

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: P560497

Luminaire Tested: FSR-12-2-LD4-2LO-50-UNV-80-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560497
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-50-UNV-80-84-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

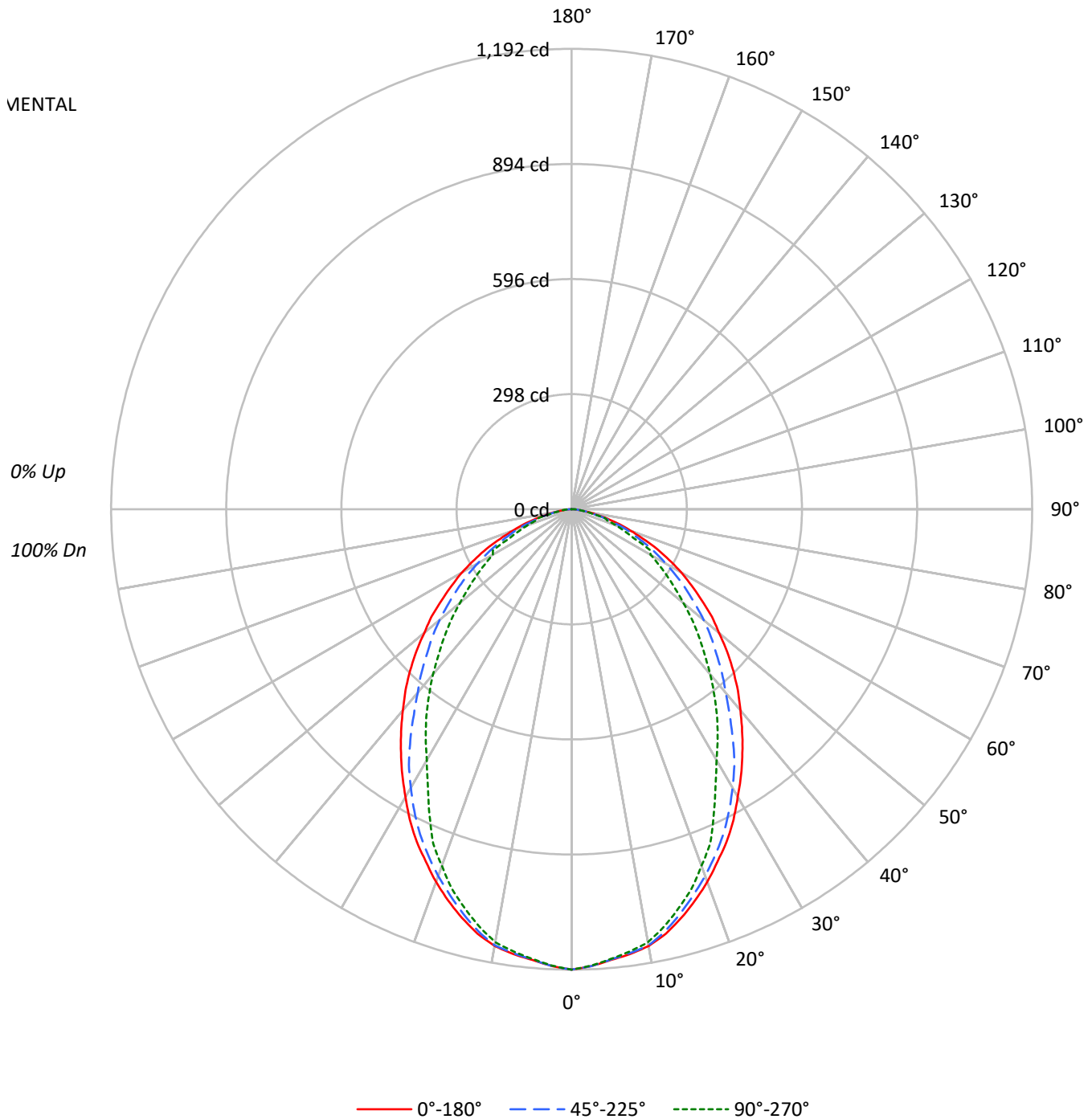
Lumens per Lamp: N/A
Luminaire Lumens: 2340.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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	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°	6415	6415	6415
5°	6328	6320	6313
10°	6273	6266	6220
15°	6104	6043	5958
20°	5880	5785	5627
25°	5638	5516	5172
30°	5344	5172	4658
35°	5061	4780	4309
40°	4773	4357	3921
45°	4500	4027	3545
50°	4165	3738	3162
55°	3853	3387	2832
60°	3531	3026	2536
65°	3106	2650	2246
70°	2559	2319	1909
75°	2034	1776	1863
80°	1367	1280	1196
85°	852	1019	1192

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4500 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	4.7
10°-20°	304.5	13.0
20°-30°	421.6	18.0
30°-40°	449.5	19.2
40°-50°	410.1	17.5
50°-60°	321.3	13.7
60°-70°	209.4	8.9
70°-80°	92.8	4.0
80°-90°	19.9	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°	837.0	35.8
0°-40°	1286.6	55.0
0°-60°	2017.9	86.2
0°-90°	2340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2340.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1192	1192	1192	1192	1192	
5°	1171	1170	1170	1168	1168	111
15°	1096	1096	1084	1074	1069	308
25°	949	944	929	896	871	436
35°	770	765	728	672	656	482
45°	591	579	529	485	466	455
55°	411	398	361	318	302	368
65°	244	230	208	212	176	240
75°	98	91	85	81	90	105
85°	14	15	16	18	19	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1192.0	1192.0	1192.0	1192.0	1192.0
2.5°	1183.7	1183.7	1183.7	1182.3	1182.3
5°	1171.3	1169.9	1169.9	1168.5	1168.5
7.5°	1161.6	1160.3	1158.9	1157.5	1154.8
10°	1147.9	1147.9	1146.5	1139.6	1138.2
12.5°	1125.8	1124.4	1118.9	1109.3	1106.5
15°	1095.5	1095.5	1084.5	1073.5	1069.3
17.5°	1062.4	1061.1	1047.3	1036.3	1030.7
20°	1026.6	1023.8	1010.1	992.2	982.5
22.5°	986.6	986.6	970.1	946.7	937.0
25°	949.4	943.9	928.8	895.7	870.9
27.5°	906.7	898.5	881.9	835.1	806.1
30°	859.9	855.7	832.3	771.7	749.6
32.5°	815.8	808.9	784.1	720.7	702.8
35°	770.3	764.8	727.6	672.5	655.9
37.5°	724.8	717.9	671.1	627.0	606.3
40°	679.4	671.1	620.1	580.1	558.1
42.5°	636.6	625.6	576.0	533.3	508.5
45°	591.2	578.8	529.1	485.1	465.8
47.5°	545.7	534.7	489.2	443.7	421.7
50°	497.5	487.8	446.5	401.0	377.6
52.5°	457.5	442.3	402.4	356.9	337.6
55°	410.6	398.2	361.0	318.3	301.8
57.5°	367.9	355.5	321.1	281.1	267.3
60°	328.0	310.0	281.1	246.7	235.6
62.5°	283.9	270.1	245.3	216.3	230.1
65°	243.9	230.1	208.1	212.2	176.4
67.5°	199.8	192.9	173.6	154.3	148.8
70°	162.6	154.3	147.4	126.8	121.3
72.5°	129.5	121.3	111.6	100.6	96.5
75°	97.8	90.9	85.4	81.3	89.6
77.5°	67.5	64.8	60.6	56.5	55.1
80°	44.1	42.7	41.3	40.0	38.6
82.5°	26.2	26.2	26.2	26.2	26.2
85°	13.8	15.2	16.5	17.9	19.3
87.5°	8.3	8.3	9.6	11.0	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)