

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: P550498

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-80-94-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: P550498
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-LD4-1HI-35-UNV-80-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

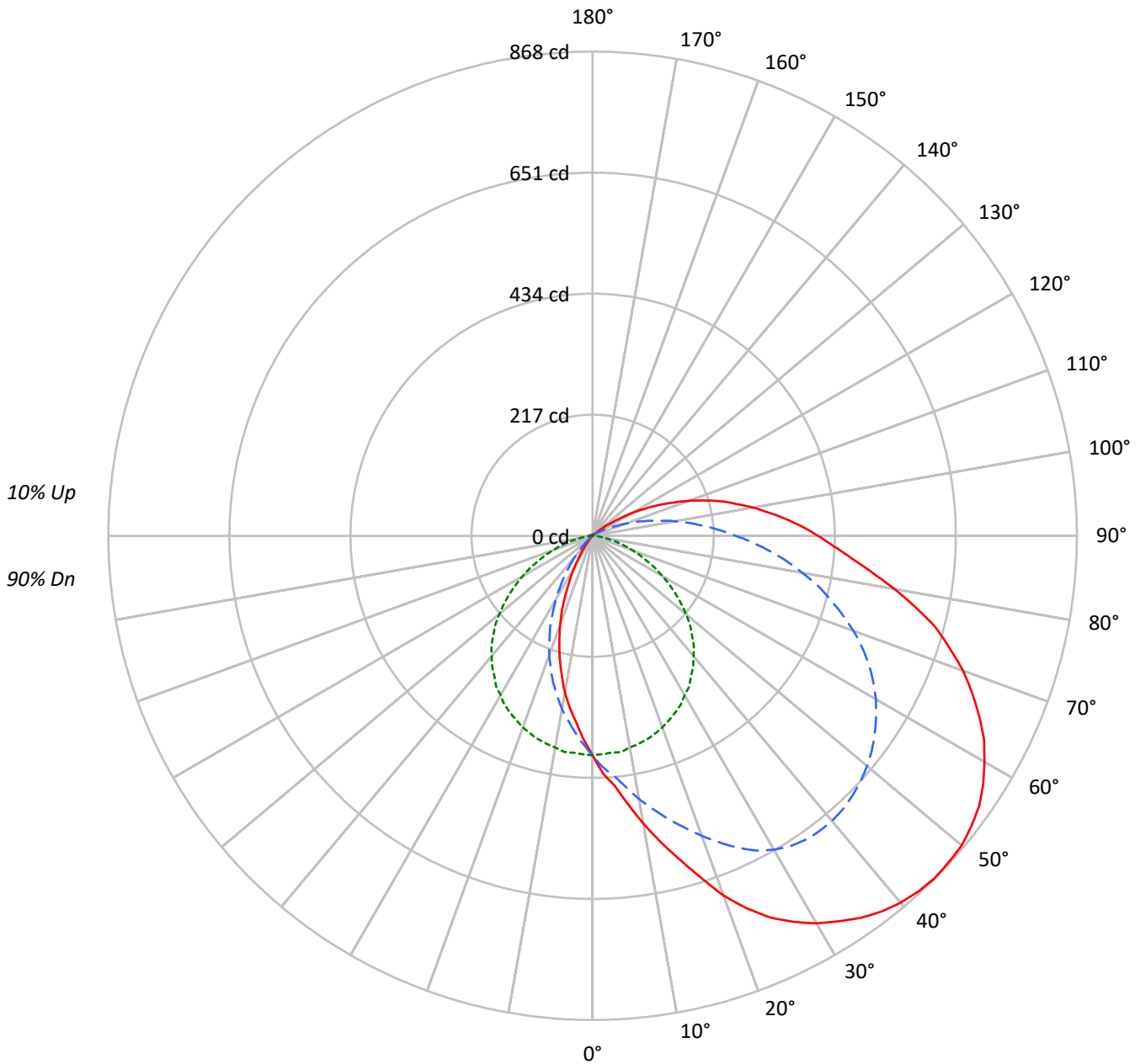
Lumens per Lamp: N/A
Luminaire Lumens: 1945.0 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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°	4235	4235	4235
5°	4649	4173	3481
10°	5260	4122	2870
15°	5895	4069	2236
20°	6649	4003	1647
25°	7274	3926	1082
30°	7739	3823	609
35°	8142	3712	269
40°	8498	3576	64
45°	8804	3404	0
50°	9061	3177	0
55°	9257	2889	0
60°	9355	2554	0
65°	9394	2175	0
70°	9363	1773	0
75°	9243	1307	7
80°	8869	802	40
85°	8572	381	55



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.7	1.9
10°-20°	112.8	5.8
20°-30°	182.7	9.4
30°-40°	234.7	12.1
40°-50°	265.7	13.7
50°-60°	275.3	14.2
60°-70°	259.6	13.3
70°-80°	217.6	11.2
80°-90°	157.7	8.1
90°-100°	103.6	5.3
100°-110°	59.9	3.1
110°-120°	26.4	1.4
120°-130°	7.1	0.4
130°-140°	1.6	0.1
140°-150°	1.1	0.1
150°-160°	0.8	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	333.3	17.1
0°-40°	568.0	29.2
0°-60°	1109.0	57.0
0°-90°	1743.9	89.7
90°-120°	189.9	9.8
90°-150°	199.8	10.3
90°-180°	201.0	10.3
0°-180°	1945.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	393	393	393	393	393	
5°	449	431	390	354	336	45
15°	600	526	377	273	228	173
25°	755	617	350	179	112	349
35°	836	665	307	87	28	525
45°	868	659	252	20	0	670
55°	846	617	181	0	0	755
65°	764	546	108	0	0	756
75°	637	441	46	0	0	668
85°	466	320	8	2	3	398
90°	404	256	2	3	4	222
95°	347	200	1	4	4	272
105°	239	104	1	2	4	252
115°	130	34	2	2	2	130
125°	39	5	2	2	2	39
135°	2	2	2	2	2	4
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	2	2	0	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°	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4
2.5°	426.5	426.0	424.5	422.0	418.5	412.5	407.5	402.9	396.9	391.9	382.4
5°	449.1	446.6	444.5	442.0	434.0	428.5	419.5	409.5	399.9	390.4	371.4
7.5°	485.1	481.1	478.1	471.1	460.1	447.6	433.5	424.0	417.5	390.9	358.3
10°	523.7	520.2	514.2	501.7	488.1	470.1	450.1	427.5	407.5	385.4	346.8
12.5°	561.8	556.8	548.3	532.3	513.2	490.7	463.1	436.5	408.0	381.9	333.3
15°	599.9	594.4	585.4	565.8	540.8	511.2	477.6	444.0	410.5	377.4	319.3
17.5°	641.5	634.0	620.5	598.4	566.8	530.2	490.7	450.1	409.5	371.9	304.2
20°	686.1	675.6	661.1	631.5	594.4	551.3	503.7	456.1	409.0	365.4	287.2
22.5°	723.2	712.7	696.6	666.1	621.5	568.8	514.7	460.1	407.0	357.8	271.1
25°	755.3	746.8	729.2	694.1	647.0	587.4	525.2	463.1	404.0	349.8	254.1
27.5°	780.3	772.3	752.8	716.7	668.6	603.9	533.3	464.6	399.9	341.8	236.6
30°	802.4	794.4	770.8	733.7	683.1	617.0	541.3	465.1	394.9	329.8	217.5
32.5°	819.4	811.9	787.9	748.3	693.1	626.0	545.8	464.6	388.4	321.3	197.0
35°	836.5	829.0	800.9	758.8	700.7	630.0	549.3	462.1	380.4	307.2	177.4
37.5°	849.5	841.0	812.4	765.8	704.2	631.0	548.8	458.6	371.9	295.7	157.9
40°	858.5	849.5	818.9	769.8	705.2	629.5	544.8	452.6	361.9	281.2	137.3
42.5°	864.5	854.5	821.9	775.8	703.2	625.5	538.8	445.0	350.8	268.6	117.8
45°	867.5	857.0	822.4	770.8	699.6	618.0	529.7	435.5	338.8	251.6	98.2
47.5°	866.0	854.5	819.9	765.3	693.1	609.9	519.7	424.0	324.3	236.6	79.7
50°	863.5	851.5	814.4	758.3	684.1	599.9	508.7	410.0	309.2	218.0	63.1
52.5°	855.5	843.5	808.4	748.3	673.6	588.4	493.7	395.4	293.2	200.0	48.1
55°	845.5	834.5	797.9	739.2	660.1	574.4	479.6	379.9	277.7	181.4	34.6
57.5°	830.0	819.9	784.8	724.7	646.5	558.8	464.1	362.9	258.1	162.9	24.1
60°	810.9	800.9	766.8	708.2	631.0	541.3	447.1	345.3	240.6	144.3	15.0
62.5°	790.9	781.3	745.8	687.6	611.4	522.7	428.5	327.8	222.0	127.3	9.0
65°	764.3	755.3	723.2	663.1	589.9	502.7	408.0	306.7	203.0	108.3	5.0
67.5°	736.2	728.2	695.6	640.5	564.8	480.6	386.9	286.2	182.9	91.7	2.5
70°	706.2	696.1	666.1	609.9	539.3	455.6	363.9	265.1	163.9	75.7	0.0
72.5°	671.1	663.6	634.5	581.4	509.7	429.0	340.3	242.1	142.8	60.1	0.5
75°	637.0	627.5	600.9	550.8	480.6	400.9	314.2	220.5	122.3	46.1	0.5
77.5°	592.9	589.9	564.8	516.2	453.1	373.9	285.7	194.5	102.7	33.1	0.5
80°	548.8	545.8	526.2	481.6	421.0	341.8	259.1	169.9	83.7	22.1	0.5
82.5°	505.2	501.2	482.6	445.5	388.4	314.7	231.5	145.3	66.2	13.5	0.5
85°	466.1	461.1	441.0	407.0	354.8	284.2	203.0	121.3	49.1	7.5	1.0
87.5°	432.5	429.0	407.0	371.9	320.8	255.6	177.9	98.2	34.6	3.5	1.5
90°	404.0	396.4	376.9	339.8	288.7	224.0	151.4	78.7	23.1	2.0	2.0
92.5°	375.9	369.4	347.8	309.7	260.1	197.0	125.8	60.1	14.5	1.0	2.5
95°	346.8	339.8	318.8	283.7	231.0	169.4	103.2	44.1	8.0	1.0	2.5
97.5°	318.2	311.7	289.7	254.6	205.0	145.3	81.7	31.1	4.0	1.0	2.0
100°	291.7	284.2	264.1	229.0	178.9	121.3	63.1	20.0	2.5	1.0	2.0
102.5°	263.6	257.6	237.1	203.0	151.9	98.7	47.1	12.5	1.0	1.0	1.5
105°	238.6	231.0	211.0	175.9	129.3	77.7	33.1	7.5	1.0	1.0	1.5



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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-80-94-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	155.4	149.4	131.8	102.2	65.7	30.6	9.0	1.5	1.5	1.5	1.5
115°	129.8	120.8	105.2	79.2	48.6	20.0	4.5	1.5	1.5	1.5	1.5
117.5°	103.7	96.2	85.2	60.1	32.1	13.0	2.5	1.5	1.5	1.5	1.5
120°	81.2	74.2	61.6	41.6	21.6	7.5	1.0	1.5	1.5	1.5	1.5
122.5°	58.1	52.6	41.6	27.1	13.0	3.5	1.5	1.5	2.0	2.0	1.5
125°	38.6	35.6	27.6	16.5	8.0	1.5	1.5	1.5	2.0	2.0	1.5
127.5°	25.1	22.6	16.0	9.5	3.5	1.5	1.5	2.0	2.0	2.0	1.5
130°	14.0	12.5	9.5	5.5	1.5	1.5	1.5	2.0	2.0	2.0	1.5
132.5°	8.0	7.5	5.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0
135°	2.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.5	2.5	2.5	2.0
140°	0.5	0.5	1.0	1.5	1.5	1.5	2.0	2.5	2.5	2.5	2.0
142.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0	2.0
145°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.0	2.0	2.0
147.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0	2.0
150°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0
152.5°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0
155°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.5
157.5°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.5
160°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
162.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
165°	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0
167.5°	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0
170°	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.5	2.5	2.5	2.5
172.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5
175°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5
177.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.0
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	393.4	393.4	393.4
2.5°	374.4	367.4	365.4
5°	354.3	342.8	336.3
7.5°	334.3	318.8	311.2
10°	315.7	293.7	285.7
12.5°	293.7	268.1	255.6
15°	272.6	239.6	227.5
17.5°	249.1	212.0	198.0
20°	227.0	184.4	169.9
22.5°	202.0	157.4	141.3
25°	179.4	130.3	112.3
27.5°	154.4	102.7	87.2
30°	130.8	78.7	63.1
32.5°	108.3	57.6	43.6
35°	87.2	39.1	27.6
37.5°	67.2	24.1	14.0
40°	48.6	12.5	6.5
42.5°	32.6	6.0	3.5
45°	20.0	3.0	0.0
47.5°	11.5	0.0	0.0
50°	6.0	0.0	0.0
52.5°	2.5	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°	0.5	0.5	0.5
77.5°	0.5	1.0	1.5
80°	1.0	2.0	2.5
82.5°	2.0	2.5	2.5
85°	2.0	2.5	3.0
87.5°	2.5	3.0	3.5
90°	3.0	3.5	3.5
92.5°	3.0	4.0	4.0
95°	3.5	4.0	4.5
97.5°	4.0	4.5	4.5
100°	3.5	4.5	5.0
102.5°	3.0	4.5	4.5
105°	2.5	3.5	4.0



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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-80-94-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.0	2.5	2.5
115°	1.5	2.0	2.5
117.5°	1.5	2.0	2.0
120°	1.5	1.5	2.0
122.5°	1.5	1.5	2.0
125°	1.5	1.5	2.0
127.5°	2.0	1.5	1.5
130°	1.5	1.5	1.5
132.5°	2.0	1.5	1.5
135°	2.0	1.5	1.5
137.5°	2.0	1.5	1.5
140°	2.0	1.5	1.5
142.5°	2.0	1.5	1.5
145°	1.5	1.5	1.5
147.5°	1.5	1.5	1.5
150°	1.5	1.5	1.0
152.5°	1.5	1.0	1.0
155°	1.5	1.0	0.5
157.5°	2.0	1.0	0.5
160°	1.5	1.0	0.5
162.5°	1.5	1.0	0.5
165°	1.5	1.0	0.0
167.5°	1.5	1.0	0.5
170°	1.5	1.0	0.5
172.5°	1.5	1.0	0.5
175°	1.5	0.5	0.5
177.5°	1.5	0.5	0.5
180°	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	210.5	204.5	184.4	151.4	105.7	59.1	22.1	4.0	1.0	1.5	1.5
110°	183.4	178.4	157.9	125.8	85.2	44.1	14.5	2.5	1.5	1.5	1.5





107.5°	2.0	3.0	3.5
110°	2.0	2.5	3.0



(END OF REPORT)