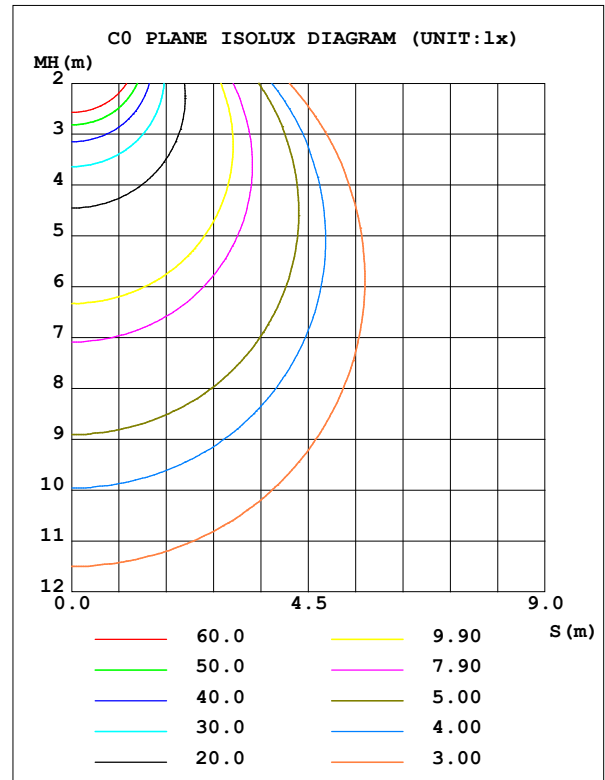
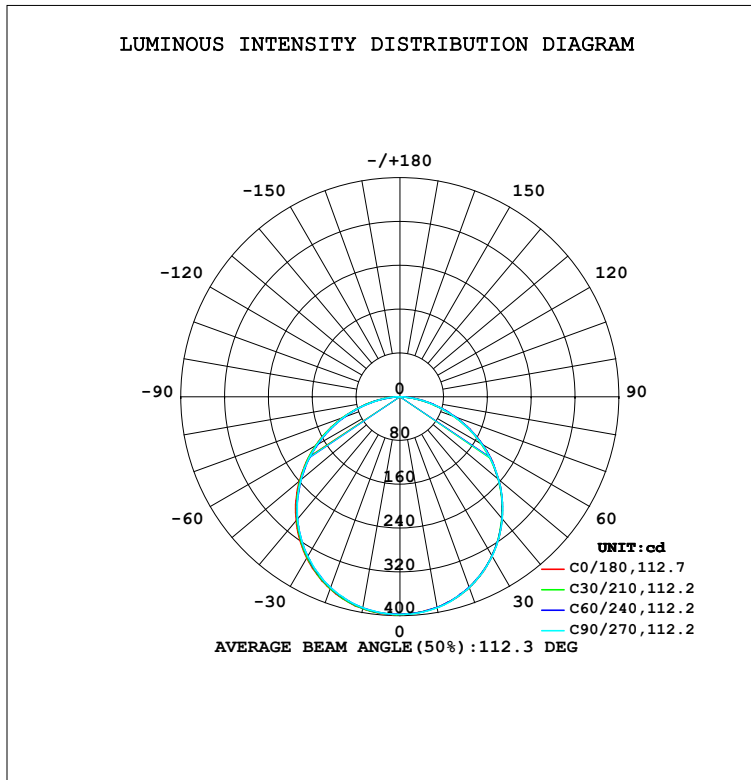


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 92.05 lm/W
MODEL		I _{max} (cd)	398.1	S/MH (C0/180)		1.27
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)		1.26
RATED VOLTAGE (V)	230V	TOTAL FLUX (lm)	1132.2	η UP,DN (C0-180)		0.0,49.9
NOMINAL FLUX (lm)	1132.24	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,50.1
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: 22 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:

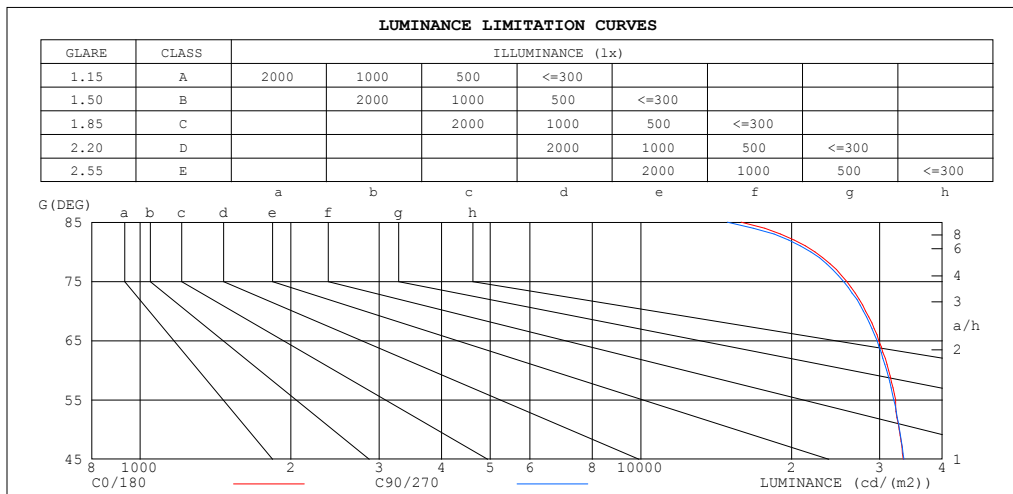
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	390.5	390.8	391.1	391.1	392.8	392.1	391.2	390.5	0- 10	37.64	37.64	3.32,3.32
20	370.8	370.3	370.6	370.9	373.3	371.6	370.9	369.5	10- 20	108.0	145.7	12.9,12.9
30	336.1	335.9	336.4	337.3	340.2	337.8	336.5	335.5	20- 30	163.8	309.4	27.3,27.3
40	290.2	290.1	290.7	292.1	294.8	291.7	291.1	289.8	30- 40	197.1	506.6	44.7,44.7
50	235.1	234.7	235.2	237.1	239.6	236.9	235.8	234.8	40- 50	204.1	710.7	62.8,62.8
60	174.0	172.4	172.5	175.2	177.1	174.9	174.8	172.9	50- 60	184.0	894.6	79,79
70	107.1	105.9	105.9	108.8	110.3	108.4	108.6	106.3	60- 70	139.5	1034	91.3,91.3
80	43.09	42.25	42.29	44.63	45.48	44.32	44.26	42.22	70- 80	79.04	1113	98.3,98.3
90	0.0298	0.0236	0.0370	0.1247	0.2405	0.2181	0.1729	0.0430	80- 90	19.03	1132	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 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	15871	14895
80	22282	21870
75	25773	25412
70	28127	27812
65	29888	29627
60	31251	30980
55	32280	31987
50	32835	32854
45	33467	33536

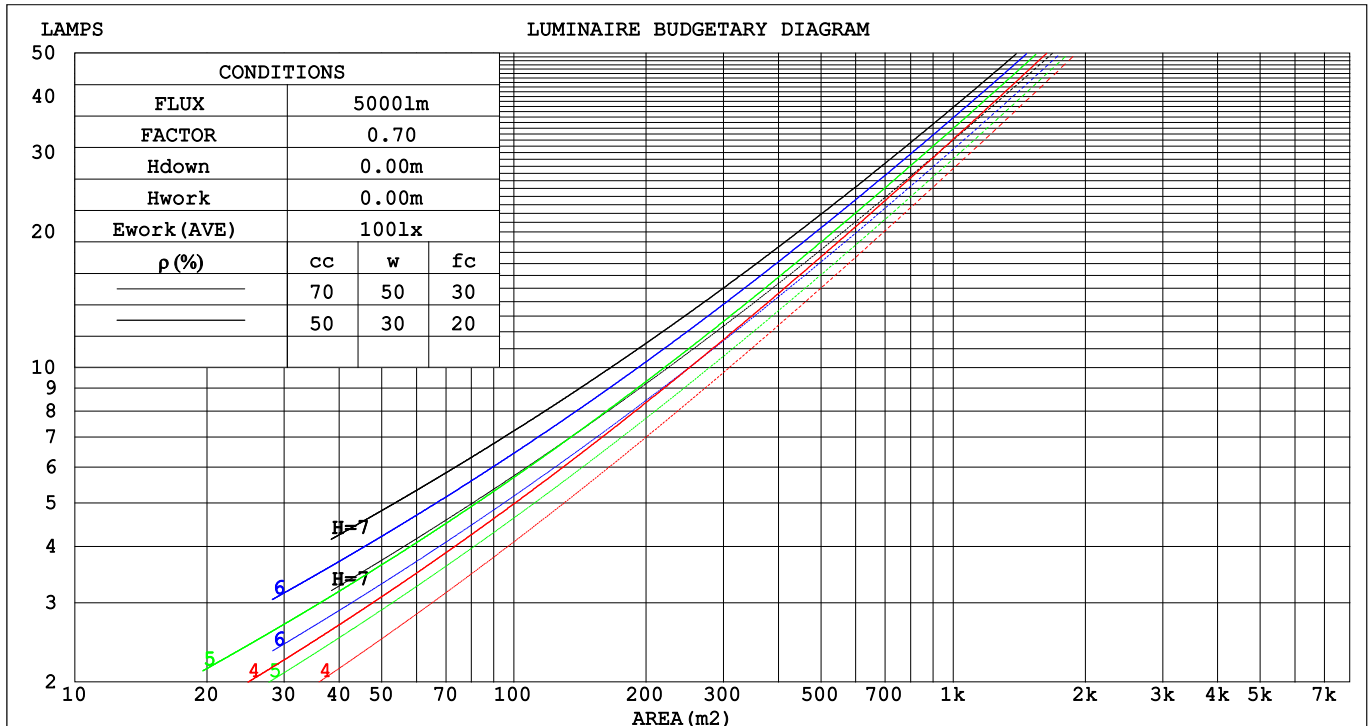
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 22 September 2020

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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	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 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm																	
NAME: SLED515F-W1S1P-TW 4K									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	.055	.301	.171	.054	.287	.165	.053	.275	.159	.051	.264	.153	.049	
2.0	.291	.159	.049	.284	.157	.048	.273	.152	.047	.262	.147	.046	.252	.142	.045	
3.0	.269	.143	.043	.264	.141	.043	.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	.218	.113	.033	.210	.111	.033	.203	.108	.033	
6.0	.213	.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	.025	.183	.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	.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	.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	.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: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm											
NAME: SLED515F-W1S1P-TW 4K					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	24.7	26.2	26.4	24.5	26.0	24.7	26.2	26.4
	3H	25.9	27.4	26.2	27.6	27.8	26.0	27.4	26.3	27.6	27.8
	4H	26.5	27.9	26.8	28.1	28.4	26.5	27.9	26.9	28.1	28.4
	6H	26.9	28.2	27.3	28.4	28.7	26.9	28.2	27.3	28.5	28.7
	8H	27.0	28.2	27.4	28.5	28.8	27.0	28.2	27.4	28.5	28.8
	12H	27.1	28.2	27.4	28.5	28.8	27.1	28.2	27.4	28.5	28.8
4H	2H	25.1	26.4	25.4	26.6	26.9	25.1	26.4	25.4	26.7	26.9
	3H	26.7	27.9	27.1	28.2	28.5	26.7	27.9	27.1	28.2	28.5
	4H	27.4	28.5	27.8	28.8	29.1	27.5	28.5	27.8	28.8	29.2
	6H	27.9	28.9	28.3	29.2	29.6	28.0	28.9	28.4	29.3	29.6
	8H	28.1	29.0	28.5	29.3	29.7	28.1	29.0	28.5	29.4	29.7
	12H	28.1	29.0	28.6	29.3	29.7	28.2	29.0	28.6	29.4	29.8
8H	4H	27.7	28.5	28.1	28.9	29.3	27.7	28.6	28.1	28.9	29.3
	6H	28.3	29.0	28.7	29.4	29.9	28.3	29.1	28.8	29.5	29.9
	8H	28.5	29.2	29.0	29.6	30.0	28.6	29.2	29.0	29.7	30.1
	12H	28.6	29.2	29.1	29.7	30.1	28.7	29.3	29.2	29.7	30.2
12H	4H	27.7	28.5	28.1	28.9	29.3	27.7	28.5	28.1	28.9	29.3
	6H	28.3	29.0	28.8	29.4	29.9	28.4	29.0	28.9	29.5	29.9
	8H	28.6	29.1	29.1	29.6	30.1	28.7	29.2	29.1	29.7	30.1
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, 1132 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

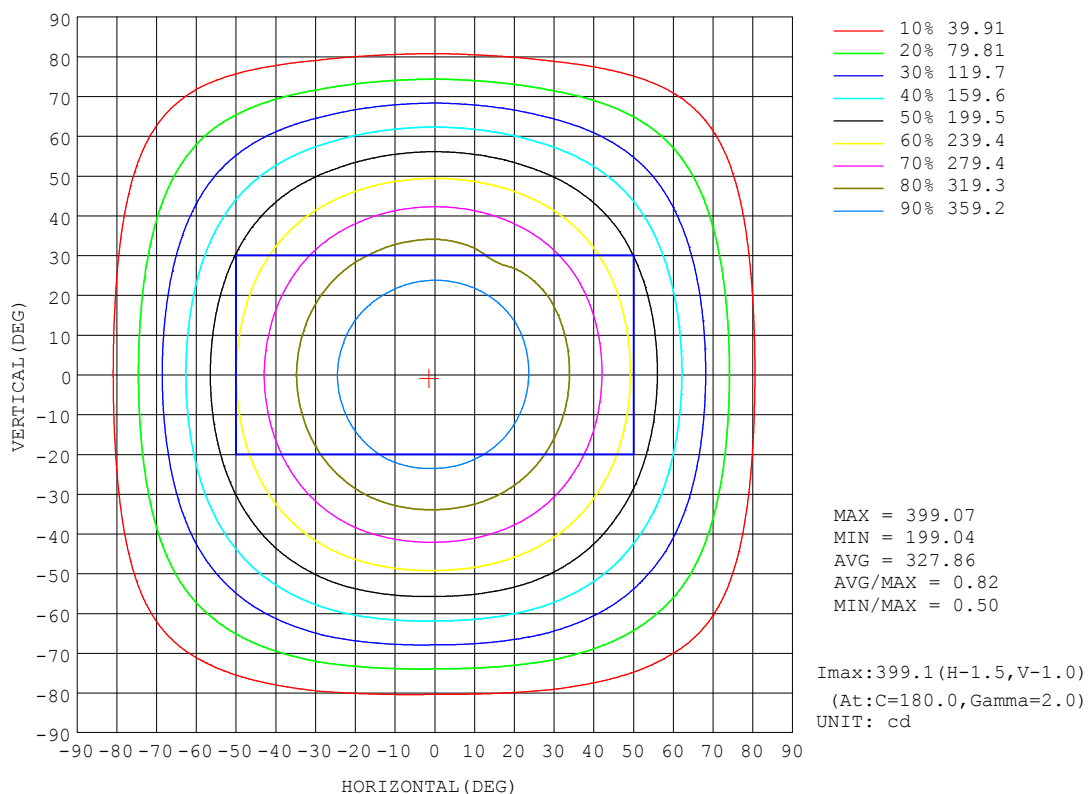
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	46	39	57	46	39	56	45	39	32
0.80	68	56	49	67	56	48	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	71	64	57
1.50	88	78	71	87	77	71	83	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	95	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:22 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

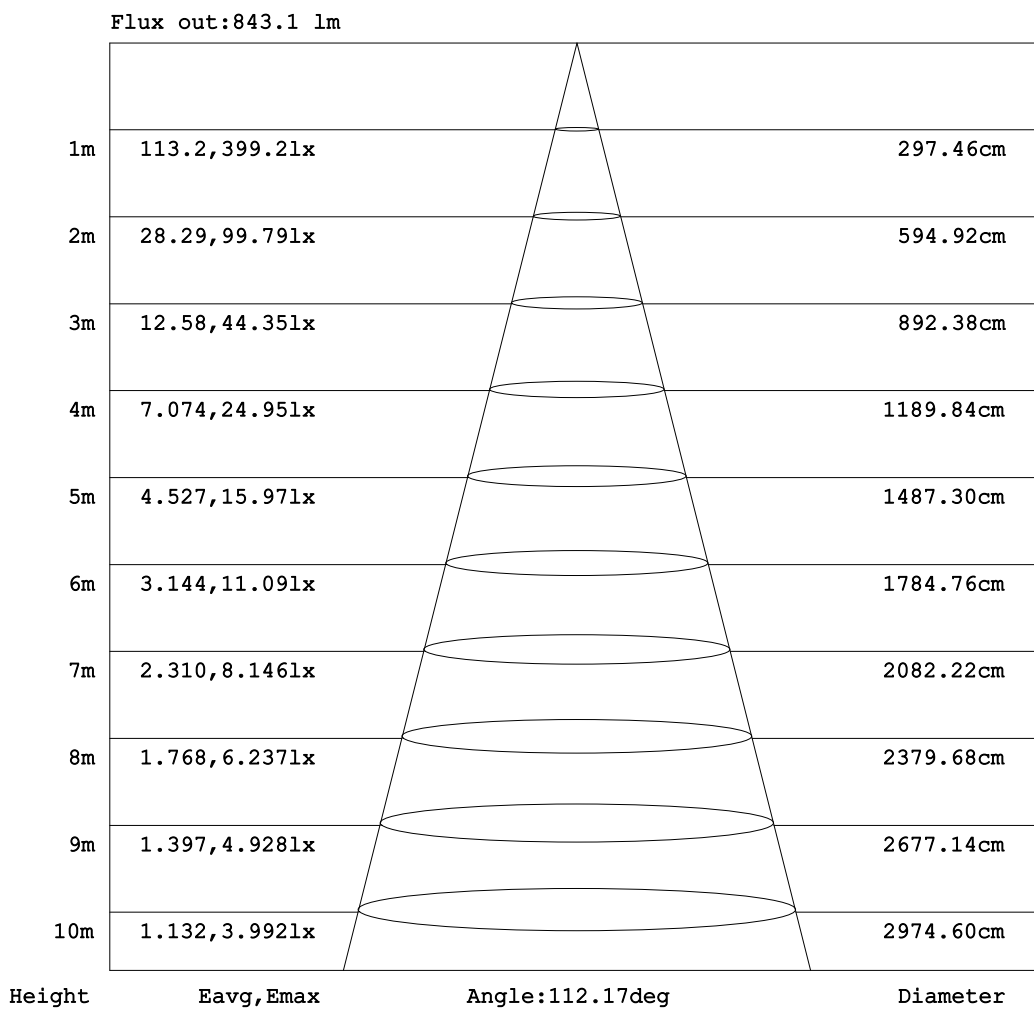


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 September 2020

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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



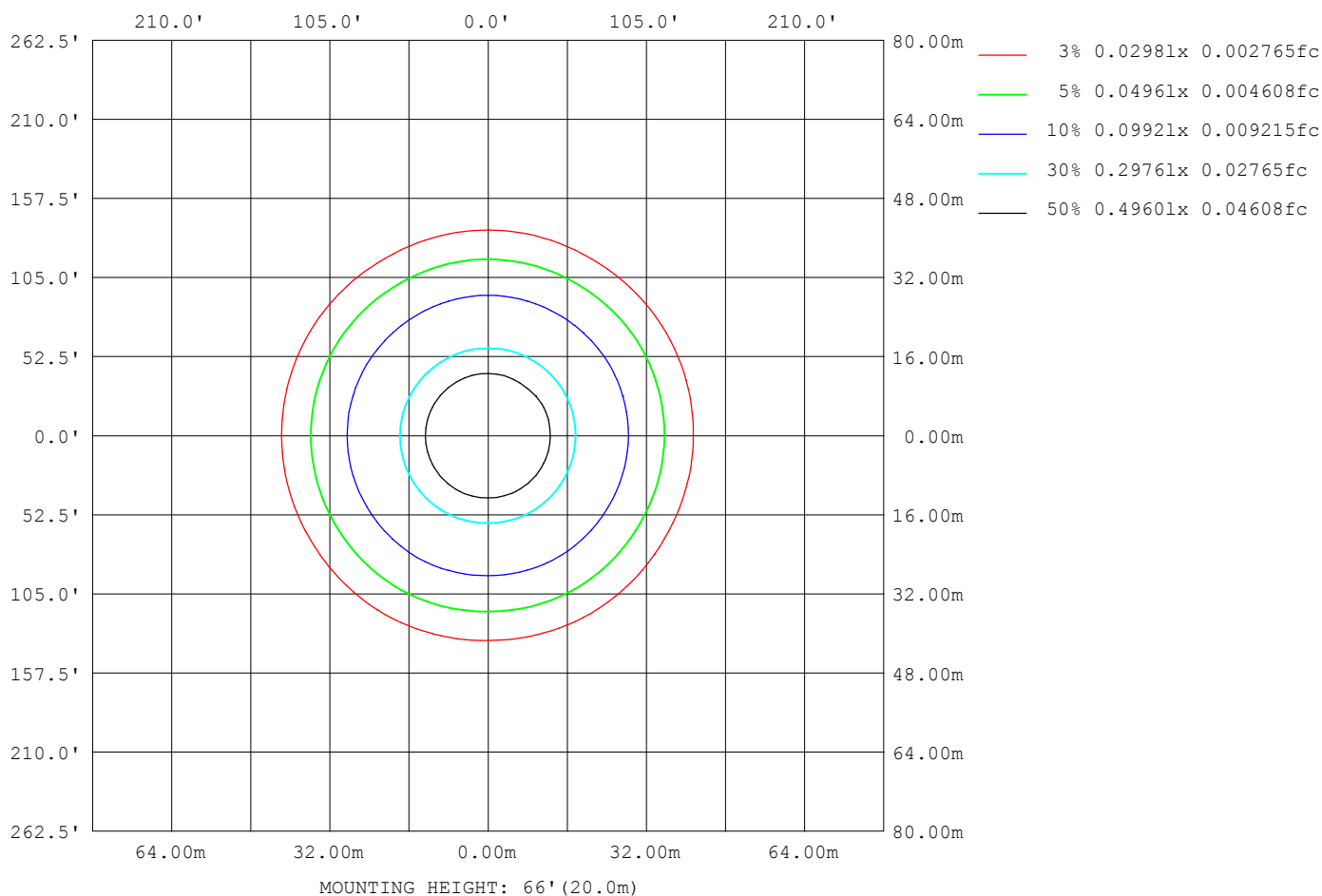
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:22 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	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 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:230.10V I:0.0550A P:12.300W PF:0.9830 Freq:50.00Hz Lamp Flux:1132.24x1 lm		
NAME: SLED515F-W1S1P-TW 4K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

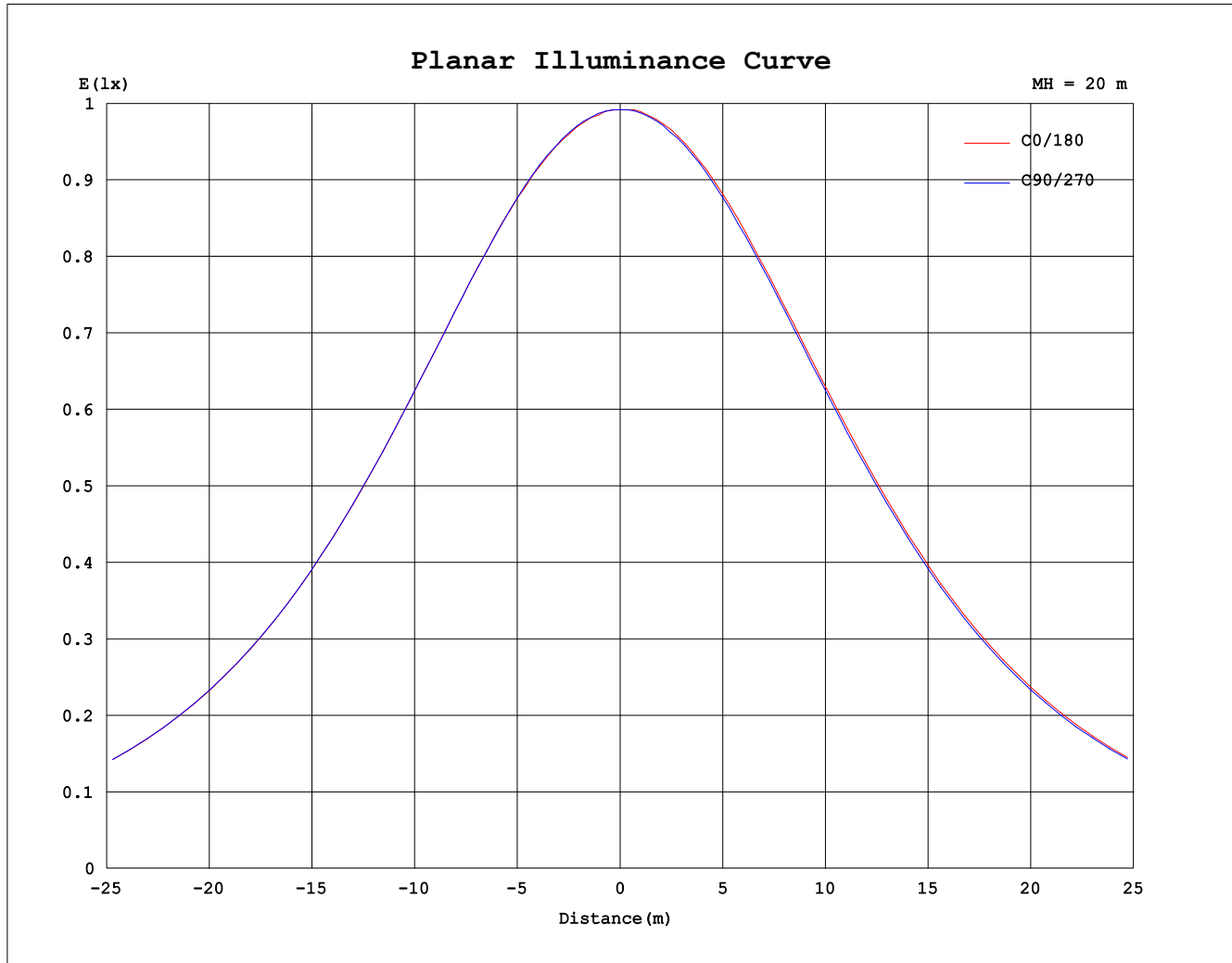
AvgL	cd/m2
L_0~180 (65) av	30287
L_0~180 (75) av	26297
L_0~180 (85) av	16798
L_90~270 (65) av	29940
L_90~270 (75) av	25847
L_90~270 (85) av	16054
L_45 (65) av	29957
L_45 (75) av	25869
L_45 (85) av	16047

Standard: GB/T 29293-2012

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