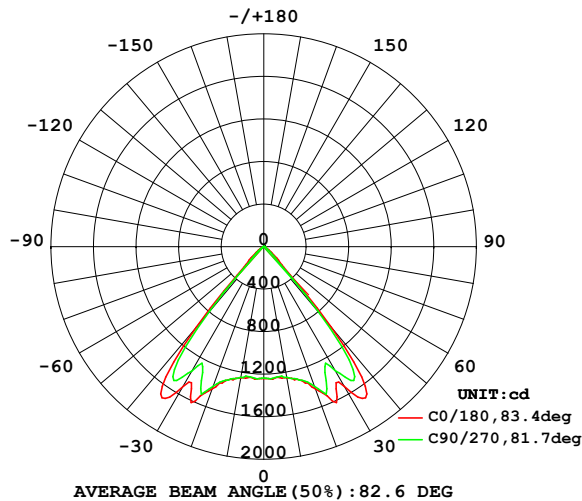


LUMINAIRE PHOTOMETRIC TEST REPORT

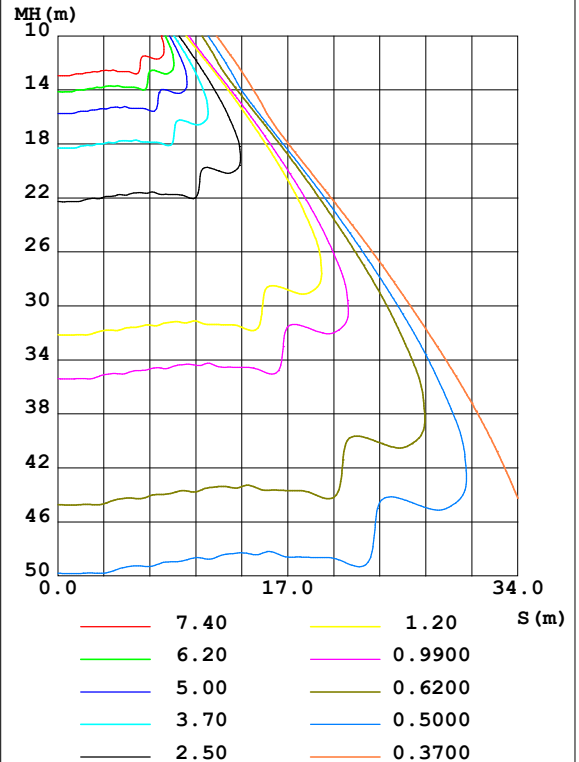
Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 74.62 lm/W			
MODEL		I _{max} (cd)	1714	S/MH (C0/180)	1.24
NOMINAL POWER(W)	30	LOR(%)	100.0	S/MH (C90/270)	1.21
RATED VOLTAGE(V)	120-277	TOTAL FLUX(lm)	2352.9	η UP,DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	2352.9	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.1	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	120	η down (%)	99.9	CIBSE SHR MAX	0.80

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, 80°lens
1#ADR4CC 98038

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%lum
10	1254	1247	1254	1247					0- 10	118.5	118.5	5.04
20	1423	1396	1423	1396					10- 20	373.1	491.6	20.9
30	1515	1349	1515	1349					20- 30	666.2	1158	49.2
40	990.5	790.8	990.5	790.8					30- 40	896.1	2054	87.3
50	127.8	85.25	127.8	85.25					40- 50	225.3	2279	96.9
60	32.14	20.63	32.14	20.63					50- 60	50.25	2329	99
70	10.11	6.333	10.11	6.333					60- 70	15.04	2344	99.6
80	3.288	2.122	3.288	2.122					70- 80	5.352	2350	99.9
90	0	0	0	0					80- 90	1.142	2351	99.9
100	0	0	0	0					90-100	0	2351	99.9
110	0	0	0	0					100-110	0	2351	99.9
120	0.0191	0.1733	0.0191	0.1733					110-120	0.0293	2351	99.9
130	0.2816	0.4742	0.2816	0.4742					120-130	0.2128	2351	99.9
140	0.5313	0.7242	0.5313	0.7242					130-140	0.3958	2352	99.9
150	0.7492	0.8971	0.7492	0.8971					140-150	0.4579	2352	100
160	0.9864	1.051	0.9864	1.051					150-160	0.4156	2352	100
170	1.294	1.352	1.294	1.352					160-170	0.3291	2353	100
180	1.550	1.563	1.550	1.563					170-180	0.1360	2353	100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

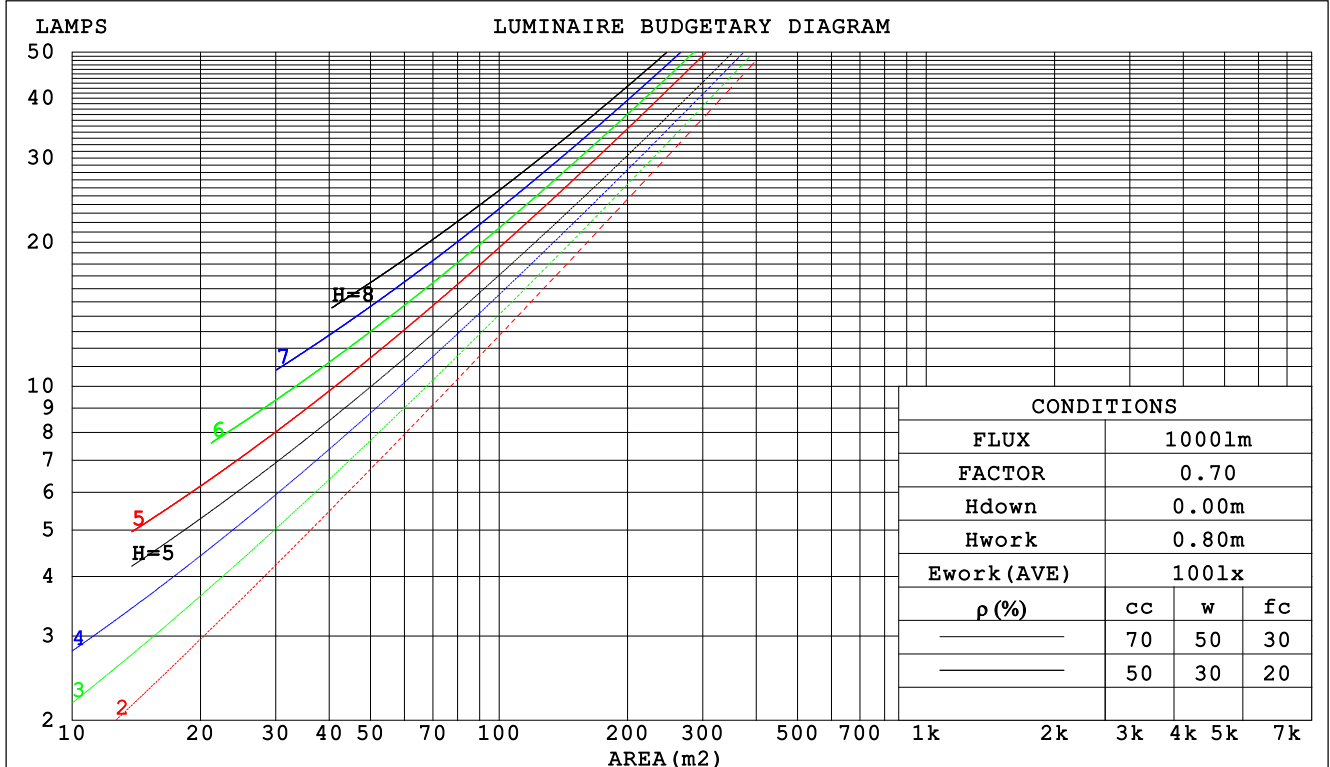
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 80°lens
1#ADR4CC 98038

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°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	1.10	1.07	1.04	1.07	1.05	1.03	1.03	1.01	.99	.00	.98	.96	.96	.95	.94	.92
2.0	1.01	.96	.92	.99	.95	.91	.96	.92	.89	.92	.90	.87	.90	.87	.85	.84
3.0	.92	.87	.82	.91	.86	.82	.88	.84	.80	.86	.82	.79	.83	.80	.78	.76
4.0	.85	.79	.74	.84	.78	.73	.81	.76	.72	.79	.75	.72	.77	.74	.71	.69
5.0	.78	.72	.67	.77	.71	.66	.75	.70	.66	.74	.69	.65	.72	.68	.64	.63
6.0	.72	.65	.60	.71	.65	.60	.70	.64	.60	.68	.63	.59	.67	.62	.59	.57
7.0	.67	.60	.55	.66	.59	.55	.65	.59	.54	.63	.58	.54	.62	.57	.54	.52
8.0	.62	.55	.50	.61	.55	.50	.60	.54	.50	.59	.53	.50	.58	.53	.49	.48
9.0	.57	.51	.46	.57	.50	.46	.56	.50	.46	.55	.49	.45	.54	.49	.45	.44
10.0	.53	.47	.42	.53	.46	.42	.52	.46	.42	.51	.46	.42	.50	.45	.42	.40



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, 80°lens
1#ADR4CC 98038

WEC AND CCEC

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°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	.199	.113	.036	.193	.110	.035	.180	.103	.033	.168	.097	.031	.157	.091	.029		
2.0	.194	.106	.033	.188	.104	.032	.177	.099	.031	.167	.094	.029	.158	.089	.028		
3.0	.186	.099	.030	.181	.097	.029	.172	.093	.028	.163	.089	.027	.155	.086	.027		
4.0	.178	.093	.027	.174	.091	.027	.166	.088	.026	.158	.085	.026	.151	.082	.025		
5.0	.171	.087	.025	.167	.086	.025	.160	.083	.024	.153	.081	.024	.147	.078	.024		
6.0	.163	.082	.023	.160	.081	.023	.153	.079	.023	.147	.077	.023	.142	.075	.022		
7.0	.156	.077	.022	.153	.076	.022	.147	.074	.021	.142	.073	.021	.137	.071	.021		
8.0	.149	.073	.020	.146	.072	.020	.141	.071	.020	.137	.069	.020	.132	.068	.020		
9.0	.143	.069	.019	.140	.068	.019	.136	.067	.019	.131	.066	.019	.127	.065	.019		
10.0	.137	.066	.018	.135	.065	.018	.130	.064	.018	.126	.063	.018	.123	.062	.018		

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	.160	.133	.111	.137	.115	.096	.094	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.149	.114	.087	.128	.099	.075	.088	.069	.053	.051	.040	.031	.016	.013	.010	
4.0	.140	.100	.070	.120	.086	.060	.083	.060	.043	.048	.035	.025	.015	.011	.008	
5.0	.132	.089	.057	.114	.077	.049	.078	.054	.035	.045	.032	.021	.015	.010	.007	
6.0	.126	.080	.047	.108	.069	.041	.075	.048	.029	.043	.029	.017	.014	.009	.006	
7.0	.120	.073	.040	.103	.063	.035	.071	.044	.025	.041	.026	.015	.013	.009	.005	
8.0	.115	.067	.034	.099	.058	.030	.068	.041	.021	.040	.024	.013	.013	.008	.004	
9.0	.110	.062	.030	.095	.054	.026	.065	.038	.018	.038	.022	.011	.012	.007	.004	
10.0	.105	.058	.026	.091	.050	.023	.063	.035	.016	.037	.021	.010	.012	.007	.003	

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

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, 80°lens
1#ADR4CC 98038

UGR(Unified Glare Rating) Table

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm										
NAME: 30ADL/80°lens 120-277V					TYPE:LED			WEIGHT:		
SPEC.:30ADL/80°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	12.3	13.4	12.6	13.6	13.8	11.7	12.8	11.9	13.0	13.1
3H	12.1	13.2	12.4	13.4	13.6	11.5	12.5	11.8	12.7	12.9
4H	12.1	13.0	12.3	13.2	13.5	11.4	12.4	11.7	12.6	12.8
6H	12.0	12.9	12.3	13.1	13.4	11.3	12.2	11.6	12.5	12.7
8H	11.9	12.8	12.2	13.0	13.3	11.3	12.1	11.6	12.4	12.7
12H	11.9	12.7	12.2	13.0	13.3	11.2	12.0	11.5	12.3	12.6
4H 2H	12.1	13.0	12.3	13.2	13.5	11.4	12.4	11.7	12.6	12.8
3H	11.9	12.7	12.2	13.0	13.3	11.2	12.1	11.6	12.3	12.6
4H	11.8	12.5	12.2	12.8	13.2	11.1	11.9	11.5	12.2	12.5
6H	11.7	12.4	12.1	12.7	13.1	11.1	11.7	11.4	12.0	12.4
8H	11.7	12.3	12.1	12.6	13.0	11.0	11.6	11.4	12.0	12.3
12H	11.6	12.2	12.0	12.5	12.9	11.0	11.5	11.4	11.9	12.3
8H 4H	11.7	12.3	12.1	12.6	13.0	11.0	11.6	11.4	12.0	12.3
6H	11.6	12.1	12.0	12.5	12.9	10.9	11.4	11.4	11.8	12.2
8H	11.5	12.0	12.0	12.4	12.8	10.9	11.3	11.3	11.7	12.2
12H	11.5	11.8	12.0	12.3	12.8	10.8	11.2	11.3	11.6	12.1
12H 4H	11.6	12.2	12.0	12.5	12.9	11.0	11.5	11.4	11.9	12.3
6H	11.5	12.0	12.0	12.4	12.8	10.9	11.3	11.3	11.7	12.2
8H	11.5	11.8	12.0	12.3	12.8	10.8	11.2	11.3	11.6	12.1
Variations with the observer position at spacings:										
S = 1.0H	+ 3.6 / -12.0					+ 3.4 / -13.3				
1.5H	+ 6.1 / -10.2					+ 6.0 / -10.3				
2.0H	+ 5.4 / - 5.8					+ 4.8 / - 5.3				

CIE Pub.117 Corrected 2353 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, 80°lens
1#ADR4CC 98038

UTILIZATION FACTORS TABLE

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°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) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	83	76	72	82	76	72	68
0.80	92	85	81	91	85	81	90	84	80	76
1.00	97	91	87	96	90	86	94	90	86	82
1.25	101	96	92	100	95	92	98	94	91	86
1.50	104	99	96	103	98	95	101	97	94	89
2.00	108	103	100	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	105	102	99	93
3.00	111	107	104	109	106	103	106	103	101	95
4.00	113	110	108	111	109	106	107	105	104	96
5.00	114	112	110	112	110	108	108	107	105	97
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, 80°lens
1#ADR4CC 98038

ISOCANDELA DIAGRAM

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

2218.2 lm

%lum = 94.3%

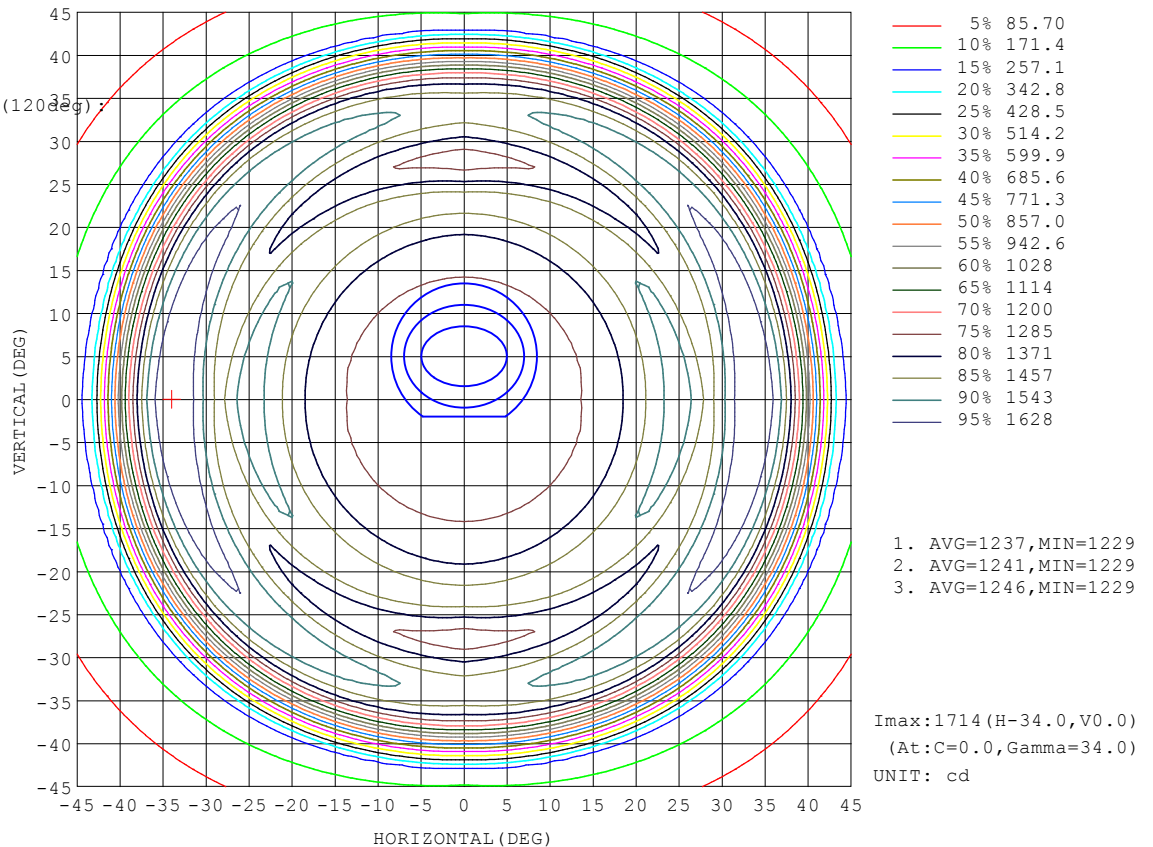
%lamp = 94.3%

Conical surface Flux(120deg):

2329.4 lm

%lum = 99.0%

%lamp = 99.0%

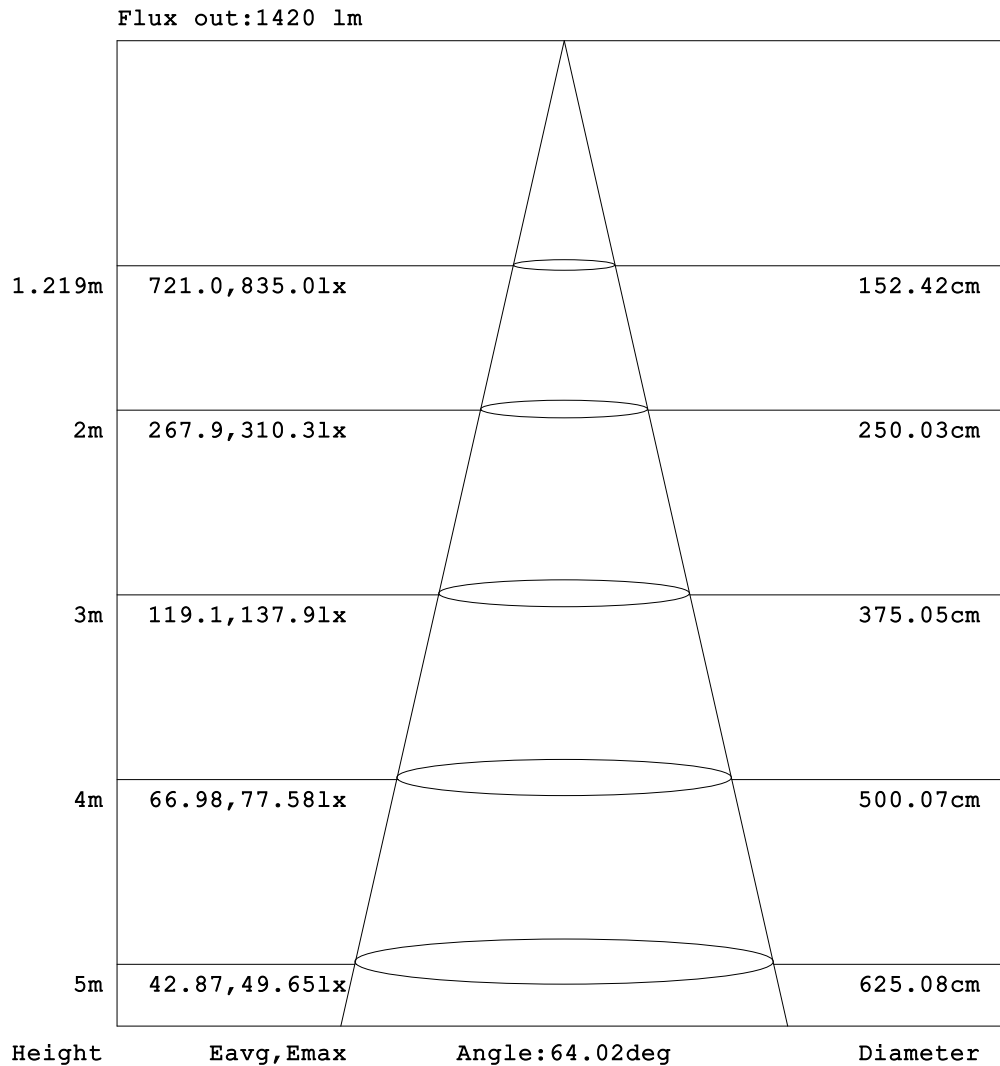


C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Aaron
Test Date:2018-01-26

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, 80°lens
1#ADR4CC 98038

AAI Figure

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



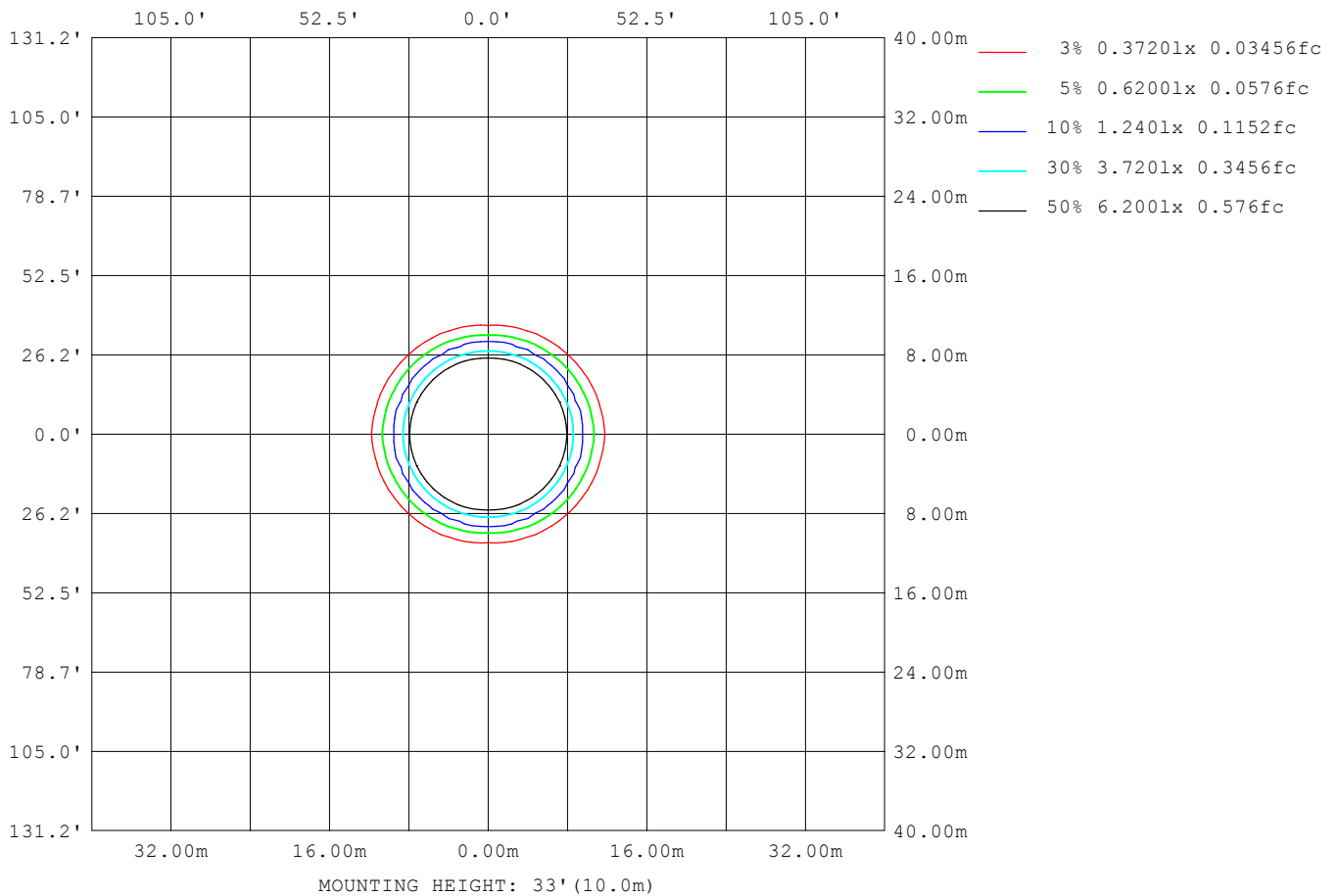
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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, 80°lens
1#ADR4CC 98038

ISOLUX DIAGRAM

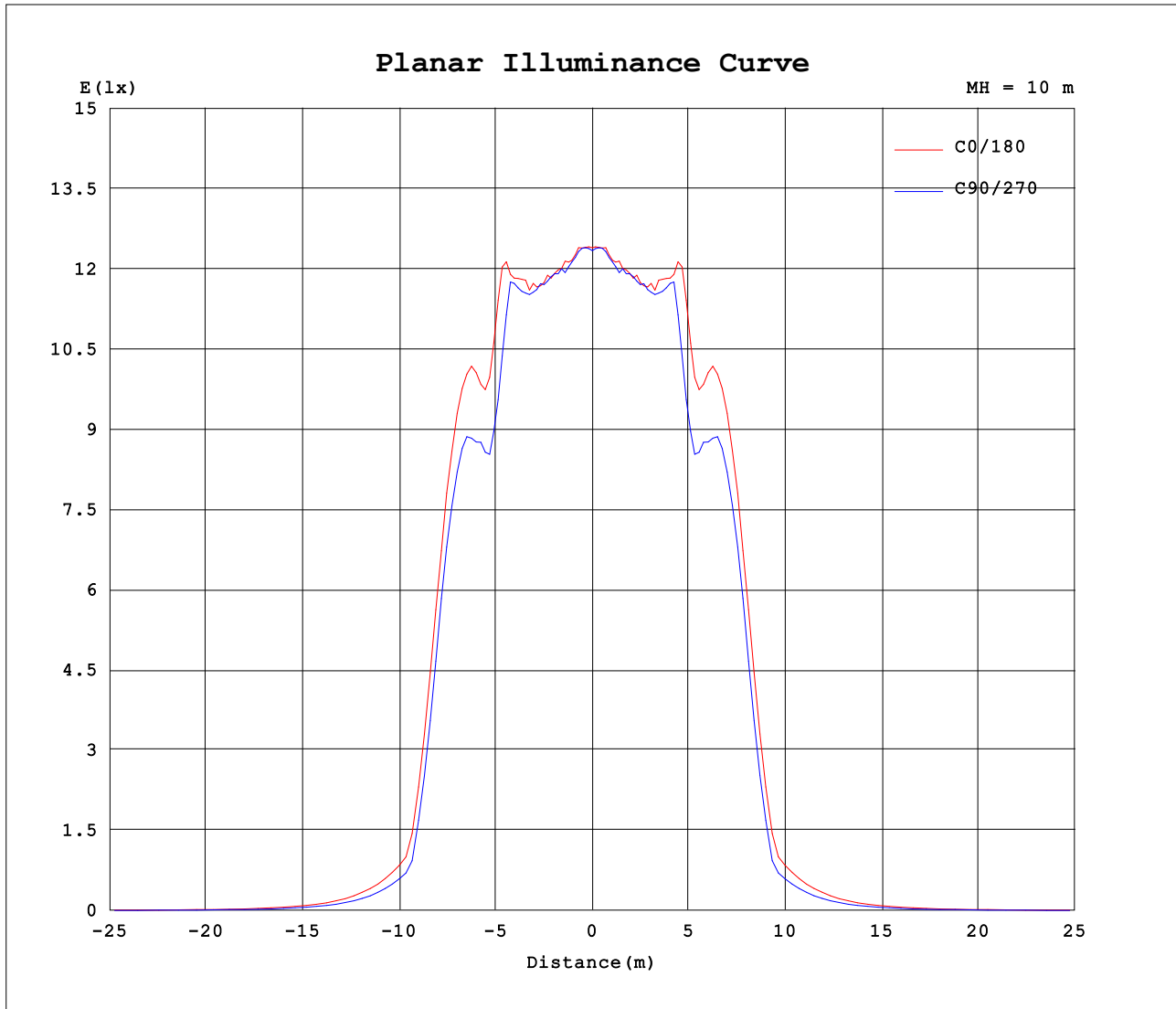
Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°lens 120-277V	DIM.:	SERIAL No.:01
MFR.: GREEN CREATIVE	SUR.:	PROTECTION ANGLE:



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, 80°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, 80° lens
 1#ADR4CC 98038

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.3V I:0.2638A P:31.53W PF:0.9939 Lamp Flux:2352.9x1 lm		
NAME: 30ADL/80°lens 120-277V	TYPE:LED	WEIGHT:
SPEC.:30ADL/80°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	1240	1234	1240	1234															
5	1241	1236	1241	1236															
10	1254	1247	1254	1247															
15	1297	1301	1297	1301															
20	1423	1396	1423	1396															
25	1617	1393	1617	1393															
30	1515	1349	1515	1349															
35	1692	1492	1692	1492															
40	990	791	990	791															
45	240	168	240	168															
50	128	85.3	128	85.3															
55	62.6	41.2	62.6	41.2															
60	32.1	20.6	32.1	20.6															
65	17.5	11.0	17.5	11.0															
70	10.1	6.33	10.1	6.33															
75	6.00	3.77	6.00	3.77															
80	3.29	2.12	3.29	2.12															
85	1.20	0.67	1.20	0.67															
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	0.04	0.00	0.04															
120	0.02	0.17	0.02	0.17															
125	0.17	0.33	0.17	0.33															
130	0.28	0.47	0.28	0.47															
135	0.42	0.62	0.42	0.62															
140	0.53	0.72	0.53	0.72															
145	0.63	0.83	0.63	0.83															
150	0.75	0.90	0.75	0.90															
155	0.84	0.94	0.84	0.94															
160	0.99	1.05	0.99	1.05															
165	1.15	1.19	1.15	1.19															
170	1.29	1.35	1.29	1.35															
175	1.45	1.51	1.45	1.51															
180	1.55	1.56	1.55	1.56															

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, 80°lens
1#ADR4CC 98038