

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: P251842

Luminaire Tested: **LD4B20D010 EU4B10208027 4LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-14)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B20D010 EU4B10208027 4LBDW1LI
Description: PORTFOLIO 4 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1750.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.32 / 1.18
Luminous Opening: Circular (Dia: 7.42' x H: 0')
CIE Type: Direct

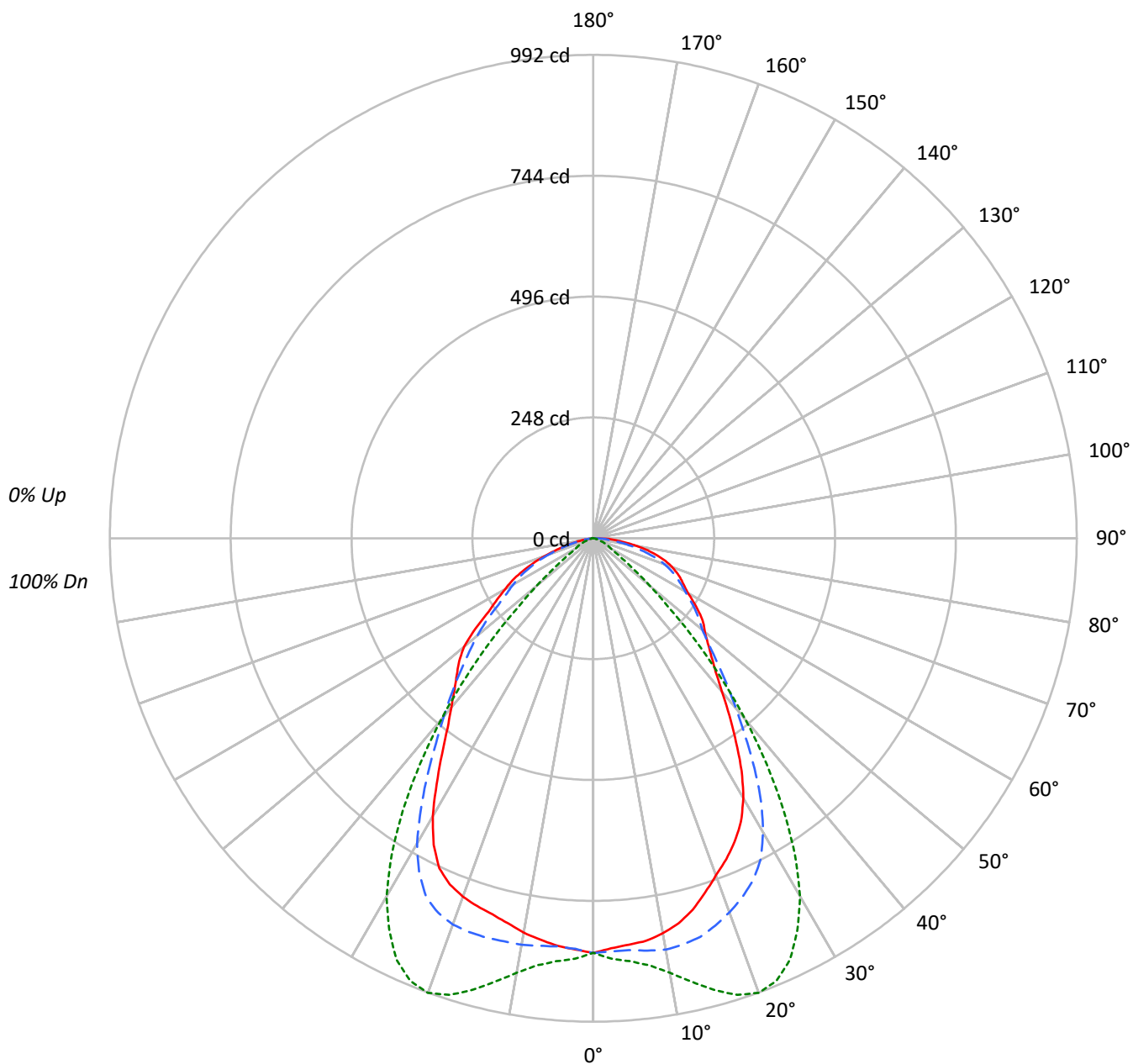
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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	110	106	103	100	108	104	101	98		100	97	95		96	94	92		93	91	89
2	102	95	89	84	100	93	88	83		90	85	81		87	83	80		84	81	78
3	94	85	78	72	92	84	77	72		81	75	71		78	73	69		76	72	68
4	87	77	69	63	85	76	68	63		73	67	62		71	66	61		69	64	60
5	81	70	62	56	79	69	61	56		67	60	55		65	59	54		63	58	54
6	76	64	56	50	74	63	55	50		61	54	49		59	53	49		58	53	48
7	71	58	50	45	69	58	50	45		56	49	44		55	49	44		54	48	44
8	66	54	46	41	65	53	46	41		52	45	40		51	45	40		50	44	40
9	62	50	42	37	61	49	42	37		48	42	37		47	41	37		46	41	37
10	58	46	39	34	57	46	39	34		45	38	34		44	38	34		43	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	212	212	212
5°	209	218	210
10°	208	229	208
15°	204	248	206
20°	195	263	207
25°	189	262	205
30°	177	244	190
35°	155	207	165
40°	133	158	147
45°	121	104	139
50°	116	58	134
55°	115	31	114
60°	112	21	104
65°	117	17	95
70°	125	12	77
75°	131	9	54
80°	129	5	34
85°	134	4	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.5	4.7
10°-20°	243.9	13.9
20°-30°	371.9	21.3
30°-40°	371.3	21.2
40°-50°	273.8	15.6
50°-60°	187.0	10.7
60°-70°	132.0	7.5
70°-80°	70.5	4.0
80°-90°	18.1	1.0
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°	697.3	39.8
0°-40°	1068.5	61.1
0°-60°	1529.3	87.4
0°-90°	1750.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1750.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	851	851	851	851	851	
5°	837	848	871	841	840	80
15°	789	847	960	848	799	221
25°	687	775	955	812	747	315
35°	511	577	680	593	541	319
45°	343	359	295	384	396	267
55°	266	255	72	238	262	236
65°	198	188	29	145	161	196
75°	137	111	9	51	56	142
85°	47	30	1	6	0	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	850.9	850.9	850.9	850.9	850.9	850.9	850.9	850.9	850.9
2.5°	842.1	847.1	848.4	857.2	863.6	856.0	843.3	843.3	844.6
5°	837.0	843.3	848.4	863.6	871.1	858.5	840.8	838.3	839.5
7.5°	833.2	842.1	853.4	876.2	883.8	867.4	843.3	833.2	830.7
10°	823.1	835.7	857.2	890.1	905.3	885.1	847.1	828.2	821.8
12.5°	809.2	824.4	853.4	905.3	931.8	901.5	847.1	819.3	809.2
15°	789.0	805.4	847.1	917.9	959.7	919.2	848.4	810.5	799.1
17.5°	762.4	782.6	833.2	924.3	982.4	935.6	847.1	804.1	791.5
20°	735.9	759.9	816.8	924.3	992.5	942.0	843.3	797.8	782.6
22.5°	713.1	737.1	797.8	912.9	982.4	934.4	832.0	786.4	768.7
25°	686.6	711.8	775.1	888.9	954.6	911.6	811.7	763.7	747.2
27.5°	656.2	684.0	743.4	850.9	906.6	869.9	773.8	727.0	709.3
30°	615.7	641.0	696.7	796.6	848.4	813.0	723.2	675.2	658.7
32.5°	566.4	589.2	641.0	730.8	770.0	740.9	657.5	617.0	598.0
35°	510.8	531.0	576.6	647.4	680.2	662.5	593.0	555.1	541.1
37.5°	459.0	474.1	512.1	563.9	584.1	572.8	529.8	502.0	490.6
40°	409.7	424.8	455.2	480.5	485.5	489.3	476.7	459.0	452.6
42.5°	371.7	385.6	404.6	402.1	386.9	408.4	428.6	426.1	421.0
45°	342.6	352.8	359.1	321.1	294.6	330.0	384.4	398.3	395.7
47.5°	318.6	323.7	319.9	256.7	208.6	256.7	345.2	373.0	373.0
50°	298.4	302.2	292.1	213.7	150.5	206.1	311.0	341.4	346.4
52.5°	284.5	285.7	273.1	180.8	103.7	163.1	274.4	300.9	304.7
55°	265.5	266.8	255.4	156.8	72.1	129.0	237.7	261.7	261.7
57.5°	244.0	246.6	235.2	136.6	50.6	107.5	209.9	232.6	233.9
60°	223.8	225.1	217.5	121.4	41.7	92.3	189.7	208.6	208.6
62.5°	209.9	211.1	202.3	112.5	35.4	80.9	168.2	185.9	187.1
65°	198.5	198.5	188.4	103.7	29.1	68.3	145.4	160.6	160.6
67.5°	185.9	183.3	173.2	92.3	22.8	55.6	122.6	134.0	132.8
70°	172.0	168.2	155.5	79.7	16.4	44.3	96.1	104.9	106.2
72.5°	155.5	150.5	134.0	65.7	12.6	32.9	70.8	78.4	78.4
75°	136.6	130.2	111.3	51.8	8.9	22.8	50.6	55.6	55.6
77.5°	113.8	107.5	88.5	37.9	6.3	15.2	34.1	37.9	37.9
80°	89.8	83.4	65.7	26.6	3.8	8.9	21.5	25.3	24.0
82.5°	67.0	60.7	44.3	16.4	2.5	5.1	13.9	13.9	12.6
85°	46.8	43.0	30.3	10.1	1.3	2.5	6.3	2.5	0.0
87.5°	31.6	27.8	19.0	5.1	0.0	1.3	1.3	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)