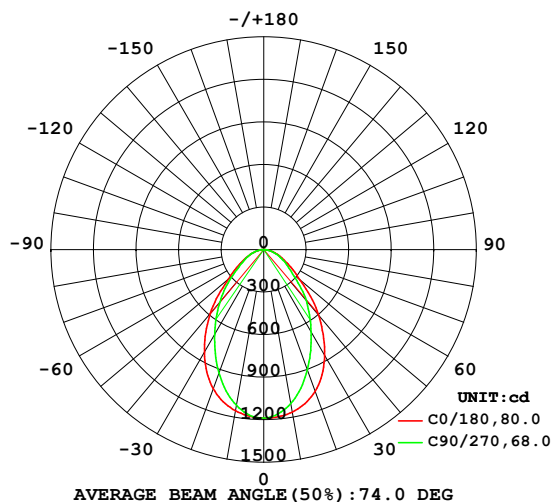


LUMINAIRE PHOTOMETRIC TEST REPORT

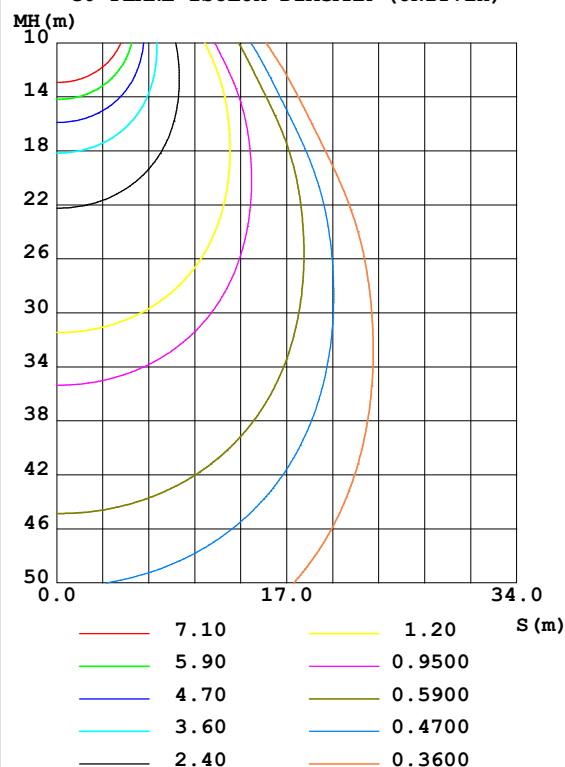
Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.04 lm/W			
LED 200000mm	1300lm 940 HV ADV5	Imax(cd)	1189	S/MH(C0/180)	1.09
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.95
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1951.2	η UP,DN(C0-180)	0.0,49.5
NOMINAL FLUX(lm)	1951.2	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [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	1164	1126	1103	1125	1154	1134	1115	1136	0- 10	110.7	110.7	5.67,5.67
20	1062	965.8	901.3	961.9	1044	977.1	924.4	984.0	10- 20	298.6	409.3	21,21
30	859.7	738.1	670.3	735.7	838.6	754.6	694.2	765.5	20- 30	399.5	808.9	41.5,41.5
40	602.1	517.0	467.3	515.4	586.2	533.1	480.5	541.8	30- 40	400.1	1209	62,62
50	334.9	298.4	267.2	295.6	327.4	307.1	287.5	315.5	40- 50	318.1	1527	78.3,78.3
60	188.6	168.5	166.7	167.8	185.9	170.8	167.8	172.6	50- 60	207.6	1735	88.9,88.9
70	104.0	95.55	93.64	95.41	101.0	95.67	98.51	95.64	60- 70	132.0	1867	95.7,95.7
80	35.57	32.98	33.08	32.88	34.14	34.87	39.25	34.32	70- 80	68.50	1935	99.2,99.2
90	0.5614	0.2660	0.2510	0.2657	0.3281	0.3279	0.3565	0.4076	80- 90	16.01	1951	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		

Conical surface Flux(90deg): 1383.6 lm

%lum = 70.9%

%lamp = 70.9%

Conical surface Flux(120deg): 1734.7 lm

%lum = 88.9%

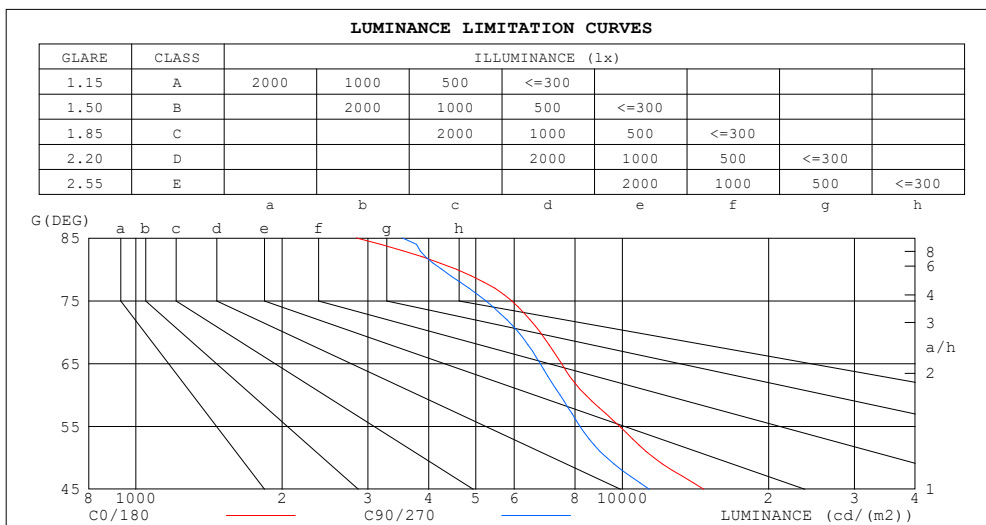
%lamp = 88.9%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2840	3535
80	4567	4255
75	5927	5240
70	6779	6115
65	7506	6782
60	8407	7448
55	9872	8184
50	11612	9285
45	14702	11373

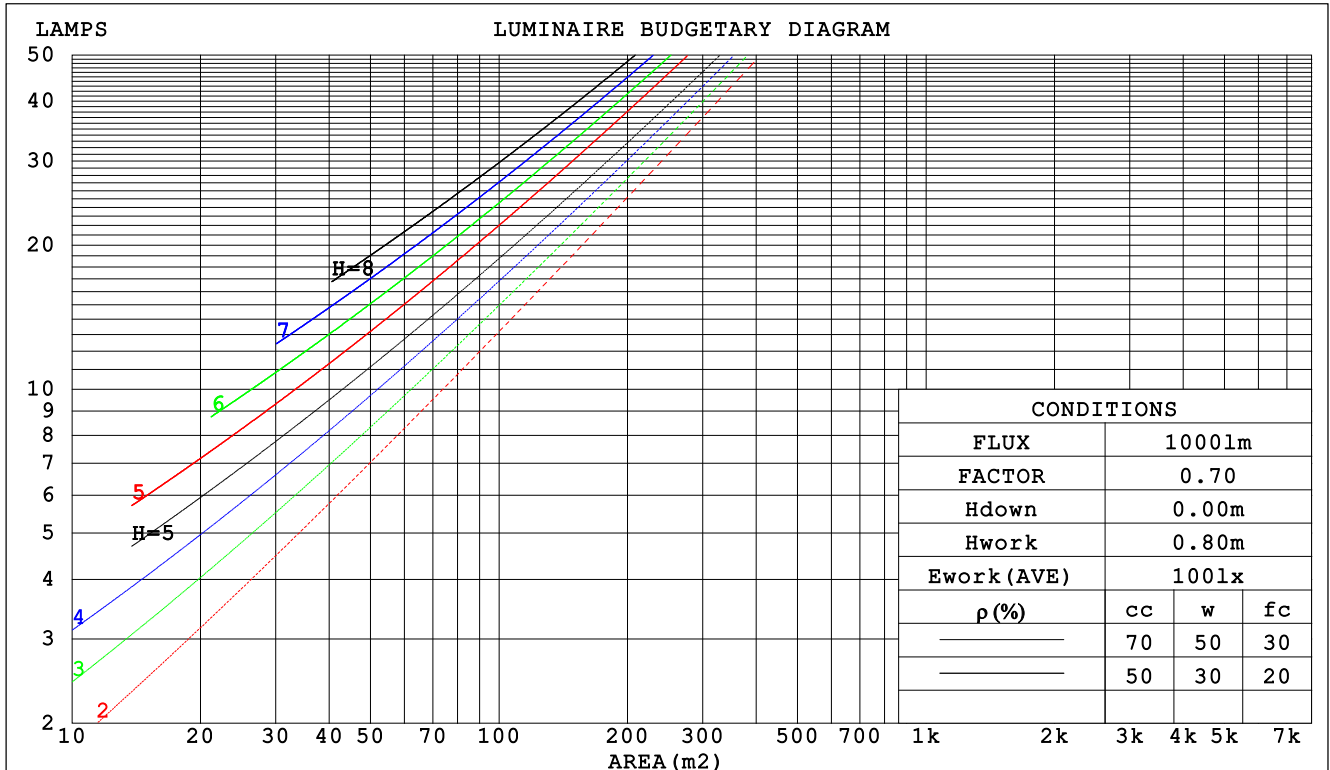
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	Coefficients of Utilization(CU)															
RCR:Room Cavity Ratio																
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	1.00
1.0	1.07	1.03	1.00	1.05	1.01	.99	1.00	.98	.96	.97	.95	.93	.93	.91	.90	.88
2.0	.96	.90	.85	.94	.89	.84	.90	.86	.82	.87	.84	.80	.84	.81	.79	.77
3.0	.86	.79	.74	.85	.78	.73	.82	.76	.72	.79	.74	.71	.77	.73	.69	.67
4.0	.78	.70	.65	.77	.70	.64	.74	.68	.63	.72	.67	.63	.70	.65	.62	.60
5.0	.71	.63	.57	.70	.62	.57	.68	.61	.56	.66	.60	.56	.64	.59	.55	.53
6.0	.65	.57	.51	.64	.57	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.60	.52	.46	.59	.51	.46	.57	.51	.46	.56	.50	.46	.55	.49	.45	.44
8.0	.55	.47	.42	.54	.47	.42	.53	.47	.42	.52	.46	.42	.51	.45	.41	.40
9.0	.51	.44	.39	.50	.43	.39	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.48	.40	.36	.47	.40	.36	.46	.40	.35	.45	.39	.35	.44	.39	.35	.34



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	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	.252	.143	.045	.245	.140	.044	.232	.133	.043	.220	.127	.041	.210	.121	.039		
2.0	.241	.132	.041	.235	.130	.040	.224	.125	.039	.214	.120	.038	.204	.115	.036		
3.0	.227	.121	.036	.222	.119	.036	.212	.115	.035	.203	.111	.034	.194	.108	.033		
4.0	.212	.110	.032	.208	.109	.032	.199	.106	.032	.191	.103	.031	.184	.100	.030		
5.0	.199	.101	.029	.195	.100	.029	.187	.098	.029	.180	.095	.028	.174	.093	.028		
6.0	.187	.094	.027	.183	.092	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026		
7.0	.176	.087	.025	.172	.086	.024	.166	.084	.024	.161	.082	.024	.155	.081	.024		
8.0	.165	.081	.023	.163	.080	.023	.157	.079	.022	.152	.077	.022	.147	.076	.022		
9.0	.156	.076	.021	.154	.075	.021	.149	.074	.021	.144	.072	.021	.140	.071	.021		
10.0	.148	.071	.020	.146	.070	.020	.141	.069	.020	.137	.068	.019	.133	.067	.019		

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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.054	.048	.019	.017	.016	
2.0	.166	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.080	.134	.098	.070	.092	.068	.049	.053	.040	.029	.017	.013	.009	
4.0	.148	.100	.064	.127	.087	.055	.087	.060	.039	.050	.035	.023	.016	.012	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.037	.079	.049	.027	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.012	.014	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm											
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90 LED						WEIGHT:					
SPEC.:						DIM.:		SERIAL No.:1			
MFR.: DARKON						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	20.0	21.3	20.2	21.5	21.7	19.1	20.4	19.4	20.6	20.8	
	3H	20.9	22.1	21.1	22.3	22.5	20.1	21.3	20.4	21.5	21.7
	4H	21.2	22.3	21.5	22.6	22.8	20.4	21.6	20.7	21.8	22.0
	6H	21.4	22.5	21.7	22.7	23.0	20.6	21.7	21.0	22.0	22.2
	8H	21.4	22.5	21.8	22.7	23.0	20.7	21.7	21.0	22.0	22.3
12H	21.4	22.4	21.8	22.7	23.0	20.7	21.7	21.1	22.0	22.3	
4H	2H	20.2	21.4	20.5	21.6	21.9	19.5	20.7	19.8	20.9	21.2
	3H	21.3	22.3	21.7	22.6	22.9	20.7	21.6	21.0	21.9	22.2
	4H	21.8	22.7	22.1	23.0	23.3	21.1	22.0	21.5	22.3	22.6
	6H	22.1	22.9	22.5	23.2	23.6	21.4	22.2	21.8	22.6	22.9
	8H	22.1	22.9	22.5	23.2	23.6	21.5	22.2	21.9	22.6	23.0
12H	22.1	22.8	22.6	23.2	23.6	21.6	22.2	22.0	22.6	23.0	
8H	4H	21.9	22.6	22.3	23.0	23.4	21.3	22.0	21.7	22.4	22.7
	6H	22.3	22.9	22.7	23.3	23.7	21.7	22.3	22.1	22.7	23.1
	8H	22.4	22.9	22.8	23.3	23.8	21.8	22.4	22.3	22.8	23.2
	12H	22.4	22.9	22.9	23.3	23.8	21.9	22.4	22.4	22.8	23.3
	12H	4H	21.9	22.5	22.3	22.9	23.3	21.3	21.9	21.7	22.3
6H	22.3	22.8	22.7	23.2	23.7	21.7	22.2	22.1	22.6	23.1	
8H	22.4	22.9	22.9	23.3	23.8	21.9	22.3	22.3	22.8	23.2	
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.6					+ 0.5 / - 0.5					
1.5H	+ 0.4 / - 0.4					+ 0.3 / - 0.4					
2.0H	+ 1.1 / - 0.7					+ 0.7 / - 0.5					

CIE Pub.117 Corrected 1951 lm Total Lamp Luminous Flux. (8log(F/F0) = 2.3)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

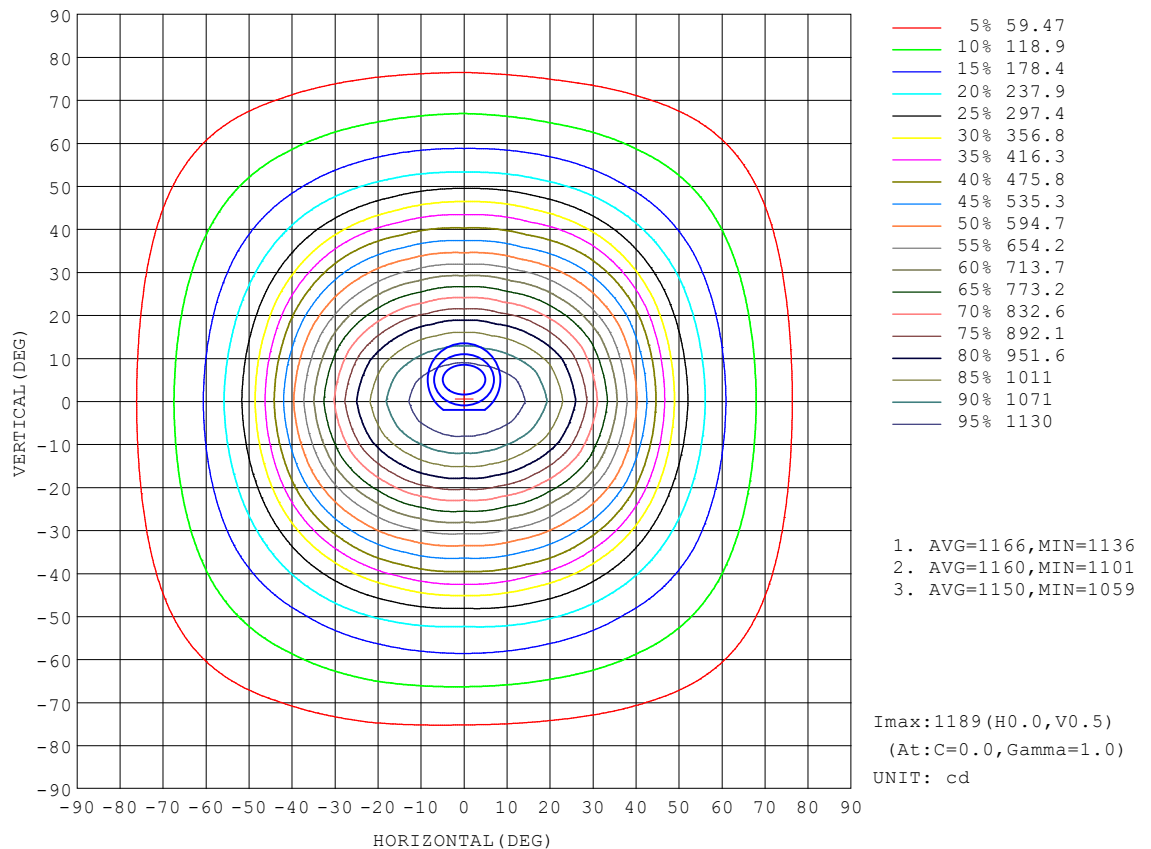
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	58	52	67	58	52	66	57	52	46
0.80	77	68	62	76	67	62	75	67	61	55
1.00	85	76	70	84	75	70	82	76	69	63
1.25	91	83	77	90	82	76	87	81	76	70
1.50	95	87	82	94	86	81	91	85	80	74
2.00	101	94	89	99	93	88	96	91	86	80
2.50	104	97	93	102	96	92	98	94	90	82
3.00	106	101	96	104	99	95	100	96	93	86
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	106	103	105	102	100	91
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

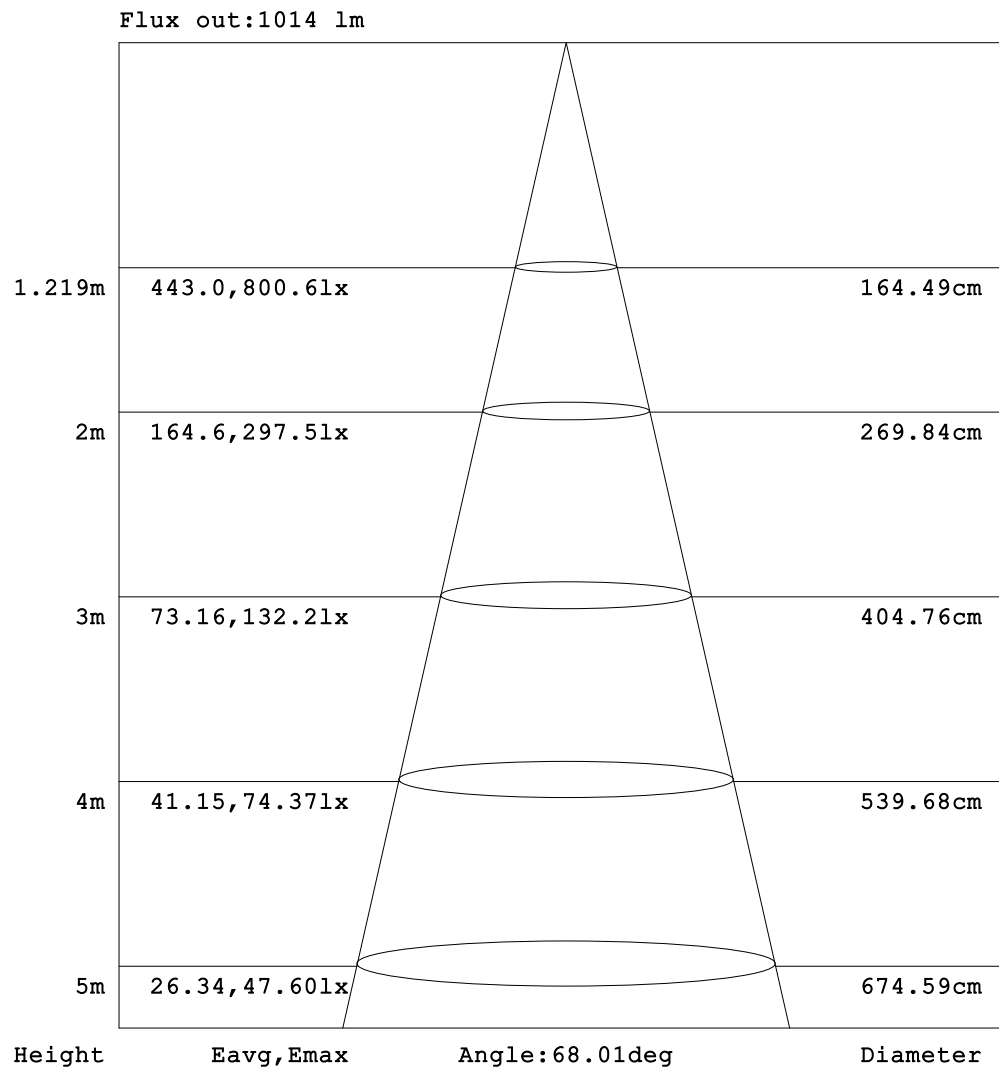


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

AAI Figure

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	CRI90:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



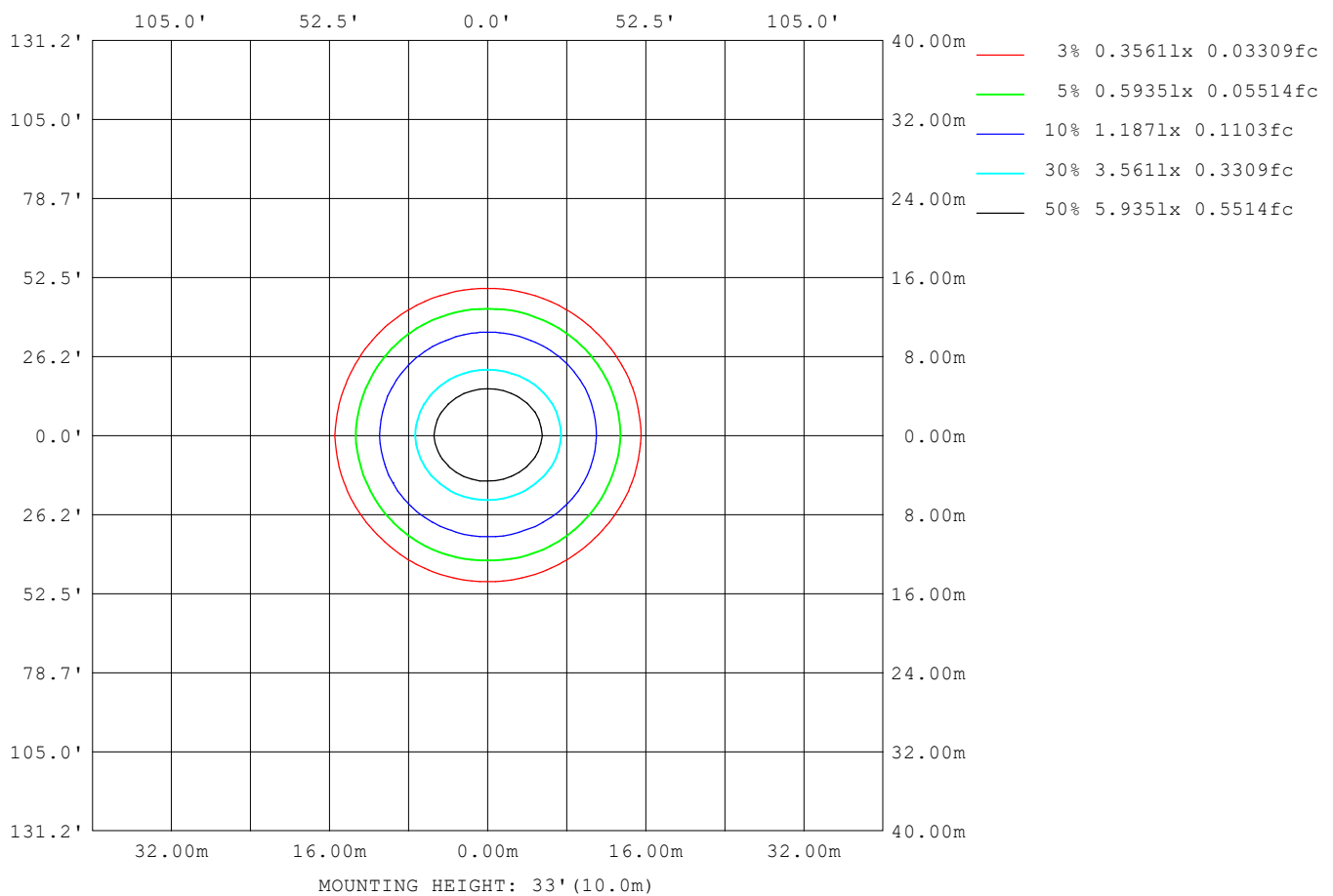
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:239.9V I:0.1135A P:25.66W PF:0.9419 Lamp Flux:1951.2x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-DG_HE_500mA_4000K	CRI90:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

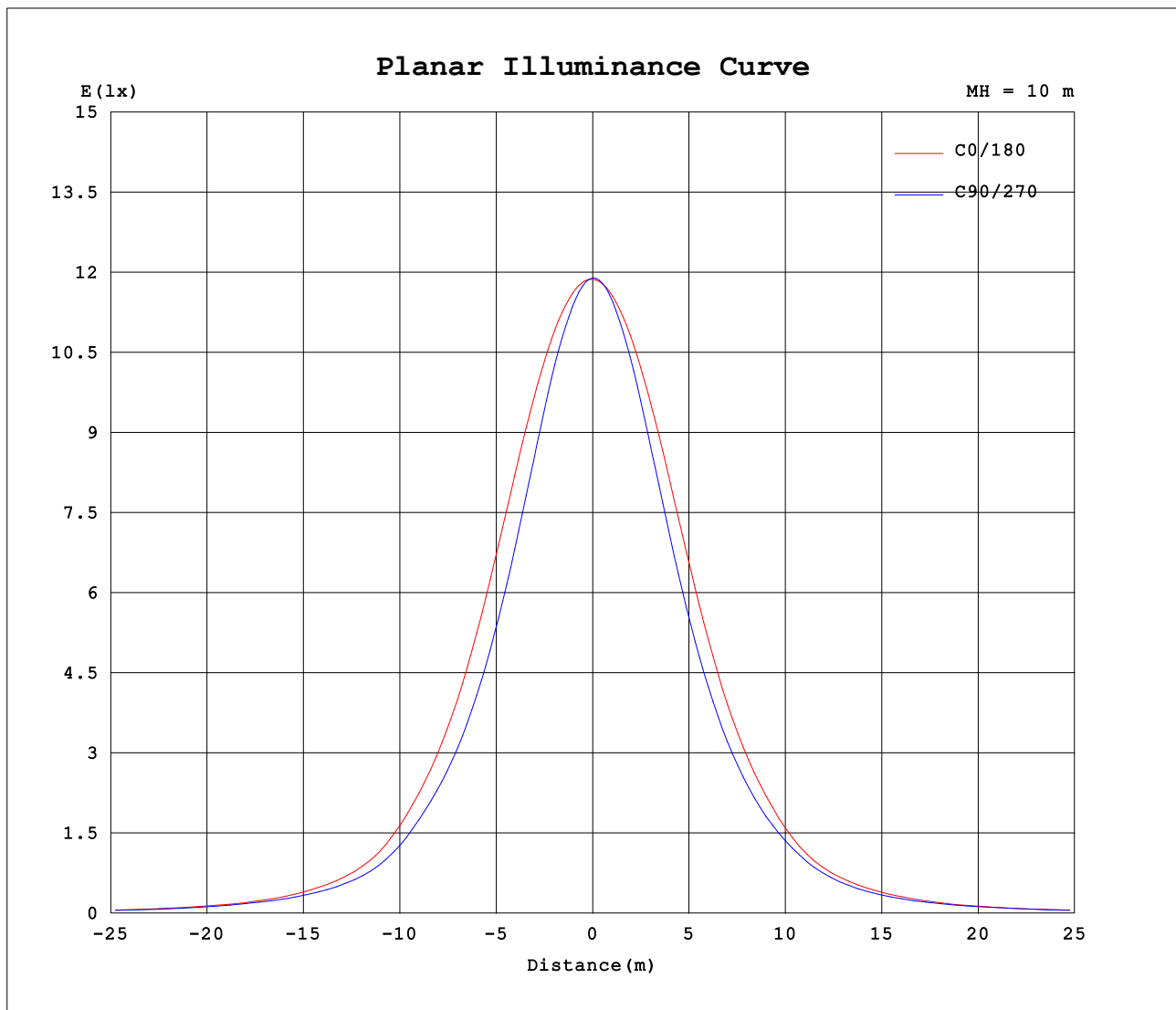
AvgL	cd/m2
L_0~180 (65) av	7388
L_0~180 (75) av	5875
L_0~180 (85) av	2717
L_90~270 (65) av	6854
L_90~270 (75) av	5548
L_90~270 (85) av	3909
L_45 (65) av	6843
L_45 (75) av	5406
L_45 (85) av	3566

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.995m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 06 January 2023

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.995m [K=1.0000]
Remarks:

