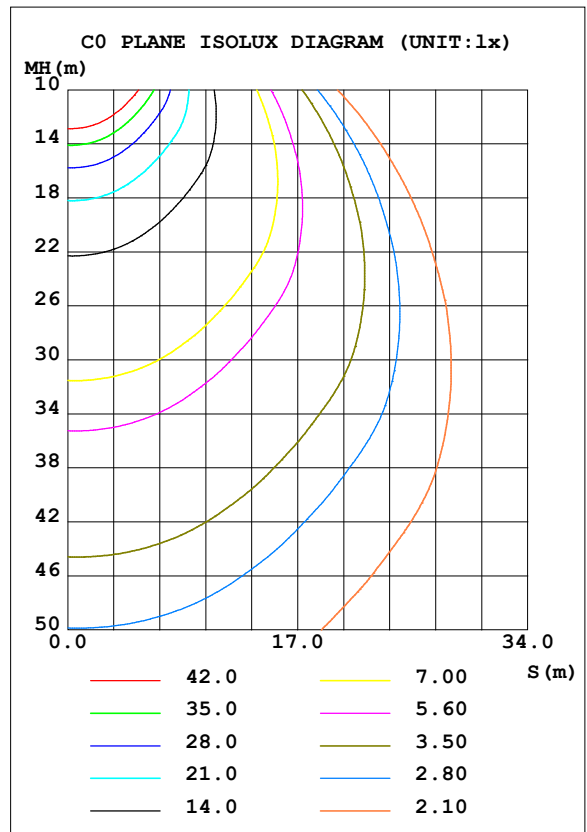
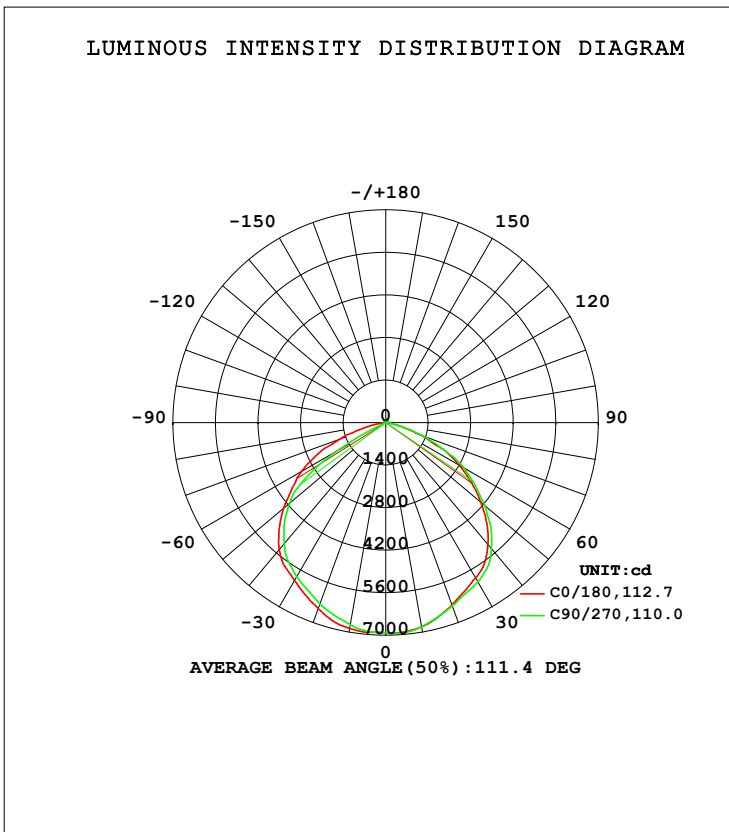


