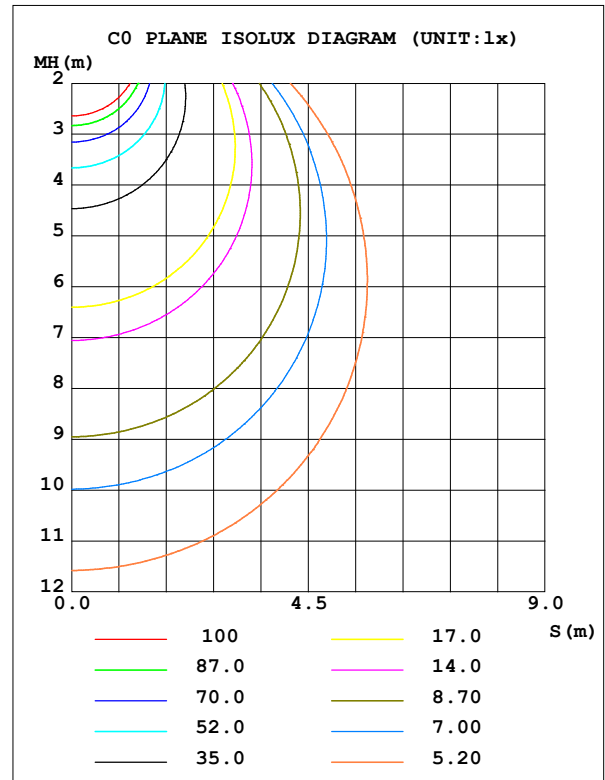
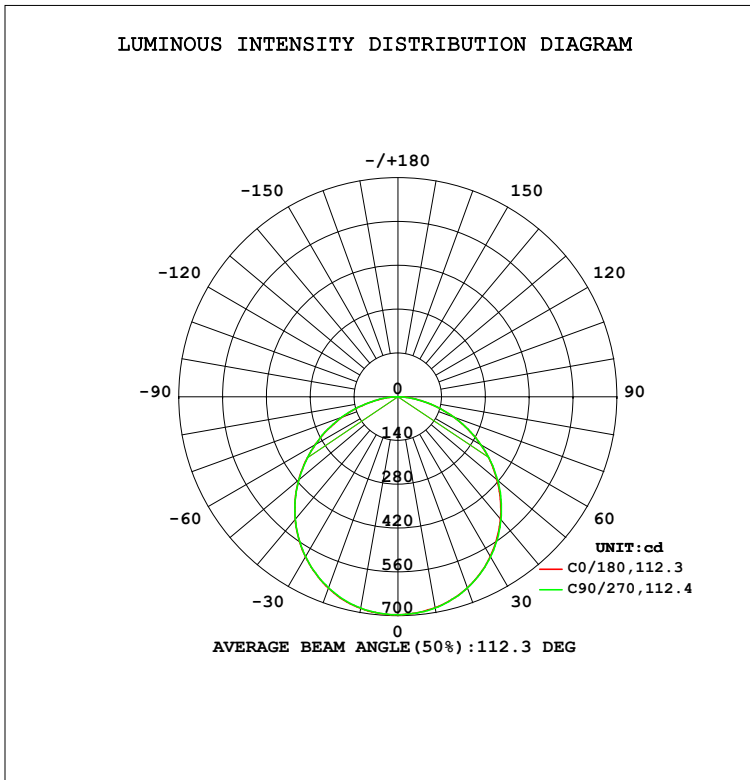


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:229.90V I:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 95.58 lm/W
MODEL		I _{max} (cd)	696.8	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)	1988.0	η UP,DN (C0-180)	0.0,50.0	
NOMINAL FLUX (lm)	1988.03	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.0	
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: 90.0DEG
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:

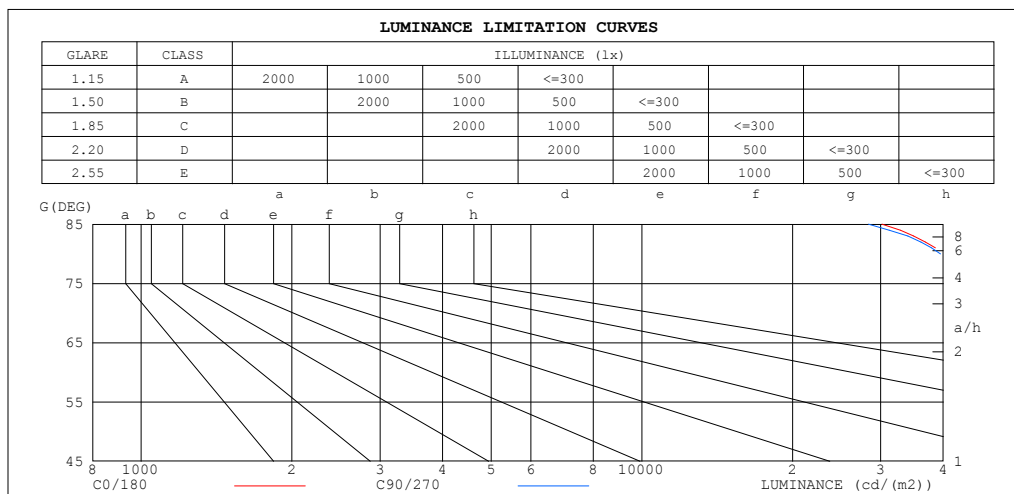
γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum,lamp
10	684.4	685.2	686.8	685.7					0- 10	65.97	65.97	3.32,3.32
20	649.3	650.0	650.9	649.7					10- 20	189.4	255.4	12.8,12.8
30	590.1	591.4	591.1	590.3					20- 30	287.1	542.5	27.3,27.3
40	509.9	512.5	511.0	510.5					30- 40	346.0	888.5	44.7,44.7
50	413.2	416.6	414.5	413.9					40- 50	358.3	1247	62.7,62.7
60	305.1	306.6	304.5	304.1					50- 60	322.6	1569	78.9,78.9
70	189.3	189.3	187.7	190.5					60- 70	244.9	1814	91.3,91.3
80	77.40	76.42	75.79	77.80					70- 80	139.1	1953	98.3,98.3
90	0.0529	0.0646	0.5246	0.3791					80- 90	34.56	1988	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: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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	30172	28356
80	40122	39524
75	45789	45617
70	49822	49709
65	52671	52797
60	54930	55069
55	56739	56801
50	57860	58203
45	58993	59241

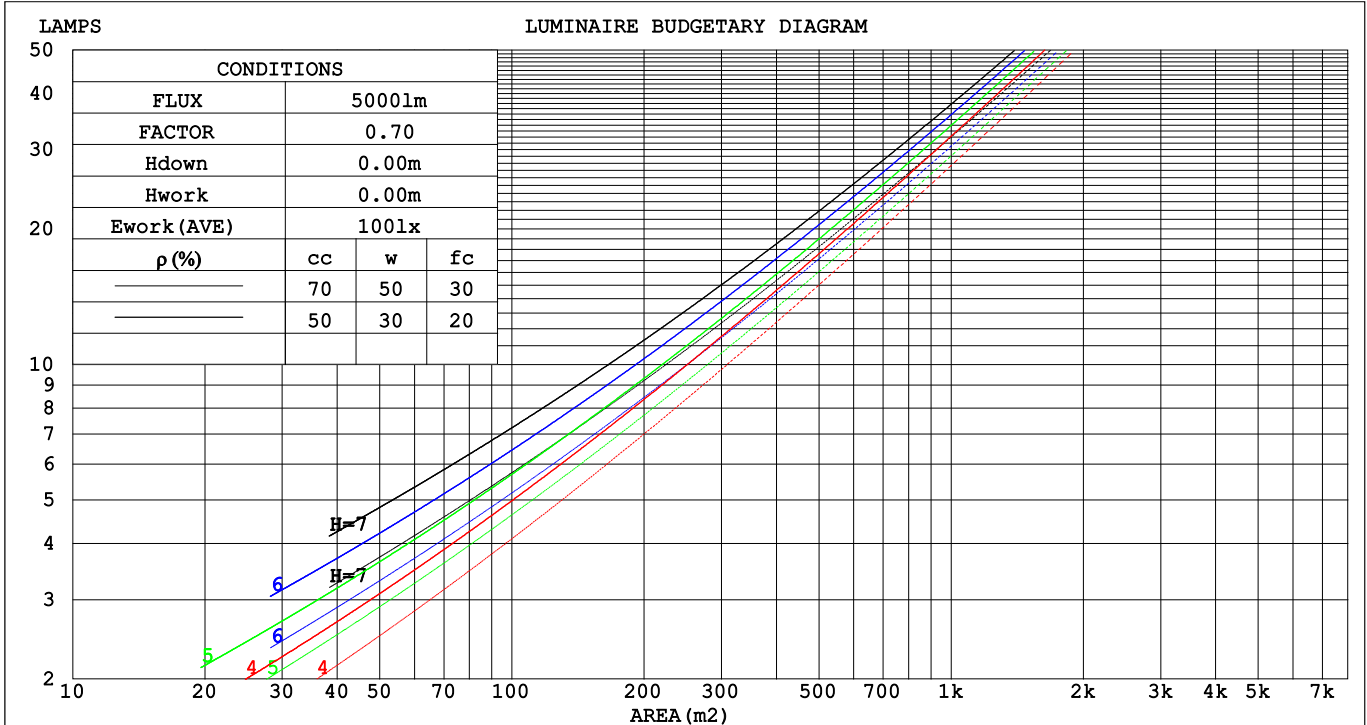
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:28 September 2020

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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	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: 90.0DEG
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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm																	
NAME: SLED515F-W140P-TWD40									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	.308	.175	.056	.301	.172	.055	.288	.165	.053	.276	.159	.051	.265	.153	.049	
2.0	.291	.159	.049	.285	.157	.048	.273	.152	.047	.262	.147	.046	.252	.143	.045	
3.0	.270	.143	.043	.264	.141	.043	.254	.137	.042	.244	.134	.041	.235	.130	.040	
4.0	.249	.129	.038	.244	.128	.038	.235	.125	.037	.226	.122	.037	.218	.119	.036	
5.0	.230	.117	.034	.226	.116	.034	.218	.113	.033	.210	.111	.033	.203	.109	.033	
6.0	.214	.107	.031	.210	.106	.030	.202	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.199	.098	.028	.195	.097	.028	.189	.095	.027	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.024	.171	.083	.023	.166	.082	.023	.161	.081	.023	.157	.080	.023	
10.0	.164	.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	.134	.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	.064	.097	.068	.045	.056	.040	.027	.018	.013	.009		
4.0	.157	.101	.058	.135	.087	.051	.093	.061	.036	.054	.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: 90.0DEG
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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm											
NAME: SLED515F-W140P-TWD40					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	26.5	24.5	26.1	24.8	26.3	26.5
	3H	26.0	27.4	26.3	27.7	27.9	26.0	27.4	26.3	27.7	27.9
	4H	26.6	28.0	26.9	28.2	28.5	26.6	28.0	26.9	28.2	28.5
	6H	27.0	28.3	27.4	28.6	28.8	27.0	28.3	27.3	28.5	28.8
	8H	27.1	28.4	27.5	28.6	28.9	27.1	28.3	27.5	28.6	28.9
	12H	27.2	28.4	27.5	28.7	29.0	27.2	28.3	27.5	28.6	28.9
4H	2H	25.1	26.5	25.4	26.7	27.0	25.1	26.5	25.5	26.7	27.0
	3H	26.8	28.0	27.2	28.3	28.6	26.8	28.0	27.2	28.3	28.6
	4H	27.5	28.6	27.9	28.9	29.3	27.5	28.6	27.9	28.9	29.2
	6H	28.1	29.0	28.5	29.4	29.7	28.0	29.0	28.4	29.3	29.7
	8H	28.2	29.1	28.6	29.5	29.9	28.2	29.1	28.6	29.5	29.8
	12H	28.3	29.1	28.7	29.5	29.9	28.3	29.1	28.7	29.5	29.9
8H	4H	27.8	28.7	28.2	29.0	29.4	27.8	28.7	28.2	29.0	29.4
	6H	28.5	29.2	28.9	29.6	30.0	28.4	29.2	28.9	29.6	30.0
	8H	28.7	29.3	29.2	29.8	30.2	28.7	29.3	29.1	29.8	30.2
	12H	28.8	29.4	29.3	29.9	30.3	28.8	29.4	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	28.5	29.2	29.0	29.6	30.0	28.5	29.1	29.0	29.6	30.0
	8H	28.8	29.3	29.3	29.8	30.3	28.8	29.3	29.2	29.8	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, 1988 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.4)

C Range: 0 - 360DEG
C Interval: 90.0DEG
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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

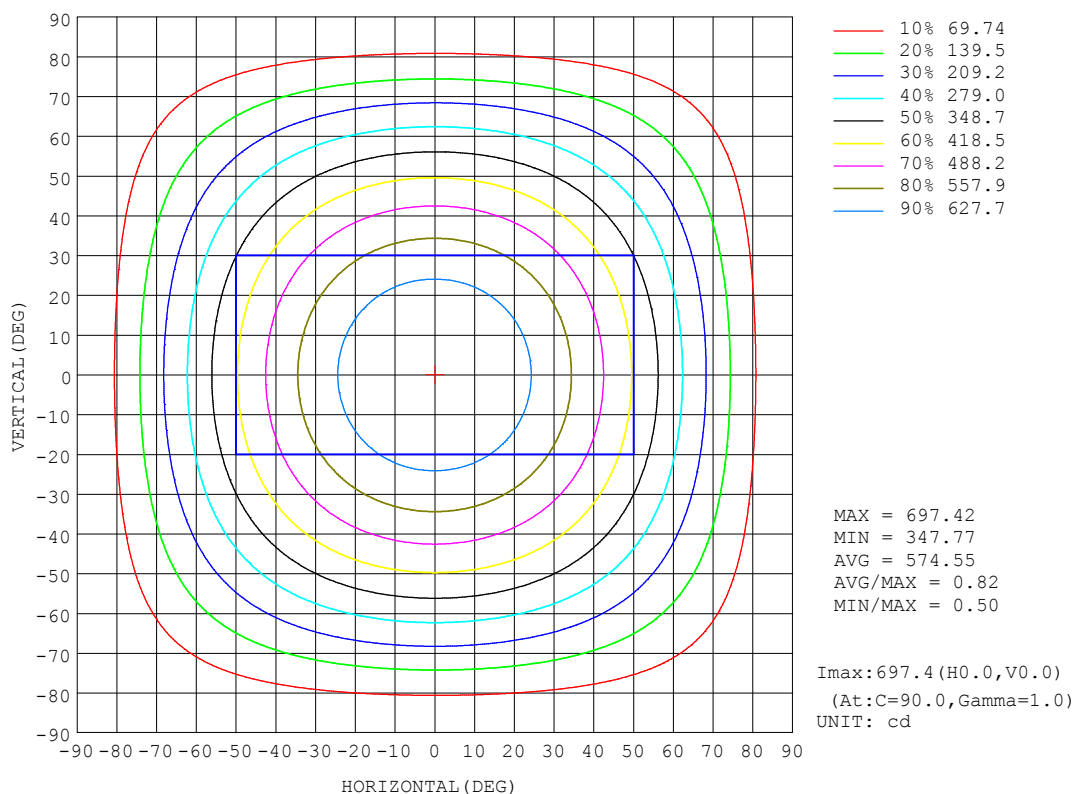
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	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	70	64	57
1.50	88	78	71	86	77	71	83	76	70	62
2.00	95	86	80	93	85	79	90	83	78	70
2.50	99	91	85	97	90	84	93	87	82	74
3.00	102	95	90	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	100	95	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: 90.0DEG
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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

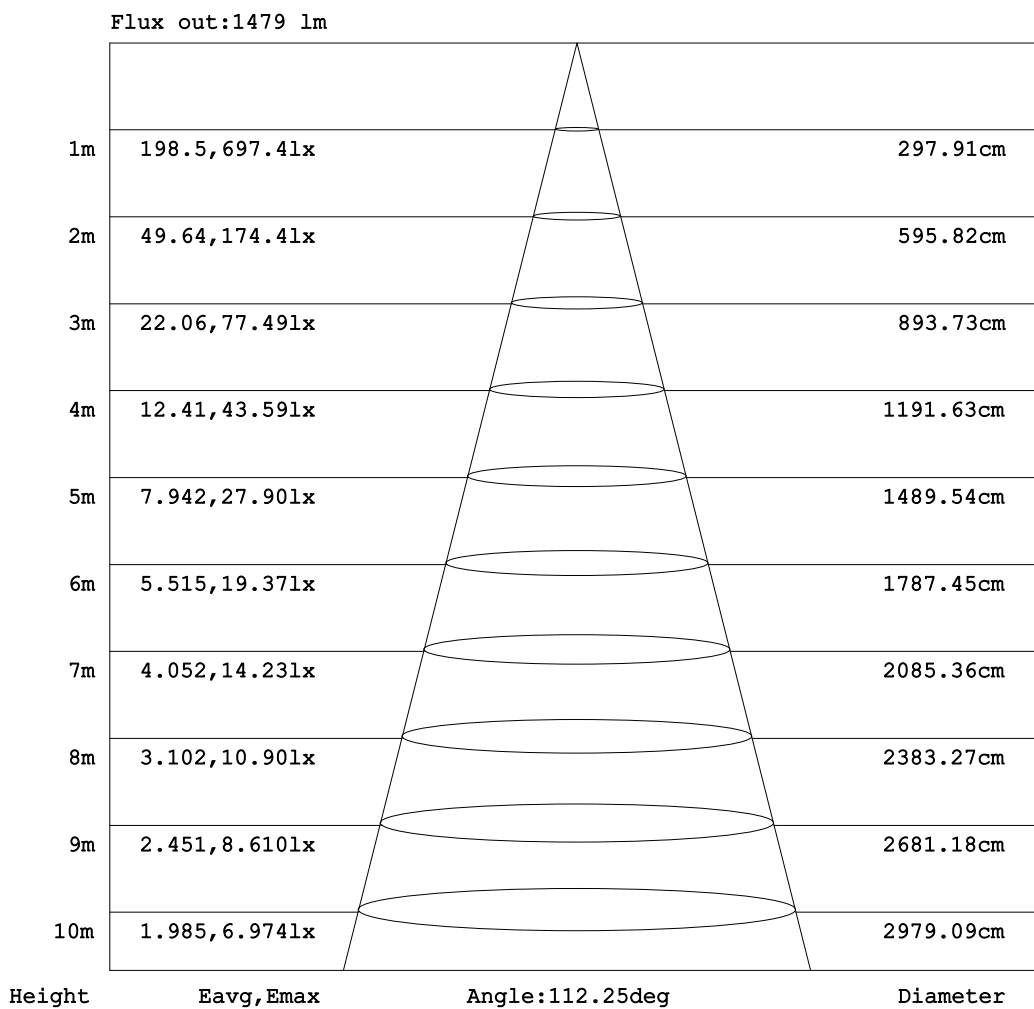


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:28 September 2020

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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



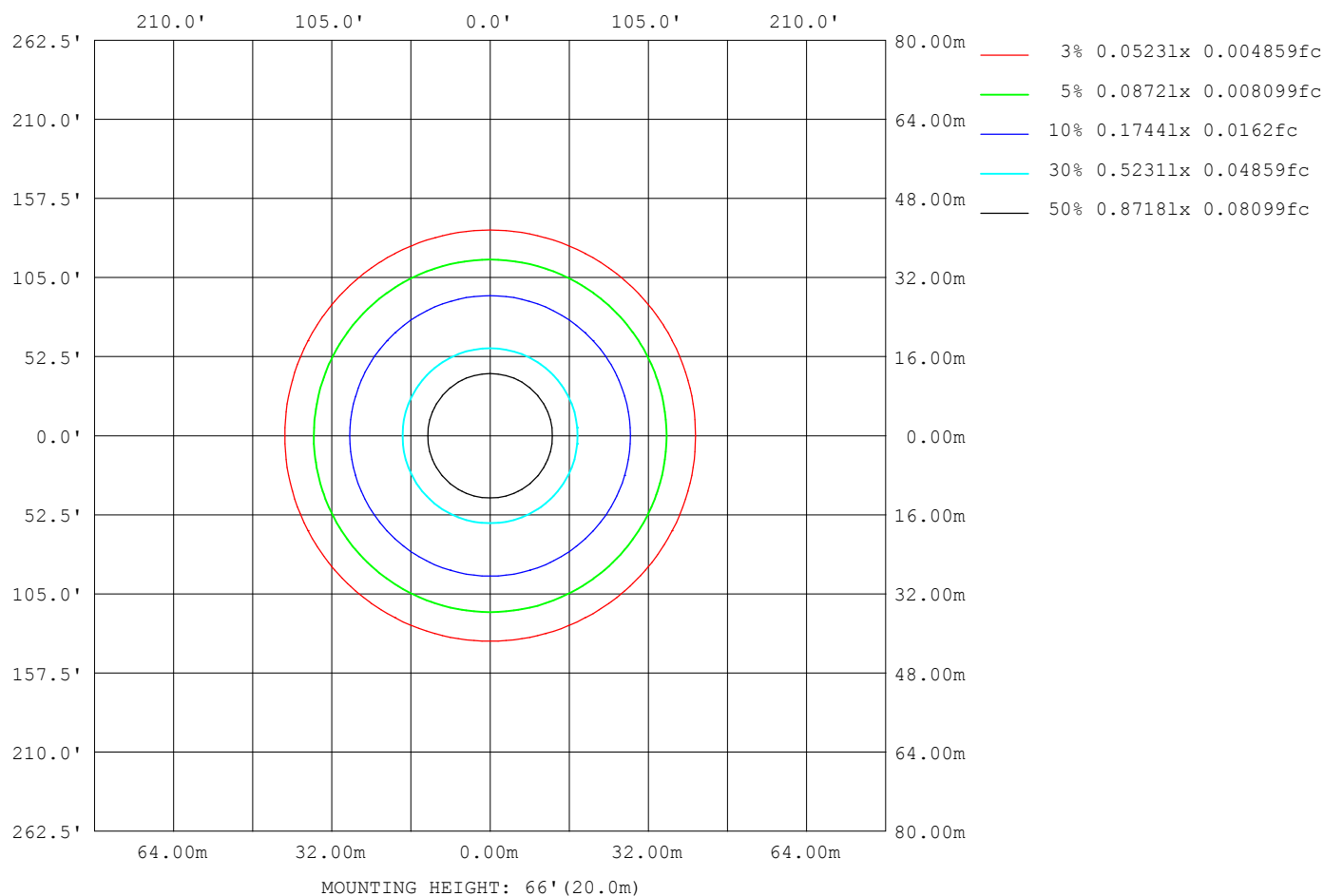
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 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:0.0920A P:20.800W PF:0.9810 Freq:50.00Hz Lamp Flux:1988.03x1 lm		
NAME: SLED515F-W140P-TWD40	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

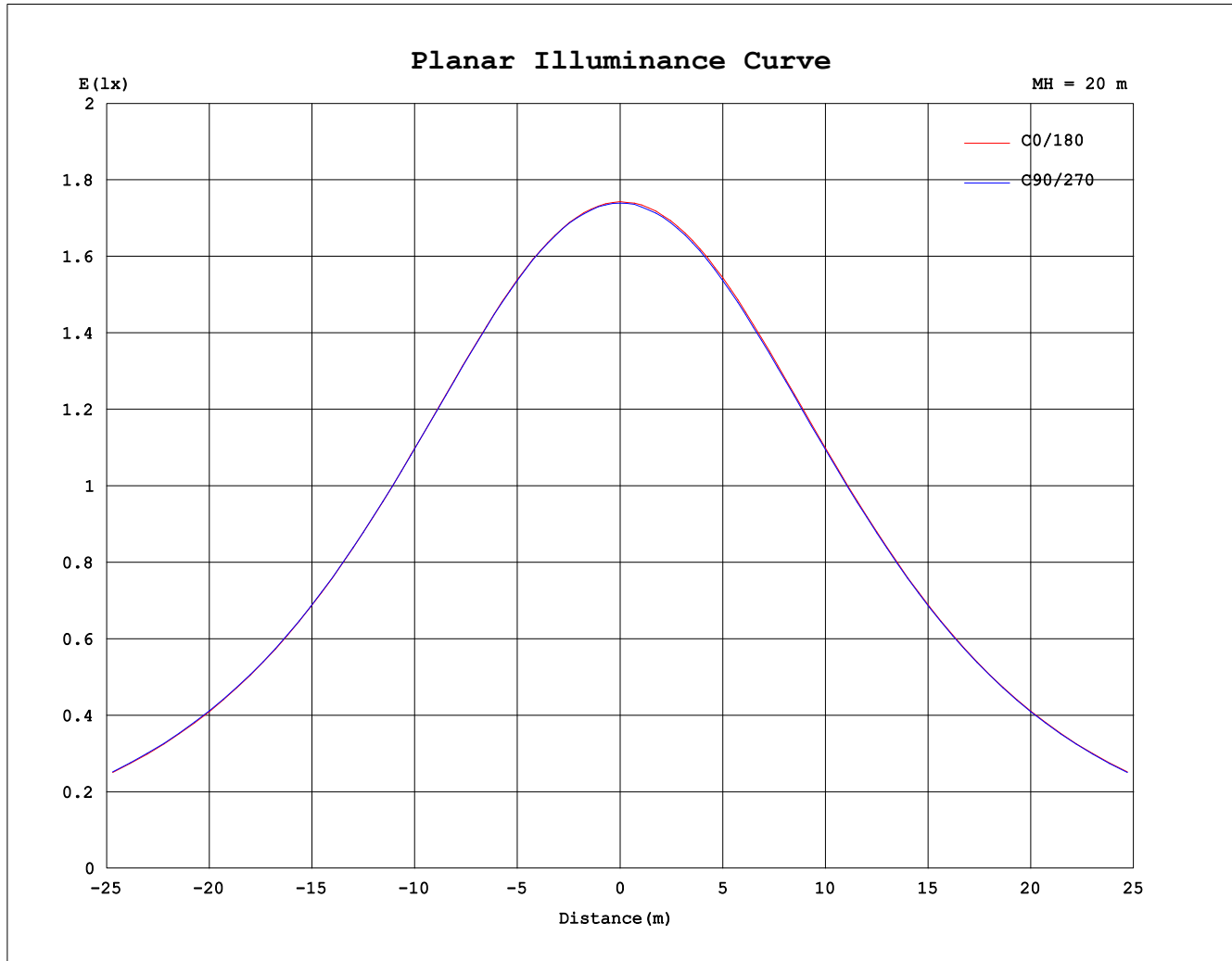
AvgL	cd/m2
L_0~180 (65) av	52525
L_0~180 (75) av	45483
L_0~180 (85) av	29766
L_90~270 (65) av	52897
L_90~270 (75) av	45820
L_90~270 (85) av	29861
L_45 (65) av	52752
L_45 (75) av	45677
L_45 (85) av	29802

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
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: 90.0DEG
 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:

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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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