

# Appendix A: Test Results of Radiated Emissions & Mains Conducted

## Emission Test

<Main model with adapter 1>

Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

WiFi 5G 802.11a_5180MHz + WiFi 5G 802.11a_5700MHz + WiFi 2.4G 802.11b_2462MHz																																																																																																																																																																									
9kHz~150kHz (Open)					150kHz~30MHz (Open)																																																																																																																																																																				
<p>TUV Rheinland Taiwan Ltd. No. 438-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.) Tel: +886-2172-1000 Fax: +886-2172-1322</p> <p>Date: 2022-12-14</p>					<p>TUV Rheinland Taiwan Ltd. No. 438-18, Sec. 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.) Tel: +886-2172-1000 Fax: +886-2172-1322</p> <p>Date: 2022-12-14</p>																																																																																																																																																																				
<table border="1"> <thead> <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> </thead> <tbody> <tr><td>1</td><td>0.01</td><td>53.78</td><td>36.07</td><td>17.71</td><td>127.60</td><td>-73.82</td><td>100</td><td>124 QP</td><td>Open</td></tr> <tr><td>2</td><td>0.03</td><td>60.37</td><td>41.19</td><td>19.18</td><td>119.18</td><td>-58.81</td><td>100</td><td>260 QP</td><td>Open</td></tr> <tr><td>3</td><td>0.05</td><td>58.30</td><td>38.94</td><td>19.36</td><td>114.51</td><td>-56.21</td><td>100</td><td>242 QP</td><td>Open</td></tr> <tr><td>4</td><td>0.08</td><td>48.11</td><td>29.41</td><td>18.70</td><td>109.77</td><td>-61.66</td><td>100</td><td>242 QP</td><td>Open</td></tr> <tr><td>5</td><td>0.12</td><td>42.94</td><td>24.66</td><td>18.28</td><td>106.31</td><td>-63.37</td><td>100</td><td>220 QP</td><td>Open</td></tr> <tr><td>6</td><td>0.14</td><td>38.26</td><td>19.90</td><td>18.36</td><td>104.72</td><td>-66.46</td><td>100</td><td>220 QP</td><td>Open</td></tr> </tbody> </table>					Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			1	0.01	53.78	36.07	17.71	127.60	-73.82	100	124 QP	Open	2	0.03	60.37	41.19	19.18	119.18	-58.81	100	260 QP	Open	3	0.05	58.30	38.94	19.36	114.51	-56.21	100	242 QP	Open	4	0.08	48.11	29.41	18.70	109.77	-61.66	100	242 QP	Open	5	0.12	42.94	24.66	18.28	106.31	-63.37	100	220 QP	Open	6	0.14	38.26	19.90	18.36	104.72	-66.46	100	220 QP	Open	<table border="1"> <thead> <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> </thead> <tbody> <tr><td>1</td><td>0.72</td><td>45.35</td><td>26.28</td><td>19.07</td><td>70.49</td><td>-25.14</td><td>100</td><td>215 QP</td><td>Open</td></tr> <tr><td>2</td><td>2.81</td><td>33.44</td><td>13.97</td><td>19.47</td><td>69.50</td><td>-36.06</td><td>100</td><td>108 QP</td><td>Open</td></tr> <tr><td>3</td><td>9.11</td><td>34.64</td><td>13.64</td><td>21.00</td><td>69.50</td><td>-34.86</td><td>100</td><td>354 QP</td><td>Open</td></tr> <tr><td>4</td><td>14.99</td><td>34.74</td><td>13.81</td><td>21.73</td><td>69.50</td><td>-34.76</td><td>100</td><td>279 QP</td><td>Open</td></tr> <tr><td>5</td><td>20.84</td><td>35.51</td><td>13.41</td><td>22.10</td><td>69.50</td><td>-33.99</td><td>100</td><td>140 QP</td><td>Open</td></tr> <tr><td>6</td><td>24.75</td><td>35.96</td><td>13.72</td><td>22.24</td><td>69.50</td><td>-33.54</td><td>100</td><td>265 QP</td><td>Open</td></tr> </tbody> </table>					Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			1	0.72	45.35	26.28	19.07	70.49	-25.14	100	215 QP	Open	2	2.81	33.44	13.97	19.47	69.50	-36.06	100	108 QP	Open	3	9.11	34.64	13.64	21.00	69.50	-34.86	100	354 QP	Open	4	14.99	34.74	13.81	21.73	69.50	-34.76	100	279 QP	Open	5	20.84	35.51	13.41	22.10	69.50	-33.99	100	140 QP	Open	6	24.75	35.96	13.72	22.24	69.50	-33.54	100	265 QP	Open
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Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

