

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: P558521

Luminaire Tested: FSR-12-1-LD4-1HI-40-UNV-80-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558521
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-12-1-LD4-1HI-40-UNV-80-88-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 823.0 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

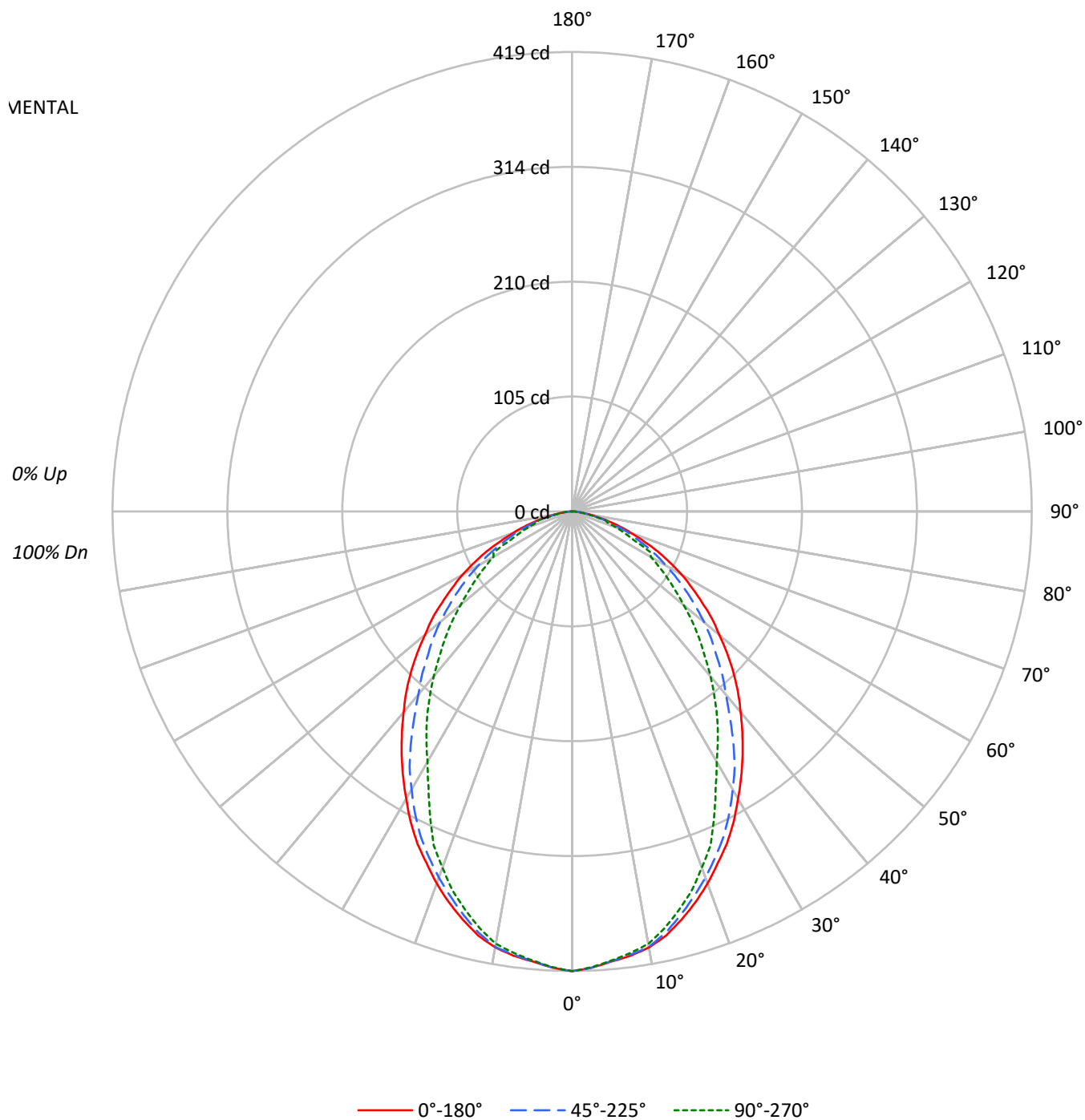
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	4512	4512	4512
5°	4452	4446	4441
10°	4412	4407	4375
15°	4294	4250	4191
20°	4136	4070	3959
25°	3966	3880	3638
30°	3759	3638	3278
35°	3560	3363	3031
40°	3357	3065	2758
45°	3165	2833	2493
50°	2930	2629	2224
55°	2710	2383	1991
60°	2482	2129	1785
65°	2185	1864	1579
70°	1800	1633	1341
75°	1431	1248	1310
80°	961	899	843
85°	593	716	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3165 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	4.7
10°-20°	107.1	13.0
20°-30°	148.3	18.0
30°-40°	158.1	19.2
40°-50°	144.2	17.5
50°-60°	113.0	13.7
60°-70°	73.6	8.9
70°-80°	32.6	4.0
80°-90°	7.0	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°	294.4	35.8
0°-40°	452.5	55.0
0°-60°	709.7	86.2
0°-90°	823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	823.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	412	412	412	411	411	39
15°	385	385	381	378	376	108
25°	334	332	327	315	306	153
35°	271	269	256	236	231	169
45°	208	204	186	171	164	160
55°	144	140	127	112	106	130
65°	86	81	73	75	62	85
75°	34	32	30	29	32	37
85°	5	5	6	6	7	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	419.2	419.2	419.2	419.2	419.2
2.5°	416.3	416.3	416.3	415.8	415.8
5°	412.0	411.5	411.5	411.0	411.0
7.5°	408.6	408.1	407.6	407.1	406.1
10°	403.7	403.7	403.2	400.8	400.3
12.5°	396.0	395.5	393.5	390.1	389.2
15°	385.3	385.3	381.4	377.5	376.1
17.5°	373.7	373.2	368.3	364.5	362.5
20°	361.1	360.1	355.3	349.0	345.6
22.5°	347.0	347.0	341.2	333.0	329.6
25°	333.9	332.0	326.7	315.0	306.3
27.5°	318.9	316.0	310.2	293.7	283.5
30°	302.4	301.0	292.7	271.4	263.7
32.5°	286.9	284.5	275.8	253.5	247.2
35°	270.9	269.0	255.9	236.5	230.7
37.5°	254.9	252.5	236.0	220.5	213.2
40°	238.9	236.0	218.1	204.0	196.3
42.5°	223.9	220.0	202.6	187.6	178.8
45°	207.9	203.6	186.1	170.6	163.8
47.5°	191.9	188.0	172.1	156.1	148.3
50°	175.0	171.6	157.0	141.0	132.8
52.5°	160.9	155.6	141.5	125.5	118.7
55°	144.4	140.1	127.0	112.0	106.1
57.5°	129.4	125.0	112.9	98.9	94.0
60°	115.3	109.0	98.9	86.8	82.9
62.5°	99.8	95.0	86.3	76.1	80.9
65°	85.8	80.9	73.2	74.6	62.0
67.5°	70.3	67.9	61.1	54.3	52.3
70°	57.2	54.3	51.9	44.6	42.6
72.5°	45.6	42.6	39.3	35.4	33.9
75°	34.4	32.0	30.0	28.6	31.5
77.5°	23.7	22.8	21.3	19.9	19.4
80°	15.5	15.0	14.5	14.1	13.6
82.5°	9.2	9.2	9.2	9.2	9.2
85°	4.8	5.3	5.8	6.3	6.8
87.5°	2.9	2.9	3.4	3.9	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)