

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: P588757

Luminaire Tested: **FMR-24-2-LD4-1HI-50-UNV-80-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588757
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-LD4-1HI-50-UNV-80-84-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

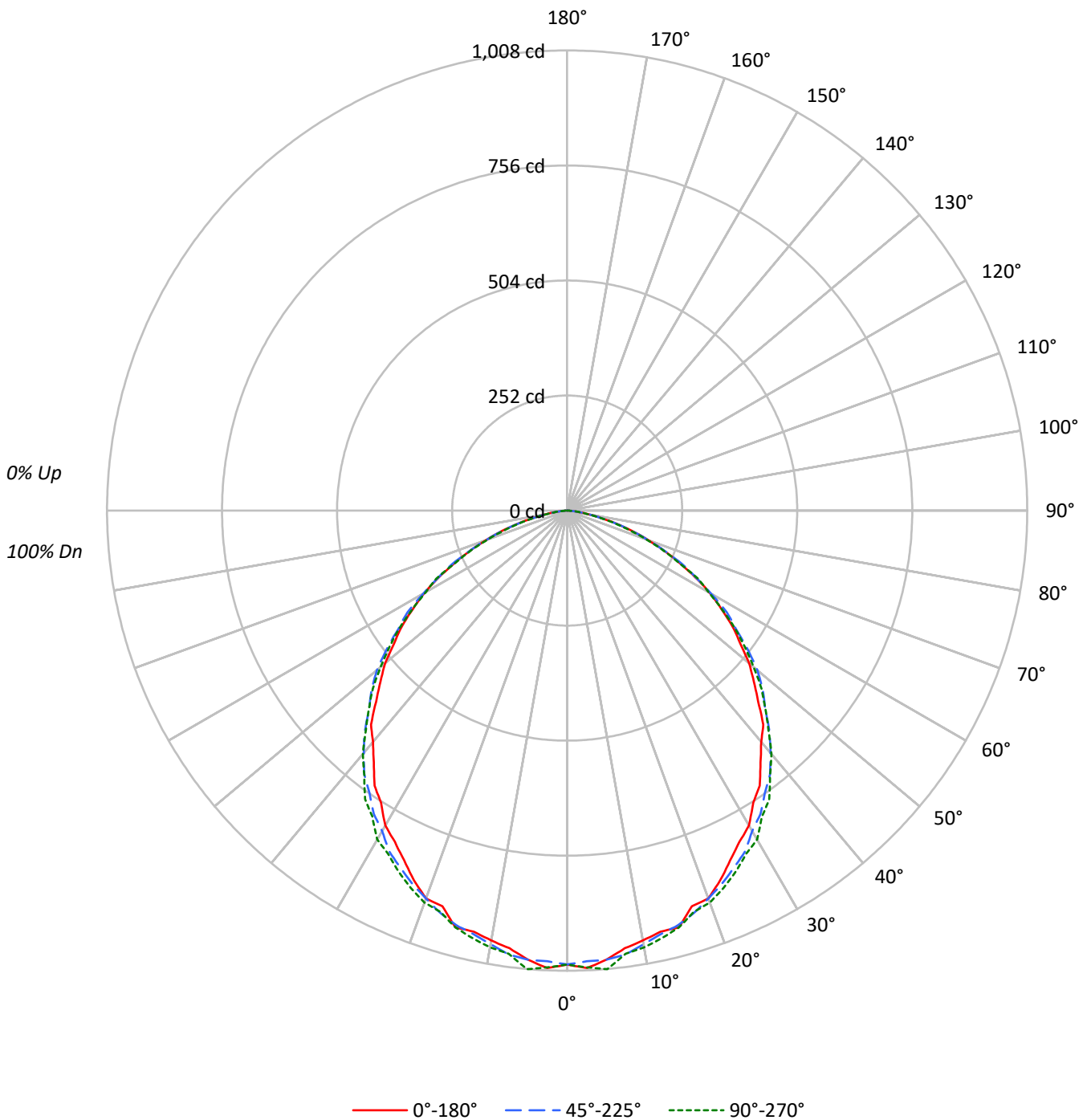
Lumens per Lamp: N/A
Luminaire Lumens: 2506.0 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	2676	2676	2676
5°	2667	2668	2724
10°	2613	2635	2654
15°	2634	2619	2634
20°	2589	2589	2617
25°	2509	2564	2592
30°	2475	2518	2585
35°	2417	2480	2535
40°	2323	2434	2445
45°	2252	2332	2336
50°	2178	2277	2233
55°	2076	2116	2101
60°	1941	1960	1925
65°	1731	1775	1719
70°	1485	1490	1448
75°	1176	1173	1128
80°	787	766	736
85°	429	423	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	3.7
10°-20°	265.1	10.6
20°-30°	397.1	15.8
30°-40°	470.7	18.8
40°-50°	471.6	18.8
50°-60°	400.3	16.0
60°-70°	269.9	10.8
70°-80°	118.6	4.7
80°-90°	19.3	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°	755.8	30.2
0°-40°	1226.4	48.9
0°-60°	2098.3	83.7
0°-90°	2506.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2506.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	987	985	988	985	1008	93
15°	945	934	940	945	945	263
25°	845	850	864	875	873	391
35°	736	738	755	772	772	457
45°	592	603	613	629	614	458
55°	442	440	451	448	448	394
65°	272	268	279	268	270	270
75°	113	111	113	105	108	121
85°	14	14	14	13	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	994.3	994.3	994.3	994.3	994.3
2.5°	1002.9	995.3	988.3	996.5	1001.5
5°	987.3	984.9	987.6	984.7	1008.4
7.5°	967.0	975.8	981.0	977.8	979.2
10°	956.2	953.1	964.5	972.5	971.3
12.5°	944.6	949.3	949.9	958.5	959.3
15°	945.3	934.4	940.1	945.0	945.4
17.5°	908.6	920.4	924.3	935.5	921.7
20°	904.1	895.5	904.1	915.5	913.7
22.5°	876.5	866.8	885.3	895.5	894.8
25°	845.1	849.8	863.6	874.9	873.1
27.5°	817.7	823.1	842.8	858.4	848.3
30°	796.5	793.8	810.5	824.3	832.0
32.5°	758.6	768.4	787.9	801.6	794.3
35°	735.6	737.8	754.9	772.3	771.8
37.5°	695.4	705.6	729.6	734.5	730.0
40°	661.2	671.3	693.0	698.3	696.1
42.5°	635.9	637.7	656.3	662.3	652.7
45°	591.8	602.9	612.9	628.7	613.8
47.5°	554.4	559.5	581.1	585.3	577.5
50°	520.3	522.1	543.8	538.6	533.4
52.5°	477.6	485.2	497.4	496.3	490.3
55°	442.4	439.5	451.0	447.9	447.8
57.5°	400.2	405.3	414.8	409.9	402.1
60°	360.6	360.8	364.2	358.7	357.7
62.5°	316.6	318.1	318.9	312.1	323.1
65°	271.8	268.2	278.7	268.1	269.9
67.5°	230.6	232.4	231.3	224.7	227.2
70°	188.7	191.0	189.4	181.8	184.1
72.5°	150.5	147.6	149.4	139.9	144.3
75°	113.1	110.8	112.8	104.9	108.5
77.5°	77.0	78.8	77.5	73.3	75.7
80°	50.8	49.4	49.4	47.0	47.5
82.5°	29.7	28.2	27.9	27.1	28.2
85°	13.9	13.5	13.7	13.4	12.8
87.5°	5.0	5.1	5.1	4.9	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)