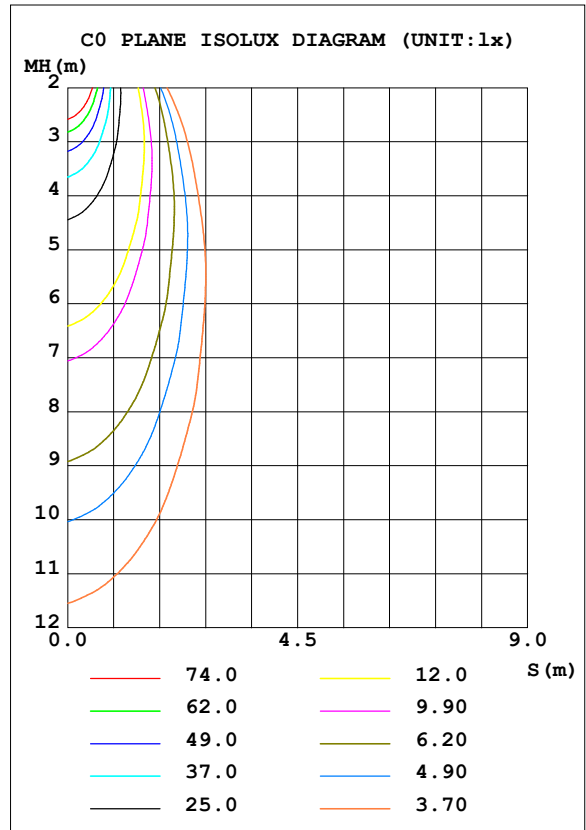
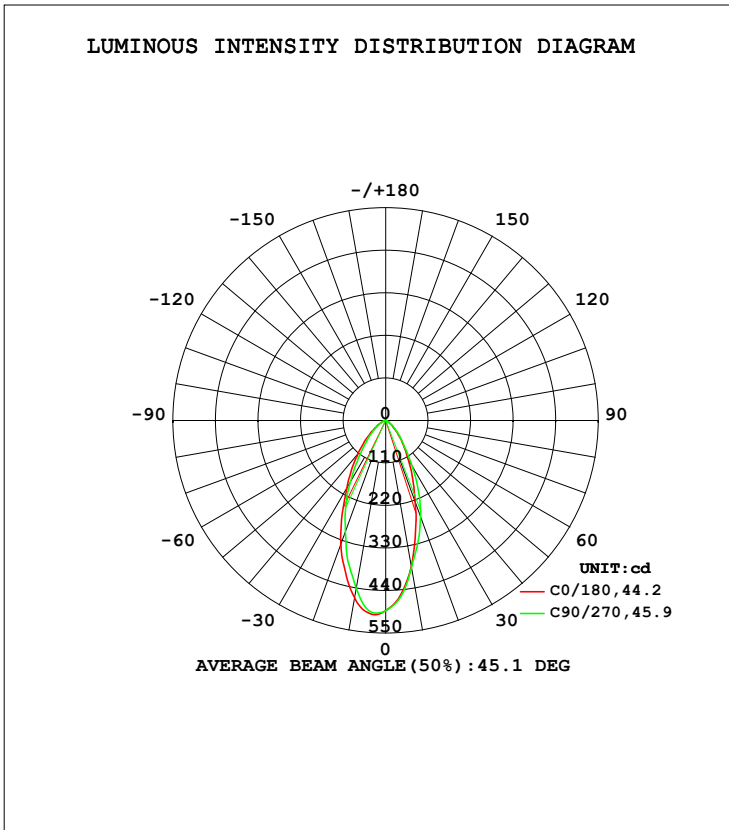


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: Jqnuvgkp	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 71.20 lm/W
MODEL	SL82	I <sub>max</sub> (cd)	503.0	S/MH (C0/180)	0.82	
NOMINAL POWER (W)	5	LOR (%)	100.0	S/MH (C90/270)	0.75	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	390.65	η UP, DN (C0-180)	0.0, 41.0	
NOMINAL FLUX (lm)	390.655	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 59.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	231.17	η down (%)	100.0	CIBSE SHR MAX	0.80	



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity: 65.0%  
 Test Distance: 5.700m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

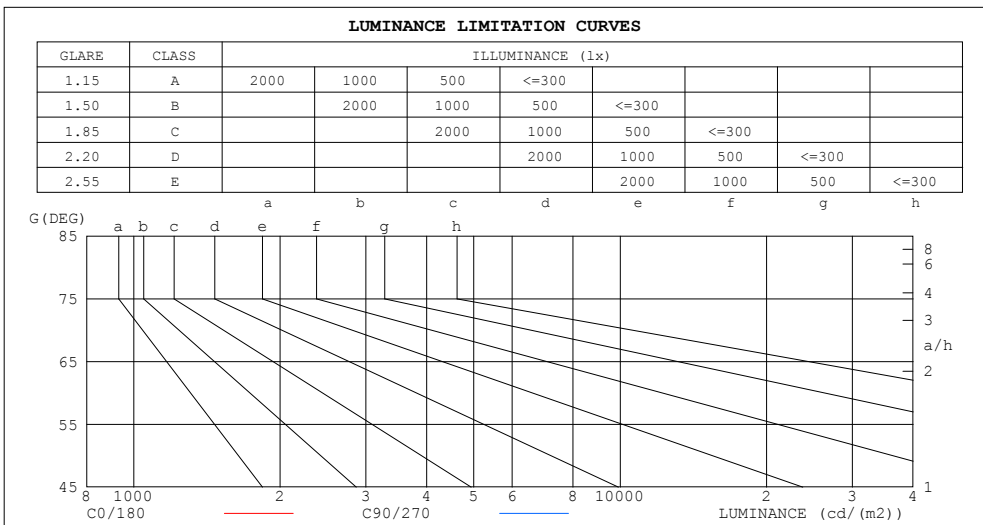
$\gamma$	C0	C90	C180	C270				$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	383.7	386.3	465.8	440.3				0- 10	43.57	43.57	11.2,11.2
20	223.6	264.2	340.4	304.7				10- 20	97.53	141.1	36.1,36.1
30	118.9	138.8	201.7	183.1				20- 30	100.2	241.3	61.8,61.8
40	58.42	61.71	110.9	88.00				30- 40	71.85	313.2	80.2,80.2
50	22.68	26.84	52.36	43.27				40- 50	42.94	356.1	91.2,91.2
60	8.827	11.06	20.36	17.73				50- 60	21.17	377.3	96.6,96.6
70	3.048	4.268	7.691	7.070				60- 70	9.302	386.6	99,99
80	0.5999	1.012	2.419	2.046				70- 80	3.409	390.0	99.8,99.8
90	0	0	0.1888	0.0796				80- 90	0.6529	390.7	100,100
100								90-100			
110								100-110			
120								110-120			
130								120-130			
140								130-140			
150								140-150			
160								150-160			
170								160-170			
180								170-180			
DEG	LUMINOUS INTENSITY:cd								UNIT: lm		

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	5	20
80	35	58
75	63	88
70	89	124
65	128	169
60	177	221
55	247	297
50	354	416
45	525	589

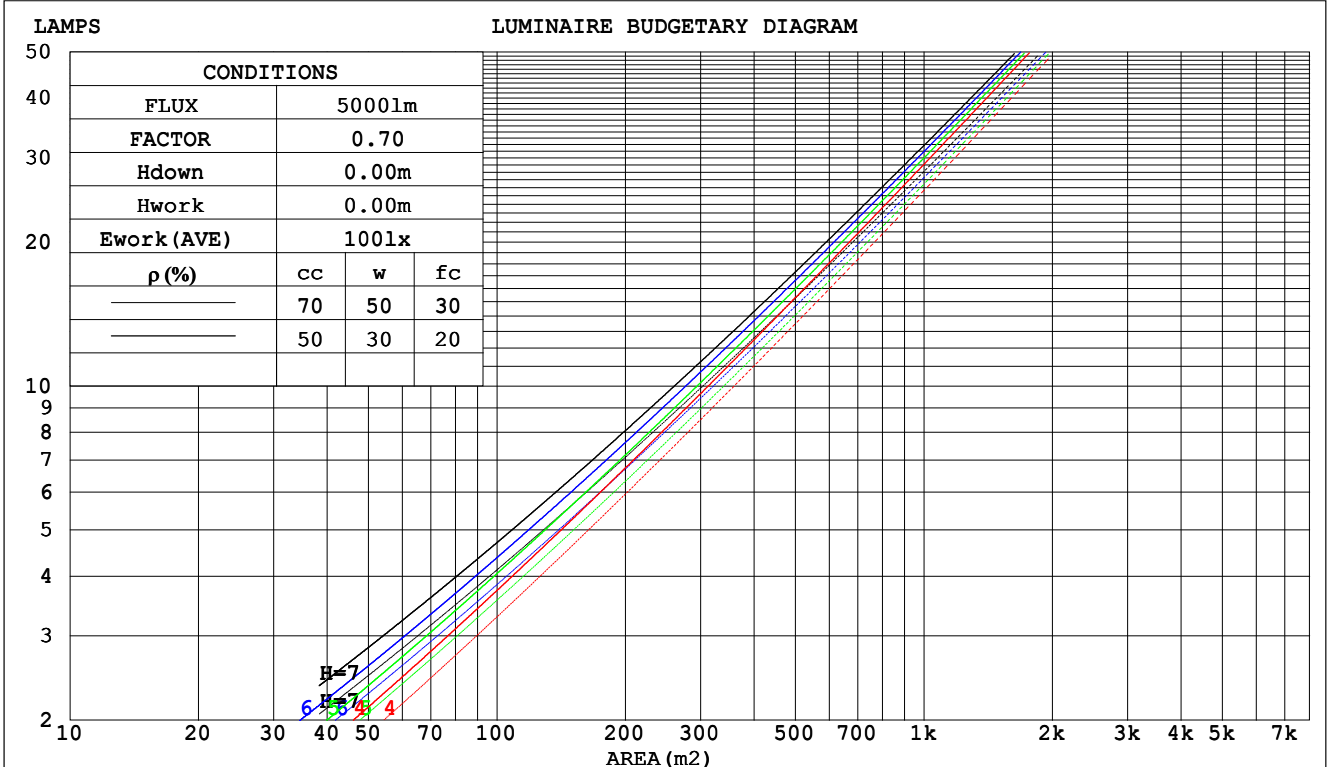
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw	0															
pfc	0															
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.10	1.07	1.04	1.08	1.05	1.03	1.03	1.01	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.88	.83	.92	.87	.83	.89	.85	.81	.87	.83	.80	.84	.81	.79	.77
4.0	.86	.80	.76	.85	.79	.75	.83	.78	.74	.81	.77	.73	.79	.75	.72	.71
5.0	.80	.74	.69	.79	.73	.69	.77	.72	.68	.76	.71	.68	.74	.70	.67	.65
6.0	.75	.68	.64	.74	.68	.63	.72	.67	.63	.71	.66	.63	.70	.65	.62	.61
7.0	.70	.64	.59	.69	.63	.59	.68	.63	.58	.67	.62	.58	.66	.61	.58	.56
8.0	.66	.59	.55	.65	.59	.55	.64	.59	.55	.63	.58	.54	.62	.57	.54	.53
9.0	.62	.56	.51	.61	.55	.51	.60	.55	.51	.60	.55	.51	.59	.54	.51	.49
10.0	.59	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.56	.51	.48	.46



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	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	.198	.113	.036	.192	.109	.035	.179	.103	.033	.167	.097	.031	.157	.091	.029	
2.0	.191	.105	.032	.185	.102	.031	.174	.097	.030	.165	.092	.029	.155	.088	.028	
3.0	.182	.097	.029	.177	.095	.028	.167	.091	.028	.159	.087	.027	.151	.083	.026	
4.0	.172	.089	.026	.168	.088	.026	.160	.085	.025	.152	.082	.025	.145	.079	.024	
5.0	.163	.083	.024	.159	.082	.024	.152	.079	.023	.146	.077	.023	.139	.074	.022	
6.0	.154	.077	.022	.151	.076	.022	.145	.074	.022	.139	.072	.021	.134	.070	.021	
7.0	.147	.073	.021	.144	.072	.020	.138	.070	.020	.133	.068	.020	.128	.067	.020	
8.0	.139	.068	.019	.137	.067	.019	.132	.066	.019	.127	.064	.019	.123	.063	.018	
9.0	.133	.064	.018	.131	.064	.018	.126	.062	.018	.122	.061	.017	.118	.060	.017	
10.0	.127	.061	.017	.125	.060	.017	.121	.059	.017	.117	.058	.017	.113	.057	.016	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.130	.088	.057	.111	.076	.050	.077	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.041	.072	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.116	.071	.040	.100	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.035	.095	.057	.030	.065	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.105	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm										
NAME: SL82					TYPE:			WEIGHT:		
SPEC.:230V5W 3000K					DIM.:			SERIAL No.:3		
MFR.: EVERFINE					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	8.4	9.5	8.7	9.7	9.8	9.0	10.0	9.2	10.2	10.4
3H	8.5	9.5	8.8	9.7	9.9	9.1	10.1	9.4	10.3	10.5
4H	8.5	9.4	8.8	9.6	9.8	9.1	10.0	9.4	10.2	10.5
6H	8.4	9.3	8.7	9.5	9.8	9.1	9.9	9.4	10.2	10.4
8H	8.4	9.2	8.7	9.5	9.7	9.0	9.8	9.3	10.1	10.4
12H	8.3	9.1	8.6	9.4	9.7	9.0	9.8	9.3	10.0	10.3
4H 2H	8.4	9.4	8.7	9.6	9.8	8.9	9.8	9.2	10.1	10.3
3H	8.6	9.4	8.9	9.6	9.9	9.1	9.9	9.4	10.2	10.5
4H	8.6	9.3	8.9	9.6	9.9	9.2	9.9	9.5	10.2	10.5
6H	8.5	9.1	8.9	9.5	9.8	9.1	9.8	9.5	10.1	10.5
8H	8.5	9.1	8.9	9.4	9.8	9.1	9.7	9.5	10.0	10.4
12H	8.4	9.0	8.8	9.3	9.7	9.1	9.6	9.5	10.0	10.4
8H 4H	8.5	9.1	8.9	9.4	9.8	9.1	9.7	9.5	10.0	10.4
6H	8.4	8.9	8.9	9.3	9.7	9.1	9.5	9.5	9.9	10.4
8H	8.4	8.8	8.9	9.2	9.7	9.0	9.5	9.5	9.9	10.3
12H	8.4	8.7	8.8	9.2	9.6	9.0	9.3	9.5	9.8	10.3
12H 4H	8.4	9.0	8.9	9.4	9.7	9.0	9.6	9.4	9.9	10.3
6H	8.4	8.8	8.9	9.2	9.7	9.0	9.4	9.5	9.9	10.3
8H	8.4	8.7	8.8	9.2	9.6	9.0	9.4	9.5	9.8	10.3
Variations with the observer position at spacings:										
S = 1.0H	+ 1.6 / - 2.9					+ 1.4 / - 2.3				
1.5H	+ 2.1 / - 2.0					+ 2.0 / - 1.9				
2.0H	+ 3.1 / - 2.6					+ 3.1 / - 2.6				

CIE Pub.117, 390.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.3)

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:

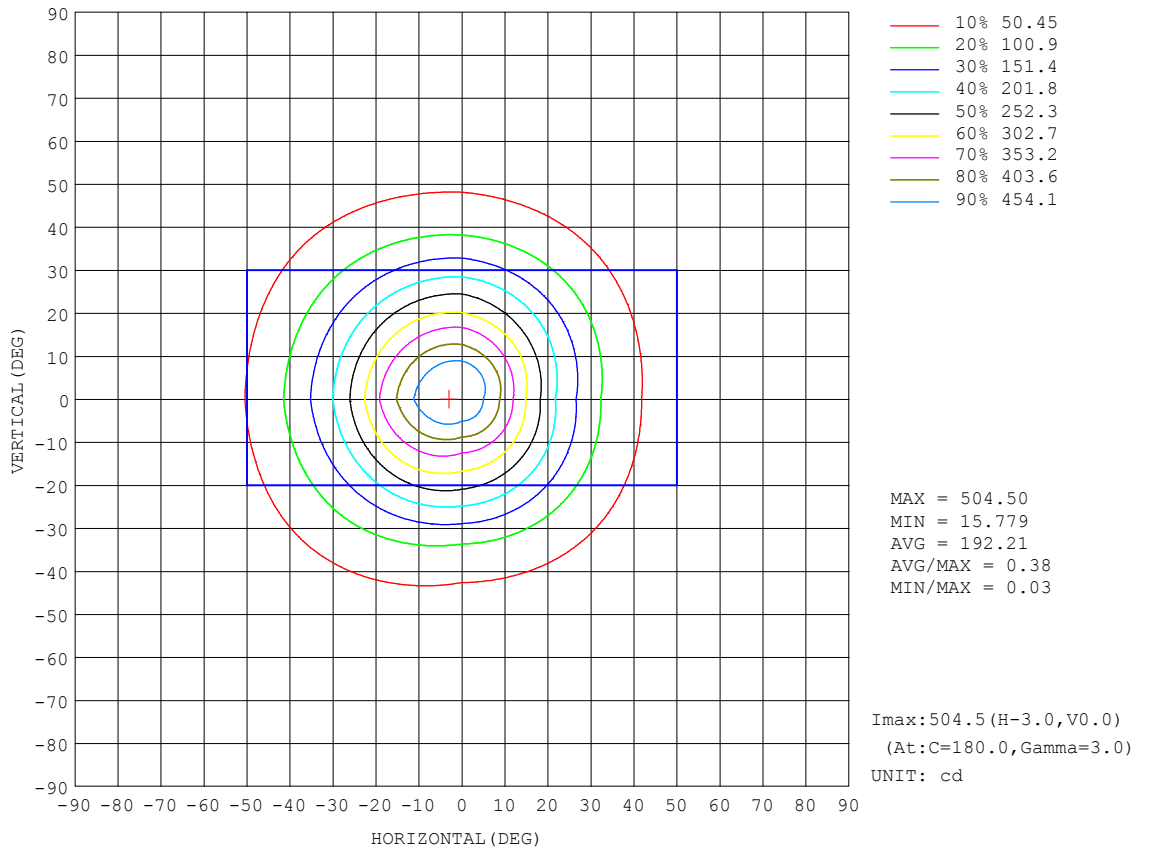
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	79	71	66	78	71	66	78	71	66	62
0.80	88	80	75	87	80	75	85	79	75	70
1.00	93	87	82	93	86	82	91	86	81	76
1.25	98	92	88	97	91	87	95	90	87	82
1.50	102	96	92	101	95	91	98	94	90	85
2.00	106	101	97	104	99	96	101	97	94	89
2.50	108	103	100	106	102	99	103	99	97	90
3.00	110	106	102	108	104	101	104	101	99	92
4.00	112	109	106	110	107	105	106	104	102	94
5.00	114	111	108	111	109	107	107	105	104	96
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:



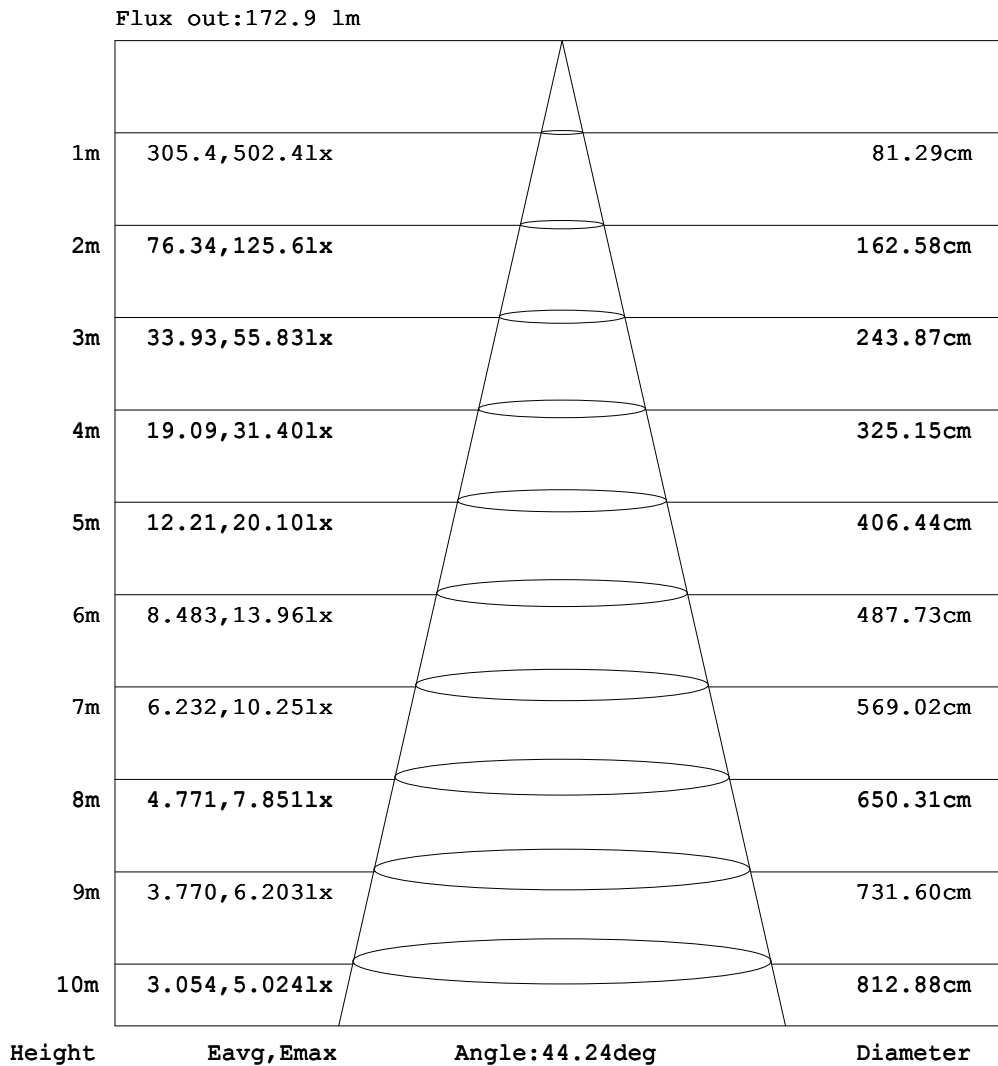
C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:



**AAI Figure**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:



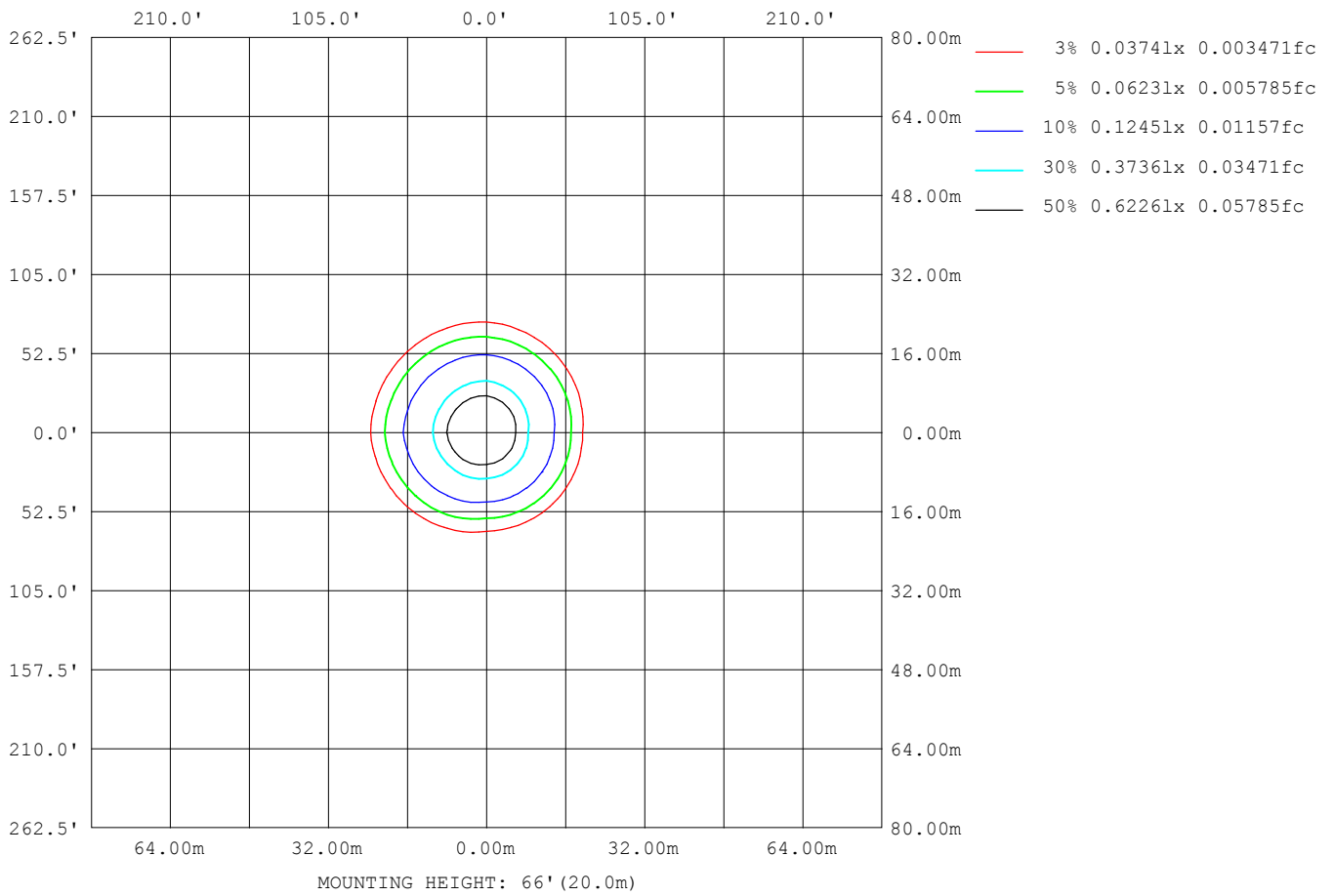
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

LED Avg.L Report

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:

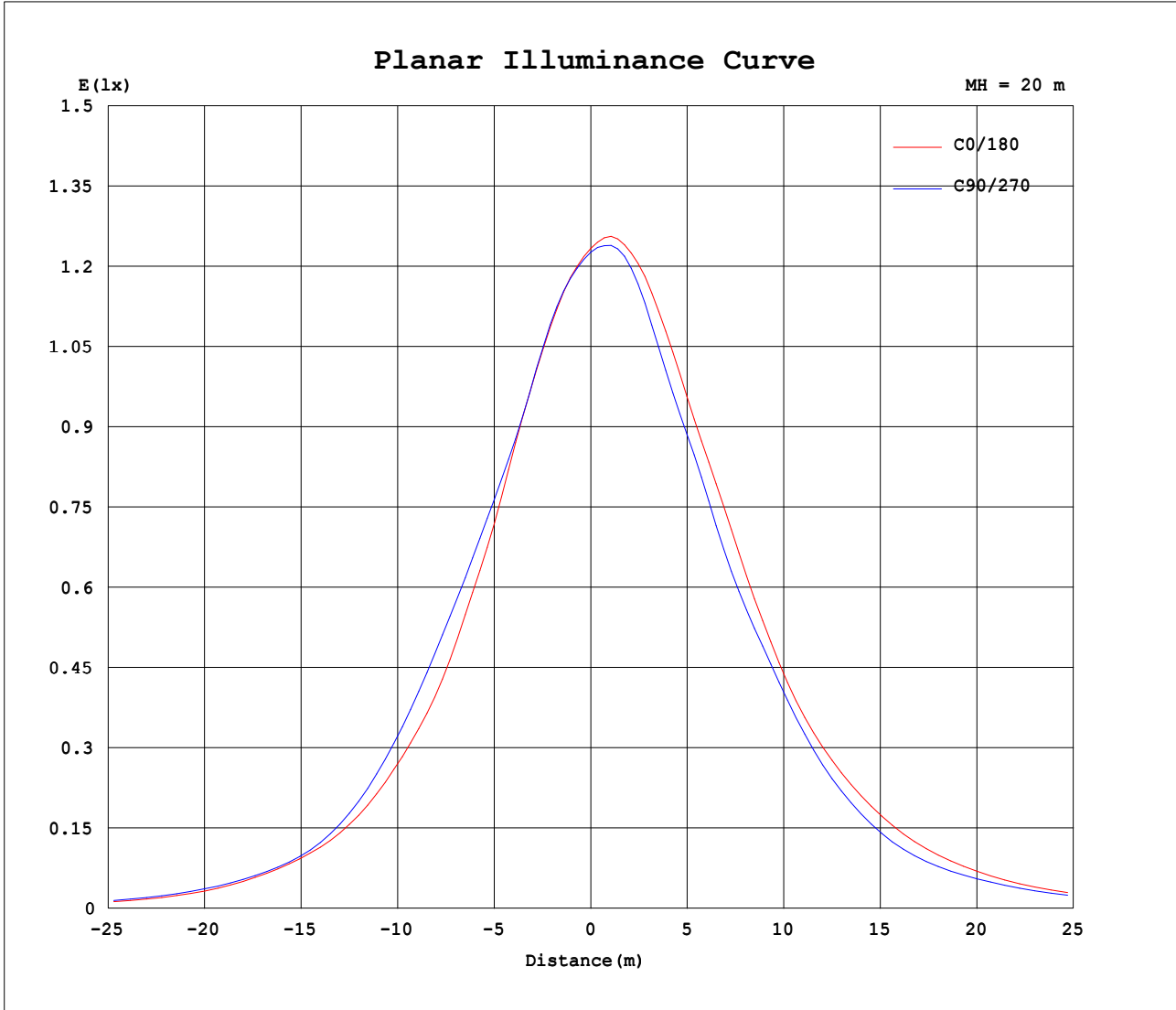
AvgL	cd/m2
L_0~180 (65) av	215
L_0~180 (75) av	118
L_0~180 (85) av	66
L_90~270 (65) av	218
L_90~270 (75) av	122
L_90~270 (85) av	53
L_45 (65) av	222
L_45 (75) av	124
L_45 (85) av	61

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:231.17V I:0.0485A P:5.4870W PF:0.4908 Freq:50.00Hz Lamp Flux:390.655x1 lm		
NAME: SL82	TYPE:	WEIGHT:
SPEC.:230V5W 3000K	DIM.:	SERIAL No.:3
MFR.: EVERFINE	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ γ (DEG)	0	90	180	270															
0	492	492	492	492															
5	452	456	500	495															
10	384	386	466	440															
15	299	325	405	377															
20	224	264	340	305															
25	166	200	267	246															
30	119	139	202	183															
35	83.4	90.1	153	129															
40	58.4	61.7	111	88.0															
45	37.0	41.8	78.4	63.3															
50	22.7	26.8	52.4	43.3															
55	14.1	17.1	33.0	27.8															
60	8.83	11.1	20.4	17.7															
65	5.41	7.15	12.8	11.3															
70	3.05	4.27	7.69	7.07															
75	1.63	2.29	4.47	4.04															
80	0.60	1.01	2.42	2.05															
85	0.05	0.18	1.10	0.75															
90	0.00	0.00	0.19	0.08															

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2018-04-19

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.404.6  
 Humidity:65.0%  
 Test Distance:5.700m [K=1.0000]  
 Remarks: