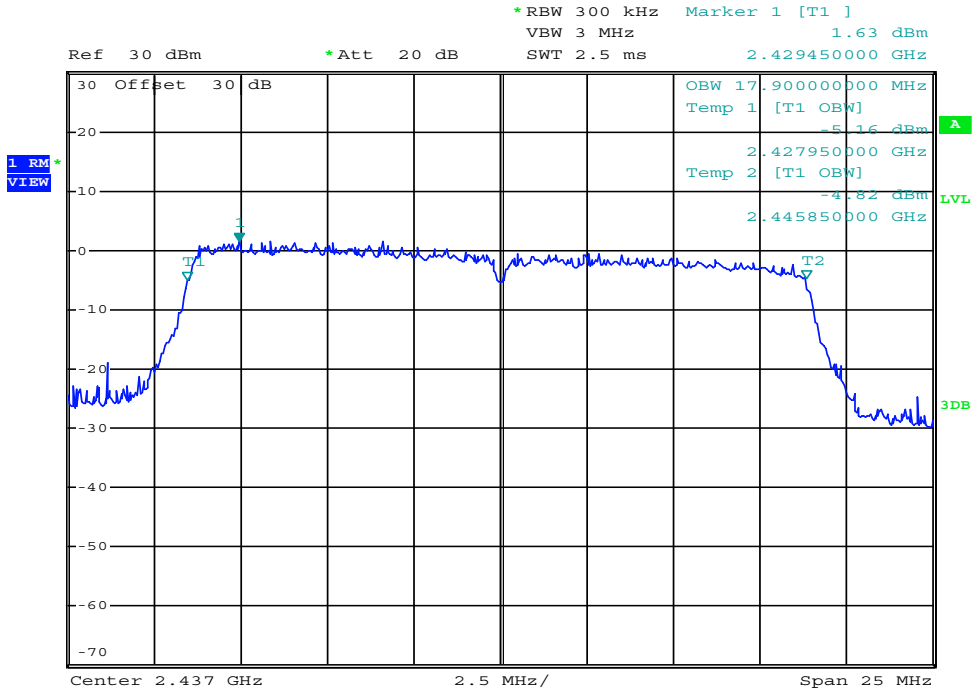
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**OFDM**

Data Rate:  
**54 Mbps**

Measured Occupied Bandwidth:  
**16.80 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:17:20

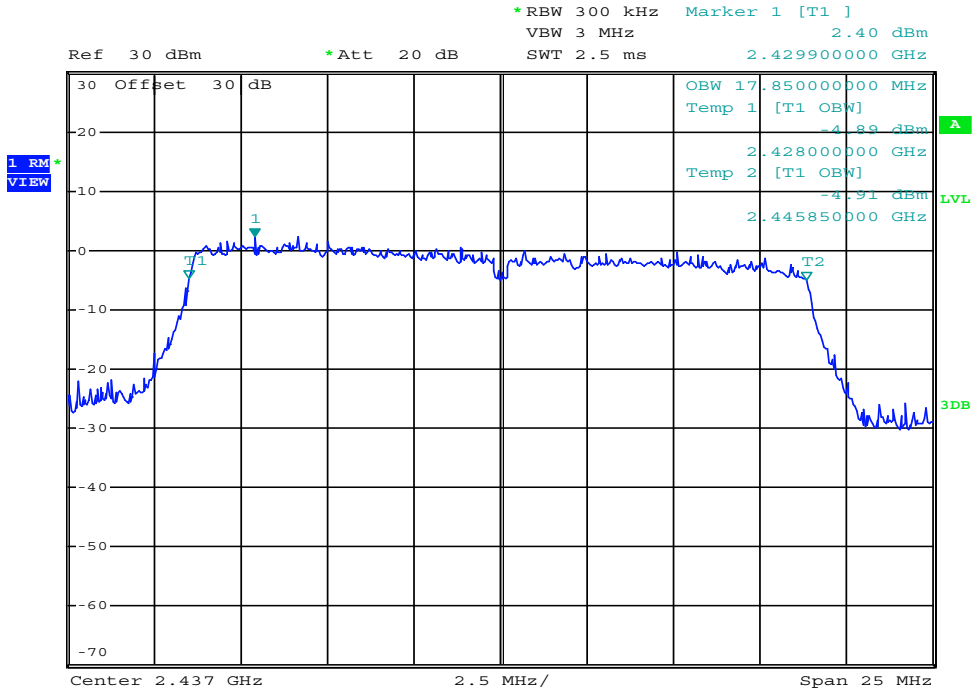
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**MCS0**

