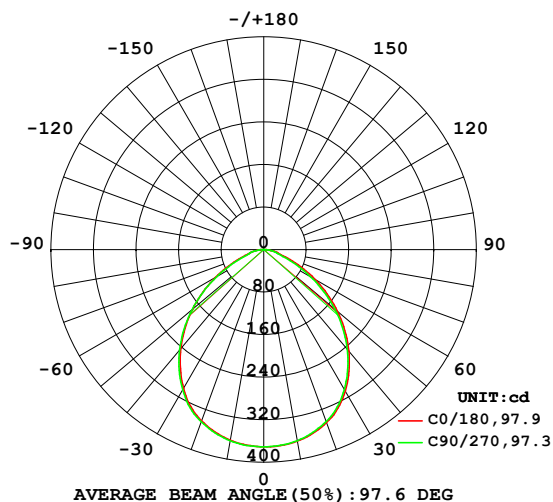


## LUMINAIRE PHOTOMETRIC TEST REPORT

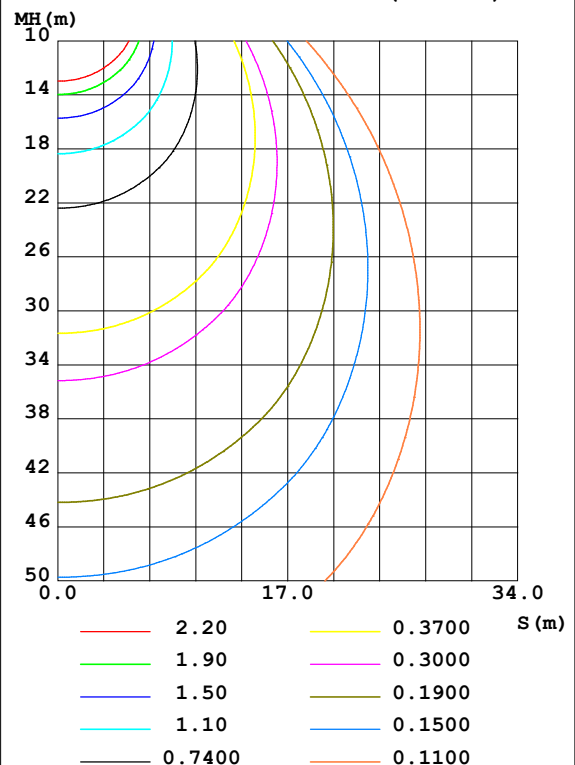
Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.76 lm/W			
MODEL: 80mm 2000lm 940 ADV5		Imax(cd)	371.0	S/MH(C0/180)	1.21
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	858.54	$\eta$ UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	858.54	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	$\eta$ 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: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	365.8	365.4	364.7	364.0	363.9	364.2	365.0	365.7	0- 10	35.13	35.13	4.09,4.09
20	346.0	345.3	343.8	342.7	342.5	343.0	344.5	345.7	10- 20	100.5	135.6	15.8,15.8
30	306.8	305.5	303.5	301.9	301.7	302.6	304.7	306.4	20- 30	150.5	286.2	33.3,33.3
40	249.1	247.2	244.7	242.6	242.4	243.4	246.2	248.2	30- 40	172.5	458.7	53.4,53.4
50	181.3	179.0	174.9	174.4	175.0	175.2	176.1	180.3	40- 50	163.3	621.9	72.4,72.4
60	110.7	107.5	101.3	103.9	105.3	104.4	102.8	108.8	50- 60	126.0	748.0	87.1,87.1
70	48.22	44.93	38.75	43.50	45.16	43.13	40.29	45.71	60- 70	71.85	819.8	95.5,95.5
80	20.26	18.41	16.47	18.42	19.34	18.82	18.53	19.28	70- 80	30.44	850.3	99,99
90	1.041	1.308	0.2235	1.414	0.6193	0.3774	1.810	0.2931	80- 90	8.277	858.5	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): 543.37 lm

%lum = 63.3%

%lamp = 63.3%

Conical surface Flux(120deg): 747.98 lm

%lum = 87.1%

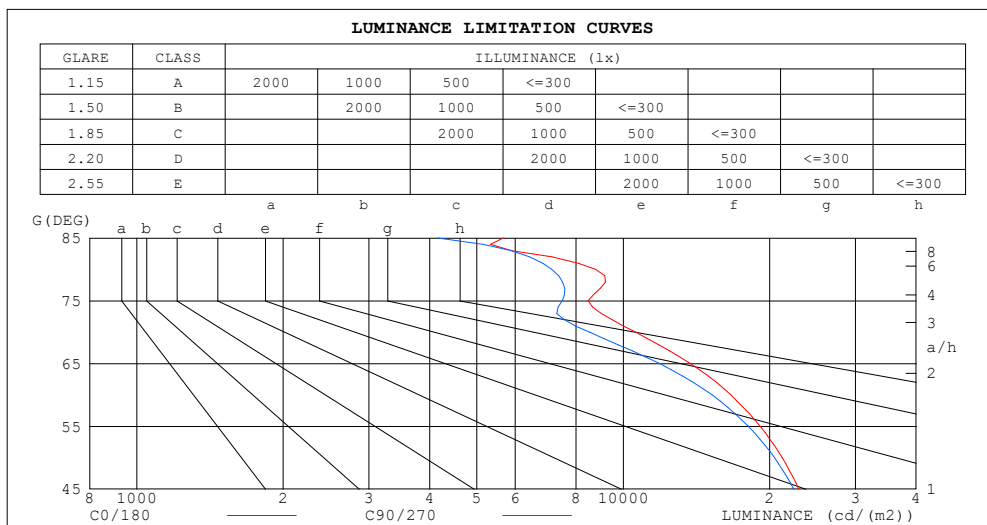
%lamp = 87.1%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JEFF  
 Test Date:23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:7.888m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_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	5671	4150
80	8769	7131
75	8473	7491
70	10599	8519
65	13736	11868
60	16647	15227
55	19108	18072
50	21205	20454
45	22961	22421

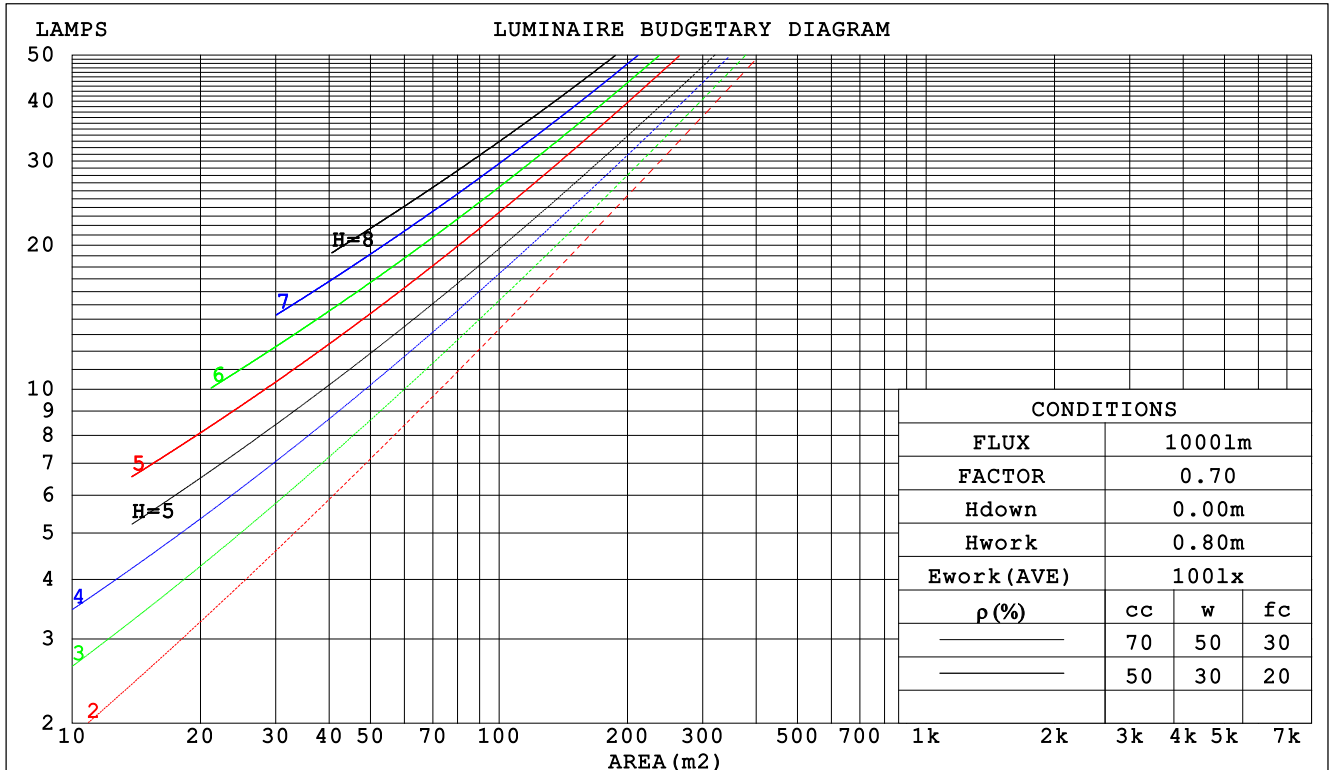
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.00	.97	.00	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.85	.82	.78	.82	.79	.76	.74
3.0	.84	.76	.70	.82	.75	.70	.79	.73	.68	.76	.71	.67	.74	.70	.66	.64
4.0	.75	.67	.61	.73	.66	.60	.71	.65	.59	.69	.63	.59	.67	.62	.58	.56
5.0	.67	.59	.53	.66	.58	.53	.64	.57	.52	.62	.56	.51	.60	.55	.51	.49
6.0	.61	.53	.47	.60	.52	.46	.58	.51	.46	.57	.50	.46	.55	.50	.45	.43
7.0	.56	.47	.41	.55	.47	.41	.53	.46	.41	.52	.46	.41	.51	.45	.40	.39
8.0	.51	.43	.37	.50	.43	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.35
9.0	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.43	.37	.33	.31
10.0	.43	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.30	.40	.34	.30	.29



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**WEC AND CCEC**

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_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	.269	.153	.048	.262	.149	.047	.249	.143	.046	.237	.137	.044	.226	.131	.042		
2.0	.258	.142	.043	.252	.139	.043	.241	.134	.042	.230	.129	.040	.220	.125	.039		
3.0	.243	.129	.039	.238	.127	.038	.228	.123	.037	.218	.120	.037	.210	.116	.036		
4.0	.227	.118	.035	.223	.117	.034	.214	.113	.034	.206	.110	.033	.198	.108	.033		
5.0	.213	.108	.031	.209	.107	.031	.201	.104	.031	.193	.102	.030	.186	.100	.030		
6.0	.199	.100	.029	.195	.099	.028	.188	.097	.028	.182	.094	.028	.176	.093	.027		
7.0	.187	.092	.026	.183	.091	.026	.177	.090	.026	.171	.088	.026	.166	.086	.025		
8.0	.176	.086	.024	.173	.085	.024	.167	.083	.024	.162	.082	.024	.157	.080	.023		
9.0	.165	.080	.022	.163	.079	.022	.158	.078	.022	.153	.077	.022	.148	.075	.022		
10.0	.156	.075	.021	.154	.074	.021	.149	.073	.021	.145	.072	.020	.141	.071	.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	.156	.138	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015		
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012		
3.0	.159	.114	.078	.137	.098	.068	.094	.068	.048	.054	.040	.028	.017	.013	.009		
4.0	.151	.101	.062	.130	.087	.053	.089	.061	.038	.052	.035	.022	.017	.012	.007		
5.0	.144	.090	.050	.124	.078	.043	.085	.054	.031	.049	.032	.018	.016	.010	.006		
6.0	.137	.081	.041	.118	.070	.036	.081	.049	.025	.047	.029	.015	.015	.009	.005		
7.0	.131	.074	.035	.113	.064	.030	.078	.045	.022	.045	.027	.013	.015	.009	.004		
8.0	.125	.069	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004		
9.0	.119	.064	.026	.103	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003		
10.0	.114	.059	.023	.098	.052	.020	.068	.036	.014	.040	.021	.009	.013	.007	.003		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm										
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90					TYPE: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	22.8	24.2	23.1	24.4	24.6	22.6	24.0	22.8	24.2	24.4
3H	23.6	24.8	23.8	25.1	25.3	23.1	24.4	23.4	24.6	24.9
4H	23.7	25.0	24.0	25.2	25.5	23.2	24.5	23.6	24.7	25.0
6H	23.9	25.1	24.3	25.4	25.6	23.4	24.5	23.7	24.8	25.1
8H	24.0	25.1	24.3	25.4	25.7	23.4	24.5	23.8	24.8	25.1
12H	24.0	25.0	24.3	25.3	25.6	23.4	24.5	23.8	24.8	25.1
4H 2H	23.1	24.4	23.5	24.6	24.9	22.9	24.1	23.2	24.4	24.6
3H	24.0	25.1	24.3	25.3	25.6	23.6	24.6	23.9	24.9	25.2
4H	24.3	25.2	24.6	25.5	25.9	23.8	24.8	24.2	25.1	25.4
6H	24.6	25.4	25.0	25.8	26.2	24.1	24.9	24.5	25.3	25.6
8H	24.7	25.5	25.1	25.8	26.2	24.1	24.9	24.5	25.3	25.7
12H	24.7	25.4	25.1	25.8	26.2	24.2	24.9	24.6	25.3	25.7
8H 4H	24.3	25.1	24.7	25.5	25.9	23.9	24.7	24.3	25.0	25.4
6H	24.8	25.4	25.2	25.8	26.3	24.3	24.9	24.7	25.3	25.7
8H	24.9	25.5	25.4	25.9	26.4	24.4	25.0	24.9	25.4	25.8
12H	25.0	25.5	25.5	25.9	26.4	24.5	25.0	24.9	25.4	25.9
12H 4H	24.3	25.0	24.7	25.4	25.8	23.9	24.6	24.3	25.0	25.4
6H	24.8	25.4	25.3	25.8	26.2	24.3	24.9	24.8	25.3	25.7
8H	25.0	25.5	25.4	25.9	26.4	24.5	25.0	24.9	25.4	25.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.6 / - 0.6					+ 0.7 / - 0.7				

CIE Pub.117 Corrected 858.5 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.5)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

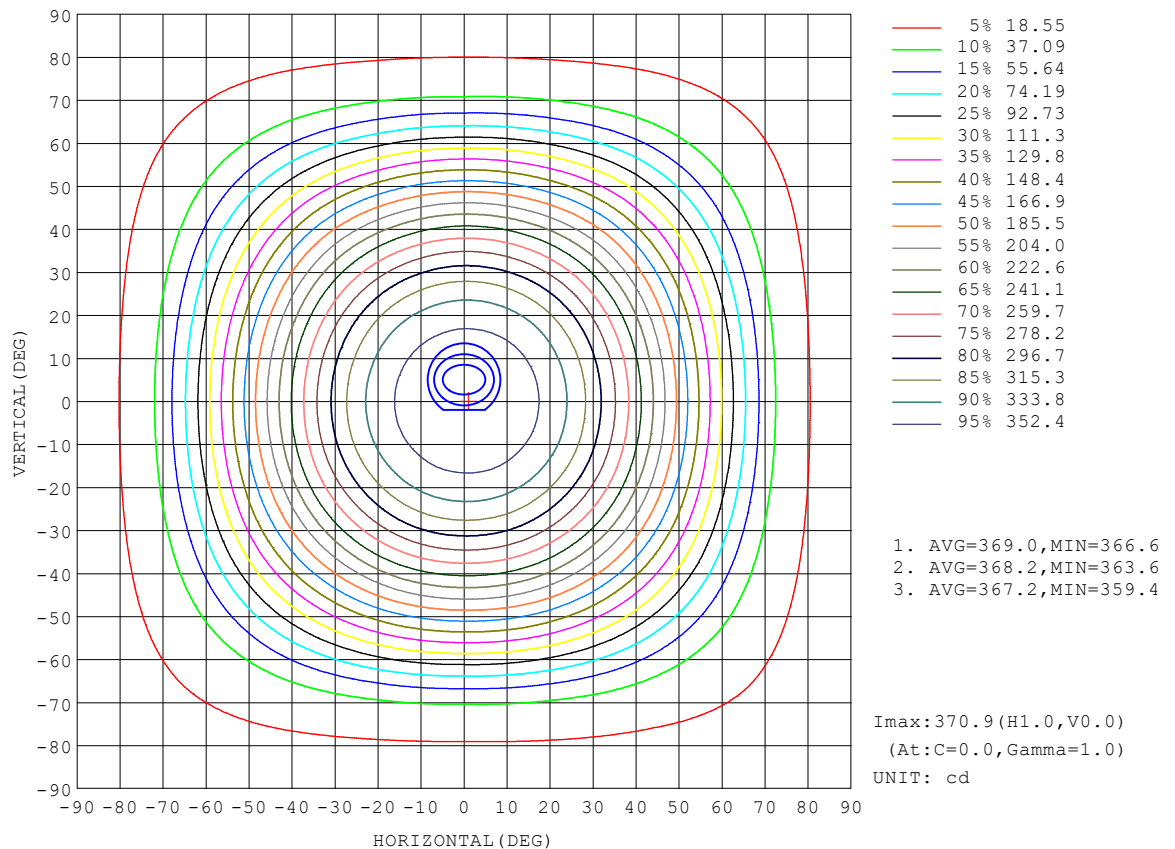
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	52	45	62	51	45	60	51	45	39
0.80	73	62	55	72	62	55	70	61	55	48
1.00	81	71	64	80	70	64	78	72	64	57
1.25	88	78	72	86	78	72	84	76	71	64
1.50	92	84	78	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	83	76
2.50	102	95	90	100	94	89	96	91	87	80
3.00	105	99	94	103	97	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
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:23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



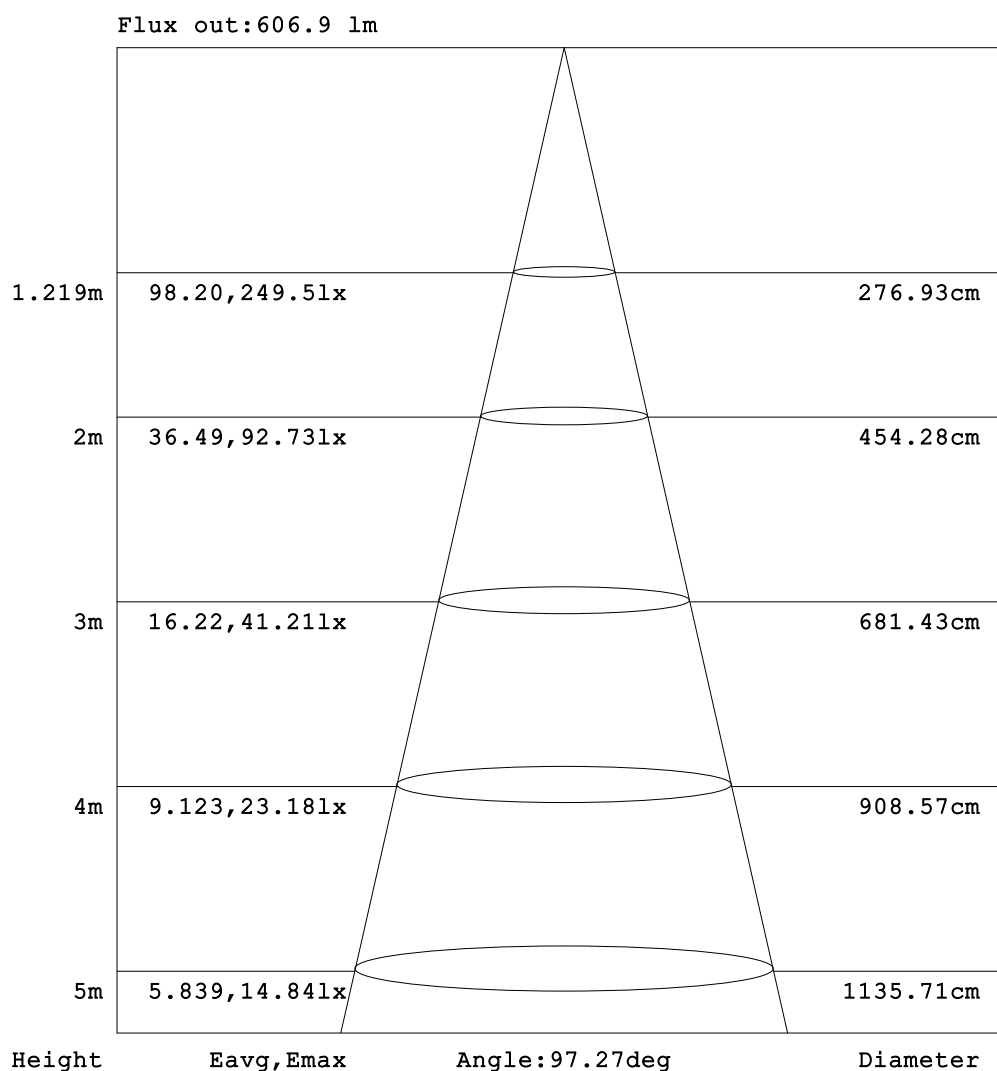
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 23 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.888m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



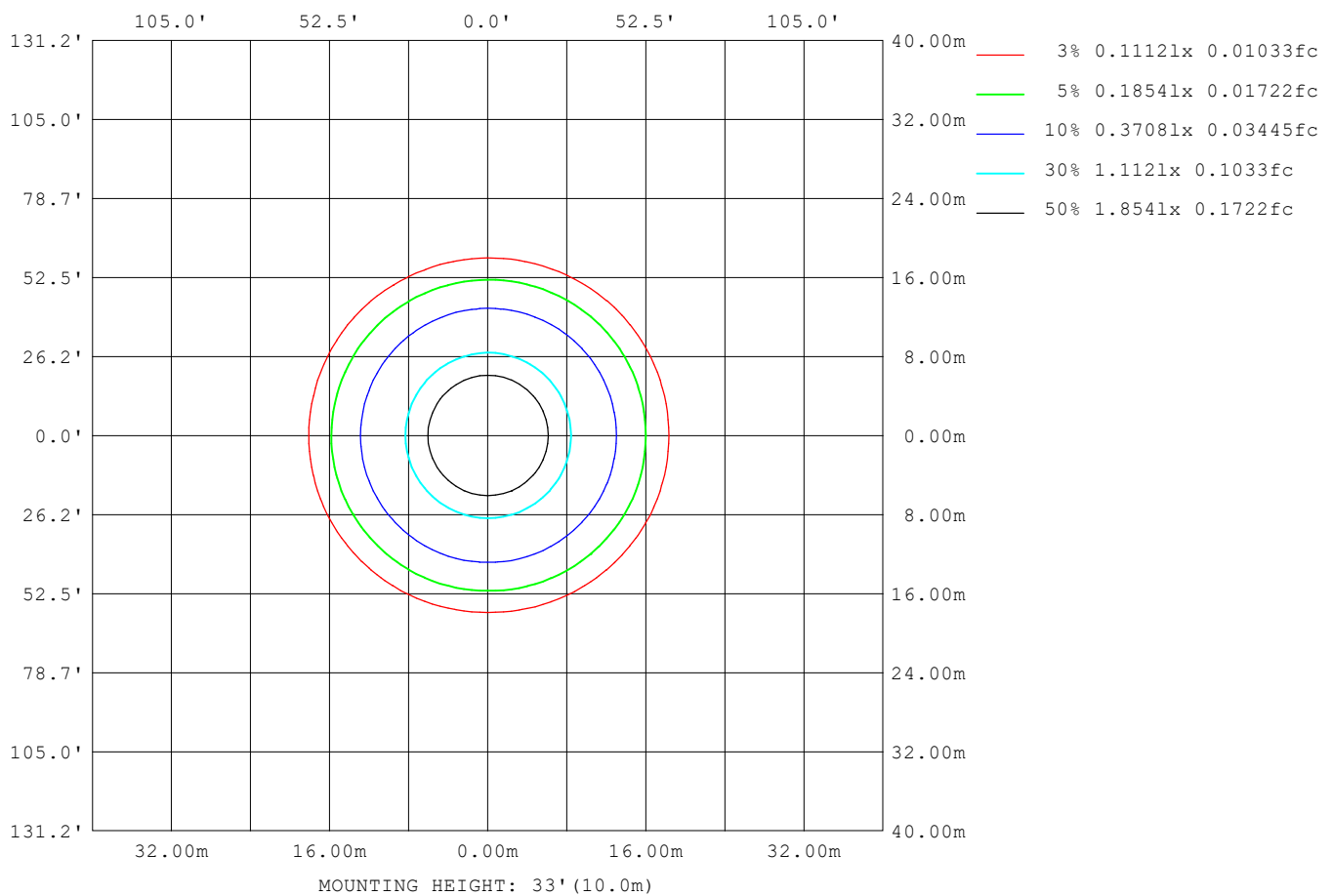
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_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:23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:240.0V I:0.0528A P:10.37W PF:0.8190 Lamp Flux:858.54x1 lm		
NAME: DEEP C 150_NA_WHT_250mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

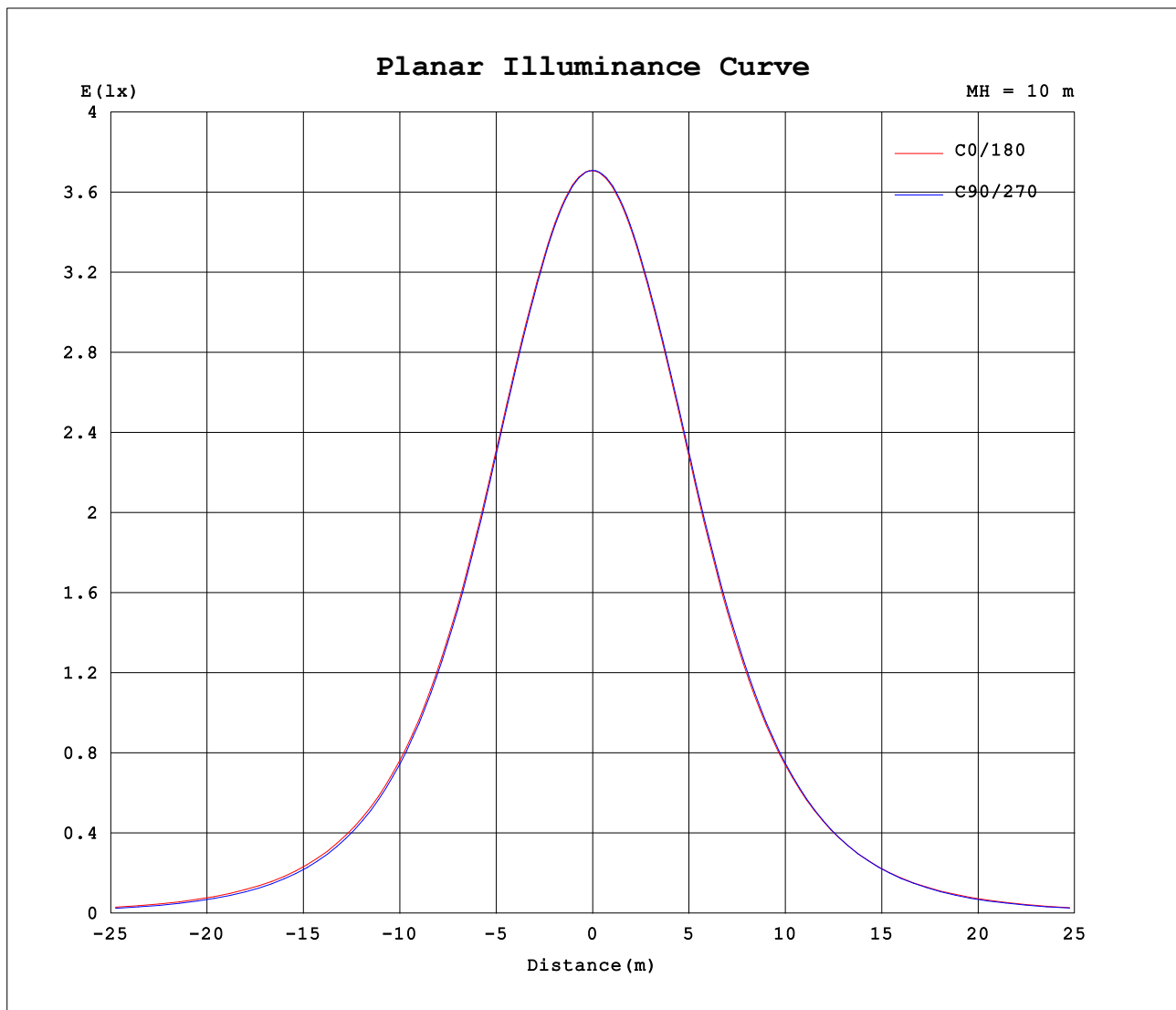
AvgL	cd/m2
L_0~180 (65) av	13347
L_0~180 (75) av	8321
L_0~180 (85) av	5566
L_90~270 (65) av	11958
L_90~270 (75) av	7782
L_90~270 (85) av	4980
L_45 (65) av	12920
L_45 (75) av	7831
L_45 (85) av	6363

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [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: 23 October 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.888m [K=1.0000]  
Remarks:

