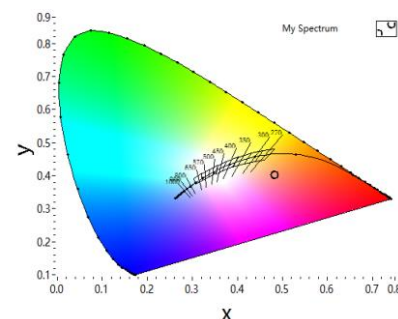


LBB-Trues-Series LED Tester Product Manual

Overview:

- > Designed for industrial field automatic measurement of LED
- > The data has been calibrated at the factory
- > Luminance and lumen probes can be selected
- > 16bit high resolution, high accuracy and good repeatability
- > brightness range is up to 1 million Lux, resolution is up to 0.01lux
- > 4/8/16 channel and H/L/M gain Selectable
- > Communication interface rich (USB / RS485 / RS232)
- > Color coordinates according to the standard CIE1931, CIE1976
- > Output data is rich in format (RGB, HSL, Lux, XYZ, xy, uv, CCT, HSL, freq, DomiWave)
- > Multi-channel simultaneous capture LED flashing frequency (<50Hz)
- > Reserved DIO, can be triggered by DI (optoc) test, DO (NPN) output test results
- > Provide development SDK, can be embedded ICT, FCT, ATE machine
- > Wide voltage work, industrial design, high stability



Application:

- > LED lumens and chromaticity measurement occasions
- > LED atmosphere lamp measurement and calibration and other occasions
- > LED color brightness requires higher measurement
- > Product shell logo lamp test
- > Weak light environment test
- > Embedded ICT / FCT / ATE machine

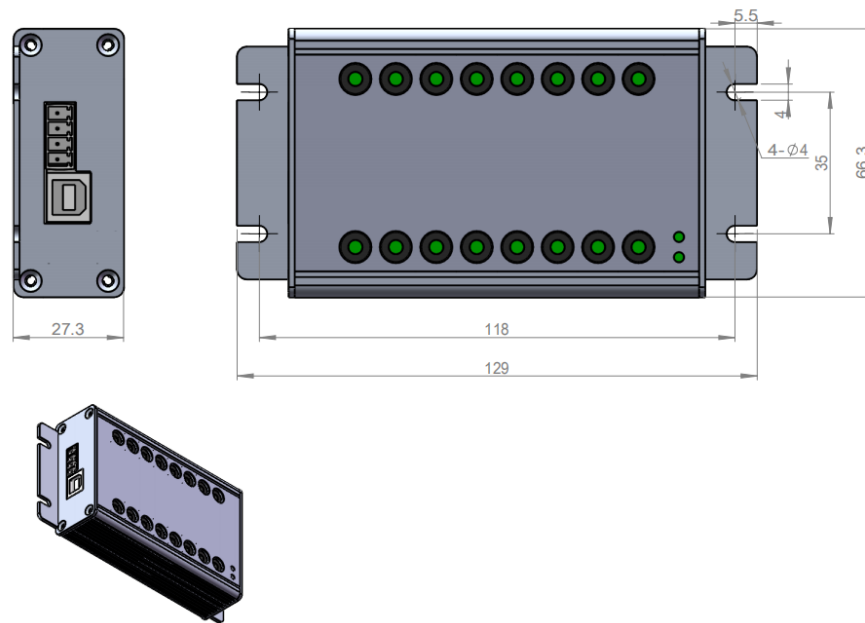


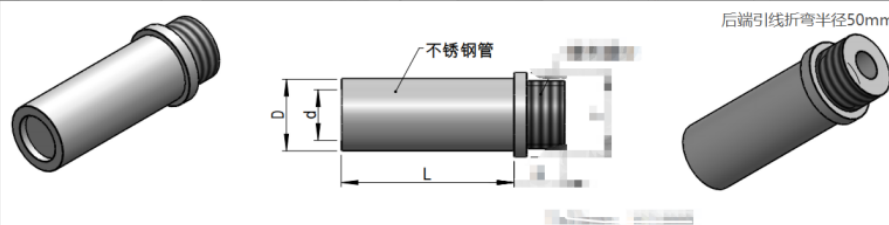
List of electrical optics specifications:

Type	Item	Parameter	Remark
electrical specification	Input voltage	USB power supply or external DC9-26V power supply	T<80℃, H<90%
	Working current	USB-300MA, DC24V-100MA	Built-in fuse, one-way diode
	Communication Interface	USB (USB to RS232) and RS485	

	communication protocol	8,1,None,buad(2400-921600)	ID, Buad can be configured, the same as the two interface communication protocols
	data format	RGB,HSL,Lux,CCT,xy,u'v',dowave,Freq etc.	CIE1931,CIE1976
	Module channel	4/8/16chl can be chosen	The size of the shell does not change
	Cascade expansion	RS485 interface supports 32 modules in parallel	
	Cascade mode	RS485 master / slave mode / USB-RS485 routing mode	Routing mode: a USB cable to access all slaves
	DIO interface	Optional DIO interface can be connected with PLC	Configure the upper and lower limits, IO automatically output the results, offline running
	special function	digitron read and LED flashing frequency (f <50Hz)	Replace the CCD to read the digital tube data
Software programming	Programming language	C,C++,C#,VB,labview etc.	Provide Labview sample source code
	SDK	Provide RS232 command table,	MODBUS-ASCII protocol
	support system	WINDOWS,LINUX,Wince etc.	Serial port instructions support any hardware and software platform
	Debugging software	Equipped with full-featured measurement and analysis software	Can be configured upper and lower limits, DI trigger, DO output, offline running
Data characteristics	Lux	Accuracy: 4% @5000lx D65 Led	Repeated : 0.5%,linearity:2%
	LM	Accuracy: 6% @100LM D65 Led	Repeated : 0.5%,linearity:2%
	xy(CIE1931)	Accuracy: 0.01 @D65 led	Repeated measurement: 0.0005
	uv(CIE1976)	Accuracy: 0.01 @D65 led	Repeated measurement: 0.0005
	CCT	Accuracy: 5% @D65 led	Repeated measurement: 10K
	DomiWave	Accuracy: +3nm @470nm Led Accuracy: +4nm @523nm Led Accuracy: +5nm @630nm Led	Repeated measurement: 1nm Digital resolution : 0.5nm
	RGB(HSL)	no international reference standard	Repeated measurement: 1%+1
Optical characteristics	Wavelength range	400-720nm	Visible light measurement
	Illumination Range	0.01lx-900k lx	Multiple ranges are optional
	Lumen Range	0.001lm-3000 lm	Multiple ranges are optional
	Optical parameters	Lux,lm,CCT,xy, u'v',dowave,RGB,	CIE1931,CIE1960,,CIE1976
	Special parameters	Freq,cd/m^2	

Shell size (Patent shell)	boundary dimension	128 * 66 * 30mm	Positioning hole spacing 35mm (4mm through hole)
	Connect Line	4 core cable	Quick plug terminal
	Material	Black POM+Aluminum alloy	Led BLACK BOX (LBB)
	Expansion interface	DIO	The extended DIO module can interact with PLC



型号	外径 D	钢网长度 L	实际采光 面积 d				功能	备注
外置色温照度 探头(实心)	钢管外径 D 误差+0.03mm, 钢管长度 L 误差+1mm; 如果要紧配, 打孔直径(D+0.05mm), 如果要方便更换, 打孔直径(D+0.1mm);						适合测量产品外壳弱光灯, 尤其是带字符图档灯, 多点测量色温照度绝对值, LED 一致性测量场合, 所有外置探头共用一个主机, 探头型号随便选择,	
<div></div>								
True6025-CL930	6.0	25	6					
True6025-CL310	6.0	25	6					
True9025-CL910	9.0	25	6					
True9025-CL310	9.0	25	6					
True9025-CL340	9.0	25	6					
True9025-CL410	9.0	25	6					
True9025-CL430	9.0	25	6					
True9035-CL211	9.0	35	3					
True9040-CL211	9.0	40	6					
True9040-CL211	9.0	40	6					

型号	外径 D	钢网长度 L	实际开口 d				功能	备注
外置色温流明探头(空心)	钢管外径 D 误差+0.03mm, 钢管长度 L 误差+1mm; 如果要紧配, 打孔直径(D+0.05mm), 如果要方便更换, 打孔直径(D+0.1mm);						适合测量 PCBA 上高亮 LED, 高温灯珠, 尤其是 RGB 氛围灯标定, 汽车照明 LED, 适合测量 LED 的流明真实值, LED 一致性测量场合, 所有外置探头共用一个主机, 探头型号随便选择,	
<div></div>								
True6042-LM930	6.0	42	4.0					
True6042-LM310	6.0	42	4.0					
True9042-LM910	9.0	42	6.5					
True9042-LM310	9.0	42	6.5					
True9042-LM340	9.0	42	6.5					
True9042-LM410	9.0	42	6.5					
True9042-LM430	10.0	42	6.5					
True9055-LM211	9.0	55	6.5					
True10060-LM211	10.0	60	8.0					

HanOpticSens.com: Industrial field LED online measurement solution provider
www.hgckled.com www.HanOpticSens.com

