

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: P397333

Luminaire Tested: **8VRVT2-LD5-16-FR50-UNV-LR63-CD2-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: P397333
 Test Lab: INNOVATION CENTER(G3)
 Issue Date: 3/3/2020
 Manufacturer: EATON (FORMERLY COOPER LIGHTING)
 Product Line: io LED
 Catalog Number: 8VRVT2-LD5-16-FR50-UNV-LR63-CD2-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: 2600.0 lumens
 Efficiency: N/A
 Efficacy: 8.6 lumens/watt
 Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
 Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')
 CIE Type: Direct

Input Watts (W): 303
 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

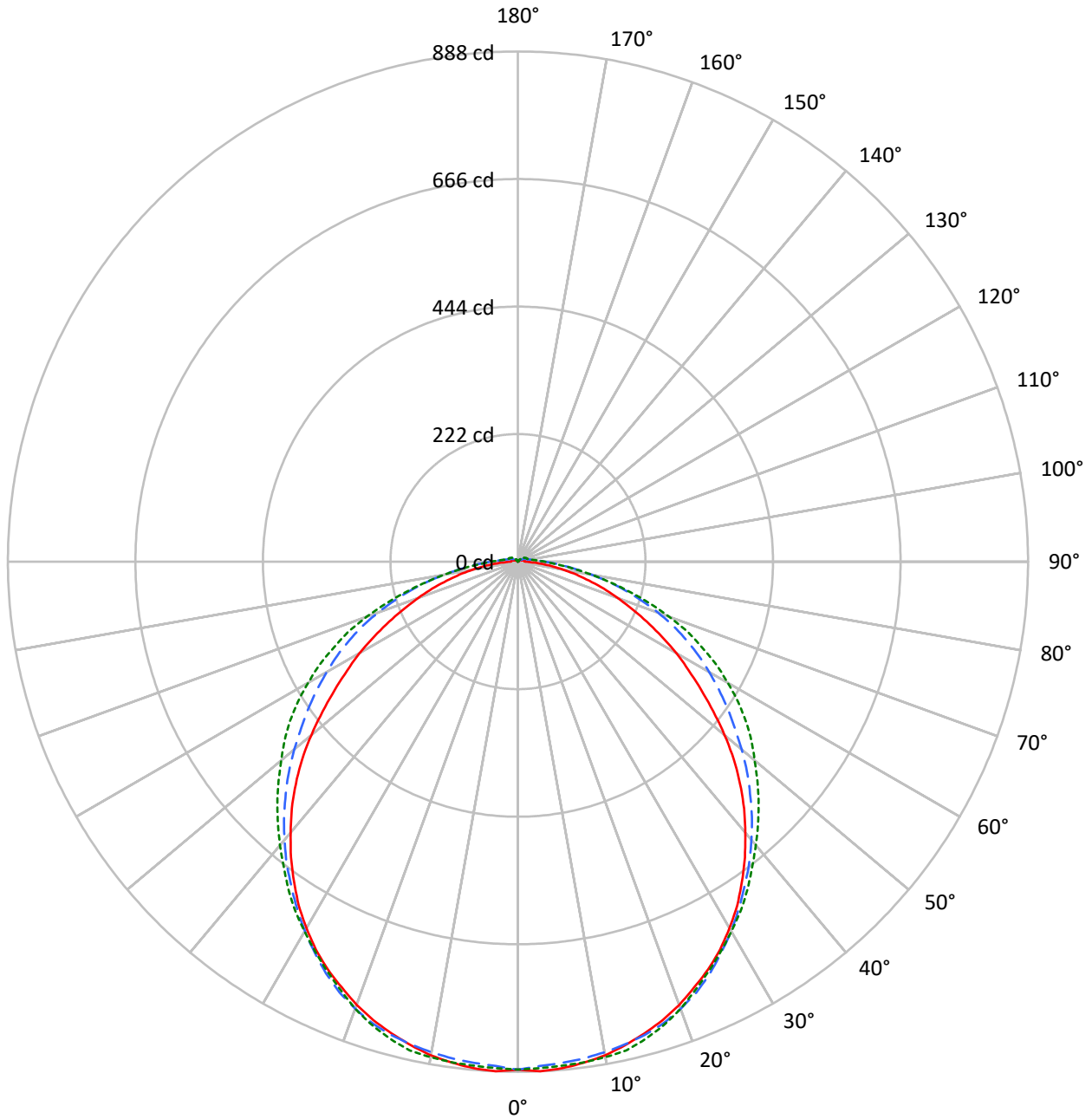


Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P1		
Power Meter			

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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	81																			
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	72	69	67																			
3	89	78	70	63	86	76	69	63	73	67	61	70	64	60	67	62	58	56																			
4	81	69	60	54	79	68	60	53	65	58	52	62	56	51	60	55	50	48																			
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	44	41																			
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36																			
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	45	39	34	32																			
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	29																			
9	56	42	34	29	54	42	34	28	40	33	28	39	33	28	38	32	28	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°	83.8	3.2
10°-20°	241.2	9.3
20°-30°	363.3	14.0
30°-40°	432.7	16.6
40°-50°	441.7	17.0
50°-60°	395.9	15.2
60°-70°	308.9	11.9
70°-80°	190.2	7.3
80°-90°	79.3	3.0
90°-100°	28.6	1.1
100°-110°	15.4	0.6
110°-120°	10.1	0.4
120°-130°	5.7	0.2
130°-140°	2.5	0.1
140°-150°	0.6	0.0
150°-160°	0.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	688.3	26.5
0°-40°	1121.0	43.1
0°-60°	1958.6	75.3
0°-90°	2537.1	97.6
90°-120°	54.0	2.1
90°-150°	62.9	2.4
90°-180°	63.0	2.4
0°-180°	2600.0	100.0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
45°	1959	1671	1623
55°	1705	1479	1478
65°	1450	1289	1261
75°	1189	1000	888
85°	942	613	473

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	885	882	876	882	881	84
15°	850	851	853	862	860	240
25°	783	790	791	789	786	361
35°	680	694	688	696	697	425
45°	547	561	572	588	592	421
55°	389	412	445	475	485	350
65°	247	273	324	350	354	246
75°	128	156	194	203	200	137
85°	39	61	80	80	77	40
90°	13	32	47	48	46	8
95°	12	18	29	31	30	9
105°	9	9	16	18	18	9
115°	5	4	11	15	15	5
125°	2	1	6	11	12	2
135°	1	1	3	6	7	1
145°	0	0	0	2	2	0
155°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.2	884.2	884.2	884.2	884.2
2.5°	888.0	884.8	878.8	884.5	882.6
5°	885.2	882.0	875.9	882.0	880.7
7.5°	879.7	877.5	872.4	879.7	879.1
10°	872.7	870.4	867.2	876.2	875.9
12.5°	862.1	861.2	860.8	872.0	871.4
15°	850.3	850.6	852.8	862.4	859.9
17.5°	836.8	838.8	842.6	848.4	845.8
20°	821.2	824.4	828.2	830.4	828.2
22.5°	802.0	807.7	811.6	810.0	807.1
25°	783.4	789.8	790.8	789.5	786.3
27.5°	761.6	769.6	766.8	768.4	764.8
30°	736.7	747.9	742.4	745.3	743.1
32.5°	710.1	723.2	715.9	720.7	721.3
35°	679.7	694.1	688.4	696.0	696.7
37.5°	649.0	664.0	661.5	671.1	669.5
40°	615.7	632.4	632.4	642.9	644.5
42.5°	582.8	596.8	602.9	615.4	618.6
45°	546.9	561.0	571.6	587.9	592.4
47.5°	510.1	525.8	540.8	558.8	565.5
50°	469.5	488.4	508.2	531.6	537.6
52.5°	428.5	449.6	475.6	503.7	512.4
55°	389.5	412.2	445.5	475.2	484.5
57.5°	352.3	375.7	414.7	446.1	454.1
60°	318.4	338.6	384.3	417.0	421.8
62.5°	281.9	305.9	354.6	384.7	390.1
65°	247.4	273.3	323.9	350.4	353.6
67.5°	214.7	241.3	292.8	316.2	320.0
70°	184.3	212.5	259.2	278.7	280.0
72.5°	156.5	184.0	225.9	241.6	239.4
75°	128.0	156.2	193.6	203.2	199.7
77.5°	104.0	129.6	161.0	168.0	162.6
80°	79.0	103.7	129.3	131.8	129.3
82.5°	57.9	81.0	103.0	103.7	99.8
85°	39.0	60.8	79.7	79.7	76.8
87.5°	22.1	44.5	60.8	61.4	58.2
90°	12.8	32.3	47.0	47.7	46.4
92.5°	11.8	23.4	36.8	37.8	36.5
95°	11.5	18.2	29.4	30.7	29.8
97.5°	11.2	14.7	24.6	25.6	25.0
100°	10.9	12.2	20.8	22.4	22.1
102.5°	9.9	10.6	18.2	19.8	19.5
105°	9.0	9.0	16.3	18.2	17.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
115°	4.8	4.5	11.2	14.7	15.4
117.5°	3.8	3.8	9.9	13.8	14.4
120°	3.2	2.9	8.6	12.8	13.8
122.5°	2.6	1.9	7.7	11.5	12.8
125°	2.2	1.3	6.4	10.6	11.5
127.5°	1.6	1.0	5.4	9.3	10.6
130°	1.3	1.0	4.5	8.0	9.3
132.5°	1.3	0.6	3.5	6.7	8.0
135°	1.0	0.6	2.6	5.8	6.7
137.5°	0.6	0.6	1.6	4.8	5.8
140°	0.6	0.6	1.0	3.5	4.5
142.5°	0.6	0.3	0.3	2.6	3.5
145°	0.3	0.3	0.3	1.6	2.2
147.5°	0.3	0.3	0.3	0.6	1.3
150°	0.3	0.3	0.3	0.0	0.3
152.5°	0.3	0.3	0.3	0.0	0.0
155°	0.3	0.3	0.3	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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AC Power Source			
DC Power Supply			
Room Thermometer			

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— 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°	8.0	7.7	14.7	17.3	17.0
110°	6.7	6.7	13.4	16.3	16.3
112.5°	5.8	5.8	12.2	15.7	15.7