

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: P588886

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588886
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-LD4-1STD-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

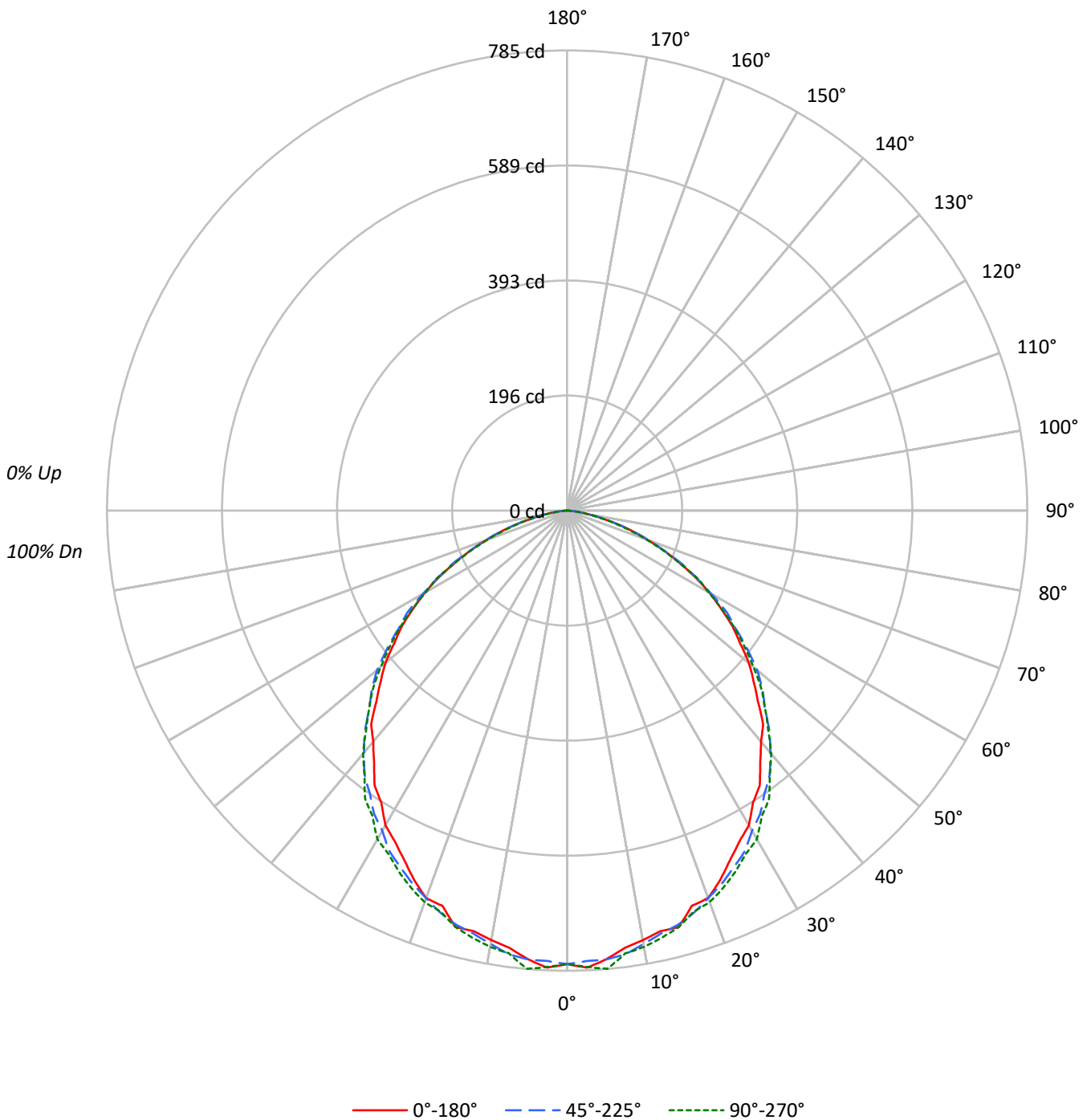
Lumens per Lamp: N/A
Luminaire Lumens: 1950.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	2082	2082	2082
5°	2075	2076	2120
10°	2033	2051	2065
15°	2049	2038	2049
20°	2015	2015	2036
25°	1953	1995	2017
30°	1926	1960	2012
35°	1880	1930	1973
40°	1807	1894	1903
45°	1752	1815	1818
50°	1695	1772	1738
55°	1615	1646	1635
60°	1510	1525	1498
65°	1347	1381	1337
70°	1156	1159	1127
75°	915	913	878
80°	614	597	573
85°	333	330	309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.8	3.7
10°-20°	206.3	10.6
20°-30°	309.0	15.8
30°-40°	366.3	18.8
40°-50°	366.9	18.8
50°-60°	311.5	16.0
60°-70°	210.0	10.8
70°-80°	92.3	4.7
80°-90°	15.0	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°	588.1	30.2
0°-40°	954.3	48.9
0°-60°	1632.7	83.7
0°-90°	1950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1950.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	768	766	768	766	785	72
15°	736	727	732	735	736	205
25°	658	661	672	681	679	304
35°	572	574	587	601	601	355
45°	460	469	477	489	478	356
55°	344	342	351	348	348	306
65°	212	209	217	209	210	210
75°	88	86	88	82	84	94
85°	11	10	11	10	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	773.7	773.7	773.7	773.7	773.7
2.5°	780.4	774.5	769.0	775.4	779.3
5°	768.2	766.4	768.5	766.2	784.7
7.5°	752.4	759.3	763.3	760.8	761.9
10°	744.0	741.6	750.5	756.7	755.8
12.5°	735.1	738.6	739.1	745.8	746.4
15°	735.5	727.1	731.6	735.3	735.6
17.5°	707.0	716.2	719.3	728.0	717.2
20°	703.5	696.8	703.5	712.4	711.0
22.5°	682.0	674.5	688.9	696.8	696.3
25°	657.6	661.2	672.0	680.8	679.4
27.5°	636.3	640.4	655.8	667.9	660.1
30°	619.8	617.7	630.7	641.4	647.4
32.5°	590.3	597.9	613.1	623.8	618.1
35°	572.4	574.1	587.4	601.0	600.6
37.5°	541.1	549.0	567.7	571.5	568.0
40°	514.5	522.4	539.2	543.3	541.6
42.5°	494.8	496.2	510.7	515.4	507.9
45°	460.5	469.1	476.9	489.2	477.6
47.5°	431.4	435.4	452.1	455.4	449.3
50°	404.9	406.3	423.2	419.1	415.1
52.5°	371.6	377.5	387.0	386.2	381.5
55°	344.2	342.0	350.9	348.5	348.4
57.5°	311.4	315.4	322.8	319.0	312.9
60°	280.6	280.7	283.4	279.1	278.3
62.5°	246.3	247.5	248.1	242.9	251.4
65°	211.5	208.7	216.9	208.6	210.0
67.5°	179.4	180.8	180.0	174.8	176.8
70°	146.9	148.6	147.3	141.5	143.3
72.5°	117.1	114.9	116.3	108.9	112.3
75°	88.0	86.2	87.8	81.6	84.4
77.5°	59.9	61.3	60.3	57.0	58.9
80°	39.6	38.5	38.5	36.6	37.0
82.5°	23.1	22.0	21.7	21.1	22.0
85°	10.8	10.5	10.7	10.4	10.0
87.5°	3.9	4.0	4.0	3.8	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)