

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: P397209

Luminaire Tested: **2VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 2VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3209.6 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 2.08' x H: 0.17')
CIE Type: Direct

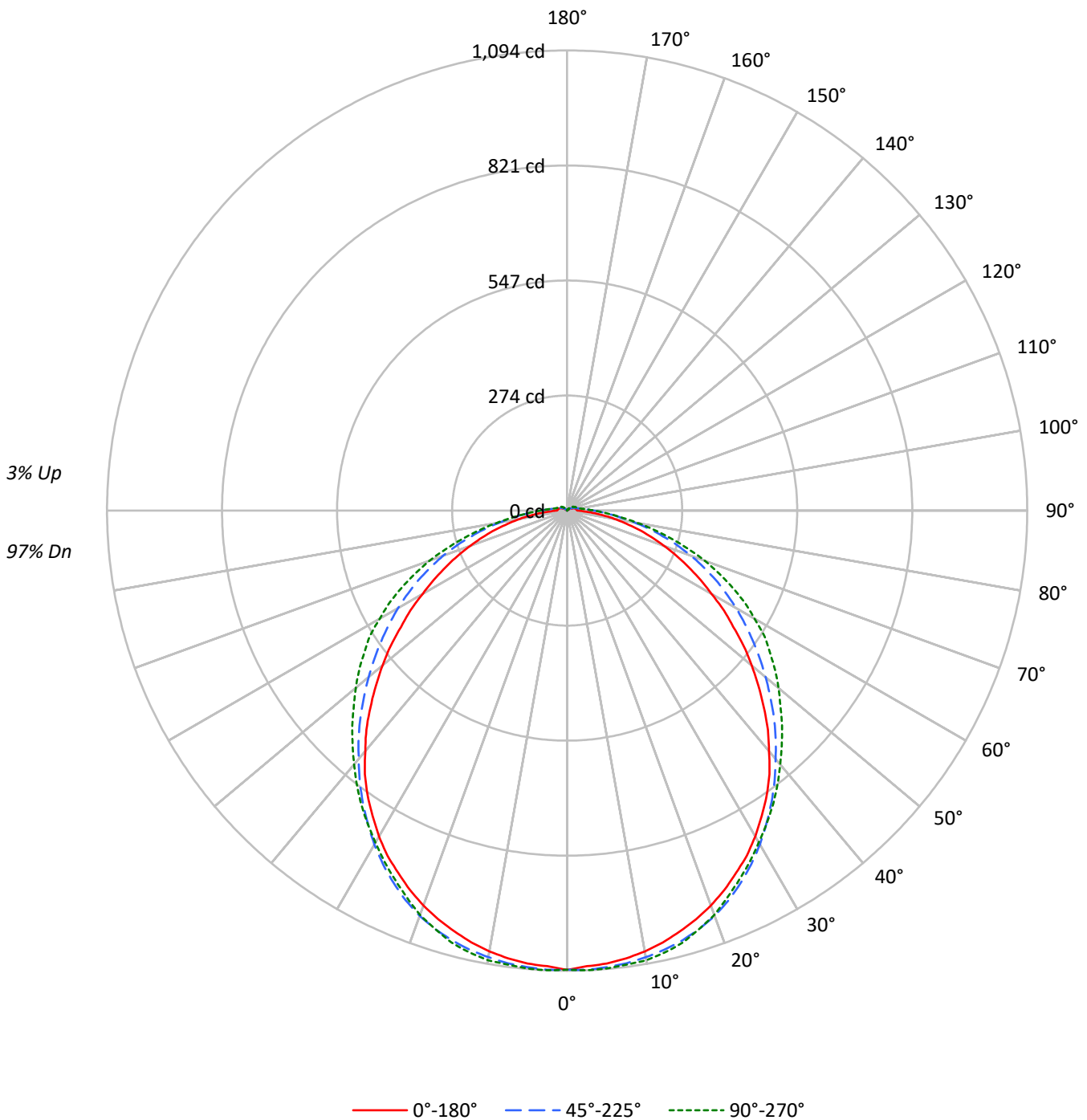
Input Watts (W): 68.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P397209

CATALOG NUMBER: 2VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397209

CATALOG NUMBER: 2VRVT2-LD5-4-FR50-UNV-LG52-CD1-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	50	30	10	50	30	10	0		
RCR																										
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	99	99	99	99	99	99	97		
1	107	102	98	94	104	100	96	92	95	92	89	91	88	85	87	84	82	87	84	82	87	84	82	80		
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	76	72	69	76	72	69	66		
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	67	62	58	67	62	58	56		
4	81	69	60	53	79	68	59	53	65	57	52	62	56	51	60	54	50	60	54	50	60	54	50	47		
5	75	62	53	46	72	60	52	46	58	51	45	56	49	44	54	48	43	54	48	43	54	48	43	41		
6	69	56	47	40	67	54	46	40	52	45	39	50	44	39	49	43	38	49	43	38	49	43	38	36		
7	64	50	42	35	62	49	41	35	48	40	35	46	39	34	44	38	34	44	38	34	44	38	34	32		
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	41	35	30	41	35	30	28		
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	38	32	27	38	32	27	26		
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	35	29	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11281	11281	11281
5°	11136	11020	11013
10°	11011	10757	10757
15°	10848	10495	10441
20°	10674	10190	10033
25°	10445	9800	9554
30°	10201	9358	9119
35°	9879	8870	8727
40°	9440	8352	8305
45°	8949	7860	7919
50°	8405	7345	7549
55°	7793	6851	7184
60°	7199	6368	6744
65°	6649	5850	6197
70°	6061	5250	5490
75°	5448	4491	4542
80°	4708	3636	3518
85°	3728	2824	2573



TEST NUMBER: P397209

CATALOG NUMBER: 2VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	3.2
10°-20°	297.2	9.3
20°-30°	446.3	13.9
30°-40°	528.7	16.5
40°-50°	536.8	16.7
50°-60°	481.9	15.0
60°-70°	378.5	11.8
70°-80°	239.8	7.5
80°-90°	106.0	3.3
90°-100°	40.8	1.3
100°-110°	22.8	0.7
110°-120°	14.7	0.5
120°-130°	8.3	0.3
130°-140°	3.5	0.1
140°-150°	0.8	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	847.0	26.4
0°-40°	1375.7	42.9
0°-60°	2394.3	74.6
0°-90°	3118.6	97.2
90°-120°	78.3	2.4
90°-150°	91.0	2.8
90°-180°	91.0	2.8
0°-180°	3209.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1081	1085	1090	1093	1093	103
15°	1036	1044	1058	1064	1063	292
25°	950	967	977	971	968	438
35°	827	845	847	850	853	516
45°	661	681	695	714	722	510
55°	482	503	539	576	589	433
65°	319	336	389	425	435	316
75°	177	197	235	255	255	188
85°	60	81	103	108	104	61
90°	25	45	63	65	64	15
95°	22	27	40	42	41	18
105°	19	16	22	25	24	20
115°	12	10	15	19	20	12
125°	5	3	8	14	15	5
135°	2	2	3	7	8	2
145°	1	1	0	2	3	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P397209

CATALOG NUMBER: 2VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1091.7	1091.7	1091.7	1091.7	1091.7
2.5°	1084.3	1087.4	1092.7	1093.8	1093.8
5°	1081.1	1085.4	1089.6	1092.7	1092.7
7.5°	1073.8	1078.0	1085.4	1088.5	1088.5
10°	1064.2	1069.5	1078.0	1084.3	1085.4
12.5°	1051.6	1057.9	1069.5	1075.8	1075.8
15°	1035.8	1044.2	1057.9	1064.2	1063.2
17.5°	1018.9	1028.4	1043.1	1046.3	1043.1
20°	998.9	1010.5	1025.2	1027.4	1023.1
22.5°	976.7	990.4	1003.0	999.9	995.7
25°	950.3	967.2	976.7	971.4	968.2
27.5°	925.0	940.9	948.2	941.9	940.9
30°	894.4	912.4	916.6	912.4	911.3
32.5°	860.7	881.8	881.8	881.8	882.8
35°	827.0	844.9	847.0	850.2	853.3
37.5°	790.0	807.9	810.1	818.5	821.7
40°	746.8	766.8	771.0	783.7	787.9
42.5°	706.7	724.6	734.1	749.9	755.2
45°	661.4	681.4	695.1	714.1	722.5
47.5°	617.0	637.0	655.0	679.3	687.7
50°	572.7	592.8	616.0	644.5	656.1
52.5°	529.5	546.4	577.0	610.7	623.4
55°	482.0	503.1	539.0	575.9	588.6
57.5°	441.9	458.8	501.0	541.1	556.9
60°	396.6	415.6	464.1	504.2	514.7
62.5°	357.6	376.6	426.2	466.2	476.7
65°	318.6	336.5	389.2	425.0	434.6
67.5°	281.6	301.7	350.2	386.1	390.2
70°	244.7	265.8	313.3	343.8	348.1
72.5°	211.0	231.0	274.2	299.5	300.6
75°	177.2	197.2	235.2	255.3	255.3
77.5°	144.5	165.6	198.3	214.1	212.0
80°	115.0	133.9	162.4	170.9	170.9
82.5°	85.4	105.4	129.8	138.2	133.9
85°	60.2	81.2	103.4	107.6	104.4
87.5°	39.0	61.2	80.2	83.4	81.2
90°	25.3	45.4	63.3	65.4	64.3
92.5°	23.2	34.8	49.6	51.7	50.6
95°	22.2	27.4	40.1	42.2	41.1
97.5°	22.2	23.2	33.8	35.8	34.8
100°	21.1	20.1	28.5	30.6	29.5
102.5°	21.1	17.9	25.3	27.4	26.4
105°	19.0	15.8	22.2	25.3	24.2
107.5°	17.9	13.7	20.1	23.2	23.2
110°	15.8	11.6	17.9	22.2	22.2



TEST NUMBER: P397209

CATALOG NUMBER: 2VRVT2-LD5-4-FR50-UNV-LG52-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	13.7	10.6	16.9	21.1	21.1
115°	11.6	9.5	14.8	19.0	20.1
117.5°	9.5	7.4	12.6	17.9	19.0
120°	8.4	6.3	11.6	16.9	17.9
122.5°	7.4	5.3	10.6	14.8	16.9
125°	5.3	3.2	8.4	13.7	14.8
127.5°	5.3	3.2	7.4	11.6	13.7
130°	4.2	3.2	6.3	10.6	11.6
132.5°	3.2	2.1	4.2	8.4	10.6
135°	2.1	2.1	3.2	7.4	8.4
137.5°	2.1	1.0	2.1	6.3	7.4
140°	1.0	1.0	1.0	4.2	5.3
142.5°	1.0	1.0	0.0	3.2	4.2
145°	1.0	1.0	0.0	2.1	3.2
147.5°	1.0	1.0	0.0	1.0	2.1
150°	1.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	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

(END OF REPORT)