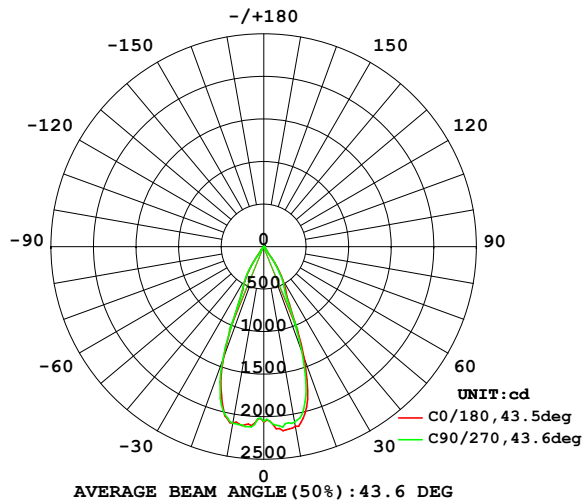


## LUMINAIRE PHOTOMETRIC TEST REPORT

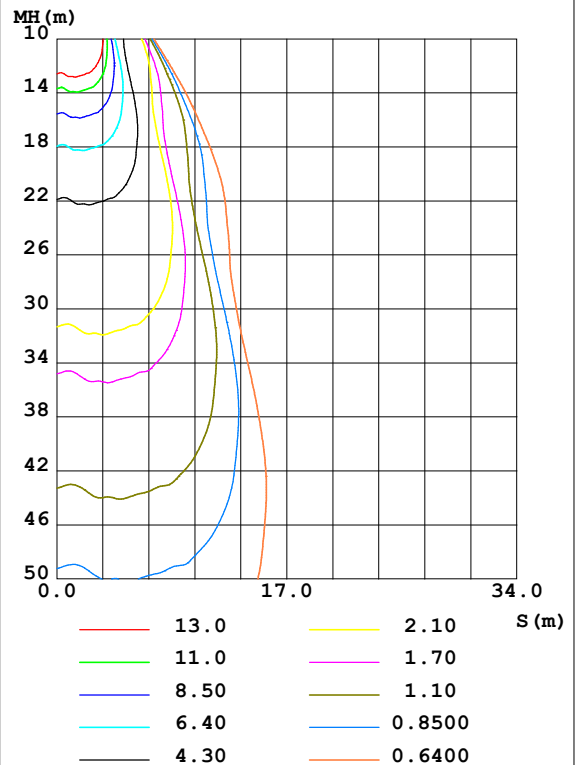
Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 96.28 lm/W			
MODEL		I <sub>max</sub> (cd)	2174	S/MH (C0/180)	0.64
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.64
RATED VOLTAGE (V)	120-277	TOTAL FLUX (lm)	1174.1	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	1174.06	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up (%)	0.1	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	120	η down (%)	99.9	CIBSE SHR MAX	0.60

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, 40°lens  
2#反射器, ADR8CC 98054

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C90	C180	C270					$\gamma$	$\Phi$ zone	$\Phi$ total	%lum
10	2143	2095	2106	2108					0- 10	201.7	201.7	17.2
20	1394	1314	1380	1417					10- 20	515.4	717.1	61.1
30	449.6	422.3	427.5	443.4					20- 30	332.9	1050	89.4
40	42.73	42.85	36.41	37.55					30- 40	111.8	1162	99
50	3.070	3.631	2.430	3.090					40- 50	9.276	1171	99.7
60	0.9338	1.212	0.6758	1.015					50- 60	1.595	1173	99.9
70	0.2686	0.3946	0.1403	0.3068					60- 70	0.5538	1173	99.9
80	0	0	0	0					70- 80	0.1111	1173	99.9
90	0	0	0	0					80- 90	0	1173	99.9
100	0	0	0	0					90-100	0	1173	99.9
110	0	0	0	0					100-110	0	1173	99.9
120	0	0	0	0					110-120	0	1173	99.9
130	0	0	0	0					120-130	0	1173	99.9
140	0.1912	0.2172	0.2109	0.1785					130-140	0.0582	1173	99.9
150	0.4526	0.4853	0.4662	0.4274					140-150	0.2045	1174	100
160	0.6126	0.6510	0.6318	0.5999					150-160	0.2550	1174	100
170	0.6382	0.6574	0.6574	0.6254					160-170	0.1802	1174	100
180	0.6829	0.6829	0.6957	0.6829					170-180	0.0624	1174	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

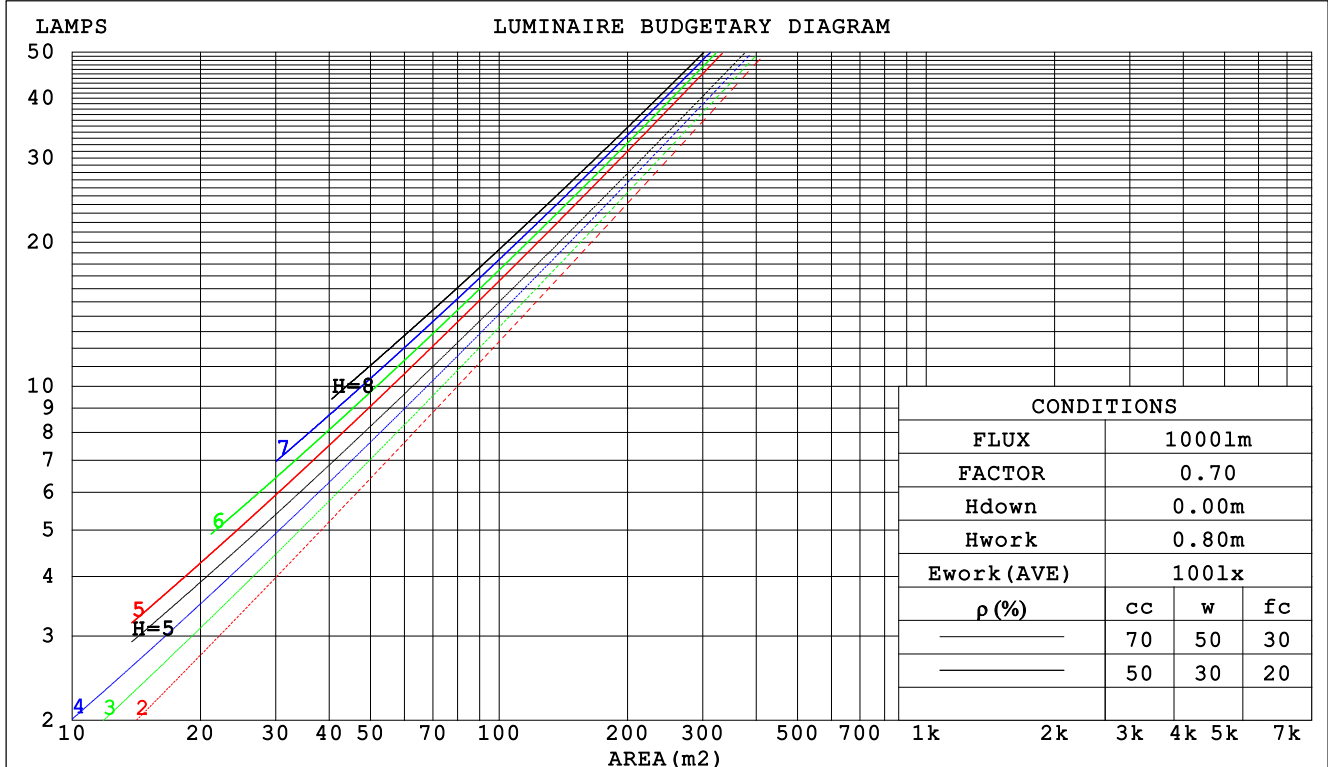
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Aaron  
Test Date:2018-01-29

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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, 40°lens  
2#反射器, ADR8CC 98054

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	1.12	1.10	1.08	1.10	1.08	1.06	1.06	1.04	1.03	1.02	1.01	.00	.99	.98	.97	.95
2.0	1.06	1.02	.99	1.04	1.01	.98	1.01	.98	.96	.98	.96	.94	.95	.94	.92	.91
3.0	1.00	.96	.92	.99	.95	.92	.96	.93	.90	.94	.91	.89	.92	.89	.88	.86
4.0	.95	.90	.87	.94	.90	.86	.92	.88	.85	.90	.87	.84	.88	.85	.83	.82
5.0	.90	.85	.82	.89	.85	.81	.88	.84	.81	.86	.83	.80	.85	.82	.79	.78
6.0	.86	.81	.78	.85	.81	.77	.84	.80	.77	.83	.79	.76	.81	.78	.76	.75
7.0	.82	.77	.74	.82	.77	.73	.80	.76	.73	.79	.76	.73	.78	.75	.72	.71
8.0	.79	.74	.70	.78	.73	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.68
9.0	.75	.70	.67	.75	.70	.67	.74	.70	.67	.73	.69	.66	.72	.69	.66	.65
10.0	.72	.67	.64	.72	.67	.64	.71	.67	.64	.70	.66	.64	.70	.66	.64	.62



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, 40°lens  
2#反射器, ADR8CC 98054

## WEC AND CCEC

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°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	.155	.088	.028	.148	.084	.027	.136	.078	.025	.124	.072	.023	.113	.066	.021		
2.0	.146	.080	.024	.140	.077	.024	.130	.072	.022	.120	.067	.021	.111	.063	.020		
3.0	.138	.073	.022	.133	.071	.021	.124	.067	.020	.116	.064	.019	.108	.060	.019		
4.0	.130	.068	.020	.126	.066	.020	.119	.063	.019	.112	.060	.018	.105	.057	.017		
5.0	.124	.063	.018	.121	.062	.018	.114	.059	.017	.108	.057	.017	.102	.055	.016		
6.0	.118	.059	.017	.115	.058	.017	.110	.056	.016	.104	.054	.016	.099	.052	.016		
7.0	.113	.056	.016	.110	.055	.016	.106	.053	.015	.101	.052	.015	.097	.050	.015		
8.0	.108	.053	.015	.106	.052	.015	.102	.051	.015	.098	.049	.014	.094	.048	.014		
9.0	.104	.050	.014	.102	.050	.014	.098	.049	.014	.094	.047	.014	.091	.046	.013		
10.0	.100	.048	.013	.098	.047	.013	.095	.046	.013	.091	.045	.013	.088	.044	.013		

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	.170	.158	.147	.146	.136	.127	.100	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.153	.133	.116	.131	.115	.100	.090	.079	.070	.052	.046	.041	.017	.015	.013	
3.0	.139	.114	.094	.120	.098	.081	.082	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.128	.099	.077	.110	.085	.066	.076	.060	.047	.044	.035	.028	.014	.011	.009	
5.0	.119	.087	.063	.102	.075	.055	.070	.053	.039	.041	.031	.023	.013	.010	.008	
6.0	.110	.077	.053	.095	.067	.046	.065	.047	.033	.038	.028	.020	.012	.009	.006	
7.0	.104	.069	.045	.089	.060	.040	.062	.042	.028	.036	.025	.017	.012	.008	.006	
8.0	.098	.063	.039	.084	.055	.034	.058	.038	.024	.034	.023	.014	.011	.007	.005	
9.0	.092	.058	.034	.080	.050	.030	.055	.035	.021	.032	.021	.013	.010	.007	.004	
10.0	.088	.053	.030	.076	.046	.026	.053	.032	.018	.031	.019	.011	.010	.006	.004	

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, 40°lens  
2#反射器, ADR8CC 98054

## UGR(Unified Glare Rating) Table

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm										
NAME: 15ADL/40°lens 120-277V					TYPE:LED			WEIGHT:		
SPEC.:15ADL/40°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	-0.0	0.8	0.2	0.9	1.1	-0.5	0.3	-0.3	0.5	0.6
3H	-0.2	0.5	0.1	0.7	0.9	-0.6	0.1	-0.4	0.3	0.5
4H	-0.3	0.4	0.0	0.6	0.9	-0.7	-0.0	-0.5	0.2	0.4
6H	-0.4	0.3	-0.1	0.5	0.8	-0.8	-0.2	-0.5	0.1	0.3
8H	-0.4	0.2	-0.1	0.5	0.7	-0.8	-0.2	-0.5	0.0	0.3
12H	-0.4	0.2	-0.1	0.4	0.7	-0.9	-0.3	-0.6	-0.0	0.2
4H 2H	-0.3	0.4	0.0	0.6	0.9	-0.7	-0.0	-0.5	0.2	0.4
3H	-0.4	0.2	-0.1	0.4	0.7	-0.9	-0.3	-0.6	-0.0	0.2
4H	-0.5	0.0	-0.2	0.3	0.6	-1.0	-0.4	-0.6	-0.1	0.2
6H	-0.6	-0.2	-0.3	0.2	0.5	-1.1	-0.6	-0.7	-0.3	0.1
8H	-0.7	-0.2	-0.3	0.1	0.5	-1.1	-0.7	-0.7	-0.3	0.0
12H	-0.7	-0.3	-0.3	0.0	0.4	-1.2	-0.8	-0.8	-0.4	-0.0
8H 4H	-0.7	-0.2	-0.3	0.1	0.5	-1.1	-0.7	-0.7	-0.3	0.0
6H	-0.8	-0.4	-0.4	-0.0	0.4	-1.2	-0.9	-0.8	-0.5	-0.1
8H	-0.9	-0.5	-0.4	-0.1	0.3	-1.3	-1.0	-0.9	-0.6	-0.1
12H	-0.9	-0.6	-0.4	-0.2	0.3	-1.4	-1.1	-0.9	-0.6	-0.2
12H 4H	-0.7	-0.3	-0.3	0.0	0.4	-1.2	-0.8	-0.8	-0.4	-0.0
6H	-0.9	-0.5	-0.4	-0.1	0.3	-1.3	-1.0	-0.9	-0.6	-0.1
8H	-0.9	-0.6	-0.4	-0.2	0.3	-1.4	-1.1	-0.9	-0.6	-0.2
Variations with the observer position at spacings:										
S = 1.0H	+ 4.1 / -14.8					+ 3.8 / -13.4				
1.5H	+ 6.8 / -12.2					+ 6.4 / -11.4				
2.0H	+ 7.1 / - 5.8					+ 6.9 / - 5.5				

CIE Pub.117 Corrected 1174 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, 40°lens  
2#反射器, ADR8CC 98054

## UTILIZATION FACTORS TABLE

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°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) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	82	90	85	82	90	85	82	78
0.80	98	93	89	97	92	89	96	92	89	86
1.00	102	97	93	101	96	93	99	96	93	89
1.25	105	101	97	104	100	97	102	99	96	92
1.50	108	103	100	106	103	100	104	101	99	95
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	107	104	107	104	102	97
3.00	113	110	107	111	108	106	108	105	104	98
4.00	115	112	110	112	110	109	109	107	106	99
5.00	116	114	112	114	112	110	110	108	107	100
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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, 40°lens  
2#反射器, ADR8CC 98054

## ISOCANDELA DIAGRAM

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

1169.1 lm

%lum = 99.6%

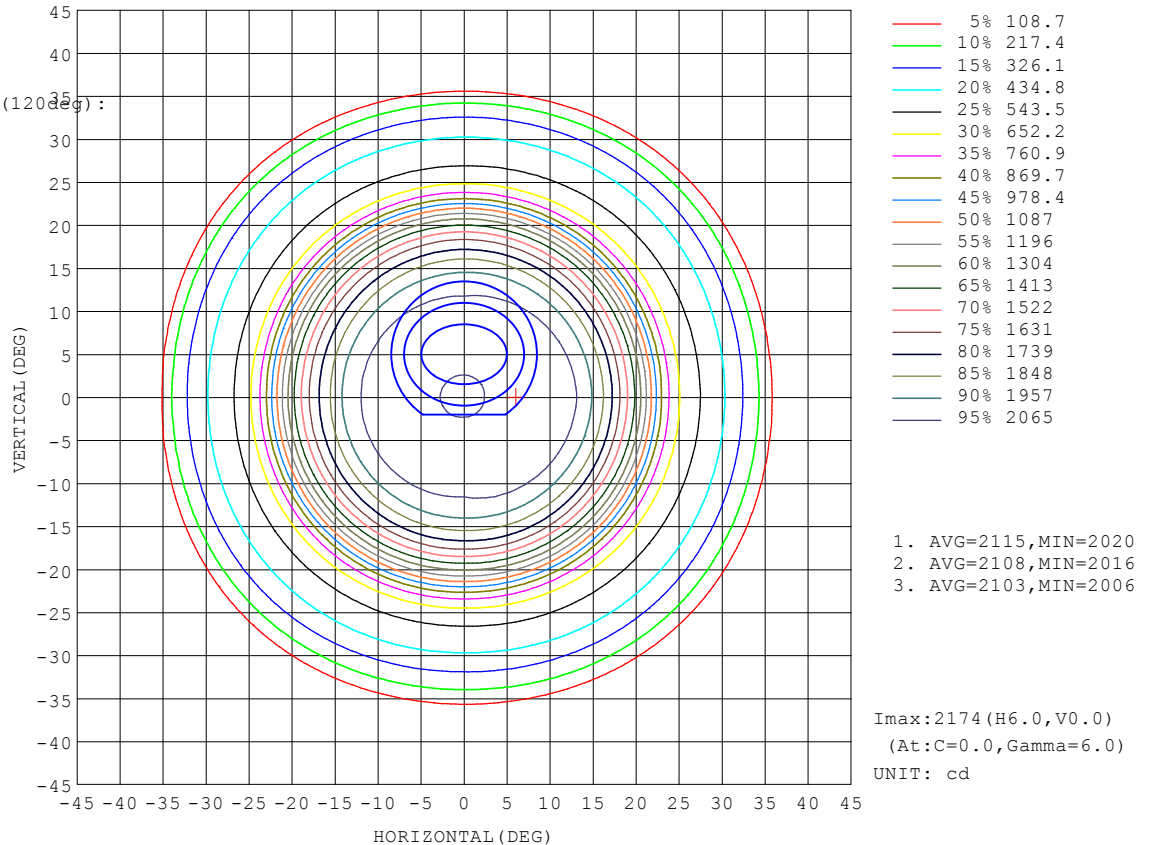
%lamp = 99.6%

Conical surface Flux(120deg):

1172.6 lm

%lum = 99.9%

%lamp = 99.9%

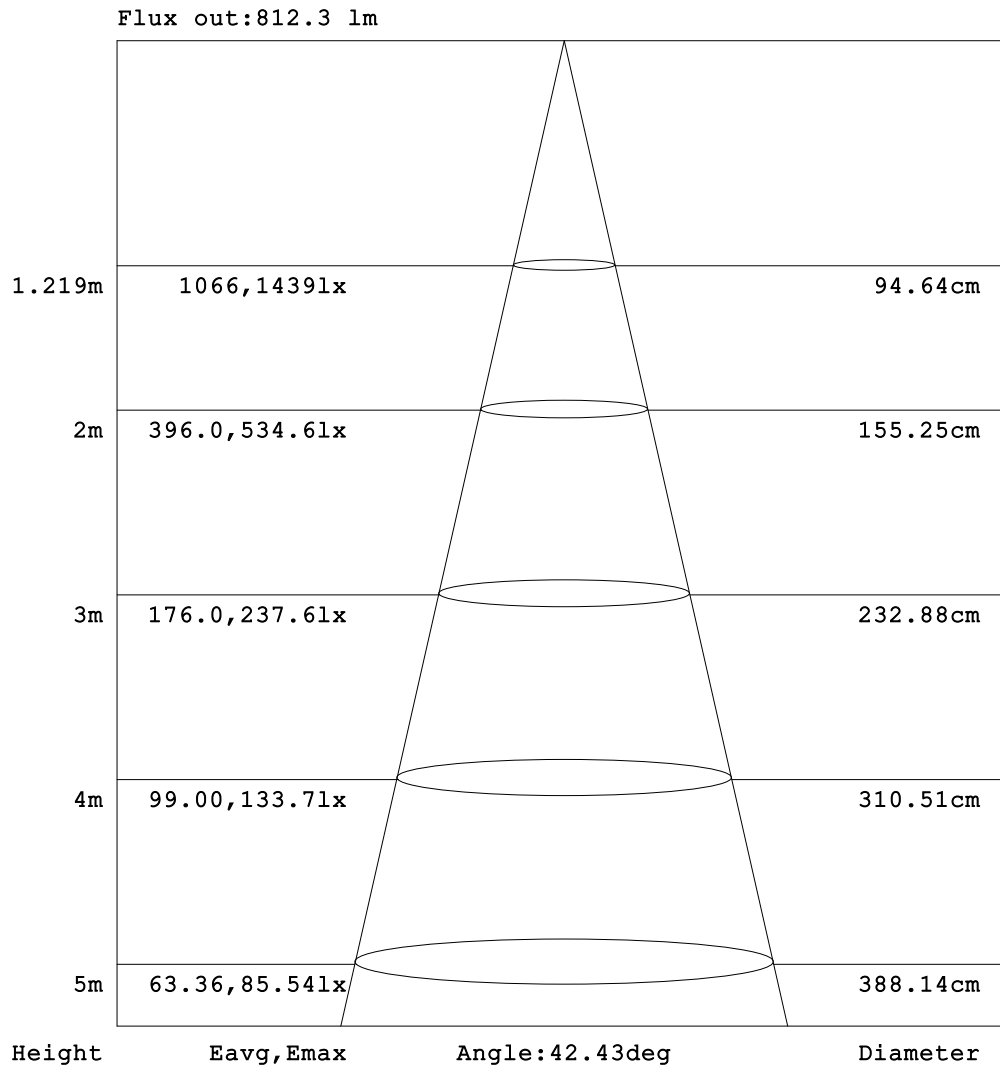


C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Aaron  
Test Date:2018-01-29

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, 40°lens  
2#反射器, ADR8CC 98054

### AAI Figure

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°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.

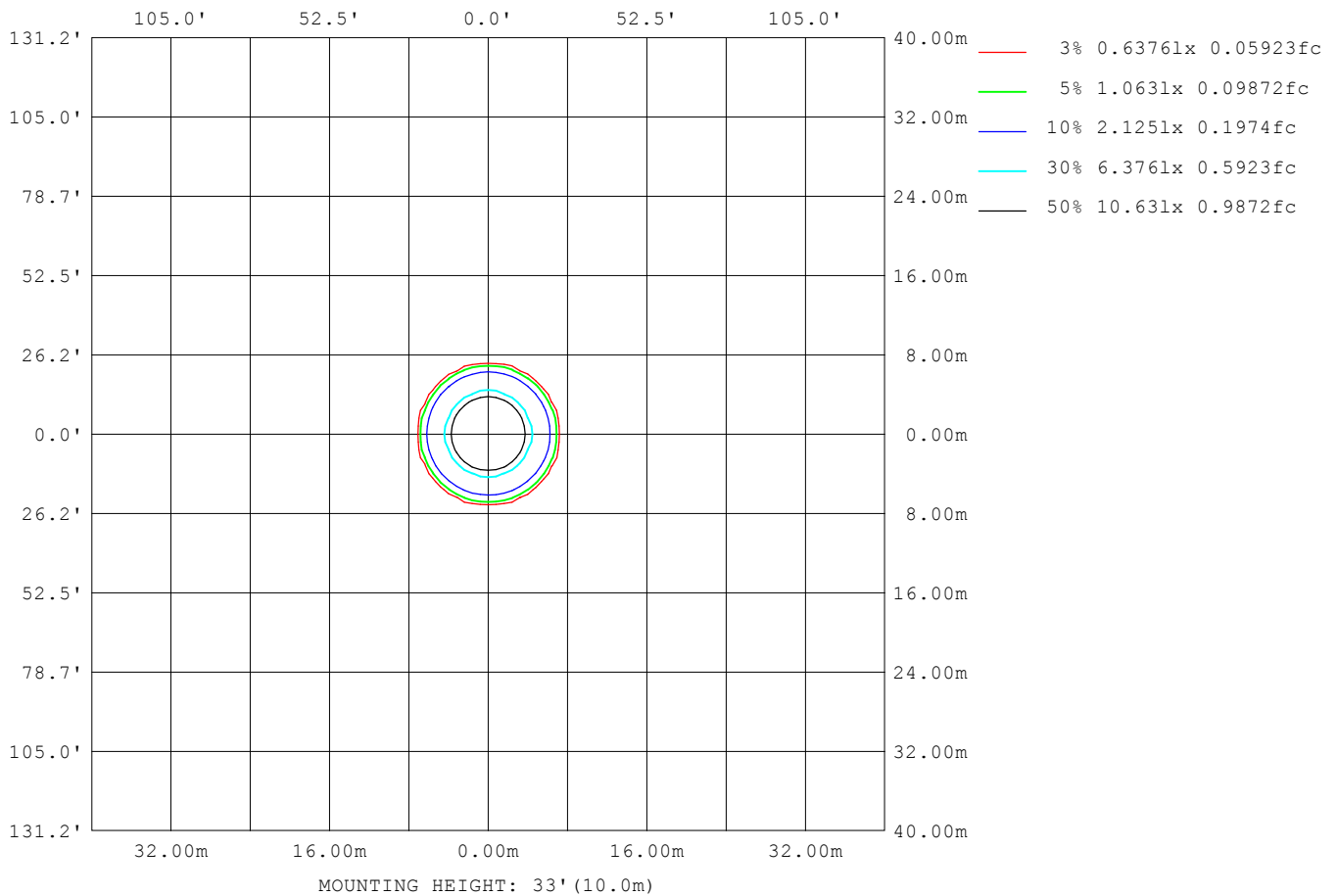
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Aaron  
Test Date:2018-01-29

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, 40°lens  
2#反射器, ADR8CC 98054



## ISOLUX DIAGRAM

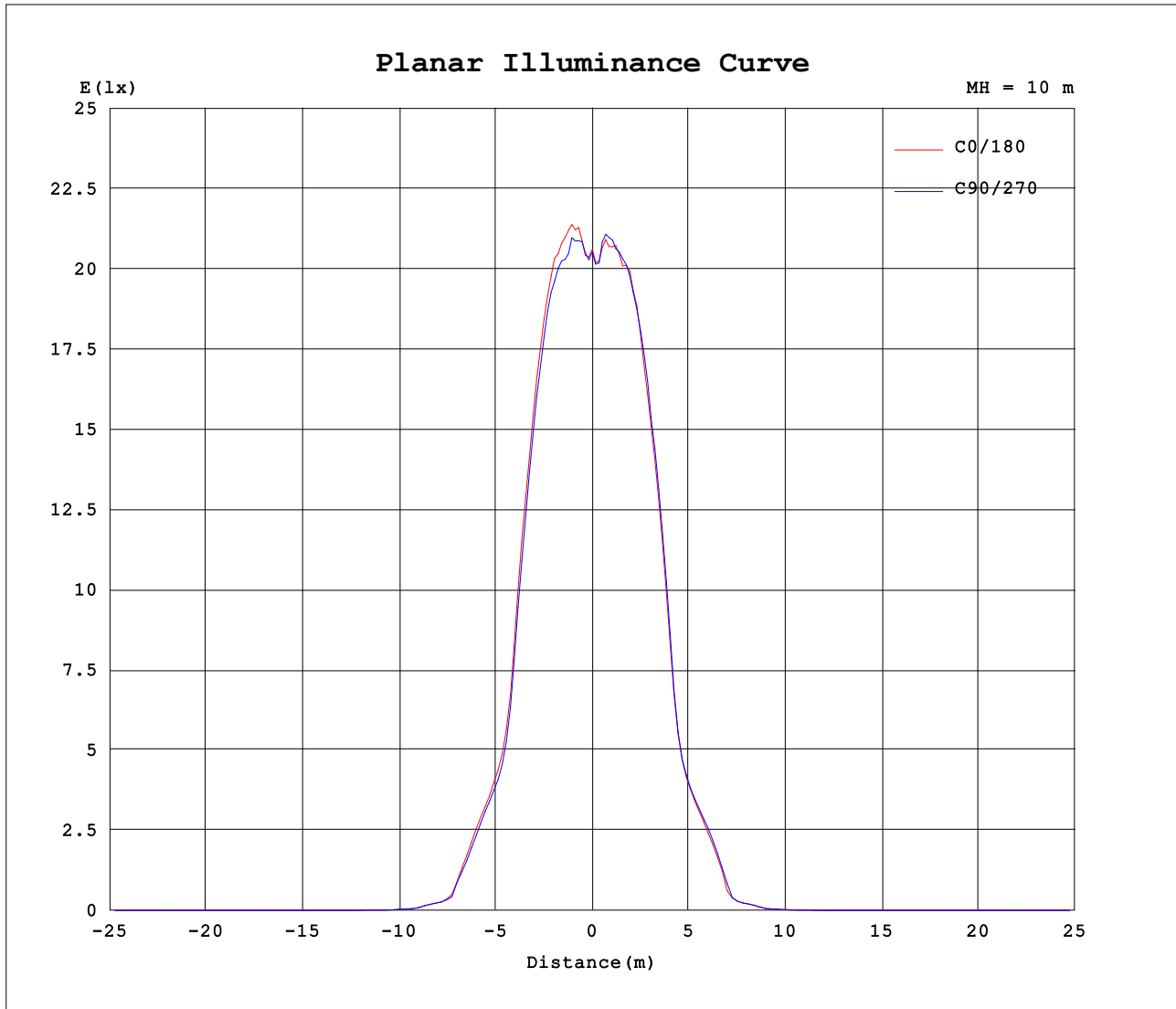
Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°lens 120-277V	DIM.:	SERIAL No.:02
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



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, 40°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

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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, 40° lens  
 2#反射器, ADR8CC 98054

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.4V I:0.1134A P:12.19W PF:0.8931 Lamp Flux:1174.06x1 lm		
NAME: 15ADL/40°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:15ADL/40°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	2061	2053	2061	2053															
5	2146	2112	2094	2122															
10	2143	2095	2106	2108															
15	1947	1885	1893	1931															
20	1394	1314	1380	1417															
25	656	613	633	634															
30	450	422	427	443															
35	167	162	113	154															
40	42.7	42.9	36.4	37.6															
45	10.4	10.7	7.39	8.63															
50	3.07	3.63	2.43	3.09															
55	1.67	2.06	1.29	1.76															
60	0.93	1.21	0.68	1.02															
65	0.51	0.70	0.35	0.58															
70	0.27	0.39	0.14	0.31															
75	0.10	0.18	0.00	0.10															
80	0.00	0.00	0.00	0.00															
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	0.00	0.00	0.00	0.00															
135	0.05	0.09	0.09	0.05															
140	0.19	0.22	0.21	0.18															
145	0.31	0.36	0.35	0.31															
150	0.45	0.49	0.47	0.43															
155	0.57	0.60	0.57	0.53															
160	0.61	0.65	0.63	0.60															
165	0.64	0.66	0.64	0.61															
170	0.64	0.66	0.66	0.63															
175	0.65	0.68	0.66	0.64															
180	0.68	0.68	0.70	0.68															

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, 40°lens  
2#反射器, ADR8CC 98054