

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: P559607

Luminaire Tested: FSR-12-2-LD4-1HI-35-UNV-80-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559607
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-12-2-LD4-1HI-35-UNV-80-87-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1754.0 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

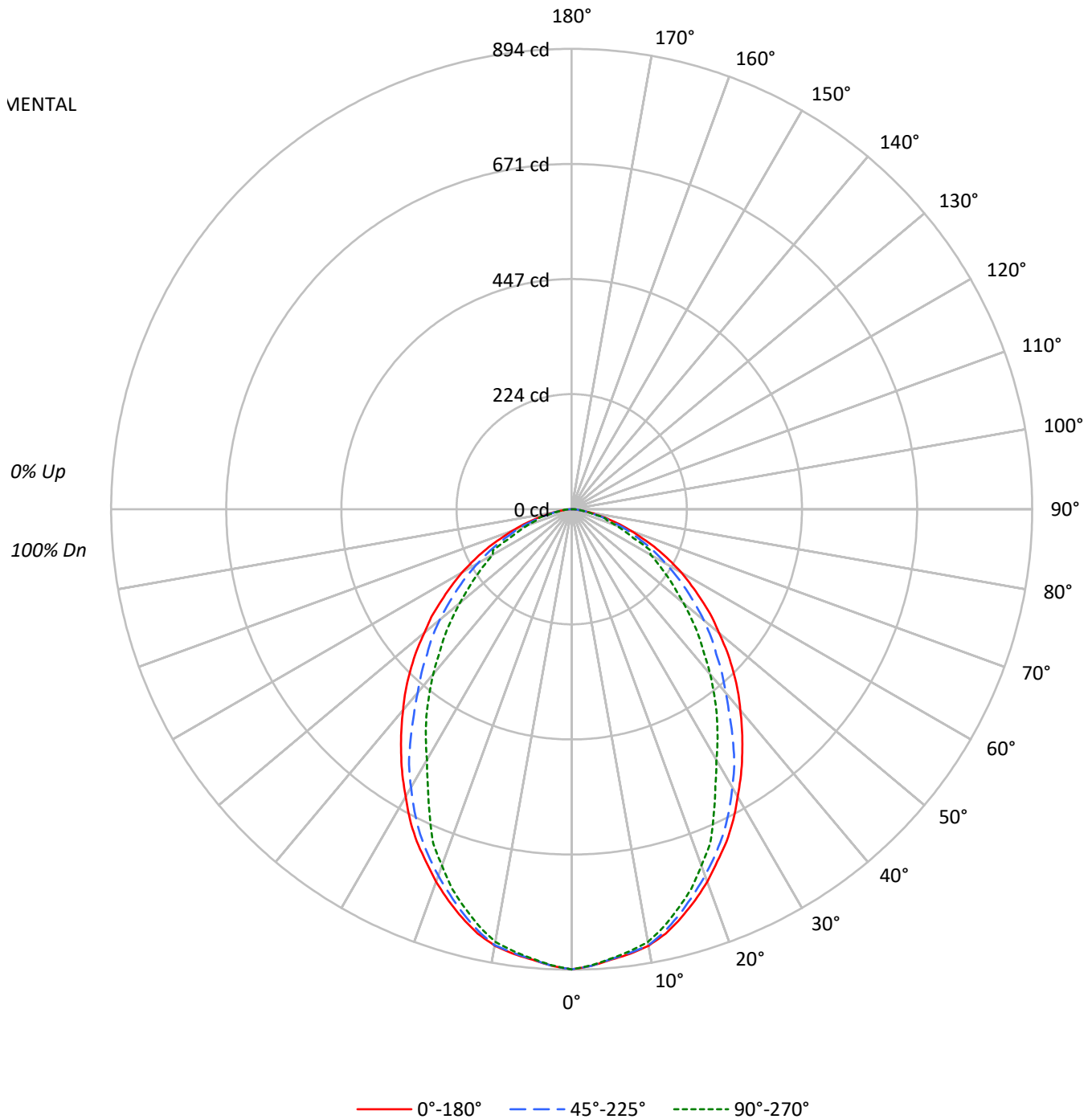
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4809	4809	4809
5°	4743	4737	4732
10°	4702	4697	4663
15°	4576	4529	4466
20°	4407	4336	4218
25°	4226	4134	3877
30°	4005	3877	3492
35°	3794	3583	3231
40°	3577	3266	2939
45°	3373	3019	2657
50°	3122	2802	2370
55°	2888	2539	2122
60°	2646	2268	1901
65°	2328	1987	1684
70°	1918	1739	1430
75°	1524	1331	1395
80°	1026	961	896
85°	636	766	895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3373 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	4.7
10°-20°	228.2	13.0
20°-30°	316.0	18.0
30°-40°	336.9	19.2
40°-50°	307.4	17.5
50°-60°	240.8	13.7
60°-70°	157.0	8.9
70°-80°	69.5	4.0
80°-90°	14.9	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°	627.4	35.8
0°-40°	964.4	55.0
0°-60°	1512.6	86.2
0°-90°	1754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1754.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	894	894	894	894	894	
5°	878	877	877	876	876	83
15°	821	821	813	805	802	231
25°	712	708	696	671	653	327
35°	577	573	545	504	492	361
45°	443	434	397	364	349	341
55°	308	298	271	239	226	276
65°	183	172	156	159	132	180
75°	73	68	64	61	67	79
85°	10	11	12	13	14	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	893.5	893.5	893.5	893.5	893.5
2.5°	887.3	887.3	887.3	886.2	886.2
5°	878.0	876.9	876.9	875.9	875.9
7.5°	870.7	869.7	868.7	867.6	865.6
10°	860.4	860.4	859.4	854.2	853.2
12.5°	843.9	842.9	838.7	831.5	829.4
15°	821.2	821.2	812.9	804.6	801.5
17.5°	796.4	795.3	785.0	776.7	772.6
20°	769.5	767.4	757.1	743.7	736.5
22.5°	739.6	739.6	727.2	709.6	702.4
25°	711.7	707.5	696.2	671.4	652.8
27.5°	679.7	673.5	661.1	625.9	604.3
30°	644.5	641.4	623.9	578.4	561.9
32.5°	611.5	606.3	587.7	540.2	526.8
35°	577.4	573.3	545.4	504.1	491.7
37.5°	543.3	538.1	503.0	470.0	454.5
40°	509.2	503.0	464.8	434.9	418.3
42.5°	477.2	468.9	431.8	399.7	381.1
45°	443.1	433.8	396.6	363.6	349.1
47.5°	409.0	400.8	366.7	332.6	316.1
50°	372.9	365.6	334.7	300.6	283.0
52.5°	342.9	331.6	301.6	267.5	253.1
55°	307.8	298.5	270.6	238.6	226.2
57.5°	275.8	266.5	240.7	210.7	200.4
60°	245.8	232.4	210.7	184.9	176.6
62.5°	212.8	202.4	183.9	162.2	172.5
65°	182.8	172.5	156.0	159.1	132.2
67.5°	149.8	144.6	130.1	115.7	111.6
70°	121.9	115.7	110.5	95.0	90.9
72.5°	97.1	90.9	83.7	75.4	72.3
75°	73.3	68.2	64.0	60.9	67.1
77.5°	50.6	48.5	45.4	42.3	41.3
80°	33.1	32.0	31.0	30.0	28.9
82.5°	19.6	19.6	19.6	19.6	19.6
85°	10.3	11.4	12.4	13.4	14.5
87.5°	6.2	6.2	7.2	8.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)