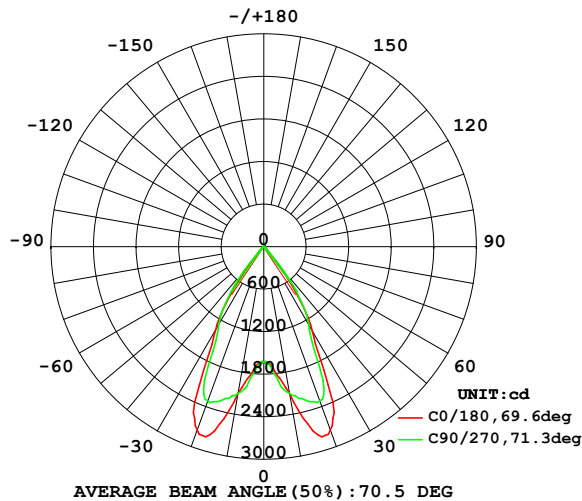


LUMINAIRE PHOTOMETRIC TEST REPORT

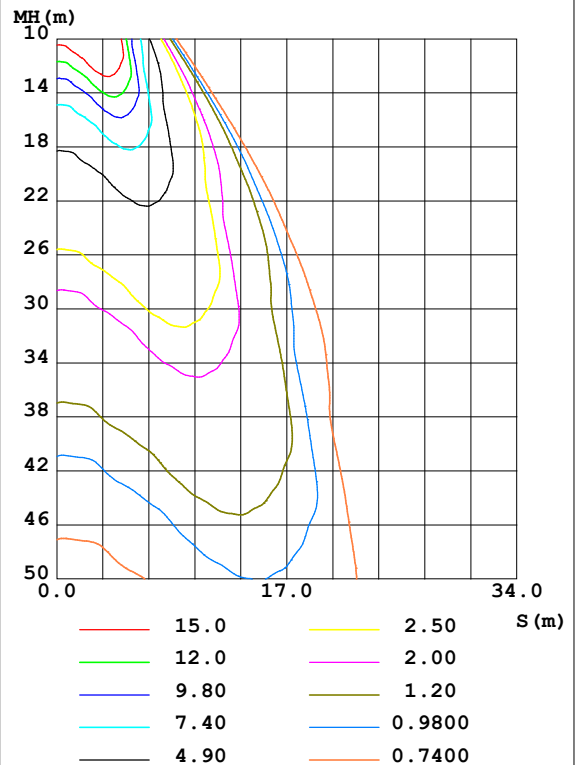
Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.33 lm/W			
MODEL		I _{max} (cd)	2807	S/MH (C0/180)	1.01
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH (C90/270)	1.04
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	2397.2	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	2397.17	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:2018-01-26

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, 60°lens
1#ADR4CC 98038

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum
10	2098	2101	2098	2101					0- 10	181.4	181.4	7.57
20	2748	2310	2748	2310					10- 20	691.0	872.3	36.4
30	1368	1275	1368	1275					20- 30	892.0	1764	73.6
40	261.8	366.3	261.8	366.3					30- 40	510.3	2275	94.9
50	44.86	47.72	44.86	47.72					40- 50	91.23	2366	98.7
60	10.69	11.05	10.69	11.05					50- 60	21.19	2387	99.6
70	3.106	3.098	3.106	3.098					60- 70	6.025	2393	99.8
80	0.8189	0.7908	0.8189	0.7908					70- 80	1.862	2395	99.9
90	0	0	0	0					80- 90	0.2743	2395	99.9
100	0	0	0	0					90-100	0	2395	99.9
110	0	0	0	0					100-110	0	2395	99.9
120	0	0.0064	0	0.0064					110-120	0.0002	2395	99.9
130	0.2373	0.3353	0.2373	0.3353					120-130	0.1131	2395	99.9
140	0.5840	0.6825	0.5840	0.6825					130-140	0.3451	2396	99.9
150	0.8887	1.011	0.8887	1.011					140-150	0.4916	2396	100
160	1.211	1.230	1.211	1.230					150-160	0.5036	2397	100
170	1.461	1.443	1.461	1.443					160-170	0.3766	2397	100
180	1.644	1.632	1.644	1.632					170-180	0.1466	2397	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

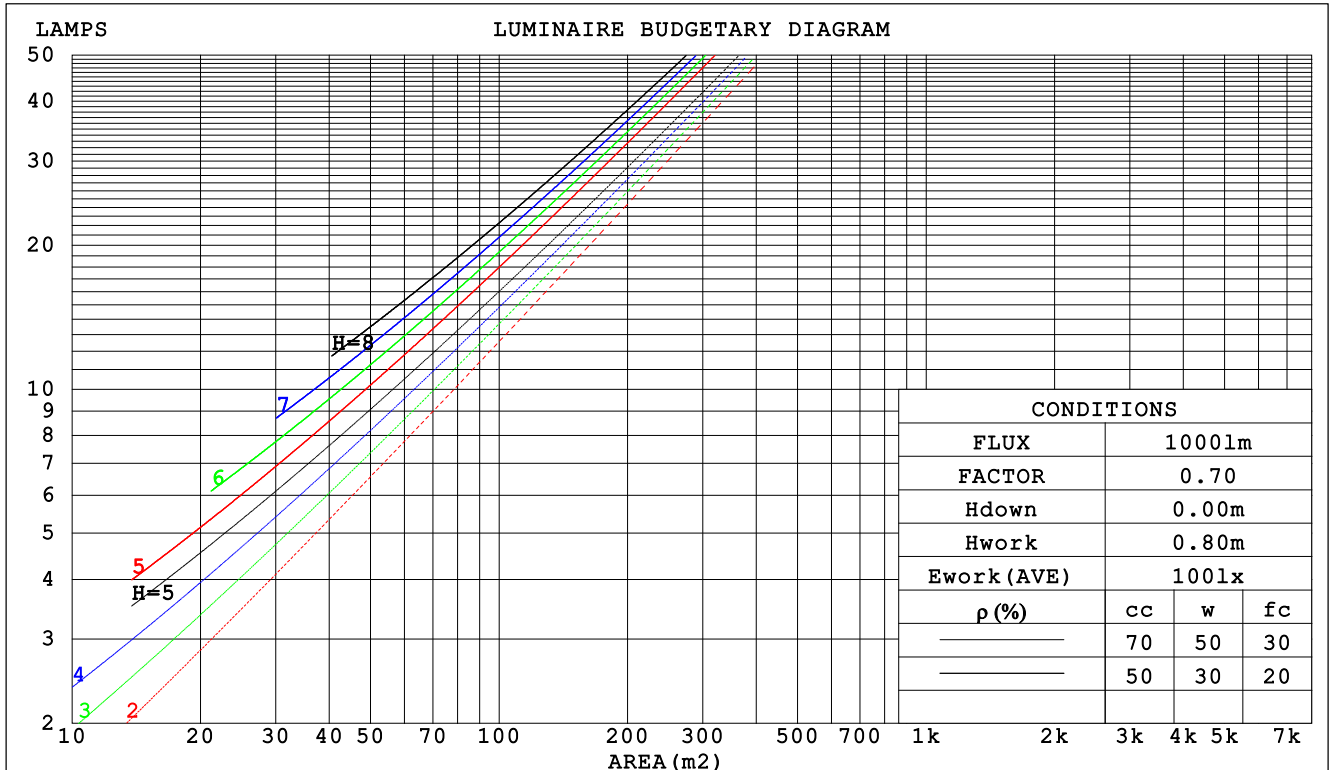
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
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	1.11	1.08	1.06	1.09	1.06	1.04	1.05	1.03	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.93	.95	.93	.91	.92	.90	.89	.87
3.0	.96	.91	.87	.95	.90	.86	.92	.88	.85	.90	.86	.84	.87	.85	.82	.81
4.0	.90	.84	.80	.89	.83	.80	.86	.82	.79	.84	.81	.78	.83	.79	.77	.75
5.0	.84	.78	.74	.83	.78	.74	.81	.76	.73	.80	.75	.72	.78	.74	.72	.70
6.0	.79	.73	.68	.78	.72	.68	.76	.71	.68	.75	.71	.67	.74	.70	.67	.65
7.0	.74	.68	.64	.73	.68	.64	.72	.67	.63	.71	.66	.63	.70	.66	.62	.61
8.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.59	.66	.62	.59	.57
9.0	.66	.60	.56	.65	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.54
10.0	.62	.56	.52	.61	.56	.52	.61	.55	.52	.60	.55	.52	.59	.55	.52	.50



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

WEC AND CCEC

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
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	.178	.101	.032	.171	.097	.031	.158	.091	.029	.147	.085	.027	.136	.079	.025		
2.0	.170	.093	.029	.165	.091	.028	.154	.086	.027	.144	.081	.025	.135	.076	.024		
3.0	.163	.087	.026	.158	.085	.025	.149	.081	.024	.140	.077	.024	.132	.073	.023		
4.0	.155	.081	.024	.151	.079	.023	.143	.076	.023	.136	.073	.022	.129	.070	.021		
5.0	.148	.076	.022	.145	.074	.022	.138	.072	.021	.131	.069	.021	.125	.067	.020		
6.0	.142	.071	.020	.139	.070	.020	.133	.068	.020	.127	.066	.019	.122	.064	.019		
7.0	.136	.067	.019	.133	.066	.019	.128	.065	.019	.123	.063	.018	.118	.061	.018		
8.0	.130	.064	.018	.128	.063	.018	.123	.061	.018	.118	.060	.017	.114	.059	.017		
9.0	.125	.061	.017	.123	.060	.017	.119	.059	.017	.114	.057	.016	.111	.056	.016		
10.0	.120	.058	.016	.118	.057	.016	.114	.056	.016	.111	.055	.016	.107	.054	.015		

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	.172	.158	.145	.147	.136	.125	.101	.093	.087	.058	.054	.050	.019	.017	.016	
2.0	.157	.133	.113	.134	.115	.098	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.090	.124	.099	.078	.085	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.134	.100	.073	.115	.086	.063	.079	.060	.045	.046	.035	.026	.015	.011	.009	
5.0	.126	.088	.060	.108	.076	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.119	.079	.050	.102	.068	.044	.070	.048	.031	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.097	.062	.037	.067	.043	.026	.039	.026	.016	.013	.008	.005	
8.0	.107	.065	.036	.092	.056	.032	.064	.040	.023	.037	.023	.013	.012	.008	.004	
9.0	.102	.060	.032	.088	.052	.028	.061	.037	.020	.035	.022	.012	.011	.007	.004	
10.0	.097	.056	.028	.084	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

UGR(Unified Glare Rating) Table

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm										
NAME: 30ADL/60°lens 120-277V					TYPE:LED			WEIGHT:		
SPEC.:30ADL/60°lens 120-277V					DIM.:			SERIAL No.:01		
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	7.6	8.6	7.9	8.8	8.9	7.8	8.8	8.1	9.0	9.1
3H	7.5	8.3	7.7	8.5	8.8	7.7	8.6	7.9	8.8	9.0
4H	7.4	8.2	7.7	8.4	8.7	7.6	8.4	7.9	8.6	8.9
6H	7.3	8.1	7.6	8.3	8.6	7.5	8.3	7.8	8.5	8.8
8H	7.2	8.0	7.6	8.2	8.5	7.5	8.2	7.8	8.5	8.7
12H	7.2	7.9	7.5	8.2	8.5	7.4	8.1	7.7	8.4	8.7
4H 2H	7.4	8.2	7.7	8.4	8.7	7.6	8.4	7.9	8.6	8.9
3H	7.2	7.9	7.5	8.2	8.5	7.4	8.1	7.7	8.4	8.7
4H	7.1	7.8	7.5	8.1	8.4	7.3	8.0	7.7	8.3	8.6
6H	7.0	7.6	7.4	7.9	8.3	7.2	7.8	7.6	8.1	8.5
8H	7.0	7.5	7.4	7.9	8.2	7.2	7.7	7.6	8.1	8.4
12H	6.9	7.4	7.3	7.8	8.2	7.1	7.6	7.5	8.0	8.4
8H 4H	7.0	7.5	7.4	7.9	8.2	7.2	7.7	7.6	8.1	8.4
6H	6.9	7.3	7.3	7.7	8.1	7.1	7.5	7.5	7.9	8.3
8H	6.8	7.2	7.3	7.6	8.1	7.0	7.4	7.5	7.8	8.3
12H	6.8	7.1	7.2	7.5	8.0	7.0	7.3	7.4	7.7	8.2
12H 4H	6.9	7.4	7.3	7.8	8.2	7.1	7.6	7.5	8.0	8.4
6H	6.8	7.2	7.3	7.6	8.1	7.0	7.4	7.5	7.8	8.3
8H	6.8	7.1	7.2	7.5	8.0	7.0	7.3	7.4	7.7	8.2
Variations with the observer position at spacings:										
S = 1.0H	+ 4.1 / -12.2					+ 4.3 / -13.1				
1.5H	+ 6.5 / - 9.8					+ 6.9 / -10.7				
2.0H	+ 5.3 / - 6.2					+ 5.7 / - 6.6				

CIE Pub.117 Corrected 2397 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.0)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

UTILIZATION FACTORS TABLE

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
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) $k(RI) \times RCR = 5$									
$k = 0.60$	88	82	78	88	82	78	87	82	78	75
0.80	96	90	86	95	90	86	94	89	86	82
1.00	100	95	91	99	94	91	98	94	90	86
1.25	104	99	96	103	98	95	101	97	94	90
1.50	106	102	99	105	101	98	103	100	97	93
2.00	109	105	102	108	104	101	105	102	100	95
2.50	111	107	104	109	106	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	108	107	105	98
5.00	115	113	111	113	111	110	109	108	107	99
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:2018-01-26

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, 60°lens
1#ADR4CC 98038

ISOCANDELA DIAGRAM

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

2338.4 lm

%lum = 97.5%

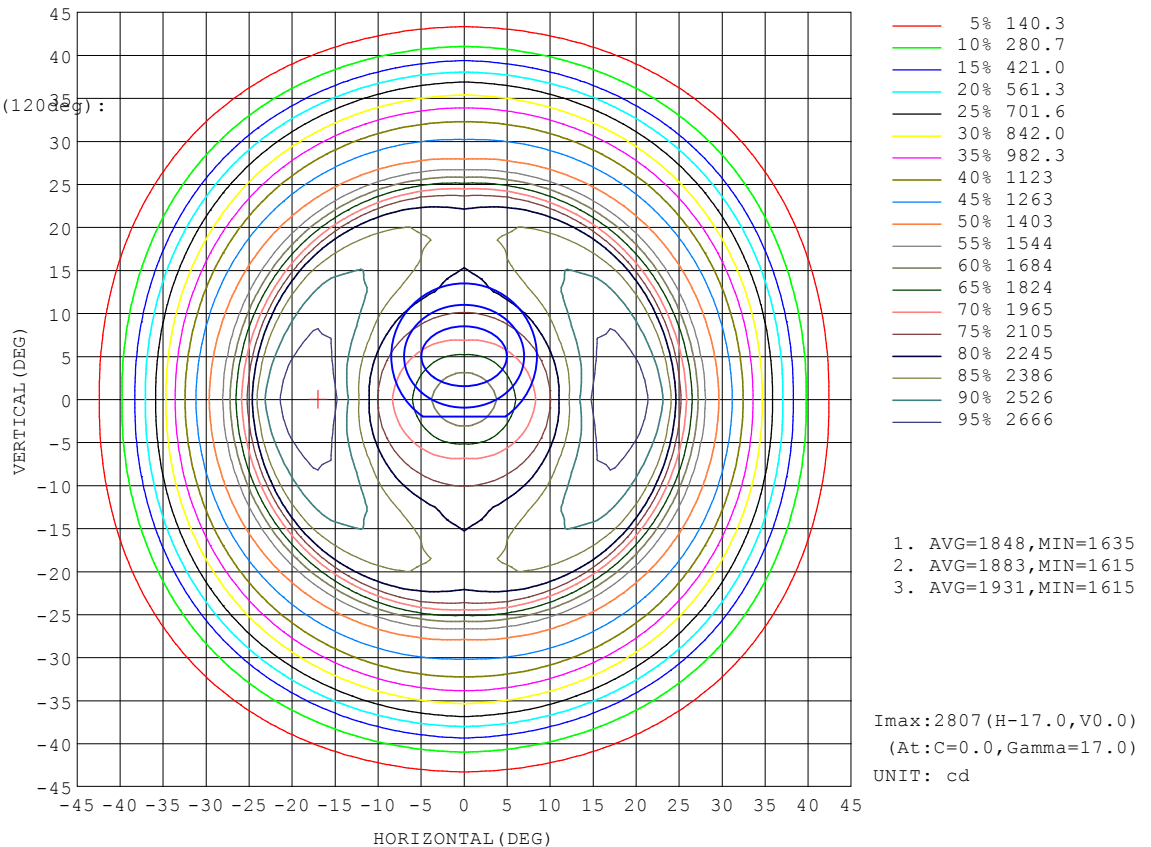
%lamp = 97.5%

Conical surface Flux(120deg):

2387 lm

%lum = 99.6%

%lamp = 99.6%

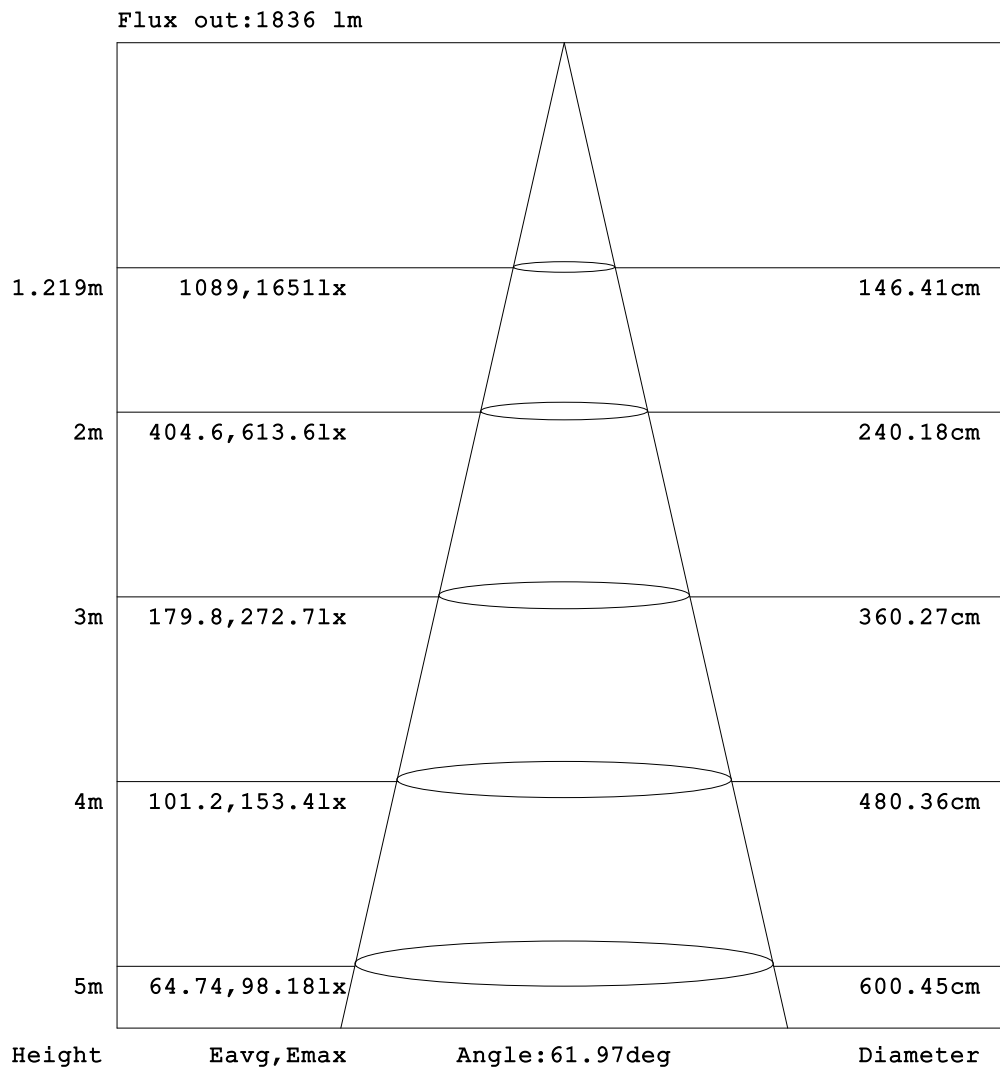


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

AAI Figure

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



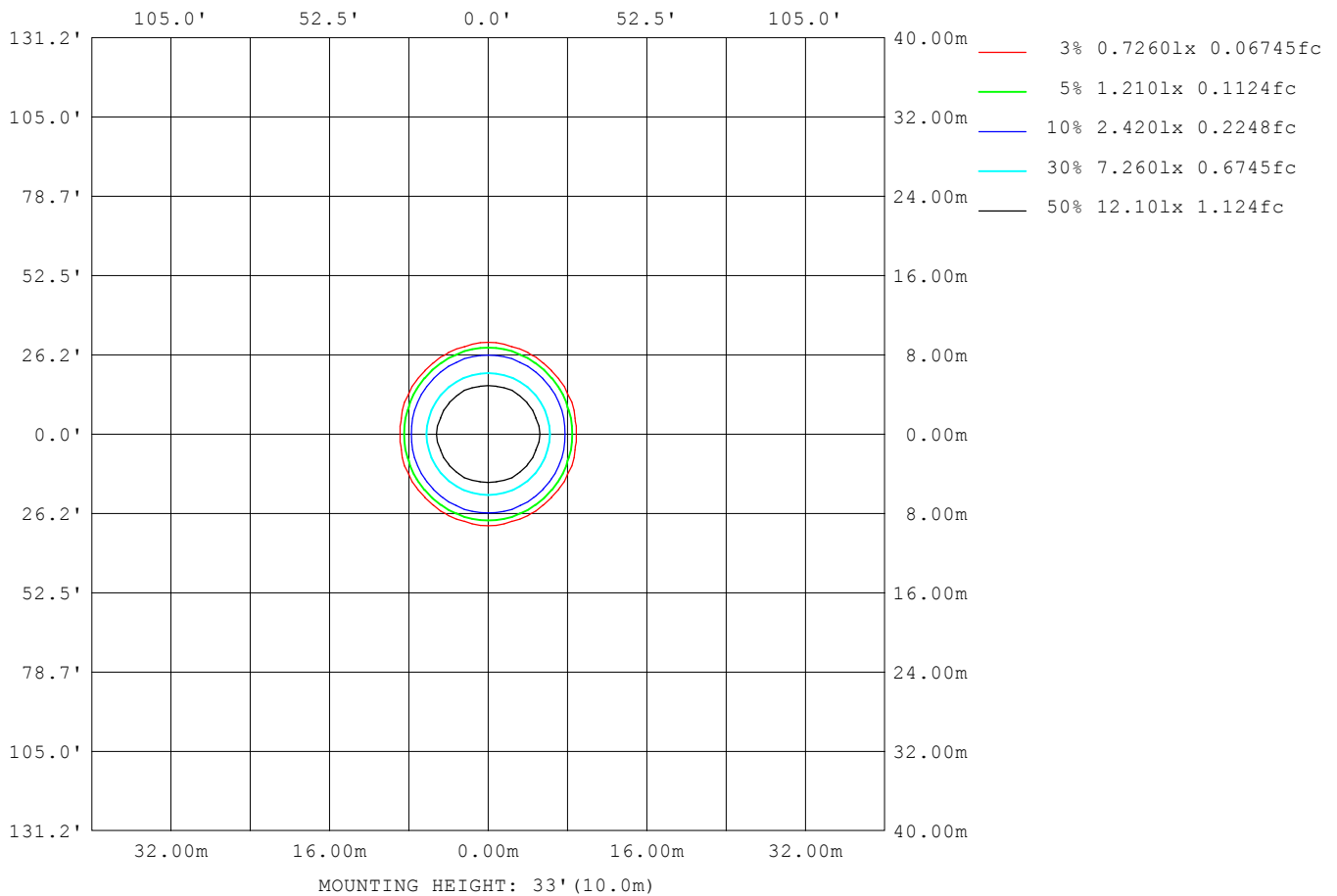
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

ISOLUX DIAGRAM

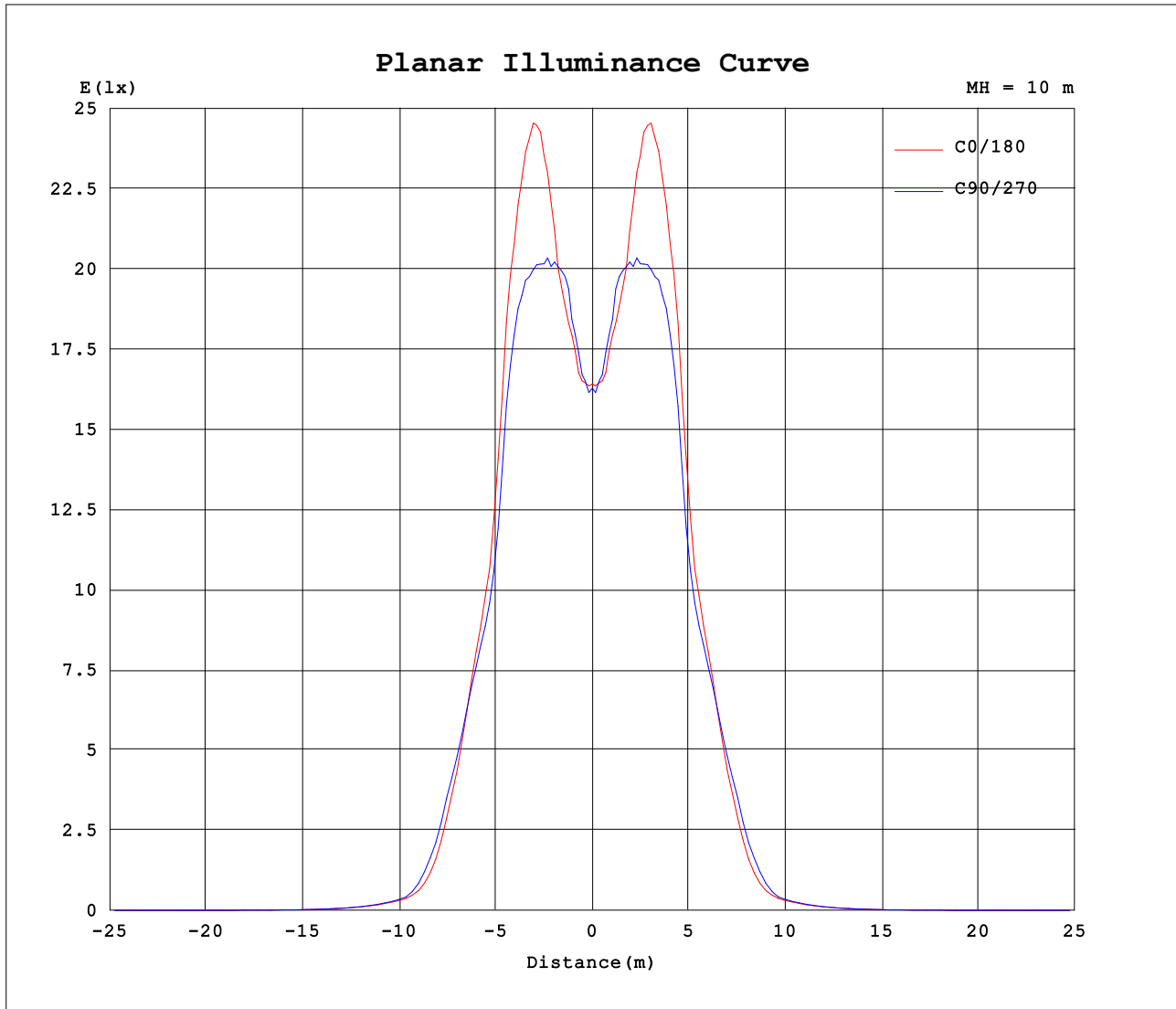
Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Aaron
Test Date: 2018-01-26

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, 60° lens
1#ADR4CC 98038

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.3V I:0.2592A P:31.00W PF:0.9941 Lamp Flux:2397.17x1 lm		
NAME: 30ADL/60°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/60°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	90	180	270															
0	1641	1629	1641	1629															
5	1762	1814	1762	1814															
10	2098	2101	2098	2101															
15	2693	2236	2693	2236															
20	2748	2310	2748	2310															
25	2153	1848	2153	1848															
30	1368	1275	1368	1275															
35	797	877	797	877															
40	262	366	262	366															
45	89.4	98.8	89.4	98.8															
50	44.9	47.7	44.9	47.7															
55	21.0	22.2	21.0	22.2															
60	10.7	11.0	10.7	11.0															
65	5.65	5.75	5.65	5.75															
70	3.11	3.10	3.11	3.10															
75	1.70	1.66	1.70	1.66															
80	0.82	0.79	0.82	0.79															
85	0.18	0.15	0.18	0.15															
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	0.01	0.00	0.01															
125	0.08	0.16	0.08	0.16															
130	0.24	0.34	0.24	0.34															
135	0.39	0.51	0.39	0.51															
140	0.58	0.68	0.58	0.68															
145	0.73	0.85	0.73	0.85															
150	0.89	1.01	0.89	1.01															
155	1.08	1.13	1.08	1.13															
160	1.21	1.23	1.21	1.23															
165	1.36	1.33	1.36	1.33															
170	1.46	1.44	1.46	1.44															
175	1.58	1.56	1.58	1.56															
180	1.64	1.63	1.64	1.63															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 60°lens
1#ADR4CC 98038