

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: P589366

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-24-2-LD4-3LO-35-UNV-80-85-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

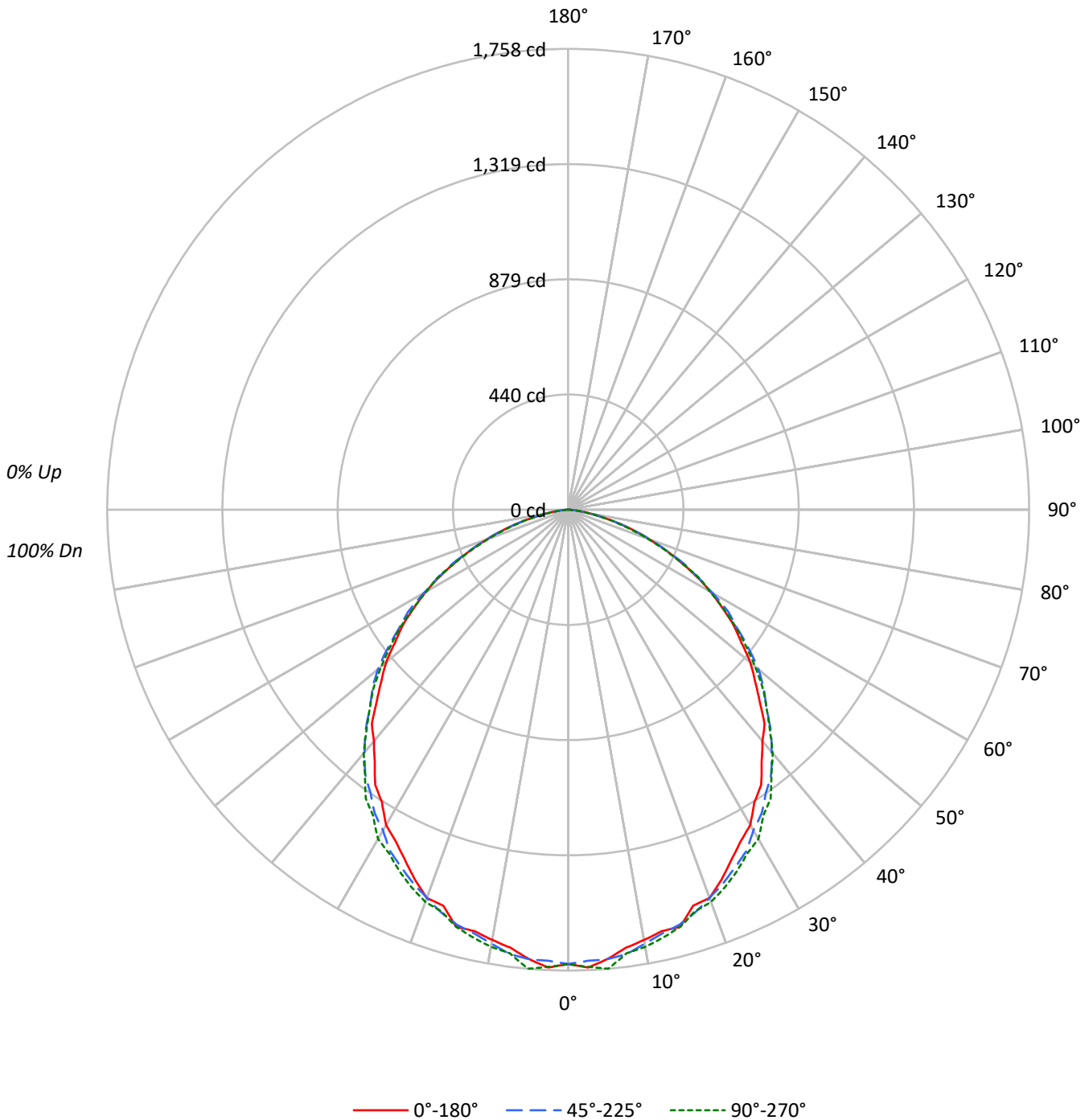
Lumens per Lamp: N/A
Luminaire Lumens: 4368.0 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
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	
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4648	4650	4748
10°	4554	4594	4626
15°	4590	4565	4591
20°	4513	4513	4561
25°	4374	4469	4519
30°	4314	4390	4506
35°	4212	4323	4419
40°	4048	4243	4262
45°	3926	4066	4072
50°	3797	3968	3893
55°	3618	3688	3662
60°	3383	3416	3355
65°	3016	3093	2995
70°	2588	2597	2525
75°	2049	2045	1966
80°	1373	1336	1283
85°	747	738	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.0	3.7
10°-20°	462.0	10.6
20°-30°	692.2	15.8
30°-40°	820.4	18.8
40°-50°	821.9	18.8
50°-60°	697.7	16.0
60°-70°	470.4	10.8
70°-80°	206.7	4.7
80°-90°	33.6	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1317.3	30.2
0°-40°	2137.7	48.9
0°-60°	3657.3	83.7
0°-90°	4368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1733	1733	1733	1733	1733	
5°	1721	1717	1722	1716	1758	162
15°	1648	1629	1639	1647	1648	459
25°	1473	1481	1505	1525	1522	681
35°	1282	1286	1316	1346	1345	796
45°	1032	1051	1068	1096	1070	798
55°	771	766	786	781	780	686
65°	474	468	486	467	470	471
75°	197	193	197	183	189	211
85°	24	24	24	23	22	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1733.1	1733.1	1733.1	1733.1	1733.1
2.5°	1748.1	1734.9	1722.6	1736.9	1745.6
5°	1720.8	1716.8	1721.5	1716.3	1757.7
7.5°	1685.4	1700.9	1709.8	1704.2	1706.7
10°	1666.7	1661.3	1681.2	1695.1	1693.1
12.5°	1646.5	1654.6	1655.7	1670.7	1672.0
15°	1647.6	1628.6	1638.7	1647.2	1647.9
17.5°	1583.6	1604.2	1611.2	1630.6	1606.5
20°	1575.8	1560.8	1575.8	1595.7	1592.6
22.5°	1527.7	1510.9	1543.1	1560.8	1559.7
25°	1473.1	1481.1	1505.3	1525.0	1521.9
27.5°	1425.2	1434.6	1469.1	1496.1	1478.7
30°	1388.3	1383.6	1412.7	1436.8	1450.3
32.5°	1322.3	1339.3	1373.3	1397.2	1384.5
35°	1282.2	1286.0	1315.8	1346.2	1345.3
37.5°	1212.2	1229.8	1271.7	1280.2	1272.4
40°	1152.4	1170.1	1207.9	1217.1	1213.3
42.5°	1108.3	1111.5	1143.9	1154.4	1137.7
45°	1031.6	1050.8	1068.3	1095.8	1069.9
47.5°	966.2	975.2	1012.8	1020.2	1006.5
50°	906.9	910.1	947.9	938.7	929.8
52.5°	832.4	845.6	866.9	865.1	854.6
55°	771.1	766.0	786.1	780.7	780.5
57.5°	697.5	706.4	723.0	714.5	700.9
60°	628.6	628.8	634.8	625.2	623.4
62.5°	551.8	554.5	555.8	544.0	563.2
65°	473.7	467.5	485.8	467.2	470.4
67.5°	401.9	405.0	403.2	391.6	396.1
70°	328.9	333.0	330.1	316.9	320.9
72.5°	262.3	257.3	260.5	243.9	251.5
75°	197.1	193.1	196.7	182.8	189.1
77.5°	134.3	137.4	135.2	127.8	132.0
80°	88.6	86.2	86.2	81.9	82.8
82.5°	51.7	49.2	48.6	47.2	49.2
85°	24.2	23.5	23.9	23.3	22.4
87.5°	8.7	9.0	9.0	8.5	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)