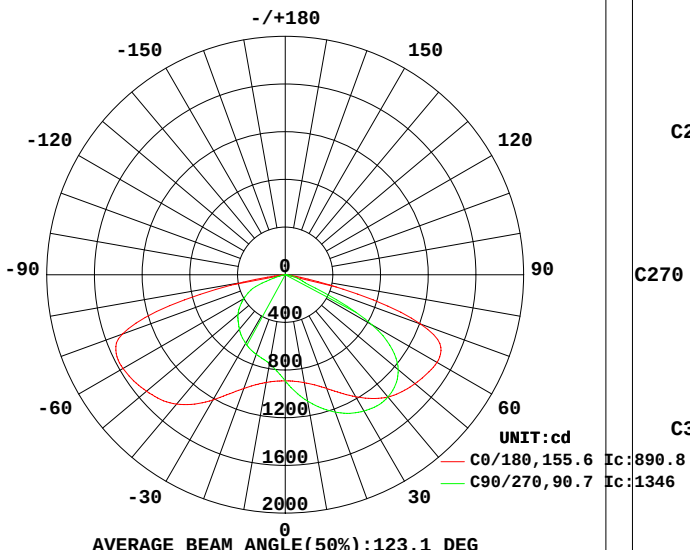
STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:26.37V I:0.8499A P:22.41W PF:1.000 Freq:0Hz Lamp Flux:4706.88x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-22WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

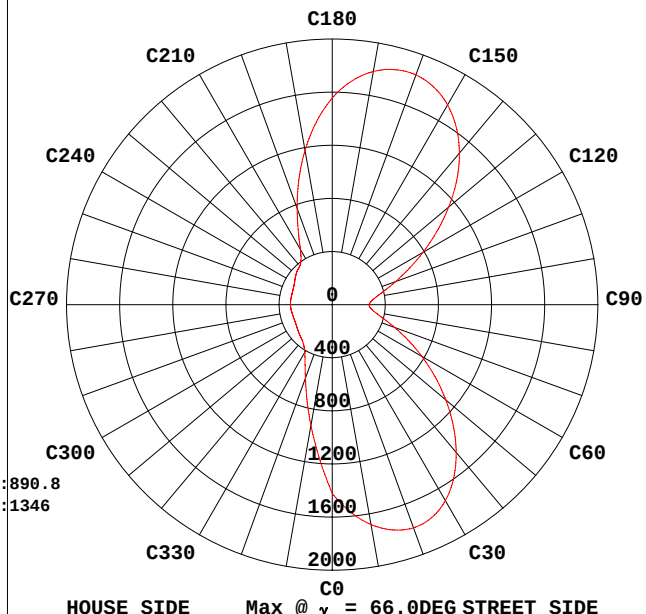
DATA OF LAMP		PHOTOMETRIC DATA Eff: 210.04 lm/W			
MODEL	5050	Imax(cd)	1832	η street_up(%)	0.0
NOMINAL POWER(W)	22	LOR(%)	100.0	η street_down(%)	66.3
RATED VOLTAGE(V)		TOTAL FLUX(lm)	4707	η house_up(%)	0.0
NOMINAL FLUX(lm)	4706.88	MAXIMUM @(C,γ)	165,66.0	η house_down(%)	33.7
LAMPS INSIDE	1	η up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)		η down(%)	100.0	SLI	18.543

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS



AVERAGE BEAM ANGLE(50%):123.1 DEG

MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM



HOUSE SIDE Max @ γ = 66.0DEG 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:26.37V I:0.8499A P:22.41W PF:1.000 Freq:0Hz Lamp Flux:4706.88x1 lm		
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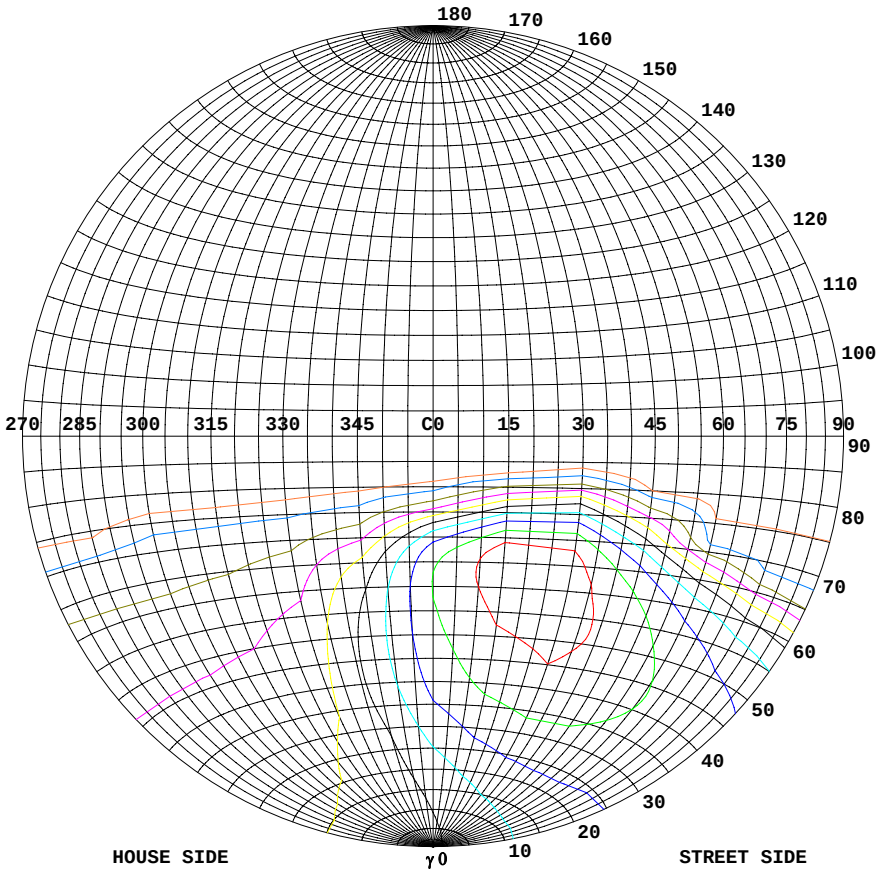
SPEC.:AoK-22WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:



Classification:

IES:Type III - Short
CIE:Average - Intermediate
IES:Semi cut-off
CIE:Non-cut-off
Max.At80:158.1cd/klm
Max.At90:0cd/klm
Max.80-90:158.1cd/klm
NRB 5101:Semi limited[26.6%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	1832
90%	1649
80%	1466
70%	1282
60%	1099
50%	916
40%	733
30%	550
20%	366
10%	183
5%	92

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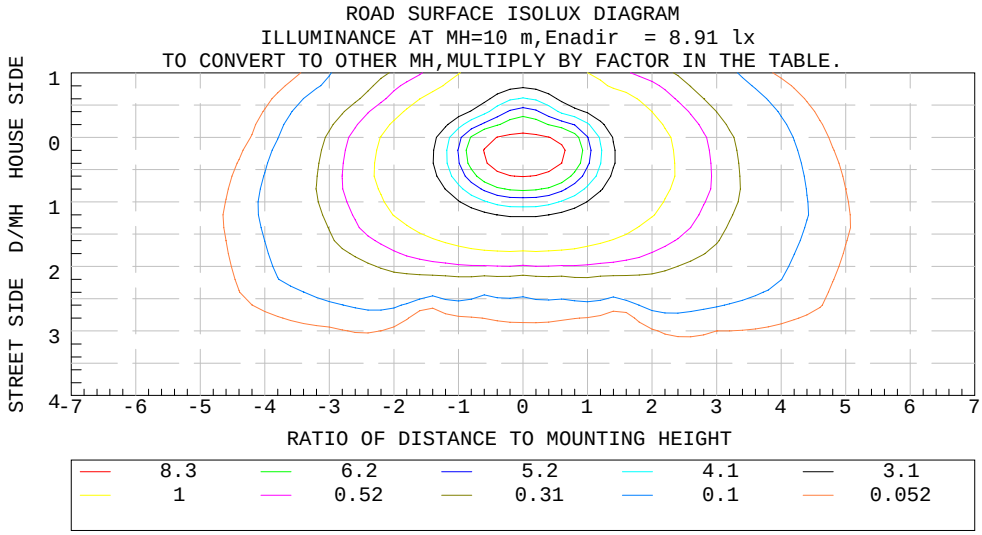
Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM





According to LB/T001-2008:
U = Emin/Eavg = 0.417
Eavg = 10.40 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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Remarks:

ZONAL FLUX DIAGRAM

Test:U:26.37V I:0.8499A P:22.41W PF:1.000 Freq:0Hz Lamp Flux:4706.88x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-22WSAF-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	919.8	1047	1076	1040	917.5	796.2	757.9	794.5	0- 10	86.39	86.39	1.84,1.84
20	1016	1226	1226	1217	1015	739.9	711.0	736.0	10- 20	270.3	356.7	7.58,7.58
30	1182	1410	1320	1416	1212	700.1	665.2	695.1	20- 30	476.6	833.3	17.7,17.7
40	1339	1549	1339	1576	1417	645.3	599.2	634.9	30- 40	693.4	1527	32.4,32.4
50	1422	1597	1237	1617	1519	566.8	518.4	549.7	40- 50	874.7	2401	51,51
60	1471	1497	841.2	1531	1572	462.2	403.1	437.1	50- 60	964.8	3366	71.5,71.5
70	1206	1019	153.1	1062	1453	294.9	207.8	260.2	60- 70	856.6	4223	89.7,89.7
80	131.3	91.97	39.35	112.3	358.7	56.66	22.38	37.62	70- 80	439.3	4662	99,99
90	0	0	0	0	0	0	0	0	80- 90	44.75	4707	100,100
100	0	0	0	0	0	0	0	0	90-100	0	4707	100,100
110	0	0	0	0	0	0	0	0	100-110	0	4707	100,100
120	0	0	0	0	0	0	0	0	110-120	0	4707	100,100
130	0	0	0	0	0	0	0	0	120-130	0	4707	100,100
140	0	0	0	0	0	0	0	0	130-140	0	4707	100,100
150	0	0	0	0	0	0	0	0	140-150	0	4707	100,100
160	0	0	0	0	0	0	0	0	150-160	0	4707	100,100
170	0	0	0	0	0	0	0	0	160-170	0	4707	100,100
180	0	0	0	0	0	0	0	0	170-180	0	4707	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
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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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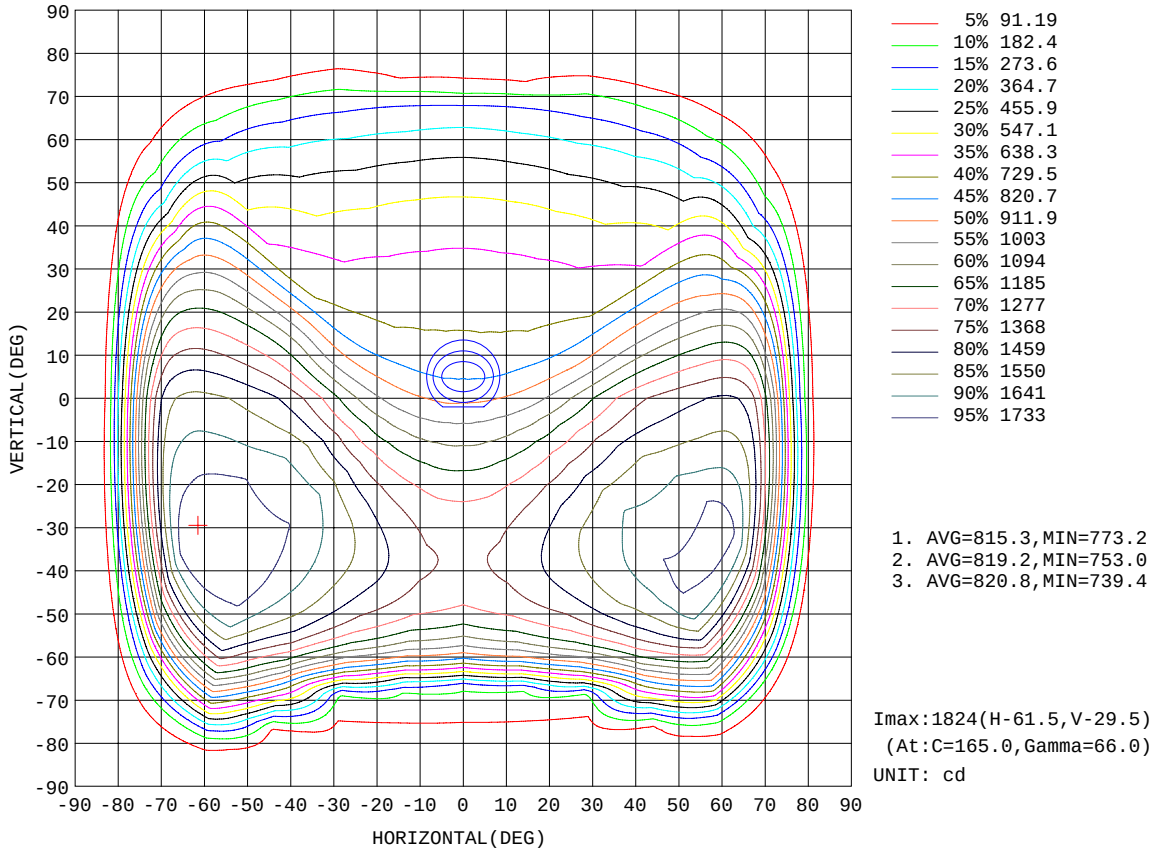

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Temperature:25.3DEG
Operators:yanyonggeng
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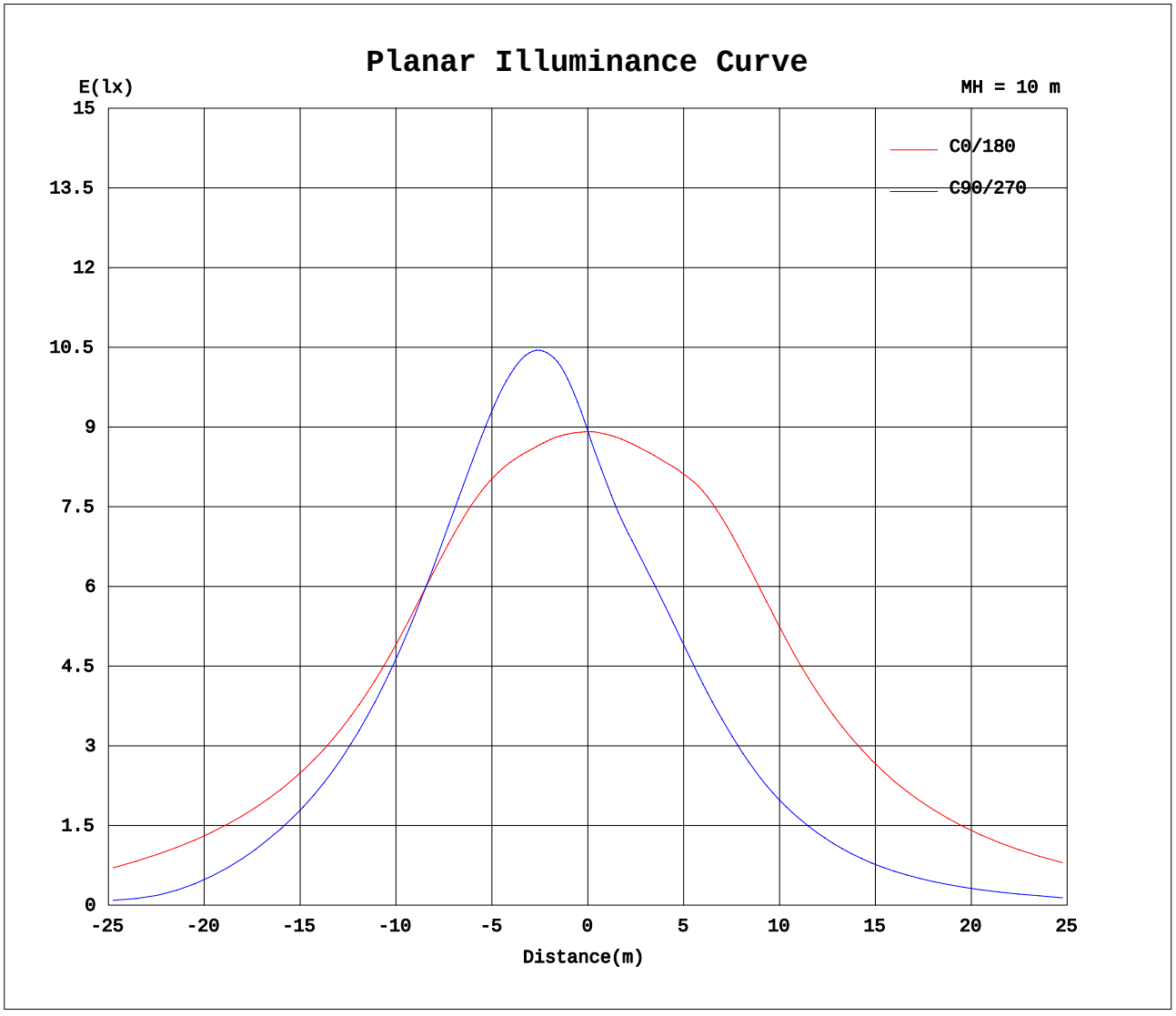
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

Planar Illuminance Curve



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C Interval: 15.0DEG
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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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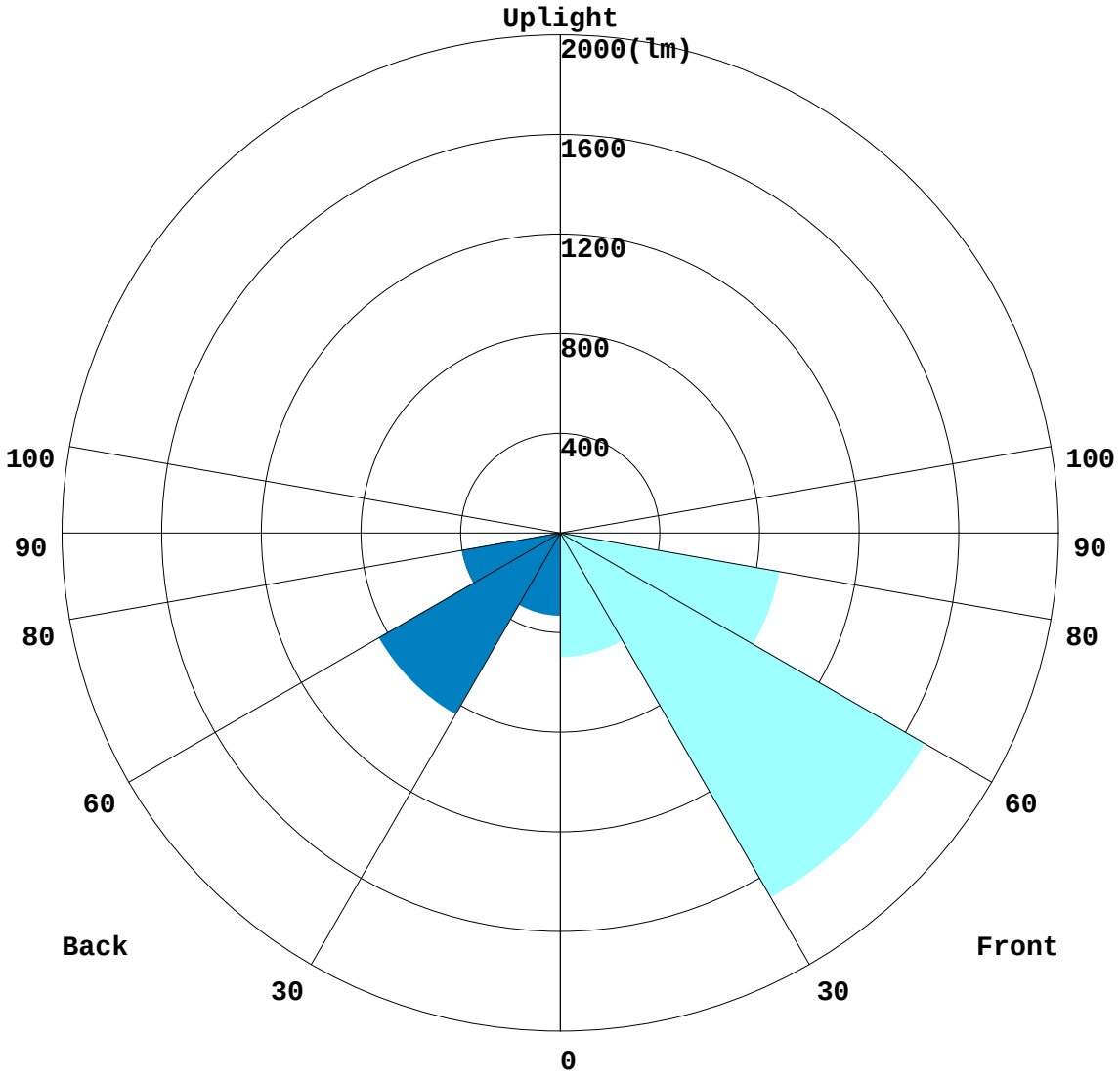
SPEC.:AoK-22WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



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

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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:

BUG REPORT

Test:U:26.37V I:0.8499A P:22.41W PF:1.000 Freq:0Hz Lamp Flux:4706.88x1 lm		
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SPEC.:AoK-22WSAF-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)	500.1	10.6
FM - Front-Medium(30-60)	1691.3	35.9
FH - Front-High(60-80)	894.4	19.0
FVH - Front-Very High(80-90)	34.314	0.7
Total Forward Light	3120.1	66.3
BL - Back-Low(0-30)	333.16	7.1
BM - Back-Medium(30-60)	841.6	17.9
BH - Back-High(60-80)	401.57	8.5
BVH - Back-Very High(80-90)	10.441	0.2
Total Back Light	1586.8	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	1586.8	0	1586.8
Street Side	3120.1	0	3120.1

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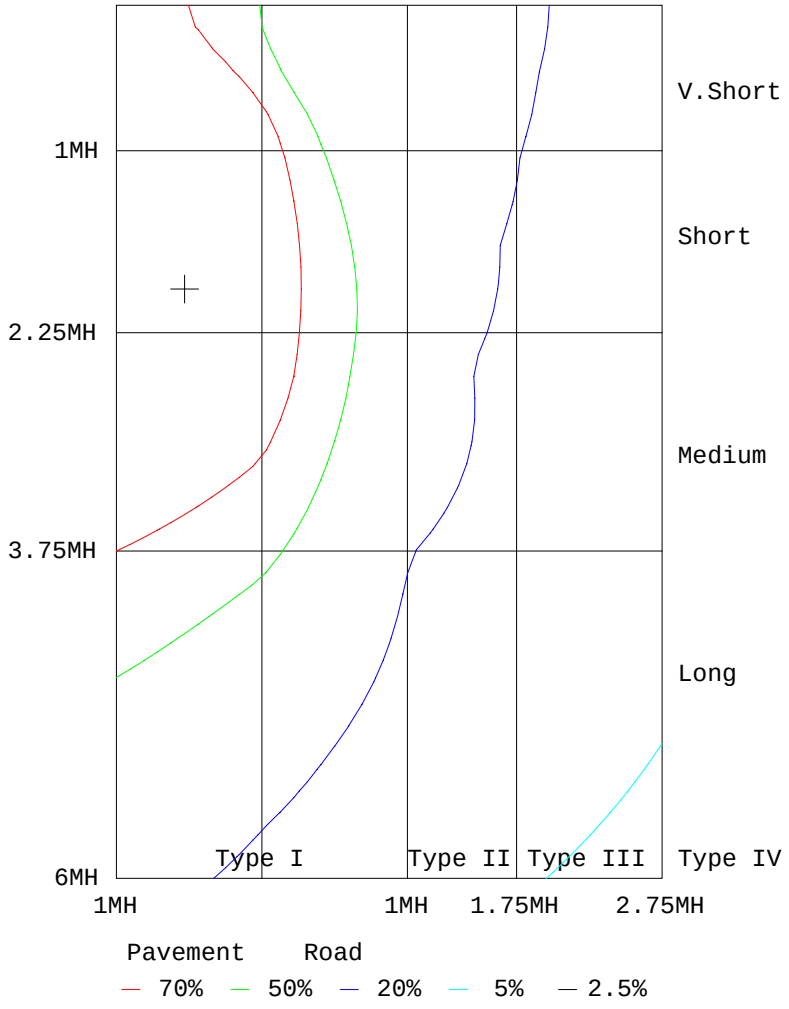
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

Test:U:26.37V I:0.8499A P:22.41W PF:1.000 Freq:0Hz Lamp Flux:4706.88x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-22WSAF-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
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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:26.37V I:0.8499A P:22.41W PF:1.000 Freq:0Hz Lamp Flux:4706.88x1 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	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890	890
5	897	922	945	963	977	984	986	984	975	961	944	921	897	873	852	835	822	815	812
10	920	971	1016	1047	1065	1074	1076	1073	1060	1040	1010	967	917	870	827	796	773	763	758
15	957	1038	1098	1134	1151	1157	1156	1154	1143	1125	1091	1033	955	878	812	763	741	735	730
20	1016	1125	1193	1226	1235	1233	1226	1228	1227	1217	1188	1123	1015	897	792	740	720	715	711
25	1093	1226	1294	1320	1312	1295	1283	1291	1305	1317	1302	1237	1101	923	771	720	700	694	691
30	1182	1326	1395	1410	1377	1343	1320	1337	1375	1416	1426	1369	1212	963	757	700	677	669	665
35	1267	1418	1492	1487	1428	1373	1343	1370	1433	1507	1552	1497	1324	1030	745	676	648	639	635
40	1339	1507	1580	1549	1462	1382	1339	1380	1472	1576	1656	1611	1417	1105	731	645	614	604	599
45	1386	1570	1644	1587	1467	1361	1307	1358	1475	1610	1714	1666	1481	1146	708	609	574	564	558
50	1422	1623	1689	1597	1429	1305	1237	1298	1435	1617	1749	1713	1519	1155	678	567	528	521	518
55	1449	1677	1722	1575	1345	1186	1097	1179	1354	1598	1777	1762	1552	1143	639	518	475	466	465
60	1471	1735	1738	1497	1191	961	841	954	1197	1531	1788	1807	1572	1104	581	462	415	402	403
65	1440	1763	1717	1336	869	512	374	516	876	1376	1753	1832	1565	1004	500	387	344	330	332
70	1206	1585	1551	1019	314	155	153	162	327	1062	1620	1767	1453	784	383	295	259	240	208
75	630	1080	1131	567	99.4	95.7	92.8	101	109	621	1298	1372	1005	411	229	181	161	84.9	81.5
80	131	388	501	92.0	50.4	41.6	39.4	45.9	59.6	112	744	667	359	128	91.3	56.7	51.6	25.4	22.4
85	12.6	23.7	39.9	17.1	10.5	8.21	6.85	9.26	15.8	29.0	128	94.6	33.4	21.0	17.9	10.4	3.98	1.26	0.95
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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MFR.:	SUR.:180*180mm	Shielding Angle:

Table--2 UNIT: cd

γ (DEG) \ C(DEG)	285	300	315	330	345														
0	890	890	890	890	890														
5	815	821	834	852	873														
10	762	771	795	826	869														
15	733	738	760	809	876														
20	713	718	736	784	889														
25	693	697	716	763	907														
30	668	673	695	747	930														
35	637	644	669	730	964														
40	602	609	635	706	990														
45	561	568	595	677	1002														
50	517	520	550	638	997														
55	462	464	498	591	969														
60	398	401	437	525	909														
65	324	328	357	437	779														
70	219	241	260	311	524														
75	77.0	135	146	165	246														
80	21.1	28.4	37.6	46.6	69.1														
85	0.71	1.37	3.86	7.30	9.05														
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: