

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: P560595

Luminaire Tested: FSR-12-2-LD4-2STD-35-UNV-82-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560595
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-LD4-2STD-35-UNV-82-85-EDD
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2781.0 lumens
Efficiency: N/A
Efficacy: 83.5 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

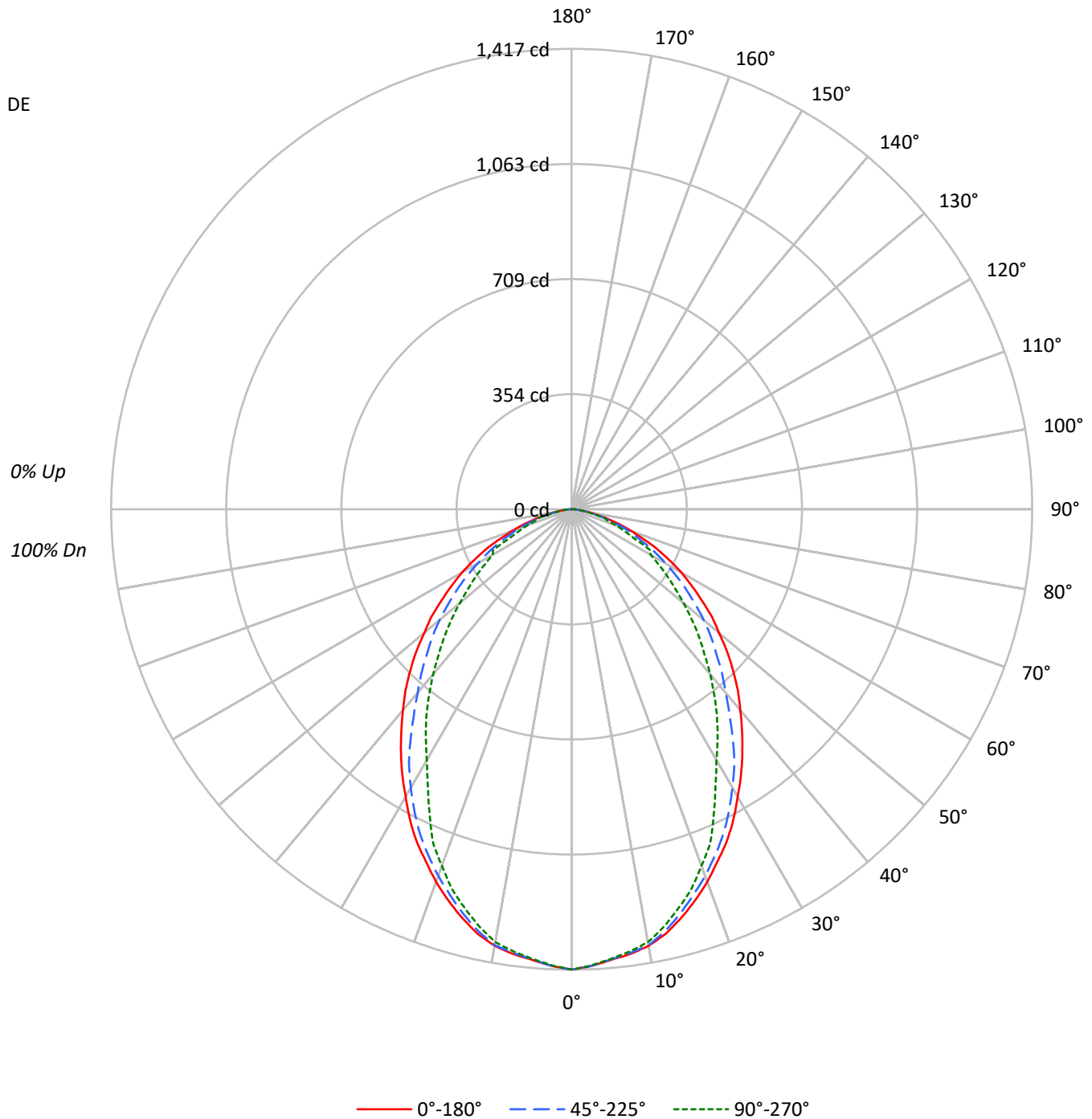
Input Watts (W): 33.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	7624	7624	7624
5°	7520	7512	7503
10°	7455	7447	7392
15°	7254	7182	7081
20°	6988	6875	6688
25°	6701	6555	6146
30°	6351	6147	5537
35°	6015	5681	5121
40°	5673	5178	4660
45°	5348	4787	4213
50°	4950	4443	3757
55°	4579	4026	3366
60°	4196	3596	3014
65°	3692	3149	2669
70°	3040	2757	2268
75°	2418	2111	2215
80°	1624	1522	1423
85°	1013	1216	1414

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5348 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	4.7
10°-20°	361.9	13.0
20°-30°	501.0	18.0
30°-40°	534.2	19.2
40°-50°	487.4	17.5
50°-60°	381.8	13.7
60°-70°	248.9	8.9
70°-80°	110.3	4.0
80°-90°	23.7	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°	994.8	35.8
0°-40°	1529.0	55.0
0°-60°	2398.2	86.2
0°-90°	2781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1392	1390	1390	1389	1389	132
15°	1302	1302	1289	1276	1271	366
25°	1128	1122	1104	1064	1035	518
35°	916	909	865	799	780	572
45°	703	688	629	576	554	541
55°	488	473	429	378	359	438
65°	290	274	247	252	210	286
75°	116	108	102	97	106	125
85°	16	18	20	21	23	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1416.6	1416.6	1416.6	1416.6	1416.6
2.5°	1406.8	1406.8	1406.8	1405.1	1405.1
5°	1392.0	1390.4	1390.4	1388.8	1388.8
7.5°	1380.6	1378.9	1377.3	1375.7	1372.4
10°	1364.2	1364.2	1362.6	1354.4	1352.7
12.5°	1338.0	1336.4	1329.8	1318.3	1315.1
15°	1302.0	1302.0	1288.9	1275.8	1270.8
17.5°	1262.7	1261.0	1244.6	1231.5	1225.0
20°	1220.1	1216.8	1200.4	1179.1	1167.7
22.5°	1172.6	1172.6	1152.9	1125.1	1113.6
25°	1128.4	1121.8	1103.8	1064.5	1035.0
27.5°	1077.6	1067.8	1048.1	992.4	958.1
30°	1021.9	1017.0	989.2	917.1	890.9
32.5°	969.5	961.3	931.8	856.5	835.2
35°	915.5	908.9	864.7	799.2	779.5
37.5°	861.4	853.2	797.6	745.2	720.6
40°	807.4	797.6	737.0	689.5	663.3
42.5°	756.6	743.5	684.6	633.8	604.3
45°	702.6	687.8	628.9	576.5	553.5
47.5°	648.5	635.4	581.4	527.3	501.1
50°	591.2	579.7	530.6	476.6	448.7
52.5°	543.7	525.7	478.2	424.2	401.2
55°	488.0	473.3	429.1	378.3	358.7
57.5°	437.3	422.5	381.6	334.1	317.7
60°	389.8	368.5	334.1	293.1	280.0
62.5°	337.4	321.0	291.5	257.1	273.5
65°	289.9	273.5	247.3	252.2	209.6
67.5°	237.5	229.3	206.3	183.4	176.9
70°	193.2	183.4	175.2	150.7	144.1
72.5°	153.9	144.1	132.7	119.6	114.6
75°	116.3	108.1	101.5	96.6	106.5
77.5°	80.2	77.0	72.1	67.1	65.5
80°	52.4	50.8	49.1	47.5	45.9
82.5°	31.1	31.1	31.1	31.1	31.1
85°	16.4	18.0	19.7	21.3	22.9
87.5°	9.8	9.8	11.5	13.1	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)