

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: P397398

Luminaire Tested: **VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-13)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

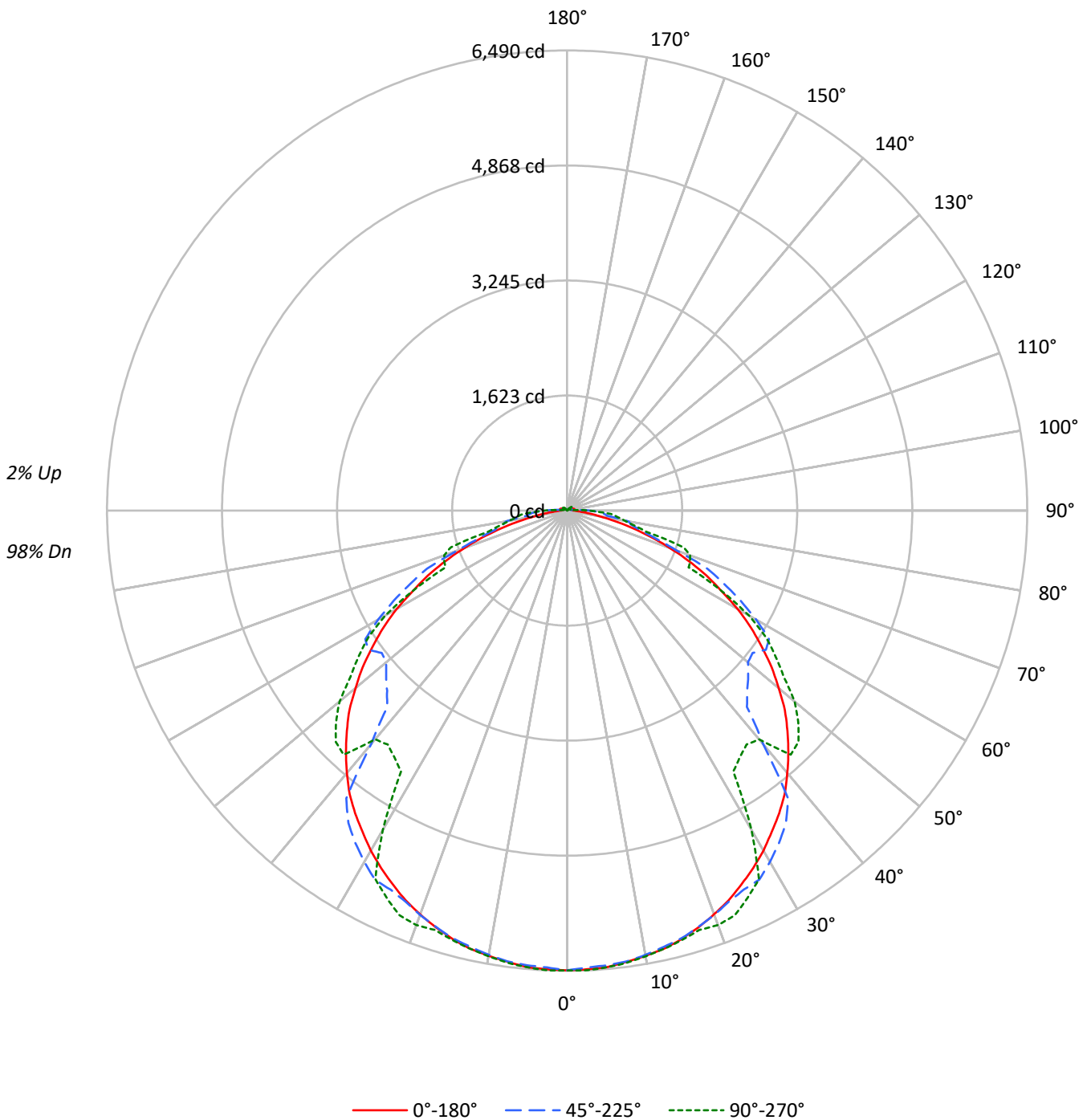
Lumens per Lamp: N/A
Luminaire Lumens: 18667.2 lumens
Efficiency: N/A
Efficacy: 43.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.17 / 1.27
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 425.6
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

TEST NUMBER: P397398

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397398

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U

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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	98
1	108	103	99	95	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72	77	74	70	68
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	68	64	60	57
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	63	54	47	73	61	53	47	59	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	41	53	46	40	51	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	36	47	40	35	45	39	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	35	29	55	42	34	29	41	34	29	40	33	28	38	33	28	26
10	53	39	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16245	16245	16245
5°	16165	15892	15924
10°	16047	15601	15576
15°	15961	15319	15275
20°	15806	15014	15253
25°	15640	14831	14976
30°	15476	14739	13217
35°	15292	14319	11115
40°	15034	11942	11462
45°	14678	10494	13185
50°	14157	10351	12698
55°	13463	11466	11683
60°	12583	11267	10475
65°	11368	9918	7401
70°	9644	7580	8146
75°	7584	5712	5935
80°	5007	5735	5020
85°	3382	4412	5025



TEST NUMBER: P397398

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	613.5	3.3
10°-20°	1766.5	9.5
20°-30°	2725.1	14.6
30°-40°	3098.6	16.6
40°-50°	3252.8	17.4
50°-60°	3059.1	16.4
60°-70°	2124.7	11.4
70°-80°	1194.2	6.4
80°-90°	522.9	2.8
90°-100°	135.3	0.7
100°-110°	62.6	0.3
110°-120°	44.1	0.2
120°-130°	39.4	0.2
130°-140°	19.9	0.1
140°-150°	4.9	0.0
150°-160°	1.8	0.0
160°-170°	1.3	0.0
170°-180°	0.5	0.0
0°-30°	5105.2	27.3
0°-40°	8203.7	43.9
0°-60°	14515.6	77.8
0°-90°	18357.4	98.3
90°-120°	242.0	1.3
90°-150°	306.2	1.6
90°-180°	310.0	1.7
0°-180°	18667.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6485	6485	6485	6485	6485	
5°	6462	6446	6438	6462	6466	614
15°	6254	6257	6243	6261	6269	1764
25°	5818	5840	5898	6018	6025	2683
35°	5213	5253	5379	4226	4246	3259
45°	4394	4527	3592	4376	4615	3386
55°	3350	3434	3422	3604	3592	2995
65°	2167	1823	2436	2098	1891	2133
75°	961	940	1058	1279	1162	1025
85°	199	330	526	676	654	221
90°	86	218	313	318	314	51
95°	87	109	102	93	86	76
105°	92	71	53	46	44	96
115°	47	48	46	30	30	49
125°	23	19	56	52	57	22
135°	10	8	23	31	24	9
145°	6	5	4	6	8	4
155°	5	5	5	3	1	2
165°	6	6	6	4	2	1
175°	6	6	6	5	3	1
180°	6	6	6	6	6	



TEST NUMBER: P397398

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6484.7	6484.7	6484.7	6484.7	6484.7
2.5°	6475.9	6468.7	6448.7	6470.3	6490.3
5°	6462.3	6446.3	6437.5	6462.3	6465.5
7.5°	6419.9	6423.9	6413.5	6420.7	6433.5
10°	6375.9	6385.5	6363.1	6379.9	6382.3
12.5°	6327.9	6327.9	6302.3	6320.7	6329.5
15°	6254.3	6256.7	6243.1	6260.7	6268.7
17.5°	6162.3	6163.9	6155.1	6179.9	6202.3
20°	6059.9	6063.9	6067.9	6136.7	6221.5
22.5°	5950.3	5952.7	5967.1	6159.1	6179.1
25°	5818.3	5839.9	5897.5	6018.3	6024.7
27.5°	5682.3	5705.5	5868.7	5887.9	5859.9
30°	5537.5	5555.1	5720.7	5697.5	5202.3
32.5°	5370.3	5411.1	5558.3	4812.7	4362.3
35°	5212.7	5252.7	5379.1	4225.5	4245.5
37.5°	5040.7	5107.1	5117.5	4107.1	4158.3
40°	4831.1	4974.3	4303.1	4004.7	4211.1
42.5°	4618.3	4765.5	3753.5	4026.3	4668.7
45°	4394.3	4527.1	3591.9	4375.9	4615.1
47.5°	4165.5	4289.5	3463.9	4387.1	4421.5
50°	3895.1	4027.1	3328.7	4168.7	4190.3
52.5°	3638.3	3751.9	3296.7	3913.5	3850.3
55°	3349.5	3434.3	3422.3	3603.9	3591.9
57.5°	3073.5	2775.1	3375.1	3331.9	3322.3
60°	2775.1	2260.0	3076.7	3027.9	2959.9
62.5°	2450.4	2031.2	2758.3	2684.8	2461.6
65°	2167.2	1823.2	2436.0	2097.6	1891.2
67.5°	1852.0	1581.6	2140.0	1703.2	1876.0
70°	1536.0	1318.4	1639.2	1664.8	1845.6
72.5°	1242.4	1108.0	1313.6	1647.2	1720.8
75°	960.8	940.0	1058.4	1279.2	1162.4
77.5°	688.0	855.2	928.0	983.2	962.4
80°	466.4	600.0	876.8	832.0	821.6
82.5°	314.4	448.0	568.8	712.8	720.8
85°	199.2	329.6	526.4	676.0	654.4
87.5°	131.2	256.8	443.2	473.6	460.8
90°	85.6	217.6	312.8	318.4	314.4
92.5°	72.0	157.6	194.4	176.8	161.6
95°	87.2	108.8	101.6	92.8	85.6
97.5°	103.2	72.8	68.0	68.0	70.4
100°	106.4	69.6	55.2	49.6	47.2
102.5°	101.6	73.6	52.0	48.8	46.4
105°	92.0	71.2	52.8	45.6	44.0
107.5°	80.0	65.6	53.6	45.6	40.8
110°	68.0	60.0	47.2	51.2	50.4



TEST NUMBER: P397398

CATALOG NUMBER: VRVT4LED-LD5-24-PC-UNV-LG52-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	56.8	54.4	41.6	38.4	42.4
115°	47.2	48.0	46.4	29.6	30.4
117.5°	40.0	41.6	60.8	29.6	26.4
120°	33.6	32.8	52.8	60.0	34.4
122.5°	28.0	25.6	63.2	65.6	71.2
125°	23.2	19.2	56.0	52.0	56.8
127.5°	19.2	15.2	32.0	80.8	52.8
130°	16.0	12.0	29.6	60.8	81.6
132.5°	12.8	10.4	42.4	32.0	50.4
135°	10.4	8.0	23.2	31.2	24.0
137.5°	8.8	7.2	11.2	56.8	43.2
140°	7.2	5.6	6.4	32.0	48.8
142.5°	6.4	4.8	4.8	12.0	25.6
145°	5.6	4.8	4.0	6.4	8.0
147.5°	4.8	4.0	4.0	4.8	4.0
150°	4.8	4.0	4.0	3.2	2.4
152.5°	4.8	4.8	4.0	2.4	1.6
155°	4.8	4.8	4.8	3.2	0.8
157.5°	4.8	4.8	4.8	3.2	1.6
160°	4.8	4.8	4.8	3.2	1.6
162.5°	4.8	4.8	4.8	3.2	1.6
165°	5.6	5.6	5.6	4.0	2.4
167.5°	5.6	5.6	5.6	4.0	2.4
170°	5.6	5.6	5.6	4.0	2.4
172.5°	5.6	5.6	5.6	4.8	3.2
175°	5.6	5.6	5.6	4.8	3.2
177.5°	5.6	5.6	5.6	4.8	3.2
180°	5.6	5.6	5.6	5.6	5.6

(END OF REPORT)