Data Rate:  
- Mbps

Measured Occupied Bandwidth:  
**17.90 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:18:00

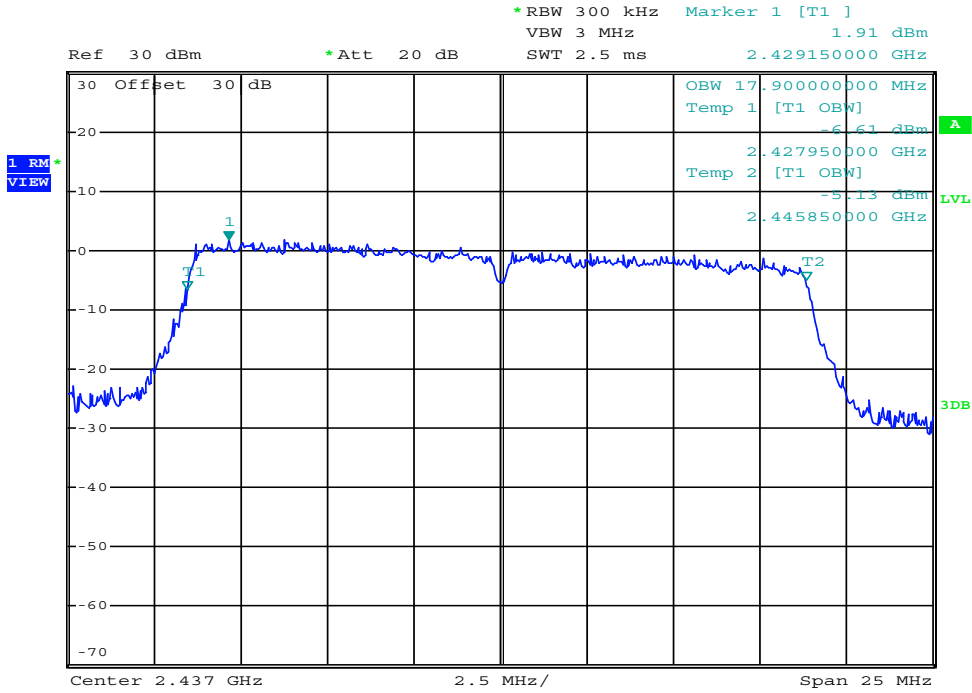
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**MCS1**

Data Rate:  
- Mbps

Measured Occupied Bandwidth:  
**17.85 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:18:37

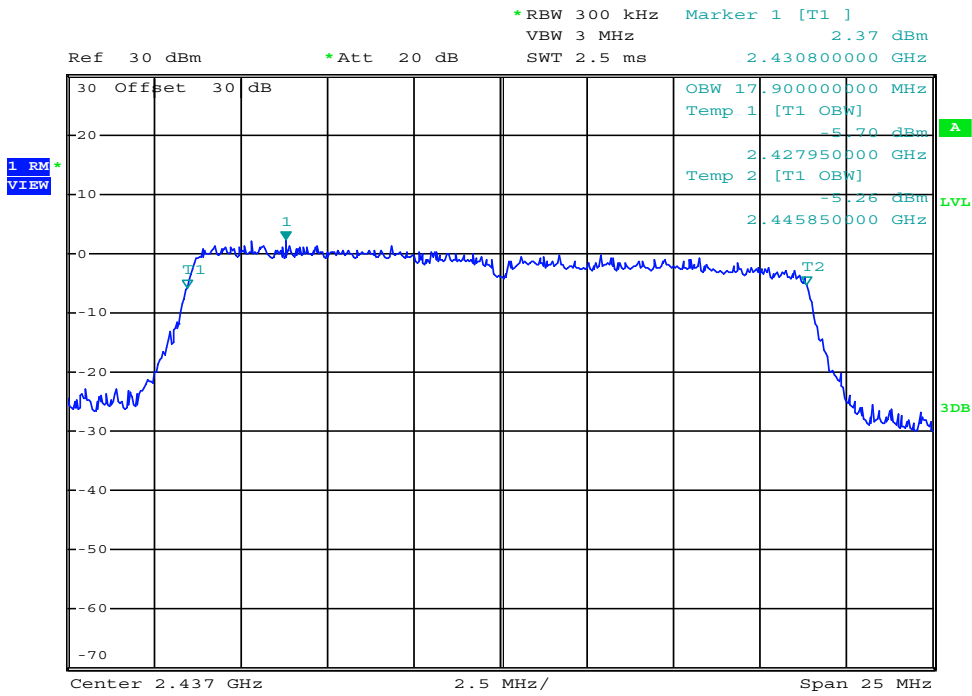
Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**MCS3**

