

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P560375

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-80-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560375
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-12-2-LD4-2LO-35-UNV-80-87-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

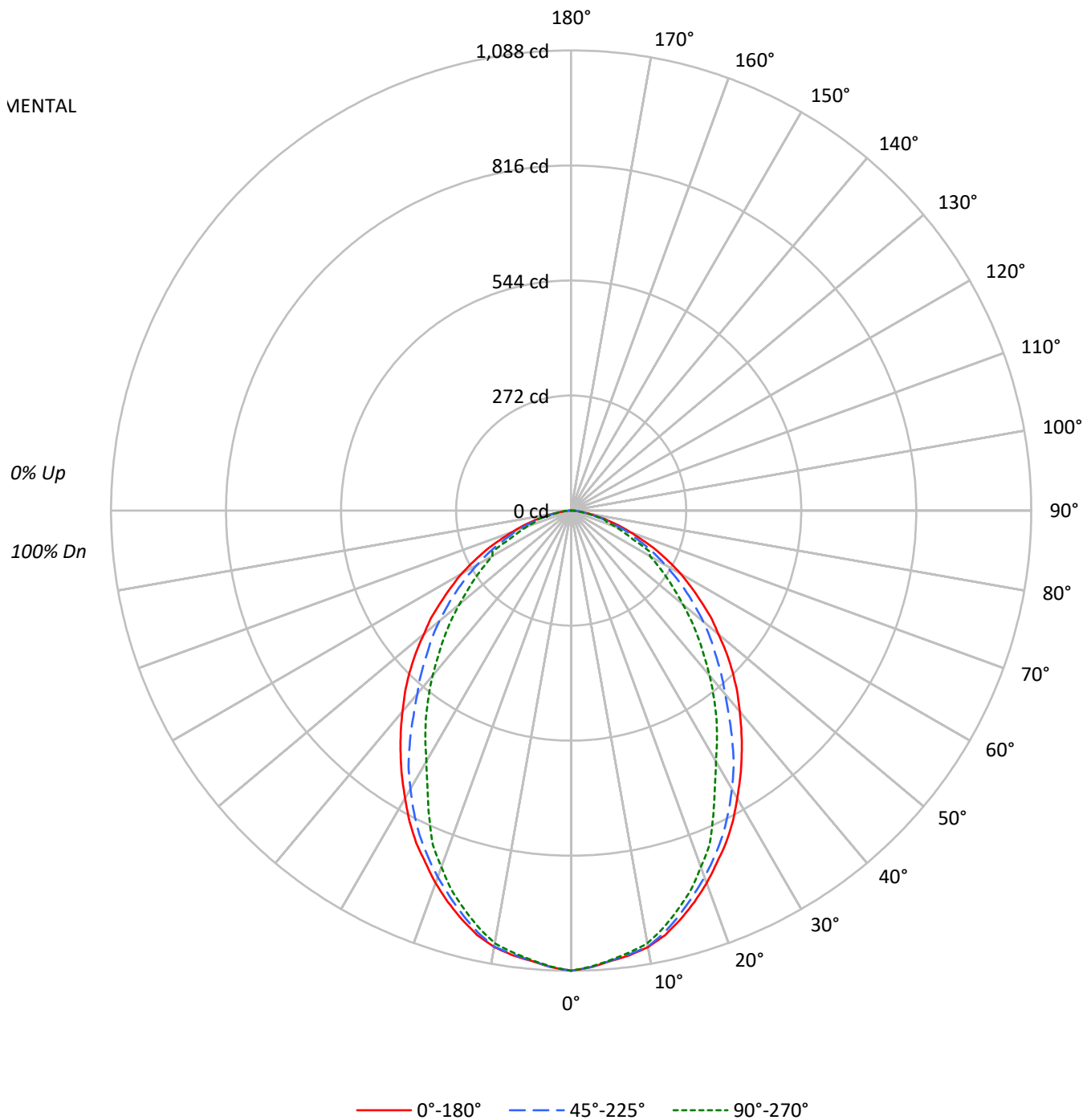
Lumens per Lamp: N/A
Luminaire Lumens: 2136.0 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V):
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: 24 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	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				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77					75				
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67					65				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58					56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52					50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46					44				
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42					40				
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38					36				
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34					33				
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32					30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5856	5856	5856
5°	5776	5769	5763
10°	5726	5719	5678
15°	5572	5516	5439
20°	5367	5281	5137
25°	5147	5035	4721
30°	4878	4721	4253
35°	4619	4364	3934
40°	4357	3977	3579
45°	4107	3676	3236
50°	3802	3412	2886
55°	3517	3093	2585
60°	3223	2762	2315
65°	2835	2418	2050
70°	2335	2118	1742
75°	1857	1622	1701
80°	1249	1168	1091
85°	778	932	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4107 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	4.7
10°-20°	278.0	13.0
20°-30°	384.8	18.0
30°-40°	410.3	19.2
40°-50°	374.3	17.5
50°-60°	293.3	13.7
60°-70°	191.1	8.9
70°-80°	84.7	4.0
80°-90°	18.2	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°	764.1	35.8
0°-40°	1174.4	55.0
0°-60°	1842.0	86.2
0°-90°	2136.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2136.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1069	1068	1068	1067	1067	101
15°	1000	1000	990	980	976	281
25°	867	862	848	818	795	398
35°	703	698	664	614	599	440
45°	540	528	483	443	425	416
55°	375	364	330	291	276	336
65°	223	210	190	194	161	219
75°	89	83	78	74	82	96
85°	13	14	15	16	18	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.0	1088.0	1088.0	1088.0	1088.0
2.5°	1080.5	1080.5	1080.5	1079.2	1079.2
5°	1069.2	1067.9	1067.9	1066.7	1066.7
7.5°	1060.4	1059.1	1057.9	1056.6	1054.1
10°	1047.8	1047.8	1046.5	1040.3	1039.0
12.5°	1027.7	1026.4	1021.4	1012.6	1010.1
15°	1000.0	1000.0	989.9	979.9	976.1
17.5°	969.8	968.6	956.0	945.9	940.9
20°	937.1	934.6	922.0	905.7	896.9
22.5°	900.6	900.6	885.5	864.2	855.3
25°	866.7	861.6	847.8	817.6	795.0
27.5°	827.7	820.1	805.0	762.3	735.8
30°	784.9	781.1	759.7	704.4	684.3
32.5°	744.7	738.4	715.7	657.9	641.5
35°	703.1	698.1	664.2	613.8	598.7
37.5°	661.6	655.3	612.6	572.3	553.5
40°	620.1	612.6	566.0	529.6	509.4
42.5°	581.1	571.1	525.8	486.8	464.2
45°	539.6	528.3	483.0	442.8	425.2
47.5°	498.1	488.1	446.5	405.0	384.9
50°	454.1	445.3	407.5	366.0	344.7
52.5°	417.6	403.8	367.3	325.8	308.2
55°	374.8	363.5	329.6	290.6	275.5
57.5°	335.8	324.5	293.1	256.6	244.0
60°	299.4	283.0	256.6	225.2	215.1
62.5°	259.1	246.5	223.9	197.5	210.1
65°	222.6	210.1	189.9	193.7	161.0
67.5°	182.4	176.1	158.5	140.9	135.8
70°	148.4	140.9	134.6	115.7	110.7
72.5°	118.2	110.7	101.9	91.8	88.1
75°	89.3	83.0	78.0	74.2	81.8
77.5°	61.6	59.1	55.3	51.6	50.3
80°	40.3	39.0	37.7	36.5	35.2
82.5°	23.9	23.9	23.9	23.9	23.9
85°	12.6	13.8	15.1	16.4	17.6
87.5°	7.5	7.5	8.8	10.1	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)