

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: P209439

Luminaire Tested: **LDSQ6B20D010 EU6B10209035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B20D010 EU6B10209035 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
WATTAGE D010TR-21.86 W DE010-20.46 W D5LT-21.24 W DMX-20.89 W DL2-22.5 W DL3-21.8 6 W DLE-22.46 W
Light Source: HIGH LUMEN LED 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1921.3 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

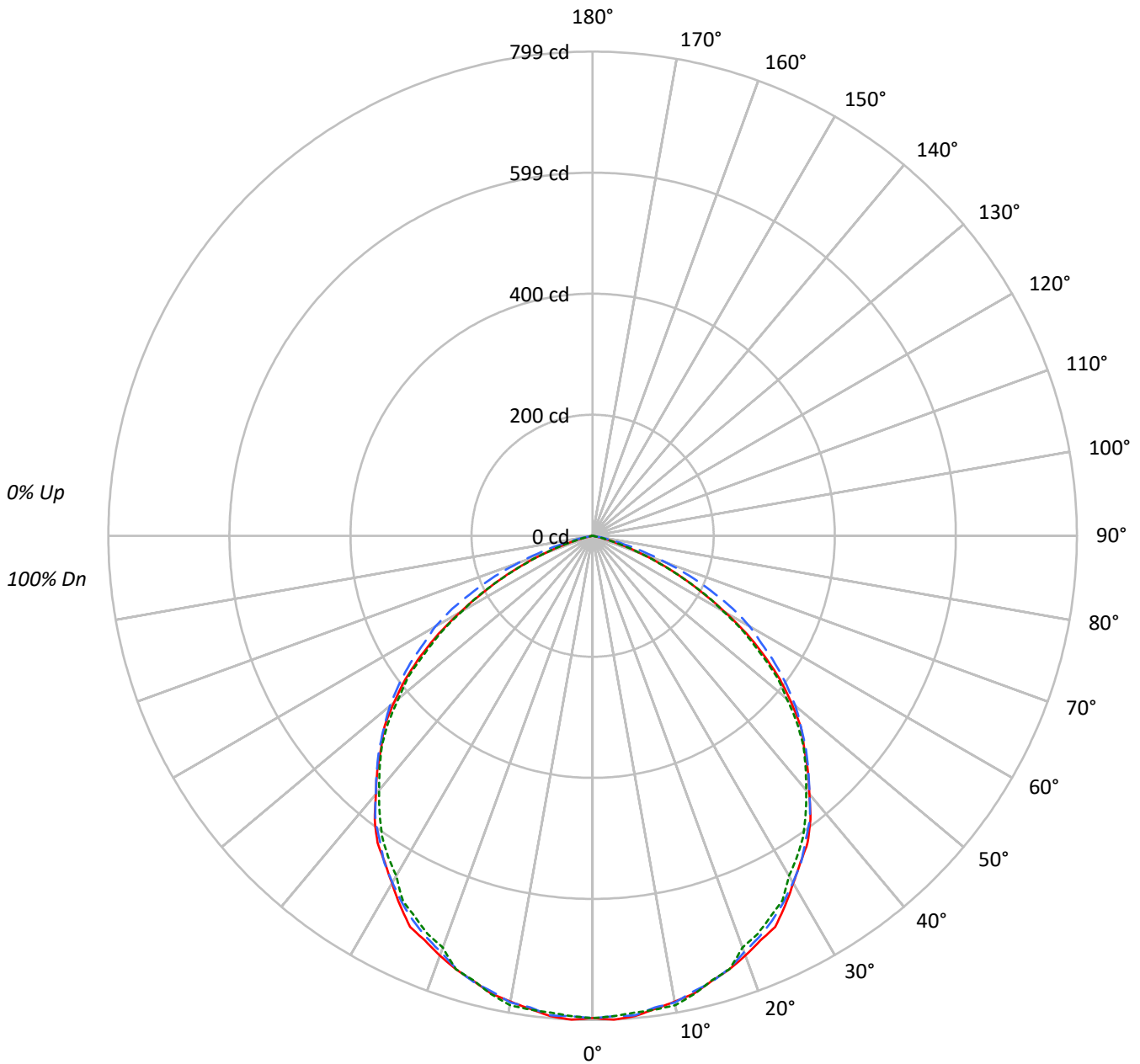
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75																			
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64																			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56																			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43																			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																			
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34																			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.3	3.9
10°-20°	214.6	11.2
20°-30°	322.9	16.8
30°-40°	382.0	19.9
40°-50°	381.3	19.8
50°-60°	316.1	16.5
60°-70°	184.7	9.6
70°-80°	44.0	2.3
80°-90°	0.3	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°	612.8	31.9
0°-40°	994.9	51.8
0°-60°	1692.3	88.1
0°-90°	1921.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1921.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	796	792	795	792	790	75
15°	761	760	762	758	759	215
25°	712	704	701	698	694	326
35°	618	613	613	609	606	385
45°	493	494	498	492	492	381
55°	346	359	367	357	338	307
65°	163	184	216	183	162	162
75°	24	34	53	33	22	32
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	795.8	795.8	795.8	795.8	795.8	795.8	795.8	795.8	795.8	795.8	795.8
2.5°	799.3	794.6	798.1	791.1	795.8	791.1	792.3	789.9	794.6	793.4	792.3
5°	795.8	796.9	794.6	796.9	793.4	789.9	793.4	791.1	784.0	794.6	792.3
7.5°	787.6	788.7	786.4	789.9	787.6	782.9	792.3	785.2	784.0	785.2	789.9
10°	780.5	782.9	781.7	780.5	781.7	781.7	779.3	775.8	779.3	781.7	780.5
12.5°	773.5	777.0	774.6	772.3	770.0	771.1	773.5	767.6	767.6	770.0	777.0
15°	760.6	762.9	764.1	759.4	759.4	760.6	765.3	755.9	760.6	761.7	762.9
17.5°	750.0	751.2	751.2	747.7	750.0	746.5	750.0	745.3	750.0	748.8	751.2
20°	737.1	739.4	737.1	737.1	734.7	735.9	735.9	735.9	732.4	731.2	733.6
22.5°	723.0	723.0	720.7	723.0	720.7	719.5	725.4	716.0	725.4	717.1	724.2
25°	712.4	706.6	703.1	701.9	706.6	701.9	704.2	700.7	703.1	700.7	701.9
27.5°	687.8	684.3	683.1	684.3	684.3	683.1	687.8	674.9	683.1	681.9	681.9
30°	662.0	662.0	664.3	662.0	664.3	660.8	665.5	654.9	662.0	660.8	662.0
32.5°	638.5	639.7	639.7	642.0	638.5	639.7	639.7	636.2	638.5	639.7	637.3
35°	618.5	612.7	612.7	612.7	612.7	612.7	615.0	611.5	615.0	612.7	612.7
37.5°	590.4	584.5	584.5	583.3	589.2	585.7	591.5	586.9	586.9	589.2	589.2
40°	556.3	558.7	555.2	559.9	558.7	554.0	564.6	557.5	562.2	556.3	561.0
42.5°	525.8	527.0	525.8	524.6	529.3	528.2	532.9	528.2	527.0	527.0	535.2
45°	493.0	493.0	493.0	496.5	493.0	494.1	498.8	496.5	498.8	497.7	505.9
47.5°	466.0	460.1	458.9	466.0	464.8	466.0	466.0	467.1	468.3	466.0	469.5
50°	427.2	424.9	424.9	426.1	427.2	429.6	433.1	435.4	433.1	436.6	437.8
52.5°	389.7	387.3	388.5	393.2	395.5	394.4	400.2	401.4	400.2	402.6	402.6
55°	346.2	343.9	347.4	353.3	356.8	360.3	366.2	361.5	366.2	367.4	368.5
57.5°	301.6	300.5	301.6	307.5	311.0	319.2	328.6	328.6	333.3	329.8	333.3
60°	252.3	252.3	257.0	260.6	270.0	275.8	285.2	289.9	294.6	299.3	296.9
62.5°	205.4	206.6	210.1	218.3	224.2	232.4	243.0	247.7	255.9	260.6	258.2
65°	163.1	163.1	165.5	172.5	178.4	189.0	198.4	208.9	213.6	216.0	217.1
67.5°	122.1	120.9	125.6	130.3	136.2	146.7	157.3	163.1	171.4	173.7	172.5
70°	82.2	83.3	85.7	90.4	97.4	105.6	117.4	122.1	126.8	129.1	126.8
72.5°	51.6	51.6	52.8	57.5	62.2	68.1	76.3	81.0	86.9	88.0	85.7
75°	23.5	23.5	25.8	28.2	31.7	36.4	42.3	45.8	49.3	52.8	52.8
77.5°	4.7	5.9	7.0	7.0	9.4	12.9	16.4	20.0	23.5	23.5	23.5
80°	1.2	1.2	1.2	1.2	1.2	1.2	2.3	3.5	5.9	5.9	5.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	795.8	795.8	795.8	795.8	795.8	795.8	795.8	795.8
2.5°	795.8	802.8	795.8	792.3	796.9	795.8	792.3	793.4
5°	792.3	794.6	796.9	787.6	793.4	794.6	792.3	789.9
7.5°	788.7	789.9	788.7	786.4	786.4	786.4	788.7	788.7
10°	787.6	784.0	778.2	774.6	778.2	778.2	777.0	786.4
12.5°	772.3	777.0	773.5	766.4	773.5	772.3	772.3	774.6
15°	760.6	760.6	762.9	753.5	758.2	757.0	757.0	759.4
17.5°	748.8	748.8	747.7	745.3	744.1	747.7	744.1	750.0
20°	732.4	734.7	741.8	730.0	733.6	730.0	730.0	723.0
22.5°	712.4	724.2	718.3	717.1	716.0	717.1	719.5	711.3
25°	699.5	699.5	701.9	694.8	694.8	697.2	696.0	693.7
27.5°	681.9	680.8	679.6	677.2	683.1	678.4	678.4	678.4
30°	657.3	660.8	659.6	653.8	660.8	658.5	654.9	647.9
32.5°	636.2	640.8	633.8	632.6	631.5	632.6	633.8	627.9
35°	610.3	611.5	611.5	606.8	608.0	606.8	604.5	605.6
37.5°	586.9	585.7	579.8	577.5	578.6	578.6	579.8	577.5
40°	554.0	557.5	557.5	549.3	551.6	549.3	549.3	548.1
42.5°	527.0	528.2	524.6	521.1	521.1	520.0	517.6	520.0
45°	498.8	497.7	494.1	490.6	490.6	489.4	487.1	491.8
47.5°	467.1	464.8	463.6	458.9	458.9	451.9	453.1	457.7
50°	435.4	433.1	428.4	426.1	422.5	419.0	417.8	417.8
52.5°	397.9	397.9	393.2	388.5	387.3	385.0	382.6	383.8
55°	365.0	365.0	361.5	353.3	348.6	342.7	339.2	338.0
57.5°	327.5	325.1	318.1	308.7	304.0	299.3	295.8	295.8
60°	289.9	284.0	277.0	268.8	260.6	252.3	250.0	248.8
62.5°	248.8	243.0	230.0	220.7	214.8	210.1	205.4	208.9
65°	207.7	199.5	187.8	178.4	172.5	165.5	162.0	162.0
67.5°	164.3	156.1	144.4	135.0	129.1	124.4	119.7	119.7
70°	120.9	115.0	104.5	96.2	91.5	84.5	83.3	83.3
72.5°	82.2	75.1	66.9	61.0	56.3	51.6	49.3	48.1
75°	45.8	41.1	35.2	31.7	27.0	24.6	22.3	22.3
77.5°	18.8	15.3	11.7	9.4	7.0	5.9	4.7	5.9
80°	3.5	2.3	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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)