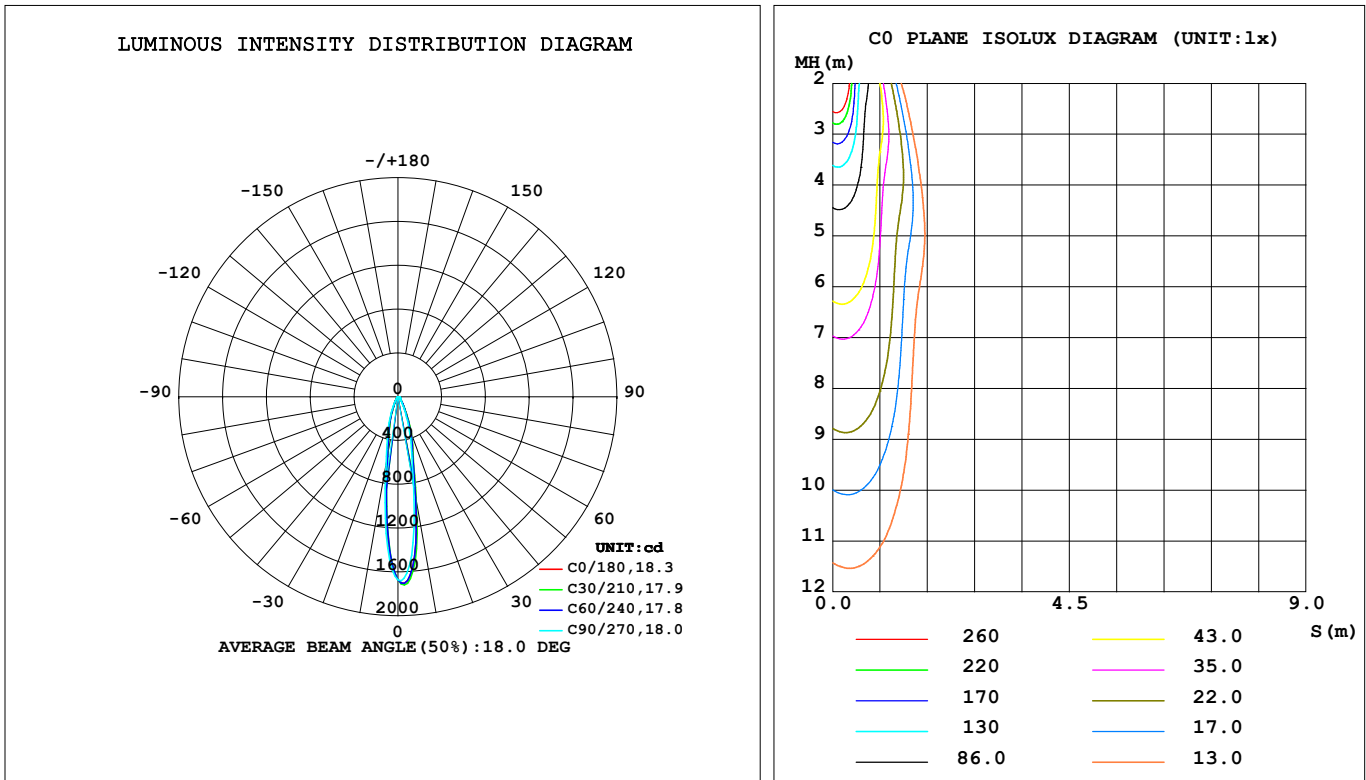


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.00V I:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 58.81 lm/W
MODEL		I _{max} (cd)	1719	S/MH (C0/180)		0.27
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)		0.28
RATED VOLTAGE (V)		TOTAL FLUX (lm)	376.39	η UP,DN (C0-180)		0.0,57.8
NOMINAL FLUX (lm)	376.393	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,42.2
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: 26 May 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:

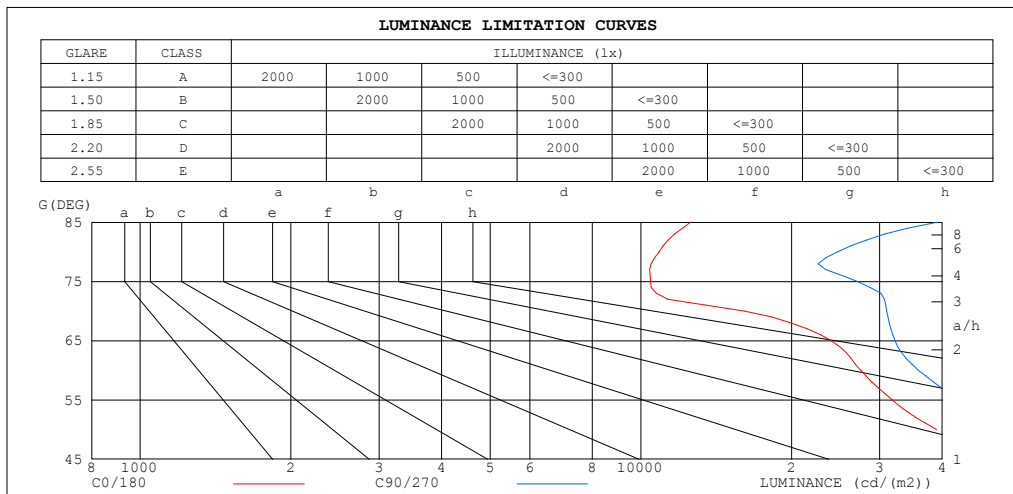
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	942.7	951.7	830.9	668.2	585.9	545.2	635.2	824.8	0- 10	109.3	109.3	29,29
20	356.2	351.9	296.1	224.8	195.5	190.5	227.0	300.5	10- 20	121.5	230.8	61.3,61.3
30	118.8	120.2	97.78	77.09	60.72	56.55	67.34	89.28	20- 30	70.90	301.7	80.1,80.1
40	46.33	51.71	42.26	38.53	28.05	19.91	17.05	27.27	30- 40	34.12	335.8	89.2,89.2
50	17.42	26.36	22.93	24.96	17.15	9.498	8.243	11.16	40- 50	18.82	354.6	94.2,94.2
60	9.559	14.22	12.73	14.54	10.94	4.007	2.068	3.460	50- 60	11.71	366.3	97.3,97.3
70	3.832	7.473	7.523	7.899	3.565	0.7078	0.3963	0.7429	60- 70	6.121	372.4	98.9,98.9
80	1.314	3.464	3.044	3.104	0.9589	0.0867	0.0029	0.1089	70- 80	2.827	375.3	99.7,99.7
90	0.0207	1.269	1.546	0.9925	0.0043	0.0061	0	0.0040	80- 90	1.138	376.4	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:26 May 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:230.00V I:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	12577	39165
80	10881	24697
75	10454	27049
70	16111	30990
65	23997	32215
60	27488	35863
55	31783	42851
50	38975	50257
45	60400	59840

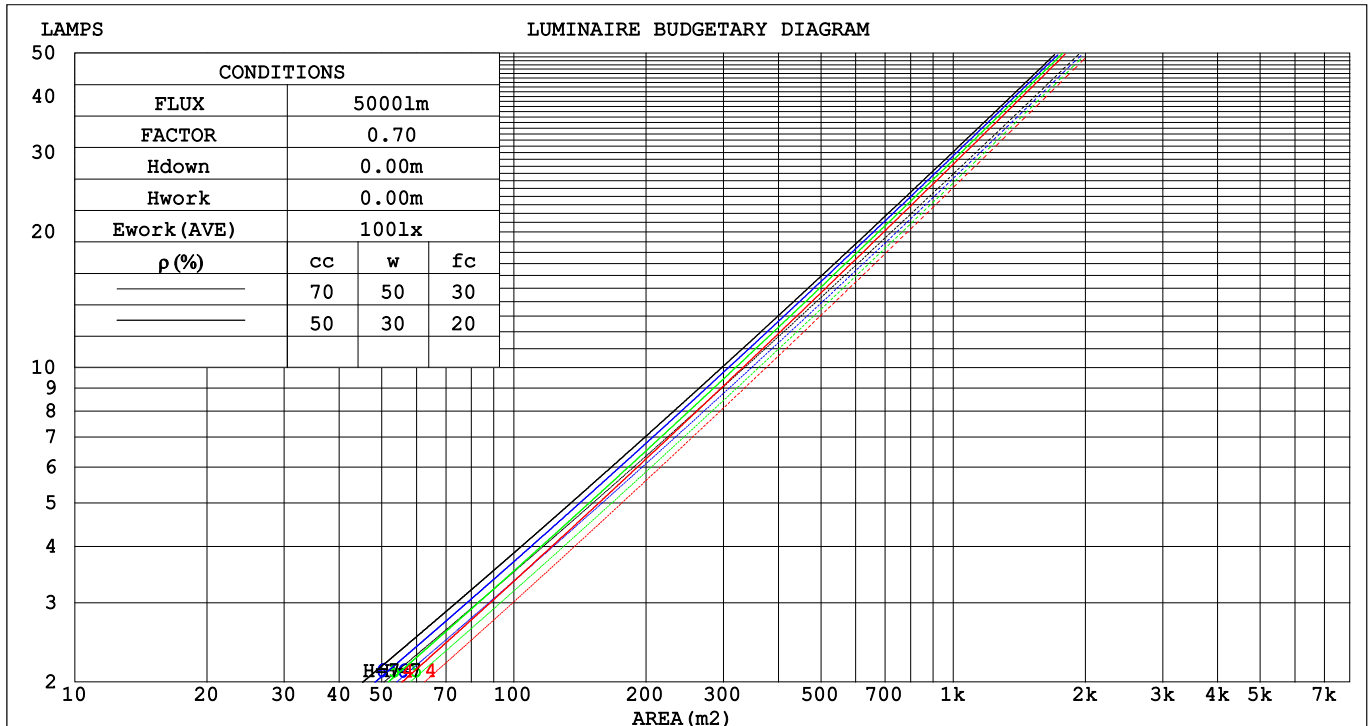
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Jason
 Test Date: 26 May 2020

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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	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:26 May 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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm																	
NAME: SL224-15-A-N-Q4									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	.167	.095	.030	.160	.091	.029	.148	.085	.027	.136	.079	.025	.126	.073	.023	
2.0	.157	.086	.026	.151	.083	.026	.141	.078	.024	.131	.074	.023	.122	.069	.022	
3.0	.147	.078	.023	.142	.076	.023	.133	.072	.022	.125	.069	.021	.117	.065	.020	
4.0	.138	.072	.021	.134	.070	.021	.126	.067	.020	.119	.064	.019	.113	.061	.019	
5.0	.130	.066	.019	.126	.065	.019	.120	.062	.018	.114	.060	.018	.108	.058	.017	
6.0	.122	.061	.018	.119	.060	.017	.114	.058	.017	.108	.056	.017	.103	.054	.016	
7.0	.116	.057	.016	.113	.056	.016	.108	.055	.016	.104	.053	.015	.099	.052	.015	
8.0	.110	.054	.015	.108	.053	.015	.103	.052	.015	.099	.050	.014	.095	.049	.014	
9.0	.105	.051	.014	.103	.050	.014	.099	.049	.014	.095	.048	.014	.091	.046	.013	
10.0	.100	.048	.013	.098	.047	.013	.094	.046	.013	.091	.045	.013	.088	.044	.013	

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	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.154	.133	.114	.132	.114	.099	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.141	.113	.092	.121	.098	.080	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.129	.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	.111	.077	.052	.096	.067	.046	.066	.047	.032	.038	.027	.019	.012	.009	.006	
7.0	.104	.069	.045	.090	.060	.039	.062	.042	.028	.036	.025	.016	.012	.008	.005	
8.0	.098	.063	.038	.084	.054	.033	.058	.038	.024	.034	.022	.014	.011	.007	.005	
9.0	.092	.057	.033	.079	.050	.029	.055	.035	.021	.032	.021	.012	.010	.007	.004	
10.0	.087	.052	.029	.075	.046	.026	.052	.032	.018	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:26 May 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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm											
NAME: SL224-15-A-N-Q4					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		26.2	27.0	26.4	27.1	27.3	25.9	26.8	26.2	26.9	27.1
	3H	26.5	27.3	26.8	27.5	27.7	26.7	27.4	26.9	27.6	27.8
	4H	26.6	27.3	26.9	27.5	27.8	27.0	27.8	27.3	28.0	28.2
	6H	26.6	27.3	26.9	27.6	27.8	27.2	27.9	27.5	28.2	28.4
	8H	26.6	27.3	26.9	27.6	27.8	27.4	28.0	27.7	28.3	28.5
	12H	26.6	27.3	27.0	27.5	27.8	27.5	28.2	27.8	28.4	28.7
4H	2H	26.4	27.2	26.7	27.4	27.6	26.3	27.0	26.5	27.2	27.4
	3H	27.1	27.7	27.4	28.0	28.2	27.2	27.8	27.5	28.1	28.4
	4H	27.3	27.9	27.6	28.2	28.5	27.7	28.3	28.0	28.5	28.9
	6H	27.4	28.0	27.8	28.3	28.6	28.0	28.5	28.3	28.8	29.1
	8H	27.5	28.0	27.9	28.3	28.7	28.1	28.6	28.5	29.0	29.3
	12H	27.5	28.0	27.9	28.3	28.7	28.4	28.8	28.8	29.2	29.6
8H	4H	27.5	28.0	27.9	28.3	28.7	27.8	28.3	28.2	28.7	29.0
	6H	27.9	28.3	28.3	28.7	29.1	28.2	28.6	28.7	29.0	29.4
	8H	28.0	28.4	28.5	28.8	29.2	28.5	28.9	28.9	29.3	29.7
	12H	28.2	28.5	28.6	28.9	29.4	28.9	29.2	29.3	29.6	30.1
12H	4H	27.5	27.9	27.9	28.3	28.7	27.8	28.3	28.2	28.6	29.0
	6H	27.9	28.3	28.4	28.7	29.1	28.3	28.6	28.7	29.0	29.5
	8H	28.2	28.5	28.6	28.9	29.4	28.6	28.9	29.1	29.3	29.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.7 / - 1.0					+ 0.5 / - 0.7					
1.5H	+ 0.9 / - 1.4					+ 0.6 / - 0.5					
2.0H	+ 1.0 / - 1.4					+ 0.8 / - 0.7					

CIE Pub.117, 376.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.4)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:26 May 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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

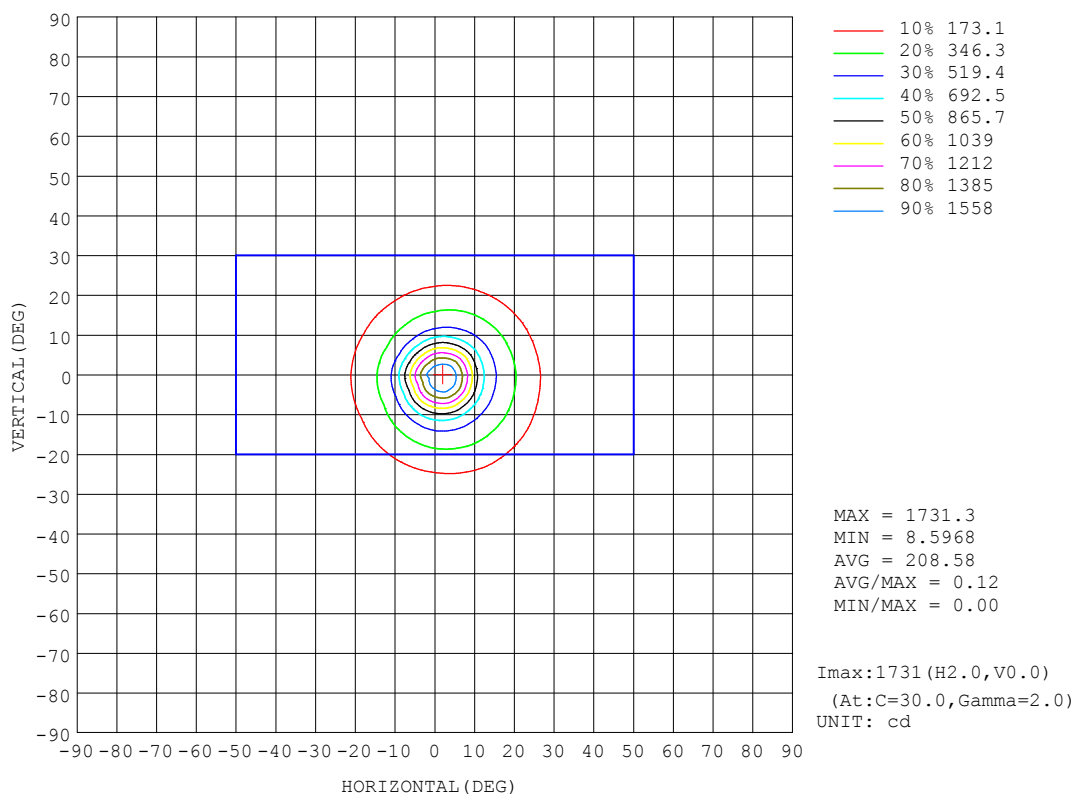
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	84	78	74	83	77	74	70
0.80	92	86	82	92	86	82	91	85	82	78
1.00	97	91	87	96	91	87	95	91	86	82
1.25	102	96	92	100	95	92	98	94	91	86
1.50	104	99	96	103	98	95	101	97	94	89
2.00	107	103	99	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	109	106	107	105	104	96
5.00	114	112	110	112	110	108	108	107	105	98
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:26 May 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:230.00V I:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

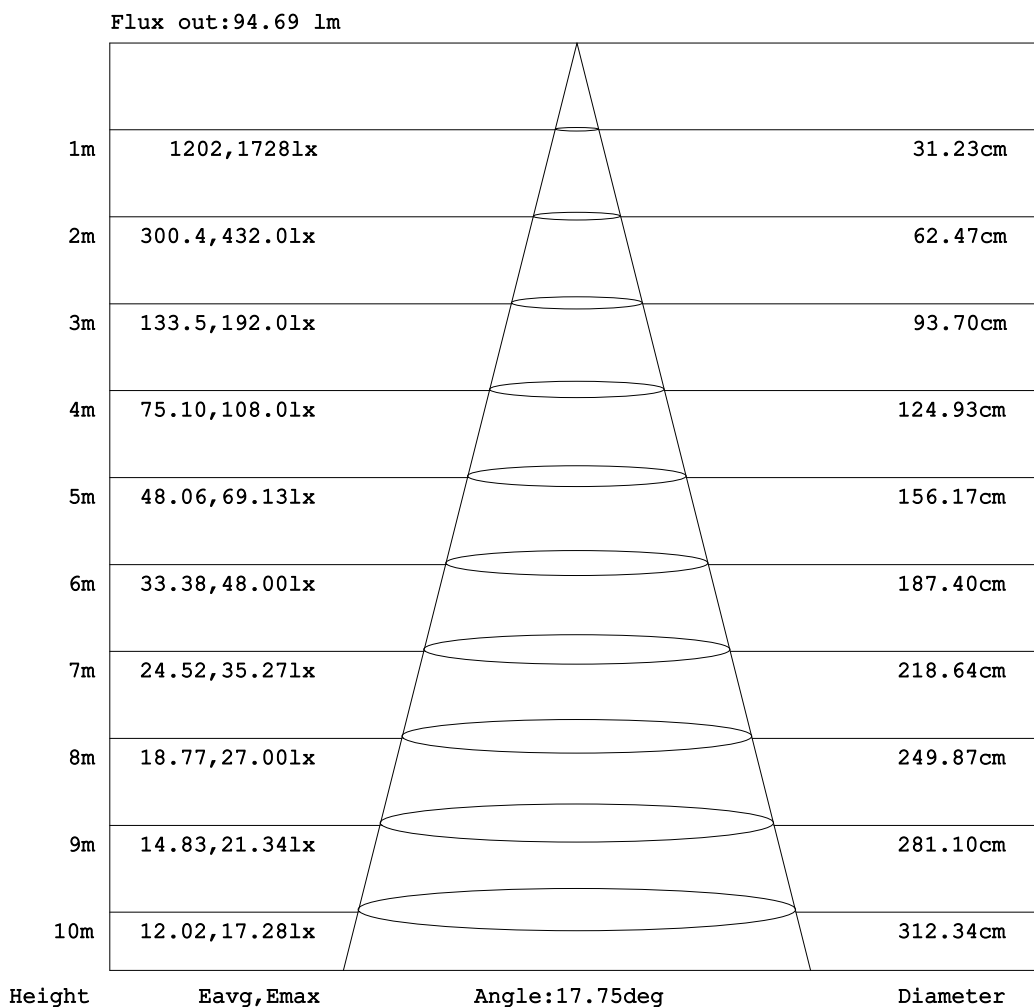


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Jason
Test Date: 26 May 2020

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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:



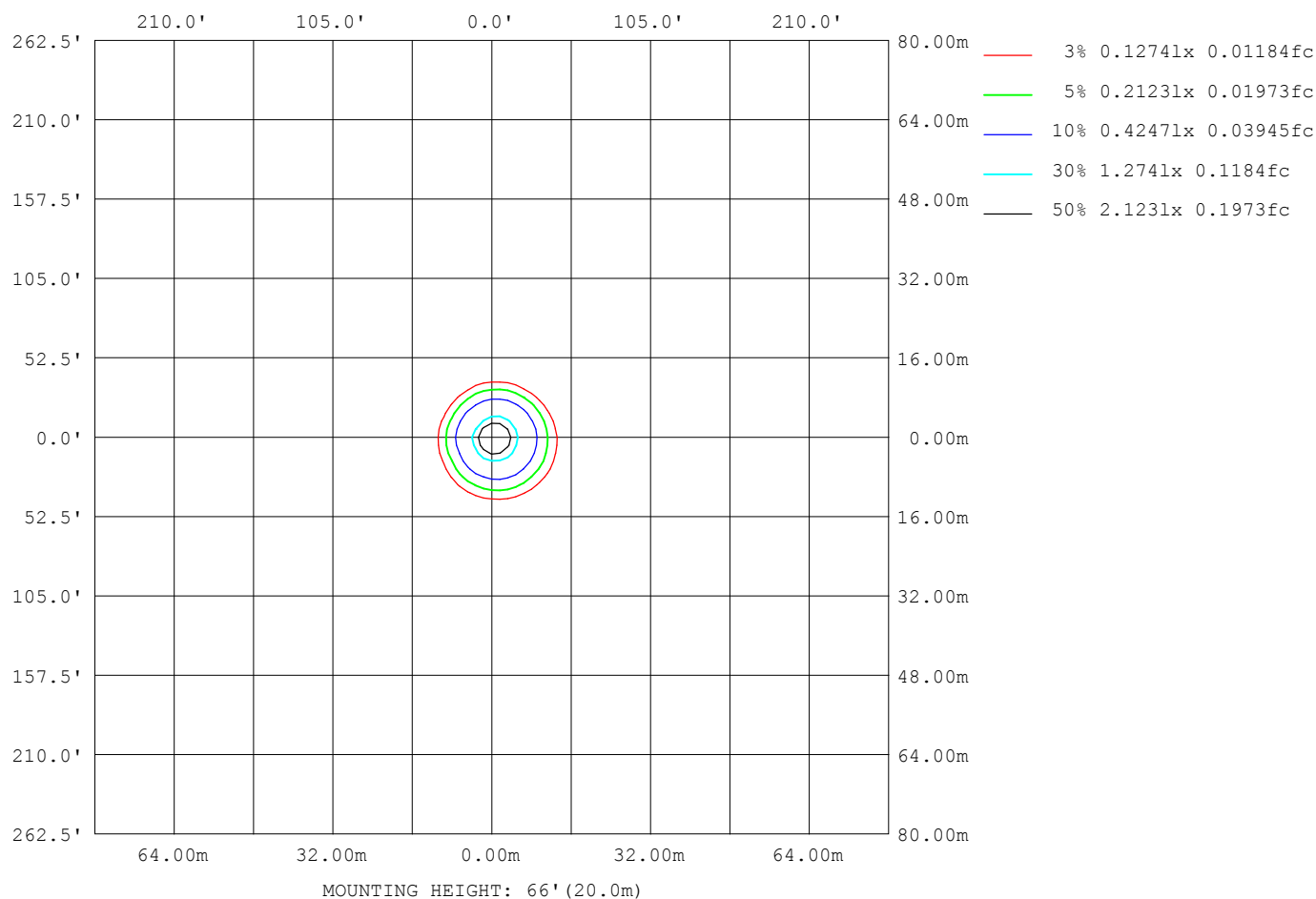
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:26 May 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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	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:26 May 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:0.0410A P:6.4000W PF:0.6770 Freq:50.00Hz Lamp Flux:376.393x1 lm		
NAME: SL224-15-A-N-Q4	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Switch Lighting	SUR.:	Shielding Angle:

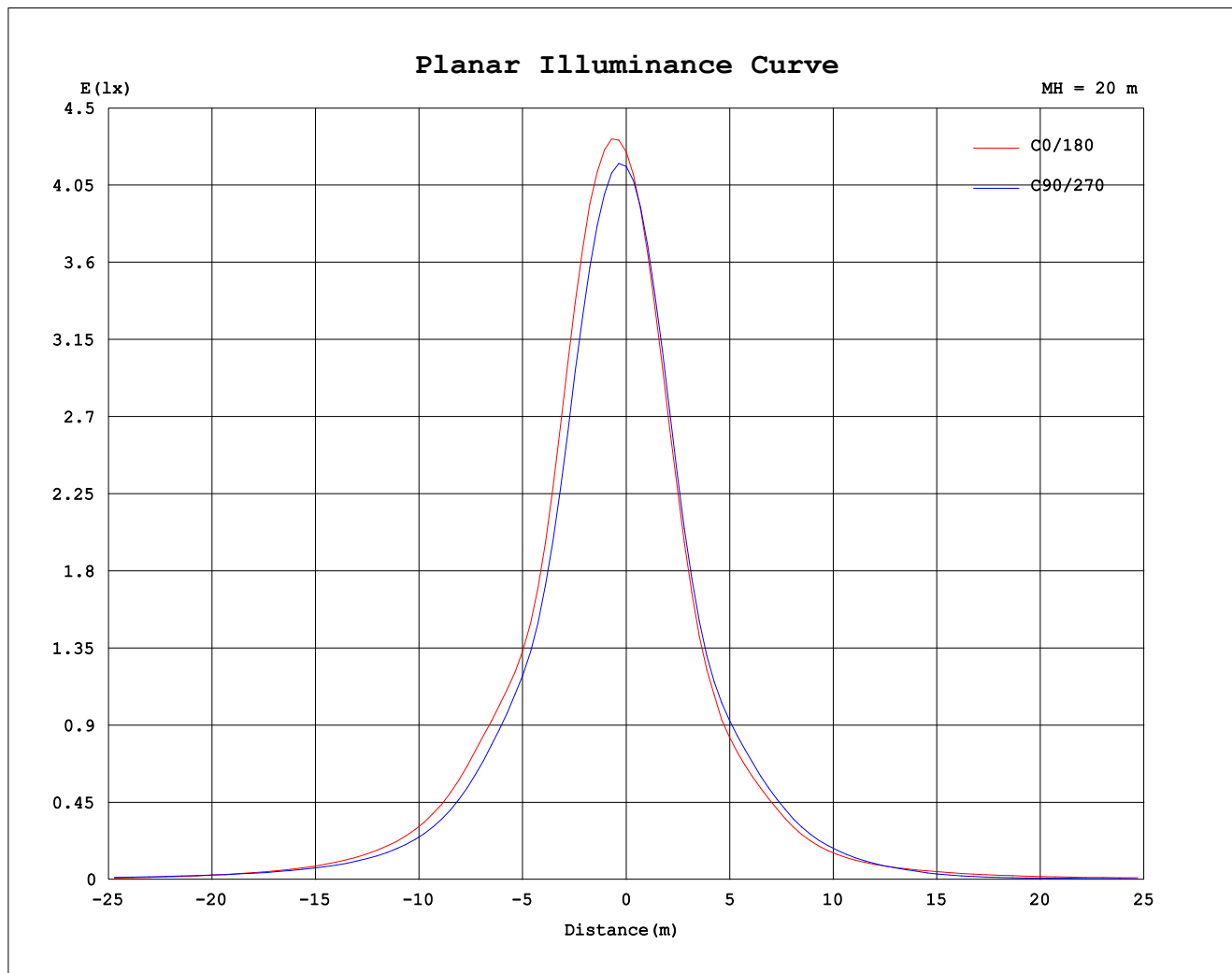
AvgL	cd/m2
L_0~180 (65) av	21323
L_0~180 (75) av	9180
L_0~180 (85) av	9874
L_90~270 (65) av	18114
L_90~270 (75) av	13657
L_90~270 (85) av	19678
L_45 (65) av	20392
L_45 (75) av	16522
L_45 (85) av	18550

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jason
Test Date:26 May 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: 26 May 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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