

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: P589280

Luminaire Tested: **FMR-24-2-LD4-3HI-35-UNV-81-87-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589280
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-LD4-3HI-35-UNV-81-87-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

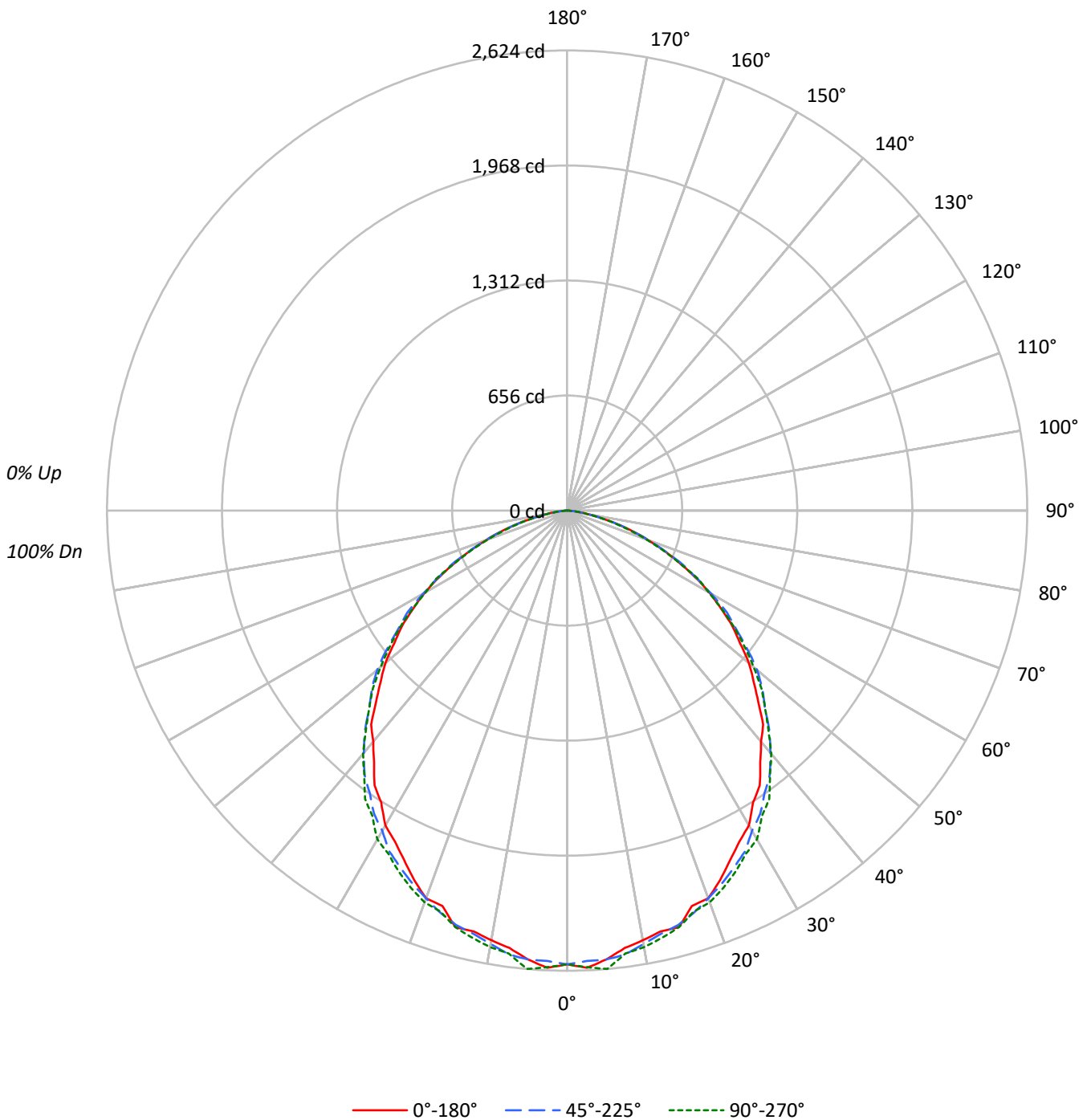
Lumens per Lamp: N/A
Luminaire Lumens: 6520.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 64.8
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					86			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41					41			
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32					32			
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6962	6962	6962
5°	6938	6941	7087
10°	6798	6857	6906
15°	6852	6814	6852
20°	6736	6736	6808
25°	6529	6671	6745
30°	6439	6552	6727
35°	6287	6452	6597
40°	6043	6334	6362
45°	5860	6068	6077
50°	5668	5923	5810
55°	5400	5505	5466
60°	5050	5100	5008
65°	4502	4618	4471
70°	3863	3877	3769
75°	3060	3053	2934
80°	2050	1993	1915
85°	1115	1102	1031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.3	3.7
10°-20°	689.7	10.6
20°-30°	1033.3	15.8
30°-40°	1224.6	18.8
40°-50°	1226.9	18.8
50°-60°	1041.4	16.0
60°-70°	702.1	10.8
70°-80°	308.5	4.7
80°-90°	50.1	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°	1966.3	30.2
0°-40°	3190.9	48.9
0°-60°	5459.2	83.7
0°-90°	6520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6520.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2587	2587	2587	2587	2587	
5°	2569	2563	2570	2562	2624	242
15°	2459	2431	2446	2459	2460	685
25°	2199	2211	2247	2276	2272	1017
35°	1914	1920	1964	2010	2008	1188
45°	1540	1568	1595	1636	1597	1191
55°	1151	1143	1173	1165	1165	1024
65°	707	698	725	697	702	703
75°	294	288	294	273	282	315
85°	36	35	36	35	33	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2587.0	2587.0	2587.0	2587.0	2587.0
2.5°	2609.4	2589.6	2571.3	2592.6	2605.7
5°	2568.6	2562.6	2569.6	2561.9	2623.7
7.5°	2515.8	2538.9	2552.2	2543.9	2547.6
10°	2487.8	2479.8	2509.5	2530.2	2527.2
12.5°	2457.7	2469.7	2471.4	2493.8	2495.8
15°	2459.4	2431.0	2446.0	2458.7	2459.7
17.5°	2363.8	2394.6	2404.9	2434.0	2397.9
20°	2352.2	2329.8	2352.2	2381.9	2377.2
22.5°	2280.3	2255.3	2303.4	2329.8	2328.1
25°	2198.8	2210.9	2246.9	2276.3	2271.7
27.5°	2127.4	2141.4	2192.8	2233.2	2207.2
30°	2072.2	2065.2	2108.7	2144.7	2164.8
32.5°	1973.7	1999.1	2049.9	2085.6	2066.6
35°	1913.9	1919.6	1964.0	2009.5	2008.1
37.5°	1809.4	1835.8	1898.2	1910.9	1899.2
40°	1720.2	1746.6	1803.0	1816.7	1811.0
42.5°	1654.4	1659.1	1707.5	1723.2	1698.1
45°	1539.8	1568.5	1594.6	1635.7	1596.9
47.5°	1442.3	1455.7	1511.8	1522.8	1502.4
50°	1353.8	1358.5	1414.9	1401.2	1387.8
52.5°	1242.5	1262.3	1294.0	1291.3	1275.6
55°	1151.0	1143.3	1173.4	1165.4	1165.1
57.5°	1041.1	1054.5	1079.2	1066.5	1046.1
60°	938.3	938.6	947.6	933.2	930.6
62.5°	823.7	827.7	829.7	812.0	840.7
65°	707.1	697.8	725.2	697.4	702.1
67.5°	599.9	604.6	601.9	584.5	591.2
70°	491.0	497.0	492.7	473.0	479.0
72.5°	391.5	384.1	388.8	364.1	375.4
75°	294.3	288.3	293.6	272.9	282.2
77.5°	200.4	205.1	201.7	190.7	197.1
80°	132.3	128.6	128.6	122.3	123.6
82.5°	77.2	73.5	72.5	70.5	73.5
85°	36.1	35.1	35.7	34.7	33.4
87.5°	13.0	13.4	13.4	12.7	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)