

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: P559853

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-93-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559853
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-93-96-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPER
GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1131.0 lumens
Efficiency: N/A
Efficacy: 96.7 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

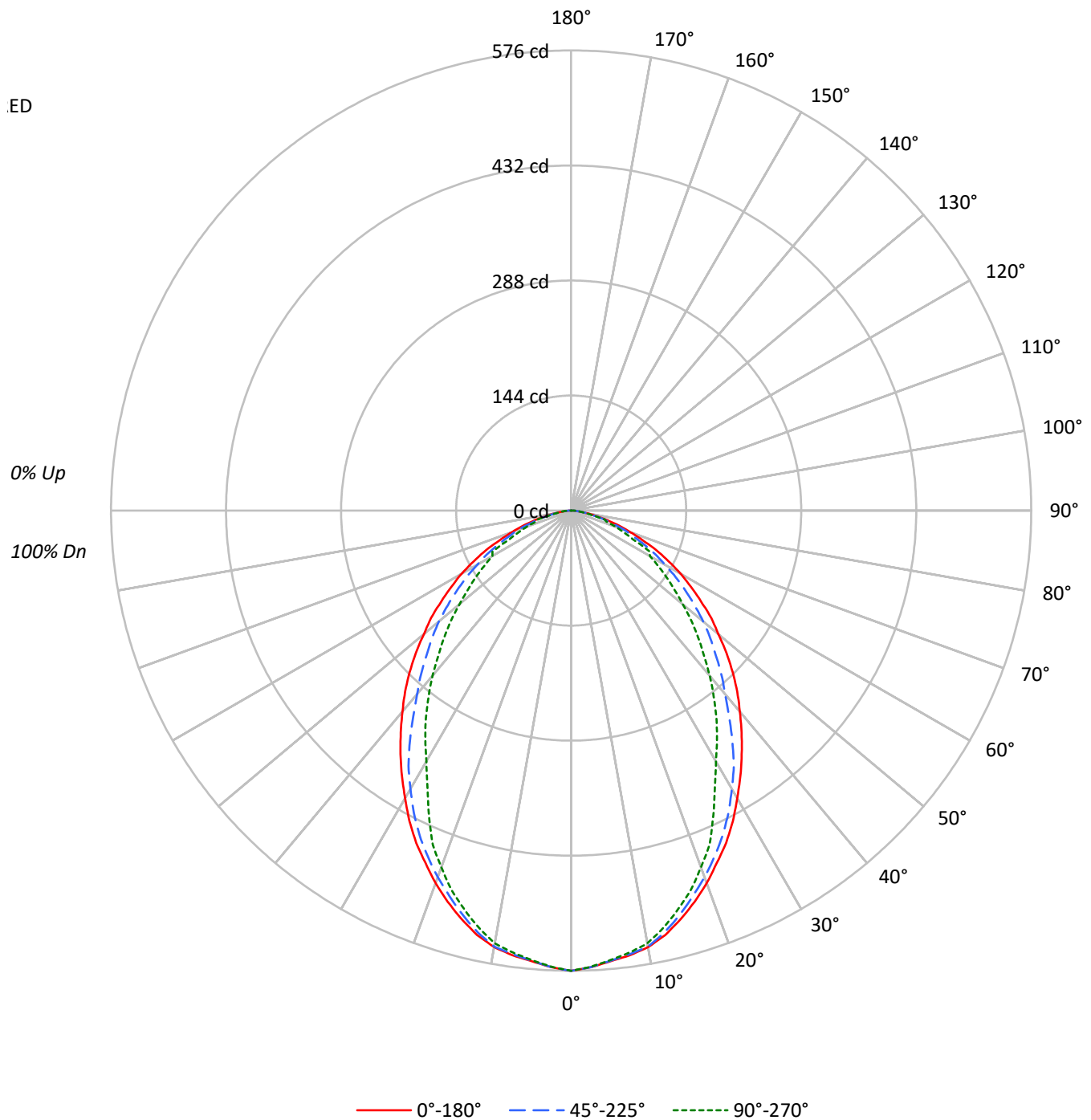
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	3101	3101	3101
5°	3058	3055	3051
10°	3032	3028	3006
15°	2950	2921	2880
20°	2842	2796	2720
25°	2725	2666	2499
30°	2583	2500	2252
35°	2446	2311	2083
40°	2307	2106	1895
45°	2175	1947	1713
50°	2013	1807	1528
55°	1863	1637	1369
60°	1706	1463	1226
65°	1501	1281	1086
70°	1237	1122	922
75°	984	859	900
80°	660	620	576
85°	414	494	574

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2175 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	4.7
10°-20°	147.2	13.0
20°-30°	203.8	18.0
30°-40°	217.3	19.2
40°-50°	198.2	17.5
50°-60°	155.3	13.7
60°-70°	101.2	8.9
70°-80°	44.8	4.0
80°-90°	9.6	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°	404.6	35.8
0°-40°	621.8	55.0
0°-60°	975.3	86.2
0°-90°	1131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	566	566	566	565	565	54
15°	530	530	524	519	517	149
25°	459	456	449	433	421	211
35°	372	370	352	325	317	233
45°	286	280	256	234	225	220
55°	198	192	174	154	146	178
65°	118	111	101	103	85	116
75°	47	44	41	39	43	51
85°	7	7	8	9	9	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	576.1	576.1	576.1	576.1	576.1
2.5°	572.1	572.1	572.1	571.5	571.5
5°	566.1	565.5	565.5	564.8	564.8
7.5°	561.5	560.8	560.1	559.5	558.1
10°	554.8	554.8	554.1	550.8	550.1
12.5°	544.1	543.5	540.8	536.2	534.8
15°	529.5	529.5	524.2	518.8	516.8
17.5°	513.5	512.8	506.2	500.9	498.2
20°	496.2	494.9	488.2	479.5	474.9
22.5°	476.9	476.9	468.9	457.6	452.9
25°	458.9	456.2	448.9	432.9	420.9
27.5°	438.2	434.3	426.3	403.6	389.6
30°	415.6	413.6	402.3	373.0	362.3
32.5°	394.3	391.0	379.0	348.3	339.7
35°	372.3	369.6	351.7	325.0	317.0
37.5°	350.3	347.0	324.4	303.0	293.1
40°	328.4	324.4	299.7	280.4	269.7
42.5°	307.7	302.4	278.4	257.8	245.8
45°	285.7	279.7	255.8	234.4	225.1
47.5°	263.7	258.4	236.4	214.5	203.8
50°	240.4	235.8	215.8	193.8	182.5
52.5°	221.1	213.8	194.5	172.5	163.2
55°	198.5	192.5	174.5	153.9	145.9
57.5°	177.8	171.8	155.2	135.9	129.2
60°	158.5	149.9	135.9	119.2	113.9
62.5°	137.2	130.5	118.6	104.6	111.2
65°	117.9	111.2	100.6	102.6	85.3
67.5°	96.6	93.2	83.9	74.6	71.9
70°	78.6	74.6	71.3	61.3	58.6
72.5°	62.6	58.6	53.9	48.6	46.6
75°	47.3	44.0	41.3	39.3	43.3
77.5°	32.6	31.3	29.3	27.3	26.6
80°	21.3	20.6	20.0	19.3	18.6
82.5°	12.7	12.7	12.7	12.7	12.7
85°	6.7	7.3	8.0	8.7	9.3
87.5°	4.0	4.0	4.7	5.3	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)