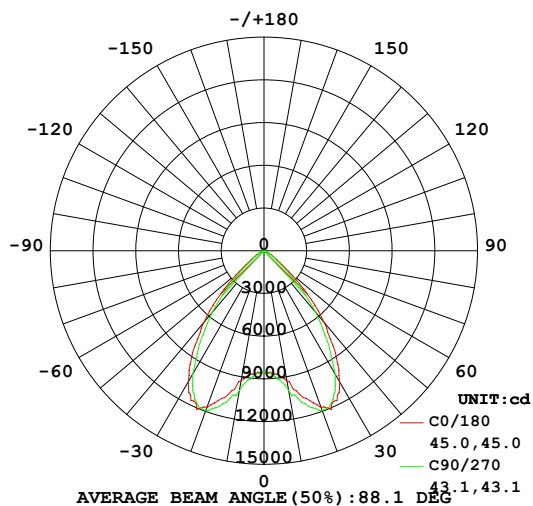


## LUMINAIRE PHOTOMETRIC TEST REPORT

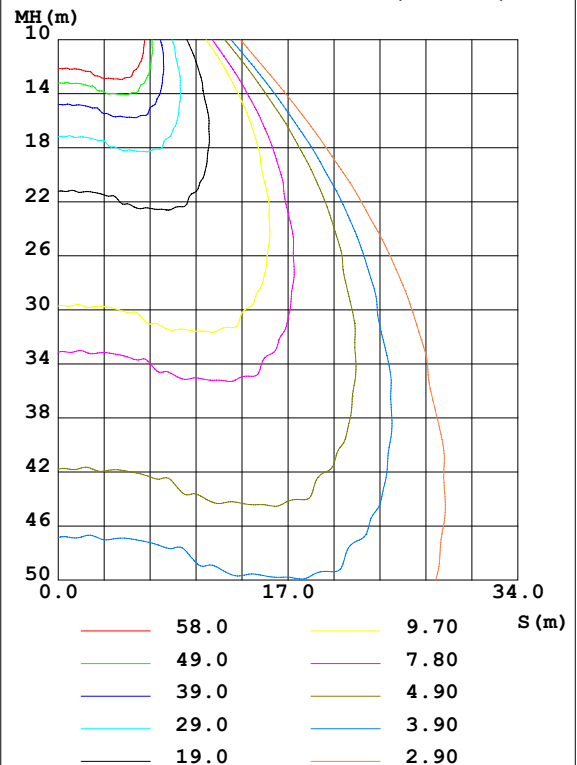
Test:U:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm					
NAME: AOK-oH		TYPE:LED		WEIGHT:4.6KG	
SPEC.:AOK-150Woh-3030-90D-PC-ALL		DIM.: $\phi 0.319 \times 0.138\text{M}$		SERIAL No.:1	
MFR.: AOK		SUR.: $\phi 0.24\text{M}$		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.43 lm/W			
MODEL	3030	I <sub>max</sub> (cd)	12136	S/MH (C0/180)	1.30
NOMINAL POWER (W)	150	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	18751	$\eta$ UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	18751.2	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	$\eta$ down (%)	100.0	CIBSE SHR MAX	1.25

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: 2018-01-03

$\gamma$  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	928.0	955.5	995.0	955.5	928.0	955.5	995.0	955.5	0- 10	860.2	860.2	4.59,4.59
20	1171	1186	1195	1186	1171	1186	1195	1186	10- 20	3117	3977	21.2,21.2
30	1064	1016	1001	1016	1064	1016	1001	1016	20- 30	5263	9240	49.3,49.3
40	655.9	604.5	563.3	604.5	655.9	604.5	563.3	604.5	30- 40	5069	14309	76.3,76.3
50	225.3	189.4	172.2	189.4	225.3	189.4	172.2	189.4	40- 50	2975	17284	92.2,92.2
60	61.58	51.87	51.77	51.87	61.58	51.87	51.77	51.87	50- 60	934.0	18218	97.2,97.2
70	21.30	18.99	18.77	18.99	21.30	18.99	18.77	18.99	60- 70	318.3	18536	98.9,98.9
80	9.575	8.789	8.429	8.789	9.575	8.789	8.429	8.789	70- 80	142.0	18678	99.6,99.6
90	0	0	0	0	0	0	0	0	80- 90	73.16	18751	100,100
100	0	0	0	0	0	0	0	0	90-100	0	18751	100,100
110	0	0	0	0	0	0	0	0	100-110	0	18751	100,100
120	0	0	0	0	0	0	0	0	110-120	0	18751	100,100
130	0	0	0	0	0	0	0	0	120-130	0	18751	100,100
140	0	0	0	0	0	0	0	0	130-140	0	18751	100,100
150	0	0	0	0	0	0	0	0	140-150	0	18751	100,100
160	0	0	0	0	0	0	0	0	150-160	0	18751	100,100
170	0	0	0	0	0	0	0	0	160-170	0	18751	100,100
180	0	0	0	0	0	0	0	0	170-180	0	18751	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 16140 lm

%lum = 86.1%

%lamp = 86.1%

Conical surface Flux(120deg): 18218 lm

%lum = 97.2%

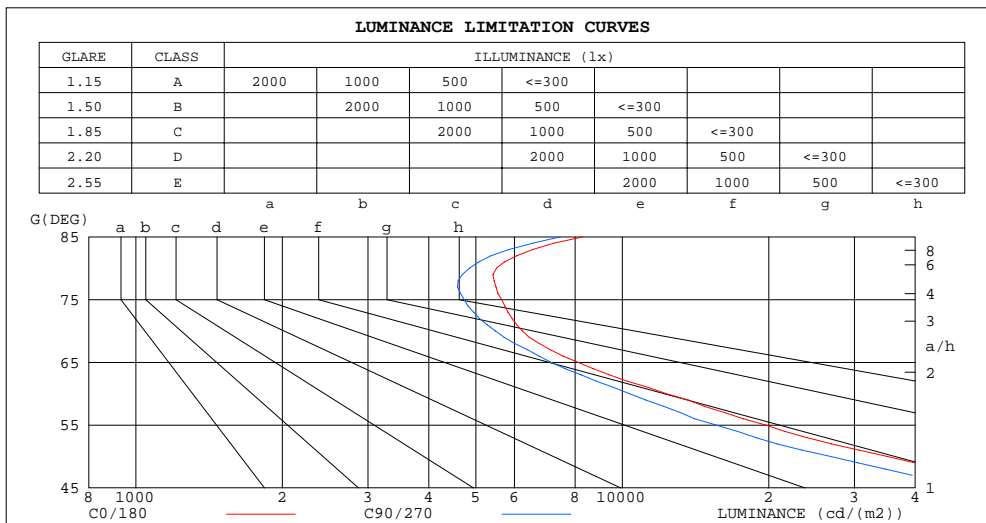
%lamp = 97.2%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138\text{M}$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24\text{M}$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	8309	7457
80	5515	4851
75	5648	4730
70	6228	5486
65	8107	7131
60	12317	10347
55	19707	15589
50	35047	26777
45	60903	49348

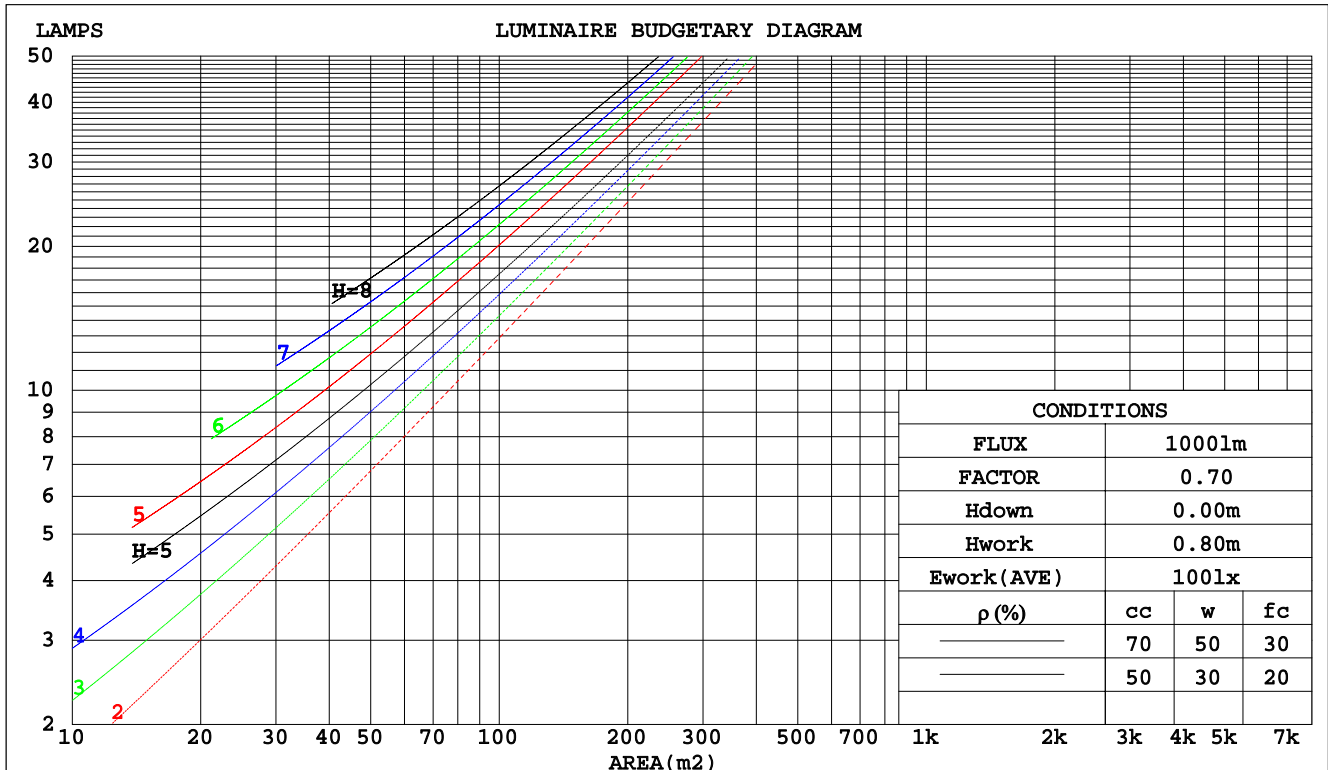
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138\text{M}$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24\text{M}$	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	1.00
1.0	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.00	.98	.99	.97	.95	.95	.94	.93	.91
2.0	.99	.94	.90	.98	.93	.89	.94	.91	.87	.91	.88	.85	.88	.86	.84	.82
3.0	.91	.85	.80	.89	.84	.79	.86	.82	.78	.84	.80	.77	.82	.78	.75	.74
4.0	.83	.76	.71	.82	.76	.71	.80	.74	.70	.77	.73	.69	.75	.71	.68	.66
5.0	.76	.69	.64	.75	.69	.64	.73	.67	.63	.71	.66	.62	.70	.65	.62	.60
6.0	.70	.63	.58	.69	.62	.58	.68	.62	.57	.66	.61	.57	.65	.60	.56	.55
7.0	.65	.57	.52	.64	.57	.52	.62	.56	.52	.61	.56	.52	.60	.55	.51	.50
8.0	.60	.53	.48	.59	.52	.48	.58	.52	.47	.57	.51	.47	.56	.51	.47	.45
9.0	.55	.48	.44	.55	.48	.44	.54	.48	.44	.53	.47	.43	.52	.47	.43	.42
10.0	.52	.45	.40	.51	.45	.40	.50	.44	.40	.49	.44	.40	.49	.43	.40	.38



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D-PC-ALL	DIM.: $\phi$ 0.319*0.138M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.24M	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	.214	.122	.039	.207	.118	.038	.194	.111	.036	.182	.105	.034	.172	.099	.032	
2.0	.207	.113	.035	.201	.111	.034	.190	.106	.033	.180	.101	.032	.170	.096	.030	
3.0	.197	.105	.031	.192	.103	.031	.183	.099	.030	.174	.095	.029	.166	.092	.028	
4.0	.188	.098	.029	.184	.096	.028	.175	.093	.028	.168	.090	.027	.160	.087	.027	
5.0	.179	.091	.026	.175	.090	.026	.168	.087	.026	.161	.085	.025	.154	.082	.025	
6.0	.170	.085	.024	.167	.084	.024	.160	.082	.024	.154	.080	.024	.148	.078	.023	
7.0	.162	.080	.023	.159	.079	.023	.153	.077	.022	.147	.076	.022	.142	.074	.022	
8.0	.154	.075	.021	.151	.074	.021	.146	.073	.021	.141	.072	.021	.137	.070	.020	
9.0	.147	.071	.020	.144	.070	.020	.140	.069	.020	.135	.068	.019	.131	.067	.019	
10.0	.140	.067	.019	.138	.067	.019	.134	.066	.018	.130	.064	.018	.126	.063	.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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.094	.094	.079	.065	.054	.046	.038	.017	.015	.012	
3.0	.150	.114	.085	.129	.098	.073	.089	.068	.051	.051	.040	.030	.016	.013	.010	
4.0	.142	.100	.067	.122	.086	.059	.084	.060	.041	.048	.035	.024	.016	.011	.008	
5.0	.134	.089	.055	.115	.077	.048	.079	.054	.034	.046	.031	.020	.015	.010	.007	
6.0	.127	.080	.045	.110	.069	.040	.076	.048	.028	.044	.028	.017	.014	.009	.005	
7.0	.121	.073	.038	.104	.063	.033	.072	.044	.024	.042	.026	.014	.014	.009	.005	
8.0	.116	.067	.033	.100	.058	.029	.069	.041	.020	.040	.024	.012	.013	.008	.004	
9.0	.111	.062	.028	.095	.053	.025	.066	.038	.018	.039	.022	.010	.012	.007	.003	
10.0	.106	.057	.025	.092	.050	.022	.063	.035	.015	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm										
NAME: AOK-oH					TYPE:LED			WEIGHT:4.6KG		
SPEC.:AOK-150WoH-3030-90D-PC-ALL					DIM.: $\phi$ 0.319*0.138M			SERIAL No.:1		
MFR.: AOK					SUR.: $\phi$ 0.24M			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	13.0	14.2	13.2	14.4	14.5	12.4	13.5	12.6	13.7	13.9
3H	12.9	14.0	13.2	14.2	14.4	12.3	13.3	12.6	13.6	13.8
4H	12.9	13.9	13.2	14.1	14.3	12.2	13.2	12.5	13.5	13.7
6H	12.8	13.8	13.1	14.0	14.3	12.2	13.1	12.5	13.4	13.6
8H	12.8	13.7	13.1	14.0	14.2	12.2	13.1	12.5	13.3	13.6
12H	12.8	13.7	13.1	13.9	14.2	12.1	13.0	12.5	13.3	13.6
4H 2H	12.8	13.8	13.1	14.0	14.3	12.2	13.2	12.5	13.4	13.7
3H	12.8	13.6	13.1	13.9	14.2	12.1	13.0	12.5	13.3	13.6
4H	12.7	13.5	13.1	13.8	14.1	12.1	12.9	12.5	13.2	13.5
6H	12.7	13.4	13.1	13.7	14.1	12.1	12.8	12.5	13.1	13.5
8H	12.7	13.4	13.1	13.7	14.1	12.1	12.7	12.5	13.1	13.5
12H	12.7	13.3	13.2	13.7	14.1	12.1	12.7	12.5	13.1	13.5
8H 4H	12.6	13.3	13.0	13.6	14.0	12.0	12.7	12.4	13.0	13.4
6H	12.6	13.2	13.1	13.6	14.0	12.0	12.6	12.5	13.0	13.4
8H	12.7	13.1	13.1	13.6	14.0	12.1	12.5	12.5	12.9	13.4
12H	12.7	13.1	13.2	13.6	14.0	12.1	12.5	12.6	13.0	13.4
12H 4H	12.6	13.2	13.0	13.5	13.9	12.0	12.6	12.4	12.9	13.3
6H	12.6	13.1	13.1	13.5	13.9	12.0	12.5	12.5	12.9	13.3
8H	12.7	13.1	13.1	13.5	14.0	12.1	12.4	12.5	12.9	13.4
Variations with the observer position at spacings:										
S = 1.0H	+ 1.9 / - 4.4					+ 2.0 / - 4.8				
1.5H	+ 2.7 / - 4.2					+ 2.8 / - 4.1				
2.0H	+ 5.1 / - 4.4					+ 4.6 / - 4.1				

CIE Pub.117, 18751 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 10.2$ )

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:

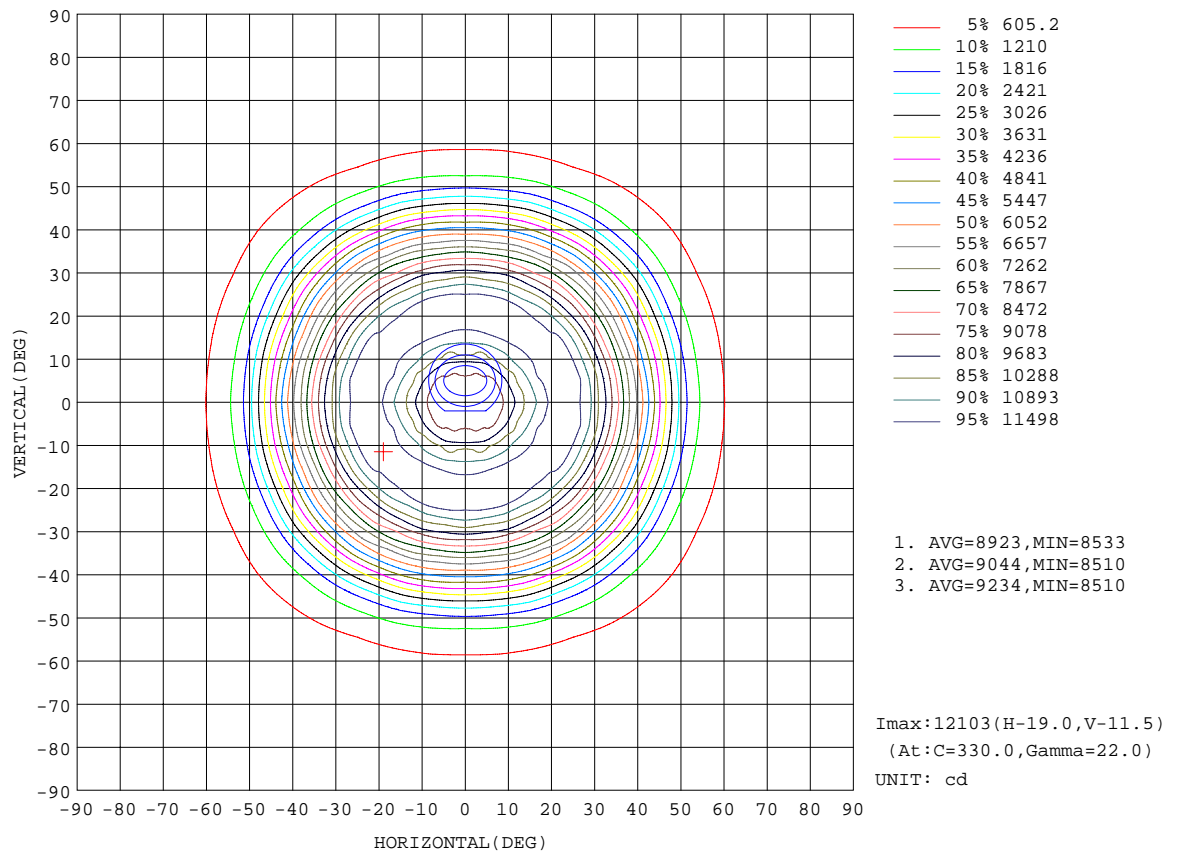
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	76	68	63	76	68	63	75	68	63	58
0.80	86	78	73	85	77	73	83	77	72	67
1.00	92	85	80	91	84	80	89	85	79	74
1.25	97	91	86	96	90	86	94	89	85	80
1.50	101	95	90	100	94	90	97	92	89	84
2.00	105	100	96	104	99	95	101	97	93	88
2.50	107	102	99	106	101	98	102	99	96	89
3.00	109	105	102	107	104	100	104	101	98	91
4.00	112	108	105	110	106	104	106	103	101	94
5.00	113	110	108	111	108	106	107	105	103	95
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:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138\text{M}$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24\text{M}$	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-01-03

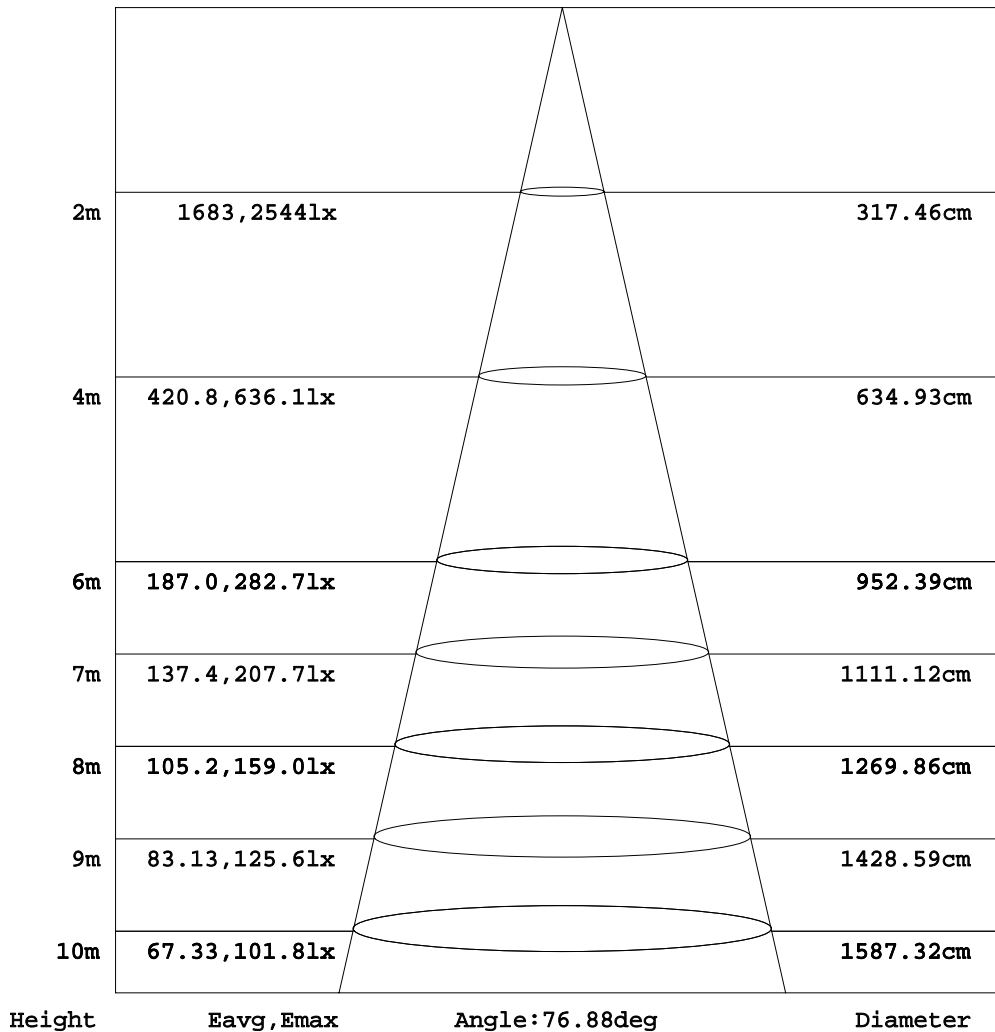
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.633m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:

Flux out:13871 lm



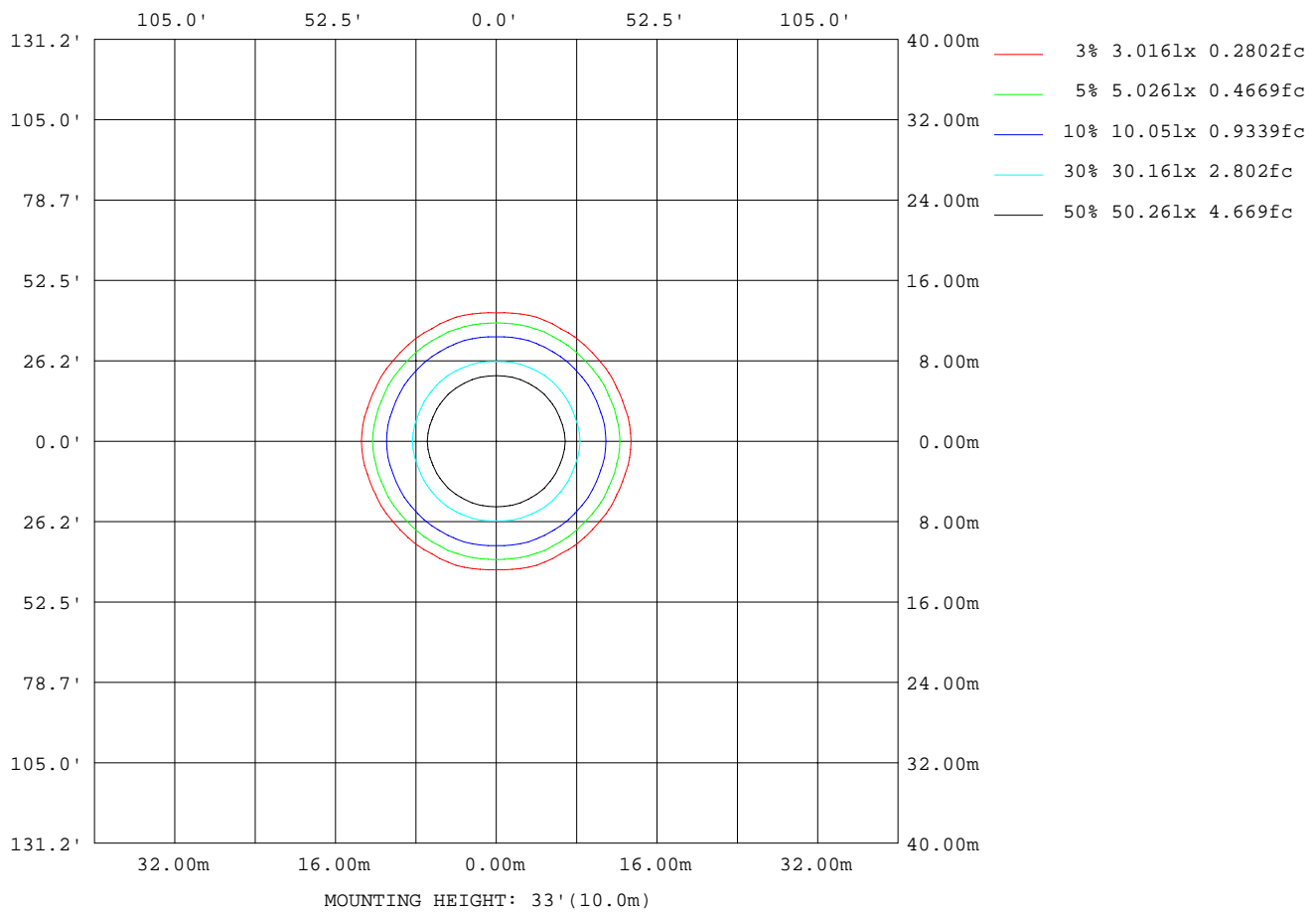
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:

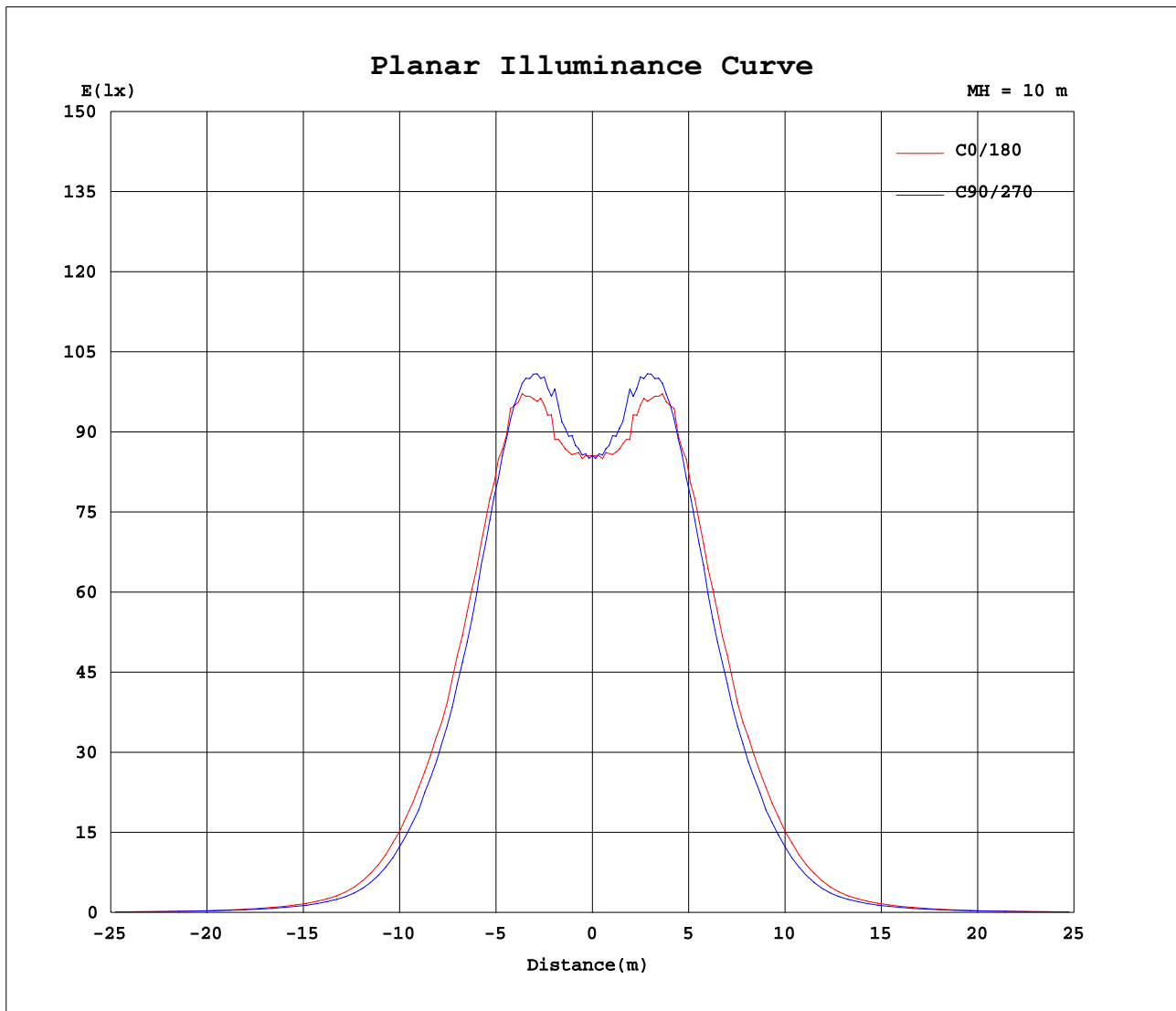
AvgL	cd/m2
L_0~180 (65) av	8106
L_0~180 (75) av	5647
L_0~180 (85) av	8309
L_90~270 (65) av	7135
L_90~270 (75) av	4732
L_90~270 (85) av	7461
L_45 (65) av	6899
L_45 (75) av	5078
L_45 (85) av	7730

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-01-03

$\gamma$  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: 2018-01-03

$\gamma$  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:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D-PC-ALL	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:

Table--1

UNIT:  $\times 10cd$ 

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856
5	869	867	875	877	868	879	888	879	885	886	885	879	888	879	868	877	875	867	869
10	928	922	932	944	951	960	963	970	992	995	992	970	963	960	951	944	932	922	928
15	1069	1072	1079	1089	1108	1104	1117	1113	1120	1110	1120	1113	1117	1104	1108	1089	1079	1072	1069
20	1171	1171	1177	1185	1188	1184	1177	1186	1197	1195	1197	1186	1177	1184	1188	1185	1177	1171	1171
25	1165	1178	1185	1158	1154	1144	1158	1160	1161	1151	1161	1160	1158	1144	1154	1158	1185	1178	1165
30	1064	1066	1047	1043	1023	1008	994	997	981	1001	981	997	994	1008	1023	1043	1047	1066	1064
35	877	860	834	823	820	818	807	786	774	781	774	786	807	818	820	823	834	860	877
40	656	645	616	627	613	596	596	582	568	563	568	582	596	596	613	627	616	645	656
45	431	422	400	401	387	380	365	364	351	349	351	364	365	380	387	401	400	422	431
50	225	220	206	204	191	188	180	181	173	172	173	181	180	188	191	204	206	220	225
55	113	105	99.3	98.8	95.0	93.4	90.4	93.6	92.5	89.5	92.5	93.6	90.4	93.4	95.0	98.8	99.3	105	113
60	61.6	58.9	54.3	54.5	52.6	51.1	49.8	50.4	51.0	51.8	51.0	50.4	49.8	51.1	52.6	54.5	54.3	58.9	61.6
65	34.3	33.2	32.2	31.2	29.5	28.8	27.8	28.7	28.9	30.2	28.9	28.7	27.8	28.8	29.5	31.2	32.2	33.2	34.3
70	21.3	20.9	20.3	19.5	19.2	18.8	18.2	18.5	18.5	18.8	18.5	18.5	18.2	18.8	19.2	19.5	20.3	20.9	21.3
75	14.6	14.1	13.7	13.5	13.2	13.0	12.7	12.6	12.3	12.2	12.3	12.6	12.7	13.0	13.2	13.5	13.7	14.1	14.6
80	9.58	9.45	9.19	9.06	8.82	8.76	8.61	8.62	8.49	8.43	8.49	8.62	8.61	8.76	8.82	9.06	9.19	9.45	9.58
85	7.24	7.10	6.99	6.91	6.78	6.70	6.63	6.64	6.52	6.50	6.52	6.64	6.63	6.70	6.78	6.91	6.99	7.10	7.24
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: 2018-01-03

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:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.7334A P:149.5W PF:0.9586 Freq:49.99Hz Lamp Flux:18751.2x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D-PC-ALL	DIM.: $\phi$ 0.319*0.138M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.24M	Shielding Angle:

Table--2

UNIT:  $\times 10\text{cd}$ 

C (DEG) $\gamma$ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856	856		
5	867	875	877	868	879	888	879	885	886	885	879	888	879	868	877	875	867		
10	922	932	944	951	960	963	970	992	995	992	970	963	960	951	944	932	922		
15	1072	1079	1089	1108	1104	1117	1113	1120	1110	1120	1113	1117	1104	1108	1089	1079	1072		
20	1171	1177	1185	1188	1184	1177	1186	1197	1195	1197	1186	1177	1184	1188	1185	1177	1171		
25	1178	1185	1158	1154	1144	1158	1160	1161	1151	1161	1160	1158	1144	1154	1158	1185	1178		
30	1066	1047	1043	1023	1008	994	997	981	1001	981	997	994	1008	1023	1043	1047	1066		
35	860	834	823	820	818	807	786	774	781	774	786	807	818	820	823	834	860		
40	645	616	627	613	596	596	582	568	563	568	582	596	596	613	627	616	645		
45	422	400	401	387	380	365	364	351	349	351	364	365	380	387	401	400	422		
50	220	206	204	191	188	180	181	173	172	173	181	180	188	191	204	206	220		
55	105	99.3	98.8	95.0	93.4	90.4	93.6	92.5	89.5	92.5	93.6	90.4	93.4	95.0	98.8	99.3	105		
60	58.9	54.3	54.5	52.6	51.1	49.8	50.4	51.0	51.8	51.0	50.4	49.8	51.1	52.6	54.5	54.3	58.9		
65	33.2	32.2	31.2	29.5	28.8	27.8	28.7	28.9	30.2	28.9	28.7	27.8	28.8	29.5	31.2	32.2	33.2		
70	20.9	20.3	19.5	19.2	18.8	18.2	18.5	18.5	18.8	18.5	18.5	18.2	18.8	19.2	19.5	20.3	20.9		
75	14.1	13.7	13.5	13.2	13.0	12.7	12.6	12.3	12.2	12.3	12.6	12.7	13.0	13.2	13.5	13.7	14.1		
80	9.45	9.19	9.06	8.82	8.76	8.61	8.62	8.49	8.43	8.49	8.62	8.61	8.76	8.82	9.06	9.19	9.45		
85	7.10	6.99	6.91	6.78	6.70	6.63	6.64	6.52	6.50	6.52	6.64	6.63	6.70	6.78	6.91	6.99	7.10		
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:2018-01-03

$\gamma$  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: