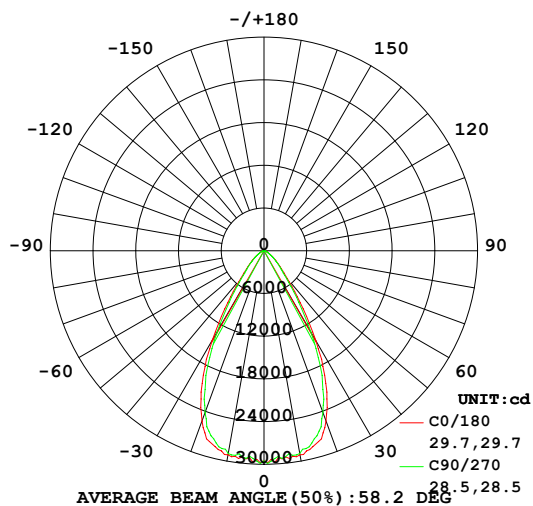


## LUMINAIRE PHOTOMETRIC TEST REPORT

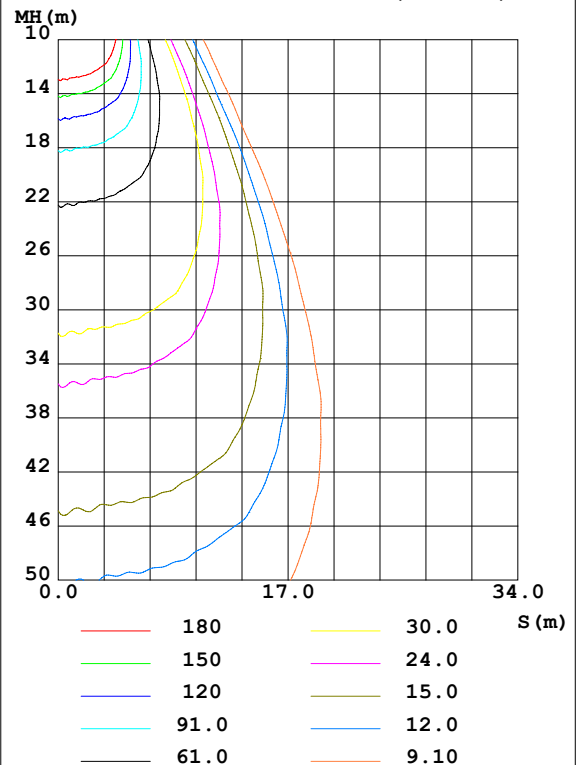
Test:U:219.8V I:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm					
NAME: AOK-oH		TYPE:LED		WEIGHT:6.0KG	
SPEC.:AOK-240Woh-3030-60D-PC-ALL		DIM.: $\phi 0.4 \times 0.141M$		SERIAL No.:1	
MFR.: AOK		SUR.: $\phi 0.29M$		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.44 lm/W			
MODEL	3030	I <sub>max</sub> (cd)	29884	S/MH (C0/180)	0.88
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	0.86
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	28556	$\eta$ UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	28556.1	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:2017-12-30

$\gamma$  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	2910	2839	2892	2839	2910	2839	2892	2839	0- 10	2755	2755	9.65,9.65
20	2547	2383	2424	2383	2547	2383	2424	2383	10- 20	7570	10325	36.2,36.2
30	1457	1264	1314	1264	1457	1264	1314	1264	20- 30	8556	18881	66.1,66.1
40	508.2	447.8	456.6	447.8	508.2	447.8	456.6	447.8	30- 40	5061	23942	83.8,83.8
50	221.9	204.8	210.7	204.8	221.9	204.8	210.7	204.8	40- 50	2387	26329	92.2,92.2
60	91.48	87.91	85.85	87.91	91.48	87.91	85.85	87.91	50- 60	1250	27579	96.6,96.6
70	42.18	40.60	38.72	40.60	42.18	40.60	38.72	40.60	60- 70	598.8	28178	98.7,98.7
80	17.07	15.11	14.54	15.11	17.07	15.11	14.54	15.11	70- 80	283.7	28462	99.7,99.7
90	0	0	0	0	0	0	0	0	80- 90	94.54	28556	100,100
100	0	0	0	0	0	0	0	0	90-100	0	28556	100,100
110	0	0	0	0	0	0	0	0	100-110	0	28556	100,100
120	0	0	0	0	0	0	0	0	110-120	0	28556	100,100
130	0	0	0	0	0	0	0	0	120-130	0	28556	100,100
140	0	0	0	0	0	0	0	0	130-140	0	28556	100,100
150	0	0	0	0	0	0	0	0	140-150	0	28556	100,100
160	0	0	0	0	0	0	0	0	150-160	0	28556	100,100
170	0	0	0	0	0	0	0	0	160-170	0	28556	100,100
180	0	0	0	0	0	0	0	0	170-180	0	28556	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 25313 lm

%lum = 88.6%

%lamp = 88.6%

Conical surface Flux(120deg): 27579 lm

%lum = 96.6%

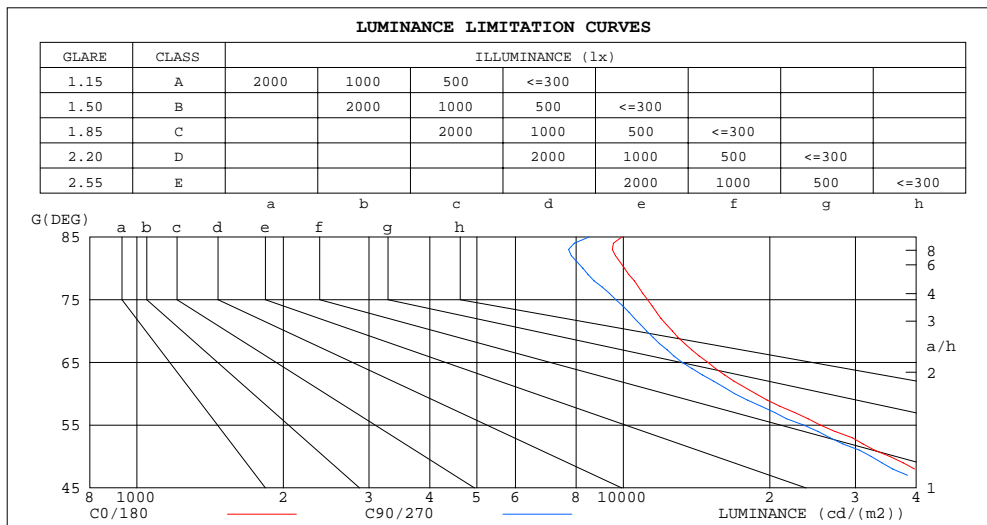
%lamp = 96.6%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-60D-PC-ALL	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	9943	8516
80	10051	8256
75	11217	9643
70	12612	11164
65	14922	13207
60	18709	16932
55	25388	23475
50	35295	32322
45	47081	42591

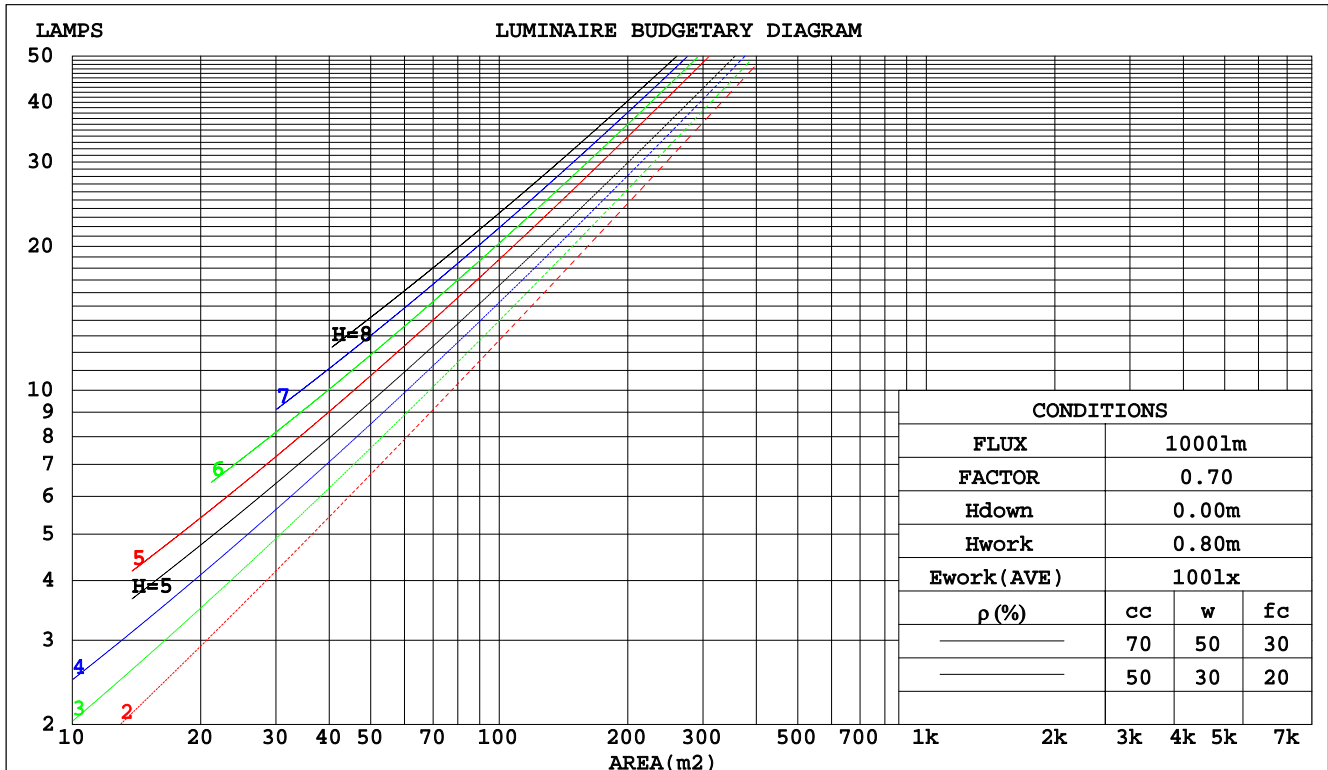
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oh	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-60D-PC-ALL	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	1.10	1.07	1.05	1.08	1.05	1.03	1.03	1.02	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.97	.93	.99	.95	.92	.96	.93	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.94	.88	.84	.92	.87	.83	.90	.85	.82	.87	.84	.81	.85	.82	.79	.78
4.0	.87	.81	.76	.86	.80	.76	.84	.79	.75	.82	.77	.74	.80	.76	.73	.72
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.76	.72	.68	.75	.71	.68	.66
6.0	.76	.69	.65	.75	.69	.64	.73	.68	.64	.72	.67	.64	.71	.66	.63	.62
7.0	.71	.65	.60	.70	.64	.60	.69	.63	.60	.68	.63	.59	.67	.62	.59	.57
8.0	.67	.60	.56	.66	.60	.56	.65	.59	.56	.64	.59	.55	.63	.58	.55	.54
9.0	.63	.57	.52	.62	.56	.52	.61	.56	.52	.60	.55	.52	.60	.55	.52	.50
10.0	.59	.53	.49	.59	.53	.49	.58	.53	.49	.57	.52	.49	.56	.52	.49	.47



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-60D-PC-ALL	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.29M	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.197	.112	.036	.190	.109	.034	.178	.102	.033	.166	.096	.031	.155	.090	.029	
2.0	.188	.103	.032	.183	.101	.031	.172	.096	.030	.162	.091	.028	.153	.086	.027	
3.0	.178	.095	.028	.174	.093	.028	.164	.089	.027	.156	.085	.026	.148	.082	.025	
4.0	.169	.088	.026	.165	.086	.025	.157	.083	.025	.149	.080	.024	.142	.077	.024	
5.0	.160	.082	.024	.156	.080	.023	.149	.078	.023	.143	.075	.022	.137	.073	.022	
6.0	.152	.076	.022	.149	.075	.022	.142	.073	.021	.137	.071	.021	.131	.069	.021	
7.0	.144	.071	.020	.141	.070	.020	.136	.069	.020	.131	.067	.020	.126	.065	.019	
8.0	.137	.067	.019	.135	.066	.019	.130	.065	.019	.125	.063	.018	.121	.062	.018	
9.0	.131	.063	.018	.129	.063	.018	.124	.061	.017	.120	.060	.017	.116	.059	.017	
10.0	.125	.060	.017	.123	.059	.017	.119	.058	.016	.115	.057	.016	.112	.056	.016	

pcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.158	.132	.111	.136	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.058	.110	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.121	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006	
7.0	.115	.071	.041	.099	.062	.035	.068	.043	.025	.040	.025	.015	.013	.008	.005	
8.0	.109	.065	.035	.094	.056	.030	.065	.040	.022	.038	.023	.013	.012	.008	.004	
9.0	.104	.060	.030	.089	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.099	.056	.027	.085	.048	.023	.059	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-30

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:

## UGR(Unified Glare Rating) Table

Test:U:219.8V I:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm										
NAME: AOK-oH					TYPE:LED			WEIGHT:6.0KG		
SPEC.:AOK-240Woh-3030-60D-PC-ALL					DIM.: $\phi 0.4 \times 0.141M$			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	10.1	11.2	10.4	11.3	11.5	9.5	10.5	9.7	10.7	10.9
3H	10.4	11.3	10.6	11.5	11.7	9.7	10.6	9.9	10.8	11.0
4H	10.4	11.3	10.7	11.6	11.8	9.8	10.7	10.0	10.9	11.1
6H	10.5	11.4	10.8	11.6	11.9	9.8	10.6	10.1	10.9	11.1
8H	10.5	11.3	10.8	11.6	11.9	9.8	10.6	10.1	10.9	11.1
12H	10.5	11.3	10.9	11.6	11.9	9.8	10.6	10.1	10.8	11.1
4H 2H	10.1	11.0	10.4	11.2	11.5	9.5	10.4	9.8	10.6	10.9
3H	10.5	11.2	10.8	11.5	11.8	9.8	10.6	10.2	10.9	11.2
4H	10.6	11.3	11.0	11.6	11.9	10.0	10.7	10.3	11.0	11.3
6H	10.8	11.4	11.1	11.7	12.1	10.1	10.7	10.5	11.0	11.4
8H	10.8	11.4	11.2	11.7	12.1	10.1	10.7	10.5	11.0	11.4
12H	10.8	11.4	11.2	11.7	12.1	10.1	10.6	10.5	11.0	11.4
8H 4H	10.6	11.2	11.0	11.5	11.9	10.0	10.6	10.4	10.9	11.3
6H	10.8	11.3	11.2	11.7	12.1	10.1	10.6	10.6	11.0	11.4
8H	10.9	11.3	11.3	11.7	12.2	10.2	10.6	10.6	11.0	11.5
12H	11.0	11.3	11.4	11.8	12.2	10.2	10.6	10.7	11.1	11.5
12H 4H	10.6	11.1	11.0	11.5	11.9	9.9	10.5	10.4	10.9	11.2
6H	10.8	11.2	11.2	11.6	12.1	10.1	10.5	10.6	11.0	11.4
8H	10.9	11.2	11.3	11.7	12.1	10.2	10.6	10.7	11.0	11.5
Variations with the observer position at spacings:										
S = 1.0H	+ 1.6 / - 1.7					+ 1.4 / - 1.6				
1.5H	+ 2.5 / - 1.3					+ 2.2 / - 1.2				
2.0H	+ 2.3 / - 1.7					+ 2.3 / - 1.8				

CIE Pub.117, 28556 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 11.6$ )

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-60D-PC-ALL	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

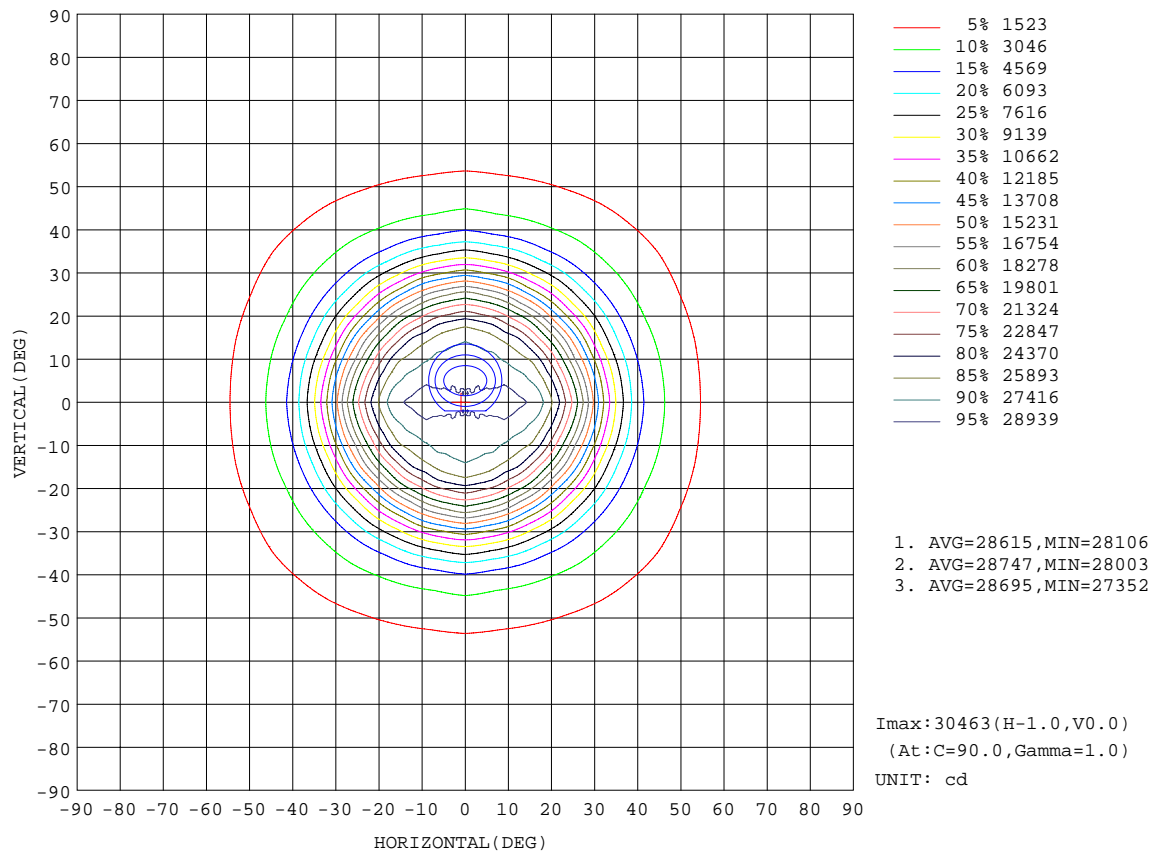
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	81	74	70	81	74	69	80	73	69	65
0.80	90	83	78	89	82	78	87	82	78	73
1.00	95	88	84	94	88	84	92	88	83	79
1.25	100	94	89	99	93	89	96	92	88	84
1.50	103	97	93	102	96	93	99	95	92	87
2.00	106	101	98	105	100	97	102	98	95	90
2.50	108	104	100	107	103	99	103	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	112	109	107	110	108	105	107	104	103	95
5.00	114	111	109	112	109	107	108	106	104	96
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:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-60D-PC-ALL	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



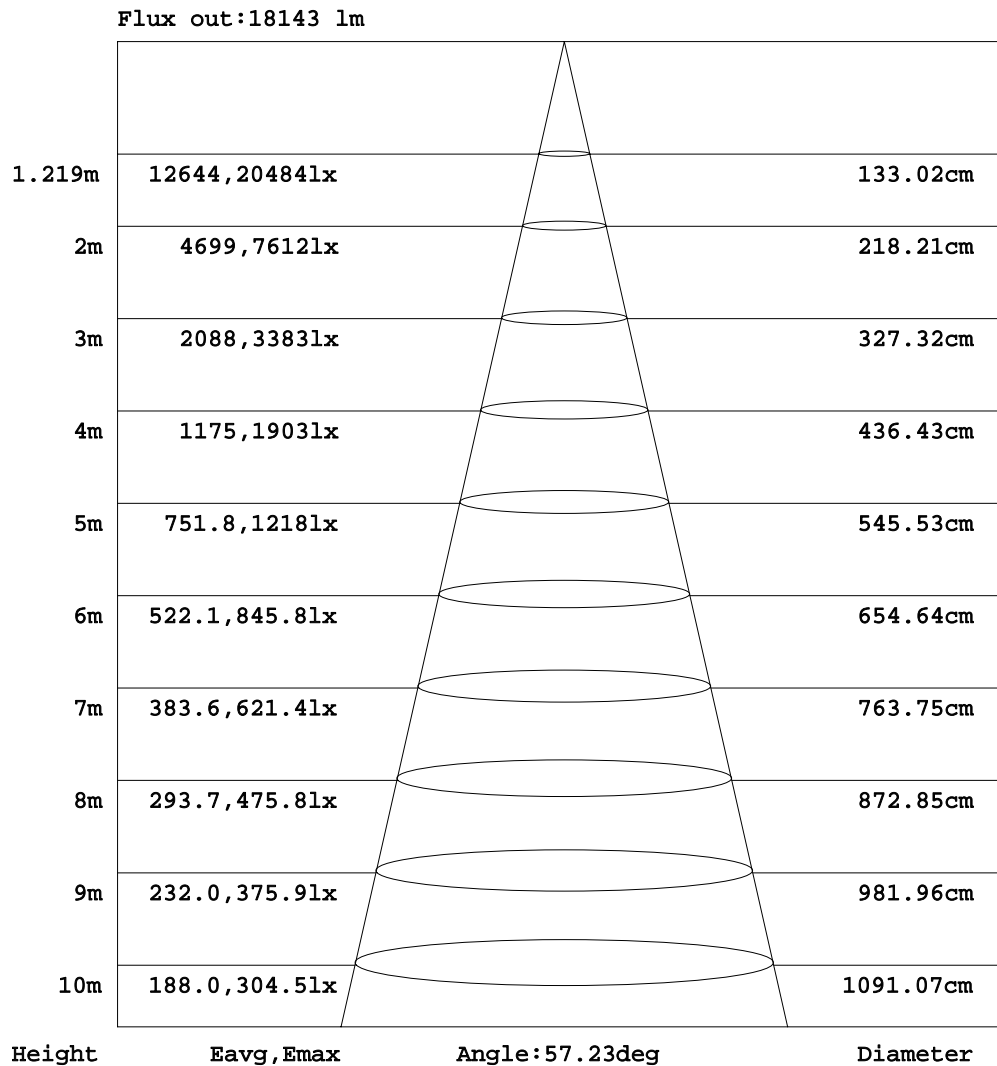
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-60D-PC-ALL	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



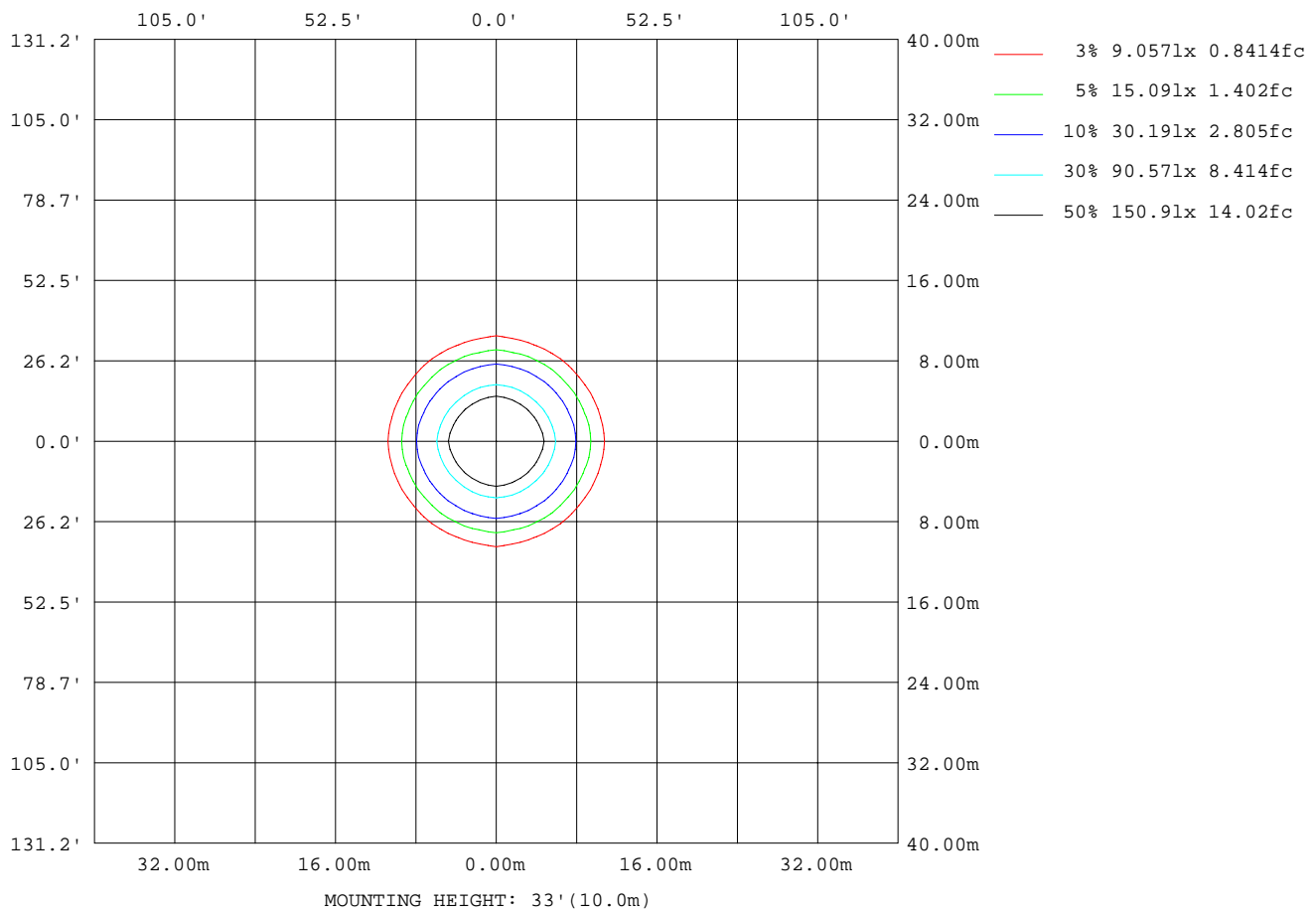
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-60D-PC-ALL	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:2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-60D-PC-ALL	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:1
MFR.: AOK	SUR.: $\phi$ 0.29M	Shielding Angle:

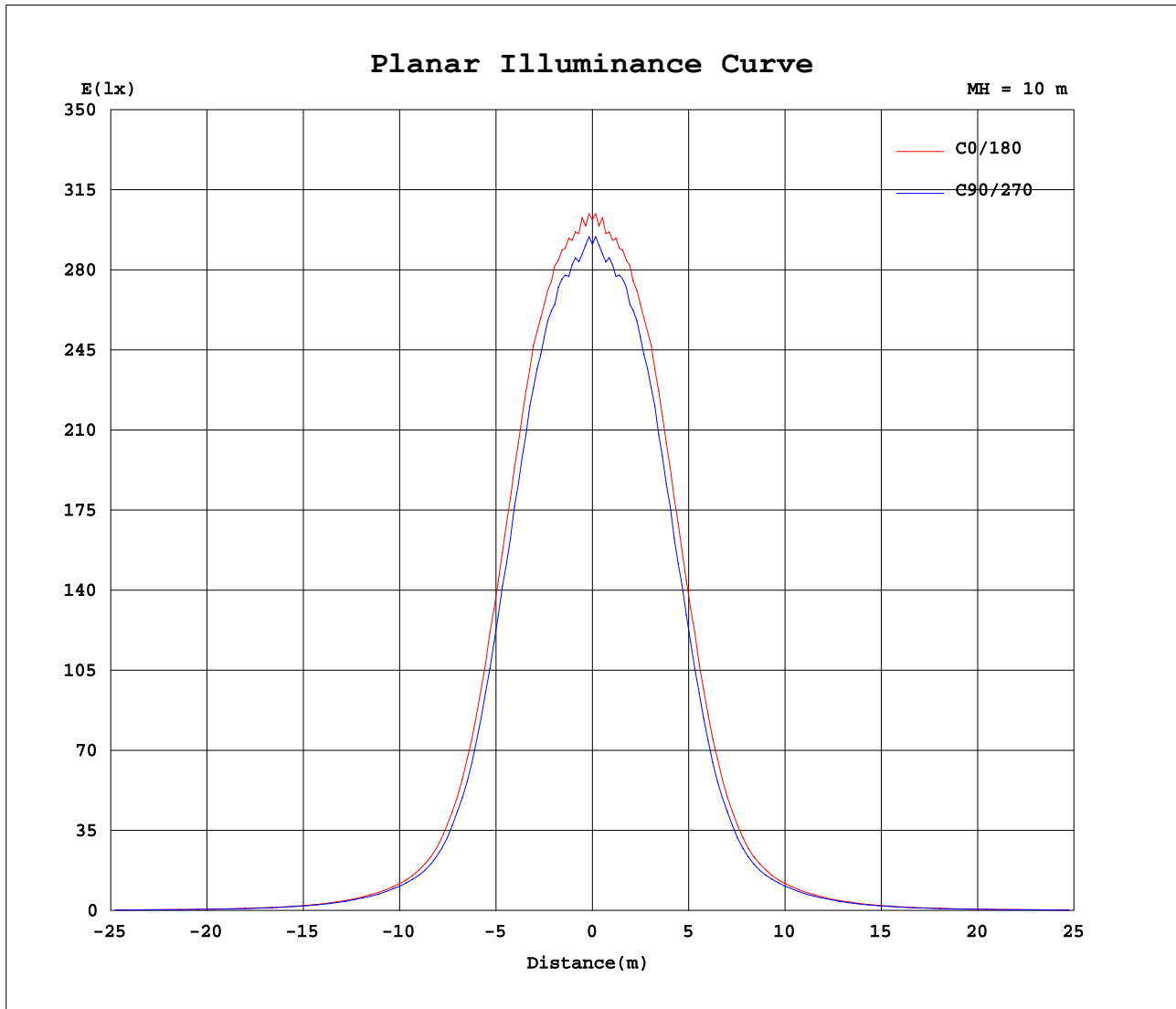
AvgL	cd/m2
L_0~180 (65) av	14592
L_0~180 (75) av	10970
L_0~180 (85) av	9724
L_90~270 (65) av	13392
L_90~270 (75) av	9779
L_90~270 (85) av	8636
L_45 (65) av	13965
L_45 (75) av	10191
L_45 (85) av	8704

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-12-30

$\gamma$  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: 2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-60D-PC-ALL	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	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952
5	2934	2950	2899	2906	2861	2914	2877	2886	2891	2927	2891	2886	2877	2914	2861	2906	2899	2950	2934
10	2910	2901	2875	2861	2817	2861	2843	2873	2876	2892	2876	2873	2843	2861	2817	2861	2875	2901	2910
15	2811	2782	2737	2704	2706	2680	2677	2712	2712	2734	2712	2712	2677	2680	2706	2704	2737	2782	2811
20	2547	2503	2428	2418	2385	2381	2350	2373	2387	2424	2387	2373	2350	2381	2385	2418	2428	2503	2547
25	2056	1987	1922	1895	1857	1845	1827	1856	1875	1931	1875	1856	1827	1845	1857	1895	1922	1987	2056
30	1457	1406	1348	1321	1271	1257	1232	1281	1269	1314	1269	1281	1232	1257	1271	1321	1348	1406	1457
35	885	860	816	804	772	774	752	761	762	800	762	761	752	774	772	804	816	860	885
40	508	501	476	461	450	445	434	441	433	457	433	441	434	445	450	461	476	501	508
45	326	321	306	304	297	298	293	290	289	305	289	290	293	298	297	304	306	321	326
50	222	218	213	209	206	203	202	197	199	211	199	197	202	203	206	209	213	218	222
55	142	143	140	142	137	137	132	131	131	137	131	131	132	137	137	142	140	143	142
60	91.5	91.4	89.8	91.3	88.8	87.0	83.0	85.0	83.8	85.9	83.8	85.0	83.0	87.0	88.8	91.3	89.8	91.4	91.5
65	61.7	61.7	60.7	61.3	59.5	58.5	56.5	57.0	55.9	56.6	55.9	57.0	56.5	58.5	59.5	61.3	60.7	61.7	61.7
70	42.2	42.2	41.6	41.9	41.1	40.1	38.6	38.8	38.4	38.7	38.4	38.8	38.6	40.1	41.1	41.9	41.6	42.2	42.2
75	28.4	28.4	27.6	27.6	26.8	26.0	25.1	25.0	25.0	25.3	25.0	25.0	25.1	26.0	26.8	27.6	27.6	28.4	28.4
80	17.1	16.9	16.2	16.1	15.3	14.9	14.2	14.3	14.2	14.5	14.2	14.3	14.2	14.9	15.3	16.1	16.2	16.9	17.1
85	8.47	8.46	8.06	7.97	7.63	7.55	7.35	7.46	7.38	7.53	7.38	7.46	7.35	7.55	7.63	7.97	8.06	8.46	8.47
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: 2017-12-30

$\gamma$  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:1.140A P:237.1W PF:0.9796 Freq:49.99Hz Lamp Flux:28556.1x1 lm		
NAME: AOK-oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-60D-PC-ALL	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

Table--2

UNIT:  $\times 10cd$ 

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952	2952		
5	2950	2899	2906	2861	2914	2877	2886	2891	2927	2891	2886	2877	2914	2861	2906	2899	2950		
10	2901	2875	2861	2817	2861	2843	2873	2876	2892	2876	2873	2843	2861	2817	2861	2875	2901		
15	2782	2737	2704	2706	2680	2677	2712	2712	2734	2712	2712	2677	2680	2706	2704	2737	2782		
20	2503	2428	2418	2385	2381	2350	2373	2387	2424	2387	2373	2350	2381	2385	2418	2428	2503		
25	1987	1922	1895	1857	1845	1827	1856	1875	1931	1875	1856	1827	1845	1857	1895	1922	1987		
30	1406	1348	1321	1271	1257	1232	1281	1269	1314	1269	1281	1232	1257	1271	1321	1348	1406		
35	860	816	804	772	774	752	761	762	800	762	761	752	774	772	804	816	860		
40	501	476	461	450	445	434	441	433	457	433	441	434	445	450	461	476	501		
45	321	306	304	297	298	293	290	289	305	289	290	293	298	297	304	306	321		
50	218	213	209	206	203	202	197	199	211	199	197	202	203	206	209	213	218		
55	143	140	142	137	137	132	131	131	137	131	131	132	137	137	142	140	143		
60	91.4	89.8	91.3	88.8	87.0	83.0	85.0	83.8	85.9	83.8	85.0	83.0	87.0	88.8	91.3	89.8	91.4		
65	61.7	60.7	61.3	59.5	58.5	56.5	57.0	55.9	56.6	55.9	57.0	56.5	58.5	59.5	61.3	60.7	61.7		
70	42.2	41.6	41.9	41.1	40.1	38.6	38.8	38.4	38.7	38.4	38.8	38.6	40.1	41.1	41.9	41.6	42.2		
75	28.4	27.6	27.6	26.8	26.0	25.1	25.0	25.0	25.3	25.0	25.0	25.1	26.0	26.8	27.6	27.6	28.4		
80	16.9	16.2	16.1	15.3	14.9	14.2	14.3	14.2	14.5	14.2	14.3	14.2	14.9	15.3	16.1	16.2	16.9		
85	8.46	8.06	7.97	7.63	7.55	7.35	7.46	7.38	7.53	7.38	7.46	7.35	7.55	7.63	7.97	8.06	8.46		
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: 2017-12-30

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: