

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: P551249

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-93-94-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: P551249
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-93-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

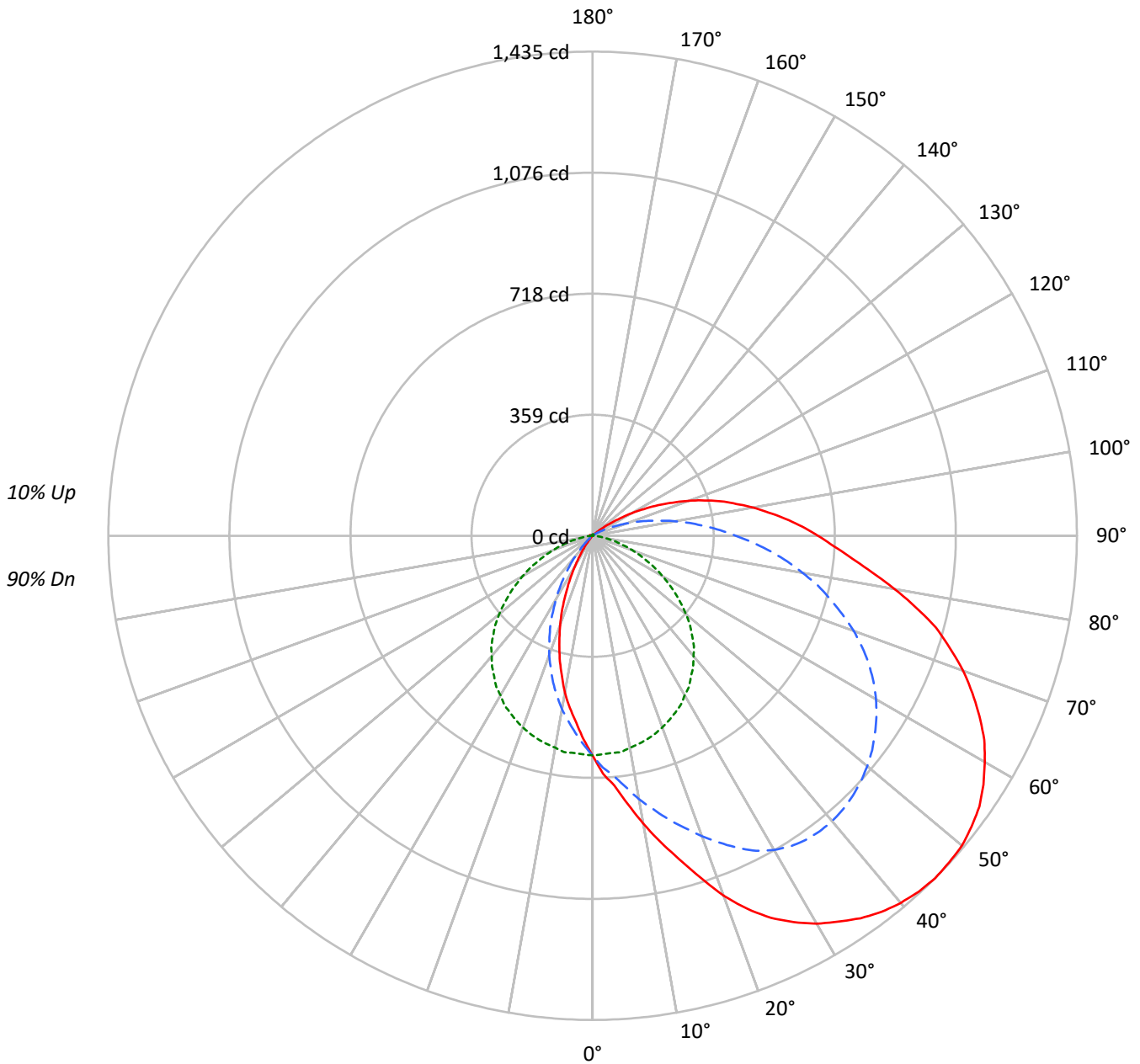
Lumens per Lamp: N/A
Luminaire Lumens: 3218.0 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7006	7006	7006
5°	7692	6903	5760
10°	8703	6820	4747
15°	9754	6733	3700
20°	11001	6623	2724
25°	12035	6496	1789
30°	12805	6325	1008
35°	13469	6142	444
40°	14060	5916	107
45°	14566	5633	0
50°	14991	5257	0
55°	15316	4780	0
60°	15478	4226	0
65°	15542	3597	0
70°	15490	2933	0
75°	15293	2164	12
80°	14674	1324	66
85°	14184	631	92



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	1.9
10°-20°	186.7	5.8
20°-30°	302.3	9.4
30°-40°	388.4	12.1
40°-50°	439.6	13.7
50°-60°	455.5	14.2
60°-70°	429.5	13.3
70°-80°	360.0	11.2
80°-90°	260.9	8.1
90°-100°	171.5	5.3
100°-110°	99.0	3.1
110°-120°	43.7	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°	551.4	17.1
0°-40°	939.7	29.2
0°-60°	1834.8	57.0
0°-90°	2885.2	89.7
90°-120°	314.2	9.8
90°-150°	330.6	10.3
90°-180°	333.0	10.3
0°-180°	3218.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	651	651	651	651	651	
5°	743	714	646	586	556	75
15°	993	870	624	451	376	286
25°	1250	1021	579	297	186	578
35°	1384	1101	508	144	46	868
45°	1435	1090	416	33	0	1108
55°	1399	1021	300	0	0	1249
65°	1264	904	179	0	0	1251
75°	1054	729	76	1	1	1105
85°	771	529	12	3	5	659
90°	668	424	3	5	6	366
95°	574	331	2	6	8	450
105°	395	171	2	4	7	417
115°	215	57	2	2	4	215
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9	650.9
2.5°	705.7	704.8	702.3	698.2	692.4	682.4	674.1	666.7	656.7	648.4	632.7
5°	743.0	738.8	735.5	731.4	718.1	709.0	694.0	677.5	661.7	645.9	614.4
7.5°	802.7	796.0	791.1	779.5	761.2	740.5	717.3	701.5	690.7	646.8	592.9
10°	866.5	860.7	850.8	830.0	807.6	777.8	744.6	707.3	674.1	637.7	573.8
12.5°	929.5	921.2	907.1	880.6	849.1	811.8	766.2	722.2	675.0	631.9	551.4
15°	992.6	983.4	968.5	936.2	894.7	845.8	790.2	734.7	679.1	624.4	528.2
17.5°	1061.4	1048.9	1026.6	990.1	937.8	877.3	811.8	744.6	677.5	615.3	503.3
20°	1135.2	1117.8	1093.7	1044.8	983.4	912.1	833.3	754.6	676.6	604.5	475.1
22.5°	1196.5	1179.1	1152.6	1102.0	1028.2	941.1	851.6	761.2	673.3	592.1	448.6
25°	1249.6	1235.5	1206.5	1148.4	1070.5	971.8	869.0	766.2	668.3	578.8	420.4
27.5°	1291.1	1277.8	1245.5	1185.8	1106.2	999.2	882.3	768.7	661.7	565.5	391.4
30°	1327.6	1314.3	1275.3	1214.0	1130.2	1020.7	895.5	769.5	653.4	545.6	359.9
32.5°	1355.7	1343.3	1303.5	1238.0	1146.8	1035.7	903.0	768.7	642.6	531.5	325.9
35°	1383.9	1371.5	1325.1	1255.4	1159.2	1042.3	908.8	764.5	629.4	508.3	293.5
37.5°	1405.5	1391.4	1344.1	1267.0	1165.0	1044.0	908.0	758.7	615.3	489.2	261.2
40°	1420.4	1405.5	1354.9	1273.7	1166.7	1041.5	901.3	748.8	598.7	465.2	227.2
42.5°	1430.4	1413.8	1359.9	1283.6	1163.4	1034.8	891.4	736.3	580.4	444.5	194.9
45°	1435.3	1417.9	1360.7	1275.3	1157.6	1022.4	876.5	720.6	560.5	416.3	162.5
47.5°	1432.9	1413.8	1356.6	1266.2	1146.8	1009.1	859.9	701.5	536.5	391.4	131.8
50°	1428.7	1408.8	1347.5	1254.6	1131.9	992.6	841.6	678.3	511.6	360.7	104.5
52.5°	1415.4	1395.5	1337.5	1238.0	1114.4	973.5	816.8	654.2	485.1	330.9	79.6
55°	1398.9	1380.6	1320.1	1223.1	1092.1	950.3	793.5	628.5	459.4	300.2	57.2
57.5°	1373.2	1356.6	1298.5	1199.0	1069.7	924.6	767.8	600.3	427.0	269.5	39.8
60°	1341.6	1325.1	1268.7	1171.7	1044.0	895.5	739.6	571.3	398.0	238.8	24.9
62.5°	1308.5	1292.7	1233.9	1137.7	1011.6	864.9	709.0	542.3	367.3	210.6	14.9
65°	1264.5	1249.6	1196.5	1097.0	976.0	831.7	675.0	507.5	335.8	179.1	8.3
67.5°	1218.1	1204.8	1150.9	1059.7	934.5	795.2	640.1	473.5	302.7	151.7	4.1
70°	1168.3	1151.8	1102.0	1009.1	892.2	753.7	602.0	438.6	271.1	125.2	0.0
72.5°	1110.3	1097.9	1049.8	961.9	843.3	709.8	563.0	400.5	236.3	99.5	0.8
75°	1053.9	1038.2	994.2	911.3	795.2	663.4	519.9	364.8	202.3	76.3	0.8
77.5°	980.9	976.0	934.5	854.1	749.6	618.6	472.6	321.7	170.0	54.7	0.8
80°	908.0	903.0	870.7	796.9	696.5	565.5	428.7	281.1	138.5	36.5	0.8
82.5°	835.8	829.2	798.5	737.2	642.6	520.7	383.1	240.5	109.5	22.4	0.8
85°	771.2	762.9	729.7	673.3	587.1	470.2	335.8	200.7	81.3	12.4	1.7
87.5°	715.6	709.8	673.3	615.3	530.7	422.9	294.4	162.5	57.2	5.8	2.5
90°	668.3	655.9	623.6	562.2	477.6	370.7	250.4	130.2	38.1	3.3	3.3
92.5°	621.9	611.1	575.5	512.4	430.4	325.9	208.1	99.5	24.0	1.7	4.1
95°	573.8	562.2	527.4	469.3	382.3	280.3	170.8	73.0	13.3	1.7	4.1
97.5°	526.5	515.8	479.3	421.2	339.1	240.5	135.2	51.4	6.6	1.7	3.3
100°	482.6	470.2	437.0	378.9	296.0	200.7	104.5	33.2	4.1	1.7	3.3
102.5°	436.2	426.2	392.2	335.8	251.2	163.4	77.9	20.7	1.7	1.7	2.5
105°	394.7	382.3	349.1	291.1	213.9	128.5	54.7	12.4	1.7	1.7	2.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	257.1	247.1	218.1	169.2	108.6	50.6	14.9	2.5	2.5	2.5	2.5
115°	214.8	199.8	174.1	131.0	80.4	33.2	7.5	2.5	2.5	2.5	2.5
117.5°	171.6	159.2	141.0	99.5	53.1	21.6	4.1	2.5	2.5	2.5	2.5
120°	134.3	122.7	102.0	68.8	35.7	12.4	1.7	2.5	2.5	2.5	2.5
122.5°	96.2	87.1	68.8	44.8	21.6	5.8	2.5	2.5	3.3	3.3	2.5
125°	63.8	58.9	45.6	27.4	13.3	2.5	2.5	2.5	3.3	3.3	2.5
127.5°	41.5	37.3	26.5	15.8	5.8	2.5	2.5	3.3	3.3	3.3	2.5
130°	23.2	20.7	15.8	9.1	2.5	2.5	2.5	3.3	3.3	3.3	2.5
132.5°	13.3	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



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	650.9	650.9	650.9
2.5°	619.4	607.8	604.5
5°	586.2	567.2	556.4
7.5°	553.1	527.4	514.9
10°	522.4	485.9	472.6
12.5°	485.9	443.6	422.9
15°	451.1	396.4	376.5
17.5°	412.1	350.8	327.5
20°	375.6	305.1	281.1
22.5°	334.2	260.4	233.8
25°	296.9	215.6	185.7
27.5°	255.4	170.0	144.3
30°	216.4	130.2	104.5
32.5°	179.1	95.4	72.1
35°	144.3	64.7	45.6
37.5°	111.1	39.8	23.2
40°	80.4	20.7	10.8
42.5°	53.9	10.0	5.8
45°	33.2	5.0	0.0
47.5°	19.1	0.0	0.0
50°	10.0	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	7.5
97.5°	6.6	7.5	7.5
100°	5.8	7.5	8.3
102.5°	5.0	7.5	7.5
105°	4.1	5.8	6.6



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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°	348.3	338.3	305.1	250.4	175.0	97.8	36.5	6.6	1.7	2.5	2.5
110°	303.5	295.2	261.2	208.1	141.0	73.0	24.0	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)