

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: P588892

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588892
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-80-97-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

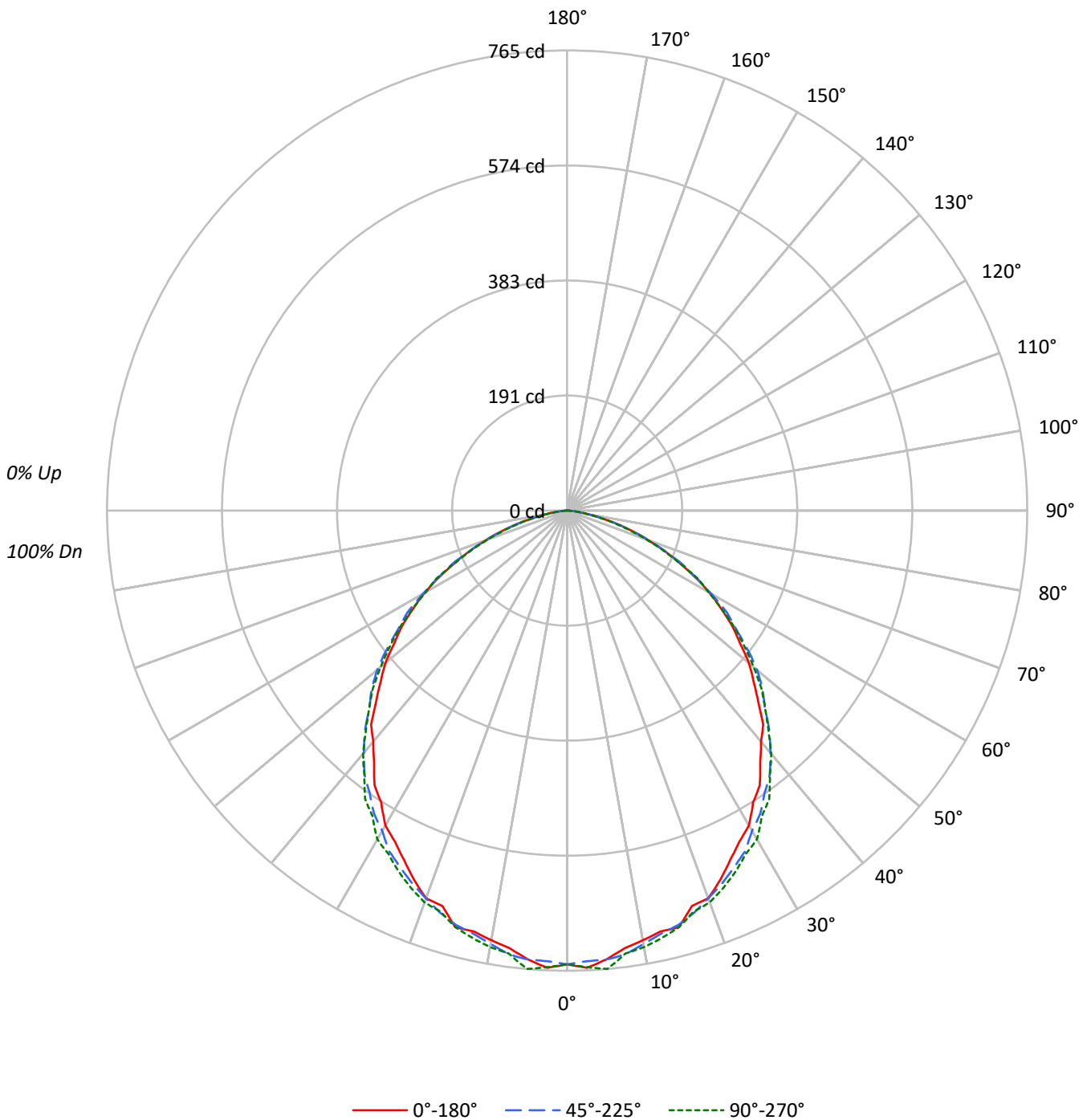
Lumens per Lamp: N/A
Luminaire Lumens: 1901.0 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2030	2030	2030
5°	2023	2024	2066
10°	1982	1999	2013
15°	1998	1987	1998
20°	1964	1964	1985
25°	1904	1945	1966
30°	1877	1910	1961
35°	1833	1881	1923
40°	1762	1847	1855
45°	1709	1769	1772
50°	1652	1727	1694
55°	1574	1605	1594
60°	1473	1487	1460
65°	1313	1346	1303
70°	1127	1130	1099
75°	892	890	856
80°	598	581	558
85°	324	321	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	3.7
10°-20°	201.1	10.6
20°-30°	301.3	15.8
30°-40°	357.1	18.8
40°-50°	357.7	18.8
50°-60°	303.7	16.0
60°-70°	204.7	10.8
70°-80°	90.0	4.7
80°-90°	14.6	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°	573.3	30.2
0°-40°	930.4	48.9
0°-60°	1591.7	83.7
0°-90°	1901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1901.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	749	747	749	747	765	71
15°	717	709	713	717	717	200
25°	641	645	655	664	662	296
35°	558	560	573	586	586	346
45°	449	457	465	477	466	347
55°	336	333	342	340	340	299
65°	206	203	211	203	205	205
75°	86	84	86	80	82	92
85°	10	10	10	10	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	754.3	754.3	754.3	754.3	754.3
2.5°	760.8	755.0	749.7	755.9	759.7
5°	748.9	747.2	749.2	747.0	765.0
7.5°	733.5	740.2	744.1	741.7	742.8
10°	725.3	723.0	731.7	737.7	736.8
12.5°	716.6	720.1	720.6	727.1	727.7
15°	717.1	708.8	713.2	716.9	717.2
17.5°	689.2	698.2	701.2	709.7	699.1
20°	685.8	679.3	685.8	694.5	693.1
22.5°	664.9	657.6	671.6	679.3	678.8
25°	641.1	644.6	655.1	663.7	662.3
27.5°	620.3	624.4	639.4	651.1	643.5
30°	604.2	602.1	614.8	625.3	631.2
32.5°	575.5	582.9	597.7	608.1	602.5
35°	558.0	559.7	572.6	585.9	585.5
37.5°	527.5	535.2	553.5	557.2	553.7
40°	501.5	509.2	525.7	529.7	528.0
42.5°	482.4	483.7	497.8	502.4	495.1
45°	449.0	457.3	464.9	476.9	465.6
47.5°	420.5	424.4	440.8	444.0	438.1
50°	394.7	396.1	412.5	408.5	404.6
52.5°	362.3	368.0	377.3	376.5	371.9
55°	335.6	333.4	342.1	339.8	339.7
57.5°	303.6	307.5	314.7	311.0	305.0
60°	273.6	273.7	276.3	272.1	271.3
62.5°	240.2	241.3	241.9	236.7	245.1
65°	206.2	203.4	211.4	203.3	204.7
67.5°	174.9	176.3	175.5	170.4	172.4
70°	143.2	144.9	143.6	137.9	139.7
72.5°	114.1	112.0	113.4	106.2	109.5
75°	85.8	84.0	85.6	79.6	82.3
77.5°	58.4	59.8	58.8	55.6	57.5
80°	38.6	37.5	37.5	35.6	36.0
82.5°	22.5	21.4	21.1	20.5	21.4
85°	10.5	10.2	10.4	10.1	9.7
87.5°	3.8	3.9	3.9	3.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)