

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: P588729

Luminaire Tested: **FMR-24-2-LD4-1HI-40-UNV-80-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588729
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-LD4-1HI-40-UNV-80-88-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

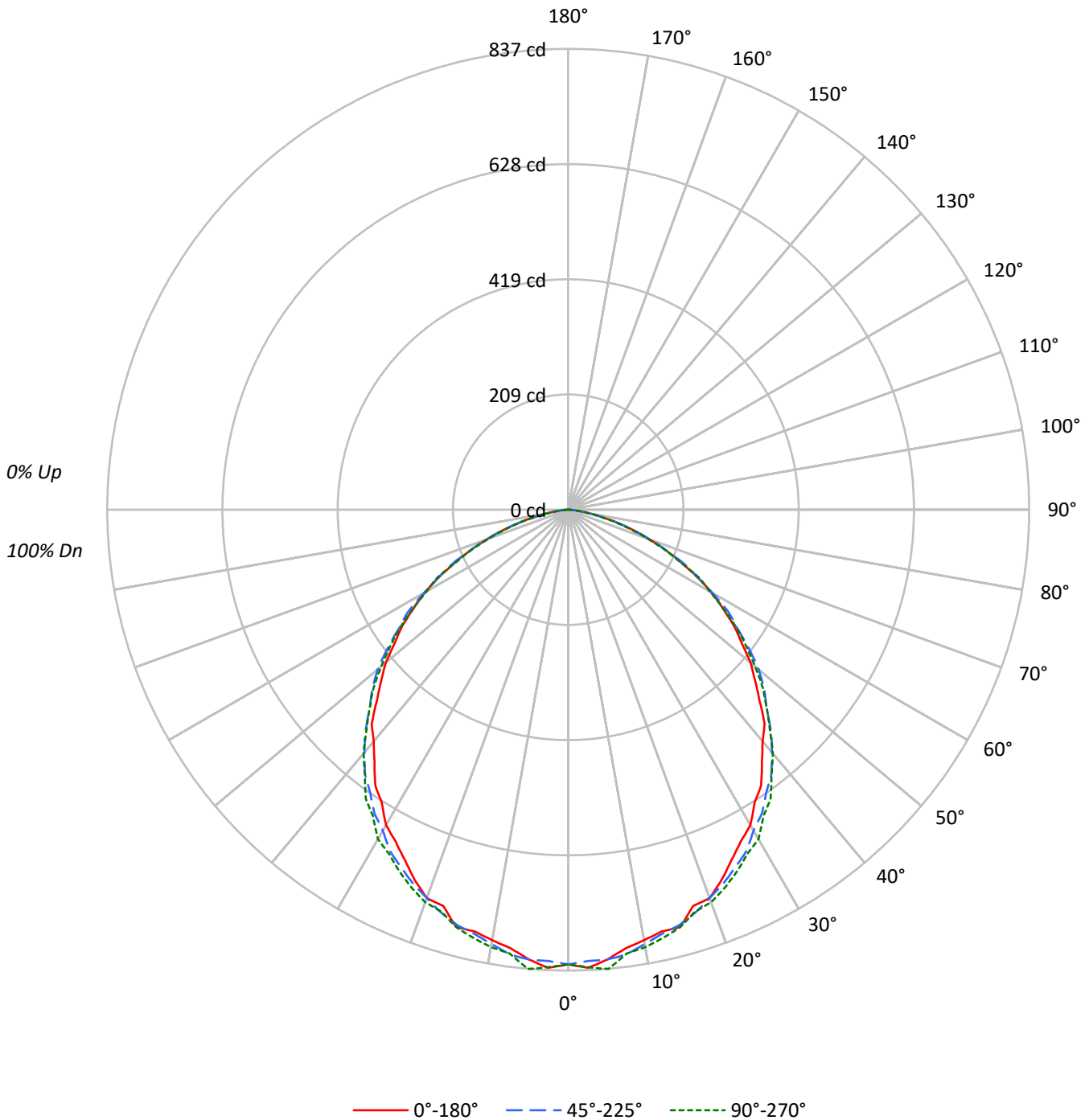
Lumens per Lamp: N/A
Luminaire Lumens: 2081.0 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	2222	2222	2222
5°	2214	2215	2262
10°	2170	2189	2204
15°	2187	2175	2187
20°	2150	2150	2173
25°	2084	2129	2153
30°	2055	2091	2147
35°	2007	2059	2105
40°	1929	2022	2030
45°	1870	1937	1940
50°	1809	1891	1855
55°	1724	1757	1745
60°	1612	1628	1598
65°	1437	1473	1427
70°	1233	1237	1203
75°	976	974	937
80°	654	635	611
85°	355	352	330



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	3.7
10°-20°	220.1	10.6
20°-30°	329.8	15.8
30°-40°	390.9	18.8
40°-50°	391.6	18.8
50°-60°	332.4	16.0
60°-70°	224.1	10.8
70°-80°	98.5	4.7
80°-90°	16.0	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°	627.6	30.2
0°-40°	1018.5	48.9
0°-60°	1742.4	83.7
0°-90°	2081.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	820	818	820	818	837	77
15°	785	776	781	785	785	219
25°	702	706	717	726	725	324
35°	611	613	627	641	641	379
45°	492	501	509	522	510	380
55°	367	365	374	372	372	327
65°	226	223	231	223	224	224
75°	94	92	94	87	90	101
85°	12	11	11	11	11	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	825.7	825.7	825.7	825.7	825.7
2.5°	832.8	826.5	820.7	827.5	831.7
5°	819.8	817.9	820.1	817.7	837.4
7.5°	803.0	810.3	814.6	811.9	813.1
10°	794.0	791.5	801.0	807.6	806.6
12.5°	784.4	788.3	788.8	795.9	796.6
15°	785.0	775.9	780.7	784.8	785.1
17.5°	754.5	764.3	767.6	776.9	765.3
20°	750.7	743.6	750.7	760.2	758.7
22.5°	727.8	719.8	735.2	743.6	743.1
25°	701.8	705.6	717.2	726.5	725.0
27.5°	679.0	683.5	699.9	712.8	704.5
30°	661.4	659.2	673.0	684.5	690.9
32.5°	630.0	638.1	654.3	665.7	659.6
35°	610.9	612.7	626.9	641.4	640.9
37.5°	577.5	585.9	605.9	609.9	606.2
40°	549.0	557.5	575.5	579.8	578.0
42.5°	528.0	529.5	545.0	550.0	542.0
45°	491.5	500.6	509.0	522.1	509.7
47.5°	460.3	464.6	482.5	486.0	479.5
50°	432.1	433.6	451.6	447.2	443.0
52.5°	396.6	402.9	413.0	412.2	407.1
55°	367.4	364.9	374.5	372.0	371.9
57.5°	332.3	336.6	344.5	340.4	333.9
60°	299.5	299.6	302.5	297.9	297.0
62.5°	262.9	264.2	264.8	259.2	268.3
65°	225.7	222.7	231.4	222.6	224.1
67.5°	191.5	193.0	192.1	186.6	188.7
70°	156.7	158.6	157.2	151.0	152.9
72.5°	124.9	122.6	124.1	116.2	119.8
75°	93.9	92.0	93.7	87.1	90.1
77.5°	64.0	65.5	64.4	60.9	62.9
80°	42.2	41.0	41.0	39.0	39.4
82.5°	24.6	23.5	23.1	22.5	23.5
85°	11.5	11.2	11.4	11.1	10.7
87.5°	4.2	4.3	4.3	4.1	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)