

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: P559623

Luminaire Tested: FSR-12-2-LD4-1HI-35-UNV-81-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559623
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-LD4-1HI-35-UNV-81-87-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1667.0 lumens
Efficiency: N/A
Efficacy: 77.2 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

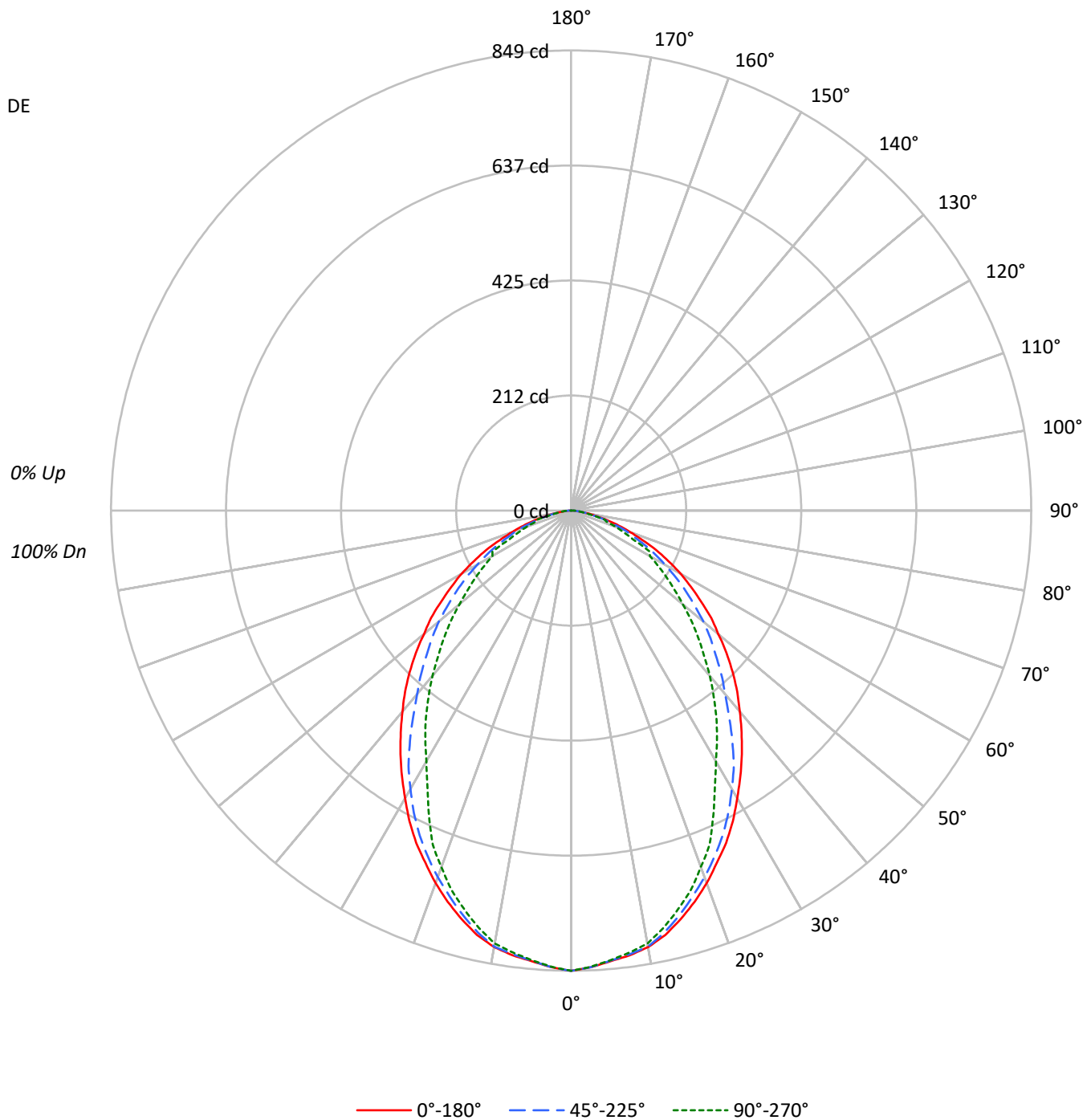
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4570	4570	4570
5°	4508	4502	4498
10°	4469	4464	4432
15°	4348	4305	4245
20°	4188	4121	4009
25°	4017	3929	3684
30°	3807	3685	3319
35°	3606	3405	3070
40°	3400	3104	2793
45°	3205	2869	2525
50°	2967	2663	2252
55°	2745	2413	2017
60°	2514	2156	1807
65°	2213	1887	1601
70°	1822	1652	1360
75°	1449	1266	1327
80°	973	914	852
85°	605	729	846

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3205 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	4.7
10°-20°	216.9	13.0
20°-30°	300.3	18.0
30°-40°	320.2	19.2
40°-50°	292.1	17.5
50°-60°	228.9	13.7
60°-70°	149.2	8.9
70°-80°	66.1	4.0
80°-90°	14.2	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°	596.3	35.8
0°-40°	916.5	55.0
0°-60°	1437.6	86.2
0°-90°	1667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1667.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	849	849	849	849	849	
5°	834	833	833	832	832	79
15°	780	780	773	765	762	219
25°	676	672	662	638	620	311
35°	549	545	518	479	467	343
45°	421	412	377	346	332	324
55°	292	284	257	227	215	262
65°	174	164	148	151	126	171
75°	70	65	61	58	64	75
85°	10	11	12	13	14	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	849.1	849.1	849.1	849.1	849.1
2.5°	843.3	843.3	843.3	842.3	842.3
5°	834.4	833.4	833.4	832.5	832.5
7.5°	827.6	826.6	825.6	824.6	822.6
10°	817.7	817.7	816.8	811.8	810.9
12.5°	802.0	801.0	797.1	790.2	788.3
15°	780.4	780.4	772.6	764.7	761.8
17.5°	756.9	755.9	746.1	738.2	734.3
20°	731.3	729.4	719.6	706.8	699.9
22.5°	702.9	702.9	691.1	674.4	667.5
25°	676.4	672.4	661.6	638.1	620.4
27.5°	645.9	640.1	628.3	594.9	574.3
30°	612.6	609.6	592.9	549.7	534.0
32.5°	581.2	576.2	558.6	513.4	500.7
35°	548.8	544.8	518.3	479.1	467.3
37.5°	516.4	511.5	478.1	446.7	431.9
40°	484.0	478.1	441.8	413.3	397.6
42.5°	453.5	445.7	410.3	379.9	362.2
45°	421.1	412.3	377.0	345.5	331.8
47.5°	388.7	380.9	348.5	316.1	300.4
50°	354.4	347.5	318.1	285.7	269.0
52.5°	325.9	315.1	286.6	254.3	240.5
55°	292.5	283.7	257.2	226.8	215.0
57.5°	262.1	253.3	228.7	200.3	190.4
60°	233.6	220.9	200.3	175.7	167.9
62.5°	202.2	192.4	174.7	154.1	163.9
65°	173.8	163.9	148.2	151.2	125.7
67.5°	142.3	137.4	123.7	109.9	106.0
70°	115.8	109.9	105.0	90.3	86.4
72.5°	92.3	86.4	79.5	71.7	68.7
75°	69.7	64.8	60.9	57.9	63.8
77.5°	48.1	46.1	43.2	40.2	39.3
80°	31.4	30.4	29.5	28.5	27.5
82.5°	18.7	18.7	18.7	18.7	18.7
85°	9.8	10.8	11.8	12.8	13.7
87.5°	5.9	5.9	6.9	7.9	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)