

UN6GHZ PRE-APPROVAL GUIDANCE CHECKLIST

1. Contention Based Protocol (CBP)

1.1 CBP testing shall be performed on one channel in each U-NII sub-band of operation for both the narrowest and widest bandwidths.

Please refer to page 184 of “6ID Test Report_P9” for the test channel and bandwidth information as follows. The narrowest and widest bandwidths were test for each UNII band.

Test Channel	Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	AWGN Power (dBm)	Ant. Gain (dBi)	Adjust Power (dBm)	Detection Limit (dBm)	Detected Number	Detection Probability (%)	Limit (%)	Test Result
Operation Band: U-NII 5											
33	20	6115	6115	-62.91	2.2	-65.11	≤ -62.0	10	100	90	Pass
63	320	6265	6110	-61.81	2.2	-64.01	≤ -62.0	10	100	90	Pass
63	320	6265	6265	-61.10	2.2	-63.30	≤ -62.0	10	100	90	Pass
63	320	6265	6420	-61.28	2.2	-63.48	≤ -62.0	10	100	90	Pass
Operation Band: U-NII 6											
97	20	6435	6435	-63.35	2.2	-65.55	≤ -62.0	10	100	90	Pass
95	320	6425	6270	-62.46	2.2	-64.66	≤ -62.0	10	100	90	Pass
95	320	6425	6425	-60.46	2.2	-62.66	≤ -62.0	10	100	90	Pass
95	320	6425	6580	-61.62	2.2	-63.82	≤ -62.0	10	100	90	Pass
Operation Band: U-NII 7											
181	20	6855	6855	-65.27	2.2	-67.47	≤ -62.0	10	100	90	Pass
127	320	6585	6430	-59.7	3.2	-62.90	≤ -62.0	10	100	90	Pass
127	320	6585	6585	-59.72	3.2	-62.92	≤ -62.0	10	100	90	Pass
127	320	6585	6740	-61.46	3.2	-64.66	≤ -62.0	10	100	90	Pass
Operation Band: U-NII 8											
213	20	7015	7015	-63.97	2.2	-66.17	≤ -62.0	10	100	90	Pass
191	320	6905	6750	-63.21	2.2	-65.41	≤ -62.0	10	100	90	Pass
191	320	6905	6905	-60.18	2.2	-62.38	≤ -62.0	10	100	90	Pass
191	320	6905	7060	-62.12	2.2	-64.32	≤ -62.0	10	100	90	Pass

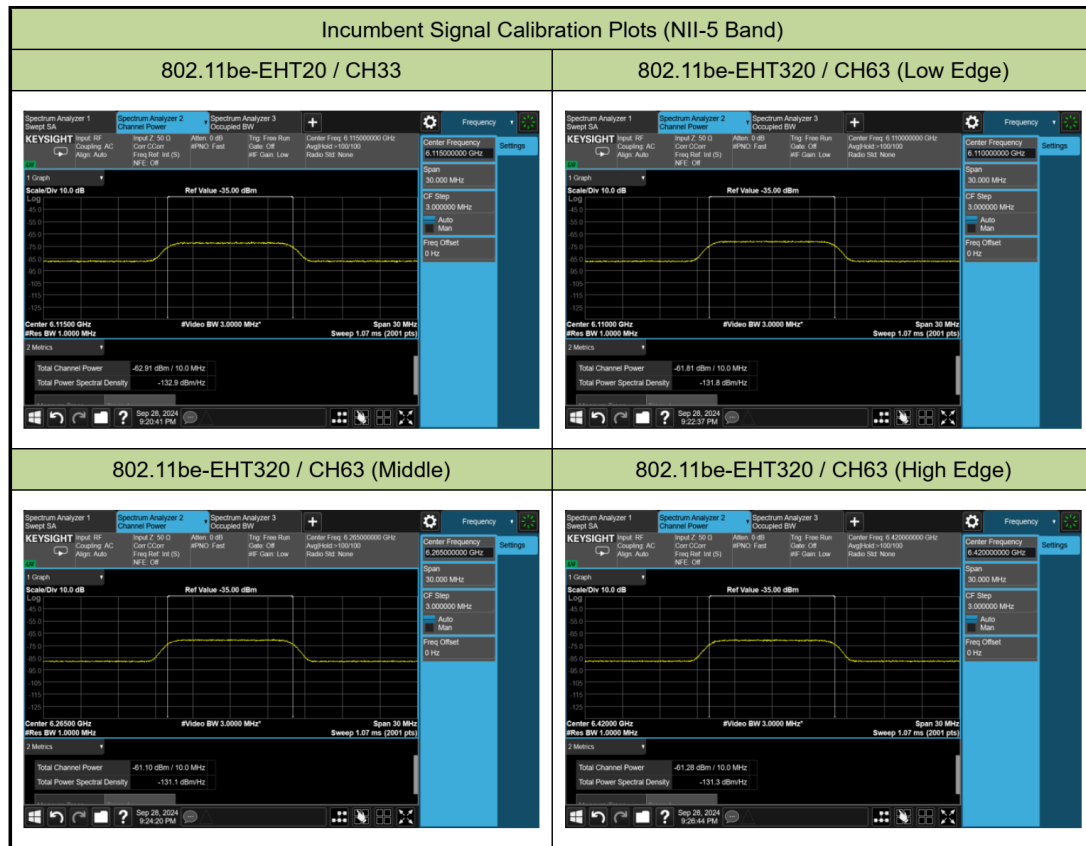
1.2 When testing a 160 MHz channel or wider, use three separate 10 MHz AWGN signals. The simulated incumbent signal must also be a 10 MHz wide AWGN signal

The widest bandwidth (320MHz) was test for each UNII band.

Please refer to page 184 of "6ID Test Report_P9" for the test summary information.

Test Channel	Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	AWGN Power (dBm)	Ant. Gain (dBi)	Adjust Power (dBm)	Detection Limit (dBm)	Detected Number	Detection Probability (%)	Limit (%)	Test Result
Operation Band: U-NII 5											
33	20	6115	6115	-62.91	2.2	-65.11	≤ -62.0	10	100	90	Pass
63	320	6265	6110	-61.81	2.2	-64.01	≤ -62.0	10	100	90	Pass
63	320	6265	6265	-61.10	2.2	-63.30	≤ -62.0	10	100	90	Pass
63	320	6265	6420	-61.28	2.2	-63.48	≤ -62.0	10	100	90	Pass
Operation Band: U-NII 6											
97	20	6435	6435	-63.35	2.2	-65.55	≤ -62.0	10	100	90	Pass
95	320	6425	6270	-62.46	2.2	-64.66	≤ -62.0	10	100	90	Pass
95	320	6425	6425	-60.46	2.2	-62.66	≤ -62.0	10	100	90	Pass
95	320	6425	6580	-61.62	2.2	-63.82	≤ -62.0	10	100	90	Pass
Operation Band: U-NII 7											
181	20	6855	6855	-65.27	2.2	-67.47	≤ -62.0	10	100	90	Pass
127	320	6585	6430	-59.7	3.2	-62.90	≤ -62.0	10	100	90	Pass
127	320	6585	6585	-59.72	3.2	-62.92	≤ -62.0	10	100	90	Pass
127	320	6585	6740	-61.46	3.2	-64.66	≤ -62.0	10	100	90	Pass
Operation Band: U-NII 8											
213	20	7015	7015	-63.97	2.2	-66.17	≤ -62.0	10	100	90	Pass
191	320	6905	6750	-63.21	2.2	-65.41	≤ -62.0	10	100	90	Pass
191	320	6905	6905	-60.18	2.2	-62.38	≤ -62.0	10	100	90	Pass
191	320	6905	7060	-62.12	2.2	-64.32	≤ -62.0	10	100	90	Pass

Please refer to page 189~192 of “6ID Test Report_P9” for the AWGN signal plots. Take UNII-5 as an example as follows.



1.3 Report lowest AWGN signal detectable by EUT.

Please refer to page 185 ~ 186 of "6ID Test Report_P9" for lowest AWGN signal detectable by EUT.

Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	Adjust Power (dBm)	EUT Tx Status
Operation Band: U-NII 5				
20	6115	6115	-76.30	ON
			-75.30	Minimal
			-65.11	OFF
320	6265	6110	-76.30	ON
			-75.30	Minimal
			-64.01	OFF
320	6265	6265	-72.70	ON
			-71.70	Minimal
			-63.30	OFF
320	6265	6420	-75.30	ON
			-74.30	Minimal
			-63.48	OFF
Operation Band: U-NII 6				
20	6435	6435	-76.70	ON
			-75.70	Minimal
			-65.55	OFF
320	6425	6270	-77.00	ON
			-76.00	Minimal
			-64.66	OFF
320	6425	6425	-71.30	ON
			-70.30	Minimal
			-62.66	OFF
320	6425	6580	-75.10	ON
			-74.10	Minimal
			-63.82	OFF

Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	Adjust Power (dBm)	EUT Status
Operation Band: U-NII 7				
20	6855	6855	-76.10	ON
			-75.10	Minimal
			-67.47	OFF
320	6585	6430	-78.10	ON
			-77.10	Minimal
			-62.90	OFF
320	6585	6585	-75.30	ON
			-74.30	Minimal
			-62.92	OFF
320	6585	6740	-76.70	ON
			-75.70	Minimal
			-64.66	OFF
Operation Band: U-NII 8				
20	7015	7015	-75.90	ON
			-74.90	Minimal
			-66.17	OFF
320	6905	6750	-77.30	ON
			-76.30	Minimal
			-65.41	OFF
320	6905	6905	-72.90	ON
			-71.90	Minimal
			-62.38	OFF
320	6905	7060	-74.50	ON
			-73.50	Minimal
			-64.32	OFF
Note: OFF: AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently ON: AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds				

1.4 Verify that the testing was performed with the AWGN signal set to the lowest level (for example, -100 dBm) and increased until the EUT detects and stops transmitting.

The test was performed with a lowest AWGN signal level and increased until the EUT detects and stop transmission.

Please refer to page 185 ~ 186 of "6ID Test Report_P9" for lowest AWGN signal detectable by EUT.

Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	Adjust Power (dBm)	EUT Tx Status
Operation Band: U-NII 5				
20	6115	6115	-76.30	ON
			-75.30	Minimal
			-65.11	OFF
320	6265	6110	-76.30	ON
			-75.30	Minimal
			-64.01	OFF
320	6265	6265	-72.70	ON
			-71.70	Minimal
			-63.30	OFF
320	6265	6420	-75.30	ON
			-74.30	Minimal
			-63.48	OFF
Operation Band: U-NII 6				
20	6435	6435	-76.70	ON
			-75.70	Minimal
			-65.55	OFF
320	6425	6270	-77.00	ON
			-76.00	Minimal
			-64.66	OFF
320	6425	6425	-71.30	ON
			-70.30	Minimal
			-62.66	OFF
320	6425	6580	-75.10	ON
			-74.10	Minimal
			-63.82	OFF

Bandwidth (MHz)	Freq. (MHz)	AWGN Freq. (MHz)	Adjust Power (dBm)	EUT Status
Operation Band: U-NII 7				
20	6855	6855	-76.10	ON
			-75.10	Minimal
			-67.47	OFF
320	6585	6430	-78.10	ON
			-77.10	Minimal
			-62.90	OFF
320	6585	6585	-75.30	ON
			-74.30	Minimal
			-62.92	OFF
320	6585	6740	-76.70	ON
			-75.70	Minimal
			-64.66	OFF
Operation Band: U-NII 8				
20	7015	7015	-75.90	ON
			-74.90	Minimal
			-66.17	OFF
320	6905	6750	-77.30	ON
			-76.30	Minimal
			-65.41	OFF
320	6905	6905	-72.90	ON
			-71.90	Minimal
			-62.38	OFF
320	6905	7060	-74.50	ON
			-73.50	Minimal
			-64.32	OFF
Note: OFF: AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently ON: AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds				

1.5 Verify that the lowest antenna gain was used for testing.

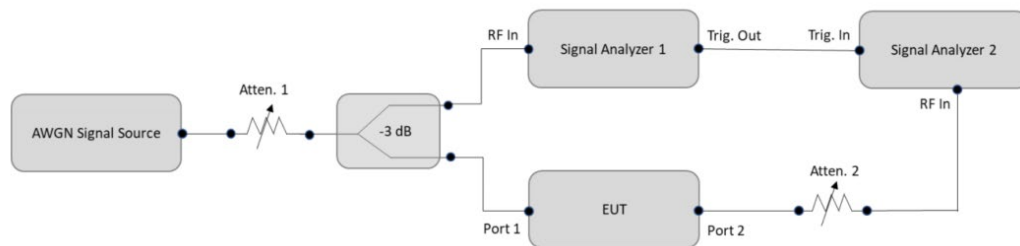
The CBP was performed by conducted test, and the RF port with a minimum antenna gain was selected to perform CBP test. According to Page 6 of Antenna Test Report. Please refer to page 184 of “6ID Test Report_P9” for CBP test result.

1.6 If measurements are conducted, the detection threshold must be corrected to refer to a 0 dBi gain antenna and include all the applicable losses (cables, etc.). For instance, the report should show (at least):

Detection Level = Injected AWGN Power (dBm) – Antenna Gain (dBi) + Path Loss (dB)

The CBP was performed by conducted test, and the RF port with a minimum antenna gain was selected to perform CBP test.

Please refer to page 29 of “6ID Test Report_P1” for the test setup diagram as below.



Please refer to page 184 of “6ID Test Report_P9” for the test result summary.

Adjust Power (dBm) = AWGN Power (dBm) – Antenna Gain (dBi).

Adjust Power (dBm) ≤ Detection Limit (-62dBm)

All Detection Power in the report comply with the -62dBm threshold.

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191	320	6905	6905	-60.18	2.2	-62.38	≤ -62.0	10	100	90	Pass
191	320	6905	7060	-62.12	2.2	-64.32	≤ -62.0	10	100	90	Pass

1.7 Include plots showing EUT has stopped transmitting upon detection of AWGN signal.

The plots of NII-5 On page 193 of "6ID Test Report_P10"



The plots of NII-6 On page 194 of "6ID Test Report_P10"



The plots of NII-7 On page 195 of “6ID Test Report_P10”



The plots of NII-8 On page 196 of “6ID Test Report_P10”



1.8 Describe whether channel puncturing and bandwidth reduction mechanisms are supported.

The report needs to include a plot as an example for at least one of the AWGN signals used.

[This device does not support channel puncturing and bandwidth reduction.](#)

1.9 Plots for one representative U-NII sub-band must be included if the device uses bandwidth reduction.

[Not Applicable.](#)

1.10 If radiated testing is used, show that spot-checks were done to identify which side of the EUT has the lowest sensitivity to the incumbent signal detection and that side was indeed chosen for the test.

[Conducted test is performed for this device.](#)

2. Puncturing

2.1 Describe the puncturing process, such as reasons for puncturing and what bandwidths may be punctured.

2.2 Provide data and results as required in KDB 987594 D02

[N/A](#)

3. Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP

3.1 The device must demonstrate that it can adjust its power based on whether it is associated with an LPI Access Point or an SP Access Point.

[N/A. This device is not a client device.](#)

3.2 The test report should clearly show the test setup used and identify each component.

[N/A](#)

4. Proper Power Adjustment, Client Devices Connected to a Standard Power AP (APC)

4.1 The device must demonstrate that it can limit its power to 6dB or greater below its associated SP Access Points authorized transmit power.

[N/A](#)

4.2 The test report should clearly show the test setup used and identify each component.

[N/A](#)

5. Transmit Power Control (TPC) for VLP

5.1 The device must demonstrate that it can dynamically change power.

5.2 The test report should clearly show the test setup used and identify each component.

5.3 Provide details on how the TPC mechanism is triggered, such as environmental factors, performance, air interface, etc. This information shall be provided in the operational description.

[N/A.](#)

6. Channel Prioritization above 6105 MHz for VLP

6.1 Provide details on how this is accomplished in the operational description.

[N/A.](#)