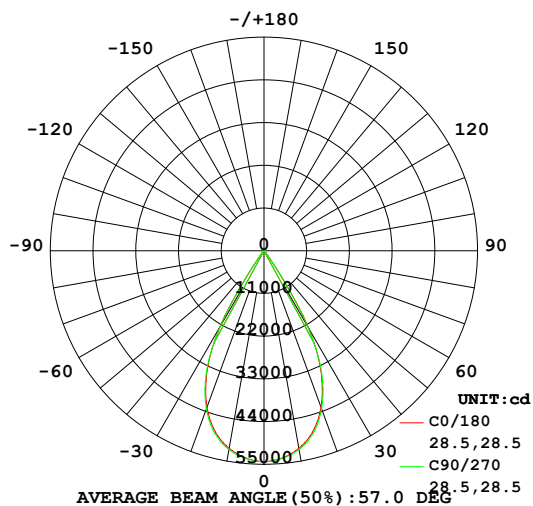


## LUMINAIRE PHOTOMETRIC TEST REPORT

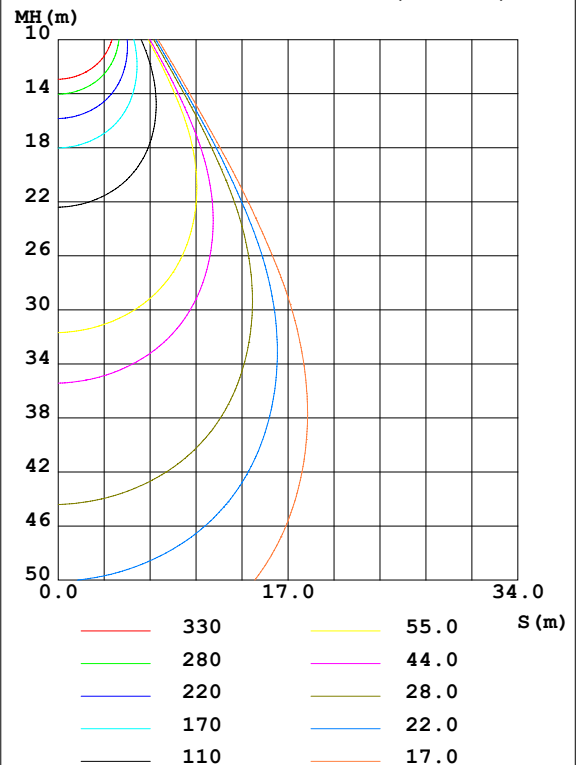
Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm					
NAME: AOK oH		TYPE:LED		WEIGHT:6KG	
SPEC.:AOK-240W oH		DIM.: $\phi 0.4 \times 0.141M$		SERIAL No.:1	
MFR.: AOK		SUR.: $\phi 0.29M$		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 166.12 lm/W			
MODEL	5050	I <sub>max</sub> (cd)	54353	S/MH (C0/180)	0.84
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	0.83
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	39803	$\eta$ UP,DN (C0-180)	0.0,50.0
NOMINAL FLUX (lm)	39802.9	CIE CLASS	DIRECT	$\eta$ UP,DN (C180-360)	0.0,50.0
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	220	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.85

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 7.633m [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	5168	5157	5196	5157	5168	5157	5196	5157	0- 10	5053	5053	12.7,12.7
20	4292	4260	4339	4260	4292	4260	4339	4260	10- 20	13452	18505	46.5,46.5
30	2304	2202	2268	2202	2304	2202	2268	2202	20- 30	15433	33938	85.3,85.3
40	80.93	76.05	79.28	76.05	80.93	76.05	79.28	76.05	30- 40	4447	38385	96.4,96.4
50	54.28	52.09	52.32	52.09	54.28	52.09	52.32	52.09	40- 50	477.9	38863	97.6,97.6
60	39.95	38.17	38.86	38.17	39.95	38.17	38.86	38.17	50- 60	404.7	39268	98.7,98.7
70	26.92	25.30	26.16	25.30	26.92	25.30	26.16	25.30	60- 70	325.1	39593	99.5,99.5
80	9.894	7.868	8.695	7.868	9.894	7.868	8.695	7.868	70- 80	187.0	39780	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	22.76	39803	100,100
100	0	0	0	0	0	0	0	0	90-100	0	39803	100,100
110	0	0	0	0	0	0	0	0	100-110	0	39803	100,100
120	0	0	0	0	0	0	0	0	110-120	0	39803	100,100
130	0	0	0	0	0	0	0	0	120-130	0	39803	100,100
140	0	0	0	0	0	0	0	0	130-140	0	39803	100,100
150	0	0	0	0	0	0	0	0	140-150	0	39803	100,100
160	0	0	0	0	0	0	0	0	150-160	0	39803	100,100
170	0	0	0	0	0	0	0	0	160-170	0	39803	100,100
180	0	0	0	0	0	0	0	0	170-180	0	39803	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 38633 lm

%lum = 97.1%

%lamp = 97.1%

Conical surface Flux(120deg): 39268 lm

%lum = 98.7%

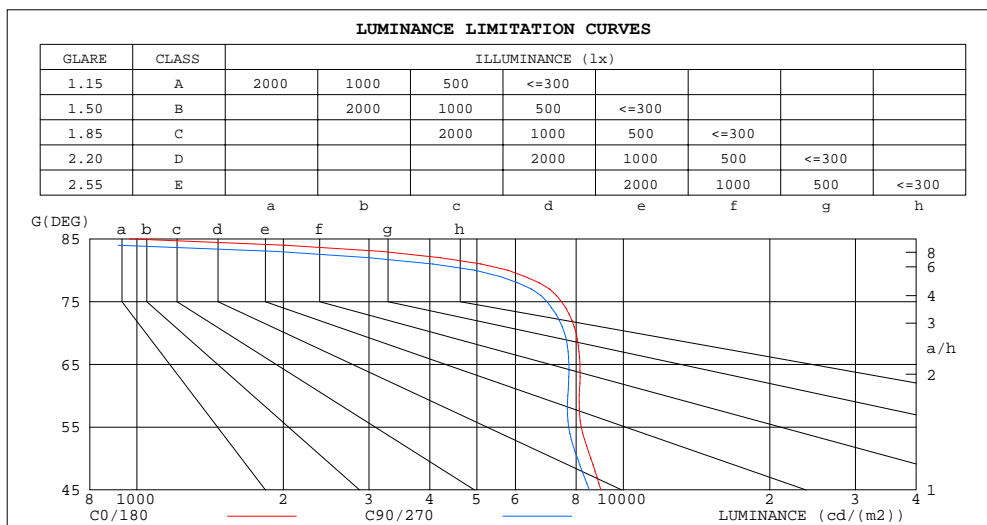
%lamp = 98.7%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.633m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	965	538
80	5788	4953
75	7462	6967
70	7996	7566
65	8147	7728
60	8116	7688
55	8195	7717
50	8578	8052
45	8993	8518

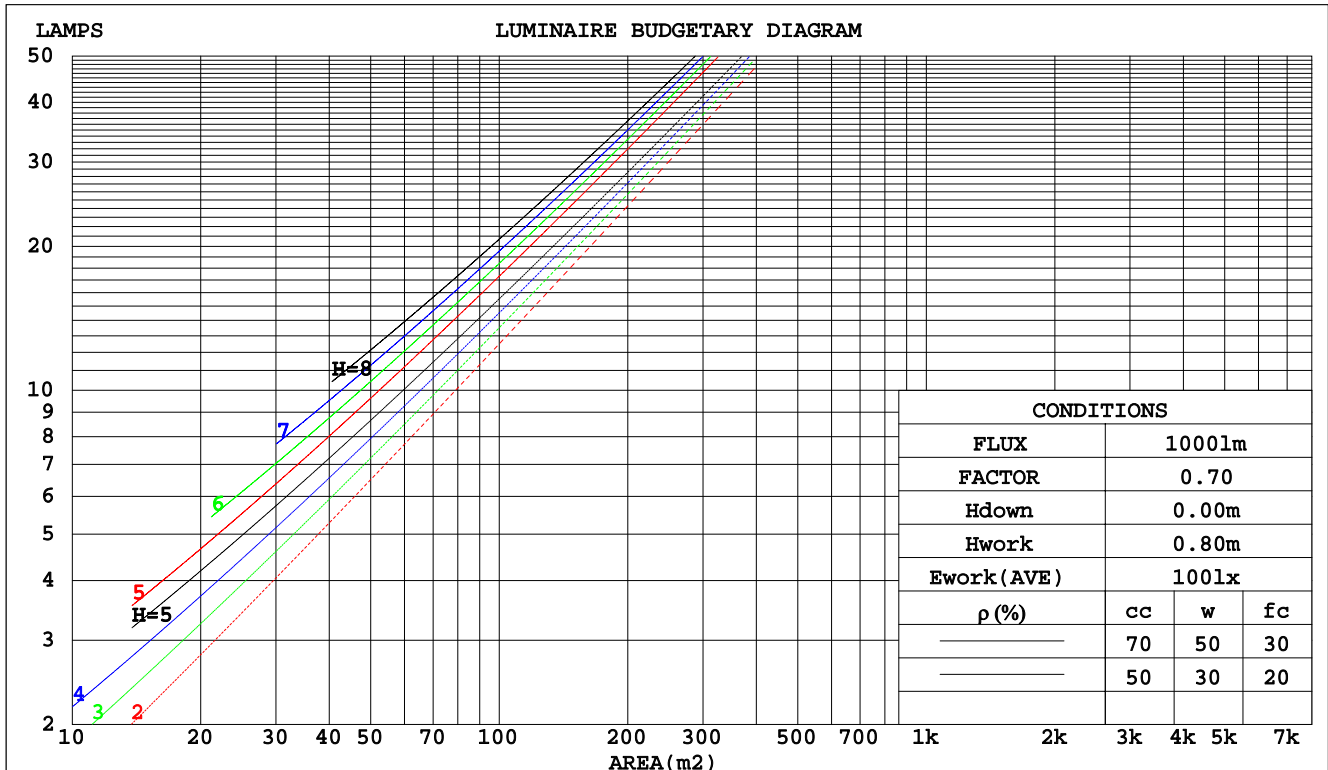
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	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						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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.92	.90	.88
3.0	.98	.93	.89	.96	.92	.89	.94	.90	.87	.91	.88	.86	.89	.87	.85	.83
4.0	.92	.87	.83	.91	.86	.83	.89	.85	.82	.87	.83	.81	.85	.82	.80	.78
5.0	.87	.82	.78	.86	.81	.77	.84	.80	.77	.83	.79	.76	.81	.78	.75	.74
6.0	.82	.77	.73	.81	.76	.73	.80	.75	.72	.79	.75	.72	.77	.74	.71	.70
7.0	.78	.72	.69	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.66
8.0	.74	.69	.65	.73	.68	.65	.72	.68	.64	.71	.67	.64	.71	.67	.64	.63
9.0	.70	.65	.61	.70	.65	.61	.69	.64	.61	.68	.64	.61	.67	.63	.61	.59
10.0	.67	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.64	.60	.58	.56



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.633m [K=1.0000]  
 Remarks:

## WEC AND CCEC

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.29M	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	.170	.097	.031	.163	.093	.030	.150	.086	.028	.139	.080	.026	.128	.074	.024	
2.0	.161	.088	.027	.155	.085	.026	.145	.080	.025	.135	.076	.024	.126	.071	.022	
3.0	.152	.081	.024	.147	.079	.024	.138	.075	.023	.130	.071	.022	.123	.068	.021	
4.0	.144	.075	.022	.140	.073	.022	.132	.070	.021	.125	.067	.020	.119	.065	.020	
5.0	.137	.070	.020	.134	.069	.020	.127	.066	.019	.121	.064	.019	.115	.061	.018	
6.0	.131	.065	.019	.128	.064	.019	.122	.062	.018	.116	.060	.018	.111	.059	.017	
7.0	.125	.062	.017	.122	.061	.017	.117	.059	.017	.112	.057	.017	.108	.056	.016	
8.0	.119	.058	.016	.117	.058	.016	.113	.056	.016	.108	.055	.016	.104	.053	.016	
9.0	.115	.055	.015	.112	.055	.015	.108	.054	.015	.105	.052	.015	.101	.051	.015	
10.0	.110	.053	.015	.108	.052	.015	.105	.051	.014	.101	.050	.014	.098	.049	.014	

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	.171	.157	.145	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.131	.099	.074	.112	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.038	.042	.031	.022	.013	.010	.007	
6.0	.114	.077	.051	.098	.067	.044	.068	.047	.031	.039	.028	.019	.013	.009	.006	
7.0	.107	.070	.043	.092	.060	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.102	.063	.037	.088	.055	.032	.061	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.097	.058	.032	.083	.050	.028	.058	.035	.020	.034	.021	.012	.011	.007	.004	
10.0	.092	.054	.028	.079	.047	.025	.055	.033	.017	.032	.019	.010	.010	.006	.003	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm										
NAME: AOK oH					TYPE:LED			WEIGHT:6KG		
SPEC.:AOK-240W oH					DIM.: $\phi$ 0.4*0.141M			SERIAL No.:1		
MFR.: AOK					SUR.: $\phi$ 0.29M			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	4.9	5.8	5.1	5.9	6.1	4.3	5.2	4.5	5.4	5.5
3H	5.1	5.9	5.3	6.1	6.3	4.5	5.3	4.8	5.5	5.7
4H	5.2	5.9	5.4	6.2	6.4	4.6	5.4	4.9	5.6	5.8
6H	5.2	5.9	5.5	6.2	6.4	4.7	5.4	5.0	5.6	5.9
8H	5.2	5.9	5.5	6.2	6.4	4.6	5.3	5.0	5.6	5.9
12H	5.2	5.8	5.5	6.1	6.4	4.6	5.3	4.9	5.5	5.8
4H 2H	4.8	5.5	5.1	5.8	6.0	4.2	5.0	4.5	5.2	5.4
3H	5.1	5.7	5.4	6.0	6.3	4.6	5.2	4.9	5.5	5.8
4H	5.3	5.9	5.6	6.2	6.5	4.8	5.4	5.1	5.7	6.0
6H	5.4	5.9	5.8	6.2	6.6	4.9	5.4	5.2	5.7	6.1
8H	5.4	5.9	5.8	6.2	6.6	4.8	5.3	5.2	5.7	6.0
12H	5.3	5.8	5.7	6.2	6.5	4.8	5.2	5.2	5.6	6.0
8H 4H	5.2	5.7	5.6	6.1	6.4	4.8	5.2	5.1	5.6	6.0
6H	5.4	5.8	5.8	6.2	6.6	4.9	5.3	5.3	5.7	6.1
8H	5.4	5.8	5.8	6.2	6.6	4.9	5.2	5.3	5.6	6.1
12H	5.4	5.7	5.8	6.1	6.6	4.8	5.1	5.3	5.6	6.0
12H 4H	5.2	5.6	5.6	6.0	6.4	4.7	5.2	5.1	5.5	5.9
6H	5.4	5.7	5.8	6.1	6.6	4.9	5.2	5.3	5.6	6.1
8H	5.4	5.7	5.8	6.1	6.6	4.8	5.1	5.3	5.6	6.1
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 0.6					+ 1.1 / - 0.5				
1.5H	+ 2.6 / - 0.5					+ 2.1 / - 0.5				
2.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				

CIE Pub.117, 39803 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 12.8$ )

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

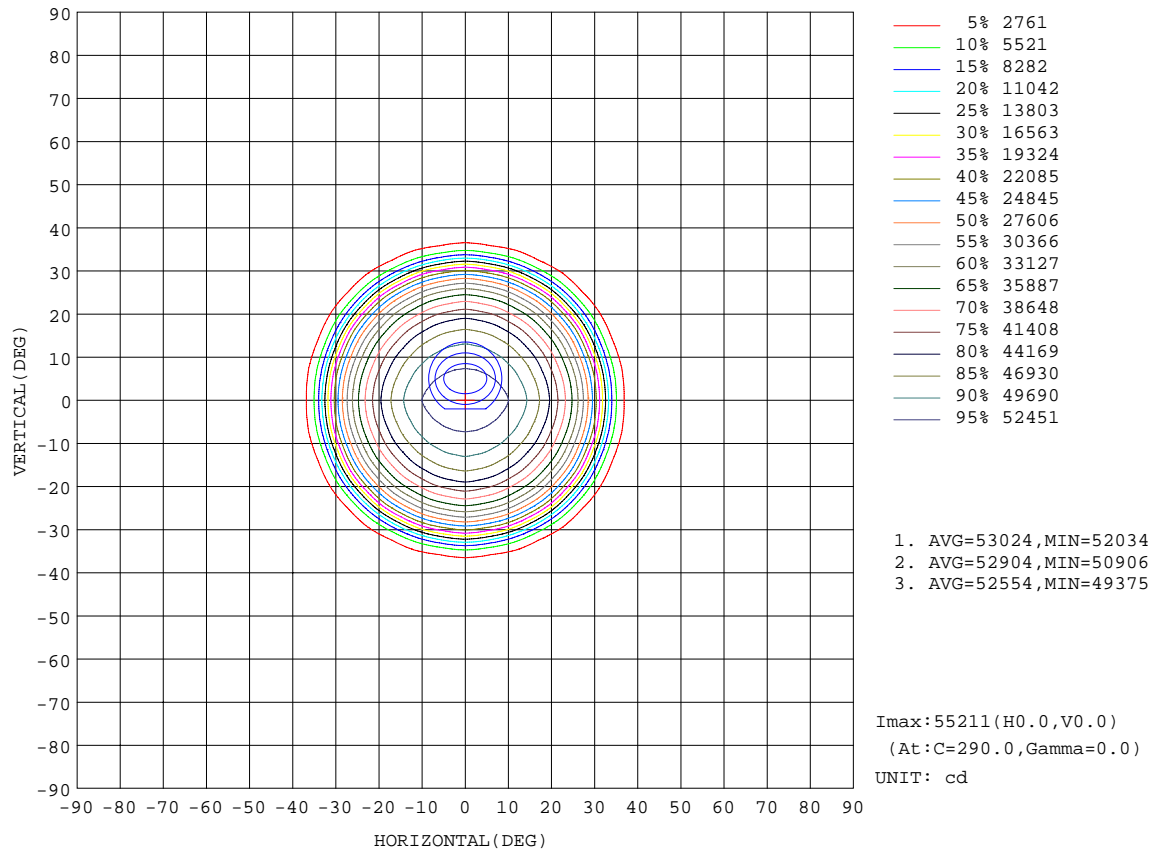
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	89	83	80	89	83	80	88	83	80	76
0.80	96	91	87	96	91	87	95	90	87	83
1.00	100	95	92	100	95	91	98	94	91	87
1.25	104	99	96	103	99	96	101	97	95	91
1.50	107	102	99	105	101	99	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	96
3.00	112	109	106	110	107	105	107	105	103	97
4.00	114	111	109	112	110	108	109	107	105	98
5.00	115	113	112	113	111	110	109	108	107	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

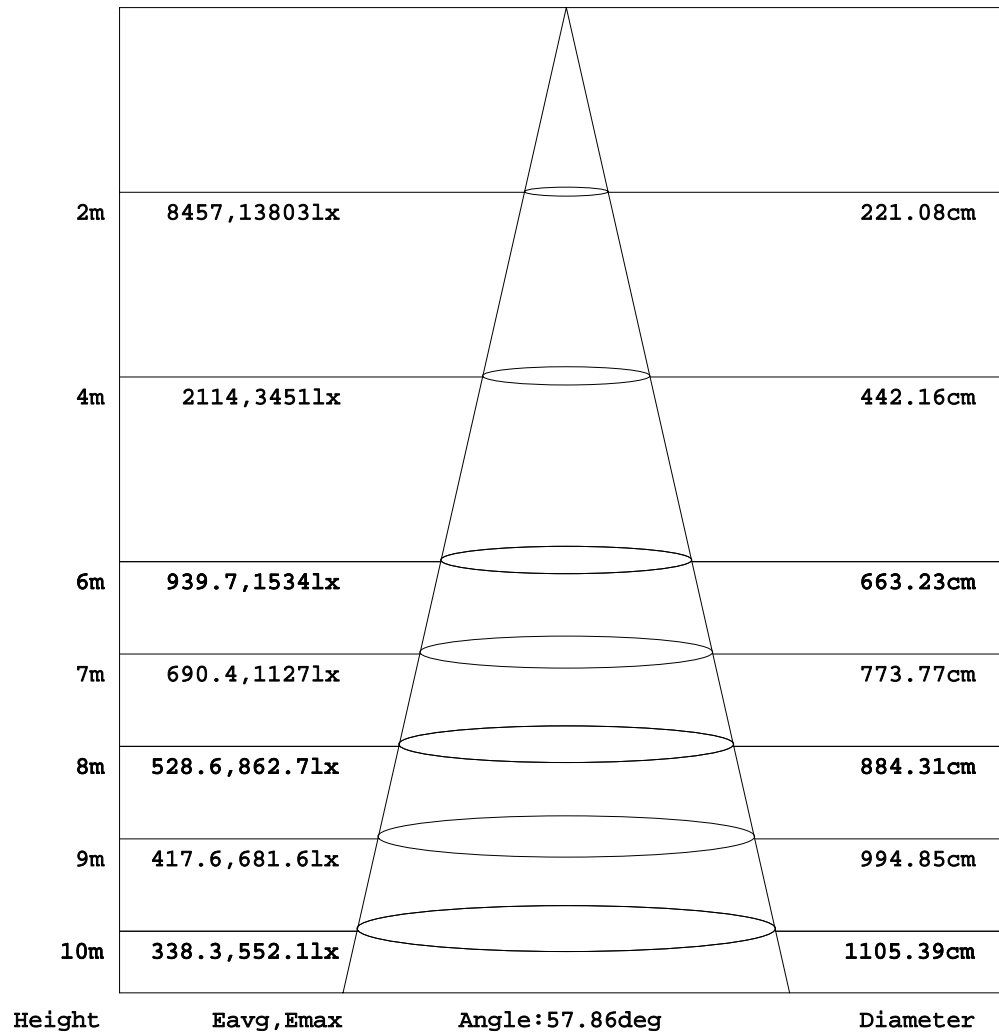
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

Flux out:32655 lm



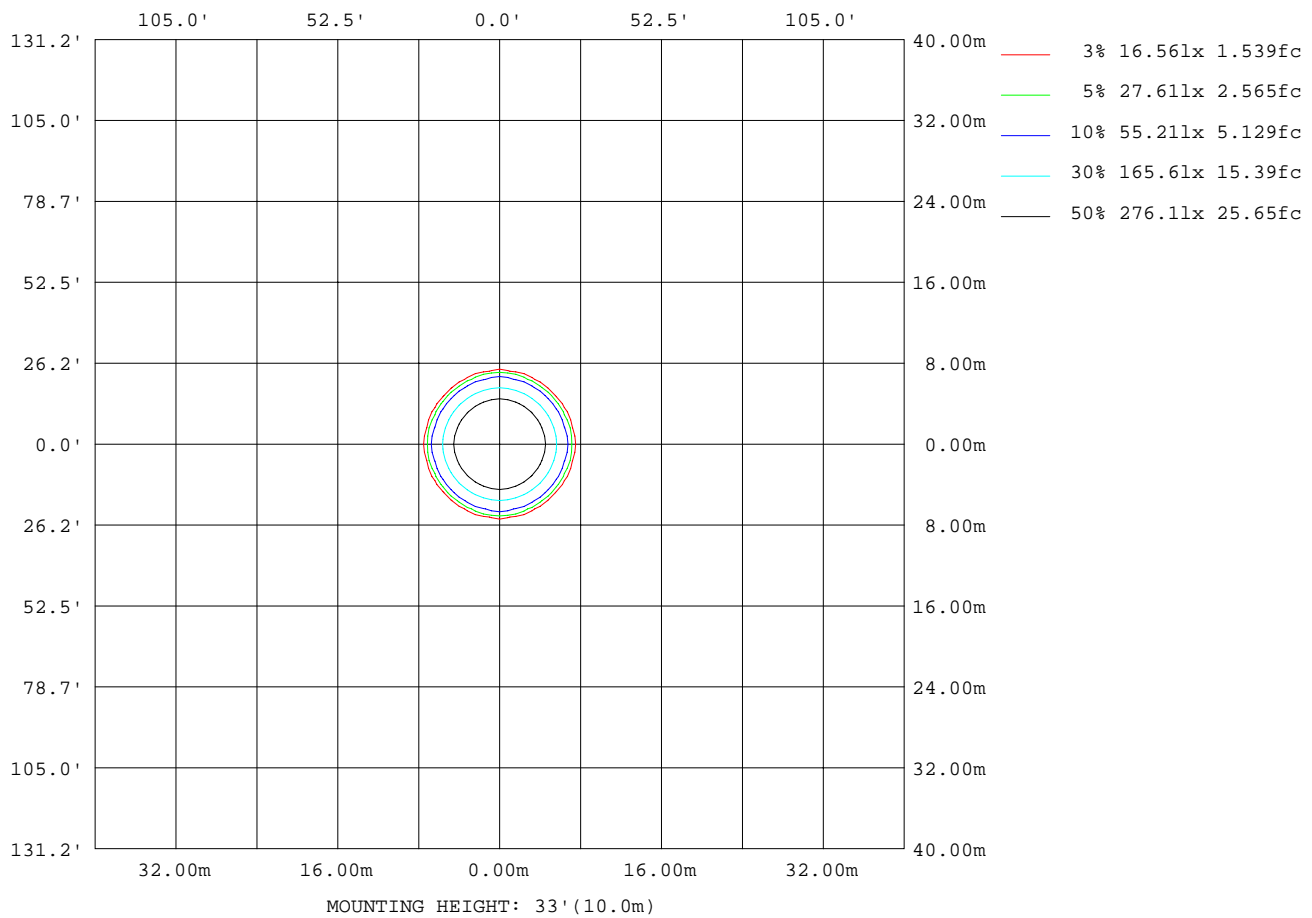
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 7.633m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.29M	Shielding Angle:

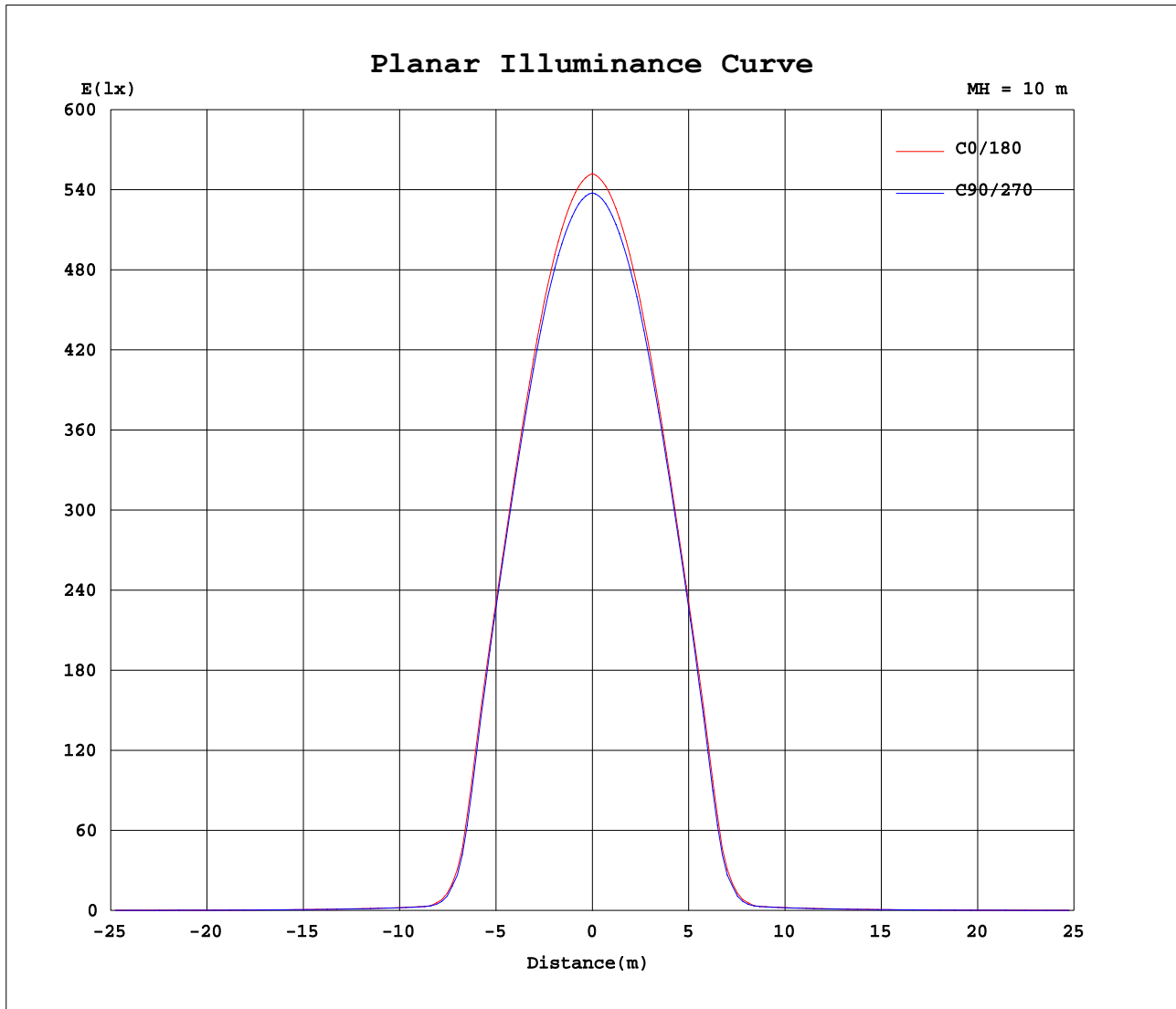
AvgL	cd/m2
L_0~180 (65) av	8020
L_0~180 (75) av	7346
L_0~180 (85) av	950
L_90~270 (65) av	7812
L_90~270 (75) av	7043
L_90~270 (85) av	544
L_45 (65) av	7608
L_45 (75) av	6635
L_45 (85) av	663

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.633m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

Table--1

UNIT:  $\times 10cd$ 

C (DEG) $\gamma$ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435
5	5358	5356	5351	5353	5350	5354	5355	5360	5363	5370	5363	5360	5355	5354	5350	5353	5351	5356	5358
10	5168	5165	5156	5158	5154	5161	5164	5174	5181	5196	5181	5174	5164	5161	5154	5158	5156	5165	5168
15	4834	4831	4814	4819	4810	4823	4822	4843	4849	4876	4849	4843	4822	4823	4810	4819	4814	4831	4834
20	4292	4286	4263	4266	4253	4266	4265	4291	4302	4339	4302	4291	4265	4266	4253	4266	4263	4286	4292
25	3491	3484	3452	3455	3434	3451	3444	3477	3484	3532	3484	3477	3444	3451	3434	3455	3452	3484	3491
30	2304	2298	2237	2241	2192	2213	2175	2215	2200	2268	2200	2215	2175	2213	2192	2241	2237	2298	2304
35	554	548	498	498	460	470	443	466	453	490	453	466	443	470	460	498	498	548	554
40	80.9	79.8	76.9	76.8	75.5	76.6	76.3	78.0	77.7	79.3	77.7	78.0	76.3	76.6	75.5	76.8	76.9	79.8	80.9
45	62.6	62.4	61.6	61.3	60.7	60.7	60.6	61.1	60.9	60.9	60.9	61.1	60.6	60.7	60.7	61.3	61.6	62.4	62.6
50	54.3	54.1	53.2	52.9	52.1	52.1	52.0	52.4	52.3	52.3	52.3	52.4	52.0	52.1	52.1	52.9	53.2	54.1	54.3
55	46.3	46.1	45.5	45.0	44.2	44.3	44.3	44.7	44.6	44.7	44.6	44.7	44.3	44.3	44.2	45.0	45.5	46.1	46.3
60	39.9	39.8	39.6	39.1	38.1	38.2	38.4	38.9	38.6	38.9	38.6	38.9	38.4	38.2	38.1	39.1	39.6	39.8	39.9
65	33.9	33.7	33.9	33.3	32.2	32.3	32.5	33.0	32.7	33.0	32.7	33.0	32.5	32.3	32.2	33.3	33.9	33.7	33.9
70	26.9	26.9	26.9	26.3	25.3	25.3	25.6	26.1	25.9	26.2	25.9	26.1	25.6	25.3	25.3	26.3	26.9	26.9	26.9
75	19.0	18.9	18.5	18.0	17.3	17.2	17.4	17.8	17.9	18.2	17.9	17.8	17.4	17.2	17.3	18.0	18.5	18.9	19.0
80	9.89	9.81	9.16	8.72	7.92	7.82	7.84	8.35	8.23	8.70	8.23	8.35	7.84	7.82	7.92	8.72	9.16	9.81	9.89
85	0.83	0.82	0.69	0.67	0.59	0.57	0.51	0.50	0.47	0.47	0.47	0.50	0.51	0.57	0.59	0.67	0.69	0.82	0.83
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-12-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 7.633m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:219.8V I:1.136A P:239.6W PF:0.9796 Freq:49.99Hz Lamp Flux:39802.9x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6KG
SPEC.:AOK-240W oH	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.29M	Shielding Angle:

Table--2

UNIT: x10cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435	5435		
5	5356	5351	5353	5350	5354	5355	5360	5363	5370	5363	5360	5355	5354	5350	5353	5351	5356		
10	5165	5156	5158	5154	5161	5164	5174	5181	5196	5181	5174	5164	5161	5154	5158	5156	5165		
15	4831	4814	4819	4810	4823	4822	4843	4849	4876	4849	4843	4822	4823	4810	4819	4814	4831		
20	4286	4263	4266	4253	4266	4265	4291	4302	4339	4302	4291	4265	4266	4253	4266	4263	4286		
25	3484	3452	3455	3434	3451	3444	3477	3484	3532	3484	3477	3444	3451	3434	3455	3452	3484		
30	2298	2237	2241	2192	2213	2175	2215	2200	2268	2200	2215	2175	2213	2192	2241	2237	2298		
35	548	498	498	460	470	443	466	453	490	453	466	443	470	460	498	498	548		
40	79.8	76.9	76.8	75.5	76.6	76.3	78.0	77.7	79.3	77.7	78.0	76.3	76.6	75.5	76.8	76.9	79.8		
45	62.4	61.6	61.3	60.7	60.7	60.6	61.1	60.9	60.9	60.9	61.1	60.6	60.7	60.7	61.3	61.6	62.4		
50	54.1	53.2	52.9	52.1	52.1	52.0	52.4	52.3	52.3	52.3	52.4	52.0	52.1	52.1	52.9	53.2	54.1		
55	46.1	45.5	45.0	44.2	44.3	44.3	44.7	44.6	44.7	44.6	44.7	44.3	44.3	44.2	45.0	45.5	46.1		
60	39.8	39.6	39.1	38.1	38.2	38.4	38.9	38.6	38.9	38.6	38.9	38.4	38.2	38.1	39.1	39.6	39.8		
65	33.7	33.9	33.3	32.2	32.3	32.5	33.0	32.7	33.0	32.7	33.0	32.5	32.3	32.2	33.3	33.9	33.7		
70	26.9	26.9	26.3	25.3	25.3	25.6	26.1	25.9	26.2	25.9	26.1	25.6	25.3	25.3	26.3	26.9	26.9		
75	18.9	18.5	18.0	17.3	17.2	17.4	17.8	17.9	18.2	17.9	17.8	17.4	17.2	17.3	18.0	18.5	18.9		
80	9.81	9.16	8.72	7.92	7.82	7.84	8.35	8.23	8.70	8.23	8.35	7.84	7.82	7.92	8.72	9.16	9.81		
85	0.82	0.69	0.67	0.59	0.57	0.51	0.50	0.47	0.47	0.47	0.50	0.51	0.57	0.59	0.67	0.69	0.82		
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks: