

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: P205706

Luminaire Tested: **LD4B20D010 EU4B10208040 4LBSH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P205706
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: LD4B20D010 EU4B10208040 4LBSH1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW 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: 2060.1 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.17
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

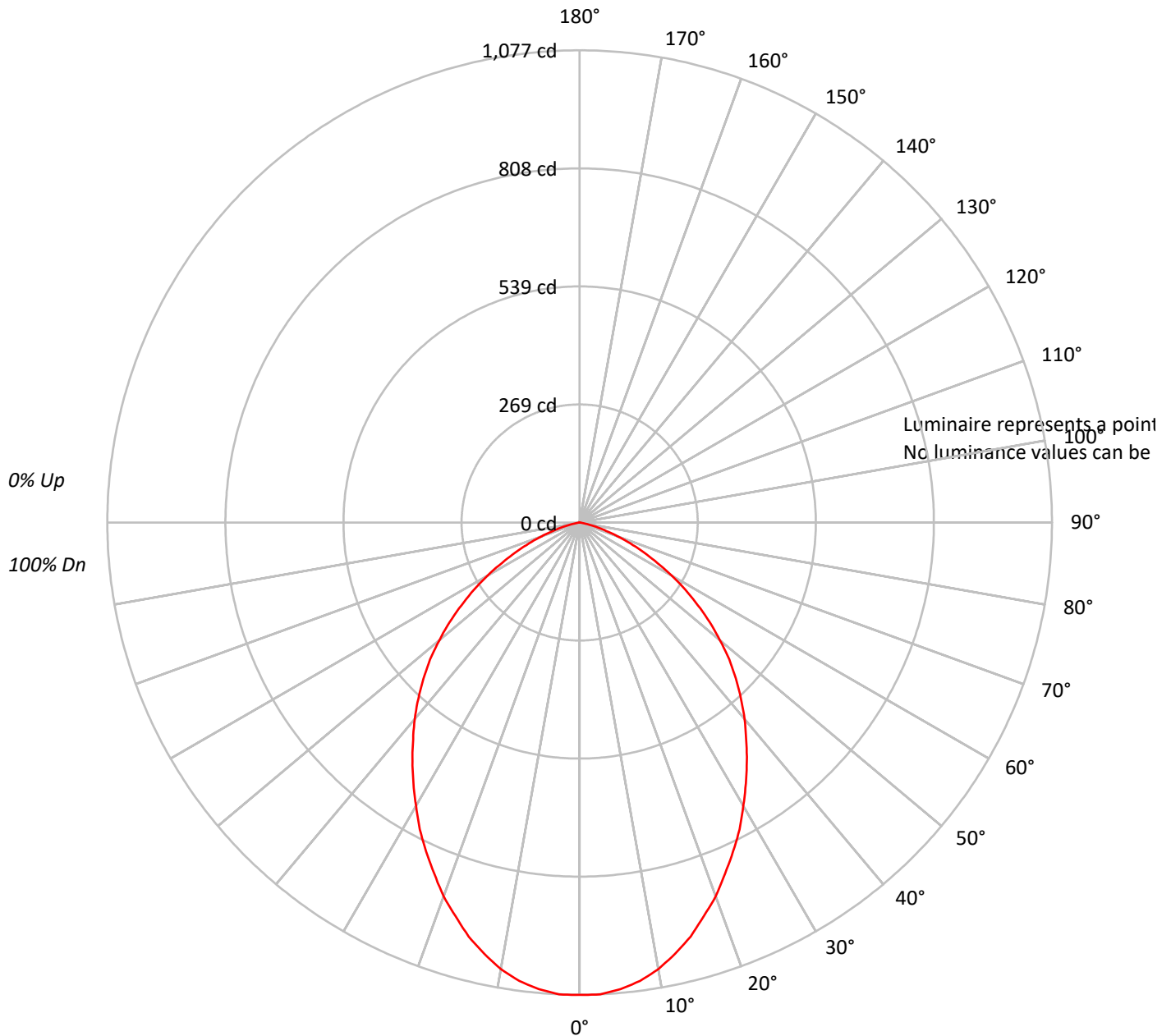
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	102	96	90	85	100	94	88	84	90	86	82	87	83	80	84	81	79	77		
3	95	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67		
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58		
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	51		
6	75	63	55	49	73	62	54	49	60	54	49	59	53	48	57	52	48	46		
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41		
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	40	35	34		
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	4.9
10°-20°	274.3	13.3
20°-30°	380.9	18.5
30°-40°	415.7	20.2
40°-50°	387.8	18.8
50°-60°	294.3	14.3
60°-70°	161.2	7.8
70°-80°	44.3	2.2
80°-90°	0.6	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°	756.1	36.7
0°-40°	1171.8	56.9
0°-60°	1853.9	90.0
0°-90°	2060.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2060.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1077	
5°	1068	101
15°	978	274
25°	828	381
35°	665	416
45°	504	388
55°	329	294
65°	161	161
75°	39	44
85°	0	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1077.4
2.5°	1077.4
5°	1068.3
7.5°	1054.7
10°	1034.3
12.5°	1007.1
15°	977.6
17.5°	941.3
20°	907.3
22.5°	866.5
25°	827.9
27.5°	789.3
30°	746.2
32.5°	705.4
35°	664.6
37.5°	623.8
40°	585.2
42.5°	544.4
45°	503.5
47.5°	462.7
50°	417.4
52.5°	374.3
55°	328.9
57.5°	285.8
60°	242.7
62.5°	199.6
65°	161.0
67.5°	124.8
70°	93.0
72.5°	63.5
75°	38.6
77.5°	18.1
80°	4.5
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)