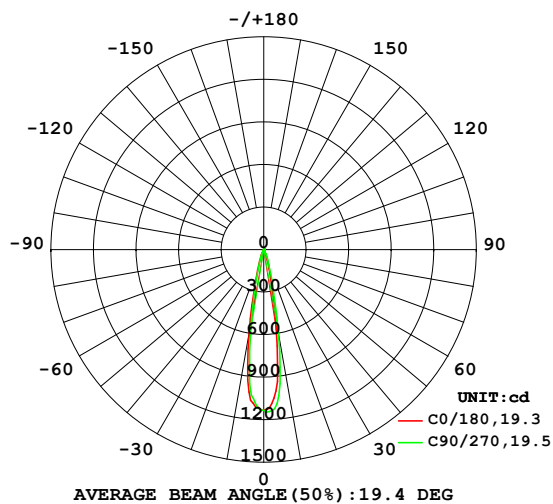


## LUMINAIRE PHOTOMETRIC TEST REPORT

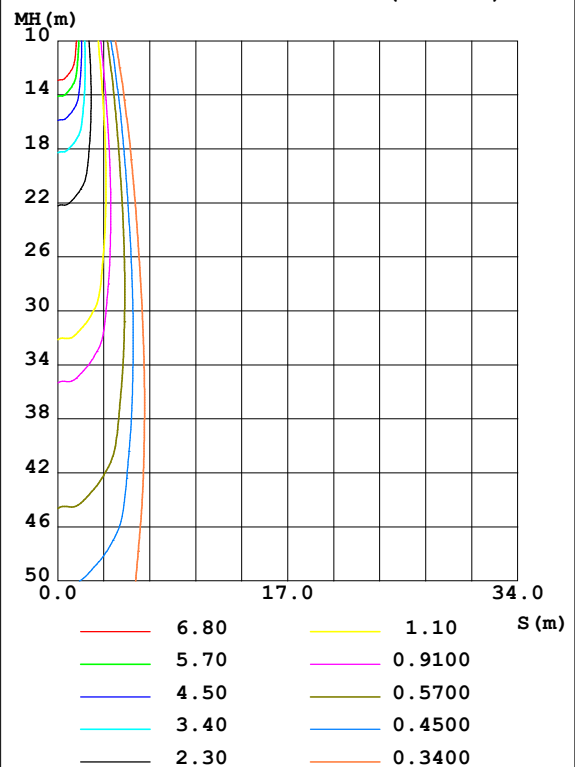
Test:U:240.1V I:0.0191A P:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOOTLED		WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 53.79 lm/W			
MODEL	CREE XPG-3	I <sub>max</sub> (cd)	1147	S/MH(C0/180)	0.34
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.31
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	162.58	η UP,DN(C0-180)	0.0,52.7
NOMINAL FLUX(lm)	162.577	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.00

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:27 August 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	470.3	523.6	608.1	620.5	591.8	540.8	494.0	469.4	0- 10	81.99	81.99	50.4,50.4
20	70.19	80.75	97.01	94.25	88.13	72.53	68.26	61.76	10- 20	59.01	141.0	86.7,86.7
30	7.120	9.239	14.51	12.14	8.384	6.026	6.568	6.240	20- 30	17.12	158.1	97.3,97.3
40	2.930	3.258	3.088	3.155	2.769	2.722	2.778	2.727	30- 40	2.789	160.9	99,99
50	0.5679	0.9518	0.7801	1.206	0.6532	0.6322	0.4844	0.4652	40- 50	1.364	162.3	99.8,99.8
60	0.1462	0.1462	0.1522	0.1458	0.0986	0.0985	0.1075	0.0982	50- 60	0.2371	162.5	100,100
70	0.0184	0.0257	0.0297	0.0292	0	0	0	0	60- 70	0.0625	162.6	100,100
80	0	0	0	0	0	0	0	0	70- 80	0.0014	162.6	100,100
90	0	0	0	0	0	0	0	0	80- 90	0	162.6	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): 161.79 lm

%lum = 99.5%

%lamp = 99.5%

Conical surface Flux(120deg): 162.51 lm

%lum = 100.0%

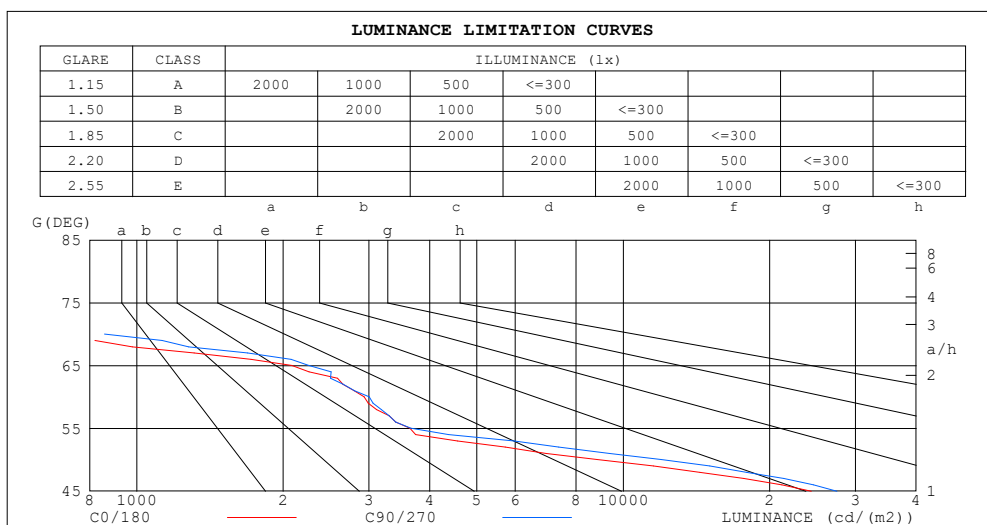
%lamp = 100.0%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JEFF  
 Test Date:27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOUTLED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	0	0
75	0	0
70	538	859
65	2084	2256
60	2931	3006
55	3642	3657
50	8856	11985
45	24344	27480

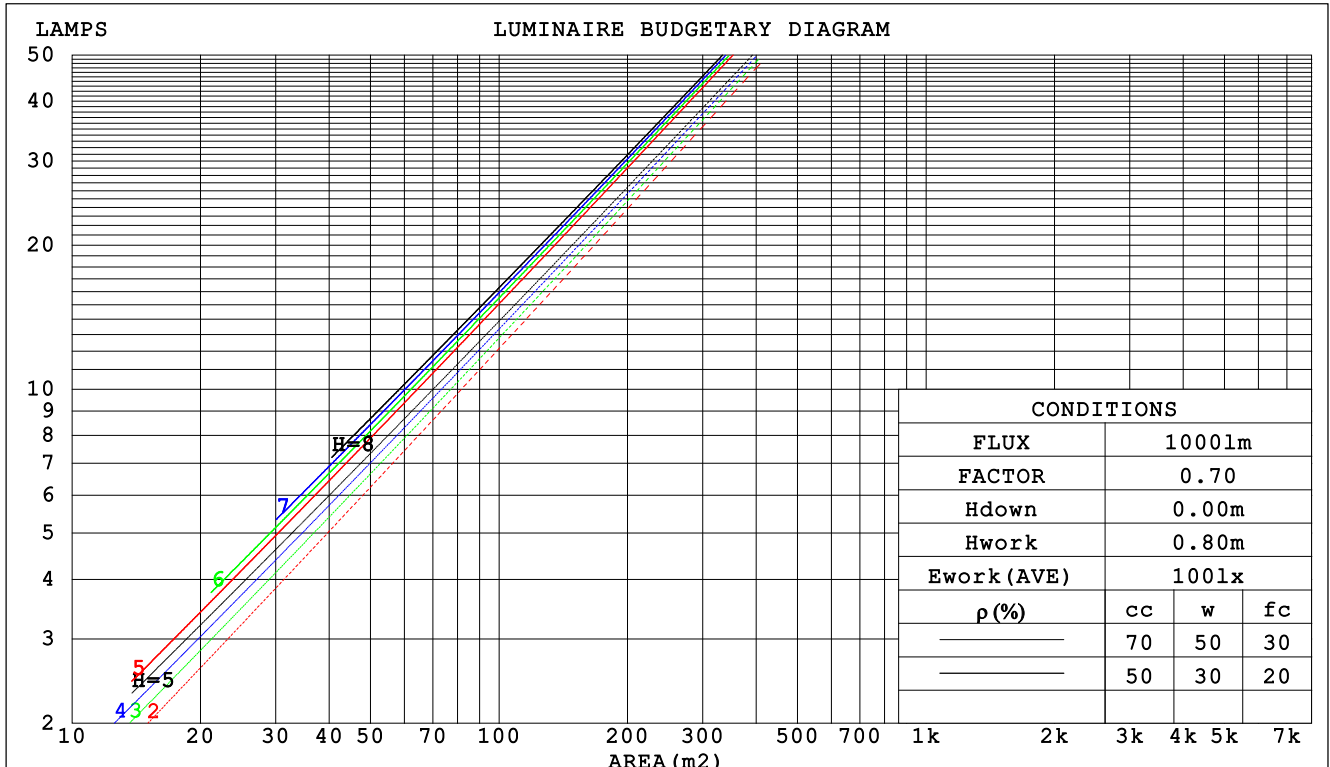
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 2024

$\gamma$  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:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:240.1V I:0.0191A P:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOUTLED		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	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	1.14	1.12	1.10	1.11	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.00	.00	.99	.98
2.0	1.09	1.06	1.04	1.07	1.05	1.03	1.04	1.02	1.01	1.01	.00	.99	.99	.98	.97	.95
3.0	1.05	1.02	.99	1.04	1.01	.98	1.01	.99	.97	.99	.97	.95	.97	.95	.94	.93
4.0	1.02	.98	.95	1.01	.97	.95	.99	.96	.94	.97	.95	.93	.95	.93	.92	.91
5.0	.99	.95	.92	.98	.94	.92	.96	.93	.91	.95	.92	.90	.93	.91	.90	.89
6.0	.96	.92	.90	.95	.92	.89	.94	.91	.89	.93	.90	.88	.92	.90	.88	.87
7.0	.94	.90	.87	.93	.90	.87	.92	.89	.87	.91	.88	.86	.90	.88	.86	.85
8.0	.91	.88	.85	.91	.88	.85	.90	.87	.85	.89	.87	.85	.88	.86	.84	.83
9.0	.89	.86	.83	.89	.86	.83	.88	.85	.83	.88	.85	.83	.87	.84	.83	.82
10.0	.87	.84	.82	.87	.84	.82	.87	.84	.81	.86	.83	.81	.85	.83	.81	.80



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOUTLED	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	.125	.071	.022	.118	.067	.021	.106	.061	.019	.094	.054	.017	.084	.049	.016		
2.0	.114	.063	.019	.109	.060	.018	.099	.055	.017	.090	.050	.016	.081	.046	.014		
3.0	.106	.056	.017	.101	.054	.016	.093	.050	.015	.085	.047	.014	.078	.043	.013		
4.0	.098	.051	.015	.095	.049	.015	.088	.046	.014	.081	.044	.013	.075	.041	.012		
5.0	.092	.047	.014	.089	.046	.013	.083	.043	.013	.077	.041	.012	.072	.039	.012		
6.0	.087	.043	.012	.084	.042	.012	.079	.040	.012	.074	.038	.011	.070	.037	.011		
7.0	.082	.040	.011	.079	.040	.011	.075	.038	.011	.071	.036	.011	.067	.035	.010		
8.0	.078	.038	.011	.076	.037	.011	.072	.036	.010	.068	.035	.010	.065	.033	.010		
9.0	.074	.036	.010	.072	.035	.010	.069	.034	.010	.066	.033	.009	.063	.032	.009		
10.0	.070	.034	.009	.069	.033	.009	.066	.032	.009	.063	.031	.009	.061	.030	.009		

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	.167	.158	.149	.143	.135	.128	.098	.093	.089	.056	.054	.052	.018	.017	.017	
2.0	.149	.133	.119	.127	.114	.103	.087	.079	.072	.050	.046	.042	.016	.015	.014	
3.0	.133	.113	.098	.114	.098	.085	.078	.068	.059	.045	.040	.035	.015	.013	.011	
4.0	.120	.098	.081	.103	.084	.070	.071	.059	.049	.041	.034	.029	.013	.011	.010	
5.0	.109	.085	.068	.093	.074	.059	.064	.051	.042	.037	.030	.025	.012	.010	.008	
6.0	.099	.075	.057	.085	.065	.050	.059	.045	.035	.034	.027	.021	.011	.009	.007	
7.0	.091	.066	.049	.078	.058	.043	.054	.040	.030	.031	.024	.018	.010	.008	.006	
8.0	.084	.060	.042	.073	.052	.037	.050	.036	.026	.029	.021	.016	.009	.007	.005	
9.0	.078	.054	.037	.068	.047	.032	.047	.033	.023	.027	.019	.014	.009	.006	.005	
10.0	.073	.049	.033	.063	.042	.028	.044	.030	.020	.026	.018	.012	.008	.006	.004	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm										
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOUTLED								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	10.5	11.0	10.7	11.2	11.3	11.0	11.5	11.2	11.7	11.8
3H	10.3	10.9	10.6	11.0	11.2	10.8	11.4	11.1	11.5	11.7
4H	10.3	10.8	10.5	11.0	11.2	10.8	11.3	11.0	11.5	11.7
6H	10.2	10.6	10.4	10.9	11.1	10.7	11.2	10.9	11.4	11.6
8H	10.1	10.6	10.4	10.8	11.1	10.6	11.1	10.9	11.3	11.6
12H	10.1	10.5	10.4	10.8	11.0	10.6	11.0	10.9	11.3	11.6
4H 2H	10.3	10.8	10.5	11.0	11.2	10.8	11.3	11.0	11.5	11.7
3H	10.1	10.6	10.4	10.8	11.1	10.6	11.1	10.9	11.3	11.6
4H	10.0	10.4	10.3	10.7	11.0	10.5	10.9	10.8	11.2	11.5
6H	9.9	10.3	10.3	10.6	10.9	10.4	10.8	10.8	11.1	11.4
8H	9.9	10.2	10.2	10.5	10.9	10.4	10.7	10.7	11.0	11.4
12H	9.8	10.1	10.2	10.5	10.9	10.3	10.6	10.7	11.0	11.4
8H 4H	9.9	10.2	10.2	10.5	10.9	10.4	10.7	10.7	11.0	11.4
6H	9.7	10.0	10.2	10.4	10.8	10.2	10.5	10.7	10.9	11.3
8H	9.7	9.9	10.1	10.3	10.8	10.2	10.4	10.6	10.8	11.3
12H	9.6	9.8	10.1	10.3	10.7	10.1	10.3	10.6	10.8	11.2
12H 4H	9.8	10.1	10.2	10.5	10.9	10.3	10.6	10.7	11.0	11.4
6H	9.7	9.9	10.1	10.3	10.8	10.2	10.4	10.6	10.8	11.3
8H	9.6	9.8	10.1	10.3	10.7	10.1	10.3	10.6	10.8	11.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.5 / -12.1					+ 2.4 / -12.1				
1.5H	+ 3.4 / -11.3					+ 3.2 / -11.5				
2.0H	+ 6.4 / - 9.7					+ 6.4 / - 9.9				

CIE Pub.117 Corrected 162.6 lm Total Lamp Luminous Flux.(8log(F/F0) = -6.3)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOOTLED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

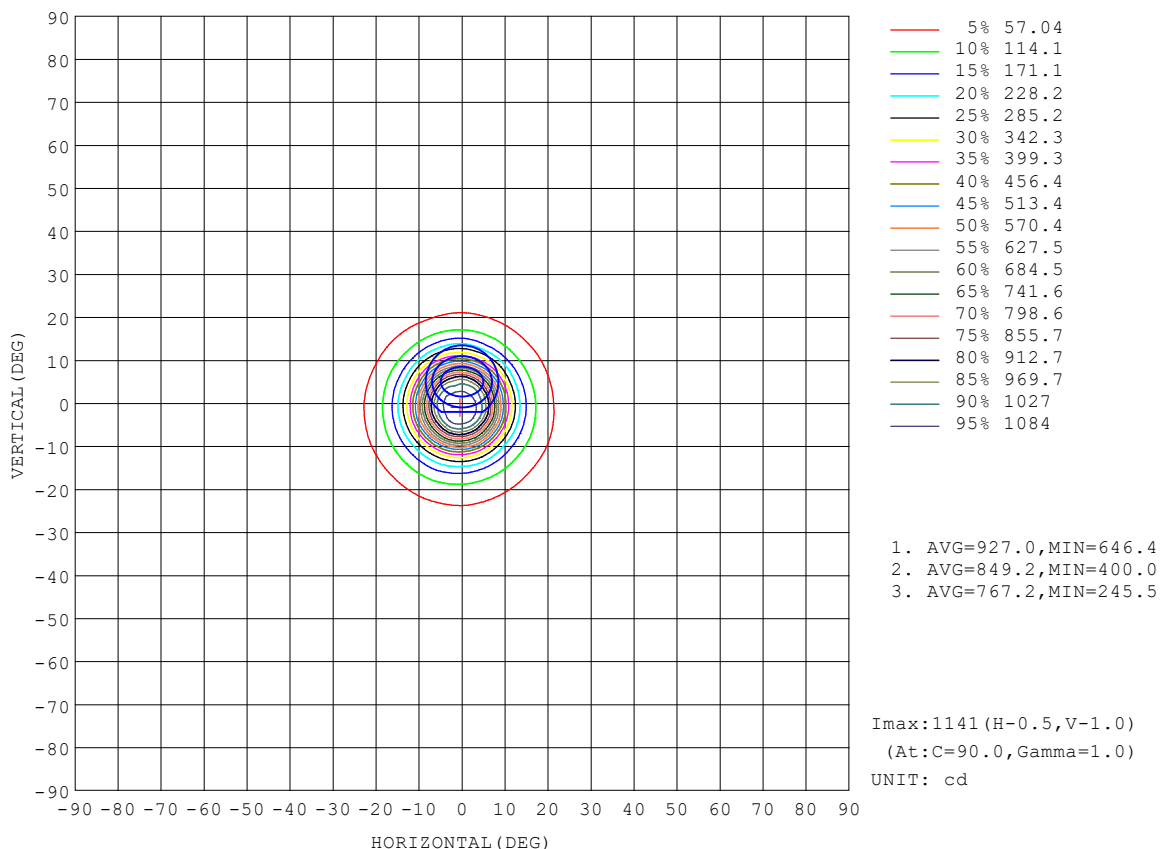
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	91	85	82	90	85	82	90	85	82	78
0.80	98	93	89	97	92	89	96	92	89	86
1.00	102	97	93	101	96	93	99	96	93	89
1.25	105	101	98	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	106	104	98
4.00	115	112	110	113	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					SHR NOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOOTLED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



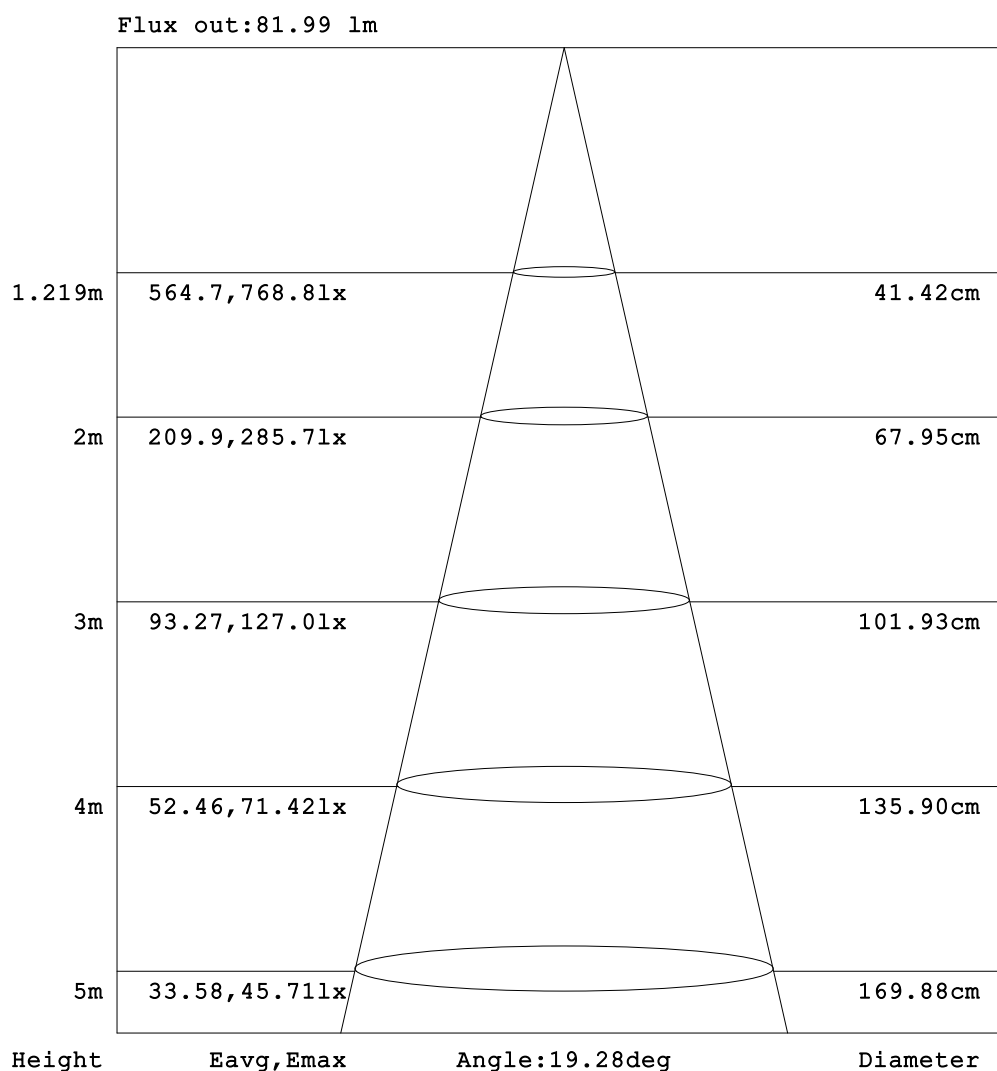
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 2024

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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOOTLED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



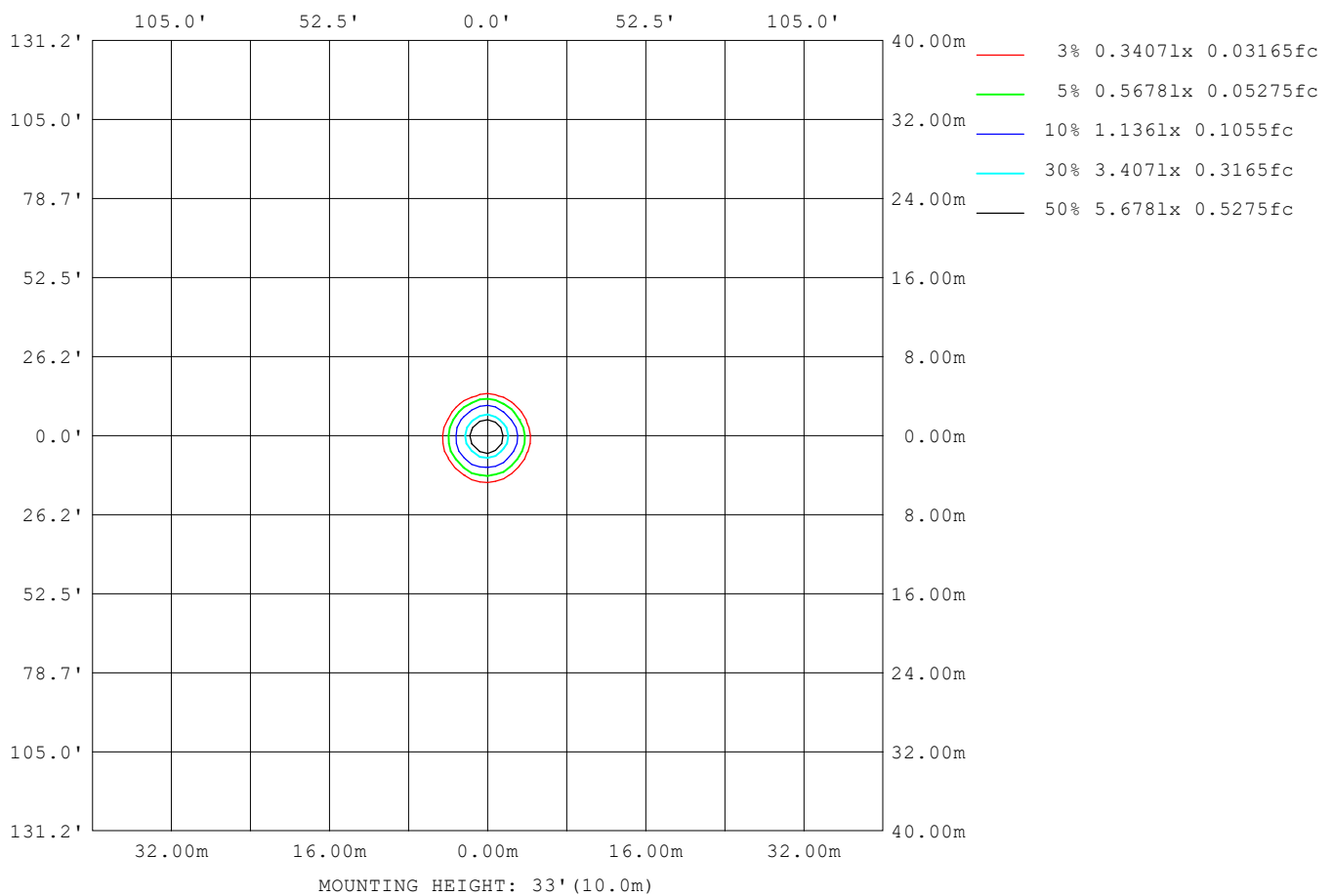
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOOTLED	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:27 August 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:3.023W PF:0.6602 Lamp Flux:162.577x1 lm		
NAME: DRAGON EYE_BLK_14 DEG_500mA_3000K 80CRI_WITH SNOOTLED	WEIGHT:	
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

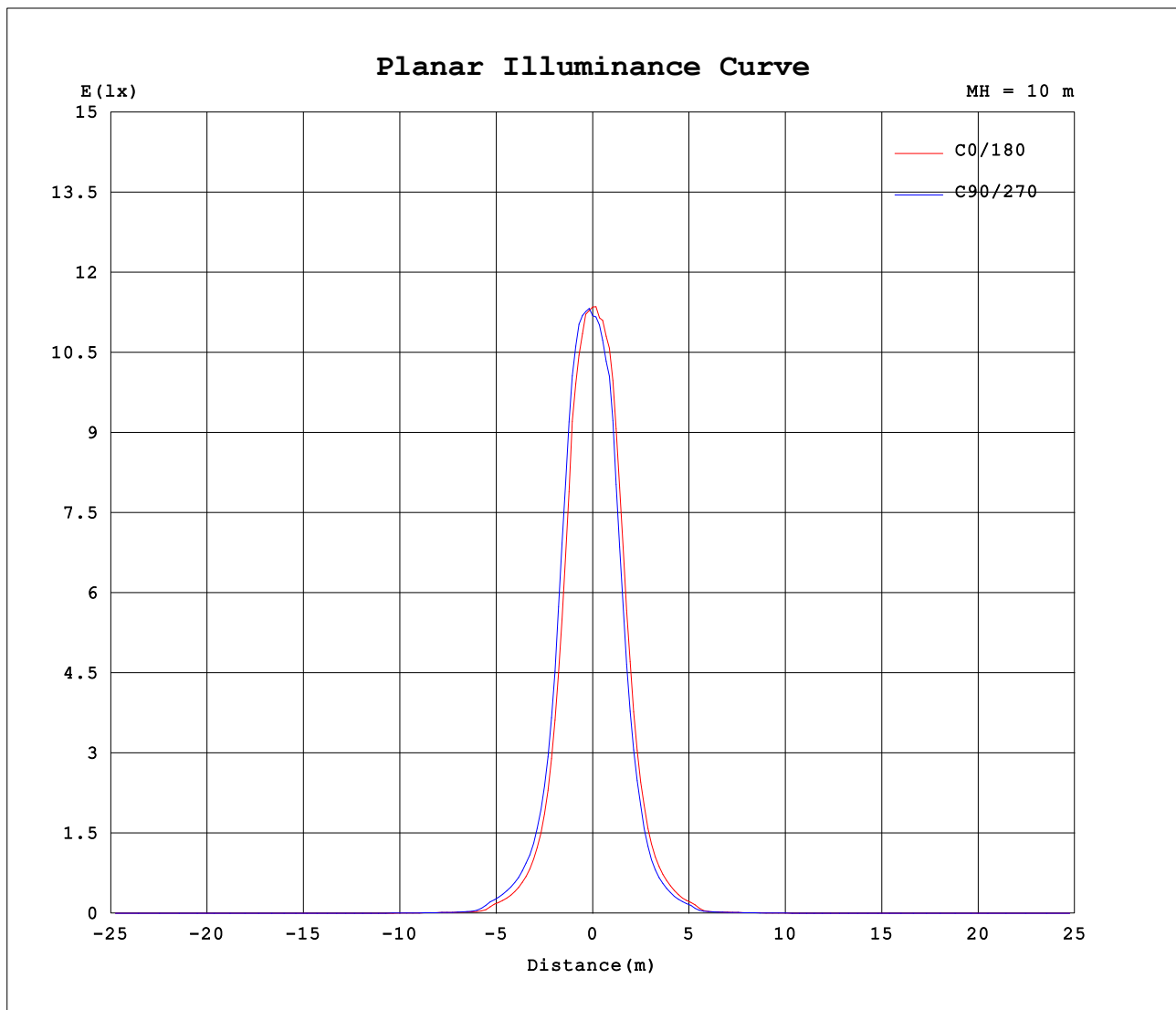
AvgL	cd/m2
L_0~180 (65) av	1771
L_0~180 (75) av	0
L_0~180 (85) av	0
L_90~270 (65) av	1577
L_90~270 (75) av	0
L_90~270 (85) av	0
L_45 (65) av	1641
L_45 (75) av	0
L_45 (85) av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:27 August 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: 27 August 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:

