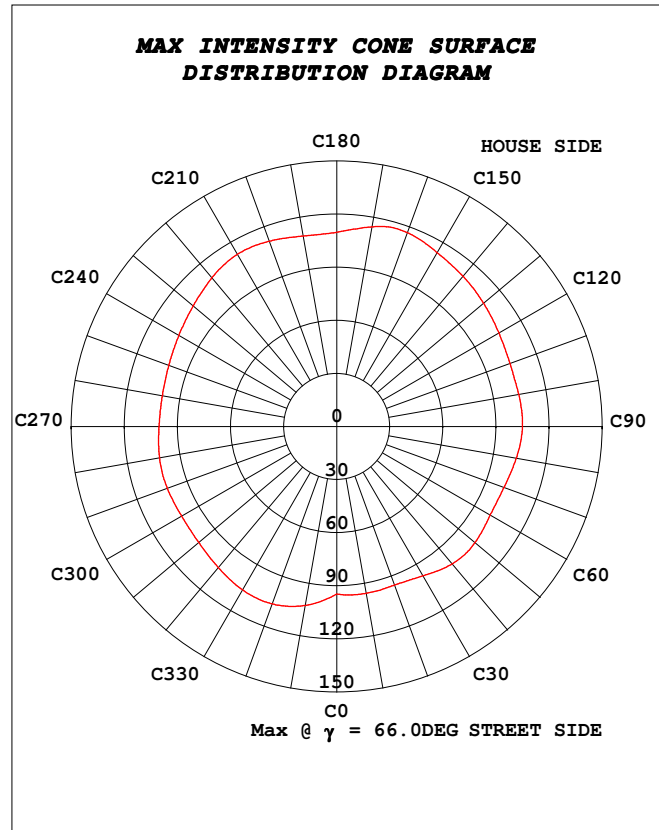
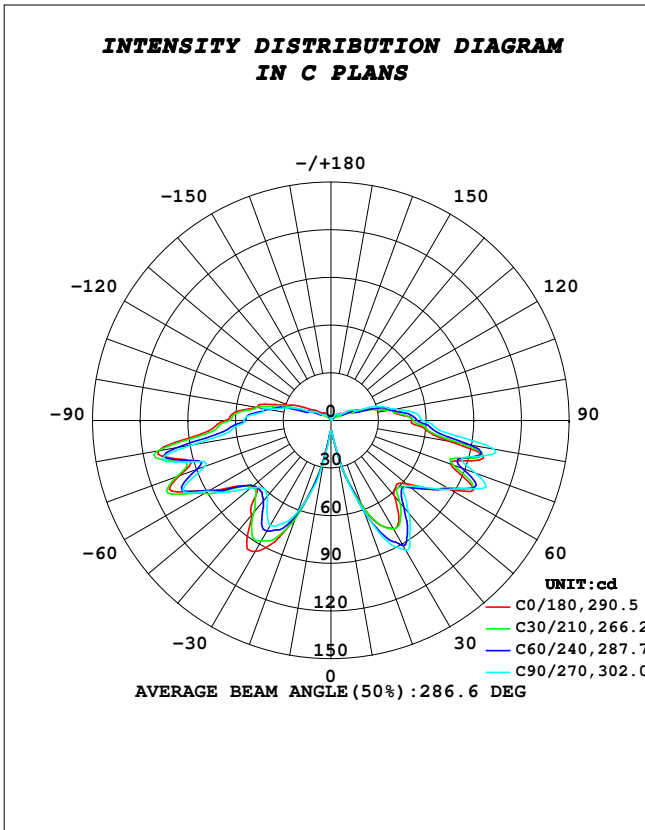


STREETLIGHT PHOTOMETRIC TEST REPORT

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	8040-12W	Imax (cd)	116.7	η street_up (%)	9.5
NOMINAL POWER (W)	12	LOR (%)	100.0	η street_down (%)	42.7
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	606.0	η house_up (%)	9.0
NOMINAL FLUX (lm)	605.965	MAXIMUM @ (C, γ)	165,66.0	η house_down (%)	38.8
LAMPS INSIDE	1	η up (%)	18.5	76 FLASHAREA (m2)	0.00100
TEST VOLTAGE (V)	230	η down (%)	81.5	SLI	16.790

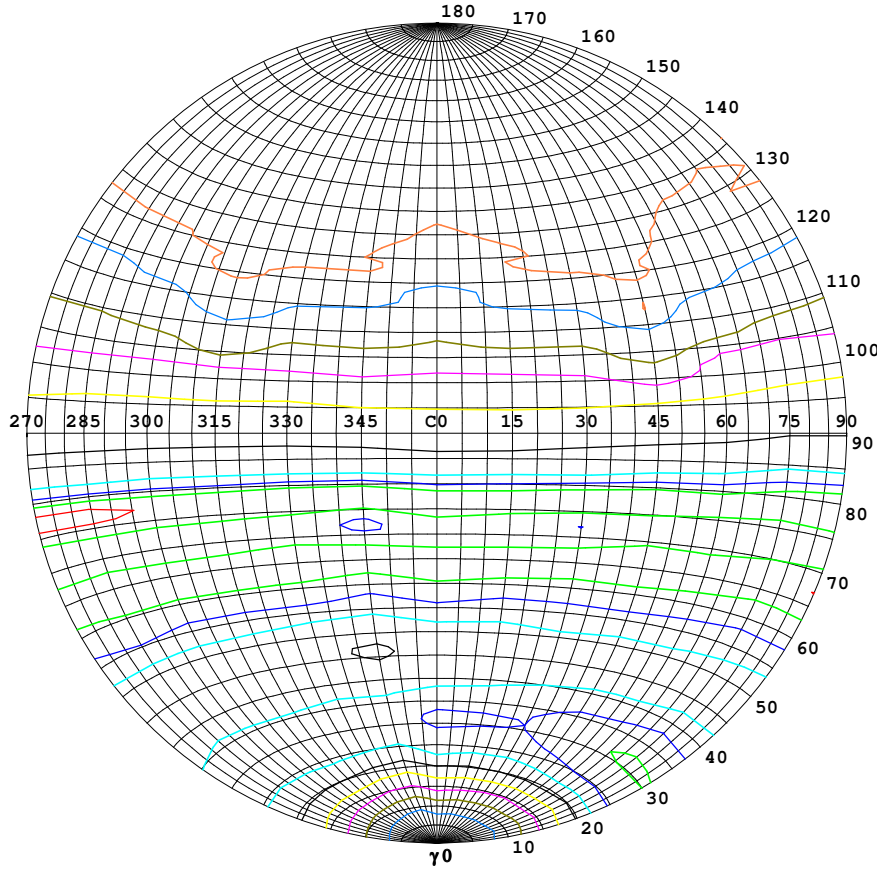


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

STREETLIGHT ISOCANDELA DIAGRAM

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



Classification:

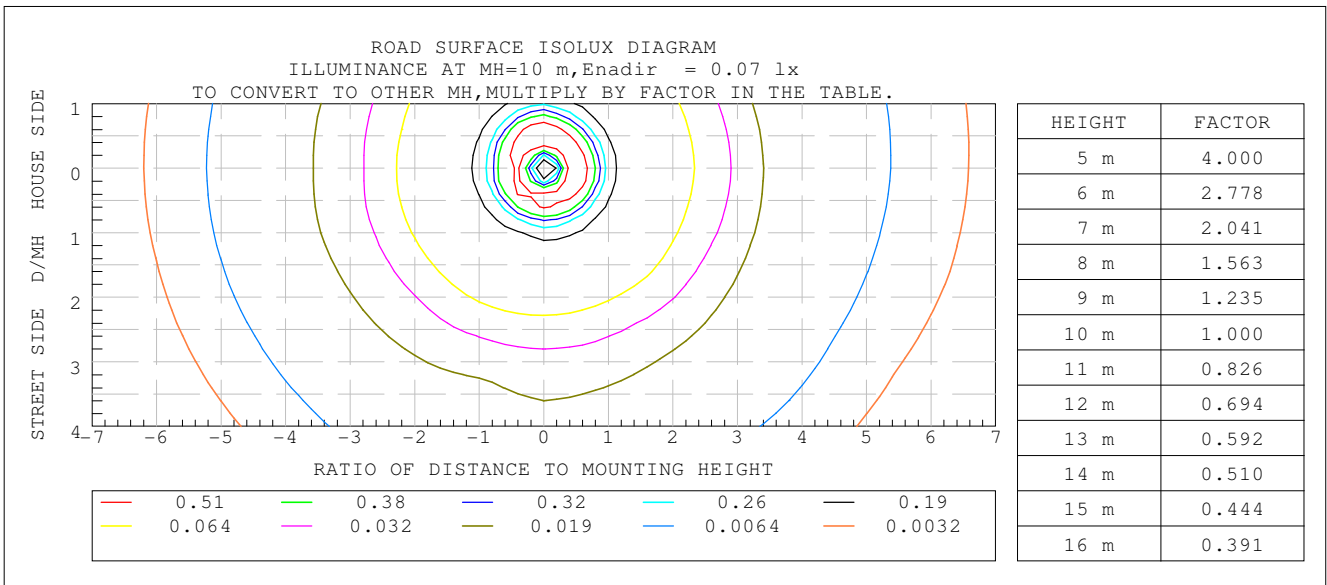
IES:Type V - Short
 CIE:Broad - Intermediate
 IES:None cut-off
 CIE:Non-cut-off
 Max.At80:184.6cd/klm
 Max.At90:109.6cd/klm
 Max.80-90:184.6cd/klm

ISOCANDELA DIAGRAM	
UNIT	cd
I _{max} =100%	117
90%	105
80%	93
70%	82
60%	70
50%	58
40%	47
30%	35
20%	23
10%	12
5%	6

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LITPA
Test Date:06 July 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

ZONAL FLUX DIAGRAM

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

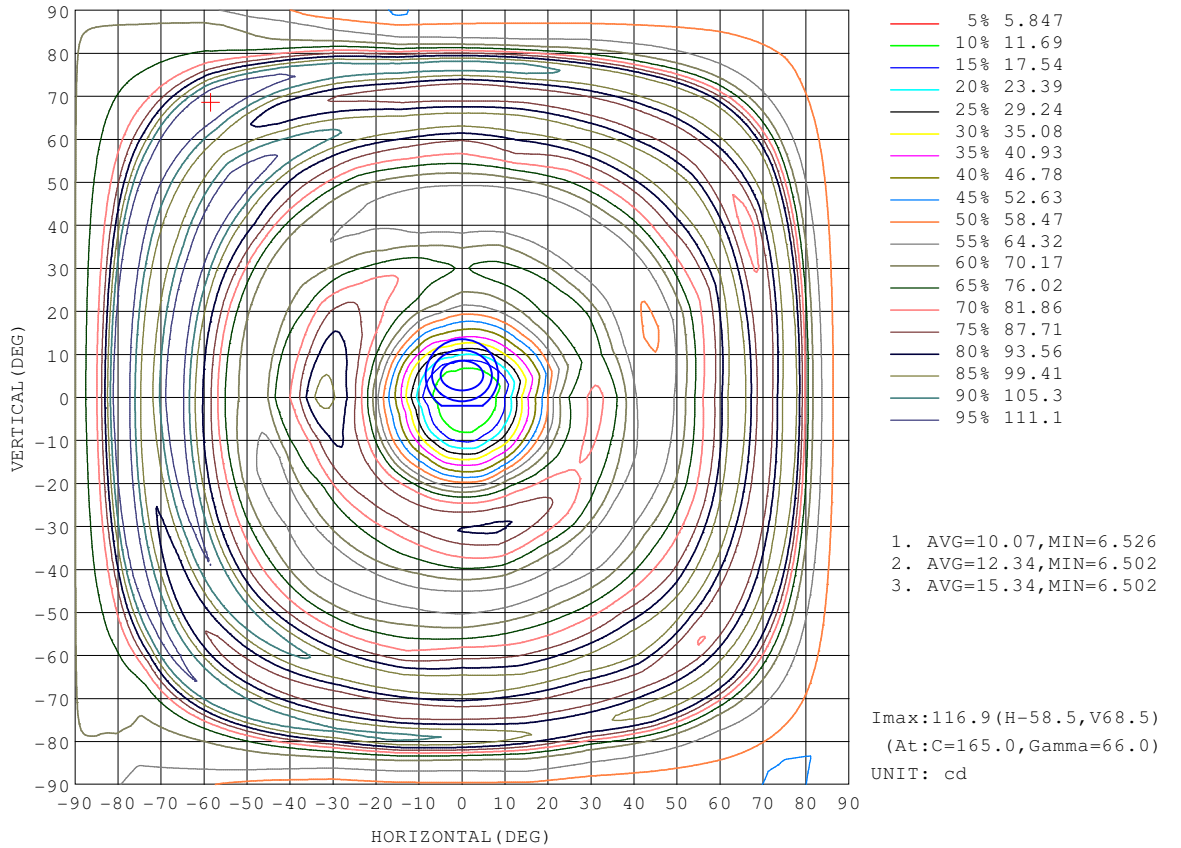
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	ϕ lum, lamp
10	17.04	16.11	16.53	21.25	19.84	22.74	24.16	18.23	0- 10	1.136	1.136	0.19,0.19
20	55.89	58.41	59.94	63.83	63.32	65.13	61.30	59.95	10- 20	12.07	13.21	2.18,2.18
30	78.79	84.78	94.19	92.78	95.11	82.68	76.27	81.19	20- 30	35.91	49.12	8.11,8.11
40	62.22	71.16	76.15	75.95	77.77	70.98	62.05	64.31	30- 40	50.04	99.16	16.4,16.4
50	62.26	64.55	64.34	65.48	64.45	66.21	66.31	66.58	40- 50	50.11	149.3	24.6,24.6
60	87.15	87.68	86.70	87.54	88.16	89.29	89.34	93.22	50- 60	68.66	217.9	36,36
70	80.29	88.54	96.83	97.31	101.4	94.92	84.25	87.83	60- 70	97.77	315.7	52.1,52.1
80	75.72	89.17	104.4	108.6	110.2	105.1	88.34	87.34	70- 80	101.5	417.2	68.9,68.9
90	51.02	53.35	57.63	57.70	66.40	59.22	54.70	57.68	80- 90	76.81	494.0	81.5,81.5
100	39.72	30.76	41.75	39.90	47.84	40.50	43.32	38.98	90-100	55.02	549.1	90.6,90.6
110	19.46	9.528	18.98	14.46	28.23	14.40	22.22	12.97	100-110	31.73	580.8	95.8,95.8
120	9.562	4.905	7.470	7.154	13.44	5.941	10.48	5.268	110-120	12.71	593.5	97.9,97.9
130	6.249	3.628	5.392	4.670	6.995	4.345	5.383	4.273	120-130	5.901	599.4	98.9,98.9
140	4.940	1.840	5.078	2.628	6.379	2.848	4.403	2.678	130-140	3.516	602.9	99.5,99.5
150	2.419	1.881	3.375	2.137	3.052	2.220	3.890	1.904	140-150	1.856	604.8	99.8,99.8
160	1.487	0.7245	2.040	0.6965	1.213	0.7024	2.148	0.7313	150-160	0.8752	605.7	99.9,99.9
170	1.142	0.7863	0.7933	0.6779	1.066	0.7068	0.8214	0.7916	160-170	0.2342	605.9	100,100
180	0.6856	0.6913	0.6939	0.6918	0.6898	0.6759	0.6939	0.6942	170-180	0.0755	606.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LITPA
Test Date:06 July 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

ISOCANDELA DIAGRAM

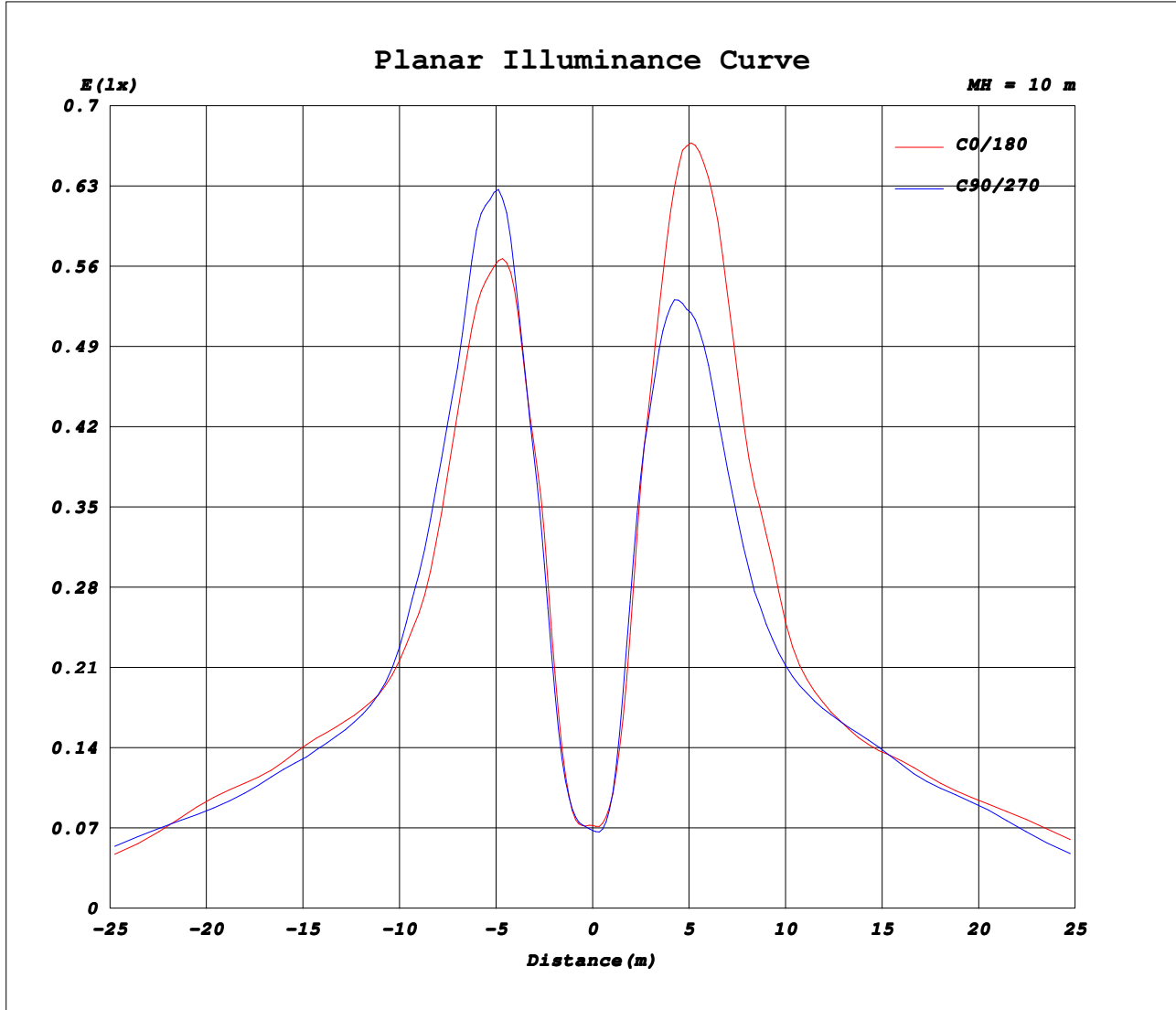
Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LITPA
Test Date:06 July 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

Planar Illuminance Curve



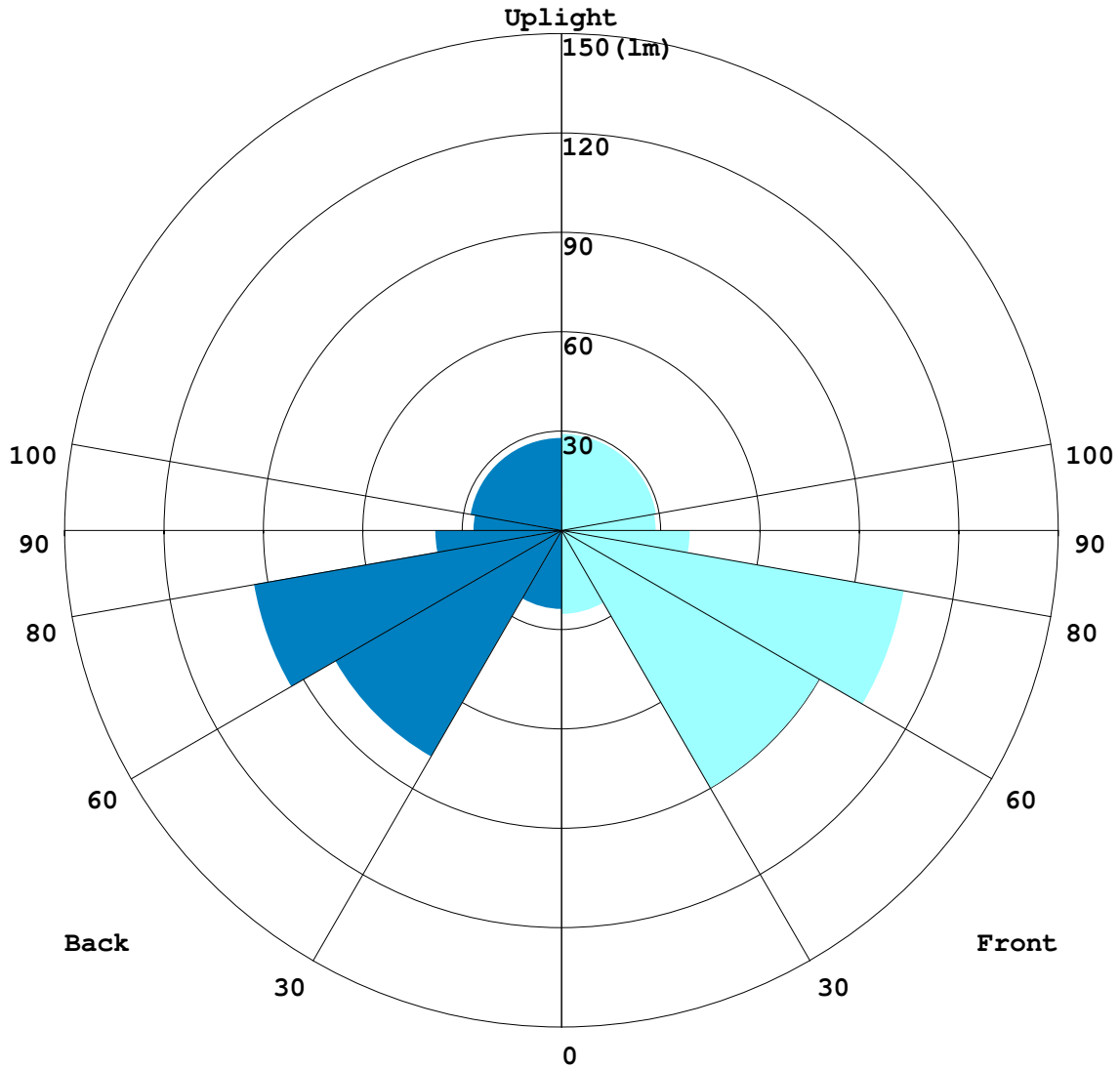
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

LCS REPORT

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

BUG REPORT

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	25.317	4.2
FM - Front-Medium(30-60)	89.913	14.8
FH - Front-High(60-80)	105.04	17.3
FVH - Front-Very High(80-90)	38.761	6.4
Total Forward Light	316.52	52.2

BL - Back-Low(0-30)	23.802	3.9
BM - Back-Medium(30-60)	78.906	13.0
BH - Back-High(60-80)	94.251	15.6
BVH - Back-Very High(80-90)	38.054	6.3
Total Back Light	289.44	47.8

UL - Uplight-Low(90-100)	55.017	9.1
UH - Uplight-High(100-180)	56.903	9.4
Total Up Light	111.92	18.5

BUG (Back, Up, Glare) Rating	B0-U3-G1
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Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	235.01	54.429	289.44
Street Side	259.03	57.491	316.52

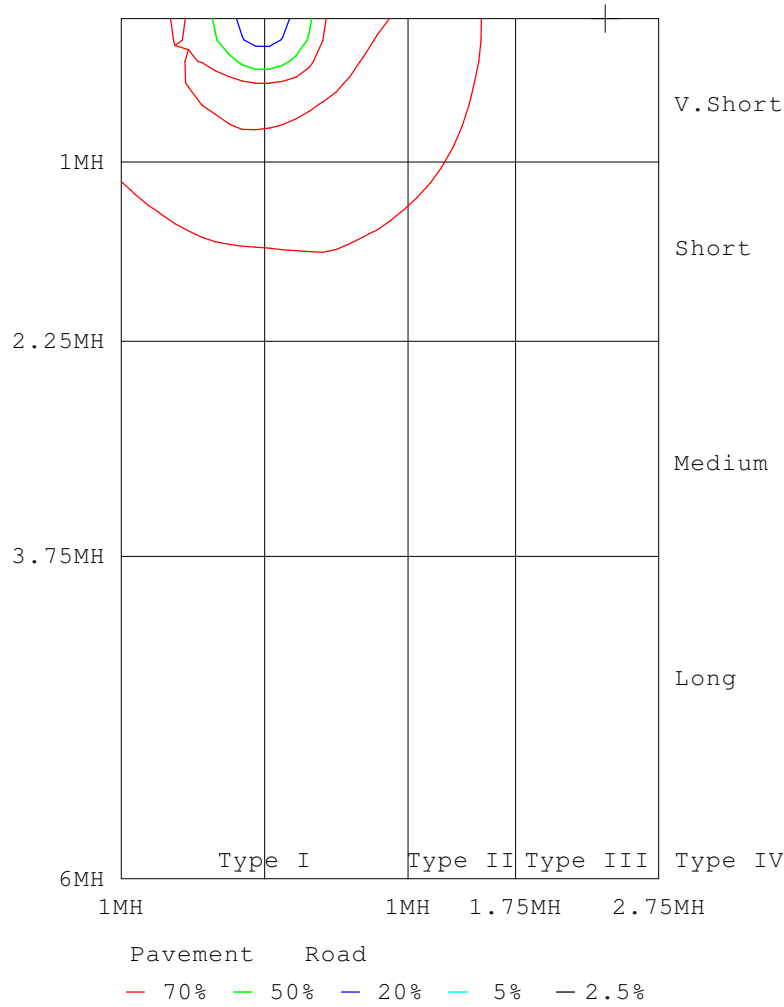
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

ROAD ISOCANDELA REPORT

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

ROAD SURFACE ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	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	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88
5	7.42	7.42	7.52	7.65	7.82	7.80	8.14	8.53	9.03	9.45	10.10	10.5	8.48	8.63	8.46	8.52	8.28	9.36	8.76
10	17.0	16.2	16.2	16.1	16.8	15.5	16.5	17.3	19.6	21.2	23.9	25.6	19.8	21.4	21.8	22.7	22.6	25.5	24.2
15	37.9	36.3	35.5	35.2	37.3	36.8	37.7	38.5	41.7	43.5	45.4	48.3	42.5	42.6	42.5	43.6	43.3	45.9	45.1
20	55.9	55.2	56.6	58.4	60.5	59.0	59.9	61.4	63.3	63.8	66.2	69.2	63.3	65.5	65.7	65.1	62.5	64.2	61.3
25	72.4	71.3	71.9	75.7	80.5	82.9	84.0	85.0	86.2	85.7	86.2	89.0	84.4	84.0	81.2	78.2	75.9	74.5	71.5
30	78.8	79.1	78.9	84.8	91.0	94.3	94.2	93.0	91.3	92.8	94.8	98.6	95.1	93.6	87.7	82.7	80.4	78.2	76.3
35	74.6	75.0	76.5	81.9	84.2	88.5	86.6	84.7	83.5	84.3	86.4	89.8	92.5	88.8	87.0	80.2	76.1	73.0	70.3
40	62.2	64.8	67.8	71.2	71.7	76.5	76.1	74.8	76.0	76.0	76.0	79.2	77.8	76.8	75.6	71.0	66.3	63.6	62.0
45	58.1	59.6	60.0	62.0	62.6	65.1	65.1	65.9	65.6	64.9	65.3	65.0	67.1	66.5	67.0	63.3	62.8	61.1	60.5
50	62.3	62.8	65.4	64.5	65.8	65.3	64.3	65.5	65.4	65.5	67.2	67.0	64.4	65.9	65.7	66.2	64.0	65.8	66.3
55	74.9	73.4	75.1	75.7	75.5	75.7	74.1	73.7	72.2	73.0	76.0	77.6	72.1	73.3	74.5	75.3	73.6	78.0	78.6
60	87.1	85.1	84.9	87.7	86.0	86.1	86.7	83.8	85.5	87.5	89.8	94.2	88.2	89.8	92.1	89.3	88.4	90.8	89.3
65	98.3	97.7	98.8	102	99.7	99.7	102	100	103	107	111	115	107	108	110	107	103	103	103
70	80.3	81.0	81.8	88.5	87.8	93.6	96.8	96.9	95.0	97.3	98.2	102	101	100.0	103	94.9	89.8	85.9	84.3
75	96.5	93.4	92.0	92.3	90.1	88.7	88.9	88.5	91.7	94.4	97.5	103	95.3	97.4	100	96.7	97.2	102	102
80	75.7	78.9	82.7	89.2	89.4	98.3	104	108	106	109	111	112	110	108	111	105	98.6	88.1	88.3
85	59.2	59.6	60.6	62.7	64.2	68.6	68.1	69.8	70.3	72.0	72.5	74.3	77.5	75.7	74.2	69.2	65.4	62.5	62.1
90	51.0	50.1	52.1	53.3	54.3	57.5	57.6	57.9	56.0	57.7	61.0	64.6	66.4	64.6	63.6	59.2	53.8	52.7	54.7
95	43.7	43.9	44.9	46.9	49.0	52.6	53.5	52.2	51.1	52.7	54.5	58.9	60.6	59.5	58.6	54.0	50.2	47.6	47.9
100	39.7	37.0	36.4	30.8	37.9	41.3	41.8	39.9	38.7	39.9	42.1	46.1	47.8	46.9	47.6	40.5	40.5	43.0	43.3
105	27.3	27.6	27.5	14.4	31.0	34.9	33.6	33.7	32.1	19.8	32.3	35.4	39.1	37.4	36.3	19.1	33.1	30.9	30.4
110	19.5	17.0	13.8	9.53	17.6	17.5	19.0	17.8	17.9	14.5	19.6	21.2	28.2	20.6	22.1	14.4	15.3	20.5	22.2
115	13.8	10.5	8.87	6.01	10.3	17.3	16.2	16.9	12.3	9.26	15.1	17.5	20.7	16.5	13.7	8.78	12.3	12.9	12.8
120	9.56	6.94	6.48	4.90	8.29	7.24	7.47	7.41	8.80	7.15	7.57	9.81	13.4	9.55	8.01	5.94	7.63	9.06	10.5
125	7.56	6.28	4.70	5.03	6.59	7.19	7.52	7.77	7.38	6.91	6.69	7.99	10.7	7.71	5.86	5.83	6.30	6.75	6.16
130	6.25	5.00	3.63	3.63	6.39	6.50	5.39	6.17	6.47	4.67	4.84	5.68	6.99	5.97	4.83	4.34	5.62	5.45	5.38
135	4.70	3.96	3.05	2.66	4.65	5.82	5.81	6.07	5.27	2.54	3.20	5.53	6.45	5.14	3.05	2.98	5.14	5.44	5.29
140	4.94	4.18	2.30	1.84	2.91	4.33	5.08	4.86	2.98	2.63	2.39	5.29	6.38	4.95	2.33	2.85	4.33	4.39	4.40
145	3.27	2.85	1.86	1.62	2.79	2.76	3.14	2.73	3.01	1.80	1.67	2.72	4.15	2.81	1.52	2.30	4.10	3.93	3.82
150	2.42	2.08	1.58	1.88	2.01	2.36	3.37	2.98	1.98	2.14	1.55	2.51	3.05	2.39	1.38	2.22	3.15	3.84	3.89
155	2.15	1.77	1.52	0.96	1.40	2.09	2.75	2.84	1.63	1.06	1.46	1.79	1.96	1.74	1.62	1.03	1.99	2.76	2.99
160	1.49	1.25	0.86	0.72	0.76	1.35	2.04	1.85	1.00	0.70	0.71	1.15	1.21	1.06	0.79	0.70	1.05	1.96	2.15
165	0.69	0.70	0.76	0.76	0.73	0.73	0.72	0.72	0.70	0.70	0.72	0.72	0.67	0.67	0.72	0.70	0.72	0.69	0.68
170	1.14	1.19	0.97	0.79	0.76	0.76	0.79	0.79	0.70	0.68	0.75	0.86	1.07	0.93	0.77	0.71	0.72	0.81	0.82
175	0.86	0.83	0.76	0.74	0.73	0.75	0.73	0.68	0.69	0.70	0.70	0.71	0.69	0.69	0.73	0.74	0.72	0.75	0.83
180	0.69	0.69	0.69	0.69	0.68	0.70	0.69	0.72	0.69	0.69	0.68	0.70	0.69	0.68	0.69	0.68	0.68	0.69	0.69

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LITPA
Test Date: 06 July 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity: 65.0%
Test Distance: 5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.48V I:0.1001A P:12.274W PF:0.5563 Freq:50.01Hz Lamp Flux:605.965x1 lm		
NAME: 8040-12W	TYPE:LED	WEIGHT:
SPEC.:12W	DIM.:	SERIAL No.:
MFR.: LITPA AYDINLATMA	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345															
0	6.88	6.88	6.88	6.88	6.88															
5	8.37	7.78	7.48	7.15	7.09															
10	22.9	20.3	18.2	15.6	14.1															
15	43.7	41.8	40.4	36.6	34.5															
20	61.1	60.3	59.9	55.9	53.6															
25	72.1	73.5	74.9	73.3	71.5															
30	79.2	79.9	81.2	82.1	80.6															
35	73.5	73.1	74.3	77.2	76.0															
40	64.3	64.5	64.3	65.8	65.1															
45	60.9	60.4	61.0	62.0	60.1															
50	66.5	66.5	66.6	65.0	64.3															
55	82.2	79.4	79.8	78.8	76.3															
60	93.7	92.6	93.2	92.5	88.5															
65	105	104	105	108	106															
70	87.2	87.2	87.8	90.2	86.9															
75	104	102	102	100	95.6															
80	87.3	87.1	87.3	91.4	92.9															
85	62.7	64.0	64.6	63.8	63.3															
90	56.9	57.2	57.7	56.9	54.8															
95	50.6	50.7	50.3	50.9	48.5															
100	45.1	41.3	39.0	44.4	38.6															
105	31.6	33.0	19.6	30.5	30.0															
110	21.8	15.7	13.0	14.1	16.9															
115	14.0	14.1	6.28	11.1	11.6															
120	9.33	7.16	5.27	7.12	6.84															
125	6.62	5.98	5.32	4.68	6.23															
130	5.41	5.42	4.27	3.72	4.68															
135	5.42	4.94	3.10	3.22	4.04															
140	4.35	4.25	2.68	2.36	4.14															
145	3.99	3.96	1.92	1.88	2.91															
150	3.65	3.14	1.90	1.56	1.83															
155	2.26	1.86	1.15	1.59	1.88															
160	1.41	0.77	0.73	0.85	1.47															
165	0.68	0.72	0.75	0.79	0.71															
170	0.74	0.79	0.79	0.96	1.16															
175	0.82	0.82	0.81	0.78	0.89															
180	0.72	0.73	0.69	0.69	0.71															

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:LITPA
Test Date:06 July 2018

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.400
Humidity:65.0%
Test Distance:5.680m [K=1.0000]
Remarks: 8040-12W-
YUVARLAK.BOLARD