

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: P551191

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90**

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: P551191
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-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

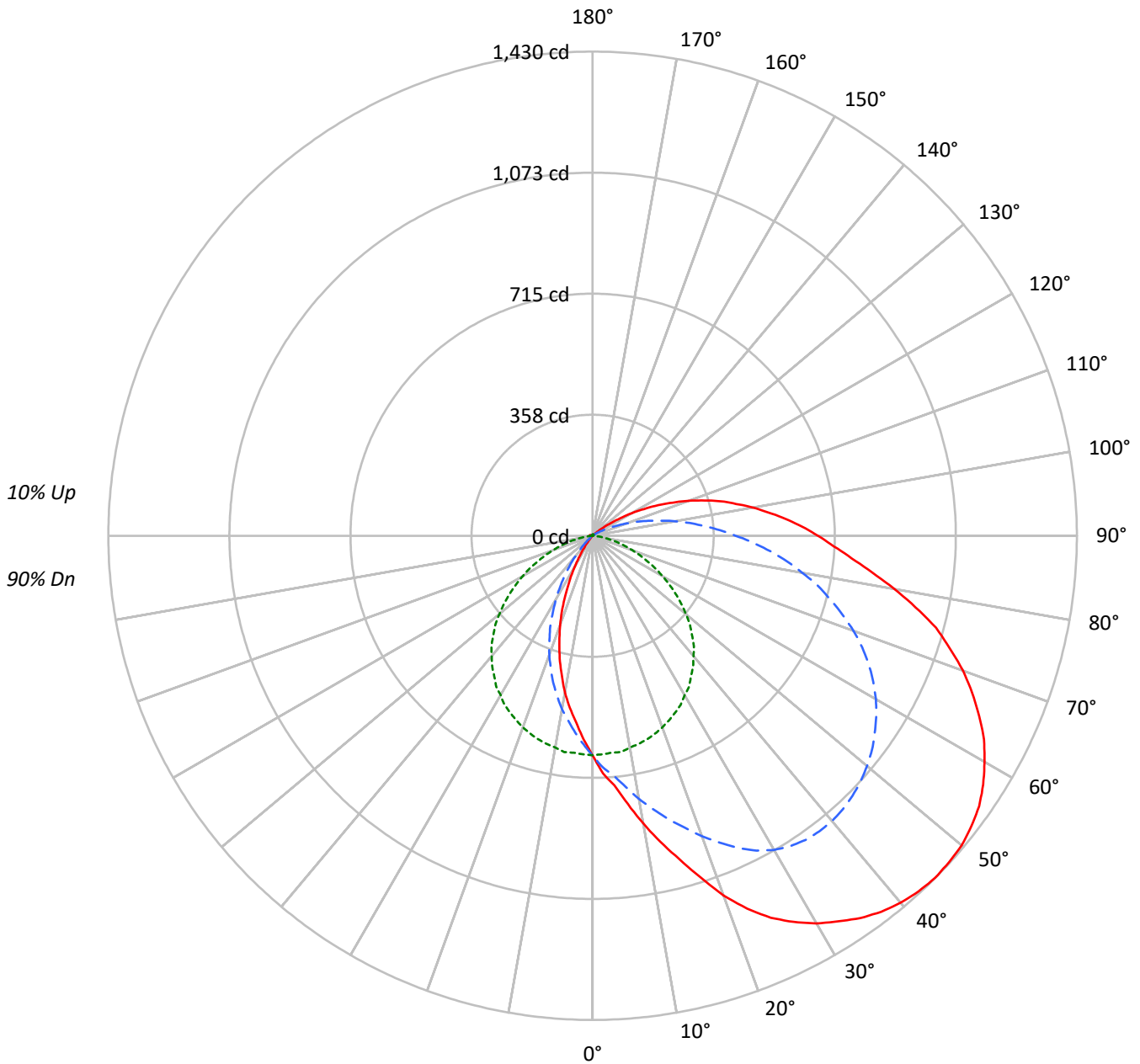
Lumens per Lamp: N/A
Luminaire Lumens: 3205.0 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

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°	6978	6978	6978
5°	7661	6876	5736
10°	8668	6792	4728
15°	9714	6706	3684
20°	10957	6596	2714
25°	11987	6469	1782
30°	12752	6299	1004
35°	13415	6116	442
40°	14003	5892	106
45°	14508	5610	0
50°	14931	5235	0
55°	15253	4761	0
60°	15415	4208	0
65°	15479	3583	0
70°	15427	2921	0
75°	15232	2155	12
80°	14614	1317	66
85°	14125	631	92



TEST NUMBER: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	1.9
10°-20°	185.9	5.8
20°-30°	301.1	9.4
30°-40°	386.8	12.1
40°-50°	437.8	13.7
50°-60°	453.6	14.2
60°-70°	427.8	13.3
70°-80°	358.5	11.2
80°-90°	259.9	8.1
90°-100°	170.8	5.3
100°-110°	98.6	3.1
110°-120°	43.5	1.4
120°-130°	11.8	0.4
130°-140°	2.7	0.1
140°-150°	1.8	0.1
150°-160°	1.3	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	549.1	17.1
0°-40°	935.9	29.2
0°-60°	1827.4	57.0
0°-90°	2873.6	89.7
90°-120°	313.0	9.8
90°-150°	329.3	10.3
90°-180°	331.0	10.3
0°-180°	3205.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	648	648	648	648	648	
5°	740	711	643	584	554	75
15°	988	867	622	449	375	285
25°	1245	1017	576	296	185	575
35°	1378	1096	506	144	45	864
45°	1430	1086	415	33	0	1104
55°	1393	1017	299	0	0	1244
65°	1259	900	178	0	0	1246
75°	1050	726	76	1	1	1101
85°	768	526	12	3	5	656
90°	666	422	3	5	6	365
95°	572	330	2	6	7	448
105°	393	171	2	4	7	415
115°	214	57	2	2	4	214
125°	64	8	3	2	3	64
135°	3	2	4	3	2	6
145°	1	3	3	2	2	1
155°	2	3	3	2	1	1
165°	2	2	3	2	0	0
175°	2	3	4	2	1	0
180°	2	2	2	2	2	



TEST NUMBER: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3	648.3
2.5°	702.8	702.0	699.5	695.4	689.6	679.7	671.4	664.0	654.1	645.8	630.1
5°	740.0	735.8	732.5	728.4	715.2	706.1	691.2	674.7	659.0	643.3	612.0
7.5°	799.4	792.8	787.9	776.3	758.1	737.5	714.4	698.7	687.9	644.2	590.5
10°	863.0	857.2	847.3	826.7	804.4	774.7	741.6	704.5	671.4	635.1	571.5
12.5°	925.8	917.5	903.5	877.1	845.7	808.5	763.1	719.3	672.2	629.3	549.2
15°	988.5	979.5	964.6	932.4	891.1	842.4	787.0	731.7	676.4	621.9	526.1
17.5°	1057.1	1044.7	1022.4	986.1	934.0	873.8	808.5	741.6	674.7	612.8	501.3
20°	1130.6	1113.2	1089.3	1040.6	979.5	908.4	830.0	751.5	673.9	602.0	473.2
22.5°	1191.7	1174.4	1147.9	1097.6	1024.1	937.3	848.2	758.1	670.6	589.7	446.8
25°	1244.6	1230.5	1201.6	1143.8	1066.2	967.9	865.5	763.1	665.6	576.4	418.7
27.5°	1285.9	1272.6	1240.4	1181.0	1101.7	995.2	878.7	765.6	659.0	563.2	389.8
30°	1322.2	1309.0	1270.2	1209.0	1125.6	1016.6	891.9	766.4	650.8	543.4	358.4
32.5°	1350.3	1337.9	1298.2	1233.0	1142.2	1031.5	899.4	765.6	640.0	529.4	324.6
35°	1378.3	1366.0	1319.7	1250.3	1154.5	1038.1	905.1	761.4	626.8	506.2	292.4
37.5°	1399.8	1385.8	1338.7	1261.9	1160.3	1039.7	904.3	755.7	612.8	487.3	260.1
40°	1414.7	1399.8	1349.4	1268.5	1162.0	1037.3	897.7	745.7	596.3	463.3	226.3
42.5°	1424.6	1408.1	1354.4	1278.4	1158.7	1030.7	887.8	733.4	578.1	442.7	194.1
45°	1429.6	1412.2	1355.2	1270.2	1152.9	1018.3	872.9	717.7	558.3	414.6	161.9
47.5°	1427.1	1408.1	1351.1	1261.1	1142.2	1005.1	856.4	698.7	534.3	389.8	131.3
50°	1422.9	1403.1	1342.0	1249.5	1127.3	988.5	838.2	675.5	509.6	359.2	104.1
52.5°	1409.7	1389.9	1332.1	1233.0	1109.9	969.6	813.5	651.6	483.1	329.5	79.3
55°	1393.2	1375.0	1314.8	1218.1	1087.6	946.4	790.3	626.0	457.5	299.0	57.0
57.5°	1367.6	1351.1	1293.3	1194.2	1065.4	920.8	764.7	597.9	425.3	268.4	39.6
60°	1336.2	1319.7	1263.6	1166.9	1039.7	891.9	736.7	569.0	396.4	237.8	24.8
62.5°	1303.2	1287.5	1228.9	1133.1	1007.5	861.4	706.1	540.1	365.9	209.8	14.9
65°	1259.4	1244.6	1191.7	1092.6	972.0	828.3	672.2	505.4	334.5	178.4	8.3
67.5°	1213.2	1200.0	1146.3	1055.4	930.7	792.0	637.6	471.6	301.4	151.1	4.1
70°	1163.6	1147.1	1097.6	1005.1	888.6	750.7	599.6	436.9	270.1	124.7	0.0
72.5°	1105.8	1093.4	1045.5	958.0	839.9	706.9	560.8	398.9	235.4	99.1	0.8
75°	1049.7	1034.0	990.2	907.6	792.0	660.7	517.8	363.4	201.5	76.0	0.8
77.5°	977.0	972.0	930.7	850.6	746.6	616.1	470.7	320.4	169.3	54.5	0.8
80°	904.3	899.4	867.1	793.6	693.7	563.2	427.0	280.0	137.9	36.3	0.8
82.5°	832.5	825.9	795.3	734.2	640.0	518.6	381.5	239.5	109.0	22.3	0.8
85°	768.0	759.8	726.8	670.6	584.7	468.3	334.5	199.9	80.9	12.4	1.7
87.5°	712.7	706.9	670.6	612.8	528.5	421.2	293.2	161.9	57.0	5.8	2.5
90°	665.6	653.2	621.0	559.9	475.7	369.2	249.4	129.7	38.0	3.3	3.3
92.5°	619.4	608.7	573.1	510.4	428.6	324.6	207.3	99.1	23.9	1.7	4.1
95°	571.5	559.9	525.2	467.4	380.7	279.1	170.1	72.7	13.2	1.7	4.1
97.5°	524.4	513.7	477.3	419.5	337.8	239.5	134.6	51.2	6.6	1.7	3.3
100°	480.6	468.3	435.2	377.4	294.8	199.9	104.1	33.0	4.1	1.7	3.3
102.5°	434.4	424.5	390.6	334.5	250.2	162.7	77.6	20.6	1.7	1.7	2.5
105°	393.1	380.7	347.7	289.9	213.1	128.0	54.5	12.4	1.7	1.7	2.5



TEST NUMBER: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	256.0	246.1	217.2	168.5	108.2	50.4	14.9	2.5	2.5	2.5	2.5
115°	213.9	199.0	173.4	130.5	80.1	33.0	7.4	2.5	2.5	2.5	2.5
117.5°	171.0	158.6	140.4	99.1	52.9	21.5	4.1	2.5	2.5	2.5	2.5
120°	133.8	122.2	101.6	68.5	35.5	12.4	1.7	2.5	2.5	2.5	2.5
122.5°	95.8	86.7	68.5	44.6	21.5	5.8	2.5	2.5	3.3	3.3	2.5
125°	63.6	58.6	45.4	27.3	13.2	2.5	2.5	2.5	3.3	3.3	2.5
127.5°	41.3	37.2	26.4	15.7	5.8	2.5	2.5	3.3	3.3	3.3	2.5
130°	23.1	20.6	15.7	9.1	2.5	2.5	2.5	3.3	3.3	3.3	2.5
132.5°	13.2	12.4	8.3	1.7	2.5	2.5	2.5	3.3	3.3	3.3	3.3
135°	3.3	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	3.3
137.5°	0.8	0.8	1.7	1.7	2.5	2.5	3.3	4.1	4.1	4.1	3.3
140°	0.8	0.8	1.7	2.5	2.5	2.5	3.3	4.1	4.1	4.1	3.3
142.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	3.3	3.3
145°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.1	3.3	3.3	3.3
147.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	3.3	3.3
150°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	3.3
152.5°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	3.3
155°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	4.1
157.5°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	4.1
160°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
162.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
165°	1.7	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3
167.5°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	3.3	3.3	3.3	3.3
170°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	4.1	4.1	4.1	4.1
172.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	4.1	4.1
175°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	4.1	4.1
177.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	4.1	3.3
180°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5



TEST NUMBER: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	648.3	648.3	648.3
2.5°	616.9	605.4	602.0
5°	583.9	564.9	554.1
7.5°	550.8	525.2	512.9
10°	520.3	483.9	470.7
12.5°	483.9	441.8	421.2
15°	449.3	394.8	374.9
17.5°	410.4	349.3	326.2
20°	374.1	303.9	280.0
22.5°	332.8	259.3	232.9
25°	295.7	214.7	185.0
27.5°	254.4	169.3	143.7
30°	215.5	129.7	104.1
32.5°	178.4	95.0	71.8
35°	143.7	64.4	45.4
37.5°	110.7	39.6	23.1
40°	80.1	20.6	10.7
42.5°	53.7	9.9	5.8
45°	33.0	5.0	0.0
47.5°	19.0	0.0	0.0
50°	9.9	0.0	0.0
52.5°	4.1	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°	0.8	0.8	0.8
77.5°	0.8	1.7	2.5
80°	1.7	3.3	4.1
82.5°	3.3	4.1	4.1
85°	3.3	4.1	5.0
87.5°	4.1	5.0	5.8
90°	5.0	5.8	5.8
92.5°	5.0	6.6	6.6
95°	5.8	6.6	7.4
97.5°	6.6	7.4	7.4
100°	5.8	7.4	8.3
102.5°	5.0	7.4	7.4
105°	4.1	5.8	6.6



TEST NUMBER: P551191

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.3	4.1	4.1
115°	2.5	3.3	4.1
117.5°	2.5	3.3	3.3
120°	2.5	2.5	3.3
122.5°	2.5	2.5	3.3
125°	2.5	2.5	3.3
127.5°	3.3	2.5	2.5
130°	2.5	2.5	2.5
132.5°	3.3	2.5	2.5
135°	3.3	2.5	2.5
137.5°	3.3	2.5	2.5
140°	3.3	2.5	2.5
142.5°	3.3	2.5	2.5
145°	2.5	2.5	2.5
147.5°	2.5	2.5	2.5
150°	2.5	2.5	1.7
152.5°	2.5	1.7	1.7
155°	2.5	1.7	0.8
157.5°	3.3	1.7	0.8
160°	2.5	1.7	0.8
162.5°	2.5	1.7	0.8
165°	2.5	1.7	0.0
167.5°	2.5	1.7	0.8
170°	2.5	1.7	0.8
172.5°	2.5	1.7	0.8
175°	2.5	0.8	0.8
177.5°	2.5	0.8	0.8
180°	2.5	2.5	2.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	346.9	336.9	303.9	249.4	174.3	97.5	36.3	6.6	1.7	2.5	2.5
110°	302.3	294.0	260.1	207.3	140.4	72.7	23.9	4.1	2.5	2.5	2.5





107.5°	3.3	5.0	5.8
110°	3.3	4.1	5.0



(END OF REPORT)