

Schedule of Accreditation (1)

according to the accredited status under registration ID: NAH-1-1876/2025

1) Name and address of accredited organization:

LightingLab Calibration Laboratory Ltd. – Testing Laboratory
H-8200 Veszprem, Cholnoky J. str. 11/b, Hungary

2) Accredited to

MSZ EN ISO/IEC 17025:2018

3) Category of accreditation:

testing laboratory

4) Validity of accreditation:

Initial Accreditation Date (YYYY.MM.DD.): **2025.08.14.**

Accreditation Valid Until (YYYY.MM.DD): **2030.08.14.**

I. Scope of accreditation - laboratory investigations:

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
Light Flicker (TLA)	Flicker Frequency, instrumental measurement, 0,1Hz ... 12.500 GHz	CIE TN 006 IEEE 1789 IEC TR 61547 IEC TR 63158
Light Flicker (TLA)	Flicker Index, instrumental measurement, 0 ... 1	CIE TN 006 IEEE 1789
Light Flicker (TLA)	Flicker Ratio, instrumental measurement, 0% ... 100%	CIE TN 006 IEEE 1789
Light Flicker (TLA)	Mp (LRC Flicker Perception), instrumental measurement, 0 ... 100	ASSIST recommends... Volume 11 Issue 3, Jan 2015
Light Flicker (TLA)	Pstlm (Short Term Flicker Perceptibility), instrumental measurement, 0 ... 100	CIE TN 006 IEC TR 61547 IEC TR 63158
Light Flicker (TLA)	SVM (Stroboscopic Visibility Measure), instrumental measurement, 0 ... 100	CIE TN 006 IEEE 1789 IEC TR 63158
Light Flicker (TLA)	SAM (Stroboscopic Acceptability Metric), instrumental measurement, -2 ... 2	ASSIST recommends... Volume 11 Issue 4, Aug 2017
LED light sources, LED luminaires and LED modules	current, current measurement, 10 mA ... 10 A	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4 ICAO 9157 AN/901

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
LED light sources, LED luminaires and LED modules	electrical power, power measurement, 1 W ... 2000 W	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4 ICAO 9157 AN/901
LED light sources, LED luminaires and LED modules	true power factor, power measurement, 0...1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
LED light sources, LED luminaires and LED modules	distortion power factor, power measurement, 0 ... 1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
LED light sources, LED luminaires and LED modules	displacement power factor, power measurement, 0 ... 1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
LED light sources, LED luminaires and LED modules	total harmonic distortion, instrumental measurement, 0% ... 200%	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
LED light sources, LED luminaires and LED modules	luminous flux, goniometry, 1 lm ... 300 klm	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4 ICAO 9157 AN/901
LED light sources, LED luminaires and LED modules	luminous intensity, luminous intensity measurement, 1 cd ... 1000 kcd	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4 ICAO 9157 AN/901
LED light sources, LED luminaires and LED modules	centre beam intensity, light intensity measurement, 1 cd ... 1000 kcd	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4 ICAO 9157 AN/901
LED light sources, LED luminaires and LED modules	beam angle, calculation, 1° ... 160°	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4 ICAO 9157 AN/901

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
LED light sources, LED luminaires and LED modules	luminance, luminance measurement, 1 cd/m ² ...50 Mcd/m ²	IESNA LM-79 CIE S025/E EN 13032-1 EN 13032-4 ICAO 9157 AN/901
LED light sources, LED luminaires and LED modules	CIE x,y colour coordinates, instrumental measurement, 0,00 ... 0,85	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 IESNA TM-30 EN 13032-4 EBU Tech 3355 ICAO 9157 AN/901 ICAO Annex 14
LED light sources, LED luminaires and LED modules	angular colour uniformity, instrumental measurement, 0,0000 ... 1,0000	IESNA LM-79 CIE S025/E EN 13032-4 ICAO 9157 AN/901 ICAO Annex 14
LED light sources, LED luminaires and LED modules	correlated colour temperature, instrumental measurement, 2000K ... 12000K, duv: -0,1 ... +0,1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 IESNA TM-30 EN 13032-4 EBU Tech 3355
LED light sources, LED luminaires and LED modules	general and special colour rendering indices, instrumental measurement, -500 ... 100	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 IESNA TM-30 EN 13032-4 EBU Tech 3355
LED light sources, LED luminaires and LED modules	colour fidelity index TM-30-15 Rf, instrumental measurement, 0 ... 100	IESNA LM-79 CIE S025/E IESNA TM-30 EN 13032-4
LED light sources, LED luminaires and LED modules	gamut area index TM-30-15 Rg, instrumental measurement, 0 ... 200	IESNA LM-79 CIE S025/E IESNA TM-30 EN 13032-4
LED light sources, LED luminaires and LED modules	EBU Tech 3355 TLCI, instrumental measurement, 0 ... 100	EBU Tech 3355
LED light sources, LED luminaires and LED modules	luminous efficacy, calculation, 0 lm/W ... 683 lm/W	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4 ICAO 9157 AN/901 ICAO Annex 14

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
LED light sources, LED luminaires and LED modules	temperature, electrical base signal measurement, 0°C ... 150°C	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
LED light sources, LED luminaires and LED modules	luminous intensity class, G*1...G*6	EN 13201-2
Current harmonic content	true power factor, power measurement, 0 ... 1	EN IEC 61000-3-2
Current harmonic content	displacement power factor, power measurement, 0 ... 1	EN IEC 61000-3-2
Current harmonic content	distortion power factor, power factor, 0 ... 1	EN IEC 61000-3-2
Current harmonic content	total harmonic distortion: instrumental measurement, 0 ... 200%	EN IEC 61000-3-2
Railway applications. External signaling devices.	total luminous flux, goniometry, 0,1 lm ... 100 klm	EN 15153-1
Railway applications. External signaling devices.	luminous intensity, luminous intensity measurement, 1 cd ... 1000 kcd	EN 15153-1
Railway applications. External signaling devices.	CIE x,y colour coordinates, instrumental measuring, 0,00 ... 0,85	EN 15153-1
Airport lighting	illuminance, instrumental measuring 0,1 lx ... 200 klx	ICAO 9157 AN/901 ICAO 9261
Airport lighting	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	ICAO 9157 AN/901 ICAO 9261
Lighting devices for Horticulture	current, current measurement, 10 mA ... 10 A	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
Lighting devices for Horticulture	electric power, power measurement, 1 W ... 2000 W	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
Lighting devices for Horticulture	true power factor, power measurement, 0...1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
Lighting devices for Horticulture	displacement power factor, power measurement, 0 ... 1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
Lighting devices for Horticulture	distortion power factor, power measurement, 0 ... 1	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
Lighting devices for Horticulture	total harmonic distortion, measuring instrument, 0 ... 200%	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
Lighting devices for Horticulture	luminous flux, goniometry, 1 lm ... 300 klm	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4
Lighting devices for Horticulture	light intensity, light intensity measurement, 1 cd ... 1000 kcd	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4
Lighting devices for Horticulture	centre beam intensity, light intensity measurement, 1cd ... 1000 kcd	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4
Lighting devices for Horticulture	beam angle, calculation, 1° ... 160°	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-1 EN 13032-4
Lighting devices for Horticulture	luminance, luminance measurement, 1 cd/m ² ... 50 Mcd/m ²	IESNA LM-79 CIE S025/E EN 13032-1 EN 13032-4
Lighting devices for Horticulture	CIE x,y colour coordinates, measuring instrument, 0,00 ... 0,85	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 IESNA TM-30 EN 13032-4
Lighting devices for Horticulture	angular colour uniformity, measuring instrument, 0,0000 ... 1,0000	IESNA LM-79 CIE S025/E EN 13032-4
Lighting devices for Horticulture	luminous efficacy, measuring instrument, 0 lm/W ... 683 lm/W	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
Lighting devices for Horticulture	temperature, electrical base signal measurement, 0°C ... 150°C	IESNA LM-79 CIE S025/E IEC 62717 IEC 62722 EN 13032-4
Lighting devices for Horticulture	photosynthetically efficient photon flux, calculation, 0,01µmol/s ... 100.000µmol/s	ANSI/ASABE S640
Lighting devices for Horticulture	photosynthetically efficient photon flux efficacy, calculation, 0,01µmol/s/W ... 100µmol/s/W	ANSI/ASABE S640
Lighting devices for Horticulture	photosynthetically efficient photon flux intensity, calculation 0,01 µmol/s/sr ... 100.000 µmol/s/sr	ANSI/ASABE S640
Photobiological Safety (Blue Light Hazard)	irradiance, instrumental measurement, [W/m ²] 250 nm ... 2500 nm	EN IEC 62471
Photobiological Safety (Blue Light Hazard)	dose, instrumental measurement, [J/m ²] 250 nm ... 2500 nm	EN IEC 62471
Primary and secondary radiators	luminance, luminance measurement, 1 cd/m ² ... 50 Mcd/m ²	SID IDMS

II. Scope of accreditation – on-site investigations:

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measurement method
Lighting of work places Part 1: Indoor work places	illuminance, measuring instrument, 0,1 lx ... 200 klx	EN 12464-1
Lighting of work places Part 1: Indoor work places	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	EN 12464-1
Lighting of work places Part 1: Indoor work places	UGR, luminance measurement, 10 ... 28	EN 12464-1
Lighting of work places Part 1: Indoor work places	correlated colour temperature, instrumental measurement, 2000K ... 12000K, duv: -0,1 ... +0,1	EN 12464-1
Lighting of work places Part 1: Indoor work places	general and specific colour rendering indices, instrumental measurement, -500 ... 100	EN 12464-1
Lighting of work places. Part 2: Outdoor work places	illuminance, instrumental measurement, 0,1 lx ... 200 klx	EN 12464-2

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measure- ment method
Lighting of work places. Part 2: Outdoor work places	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	EN 12464-2
Lighting of work places. Part 2: Outdoor work places	correlated colour temperature, instrumental measurement, 2000K ... 12000K, duv: -0,1 ... +0,1	EN 12464-2
Lighting of work places. Part 2: Outdoor work places	general and specific colour rendering indices, instrumental measurement, -500 ... 100	EN 12464-2
Sports Lighting	illuminance, measuring instrument, 0,1 lx ... 200 klx	EN 12193 FINA Facility Rules UEFA Stadium Lighting Guide IAAF Track and Field Facilities Manual IIHF Lighting Guide
Sports Lighting	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	EN 12193 IAAF Track and Field Facilities Manual
Sports Lighting	correlated colour temperature, instrumental measurement, 2000K ... 12000K, duv: -0,1 ... +0,1	EN 12193 UEFA Stadium Lighting Guide IAAF Track and Field Facilities Manual IIHF Lighting Guide
Sports Lighting	general and specific colour rendering indices, instrumental measurement, -500 ... 100	EN 12193 UEFA Stadium Lighting Guide IAAF Track and Field Facilities Manual IIHF Lighting Guide
Sports Lighting	EBU Tech 3355 TLCI, instrumental measurement, 0 ... 100	EN 12193 EBU Tech 3355 UEFA Stadium Lighting Guide
Sports Lighting	Flicker Factor, instrumental measurement, 0% ... 100%	UEFA Stadium Lighting Guide IIHF Lighting Guide
Sports Lighting	Minimum adjacent uniformity ratio (MAUR), illuminance measurement, 0 ... 1	UEFA Stadium Lighting Guide IAAF Track and Field Facilities Manual IIHF Lighting Guide
Lighting of Airports	illuminance, measuring instrument, 0,1 lx ... 200 klx	ICAO 9157 AN/901
Lighting of Airports	illuminance, measuring instrument, 0,1 lx ... 200 klx	ICAO 9261
Lighting of Airports	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	ICAO 9157 AN/901
Lighting of Airports	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	ICAO 9261

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measure- ment method
Lighting of Airports	CIE x,y colour coordinates, instrumental measurement, 0,00 ... 0,85	ICAO 9157 AN/901 ICAO 9261
Lighting of Airports	correlated colour temperature, instrumental measurement, 2000K ... 12000K, duv: -0,1 ... +0,1	ICAO 9157 AN/901
Road Lighting	illuminance, measuring instrument, 0,1 lx ... 200 klx	EN 13201
Road Lighting	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	EN 13201
Electromagnetic compatibility	current, current measurement, 10 mA ... 10 A	EN IEC 61000-3-2
Electromagnetic compatibility	electrical power, power measurement, 1 W ... 2000 W	EN IEC 61000-3-2
Electromagnetic compatibility	true power factor, power measurement, 0...1	EN IEC 61000-3-2
Electromagnetic compatibility	distortion power factor, power measurement, 0...1	EN IEC 61000-3-2
Electromagnetic compatibility	displacement power factor, power measurement, 0...1	EN IEC 61000-3-2
Electromagnetic compatibility	total harmonic distortion, measuring instrument, 0 ... 200%	EN IEC 61000-3-2
Light flicker	Flicker Frequency, measuring instrument, 0,1Hz ... 12.500 GHz	CIE TN 006 IEEE 1789 IEC TR 61547 IEC TR 63158
Light flicker	Flicker Index, measuring instrument, 0 ... 1	CIE TN 006 IEEE 1789
Light flicker	Flicker Ratio, measuring instrument, 0% ... 100%	CIE TN 006 IEEE 1789
Light flicker	Mp (LRC Flicker Perception), measuring instrument, 0 ... 100	ASSIST recommends... Volume 11 Issue 3, Jan 2015
Light flicker	Pstlm (Short Term Flicker Percepti- bility), measuring instrument, 0 ... 100	CIE TN 006 IEC TR 61547 IEC TR 63158
Light flicker	SVM (Stroboscopic Visibility Meas- ure), measuring instrument, 0 ... 100	CIE TN 006 IEEE 1789 IEC TR 63158

Investigated product / material	Investigated / measurement property type of investigation, measurement range	ID of investigation / measure- ment method
Light flicker	SAM (Stroboscopic Acceptability Metric), measuring instrument, -2 ... 2	ASSIST recommends... Volume 11 Issue 4, Aug 2017
Photobiological Safety (Blue Light Hazard)	irradiance, instrumental measurement, [W/m ²] 250 nm ... 2500 nm	EN IEC 62471
Photobiological Safety (Blue Light Hazard)	dose, instrumental measurement, [J/m ²] 250 nm ... 2500 nm	EN IEC 62471
Primary and secondary radiators	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	SID IDMS
Tunnel lighting	illuminance, measuring instrument, 0,1 lx ... 200 klx	CIE 88
Tunnel lighting	illuminance, measuring instrument, 0,1 lx ... 200 klx	CIE 194
Tunnel lighting	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	CIE 88
Tunnel lighting	luminance, luminance measurement, 0,1 cd/m ² ... 50 Mcd/m ²	CIE 194