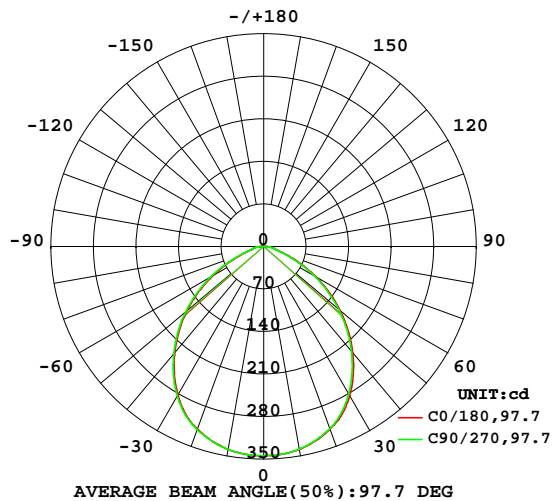
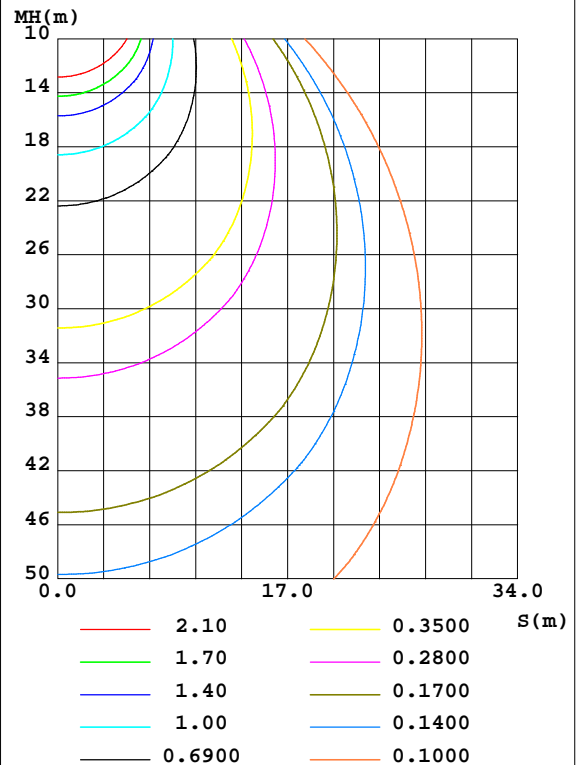


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 59.51 lm/W
MODEL		Imax(cd)	344.5	S/MH(C0/180)	1.22	
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.23	
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	793.79	η UP,DN(C0-180)	0.0,49.6	
NOMINAL FLUX(lm)	793.793	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.4	
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:Ky
Test Date:10 September 2015

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [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	343.3	343.3	343.1	343.4	343.2	343.1	343.2	343.2	0- 5	8.220	8.220	1.04,1.04
10	339.2	338.7	338.4	338.5	339.0	338.7	338.9	339.2	5- 10	24.40	32.62	4.11,4.11
15	331.0	330.5	330.1	330.5	331.0	330.8	331.3	331.9	10- 15	39.73	72.36	9.12,9.12
20	319.8	318.9	318.8	319.1	319.6	319.5	320.5	320.9	15- 20	53.61	126.0	15.9,15.9
25	305.0	303.2	302.5	303.3	304.3	304.3	305.8	306.5	20- 25	65.51	191.5	24.1,24.1
30	283.4	280.8	280.0	281.1	282.5	282.5	284.3	285.1	25- 30	74.29	265.8	33.5,33.5
35	257.1	254.7	253.7	254.8	256.4	256.7	258.9	259.4	30- 35	79.36	345.1	43.5,43.5
40	228.1	225.5	224.6	225.6	227.7	228.0	230.2	230.8	35- 40	80.73	425.9	53.6,53.6
45	197.1	194.7	193.7	194.3	197.0	197.0	199.7	199.6	40- 45	78.50	504.4	63.5,63.5
50	164.6	162.4	161.2	161.3	164.9	165.1	168.3	167.6	45- 50	72.93	577.3	72.7,72.7
55	131.6	129.3	127.9	127.6	131.1	131.9	134.9	134.6	50- 55	64.19	641.5	80.8,80.8
60	98.48	97.02	95.35	94.53	96.75	98.43	101.4	101.2	55- 60	52.77	694.2	87.5,87.5
65	66.64	65.73	63.19	62.22	64.72	66.31	68.69	69.15	60- 65	39.63	733.9	92.5,92.5
70	39.14	39.29	36.06	35.37	36.68	38.66	40.79	41.19	65- 70	26.03	759.9	95.7,95.7
75	21.56	20.95	20.45	20.15	20.49	21.02	22.24	22.73	70- 75	14.94	774.9	97.6,97.6
80	16.18	15.68	15.10	14.52	16.00	15.64	16.92	16.53	75- 80	9.988	784.8	98.9,98.9
85	6.270	8.931	7.027	7.092	6.205	7.964	9.549	9.486	80- 85	6.581	791.4	99.7,99.7
90	0.6132	1.224	0.6128	0.8190	2.153	0.3883	1.925	1.756	85- 90	2.372	793.8	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): 504.36 lm

%lum = 63.5%

%lamp = 63.5%

Conical surface Flux(120deg): 694.25 lm

%lum = 87.5%

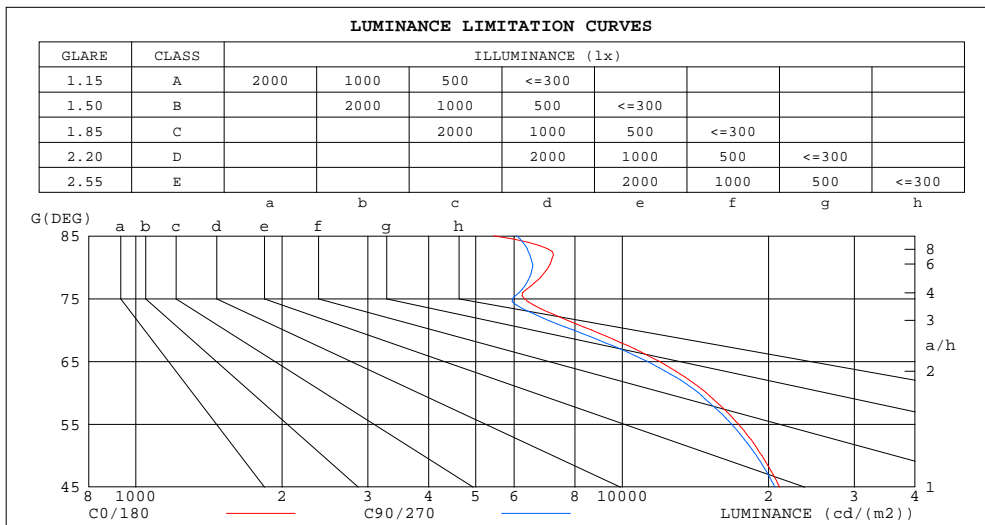
%lamp = 87.5%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:25.3DEG
 Operators:Ky
 Test Date:10 September 2015

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:7.220m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5439	6070
80	7047	6548
75	6299	5949
70	8654	7938
65	11923	11258
60	14892	14357
55	17343	16784
50	19368	18880
45	21075	20620

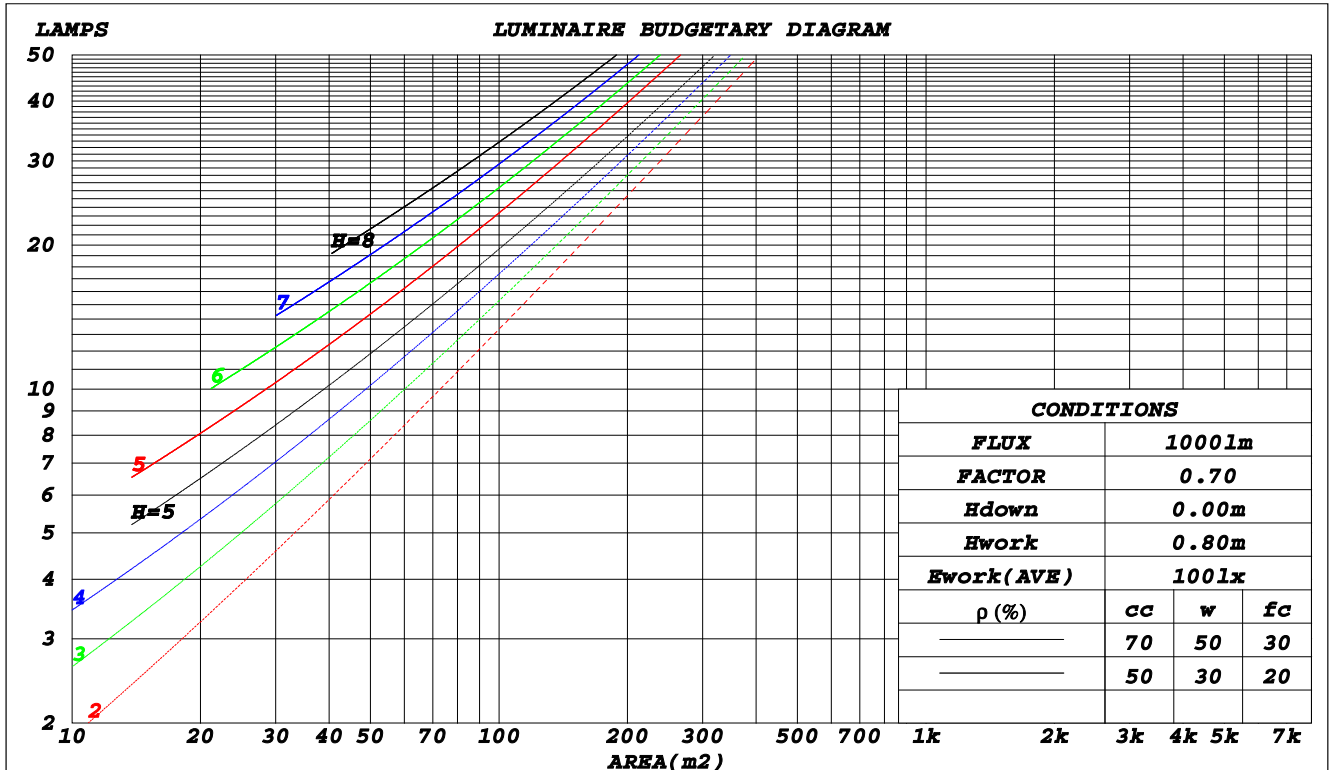
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Ky
Test Date: 10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	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	1.00
1.0	1.06	1.02	.99	1.04	1.00	.97	.90	.97	.94	.96	.94	.91	.92	.90	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.77	.74
3.0	.84	.76	.70	.82	.75	.70	.79	.73	.69	.77	.72	.67	.74	.70	.66	.64
4.0	.75	.67	.61	.74	.66	.60	.71	.65	.60	.69	.63	.59	.67	.62	.58	.56
5.0	.67	.59	.53	.66	.59	.53	.64	.57	.52	.62	.56	.52	.61	.55	.51	.49
6.0	.61	.53	.47	.60	.52	.47	.58	.51	.46	.57	.51	.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	.34	.44	.38	.33	.43	.37	.33	.32
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: MEDIUM
 Temperature: 25.3DEG
 Operators: Ky
 Test Date: 10 September 2015

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	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						Wall Exitance Coefficients(WEC)											
0.0																		
1.0	.268	.153	.048	.261	.149	.047	.248	.142	.045	.236	.136	.044	.225	.130	.042			
2.0	.257	.141	.043	.251	.138	.043	.240	.133	.041	.229	.129	.040	.220	.124	.039			
3.0	.242	.129	.039	.237	.127	.038	.227	.123	.037	.218	.119	.037	.209	.116	.036			
4.0	.227	.118	.035	.222	.116	.034	.213	.113	.034	.205	.110	.033	.197	.107	.033			
5.0	.212	.108	.031	.208	.107	.031	.200	.104	.031	.193	.102	.030	.186	.099	.030			
6.0	.199	.100	.029	.195	.098	.028	.188	.096	.028	.181	.094	.028	.175	.092	.027			
7.0	.186	.092	.026	.183	.091	.026	.177	.089	.026	.171	.088	.026	.165	.086	.025			
8.0	.175	.086	.024	.172	.085	.024	.167	.083	.024	.161	.082	.024	.156	.080	.023			
9.0	.165	.080	.022	.163	.079	.022	.157	.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			

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						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	.157	.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	.136	.098	.068	.094	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.130	.087	.054	.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	.112	.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	.102	.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: MEDIUM
Temperature: 25.3DEG
Operators: Ky
Test Date: 10 September 2015

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K					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					22.4	23.8	22.7	24.0	24.2	22.3	23.7	22.5	23.9	24.1
3H					23.0	24.3	23.3	24.5	24.8	22.8	24.1	23.1	24.4	24.6
4H					23.1	24.3	23.4	24.6	24.8	22.9	24.2	23.2	24.4	24.7
6H					23.2	24.4	23.6	24.7	24.9	23.1	24.2	23.4	24.5	24.7
8H					23.3	24.4	23.6	24.7	25.0	23.1	24.2	23.4	24.5	24.8
12H					23.3	24.4	23.7	24.7	25.0	23.1	24.2	23.5	24.5	24.8
4H 2H					22.7	23.9	23.0	24.2	24.4	22.6	23.8	22.9	24.1	24.3
3H					23.4	24.5	23.8	24.8	25.1	23.3	24.3	23.6	24.6	24.9
4H					23.6	24.6	24.0	24.9	25.2	23.5	24.4	23.8	24.7	25.1
6H					23.8	24.7	24.2	25.0	25.4	23.7	24.5	24.1	24.9	25.2
8H					24.0	24.8	24.4	25.1	25.5	23.8	24.6	24.2	24.9	25.3
12H					24.0	24.8	24.5	25.1	25.5	23.9	24.6	24.3	25.0	25.4
8H 4H					23.6	24.4	24.0	24.8	25.2	23.5	24.3	23.9	24.6	25.0
6H					24.0	24.7	24.4	25.1	25.5	23.8	24.5	24.3	24.9	25.3
8H					24.2	24.8	24.7	25.2	25.6	24.0	24.6	24.5	25.0	25.5
12H					24.3	24.8	24.8	25.3	25.7	24.2	24.7	24.7	25.1	25.6
12H 4H					23.6	24.3	24.1	24.7	25.1	23.5	24.2	23.9	24.6	25.0
6H					24.0	24.6	24.5	25.0	25.5	23.9	24.4	24.3	24.9	25.3
8H					24.3	24.7	24.7	25.2	25.7	24.1	24.6	24.6	25.0	25.5
Variations with the observer position at spacings:														
S = 1.0H					+ 0.4 / - 0.5					+ 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 793.8 lm Total Lamp Luminous Flux.(8log(F/F0) = -0.8)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Ky
Test Date:10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

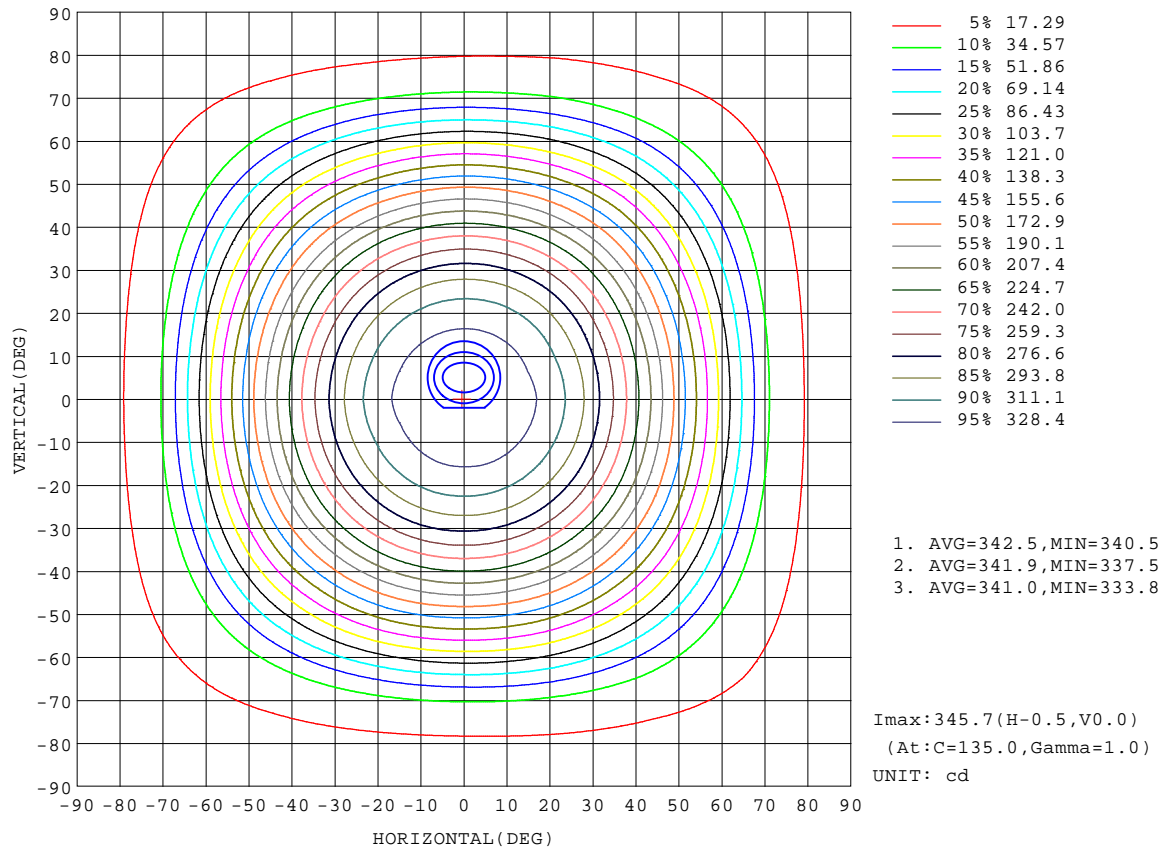
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	52	45	62	51	45	61	51	45	39
0.80	73	62	55	72	62	55	70	61	55	49
1.00	81	71	65	80	71	64	78	72	64	57
1.25	88	79	72	87	78	72	84	77	71	65
1.50	93	84	78	91	83	77	88	81	76	70
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					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Ky
Test Date:10 September 2015

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

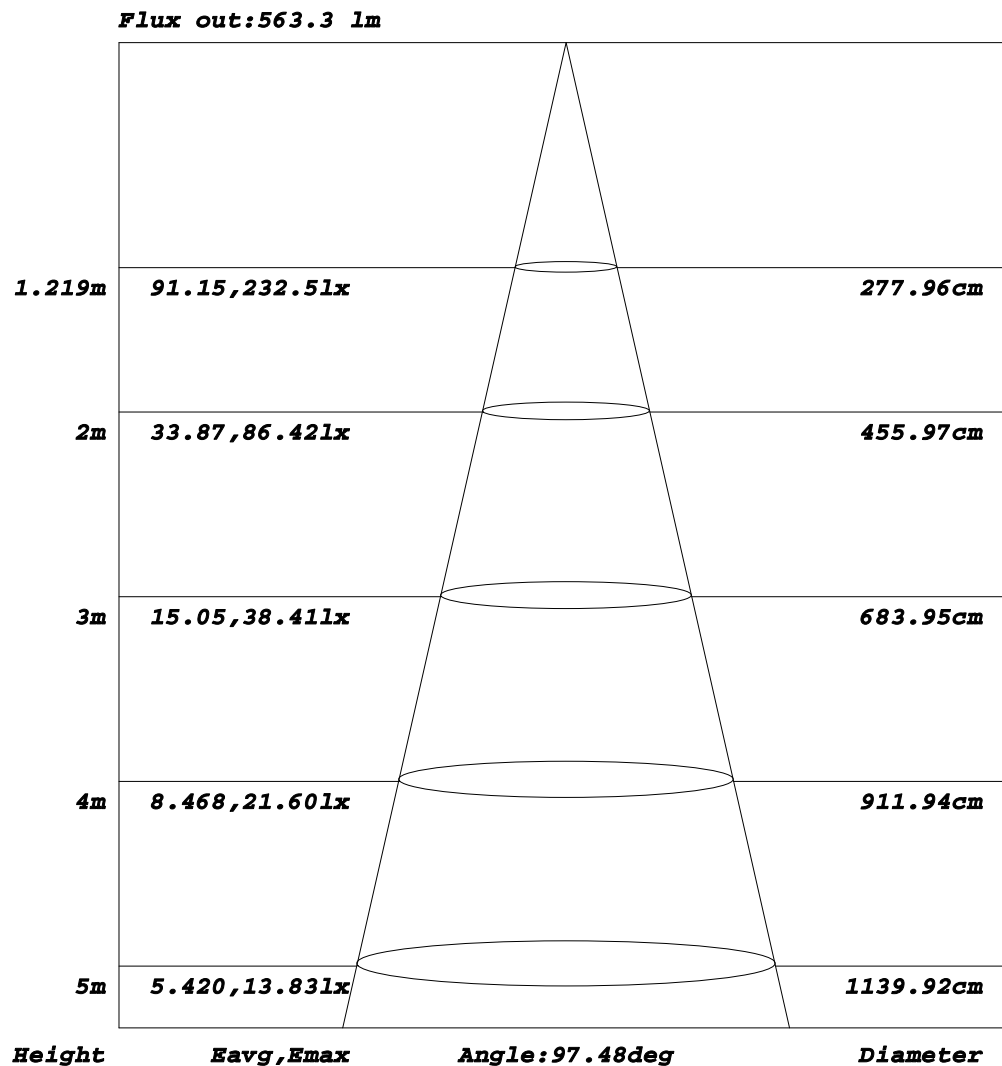


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Ky
Test Date:10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

AAI Figure

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:



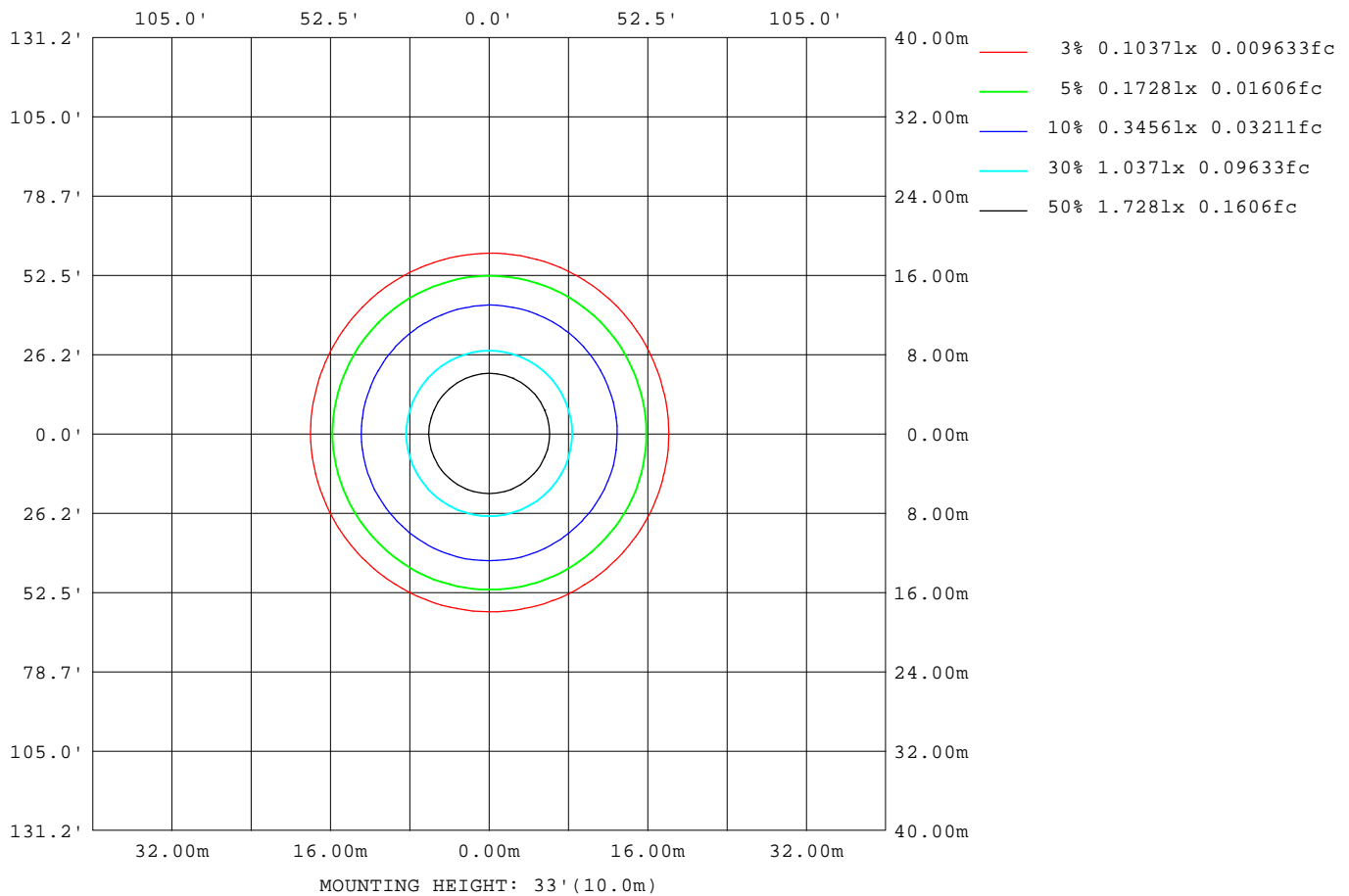
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Ky
Test Date: 10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE: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: Ky
Test Date: 10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

LED Avg.L Report

NAME: DeepC150_WHT_CLE80@500mA_13.5W_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

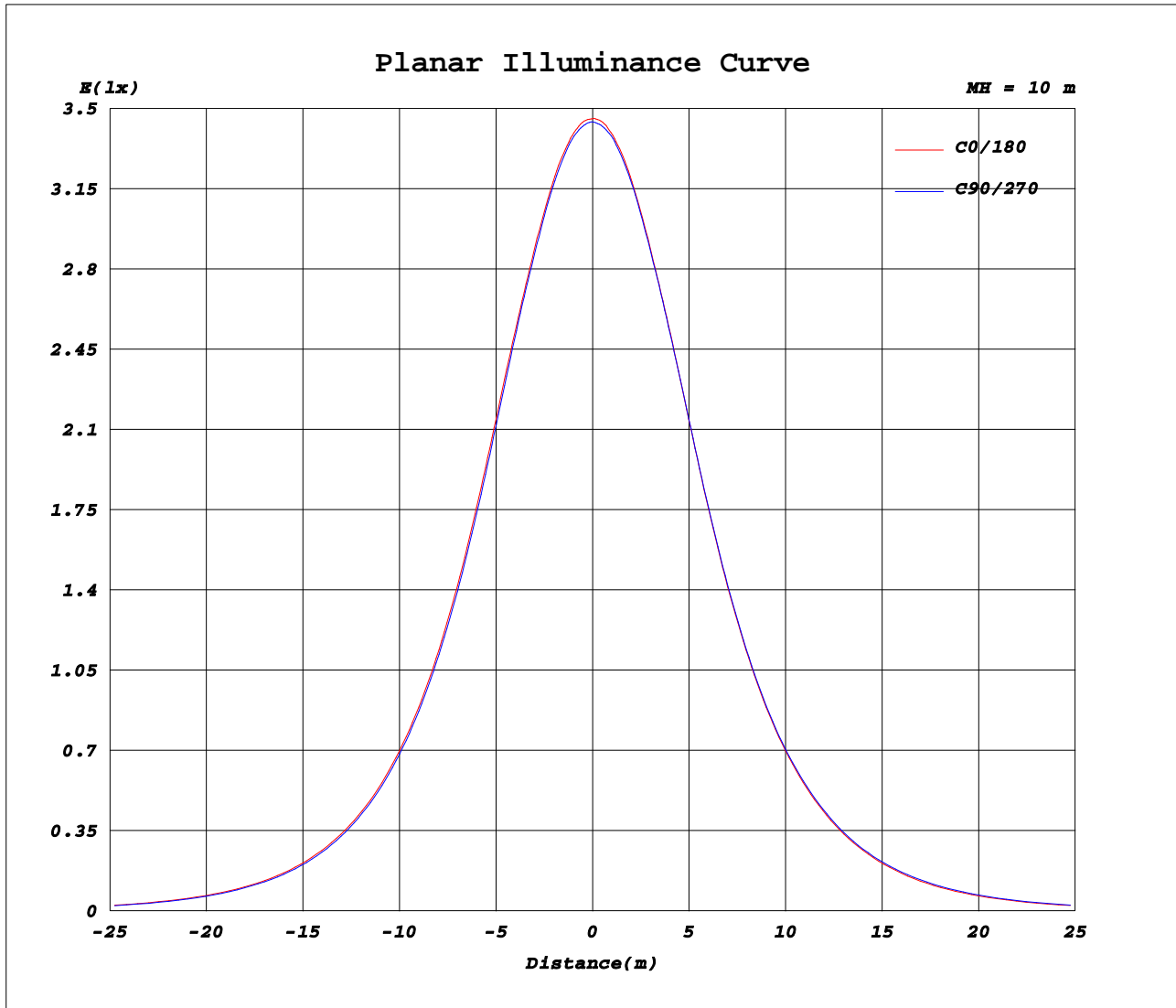
AvgL	cd/m2
L_0~180(65)av	11709
L_0~180(75)av	6120
L_0~180(85)av	5392
L_90~270(65)av	11756
L_90~270(75)av	6214
L_90~270(85)av	7165
L_45(65)av	11739
L_45(75)av	6175
L_45(85)av	7234

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature:25.3DEG
Operators:Ky
Test Date:10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 25.3DEG
Operators: Ky
Test Date: 10 September 2015

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

