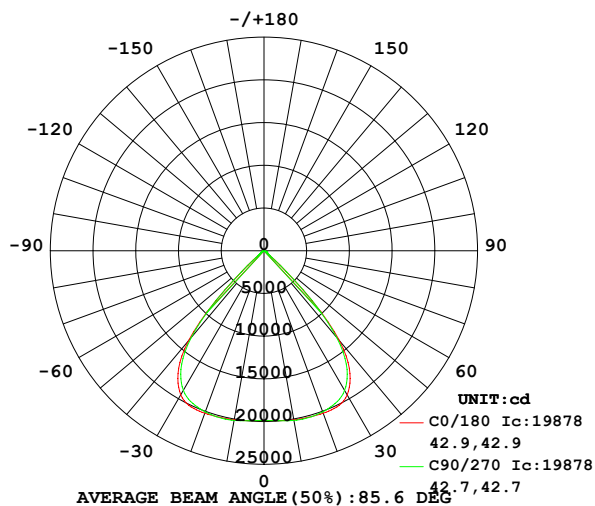


LUMINAIRE PHOTOMETRIC TEST REPORT

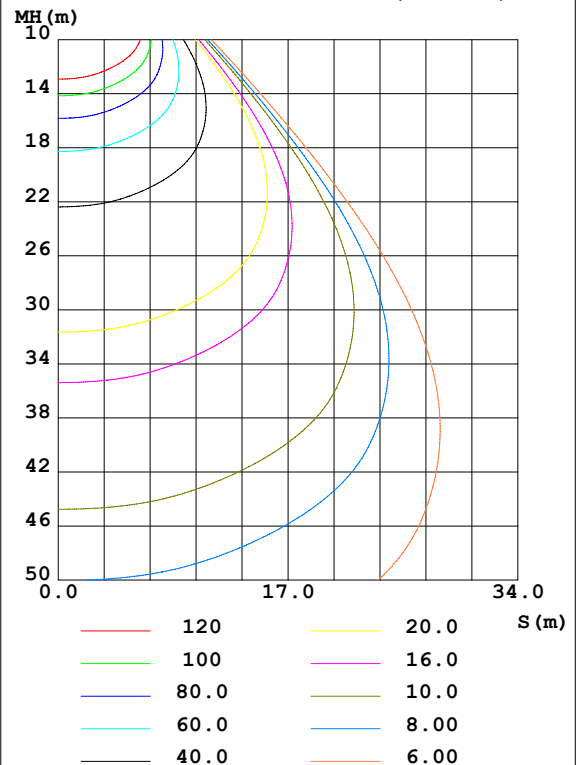
Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 135.06 lm/W			
MODEL	3030	I _{max} (cd)	20241	S/MH (C0/180)	1.26
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	33468	η UP, DN (C0-180)	0.0, 50.0
NOMINAL FLUX (lm)	33467.7	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.30

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: 2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.633m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	2010	2015	2016	2015	2010	2015	2016	2015	0- 10	1912	1912	5.71,5.71
20	2024	2018	2008	2018	2024	2018	2008	2018	10- 20	5724	7637	22.8,22.8
30	1948	1914	1887	1914	1948	1914	1887	1914	20- 30	9174	16811	50.2,50.2
40	1374	1342	1325	1342	1374	1342	1325	1342	30- 40	10560	27371	81.8,81.8
50	123.5	122.4	126.5	122.4	123.5	122.4	126.5	122.4	40- 50	4990	32361	96.7,96.7
60	40.54	40.71	42.66	40.71	40.54	40.71	42.66	40.71	50- 60	538.5	32900	98.3,98.3
70	26.84	26.71	28.34	26.71	26.84	26.71	28.34	26.71	60- 70	335.5	33235	99.3,99.3
80	10.36	9.882	10.97	9.882	10.36	9.882	10.97	9.882	70- 80	203.0	33438	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	29.49	33468	100,100
100	0	0	0	0	0	0	0	0	90-100	0	33468	100,100
110	0	0	0	0	0	0	0	0	100-110	0	33468	100,100
120	0	0	0	0	0	0	0	0	110-120	0	33468	100,100
130	0	0	0	0	0	0	0	0	120-130	0	33468	100,100
140	0	0	0	0	0	0	0	0	130-140	0	33468	100,100
150	0	0	0	0	0	0	0	0	140-150	0	33468	100,100
160	0	0	0	0	0	0	0	0	150-160	0	33468	100,100
170	0	0	0	0	0	0	0	0	160-170	0	33468	100,100
180	0	0	0	0	0	0	0	0	170-180	0	33468	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 31080 lm

%lum = 92.9%

%lamp = 92.9%

Conical surface Flux(120deg): 32900 lm

%lum = 98.3%

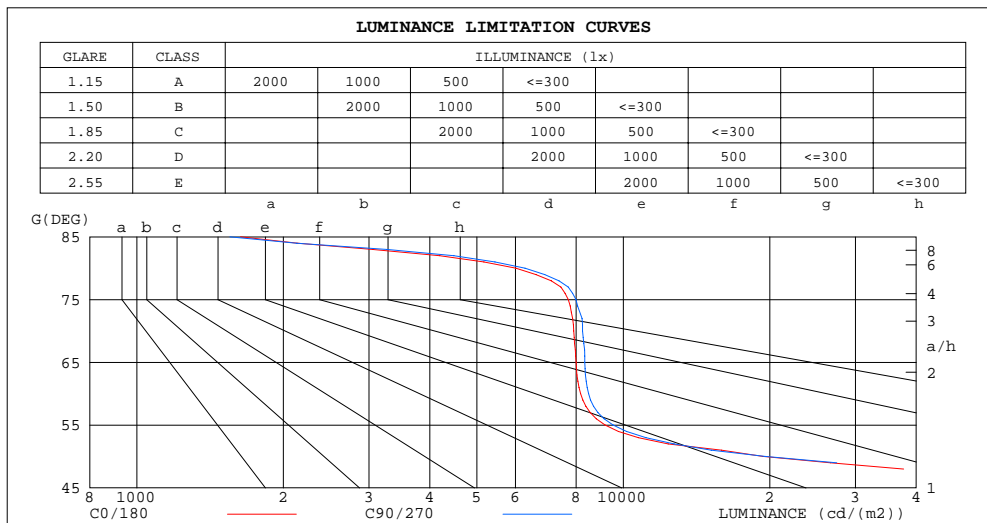
%lamp = 98.3%

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.633m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1634	1553
80	6015	6282
75	7705	7992
70	7908	8244
65	7999	8334
60	8172	8486
55	9172	9527
50	19358	19572
45	91805	89915

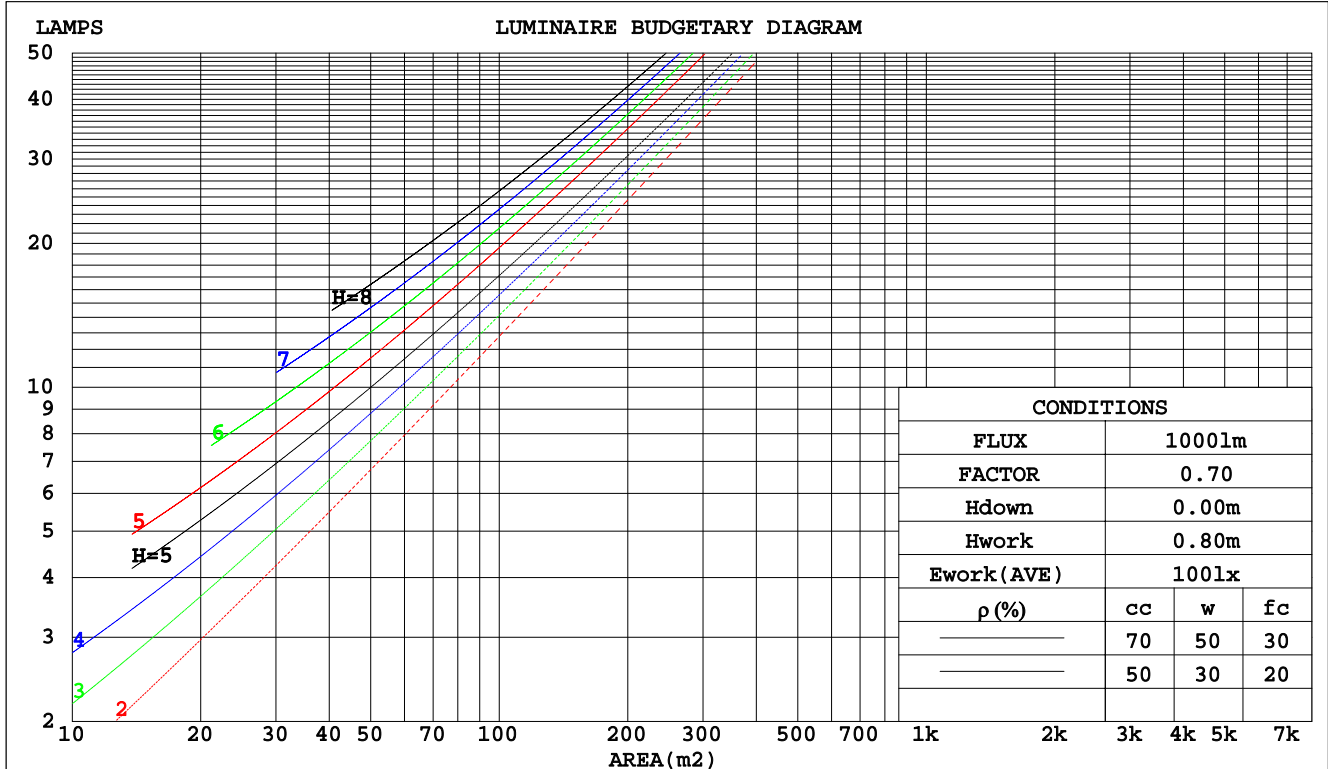
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.633m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{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	1.09	1.07	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.95	.93	.92
2.0	1.00	.96	.92	.99	.94	.91	.95	.92	.89	.92	.89	.87	.89	.87	.85	.83
3.0	.92	.86	.82	.91	.85	.81	.88	.83	.80	.85	.82	.78	.83	.80	.77	.76
4.0	.85	.78	.73	.83	.77	.73	.81	.76	.72	.79	.75	.71	.77	.73	.70	.69
5.0	.78	.71	.66	.77	.71	.66	.75	.69	.65	.73	.68	.65	.72	.67	.64	.62
6.0	.72	.65	.60	.71	.65	.60	.69	.64	.59	.68	.63	.59	.67	.62	.59	.57
7.0	.66	.60	.55	.66	.59	.55	.64	.59	.54	.63	.58	.54	.62	.57	.54	.52
8.0	.62	.55	.50	.61	.54	.50	.60	.54	.50	.59	.53	.49	.58	.53	.49	.48
9.0	.57	.51	.46	.57	.50	.46	.56	.50	.46	.55	.49	.45	.54	.49	.45	.44
10.0	.53	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.50	.45	.42	.40



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.633m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: ϕ 0.4*0.141M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 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	.203	.115	.037	.196	.112	.036	.183	.105	.034	.172	.099	.032	.161	.093	.030	
2.0	.197	.108	.033	.191	.105	.032	.180	.100	.031	.170	.095	.030	.161	.091	.029	
3.0	.189	.100	.030	.184	.098	.030	.174	.094	.029	.166	.091	.028	.158	.087	.027	
4.0	.180	.094	.028	.176	.092	.027	.168	.089	.027	.160	.086	.026	.153	.083	.025	
5.0	.172	.088	.025	.168	.086	.025	.161	.084	.025	.154	.081	.024	.148	.079	.024	
6.0	.164	.082	.024	.161	.081	.023	.154	.079	.023	.148	.077	.023	.143	.075	.022	
7.0	.157	.077	.022	.153	.076	.022	.148	.075	.022	.142	.073	.021	.137	.071	.021	
8.0	.149	.073	.021	.147	.072	.020	.142	.071	.020	.137	.069	.020	.132	.068	.020	
9.0	.143	.069	.019	.140	.068	.019	.136	.067	.019	.131	.066	.019	.127	.065	.019	
10.0	.137	.066	.018	.135	.065	.018	.130	.064	.018	.126	.063	.018	.123	.062	.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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.110	.137	.114	.095	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.149	.114	.086	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.140	.099	.069	.120	.086	.060	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.132	.088	.056	.113	.076	.049	.078	.053	.034	.045	.031	.020	.015	.010	.007	
6.0	.125	.079	.046	.108	.069	.040	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.103	.063	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.114	.066	.033	.098	.057	.029	.068	.040	.021	.040	.024	.012	.013	.008	.004	
9.0	.109	.061	.029	.094	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.105	.057	.025	.090	.049	.022	.062	.035	.016	.036	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.633m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm										
NAME: AOK oH					TYPE:LED			WEIGHT:6.0KG		
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D					DIM.: ϕ 0.4*0.141M			SERIAL No.:		
MFR.: AOK					SUR.: ϕ 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	12.8	13.9	13.0	14.1	14.3	12.6	13.7	12.8	13.9	14.0
3H	12.7	13.7	12.9	13.9	14.1	12.4	13.5	12.7	13.7	13.9
4H	12.6	13.6	12.9	13.8	14.0	12.4	13.3	12.7	13.6	13.8
6H	12.5	13.4	12.8	13.7	13.9	12.3	13.2	12.6	13.5	13.7
8H	12.5	13.4	12.8	13.6	13.9	12.3	13.1	12.6	13.4	13.7
12H	12.4	13.3	12.8	13.5	13.8	12.2	13.0	12.5	13.3	13.6
4H 2H	12.5	13.5	12.8	13.7	14.0	12.3	13.3	12.6	13.5	13.7
3H	12.4	13.3	12.8	13.5	13.8	12.2	13.0	12.5	13.3	13.6
4H	12.4	13.1	12.7	13.4	13.7	12.2	12.9	12.5	13.2	13.5
6H	12.3	13.0	12.7	13.3	13.7	12.1	12.8	12.5	13.1	13.5
8H	12.3	12.9	12.7	13.3	13.6	12.1	12.7	12.5	13.0	13.4
12H	12.2	12.8	12.7	13.2	13.6	12.0	12.6	12.4	13.0	13.4
8H 4H	12.3	12.9	12.7	13.2	13.6	12.1	12.7	12.4	13.0	13.4
6H	12.2	12.7	12.7	13.1	13.5	12.0	12.5	12.4	12.9	13.3
8H	12.2	12.6	12.6	13.0	13.5	12.0	12.4	12.4	12.8	13.3
12H	12.1	12.5	12.6	13.0	13.4	11.9	12.3	12.4	12.7	13.2
12H 4H	12.2	12.8	12.6	13.2	13.5	12.0	12.6	12.4	12.9	13.3
6H	12.2	12.6	12.6	13.0	13.5	12.0	12.4	12.4	12.8	13.3
8H	12.2	12.5	12.6	13.0	13.4	11.9	12.3	12.4	12.8	13.2
Variations with the observer position at spacings:										
S = 1.0H	+ 2.3 / - 9.3					+ 2.3 / - 8.9				
1.5H	+ 4.3 / - 9.3					+ 4.3 / - 9.0				
2.0H	+ 7.6 / - 4.5					+ 7.6 / - 4.2				

CIE Pub.117, 33468 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 12.2$)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.633m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

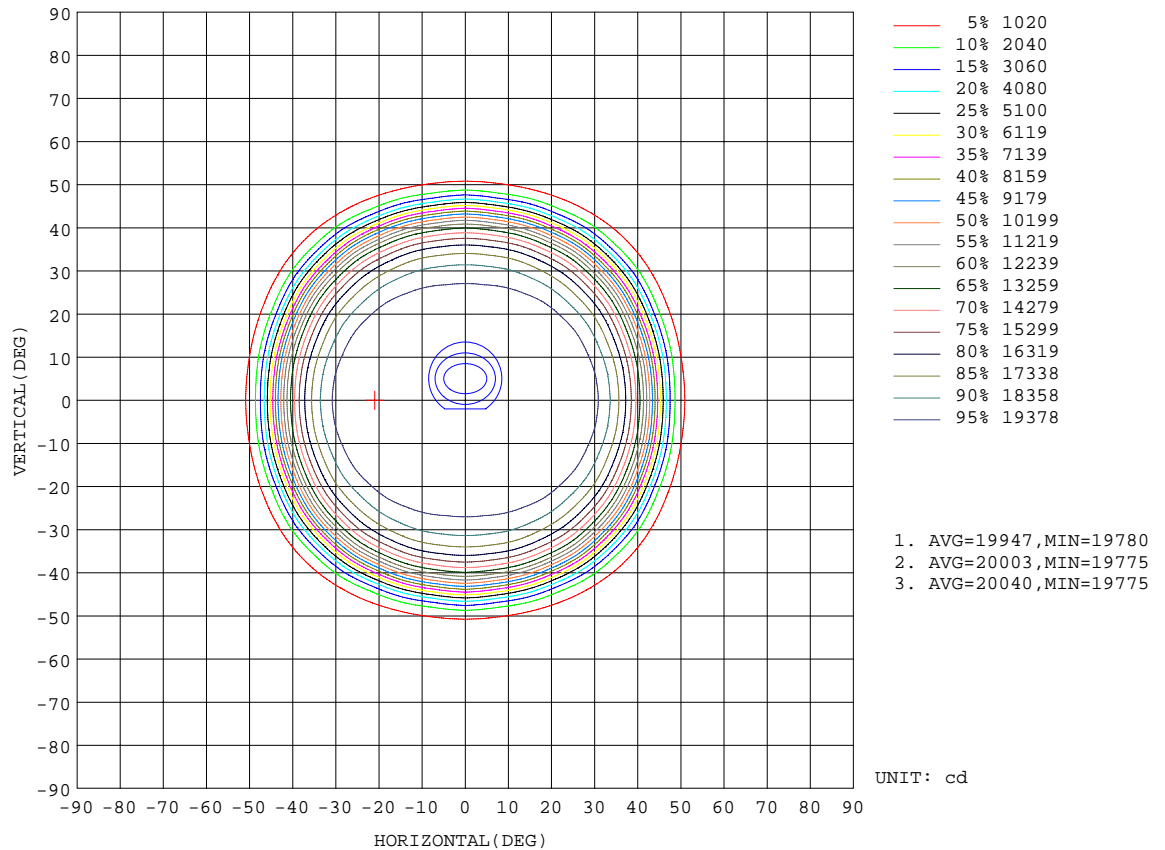
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	80	73	68	80	72	68	79	72	68	63
0.80	89	82	77	88	81	77	87	81	77	72
1.00	95	88	84	94	87	83	92	88	83	78
1.25	100	93	89	98	93	89	96	92	88	83
1.50	103	97	93	101	96	93	99	95	92	87
2.00	106	102	98	105	100	97	102	98	96	90
2.50	108	104	100	107	103	100	104	100	98	91
3.00	110	106	103	108	105	102	105	102	100	93
4.00	113	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										
SHRNM = 1.25										

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.633m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

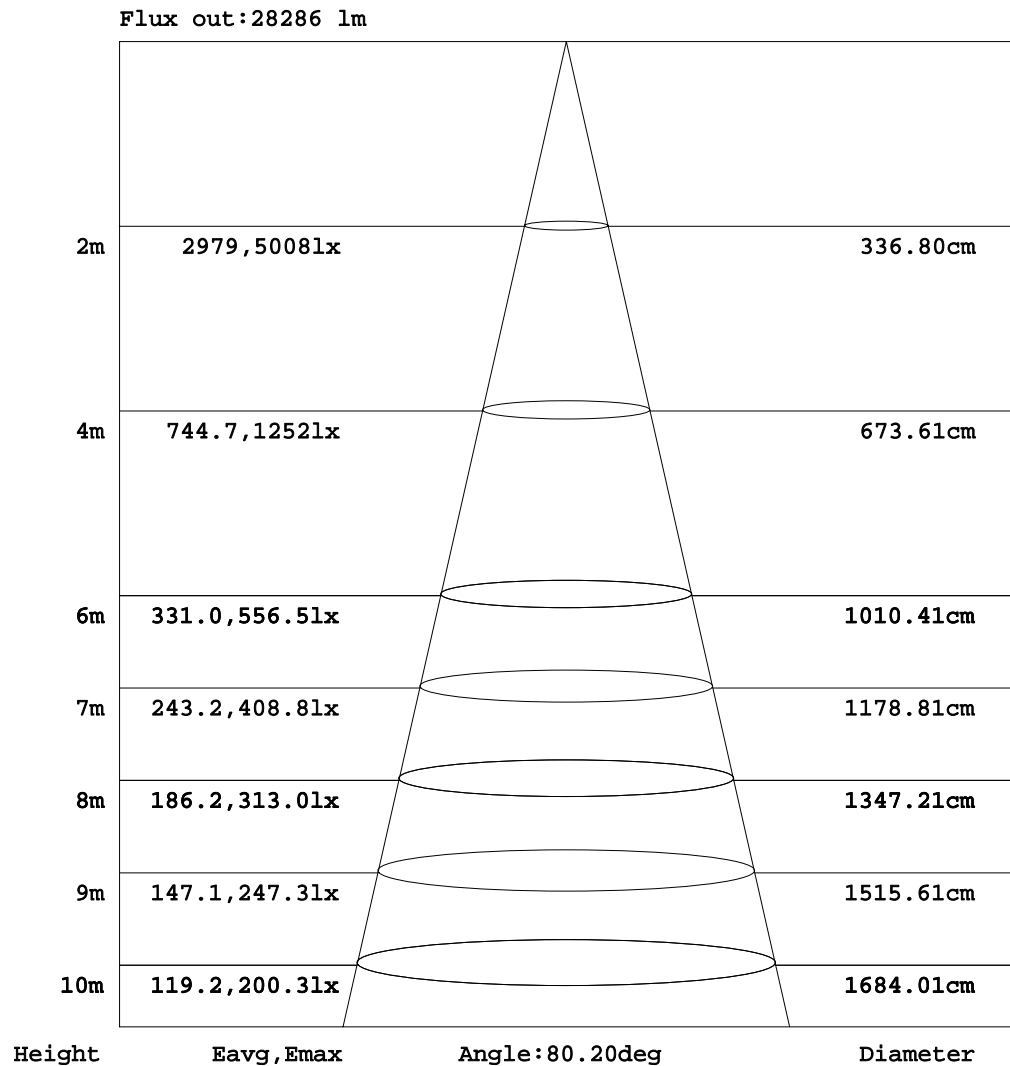


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.633m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



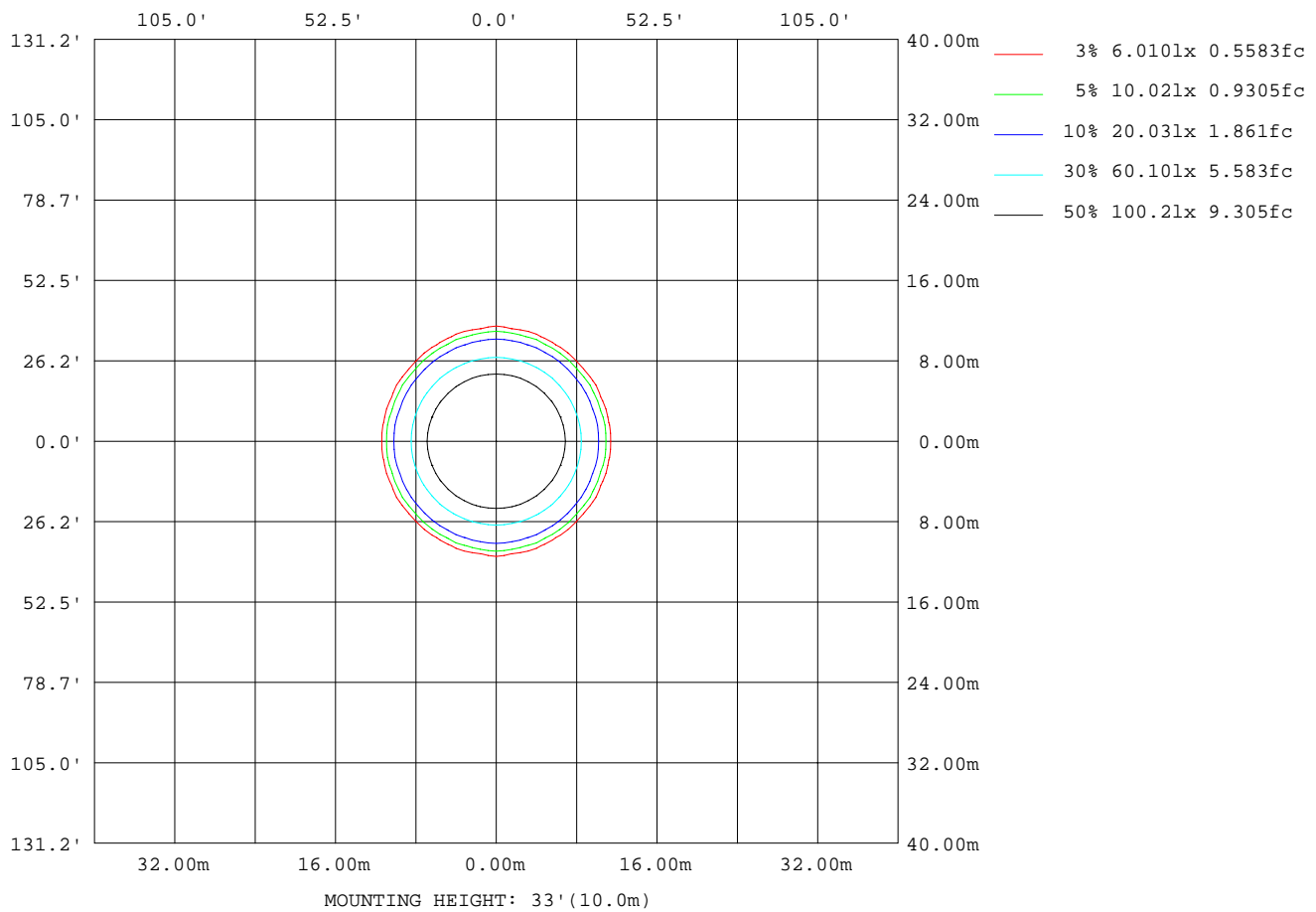
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.633m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
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: 2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.633m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: ϕ 0.4*0.141M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.29M	Shielding Angle:

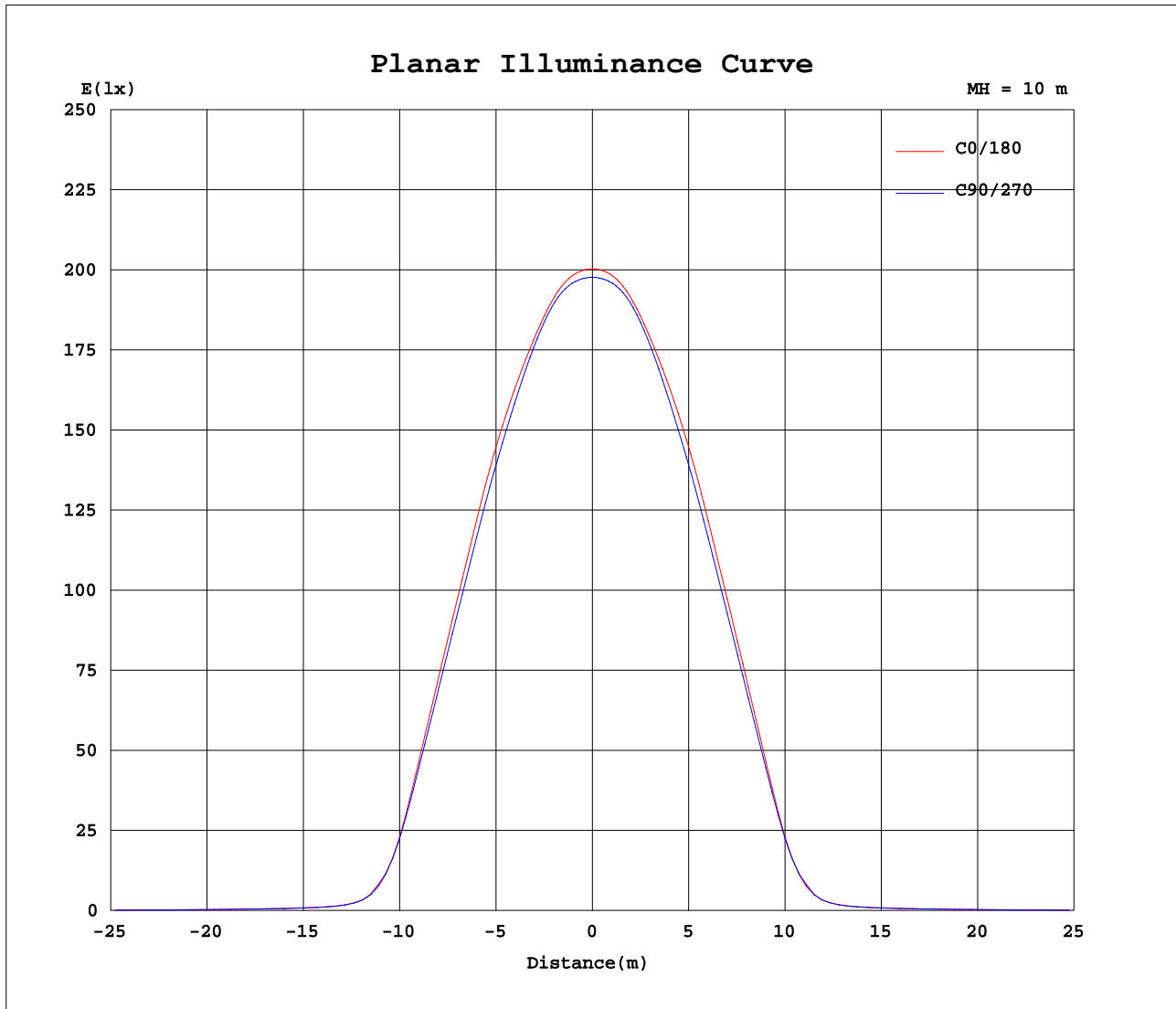
AvgL	cd/m2
L_0~180 (65) av	7938
L_0~180 (75) av	7646
L_0~180 (85) av	1622
L_90~270 (65) av	8378
L_90~270 (75) av	8034
L_90~270 (85) av	1561
L_45 (65) av	7957
L_45 (75) av	7461
L_45 (85) av	1496

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_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: 2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.633m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	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	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988
5	1996	1996	1996	1997	1998	1998	1998	1998	1998	1997	1998	1998	1998	1998	1998	1997	1996	1996	1996
10	2010	2010	2012	2013	2014	2015	2017	2017	2017	2016	2017	2017	2017	2015	2014	2013	2012	2010	2010
15	2018	2018	2020	2021	2022	2023	2023	2023	2022	2022	2022	2023	2023	2023	2022	2021	2020	2018	2018
20	2024	2023	2023	2021	2019	2016	2013	2010	2007	2008	2007	2010	2013	2016	2019	2021	2023	2023	2024
25	2017	2015	2010	2005	1997	1991	1982	1977	1972	1971	1972	1977	1982	1991	1997	2005	2010	2015	2017
30	1948	1946	1936	1930	1916	1911	1899	1895	1887	1887	1887	1895	1899	1911	1916	1930	1936	1946	1948
35	1756	1755	1742	1741	1723	1718	1708	1709	1694	1696	1694	1709	1708	1718	1723	1741	1742	1755	1756
40	1374	1375	1355	1358	1339	1346	1321	1326	1311	1325	1311	1326	1321	1346	1339	1358	1355	1375	1374
45	644	649	621	628	605	619	600	615	605	639	605	615	600	619	605	628	621	649	644
50	123	125	119	121	125	120	124	120	127	126	127	120	124	120	125	121	119	125	123
55	52.2	52.2	51.6	52.3	52.2	53.0	52.9	53.7	53.6	54.9	53.6	53.7	52.9	53.0	52.2	52.3	51.6	52.2	52.2
60	40.5	40.4	40.1	40.3	40.4	41.0	41.2	41.8	41.9	42.7	41.9	41.8	41.2	41.0	40.4	40.3	40.1	40.4	40.5
65	33.5	33.4	33.2	33.3	33.4	33.8	34.0	34.6	34.8	35.4	34.8	34.6	34.0	33.8	33.4	33.3	33.2	33.4	33.5
70	26.8	26.7	26.4	26.5	26.6	26.8	27.0	27.5	27.8	28.3	27.8	27.5	27.0	26.8	26.6	26.5	26.4	26.7	26.8
75	19.8	19.6	19.3	19.3	19.3	19.3	19.4	19.8	20.2	20.8	20.2	19.8	19.4	19.3	19.3	19.3	19.3	19.6	19.8
80	10.4	10.4	9.96	10.0	9.82	9.94	9.77	10.2	10.2	11.0	10.2	10.2	9.77	9.94	9.82	10.0	9.96	10.4	10.4
85	1.41	1.41	1.33	1.35	1.30	1.31	1.28	1.31	1.28	1.36	1.28	1.31	1.28	1.31	1.30	1.35	1.33	1.41	1.41
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: 2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.633m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.2V I:1.115A P:247.8W PF:0.9789 Freq:49.99Hz Lamp Flux:33467.7x1 lm																	
NAME: AOK oH									TYPE:LED						WEIGHT:6.0KG		
SPEC.:AOK-240WoH-3030-4000K-Ra80-90D									DIM.: ϕ 0.4*0.141M						SERIAL No.:		
MFR.: AOK									SUR.: ϕ 0.29M						Shielding Angle:		

Table--2

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

γ (DEG) \ C (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988	1988		
5	1996	1996	1997	1998	1998	1998	1998	1998	1997	1998	1998	1998	1998	1998	1998	1997	1996	1996	
10	2010	2012	2013	2014	2015	2017	2017	2017	2016	2017	2017	2017	2017	2015	2014	2013	2012	2010	
15	2018	2020	2021	2022	2023	2023	2023	2022	2022	2022	2023	2023	2023	2022	2021	2020	2018		
20	2023	2023	2021	2019	2016	2013	2010	2007	2008	2007	2010	2013	2016	2019	2021	2023	2023		
25	2015	2010	2005	1997	1991	1982	1977	1972	1971	1972	1977	1982	1991	1997	2005	2010	2015		
30	1946	1936	1930	1916	1911	1899	1895	1887	1887	1887	1895	1899	1911	1916	1930	1936	1946		
35	1755	1742	1741	1723	1718	1708	1709	1694	1696	1694	1709	1708	1718	1723	1741	1742	1755		
40	1375	1355	1358	1339	1346	1321	1326	1311	1325	1311	1326	1321	1346	1339	1358	1355	1375		
45	649	621	628	605	619	600	615	605	639	605	615	600	619	605	628	621	649		
50	125	119	121	125	120	124	120	127	126	127	120	124	120	125	121	119	125		
55	52.2	51.6	52.3	52.2	53.0	52.9	53.7	53.6	54.9	53.6	53.7	52.9	53.0	52.2	52.3	51.6	52.2		
60	40.4	40.1	40.3	40.4	41.0	41.2	41.8	41.9	42.7	41.9	41.8	41.2	41.0	40.4	40.3	40.1	40.4		
65	33.4	33.2	33.3	33.4	33.8	34.0	34.6	34.8	35.4	34.8	34.6	34.0	33.8	33.4	33.3	33.2	33.4		
70	26.7	26.4	26.5	26.6	26.8	27.0	27.5	27.8	28.3	27.8	27.5	27.0	26.8	26.6	26.5	26.4	26.7		
75	19.6	19.3	19.3	19.3	19.3	19.4	19.8	20.2	20.8	20.2	19.8	19.4	19.3	19.3	19.3	19.3	19.6		
80	10.4	9.96	10.0	9.82	9.94	9.77	10.2	10.2	11.0	10.2	10.2	9.77	9.94	9.82	10.0	9.96	10.4		
85	1.41	1.33	1.35	1.30	1.31	1.28	1.31	1.28	1.36	1.28	1.31	1.28	1.31	1.30	1.35	1.33	1.41		
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: 2018-04-14

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 7.633m [K=1.0000]
 Remarks: