

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Report Prepared for
Eaton Lighting Division
(formerly Cooper Lighting)
io LED

Report Number: P397363

Luminaire Tested: **8VRVT2-LD5-9-FR50-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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Results contained in this report are valid for luminaire sample tested.
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Test Information

Test Method: LM-79-08
 Report Number: P397363
 Test Lab: INNOVATION CENTER(G3)
 Issue Date: 3/3/2020
 Manufacturer: EATON (FORMERLY COOPER LIGHTING)
 Product Line: io LED
 Catalog Number: 8VRVT2-LD5-9-FR50-UNV-LR63-CD1-WL-U
 Description:
 Light Source: -
 Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 1434.4 lumens
 Efficiency: N/A
 Efficacy: 8.4 lumens/watt
 Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
 Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')
 CIE Type: Direct

Input Watts (W): 170.2
 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

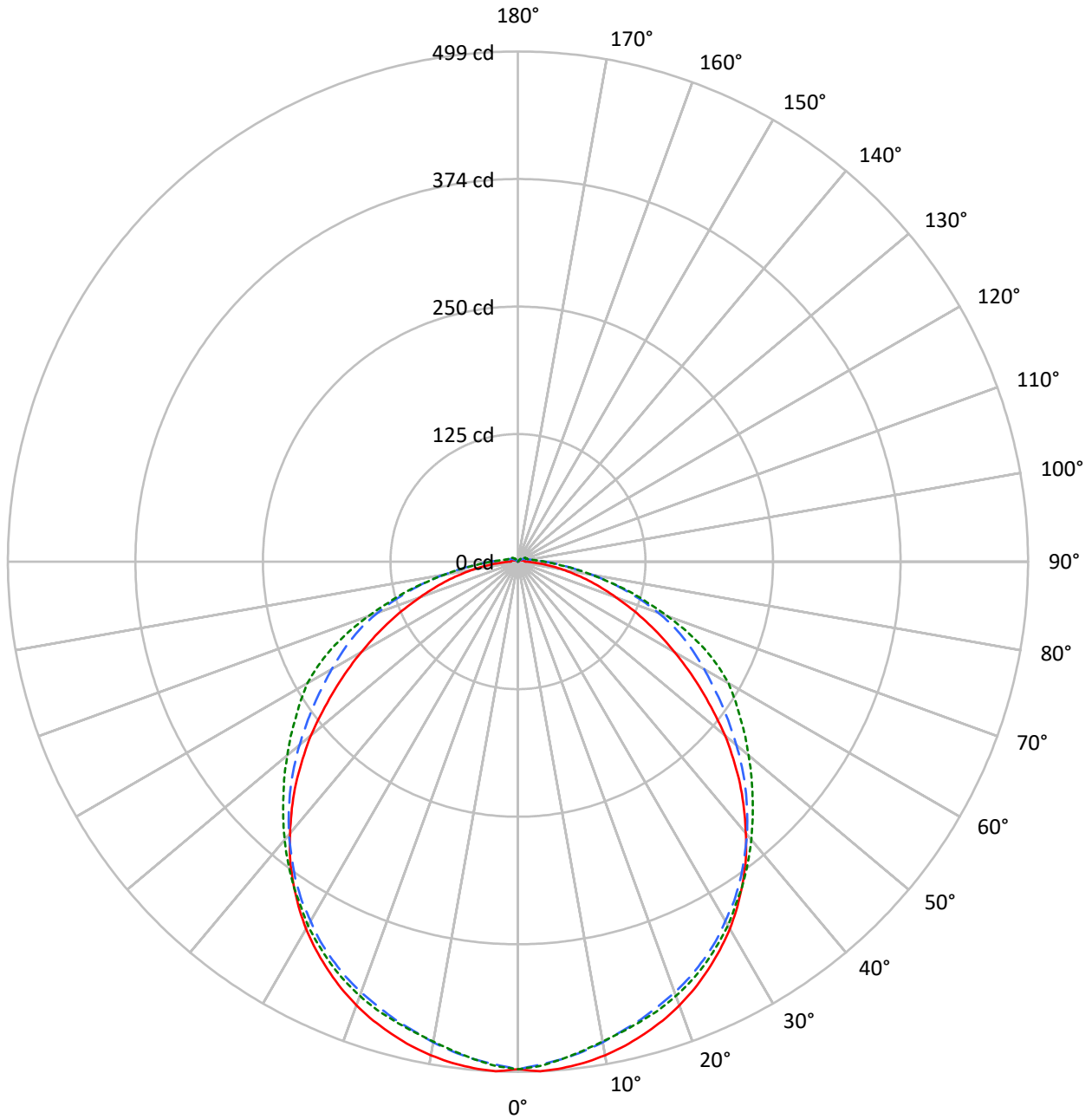


Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P1		
Power Meter			

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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	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																												

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	3.2
10°-20°	132.3	9.2
20°-30°	199.5	13.9
30°-40°	238.1	16.6
40°-50°	242.8	16.9
50°-60°	217.4	15.2
60°-70°	171.8	12.0
70°-80°	106.3	7.4
80°-90°	44.7	3.1
90°-100°	15.9	1.1
100°-110°	8.5	0.6
110°-120°	5.6	0.4
120°-130°	3.2	0.2
130°-140°	1.4	0.1
140°-150°	0.2	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	378.4	26.4
0°-40°	616.5	43.0
0°-60°	1076.7	75.1
0°-90°	1399.6	97.6
90°-120°	30.0	2.1
90°-150°	34.8	2.4
90°-180°	35.0	2.4
0°-180°	1434.4	100.0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
45°	1101	921	890
55°	960	808	810
65°	810	716	717
75°	664	564	503
85°	530	343	265

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	498	494	489	491	489	47
15°	478	471	464	467	466	135
25°	441	431	430	435	434	203
35°	384	377	380	384	384	240
45°	307	305	315	323	325	237
55°	219	224	243	261	265	196
65°	138	148	180	198	201	137
75°	72	86	109	113	113	76
85°	22	34	45	45	43	23
90°	7	18	27	27	26	5
95°	7	10	17	17	17	5
105°	5	5	9	10	10	5
115°	3	3	6	8	8	3
125°	1	1	4	6	7	1
135°	0	0	1	3	4	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0

TEST NUMBER: P397363

CATALOG NUMBER: 8VRVT2-LD5-9-FR50-UNV-LR63-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	496.7	496.7	496.7	496.7	496.7
2.5°	499.3	496.5	492.8	495.3	494.2
5°	497.7	493.9	489.0	490.7	489.0
7.5°	494.9	490.2	483.9	484.6	482.9
10°	490.7	485.0	477.8	478.5	476.9
12.5°	485.3	478.5	470.5	473.1	471.5
15°	478.5	470.8	464.0	466.8	465.6
17.5°	471.0	462.6	456.3	460.7	459.8
20°	462.1	452.8	448.8	453.0	452.3
22.5°	452.1	442.0	439.9	444.6	443.9
25°	440.6	431.3	429.9	434.6	434.1
27.5°	428.2	418.4	419.1	423.1	422.9
30°	414.9	406.3	406.0	411.4	411.2
32.5°	400.0	391.3	393.6	397.9	397.2
35°	383.6	376.6	379.6	384.3	384.3
37.5°	366.5	360.0	364.0	368.9	370.0
40°	347.1	342.2	348.8	354.6	355.3
42.5°	327.5	324.2	332.2	338.7	340.1
45°	307.4	305.1	315.1	323.1	324.7
47.5°	285.9	285.9	297.3	306.9	310.0
50°	264.6	264.6	279.1	291.0	294.5
52.5°	241.0	244.3	260.9	275.1	280.3
55°	219.3	224.2	243.3	260.6	265.3
57.5°	197.8	203.8	226.3	246.4	251.8
60°	177.0	185.1	210.4	231.9	238.0
62.5°	157.3	166.0	195.2	216.2	220.4
65°	138.1	147.7	180.0	198.5	201.0
67.5°	119.7	132.1	164.1	178.1	179.1
70°	101.9	116.4	146.1	156.6	155.2
72.5°	86.5	101.0	127.6	134.9	132.5
75°	71.5	86.5	109.2	113.4	113.1
77.5°	57.5	72.2	91.2	93.5	91.2
80°	44.2	58.9	73.4	74.6	72.5
82.5°	33.0	45.6	57.7	58.4	57.3
85°	22.0	34.4	44.6	44.9	43.0
87.5°	13.3	25.0	34.1	34.6	33.2
90°	7.2	18.0	26.7	26.9	26.0
92.5°	6.8	13.1	20.6	21.0	20.6
95°	6.5	10.0	16.6	17.1	16.6
97.5°	6.5	8.2	13.6	14.3	13.8
100°	6.1	6.8	11.5	12.2	11.9
102.5°	5.8	5.6	10.0	11.0	10.5
105°	5.1	4.9	8.9	10.0	9.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
115°	2.8	2.6	6.1	8.2	8.2
117.5°	2.3	2.1	5.6	7.7	8.0
120°	1.9	1.6	4.9	7.0	7.5
122.5°	1.6	1.2	4.2	6.5	7.0
125°	1.2	0.7	3.7	5.8	6.5
127.5°	0.9	0.7	3.0	5.1	5.8
130°	0.7	0.5	2.6	4.7	5.1
132.5°	0.7	0.5	1.9	4.0	4.4
135°	0.5	0.5	1.4	3.3	4.0
137.5°	0.5	0.2	0.9	2.6	3.3
140°	0.5	0.2	0.5	2.1	2.6
142.5°	0.2	0.2	0.2	1.4	1.9
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

Eaton Lighting Division Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



NVLAP Lab Code: 200050-0



This test was performed under the Supervised Manufacturer's Testing Program.
The results of this test have not been influenced by sources from within Eaton or from external interests.

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Peachtree City, GA 30269



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AC Power Source			
DC Power Supply			
Room Thermometer			

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NVLAP Lab Code: 200050-0



— 0°-180° - - 45°-225° - - - 90°-270°

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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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107.5°	4.7	4.2	8.2	9.3	9.1
110°	4.0	3.7	7.5	8.9	8.9
112.5°	3.3	3.0	6.8	8.4	8.4