The Light You Can Trust

All Contact

WIP®
GIT Gem and Jewelry Institute of Thailand
Being Developed in Collaboration With GIT

Gems Color Grading Cabinet

Series : GemoLED Pro FLICKER FREE LED

Natural Light



HIGHCRI • HIGHCRI • HIGHCRI • HIGHCRI • 98+

Made in Thailand MiT6709000100

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







NICHIA LEDiL 10KV SURGE PROTECTION Made in Thailand MiT6709000100 RoHS Green Industry TIS 1955 2551 Products of Thailand

Eff. Date 15/09/25
Rev.6

Gems Color Grading Cabinet

Series : GemoLED Pro Model : Gemo-L001

Being Developed in Collaboration With GIT

Light source for the colour grading of gemstone was developed in a collaboration between GIT (Gem and JewelryInstitute 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 1 year warranty

PHOTOMETRIC SPECIFICATIONS

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

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



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 :	13.5 Kg.
Package dimension (H x W x D) :	33 cm x 79 cm x 72 cm
Gross weight :	21.0 Kg.
Warranty :	1 Year

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 Uion)	: 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	

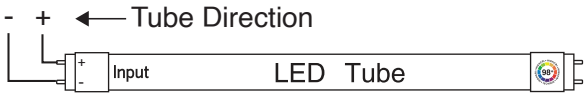
Part No.	Position of Light sources	Lamp Size (T8 Lamps)	Power	Lux	CRI	Lens	Beam Angle	Description
T8L65-20	First	60 cm. (24 In.)	19W x 2	2627 lux	98+	PMMA	~165° + 130°	D65 (Daylight 6500K) CRI98+
T8L25-25	Second	60 cm. (24 In.)	25W	2342lux	90+	PMMA	~165° + 130°	D25 (Warm White 2500K) CRI90+
T8L57-20	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

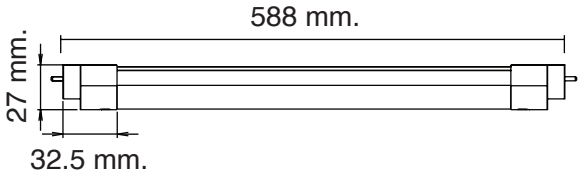
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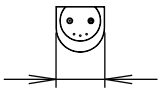
Wiring Diagram

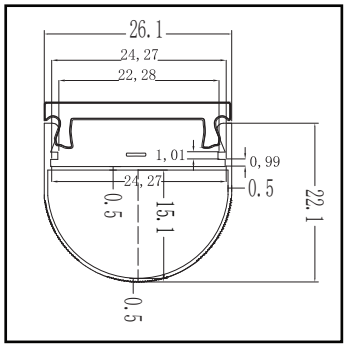


Single - end ไฟเข้า 1 ข้าง

Dimension

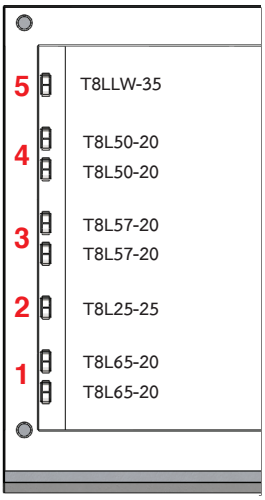




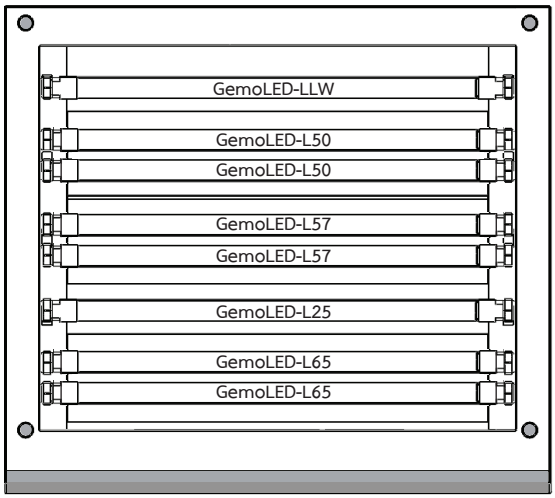


Position of Light source

Part No.

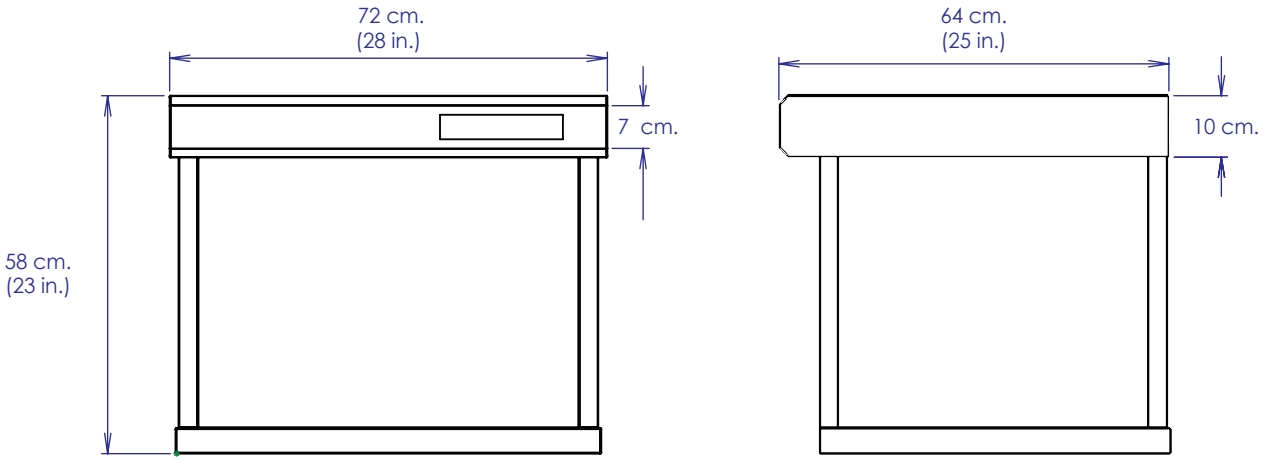


Front



Front

Dimension



Front View

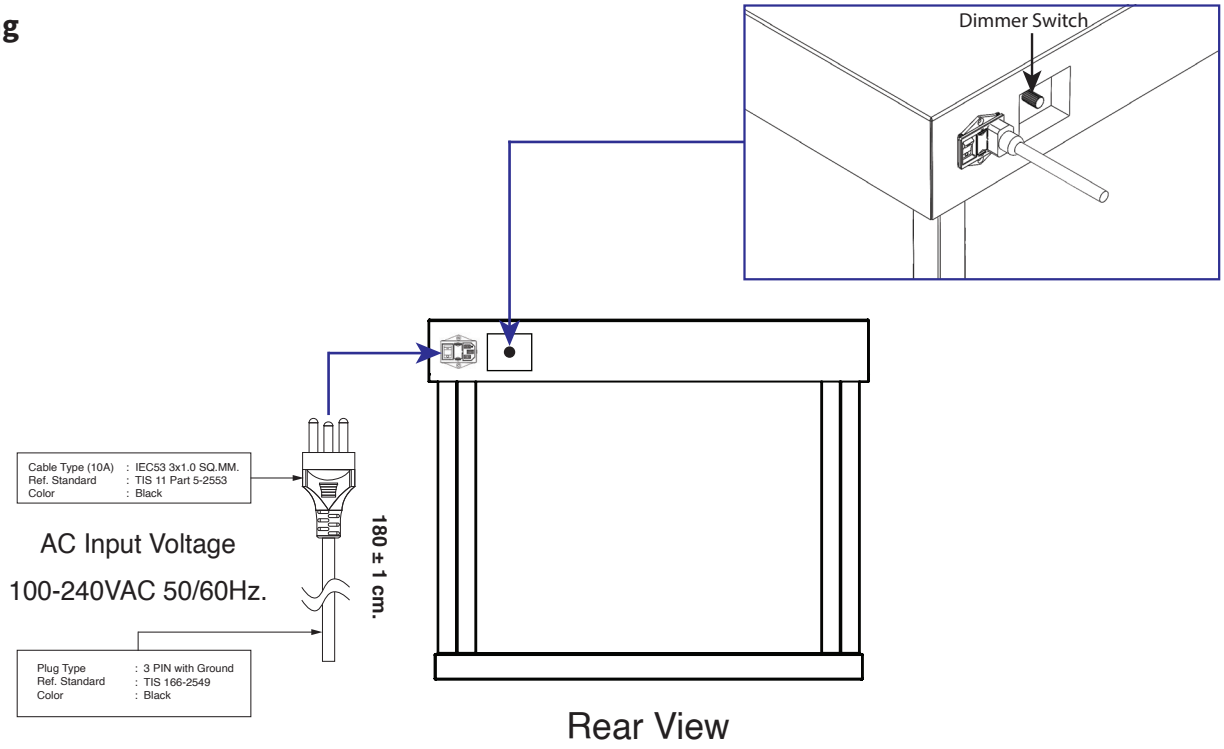
Side View

Gems Color Grading Cabinet

Series : GemoLED Pro Model : Gemo-L001

Being Developed in Collaboration With GIT

Wiring

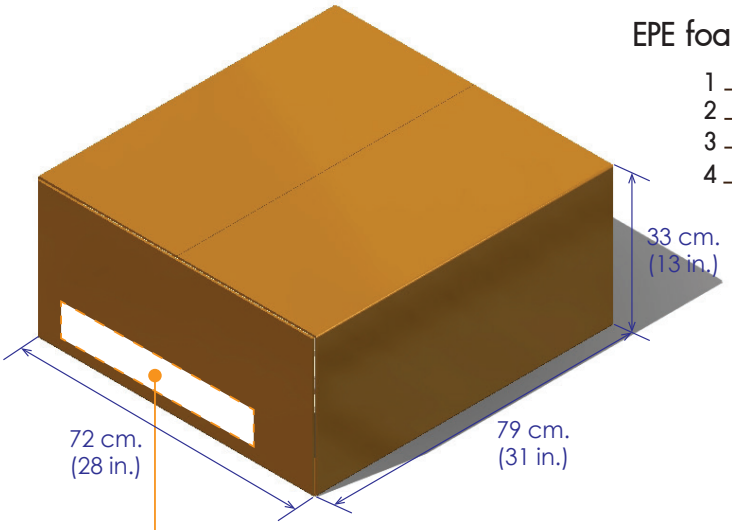


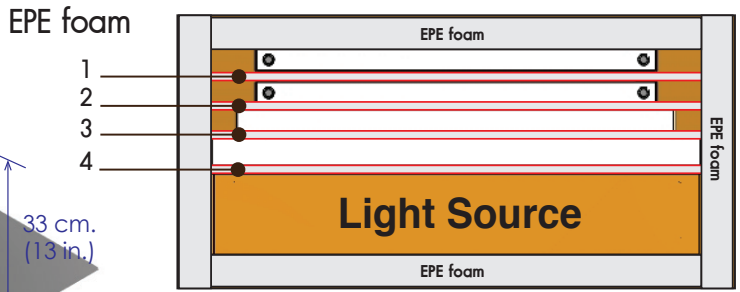
Package

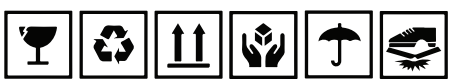
Packing

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	: 21 Kg

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







W.I.P. บริษัท ดับบลิว.ไอ.พี. อีเล็คทริค จำกัด
W.I.P. ELECTRIC CO., LTD.
55/5 Moo 3, Lampho Soi 3, High Way No. 345, Lampho, Bangbuathong District, Nonthaburi 11110 THAILAND
Tel. (+66)2-525-8825

Products of Thailand

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.

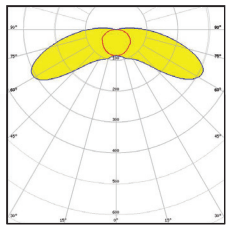
Date:2024-07-16

Tester:Chanchai Chimwai

TMP:25.3 DEG

Humidity:65 %RH

Remark:GemoLED-L65

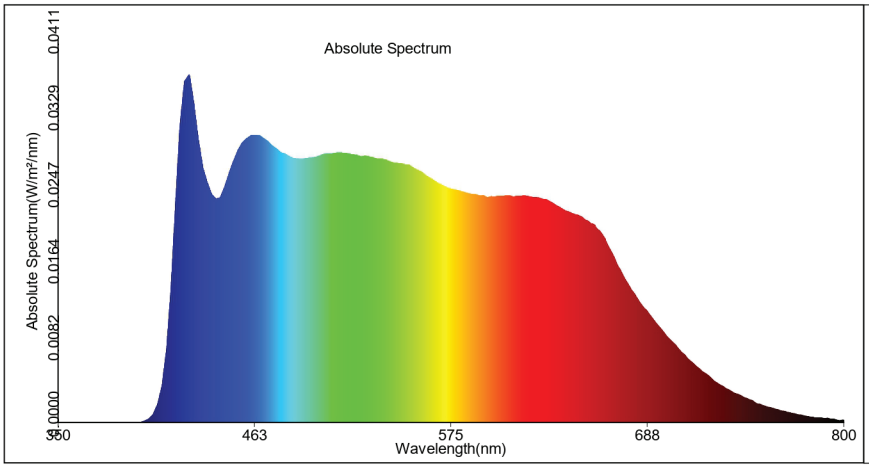


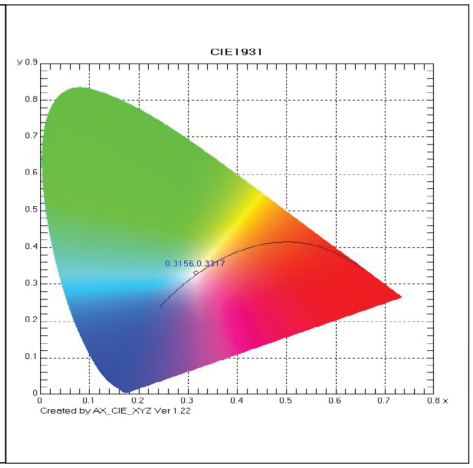
~165° + 130° extra wide beam for uplighting

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.

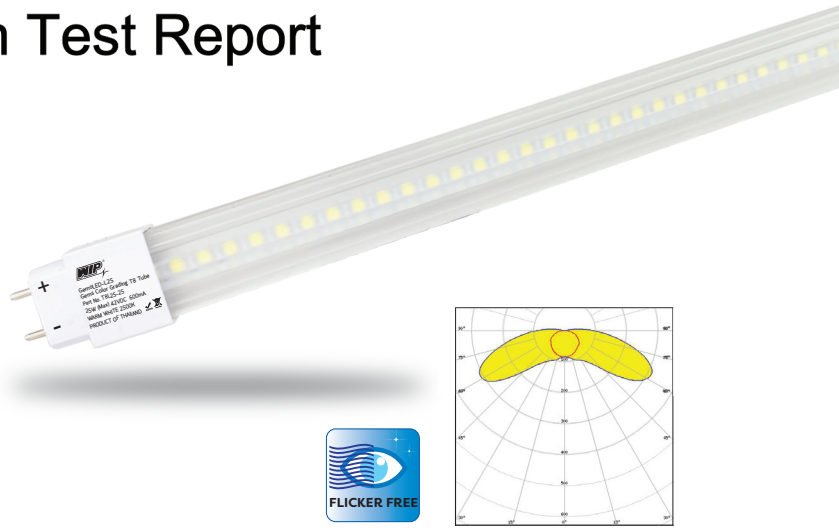
Date:2025-05-26

Tester:Chanchai Chimwai

TMP:25.3 DEG

Humidity:65 %RH

Remark:GemoLED-L25

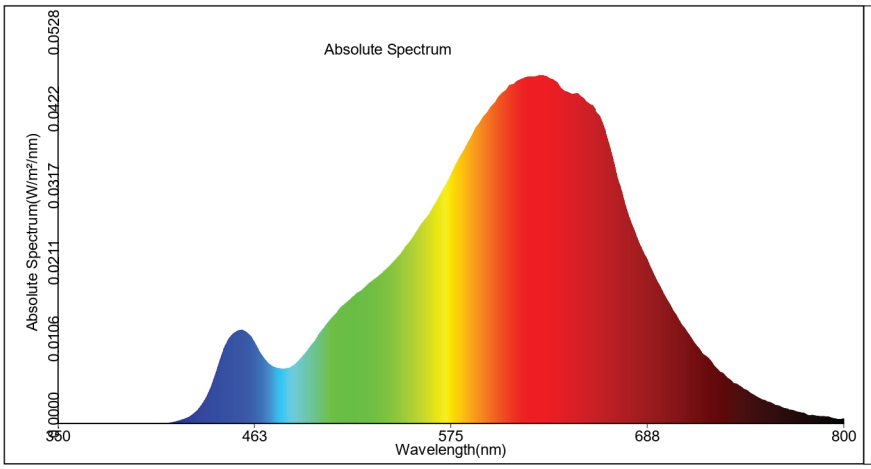


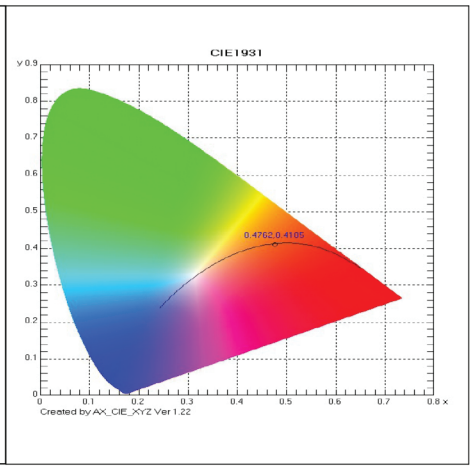
~165° + 130° extra wide beam for uplighting

Meter state:

Test Meter: PLA-20 Sensitivity: High

Integral T: 980 ms PeakAD Ip: 41588.8 Average times: 1





Test parameter:

E= 2341.6 lx E(fc)=217.624 fc

CIE x= 0.4762	CIE y= 0.4105	CIE u'=0.2732	CIE v'=0.5298
Tc=2486 K	Lp=626.0 nm	HW=136.2 nm	Ld=585.7 nm
Pur=66.2 %	Ratio_R=27.8 %	Ratio_G=70.1 %	Ratio_B=2.1 %
Duv=-0.00106			

Ra=90.0	R1= 89	R2= 96	R3= 97
R4= 88	R5= 90	R6= 96	R7= 88
R8= 75	R9= 49	R10= 91	R11= 89
R12= 86	R13= 91	R14= 99	R15= 85

SDCM=11.4(2700K_C78.376)

E1(400-700nm)=7.881 W/m² E2(380-780nm)=8.4385 W/m²

Ech-A=1.5256 W/m²	Ech-B=1.1891 W/m²	Ef=0.51946 W/m²
Eb=0.70191 W/m²	Ey=2.9108 W/m²	Er=4.2745 W/m²
Ep=7.1872 Wphyto/m²	Erb_Ratio=6.0898	

PPFDf=3.1521E+000 µmol/(m²·s)

PPFD=39.298 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.

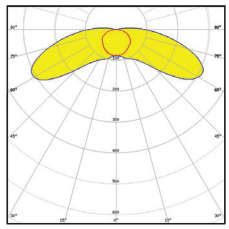
Date:2024-07-16

Tester:Chanchai Chimwai

TMP:25.3 DEG

Humidity:65 %RH

Remark:GemoLED-L57

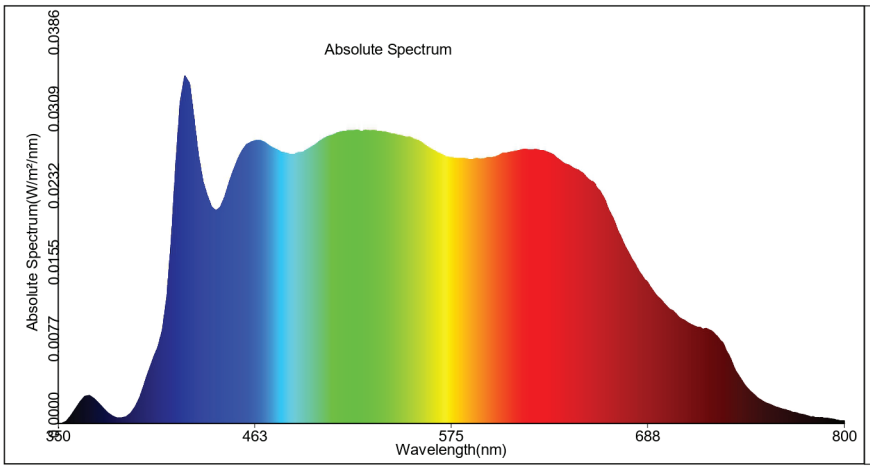


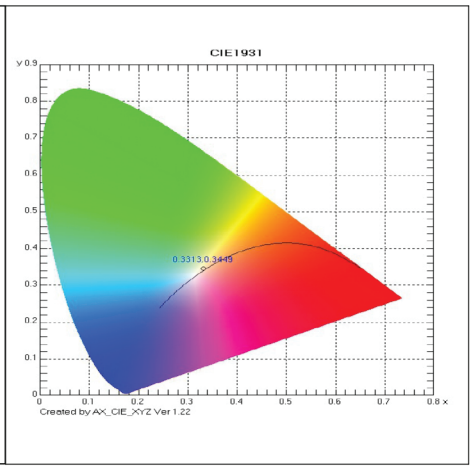
~165° + 130° extra wide beam for uplighting

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

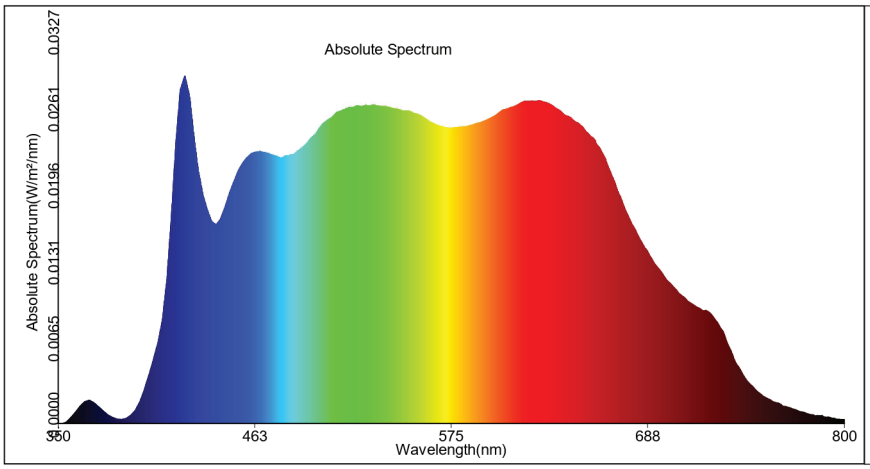


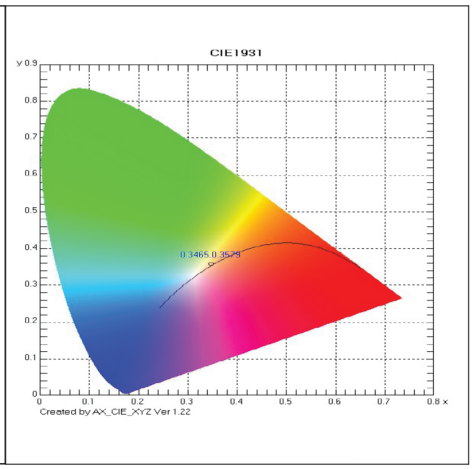
~165° + 130° extra wide beam for uplighting

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	

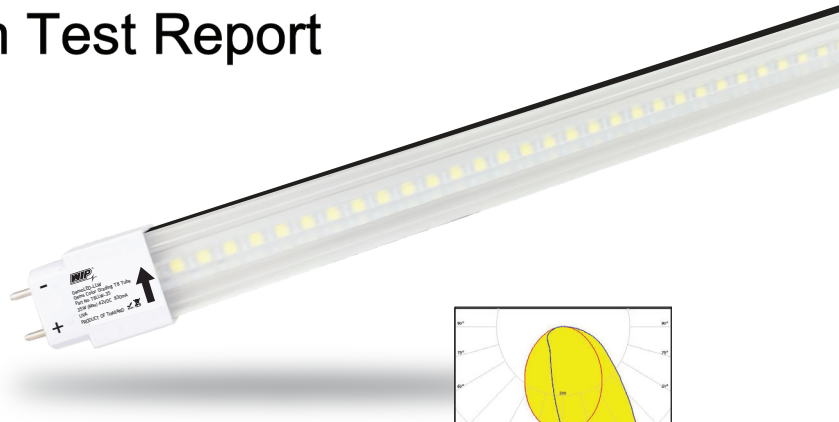
PPFDf=2.8308E+000 µmol/(m²·s)

PPFD=35.23 µmol/(m²·s)

Gems Color Grading T8 Tube

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

Spectrum Test Report



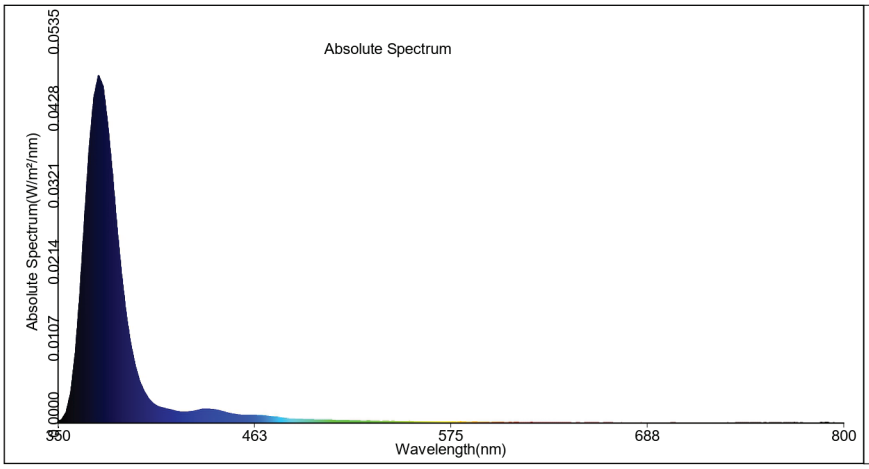
Sample Info.:

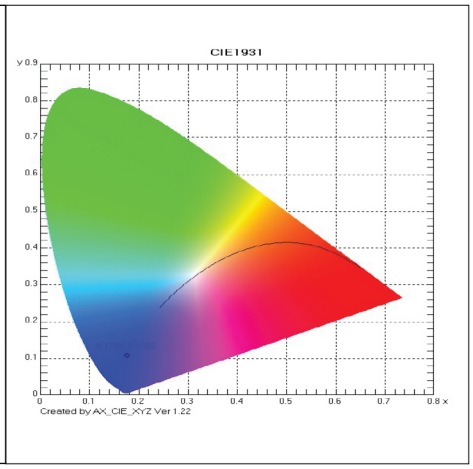
Name: GemoLED-LLW
Type:S-1
SN:001
Manu:W.I.P. ELECTRIC CO., LTD.
Date:2024-07-16
Tester:Chanchai Chimwai
TMP:25.3 DEG
Humidity:65 %RH
Remark: GemoLED-LLW 3589

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)