Data Rate:  
- Mbps

Measured Occupied Bandwidth:  
**17.90 MHz**

# Occupied Bandwidth



Date: 1.DEC.2020 17:19:15

Channel Frequency:  
**2437.00 MHz**

DUT Modulation:  
**MCS7**

Data Rate:  
- Mbps

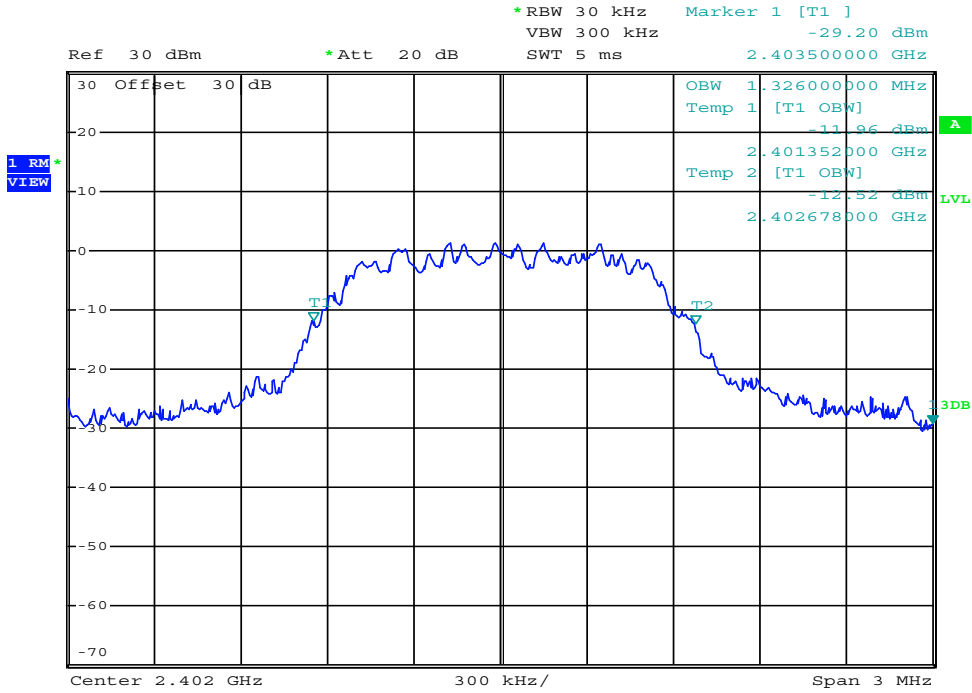
Measured Occupied Bandwidth:  
**17.90 MHz**



<b>Occupied Bandwidth Measurement Results (DSS)</b>						
<b>Frequency (MHz)</b>	<b>Modulation</b>	<b>Data Rate (Mbps)</b>	<b>Measured Occupied Bandwidth (MHz)</b>	<b>Minimum Authorized Bandwidth (MHz)</b>	<b>Margin (kHz)</b>	<b>Emission Designator</b>
2402	Pi/4-DQPSK	2	1.3	0.5	0.8	1M32D1D
2442	Pi/4-DQPSK	2	1.3		0.8	1M33D1D
2480	Pi/4-DQPSK	2	1.3		0.8	1M30D1D
2402	8-DPSK	3	1.3		0.8	1M31D1D
2442	8-DPSK	3	1.3		0.8	1M33D1D
2480	8-DPSK	3	1.3		0.8	1M30D1D
						<b>Complies</b>

Margin = Measured BW - Minimum Authorized BW

# Occupied Bandwidth



Date: 2.DEC.2020 15:15:24

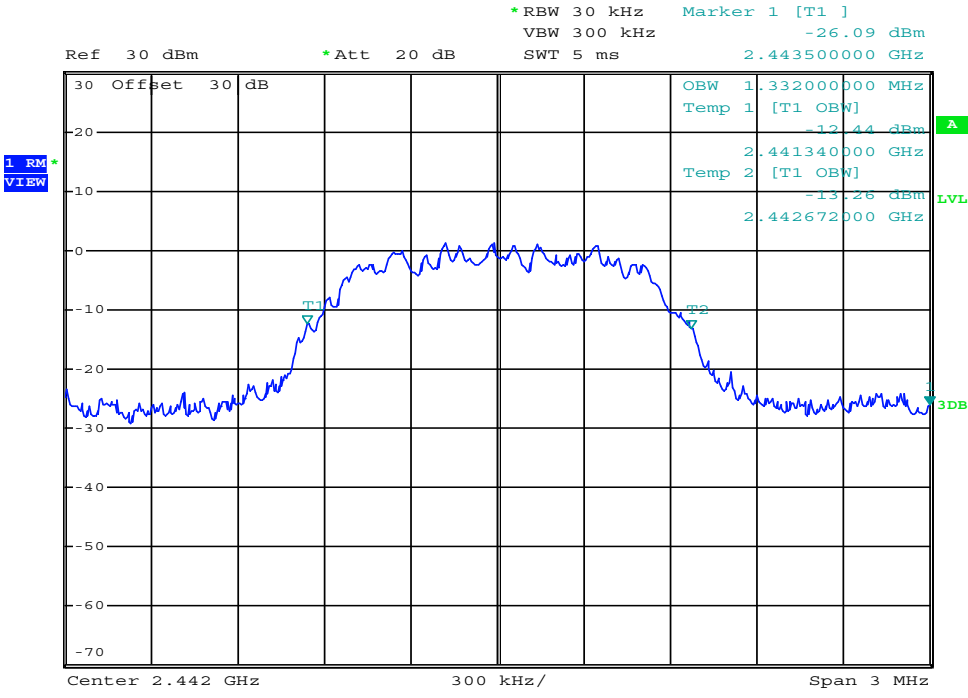
Channel Frequency:  
**2402.00 MHz**

DUT Modulation:  
**Pi/4-DQPSK**

Data Rate:  
**2 Mbps**

Measured Occupied Bandwidth:  
**1.32 MHz**

# Occupied Bandwidth



Date: 2.DEC.2020 15:17:22

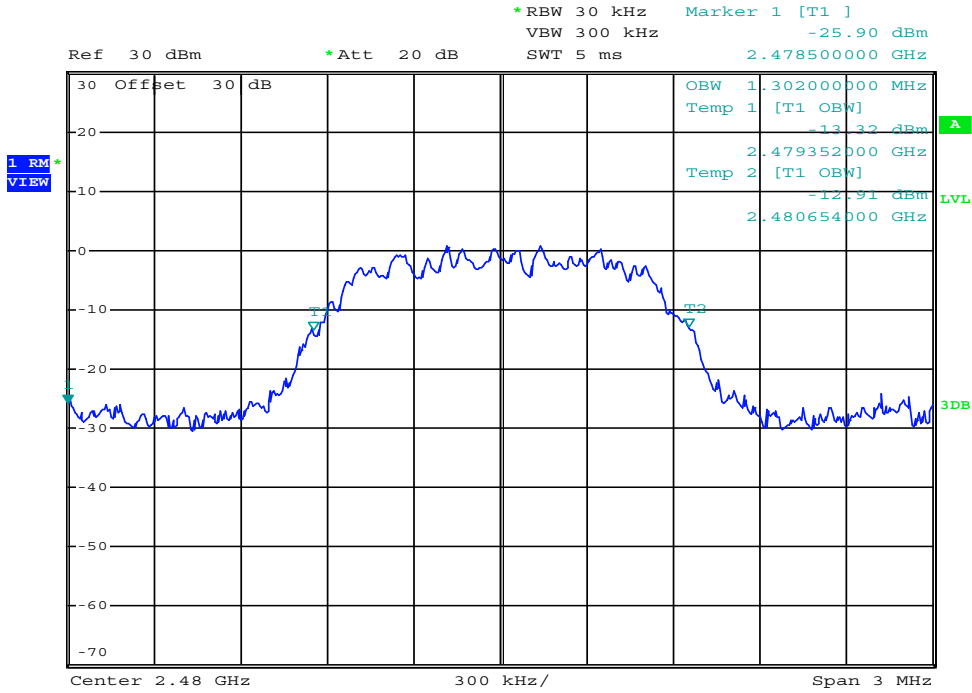
Channel Frequency:  
**2442.00 MHz**

DUT Modulation:  
**Pi/4-DQPSK**

Data Rate:  
**2 Mbps**

Measured Occupied Bandwidth:  
**1.33 MHz**

# Occupied Bandwidth



Date: 2.DEC.2020 15:16:21

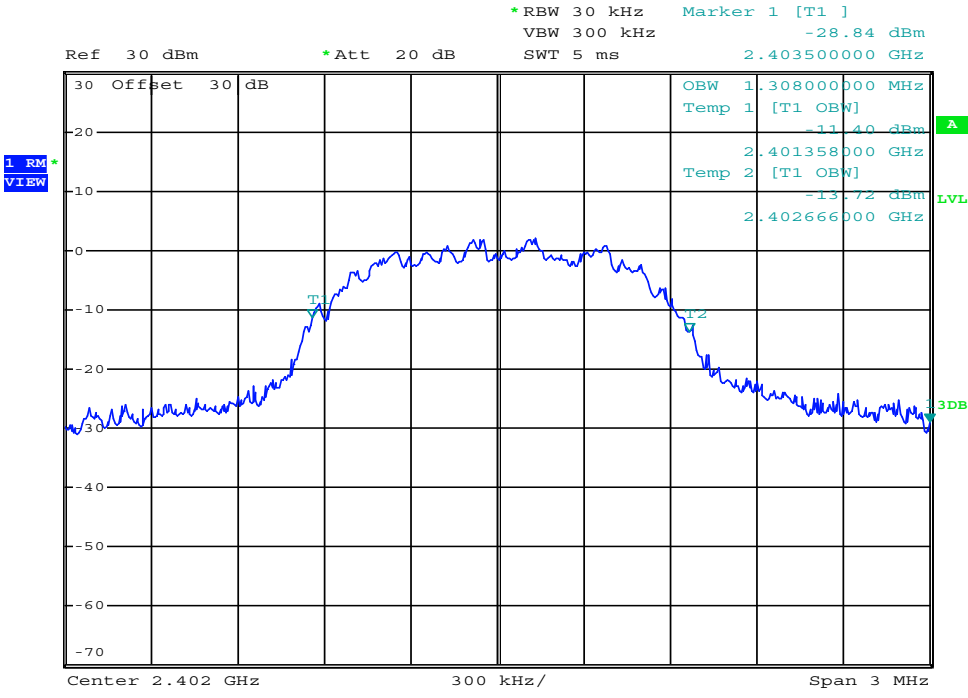
Channel Frequency:  
**2480.00 MHz**

DUT Modulation:  
**Pi/4-DQPSK**

Data Rate:  
**2 Mbps**

Measured Occupied Bandwidth:  
**1.30 MHz**

# Occupied Bandwidth



Date: 2.DEC.2020 15:19:08

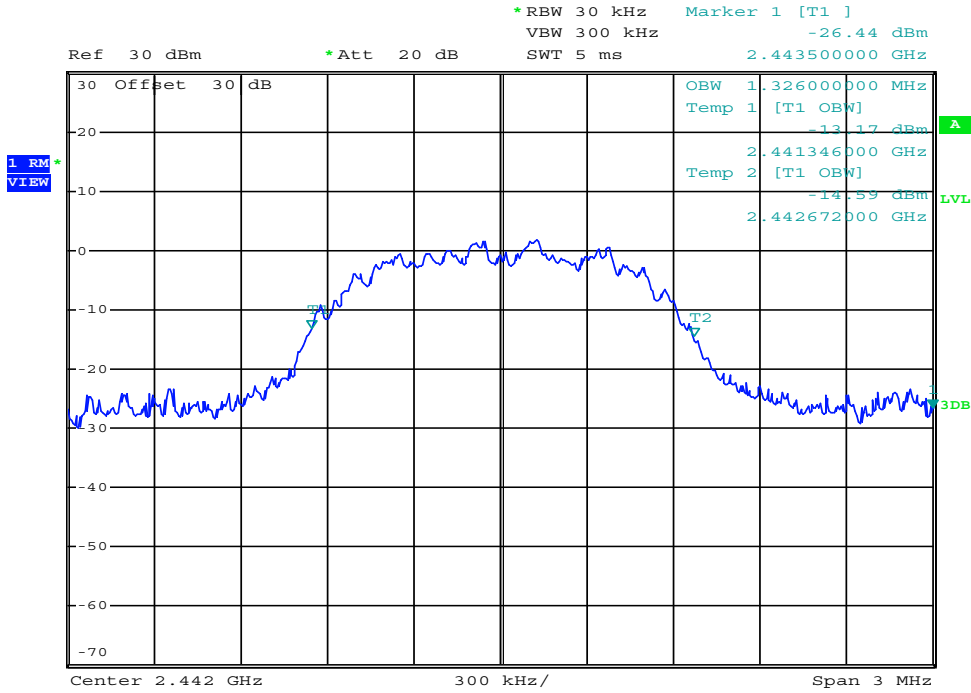
Channel Frequency:  
**2402.00 MHz**

DUT Modulation:  
**8-DPSK**

Data Rate:  
**3 Mbps**

Measured Occupied Bandwidth:  
**1.31 MHz**

# Occupied Bandwidth



Date: 2.DEC.2020 15:18:25

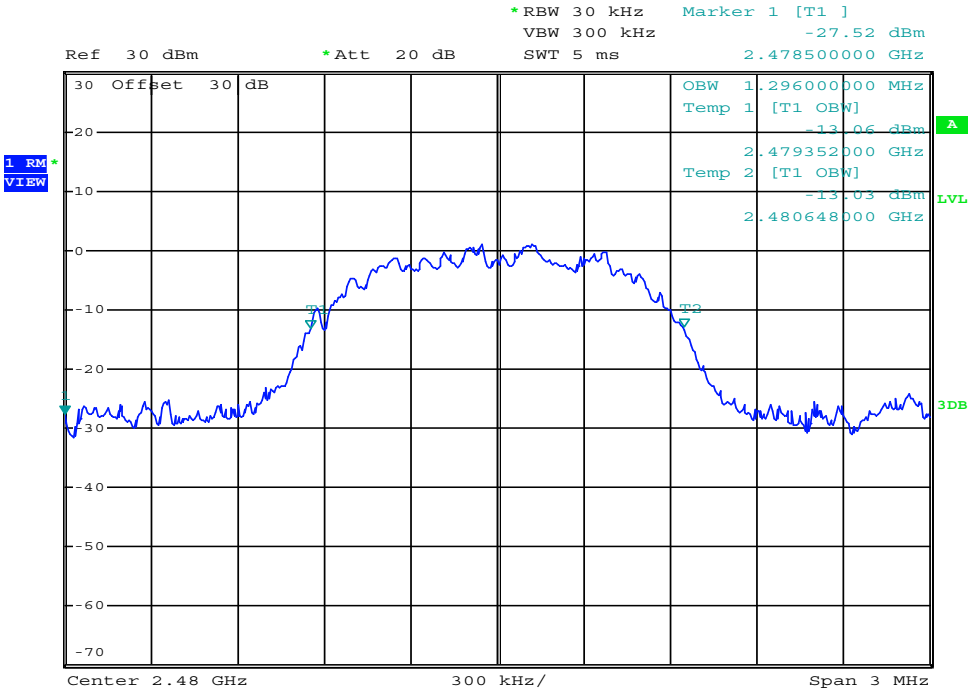
Channel Frequency:  
**2442.00 MHz**

DUT Modulation:  
**8-DPSK**

Data Rate:  
**3 Mbps**

Measured Occupied Bandwidth:  
**1.33 MHz**

# Occupied Bandwidth



Date: 2.DEC.2020 15:20:05

Channel Frequency:  
**2480.00 MHz**

DUT Modulation:  
**8-DPSK**

Data Rate:  
**3 Mbps**

Measured Occupied Bandwidth:  
**1.30 MHz**