

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: P559034

Luminaire Tested: FSR-12-1-LD4-2HI-35-UNV-80-94-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559034
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-35-UNV-80-94-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1619.0 lumens
Efficiency: N/A
Efficacy: 75.0 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

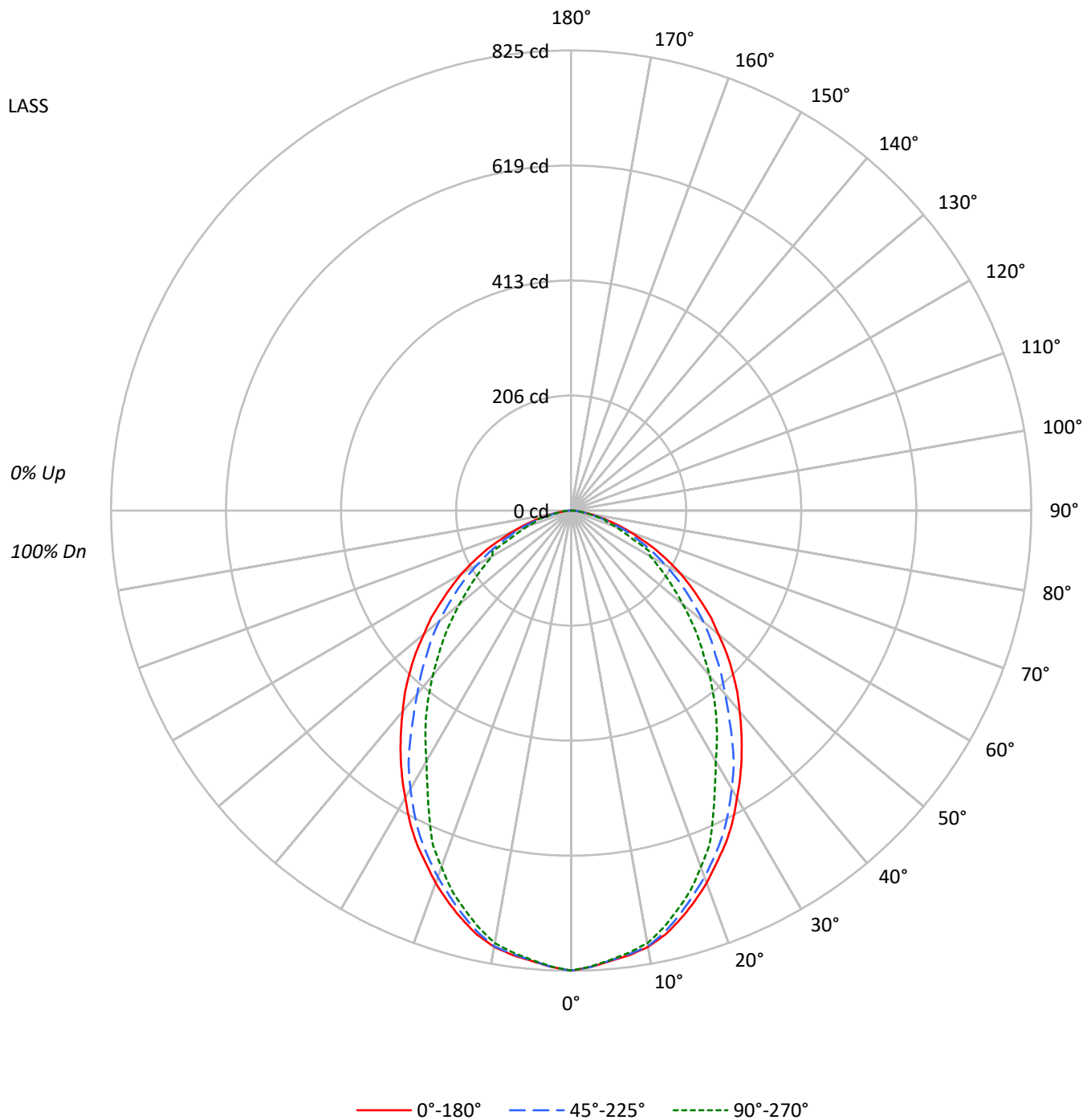
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	8877	8877	8877
5°	8756	8746	8736
10°	8681	8670	8607
15°	8447	8361	8244
20°	8136	8005	7787
25°	7802	7632	7157
30°	7394	7158	6447
35°	7004	6615	5963
40°	6604	6028	5425
45°	6226	5573	4906
50°	5764	5173	4374
55°	5332	4688	3918
60°	4885	4187	3509
65°	4299	3668	3107
70°	3541	3210	2640
75°	2816	2458	2578
80°	1891	1773	1655
85°	1173	1408	1643

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6226 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	4.7
10°-20°	210.7	13.0
20°-30°	291.7	18.0
30°-40°	311.0	19.2
40°-50°	283.7	17.5
50°-60°	222.3	13.7
60°-70°	144.9	8.9
70°-80°	64.2	4.0
80°-90°	13.8	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°	579.1	35.8
0°-40°	890.1	55.0
0°-60°	1396.1	86.2
0°-90°	1619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1619.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	810	809	809	808	808	77
15°	758	758	750	743	740	213
25°	657	653	643	620	603	302
35°	533	529	503	465	454	333
45°	409	400	366	336	322	315
55°	284	276	250	220	209	255
65°	169	159	144	147	122	166
75°	68	63	59	56	62	73
85°	10	10	11	12	13	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.7	824.7	824.7	824.7	824.7
2.5°	819.0	819.0	819.0	818.0	818.0
5°	810.4	809.4	809.4	808.5	808.5
7.5°	803.7	802.8	801.8	800.9	799.0
10°	794.2	794.2	793.2	788.5	787.5
12.5°	778.9	778.0	774.2	767.5	765.6
15°	758.0	758.0	750.3	742.7	739.8
17.5°	735.1	734.1	724.6	717.0	713.1
20°	710.3	708.4	698.8	686.5	679.8
22.5°	682.6	682.6	671.2	655.0	648.3
25°	656.9	653.1	642.6	619.7	602.6
27.5°	627.3	621.6	610.2	577.8	557.7
30°	594.9	592.1	575.9	533.9	518.7
32.5°	564.4	559.6	542.5	498.6	486.2
35°	533.0	529.1	503.4	465.3	453.8
37.5°	501.5	496.7	464.3	433.8	419.5
40°	470.0	464.3	429.0	401.4	386.1
42.5°	440.5	432.8	398.5	369.0	351.8
45°	409.0	400.4	366.1	335.6	322.3
47.5°	377.5	369.9	338.5	307.0	291.7
50°	344.2	337.5	308.9	277.4	261.2
52.5°	316.5	306.0	278.4	246.9	233.6
55°	284.1	275.5	249.8	220.2	208.8
57.5°	254.6	246.0	222.1	194.5	185.0
60°	226.9	214.5	194.5	170.7	163.0
62.5°	196.4	186.9	169.7	149.7	159.2
65°	168.8	159.2	144.0	146.8	122.0
67.5°	138.2	133.5	120.1	106.8	103.0
70°	112.5	106.8	102.0	87.7	83.9
72.5°	89.6	83.9	77.2	69.6	66.7
75°	67.7	62.9	59.1	56.3	62.0
77.5°	46.7	44.8	41.9	39.1	38.1
80°	30.5	29.6	28.6	27.6	26.7
82.5°	18.1	18.1	18.1	18.1	18.1
85°	9.5	10.5	11.4	12.4	13.3
87.5°	5.7	5.7	6.7	7.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)