

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: P559800

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-88-EDD-90

Issue Date: 7/20/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P559800  
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-LD4-1LO-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

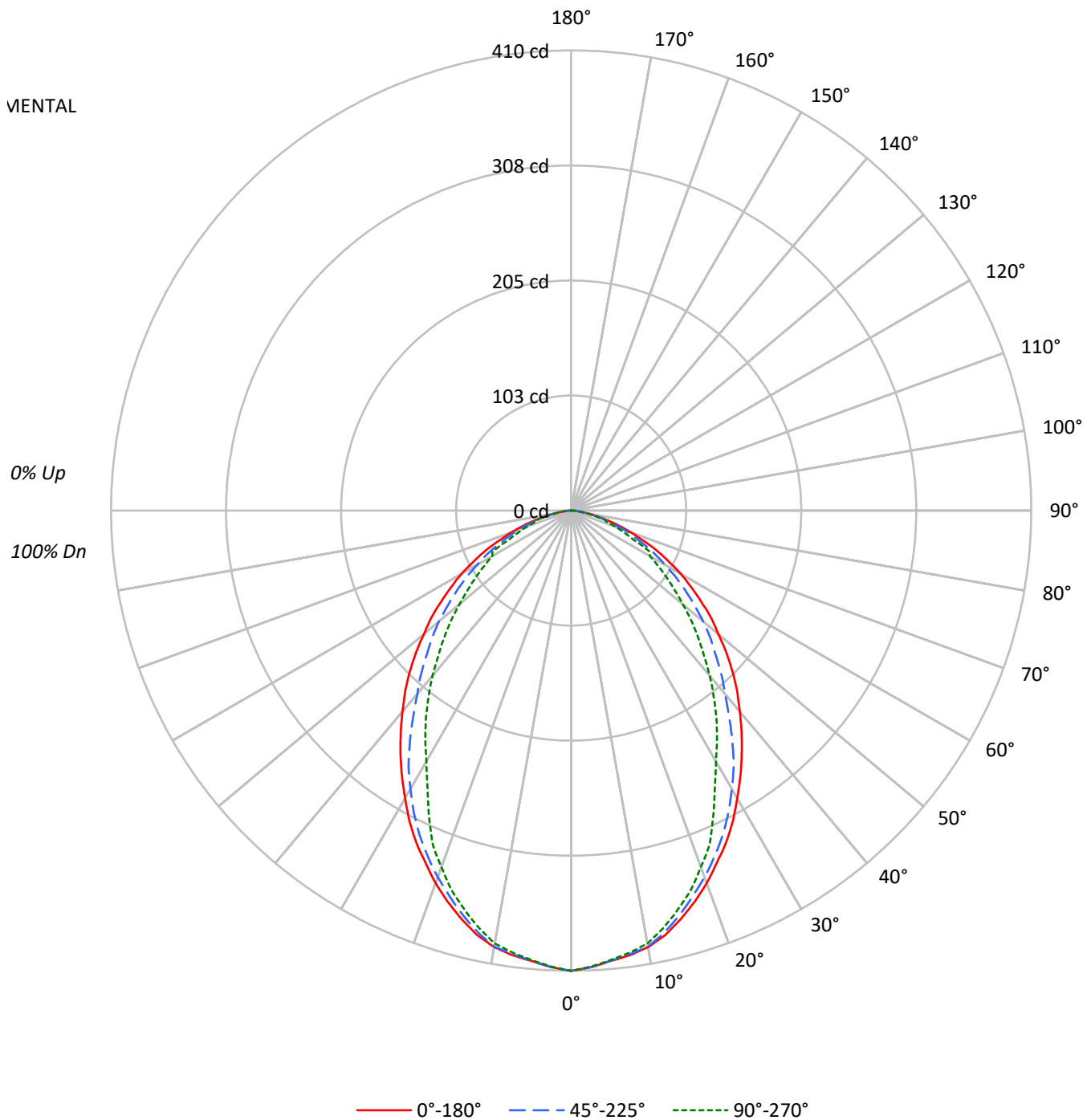
Lumens per Lamp: N/A  
Luminaire Lumens: 805.0 lumens  
Efficiency: N/A  
Efficacy: 68.8 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	2207	2207	2207
5°	2177	2175	2172
10°	2158	2155	2140
15°	2100	2079	2050
20°	2023	1990	1936
25°	1939	1897	1779
30°	1838	1779	1603
35°	1741	1645	1482
40°	1642	1499	1349
45°	1548	1385	1219
50°	1433	1286	1088
55°	1326	1165	974
60°	1214	1041	873
65°	1068	912	773
70°	880	798	656
75°	701	611	640
80°	471	440	412
85°	290	352	408

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1548 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.2	4.7
10°-20°	104.8	13.0
20°-30°	145.0	18.0
30°-40°	154.6	19.2
40°-50°	141.1	17.5
50°-60°	110.5	13.7
60°-70°	72.0	8.9
70°-80°	31.9	4.0
80°-90°	6.8	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°	288.0	35.8
0°-40°	442.6	55.0
0°-60°	694.2	86.2
0°-90°	805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	403	402	402	402	402	38
15°	377	377	373	369	368	106
25°	327	325	320	308	300	150
35°	265	263	250	231	226	166
45°	203	199	182	167	160	157
55°	141	137	124	110	104	127
65°	84	79	72	73	61	83
75°	34	31	29	28	31	36
85°	5	5	6	6	7	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	410.1	410.1	410.1	410.1	410.1
2.5°	407.2	407.2	407.2	406.7	406.7
5°	402.9	402.5	402.5	402.0	402.0
7.5°	399.6	399.2	398.7	398.2	397.3
10°	394.9	394.9	394.4	392.0	391.6
12.5°	387.3	386.8	384.9	381.6	380.7
15°	376.9	376.9	373.1	369.3	367.9
17.5°	365.5	365.0	360.3	356.5	354.6
20°	353.2	352.2	347.5	341.3	338.0
22.5°	339.4	339.4	333.7	325.7	322.4
25°	326.6	324.7	319.5	308.1	299.6
27.5°	311.9	309.1	303.4	287.3	277.3
30°	295.8	294.4	286.3	265.5	257.9
32.5°	280.6	278.3	269.7	247.9	241.8
35°	265.0	263.1	250.3	231.3	225.6
37.5°	249.4	247.0	230.9	215.7	208.6
40°	233.7	230.9	213.3	199.6	192.0
42.5°	219.0	215.2	198.2	183.5	174.9
45°	203.4	199.1	182.0	166.9	160.2
47.5°	187.7	183.9	168.3	152.6	145.1
50°	171.1	167.8	153.6	137.9	129.9
52.5°	157.4	152.2	138.4	122.8	116.1
55°	141.3	137.0	124.2	109.5	103.8
57.5°	126.6	122.3	110.5	96.7	92.0
60°	112.8	106.7	96.7	84.9	81.1
62.5°	97.7	92.9	84.4	74.4	79.2
65°	83.9	79.2	71.6	73.0	60.7
67.5°	68.7	66.4	59.7	53.1	51.2
70°	55.9	53.1	50.7	43.6	41.7
72.5°	44.6	41.7	38.4	34.6	33.2
75°	33.7	31.3	29.4	28.0	30.8
77.5°	23.2	22.3	20.9	19.4	19.0
80°	15.2	14.7	14.2	13.7	13.3
82.5°	9.0	9.0	9.0	9.0	9.0
85°	4.7	5.2	5.7	6.2	6.6
87.5°	2.8	2.8	3.3	3.8	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)