

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: P558610

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-82-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558610
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-50-UNV-82-85-EDD-90
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 786.0 lumens
Efficiency: N/A
Efficacy: 72.8 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

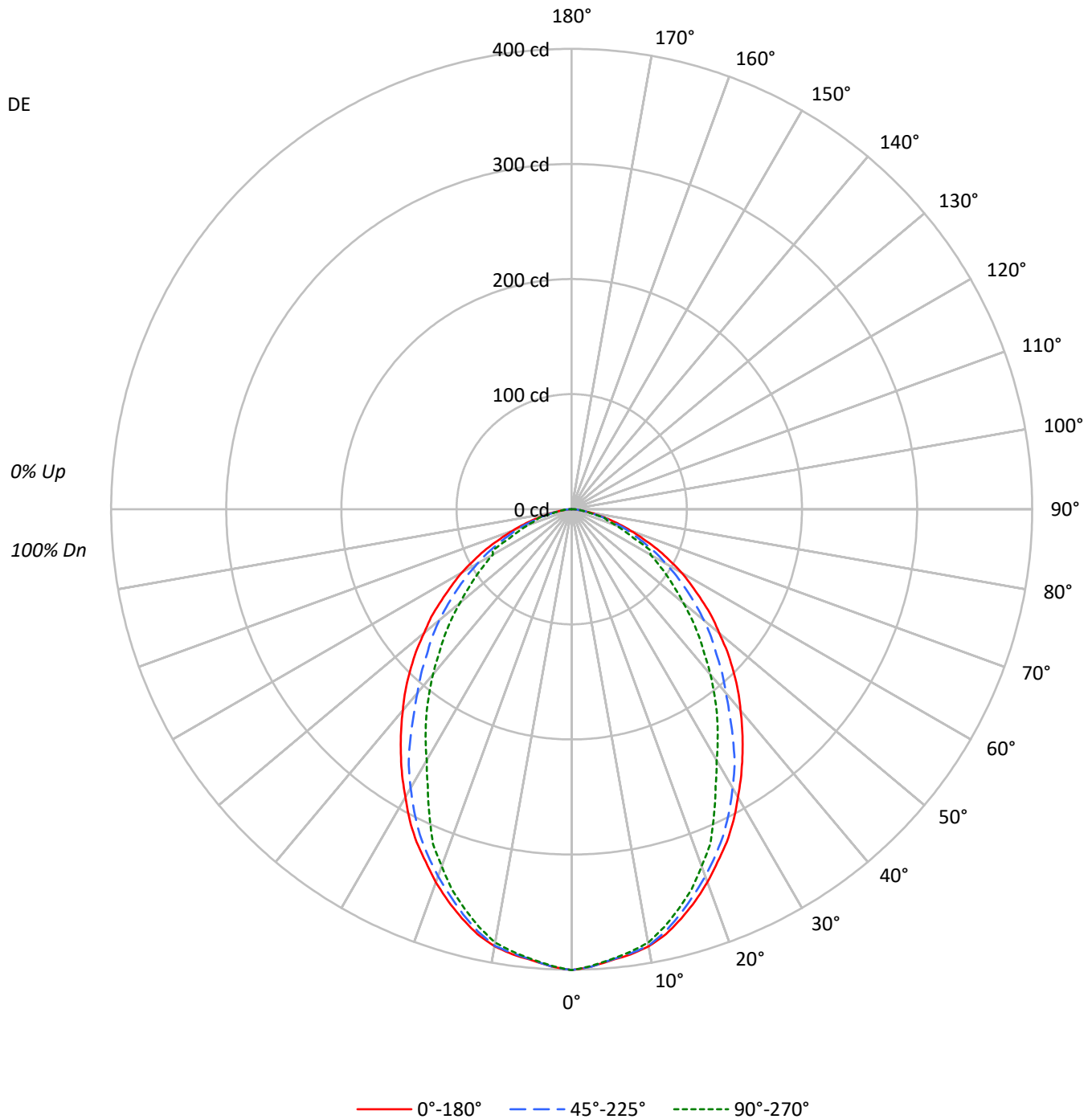
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					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°	4310	4310	4310
5°	4251	4246	4241
10°	4215	4209	4179
15°	4101	4060	4003
20°	3950	3887	3780
25°	3787	3706	3474
30°	3590	3475	3130
35°	3399	3211	2895
40°	3207	2927	2635
45°	3023	2705	2381
50°	2798	2512	2123
55°	2588	2276	1903
60°	2372	2032	1703
65°	2086	1780	1508
70°	1718	1558	1281
75°	1368	1194	1252
80°	917	862	806
85°	568	692	803

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3023 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	4.7
10°-20°	102.3	13.0
20°-30°	141.6	18.0
30°-40°	151.0	19.2
40°-50°	137.7	17.5
50°-60°	107.9	13.7
60°-70°	70.3	8.9
70°-80°	31.2	4.0
80°-90°	6.7	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°	281.2	35.8
0°-40°	432.2	55.0
0°-60°	677.8	86.2
0°-90°	786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	786.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	393	393	393	392	392	37
15°	368	368	364	361	359	103
25°	319	317	312	301	292	146
35°	259	257	244	226	220	162
45°	199	194	178	163	156	153
55°	138	134	121	107	101	124
65°	82	77	70	71	59	81
75°	33	30	29	27	30	35
85°	5	5	6	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.4	400.4	400.4	400.4	400.4
2.5°	397.6	397.6	397.6	397.1	397.1
5°	393.4	393.0	393.0	392.5	392.5
7.5°	390.2	389.7	389.3	388.8	387.9
10°	385.6	385.6	385.1	382.8	382.3
12.5°	378.2	377.7	375.8	372.6	371.7
15°	368.0	368.0	364.3	360.6	359.2
17.5°	356.9	356.4	351.8	348.1	346.2
20°	344.8	343.9	339.3	333.3	330.0
22.5°	331.4	331.4	325.9	318.0	314.7
25°	318.9	317.1	312.0	300.9	292.5
27.5°	304.6	301.8	296.2	280.5	270.8
30°	288.8	287.4	279.6	259.2	251.8
32.5°	274.0	271.7	263.4	242.1	236.1
35°	258.7	256.9	244.4	225.9	220.3
37.5°	243.5	241.2	225.4	210.6	203.7
40°	228.2	225.4	208.3	194.9	187.5
42.5°	213.8	210.1	193.5	179.1	170.8
45°	198.6	194.4	177.7	162.9	156.4
47.5°	183.3	179.6	164.3	149.0	141.6
50°	167.1	163.9	150.0	134.7	126.8
52.5°	153.7	148.6	135.2	119.9	113.4
55°	137.9	133.8	121.3	106.9	101.4
57.5°	123.6	119.4	107.8	94.4	89.8
60°	110.2	104.1	94.4	82.9	79.1
62.5°	95.4	90.7	82.4	72.7	77.3
65°	81.9	77.3	69.9	71.3	59.2
67.5°	67.1	64.8	58.3	51.8	50.0
70°	54.6	51.8	49.5	42.6	40.7
72.5°	43.5	40.7	37.5	33.8	32.4
75°	32.9	30.5	28.7	27.3	30.1
77.5°	22.7	21.8	20.4	19.0	18.5
80°	14.8	14.3	13.9	13.4	13.0
82.5°	8.8	8.8	8.8	8.8	8.8
85°	4.6	5.1	5.6	6.0	6.5
87.5°	2.8	2.8	3.2	3.7	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)