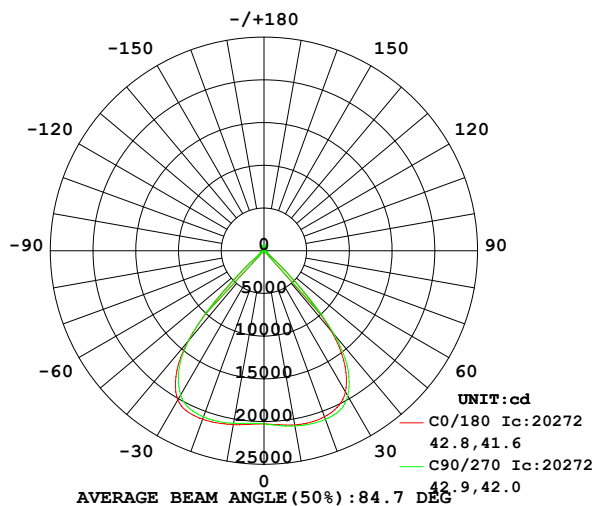


## LUMINAIRE PHOTOMETRIC TEST REPORT

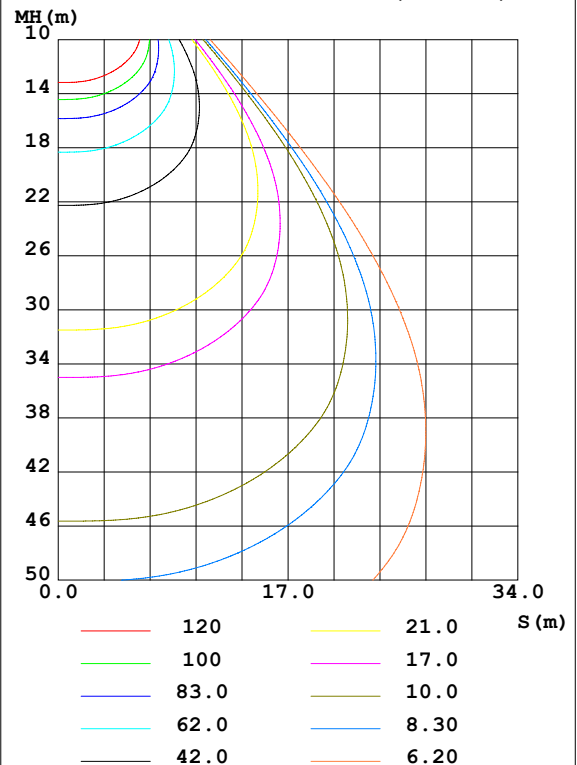
Test:U:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240W oH-3030-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.79 lm/W			
MODEL	3030	I <sub>max</sub> (cd)	21086	S/MH (C0/180)	1.25
NOMINAL POWER (W)	240	LOR (%)	100.0	S/MH (C90/270)	1.25
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	35710	$\eta$ UP, DN (C0-180)	2.1, 47.2
NOMINAL FLUX (lm)	35710.2	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	2.1, 48.6
LAMPS INSIDE	1	$\eta$ up (%)	4.2	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	$\eta$ down (%)	95.8	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: 2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	2070	2078	2081	2078	2066	2052	2051	2061	0- 10	1957	1957	5.48, 5.48
20	2068	2078	2100	2108	2099	2077	2070	2071	10- 20	5901	7858	22, 22
30	1907	1922	1959	2007	2017	1994	1950	1921	20- 30	9449	17307	48.5, 48.5
40	1222	1219	1281	1337	1387	1422	1370	1300	30- 40	10629	27936	78.2, 78.2
50	129.2	119.9	125.9	129.3	146.4	166.7	164.8	149.7	40- 50	4942	32878	92.1, 92.1
60	50.18	48.71	48.02	47.66	50.17	50.40	50.58	49.62	50- 60	652.0	33530	93.9, 93.9
70	32.52	31.38	31.38	31.49	32.54	33.00	33.15	33.16	60- 70	401.7	33931	95, 95
80	11.30	9.852	10.45	11.12	13.42	13.88	13.85	12.22	70- 80	240.8	34172	95.7, 95.7
90	0.7482	0.3994	0.9867	0.5378	0.9780	0.3667	0.7951	0.4244	80- 90	36.21	34208	95.8, 95.8
100	2.920	1.836	3.645	2.746	3.508	1.829	2.945	1.879	90-100	14.76	34223	95.8, 95.8
110	8.654	4.706	9.247	6.495	8.964	4.870	11.07	5.082	100-110	47.04	34270	96, 96
120	22.30	8.497	17.52	10.53	23.32	7.979	11.94	8.285	110-120	86.69	34357	96.2, 96.2
130	41.28	23.56	43.26	29.59	40.04	27.52	42.73	22.27	120-130	201.3	34558	96.8, 96.8
140	65.64	50.95	67.07	40.62	59.66	44.02	67.23	48.87	130-140	347.5	34906	97.7, 97.7
150	49.44	49.42	52.49	57.29	61.12	55.04	56.95	50.73	140-150	356.1	35262	98.7, 98.7
160	53.45	53.42	54.84	54.67	54.98	53.79	54.99	46.65	150-160	246.9	35509	99.4, 99.4
170	55.98	39.49	57.02	41.34	57.56	46.21	57.64	40.82	160-170	147.5	35656	99.8, 99.8
180	72.91	56.45	72.89	57.11	73.34	56.46	72.76	57.11	170-180	53.98	35710	100, 100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$									UNIT: lm		

Conical surface Flux(90deg): 31554 lm

%lum = 88.4%

%lamp = 88.4%

Conical surface Flux(120deg): 33530 lm

%lum = 93.9%

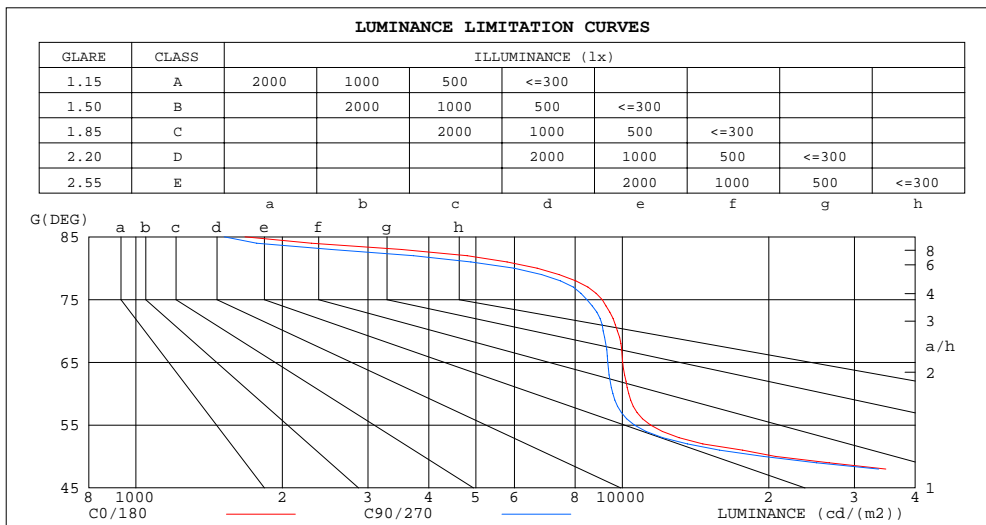
%lamp = 93.9%

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240W oH-3030-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:



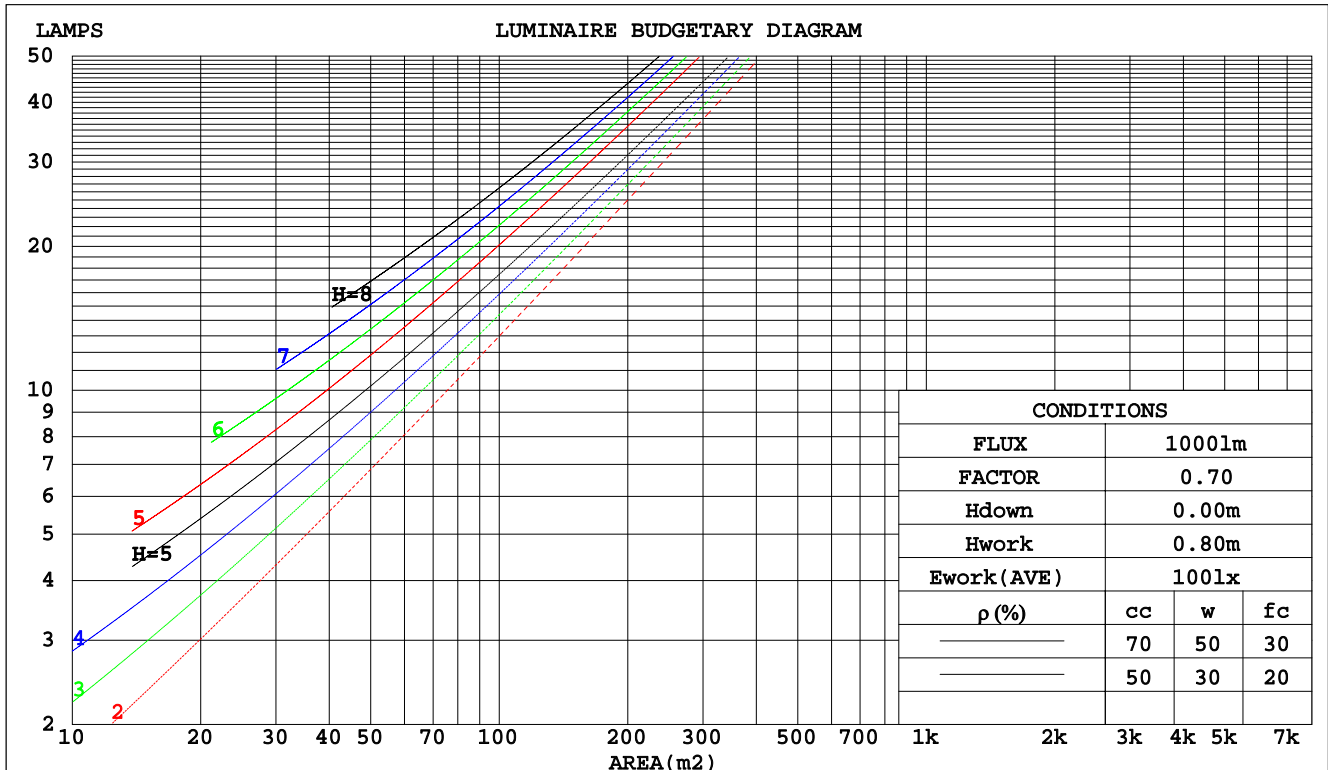
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240Woh-3030-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
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	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.03	1.03	1.03	.98	.98	.98	.96
1.0	1.08	1.05	1.03	1.06	1.03	1.01	1.01	.99	.97	.96	.95	.93	.92	.91	.90	.88
2.0	.99	.94	.90	.97	.93	.89	.93	.89	.86	.89	.86	.84	.86	.84	.82	.80
3.0	.91	.85	.80	.89	.84	.79	.86	.81	.78	.83	.79	.76	.80	.77	.74	.72
4.0	.83	.77	.72	.82	.76	.71	.79	.74	.70	.76	.72	.69	.74	.70	.67	.66
5.0	.77	.70	.65	.75	.69	.64	.73	.68	.63	.71	.66	.62	.69	.65	.61	.60
6.0	.71	.64	.59	.70	.63	.58	.68	.62	.58	.66	.61	.57	.64	.60	.56	.54
7.0	.65	.58	.53	.64	.58	.53	.63	.57	.53	.61	.56	.52	.59	.55	.51	.50
8.0	.61	.54	.49	.60	.53	.49	.58	.52	.48	.57	.52	.48	.55	.51	.47	.46
9.0	.56	.49	.45	.56	.49	.45	.54	.48	.44	.53	.48	.44	.52	.47	.44	.42
10.0	.52	.46	.41	.52	.45	.41	.51	.45	.41	.49	.44	.41	.48	.44	.40	.39



C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-90D	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:
MFR.: AOK	SUR.: $\phi$ 0.29M	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.206	.117	.037	.198	.113	.036	.183	.105	.034	.169	.097	.031	.156	.091	.029	
2.0	.199	.109	.033	.192	.106	.033	.179	.100	.031	.167	.094	.029	.156	.088	.028	
3.0	.190	.101	.030	.184	.099	.030	.173	.094	.028	.162	.089	.027	.152	.084	.026	
4.0	.181	.094	.028	.176	.092	.027	.166	.088	.026	.157	.084	.025	.148	.080	.024	
5.0	.173	.088	.026	.168	.086	.025	.159	.083	.024	.151	.079	.024	.143	.076	.023	
6.0	.165	.083	.024	.160	.081	.023	.152	.078	.023	.145	.075	.022	.138	.072	.022	
7.0	.157	.078	.022	.153	.076	.022	.146	.074	.021	.139	.071	.021	.132	.069	.020	
8.0	.150	.073	.021	.146	.072	.020	.140	.070	.020	.133	.068	.019	.128	.065	.019	
9.0	.143	.069	.019	.140	.068	.019	.134	.066	.019	.128	.064	.018	.123	.062	.018	
10.0	.137	.066	.018	.134	.065	.018	.128	.063	.018	.123	.061	.017	.118	.059	.017	

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	.223	.223	.223	.190	.190	.190	.130	.130	.130	.075	.075	.075	.024	.024	.024	
1.0	.205	.189	.175	.176	.163	.151	.120	.112	.104	.069	.065	.061	.022	.021	.020	
2.0	.192	.165	.142	.165	.142	.123	.113	.098	.085	.065	.057	.050	.021	.018	.016	
3.0	.182	.146	.118	.156	.126	.103	.107	.088	.072	.062	.051	.042	.020	.017	.014	
4.0	.173	.132	.101	.148	.114	.088	.102	.080	.062	.059	.047	.037	.019	.015	.012	
5.0	.165	.121	.089	.142	.105	.077	.098	.073	.054	.057	.043	.032	.018	.014	.011	
6.0	.159	.112	.079	.136	.097	.069	.094	.068	.049	.055	.040	.029	.018	.013	.010	
7.0	.153	.105	.072	.131	.091	.063	.091	.064	.044	.053	.038	.026	.017	.012	.009	
8.0	.147	.099	.066	.127	.086	.058	.088	.061	.041	.051	.036	.025	.017	.012	.008	
9.0	.142	.094	.062	.123	.082	.054	.085	.058	.038	.049	.034	.023	.016	.011	.008	
10.0	.138	.090	.059	.119	.078	.051	.082	.055	.036	.048	.033	.022	.016	.011	.007	

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm										
NAME: AOK oH					TYPE:LED			WEIGHT:6.0KG		
SPEC.:AOK-240WoH-3030-90D					DIM.: $\phi 0.4 \times 0.141M$			SERIAL No.:		
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	11.7	12.8	12.0	13.1	13.3	11.7	12.7	12.0	13.0	13.2
3H	11.6	12.6	11.9	12.9	13.2	11.5	12.5	11.9	12.8	13.1
4H	11.6	12.5	11.9	12.8	13.1	11.5	12.4	11.8	12.7	13.0
6H	11.5	12.4	11.9	12.7	13.0	11.4	12.3	11.8	12.6	12.9
8H	11.5	12.3	11.8	12.6	13.0	11.4	12.2	11.7	12.5	12.9
12H	11.4	12.2	11.8	12.6	12.9	11.3	12.1	11.7	12.5	12.8
4H 2H	11.5	12.4	11.8	12.7	13.0	11.4	12.3	11.7	12.6	12.9
3H	11.4	12.2	11.8	12.5	12.9	11.3	12.1	11.7	12.5	12.8
4H	11.4	12.1	11.8	12.5	12.9	11.3	12.0	11.7	12.4	12.8
6H	11.3	11.9	11.8	12.4	12.8	11.2	11.9	11.7	12.3	12.7
8H	11.3	11.9	11.7	12.3	12.7	11.2	11.8	11.6	12.2	12.6
12H	11.2	11.8	11.7	12.2	12.7	11.1	11.7	11.6	12.1	12.6
8H 4H	11.2	11.8	11.7	12.3	12.7	11.2	11.7	11.6	12.2	12.6
6H	11.2	11.7	11.7	12.2	12.7	11.1	11.6	11.6	12.1	12.6
8H	11.2	11.6	11.7	12.1	12.6	11.1	11.5	11.6	12.0	12.5
12H	11.1	11.5	11.7	12.0	12.6	11.0	11.4	11.6	11.9	12.5
12H 4H	11.2	11.7	11.7	12.2	12.7	11.1	11.6	11.6	12.1	12.6
6H	11.2	11.6	11.7	12.1	12.6	11.1	11.5	11.6	12.0	12.5
8H	11.1	11.5	11.7	12.0	12.6	11.0	11.4	11.6	11.9	12.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.3 / - 7.7					+ 2.4 / - 8.0				
1.5H	+ 4.5 / - 7.7					+ 4.6 / - 8.0				
2.0H	+ 6.7 / - 3.0					+ 7.0 / - 3.2				

CIE Pub.117, 35710 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 12.4$ )

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

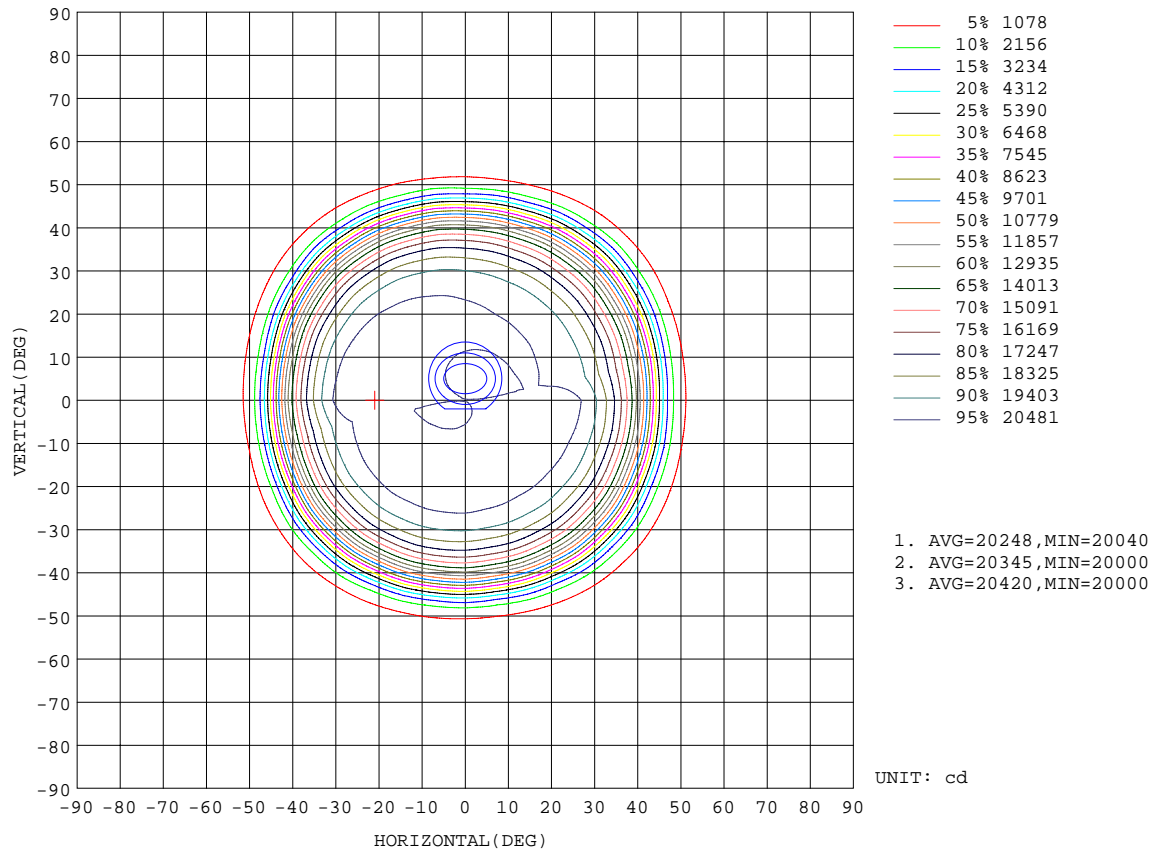
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	78	70	66	77	70	65	76	69	65	61
0.80	87	79	75	86	79	74	84	78	74	69
1.00	93	86	81	91	85	81	89	85	80	75
1.25	98	91	87	96	90	86	93	89	85	80
1.50	101	95	91	99	94	90	96	92	89	83
2.00	105	100	96	103	98	95	99	96	93	86
2.50	107	102	98	105	101	97	101	98	95	87
3.00	109	105	101	106	103	100	102	99	97	89
4.00	111	108	105	109	106	103	104	102	100	91
5.00	112	110	107	110	107	105	105	103	102	92
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:2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-90D	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: 2018-03-13

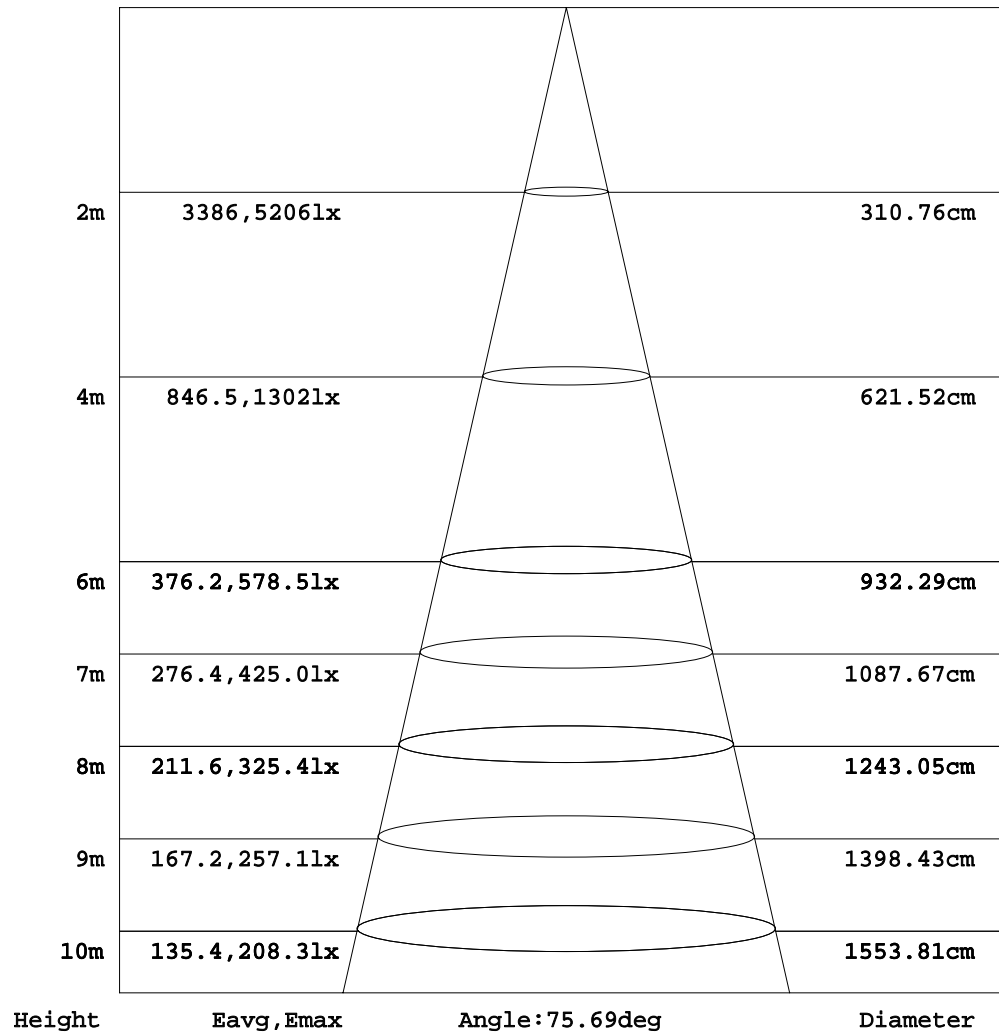
$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.633m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240W oH-3030-90D	DIM.: $\phi 0.4 \times 0.141M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.29M$	Shielding Angle:

Flux out:25974 lm



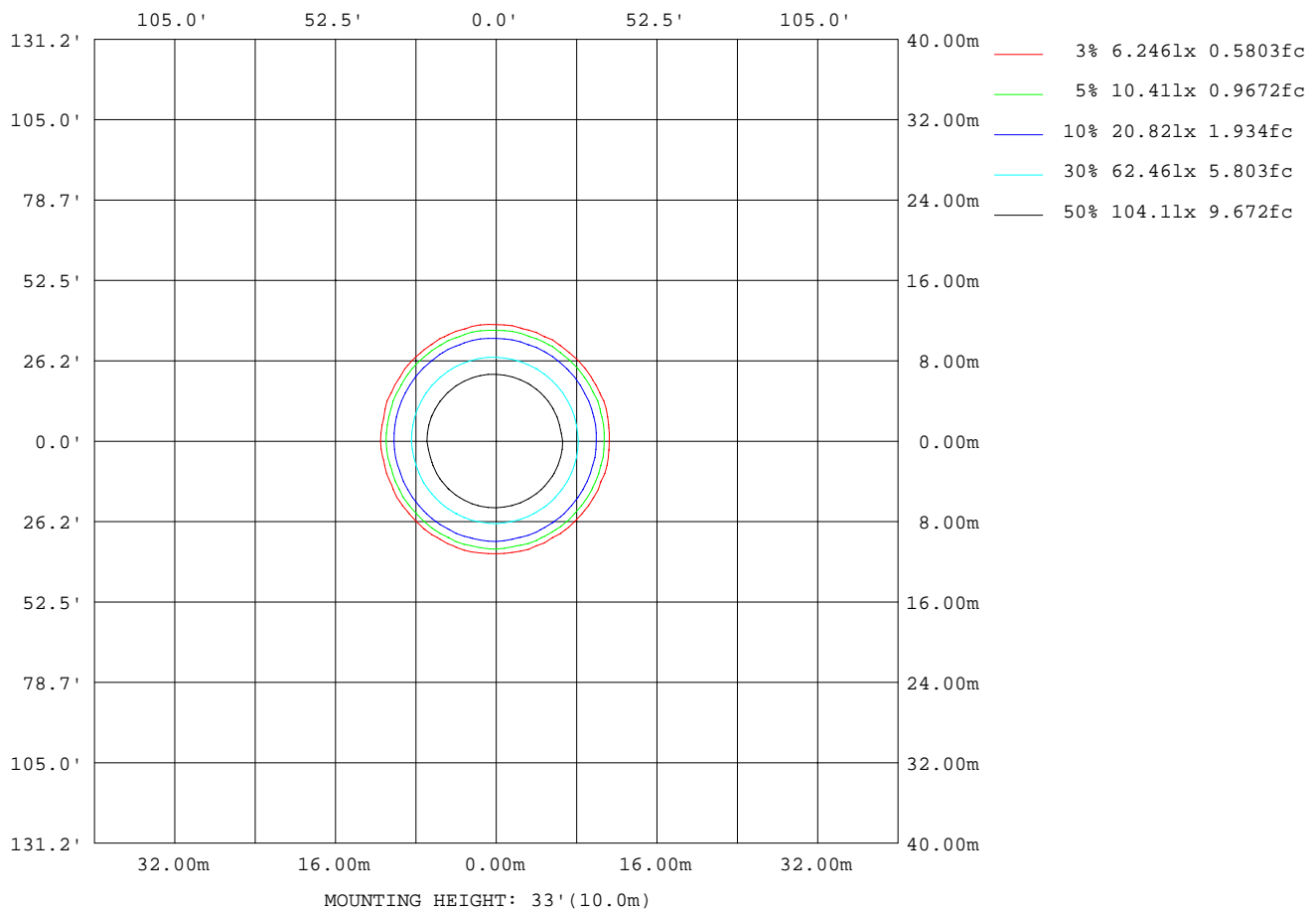
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240W oH-3030-90D	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: 2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:6.0KG
SPEC.:AOK-240WoH-3030-90D	DIM.: $\phi$ 0.4*0.141M	SERIAL No.:
MFR.: AOK	SUR.: $\phi$ 0.29M	Shielding Angle:

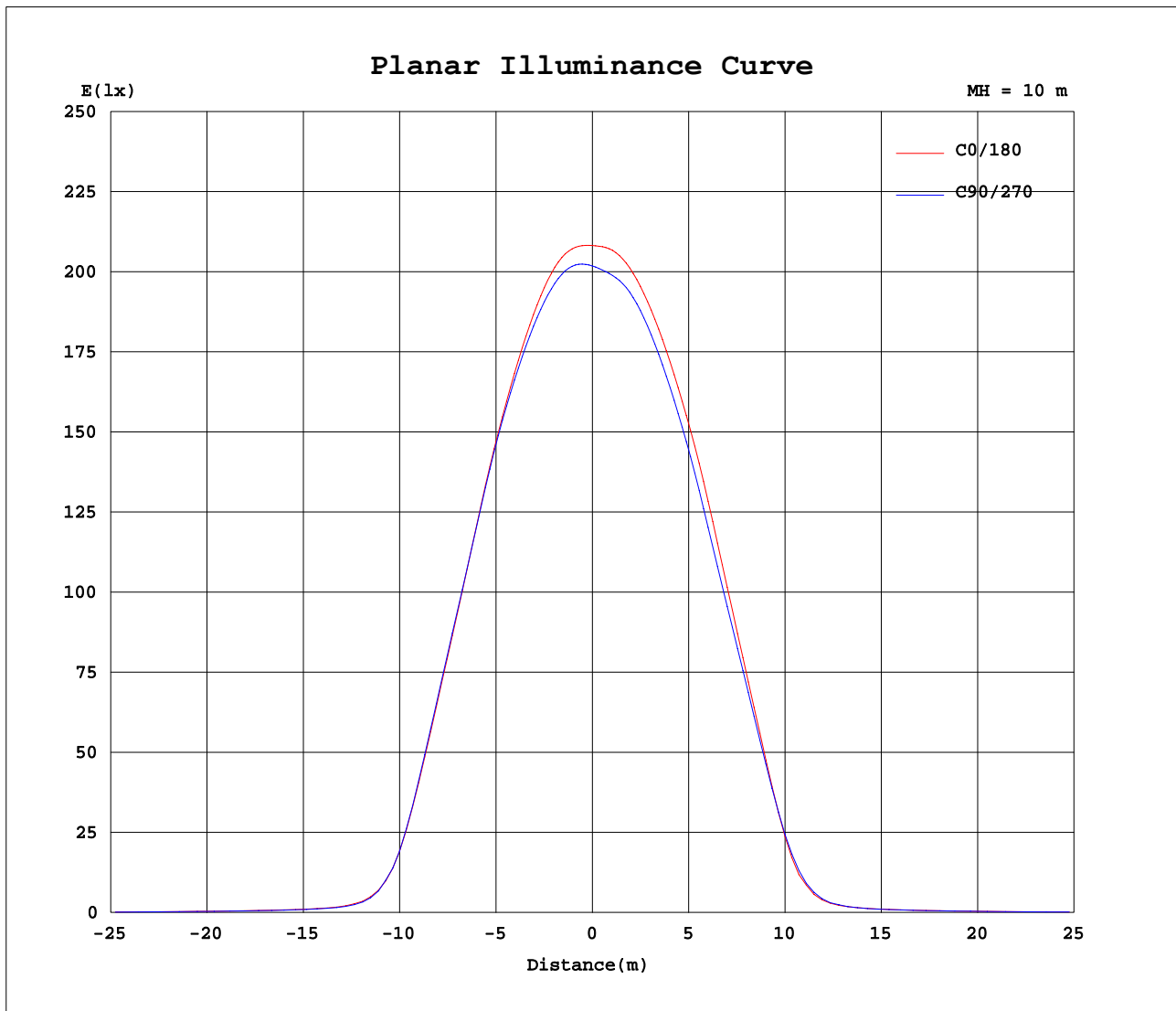
AvgL	cd/m2
L_0~180 (65) av	9715
L_0~180 (75) av	8996
L_0~180 (85) av	1753
L_90~270 (65) av	9583
L_90~270 (75) av	8942
L_90~270 (85) av	1805
L_45 (65) av	9555
L_45 (75) av	8912
L_45 (85) av	1542

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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: 2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm																		
NAME: AOK oH									TYPE:LED					WEIGHT:6.0KG				
SPEC.:AOK-240Woh-3030-90D									DIM.: $\phi 0.4 \times 0.141M$					SERIAL No.:				
MFR.: AOK									SUR.: $\phi 0.29M$					Shielding Angle:				

Table--1

UNIT:  $\times 10cd$ 

$\gamma$ (DEG) \ C (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027
5	2045	2047	2049	2050	2052	2053	2054	2054	2054	2053	2053	2052	2051	2050	2049	2046	2045	2042	2040
10	2070	2072	2074	2076	2077	2079	2080	2081	2081	2081	2081	2081	2080	2079	2077	2074	2072	2068	2066
15	2079	2081	2082	2085	2086	2090	2092	2095	2097	2099	2099	2100	2100	2099	2098	2096	2093	2089	2087
20	2068	2070	2069	2073	2075	2081	2084	2091	2095	2100	2104	2106	2107	2109	2108	2107	2104	2101	2099
25	2024	2028	2027	2032	2035	2042	2046	2056	2062	2073	2079	2086	2088	2094	2095	2096	2094	2091	2087
30	1907	1912	1910	1918	1917	1926	1927	1938	1942	1959	1969	1983	1991	2005	2009	2017	2015	2017	2017
35	1655	1666	1662	1672	1668	1681	1680	1696	1697	1721	1734	1754	1757	1778	1782	1798	1798	1806	1798
40	1222	1225	1207	1221	1210	1227	1218	1240	1241	1281	1287	1312	1311	1337	1338	1365	1362	1387	1387
45	529	534	509	518	500	513	499	518	513	547	553	575	566	592	586	614	611	646	653
50	129	130	123	124	118	121	124	121	120	126	126	131	127	131	127	133	132	140	146
55	63.8	63.8	62.3	62.0	61.1	61.4	60.4	60.6	60.0	61.0	61.1	61.8	61.1	61.5	61.0	61.9	61.9	63.4	66.6
60	50.2	50.1	49.3	49.1	48.6	48.8	48.1	48.0	47.6	48.0	48.0	48.4	48.1	47.9	47.4	47.6	47.4	48.0	50.2
65	41.2	41.0	40.4	40.2	39.9	40.2	39.7	39.5	39.3	39.6	39.7	39.9	39.7	39.6	39.0	39.2	38.9	39.2	40.9
70	32.5	32.4	31.8	31.7	31.2	31.6	31.4	31.1	30.9	31.4	31.5	32.1	31.9	31.8	31.2	31.4	31.1	31.2	32.5
75	22.9	22.6	22.3	22.1	21.4	21.6	21.4	21.6	21.5	22.0	22.3	22.8	23.0	22.9	22.6	22.8	22.4	22.6	23.7
80	11.3	10.9	10.2	10.2	9.76	9.94	9.46	9.81	9.73	10.4	10.5	10.7	10.6	11.1	11.1	11.7	11.7	12.7	13.4
85	1.42	1.37	1.18	1.12	1.05	1.05	1.05	1.15	1.21	1.33	1.31	1.26	1.15	1.16	1.14	1.24	1.31	1.49	1.63
90	0.75	0.69	0.58	0.45	0.41	0.39	0.52	0.61	0.87	0.99	0.97	0.77	0.67	0.54	0.53	0.68	0.82	1.00	0.98
95	1.56	1.34	1.12	0.86	0.64	0.67	0.89	1.02	1.38	1.75	1.96	1.61	1.62	1.41	1.36	1.51	1.46	1.62	1.54
100	2.92	2.58	2.61	2.20	1.81	1.87	2.23	2.28	3.05	3.65	3.72	3.17	2.99	2.79	2.70	2.75	2.78	3.42	3.51
105	6.44	4.92	4.11	3.22	2.92	2.92	3.28	3.90	5.76	7.20	5.78	4.24	4.27	4.02	3.97	4.28	3.97	6.07	7.57
110	8.65	5.83	5.88	4.99	4.65	4.76	5.50	4.70	9.05	9.25	6.25	7.71	6.98	6.43	6.56	6.48	7.70	6.02	8.96
115	8.33	9.82	6.41	6.59	6.93	6.67	6.57	6.46	8.47	13.0	12.9	9.86	9.38	8.94	8.97	8.94	8.63	10.6	9.31
120	22.3	13.6	9.54	8.46	8.61	8.39	8.92	11.9	9.53	17.5	22.5	19.9	12.6	10.5	10.5	11.3	15.1	19.8	23.3
125	28.6	27.6	22.0	17.7	16.2	15.8	16.0	19.2	27.1	27.7	30.6	25.9	26.5	24.0	22.2	21.4	25.4	30.7	40.1
130	41.3	43.1	34.9	26.0	23.8	23.3	27.0	39.8	50.9	43.3	32.3	29.1	28.3	29.3	29.9	31.0	36.7	37.5	40.0
135	51.0	48.9	48.5	49.7	38.7	39.5	49.0	55.7	63.7	59.9	52.1	39.4	37.8	29.6	30.7	38.2	46.5	49.7	48.7
140	65.6	60.6	55.7	49.2	50.4	51.5	53.8	66.9	65.4	67.1	63.3	57.4	42.5	40.5	40.8	42.6	60.2	62.1	59.7
145	55.6	59.3	55.6	53.1	53.5	53.3	51.4	59.3	47.2	64.9	68.4	61.8	55.7	54.2	53.4	53.1	66.4	68.5	53.3
150	49.4	48.8	48.8	49.4	49.5	49.4	49.3	59.2	57.1	52.5	52.7	55.7	57.2	57.7	56.9	55.8	68.8	68.3	61.1
155	51.2	51.4	51.1	51.4	51.5	51.7	51.8	64.2	52.7	52.5	52.8	53.0	53.8	54.6	54.8	54.7	66.5	53.1	52.9
160	53.5	53.4	53.0	53.2	53.3	53.6	40.9	54.7	54.8	54.8	54.6	54.4	54.4	54.6	54.7	47.6	55.0	55.2	55.0
165	55.1	55.0	54.4	54.6	54.7	39.2	39.1	56.0	56.2	56.2	55.9	55.7	55.7	55.9	41.2	40.8	56.6	56.9	56.6
170	56.0	55.8	55.2	55.4	39.5	39.4	39.6	56.9	57.0	57.0	56.6	56.3	56.3	41.6	41.1	41.4	57.5	57.7	57.6
175	56.3	69.0	72.8	61.0	56.6	56.8	56.7	57.2	57.1	57.4	68.8	72.8	61.4	57.2	57.3	57.4	57.7	57.9	57.9
180	72.9	73.2	56.5	56.6	56.4	56.5	56.4	72.8	72.7	72.9	72.7	57.3	57.1	57.1	57.1	57.1	71.8	72.7	73.3

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2018-03-13

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  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:220.0V I:1.132A P:240.0W PF:0.9772 Freq:49.80Hz Lamp Flux:35710.2x1 lm																	
NAME: AOK oH									TYPE:LED						WEIGHT:6.0KG		
SPEC.:AOK-240WoH-3030-90D									DIM.: $\phi 0.4 \times 0.141M$						SERIAL No.:		
MFR.: AOK									SUR.: $\phi 0.29M$						Shielding Angle:		

Table--2

UNIT:  $\times 10cd$ 

$\gamma$ (DEG) \ C (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027	2027		
5	2038	2034	2032	2029	2028	2026	2026	2025	2027	2027	2029	2030	2033	2034	2037	2039	2042		
10	2063	2059	2056	2053	2051	2049	2049	2048	2051	2053	2055	2057	2060	2061	2064	2065	2068		
15	2083	2079	2076	2072	2070	2068	2068	2067	2069	2070	2072	2073	2075	2077	2079	2079	2080		
20	2092	2087	2082	2078	2075	2074	2072	2071	2070	2069	2069	2070	2071	2072	2071	2071	2070		
25	2080	2075	2068	2063	2058	2055	2052	2049	2044	2041	2036	2034	2032	2031	2028	2028	2027		
30	2010	2010	2003	2000	1989	1984	1972	1966	1950	1940	1928	1926	1920	1922	1917	1919	1916		
35	1804	1816	1810	1811	1801	1796	1780	1769	1746	1734	1718	1714	1702	1701	1692	1692	1681		
40	1391	1414	1413	1429	1416	1420	1403	1402	1370	1351	1325	1320	1300	1300	1281	1282	1267		
45	660	700	702	735	722	741	723	735	692	681	648	650	622	626	598	605	582		
50	148	157	158	167	166	175	172	177	165	163	155	158	149	150	142	144	138		
55	66.5	67.7	67.3	68.6	68.5	69.7	69.1	69.4	67.8	67.7	66.8	66.7	65.3	64.9	63.9	64.2	63.5		
60	49.8	50.1	49.8	50.3	50.5	51.1	50.8	51.0	50.6	50.7	50.5	50.5	49.7	49.5	49.1	49.3	49.2		
65	40.6	40.9	40.6	41.0	41.2	41.7	41.3	41.5	41.4	41.6	41.5	41.7	41.2	41.0	40.8	40.9	40.7		
70	32.3	32.7	32.6	32.9	33.1	33.4	33.3	33.3	33.2	33.4	33.5	33.8	33.3	33.0	32.8	32.8	32.4		
75	23.4	23.7	23.8	24.0	24.1	24.6	24.4	24.5	24.3	24.4	24.3	24.6	24.1	23.8	23.7	23.4	23.0		
80	13.4	13.5	13.4	13.9	13.9	14.2	14.2	14.3	13.8	13.4	12.9	12.8	12.3	12.2	11.7	11.6	11.6		
85	1.64	1.80	1.79	2.00	1.81	2.09	1.91	2.08	1.82	1.67	1.42	1.38	1.29	1.30	1.29	1.41	1.44		
90	0.79	0.57	0.46	0.37	0.36	0.45	0.58	0.76	0.80	0.69	0.54	0.42	0.32	0.53	0.46	0.56	0.67		
95	1.36	1.14	0.95	0.60	0.62	0.91	1.06	1.47	1.47	1.23	0.96	0.80	0.59	0.62	0.95	1.11	1.45		
100	3.05	2.53	2.25	1.81	1.85	2.35	2.40	2.80	2.94	2.59	1.97	2.03	1.79	1.97	2.35	2.57	2.92		
105	5.52	4.35	3.43	3.28	3.23	3.48	3.82	5.96	7.16	5.98	3.78	3.45	3.17	3.18	3.54	3.91	5.62		
110	5.86	6.17	5.34	4.77	4.97	5.18	5.43	7.24	11.1	7.88	4.92	5.06	5.11	5.06	5.21	5.61	6.89		
115	7.06	7.79	6.33	6.12	6.06	6.41	10.2	9.86	13.3	7.97	7.72	6.42	6.40	6.52	6.49	8.14	10.4		
120	14.9	10.5	8.07	7.94	8.02	10.3	17.1	20.8	11.9	10.7	11.3	7.92	8.31	8.26	7.98	10.01	15.7		
125	31.1	21.4	17.2	17.9	19.5	21.0	20.8	24.7	25.1	22.8	14.2	15.0	15.8	16.0	18.0	22.3	29.1		
130	43.2	41.6	32.2	28.5	26.5	24.5	24.6	32.3	42.7	47.8	32.8	23.1	21.4	23.2	25.8	28.3	35.6		
135	45.3	47.3	43.9	33.9	32.2	36.8	42.8	51.0	56.9	59.9	50.8	46.9	36.3	35.9	43.0	47.2	58.2		
140	60.4	48.1	44.6	43.8	44.2	50.9	60.7	68.2	67.2	57.2	61.6	49.2	48.9	48.9	52.6	60.7	61.8		
145	65.5	62.5	51.1	52.5	54.3	55.7	64.1	65.3	61.5	62.4	55.3	54.8	54.7	53.8	52.5	60.6	63.3		
150	55.6	65.7	54.7	55.0	55.1	54.8	53.2	50.8	57.0	63.4	63.4	40.4	50.5	50.9	50.9	50.2	49.5		
155	52.6	47.6	54.5	55.5	54.6	53.7	52.7	52.7	52.7	52.9	55.8	52.0	51.9	51.8	51.6	51.5	51.6		
160	54.7	42.4	45.1	52.9	54.7	54.6	54.5	54.8	55.0	55.0	42.9	53.9	39.6	53.7	53.5	53.4	53.7		
165	56.3	43.6	40.7	43.8	56.1	56.0	55.9	56.3	52.5	48.7	41.9	40.5	55.2	55.0	54.9	54.9	55.2		
170	57.2	47.7	41.3	41.1	51.3	56.9	56.8	57.4	57.6	57.7	48.5	40.9	40.7	41.0	55.7	55.7	56.1		
175	57.5	57.3	56.8	56.8	56.4	71.3	70.8	60.8	58.1	58.1	57.7	57.5	57.3	57.2	72.5	70.5	61.3		
180	72.9	56.8	56.4	56.6	56.4	56.5	72.6	72.9	72.8	72.8	57.2	57.1	57.1	57.1	57.1	71.5	72.7		

C Range: 0 - 360DEG  
 C Interval: 10.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2018-03-13

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