

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: P551290

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-82-85-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: P551290
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-35-UNV-82-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

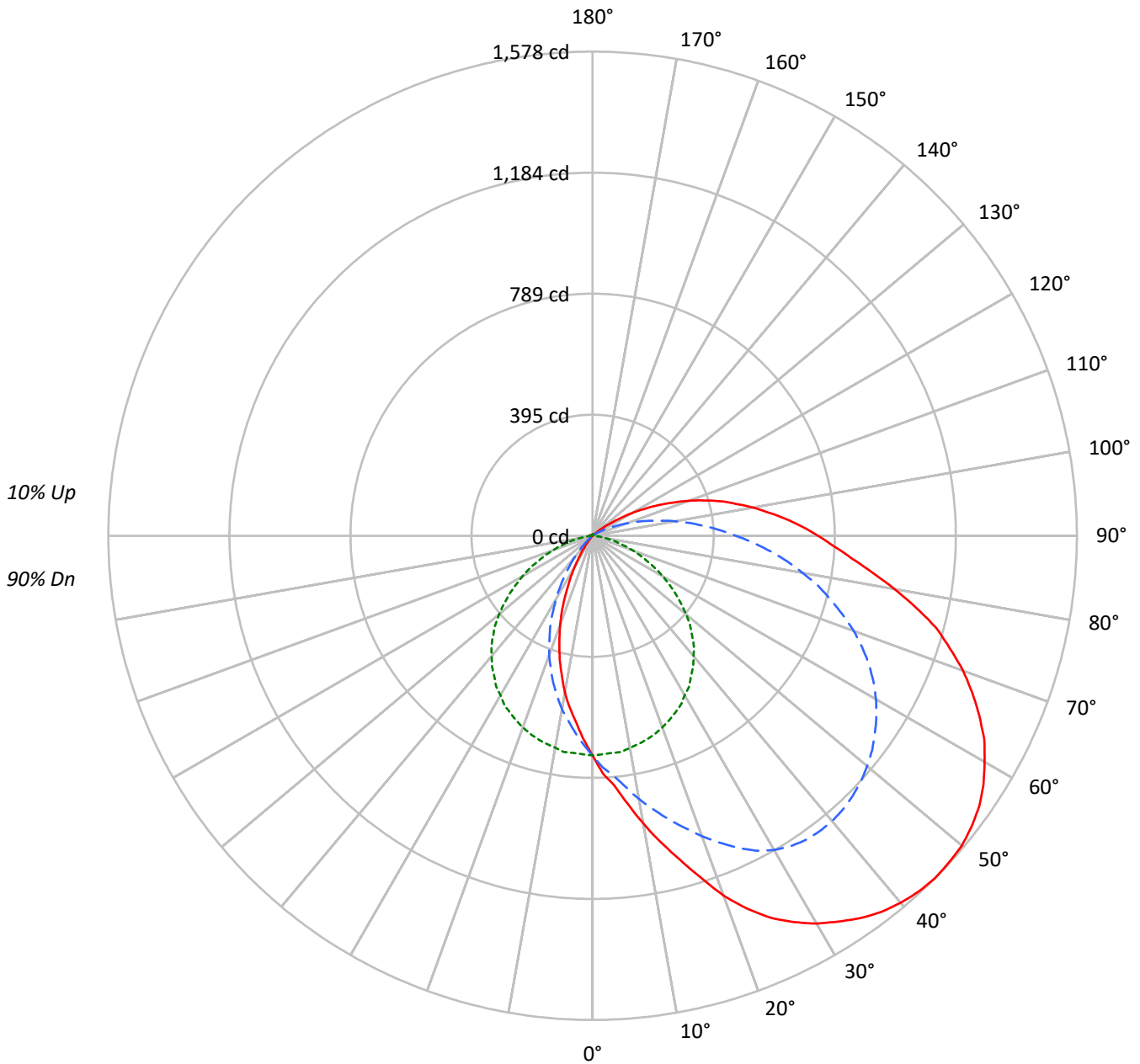
Lumens per Lamp: N/A
Luminaire Lumens: 3537.9 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (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: P551290

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551290

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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°	7704	7704	7704
5°	8456	7591	6332
10°	9569	7498	5219
15°	10724	7402	4067
20°	12095	7282	2996
25°	13232	7141	1967
30°	14078	6954	1108
35°	14809	6752	488
40°	15458	6504	118
45°	16015	6193	0
50°	16483	5780	0
55°	16839	5255	0
60°	17018	4647	0
65°	17088	3955	0
70°	17030	3226	0
75°	16814	2379	13
80°	16133	1455	74
85°	15593	697	101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	1.9
10°-20°	205.3	5.8
20°-30°	332.4	9.4
30°-40°	427.0	12.1
40°-50°	483.3	13.7
50°-60°	500.7	14.2
60°-70°	472.3	13.3
70°-80°	395.8	11.2
80°-90°	286.9	8.1
90°-100°	188.5	5.3
100°-110°	108.9	3.1
110°-120°	48.0	1.4
120°-130°	13.0	0.4
130°-140°	3.0	0.1
140°-150°	1.9	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	606.2	17.1
0°-40°	1033.2	29.2
0°-60°	2017.3	57.0
0°-90°	3172.1	89.7
90°-120°	345.5	9.8
90°-150°	363.3	10.3
90°-180°	366.0	10.3
0°-180°	3537.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	716	716	716	716	716	
5°	817	784	710	644	612	82
15°	1091	957	686	496	414	315
25°	1374	1123	636	326	204	635
35°	1522	1210	559	159	50	954
45°	1578	1198	458	36	0	1218
55°	1538	1123	330	0	0	1373
65°	1390	994	197	0	0	1376
75°	1159	802	84	1	1	1215
85°	848	581	14	4	6	724
90°	735	466	4	6	6	403
95°	631	364	2	6	8	495
105°	434	188	2	5	7	458
115°	236	62	3	3	5	236
125°	70	9	4	3	4	70
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°	715.7	715.7	715.7	715.7	715.7	715.7	715.7	715.7	715.7	715.7	715.7
2.5°	775.8	774.9	772.2	767.6	761.2	750.3	741.2	733.0	722.0	712.9	695.6
5°	816.8	812.3	808.6	804.1	789.5	779.5	763.1	744.8	727.5	710.2	675.5
7.5°	882.5	875.2	869.7	857.0	836.9	814.1	788.6	771.3	759.4	711.1	651.8
10°	952.7	946.3	935.4	912.6	888.0	855.1	818.7	777.6	741.2	701.1	630.9
12.5°	1022.0	1012.9	997.4	968.2	933.5	892.5	842.4	794.1	742.1	694.7	606.3
15°	1091.3	1081.2	1064.8	1029.3	983.7	929.9	868.8	807.7	746.6	686.5	580.7
17.5°	1166.9	1153.2	1128.6	1088.5	1031.1	964.5	892.5	818.7	744.8	676.5	553.4
20°	1248.1	1228.9	1202.5	1148.7	1081.2	1002.8	916.2	829.6	743.9	664.6	522.4
22.5°	1315.5	1296.4	1267.2	1211.6	1130.5	1034.7	936.3	836.9	740.3	650.9	493.2
25°	1373.9	1358.4	1326.5	1262.6	1177.0	1068.5	955.4	842.4	734.8	636.3	462.2
27.5°	1419.5	1404.9	1369.3	1303.7	1216.2	1098.5	970.0	845.1	727.5	621.8	430.3
30°	1459.6	1445.0	1402.1	1334.7	1242.6	1122.3	984.6	846.0	718.4	599.9	395.7
32.5°	1490.6	1476.9	1433.1	1361.1	1260.8	1138.7	992.8	845.1	706.5	584.4	358.3
35°	1521.6	1507.9	1456.8	1380.3	1274.5	1146.0	999.2	840.5	691.9	558.8	322.7
37.5°	1545.3	1529.8	1477.8	1393.0	1280.9	1147.8	998.3	834.2	676.5	537.9	287.2
40°	1561.7	1545.3	1489.7	1400.3	1282.7	1145.0	991.0	823.2	658.2	511.4	249.8
42.5°	1572.6	1554.4	1495.1	1411.2	1279.1	1137.8	980.0	809.6	638.2	488.6	214.2
45°	1578.1	1558.9	1496.0	1402.1	1272.7	1124.1	963.6	792.2	616.3	457.7	178.7
47.5°	1575.3	1554.4	1491.5	1392.1	1260.8	1109.5	945.4	771.3	589.8	430.3	145.0
50°	1570.8	1548.9	1481.4	1379.3	1244.4	1091.3	925.3	745.7	562.5	396.6	114.9
52.5°	1556.2	1534.3	1470.5	1361.1	1225.3	1070.3	898.0	719.3	533.3	363.8	87.5
55°	1538.0	1517.9	1451.4	1344.7	1200.7	1044.8	872.5	691.0	505.1	330.0	62.9
57.5°	1509.7	1491.5	1427.7	1318.3	1176.0	1016.5	844.2	660.0	469.5	296.3	43.8
60°	1475.1	1456.8	1394.8	1288.2	1147.8	984.6	813.2	628.1	437.6	262.6	27.3
62.5°	1438.6	1421.3	1356.5	1250.8	1112.2	950.9	779.5	596.2	403.9	231.6	16.4
65°	1390.3	1373.9	1315.5	1206.1	1073.0	914.4	742.1	557.9	369.2	196.9	9.1
67.5°	1339.2	1324.6	1265.4	1165.1	1027.4	874.3	703.8	520.6	332.8	166.8	4.6
70°	1284.5	1266.3	1211.6	1109.5	980.9	828.7	661.9	482.3	298.1	137.7	0.0
72.5°	1220.7	1207.0	1154.2	1057.5	927.2	780.4	619.0	440.3	259.8	109.4	0.9
75°	1158.7	1141.4	1093.1	1001.9	874.3	729.3	571.6	401.1	222.4	83.9	0.9
77.5°	1078.5	1073.0	1027.4	939.0	824.1	680.1	519.6	353.7	186.9	60.2	0.9
80°	998.3	992.8	957.2	876.1	765.8	621.8	471.3	309.1	152.2	40.1	0.9
82.5°	919.0	911.7	877.9	810.5	706.5	572.5	421.2	264.4	120.3	24.6	0.9
85°	847.8	838.7	802.3	740.3	645.5	516.9	369.2	220.6	89.3	13.7	1.8
87.5°	786.8	780.4	740.3	676.5	583.5	464.9	323.6	178.7	62.9	6.4	2.7
90°	734.8	721.1	685.6	618.1	525.1	407.5	275.3	143.1	41.9	3.6	3.6
92.5°	683.7	671.9	632.7	563.4	473.2	358.3	228.8	109.4	26.4	1.8	4.6
95°	630.9	618.1	579.8	516.0	420.3	308.1	187.8	80.2	14.6	1.8	4.6
97.5°	578.9	567.1	526.9	463.1	372.9	264.4	148.6	56.5	7.3	1.8	3.6
100°	530.6	516.9	480.4	416.6	325.5	220.6	114.9	36.5	4.6	1.8	3.6
102.5°	479.5	468.6	431.2	369.2	276.2	179.6	85.7	22.8	1.8	1.8	2.7
105°	433.9	420.3	383.8	320.0	235.2	141.3	60.2	13.7	1.8	1.8	2.7



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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	282.6	271.7	239.8	186.0	119.4	55.6	16.4	2.7	2.7	2.7	2.7
115°	236.1	219.7	191.4	144.0	88.4	36.5	8.2	2.7	2.7	2.7	2.7
117.5°	188.7	175.0	155.0	109.4	58.3	23.7	4.6	2.7	2.7	2.7	2.7
120°	147.7	134.9	112.1	75.7	39.2	13.7	1.8	2.7	2.7	2.7	2.7
122.5°	105.8	95.7	75.7	49.2	23.7	6.4	2.7	2.7	3.6	3.6	2.7
125°	70.2	64.7	50.1	30.1	14.6	2.7	2.7	2.7	3.6	3.6	2.7
127.5°	45.6	41.0	29.2	17.3	6.4	2.7	2.7	3.6	3.6	3.6	2.7
130°	25.5	22.8	17.3	10.0	2.7	2.7	2.7	3.6	3.6	3.6	2.7
132.5°	14.6	13.7	9.1	1.8	2.7	2.7	2.7	3.6	3.6	3.6	3.6
135°	3.6	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.6	4.6	3.6
137.5°	0.9	0.9	1.8	1.8	2.7	2.7	3.6	4.6	4.6	4.6	3.6
140°	0.9	0.9	1.8	2.7	2.7	2.7	3.6	4.6	4.6	4.6	3.6
142.5°	0.9	1.8	1.8	2.7	2.7	3.6	3.6	4.6	4.6	3.6	3.6
145°	0.9	1.8	1.8	2.7	2.7	3.6	3.6	4.6	3.6	3.6	3.6
147.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.6	4.6	3.6	3.6
150°	0.9	1.8	1.8	2.7	3.6	3.6	3.6	4.6	3.6	3.6	3.6
152.5°	0.9	1.8	1.8	2.7	3.6	3.6	3.6	4.6	3.6	3.6	3.6
155°	1.8	1.8	1.8	2.7	3.6	3.6	3.6	4.6	3.6	3.6	4.6
157.5°	1.8	1.8	1.8	2.7	3.6	3.6	3.6	4.6	3.6	3.6	4.6
160°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6	3.6
162.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6	3.6
165°	1.8	1.8	1.8	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6
167.5°	1.8	1.8	1.8	2.7	2.7	2.7	3.6	3.6	3.6	3.6	3.6
170°	1.8	1.8	1.8	2.7	2.7	2.7	3.6	4.6	4.6	4.6	4.6
172.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.6	4.6	4.6	4.6
175°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.6	4.6	4.6	4.6
177.5°	0.9	1.8	1.8	2.7	2.7	3.6	3.6	4.6	4.6	4.6	3.6
180°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7



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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	715.7	715.7	715.7
2.5°	681.0	668.2	664.6
5°	644.5	623.6	611.7
7.5°	608.1	579.8	566.1
10°	574.3	534.2	519.6
12.5°	534.2	487.7	464.9
15°	495.9	435.8	413.9
17.5°	453.1	385.6	360.1
20°	413.0	335.5	309.1
22.5°	367.4	286.3	257.1
25°	326.4	237.0	204.2
27.5°	280.8	186.9	158.6
30°	237.9	143.1	114.9
32.5°	196.9	104.8	79.3
35°	158.6	71.1	50.1
37.5°	122.2	43.8	25.5
40°	88.4	22.8	11.9
42.5°	59.3	10.9	6.4
45°	36.5	5.5	0.0
47.5°	21.0	0.0	0.0
50°	10.9	0.0	0.0
52.5°	4.6	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°	0.9	0.9	0.9
77.5°	0.9	1.8	2.7
80°	1.8	3.6	4.6
82.5°	3.6	4.6	4.6
85°	3.6	4.6	5.5
87.5°	4.6	5.5	6.4
90°	5.5	6.4	6.4
92.5°	5.5	7.3	7.3
95°	6.4	7.3	8.2
97.5°	7.3	8.2	8.2
100°	6.4	8.2	9.1
102.5°	5.5	8.2	8.2
105°	4.6	6.4	7.3



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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.6	4.6	4.6
115°	2.7	3.6	4.6
117.5°	2.7	3.6	3.6
120°	2.7	2.7	3.6
122.5°	2.7	2.7	3.6
125°	2.7	2.7	3.6
127.5°	3.6	2.7	2.7
130°	2.7	2.7	2.7
132.5°	3.6	2.7	2.7
135°	3.6	2.7	2.7
137.5°	3.6	2.7	2.7
140°	3.6	2.7	2.7
142.5°	3.6	2.7	2.7
145°	2.7	2.7	2.7
147.5°	2.7	2.7	2.7
150°	2.7	2.7	1.8
152.5°	2.7	1.8	1.8
155°	2.7	1.8	0.9
157.5°	3.6	1.8	0.9
160°	2.7	1.8	0.9
162.5°	2.7	1.8	0.9
165°	2.7	1.8	0.0
167.5°	2.7	1.8	0.9
170°	2.7	1.8	0.9
172.5°	2.7	1.8	0.9
175°	2.7	0.9	0.9
177.5°	2.7	0.9	0.9
180°	2.7	2.7	2.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	382.9	372.0	335.5	275.3	192.4	107.6	40.1	7.3	1.8	2.7	2.7
110°	333.7	324.6	287.2	228.8	155.0	80.2	26.4	4.6	2.7	2.7	2.7





107.5°	3.6	5.5	6.4
110°	3.6	4.6	5.5



(END OF REPORT)