

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: P209434

Luminaire Tested: **LDSQ6B20D010 EU6B10208040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209434
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 EU6B10208040 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 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2297.0 lumens
Efficiency: N/A
Efficacy: 110.4 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

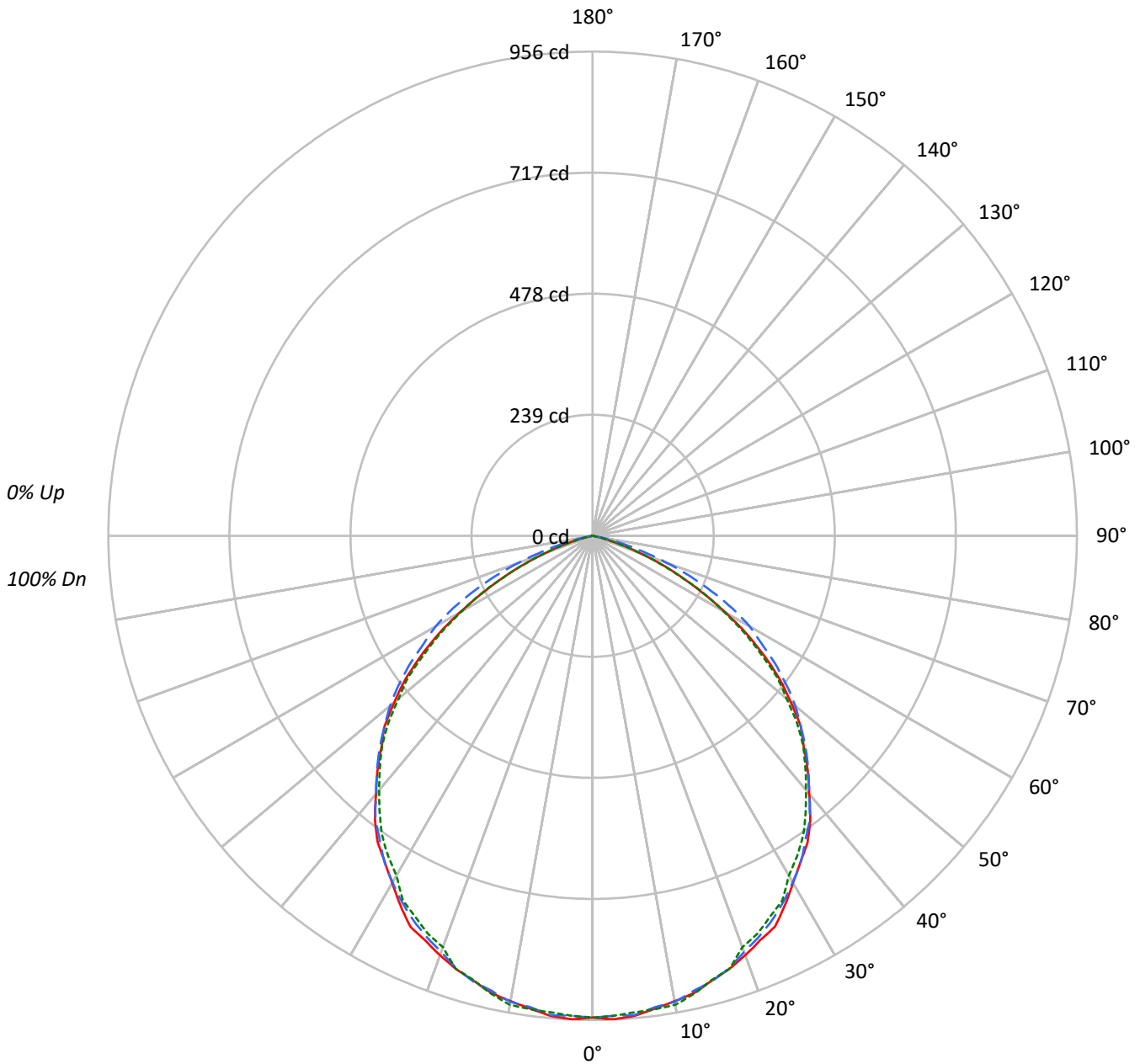
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	90.0	3.9
10°-20°	256.6	11.2
20°-30°	386.1	16.8
30°-40°	456.7	19.9
40°-50°	455.8	19.8
50°-60°	378.0	16.5
60°-70°	220.8	9.6
70°-80°	52.6	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°	732.7	31.9
0°-40°	1189.4	51.8
0°-60°	2023.2	88.1
0°-90°	2297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	951	951	951	951	951	
5°	951	946	950	947	944	90
15°	909	909	911	906	908	257
25°	852	842	838	835	829	389
35°	740	732	732	728	724	460
45°	589	590	595	589	588	456
55°	414	429	439	427	404	368
65°	195	220	258	219	194	194
75°	28	41	63	40	27	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°	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4
2.5°	955.6	950.0	954.2	945.8	951.4	945.8	947.2	944.4	950.0	948.6	947.2
5°	951.4	952.8	950.0	952.8	948.6	944.4	948.6	945.8	937.4	950.0	947.2
7.5°	941.6	943.0	940.2	944.4	941.6	936.0	947.2	938.8	937.4	938.8	944.4
10°	933.1	936.0	934.6	933.1	934.6	934.6	931.7	927.5	931.7	934.6	933.1
12.5°	924.7	928.9	926.1	923.3	920.5	921.9	924.7	917.7	917.7	920.5	928.9
15°	909.3	912.1	913.5	907.9	907.9	909.3	914.9	903.7	909.3	910.7	912.1
17.5°	896.7	898.1	898.1	893.9	896.7	892.5	896.7	891.1	896.7	895.3	898.1
20°	881.2	884.0	881.2	881.2	878.4	879.8	879.8	879.8	875.6	874.2	877.0
22.5°	864.4	864.4	861.6	864.4	861.6	860.2	867.2	856.0	867.2	857.4	865.8
25°	851.8	844.7	840.5	839.1	844.7	839.1	841.9	837.7	840.5	837.7	839.1
27.5°	822.3	818.1	816.7	818.1	818.1	816.7	822.3	806.9	816.7	815.3	815.3
30°	791.4	791.4	794.2	791.4	794.2	790.0	795.6	783.0	791.4	790.0	791.4
32.5°	763.4	764.8	764.8	767.6	763.4	764.8	764.8	760.6	763.4	764.8	762.0
35°	739.5	732.5	732.5	732.5	732.5	732.5	735.3	731.1	735.3	732.5	732.5
37.5°	705.8	698.8	698.8	697.4	704.4	700.2	707.2	701.6	701.6	704.4	704.4
40°	665.1	667.9	663.7	669.3	667.9	662.3	675.0	666.5	672.1	665.1	670.7
42.5°	628.6	630.1	628.6	627.2	632.9	631.5	637.1	631.5	630.1	630.1	639.9
45°	589.4	589.4	589.4	593.6	589.4	590.8	596.4	593.6	596.4	595.0	604.8
47.5°	557.1	550.1	548.7	557.1	555.7	557.1	557.1	558.5	559.9	557.1	561.3
50°	510.8	508.0	508.0	509.4	510.8	513.6	517.8	520.6	517.8	522.0	523.4
52.5°	465.9	463.1	464.5	470.1	472.9	471.5	478.5	479.9	478.5	481.3	481.3
55°	414.0	411.1	415.4	422.4	426.6	430.8	437.8	432.2	437.8	439.2	440.6
57.5°	360.6	359.2	360.6	367.6	371.9	381.7	392.9	392.9	398.5	394.3	398.5
60°	301.7	301.7	307.3	311.5	322.7	329.8	341.0	346.6	352.2	357.8	355.0
62.5°	245.6	247.0	251.2	261.0	268.0	277.8	290.5	296.1	305.9	311.5	308.7
65°	195.0	195.0	197.9	206.3	213.3	225.9	237.1	249.8	255.4	258.2	259.6
67.5°	145.9	144.5	150.1	155.8	162.8	175.4	188.0	195.0	204.9	207.7	206.3
70°	98.2	99.6	102.4	108.0	116.5	126.3	140.3	145.9	151.5	154.4	151.5
72.5°	61.7	61.7	63.1	68.8	74.4	81.4	91.2	96.8	103.8	105.2	102.4
75°	28.1	28.1	30.9	33.7	37.9	43.5	50.5	54.7	58.9	63.1	63.1
77.5°	5.6	7.0	8.4	8.4	11.2	15.4	19.6	23.9	28.1	28.1	28.1
80°	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.2	7.0	7.0	7.0
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°	951.4	951.4	951.4	951.4	951.4	951.4	951.4	951.4
2.5°	951.4	959.8	951.4	947.2	952.8	951.4	947.2	948.6
5°	947.2	950.0	952.8	941.6	948.6	950.0	947.2	944.4
7.5°	943.0	944.4	943.0	940.2	940.2	940.2	943.0	943.0
10°	941.6	937.4	930.3	926.1	930.3	930.3	928.9	940.2
12.5°	923.3	928.9	924.7	916.3	924.7	923.3	923.3	926.1
15°	909.3	909.3	912.1	900.9	906.5	905.1	905.1	907.9
17.5°	895.3	895.3	893.9	891.1	889.6	893.9	889.6	896.7
20°	875.6	878.4	886.8	872.8	877.0	872.8	872.8	864.4
22.5°	851.8	865.8	858.8	857.4	856.0	857.4	860.2	850.4
25°	836.3	836.3	839.1	830.7	830.7	833.5	832.1	829.3
27.5°	815.3	813.9	812.5	809.7	816.7	811.1	811.1	811.1
30°	785.8	790.0	788.6	781.6	790.0	787.2	783.0	774.6
32.5°	760.6	766.2	757.7	756.3	754.9	756.3	757.7	750.7
35°	729.7	731.1	731.1	725.5	726.9	725.5	722.7	724.1
37.5°	701.6	700.2	693.2	690.4	691.8	691.8	693.2	690.4
40°	662.3	666.5	666.5	656.7	659.5	656.7	656.7	655.3
42.5°	630.1	631.5	627.2	623.0	623.0	621.6	618.8	621.6
45°	596.4	595.0	590.8	586.6	586.6	585.1	582.3	588.0
47.5°	558.5	555.7	554.3	548.7	548.7	540.2	541.6	547.3
50°	520.6	517.8	512.2	509.4	505.2	501.0	499.6	499.6
52.5°	475.7	475.7	470.1	464.5	463.1	460.3	457.5	458.9
55°	436.4	436.4	432.2	422.4	416.8	409.7	405.5	404.1
57.5°	391.5	388.7	380.3	369.1	363.4	357.8	353.6	353.6
60°	346.6	339.6	331.2	321.3	311.5	301.7	298.9	297.5
62.5°	297.5	290.5	275.0	263.8	256.8	251.2	245.6	249.8
65°	248.4	238.5	224.5	213.3	206.3	197.9	193.6	193.6
67.5°	196.5	186.6	172.6	161.4	154.4	148.7	143.1	143.1
70°	144.5	137.5	124.9	115.1	109.5	101.0	99.6	99.6
72.5°	98.2	89.8	80.0	73.0	67.4	61.7	58.9	57.5
75°	54.7	49.1	42.1	37.9	32.3	29.5	26.7	26.7
77.5°	22.5	18.2	14.0	11.2	8.4	7.0	5.6	7.0
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)