

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: P397405

Luminaire Tested: **VRVT4LED-LD5-30-DRF-UNV-LR63-CD3-WL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4LED-LD5-30-DRF-UNV-LR63-CD3-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

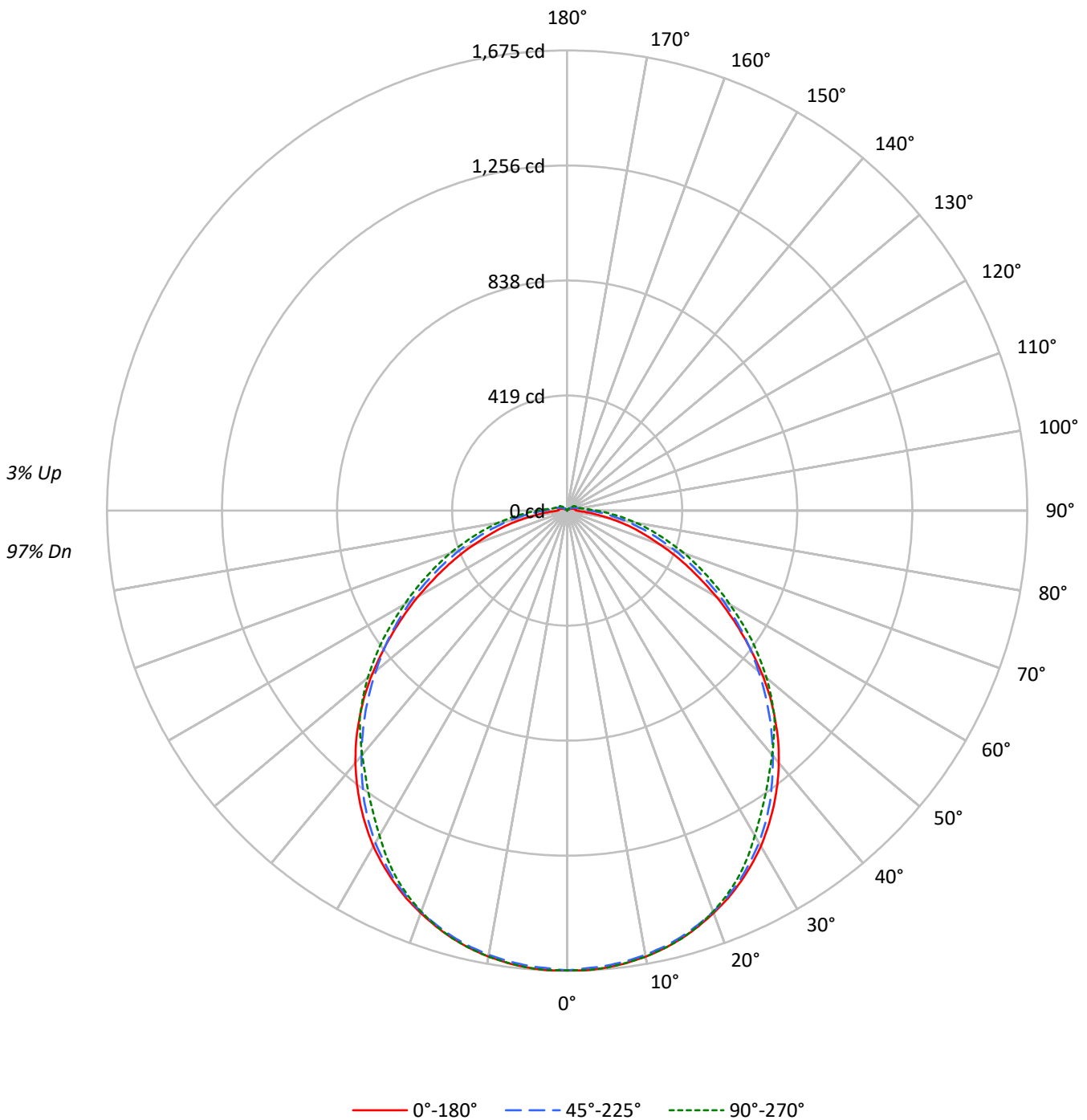
Lumens per Lamp: N/A
Luminaire Lumens: 4757.4 lumens
Efficiency: N/A
Efficacy: 7.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.21 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

Input Watts (W): 601.9
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: P397405

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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	93	95	92	89	91	88	86	87	85	83	80
2	98	90	83	77	95	87	81	76	83	78	74	80	75	71	76	73	69	67
3	89	79	71	64	87	77	69	63	74	67	62	70	65	60	67	63	59	57
4	82	70	61	54	79	68	60	54	65	58	53	63	57	52	60	55	51	48
5	75	63	54	47	73	61	53	47	59	51	46	56	50	45	54	49	44	42
6	70	56	47	41	68	55	47	41	53	46	40	51	45	40	49	43	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	41	35	31	29
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	28	26
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4192	4192	4192
5°	4176	4104	4113
10°	4149	4025	4023
15°	4115	3941	3928
20°	4066	3847	3809
25°	4011	3736	3662
30°	3942	3598	3470
35°	3846	3430	3296
40°	3731	3234	3158
45°	3572	3033	3050
50°	3365	2827	2873
55°	3112	2623	2664
60°	2844	2401	2423
65°	2555	2150	2203
70°	2247	1906	1995
75°	1974	1654	1769
80°	1608	1406	1551
85°	1195	1152	1306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.4	3.3
10°-20°	454.0	9.5
20°-30°	683.1	14.4
30°-40°	804.9	16.9
40°-50°	813.5	17.1
50°-60°	707.1	14.9
60°-70°	522.4	11.0
70°-80°	321.1	6.8
80°-90°	146.5	3.1
90°-100°	60.4	1.3
100°-110°	37.3	0.8
110°-120°	25.1	0.5
120°-130°	14.4	0.3
130°-140°	6.5	0.1
140°-150°	1.8	0.0
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	1295.5	27.2
0°-40°	2100.4	44.2
0°-60°	3621.1	76.1
0°-90°	4611.1	96.9
90°-120°	122.9	2.6
90°-150°	145.6	3.1
90°-180°	146.0	3.1
0°-180°	4757.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1674	1674	1674	1674	1674	
5°	1670	1668	1663	1667	1670	159
15°	1612	1609	1606	1610	1612	455
25°	1492	1491	1486	1479	1473	688
35°	1311	1310	1289	1264	1259	820
45°	1069	1066	1038	1051	1068	824
55°	774	773	783	813	819	693
65°	487	492	528	559	563	483
75°	250	264	306	339	346	265
85°	70	93	137	165	170	75
90°	34	52	85	104	107	20
95°	31	40	57	65	67	25
105°	25	28	37	42	42	26
115°	15	16	27	33	35	15
125°	8	6	16	24	26	7
135°	4	3	7	13	16	3
145°	2	1	1	4	6	1
155°	1	1	1	0	0	1
165°	1	1	1	0	0	0
175°	1	1	1	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P397405

CATALOG NUMBER: VRVT4LED-LD5-30-DRF-UNV-LR63-CD3-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1673.6	1673.6	1673.6	1673.6	1673.6
2.5°	1674.9	1673.3	1667.5	1671.8	1674.2
5°	1669.6	1668.2	1662.6	1667.0	1669.8
7.5°	1661.3	1659.0	1653.9	1658.7	1660.0
10°	1648.6	1646.2	1641.6	1646.2	1648.6
12.5°	1632.5	1630.1	1626.4	1630.4	1632.8
15°	1612.3	1609.4	1606.1	1610.2	1612.2
17.5°	1587.4	1585.4	1581.6	1586.1	1585.9
20°	1559.0	1557.4	1554.7	1556.3	1553.6
22.5°	1528.5	1525.4	1522.7	1519.7	1516.3
25°	1492.3	1490.6	1485.8	1478.6	1473.3
27.5°	1453.3	1452.0	1442.2	1429.9	1423.2
30°	1410.6	1408.0	1396.6	1377.6	1365.9
32.5°	1362.6	1361.1	1344.8	1323.4	1311.0
35°	1311.0	1309.8	1288.6	1264.5	1259.0
37.5°	1256.8	1254.7	1226.1	1209.1	1207.7
40°	1198.9	1194.9	1165.4	1155.0	1160.3
42.5°	1137.8	1133.4	1101.8	1104.0	1114.4
45°	1069.4	1066.1	1038.2	1051.2	1067.5
47.5°	1001.4	996.5	973.8	996.2	1008.5
50°	925.8	920.2	909.0	940.2	948.0
52.5°	849.0	846.6	845.8	877.1	881.8
55°	774.1	773.3	782.9	812.8	818.9
57.5°	699.7	699.5	717.8	745.9	750.6
60°	627.2	628.3	655.8	681.3	684.6
62.5°	553.1	559.2	589.9	617.1	622.6
65°	487.0	491.8	528.0	559.4	563.0
67.5°	422.4	430.2	467.7	498.9	505.9
70°	357.9	371.8	412.3	443.0	452.0
72.5°	301.3	313.9	357.6	392.3	395.5
75°	250.1	264.5	306.4	339.2	346.4
77.5°	199.0	214.1	259.0	293.6	298.2
80°	149.8	168.6	214.9	247.8	253.9
82.5°	106.4	128.0	173.4	205.0	210.2
85°	70.4	92.8	137.4	165.3	170.1
87.5°	44.5	68.3	107.5	132.0	136.6
90°	34.4	52.3	84.8	103.5	106.9
92.5°	32.2	44.5	68.2	81.4	83.8
95°	30.6	40.2	56.6	65.3	66.9
97.5°	29.6	36.6	49.3	55.0	55.8
100°	28.5	33.6	44.3	48.8	49.4
102.5°	26.9	30.6	40.2	44.8	45.1
105°	24.8	27.7	37.0	41.6	42.4
107.5°	22.2	24.8	34.4	39.2	40.5
110°	19.8	21.9	31.8	37.1	38.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	17.3	19.0	29.4	35.2	36.8
115°	14.9	16.2	26.9	33.1	35.2
117.5°	13.0	13.3	24.3	30.9	33.1
120°	10.9	10.7	21.8	28.5	30.9
122.5°	9.1	8.5	19.0	26.2	28.8
125°	7.7	6.4	16.5	23.5	26.4
127.5°	6.4	5.1	13.9	21.1	23.8
130°	5.4	4.3	11.4	18.6	21.1
132.5°	4.5	3.5	9.1	16.0	18.4
135°	3.7	3.0	6.9	13.4	15.8
137.5°	3.0	2.4	4.8	10.9	13.1
140°	2.6	2.1	3.0	8.6	10.7
142.5°	2.1	1.6	1.6	6.4	8.3
145°	1.8	1.3	0.8	4.5	6.1
147.5°	1.4	1.1	0.6	2.6	4.0
150°	1.1	1.0	0.6	1.1	2.1
152.5°	1.1	1.0	0.8	0.3	0.5
155°	1.1	1.1	0.8	0.3	0.0
157.5°	1.1	1.1	0.8	0.3	0.0
160°	1.3	1.1	0.8	0.3	0.2
162.5°	1.3	1.1	1.0	0.5	0.2
165°	1.3	1.3	1.0	0.5	0.2
167.5°	1.3	1.3	1.0	0.5	0.3
170°	1.3	1.3	1.0	0.5	0.3
172.5°	1.3	1.3	1.0	0.6	0.3
175°	1.4	1.3	1.1	0.6	0.5
177.5°	1.4	1.3	1.0	0.6	0.5
180°	1.0	1.0	1.0	1.0	1.0

(END OF REPORT)