

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: P588987

Luminaire Tested: **FMR-24-2-LD4-2HI-35-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588987
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-LD4-2HI-35-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

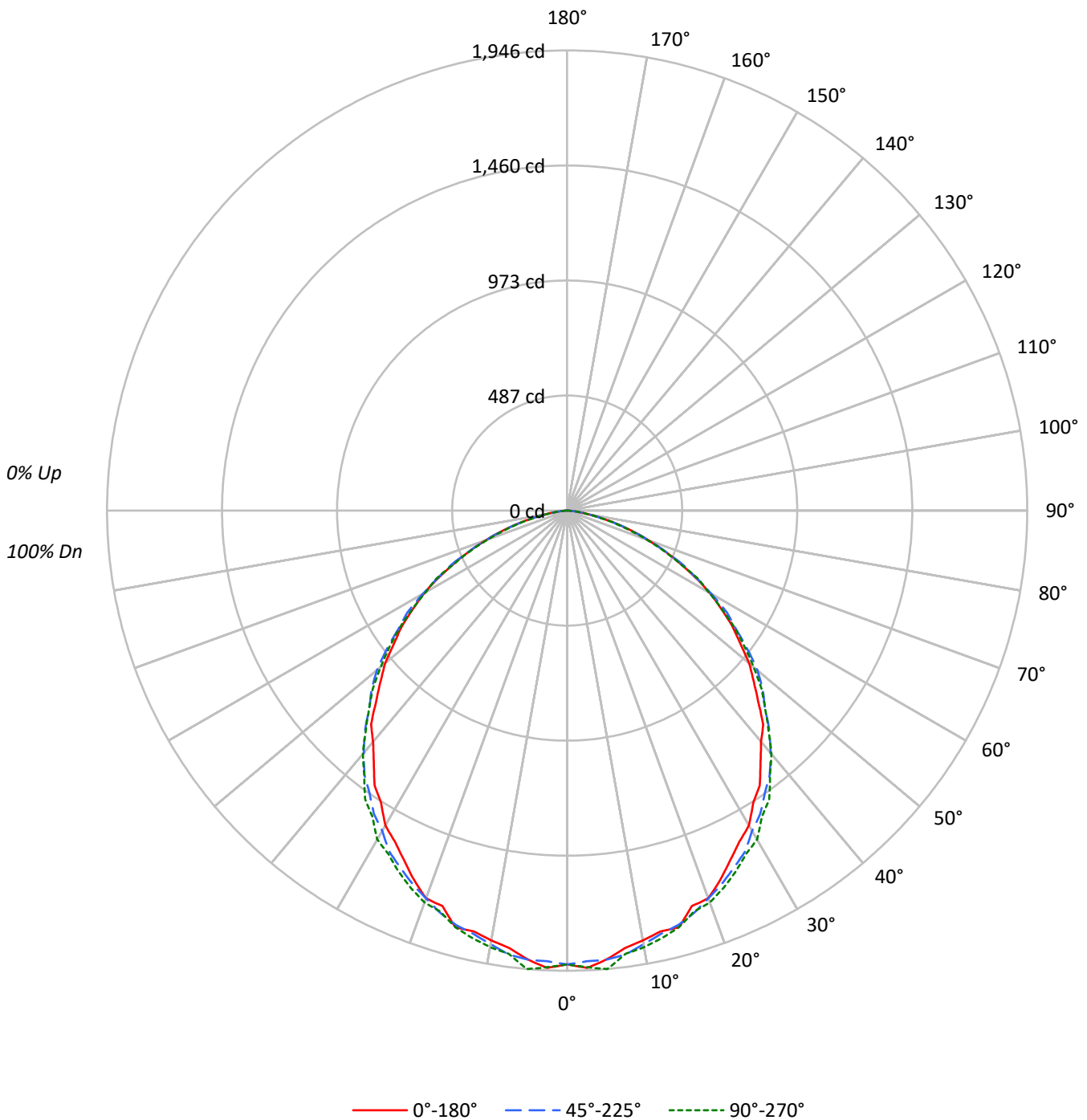
Lumens per Lamp: N/A
Luminaire Lumens: 4837.0 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	5165	5165	5165
5°	5148	5149	5258
10°	5043	5087	5123
15°	5083	5055	5084
20°	4997	4997	5050
25°	4844	4949	5004
30°	4777	4861	4990
35°	4664	4787	4894
40°	4483	4699	4720
45°	4348	4502	4509
50°	4204	4394	4310
55°	4006	4084	4055
60°	3746	3784	3716
65°	3340	3426	3317
70°	2866	2876	2795
75°	2270	2264	2177
80°	1520	1478	1421
85°	827	818	766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	3.7
10°-20°	511.6	10.6
20°-30°	766.5	15.8
30°-40°	908.5	18.8
40°-50°	910.2	18.8
50°-60°	772.6	16.0
60°-70°	520.9	10.8
70°-80°	228.9	4.7
80°-90°	37.2	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°	1458.7	30.2
0°-40°	2367.2	48.9
0°-60°	4050.0	83.7
0°-90°	4837.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4837.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1919	1919	1919	1919	1919	
5°	1906	1901	1906	1901	1946	180
15°	1824	1804	1815	1824	1825	508
25°	1631	1640	1667	1689	1685	754
35°	1420	1424	1457	1491	1490	882
45°	1142	1164	1183	1214	1185	884
55°	854	848	870	865	864	760
65°	525	518	538	517	521	522
75°	218	214	218	202	209	234
85°	27	26	26	26	25	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1919.2	1919.2	1919.2	1919.2	1919.2
2.5°	1935.8	1921.2	1907.6	1923.4	1933.1
5°	1905.6	1901.1	1906.3	1900.6	1946.5
7.5°	1866.4	1883.5	1893.4	1887.2	1890.0
10°	1845.6	1839.7	1861.7	1877.1	1874.8
12.5°	1823.3	1832.2	1833.5	1850.1	1851.6
15°	1824.5	1803.5	1814.6	1824.0	1824.8
17.5°	1753.7	1776.5	1784.1	1805.7	1778.9
20°	1745.0	1728.4	1745.0	1767.1	1763.6
22.5°	1691.7	1673.1	1708.8	1728.4	1727.2
25°	1631.3	1640.2	1666.9	1688.7	1685.3
27.5°	1578.2	1588.6	1626.8	1656.8	1637.5
30°	1537.3	1532.1	1564.4	1591.1	1606.0
32.5°	1464.2	1483.1	1520.7	1547.3	1533.1
35°	1419.9	1424.1	1457.1	1490.8	1489.8
37.5°	1342.3	1361.9	1408.2	1417.7	1409.0
40°	1276.2	1295.7	1337.6	1347.8	1343.6
42.5°	1227.3	1230.8	1266.7	1278.4	1259.8
45°	1142.4	1163.7	1183.0	1213.5	1184.7
47.5°	1070.0	1079.9	1121.5	1129.7	1114.6
50°	1004.3	1007.8	1049.7	1039.5	1029.6
52.5°	921.8	936.4	960.0	958.0	946.3
55°	853.9	848.2	870.5	864.6	864.3
57.5°	772.4	782.3	800.6	791.2	776.1
60°	696.1	696.3	703.0	692.3	690.4
62.5°	611.1	614.0	615.5	602.4	623.7
65°	524.6	517.7	538.0	517.4	520.9
67.5°	445.0	448.5	446.5	433.6	438.6
70°	364.3	368.7	365.5	350.9	355.3
72.5°	290.4	285.0	288.4	270.1	278.5
75°	218.3	213.9	217.8	202.5	209.4
77.5°	148.7	152.1	149.7	141.5	146.2
80°	98.1	95.4	95.4	90.7	91.7
82.5°	57.2	54.5	53.8	52.3	54.5
85°	26.8	26.0	26.5	25.8	24.8
87.5°	9.7	9.9	9.9	9.4	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)