brighter

ul. Warszawska 111 32-087 Bibice POLAND NIP: 9442248196 REGON: 361197164

# ACOUSTIC TEST REPORT BRIGHTER LUMO IP

#### **Test conditions:**

Test carried out according to ISO 3744:2011

### **Device tested:**

Make: Brighter Lighting SP. ZO.O.

Model: Brighter Lumo IP

# Setup:

The product was placed in anechoic chamber at IEN-BIP OL ITC (volume 350m³) in Łódź, Poland. The measurements were performed by IEN staff:

• mgr. inż. Kamil Wójciak

• mgr. inż. Patryk Gaj

• dr inż. Joanna Kopania

The product was allowed a minimum 20 minutes of warm-up time before measurements were performed

# Test equipment list:

Туре	Manufacturer	Serial number
Nor140	Norsonic	1407332
Nor1225	Norsonic	358181
Nor1209	Norsonic	21954
Nor1256	Norsonic	125626714
HD 9908T	Delta OHM	125626714
HD 2717T.D0	Delta OHM	11032846
30m	Richter	2134

#### **Environment:**

	Anecho	Anechoic chamber	
Chamber volume	350	$m^3$	
Measuring radius	1,00	m	
Measurement surface area	6,3	m <sup>2</sup>	
10 log <sub>10</sub> (s/s <sub>0</sub> )	8,0	-	
Calibration of the measurement path	-25,7	dB	
Temperature	17,9	°C	
Humidity	48,8	%	
Air pressure	988	hPa	

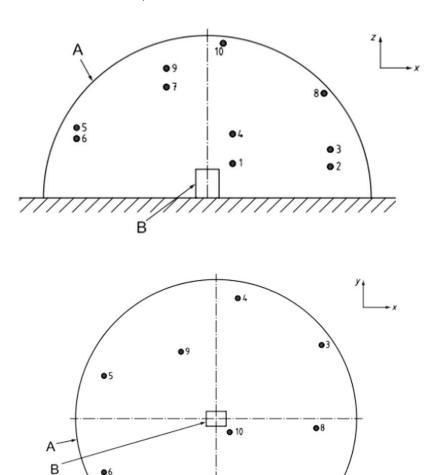
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# Measurement method:

Measurements were performed using a setup with one microphone. The microphone was in turn moved to the measurement positions described below



A - measurement surface

B - reference box



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#### Results:

The Lumo Ip was measured in below 2 different modes:

- 1. All effects static, Light source on, 100% output white light, Fan mode Auto
- 2. All effects static, Light source on, 100% output white light, Fan mode Silent

Measured sound pressure levels results are shown below:

Distance from fixture [m]	Fan Auto [dB]	Fan Silent [dB]
LpA at 1m	51,0	14,9
LpA at 2m	45,0	8,9
LpA at 3m	41,5	5,4
LpA at 5m	37,0	0,9
LpA at 10m	31,0	-5,1

The duration of the acoustical measurement for each position is 10s.