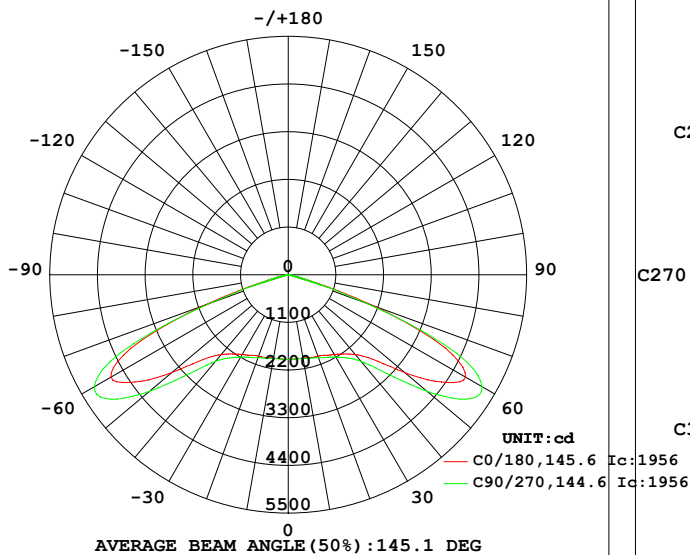
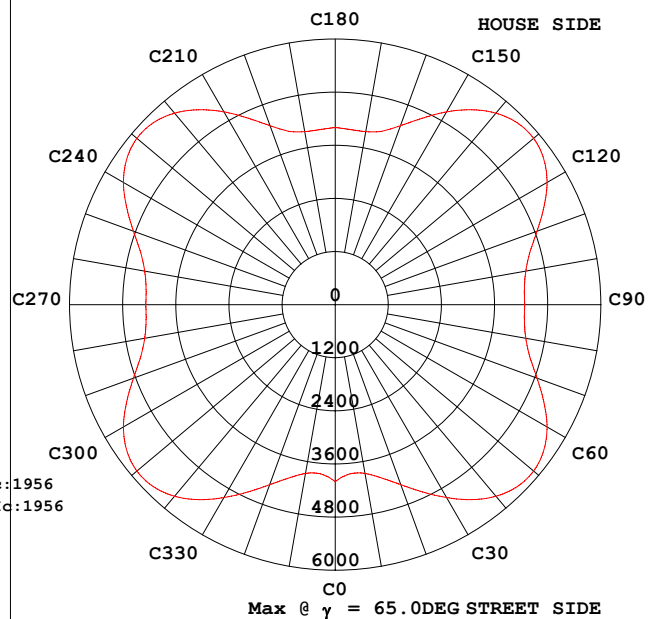


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 125.39 lm/W			
MODEL	3030	I _{max} (cd)	5812	η street_up (%)	0.0
NOMINAL POWER (W)	120	LOR (%)	100.0	η street_down (%)	54.1
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	14871	η house_up (%)	0.0
NOMINAL FLUX (lm)	14871	MAXIMUM @ (C, γ)	315,65.0	η house_down (%)	45.9
LAMPS INSIDE	1	η up (%)	0.0	76 FLASHAREA (m2)	0.00100
TEST VOLTAGE (V)	220	η down (%)	100.0	SLI	18.132

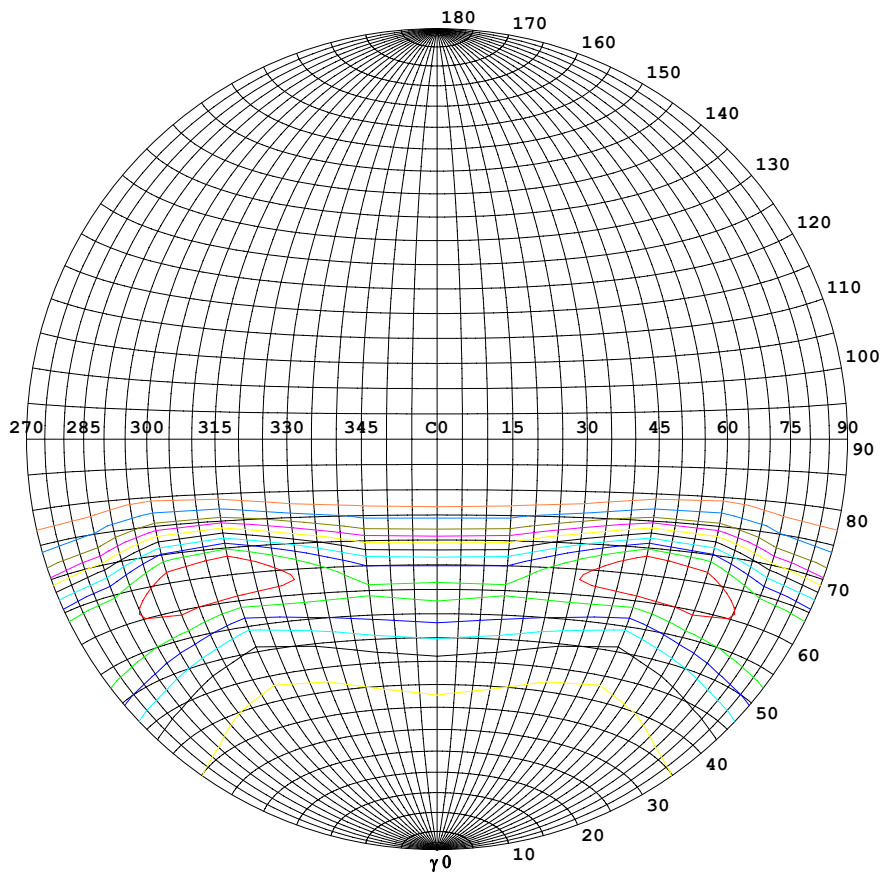
INTENSITY DISTRIBUTION DIAGRAM
IN C PLANSMAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.684m [K=1.0000]
 Remarks:

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:1487lx1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:



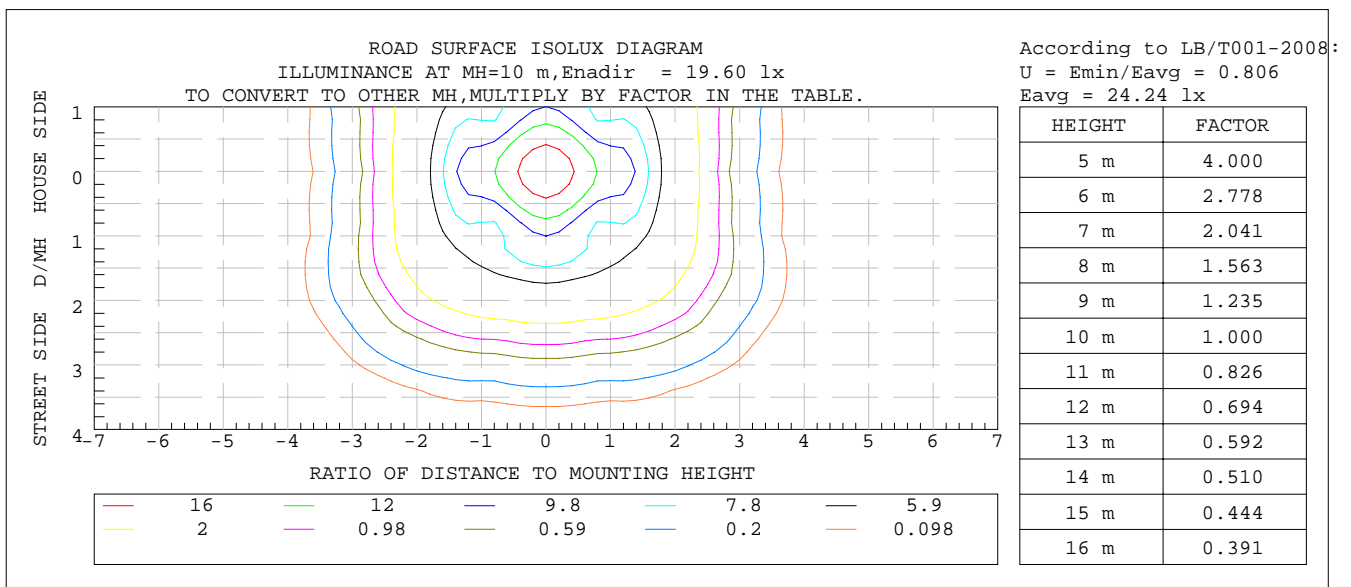
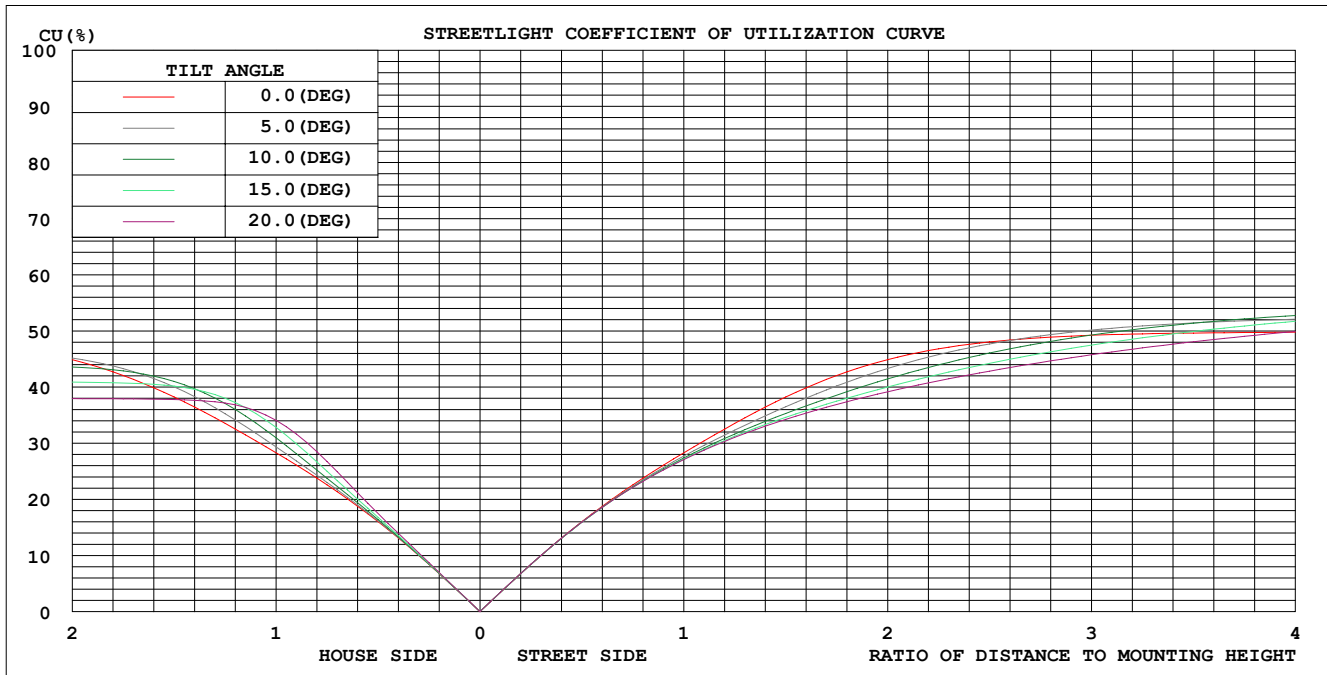
Classification:

IES:Type V - Short
 CIE:Narrow - Intermediate
 IES:Full cut-off
 CIE:Full cut-off
 Max.At80:15.90cd/klm
 Max.At90:0cd/klm
 Max.80-90:15.90cd/klm
 NRB 5101:Limited[4.3%]

ISOCANDELA DIAGRAM	
UNIT	cd
Imax=100%	5812
90%	5231
80%	4650
70%	4068
60%	3487
50%	2906
40%	2325
30%	1744
20%	1162
10%	581
5%	291

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.684m [K=1.0000]
 Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.684m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.:Φ0.409-Φ0.297M	Shielding Angle:

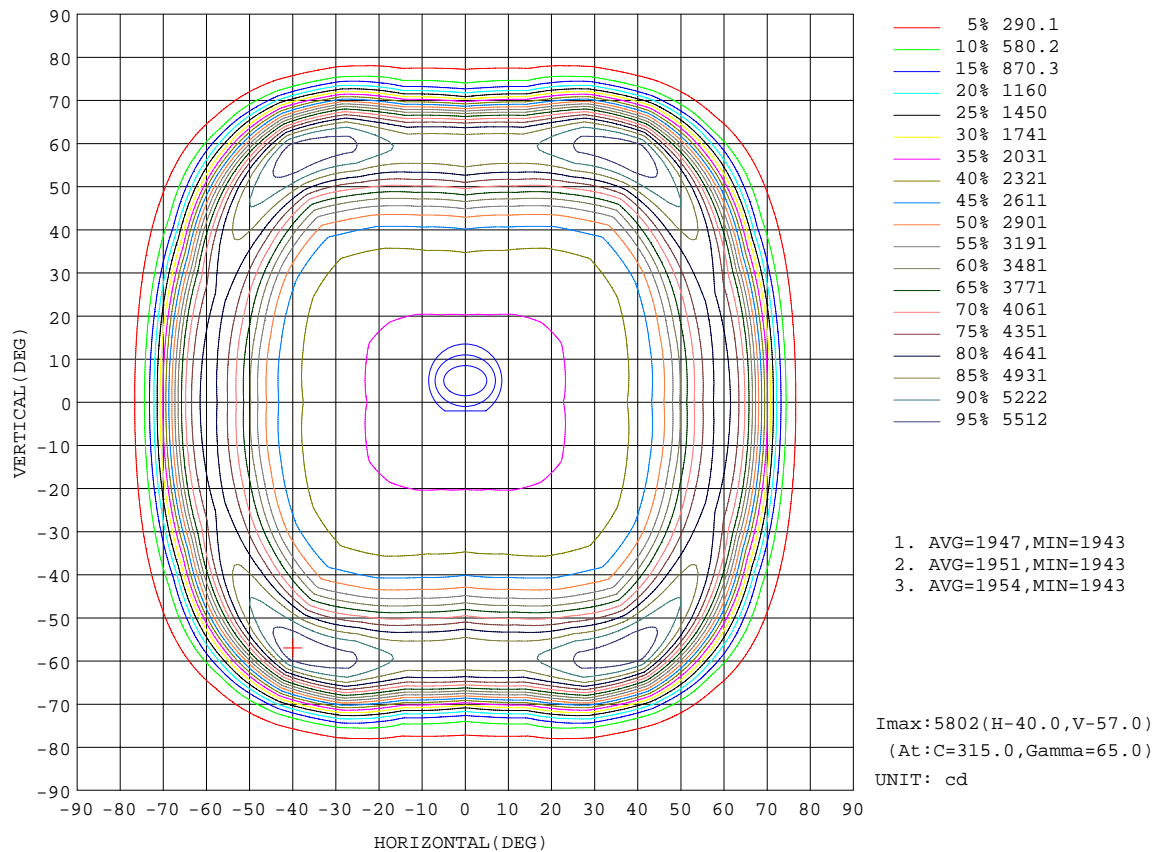
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
10	1954	1956	1961	1956	1954	1956	1961	1956	0- 10	186.3	186.3	1.25,1.25
20	2001	1993	2035	1993	2001	1993	2035	1993	10- 20	561.9	748.2	5.03,5.03
30	2126	2091	2195	2091	2126	2091	2195	2091	20- 30	952.8	1701	11.4,11.4
40	2405	2229	2609	2229	2405	2229	2609	2229	30- 40	1397	3098	20.8,20.8
50	3510	2790	4177	2790	3510	2790	4177	2790	40- 50	2138	5236	35.2,35.2
60	4722	5002	5164	5002	4722	5002	5164	5002	50- 60	3824	9060	60.9,60.9
70	2063	4562	1873	4562	2063	4562	1873	4562	60- 70	4524	13584	91.3,91.3
80	132.3	182.1	177.9	182.1	132.3	182.1	177.9	182.1	70- 80	1225	14809	99.6,99.6
90	0	0	0	0	0	0	0	0	80- 90	62.12	14871	100,100
100	0	0	0	0	0	0	0	0	90-100	0	14871	100,100
110	0	0	0	0	0	0	0	0	100-110	0	14871	100,100
120	0	0	0	0	0	0	0	0	110-120	0	14871	100,100
130	0	0	0	0	0	0	0	0	120-130	0	14871	100,100
140	0	0	0	0	0	0	0	0	130-140	0	14871	100,100
150	0	0	0	0	0	0	0	0	140-150	0	14871	100,100
160	0	0	0	0	0	0	0	0	150-160	0	14871	100,100
170	0	0	0	0	0	0	0	0	160-170	0	14871	100,100
180	0	0	0	0	0	0	0	0	170-180	0	14871	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-09-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.684m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

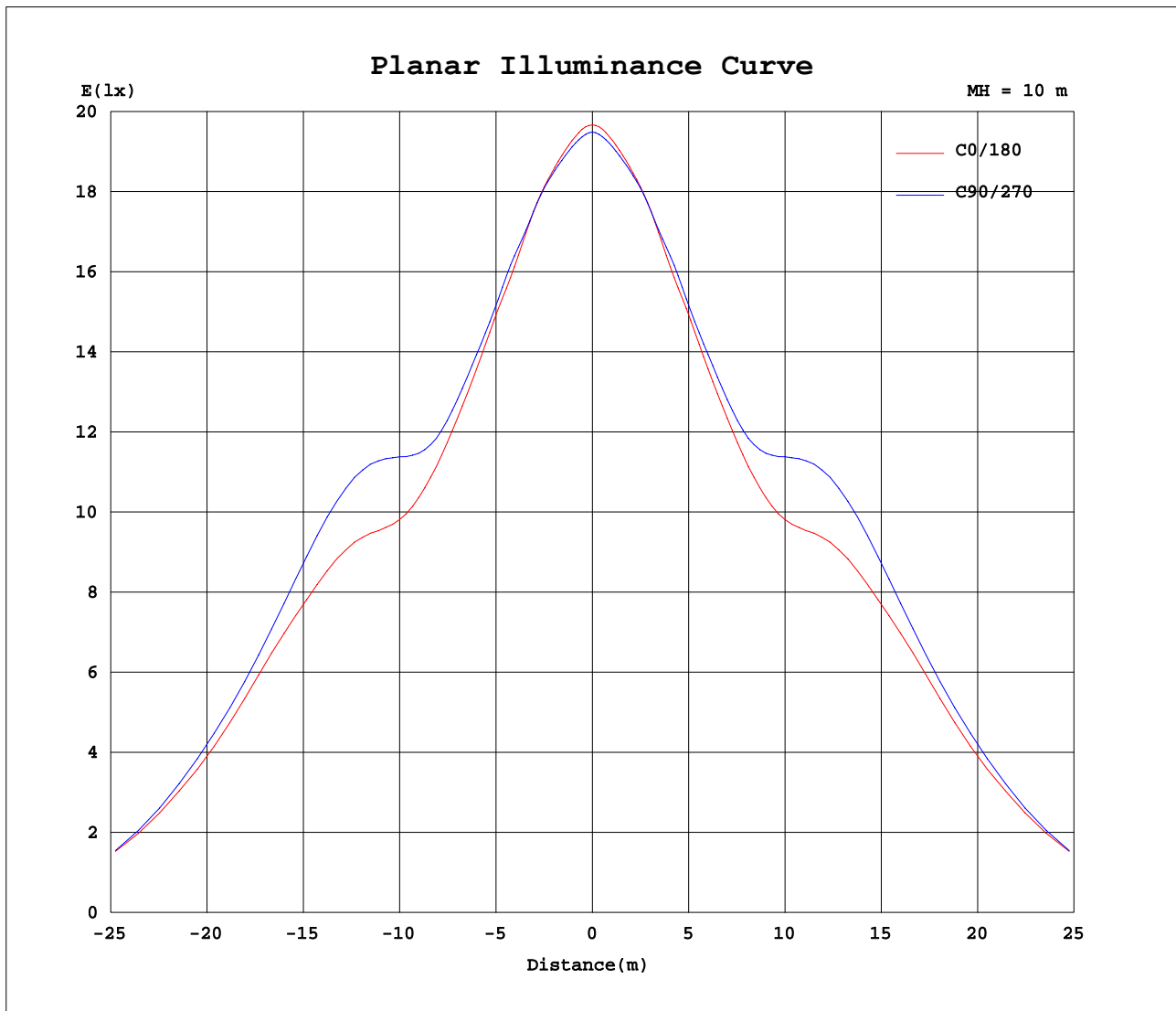
Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.684m [K=1.0000]
Remarks:

Planar Illuminance Curve



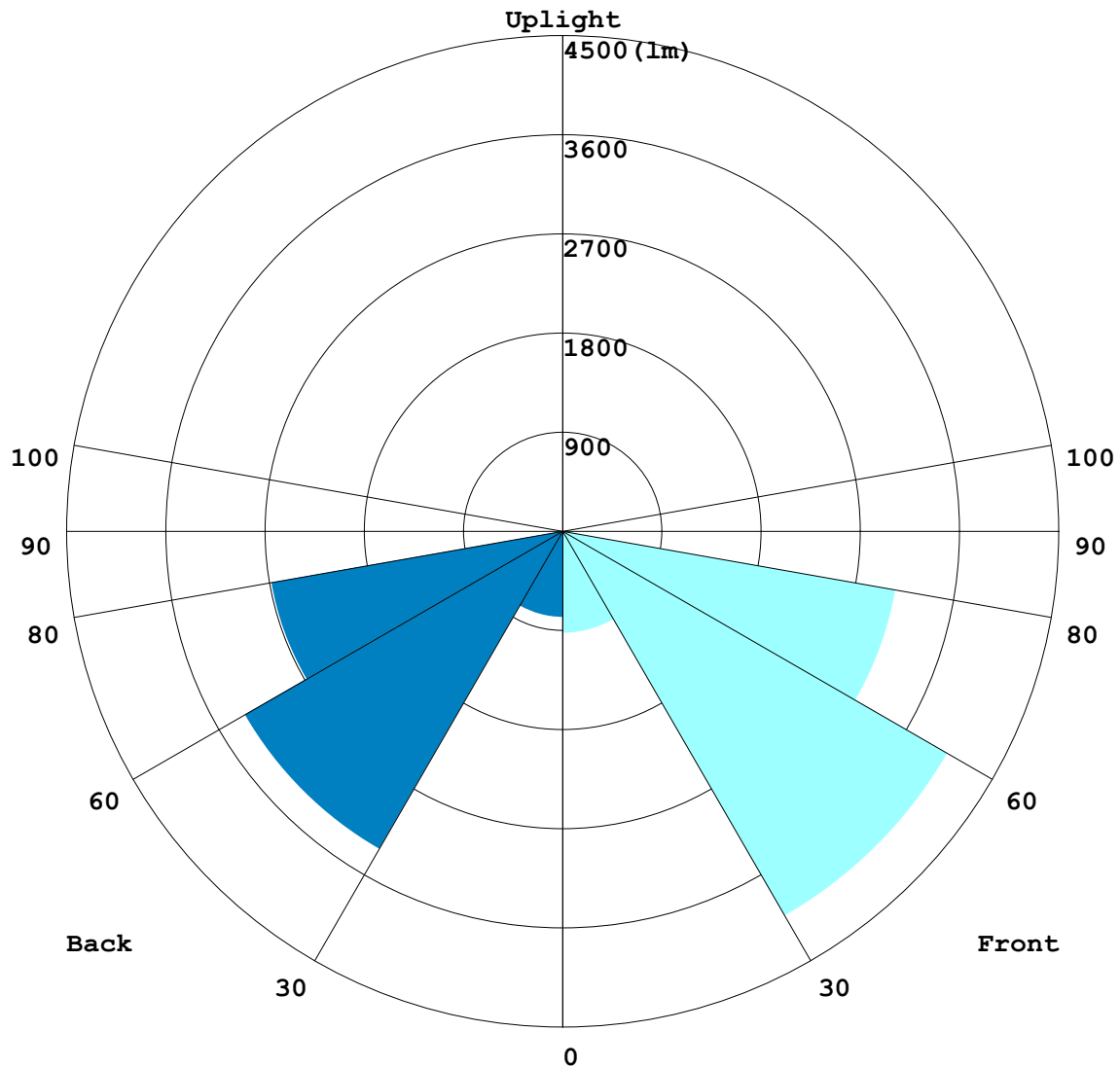
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 7.684m [K=1.0000]
Remarks:

LCS REPORT

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.684m [K=1.0000]
Remarks:

BUG REPORT

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	922.35	6.2
FM - Front-Medium(30-60)	4030.1	27.1
FH - Front-High(60-80)	3066.2	20.6
FVH - Front-Very High(80-90)	33.683	0.2
Total Forward Light	8052.3	54.1

BL - Back-Low(0-30)	778.62	5.2
BM - Back-Medium(30-60)	3328.7	22.4
BH - Back-High(60-80)	2683	18.0
BVH - Back-Very High(80-90)	28.438	0.2
Total Back Light	6818.7	45.9

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	B4-U0-G2
---------------------------	----------

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	6818.7	0	6818.7
Street Side	8052.3	0	8052.3

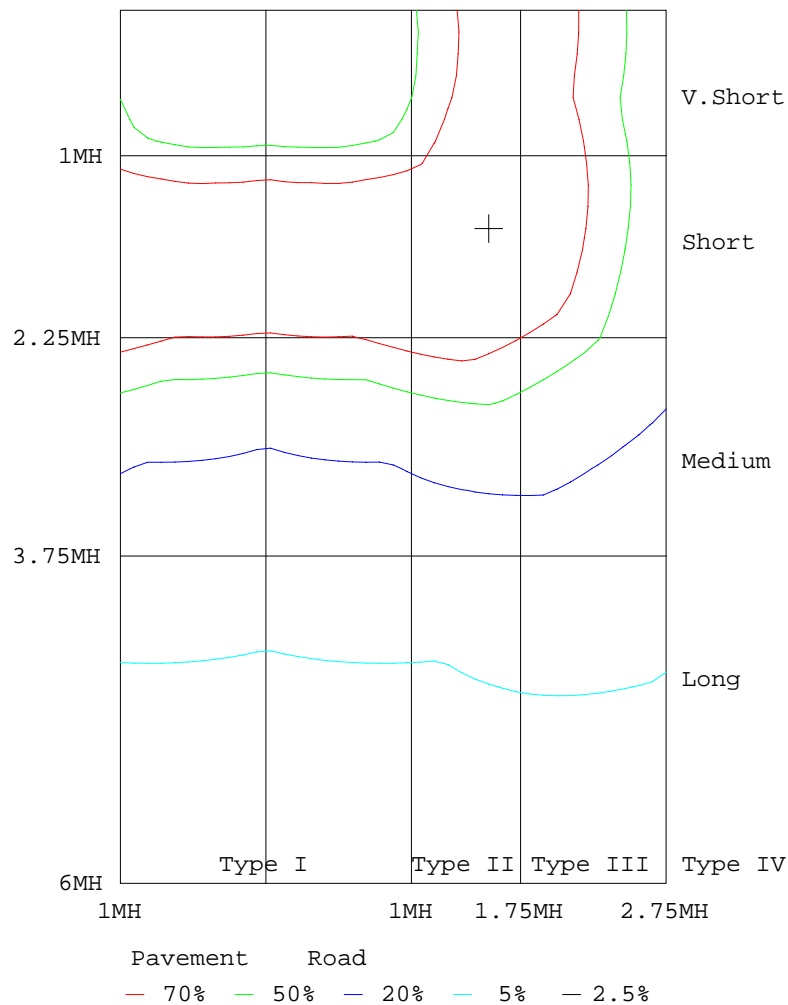
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.684m [K=1.0000]
Remarks:

ROAD ISOCANDELA REPORT

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.684m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956
5	1950	1950	1950	1949	1950	1950	1951	1950	1950	1949	1950	1950	1950	1950	1950	1949	1950	1950	1951
10	1954	1954	1955	1956	1956	1958	1961	1958	1956	1956	1955	1954	1954	1954	1955	1956	1956	1958	1961
15	1980	1974	1970	1975	1981	1990	1996	1990	1981	1975	1970	1974	1980	1974	1970	1975	1981	1990	1996
20	2001	1995	1988	1993	2004	2025	2035	2025	2004	1993	1988	1995	2001	1995	1988	1993	2004	2025	2035
25	2050	2037	2017	2027	2058	2095	2105	2095	2058	2027	2017	2037	2050	2037	2017	2027	2058	2095	2105
30	2126	2104	2075	2091	2113	2171	2195	2171	2113	2091	2075	2104	2126	2104	2075	2091	2113	2171	2195
35	2234	2201	2145	2128	2199	2292	2339	2292	2199	2128	2145	2201	2234	2201	2145	2128	2199	2292	2339
40	2405	2344	2257	2229	2336	2502	2609	2502	2336	2229	2257	2344	2405	2344	2257	2229	2336	2502	2609
45	2761	2643	2461	2409	2630	2991	3231	2991	2630	2409	2461	2643	2761	2643	2461	2409	2630	2991	3231
50	3510	3337	2982	2790	3296	3855	4177	3855	3296	2790	2982	3337	3510	3337	2982	2790	3296	3855	4177
55	4318	4200	3994	3646	4376	4777	5006	4777	4376	3646	3994	4200	4318	4200	3994	3646	4376	4777	5006
60	4722	4674	4913	5002	5364	5170	5164	5170	5364	5002	4913	4674	4722	4674	4913	5002	5364	5170	5164
65	4002	4055	5031	5812	5525	4547	4281	4547	5525	5812	5031	4055	4002	4055	5031	5812	5525	4547	4281
70	2063	2160	3356	4562	4141	2475	1873	2475	4141	4562	3356	2160	2063	2160	3356	4562	4141	2475	1873
75	465	492	895	1522	1362	596	459	596	1362	1522	895	492	465	492	895	1522	1362	596	459
80	132	129	135	182	236	194	178	194	236	182	135	129	132	129	135	182	236	194	178
85	41.8	41.9	34.3	33.0	50.9	49.6	40.3	49.6	50.9	33.0	34.3	41.9	41.8	41.9	34.3	33.0	50.9	49.6	40.3
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

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.684m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.1V I:0.6095A P:118.6W PF:0.9562 Freq:49.99Hz Lamp Flux:14871x1 lm		
NAME: AOK iP	TYPE:LED	WEIGHT:
SPEC.:AOK-120WiP-NV-L3-00-5070-T501-P	DIM.: 0.46*0.08M	SERIAL No.:
MFR.: AOK	SUR.: ϕ 0.409- ϕ 0.297M	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345														
0	1956	1956	1956	1956	1956														
5	1950	1950	1949	1950	1950														
10	1958	1956	1956	1955	1954														
15	1990	1981	1975	1970	1974														
20	2025	2004	1993	1988	1995														
25	2095	2058	2027	2017	2037														
30	2171	2113	2091	2075	2104														
35	2292	2199	2128	2145	2201														
40	2502	2336	2229	2257	2344														
45	2991	2630	2409	2461	2643														
50	3855	3296	2790	2982	3337														
55	4777	4376	3646	3994	4200														
60	5170	5364	5002	4913	4674														
65	4547	5525	5812	5031	4055														
70	2475	4141	4562	3356	2160														
75	596	1362	1522	895	492														
80	194	236	182	135	129														
85	49.6	50.9	33.0	34.3	41.9														
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:
 Test Date:2018-09-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:7.684m [K=1.0000]
 Remarks: