

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: P589178

Luminaire Tested: **FMR-24-2-LD4-2STD-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589178
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-35-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

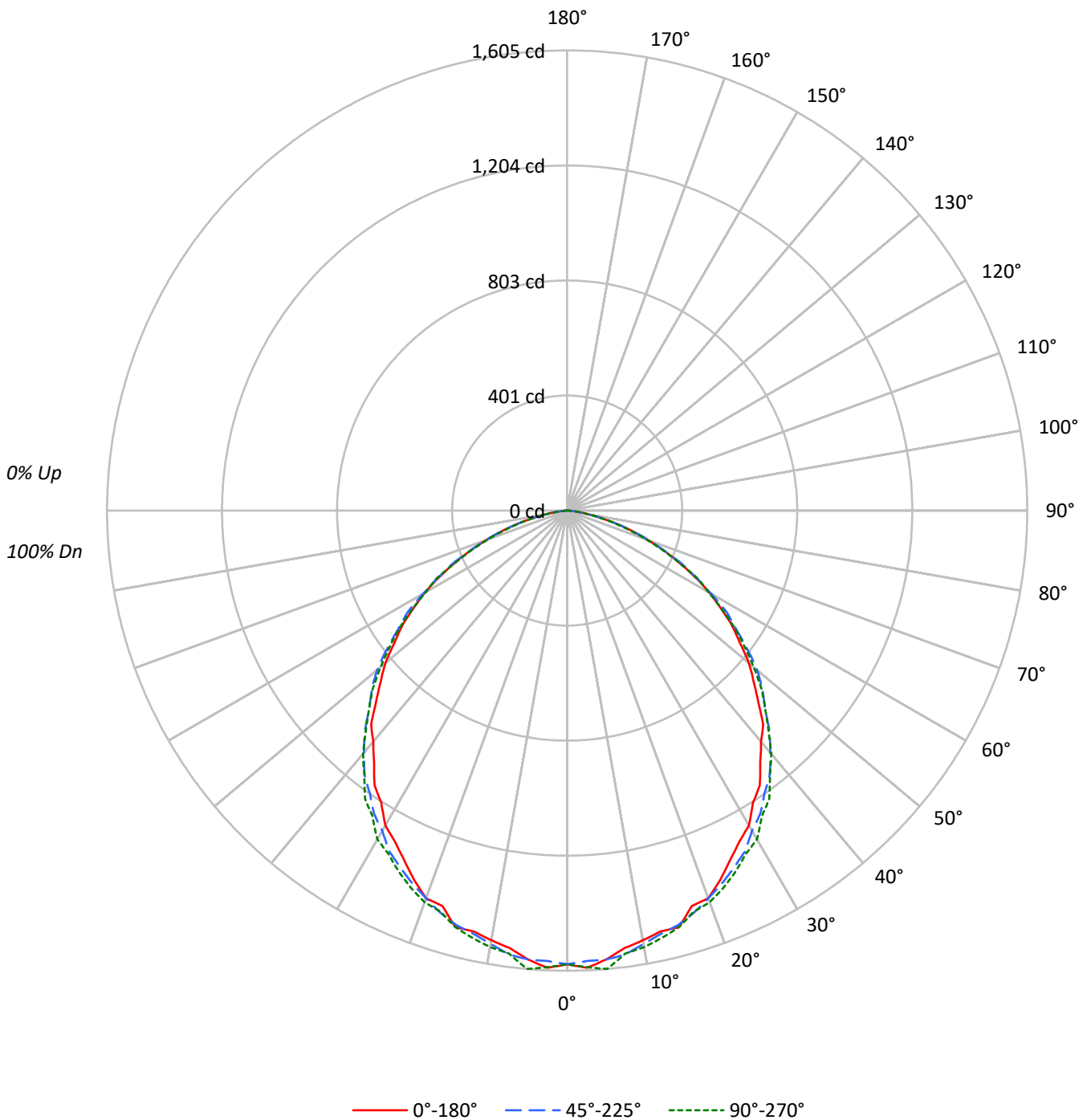
Lumens per Lamp: N/A
Luminaire Lumens: 3988.0 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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°	4258	4258	4258
5°	4244	4246	4335
10°	4158	4194	4224
15°	4191	4168	4191
20°	4120	4120	4164
25°	3993	4081	4126
30°	3938	4008	4114
35°	3846	3946	4035
40°	3696	3874	3891
45°	3584	3712	3717
50°	3466	3623	3554
55°	3303	3367	3343
60°	3089	3119	3063
65°	2754	2824	2734
70°	2363	2371	2305
75°	1871	1867	1795
80°	1254	1220	1172
85°	682	676	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.7
10°-20°	421.8	10.6
20°-30°	632.0	15.8
30°-40°	749.1	18.8
40°-50°	750.4	18.8
50°-60°	637.0	16.0
60°-70°	429.5	10.8
70°-80°	188.7	4.7
80°-90°	30.7	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°	1202.7	30.2
0°-40°	1951.7	48.9
0°-60°	3339.2	83.7
0°-90°	3988.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3988.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1571	1567	1572	1567	1605	148
15°	1504	1487	1496	1504	1504	419
25°	1345	1352	1374	1392	1390	622
35°	1171	1174	1201	1229	1228	727
45°	942	959	975	1000	977	729
55°	704	699	718	713	713	626
65°	432	427	444	427	429	430
75°	180	176	180	167	173	193
85°	22	22	22	21	20	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.3	1582.3	1582.3	1582.3	1582.3
2.5°	1596.0	1584.0	1572.7	1585.8	1593.8
5°	1571.1	1567.4	1571.7	1567.0	1604.8
7.5°	1538.8	1552.9	1561.1	1556.0	1558.2
10°	1521.7	1516.8	1534.9	1547.6	1545.8
12.5°	1503.3	1510.6	1511.6	1525.3	1526.6
15°	1504.3	1486.9	1496.1	1503.9	1504.5
17.5°	1445.9	1464.7	1471.0	1488.8	1466.7
20°	1438.7	1425.0	1438.7	1456.9	1454.0
22.5°	1394.8	1379.5	1408.9	1425.0	1424.0
25°	1344.9	1352.3	1374.4	1392.3	1389.5
27.5°	1301.2	1309.8	1341.3	1366.0	1350.0
30°	1267.5	1263.2	1289.8	1311.8	1324.1
32.5°	1207.2	1222.8	1253.8	1275.7	1264.0
35°	1170.7	1174.1	1201.3	1229.1	1228.3
37.5°	1106.7	1122.9	1161.1	1168.8	1161.7
40°	1052.2	1068.3	1102.8	1111.2	1107.7
42.5°	1011.9	1014.8	1044.4	1054.0	1038.7
45°	941.8	959.4	975.3	1000.5	976.8
47.5°	882.2	890.4	924.7	931.4	919.0
50°	828.0	830.9	865.4	857.1	848.9
52.5°	760.0	772.1	791.5	789.8	780.2
55°	704.0	699.3	717.7	712.8	712.6
57.5°	636.8	645.0	660.1	652.3	639.9
60°	573.9	574.1	579.6	570.8	569.2
62.5°	503.8	506.3	507.5	496.7	514.2
65°	432.5	426.8	443.5	426.6	429.4
67.5°	366.9	369.8	368.2	357.5	361.6
70°	300.3	304.0	301.3	289.3	293.0
72.5°	239.4	235.0	237.8	222.7	229.6
75°	180.0	176.3	179.6	166.9	172.6
77.5°	122.6	125.4	123.4	116.7	120.5
80°	80.9	78.7	78.7	74.8	75.6
82.5°	47.2	44.9	44.3	43.1	44.9
85°	22.1	21.5	21.9	21.2	20.4
87.5°	8.0	8.2	8.2	7.8	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)