

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: P588893

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-81-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588893
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-81-84-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

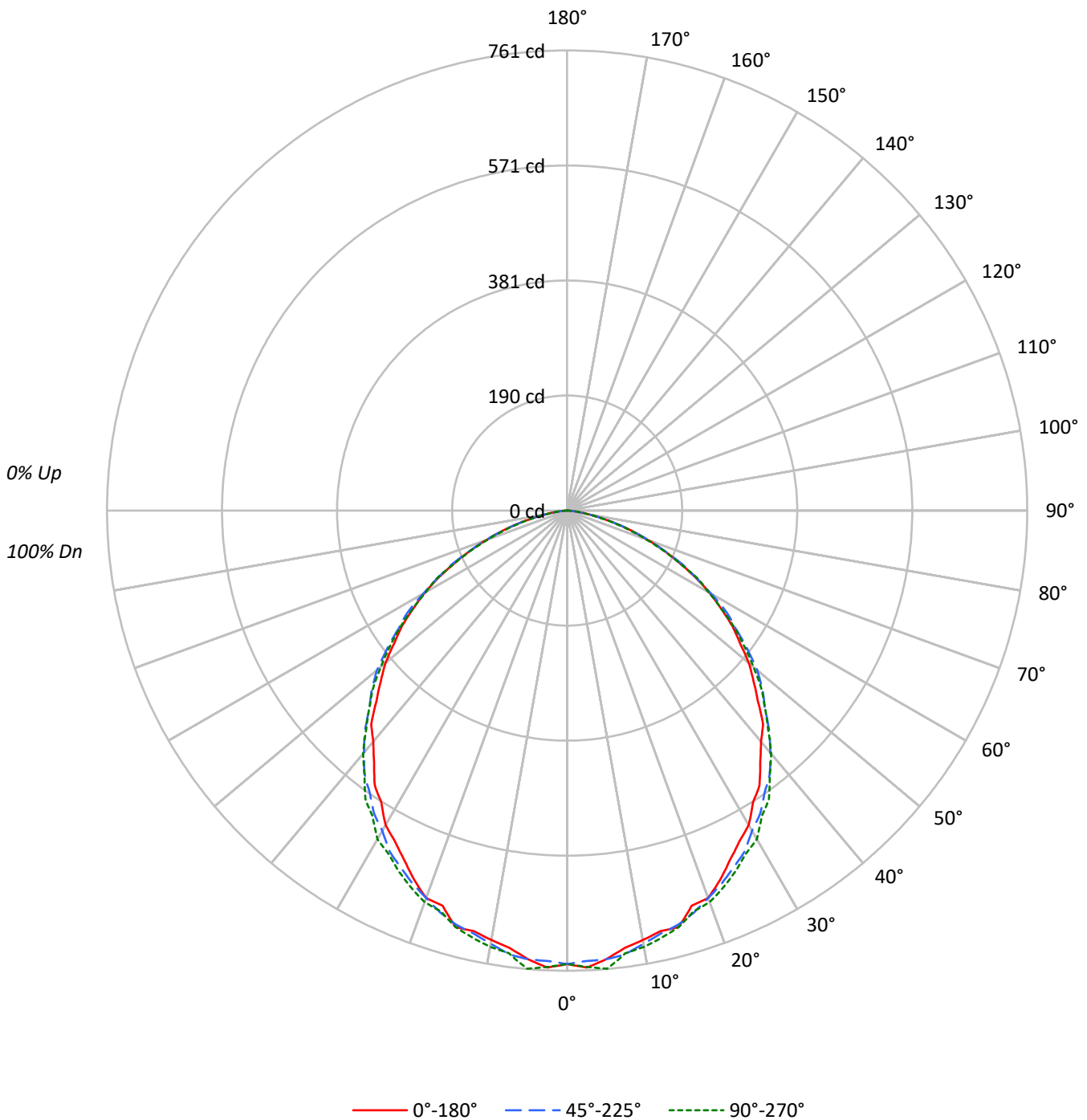
Lumens per Lamp: N/A
Luminaire Lumens: 1890.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	2018	2018	2018
5°	2011	2012	2055
10°	1970	1988	2002
15°	1986	1975	1986
20°	1952	1952	1973
25°	1893	1934	1955
30°	1867	1899	1950
35°	1823	1870	1912
40°	1751	1836	1844
45°	1699	1759	1762
50°	1643	1717	1684
55°	1566	1596	1584
60°	1464	1478	1452
65°	1305	1338	1296
70°	1120	1124	1092
75°	887	885	850
80°	594	578	555
85°	324	321	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.5	3.7
10°-20°	199.9	10.6
20°-30°	299.5	15.8
30°-40°	355.0	18.8
40°-50°	355.6	18.8
50°-60°	301.9	16.0
60°-70°	203.5	10.8
70°-80°	89.4	4.7
80°-90°	14.5	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°	570.0	30.2
0°-40°	925.0	48.9
0°-60°	1582.5	83.7
0°-90°	1890.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1890.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	745	743	745	743	761	70
15°	713	705	709	713	713	199
25°	637	641	651	660	658	295
35°	555	556	569	582	582	344
45°	446	455	462	474	463	345
55°	334	331	340	338	338	297
65°	205	202	210	202	204	204
75°	85	84	85	79	82	91
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°	749.9	749.9	749.9	749.9	749.9
2.5°	756.4	750.7	745.4	751.6	755.3
5°	744.6	742.8	744.9	742.6	760.6
7.5°	729.3	736.0	739.8	737.4	738.5
10°	721.1	718.8	727.4	733.4	732.6
12.5°	712.4	715.9	716.4	722.9	723.5
15°	712.9	704.7	709.0	712.7	713.0
17.5°	685.2	694.1	697.1	705.6	695.1
20°	681.8	675.3	681.8	690.5	689.1
22.5°	661.0	653.8	667.7	675.3	674.9
25°	637.4	640.9	651.3	659.9	658.5
27.5°	616.7	620.7	635.7	647.4	639.8
30°	600.7	598.7	611.3	621.7	627.5
32.5°	572.1	579.5	594.2	604.6	599.1
35°	554.8	556.4	569.3	582.5	582.1
37.5°	524.5	532.1	550.3	553.9	550.5
40°	498.6	506.3	522.7	526.6	525.0
42.5°	479.6	480.9	495.0	499.5	492.3
45°	446.4	454.7	462.2	474.1	462.9
47.5°	418.1	422.0	438.2	441.4	435.5
50°	392.4	393.8	410.1	406.2	402.3
52.5°	360.2	365.9	375.1	374.3	369.8
55°	333.7	331.4	340.1	337.8	337.7
57.5°	301.8	305.7	312.8	309.2	303.3
60°	272.0	272.1	274.7	270.5	269.8
62.5°	238.8	239.9	240.5	235.4	243.7
65°	205.0	202.3	210.2	202.2	203.5
67.5°	173.9	175.3	174.5	169.4	171.4
70°	142.3	144.1	142.8	137.1	138.8
72.5°	113.5	111.3	112.7	105.5	108.8
75°	85.3	83.6	85.1	79.1	81.8
77.5°	58.1	59.5	58.5	55.3	57.1
80°	38.3	37.3	37.3	35.4	35.8
82.5°	22.4	21.3	21.0	20.4	21.3
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)