

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: P550621

Luminaire Tested: **FCC-X-2-LD4-1HI-50-UNV-80-87-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: P550621
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-50-UNV-80-87-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

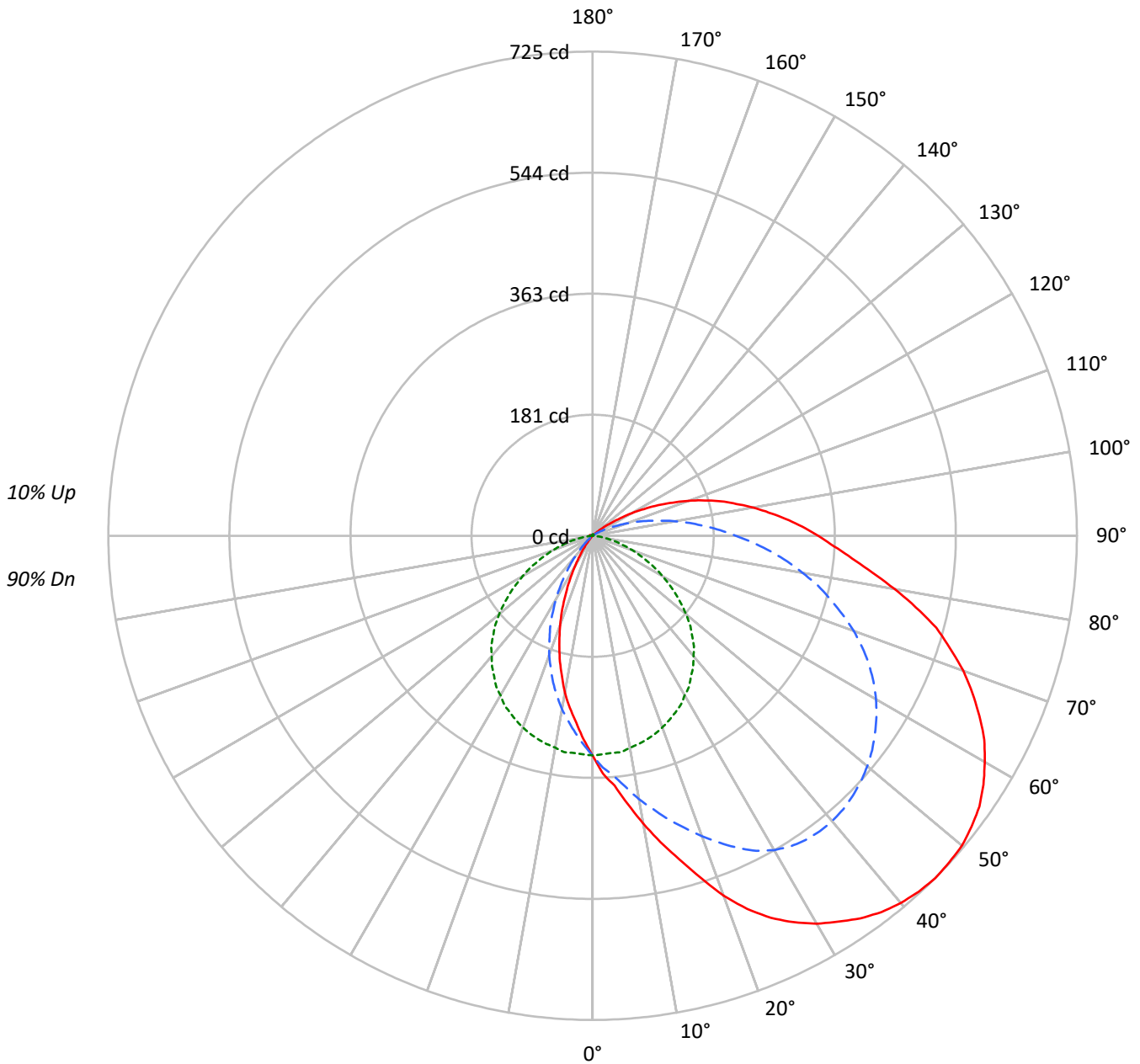
Lumens per Lamp: N/A
Luminaire Lumens: 1626.1 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (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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CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-87-ED1D-90

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°	3540	3540	3540
5°	3886	3489	2910
10°	4397	3446	2399
15°	4928	3402	1869
20°	5559	3346	1376
25°	6081	3281	904
30°	6470	3196	509
35°	6806	3103	224
40°	7104	2989	53
45°	7361	2846	0
50°	7575	2657	0
55°	7738	2416	0
60°	7821	2136	0
65°	7853	1818	0
70°	7826	1483	0
75°	7727	1092	6
80°	7415	667	34
85°	7167	320	46



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.5	1.9
10°-20°	94.3	5.8
20°-30°	152.8	9.4
30°-40°	196.2	12.1
40°-50°	222.1	13.7
50°-60°	230.1	14.2
60°-70°	217.0	13.3
70°-80°	181.9	11.2
80°-90°	131.8	8.1
90°-100°	86.7	5.3
100°-110°	50.1	3.1
110°-120°	22.1	1.4
120°-130°	6.0	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	278.6	17.1
0°-40°	474.8	29.2
0°-60°	927.1	57.0
0°-90°	1457.8	89.7
90°-120°	158.8	9.8
90°-150°	167.1	10.3
90°-180°	168.0	10.3
0°-180°	1626.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	329	329	329	329	329	
5°	375	360	326	296	281	38
15°	502	440	316	228	190	145
25°	631	516	292	150	94	292
35°	699	556	257	73	23	439
45°	725	551	210	17	0	560
55°	707	516	152	0	0	631
65°	639	457	90	0	0	632
75°	532	368	38	0	0	559
85°	390	267	6	2	2	333
90°	338	214	2	2	3	185
95°	290	167	1	3	4	227
105°	199	86	1	2	3	210
115°	108	29	1	1	2	109
125°	32	4	2	1	2	32
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	1	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9	328.9
2.5°	356.6	356.1	354.9	352.8	349.8	344.8	340.6	336.9	331.8	327.6	319.7
5°	375.4	373.3	371.6	369.5	362.8	358.2	350.7	342.3	334.3	326.4	310.5
7.5°	405.6	402.2	399.7	393.8	384.6	374.2	362.4	354.5	349.0	326.8	299.6
10°	437.8	434.9	429.9	419.4	408.1	393.0	376.2	357.4	340.6	322.2	289.9
12.5°	469.7	465.5	458.4	445.0	429.0	410.2	387.1	364.9	341.1	319.3	278.6
15°	501.5	496.9	489.4	473.0	452.1	427.4	399.3	371.2	343.1	315.5	266.9
17.5°	536.3	530.0	518.7	500.3	473.9	443.3	410.2	376.2	342.3	310.9	254.3
20°	573.6	564.8	552.6	527.9	496.9	460.9	421.1	381.3	341.9	305.4	240.1
22.5°	604.6	595.8	582.4	556.8	519.5	475.5	430.3	384.6	340.2	299.2	226.7
25°	631.4	624.3	609.6	580.3	540.9	491.0	439.1	387.1	337.7	292.4	212.4
27.5°	652.4	645.7	629.3	599.1	558.9	504.9	445.8	388.4	334.3	285.7	197.8
30°	670.8	664.1	644.4	613.4	571.1	515.8	452.5	388.8	330.2	275.7	181.8
32.5°	685.0	678.8	658.6	625.5	579.5	523.3	456.3	388.4	324.7	268.6	164.7
35°	699.3	693.0	669.5	634.3	585.7	526.7	459.2	386.3	318.0	256.8	148.3
37.5°	710.2	703.1	679.2	640.2	588.7	527.5	458.8	383.4	310.9	247.2	132.0
40°	717.7	710.2	684.6	643.6	589.5	526.2	455.4	378.3	302.5	235.0	114.8
42.5°	722.7	714.4	687.1	648.6	587.8	522.9	450.4	372.1	293.3	224.6	98.5
45°	725.3	716.5	687.5	644.4	584.9	516.6	442.9	364.1	283.2	210.3	82.1
47.5°	724.0	714.4	685.5	639.8	579.5	509.9	434.5	354.5	271.1	197.8	66.6
50°	721.9	711.9	680.8	633.9	571.9	501.5	425.3	342.7	258.5	182.3	52.8
52.5°	715.2	705.1	675.8	625.5	563.1	491.9	412.7	330.6	245.1	167.2	40.2
55°	706.8	697.6	667.0	618.0	551.8	480.2	401.0	317.6	232.1	151.7	28.9
57.5°	693.8	685.5	656.1	605.8	540.5	467.2	388.0	303.3	215.8	136.2	20.1
60°	677.9	669.5	641.0	592.0	527.5	452.5	373.7	288.7	201.1	120.7	12.6
62.5°	661.2	653.2	623.4	574.8	511.2	437.0	358.2	274.0	185.6	106.4	7.5
65°	638.9	631.4	604.6	554.3	493.1	420.2	341.1	256.4	169.7	90.5	4.2
67.5°	615.5	608.8	581.5	535.5	472.2	401.8	323.5	239.2	152.9	76.7	2.1
70°	590.3	582.0	556.8	509.9	450.8	380.9	304.2	221.6	137.0	63.3	0.0
72.5°	561.0	554.7	530.4	486.0	426.1	358.6	284.5	202.4	119.4	50.3	0.4
75°	532.5	524.6	502.4	460.5	401.8	335.2	262.7	184.4	102.2	38.5	0.4
77.5°	495.7	493.1	472.2	431.6	378.8	312.6	238.8	162.6	85.9	27.7	0.4
80°	458.8	456.3	439.9	402.6	351.9	285.7	216.6	142.0	70.0	18.4	0.4
82.5°	422.3	419.0	403.5	372.5	324.7	263.1	193.6	121.5	55.3	11.3	0.4
85°	389.7	385.5	368.7	340.2	296.6	237.6	169.7	101.4	41.1	6.3	0.8
87.5°	361.6	358.6	340.2	310.9	268.1	213.7	148.7	82.1	28.9	2.9	1.3
90°	337.7	331.4	315.1	284.1	241.3	187.3	126.5	65.8	19.3	1.7	1.7
92.5°	314.2	308.8	290.8	258.9	217.5	164.7	105.2	50.3	12.2	0.8	2.1
95°	289.9	284.1	266.5	237.1	193.2	141.6	86.3	36.9	6.7	0.8	2.1
97.5°	266.1	260.6	242.2	212.8	171.4	121.5	68.3	26.0	3.4	0.8	1.7
100°	243.8	237.6	220.8	191.5	149.6	101.4	52.8	16.8	2.1	0.8	1.7
102.5°	220.4	215.4	198.2	169.7	127.0	82.5	39.4	10.5	0.8	0.8	1.3
105°	199.4	193.2	176.4	147.1	108.1	64.9	27.7	6.3	0.8	0.8	1.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	129.9	124.9	110.2	85.5	54.9	25.6	7.5	1.3	1.3	1.3	1.3
115°	108.5	101.0	88.0	66.2	40.6	16.8	3.8	1.3	1.3	1.3	1.3
117.5°	86.7	80.4	71.2	50.3	26.8	10.9	2.1	1.3	1.3	1.3	1.3
120°	67.9	62.0	51.5	34.8	18.0	6.3	0.8	1.3	1.3	1.3	1.3
122.5°	48.6	44.0	34.8	22.6	10.9	2.9	1.3	1.3	1.7	1.7	1.3
125°	32.3	29.7	23.0	13.8	6.7	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	20.9	18.9	13.4	8.0	2.9	1.3	1.3	1.7	1.7	1.7	1.3
130°	11.7	10.5	8.0	4.6	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.7	6.3	4.2	0.8	1.3	1.3	1.3	1.7	1.7	1.7	1.7
135°	1.7	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7
137.5°	0.4	0.4	0.8	0.8	1.3	1.3	1.7	2.1	2.1	2.1	1.7
140°	0.4	0.4	0.8	1.3	1.3	1.3	1.7	2.1	2.1	2.1	1.7
142.5°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
145°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	1.7	1.7	1.7
147.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
150°	0.4	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
152.5°	0.4	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
155°	0.8	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
157.5°	0.8	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
160°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.8	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7
167.5°	0.8	0.8	0.8	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
170°	0.8	0.8	0.8	1.3	1.3	1.3	1.7	2.1	2.1	2.1	2.1
172.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
175°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
177.5°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	1.7
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	328.9	328.9	328.9
2.5°	313.0	307.1	305.4
5°	296.2	286.6	281.1
7.5°	279.5	266.5	260.2
10°	264.0	245.5	238.8
12.5°	245.5	224.2	213.7
15°	227.9	200.3	190.2
17.5°	208.2	177.2	165.5
20°	189.8	154.2	142.0
22.5°	168.8	131.6	118.2
25°	150.0	108.9	93.9
27.5°	129.0	85.9	72.9
30°	109.4	65.8	52.8
32.5°	90.5	48.2	36.5
35°	72.9	32.7	23.0
37.5°	56.1	20.1	11.7
40°	40.6	10.5	5.4
42.5°	27.2	5.0	2.9
45°	16.8	2.5	0.0
47.5°	9.6	0.0	0.0
50°	5.0	0.0	0.0
52.5°	2.1	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.3
80°	0.8	1.7	2.1
82.5°	1.7	2.1	2.1
85°	1.7	2.1	2.5
87.5°	2.1	2.5	2.9
90°	2.5	2.9	2.9
92.5°	2.5	3.4	3.4
95°	2.9	3.4	3.8
97.5°	3.4	3.8	3.8
100°	2.9	3.8	4.2
102.5°	2.5	3.8	3.8
105°	2.1	2.9	3.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.1	2.1
115°	1.3	1.7	2.1
117.5°	1.3	1.7	1.7
120°	1.3	1.3	1.7
122.5°	1.3	1.3	1.7
125°	1.3	1.3	1.7
127.5°	1.7	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.7	1.3	1.3
135°	1.7	1.3	1.3
137.5°	1.7	1.3	1.3
140°	1.7	1.3	1.3
142.5°	1.7	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.8
152.5°	1.3	0.8	0.8
155°	1.3	0.8	0.4
157.5°	1.7	0.8	0.4
160°	1.3	0.8	0.4
162.5°	1.3	0.8	0.4
165°	1.3	0.8	0.0
167.5°	1.3	0.8	0.4
170°	1.3	0.8	0.4
172.5°	1.3	0.8	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	176.0	170.9	154.2	126.5	88.4	49.4	18.4	3.4	0.8	1.3	1.3
110°	153.3	149.2	132.0	105.2	71.2	36.9	12.2	2.1	1.3	1.3	1.3





107.5°	1.7	2.5	2.9
110°	1.7	2.1	2.5



(END OF REPORT)