

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: P559179

Luminaire Tested: FSR-12-1-LD4-2HI-50-UNV-81-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559179
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-LD4-2HI-50-UNV-81-94-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1888.0 lumens
Efficiency: N/A
Efficacy: 87.4 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

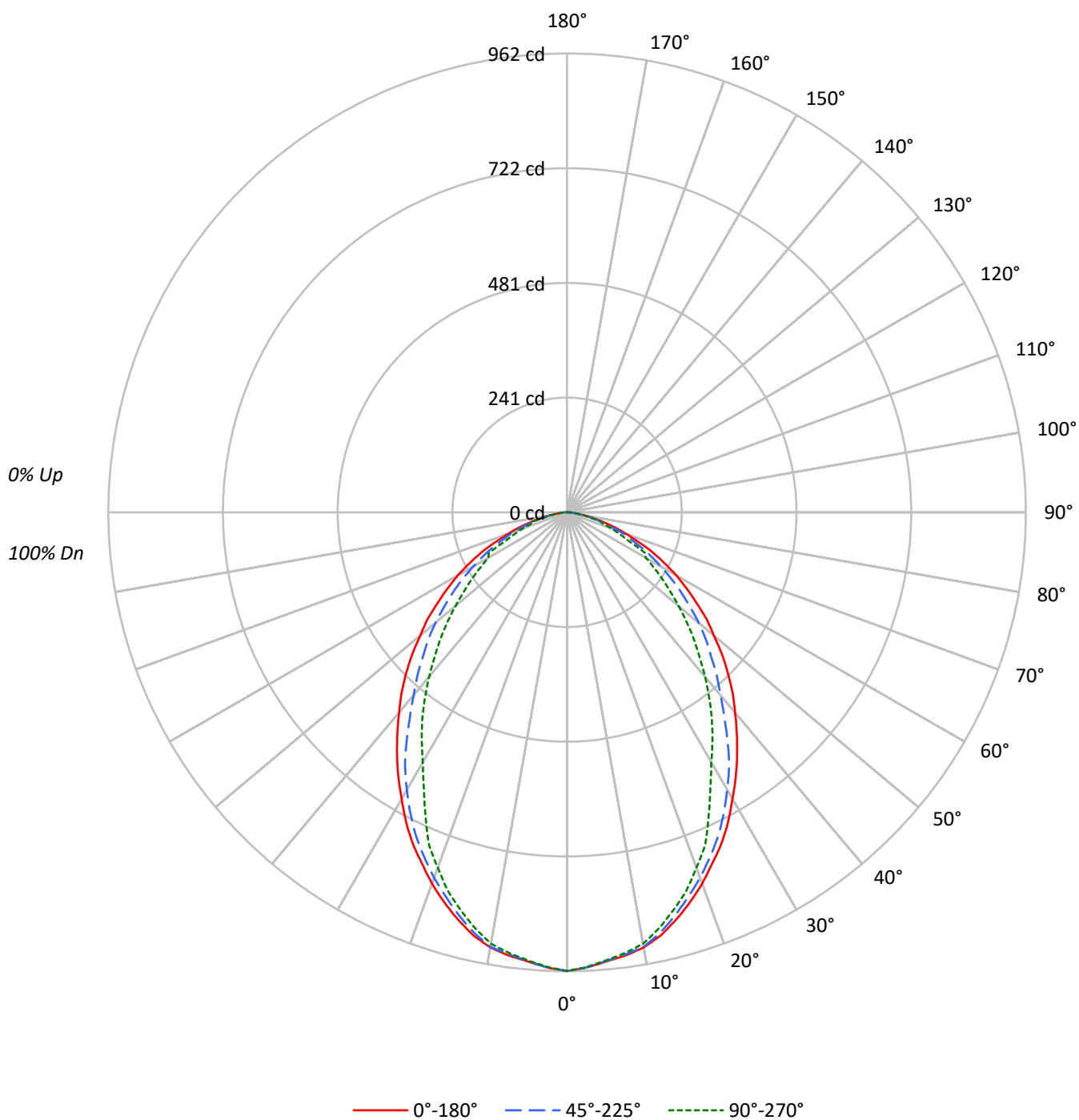
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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		87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75		75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65		65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56		56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		50
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44		44
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40		40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36		36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33		33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10352	10352	10352
5°	10211	10199	10187
10°	10122	10110	10038
15°	9850	9751	9615
20°	9488	9336	9080
25°	9098	8900	8346
30°	8623	8346	7517
35°	8167	7713	6954
40°	7702	7030	6327
45°	7261	6498	5721
50°	6722	6032	5101
55°	6217	5467	4570
60°	5696	4883	4092
65°	5012	4276	3624
70°	4129	3745	3078
75°	3281	2865	3007
80°	2207	2070	1928
85°	1371	1643	1927

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7261 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.5	4.7
10°-20°	245.7	13.0
20°-30°	340.1	18.0
30°-40°	362.7	19.2
40°-50°	330.9	17.5
50°-60°	259.2	13.7
60°-70°	168.9	8.9
70°-80°	74.9	4.0
80°-90°	16.1	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°	675.4	35.8
0°-40°	1038.0	55.0
0°-60°	1628.1	86.2
0°-90°	1888.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1888.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	945	944	944	943	943	90
15°	884	884	875	866	863	248
25°	766	762	749	723	703	352
35°	622	617	587	543	529	389
45°	477	467	427	391	376	367
55°	331	321	291	257	244	297
65°	197	186	168	171	142	194
75°	79	73	69	66	72	85
85°	11	12	13	14	16	15
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.7	961.7	961.7	961.7	961.7
2.5°	955.1	955.1	955.1	953.9	953.9
5°	945.0	943.9	943.9	942.8	942.8
7.5°	937.3	936.2	935.0	933.9	931.7
10°	926.1	926.1	925.0	919.5	918.4
12.5°	908.4	907.2	902.8	895.0	892.8
15°	883.9	883.9	875.0	866.1	862.8
17.5°	857.2	856.1	845.0	836.1	831.6
20°	828.3	826.1	815.0	800.5	792.7
22.5°	796.1	796.1	782.7	763.8	756.0
25°	766.0	761.6	749.4	722.7	702.7
27.5°	731.6	724.9	711.6	673.8	650.4
30°	693.8	690.4	671.5	622.6	604.8
32.5°	658.2	652.6	632.6	581.5	567.0
35°	621.5	617.1	587.0	542.6	529.2
37.5°	584.8	579.3	541.5	505.9	489.2
40°	548.1	541.5	500.3	468.1	450.3
42.5°	513.7	504.8	464.7	430.3	410.3
45°	477.0	467.0	426.9	391.4	375.8
47.5°	440.3	431.4	394.7	358.0	340.2
50°	401.4	393.6	360.2	323.5	304.6
52.5°	369.1	356.9	324.7	288.0	272.4
55°	331.3	321.3	291.3	256.8	243.5
57.5°	296.9	286.8	259.1	226.8	215.7
60°	264.6	250.2	226.8	199.0	190.1
62.5°	229.0	217.9	197.9	174.6	185.7
65°	196.8	185.7	167.9	171.2	142.3
67.5°	161.2	155.7	140.1	124.5	120.1
70°	131.2	124.5	119.0	102.3	97.8
72.5°	104.5	97.8	90.1	81.2	77.8
75°	78.9	73.4	68.9	65.6	72.3
77.5°	54.5	52.3	48.9	45.6	44.5
80°	35.6	34.5	33.4	32.2	31.1
82.5°	21.1	21.1	21.1	21.1	21.1
85°	11.1	12.2	13.3	14.5	15.6
87.5°	6.7	6.7	7.8	8.9	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)