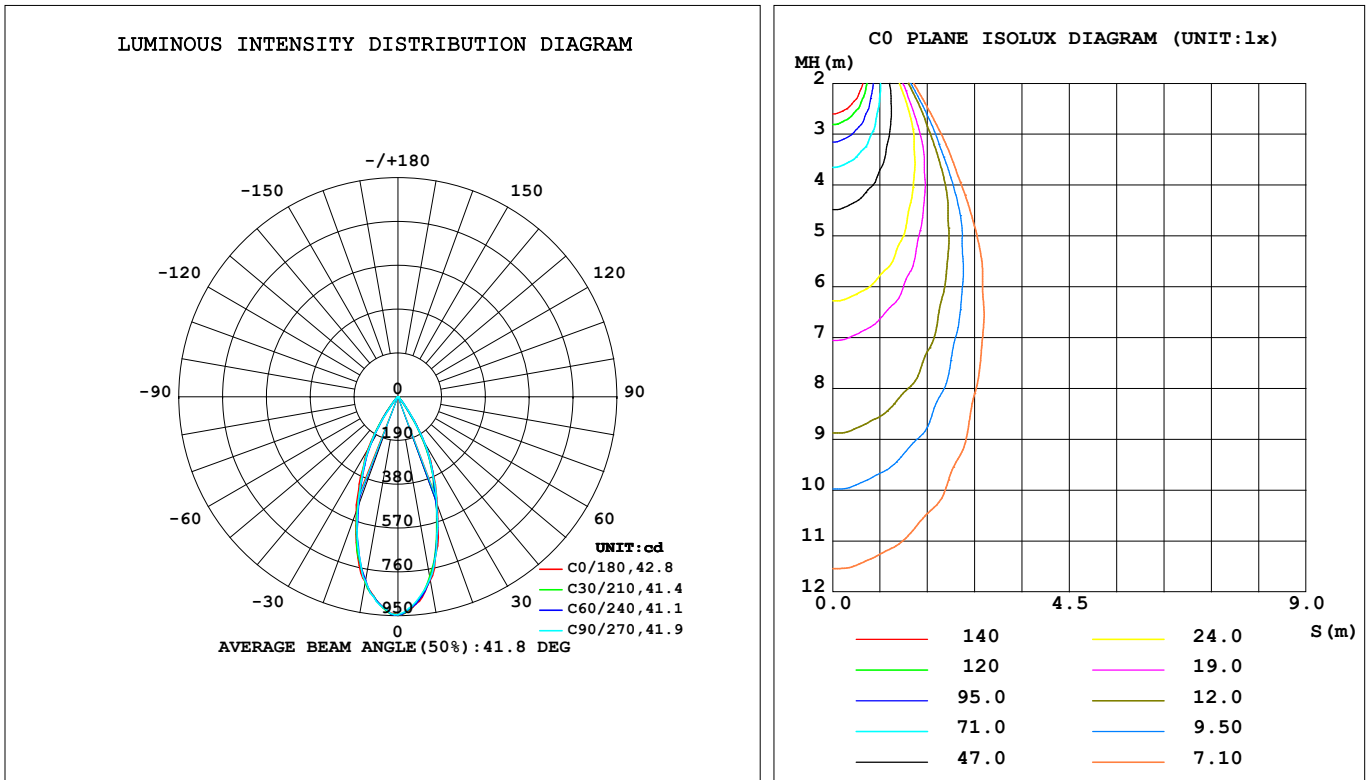


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 55.34 lm/W
MODEL		I _{max} (cd)	946.1	S/MH (C0/180)		0.69
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)		0.68
RATED VOLTAGE (V)		TOTAL FLUX (lm)	520.23	η UP,DN (C0-180)		0.0,49.4
NOMINAL FLUX (lm)	520.227	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,50.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.75
TEST VOLTAGE (V)		η down (%)	100.0	CIBSE SHR MAX		0.75



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 22 July 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:

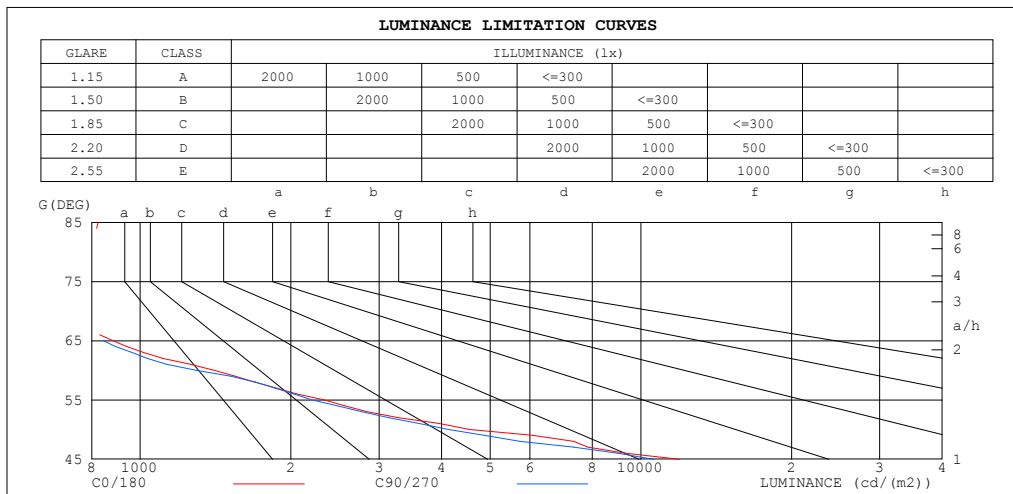
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	807.2	798.5	802.4	815.8	814.7	813.1	814.4	818.5	0- 10	83.29	83.29	16,16
20	502.3	480.3	492.4	516.8	530.3	507.3	508.5	508.2	10- 20	184.2	267.5	51.4,51.4
30	226.3	221.4	231.8	263.8	252.7	238.4	240.4	244.5	20- 30	167.0	434.5	83.5,83.5
40	31.72	28.69	31.38	39.94	37.19	34.73	32.88	32.99	30- 40	72.97	507.4	97.5,97.5
50	3.673	3.619	3.338	4.116	4.419	4.233	4.201	3.806	40- 50	10.28	517.7	99.5,99.5
60	0.8817	0.8276	0.8127	0.8711	0.8962	0.9495	0.9978	0.9103	50- 60	1.687	519.4	99.8,99.8
70	0.3032	0.3015	0.2893	0.2816	0.2978	0.3274	0.3302	0.3046	60- 70	0.5082	519.9	99.9,99.9
80	0.1566	0.1475	0.1508	0.1556	0.1606	0.1576	0.1554	0.1495	70- 80	0.2318	520.1	100,100
90	0	0	0	0	0	0	0	0	80- 90	0.0845	520.2	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:22 July 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:

LUMINANCE LIMITATION CURVES

Test:U:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	825	772
80	719	691
75	675	636
70	707	673
65	880	842
60	1405	1293
55	2324	2199
50	4554	4132
45	11941	10608

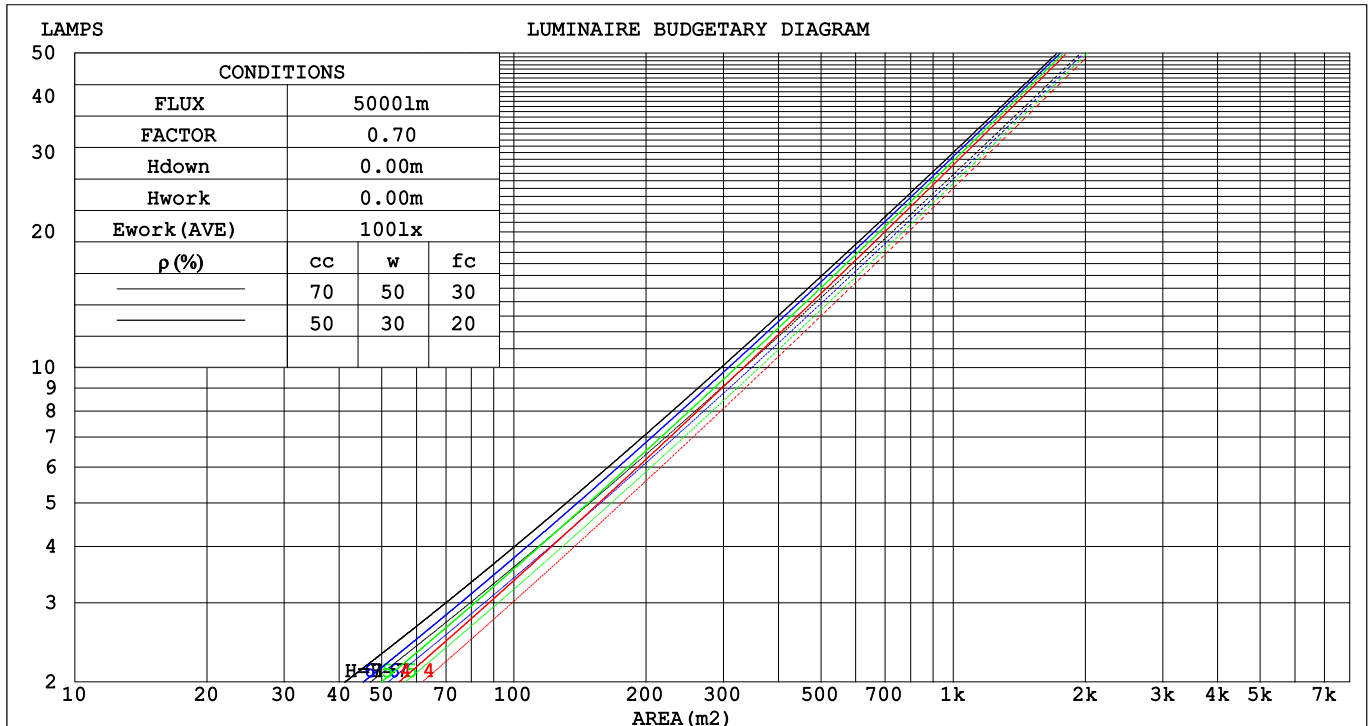
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 22 July 2020

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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	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															



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 July 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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	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	.162	.092	.029	.155	.089	.028	.143	.082	.026	.131	.076	.024	.121	.070	.023	
2.0	.154	.084	.026	.148	.082	.025	.138	.077	.024	.128	.072	.022	.119	.067	.021	
3.0	.146	.078	.023	.141	.076	.023	.132	.072	.022	.124	.068	.021	.116	.064	.020	
4.0	.138	.072	.021	.134	.070	.021	.127	.067	.020	.120	.064	.019	.113	.062	.019	
5.0	.132	.067	.019	.128	.066	.019	.122	.063	.019	.116	.061	.018	.110	.059	.018	
6.0	.126	.063	.018	.123	.062	.018	.117	.060	.017	.112	.058	.017	.107	.056	.017	
7.0	.120	.060	.017	.118	.059	.017	.113	.057	.016	.108	.055	.016	.104	.054	.016	
8.0	.115	.056	.016	.113	.056	.016	.109	.054	.015	.104	.053	.015	.100	.052	.015	
9.0	.111	.054	.015	.109	.053	.015	.105	.052	.015	.101	.051	.014	.097	.049	.014	
10.0	.106	.051	.014	.105	.051	.014	.101	.049	.014	.098	.048	.014	.094	.047	.014	

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	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.115	.132	.114	.099	.090	.079	.069	.052	.046	.041	.017	.015	.013	
3.0	.141	.113	.092	.120	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.075	.111	.085	.065	.076	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.120	.087	.062	.103	.075	.054	.071	.052	.038	.041	.031	.023	.013	.010	.007	
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.012	.009	.006	
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.082	.050	.028	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.090	.053	.029	.078	.046	.025	.054	.033	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 July 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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm											
NAME: SLDL216F-4030P-TWD10					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	2H	19.7	20.5	19.9	20.7	20.8	20.0	20.9	20.2	21.0	21.2
	3H	19.5	20.3	19.8	20.5	20.7	19.9	20.6	20.1	20.8	21.0
	4H	19.4	20.2	19.7	20.4	20.6	19.8	20.5	20.0	20.7	20.9
	6H	19.3	20.0	19.6	20.3	20.5	19.7	20.4	20.0	20.6	20.9
	8H	19.3	20.0	19.6	20.2	20.5	19.6	20.3	19.9	20.6	20.8
	12H	19.2	19.9	19.6	20.1	20.4	19.6	20.2	19.9	20.5	20.8
4H	2H	19.4	20.1	19.7	20.4	20.6	19.8	20.5	20.0	20.7	20.9
	3H	19.2	19.9	19.6	20.1	20.4	19.6	20.2	19.9	20.5	20.8
	4H	19.2	19.7	19.5	20.0	20.3	19.5	20.1	19.8	20.4	20.7
	6H	19.1	19.6	19.4	19.9	20.2	19.4	19.9	19.8	20.2	20.6
	8H	19.0	19.5	19.4	19.8	20.2	19.4	19.8	19.8	20.2	20.5
	12H	19.0	19.4	19.4	19.8	20.1	19.3	19.7	19.7	20.1	20.5
8H	4H	19.0	19.5	19.4	19.8	20.2	19.4	19.8	19.7	20.2	20.5
	6H	18.9	19.3	19.3	19.7	20.1	19.3	19.6	19.7	20.0	20.4
	8H	18.8	19.2	19.3	19.6	20.0	19.2	19.5	19.6	20.0	20.4
	12H	18.8	19.1	19.3	19.5	20.0	19.1	19.4	19.6	19.9	20.4
12H	4H	19.0	19.4	19.4	19.8	20.1	19.3	19.7	19.7	20.1	20.5
	6H	18.8	19.2	19.3	19.6	20.0	19.2	19.5	19.6	20.0	20.4
	8H	18.8	19.1	19.3	19.5	20.0	19.1	19.4	19.6	19.9	20.3
Variations with the observer position at spacings:											
S = 1.0H	+ 4.7 / -13.0					+ 4.3 / -13.3					
1.5H	+ 7.2 / -11.2					+ 6.8 / -11.3					
2.0H	+ 6.9 / - 5.7					+ 6.1 / - 5.8					

CIE Pub.117, 520.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.3)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 July 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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

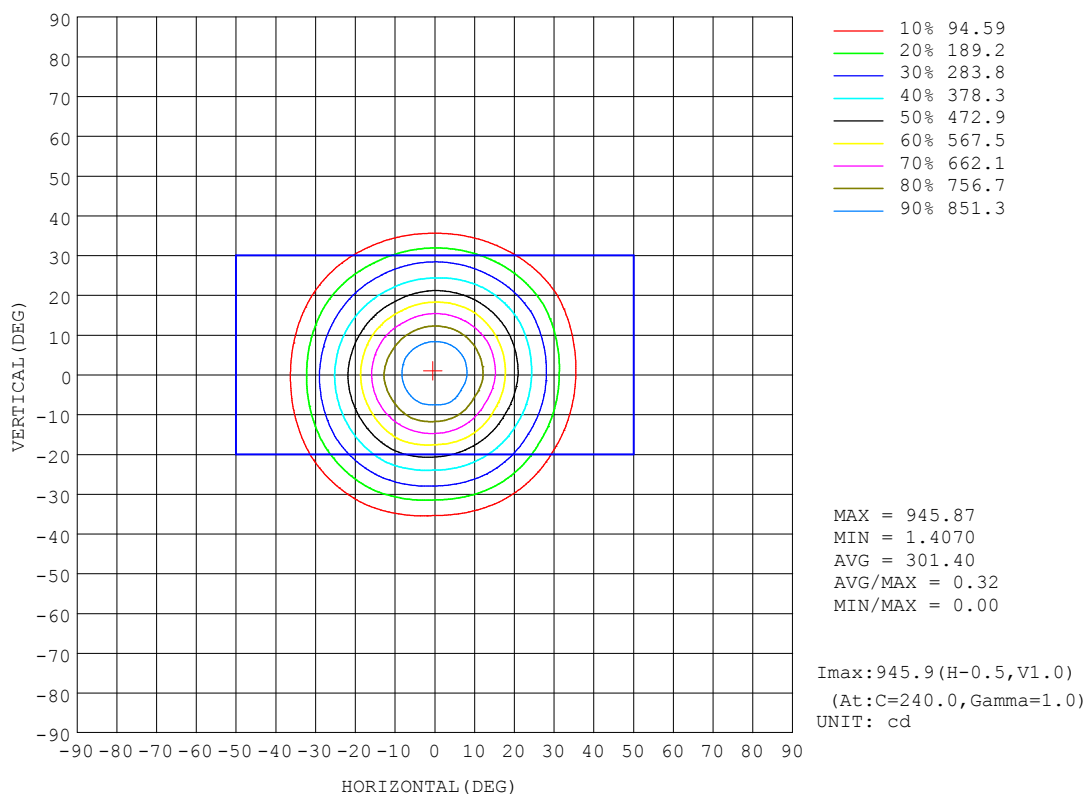
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	90	84	81	90	84	81	89	84	80	77
0.80	97	92	88	96	91	88	95	91	88	84
1.00	101	96	93	100	96	92	99	95	92	88
1.25	105	100	97	104	99	96	102	98	96	92
1.50	107	103	100	106	102	99	104	101	98	94
2.00	110	106	103	108	105	102	105	103	100	95
2.50	111	108	105	109	106	104	106	104	102	96
3.00	112	109	107	111	108	106	107	105	103	97
4.00	114	112	110	112	110	108	109	107	106	99
5.00	116	113	112	113	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:22 July 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:

ISOCANDELA DIAGRAM

Test:U:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

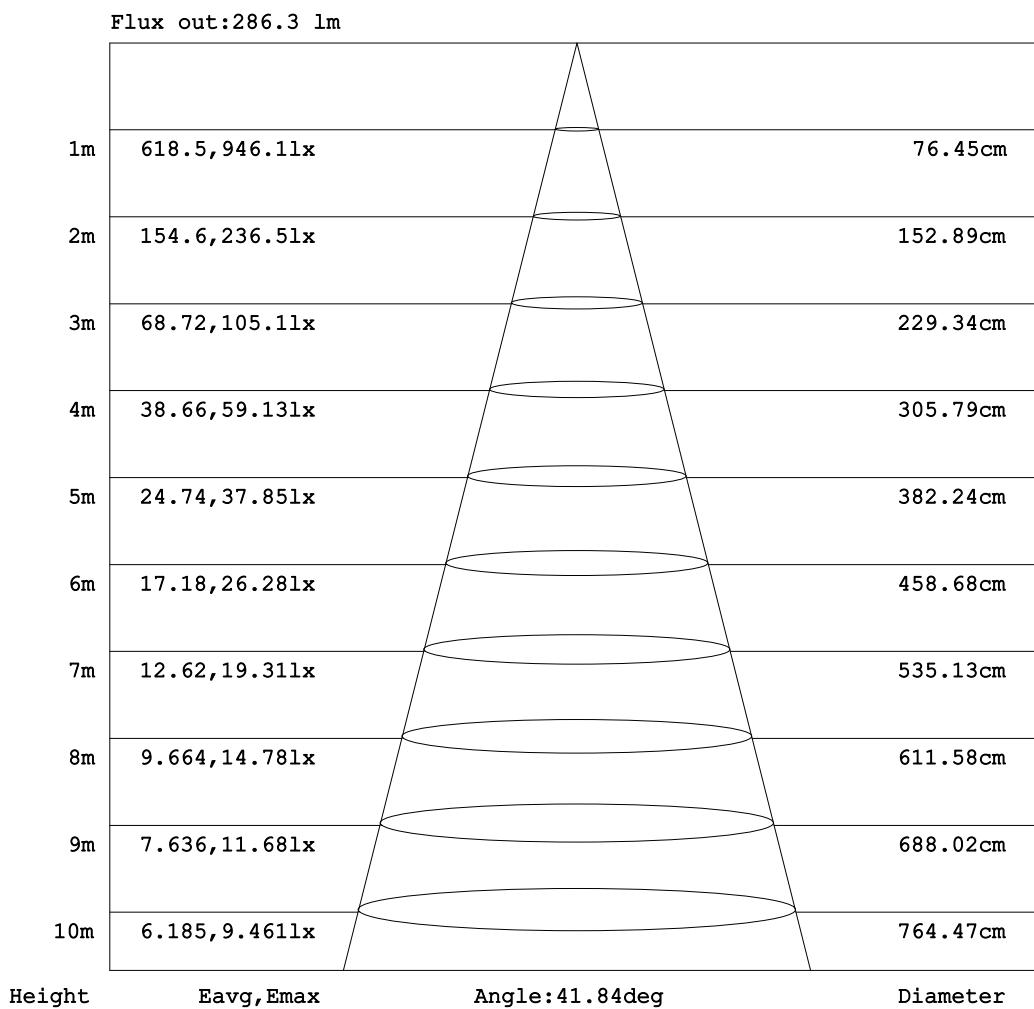


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:22 July 2020

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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



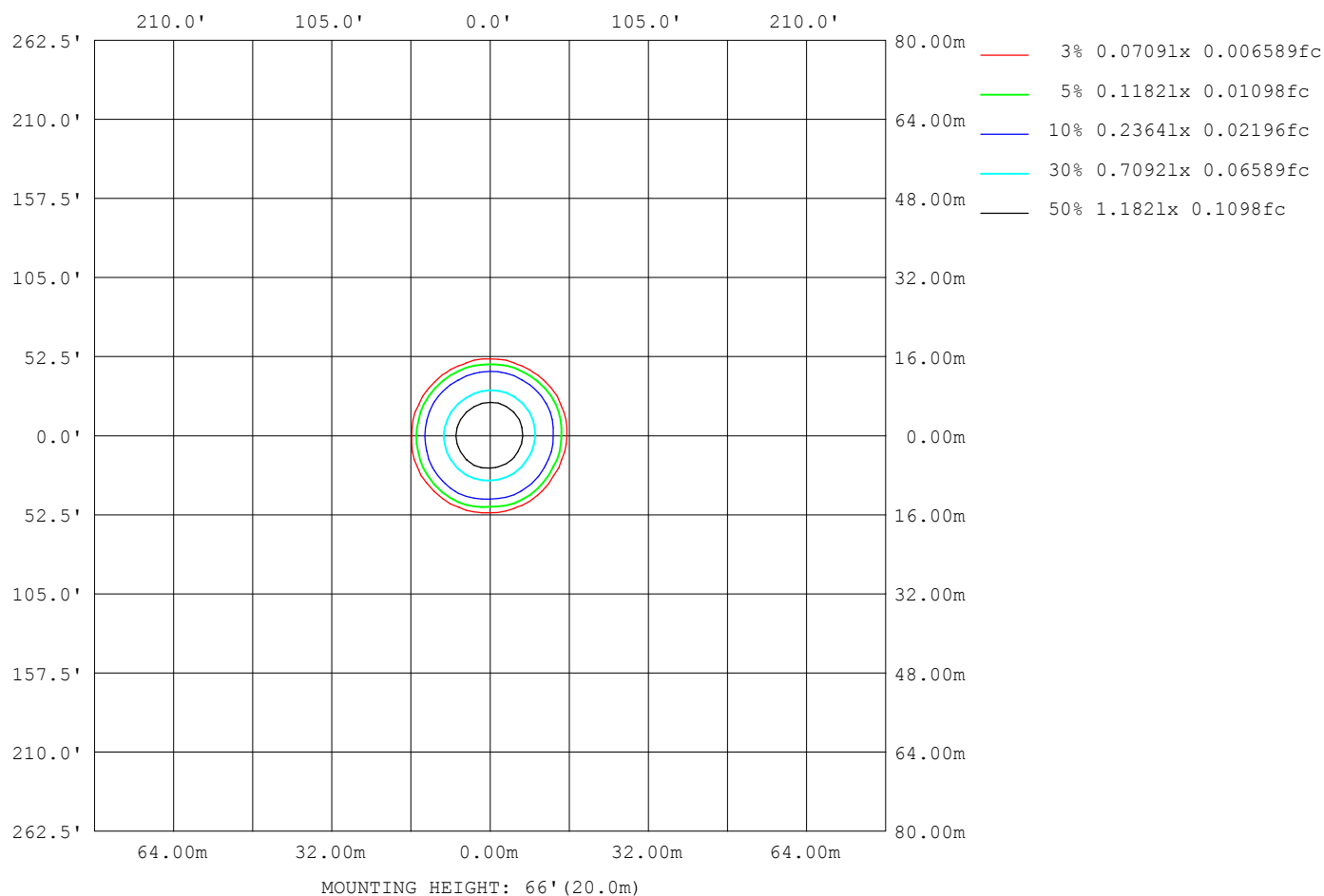
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 July 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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	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:22 July 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:229.90V I:0.0420A P:9.4000W PF:0.9770 Freq:50.00Hz Lamp Flux:520.227x1 lm		
NAME: SLDL216F-4030P-TWD10	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

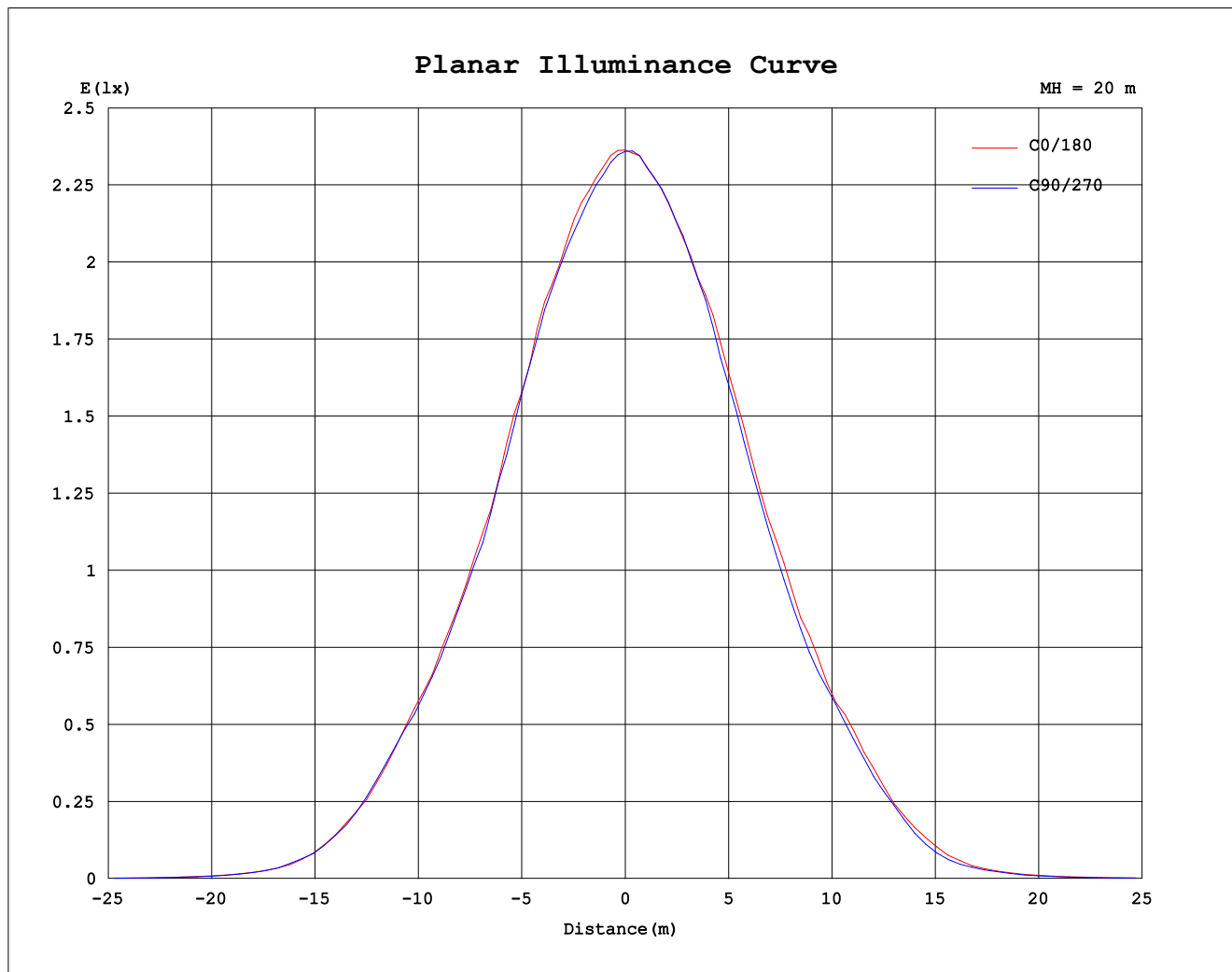
AvgL	cd/m2
L_0~180 (65) av	868
L_0~180 (75) av	673
L_0~180 (85) av	820
L_90~270 (65) av	913
L_90~270 (75) av	666
L_90~270 (85) av	795
L_45 (65) av	892
L_45 (75) av	658
L_45 (85) av	778

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 July 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: 22 July 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:

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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:

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