

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: P551192

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-80-84-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: P551192
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-30-UNV-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

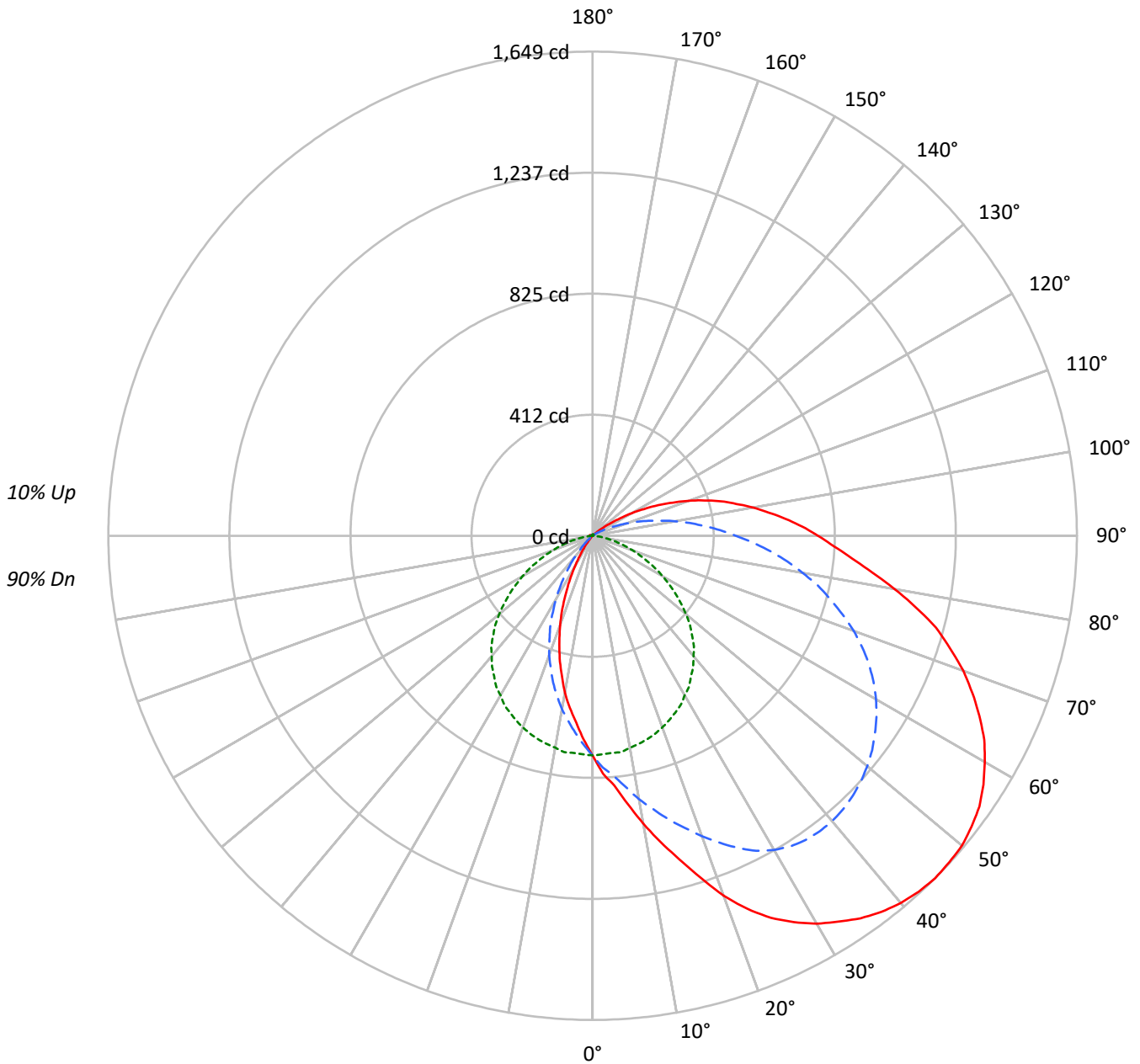
Lumens per Lamp: N/A
Luminaire Lumens: 3698.1 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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Luminous Intensity Polar Plot





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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°	8051	8051	8051
5°	8839	7934	6619
10°	10002	7837	5455
15°	11209	7736	4251
20°	12642	7611	3130
25°	13830	7464	2055
30°	14714	7268	1158
35°	15479	7058	510
40°	16157	6799	123
45°	16739	6472	0
50°	17228	6041	0
55°	17600	5492	0
60°	17787	4856	0
65°	17861	4134	0
70°	17801	3371	0
75°	17574	2487	15
80°	16862	1520	78
85°	16299	727	105



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	1.9
10°-20°	214.5	5.8
20°-30°	347.4	9.4
30°-40°	446.3	12.1
40°-50°	505.2	13.7
50°-60°	523.4	14.2
60°-70°	493.6	13.3
70°-80°	413.7	11.2
80°-90°	299.8	8.1
90°-100°	197.1	5.3
100°-110°	113.8	3.1
110°-120°	50.2	1.4
120°-130°	13.6	0.4
130°-140°	3.1	0.1
140°-150°	2.1	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	633.6	17.1
0°-40°	1079.9	29.2
0°-60°	2108.5	57.0
0°-90°	3315.6	89.7
90°-120°	361.1	9.8
90°-150°	379.9	10.3
90°-180°	383.0	10.4
0°-180°	3698.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	748	748	748	748	748	
5°	854	820	742	674	639	86
15°	1141	1000	718	518	433	329
25°	1436	1174	665	341	213	664
35°	1590	1265	584	166	52	997
45°	1649	1253	478	38	0	1273
55°	1608	1174	345	0	0	1435
65°	1453	1039	206	0	0	1438
75°	1211	838	88	1	1	1270
85°	886	607	14	4	6	757
90°	768	487	4	6	7	421
95°	659	381	2	7	9	517
105°	454	197	2	5	8	479
115°	247	65	3	3	5	247
125°	73	9	4	3	4	73
135°	4	3	5	4	3	7
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	3	5	3	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	748.0	748.0	748.0	748.0	748.0	748.0	748.0	748.0	748.0	748.0	748.0
2.5°	810.9	810.0	807.1	802.3	795.7	784.2	774.7	766.1	754.7	745.2	727.1
5°	853.8	849.0	845.2	840.4	825.2	814.7	797.6	778.5	760.4	742.3	706.1
7.5°	922.4	914.8	909.1	895.7	874.8	850.9	824.2	806.1	793.8	743.3	681.3
10°	995.8	989.1	977.7	953.8	928.1	893.8	855.7	812.8	774.7	732.8	659.4
12.5°	1068.2	1058.7	1042.5	1012.0	975.8	932.9	880.5	830.0	775.7	726.1	633.7
15°	1140.6	1130.1	1113.0	1075.8	1028.2	971.9	908.1	844.3	780.4	717.5	607.0
17.5°	1219.7	1205.4	1179.7	1137.7	1077.7	1008.2	932.9	855.7	778.5	707.0	578.4
20°	1304.5	1284.5	1256.9	1200.6	1130.1	1048.2	957.7	867.1	777.6	694.7	546.0
22.5°	1375.0	1355.0	1324.5	1266.4	1181.6	1081.5	978.6	874.8	773.7	680.4	515.5
25°	1436.0	1419.8	1386.5	1319.7	1230.2	1116.8	998.6	880.5	768.0	665.1	483.1
27.5°	1483.6	1468.4	1431.2	1362.6	1271.2	1148.2	1013.9	883.3	760.4	649.9	449.8
30°	1525.6	1510.3	1465.5	1395.0	1298.8	1173.0	1029.1	884.3	750.9	627.0	413.6
32.5°	1558.0	1543.7	1497.9	1422.7	1317.8	1190.2	1037.7	883.3	738.5	610.8	374.5
35°	1590.4	1576.1	1522.7	1442.7	1332.1	1197.8	1044.4	878.6	723.2	584.1	337.3
37.5°	1615.1	1598.9	1544.6	1456.0	1338.8	1199.7	1043.4	871.9	707.0	562.2	300.2
40°	1632.3	1615.1	1557.0	1463.6	1340.7	1196.8	1035.8	860.5	688.0	534.6	261.1
42.5°	1643.7	1624.7	1562.7	1475.1	1336.9	1189.2	1024.4	846.2	667.0	510.7	223.9
45°	1649.4	1629.4	1563.7	1465.5	1330.2	1174.9	1007.2	828.1	644.2	478.3	186.8
47.5°	1646.6	1624.7	1558.9	1455.1	1317.8	1159.7	988.1	806.1	616.5	449.8	151.5
50°	1641.8	1619.0	1548.4	1441.7	1300.7	1140.6	967.2	779.5	587.9	414.5	120.1
52.5°	1626.6	1603.7	1537.0	1422.7	1280.7	1118.7	938.6	751.8	557.4	380.2	91.5
55°	1607.5	1586.6	1517.0	1405.5	1255.0	1092.0	911.9	722.3	527.9	344.9	65.7
57.5°	1578.0	1558.9	1492.2	1377.9	1229.2	1062.5	882.4	689.9	490.7	309.7	45.7
60°	1541.8	1522.7	1457.9	1346.4	1199.7	1029.1	850.0	656.5	457.4	274.4	28.6
62.5°	1503.7	1485.6	1417.9	1307.4	1162.5	993.9	814.7	623.2	422.1	242.0	17.2
65°	1453.2	1436.0	1375.0	1260.7	1121.5	955.7	775.7	583.2	385.9	205.8	9.5
67.5°	1399.8	1384.5	1322.6	1217.8	1073.9	913.8	735.6	544.1	347.8	174.4	4.8
70°	1342.6	1323.6	1266.4	1159.7	1025.3	866.2	691.8	504.1	311.6	143.9	0.0
72.5°	1275.9	1261.6	1206.4	1105.3	969.1	815.7	647.0	460.2	271.6	114.3	1.0
75°	1211.1	1193.0	1142.5	1047.2	913.8	762.3	597.5	419.3	232.5	87.7	1.0
77.5°	1127.3	1121.5	1073.9	981.5	861.4	710.9	543.1	369.7	195.3	62.9	1.0
80°	1043.4	1037.7	1000.5	915.7	800.4	649.9	492.6	323.0	159.1	41.9	1.0
82.5°	960.5	952.9	917.6	847.1	738.5	598.4	440.2	276.3	125.8	25.7	1.0
85°	886.2	876.7	838.5	773.7	674.6	540.3	385.9	230.6	93.4	14.3	1.9
87.5°	822.3	815.7	773.7	707.0	609.8	486.0	338.3	186.8	65.7	6.7	2.9
90°	768.0	753.7	716.6	646.1	548.9	425.9	287.8	149.6	43.8	3.8	3.8
92.5°	714.7	702.3	661.3	588.9	494.5	374.5	239.2	114.3	27.6	1.9	4.8
95°	659.4	646.1	606.0	539.3	439.3	322.1	196.3	83.9	15.2	1.9	4.8
97.5°	605.1	592.7	550.8	484.1	389.7	276.3	155.3	59.1	7.6	1.9	3.8
100°	554.6	540.3	502.2	435.5	340.2	230.6	120.1	38.1	4.8	1.9	3.8
102.5°	501.2	489.8	450.7	385.9	288.7	187.7	89.6	23.8	1.9	1.9	2.9
105°	453.6	439.3	401.2	334.5	245.8	147.7	62.9	14.3	1.9	1.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	295.4	284.0	250.6	194.4	124.8	58.1	17.2	2.9	2.9	2.9	2.9
115°	246.8	229.6	200.1	150.6	92.4	38.1	8.6	2.9	2.9	2.9	2.9
117.5°	197.2	183.0	162.0	114.3	61.0	24.8	4.8	2.9	2.9	2.9	2.9
120°	154.4	141.0	117.2	79.1	41.0	14.3	1.9	2.9	2.9	2.9	2.9
122.5°	110.5	100.1	79.1	51.5	24.8	6.7	2.9	2.9	3.8	3.8	2.9
125°	73.4	67.7	52.4	31.4	15.2	2.9	2.9	2.9	3.8	3.8	2.9
127.5°	47.6	42.9	30.5	18.1	6.7	2.9	2.9	3.8	3.8	3.8	2.9
130°	26.7	23.8	18.1	10.5	2.9	2.9	2.9	3.8	3.8	3.8	2.9
132.5°	15.2	14.3	9.5	1.9	2.9	2.9	2.9	3.8	3.8	3.8	3.8
135°	3.8	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	3.8
137.5°	1.0	1.0	1.9	1.9	2.9	2.9	3.8	4.8	4.8	4.8	3.8
140°	1.0	1.0	1.9	2.9	2.9	2.9	3.8	4.8	4.8	4.8	3.8
142.5°	1.0	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	3.8	3.8
145°	1.0	1.9	1.9	2.9	2.9	3.8	3.8	4.8	3.8	3.8	3.8
147.5°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	3.8	3.8
150°	1.0	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	3.8
152.5°	1.0	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	3.8
155°	1.9	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	4.8
157.5°	1.9	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	4.8
160°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8	3.8
162.5°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8	3.8
165°	1.9	1.9	1.9	1.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8
167.5°	1.9	1.9	1.9	2.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8
170°	1.9	1.9	1.9	2.9	2.9	2.9	3.8	4.8	4.8	4.8	4.8
172.5°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	4.8	4.8
175°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	4.8	4.8
177.5°	1.0	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	4.8	3.8
180°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	748.0	748.0	748.0
2.5°	711.8	698.5	694.7
5°	673.7	651.8	639.4
7.5°	635.6	606.0	591.7
10°	600.3	558.4	543.1
12.5°	558.4	509.8	486.0
15°	518.4	455.5	432.6
17.5°	473.6	403.1	376.4
20°	431.7	350.7	323.0
22.5°	384.0	299.2	268.7
25°	341.1	247.8	213.4
27.5°	293.5	195.3	165.8
30°	248.7	149.6	120.1
32.5°	205.8	109.6	82.9
35°	165.8	74.3	52.4
37.5°	127.7	45.7	26.7
40°	92.4	23.8	12.4
42.5°	61.9	11.4	6.7
45°	38.1	5.7	0.0
47.5°	21.9	0.0	0.0
50°	11.4	0.0	0.0
52.5°	4.8	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	1.9	2.9
80°	1.9	3.8	4.8
82.5°	3.8	4.8	4.8
85°	3.8	4.8	5.7
87.5°	4.8	5.7	6.7
90°	5.7	6.7	6.7
92.5°	5.7	7.6	7.6
95°	6.7	7.6	8.6
97.5°	7.6	8.6	8.6
100°	6.7	8.6	9.5
102.5°	5.7	8.6	8.6
105°	4.8	6.7	7.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.8	4.8	4.8
115°	2.9	3.8	4.8
117.5°	2.9	3.8	3.8
120°	2.9	2.9	3.8
122.5°	2.9	2.9	3.8
125°	2.9	2.9	3.8
127.5°	3.8	2.9	2.9
130°	2.9	2.9	2.9
132.5°	3.8	2.9	2.9
135°	3.8	2.9	2.9
137.5°	3.8	2.9	2.9
140°	3.8	2.9	2.9
142.5°	3.8	2.9	2.9
145°	2.9	2.9	2.9
147.5°	2.9	2.9	2.9
150°	2.9	2.9	1.9
152.5°	2.9	1.9	1.9
155°	2.9	1.9	1.0
157.5°	3.8	1.9	1.0
160°	2.9	1.9	1.0
162.5°	2.9	1.9	1.0
165°	2.9	1.9	0.0
167.5°	2.9	1.9	1.0
170°	2.9	1.9	1.0
172.5°	2.9	1.9	1.0
175°	2.9	1.0	1.0
177.5°	2.9	1.0	1.0
180°	2.9	2.9	2.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	400.2	388.8	350.7	287.8	201.1	112.4	41.9	7.6	1.9	2.9	2.9
110°	348.8	339.2	300.2	239.2	162.0	83.9	27.6	4.8	2.9	2.9	2.9





107.5°	3.8	5.7	6.7
110°	3.8	4.8	5.7



(END OF REPORT)