

The Light You Can Trust



@wipintertrade



Official Website



Gems Color Grading Cabinet

Series : GemoLED Pro



Model : Gemo-L001 | Part No. : WDL-A01



Products of Thailand

Eff. Date 14/10/24
Rev.2

Gems Color Grading Cabinet



Series : GemoLED Pro Model : Gemo-L001

Light source for the colour grading of gemstone was developed in a collaboration between GIT (Gem and Jewelry Institute of Thailand.) and WIP (W.I.P. Electric Co.,Ltd)

In contrast to many of the models on the market, the new light source uses state-of-the-art LED (Light Emitting Diode) lights under specification of GIT Standard "Jewelry and precious metals – Grading polished diamonds – Terminology, classification and test methods" and, unlike most commercially available instruments, allows the addition of a customizable percentage of UV-light

FEATURES

- Available in 6500K, 2500K, 5700K, 5000K and UVA
- 98+ CRI and R9 > 95
- Flicker free
- Easy to operate by individual switch for each light source
- Economic power consumption and low heat generation
- More than 50,000 hours lifetime and 2 years warranty



PHOTOMETRIC SPECIFICATIONS

LED :	Nichia
CRI :	98+
R9 :	95+
LED Lifetime (L70) :	50,000 hours
Light distribution :	~165° + 130° extra wide beam for uplighting, ~40° + 100° oval beam, Asymmetric beam for wall washing

MECHANICAL SPECIFICATIONS

Enclosure material :	Aluminum with Powder Coating
Viewing area (H x W x D) :	45 cm x 64 cm x 54 cm
Product dimension (H x W x D) :	58 cm x 72 cm x 64 cm
Weight :	11.5 Kg.
Warranty :	1 Year

ELECTRICAL SPECIFICATIONS

Lamp base :	G13 Bi-pin
Power :	180W (Max)
Input voltage :	100 - 240 VAC
Input frequency :	50 - 60 Hz.
Power factor :	>0.95
THDi :	<10%
Flicker Free :	Yes
Surge Protection :	10KV

TECHNICAL SPECIFICATIONS

Lens material :	PMMA
Illuminants :	Daylight 6500K CRI98+ Warm White 2500K CRI90+ Noon Sky Daylight 5700K CRI98+ Noon Sky Daylight 5000K CRI98+ UVA
Control output :	5 Relays SPDT Contract Rating 5A/250Vac (resistive load)
Operating Temperature :	0 °C to +50 °C
Humidity tolerance :	0-90% w/o condensation

CONTROLLER

6500K 2500K 5700K 5000K UVA



Model	Part No.	Power	TC
Gemo-L001	WDL-A01	180W (Max)	6500K, 2500K, 5700K 5000K, UVA

LED Driver Standard	
(Thai)	: TIS. 1955-2551
(China)	: GB19510.1, GB19510.14
(Germany)	: EN61347-1, EN61347-2-13, EN62493
(CB Member States)	: IEC61347-1, IEC61347-2-13
(European Union)	: EN61347-1, EN61347-2-13, EN62384
(Korea)	: KC61347-1, KC61347-2-13
(Russia)	: IEC6137-1, IEC61347-2-13
(Australia)	: AS61347-1, AS61347-2-13
(Europe)	: EN61347-1, EN61347-2-13, EN62384
(Britain)	: BS EN61347-1, BS EN61347-2-13, BS EN62493
(India)	: IS15885 (Part 2/SEC 13)
(Canada)	: CSA C22.2 NO.250.13
(America)	: UL8750
EMC Emission	
(China)	: GB/T17743, GB17625.1
(European Union)	: EN55015, EN61000-3-2, EN61000-3-3, EN61547
(Korea)	: KSC9815, KSC9547
(Russia)	: IEC62493, IEC61547, EH55015
(Australia)	: EN55015, EN61000-3-2, EN6100-3-3, EN61547
(Britain)	: BS EN IEC55015, BS EN IEC61000-3-2, BS EN61000-3-3, BS EN61547
(Canada)	: ICES-005
(America)	: FCC PART 15B
EMC Immunity	
EN61000-4-2,3,4,5,6,8,11, EN61547	

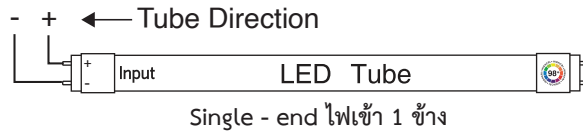
Part No.	Position of Light sources	Lamp Size (T8 Lamps)	Power	Lux	CRI	Lens	Beam Angle	Description
T8L65-20	First	60 cm. (24 In.)	19W x 2	2627 lux	98+	PMMA	~165° + 130°	D65 (Daylight 6500K) CRI98+
T8L25-25	Second	60 cm. (24 In.)	25W	4032 lux	90+	PMMA	~40° + 100°	D25 (Warm White 2500K) CRI90+
T8L57-20	Third	60 cm. (24 In.)	19W x 2	2891 lux	98+	PMMA	~165° + 130°	D57 (Noon Sky Daylight 5700K) CRI98+
T8L50-20	Fourth	60 cm. (24 In.)	19W x 2	2560 lux	98+	PMMA	~165° + 130°	D50 (Noon Sky Daylight 5000K) CRI98+
T8LLW-35	Fifth	60 cm. (24 In.)	35W	9.2 lux	-	PMMA	Asymmetric beam for wall washing	LW (UVA)

Gems Color Grading Cabinet

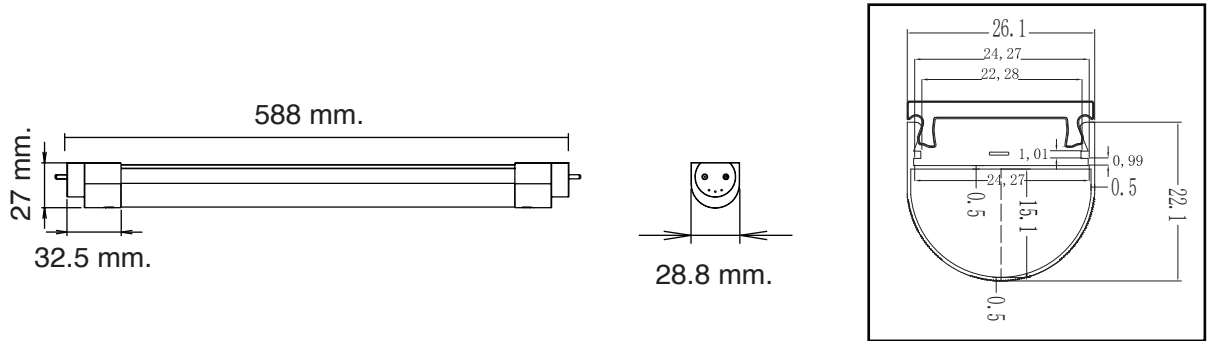
Series : GemoLED Pro Model : Gemo-L001



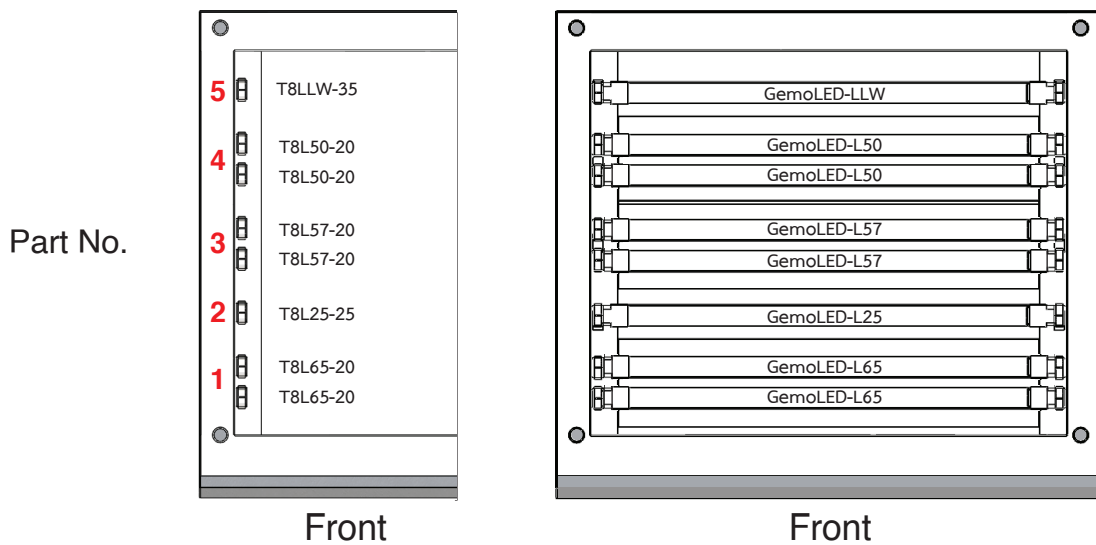
Wiring Diagram



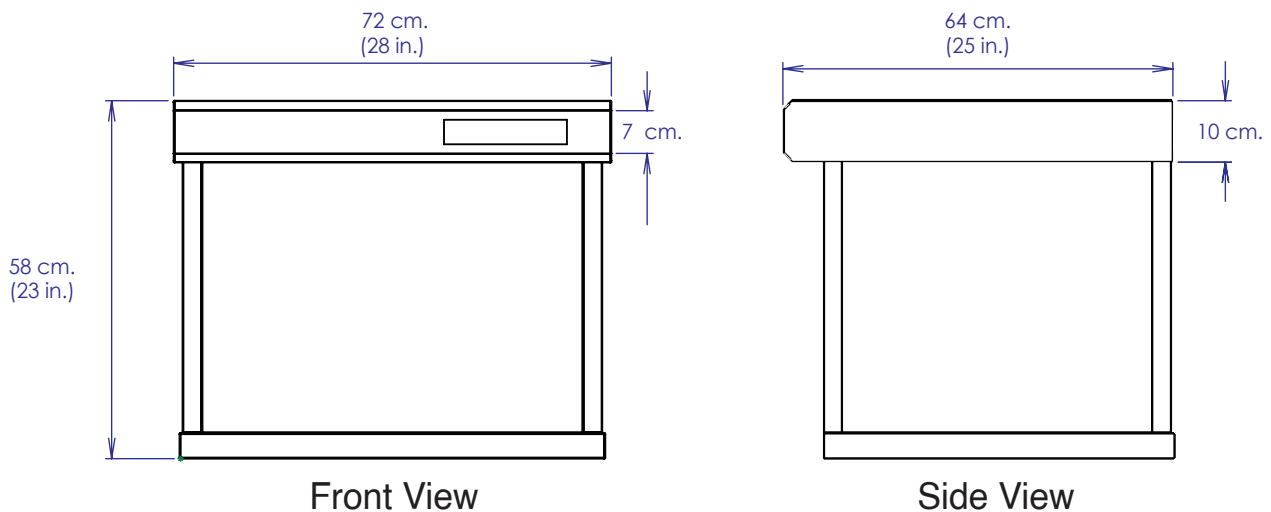
Dimension



Position of Light source



Dimension

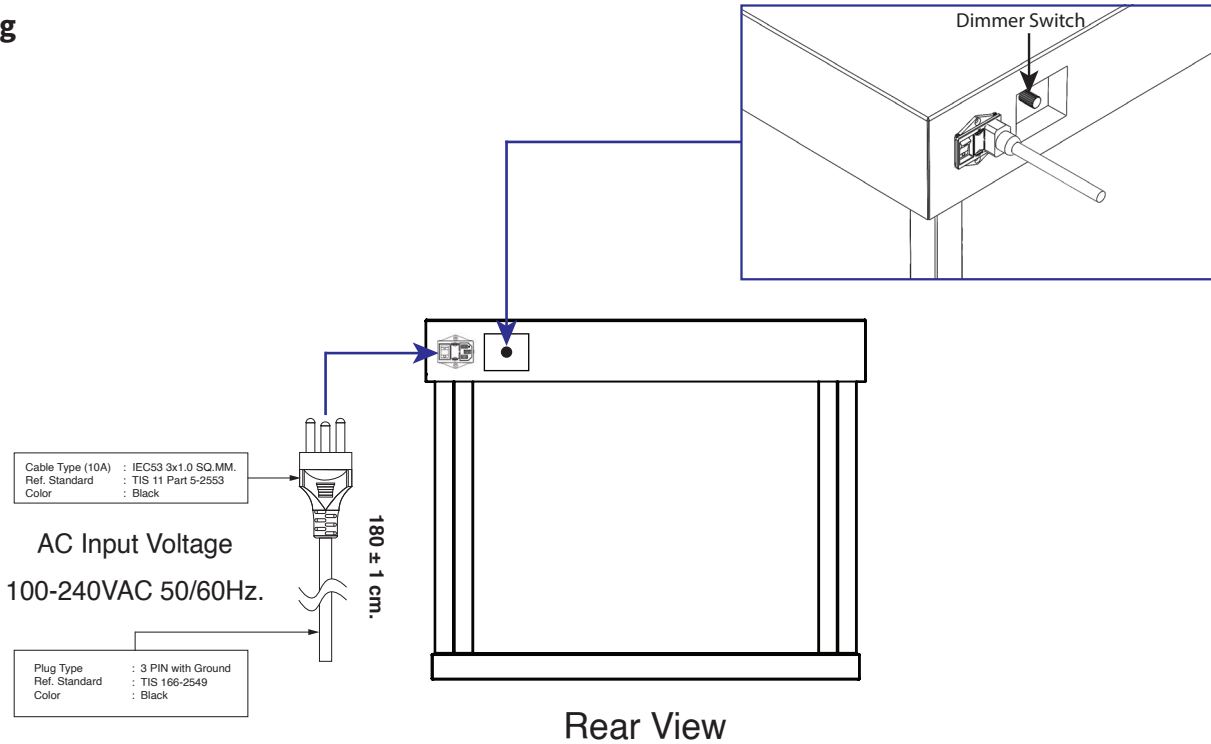


Gems Color Grading Cabinet

Series : GemoLED Pro Model : Gemo-L001



Wiring

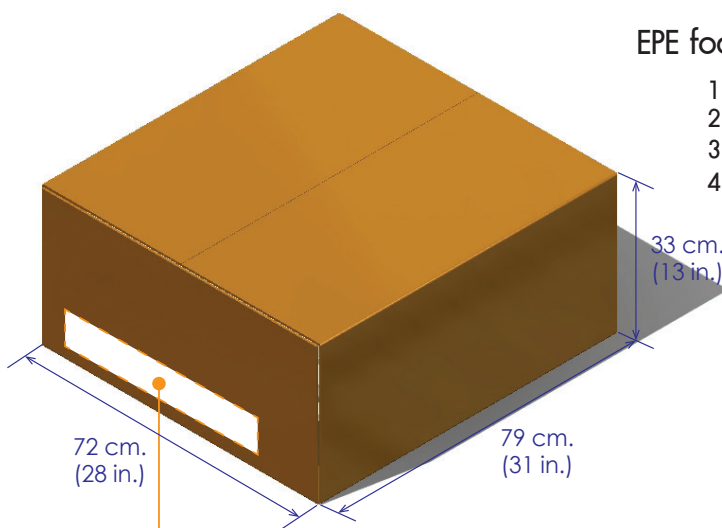


Package

Packing

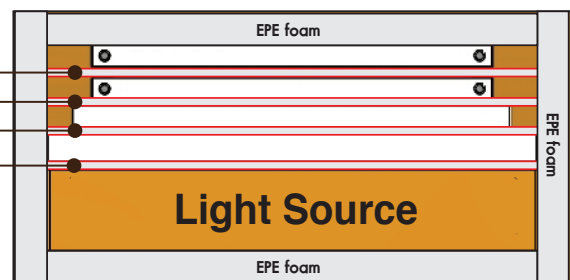
Packaging details	: EPE foam + carton
Selling units	: Single item
Single package size (H x W x D)	: 33cm x 79cm x 72cm
Single gross weight	: 19 Kg

Each layer will have a EPE foam, 4pads in total.
Type of foam : EPE foam



EPE foam

- 1
- 2
- 3
- 4



Caution symbol



Gems Color Grading T8 Tube



Model : GemoLED-L65 Part No. : T8L65-20

Spectrum Test Report

Sample Info.:

Name: GemoLED-L65

Type: S-1

SN: 001

Manu: W.I.P. ELECTRIC CO., LTD.

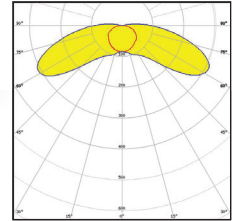
Date: 2024-07-16

Tester: Chanchai Chimwai

TMP: 25.3 DEG

Humidity: 65 %RH

Remark: GemoLED-L65



~165° + 130° extra wide beam for uplighting

Meter state:

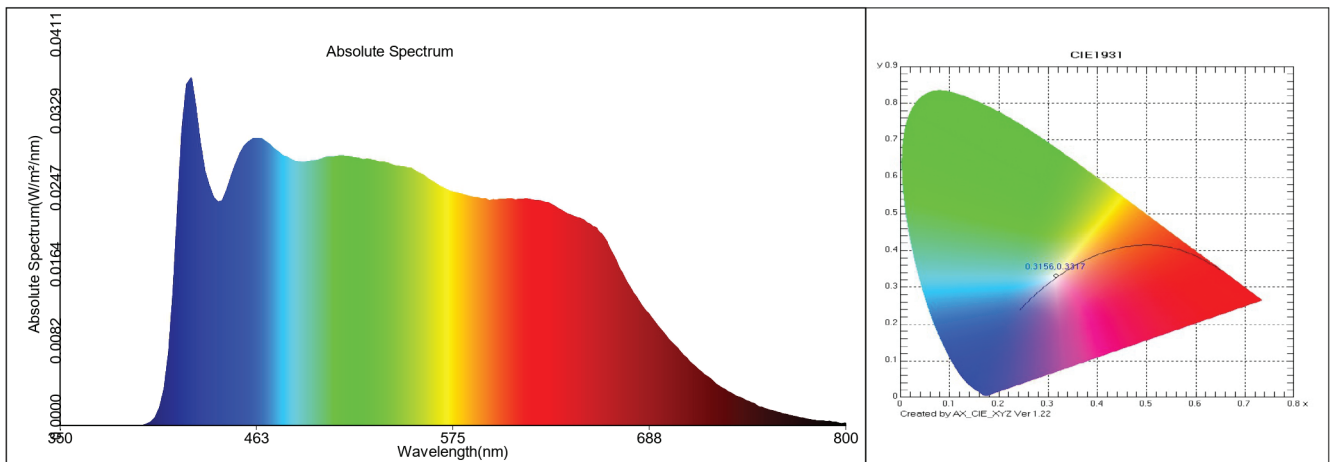
Test Meter: PLA-20

Sensitivity: High

Integral T: 1119 ms

PeakAD Ip: 45071.4

Average times: 1



Test parameter:

E= 2119.1 lx

E(fc)=196.939 fc

CIE x= 0.3156

CIE y= 0.3317

CIE u'=0.1988

CIE v'=0.4702

Tc=6331 K

Lp=425.0 nm

HW=249.9 nm

Ld=490.5 nm

Pur=6.1 %

Ratio_R=15.8 %

Ratio_G=77.0 %

Ratio_B=7.2 %

Duv=0.00314

Ra=99.1

R1=100

R2=100

R3= 99

R4= 98

R5= 99

R6=100

R7= 99

R8= 98

R9= 97

R10= 99

R11= 98

R12= 97

R13=100

R14= 99

R15= 99

SDCM= 3.3(F6500)

E1(400-700nm)=7.897 W/m²

E2(380-780nm)=8.2091 W/m²

Ech-A=1.4471 W/m²

Ech-B=1.5926 W/m²

Ef=0.29087 W/m²

Eb=2.7664 W/m²

Ey=2.9693 W/m²

Er=2.1672 W/m²

Ep=6.6013 Wphyto/m²

Erb_Ratio=0.78341

PPFDf=1.7654E+000 μmol/(m²·s)

PPFD=35.765 μmol/(m²·s)

Gems Color Grading T8 Tube



Model : GemoLED-L25 Part No. : T8L25-25

Spectrum Test Report

Sample Info.:

Name:GemoLED-L25

Type:S-1

SN:001

Manu:W.I.P. ELECTRIC CO., LTD.

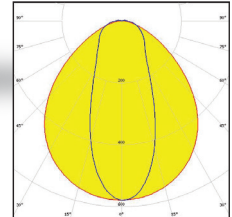
Date:2024-07-16

Tester:Chanchai Chimwai

TMP:25.3 DEG

Humidity:65 %RH

Remark:GemoLED-L25



~ 40° + 100° Oval Beam

Meter state:

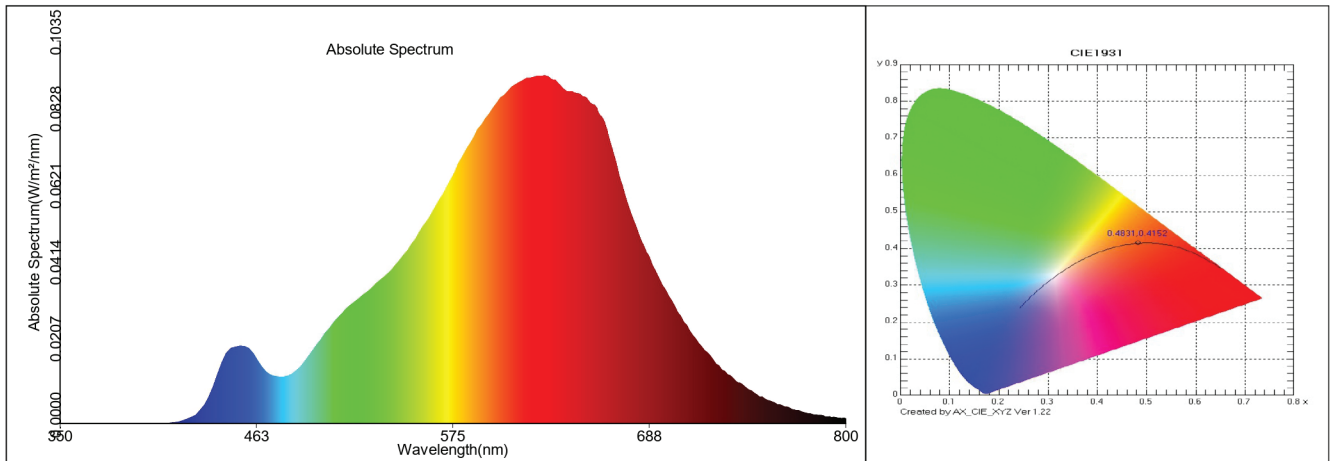
Test Meter: PLA-20

Sensitivity: High

Integral T: 490 ms

PeakAD Ip: 40769.9

Average times: 1



Test parameter:

E= 4544.1 lx

E(fc)=422.314 fc

CIE x= 0.4831

CIE y= 0.4152

CIE u'=0.2754

CIE v'=0.5326

Tc=2438 K

Lp=628.0 nm

HW=135.6 nm

Ld=585.6 nm

Pur=69.7 %

Ratio_R=28.1 %

Ratio_G=70.0 %

Ratio_B=1.9 %

Duv=0.00027

Ra=89.1

R1= 88

R2= 95

R3= 98

R4= 87

R5= 88

R6= 94

R7= 89

R8= 74

R9= 46

R10= 88

R11= 88

R12= 84

R13= 89

R14=100

R15= 83

SDCM=14.3(2700K_C78.376)

E1(400-700nm)=15.241 W/m²

E2(380-780nm)=16.376 W/m²

Ech-A=2.9854 W/m²

Ech-B=2.2409 W/m²

Ef=1.0554 W/m²

Eb=1.2125 W/m²

Ey=5.6374 W/m²

Er=8.4035 W/m²

Ep=13.943 Wphyto/m²

Erb_Ratio=6.9306

PPFDf=6.4051E+000 μmol/(m²·s)

PPFD=76.237 μmol/(m²·s)

Gems Color Grading T8 Tube



Model : GemoLED-L57 Part No. : T8L57-20

Spectrum Test Report

Sample Info.:

Name: GemoLED-L57

Type: S-1

SN: 001

Manu: W.I.P. ELECTRIC CO., LTD.

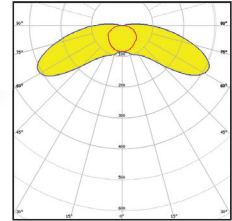
Date: 2024-07-16

Tester: Chanchai Chimwai

TMP: 25.3 DEG

Humidity: 65 %RH

Remark: GemoLED-L57



~165° + 130° extra wide beam for uplighting

Meter state:

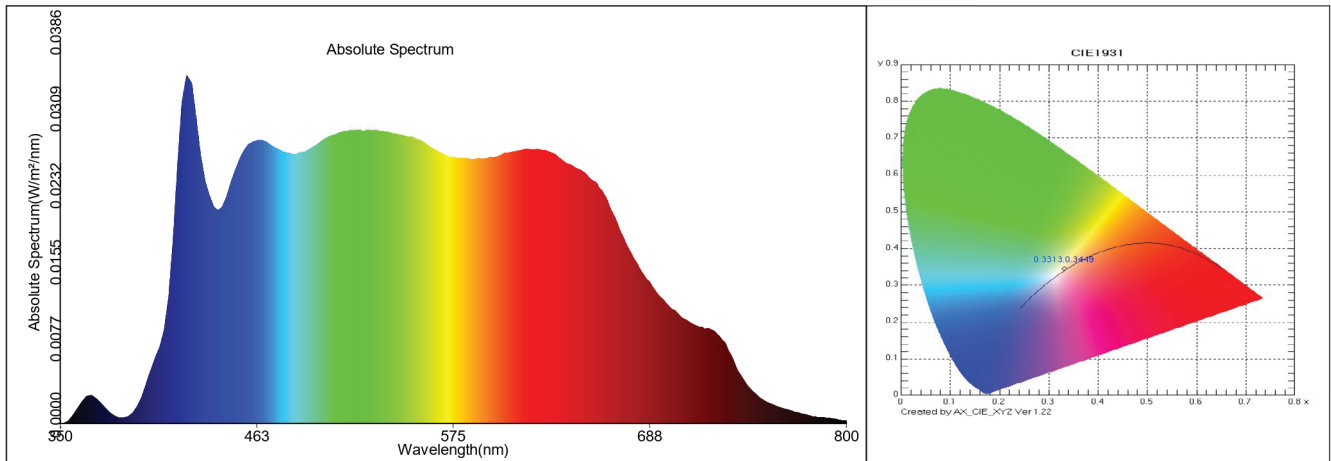
Test Meter: PLA-20

Sensitivity: High

Integral T: 1081 ms

PeakAD Ip: 41017.6

Average times: 1



Test parameter:

E= 2243.6 lx

E(fc)=208.51 fc

CIE x= 0.3313

CIE y= 0.3449

CIE u'=0.2046

CIE v'=0.4793

Tc=5550 K

Lp=423.0 nm

HW=261.4 nm

Ld=544.9 nm

Pur=3.0 %

Ratio_R=16.9 %

Ratio_G=76.6 %

Ratio_B=6.5 %

Duv=0.00247

Ra=98.5

R1= 99

R2= 99

R3= 98

R4= 97

R5= 98

R6= 99

R7= 99

R8= 98

R9= 98

R10= 99

R11= 96

R12= 94

R13=100

R14= 99

R15= 98

SDCM= 4.9(5300K/ENM)

E1(400-700nm)=8.2961 W/m²

E2(380-780nm)=8.8127 W/m²

Ech-A=1.5622 W/m²

Ech-B=1.5854 W/m²

Ef=0.46103 W/m²

Eb=2.6923 W/m²

Ey=3.1184 W/m²

Er=2.4915 W/m²

Ep=7.0489 Wphyto/m²

Erb_Ratio=0.92544

PPFDf=2.7999E+000 μmol/(m²·s)

PPFD=37.902 μmol/(m²·s)

Gems Color Grading T8 Tube



Model : GemoLED-L50 Part No. : T8L50-20

Spectrum Test Report

Sample Info.:

Name: GemoLED-L50

Type: S-1

SN: 001

Manu: W.I.P. ELECTRIC CO., LTD.

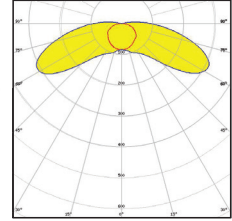
Date: 2024-07-16

Tester: Chanchai Chimwai

TMP: 25.3 DEG

Humidity: 65 %RH

Remark: GemoLED-L50



~165° + 130° extra wide beam for uplighting

Meter state:

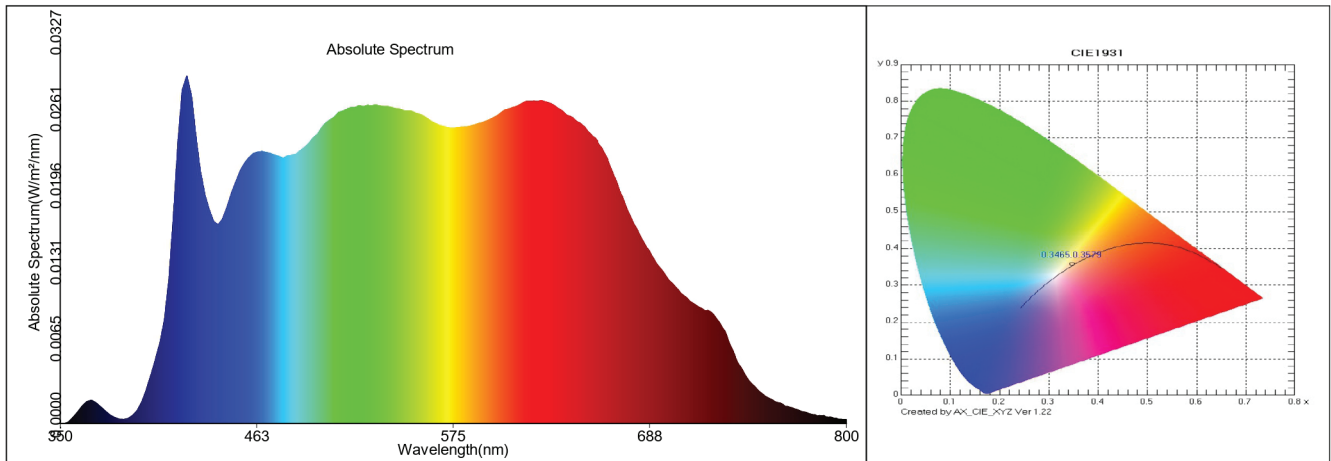
Test Meter: PLA-20

Sensitivity: High

Integral T: 1246 ms

PeakAD Ip: 39985.7

Average times: 1



Test parameter:

E= 2094.4 lx

E(fc)=194.645 fc

CIE x= 0.3465

CIE y= 0.3579

CIE u'=0.2100

CIE v'=0.4879

Tc=4969 K

Lp=422.0 nm

HW=273.8 nm

Ld=570.8 nm

Pur=11.3 %

Ratio_R=18.0 %

Ratio_G=76.1 %

Ratio_B=5.9 %

Duv=0.00255

Ra=99.0

R1= 99

R2= 99

R3= 98

R4= 99

R5= 99

R6= 99

R7= 99

R8= 99

R9= 97

R10= 98

R11= 97

R12= 98

R13= 99

R14= 99

R15= 99

SDCM= 0.8(F5000)

E1(400-700nm)=7.6302 W/m²

E2(380-780nm)=8.1443 W/m²

Ech-A=1.4519 W/m²

Ech-B=1.3883 W/m²

Ef=0.46619 W/m²

Eb=2.244 W/m²

Ey=2.8909 W/m²

Er=2.5009 W/m²

Ep=6.5312 Wphyto/m²

Erb_Ratio=1.1145

PPFDf=2.8308E+000 μmol/(m²·s)

PPFD=35.23 μmol/(m²·s)

Gems Color Grading T8 Tube



Model : GemoLED-LLW Part No. : T8LLW-35

Spectrum Test Report

Sample Info.:

Name: GemoLED-LLW

Type: S-1

SN: 001

Manu: W.I.P. ELECTRIC CO., LTD.

Date: 2024-07-16

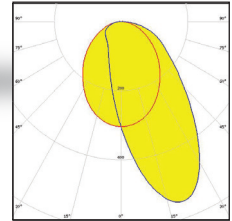
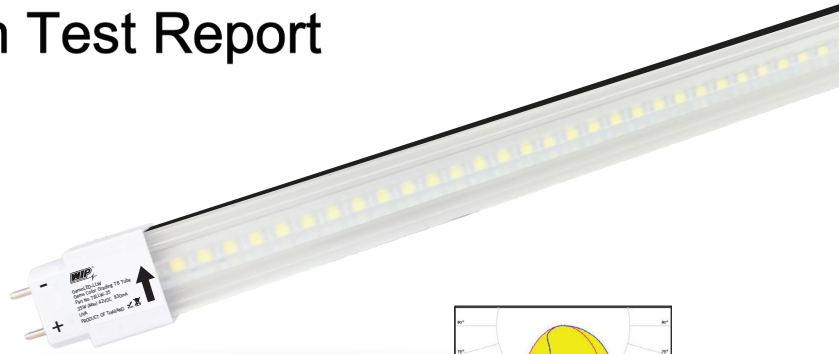
Tester: Chanchai Chimwai

TMP: 25.3 DEG

Humidity: 65 %RH

Remark: GemoLED-LLW

3589



Asymmetric beam for wall washing

Meter state:

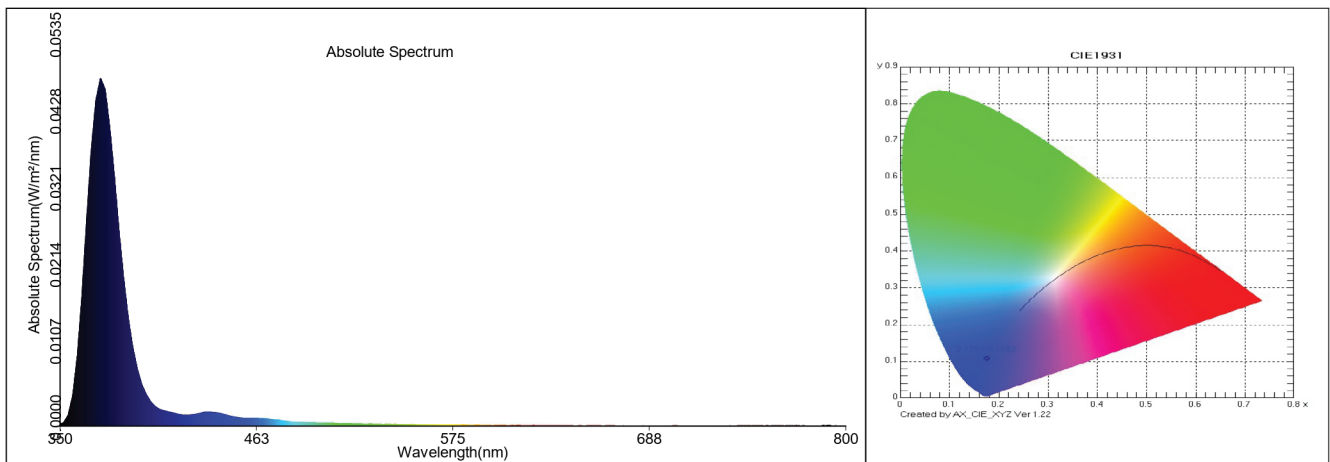
Test Meter: PLA-20

Sensitivity: High

Integral T: 1012 ms

PeakAD Ip: 39239.8

Average times: 1



Test parameter:

E= 15.8 lx

E(fc)=1.4677 fc

CIE x= 0.1766

CIE y= 0.1082

CIE u'=0.1790

CIE v'=0.2469

Tc=100000 K

Lp=373.0 nm

HW=20.8 nm

Ld=466.6 nm

Pur=78.0 %

Ratio_R=4.9 %

Ratio_G=70.6 %

Ratio_B=24.5 %

Duv=0.10138

Ra=41.5

R1= 55

R2= 71

R3= 6

R4= 17

R5= 61

R6= 54

R7= 44

R8= 23

R9=-105

R10= 21

R11= 7

R12= 12

R13= 74

R14= 48

R15= 59

SDCM=96.4(F5000)

E1(400-700nm)=0.17426 W/m²

E2(380-780nm)=0.53481 W/m²

Ech-A=0.055037 W/m²

Ech-B=0.055041 W/m²

Ef=0.0012702 W/m²

Eb=0.14913 W/m²

Ey=0.021558 W/m²

Er=0.0036323 W/m²

Ep=0.66604 Wphyto/m²

Erb_Ratio=0.024357

PPFDf=7.9040E-003 μmol/(m²·s)

PPFD=0.65879 μmol/(m²·s)