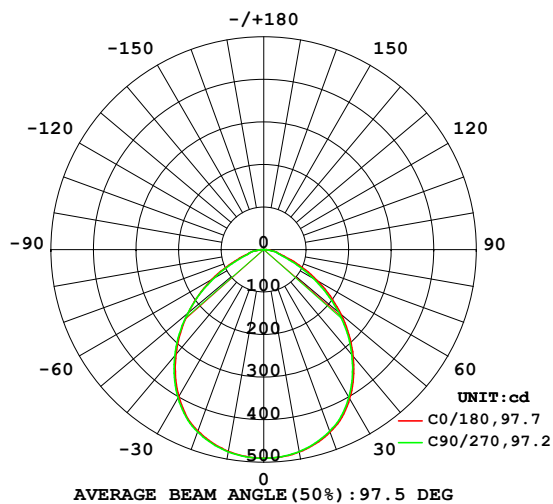


LUMINAIRE PHOTOMETRIC TEST REPORT

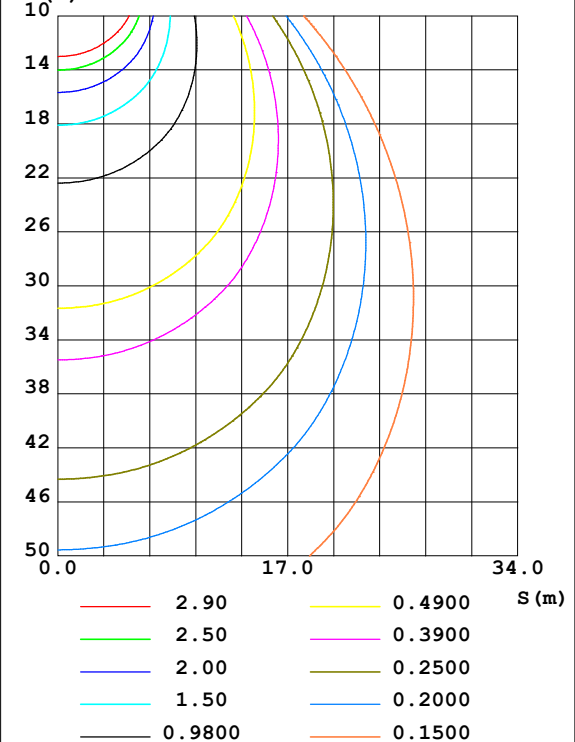
Test:U:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 79.94 lm/W			
MODEL: 80mm 2000lm 930 ADV5		I _{max} (cd)	490.4	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)	1133.2	η UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	1133.23	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.1
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: 31 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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	483.1	482.6	481.9	481.3	481.5	482.0	482.8	483.1	0- 10	46.44	46.44	4.1,4.1
20	456.5	455.3	453.9	453.2	453.3	454.1	455.6	456.5	10- 20	132.8	179.3	15.8,15.8
30	404.3	402.7	400.5	399.2	399.3	400.4	402.9	404.1	20- 30	198.9	378.1	33.4,33.4
40	327.1	325.1	322.4	320.7	321.0	322.4	326.0	327.1	30- 40	227.8	605.9	53.5,53.5
50	237.9	234.9	230.2	230.2	231.8	232.4	233.5	237.3	40- 50	215.5	821.4	72.5,72.5
60	144.6	141.6	133.1	136.7	140.7	138.7	135.8	142.8	50- 60	166.3	987.6	87.2,87.2
70	62.02	58.85	51.79	56.78	61.31	57.52	53.93	59.44	60- 70	94.64	1082	95.5,95.5
80	24.79	24.38	22.73	24.82	25.82	24.44	24.44	25.69	70- 80	40.12	1122	99,99
90	0.4976	1.245	0.5132	0.9129	2.949	0.2783	2.075	1.375	80- 90	10.84	1133	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): 717.68 lm

%lum = 63.3%

%lamp = 63.3%

Conical surface Flux(120deg): 987.64 lm

%lum = 87.2%

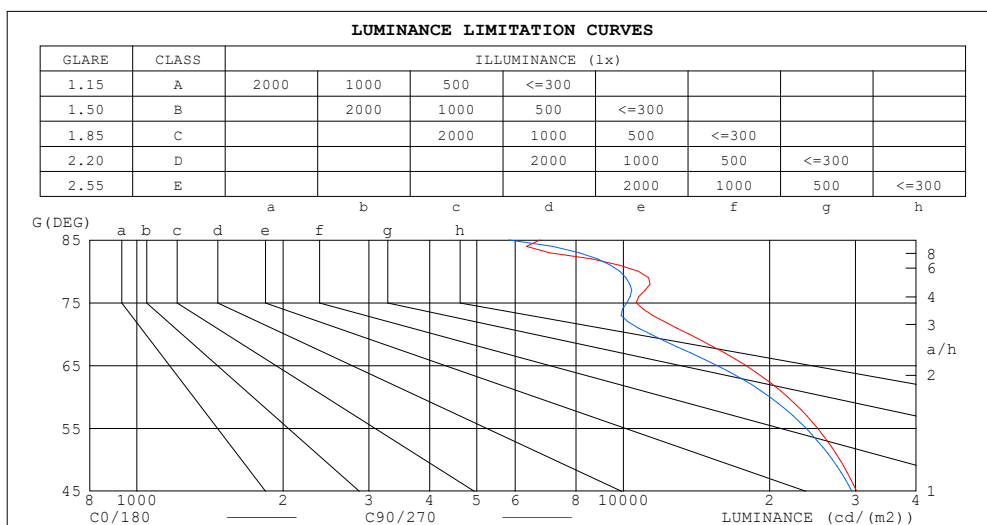
%lamp = 87.2%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JEFF
 Test Date:31 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:

LUMINANCE LIMITATION CURVES

Test:U:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	6741	5819
80	10747	9838
75	10638	10181
70	13652	11380
65	17875	15585
60	21767	20000
55	25088	23753
50	27861	26915
45	30190	29514

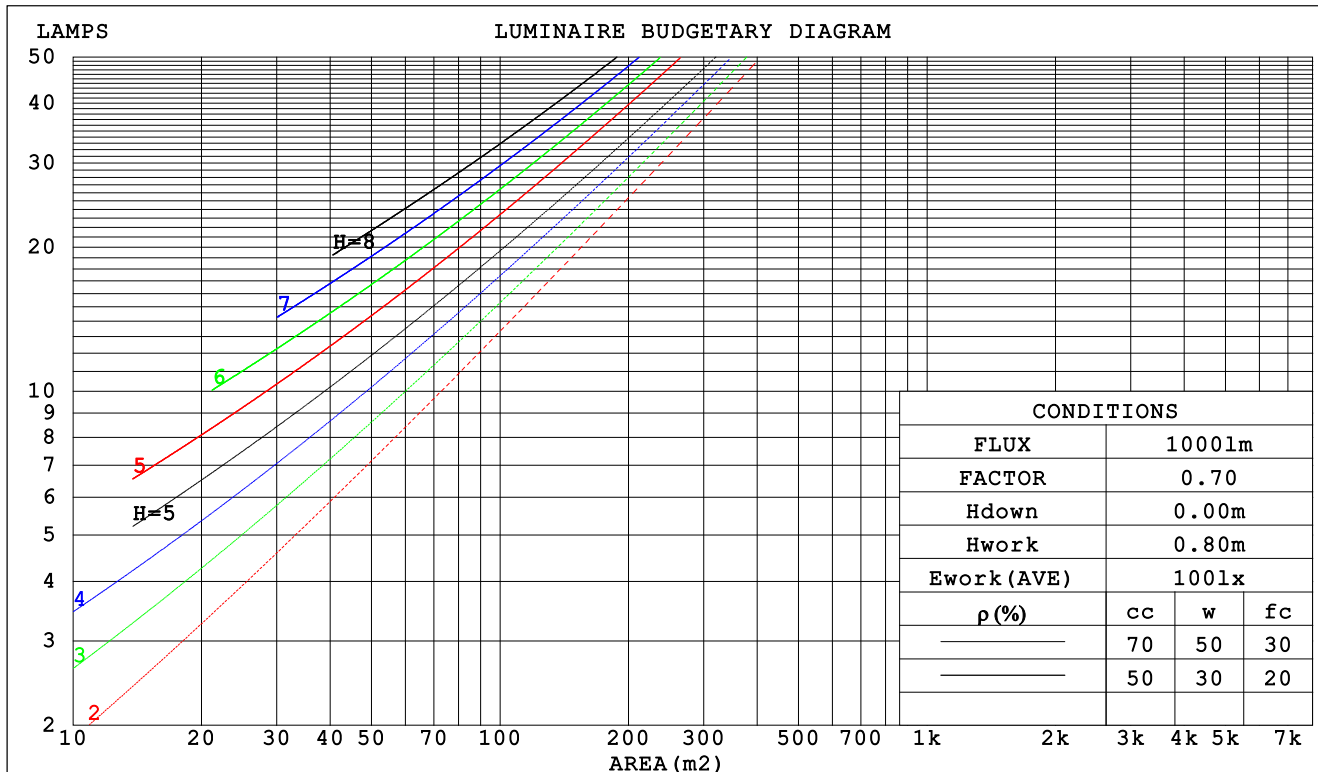
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:31 October 2024

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE: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	RCR:Room Cavity Ratio			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	1.06	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	.74	.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	.42	.55	.47	.41	.53	.46	.41	.52	.46	.41	.51	.45	.41	.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:31 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:

WEC AND CCEC

Test:U:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K 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	.136	.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	.208	.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	.092	.027		
7.0	.187	.092	.026	.183	.091	.026	.177	.090	.026	.171	.088	.026	.166	.086	.025		
8.0	.175	.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:31 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:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm										
NAME: DEEP C 150_NA_WHT_350mA_3000K 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	23.8	25.2	24.0	25.4	25.6	23.5	24.9	23.8	25.1	25.3
3H	24.5	25.7	24.7	26.0	26.2	24.1	25.3	24.3	25.6	25.8
4H	24.6	25.8	24.9	26.1	26.3	24.2	25.4	24.5	25.7	25.9
6H	24.8	25.9	25.1	26.2	26.5	24.4	25.5	24.7	25.8	26.1
8H	24.8	25.9	25.2	26.2	26.5	24.4	25.5	24.8	25.8	26.1
12H	24.8	25.9	25.2	26.2	26.5	24.4	25.5	24.8	25.8	26.1
4H 2H	24.1	25.3	24.4	25.5	25.8	23.9	25.1	24.2	25.3	25.6
3H	24.9	25.9	25.2	26.2	26.5	24.5	25.6	24.9	25.9	26.2
4H	25.1	26.1	25.5	26.4	26.7	24.8	25.7	25.1	26.0	26.4
6H	25.4	26.3	25.8	26.6	27.0	25.0	25.9	25.4	26.2	26.6
8H	25.5	26.3	25.9	26.7	27.0	25.1	25.9	25.5	26.3	26.7
12H	25.5	26.2	25.9	26.6	27.0	25.2	25.9	25.6	26.3	26.7
8H 4H	25.2	26.0	25.6	26.3	26.7	24.8	25.6	25.3	26.0	26.4
6H	25.6	26.3	26.0	26.7	27.1	25.3	25.9	25.7	26.3	26.7
8H	25.7	26.3	26.2	26.7	27.2	25.4	26.0	25.9	26.4	26.8
12H	25.8	26.3	26.3	26.7	27.2	25.5	26.0	26.0	26.4	26.9
12H 4H	25.2	25.9	25.6	26.3	26.7	24.8	25.6	25.3	25.9	26.3
6H	25.6	26.2	26.1	26.6	27.1	25.3	25.9	25.7	26.3	26.7
8H	25.8	26.3	26.3	26.7	27.2	25.5	26.0	25.9	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	+ 0.7 / - 0.7					+ 0.7 / - 0.7				

CIE Pub.117 Corrected 1133 lm Total Lamp Luminous Flux. (8log(F/F0) = 0.4)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:31 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:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

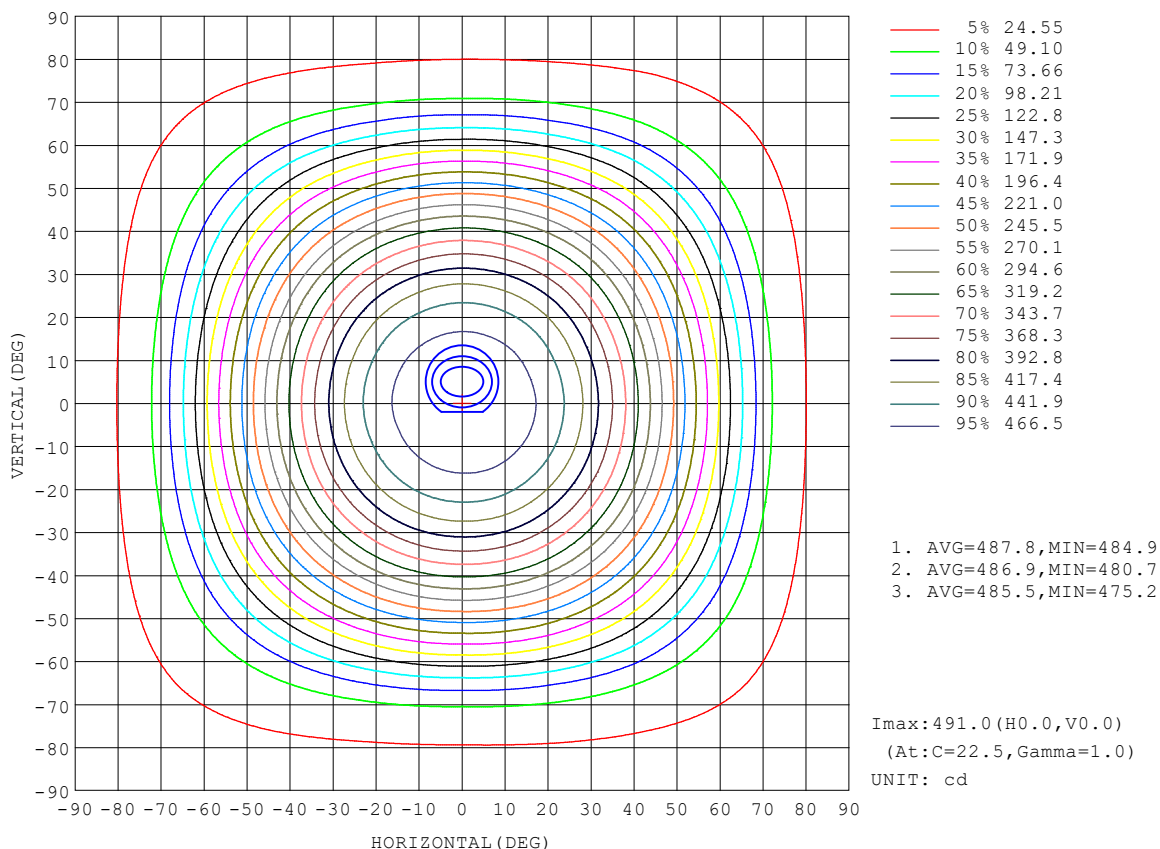
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	52	45	62	51	45	60	51	45	39
0.80	73	62	55	72	62	55	70	61	55	48
1.00	81	71	64	80	70	64	78	72	64	57
1.25	88	79	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: 31 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:

ISOCANDELA DIAGRAM

Test:U:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

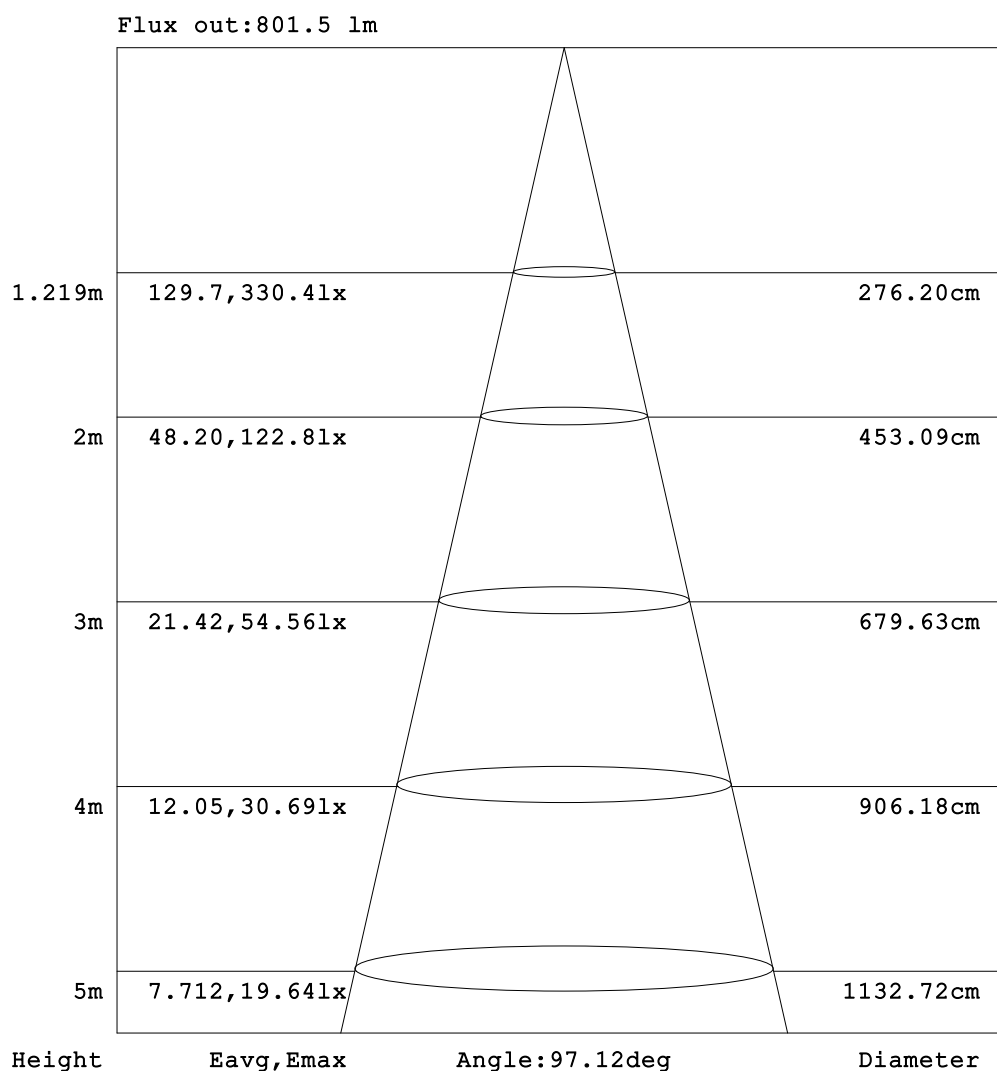


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:31 October 2024

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:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



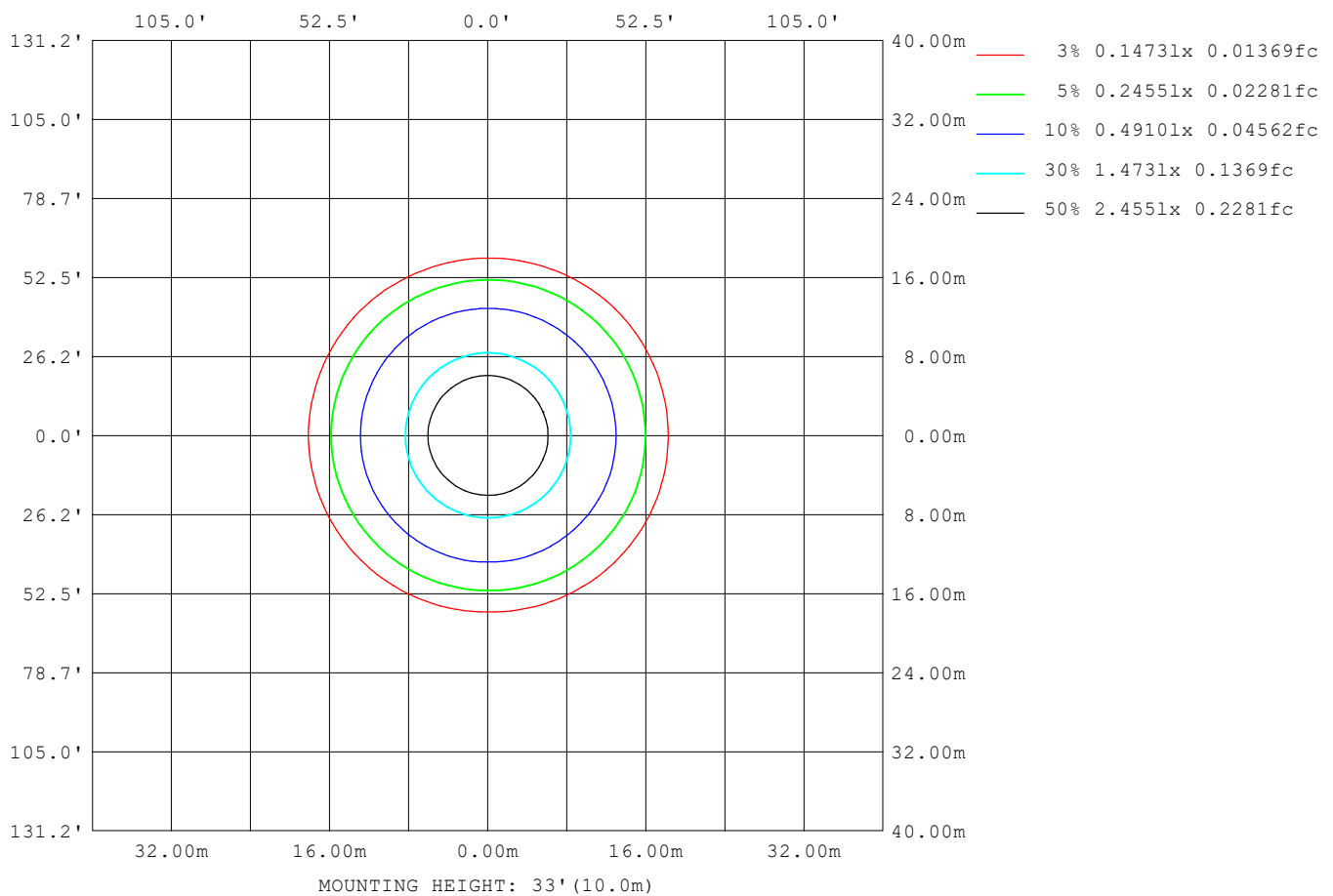
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:31 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:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K 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:31 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:

LED Avg.L Report

Test:U:240.1V I:0.0669A P:14.18W PF:0.8830 Lamp Flux:1133.23x1 lm		
NAME: DEEP C 150_NA_WHT_350mA_3000K CRI90	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

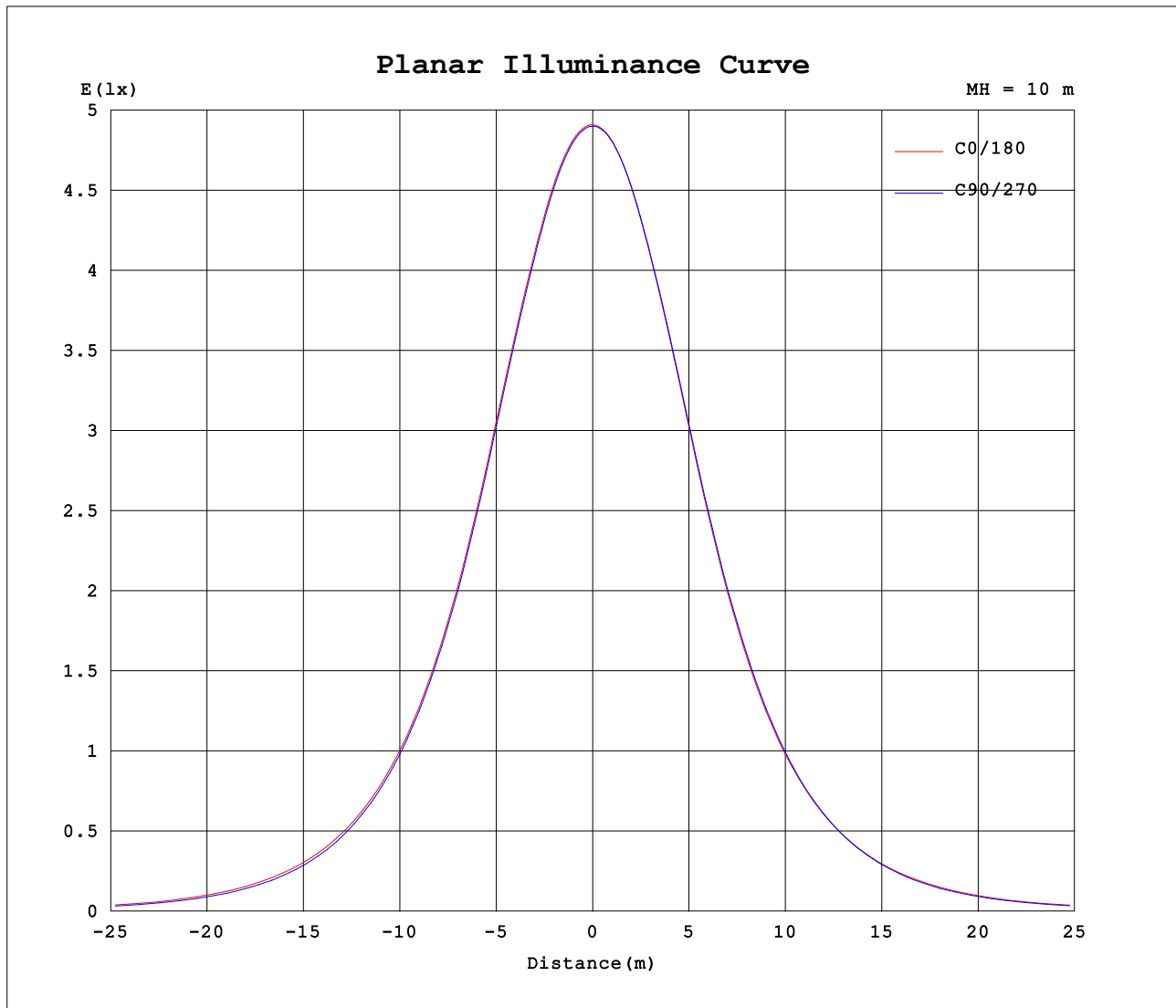
AvgL	cd/m2
L_0~180 (65) av	17508
L_0~180 (75) av	10815
L_0~180 (85) av	7129
L_90~270 (65) av	15800
L_90~270 (75) av	10393
L_90~270 (85) av	6444
L_45 (65) av	17006
L_45 (75) av	10359
L_45 (85) av	8351

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:31 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: 31 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:

