

Appendix D: Test Results of Radiated Spurious Emissions & Mains

Radiated Emission Test for Series Model No. DK-9183B

Band Edges, 2.31GHz ~ 2.5GHz

BLE_1M

Low Channel (Horizontal) Peak

TUV Rheinland

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

Level (dBuV/m)

Date: 2024-08-20

Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2388.28	55.51	17.49	38.02	74.00	-18.49	343	123 Peak	Horizontal
2 *	2402.00	100.34	62.27	38.07	74.00	26.34	343	123 Peak	Horizontal
3	2498.72	55.68	17.41	38.27	74.00	-18.32	343	123 Peak	Horizontal

TUV Rheinland

TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

Level (dBuV/m)

Date: 2024-08-20

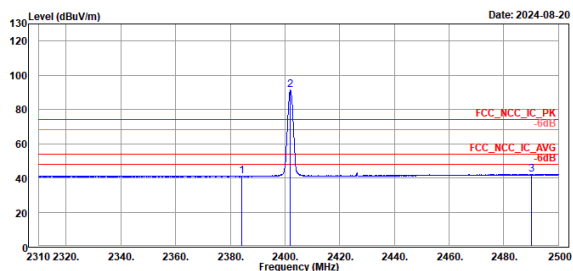
Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2374.46	55.35	17.37	37.98	74.00	-18.65	344	162 Peak	Vertical
2 *	2402.00	98.00	60.73	38.07	74.00	24.00	344	162 Peak	Vertical
3	2485.75	56.01	17.73	38.28	74.00	-17.99	344	162 Peak	Vertical

BLE_1M

Low Channel (Horizontal) Average



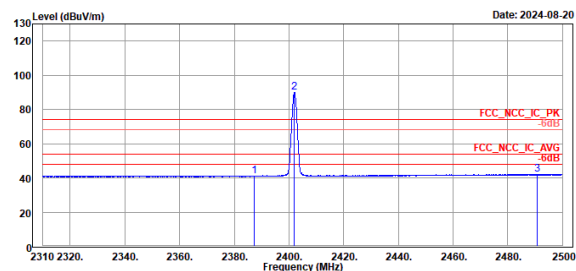
TUV Rheinland Taiwan Ltd.
No. 458-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



	Freq	Level	Read dBm	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz		dBm	dB/m	dBm/m	dB	cm	deg			
1	2384.34	41.18	3.17	38.01	54.00	-12.82	343	123	Average	Horizontal	
2 *	2402.00	91.22	53.15	38.07	54.00	37.22	343	123	Average	Horizontal	
3	2490.22	42.13	3.85	38.28	54.00	-11.87	343	123	Average	Horizontal	

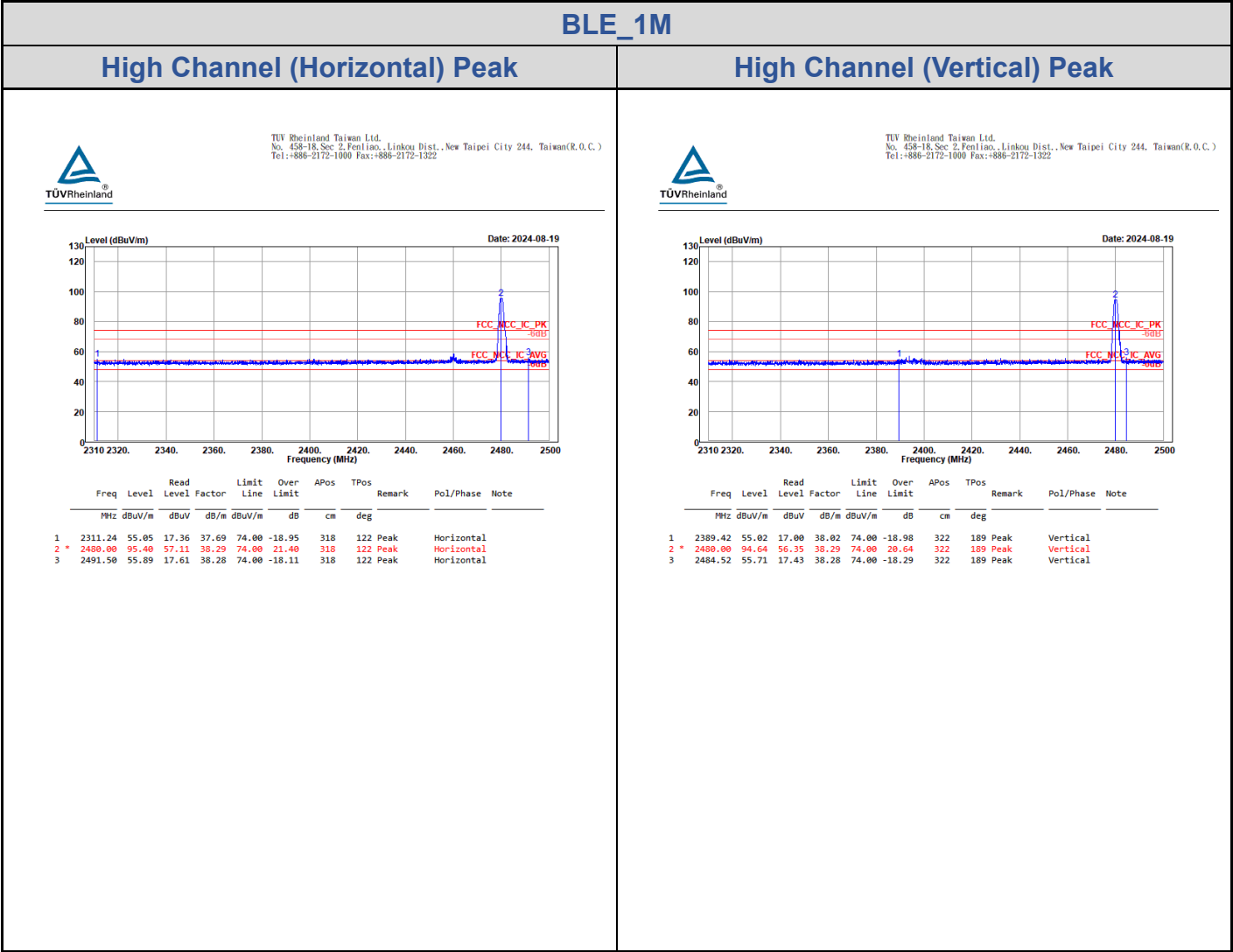


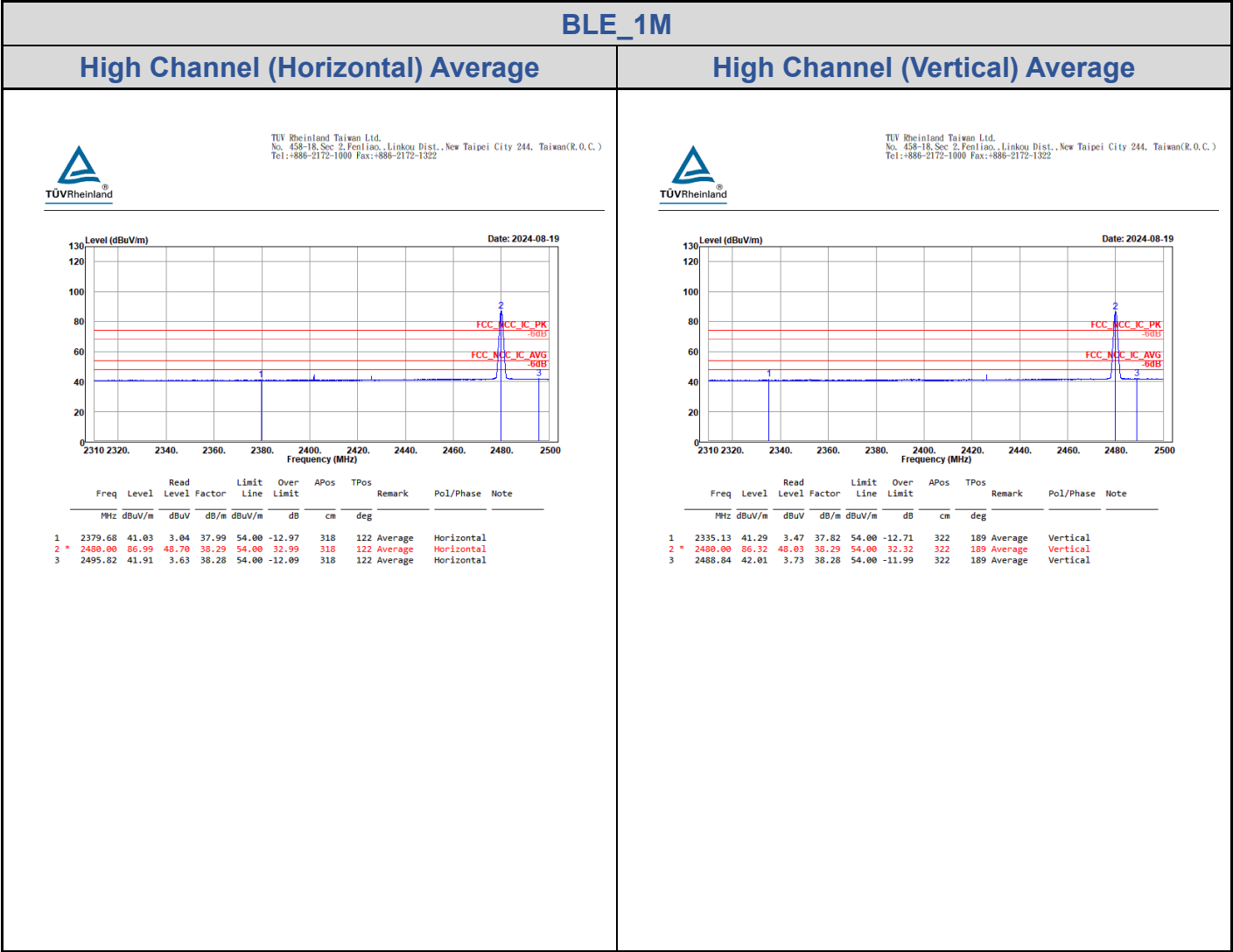
TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

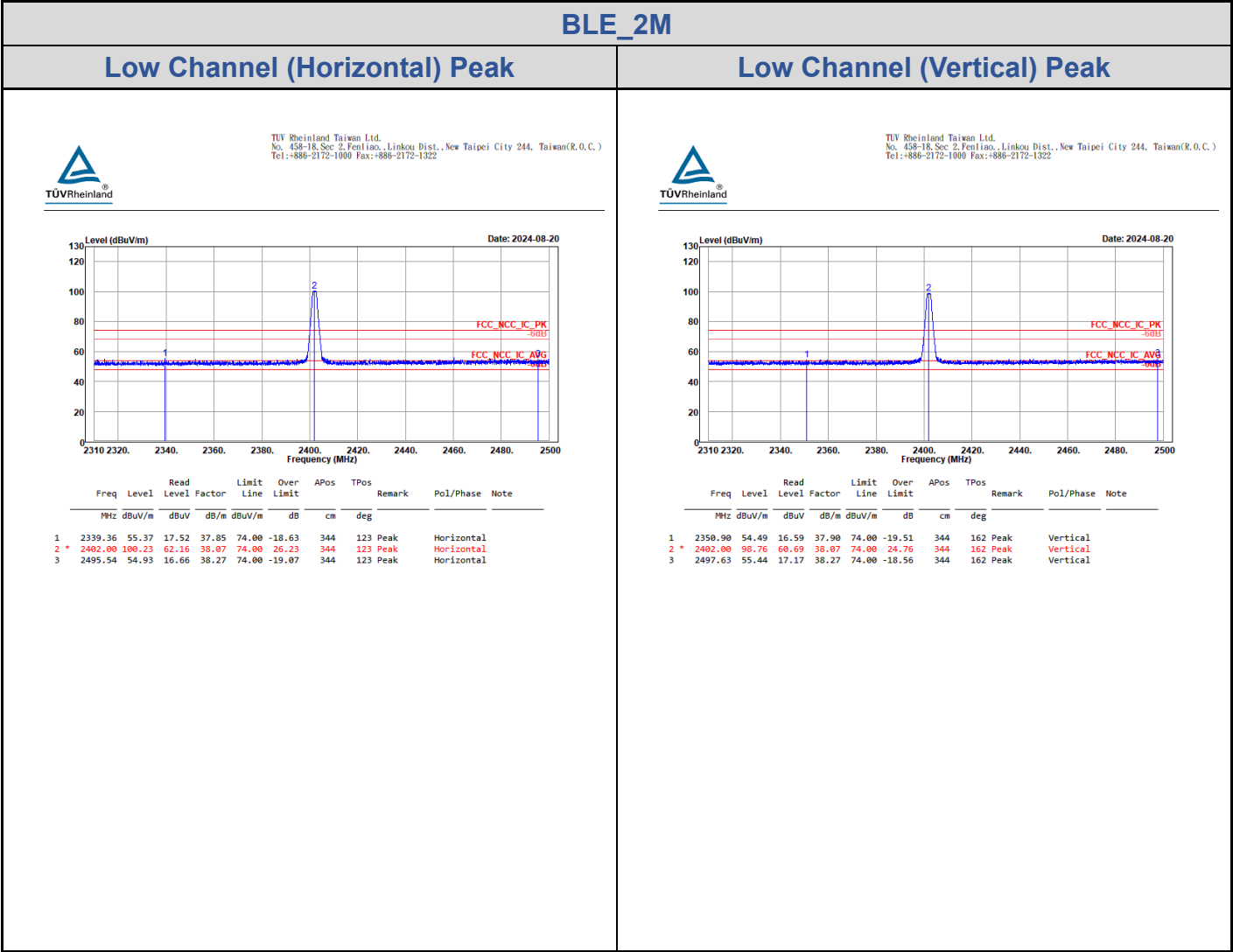


	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2387.33	41.23	3.22	38.01	54.00	-12.77	344	162	Average	Vertical	
2 *	2402.00	89.86	51.79	38.07	54.00	35.86	344	162	Average	Vertical	
3	2490.64	42.87	3.79	38.28	54.00	-11.93	344	162	Average	Vertical	

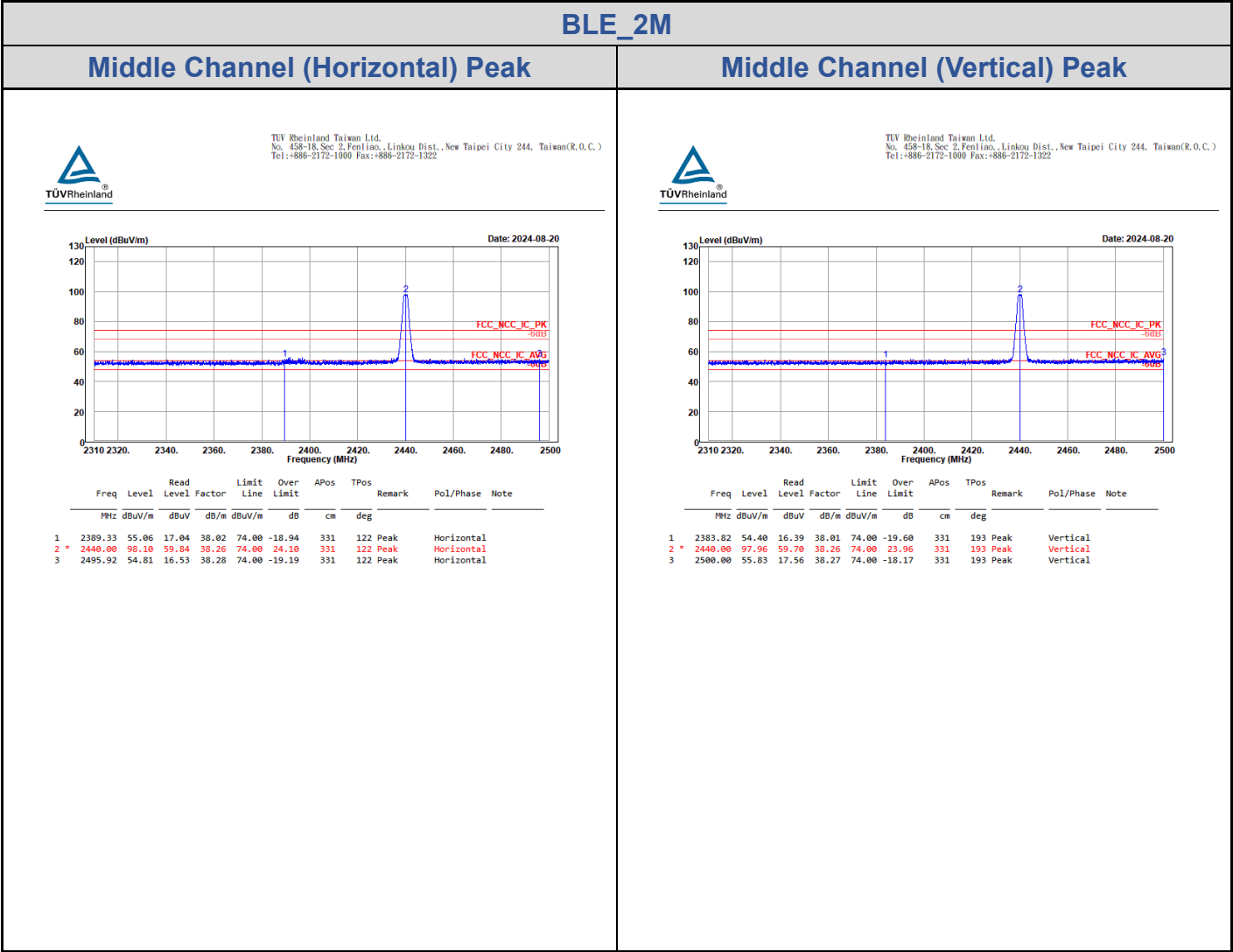
	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
			Level		Line	Limit					
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2315.70	55.21	17.49	37.72	74.00	-18.79	331	194	Peak	Vertical	
2	2440.00	97.99	59.73	38.26	74.00	23.99	331	194	Peak	Vertical	
3	2499.81	55.38	17.11	38.27	74.00	-18.62	331	194	Peak	Vertical	

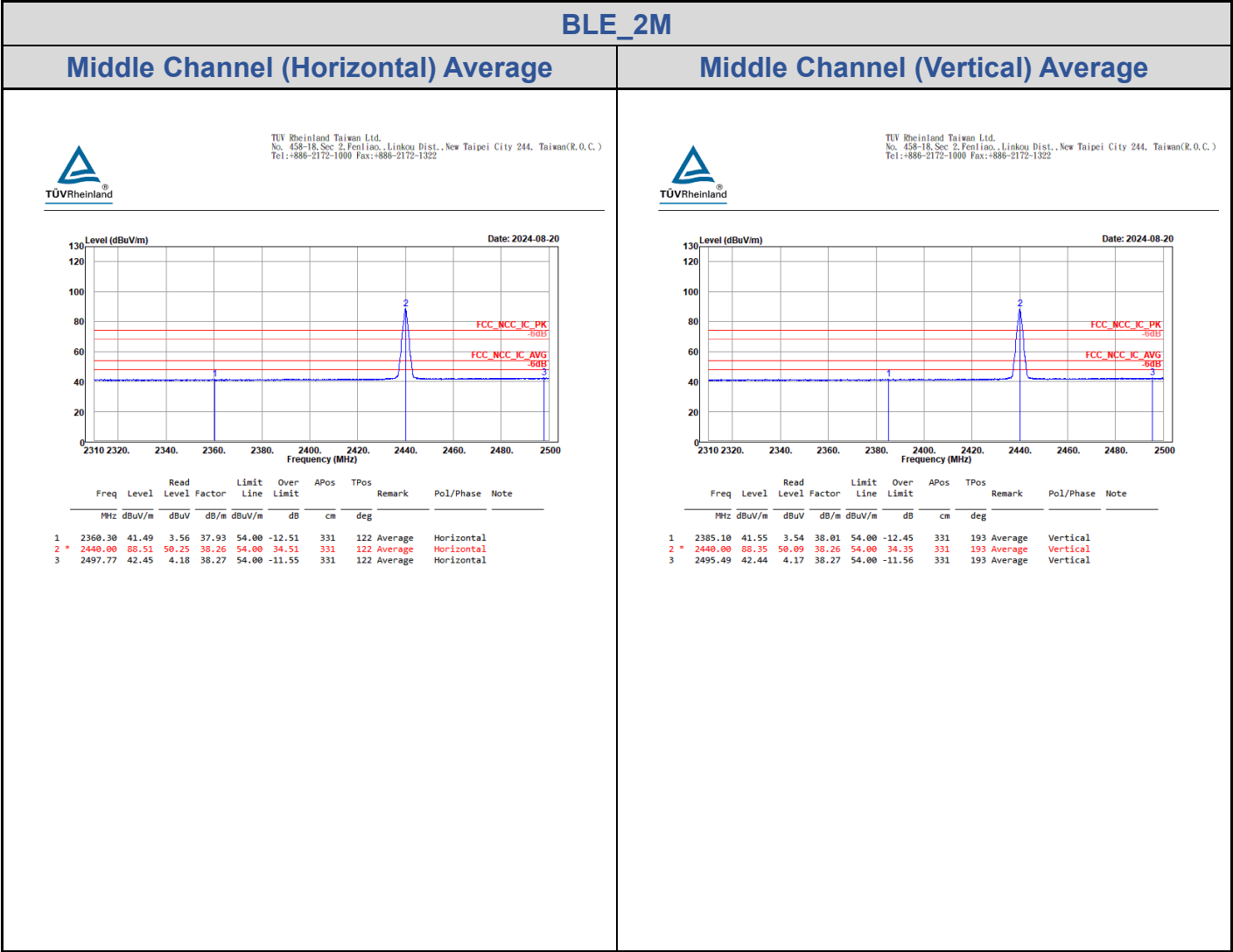


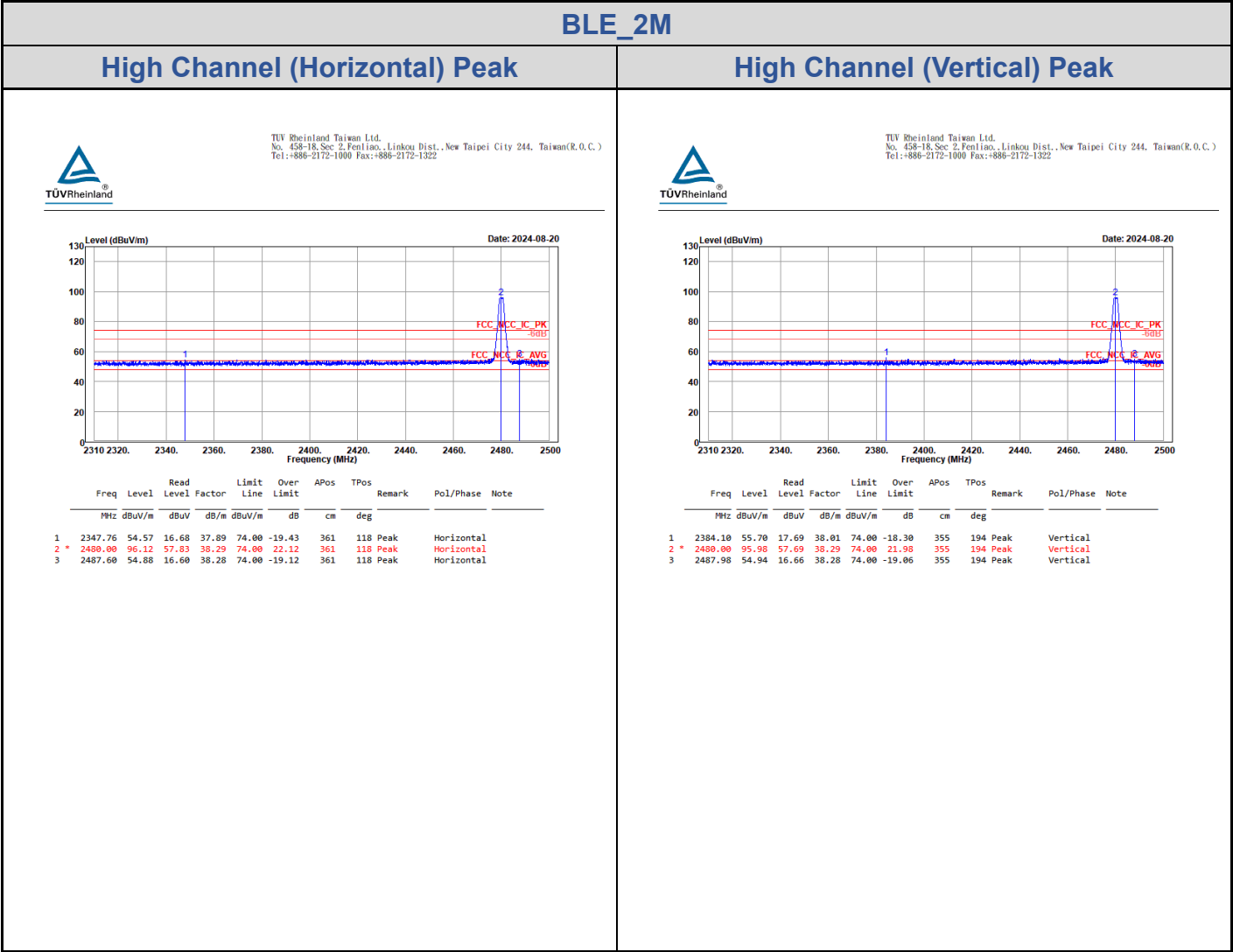




	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
			Level		Line	Limit					
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2387.24	41.64	3.63	38.01	54.00	-12.36	344	162	Average	Vertical	
2 *	2402.00	89.05	50.98	38.07	54.00	35.05	344	162	Average	Vertical	
3	2487.75	42.29	4.01	38.28	54.00	-11.71	344	162	Average	Vertical	







	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2352.23	41.68	3.78	37.90	54.00	-12.32	355	194	Average	Vertical	
2	2480.00	86.70	48.41	38.29	54.00	32.70	355	194	Average	Vertical	
3	2483.61	42.90	4.62	38.28	54.00	-11.10	355	194	Average	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

BLE_2M

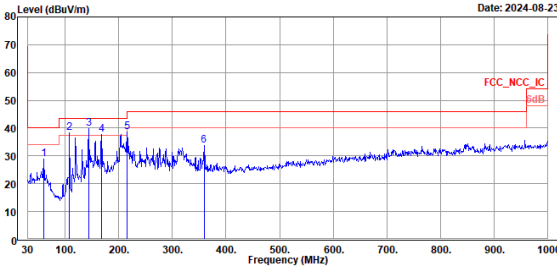
High Channel (Horizontal)

TÜVRheinland

TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

Level (dBuV/m)

Date: 2024-08-23



Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	60.07	28.81	35.18	-6.37	40.00	-11.19	100	125 Peak	Horizontal
2	107.60	38.26	48.23	-9.97	43.50	-5.24	100	78 Peak	Horizontal
3	143.49	39.95	46.27	-6.32	43.50	-3.55	100	284 Peak	Horizontal
4	167.74	37.69	43.33	-5.64	43.50	-5.81	100	276 Peak	Horizontal
5	215.27	38.49	46.87	-8.38	43.50	-5.01	100	251 Peak	Horizontal
6	358.83	33.88	38.02	-4.14	46.00	-12.12	100	292 Peak	Horizontal

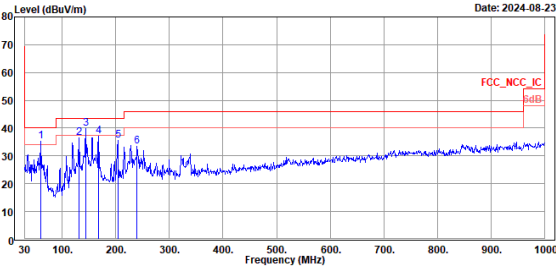
High Channel (Vertical)

TÜVRheinland

TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

Level (dBuV/m)

Date: 2024-08-23



Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	59.10	35.24	41.51	-6.27	40.00	-4.76	100	31 Peak	Vertical
2	131.85	36.51	44.10	-7.59	43.50	-6.99	100	251 Peak	Vertical
3	143.49	39.75	46.07	-6.32	43.50	-3.75	100	282 Peak	Vertical
4	167.74	37.07	42.71	-5.64	43.50	-6.43	100	254 Peak	Vertical
5	203.63	35.67	44.21	-8.54	43.50	-7.83	100	42 Peak	Vertical
6	239.52	33.55	40.32	-6.77	46.00	-12.45	100	337 Peak	Vertical

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

TÜVRheinland

TÜV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

Level (dBuV/m)

Date: 2024-08-20

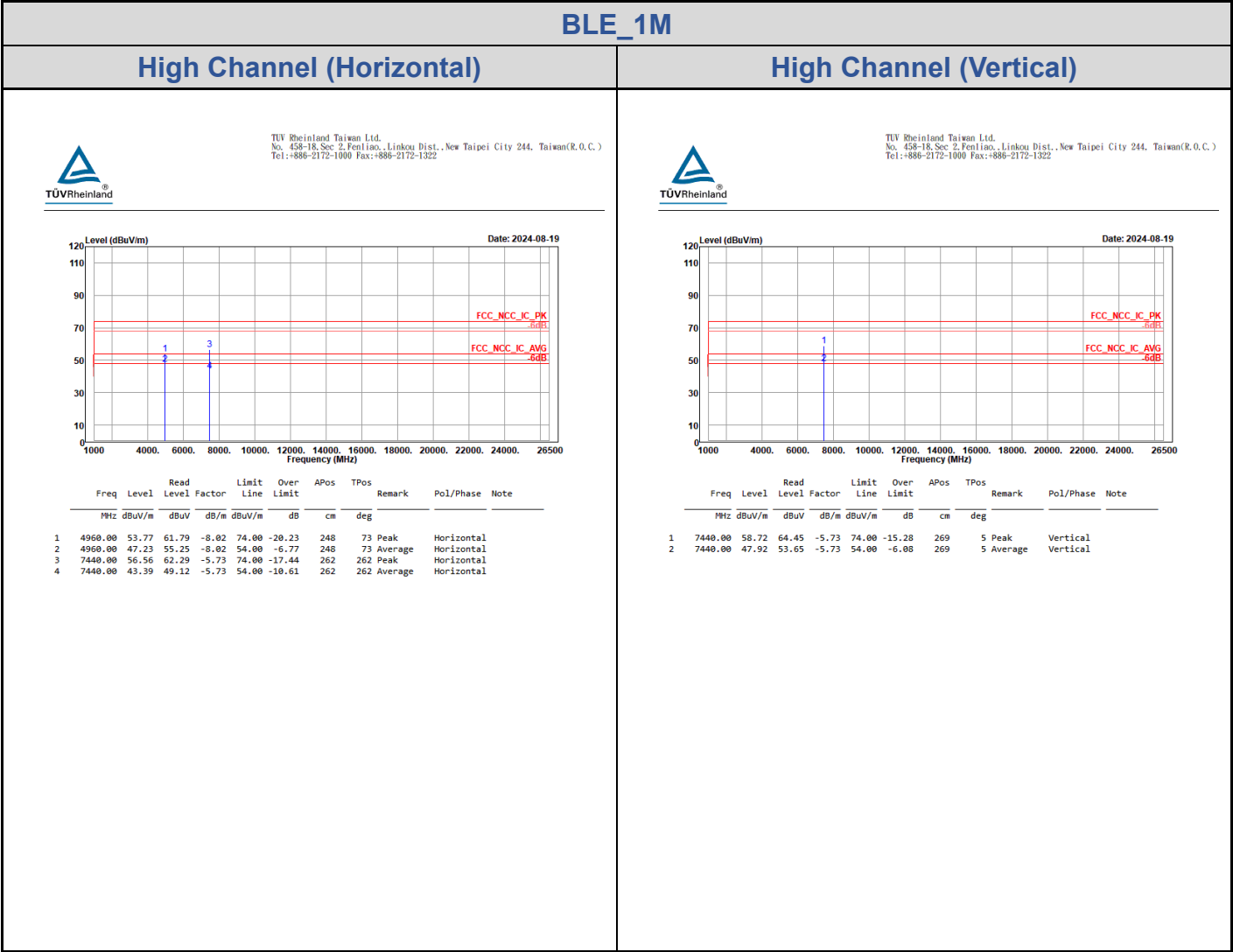
Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4884.00	58.05	66.28	-8.23	74.00	-15.95	368	65 Peak	Horizontal	
2	4884.00	50.07	58.30	-8.23	54.00	-3.93	368	65 Average	Horizontal	

Level (dBuV/m)

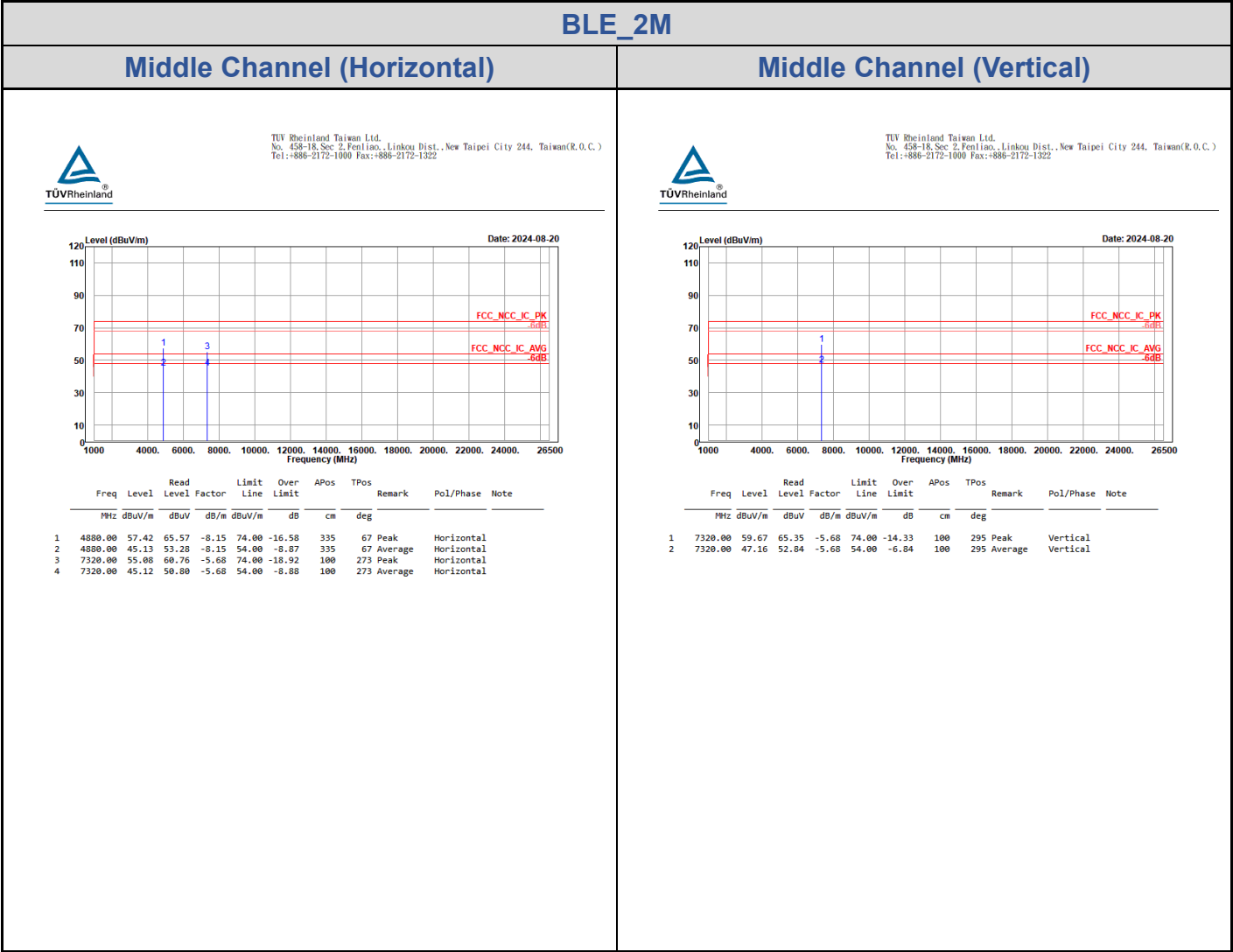
Date: 2024-08-20

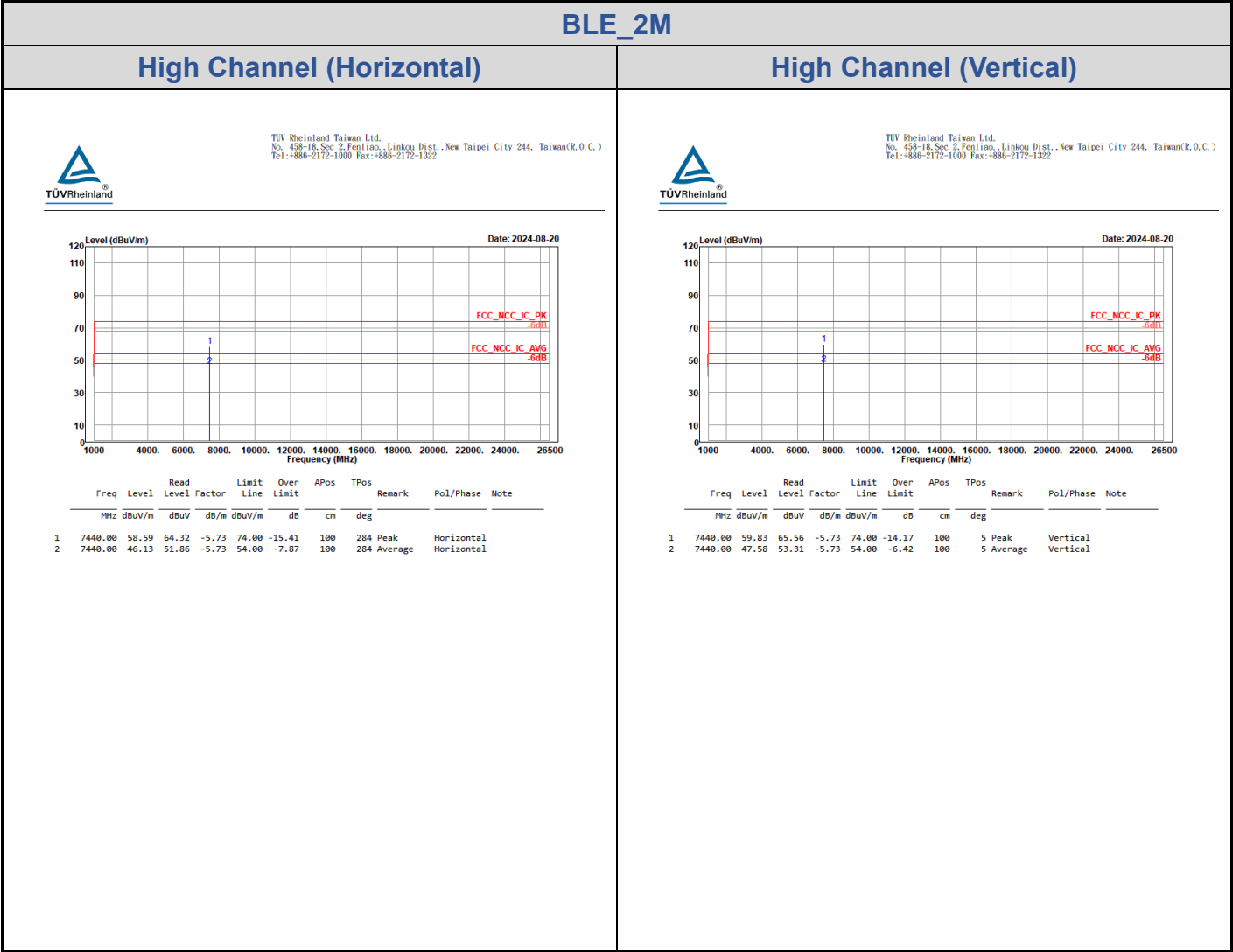
Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4884.00	49.08	57.31	-8.23	74.00	-24.92	300	336 Peak	Vertical	
2	4884.00	41.10	49.33	-8.23	54.00	-12.90	300	336 Average	Vertical	

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	7320.00	59.67	65.35	-5.68	74.00	-14.33	100	295	Peak	Vertical	
2	7320.00	47.24	52.92	-5.68	54.00	-6.76	100	295	Average	Vertical	



BLE_2M																																																																																									
Low Channel (Horizontal)					Low Channel (Vertical)																																																																																				
TÜVRheinland TÜV Rheinland Taiwan Ltd. No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.) Tel: +886-2172-1000 Fax: +886-2172-1322 Level (dBuV/m) 120 110 90 70 50 30 10 0 1000 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 26500 Frequency (MHz) 2024-08-20 1 2 FCC_NCC_IC_PK FCC_NCC_IC_AVG -6dB <table><tr><th>Freq</th><th>Level</th><th>Read</th><th>Limit</th><th>Over</th><th>APos</th><th>TPos</th><th>Remark</th><th>Pol/Phase</th><th>Note</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV</th><th>dB/m</th><th>dBuV/m</th><th>dB</th><th>cm</th><th>deg</th><th></th><th></th></tr><tr><td>1</td><td>4804.00</td><td>58.87</td><td>67.10</td><td>-8.23</td><td>74.00</td><td>-15.13</td><td>366</td><td>63 Peak</td><td>Horizontal</td></tr><tr><td>2</td><td>4804.00</td><td>46.87</td><td>55.10</td><td>-8.23</td><td>54.00</td><td>-7.13</td><td>366</td><td>63 Average</td><td>Horizontal</td></tr></table>					Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			1	4804.00	58.87	67.10	-8.23	74.00	-15.13	366	63 Peak	Horizontal	2	4804.00	46.87	55.10	-8.23	54.00	-7.13	366	63 Average	Horizontal	TÜVRheinland TÜV Rheinland Taiwan Ltd. No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.) Tel: +886-2172-1000 Fax: +886-2172-1322 Level (dBuV/m) 120 110 90 70 50 30 10 0 1000 4000 6000 8000 10000 12000 14000 16000 18000 20000 22000 24000 26500 Frequency (MHz) 2024-08-20 1 2 FCC_NCC_IC_PK FCC_NCC_IC_AVG -6dB <table><tr><th>Freq</th><th>Level</th><th>Read</th><th>Limit</th><th>Over</th><th>APos</th><th>TPos</th><th>Remark</th><th>Pol/Phase</th><th>Note</th></tr><tr><th>MHz</th><th>dBuV/m</th><th>dBuV</th><th>dB/m</th><th>dBuV/m</th><th>dB</th><th>cm</th><th>deg</th><th></th><th></th></tr><tr><td>1</td><td>4804.00</td><td>49.14</td><td>57.37</td><td>-8.23</td><td>74.00</td><td>-24.86</td><td>100</td><td>336 Peak</td><td>Vertical</td></tr><tr><td>2</td><td>4804.00</td><td>40.55</td><td>48.78</td><td>-8.23</td><td>54.00</td><td>-13.45</td><td>100</td><td>336 Average</td><td>Vertical</td></tr></table>					Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			1	4804.00	49.14	57.37	-8.23	74.00	-24.86	100	336 Peak	Vertical	2	4804.00	40.55	48.78	-8.23	54.00	-13.45	100	336 Average	Vertical
Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note																																																																																
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg																																																																																		
1	4804.00	58.87	67.10	-8.23	74.00	-15.13	366	63 Peak	Horizontal																																																																																
2	4804.00	46.87	55.10	-8.23	54.00	-7.13	366	63 Average	Horizontal																																																																																
Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note																																																																																
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg																																																																																		
1	4804.00	49.14	57.37	-8.23	74.00	-24.86	100	336 Peak	Vertical																																																																																
2	4804.00	40.55	48.78	-8.23	54.00	-13.45	100	336 Average	Vertical																																																																																





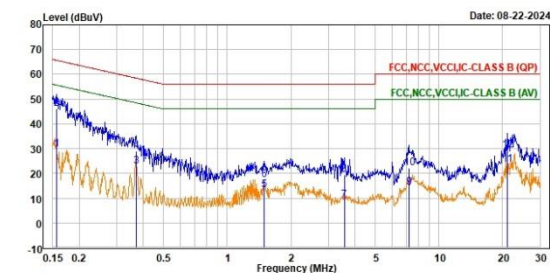
Mains Conducted Emission, Tx Mode, 150kHz ~ 30MHz

Worst Band

(Line)



TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322

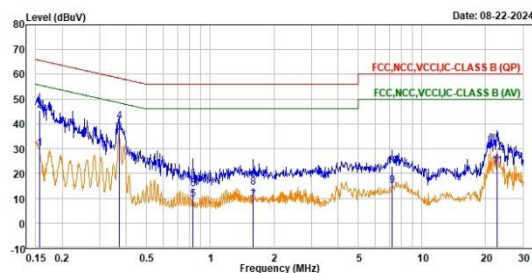


Trace: 1	Frequency (MHz)							
	Freq		Read Level		Limit		Over Limit Remark	
	MHz	Level	Factor	dB	dB	dB	Pol/Phase	Note
1	0.16	29.54	19.91	9.63	55.67	-26.13	Average	line1
2	0.16	45.97	36.34	9.63	65.67	-19.70	QP	line1
3	0.37	22.99	13.36	9.63	48.42	-25.45	Average	line1
4	0.37	28.98	19.35	9.63	58.42	-29.44	QP	line1
5	1.50	13.18	3.52	9.66	46.00	-32.82	Average	line1
6	1.50	14.49	7.83	9.66	56.00	-38.51	QP	line1
7	3.57	9.26	-0.42	9.68	46.00	-36.36	Average	line1
8	3.57	19.46	9.78	9.68	56.00	-36.54	QP	line1
9	7.21	14.40	4.67	9.73	58.00	-35.60	Average	line1
10	7.21	22.83	12.30	9.73	68.00	-37.97	QP	line1
11	21.86	23.40	13.65	9.75	68.00	-35.73	Average	line1
12	21.86	29.47	19.72	9.75	69.00	-30.53	QP	line1

(Neutral)



TUV Rheinland Taiwan Ltd.
No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan (R.O.C.)
Tel: +886-2172-1000 Fax: +886-2172-1322



Trace:	Frequency (MHz)									
	Freq		Read Level		Limit		Over		Pol/Phase	Note
	MHz	dBuV	dBuV	dB	dBuV	dB	Limit	Remark		
1	0.16	30.20	20.57	9.63	55.67	-25.47	Average		neutral	
2	0.16	45.32	35.69	6.63	65.67	-20.35	QP		neutral	
3	0.37	26.42	26.79	9.63	48.47	-13.13	Average		neutral	
4	0.37	40.95	31.32	6.63	58.47	-17.52	QP		neutral	
5	0.83	9.45	-0.19	9.64	46.00	-36.55	Average		neutral	
6	0.83	13.71	4.07	9.64	56.00	-42.29	QP		neutral	
7	1.60	12.13	-0.53	9.63	46.00	-36.55	Average		neutral	
8	1.60	14.22	4.56	9.66	56.00	-41.78	QP		neutral	
9	7.25	14.82	5.07	9.75	50.00	-35.18	Average		neutral	
10	7.25	22.17	12.95	9.75	60.00	-37.30	QP		neutral	
11	22.58	22.07	12.67	9.86	60.00	-37.30	Average		neutral	
12	22.58	28.78	18.31	9.86	60.00	-31.83	QP		neutral	