

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: P559185

Luminaire Tested: FSR-12-1-LD4-2HI-50-UNV-82-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559185
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-LD4-2HI-50-UNV-82-84-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1844.0 lumens
Efficiency: N/A
Efficacy: 85.4 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

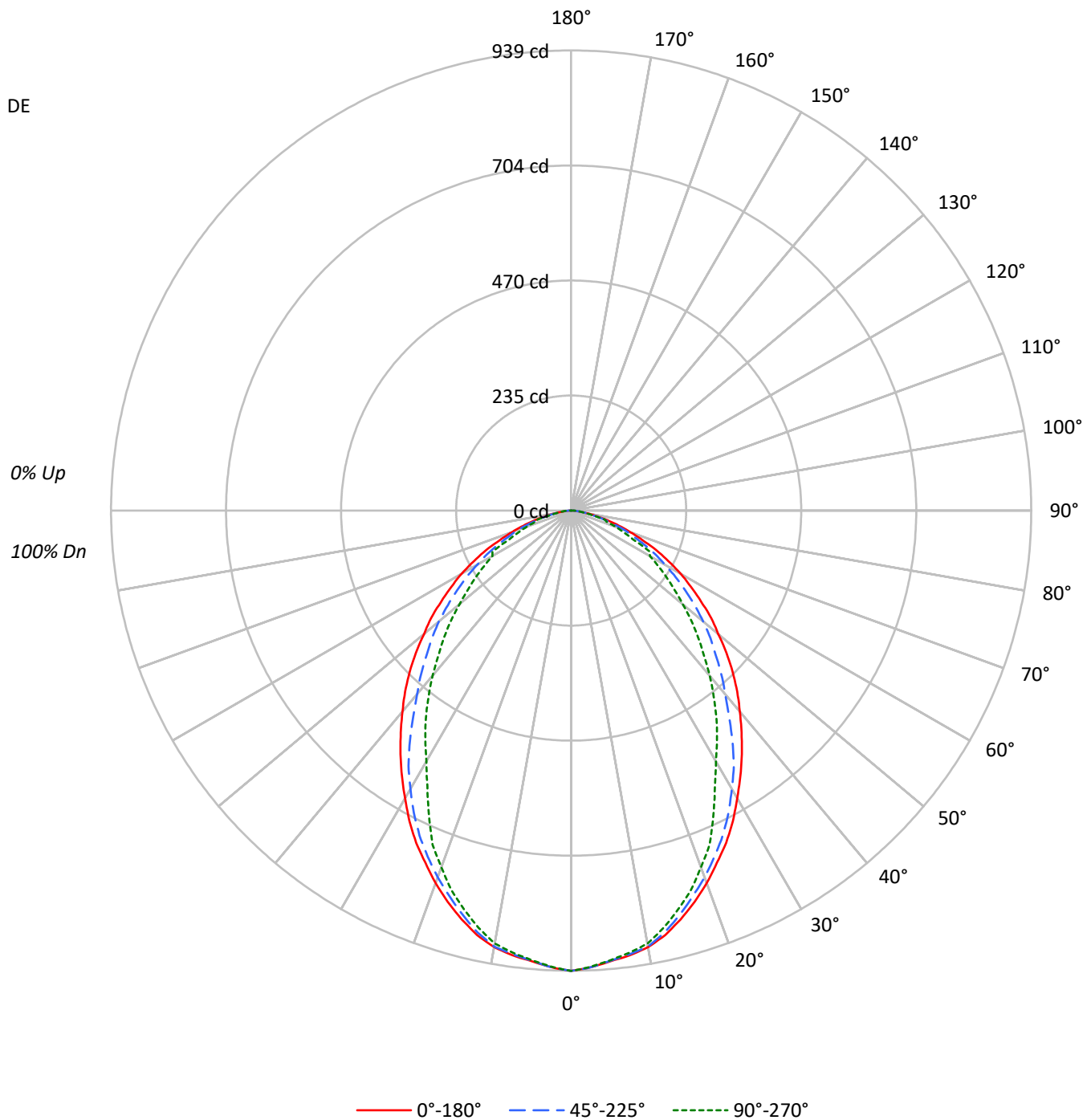
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	10111	10111	10111
5°	9973	9961	9949
10°	9887	9875	9804
15°	9620	9523	9391
20°	9267	9118	8869
25°	8886	8693	8151
30°	8422	8152	7342
35°	7976	7535	6792
40°	7523	6867	6180
45°	7092	6348	5587
50°	6564	5891	4982
55°	6073	5339	4463
60°	5563	4768	3998
65°	4895	4177	3540
70°	4032	3657	3009
75°	3206	2799	2936
80°	2151	2021	1884
85°	1346	1606	1877

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7092 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	4.7
10°-20°	240.0	13.0
20°-30°	332.2	18.0
30°-40°	354.2	19.2
40°-50°	323.2	17.5
50°-60°	253.2	13.7
60°-70°	165.0	8.9
70°-80°	73.1	4.0
80°-90°	15.7	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°	659.6	35.8
0°-40°	1013.9	55.0
0°-60°	1590.2	86.2
0°-90°	1844.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	939	939	939	939	939	
5°	923	922	922	921	921	88
15°	863	863	855	846	843	243
25°	748	744	732	706	686	343
35°	607	603	573	530	517	380
45°	466	456	417	382	367	359
55°	324	314	284	251	238	290
65°	192	181	164	167	139	189
75°	77	72	67	64	71	83
85°	11	12	13	14	15	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	939.3	939.3	939.3	939.3	939.3
2.5°	932.8	932.8	932.8	931.7	931.7
5°	923.0	921.9	921.9	920.8	920.8
7.5°	915.4	914.3	913.2	912.2	910.0
10°	904.6	904.6	903.5	898.0	897.0
12.5°	887.2	886.1	881.8	874.2	872.0
15°	863.3	863.3	854.6	845.9	842.7
17.5°	837.2	836.1	825.3	816.6	812.3
20°	809.0	806.8	796.0	781.9	774.3
22.5°	777.5	777.5	764.5	746.0	738.4
25°	748.2	743.8	731.9	705.8	686.3
27.5°	714.5	708.0	695.0	658.1	635.3
30°	677.6	674.3	655.9	608.1	590.7
32.5°	642.9	637.4	617.9	567.9	553.8
35°	607.0	602.7	573.4	529.9	516.9
37.5°	571.2	565.8	528.8	494.1	477.8
40°	535.4	528.8	488.7	457.2	439.8
42.5°	501.7	493.0	453.9	420.2	400.7
45°	465.9	456.1	417.0	382.2	367.0
47.5°	430.0	421.3	385.5	349.7	332.3
50°	392.0	384.4	351.8	316.0	297.5
52.5°	360.5	348.6	317.1	281.2	266.0
55°	323.6	313.8	284.5	250.8	237.8
57.5°	289.9	280.2	253.0	221.5	210.7
60°	258.4	244.3	221.5	194.4	185.7
62.5°	223.7	212.8	193.3	170.5	181.3
65°	192.2	181.3	164.0	167.2	139.0
67.5°	157.5	152.0	136.8	121.6	117.3
70°	128.1	121.6	116.2	99.9	95.6
72.5°	102.1	95.6	88.0	79.3	76.0
75°	77.1	71.7	67.3	64.1	70.6
77.5°	53.2	51.0	47.8	44.5	43.4
80°	34.7	33.7	32.6	31.5	30.4
82.5°	20.6	20.6	20.6	20.6	20.6
85°	10.9	11.9	13.0	14.1	15.2
87.5°	6.5	6.5	7.6	8.7	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)