

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: P136665

Luminaire Tested: **LD6A20D010TE ERW6A20830 6LW121H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136665
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 ERW6A20830 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 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2322.0 lumens
Efficiency: N/A
Efficacy: 70.8 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

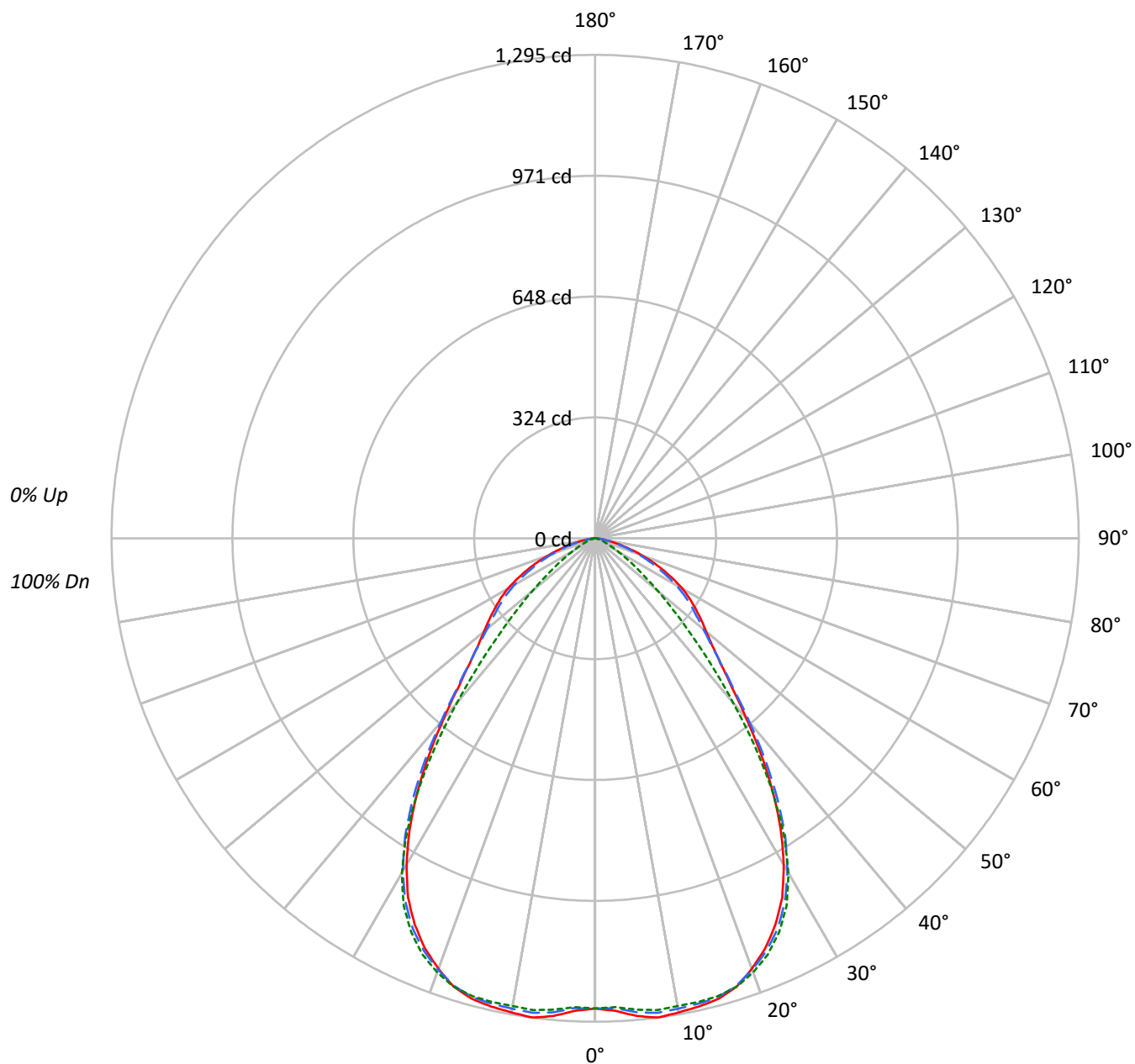
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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°	82184	82184	82184
5°	84135	83480	82989
10°	85439	84776	84280
15°	86265	85927	85758
20°	85202	85375	85896
25°	82221	83121	83841
30°	76072	77578	77955
35°	66089	67682	65890
40°	53646	54710	48962
45°	43816	44047	33206
50°	39320	38305	22065
55°	37240	35533	14218
60°	35217	32607	9134
65°	30874	28173	5789
70°	25274	22890	3815
75°	18275	16385	2521
80°	12210	10332	1879
85°	7486	5614	1871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	5.2
10°-20°	358.1	15.4
20°-30°	527.2	22.7
30°-40°	518.8	22.3
40°-50°	350.8	15.1
50°-60°	235.8	10.2
60°-70°	143.9	6.2
70°-80°	56.7	2.4
80°-90°	8.7	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°	1007.2	43.4
0°-40°	1526.0	65.7
0°-60°	2112.6	91.0
0°-90°	2322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1260	1260	1260	1260	1260	
5°	1285	1280	1275	1273	1267	123
15°	1277	1272	1272	1273	1270	359
25°	1142	1146	1155	1166	1165	522
35°	830	840	850	836	827	514
45°	475	482	477	395	360	375
55°	327	331	312	175	125	294
65°	200	201	182	74	38	199
75°	72	72	65	25	10	81
85°	10	8	8	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°	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7
2.5°	1267.2	1262.2	1264.7	1262.2	1262.2	1257.2	1262.2	1262.2	1259.7	1259.7	1259.7
5°	1284.7	1282.2	1284.7	1279.7	1282.2	1277.2	1279.7	1277.2	1274.7	1274.7	1274.7
7.5°	1294.7	1289.7	1292.2	1287.2	1289.7	1284.7	1287.2	1284.7	1282.2	1282.2	1279.7
10°	1289.7	1287.2	1287.2	1284.7	1284.7	1279.7	1284.7	1282.2	1277.2	1279.7	1277.2
12.5°	1284.7	1282.2	1284.7	1279.7	1282.2	1274.7	1279.7	1277.2	1274.7	1277.2	1274.7
15°	1277.2	1274.7	1277.2	1272.2	1274.7	1269.7	1274.7	1272.2	1269.7	1272.2	1269.7
17.5°	1259.7	1257.2	1259.7	1257.2	1259.7	1252.2	1257.2	1257.2	1254.7	1257.2	1257.2
20°	1227.2	1224.7	1227.2	1224.7	1227.2	1222.2	1227.2	1227.2	1224.7	1229.7	1229.7
22.5°	1189.7	1189.7	1189.7	1189.7	1192.2	1187.2	1192.2	1192.2	1192.2	1197.2	1197.2
25°	1142.2	1144.7	1144.7	1144.7	1147.2	1144.7	1149.7	1149.7	1149.7	1154.7	1154.7
27.5°	1084.7	1084.7	1087.2	1089.7	1089.7	1087.2	1092.2	1094.7	1094.7	1099.7	1102.2
30°	1009.8	1012.3	1014.8	1017.3	1019.8	1017.3	1022.3	1022.3	1024.8	1029.8	1032.3
32.5°	924.8	929.8	929.8	934.8	937.3	934.8	942.3	939.8	942.3	947.3	949.8
35°	829.8	834.8	834.8	839.8	839.8	839.8	844.8	847.3	847.3	849.8	849.8
37.5°	729.8	734.8	732.3	739.8	739.8	737.3	747.3	747.3	744.8	747.3	744.8
40°	629.9	634.9	634.9	639.9	639.9	639.9	647.3	642.4	642.4	642.4	637.4
42.5°	542.4	547.4	547.4	552.4	552.4	552.4	557.4	557.4	552.4	549.9	542.4
45°	474.9	477.4	479.9	482.4	482.4	482.4	487.4	484.9	482.4	477.4	464.9
47.5°	424.9	427.4	427.4	429.9	429.9	429.9	432.4	432.4	427.4	419.9	407.4
50°	387.4	387.4	389.9	389.9	392.4	389.9	392.4	389.9	384.9	377.4	362.4
52.5°	357.4	357.4	357.4	359.9	359.9	359.9	359.9	357.4	352.4	342.4	324.9
55°	327.4	327.4	329.9	329.9	332.4	329.9	329.9	327.4	319.9	312.4	292.4
57.5°	299.9	299.9	299.9	302.4	302.4	302.4	299.9	297.4	292.4	282.4	262.4
60°	269.9	269.9	269.9	269.9	272.4	269.9	269.9	264.9	259.9	249.9	232.4
62.5°	234.9	234.9	234.9	237.4	237.4	234.9	234.9	229.9	224.9	215.0	197.5
65°	200.0	200.0	200.0	202.5	202.5	200.0	200.0	195.0	190.0	182.5	165.0
67.5°	167.5	167.5	167.5	167.5	167.5	165.0	165.0	162.5	157.5	150.0	137.5
70°	132.5	132.5	132.5	135.0	132.5	132.5	132.5	130.0	125.0	120.0	107.5
72.5°	102.5	102.5	102.5	102.5	102.5	102.5	100.0	100.0	95.0	90.0	82.5
75°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	70.0	67.5	65.0	57.5
77.5°	50.0	50.0	50.0	50.0	50.0	50.0	50.0	47.5	47.5	45.0	40.0
80°	32.5	32.5	32.5	32.5	32.5	30.0	30.0	30.0	30.0	27.5	25.0
82.5°	20.0	17.5	20.0	17.5	17.5	17.5	17.5	17.5	17.5	17.5	15.0
85°	10.0	10.0	10.0	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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°	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7	1259.7
2.5°	1259.7	1254.7	1259.7	1262.2	1257.2	1259.7	1262.2	1257.2
5°	1274.7	1267.2	1272.2	1274.7	1267.2	1269.7	1272.2	1267.2
7.5°	1282.2	1274.7	1279.7	1279.7	1272.2	1277.2	1279.7	1274.7
10°	1277.2	1272.2	1277.2	1277.2	1272.2	1274.7	1277.2	1272.2
12.5°	1274.7	1269.7	1274.7	1277.2	1269.7	1274.7	1277.2	1272.2
15°	1272.2	1267.2	1272.2	1274.7	1267.2	1272.2	1274.7	1269.7
17.5°	1257.2	1254.7	1262.2	1262.2	1257.2	1262.2	1264.7	1259.7
20°	1232.2	1229.7	1237.2	1239.7	1234.7	1239.7	1242.2	1237.2
22.5°	1199.7	1197.2	1204.7	1207.2	1202.2	1207.2	1209.7	1207.2
25°	1159.7	1157.2	1164.7	1167.2	1162.2	1167.2	1169.7	1164.7
27.5°	1104.7	1102.2	1109.7	1109.7	1107.2	1112.2	1114.7	1109.7
30°	1034.8	1029.8	1037.3	1034.8	1032.3	1037.3	1037.3	1034.8
32.5°	947.3	942.3	947.3	942.3	942.3	944.8	944.8	939.8
35°	844.8	842.3	839.8	832.3	832.3	832.3	832.3	827.3
37.5°	737.3	729.8	724.8	712.3	707.3	709.8	707.3	702.3
40°	627.4	614.9	604.9	589.9	582.4	582.4	579.9	574.9
42.5°	529.9	512.4	497.4	477.4	469.9	467.4	462.4	459.9
45°	449.9	427.4	404.9	384.9	372.4	369.9	364.9	359.9
47.5°	387.4	359.9	332.4	309.9	297.4	289.9	284.9	282.4
50°	337.4	307.4	274.9	247.4	234.9	224.9	219.9	217.4
52.5°	297.4	264.9	227.4	200.0	185.0	175.0	170.0	165.0
55°	264.9	227.4	190.0	160.0	145.0	135.0	130.0	125.0
57.5°	232.4	197.5	157.5	127.5	112.5	102.5	97.5	95.0
60°	202.5	167.5	130.0	102.5	87.5	77.5	72.5	70.0
62.5°	172.5	140.0	107.5	82.5	67.5	57.5	52.5	52.5
65°	142.5	115.0	85.0	62.5	50.0	42.5	37.5	37.5
67.5°	117.5	92.5	67.5	50.0	37.5	32.5	27.5	27.5
70°	92.5	75.0	52.5	40.0	30.0	22.5	20.0	20.0
72.5°	70.0	57.5	40.0	30.0	22.5	17.5	15.0	15.0
75°	50.0	40.0	30.0	20.0	15.0	12.5	10.0	10.0
77.5°	35.0	27.5	20.0	15.0	10.0	7.5	7.5	7.5
80°	22.5	17.5	12.5	10.0	7.5	5.0	5.0	5.0
82.5°	12.5	10.0	7.5	5.0	5.0	2.5	2.5	2.5
85°	5.0	5.0	5.0	2.5	2.5	2.5	2.5	2.5
87.5°	2.5	2.5	2.5	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)