

Appendix C: Test Results of Radiated Spurious Emissions & Mains

Radiated Emission Test for UFL Antenna

Ant No. 2
 Band Edges, 2.31GHz ~ 2.9GHz

BLE_1M

Low Channel (Horizontal) Peak

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Level (dBuV/m) Date: 2023-12-14

Frequency (MHz)

Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.77	58.04	19.98	38.06	74.00	-15.96	315	201	Peak	Horizontal	
2 *	2402.00	115.70	78.60	38.10	74.00	42.70	315	201	Peak	Horizontal	
3	2889.85	55.71	16.75	38.96	74.00	-18.29	315	201	Peak	Horizontal	

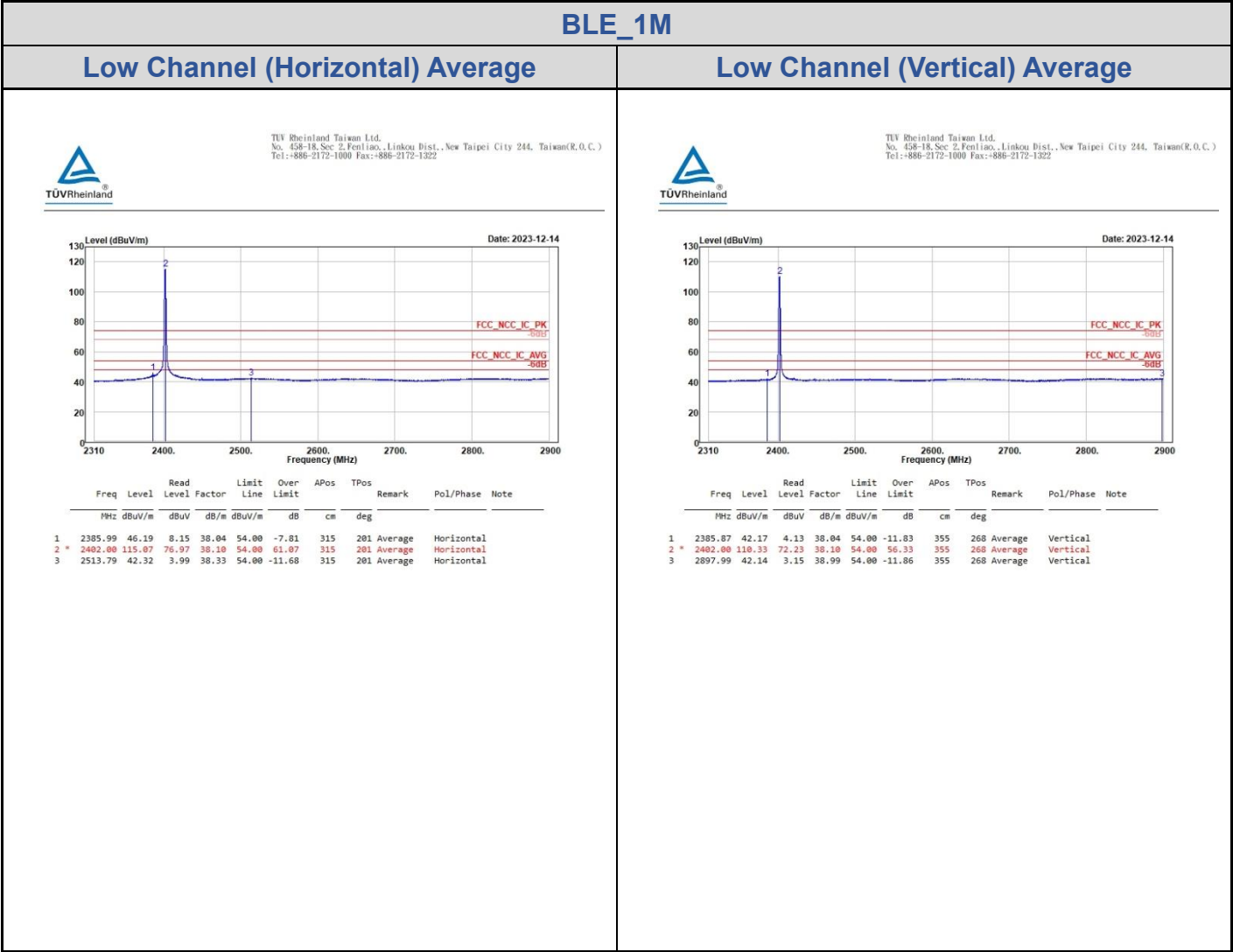
Low Channel (Vertical) Peak

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Level (dBuV/m) Date: 2023-12-14

Frequency (MHz)

Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2335.02	54.77	16.92	37.85	74.00	-19.23	355	268	Peak	Vertical	
2 *	2402.00	111.92	73.82	38.10	74.00	37.92	355	268	Peak	Vertical	
3	2506.59	55.94	17.62	38.32	74.00	-18.06	355	268	Peak	Vertical	



BLE_1M

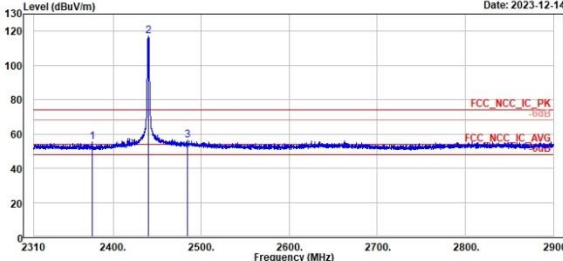
Middle Channel (Horizontal) Peak



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Level (dBuV/m)

Date: 2023-12-14



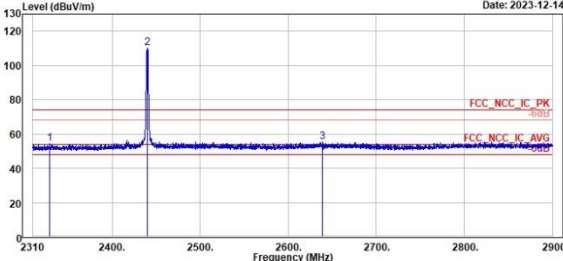
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2376.43	55.24	17.23	38.01	74.00	-18.76	210	207	Peak	Horizontal	
2 *	2440.00	117.18	78.88	38.30	74.00	43.18	210	207	Peak	Horizontal	
3	2484.76	56.16	17.84	38.32	74.00	-17.84	210	207	Peak	Horizontal	



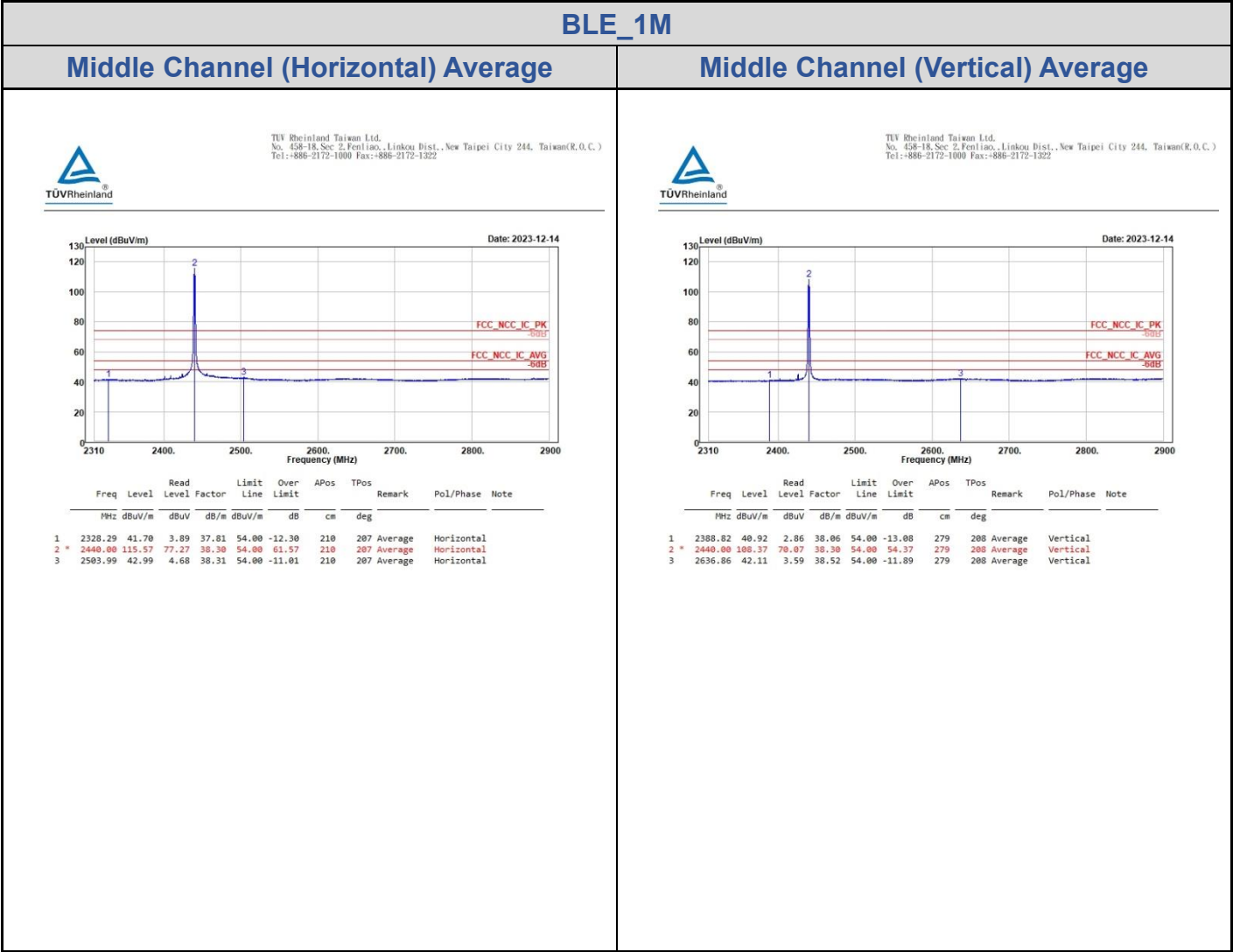
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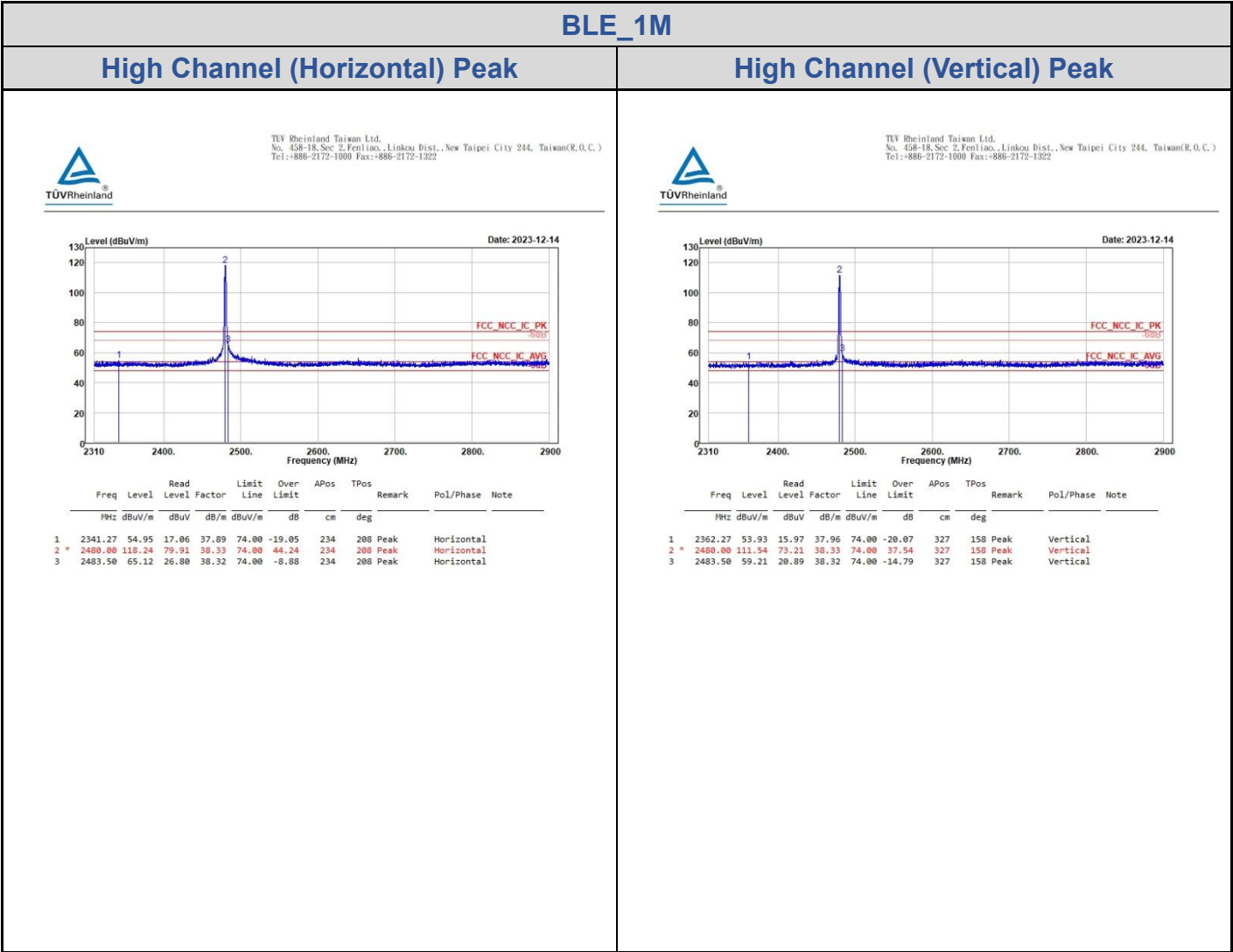
Level (dBuV/m)

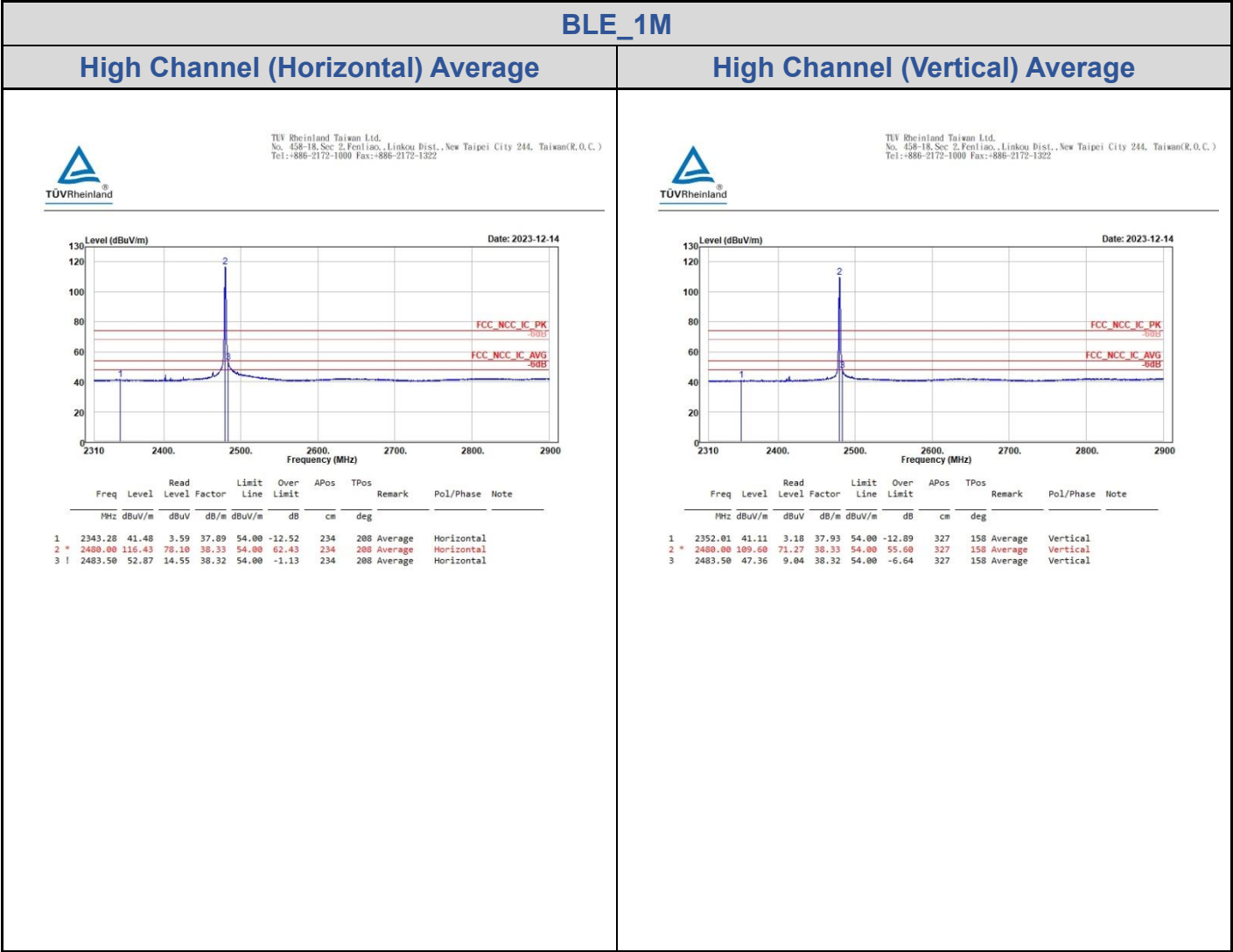
Date: 2023-12-14

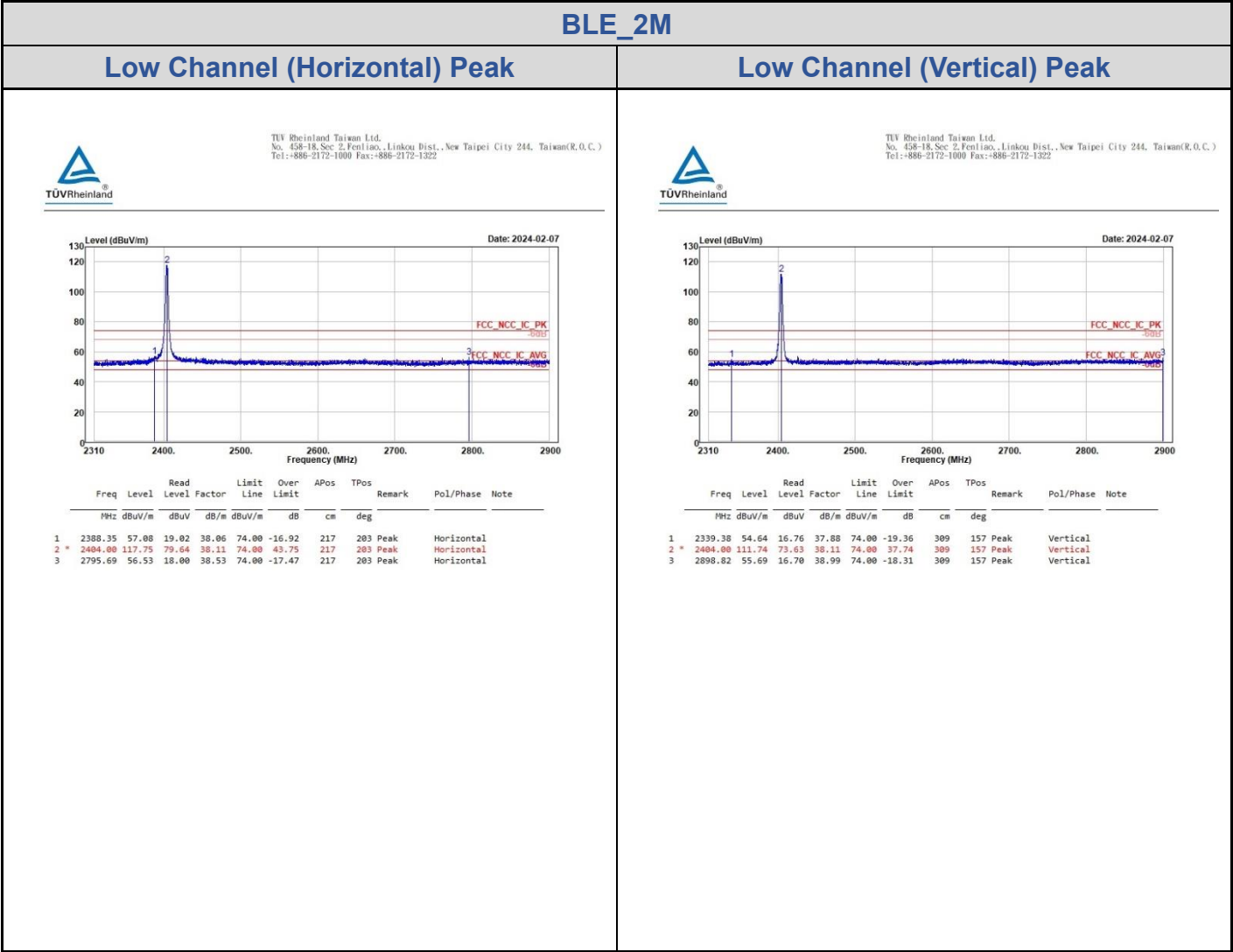


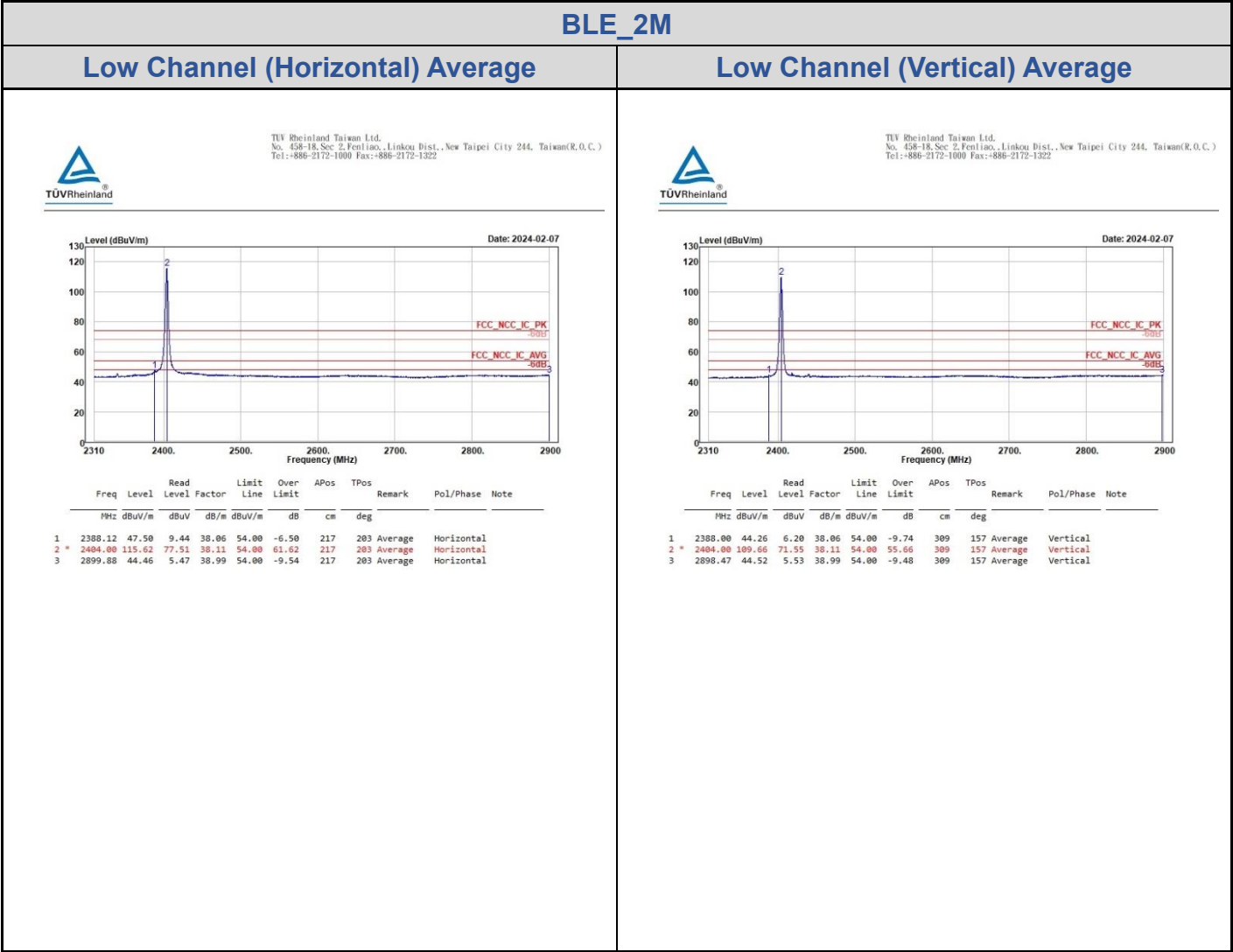
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2329.12	54.16	16.34	37.82	74.00	-19.84	279	208	Peak	Vertical	
2 *	2440.00	110.12	71.82	38.30	74.00	36.12	279	208	Peak	Vertical	
3	2638.63	55.32	16.79	38.53	74.00	-18.68	279	208	Peak	Vertical	











BLE_2M

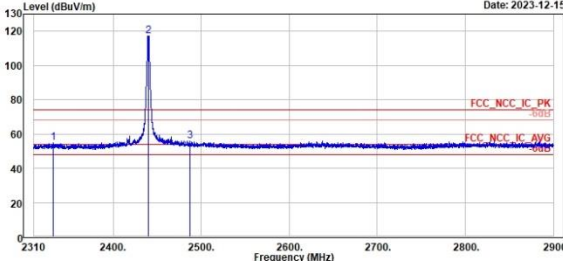
Middle Channel (Horizontal) Peak



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Level (dBuV/m)

Date: 2023-12-15



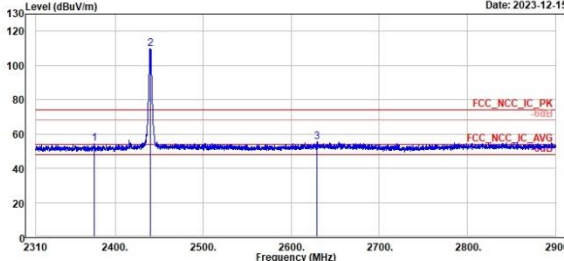
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2331.59	54.95	17.11	37.84	74.00	-19.05	212	207	Peak	Horizontal	
2 *	2440.00	117.35	79.05	38.30	74.00	43.35	212	207	Peak	Horizontal	
3	2487.00	55.92	17.60	38.32	74.00	-18.08	212	207	Peak	Horizontal	



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Level (dBuV/m)

Date: 2023-12-15



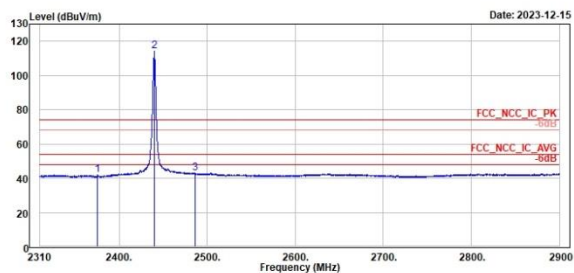
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2376.32	54.21	16.20	38.01	74.00	-19.79	276	209	Peak	Vertical	
2 *	2440.00	109.74	71.44	38.30	74.00	35.74	276	209	Peak	Vertical	
3	2629.54	55.45	16.96	38.49	74.00	-18.55	276	209	Peak	Vertical	

BLE_2M

Middle Channel (Horizontal) Average



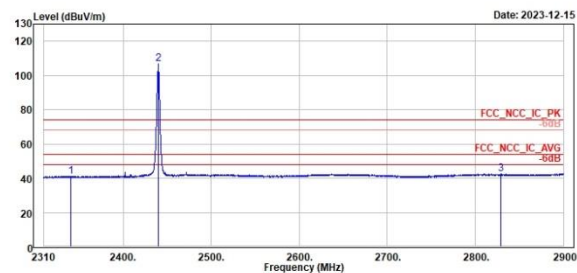
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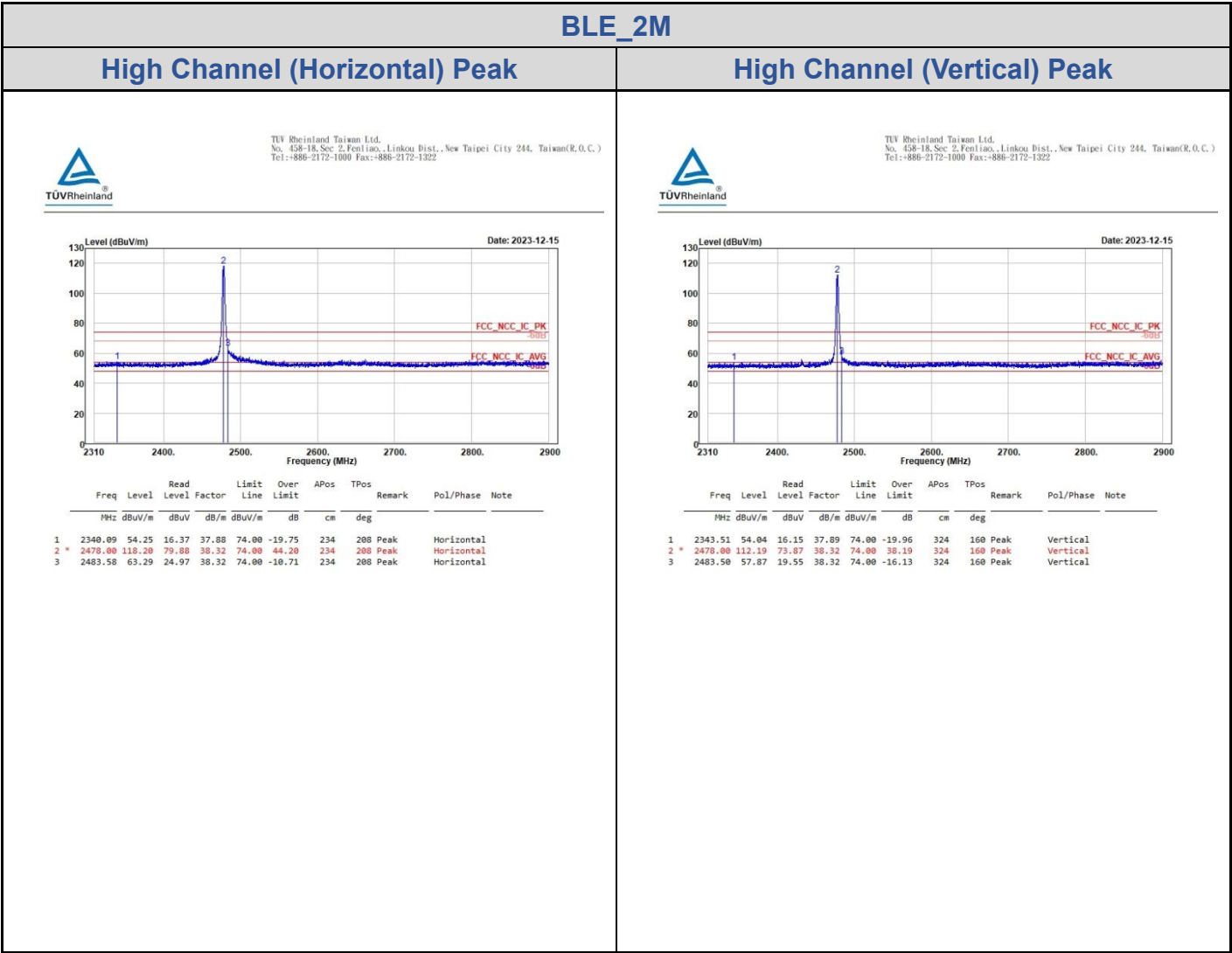
	Freq	Level	Read dBm	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBm	dBm	dB/m	dBm/m	dB	cm	deg			
1	2375.84	41.91	3.90	38.01	54.00	-12.09	212	207	Average	Horizontal	
2 *	2440.00	114.03	75.73	38.30	54.00	60.03	212	207	Average	Horizontal	
3	2486.65	43.22	4.90	38.32	54.00	-10.78	212	207	Average	Horizontal	



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	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	2340.56	41.24	3.36	37.88	54.00	-12.76	276	209	Average	Vertical	
2	2440.00	106.52	68.22	38.30	54.00	52.52	276	209	Average	Vertical	
3	2820.20	42.75	4.02	38.73	54.00	-11.25	276	209	Average	Vertical	

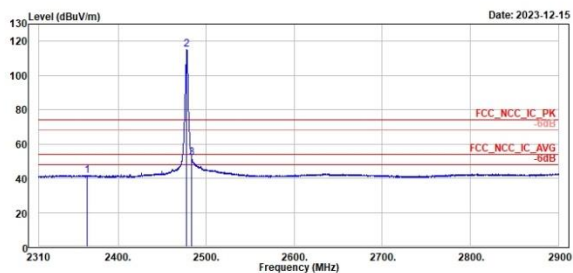


BLE_2M

High Channel (Horizontal) Average



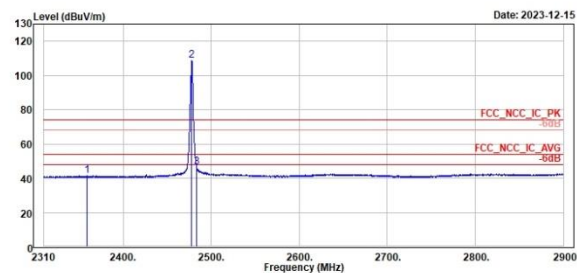
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	Freq	Level	Read dBm	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBm	dBm	dB/m	dBm/m	dB	cm	deg			
1	2365.11	41.70	3.72	37.98	54.00	-12.30	234	208	Average	Horizontal	
2 *	2478.00	114.96	76.64	38.32	54.00	60.96	234	208	Average	Horizontal	
3 †	2483.50	51.74	13.42	38.32	54.00	-2.26	234	208	Average	Horizontal	



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	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dB	dB	cm	deg			
1	2358.62	41.49	3.53	37.96	54.00	-12.51	324	168	Average	Vertical	
2	2478.00	108.94	70.62	38.32	54.00	54.94	324	168	Average	Vertical	
3	2483.50	46.64	8.32	38.32	54.00	-7.36	324	168	Average	Vertical	

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

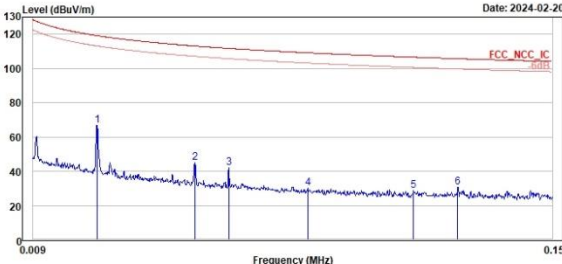
BLE_1M

High Channel (Open) 9kHz~150kHz



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Date: 2024-02-20



Level (dBuV/m) vs Frequency (MHz) for 9kHz~150kHz. The graph shows a red limit line and a blue measurement line with peaks labeled 1 through 6. The x-axis ranges from 0.009 to 0.15 MHz, and the y-axis ranges from 0 to 130 dBuV/m.

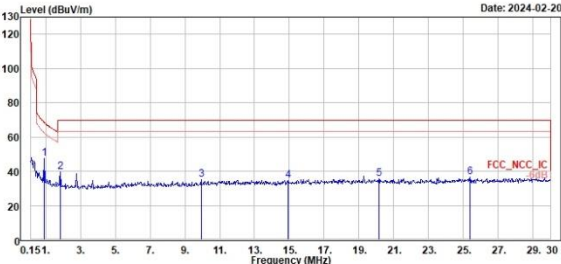
	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.03	66.96	47.15	19.81	119.13	-52.17	100	105 Peak	Open	
2	0.05	44.88	25.50	19.30	113.11	-68.31	100	109 Peak	Open	
3	0.06	41.88	23.09	18.79	111.72	-69.84	100	190 Peak	Open	
4	0.08	29.92	11.36	18.56	109.14	-79.22	100	0 Peak	Open	
5	0.11	28.62	10.03	18.59	106.59	-77.97	100	0 Peak	Open	
6	0.12	30.68	12.01	18.67	105.71	-75.03	100	6 Peak	Open	

High Channel (Open) 150kHz~30MHz



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Date: 2024-02-20



Level (dBuV/m) vs Frequency (MHz) for 150kHz~30MHz. The graph shows a red limit line and a blue measurement line with peaks labeled 1 through 6. The x-axis ranges from 0.151 to 30 MHz, and the y-axis ranges from 0 to 130 dBuV/m.

	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.93	47.41	28.27	19.14	68.27	-20.86	100	144 Peak	Open	
2	1.85	39.47	20.45	19.02	69.50	-30.03	100	144 Peak	Open	
3	9.94	34.85	13.60	21.25	69.50	-34.65	100	52 Peak	Open	
4	14.93	34.72	13.19	21.53	69.50	-34.78	100	270 Peak	Open	
5	20.15	35.45	12.88	22.57	69.50	-34.05	100	183 Peak	Open	
6	25.37	36.44	13.45	22.99	69.50	-33.06	100	132 Peak	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

BLE_1M

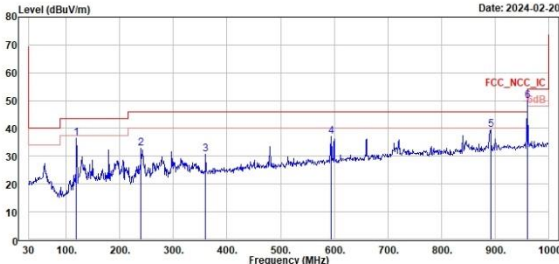
High Channel (Horizontal)

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Level (dBuV/m)

Date: 2024-02-20



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	119.24	36.63	45.82	-9.19	43.50	-6.87	300	260	Peak	Horizontal	
2	239.52	32.91	39.51	-6.60	46.00	-13.09	200	196	Peak	Horizontal	
3	359.08	30.72	34.28	-3.56	46.00	-15.28	100	278	Peak	Horizontal	
4	594.54	37.05	36.69	0.36	46.00	-8.95	100	227	Peak	Horizontal	
5	892.33	39.56	34.99	4.57	46.00	-6.44	100	202	Peak	Horizontal	
6	960.23	49.00	44.29	5.51	54.00	-4.20	100	196	Peak	Horizontal	

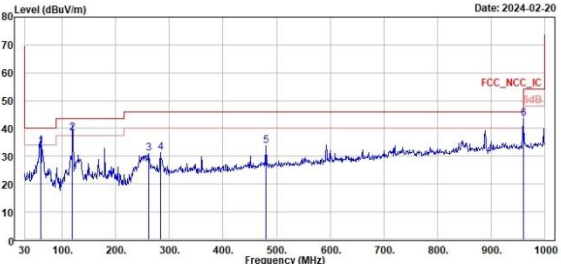
High Channel (Vertical)

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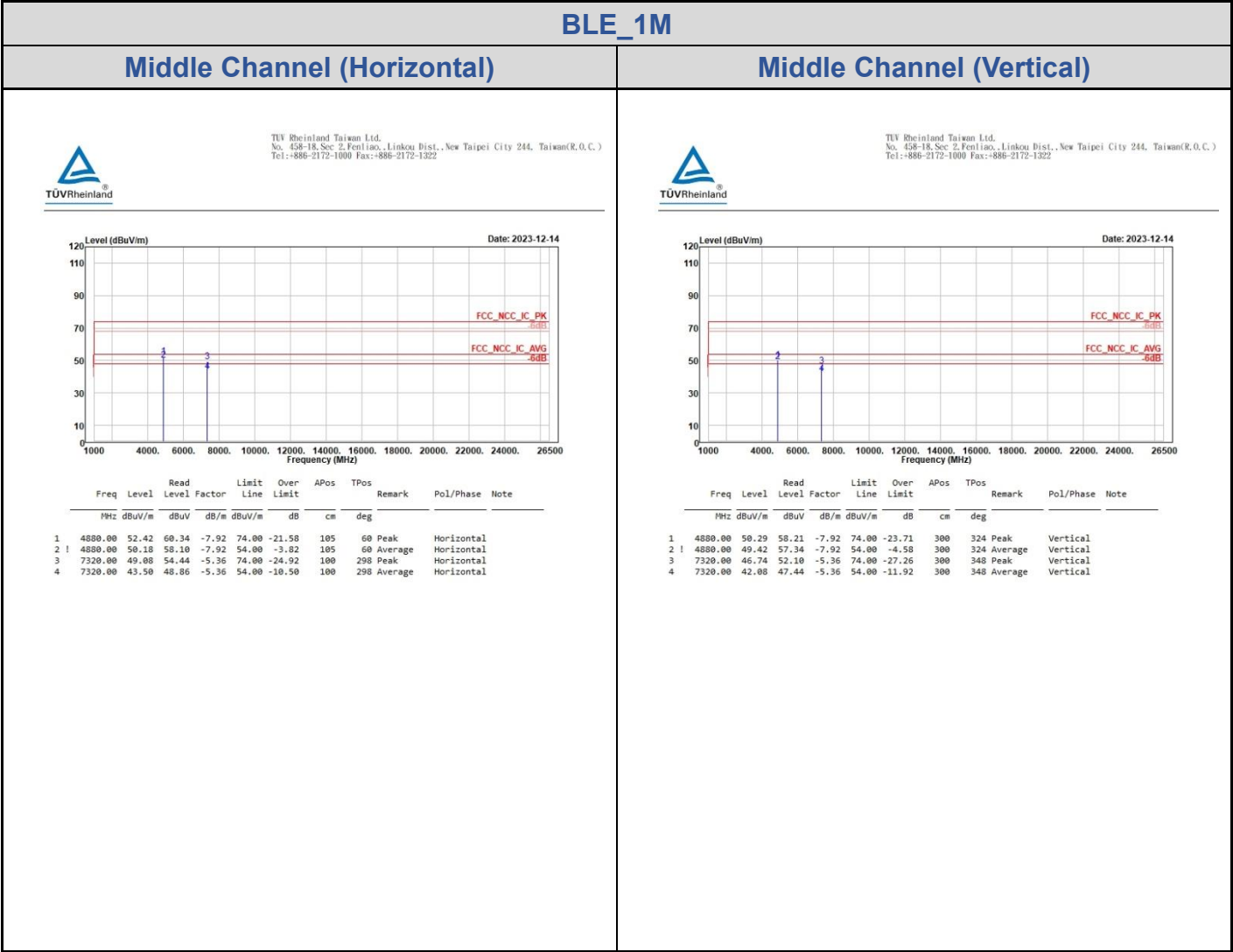
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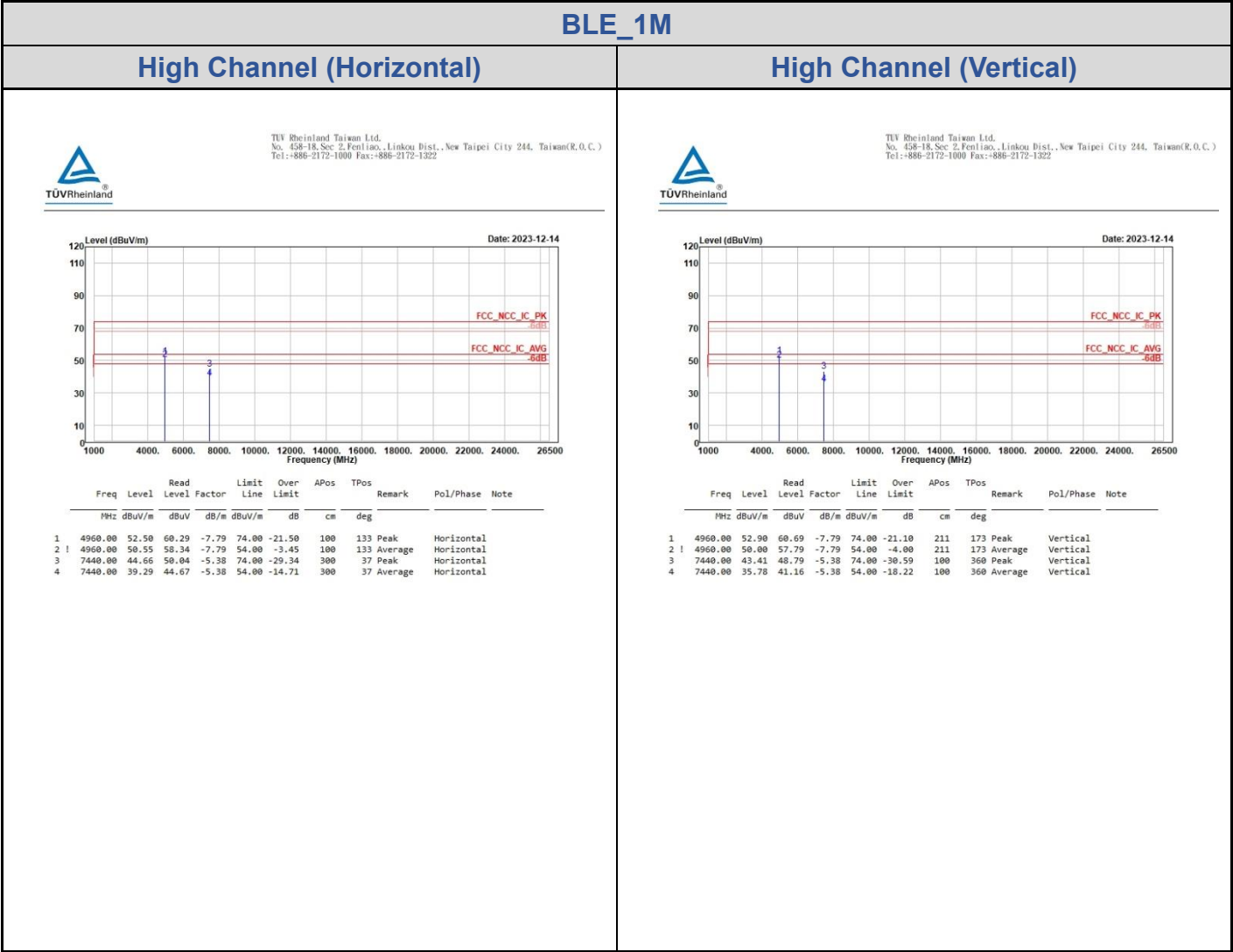
Level (dBuV/m)

Date: 2024-02-20



Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	59.10	33.40	39.72	-6.32	40.00	-6.60	100	138	QP	Vertical	
2	119.24	38.38	47.57	-9.19	43.50	-5.12	100	66	QP	Vertical	
3	260.06	30.94	37.07	-6.13	46.00	-15.06	100	272	Peak	Vertical	
4	285.17	31.44	36.54	-5.10	46.00	-14.56	100	322	Peak	Vertical	
5	480.08	33.68	35.31	-1.63	46.00	-12.32	100	166	Peak	Vertical	
6	960.23	43.56	38.05	5.51	54.00	-10.44	100	156	Peak	Vertical	





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Level (dBuV/m)

120

110

90

70

50

30

10

0

1000

2000

4000

6000

8000

10000

12000

14000

16000

18000

Frequency (MHz)

1

2

FCC_NCC_IC_PK

FCC_NCC_IC_AVG

-6dB

Date: 2024-02-07

Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4808.00	52.28	60.28	-8.00	74.00	-21.72	100	61 Peak	Horizontal
2	4808.00	44.25	52.25	-8.00	54.00	-9.75	100	61 Average	Horizontal

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Level (dBuV/m)

120

110

90

70

50

30

10

0

1000

2000

4000

6000

8000

10000

12000

14000

16000

18000

Frequency (MHz)

1

2

FCC_NCC_IC_PK

FCC_NCC_IC_AVG

-6dB

Date: 2024-02-07

Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4808.00	52.23	60.23	-8.00	74.00	-21.77	100	53 Peak	Vertical
2	4808.00	43.34	51.34	-8.00	54.00	-10.66	100	53 Average	Vertical

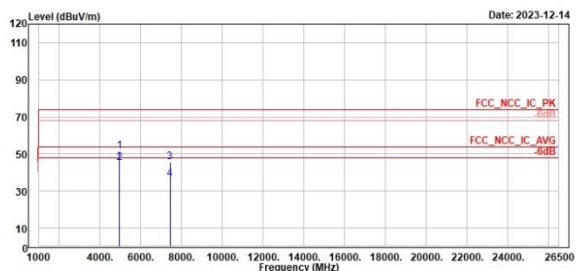
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	4899.00	51.34	59.26	-7.92	74.00	-22.66	305	315	Peak	Vertical	
2	4899.00	44.56	52.28	-7.92	54.00	-9.64	305	315	Average	Vertical	
3	7320.00	46.44	51.80	-5.36	74.00	-27.56	300	317	Peak	Vertical	
4	7320.00	40.28	45.64	-5.36	54.00	-13.72	300	317	Average	Vertical	

BLE_2M

High Channel (Horizontal)



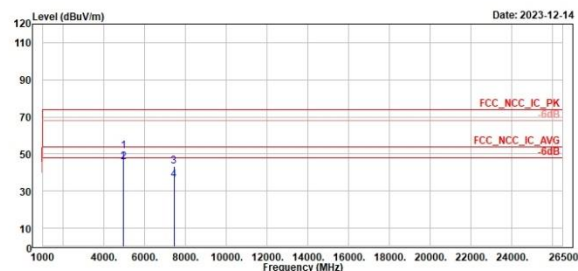
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	Freq	Level	Read Level	Limit Factor	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4956.00	51.33	59.12	-7.79	74.00	-22.67	100	144 Peak	Horizontal	
2	4956.00	45.37	53.79	-7.79	54.00	-18.60	100	144 Average	Horizontal	
3	7434.00	45.51	50.00	-5.39	74.00	-28.49	100	303 Peak	Horizontal	
4	7434.00	36.38	41.77	-5.39	54.00	-17.62	100	303 Average	Horizontal	



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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	4956.00	51.75	59.54	-7.79	74.00	-22.25	214	171 Peak	Vertical	
2	4956.00	45.73	55.2	-7.79	54.00	-22.25	217	171 Average	Vertical	
3	7434.00	43.47	48.86	-5.39	74.00	-20.13	100	360 Peak	Vertical	
4	7434.00	35.91	41.30	-5.39	54.00	-18.09	100	360 Average	Vertical	

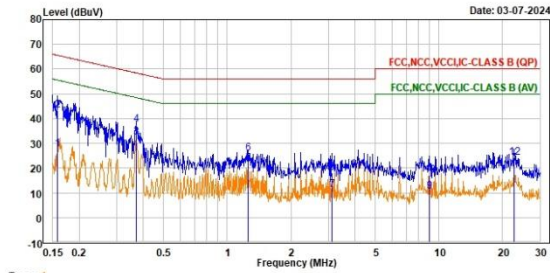
Mains Conducted Emission, Tx Mode 150kHz ~ 30MHz

Worst Band

(Line)



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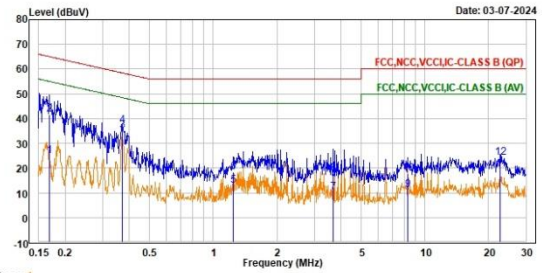


Trace 1		Frequency (MHz)							
	Freq	Level	Read Level	Factor	Limit	Over	Limit Remark	PoI/Phase	Note
	MHz	dBuV	dBuV	dB	dBuV	dB			
1	0.16	27.54	17.92	9.62	55.54	-22.05	Average	line1	
2	0.16	43.39	33.77	9.62	65.54	-28.18	QP	line1	
3	0.37	32.27	22.64	9.63	48.47	-16.20	Average	line1	
4	0.37	37.43	27.80	9.63	58.47	-21.04	QP	line1	
5	1.25	21.80	12.16	9.64	46.00	-24.20	Average	line1	
6	1.25	26.06	16.42	9.64	56.00	-29.00	QP	line1	
7	3.12	21.16	1.48	9.68	46.00	-34.84	Average	line1	
8	3.12	18.12	8.44	9.68	56.00	-37.88	QP	line1	
9	9.02	10.65	0.90	9.75	50.00	-39.35	Average	line1	
10	9.02	17.64	7.29	9.75	60.00	-42.96	QP	line1	
11	22.69	19.44	9.68	9.76	50.00	-38.00	Average	line1	
12	22.69	24.21	14.45	9.76	60.00	-35.79	QP	line1	

(Neutral)



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Trace: 1		Frequency (MHz)							
	Freq	Level	Read Level	Factor	Limit	Over Limit	Remark	Pol/Phase	Note
	MHz	dBuV	dBuV	dB	dBuV	dB			
2	0.17	24.96	15.34	9.62	55.05	-30.09	Average	neutral	
1	0.17	24.51	31.93	9.62	65.95	-23.50	Q	neutral	
3	0.37	35.11	25.48	9.63	48.47	-13.33	Average	neutral	
4	0.37	37.14	27.51	9.63	58.47	-21.36	Q	neutral	
5	1.25	13.05	3.41	9.64	46.00	-33.95	Average	neutral	
6	1.25	18.36	8.72	9.64	56.00	-37.64	Q	neutral	
7	10.21	19.21	8.52	9.69	46.00	-33.95	Average	neutral	
8	3.70	17.72	8.63	9.69	56.00	-38.28	Q	neutral	
9	8.33	11.06	1.29	9.77	50.00	-30.94	Average	neutral	
10	8.33	17.76	7.89	9.77	60.00	-42.34	Q	neutral	
11	22.69	19.43	9.56	9.87	50.00	-30.94	Average	neutral	
12	22.69	24.16	14.29	9.87	60.00	-35.84	Q	neutral	

Ant No. 4
 Band Edges, 2.31GHz ~ 2.9GHz

BLE_1M

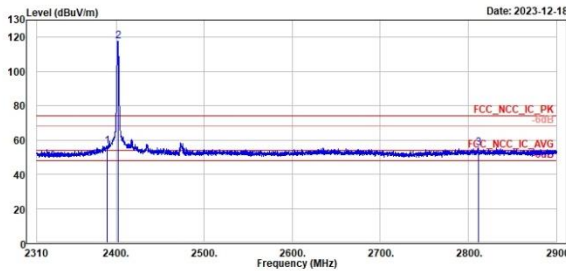
Low Channel (Horizontal) Peak

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Level (dBuV/m)

Date: 2023-12-18



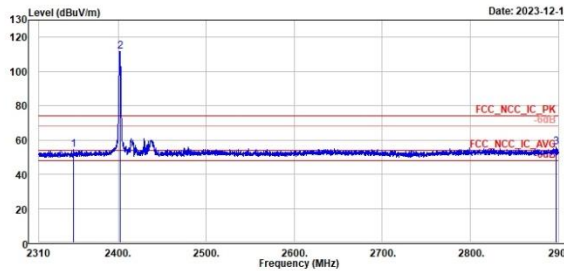
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.89	56.29	18.23	38.06	74.00	-17.71	307	194	Peak	Horizontal		
2 *	2402.00	117.67	79.57	38.10	74.00	43.67	307	194	Peak	Horizontal		
3	2811.26	55.30	16.67	38.63	74.00	-18.70	307	194	Peak	Horizontal		

TÜVRheinland

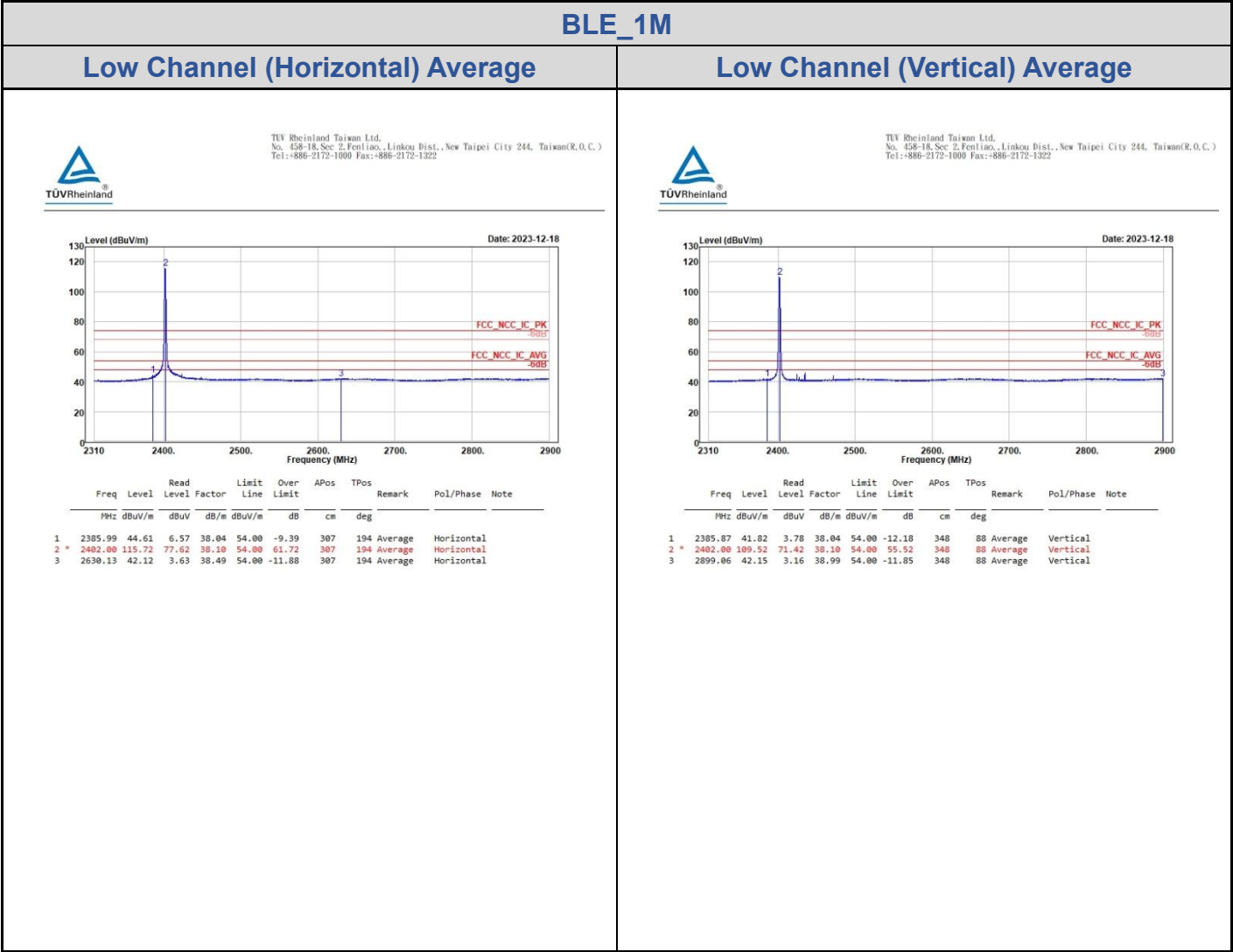
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No. 458-18, Sec 2, Fentiao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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Level (dBuV/m)

Date: 2023-12-18



	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2349.06	54.23	16.30	37.93	74.00	-19.77	348	88	Peak	Vertical		
2 *	2402.00	111.59	73.49	38.10	74.00	37.59	348	88	Peak	Vertical		
3	2897.17	55.87	16.89	38.98	74.00	-18.13	348	88	Peak	Vertical		



BLE_1M

Middle Channel (Horizontal) Peak

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Level (dBuV/m) Date: 2023-12-21

	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2358.85	54.33	16.37	37.96	74.00	-19.67	373	331	Peak	Horizontal	
2 *	2440.00	118.38	80.08	38.30	74.00	44.38	373	331	Peak	Horizontal	
3	2497.38	55.85	17.53	38.32	74.00	-18.15	373	331	Peak	Horizontal	

Middle Channel (Vertical) Peak

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Level (dBuV/m) Date: 2023-12-21

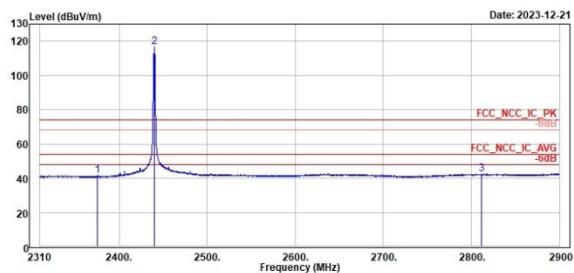
	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2325.81	54.09	16.29	37.80	74.00	-19.91	100	184	Peak	Vertical	
2 *	2440.00	105.62	67.32	38.30	74.00	31.62	100	184	Peak	Vertical	
3	2636.39	55.93	17.41	38.52	74.00	-18.07	100	184	Peak	Vertical	

BLE_1M

Middle Channel (Horizontal) Average



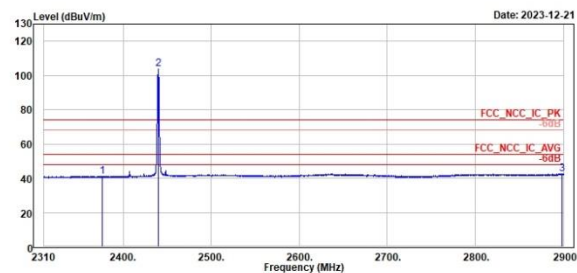
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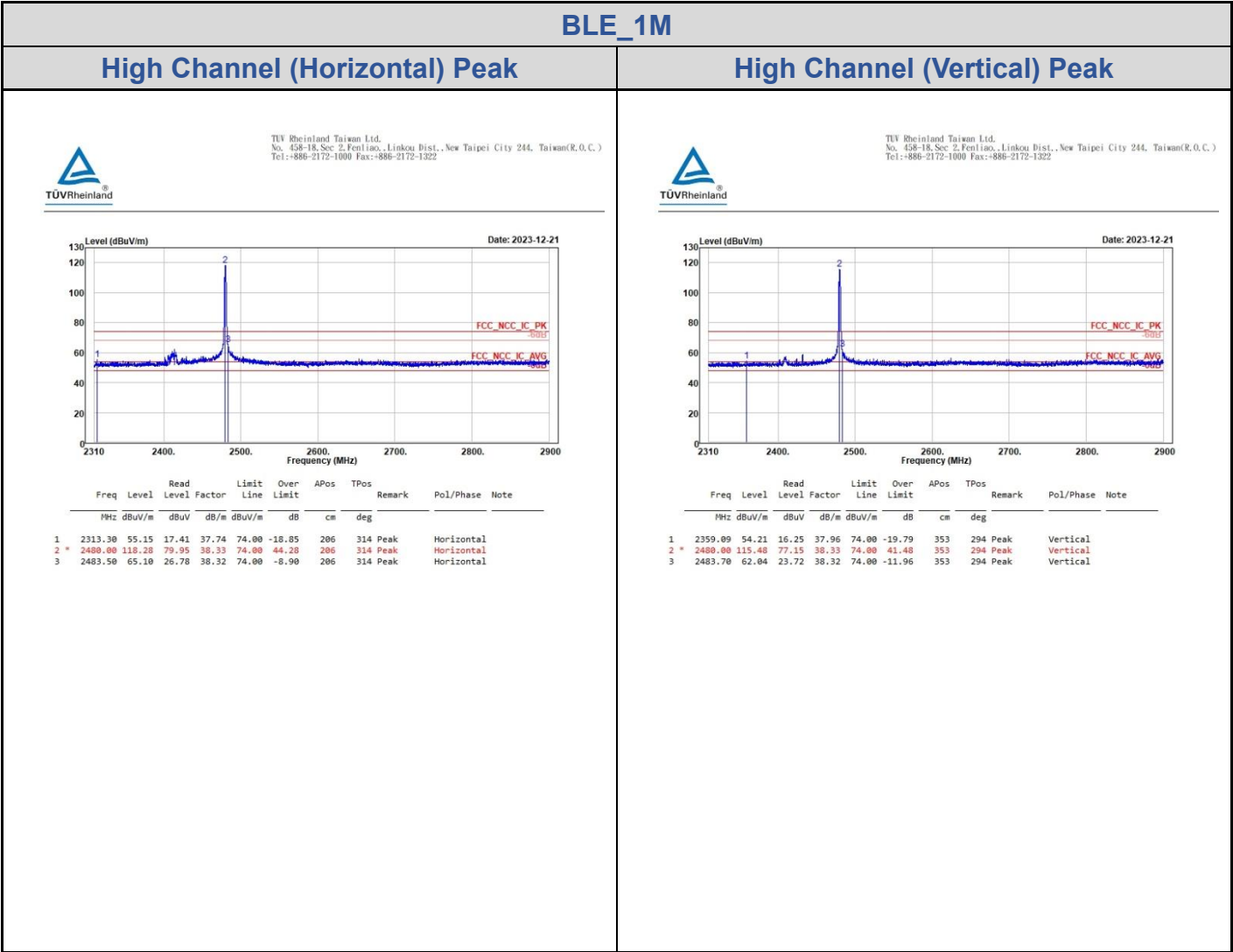
	Freq	Level	Read dBm	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBm	dBm	dB/m	dBm/m	dB	cm	deg			
1	2375.84	41.75	3.74	38.01	54.00	-12.25	373	331	Average	Horizontal	
2 *	2440.00	116.83	78.53	38.30	54.00	62.83	373	331	Average	Horizontal	
3	2811.50	42.56	3.93	38.63	54.00	-11.44	373	331	Average	Horizontal	



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	Freq	Level	Read Line	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2376.08	41.08	3.97	38.01	54.00	-12.92	100	184	Average	Vertical	
2	2440.00	104.05	65.75	38.30	54.00	50.05	100	184	Average	Vertical	
3	2897.88	42.61	3.62	38.99	54.00	-11.39	100	184	Average	Vertical	

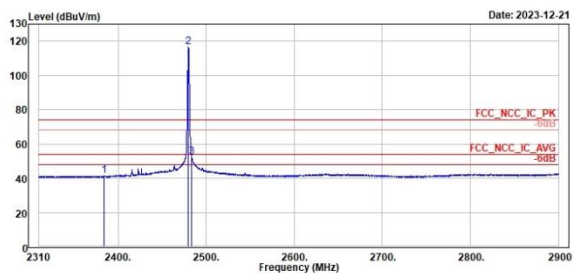


BLE_1M

High Channel (Horizontal) Average



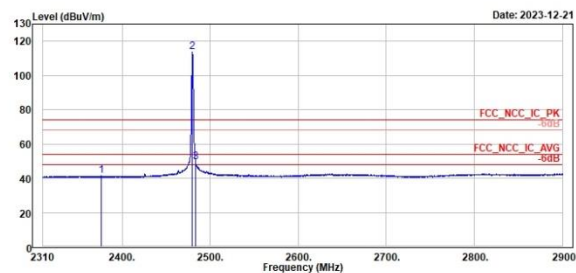
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No. 458-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)
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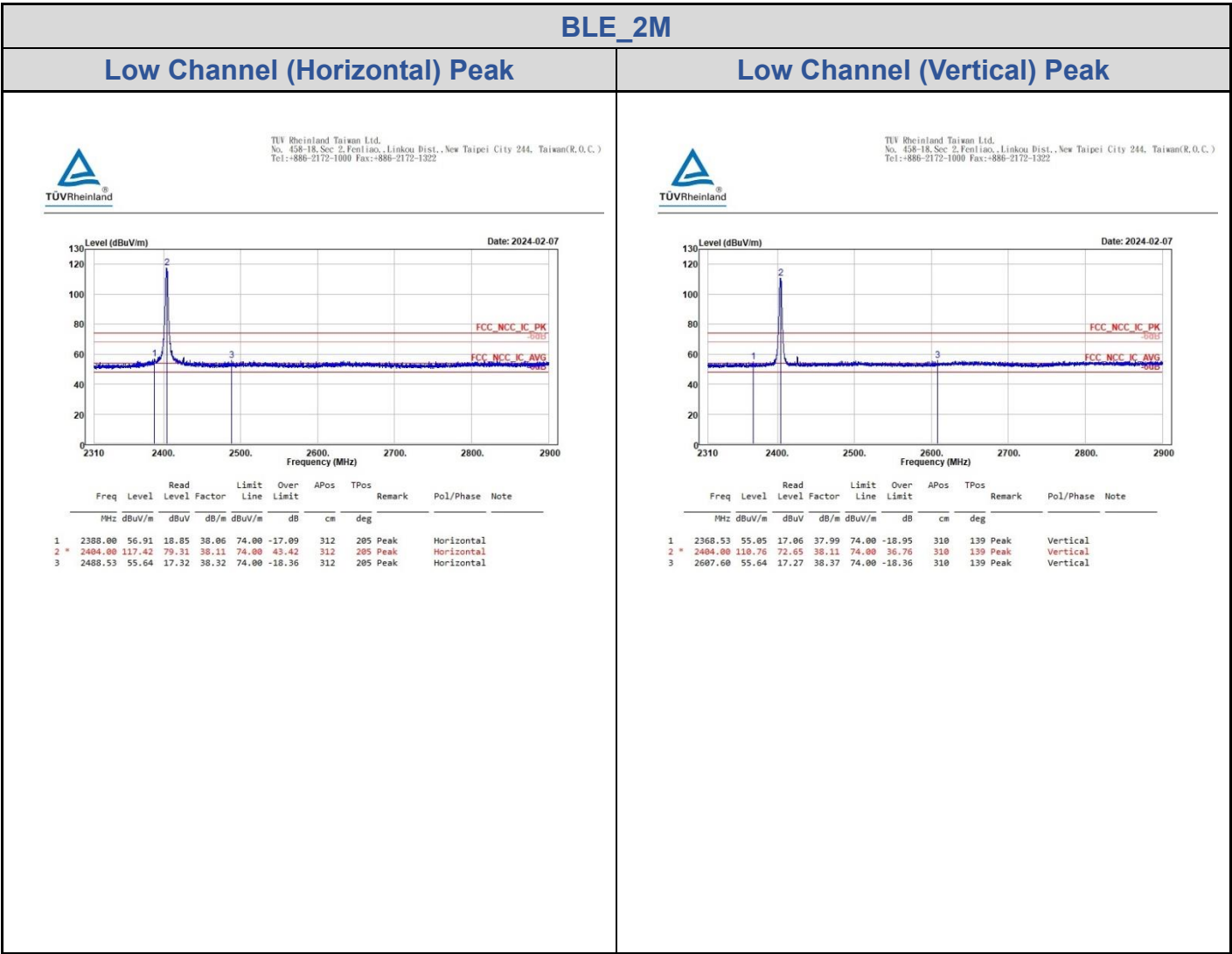
	Freq	Level	Head	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBm	Factor	Line	Limit					
	MHz	dBm	dB/m	dB/m	dB	cm	deg			
1	2383.87	41.35	3.31	38.04	54.00	-12.65	206	314	Average	Horizontal
2 *	2480.00	116.66	78.33	38.33	54.00	62.66	206	314	Average	Horizontal
3 †	2483.50	52.60	14.28	38.32	54.00	-1.40	206	314	Average	Horizontal

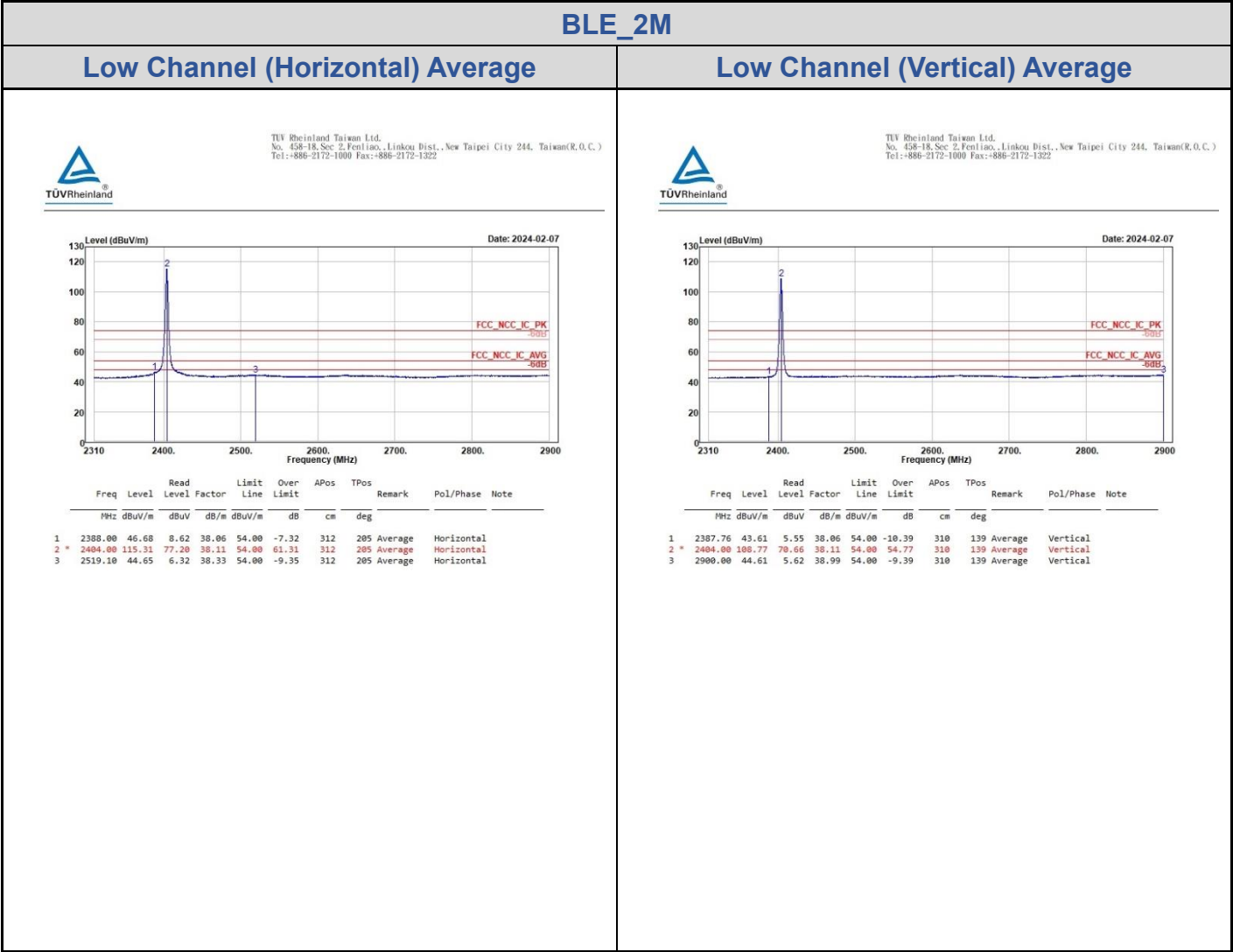


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	Freq	Head	Lead	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBu/m	dBu	dB/m	dBu/m	dB	cm	deg		
1	2376.08	41.28	3.27	38.01	54.00	-12.72	353	294	Average	Vertical
2 *	2480.00	113.08	75.55	38.33	54.00	59.88	353	294	Average	Vertical
3 I	2483.50	49.57	11.25	38.32	54.00	-4.43	353	294	Average	Vertical





BLE_2M

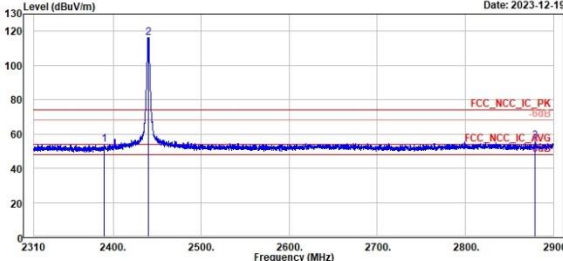
Middle Channel (Horizontal) Peak



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Level (dBuV/m)

Date: 2023-12-19



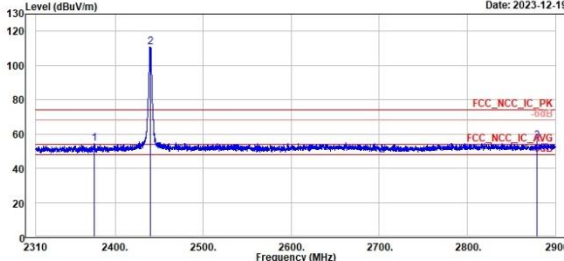
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.53	53.83	15.77	38.06	74.00	-20.17	334		5 Peak	Horizontal	
2 *	2440.00	116.27	77.97	38.30	74.00	42.27	334		5 Peak	Horizontal	
3	2878.76	55.64	16.72	38.92	74.00	-18.36	334		5 Peak	Horizontal	



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Level (dBuV/m)

Date: 2023-12-19



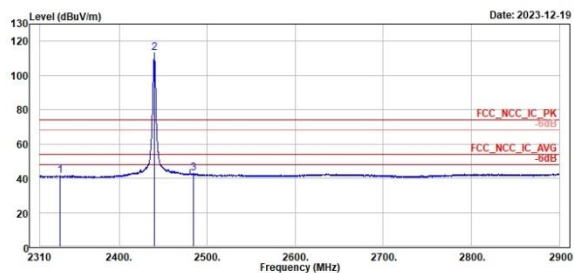
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2376.08	54.14	16.13	38.01	74.00	-19.86	330		103 Peak	Vertical	
2 *	2440.00	118.84	72.54	38.30	74.00	36.84	330		103 Peak	Vertical	
3	2879.11	56.10	17.18	38.92	74.00	-17.90	330		103 Peak	Vertical	

BLE_2M

Middle Channel (Horizontal) Average



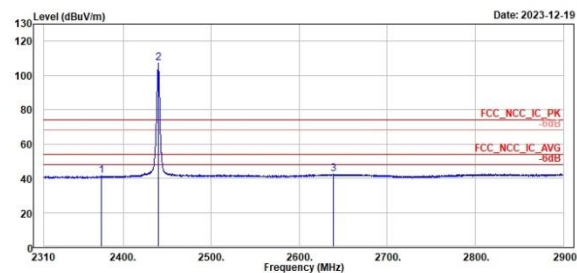
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Tel: +886-2172-1000 Fax: +886-2172-1322



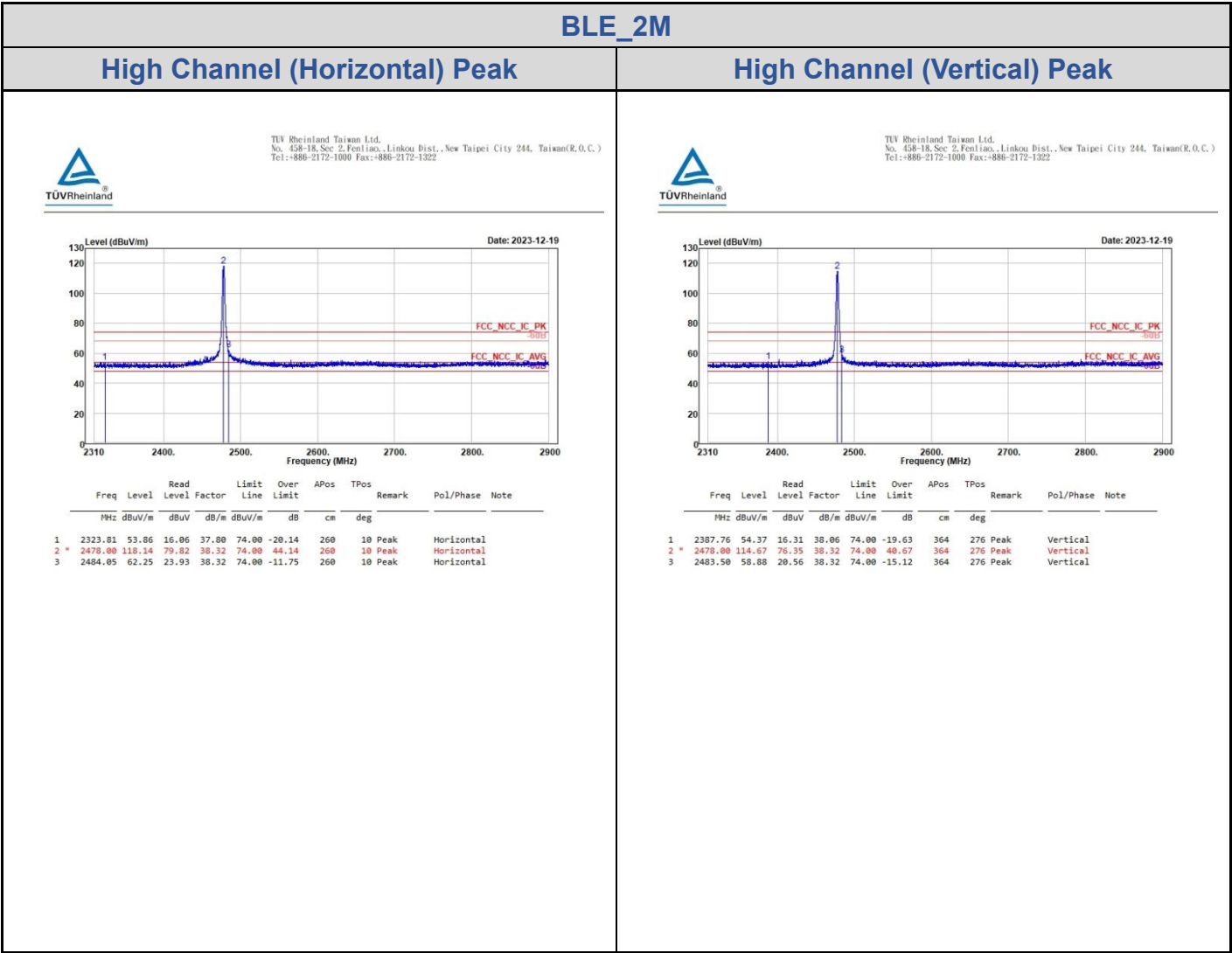
	Freq	Level	Read dBuV/m	Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz		dBuV/m	dB/m	dBuV/m	dB	cm	deg			
1	2333.36	41.44	3.60	37.84	54.00	-12.56	334	5	Average	Horizontal	
2 *	2440.00	113.17	74.87	38.30	54.00	59.17	334	5	Average	Horizontal	
3	2484.29	42.79	4.47	38.32	54.00	-11.21	334	5	Average	Horizontal	



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	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	2375.61	41.39	3.38	38.01	54.00	-12.61	330	103	Average	Vertical	
2	2440.00	127.35	69.05	38.30	54.00	53.35	330	103	Average	Vertical	
3	2638.51	42.45	3.92	38.53	54.00	-11.55	330	103	Average	Vertical	

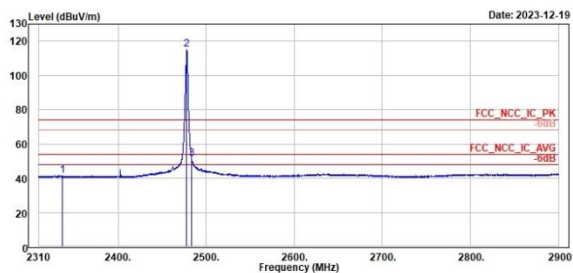


BLE_2M

High Channel (Horizontal) Average



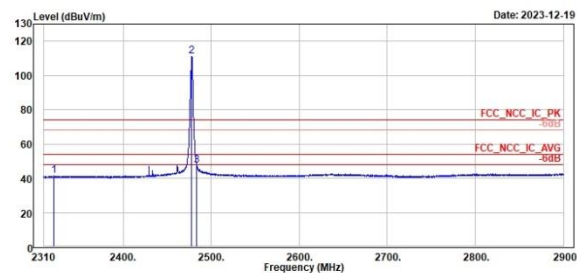
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	Freq	Level	Head	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBm	Factor	Line	Limit					
			dBm	dBm	dBm	dB	cm	deg		
1	2337.02	41.43	3.57	37.86	54.00	-12.57	260	10	Average	Horizontal
2 *	2478.00	114.95	76.63	38.32	54.00	60.95	260	10	Average	Horizontal
3	2483.50	51.25	12.93	38.32	54.00	-2.75	260	10	Average	Horizontal



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	Freq	Head	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	Hz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg	
1	2321.09	41.28	3.50	37.78	54.00	-12.72	364	276 Average	Vertical
2	2478.00	111.45	73.13	38.32	54.00	57.45	364	276 Average	Vertical
3	2483.50	47.67	9.35	38.32	54.00	-6.33	364	276 Average	Vertical

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

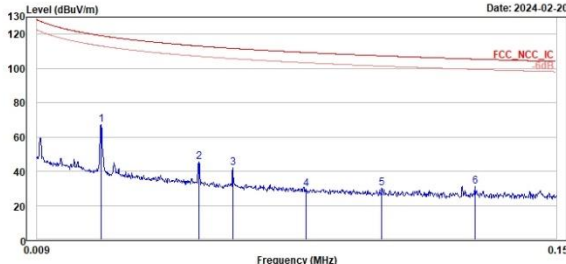
BLE_1M

High Channel (Open) 9kHz~150kHz



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Date: 2024-02-20



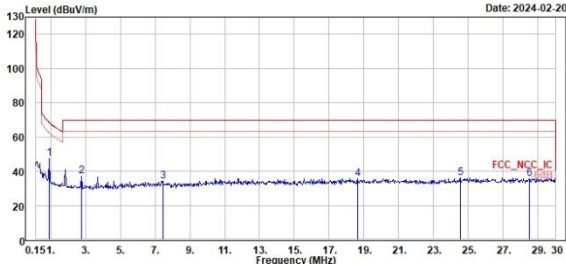
Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.03	67.22	47.41	19.81	119.13	-51.91	100	66 Peak	Open
2	0.05	45.55	26.25	19.30	113.11	-67.56	100	110 Peak	Open
3	0.06	41.99	23.20	18.79	111.72	-69.73	100	216 Peak	Open
4	0.08	29.55	11.01	18.54	109.32	-79.77	100	176 Peak	Open
5	0.10	30.00	11.46	18.54	107.37	-77.37	100	54 Peak	Open
6	0.13	30.91	12.22	18.69	105.46	-74.55	100	142 Peak	Open

High Channel (Open) 150kHz~30MHz



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Date: 2024-02-20



Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.93	47.57	28.43	19.14	68.27	-20.70	100	168 Peak	Open
2	2.78	37.00	17.88	19.12	69.50	-32.50	100	159 Peak	Open
3	7.46	34.20	13.31	20.89	69.50	-35.30	100	333 Peak	Open
4	18.63	35.82	13.28	22.54	69.50	-33.68	100	312 Peak	Open
5	24.54	36.11	13.39	22.72	69.50	-33.39	100	44 Peak	Open
6	28.51	35.80	12.78	23.02	69.50	-33.70	100	213 Peak	Open

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

BLE_1M

High Channel (Horizontal)

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Level (dBuV/m)

Date: 2024-02-20

	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	59.10	27.94	34.26	-6.32	40.00	-12.06	200	231 Peak	Horizontal	
2	119.24	33.69	42.88	-9.19	43.50	-9.81	200	240 Peak	Horizontal	
3	179.38	32.67	39.36	-6.69	43.50	-10.83	200	156 Peak	Horizontal	
4	239.52	31.89	38.49	-6.60	46.00	-14.11	200	0 Peak	Horizontal	
5	592.60	36.26	35.94	0.32	46.00	-9.74	100	220 Peak	Horizontal	
6	960.23	50.69	45.18	5.51	54.00	-3.31	100	199 Peak	Horizontal	

TÜVRheinland

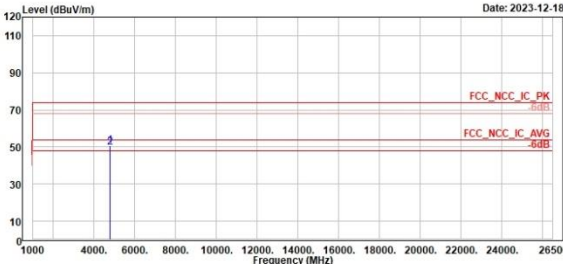
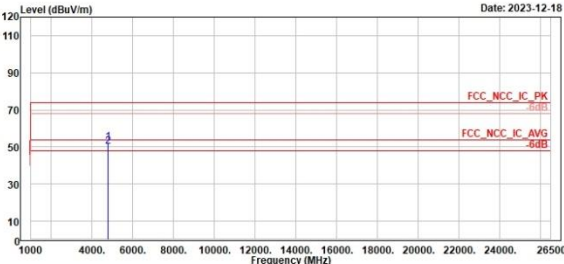
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Tel: +886-2172-1000 Fax: +886-2172-1322

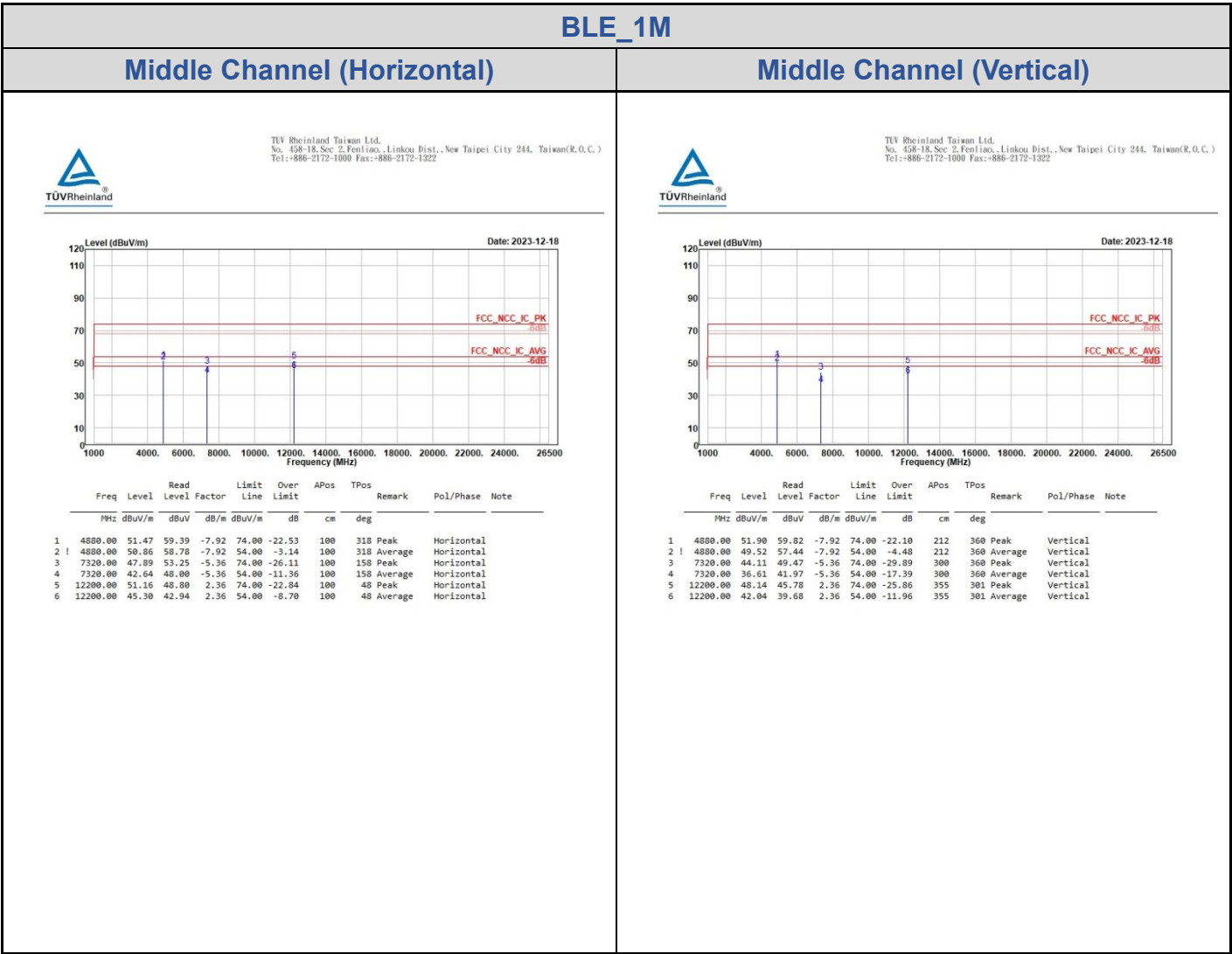
Level (dBuV/m)

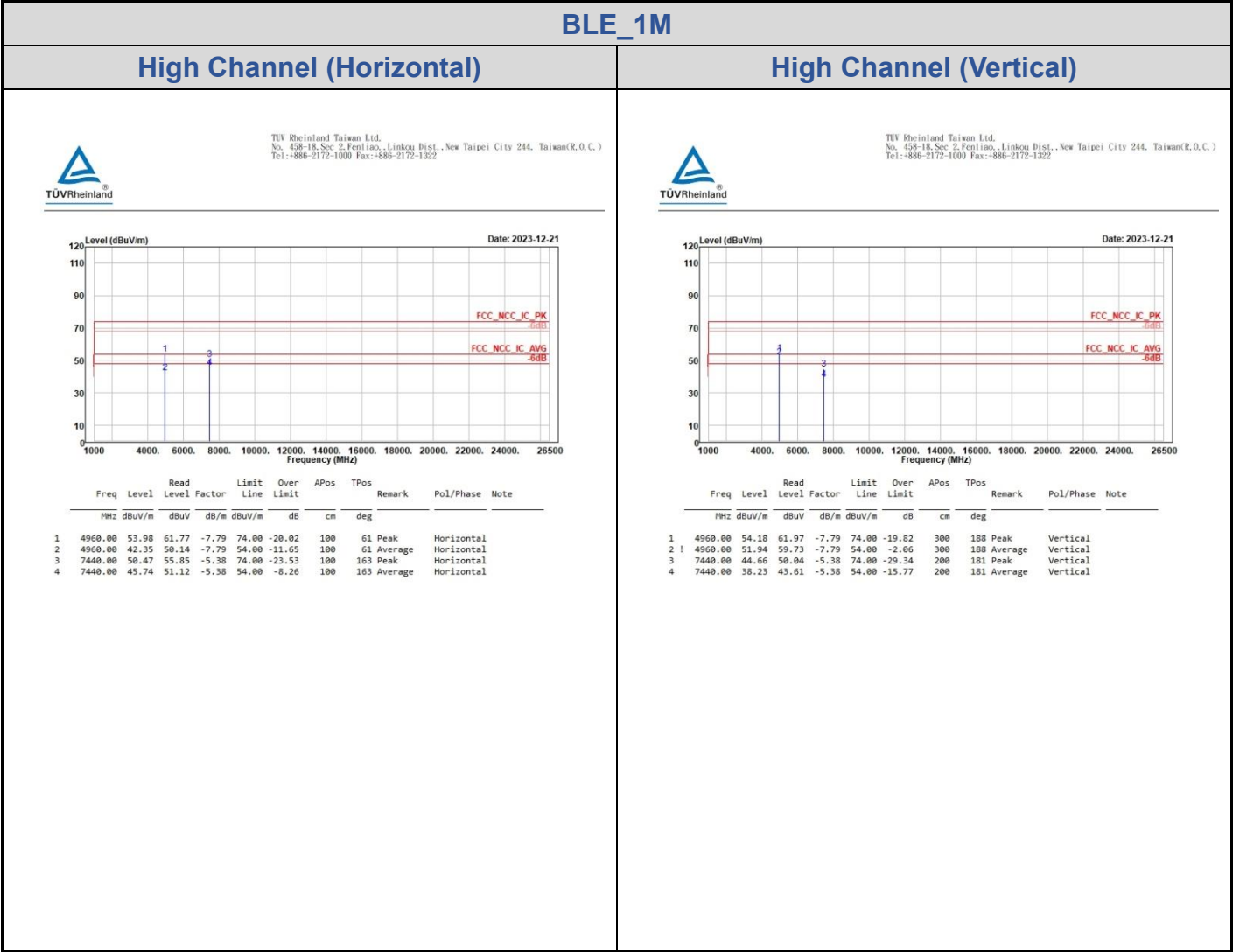
Date: 2024-02-20

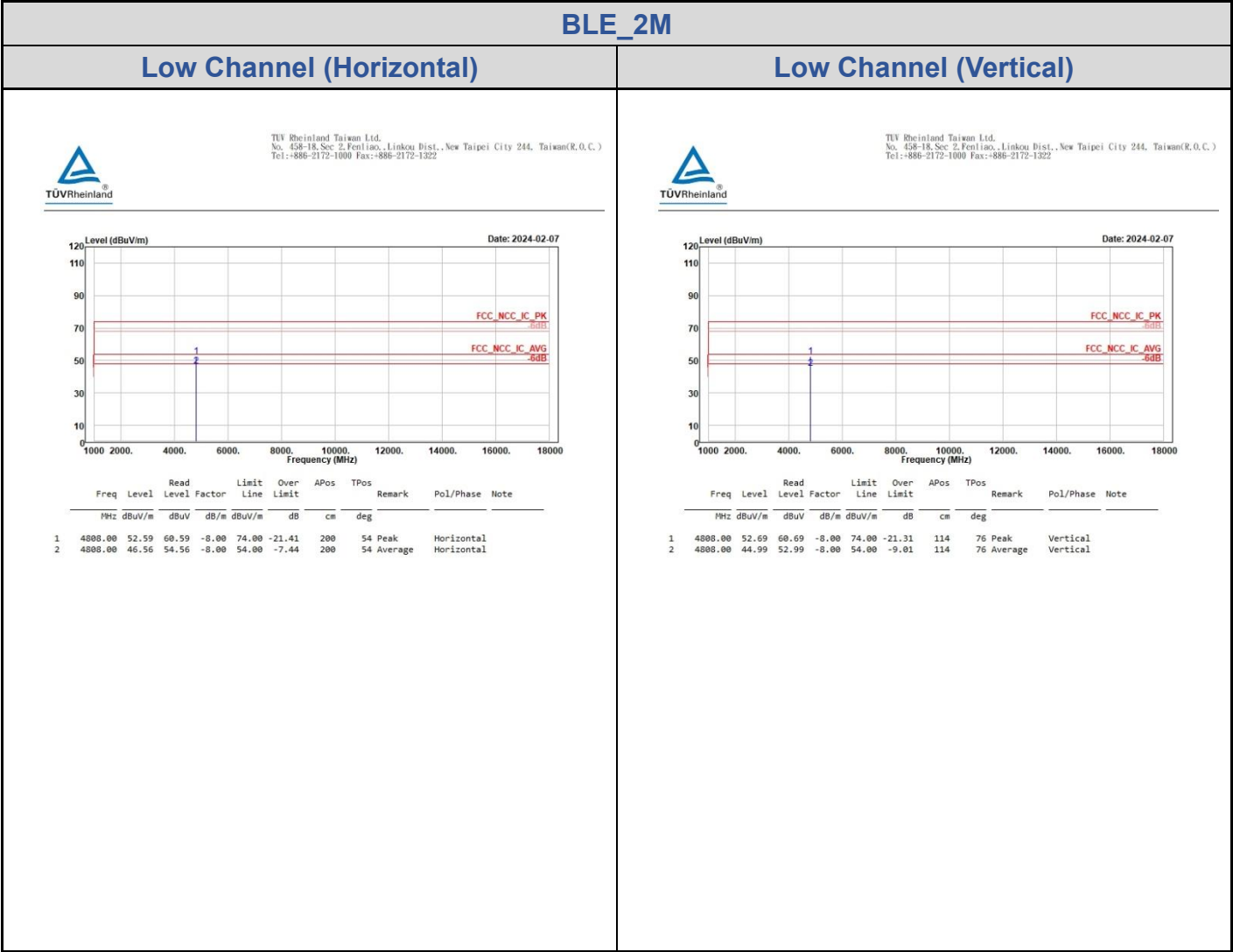
	Freq	Level	Read Level Factor	Limit Line	Over Limit	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	59.10	33.62	39.94	-6.32	40.00	-6.38	100	297 QP	Vertical	
2	119.24	38.96	48.15	-9.19	43.50	-4.54	100	44 QP	Vertical	
3	179.38	33.36	40.05	-6.69	43.50	-10.14	100	114 Peak	Vertical	
4	245.34	30.62	37.15	-6.53	46.00	-15.38	100	275 Peak	Vertical	
5	480.08	33.77	35.40	-1.63	46.00	-12.23	100	166 Peak	Vertical	
6	960.23	43.92	38.41	5.51	54.00	-10.08	100	231 Peak	Vertical	

Spurious Emissions, Tx Mode, 1GHz ~ 26.5GHz

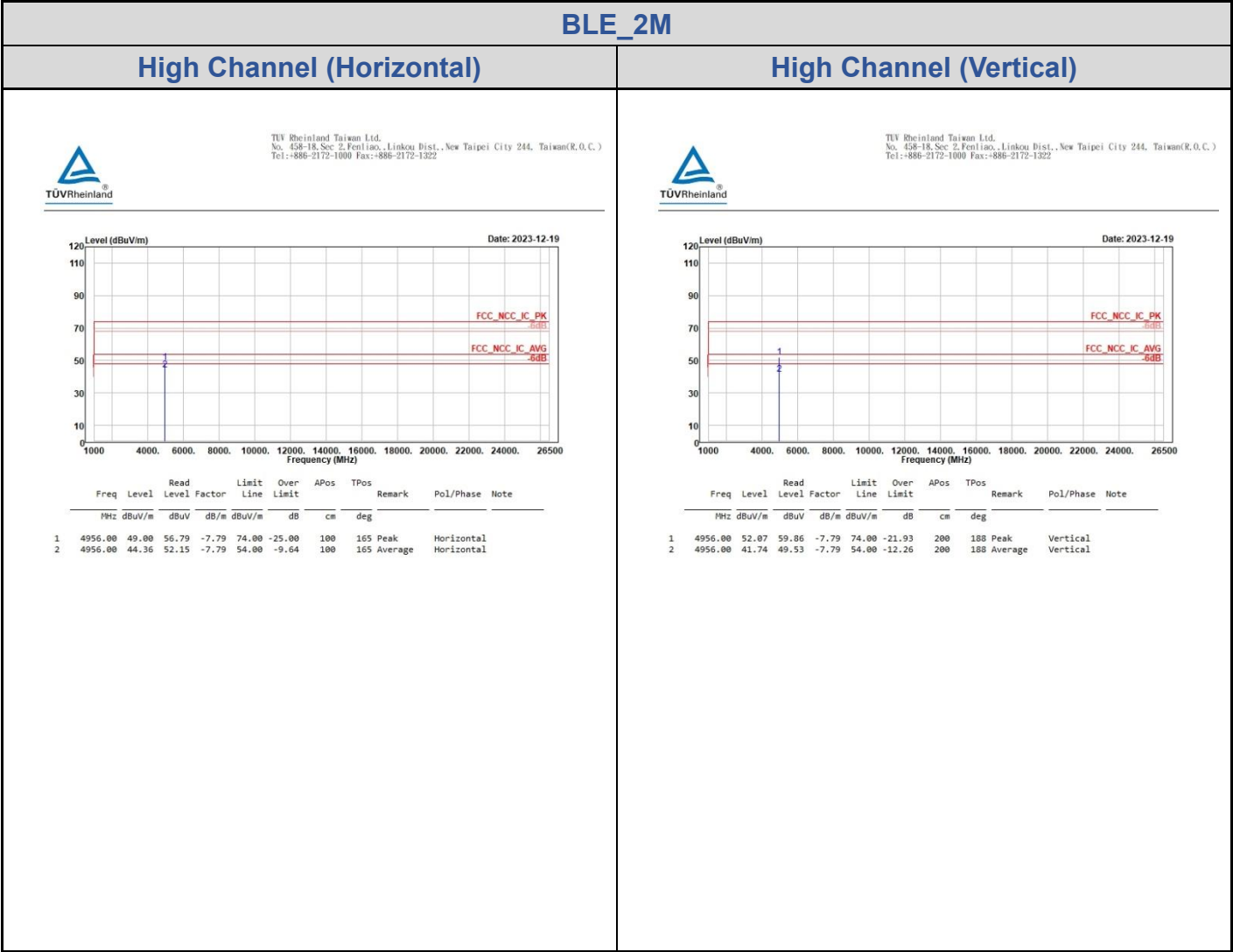
BLE_1M																																																																																																											
Low Channel (Horizontal)						Low Channel (Vertical)																																																																																																					
 TUV Rheinland Taiwan Ltd. No. 458-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.) Tel: +886-2172-1000 Fax: +886-2172-1322 Level (dBuV/m) 2023-12-18 <table><tr><th>Freq</th><th>Level</th><th>Read</th><th>Level</th><th>Factor</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><th></th><th></th></tr><tr><td>1</td><td>4804.00</td><td>50.74</td><td>58.75</td><td>-8.01</td><td>74.00</td><td>-23.26</td><td>100</td><td>327</td><td>Peak</td><td>Horizontal</td><td></td></tr><tr><td>2</td><td>4804.00</td><td>49.57</td><td>57.58</td><td>-8.01</td><td>54.00</td><td>-4.43</td><td>100</td><td>327</td><td>Average</td><td>Horizontal</td><td></td></tr></table>						Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg					1	4804.00	50.74	58.75	-8.01	74.00	-23.26	100	327	Peak	Horizontal		2	4804.00	49.57	57.58	-8.01	54.00	-4.43	100	327	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 Level (dBuV/m) 2023-12-18 <table><tr><th>Freq</th><th>Level</th><th>Read</th><th>Level</th><th>Factor</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><th></th><th></th></tr><tr><td>1</td><td>4804.00</td><td>52.54</td><td>60.55</td><td>-8.01</td><td>74.00</td><td>-21.46</td><td>300</td><td>184</td><td>Peak</td><td>Vertical</td><td></td></tr><tr><td>2</td><td>4804.00</td><td>50.05</td><td>58.06</td><td>-8.01</td><td>54.00</td><td>-3.95</td><td>300</td><td>184</td><td>Average</td><td>Vertical</td><td></td></tr></table>						Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg					1	4804.00	52.54	60.55	-8.01	74.00	-21.46	300	184	Peak	Vertical		2	4804.00	50.05	58.06	-8.01	54.00	-3.95	300	184	Average	Vertical	
Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note																																																																																																
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1	4804.00	50.74	58.75	-8.01	74.00	-23.26	100	327	Peak	Horizontal																																																																																																	
2	4804.00	49.57	57.58	-8.01	54.00	-4.43	100	327	Average	Horizontal																																																																																																	
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2	4804.00	50.05	58.06	-8.01	54.00	-3.95	300	184	Average	Vertical																																																																																																	







BLE_2M	
Middle Channel (Horizontal)	Middle 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) 1 2 FCC_NCC_IC_PK FCC_NCC_IC_AVG -6dB Read Level Factor Limit Over Limit APos TPos Remark Pol/Phase Note MHz dBuV/m dBuV dB/m dBuV/m dB cm deg 1 4880.00 50.22 58.14 -7.92 74.00 -23.78 100 59 Peak Horizontal 2 4880.00 44.01 51.93 -7.92 54.00 -9.99 100 59 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) 1 2 FCC_NCC_IC_PK FCC_NCC_IC_AVG -6dB Read Level Factor Limit Over Limit APos TPos Remark Pol/Phase Note MHz dBuV/m dBuV dB/m dBuV/m dB cm deg 1 4880.00 49.03 56.95 -7.92 74.00 -24.97 110 77 Peak Vertical 2 4880.00 41.34 49.26 -7.92 54.00 -12.66 110 77 Average Vertical



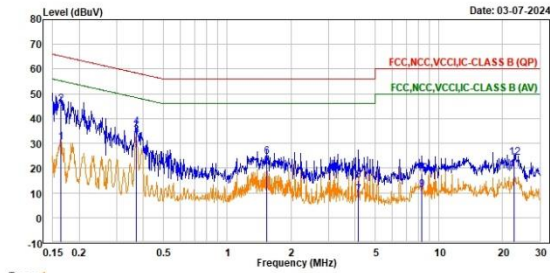
Mains Conducted Emission, Tx Mode 150kHz ~ 30MHz

Worst Band

(Line)



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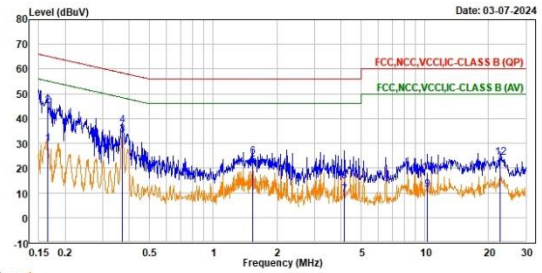


Trace: 1	Frequency (MHz)						Pol/Phase	Note
	Freq	Level	Read Level	Limit	Over			
	MHz	dBuV	Factor	Line	Line	Remark		
				dB	dBuV	dB		
1	0.16	30.29	20.67	9.62	55.25	-23.96 Average	line1	
2	0.16	45.89	30.27	9.62	65.32	-19.96 QP	line1	
3	0.37	33.01	23.38	9.63	48.42	-15.41 Average	line1	
4	0.37	36.48	26.85	9.63	58.42	-21.94 QP	line1	
5	1.53	20.68	11.02	9.66	46.00	-25.32 Average	line1	
6	1.53	24.69	15.03	9.66	46.00	-31.33 QP	line1	
7	4.17	14.83	9.24	9.68	50.00	-36.76 Average	line1	
8	4.17	14.83	5.15	9.68	50.00	-41.17 QP	line1	
9	8.33	11.15	1.41	9.74	68.00	-38.85 Average	line1	
10	8.33	17.87	8.13	9.74	68.00	-42.13 QP	line1	
11	22.69	19.45	9.69	9.76	50.00	-38.95 Average	line1	
12	22.69	24.24	14.48	9.76	68.00	-35.76 QP	line1	

(Neutral)



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Trace 1:		Frequency (MHz)									
		Freq		Read Level		Limit		Over		Pol/Phase	Note
		MHz	dBuV	dBuV	Factor	dBuV	dB	Limit	Remark		
7											
1		0.16	29.68	20.86	9.62	55.21	-25.53	Average		neutral	
2		0.16	35.21	35.55	9.62	65.21	-20.84	Q		neutral	
3		0.37	33.58	23.95	9.63	48.47	-14.89	Average		neutral	
4		0.37	37.11	27.48	9.63	58.47	-21.36	Q		neutral	
5		1.53	20.63	10.97	9.66	46.00	-37.37	Average		neutral	
6		1.53	24.64	14.98	9.66	56.00	-31.37	Q		neutral	
7		4.17	9.31	0.38	9.69	56.00	-46.36	Average		neutral	
8		4.17	14.80	5.11	9.69	56.00	-41.20	Q		neutral	
9		10.27	11.35	1.56	9.79	58.00	-36.65	Average		neutral	
10		10.27	17.11	8.32	9.79	68.00	-41.69	Q		neutral	
11		22.69	19.53	9.66	9.87	68.00	-36.65	Average		neutral	
12		22.69	24.36	14.94	9.87	68.00	-35.64	Q		neutral	

Ant No. 5
Band Edges, 2.31GHz ~ 2.9GHz

BLE_1M

Low Channel (Horizontal) Peak

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Level (dBuV/m)

Date: 2023-12-19

Frequency (MHz)

FCC_NCC_IC_PK

FCC_NCC_IC_AVG

	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2390.00	56.36	18.30	38.06	74.00	-17.64	344	197	Peak	Horizontal	
2 *	2402.00	115.40	77.30	38.10	74.00	41.40	344	197	Peak	Horizontal	
3	2761.35	55.42	17.21	38.21	74.00	-18.58	344	197	Peak	Horizontal	

Low Channel (Vertical) Peak

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Level (dBuV/m)

Date: 2023-12-19

Frequency (MHz)

FCC_NCC_IC_PK

FCC_NCC_IC_AVG

	Freq	Level	Read	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	2382.92	55.35	17.31	38.04	74.00	-18.65	355	276	Peak	Vertical	
2 *	2402.00	109.61	71.51	38.10	74.00	35.61	355	276	Peak	Vertical	
3	2814.21	55.60	16.95	38.65	74.00	-18.40	355	276	Peak	Vertical	