



Test report No. : 4790420462-US-R0-V0
Page : 65 of 84
Issued date : 2022/7/26
FCC ID : 2APLE18300422

Mode	802.11g	Channel	10
------	---------	---------	----

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	2457	96.69	15.92	112.61	N/A	N/A	PK
	@	2457	87.64	15.92	103.56	N/A	N/A	AVG
		2483.66	52.55	15.68	68.23	74	-5.77	PK
		2483.85	38.02	15.68	53.7	54	-0.3	AVG
	*	4914	39.65	2.42	42.07	74	-31.93	PK
Vertical	@	2457	97.09	15.92	113.01	N/A	N/A	PK
	@	2457	87.51	15.92	103.43	N/A	N/A	AVG
		2484.61	36.99	15.67	52.66	54	-1.34	AVG
		2487.27	50.38	15.66	66.04	74	-7.96	PK
	*	4914	38.86	2.42	41.28	74	-32.72	PK

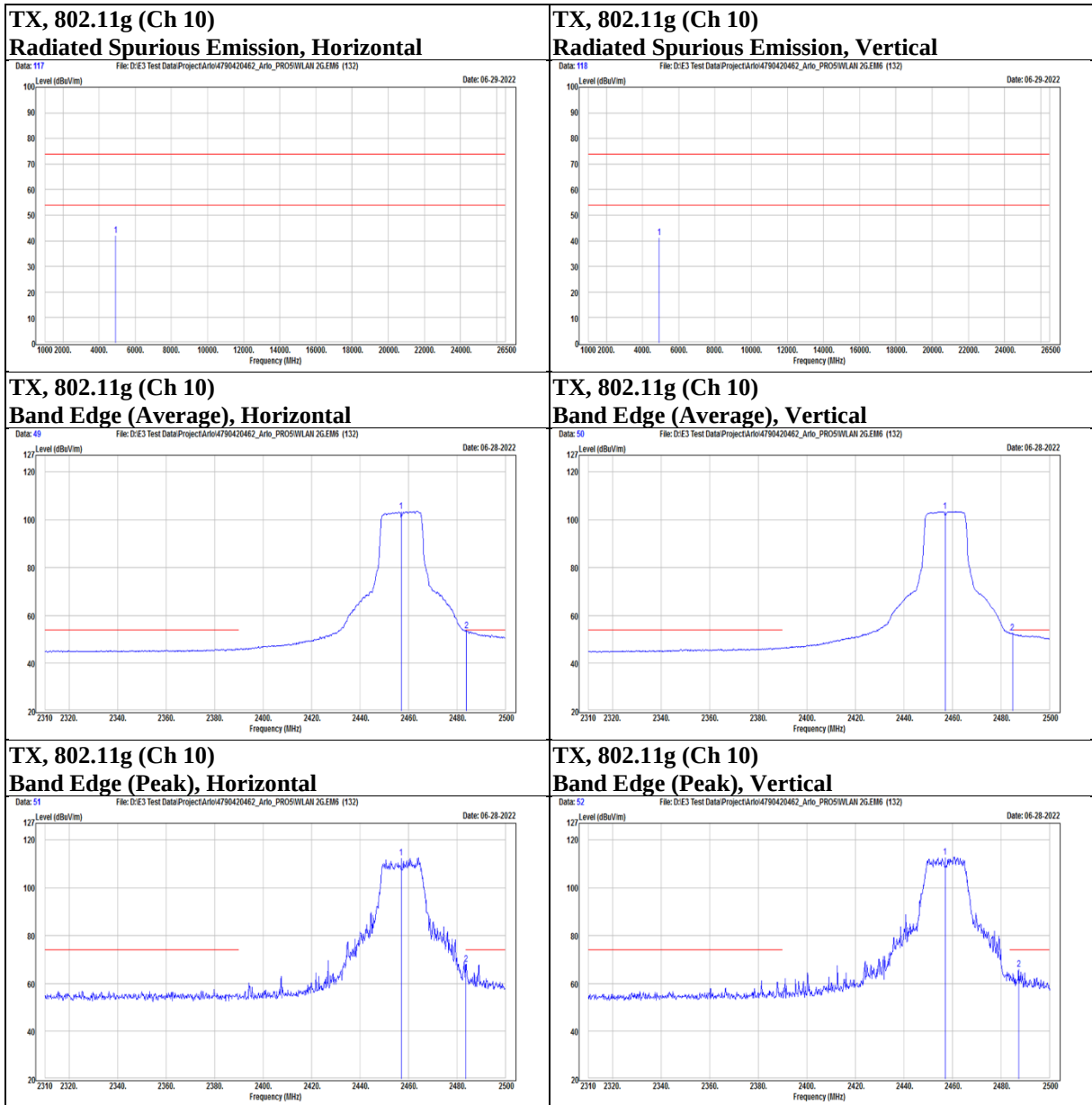
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0





Mode	802.11g	Channel	11
------	---------	---------	----

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	2462	93.86	15.87	109.73	N/A	N/A	PK
	@	2462	85.56	15.87	101.43	N/A	N/A	AVG
		2483.66	37.87	15.68	53.55	54	-0.45	AVG
		2484.04	52.35	15.68	68.03	74	-5.97	PK
	*	4924	37.79	2.4	40.19	74	-33.81	PK
Vertical	@	2462	94.19	15.87	110.06	N/A	N/A	PK
	@	2462	84.86	15.87	100.73	N/A	N/A	AVG
		2483.66	53.45	15.68	69.13	74	-4.87	PK
		2483.66	36.58	15.68	52.26	54	-1.74	AVG
	*	4924	36.86	2.4	39.26	74	-34.74	PK

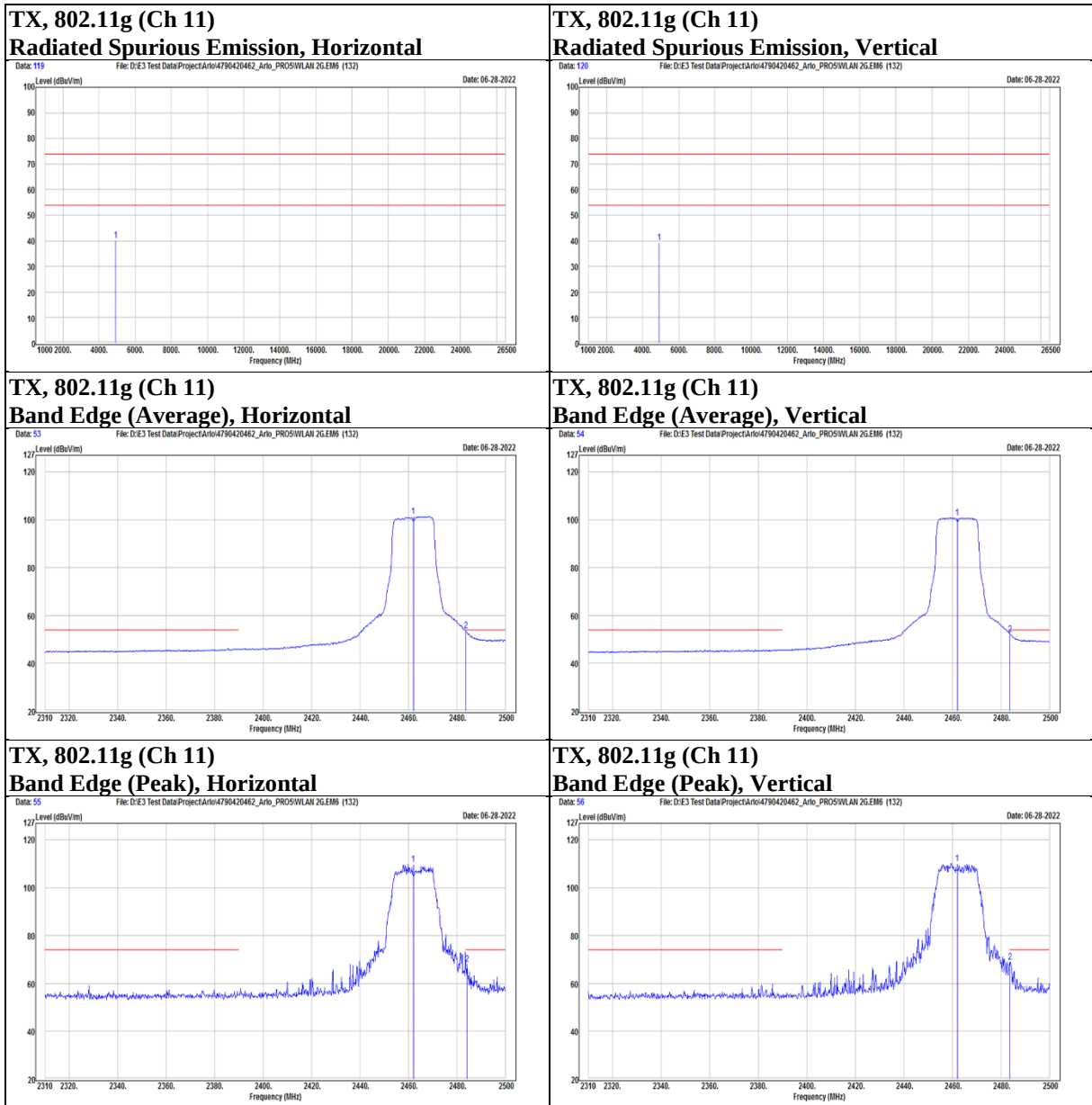
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0





Test report No. : 4790420462-US-R0-V0
Page : 69 of 84
Issued date : 2022/7/26
FCC ID : 2APLE18300422

Mode	802.11n(HT20)	Channel	1
------	---------------	---------	---

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		2382.77	45.85	15.83	61.68	74	-12.32	PK
		2389.42	34.9	15.82	50.72	54	-3.28	AVG
	@	2412	90.03	15.83	105.86	N/A	N/A	PK
	@	2412	82.76	15.83	98.59	N/A	N/A	AVG
	*	4824	36.51	2.35	38.86	74	-35.14	PK
Vertical		2387.9	49.35	15.82	65.17	74	-8.83	PK
		2389.8	37.52	15.82	53.34	54	-0.66	AVG
	@	2412	93.27	15.83	109.1	N/A	N/A	PK
	@	2412	84.37	15.83	100.2	N/A	N/A	AVG
	*	4824	39	2.35	41.35	74	-32.65	PK

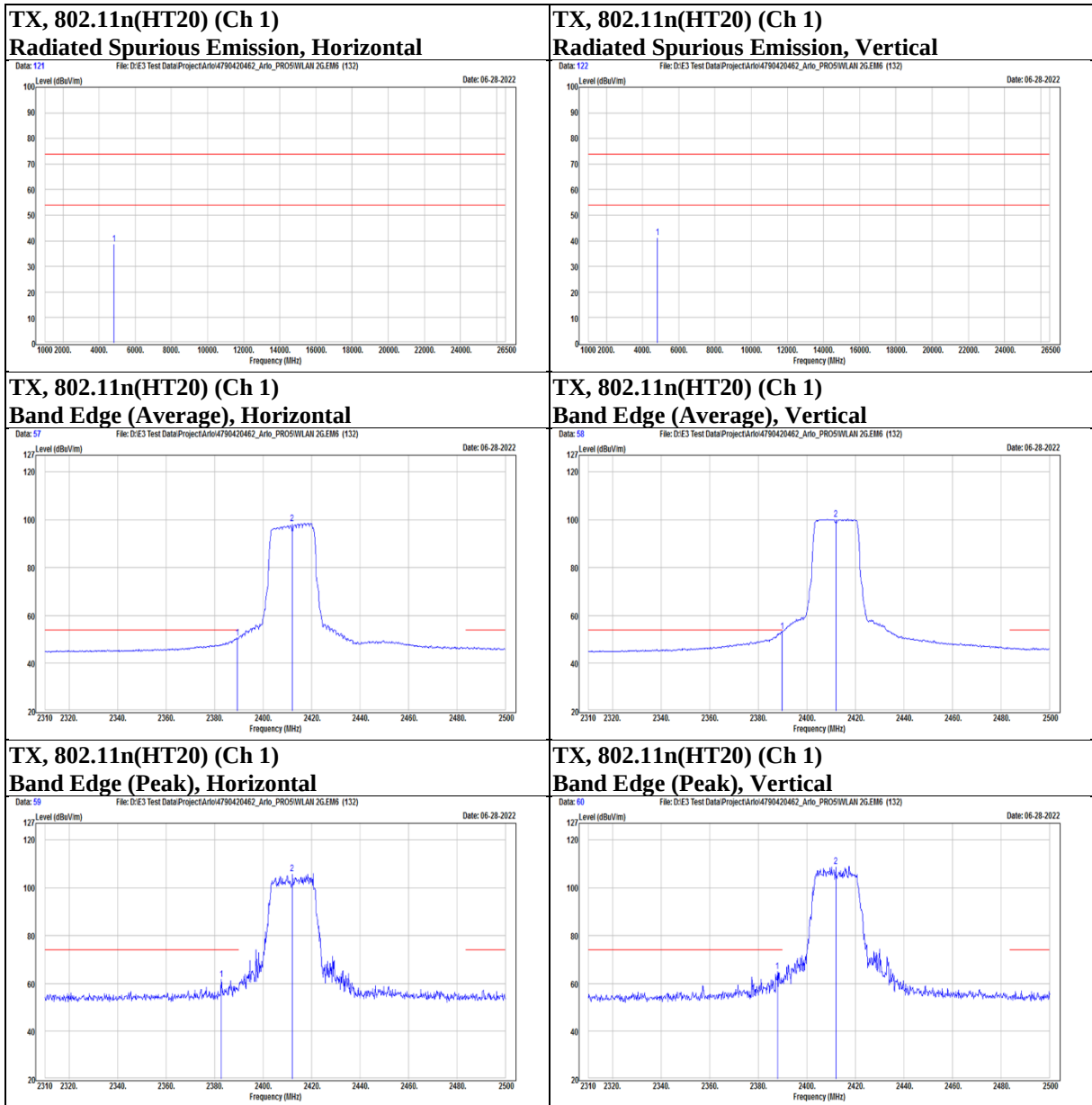
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0





Test report No. : 4790420462-US-R0-V0
Page : 71 of 84
Issued date : 2022/7/26
FCC ID : 2APLE18300422

Mode	802.11n(HT20)	Channel	2
------	---------------	---------	---

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		2384.86	52.75	15.83	68.58	74	-5.42	PK
		2389.23	37.86	15.82	53.68	54	-0.32	AVG
	@	2417	94.14	15.84	109.98	N/A	N/A	PK
	@	2417	85.59	15.84	101.43	N/A	N/A	AVG
	*	4834	37.48	2.36	39.84	74	-34.16	PK
Vertical		2386.19	49.19	15.83	65.02	74	-8.98	PK
		2389.99	37.16	15.82	52.98	54	-1.02	AVG
	@	2417	96.06	15.84	111.9	N/A	N/A	PK
	@	2417	87.07	15.84	102.91	N/A	N/A	AVG
	*	4834	38.57	2.36	40.93	74	-33.07	PK

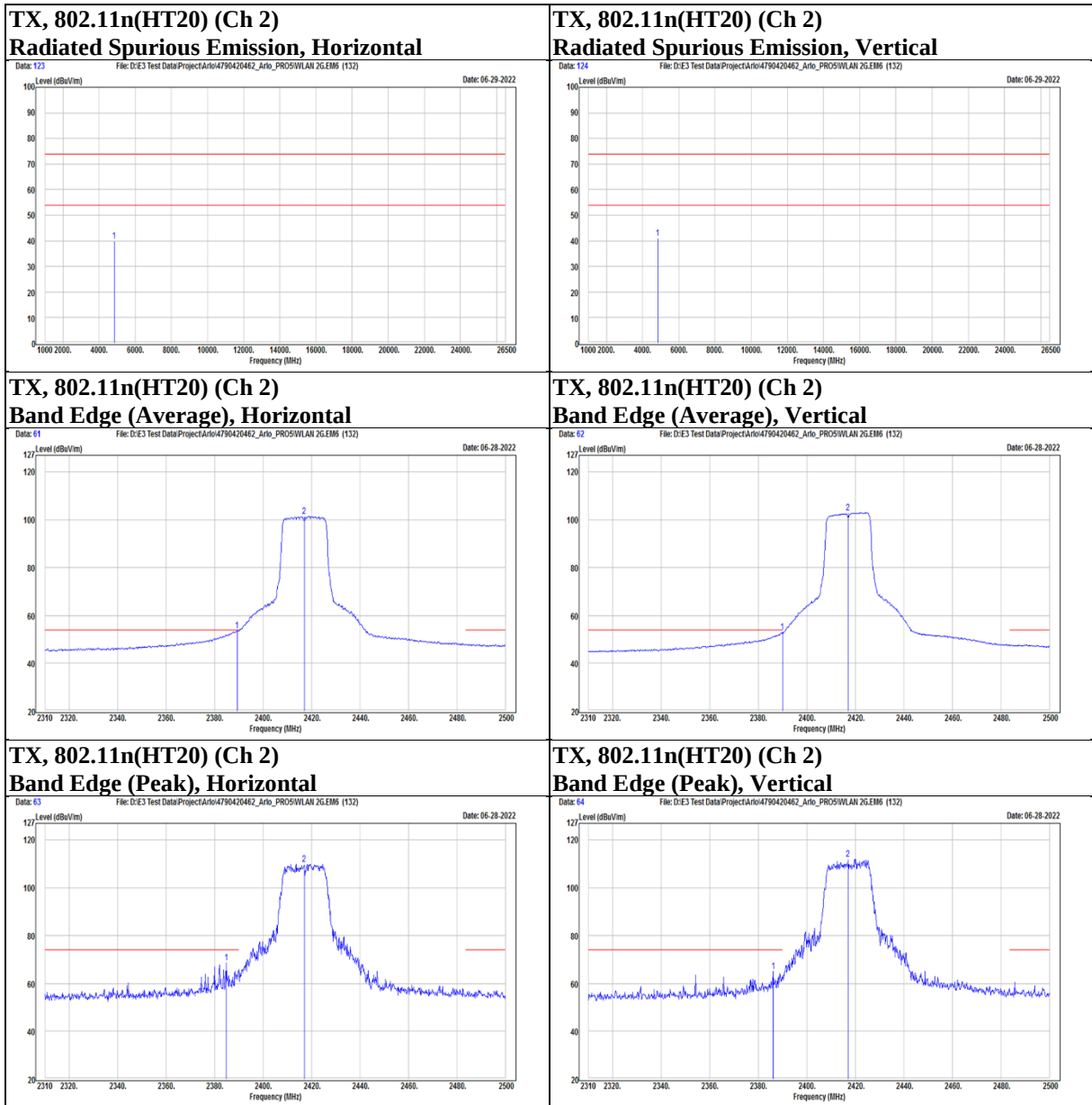
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0





Mode	802.11n(HT20)	Channel	6
------	---------------	---------	---

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		2382.58	50.11	15.83	65.94	74	-8.06	PK
		2389.23	36.39	15.82	52.21	54	-1.79	AVG
	@	2437	97.4	15.92	113.32	N/A	N/A	PK
	@	2437	88.89	15.92	104.81	N/A	N/A	AVG
		2483.66	37.86	15.68	53.54	54	-0.46	AVG
		2485.56	48.5	15.67	64.17	74	-9.83	PK
	*	4874	40.07	2.4	42.47	74	-31.53	PK
		2387.9	49.06	15.82	64.88	74	-9.12	PK
Vertical		2389.8	35.33	15.82	51.15	54	-2.85	AVG
	@	2437	98.75	15.92	114.67	N/A	N/A	PK
	@	2437	89.27	15.92	105.19	N/A	N/A	AVG
		2484.23	50.11	15.68	65.79	74	-8.21	PK
		2484.23	36.64	15.68	52.32	54	-1.68	AVG
	*	4874	40.86	2.4	43.26	74	-30.74	PK

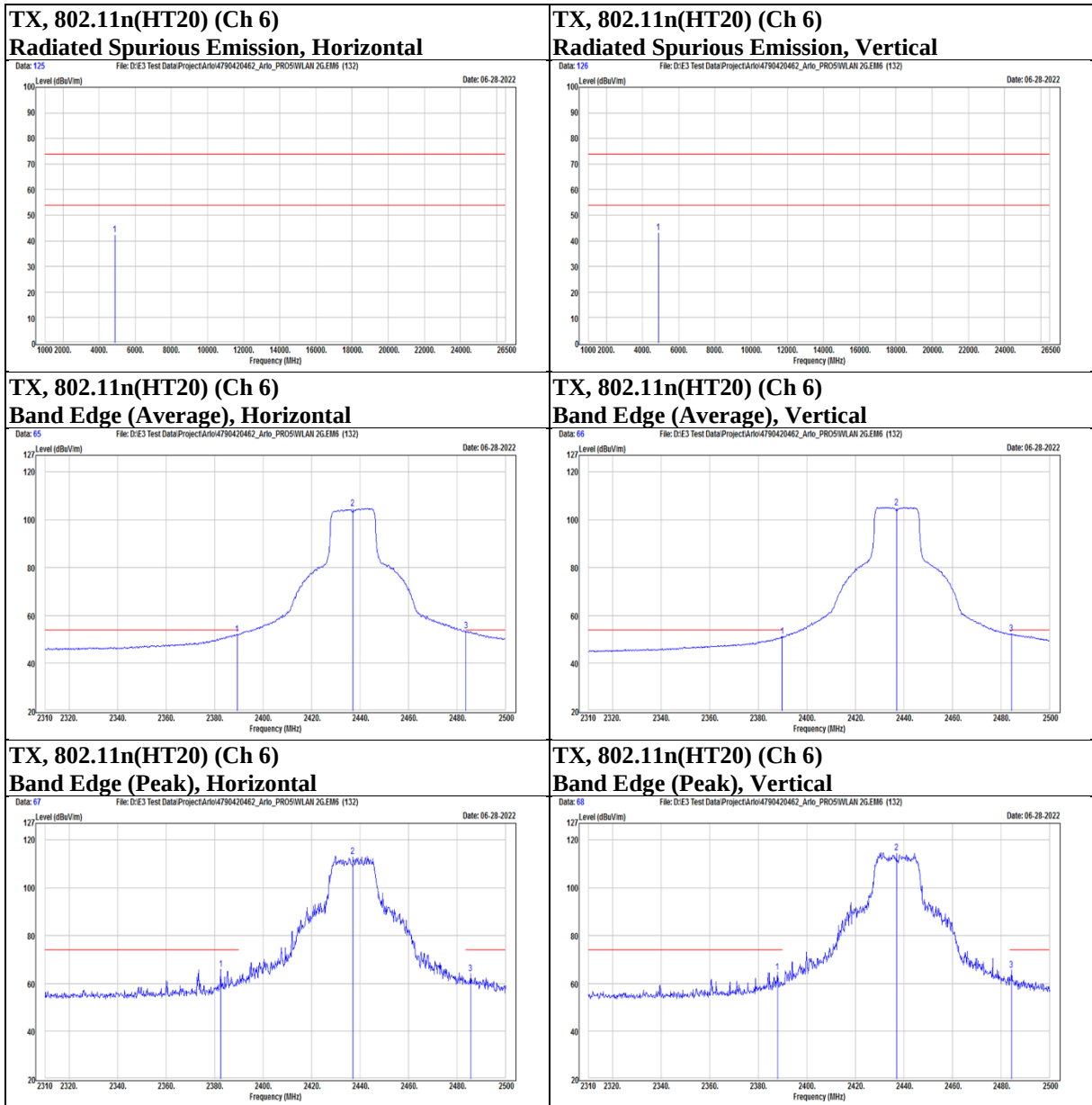
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone : +886-2-7737-3000

Facsimile (FAX) : +886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



Mode	802.11n(HT20)	Channel	10
------	---------------	---------	----

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	2457	95.86	15.92	111.78	N/A	N/A	PK
	@	2457	86.83	15.92	102.75	N/A	N/A	AVG
		2483.66	37.88	15.68	53.56	54	-0.44	AVG
		2486.7	50.05	15.66	65.71	74	-8.29	PK
	*	4914	36.93	2.42	39.35	74	-34.65	PK
Vertical	@	2457	95.84	15.92	111.76	N/A	N/A	PK
	@	2457	86.93	15.92	102.85	N/A	N/A	AVG
		2483.66	47.9	15.68	63.58	74	-10.42	PK
		2483.66	36.83	15.68	52.51	54	-1.49	AVG
	*	4914	41.37	2.42	43.79	74	-30.21	PK

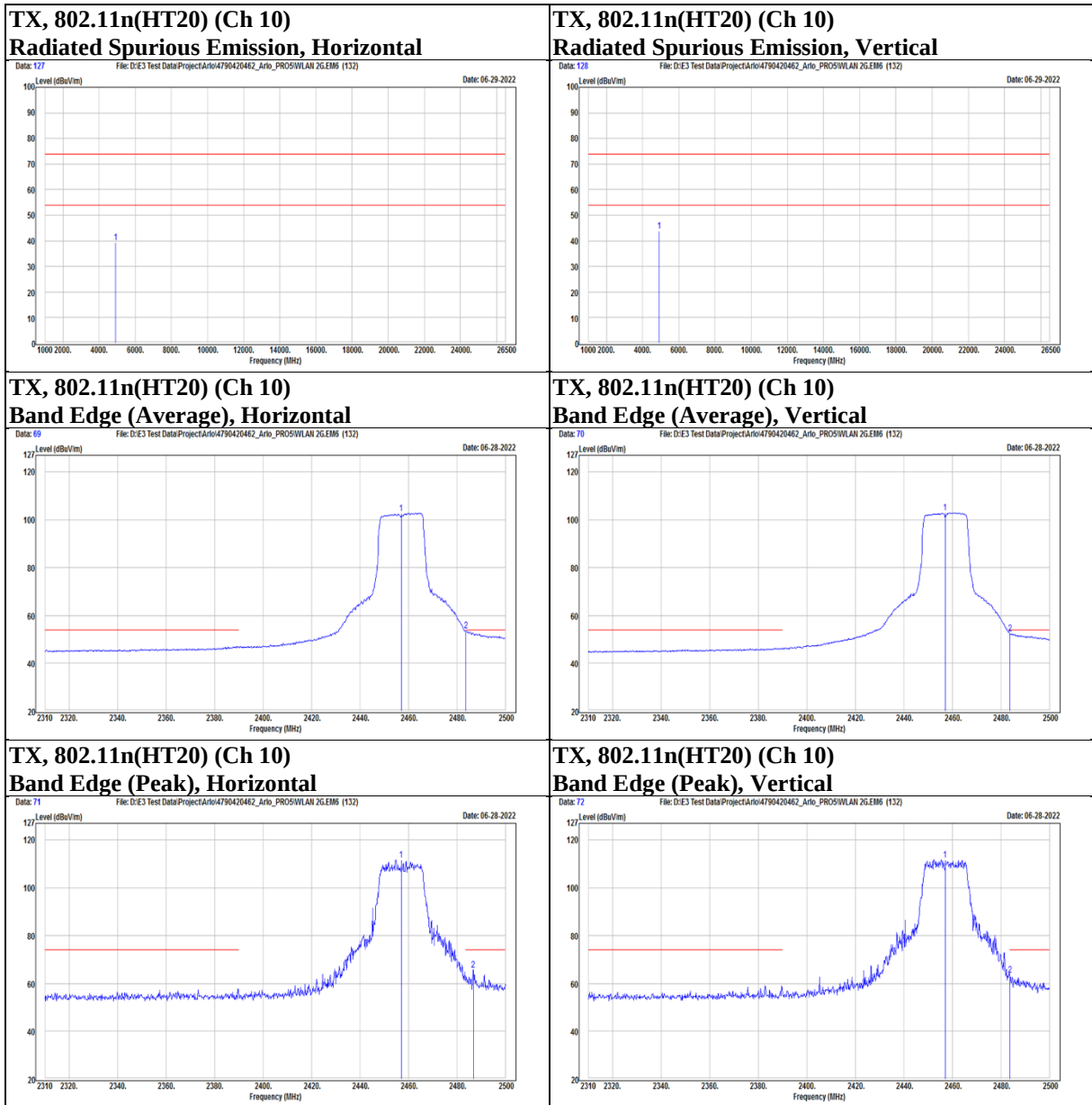
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0





Test report No. : 4790420462-US-R0-V0
Page : 77 of 84
Issued date : 2022/7/26
FCC ID : 2APLE18300422

Mode	802.11n(HT20)	Channel	11
------	---------------	---------	----

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	2462	93.56	15.87	109.43	N/A	N/A	PK
	@	2462	84.78	15.87	100.65	N/A	N/A	AVG
		2484.04	37.9	15.68	53.58	54	-0.42	AVG
		2484.23	51.85	15.68	67.53	74	-6.47	PK
	*	4924	36.31	2.4	38.71	74	-35.29	PK
Vertical	@	2462	93.55	15.87	109.42	N/A	N/A	PK
	@	2462	84.39	15.87	100.26	N/A	N/A	AVG
		2483.66	37.21	15.68	52.89	54	-1.11	AVG
		2484.04	52.8	15.68	68.48	74	-5.52	PK
	*	4924	38.31	2.4	40.71	74	-33.29	PK

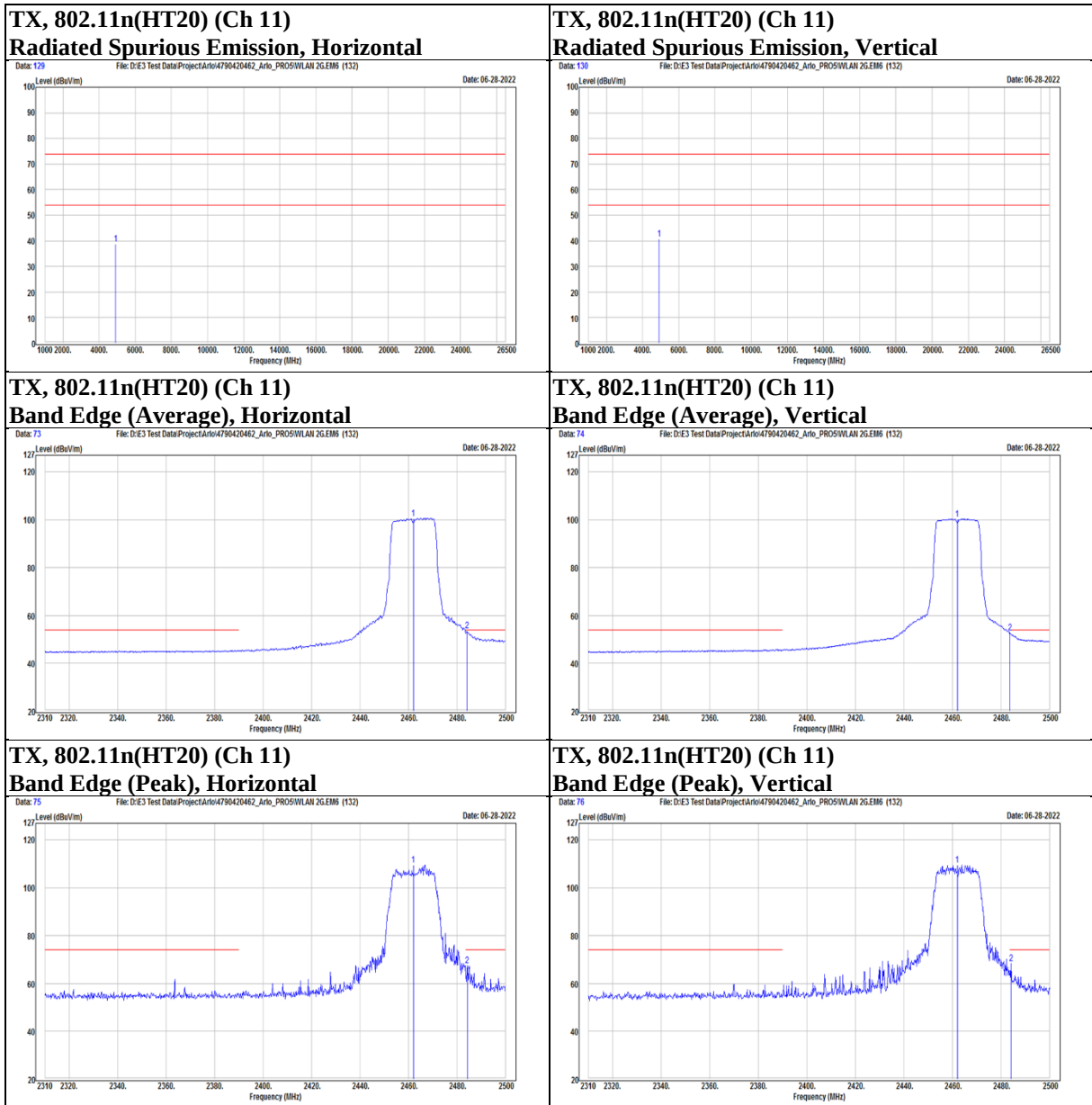
Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone : +886-2-7737-3000

Facsimile (FAX) : +886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



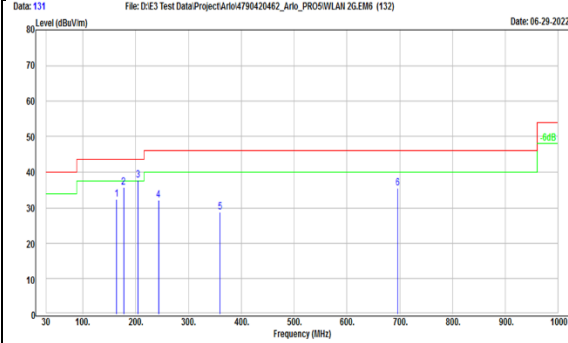
Below 1 GHz

Mode	802.11g	Channel	6
------	---------	---------	---

Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		163.86	43.49	-11.08	32.41	43.5	-11.09	PK
		177.44	47.86	-12.22	35.64	43.5	-7.86	PK
		204.6	51.71	-14	37.71	43.5	-5.79	PK
		243.4	44.26	-12.06	32.2	46	-13.8	PK
		359.8	37.14	-8.3	28.84	46	-17.16	PK
		696.39	36.14	-0.57	35.57	46	-10.43	PK
Vertical		45.52	44.07	-11.29	32.78	40	-7.22	PK
		107.6	44.12	-15.26	28.86	43.5	-14.64	PK
		161.92	39.42	-11.2	28.22	43.5	-15.28	PK
		202.66	42.41	-13.97	28.44	43.5	-15.06	PK
		359.8	39.18	-8.3	30.88	46	-15.12	PK
		696.39	37.01	-0.57	36.44	46	-9.56	PK

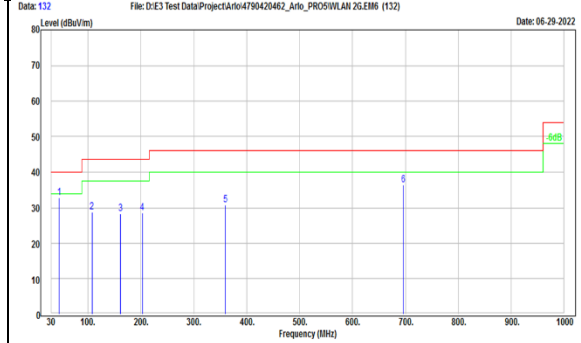
TX, 802.11g (Ch 6)

Radiated Spurious Emission, Horizontal



TX, 802.11g (Ch 6)

Radiated Spurious Emission, Vertical



Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



9 kHz ~ 30 MHz Data:

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

KDB 414788 D01 OATS and Chamber Correlation Justification

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



9.6. AC Power Line Conducted Emission

Requirements

Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.
2. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported, the other emission levels were low against the limit.
3. Test data of Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB).
4. Test data of Margin(dB) = Result value (dBuV) - Limit value (dBuV).
5. Test data of Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).

Underwriters Laboratories Taiwan Co., Ltd.

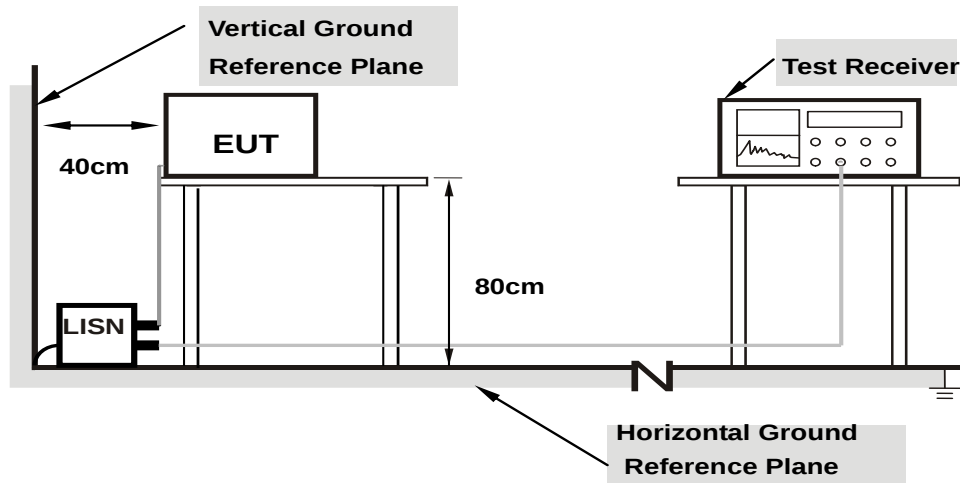
Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0

Test Setup



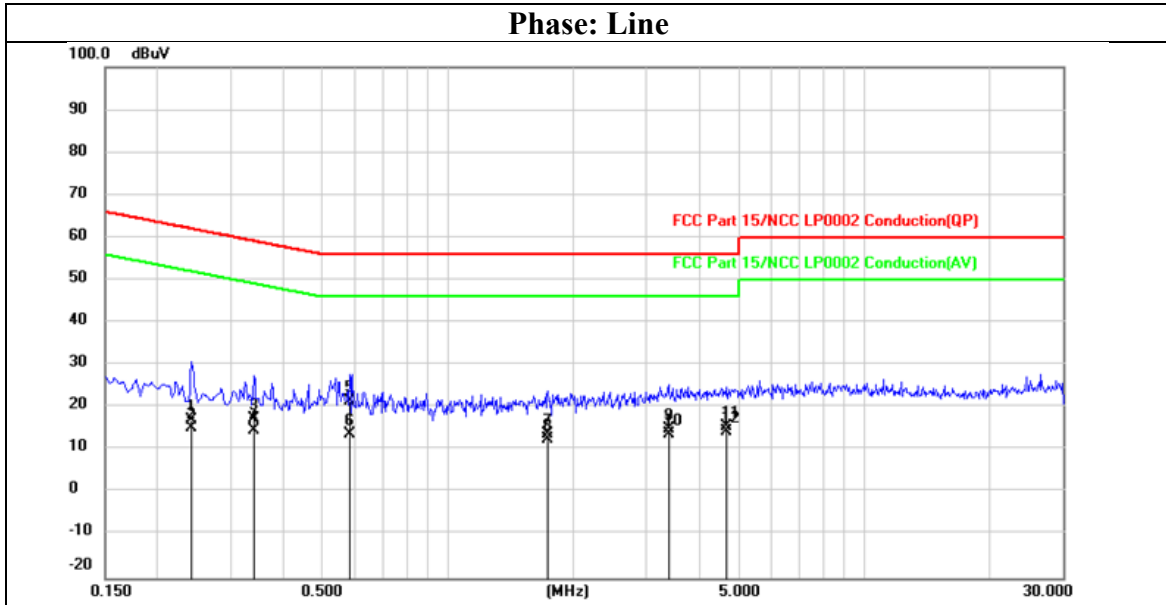
Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the Setup Configurations.



Test Data

Mode	802.11g	Channel	6
------	---------	---------	---



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2420	-2.47	19.53	17.06	62.03	-44.97	QP
2	0.2420	-4.24	19.53	15.29	52.03	-36.74	AVG
3	0.3420	-2.13	19.53	17.40	59.15	-41.75	QP
4	0.3420	-4.82	19.53	14.71	49.15	-34.44	AVG
5	0.5820	2.07	19.54	21.61	56.00	-34.39	QP
6	0.5820	-5.69	19.54	13.85	46.00	-32.15	AVG
7	1.7420	-5.69	19.57	13.88	56.00	-42.12	QP
8	1.7420	-6.90	19.57	12.67	46.00	-33.33	AVG
9	3.3900	-4.59	19.60	15.01	56.00	-40.99	QP
10	3.3900	-5.86	19.60	13.74	46.00	-32.26	AVG
11	4.6860	-4.08	19.63	15.55	56.00	-40.45	QP
12	4.6860	-5.25	19.63	14.38	46.00	-31.62	AVG

Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

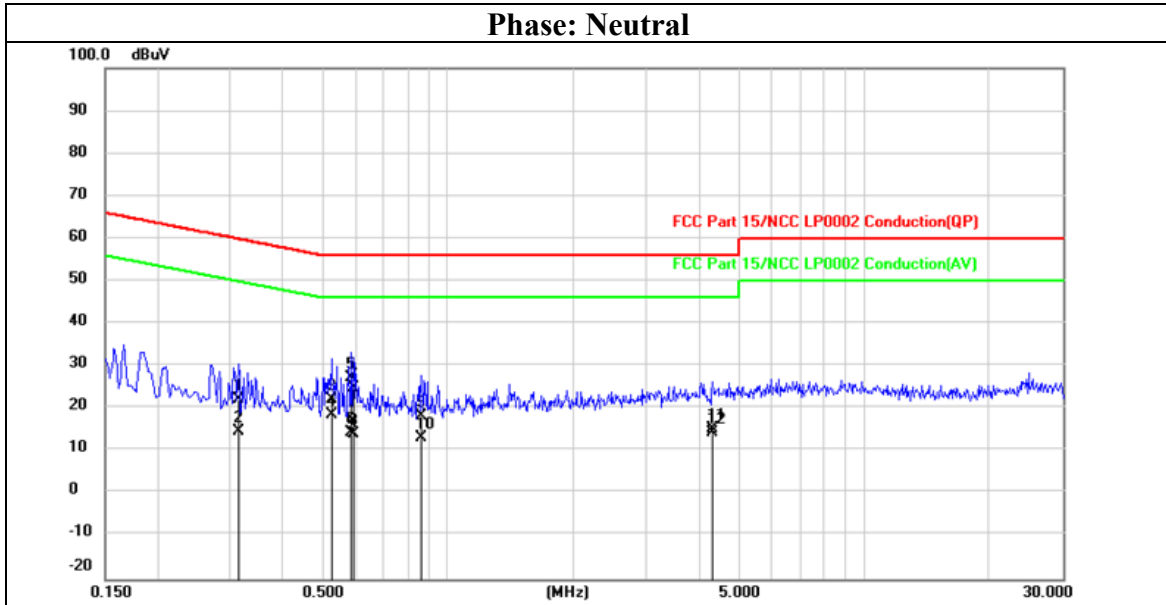
Telephone : +886-2-7737-3000

Facsimile (FAX) : +886-3-583-7948

Doc No: 17-EM-F0876 / 6.0



Mode	802.11g	Channel	6
------	---------	---------	---



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.3140	2.50	19.53	22.03	59.86	-37.83	QP
2	0.3140	-4.87	19.53	14.66	49.86	-35.20	AVG
3	0.5260	2.58	19.54	22.12	56.00	-33.88	QP
4	0.5260	-1.06	19.54	18.48	46.00	-27.52	AVG
5	0.5860	7.62	19.54	27.16	56.00	-28.84	QP
6	0.5860	-5.17	19.54	14.37	46.00	-31.63	AVG
7	0.5940	5.32	19.54	24.86	56.00	-31.14	QP
8	0.5940	-5.50	19.54	14.04	46.00	-31.96	AVG
9	0.8660	-1.31	19.55	18.24	56.00	-37.76	QP
10	0.8660	-6.46	19.55	13.09	46.00	-32.91	AVG
11	4.3220	-4.37	19.62	15.25	56.00	-40.75	QP
12	4.3220	-5.40	19.62	14.22	46.00	-31.78	AVG

END OF REPORT

Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0876 / 6.0