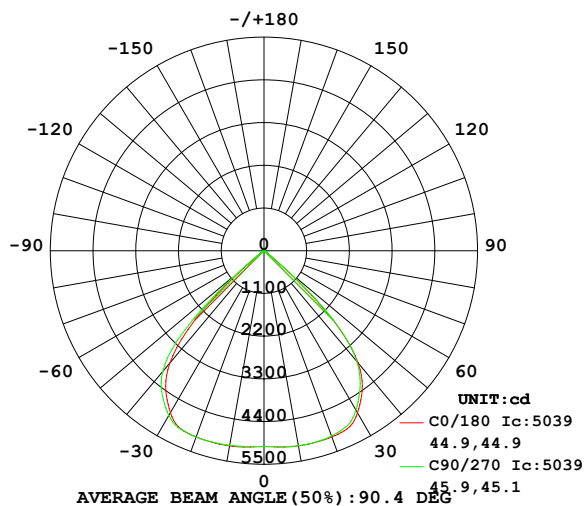


LUMINAIRE PHOTOMETRIC TEST REPORT

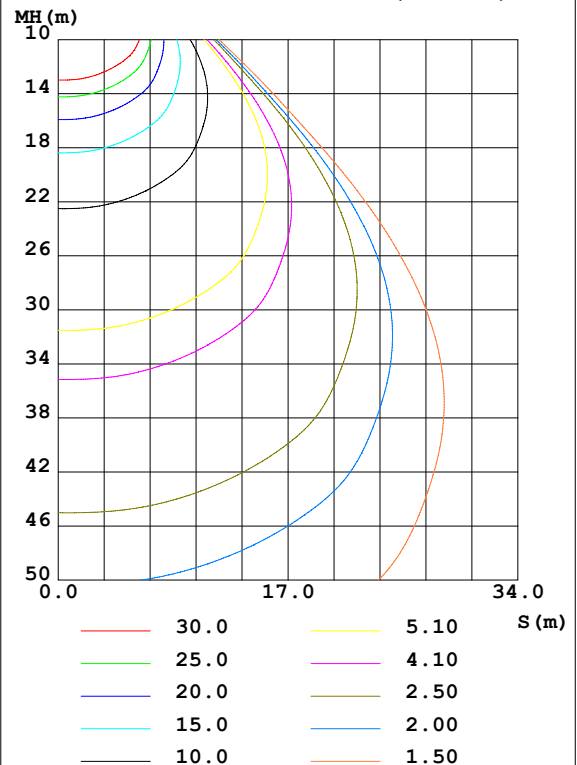
Test:U:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm					
NAME: AOK oH		TYPE:LED		WEIGHT:2.9KG	
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D		DIM.: $\phi 0.248 \times 0.138$		SERIAL No.:1	
MFR.: AOK		SUR.: $\phi 0.16M$		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.77 lm/W			
MODEL	3030	I _{max} (cd)	5123	S/MH (C0/180)	1.31
NOMINAL POWER (W)	60	LOR (%)	100.0	S/MH (C90/270)	1.35
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	9079.7	η UP,DN (C0-180)	0.0,49.3
NOMINAL FLUX (lm)	9079.66	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.35

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:2018-04-13

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	5102	5115	5099	5115	5102	5084	5089	5084	0- 10	484.9	484.9	5.34,5.34
20	5101	5090	5079	5090	5101	5088	5106	5088	10- 20	1446	1931	21.3,21.3
30	4817	4733	4738	4733	4817	4908	4900	4908	20- 30	2317	4248	46.8,46.8
40	3764	3717	3715	3717	3764	3903	4056	3903	30- 40	2743	6991	77,77
50	538.8	599.8	693.4	599.8	538.8	654.1	833.5	654.1	40- 50	1841	8833	97.3,97.3
60	65.59	63.27	65.03	63.27	65.59	66.93	68.51	66.93	50- 60	157.1	8990	99,99
70	42.06	41.42	42.46	41.42	42.06	43.11	44.66	43.11	60- 70	52.00	9042	99.6,99.6
80	16.18	16.02	17.11	16.02	16.18	17.21	18.92	17.21	70- 80	32.98	9075	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	5.027	9080	100,100
100	0	0	0	0	0	0	0	0	90-100	0	9080	100,100
110	0	0	0	0	0	0	0	0	100-110	0	9080	100,100
120	0	0	0	0	0	0	0	0	110-120	0	9080	100,100
130	0	0	0	0	0	0	0	0	120-130	0	9080	100,100
140	0	0	0	0	0	0	0	0	130-140	0	9080	100,100
150	0	0	0	0	0	0	0	0	140-150	0	9080	100,100
160	0	0	0	0	0	0	0	0	150-160	0	9080	100,100
170	0	0	0	0	0	0	0	0	160-170	0	9080	100,100
180	0	0	0	0	0	0	0	0	170-180	0	9080	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 8196.7 lm

%lum = 90.3%

%lamp = 90.3%

Conical surface Flux(120deg): 8989.7 lm

%lum = 99.0%

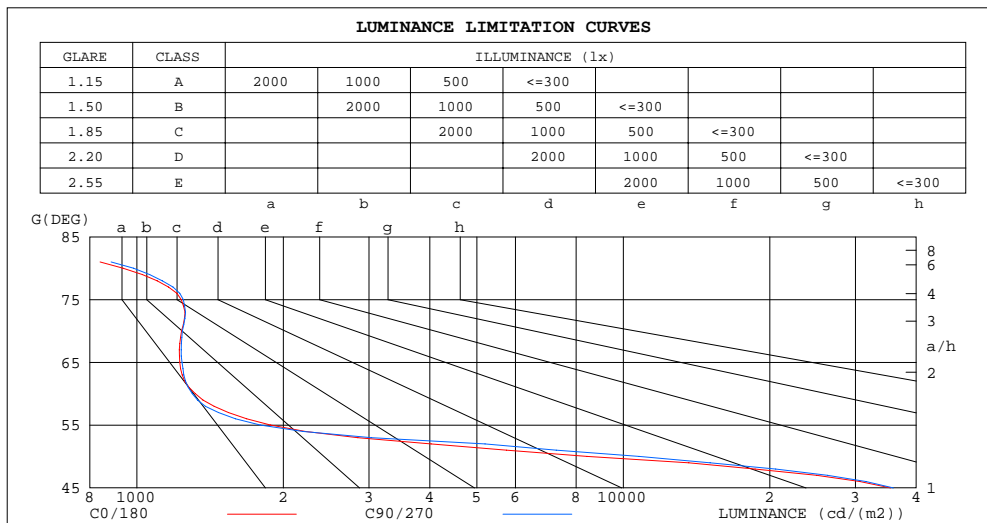
%lamp = 99.0%

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	196	237
80	936	984
75	1233	1246
70	1236	1240
65	1225	1238
60	1318	1299
55	1883	1793
50	8424	10778
45	35449	35900

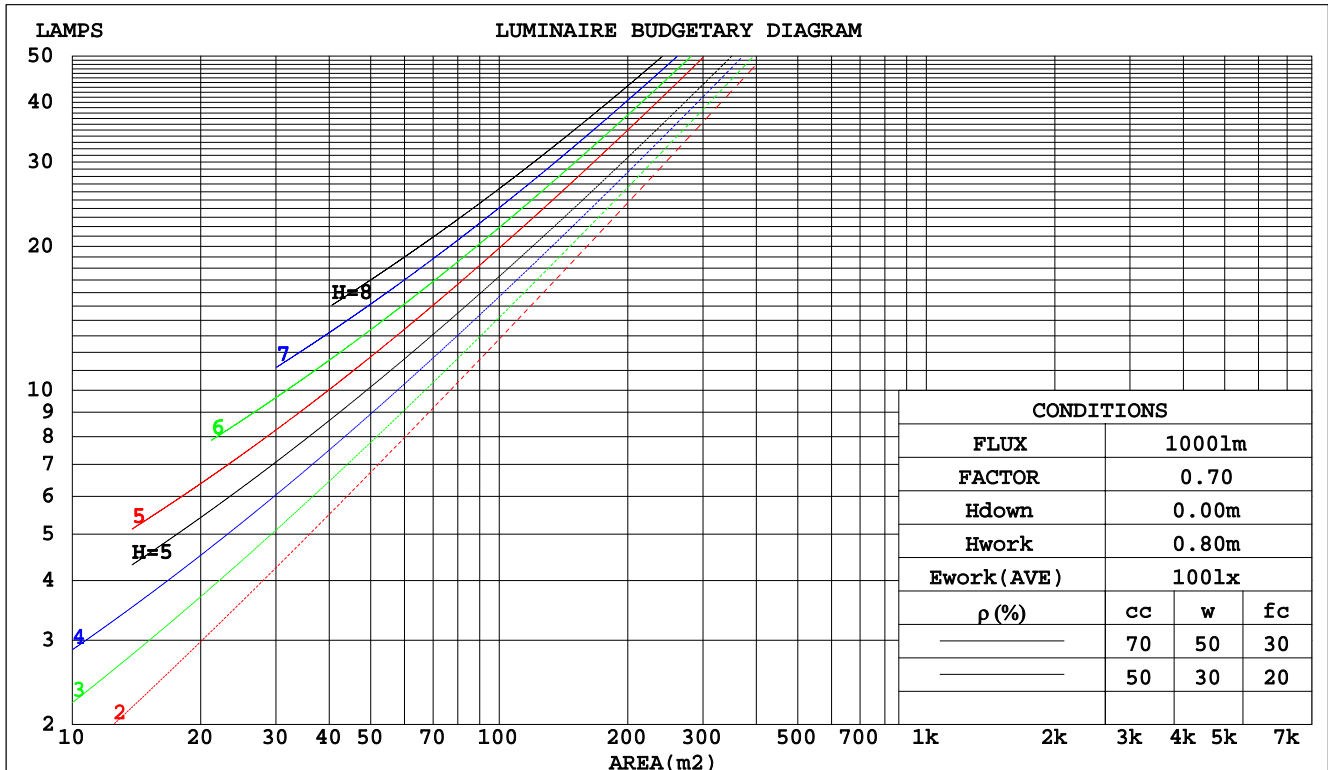
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	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	1.07	1.04	1.07	1.05	1.02	1.03	1.01	.99	.99	.98	.96	.96	.95	.93	.92
2.0	1.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.87	.85	.83
3.0	.92	.86	.81	.90	.85	.80	.87	.83	.79	.85	.81	.78	.83	.79	.77	.75
4.0	.84	.77	.72	.83	.77	.72	.80	.75	.71	.78	.74	.70	.76	.73	.69	.68
5.0	.77	.70	.65	.76	.70	.65	.74	.68	.64	.72	.67	.64	.71	.66	.63	.61
6.0	.71	.64	.59	.70	.63	.58	.68	.62	.58	.67	.62	.58	.65	.61	.57	.56
7.0	.65	.58	.53	.65	.58	.53	.63	.57	.53	.62	.56	.52	.61	.56	.52	.51
8.0	.60	.53	.49	.60	.53	.48	.59	.52	.48	.57	.52	.48	.56	.51	.48	.46
9.0	.56	.49	.44	.55	.49	.44	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42
10.0	.52	.45	.41	.52	.45	.41	.51	.45	.41	.50	.44	.40	.49	.44	.40	.39