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 121.30 lm/W			
MODEL	150W	I _{max} (cd)	6947	S/MH (C0/180)	1.30
NOMINAL POWER (W)	150	LOR (%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	18802	η UP, DN (C0-180)	0.8, 49.8
NOMINAL FLUX (lm)	18802	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.8, 48.6
LAMPS INSIDE	1	η up (%)	1.6	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	98.4	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	6825	6822	6826	6874	6878	6837	6752	6766	0- 10	657.3	657.3	3.5,3.5
20	6384	6340	6417	6462	6509	6432	6341	6349	10- 20	1875	2532	13.5,13.5
30	5910	5695	6057	5805	6000	5780	5862	5687	20- 30	2827	5359	28.5,28.5
40	5233	5175	5420	5250	5454	5132	5200	5050	30- 40	3487	8846	47,47
50	4084	4306	4253	4475	4386	4368	4131	4219	40- 50	3708	12553	66.8,66.8
60	2783	2884	2961	3130	3176	3106	1727	2882	50- 60	3218	15772	83.9,83.9
70	1260	1373	1317	1679	1624	1625	27.64	1383	60- 70	1986	17758	94.4,94.4
80	139.1	115.3	108.9	208.3	326.6	298.3	5.553	159.0	70- 80	685.9	18444	98.1,98.1
90	10.49	14.13	15.17	13.89	17.11	17.86	8.790	10.42	80- 90	52.83	18497	98.4,98.4
100	20.93	21.48	11.84	19.37	21.44	20.52	19.03	22.30	90-100	16.48	18513	98.5,98.5
110	35.63	33.82	22.87	31.01	37.60	34.21	31.37	35.98	100-110	27.40	18540	98.6,98.6
120	51.18	48.11	41.95	44.55	53.65	48.27	46.14	50.13	110-120	40.05	18580	98.8,98.8
130	63.63	60.68	55.96	56.24	67.41	60.48	60.36	62.45	120-130	48.96	18629	99.1,99.1
140	72.99	71.24	67.65	67.05	76.61	70.77	72.02	72.21	130-140	51.24	18681	99.4,99.4
150	80.48	81.71	77.94	76.31	83.39	79.24	79.76	79.33	140-150	47.36	18728	99.6,99.6
160	89.02	91.10	87.33	84.30	91.24	85.95	87.03	85.08	150-160	38.68	18767	99.8,99.8
170	100.6	99.44	95.91	92.09	101.1	94.30	96.78	93.04	160-170	25.92	18793	99.9,100
180	106.2	101.2	104.3	98.18	106.5	101.0	104.6	98.03	170-180	9.477	18802	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 10711 lm

%lum = 57.0%

%lamp = 57.0%

Conical surface Flux(120deg): 15772 lm

%lum = 83.9%

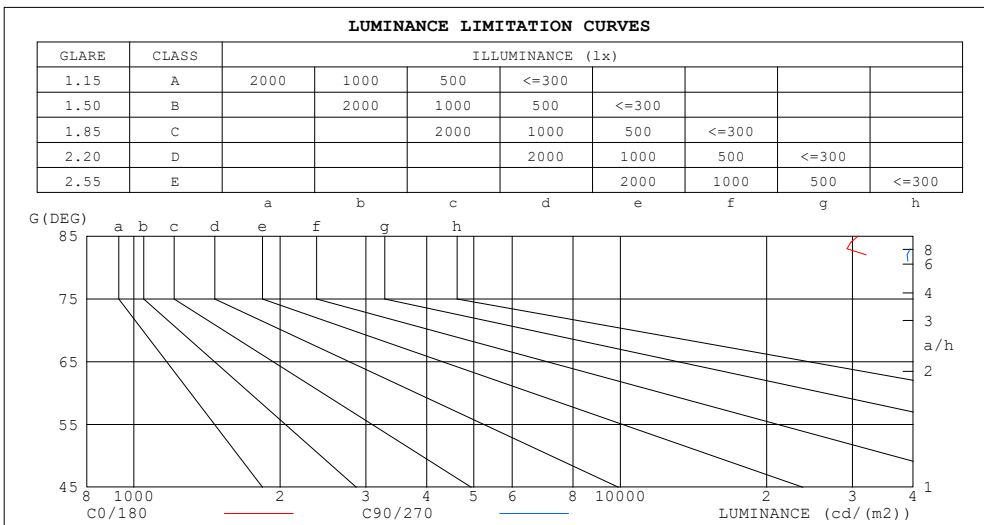
%lamp = 83.9%

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	30850	43026
80	80610	62570
75	219574	226006
70	370738	384065
65	495981	490044
60	560085	590604
55	604708	624440
50	639427	659819
45	669942	690624

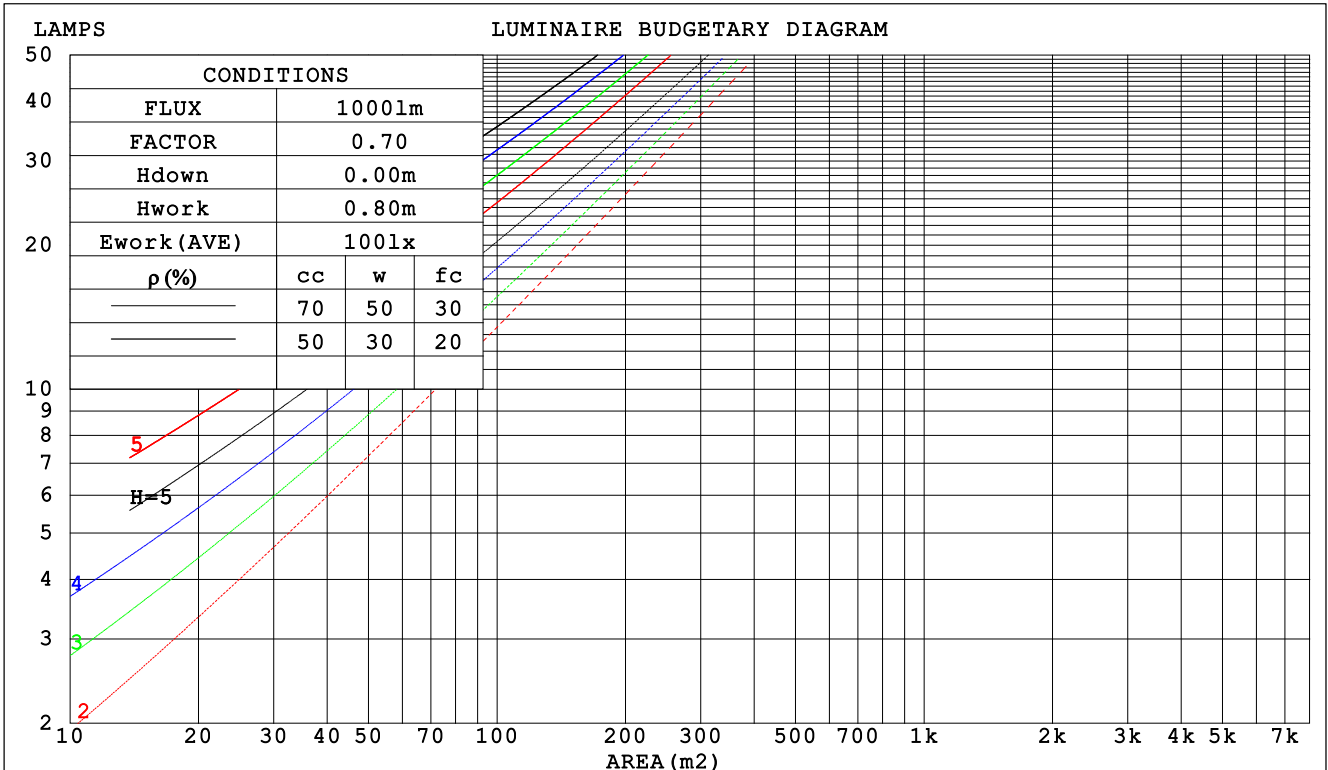
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	.98
1.0	1.05	1.02	.98	1.03	.90	.96	.98	.96	.93	.94	.92	.90	.91	.89	.87	.85
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.83	.79	.76	.80	.77	.74	.72
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.74	.69	.65	.71	.67	.63	.61
4.0	.73	.64	.58	.71	.63	.57	.69	.62	.56	.66	.60	.55	.64	.59	.55	.52
5.0	.65	.56	.50	.64	.56	.50	.61	.54	.49	.59	.53	.48	.57	.52	.48	.45
6.0	.58	.50	.44	.57	.49	.43	.55	.48	.43	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.47	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.33	.43	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.31	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.274	.156	.049	.266	.152	.048	.252	.145	.046	.239	.138	.044	.227	.132	.043	
2.0	.267	.146	.045	.260	.143	.044	.248	.138	.043	.236	.133	.042	.226	.128	.040	
3.0	.252	.134	.040	.246	.132	.040	.235	.128	.039	.225	.123	.038	.216	.119	.037	
4.0	.236	.123	.036	.231	.121	.036	.221	.117	.035	.212	.114	.034	.204	.111	.034	
5.0	.220	.112	.033	.216	.111	.032	.207	.108	.032	.199	.105	.031	.192	.102	.031	
6.0	.206	.103	.030	.202	.102	.029	.194	.099	.029	.187	.097	.029	.180	.095	.028	
7.0	.193	.095	.027	.189	.094	.027	.182	.092	.027	.176	.090	.026	.169	.088	.026	
8.0	.181	.088	.025	.178	.087	.025	.171	.086	.024	.165	.084	.024	.160	.082	.024	
9.0	.170	.082	.023	.167	.081	.023	.161	.080	.023	.156	.078	.022	.151	.077	.022	
10.0	.160	.077	.021	.158	.076	.021	.152	.075	.021	.148	.073	.021	.143	.072	.021	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.203	.203	.203	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.190	.169	.150	.163	.145	.129	.111	.100	.089	.064	.058	.052	.021	.019	.017	
2.0	.181	.145	.114	.155	.124	.098	.107	.086	.068	.061	.050	.040	.020	.016	.013	
3.0	.174	.127	.089	.149	.109	.078	.102	.076	.054	.059	.044	.032	.019	.014	.011	
4.0	.166	.113	.073	.143	.098	.063	.098	.068	.045	.057	.040	.026	.018	.013	.009	
5.0	.159	.103	.061	.137	.089	.053	.094	.062	.038	.055	.037	.022	.018	.012	.007	
6.0	.152	.095	.053	.131	.082	.046	.090	.057	.033	.052	.034	.019	.017	.011	.006	
7.0	.146	.088	.047	.126	.076	.041	.087	.053	.029	.050	.031	.017	.016	.010	.006	
8.0	.140	.082	.042	.120	.071	.037	.083	.050	.026	.048	.029	.016	.016	.010	.005	
9.0	.134	.077	.039	.115	.067	.034	.080	.047	.024	.047	.028	.014	.015	.009	.005	
10.0	.128	.073	.036	.111	.063	.031	.077	.044	.022	.045	.026	.013	.015	.009	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

NAME:		TYPE:					WEIGHT:				
SPEC.:		DIM.:					SERIAL No.:				
MFR.:		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		25.0	26.5	25.3	26.7	26.9	25.2	26.6	25.4	26.8	27.1
	3H	25.9	27.2	26.2	27.5	27.7	26.1	27.4	26.4	27.6	27.9
	4H	26.0	27.3	26.3	27.5	27.8	26.2	27.4	26.5	27.7	28.0
	6H	26.0	27.1	26.3	27.4	27.7	26.1	27.3	26.5	27.6	27.9
	8H	25.9	27.0	26.3	27.3	27.7	26.1	27.2	26.4	27.5	27.8
	12H	25.9	26.9	26.2	27.3	27.6	26.0	27.1	26.4	27.4	27.8
	4H 2H	25.5	26.8	25.8	27.0	27.3	25.6	26.9	26.0	27.2	27.4
	3H	26.5	27.6	26.9	27.9	28.2	26.6	27.7	27.0	28.0	28.4
	4H	26.7	27.6	27.1	28.0	28.3	26.8	27.8	27.2	28.1	28.5
	6H	26.6	27.5	27.0	27.9	28.3	26.8	27.6	27.2	28.0	28.4
	8H	26.6	27.4	27.0	27.8	28.2	26.7	27.5	27.1	27.9	28.3
	12H	26.5	27.3	27.0	27.7	28.1	26.7	27.4	27.1	27.8	28.2
	8H 4H	26.7	27.5	27.1	27.9	28.3	26.8	27.6	27.2	28.0	28.4
	6H	26.6	27.3	27.1	27.7	28.2	26.8	27.4	27.2	27.8	28.3
	8H	26.6	27.2	27.1	27.6	28.1	26.7	27.3	27.2	27.8	28.2
	12H	26.6	27.1	27.1	27.5	28.0	26.7	27.2	27.2	27.7	28.2
	12H 4H	26.6	27.3	27.1	27.8	28.2	26.7	27.5	27.2	27.9	28.3
	6H	26.6	27.2	27.1	27.6	28.1	26.7	27.3	27.2	27.8	28.2
	8H	26.6	27.1	27.1	27.5	28.0	26.7	27.2	27.2	27.7	28.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H		+ 0.3 / - 0.6					+ 0.3 / - 0.5				
2.0H		+ 0.5 / - 0.5					+ 0.5 / - 0.5				

CIE Pub.117, 18802 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.2)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

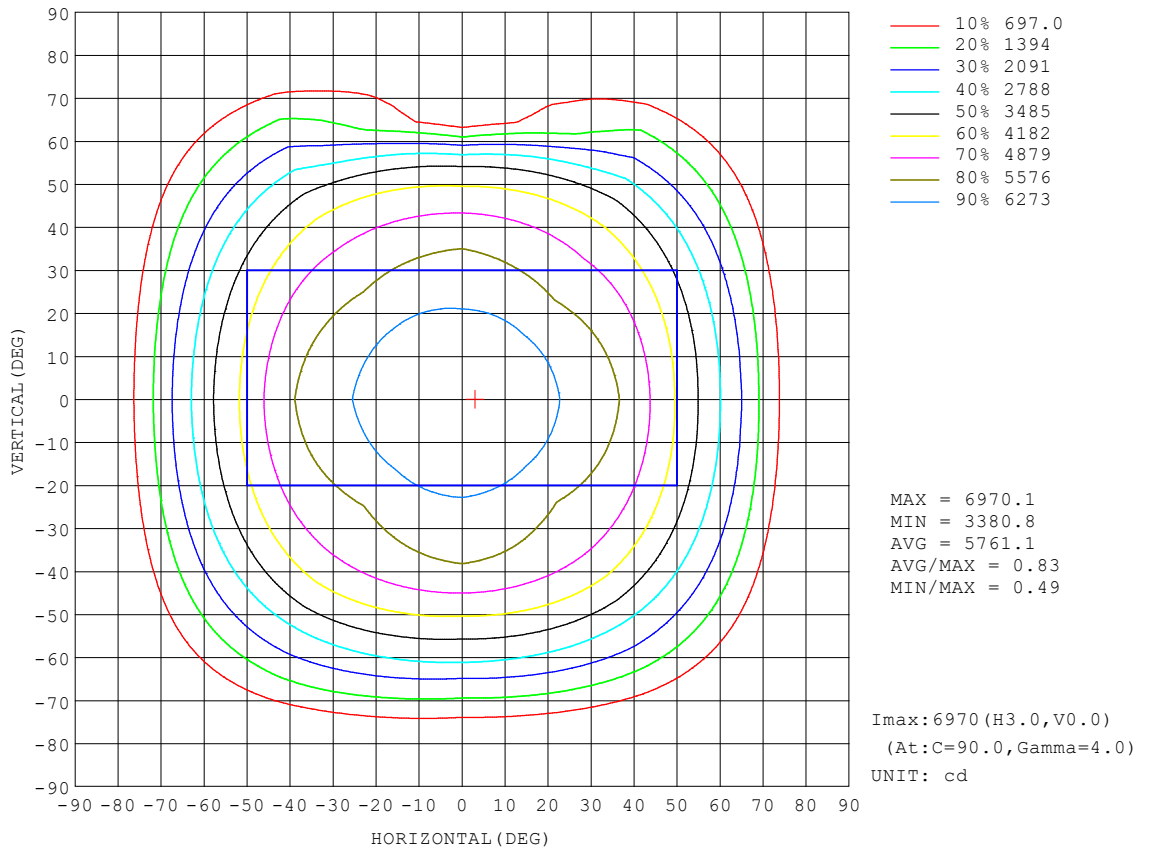
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	58	47	40	56	46	40	33
0.80	69	58	51	68	57	50	66	56	50	43
1.00	78	67	60	77	67	60	74	68	59	52
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	74	85	78	72	65
2.00	97	89	83	95	88	82	91	85	80	73
2.50	100	93	88	98	92	87	94	89	85	76
3.00	104	97	92	101	96	91	97	93	89	80
4.00	107	102	98	105	100	96	100	97	94	85
5.00	109	105	101	107	103	100	102	99	96	87
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

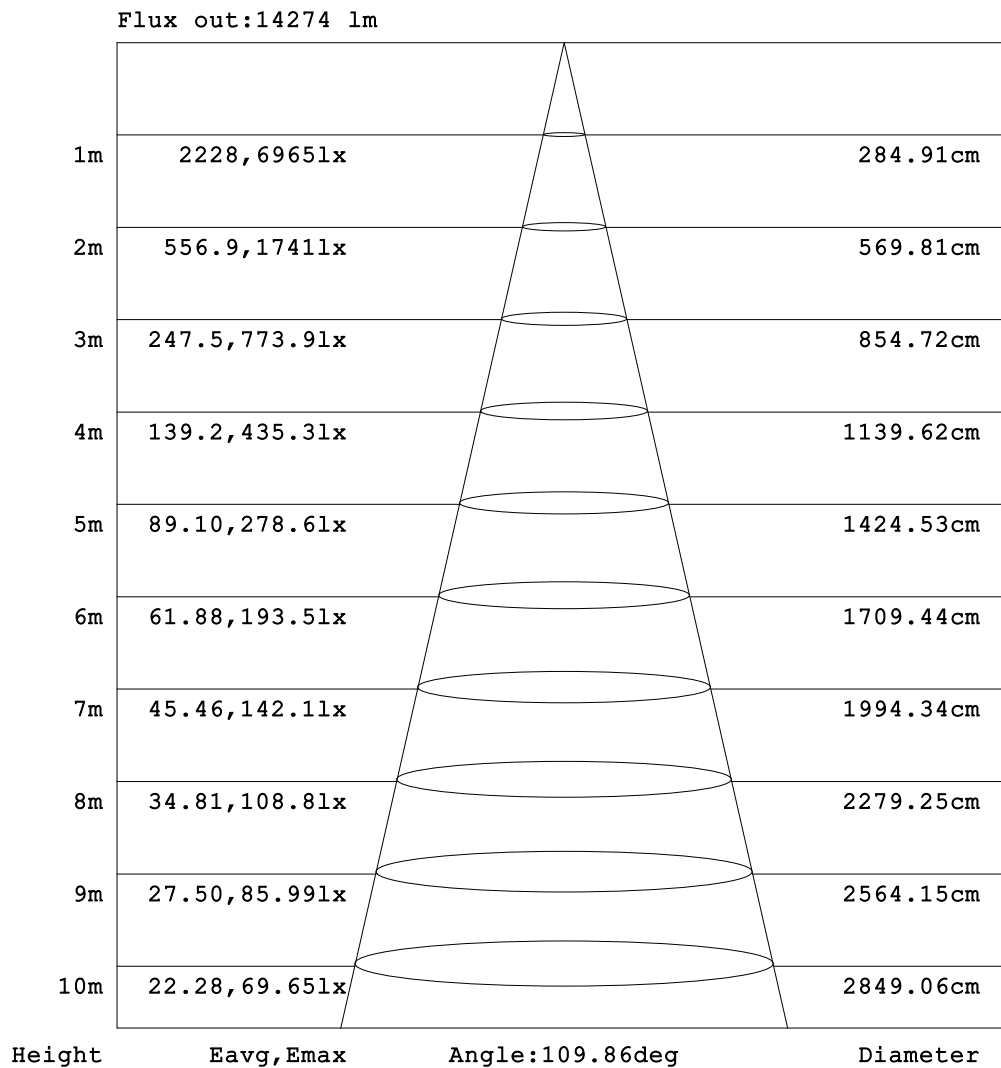


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

AAI Figure

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



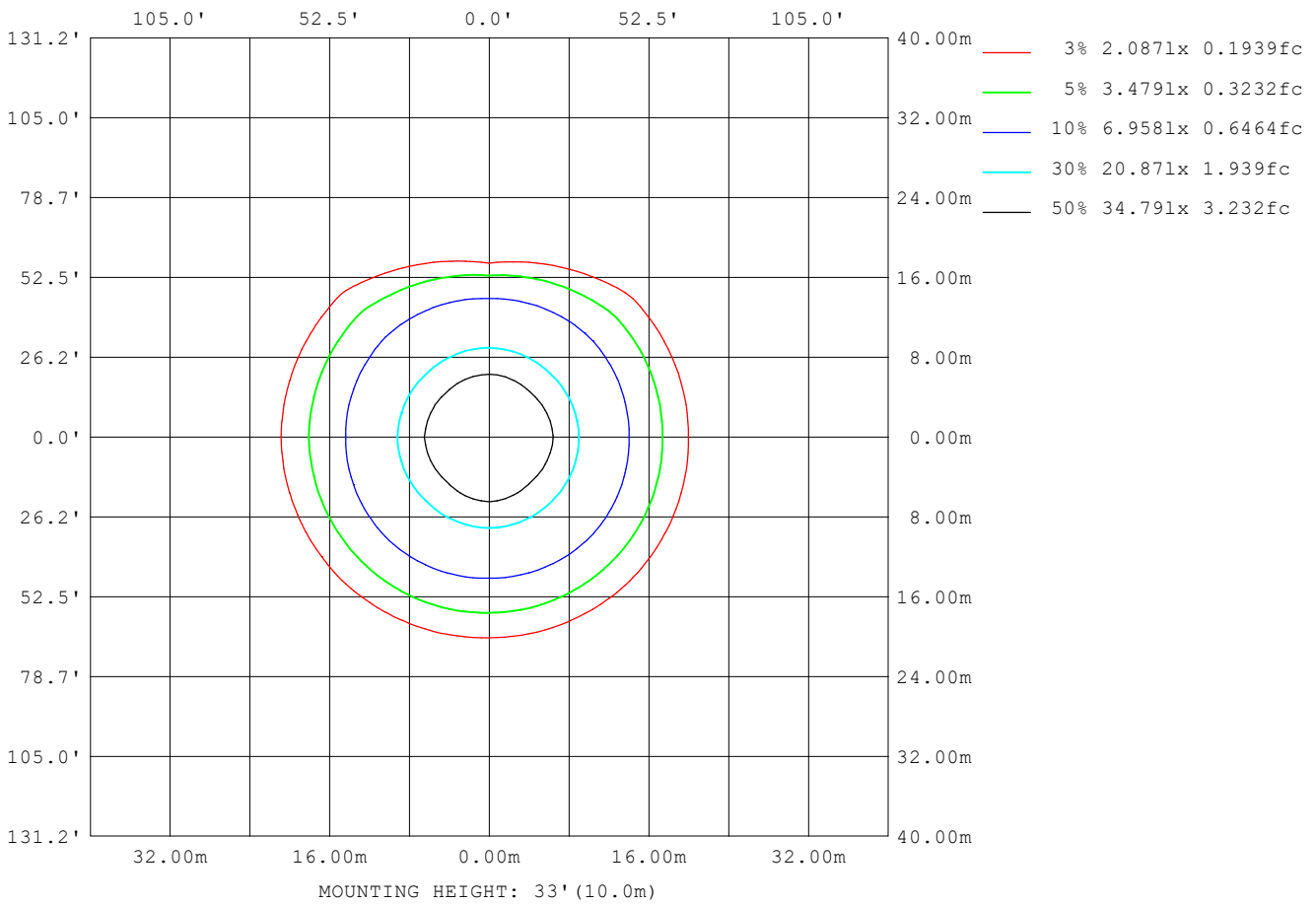
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

LED Avg.L Report

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

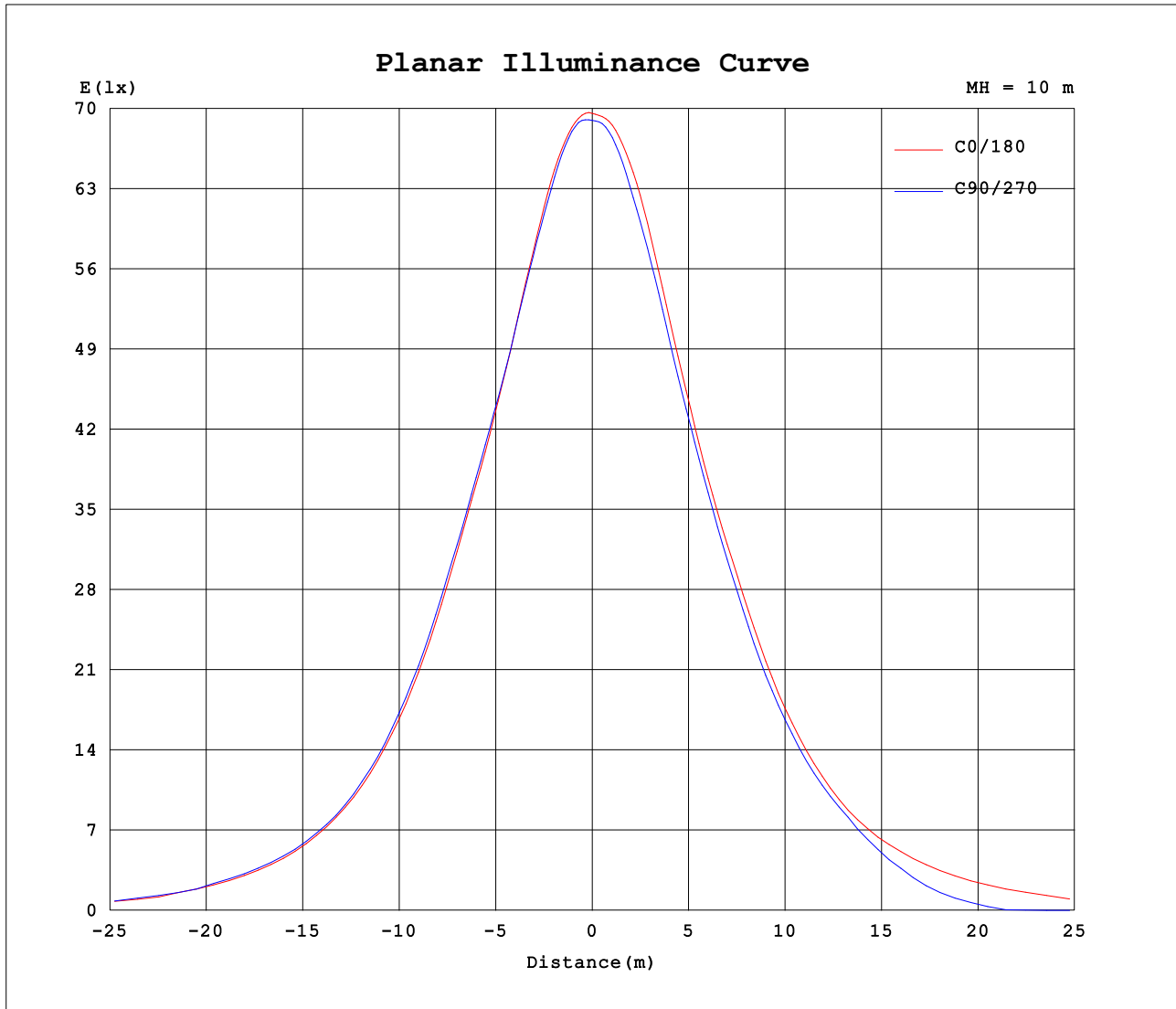
AvgL	cd/m2
L_0~180 (65) av	540311
L_0~180 (75) av	282897
L_0~180 (85) av	35895
L_90~270 (65) av	255814
L_90~270 (75) av	116581
L_90~270 (85) av	25383
L_45 (65) av	532385
L_45 (75) av	277890
L_45 (85) av	37250

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 8.250m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	45	90	135	180	225	270	315										
0	6915	6915	6915	6915	6915	6915	6915	6915										
5	6916	6926	6941	6940	6923	6906	6894	6899										
10	6825	6822	6826	6874	6878	6837	6752	6766										
15	6629	6624	6628	6726	6755	6665	6565	6583										
20	6384	6340	6417	6462	6509	6432	6341	6349										
25	6131	6020	6207	6135	6258	6112	6086	6025										
30	5910	5695	6057	5805	6000	5780	5862	5687										
35	5669	5412	5824	5504	5783	5459	5591	5355										
40	5233	5175	5420	5250	5454	5132	5200	5050										
45	4707	4840	4896	4957	4962	4811	4723	4716										
50	4084	4306	4253	4475	4386	4368	4131	4219										
55	3447	3648	3591	3833	3759	3789	3286	3616										
60	2783	2884	2961	3130	3176	3106	1727	2882										
65	2083	2183	2077	2391	2484	2376	85.7	2050										
70	1260	1373	1317	1679	1624	1625	27.6	1383										
75	565	614	587	768	900	861	17.0	634										
80	139	115	109	208	327	298	5.55	159										
85	26.7	30.3	37.6	36.5	35.9	37.9	6.65	25.2										
90	10.5	14.1	15.2	13.9	17.1	17.9	8.79	10.4										
95	14.3	16.5	13.1	15.2	14.5	14.5	13.4	15.6										
100	20.9	21.5	11.8	19.4	21.4	20.5	19.0	22.3										
105	28.2	27.4	15.0	24.9	29.4	27.5	24.9	29.2										
110	35.6	33.8	22.9	31.0	37.6	34.2	31.4	36.0										
115	43.4	41.0	32.8	37.8	45.6	41.2	38.6	43.1										
120	51.2	48.1	41.9	44.6	53.7	48.3	46.1	50.1										
125	58.0	54.7	48.9	50.7	61.3	54.7	53.7	56.6										
130	63.6	60.7	56.0	56.2	67.4	60.5	60.4	62.4										
135	68.6	66.3	62.3	61.8	72.3	65.8	66.5	67.6										
140	73.0	71.2	67.7	67.1	76.6	70.8	72.0	72.2										
145	76.6	76.2	72.4	71.7	80.3	75.2	76.2	76.0										
150	80.5	81.7	77.9	76.3	83.4	79.2	79.8	79.3										
155	84.7	86.8	83.7	80.5	87.1	82.6	83.3	82.0										
160	89.0	91.1	87.3	84.3	91.2	86.0	87.0	85.1										
165	94.2	95.4	90.7	88.1	95.9	89.5	91.6	88.7										
170	101	99.4	95.9	92.1	101	94.3	96.8	93.0										
175	105	101	101	95.6	105	98.1	102	96.1										
180	106	101	104	98.2	107	101	105	98.0										

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:01 November 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:8.250m [K=1.0000]
 Remarks: