TEST REPORT

Reference No.	:	713-LU412-R01 ver. 0
Applicant	:	VALUXILLUMINACION
Address.	:	POL.OLIVERAL NORTE FASEIII NAVE 19, 46190 RIBA-ROJA DE TURIA VALENCIA ESPANA.
Manufacturer.	:	VALUXILLUMINACION
Address.	:	POL.OLIVERAL NORTE FASEIII NAVE 19, 46190 RIBA-ROJA DE TURIA VALENCIA ESPANA.
Product Name	:	Bollard luminaire
Model No.	:	Gardenia 170 Type I&II
Ratings	:	200-240V~, 50-60Hz, 10W
Standards	:	IES LM-79-08 Electrical and Photometric Measurements of Solid-State Lighting Products
Date of Receipt sample	:	07-09-2017
Date of Test	:	11-09-2017 to 12-09-2017
Date of Issue	:	13-09-2017
Test Report Form No.	:	789-LU79081A-01B
Test Result	:	See the attached sheets

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:
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Avda. Miguel Hernández 27 46960 Aldaya-Valencia, Spain

Complied by:

Ing. Feliciano Bertina

Test engineer

Approved by:

Ing. Michael Paschier
Reviewer

VALUX ILUMINACION
C.I.R. 8-98.329.097
C/.Morvedre.30-B
16117-BETERA (Valencia) SPAIN

Measurement Point: N
Characteristic data (not shown on the marking plate) N
Purpose of the product (Description of intended use) LED flood lighting for generally lighting purpose. Other information refers to photos in end page.
Possible test case verdicts: - test case does not apply to the test object:..... N(.A.) / not included in the order - test object does meet the requirement.....P(ass) - test object does not meet the requirement: ..... F(ail) **Possible suffixes to the verdicts:** - suffix for detailed information for the client ..... .: - C(omment) - suffix for important information for factory inspection .. .: - M(anufacturing)
General remarks: "(See Attachment #)" refers to additional information appended to the report. “(See remark #)” refers to a remark appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a comma is used as the decimal separator. Remark: 1. Measurement was conducted at voltage 240VAC 50Hz and at a stable ambient temperature 25°C±1°C.

Test summary:

Testing is performed in accordance with the procedures outlined in IES LM-79-08. The sample is evaluated for photometric and electrical characteristics using an integrating sphere and a goniophotometer, located in an accredited, temperature and humidity-controlled, draft free photometric laboratory.

☒ Test No. 1 : Integrating Sphere Test

The sample was tested according to the IES LM-79-08.

Photometric paramters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25º C ± 1º C.

The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load. The AC power supply, while operating the product, shall have a sinusoidal voltage waveshape at the prescribed frequency 50Hz or 60Hz such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item. It was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.

☒ Test No.2: Goniophotometer Test

The sample was tested according to the IES LM-79-08.

Photometric paramters were measured using a type C goniophotometer and software.

The ambient temperature shall be maintained at 25° C ± 1° C, measured at a point not more than 1 m from the sample and at the same height as the sample.

The sample was operated at Rated Volts(see Table 1). The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load. The AC power supply, while operating the product, shall have a sinusoidal voltage waveshape at the prescribed frequency 50Hz or 60Hz such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item. It was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1° vertical intervals and 15° horizontal intervals and chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm by center test position.

IES LM-79-08			
Clause	Requirement – Test	Measuring result – Remark	Verdict
2.0	Ambient Conditions		P
2.1	General		P
2.2	Air Temperature		P
2.3	Thermal Condition for Mounting SSL Products		P
2.4	Air Movement		P
3.0	Power Supply Characteristics		P
3.1	Waveshape of AC power supply		N
3.2	Voltage regulation		N
4.0	Seasoning of SSL Product		N
	No seasoning of SSL product		N
5.0	Stabilisation of SSL Product		P
	SSL product has sufficiently stabilized before measurement	Stabilized 30 minute	P
6.0	Operation Orientation		P
	SSL product shall be stabilized and measured in intended operating orientation	As normal working	P
7.0	Electrical Settings		P
	SSL product shall be operated at rated voltage		P
	SSL product with dimming capability are tested at maximum input power condition		N
	SSL product with different modes are measured in all relevant modes		N
8.0	Electrical Instrumentations		P
8.1	Circuits		P
8.2	Uncertainties		P
9.0	Test Methods for Luminous Flux measurement		P
9.1	Integrating sphere with a spectroradiometer (Sphere-spectroradiometer system)		P
9.2	Integrating sphere with a photometer head (Sphere-photometer system)		N
9.3	Goniophotometer		P
10.0	Luminous Intensity Distribution		P
	Reporting acc. to IES LM-63		P
11.0	Luminous Efficacy		P
	Calculation	See table 1	P
12.0	Test Methods for Color Characteristics of SSL Products		P
	Measurements	See table 1	P
13.0	Uncertainty statement		N

Table 1	**Test data**		
Model:	Gardenia 170 Type I&II		
Rated Voltage:	200-240VAC	Rated Power (W):	15
Rated luminous flux (lm):	N	Ambient temperature 25 ±1 (°C):	Refer to below table

Test item	**Measured Value**	
	Integrating Sphere	**Goniophotometer**
Key Photometric Results		
Luminous Efficacy (Lumens/Watt)	---	90,4
Total Luminous Flux (Lumens)	---	1348
Peak Intensity (cd)	---	8116
Total Radiant Flux (Watts)	---	---
Correlated Color Temperature (CCT)	3034K	---
Color Rendering Index (CRI)	85,0	---
Chromaticity (Chroma x / Chroma y)	0,4345/0,4032	---
Chromaticity (Chroma u' / Chroma v')	0,2494/0,5207	---
Duv Value	-2,99e-05	---
Stabilization Time (Light and Power) (Minutes)	30	30
Total Run Time (Minutes)	35	90
Electrical Input Results		
Input Power (Watts)	---	59,8
Input Voltage (Volts AC)	---	239,9
Input Current (Amps)	---	0,256
Input Frequency (Hertz)	---	50
Power Factor	---	0,976
Additional Information		
Test Geometry Configuration	4π	Type C
Ambient Temperature (°C):	25,1	24,9
ISTMT (In-Situ Temperature Measurement) (°C):	N	

Supplementary Information:

- Absorbtion Correction used: NO
- Stabilisation was considered reached by: the variation (maximum-minimum) of at least 3 readings of the light output and electrical power over a period of 30 minutes is less than 0,5%.

EVERFINE

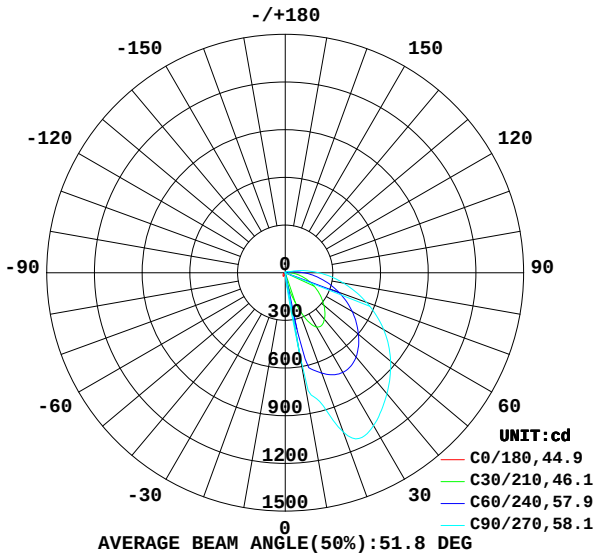
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:

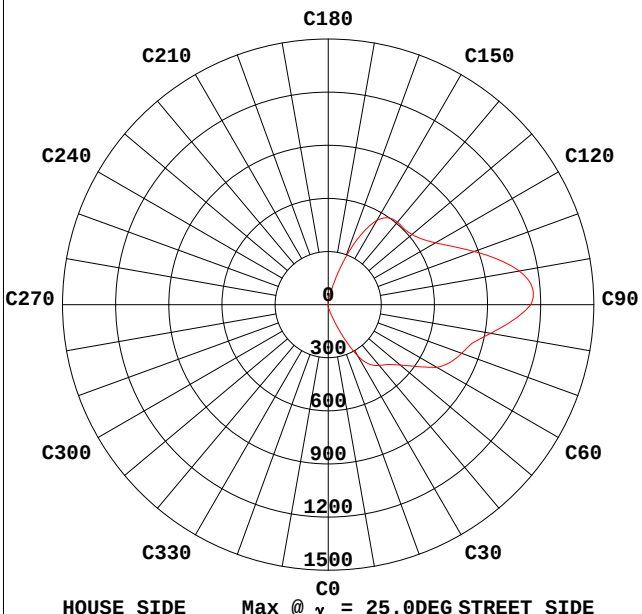
DATA OF LAMP		PHOTOMETRIC DATA		Eff: 92.14 lm/W	
MODEL	Bollard	Imax(cd)	1143	η street_up(%)	4.2
NOMINAL POWER(W)	15	LOR(%)	100.0	η street_down(%)	94.7
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	1225	η house_up(%)	0.2
NOMINAL FLUX(lm)	1225.18	MAXIMUM @(C,γ)	90,25.0	η house_down(%)	0.4
LAMPS INSIDE	1	η up(%)	4.8	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)	231.0	η down(%)	95.2	SLI	11.013

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS



AVERAGE BEAM ANGLE(50%):51.8 DEG

MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM



HOUSE SIDE Max @ γ = 25.0DEG STREET SIDE

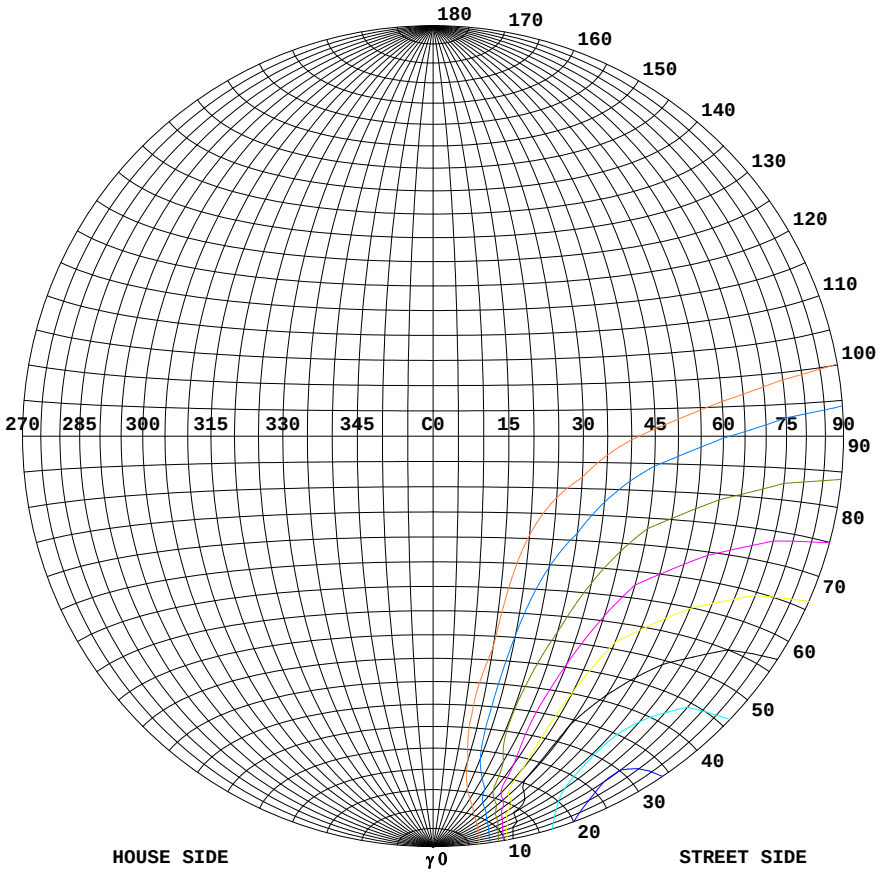
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:



Classification:

IES:Type V - Very Short
CIE:Narrow - Short
IES:None cut-off
CIE:Non-cut-off
Max.At80:361.1cd/klm
Max.At90:206.3cd/klm
Max.80-90:361.1cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1143
90%	1029
80%	915
70%	800
60%	686
50%	572
40%	457
30%	343
20%	229
10%	114
5%	57

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks:

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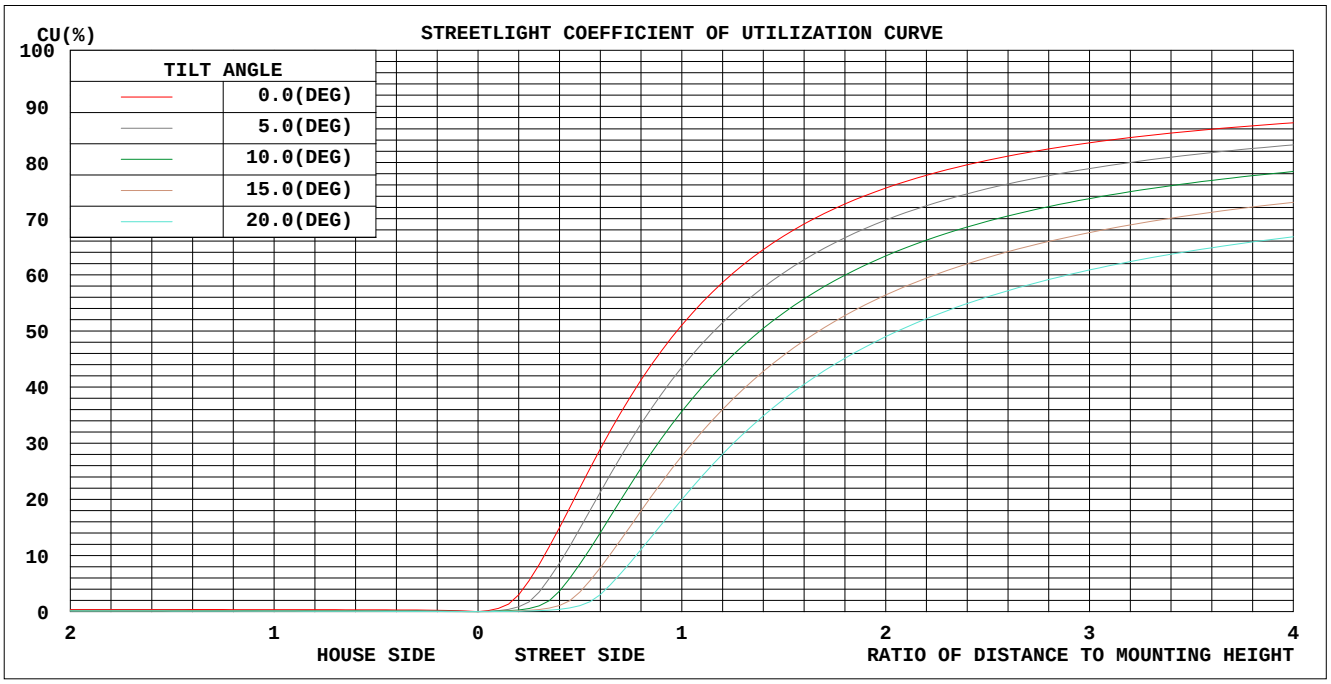
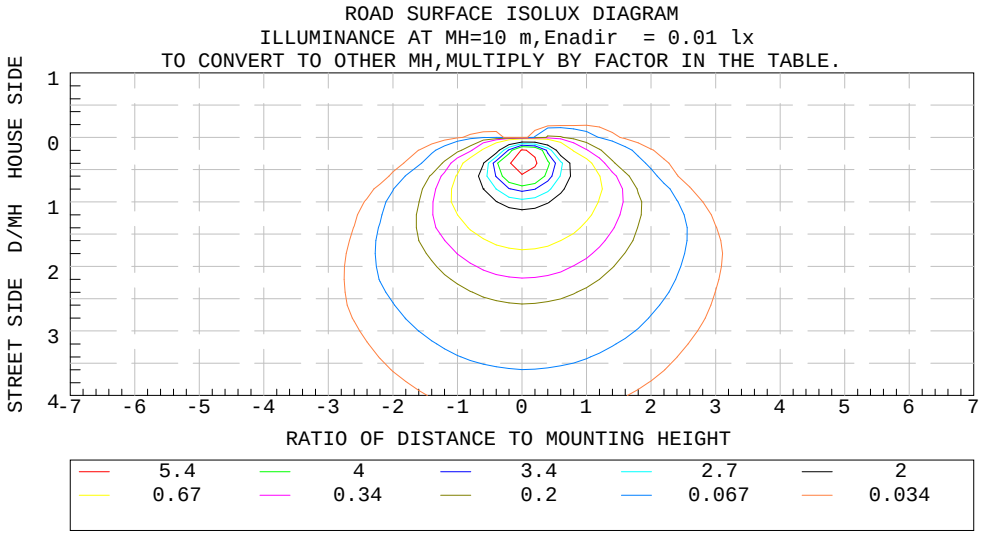
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM





According to LB/T001-2008:
U = Emin/Eavg = 0.002
Eavg = 1.235 lx

HEIGHT	FACTOR
5 m	4.000
6 m	2.778
7 m	2.041
8 m	1.563
9 m	1.235
10 m	1.000
11 m	0.826
12 m	0.694
13 m	0.592
14 m	0.510
15 m	0.444
16 m	0.391

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks:

EVERFINE

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	0.9254	65.37	502.5	114.0	4.459	0.4263	0.6963	0.6413	0- 10	2.161	2.161	0.21,0.21
20	5.223	466.1	1066	586.2	18.72	0.1907	0.6199	0.6719	10- 20	51.04	53.20	5.19,5.19
30	6.773	476.2	1111	612.4	25.50	0.1907	0.6199	0.6194	20- 30	116.0	169.2	16.5,16.5
40	6.644	445.8	995.0	581.9	23.46	0.1907	0.6199	0.5059	30- 40	156.8	326.0	31.8,31.8
50	5.315	383.8	865.1	507.7	18.67	0.1907	0.7141	0.5257	40- 50	172.3	498.3	48.6,48.6
60	3.723	302.8	715.4	408.1	13.54	0.3734	0.7404	0.5628	50- 60	166.6	664.9	64.9,64.9
70	2.173	214.1	543.8	297.2	8.189	0.4503	0.7666	0.6000	60- 70	142.4	807.4	78.8,78.8
80	0.9749	129.2	370.2	187.0	3.486	0.4913	0.9272	0.6199	70- 80	105.3	912.7	89,89
90	0.3561	55.14	211.5	89.17	1.150	0.5260	1.252	0.7236	80- 90	63.62	976.3	95.2,95.2
100	0.2657	10.60	78.01	17.41	0.7521	0.7623	1.626	0.9273	90-100	27.14	1003	97.9,97.9
110	0.2657	8.304	20.30	11.28	0.7084	0.8889	2.062	1.184	100-110	7.645	1011	98.6,98.6
120	0.2657	6.158	17.44	8.736	0.7084	1.147	2.559	1.690	110-120	5.026	1016	99.1,99.1
130	0.3041	4.154	13.02	6.204	0.7084	1.316	3.255	1.920	120-130	3.701	1020	99.5,99.5
140	0.3859	2.719	8.689	4.062	0.7527	1.277	3.817	2.175	130-140	2.499	1022	99.7,99.7
150	0.4418	1.719	5.426	2.707	0.7527	1.239	3.863	2.140	140-150	1.539	1024	99.9,99.9
160	0.4491	1.145	3.025	1.558	0.7527	1.216	2.548	1.499	150-160	0.8514	1025	100,100
170	0.5366	0.8121	1.553	1.035	0.7527	1.193	1.859	1.424	160-170	0.3783	1025	100,100
180	0.7084	0.7629	1.162	0.9580	0.8412	0.9046	1.240	0.9580	170-180	0.1066	1025	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

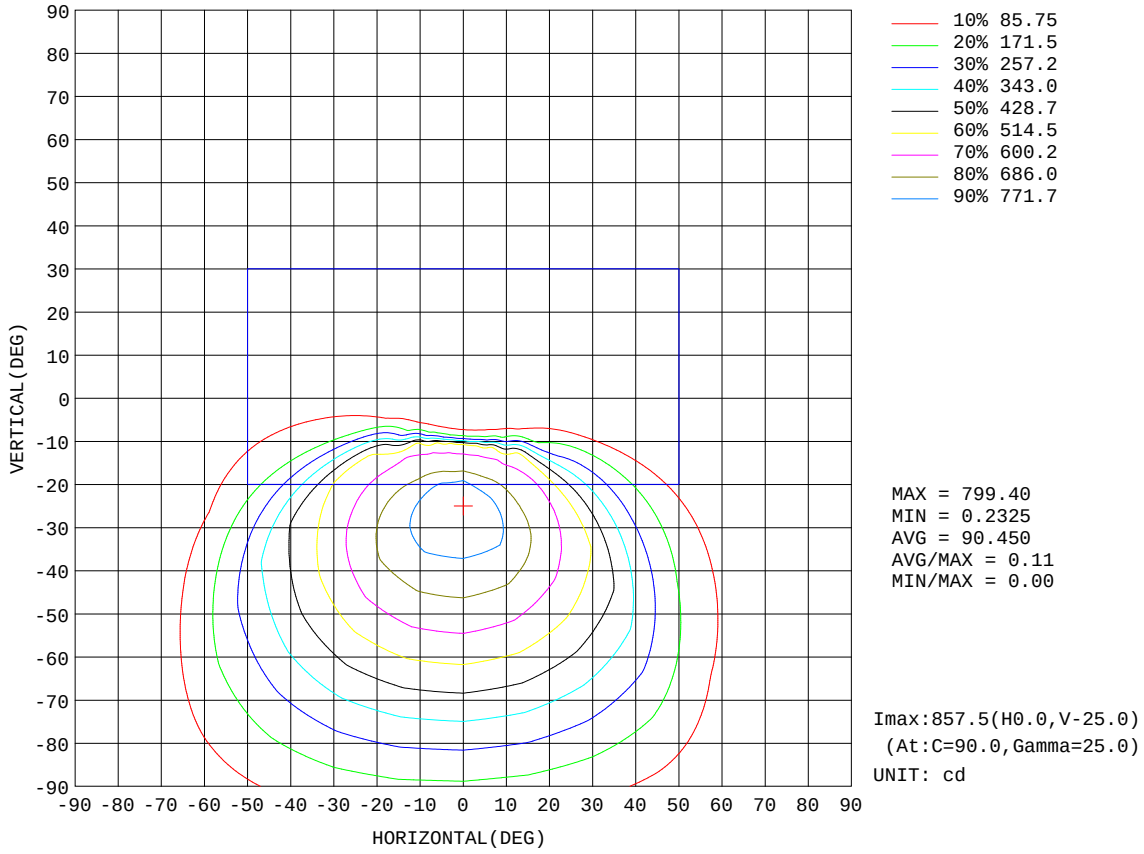
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks: Parabola-15W-5(5050 30K RA80)

EVERFINE

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks:

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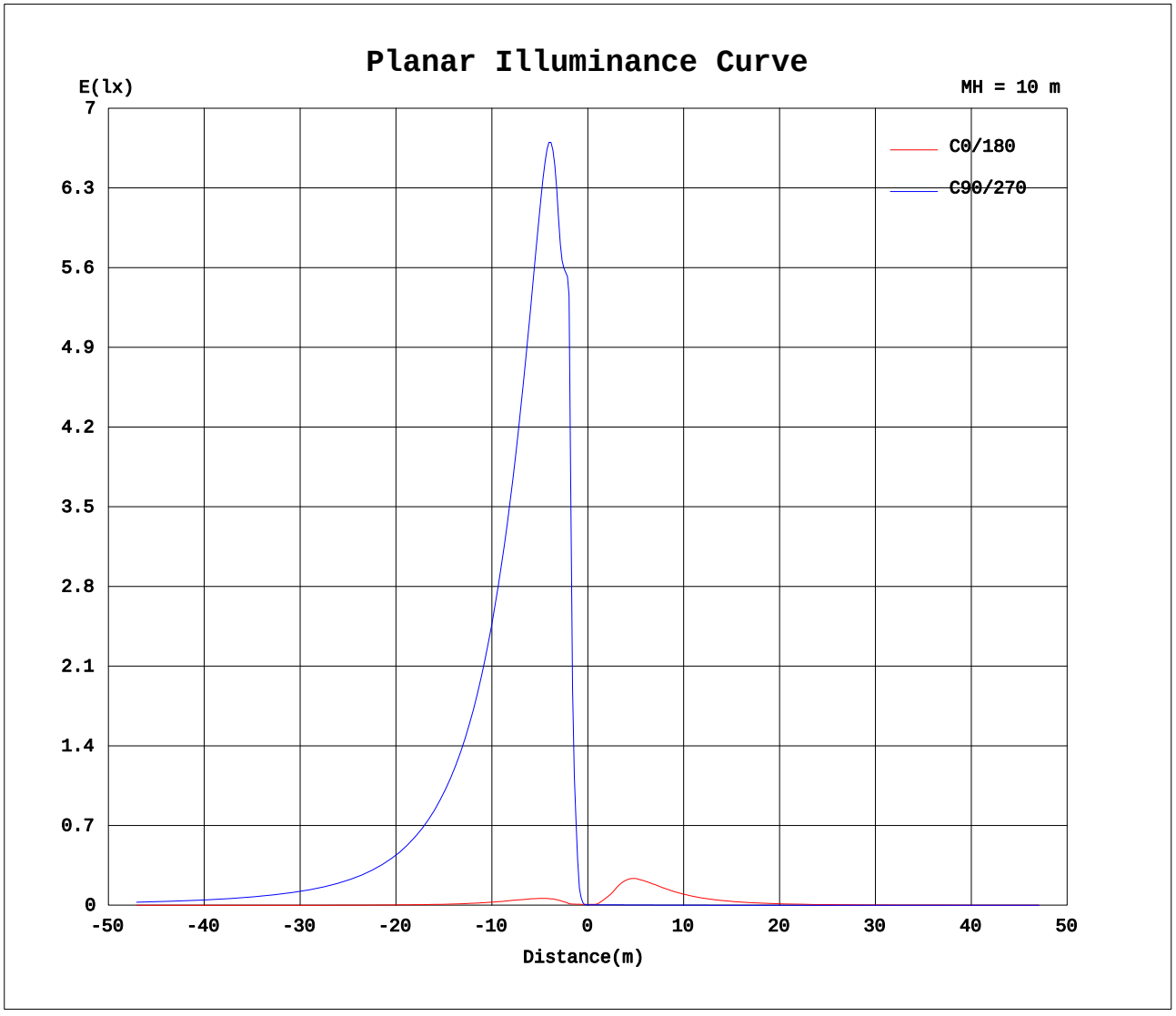
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks:

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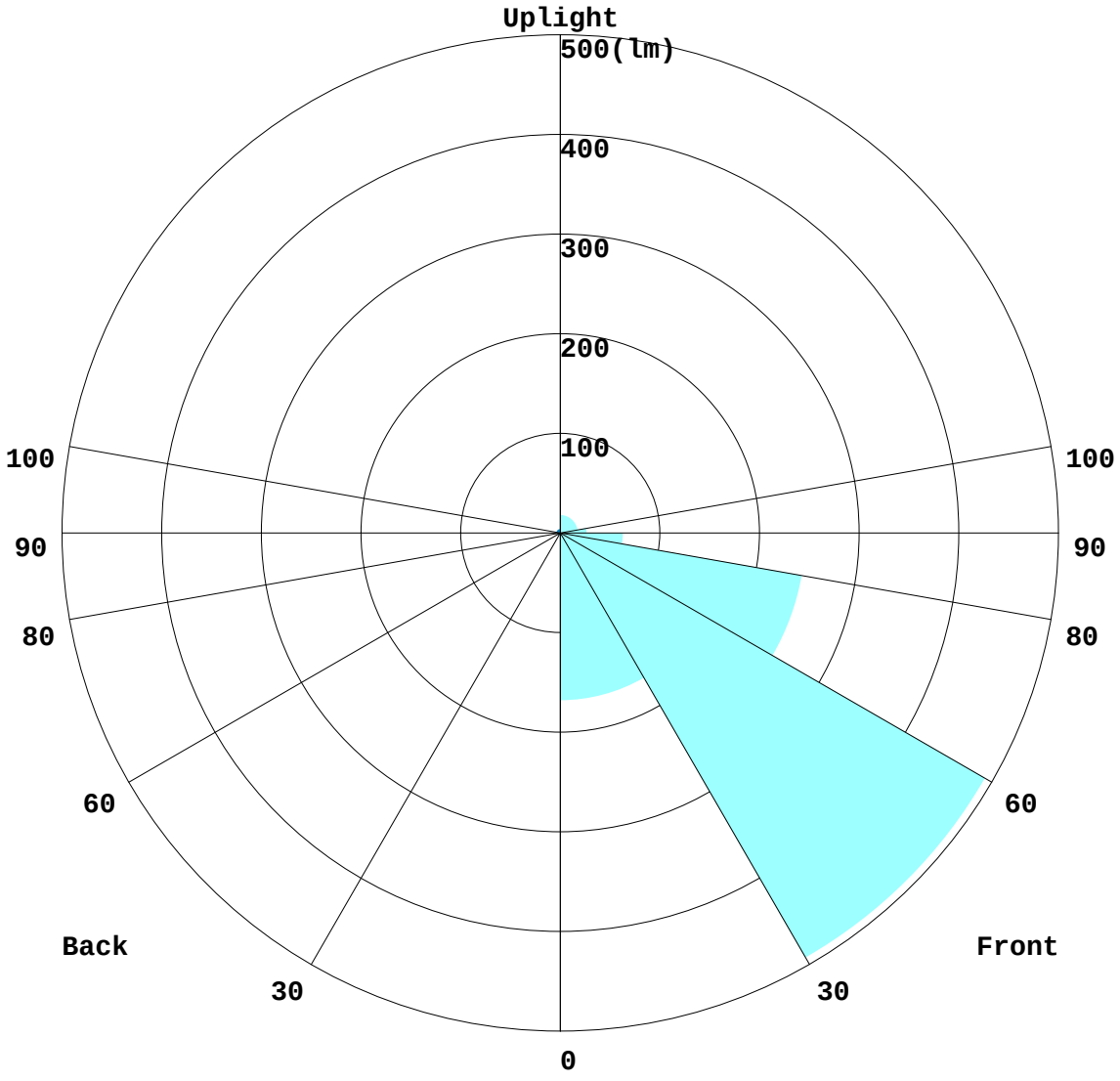
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LCS REPORT

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-55	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks: Parabola-15W-5(5050 30K RA80)

EVERFINE

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

BUG REPORT

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-ilumiancion	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	168.15	16.4
FM - Front-Medium(30-60)	492.47	48.0
FH - Front-High(60-80)	246.24	24.0
FVH - Front-Very High(80-90)	63.166	6.2
Total Forward Light	1014.6	99.0
BL - Back-Low(0-30)	1.0795	0.1
BM - Back-Medium(30-60)	3.2424	0.3
BH - Back-High(60-80)	1.465	0.1
BVH - Back-Very High(80-90)	0.44974	0.0
Total Back Light	10.541	1.0
UL - Uplight-Low(90-100)	27.138	2.6
UH - Uplight-High(100-180)	21.746	2.1
Total Up Light	48.884	4.8

BUG(Back,Up,Glare) Rating	B0-U2-G1

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	6.2366	4.3039	10.541
Street Side	970.03	44.58	1014.6

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks:

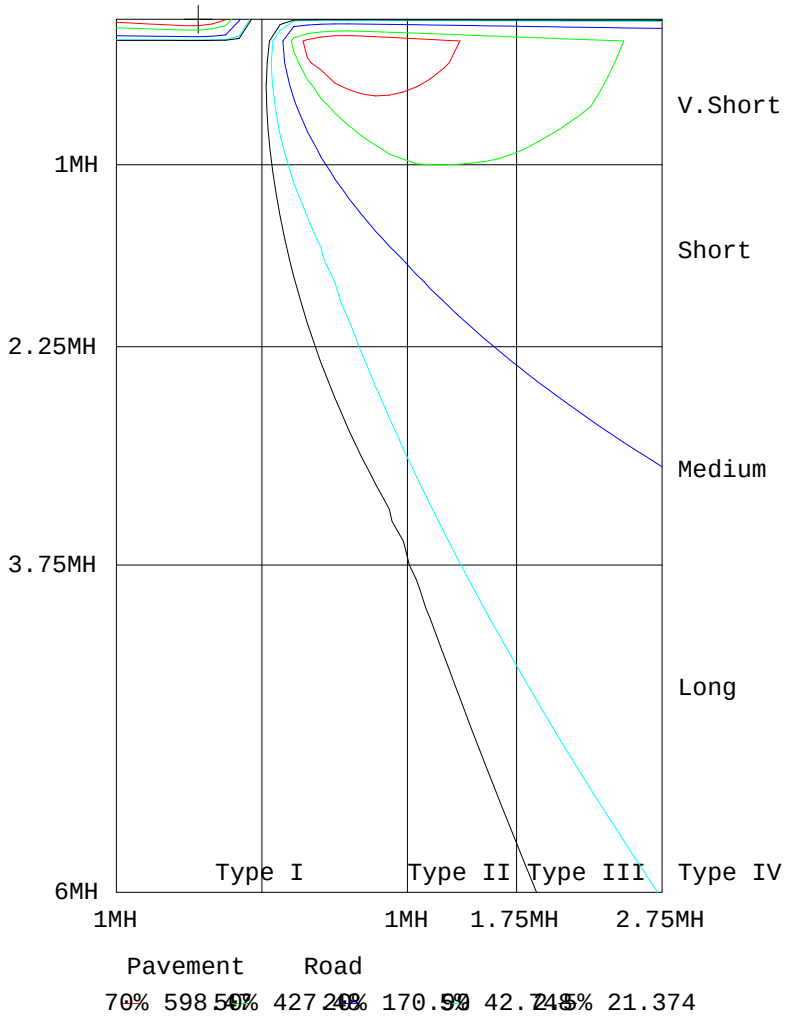
EVERFINE

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ROAD ISOCANDELA REPORT

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]

EVERFINE

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.70V I:0.0716A P:15.007W PF:0.9453 Freq:50.00Hz Lamp Flux:1225.18x1 lm		
NAME: Gardenia 170 Type I&II-15W-5	TYPE:	WEIGHT:
SPEC.: 3000K	DIM.:	SERIAL No.:
MFR.: Valux-iluminacion	SUR.:	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
5	0.71	0.62	2.85	4.40	9.94	13.5	20.5	18.0	11.7	8.41	5.18	1.98	0.71	0.68	0.61	0.57	0.64	0.64	0.62
10	0.93	5.51	41.0	65.4	157	287	503	410	210	114	64.3	20.4	4.46	0.84	0.57	0.43	0.62	0.68	0.70
15	3.09	20.4	128	267	627	655	838	740	587	537	188	67.6	10.4	2.08	0.54	0.19	0.56	0.66	0.62
20	5.22	37.3	227	466	672	759	1066	905	647	586	433	106	18.7	2.79	0.54	0.19	0.51	0.64	0.62
25	6.20	47.1	335	478	708	841	1143	991	699	606	550	133	24.1	2.96	0.54	0.19	0.46	0.62	0.62
30	6.77	51.2	394	476	724	854	1111	979	721	612	563	148	25.5	2.97	0.54	0.19	0.37	0.43	0.62
35	6.82	51.1	402	466	719	823	1056	932	711	603	548	151	25.2	2.64	0.54	0.19	0.43	0.54	0.62
40	6.64	49.2	383	446	693	775	995	877	677	582	522	146	23.5	2.52	0.54	0.19	0.43	0.57	0.62
45	6.03	45.5	354	418	652	723	932	821	634	549	484	138	21.2	1.95	0.54	0.19	0.43	0.58	0.70
50	5.32	41.1	318	384	602	668	865	761	585	508	439	126	18.7	1.73	0.54	0.19	0.43	0.58	0.71
55	4.52	36.3	280	345	546	610	794	698	532	460	391	113	16.1	1.28	0.54	0.24	0.43	0.59	0.73
60	3.72	31.2	241	303	486	547	715	628	476	408	338	98.5	13.5	1.14	0.54	0.37	0.43	0.60	0.74
65	2.97	26.1	202	258	423	481	630	553	418	353	285	83.8	10.8	0.84	0.62	0.42	0.43	0.61	0.75
70	2.17	20.8	163	214	358	413	544	476	357	297	233	68.6	8.19	0.44	0.65	0.45	0.43	0.62	0.77
75	1.51	15.7	125	171	295	344	456	398	296	241	182	52.9	5.66	0.43	0.68	0.47	0.58	0.68	0.74
80	0.97	11.0	90.1	129	232	277	370	323	237	187	133	37.9	3.49	0.43	0.70	0.49	0.65	0.72	0.93
85	0.62	6.83	57.9	90.2	173	213	288	250	179	136	88.4	23.8	1.72	0.42	0.72	0.51	0.75	0.80	1.16
90	0.36	3.91	30.9	55.1	118	153	212	183	127	89.2	49.5	12.7	1.15	0.41	0.75	0.53	0.93	0.86	1.25
95	0.27	3.06	14.3	26.0	69.3	99.4	142	122	79.4	47.6	19.8	7.75	0.93	0.40	0.79	0.62	0.98	1.05	1.38
100	0.27	2.83	10.93	10.6	29.1	50.4	78.0	65.0	37.0	17.4	11.1	6.94	0.75	0.43	0.89	0.76	1.03	1.24	1.63
105	0.27	2.52	10.16	9.01	14.7	18.1	27.8	22.9	14.7	12.0	10.29	6.32	0.71	0.48	0.94	0.81	1.18	1.34	1.86
110	0.27	2.17	8.91	8.30	13.6	15.5	20.3	17.8	13.2	11.3	9.24	5.46	0.71	0.48	1.00	0.89	1.49	1.55	2.06
115	0.27	1.82	7.52	7.25	12.3	14.5	19.4	16.9	12.4	10.1	7.94	4.65	0.71	0.49	1.26	0.90	1.65	1.80	2.30
120	0.27	1.51	6.21	6.16	10.8	12.9	17.4	15.2	11.0	8.74	6.76	3.85	0.71	0.51	1.32	1.15	1.80	1.98	2.56
125	0.27	1.29	5.12	5.06	9.17	11.2	15.3	13.2	9.53	7.44	5.58	3.16	0.71	0.55	1.37	1.34	2.11	2.29	2.95
130	0.30	1.19	4.11	4.15	7.63	9.49	13.02	11.30	7.16	6.20	4.65	2.68	0.71	0.58	1.70	1.32	2.29	2.54	3.25
135	0.35	1.05	3.41	3.34	6.21	7.75	10.86	9.10	6.65	5.07	3.79	2.23	0.71	0.63	1.86	1.30	2.53	2.59	3.74
140	0.39	0.97	2.79	2.72	5.03	6.02	8.69	6.96	5.53	4.06	3.04	1.92	0.75	0.67	1.88	1.28	2.50	2.64	3.82
145	0.42	0.76	2.40	2.20	4.03	4.59	6.90	5.58	4.40	3.33	2.48	1.67	0.75	0.71	1.90	1.26	2.51	2.68	3.84
150	0.44	0.79	2.02	1.72	3.16	3.60	5.43	4.34	3.33	2.71	2.05	1.30	0.75	0.71	1.92	1.24	2.53	2.73	3.86
155	0.44	0.78	1.71	1.38	2.42	2.79	4.04	3.45	2.48	2.03	1.80	1.25	0.75	0.71	1.94	1.23	2.29	2.35	3.10
160	0.45	0.78	1.64	1.15	1.86	2.05	3.02	2.69	1.86	1.56	1.43	1.17	0.75	0.71	1.84	1.22	1.72	1.80	2.55
165	0.48	0.77	1.54	0.99	1.49	1.61	2.17	1.87	1.41	1.24	1.24	1.00	0.75	0.71	1.82	1.20	1.66	1.43	2.05
170	0.54	0.76	1.51	0.81	1.18	1.18	1.55	1.45	1.07	1.04	1.15	0.90	0.75	0.71	1.79	1.19	1.57	1.43	1.86
175	0.62	0.76	1.48	0.78	1.16	0.99	1.16	1.26	0.98	0.96	1.08	0.88	0.75	0.71	1.39	1.19	1.42	1.43	1.85
180	0.71	0.75	1.47	0.76	1.12	0.93	1.16	1.17	0.96	0.96	1.05	0.87	0.84	0.71	1.32	0.90	0.99	1.11	1.24

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:13.9DEG
Operators:
Test Date:2023-03-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.404.7
Humidity:38.0%
Test Distance:10.000m [K=1.0000]
Remarks: