

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: P545246

Luminaire Tested: **FMR-12-2-LD4-1HI-35-UNV-80-97-EDD**

Issue Date: 6/15/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P545246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 6/15/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-12-2-LD4-1HI-35-UNV-80-97-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

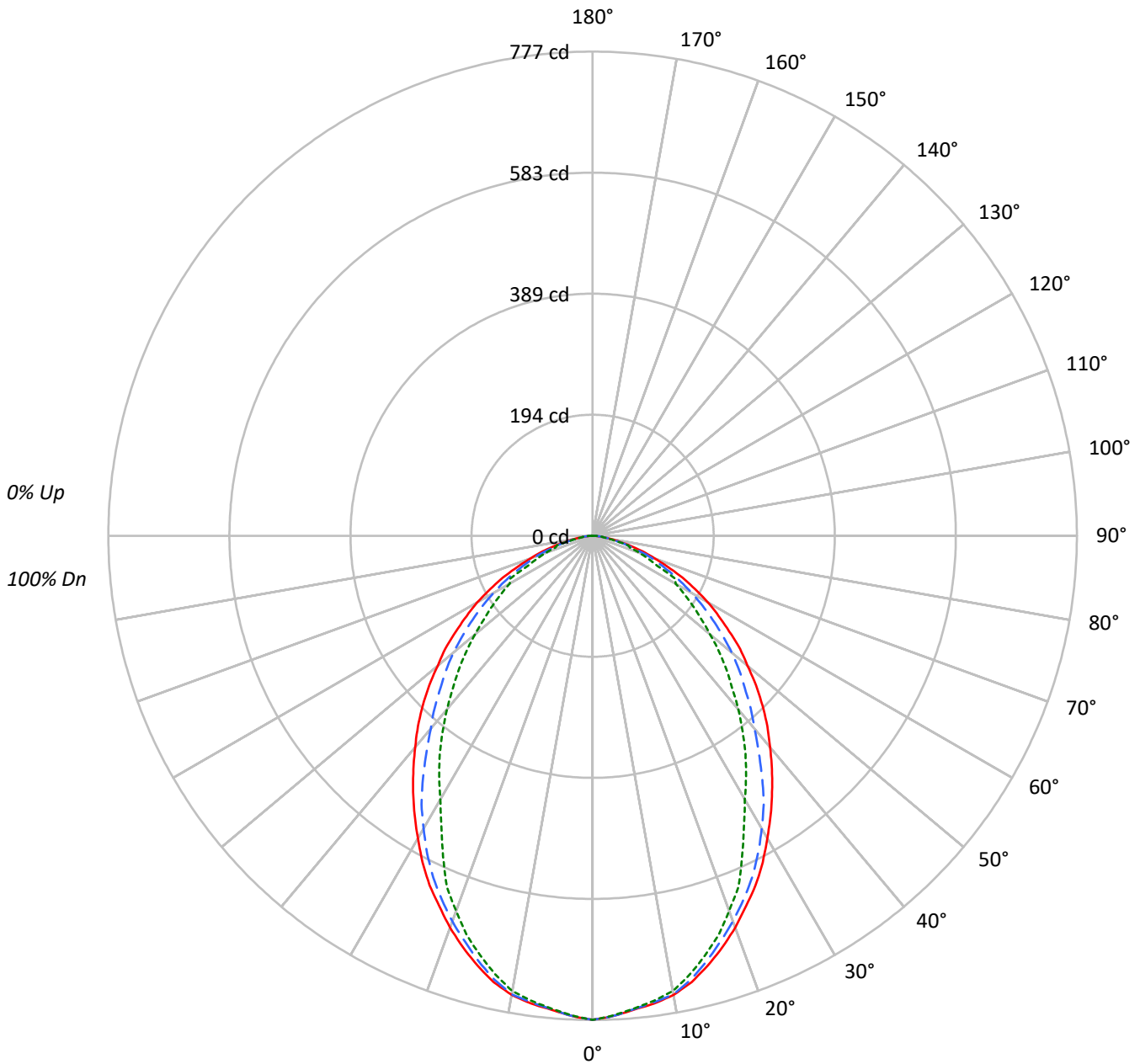
Lumens per Lamp: N/A
Luminaire Lumens: 1525.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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: P545246

CATALOG NUMBER: FMR-12-2-LD4-1HI-35-UNV-80-97-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P545246

CATALOG NUMBER: FMR-12-2-LD4-1HI-35-UNV-80-97-EDD

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	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75					75			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65					65			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44					44			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40					40			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36					36			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33					33			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4181	4181	4181
5°	4124	4119	4114
10°	4088	4083	4054
15°	3978	3938	3883
20°	3832	3770	3667
25°	3675	3594	3371
30°	3483	3371	3036
35°	3298	3116	2809
40°	3110	2839	2555
45°	2933	2625	2310
50°	2714	2436	2061
55°	2511	2208	1846
60°	2300	1972	1653
65°	2025	1727	1465
70°	1668	1512	1243
75°	1327	1158	1214
80°	890	834	778
85°	556	667	778



TEST NUMBER: P545246

CATALOG NUMBER: FMR-12-2-LD4-1HI-35-UNV-80-97-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	4.7
10°-20°	198.5	13.0
20°-30°	274.7	18.0
30°-40°	293.0	19.2
40°-50°	267.3	17.5
50°-60°	209.4	13.7
60°-70°	136.5	8.9
70°-80°	60.5	4.0
80°-90°	13.0	0.9
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°	545.5	35.8
0°-40°	838.5	55.0
0°-60°	1315.1	86.2
0°-90°	1525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	763	762	762	762	762	72
15°	714	714	707	700	697	201
25°	619	615	605	584	568	284
35°	502	498	474	438	428	314
45°	385	377	345	316	304	297
55°	268	260	235	207	197	240
65°	159	150	136	138	115	157
75°	64	59	56	53	58	68
85°	9	10	11	12	13	12
90°	0	0	0	0	0	



TEST NUMBER: P545246

CATALOG NUMBER: FMR-12-2-LD4-1HI-35-UNV-80-97-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.8	776.8	776.8	776.8	776.8
2.5°	771.4	771.4	771.4	770.5	770.5
5°	763.3	762.4	762.4	761.5	761.5
7.5°	757.1	756.2	755.3	754.4	752.6
10°	748.1	748.1	747.2	742.7	741.8
12.5°	733.7	732.8	729.2	722.9	721.1
15°	714.0	714.0	706.8	699.6	696.9
17.5°	692.4	691.5	682.5	675.3	671.7
20°	669.0	667.3	658.3	646.6	640.3
22.5°	643.0	643.0	632.2	617.0	610.7
25°	618.8	615.2	605.3	583.7	567.6
27.5°	590.9	585.5	574.8	544.2	525.4
30°	560.4	557.7	542.4	502.9	488.5
32.5°	531.6	527.2	511.0	469.7	458.0
35°	502.0	498.4	474.2	438.2	427.5
37.5°	472.4	467.9	437.4	408.6	395.1
40°	442.7	437.4	404.1	378.1	363.7
42.5°	414.9	407.7	375.4	347.5	331.4
45°	385.3	377.2	344.9	316.1	303.5
47.5°	355.6	348.4	318.8	289.2	274.8
50°	324.2	317.9	291.0	261.3	246.1
52.5°	298.2	288.3	262.2	232.6	220.0
55°	267.6	259.5	235.3	207.4	196.7
57.5°	239.8	231.7	209.2	183.2	174.2
60°	213.7	202.1	183.2	160.8	153.6
62.5°	185.0	176.0	159.9	141.0	150.0
65°	159.0	150.0	135.6	138.3	115.0
67.5°	130.2	125.7	113.2	100.6	97.0
70°	106.0	100.6	96.1	82.6	79.0
72.5°	84.4	79.0	72.7	65.6	62.9
75°	63.8	59.3	55.7	53.0	58.4
77.5°	44.0	42.2	39.5	36.8	35.9
80°	28.7	27.8	26.9	26.0	25.1
82.5°	17.1	17.1	17.1	17.1	17.1
85°	9.0	9.9	10.8	11.7	12.6
87.5°	5.4	5.4	6.3	7.2	8.1
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)