

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: P560435

Luminaire Tested: FSR-12-2-LD4-2LO-40-UNV-80-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560435
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-LD4-2LO-40-UNV-80-85-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

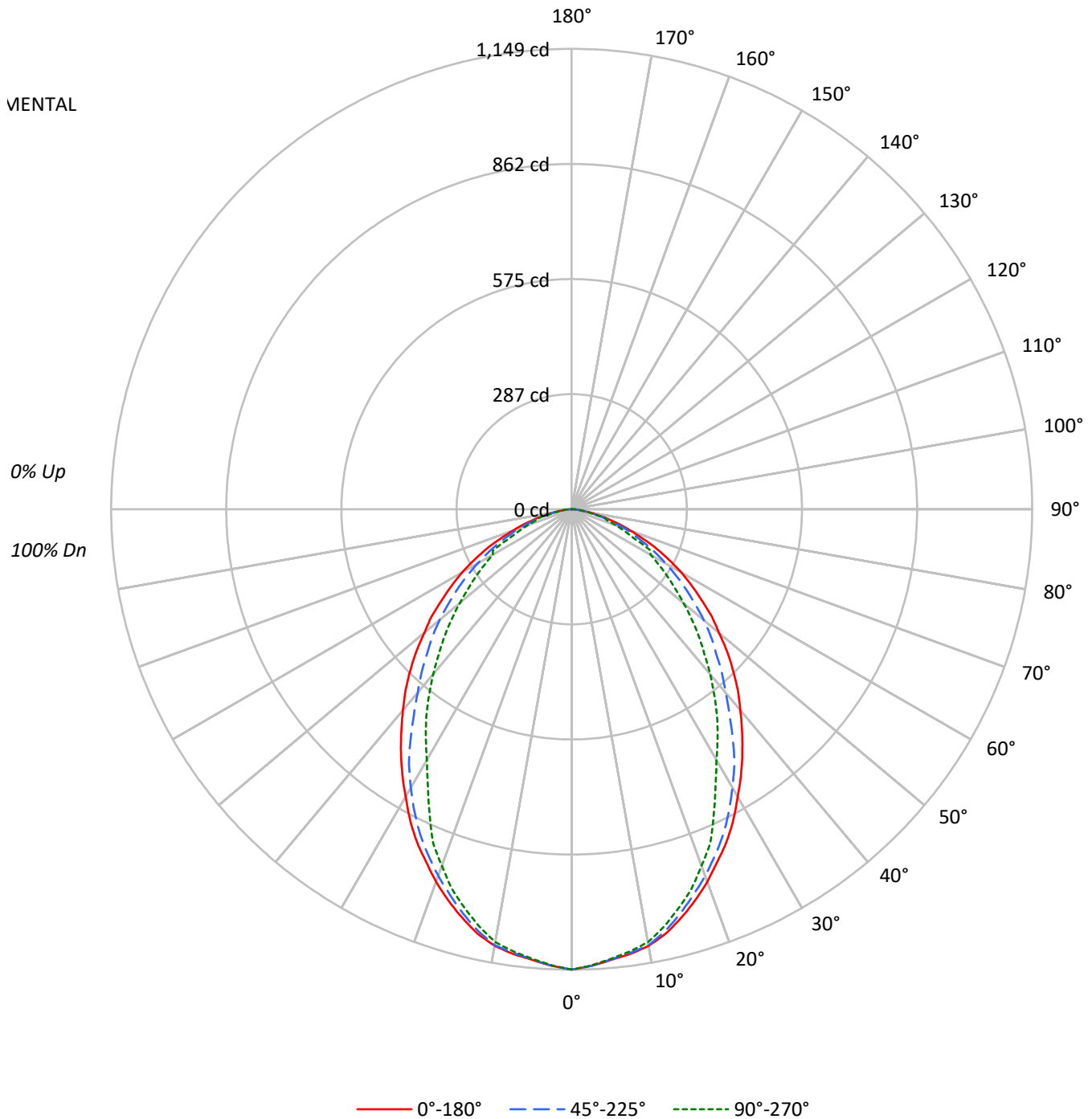
Lumens per Lamp: N/A
Luminaire Lumens: 2255.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	6182	6182	6182
5°	6098	6091	6084
10°	6045	6038	5995
15°	5882	5823	5742
20°	5666	5575	5423
25°	5433	5315	4984
30°	5149	4985	4489
35°	4877	4607	4153
40°	4600	4199	3778
45°	4336	3881	3416
50°	4014	3603	3047
55°	3713	3264	2729
60°	3401	2916	2444
65°	2993	2553	2165
70°	2466	2236	1840
75°	1961	1711	1795
80°	1317	1234	1153
85°	821	982	1149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4336 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	4.7
10°-20°	293.4	13.0
20°-30°	406.3	18.0
30°-40°	433.2	19.2
40°-50°	395.2	17.5
50°-60°	309.6	13.7
60°-70°	201.8	8.9
70°-80°	89.4	4.0
80°-90°	19.2	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°	806.6	35.8
0°-40°	1239.8	55.0
0°-60°	1944.6	86.2
0°-90°	2255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2255.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1129	1127	1127	1126	1126	107
15°	1056	1056	1045	1034	1030	297
25°	915	910	895	863	839	420
35°	742	737	701	648	632	464
45°	570	558	510	467	449	439
55°	396	384	348	307	291	355
65°	235	222	200	204	170	232
75°	94	88	82	78	86	101
85°	13	15	16	17	19	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.7	1148.7	1148.7	1148.7	1148.7
2.5°	1140.7	1140.7	1140.7	1139.4	1139.4
5°	1128.7	1127.4	1127.4	1126.1	1126.1
7.5°	1119.5	1118.1	1116.8	1115.5	1112.8
10°	1106.2	1106.2	1104.8	1098.2	1096.9
12.5°	1084.9	1083.6	1078.3	1069.0	1066.3
15°	1055.7	1055.7	1045.1	1034.5	1030.5
17.5°	1023.8	1022.5	1009.2	998.6	993.3
20°	989.3	986.7	973.4	956.1	946.8
22.5°	950.8	950.8	934.9	912.3	903.0
25°	914.9	909.6	895.0	863.2	839.3
27.5°	873.8	865.8	849.9	804.7	776.8
30°	828.6	824.6	802.1	743.6	722.4
32.5°	786.1	779.5	755.6	694.5	677.2
35°	742.3	737.0	701.2	648.0	632.1
37.5°	698.5	691.9	646.7	604.2	584.3
40°	654.7	646.7	597.6	559.1	537.8
42.5°	613.5	602.9	555.1	513.9	490.0
45°	569.7	557.7	509.9	467.4	448.8
47.5°	525.9	515.2	471.4	427.6	406.3
50°	479.4	470.1	430.3	386.4	363.9
52.5°	440.9	426.3	387.8	343.9	325.3
55°	395.7	383.8	347.9	306.8	290.8
57.5°	354.6	342.6	309.4	270.9	257.6
60°	316.0	298.8	270.9	237.7	227.1
62.5°	273.6	260.3	236.4	208.5	221.8
65°	235.0	221.8	200.5	204.5	170.0
67.5°	192.6	185.9	167.3	148.7	143.4
70°	156.7	148.7	142.1	122.2	116.9
72.5°	124.8	116.9	107.6	96.9	93.0
75°	94.3	87.6	82.3	78.3	86.3
77.5°	65.1	62.4	58.4	54.4	53.1
80°	42.5	41.2	39.8	38.5	37.2
82.5°	25.2	25.2	25.2	25.2	25.2
85°	13.3	14.6	15.9	17.3	18.6
87.5°	8.0	8.0	9.3	10.6	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)