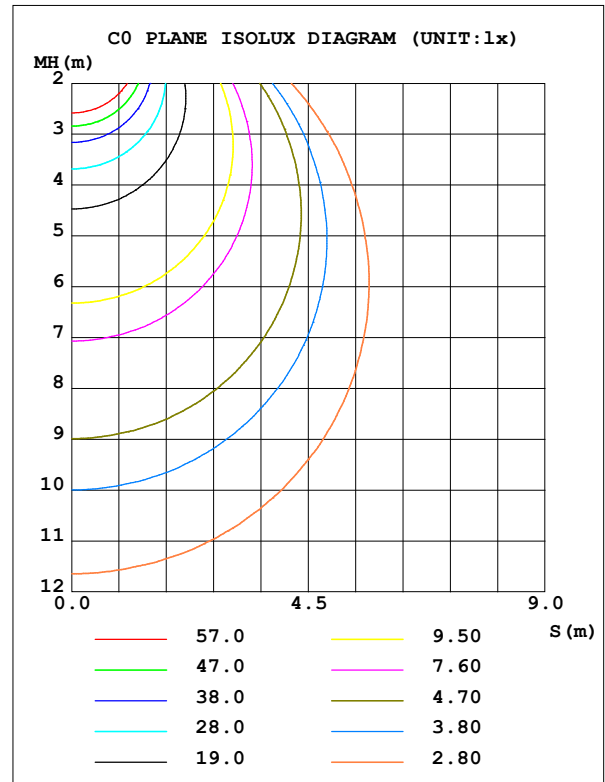
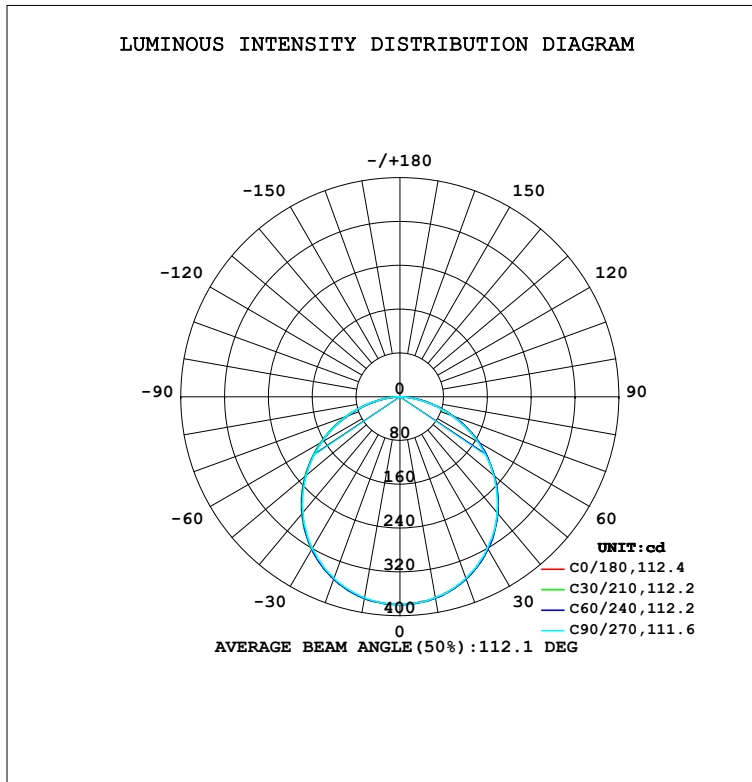


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.90V I:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 86.89 lm/W
MODEL		I _{max} (cd)	379.9	S/MH (C0/180)	1.26	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.26	
RATED VOLTAGE (V)	230V	TOTAL FLUX (lm)	1077.5	η UP,DN (C0-180)	0.0,50.1	
NOMINAL FLUX (lm)	1077.45	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,49.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)		η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 28 September 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:

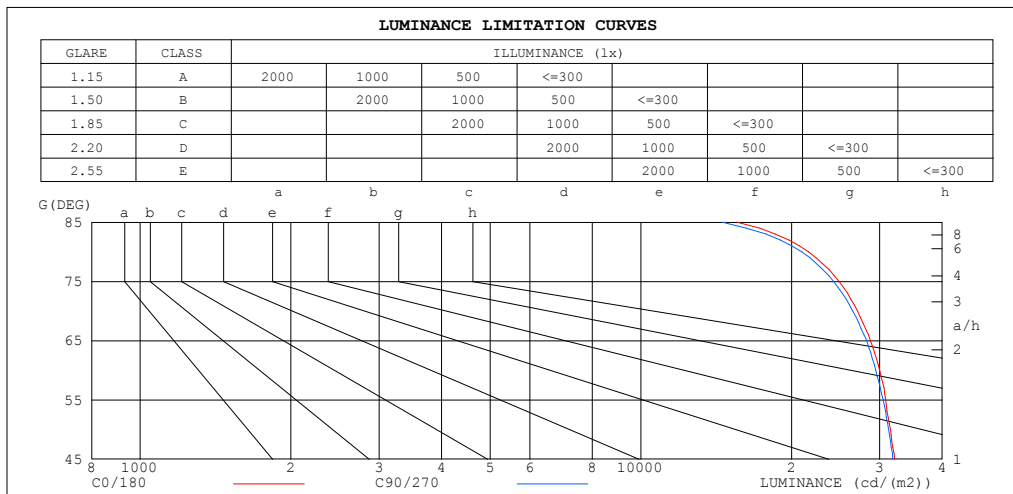
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	372.9	373.1	372.4	373.3	373.4	373.9	372.6	372.8	0- 10	35.92	35.92	3.33,3.33
20	353.2	354.0	352.6	353.2	354.2	354.3	352.9	352.8	10- 20	103.0	138.9	12.9,12.9
30	321.4	321.4	319.9	320.7	322.0	322.0	320.2	319.9	20- 30	156.1	295.0	27.4,27.4
40	277.8	278.0	276.3	277.7	278.2	278.2	275.9	275.9	30- 40	187.9	482.9	44.8,44.8
50	225.1	224.9	223.4	224.9	225.8	225.5	223.4	222.9	40- 50	194.3	677.1	62.8,62.8
60	166.6	165.7	163.9	166.4	166.2	165.8	164.2	163.2	50- 60	174.7	851.8	79.1,79.1
70	103.0	102.1	100.8	103.3	102.5	103.0	102.4	100.6	60- 70	132.6	984.5	91.4,91.4
80	41.75	41.08	40.50	42.45	41.09	41.50	41.50	39.71	70- 80	75.07	1060	98.3,98.3
90	0.0377	0.0407	0.1008	0.2047	0.1963	0.1384	0.0805	0.0239	80- 90	17.90	1077	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:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15557	14538
80	21647	20972
75	24894	24264
70	27116	26506
65	28740	28264
60	29998	29471
55	30847	30466
50	31522	31249
45	32148	31884

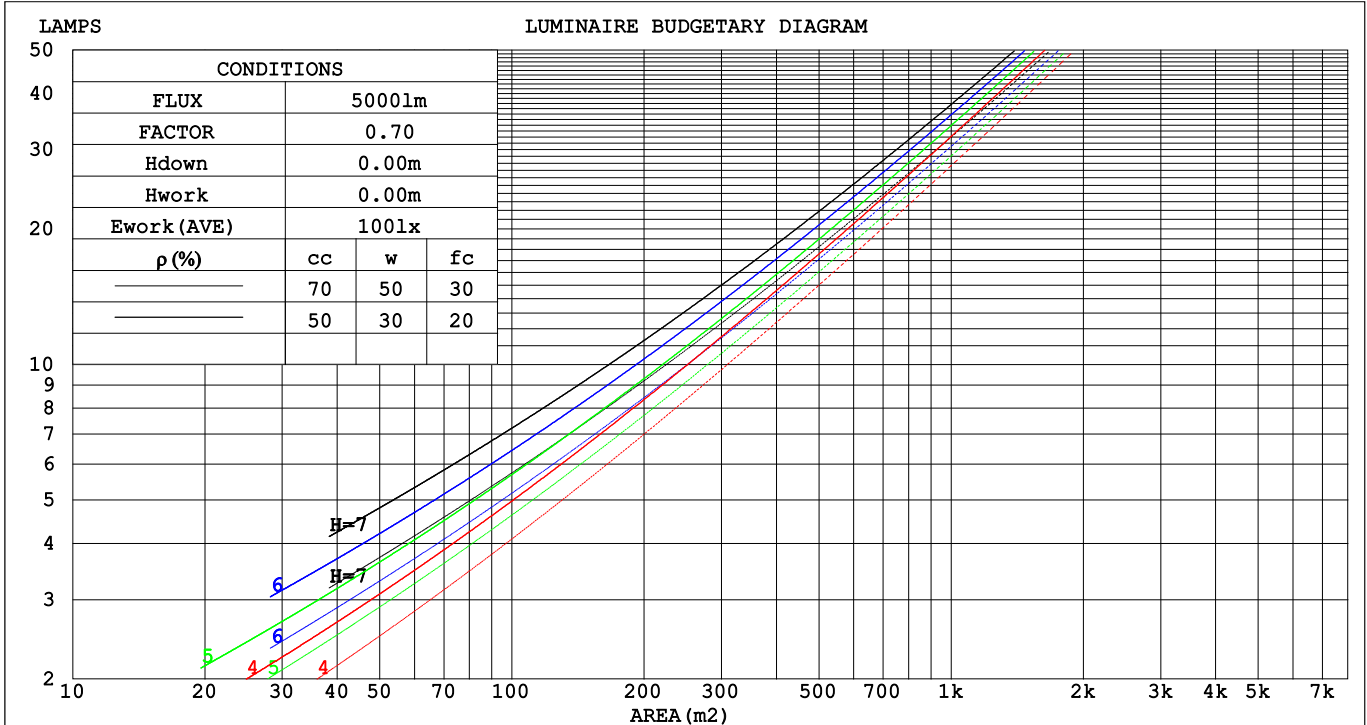
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 28 September 2020

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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	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	.00
1.0	1.04	.00	.96	1.02	.98	.94	.97	.94	.91	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.82	.77	.85	.80	.75	.82	.77	.74	.79	.75	.72	.70
3.0	.80	.71	.65	.78	.70	.64	.75	.68	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.70	.62	.55	.69	.61	.54	.67	.59	.54	.64	.58	.53	.62	.57	.52	.50
5.0	.63	.54	.47	.62	.53	.47	.60	.52	.46	.58	.51	.46	.56	.50	.45	.43
6.0	.57	.48	.41	.56	.47	.41	.54	.46	.41	.52	.45	.40	.51	.45	.40	.38
7.0	.51	.42	.36	.50	.42	.36	.49	.41	.36	.47	.41	.36	.46	.40	.35	.33
8.0	.47	.38	.32	.46	.38	.32	.45	.37	.32	.43	.37	.32	.42	.36	.32	.30
9.0	.43	.35	.29	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.29	.27
10.0	.40	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm																	
NAME: SLED515F-W1SDP-TW									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	.307	.175	.055	.300	.171	.054	.287	.165	.053	.275	.158	.051	.263	.153	.049	
2.0	.290	.159	.049	.284	.156	.048	.272	.151	.047	.262	.147	.046	.252	.142	.045	
3.0	.269	.143	.043	.264	.141	.042	.253	.137	.042	.244	.134	.041	.235	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.124	.037	.226	.121	.037	.218	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.217	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.107	.031	.209	.106	.030	.202	.104	.030	.195	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.185	.091	.025	.182	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.023	.171	.083	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.148	.074	.021	

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.074	.141	.099	.065	.097	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.157	.101	.058	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm											
NAME: SLED515F-W1SDP-TW					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	24.5	26.0	24.8	26.2	26.4	24.5	26.0	24.8	26.2	26.4
	3H	26.0	27.4	26.3	27.7	27.9	26.0	27.4	26.3	27.6	27.9
	4H	26.6	27.9	26.9	28.2	28.5	26.6	27.9	26.9	28.2	28.4
	6H	27.0	28.3	27.3	28.5	28.8	27.0	28.2	27.3	28.5	28.8
	8H	27.1	28.3	27.5	28.6	28.9	27.1	28.3	27.4	28.6	28.9
	12H	27.2	28.3	27.5	28.6	28.9	27.1	28.3	27.5	28.6	28.9
4H	2H	25.1	26.5	25.4	26.7	27.0	25.1	26.4	25.4	26.7	27.0
	3H	26.8	28.0	27.1	28.3	28.6	26.8	28.0	27.1	28.3	28.6
	4H	27.5	28.6	27.9	28.9	29.2	27.5	28.6	27.9	28.9	29.2
	6H	28.0	29.0	28.4	29.3	29.7	28.0	29.0	28.4	29.3	29.7
	8H	28.2	29.1	28.6	29.4	29.8	28.2	29.0	28.6	29.4	29.8
	12H	28.3	29.1	28.7	29.4	29.9	28.2	29.1	28.7	29.4	29.8
8H	4H	27.8	28.6	28.2	29.0	29.4	27.7	28.6	28.2	29.0	29.4
	6H	28.4	29.1	28.8	29.5	30.0	28.4	29.1	28.9	29.5	30.0
	8H	28.6	29.3	29.1	29.7	30.1	28.6	29.3	29.1	29.7	30.2
	12H	28.8	29.3	29.2	29.8	30.2	28.8	29.3	29.3	29.8	30.3
12H	4H	27.8	28.6	28.2	29.0	29.4	27.8	28.6	28.2	29.0	29.4
	6H	28.4	29.1	28.9	29.5	30.0	28.5	29.1	28.9	29.5	30.0
	8H	28.7	29.3	29.2	29.7	30.2	28.7	29.3	29.2	29.7	30.2
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H		+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 1077 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.3)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

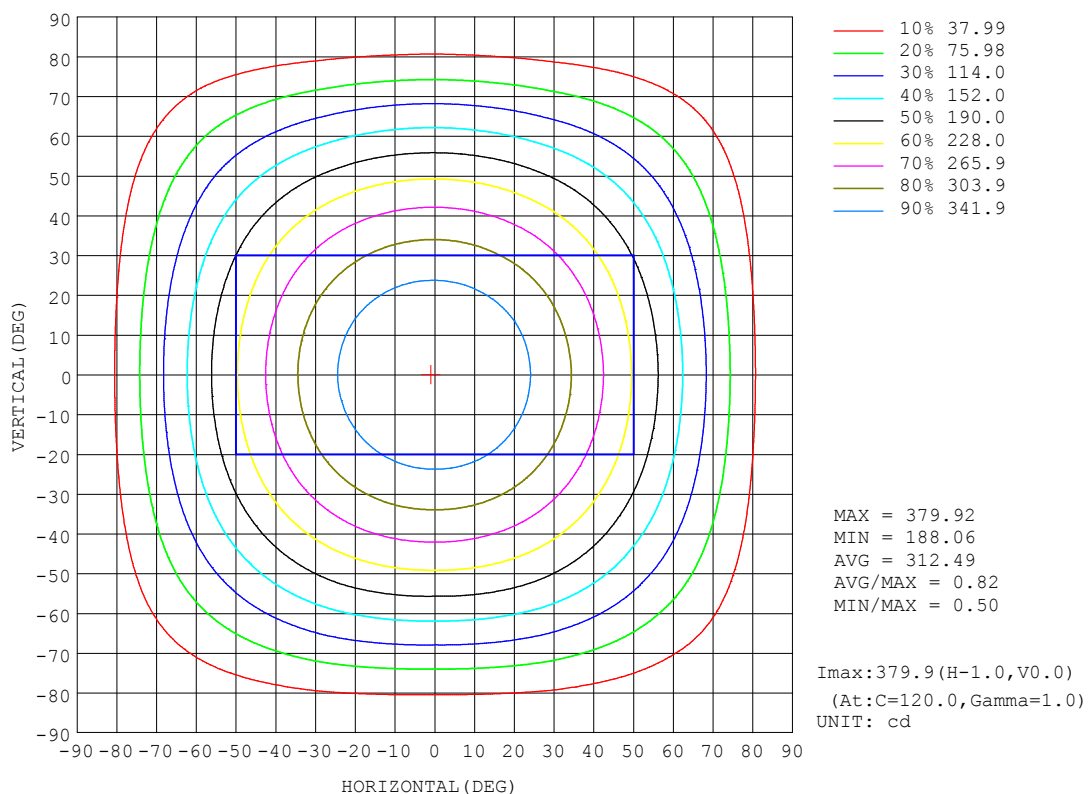
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	49	65	55	48	41
1.00	76	65	58	75	64	57	73	66	57	50
1.25	83	73	66	82	72	65	79	71	64	57
1.50	88	78	71	87	77	71	84	76	70	62
2.00	95	87	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	96	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	98	102	98	95	86
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:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

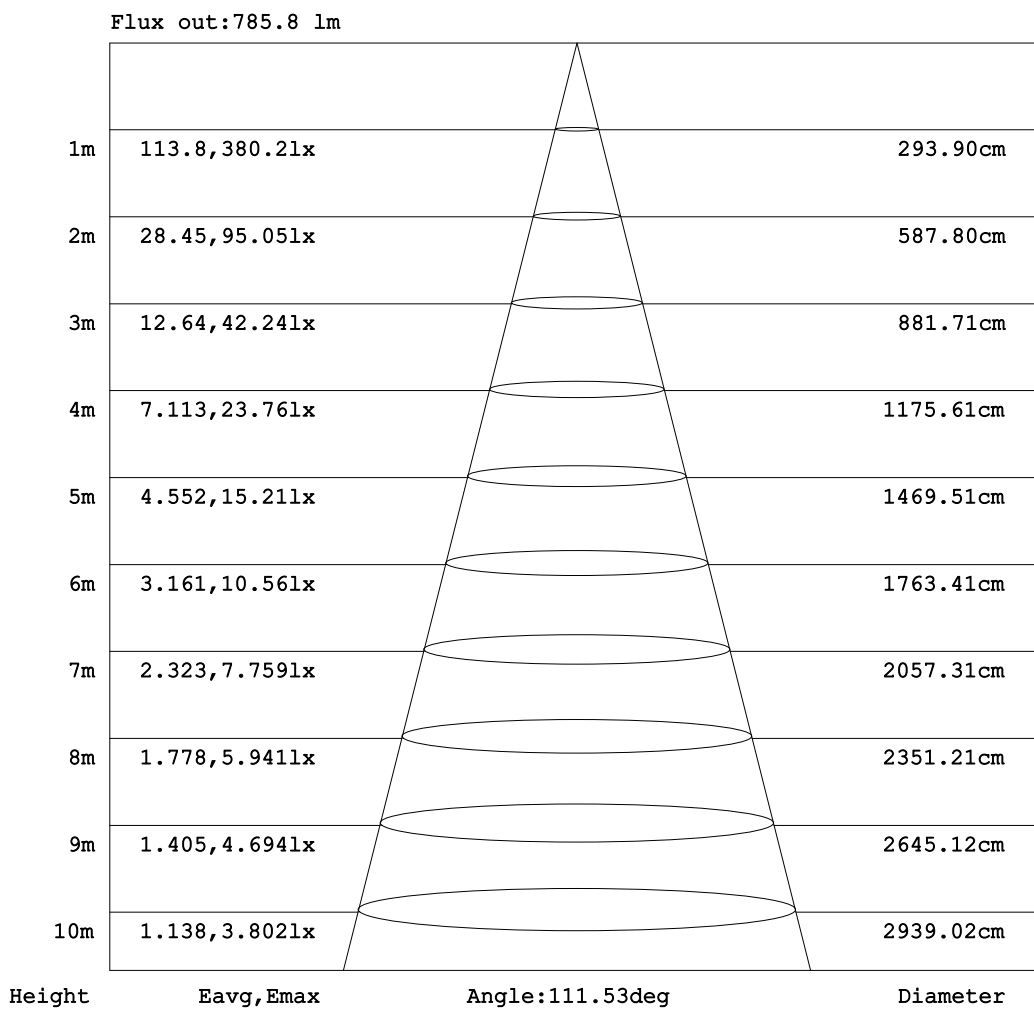


C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 28 September 2020

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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



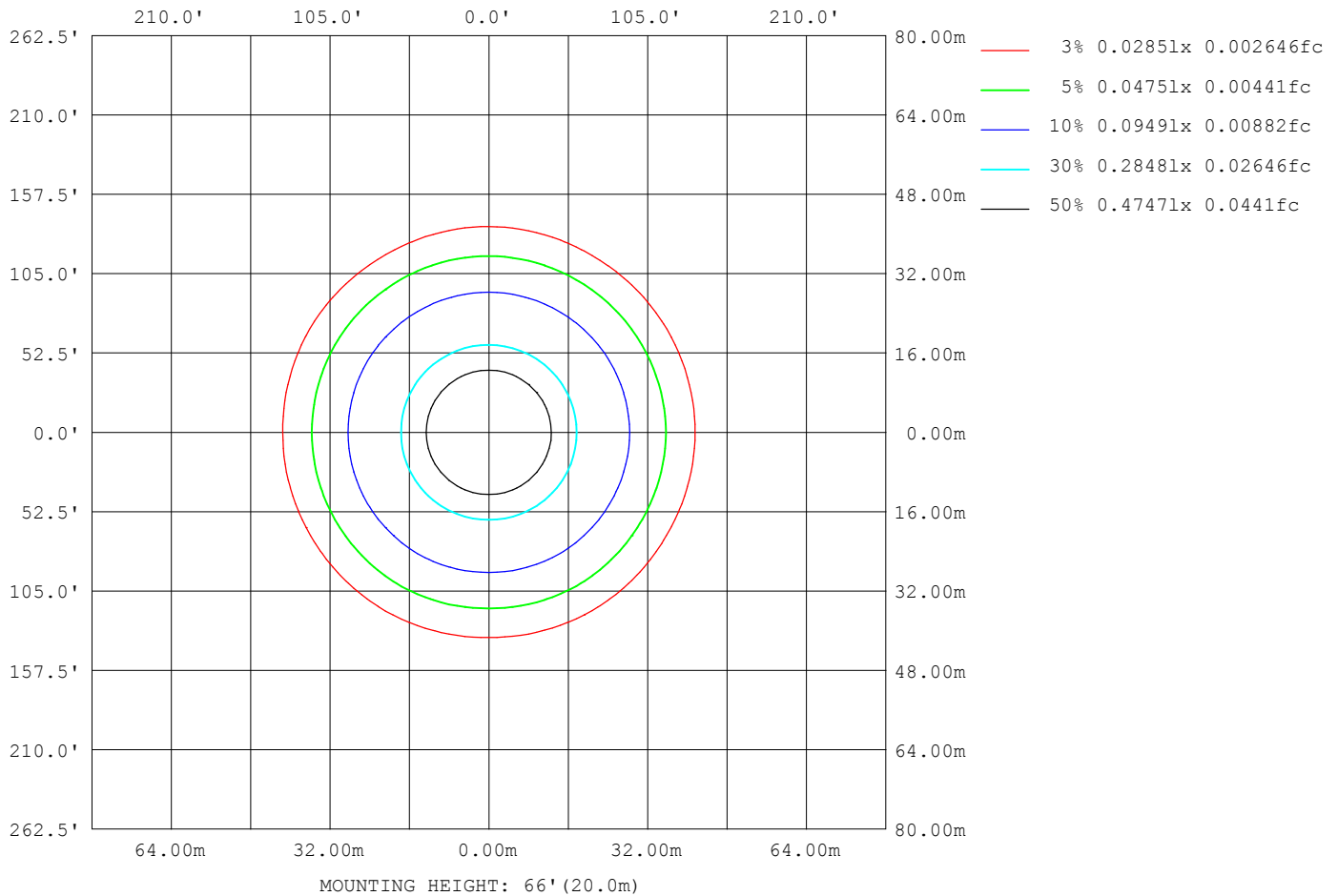
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jason
 Test Date:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	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:28 September 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:0.0550A P:12.400W PF:0.9830 Freq:50.00Hz Lamp Flux:1077.45x1 lm		
NAME: SLED515F-W1SDP-TW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

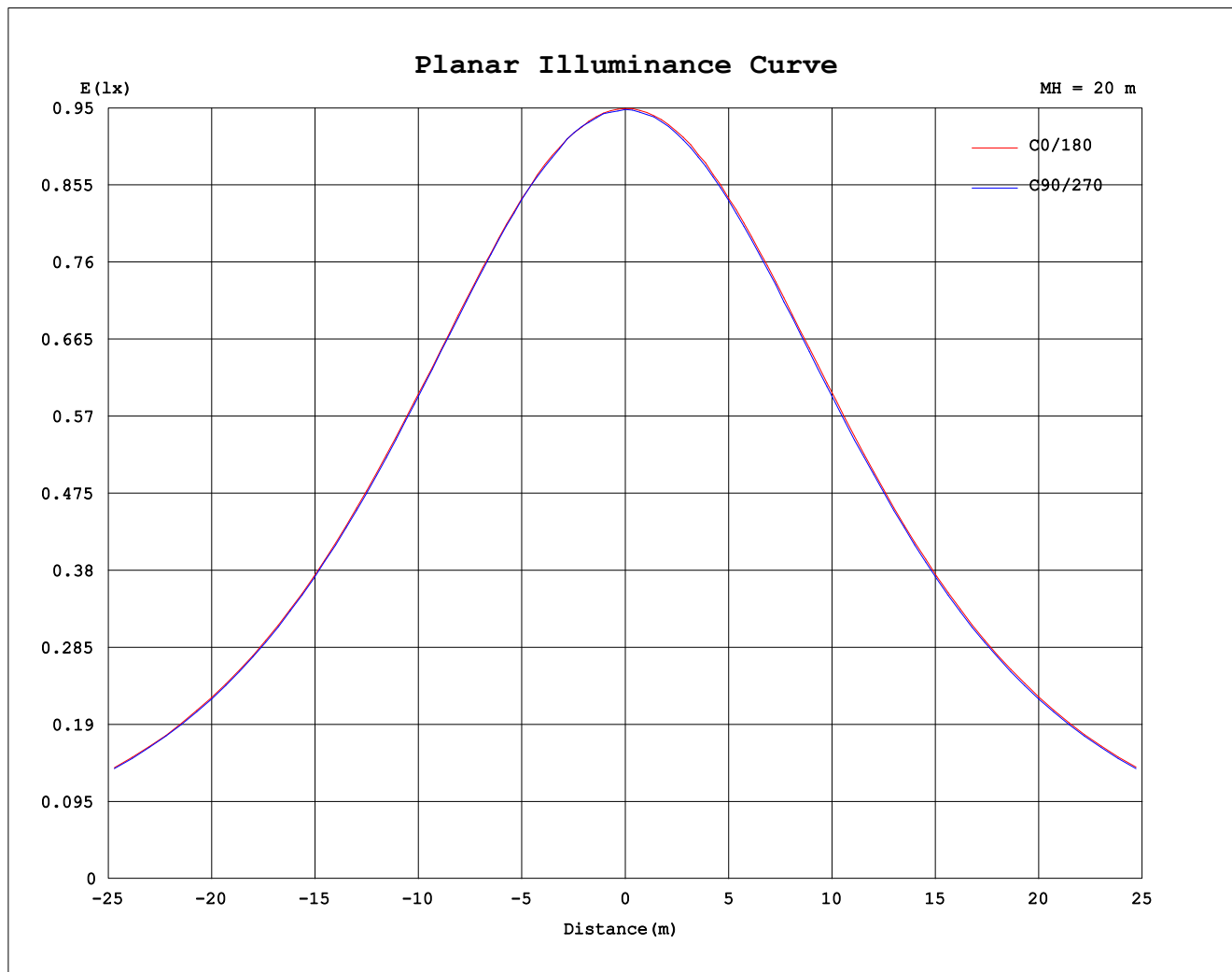
AvgL	cd/m2
L_0~180 (65) av	28661
L_0~180 (75) av	24757
L_0~180 (85) av	15200
L_90~270 (65) av	28422
L_90~270 (75) av	24503
L_90~270 (85) av	15156
L_45 (65) av	28556
L_45 (75) av	24650
L_45 (85) av	15182

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:28 September 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: 28 September 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:

```

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:

```