

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: P589018

Luminaire Tested: **FMR-24-2-LD4-2HI-40-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589018
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-40-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

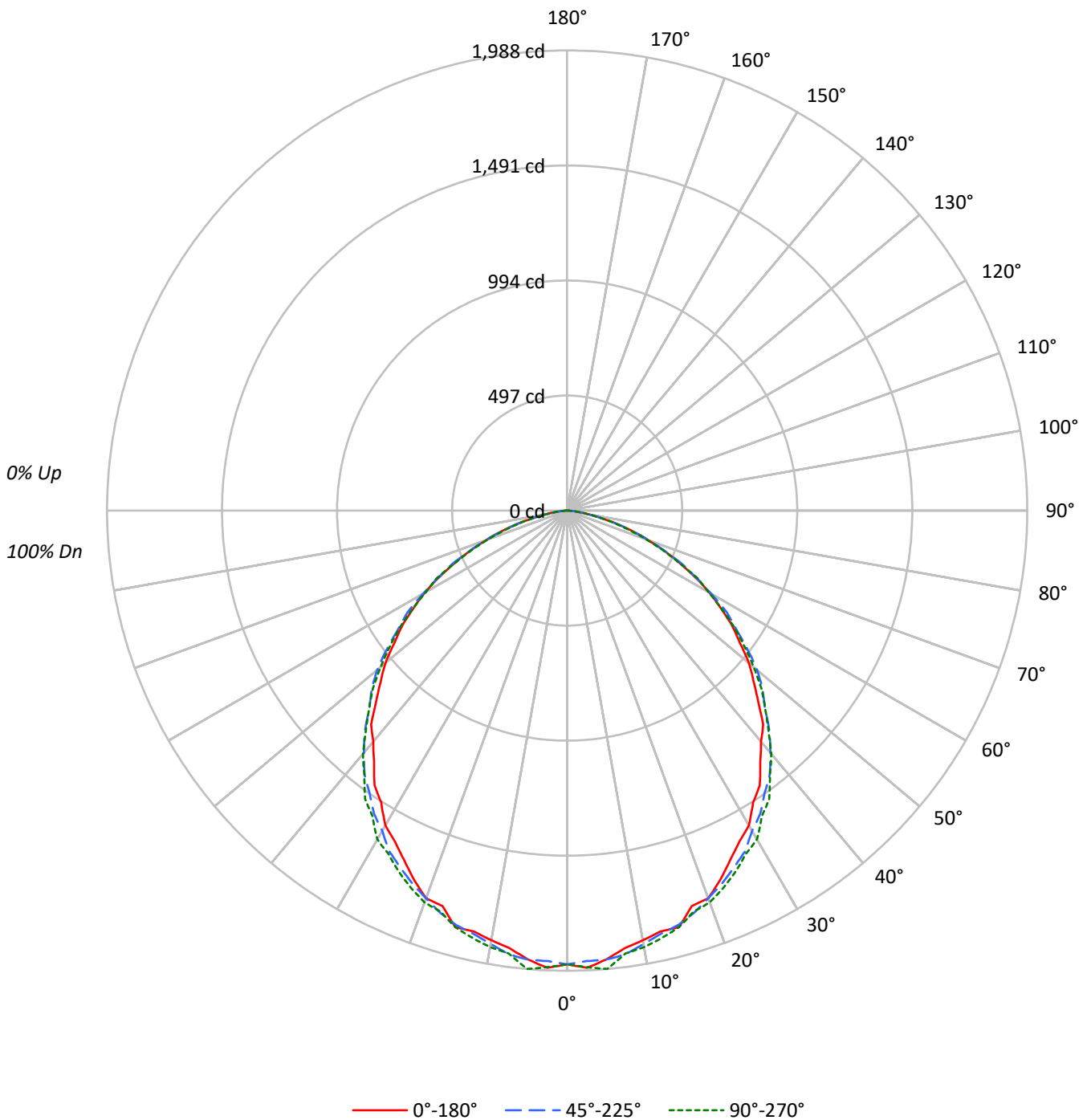
Lumens per Lamp: N/A
Luminaire Lumens: 4940.0 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	5275	5275	5275
5°	5257	5259	5370
10°	5150	5196	5232
15°	5191	5163	5192
20°	5104	5104	5158
25°	4947	5055	5111
30°	4879	4964	5097
35°	4764	4889	4998
40°	4578	4799	4820
45°	4440	4598	4605
50°	4294	4488	4402
55°	4092	4171	4141
60°	3826	3864	3795
65°	3412	3498	3387
70°	2927	2937	2855
75°	2319	2313	2223
80°	1553	1509	1450
85°	843	837	781



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.4	3.7
10°-20°	522.5	10.6
20°-30°	782.9	15.8
30°-40°	927.9	18.8
40°-50°	929.6	18.8
50°-60°	789.1	16.0
60°-70°	532.0	10.8
70°-80°	233.8	4.7
80°-90°	38.0	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°	1489.8	30.2
0°-40°	2417.6	48.9
0°-60°	4136.3	83.7
0°-90°	4940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4940.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1960	1960	1960	1960	1960	
5°	1946	1942	1947	1941	1988	183
15°	1863	1842	1853	1863	1864	519
25°	1666	1675	1702	1725	1721	770
35°	1450	1454	1488	1522	1522	900
45°	1167	1188	1208	1239	1210	902
55°	872	866	889	883	883	776
65°	536	529	549	528	532	533
75°	223	218	222	207	214	239
85°	27	27	27	26	25	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1960.1	1960.1	1960.1	1960.1	1960.1
2.5°	1977.0	1962.1	1948.2	1964.4	1974.2
5°	1946.1	1941.6	1946.9	1941.1	1987.9
7.5°	1906.2	1923.6	1933.7	1927.4	1930.2
10°	1884.9	1878.8	1901.4	1917.0	1914.8
12.5°	1862.1	1871.2	1872.5	1889.5	1891.0
15°	1863.4	1841.9	1853.3	1862.9	1863.6
17.5°	1791.0	1814.3	1822.1	1844.2	1816.8
20°	1782.2	1765.2	1782.2	1804.7	1801.1
22.5°	1727.7	1708.8	1745.2	1765.2	1763.9
25°	1666.0	1675.1	1702.4	1724.7	1721.2
27.5°	1611.8	1622.5	1661.4	1692.1	1672.3
30°	1570.1	1564.8	1597.7	1625.0	1640.2
32.5°	1495.4	1514.7	1553.1	1580.2	1565.8
35°	1450.1	1454.4	1488.1	1522.5	1521.5
37.5°	1370.9	1390.9	1438.2	1447.8	1439.0
40°	1303.3	1323.3	1366.1	1376.5	1372.2
42.5°	1253.5	1257.0	1293.7	1305.6	1286.6
45°	1166.7	1188.4	1208.2	1239.3	1210.0
47.5°	1092.8	1102.9	1145.4	1153.8	1138.3
50°	1025.7	1029.3	1072.0	1061.7	1051.5
52.5°	941.4	956.4	980.4	978.4	966.5
55°	872.1	866.3	889.1	883.0	882.7
57.5°	788.8	799.0	817.7	808.1	792.6
60°	710.9	711.1	718.0	707.1	705.1
62.5°	624.1	627.1	628.6	615.2	637.0
65°	535.8	528.7	549.4	528.4	532.0
67.5°	454.5	458.1	456.0	442.9	447.9
70°	372.0	376.6	373.3	358.4	362.9
72.5°	296.6	291.0	294.6	275.9	284.5
75°	223.0	218.4	222.5	206.8	213.8
77.5°	151.8	155.4	152.9	144.5	149.3
80°	100.2	97.4	97.4	92.6	93.6
82.5°	58.5	55.7	54.9	53.4	55.7
85°	27.3	26.6	27.1	26.3	25.3
87.5°	9.9	10.1	10.1	9.6	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)