

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P551386

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D**

Issue Date: 7/9/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P551386
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-248-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

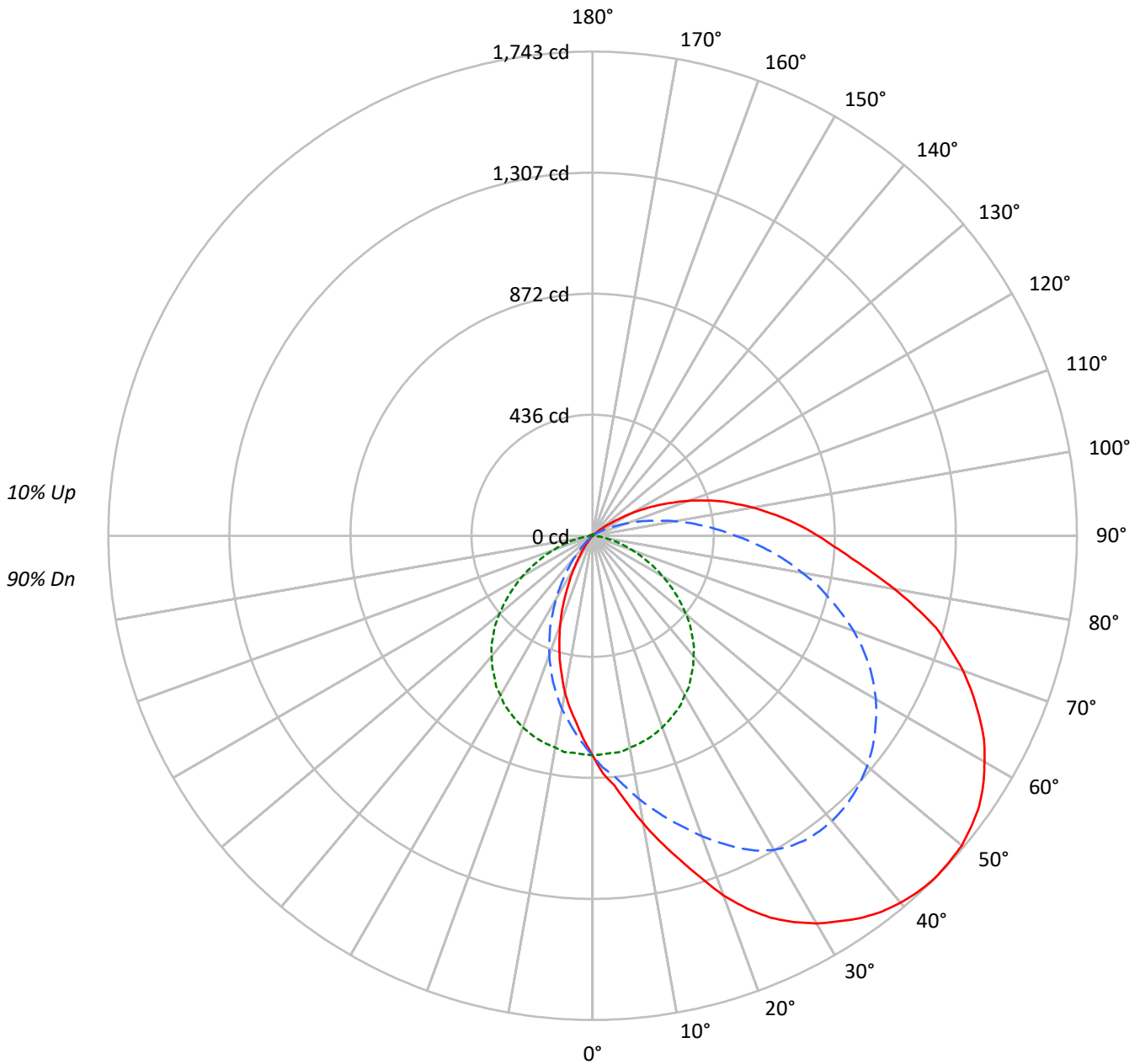
Lumens per Lamp: N/A
Luminaire Lumens: 3906.9 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (Ain): 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: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8507	8507	8507
5°	9338	8383	6993
10°	10567	8279	5763
15°	11843	8174	4492
20°	13356	8041	3308
25°	14612	7886	2172
30°	15546	7679	1223
35°	16354	7456	539
40°	17070	7183	130
45°	17685	6839	0
50°	18201	6382	0
55°	18595	5803	0
60°	18792	5130	0
65°	18870	4369	0
70°	18807	3561	0
75°	18568	2626	15
80°	17816	1607	81
85°	17220	768	110



TEST NUMBER: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	1.9
10°-20°	226.7	5.8
20°-30°	367.1	9.4
30°-40°	471.5	12.1
40°-50°	533.7	13.7
50°-60°	553.0	14.2
60°-70°	521.5	13.3
70°-80°	437.0	11.2
80°-90°	316.8	8.1
90°-100°	208.2	5.3
100°-110°	120.2	3.1
110°-120°	53.0	1.4
120°-130°	14.4	0.4
130°-140°	3.3	0.1
140°-150°	2.1	0.1
150°-160°	1.5	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	669.4	17.1
0°-40°	1140.9	29.2
0°-60°	2227.6	57.0
0°-90°	3502.9	89.7
90°-120°	381.5	9.8
90°-150°	401.3	10.3
90°-180°	404.0	10.3
0°-180°	3906.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	790	790	790	790	790	
5°	902	866	784	712	676	91
15°	1205	1057	758	548	457	347
25°	1517	1240	703	360	226	701
35°	1680	1336	617	175	55	1054
45°	1743	1323	505	40	0	1345
55°	1698	1240	364	0	0	1517
65°	1535	1097	218	0	0	1519
75°	1280	885	93	1	1	1342
85°	936	642	15	4	6	800
90°	811	515	4	6	7	445
95°	697	402	2	7	9	547
105°	479	208	2	5	8	506
115°	261	69	3	3	5	261
125°	78	10	4	3	4	77
135°	4	3	5	4	3	7
145°	1	4	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	4	5	3	1	0
180°	3	3	3	3	3	



TEST NUMBER: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	790.3	790.3	790.3	790.3	790.3	790.3	790.3	790.3	790.3	790.3	790.3
2.5°	856.7	855.7	852.7	847.7	840.6	828.5	818.5	809.4	797.3	787.3	768.1
5°	902.0	897.0	893.0	887.9	871.8	860.8	842.6	822.5	803.4	784.3	746.0
7.5°	974.5	966.5	960.4	946.3	924.2	899.0	870.8	851.7	838.6	785.3	719.8
10°	1052.0	1045.0	1032.9	1007.7	980.6	944.3	904.1	858.8	818.5	774.2	696.7
12.5°	1128.6	1118.5	1101.4	1069.2	1030.9	985.6	930.2	876.9	819.5	767.1	669.5
15°	1205.1	1194.0	1175.9	1136.6	1086.3	1026.9	959.4	892.0	824.5	758.1	641.3
17.5°	1288.6	1273.5	1246.3	1202.0	1138.6	1065.1	985.6	904.1	822.5	747.0	611.1
20°	1378.2	1357.1	1327.9	1268.5	1194.0	1107.4	1011.8	916.1	821.5	733.9	576.9
22.5°	1452.7	1431.6	1399.4	1338.0	1248.4	1142.7	1033.9	924.2	817.5	718.8	544.6
25°	1517.2	1500.0	1464.8	1394.3	1299.7	1179.9	1055.1	930.2	811.4	702.7	510.4
27.5°	1567.5	1551.4	1512.1	1439.6	1343.0	1213.1	1071.2	933.2	803.4	686.6	475.2
30°	1611.8	1595.7	1548.4	1473.9	1372.2	1239.3	1087.3	934.3	793.3	662.4	436.9
32.5°	1646.0	1630.9	1582.6	1503.1	1392.3	1257.4	1096.3	933.2	780.2	645.3	395.6
35°	1680.3	1665.2	1608.8	1524.2	1407.4	1265.5	1103.4	928.2	764.1	617.1	356.4
37.5°	1706.4	1689.3	1631.9	1538.3	1414.5	1267.5	1102.4	921.2	747.0	594.0	317.1
40°	1724.5	1706.4	1645.0	1546.4	1416.5	1264.5	1094.3	909.1	726.9	564.8	275.8
42.5°	1736.6	1716.5	1651.1	1558.4	1412.5	1256.4	1082.2	894.0	704.7	539.6	236.6
45°	1742.7	1721.5	1652.1	1548.4	1405.4	1241.3	1064.1	874.9	680.6	505.4	197.3
47.5°	1739.6	1716.5	1647.0	1537.3	1392.3	1225.2	1044.0	851.7	651.4	475.2	160.1
50°	1734.6	1710.5	1636.0	1523.2	1374.2	1205.1	1021.8	823.5	621.2	437.9	126.8
52.5°	1718.5	1694.3	1623.9	1503.1	1353.1	1181.9	991.6	794.3	588.9	401.7	96.6
55°	1698.4	1676.2	1602.7	1484.9	1325.9	1153.7	963.5	763.1	557.7	364.4	69.5
57.5°	1667.2	1647.0	1576.6	1455.7	1298.7	1122.5	932.2	728.9	518.5	327.2	48.3
60°	1628.9	1608.8	1540.3	1422.5	1267.5	1087.3	898.0	693.6	483.2	289.9	30.2
62.5°	1588.6	1569.5	1498.0	1381.2	1228.2	1050.0	860.8	658.4	446.0	255.7	18.1
65°	1535.3	1517.2	1452.7	1331.9	1184.9	1009.8	819.5	616.1	407.7	217.5	10.1
67.5°	1478.9	1462.8	1397.4	1286.6	1134.6	965.5	777.2	574.8	367.5	184.2	5.0
70°	1418.5	1398.4	1338.0	1225.2	1083.3	915.1	730.9	532.6	329.2	152.0	0.0
72.5°	1348.0	1332.9	1274.5	1167.8	1023.9	861.8	683.6	486.3	286.9	120.8	1.0
75°	1279.6	1260.4	1207.1	1106.4	965.5	805.4	631.2	443.0	245.6	92.6	1.0
77.5°	1191.0	1184.9	1134.6	1036.9	910.1	751.0	573.8	390.6	206.4	66.4	1.0
80°	1102.4	1096.3	1057.1	967.5	845.7	686.6	520.5	341.3	168.1	44.3	1.0
82.5°	1014.8	1006.7	969.5	895.0	780.2	632.2	465.1	292.0	132.9	27.2	1.0
85°	936.3	926.2	885.9	817.5	712.8	570.8	407.7	243.6	98.7	15.1	2.0
87.5°	868.8	861.8	817.5	747.0	644.3	513.4	357.4	197.3	69.5	7.0	3.0
90°	811.4	796.3	757.1	682.6	579.9	450.0	304.0	158.1	46.3	4.0	4.0
92.5°	755.1	742.0	698.7	622.2	522.5	395.6	252.7	120.8	29.2	2.0	5.0
95°	696.7	682.6	640.3	569.8	464.1	340.3	207.4	88.6	16.1	2.0	5.0
97.5°	639.3	626.2	581.9	511.4	411.8	292.0	164.1	62.4	8.1	2.0	4.0
100°	585.9	570.8	530.6	460.1	359.4	243.6	126.8	40.3	5.0	2.0	4.0
102.5°	529.5	517.5	476.2	407.7	305.0	198.3	94.6	25.2	2.0	2.0	3.0
105°	479.2	464.1	423.8	353.4	259.7	156.0	66.4	15.1	2.0	2.0	3.0



TEST NUMBER: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	312.1	300.0	264.8	205.4	131.9	61.4	18.1	3.0	3.0	3.0	3.0
115°	260.7	242.6	211.4	159.1	97.7	40.3	9.1	3.0	3.0	3.0	3.0
117.5°	208.4	193.3	171.1	120.8	64.4	26.2	5.0	3.0	3.0	3.0	3.0
120°	163.1	149.0	123.8	83.6	43.3	15.1	2.0	3.0	3.0	3.0	3.0
122.5°	116.8	105.7	83.6	54.4	26.2	7.0	3.0	3.0	4.0	4.0	3.0
125°	77.5	71.5	55.4	33.2	16.1	3.0	3.0	3.0	4.0	4.0	3.0
127.5°	50.3	45.3	32.2	19.1	7.0	3.0	3.0	4.0	4.0	4.0	3.0
130°	28.2	25.2	19.1	11.1	3.0	3.0	3.0	4.0	4.0	4.0	3.0
132.5°	16.1	15.1	10.1	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0
135°	4.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	4.0
137.5°	1.0	1.0	2.0	2.0	3.0	3.0	4.0	5.0	5.0	5.0	4.0
140°	1.0	1.0	2.0	3.0	3.0	3.0	4.0	5.0	5.0	5.0	4.0
142.5°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	4.0	4.0
145°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	4.0	4.0	4.0
147.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	4.0	4.0
150°	1.0	2.0	2.0	3.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0
152.5°	1.0	2.0	2.0	3.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0
155°	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.0	4.0	4.0	5.0
157.5°	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.0	4.0	4.0	5.0
160°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
162.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
165°	2.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
167.5°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
170°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	5.0	5.0	5.0	5.0
172.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0
175°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0
177.5°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	4.0
180°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0



TEST NUMBER: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	790.3	790.3	790.3
2.5°	752.0	737.9	733.9
5°	711.8	688.6	675.5
7.5°	671.5	640.3	625.2
10°	634.2	590.0	573.8
12.5°	590.0	538.6	513.4
15°	547.7	481.2	457.1
17.5°	500.4	425.9	397.7
20°	456.1	370.5	341.3
22.5°	405.7	316.1	283.9
25°	360.4	261.8	225.5
27.5°	310.1	206.4	175.2
30°	262.8	158.1	126.8
32.5°	217.5	115.8	87.6
35°	175.2	78.5	55.4
37.5°	134.9	48.3	28.2
40°	97.7	25.2	13.1
42.5°	65.4	12.1	7.0
45°	40.3	6.0	0.0
47.5°	23.2	0.0	0.0
50°	12.1	0.0	0.0
52.5°	5.0	0.0	0.0
55°	0.0	0.0	0.0
57.5°	0.0	0.0	0.0
60°	0.0	0.0	0.0
62.5°	0.0	0.0	0.0
65°	0.0	0.0	0.0
67.5°	0.0	0.0	0.0
70°	0.0	0.0	0.0
72.5°	0.0	0.0	0.0
75°	1.0	1.0	1.0
77.5°	1.0	2.0	3.0
80°	2.0	4.0	5.0
82.5°	4.0	5.0	5.0
85°	4.0	5.0	6.0
87.5°	5.0	6.0	7.0
90°	6.0	7.0	7.0
92.5°	6.0	8.1	8.1
95°	7.0	8.1	9.1
97.5°	8.1	9.1	9.1
100°	7.0	9.1	10.1
102.5°	6.0	9.1	9.1
105°	5.0	7.0	8.1



TEST NUMBER: P551386

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	4.0	5.0	5.0
115°	3.0	4.0	5.0
117.5°	3.0	4.0	4.0
120°	3.0	3.0	4.0
122.5°	3.0	3.0	4.0
125°	3.0	3.0	4.0
127.5°	4.0	3.0	3.0
130°	3.0	3.0	3.0
132.5°	4.0	3.0	3.0
135°	4.0	3.0	3.0
137.5°	4.0	3.0	3.0
140°	4.0	3.0	3.0
142.5°	4.0	3.0	3.0
145°	3.0	3.0	3.0
147.5°	3.0	3.0	3.0
150°	3.0	3.0	2.0
152.5°	3.0	2.0	2.0
155°	3.0	2.0	1.0
157.5°	4.0	2.0	1.0
160°	3.0	2.0	1.0
162.5°	3.0	2.0	1.0
165°	3.0	2.0	0.0
167.5°	3.0	2.0	1.0
170°	3.0	2.0	1.0
172.5°	3.0	2.0	1.0
175°	3.0	1.0	1.0
177.5°	3.0	1.0	1.0
180°	3.0	3.0	3.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	422.8	410.8	370.5	304.0	212.4	118.8	44.3	8.1	2.0	3.0	3.0
110°	368.5	358.4	317.1	252.7	171.1	88.6	29.2	5.0	3.0	3.0	3.0





107.5°	4.0	6.0	7.0
110°	4.0	5.0	6.0



(END OF REPORT)