



IESNA LM-79 TEST REPORT Issue 2

Applicant's name	GREEN CREATIVE LTD
Address	Room 1206-07 New Victory House.93-103 Wing Lok Street, Central, Hong Kong
Brand Name.....	N/A
Report No.....	BTR66.181.19.0019.16-4
Product Name.....	HID replacement lamp
Model Number	34HID/830/277V/EX39; 34HID/830/277V/E26
Tested by (printed name and signature)	Xia Zeng
Title	Test Engineer
Approved by (printed name and signature)	Zack Zhao
Title	Approved Signatory
Date of issue	Feb 18, 2020(Revise: Mar 06, 2020)
Testing Laboratory Name	BEST Test Service Shenzhen Co., Ltd.
Address	1 st Floor, 1 st Building, Weitai Industrial Park, Yingrenshi, Shiyao, Baoan, Shenzhen, China
Accreditation	DLC/Lighting Facts/UL/ETL/ELI/CEC/EPA/DOE NVLAP Testing Lab Code: 200770-0
Test specification	
Standard	IESNA LM-79
Test procedure/method	IESNA LM-79 Test Procedure
Non-standard test method	No
Test Report Form No. BEST_LM-79	
TRF originator.....	BEST Test Service Shenzhen Co., Ltd. Mr Tseng
Master TRF	BEST_LM-79.doc

Note:

The laboratory has not been responsible for the sampling stage (e.g. the sample has been provided by the customer), the results relate only to the items tested. This report is not valid as a BEST Test Report unless signed by an approved BEST Test Service Shenzhen Co., Ltd. This report shall not be reproduced except in full without approval of BEST TEST SERVICE SHENZHEN CO., LTD can provide assurance that parts of a report are not taken out of context. The test report only allows to be revised within the retention period unless further standard or the requirement was noticed. This report is for the exclusive use of BEST's Client and is provided pursuant to the agreement between BEST and its Client. BEST's responsibility and Liability are limited to the terms and conditions of the agreement. BEST assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the BEST name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by BEST. The observations and test results in this report are relevant only to the sample tested. This report by itself does not cover that the material, product, of service is or has ever been under a BEST certification program. National Voluntary Laboratory Accreditation Program (NVLAP) has accredited this laboratory under ISO17025: 2017 for specific laboratory activities as listed in the NVLAP directory of accredited laboratories. The results shown in this report were determined by this laboratory in accordance with its terms of accreditation. This report must not be used by the client to claim product endorsement by NVLAP, NIST or any agency of the U.S. Government.

Description:	
The date of sampling	Jan 06, 2020
The date of receipt of the test sample / requirement /item(s).....	Jan 06, 2020
Test date	Feb 17, 2020 to Feb 18, 2020
Description	HID replacement lamp
The condition of the item	N/A
Sampling method	Provided by Applicant
Sample Quantity	1 unit
SKU.....	N/A
Rating(s) (V; Hz)	AC 120-277 50/60Hz
Nominal Power.....	34W
Nominal Power Factor	N/A
Nominal Lumen Output.....	4500lm
Nominal CCT	3000K
Nominal CRI(Ra)	80
Number of hours operated prior to measurement.....	0H
Total operating time of the product for measurements including stabilization:	3.5H
Ambient temperature	24.7°C
Orientation (burning position) of SSL product during test	Lighting Surface Down or Base Up
Stabilization time	1.5 H
Photometric method	Sphere-spectroradiometer+Goniophotometer
Calibration standard lamp used	DC 24V 100W Omni-Directional Halogen Calibrated by NIM China(Sphere) DC 120V 500W Omni-Directional Halogen Calibrated by NIM China(Goniophotometer)
Correction factors applied	Self absorbing applied
Photometric measurement conditions:	See test method description below

Equipments used	EVERFINE HASS-2000 Sphere System CHROMA 61602 AC Source YOKOGAWA WT 310 Power Meter FLUKE 52II EVERFINE GOR-5000 Goniophotometer CALIFORNIA INSTRUMENT 1501I AC Source YOKOGAWA WT 210 Power Meter FLUKE 233 Temperature Meter
Bandwidth of spectroradiometer	2nm
Statement of uncertainties	3.1%
Deviation	None
Note	These models are all the same except for lamp base. Here we choose 34HID/830/277V/EX39 to be tested and the other to share the test data.

Photometric and Electrical Measurement

Total light output (luminous flux) for the 25°C \pm 1°C ambient temperature conditions was measured using a ϕ 2.0m 4 π geometry integrating sphere. Temperature was measured at a position inside the sphere. Spectral radiant flux were measured using the photo detector built in the integrating sphere. Each lamp was operated at rated voltage in its designated orientation. Each lamp was in a stable state before measurements are done as below:

Step 1 Take 3 measurements of the lamp light output at 15 minute interval (total time=30mintues.), the pre-burning time is not included in the formal testing time period.

Step 2 Calculate the difference in percentage between the maximum measured value and the minimum measured value with the three consecutive measurements.

Step 3 If the value calculated in Step 2 does not exceed 0.5 percent, the lamp is considered stable.

Luminous flux, chromaticity coordinates, correlated color temperature and color rendering index for each lamp were calculated from the spectral radiant flux measurements taken at 2 nm increment over the range of 380 to 780 nm. The calibration of the sphere photometer-spectrometer system can be traced back to the NIST USA. Lamp efficacy (lumens per watt) for each lamp model was computed based on the luminous flux result revised taking the self-absorbing correction factor into consideration. Electrical measurements including voltage, current, power and power factor were measured using the digital power meter.

The total uncertainty of the light output measurements is estimated, at the 95% confidence level, not to exceed \pm 3.1% over the wavelength range of 380-780 nm.

Luminous Intensity

An Everfine GOR-5000 Goniophotometer was used to measure the intensity distribution at each angle, Luminous intensity (cd) was measured within each vertical plane at a 5° vertical angle increment (maximum) from 0° to 360°, measurements were repeated in vertical planes about the lamp (polar) axis in an increments of 22.5° from 0° to 180°, and the intensity data were exported to a file in excel format.

Photometric and Electrical Test Data

Input Voltage (V)	Frequency (Hz)	Input Current (A)	ITHD	Input Power (W)	Power Factor	Lumen Output (Lumens)	Efficiency (Lumen/W)
120.00	60.0	0.2885	13.9%	34.25	0.9894	4887.28	142.70
277.06	60.0	0.1324	11.6%	33.76	0.9203	4718.8	139.76
CCT (K)	CRI (Ra)	R9	x CIE1931	y CIE1931	u' CIE1976	v' CIE1976	Duv CIE1976
2973	82.0	5	0.4392	0.4055	0.2514	0.5223	0.0003
2980	82.0	5	0.4389	0.4056	0.2512	0.5223	0.0004

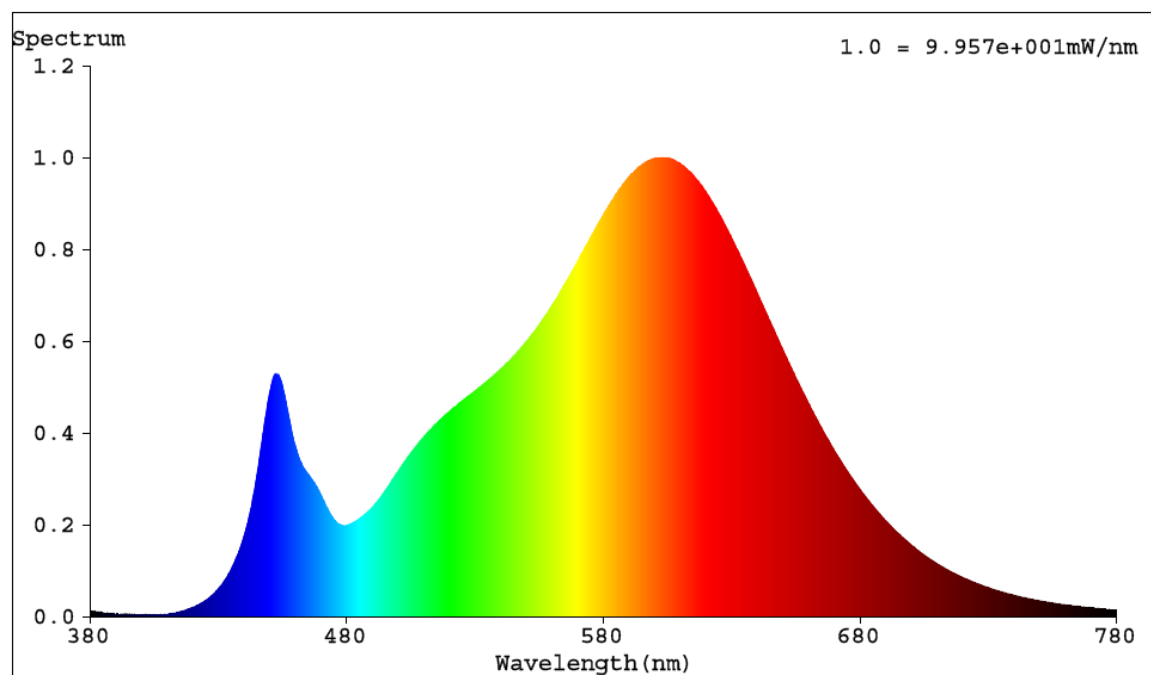
Sphere-Spectroradiometer Method

Parameter	Result		Special Color Rendering Indices	
Test Voltage(V)	120.08	277.06	R1	80
Voltage frequency(Hz)	60	60	R2	91
Test Current(A)	0.2885	0.1324	R3	96
Power Factor	0.9864	0.9203	R4	79
Test Power(W)	34.17	33.76	R5	81
THD A%	13.9%	11.6%	R6	89
Luminous Efficacy (lm/W)	141.95	139.76	R7	82
Total Luminous Flux (lm)	4850.4	4718.8	R8	57
Color Rendering Index (CRI)	82.0		R9	5
R9	5		R10	80
Correlated Color Temperature (CCT)(K)	2973		R11	78
Chromaticity Chroma x	0.4392		R12	71
Chromaticity Chroma y	0.4055		R13	83
Duv	0.0003		R14	98
Chromaticity Chroma u'	0.2514			
Chromaticity Chroma v'	0.5223			

Goniophotometer Method.

Test Voltage(V)	120.00
Voltage frequency(Hz)	60
Test Current(A)	0.2885
Power factor	0.9894
Power(W)	34.25
Luminous Efficacy(lm/W)	142.70
Total Luminous Flux(lm)	4887.28
Beam Angle(°)	224.6(0°-180°), 222.8(90°-270°)
Center Beam Candle Power(cd)	611.2
Maximum Beam Candle Power(cd)	611.2(At:C=0.0, Gamma=0.0)
Spacing Criteria	1.46(0°-180°), 1.48(90°-270°)
Zonal Lumens in the 0°-60°Zone	36.8%
Zonal Lumens in the 60°-90°Zone	30.8%
Zonal Lumens in the 90°-120°Zone	21.8%
Zonal Lumens in the 120°-180°Zone	10.6%

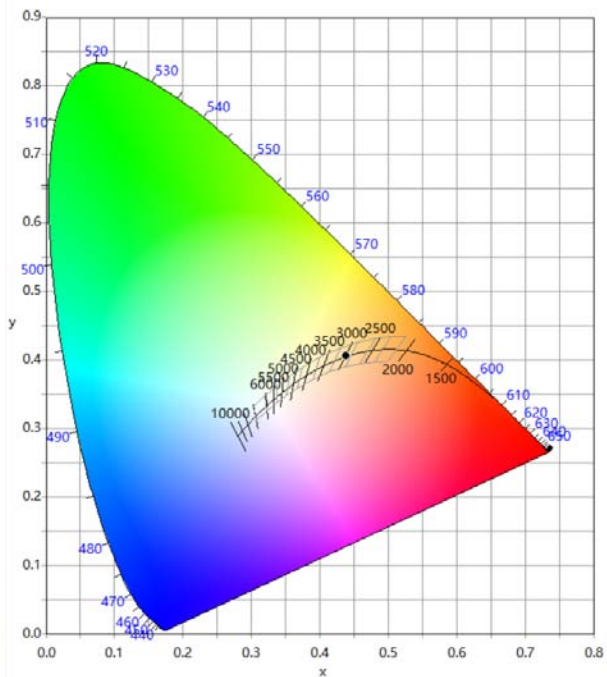
Spectral Plots



Spectral power distribution- Sphere spectroradiometer Method

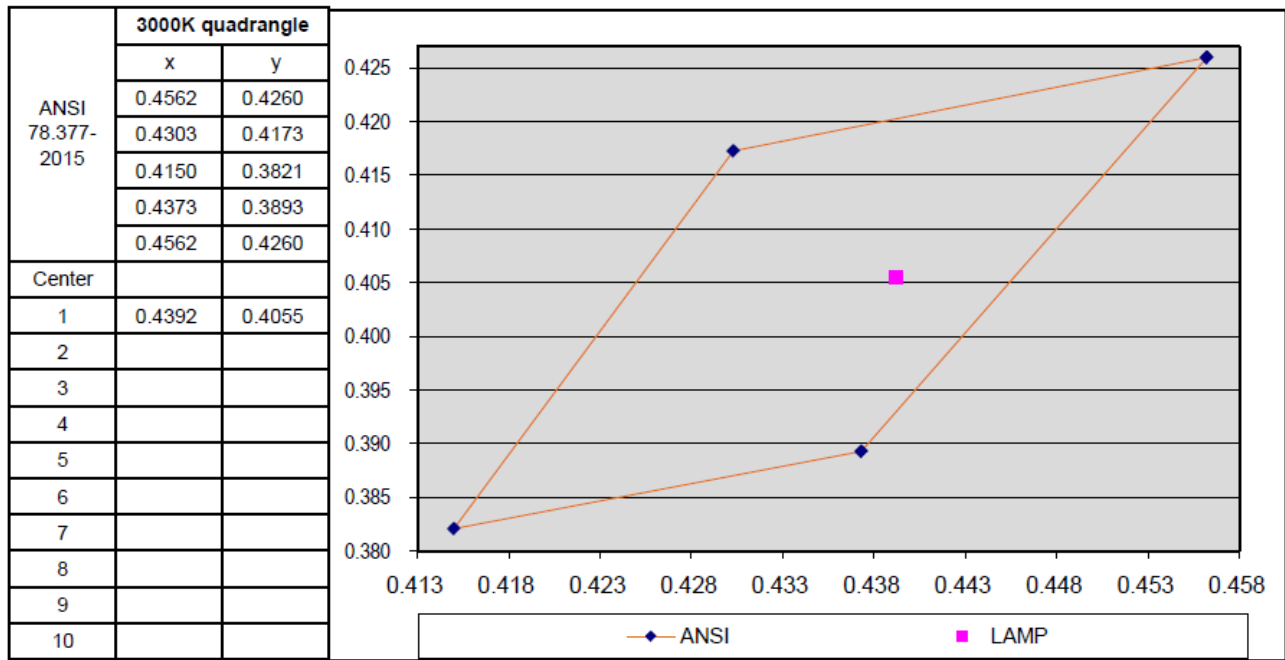
Spectral Distribution over Visible Wavelength							
WL (nm)	Radiant (mWatts)	WL (nm)	Radiant (mWatts)	WL (nm)	Radiant (mWatts)	WL (nm)	Radiant (mWatts)
380	1.0960E+00	485	2.1200E+01	590	9.5330E+01	695	1.7900E+01
385	7.9340E-01	490	2.3600E+01	595	9.7950E+01	700	1.5410E+01
390	5.1990E-01	495	2.7240E+01	600	9.9390E+01	705	1.3240E+01
395	4.4660E-01	500	3.1420E+01	605	9.9490E+01	710	1.1380E+01
400	3.6700E-01	505	3.5400E+01	610	9.8210E+01	715	9.7830E+00
405	3.6570E-01	510	3.8880E+01	615	9.5700E+01	720	8.3920E+00
410	5.0430E-01	515	4.1820E+01	620	9.1980E+01	725	7.2140E+00
415	9.8580E-01	520	4.4420E+01	625	8.7320E+01	730	6.1840E+00
420	1.9280E+00	525	4.6750E+01	630	8.1900E+01	735	5.2980E+00
425	3.4140E+00	530	4.8880E+01	635	7.6130E+01	740	4.5450E+00
430	5.9550E+00	535	5.1170E+01	640	7.0000E+01	745	3.8930E+00
435	1.0210E+01	540	5.3640E+01	645	6.3810E+01	750	3.3620E+00
440	1.7350E+01	545	5.6340E+01	650	5.7650E+01	755	2.8970E+00
445	3.0700E+01	550	5.9570E+01	655	5.1640E+01	760	2.4930E+00
450	4.8690E+01	555	6.3220E+01	660	4.6070E+01	765	2.1440E+00
455	4.9880E+01	560	6.7470E+01	665	4.0760E+01	770	1.8630E+00
460	3.6730E+01	565	7.2060E+01	670	3.5880E+01	775	1.6130E+00
465	3.0760E+01	570	7.6980E+01	675	3.1450E+01	780	1.4820E+00
470	2.6150E+01	575	8.2110E+01	680	2.7460E+01		
475	2.0970E+01	580	8.7040E+01	685	2.3890E+01		
480	1.9730E+01	585	9.1660E+01	690	2.0700E+01		

Chromaticity Diagram- Sphere spectroradiometer Method



Tristimulus values(x,y):(0.4392, 0.4055)

7-Step Chromaticity Quadrangles Test Data



Color rendition report-Sphere spectroradiometer Method

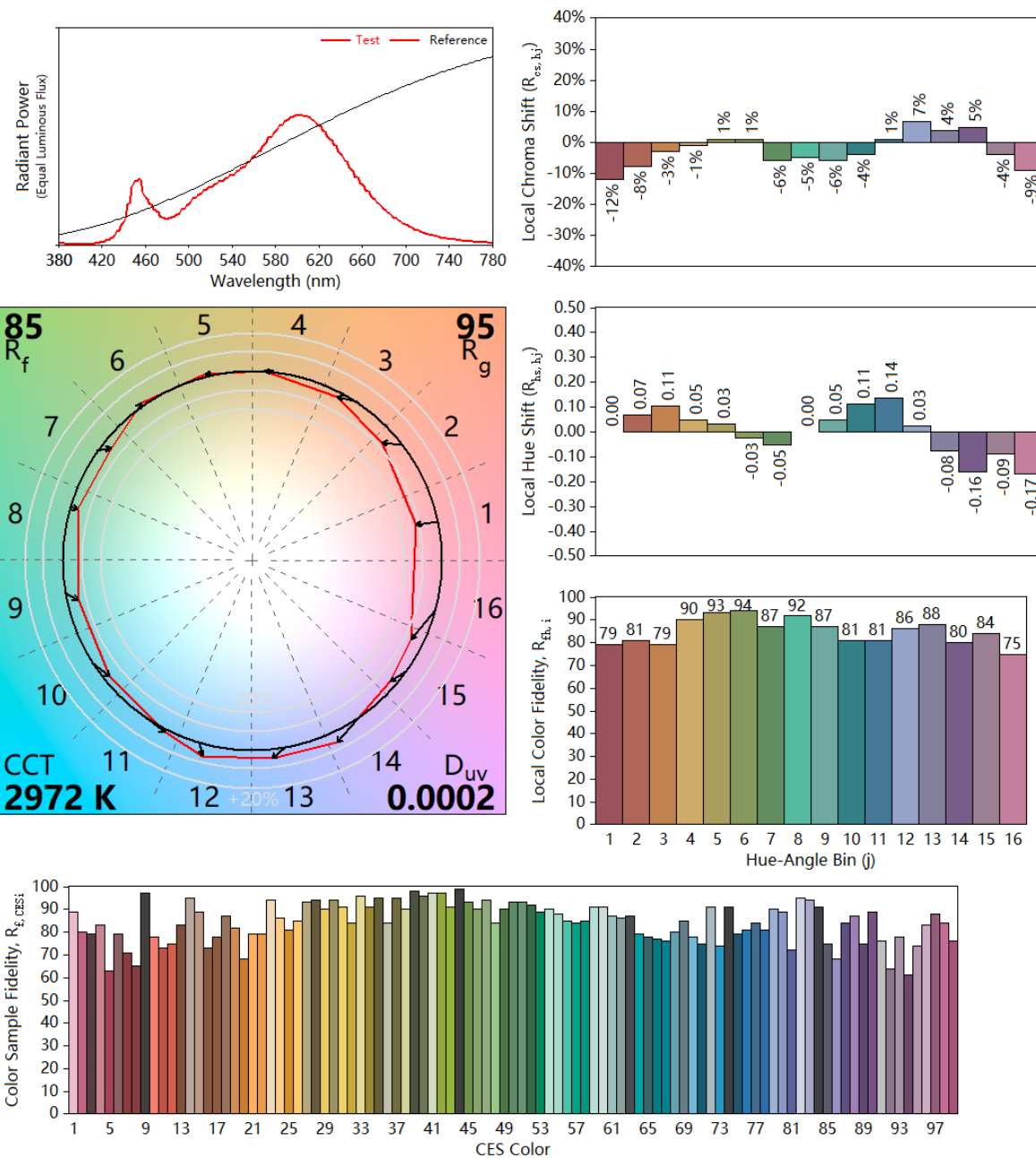
IES TM-30-18 Color Rendition Report

Source: BTR66.181.19.0019.16-4

Manufacturer: Green Creative

Date: Feb 20, 2020

Model: 34HID-830-277V-EX39



Notes: 3000K CCT

x 0.4393
y 0.4055
u' 0.2515
v' 0.5223

CIE 13.3-1995
(CRI)
 R_a 82
 R_g 5

Colors are for visual orientation purposes only.

Spectral Energy Distribution

WL(nm)	Spectrum	Spectrum	WL(nm)	Spectrum	Spectrum
380	0.0110	1.0960	585	0.9205	91.6600
385	0.0080	0.7934	590	0.9574	95.3300
390	0.0052	0.5199	595	0.9837	97.9500
395	0.0045	0.4466	600	0.9982	99.3900
400	0.0037	0.3670	605	0.9992	99.4900
405	0.0037	0.3657	610	0.9863	98.2100
410	0.0051	0.5043	615	0.9611	95.7000
415	0.0099	0.9858	620	0.9238	91.9800
420	0.0194	1.9280	625	0.8770	87.3200
425	0.0343	3.4140	630	0.8226	81.9000
430	0.0598	5.9550	635	0.7646	76.1300
435	0.1025	10.2100	640	0.7030	70.0000
440	0.1743	17.3500	645	0.6408	63.8100
445	0.3084	30.7000	650	0.5790	57.6500
450	0.4890	48.6900	655	0.5187	51.6400
455	0.5009	49.8800	660	0.4626	46.0700
460	0.3689	36.7300	665	0.4094	40.7600
465	0.3089	30.7600	670	0.3604	35.8800
470	0.2626	26.1500	675	0.3159	31.4500
475	0.2106	20.9700	680	0.2758	27.4600
480	0.1982	19.7300	685	0.2399	23.8900
485	0.2129	21.2000	690	0.2078	20.7000
490	0.2370	23.6000	695	0.1797	17.9000
495	0.2736	27.2400	700	0.1548	15.4100
500	0.3156	31.4200	705	0.1330	13.2400
505	0.3555	35.4000	710	0.1143	11.3800
510	0.3905	38.8800	715	0.0983	9.7830
515	0.4200	41.8200	720	0.0843	8.3920
520	0.4461	44.4200	725	0.0725	7.2140
525	0.4695	46.7500	730	0.0621	6.1840
530	0.4909	48.8800	735	0.0532	5.2980
535	0.5139	51.1700	740	0.0456	4.5450
540	0.5387	53.6400	745	0.0391	3.8930
545	0.5659	56.3400	750	0.0338	3.3620
550	0.5982	59.5700	755	0.0291	2.8970
555	0.6349	63.2200	760	0.0250	2.4930
560	0.6776	67.4700	765	0.0215	2.1440
565	0.7237	72.0600	770	0.0187	1.8630
570	0.7732	76.9800	775	0.0162	1.6130
575	0.8247	82.1100	780	0.0149	1.4820
580	0.8741	87.0400			

EUT Photo

BEST

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Annex

Please see the next page for the luminous intensity test data

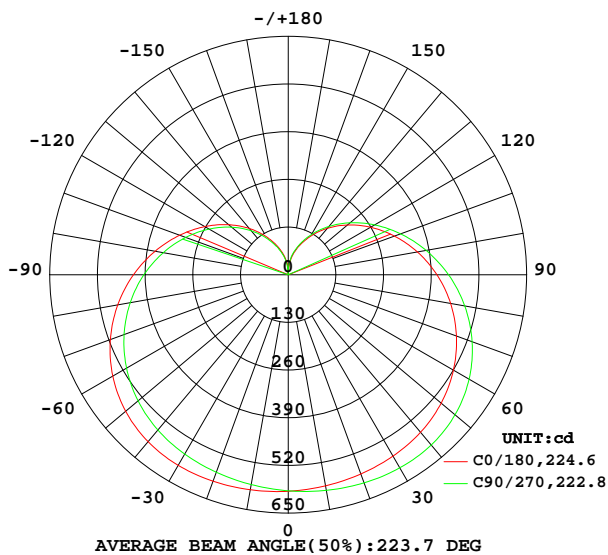
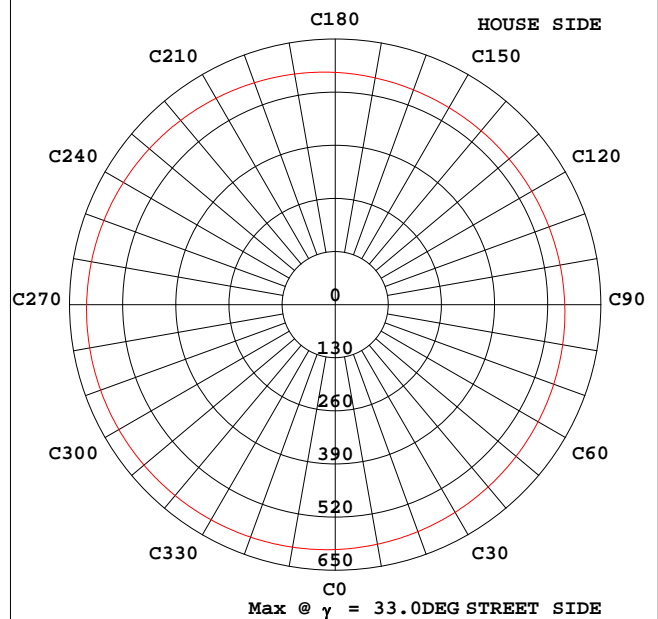
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STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 142.70 lm/W			
MODEL	34HID/830/277V/EX39	I _{max} (cd)	611.2	η street_up(%)	18.4
NOMINAL POWER(W)	34	LOR(%)	100.0	η street_down(%)	38.6
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	4887	η house_up(%)	14.0
NOMINAL FLUX(lm)	4887.28	MAXIMUM @(C,γ)	293,33.0	η house_down(%)	29.0
LAMPS INSIDE	1	η up(%)	32.4	76 FLASHAREA(m2)	
TEST VOLTAGE(V)	120	η down(%)	67.6	SLI	

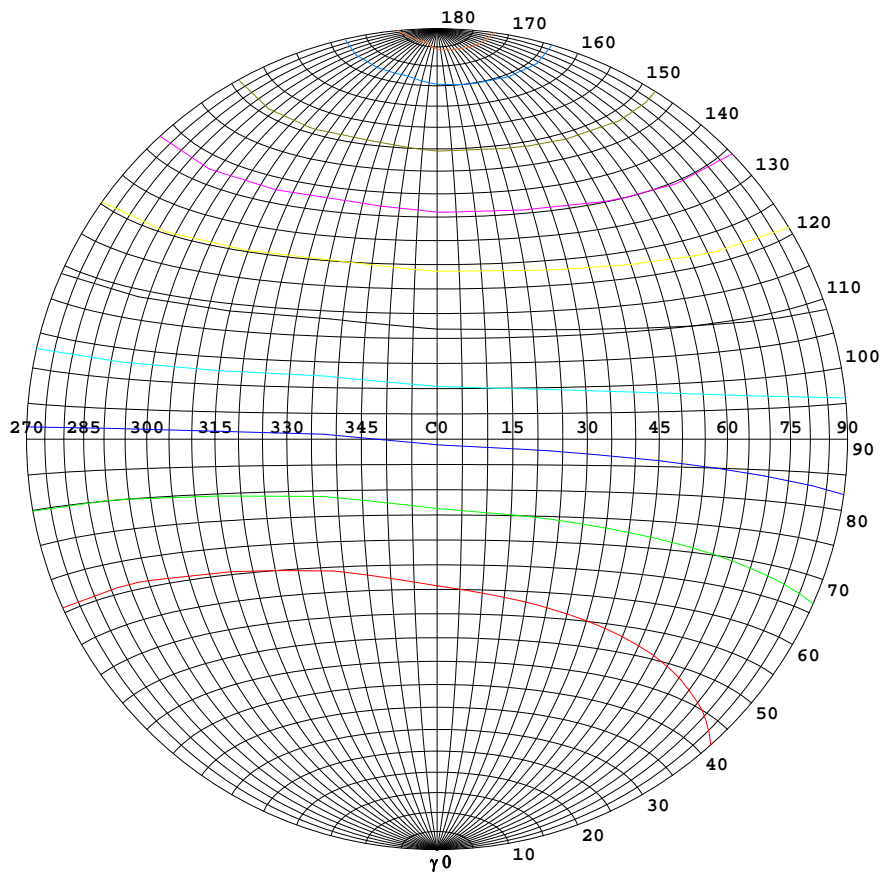
INTENSITY DISTRIBUTION DIAGRAM
IN C PLANSMAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.4DEG
 Operators:Zack
 Test Date:18 February 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60.2%
 Test Distance:2.436m [K=1.0132]
 Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:



Classification:

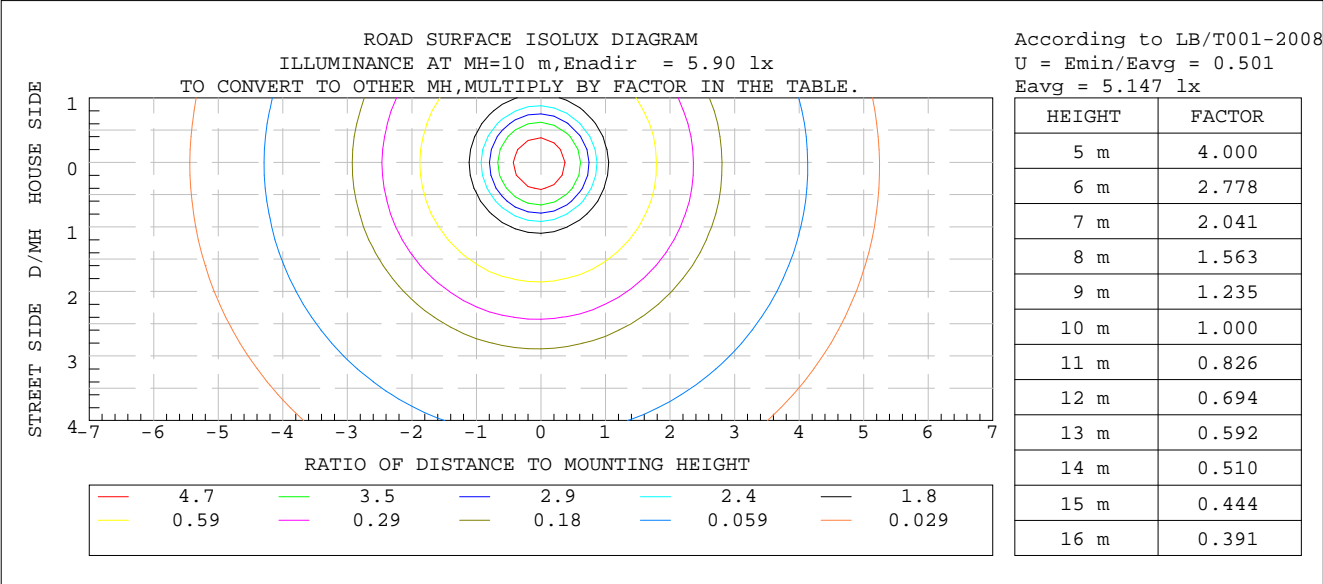
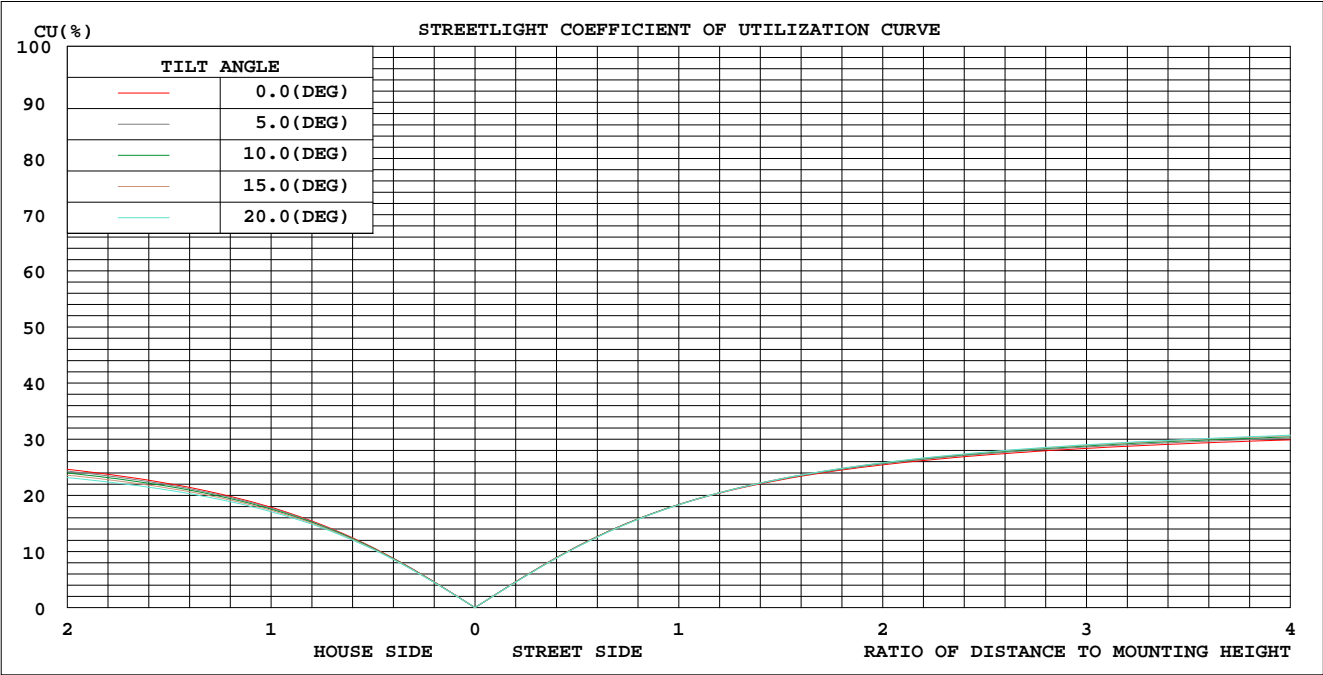
IES:Type VS - Very Short
 CIE:Broad - Short
 IES:None cut-off
 CIE:Non-cut-off
 Max.At80:100.1cd/klm
 Max.At90:89.44cd/klm
 Max.80-90:100.1cd/klm
 NRB 5101:Semi limited[10.4%]

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	611
90%	550
80%	489
70%	428
60%	367
50%	306
40%	244
30%	183
20%	122
10%	61
5%	31

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.4DEG
 Operators:Zack
 Test Date:18 February 2020

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 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60.2%
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 Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



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Test Speed: HIGH
Temperature:24.4DEG
Operators:Zack
Test Date:18 February 2020

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60.2%
Test Distance:2.436m [K=1.0132]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:

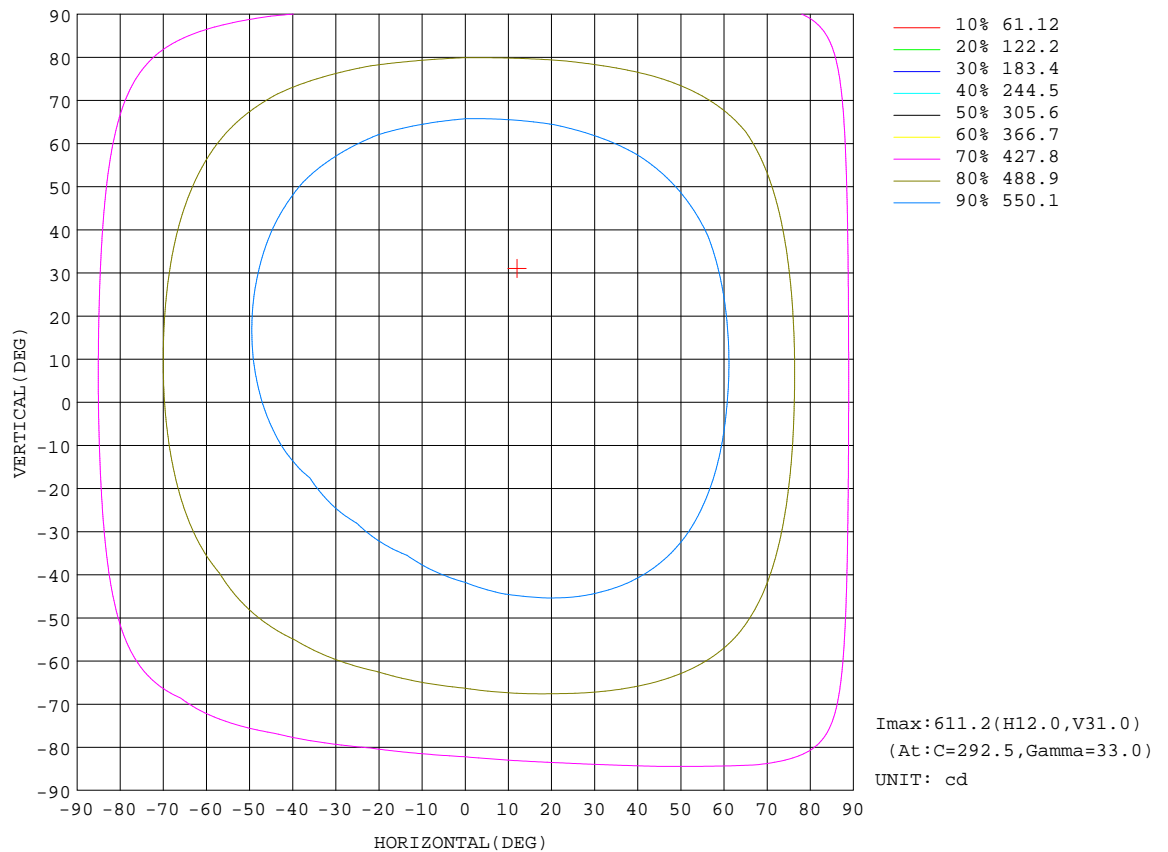
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lamp
10	595.1	587.6	581.1	579.0	584.4	591.3	596.8	598.2	0- 10	56.25	56.25	1.15
20	599.3	585.5	573.0	569.2	578.2	592.6	603.8	605.8	10- 20	166.9	223.1	4.57
30	600.1	581.8	564.5	558.8	571.1	592.1	608.0	610.3	20- 30	271.8	494.9	10.1
40	594.3	573.3	552.6	545.5	560.9	587.2	606.2	607.8	30- 40	365.9	860.9	17.6
50	578.8	556.8	534.6	526.4	544.5	573.8	593.7	594.6	40- 50	442.4	1303	26.7
60	552.4	531.2	509.1	500.5	520.0	550.2	569.3	569.2	50- 60	494.2	1797	36.8
70	516.1	496.9	476.3	468.3	488.0	516.3	533.4	532.4	60- 70	517.2	2315	47.4
80	471.8	455.4	437.3	430.1	449.3	474.2	488.4	487.1	70- 80	510.9	2826	57.8
90	422.0	408.8	393.6	387.2	405.5	426.1	437.0	435.5	80- 90	478.4	3304	67.6
100	369.0	358.8	346.3	341.5	357.8	374.1	381.9	380.6	90-100	424.9	3729	76.3
110	315.5	307.8	297.8	294.0	308.4	320.9	326.4	325.3	100-110	357.7	4086	83.6
120	263.0	257.2	249.5	246.7	259.4	268.4	272.2	271.6	110-120	284.6	4371	89.4
130	212.5	207.8	202.0	200.1	211.5	218.0	220.6	220.2	120-130	212.3	4583	93.8
140	164.8	160.9	156.4	155.2	165.2	170.1	172.0	171.7	130-140	146.0	4729	96.8
150	120.1	116.6	113.3	112.6	121.3	125.3	126.9	126.5	140-150	89.90	4819	98.6
160	80.08	76.80	74.15	73.99	81.25	84.35	86.13	86.06	150-160	46.82	4866	99.6
170	45.40	42.22	39.24	39.33	44.50	49.40	50.16	51.70	160-170	18.28	4884	99.9
180	0	0	0	0	0.0003	0	0	0	170-180	2.926	4887	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.4DEG
 Operators:Zack
 Test Date:18 February 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60.2%
 Test Distance:2.436m [K=1.0132]
 Remarks:

ISOCANDELA DIAGRAM

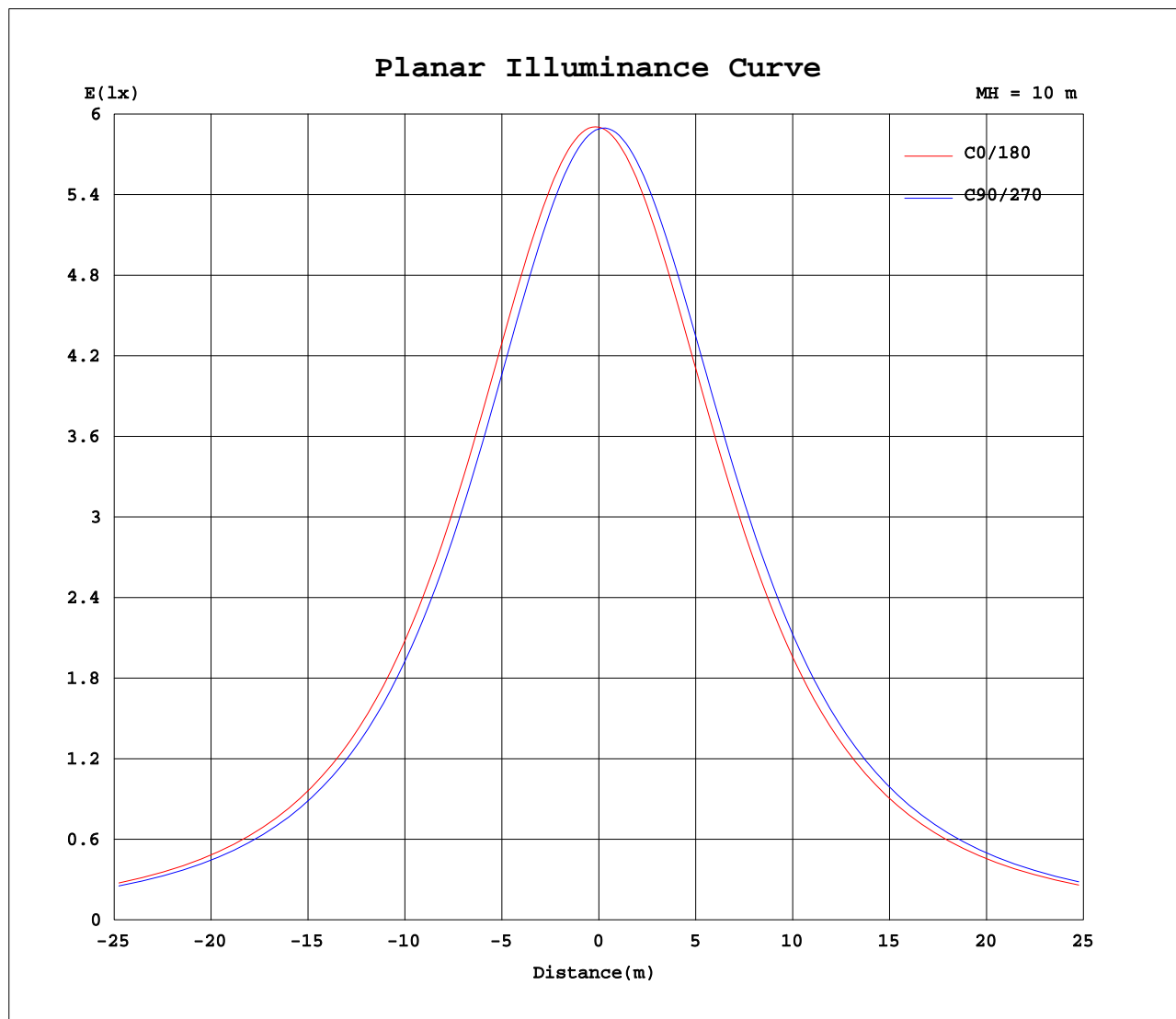
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NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:



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 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60.2%
Test Distance:2.436m [K=1.0132]
Remarks:

Planar Illuminance Curve



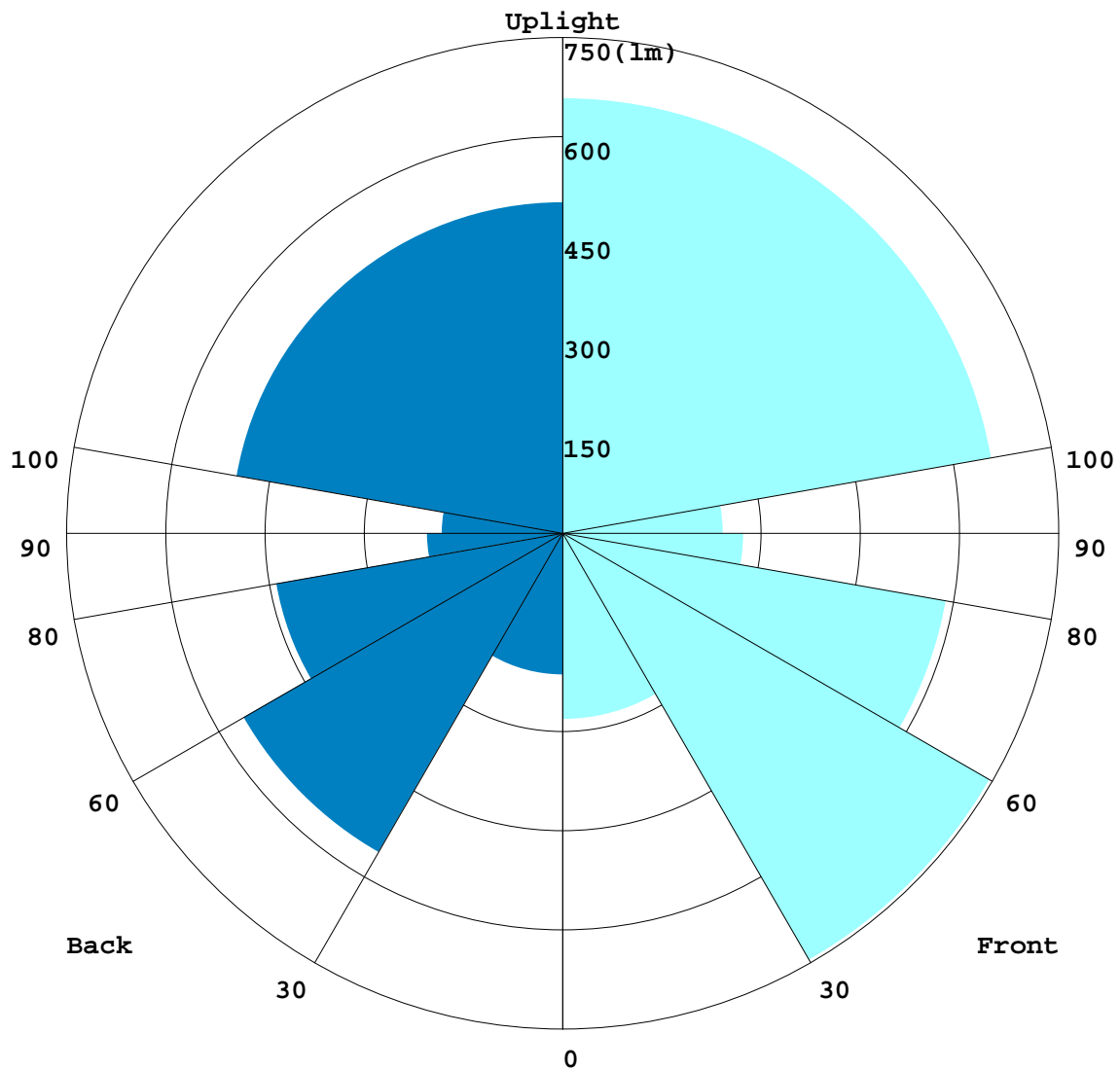
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 24.4DEG
Operators: Zack
Test Date: 18 February 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity: 60.2%
Test Distance: 2.436m [K=1.0132]
Remarks:

LCS REPORT

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.4DEG
 Operators:Zack
 Test Date:18 February 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60.2%
 Test Distance:2.436m [K=1.0132]
 Remarks:

BUG REPORT

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	281.12	5.8
FM - Front-Medium(30-60)	745.3	15.2
FH - Front-High(60-80)	588.49	12.0
FVH - Front-Very High(80-90)	273.22	5.6
Total Forward Light	2788.3	57.1

BL - Back-Low(0-30)	213.81	4.4
BM - Back-Medium(30-60)	557.2	11.4
BH - Back-High(60-80)	439.65	9.0
BVH - Back-Very High(80-90)	205.13	4.2
Total Back Light	2099	42.9

UL - Uplight-Low(90-100)	424.85	8.7
UH - Uplight-High(100-180)	1158.5	23.7
Total Up Light	1583.4	32.4

BUG(Back,Up,Glare) Rating	B1-U4-G3
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	1415.8	683.23	2099
Street Side	1888.1	900.13	2788.3

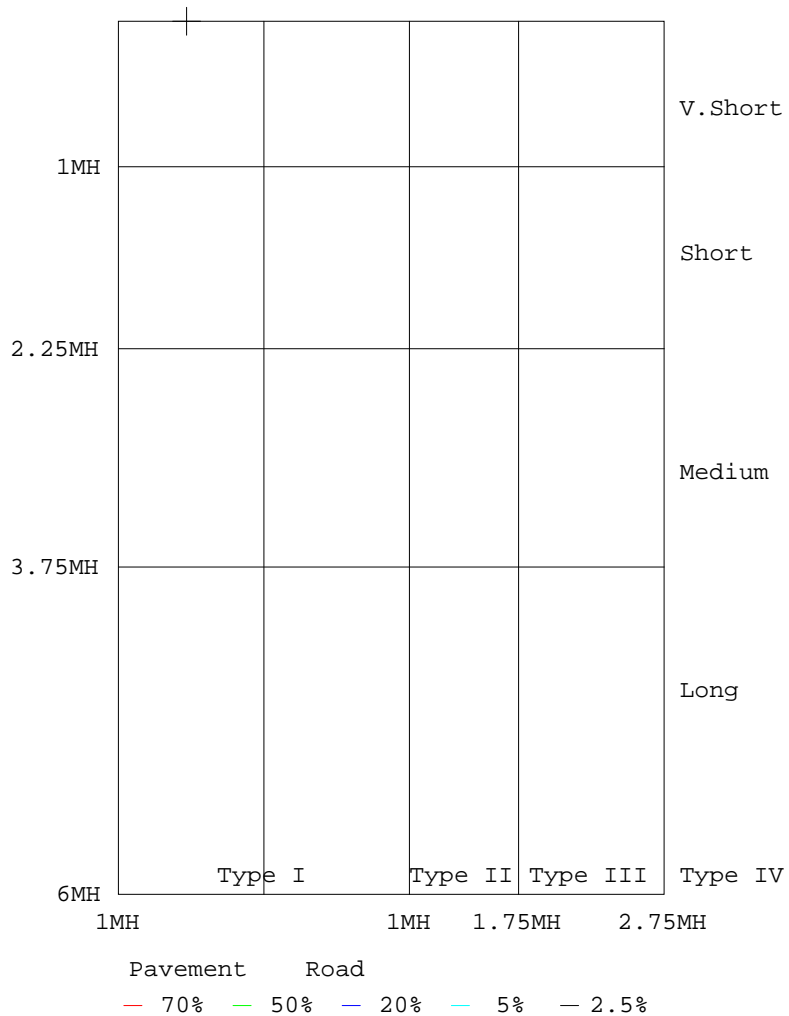
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.4DEG
 Operators:Zack
 Test Date:18 February 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60.2%
 Test Distance:2.436m [K=1.0132]
 Remarks:

ROAD ISOCANDELA REPORT

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 24.4DEG
 Operators: Zack
 Test Date: 18 February 2020

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 60.2%
 Test Distance: 2.436m [K=1.0132]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.2885A P:34.248W PF:0.9894 Freq:60.00Hz Lamp Flux:4887.28x1 lm		
NAME:	TYPE:34HID/830/277V/EX39	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: GREEN CREATIVE LTD	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	590	590	590	589	589	589	589	589	590	590	590	589	589	589	589	589			
5	593	591	589	587	585	584	584	585	588	589	590	592	593	594	594	593			
10	595	591	588	584	581	579	579	580	584	588	591	594	597	598	598	597			
15	597	592	587	581	577	574	574	576	581	586	592	597	601	602	602	600			
20	599	593	585	579	573	570	569	572	578	585	593	599	604	606	606	603			
25	600	592	584	576	569	565	564	567	575	583	593	601	606	609	609	605			
30	600	591	582	572	565	560	559	562	571	581	592	602	608	611	610	606			
35	598	589	578	568	559	554	553	556	567	578	591	601	608	611	610	606			
40	594	584	573	562	553	547	545	549	561	574	587	599	606	609	608	603			
45	588	577	566	555	545	538	537	541	554	567	582	594	601	604	603	598			
50	579	568	557	545	535	528	526	531	544	559	574	586	594	596	595	590			
55	567	557	545	533	523	516	514	519	533	548	563	576	583	585	583	578			
60	552	543	531	519	509	502	501	505	520	535	550	562	569	571	569	564			
65	535	526	515	504	494	487	485	490	505	519	534	546	553	554	552	547			
70	516	508	497	486	476	470	468	472	488	502	516	528	533	535	532	528			
75	495	487	477	467	457	451	450	454	469	483	496	507	512	513	511	507			
80	472	465	455	446	437	432	430	434	449	462	474	484	488	489	487	483			
85	447	441	433	424	416	411	409	413	428	439	451	459	463	464	462	459			
90	422	416	409	401	394	389	387	391	405	416	426	434	437	437	436	433			
95	396	391	384	377	370	366	365	368	382	391	400	407	410	410	408	406			
100	369	365	359	352	346	342	341	344	358	366	374	379	382	382	381	379			
105	342	339	333	328	322	319	318	320	333	341	347	352	354	354	353	351			
110	315	312	308	303	298	295	294	296	308	315	321	325	326	326	325	324			
115	289	286	282	278	274	271	270	272	284	289	294	298	299	299	298	297			
120	263	261	257	253	249	247	247	249	259	264	268	271	272	272	272	271			
125	237	236	232	229	226	224	223	225	235	239	243	245	246	246	246	245			
130	213	211	208	205	202	200	200	202	211	215	218	220	221	221	220	220			
135	188	187	184	182	179	178	177	179	188	191	194	195	196	196	196	195			
140	165	163	161	159	156	155	155	157	165	168	170	171	172	172	172	171			
145	142	141	138	136	135	134	134	135	143	145	147	148	149	149	149	148			
150	120	119	117	115	113	113	113	114	121	124	125	127	127	127	127	126			
155	99.4	98.0	95.9	94.4	93.1	92.5	92.7	93.8	101	102	104	105	106	106	106	105			
160	80.1	78.6	76.8	75.4	74.1	73.7	74.0	74.8	81.3	82.1	84.4	85.6	86.1	86.4	86.1	85.6			
165	62.3	60.5	59.1	57.7	56.9	56.5	56.8	57.8	63.3	63.6	66.2	67.3	68.0	68.3	68.1	67.7			
170	45.4	44.2	42.2	40.9	39.2	39.3	39.3	39.2	44.5	45.0	49.4	50.6	50.2	51.8	51.7	50.9			
175	28.0	26.4	24.6	21.5	16.8	15.4	18.7	18.2	21.1	20.1	19.4	19.3	29.1	32.7	34.7	34.3			
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:24.4DEG

Operators:Zack

Test Date:18 February 2020

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366

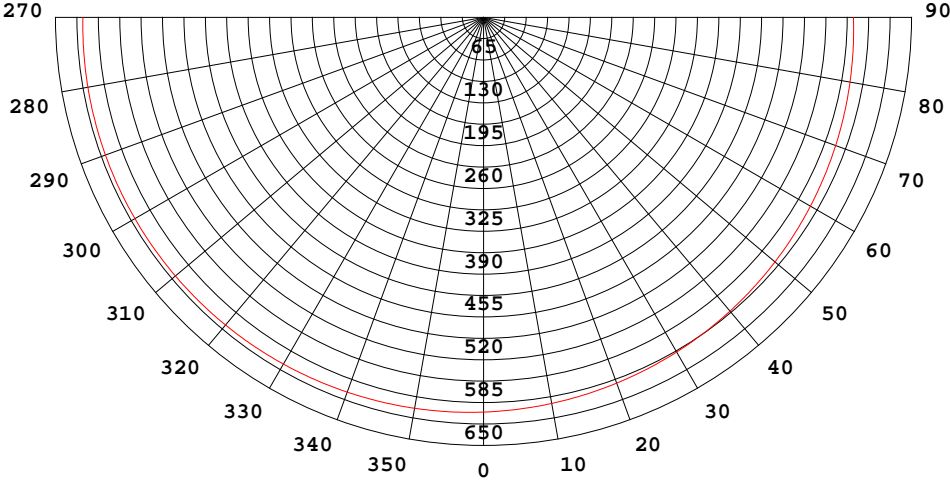
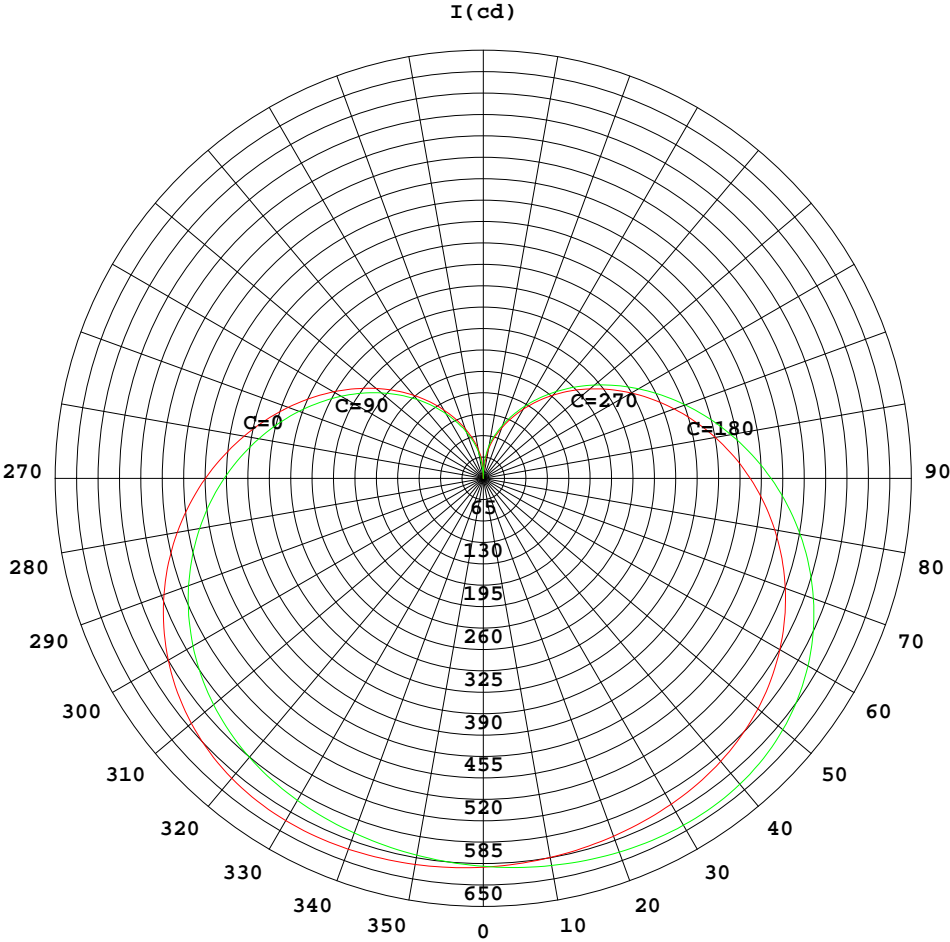
Humidity:60.2%

Test Distance:2.436m [K=1.0132]

Remarks:

FLUX DATA:

LOR:	100.0 %
STREET DOWN:	1888 lm
STREET UP:	900.1 lm
HOUSE DOWN:	1416 lm
HOUSE UP:	683.2 lm



$I_{\max}(100\%) = 611.2 \text{ cd}$

