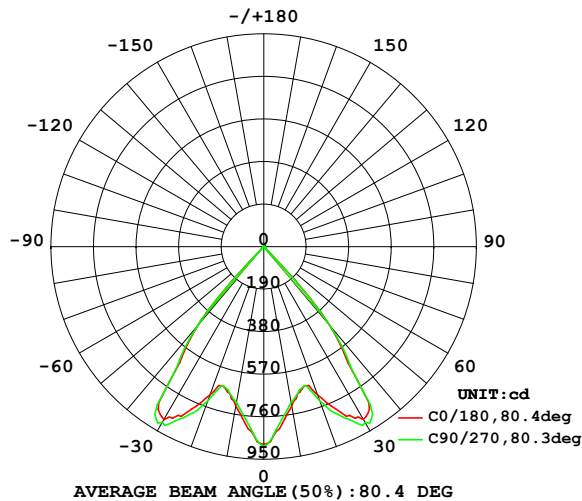


LUMINAIRE PHOTOMETRIC TEST REPORT

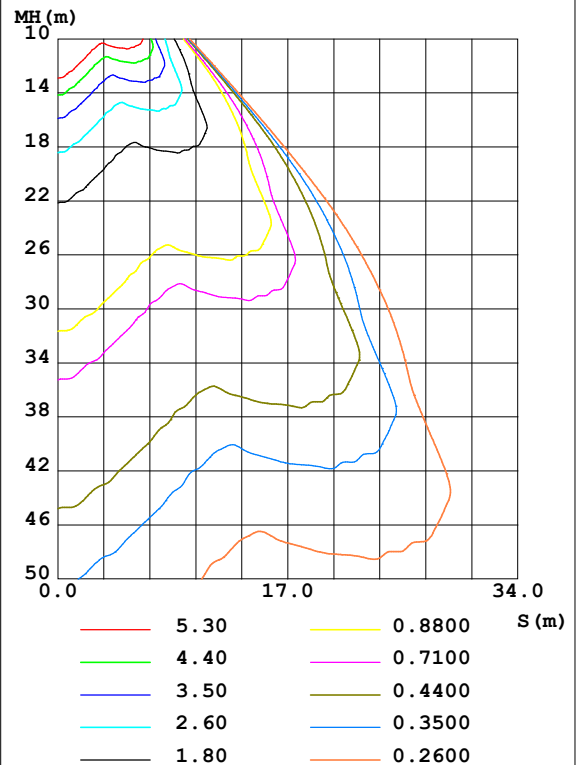
Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 97.37 lm/W			
MODEL		I _{max} (cd)	919.7	S/MH (C0/180)	1.17
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	1.17
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	1200.0	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	1199.96	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	120	η down (%)	100.0	CIBSE SHR MAX	0.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Aaron
Test Date: 2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity: 65.0%
Test Distance: 10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum
10	723.1	707.3	723.1	707.3					0- 10	73.93	73.93	6.16
20	704.0	733.3	704.0	733.3					10- 20	191.2	265.1	22.1
30	891.3	906.2	891.3	906.2					20- 30	383.5	648.5	54
40	454.6	459.0	454.6	459.0					30- 40	449.7	1098	91.5
50	9.383	10.90	9.383	10.90					40- 50	93.27	1192	99.3
60	2.699	3.395	2.699	3.395					50- 60	5.146	1197	99.7
70	1.017	1.298	1.017	1.298					60- 70	1.902	1199	99.9
80	0.2708	0.3587	0.2708	0.3587					70- 80	0.7595	1199	99.9
90	0	0	0	0					80- 90	0.0712	1199	100
100	0	0	0	0					90-100	0	1199	100
110	0	0	0	0					100-110	0	1199	100
120	0	0	0	0					110-120	0	1199	100
130	0.0318	0.0515	0.0318	0.0515					120-130	0.0051	1199	100
140	0.1799	0.1865	0.1799	0.1865					130-140	0.0838	1199	100
150	0.2765	0.2893	0.2765	0.2893					140-150	0.1479	1200	100
160	0.3792	0.3987	0.3792	0.3987					150-160	0.1484	1200	100
170	0.5529	0.5853	0.5529	0.5853					160-170	0.1305	1200	100
180	0.6430	0.6494	0.6430	0.6494					170-180	0.0584	1200	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

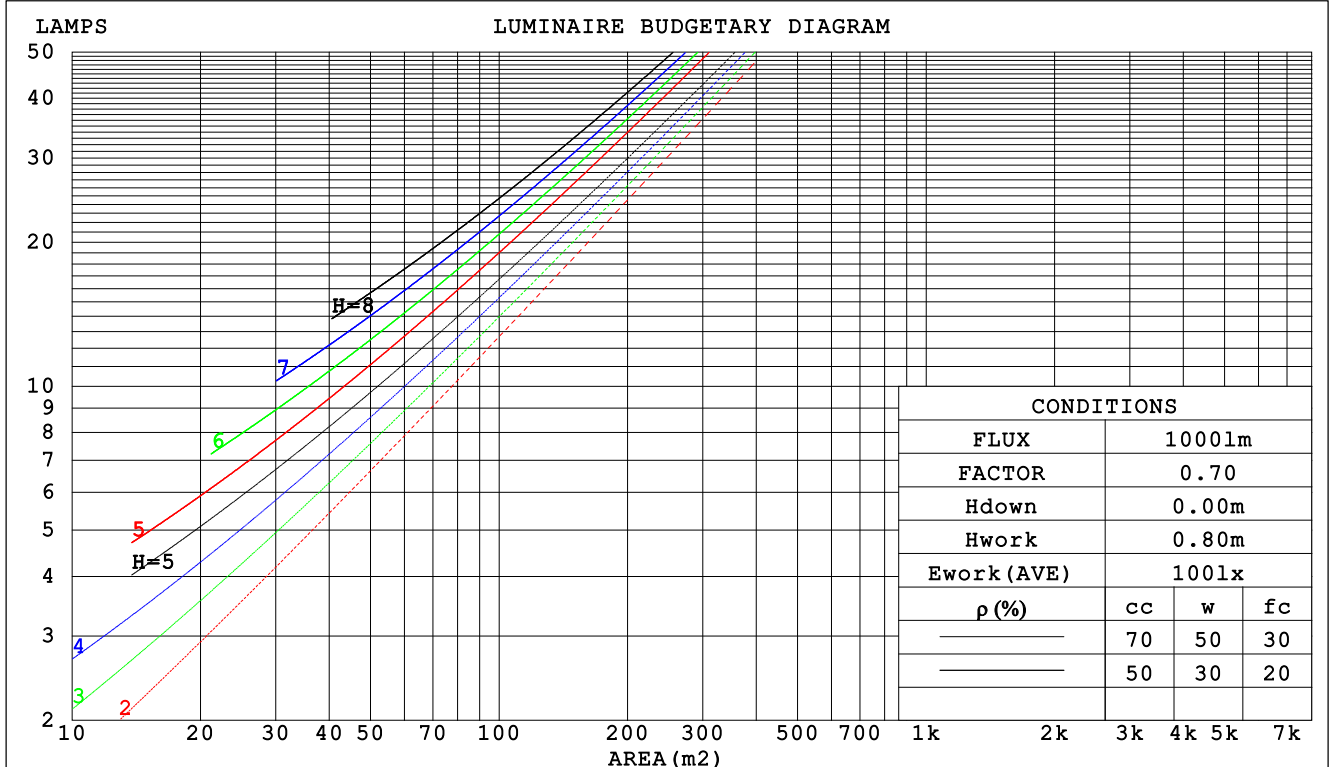
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION 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)															
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	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	1.00	1.00	.98	.97	.97	.95	.94	.92
2.0	1.01	.97	.93	.90	.96	.92	.96	.93	.90	.93	.91	.88	.91	.88	.86	.85
3.0	.94	.88	.84	.82	.87	.83	.89	.85	.82	.87	.83	.80	.85	.82	.79	.78
4.0	.86	.80	.76	.75	.80	.75	.83	.78	.74	.81	.77	.73	.79	.75	.73	.71
5.0	.80	.73	.69	.68	.73	.68	.77	.72	.68	.75	.71	.67	.74	.70	.66	.65
6.0	.74	.67	.63	.63	.67	.62	.72	.66	.62	.70	.65	.61	.69	.64	.61	.59
7.0	.69	.62	.57	.62	.62	.57	.67	.61	.57	.65	.60	.56	.64	.60	.56	.55
8.0	.64	.57	.52	.57	.57	.52	.62	.56	.52	.61	.56	.52	.60	.55	.52	.50
9.0	.59	.53	.48	.52	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.46
10.0	.55	.49	.45	.49	.49	.44	.54	.48	.44	.53	.48	.44	.52	.48	.44	.43



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

WEC AND CCEC

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION 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	.192	.109	.035	.185	.105	.034	.172	.099	.032	.161	.093	.030	.150	.087	.028		
2.0	.186	.102	.031	.180	.099	.031	.169	.094	.029	.160	.089	.028	.150	.085	.027		
3.0	.179	.095	.028	.174	.093	.028	.165	.089	.027	.156	.085	.026	.148	.082	.025		
4.0	.171	.089	.026	.167	.087	.026	.159	.084	.025	.152	.081	.025	.145	.079	.024		
5.0	.164	.084	.024	.160	.082	.024	.153	.080	.024	.147	.077	.023	.141	.075	.023		
6.0	.157	.079	.023	.154	.078	.022	.148	.076	.022	.142	.074	.022	.136	.072	.021		
7.0	.151	.075	.021	.148	.074	.021	.142	.072	.021	.137	.070	.020	.132	.069	.020		
8.0	.144	.071	.020	.142	.070	.020	.137	.068	.020	.132	.067	.019	.128	.065	.019		
9.0	.139	.067	.019	.136	.066	.019	.132	.065	.018	.127	.064	.018	.123	.063	.018		
10.0	.133	.064	.018	.131	.063	.018	.127	.062	.017	.123	.061	.017	.119	.060	.017		

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	.191	.191	.191	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.173	.158	.144	.148	.135	.124	.101	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.158	.133	.111	.136	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.088	.126	.098	.076	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.100	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.130	.088	.057	.112	.076	.050	.077	.053	.035	.045	.031	.021	.014	.010	.007	
6.0	.124	.079	.048	.106	.069	.041	.073	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.118	.072	.040	.101	.062	.035	.070	.044	.025	.041	.026	.015	.013	.008	.005	
8.0	.112	.066	.034	.097	.057	.030	.067	.040	.021	.039	.024	.013	.013	.008	.004	
9.0	.108	.061	.030	.093	.053	.026	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.023	.062	.035	.016	.036	.021	.010	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

UGR(Unified Glare Rating) Table

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm										
NAME: 15ADL/80°lens 120-277V					TYPE:LED			WEIGHT:		
SPEC.:15ADL/80°lens 120-277V					DIM.:			SERIAL No.:02		
MFR.: GREEN CREATIVE					SUR.:			PROTECTION 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	9.5	10.6	9.8	10.8	11.0	9.6	10.7	9.8	10.8	11.0
3H	9.3	10.3	9.6	10.5	10.7	9.4	10.4	9.7	10.6	10.8
4H	9.3	10.2	9.5	10.4	10.6	9.3	10.2	9.6	10.5	10.7
6H	9.2	10.0	9.5	10.3	10.5	9.2	10.1	9.5	10.3	10.6
8H	9.1	9.9	9.4	10.2	10.5	9.2	10.0	9.5	10.3	10.5
12H	9.1	9.9	9.4	10.1	10.4	9.1	9.9	9.5	10.2	10.5
4H 2H	9.3	10.2	9.5	10.4	10.6	9.3	10.2	9.6	10.5	10.7
3H	9.1	9.9	9.4	10.1	10.4	9.1	9.9	9.5	10.2	10.5
4H	9.0	9.7	9.3	10.0	10.3	9.0	9.7	9.4	10.1	10.4
6H	8.9	9.5	9.3	9.8	10.2	8.9	9.6	9.3	9.9	10.3
8H	8.8	9.4	9.2	9.8	10.1	8.9	9.5	9.3	9.8	10.2
12H	8.8	9.3	9.2	9.7	10.1	8.9	9.4	9.3	9.7	10.1
8H 4H	8.8	9.4	9.2	9.8	10.1	8.9	9.5	9.3	9.8	10.2
6H	8.7	9.2	9.2	9.6	10.0	8.8	9.3	9.2	9.7	10.1
8H	8.7	9.1	9.1	9.5	10.0	8.8	9.2	9.2	9.6	10.0
12H	8.6	9.0	9.1	9.4	9.9	8.7	9.1	9.2	9.5	10.0
12H 4H	8.8	9.3	9.2	9.7	10.1	8.9	9.4	9.3	9.7	10.1
6H	8.7	9.1	9.1	9.5	10.0	8.8	9.2	9.2	9.6	10.0
8H	8.6	9.0	9.1	9.4	9.9	8.7	9.1	9.2	9.5	10.0
Variations with the observer position at spacings:										
S = 1.0H	+ 2.8 / -22.4					+ 3.0 / -21.6				
1.5H	+ 5.7 / -20.1					+ 5.8 / -19.7				
2.0H	+ 5.6 / - 4.3					+ 5.0 / - 4.2				

CIE Pub.117 Corrected 1200 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.6)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

UTILIZATION FACTORS TABLE

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION 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) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	80	76	85	79	76	72
0.80	94	88	84	93	88	84	92	87	84	80
1.00	99	93	89	98	93	89	96	92	89	85
1.25	103	98	94	102	97	94	100	96	93	89
1.50	106	101	98	104	100	97	102	99	96	91
2.00	108	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	102	105	103	101	95
3.00	112	108	106	110	107	104	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

ISOCANDELA DIAGRAM

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

1185.6 lm

%lum = 98.8%

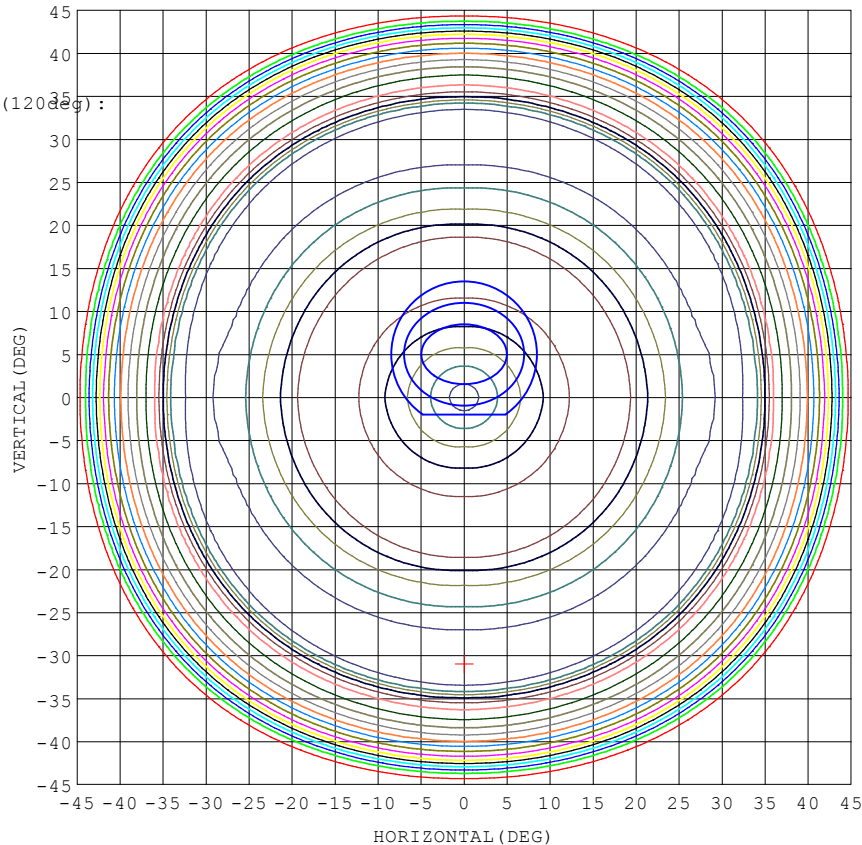
%lamp = 98.8%

Conical surface Flux(120deg):

1196.7 lm

%lum = 99.7%

%lamp = 99.7%



5%	45.98
10%	91.97
15%	137.9
20%	183.9
25%	229.9
30%	275.9
35%	321.9
40%	367.9
45%	413.8
50%	459.8
55%	505.8
60%	551.8
65%	597.8
70%	643.8
75%	689.7
80%	735.7
85%	781.7
90%	827.7
95%	873.7

1. AVG=790.0,MIN=730.5
2. AVG=780.5,MIN=696.9
3. AVG=765.9,MIN=667.0

Imax:919.7 (H0.0,V-31.0)
(At:C=90.0,Gamma=31.0)

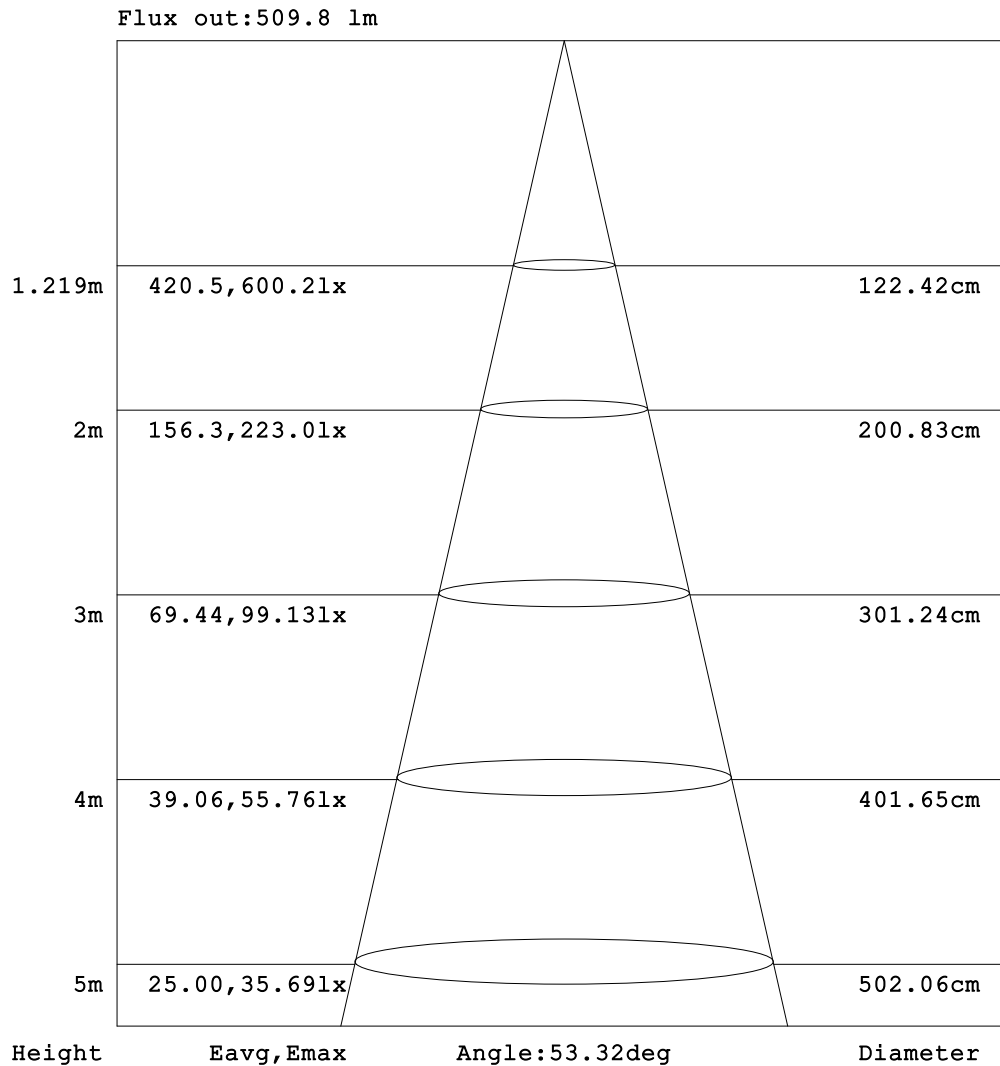
UNIT: cd

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

AAI Figure

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



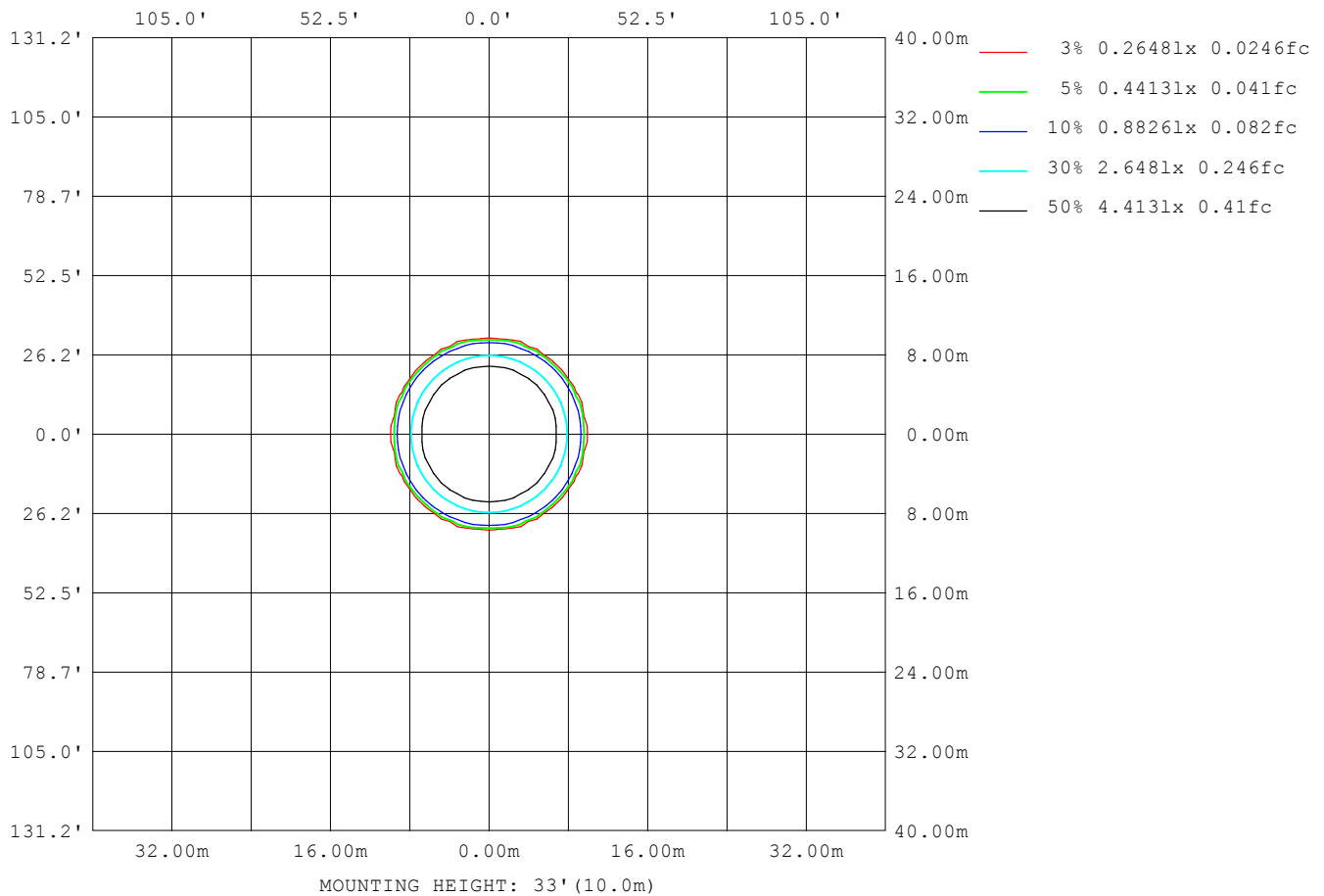
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

ISOLUX DIAGRAM

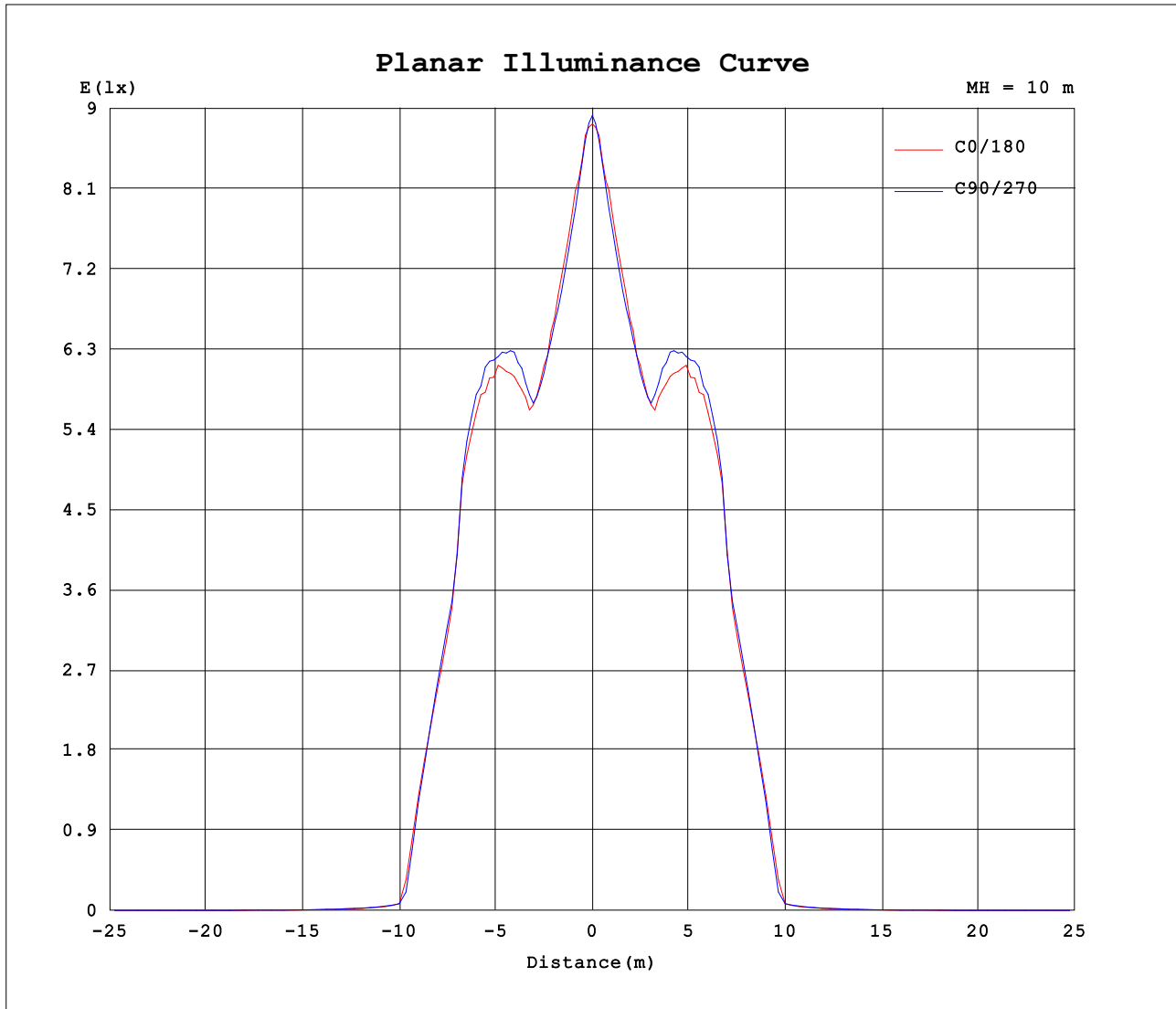
Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Aaron
 Test Date: 2018-01-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.291
 Humidity: 65.0%
 Test Distance: 10.830m [K=1.0000]
 Remarks: 2700K, 80° lens
 2#反射器, ADR8CC 98054

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.4V I:0.1145A P:12.32W PF:0.8937 Lamp Flux:1199.96x1 lm		
NAME: 15ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/80°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	883	892	883	892															
5	817	796	817	796															
10	723	707	723	707															
15	659	654	659	654															
20	704	733	704	733															
25	818	842	818	842															
30	891	906	891	906															
35	734	726	734	726															
40	455	459	455	459															
45	22.0	21.6	22.0	21.6															
50	9.38	10.9	9.38	10.9															
55	4.91	5.90	4.91	5.90															
60	2.70	3.39	2.70	3.39															
65	1.62	2.06	1.62	2.06															
70	1.02	1.30	1.02	1.30															
75	0.62	0.80	0.62	0.80															
80	0.27	0.36	0.27	0.36															
85	0.00	0.00	0.00	0.00															
90	0.00	0.00	0.00	0.00															
95	0.00	0.00	0.00	0.00															
100	0.00	0.00	0.00	0.00															
105	0.00	0.00	0.00	0.00															
110	0.00	0.00	0.00	0.00															
115	0.00	0.00	0.00	0.00															
120	0.00	0.00	0.00	0.00															
125	0.00	0.00	0.00	0.00															
130	0.03	0.05	0.03	0.05															
135	0.10	0.12	0.10	0.12															
140	0.18	0.19	0.18	0.19															
145	0.23	0.24	0.23	0.24															
150	0.28	0.29	0.28	0.29															
155	0.30	0.33	0.30	0.33															
160	0.38	0.40	0.38	0.40															
165	0.45	0.48	0.45	0.48															
170	0.55	0.59	0.55	0.59															
175	0.61	0.65	0.61	0.65															
180	0.64	0.65	0.64	0.65															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.291
Humidity:65.0%
Test Distance:10.830m [K=1.0000]
Remarks: 2700K, 80°lens
2#反射器, ADR8CC 98054