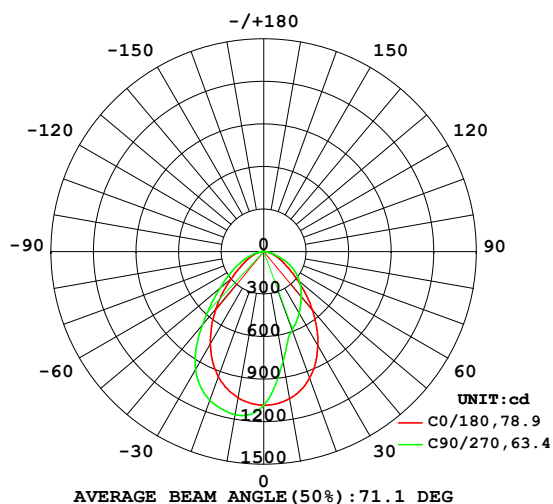


LUMINAIRE PHOTOMETRIC TEST REPORT

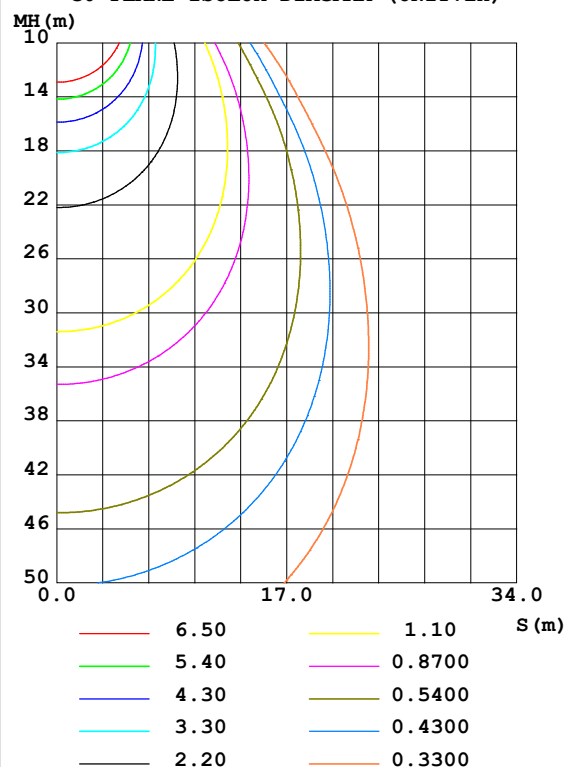
Test:U:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP			PHOTOMETRIC DATA				Eff: 82.45 lm/W
LLE 2000A	MODEL	1300lm 940 HV ADV5	Imax (cd)	1167	S/MH (C0/180)	1.08	
	NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.24	
	RATED VOLTAGE (V)		230.0	TOTAL FLUX (lm)	2121.0	η UP, DN (C0~180)	0.0, 39.9
	NOMINAL FLUX (lm)		2120.96	CIE CLASS	DIRECT	η UP, DN (C180~360)	0.0, 60.1
	LAMPS INSIDE		1	η up (%)	0.0	CIBSE SHR NOM	1.00
	TEST VOLTAGE (V)		230	η down (%)	100.0	CIBSE SHR MAX	1.10

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	1053	859.6	786.9	857.8	1046	1150	1167	1155	0- 10	99.67	99.67	4.7,4.7
20	948.8	628.0	588.2	624.4	937.7	1107	1115	1118	10- 20	266.3	365.9	17.3,17.3
30	764.8	537.1	500.0	532.1	753.9	1000	961.3	1017	20- 30	378.5	744.5	35.1,35.1
40	532.1	446.9	411.4	441.3	525.0	819.1	673.7	838.8	30- 40	421.8	1166	55,55
50	306.4	337.0	328.4	332.3	303.2	562.2	406.0	580.3	40- 50	383.2	1549	73.1,73.1
60	166.1	224.8	235.9	220.9	160.9	318.9	237.9	329.5	50- 60	289.8	1839	86.7,86.7
70	89.73	118.5	123.8	116.2	86.81	147.7	122.3	152.7	60- 70	181.7	2021	95.3,95.3
80	30.53	37.29	39.02	36.40	28.92	41.73	43.11	43.10	70- 80	82.05	2103	99.2,99.2
90	0.6333	0.3899	0.3206	0.3969	0.3749	0.4409	0.4992	0.5280	80- 90	18.01	2121	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): 1367.2 lm

%lum = 64.5%

%lamp = 64.5%

Conical surface Flux(120deg): 1839.2 lm

%lum = 86.7%

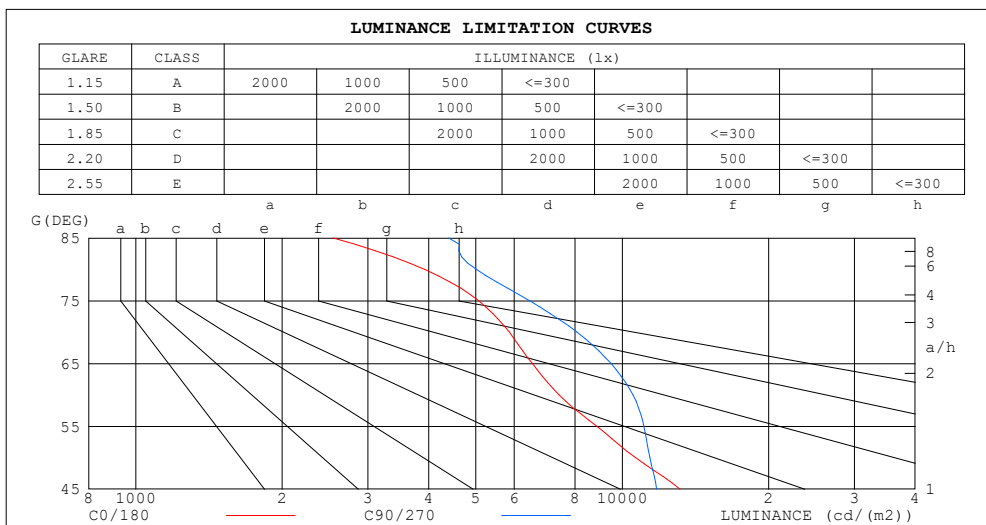
%lamp = 86.7%

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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_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	2543	4395
80	3926	5012
75	5072	6452
70	5858	8073
65	6537	9485
60	7419	10525
55	8869	11084
50	10642	11397
45	13153	11775

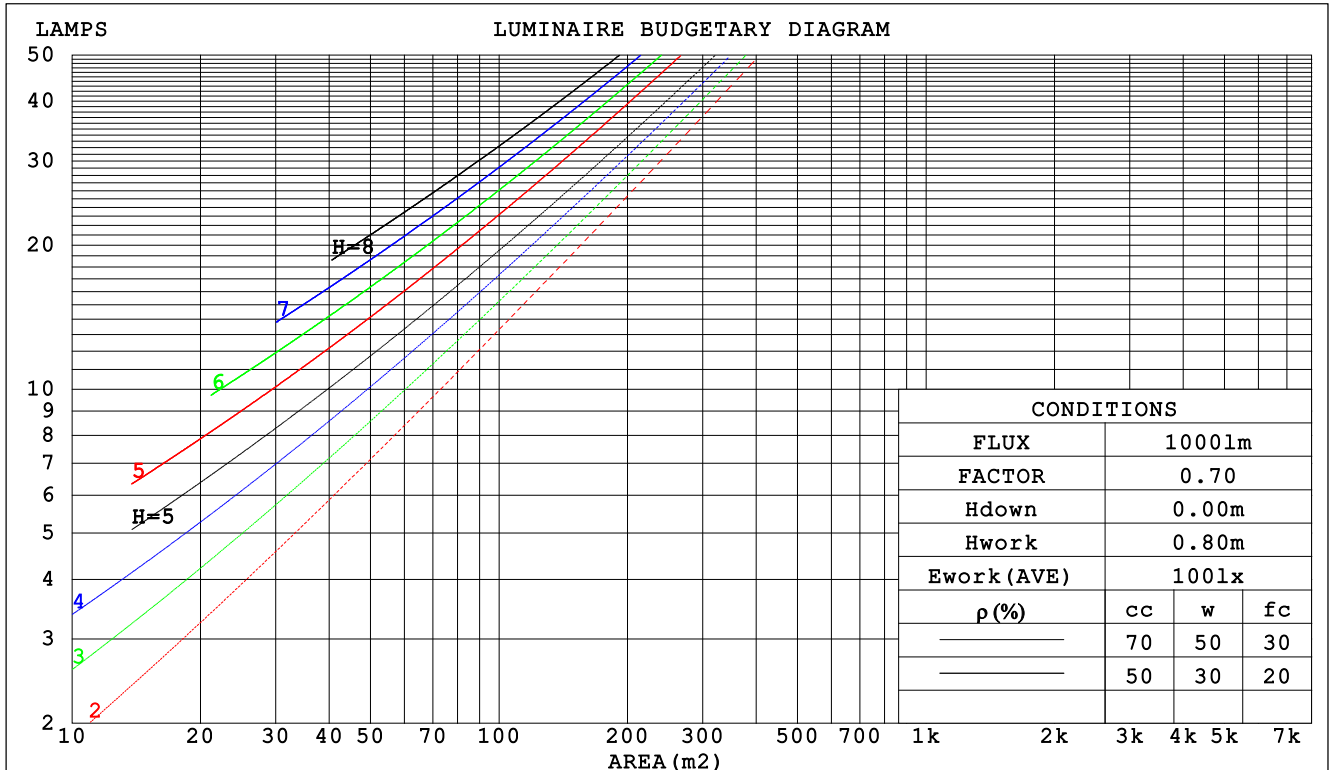
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE: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	.00
1.0	1.06	1.02	.99	1.04	1.01	.97	.00	.97	.94	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.80	.77	.75
3.0	.84	.77	.71	.82	.76	.70	.80	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.67	.61	.72	.65	.60	.69	.64	.59	.67	.62	.58	.56
5.0	.68	.60	.54	.67	.59	.53	.65	.58	.53	.63	.57	.52	.61	.56	.52	.50
6.0	.62	.53	.47	.61	.53	.47	.59	.52	.47	.57	.51	.46	.56	.50	.46	.44
7.0	.56	.48	.42	.56	.48	.42	.54	.47	.42	.53	.46	.42	.51	.46	.41	.40
8.0	.52	.44	.38	.51	.43	.38	.50	.43	.38	.49	.42	.38	.47	.42	.38	.36
9.0	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.44	.38	.34	.32
10.0	.44	.37	.32	.44	.37	.32	.43	.36	.32	.42	.36	.31	.41	.35	.31	.30



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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE: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	.267	.152	.048	.260	.148	.047	.247	.142	.045	.235	.135	.043	.224	.130	.042		
2.0	.256	.140	.043	.250	.138	.042	.239	.133	.041	.228	.128	.040	.218	.124	.039		
3.0	.241	.128	.038	.235	.126	.038	.225	.122	.037	.216	.118	.036	.208	.115	.036		
4.0	.225	.117	.034	.220	.115	.034	.212	.112	.034	.203	.109	.033	.196	.106	.032		
5.0	.210	.107	.031	.206	.106	.031	.198	.103	.030	.191	.101	.030	.184	.098	.030		
6.0	.197	.099	.028	.193	.098	.028	.186	.095	.028	.180	.093	.027	.174	.091	.027		
7.0	.185	.091	.026	.181	.090	.026	.175	.088	.025	.169	.087	.025	.164	.085	.025		
8.0	.173	.085	.024	.171	.084	.024	.165	.082	.024	.160	.081	.023	.155	.079	.023		
9.0	.163	.079	.022	.161	.078	.022	.156	.077	.022	.151	.076	.022	.147	.074	.022		
10.0	.154	.074	.021	.152	.073	.020	.148	.072	.020	.143	.071	.020	.139	.070	.020		

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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.102	.143	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.136	.098	.068	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.129	.087	.054	.089	.060	.038	.052	.035	.022	.017	.012	.007	
5.0	.143	.090	.050	.123	.078	.044	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.137	.081	.042	.117	.070	.036	.081	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.130	.074	.035	.112	.064	.031	.077	.045	.022	.045	.027	.013	.015	.009	.004	
8.0	.124	.068	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.026	.102	.055	.023	.071	.039	.016	.041	.023	.010	.013	.007	.003	
10.0	.113	.059	.023	.097	.051	.020	.067	.036	.015	.039	.021	.009	.013	.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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm										
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90						TYPE:LED				
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	19.6	21.0	19.9	21.2	21.4	20.1	21.4	20.3	21.6	21.8
3H	20.5	21.8	20.8	22.0	22.3	21.2	22.5	21.5	22.7	23.0
4H	20.8	22.0	21.1	22.3	22.5	21.6	22.8	21.9	23.1	23.3
6H	21.0	22.1	21.3	22.4	22.6	21.8	22.9	22.1	23.2	23.5
8H	21.0	22.1	21.3	22.4	22.6	21.8	22.9	22.2	23.2	23.5
12H	21.0	22.0	21.3	22.3	22.6	21.9	22.9	22.2	23.2	23.5
4H 2H	20.2	21.4	20.5	21.7	21.9	20.5	21.8	20.8	22.0	22.2
3H	21.3	22.4	21.6	22.6	22.9	21.9	22.9	22.2	23.2	23.5
4H	21.7	22.7	22.1	23.0	23.3	22.3	23.3	22.7	23.6	23.9
6H	21.9	22.8	22.3	23.1	23.5	22.6	23.5	23.0	23.8	24.2
8H	22.0	22.8	22.4	23.1	23.5	22.7	23.5	23.1	23.8	24.2
12H	22.0	22.7	22.4	23.1	23.5	22.7	23.5	23.2	23.8	24.2
8H 4H	21.9	22.7	22.3	23.0	23.4	22.5	23.2	22.9	23.6	24.0
6H	22.2	22.8	22.6	23.2	23.7	22.8	23.5	23.3	23.9	24.3
8H	22.3	22.9	22.7	23.3	23.7	23.0	23.5	23.4	24.0	24.4
12H	22.3	22.8	22.8	23.3	23.7	23.1	23.6	23.5	24.0	24.5
12H 4H	21.9	22.6	22.3	23.0	23.4	22.4	23.1	22.9	23.5	23.9
6H	22.2	22.8	22.7	23.2	23.7	22.8	23.4	23.3	23.8	24.3
8H	22.3	22.8	22.8	23.3	23.7	23.0	23.5	23.5	23.9	24.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.5					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.4 / - 1.2					+ 0.3 / - 0.3				

CIE Pub.117 Corrected 2121 lm Total Lamp Luminous Flux. (8log(F/F0) = 2.6)

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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

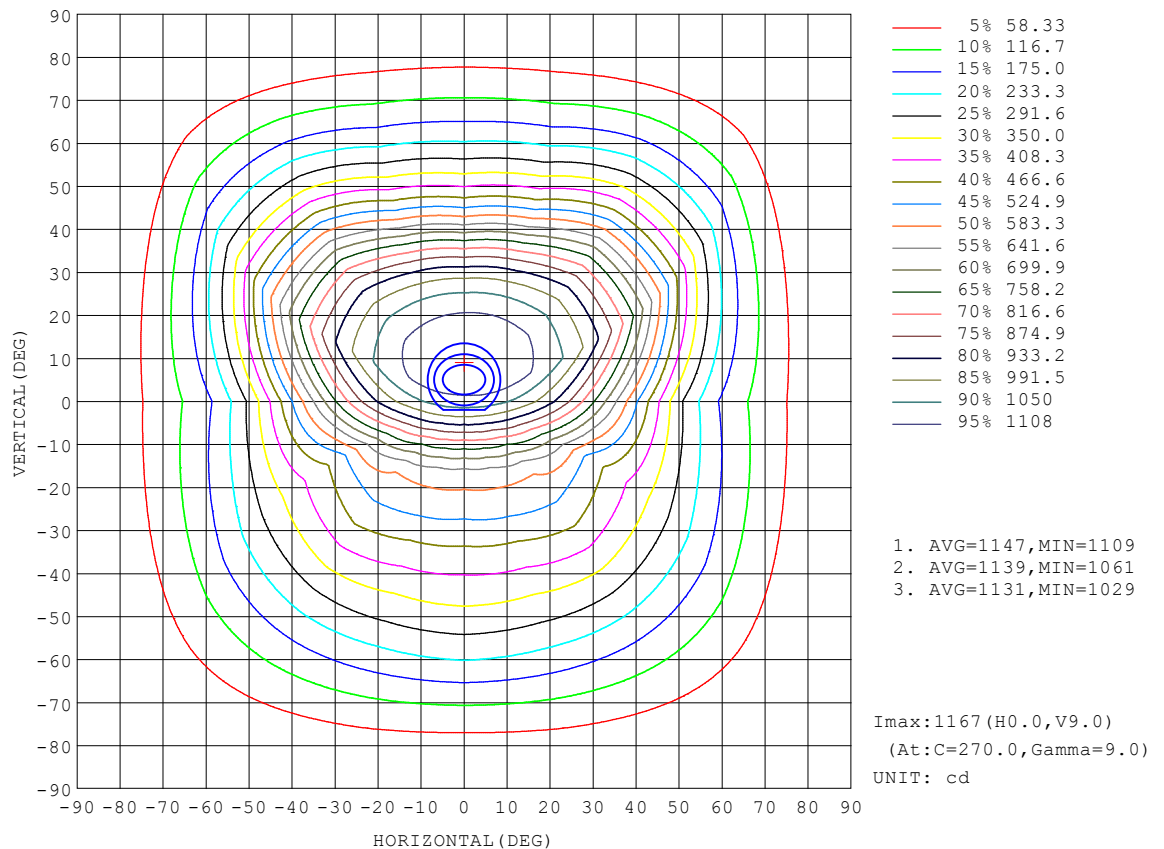
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	63	53	47	63	53	46	62	52	46	40
0.80	73	63	56	72	63	56	71	62	56	50
1.00	82	72	65	80	71	65	78	72	64	58
1.25	88	79	73	87	78	72	84	77	72	65
1.50	93	84	78	91	83	78	88	82	77	70
2.00	99	91	86	97	90	85	94	88	84	77
2.50	102	95	90	100	94	89	97	92	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	104	100	106	102	98	102	99	96	87
5.00	110	106	103	108	104	101	104	101	98	90
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHR NOM = 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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

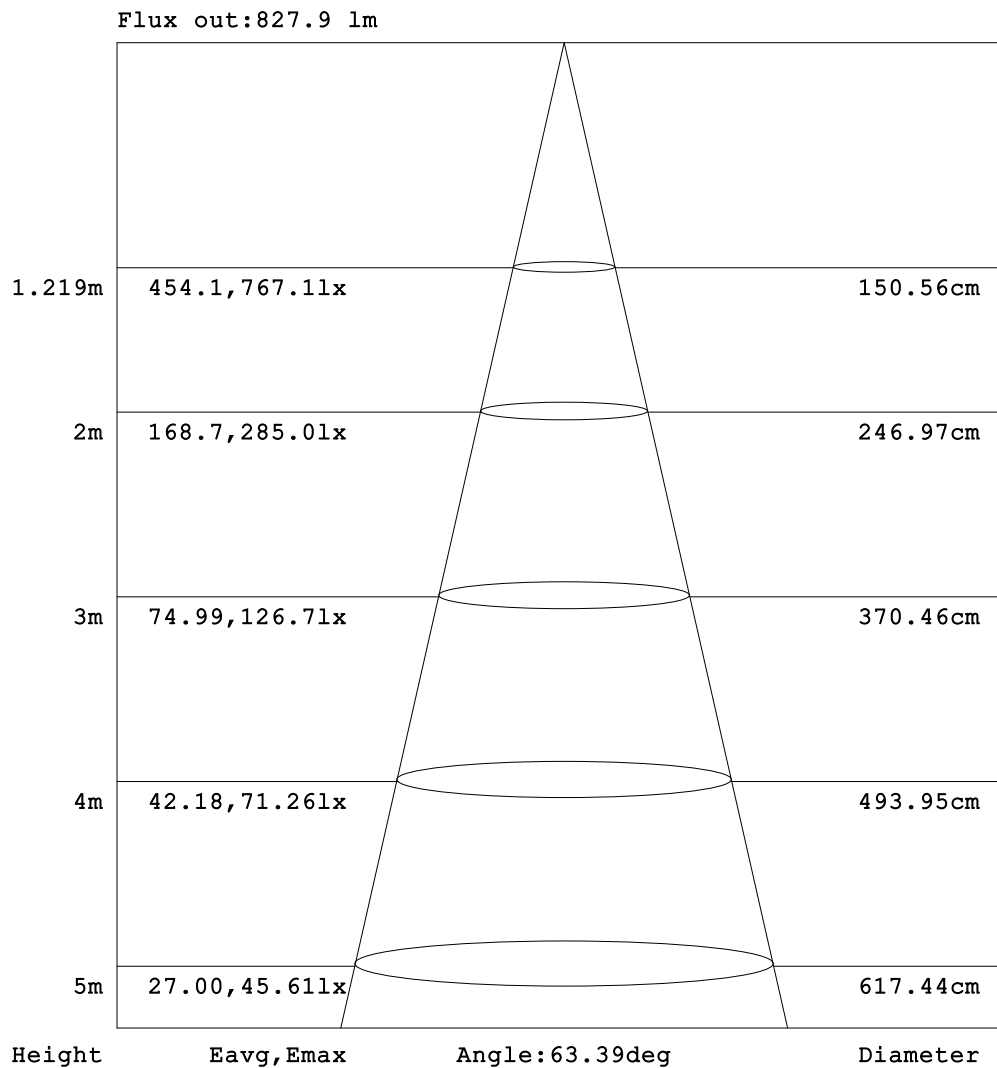


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:06 January 2023

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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



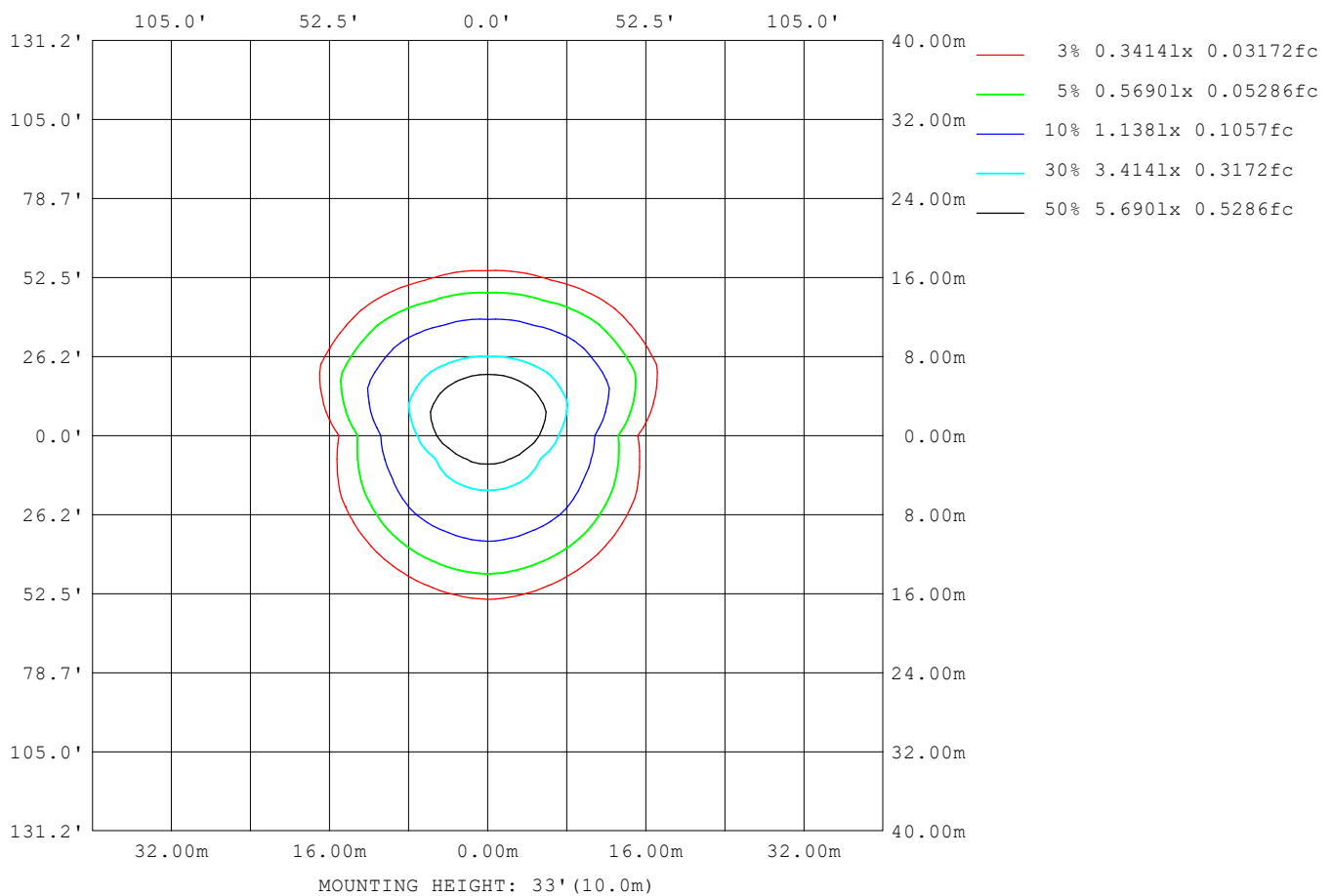
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_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:240.0V I:0.1138A P:25.73W PF:0.9417 Lamp Flux:2120.96x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_ASY_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

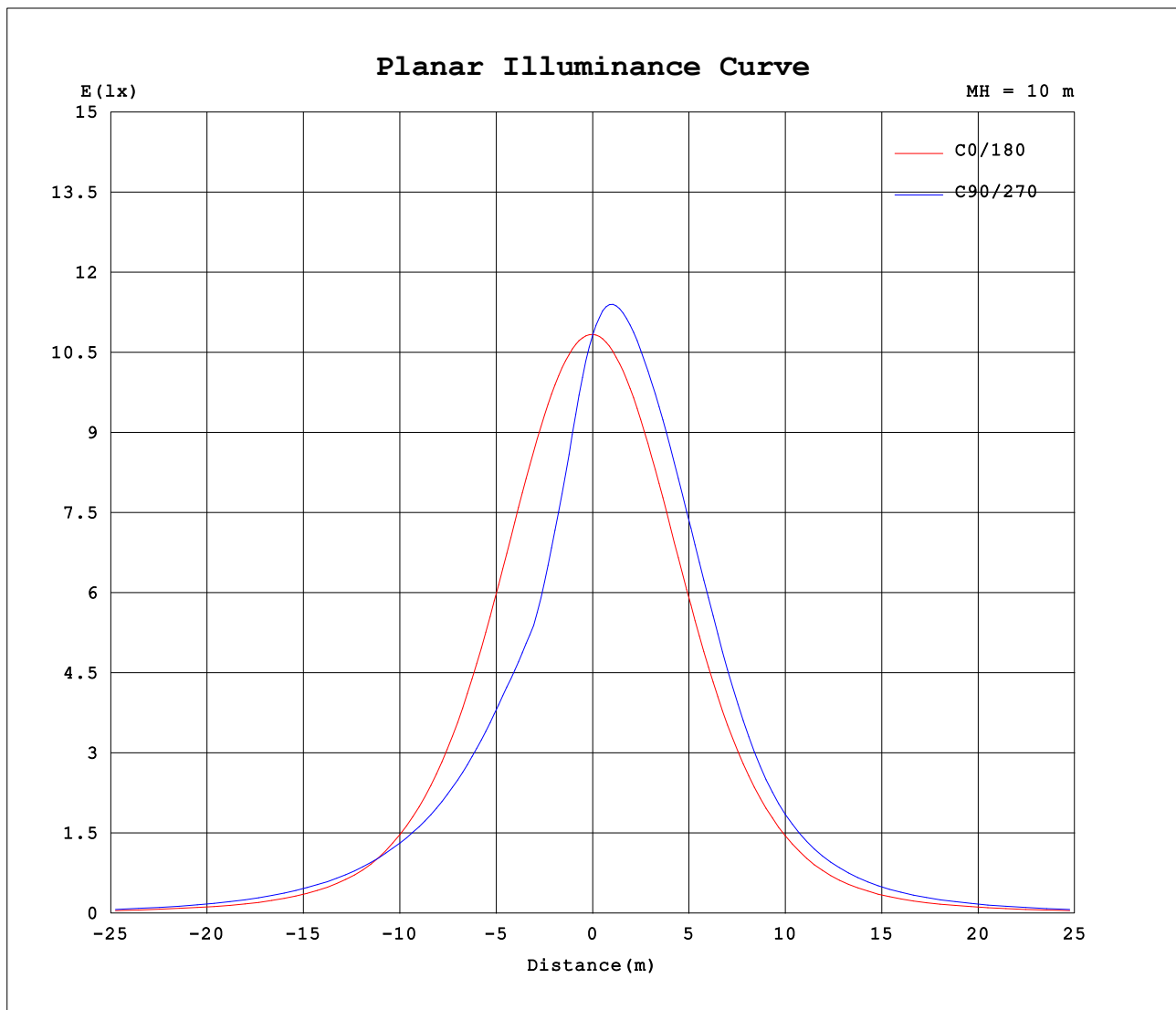
AvgL	cd/m2
L_0~180 (65) av	6434
L_0~180 (75) av	4973
L_0~180 (85) av	2428
L_90~270 (65) av	9373
L_90~270 (75) av	6606
L_90~270 (85) av	4543
L_45 (65) av	10506
L_45 (75) av	6834
L_45 (85) av	4180

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:

