

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: P397267

Luminaire Tested: **4VRVT2-LD5-6-DR-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397267
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-16)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-6-DR-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 991.5 lumens
Efficiency: N/A
Efficacy: 7.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

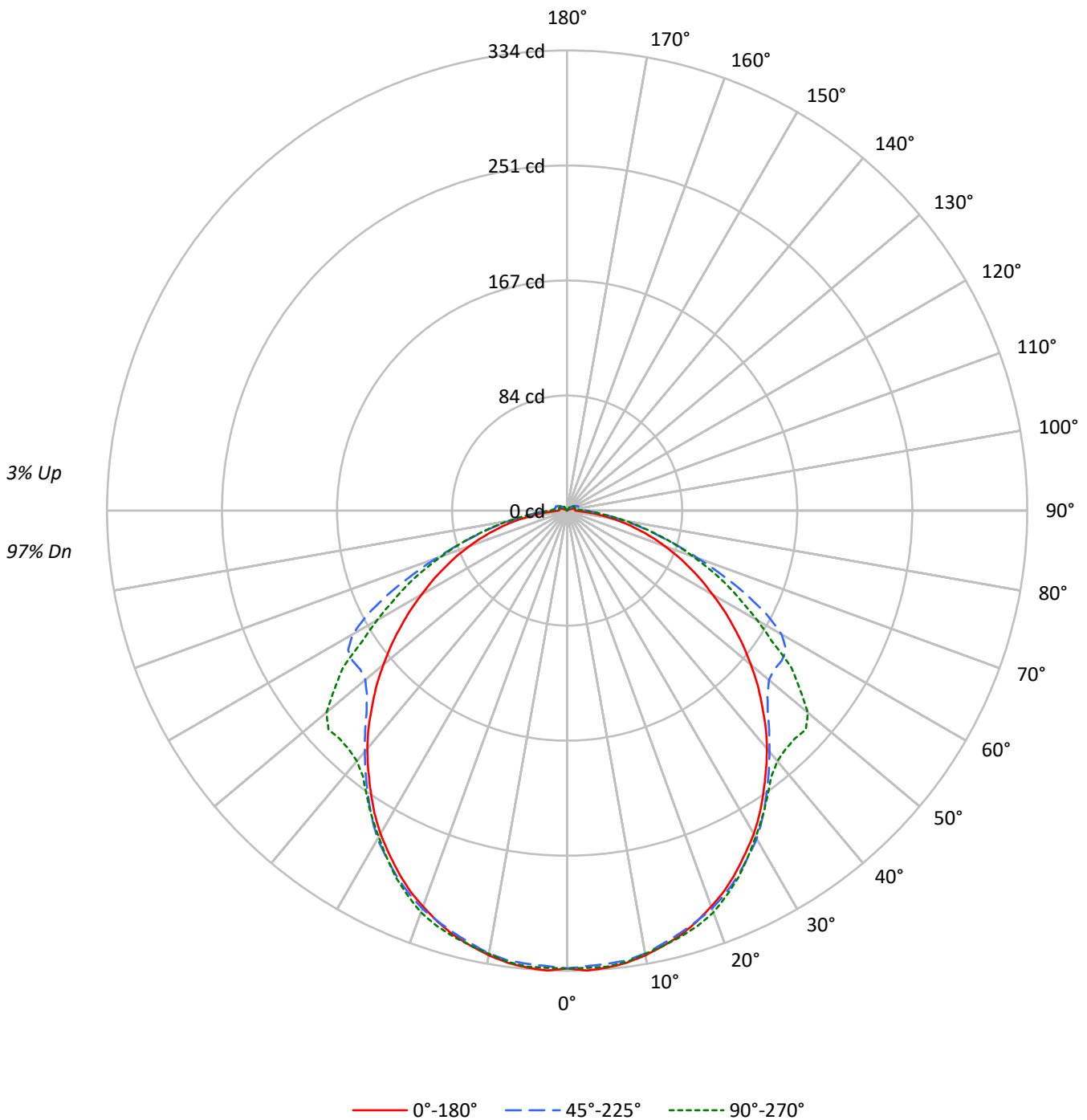
Input Watts (W): 131.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	0
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	66
3	89	78	70	63	86	76	68	62	73	66	61	70	64	59	67	62	58	55
4	81	69	60	53	79	67	59	53	64	57	51	62	56	50	59	54	49	47
5	75	61	52	46	72	60	52	45	58	50	44	55	49	44	53	47	43	41
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38	48	42	38	35
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1717	1717	1717
5°	1721	1674	1674
10°	1707	1636	1619
15°	1688	1586	1571
20°	1657	1542	1522
25°	1622	1486	1450
30°	1580	1425	1369
35°	1525	1341	1295
40°	1472	1262	1251
45°	1405	1190	1282
50°	1336	1169	1312
55°	1259	1244	1212
60°	1178	1275	1044
65°	1105	1113	915
70°	1026	883	765
75°	928	674	608
80°	800	490	443
85°	610	350	282



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.5	3.2
10°-20°	90.1	9.1
20°-30°	134.7	13.6
30°-40°	157.8	15.9
40°-50°	165.1	16.7
50°-60°	159.7	16.1
60°-70°	124.2	12.5
70°-80°	73.2	7.4
80°-90°	26.4	2.7
90°-100°	9.8	1.0
100°-110°	7.4	0.7
110°-120°	5.7	0.6
120°-130°	3.6	0.4
130°-140°	1.9	0.2
140°-150°	0.4	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	256.3	25.9
0°-40°	414.1	41.8
0°-60°	738.9	74.5
0°-90°	962.7	97.1
90°-120°	22.9	2.3
90°-150°	28.8	2.9
90°-180°	29.0	2.9
0°-180°	991.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	332	332	332	332	332	
5°	333	331	330	333	332	32
15°	319	320	317	321	320	90
25°	290	291	293	295	294	133
35°	249	252	252	253	253	156
45°	200	204	206	225	234	154
55°	148	153	190	203	199	132
65°	98	118	143	127	128	97
75°	53	80	67	68	68	57
85°	15	24	24	24	23	16
90°	6	12	14	13	12	4
95°	6	9	10	9	8	5
105°	5	7	9	7	6	5
115°	2	5	8	7	6	3
125°	1	2	5	6	5	1
135°	0	0	3	4	4	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	332.3	332.3	332.3	332.3	332.3
2.5°	334.2	332.6	330.9	333.0	332.2
5°	333.0	331.4	330.2	333.1	332.2
7.5°	331.0	329.9	329.3	331.7	330.4
10°	327.7	327.2	326.4	328.8	326.7
12.5°	323.5	324.0	321.9	324.6	323.4
15°	318.9	319.8	317.4	321.3	320.0
17.5°	312.8	313.9	312.5	317.3	315.8
20°	305.8	306.4	307.4	310.7	310.4
22.5°	298.6	299.0	300.6	303.2	302.4
25°	289.8	291.0	292.8	295.0	293.9
27.5°	280.3	282.2	284.0	285.8	283.8
30°	271.0	272.0	275.2	275.0	273.6
32.5°	260.3	262.7	264.0	263.5	263.7
35°	248.6	251.8	252.0	253.4	253.3
37.5°	237.1	240.6	240.2	242.9	243.4
40°	225.6	228.0	228.5	233.3	237.4
42.5°	213.3	215.7	217.0	227.0	234.7
45°	200.0	203.5	205.8	225.4	233.9
47.5°	187.5	190.7	197.1	225.4	235.0
50°	174.1	177.9	191.2	225.0	228.0
52.5°	161.1	165.0	189.4	218.1	212.8
55°	147.7	152.8	190.1	202.7	198.6
57.5°	135.2	142.4	188.5	184.3	176.0
60°	121.9	132.5	179.8	163.8	159.4
62.5°	110.2	124.5	163.2	144.3	142.7
65°	98.1	117.9	142.6	127.4	128.3
67.5°	87.0	112.0	121.0	111.8	112.5
70°	75.4	105.0	100.8	97.1	97.0
72.5°	64.5	94.9	83.2	82.1	82.6
75°	53.4	79.8	67.0	67.8	68.3
77.5°	43.4	64.5	53.8	54.7	54.7
80°	33.0	48.2	41.1	42.9	43.0
82.5°	23.7	34.4	31.4	32.3	31.5
85°	15.0	23.7	23.7	23.5	22.9
87.5°	8.5	16.3	17.3	17.1	16.3
90°	5.8	12.3	13.6	13.0	12.2
92.5°	5.8	10.4	11.4	10.2	9.4
95°	5.9	9.0	9.9	8.6	7.7
97.5°	5.8	8.3	9.3	7.7	6.7
100°	5.6	7.7	9.0	7.2	6.2
102.5°	5.3	7.4	8.8	6.9	5.9
105°	4.8	7.0	8.6	6.9	5.9
107.5°	4.2	6.6	8.6	6.9	5.9
110°	3.7	5.9	8.5	6.7	5.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	3.0	5.3	8.2	6.7	5.8
115°	2.4	4.6	7.7	6.6	5.8
117.5°	2.1	3.8	7.2	6.6	5.8
120°	1.6	3.2	6.7	6.2	5.6
122.5°	1.3	2.4	6.1	6.1	5.4
125°	1.0	1.8	5.3	5.8	5.4
127.5°	0.8	1.3	4.6	5.4	5.3
130°	0.6	0.8	4.0	5.1	5.0
132.5°	0.5	0.5	3.4	4.6	4.6
135°	0.5	0.3	2.7	4.2	4.3
137.5°	0.3	0.3	2.1	3.5	3.8
140°	0.3	0.3	1.6	3.0	3.4
142.5°	0.3	0.3	1.1	2.4	2.7
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)