

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: P397453

Luminaire Tested: **VRVT4S-LD5-18-PCF-LR63-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-18-PCF-LR63-CD2-U
Description:
Light Source: -
Ballast/Driver: -

Summary

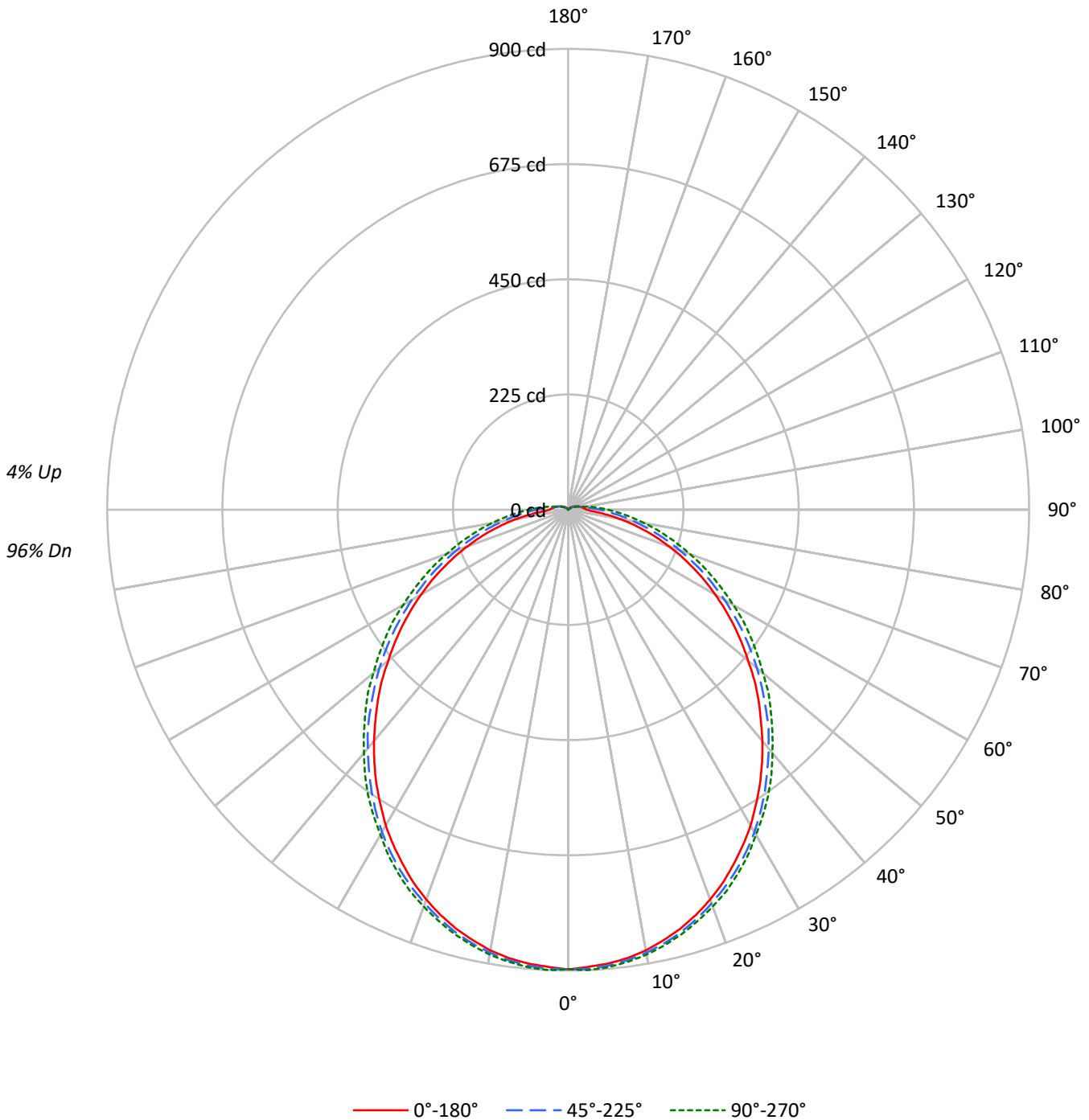
Lumens per Lamp: N/A
Luminaire Lumens: 2561.6 lumens
Efficiency: N/A
Efficacy: 7.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 356.1
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	109	109	109	104	104	104	99	99	99	96
1	107	102	97	93	104	99	95	91	94	91	88	90	87	85	86	83	81	79
2	97	89	82	76	94	87	80	75	82	77	72	79	74	70	75	71	68	66
3	89	78	70	63	86	76	68	62	73	66	61	69	64	59	66	62	58	55
4	81	69	60	53	79	67	59	53	64	57	52	62	56	51	59	54	50	47
5	75	62	53	46	72	60	52	46	58	50	45	56	49	44	53	48	43	41
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	43	38	36
7	64	51	42	36	62	50	41	35	48	40	35	46	39	34	44	38	34	32
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31	41	35	30	28
9	56	42	34	29	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	26	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4283	4283	4283
5°	4217	4191	4211
10°	4146	4078	4108
15°	4053	3953	3990
20°	3943	3811	3863
25°	3809	3664	3728
30°	3669	3505	3564
35°	3508	3324	3414
40°	3337	3138	3236
45°	3167	2945	3069
50°	2976	2757	2888
55°	2806	2557	2723
60°	2619	2354	2535
65°	2422	2145	2346
70°	2200	1925	2151
75°	1951	1697	1973
80°	1641	1482	1797
85°	1293	1292	1658



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.8	3.3
10°-20°	240.4	9.4
20°-30°	357.1	13.9
30°-40°	417.9	16.3
40°-50°	419.9	16.4
50°-60°	372.3	14.5
60°-70°	288.9	11.3
70°-80°	188.4	7.4
80°-90°	98.4	3.8
90°-100°	47.1	1.8
100°-110°	24.5	1.0
110°-120°	13.3	0.5
120°-130°	6.3	0.2
130°-140°	1.9	0.1
140°-150°	0.3	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	682.3	26.6
0°-40°	1100.1	42.9
0°-60°	1892.4	73.9
0°-90°	2468.1	96.3
90°-120°	84.9	3.3
90°-150°	93.4	3.6
90°-180°	94.0	3.7
0°-180°	2561.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	890	891	894	896	897	84
15°	847	849	854	856	858	239
25°	764	769	776	783	784	352
35°	653	660	670	678	681	408
45°	526	533	545	555	560	405
55°	395	402	416	430	435	353
65°	270	277	291	307	311	267
75°	153	160	177	194	199	163
85°	56	72	90	106	110	55
90°	36	47	62	74	77	20
95°	32	34	42	50	52	25
105°	23	22	22	23	24	24
115°	16	13	13	12	13	16
125°	10	8	6	6	7	9
135°	5	4	1	1	2	4
145°	1	1	0	0	0	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	1	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°	897.7	897.7	897.7	897.7	897.7
2.5°	893.6	894.7	897.2	899.6	900.0
5°	889.7	890.9	893.9	896.0	897.0
7.5°	883.3	884.4	887.3	890.1	890.5
10°	873.9	875.4	878.5	881.7	882.3
12.5°	861.2	863.6	867.4	870.3	871.1
15°	846.8	848.9	853.5	856.4	857.7
17.5°	829.7	832.4	837.1	840.6	842.1
20°	810.4	813.1	818.3	824.2	824.7
22.5°	788.7	792.9	798.4	804.2	806.4
25°	763.9	768.7	776.5	782.6	784.3
27.5°	738.8	743.4	752.9	759.2	760.5
30°	712.1	717.1	727.2	732.1	733.1
32.5°	682.4	688.1	698.9	705.8	707.5
35°	652.8	659.5	669.8	678.0	680.8
37.5°	621.6	629.0	638.9	649.4	651.7
40°	589.7	597.5	608.6	618.3	620.2
42.5°	556.6	565.1	578.9	586.7	590.3
45°	525.7	532.7	544.8	555.2	559.8
47.5°	493.1	500.1	512.7	525.1	530.3
50°	458.2	467.7	481.3	493.3	496.1
52.5°	427.3	436.5	448.3	461.6	466.0
55°	395.1	402.4	416.3	430.4	435.3
57.5°	363.1	370.9	383.7	398.0	405.4
60°	331.5	338.9	352.6	367.5	371.9
62.5°	300.8	308.4	320.8	337.0	341.4
65°	269.7	277.1	291.1	306.7	310.7
67.5°	239.6	246.6	260.9	277.5	282.5
70°	209.7	218.8	232.0	247.4	252.0
72.5°	181.5	189.5	204.5	220.1	225.5
75°	153.2	160.5	177.3	193.6	199.2
77.5°	126.8	136.1	152.5	170.4	174.8
80°	100.4	110.4	129.8	147.0	151.0
82.5°	76.6	89.4	109.2	126.2	128.7
85°	56.0	71.7	90.5	106.4	110.2
87.5°	42.1	57.4	75.9	89.0	92.4
90°	36.2	46.7	62.0	73.8	76.6
92.5°	33.7	38.9	50.9	61.4	63.3
95°	31.5	33.6	41.7	50.3	52.4
97.5°	29.2	29.9	35.1	41.2	42.9
100°	27.1	27.3	29.5	33.9	35.1
102.5°	25.0	24.4	25.3	27.6	28.6
105°	23.1	21.9	22.5	22.9	24.0
107.5°	21.2	19.4	19.8	19.4	20.0
110°	19.2	17.0	17.3	16.8	17.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	17.3	14.9	15.2	14.5	15.2
115°	15.6	13.0	13.2	12.4	13.3
117.5°	14.1	11.6	11.1	10.5	11.6
120°	12.4	10.1	9.2	8.8	10.1
122.5°	11.1	9.0	7.2	7.2	8.6
125°	9.5	7.8	5.5	5.7	7.1
127.5°	8.4	6.7	4.0	4.6	5.7
130°	7.2	5.7	2.5	3.4	4.6
132.5°	5.9	4.6	1.5	2.3	3.2
135°	5.0	3.8	1.0	1.1	2.1
137.5°	4.0	2.9	0.4	0.2	1.0
140°	3.1	2.1	0.2	0.0	0.0
142.5°	2.1	1.3	0.0	0.0	0.0
145°	1.3	0.8	0.0	0.0	0.0
147.5°	0.8	0.4	0.0	0.0	0.0
150°	0.4	0.2	0.0	0.0	0.0
152.5°	0.4	0.2	0.0	0.0	0.0
155°	0.4	0.4	0.0	0.0	0.0
157.5°	0.4	0.4	0.2	0.0	0.0
160°	0.4	0.4	0.2	0.0	0.0
162.5°	0.4	0.4	0.2	0.0	0.0
165°	0.4	0.4	0.2	0.0	0.0
167.5°	0.4	0.4	0.2	0.0	0.0
170°	0.4	0.4	0.2	0.0	0.0
172.5°	0.4	0.4	0.2	0.0	0.0
175°	0.6	0.4	0.2	0.0	0.0
177.5°	0.6	0.4	0.2	0.0	0.0
180°	0.2	0.2	0.2	0.2	0.2

(END OF REPORT)