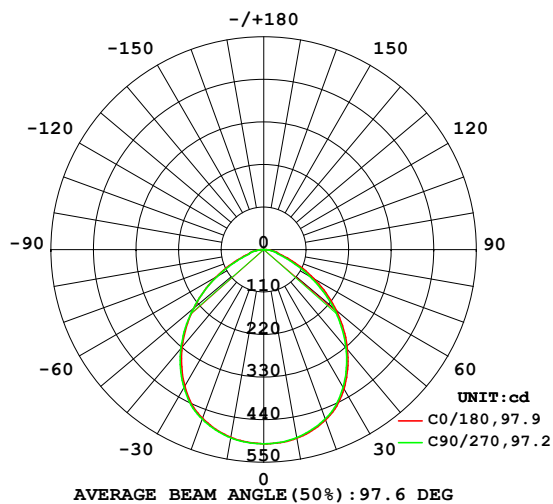


## LUMINAIRE PHOTOMETRIC TEST REPORT

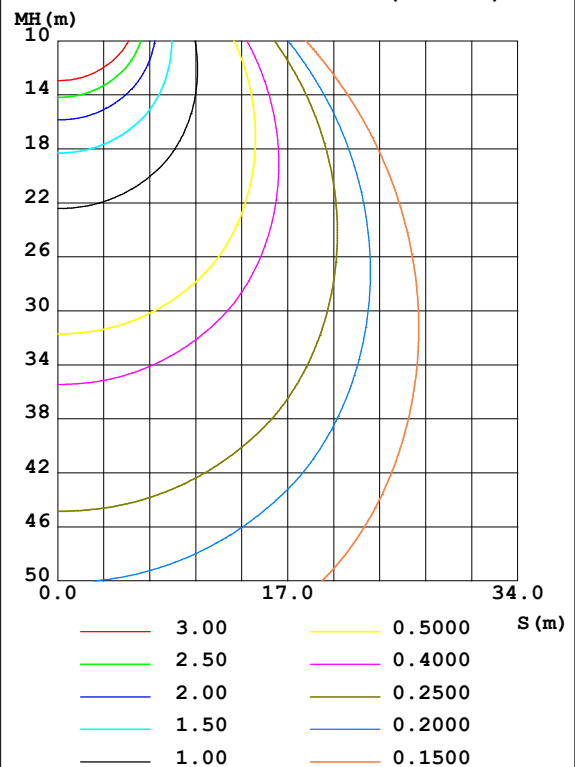
Test:U:240.0V I:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 82.06 lm/W			
MODEL: 80mm 2000lm 940 ADV5		I <sub>max</sub> (cd)	502.2	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)	1162.1	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	1162.07	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
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: 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:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	495.2	494.7	493.6	492.8	492.7	493.1	494.1	495.0	0- 10	47.55	47.55	4.09,4.09
20	468.5	467.4	465.4	464.0	463.7	464.5	466.3	468.0	10- 20	136.1	183.6	15.8,15.8
30	415.2	413.4	410.8	408.7	408.5	409.9	412.6	414.9	20- 30	203.8	387.4	33.3,33.3
40	337.0	334.3	331.2	328.4	328.2	329.7	333.4	336.0	30- 40	233.6	620.9	53.4,53.4
50	245.4	242.1	236.5	236.1	236.9	237.3	238.3	243.8	40- 50	221.0	841.9	72.4,72.4
60	149.5	144.9	136.6	140.3	142.6	141.5	139.2	147.2	50- 60	170.6	1012	87.1,87.1
70	65.20	60.59	52.39	58.86	61.20	58.57	54.58	61.82	60- 70	97.18	1110	95.5,95.5
80	27.34	24.87	22.31	24.93	26.23	25.54	25.12	26.11	70- 80	41.19	1151	99,99
90	1.416	1.780	0.3188	1.936	0.8528	0.5311	2.463	0.4143	80- 90	11.21	1162	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): 735.57 lm

%lum = 63.3%

%lamp = 63.3%

Conical surface Flux(120deg): 1012.5 lm

%lum = 87.1%

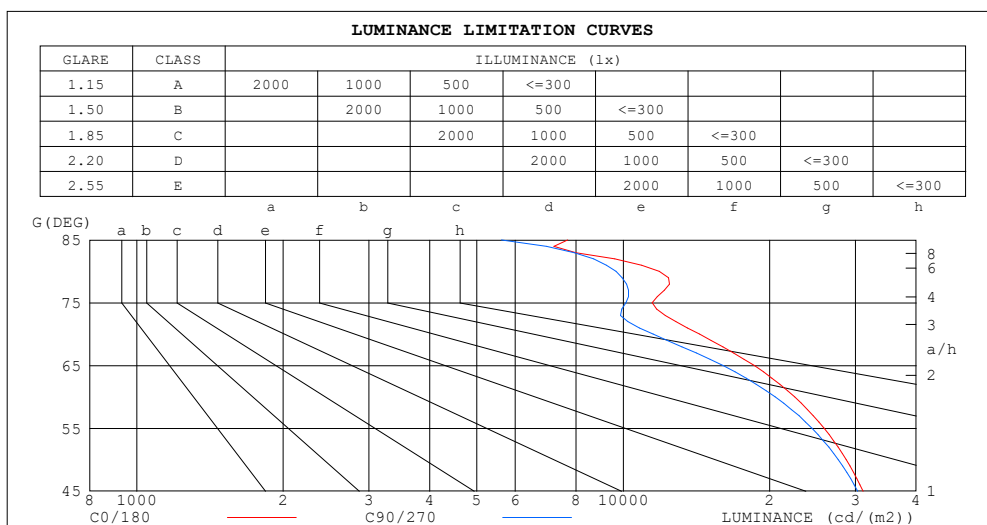
%lamp = 87.1%

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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_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	7684	5619
80	11852	9659
75	11466	10130
70	14348	11515
65	18583	16031
60	22506	20533
55	25888	24442
50	28734	27666
45	31106	30340

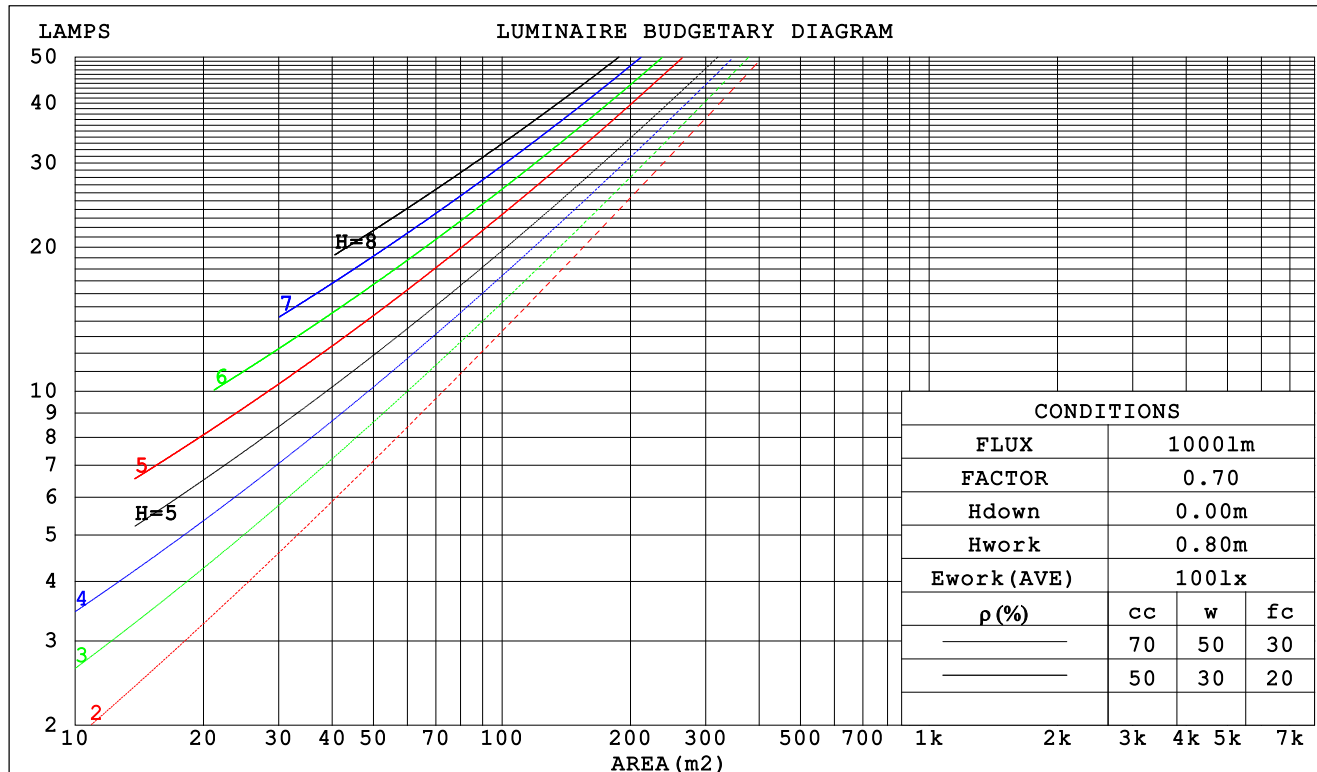
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:23 October 2024

$\gamma$  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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_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)															
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	1.06	1.02	.99	1.04	1.00	.97	.90	.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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_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	.141	.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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm										
NAME: DEEP C 150_NA_WHT_350mA_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	23.9	25.3	24.1	25.5	25.7	23.6	25.0	23.9	25.2	25.4
3H	24.6	25.9	24.9	26.1	26.3	24.1	25.4	24.4	25.7	25.9
4H	24.8	26.0	25.1	26.3	26.5	24.3	25.5	24.6	25.8	26.0
6H	25.0	26.1	25.3	26.4	26.7	24.4	25.6	24.8	25.8	26.1
8H	25.0	26.1	25.4	26.4	26.7	24.5	25.6	24.8	25.9	26.1
12H	25.0	26.1	25.4	26.4	26.7	24.5	25.5	24.8	25.8	26.1
4H 2H	24.2	25.4	24.5	25.7	25.9	24.0	25.2	24.3	25.4	25.7
3H	25.0	26.1	25.4	26.4	26.7	24.6	25.7	25.0	26.0	26.3
4H	25.3	26.3	25.7	26.6	26.9	24.8	25.8	25.2	26.1	26.5
6H	25.6	26.5	26.0	26.8	27.2	25.1	26.0	25.5	26.3	26.7
8H	25.7	26.5	26.1	26.9	27.3	25.2	26.0	25.6	26.3	26.7
12H	25.7	26.5	26.2	26.9	27.3	25.2	25.9	25.6	26.3	26.7
8H 4H	25.4	26.2	25.8	26.5	26.9	24.9	25.7	25.3	26.1	26.5
6H	25.8	26.5	26.3	26.9	27.3	25.3	26.0	25.7	26.4	26.8
8H	26.0	26.5	26.4	27.0	27.4	25.4	26.0	25.9	26.4	26.9
12H	26.0	26.5	26.5	27.0	27.5	25.5	26.0	26.0	26.4	26.9
12H 4H	25.4	26.1	25.8	26.5	26.9	24.9	25.7	25.4	26.0	26.4
6H	25.8	26.4	26.3	26.8	27.3	25.3	25.9	25.8	26.3	26.8
8H	26.0	26.5	26.5	26.9	27.4	25.5	26.0	26.0	26.4	26.9
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 1162 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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

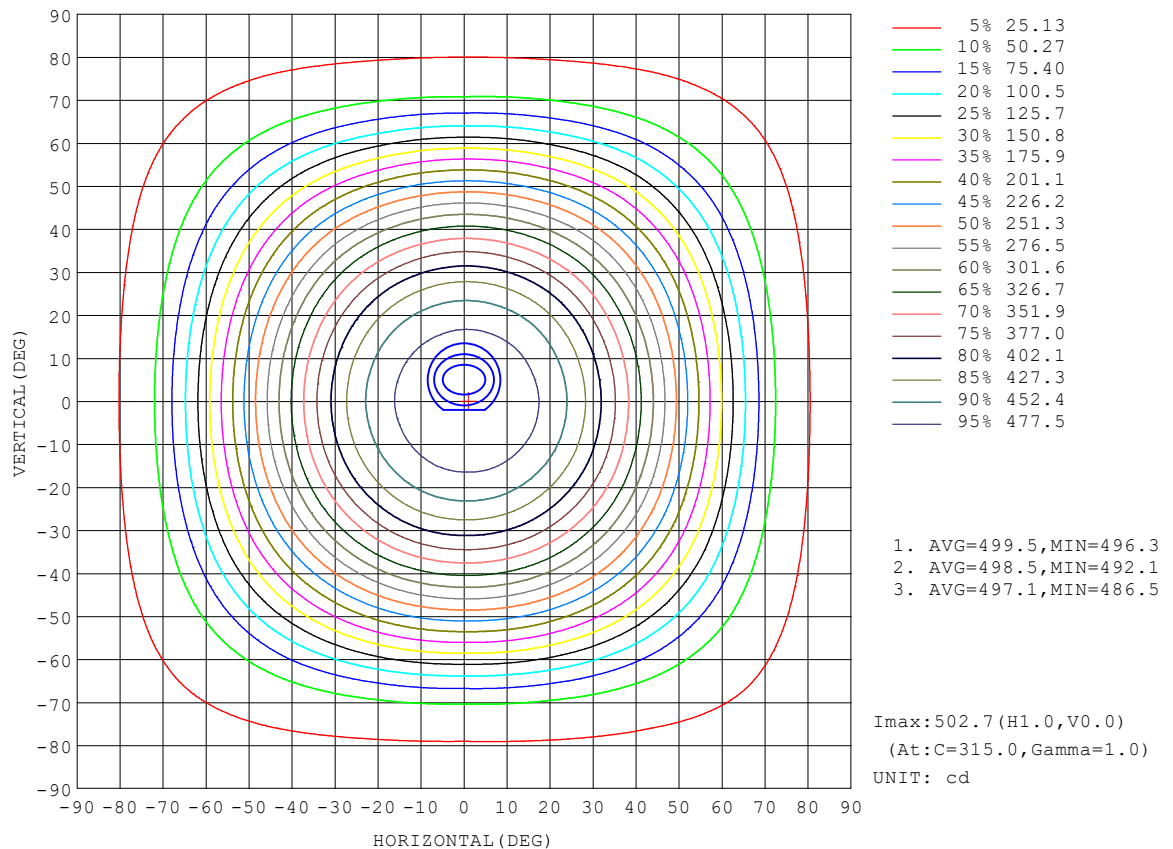
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	52	45	62	51	45	60	51	45	39
0.80	73	62	55	72	62	55	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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



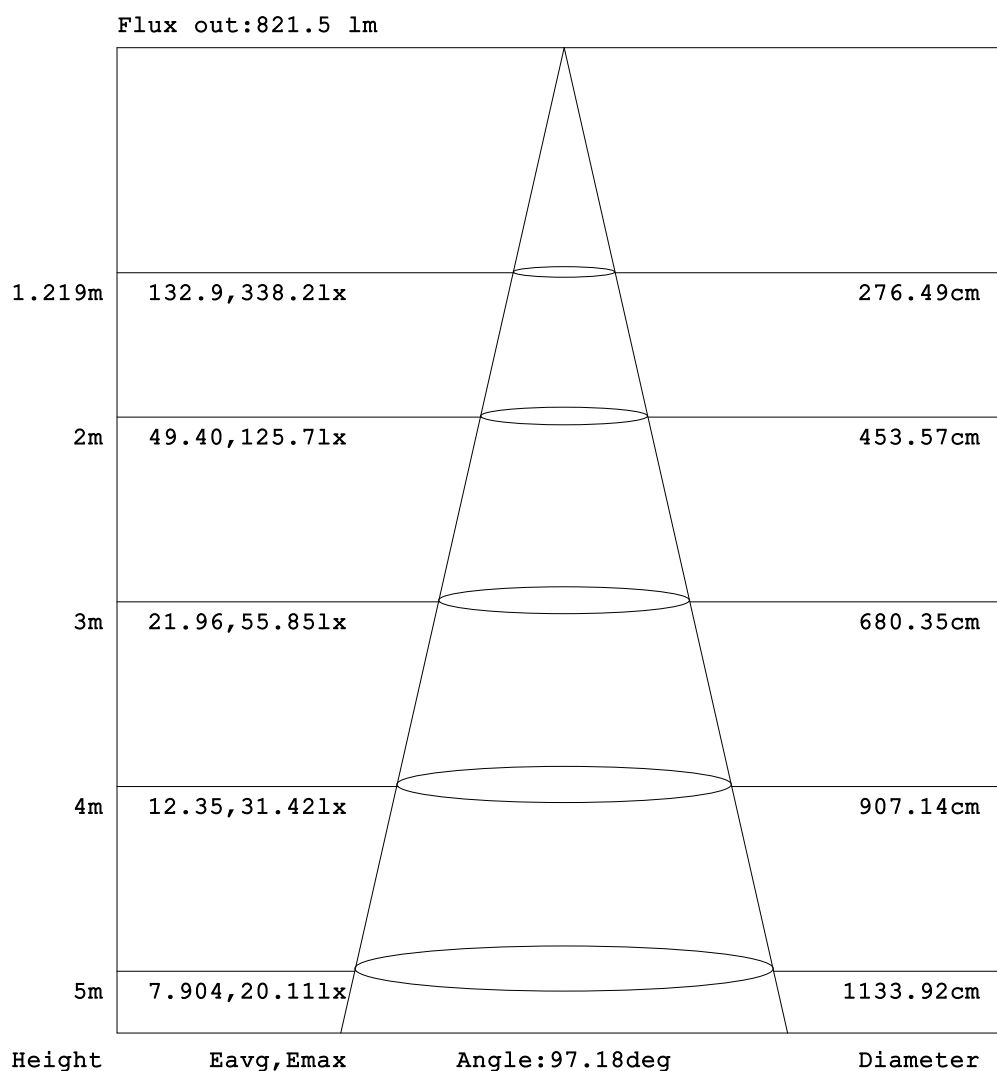
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 23 October 2024

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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



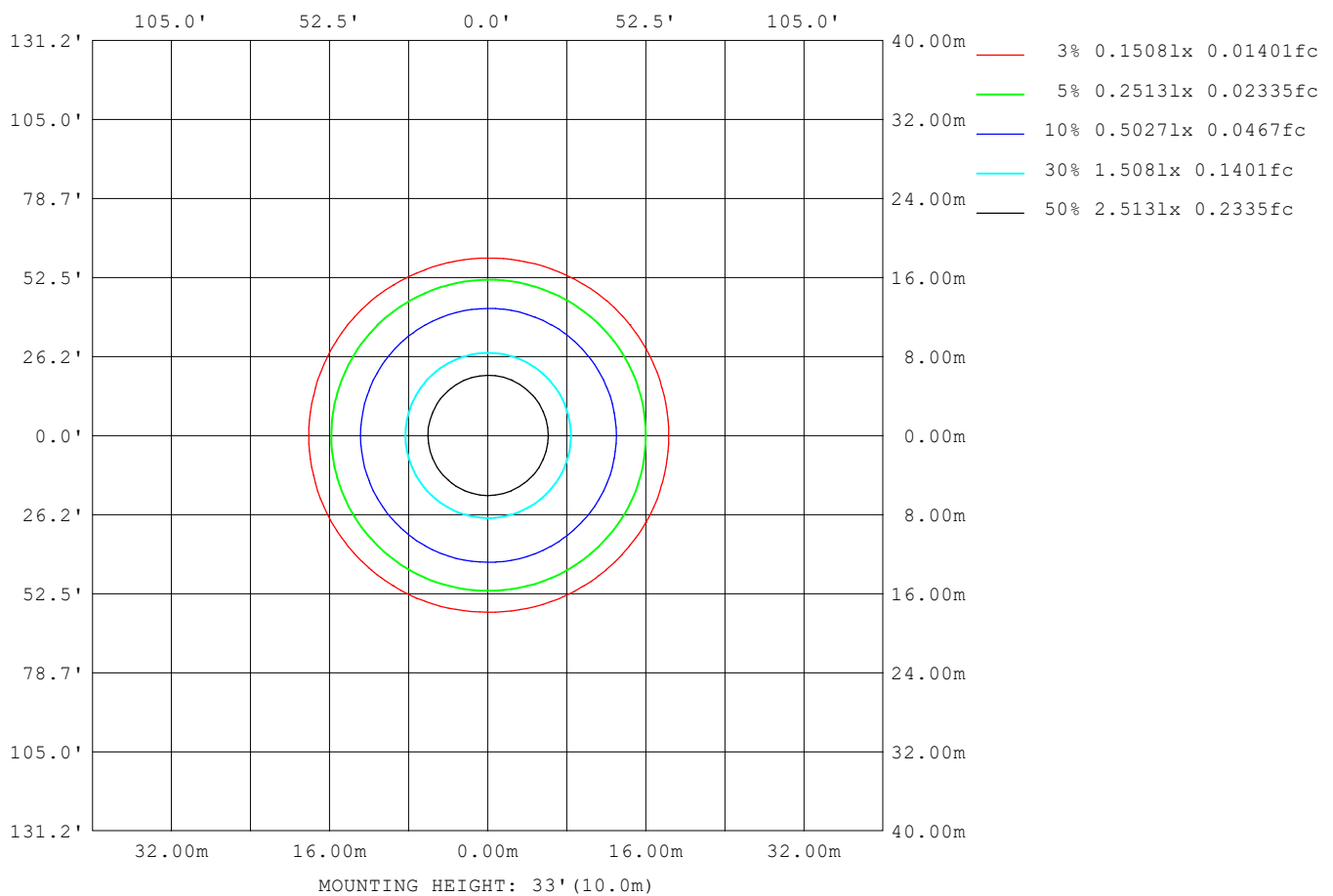
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_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:0.0668A P:14.16W PF:0.8832 Lamp Flux:1162.07x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_4000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

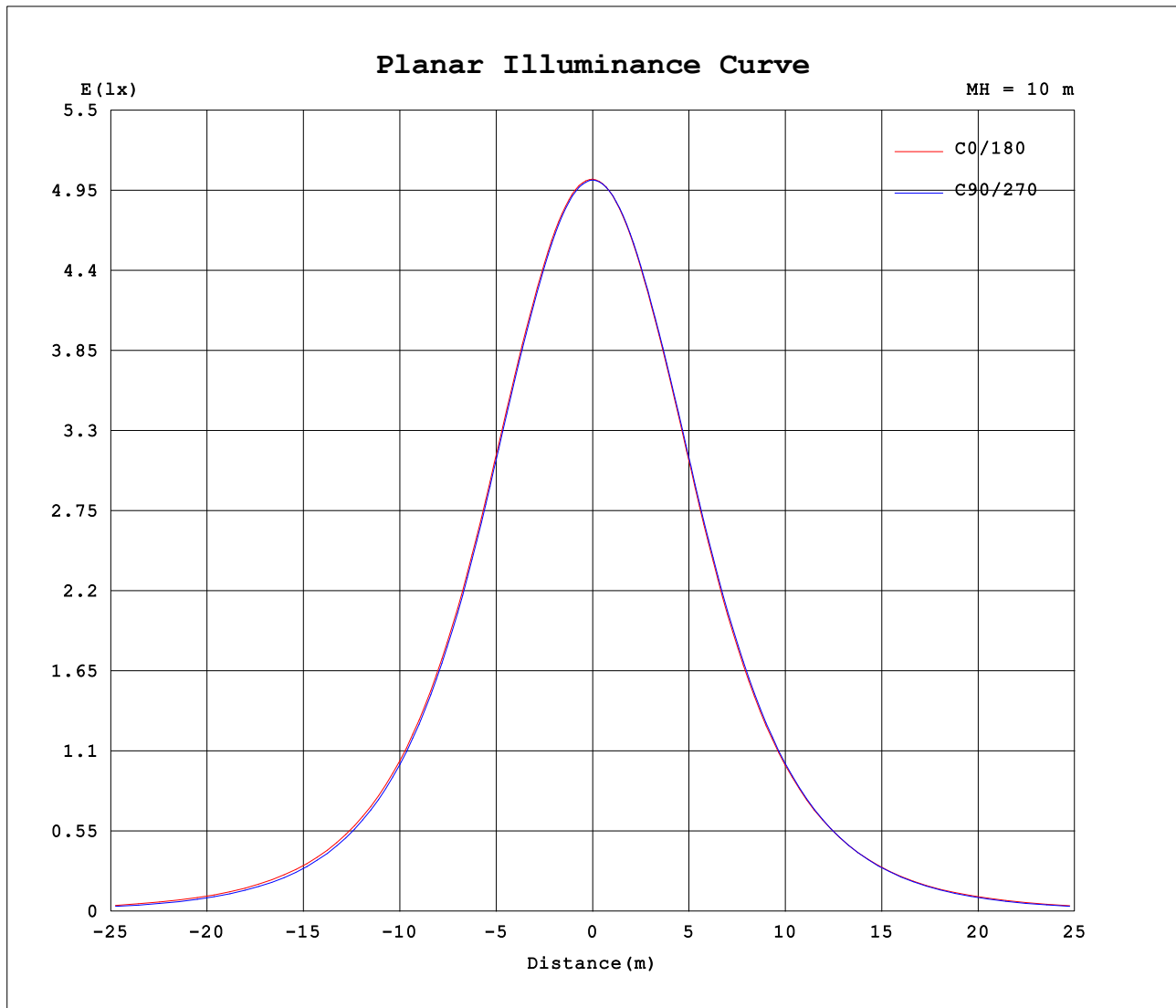
AvgL	cd/m2
L_0~180 (65) av	18053
L_0~180 (75) av	11258
L_0~180 (85) av	7530
L_90~270 (65) av	16174
L_90~270 (75) av	10535
L_90~270 (85) av	6755
L_45 (65) av	17480
L_45 (75) av	10601
L_45 (85) av	8613

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:

