

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: P397264

Luminaire Tested: **4VRVT2-LD5-4-FR50-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-4-FR50-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 656.0 lumens
Efficiency: N/A
Efficacy: 8.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

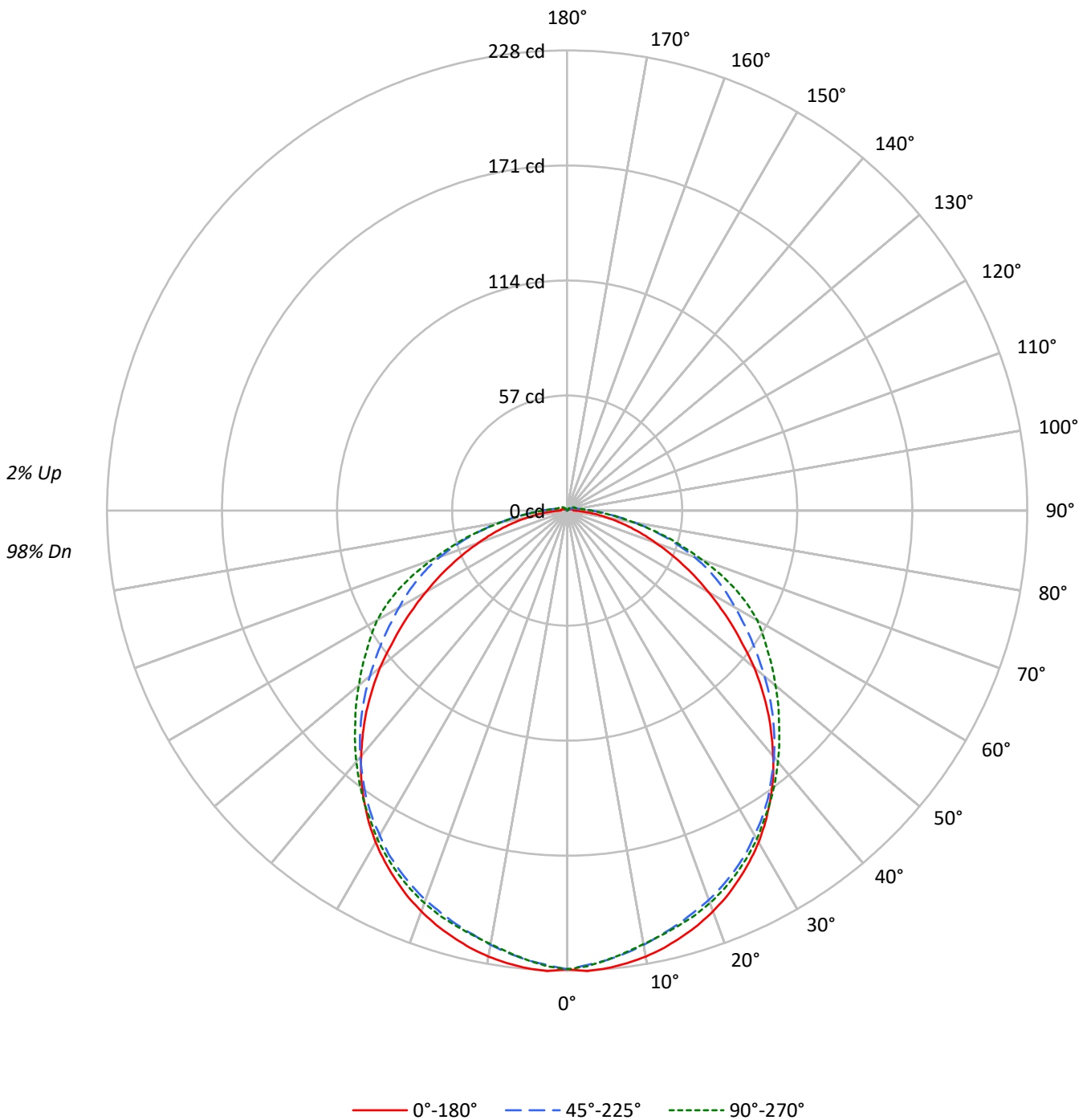
Input Watts (W): 77.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	105	105	105	100	100	100	98
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	81	75	83	78	73	79	75	71	76	72	69	67
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	42	35	62	50	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1174	1174	1174
5°	1176	1134	1127
10°	1169	1095	1081
15°	1158	1060	1046
20°	1145	1030	1015
25°	1128	998	979
30°	1107	961	941
35°	1076	924	898
40°	1036	881	856
45°	988	833	814
50°	928	780	775
55°	855	728	740
60°	782	682	713
65°	712	642	655
70°	634	585	560
75°	568	502	460
80°	490	400	341
85°	407	301	243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	3.2
10°-20°	60.5	9.2
20°-30°	91.3	13.9
30°-40°	108.9	16.6
40°-50°	111.1	16.9
50°-60°	99.4	15.2
60°-70°	78.6	12.0
70°-80°	48.6	7.4
80°-90°	20.4	3.1
90°-100°	7.3	1.1
100°-110°	3.9	0.6
110°-120°	2.5	0.4
120°-130°	1.5	0.2
130°-140°	0.6	0.1
140°-150°	0.1	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	173.1	26.4
0°-40°	282.0	43.0
0°-60°	492.4	75.1
0°-90°	640.1	97.6
90°-120°	13.7	2.1
90°-150°	15.9	2.4
90°-180°	16.0	2.4
0°-180°	656.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	227	227	227	227	227	
5°	228	226	224	224	224	22
15°	219	215	212	214	213	62
25°	202	197	197	199	198	93
35°	175	172	174	176	176	110
45°	141	140	144	148	148	108
55°	100	102	111	119	121	90
65°	63	68	82	91	92	63
75°	33	40	50	52	52	35
85°	10	16	20	20	20	10
90°	3	8	12	12	12	2
95°	3	5	8	8	8	2
105°	2	2	4	5	4	3
115°	1	1	3	4	4	1
125°	0	0	2	3	3	1
135°	0	0	1	2	2	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°	227.2	227.2	227.2	227.2	227.2
2.5°	228.4	227.1	225.4	226.5	226.0
5°	227.6	225.9	223.6	224.4	223.6
7.5°	226.3	224.2	221.3	221.6	220.9
10°	224.4	221.8	218.5	218.8	218.1
12.5°	221.9	218.8	215.2	216.4	215.6
15°	218.8	215.3	212.2	213.5	213.0
17.5°	215.4	211.6	208.7	210.7	210.3
20°	211.3	207.1	205.3	207.2	206.9
22.5°	206.8	202.2	201.2	203.3	203.0
25°	201.5	197.2	196.6	198.7	198.5
27.5°	195.9	191.4	191.7	193.5	193.4
30°	189.8	185.8	185.7	188.2	188.0
32.5°	182.9	179.0	180.0	182.0	181.6
35°	175.4	172.2	173.6	175.7	175.7
37.5°	167.6	164.6	166.4	168.7	169.2
40°	158.8	156.5	159.5	162.2	162.5
42.5°	149.8	148.3	151.9	154.9	155.6
45°	140.6	139.5	144.1	147.7	148.5
47.5°	130.8	130.8	136.0	140.4	141.8
50°	121.0	121.0	127.6	133.1	134.7
52.5°	110.2	111.7	119.3	125.8	128.2
55°	100.3	102.5	111.3	119.2	121.3
57.5°	90.4	93.2	103.5	112.7	115.1
60°	80.9	84.7	96.2	106.0	108.8
62.5°	72.0	75.9	89.3	98.9	100.8
65°	63.2	67.6	82.3	90.8	91.9
67.5°	54.7	60.4	75.0	81.5	81.9
70°	46.6	53.2	66.8	71.6	71.0
72.5°	39.6	46.2	58.4	61.7	60.6
75°	32.7	39.6	49.9	51.9	51.7
77.5°	26.3	33.0	41.7	42.8	41.7
80°	20.2	26.9	33.6	34.1	33.1
82.5°	15.1	20.8	26.4	26.7	26.2
85°	10.0	15.7	20.4	20.5	19.7
87.5°	6.1	11.4	15.6	15.8	15.2
90°	3.3	8.2	12.2	12.3	11.9
92.5°	3.1	6.0	9.4	9.6	9.4
95°	3.0	4.6	7.6	7.8	7.6
97.5°	3.0	3.7	6.2	6.5	6.3
100°	2.8	3.1	5.2	5.6	5.5
102.5°	2.7	2.6	4.6	5.0	4.8
105°	2.4	2.2	4.1	4.6	4.5
107.5°	2.1	1.9	3.7	4.3	4.2
110°	1.8	1.7	3.4	4.1	4.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	1.4	3.1	3.9	3.9
115°	1.3	1.2	2.8	3.7	3.7
117.5°	1.1	1.0	2.6	3.5	3.6
120°	0.8	0.8	2.2	3.2	3.4
122.5°	0.8	0.5	1.9	3.0	3.2
125°	0.5	0.3	1.7	2.7	3.0
127.5°	0.4	0.3	1.4	2.4	2.7
130°	0.3	0.2	1.2	2.1	2.4
132.5°	0.3	0.2	0.8	1.8	2.0
135°	0.2	0.2	0.6	1.5	1.8
137.5°	0.2	0.1	0.4	1.2	1.5
140°	0.2	0.1	0.2	1.0	1.2
142.5°	0.1	0.1	0.1	0.6	0.8
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)