

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: P588827

Luminaire Tested: **FMR-24-2-LD4-1LO-40-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588827
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-LD4-1LO-40-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

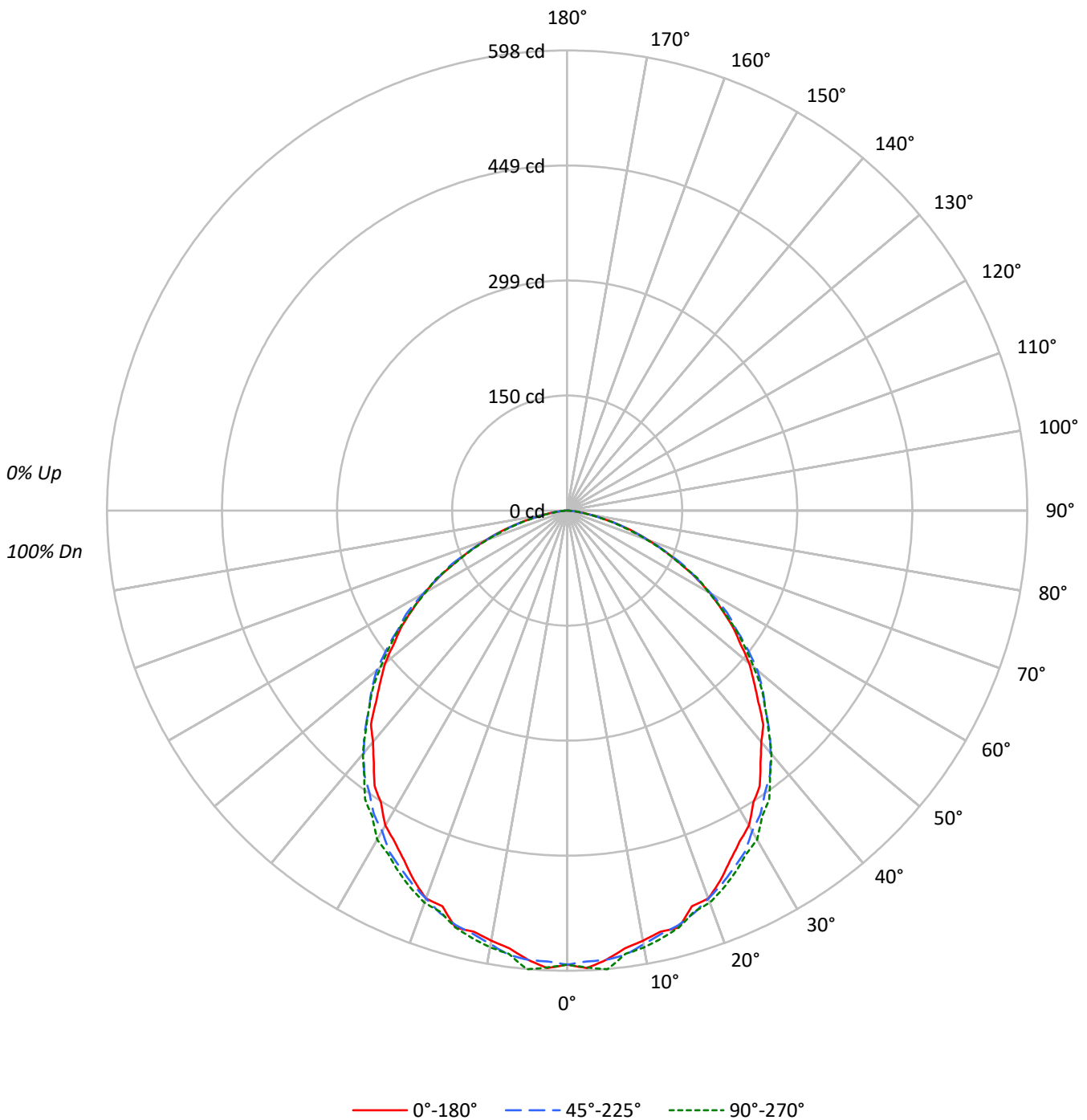
Lumens per Lamp: N/A
Luminaire Lumens: 1487.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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	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					100			
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41					41			
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32					32			
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1588	1588	1588
5°	1582	1583	1616
10°	1550	1564	1575
15°	1563	1554	1563
20°	1536	1536	1553
25°	1489	1522	1538
30°	1468	1494	1534
35°	1434	1471	1505
40°	1378	1444	1451
45°	1337	1384	1386
50°	1293	1351	1325
55°	1232	1255	1247
60°	1152	1163	1142
65°	1027	1053	1019
70°	881	884	859
75°	698	697	670
80°	468	454	437
85°	253	253	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.5	3.7
10°-20°	157.3	10.6
20°-30°	235.7	15.8
30°-40°	279.3	18.8
40°-50°	279.8	18.8
50°-60°	237.5	16.0
60°-70°	160.1	10.8
70°-80°	70.4	4.7
80°-90°	11.4	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°	448.4	30.2
0°-40°	727.7	48.9
0°-60°	1245.1	83.7
0°-90°	1487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	586	584	586	584	598	55
15°	561	554	558	561	561	156
25°	502	504	512	519	518	232
35°	436	438	448	458	458	271
45°	351	358	364	373	364	272
55°	262	261	268	266	266	234
65°	161	159	165	159	160	160
75°	67	66	67	62	64	72
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	590.0	590.0	590.0	590.0	590.0
2.5°	595.1	590.6	586.4	591.3	594.3
5°	585.8	584.4	586.0	584.3	598.4
7.5°	573.8	579.0	582.1	580.2	581.0
10°	567.4	565.6	572.3	577.1	576.4
12.5°	560.5	563.3	563.6	568.8	569.2
15°	560.9	554.4	557.9	560.8	561.0
17.5°	539.1	546.1	548.5	555.1	546.9
20°	536.5	531.3	536.5	543.2	542.2
22.5°	520.1	514.4	525.3	531.3	531.0
25°	501.5	504.2	512.5	519.2	518.1
27.5°	485.2	488.4	500.1	509.3	503.4
30°	472.6	471.0	480.9	489.1	493.7
32.5°	450.1	455.9	467.5	475.7	471.3
35°	436.5	437.8	447.9	458.3	458.0
37.5°	412.7	418.7	432.9	435.8	433.2
40°	392.3	398.3	411.2	414.3	413.0
42.5°	377.3	378.4	389.4	393.0	387.3
45°	351.2	357.7	363.7	373.0	364.2
47.5°	328.9	332.0	344.8	347.3	342.7
50°	308.8	309.8	322.7	319.6	316.5
52.5°	283.4	287.9	295.1	294.5	290.9
55°	262.5	260.8	267.6	265.8	265.7
57.5°	237.4	240.5	246.1	243.2	238.6
60°	214.0	214.1	216.1	212.8	212.2
62.5°	187.9	188.8	189.2	185.2	191.7
65°	161.3	159.1	165.4	159.1	160.1
67.5°	136.8	137.9	137.3	133.3	134.8
70°	112.0	113.4	112.4	107.9	109.2
72.5°	89.3	87.6	88.7	83.0	85.6
75°	67.1	65.7	67.0	62.2	64.4
77.5°	45.7	46.8	46.0	43.5	44.9
80°	30.2	29.3	29.3	27.9	28.2
82.5°	17.6	16.8	16.5	16.1	16.8
85°	8.2	8.0	8.2	7.9	7.6
87.5°	3.0	3.0	3.0	2.9	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)