

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: P209433

Luminaire Tested: **LDSQ6B20D010 EU6B10208035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209433
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 EU6B10208035 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: 2272.6 lumens
Efficiency: N/A
Efficacy: 109.3 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

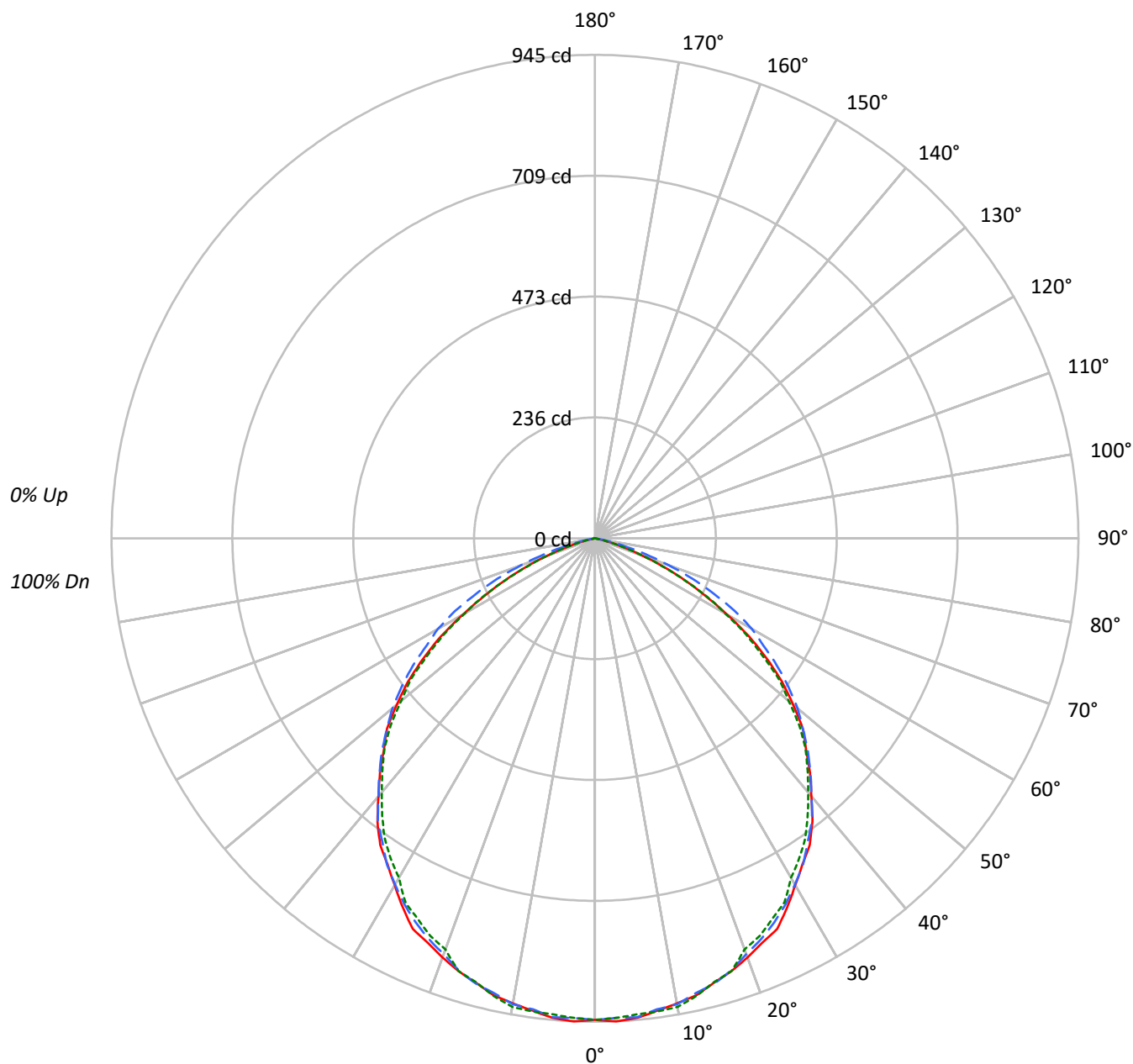
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	89.0	3.9
10°-20°	253.9	11.2
20°-30°	382.0	16.8
30°-40°	451.9	19.9
40°-50°	451.0	19.8
50°-60°	374.0	16.5
60°-70°	218.5	9.6
70°-80°	52.0	2.3
80°-90°	0.4	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°	724.9	31.9
0°-40°	1176.8	51.8
0°-60°	2001.7	88.1
0°-90°	2272.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2272.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	941	941	941	941	941	
5°	941	936	940	937	934	89
15°	900	899	901	897	898	254
25°	843	833	829	826	820	385
35°	732	725	725	721	716	455
45°	583	584	589	582	582	451
55°	410	424	434	423	400	364
65°	193	217	256	217	192	192
75°	28	40	62	40	26	38
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°	941.3	941.3	941.3	941.3	941.3	941.3	941.3	941.3	941.3	941.3	941.3
2.5°	945.4	939.9	944.1	935.7	941.3	935.7	937.1	934.3	939.9	938.5	937.1
5°	941.3	942.7	939.9	942.7	938.5	934.3	938.5	935.7	927.4	939.9	937.1
7.5°	931.6	933.0	930.2	934.3	931.6	926.0	937.1	928.8	927.4	928.8	934.3
10°	923.2	926.0	924.6	923.2	924.6	924.6	921.8	917.7	921.8	924.6	923.2
12.5°	914.9	919.1	916.3	913.5	910.7	912.1	914.9	908.0	908.0	910.7	919.1
15°	899.6	902.4	903.8	898.2	898.2	899.6	905.2	894.1	899.6	901.0	902.4
17.5°	887.1	888.5	888.5	884.4	887.1	883.0	887.1	881.6	887.1	885.7	888.5
20°	871.9	874.6	871.9	871.9	869.1	870.5	870.5	870.5	866.3	864.9	867.7
22.5°	855.2	855.2	852.4	855.2	852.4	851.0	858.0	846.9	858.0	848.3	856.6
25°	842.7	835.8	831.6	830.2	835.8	830.2	833.0	828.8	831.6	828.8	830.2
27.5°	813.6	809.4	808.0	809.4	809.4	808.0	813.6	798.3	808.0	806.6	806.6
30°	783.0	783.0	785.8	783.0	785.8	781.6	787.2	774.7	783.0	781.6	783.0
32.5°	755.2	756.6	756.6	759.4	755.2	756.6	756.6	752.5	755.2	756.6	753.9
35°	731.6	724.7	724.7	724.7	724.7	724.7	727.5	723.3	727.5	724.7	724.7
37.5°	698.3	691.4	691.4	690.0	696.9	692.8	699.7	694.2	694.2	696.9	696.9
40°	658.1	660.8	656.7	662.2	660.8	655.3	667.8	659.5	665.0	658.1	663.6
42.5°	622.0	623.4	622.0	620.6	626.1	624.7	630.3	624.7	623.4	623.4	633.1
45°	583.1	583.1	583.1	587.3	583.1	584.5	590.0	587.3	590.0	588.6	598.4
47.5°	551.2	544.2	542.8	551.2	549.8	551.2	551.2	552.6	553.9	551.2	555.3
50°	505.3	502.6	502.6	504.0	505.3	508.1	512.3	515.1	512.3	516.5	517.8
52.5°	460.9	458.1	459.5	465.1	467.9	466.5	473.4	474.8	473.4	476.2	476.2
55°	409.6	406.8	410.9	417.9	422.0	426.2	433.2	427.6	433.2	434.5	435.9
57.5°	356.8	355.4	356.8	363.7	367.9	377.6	388.7	388.7	394.3	390.1	394.3
60°	298.5	298.5	304.0	308.2	319.3	326.3	337.4	342.9	348.5	354.0	351.2
62.5°	243.0	244.3	248.5	258.2	265.2	274.9	287.4	292.9	302.7	308.2	305.4
65°	193.0	193.0	195.8	204.1	211.0	223.5	234.6	247.1	252.7	255.5	256.8
67.5°	144.4	143.0	148.6	154.1	161.0	173.5	186.0	193.0	202.7	205.5	204.1
70°	97.2	98.6	101.3	106.9	115.2	124.9	138.8	144.4	149.9	152.7	149.9
72.5°	61.1	61.1	62.5	68.0	73.6	80.5	90.2	95.8	102.7	104.1	101.3
75°	27.8	27.8	30.5	33.3	37.5	43.0	50.0	54.1	58.3	62.5	62.5
77.5°	5.6	6.9	8.3	8.3	11.1	15.3	19.4	23.6	27.8	27.8	27.8
80°	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.2	6.9	6.9	6.9
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°	941.3	941.3	941.3	941.3	941.3	941.3	941.3	941.3
2.5°	941.3	949.6	941.3	937.1	942.7	941.3	937.1	938.5
5°	937.1	939.9	942.7	931.6	938.5	939.9	937.1	934.3
7.5°	933.0	934.3	933.0	930.2	930.2	930.2	933.0	933.0
10°	931.6	927.4	920.5	916.3	920.5	920.5	919.1	930.2
12.5°	913.5	919.1	914.9	906.6	914.9	913.5	913.5	916.3
15°	899.6	899.6	902.4	891.3	896.9	895.5	895.5	898.2
17.5°	885.7	885.7	884.4	881.6	880.2	884.4	880.2	887.1
20°	866.3	869.1	877.4	863.5	867.7	863.5	863.5	855.2
22.5°	842.7	856.6	849.7	848.3	846.9	848.3	851.0	841.3
25°	827.4	827.4	830.2	821.9	821.9	824.7	823.3	820.5
27.5°	806.6	805.2	803.8	801.1	808.0	802.4	802.4	802.4
30°	777.5	781.6	780.2	773.3	781.6	778.8	774.7	766.4
32.5°	752.5	758.0	749.7	748.3	746.9	748.3	749.7	742.8
35°	721.9	723.3	723.3	717.8	719.2	717.8	715.0	716.4
37.5°	694.2	692.8	685.8	683.1	684.4	684.4	685.8	683.1
40°	655.3	659.5	659.5	649.7	652.5	649.7	649.7	648.3
42.5°	623.4	624.7	620.6	616.4	616.4	615.0	612.2	615.0
45°	590.0	588.6	584.5	580.3	580.3	578.9	576.2	581.7
47.5°	552.6	549.8	548.4	542.8	542.8	534.5	535.9	541.4
50°	515.1	512.3	506.7	504.0	499.8	495.6	494.2	494.2
52.5°	470.6	470.6	465.1	459.5	458.1	455.4	452.6	454.0
55°	431.8	431.8	427.6	417.9	412.3	405.4	401.2	399.8
57.5°	387.3	384.6	376.2	365.1	359.6	354.0	349.9	349.9
60°	342.9	336.0	327.6	317.9	308.2	298.5	295.7	294.3
62.5°	294.3	287.4	272.1	261.0	254.1	248.5	243.0	247.1
65°	245.7	236.0	222.1	211.0	204.1	195.8	191.6	191.6
67.5°	194.4	184.6	170.8	159.7	152.7	147.2	141.6	141.6
70°	143.0	136.1	123.6	113.8	108.3	100.0	98.6	98.6
72.5°	97.2	88.9	79.1	72.2	66.6	61.1	58.3	56.9
75°	54.1	48.6	41.6	37.5	31.9	29.2	26.4	26.4
77.5°	22.2	18.0	13.9	11.1	8.3	6.9	5.6	6.9
80°	4.2	2.8	1.4	1.4	1.4	1.4	1.4	1.4
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)