

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: P558480

Luminaire Tested: FSR-12-1-LD4-1HI-35-UNV-82-84-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558480
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-35-UNV-82-84-EDD-90
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 751.0 lumens
Efficiency: N/A
Efficacy: 69.5 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

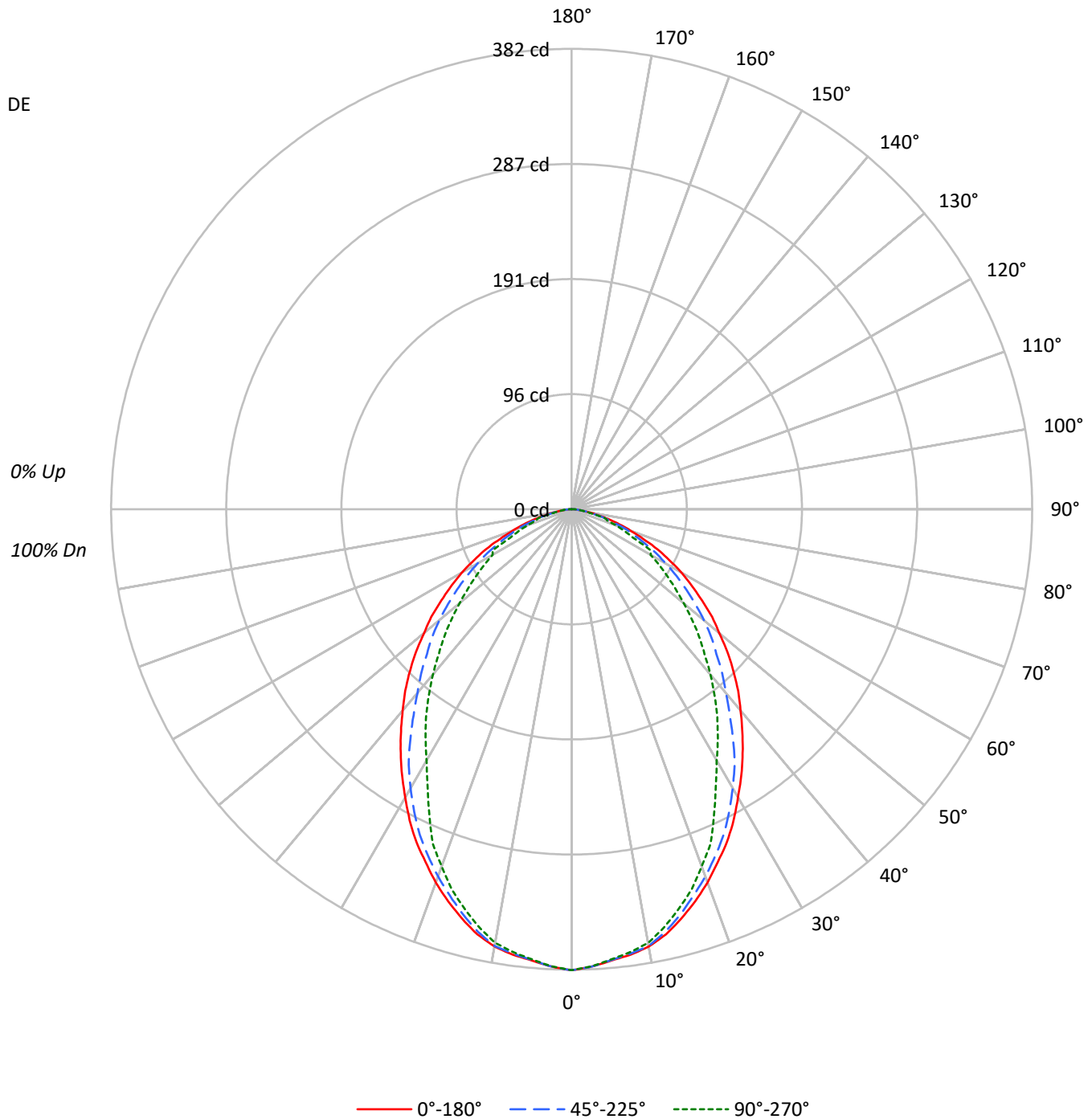
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	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°	4117	4117	4117
5°	4062	4057	4052
10°	4027	4022	3993
15°	3918	3879	3824
20°	3774	3714	3612
25°	3619	3540	3320
30°	3430	3320	2990
35°	3248	3068	2766
40°	3063	2796	2517
45°	2888	2585	2276
50°	2674	2400	2030
55°	2473	2175	1818
60°	2267	1942	1628
65°	1994	1701	1442
70°	1643	1489	1224
75°	1306	1140	1194
80°	880	824	769
85°	543	655	766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2888 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.6	4.7
10°-20°	97.7	13.0
20°-30°	135.3	18.0
30°-40°	144.3	19.2
40°-50°	131.6	17.5
50°-60°	103.1	13.7
60°-70°	67.2	8.9
70°-80°	29.8	4.0
80°-90°	6.4	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°	268.6	35.8
0°-40°	412.9	55.0
0°-60°	647.6	86.2
0°-90°	751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	751.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	376	376	376	375	375	36
15°	352	352	348	344	343	99
25°	305	303	298	288	280	140
35°	247	246	234	216	210	155
45°	190	186	170	156	150	146
55°	132	128	116	102	97	118
65°	78	74	67	68	57	77
75°	31	29	27	26	29	34
85°	4	5	5	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	382.5	382.5	382.5	382.5	382.5
2.5°	379.9	379.9	379.9	379.5	379.5
5°	375.9	375.5	375.5	375.0	375.0
7.5°	372.8	372.4	371.9	371.5	370.6
10°	368.4	368.4	368.0	365.7	365.3
12.5°	361.3	360.9	359.1	356.0	355.1
15°	351.6	351.6	348.1	344.5	343.2
17.5°	341.0	340.5	336.1	332.6	330.8
20°	329.5	328.6	324.2	318.4	315.3
22.5°	316.7	316.7	311.3	303.8	300.7
25°	304.7	302.9	298.1	287.5	279.5
27.5°	291.0	288.3	283.0	268.0	258.7
30°	276.0	274.6	267.1	247.7	240.6
32.5°	261.8	259.6	251.6	231.3	225.5
35°	247.2	245.5	233.5	215.8	210.5
37.5°	232.6	230.4	215.4	201.2	194.6
40°	218.0	215.4	199.0	186.2	179.1
42.5°	204.3	200.8	184.9	171.2	163.2
45°	189.7	185.7	169.8	155.7	149.5
47.5°	175.1	171.6	157.0	142.4	135.3
50°	159.7	156.6	143.3	128.7	121.2
52.5°	146.8	142.0	129.1	114.5	108.4
55°	131.8	127.8	115.9	102.2	96.9
57.5°	118.1	114.1	103.0	90.2	85.8
60°	105.3	99.5	90.2	79.2	75.6
62.5°	91.1	86.7	78.7	69.4	73.9
65°	78.3	73.9	66.8	68.1	56.6
67.5°	64.1	61.9	55.7	49.5	47.8
70°	52.2	49.5	47.3	40.7	38.9
72.5°	41.6	38.9	35.8	32.3	31.0
75°	31.4	29.2	27.4	26.1	28.7
77.5°	21.7	20.8	19.5	18.1	17.7
80°	14.2	13.7	13.3	12.8	12.4
82.5°	8.4	8.4	8.4	8.4	8.4
85°	4.4	4.9	5.3	5.7	6.2
87.5°	2.7	2.7	3.1	3.5	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)