

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: P560312

Luminaire Tested: FSR-12-2-LD4-2HI-50-UNV-80-88-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560312
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-LD4-2HI-50-UNV-80-88-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2823.0 lumens
Efficiency: N/A
Efficacy: 65.3 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

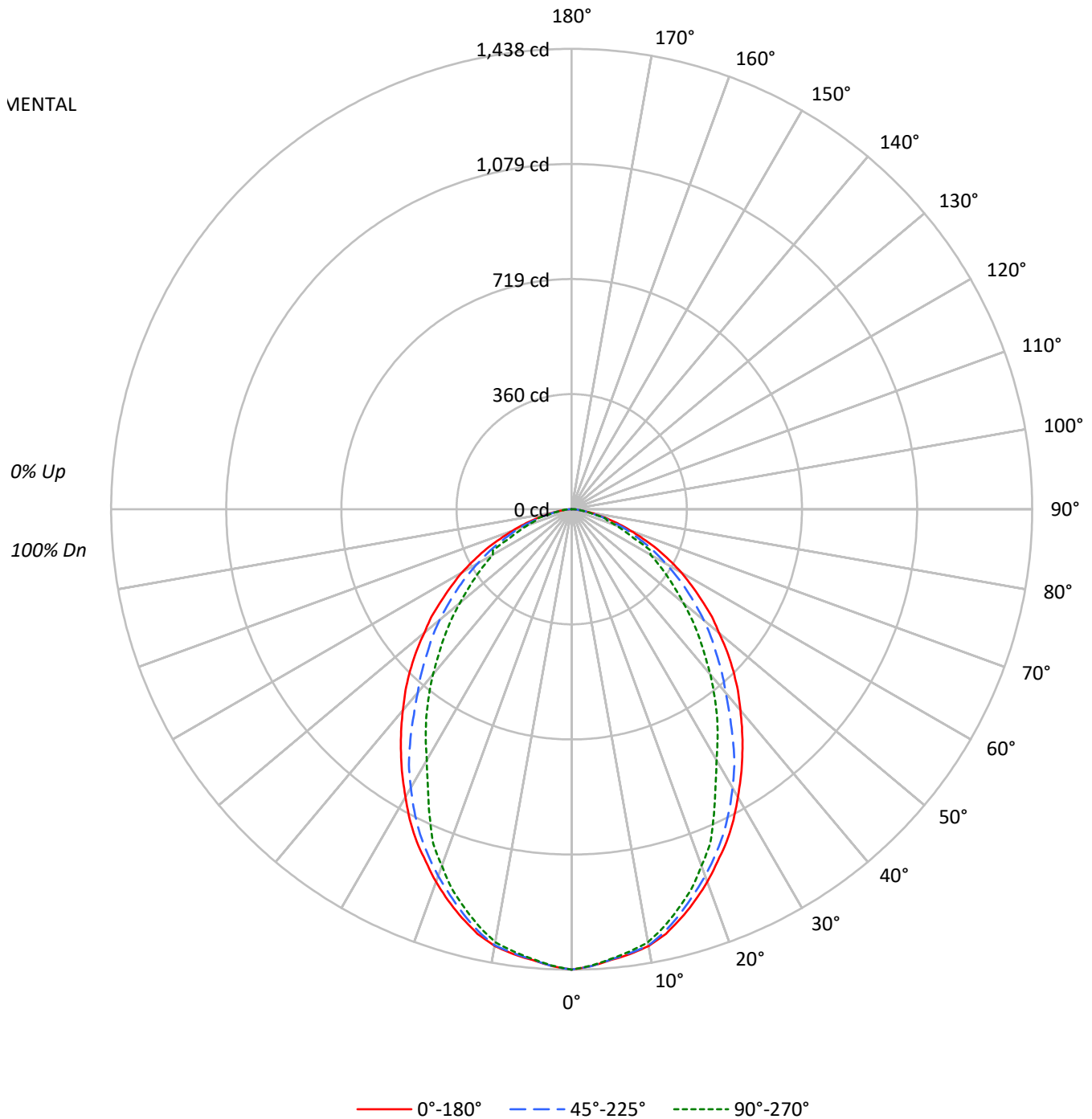
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7739	7739	7739
5°	7634	7625	7616
10°	7568	7559	7505
15°	7364	7290	7188
20°	7093	6979	6789
25°	6802	6654	6239
30°	6447	6240	5620
35°	6106	5767	5199
40°	5758	5256	4730
45°	5428	4859	4277
50°	5025	4510	3814
55°	4648	4087	3416
60°	4259	3650	3060
65°	3747	3196	2710
70°	3087	2799	2302
75°	2454	2144	2248
80°	1649	1547	1441
85°	1025	1229	1439

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5428 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	4.7
10°-20°	367.4	13.0
20°-30°	508.6	18.0
30°-40°	542.3	19.2
40°-50°	494.7	17.5
50°-60°	387.6	13.7
60°-70°	252.6	8.9
70°-80°	111.9	4.0
80°-90°	24.0	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°	1009.8	35.8
0°-40°	1552.1	55.0
0°-60°	2434.4	86.2
0°-90°	2823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2823.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1413	1411	1411	1410	1410	134
15°	1322	1322	1308	1295	1290	372
25°	1145	1139	1120	1081	1051	526
35°	929	923	878	811	791	581
45°	713	698	638	585	562	549
55°	495	480	436	384	364	444
65°	294	278	251	256	213	290
75°	118	110	103	98	108	127
85°	17	18	20	22	23	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1438.0	1438.0	1438.0	1438.0	1438.0
2.5°	1428.0	1428.0	1428.0	1426.4	1426.4
5°	1413.1	1411.4	1411.4	1409.7	1409.7
7.5°	1401.4	1399.8	1398.1	1396.4	1393.1
10°	1384.8	1384.8	1383.1	1374.8	1373.2
12.5°	1358.2	1356.5	1349.9	1338.3	1334.9
15°	1321.6	1321.6	1308.3	1295.0	1290.0
17.5°	1281.7	1280.1	1263.4	1250.1	1243.5
20°	1238.5	1235.2	1218.6	1196.9	1185.3
22.5°	1190.3	1190.3	1170.3	1142.1	1130.4
25°	1145.4	1138.8	1120.5	1080.6	1050.7
27.5°	1093.9	1083.9	1064.0	1007.4	972.5
30°	1037.4	1032.4	1004.1	931.0	904.4
32.5°	984.2	975.8	945.9	869.4	847.8
35°	929.3	922.6	877.8	811.3	791.3
37.5°	874.4	866.1	809.6	756.4	731.5
40°	819.6	809.6	748.1	699.9	673.3
42.5°	768.0	754.7	694.9	643.4	613.4
45°	713.2	698.2	638.4	585.2	561.9
47.5°	658.3	645.0	590.2	535.3	508.7
50°	600.1	588.5	538.6	483.8	455.5
52.5°	551.9	533.6	485.4	430.6	407.3
55°	495.4	480.4	435.6	384.0	364.1
57.5°	443.9	428.9	387.3	339.1	322.5
60°	395.7	374.0	339.1	297.6	284.3
62.5°	342.5	325.8	295.9	261.0	277.6
65°	294.2	277.6	251.0	256.0	212.8
67.5°	241.1	232.7	209.5	186.2	179.5
70°	196.2	186.2	177.9	152.9	146.3
72.5°	156.3	146.3	134.7	121.4	116.4
75°	118.0	109.7	103.1	98.1	108.1
77.5°	81.5	78.1	73.1	68.2	66.5
80°	53.2	51.5	49.9	48.2	46.5
82.5°	31.6	31.6	31.6	31.6	31.6
85°	16.6	18.3	19.9	21.6	23.3
87.5°	10.0	10.0	11.6	13.3	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)