

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: io LED

Report Number: P273509

Luminaire Tested: **0.10-5W-840-45-OD-STD-UNV-AN-1F6**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89168-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.10-5W-840-45-OD-STD-UNV-AN-1F6
Description: iO LIGHTING SERIES 1.5 LINEAR LED LUMINAIRE, 45 DEGREE OPTIC.
VERY HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 404.0 lumens
Efficiency: N/A
Efficacy: 35.8 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 1.18 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 1.4' x L: 0.07' x H: 0.01')
CIE Type: Direct

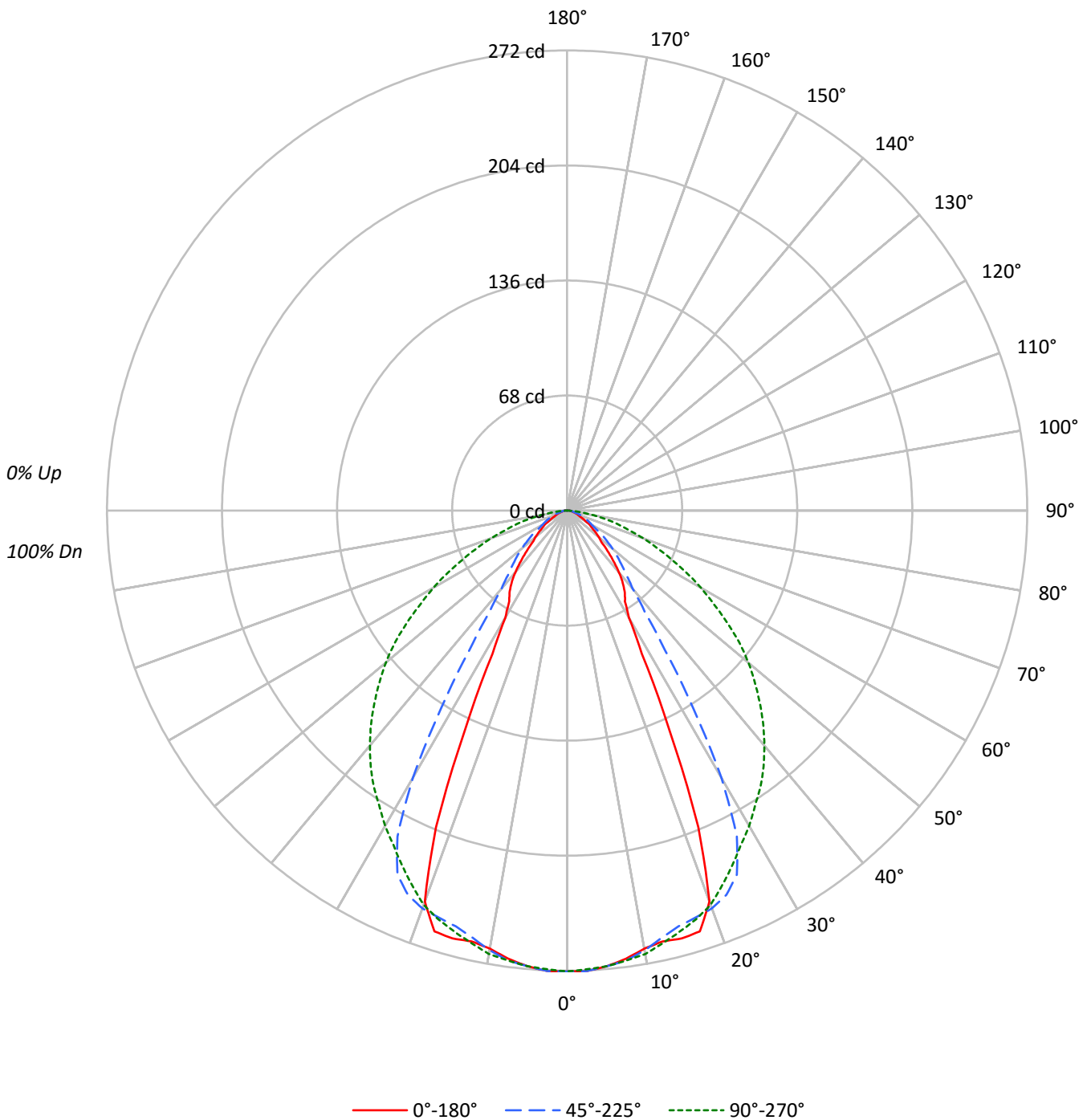
Input Watts (W): 11.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P273509

CATALOG NUMBER: 0.10-5W-840-45-OD-STD-UNV-AN-1F6

Luminous Intensity Polar Plot





TEST NUMBER: P273509

CATALOG NUMBER: 0.10-5W-840-45-OD-STD-UNV-AN-1F6

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	108	104	101	109	105	102	100	101	99	97	97	95	94	94	92	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	68	88	79	72	67	77	71	66	74	69	65	72	68	65	63					63			
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	58	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47					47			
8	69	58	51	46	68	57	50	45	56	50	45	55	49	45	54	49	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40					40			
10	62	50	43	39	61	50	43	39	49	43	39	48	42	38	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30909	30909	30909
5°	30379	30484	30768
10°	29491	29807	30620
15°	29537	28999	30201
20°	28118	29008	29866
25°	16588	28222	28834
30°	8796	22410	28076
35°	7428	12917	27464
40°	6258	8165	26688
45°	4715	6568	25661
50°	3640	5439	24479
55°	2919	4321	22609
60°	2276	3222	20434
65°	1716	2740	17918
70°	1492	2147	15508
75°	1170	1630	13096
80°	1117	1270	9969
85°	991	1187	6360



TEST NUMBER: P273509

CATALOG NUMBER: 0.10-5W-840-45-OD-STD-UNV-AN-1F6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.6	6.3
10°-20°	72.8	18.0
20°-30°	94.1	23.3
30°-40°	77.6	19.2
40°-50°	61.8	15.3
50°-60°	37.8	9.4
60°-70°	21.0	5.2
70°-80°	9.9	2.4
80°-90°	3.0	0.7
90°-100°	0.5	0.1
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	192.5	47.6
0°-40°	270.1	66.9
0°-60°	369.7	91.5
0°-90°	403.6	99.9
90°-120°	0.5	0.1
90°-150°	0.5	0.1
90°-180°	0.0	0.0
0°-180°	404.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	272	272	272	272	272	
5°	270	270	270	270	270	26
15°	262	260	254	258	258	73
25°	142	180	237	228	231	67
35°	59	60	101	198	199	37
45°	34	37	46	142	161	26
55°	18	19	25	55	116	16
65°	8	10	13	23	68	9
75°	4	4	5	10	31	5
85°	2	2	2	2	5	2
90°	1	1	1	1	0	1
95°	1	1	0	0	0	1
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P273509

CATALOG NUMBER: 0.10-5W-840-45-OD-STD-UNV-AN-1F6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	272.4	272.4	272.4	272.4	272.4
2.5°	272.4	272.4	272.4	271.4	271.4
5°	270.3	270.3	270.3	270.3	270.3
7.5°	267.1	267.1	268.2	268.2	268.2
10°	262.9	262.9	263.9	265.0	266.1
12.5°	260.8	259.7	258.6	261.8	261.8
15°	261.8	259.7	254.4	257.6	257.6
17.5°	260.8	260.8	252.3	252.3	253.3
20°	245.9	254.4	250.2	244.9	248.0
22.5°	202.5	230.0	245.9	236.4	239.6
25°	142.0	180.2	237.4	227.9	231.1
27.5°	95.4	125.1	217.3	219.4	222.6
30°	73.1	86.9	182.3	213.1	215.2
32.5°	63.6	67.8	138.9	205.6	206.7
35°	59.4	60.4	100.7	198.2	199.3
37.5°	54.1	55.1	75.3	189.7	190.8
40°	47.7	49.8	60.4	178.1	181.3
42.5°	40.3	43.5	51.9	163.2	171.7
45°	33.9	37.1	45.6	142.0	161.1
47.5°	27.6	30.7	40.3	118.7	150.5
50°	24.4	25.4	35.0	94.3	139.9
52.5°	21.2	21.2	29.7	72.1	128.3
55°	18.0	19.1	25.4	55.1	115.5
57.5°	15.9	15.9	20.1	42.4	102.8
60°	12.7	13.8	17.0	35.0	91.2
62.5°	10.6	11.7	14.8	28.6	79.5
65°	8.5	9.5	12.7	23.3	67.8
67.5°	7.4	7.4	10.6	19.1	57.2
70°	6.4	6.4	8.5	14.8	47.7
72.5°	5.3	5.3	7.4	11.7	38.2
75°	4.2	4.2	5.3	9.5	30.7
77.5°	3.2	3.2	4.2	7.4	23.3
80°	3.2	3.2	3.2	5.3	15.9
82.5°	2.1	2.1	3.2	3.2	9.5
85°	2.1	2.1	2.1	2.1	5.3
87.5°	2.1	2.1	2.1	1.1	1.1
90°	1.1	1.1	1.1	1.1	0.0
92.5°	1.1	1.1	1.1	0.0	0.0
95°	1.1	1.1	0.0	0.0	0.0
97.5°	1.1	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P273509

CATALOG NUMBER: 0.10-5W-840-45-OD-STD-UNV-AN-1F6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)