

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: P589244

Luminaire Tested: **FMR-24-2-LD4-2STD-50-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589244
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-LD4-2STD-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

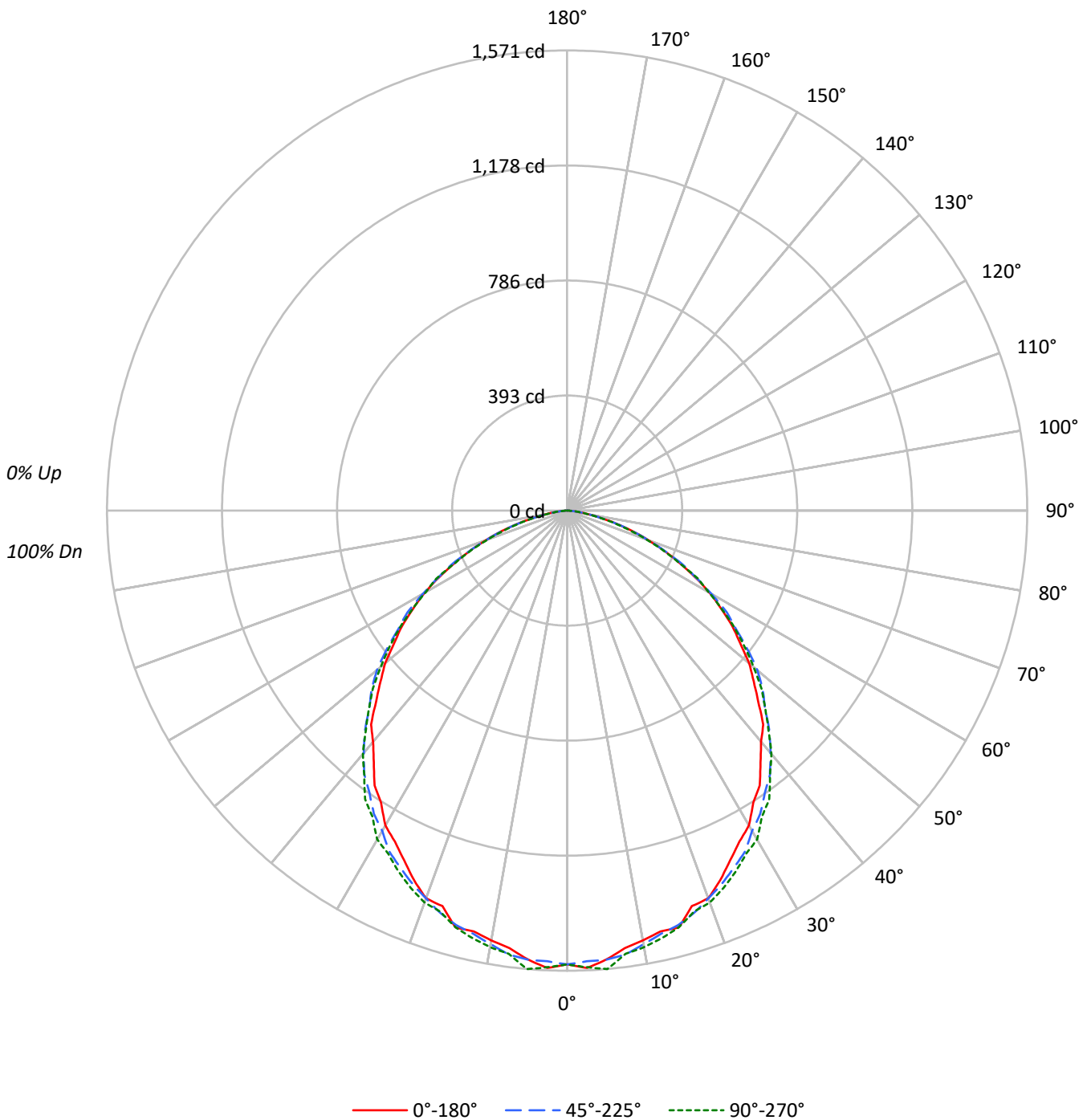
Lumens per Lamp: N/A
Luminaire Lumens: 3905.0 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	4169	4169	4169
5°	4156	4157	4245
10°	4071	4107	4136
15°	4104	4081	4104
20°	4034	4034	4077
25°	3910	3996	4040
30°	3856	3924	4029
35°	3766	3864	3951
40°	3619	3793	3810
45°	3510	3634	3640
50°	3394	3548	3480
55°	3234	3297	3274
60°	3024	3054	2999
65°	2697	2765	2677
70°	2314	2322	2257
75°	1832	1828	1757
80°	1227	1193	1147
85°	667	661	618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	3.7
10°-20°	413.1	10.6
20°-30°	618.8	15.8
30°-40°	733.5	18.8
40°-50°	734.8	18.8
50°-60°	623.7	16.0
60°-70°	420.5	10.8
70°-80°	184.8	4.7
80°-90°	30.0	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°	1177.7	30.2
0°-40°	1911.1	48.9
0°-60°	3269.7	83.7
0°-90°	3905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1549	1549	1549	1549	1549	
5°	1538	1535	1539	1534	1571	145
15°	1473	1456	1465	1473	1473	410
25°	1317	1324	1346	1363	1361	609
35°	1146	1150	1176	1204	1203	712
45°	922	939	955	980	956	713
55°	689	685	703	698	698	613
65°	424	418	434	418	420	421
75°	176	173	176	163	169	189
85°	22	21	21	21	20	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1549.4	1549.4	1549.4	1549.4	1549.4
2.5°	1562.8	1551.0	1540.0	1552.8	1560.6
5°	1538.4	1534.8	1539.0	1534.4	1571.4
7.5°	1506.8	1520.6	1528.6	1523.6	1525.8
10°	1490.0	1485.2	1503.0	1515.4	1513.6
12.5°	1472.0	1479.2	1480.2	1493.6	1494.8
15°	1473.0	1456.0	1465.0	1472.6	1473.2
17.5°	1415.8	1434.2	1440.4	1457.8	1436.2
20°	1408.8	1395.4	1408.8	1426.6	1423.8
22.5°	1365.8	1350.8	1379.6	1395.4	1394.4
25°	1316.9	1324.1	1345.8	1363.4	1360.6
27.5°	1274.1	1282.5	1313.3	1337.5	1321.9
30°	1241.1	1236.9	1262.9	1284.5	1296.5
32.5°	1182.1	1197.3	1227.7	1249.1	1237.7
35°	1146.3	1149.7	1176.3	1203.5	1202.7
37.5°	1083.7	1099.5	1136.9	1144.5	1137.5
40°	1030.3	1046.1	1079.9	1088.1	1084.7
42.5°	990.9	993.7	1022.7	1032.1	1017.1
45°	922.2	939.4	955.0	979.7	956.5
47.5°	863.8	871.8	905.4	912.0	899.8
50°	810.8	813.6	847.4	839.2	831.2
52.5°	744.2	756.0	775.0	773.4	764.0
55°	689.4	684.8	702.8	698.0	697.8
57.5°	623.6	631.6	646.4	638.8	626.6
60°	561.9	562.1	567.5	558.9	557.3
62.5°	493.3	495.7	496.9	486.3	503.5
65°	423.5	417.9	434.3	417.7	420.5
67.5°	359.3	362.1	360.5	350.1	354.1
70°	294.1	297.7	295.1	283.3	286.9
72.5°	234.5	230.1	232.9	218.1	224.9
75°	176.2	172.6	175.8	163.4	169.0
77.5°	120.0	122.8	120.8	114.2	118.0
80°	79.2	77.0	77.0	73.2	74.0
82.5°	46.2	44.0	43.4	42.2	44.0
85°	21.6	21.0	21.4	20.8	20.0
87.5°	7.8	8.0	8.0	7.6	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)