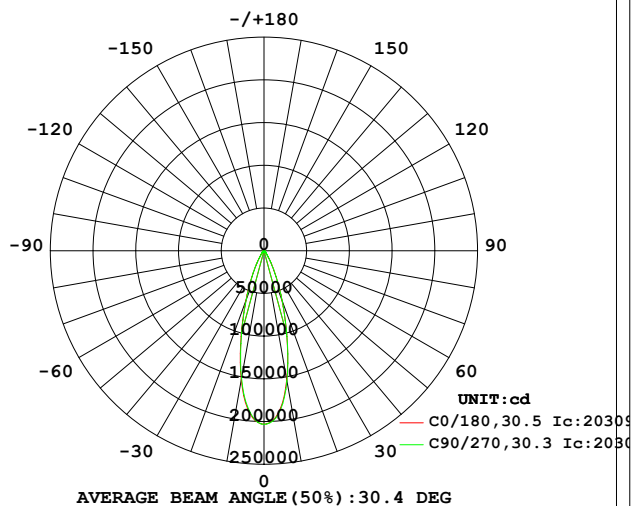


## LUMINAIRE PHOTOMETRIC TEST REPORT

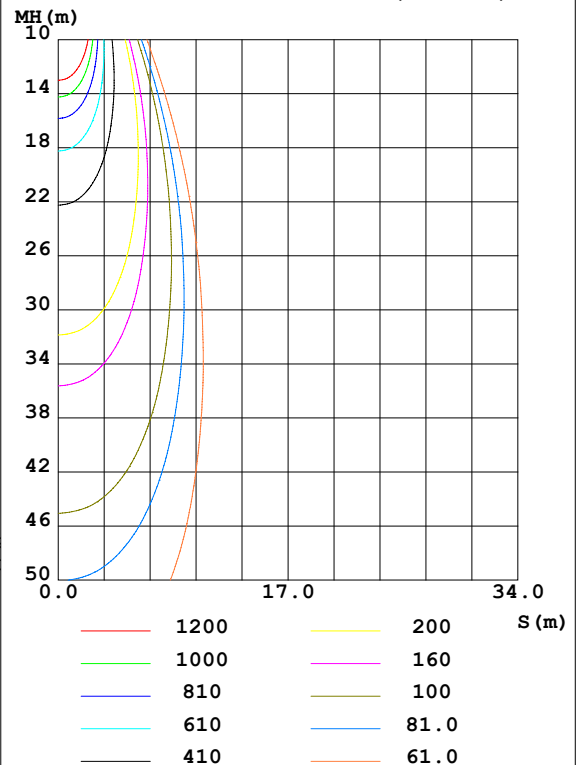
Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi 550 \times 180\text{mm}$	SERIAL No.:
MFR.: AOK	SUR.: $\Phi 490\text{mm}$	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 162.02 lm/W			
MODEL	5050	I <sub>max</sub> (cd)	203094	S/MH (C0/180)	0.51
NOMINAL POWER (W)	460	LOR (%)	100.0	S/MH (C90/270)	0.50
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	73677	$\eta$ UP,DN (C0-180)	0.0,50.4
NOMINAL FLUX (lm)	73676.9	CIE CLASS	DIRECT	$\eta$ UP,DN (C180-360)	0.0,49.6
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.50

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.684m [K=1.0177]  
 Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1535	1540	1548	1540	1535	1483	1519	1483	0- 10	16935	16935	23,23
20	622.0	620.8	621.1	620.8	622.0	590.9	611.7	590.9	10- 20	28122	45057	61.2,61.2
30	165.6	160.7	161.7	160.7	165.6	155.3	164.6	155.3	20- 30	15547	60604	82.3,82.3
40	48.77	47.51	47.98	47.51	48.77	46.43	47.80	46.43	30- 40	5393	65997	89.6,89.6
50	26.42	26.83	26.51	26.83	26.42	26.24	25.99	26.24	40- 50	2631	68629	93.1,93.1
60	19.71	20.74	19.76	20.74	19.71	20.08	19.35	20.08	50- 60	2028	70656	95.9,95.9
70	14.02	14.42	14.00	14.42	14.02	13.91	13.60	13.91	60- 70	1649	72305	98.1,98.1
80	6.772	6.801	6.771	6.801	6.772	6.397	6.252	6.397	70- 80	1088	73393	99.6,99.6
90	0	0	0	0	0	0	0	0	80- 90	284.0	73677	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:×100cd									UNIT:lm		

Conical surface Flux(90deg): 67453 lm

%lum = 91.6%

%lamp = 91.6%

Conical surface Flux(120deg): 70656 lm

%lum = 95.9%

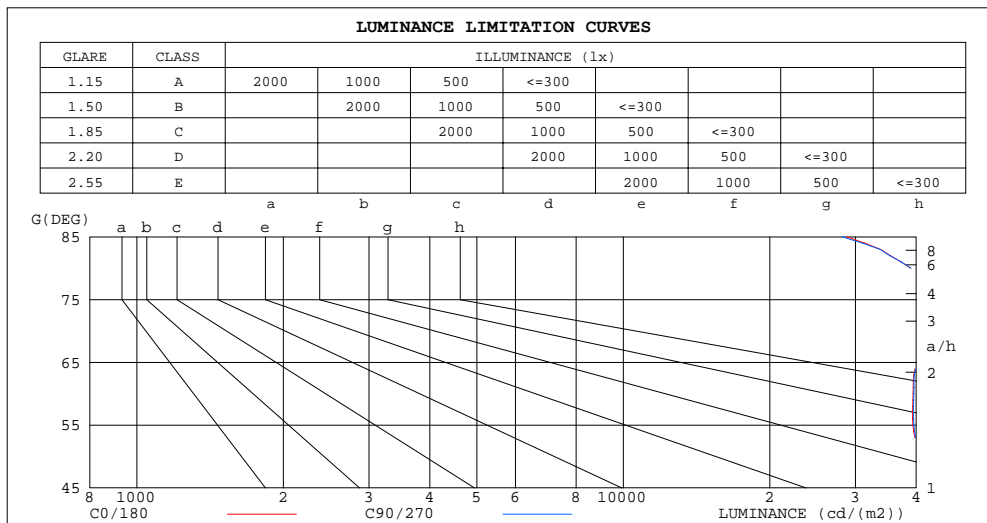
%lamp = 95.9%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.684m [K=1.0177]  
 Remarks:

## LUMINANCE LIMITATION CURVES

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi 550 \times 180 \text{mm}$	SERIAL No.:
MFR.: AOK	SUR.: $\Phi 490 \text{mm}$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	28798	28180
80	38987	39032
75	42137	42173
70	40977	40990
65	40002	40091
60	39415	39558
55	39387	39562
50	41093	41294
45	47697	47647

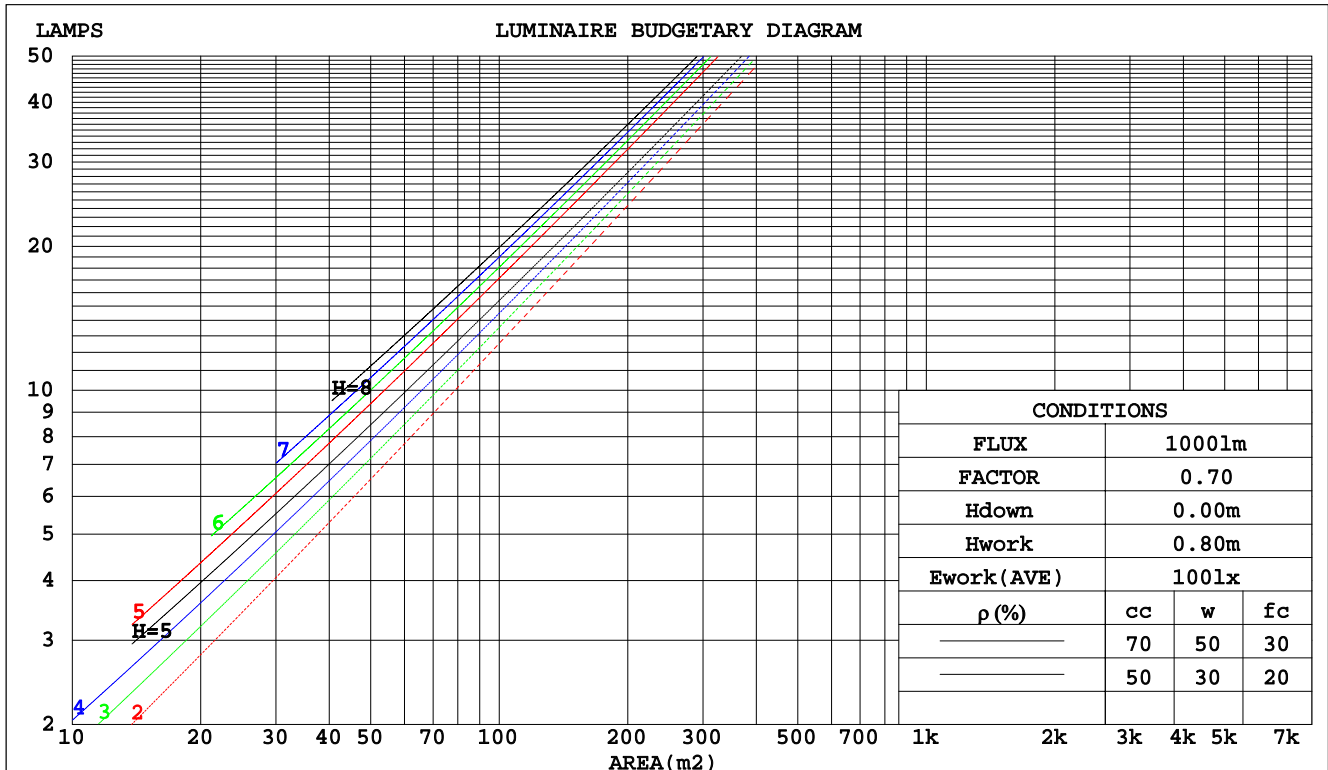
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.684m [K=1.0177]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi 550 \times 180\text{mm}$	SERIAL No.:
MFR.: AOK	SUR.: $\Phi 490\text{mm}$	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	1.11	1.09	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.91	.90	.88
3.0	.98	.93	.89	.96	.92	.89	.94	.90	.87	.91	.88	.86	.89	.87	.85	.83
4.0	.93	.87	.84	.91	.87	.83	.89	.85	.82	.87	.84	.81	.86	.83	.80	.79
5.0	.88	.83	.79	.87	.82	.78	.85	.81	.78	.84	.80	.77	.82	.79	.76	.75
6.0	.84	.78	.75	.83	.78	.74	.82	.77	.74	.80	.76	.73	.79	.76	.73	.72
7.0	.80	.75	.71	.79	.74	.71	.78	.74	.71	.77	.73	.70	.76	.73	.70	.69
8.0	.77	.72	.68	.76	.71	.68	.75	.71	.68	.74	.70	.67	.73	.70	.67	.66
9.0	.74	.69	.65	.73	.68	.65	.72	.68	.65	.72	.68	.65	.71	.67	.64	.63
10.0	.71	.66	.63	.71	.66	.63	.70	.65	.62	.69	.65	.62	.68	.65	.62	.61



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 7.684m [K=1.0177]  
 Remarks:

## WEC AND CCEC

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi$ 550*180mm	SERIAL No.:
MFR.: AOK	SUR.: $\Phi$ 490mm	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	.175	.099	.031	.168	.096	.030	.155	.089	.028	.144	.083	.027	.133	.077	.025	
2.0	.163	.089	.027	.157	.087	.027	.147	.082	.025	.137	.077	.024	.128	.072	.023	
3.0	.152	.081	.024	.147	.079	.024	.138	.075	.023	.130	.071	.022	.122	.068	.021	
4.0	.142	.074	.022	.138	.072	.021	.130	.069	.021	.123	.066	.020	.117	.063	.019	
5.0	.133	.068	.020	.130	.067	.019	.123	.064	.019	.117	.062	.018	.111	.060	.018	
6.0	.126	.063	.018	.123	.062	.018	.117	.060	.017	.112	.058	.017	.107	.056	.017	
7.0	.119	.059	.017	.116	.058	.017	.111	.056	.016	.107	.055	.016	.102	.053	.016	
8.0	.113	.055	.016	.111	.054	.015	.106	.053	.015	.102	.052	.015	.098	.050	.015	
9.0	.107	.052	.015	.105	.051	.014	.101	.050	.014	.098	.049	.014	.094	.048	.014	
10.0	.103	.049	.014	.101	.049	.014	.097	.048	.013	.094	.047	.013	.091	.046	.013	

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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.068	.052	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.074	.112	.085	.065	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.121	.087	.062	.104	.075	.054	.071	.052	.038	.041	.031	.022	.013	.010	.007	
6.0	.112	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.012	.009	.006	
7.0	.105	.069	.044	.091	.060	.038	.063	.042	.027	.036	.025	.016	.012	.008	.005	
8.0	.099	.063	.038	.085	.054	.033	.059	.038	.023	.034	.023	.014	.011	.007	.005	
9.0	.093	.057	.033	.080	.050	.029	.056	.035	.020	.032	.021	.012	.011	.007	.004	
10.0	.088	.053	.029	.076	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.684m [K=1.0177]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm											
NAME: AOK-WiN					TYPE:LED 灯珠			WEIGHT:26KG			
SPEC.:AOK-460WiN-NV-L5-5070-30D					DIM.: $\Phi$ 550*180mm			SERIAL No.:			
MFR.: AOK					SUR.: $\Phi$ 490mm			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	5.6	6.5	5.8	6.6	6.8	5.6	6.4	5.8	6.6	6.7	
	3H	7.1	7.9	7.4	8.1	8.3	7.1	7.9	7.3	8.1	8.3
	4H	7.9	8.6	8.2	8.8	9.1	7.8	8.6	8.1	8.8	9.0
	6H	8.5	9.2	8.8	9.4	9.7	8.4	9.2	8.7	9.4	9.6
	8H	8.7	9.4	9.0	9.6	9.9	8.6	9.3	8.9	9.6	9.8
	12H	8.8	9.4	9.1	9.7	10.0	8.7	9.4	9.0	9.6	9.9
4H	2H	6.2	7.0	6.5	7.2	7.4	6.2	6.9	6.5	7.2	7.4
	3H	8.0	8.6	8.3	8.9	9.2	7.9	8.6	8.3	8.9	9.1
	4H	8.9	9.5	9.2	9.8	10.1	8.8	9.4	9.2	9.7	10.0
	6H	9.6	10.1	10.0	10.5	10.8	9.5	10.1	9.9	10.4	10.7
	8H	9.8	10.3	10.2	10.7	11.0	9.8	10.3	10.2	10.6	11.0
	12H	9.9	10.4	10.4	10.8	11.2	9.9	10.3	10.3	10.7	11.1
8H	4H	9.2	9.7	9.6	10.0	10.4	9.2	9.6	9.5	10.0	10.4
	6H	10.1	10.5	10.5	10.9	11.3	10.0	10.4	10.4	10.8	11.2
	8H	10.4	10.7	10.8	11.2	11.6	10.3	10.7	10.7	11.1	11.5
	12H	10.6	10.9	11.0	11.3	11.8	10.5	10.8	10.9	11.2	11.7
12H	4H	9.2	9.7	9.6	10.0	10.4	9.2	9.6	9.6	10.0	10.4
	6H	10.1	10.5	10.6	10.9	11.4	10.1	10.4	10.5	10.9	11.3
	8H	10.5	10.8	10.9	11.2	11.7	10.4	10.7	10.9	11.2	11.6
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.3 / - 0.2					+ 0.3 / - 0.2					
2.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					

CIE Pub.117, 73677 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 14.9$ )

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.684m [K=1.0177]  
Remarks:

## UTILIZATION FACTORS TABLE

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi$ 550*180mm	SERIAL No.:
MFR.: AOK	SUR.: $\Phi$ 490mm	Shielding Angle:

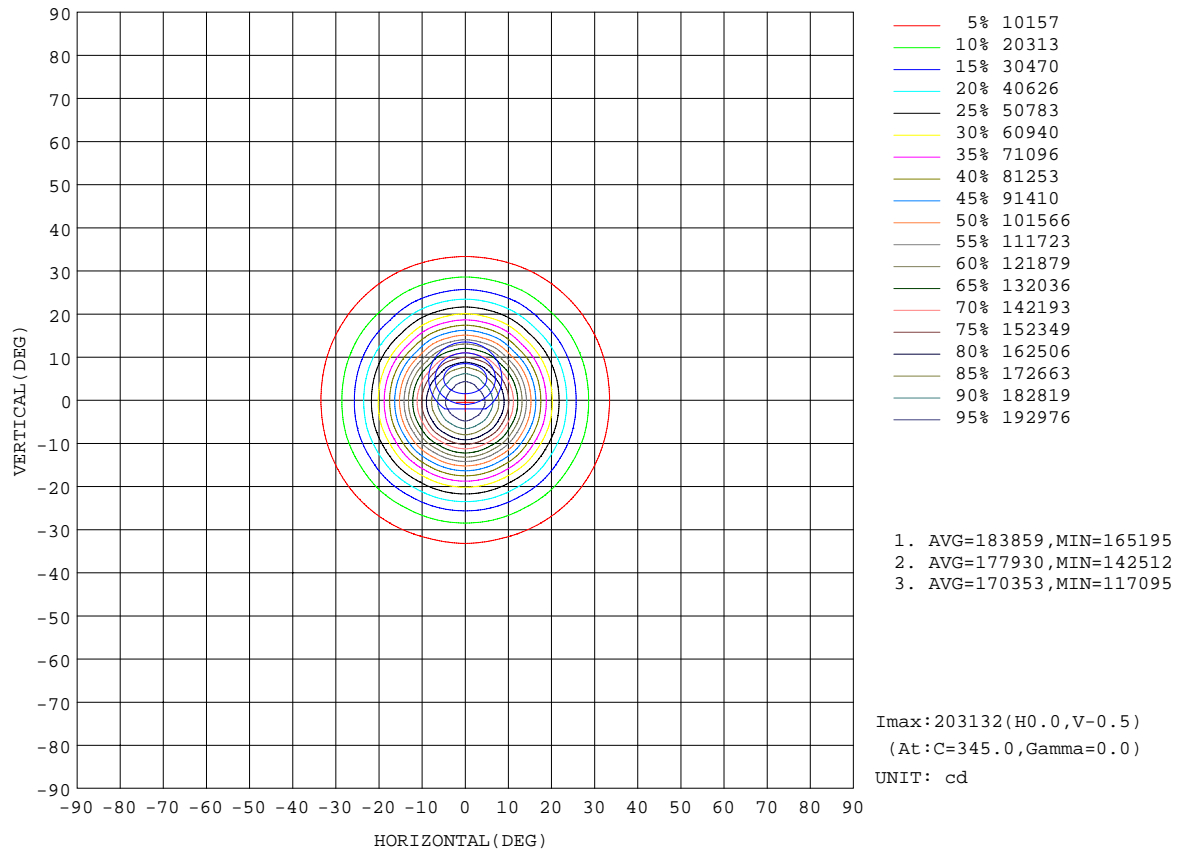
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	85	78	74	85	78	74	84	78	74	70
0.80	93	86	82	92	86	82	91	85	82	78
1.00	97	91	87	96	91	87	95	91	86	82
1.25	101	96	92	100	95	91	98	94	91	86
1.50	104	99	95	103	98	95	101	97	94	89
2.00	107	103	99	106	101	98	103	99	97	91
2.50	109	105	102	107	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	108	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	107	105	97
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.684m [K=1.0177]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi$ 550*180mm	SERIAL No.:
MFR.: AOK	SUR.: $\Phi$ 490mm	Shielding Angle:



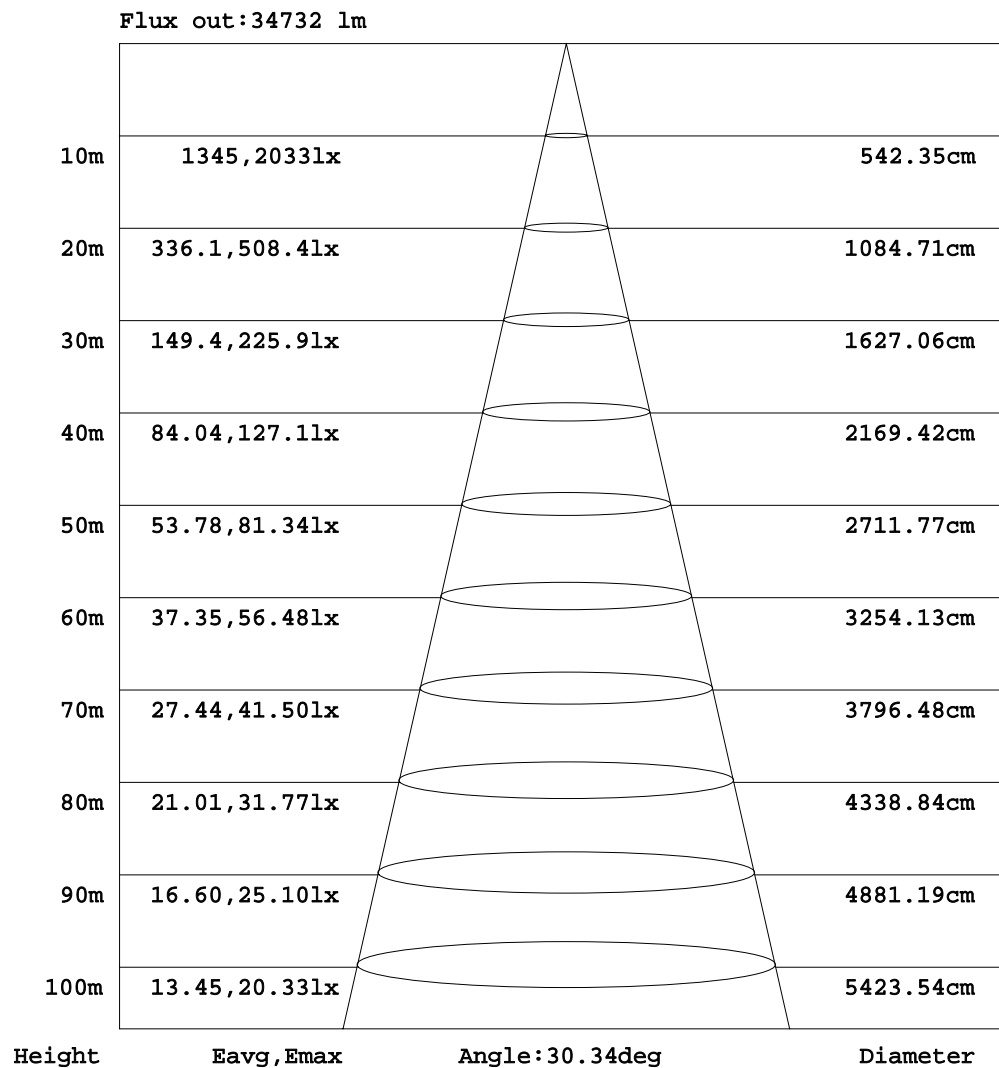
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.684m [K=1.0177]  
 Remarks:



## AAI Figure

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi 550 \times 180\text{mm}$	SERIAL No.:
MFR.: AOK	SUR.: $\Phi 490\text{mm}$	Shielding Angle:



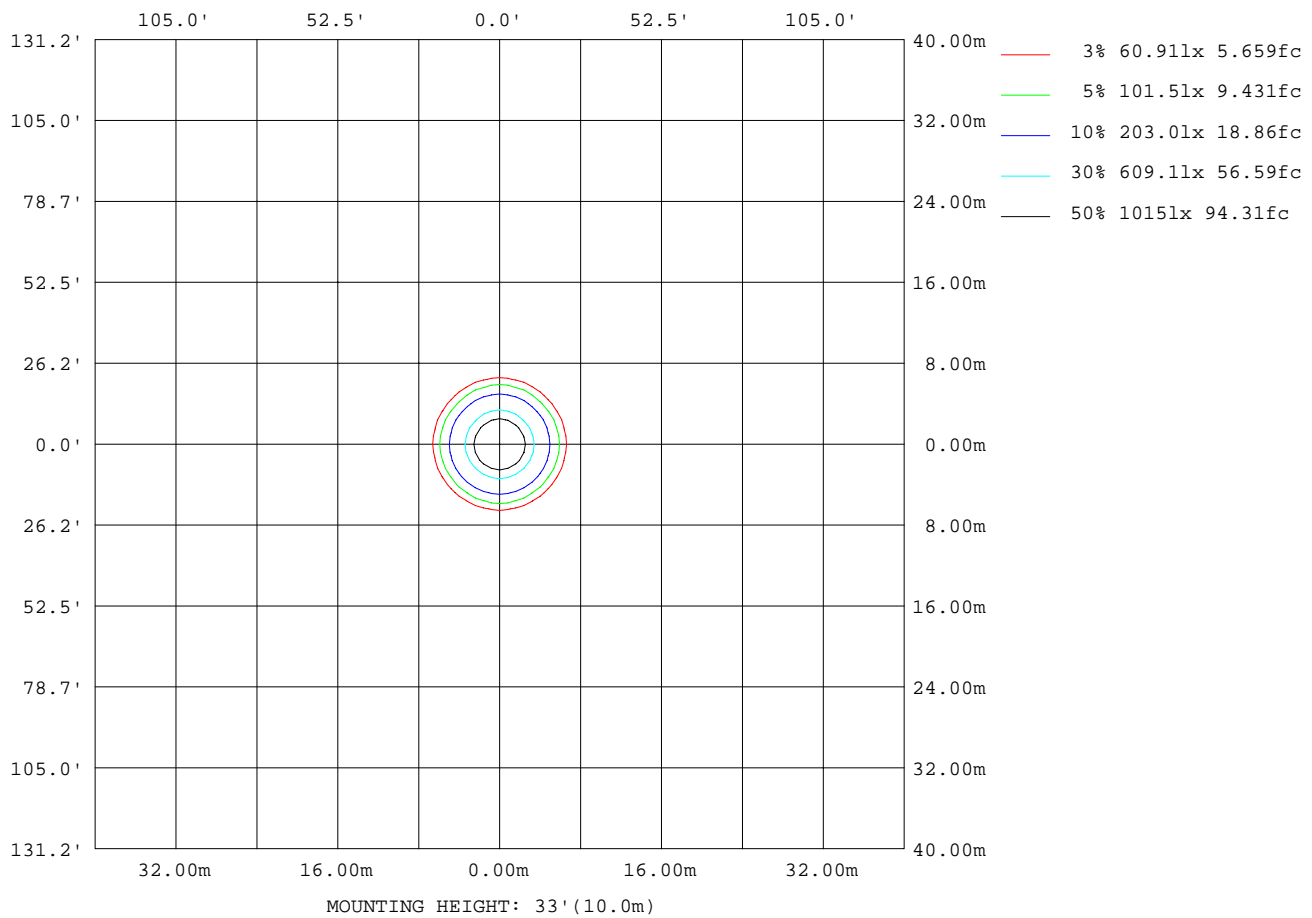
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.684m [K=1.0177]  
 Remarks:

## ISOLUX DIAGRAM

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi$ 550*180mm	SERIAL No.:
MFR.: AOK	SUR.: $\Phi$ 490mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.684m [K=1.0177]  
Remarks:

## LED Avg.L Report

Test:U:219.1V I:2.083A P:454.7W PF:0.9964 Freq:49.99Hz Lamp Flux:73676.9x1 lm		
NAME: AOK-WiN	TYPE:LED 灯珠	WEIGHT:26KG
SPEC.:AOK-460WiN-NV-L5-5070-30D	DIM.: $\Phi$ 550*180mm	SERIAL No.:
MFR.: AOK	SUR.: $\Phi$ 490mm	Shielding Angle:

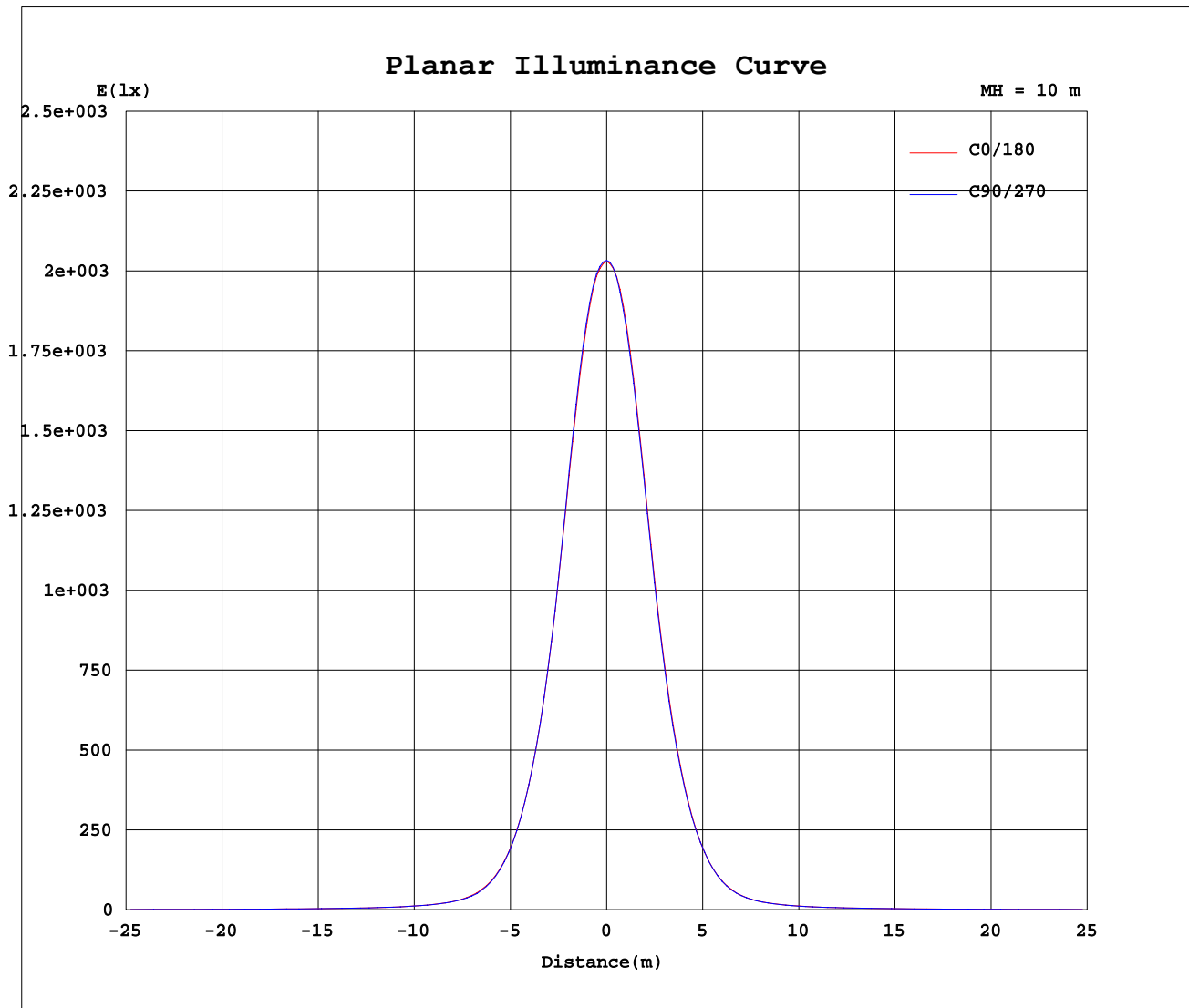
AvgL	cd/m2
L_0~180 (65) av	40015
L_0~180 (75) av	42151
L_0~180 (85) av	28807
L_90~270 (65) av	39550
L_90~270 (75) av	41260
L_90~270 (85) av	26058
L_45 (65) av	41444
L_45 (75) av	40971
L_45 (85) av	26849

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.684m [K=1.0177]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2019-05-15

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.684m [K=1.0177]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.684m [K=1.0177]
Remarks:

```

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.684m [K=1.0177]
Remarks:

```