

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: P551065

Luminaire Tested: **FCC-X-2-LD4-1STD-40-UNV-80-85-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: P551065
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-LD4-1STD-40-UNV-80-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

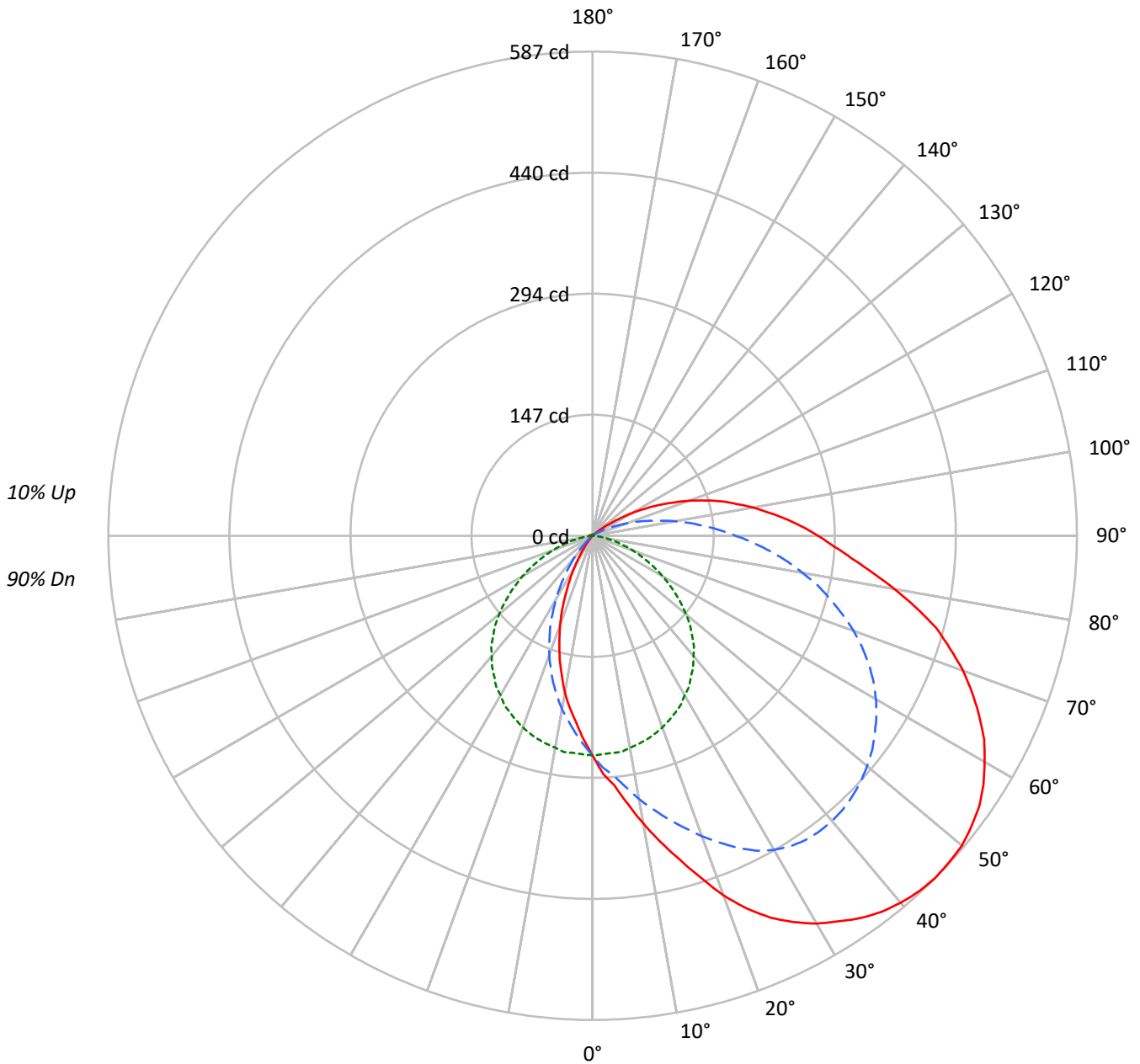
Lumens per Lamp: N/A
Luminaire Lumens: 1316.1 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
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

TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

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°	2865	2865	2865
5°	3145	2824	2355
10°	3560	2789	1942
15°	3989	2753	1513
20°	4499	2708	1114
25°	4922	2656	732
30°	5236	2586	412
35°	5509	2512	182
40°	5750	2419	44
45°	5957	2303	0
50°	6131	2150	0
55°	6264	1955	0
60°	6330	1729	0
65°	6356	1470	0
70°	6335	1199	0
75°	6254	885	4
80°	6000	540	27
85°	5801	259	37



TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.5	1.9
10°-20°	76.3	5.8
20°-30°	123.6	9.4
30°-40°	158.8	12.1
40°-50°	179.8	13.7
50°-60°	186.3	14.2
60°-70°	175.7	13.3
70°-80°	147.2	11.2
80°-90°	106.7	8.1
90°-100°	70.1	5.3
100°-110°	40.5	3.1
110°-120°	17.9	1.4
120°-130°	4.8	0.4
130°-140°	1.1	0.1
140°-150°	0.7	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	225.5	17.1
0°-40°	384.3	29.2
0°-60°	750.3	57.0
0°-90°	1179.9	89.7
90°-120°	128.5	9.8
90°-150°	135.2	10.3
90°-180°	136.0	10.3
0°-180°	1316.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	266	266	266	266	266	
5°	304	292	264	240	228	31
15°	406	356	255	184	154	117
25°	511	418	237	121	76	236
35°	566	450	208	59	19	355
45°	587	446	170	14	0	453
55°	572	418	123	0	0	511
65°	517	370	73	0	0	512
75°	431	298	31	0	0	452
85°	315	216	5	1	2	269
90°	273	173	1	2	2	150
95°	235	135	1	2	3	184
105°	161	70	1	2	3	170
115°	88	23	1	1	2	88
125°	26	3	1	1	1	26
135°	1	1	2	1	1	2
145°	0	1	1	1	1	0
155°	1	1	1	1	0	0
165°	1	1	1	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	266.2	266.2	266.2	266.2	266.2	266.2	266.2	266.2	266.2	266.2	266.2
2.5°	288.6	288.2	287.2	285.5	283.2	279.1	275.7	272.6	268.6	265.2	258.7
5°	303.8	302.1	300.8	299.1	293.7	289.9	283.8	277.0	270.6	264.2	251.3
7.5°	328.3	325.5	323.5	318.8	311.3	302.8	293.3	286.9	282.5	264.5	242.5
10°	354.4	352.0	347.9	339.4	330.3	318.1	304.5	289.3	275.7	260.8	234.7
12.5°	380.1	376.7	371.0	360.1	347.2	332.0	313.3	295.4	276.0	258.4	225.5
15°	405.9	402.2	396.1	382.8	365.9	345.9	323.2	300.4	277.7	255.3	216.0
17.5°	434.1	429.0	419.8	404.9	383.5	358.8	332.0	304.5	277.0	251.6	205.8
20°	464.2	457.1	447.3	427.3	402.2	373.0	340.8	308.6	276.7	247.2	194.3
22.5°	489.3	482.2	471.4	450.7	420.5	384.9	348.3	311.3	275.4	242.1	183.5
25°	511.0	505.3	493.4	469.7	437.8	397.4	355.4	313.3	273.3	236.7	171.9
27.5°	528.0	522.6	509.3	484.9	452.4	408.6	360.8	314.3	270.6	231.3	160.1
30°	542.9	537.5	521.5	496.4	462.2	417.4	366.2	314.7	267.2	223.1	147.2
32.5°	554.4	549.3	533.1	506.3	469.0	423.5	369.3	314.3	262.8	217.4	133.3
35°	566.0	560.9	541.9	513.4	474.1	426.3	371.7	312.7	257.4	207.9	120.0
37.5°	574.8	569.0	549.7	518.1	476.4	426.9	371.3	310.3	251.6	200.1	106.8
40°	580.9	574.8	554.1	520.9	477.1	425.9	368.6	306.2	244.8	190.2	92.9
42.5°	585.0	578.2	556.1	524.9	475.8	423.2	364.5	301.1	237.4	181.8	79.7
45°	587.0	579.9	556.5	521.5	473.4	418.1	358.4	294.7	229.2	170.2	66.5
47.5°	586.0	578.2	554.8	517.8	469.0	412.7	351.6	286.9	219.4	160.1	53.9
50°	584.3	576.1	551.0	513.1	462.9	405.9	344.2	277.4	209.2	147.5	42.7
52.5°	578.8	570.7	547.0	506.3	455.8	398.1	334.0	267.6	198.4	135.3	32.6
55°	572.1	564.6	539.9	500.2	446.6	388.6	324.5	257.0	187.9	122.8	23.4
57.5°	561.6	554.8	531.0	490.3	437.4	378.1	314.0	245.5	174.6	110.2	16.3
60°	548.7	541.9	518.8	479.2	426.9	366.2	302.5	233.6	162.8	97.7	10.2
62.5°	535.1	528.7	504.6	465.2	413.7	353.7	289.9	221.8	150.2	86.1	6.1
65°	517.1	511.0	489.3	448.6	399.1	340.1	276.0	207.5	137.3	73.2	3.4
67.5°	498.1	492.7	470.7	433.4	382.2	325.2	261.8	193.6	123.8	62.1	1.7
70°	477.8	471.0	450.7	412.7	364.9	308.2	246.2	179.4	110.9	51.2	0.0
72.5°	454.1	449.0	429.3	393.4	344.9	290.3	230.3	163.8	96.6	40.7	0.3
75°	431.0	424.6	406.6	372.7	325.2	271.3	212.6	149.2	82.7	31.2	0.3
77.5°	401.2	399.1	382.2	349.3	306.5	253.0	193.3	131.6	69.5	22.4	0.3
80°	371.3	369.3	356.1	325.9	284.8	231.3	175.3	115.0	56.6	14.9	0.3
82.5°	341.8	339.1	326.6	301.5	262.8	213.0	156.7	98.3	44.8	9.2	0.3
85°	315.4	312.0	298.4	275.4	240.1	192.3	137.3	82.1	33.2	5.1	0.7
87.5°	292.6	290.3	275.4	251.6	217.0	172.9	120.4	66.5	23.4	2.4	1.0
90°	273.3	268.2	255.0	229.9	195.3	151.6	102.4	53.2	15.6	1.4	1.4
92.5°	254.3	249.9	235.3	209.6	176.0	133.3	85.1	40.7	9.8	0.7	1.7
95°	234.7	229.9	215.7	191.9	156.3	114.6	69.9	29.8	5.4	0.7	1.7
97.5°	215.3	210.9	196.0	172.3	138.7	98.3	55.3	21.0	2.7	0.7	1.4
100°	197.4	192.3	178.7	155.0	121.1	82.1	42.7	13.6	1.7	0.7	1.4
102.5°	178.4	174.3	160.4	137.3	102.7	66.8	31.9	8.5	0.7	0.7	1.0
105°	161.4	156.3	142.8	119.0	87.5	52.6	22.4	5.1	0.7	0.7	1.0



TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	105.1	101.1	89.2	69.2	44.4	20.7	6.1	1.0	1.0	1.0	1.0
115°	87.8	81.7	71.2	53.6	32.9	13.6	3.1	1.0	1.0	1.0	1.0
117.5°	70.2	65.1	57.6	40.7	21.7	8.8	1.7	1.0	1.0	1.0	1.0
120°	54.9	50.2	41.7	28.1	14.6	5.1	0.7	1.0	1.0	1.0	1.0
122.5°	39.3	35.6	28.1	18.3	8.8	2.4	1.0	1.0	1.4	1.4	1.0
125°	26.1	24.1	18.7	11.2	5.4	1.0	1.0	1.0	1.4	1.4	1.0
127.5°	17.0	15.3	10.9	6.4	2.4	1.0	1.0	1.4	1.4	1.4	1.0
130°	9.5	8.5	6.4	3.7	1.0	1.0	1.0	1.4	1.4	1.4	1.0
132.5°	5.4	5.1	3.4	0.7	1.0	1.0	1.0	1.4	1.4	1.4	1.4
135°	1.4	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4
137.5°	0.3	0.3	0.7	0.7	1.0	1.0	1.4	1.7	1.7	1.7	1.4
140°	0.3	0.3	0.7	1.0	1.0	1.0	1.4	1.7	1.7	1.7	1.4
142.5°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4	1.4
145°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4	1.4
150°	0.3	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.4
152.5°	0.3	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.7
157.5°	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.7
160°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4
167.5°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.4	1.4	1.4	1.4
170°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.7	1.7	1.7	1.7
172.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.7
175°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.7
177.5°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.4
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	266.2	266.2	266.2
2.5°	253.3	248.6	247.2
5°	239.7	231.9	227.5
7.5°	226.2	215.7	210.6
10°	213.6	198.7	193.3
12.5°	198.7	181.4	172.9
15°	184.5	162.1	154.0
17.5°	168.5	143.4	133.9
20°	153.6	124.8	115.0
22.5°	136.7	106.5	95.6
25°	121.4	88.2	76.0
27.5°	104.4	69.5	59.0
30°	88.5	53.2	42.7
32.5°	73.2	39.0	29.5
35°	59.0	26.4	18.7
37.5°	45.4	16.3	9.5
40°	32.9	8.5	4.4
42.5°	22.0	4.1	2.4
45°	13.6	2.0	0.0
47.5°	7.8	0.0	0.0
50°	4.1	0.0	0.0
52.5°	1.7	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°	0.3	0.3	0.3
77.5°	0.3	0.7	1.0
80°	0.7	1.4	1.7
82.5°	1.4	1.7	1.7
85°	1.4	1.7	2.0
87.5°	1.7	2.0	2.4
90°	2.0	2.4	2.4
92.5°	2.0	2.7	2.7
95°	2.4	2.7	3.1
97.5°	2.7	3.1	3.1
100°	2.4	3.1	3.4
102.5°	2.0	3.1	3.1
105°	1.7	2.4	2.7



TEST NUMBER: P551065

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.4	1.7	1.7
115°	1.0	1.4	1.7
117.5°	1.0	1.4	1.4
120°	1.0	1.0	1.4
122.5°	1.0	1.0	1.4
125°	1.0	1.0	1.4
127.5°	1.4	1.0	1.0
130°	1.0	1.0	1.0
132.5°	1.4	1.0	1.0
135°	1.4	1.0	1.0
137.5°	1.4	1.0	1.0
140°	1.4	1.0	1.0
142.5°	1.4	1.0	1.0
145°	1.0	1.0	1.0
147.5°	1.0	1.0	1.0
150°	1.0	1.0	0.7
152.5°	1.0	0.7	0.7
155°	1.0	0.7	0.3
157.5°	1.4	0.7	0.3
160°	1.0	0.7	0.3
162.5°	1.0	0.7	0.3
165°	1.0	0.7	0.0
167.5°	1.0	0.7	0.3
170°	1.0	0.7	0.3
172.5°	1.0	0.7	0.3
175°	1.0	0.3	0.3
177.5°	1.0	0.3	0.3
180°	1.0	1.0	1.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	142.4	138.4	124.8	102.4	71.6	40.0	14.9	2.7	0.7	1.0	1.0
110°	124.1	120.7	106.8	85.1	57.6	29.8	9.8	1.7	1.0	1.0	1.0





107.5°	1.4	2.0	2.4
110°	1.4	1.7	2.0



(END OF REPORT)