

## Certificate of UVC exposure dose.

Each Phoenix MB 72 is calibrated by measurement with reference to our certified exposure map.

The exposure map measured with a calibrated UV-C exposure meter at pre-defined points in the chamber is as follows.

Unit under test MB72T Serial no 3913 - Date of test 28/09/20 – Location NAE Workshops.

Calibration point	method	point measure	cycle dose
1	reflected	0.92	220.8
2	reflected	1.2	288
3	reflected	1.7	408
4	reflected	0.88	211.2
5	reflected	0.88	211.2
6	reflected	0.82	196.8
7	reflected	1.2	288
8	reflected	0.84	201.6
9	reflected	0.82	196.8
10	reflected	1.2	288
11	reflected	3.2	768
12	reflected	4.9	1176
13	reflected	1.1	264
14	reflected	1.5	360
15	reflected	0.96	230.4
16	reflected	2.6	624
17	reflected	1.5	360
18	reflected	1.1	264
19	reflected	1.12	268.8
20	direct	5.17	1240.8
21	reflected	1.62	388.8
22	reflected	0.85	204
23	reflected	1.06	254.4
24	reflected	1.12	268.8
25	reflected	2.45	588
26	direct	8.35	2004
27	reflected	2.1	504

It is hereby certified that the minimum dose measured over the programmed cycle is 196.8 mW/cm<sup>2</sup> from wall reflected UV-C light.

Direct exposure is measured to be between 2.5mW/cm<sup>2</sup> and 8.5mW/cm<sup>2</sup>

Measurement device Sentry ST512, S/N 3897, Factory calibration certificate available on request.

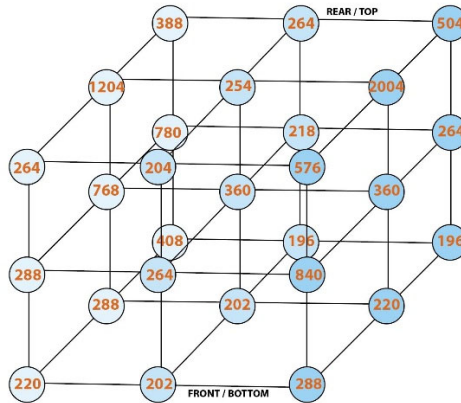
Measurement method multi-point chamber mesh grid, sensor facing reflectors.

Measurement frequency calibration point 253nm



**PHOENIX MB72**  
Standard UV-c measured surface exposure rate per cycle

Mesh model of exposure chamber  
Measurements in mW/cm<sup>2</sup>



For UVC to kill the following organisms the following doses are required.

Microorganism	90% disinfection mW/cm <sup>2</sup> /sec	99.9% disinfection mW/cm <sup>2</sup> /sec
Bacterium coli (in air)	0.7	2.1
Legionella pneumophila	0.92	2.76
Dysentery bacilli	2.2	6.6
Baccillus tuberculi	10	30
Infectus Hepatitis	5.8	17.4
Influenza	3.4	10.2
Covid 19	6.6	10-20

It is certified that the chamber of the Phoenix MB72 exceeds these published figures for surface decontamination.

NOTE: Presence of items in the chamber will affect the measured dosage, if in doubt measure with items present to confirm.

**Signed for and on behalf of**

J Newell Acoustic Engineering (Unipessoal) Lda  
Caparica. September 2020.