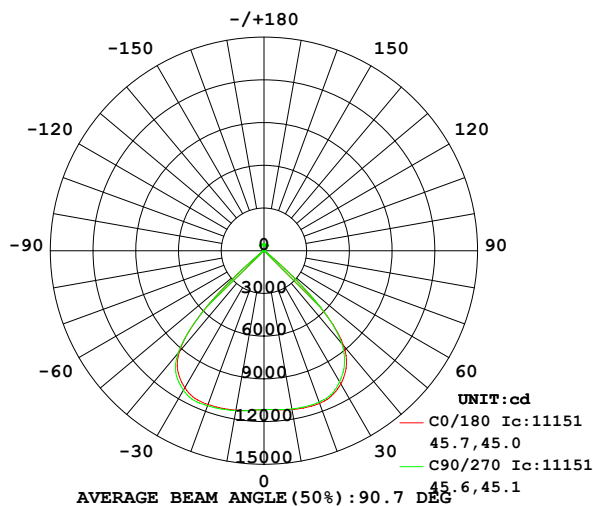


LUMINAIRE PHOTOMETRIC TEST REPORT

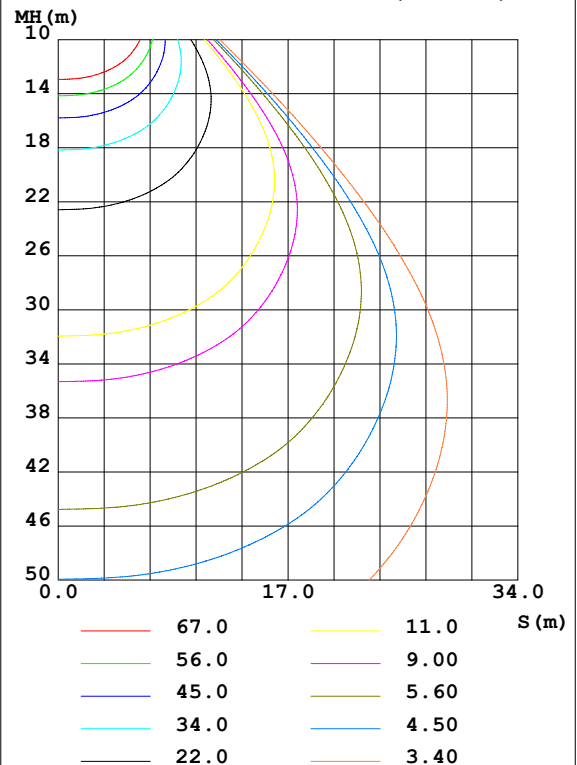
Test:U:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150W oH-3030-90D	DIM.: ϕ 0.319*0.138M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.24M	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 148.19 lm/W			
MODEL	3030	I _{max} (cd)	11621	S/MH (C0/180)	1.35
NOMINAL POWER (W)	150	LOR (%)	100.0	S/MH (C90/270)	1.35
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	22077	η UP,DN (C0-180)	3.0,46.0
NOMINAL FLUX (lm)	22076.7	CIE CLASS	DIRECT	η UP,DN (C180-360)	3.0,48.0
LAMPS INSIDE	1	η up (%)	6.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	η down (%)	94.0	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:2018-03-13

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	1132	1127	1128	1132	1137	1139	1140	1138	0- 10	1076	1076	4.87,4.87
20	1141	1132	1131	1138	1149	1155	1159	1152	10- 20	3236	4312	19.5,19.5
30	1079	1067	1063	1084	1112	1135	1131	1111	20- 30	5227	9539	43.2,43.2
40	868.7	839.5	849.1	881.6	923.8	944.7	939.8	915.5	30- 40	6373	15912	72.1,72.1
50	132.2	135.8	147.2	152.6	159.5	160.0	149.4	143.9	40- 50	4272	20184	91.4,91.4
60	15.59	16.28	16.75	17.67	18.34	17.03	16.15	15.58	50- 60	370.8	20554	93.1,93.1
70	8.492	8.906	9.646	9.961	10.31	9.498	8.963	8.423	60- 70	123.6	20678	93.7,93.7
80	3.043	3.168	3.733	4.429	4.193	3.799	3.224	3.172	70- 80	68.52	20746	94,94
90	0.4072	0.5150	0.4218	0.5615	0.4335	0.5019	0.3966	0.4609	80- 90	13.40	20760	94,94
100	2.138	2.543	2.319	2.392	2.320	1.848	1.885	2.233	90-100	11.03	20771	94.1,94.1
110	4.748	5.838	4.673	5.843	4.840	5.864	4.862	5.062	100-110	41.97	20813	94.3,94.3
120	11.40	14.59	12.89	13.27	12.84	14.35	13.26	14.01	110-120	85.12	20898	94.7,94.7
130	21.11	26.98	21.44	26.96	20.09	24.14	21.61	25.38	120-130	185.4	21083	95.5,95.5
140	47.10	48.70	46.59	47.99	44.14	50.06	46.02	47.03	130-140	280.2	21364	96.8,96.8
150	45.90	52.24	48.80	50.54	46.41	50.08	46.69	51.38	140-150	323.1	21687	98.2,98.2
160	47.12	48.58	49.01	47.26	47.51	38.28	47.84	39.52	150-160	220.9	21908	99.2,99.2
170	35.04	50.58	35.55	49.17	49.26	37.96	45.20	37.96	160-170	126.4	22034	99.8,99.8
180	50.78	50.42	49.46	50.55	50.93	50.56	49.46	50.68	170-180	42.50	22077	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 18734 lm

%lum = 84.9%

%lamp = 84.9%

Conical surface Flux(120deg): 20554 lm

%lum = 93.1%

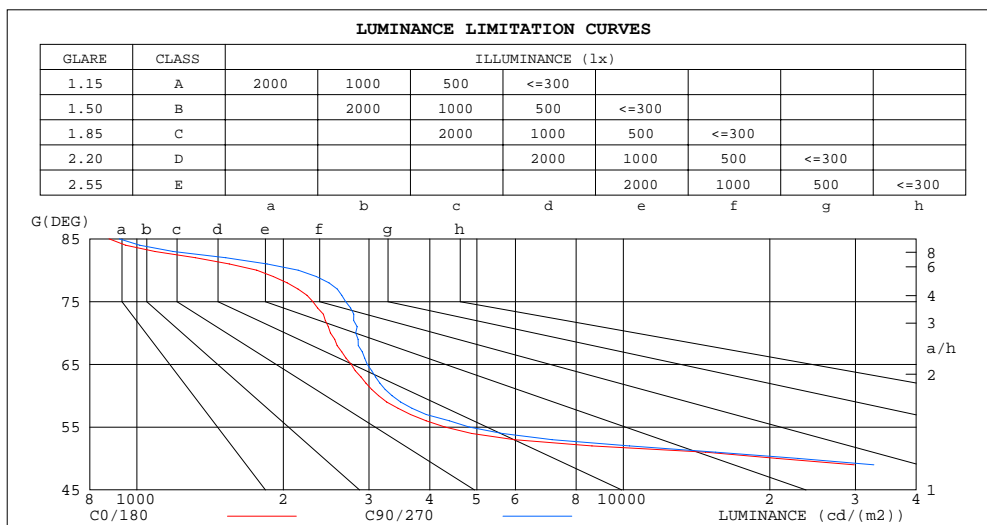
%lamp = 93.1%

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

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:

LUMINANCE LIMITATION CURVES

Test:U:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	877	920
80	1764	2147
75	2300	2685
70	2499	2816
65	2757	2975
60	3139	3346
55	4300	4823
50	20697	22864
45	79050	80194

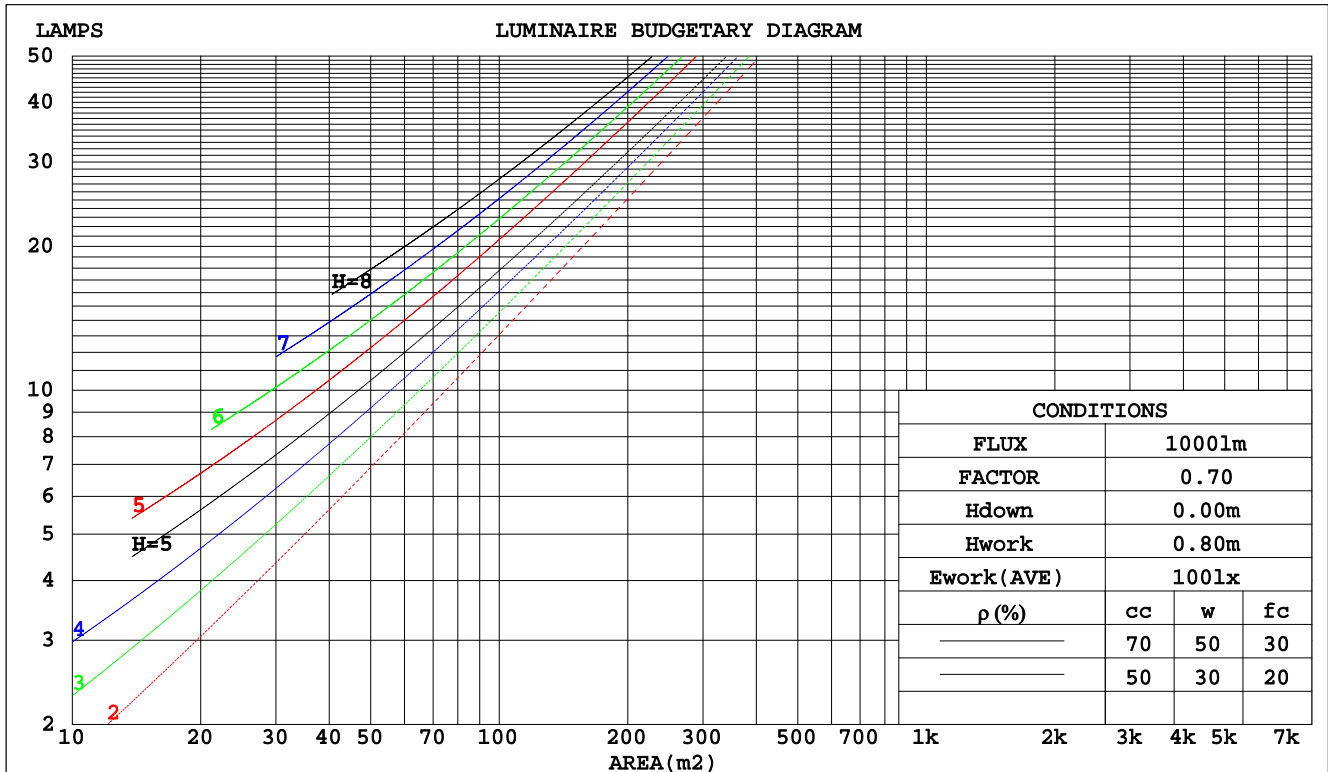
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-03-13

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D	DIM.: $\phi 0.319 \times 0.138\text{M}$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.24\text{M}$	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	1.14	1.14	1.14	1.08	1.08	1.08	1.02	1.02	1.02	.97	.97	.97	.94
1.0	1.08	1.05	1.02	1.05	1.02	1.00	.90	.98	.96	.95	.93	.92	.91	.89	.88	.86
2.0	.98	.94	.90	.96	.92	.88	.92	.88	.85	.88	.85	.82	.84	.82	.80	.78
3.0	.90	.84	.79	.88	.82	.78	.84	.80	.76	.81	.77	.74	.78	.75	.72	.70
4.0	.82	.75	.70	.80	.74	.70	.77	.72	.68	.75	.70	.67	.72	.68	.65	.63
5.0	.75	.68	.63	.74	.67	.63	.71	.66	.61	.69	.64	.60	.67	.62	.59	.57
6.0	.69	.62	.57	.68	.61	.56	.66	.60	.55	.64	.58	.55	.62	.57	.54	.52
7.0	.63	.56	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.57	.52	.49	.47
8.0	.59	.52	.47	.58	.51	.46	.56	.50	.46	.54	.49	.45	.53	.48	.45	.43
9.0	.54	.47	.43	.53	.47	.42	.52	.46	.42	.51	.45	.41	.49	.44	.41	.39
10.0	.50	.44	.39	.50	.43	.39	.48	.42	.38	.47	.42	.38	.46	.41	.38	.36



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

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D	DIM.: ϕ 0.319*0.138M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.24M	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	.209	.119	.038	.200	.114	.036	.184	.105	.034	.169	.097	.031	.155	.090	.029		
2.0	.202	.111	.034	.195	.107	.033	.181	.101	.031	.168	.094	.030	.156	.088	.028		
3.0	.194	.103	.031	.188	.100	.030	.175	.095	.029	.164	.090	.028	.153	.085	.026		
4.0	.185	.096	.028	.180	.094	.028	.169	.089	.027	.158	.085	.026	.149	.081	.025		
5.0	.177	.090	.026	.172	.088	.026	.162	.084	.025	.153	.081	.024	.144	.077	.023		
6.0	.169	.085	.024	.164	.083	.024	.155	.079	.023	.147	.076	.022	.139	.073	.022		
7.0	.161	.079	.023	.156	.078	.022	.148	.075	.022	.141	.072	.021	.134	.070	.020		
8.0	.153	.075	.021	.149	.074	.021	.142	.071	.020	.135	.069	.020	.129	.066	.019		
9.0	.146	.071	.020	.143	.070	.020	.136	.067	.019	.130	.065	.019	.124	.063	.018		
10.0	.140	.067	.019	.137	.066	.018	.130	.064	.018	.125	.062	.018	.119	.060	.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	.236	.236	.236	.202	.202	.202	.138	.138	.138	.079	.079	.079	.025	.025	.025	
1.0	.219	.203	.188	.187	.174	.162	.128	.120	.112	.074	.069	.065	.024	.022	.021	
2.0	.206	.178	.155	.177	.154	.134	.121	.106	.093	.070	.062	.055	.022	.020	.018	
3.0	.196	.160	.131	.168	.138	.114	.116	.096	.080	.067	.056	.047	.021	.018	.015	
4.0	.188	.146	.114	.161	.126	.099	.111	.088	.070	.064	.052	.041	.021	.017	.014	
5.0	.180	.135	.102	.155	.117	.089	.107	.082	.063	.062	.048	.037	.020	.016	.012	
6.0	.174	.126	.093	.149	.110	.081	.103	.077	.057	.060	.045	.034	.019	.015	.011	
7.0	.168	.119	.085	.145	.104	.074	.100	.073	.053	.058	.043	.031	.019	.014	.010	
8.0	.163	.114	.080	.140	.099	.070	.097	.069	.049	.056	.041	.029	.018	.013	.010	
9.0	.158	.109	.076	.136	.094	.066	.094	.066	.047	.055	.039	.028	.018	.013	.009	
10.0	.153	.105	.072	.132	.091	.063	.092	.064	.045	.053	.038	.027	.017	.012	.009	

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

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm											
NAME: AOK oH					TYPE:LED			WEIGHT:4.6KG			
SPEC.:AOK-150WoH-3030-90D					DIM.: ϕ 0.319*0.138M			SERIAL No.:			
MFR.: AOK					SUR.: ϕ 0.24M			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	12.7	13.8	13.0	14.1	14.4	12.6	13.7	12.9	14.0	14.3	
	3H	12.5	13.5	12.9	13.8	14.2	12.4	13.4	12.8	13.7	
	4H	12.4	13.4	12.8	13.7	14.0	12.3	13.3	12.7	13.6	
	6H	12.3	13.2	12.7	13.6	13.9	12.2	13.1	12.6	13.4	
	8H	12.3	13.1	12.7	13.5	13.9	12.2	13.0	12.6	13.4	
	12H	12.2	13.0	12.6	13.4	13.8	12.1	12.9	12.5	13.3	
4H	2H	12.4	13.4	12.8	13.7	14.0	12.3	13.2	12.7	13.6	
	3H	12.2	13.0	12.6	13.4	13.8	12.1	12.9	12.5	13.3	
	4H	12.1	12.8	12.6	13.3	13.7	12.0	12.7	12.5	13.1	
	6H	12.0	12.7	12.5	13.1	13.6	11.9	12.5	12.4	13.0	
	8H	12.0	12.6	12.5	13.0	13.5	11.9	12.4	12.4	12.9	
	12H	11.9	12.4	12.4	12.9	13.4	11.8	12.3	12.3	12.8	
8H	4H	12.0	12.5	12.5	13.0	13.5	11.9	12.4	12.4	12.9	
	6H	11.9	12.3	12.4	12.8	13.4	11.8	12.2	12.3	12.7	
	8H	11.8	12.2	12.4	12.8	13.3	11.7	12.1	12.3	12.6	
	12H	11.8	12.1	12.3	12.7	13.3	11.7	12.0	12.2	12.6	
12H	4H	11.9	12.4	12.4	12.9	13.4	11.8	12.3	12.3	12.8	
	6H	11.8	12.2	12.4	12.7	13.3	11.7	12.1	12.3	12.6	
	8H	11.8	12.1	12.3	12.7	13.3	11.7	12.0	12.2	12.6	
Variations with the observer position at spacings:											
S = 1.0H	+ 2.9 / -13.4					+ 2.9 / -12.7					
1.5H	+ 3.4 / -13.6					+ 3.3 / -13.1					
2.0H	+ 7.8 / -10.7					+ 7.8 / -10.3					

CIE Pub.117, 22077 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 10.8$)

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

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:

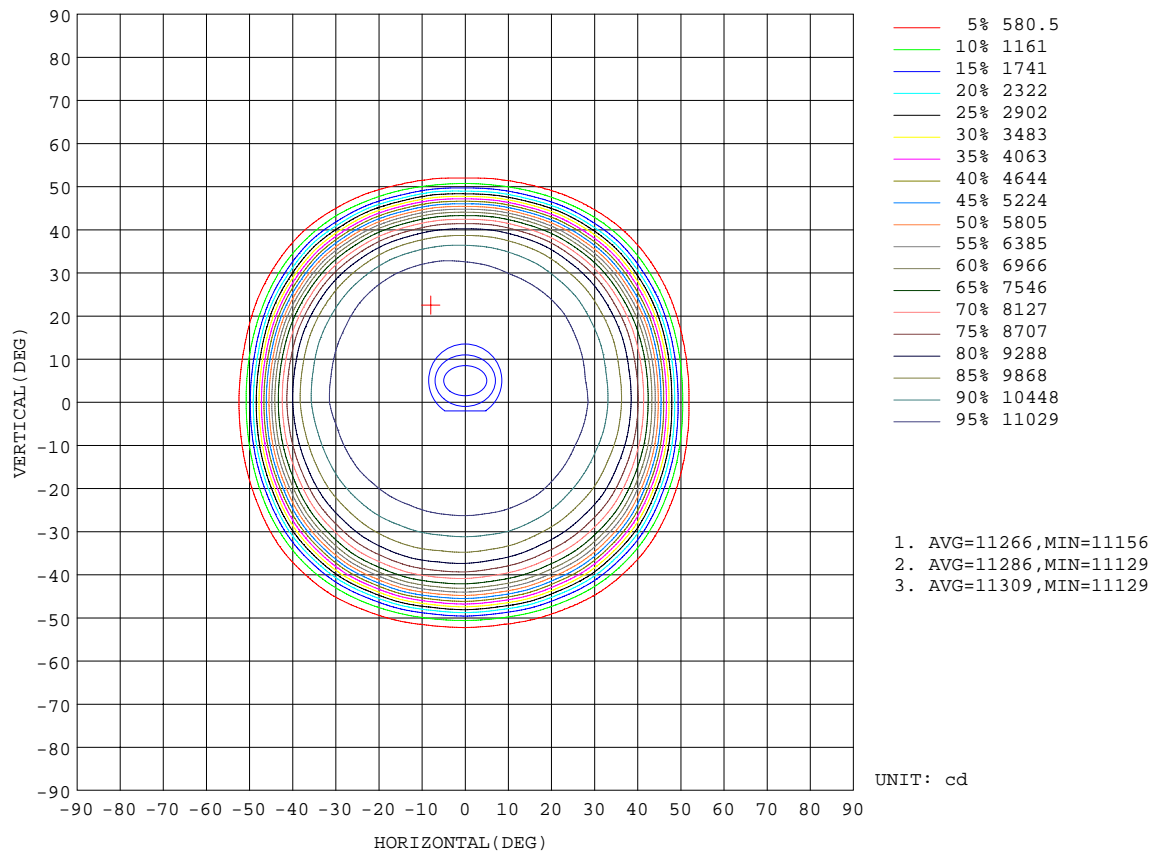
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	74	66	61	73	65	61	72	65	60	55
0.80	83	75	70	82	75	70	80	74	69	64
1.00	90	83	78	89	82	77	86	82	76	71
1.25	95	89	84	94	88	83	91	86	82	76
1.50	99	93	88	97	92	88	94	89	86	80
2.00	103	98	94	101	96	93	98	94	91	83
2.50	106	101	97	103	99	96	99	96	93	85
3.00	108	103	100	105	101	98	101	98	95	87
4.00	110	106	103	107	104	102	103	100	98	89
5.00	112	108	106	109	106	104	104	101	100	90
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

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:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D	DIM.: $\phi 0.319 \times 0.138\text{M}$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.24\text{M}$	Shielding Angle:

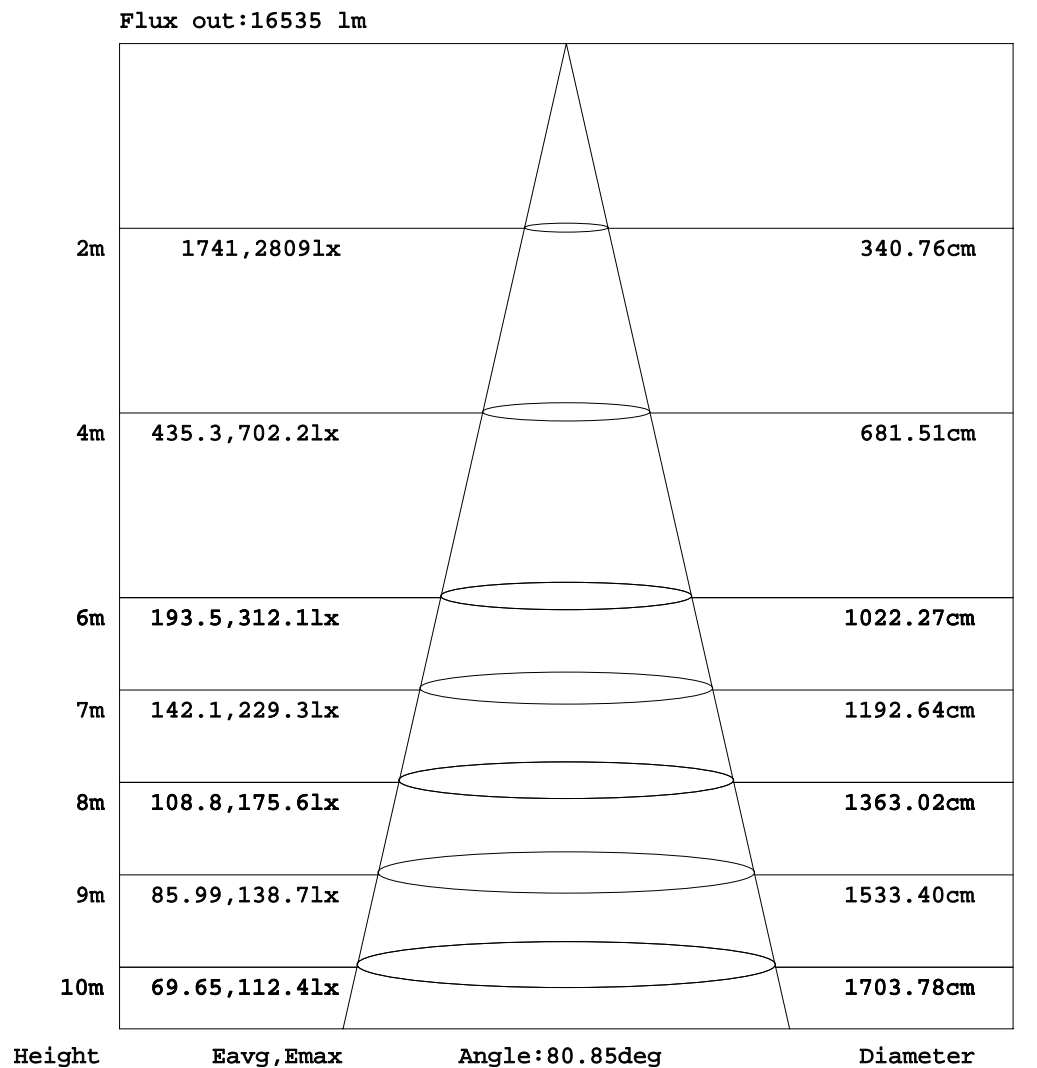


C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-03-13

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.24M$	Shielding Angle:



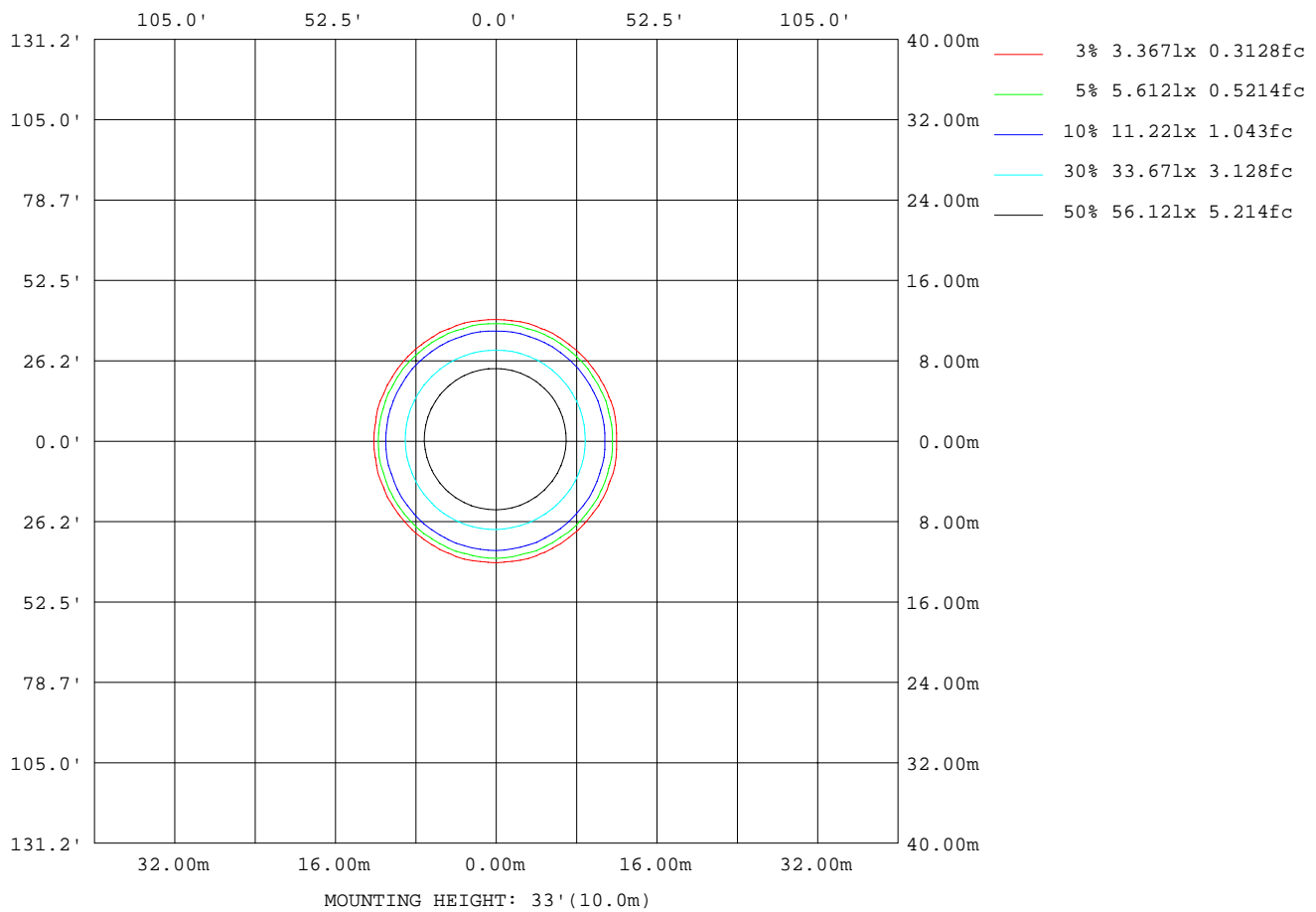
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D	DIM.: Φ 0.319*0.138M	SERIAL No.:
MFR.: AOK	SUR.: Φ 0.24M	Shielding Angle:



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

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150Woh-3030-90D	DIM.: ϕ 0.319*0.138M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.24M	Shielding Angle:

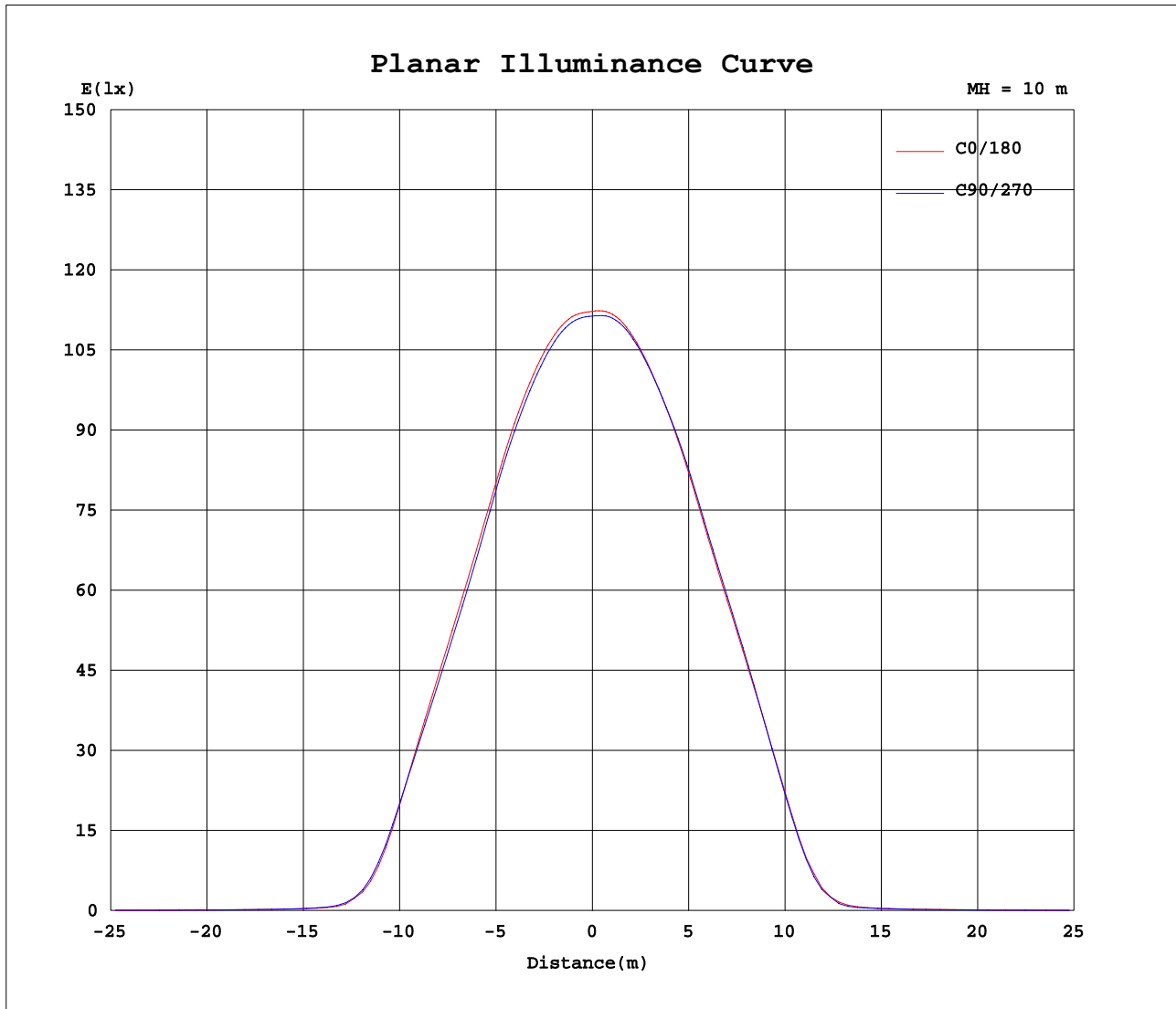
AvgL	cd/m2
L_0~180 (65) av	2982
L_0~180 (75) av	2566
L_0~180 (85) av	932
L_90~270 (65) av	2909
L_90~270 (75) av	2551
L_90~270 (85) av	894
L_45 (65) av	2925
L_45 (75) av	2525
L_45 (85) av	965

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

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: 2018-03-13

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D	DIM.: $\phi 0.319 \times 0.138M$	SERIAL No.:
MFR.: AOK	SUR.: $\phi 0.24M$	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	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115
5	1121	1120	1120	1119	1119	1119	1119	1119	1120	1120	1121	1121	1122	1122	1123	1124	1124	1125	1125
10	1132	1130	1129	1128	1128	1127	1128	1128	1128	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137
15	1140	1137	1135	1133	1133	1133	1133	1133	1133	1133	1133	1134	1135	1137	1139	1140	1142	1143	1145
20	1141	1138	1135	1134	1132	1131	1131	1131	1131	1131	1132	1134	1135	1137	1139	1141	1143	1146	1149
25	1124	1122	1119	1118	1117	1116	1115	1115	1114	1115	1116	1119	1120	1124	1127	1131	1135	1140	1144
30	1079	1075	1069	1067	1066	1067	1066	1066	1063	1063	1064	1068	1072	1081	1087	1095	1101	1107	1112
35	1006	1002	993	990	982	980	976	980	979	985	986	996	1002	1010	1016	1026	1033	1044	1050
40	869	866	856	854	841	838	831	837	838	849	854	866	869	881	882	895	901	916	924
45	555	563	553	558	546	550	542	553	551	568	569	586	583	599	595	606	605	623	624
50	132	139	132	138	133	139	133	142	137	147	143	152	146	156	150	157	150	159	159
55	24.5	25.5	24.7	26.2	25.4	26.3	26.2	27.0	26.8	27.7	27.5	28.8	28.9	29.7	29.3	29.7	28.9	29.3	30.1
60	15.6	15.5	15.6	15.9	16.1	16.4	16.6	16.7	16.7	16.8	16.8	17.1	17.3	17.6	17.7	17.8	17.7	17.8	18.3
65	11.6	11.5	11.5	11.7	11.9	12.3	12.4	12.6	12.7	12.6	12.6	12.7	12.8	13.1	13.3	13.3	13.3	13.4	13.6
70	8.49	8.30	8.24	8.40	8.61	9.20	9.31	9.50	9.59	9.65	9.50	9.55	9.56	9.75	10.2	10.1	9.98	10.1	10.3
75	5.91	5.73	5.77	5.89	6.02	6.32	6.60	6.74	6.75	6.96	6.84	7.03	7.09	7.23	7.31	7.34	7.21	7.24	7.37
80	3.04	3.11	3.14	3.22	3.14	3.20	3.21	3.41	3.48	3.73	3.89	4.38	4.44	4.54	4.32	4.37	4.25	4.21	4.19
85	0.76	0.84	0.90	0.92	0.83	0.77	0.74	0.74	0.70	0.80	0.86	0.99	0.97	0.96	0.85	0.83	0.79	0.85	0.87
90	0.41	0.48	0.64	0.64	0.57	0.46	0.39	0.33	0.32	0.42	0.53	0.64	0.71	0.61	0.51	0.38	0.32	0.35	0.43
95	0.82	0.89	1.17	1.23	1.13	0.92	0.84	0.52	0.59	0.87	1.02	1.31	1.35	1.15	0.98	0.72	0.49	0.58	0.81
100	2.14	1.89	2.28	2.43	2.65	2.44	2.12	1.70	1.80	2.32	2.14	2.39	2.42	2.40	2.38	1.97	1.57	1.76	2.32
105	3.49	3.82	5.34	5.65	5.20	4.21	3.68	3.52	3.32	3.45	4.05	5.39	5.32	4.83	4.75	3.98	3.70	3.80	4.01
110	4.75	4.46	7.82	8.71	6.36	5.31	4.96	4.49	4.61	4.67	5.07	7.03	8.80	6.40	5.29	4.85	4.68	4.72	4.84
115	6.96	10.3	9.41	11.7	8.26	7.72	5.70	5.78	5.69	6.54	10.6	9.68	11.8	7.98	7.63	5.82	5.99	5.90	6.12
120	11.4	14.9	16.0	16.1	16.5	12.6	9.62	9.75	10.7	12.9	15.6	16.9	15.9	14.6	12.0	9.31	9.92	10.7	12.8
125	19.1	18.0	23.6	27.1	22.9	21.6	22.4	22.0	22.0	20.9	19.2	22.0	27.5	22.8	19.1	20.5	21.2	21.5	21.6
130	21.1	25.2	36.7	38.7	29.3	24.6	23.1	22.2	21.5	21.4	24.3	33.9	39.0	28.5	25.4	23.0	21.4	20.4	20.1
135	31.2	38.3	51.2	51.9	38.7	34.5	29.6	28.1	28.9	30.3	37.3	50.4	51.0	37.5	33.0	28.2	27.9	27.9	30.1
140	47.1	52.2	60.2	56.9	52.8	44.6	40.7	40.2	41.7	46.6	52.3	57.8	56.2	51.6	44.4	39.2	38.5	38.6	44.1
145	49.3	57.3	59.2	60.1	59.6	55.0	50.6	50.7	51.1	50.5	56.8	58.5	58.7	55.0	51.8	47.9	47.9	47.8	48.3
150	45.9	58.3	58.1	58.1	56.0	48.4	49.7	50.5	50.1	48.8	58.9	55.8	49.6	54.9	46.2	47.2	47.7	47.6	46.4
155	45.7	46.0	53.7	47.2	47.1	47.3	47.6	47.8	47.7	47.6	54.8	46.7	45.7	45.6	45.7	45.8	45.9	45.9	45.9
160	47.1	34.1	45.2	48.7	48.6	48.6	48.8	49.0	49.2	49.0	34.4	47.5	47.4	47.2	47.3	47.4	47.5	47.6	47.5
165	34.5	34.9	46.7	50.0	49.8	49.8	50.0	50.2	38.8	35.2	35.3	48.8	48.7	48.4	48.4	48.5	48.6	35.9	48.5
170	35.0	35.3	51.0	50.9	50.6	50.6	50.6	35.4	35.5	35.5	35.7	49.7	49.6	49.2	49.1	49.2	34.5	34.5	49.3
175	44.7	49.7	51.6	51.5	50.9	50.8	37.9	39.2	40.8	43.1	48.0	50.2	50.2	49.6	49.4	36.8	38.9	39.3	39.9
180	50.8	51.0	65.1	65.1	51.3	49.5	49.5	49.5	49.5	49.5	49.5	54.0	65.0	51.2	49.9	49.9	49.9	49.9	50.9

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

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:220.2V I:0.6958A P:149.0W PF:0.9724 Freq:49.80Hz Lamp Flux:22076.7x1 lm		
NAME: AOK oH	TYPE:LED	WEIGHT:4.6KG
SPEC.:AOK-150WoH-3030-90D	DIM.: ϕ 0.319*0.138M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.24M	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	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115	1115		
5	1126	1126	1127	1127	1127	1127	1127	1127	1127	1126	1126	1124	1124	1124	1123	1122	1121		
10	1137	1138	1138	1139	1139	1140	1141	1141	1140	1140	1139	1139	1138	1138	1136	1135	1133		
15	1146	1147	1147	1148	1148	1149	1150	1151	1151	1150	1150	1149	1148	1147	1145	1143	1141		
20	1151	1154	1154	1155	1156	1157	1158	1159	1159	1158	1156	1154	1153	1151	1148	1146	1143		
25	1148	1153	1155	1157	1158	1160	1161	1161	1160	1158	1154	1150	1145	1142	1137	1134	1129		
30	1116	1122	1126	1133	1136	1139	1139	1138	1131	1126	1119	1116	1113	1109	1101	1096	1088		
35	1056	1064	1068	1075	1078	1081	1079	1077	1072	1068	1062	1058	1050	1045	1034	1028	1017		
40	931	942	943	946	943	948	942	944	940	943	936	933	918	913	901	895	882		
45	625	639	630	640	627	635	622	629	617	624	610	613	596	596	580	585	571		
50	156	163	156	164	156	161	153	158	149	154	145	149	142	146	138	144	138		
55	28.6	28.7	27.9	27.9	26.8	26.7	25.8	26.6	25.1	26.2	25.2	26.1	24.8	25.7	24.6	25.4	24.3		
60	17.7	17.5	17.3	17.2	16.9	16.7	16.4	16.2	16.1	16.1	16.0	15.9	15.7	15.5	15.4	15.3	15.3		
65	13.3	13.0	12.8	12.7	12.7	12.5	12.2	12.1	12.0	12.0	11.6	11.5	11.4	11.5	11.4	11.4	11.4		
70	9.85	9.64	9.44	9.44	9.55	9.47	9.22	9.10	8.96	8.73	8.46	8.40	8.31	8.54	8.41	8.30	8.41		
75	7.14	7.06	6.86	6.82	6.77	6.75	6.49	6.37	6.24	6.10	5.96	5.90	5.82	5.98	5.88	5.82	5.78		
80	4.08	4.25	4.09	3.94	3.65	3.57	3.39	3.31	3.22	3.31	3.37	3.35	3.19	3.15	3.04	3.04	3.01		
85	0.87	0.96	0.92	0.89	0.77	0.74	0.70	0.73	0.76	0.85	0.92	0.94	0.86	0.81	0.76	0.73	0.72		
90	0.50	0.58	0.58	0.53	0.47	0.39	0.41	0.33	0.40	0.46	0.58	0.56	0.50	0.42	0.32	0.26	0.30		
95	0.96	1.18	1.21	1.04	0.82	0.67	0.53	0.57	0.71	0.79	1.07	1.10	1.01	0.87	0.67	0.36	0.56		
100	2.21	2.21	2.16	1.85	1.85	1.73	1.53	1.57	1.89	1.67	1.99	2.10	2.27	2.20	1.78	1.37	1.62		
105	4.63	4.94	5.33	4.45	3.78	3.62	3.47	3.63	3.71	3.99	5.26	5.19	4.57	3.95	3.23	2.97	3.17		
110	5.12	7.07	9.26	6.39	5.34	4.75	4.87	4.80	4.86	4.55	7.28	8.30	5.36	4.76	4.43	4.08	4.20		
115	10.4	9.38	13.8	8.73	7.87	6.53	6.58	6.43	6.64	9.96	9.23	12.1	8.68	6.95	6.07	5.90	5.79		
120	15.6	16.4	15.6	15.3	13.4	11.0	10.7	10.9	13.3	15.6	16.5	17.9	15.8	12.3	9.30	9.02	9.72		
125	19.1	21.4	24.2	21.4	21.7	23.5	23.2	24.2	22.4	20.3	26.8	25.9	19.5	19.6	21.3	20.6	20.7		
130	23.4	34.5	38.1	26.0	22.3	20.7	20.2	20.4	21.6	25.6	36.7	38.9	27.8	23.0	20.9	19.8	20.0		
135	36.5	47.6	51.0	40.4	34.2	29.3	29.1	29.5	31.3	37.8	49.6	51.5	41.0	34.6	29.8	28.3	29.2		
140	45.2	54.6	56.7	53.8	46.3	41.3	40.2	40.3	46.0	46.1	52.6	53.8	50.1	44.0	41.8	40.4	41.2		
145	57.0	58.4	52.0	49.8	54.7	50.1	50.4	49.9	49.8	58.3	57.6	58.0	58.4	53.9	39.2	49.7	49.8		
150	51.4	57.5	57.8	58.8	41.4	42.6	48.4	48.2	46.7	52.2	57.0	56.9	57.6	45.2	46.3	39.1	46.4		
155	45.8	45.7	46.6	59.7	46.4	46.5	42.2	46.4	46.4	46.1	46.0	47.9	59.5	45.4	45.5	45.4	33.3		
160	47.4	47.4	47.5	39.7	36.9	48.0	47.9	47.6	47.8	47.7	47.7	47.9	40.5	38.5	46.9	46.8	46.8		
165	48.4	48.6	48.8	38.2	34.2	34.2	49.2	49.0	49.0	48.9	48.9	49.2	41.3	33.6	33.7	48.0	48.0		
170	49.1	49.4	49.7	41.3	34.7	34.7	34.6	49.7	45.2	49.6	49.6	50.0	41.9	34.0	34.1	34.0	48.7		
175	49.5	50.0	50.3	48.4	43.2	38.7	37.0	35.3	38.4	34.8	49.9	50.6	49.7	43.1	39.0	36.5	36.1		
180	50.9	65.1	65.1	51.7	49.5	49.5	49.5	49.5	49.5	49.5	56.3	65.0	51.5	49.9	49.9	49.9	49.9		

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

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: