

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: P211655

Luminaire Tested: **LSR4B20D010BZ EC4B10208035 4LBNI1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211655
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 EC4B10208035 4LBNLI1
Description: PORTFOLIO 4 INCH CYLINDER
NARROW DISTRIBUTION WITH 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: 1527.7 lumens
Efficiency: N/A
Efficacy: 73.4 lumens/watt
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.54
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

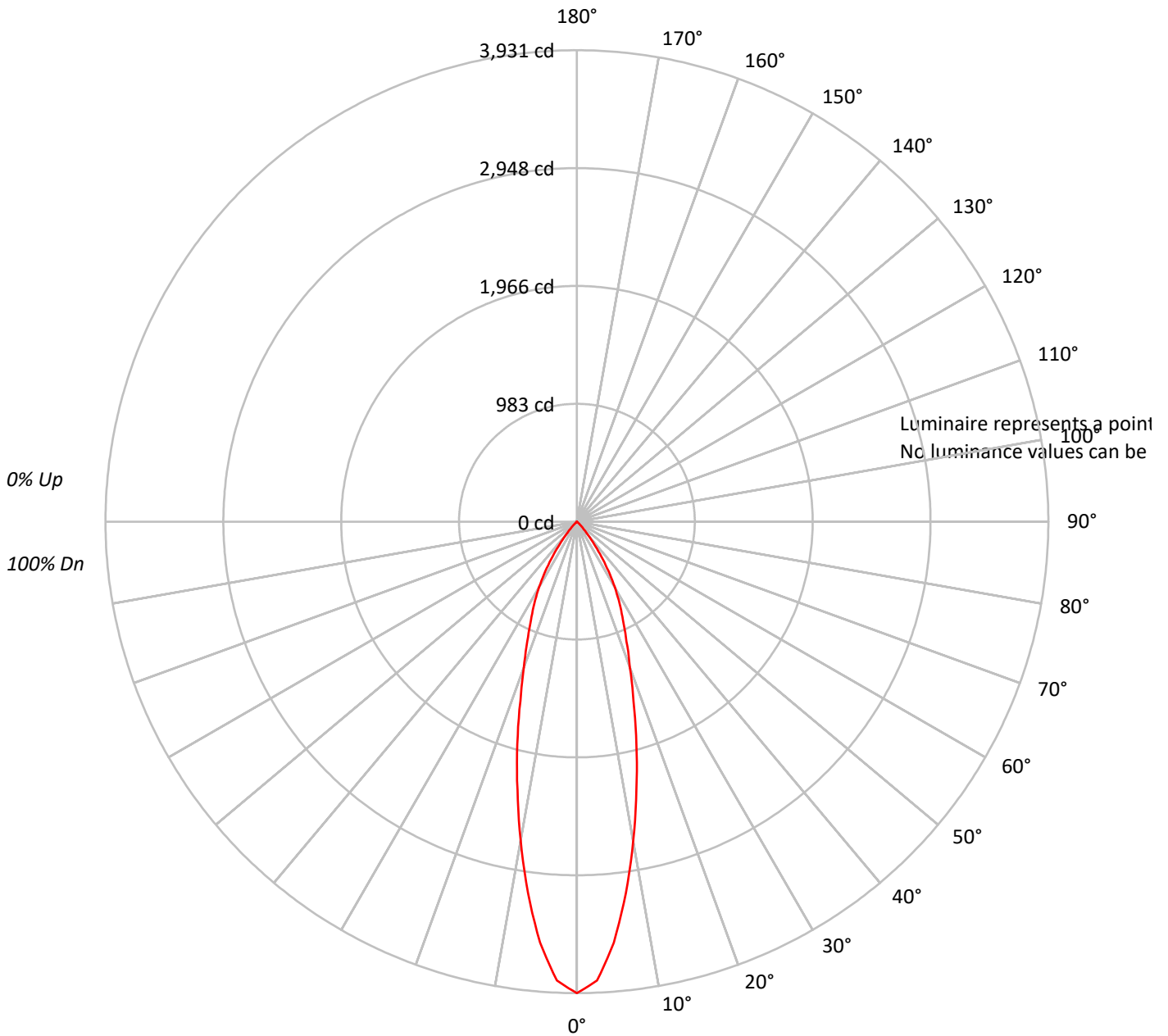
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P211655

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBNLI1

Luminous Intensity Polar Plot





TEST NUMBER: P211655

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBNLI1

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	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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95																																				
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	92	90																																				
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85																																				
4	101	94	89	86	99	93	88	85	91	87	84	89	86	83	87	84	82	81																																				
5	96	89	84	80	95	88	84	80	87	82	79	85	81	79	83	80	78	77																																				
6	92	85	80	76	91	84	79	76	83	78	75	81	78	75	80	77	74	73																																				
7	89	81	76	72	88	80	75	72	79	75	71	78	74	71	77	73	71	69																																				
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66																																				
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	64	63																																				
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61																																				

AVERAGE LUMINANCE (cd/sqm):





TEST NUMBER: P211655

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBNLI1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.8	20.3
10°-20°	530.4	34.7
20°-30°	421.5	27.6
30°-40°	223.1	14.6
40°-50°	38.4	2.5
50°-60°	2.9	0.2
60°-70°	1.5	0.1
70°-80°	0.0	0.0
80°-90°	0.0	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°	1261.8	82.6
0°-40°	1484.9	97.2
0°-60°	1526.2	99.9
0°-90°	1527.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1527.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3931	
5°	3524	310
15°	1918	530
25°	908	422
35°	353	223
45°	40	38
55°	2	3
65°	2	1
75°	0	0
85°	0	0
90°	0	



TEST NUMBER: P211655

CATALOG NUMBER: LSR4B20D010BZ EC4B10208035 4LBNLI1

CANDELA DISTRIBUTION (FULL):

	0°
0°	3931.4
2.5°	3830.2
5°	3524.4
7.5°	3124.4
10°	2700.9
12.5°	2291.5
15°	1917.5
17.5°	1569.3
20°	1291.6
22.5°	1079.9
25°	908.1
27.5°	769.3
30°	630.5
32.5°	489.4
35°	352.9
37.5°	232.9
40°	138.8
42.5°	80.0
45°	40.0
47.5°	14.1
50°	4.7
52.5°	4.7
55°	2.4
57.5°	2.4
60°	2.4
62.5°	2.4
65°	2.4
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)