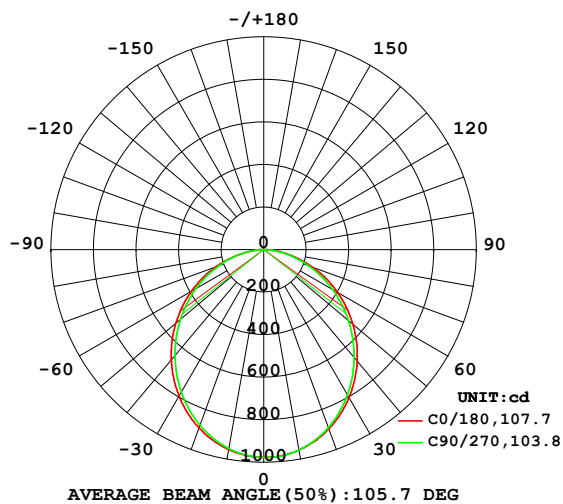


LUMINAIRE PHOTOMETRIC TEST REPORT

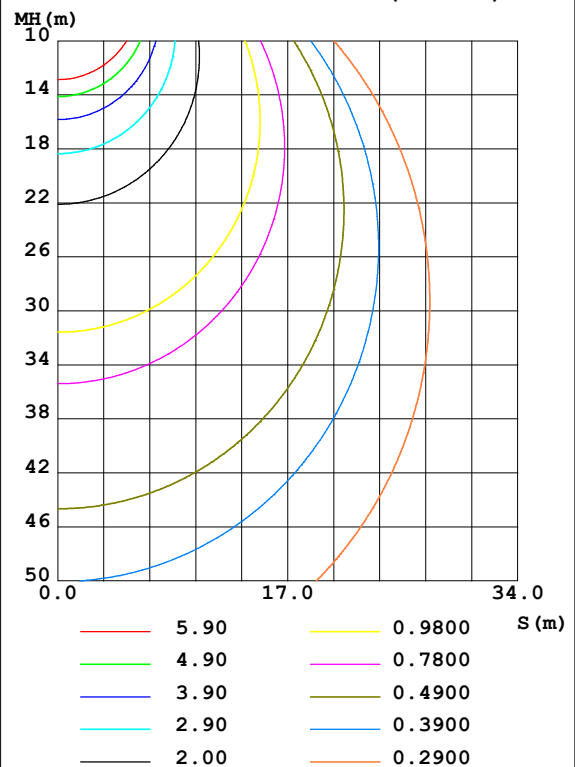
Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE:LED		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 100.76 lm/W			
LLE 20000mm	1300lm 930 HV ADV6	Imax(cd)	977.1	S/MH(C0/180)	1.22
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2593.3	η UP,DN(C0-180)	0.0,50.3
NOMINAL FLUX(lm)	2593.33	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [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
5	972.2	973.2	973.5	973.1	970.8	970.4	969.4	970.6	0- 5	23.30	23.30	0.90,0.90
10	956.9	957.4	956.8	957.4	954.2	952.1	949.3	952.3	5- 10	68.91	92.21	3.56,3.56
15	931.6	930.5	928.7	930.3	927.6	923.3	918.6	923.5	10- 15	111.6	203.8	7.86,7.86
20	896.8	893.5	890.3	893.5	891.6	884.9	878.2	885.2	15- 20	149.7	353.5	13.6,13.6
25	853.6	848.0	842.9	847.9	847.5	838.5	829.7	838.9	20- 25	181.7	535.2	20.6,20.6
30	803.0	794.9	788.1	795.0	796.2	785.2	774.5	785.5	25- 30	206.7	741.9	28.6,28.6
35	746.1	735.6	727.0	735.9	738.9	726.2	714.0	726.5	30- 35	224.0	965.9	37.2,37.2
40	683.9	671.4	661.2	671.7	676.4	662.7	649.4	662.8	35- 40	233.3	1199	46.2,46.2
45	617.5	603.2	592.1	603.7	610.0	595.7	581.6	595.7	40- 45	234.6	1434	55.3,55.3
50	547.7	532.0	520.5	532.7	540.1	525.9	511.8	525.7	45- 50	228.1	1662	64.1,64.1
55	475.1	458.6	447.3	459.6	467.7	454.0	440.4	453.6	50- 55	214.4	1876	72.4,72.4
60	400.3	383.7	373.2	385.0	393.1	380.8	368.4	380.1	55- 60	194.1	2070	79.8,79.8
65	323.8	308.5	299.4	309.8	317.0	307.1	296.3	306.0	60- 65	168.0	2238	86.3,86.3
70	247.0	233.9	227.0	235.3	240.5	234.0	225.7	232.7	65- 70	137.3	2376	91.6,91.6
75	171.3	162.0	157.5	163.5	165.6	163.2	157.3	161.7	70- 75	103.5	2479	95.6,95.6
80	100.5	95.66	93.00	97.12	95.93	97.76	93.86	96.05	75- 80	68.90	2548	98.3,98.3
85	40.85	38.01	35.94	39.44	37.08	40.41	37.25	38.80	80- 85	36.06	2584	99.6,99.6
90	1.473	0.7292	0.6854	0.7331	0.7842	0.7805	0.7294	0.6525	85- 90	9.215	2593	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1433.8 lm

%lum = 55.3%

%lamp = 55.3%

Conical surface Flux(120deg): 2070.4 lm

%lum = 79.8%

%lamp = 79.8%

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:JEFF

Test Date:13 December 2024

 γ Range: 0 - 90DEG γ Interval: 0.5DEG

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

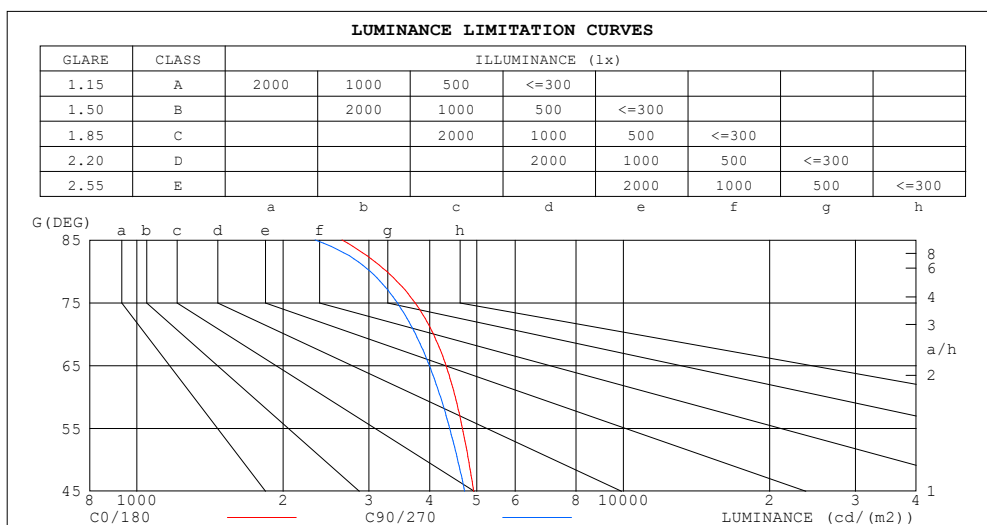
Humidity:65.0%

Test Distance:7.889m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K_CRI90TYPE:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2644	2326
80	3264	3020
75	3732	3431
70	4073	3743
65	4322	3996
60	4516	4210
55	4672	4398
50	4806	4566
45	4926	4723

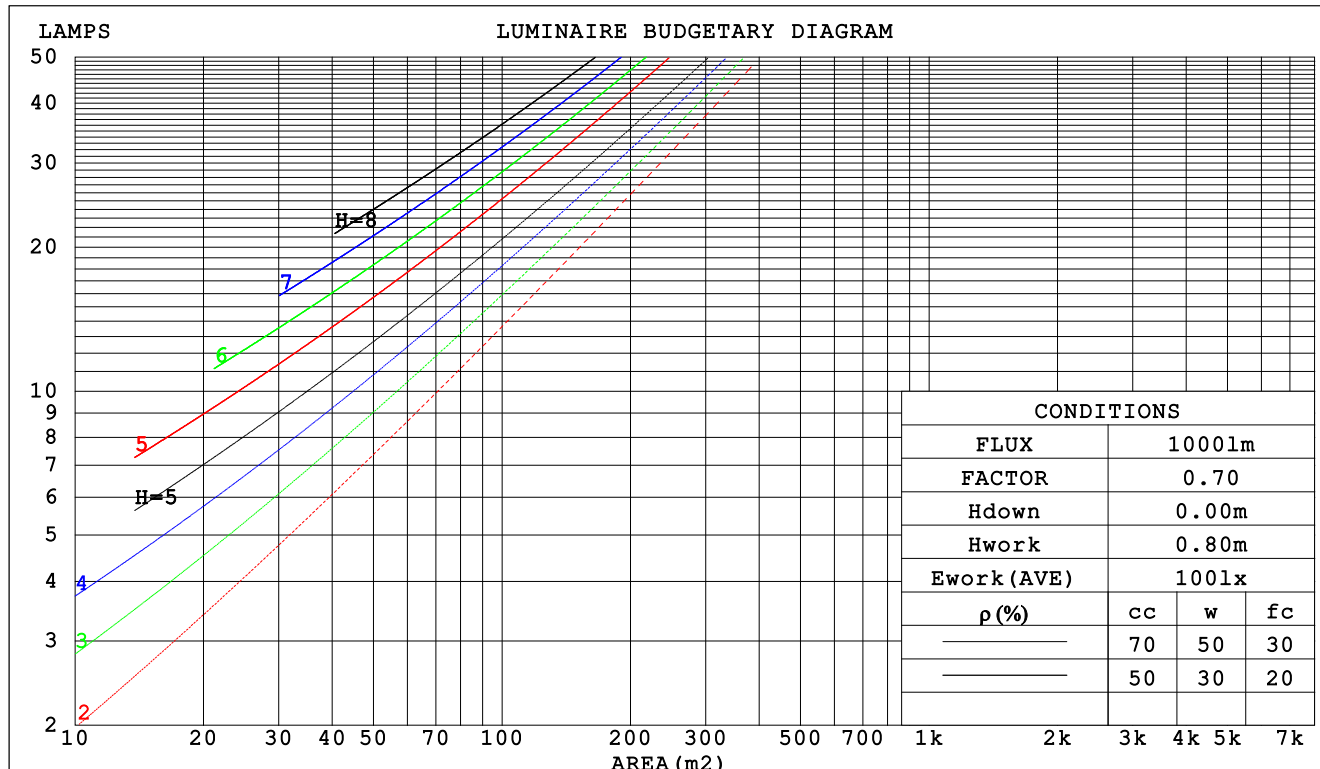
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE: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)															
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	1.04	.00	.96	1.02	.98	.95	.98	.94	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.79	.89	.83	.78	.86	.80	.76	.82	.78	.74	.79	.76	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.64	.73	.67	.63	.70	.66	.62	.59
4.0	.71	.62	.56	.70	.62	.55	.67	.60	.54	.65	.59	.54	.63	.57	.53	.51
5.0	.64	.55	.48	.62	.54	.48	.60	.53	.47	.58	.52	.47	.56	.51	.46	.44
6.0	.57	.48	.42	.56	.48	.42	.55	.47	.41	.53	.46	.41	.51	.45	.41	.39
7.0	.52	.43	.37	.51	.43	.37	.50	.42	.37	.48	.41	.36	.47	.41	.36	.34
8.0	.47	.39	.33	.47	.39	.33	.45	.38	.33	.44	.38	.33	.43	.37	.32	.31
9.0	.44	.35	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.40	.34	.29	.28
10.0	.40	.32	.27	.40	.32	.27	.39	.32	.27	.38	.31	.27	.37	.31	.27	.25



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:JEFF

Test Date:13 December 2024

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

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

Humidity:65.0%

Test Distance:7.889m [K=1.0000]

Remarks:

WEC AND CCEC

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE: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	.304	.173	.055	.297	.169	.054	.284	.163	.052	.271	.157	.050	.260	.151	.049		
2.0	.287	.157	.048	.280	.154	.048	.269	.149	.046	.258	.145	.045	.248	.140	.044		
3.0	.266	.141	.042	.260	.139	.042	.250	.135	.041	.240	.132	.040	.232	.128	.040		
4.0	.246	.128	.038	.241	.126	.037	.232	.123	.037	.223	.120	.036	.215	.117	.036		
5.0	.227	.116	.034	.223	.115	.033	.215	.112	.033	.207	.109	.033	.200	.107	.032		
6.0	.211	.106	.030	.207	.105	.030	.200	.103	.030	.193	.100	.030	.187	.098	.029		
7.0	.197	.097	.028	.193	.096	.027	.187	.094	.027	.181	.093	.027	.175	.091	.027		
8.0	.184	.090	.025	.181	.089	.025	.175	.087	.025	.170	.086	.025	.164	.084	.025		
9.0	.172	.083	.023	.170	.083	.023	.164	.081	.023	.160	.080	.023	.155	.079	.023		
10.0	.162	.078	.022	.160	.077	.022	.155	.076	.021	.151	.075	.021	.146	.074	.021		

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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.099	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.140	.099	.065	.096	.068	.046	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.090	.048	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.034	.116	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.025	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm										
NAME: LAB DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE: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	18.2	19.7	18.5	19.9	20.1	17.9	19.4	18.2	19.6	19.8
3H	19.7	21.1	20.0	21.3	21.5	19.3	20.7	19.6	20.9	21.2
4H	20.3	21.6	20.6	21.8	22.1	19.9	21.2	20.2	21.4	21.7
6H	20.7	21.9	21.0	22.2	22.5	20.3	21.5	20.6	21.8	22.1
8H	20.8	22.0	21.1	22.3	22.6	20.4	21.6	20.7	21.9	22.2
12H	20.9	22.0	21.2	22.3	22.6	20.4	21.6	20.8	21.9	22.2
4H 2H	18.7	20.1	19.1	20.3	20.6	18.5	19.8	18.8	20.1	20.4
3H	20.4	21.6	20.8	21.9	22.2	20.1	21.3	20.5	21.6	21.9
4H	21.1	22.2	21.5	22.5	22.8	20.8	21.8	21.2	22.2	22.5
6H	21.7	22.6	22.1	22.9	23.3	21.3	22.2	21.7	22.6	23.0
8H	21.8	22.7	22.2	23.1	23.4	21.5	22.3	21.9	22.7	23.1
12H	21.9	22.7	22.4	23.1	23.5	21.6	22.4	22.0	22.7	23.1
8H 4H	21.4	22.2	21.8	22.6	23.0	21.1	21.9	21.5	22.3	22.7
6H	22.0	22.7	22.5	23.2	23.6	21.7	22.4	22.1	22.8	23.3
8H	22.3	22.9	22.7	23.3	23.8	21.9	22.6	22.4	23.0	23.5
12H	22.4	23.0	22.9	23.4	23.9	22.1	22.7	22.6	23.1	23.6
12H 4H	21.4	22.2	21.8	22.5	22.9	21.1	21.9	21.5	22.3	22.7
6H	22.1	22.7	22.5	23.1	23.6	21.8	22.4	22.2	22.8	23.3
8H	22.4	22.9	22.8	23.4	23.8	22.0	22.6	22.5	23.0	23.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117 Corrected 2593 lm Total Lamp Luminous Flux. (8log(F/F0) = 3.3)

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:JEFF

Test Date:13 December 2024

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

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

Humidity:65.0%

Test Distance:7.889m [K=1.0000]

Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

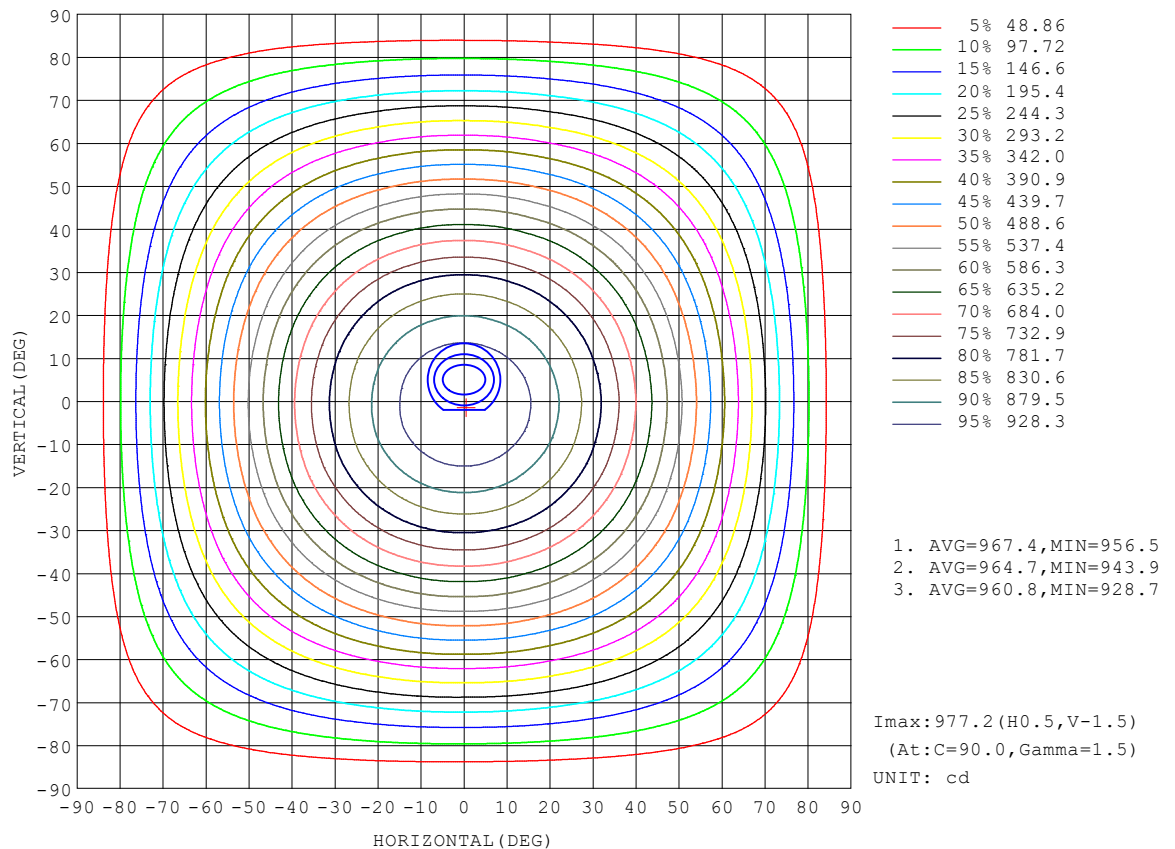
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	58	47	40	58	47	40	57	46	40	34
0.80	68	57	50	67	57	50	66	56	49	42
1.00	77	66	59	76	65	58	73	67	58	51
1.25	84	74	67	82	73	66	80	71	65	58
1.50	89	79	72	87	78	72	84	76	71	63
2.00	96	87	81	94	86	80	90	84	79	71
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	107	101	96	104	99	95	100	96	92	84
5.00	109	104	100	106	102	99	102	99	96	86
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: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K_CRI90TYPE:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

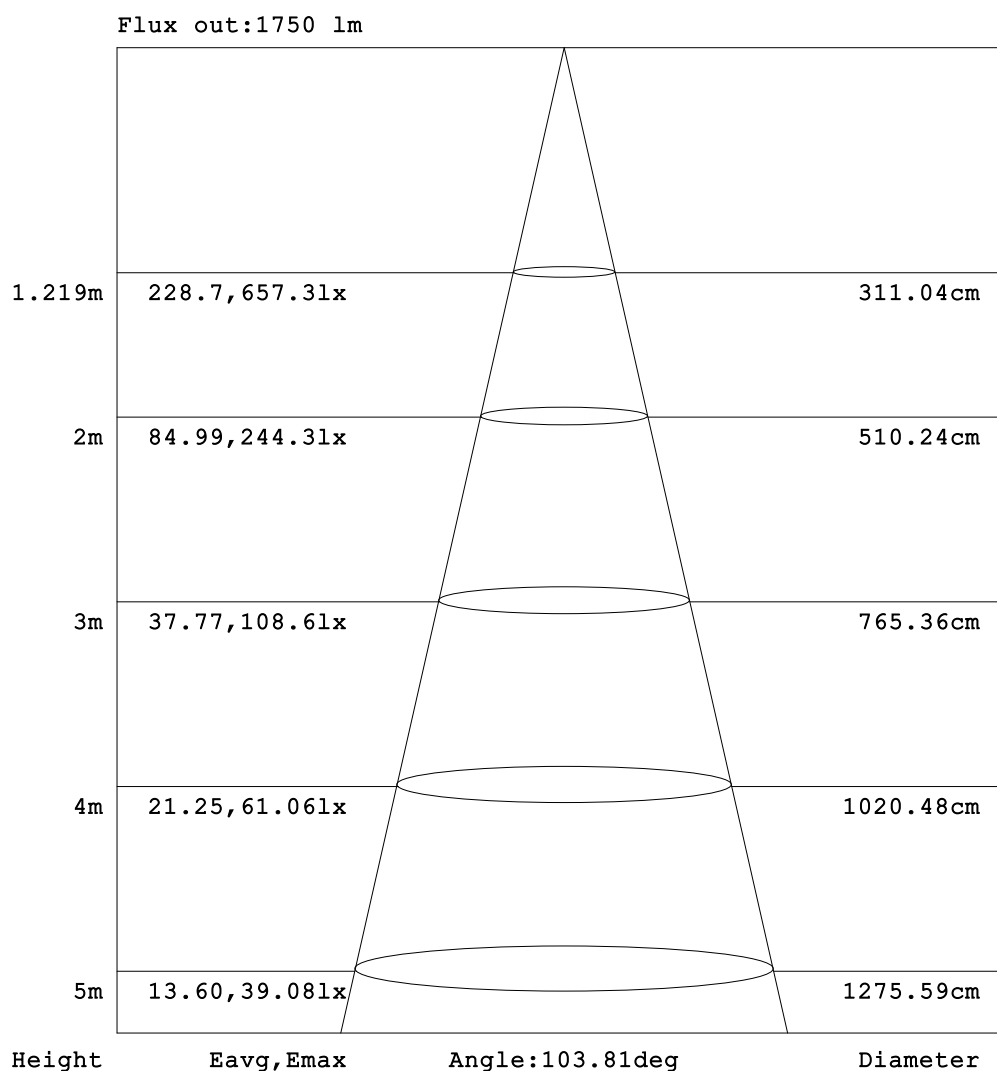


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



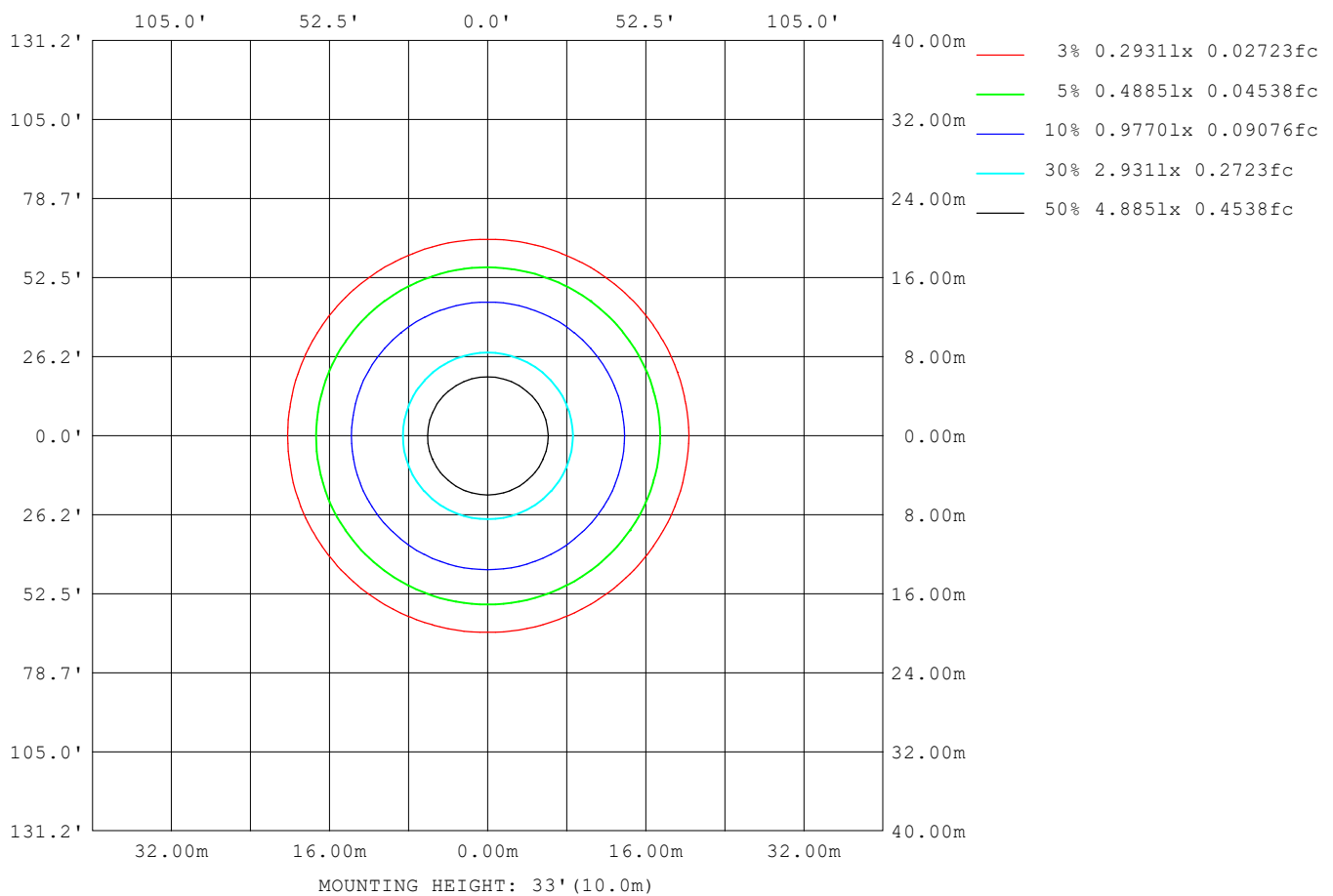
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K_CRI90TYPE:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:JEFF
Test Date:13 December 2024

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.889m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:240.0V I:0.1154A P:25.74W PF:0.9294 Lamp Flux:2593.33x1 lm		
NAME: LAB_DR_1492_REC_WHT_OPAL_HE_500mA_3000K CRI90TYPE:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

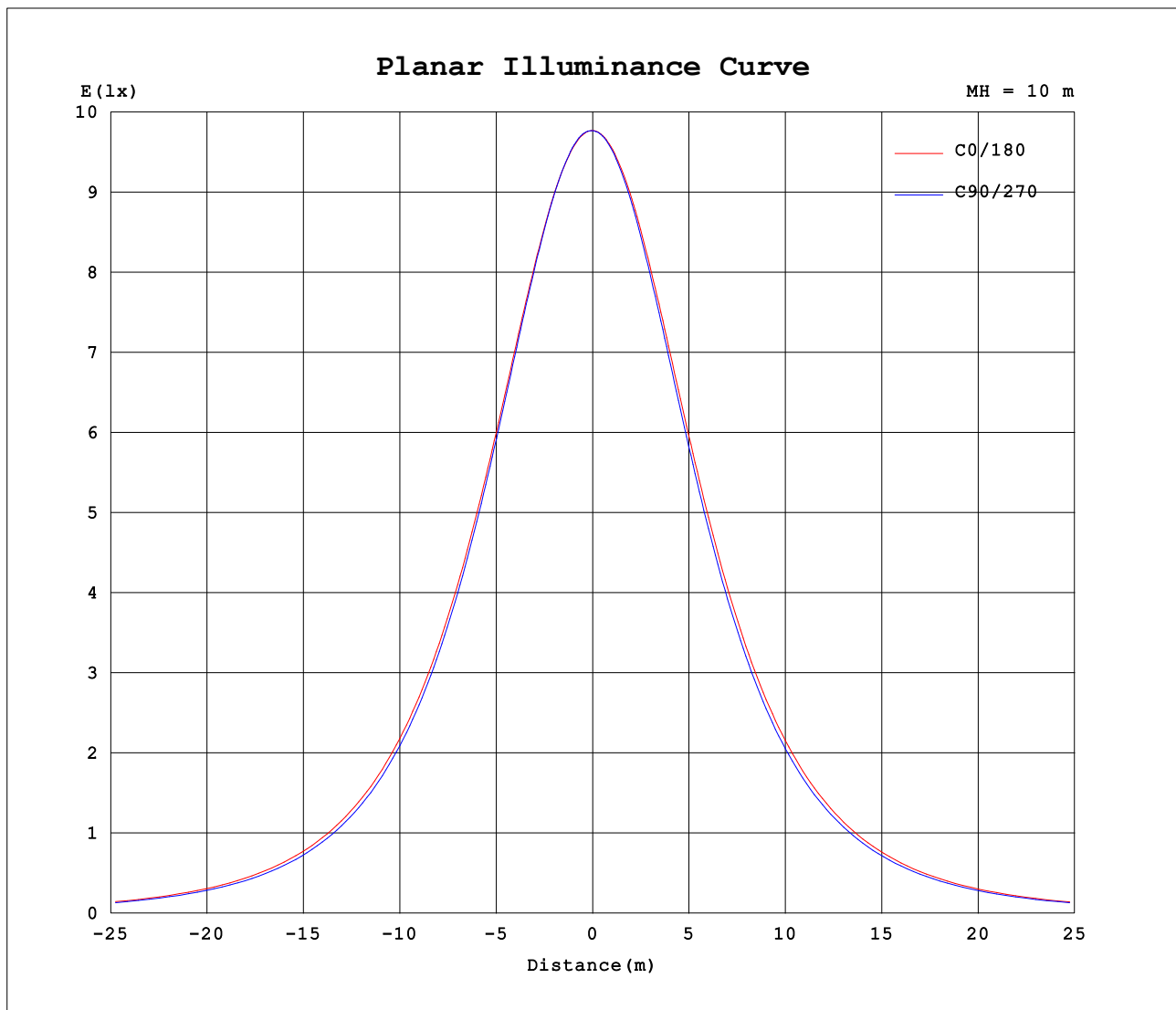
AvgL	cd/m2
L_0~180 (65) av	4276
L_0~180 (75) av	3671
L_0~180 (85) av	2522
L_90~270 (65) av	3975
L_90~270 (75) av	3430
L_90~270 (85) av	2368
L_45 (65) av	4108
L_45 (75) av	3544
L_45 (85) av	2534

Standard: GB/T 29293-2012

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Remarks:

Planar Illuminance Curve



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Remarks:

