



Plot 7-127. BANDWIDTH Plot - ANT1 - CH.9 - SP0 - Preamble 30



Plot 7-128. BANDWIDTH Plot - ANT1 - CH.9 - SP1 - Preamble 30

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Plot 7-129. BANDWIDTH Plot - ANT1 - CH.9 - SP3 - Preamble 30



Plot 7-130. BANDWIDTH Plot - ANT2 - CH.9 - SP0 - Preamble 30

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Plot 7-131. BANDWIDTH Plot - ANT2 - CH.9 - SP1 - Preamble 30



Plot 7-132. BANDWIDTH Plot - ANT2 - CH.9 - SP3 - Preamble 30

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Plot 7-133. BANDWIDTH Plot - ANT1 - CH.9 - SP0 - Preamble 31



Plot 7-134. BANDWIDTH Plot - ANT1 - CH.9 - SP1 - Preamble 31

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Plot 7-135. BANDWIDTH Plot - ANT1 - CH.9 - SP3 - Preamble 31



Plot 7-136. BANDWIDTH Plot - ANT2 - CH.9 - SP0 - Preamble 31

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Plot 7-137. BANDWIDTH Plot - ANT2 - CH.9 - SP1 - Preamble 31



Plot 7-138. BANDWIDTH Plot - ANT2 - CH.9 - SP3 - Preamble 31

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Plot 7-139. BANDWIDTH Plot - ANT1 - CH.9 - SP0 - Preamble 32



Plot 7-140. BANDWIDTH Plot - ANT1 - CH.9 - SP1 - Preamble 32

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Plot 7-141. BANDWIDTH Plot - ANT1 - CH.9 - SP3 - Preamble 32



Plot 7-142. BANDWIDTH Plot - ANT2 - CH.9 - SP0 - Preamble 32

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Plot 7-143. BANDWIDTH Plot - ANT2 - CH.9 - SP1 - Preamble 32



Plot 7-144. BANDWIDTH Plot - ANT2 - CH.9 - SP3 - Preamble 32

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7.3 Cessation Time §15.519(a)(1)

Test Overview and Limit

§15.519(a)(1) A UWB device operating under the provisions of this section shall transmit only when it is sending information to an associated receiver. The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgment from the associated receiver that its transmission is being received an acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

Test Settings

- 1. RBW = 1MHz
- VBW = 3MHz
- 3. Span = 0 Span Mode
- 4. Sweep time shall be sufficient to demonstrate EUTs compliance with the rule part.
- Vertical Markers are placed to indicate the point in which the receiver ceases acknowledging the EUT and the point 10s after.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

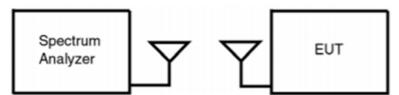
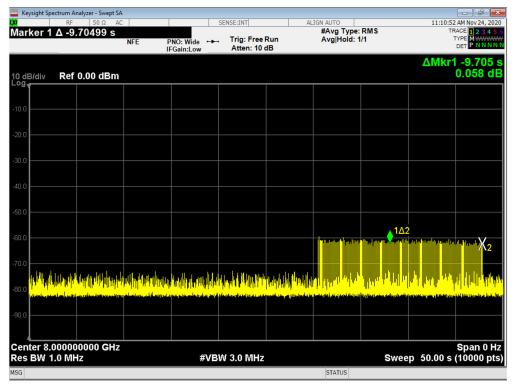


Figure 7-2. Test Instrument and Measurement Setup

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Plot 7-145. Cessation Time Plot

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7.4 Peak Power and Maximum Average Emissions §15.519(e), §15.519(c)

Test Overview and Limit

15.519 (3)(e) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, fM. That limit is 0 dBm EIRP.

15.519 (3)(c) The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

Frequency in MHz	EIRP in dBm
3100 - 10600	-41.3

Test Procedures Used

ANSI C63.10-2013

Test Settings

Peak:

- 1. Analyzer frequency set to the frequency of the radiated spurious emission of interest
- 2. RBW = 50MHz, VBW = 80MHz
- 3. Detector = Peak
- 4. Sweep time = 2s
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize

Average:

- 1. Analyzer frequency set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz, VBW = 3MHz
- 3. Detector = Average-RMS (for Average)
- 4. Sweep time = 2s
- 5. Sweep Points = 2001 (1ms integration period per measurement bin)
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

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RESULTS - BPRF

ANT	СН	MODE	Preamble	Meas. Ant.	FM [GHz]	Peak Power (dBm/50MHz)	Peak Limit (dBm/50MHz)	Margin [dB]
1	5	SP1	9	V	6.487	-1.67	0	-1.67
2	5	SP1	9	Н	6.487	-2.50	0	-2.50
1	9	SP0	12	Н	7.997	-1.54	0	-1.54
2	9	SP1	9	Н	7.997	-1.51	0	-1.51

Table 7-4. BPRF Highest Peak Power Results

ANT	СН	MODE	Preamble	Meas. Ant.	FM [GHz]	Average Power (dBm)	Average Limit (dBm)	Margin [dB]
1	5	SP3	10	V	6.503	-43.03	-41.3	-1.73
2	5	SP3	10	Н	6.351	-42.99	-41.3	-1.69
1	9	SP3	10	Н	8.032	-43.33	-41.3	-2.03
2	9	SP3	12	Н	7.845	-43.04	-41.3	-1.74

Table 7-5. BPRF Highest Average Power Results

Sample Calculation:

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) - 104.8



Plot 7-146. UWB Peak Power Measurement - ANT 1 - CH.5 - SP1 - BPRF

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