

A.3 DTS/OCCUPIED BANDWIDTH

Test Date	2024/10/04 ~ 05	Temp./Hum.	25 ~ 26°C/61 ~ 62%
Cable Loss	0.5dB	Tested By	Ryan Chiang
Test Voltage	AC 120V, 60Hz (via AC Adapter)		

A.3.1 DTS/Occupied Bandwidth Result

Mode	Centre Frequency (MHz)	DTS (6dB) Bandwidth (MHz)		Occupied (99%) Bandwidth (MHz)		Limit
		AUX	Main	AUX	Main	
802.11b	2412	9.067	9.069	13.451	13.447	>500kHz
	2442	9.067	9.057	13.458	13.416	
	2462	9.071	9.063	13.457	13.438	
	2472	9.071	9.054	13.451	13.416	
802.11g	2412	15.16	15.16	16.585	16.554	
	2442	15.16	15.16	16.607	16.550	
	2472	16.38	16.38	16.363	16.368	
802.11n-HT20	2412	15.71	16.29	17.711	17.711	
	2442	15.16	16.57	17.753	17.707	
	2462	15.15	16.08	17.742	17.702	
	2472	17.63	17.64	17.568	17.571	
802.11n-HT40	2422	35.17	35.13	36.051	36.056	
	2442	34.31	35.16	36.089	36.072	
	2462	36.41	36.42	36.147	36.186	
802.11ax-HE20	2412	18.02	17.00	18.891	18.893	
	2442	18.08	17.57	18.895	18.862	
	2472	18.84	18.76	18.696	18.702	
802.11ax-HE40	2422	37.39	36.62	37.517	37.517	
	2442	37.44	37.55	37.552	37.531	
	2462	38.01	37.88	37.587	37.570	
802.11be-EHT20	2412	18.23	17.63	18.899	18.899	
	2442	17.20	16.66	18.883	18.885	
	2472	18.85	18.84	18.713	18.727	
802.11be-EHT40	2422	37.50	37.00	37.539	37.510	
	2442	37.33	36.82	37.560	37.526	
	2462	38.03	37.86	37.598	37.577	

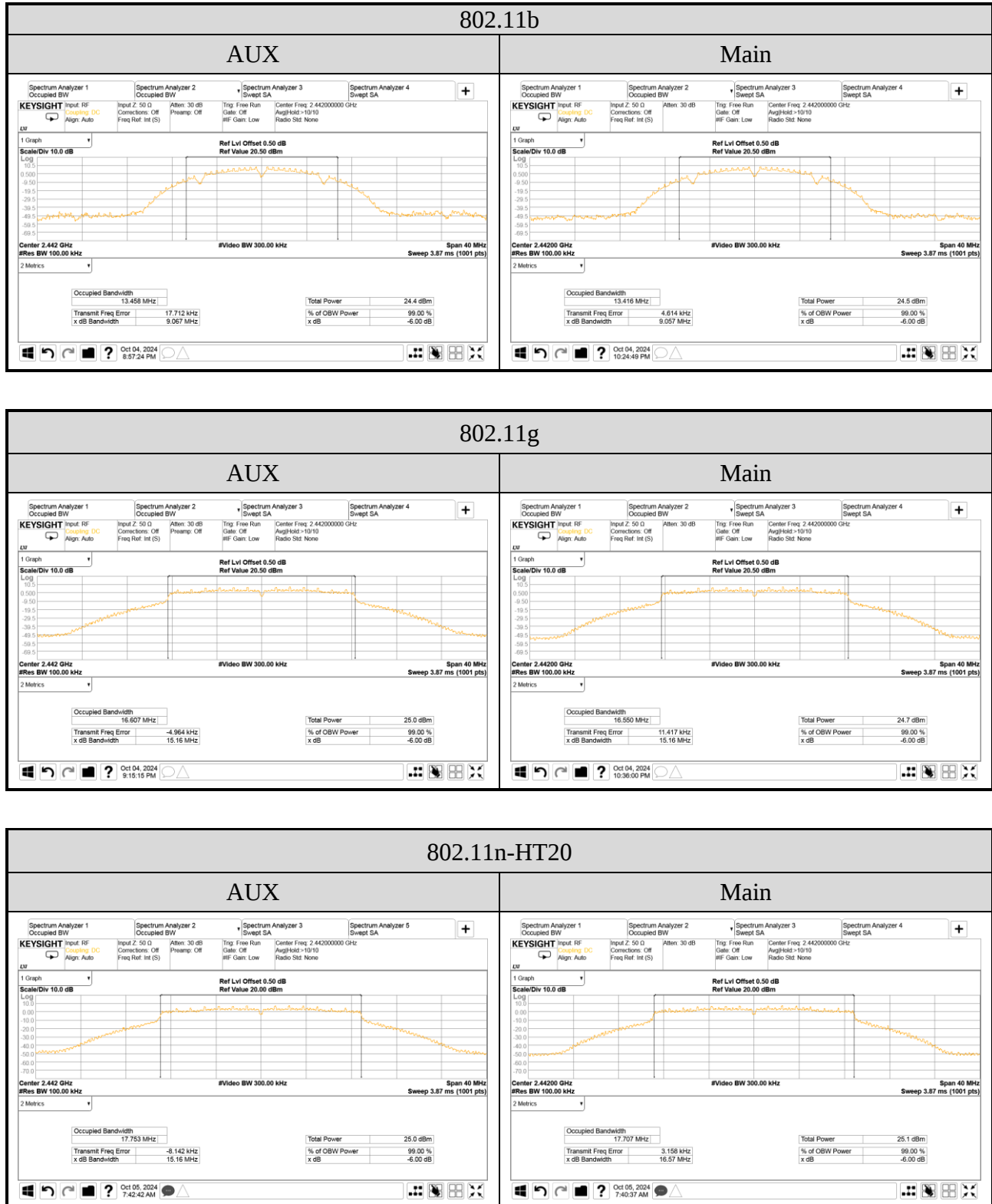
Mode	Centre Frequency (MHz)	DTS (6dB) Bandwidth (MHz)	Occupied (99%) Bandwidth (MHz)	Limit
BLE (1Mbps)	2402	0.6892	1.0324	>500kHz
	2440	0.6914	1.0327	
	2480	0.6875	1.0310	
BLE (2Mbps)	2402	1.193	2.0545	
	2440	1.192	2.0521	
	2480	1.190	2.0521	
BLE (PHY Coded S2)	2402	0.6620	1.0289	
	2440	0.6616	1.0290	
	2480	0.6619	1.0285	
BLE (PHY Coded S8)	2402	0.6781	1.0426	
	2440	0.6794	1.0418	
	2480	0.6745	1.0408	

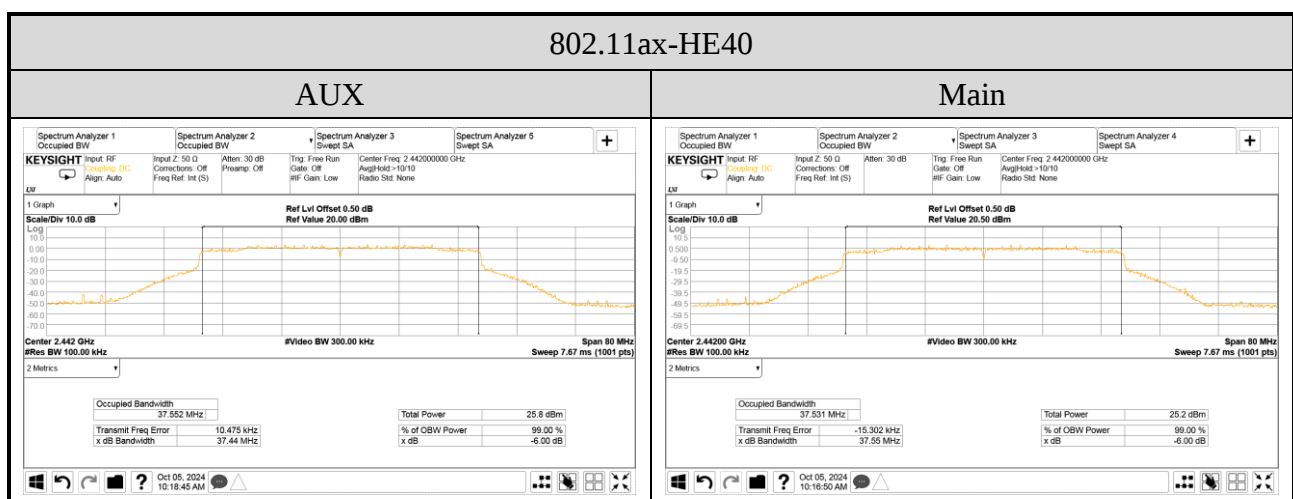
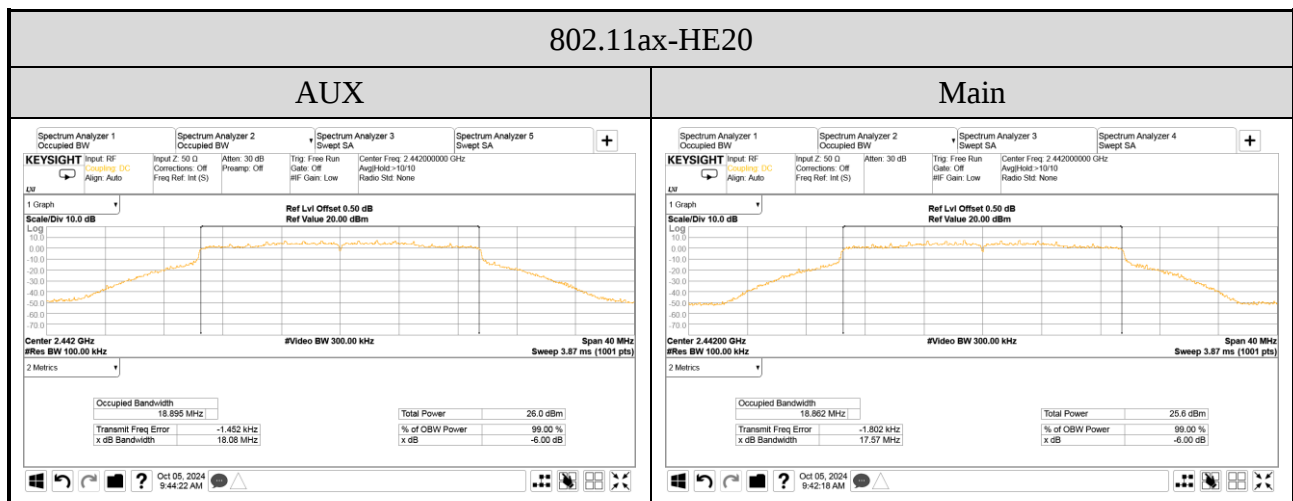
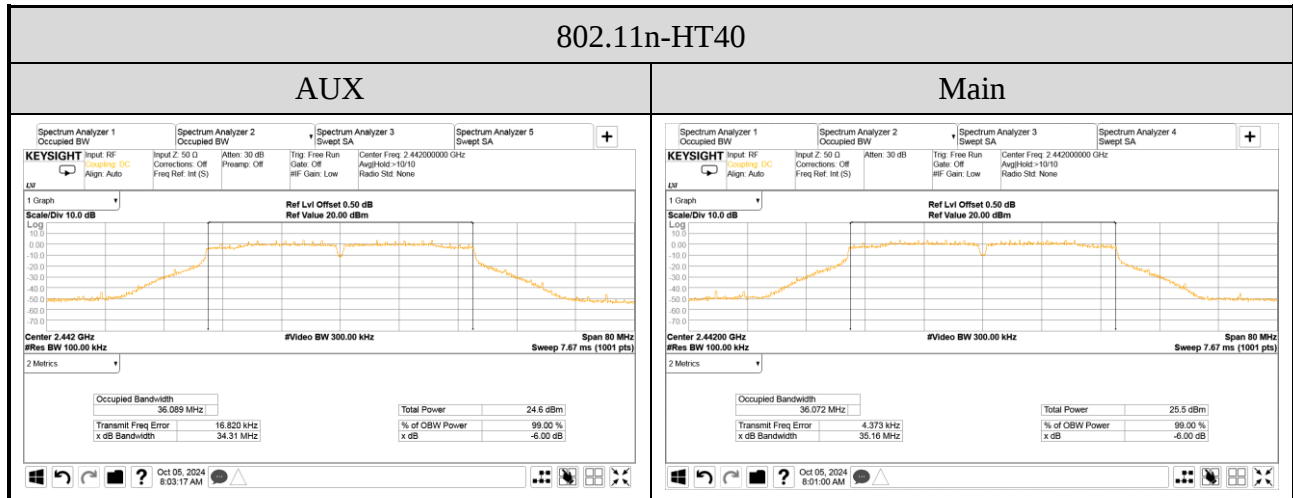
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.3.2 Measurement Plots

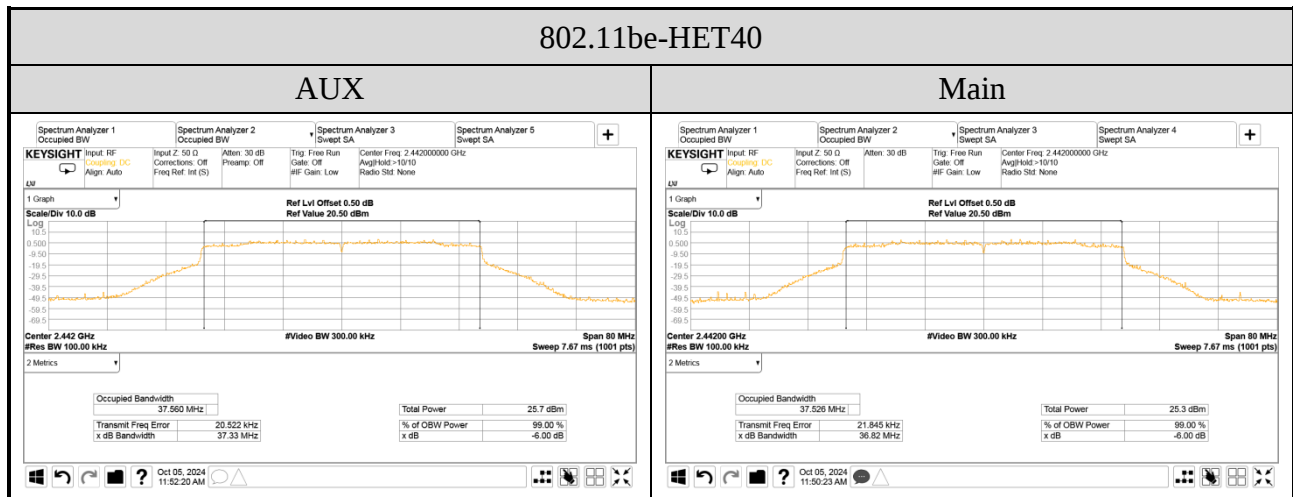
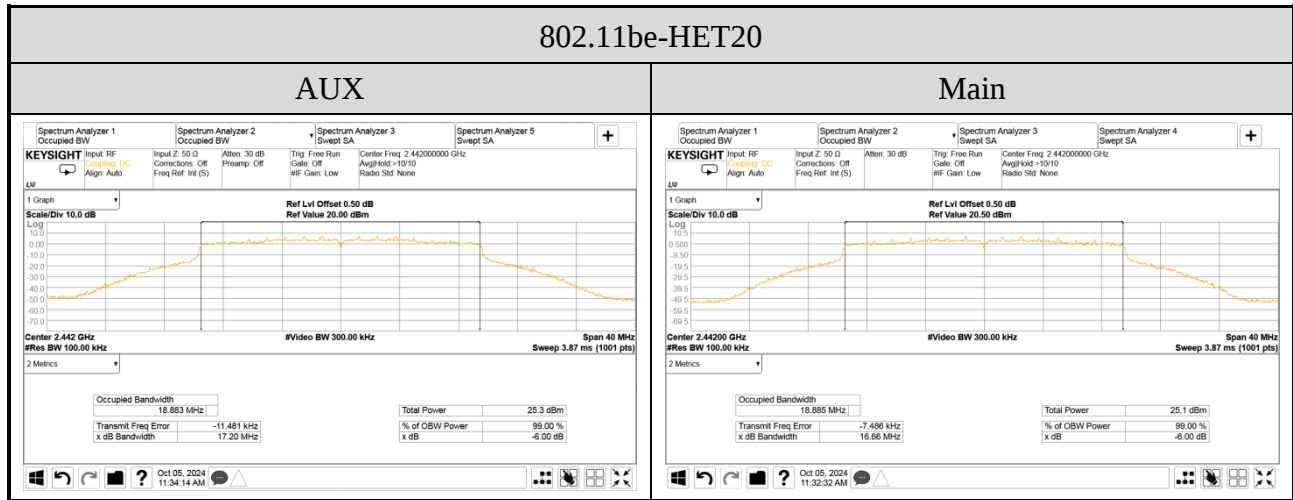
● DTS (6dB) Bandwidth





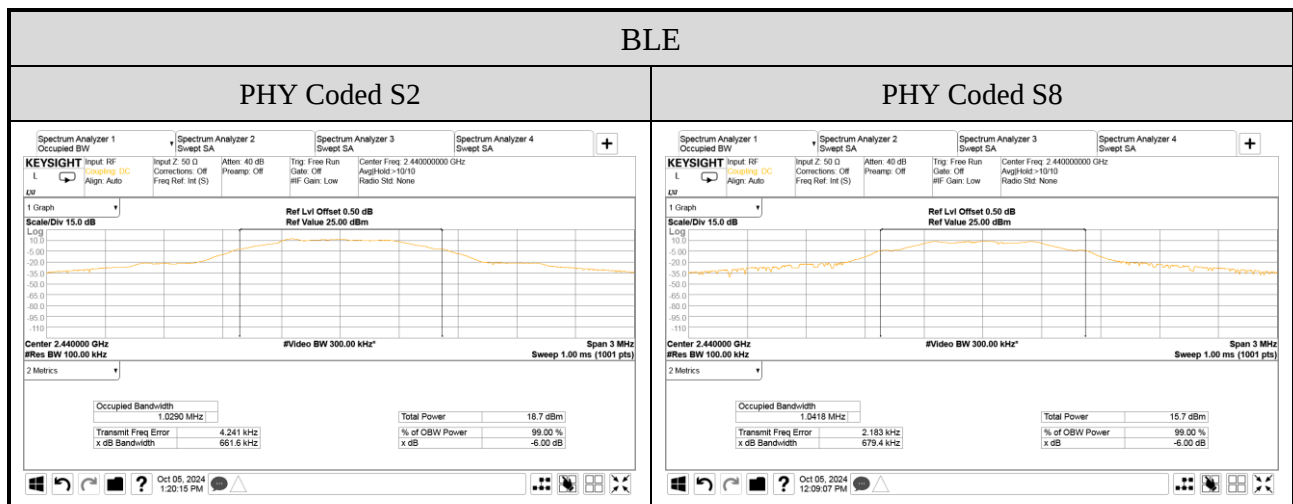
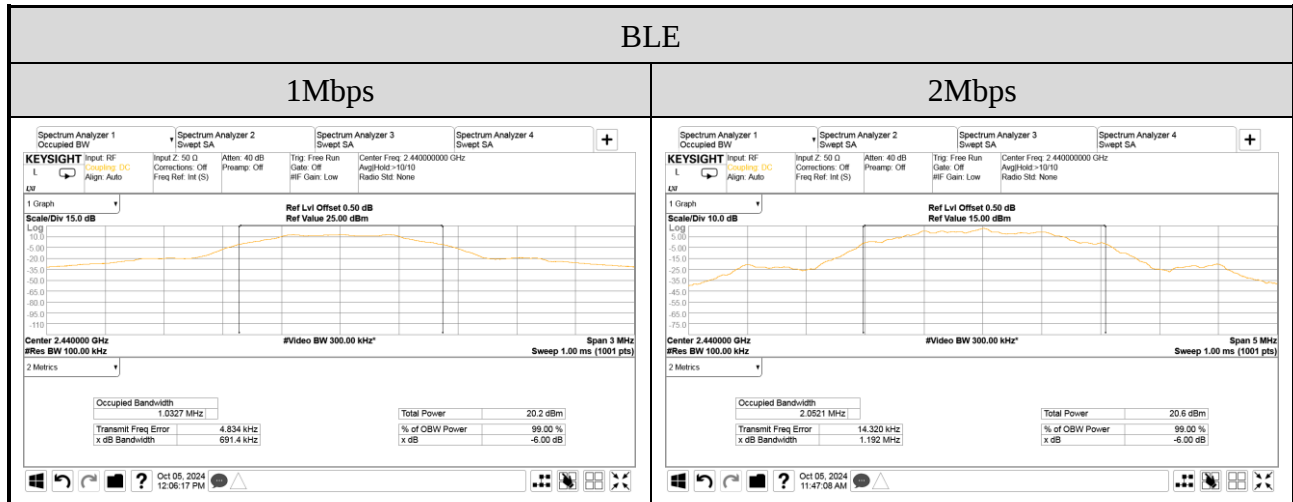
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

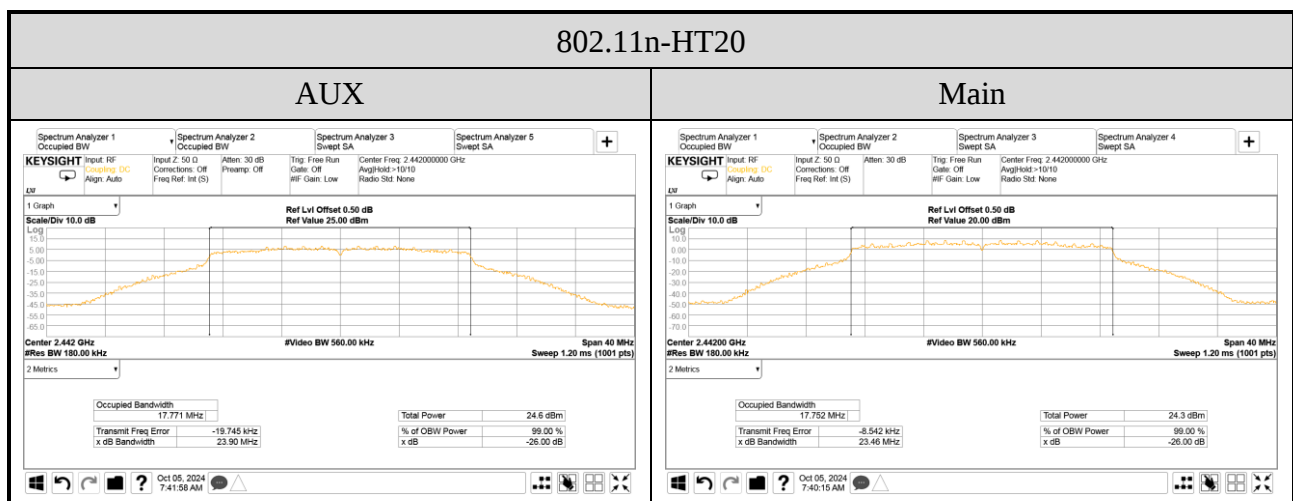
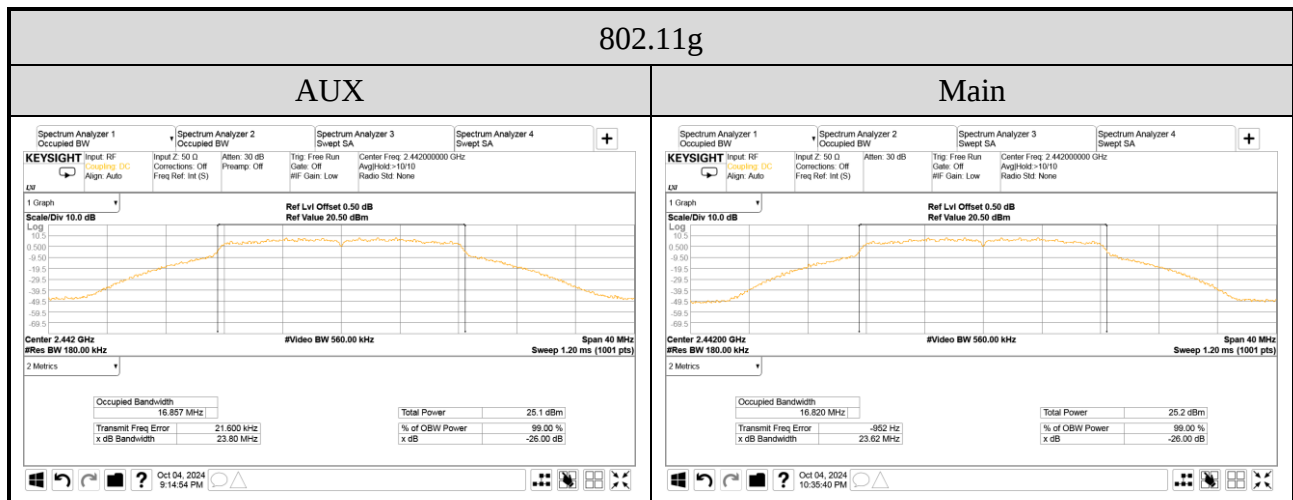
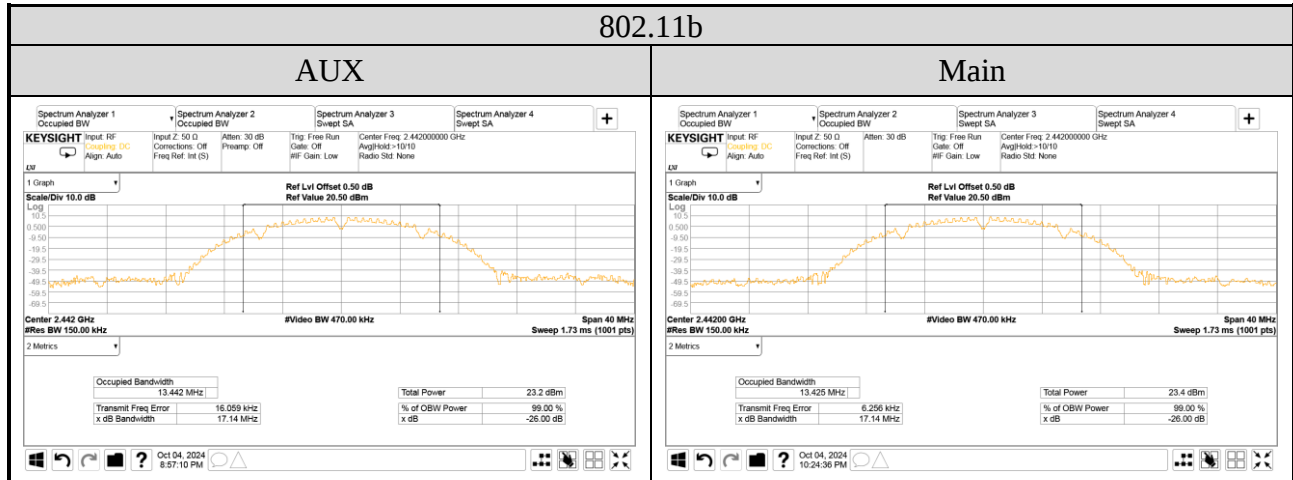
Tel: +886 2 26099301
Fax: +886 2 26099303



Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

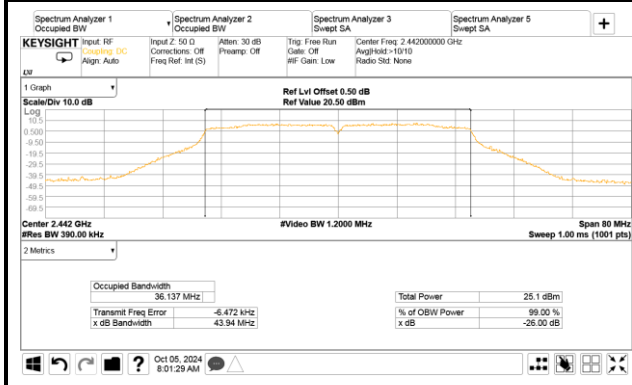
Tel: +886 2 26099301
Fax: +886 2 26099303

● Occupied (99%) Bandwidth

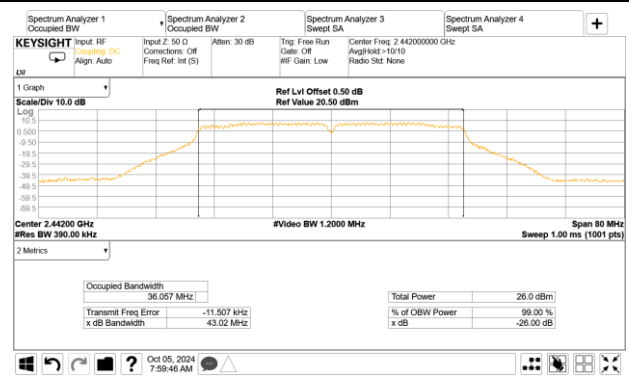


802.11n-HT40

AUX

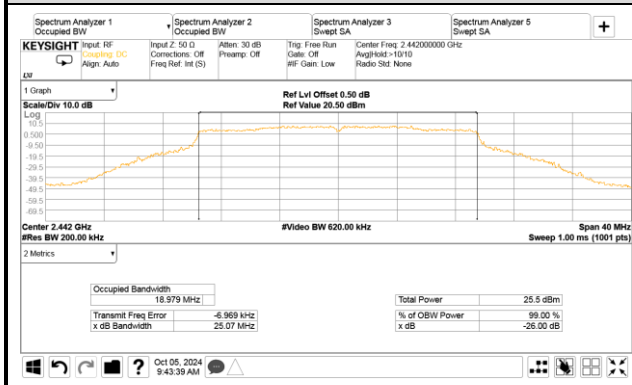


Main

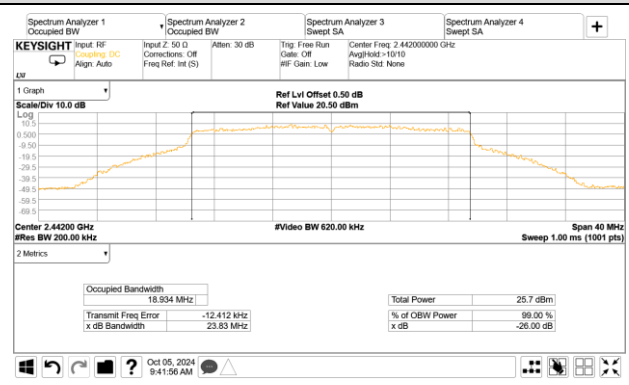


802.11ax-HE20

AUX

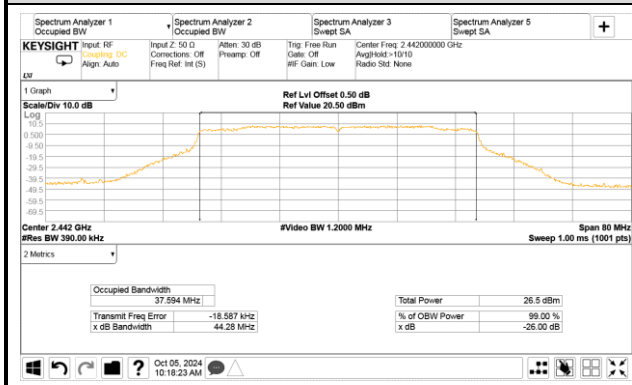


Main

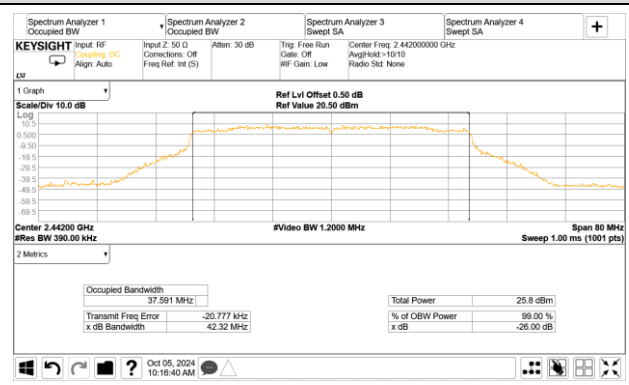


802.11ax-HE40

AUX

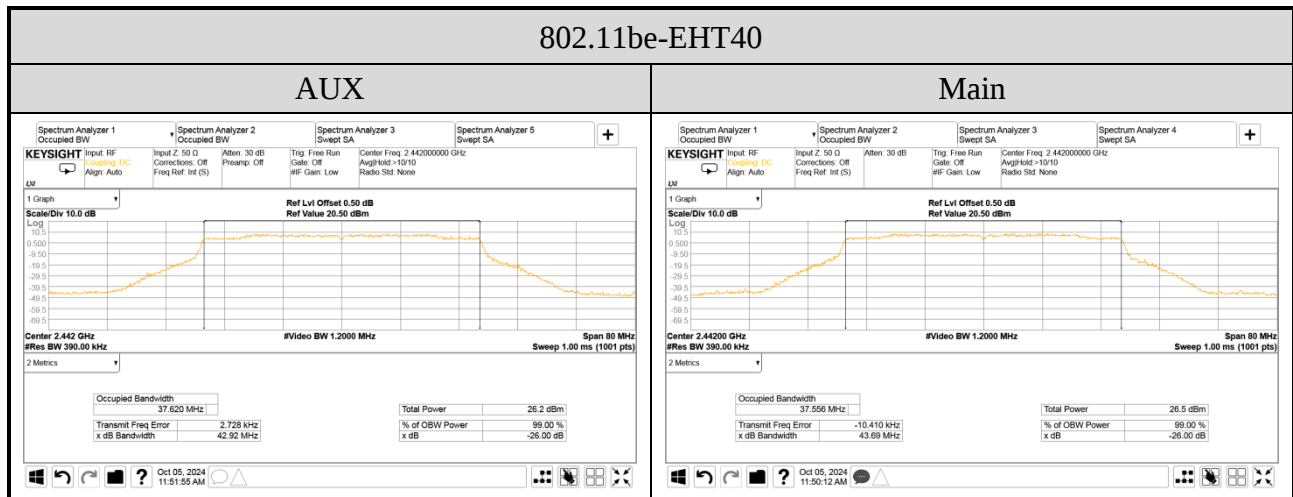
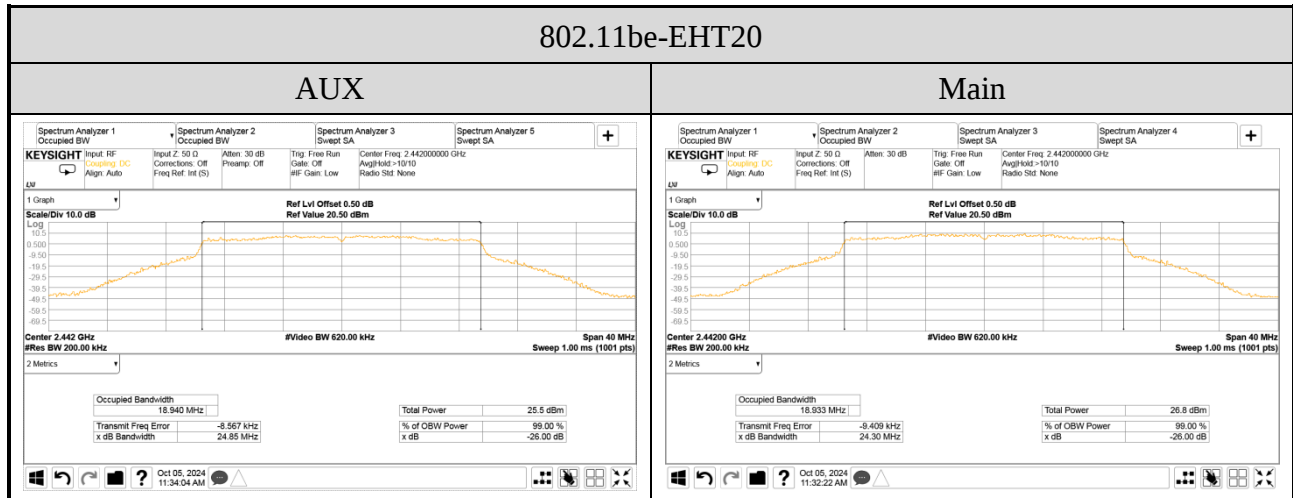


Main



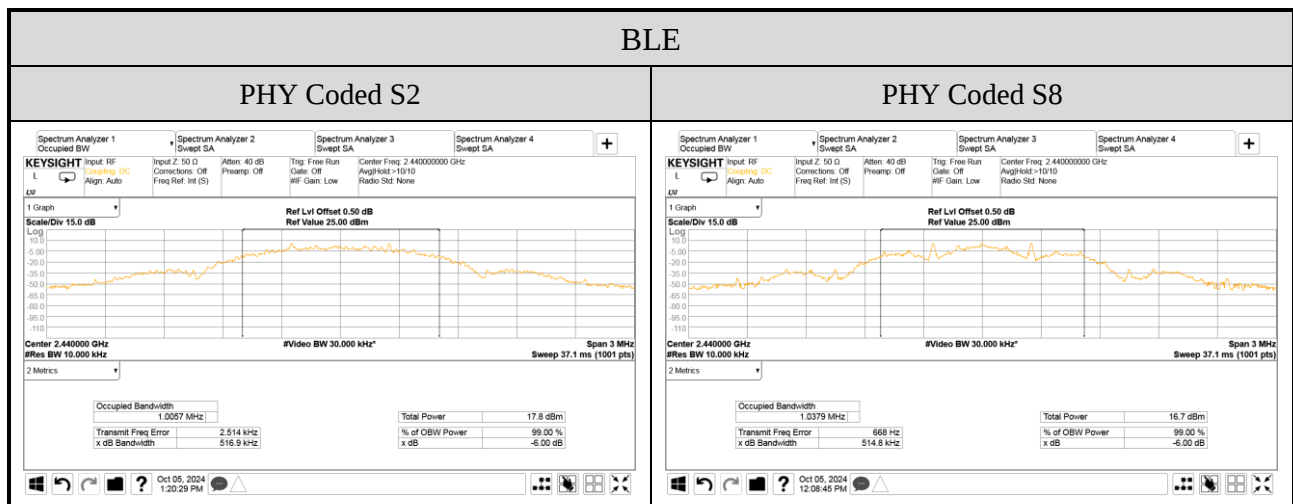
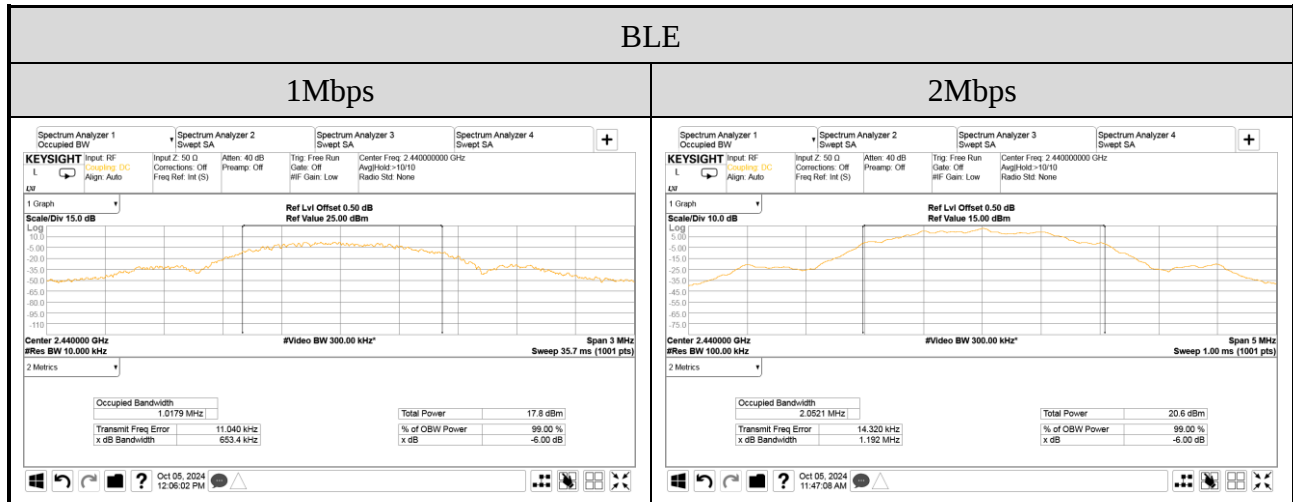
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



A.4 MAXIMUM PEAK OUTPUT POWER

Test Date	2024/09/25 ~ 10/04	Temp./Hum.	23 ~ 25°C/53 ~ 62%
Cable Loss	0.5dB	Tested By	Ryan Chiang
Test Voltage	AC 120V, 60Hz (via AC Adapter)		

A.4.1 Peak Output Power

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)		Max Peak Output Power (dBm)	Antenna Gain (dBi)		E.I.R.P (dBm) ^{Note 2}	Limit
		Aux	Main		Aux	Main		
802.11b	2412	19.22	19.83	19.83	2.10	2.10	21.93	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
	2417	19.52	19.81	19.81	2.10	2.10	21.91	
	2422	20.15	19.85	20.15	2.10	2.10	22.25	
	2442	20.36	19.73	20.36	2.10	2.10	22.46	
	2467	20.29	19.62	20.29	2.10	2.10	22.39	
	2472	19.14	19.41	19.41	2.10	2.10	21.51	
802.11g	2412	23.13	22.55	23.13	2.10	2.10	25.23	
	2417	23.09	22.69	23.09	2.10	2.10	25.19	
	2422	23.12	22.47	23.12	2.10	2.10	25.22	
	2472	24.04	24.93	24.93	2.10	2.10	27.03	

Note: 1. The results have been included cable loss.

2. E.I.R.P.= The Max. of Peak Output Power (AUX or Main)(dBm)+ Antenna Gain (dBi).

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)		Total Peak Output Power Note 2 (dBm)	Directional Gain Note 3 (dBi)	E.I.R.P. ^{Note 4} (dBm)	Limit
		Aux	Main				
802.11n-HT20	2412	22.54	21.84	25.21	2.10	27.31	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
	2417	23.02	22.55	25.80	2.10	27.90	
	2442	23.06	22.42	25.76	2.10	27.86	
	2462	22.95	22.50	25.74	2.10	27.84	
	2467	21.12	21.32	24.23	2.10	26.33	
	2472	23.28	22.76	26.04	2.05	28.09	
802.11n-HT40	2422	23.43	22.79	26.13	2.05	28.18	
	2427	24.08	23.63	26.87	2.05	28.92	
	2442	23.88	23.59	26.75	2.05	28.80	
	2462	23.03	22.62	25.84	2.05	27.89	
802.11ax-HE20	2412	22.46	21.89	25.19	2.05	27.24	
	2417	22.89	22.55	25.73	2.05	27.78	
	2442	23.02	22.41	25.74	2.05	27.79	
	2472	23.12	22.00	25.61	2.05	27.66	
802.11ax-HE40	2422	23.37	22.88	26.14	2.05	28.19	
	2427	24.06	23.66	26.87	2.05	28.92	
	2442	23.88	23.57	26.74	2.05	28.79	
	2462	23.07	22.54	25.82	2.05	27.87	
802.11be-EHT20	2412	22.49	21.80	25.17	2.05	27.22	
	2417	22.93	22.60	25.78	2.05	27.83	
	2442	23.01	22.55	25.80	2.05	27.85	
	2472	23.01	22.52	25.78	2.05	27.83	
802.11be-EHT40	2422	23.61	23.00	26.33	2.05	28.38	
	2427	24.04	23.70	26.88	2.05	28.93	
	2442	24.00	23.45	26.74	2.05	28.79	
	2462	23.52	23.21	26.38	2.05	28.43	

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total peak power = sum to individual output power

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G^1/10} + 10^{G^2/10} + \dots + 10^{G^N/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{2.1/10} + 10^{2.1/10})/2] = 2.10 \text{ dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Peak Output Power (dBm)+ Directional Gain (dBi).

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Centre Frequency (MHz)	RU Configuration	Peak Output Power (dBm)		Total Peak Output Power Note 2 (dBm)	Directional Gain Note 3 (dBi)	E.I.R.P. ^{Note 4} (dBm)	Limit
			Aux	Main				
802.11ax-HE20	2412	26/0	22.70	21.82	25.29	2.10	27.39	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
		52/37	22.72	21.98	25.38	2.10	27.48	
		106/53	22.70	21.97	25.36	2.10	27.46	
	2472	26/8	16.52	16.05	19.30	2.10	21.40	
		52/40	15.52	15.13	18.34	2.10	20.44	
		106/54	21.35	20.29	23.86	2.10	25.96	
802.11ax-HE40	2422	242/61	22.31	21.79	25.07	2.10	27.17	
	2462	242/62	24.05	24.43	27.25	2.10	29.35	
802.11be-EHT20	2412	26/0	22.83	21.85	25.38	2.10	27.48	
		52/37	22.38	21.83	25.12	2.10	27.22	
		106/53	22.37	21.78	25.10	2.10	27.20	
	2472	26/8	14.68	14.10	17.41	2.10	19.51	
		52/40	13.87	13.39	16.65	2.10	18.75	
		106/54	19.85	19.55	22.71	2.10	24.81	
802.11be-EHT40	2422	242/61	22.52	21.82	25.19	2.10	27.29	
	2462	242/62	23.80	23.17	26.51	2.10	28.61	

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total peak power = sum to individual output power

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{2.1/10} + 10^{2.1/10})/2] = 2.10 \text{ dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Peak Output Power (dBm)+ Directional Gain (dBi).

Mode	Centre Frequency (MHz)	Peak Output Power (dBm)	Antenna Gain (dBi)	E.I.R.P (dBm) ^{Note 2}	Limit
		Aux	Aux		
BLE (1Mbps)	2402	13.72	2.10	15.82	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
	2440	13.76	2.10	15.86	
	2480	13.72	2.10	15.82	
BLE (2Mbps)	2402	12.19	2.10	14.29	
	2440	11.95	2.10	14.05	
	2480	12.21	2.10	14.31	
BLE (PHY Coded S2)	2402	12.56	2.10	14.66	
	2440	12.59	2.10	14.69	
	2480	12.45	2.10	14.55	
BLE (PHY Coded S8)	2402	12.96	2.10	15.06	
	2440	12.99	2.10	15.09	
	2480	12.84	2.10	14.94	

Note: 1. The results have been included cable loss.

2. E.I.R.P.= The Peak Output Power (dBm)+ Antenna Gain (dBi).

A.4.2 Average Output Power (Reporting only)

Mode	Centre Frequency (MHz)	Average Output Power (dBm)		Duty cycle factor (dB) 10log (1/x)	Max Average Output Power (dBm)	Antenna Gain (dBi)		E.I.R.P (dBm) ^{Note 2}	Limit
		Aux	Main			Aux	Main		
802.11b	2412	17.10	17.15	N/A	17.15	2.10	2.10	19.25	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
	2417	17.39	16.13		17.39	2.10	2.10	19.49	
	2422	18.04	16.18		18.04	2.10	2.10	20.14	
	2442	15.96	16.82		16.82	2.10	2.10	18.92	
	2467	17.91	17.45		17.91	2.10	2.10	20.01	
	2472	17.02	17.27		17.27	2.10	2.10	19.37	
802.11g	2412	17.86	17.62	N/A	17.86	2.10	2.10	20.06	
	2417	17.68	17.15		17.68	2.10	2.10	19.88	
	2442	17.37	16.77		17.37	2.10	2.10	19.57	
	2472	13.12	13.37		13.37	2.10	2.10	15.57	

Note: 1. The results have been included cable loss.

2. E.I.R.P.= The Max. of Average Output Power (AUX or Main)(dBm)+ Antenna Gain (dBi).

3. Max Average Output Power (dBm) = Max of each average output power (dBm)+ Duty Cycle Factor (dB) when duty cycle is less than 98%.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Centre Frequency (MHz)	Average Output Power (dBm)		Duty cycle factor (dB) 10log (1/x)	Total Average Output Power Note 2 (dBm)	Directional Gain Note 3 (dBi)	Average Output Power (E.I.R.P.) Note 4 (dBm)	Limit
		Aux	Main					
802.11n-HT20	2412	17.40	16.75	N/A	20.10	2.10	22.20	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
	2417	17.30	17.46		20.39	2.10	22.49	
	2442	17.93	17.43		20.70	2.10	22.80	
	2457	17.26	17.33		20.31	2.10	22.41	
	2462	17.77	17.13		20.47	2.10	22.57	
	2467	13.04	12.35		15.72	2.10	17.82	
	2472	12.12	11.43		14.80	2.10	16.90	
802.11n-HT40	2422	17.61	16.90	N/A	20.28	2.10	22.38	
	2427	17.84	17.67		20.77	2.10	22.87	
	2442	17.67	17.63		20.66	2.10	22.76	
	2462	12.53	12.00		15.28	2.10	17.38	
802.11ax-HE20	2412	17.35	16.68	N/A	20.04	2.10	22.14	
	2417	17.23	17.38		20.32	2.10	22.42	
	2442	17.94	17.23		20.61	2.10	22.71	
	2472	12.06	11.33		14.72	2.10	16.82	
802.11ax-HE40	2422	17.51	16.84	N/A	20.20	2.10	22.30	
	2427	17.79	17.60		20.71	2.10	22.81	
	2442	18.02	17.56		20.81	2.10	22.91	
	2462	12.51	11.98		15.26	2.10	17.36	
802.11be-EHT20	2412	17.33	16.70	N/A	20.04	2.10	22.14	
	2417	17.22	17.37		20.31	2.10	22.41	
	2442	17.96	17.29		20.65	2.10	22.75	
	2472	12.03	11.33		14.70	2.10	16.80	
802.11be-EHT40	2422	17.53	16.85	N/A	20.21	2.10	22.31	
	2427	17.61	17.60		20.62	2.10	22.72	
	2442	18.01	17.56		20.80	2.10	22.90	
	2462	12.48	11.97		15.24	2.10	17.34	

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total Ave power = sum to individual output power + duty cycle factor (dB), when duty cycle is less than 98%.

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{2.1/10} + 10^{2.1/10})/2] = 2.10 \text{ dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Average Output Power (dBm)+ Directional Gain (dBi).

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Centre Frequency (MHz)	RU Configuration	Average Output Power (dBm)		Duty cycle factor (dB) 10log	Total Average Output Power Note 2 (dBm)	Directional Gain Note 3 (dBi)	Average Output Power (E.I.R.P) Note 4	Limit
			Aux	Main					
802.11ax-HE20	2412	26/0	17.82	17.37	N/A	20.61	2.10	22.71	<30dBm (Maximum Peak Output Power) <36dBm (E.I.R.P)
		52/37	17.96	17.52	N/A	20.76	2.10	22.86	
		106/53	17.89	17.50	N/A	20.71	2.10	22.81	
	2472	26/8	2.56	2.14	N/A	5.37	2.10	7.47	
		52/40	1.91	1.48	N/A	4.71	2.10	6.81	
		106/54	8.03	7.66	N/A	10.86	2.10	12.96	
802.11ax-HE40	2422	242/61	17.32	16.74	N/A	20.05	2.10	22.15	
	2462	242/62	12.10	11.45	N/A	14.80	2.10	16.90	
802.11be-EHT20	2412	26/0	17.81	17.35	N/A	20.60	2.10	22.70	
		52/37	17.95	17.56	N/A	20.77	2.10	22.87	
		106/53	17.88	17.51	N/A	20.71	2.10	22.81	
	2472	26/8	2.54	2.06	N/A	5.32	2.10	7.42	
		52/40	1.92	1.45	N/A	4.70	2.10	6.80	
		106/54	8.03	7.63	N/A	10.84	2.10	12.94	
802.11be-EHT40	2422	242/61	17.34	16.70	N/A	20.04	2.10	22.14	
	2462	242/62	12.05	11.35	N/A	14.72	2.10	16.82	

Note: 1. The results have been included cable loss.

2. According to KDB 662911 D01 E)1), Total Ave power = sum to individual output power + duty cycle factor (dB), when duty cycle is less than 98%.

3. According to KDB 662911 D01 d) ii), transmit signals are completely uncorrelated, then

$$\text{Directional gain} = 10 \log[(10^{G1/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{\text{ANT}}] \text{ dBi}$$

$$\text{Directional gain} = 10 \log[(10^{2.1/10} + 10^{2.1/10})/2] = 2.10 \text{ dBi}$$

The MIMO is uncorrelated and supported SDM(Spatial Division Multiplexing) mode only. This radio device doesn't support beamforming and Cyclic Delay Diversity (CDD).

4. E.I.R.P.= The Total Average Output Power (dBm)+ Directional Gain (dBi).