

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: P588965

Luminaire Tested: **FMR-24-2-LD4-1STD-50-UNV-82-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588965
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-50-UNV-82-84-EDD
Description: 2X2 FMR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

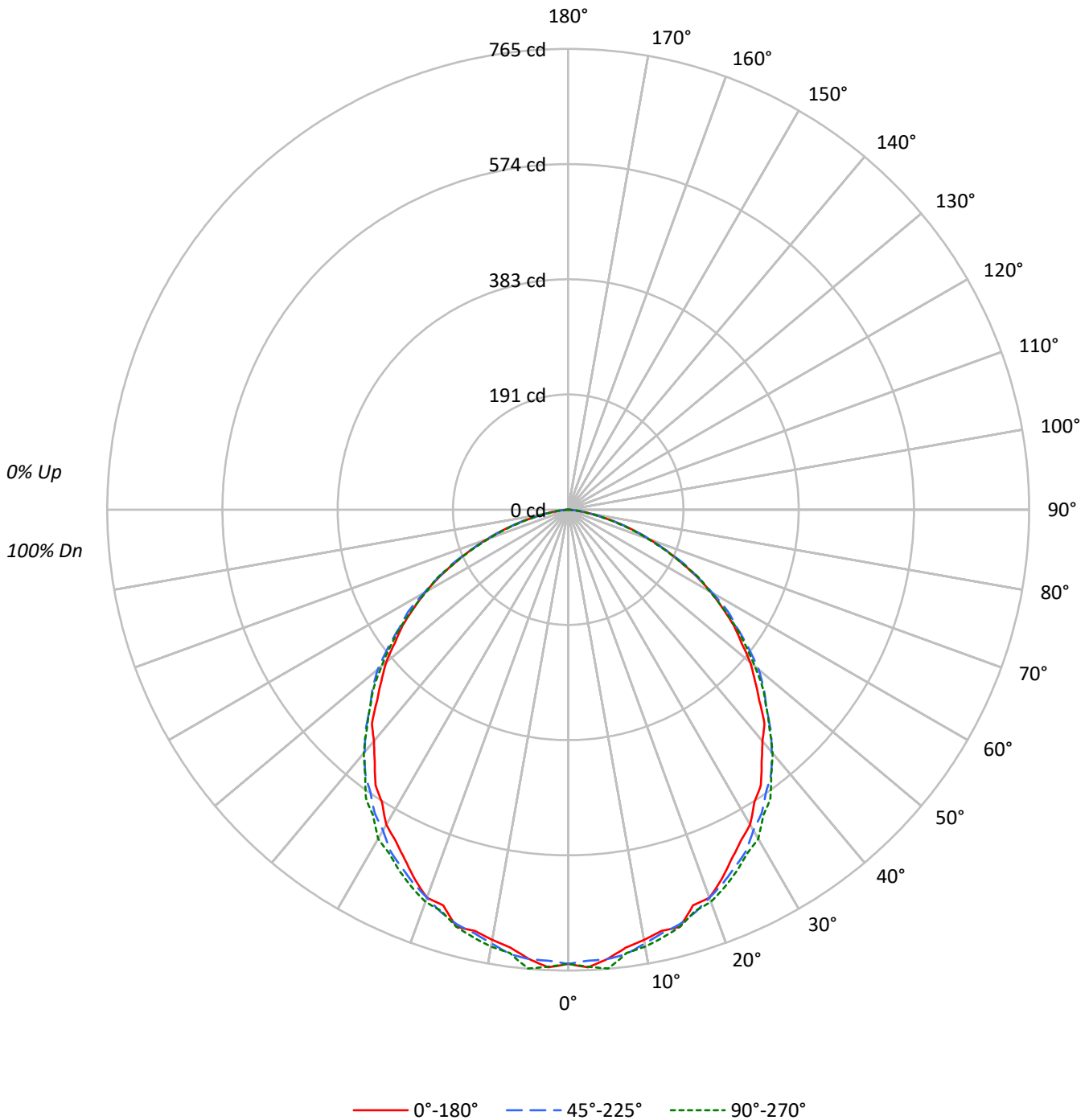
Lumens per Lamp: N/A
Luminaire Lumens: 1900.0 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2029	2029	2029
5°	2022	2023	2065
10°	1981	1998	2012
15°	1997	1986	1997
20°	1963	1963	1984
25°	1903	1944	1966
30°	1876	1909	1960
35°	1832	1880	1922
40°	1761	1846	1854
45°	1708	1768	1771
50°	1652	1726	1693
55°	1574	1604	1593
60°	1471	1486	1460
65°	1312	1345	1303
70°	1126	1130	1098
75°	892	890	855
80°	597	581	558
85°	324	321	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	3.7
10°-20°	201.0	10.6
20°-30°	301.1	15.8
30°-40°	356.9	18.8
40°-50°	357.5	18.8
50°-60°	303.5	16.0
60°-70°	204.6	10.8
70°-80°	89.9	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°	573.0	30.2
0°-40°	929.9	48.9
0°-60°	1590.9	83.7
0°-90°	1900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1900.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	748	747	749	747	765	71
15°	717	708	713	716	717	200
25°	641	644	655	663	662	296
35°	558	559	572	586	585	346
45°	449	457	465	477	465	347
55°	335	333	342	340	340	298
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°	753.9	753.9	753.9	753.9	753.9
2.5°	760.4	754.7	749.3	755.5	759.3
5°	748.5	746.8	748.8	746.6	764.6
7.5°	733.1	739.9	743.7	741.3	742.4
10°	725.0	722.6	731.3	737.3	736.4
12.5°	716.2	719.7	720.2	726.7	727.3
15°	716.7	708.4	712.8	716.5	716.8
17.5°	688.9	697.8	700.8	709.3	698.8
20°	685.4	678.9	685.4	694.1	692.7
22.5°	664.5	657.2	671.2	678.9	678.4
25°	640.8	644.3	654.8	663.3	662.0
27.5°	619.9	624.0	639.0	650.8	643.2
30°	603.9	601.8	614.5	625.0	630.8
32.5°	575.2	582.6	597.4	607.8	602.2
35°	557.7	559.4	572.3	585.6	585.2
37.5°	527.3	535.0	553.2	556.9	553.5
40°	501.3	509.0	525.4	529.4	527.8
42.5°	482.1	483.5	497.6	502.2	494.9
45°	448.7	457.1	464.7	476.7	465.4
47.5°	420.3	424.2	440.5	443.8	437.8
50°	394.5	395.9	412.3	408.3	404.4
52.5°	362.1	367.8	377.1	376.3	371.7
55°	335.4	333.2	341.9	339.6	339.5
57.5°	303.4	307.3	314.5	310.8	304.9
60°	273.4	273.5	276.1	272.0	271.2
62.5°	240.0	241.2	241.8	236.6	245.0
65°	206.1	203.3	211.3	203.2	204.6
67.5°	174.8	176.2	175.4	170.3	172.3
70°	143.1	144.8	143.6	137.8	139.6
72.5°	114.1	111.9	113.3	106.1	109.4
75°	85.8	84.0	85.6	79.5	82.2
77.5°	58.4	59.8	58.8	55.6	57.4
80°	38.5	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)