

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: P551284

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-81-96-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: P551284
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-35-UNV-81-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

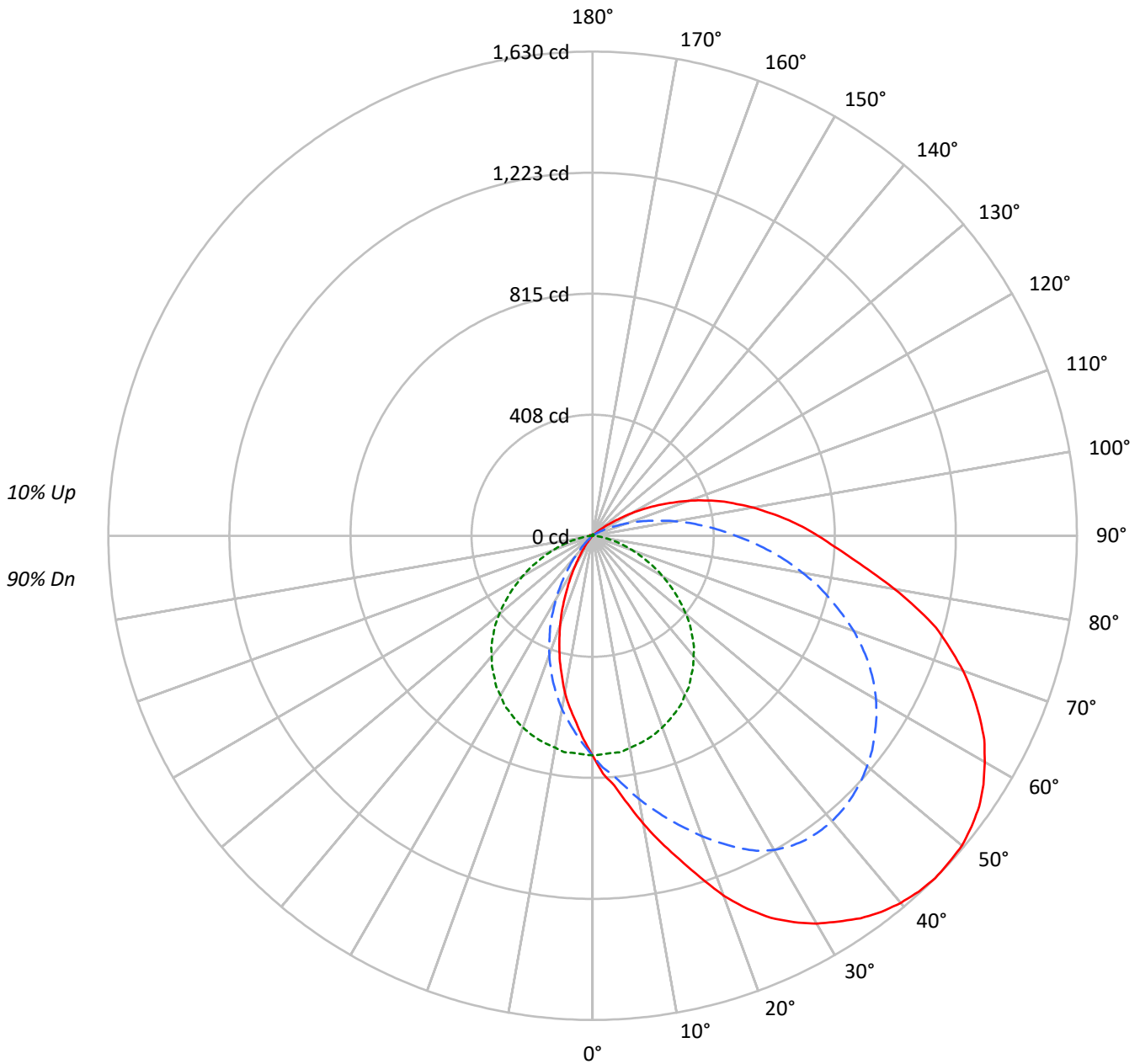
Lumens per Lamp: N/A
Luminaire Lumens: 3655.0 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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Luminous Intensity Polar Plot





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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°	7958	7958	7958
5°	8736	7842	6543
10°	9886	7745	5392
15°	11078	7647	4202
20°	12495	7523	3094
25°	13669	7378	2032
30°	14543	7184	1145
35°	15299	6975	504
40°	15969	6720	121
45°	16545	6397	0
50°	17027	5971	0
55°	17395	5428	0
60°	17580	4799	0
65°	17653	4085	0
70°	17594	3331	0
75°	17370	2456	13
80°	16667	1502	76
85°	16109	717	105



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	1.9
10°-20°	212.0	5.8
20°-30°	343.4	9.4
30°-40°	441.1	12.1
40°-50°	499.3	13.7
50°-60°	517.3	14.2
60°-70°	487.9	13.3
70°-80°	408.8	11.2
80°-90°	296.4	8.1
90°-100°	194.8	5.3
100°-110°	112.5	3.1
110°-120°	49.6	1.4
120°-130°	13.4	0.4
130°-140°	3.1	0.1
140°-150°	2.0	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	626.2	17.1
0°-40°	1067.3	29.2
0°-60°	2084.0	57.0
0°-90°	3277.0	89.7
90°-120°	356.9	9.8
90°-150°	375.5	10.3
90°-180°	378.0	10.3
0°-180°	3655.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	739	739	739	739	739	
5°	844	810	734	666	632	85
15°	1127	988	709	512	428	325
25°	1419	1160	657	337	211	656
35°	1572	1250	577	164	52	986
45°	1630	1238	473	38	0	1259
55°	1589	1160	341	0	0	1419
65°	1436	1027	203	0	0	1421
75°	1197	828	87	1	1	1256
85°	876	600	14	4	6	748
90°	759	482	4	6	7	416
95°	652	376	2	7	8	511
105°	448	194	2	5	8	473
115°	244	65	3	3	5	244
125°	72	9	4	3	4	72
135°	4	3	5	4	3	7
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	3	5	3	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	801.5	800.5	797.7	793.0	786.4	775.1	765.7	757.2	745.9	736.5	718.6
5°	843.9	839.2	835.4	830.7	815.6	805.2	788.3	769.5	751.6	733.7	697.9
7.5°	911.7	904.1	898.5	885.3	864.6	841.0	814.7	796.8	784.5	734.6	673.4
10°	984.2	977.6	966.3	942.7	917.3	883.4	845.7	803.4	765.7	724.2	651.7
12.5°	1055.8	1046.3	1030.3	1000.2	964.4	922.0	870.2	820.3	766.6	717.7	626.3
15°	1127.3	1117.0	1100.0	1063.3	1016.2	960.6	897.5	834.4	771.3	709.2	599.9
17.5°	1205.5	1191.4	1166.0	1124.5	1065.2	996.4	922.0	845.7	769.5	698.8	571.7
20°	1289.3	1269.6	1242.2	1186.7	1117.0	1036.0	946.5	857.0	768.5	686.6	539.7
22.5°	1359.0	1339.2	1309.1	1251.7	1167.8	1069.0	967.2	864.6	764.7	672.5	509.5
25°	1419.3	1403.3	1370.3	1304.4	1215.9	1103.8	987.0	870.2	759.1	657.4	477.5
27.5°	1466.4	1451.3	1414.6	1346.8	1256.4	1134.9	1002.1	873.1	751.6	642.3	444.5
30°	1507.8	1492.8	1448.5	1378.8	1283.7	1159.4	1017.2	874.0	742.1	619.7	408.7
32.5°	1539.9	1525.7	1480.5	1406.1	1302.5	1176.3	1025.6	873.1	729.9	603.7	370.1
35°	1571.9	1557.7	1505.0	1425.9	1316.6	1183.9	1032.2	868.3	714.8	577.3	333.4
37.5°	1596.4	1580.4	1526.7	1439.1	1323.2	1185.7	1031.3	861.8	698.8	555.7	296.7
40°	1613.3	1596.4	1538.9	1446.6	1325.1	1182.9	1023.7	850.5	680.0	528.4	258.1
42.5°	1624.6	1605.8	1544.6	1457.9	1321.4	1175.4	1012.4	836.3	659.3	504.8	221.3
45°	1630.3	1610.5	1545.5	1448.5	1314.8	1161.2	995.5	818.4	636.7	472.8	184.6
47.5°	1627.4	1605.8	1540.8	1438.1	1302.5	1146.2	976.7	796.8	609.3	444.5	149.7
50°	1622.7	1600.1	1530.4	1425.0	1285.6	1127.3	955.9	770.4	581.1	409.7	118.7
52.5°	1607.7	1585.1	1519.1	1406.1	1265.8	1105.7	927.7	743.1	551.0	375.8	90.4
55°	1588.8	1568.1	1499.4	1389.2	1240.4	1079.3	901.3	713.9	521.8	340.9	65.0
57.5°	1559.6	1540.8	1474.9	1361.9	1214.9	1050.1	872.1	681.9	485.0	306.1	45.2
60°	1523.8	1505.0	1441.0	1330.8	1185.7	1017.2	840.1	648.9	452.1	271.2	28.3
62.5°	1486.2	1468.3	1401.4	1292.2	1149.0	982.3	805.2	615.9	417.2	239.2	17.0
65°	1436.3	1419.3	1359.0	1246.0	1108.5	944.6	766.6	576.4	381.4	203.4	9.4
67.5°	1383.5	1368.4	1307.2	1203.6	1061.4	903.2	727.1	537.8	343.8	172.4	4.7
70°	1327.0	1308.2	1251.7	1146.2	1013.4	856.1	683.8	498.2	308.0	142.2	0.0
72.5°	1261.1	1247.0	1192.3	1092.5	957.8	806.2	639.5	454.9	268.4	113.0	0.9
75°	1197.0	1179.1	1129.2	1035.0	903.2	753.4	590.5	414.4	229.8	86.6	0.9
77.5°	1114.2	1108.5	1061.4	970.1	851.4	702.6	536.8	365.4	193.1	62.2	0.9
80°	1031.3	1025.6	988.9	905.1	791.1	642.3	486.9	319.3	157.3	41.4	0.9
82.5°	949.3	941.8	907.0	837.3	729.9	591.5	435.1	273.1	124.3	25.4	0.9
85°	875.9	866.5	828.8	764.7	666.8	534.0	381.4	227.9	92.3	14.1	1.9
87.5°	812.8	806.2	764.7	698.8	602.8	480.3	334.3	184.6	65.0	6.6	2.8
90°	759.1	745.0	708.2	638.5	542.5	421.0	284.4	147.9	43.3	3.8	3.8
92.5°	706.4	694.1	653.6	582.0	488.8	370.1	236.4	113.0	27.3	1.9	4.7
95°	651.7	638.5	599.0	533.1	434.2	318.3	194.0	82.9	15.1	1.9	4.7
97.5°	598.0	585.8	544.4	478.4	385.2	273.1	153.5	58.4	7.5	1.9	3.8
100°	548.1	534.0	496.3	430.4	336.2	227.9	118.7	37.7	4.7	1.9	3.8
102.5°	495.4	484.1	445.5	381.4	285.4	185.5	88.5	23.5	1.9	1.9	2.8
105°	448.3	434.2	396.5	330.6	243.0	146.0	62.2	14.1	1.9	1.9	2.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	292.0	280.7	247.7	192.1	123.4	57.5	17.0	2.8	2.8	2.8	2.8
115°	243.9	227.0	197.8	148.8	91.4	37.7	8.5	2.8	2.8	2.8	2.8
117.5°	195.0	180.8	160.1	113.0	60.3	24.5	4.7	2.8	2.8	2.8	2.8
120°	152.6	139.4	115.8	78.2	40.5	14.1	1.9	2.8	2.8	2.8	2.8
122.5°	109.2	98.9	78.2	50.9	24.5	6.6	2.8	2.8	3.8	3.8	2.8
125°	72.5	66.9	51.8	31.1	15.1	2.8	2.8	2.8	3.8	3.8	2.8
127.5°	47.1	42.4	30.1	17.9	6.6	2.8	2.8	3.8	3.8	3.8	2.8
130°	26.4	23.5	17.9	10.4	2.8	2.8	2.8	3.8	3.8	3.8	2.8
132.5°	15.1	14.1	9.4	1.9	2.8	2.8	2.8	3.8	3.8	3.8	3.8
135°	3.8	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8
137.5°	0.9	0.9	1.9	1.9	2.8	2.8	3.8	4.7	4.7	4.7	3.8
140°	0.9	0.9	1.9	2.8	2.8	2.8	3.8	4.7	4.7	4.7	3.8
142.5°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
145°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	3.8	3.8	3.8
147.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
150°	0.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	3.8
152.5°	0.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	3.8
155°	1.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	4.7
157.5°	1.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	4.7
160°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8	3.8
162.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8	3.8
165°	1.9	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8
167.5°	1.9	1.9	1.9	2.8	2.8	2.8	3.8	3.8	3.8	3.8	3.8
170°	1.9	1.9	1.9	2.8	2.8	2.8	3.8	4.7	4.7	4.7	4.7
172.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	4.7
175°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	4.7
177.5°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	3.8
180°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	739.3	739.3	739.3
2.5°	703.5	690.3	686.6
5°	665.9	644.2	632.0
7.5°	628.2	599.0	584.9
10°	593.3	551.9	536.8
12.5°	551.9	503.9	480.3
15°	512.3	450.2	427.6
17.5°	468.1	398.4	372.0
20°	426.6	346.6	319.3
22.5°	379.5	295.7	265.6
25°	337.2	244.9	211.0
27.5°	290.1	193.1	163.9
30°	245.8	147.9	118.7
32.5°	203.4	108.3	81.9
35°	163.9	73.5	51.8
37.5°	126.2	45.2	26.4
40°	91.4	23.5	12.2
42.5°	61.2	11.3	6.6
45°	37.7	5.7	0.0
47.5°	21.7	0.0	0.0
50°	11.3	0.0	0.0
52.5°	4.7	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°	0.9	0.9	0.9
77.5°	0.9	1.9	2.8
80°	1.9	3.8	4.7
82.5°	3.8	4.7	4.7
85°	3.8	4.7	5.7
87.5°	4.7	5.7	6.6
90°	5.7	6.6	6.6
92.5°	5.7	7.5	7.5
95°	6.6	7.5	8.5
97.5°	7.5	8.5	8.5
100°	6.6	8.5	9.4
102.5°	5.7	8.5	8.5
105°	4.7	6.6	7.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.8	4.7	4.7
115°	2.8	3.8	4.7
117.5°	2.8	3.8	3.8
120°	2.8	2.8	3.8
122.5°	2.8	2.8	3.8
125°	2.8	2.8	3.8
127.5°	3.8	2.8	2.8
130°	2.8	2.8	2.8
132.5°	3.8	2.8	2.8
135°	3.8	2.8	2.8
137.5°	3.8	2.8	2.8
140°	3.8	2.8	2.8
142.5°	3.8	2.8	2.8
145°	2.8	2.8	2.8
147.5°	2.8	2.8	2.8
150°	2.8	2.8	1.9
152.5°	2.8	1.9	1.9
155°	2.8	1.9	0.9
157.5°	3.8	1.9	0.9
160°	2.8	1.9	0.9
162.5°	2.8	1.9	0.9
165°	2.8	1.9	0.0
167.5°	2.8	1.9	0.9
170°	2.8	1.9	0.9
172.5°	2.8	1.9	0.9
175°	2.8	0.9	0.9
177.5°	2.8	0.9	0.9
180°	2.8	2.8	2.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	395.6	384.3	346.6	284.4	198.7	111.1	41.4	7.5	1.9	2.8	2.8
110°	344.7	335.3	296.7	236.4	160.1	82.9	27.3	4.7	2.8	2.8	2.8





107.5°	3.8	5.7	6.6
110°	3.8	4.7	5.7



(END OF REPORT)