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: ϕ 0.248*0.138	SERIAL No.:1
MFR.: AOK	SUR.: ϕ 0.16M	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	.205	.116	.037	.198	.113	.036	.185	.106	.034	.173	.100	.032	.163	.094	.030	
2.0	.199	.109	.034	.194	.107	.033	.183	.102	.032	.173	.097	.030	.164	.093	.029	
3.0	.192	.102	.031	.187	.100	.030	.177	.096	.029	.169	.092	.028	.161	.089	.028	
4.0	.184	.095	.028	.179	.094	.028	.171	.091	.027	.163	.088	.026	.156	.085	.026	
5.0	.175	.089	.026	.171	.088	.026	.164	.086	.025	.157	.083	.025	.151	.081	.024	
6.0	.167	.084	.024	.164	.083	.024	.158	.081	.023	.151	.079	.023	.146	.077	.023	
7.0	.160	.079	.022	.157	.078	.022	.151	.076	.022	.146	.075	.022	.141	.073	.021	
8.0	.153	.075	.021	.150	.074	.021	.145	.072	.021	.140	.071	.020	.135	.069	.020	
9.0	.146	.071	.020	.143	.070	.020	.139	.069	.019	.134	.067	.019	.130	.066	.019	
10.0	.139	.067	.019	.137	.066	.018	.133	.065	.018	.129	.064	.018	.125	.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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.094	.094	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.149	.114	.085	.128	.098	.074	.088	.068	.052	.051	.040	.031	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.133	.088	.055	.114	.076	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.127	.080	.046	.109	.069	.040	.075	.048	.028	.044	.028	.017	.014	.009	.006	
7.0	.121	.072	.039	.104	.063	.034	.072	.044	.024	.042	.026	.014	.013	.008	.005	
8.0	.115	.066	.033	.099	.058	.029	.069	.040	.020	.040	.024	.012	.013	.008	.004	
9.0	.110	.062	.029	.095	.053	.025	.066	.038	.018	.038	.022	.011	.012	.007	.003	
10.0	.106	.057	.025	.091	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm											
NAME: AOK oH					TYPE:LED			WEIGHT:2.9KG			
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D					DIM.: ϕ 0.248*0.138			SERIAL No.:1			
MFR.: AOK					SUR.: ϕ 0.16M			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	13.3	14.4	13.5	14.6	14.8	13.3	14.4	13.5	14.6	14.8	
	3H	13.1	14.2	13.4	14.4	14.6	13.1	14.1	13.4	14.3	14.6
	4H	13.0	14.0	13.3	14.3	14.5	13.0	14.0	13.3	14.2	14.4
	6H	12.9	13.9	13.3	14.1	14.4	12.9	13.8	13.2	14.1	14.3
	8H	12.9	13.8	13.2	14.0	14.3	12.9	13.8	13.2	14.0	14.3
	12H	12.9	13.7	13.2	14.0	14.3	12.8	13.7	13.2	13.9	14.2
4H	2H	13.0	14.0	13.3	14.2	14.5	13.0	14.0	13.3	14.2	14.4
	3H	12.8	13.7	13.2	14.0	14.3	12.8	13.7	13.1	13.9	14.2
	4H	12.8	13.5	13.1	13.8	14.2	12.7	13.5	13.1	13.8	14.1
	6H	12.7	13.4	13.1	13.7	14.0	12.7	13.3	13.0	13.7	14.0
	8H	12.6	13.3	13.0	13.6	14.0	12.6	13.2	13.0	13.6	14.0
	12H	12.6	13.2	13.0	13.5	13.9	12.6	13.1	13.0	13.5	13.9
8H	4H	12.6	13.3	13.0	13.6	14.0	12.6	13.2	13.0	13.6	13.9
	6H	12.6	13.1	13.0	13.5	13.9	12.5	13.0	13.0	13.4	13.8
	8H	12.5	13.0	13.0	13.4	13.8	12.5	12.9	12.9	13.3	13.8
	12H	12.5	12.8	12.9	13.3	13.8	12.4	12.8	12.9	13.3	13.7
12H	4H	12.6	13.2	13.0	13.5	13.9	12.6	13.1	13.0	13.5	13.9
	6H	12.5	13.0	13.0	13.4	13.8	12.5	12.9	12.9	13.3	13.8
	8H	12.5	12.8	12.9	13.3	13.8	12.4	12.8	12.9	13.3	13.7
Variations with the observer position at spacings:											
S = 1.0H	+ 2.9 / -12.9					+ 2.9 / -12.7					
1.5H	+ 3.3 / -13.4					+ 3.2 / -13.5					
2.0H	+ 7.7 / -10.5					+ 7.7 / -10.5					

CIE Pub.117, 9080 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 7.7$)

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	Shielding Angle:

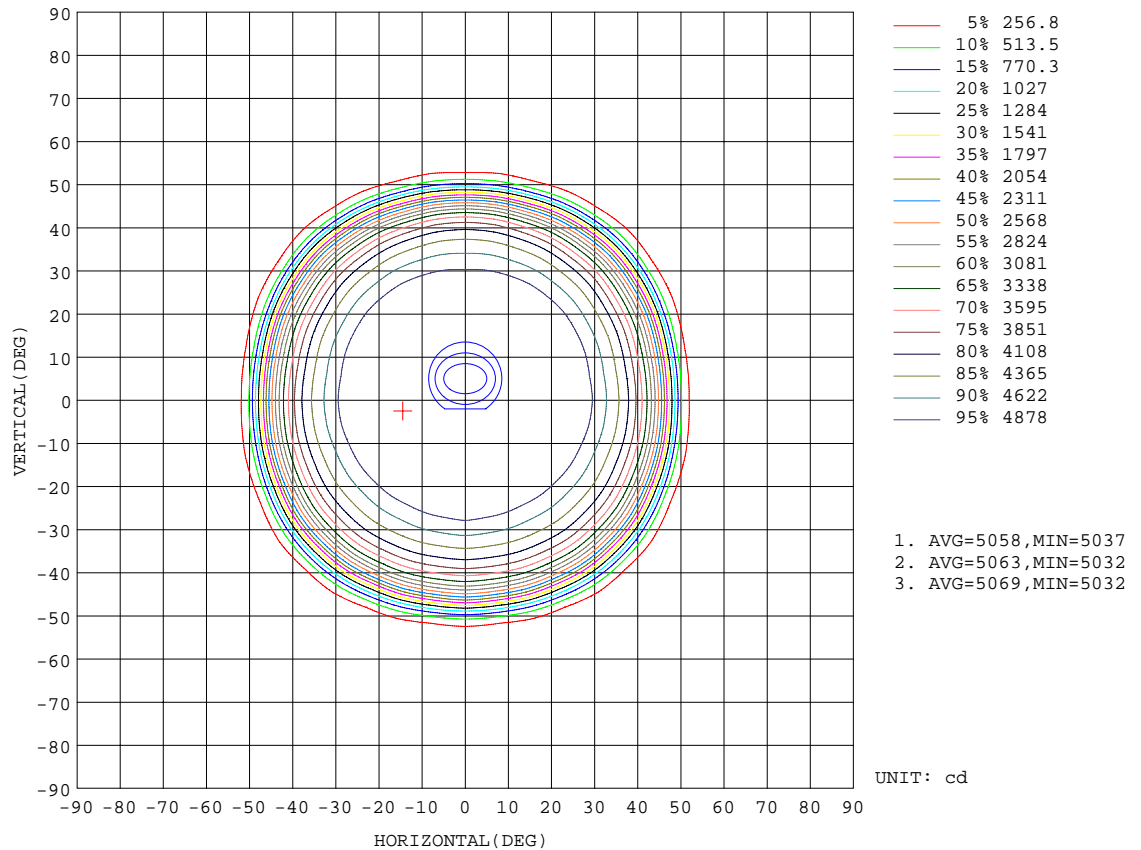
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	77	69	64	76	69	64	76	68	64	59
0.80	86	79	74	85	78	74	84	78	73	68
1.00	93	86	81	92	85	81	90	86	80	76
1.25	98	92	87	97	91	87	95	90	86	81
1.50	102	96	92	100	95	91	98	93	90	85
2.00	106	101	97	104	100	96	101	98	95	89
2.50	108	103	100	106	102	99	103	99	97	90
3.00	110	106	102	108	104	101	104	101	99	92
4.00	112	109	106	110	107	104	106	104	102	94
5.00	113	110	108	111	109	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:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	Shielding Angle:

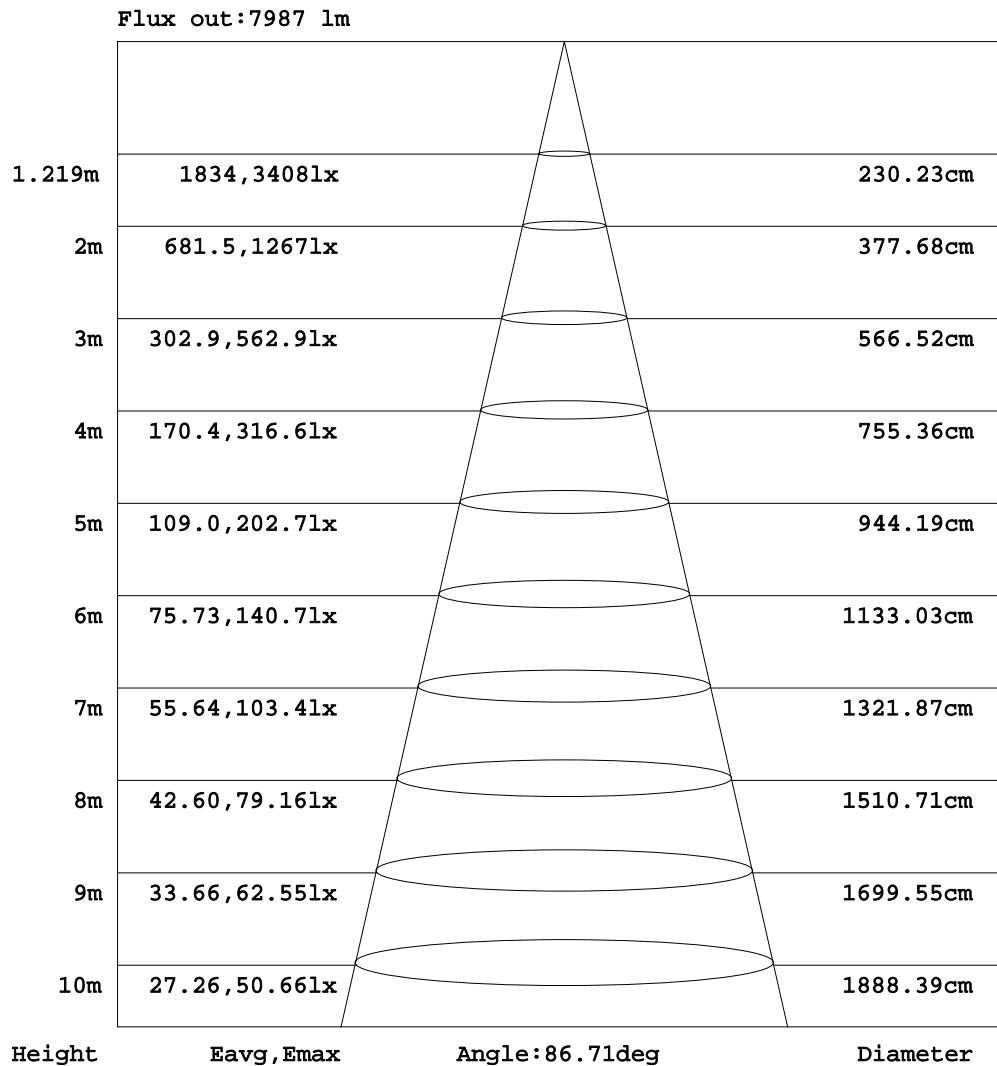


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	Shielding Angle:



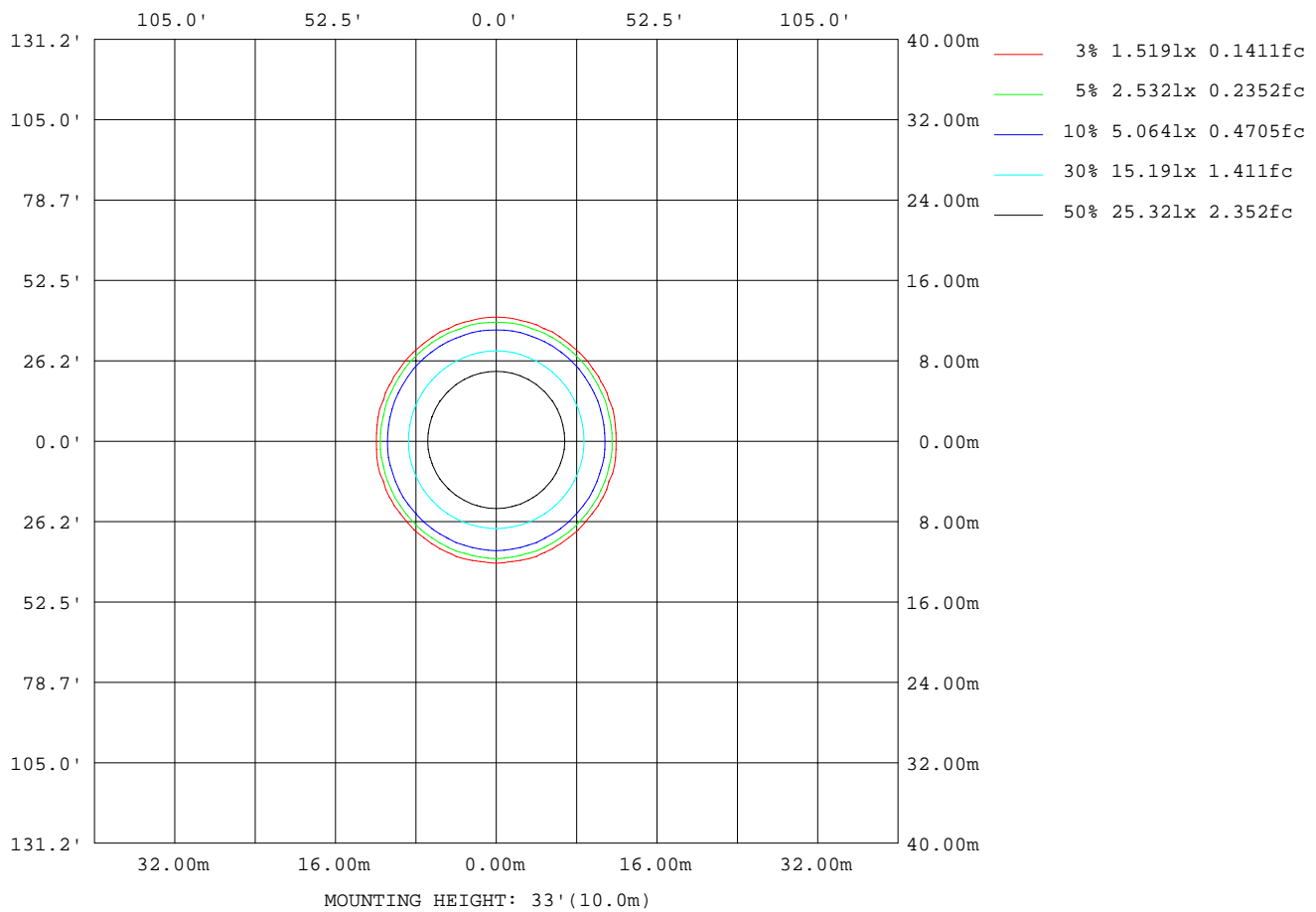
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: Φ 0.248*0.138	SERIAL No.:1
MFR.: AOK	SUR.: Φ 0.16M	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	Shielding Angle:

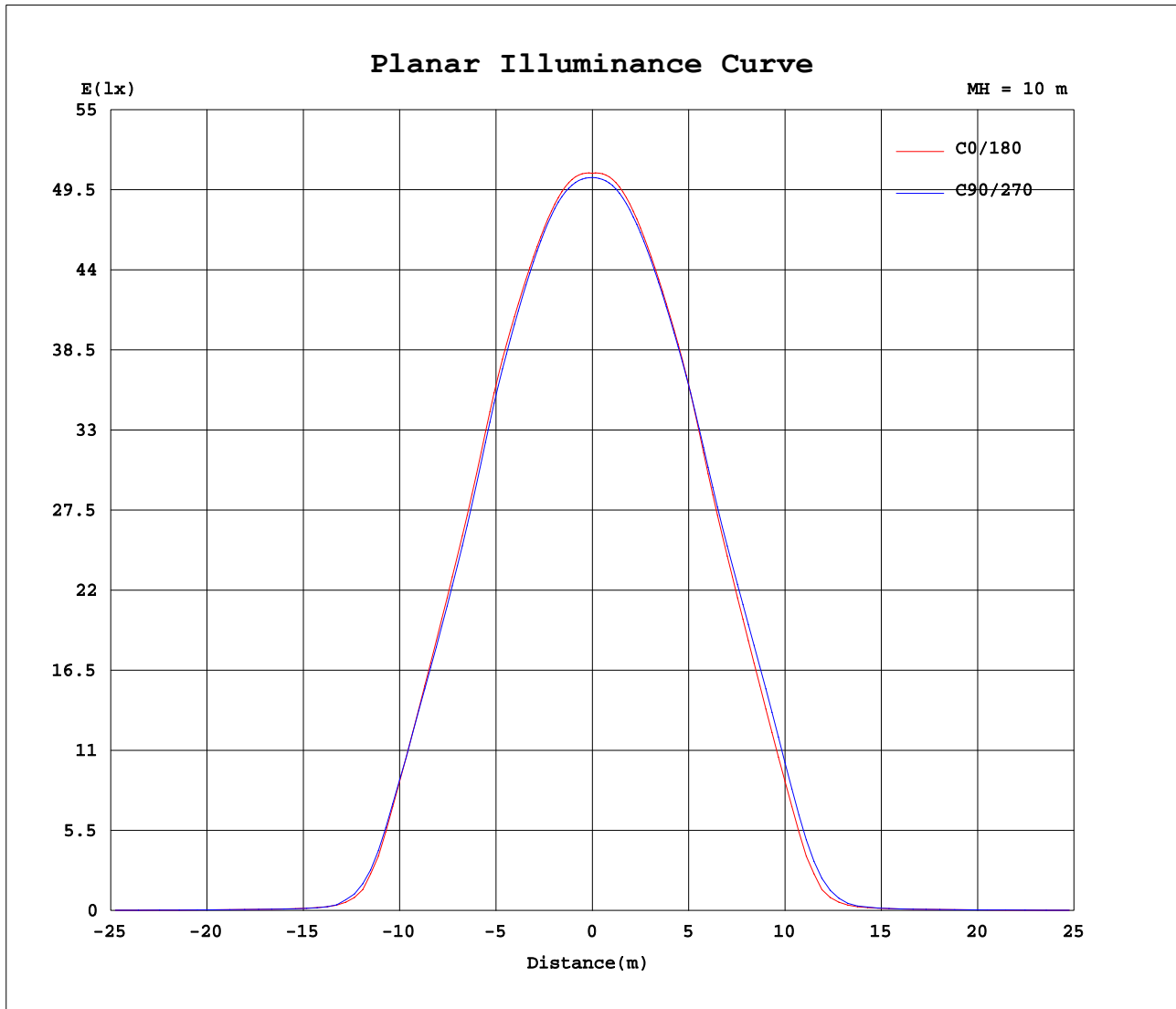
AvgL	cd/m2
L_0~180 (65) av	1219
L_0~180 (75) av	1227
L_0~180 (85) av	195
L_90~270 (65) av	1264
L_90~270 (75) av	1295
L_90~270 (85) av	261
L_45 (65) av	1225
L_45 (75) av	1235
L_45 (85) av	208

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-04-13

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ 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: 2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: $\phi 0.248 \times 0.138$	SERIAL No.:1
MFR.: AOK	SUR.: $\phi 0.16M$	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039
5	5072	5074	5076	5075	5076	5074	5073	5070	5067	5062	5067	5070	5073	5074	5076	5075	5076	5074	5072
10	5102	5108	5111	5114	5115	5115	5115	5111	5105	5099	5105	5111	5115	5115	5114	5111	5108	5102	5102
15	5109	5116	5119	5122	5122	5122	5119	5116	5111	5107	5111	5116	5119	5122	5122	5122	5119	5116	5109
20	5101	5103	5100	5098	5092	5087	5082	5081	5077	5079	5077	5081	5082	5087	5092	5098	5100	5103	5101
25	5062	5054	5036	5026	5009	5002	4991	4993	4991	5001	4991	4993	4991	5002	5009	5026	5036	5054	5062
30	4817	4803	4770	4758	4735	4731	4714	4722	4719	4738	4719	4722	4714	4731	4735	4758	4770	4803	4817
35	4408	4395	4363	4359	4334	4331	4310	4309	4296	4313	4296	4309	4310	4331	4334	4359	4363	4395	4408
40	3764	3772	3735	3743	3711	3723	3692	3710	3689	3715	3689	3710	3692	3723	3711	3743	3735	3772	3764
45	2494	2514	2458	2484	2431	2467	2438	2492	2476	2541	2476	2492	2438	2467	2431	2484	2458	2514	2494
50	539	571	547	589	573	627	618	672	647	693	647	672	618	627	573	589	547	571	539
55	107	109	104	103	98.5	98.5	96.6	99.3	99.4	103	99.4	99.3	96.6	98.5	98.5	103	104	109	107
60	65.6	65.7	64.4	63.9	63.2	63.4	63.0	63.6	64.0	65.0	64.0	63.6	63.0	63.4	63.2	63.9	64.4	65.7	65.6
65	51.5	51.6	51.1	51.1	50.8	50.9	50.7	51.4	51.6	52.4	51.6	51.4	50.7	50.9	50.8	51.1	51.1	51.6	51.5
70	42.1	42.0	41.8	41.7	41.4	41.4	41.4	42.1	42.2	42.5	42.2	42.1	41.4	41.4	41.4	41.7	41.8	42.0	42.1
75	31.8	31.7	31.3	31.4	31.0	31.2	31.3	32.2	32.1	32.3	32.1	32.2	31.3	31.2	31.0	31.4	31.3	31.7	31.8
80	16.2	16.3	15.8	16.1	15.7	16.3	16.1	16.7	16.5	17.1	16.5	16.7	16.1	16.3	15.7	16.1	15.8	16.3	16.2
85	1.70	1.78	1.52	1.68	1.49	1.74	1.61	1.88	1.79	2.06	1.79	1.88	1.61	1.74	1.49	1.68	1.52	1.78	1.70
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:2018-04-13

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:220.4V I:0.2896A P:64.50W PF:0.9727 Freq:49.99Hz Lamp Flux:9079.66x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:2.9KG
SPEC.:AOK-60WoH-3030-4000K-Ra80-90D	DIM.: ϕ 0.248*0.138	SERIAL No.:1
MFR.: AOK	SUR.: ϕ 0.16M	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039	5039		
5	5069	5066	5065	5063	5063	5061	5063	5060	5060	5060	5063	5061	5063	5063	5065	5066	5069		
10	5095	5090	5086	5085	5084	5084	5087	5088	5089	5088	5087	5084	5084	5085	5086	5090	5095		
15	5100	5093	5089	5088	5088	5091	5097	5101	5105	5101	5097	5091	5088	5088	5089	5093	5100		
20	5096	5093	5087	5088	5088	5092	5099	5103	5106	5103	5099	5092	5088	5088	5087	5093	5096		
25	5068	5072	5073	5075	5074	5074	5075	5075	5073	5075	5075	5074	5074	5075	5073	5072	5068		
30	4838	4870	4883	4907	4909	4920	4915	4916	4900	4916	4915	4920	4909	4907	4883	4870	4838		
35	4426	4460	4475	4504	4514	4539	4544	4563	4560	4563	4544	4539	4514	4504	4475	4460	4426		
40	3776	3820	3835	3895	3911	3966	3992	4044	4056	4044	3992	3966	3911	3895	3835	3820	3776		
45	2513	2579	2577	2635	2659	2720	2754	2832	2870	2832	2754	2720	2659	2635	2577	2579	2513		
50	535	578	577	647	661	745	754	829	834	829	754	745	661	647	577	578	535		
55	105	105	103	107	115	117	126	123	130	123	126	117	115	107	103	105	105		
60	64.6	65.0	65.2	66.6	67.3	68.6	68.4	68.5	68.5	68.5	68.4	68.6	67.3	66.6	65.2	65.0	64.6		
65	50.9	51.2	51.5	52.5	52.9	53.7	53.7	54.1	54.4	54.1	53.7	53.7	52.9	52.5	51.5	51.2	50.9		
70	41.7	42.1	42.4	42.9	43.3	43.7	43.9	44.4	44.7	44.4	43.9	43.7	43.3	42.9	42.4	42.1	41.7		
75	31.4	32.0	32.1	32.7	33.1	33.6	33.7	34.4	34.8	34.4	33.7	33.6	33.1	32.7	32.1	32.0	31.4		
80	15.8	16.5	16.6	17.2	17.3	17.9	18.1	18.8	18.9	18.8	18.1	17.9	17.3	17.2	16.6	16.5	15.8		
85	1.56	1.77	1.79	2.02	2.02	2.26	2.24	2.54	2.48	2.54	2.24	2.26	2.02	2.02	1.79	1.77	1.56		
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:2018-04-13

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: