

Date:	_____
Project:	_____
Price:	_____

**1.1 Product Information:**

Organization Name	i-luminosity	
Brand Name	IL	
Model Number	ILWRJWRD	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	LED Luminaire	
Rated Voltage / Frequency	120-277Vac, 50/60Hz	
Nominal Power	32W	
Rated Initial Lamp Lumen	--	
Declared CCT	5000K	
LED Model	SMD2835	
Sample Number		
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

**Photo**



Date:	_____
Project:	_____
Price:	_____

**1.2 Test Specifications:**

Date of Receipt	Aug.10,2019
Date of Test	Aug.13,2019
Test item	<ol style="list-style-type: none"> <li>1. Total Luminous Flux</li> <li>2. Luminous Distribution Intensity</li> <li>3. Luminous Efficacy</li> <li>4. Electrical Parameters</li> </ol>
Reference Standard	<ol style="list-style-type: none"> <li>1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products</li> <li>2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products</li> <li>3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources</li> <li>4. CIE 15-2004 Technical Report Colorimetry</li> <li>5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source</li> <li>6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems</li> </ol>

**1.3 Test Methods**

**1) Photometric and Light Distribution Measurement – Goniophotometer Method:**

Photometric parameters were measured using the 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 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1 ° vertical intervals and 22.5 ° horizontal intervals.

**2) Electrical Measurements:**

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at 25 °C ± 1 °C. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.

Date:	_____
Project:	_____
Price:	_____

**2.1 Electrical, Photometric and Chromaticity Measurements**

<b>Test date</b>	2019-08-13	<b>Test Ambient:</b>	25.1 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	60
<b>Model Number</b>	ILWRJWRD	<b>Total Operating Time (min)</b>	90

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
	120.0	60	0.2565	30.40	0.9875	10.1

**Photometric Measurement – Goniophotometer Method (Test Distance: 26.000m):**

Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
Total Luminous (lm)	4285.0
Luminous Efficacy (lm/W)	140.95
Beam Angle ( ° )	106.9
Center Beam Candle Power (cd)	1499

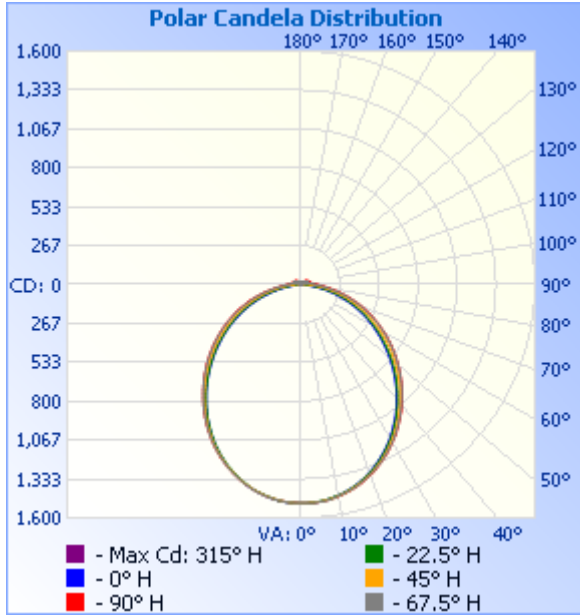
Date:	_____
Project:	_____
Price:	_____

**Zonal Lumen Tabulation**

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	1,146.3	26.8%
0-40	1,856.8	43.3%
0-60	3,219.2	75.1%
60-90	914.8	21.4%
70-100	468.1	10.9%
90-120	94.7	2.2%
0-90	4,134.0	96.5%
90-180	150.6	3.5%
0-180	4,284.6	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	141.6	3.3%	90-100	45.8	1.1%
10-20	402.9	9.4%	100-110	18.4	0.4%
20-30	601.7	14.0%	110-120	30.5	0.7%
30-40	710.5	16.6%	120-130	22.9	0.5%
40-50	720.9	16.8%	130-140	16.3	0.4%
50-60	641.5	15.0%	140-150	9.9	0.2%
60-70	492.5	11.5%	150-160	4.9	0.1%
70-80	300.1	7.0%	160-170	1.5	0%
80-90	122.2	2.9%	170-180	0.4	0%

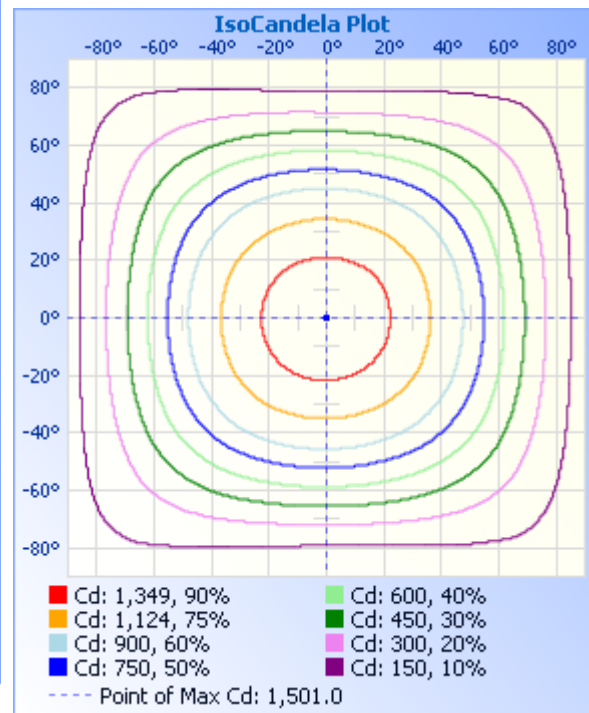
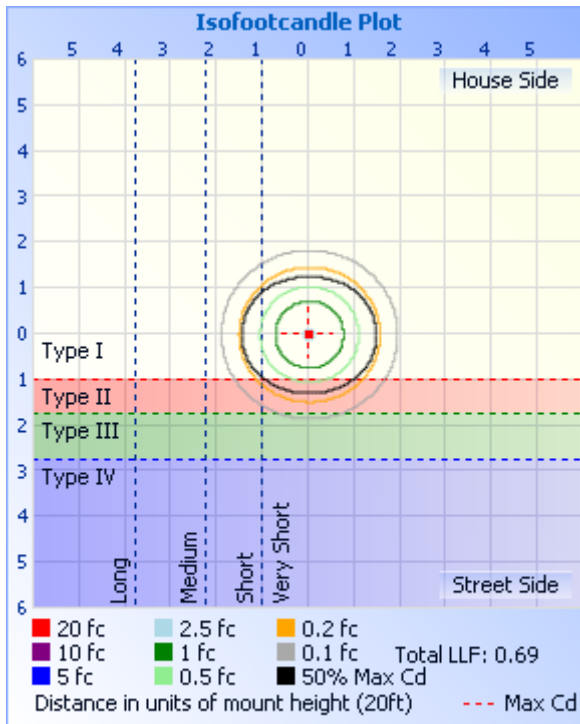
**Photometric Data**



**Illuminance at a Distance**

	Center Beam fc	Beam Width	
4.0ft	93.7 fc	10.2 ft	11.5 ft
8.0ft	23.4 fc	20.4 ft	22.9 ft
12.0ft	10.4 fc	30.6 ft	34.4 ft
16.0ft	5.9 fc	40.7 ft	45.9 ft
20.0ft	3.7 fc	50.9 ft	57.3 ft

■ Vert. Spread: 103.7°  
 ■ Horiz. Spread: 110.2°





**i-LUMINOSITY**  
LED LIGHTING FIXTURES

Date:	_____
Project:	_____
Price:	_____

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	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499		
5	1489	1489	1493	1490	1493	1490	1493	1495	1493	1493	1492	1492	1492	1491	1490	1490		
10	1465	1470	1473	1465	1467	1466	1471	1473	1474	1471	1469	1468	1466	1463	1465	1467		
15	1426	1430	1434	1425	1426	1426	1433	1437	1439	1435	1433	1426	1426	1421	1423	1426		
20	1371	1376	1379	1366	1368	1372	1380	1384	1388	1384	1381	1370	1367	1363	1367	1371		
25	1304	1308	1310	1295	1298	1303	1315	1323	1324	1320	1314	1301	1295	1293	1300	1303		
30	1226	1229	1228	1213	1214	1222	1235	1247	1249	1244	1236	1218	1211	1209	1219	1225		
35	1138	1144	1136	1118	1120	1129	1148	1161	1163	1159	1150	1125	1116	1115	1128	1137		
40	1043	1046	1036	1018	1017	1027	1051	1068	1071	1065	1050	1023	1012	1013	1030	1043		
45	944	945	933	909	908	920	948	971	973	966	946	915	903	906	926	943		
50	842	841	823	799	795	809	840	868	871	863	839	804	790	794	818	839		
55	738	734	714	687	681	697	730	762	766	756	728	691	674	682	708	734		
60	632	627	605	575	566	585	618	654	659	648	616	578	561	570	597	627		
65	527	518	495	463	452	475	509	546	553	539	506	463	445	459	488	521		
70	423	413	386	352	340	364	401	439	446	432	396	352	332	349	382	414		
75	319	310	281	246	231	255	297	333	342	328	289	245	222	241	279	312		
80	222	215	184	148	130	156	199	235	246	231	191	146	122	143	182	217		
85	146	138	106	67.7	46.7	74.8	119	153	168	152	112	66.8	40.1	64.9	106	140		
90	96.5	89.2	60.2	26.6	5.84	31.3	69.6	100	114	101	66.0	27.3	4.90	26.8	60.9	91.0		
95	73.1	66.5	44.6	9.95	4.84	11.7	50.4	74.5	85.6	75.4	48.8	9.33	5.05	9.57	45.4	68.2		
100	39.2	21.6	6.78	14.6	4.84	16.3	6.99	30.7	49.0	24.5	6.24	14.9	5.16	15.6	6.03	21.3		
105	2.15	2.73	31.8	14.6	4.95	16.6	35.0	2.06	2.16	2.93	34.8	14.8	5.00	15.3	33.2	2.91		
110	57.3	49.2	31.7	15.3	4.95	16.1	33.8	53.2	61.3	53.4	33.1	14.1	4.90	15.6	32.7	50.2		
115	54.2	47.5	29.2	14.3	4.54	14.7	31.4	49.6	56.5	49.3	30.7	13.0	4.11	14.7	30.2	47.9		
120	49.5	43.3	28.5	11.9	3.55	12.2	29.4	45.3	51.2	45.1	29.5	11.0	3.27	12.6	29.1	44.1		
125	44.6	39.7	27.2	10.9	2.19	10.8	27.5	40.6	45.5	40.3	26.0	9.49	2.55	11.5	27.4	40.0		
130	40.1	35.7	25.3	11.3	2.40	10.7	25.4	35.7	40.3	35.9	23.9	9.39	2.87	11.5	25.6	36.2		
135	35.3	31.5	22.6	11.6	3.38	10.8	22.5	31.2	35.1	31.2	21.6	9.39	3.70	11.4	23.1	32.1		
140	30.6	27.5	20.1	11.5	4.11	10.5	19.6	26.8	29.6	26.5	18.8	9.23	4.49	10.9	20.2	27.5		
145	26.0	23.5	17.3	7.49	4.12	8.86	16.4	22.5	24.7	22.6	16.5	8.61	4.74	5.10	17.4	23.5		
150	21.8	19.9	14.9	4.57	4.12	4.49	13.1	18.5	20.2	18.9	14.0	5.03	4.38	7.34	14.4	19.2		
155	17.7	16.5	12.7	6.22	3.86	4.88	11.0	14.8	15.8	15.4	11.8	3.47	3.54	5.25	10.9	15.4		
160	13.9	12.9	4.14	5.39	3.70	4.43	4.20	11.1	11.5	11.6	9.38	3.01	3.33	3.85	3.90	11.2		
165	9.24	3.00	4.40	5.14	3.54	3.75	3.82	3.16	7.17	6.92	2.83	4.20	3.33	3.70	5.08	3.48		
170	6.05	6.06	5.88	4.67	3.44	3.80	4.88	4.70	4.30	4.31	4.14	4.05	4.06	4.32	4.77	5.75		
175	4.31	4.06	4.88	4.36	4.01	4.06	4.40	3.39	3.10	3.06	3.31	3.99	3.96	4.37	4.14	4.85		
180	3.15	3.59	4.15	3.79	4.01	4.06	4.40	3.22	3.10	3.27	3.36	4.10	3.91	4.01	4.09	4.43		

Date:	_____
Project:	_____
Price:	_____

**3. Test Equipment**

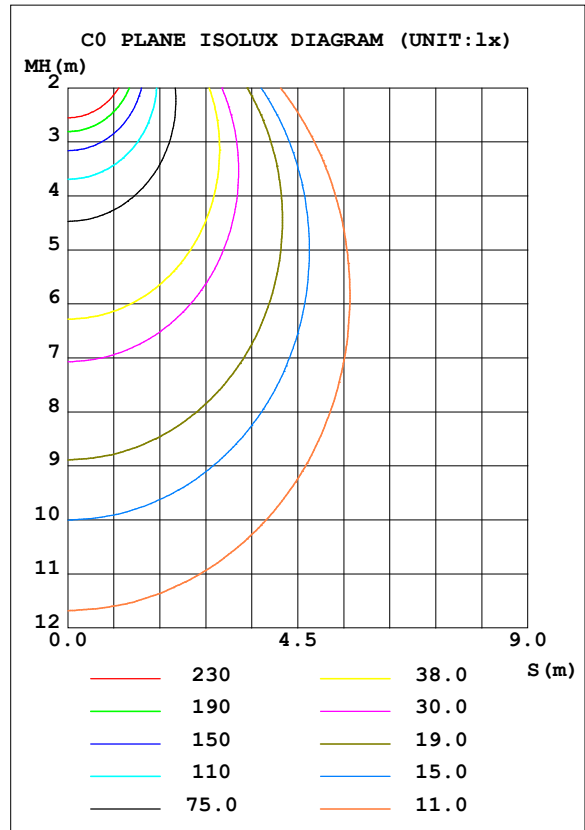
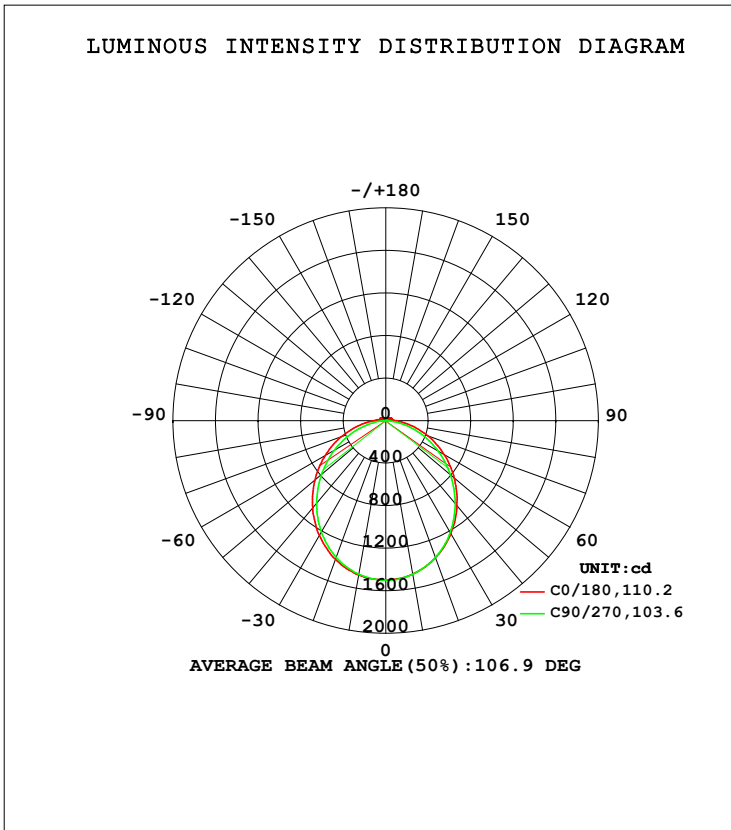
Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-355	Goniophotometer system	Verified by D908S standard lamp	
ST-R-359	Standard Lamp	2019-07-03	2020-07-02
ST-R-358	Power Meter for Goniophotometer	2019-06-27	2020-06-26
Expand Uncertainty: Photometric Measurement(Goniophotometer):2.76%, k=2			

**\*\*\*\*\* END OF REPORT \*\*\*\*\***

**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.95 lm/W			
MODEL	ILWRJWRD	I <sub>max</sub> (cd)	1501	S/MH (C0/180)	1.24
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	4285.2	η UP, DN (C0-180)	1.8, 48.3
NOMINAL FLUX (lm)	4285.19	CIE CLASS	DIRECT	η UP, DN (C180-360)	1.8, 48.2
LAMPS INSIDE	1	η up (%)	3.5	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	120.0	η down (%)	96.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators: Jenson  
 Test Date: 13 August 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity: 61.9%  
 Test Distance: 26.000m [K=1.3518]  
 Remarks:



Date:	_____
Project:	_____
Price:	_____

**ZONAL FLUX DIAGRAM**

ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1465	1473	1467	1471	1474	1469	1466	1465	0- 10	141.6	141.6	3.31,3.31
20	1371	1379	1368	1380	1388	1381	1367	1367	10- 20	402.9	544.6	12.7,12.7
30	1226	1228	1214	1235	1249	1236	1211	1219	20- 30	601.8	1146	26.8,26.8
40	1043	1036	1017	1051	1071	1050	1012	1030	30- 40	710.7	1857	43.3,43.3
50	842.2	823.4	794.8	840.3	870.7	839.0	789.7	818.2	40- 50	721.0	2578	60.2,60.2
60	631.8	605.2	566.3	618.2	659.5	616.3	560.6	596.7	50- 60	641.7	3220	75.1,75.1
70	422.8	386.0	340.1	400.9	446.2	395.7	332.3	381.7	60- 70	492.5	3712	86.6,86.6
80	222.1	184.2	129.9	199.0	246.4	191.0	121.6	181.9	70- 80	300.1	4012	93.6,93.6
90	96.54	60.24	5.839	69.59	114.2	65.99	9.434	60.87	80- 90	122.2	4134	96.5,96.5
100	39.23	6.782	4.949	6.988	48.95	6.241	5.076	6.026	90-100	45.88	4180	97.6,97.6
110	57.32	31.74	4.991	33.82	61.33	33.09	4.895	32.70	100-110	18.36	4199	98,98
120	49.49	28.54	3.547	29.41	51.23	29.50	3.273	29.14	110-120	30.49	4229	98.7,98.7
130	40.15	25.28	2.395	25.37	40.27	23.86	2.869	25.57	120-130	22.92	4252	99.2,99.2
140	30.64	20.11	4.108	19.55	29.59	18.82	4.487	20.22	130-140	16.31	4268	99.6,99.6
150	21.80	14.85	4.076	13.12	20.19	14.00	4.375	14.36	140-150	9.961	4278	99.8,99.8
160	13.91	4.135	3.699	4.203	11.53	9.376	3.422	3.901	150-160	4.856	4283	100,100
170	6.049	5.875	3.646	4.875	4.299	4.143	4.063	4.768	160-170	1.559	4285	100,100
180	3.148	4.151	4.011	4.403	3.096	3.359	3.907	4.089	170-180	0.4077	4285	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

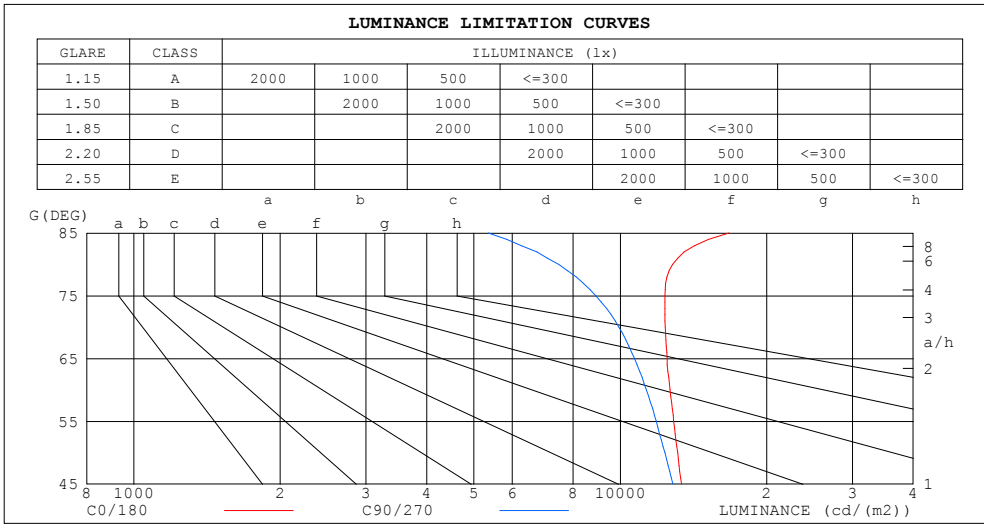
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Jenson  
 Test Date:13 August 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity:61.9%  
 Test Distance:26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**LUMINANCE LIMITATION CURVES**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	16721	5352
80	12803	7473
75	12356	8910
70	12377	9935
65	12480	10696
60	12650	11318
55	12876	11865
50	13117	12355
45	13360	12827

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators: Jenson  
 Test Date: 13 August 2019

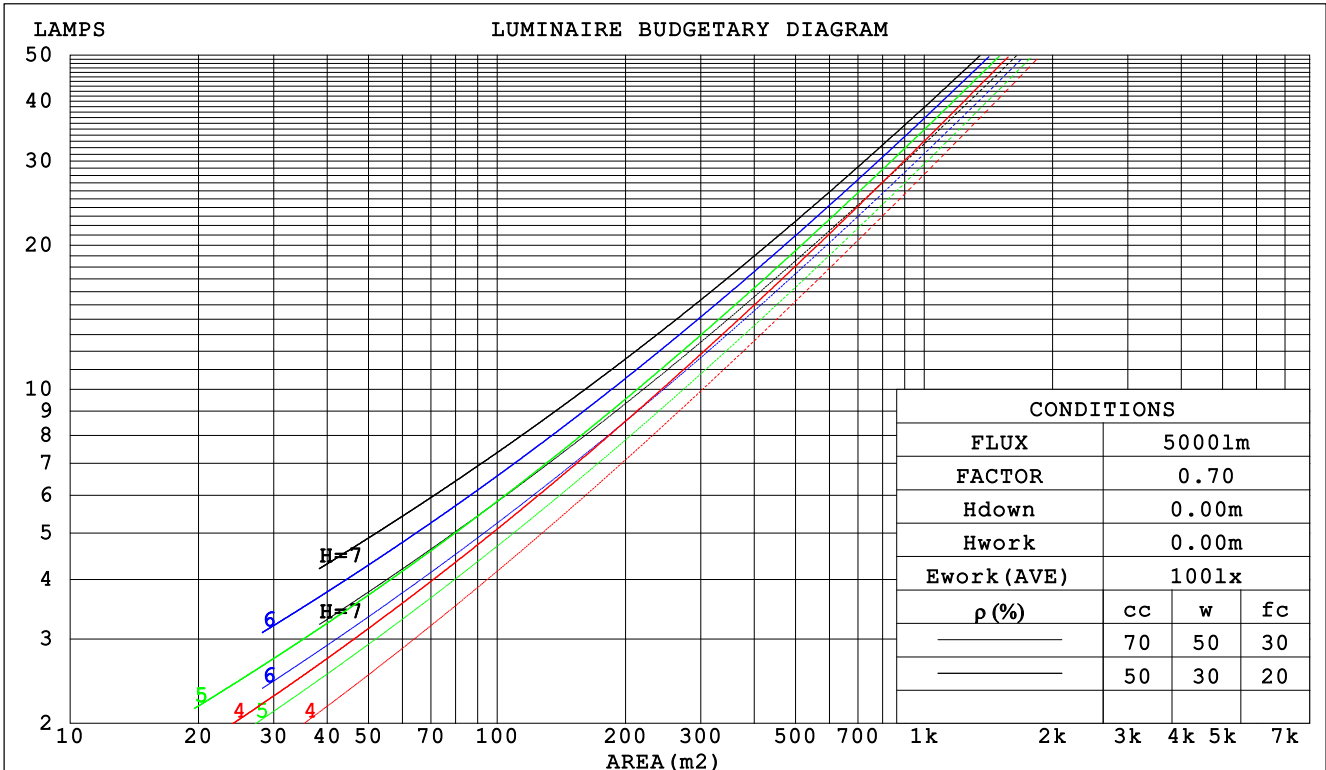
γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity: 61.9%  
 Test Distance: 26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.96
1.0	1.03	.98	.94	.90	.96	.92	.95	.92	.89	.91	.88	.85	.86	.84	.82	.80
2.0	.89	.82	.77	.87	.81	.75	.83	.78	.73	.79	.75	.71	.76	.72	.69	.66
3.0	.78	.70	.64	.77	.69	.63	.73	.67	.61	.70	.64	.60	.67	.62	.58	.56
4.0	.70	.61	.54	.68	.60	.53	.65	.58	.52	.62	.56	.51	.60	.54	.50	.48
5.0	.62	.53	.47	.61	.52	.46	.58	.51	.45	.56	.49	.44	.54	.48	.44	.41
6.0	.56	.47	.41	.55	.46	.40	.53	.45	.40	.51	.44	.39	.49	.43	.38	.36
7.0	.51	.42	.36	.50	.42	.36	.48	.41	.35	.46	.40	.35	.45	.39	.34	.32
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.42	.36	.31	.41	.35	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.37	.30	.26	.36	.30	.25	.35	.29	.25	.23



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Jenson  
 Test Date:13 August 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity:61.9%  
 Test Distance:26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**WEC AND CCEC**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.318	.181	.057	.310	.177	.056	.294	.169	.054	.280	.162	.052	.267	.155	.050	
2.0	.294	.161	.049	.287	.158	.049	.273	.152	.047	.261	.146	.046	.249	.141	.044	
3.0	.270	.144	.043	.264	.141	.043	.252	.136	.041	.241	.132	.040	.230	.127	.039	
4.0	.249	.129	.038	.243	.127	.038	.232	.123	.037	.222	.119	.036	.213	.116	.035	
5.0	.229	.117	.034	.224	.115	.034	.215	.112	.033	.206	.108	.032	.197	.105	.032	
6.0	.212	.106	.030	.208	.105	.030	.199	.102	.030	.191	.099	.029	.184	.097	.029	
7.0	.198	.098	.028	.193	.096	.027	.186	.094	.027	.178	.091	.027	.172	.089	.026	
8.0	.184	.090	.025	.181	.089	.025	.174	.087	.025	.167	.085	.024	.161	.083	.024	
9.0	.173	.084	.023	.169	.083	.023	.163	.081	.023	.157	.079	.023	.151	.077	.022	
10.0	.162	.078	.022	.159	.077	.021	.154	.075	.021	.148	.074	.021	.143	.072	.021	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.217	.217	.217	.186	.186	.186	.127	.127	.127	.073	.073	.073	.023	.023	.023	
1.0	.208	.183	.161	.178	.157	.138	.122	.108	.096	.070	.063	.056	.022	.020	.018	
2.0	.200	.159	.125	.171	.137	.108	.117	.095	.075	.068	.055	.044	.022	.018	.014	
3.0	.192	.142	.102	.165	.122	.088	.113	.085	.062	.065	.050	.036	.021	.016	.012	
4.0	.184	.128	.086	.158	.111	.075	.109	.077	.053	.063	.045	.031	.020	.015	.010	
5.0	.177	.118	.075	.152	.102	.065	.105	.071	.046	.061	.042	.027	.020	.014	.009	
6.0	.169	.110	.067	.146	.095	.058	.100	.067	.041	.058	.039	.025	.019	.013	.008	
7.0	.163	.103	.061	.140	.089	.053	.097	.063	.038	.056	.037	.022	.018	.012	.007	
8.0	.156	.097	.057	.134	.084	.049	.093	.059	.035	.054	.035	.021	.018	.011	.007	
9.0	.150	.092	.053	.129	.080	.046	.090	.056	.033	.052	.033	.020	.017	.011	.007	
10.0	.144	.088	.050	.125	.076	.044	.086	.054	.031	.050	.032	.019	.016	.010	.006	

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Jenson  
 Test Date:13 August 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity:61.9%  
 Test Distance:26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**UGR(Unified Glare Rating) Table**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm										
NAME: ILWRJWRD					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:IL					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	16.5	17.9	16.8	18.2	18.5	16.0	17.5	16.3	17.7	18.0
3H	18.1	19.5	18.5	19.8	20.1	17.4	18.7	17.7	19.0	19.3
4H	18.9	20.2	19.2	20.5	20.8	17.9	19.2	18.3	19.5	19.8
6H	19.5	20.7	19.9	21.1	21.4	18.2	19.5	18.6	19.8	20.1
8H	19.8	21.0	20.2	21.3	21.7	18.3	19.5	18.7	19.8	20.2
12H	20.1	21.2	20.5	21.6	22.0	18.4	19.5	18.8	19.8	20.2
4H 2H	17.0	18.3	17.4	18.6	18.9	16.6	17.9	17.0	18.2	18.6
3H	18.9	20.0	19.3	20.4	20.7	18.2	19.3	18.6	19.7	20.1
4H	19.8	20.8	20.2	21.2	21.6	18.9	19.9	19.3	20.3	20.7
6H	20.6	21.5	21.0	21.9	22.4	19.3	20.2	19.8	20.7	21.1
8H	21.0	21.8	21.4	22.2	22.7	19.5	20.3	19.9	20.7	21.2
12H	21.3	22.1	21.8	22.6	23.1	19.5	20.3	20.0	20.8	21.2
8H 4H	20.0	20.9	20.5	21.3	21.8	19.2	20.1	19.7	20.5	21.0
6H	21.0	21.7	21.5	22.2	22.7	19.8	20.6	20.3	21.0	21.5
8H	21.5	22.2	22.0	22.6	23.2	20.1	20.7	20.6	21.2	21.7
12H	22.1	22.6	22.6	23.1	23.7	20.2	20.7	20.7	21.3	21.8
12H 4H	20.0	20.8	20.5	21.2	21.7	19.3	20.0	19.7	20.5	21.0
6H	21.1	21.7	21.6	22.2	22.7	20.0	20.6	20.5	21.1	21.6
8H	21.6	22.2	22.2	22.7	23.2	20.2	20.8	20.8	21.3	21.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 4285 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.1)

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Jenson  
 Test Date:13 August 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity:61.9%  
 Test Distance:26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**UTILIZATION FACTORS TABLE**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	44	38	31
0.80	67	55	48	65	54	47	63	53	47	40
1.00	75	64	56	73	63	56	71	64	55	48
1.25	82	71	64	80	70	63	77	69	62	55
1.50	87	77	69	85	76	69	81	73	68	60
2.00	93	85	78	91	83	77	87	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	98	92	87	94	88	84	75
4.00	105	99	94	102	97	92	97	93	89	79
5.00	107	102	98	104	100	96	99	96	92	82
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

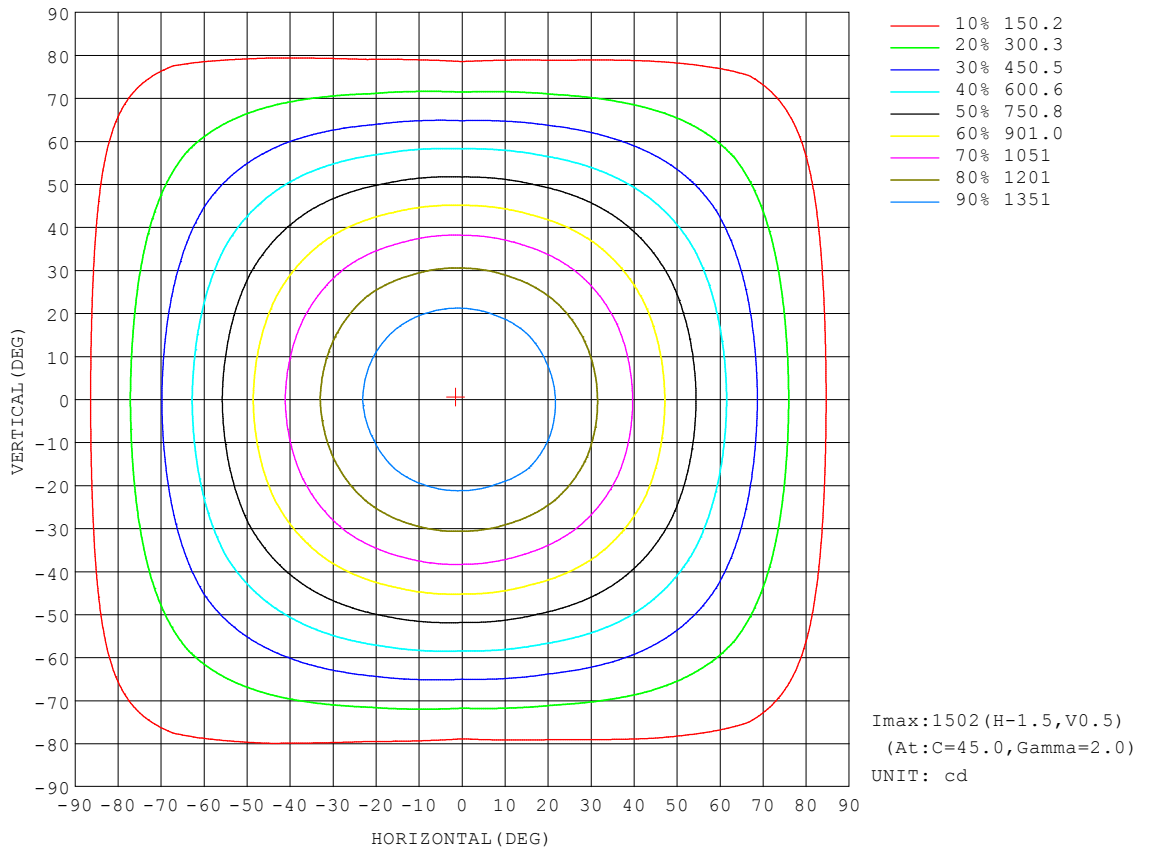
C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Jenson  
 Test Date:13 August 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity:61.9%  
 Test Distance:26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**ISOCANDELA DIAGRAM**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:IL	SUR.:	Shielding Angle:



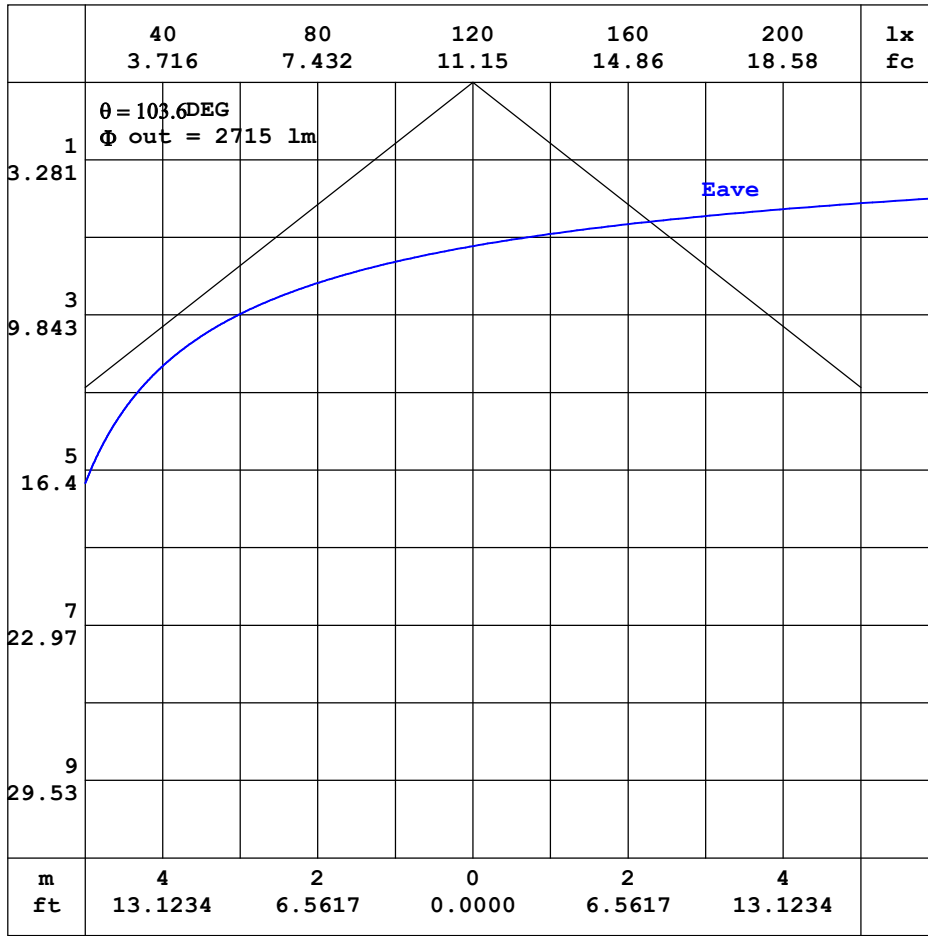
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Jenson  
Test Date:13 August 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
Humidity:61.9%  
Test Distance:26.000m [K=1.3518]  
Remarks:

Date:	_____
Project:	_____
Price:	_____

**AAI CURVES**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators: Jenson  
 Test Date: 13 August 2019

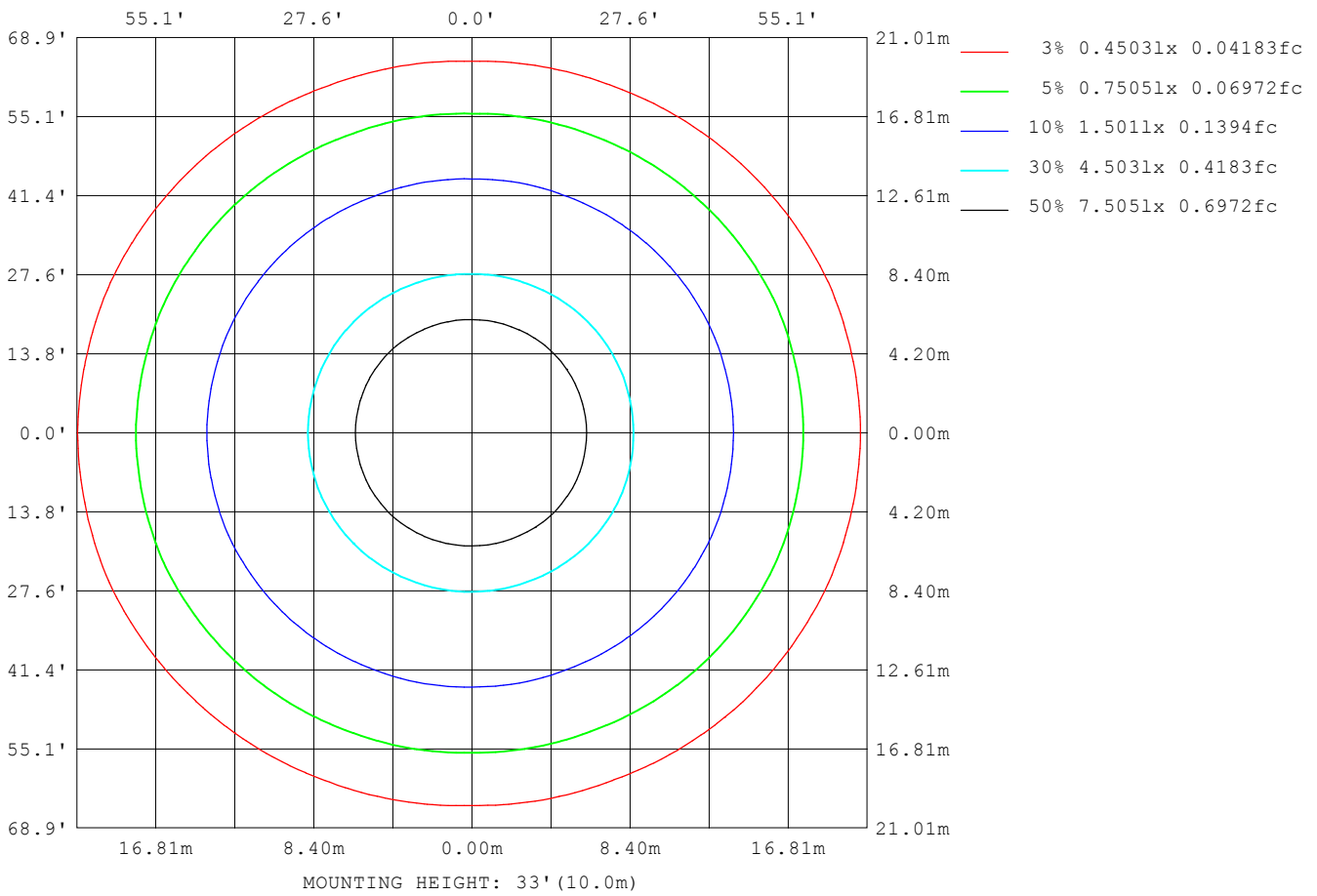
γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity: 61.9%  
 Test Distance: 26.000m [K=1.3518]  
 Remarks:



Date:	_____
Project:	_____
Price:	_____

### ISOLUX DIAGRAM

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators: Jenson  
 Test Date: 13 August 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity: 61.9%  
 Test Distance: 26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**LED Avg.L Report**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	SUR.:	Shielding Angle:

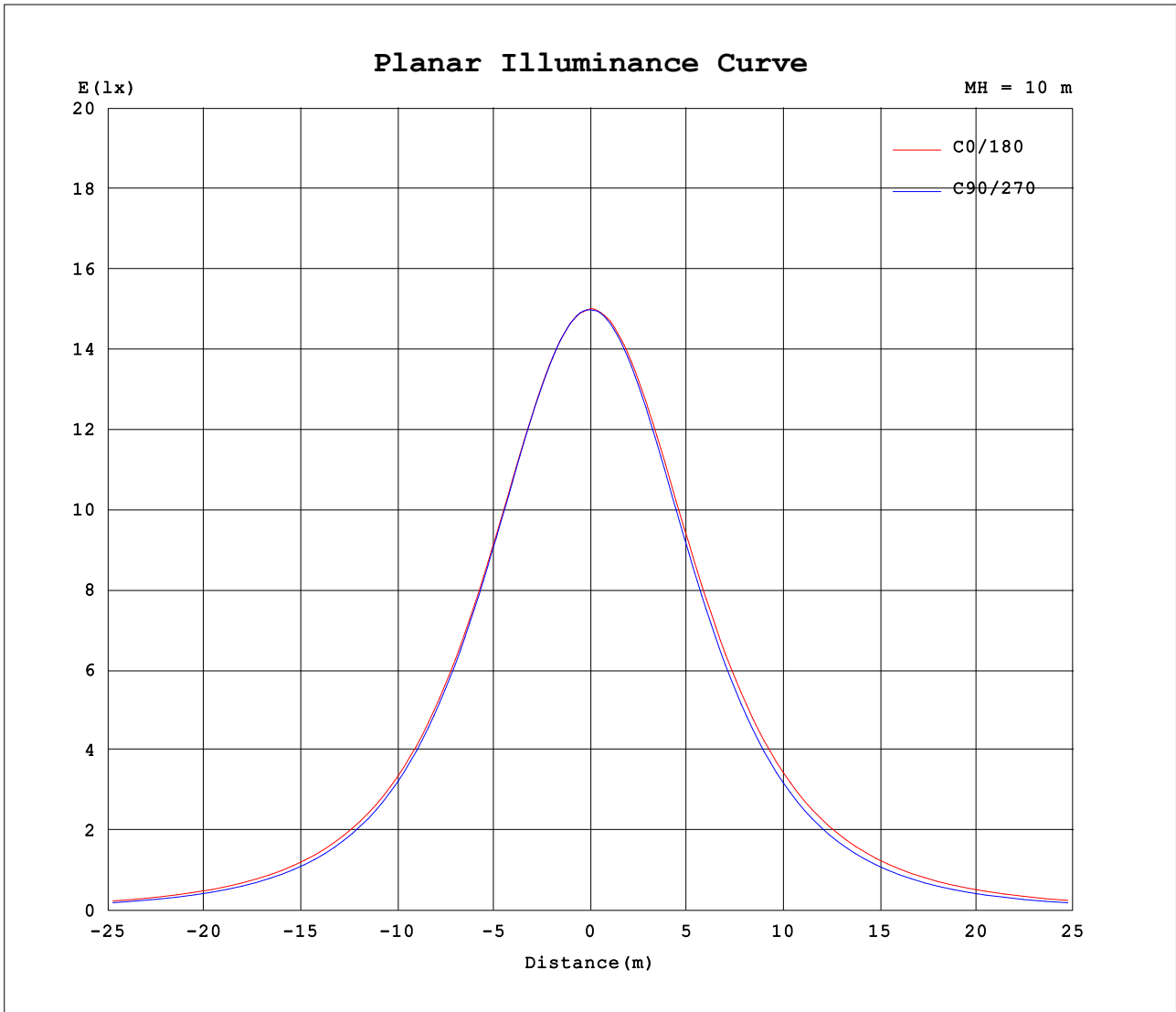
AvgL	cd/m2
L_0~180 (65) av	12775
L_0~180 (75) av	12785
L_0~180 (85) av	17965
L_90~270 (65) av	10619
L_90~270 (75) av	8754
L_90~270 (85) av	4976
L_45 (65) av	11813
L_45 (75) av	11062
L_45 (85) av	12708

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.1DEG  
Operators:Jenson  
Test Date:13 August 2019

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
Humidity:61.9%  
Test Distance:26.000m [K=1.3518]  
Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.1DEG  
 Operators: Jenson  
 Test Date: 13 August 2019

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity: 61.9%  
 Test Distance: 26.000m [K=1.3518]  
 Remarks:

Date:	_____
Project:	_____
Price:	_____

**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:120.0V I:0.2567A P:30.40W PF:0.9875 Freq:60.01Hz Lamp Flux:4285.19x1 lm		
NAME: ILWRJWRD	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: IL	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	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499	1499			
5	1489	1489	1493	1490	1493	1490	1493	1495	1493	1493	1492	1492	1492	1491	1490	1490			
10	1465	1470	1473	1465	1467	1466	1471	1473	1474	1471	1469	1468	1466	1463	1465	1467			
15	1426	1430	1434	1425	1426	1426	1433	1437	1439	1435	1433	1426	1426	1421	1423	1426			
20	1371	1376	1379	1366	1368	1372	1380	1384	1388	1384	1381	1370	1367	1363	1367	1371			
25	1304	1308	1310	1295	1298	1303	1315	1323	1324	1320	1314	1301	1295	1293	1300	1303			
30	1226	1229	1228	1213	1214	1222	1235	1247	1249	1244	1236	1218	1211	1209	1219	1225			
35	1138	1144	1136	1118	1120	1129	1148	1161	1163	1159	1150	1125	1116	1115	1128	1137			
40	1043	1046	1036	1018	1017	1027	1051	1068	1071	1065	1050	1023	1012	1013	1030	1043			
45	944	945	933	909	908	920	948	971	973	966	946	915	903	906	926	943			
50	842	841	823	799	795	809	840	868	871	863	839	804	790	794	818	839			
55	738	734	714	687	681	697	730	762	766	756	728	691	674	682	708	734			
60	632	627	605	575	566	585	618	654	659	648	616	578	561	570	597	627			
65	527	518	495	463	452	475	509	546	553	539	506	463	445	459	488	521			
70	423	413	386	352	340	364	401	439	446	432	396	352	332	349	382	414			
75	319	310	281	246	231	255	297	333	342	328	289	245	222	241	279	312			
80	222	215	184	148	130	156	199	235	246	231	191	146	122	143	182	217			
85	146	138	106	67.7	46.7	74.8	119	153	168	152	112	66.8	40.1	64.9	106	140			
90	96.5	89.2	60.2	26.6	5.84	31.3	69.6	100	114	101	66.0	27.3	9.43	26.8	60.9	91.0			
95	73.1	66.5	44.6	9.95	4.95	11.7	50.4	74.5	85.6	75.4	48.8	9.33	5.05	9.57	45.4	68.2			
100	39.2	21.6	6.78	14.6	4.95	16.3	6.99	30.7	49.0	24.5	6.24	14.9	5.08	15.6	6.03	21.3			
105	2.15	2.73	31.8	14.6	4.97	16.3	35.0	2.06	2.16	2.93	34.8	14.8	5.00	15.6	33.2	2.91			
110	57.3	49.2	31.7	15.3	4.99	16.1	33.8	53.2	61.3	53.4	33.1	14.2	4.90	15.6	32.7	50.2			
115	54.2	47.5	29.2	14.3	4.54	14.7	31.4	49.6	56.5	49.3	30.7	13.0	4.11	14.7	30.2	47.9			
120	49.5	43.3	28.5	11.9	3.55	12.2	29.4	45.3	51.2	45.1	29.5	11.0	3.27	12.6	29.1	44.1			
125	44.6	39.7	27.2	10.9	2.19	10.8	27.5	40.6	45.5	40.3	26.0	9.52	2.55	11.5	27.4	40.0			
130	40.1	35.7	25.3	11.3	2.40	10.8	25.4	35.7	40.3	35.9	23.9	9.42	2.87	11.5	25.6	36.2			
135	35.3	31.5	22.6	11.5	3.38	10.8	22.5	31.2	35.1	31.2	21.6	9.32	3.70	11.4	23.1	32.1			
140	30.6	27.5	20.1	11.5	4.11	10.5	19.6	26.8	29.6	26.5	18.8	9.23	4.49	10.9	20.2	27.5			
145	26.0	23.5	17.3	7.49	4.15	8.86	16.4	22.5	24.7	22.6	16.5	8.61	4.71	8.41	17.4	23.5			
150	21.8	19.9	14.9	4.57	4.08	4.49	13.1	18.5	20.2	18.9	14.0	5.03	4.38	7.34	14.4	19.2			
155	17.7	16.5	12.7	6.22	3.86	4.18	11.0	14.8	15.8	15.4	11.8	3.47	3.54	5.25	10.9	15.4			
160	13.9	12.9	4.14	5.55	3.70	4.43	4.20	11.1	11.5	11.6	9.38	3.31	3.42	3.90	3.90	11.2			
165	9.24	6.95	4.40	5.14	3.54	3.75	3.82	3.16	7.17	6.92	2.83	4.35	3.40	3.87	5.08	5.69			
170	6.05	6.06	5.88	4.67	3.65	3.84	4.88	4.70	4.30	4.31	4.14	4.10	4.06	4.32	4.77	5.75			
175	4.31	4.06	4.88	4.36	4.01	4.02	4.40	3.39	3.10	3.06	3.49	4.02	3.98	4.28	4.26	4.85			
180	3.15	3.59	4.15	3.79	4.01	4.06	4.40	3.22	3.10	3.27	3.36	4.10	3.91	4.01	4.09	4.43			

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.1DEG  
 Operators:Jenson  
 Test Date:13 August 2019

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.361  
 Humidity:61.9%  
 Test Distance:26.000m [K=1.3518]  
 Remarks: