

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: P274469

Luminaire Tested: **LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35088)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI
Description: PORTFOLIO 6" W2N SQ DOWNLIGHT WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1649.8 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

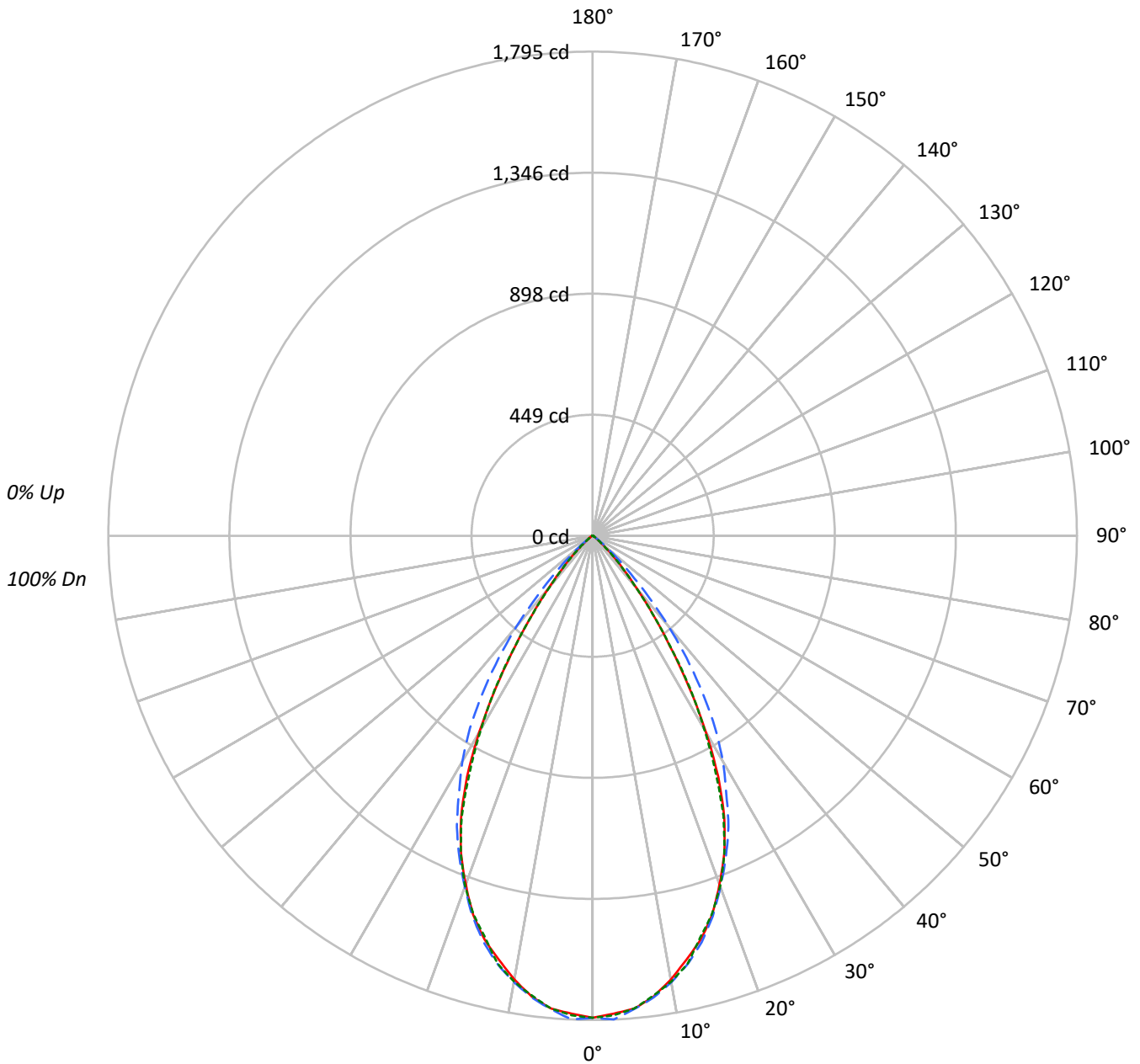
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P274469

CATALOG NUMBER: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI

Luminous Intensity Polar Plot





TEST NUMBER: P274469

CATALOG NUMBER: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI

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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	65																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	76940	76940	76940
5°	76059	76158	76059
10°	73017	73462	73366
15°	69028	69536	68676
20°	62996	63464	63308
25°	54856	56580	54476
30°	41712	47981	41091
35°	26260	37297	26496
40°	14164	24629	13911
45°	6704	12166	6637
50°	2512	4562	2512
55°	1194	1449	1111
60°	784	680	784
65°	458	458	458
70°	290	428	290
75°	183	183	183
80°	273	273	273
85°	0	0	0



TEST NUMBER: P274469

CATALOG NUMBER: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	10.0
10°-20°	434.2	26.3
20°-30°	530.5	32.2
30°-40°	371.0	22.5
40°-50°	121.6	7.4
50°-60°	19.3	1.2
60°-70°	5.3	0.3
70°-80°	1.7	0.1
80°-90°	0.5	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°	1130.4	68.5
0°-40°	1501.4	91.0
0°-60°	1642.3	99.5
0°-90°	1649.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1649.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1760	1760	1762	1751	1760	165
15°	1549	1555	1560	1550	1541	432
25°	1155	1172	1191	1169	1147	519
35°	500	590	710	581	504	319
45°	110	136	200	134	109	92
55°	16	17	19	17	15	16
65°	4	6	4	6	4	5
75°	1	1	1	1	1	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P274469

CATALOG NUMBER: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0
2.5°	1773.4	1785.9	1782.5	1790.5	1790.5	1781.4	1783.6	1787.0	1791.6	1795.0	1767.7
5°	1759.8	1771.2	1760.9	1772.3	1765.5	1755.3	1772.3	1763.2	1768.9	1762.1	1766.6
7.5°	1723.5	1741.6	1721.2	1734.8	1730.3	1724.6	1731.4	1729.1	1732.6	1726.9	1714.4
10°	1670.1	1684.9	1671.2	1690.5	1681.5	1675.8	1681.5	1687.1	1686.0	1680.3	1687.1
12.5°	1608.8	1625.8	1619.0	1630.4	1620.2	1620.2	1633.8	1630.4	1631.5	1627.0	1634.9
15°	1548.6	1561.1	1550.9	1565.7	1561.1	1548.6	1554.3	1554.3	1563.4	1560.0	1550.9
17.5°	1473.7	1483.9	1472.6	1476.0	1471.4	1469.1	1493.0	1477.1	1486.2	1479.4	1480.5
20°	1374.9	1379.5	1376.0	1385.1	1379.5	1386.3	1384.0	1381.7	1381.7	1385.1	1377.2
22.5°	1275.0	1275.0	1278.4	1280.7	1285.2	1278.4	1292.0	1280.7	1281.8	1289.8	1287.5
25°	1154.7	1151.2	1159.2	1170.6	1175.1	1169.4	1187.6	1178.5	1185.3	1191.0	1178.5
27.5°	1008.2	1008.2	1016.1	1035.4	1038.8	1045.7	1070.6	1070.6	1079.7	1071.8	1080.9
30°	839.0	851.5	861.7	886.7	894.7	909.4	935.5	948.0	968.5	965.1	960.5
32.5°	665.3	682.3	683.5	709.6	731.2	756.1	791.3	820.9	835.6	845.8	834.5
35°	499.6	509.8	518.9	537.0	573.4	606.3	638.1	676.7	702.8	709.6	699.4
37.5°	365.6	367.9	376.9	394.0	421.2	453.0	491.6	533.6	560.9	571.1	559.7
40°	252.0	254.3	258.9	273.6	296.3	319.0	349.7	392.8	417.8	438.2	423.5
42.5°	169.2	171.4	176.0	187.3	199.8	221.4	245.2	272.5	296.3	305.4	297.5
45°	110.1	110.1	112.4	120.3	127.2	144.2	161.2	178.3	194.1	199.8	194.1
47.5°	64.7	65.9	68.1	73.8	81.7	88.6	101.0	112.4	116.9	121.5	119.2
50°	37.5	37.5	40.9	44.3	50.0	54.5	59.0	63.6	65.9	68.1	65.9
52.5°	20.4	21.6	22.7	23.8	26.1	30.7	34.1	34.1	35.2	36.3	35.2
55°	15.9	15.9	15.9	15.9	17.0	17.0	17.0	18.2	18.2	19.3	18.2
57.5°	11.4	11.4	11.4	12.5	12.5	12.5	11.4	11.4	11.4	11.4	11.4
60°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	7.9	7.9	7.9	7.9
62.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
65°	4.5	4.5	5.7	5.7	5.7	5.7	5.7	4.5	4.5	4.5	4.5
67.5°	3.4	3.4	3.4	3.4	4.5	4.5	3.4	3.4	3.4	3.4	3.4
70°	2.3	2.3	2.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	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°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P274469

CATALOG NUMBER: LD6B20DE010W2N2050 EU6B1020W2N902050 6LBSQ0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0	1787.0
2.5°	1787.0	1767.7	1770.0	1780.2	1774.6	1780.2	1779.1	1779.1
5°	1767.7	1762.1	1753.0	1749.6	1756.4	1771.2	1768.9	1759.8
7.5°	1731.4	1716.7	1726.9	1731.4	1725.7	1734.8	1739.4	1720.1
10°	1688.3	1682.6	1680.3	1682.6	1680.3	1689.4	1678.1	1678.1
12.5°	1627.0	1617.9	1617.9	1631.5	1623.6	1616.7	1625.8	1624.7
15°	1565.7	1547.5	1547.5	1552.0	1555.4	1550.9	1552.0	1540.7
17.5°	1474.8	1469.1	1461.2	1473.7	1477.1	1472.6	1476.0	1470.3
20°	1389.7	1389.7	1374.9	1380.6	1385.1	1388.5	1390.8	1381.7
22.5°	1280.7	1283.0	1272.7	1284.1	1287.5	1276.1	1278.4	1276.1
25°	1180.8	1179.6	1171.7	1167.1	1169.4	1164.9	1163.7	1146.7
27.5°	1070.6	1059.3	1042.3	1046.8	1027.5	1011.6	1011.6	985.5
30°	951.4	932.1	909.4	886.7	869.7	851.5	841.3	826.5
32.5°	811.8	785.7	757.3	726.6	707.3	680.1	665.3	673.3
35°	673.3	634.7	596.1	565.4	535.9	520.0	501.8	504.1
37.5°	539.3	484.8	450.7	417.8	392.8	372.4	364.4	362.2
40°	394.0	350.8	316.8	292.9	275.9	260.0	250.9	247.5
42.5°	272.5	241.8	214.6	195.3	183.9	173.7	169.2	168.0
45°	177.1	158.9	140.8	127.2	118.1	111.3	110.1	109.0
47.5°	111.3	102.2	90.8	80.6	72.7	68.1	64.7	64.7
50°	63.6	60.2	54.5	48.8	44.3	42.0	38.6	37.5
52.5°	34.1	34.1	31.8	27.2	23.8	21.6	21.6	20.4
55°	18.2	18.2	17.0	17.0	15.9	15.9	15.9	14.8
57.5°	11.4	11.4	12.5	12.5	11.4	11.4	11.4	11.4
60°	7.9	9.1	9.1	9.1	9.1	9.1	9.1	9.1
62.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
65°	4.5	5.7	5.7	5.7	5.7	4.5	4.5	4.5
67.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
70°	3.4	3.4	3.4	3.4	3.4	2.3	2.3	2.3
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)