

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: P558663

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558663
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-12-1-LD4-1LO-35-UNV-81-87-EDD
Description: 1X1 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

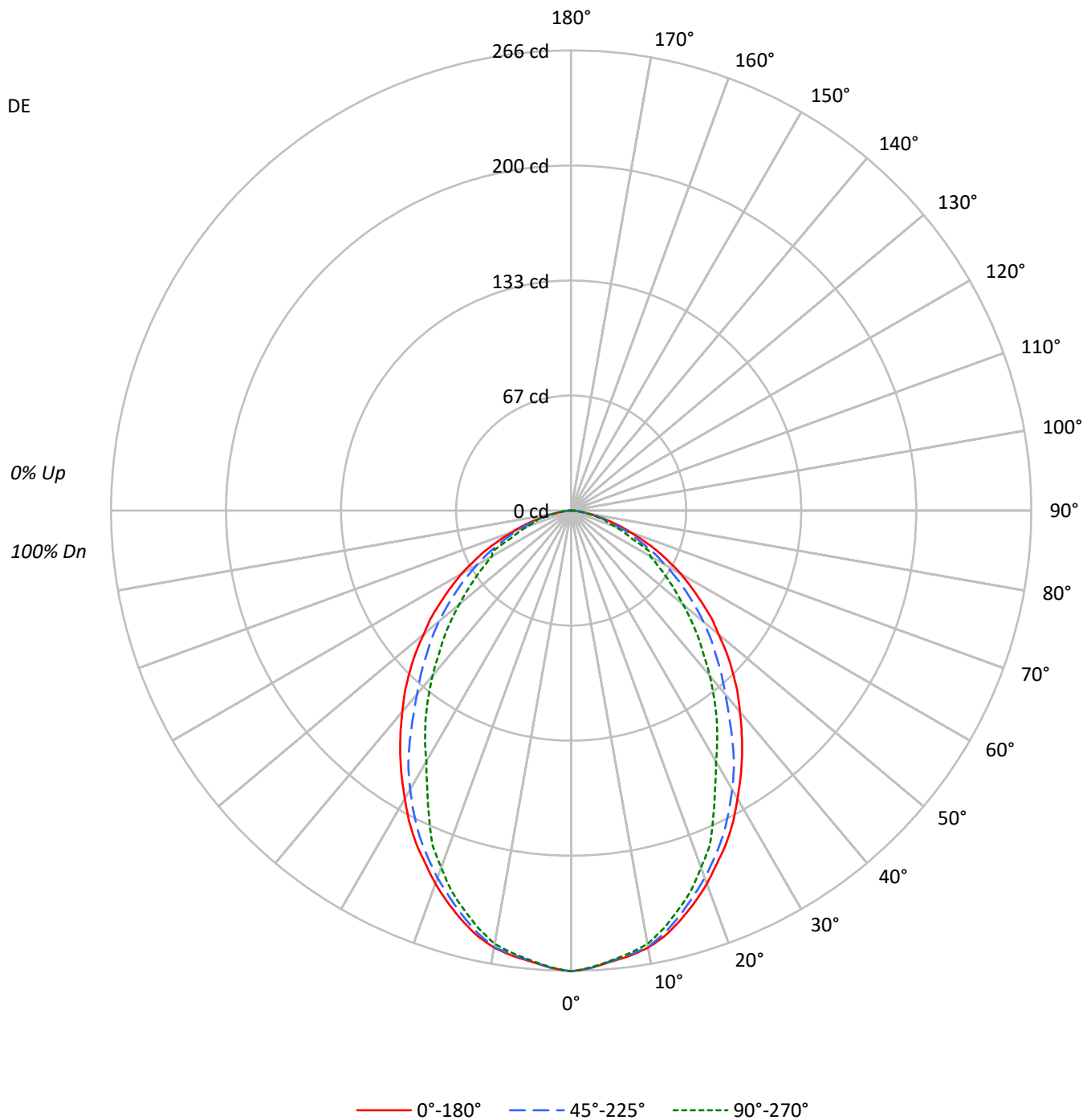
Lumens per Lamp: N/A
Luminaire Lumens: 523.0 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 5.8
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°	2868	2868	2868
5°	2829	2826	2822
10°	2805	2800	2781
15°	2729	2701	2663
20°	2629	2586	2515
25°	2520	2466	2311
30°	2389	2312	2082
35°	2263	2137	1926
40°	2133	1948	1752
45°	2011	1801	1585
50°	1862	1671	1413
55°	1723	1514	1265
60°	1578	1352	1135
65°	1388	1184	1004
70°	1142	1039	853
75°	911	794	832
80°	614	570	533
85°	383	457	531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2011 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.8	4.7
10°-20°	68.1	13.0
20°-30°	94.2	18.0
30°-40°	100.5	19.2
40°-50°	91.7	17.5
50°-60°	71.8	13.7
60°-70°	46.8	8.9
70°-80°	20.7	4.0
80°-90°	4.5	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°	187.1	35.8
0°-40°	287.6	55.0
0°-60°	451.0	86.2
0°-90°	523.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	523.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	262	262	262	261	261	25
15°	245	245	242	240	239	69
25°	212	211	208	200	195	97
35°	172	171	163	150	147	108
45°	132	129	118	108	104	102
55°	92	89	81	71	67	82
65°	54	51	46	47	39	54
75°	22	20	19	18	20	23
85°	3	3	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	266.4	266.4	266.4	266.4	266.4
2.5°	264.6	264.6	264.6	264.3	264.3
5°	261.8	261.5	261.5	261.2	261.2
7.5°	259.6	259.3	259.0	258.7	258.1
10°	256.6	256.6	256.2	254.7	254.4
12.5°	251.6	251.3	250.1	247.9	247.3
15°	244.9	244.9	242.4	239.9	239.0
17.5°	237.5	237.2	234.1	231.6	230.4
20°	229.5	228.8	225.8	221.8	219.6
22.5°	220.5	220.5	216.8	211.6	209.4
25°	212.2	211.0	207.6	200.2	194.6
27.5°	202.7	200.8	197.1	186.6	180.2
30°	192.2	191.3	186.0	172.5	167.5
32.5°	182.3	180.8	175.2	161.1	157.1
35°	172.2	170.9	162.6	150.3	146.6
37.5°	162.0	160.5	150.0	140.1	135.5
40°	151.8	150.0	138.6	129.7	124.7
42.5°	142.3	139.8	128.7	119.2	113.6
45°	132.1	129.4	118.3	108.4	104.1
47.5°	122.0	119.5	109.3	99.2	94.2
50°	111.2	109.0	99.8	89.6	84.4
52.5°	102.3	98.9	89.9	79.8	75.5
55°	91.8	89.0	80.7	71.1	67.4
57.5°	82.2	79.5	71.8	62.8	59.7
60°	73.3	69.3	62.8	55.1	52.7
62.5°	63.4	60.4	54.8	48.4	51.4
65°	54.5	51.4	46.5	47.4	39.4
67.5°	44.7	43.1	38.8	34.5	33.3
70°	36.3	34.5	33.0	28.3	27.1
72.5°	29.0	27.1	24.9	22.5	21.6
75°	21.9	20.3	19.1	18.2	20.0
77.5°	15.1	14.5	13.6	12.6	12.3
80°	9.9	9.5	9.2	8.9	8.6
82.5°	5.9	5.9	5.9	5.9	5.9
85°	3.1	3.4	3.7	4.0	4.3
87.5°	1.8	1.8	2.2	2.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)