

802.11ac(HT20) 5200MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.43	42.91	-5.67	37.24	68.20	-30.96	Vertical
15540.51	33.00	-1.03	31.96	74.00	-42.04	Vertical
10360.75	42.38	-5.63	36.75	68.20	-31.45	Horizontal
15540.57	32.49	-1.04	31.45	74.00	-42.55	Horizontal

802.11ac(HT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.50	42.31	-5.64	36.67	68.20	-31.53	Vertical
15540.86	31.91	-0.98	30.93	74.00	-43.07	Vertical
10360.66	41.80	-5.67	36.14	68.20	-32.06	Horizontal
15540.82	32.82	-1.00	31.82	74.00	-42.18	Horizontal

802.11n(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.11	42.48	-5.65	36.83	68.20	-31.37	Vertical
15540.67	32.51	-1.00	31.50	74.00	-42.50	Vertical
10360.92	42.74	-5.64	37.10	68.20	-31.10	Horizontal
15540.31	32.63	-1.01	31.62	74.00	-42.38	Horizontal

802.11n(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.83	42.41	-5.62	36.79	68.20	-31.41	Vertical
15540.58	32.42	-1.02	31.40	74.00	-42.60	Vertical
10360.29	42.75	-5.60	37.15	68.20	-31.05	Horizontal
15540.07	32.15	-0.96	31.18	74.00	-42.82	Horizontal

802.11ac(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.01	42.00	-5.61	36.39	68.20	-31.81	Vertical
15540.23	32.15	-1.02	31.13	74.00	-42.87	Vertical
10360.79	42.06	-5.61	36.46	68.20	-31.74	Horizontal
15540.01	32.11	-1.02	31.09	74.00	-42.91	Horizontal

802.11ac(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.98	42.29	-5.62	36.67	68.20	-31.53	Vertical
15540.27	32.79	-1.00	31.80	74.00	-42.20	Vertical
10360.22	42.25	-5.63	36.61	68.20	-31.59	Horizontal
15540.66	32.89	-0.98	31.90	74.00	-42.10	Horizontal

802.11ac(HT80) 5210MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.33	41.86	-5.64	36.22	68.20	-31.98	Vertical
15540.62	32.27	-1.01	31.26	74.00	-42.74	Vertical
10360.07	41.97	-5.63	36.34	68.20	-31.86	Horizontal
15540.25	33.16	-1.04	32.13	74.00	-41.87	Horizontal

802.11ax(HT20) 5180MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.47	42.08	-5.65	36.43	68.20	-31.77	Vertical
15540.28	32.20	-1.02	31.18	74.00	-42.82	Vertical
10360.87	42.68	-5.65	37.03	68.20	-31.17	Horizontal
15540.98	32.55	-1.00	31.56	74.00	-42.44	Horizontal

802.11ax(HT20) 5200MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.40	42.77	-5.67	37.10	68.20	-31.10	Vertical
15540.84	32.16	-1.03	31.12	74.00	-42.88	Vertical
10360.13	42.75	-5.64	37.12	68.20	-31.08	Horizontal
15540.78	32.77	-1.03	31.75	74.00	-42.25	Horizontal

802.11ax(HT20) 5240MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.51	42.15	-5.65	36.50	68.20	-31.70	Vertical
15540.50	32.97	-1.01	31.96	74.00	-42.04	Vertical
10360.00	42.61	-5.67	36.95	68.20	-31.25	Horizontal
15540.35	32.65	-0.97	31.68	74.00	-42.32	Horizontal

802.11ax(HT40) 5190MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.41	42.15	-5.61	36.54	68.20	-31.66	Vertical
15540.36	32.55	-1.03	31.52	74.00	-42.48	Vertical
10360.63	42.71	-5.61	37.10	68.20	-31.10	Horizontal
15540.41	32.52	-1.04	31.48	74.00	-42.52	Horizontal

802.11ax(HT40) 5230MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.83	42.02	-5.65	36.37	68.20	-31.83	Vertical
15540.07	33.16	-0.96	32.19	74.00	-41.81	Vertical
10360.61	42.69	-5.66	37.03	68.20	-31.17	Horizontal
15540.18	33.08	-1.04	32.05	74.00	-41.95	Horizontal

802.11ax(HT80) 5210MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.87	42.75	-5.66	37.09	68.20	-31.11	Vertical
15540.83	32.33	-1.00	31.34	74.00	-42.66	Vertical
10360.89	41.99	-5.66	36.32	68.20	-31.88	Horizontal
15540.74	32.47	-1.02	31.45	74.00	-42.55	Horizontal

Note:

1. Level = Read Level + Factor. (Factor=Antenna Factor+ Cable loss- Preamp Factor).
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. This Report only show the test plots of the worst case (U-NII-1).
5. Except for mode a, other modes test the MIMO status.
6. The test result of SISO mode reflects the worst data between antenna 1 and antenna 2.

U-NII-2A

Worst case:

802.11a 5260MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.72	42.63	-5.60	37.03	68.20	-31.17	Vertical
15540.11	32.62	-1.00	31.62	74.00	-42.38	Vertical
10360.06	42.84	-5.61	37.23	68.20	-30.97	Horizontal
15540.04	32.31	-1.02	31.29	74.00	-42.71	Horizontal

802.11a 5300MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.91	41.85	-5.66	36.20	68.20	-32.00	Vertical
15540.84	32.25	-0.96	31.28	74.00	-42.72	Vertical
10361.00	42.70	-5.65	37.05	68.20	-31.15	Horizontal
15540.30	32.83	-0.99	31.84	74.00	-42.16	Horizontal

802.11a 5320MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.44	42.00	-5.60	36.39	68.20	-31.81	Vertical
15540.80	32.79	-0.98	31.81	74.00	-42.19	Vertical
10360.77	42.70	-5.64	37.06	68.20	-31.14	Horizontal
15540.88	32.59	-0.99	31.60	74.00	-42.40	Horizontal

U-NII-2C

Worst case:

802.11a 5500MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.57	42.04	-5.66	36.38	68.20	-31.82	Vertical
15540.12	31.91	-0.99	30.92	74.00	-43.08	Vertical
10360.16	42.10	-5.60	36.49	68.20	-31.71	Horizontal
15540.53	32.60	-1.01	31.59	74.00	-42.41	Horizontal

802.11a 5600MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.83	42.62	-5.62	37.00	68.20	-31.20	Vertical
15540.43	33.17	-0.99	32.18	74.00	-41.82	Vertical
10360.26	42.08	-5.60	36.48	68.20	-31.72	Horizontal
15540.94	32.69	-1.00	31.69	74.00	-42.31	Horizontal

802.11a 5700MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.32	42.79	-5.62	37.17	68.20	-31.03	Vertical
15540.42	32.28	-0.98	31.30	74.00	-42.70	Vertical
10360.13	42.10	-5.66	36.44	68.20	-31.76	Horizontal
15540.16	32.68	-1.03	31.65	74.00	-42.35	Horizontal

U-NII-3

Worst case:

802.11ac20 5745MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.46	42.29	-5.62	36.67	68.20	-31.53	Vertical
15540.49	32.65	-0.97	31.69	74.00	-42.31	Vertical
10360.43	42.28	-5.62	36.67	68.20	-31.53	Horizontal
15540.93	32.10	-0.97	31.13	74.00	-42.87	Horizontal

802.11ac20 5785MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.46	42.06	-5.67	36.39	68.20	-31.81	Vertical
15540.59	32.38	-1.00	31.37	74.00	-42.63	Vertical
10360.45	43.17	-5.64	37.52	68.20	-30.68	Horizontal
15540.86	32.41	-0.98	31.43	74.00	-42.57	Horizontal

802.11ac20 5825MHz

Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360.25	42.33	-5.65	36.67	68.20	-31.53	Vertical
15540.42	32.17	-1.02	31.15	74.00	-42.85	Vertical
10360.12	42.19	-5.64	36.56	68.20	-31.64	Horizontal
15540.91	32.80	-1.01	31.80	74.00	-42.20	Horizontal

Note:

1. Level = Read Level + Factor. (Factor= Antenna Factor+ Cable loss- Preamp Factor)
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.
4. All modes have been pre tested, and the report retains the worst mode data.
5. Except for mode a, other modes test the MIMO status.
6. The test result of SISO mode reflects the worst data between antenna 1 and antenna 2.

4.8 Frequency stability

Test Standard	15.407(g)
Test limit	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
Test results:	Pass

Measurement Data:

Mode	Voltage (V)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	DC 10.8V	5179.998	2	5239.996	4
	DC 12.0V	5179.995	5	5239.993	7
	DC 13.2V	5179.999	1	5239.995	5
Mode	Voltage (V)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)
Band 2 (5250-5350 MHz)	DC 10.8V	5259.991	9	5319.991	9
	DC 12.0V	5259.998	2	5319.996	4
	DC 13.2V	5259.991	9	5319.993	7
Mode	Voltage (V)	FHL (5500MHz)	Deviation (KHz)	FHH (5700MHz)	Deviation (KHz)
Band 3 (5470-5725 MHz)	DC 10.8V	5499.999	1	5699.999	1
	DC 12.0V	5499.994	6	5699.992	8
	DC 13.2V	5499.994	6	5699.997	3
Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	DC 10.8V	5744.993	7	5824.992	8
	DC 12.0V	5744.999	1	5824.995	5
	DC 13.2V	5744.994	6	5824.998	2

Mode	Temperature (°C)	FHL (5180MHz)	Deviation (KHz)	FHH (5240MHz)	Deviation (KHz)
Band 1 (5150-5250 MHz)	-10°C	5179.991	9	5239.997	3
	0°C	5179.997	3	5239.999	1
	+10°C	5179.997	3	5239.994	6
	+20°C	5179.993	7	5239.994	6
	+30°C	5179.992	8	5239.992	8
	+40°C	5179.991	9	5239.992	8
	+50°C	5179.995	5	5239.993	7
Mode	Temperature (°C)	FHL (5260MHz)	Deviation (KHz)	FHH (5320MHz)	Deviation (KHz)
Band 2 (5250-5350 MHz)	-10°C	5259.999	1	5319.994	6
	0°C	5259.997	3	5319.997	3
	+10°C	5259.995	5	5319.992	8
	+20°C	5259.993	7	5319.995	5
	+30°C	5259.993	7	5319.993	7
	+40°C	5259.994	6	5319.994	6
	+50°C	5259.996	4	5319.992	8
	-10°C	5259.999	1	5319.994	6
Mode	Temperature (°C)	FHL (5500MHz)	Deviation (KHz)	FHH (5700MHz)	Deviation (KHz)
Band 3 (5470-5725 MHz)	-10°C	5499.998	2	5699.997	3
	0°C	5499.991	9	5699.991	9
	+10°C	5499.998	2	5699.991	9
	+20°C	5499.997	3	5699.993	7
	+30°C	5499.998	2	5699.992	8
	+40°C	5499.998	2	5699.995	5
	+50°C	5499.992	8	5699.991	9
	-10°C	5499.998	2	5699.997	3
Mode	Temperature (°C)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	-10°C	5744.992	8	5824.997	3
	0°C	5744.999	1	5824.993	7
	+10°C	5744.998	2	5824.996	4
	+20°C	5744.995	5	5824.999	1
	+30°C	5744.991	9	5824.997	3
	+40°C	5744.998	2	5824.999	1
	+50°C	5744.997	3	5824.999	1

5 Photos Of Test Setup

Reference to the **appendix I Test Setup Photo** for details.

6 Photos Of EUT

Reference to the **appendix II external photos** and **appendix III internal photos** for details.

-----END OF REPORT-----

