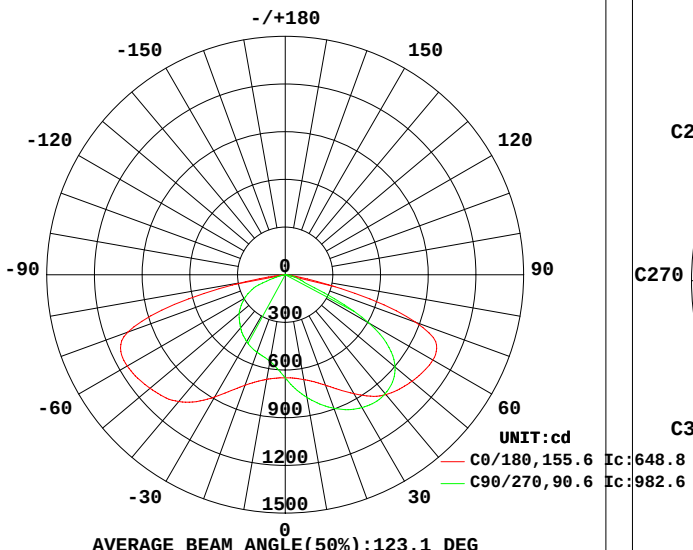
STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:26.11V I:0.6180A P:16.13W PF:1.000 Freq:0Hz Lamp Flux:3431.98x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-16WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

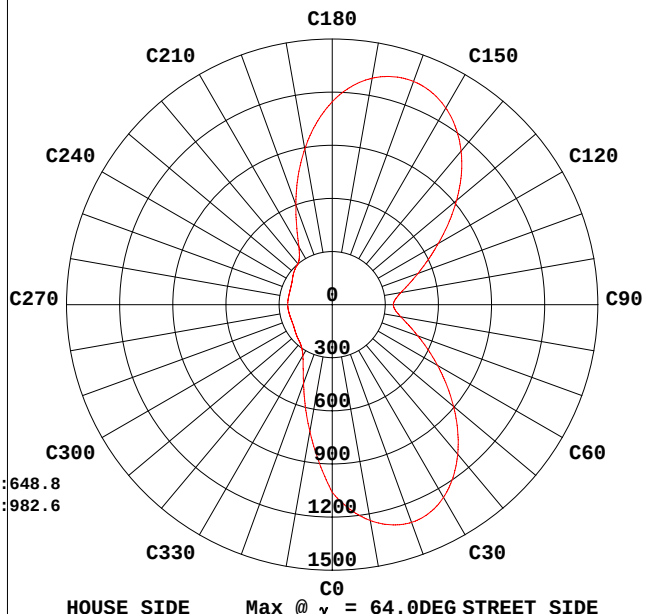
DATA OF LAMP		PHOTOMETRIC DATA Eff: 212.72 lm/W			
MODEL	5050	Imax(cd)	1333	η street_up(%)	0.0
NOMINAL POWER(W)	16	LOR(%)	100.0	η street_down(%)	66.3
RATED VOLTAGE(V)		TOTAL FLUX(lm)	3432	η house_up(%)	0.0
NOMINAL FLUX(lm)	3431.98	MAXIMUM @(C,γ)	165,64.0	η house_down(%)	33.7
LAMPS INSIDE	1	η up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)		η down(%)	100.0	SLI	18.105

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS



AVERAGE BEAM ANGLE(50%):123.1 DEG

MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM



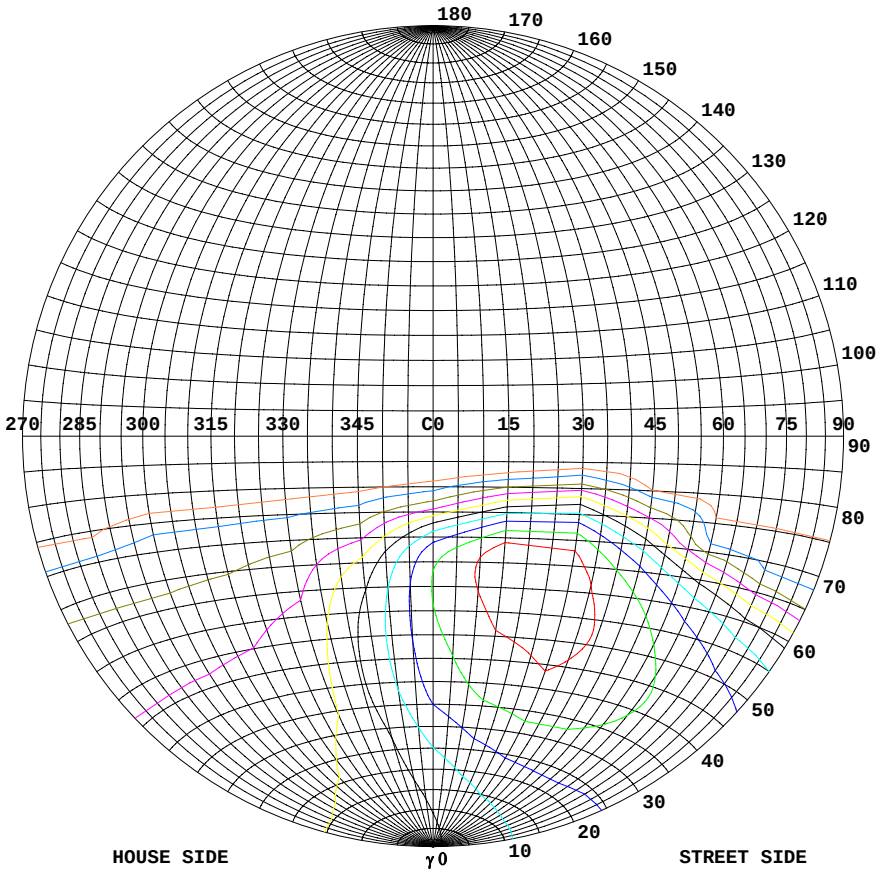
HOUSE SIDE Max @ γ = 64.0DEG STREET SIDE

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yanyonggeng
Test Date:2025-8-8

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:26.11V I:0.6180A P:16.13W PF:1.000 Freq:0Hz Lamp Flux:3431.98x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-16WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:



Classification:

IES:Type III - Short
CIE:Average - Intermediate
IES:Semi cut-off
CIE:Non-cut-off
Max.At80:155.2cd/klm
Max.At90:0cd/klm
Max.80-90:155.2cd/klm
NRB 5101:Semi limited[26.2%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1333
90%	1200
80%	1066
70%	933
60%	800
50%	666
40%	533
30%	400
20%	267
10%	133
5%	67

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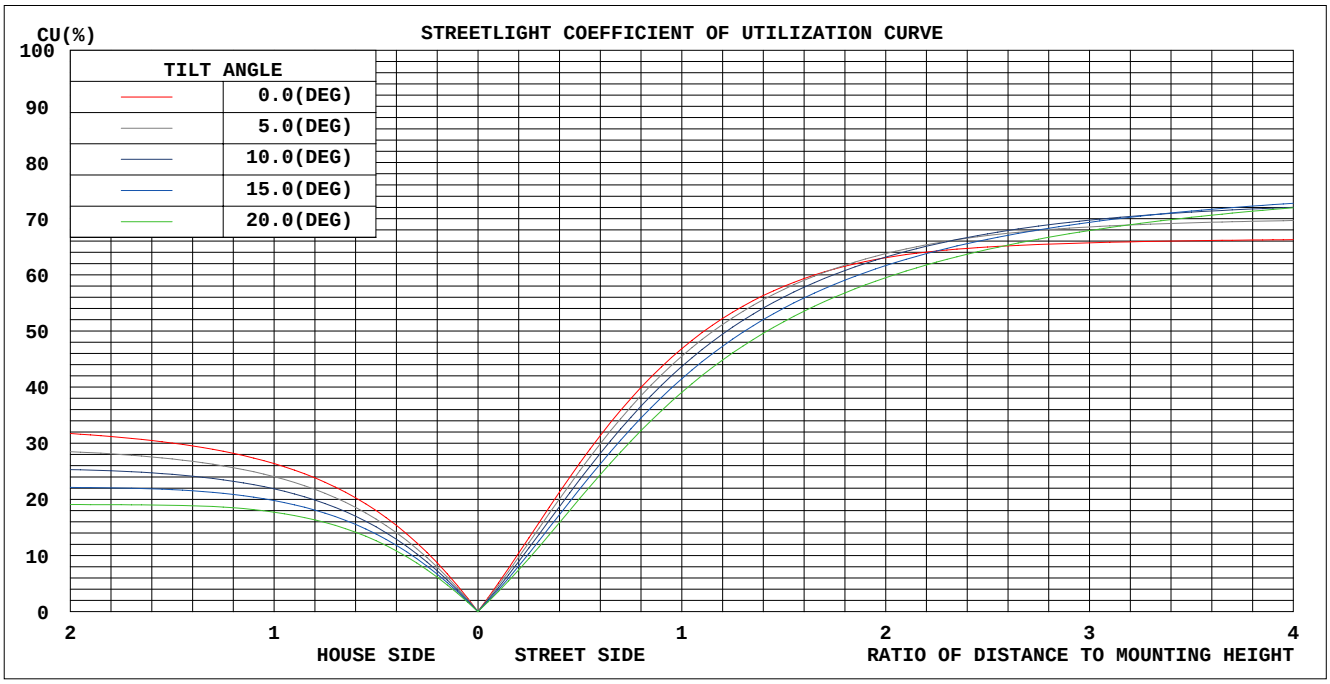
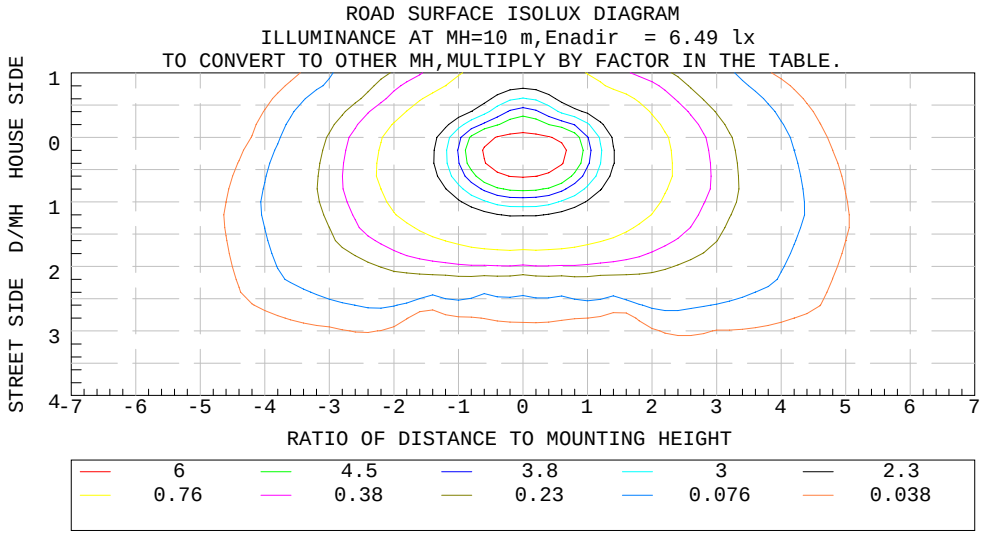
Test Distance:7.682m [K=1.0000]
Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM





According to LB/T001-2008:
U = Emin/Eavg = 0.415
Eavg = 7.600 lx

HEIGHT	FACTOR
5 m	4.000
6 m	2.778
7 m	2.041
8 m	1.563
9 m	1.235
10 m	1.000
11 m	0.826
12 m	0.694
13 m	0.592
14 m	0.510
15 m	0.444
16 m	0.391

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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:26.11V I:0.6180A P:16.13W PF:1.000 Freq:0Hz Lamp Flux:3431.98x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-16WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	669.9	761.6	783.4	757.2	668.5	580.6	552.8	578.9	0- 10	62.93	62.93	1.83,1.83
20	739.8	892.5	894.0	887.8	740.0	540.5	519.1	537.4	10- 20	197.0	259.9	7.57,7.57
30	864.5	1032	965.1	1041	887.9	512.6	485.6	507.6	20- 30	348.1	608.0	17.7,17.7
40	984.9	1136	977.5	1158	1042	471.1	437.4	463.6	30- 40	508.1	1116	32.5,32.5
50	1042	1167	901.9	1184	1111	414.3	378.7	401.7	40- 50	639.5	1756	51.2,51.2
60	1073	1090	608.4	1115	1148	337.8	294.5	319.1	50- 60	703.7	2459	71.7,71.7
70	872.1	738.4	111.6	764.2	1052	214.2	151.5	189.2	60- 70	622.5	3082	89.8,89.8
80	96.55	68.72	29.37	81.55	252.2	41.29	16.62	28.03	70- 80	317.8	3400	99.1,99.1
90	0	0	0	0	0	0	0	0	80- 90	32.45	3432	100,100
100	0	0	0	0	0	0	0	0	90-100	0	3432	100,100
110	0	0	0	0	0	0	0	0	100-110	0	3432	100,100
120	0	0	0	0	0	0	0	0	110-120	0	3432	100,100
130	0	0	0	0	0	0	0	0	120-130	0	3432	100,100
140	0	0	0	0	0	0	0	0	130-140	0	3432	100,100
150	0	0	0	0	0	0	0	0	140-150	0	3432	100,100
160	0	0	0	0	0	0	0	0	150-160	0	3432	100,100
170	0	0	0	0	0	0	0	0	160-170	0	3432	100,100
180	0	0	0	0	0	0	0	0	170-180	0	3432	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yanyonggeng
Test Date:2025-8-8

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

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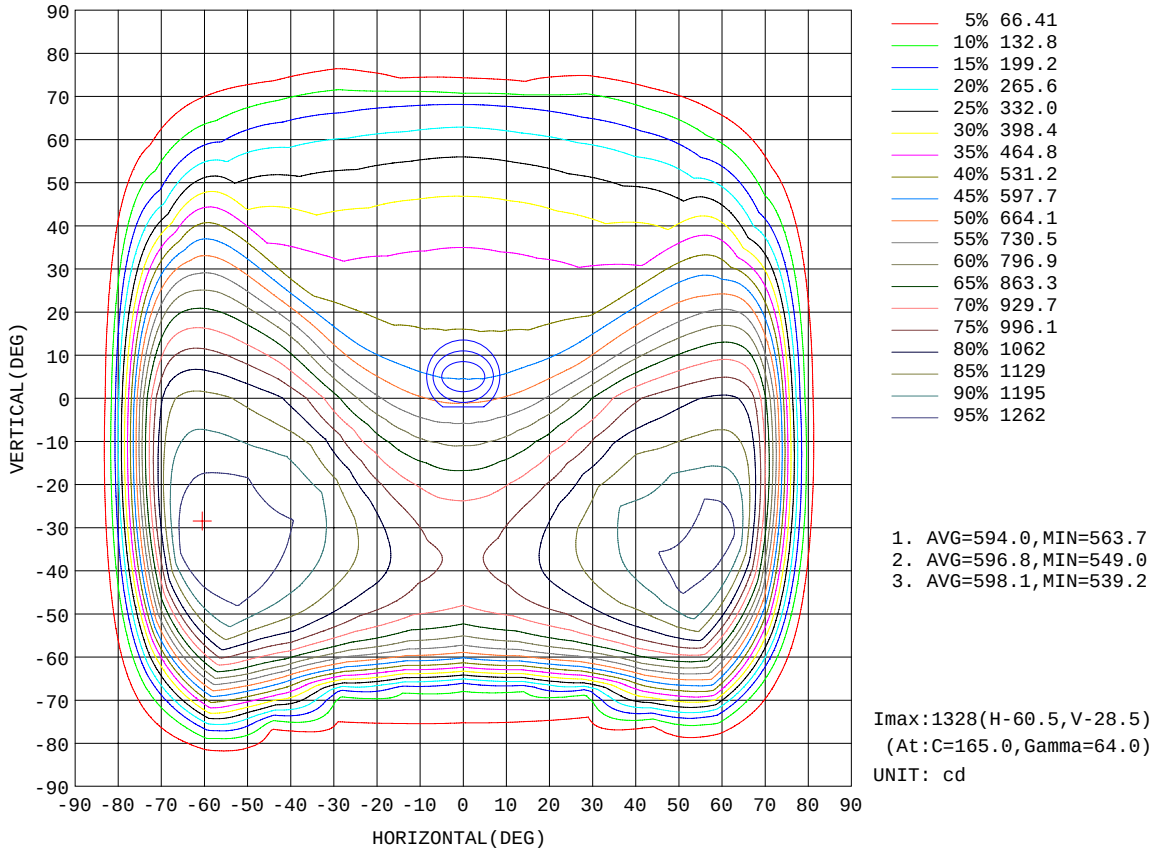

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Temperature:25.3DEG
Operators:yanyonggeng
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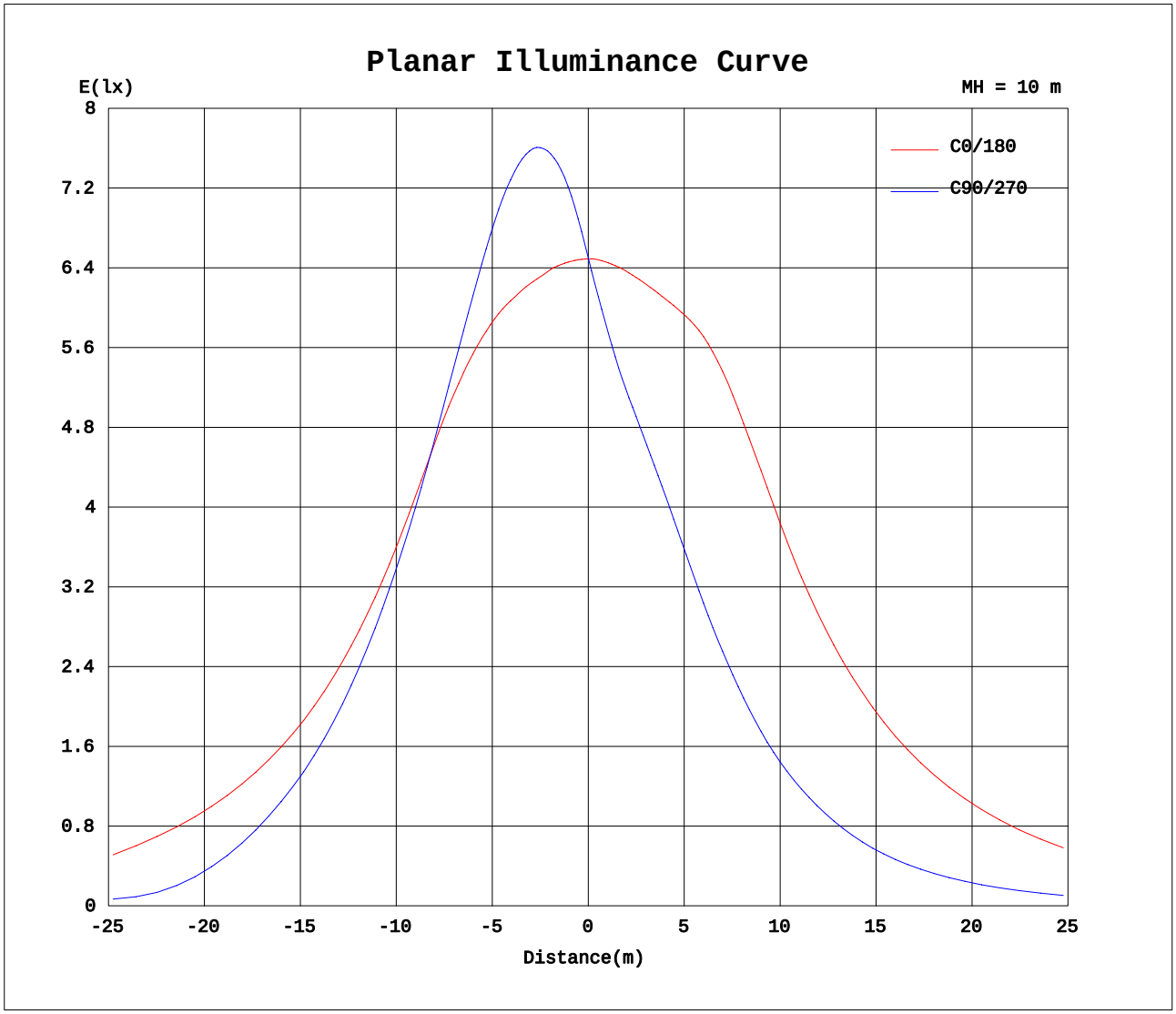
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

Planar Illuminance Curve



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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

LCS REPORT

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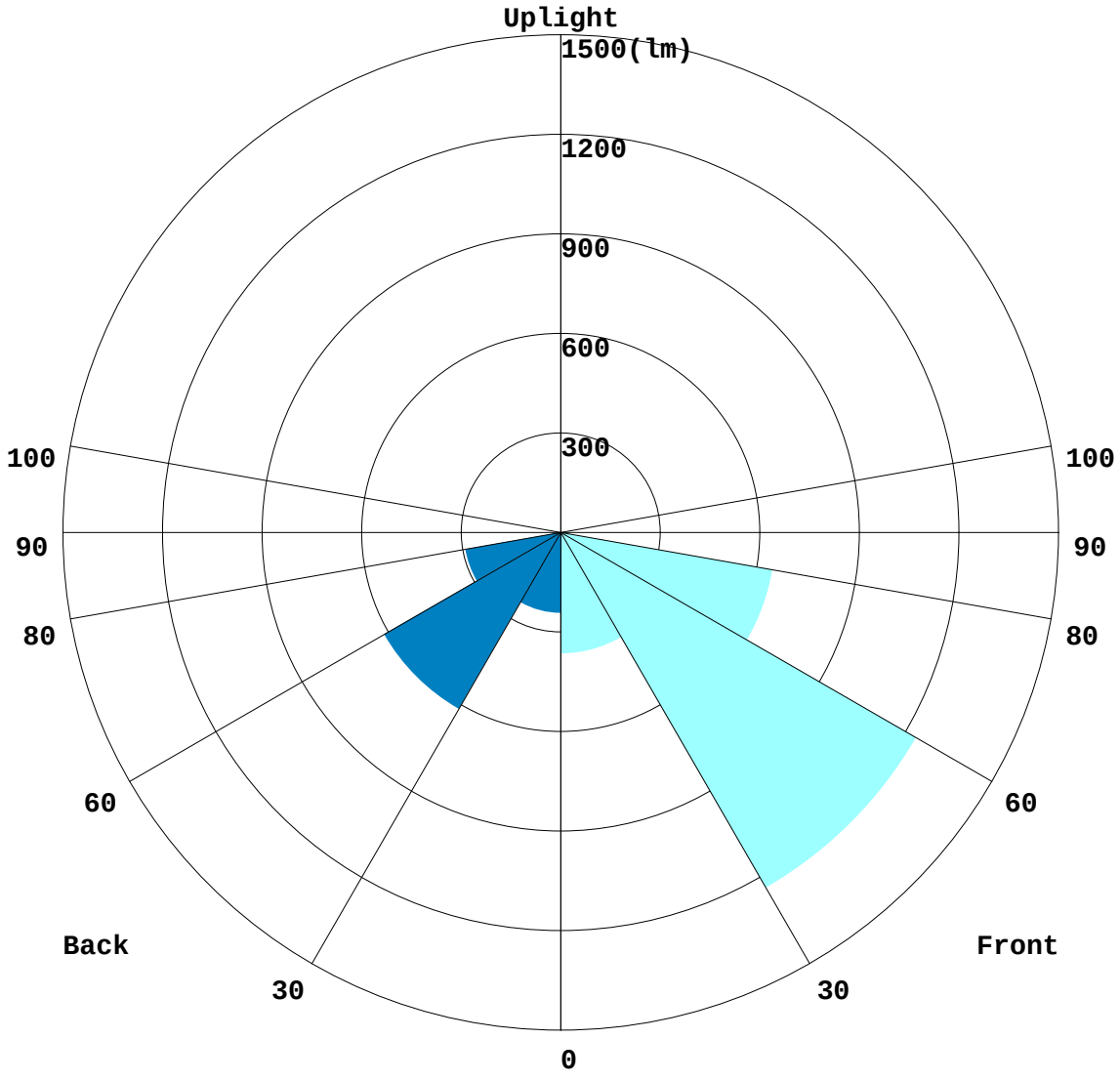
SPEC.:AoK-16WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



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Test Speed: HIGH
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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
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Remarks:

BUG REPORT

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SPEC.:AoK-16WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	364.94	10.6
FM - Front-Medium(30-60)	1236.6	36.0
FH - Front-High(60-80)	648.56	18.9
FVH - Front-Very High(80-90)	24.885	0.7
Total Forward Light	2275	66.3
BL - Back-Low(0-30)	243.04	7.1
BM - Back-Medium(30-60)	614.59	17.9
BH - Back-High(60-80)	291.77	8.5
BVH - Back-Very High(80-90)	7.5635	0.2
Total Back Light	1157	33.7
UL - Uplight-Low(90-100)	0	0.0
UH - Uplight-High(100-180)	0	0.0
Total Up Light	0	0.0

BUG(Back,Up,Glare) Rating	B1-U0-G1

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	1157	0	1157
Street Side	2275	0	2275

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γ Interval: 1.0DEG
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Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

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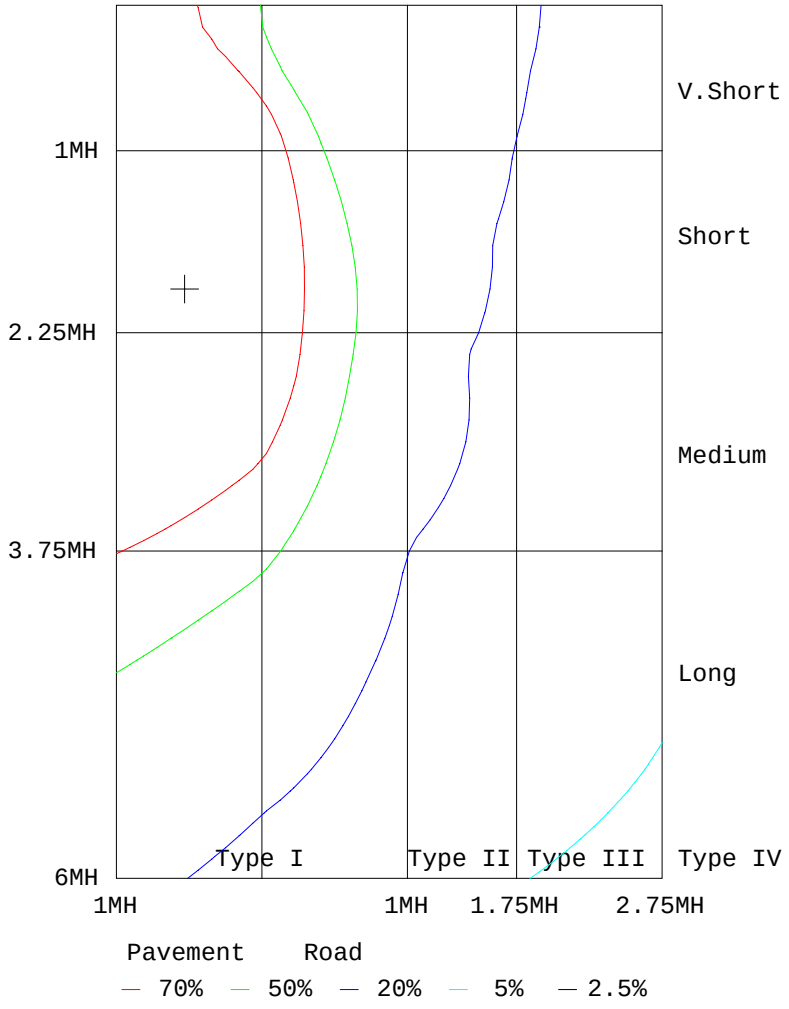
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-16WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



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C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yanyonggeng
Test Date:2025-8-8

γ Range: 0 - 180DEG
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Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:26.11V I:0.6180A P:16.13W PF:1.000 Freq:0Hz Lamp Flux:3431.98x1 lm		
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MFR.:	SUR.:180*180mm	Shielding Angle:

Table--1 UNIT: cd

γ (DEG) \ C(DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	649	649	649	649	649	649	649	649	649	649	649	649	649	649	649	649	649	649	649
5	654	671	688	701	711	717	719	716	711	700	687	671	653	636	621	608	599	594	592
10	670	707	739	762	775	782	783	781	773	757	735	705	668	634	603	581	564	556	553
15	697	755	800	825	838	843	842	841	834	820	795	754	696	640	591	557	540	536	533
20	740	819	869	892	900	899	894	895	895	888	867	820	740	654	578	541	526	521	519
25	797	894	944	963	957	946	937	942	954	963	951	906	803	674	563	527	511	506	505
30	865	969	1022	1032	1007	982	965	977	1008	1041	1048	1004	888	707	555	513	494	488	486
35	933	1046	1099	1091	1045	1003	981	1001	1049	1110	1141	1101	975	757	547	494	473	466	464
40	985	1113	1166	1136	1069	1009	977	1007	1076	1158	1212	1179	1042	809	534	471	448	440	437
45	1017	1152	1206	1161	1072	994	954	990	1077	1180	1252	1216	1085	837	517	445	419	411	408
50	1042	1190	1237	1167	1042	951	902	946	1047	1184	1278	1249	1111	842	495	414	385	380	379
55	1061	1228	1259	1147	978	862	797	857	985	1167	1297	1285	1134	834	467	379	347	340	340
60	1073	1268	1265	1090	863	694	608	690	868	1115	1303	1317	1148	804	424	338	303	293	294
65	1050	1286	1247	970	626	369	271	371	631	999	1274	1332	1141	729	364	282	250	240	240
70	872	1152	1132	738	229	114	112	119	235	764	1180	1281	1052	565	278	214	187	174	152
75	454	782	817	407	73.7	70.7	68.5	74.5	80.4	438	936	990	722	294	165	130	116	62.4	60.0
80	96.6	268	361	68.7	37.4	31.1	29.4	34.1	44.3	81.5	533	480	252	97.7	65.7	41.3	38.2	18.7	16.6
85	9.51	17.8	29.9	12.8	8.02	6.23	5.19	7.02	12.0	21.9	103	70.0	24.9	15.6	13.4	7.82	3.02	0.90	0.71
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

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C Interval: 15.0DEG
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MFR.:	SUR.:180*180mm	Shielding Angle:

Table--2 UNIT: cd

γ (DEG) \ C(DEG)	285	300	315	330	345														
0	649	649	649	649	649														
5	593	598	608	620	636														
10	555	562	579	601	633														
15	535	538	554	589	638														
20	520	524	537	571	648														
25	505	509	523	556	660														
30	487	491	508	544	678														
35	465	470	488	531	701														
40	439	445	464	514	720														
45	409	415	435	493	729														
50	378	379	402	465	725														
55	337	340	364	431	704														
60	290	293	319	382	660														
65	236	238	260	318	566														
70	159	175	189	225	382														
75	56.6	99.6	105	121	181														
80	15.7	21.2	28.0	34.5	51.5														
85	0.53	1.00	2.92	5.56	6.79														
90	0.00	0.00	0.00	0.00	0.00														
95	0.00	0.00	0.00	0.00	0.00														
100	0.00	0.00	0.00	0.00	0.00														
105	0.00	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00	0.00														
140	0.00	0.00	0.00	0.00	0.00														
145	0.00	0.00	0.00	0.00	0.00														
150	0.00	0.00	0.00	0.00	0.00														
155	0.00	0.00	0.00	0.00	0.00														
160	0.00	0.00	0.00	0.00	0.00														
165	0.00	0.00	0.00	0.00	0.00														
170	0.00	0.00	0.00	0.00	0.00														
175	0.00	0.00	0.00	0.00	0.00														
180	0.00	0.00	0.00	0.00	0.00														

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:yanyonggeng
Test Date:2025-8-8

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks: