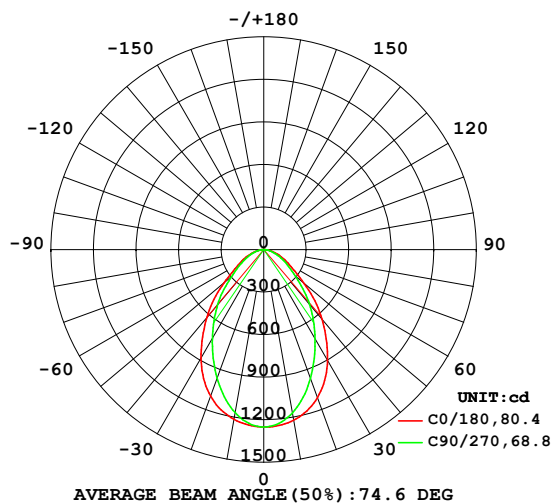


LUMINAIRE PHOTOMETRIC TEST REPORT

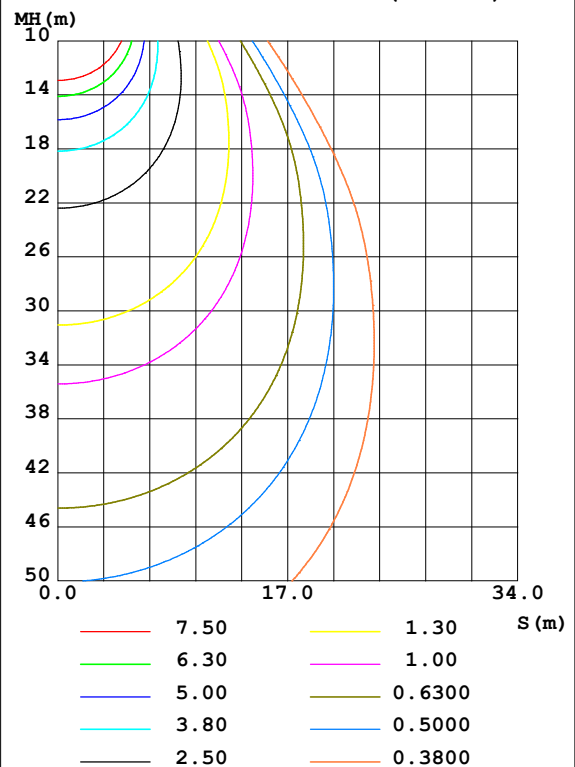
Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.73 lm/W			
MODEL: 2000A	1300lm 940 HV ADV6	Imax(cd)	1252	S/MH(C0/180)	1.09
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.94
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2066.3	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	2066.3	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.15

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: 20 February 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.890m [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	1221	1193	1169	1185	1215	1191	1168	1198	0- 10	116.6	116.6	5.64,5.64
20	1111	1027	965.2	1016	1099	1025	963.8	1035	10- 20	314.6	431.3	20.9,20.9
30	901.2	793.8	724.9	784.7	885.3	794.7	725.9	803.2	20- 30	422.2	853.5	41.3,41.3
40	639.0	562.5	505.3	556.8	624.1	564.7	505.9	570.7	30- 40	425.6	1279	61.9,61.9
50	373.4	327.1	292.3	324.0	366.2	331.2	296.7	335.5	40- 50	344.4	1623	78.6,78.6
60	204.1	182.5	169.4	180.3	196.9	182.7	171.4	186.2	50- 60	222.7	1846	89.3,89.3
70	110.5	97.38	90.33	95.12	106.9	96.70	91.98	99.11	60- 70	137.3	1984	96,96
80	36.87	32.42	30.71	31.42	34.22	32.96	32.59	34.16	70- 80	67.73	2051	99.3,99.3
90	0.8090	0.2855	0.2490	0.2943	0.3368	0.3295	0.3516	0.3605	80- 90	15.03	2066	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): 1467.2 lm

%lum = 71.0%

%lamp = 71.0%

Conical surface Flux(120deg): 1846.2 lm

%lum = 89.3%

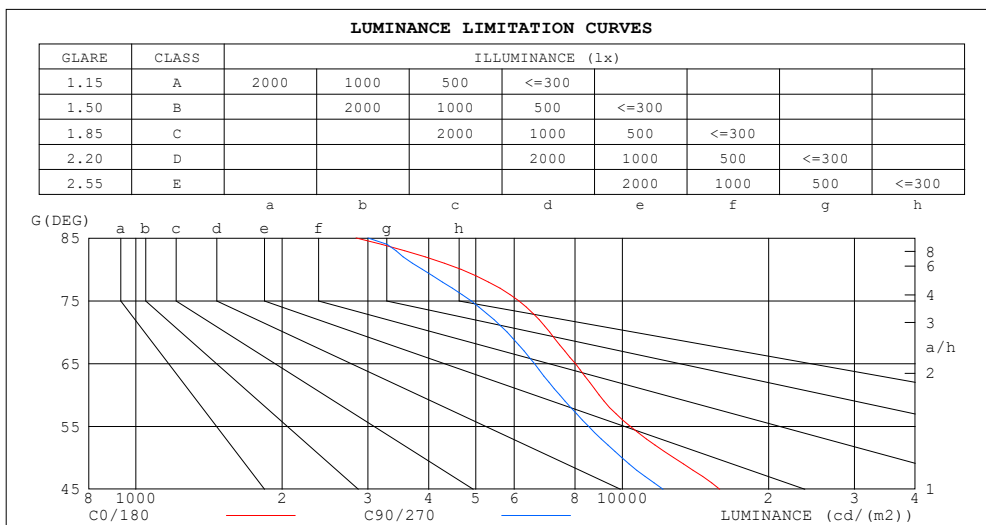
%lamp = 89.3%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2837	2999
80	4663	3881
75	6122	4884
70	7098	5797
65	8006	6600
60	8963	7438
55	10385	8516
50	12757	9982
45	15856	12134

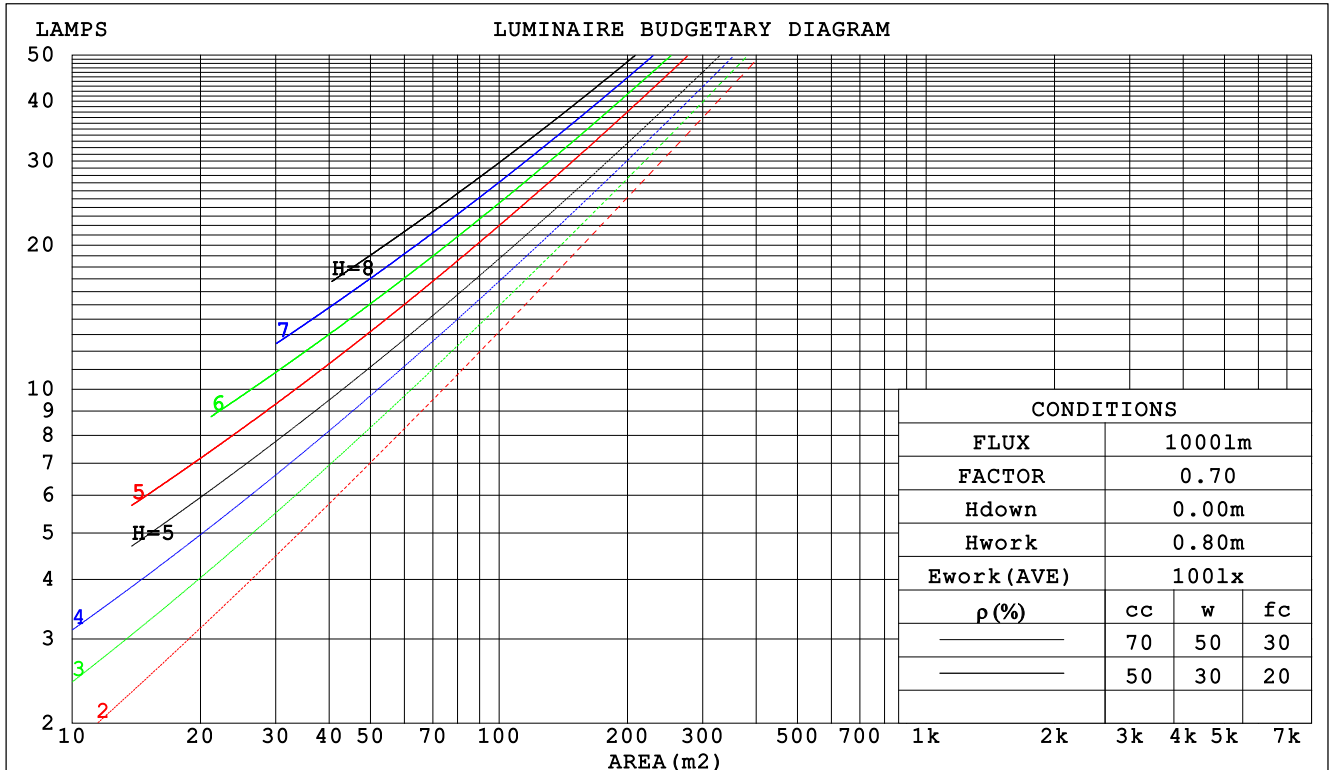
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:20 February 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90		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	1.02	.99	1.01	.98	.96	.97	.95	.93	.93	.92	.90	.88
2.0	.96	.90	.85	.94	.89	.84	.91	.86	.83	.87	.84	.81	.85	.82	.79	.77
3.0	.86	.79	.74	.85	.78	.73	.82	.76	.72	.79	.75	.71	.77	.73	.70	.68
4.0	.78	.70	.65	.77	.70	.64	.74	.68	.63	.72	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.57	.70	.63	.57	.68	.61	.57	.66	.60	.56	.64	.59	.55	.54
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	.35	.46	.40	.35	.45	.39	.35	.44	.39	.35	.33



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:JEFF

Test Date:20 February 2024

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295

Humidity:65.0%

Test Distance:7.890m [K=1.0000]

Remarks:

WEC AND CCEC

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	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	.250	.142	.045	.243	.139	.044	.230	.132	.042	.219	.126	.040	.208	.120	.039		
2.0	.240	.132	.040	.234	.129	.040	.223	.124	.038	.212	.119	.037	.203	.115	.036		
3.0	.226	.120	.036	.221	.118	.036	.211	.114	.035	.202	.111	.034	.194	.107	.033		
4.0	.212	.110	.032	.207	.109	.032	.199	.105	.031	.191	.102	.031	.183	.100	.030		
5.0	.199	.101	.029	.195	.100	.029	.187	.097	.029	.180	.095	.028	.173	.093	.028		
6.0	.187	.094	.027	.183	.092	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026		
7.0	.175	.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	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.104	.142	.114	.090	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.156	.114	.081	.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:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm											
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90								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	2H	20.4	21.7	20.6	21.9	22.0	19.3	20.6	19.6	20.8	21.0
	3H	21.2	22.4	21.5	22.6	22.8	20.1	21.3	20.4	21.5	21.7
	4H	21.5	22.6	21.8	22.9	23.1	20.4	21.5	20.7	21.8	22.0
	6H	21.7	22.7	22.0	23.0	23.3	20.5	21.6	20.9	21.9	22.1
	8H	21.7	22.7	22.0	23.0	23.3	20.6	21.6	20.9	21.9	22.2
	12H	21.7	22.7	22.0	23.0	23.3	20.6	21.6	20.9	21.9	22.1
4H	2H	20.6	21.7	20.9	21.9	22.2	19.7	20.8	20.0	21.1	21.3
	3H	21.6	22.6	21.9	22.9	23.2	20.7	21.7	21.0	21.9	22.2
	4H	22.0	22.9	22.4	23.2	23.6	21.1	21.9	21.4	22.3	22.6
	6H	22.3	23.1	22.7	23.4	23.8	21.3	22.1	21.7	22.4	22.8
	8H	22.3	23.1	22.8	23.4	23.8	21.4	22.1	21.8	22.5	22.8
	12H	22.4	23.0	22.8	23.4	23.8	21.4	22.1	21.8	22.4	22.8
8H	4H	22.1	22.8	22.5	23.2	23.6	21.2	21.9	21.6	22.3	22.7
	6H	22.5	23.1	22.9	23.5	23.9	21.5	22.1	22.0	22.5	23.0
	8H	22.5	23.1	23.0	23.5	24.0	21.6	22.2	22.1	22.6	23.1
	12H	22.6	23.1	23.1	23.5	24.0	21.7	22.2	22.2	22.6	23.1
12H	4H	22.1	22.7	22.5	23.1	23.5	21.2	21.9	21.6	22.2	22.6
	6H	22.4	23.0	22.9	23.4	23.9	21.5	22.1	22.0	22.5	22.9
	8H	22.6	23.0	23.0	23.5	23.9	21.7	22.1	22.2	22.6	23.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.6					+ 0.6 / - 0.6					
1.5H	+ 0.3 / - 0.3					+ 0.3 / - 0.4					
2.0H	+ 1.2 / - 0.8					+ 0.9 / - 0.7					

CIE Pub.117 Corrected 2066 lm Total Lamp Luminous Flux. (8log(F/F0) = 2.5)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

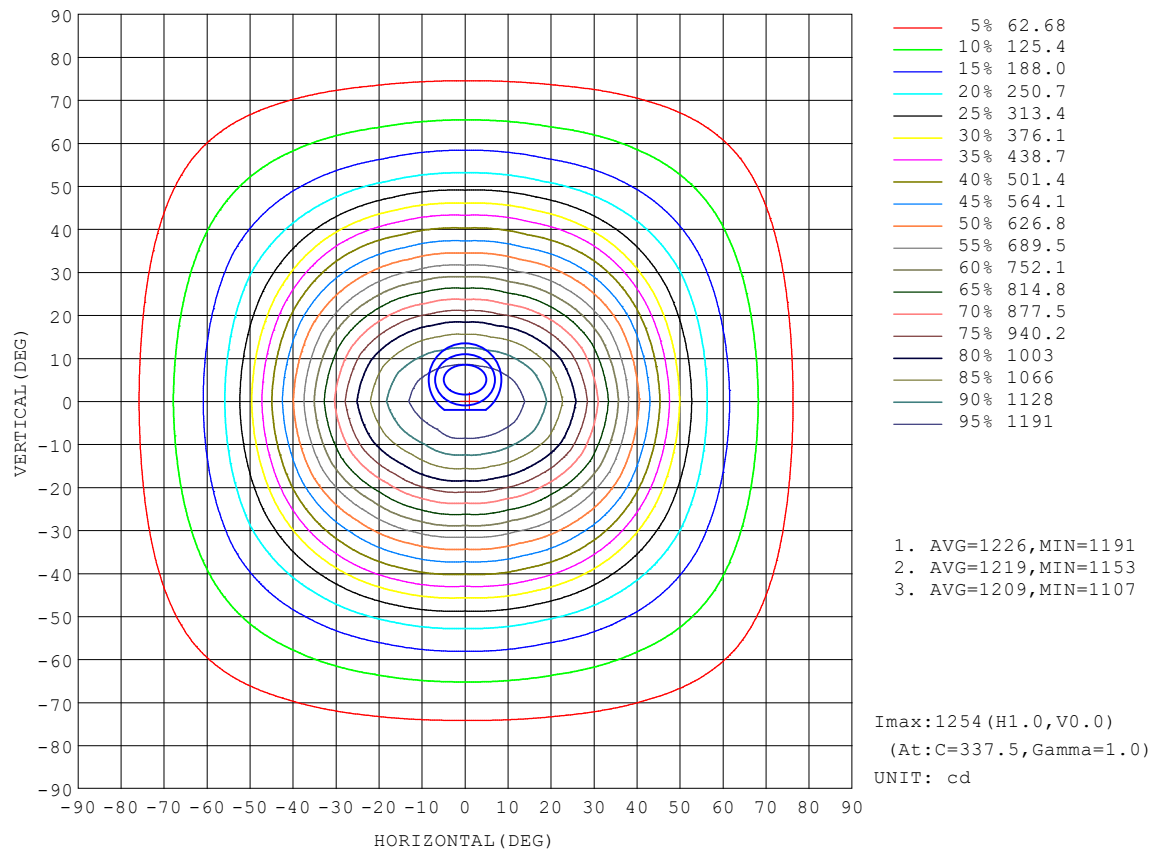
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	68	58	52	67	58	52	66	57	52	46
0.80	77	68	62	76	67	62	75	67	61	55
1.00	85	76	70	84	75	70	82	76	69	63
1.25	91	83	77	90	82	77	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	87	80
2.50	104	98	93	102	96	92	98	94	90	83
3.00	106	101	97	104	99	95	101	97	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: 20 February 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.890m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

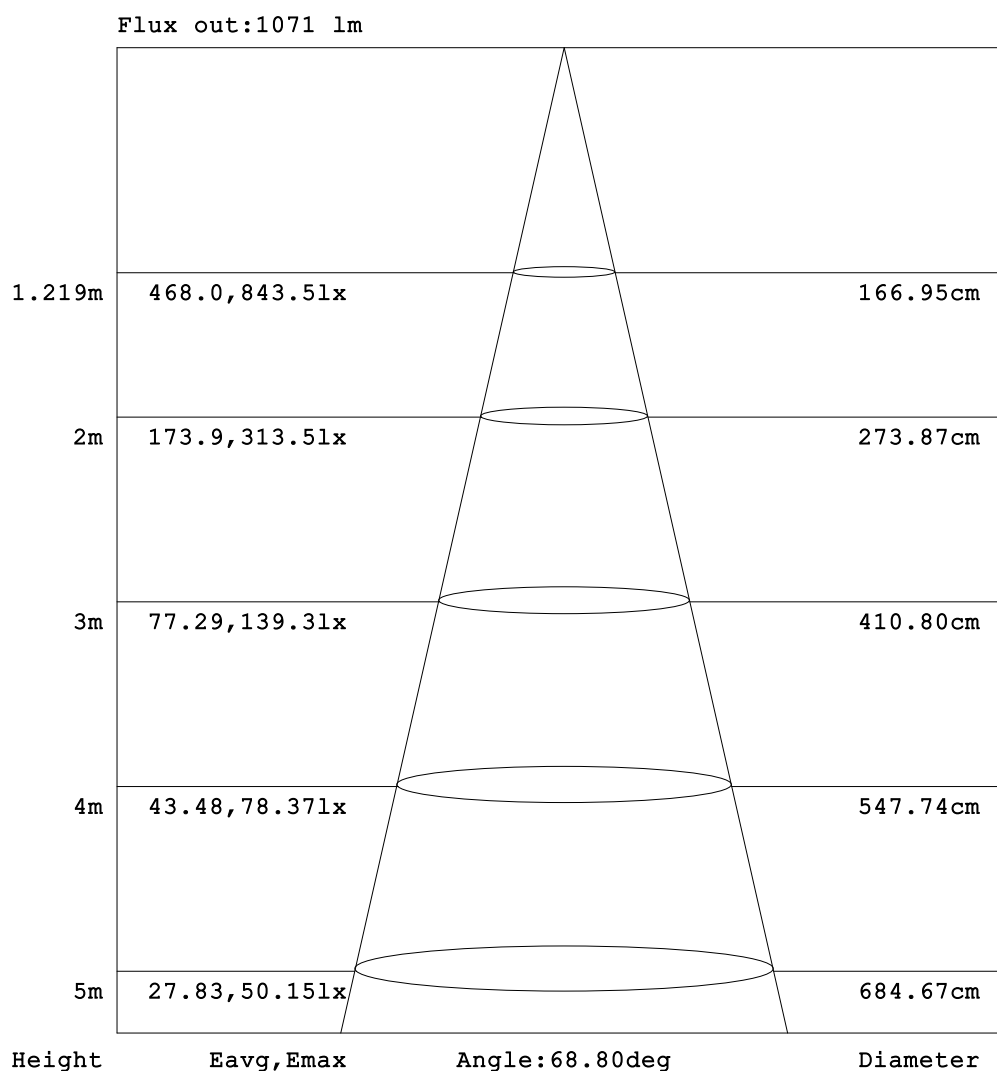


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

AAI Figure

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



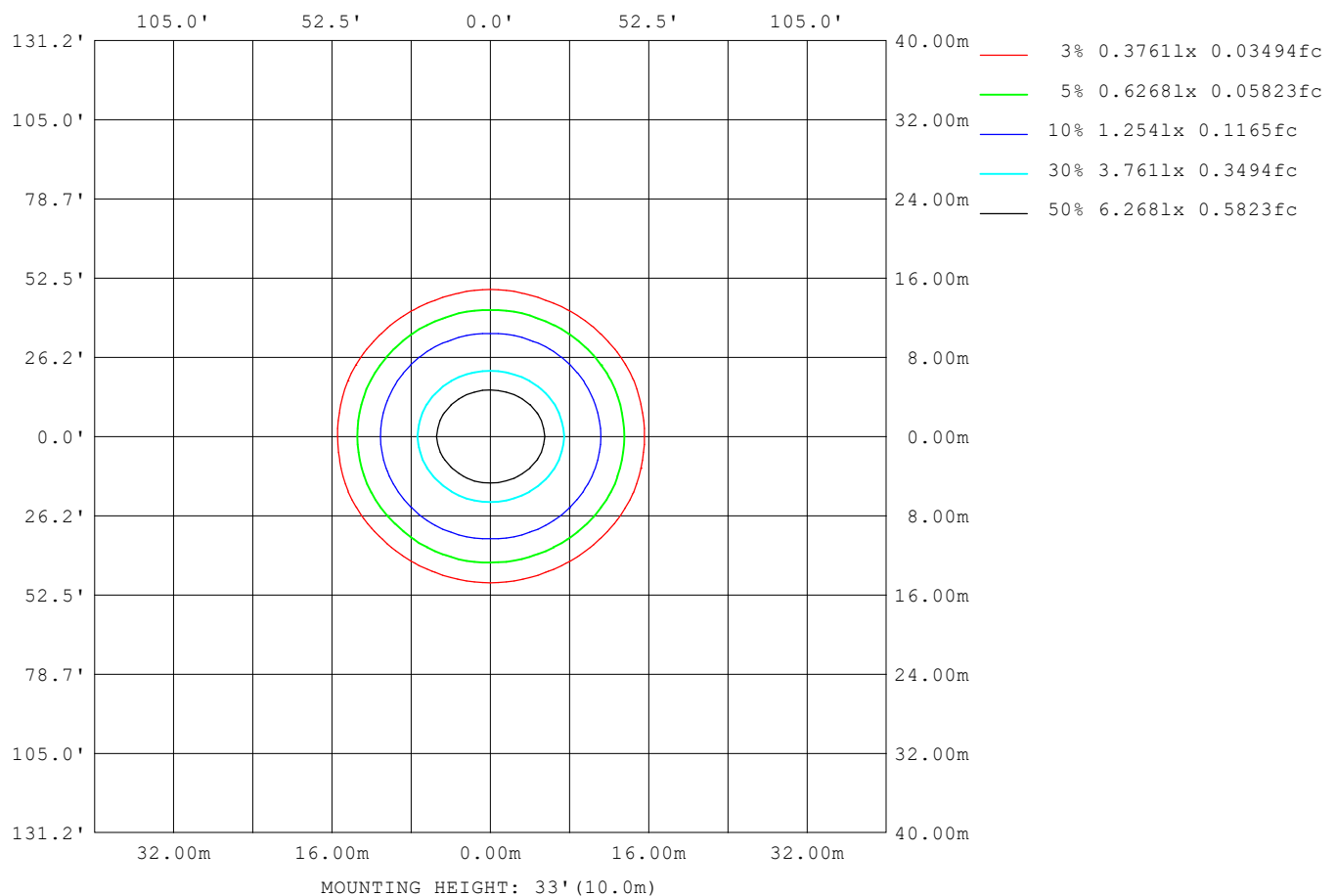
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90	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:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:239.9V I:0.1149A P:25.60W PF:0.9288 Lamp Flux:2066.3x1 lm		
NAME: SLIM H DIRECT_1160_NA_WHT_DEGLARING_HE_500mA_4000K CRI90		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

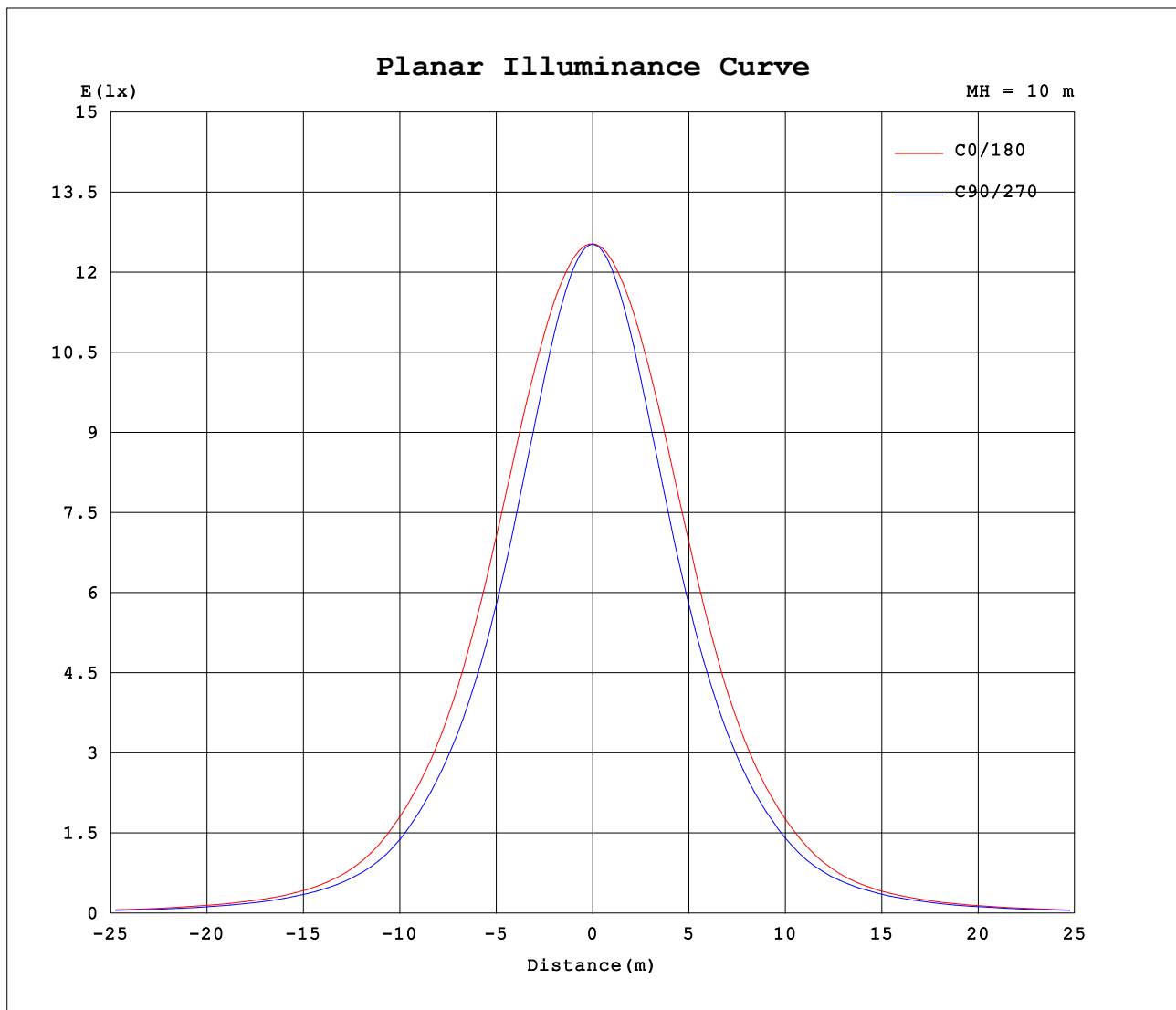
AvgL	cd/m2
L_0~180 (65) av	7882
L_0~180 (75) av	5948
L_0~180 (85) av	2644
L_90~270 (65) av	6630
L_90~270 (75) av	4966
L_90~270 (85) av	3229
L_45 (65) av	7020
L_45 (75) av	5296
L_45 (85) av	3288

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:20 February 2024

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.890m [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: 20 February 2024

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.890m [K=1.0000]
Remarks:

