

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: P558899

Luminaire Tested: FSR-12-1-LD4-1STD-40-UNV-80-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558899
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-LD4-1STD-40-UNV-80-85-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 779.0 lumens
Efficiency: N/A
Efficacy: 93.9 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

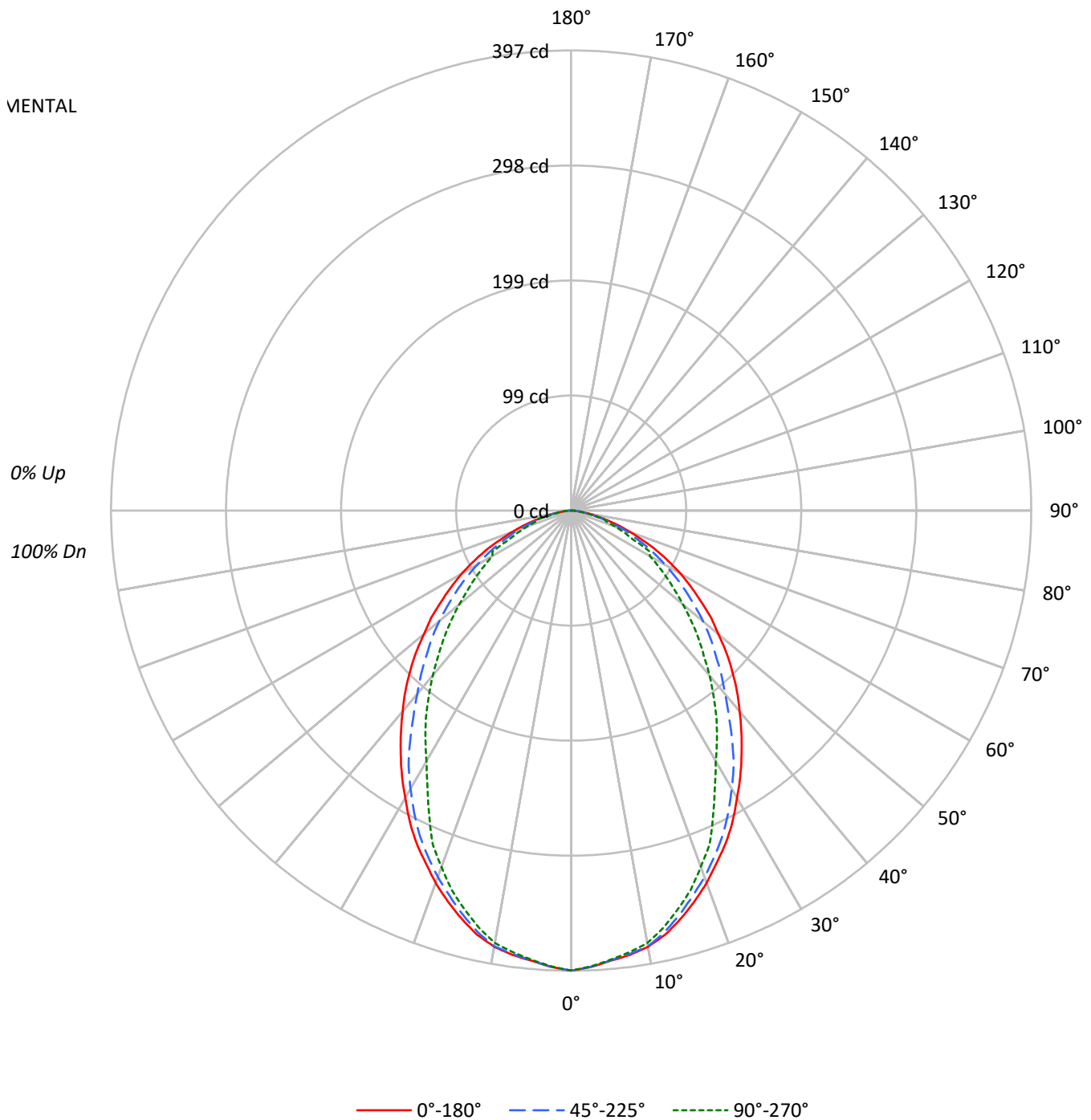
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4271	4271	4271
5°	4213	4209	4203
10°	4176	4172	4141
15°	4064	4023	3967
20°	3915	3852	3747
25°	3754	3672	3443
30°	3558	3444	3102
35°	3369	3183	2870
40°	3178	2900	2611
45°	2996	2682	2361
50°	2773	2488	2105
55°	2565	2256	1886
60°	2351	2015	1688
65°	2068	1765	1495
70°	1703	1545	1271
75°	1356	1181	1239
80°	911	855	793
85°	568	679	790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2996 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.9	4.7
10°-20°	101.4	13.0
20°-30°	140.4	18.0
30°-40°	149.6	19.2
40°-50°	136.5	17.5
50°-60°	107.0	13.7
60°-70°	69.7	8.9
70°-80°	30.9	4.0
80°-90°	6.6	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°	278.7	35.8
0°-40°	428.3	55.0
0°-60°	671.8	86.2
0°-90°	779.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	779.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	397	397	397	397	397	
5°	390	390	390	389	389	37
15°	365	365	361	357	356	103
25°	316	314	309	298	290	145
35°	256	255	242	224	218	160
45°	197	193	176	162	155	152
55°	137	133	120	106	100	123
65°	81	77	69	71	59	80
75°	33	30	28	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°	396.8	396.8	396.8	396.8	396.8
2.5°	394.1	394.1	394.1	393.6	393.6
5°	389.9	389.5	389.5	389.0	389.0
7.5°	386.7	386.3	385.8	385.3	384.4
10°	382.1	382.1	381.7	379.4	378.9
12.5°	374.8	374.3	372.5	369.3	368.4
15°	364.7	364.7	361.0	357.4	356.0
17.5°	353.7	353.2	348.6	345.0	343.1
20°	341.8	340.8	336.3	330.3	327.1
22.5°	328.5	328.5	323.0	315.2	311.9
25°	316.1	314.2	309.2	298.2	289.9
27.5°	301.9	299.1	293.6	278.0	268.4
30°	286.3	284.9	277.1	256.9	249.6
32.5°	271.6	269.3	261.0	239.9	234.0
35°	256.4	254.6	242.2	223.9	218.4
37.5°	241.3	239.0	223.4	208.7	201.8
40°	226.2	223.4	206.4	193.1	185.8
42.5°	211.9	208.3	191.8	177.5	169.3
45°	196.8	192.7	176.2	161.5	155.1
47.5°	181.7	178.0	162.9	147.7	140.4
50°	165.6	162.4	148.6	133.5	125.7
52.5°	152.3	147.3	134.0	118.8	112.4
55°	136.7	132.6	120.2	106.0	100.5
57.5°	122.5	118.4	106.9	93.6	89.0
60°	109.2	103.2	93.6	82.1	78.4
62.5°	94.5	89.9	81.7	72.0	76.6
65°	81.2	76.6	69.3	70.6	58.7
67.5°	66.5	64.2	57.8	51.4	49.5
70°	54.1	51.4	49.1	42.2	40.4
72.5°	43.1	40.4	37.2	33.5	32.1
75°	32.6	30.3	28.4	27.1	29.8
77.5°	22.5	21.6	20.2	18.8	18.3
80°	14.7	14.2	13.8	13.3	12.8
82.5°	8.7	8.7	8.7	8.7	8.7
85°	4.6	5.0	5.5	6.0	6.4
87.5°	2.8	2.8	3.2	3.7	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)