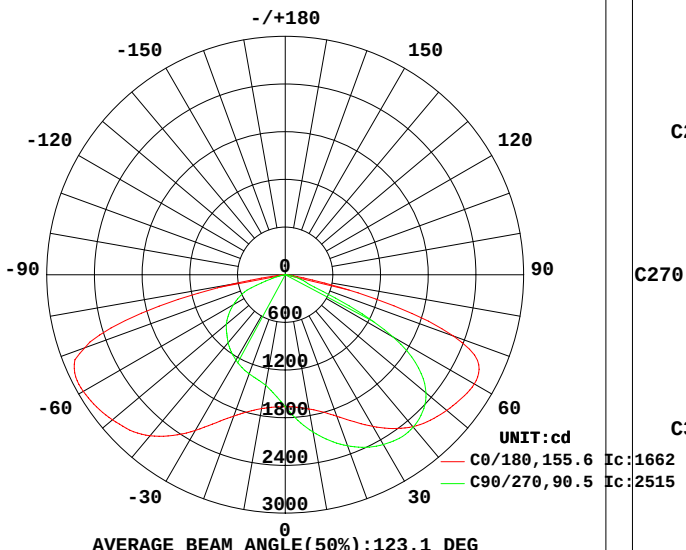
STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:27.18V I:1.610A P:43.76W PF:1.000 Freq:0Hz Lamp Flux:8772.56x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-43WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

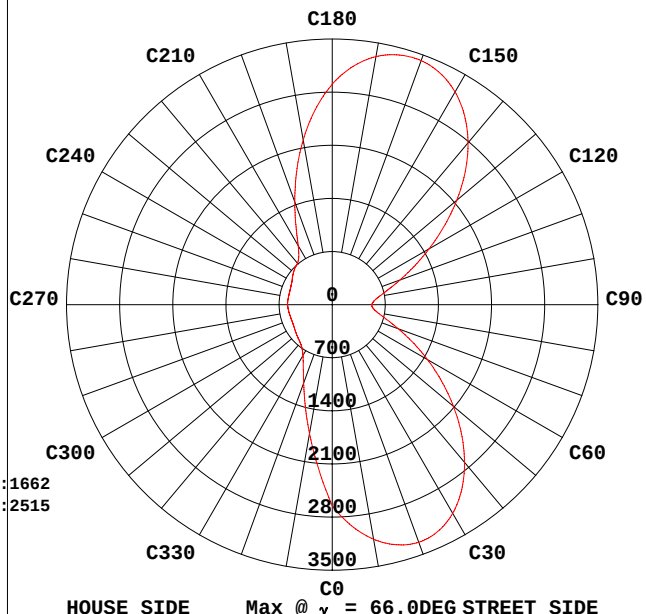
DATA OF LAMP		PHOTOMETRIC DATA Eff: 200.45 lm/W			
MODEL	5050	Imax(cd)	3406	η street_up(%)	0.0
NOMINAL POWER(W)	43	LOR(%)	100.0	η street_down(%)	66.2
RATED VOLTAGE(V)		TOTAL FLUX(lm)	8773	η house_up(%)	0.0
NOMINAL FLUX(lm)	8772.56	MAXIMUM @(C,γ)	165,66.0	η house_down(%)	33.8
LAMPS INSIDE	1	η up(%)	0.0	76 FLASHAREA(m2)	0.00100
TEST VOLTAGE(V)		η down(%)	100.0	SLI	19.397

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:27.18V I:1.610A P:43.76W PF:1.000 Freq:0Hz Lamp Flux:8772.56x1 lm		
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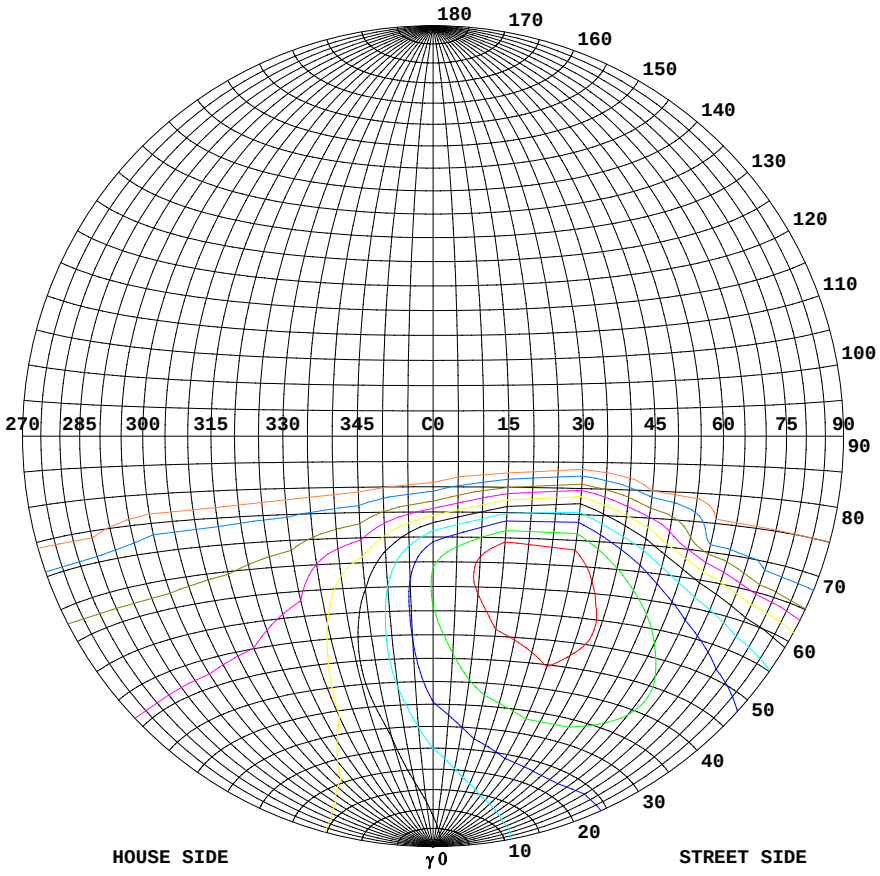
SPEC.:AoK-43WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:



Classification:

IES:Type III - Short
CIE:Average - Intermediate
IES:Semi cut-off
CIE:Non-cut-off
Max.At80:162.2cd/klm
Max.At90:0cd/klm
Max.80-90:162.2cd/klm
NRB 5101:Semi limited[27.0%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	3406
90%	3065
80%	2725
70%	2384
60%	2044
50%	1703
40%	1362
30%	1022
20%	681
10%	341
5%	170

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γ Interval: 1.0DEG
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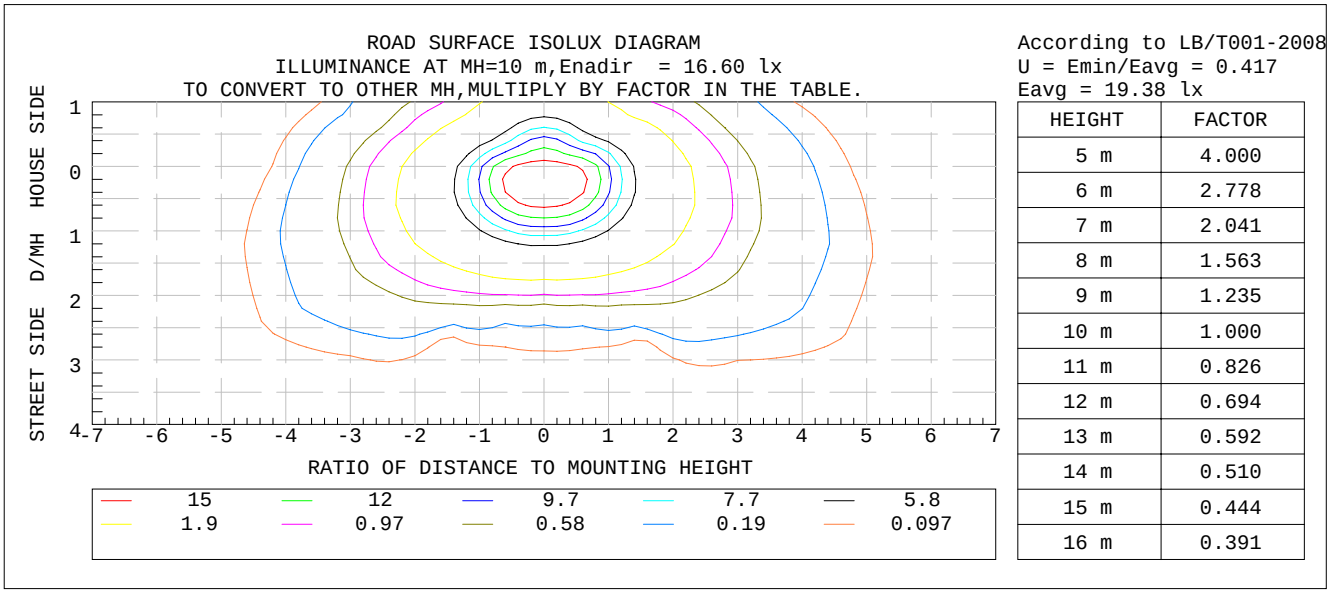
Remarks:

COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM





According to LB/T001-2008:
U = Emin/Eavg = 0.417
Eavg = 19.38 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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C Interval: 15.0DEG
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Remarks:

ZONAL FLUX DIAGRAM

Test:U:27.18V I:1.610A P:43.76W PF:1.000 Freq:0Hz Lamp Flux:8772.56x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-43WSAF-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	1716	1952	2008	1939	1711	1487	1414	1483	0- 10	161.2	161.2	1.84,1.84
20	1895	2286	2290	2269	1892	1382	1327	1373	10- 20	504.3	665.5	7.59,7.59
30	2203	2630	2467	2636	2262	1308	1241	1297	20- 30	888.5	1554	17.7,17.7
40	2496	2890	2503	2933	2644	1207	1118	1186	30- 40	1290	2844	32.4,32.4
50	2654	2983	2312	3013	2839	1061	967.9	1027	40- 50	1629	4473	51,51
60	2747	2801	1569	2858	2935	864.7	752.4	816.3	50- 60	1799	6272	71.5,71.5
70	2246	1901	282.3	1990	2684	551.7	389.4	483.6	60- 70	1598	7870	89.7,89.7
80	237.8	166.3	70.73	273.0	648.7	108.4	41.14	68.34	70- 80	819.5	8690	99.1,99.1
90	0	0	0	0	0	0	0	0	80- 90	82.75	8773	100,100
100	0	0	0	0	0	0	0	0	90-100	0	8773	100,100
110	0	0	0	0	0	0	0	0	100-110	0	8773	100,100
120	0	0	0	0	0	0	0	0	110-120	0	8773	100,100
130	0	0	0	0	0	0	0	0	120-130	0	8773	100,100
140	0	0	0	0	0	0	0	0	130-140	0	8773	100,100
150	0	0	0	0	0	0	0	0	140-150	0	8773	100,100
160	0	0	0	0	0	0	0	0	150-160	0	8773	100,100
170	0	0	0	0	0	0	0	0	160-170	0	8773	100,100
180	0	0	0	0	0	0	0	0	170-180	0	8773	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

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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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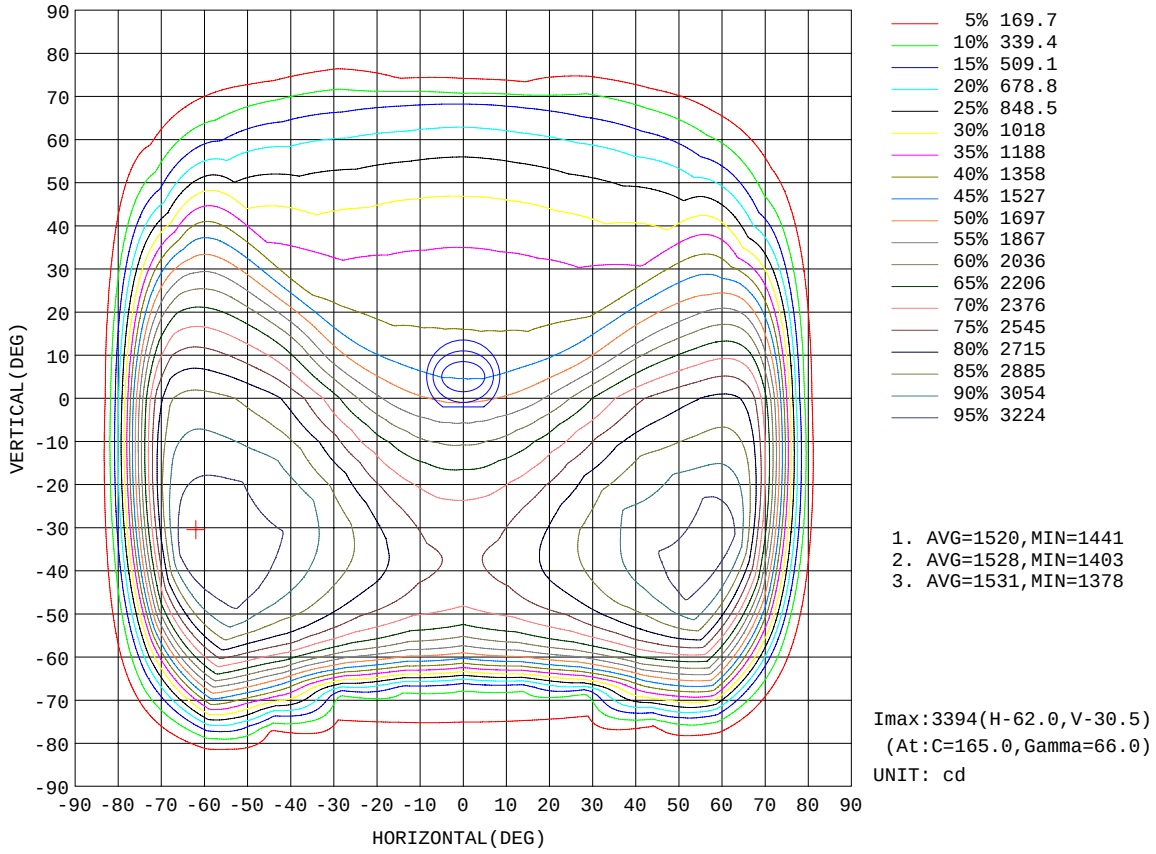

C Range: 0 - 360DEG
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Temperature:25.3DEG
Operators:yanyonggeng
Test Date:2025-8-8

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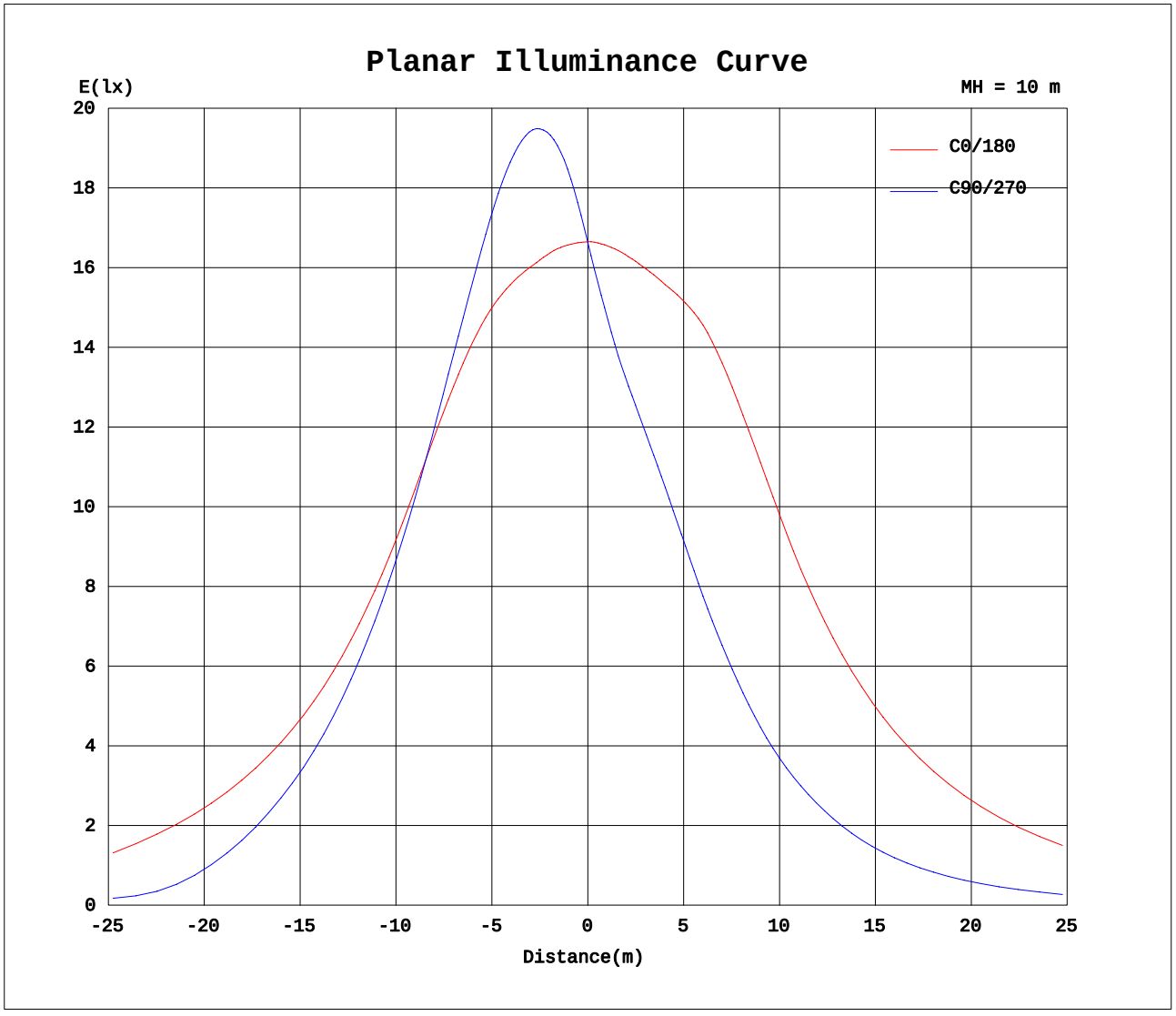
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.363T
Humidity:65.0%
Test Distance:7.682m [K=1.0000]
Remarks:

Planar Illuminance Curve



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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:

LCS REPORT

Test:U:27.18V I:1.610A P:43.76W PF:1.000 Freq:0Hz Lamp Flux:8772.56x1 lm		
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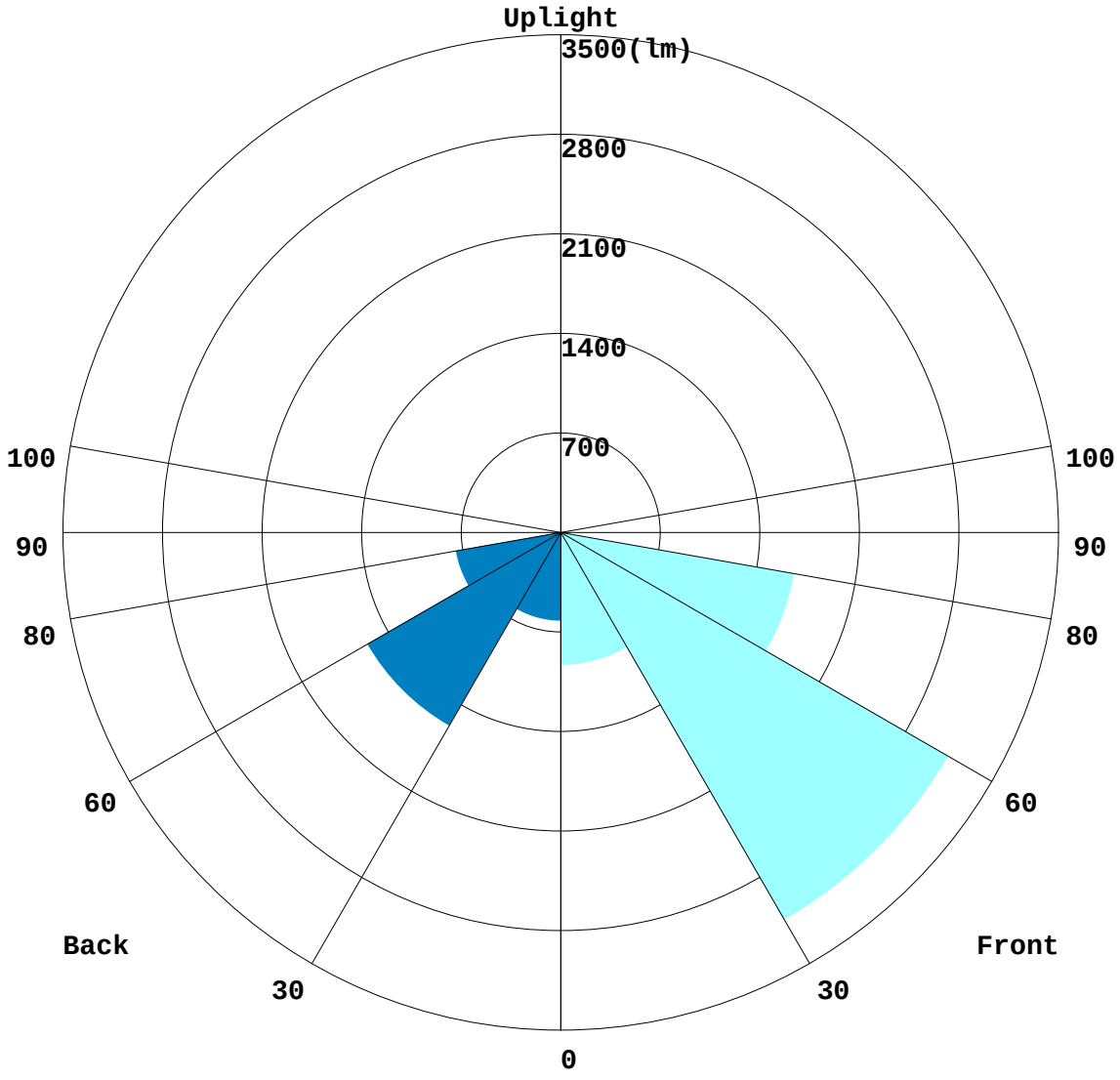
SPEC.:AoK-43WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



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:

BUG REPORT

Test:U:27.18V I:1.610A P:43.76W PF:1.000 Freq:0Hz Lamp Flux:8772.56x1 lm		
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-43WSAF-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)	932.47	10.6
FM - Front-Medium(30-60)	3147.6	35.9
FH - Front-High(60-80)	1667.6	19.0
FVH - Front-Very High(80-90)	63.594	0.7
Total Forward Light	5811.2	66.2
BL - Back-Low(0-30)	621.51	7.1
BM - Back-Medium(30-60)	1570.8	17.9
BH - Back-High(60-80)	749.81	8.5
BVH - Back-Very High(80-90)	19.158	0.2
Total Back Light	2961.3	33.8
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	B2-U0-G2

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	2961.3	0	2961.3
Street Side	5811.2	0	5811.2

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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:

ROAD ISOCANDELA REPORT

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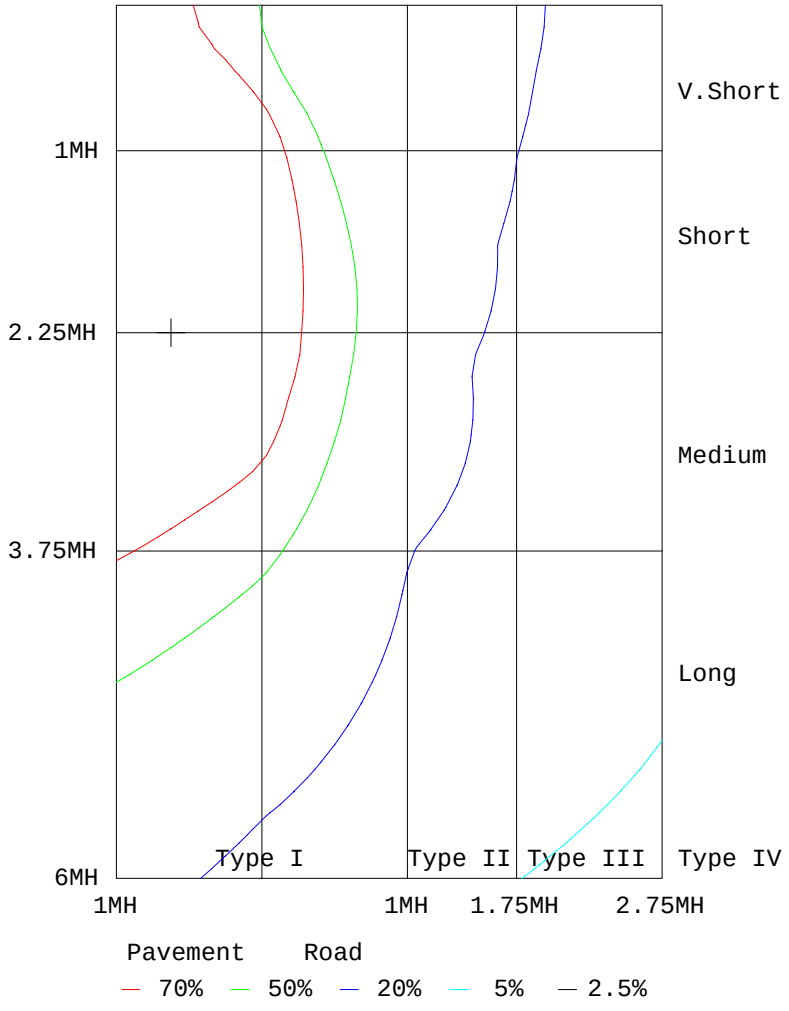
NAME: AoK SAF	TYPE:LED STREET LIGHT	WEIGHT:4.2KG
SPEC.:AoK-43WSAF-DC-A5-00-4070-T312-P	DIM.: 560*240*200mm	SERIAL No.:
MFR.:	SUR.:180*180mm	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



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:

LUMINOUS DISTRIBUTION INTENSITY DATA

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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	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661	1661
5	1674	1719	1762	1798	1824	1836	1840	1835	1820	1793	1760	1717	1672	1629	1589	1557	1534	1521	1515
10	1716	1811	1894	1952	1989	2004	2008	2001	1979	1939	1884	1804	1711	1622	1543	1487	1443	1423	1414
15	1785	1936	2048	2115	2149	2159	2159	2153	2135	2098	2034	1927	1781	1638	1514	1425	1383	1371	1363
20	1895	2098	2224	2286	2305	2300	2290	2291	2289	2269	2213	2091	1892	1672	1477	1382	1345	1334	1327
25	2039	2287	2412	2462	2449	2416	2396	2408	2435	2453	2419	2299	2053	1722	1438	1345	1308	1296	1289
30	2203	2472	2601	2630	2570	2505	2467	2493	2566	2636	2637	2528	2262	1796	1413	1308	1263	1249	1241
35	2362	2643	2778	2774	2667	2562	2510	2555	2673	2800	2832	2736	2470	1920	1391	1256	1210	1193	1185
40	2496	2810	2940	2890	2729	2580	2503	2576	2746	2933	3018	2927	2644	2062	1365	1207	1147	1128	1118
45	2586	2930	3062	2961	2736	2543	2443	2534	2750	2998	3151	3066	2765	2140	1323	1140	1072	1054	1042
50	2654	3030	3150	2983	2664	2437	2312	2426	2675	3013	3223	3165	2839	2156	1267	1061	987	972	968
55	2709	3137	3214	2948	2509	2217	2049	2202	2525	2980	3275	3256	2899	2134	1195	970	889	870	868
60	2747	3249	3256	2801	2221	1794	1569	1783	2236	2858	3305	3345	2935	2060	1085	865	778	751	752
65	2687	3291	3213	2502	1620	955	699	967	1640	2571	3256	3402	2922	1874	936	726	643	616	618
70	2246	2959	2877	1901	583	289	282	300	618	1990	3014	3298	2684	1465	716	552	484	447	389
75	1183	2002	2112	1053	183	175	171	185	200	1164	2423	2586	1872	769	429	338	301	157	150
80	238	667	915	166	91.1	75.4	70.7	82.2	107	273	1423	1271	649	236	170	108	94.6	47.0	41.1
85	23.0	42.7	82.5	31.0	18.5	14.6	12.1	16.3	27.9	51.1	234	175	61.3	37.9	32.2	18.5	7.24	2.32	1.74
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	1661	1661	1661	1661	1661														
5	1520	1532	1555	1588	1629														
10	1421	1440	1483	1541	1621														
15	1368	1379	1418	1507	1635														
20	1331	1340	1373	1459	1659														
25	1293	1302	1334	1416	1690														
30	1246	1257	1297	1385	1729														
35	1189	1203	1249	1353	1787														
40	1123	1138	1186	1313	1841														
45	1048	1062	1112	1257	1867														
50	966	972	1027	1185	1852														
55	863	868	931	1095	1800														
60	743	750	816	975	1694														
65	605	613	667	813	1455														
70	406	451	484	580	979														
75	142	251	270	312	460														
80	38.8	51.6	68.3	84.0	127														
85	1.28	2.53	6.80	12.9	16.0														
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: