

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: P560215

Luminaire Tested: FSR-12-2-LD4-2HI-35-UNV-82-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560215
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-35-UNV-82-87-EDD
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3263.0 lumens
Efficiency: N/A
Efficacy: 75.5 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

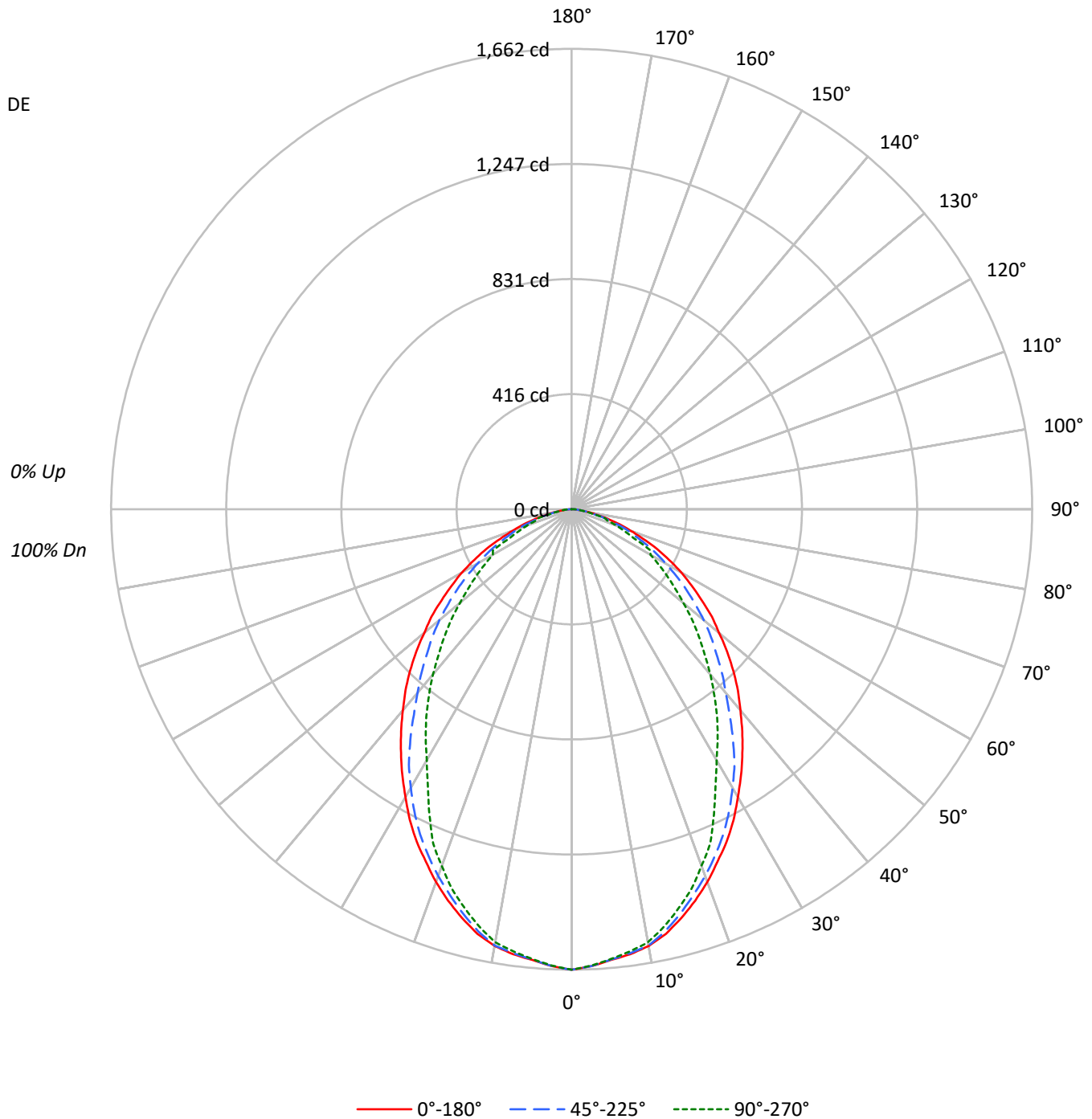
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	8945	8945	8945
5°	8824	8814	8803
10°	8747	8737	8674
15°	8512	8426	8308
20°	8199	8067	7847
25°	7862	7691	7212
30°	7451	7213	6496
35°	7057	6666	6010
40°	6655	6075	5467
45°	6274	5616	4943
50°	5808	5213	4408
55°	5373	4723	3948
60°	4922	4219	3537
65°	4331	3696	3133
70°	3567	3235	2661
75°	2836	2477	2597
80°	1906	1785	1667
85°	1186	1426	1661

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6274 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	4.7
10°-20°	424.6	13.0
20°-30°	587.9	18.0
30°-40°	626.8	19.2
40°-50°	571.8	17.5
50°-60°	448.0	13.7
60°-70°	292.0	8.9
70°-80°	129.4	4.0
80°-90°	27.8	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°	1167.2	35.8
0°-40°	1794.0	55.0
0°-60°	2813.9	86.2
0°-90°	3263.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3263.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1662	1662	1662	1662	1662	
5°	1633	1631	1631	1630	1630	155
15°	1528	1528	1512	1497	1491	429
25°	1324	1316	1295	1249	1214	608
35°	1074	1066	1015	938	915	672
45°	824	807	738	676	650	635
55°	573	555	503	444	421	514
65°	340	321	290	296	246	335
75°	136	127	119	113	125	146
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°	1662.1	1662.1	1662.1	1662.1	1662.1
2.5°	1650.6	1650.6	1650.6	1648.7	1648.7
5°	1633.3	1631.4	1631.4	1629.5	1629.5
7.5°	1619.9	1617.9	1616.0	1614.1	1610.2
10°	1600.6	1600.6	1598.7	1589.1	1587.2
12.5°	1569.9	1568.0	1560.3	1546.8	1543.0
15°	1527.6	1527.6	1512.2	1496.9	1491.1
17.5°	1481.5	1479.6	1460.4	1445.0	1437.3
20°	1431.5	1427.7	1408.5	1383.5	1370.1
22.5°	1375.8	1375.8	1352.8	1320.1	1306.6
25°	1323.9	1316.3	1295.1	1249.0	1214.4
27.5°	1264.4	1252.8	1229.8	1164.5	1124.1
30°	1199.0	1193.3	1160.6	1076.1	1045.3
32.5°	1137.5	1127.9	1093.4	1005.0	980.0
35°	1074.1	1066.5	1014.6	937.7	914.7
37.5°	1010.7	1001.1	935.8	874.3	845.5
40°	947.3	935.8	864.7	809.0	778.2
42.5°	887.7	872.4	803.2	743.6	709.0
45°	824.3	807.0	737.9	676.4	649.5
47.5°	760.9	745.6	682.1	618.7	588.0
50°	693.7	680.2	622.6	559.2	526.5
52.5°	637.9	616.8	561.1	497.7	470.8
55°	572.6	555.3	503.4	443.9	420.8
57.5°	513.1	495.8	447.7	392.0	372.8
60°	457.3	432.3	392.0	344.0	328.6
62.5°	395.8	376.6	342.0	301.7	320.9
65°	340.1	320.9	290.2	295.9	246.0
67.5°	278.6	269.0	242.1	215.2	207.5
70°	226.7	215.2	205.6	176.8	169.1
72.5°	180.6	169.1	155.6	140.3	134.5
75°	136.4	126.8	119.1	113.4	124.9
77.5°	94.2	90.3	84.5	78.8	76.9
80°	61.5	59.6	57.6	55.7	53.8
82.5°	36.5	36.5	36.5	36.5	36.5
85°	19.2	21.1	23.1	25.0	26.9
87.5°	11.5	11.5	13.5	15.4	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)