

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: P560188

Luminaire Tested: FSR-12-2-LD4-2HI-35-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560188
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-80-96-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3104.0 lumens
Efficiency: N/A
Efficacy: 71.9 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

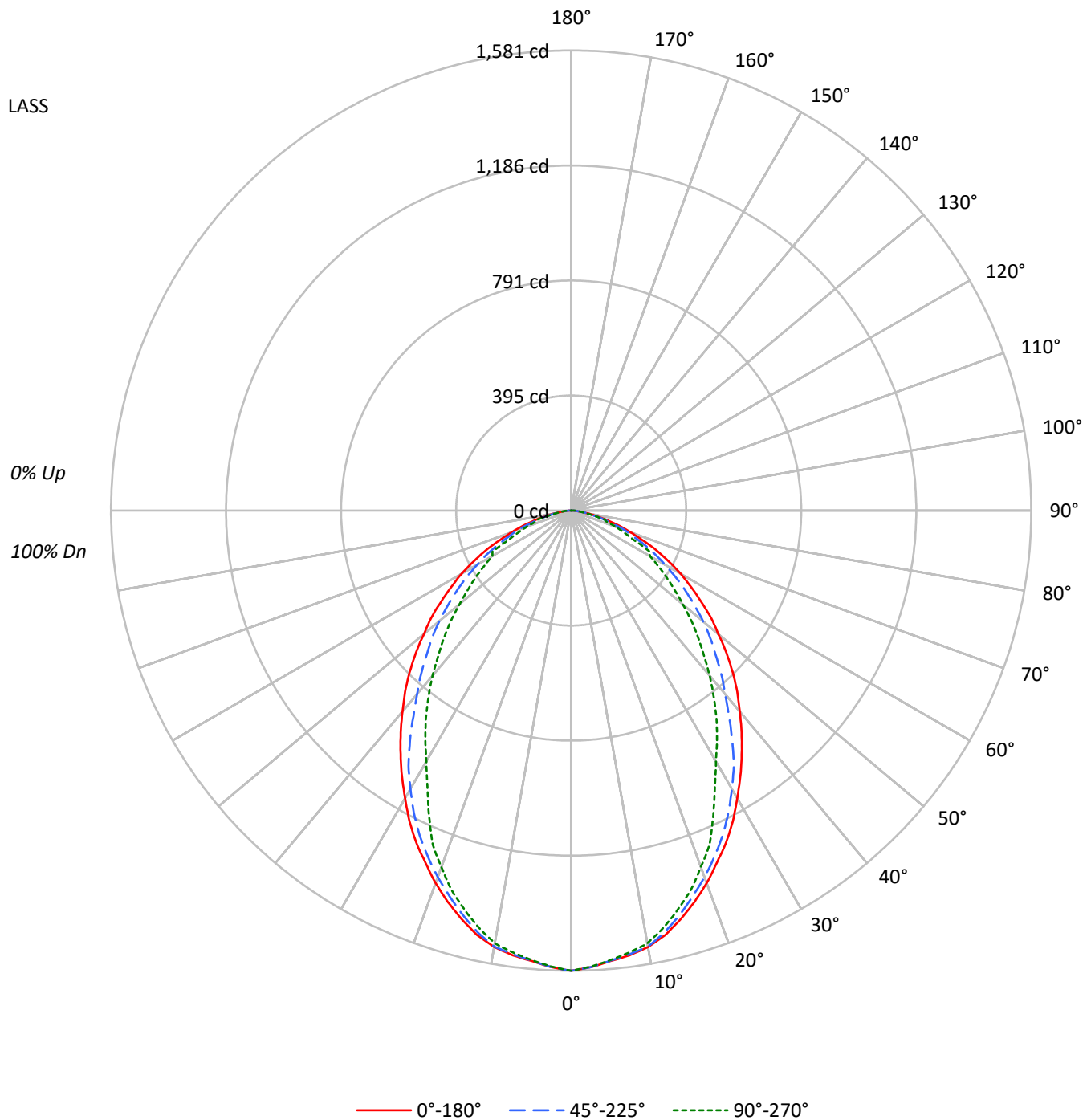
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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				
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°	8509	8509	8509
5°	8394	8384	8374
10°	8321	8311	8251
15°	8097	8016	7904
20°	7800	7674	7464
25°	7479	7316	6860
30°	7088	6861	6180
35°	6713	6341	5717
40°	6332	5779	5201
45°	5969	5342	4702
50°	5525	4958	4193
55°	5111	4494	3756
60°	4682	4014	3365
65°	4120	3515	2980
70°	3394	3078	2532
75°	2699	2356	2470
80°	1813	1698	1587
85°	1130	1352	1581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5969 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	4.7
10°-20°	403.9	13.0
20°-30°	559.2	18.0
30°-40°	596.3	19.2
40°-50°	544.0	17.5
50°-60°	426.2	13.7
60°-70°	277.8	8.9
70°-80°	123.1	4.0
80°-90°	26.4	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°	1110.3	35.8
0°-40°	1706.6	55.0
0°-60°	2676.8	86.2
0°-90°	3104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3104.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1581	1581	1581	1581	1581	
5°	1554	1552	1552	1550	1550	147
15°	1453	1453	1439	1424	1418	409
25°	1259	1252	1232	1188	1155	578
35°	1022	1014	965	892	870	639
45°	784	768	702	643	618	604
55°	545	528	479	422	400	489
65°	324	305	276	282	234	319
75°	130	121	113	108	119	139
85°	18	20	22	24	26	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1581.1	1581.1	1581.1	1581.1	1581.1
2.5°	1570.2	1570.2	1570.2	1568.3	1568.3
5°	1553.7	1551.9	1551.9	1550.1	1550.1
7.5°	1540.9	1539.1	1537.3	1535.4	1531.8
10°	1522.6	1522.6	1520.8	1511.7	1509.8
12.5°	1493.4	1491.6	1484.3	1471.5	1467.8
15°	1453.2	1453.2	1438.6	1423.9	1418.5
17.5°	1409.3	1407.5	1389.2	1374.6	1367.3
20°	1361.8	1358.1	1339.9	1316.1	1303.3
22.5°	1308.8	1308.8	1286.8	1255.8	1243.0
25°	1259.4	1252.1	1232.0	1188.1	1155.2
27.5°	1202.8	1191.8	1169.9	1107.7	1069.3
30°	1140.6	1135.1	1104.1	1023.6	994.4
32.5°	1082.1	1073.0	1040.1	956.0	932.2
35°	1021.8	1014.5	965.1	892.0	870.1
37.5°	961.5	952.3	890.2	831.7	804.3
40°	901.2	890.2	822.6	769.5	740.3
42.5°	844.5	829.9	764.1	707.4	674.5
45°	784.2	767.7	701.9	643.4	617.8
47.5°	723.8	709.2	648.9	588.6	559.3
50°	659.9	647.1	592.2	531.9	500.8
52.5°	606.9	586.8	533.7	473.4	447.8
55°	544.7	528.3	478.9	422.2	400.3
57.5°	488.1	471.6	425.9	372.9	354.6
60°	435.0	411.3	372.9	327.2	312.6
62.5°	376.5	358.3	325.4	287.0	305.3
65°	323.5	305.3	276.0	281.5	234.0
67.5°	265.0	255.9	230.3	204.7	197.4
70°	215.7	204.7	195.6	168.2	160.9
72.5°	171.8	160.9	148.1	133.4	128.0
75°	129.8	120.6	113.3	107.8	118.8
77.5°	89.6	85.9	80.4	74.9	73.1
80°	58.5	56.7	54.8	53.0	51.2
82.5°	34.7	34.7	34.7	34.7	34.7
85°	18.3	20.1	21.9	23.8	25.6
87.5°	11.0	11.0	12.8	14.6	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)