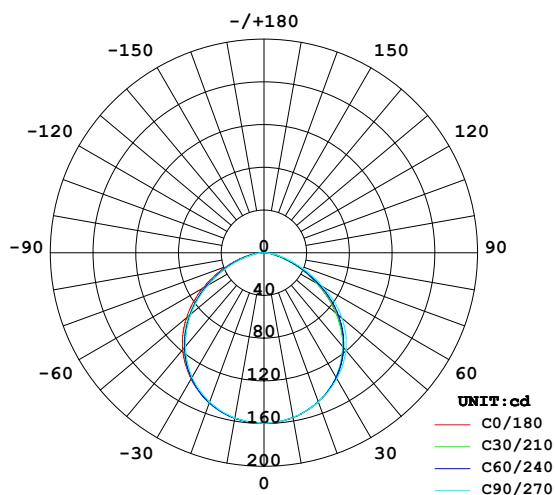


LUMINAIRE PHOTOMETRIC TEST REPORT

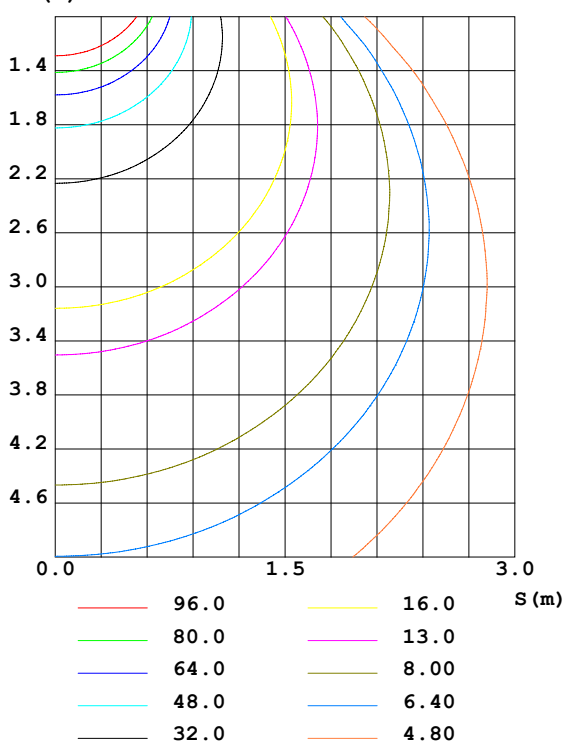
NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 97.45 lm/W			
MODEL	5050	I _{max} (cd)	159.6	S/MH (C0/180)	1.27
NOMINAL POWER (W)	4.4	LOR (%)	85.8	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	36	TOTAL FLUX (lm)	428.78	η UP, DN (C0-180)	0.0, 42.4
NOMINAL FLUX (lm)	500	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 43.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	36	η down (%)	85.8	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 56%
Test Distance: 6.810m [K=0.8223]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	159.1	159.0	158.9	158.7	158.8	158.7	158.8	158.8	0- 5	3.806	3.806	0.89,0.76
10	157.3	157.3	157.1	156.6	156.8	156.6	156.8	156.9	5- 10	11.29	15.10	3.52,3.02
15	154.0	154.4	153.6	153.2	153.4	153.2	153.2	153.9	10- 15	18.42	33.52	7.82,6.7
20	149.4	149.7	148.8	148.4	148.7	148.5	148.8	149.6	15- 20	24.93	58.45	13.6,11.7
25	143.6	143.5	142.4	142.5	142.7	142.4	143.0	144.2	20- 25	30.63	89.07	20.8,17.8
30	136.5	135.7	134.8	135.1	135.2	134.8	136.5	137.4	25- 30	35.28	124.4	29,24.9
35	128.1	126.6	125.2	126.3	126.1	125.8	128.6	129.3	30- 35	38.69	163.0	38,32.6
40	118.4	116.3	114.6	115.4	115.4	115.0	119.4	120.0	35- 40	40.65	203.7	47.5,40.7
45	107.3	103.9	102.5	103.0	102.7	102.5	108.3	109.2	40- 45	41.04	244.7	57.1,48.9
50	94.65	90.77	89.36	89.28	88.47	88.59	95.63	97.60	45- 50	39.75	284.5	66.3,56.9
55	80.90	76.73	75.17	74.54	72.87	73.63	80.53	84.82	50- 55	36.79	321.3	74.9,64.3
60	65.90	62.18	60.19	59.24	57.07	57.74	63.55	71.44	55- 60	32.25	353.5	82.4,70.7
65	51.00	48.23	45.73	44.57	42.32	42.19	47.38	57.02	60- 65	26.51	380.0	88.6,76
70	37.25	34.45	31.75	31.52	29.52	28.50	32.58	42.65	65- 70	20.34	400.4	93.4,80.1
75	24.95	22.21	19.82	20.30	19.38	17.14	20.41	29.68	70- 75	14.19	414.6	96.7,82.9
80	14.80	12.35	9.831	11.37	11.33	8.925	10.50	18.33	75- 80	8.736	423.3	98.7,84.7
85	7.423	5.523	2.116	5.019	5.447	4.026	2.602	10.13	80- 85	4.516	427.8	99.8,85.6
90	3.997	0	0	0	2.700	0	0	0	85- 90	0.9705	428.8	100,85.8
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

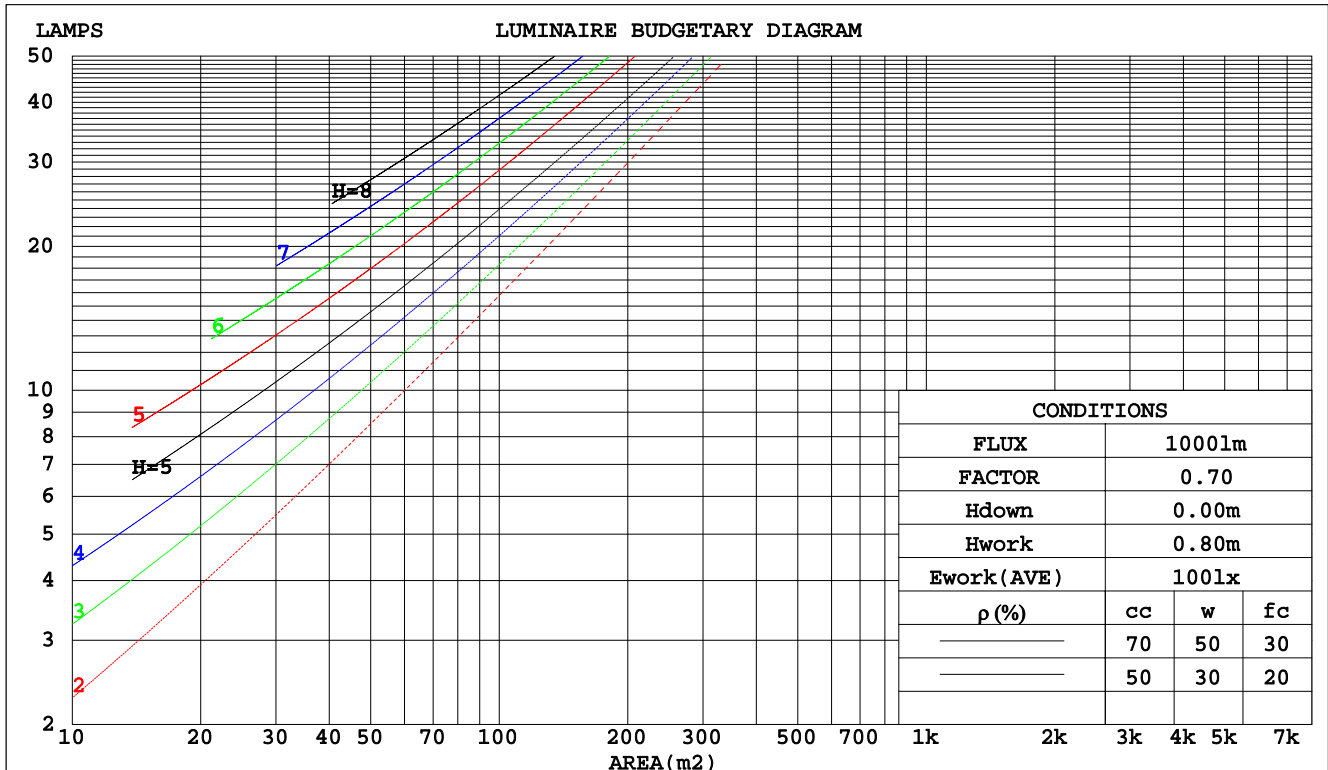
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.02	1.02	1.02	.00	.00	.00	.95	.95	.95	.91	.91	.91	.88	.88	.88	.86
1.0	.90	.86	.83	.88	.85	.82	.84	.82	.79	.81	.79	.77	.78	.76	.75	.73
2.0	.79	.73	.68	.77	.72	.68	.74	.70	.66	.71	.68	.65	.69	.66	.63	.61
3.0	.69	.63	.57	.68	.62	.57	.66	.60	.56	.63	.59	.55	.61	.57	.54	.52
4.0	.62	.54	.49	.61	.54	.48	.58	.53	.48	.56	.51	.47	.55	.50	.47	.45
5.0	.55	.48	.42	.54	.47	.42	.52	.46	.41	.51	.45	.41	.49	.44	.41	.39
6.0	.50	.42	.37	.49	.42	.37	.47	.41	.36	.46	.40	.36	.45	.40	.36	.34
7.0	.45	.38	.33	.44	.37	.32	.43	.37	.32	.42	.36	.32	.41	.36	.32	.30
8.0	.41	.34	.29	.41	.34	.29	.40	.33	.29	.38	.33	.29	.37	.32	.28	.27
9.0	.38	.31	.26	.37	.31	.26	.36	.30	.26	.35	.30	.26	.35	.29	.26	.24
10.0	.35	.28	.24	.35	.28	.24	.34	.28	.24	.33	.27	.23	.32	.27	.23	.22



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 56%
Test Distance: 6.810m [K=0.8223]
Remarks:

WEC AND CCEC

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

pcc	80%	70%	50%	30%	10%	0
pw	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
pfc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC)					
0.0						
1.0	.250 .142 .045	.244 .139 .044	.232 .133 .043	.222 .128 .041	.212 .123 .040	
2.0	.238 .130 .040	.233 .128 .040	.223 .124 .038	.214 .120 .038	.205 .116 .037	
3.0	.222 .118 .035	.218 .117 .035	.209 .113 .034	.201 .110 .034	.193 .107 .033	
4.0	.207 .107 .032	.202 .106 .031	.195 .103 .031	.187 .101 .030	.181 .098 .030	
5.0	.192 .098 .028	.188 .097 .028	.181 .094 .028	.175 .092 .027	.169 .090 .027	
6.0	.179 .090 .026	.176 .089 .026	.169 .087 .025	.164 .085 .025	.158 .083 .025	
7.0	.167 .083 .023	.164 .082 .023	.159 .080 .023	.153 .079 .023	.149 .077 .023	
8.0	.156 .076 .021	.154 .076 .021	.149 .074 .021	.144 .073 .021	.140 .072 .021	
9.0	.147 .071 .020	.144 .070 .020	.140 .069 .020	.136 .068 .020	.132 .067 .019	
10.0	.138 .066 .018	.136 .066 .018	.132 .065 .018	.128 .064 .018	.125 .063 .018	

pcc	80%	70%	50%	30%	10%	0
pw	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
pfc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC)					
0.0	.163 .163 .163	.140 .140 .140	.095 .095 .095	.055 .055 .055	.018 .018 .018	
1.0	.154 .134 .116	.131 .115 .100	.090 .079 .069	.052 .046 .040	.017 .015 .013	
2.0	.146 .113 .086	.125 .097 .074	.086 .067 .052	.049 .039 .030	.016 .013 .010	
3.0	.139 .098 .065	.119 .085 .056	.082 .059 .040	.047 .034 .023	.015 .011 .008	
4.0	.133 .086 .051	.114 .075 .044	.078 .052 .031	.045 .030 .018	.015 .010 .006	
5.0	.126 .077 .041	.109 .067 .036	.075 .047 .025	.043 .027 .015	.014 .009 .005	
6.0	.120 .070 .034	.104 .061 .030	.071 .043 .021	.041 .025 .013	.013 .008 .004	
7.0	.115 .064 .029	.099 .056 .025	.068 .039 .018	.040 .023 .011	.013 .008 .004	
8.0	.109 .059 .025	.094 .051 .022	.065 .036 .015	.038 .021 .009	.012 .007 .003	
9.0	.104 .055 .022	.090 .048 .019	.062 .034 .014	.036 .020 .008	.012 .007 .003	
10.0	.100 .051 .019	.086 .045 .017	.060 .031 .012	.035 .019 .007	.011 .006 .002	

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

Uncorrected UGR Table

NAME: X-Glo-30-36v						TYPE:			WEIGHT:		
DIM.:						SPEC.:			SERIAL No.:		
MFR.:						SUR.:			PROTECTION 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	13.3	14.8	13.5	15.0	15.2	13.1	14.6	13.3	14.8	15.0	
3H	14.5	15.9	14.8	16.1	16.3	14.2	15.6	14.5	15.8	16.0	
4H	15.0	16.3	15.3	16.5	16.8	14.5	15.8	14.9	16.1	16.3	
6H	15.3	16.5	15.6	16.7	17.0	14.7	15.9	15.1	16.2	16.5	
8H	15.4	16.5	15.7	16.8	17.1	14.8	15.9	15.1	16.2	16.5	
12H	15.4	16.6	15.8	16.8	17.1	14.7	15.9	15.1	16.2	16.5	
4H 2H	13.8	15.1	14.1	15.3	15.6	13.6	14.9	13.9	15.1	15.4	
3H	15.2	16.3	15.5	16.6	16.9	14.9	16.0	15.2	16.3	16.6	
4H	15.7	16.7	16.1	17.1	17.4	15.3	16.4	15.7	16.7	17.0	
6H	16.1	17.0	16.5	17.4	17.7	15.6	16.5	16.0	16.9	17.3	
8H	16.3	17.1	16.7	17.5	17.8	15.7	16.5	16.1	16.9	17.3	
12H	16.4	17.1	16.8	17.5	17.9	15.7	16.5	16.1	16.9	17.3	
8H 4H	15.9	16.7	16.3	17.1	17.5	15.5	16.4	15.9	16.8	17.1	
6H	16.4	17.1	16.8	17.5	17.9	15.9	16.6	16.4	17.0	17.5	
8H	16.6	17.2	17.0	17.6	18.1	16.1	16.7	16.5	17.1	17.5	
12H	16.8	17.3	17.2	17.7	18.2	16.1	16.6	16.6	17.1	17.6	
12H 4H	15.9	16.6	16.3	17.0	17.4	15.5	16.3	16.0	16.7	17.1	
6H	16.4	17.0	16.9	17.4	17.9	16.0	16.6	16.4	17.0	17.5	
8H	16.6	17.2	17.1	17.6	18.1	16.1	16.7	16.6	17.1	17.6	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					
2.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.4					

CIE Pub.117 Corrected 500.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.4)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

UTILIZATION FACTORS TABLE

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

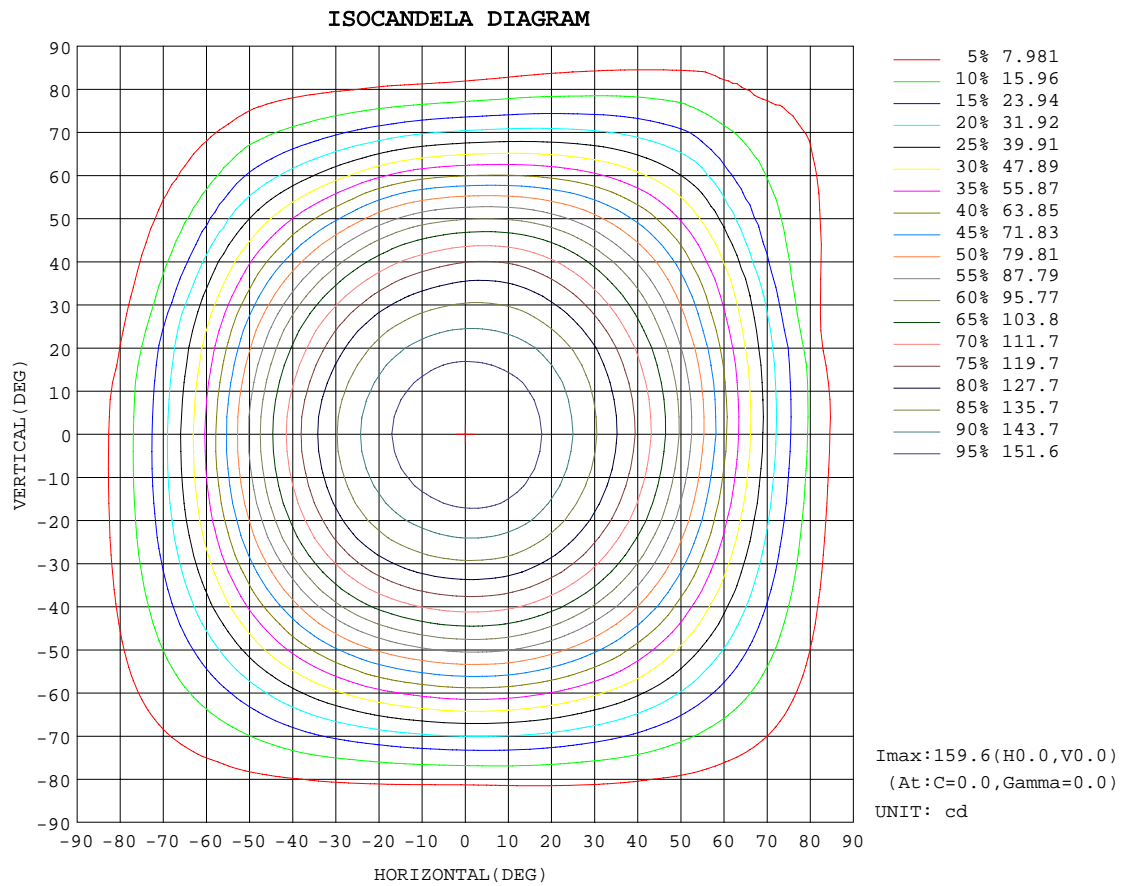
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	51	41	35	50	41	35	49	40	35	29
0.80	59	50	44	58	49	43	57	49	43	37
1.00	67	58	51	66	57	51	64	58	51	45
1.25	73	64	58	72	64	58	69	62	57	51
1.50	77	69	63	76	68	63	73	67	62	56
2.00	83	76	71	81	75	70	78	73	69	62
2.50	86	80	75	84	78	74	81	76	72	65
3.00	89	83	79	87	82	78	83	79	76	69
4.00	92	87	83	90	86	82	86	83	80	73
5.00	94	90	87	92	88	85	88	85	83	75
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNOM = 1.25										

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 56%
Test Distance: 6.810m [K=0.8223]
Remarks:

ISOCANDELA DIAGRAM

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

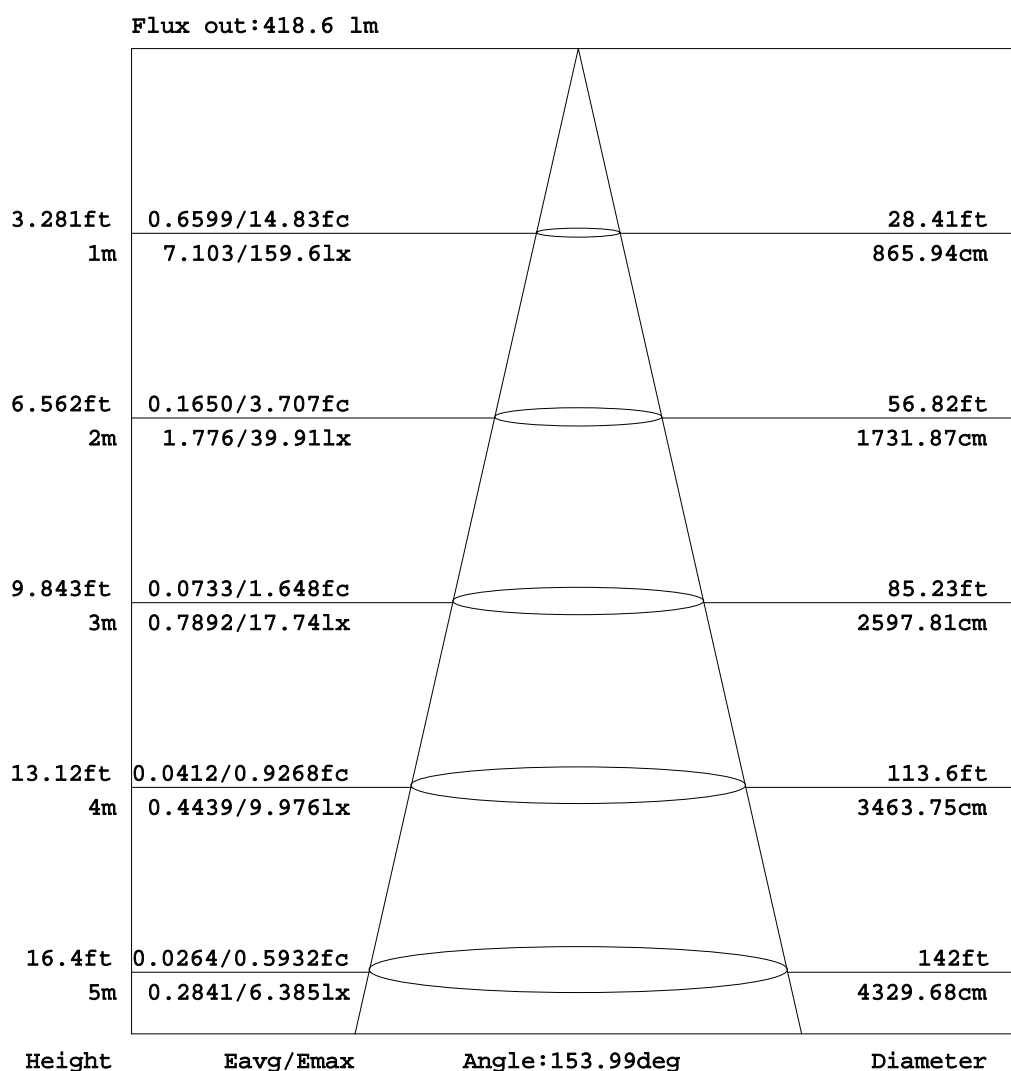


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

AAI Figure

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



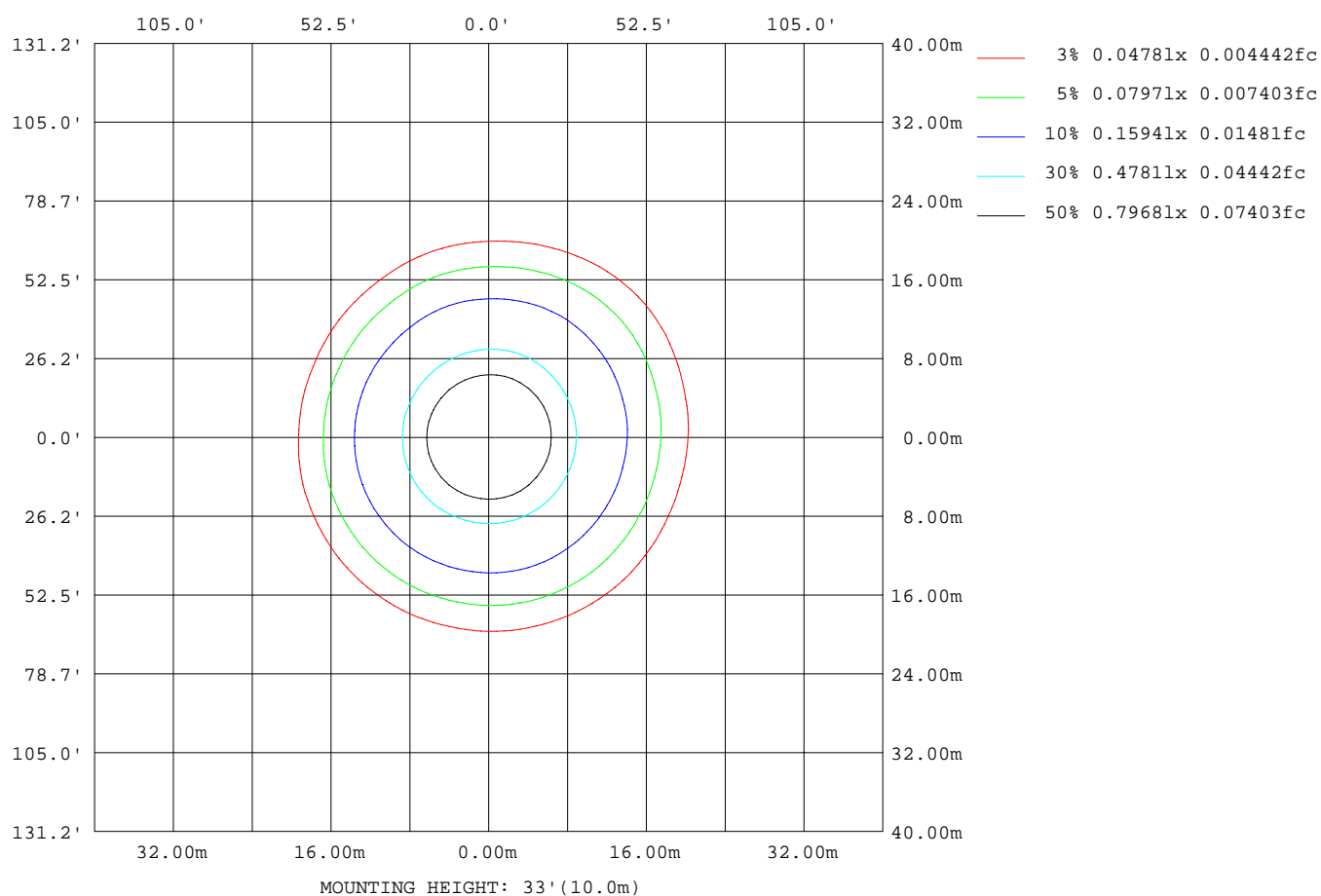
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

ISOLUX DIAGRAM

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 56%
Test Distance: 6.810m [K=0.8223]
Remarks:

Average Luminance Table (CIBSE)

NAME: X-Glo-30-36v	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.:	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	500	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.12	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G	C plane(deg)																		
deg	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	1175	1144	1129	1121	1117	1113	1110	1107	1103	1092	1084	1082	1083	1083	1079	1074	1074	1067	1059
60	1098	1064	1047	1038	1037	1040	1032	1023	1014	1003	993	992	989	988	985	976	973	960	951
65	1006	972	956	947	951	944	931	918	910	902	890	887	885	882	876	866	860	857	834
70	908	868	851	842	842	832	817	804	786	774	763	767	770	771	762	755	752	749	719
75	803	750	737	728	722	709	693	674	656	638	633	636	646	655	651	646	648	650	624
80	710	639	620	601	599	588	561	527	493	472	477	498	523	544	547	549	561	572	544
85	710	587	569	553	545	507	419	307	234	202	226	289	398	476	477	510	513	535	521

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum	specified	maximum	specified
		calculated	maximum	measured	maximum
Category 1	55 to 90	1175	200	---	500
Category 2	65 to 90	1006	200	---	500
Category 3	75 to 90	803	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:28.5DEG
Operators:
Test Date:

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:56%
Test Distance:6.810m [K=0.8223]
Remarks:

```