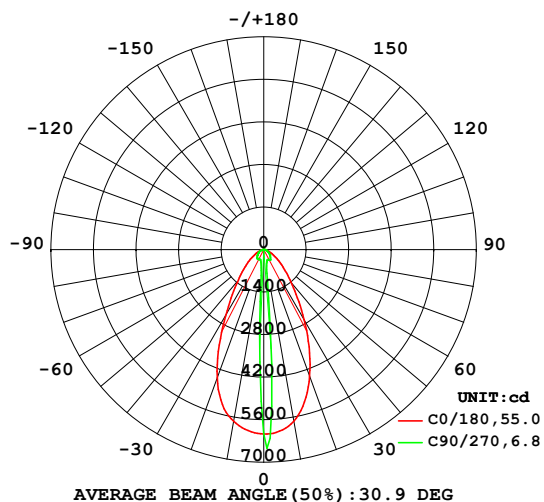


LUMINAIRE PHOTOMETRIC TEST REPORT

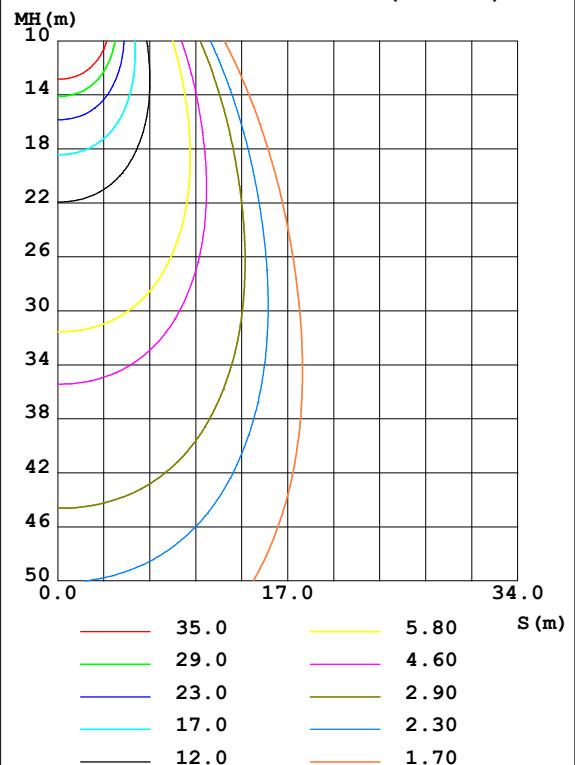
Test:U:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.43 lm/W			
MODEL: 1160	1300lm 940 HV ADV5	Imax(cd)	6656	S/MH(C0/180)	0.84
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.09
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2189.7	η UP,DN(C0-180)	0.0,52.4
NOMINAL FLUX(lm)	2189.7	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.00

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:09 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	5729	1143	580.4	709.2	5734	696.1	509.0	674.3	0- 10	272.5	272.5	12.4,12.4
20	4428	439.1	362.7	364.0	4479	408.6	356.1	366.3	10- 20	348.8	621.3	28.4,28.4
30	2669	374.6	407.8	314.6	2519	356.0	375.9	319.4	20- 30	374.3	995.5	45.5,45.5
40	1406	356.6	349.9	300.9	1306	330.7	344.8	296.7	30- 40	369.2	1365	62.3,62.3
50	752.6	281.8	264.7	239.2	711.0	268.7	269.4	240.7	40- 50	325.6	1690	77.2,77.2
60	382.7	199.9	178.2	170.0	361.3	199.8	189.8	179.4	50- 60	251.0	1941	88.7,88.7
70	152.4	112.4	103.5	95.09	144.5	114.6	104.4	103.3	60- 70	161.6	2103	96,96
80	37.43	33.94	31.66	28.68	35.44	35.74	32.71	32.29	70- 80	72.82	2176	99.4,99.4
90	0.7580	0.3076	0.2628	0.2705	0.4938	0.3730	0.3694	0.3407	80- 90	14.06	2190	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): 1535.4 lm

%lum = 70.1%
%lamp = 70.1%

Conical surface Flux(120deg): 1941.3 lm

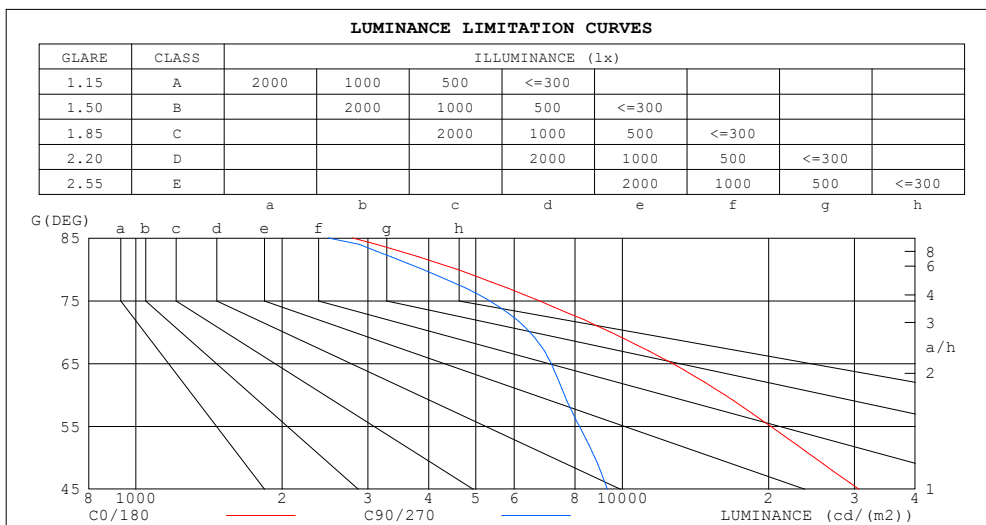
%lum = 88.7%
%lamp = 88.7%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2789	2486
80	4576	3890
75	6751	5336
70	9458	6461
65	12687	7144
60	16249	7604
55	20188	8166
50	24853	8786
45	30682	9319

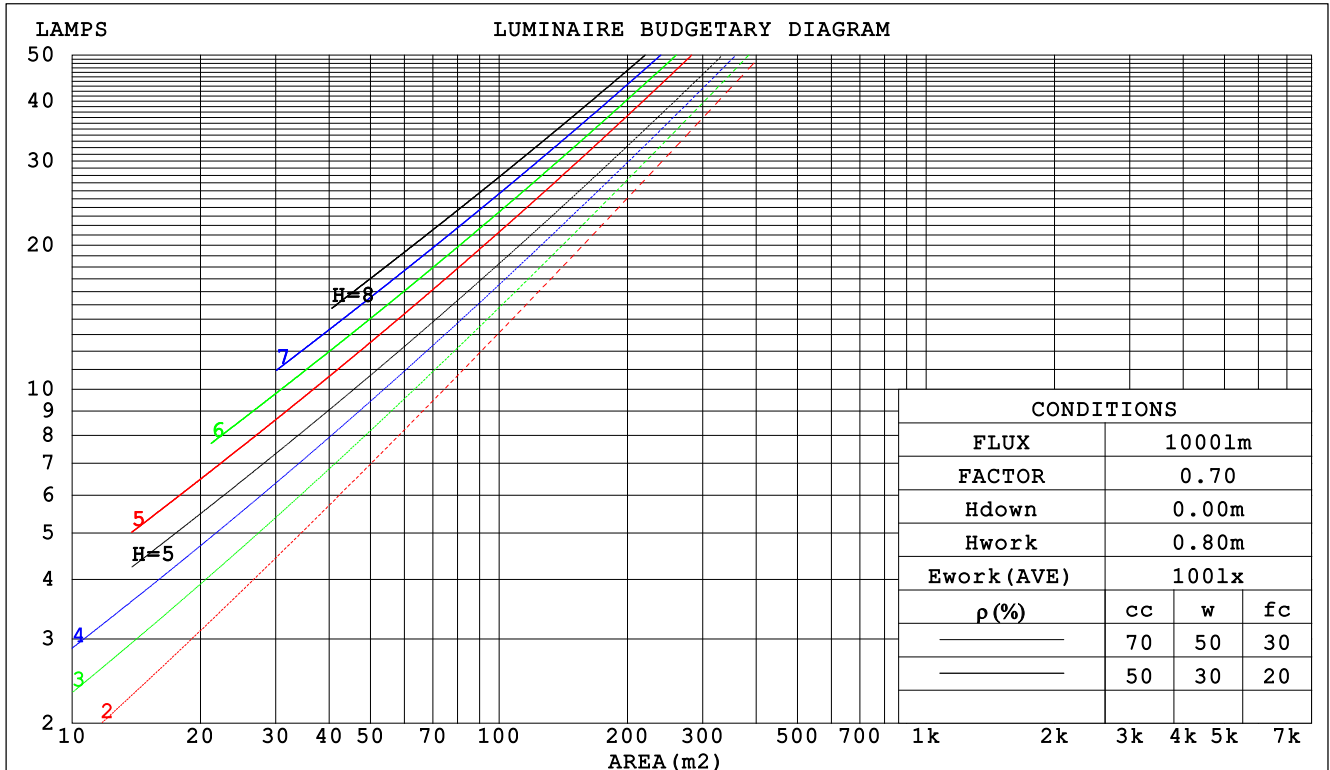
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 January 2023

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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_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	1.04	1.01	1.05	1.02	.99	1.01	.98	.96	.97	.95	.93	.94	.92	.91	.89
2.0	.97	.91	.86	.95	.90	.85	.91	.87	.84	.88	.85	.82	.85	.82	.80	.78
3.0	.87	.81	.75	.86	.80	.75	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.80	.72	.67	.78	.72	.66	.76	.70	.65	.74	.69	.65	.72	.67	.64	.62
5.0	.73	.65	.60	.72	.65	.60	.70	.64	.59	.68	.63	.58	.66	.62	.58	.56
6.0	.67	.60	.54	.66	.59	.54	.65	.58	.54	.63	.58	.53	.62	.57	.53	.51
7.0	.62	.55	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.58	.53	.49	.47
8.0	.58	.51	.46	.58	.51	.46	.56	.50	.46	.55	.50	.45	.54	.49	.45	.44
9.0	.55	.48	.43	.54	.47	.43	.53	.47	.43	.52	.46	.42	.51	.46	.42	.41
10.0	.51	.45	.40	.51	.44	.40	.50	.44	.40	.49	.44	.40	.48	.43	.40	.38



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_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	.243	.138	.044	.237	.135	.043	.224	.128	.041	.212	.122	.039	.201	.116	.038		
2.0	.233	.128	.039	.227	.125	.039	.216	.120	.037	.206	.115	.036	.196	.111	.035		
3.0	.219	.116	.035	.214	.114	.034	.204	.110	.034	.195	.107	.033	.187	.103	.032		
4.0	.204	.106	.031	.200	.105	.031	.191	.101	.030	.183	.099	.030	.176	.096	.029		
5.0	.191	.097	.028	.187	.096	.028	.179	.093	.028	.172	.091	.027	.166	.089	.027		
6.0	.179	.090	.026	.175	.089	.025	.169	.086	.025	.162	.084	.025	.157	.082	.024		
7.0	.168	.083	.023	.165	.082	.023	.159	.080	.023	.153	.078	.023	.148	.077	.023		
8.0	.158	.077	.022	.155	.076	.022	.150	.075	.021	.145	.073	.021	.140	.072	.021		
9.0	.149	.072	.020	.146	.071	.020	.141	.070	.020	.137	.069	.020	.133	.067	.019		
10.0	.141	.067	.019	.138	.067	.019	.134	.066	.019	.130	.065	.018	.126	.064	.018		

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	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.082	.133	.098	.071	.091	.068	.050	.053	.040	.029	.017	.013	.010	
4.0	.146	.100	.065	.125	.086	.056	.086	.060	.040	.050	.035	.024	.016	.011	.008	
5.0	.138	.089	.053	.118	.077	.046	.082	.054	.033	.047	.032	.019	.015	.010	.006	
6.0	.130	.080	.044	.112	.069	.038	.077	.049	.027	.045	.029	.016	.014	.009	.005	
7.0	.124	.073	.037	.106	.063	.033	.073	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.117	.067	.032	.101	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.112	.062	.028	.096	.054	.025	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.106	.057	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm										
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_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	22.5	23.8	22.8	24.0	24.1	18.2	19.4	18.5	19.6	19.8
3H	23.2	24.4	23.5	24.6	24.8	19.4	20.6	19.7	20.8	21.0
4H	23.4	24.5	23.7	24.8	25.0	19.8	20.9	20.1	21.2	21.4
6H	23.5	24.5	23.8	24.8	25.0	20.0	21.1	20.4	21.3	21.6
8H	23.5	24.5	23.8	24.7	25.0	20.1	21.1	20.4	21.3	21.6
12H	23.4	24.4	23.8	24.7	25.0	20.1	21.0	20.4	21.3	21.6
4H 2H	22.5	23.6	22.8	23.9	24.1	18.9	20.0	19.2	20.3	20.5
3H	23.4	24.4	23.8	24.7	24.9	20.3	21.2	20.6	21.5	21.8
4H	23.7	24.6	24.1	24.9	25.2	20.8	21.6	21.1	21.9	22.3
6H	23.8	24.6	24.2	24.9	25.3	21.0	21.8	21.4	22.1	22.5
8H	23.8	24.5	24.2	24.9	25.3	21.1	21.8	21.5	22.2	22.5
12H	23.8	24.5	24.2	24.8	25.2	21.1	21.7	21.5	22.1	22.5
8H 4H	23.7	24.4	24.1	24.8	25.1	21.0	21.7	21.4	22.0	22.4
6H	23.9	24.5	24.3	24.9	25.3	21.3	21.9	21.7	22.3	22.7
8H	23.9	24.4	24.4	24.9	25.3	21.4	21.9	21.9	22.3	22.8
12H	23.9	24.4	24.4	24.8	25.3	21.4	21.9	21.9	22.3	22.8
12H 4H	23.7	24.3	24.1	24.7	25.1	20.9	21.6	21.4	22.0	22.4
6H	23.9	24.4	24.3	24.8	25.2	21.3	21.8	21.8	22.3	22.7
8H	23.9	24.3	24.4	24.8	25.3	21.4	21.9	21.9	22.3	22.8
Variations with the observer position at spacings:										
S = 1.0H	+ 1.7 / - 0.7					+ 0.2 / - 0.3				
1.5H	+ 2.7 / - 1.8					+ 0.1 / - 0.3				
2.0H	+ 3.1 / - 2.2					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 2190 lm Total Lamp Luminous Flux. (8log(F/F0) = 2.7)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

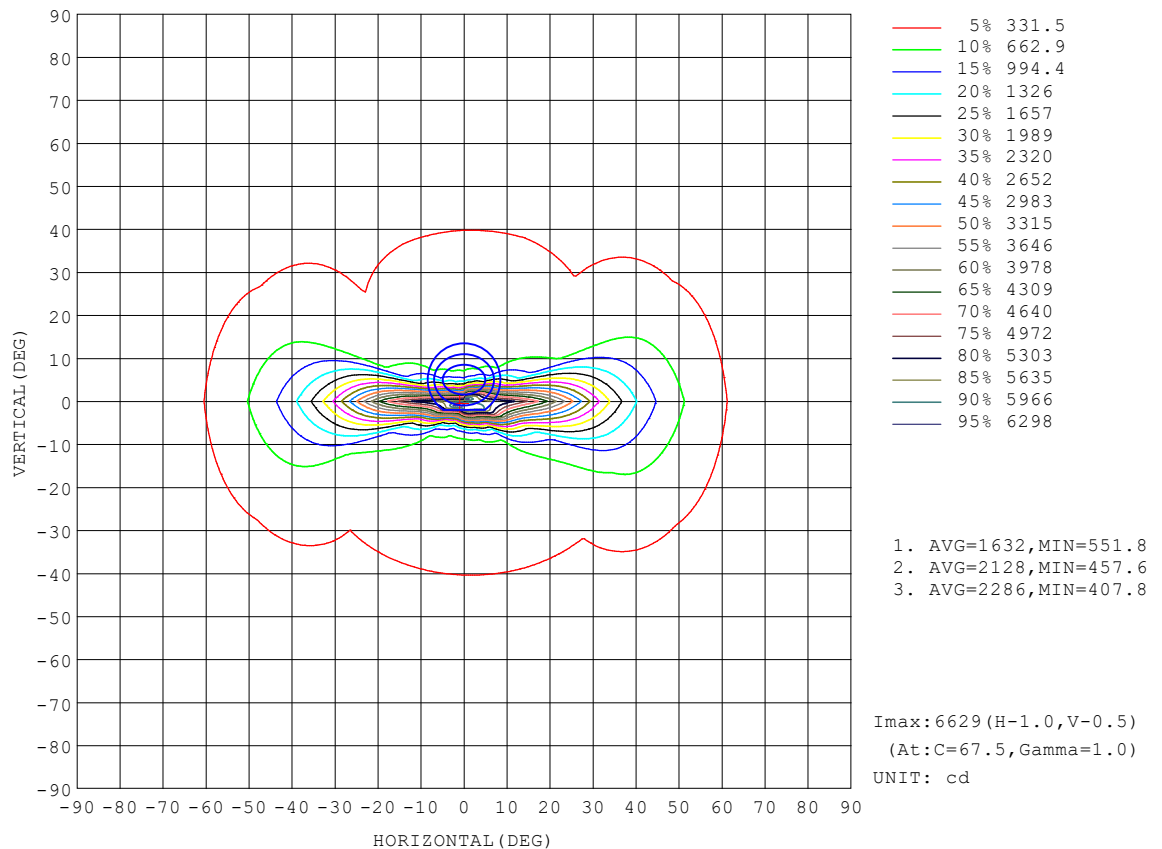
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	58	52	67	58	52	66	58	52	47
0.80	78	68	62	77	68	62	75	67	61	56
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	87	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	83
3.00	106	101	97	104	99	95	100	97	93	86
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	108	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: 09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

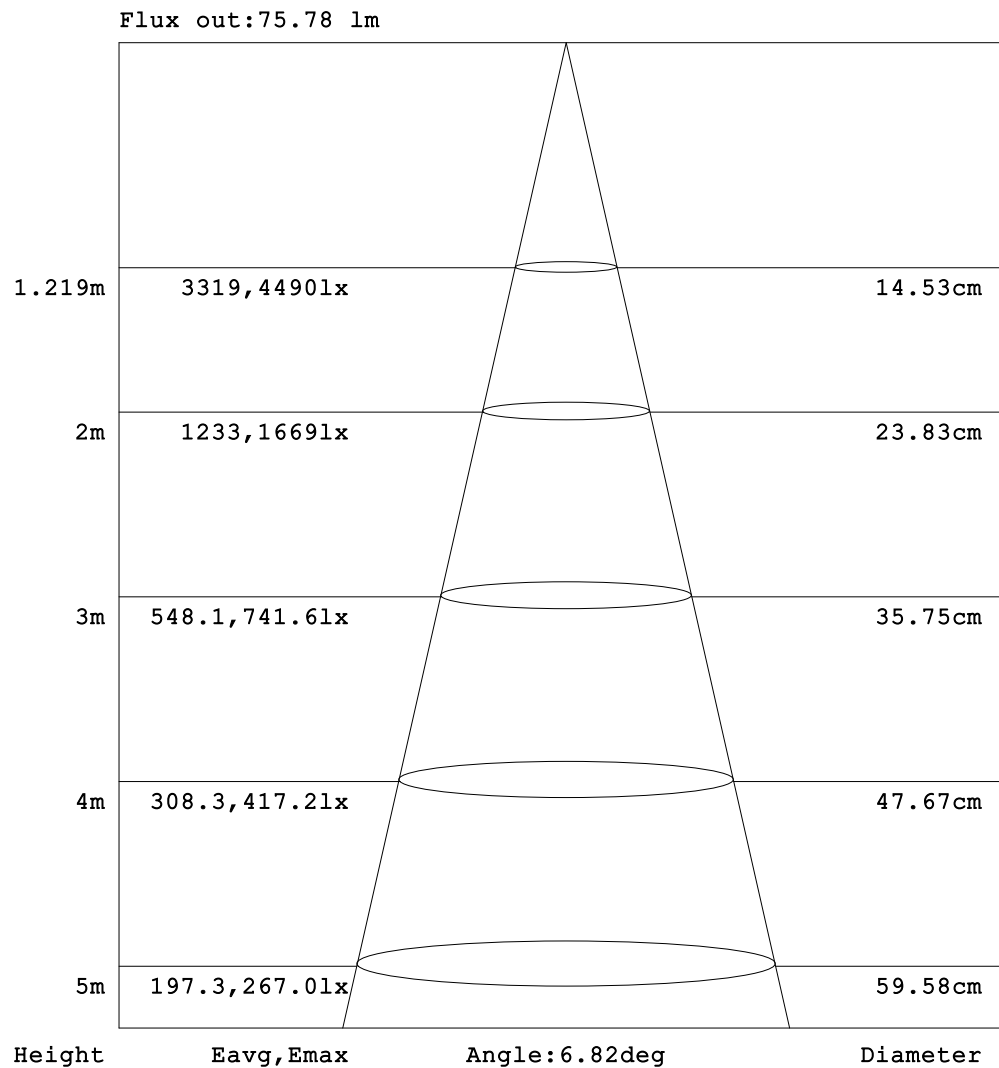


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 January 2023

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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



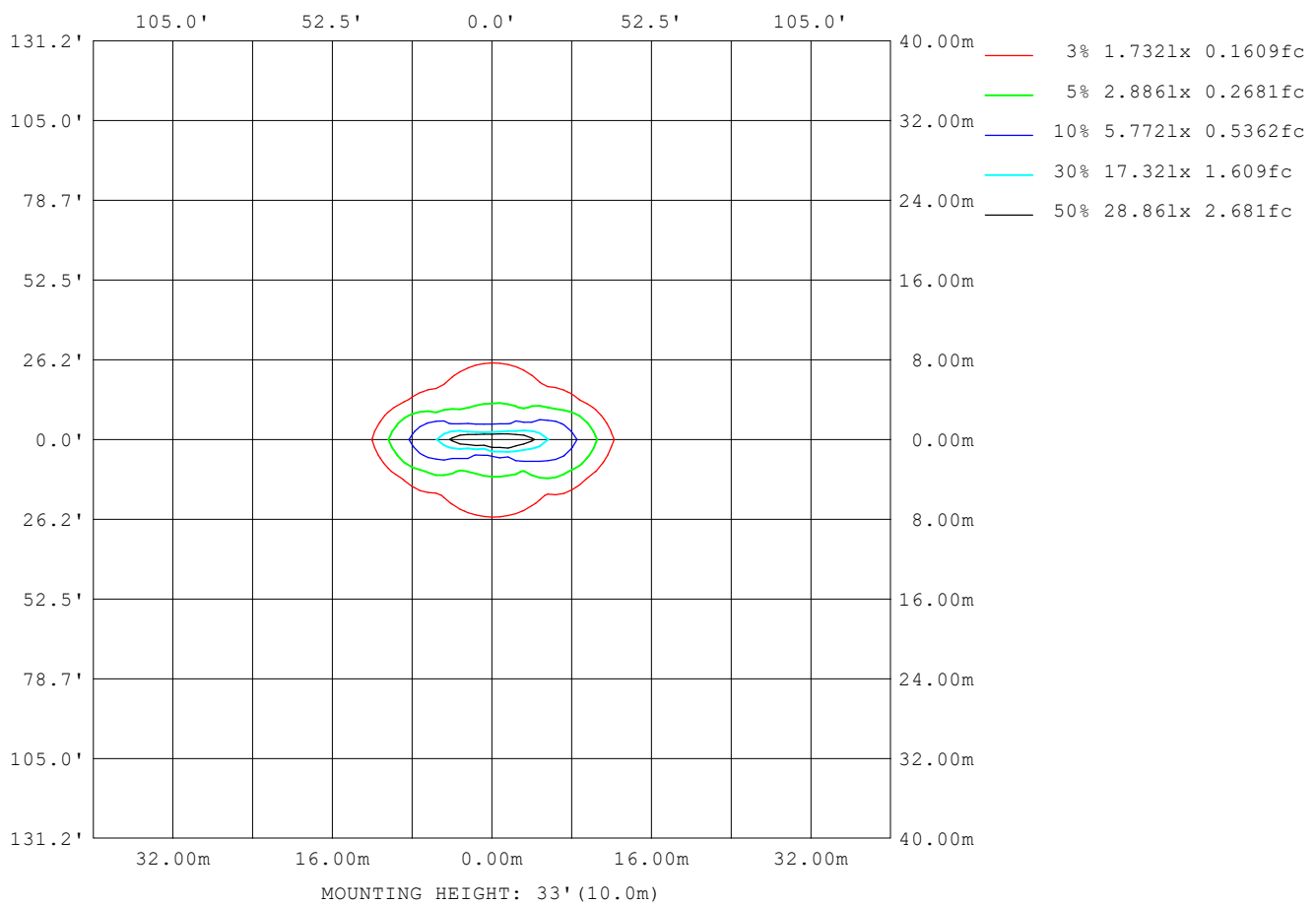
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90: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:09 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:239.7V I:0.1136A P:25.63W PF:0.9414 Lamp Flux:2189.7x1 lm		
NAME: SLIM TRIM_1160_REC_WHT_C-NRW_HE_500mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

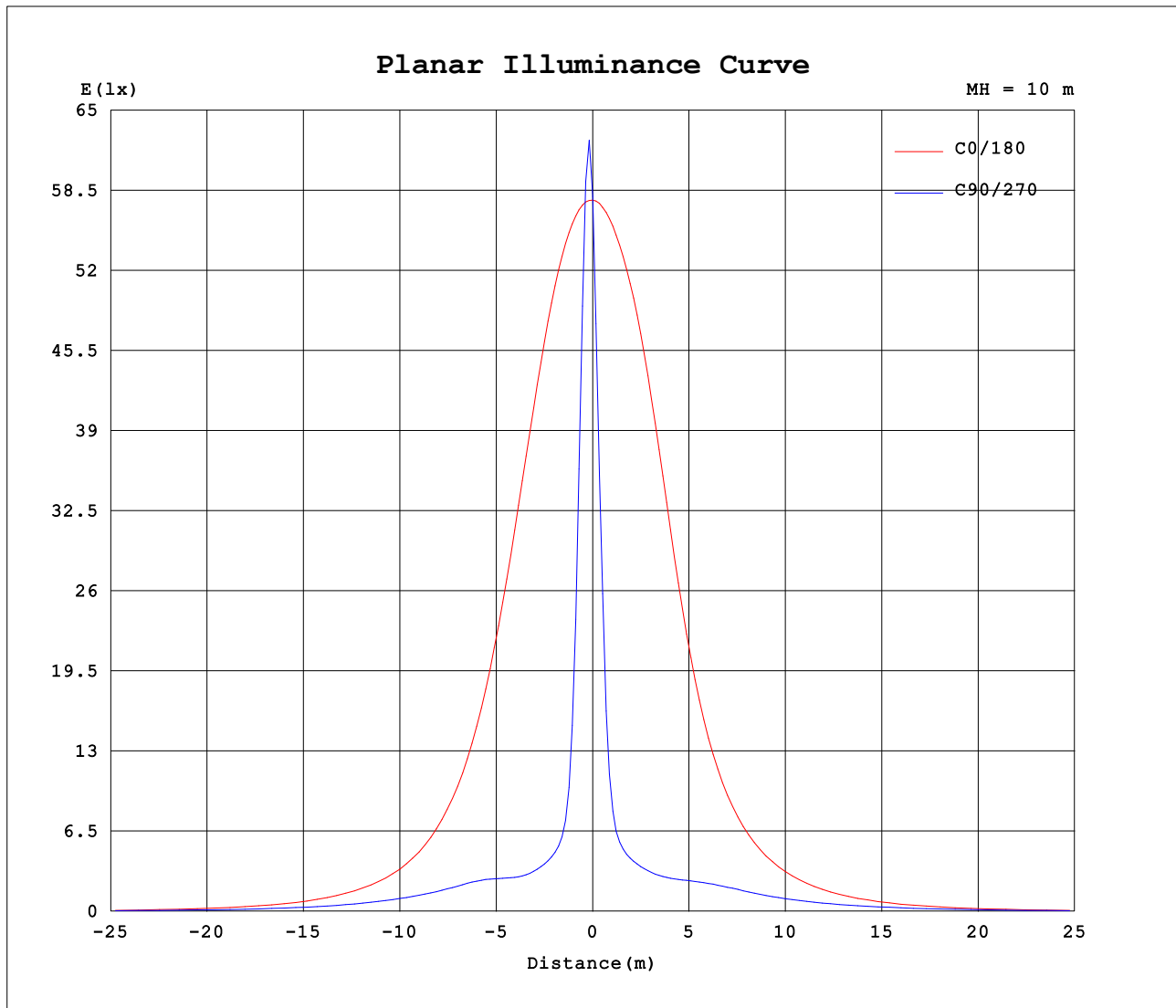
AvgL	cd/m2
L_0~180 (65) av	12993
L_0~180 (75) av	6931
L_0~180 (85) av	2809
L_90~270 (65) av	7604
L_90~270 (75) av	5585
L_90~270 (85) av	2970
L_45 (65) av	7807
L_45 (75) av	5713
L_45 (85) av	2879

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:09 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: 09 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:

