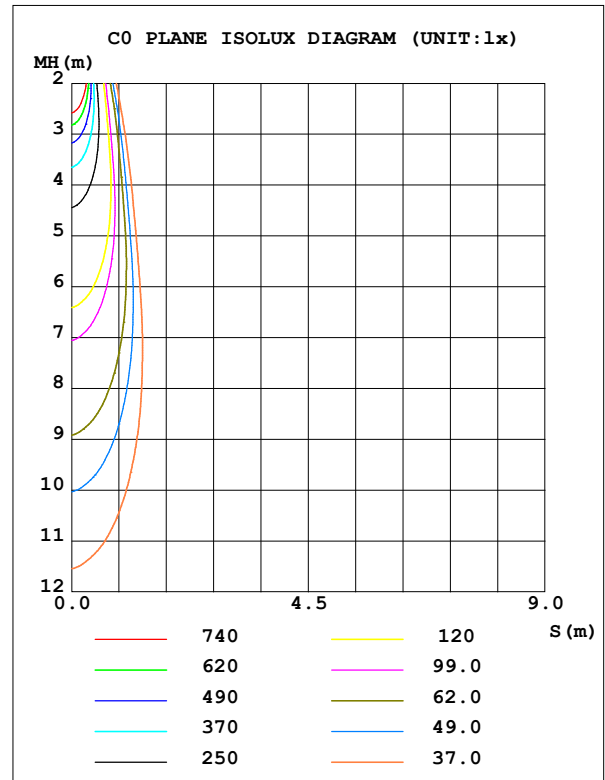
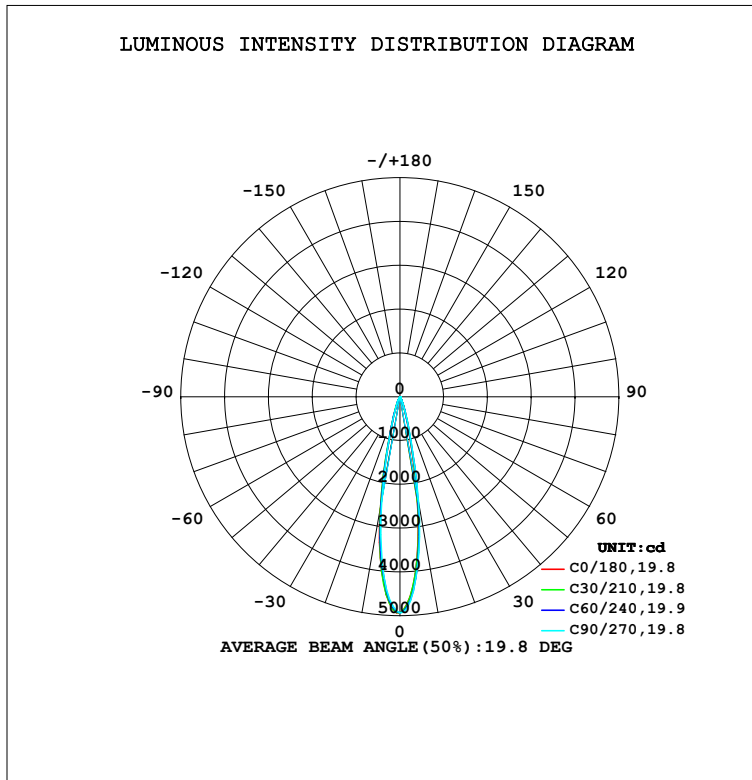


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.82lx1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 74.66 lm/W
MODEL		I <sub>max</sub> (cd)	4938	S/MH (C0/180)		0.34
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)		0.33
RATED VOLTAGE (V)	230V	TOTAL FLUX (lm)	701.82	η UP,DN (C0-180)		0.0,49.6
NOMINAL FLUX (lm)	701.821	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,50.4
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE (V)		η down (%)	100.0	CIBSE SHR MAX		1.00



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_v1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

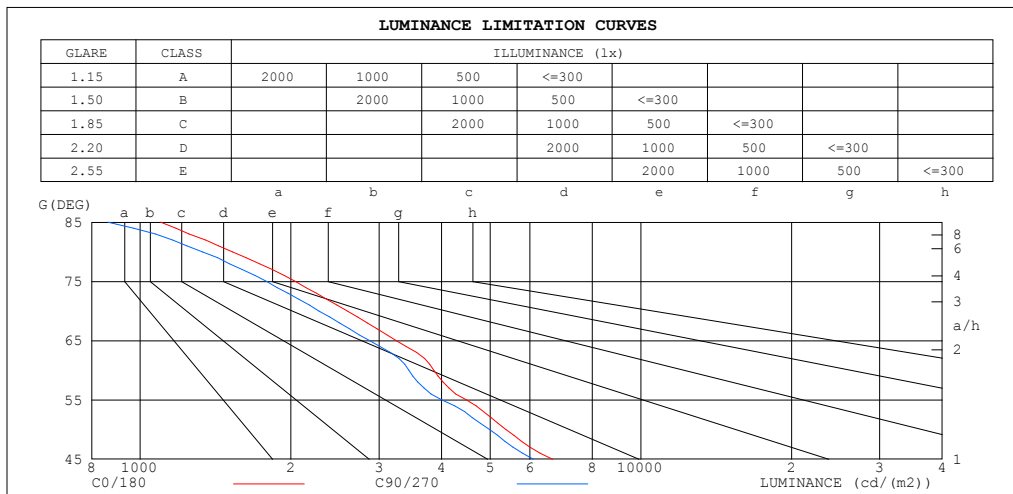
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	2246	2327	2448	2552	2605	2549	2426	2284	0- 10	341.6	341.6	48.7,48.7
20	308.2	318.0	327.5	330.3	338.4	341.1	335.0	311.7	10- 20	265.9	607.5	86.6,86.6
30	61.83	59.20	58.27	60.66	62.97	62.54	61.19	60.00	20- 30	69.08	676.6	96.4,96.4
40	8.893	8.127	8.021	8.761	9.314	9.124	8.636	8.705	30- 40	15.36	691.9	98.6,98.6
50	4.344	4.035	4.024	4.186	4.373	4.453	4.369	4.279	40- 50	4.617	696.6	99.2,99.2
60	2.427	2.214	2.160	2.285	2.347	2.375	2.353	2.331	50- 60	2.817	699.4	99.7,99.7
70	1.116	0.9950	0.9768	1.052	1.071	1.092	1.093	1.055	60- 70	1.642	701.0	99.9,99.9
80	0.3340	0.2902	0.2904	0.3226	0.3191	0.3215	0.3213	0.3014	70- 80	0.6772	701.7	100,100
90	0	0	0	0	0.0015	0	0.0007	0	80- 90	0.1314	701.8	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: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_v1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1099	861
80	1531	1332
75	2041	1789
70	2596	2275
65	3248	2871
60	3864	3442
55	4480	4001
50	5378	4988
45	6667	6102

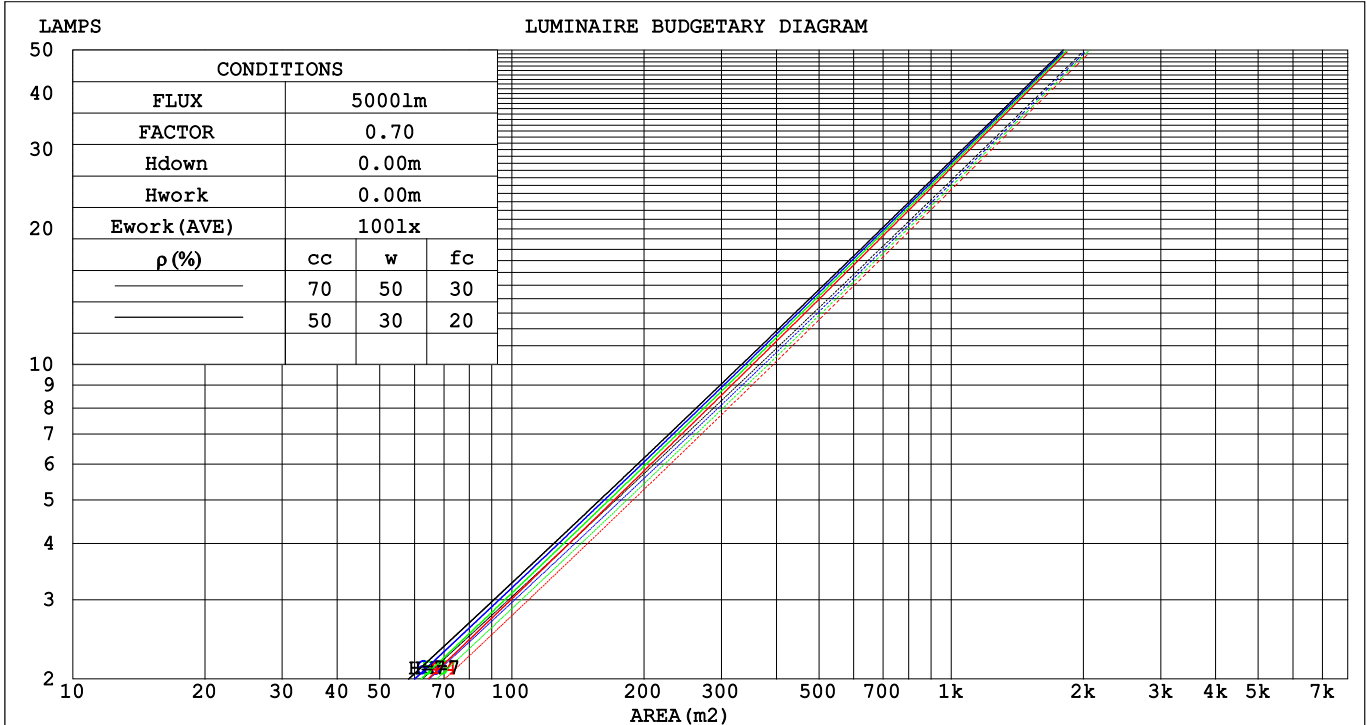
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding 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	1.19	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	1.13	1.12	1.10	1.11	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.00	.99	.97
2.0	1.09	1.06	1.04	1.07	1.05	1.02	1.04	1.02	1.00	1.01	.00	.98	.98	.97	.96	.95
3.0	1.05	1.01	.99	1.03	1.00	.98	1.01	.98	.96	.99	.97	.95	.97	.95	.94	.92
4.0	1.01	.98	.95	1.00	.97	.94	.98	.95	.93	.96	.94	.92	.95	.93	.91	.90
5.0	.98	.94	.92	.97	.94	.91	.96	.93	.91	.94	.92	.90	.93	.91	.89	.88
6.0	.95	.92	.89	.95	.91	.89	.93	.90	.88	.92	.90	.88	.91	.89	.87	.86
7.0	.93	.89	.87	.92	.89	.86	.91	.88	.86	.90	.88	.86	.89	.87	.85	.84
8.0	.91	.87	.85	.90	.87	.84	.89	.86	.84	.88	.86	.84	.88	.85	.83	.83
9.0	.89	.85	.83	.88	.85	.82	.87	.84	.82	.87	.84	.82	.86	.84	.82	.81
10.0	.87	.83	.81	.86	.83	.81	.86	.83	.81	.85	.82	.80	.85	.82	.80	.79



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

### WEC AND CCEC

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm																	
NAME: SLDL284F-2030P-BGDD10									TYPE:						WEIGHT:		
SPEC.:									DIM.:						SERIAL No.:		
MFR.: Switch Lighting									SUR.:						Shielding 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	.127	.072	.023	.121	.069	.022	.108	.062	.020	.097	.056	.018	.087	.050	.016	
2.0	.117	.064	.020	.111	.061	.019	.101	.056	.018	.092	.052	.016	.083	.047	.015	
3.0	.108	.057	.017	.104	.055	.017	.095	.052	.016	.087	.048	.015	.080	.044	.014	
4.0	.100	.052	.015	.097	.051	.015	.090	.048	.014	.083	.045	.013	.077	.042	.013	
5.0	.094	.048	.014	.091	.047	.014	.085	.044	.013	.079	.042	.012	.074	.040	.012	
6.0	.088	.044	.013	.086	.043	.012	.081	.041	.012	.076	.039	.012	.071	.038	.011	
7.0	.084	.041	.012	.081	.040	.012	.077	.039	.011	.073	.037	.011	.069	.036	.011	
8.0	.079	.039	.011	.077	.038	.011	.073	.037	.010	.070	.035	.010	.066	.034	.010	
9.0	.075	.036	.010	.074	.036	.010	.070	.035	.010	.067	.034	.010	.064	.033	.009	
10.0	.072	.035	.010	.070	.034	.009	.067	.033	.009	.065	.032	.009	.062	.031	.009	

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.168	.158	.149	.143	.135	.128	.098	.093	.089	.056	.054	.052	.018	.017	.017	
2.0	.149	.133	.119	.128	.114	.103	.087	.079	.072	.050	.046	.042	.016	.015	.014	
3.0	.133	.113	.097	.114	.098	.084	.078	.068	.059	.045	.040	.035	.015	.013	.011	
4.0	.120	.098	.080	.103	.084	.070	.071	.059	.049	.041	.034	.029	.013	.011	.010	
5.0	.109	.085	.067	.094	.074	.059	.065	.051	.041	.037	.030	.025	.012	.010	.008	
6.0	.100	.075	.057	.086	.065	.050	.059	.045	.035	.034	.027	.021	.011	.009	.007	
7.0	.092	.067	.049	.079	.058	.043	.055	.040	.030	.032	.024	.018	.010	.008	.006	
8.0	.085	.060	.042	.073	.052	.037	.051	.036	.026	.029	.021	.016	.010	.007	.005	
9.0	.079	.054	.037	.068	.047	.032	.047	.033	.023	.028	.019	.014	.009	.006	.005	
10.0	.074	.049	.032	.064	.043	.028	.044	.030	.020	.026	.018	.012	.008	.006	.004	

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.82lx1 lm											
NAME: SLDL284F-2030P-BGDD10					TYPE:			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.: Switch Lighting					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	9.3	9.8	9.5	10.0	10.1	8.9	9.5	9.1	9.7	9.8
	3H	9.6	10.1	9.8	10.3	10.5	9.2	9.8	9.5	10.0	10.1
	4H	9.7	10.2	9.9	10.4	10.6	9.3	9.8	9.6	10.0	10.2
	6H	9.7	10.2	10.0	10.4	10.6	9.3	9.8	9.6	10.0	10.3
	8H	9.7	10.2	10.0	10.4	10.6	9.3	9.8	9.6	10.0	10.3
	12H	9.7	10.1	10.0	10.4	10.6	9.3	9.7	9.6	10.0	10.3
4H	2H	9.3	9.8	9.6	10.0	10.2	9.0	9.5	9.3	9.8	10.0
	3H	9.7	10.2	10.0	10.4	10.7	9.4	9.9	9.7	10.1	10.4
	4H	9.8	10.3	10.2	10.6	10.8	9.5	9.9	9.9	10.2	10.5
	6H	9.9	10.3	10.3	10.6	10.9	9.6	9.9	9.9	10.3	10.6
	8H	9.9	10.2	10.3	10.6	10.9	9.6	9.9	9.9	10.3	10.6
	12H	9.9	10.2	10.3	10.6	10.9	9.5	9.8	9.9	10.2	10.6
8H	4H	9.8	10.1	10.2	10.5	10.8	9.5	9.8	9.9	10.2	10.5
	6H	9.9	10.2	10.3	10.5	11.0	9.6	9.8	10.0	10.2	10.6
	8H	9.9	10.1	10.3	10.5	11.0	9.6	9.8	10.0	10.2	10.7
	12H	9.9	10.1	10.3	10.5	11.0	9.5	9.8	10.0	10.2	10.7
12H	4H	9.7	10.1	10.1	10.4	10.8	9.4	9.8	9.8	10.1	10.5
	6H	9.8	10.1	10.3	10.5	10.9	9.5	9.8	10.0	10.2	10.6
	8H	9.8	10.1	10.3	10.5	11.0	9.5	9.7	10.0	10.2	10.7
Variations with the observer position at spacings:											
S = 1.0H		+ 1.2 / - 1.1					+ 1.1 / - 1.2				
1.5H		+ 2.1 / - 0.9					+ 1.8 / - 0.7				
2.0H		+ 1.4 / - 1.0					+ 1.2 / - 0.8				

CIE Pub.117, 701.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.2)

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

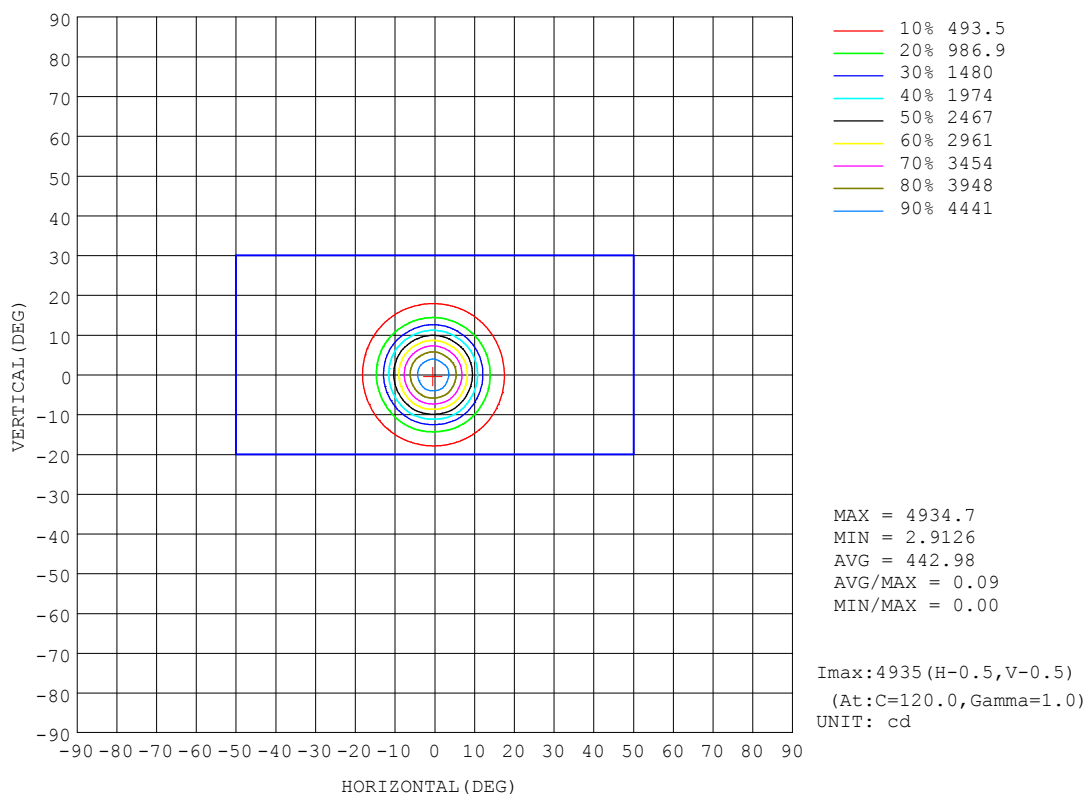
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	82	90	85	81	89	84	81	78
0.80	98	92	89	97	92	89	96	92	89	85
1.00	101	96	93	101	96	93	99	96	92	89
1.25	105	100	97	104	100	97	102	99	96	92
1.50	107	103	100	106	102	100	104	101	99	94
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	106	104	107	104	102	96
3.00	113	109	107	111	108	106	107	105	104	97
4.00	114	112	110	112	110	109	109	107	106	99
5.00	116	114	112	114	112	110	110	108	107	100
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



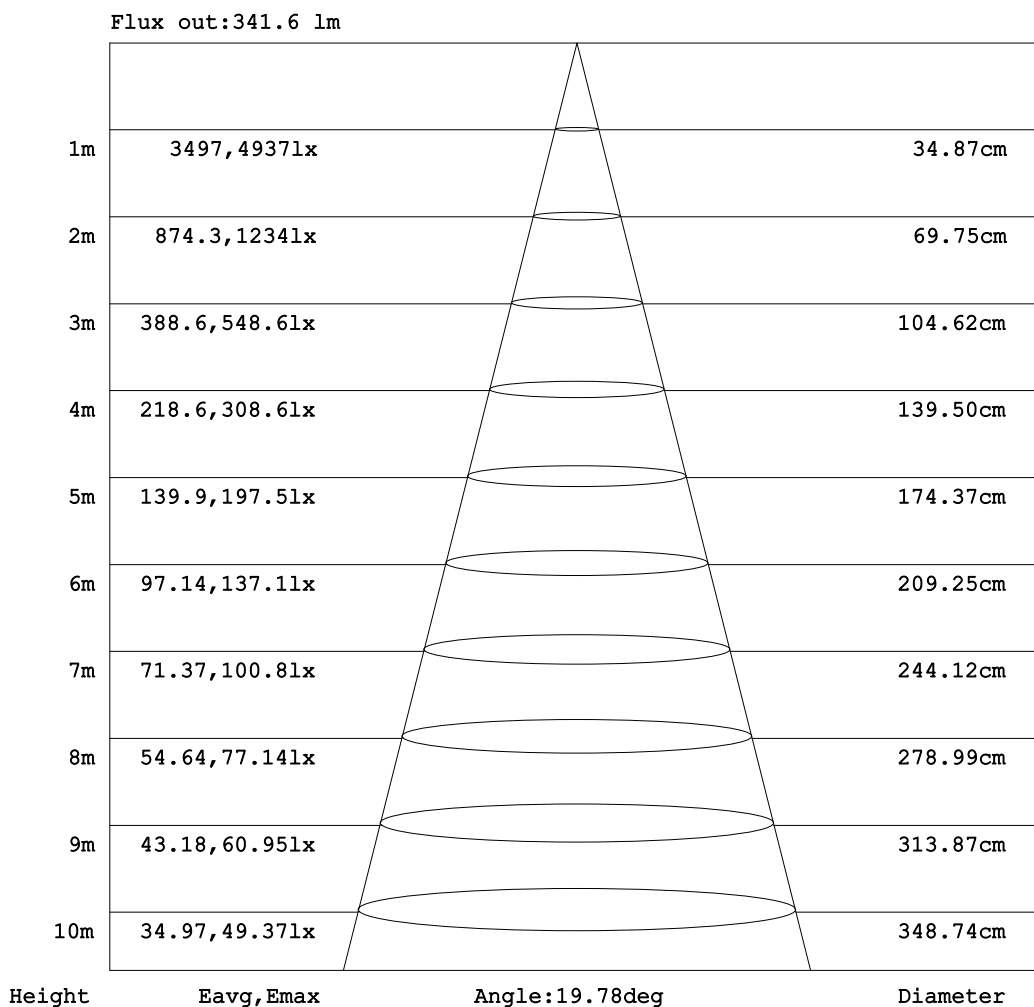
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Jason  
 Test Date: 06 October 2020

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-i300\_v1 SYSTEM V2.0.401  
 Humidity: 65.0%  
 Test Distance: 3.160m [K=1.0000]  
 Remarks:



### AAI Figure

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.82lx1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



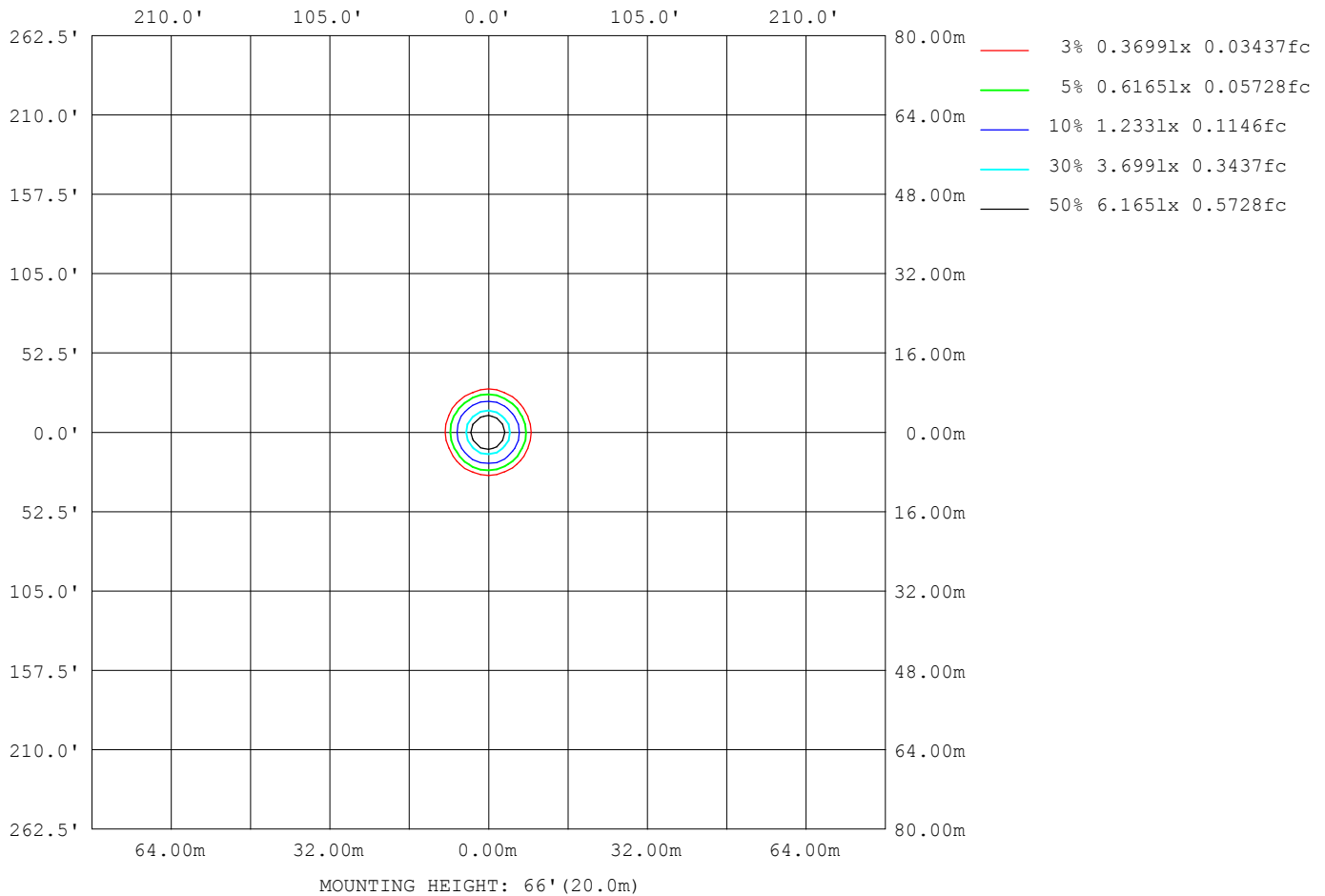
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:230.00V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:701.821x1 lm		
NAME: SLDL284F-2030P-BGDD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

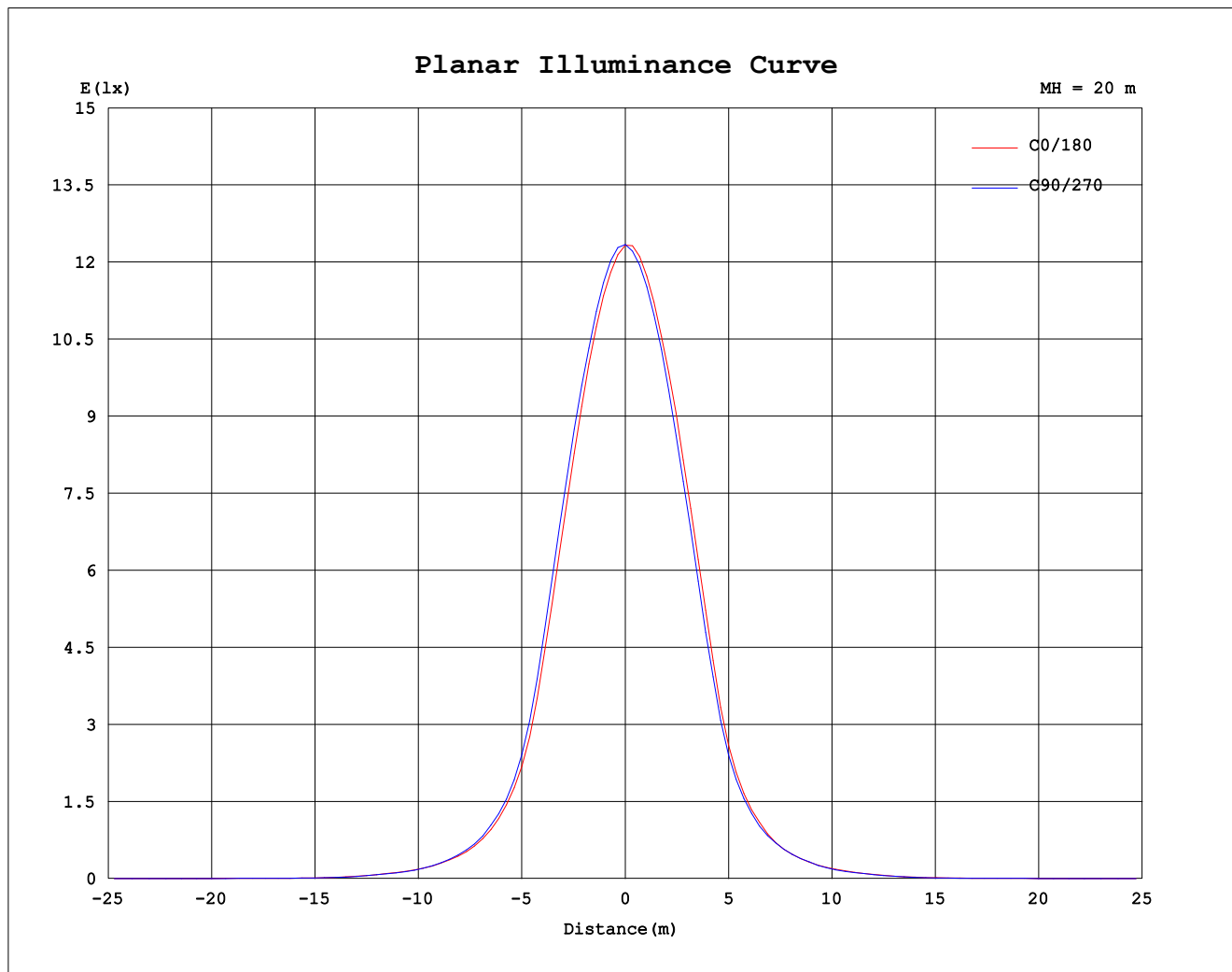
AvgL	cd/m2
L_0~180 (65) av	3191
L_0~180 (75) av	2001
L_0~180 (85) av	1054
L_90~270 (65) av	3024
L_90~270 (75) av	1881
L_90~270 (85) av	953
L_45 (65) av	3075
L_45 (75) av	1900
L_45 (85) av	953

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Jason  
Test Date:06 October 2020

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Jason  
 Test Date: 06 October 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-i300\_V1 SYSTEM V2.0.401  
 Humidity: 65.0%  
 Test Distance: 3.160m [K=1.0000]  
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-i300_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 3.160m [K=1.0000]
Remarks:

```