

Site 3m Chamber #1

Polarization: **Horizontal**

Temperature: 28.1 C

Limit: (RE)FCC PART 15 CLASS B

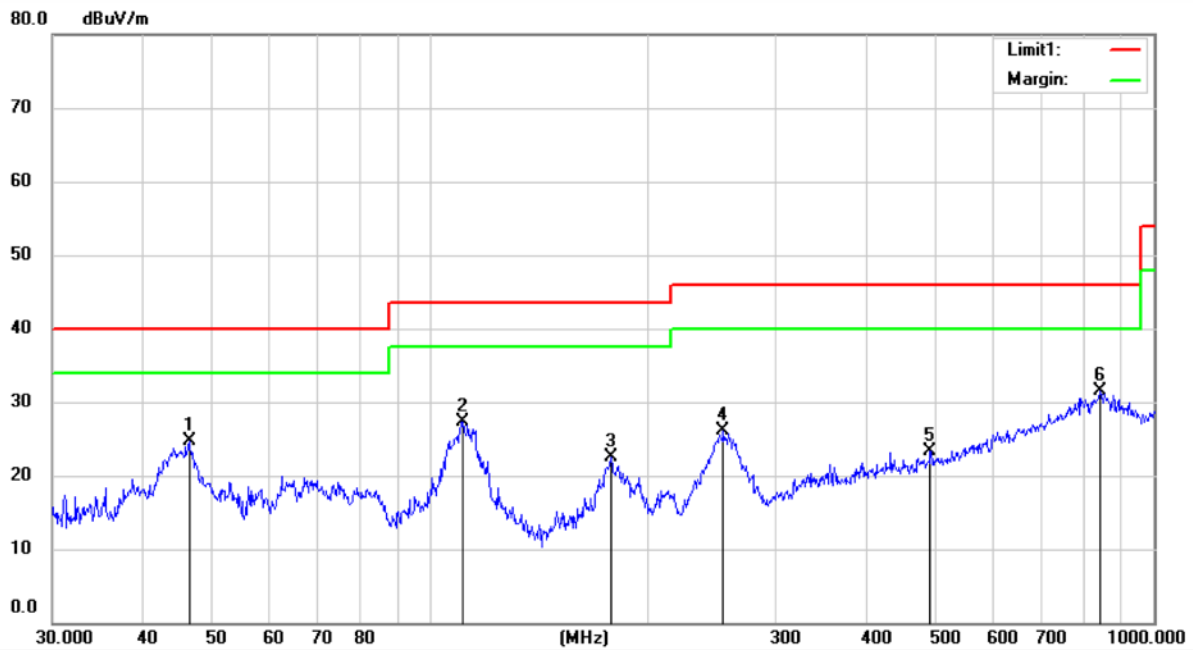
Power: AC 120V/60Hz

Humidity: 43 %

Mode: BT 2402

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		46.3200	37.52	-12.45	25.07	40.00	-14.93	QP		
2		111.0544	41.93	-14.57	27.36	43.50	-16.14	QP		
3		181.9202	36.21	-13.90	22.31	43.50	-21.19	QP		
4		256.0717	36.98	-11.09	25.89	46.00	-20.11	QP		
5		528.4774	28.84	-4.82	24.02	46.00	-21.98	QP		
6	*	845.0878	28.87	2.89	31.76	46.00	-14.24	QP		



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Polarization: **Horizontal**

Temperature: 28.1 C

Limit: (RE)FCC PART 15 CLASS B

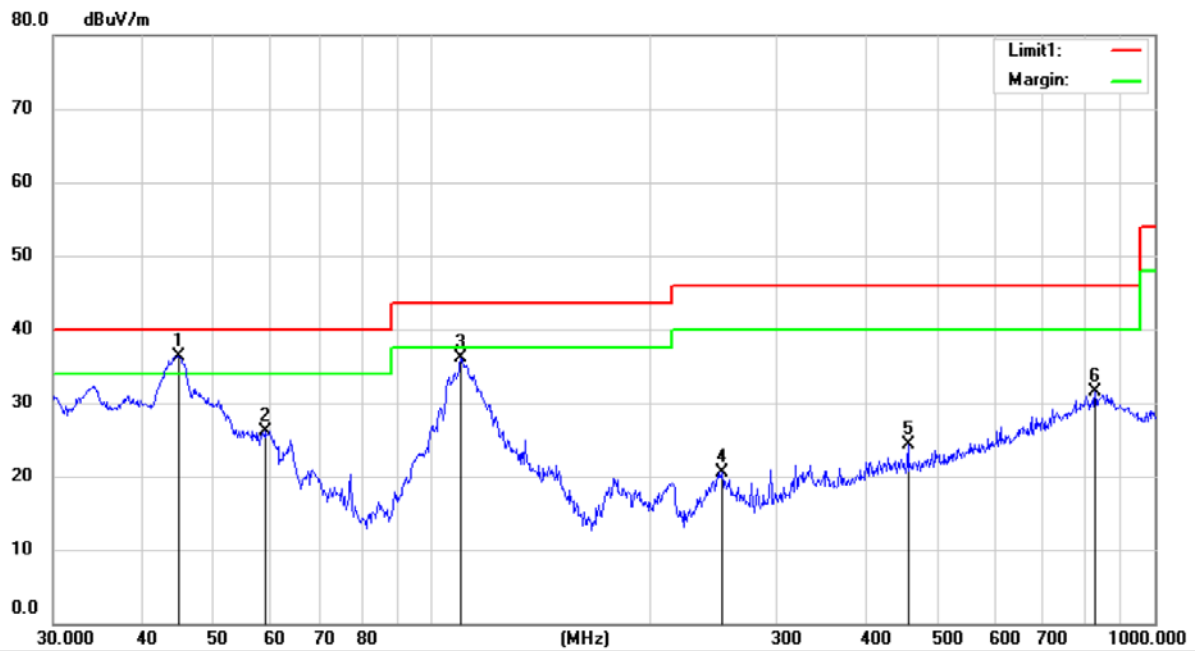
Power: AC 120V/60Hz

Humidity: 43 %

Mode: BT 2441

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		46.3810	37.18	-12.45	24.73	40.00	-15.27	QP		
2		111.2980	41.93	-14.55	27.38	43.50	-16.12	QP		
3		177.5092	36.52	-13.93	22.59	43.50	-20.91	QP		
4		253.8367	37.21	-11.14	26.07	46.00	-19.93	QP		
5		491.1751	28.69	-5.39	23.30	46.00	-22.70	QP		
6	*	843.2377	28.56	2.88	31.44	46.00	-14.56	QP		



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 28.1 C

Limit: (RE)FCC PART 15 CLASS B

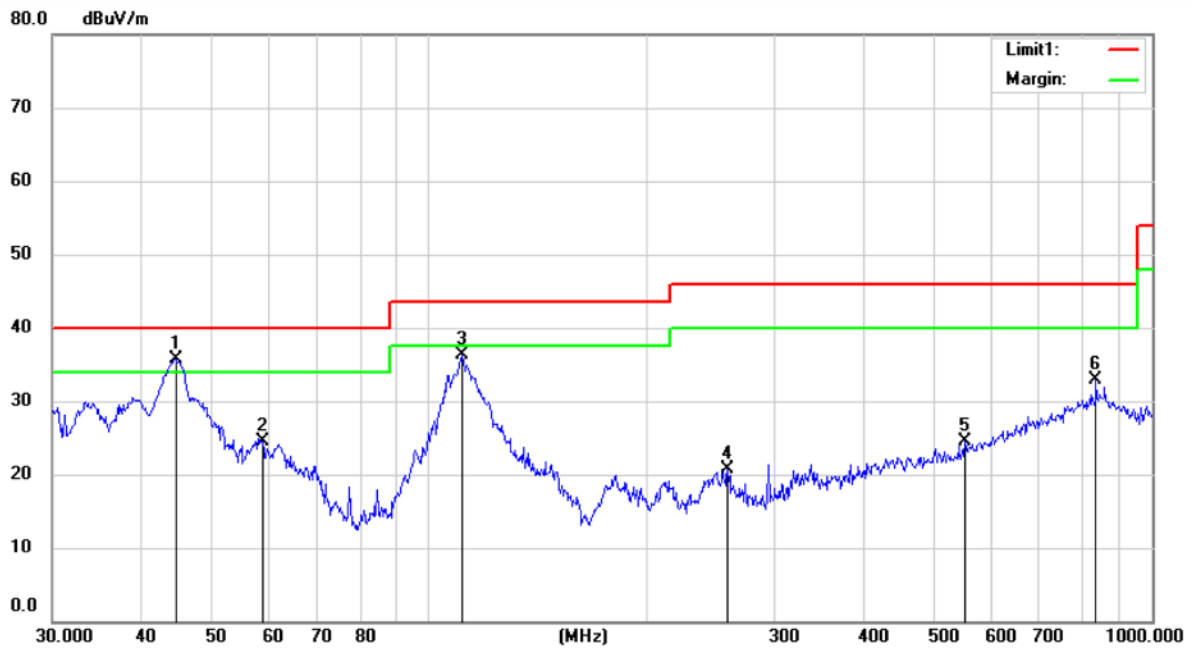
Power: AC 120V/60Hz

Humidity: 43 %

Mode: BT 2441

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	44.8220	48.96	-12.57	36.39	40.00	-3.61	QP		
2		59.2065	38.17	-12.03	26.14	40.00	-13.86	QP		
3		109.7960	50.74	-14.65	36.09	43.50	-7.41	QP		
4		252.0627	31.70	-11.19	20.51	46.00	-25.49	QP		
5		457.1064	30.14	-5.87	24.27	46.00	-21.73	QP		
6		828.2191	29.09	2.35	31.44	46.00	-14.56	QP		



Site 3m Chamber #1

Polarization: Vertical

Temperature: 28.1 C

Limit: (RE)FCC PART 15 CLASS B

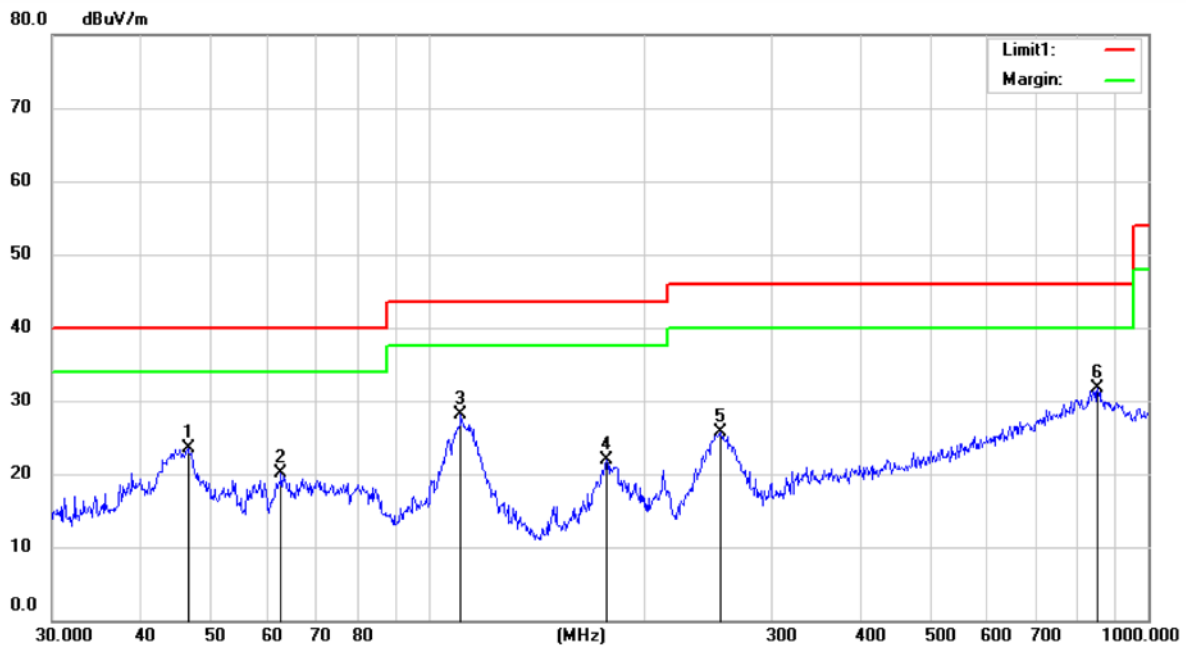
Power: AC 120V/60Hz

Humidity: 43 %

Mode: BT 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	44.4892	48.27	-12.60	35.67	40.00	-4.33	QP		
2		58.6640	36.50	-12.06	24.44	40.00	-15.56	QP		
3		110.9085	50.79	-14.58	36.21	43.50	-7.29	QP		
4		258.8932	31.76	-11.02	20.74	46.00	-25.26	QP		
5		551.6730	28.44	-3.99	24.45	46.00	-21.55	QP		
6		836.9777	30.16	2.73	32.89	46.00	-13.11	QP		



Site 3m Chamber #1

Polarization: **Horizontal**

Temperature: 28.1 C

Limit: (RE)FCC PART 15 CLASS B

Power: AC 120V/60Hz

Humidity: 43 %

Mode: BT 2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		46.4826	35.97	-12.45	23.52	40.00	-16.48	QP		
2		62.4314	32.16	-12.05	20.11	40.00	-19.89	QP		
3		111.1518	42.74	-14.56	28.18	43.50	-15.32	QP		
4		177.3536	35.84	-13.93	21.91	43.50	-21.59	QP		
5		254.7284	36.74	-11.13	25.61	46.00	-20.39	QP		
6	*	853.6505	29.11	2.65	31.76	46.00	-14.24	QP		

9.8 CONDUCTED EMISSION TEST

9.8.1 Applicable Standard

According to FCC Part 15.207
According to IC RSS-Gen 8.8

9.8.2 Conformance Limit

Conducted Emission Limit		
Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	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.		

9.8.3 Test Configuration

Test according to clause 7.3 conducted emission test setup

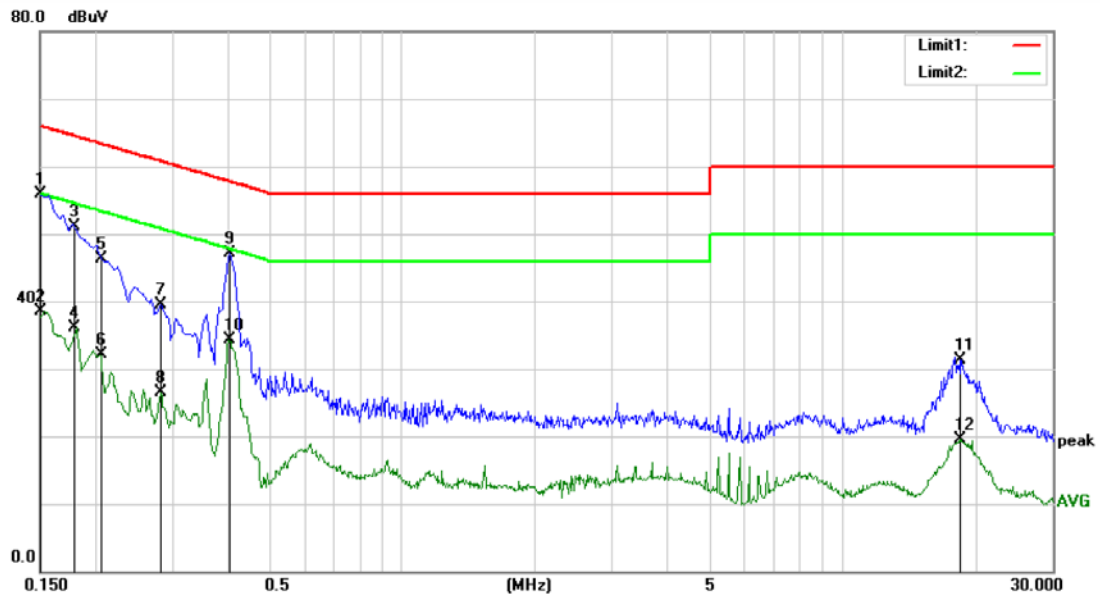
9.8.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

9.8.5 Test Results

Pass

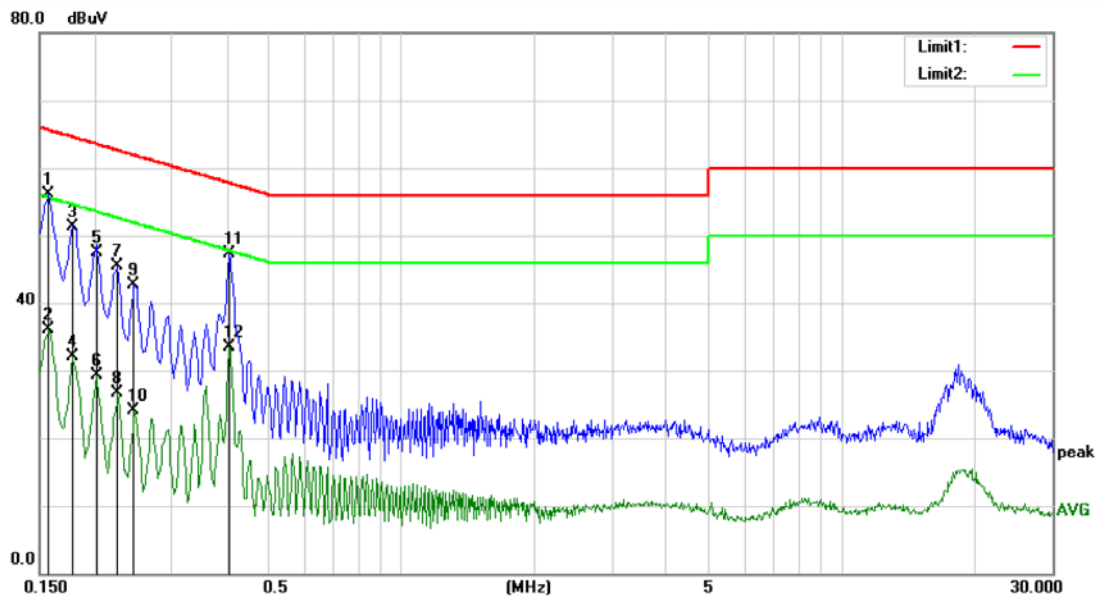
The AC120V & 240V voltage have been tested, and the worst result recorded was report as below:



Site Conduction #2
 Limit: (CE)FCC PART 15 class B_QP
 Mode: BT mode
 Note:

Phase: **N**
 Power: AC 120V/60Hz
 Temperature: 25.1
 Humidity: 45 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1500	45.37	10.52	55.89	66.00	-10.11	QP	
2		0.1500	28.00	10.52	38.52	56.00	-17.48	AVG	
3		0.1796	40.56	10.47	51.03	64.50	-13.47	QP	
4		0.1796	25.58	10.47	36.05	54.50	-18.45	AVG	
5		0.2072	35.81	10.43	46.24	63.32	-17.08	QP	
6		0.2072	21.74	10.43	32.17	53.32	-21.15	AVG	
7		0.2820	29.05	10.39	39.44	60.76	-21.32	QP	
8		0.2820	16.16	10.39	26.55	50.76	-24.21	AVG	
9		0.4060	36.72	10.35	47.07	57.73	-10.66	QP	
10		0.4060	24.04	10.35	34.39	47.73	-13.34	AVG	
11		18.4740	20.65	10.66	31.31	60.00	-28.69	QP	
12		18.4740	8.79	10.66	19.45	50.00	-30.55	AVG	



Site Conduction #2

Phase: **L1**

Temperature: 25.1

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 45 %

Mode: BT mode

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1580	45.56	10.51	56.07	65.57	-9.50	QP	
2		0.1580	25.58	10.51	36.09	55.57	-19.48	AVG	
3		0.1785	40.82	10.47	51.29	64.56	-13.27	QP	
4		0.1785	21.63	10.47	32.10	54.56	-22.46	AVG	
5		0.2028	37.16	10.43	47.59	63.50	-15.91	QP	
6		0.2028	18.84	10.43	29.27	53.50	-24.23	AVG	
7		0.2260	35.07	10.42	45.49	62.60	-17.11	QP	
8		0.2260	16.33	10.42	26.75	52.60	-25.85	AVG	
9		0.2460	32.22	10.41	42.63	61.89	-19.26	QP	
10		0.2460	13.64	10.41	24.05	51.89	-27.84	AVG	
11		0.4060	36.89	10.35	47.24	57.73	-10.49	QP	
12		0.4060	23.12	10.35	33.47	47.73	-14.26	AVG	

9.9 ANTENNA APPLICATION

9.9.1 Antenna Requirement

Standard	Requirement
FCC CRF Part15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
FCC 47 CFR Part 15.247 (b)	If transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.
RSS-Gen Section 6.8	The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.
RSS-247 Section 5.4	If the transmitter employs an antenna system that emits multiple directional beams, but does not emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device (i.e. the sum of the power supplied to all antennas, antenna elements, staves, etc., and summed across all carriers or frequency channels) shall not exceed the applicable output power limit. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi. The directional antenna gain shall be computed as the sum of 10 log (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

9.9.2 Result

PASS.

- Note:
- ☒ Antenna use a permanently attached antenna which is not replaceable.
 - ☐ Not using a standard antenna jack or electrical connector for antenna replacement
 - ☐ The antenna has to be professionally installed (please provide method of installation)

Please refer to the attached documentInternal Photos to show the antenna connector.

Detail of factor for radiated emission

Frequency(MHz)	Ant_F(dB)	Cab_L(dB)	Preamp(dB)	Correct Factor(dB)
0.009	20.6	0.03	\	20.63
0.15	20.7	0.1	\	20.8
1	20.9	0.15	\	21.05
10	20.1	0.28	\	20.38
30	18.8	0.45	\	19.25
30	11.7	0.62	27.9	-15.58
100	12.5	1.02	27.8	-14.28
300	12.9	1.91	27.5	-12.69
600	19.2	2.92	27	-4.88
800	21.1	3.54	26.6	-1.96
1000	22.3	4.17	26.2	0.27
1000	25.6	1.76	41.4	-14.04
3000	28.9	3.27	43.2	-11.03
5000	31.1	4.2	44.6	-9.3
8000	36.2	5.95	44.7	-2.55
10000	38.4	6.3	43.9	0.8
12000	38.5	7.14	42.3	3.34
15000	40.2	8.15	41.4	6.95
18000	45.4	9.02	41.3	13.12
18000	37.9	1.81	47.9	-8.19
21000	37.9	1.95	48.7	-8.85
25000	39.3	2.01	42.8	-1.49
28000	39.6	2.16	46.0	-4.24
31000	41.2	2.24	44.5	-1.06
34000	41.5	2.29	46.6	-2.81
37000	43.8	2.30	46.4	-0.3
40000	43.2	2.50	42.2	3.5

