

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: P211697

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBWH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211697
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 EC4B10209035 4LBWH1
Description: PORTFOLIO 4 INCH CYLINDER
WIDE DISTRIBUTION WITH SEMI-SPECULAR CLEAR 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: 1466.7 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.13
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

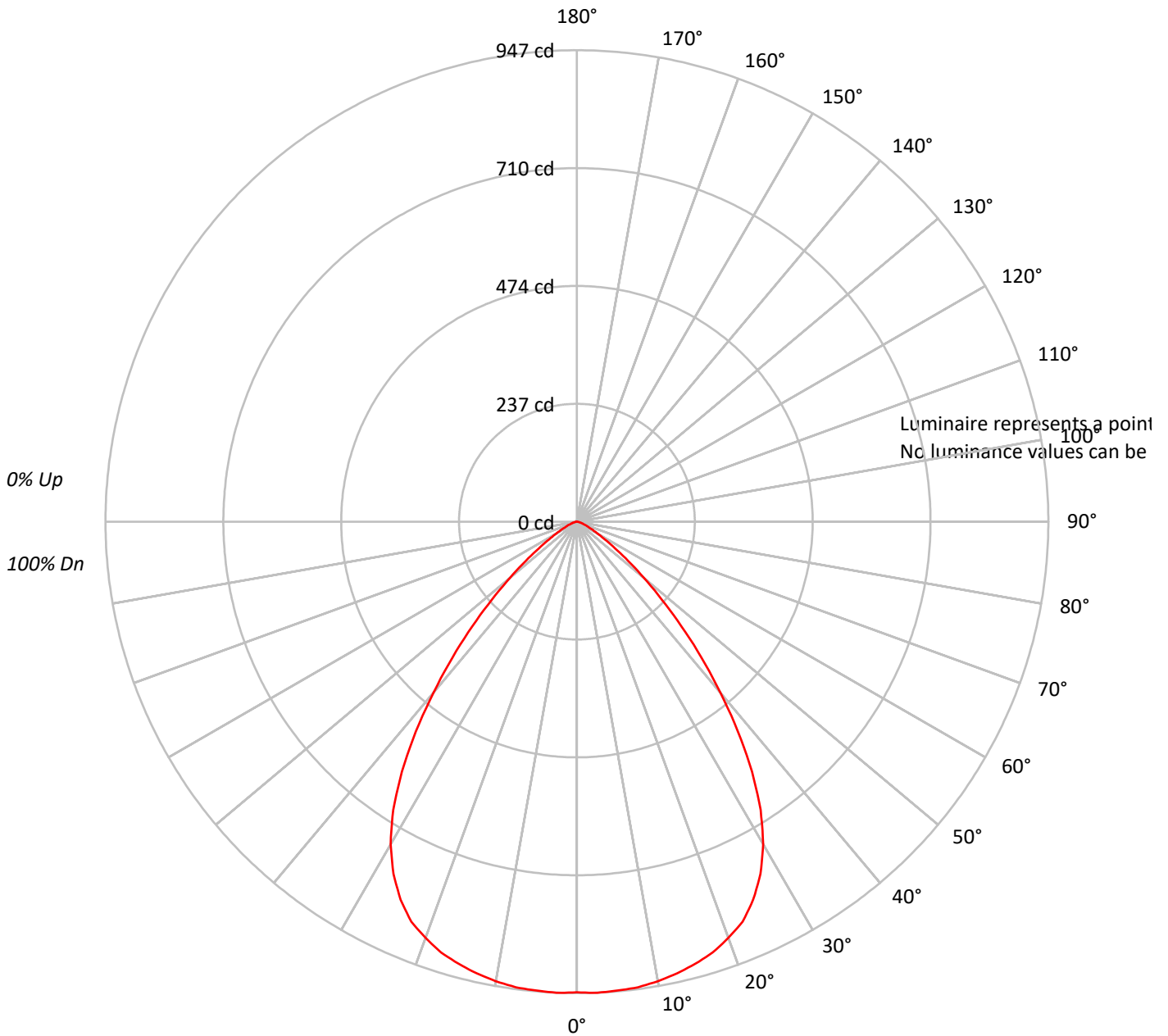
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211697

CATALOG NUMBER: LSR4B20D010BZ EC4B10209035 4LBWH1

Luminous Intensity Polar Plot





TEST NUMBER: P211697

CATALOG NUMBER: LSR4B20D010BZ EC4B10209035 4LBWH1

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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91			
2	105	100	95	91	103	98	93	90	95	91	88	91	88	86	89	86	84	82			
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	62	61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55			
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50			
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43			
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211697

CATALOG NUMBER: LSR4B20D010BZ EC4B10209035 4LBWH1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	6.1
10°-20°	259.4	17.7
20°-30°	382.8	26.1
30°-40°	377.8	25.8
40°-50°	231.2	15.8
50°-60°	88.6	6.0
60°-70°	27.7	1.9
70°-80°	8.1	0.6
80°-90°	1.1	0.1
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°	732.2	49.9
0°-40°	1110.0	75.7
0°-60°	1429.8	97.5
0°-90°	1466.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1466.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	945	
5°	945	90
15°	919	259
25°	838	383
35°	613	378
45°	296	231
55°	94	89
65°	26	28
75°	8	8
85°	0	1
90°	0	



TEST NUMBER: P211697

CATALOG NUMBER: LSR4B20D010BZ EC4B10209035 4LBWH1

CANDELA DISTRIBUTION (FULL):

0°	
0°	945.3
2.5°	947.3
5°	945.3
7.5°	943.3
10°	937.4
12.5°	929.4
15°	919.4
17.5°	907.5
20°	889.6
22.5°	869.7
25°	837.9
27.5°	798.0
30°	748.3
32.5°	686.6
35°	613.0
37.5°	531.4
40°	447.8
42.5°	370.2
45°	296.5
47.5°	230.9
50°	175.1
52.5°	129.4
55°	93.5
57.5°	65.7
60°	47.8
62.5°	35.8
65°	25.9
67.5°	19.9
70°	13.9
72.5°	10.0
75°	8.0
77.5°	4.0
80°	4.0
82.5°	2.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)