

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: P397454

Luminaire Tested: **VRVT4S-LD5-9-DR-LA59-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P397454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1801-511-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: VRVT4S-LD5-9-DR-LA59-CD1-U
Description:
Light Source: -
Ballast/Driver: -

Summary

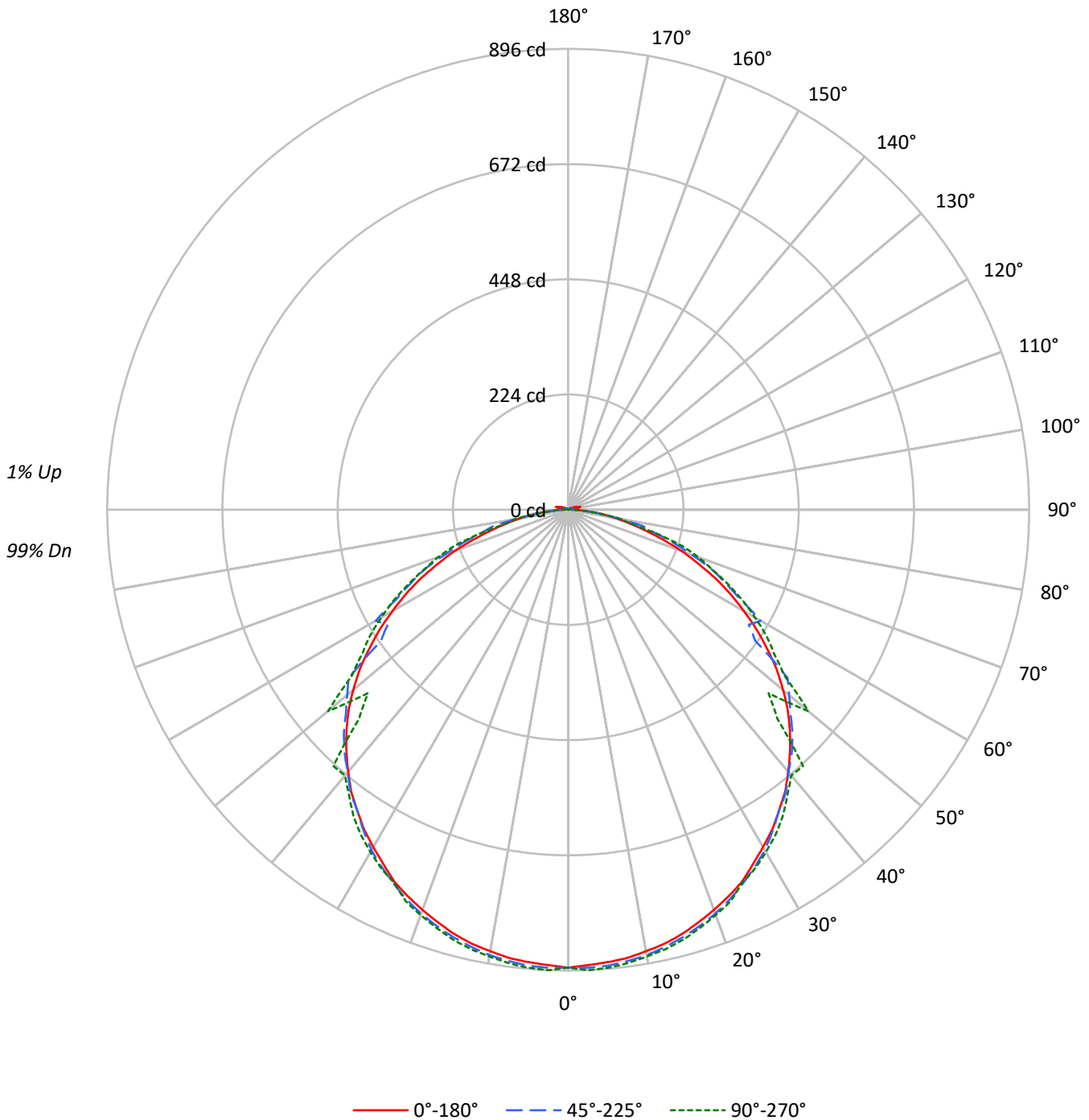
Lumens per Lamp: N/A
Luminaire Lumens: 2630.3 lumens
Efficiency: N/A
Efficacy: 28.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 1.08' x L: 2.08' x H: 0.25')
CIE Type: Direct

Input Watts (W): 94.1
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

TEST NUMBER: P397454

CATALOG NUMBER: VRVT4S-LD5-9-DR-LA59-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P397454

CATALOG NUMBER: VRVT4S-LD5-9-DR-LA59-CD1-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	111	111	111	106	106	106	101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	78	96	88	82	77	84	79	75	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	35	31	29
9	56	42	34	29	54	42	34	29	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4249	4249	4249
5°	4186	4173	4197
10°	4135	4083	4106
15°	4089	3987	4025
20°	4028	3892	3928
25°	3982	3787	3803
30°	3903	3684	3737
35°	3838	3545	3647
40°	3765	3436	3520
45°	3671	3334	3151
50°	3541	3213	3547
55°	3355	2726	3059
60°	3114	2883	2858
65°	2831	2484	2586
70°	2461	2109	2290
75°	1957	1668	1711
80°	1506	1142	1242
85°	951	544	552



TEST NUMBER: P397454

CATALOG NUMBER: VRVT4S-LD5-9-DR-LA59-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	3.2
10°-20°	242.9	9.2
20°-30°	369.7	14.1
30°-40°	450.4	17.1
40°-50°	470.4	17.9
50°-60°	430.3	16.4
60°-70°	328.6	12.5
70°-80°	179.2	6.8
80°-90°	48.4	1.8
90°-100°	7.4	0.3
100°-110°	9.0	0.3
110°-120°	5.4	0.2
120°-130°	2.6	0.1
130°-140°	0.9	0.0
140°-150°	0.3	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.1	0.0
0°-30°	697.1	26.5
0°-40°	1147.5	43.6
0°-60°	2048.2	77.9
0°-90°	2604.4	99.0
90°-120°	21.8	0.8
90°-150°	25.6	1.0
90°-180°	26.0	1.0
0°-180°	2630.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	883	887	890	893	894	84
15°	854	858	861	864	865	241
25°	799	801	802	805	800	367
35°	714	718	714	724	727	447
45°	609	612	617	648	575	470
55°	472	475	444	492	489	422
65°	315	325	337	338	342	311
75°	154	166	174	174	173	166
85°	41	41	38	37	37	45
90°	7	12	11	11	11	5
95°	7	6	6	5	5	8
105°	22	29	4	4	4	22
115°	11	5	7	2	3	11
125°	5	4	2	1	1	5
135°	2	2	1	1	1	2
145°	1	1	0	0	0	1
155°	0	0	0	0	0	0
165°	1	1	1	1	0	0
175°	1	1	1	1	1	0
180°	1	1	1	1	1	



TEST NUMBER: P397454

CATALOG NUMBER: VRVT4S-LD5-9-DR-LA59-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	890.4	890.4	890.4	890.4	890.4
2.5°	886.2	888.4	891.2	895.2	896.3
5°	883.1	886.8	890.1	893.2	894.0
7.5°	879.2	883.7	885.1	889.0	889.0
10°	871.6	876.7	879.5	882.0	882.0
12.5°	864.4	868.0	870.5	873.6	875.0
15°	854.3	857.6	860.7	863.8	865.2
17.5°	841.4	846.7	848.7	851.2	852.3
20°	828.0	833.0	835.8	838.0	838.6
22.5°	813.7	817.6	820.4	821.2	824.3
25°	798.6	801.1	802.5	804.7	800.2
27.5°	777.3	782.0	784.0	782.0	786.5
30°	757.4	762.2	764.4	765.0	768.6
32.5°	737.8	741.2	740.0	744.2	749.6
35°	714.3	718.2	714.3	723.5	727.4
37.5°	692.2	694.1	694.4	703.6	699.7
40°	665.3	667.8	666.4	672.3	674.5
42.5°	638.1	640.4	642.9	647.4	675.9
45°	609.3	612.1	616.6	648.2	574.8
47.5°	579.3	579.9	585.8	537.3	528.1
50°	545.2	544.9	560.8	510.2	609.3
52.5°	511.0	510.7	537.3	561.4	530.0
55°	472.4	475.2	443.8	492.2	488.9
57.5°	434.8	437.4	416.1	449.7	457.0
60°	394.2	404.0	432.0	418.9	419.2
62.5°	355.6	364.3	376.6	380.8	382.5
65°	315.3	324.8	337.1	338.2	342.4
67.5°	272.4	286.2	301.0	299.0	303.0
70°	234.6	217.8	254.2	255.9	268.2
72.5°	192.1	212.2	215.0	179.2	230.7
75°	153.7	165.5	174.2	173.9	172.8
77.5°	121.8	129.6	150.6	135.5	122.6
80°	92.1	94.4	100.0	99.4	104.4
82.5°	69.4	66.1	68.0	67.2	59.4
85°	41.2	41.4	38.1	37.0	36.7
87.5°	17.1	19.0	18.5	17.6	19.0
90°	7.0	11.8	11.2	10.9	10.6
92.5°	7.8	8.4	7.8	6.7	5.9
95°	6.7	6.2	6.4	5.3	5.3
97.5°	9.2	5.0	5.0	4.5	4.2
100°	18.5	4.5	4.8	3.9	3.9
102.5°	24.6	4.8	4.2	3.9	4.2
105°	21.6	28.6	3.6	3.9	3.9
107.5°	18.2	16.8	3.4	3.6	3.9
110°	15.4	10.4	2.8	3.4	3.6



TEST NUMBER: P397454

CATALOG NUMBER: VRVT4S-LD5-9-DR-LA59-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	12.6	7.3	2.5	2.8	3.4
115°	10.6	5.3	7.0	2.5	2.8
117.5°	9.0	5.6	7.6	2.2	2.5
120°	7.3	11.5	3.9	2.0	2.0
122.5°	5.9	5.3	2.8	1.4	1.7
125°	4.8	3.9	2.0	1.1	1.4
127.5°	3.9	3.1	1.4	0.8	1.1
130°	3.4	2.8	0.8	0.8	0.8
132.5°	2.8	2.2	0.8	0.6	0.8
135°	2.2	1.7	0.8	0.6	0.6
137.5°	1.7	1.4	0.6	0.6	0.6
140°	1.4	0.8	0.3	0.3	0.3
142.5°	1.1	0.8	0.3	0.3	0.3
145°	0.8	0.6	0.3	0.3	0.3
147.5°	0.6	0.3	0.3	0.3	0.3
150°	0.3	0.3	0.3	0.3	0.3
152.5°	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.3	0.3
157.5°	0.3	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.3	0.3	0.3
162.5°	0.6	0.6	0.6	0.6	0.3
165°	0.6	0.6	0.6	0.6	0.3
167.5°	0.6	0.6	0.6	0.6	0.3
170°	0.6	0.6	0.6	0.6	0.3
172.5°	0.6	0.6	0.6	0.6	0.6
175°	0.6	0.6	0.6	0.6	0.6
177.5°	0.6	0.6	0.6	0.6	0.6
180°	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)