

# Test Report No.50344115 002

## Appendix D: Radiated Spurious Emission Data

(File: 50344115 002 Appendix D)

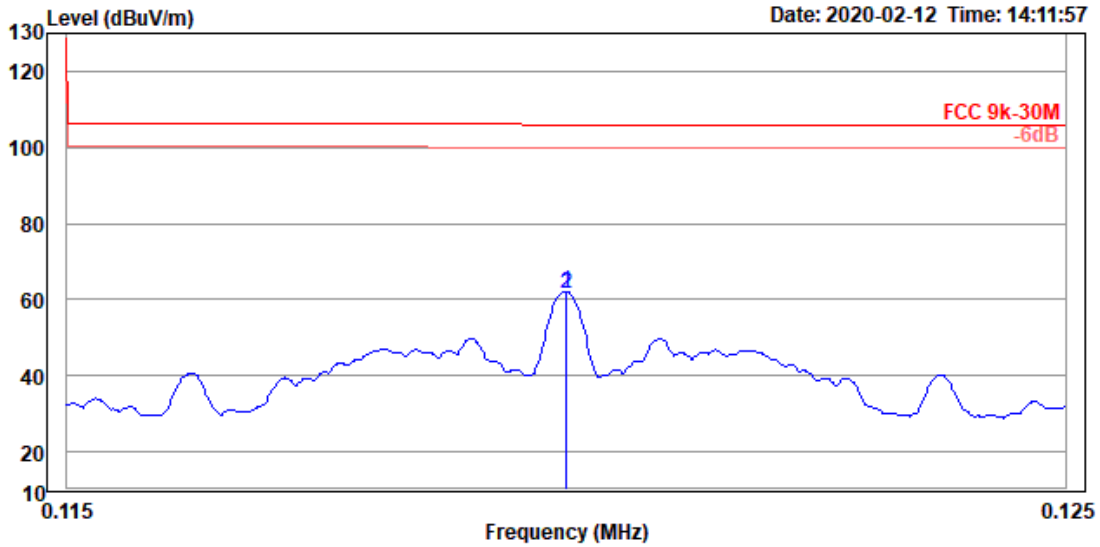
### Contents

Spurious Emissions, Fundamental.....	2
Spurious Emissions, TX+RX Mode, 9kHz-30MHz.....	3
Spurious Emissions, TX+RX Mode, 30MHz-1GHz.....	5
Spurious Emissions, AC Mains .....	7

# Spurious Emissions, Fundamental



TUV Rheinland Taiwan Ltd.  
 11F., No. 758, Sec. 4 Bade Road, Songshan Dist, Taipei City 105  
 Tel:+886-2172-7000 Fax:+886-2528-0018



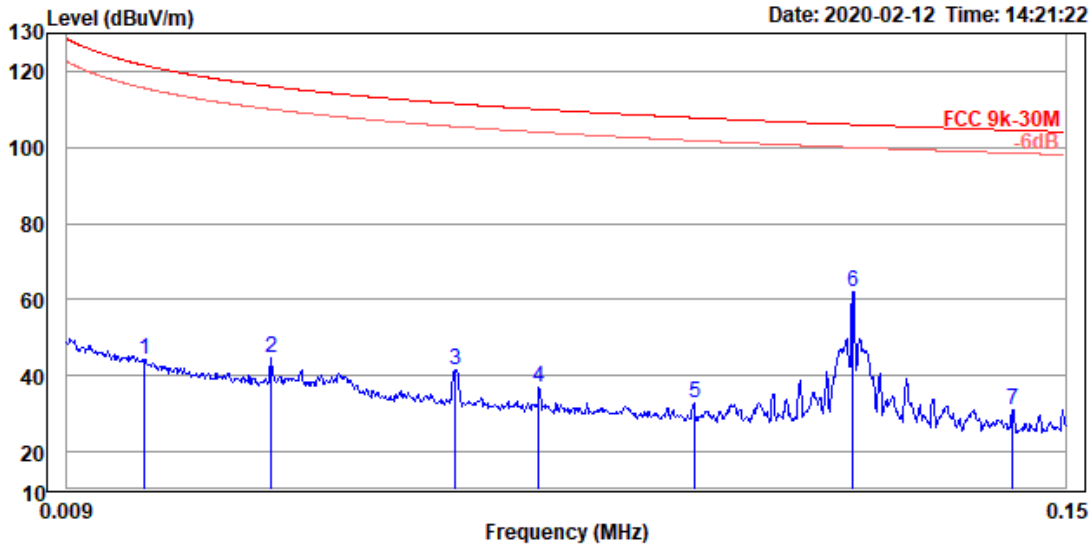
Site : 966A Chamber A  
 Condition : FCC 9k-30M 3m horizontal  
 Test Engineer: Kevin Kuo  
 Applicant : Nedap  
 Product : Reader  
 Model No. : NVITE  
 Test Rating : 24Vdc  
 Tmp/Hum : 20°C/53%  
 Memo : Normal Operation  
 : Fundamental

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.120	62.22	44.44	17.78	106.01	-43.79	100	350	Peak	
2	0.120	61.68	43.90	17.78	106.01	-44.33	100	350	Average	

# Spurious Emissions, TX+RX Mode, 9kHz-30MHz

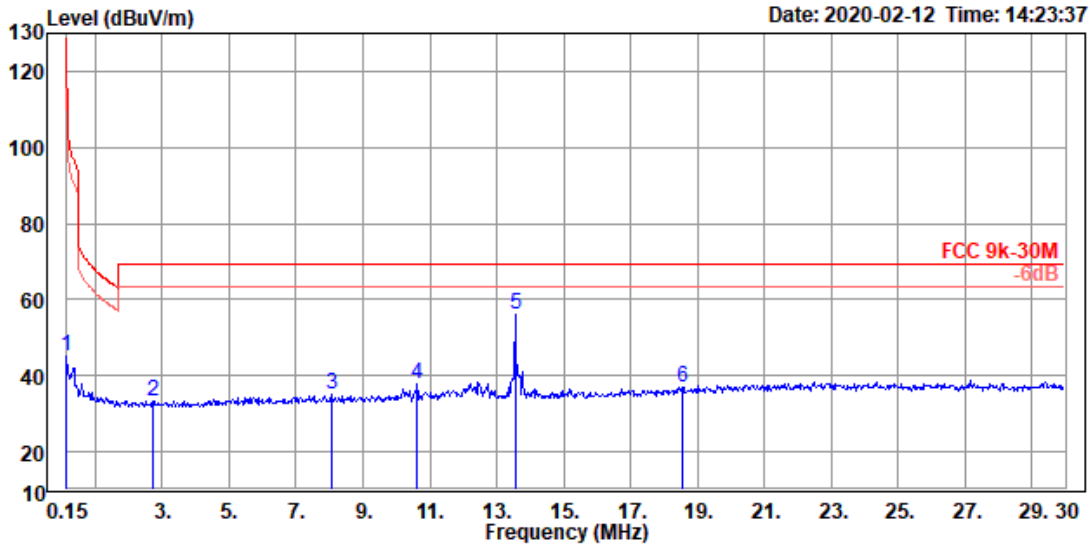


TUV Rheinland Taiwan Ltd.  
 11F., No. 758, Sec. 4 Bade Road, Songshan Dist, Taipei City 105  
 Tel:+886-2172-7000 Fax:+886-2528-0018



Site : 966A Chamber A  
 Condition : FCC 9k-30M 3m horizontal  
 Test Engineer: Kevin Kuo  
 Applicant : Nedap  
 Product : Reader  
 Model No. : NVITE  
 Test Rating : 24Vdc  
 Tmp/Hum : 20°C/53%  
 Memo : Normal Operation  
 : TX+RX

	Read	Limit	Over	APos	TPos	Remark	Note
Freq	Level	Level	Factor	Line	Limit		
MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg
1	0.020	44.27	25.74	18.53	121.57	-77.30	100 42 QP
2	0.038	44.52	25.58	18.94	116.02	-71.50	100 212 QP
3	0.064	41.55	22.99	18.56	111.51	-69.96	100 181 QP
4	0.076	36.85	18.58	18.27	110.01	-73.16	100 147 QP
5	0.098	32.69	14.93	17.76	107.81	-75.12	100 110 QP
6	0.120	62.22	44.44	17.78	106.02	-43.80	100 39 QP TX
7	0.143	31.05	13.17	17.88	104.52	-73.47	100 356 QP



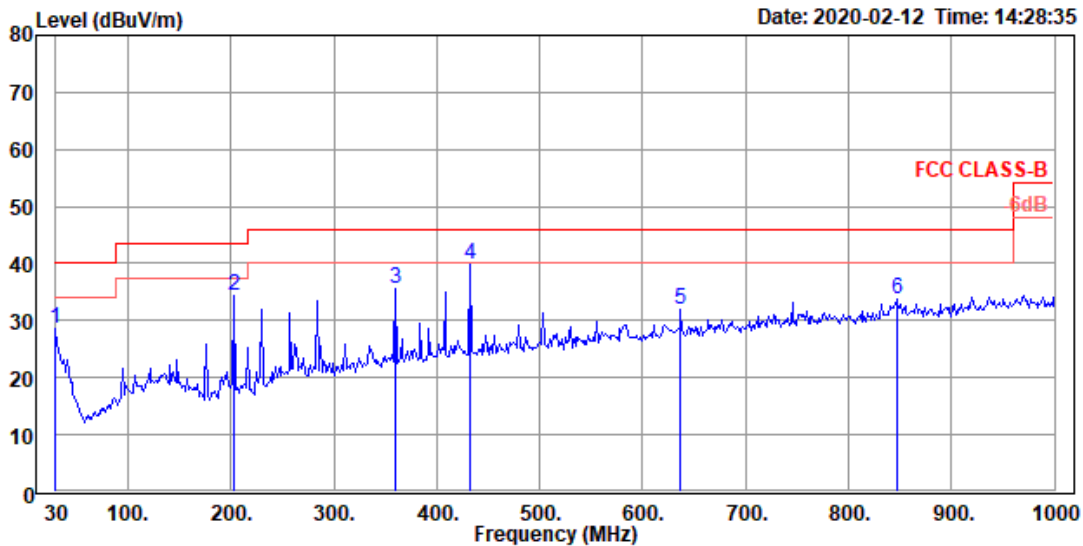
Site : 966A Chamber A  
 Condition : FCC 9k-30M 3m horizontal  
 Test Engineer: Kevin Kuo  
 Applicant : Nedap  
 Product : Reader  
 Model No. : NVITE  
 Test Rating : 24Vdc  
 Tmp/Hum : 20°C/53%  
 Memo : Normal Operation  
 : TX+RX

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	0.150	45.11	27.20	17.91	104.08	-58.97	100	161	QP	
2	2.717	33.43	14.82	18.61	69.50	-36.07	100	334	QP	
3	8.060	34.92	14.93	19.99	69.50	-34.58	100	56	QP	
4	10.627	37.61	17.14	20.47	69.50	-31.89	100	37	QP	
5	13.553	56.06	35.30	20.76	69.50	-13.44	100	265	QP	
6	18.538	37.13	15.87	21.26	69.50	-32.37	100	118	QP	

# Spurious Emissions, TX+RX Mode, 30MHz-1GHz

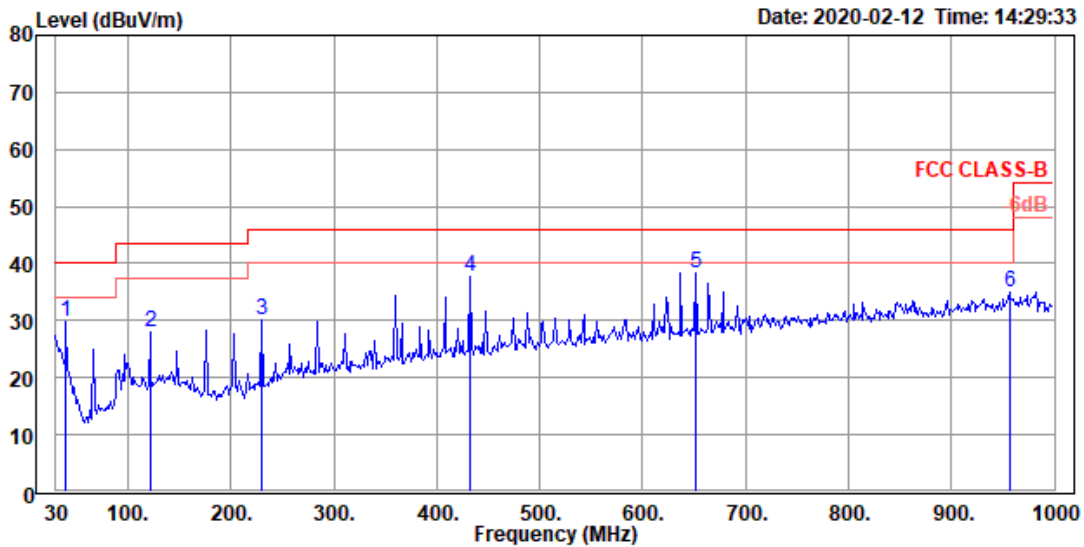


TUV Rheinland Taiwan Ltd.  
 11F., No. 758, Sec. 4 Bade Road, Songshan Dist, Taipei City 105  
 Tel:+886-2172-7000 Fax:+886-2528-0018



Site : 966A Chamber A  
 Condition : FCC CLASS-B 3m horizontal  
 Test Engineer: Kevin Kuo  
 Applicant : Nedap  
 Product : Reader  
 Model No. : NVITE  
 Test Rating : 24Vdc  
 Tmp/Hum : 20°C/53%  
 Memo : Normal Operation  
 : TX+RX

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	30.000	28.63	28.77	-0.14	40.00	-11.37	100	177	QP	
2	202.913	34.33	42.87	-8.54	43.50	-9.17	100	231	QP	
3	360.362	35.68	39.03	-3.35	46.00	-10.32	100	135	QP	
4	432.058	39.77	41.97	-2.20	46.00	-6.23	100	159	QP	
5	637.304	32.03	31.42	0.61	46.00	-13.97	100	273	QP	
6	846.768	33.88	30.15	3.73	46.00	-12.12	100	352	QP	



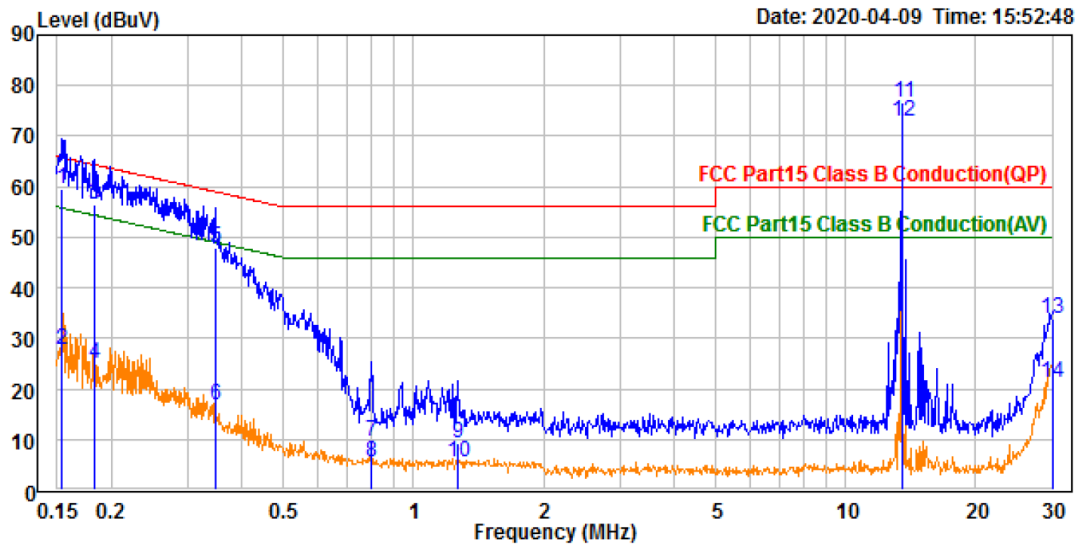
Site : 966A Chamber A  
 Condition : FCC CLASS-B 3m vertical  
 Test Engineer: Kevin Kuo  
 Applicant : Nedap  
 Product : Reader  
 Model No. : NVITE  
 Test Rating : 24Vdc  
 Tmp/Hum : 20°C/53%  
 Memo : Normal Operation  
 : TX+RX

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	APos	TPos	Remark	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	39.841	29.83	35.19	-5.36	40.00	-10.17	100	198	QP	
2	121.377	27.87	35.20	-7.33	43.50	-15.63	100	346	QP	
3	229.623	30.18	37.77	-7.59	46.00	-15.82	100	151	QP	
4	432.058	37.61	39.81	-2.20	46.00	-8.39	100	170	QP	
5	651.362	38.33	37.72	0.61	46.00	-7.67	100	360	QP	
6	956.420	35.08	29.51	5.57	46.00	-10.92	100	69	QP	

# Spurious Emissions, AC Mains

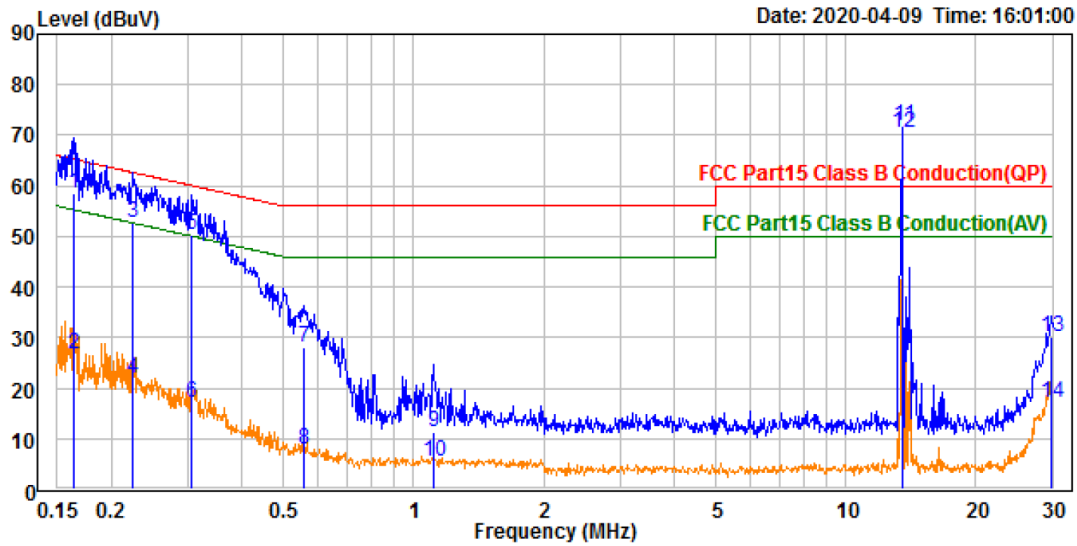


TUV Rheinland Taiwan Ltd.  
 11F., No. 758, Sec. 4 Bade Road. Songshan Dist, Taipei City 105  
 Tel:+886-2172-7000 Fax:+886-2528-0018



Trace: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Note
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.154	49.82	9.61	59.43	65.79	-6.36	QP	
2	0.154	17.96	9.61	27.57	55.79	-28.22	Average	
3	0.183	46.73	9.61	56.34	64.34	-8.00	QP	
4	0.183	15.22	9.61	24.83	54.34	-29.51	Average	
5	0.348	38.19	9.61	47.80	59.00	-11.20	QP	
6	0.348	7.19	9.61	16.80	49.00	-32.20	Average	
7	0.801	-0.09	9.62	9.53	56.00	-46.47	QP	
8	0.801	-4.14	9.62	5.48	46.00	-40.52	Average	
9	1.266	-0.23	9.62	9.39	56.00	-46.61	QP	
10	1.266	-4.28	9.62	5.34	46.00	-40.66	Average	
11 *	13.560	66.80	9.75	76.55	60.00	16.55	QP	TX
12 *	13.560	63.00	9.75	72.75	50.00	22.75	Average	TX
13	30.000	24.03	9.76	33.79	60.00	-26.21	QP	
14	30.000	11.54	9.76	21.30	50.00	-28.70	Average	



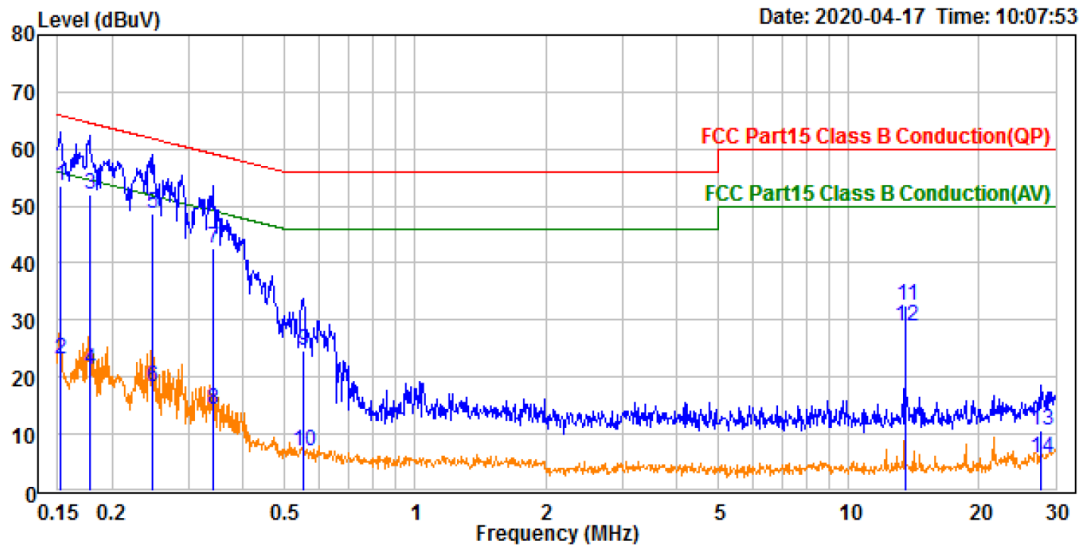
Trace: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Note
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.163	48.92	9.62	58.54	65.30	-6.76	QP	
2	0.163	17.07	9.62	26.69	55.30	-28.61	Average	
3	0.223	43.11	9.62	52.73	62.69	-9.96	QP	
4	0.223	12.37	9.62	21.99	52.69	-30.70	Average	
5	0.306	40.66	9.62	50.28	60.08	-9.80	QP	
6	0.306	7.66	9.62	17.28	50.08	-32.80	Average	
7	0.559	18.45	9.63	28.08	56.00	-27.92	QP	
8	0.559	-1.76	9.63	7.87	46.00	-38.13	Average	
9	1.112	1.66	9.63	11.29	56.00	-44.71	QP	
10	1.112	-4.14	9.63	5.49	46.00	-40.51	Average	
11 *	13.560	62.00	9.78	71.78	60.00	11.78	QP	TX
12 *	13.560	60.60	9.78	70.38	50.00	20.38	Average	TX
13	29.851	20.24	9.84	30.08	60.00	-29.92	QP	
14	29.851	7.24	9.84	17.08	50.00	-32.92	Average	



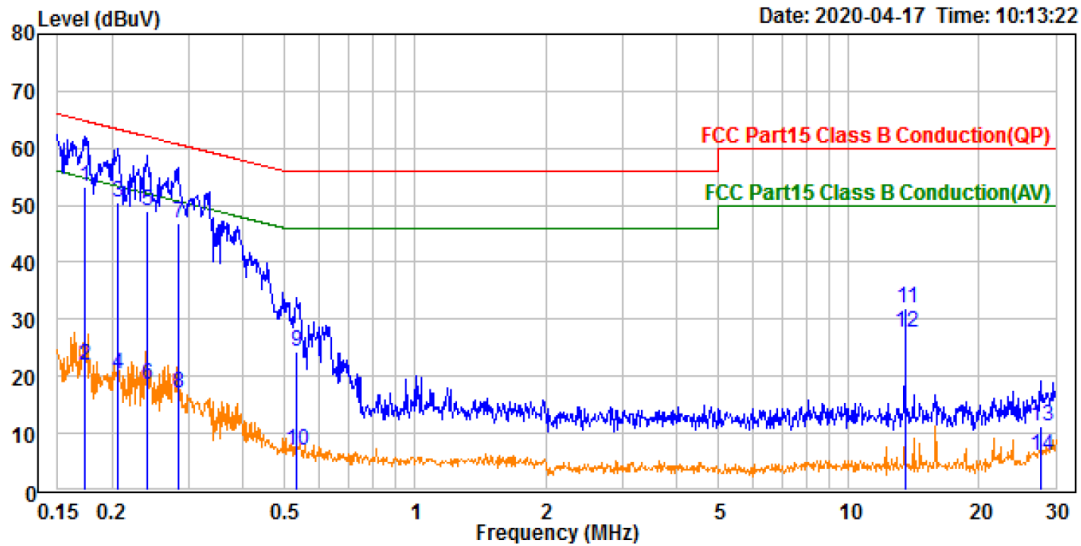


TUV Rheinland Taiwan Ltd.  
 11F., No. 758, Sec. 4 Bade Road. Songshan Dist, Taipei City 105  
 Tel:+886-2172-7000 Fax:+886-2528-0018



Trace: 1

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Note
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.152	44.07	9.61	53.68	65.92	-12.24	QP	
2	0.152	13.58	9.61	23.19	55.92	-32.73	Average	
3	0.178	42.43	9.61	52.04	64.59	-12.55	QP	
4	0.178	11.65	9.61	21.26	54.59	-33.33	Average	
5	0.247	39.06	9.61	48.67	61.86	-13.19	QP	
6	0.247	8.76	9.61	18.37	51.86	-33.49	Average	
7	0.341	32.84	9.61	42.45	59.17	-16.72	QP	
8	0.341	4.57	9.61	14.18	49.17	-34.99	Average	
9	0.554	14.94	9.62	24.56	56.00	-31.44	QP	
10	0.554	-2.60	9.62	7.02	46.00	-38.98	Average	
11	13.560	22.90	9.75	32.65	60.00	-27.35	QP	TX
12	13.560	19.20	9.75	28.95	50.00	-21.05	Average	TX
13	27.700	0.85	9.77	10.62	60.00	-49.38	QP	
14	27.700	-4.08	9.77	5.69	50.00	-44.31	Average	



Trace: 1

	Read Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Note
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.173	43.52	9.62	53.14	64.80	-11.66	QP	
2	0.173	12.25	9.62	21.87	54.80	-32.93	Average	
3	0.206	40.80	9.62	50.42	63.35	-12.93	QP	
4	0.206	10.64	9.62	20.26	53.35	-33.09	Average	
5	0.242	39.36	9.62	48.98	62.03	-13.05	QP	
6	0.242	9.06	9.62	18.68	52.03	-33.35	Average	
7	0.284	37.17	9.62	46.79	60.70	-13.91	QP	
8	0.284	7.43	9.62	17.05	50.70	-33.65	Average	
9	0.532	14.63	9.63	24.26	56.00	-31.74	QP	
10	0.532	-2.72	9.63	6.91	46.00	-39.09	Average	
11	13.560	22.20	9.78	31.98	60.00	-28.02	QP	TX
12	13.560	17.80	9.78	27.58	50.00	-22.42	Average	TX
13	27.700	1.36	9.84	11.20	60.00	-48.80	QP	
14	27.700	-3.75	9.84	6.09	50.00	-43.91	Average	