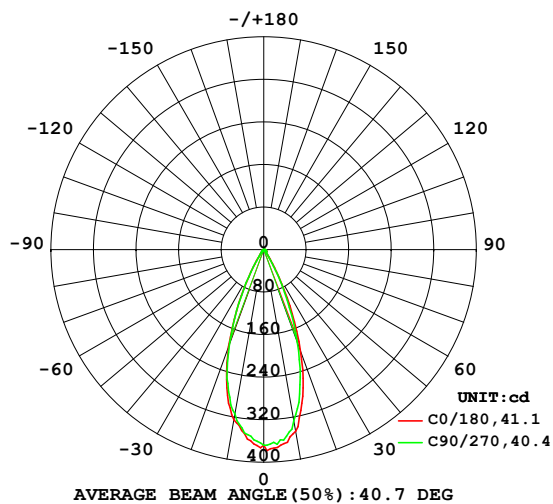


## LUMINAIRE PHOTOMETRIC TEST REPORT

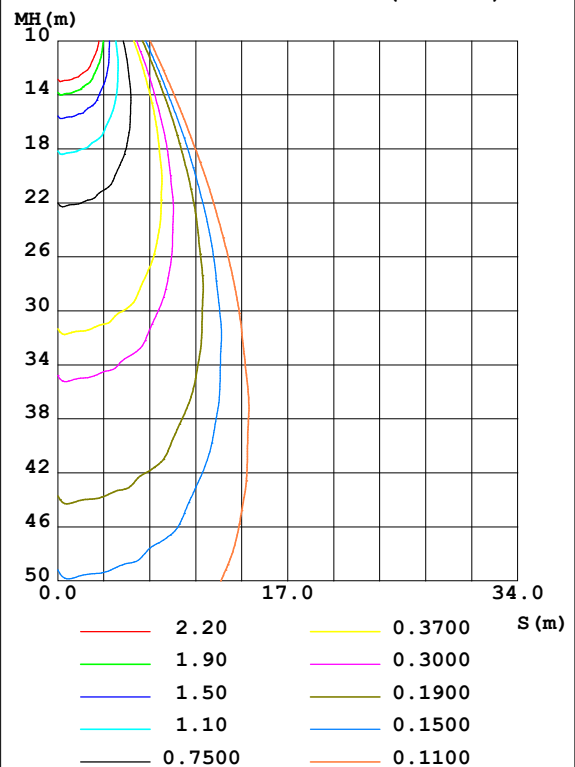
Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 59.90 lm/W			
MODEL	CREE XPG-3	I <sub>max</sub> (cd)	377.9	S/MH(C0/180)	0.64
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.64
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	181.33	η UP,DN(C0-180)	0.0,50.5
NOMINAL FLUX(lm)	181.327	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	0.65

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	346.7	341.1	326.8	322.9	325.2	316.3	313.6	329.1	0- 10	33.26	33.26	18.3,18.3
20	200.6	194.1	186.4	190.9	193.7	182.1	189.1	194.0	10- 20	73.38	106.6	58.8,58.8
30	49.00	44.88	43.97	45.66	48.19	43.30	48.76	47.73	20- 30	49.97	156.6	86.4,86.4
40	8.264	8.039	7.614	7.399	7.443	7.248	7.509	7.820	30- 40	12.01	168.6	93,93
50	4.927	5.095	4.706	4.581	4.616	4.729	4.676	4.858	40- 50	4.490	173.1	95.5,95.5
60	3.501	3.482	3.280	3.212	3.306	3.313	3.305	3.405	50- 60	3.631	176.7	97.5,97.5
70	2.391	2.327	2.200	2.159	2.211	2.222	2.228	2.392	60- 70	2.801	179.5	99,99
80	0.7739	0.7454	0.6608	0.6110	0.6306	0.6390	0.6835	0.7864	70- 80	1.624	181.2	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	0.1606	181.3	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 171.02 lm

%lum = 94.3%

%lamp = 94.3%

Conical surface Flux(120deg): 176.74 lm

%lum = 97.5%

%lamp = 97.5%

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:JEFF

Test Date:02 September 2024

$\gamma$  Range: 0 - 90DEG

$\gamma$  Interval: 1.0DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295

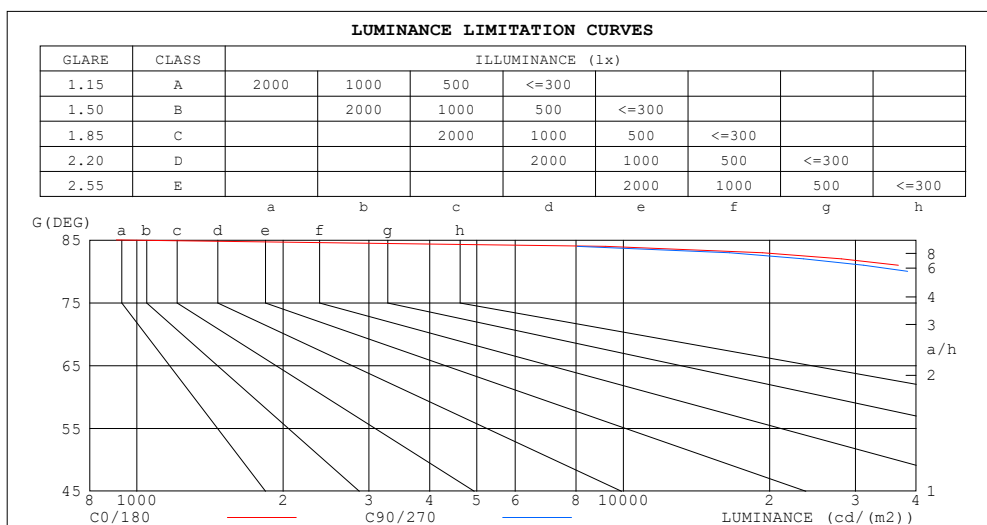
Humidity:65.0%

Test Distance:7.888m [K=1.0000]

Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	909	420
80	43982	38427
75	64609	59209
70	69005	64951
65	69733	66533
60	69112	66243
55	73159	70023
50	75654	73933
45	81943	78606

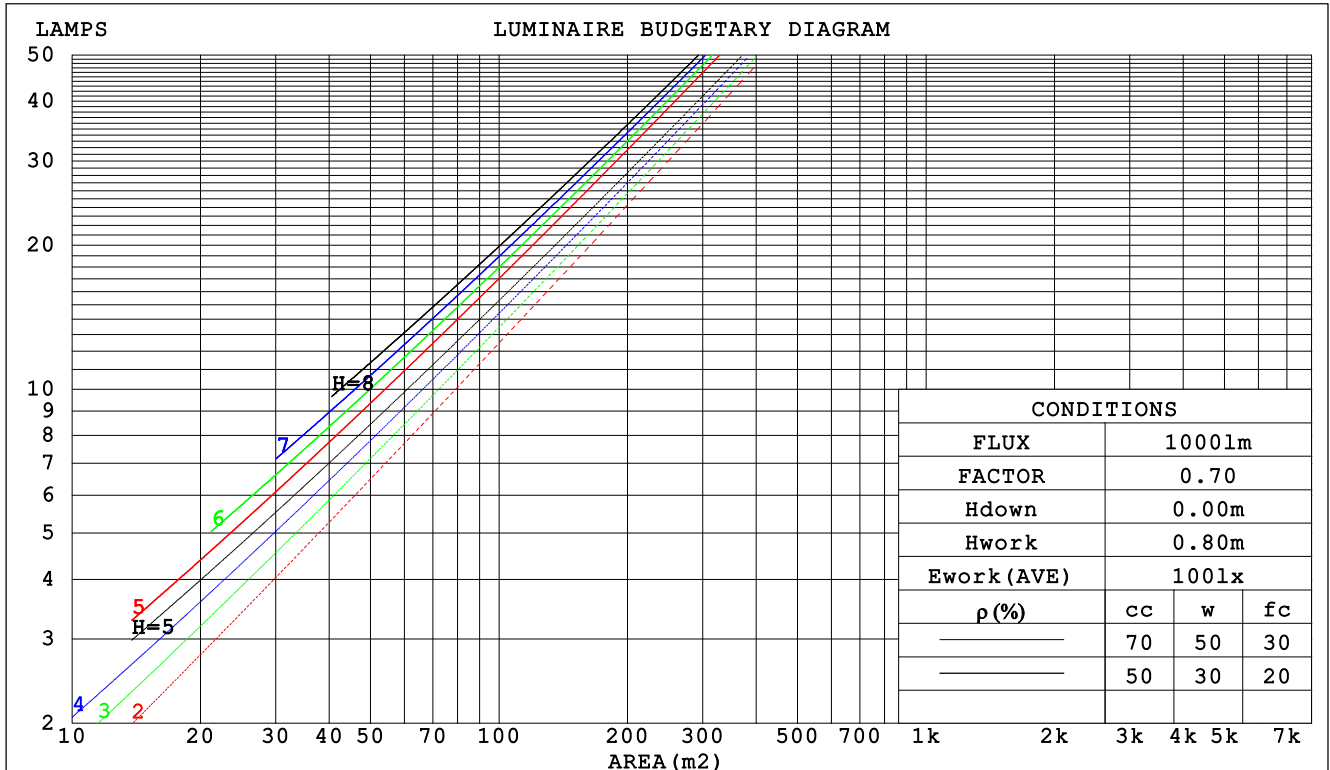
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.01	.98	1.03	.99	.96	.90	.97	.94	.97	.94	.92	.94	.92	.90	.89
3.0	.98	.94	.90	.97	.93	.90	.94	.91	.88	.92	.89	.87	.90	.88	.85	.84
4.0	.93	.88	.84	.92	.87	.84	.90	.86	.83	.88	.85	.82	.86	.83	.81	.80
5.0	.88	.83	.79	.87	.83	.79	.86	.82	.78	.84	.80	.78	.83	.80	.77	.76
6.0	.84	.79	.75	.83	.78	.75	.82	.78	.74	.81	.77	.74	.79	.76	.73	.72
7.0	.80	.75	.71	.80	.75	.71	.78	.74	.71	.77	.73	.70	.76	.73	.70	.69
8.0	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.73	.70	.67	.66
9.0	.73	.68	.65	.73	.68	.65	.72	.68	.65	.71	.67	.64	.71	.67	.64	.63
10.0	.71	.65	.62	.70	.65	.62	.69	.65	.62	.69	.65	.62	.68	.64	.62	.60



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:JEFF

Test Date:02 September 2024

$\gamma$  Range: 0 - 90DEG

$\gamma$  Interval: 1.0DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295

Humidity:65.0%

Test Distance:7.888m [K=1.0000]

Remarks:

**WEC AND CCEC**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding 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	.168 .095 .030	.161 .092 .029	.148 .085 .027	.137 .079 .025	.126 .073 .024	
2.0	.158 .086 .027	.152 .084 .026	.142 .079 .024	.132 .074 .023	.123 .070 .022	
3.0	.148 .079 .024	.143 .077 .023	.134 .073 .022	.126 .069 .021	.119 .066 .020	
4.0	.139 .072 .021	.135 .071 .021	.128 .068 .020	.121 .065 .020	.114 .062 .019	
5.0	.132 .067 .019	.128 .066 .019	.122 .063 .019	.115 .061 .018	.110 .059 .018	
6.0	.125 .063 .018	.122 .061 .018	.116 .059 .017	.111 .057 .017	.106 .056 .017	
7.0	.119 .059 .017	.116 .058 .016	.111 .056 .016	.106 .054 .016	.102 .053 .016	
8.0	.113 .055 .016	.111 .054 .015	.106 .053 .015	.102 .052 .015	.098 .050 .015	
9.0	.108 .052 .015	.106 .052 .014	.102 .050 .014	.098 .049 .014	.095 .048 .014	
10.0	.103 .050 .014	.102 .049 .014	.098 .048 .014	.095 .047 .013	.091 .046 .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	.190 .190 .190	.163 .163 .163	.111 .111 .111	.064 .064 .064	.020 .020 .020	
1.0	.170 .157 .146	.146 .135 .125	.100 .093 .087	.057 .054 .050	.018 .017 .016	
2.0	.154 .133 .114	.132 .114 .099	.091 .079 .069	.052 .046 .040	.017 .015 .013	
3.0	.141 .113 .092	.121 .098 .079	.083 .068 .056	.048 .040 .033	.015 .013 .011	
4.0	.130 .099 .075	.111 .085 .065	.077 .059 .046	.044 .035 .027	.014 .011 .009	
5.0	.120 .087 .062	.103 .075 .054	.071 .052 .038	.041 .031 .023	.013 .010 .007	
6.0	.112 .077 .052	.096 .067 .045	.066 .047 .032	.039 .027 .019	.012 .009 .006	
7.0	.105 .069 .044	.090 .060 .038	.062 .042 .027	.036 .025 .016	.012 .008 .005	
8.0	.099 .063 .038	.085 .054 .033	.059 .038 .023	.034 .023 .014	.011 .007 .005	
9.0	.094 .057 .033	.081 .050 .029	.056 .035 .020	.033 .021 .012	.011 .007 .004	
10.0	.089 .053 .029	.077 .046 .025	.053 .032 .018	.031 .019 .011	.010 .006 .004	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm										
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT: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	22.0	22.8	22.2	23.0	23.2	21.7	22.6	22.0	22.7	22.9
3H	23.3	24.0	23.5	24.2	24.4	23.0	23.7	23.2	23.9	24.1
4H	23.8	24.6	24.1	24.8	25.0	23.5	24.2	23.8	24.4	24.7
6H	24.1	24.8	24.4	25.0	25.3	23.7	24.4	24.0	24.7	24.9
8H	24.1	24.8	24.4	25.0	25.3	23.7	24.4	24.1	24.7	24.9
12H	24.1	24.7	24.4	25.0	25.3	23.7	24.3	24.0	24.6	24.9
4H 2H	22.5	23.2	22.7	23.4	23.6	22.2	23.0	22.5	23.2	23.4
3H	23.9	24.6	24.3	24.9	25.1	23.7	24.3	24.0	24.6	24.9
4H	24.6	25.2	25.0	25.5	25.8	24.3	24.9	24.7	25.2	25.5
6H	25.0	25.5	25.4	25.8	26.2	24.7	25.2	25.0	25.5	25.9
8H	25.0	25.5	25.4	25.9	26.2	24.7	25.1	25.1	25.5	25.9
12H	25.0	25.4	25.4	25.8	26.2	24.6	25.1	25.0	25.4	25.8
8H 4H	24.8	25.3	25.2	25.7	26.0	24.6	25.0	24.9	25.4	25.8
6H	25.3	25.7	25.7	26.1	26.5	25.0	25.4	25.4	25.7	26.2
8H	25.3	25.6	25.7	26.1	26.5	25.0	25.3	25.4	25.7	26.2
12H	25.2	25.5	25.7	26.0	26.5	24.9	25.2	25.4	25.7	26.1
12H 4H	24.8	25.2	25.2	25.6	26.0	24.5	25.0	24.9	25.4	25.7
6H	25.2	25.6	25.7	26.0	26.5	24.9	25.3	25.4	25.7	26.2
8H	25.3	25.6	25.7	26.0	26.5	25.0	25.3	25.4	25.7	26.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				
1.5H	+ 0.5 / - 0.4					+ 0.4 / - 0.3				
2.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4				

CIE Pub.117 Corrected 181.3 lm Total Lamp Luminous Flux.(8log(F/F0) = -5.9)

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:JEFF

Test Date:02 September 2024

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295

Humidity:65.0%

Test Distance:7.888m [K=1.0000]

Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

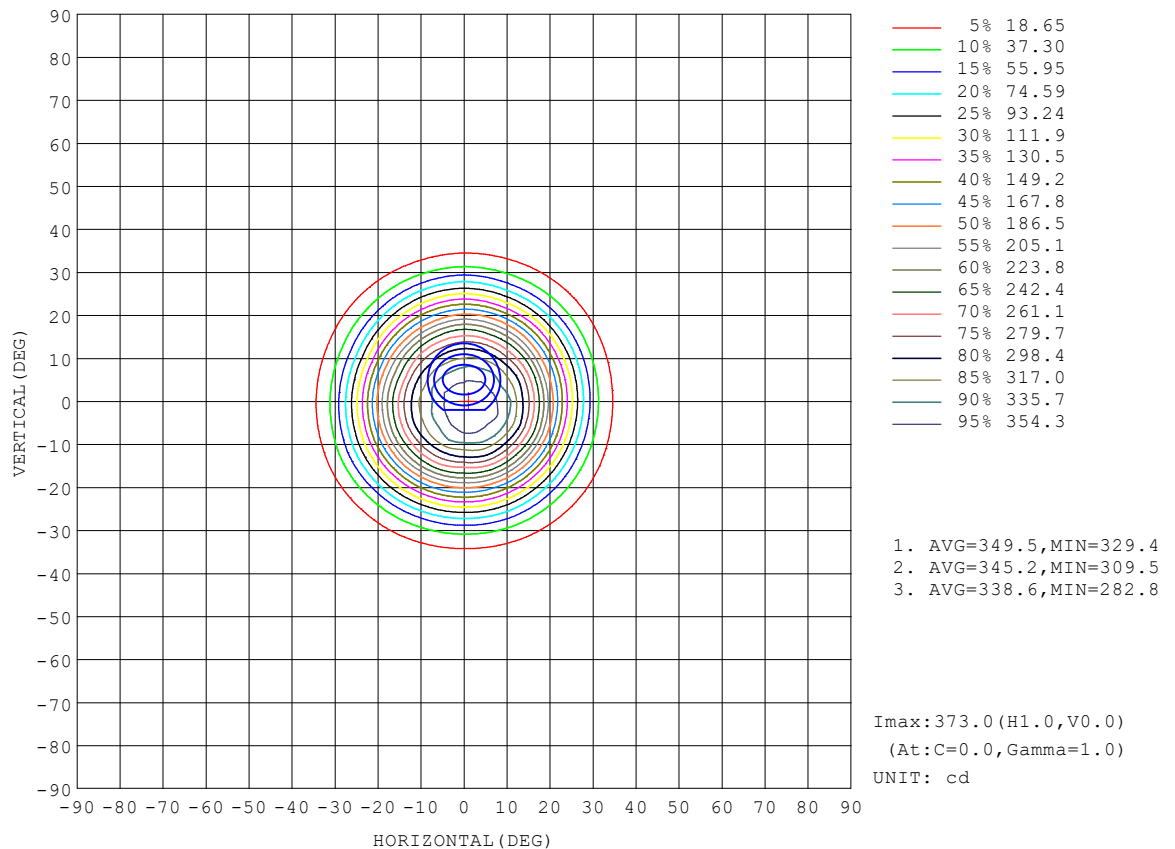
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	93	89	98	93	89	96	93	89	85
1.25	103	97	94	102	97	94	100	96	93	89
1.50	105	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	104	97
5.00	115	113	111	113	111	109	109	107	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNM = 1.25		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 02 September 2024

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.888m [K=1.0000]  
Remarks:

**ISOCANDELA DIAGRAM**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



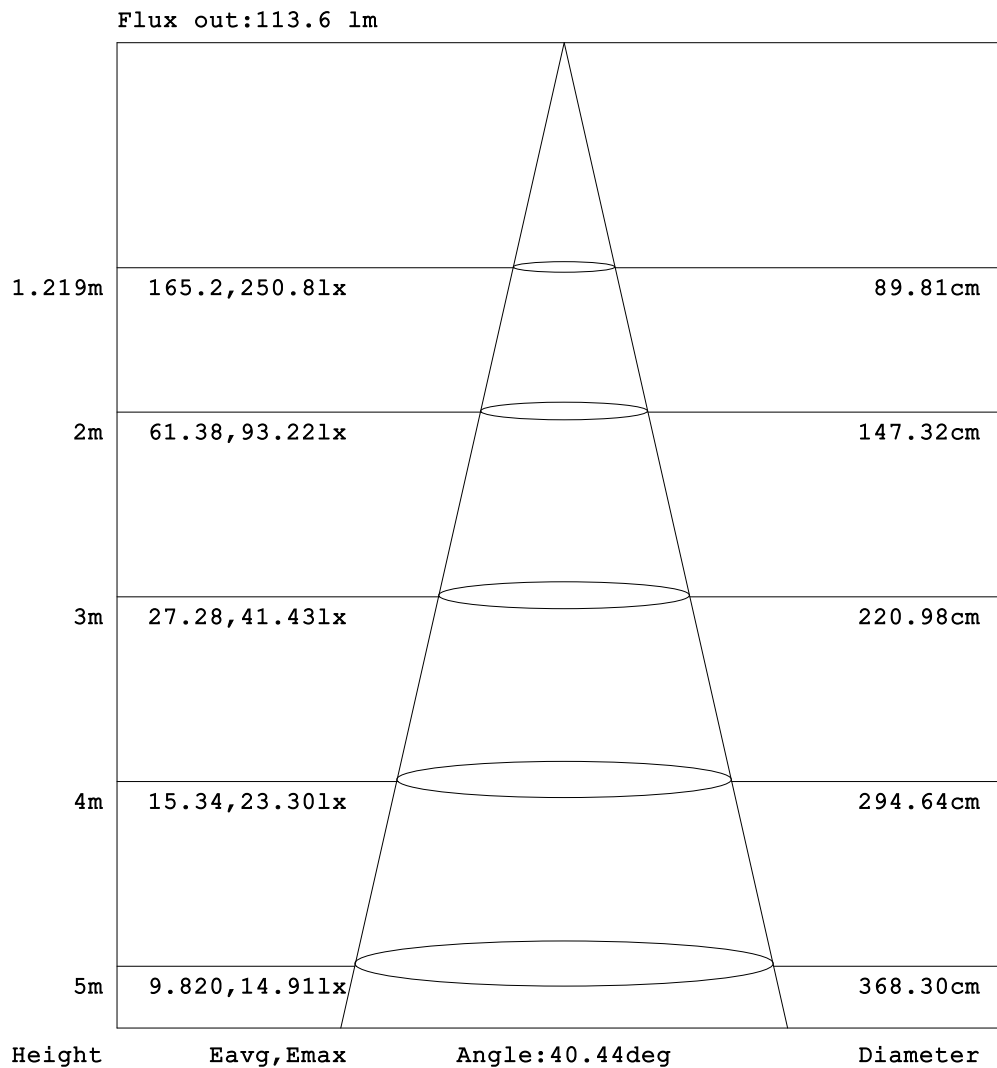
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



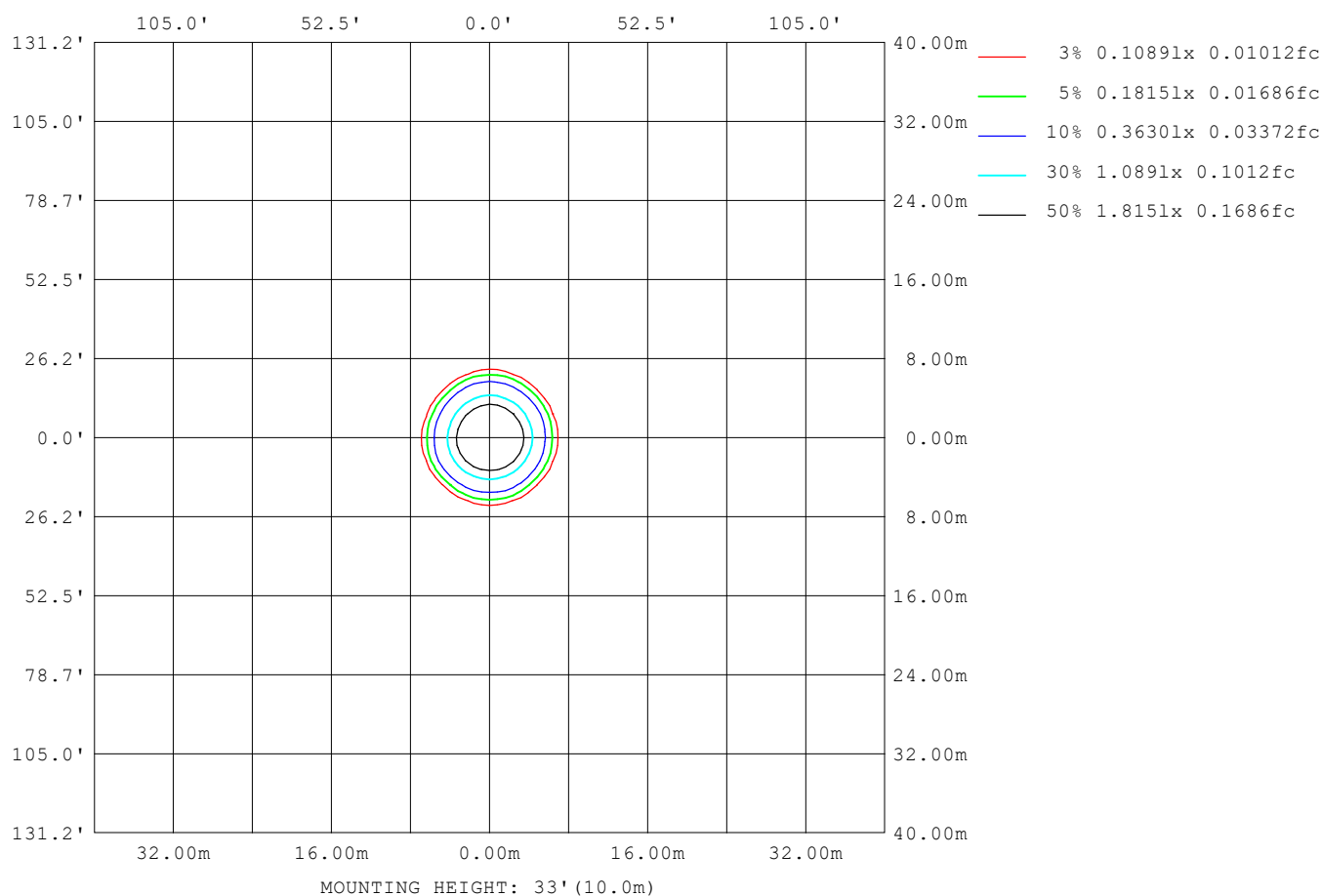
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:240.1V I:0.0191A P:3.027W PF:0.6618 Lamp Flux:181.327x1 lm		
NAME: DRAGON EYE_BLK_36 DEG_500mA_3000K 80CRI_NO SNOOT:LED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

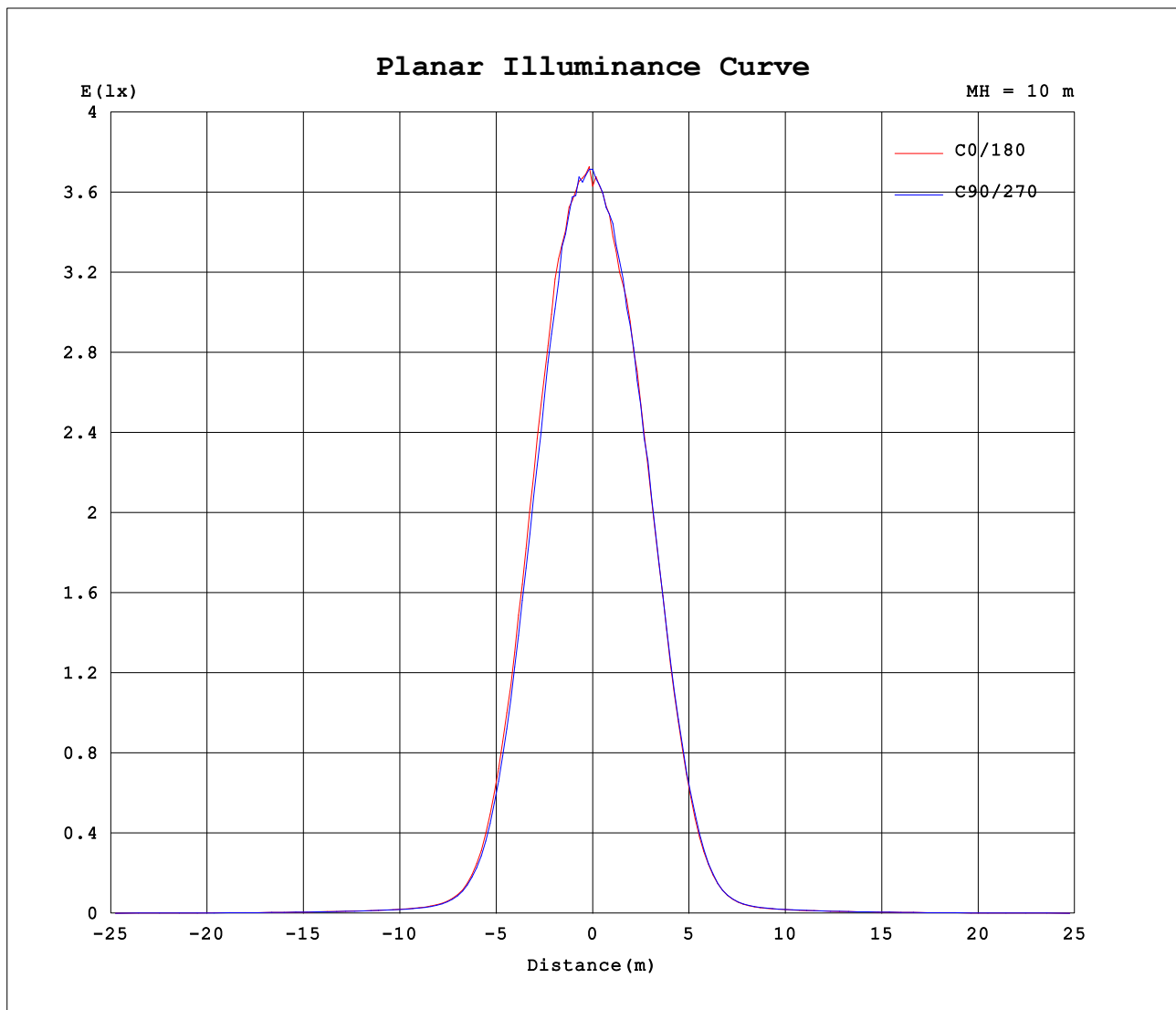
AvgL	cd/m2
L_0~180 (65) av	68306
L_0~180 (75) av	61624
L_0~180 (85) av	460
L_90~270 (65) av	65945
L_90~270 (75) av	59646
L_90~270 (85) av	208
L_45 (65) av	67254
L_45 (75) av	61629
L_45 (85) av	334

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:02 September 2024

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.888m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: JEFF

Test Date: 02 September 2024

$\gamma$  Range: 0 - 90DEG

$\gamma$  Interval: 1.0DEG

Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295

Humidity: 65.0%

Test Distance: 7.888m [K=1.0000]

Remarks:

