

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P211787

Luminaire Tested: **LSR4B20D010BZ EC4B10208050 4LBWWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LSR4B20D010BZ EC4B10208050 4LBWWH1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE DISTRIBUTION WITH WHEAT TRIM
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W
DL3-21.8 6W DLE-22.46W
Light Source: HIGH LUMEN LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1819.4 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.16
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

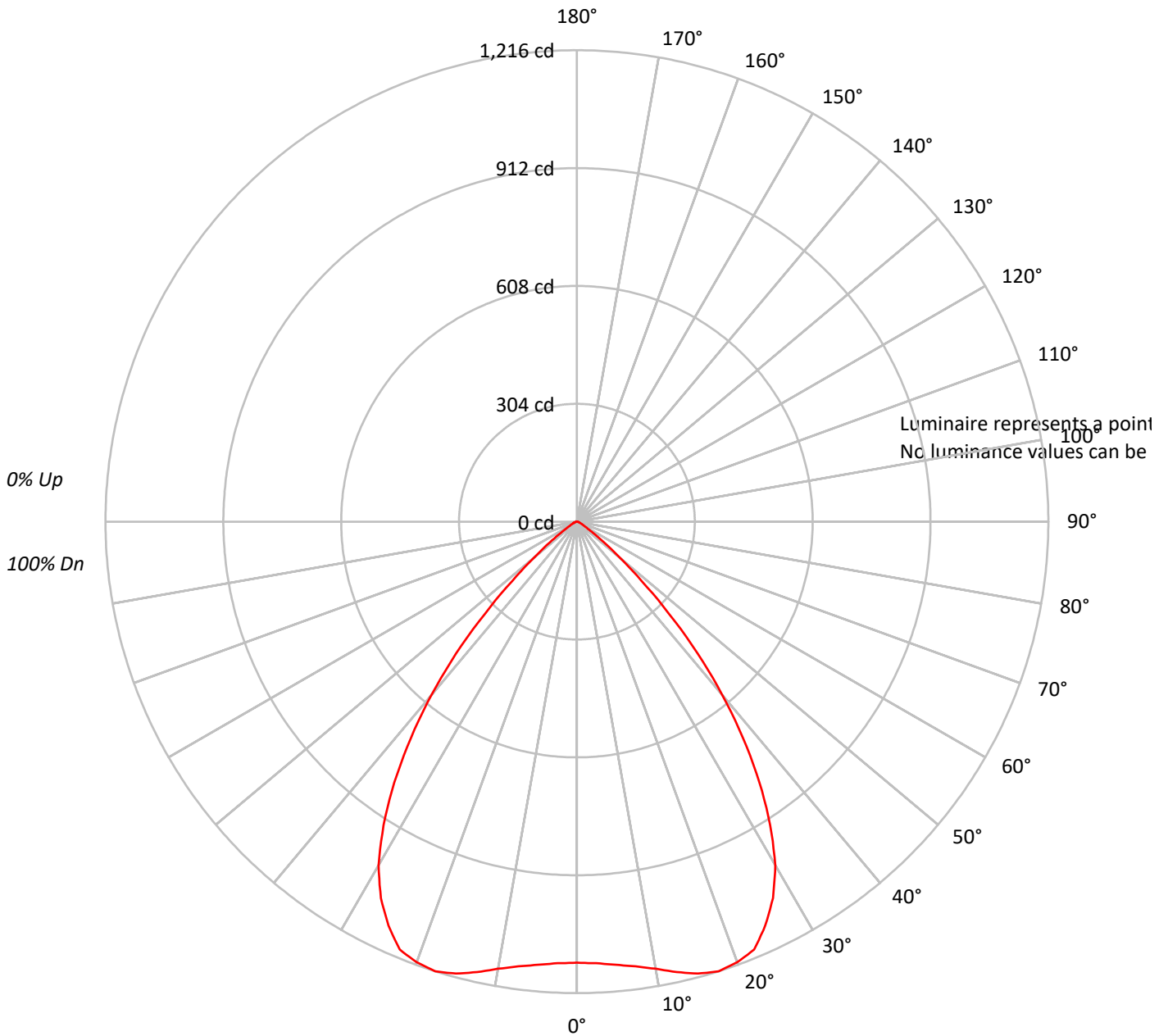
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100													
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92						92													
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84						84													
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76						76													
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69						69													
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63						63													
6	83	73	66	61	81	72	65	61	70	64	60	69	64	60	67	63	59	58						58													
7	78	67	60	56	76	67	60	55	65	59	55	64	59	55	63	58	54	53						53													
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49						49													
9	69	58	51	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45						45													
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41						41													

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	6.1
10°-20°	341.0	18.7
20°-30°	524.5	28.8
30°-40°	506.0	27.8
40°-50°	263.9	14.5
50°-60°	55.6	3.1
60°-70°	12.9	0.7
70°-80°	5.0	0.3
80°-90°	0.3	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	975.7	53.6
0°-40°	1481.7	81.4
0°-60°	1801.2	99.0
0°-90°	1819.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1819.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1138	
5°	1147	110
15°	1207	341
25°	1150	524
35°	821	506
45°	336	264
55°	50	56
65°	12	13
75°	5	5
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1137.6
2.5°	1139.9
5°	1147.1
7.5°	1156.6
10°	1170.9
12.5°	1189.9
15°	1206.6
17.5°	1216.1
20°	1208.9
22.5°	1194.7
25°	1149.5
27.5°	1094.7
30°	1023.3
32.5°	928.1
35°	821.0
37.5°	704.4
40°	583.1
42.5°	461.7
45°	335.6
47.5°	226.1
50°	145.2
52.5°	88.1
55°	50.0
57.5°	30.9
60°	21.4
62.5°	16.7
65°	11.9
67.5°	9.5
70°	7.1
72.5°	7.1
75°	4.8
77.5°	2.4
80°	2.4
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)