

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: P588979

Luminaire Tested: **FMR-24-2-LD4-1STD-50-UNV-93-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588979
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-50-UNV-93-96-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

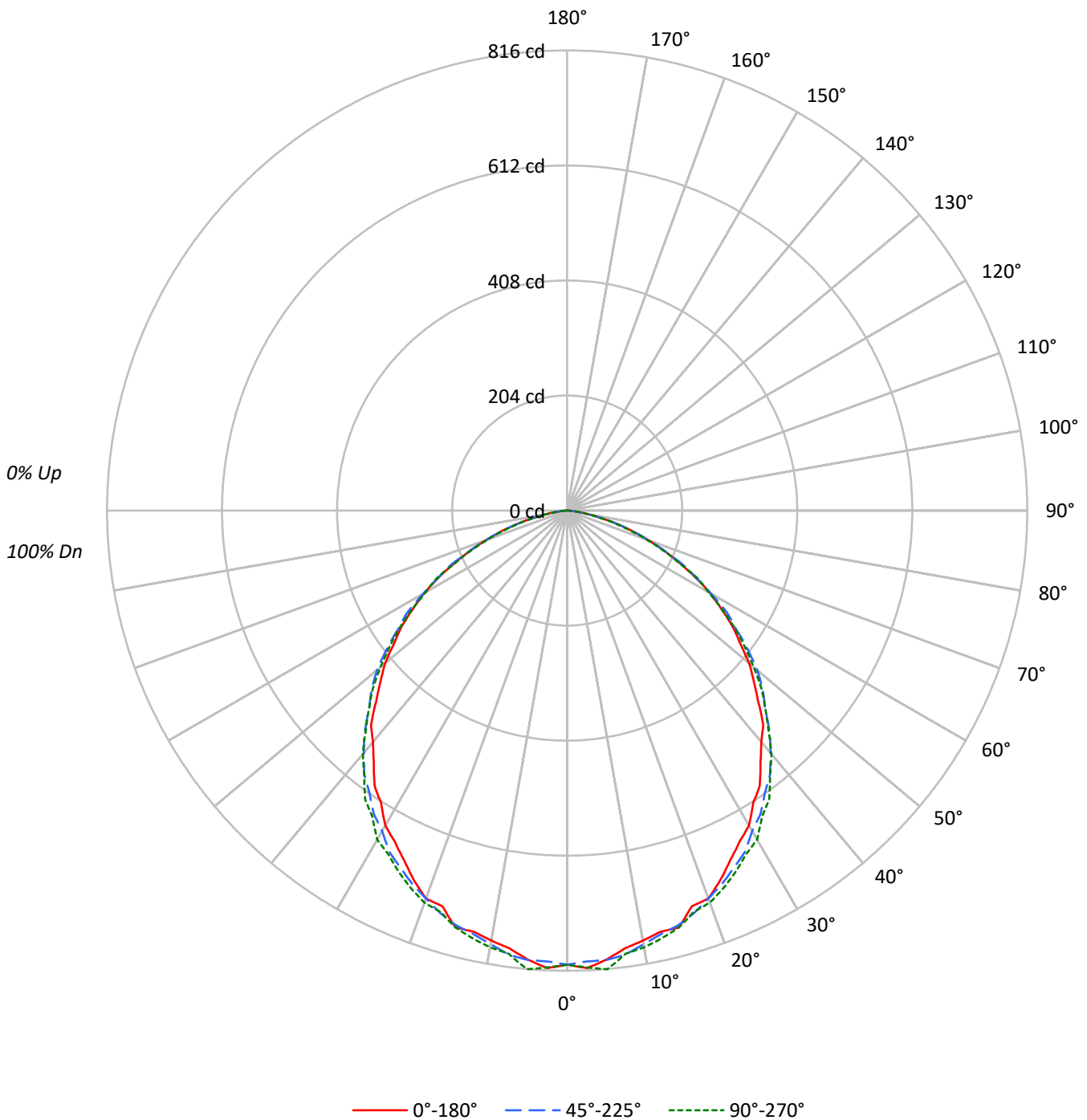
Lumens per Lamp: N/A
Luminaire Lumens: 2029.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P588979

CATALOG NUMBER: FMR-24-2-LD4-1STD-50-UNV-93-96-EDD

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°	2167	2167	2167
5°	2159	2160	2206
10°	2115	2134	2149
15°	2132	2121	2133
20°	2096	2096	2119
25°	2032	2076	2099
30°	2004	2039	2093
35°	1957	2008	2053
40°	1880	1971	1980
45°	1824	1888	1891
50°	1764	1843	1808
55°	1681	1713	1701
60°	1572	1587	1559
65°	1401	1437	1391
70°	1202	1206	1173
75°	952	950	913
80°	638	620	597
85°	346	343	321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	3.7
10°-20°	214.6	10.6
20°-30°	321.5	15.8
30°-40°	381.1	18.8
40°-50°	381.8	18.8
50°-60°	324.1	16.0
60°-70°	218.5	10.8
70°-80°	96.0	4.7
80°-90°	15.6	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°	611.9	30.2
0°-40°	993.0	48.9
0°-60°	1698.9	83.7
0°-90°	2029.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	799	798	800	797	816	75
15°	765	756	761	765	766	213
25°	684	688	699	708	707	316
35°	596	597	611	625	625	370
45°	479	488	496	509	497	371
55°	358	356	365	363	363	319
65°	220	217	226	217	218	219
75°	92	90	91	85	88	98
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.1	805.1	805.1	805.1	805.1
2.5°	812.0	805.9	800.2	806.8	810.9
5°	799.3	797.5	799.7	797.3	816.5
7.5°	782.9	790.1	794.2	791.6	792.8
10°	774.2	771.7	780.9	787.4	786.4
12.5°	764.8	768.6	769.1	776.1	776.7
15°	765.3	756.5	761.2	765.1	765.5
17.5°	735.6	745.2	748.4	757.4	746.2
20°	732.0	725.0	732.0	741.2	739.8
22.5°	709.6	701.8	716.8	725.0	724.5
25°	684.3	688.0	699.2	708.4	706.9
27.5°	662.0	666.4	682.4	695.0	686.9
30°	644.9	642.7	656.2	667.4	673.7
32.5°	614.2	622.1	637.9	649.0	643.1
35°	595.6	597.4	611.2	625.3	624.9
37.5°	563.1	571.3	590.7	594.7	591.0
40°	535.3	543.5	561.1	565.4	563.6
42.5°	514.8	516.3	531.4	536.3	528.5
45°	479.2	488.1	496.2	509.0	497.0
47.5°	448.8	453.0	470.5	473.9	467.5
50°	421.3	422.7	440.3	436.1	431.9
52.5°	386.7	392.8	402.7	401.9	397.0
55°	358.2	355.8	365.2	362.7	362.6
57.5°	324.0	328.2	335.8	331.9	325.6
60°	292.0	292.1	294.9	290.4	289.6
62.5°	256.3	257.6	258.2	252.7	261.6
65°	220.1	217.1	225.7	217.0	218.5
67.5°	186.7	188.1	187.3	181.9	184.0
70°	152.8	154.7	153.3	147.2	149.1
72.5°	121.8	119.5	121.0	113.3	116.8
75°	91.6	89.7	91.4	84.9	87.8
77.5°	62.4	63.8	62.8	59.4	61.3
80°	41.2	40.0	40.0	38.0	38.5
82.5°	24.0	22.9	22.6	21.9	22.9
85°	11.2	10.9	11.1	10.8	10.4
87.5°	4.1	4.2	4.2	3.9	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)