

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: P558792

Luminaire Tested: FSR-12-1-LD4-1LO-50-UNV-81-88-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558792
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-50-UNV-81-88-EDD-90
Description: 1X1 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 421.0 lumens
Efficiency: N/A
Efficacy: 72.6 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

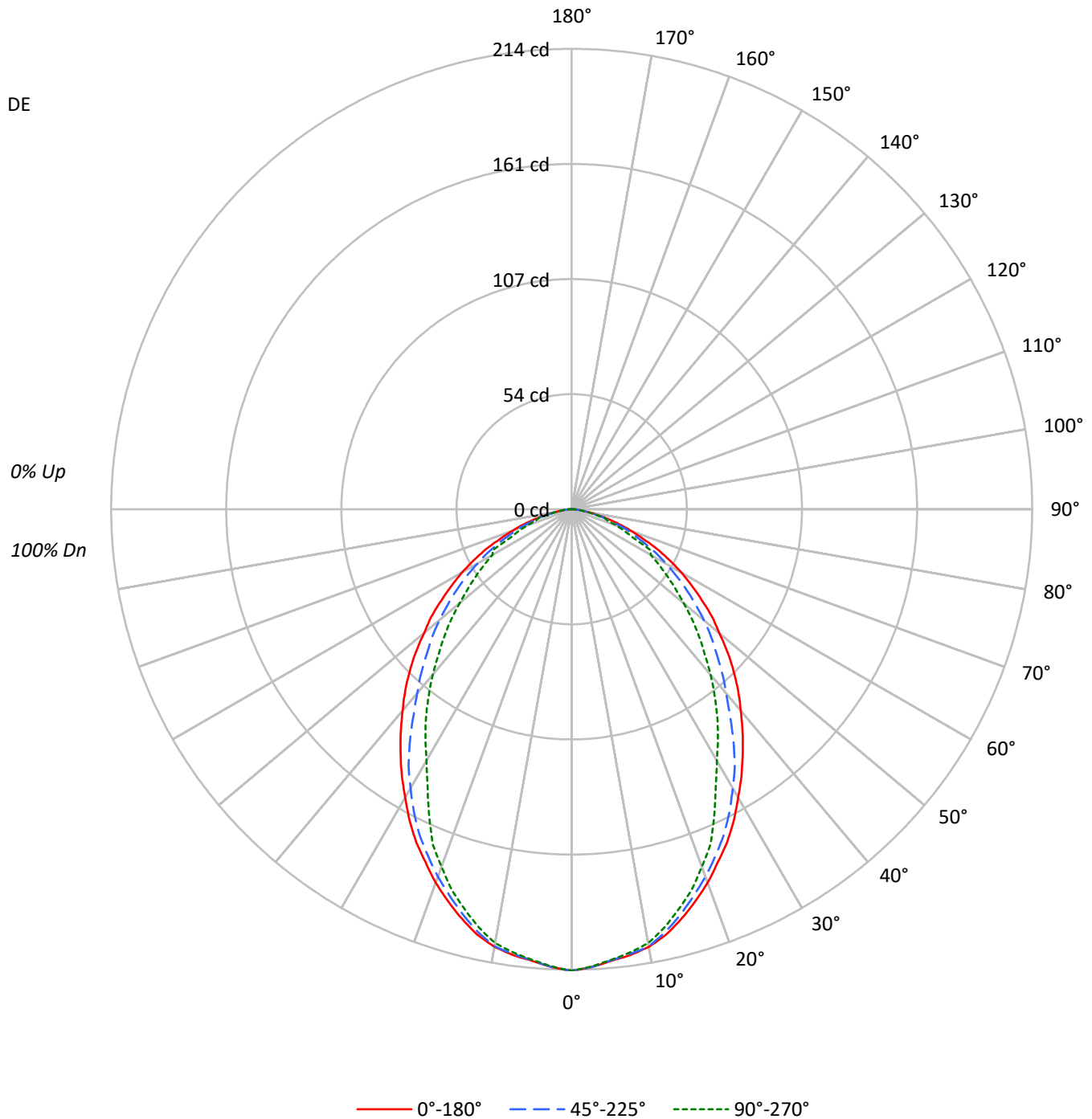
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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					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°	2309	2309	2309
5°	2277	2274	2271
10°	2257	2255	2238
15°	2196	2174	2144
20°	2116	2081	2025
25°	2029	1985	1861
30°	1923	1861	1677
35°	1821	1720	1551
40°	1717	1568	1411
45°	1620	1449	1276
50°	1499	1345	1137
55°	1387	1220	1019
60°	1270	1089	913
65°	1118	953	807
70°	922	834	686
75°	732	640	670
80°	490	459	428
85°	309	371	432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1620 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.0	4.7
10°-20°	54.8	13.0
20°-30°	75.8	18.0
30°-40°	80.9	19.2
40°-50°	73.8	17.5
50°-60°	57.8	13.7
60°-70°	37.7	8.9
70°-80°	16.7	4.0
80°-90°	3.6	0.8
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°	150.6	35.8
0°-40°	231.5	55.0
0°-60°	363.1	86.2
0°-90°	421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	214	214	214	214	214	
5°	211	210	210	210	210	20
15°	197	197	195	193	192	55
25°	171	170	167	161	157	78
35°	139	138	131	121	118	87
45°	106	104	95	87	84	82
55°	74	72	65	57	54	66
65°	44	41	37	38	32	43
75°	18	16	15	15	16	19
85°	2	3	3	3	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	214.5	214.5	214.5	214.5	214.5
2.5°	213.0	213.0	213.0	212.7	212.7
5°	210.7	210.5	210.5	210.2	210.2
7.5°	209.0	208.7	208.5	208.3	207.8
10°	206.5	206.5	206.3	205.0	204.8
12.5°	202.6	202.3	201.3	199.6	199.1
15°	197.1	197.1	195.1	193.1	192.4
17.5°	191.1	190.9	188.4	186.4	185.4
20°	184.7	184.2	181.7	178.5	176.8
22.5°	177.5	177.5	174.5	170.3	168.6
25°	170.8	169.8	167.1	161.1	156.7
27.5°	163.1	161.6	158.7	150.2	145.0
30°	154.7	154.0	149.7	138.8	134.9
32.5°	146.8	145.5	141.1	129.7	126.4
35°	138.6	137.6	130.9	121.0	118.0
37.5°	130.4	129.2	120.7	112.8	109.1
40°	122.2	120.7	111.6	104.4	100.4
42.5°	114.5	112.6	103.6	95.9	91.5
45°	106.4	104.1	95.2	87.3	83.8
47.5°	98.2	96.2	88.0	79.8	75.9
50°	89.5	87.8	80.3	72.1	67.9
52.5°	82.3	79.6	72.4	64.2	60.7
55°	73.9	71.6	65.0	57.3	54.3
57.5°	66.2	64.0	57.8	50.6	48.1
60°	59.0	55.8	50.6	44.4	42.4
62.5°	51.1	48.6	44.1	38.9	41.4
65°	43.9	41.4	37.4	38.2	31.7
67.5°	35.9	34.7	31.2	27.8	26.8
70°	29.3	27.8	26.5	22.8	21.8
72.5°	23.3	21.8	20.1	18.1	17.4
75°	17.6	16.4	15.4	14.6	16.1
77.5°	12.1	11.7	10.9	10.2	9.9
80°	7.9	7.7	7.4	7.2	6.9
82.5°	4.7	4.7	4.7	4.7	4.7
85°	2.5	2.7	3.0	3.2	3.5
87.5°	1.5	1.5	1.7	2.0	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)