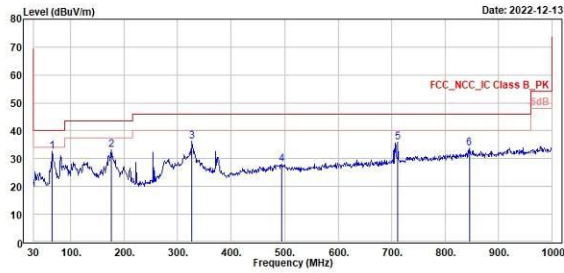
WiFi 5G 802.11a\_5180MHz + WiFi 5G 802.11a\_5700MHz + WiFi 2.4G 802.11b\_2462MHz

Horizontal

Vertical



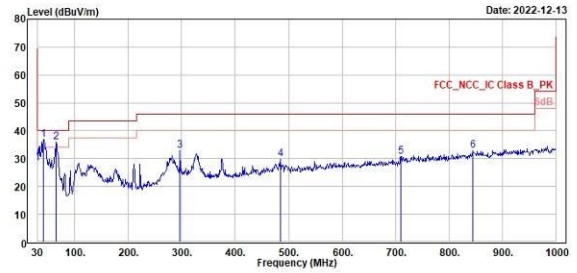
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	64.92	32.57	48.48	-7.91	48.00	-7.43	280	163 QP	Horizontal
2	175.58	33.25	39.88	-6.63	43.50	-10.25	280	224 QP	Horizontal
3	326.82	36.06	48.16	-4.10	46.00	-9.94	100	252 QP	Horizontal
4	493.66	28.00	29.73	-1.73	46.00	-18.00	200	158 QP	Horizontal
5	711.91	35.85	34.01	1.84	46.00	-10.15	100	344 QP	Horizontal
6	845.77	33.78	29.75	4.03	46.00	-12.22	100	134 QP	Horizontal



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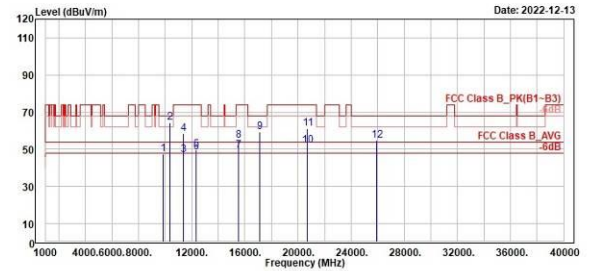
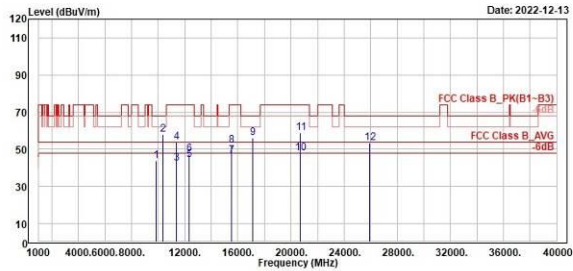
Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	48.67	36.95	43.33	-6.38	48.00	-3.05	100	131 QP	Vertical
2	64.92	35.98	43.81	-7.81	48.00	-4.10	100	4 QP	Vertical
3	296.75	32.76	37.47	-4.71	46.00	-13.24	100	219 QP	Vertical
4	484.93	29.83	31.62	-1.79	46.00	-16.17	100	204 QP	Vertical
5	789.97	38.84	29.82	1.82	46.00	-15.16	200	278 QP	Vertical
6	844.80	32.89	28.86	4.03	46.00	-13.11	400	113 QP	Vertical

Spurious Emissions, Tx Mode, 1GHz ~ 40GHz

WiFi 5G 802.11a\_5180MHz + WiFi 5G 802.11a\_5700MHz + WiFi 2.4G 802.11b\_2462MHz

(Horizontal) Peak

(Vertical) Peak



Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	9840.00	43.73	46.32	-2.59	68.20	-24.47	480	170 Peak	Horizontal
2	10360.00	58.14	59.97	-1.83	68.20	-10.06	480	117 Peak	Horizontal
3	11400.00	42.55	42.71	-0.16	54.00	-11.45	198	113 Average	Horizontal
4	11400.00	53.94	54.10	-0.16	74.00	-20.06	198	113 Peak	Horizontal
5	12310.00	44.08	42.59	1.49	54.00	-9.92	480	86 Average	Horizontal
6	12310.00	47.23	45.74	1.49	74.00	-26.77	480	86 Peak	Horizontal
7	15540.00	46.59	46.77	5.82	54.00	-7.41	480	142 Average	Horizontal
8	15540.00	51.99	46.17	5.82	74.00	-22.01	480	142 Peak	Horizontal
9	17100.00	56.25	48.03	8.22	68.20	-11.95	300	9 Peak	Horizontal
10	20720.00	48.12	46.50	1.62	54.00	-5.88	360	360 Average	Horizontal
11	20720.00	59.05	57.43	1.62	74.00	-14.95	360	360 Peak	Horizontal
12	25900.00	53.31	48.01	5.30	68.20	-14.89	300	100 Peak	Horizontal

Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	9840.00	47.68	50.27	-2.59	68.20	-20.52	300	261 Peak	Vertical
2	10360.00	64.18	66.81	-1.83	68.20	-4.02	200	224 Peak	Vertical
3	11400.00	46.81	46.97	-0.16	54.00	-7.19	300	268 Average	Vertical
4	11400.00	58.53	58.69	-0.16	74.00	-15.47	300	268 Peak	Vertical
5	12310.00	49.58	48.09	1.49	54.00	-4.42	100	280 Average	Vertical
6	12310.00	48.58	47.09	1.49	74.00	-25.42	100	280 Peak	Vertical
7	15540.00	49.14	43.32	5.82	54.00	-4.86	376	118 Average	Vertical
8	15540.00	54.53	48.71	5.82	74.00	-19.47	376	118 Peak	Vertical
9	17100.00	59.49	51.27	8.22	68.20	-8.71	400	125 Peak	Vertical
10	20720.00	51.98	50.36	1.62	54.00	-2.02	200	151 Average	Vertical
11	20720.00	61.23	59.61	1.62	74.00	-12.77	200	151 Peak	Vertical
12	25900.00	54.93	49.63	5.30	68.20	-13.27	400	116 Peak	Vertical

<Series model with adapter 1>  
Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

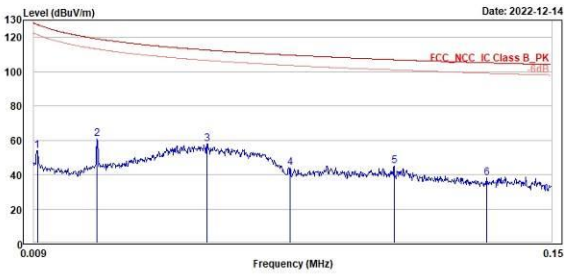
WiFi 5G 802.11a\_5180MHz + WiFi 5G 802.11a\_5700MHz + WiFi 2.4G 802.11b\_2462MHz

9kHz~150kHz (Open)

150kHz~30MHz (Open)



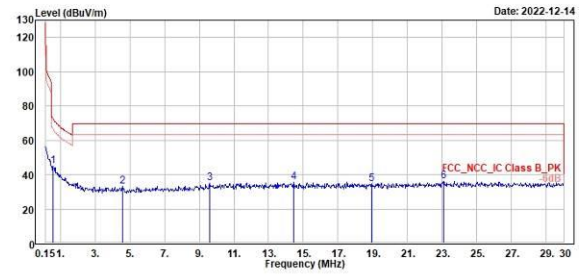
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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.01	54.09	36.38	17.71	127.68	-73.51	100	167	QP	Open	
2	0.03	60.62	41.44	19.18	119.18	-58.56	100	127	QP	Open	
3	0.06	57.75	38.58	19.17	112.59	-54.84	100	223	QP	Open	
4	0.08	44.10	25.42	18.68	109.67	-65.57	100	252	QP	Open	
5	0.11	44.94	26.70	18.24	107.00	-62.06	100	228	QP	Open	
6	0.13	38.17	19.84	18.33	105.17	-67.00	100	224	QP	Open	



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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	0.57	44.94	25.96	18.98	72.52	-27.58	100	226	QP	Open	
2	4.60	33.17	13.81	19.36	69.50	-36.33	100	282	QP	Open	
3	9.61	35.03	13.81	21.22	69.50	-34.47	100	98	QP	Open	
4	14.42	35.56	13.86	21.70	69.50	-33.94	100	22	QP	Open	
5	18.96	34.38	12.39	21.99	69.50	-35.12	100	200	QP	Open	
6	23.07	36.21	14.04	22.17	69.50	-33.29	100	32	QP	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

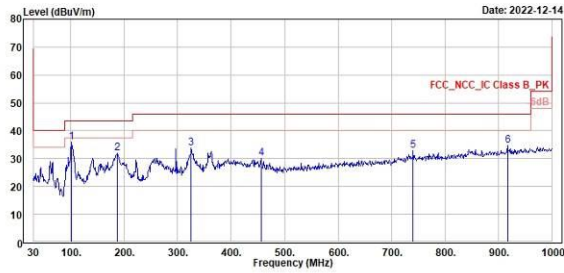
WiFi 5G 802.11a\_5180MHz + WiFi 5G 802.11a\_5700MHz + WiFi 2.4G 802.11b\_2462MHz

Horizontal

Vertical



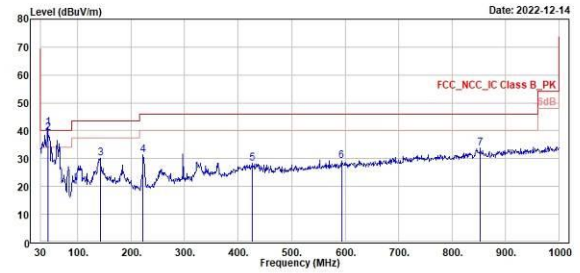
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Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	181.78	36.03	46.83	-10.80	43.50	-7.47	300	273 QP	Horizontal
2	187.14	32.00	39.94	-7.94	43.50	-11.50	100	226 QP	Horizontal
3	324.88	33.72	37.87	-4.15	46.00	-12.28	100	246 QP	Horizontal
4	455.83	30.08	32.02	-1.94	46.00	-15.92	200	238 QP	Horizontal
5	741.01	32.93	30.41	2.52	46.00	-13.07	100	266 QP	Horizontal
6	917.55	34.80	29.78	5.02	46.00	-11.20	194	360 QP	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 *	43.58	41.11	47.00	-5.98	40.00	1.11	100	179 Peak	Vertical
2 †	43.58	39.32	45.30	-5.98	40.00	-0.68	100	179 QP	Vertical
3	141.55	30.26	36.31	-6.05	43.50	-13.24	100	33 QP	Vertical
4	222.06	31.43	39.22	-7.79	46.00	-14.57	100	71 QP	Vertical
5	425.76	28.40	30.86	-2.46	46.00	-17.60	100	177 QP	Vertical
6	593.57	29.25	29.00	0.17	46.00	-16.75	200	210 QP	Vertical
7	853.53	33.76	29.70	4.06	46.00	-12.24	100	17 QP	Vertical

<Series model with adapter 2>  
Spurious Emissions, Tx Mode, 9kHz ~ 30MHz

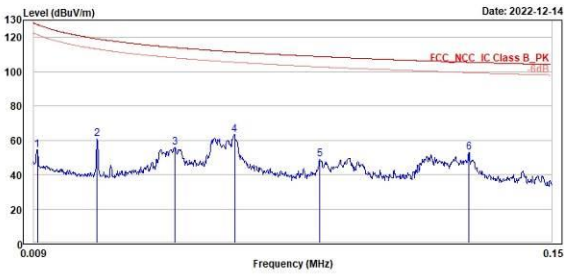
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9kHz~150kHz (Open)

150kHz~30MHz (Open)



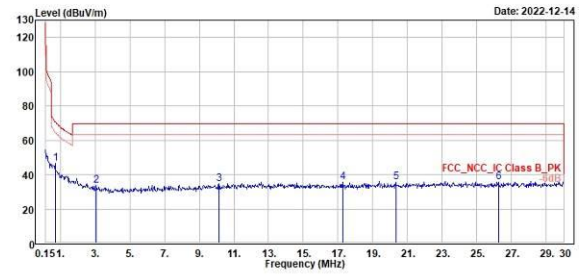
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Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	0.01	54.57	36.86	17.71	127.68	-73.83	100	154	QP	Open	
2	0.03	60.65	41.47	19.18	119.18	-58.53	100	243	QP	Open	
3	0.05	55.90	36.56	19.34	114.09	-58.19	100	239	QP	Open	
4	0.06	63.25	44.24	19.01	111.51	-48.26	100	216	QP	Open	
5	0.09	48.74	30.24	18.50	108.81	-60.07	100	240	QP	Open	
6	0.13	52.75	34.43	18.32	105.49	-52.74	100	216	QP	Open	



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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	0.72	46.61	27.54	19.07	70.49	-23.88	100	234	QP	Open	
2	3.08	33.42	13.94	19.48	69.50	-36.08	100	208	QP	Open	
3	10.15	34.59	13.18	21.41	69.50	-34.91	100	40	QP	Open	
4	17.28	35.49	13.61	21.88	69.50	-34.01	100	297	QP	Open	
5	20.33	35.73	13.66	22.07	69.50	-33.77	100	199	QP	Open	
6	26.24	35.53	13.23	22.30	69.50	-33.97	100	270	QP	Open	

Spurious Emissions, Tx Mode, 30MHz ~ 1GHz

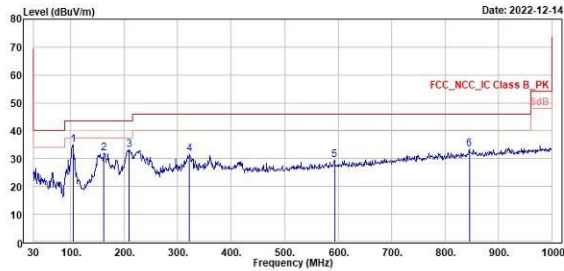
WiFi 5G 802.11a\_5180MHz + WiFi 5G 802.11a\_5700MHz + WiFi 2.4G 802.11b\_2462MHz

Horizontal

Vertical



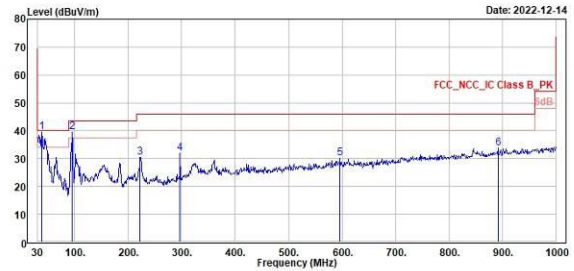
TUV Rheinland Taiwan Ltd.  
No. 438-18, Sec 2, Fenliao, Linkou Dist., New Taipei City 244, Taiwan(R.O.C.)  
Tel: +886-2172-1000 Fax: +886-2172-1322



Peak	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	
1	2	3	4	5	6	7	8	9	10	
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	183.72	34.03	45.31	-10.48	43.50	-8.67	300	251	QP	Horizontal
2	160.95	31.79	37.54	-5.75	43.50	-11.71	200	269	QP	Horizontal
3	208.48	33.15	41.16	-8.01	43.50	-10.35	200	294	QP	Horizontal
4	321.97	31.61	35.81	-4.20	46.00	-14.39	100	219	QP	Horizontal
5	593.57	29.47	29.30	0.17	46.00	-16.53	100	42	QP	Horizontal
6	845.77	33.59	29.56	4.03	46.00	-12.41	146	360	QP	Horizontal

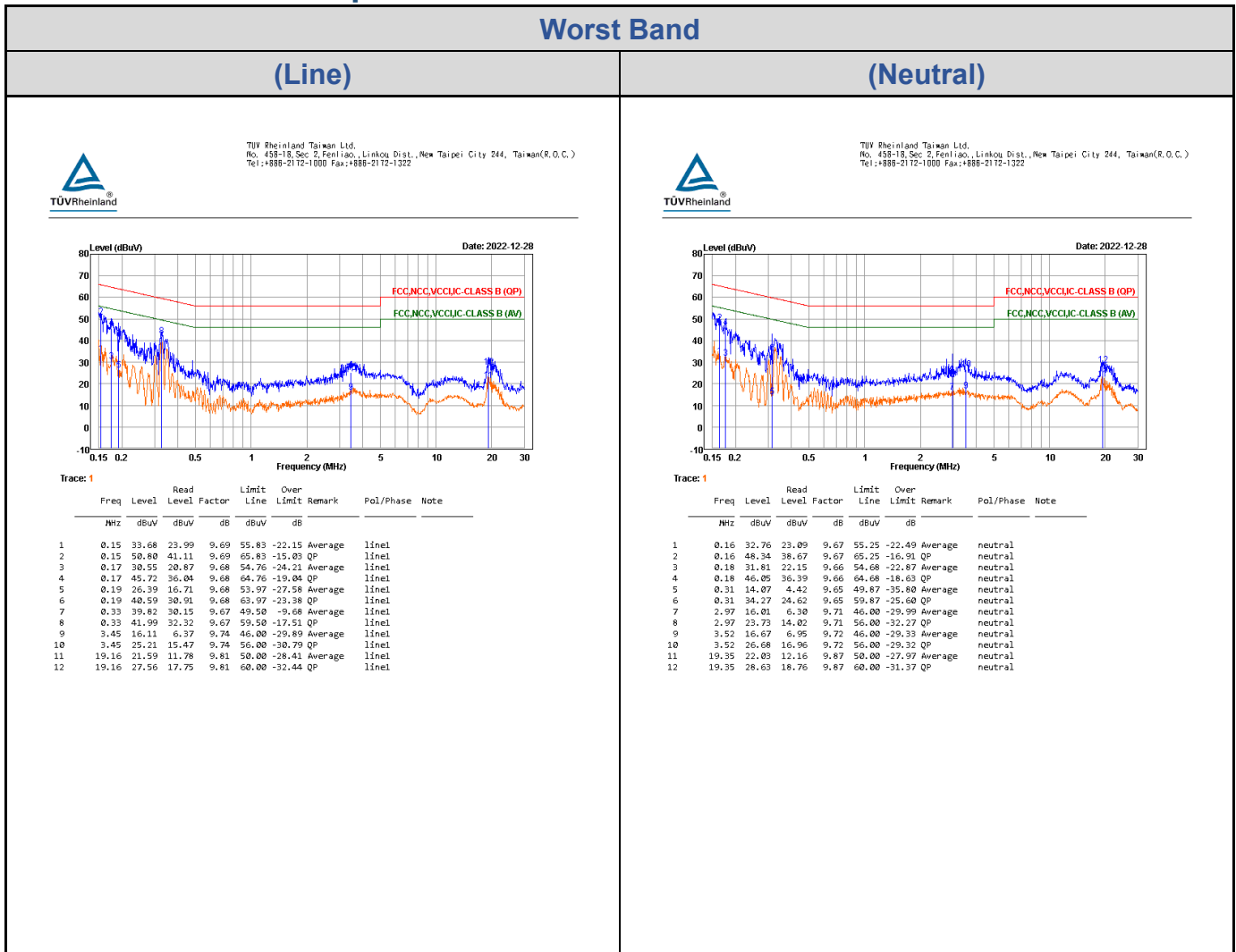


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Peak	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note	
1	2	3	4	5	6	7	8	9	10	
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg			
1	37.76	39.67	46.12	-6.45	40.00	-0.33	100	38	QP	Vertical
2	94.99	39.68	51.78	-12.10	43.50	-3.82	200	189	QP	Vertical
3	222.06	30.51	38.30	-7.79	46.00	-15.49	100	50	QP	Vertical
4	296.75	31.00	36.51	-4.71	46.00	-14.20	100	115	QP	Vertical
5	596.48	30.08	29.85	0.23	46.00	-15.92	100	128	QP	Vertical
6	892.33	33.74	29.11	4.63	46.00	-12.26	300	114	QP	Vertical

Mains Conducted Emission, 150kHz ~ 30MHz  
<Main model with adapter 1>





<Main model with adapter 2>

