

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: P136670

Luminaire Tested: **LD6A20D010TE ERW6A20935 6LW121H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136670
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23376)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A20D010TE ERW6A20935 6LW121H
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2196.2 lumens
Efficiency: N/A
Efficacy: 67.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

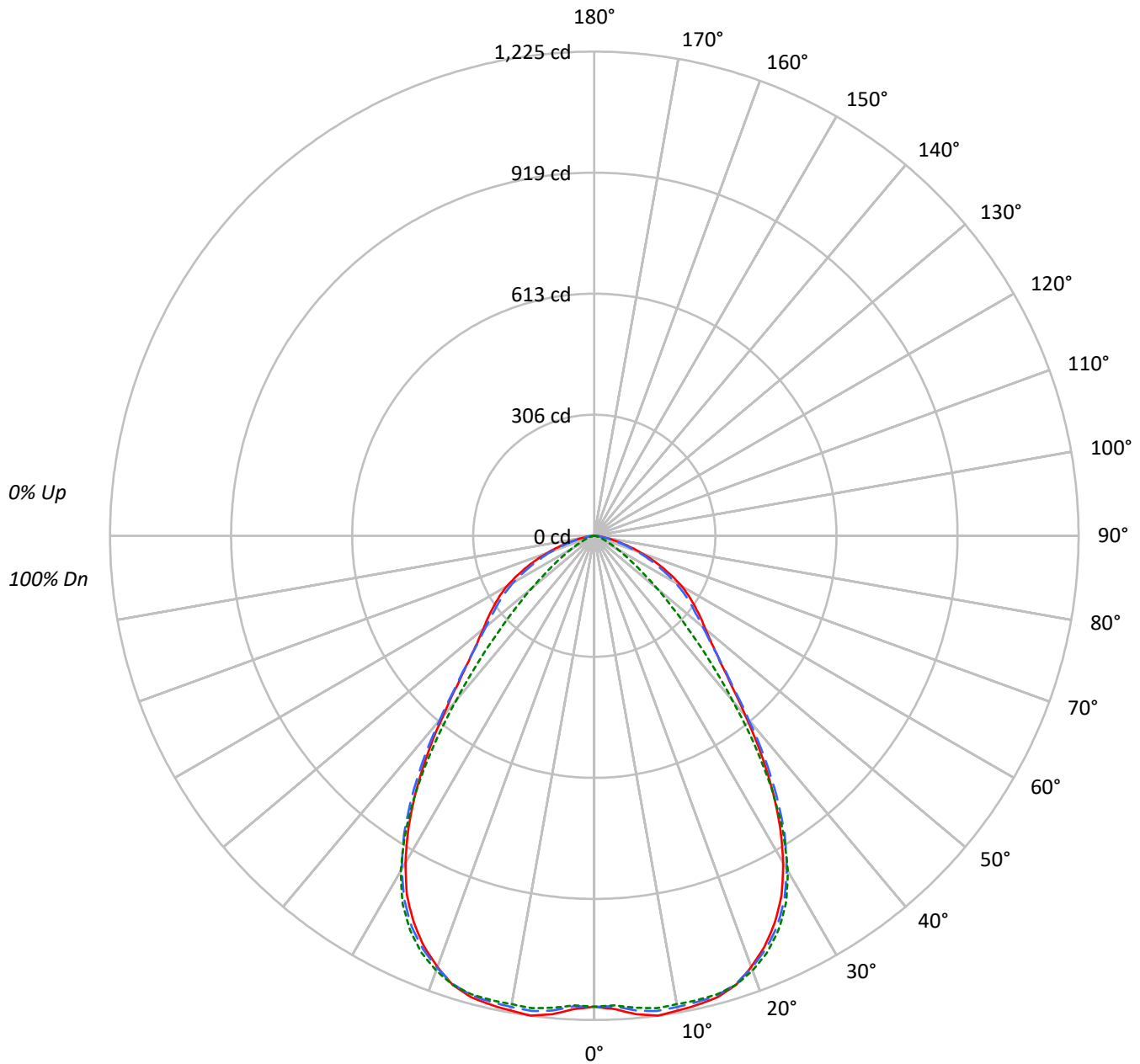
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89		
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78		
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69		
4	89	79	72	66	87	78	71	66	75	70	65	73	68	64	71	67	63	61		
5	83	72	64	59	81	71	64	59	69	63	58	67	62	57	65	61	57	55		
6	77	66	58	53	76	65	58	53	63	57	52	62	56	52	60	55	51	50		
7	72	61	53	48	71	60	53	48	58	52	47	57	51	47	56	51	47	45		
8	68	56	49	43	67	55	48	43	54	48	43	53	47	43	52	47	43	41		
9	64	52	45	40	63	51	44	40	50	44	39	49	43	39	48	43	39	37		
10	60	48	41	37	59	48	41	36	47	41	36	46	40	36	45	40	36	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	77734	77734	77734
5°	79577	78955	78496
10°	80808	80185	79715
15°	81591	81273	81111
20°	80585	80751	81244
25°	77765	78622	79299
30°	71951	73375	73729
35°	62505	64018	62322
40°	50733	51738	46305
45°	41445	41657	31407
50°	37188	36234	20878
55°	35226	33611	13444
60°	33312	30846	8638
65°	29192	26645	5480
70°	23901	21650	3605
75°	17292	15502	2395
80°	11534	9768	1766
85°	7111	5315	1797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	5.2
10°-20°	338.7	15.4
20°-30°	498.6	22.7
30°-40°	490.7	22.3
40°-50°	331.8	15.1
50°-60°	223.0	10.2
60°-70°	136.1	6.2
70°-80°	53.7	2.4
80°-90°	8.3	0.4
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°	952.6	43.4
0°-40°	1443.3	65.7
0°-60°	1998.1	91.0
0°-90°	2196.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2196.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1192	1192	1192	1192	1192	
5°	1215	1210	1206	1204	1199	116
15°	1208	1203	1203	1204	1201	340
25°	1080	1084	1092	1103	1102	494
35°	785	794	804	791	782	486
45°	449	456	452	374	340	355
55°	310	313	296	166	118	278
65°	189	190	173	70	36	188
75°	69	69	62	24	10	77
85°	10	7	7	4	2	13
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°	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5
2.5°	1198.6	1193.8	1196.2	1193.8	1193.8	1189.1	1193.8	1193.8	1191.5	1191.5	1191.5
5°	1215.1	1212.7	1215.1	1210.4	1212.7	1208.0	1210.4	1208.0	1205.6	1205.6	1205.6
7.5°	1224.6	1219.8	1222.2	1217.5	1219.8	1215.1	1217.5	1215.1	1212.7	1212.7	1210.4
10°	1219.8	1217.5	1217.5	1215.1	1215.1	1210.4	1215.1	1212.7	1208.0	1210.4	1208.0
12.5°	1215.1	1212.7	1215.1	1210.4	1212.7	1205.6	1210.4	1208.0	1205.6	1208.0	1205.6
15°	1208.0	1205.6	1208.0	1203.3	1205.6	1200.9	1205.6	1203.3	1200.9	1203.3	1200.9
17.5°	1191.5	1189.1	1191.5	1189.1	1191.5	1184.4	1189.1	1189.1	1186.7	1189.1	1189.1
20°	1160.7	1158.4	1160.7	1158.4	1160.7	1156.0	1160.7	1160.7	1158.4	1163.1	1163.1
22.5°	1125.3	1125.3	1125.3	1125.3	1127.6	1122.9	1127.6	1127.6	1127.6	1132.4	1132.4
25°	1080.3	1082.7	1082.7	1082.7	1085.1	1082.7	1087.4	1087.4	1087.4	1092.2	1092.2
27.5°	1026.0	1026.0	1028.3	1030.7	1030.7	1028.3	1033.1	1035.4	1035.4	1040.2	1042.5
30°	955.1	957.4	959.8	962.1	964.5	962.1	966.9	966.9	969.2	974.0	976.3
32.5°	874.7	879.4	879.4	884.1	886.5	884.1	891.2	888.9	891.2	896.0	898.3
35°	784.8	789.6	789.6	794.3	794.3	794.3	799.0	801.4	801.4	803.8	803.8
37.5°	690.3	695.0	692.7	699.7	699.7	697.4	706.8	706.8	704.5	706.8	704.5
40°	595.7	600.5	600.5	605.2	605.2	605.2	612.3	607.5	607.5	607.5	602.8
42.5°	513.0	517.7	517.7	522.4	522.4	522.4	527.2	527.2	522.4	520.1	513.0
45°	449.2	451.5	453.9	456.3	456.3	456.3	461.0	458.6	456.3	451.5	439.7
47.5°	401.9	404.2	404.2	406.6	406.6	406.6	409.0	409.0	404.2	397.2	385.3
50°	366.4	366.4	368.8	368.8	371.1	368.8	371.1	368.8	364.1	357.0	342.8
52.5°	338.1	338.1	338.1	340.4	340.4	340.4	340.4	338.1	333.3	323.9	307.3
55°	309.7	309.7	312.0	312.0	314.4	312.0	312.0	309.7	302.6	295.5	276.6
57.5°	283.7	283.7	283.7	286.0	286.0	286.0	283.7	281.3	276.6	267.1	248.2
60°	255.3	255.3	255.3	255.3	257.7	255.3	255.3	250.6	245.9	236.4	219.9
62.5°	222.2	222.2	222.2	224.6	224.6	222.2	222.2	217.5	212.8	203.3	186.8
65°	189.1	189.1	189.1	191.5	191.5	189.1	189.1	184.4	179.7	172.6	156.0
67.5°	158.4	158.4	158.4	158.4	158.4	156.0	156.0	153.7	148.9	141.8	130.0
70°	125.3	125.3	125.3	127.7	125.3	125.3	125.3	122.9	118.2	113.5	101.7
72.5°	96.9	96.9	96.9	96.9	96.9	96.9	94.6	94.6	89.8	85.1	78.0
75°	68.6	68.6	68.6	68.6	68.6	68.6	68.6	66.2	63.8	61.5	54.4
77.5°	47.3	47.3	47.3	47.3	47.3	47.3	47.3	44.9	44.9	42.6	37.8
80°	30.7	30.7	30.7	30.7	30.7	28.4	28.4	28.4	28.4	26.0	23.6
82.5°	18.9	16.5	18.9	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14.2
85°	9.5	9.5	9.5	9.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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°	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5	1191.5
2.5°	1191.5	1186.7	1191.5	1193.8	1189.1	1191.5	1193.8	1189.1
5°	1205.6	1198.6	1203.3	1205.6	1198.6	1200.9	1203.3	1198.6
7.5°	1212.7	1205.6	1210.4	1210.4	1203.3	1208.0	1210.4	1205.6
10°	1208.0	1203.3	1208.0	1208.0	1203.3	1205.6	1208.0	1203.3
12.5°	1205.6	1200.9	1205.6	1208.0	1200.9	1205.6	1208.0	1203.3
15°	1203.3	1198.6	1203.3	1205.6	1198.6	1203.3	1205.6	1200.9
17.5°	1189.1	1186.7	1193.8	1193.8	1189.1	1193.8	1196.2	1191.5
20°	1165.5	1163.1	1170.2	1172.5	1167.8	1172.5	1174.9	1170.2
22.5°	1134.7	1132.4	1139.5	1141.8	1137.1	1141.8	1144.2	1141.8
25°	1096.9	1094.5	1101.6	1104.0	1099.3	1104.0	1106.4	1101.6
27.5°	1044.9	1042.5	1049.6	1049.6	1047.3	1052.0	1054.3	1049.6
30°	978.7	974.0	981.1	978.7	976.3	981.1	981.1	978.7
32.5°	896.0	891.2	896.0	891.2	891.2	893.6	893.6	888.9
35°	799.0	796.7	794.3	787.2	787.2	787.2	787.2	782.5
37.5°	697.4	690.3	685.6	673.7	669.0	671.4	669.0	664.3
40°	593.4	581.5	572.1	557.9	550.8	550.8	548.4	543.7
42.5°	501.2	484.6	470.4	451.5	444.4	442.1	437.3	435.0
45°	425.5	404.2	383.0	364.1	352.2	349.9	345.1	340.4
47.5°	366.4	340.4	314.4	293.1	281.3	274.2	269.5	267.1
50°	319.1	290.8	260.0	234.0	222.2	212.8	208.0	205.7
52.5°	281.3	250.6	215.1	189.1	174.9	165.5	160.8	156.0
55°	250.6	215.1	179.7	151.3	137.1	127.7	122.9	118.2
57.5°	219.9	186.8	148.9	120.6	106.4	96.9	92.2	89.8
60°	191.5	158.4	122.9	96.9	82.7	73.3	68.6	66.2
62.5°	163.1	132.4	101.7	78.0	63.8	54.4	49.6	49.6
65°	134.7	108.7	80.4	59.1	47.3	40.2	35.5	35.5
67.5°	111.1	87.5	63.8	47.3	35.5	30.7	26.0	26.0
70°	87.5	70.9	49.6	37.8	28.4	21.3	18.9	18.9
72.5°	66.2	54.4	37.8	28.4	21.3	16.5	14.2	14.2
75°	47.3	37.8	28.4	18.9	14.2	11.8	9.5	9.5
77.5°	33.1	26.0	18.9	14.2	9.5	7.1	7.1	7.1
80°	21.3	16.5	11.8	9.5	7.1	4.7	4.7	4.7
82.5°	11.8	9.5	7.1	4.7	4.7	2.4	2.4	2.4
85°	4.7	4.7	4.7	2.4	2.4	2.4	2.4	2.4
87.5°	2.4	2.4	2.4	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)