

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: P560306

Luminaire Tested: FSR-12-2-LD4-2HI-50-UNV-80-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560306
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-80-85-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3277.0 lumens
Efficiency: N/A
Efficacy: 75.9 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

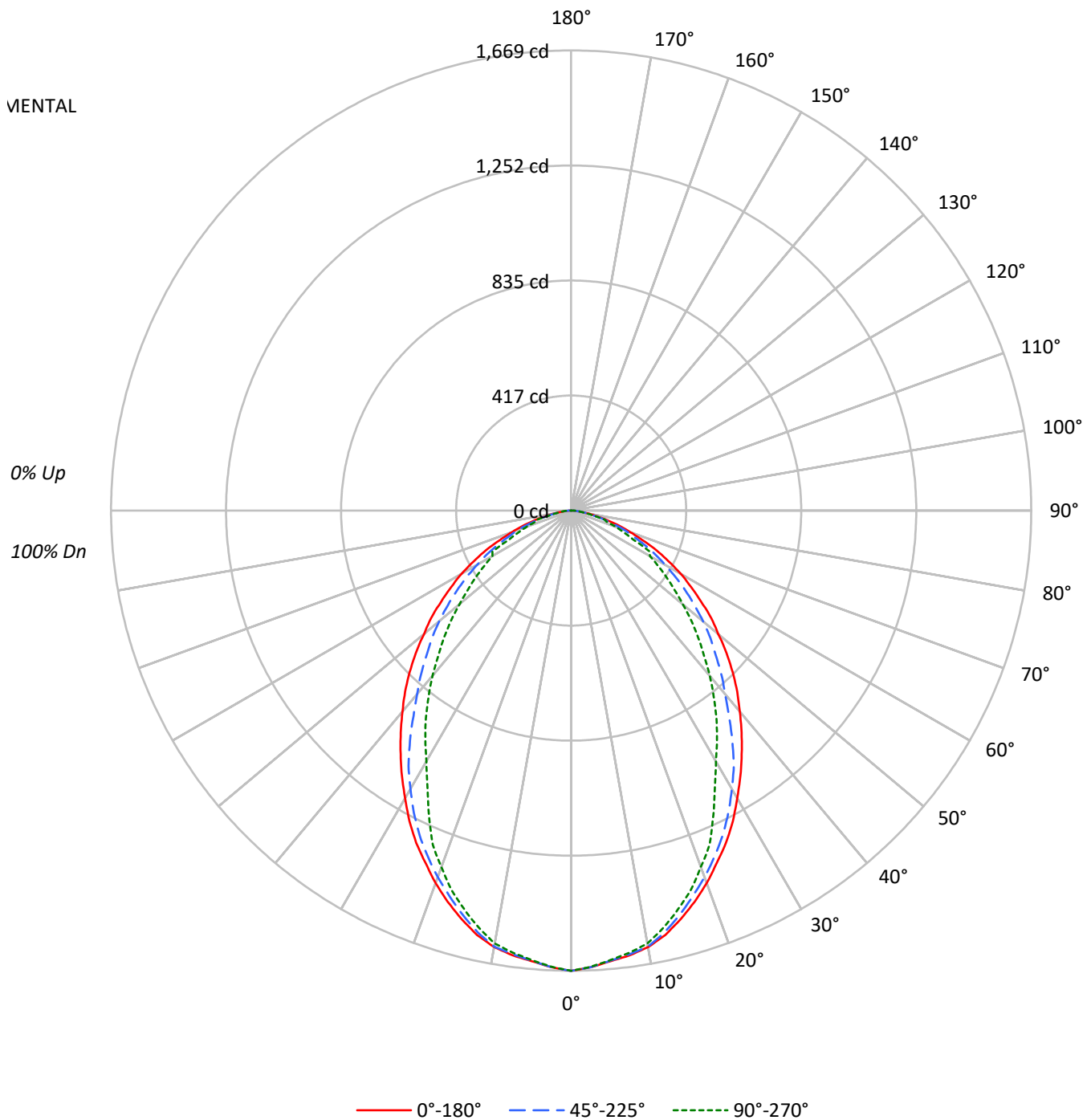
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	8984	8984	8984
5°	8862	8851	8841
10°	8785	8775	8711
15°	8548	8462	8344
20°	8234	8101	7880
25°	7896	7724	7242
30°	7484	7244	6524
35°	7087	6694	6035
40°	6684	6101	5491
45°	6301	5640	4965
50°	5833	5235	4428
55°	5396	4744	3965
60°	4944	4238	3552
65°	4350	3711	3145
70°	3583	3249	2672
75°	2849	2487	2608
80°	1915	1795	1674
85°	1192	1433	1667

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6301 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	4.7
10°-20°	426.4	13.0
20°-30°	590.4	18.0
30°-40°	629.5	19.2
40°-50°	574.3	17.5
50°-60°	449.9	13.7
60°-70°	293.2	8.9
70°-80°	129.9	4.0
80°-90°	27.9	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°	1172.2	35.8
0°-40°	1801.7	55.0
0°-60°	2826.0	86.2
0°-90°	3277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3277.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1669	1669	1669	1669	1669	
5°	1640	1638	1638	1636	1636	156
15°	1534	1534	1519	1503	1498	431
25°	1330	1322	1301	1254	1220	610
35°	1079	1071	1019	942	919	674
45°	828	810	741	679	652	638
55°	575	558	506	446	423	516
65°	342	322	291	297	247	337
75°	137	127	120	114	125	147
85°	19	21	23	25	27	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1669.3	1669.3	1669.3	1669.3	1669.3
2.5°	1657.7	1657.7	1657.7	1655.8	1655.8
5°	1640.3	1638.4	1638.4	1636.5	1636.5
7.5°	1626.8	1624.9	1622.9	1621.0	1617.2
10°	1607.5	1607.5	1605.6	1595.9	1594.0
12.5°	1576.6	1574.7	1567.0	1553.5	1549.6
15°	1534.2	1534.2	1518.7	1503.3	1497.5
17.5°	1487.9	1485.9	1466.6	1451.2	1443.5
20°	1437.7	1433.8	1414.5	1389.4	1375.9
22.5°	1381.7	1381.7	1358.6	1325.8	1312.3
25°	1329.6	1321.9	1300.7	1254.4	1219.6
27.5°	1269.8	1258.2	1235.1	1169.4	1128.9
30°	1204.2	1198.4	1165.6	1080.7	1049.8
32.5°	1142.4	1132.8	1098.0	1009.3	984.2
35°	1078.7	1071.0	1018.9	941.7	918.6
37.5°	1015.1	1005.4	939.8	878.1	849.1
40°	951.4	939.8	868.4	812.4	781.6
42.5°	891.6	876.1	806.6	746.8	712.1
45°	827.9	810.5	741.0	679.3	652.3
47.5°	764.2	748.8	685.1	621.4	590.5
50°	696.7	683.1	625.2	561.6	528.8
52.5°	640.7	619.5	563.5	499.8	472.8
55°	575.1	557.7	505.6	445.8	422.6
57.5°	515.3	497.9	449.6	393.7	374.4
60°	459.3	434.2	393.7	345.4	330.0
62.5°	397.5	378.2	343.5	303.0	322.3
65°	341.6	322.3	291.4	297.2	247.0
67.5°	279.8	270.2	243.2	216.1	208.4
70°	227.7	216.1	206.5	177.5	169.8
72.5°	181.4	169.8	156.3	140.9	135.1
75°	137.0	127.4	119.6	113.9	125.4
77.5°	94.6	90.7	84.9	79.1	77.2
80°	61.8	59.8	57.9	56.0	54.0
82.5°	36.7	36.7	36.7	36.7	36.7
85°	19.3	21.2	23.2	25.1	27.0
87.5°	11.6	11.6	13.5	15.4	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)