

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: P209435

Luminaire Tested: **LDSQ6B20D010 EU6B10208050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209435
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 EU6B10208050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2296.1 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

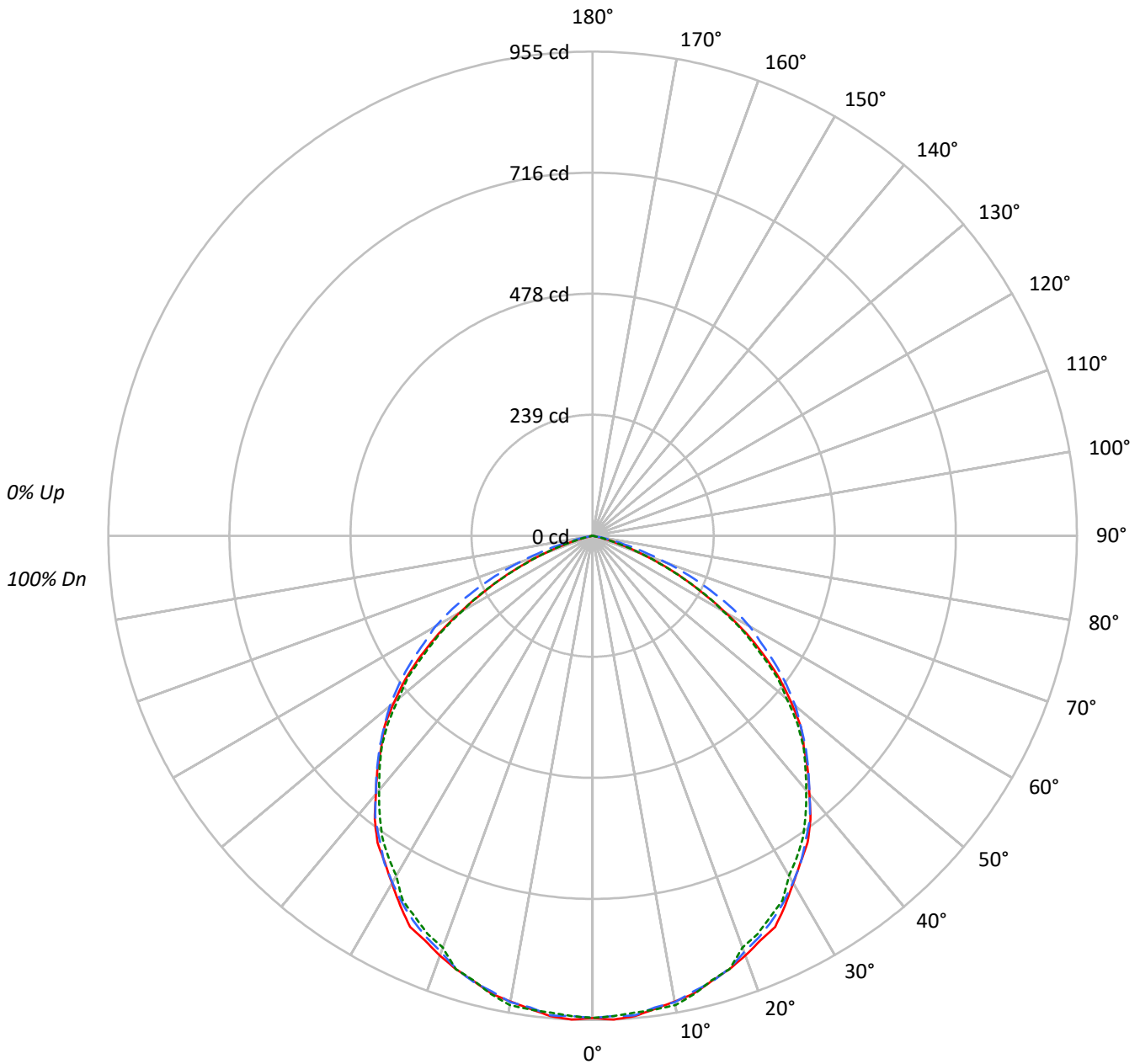
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	89.9	3.9
10°-20°	256.5	11.2
20°-30°	386.0	16.8
30°-40°	456.6	19.9
40°-50°	455.6	19.8
50°-60°	377.8	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°	732.4	31.9
0°-40°	1189.0	51.8
0°-60°	2022.4	88.1
0°-90°	2296.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2296.1	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	908	910	906	908	257
25°	851	842	837	835	829	389
35°	739	732	732	728	724	460
45°	589	590	595	588	588	456
55°	414	428	439	427	404	367
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°	951.0	951.0	951.0	951.0	951.0	951.0	951.0	951.0	951.0	951.0	951.0
2.5°	955.2	949.6	953.8	945.4	951.0	945.4	946.8	944.0	949.6	948.2	946.8
5°	951.0	952.4	949.6	952.4	948.2	944.0	948.2	945.4	937.0	949.6	946.8
7.5°	941.2	942.6	939.8	944.0	941.2	935.6	946.8	938.4	937.0	938.4	944.0
10°	932.8	935.6	934.2	932.8	934.2	934.2	931.4	927.2	931.4	934.2	932.8
12.5°	924.4	928.6	925.8	923.0	920.2	921.6	924.4	917.4	917.4	920.2	928.6
15°	908.9	911.8	913.2	907.5	907.5	908.9	914.6	903.3	908.9	910.4	911.8
17.5°	896.3	897.7	897.7	893.5	896.3	892.1	896.3	890.7	896.3	894.9	897.7
20°	880.9	883.7	880.9	880.9	878.1	879.5	879.5	879.5	875.3	873.9	876.7
22.5°	864.1	864.1	861.3	864.1	861.3	859.9	866.9	855.6	866.9	857.0	865.5
25°	851.4	844.4	840.2	838.8	844.4	838.8	841.6	837.4	840.2	837.4	838.8
27.5°	822.0	817.8	816.4	817.8	817.8	816.4	822.0	806.6	816.4	815.0	815.0
30°	791.1	791.1	793.9	791.1	793.9	789.7	795.3	782.7	791.1	789.7	791.1
32.5°	763.1	764.5	764.5	767.3	763.1	764.5	764.5	760.3	763.1	764.5	761.7
35°	739.2	732.2	732.2	732.2	732.2	732.2	735.0	730.8	735.0	732.2	732.2
37.5°	705.6	698.5	698.5	697.1	704.2	699.9	707.0	701.4	701.4	704.2	704.2
40°	664.9	667.7	663.5	669.1	667.7	662.1	674.7	666.3	671.9	664.9	670.5
42.5°	628.4	629.8	628.4	627.0	632.6	631.2	636.8	631.2	629.8	629.8	639.6
45°	589.1	589.1	589.1	593.3	589.1	590.5	596.1	593.3	596.1	594.7	604.6
47.5°	556.9	549.9	548.5	556.9	555.5	556.9	556.9	558.3	559.7	556.9	561.1
50°	510.6	507.8	507.8	509.2	510.6	513.4	517.6	520.4	517.6	521.8	523.2
52.5°	465.7	462.9	464.3	469.9	472.7	471.3	478.3	479.7	478.3	481.1	481.1
55°	413.8	411.0	415.2	422.2	426.4	430.6	437.6	432.0	437.6	439.0	440.4
57.5°	360.5	359.1	360.5	367.5	371.7	381.5	392.8	392.8	398.4	394.2	398.4
60°	301.6	301.6	307.2	311.4	322.6	329.6	340.9	346.5	352.1	357.7	354.9
62.5°	245.5	246.9	251.1	260.9	267.9	277.7	290.4	296.0	305.8	311.4	308.6
65°	195.0	195.0	197.8	206.2	213.2	225.8	237.1	249.7	255.3	258.1	259.5
67.5°	145.9	144.5	150.1	155.7	162.7	175.3	188.0	195.0	204.8	207.6	206.2
70°	98.2	99.6	102.4	108.0	116.4	126.2	140.3	145.9	151.5	154.3	151.5
72.5°	61.7	61.7	63.1	68.7	74.3	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	23.8	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°	951.0	951.0	951.0	951.0	951.0	951.0	951.0	951.0
2.5°	951.0	959.4	951.0	946.8	952.4	951.0	946.8	948.2
5°	946.8	949.6	952.4	941.2	948.2	949.6	946.8	944.0
7.5°	942.6	944.0	942.6	939.8	939.8	939.8	942.6	942.6
10°	941.2	937.0	930.0	925.8	930.0	930.0	928.6	939.8
12.5°	923.0	928.6	924.4	916.0	924.4	923.0	923.0	925.8
15°	908.9	908.9	911.8	900.5	906.1	904.7	904.7	907.5
17.5°	894.9	894.9	893.5	890.7	889.3	893.5	889.3	896.3
20°	875.3	878.1	886.5	872.5	876.7	872.5	872.5	864.1
22.5°	851.4	865.5	858.5	857.0	855.6	857.0	859.9	850.0
25°	836.0	836.0	838.8	830.4	830.4	833.2	831.8	829.0
27.5°	815.0	813.6	812.2	809.4	816.4	810.8	810.8	810.8
30°	785.5	789.7	788.3	781.3	789.7	786.9	782.7	774.3
32.5°	760.3	765.9	757.5	756.1	754.7	756.1	757.5	750.4
35°	729.4	730.8	730.8	725.2	726.6	725.2	722.4	723.8
37.5°	701.4	699.9	692.9	690.1	691.5	691.5	692.9	690.1
40°	662.1	666.3	666.3	656.5	659.3	656.5	656.5	655.1
42.5°	629.8	631.2	627.0	622.8	622.8	621.4	618.6	621.4
45°	596.1	594.7	590.5	586.3	586.3	584.9	582.1	587.7
47.5°	558.3	555.5	554.1	548.5	548.5	540.0	541.4	547.1
50°	520.4	517.6	512.0	509.2	505.0	500.8	499.4	499.4
52.5°	475.5	475.5	469.9	464.3	462.9	460.1	457.3	458.7
55°	436.2	436.2	432.0	422.2	416.6	409.6	405.4	404.0
57.5°	391.4	388.5	380.1	368.9	363.3	357.7	353.5	353.5
60°	346.5	339.5	331.0	321.2	311.4	301.6	298.8	297.4
62.5°	297.4	290.4	274.9	263.7	256.7	251.1	245.5	249.7
65°	248.3	238.5	224.4	213.2	206.2	197.8	193.6	193.6
67.5°	196.4	186.6	172.5	161.3	154.3	148.7	143.1	143.1
70°	144.5	137.5	124.8	115.0	109.4	101.0	99.6	99.6
72.5°	98.2	89.8	80.0	72.9	67.3	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°	22.4	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)