

A.8 CONTENTION BASED PROTOCOL

Test Date	2023/10/17 ~ 12/22	Temp./Hum.	18 ~ 25°C/58 ~ 65%
Cable Loss	N/A	Tested By	Harry Huang
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

A.8.1 Contention-based Protocol

● Contention-based Protocol Threshold Incumbent Signal & Mini. Detection level

Mode	U-NII Band	EUT Frequency (MHz)	AWGN Frequency (MHz)	Injected AWGN Power (dBm)	Min. Antenna Gain (Include path loss) (dBi) *Note1	Adjusted Power (dBm)	Detection Limit (dBm)	EUT Tx Status
802.11ax-HE20	5	6135	6135	-74.80	-0.314	-74.486	-62	OFF
			6135	-79.80	-0.314	-79.486	-62	Minimum
			6135	-82.80	-0.314	-82.486	-62	ON
	6	6455	6455	-69.60	-0.314	-69.286	-62	OFF
			6455	-78.60	-0.314	-78.286	-62	Minimum
			6455	-80.60	-0.314	-80.286	-62	ON
	7	6695	6695	-73.50	-0.314	-73.186	-62	OFF
			6695	-76.50	-0.314	-76.186	-62	Minimum
			6695	-78.50	-0.314	-78.186	-62	ON
	8	7015	7015	-77.00	-0.314	-76.686	-62	OFF
			7015	-82.00	-0.314	-81.686	-62	Minimum
			7015	-84.00	-0.314	-83.686	-62	ON

Note 1: the listed Min. gain of EUT was included path loss.

Note 2: Detected level (Adjusted Power) = Injected AWGN Power (dBm) – (Antenna Gain (dBi) + Path loss (dB)) *Note1.

Note 3: The AWGN level is reported for the following conditions:

- 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.

Note 4: The EUT don't support channel puncturing or BW reduction mechanism.

Note 5: Per FCC TCB workshop April 2022, The Injected AWGN power is actual power of AWGN injected into the antenna port.

Mode	U-NII Band	EUT Frequency (MHz)	AWGN Frequency (MHz)	Injected AWGN Power (dBm)	Min. Antenna Gain (Include path loss) (dBi) *Note1	Adjusted Power (dBm)	Detection Limit (dBm)	EUT Tx Status
802.11ax-HE160	5	6185	6110	-78.00	-0.314	-77.686	-62	OFF
			6110	-81.00	-0.314	-80.686	-62	Minimum
			6110	-83.00	-0.314	-82.686	-62	ON
			6185	-69.00	-0.314	-68.686	-62	OFF
			6185	-75.00	-0.314	-74.686	-62	Minimum
			6185	-79.00	-0.314	-78.686	-62	ON
			6260	-80.00	-0.314	-79.686	-62	OFF
			6260	-82.00	-0.314	-81.686	-62	Minimum
	6-7	6505	6430	-76.80	-0.314	-76.486	-62	OFF
			6430	-80.80	-0.314	-80.486	-62	Minimum
			6430	-82.80	-0.314	-82.486	-62	ON
			6505	-73.00	-0.314	-72.686	-62	OFF
			6505	-75.00	-0.314	-74.686	-62	Minimum
			6505	-77.00	-0.314	-76.686	-62	ON
			6580	-77.60	-0.314	-77.286	-62	OFF
			6580	-79.60	-0.314	-79.286	-62	Minimum
	7	6665	6590	-71.50	-0.314	-71.186	-62	OFF
			6590	-72.50	-0.314	-72.186	-62	Minimum
			6590	-75.50	-0.314	-75.186	-62	ON
			6665	-76.00	-0.314	-75.686	-62	OFF
			6665	-79.00	-0.314	-78.686	-62	Minimum
			6665	-81.00	-0.314	-80.686	-62	ON
			6740	-77.50	-0.314	-77.186	-62	OFF
			6740	-79.50	-0.314	-79.186	-62	Minimum
	8	6985	6740	-81.50	-0.314	-81.186	-62	ON
			6910	-76.00	-0.314	-75.686	-62	OFF
			6910	-79.00	-0.314	-78.686	-62	Minimum
			6910	-81.00	-0.314	-80.686	-62	ON
			6985	-70.00	-0.314	-69.686	-62	OFF
			6985	-76.00	-0.314	-75.686	-62	Minimum
			6985	-79.00	-0.314	-78.686	-62	ON
			7060	-76.60	-0.314	-76.286	-62	OFF
	7060	-81.60	-0.314	-81.286	-62	Minimum		
		-83.60	-0.314	-83.286	-62	ON		

Note 1: the listed Min. gain of EUT was included path loss.

Note 2: Detected level (Adjusted Power) = Injected AWGN Power (dBm) – (Antenna Gain (dBi) + Path loss (dB)) *Note1.

Note 3: The AWGN level is reported for the following conditions:

- 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.
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Note 4: The EUT don't support channel puncturing or BW reduction mechanism.

Note 5: Per FCC TCB workshop April 2022, The Injected AWGN power is actual power of AWGN injected into the antenna port.

● Summary table

Mode	U-NII Band	Centre Frequency (MHz)	Incumbent Frequency (MHz)	1	2	3	4	5	6	7	8	9	10	Detection Possibility (%)	Limit (%)	
802.11ax-HE20	5	6135	6135	1	1	1	1	1	1	1	1	1	1	100	90	
	6	6455	6455	1	1	1	1	1	1	1	1	1	1	100	90	
	7	6695	6695	1	1	1	1	1	1	1	1	1	1	100	90	
	8	7015	7015	1	1	1	1	1	1	1	1	1	1	100	90	
802.11ax-HE160	5	6185	6110	1	1	1	1	1	1	1	1	1	1	100	90	
			6185	1	1	1	1	1	1	1	1	1	1	100	90	
			6260	1	1	1	1	1	1	1	1	1	1	1	100	90
	6-7	6505	6430	1	1	1	1	1	1	1	1	1	1	1	100	90
			6505	1	1	1	1	1	1	1	1	1	1	1	100	90
			6580	1	1	1	1	1	1	1	1	1	1	1	100	90
	7	6665	6590	1	1	1	1	1	1	1	1	1	1	1	100	90
			6665	1	1	1	1	1	1	1	1	1	1	1	100	90
			6740	1	1	1	1	1	1	1	1	1	1	1	100	90
	8	6985	6910	1	1	1	1	1	1	1	1	1	1	1	100	90
			6985	1	1	1	1	1	1	1	1	1	1	1	100	90
			7060	1	1	1	1	1	1	1	1	1	1	1	100	90

Note: CBP Detection Trials (1= Detection, 0= No Detection)

A.8.2 Measurement Plots





