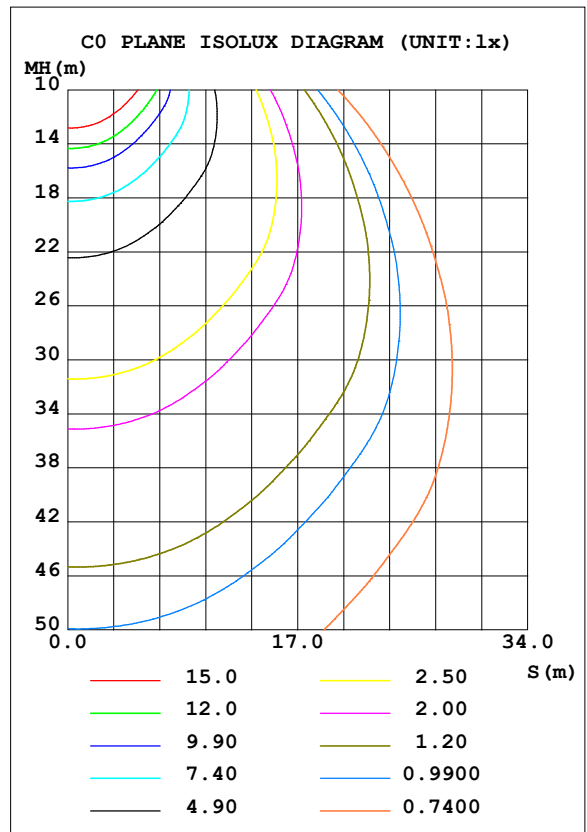
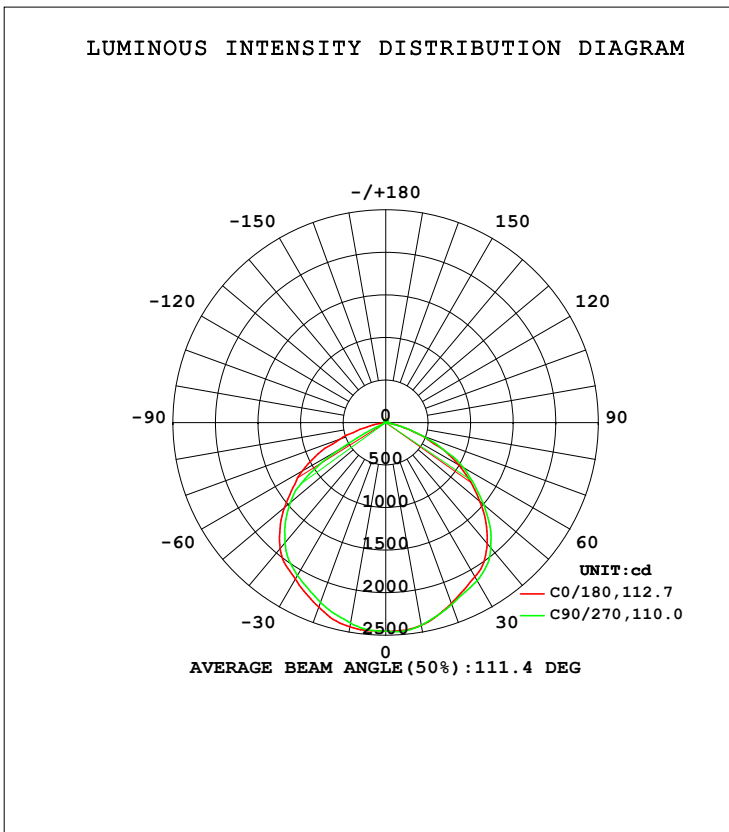


LUMINAIRE PHOTOMETRIC TEST REPORT

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

DATA OF LAMP		PHOTOMETRIC DATA Eff: 121.13 lm/W			
MODEL	50W	I _{max} (cd)	2462	S/MH (C0/180)	1.30
NOMINAL POWER (W)	50	LOR (%)	100.0	S/MH (C90/270)	1.27
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	6662.1	η UP, DN (C0-180)	0.8, 49.8
NOMINAL FLUX (lm)	6662.1	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	2418	2417	2419	2436	2437	2422	2392	2397	0- 10	232.9	232.9	3.5,3.5
20	2262	2246	2274	2290	2306	2279	2247	2250	10- 20	664.2	897.2	13.5,13.5
30	2094	2018	2146	2057	2126	2048	2077	2015	20- 30	1002	1899	28.5,28.5
40	1854	1834	1920	1860	1932	1819	1842	1789	30- 40	1236	3134	47,47
50	1447	1526	1507	1586	1554	1548	1464	1495	40- 50	1314	4448	66.8,66.8
60	986.1	1022	1049	1109	1125	1100	612.1	1021	50- 60	1140	5588	83.9,83.9
70	446.5	486.5	466.7	594.9	575.3	575.8	9.794	490.1	60- 70	703.6	6292	94.4,94.4
80	49.29	40.85	38.60	73.81	115.7	105.7	1.968	56.34	70- 80	243.0	6535	98.1,98.1
90	3.716	5.007	5.376	4.921	6.063	6.327	3.115	3.691	80- 90	18.72	6554	98.4,98.4
100	7.416	7.611	4.196	6.863	7.595	7.273	6.744	7.903	90-100	5.840	6560	98.5,98.5
110	12.63	11.98	8.104	10.99	13.32	12.12	11.12	12.75	100-110	9.710	6569	98.6,98.6
120	18.14	17.05	14.86	15.79	19.01	17.10	16.35	17.76	110-120	14.19	6584	98.8,98.8
130	22.55	21.50	19.83	19.93	23.88	21.43	21.39	22.13	120-130	17.35	6601	99.1,99.1
140	25.86	25.24	23.97	23.76	27.14	25.08	25.52	25.59	130-140	18.16	6619	99.4,99.4
150	28.52	28.95	27.62	27.04	29.55	28.08	28.26	28.11	140-150	16.78	6636	99.6,99.6
160	31.54	32.28	30.94	29.87	32.33	30.46	30.84	30.15	150-160	13.70	6650	99.8,99.8
170	35.66	35.24	33.98	32.63	35.84	33.41	34.29	32.97	160-170	9.183	6659	99.9,100
180	37.64	35.86	36.97	34.79	37.75	35.78	37.07	34.74	170-180	3.358	6662	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 3795.2 lm

%lum = 57.0%

%lamp = 57.0%

Conical surface Flux(120deg): 5588.5 lm

%lum = 83.9%

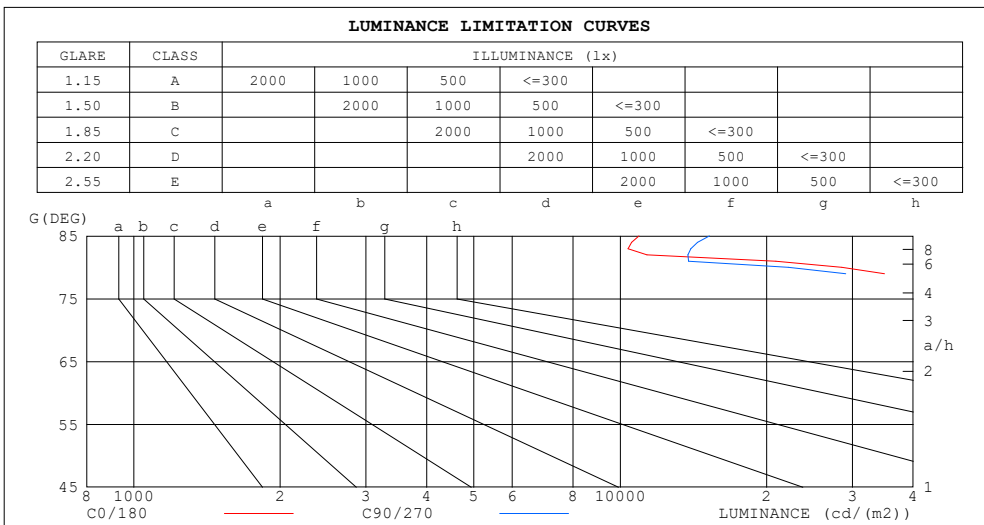
%lamp = 83.9%

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	10931	15245
80	28563	22170
75	77801	80081
70	131364	136086
65	175741	173637
60	198455	209269
55	214266	221258
50	226568	233793
45	237380	244709

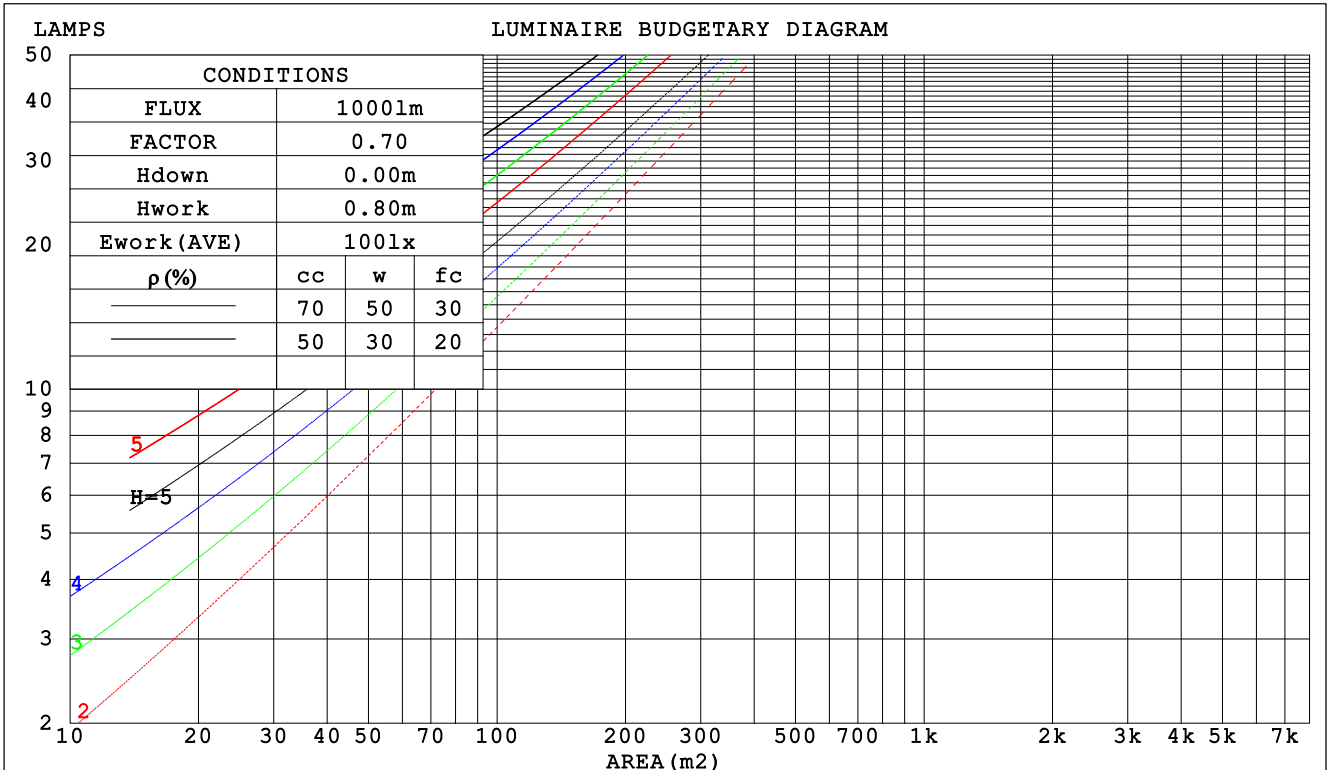
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

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:

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	.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	

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	.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, 6662 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 6.6)

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:

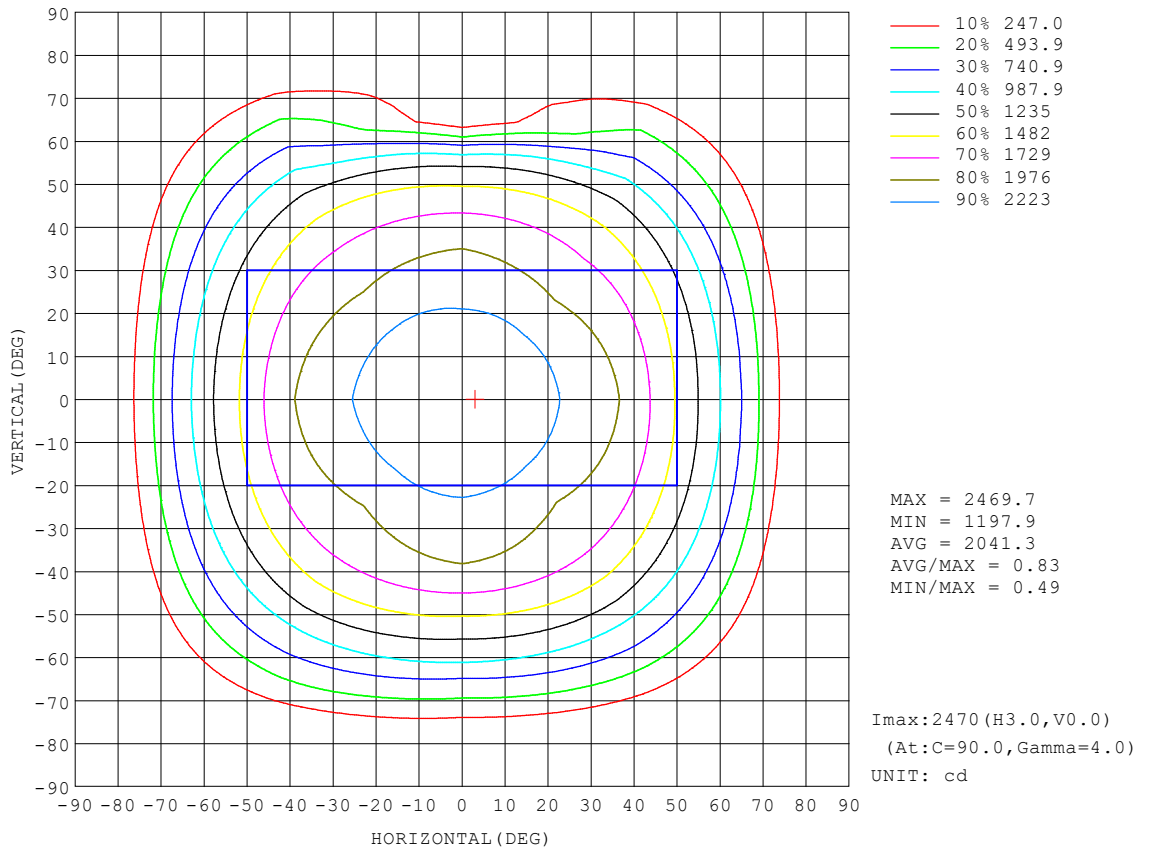
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) k(RI) x RCR = 5									
k = 0.60	58	47	40	58	47	40	56	46	40	33
0.80	69	58	51	68	57	50	66	56	50	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:

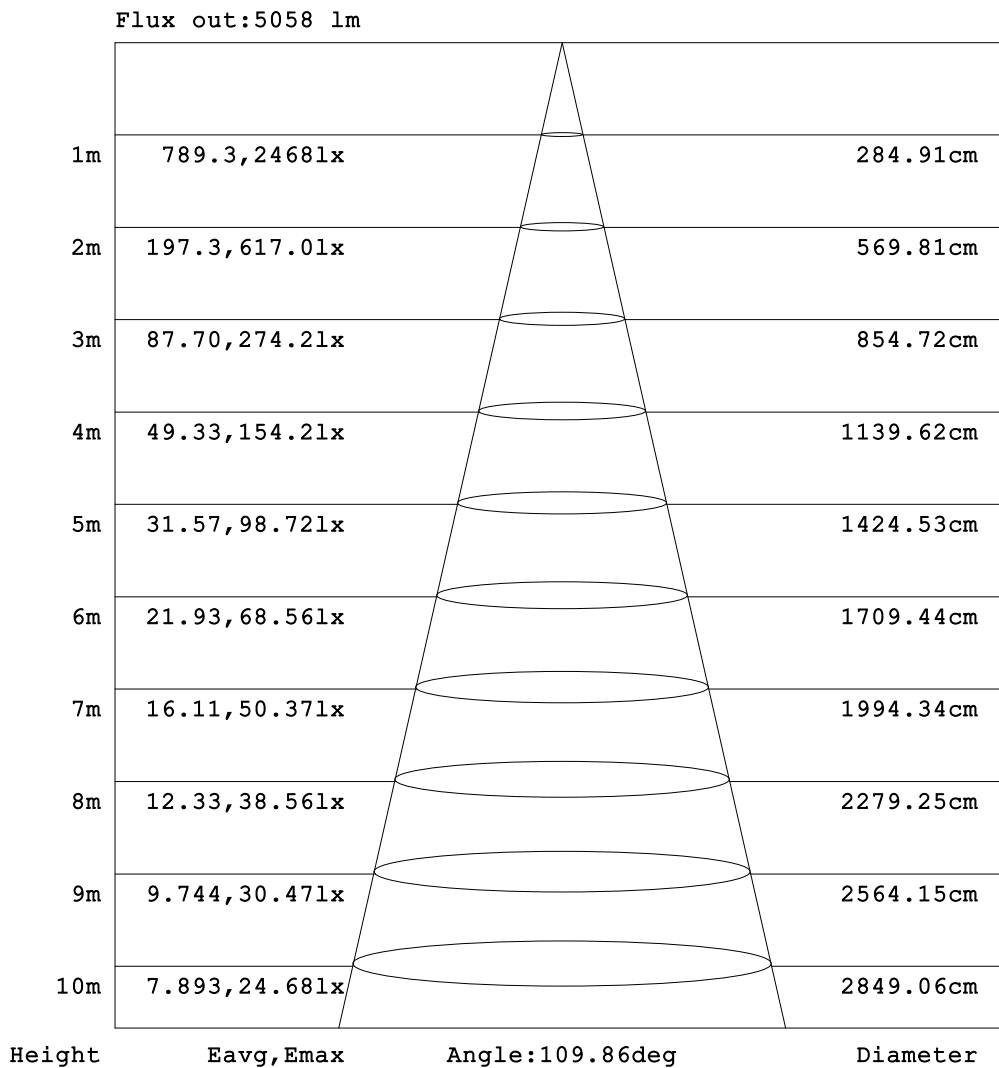


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 01 November 2018

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:



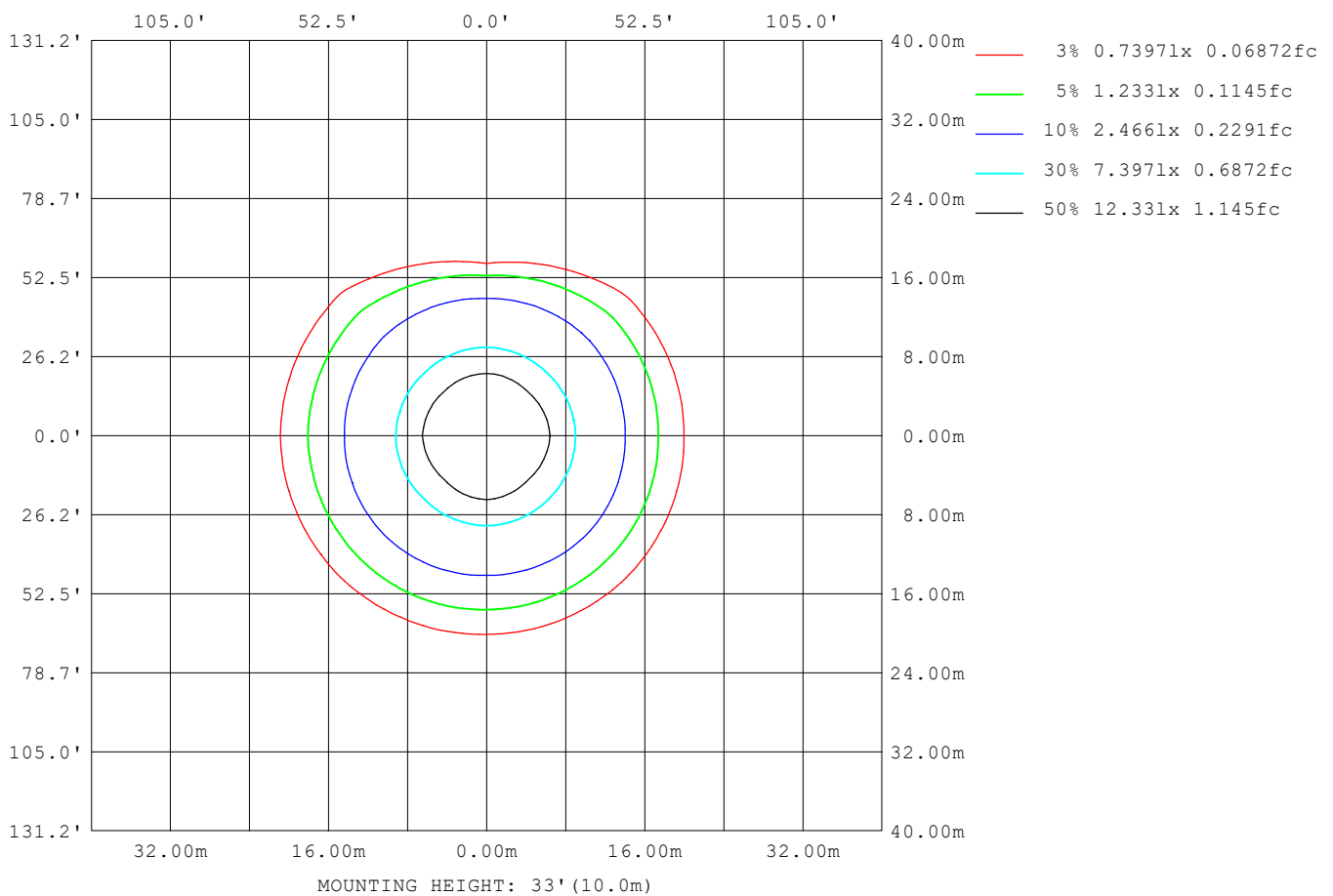
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

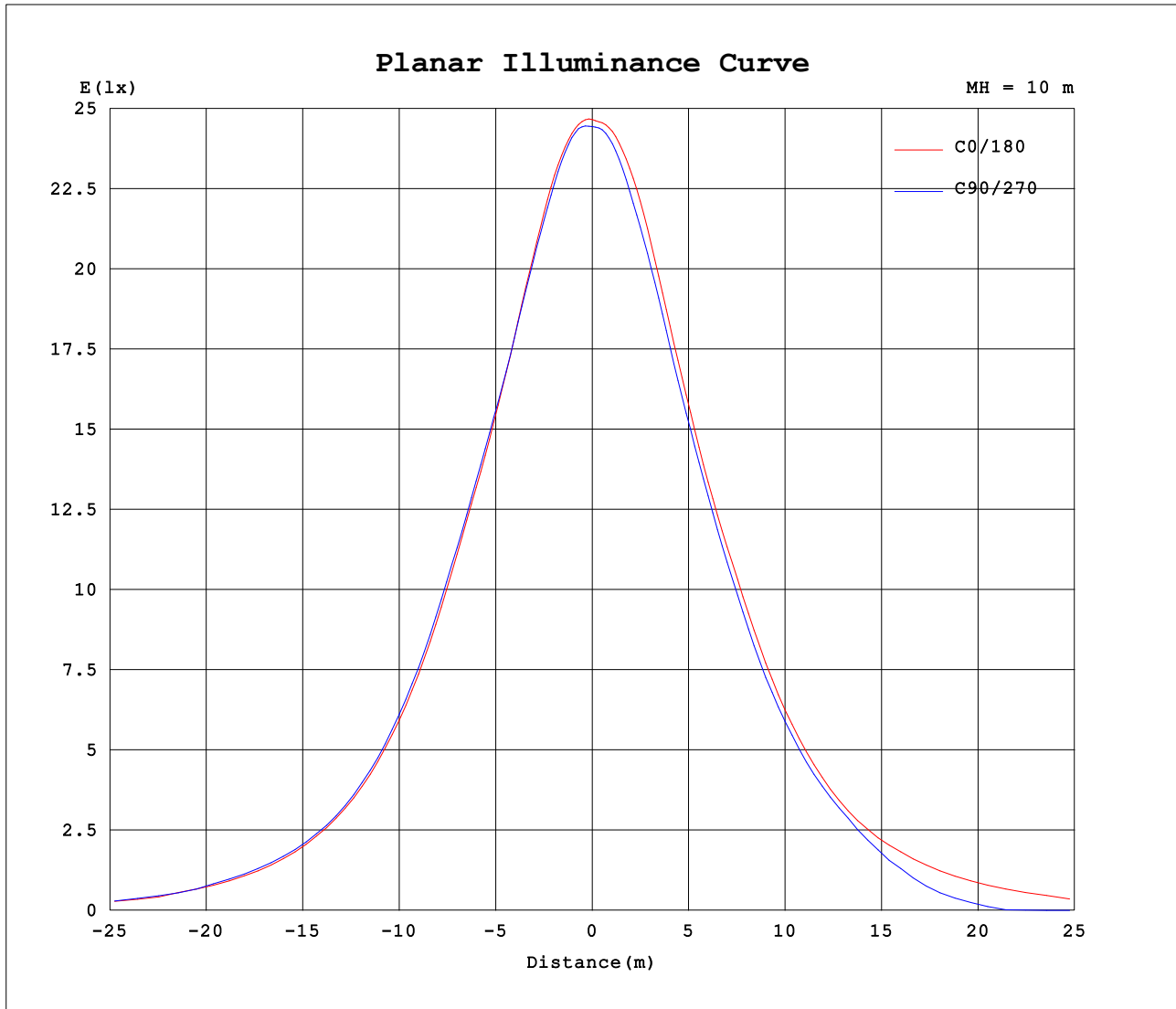
AvgL	cd/m2
L_0~180 (65) av	191448
L_0~180 (75) av	100239
L_0~180 (85) av	12719
L_90~270 (65) av	90643
L_90~270 (75) av	41308
L_90~270 (85) av	8994
L_45 (65) av	188640
L_45 (75) av	98465
L_45 (85) av	13199

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	2450	2450	2450	2450	2450	2450	2450	2450										
5	2451	2454	2459	2459	2453	2447	2443	2444										
10	2418	2417	2419	2436	2437	2422	2392	2397										
15	2349	2347	2348	2383	2394	2362	2326	2332										
20	2262	2246	2274	2290	2306	2279	2247	2250										
25	2172	2133	2199	2174	2218	2166	2156	2135										
30	2094	2018	2146	2057	2126	2048	2077	2015										
35	2009	1918	2064	1950	2049	1934	1981	1897										
40	1854	1834	1920	1860	1932	1819	1842	1789										
45	1668	1715	1735	1756	1758	1705	1673	1671										
50	1447	1526	1507	1586	1554	1548	1464	1495										
55	1221	1293	1272	1358	1332	1343	1164	1281										
60	986	1022	1049	1109	1125	1100	612	1021										
65	738	773	736	847	880	842	30.4	727										
70	446	487	467	595	575	576	9.79	490										
75	200	218	208	272	319	305	6.01	225										
80	49.3	40.9	38.6	73.8	116	106	1.97	56.3										
85	9.47	10.7	13.3	12.9	12.7	13.4	2.35	8.92										
90	3.72	5.01	5.38	4.92	6.06	6.33	3.11	3.69										
95	5.08	5.86	4.64	5.37	5.13	5.12	4.75	5.53										
100	7.42	7.61	4.20	6.86	7.60	7.27	6.74	7.90										
105	10.00	9.69	5.32	8.82	10.4	9.74	8.84	10.4										
110	12.6	12.0	8.10	11.0	13.3	12.1	11.1	12.7										
115	15.4	14.5	11.6	13.4	16.2	14.6	13.7	15.3										
120	18.1	17.0	14.9	15.8	19.0	17.1	16.3	17.8										
125	20.6	19.4	17.3	18.0	21.7	19.4	19.0	20.0										
130	22.5	21.5	19.8	19.9	23.9	21.4	21.4	22.1										
135	24.3	23.5	22.1	21.9	25.6	23.3	23.6	24.0										
140	25.9	25.2	24.0	23.8	27.1	25.1	25.5	25.6										
145	27.1	27.0	25.6	25.4	28.5	26.6	27.0	26.9										
150	28.5	29.0	27.6	27.0	29.5	28.1	28.3	28.1										
155	30.0	30.8	29.7	28.5	30.9	29.3	29.5	29.1										
160	31.5	32.3	30.9	29.9	32.3	30.5	30.8	30.1										
165	33.4	33.8	32.1	31.2	34.0	31.7	32.4	31.4										
170	35.7	35.2	34.0	32.6	35.8	33.4	34.3	33.0										
175	37.1	35.8	35.7	33.9	37.2	34.8	36.3	34.0										
180	37.6	35.9	37.0	34.8	37.7	35.8	37.1	34.7										

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: