

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: P211441

Luminaire Tested: **LE_4B20D010 EC4B10209024 4LBCS1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P211441
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: LE_4B20D010 EC4B10209024 4LBCS1MMS
Description: PORTFOLIO 4 INCH CYLINDER
SHALLOW DISTRIBUTION WITH CAST MATTE BLACK 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: 1496.4 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

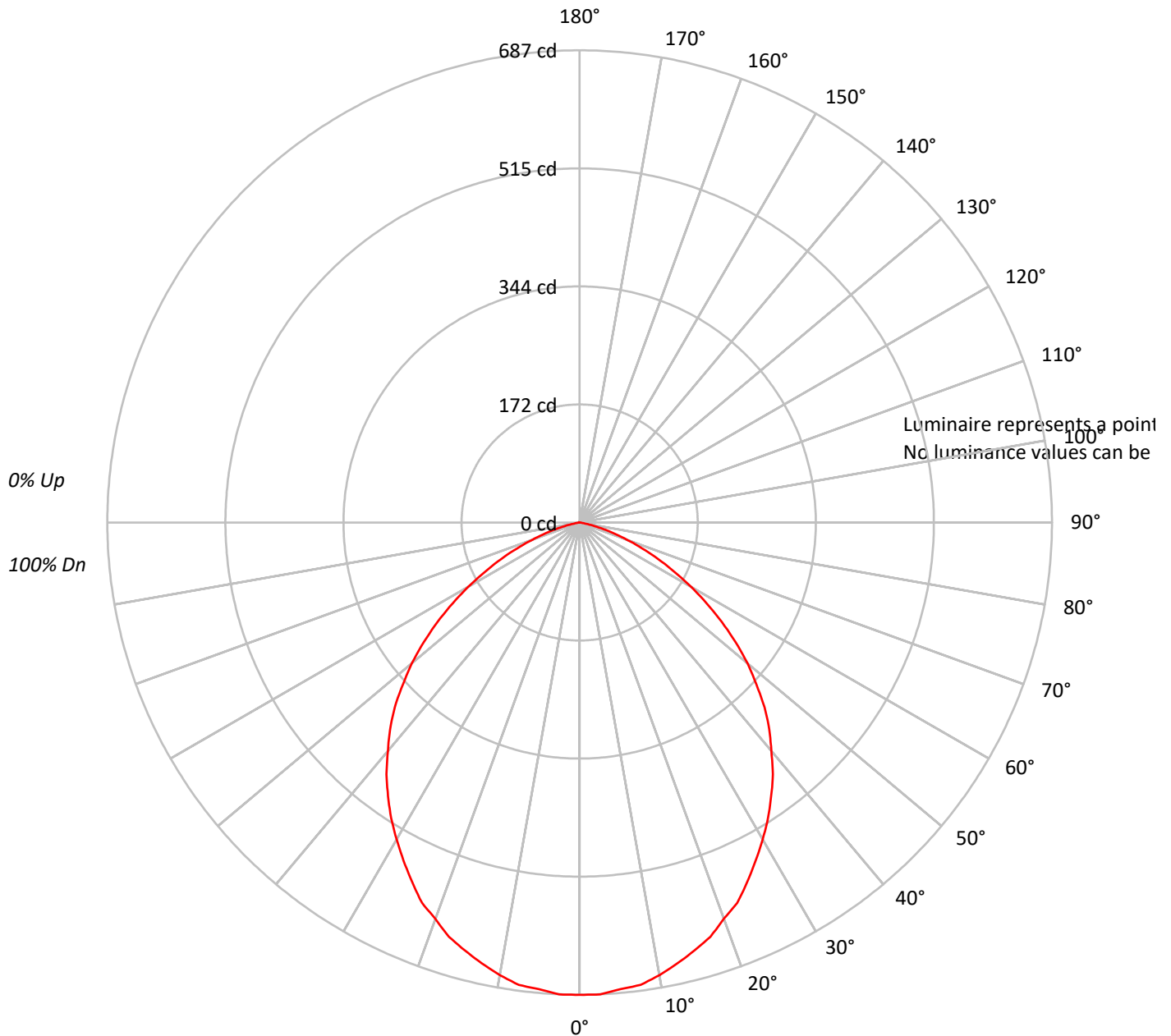
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





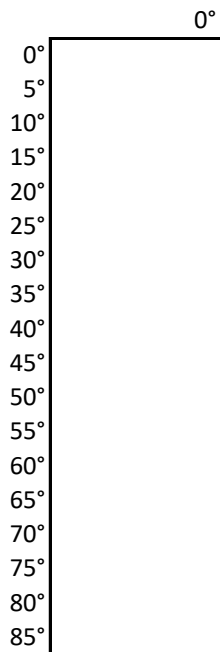
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	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
1	111	107	103	100	108	105	101	98		100	98	95		97	94	92		93	91	90
2	102	95	89	84	99	93	88	83		90	85	81		86	83	79		83	80	78
3	94	85	77	72	92	83	76	71		80	74	70		77	73	69		75	71	67
4	87	76	68	62	84	74	67	61		72	66	61		70	64	60		68	63	59
5	80	68	60	54	78	67	59	54		65	58	53		63	57	53		61	56	52
6	74	62	54	48	72	61	53	47		59	52	47		58	51	47		56	51	46
7	69	56	48	42	67	56	48	42		54	47	42		53	46	42		51	46	41
8	64	52	44	38	63	51	43	38		50	43	38		48	42	38		47	42	37
9	60	48	40	35	59	47	40	34		46	39	34		45	39	34		44	38	34
10	57	44	36	31	55	43	36	31		43	36	31		42	35	31		41	35	31

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	4.3
10°-20°	181.7	12.1
20°-30°	265.4	17.7
30°-40°	303.6	20.3
40°-50°	291.8	19.5
50°-60°	225.3	15.1
60°-70°	125.8	8.4
70°-80°	36.6	2.4
80°-90°	1.6	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°	511.9	34.2
0°-40°	815.4	54.5
0°-60°	1332.5	89.0
0°-90°	1496.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1496.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	687	
5°	681	65
15°	645	182
25°	577	265
35°	486	304
45°	380	292
55°	253	225
65°	126	126
75°	32	37
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	687.2
2.5°	687.2
5°	681.4
7.5°	678.5
10°	668.7
12.5°	657.1
15°	644.6
17.5°	632.0
20°	613.6
22.5°	599.1
25°	576.9
27.5°	554.6
30°	532.3
32.5°	510.1
35°	485.8
37.5°	461.7
40°	433.6
42.5°	408.4
45°	380.4
47.5°	348.5
50°	318.4
52.5°	285.5
55°	252.6
57.5°	218.8
60°	186.8
62.5°	154.9
65°	125.9
67.5°	98.7
70°	73.5
72.5°	51.3
75°	31.9
77.5°	16.5
80°	5.8
82.5°	2.0
85°	0.9
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)