

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: P588922

Luminaire Tested: **FMR-24-2-LD4-1STD-40-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588922
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-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

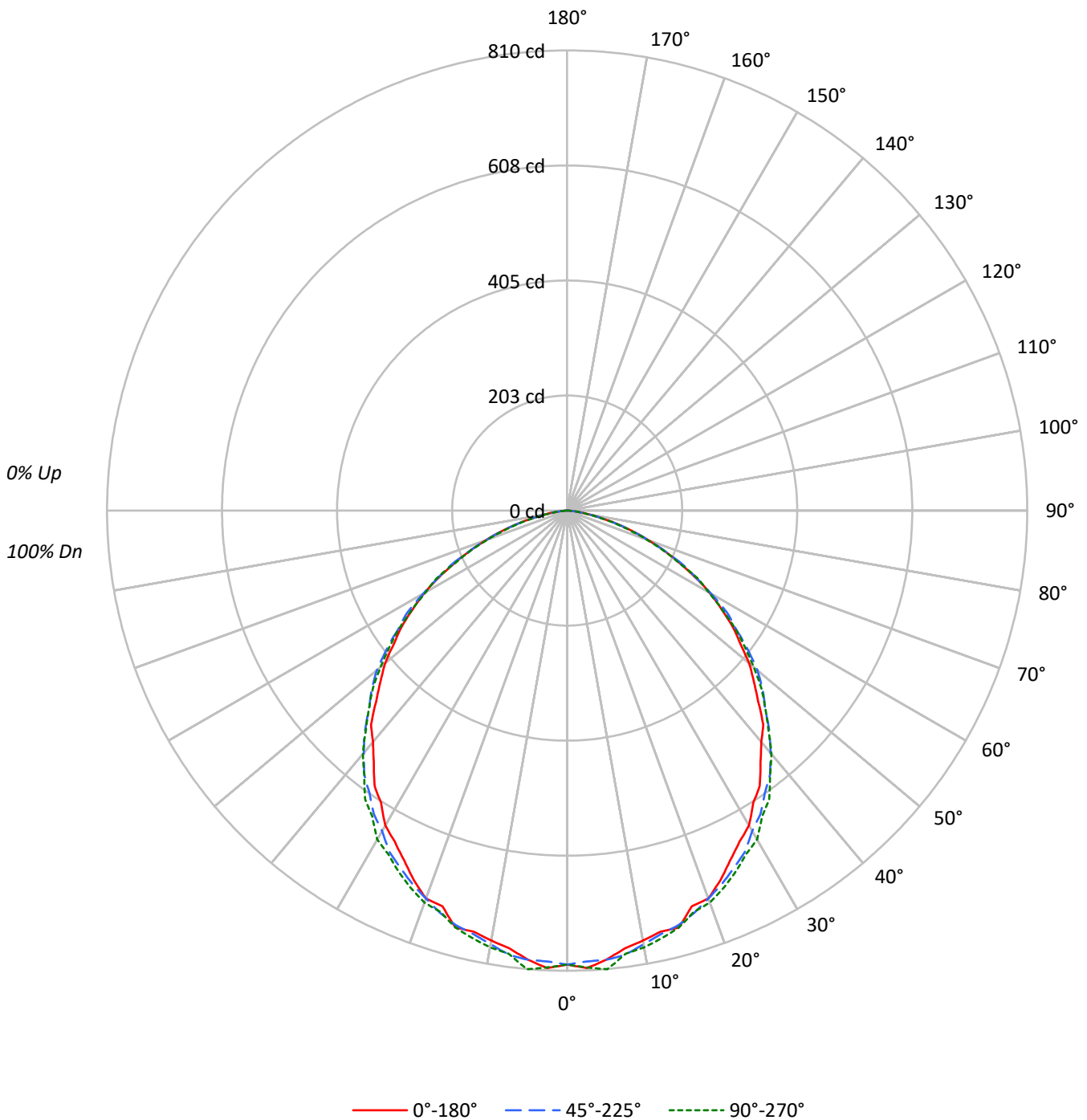
Lumens per Lamp: N/A
Luminaire Lumens: 2014.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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

TEST NUMBER: P588922

CATALOG NUMBER: FMR-24-2-LD4-1STD-40-UNV-80-94-EDD

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°	2150	2150	2150
5°	2143	2144	2189
10°	2100	2118	2133
15°	2116	2105	2117
20°	2081	2081	2103
25°	2017	2061	2083
30°	1989	2024	2078
35°	1942	1993	2038
40°	1867	1956	1965
45°	1810	1875	1877
50°	1751	1830	1795
55°	1668	1701	1688
60°	1560	1575	1547
65°	1391	1426	1381
70°	1194	1197	1164
75°	945	943	907
80°	634	615	592
85°	343	340	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	3.7
10°-20°	213.0	10.6
20°-30°	319.2	15.8
30°-40°	378.3	18.8
40°-50°	379.0	18.8
50°-60°	321.7	16.0
60°-70°	216.9	10.8
70°-80°	95.3	4.7
80°-90°	15.5	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°	607.4	30.2
0°-40°	985.7	48.9
0°-60°	1686.3	83.7
0°-90°	2014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	793	792	794	791	810	75
15°	760	751	756	760	760	212
25°	679	683	694	703	702	314
35°	591	593	607	621	620	367
45°	476	484	493	505	493	368
55°	356	353	362	360	360	316
65°	218	216	224	215	217	217
75°	91	89	91	84	87	97
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	799.1	799.1	799.1	799.1	799.1
2.5°	806.0	799.9	794.3	800.9	804.9
5°	793.4	791.6	793.7	791.4	810.5
7.5°	777.1	784.2	788.4	785.8	786.9
10°	768.5	766.0	775.2	781.6	780.6
12.5°	759.2	762.9	763.4	770.3	770.9
15°	759.7	750.9	755.6	759.5	759.8
17.5°	730.2	739.7	742.9	751.8	740.7
20°	726.6	719.7	726.6	735.8	734.3
22.5°	704.4	696.6	711.5	719.7	719.1
25°	679.2	682.9	694.1	703.1	701.7
27.5°	657.1	661.5	677.4	689.8	681.8
30°	640.1	637.9	651.4	662.5	668.7
32.5°	609.7	617.5	633.2	644.2	638.4
35°	591.2	593.0	606.7	620.7	620.3
37.5°	558.9	567.1	586.4	590.3	586.7
40°	531.4	539.5	556.9	561.2	559.4
42.5°	511.0	512.5	527.4	532.3	524.6
45°	475.6	484.5	492.6	505.3	493.3
47.5°	445.5	449.6	467.0	470.4	464.1
50°	418.2	419.6	437.1	432.8	428.7
52.5°	383.8	389.9	399.7	398.9	394.0
55°	355.5	353.2	362.5	360.0	359.9
57.5°	321.6	325.7	333.4	329.4	323.1
60°	289.8	289.9	292.7	288.3	287.5
62.5°	254.4	255.7	256.3	250.8	259.7
65°	218.4	215.5	224.0	215.4	216.9
67.5°	185.3	186.8	185.9	180.6	182.6
70°	151.7	153.5	152.2	146.1	148.0
72.5°	120.9	118.7	120.1	112.5	116.0
75°	90.9	89.0	90.7	84.3	87.2
77.5°	61.9	63.4	62.3	58.9	60.9
80°	40.9	39.7	39.7	37.8	38.2
82.5°	23.8	22.7	22.4	21.8	22.7
85°	11.1	10.8	11.0	10.7	10.3
87.5°	4.0	4.1	4.1	3.9	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)