

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: P559557

Luminaire Tested: FSR-12-1-LD4-2STD-50-UNV-81-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559557
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-LD4-2STD-50-UNV-81-86-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1488.0 lumens
Efficiency: N/A
Efficacy: 89.6 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

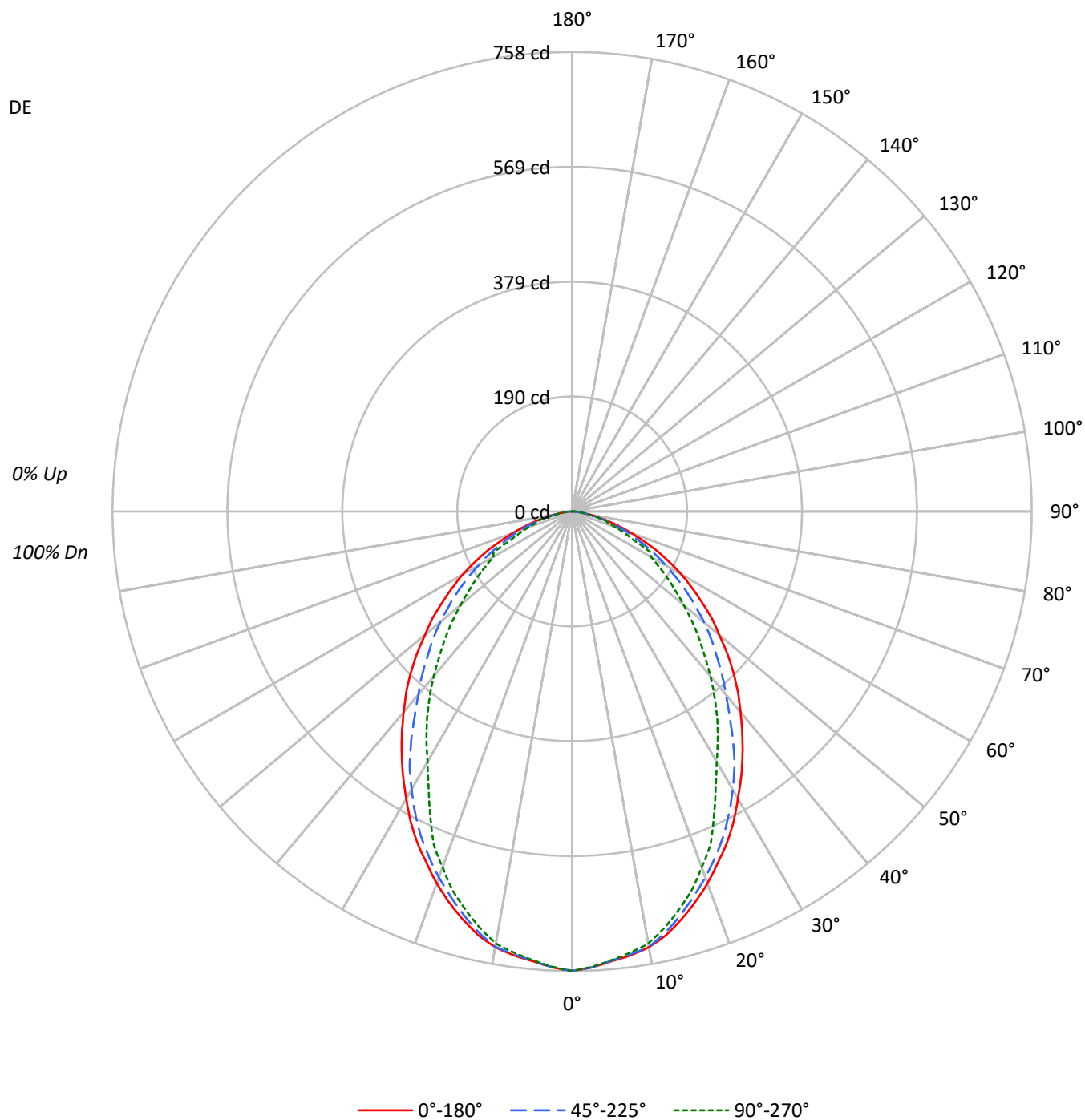
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10		70	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
1	110	106	102	99		108	104	100	97		100	97	94		96	94	91		92	90	89
2	101	94	88	83		99	92	87	82		89	84	80		86	82	78		83	79	77
3	93	84	77	71		91	82	76	70		79	74	69		77	72	68		74	70	67
4	86	75	67	61		84	74	66	61		72	65	60		69	64	59		67	62	58
5	80	68	60	54		78	67	59	53		65	58	53		63	57	52		61	56	52
6	74	62	53	48		72	61	53	47		59	52	47		57	51	47		56	50	46
7	69	56	48	43		67	56	48	42		54	47	42		53	46	42		51	46	42
8	65	52	44	38		63	51	44	38		50	43	38		49	42	38		48	42	38
9	61	48	40	35		59	47	40	35		46	39	35		45	39	34		44	38	34
10	57	44	37	32		56	44	37	32		43	36	32		42	36	32		41	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8159	8159	8159
5°	8048	8038	8029
10°	7978	7969	7911
15°	7763	7685	7578
20°	7478	7357	7157
25°	7170	7014	6577
30°	6796	6579	5925
35°	6436	6080	5481
40°	6070	5540	4987
45°	5722	5122	4509
50°	5297	4754	4021
55°	4900	4309	3601
60°	4491	3849	3225
65°	3950	3370	2858
70°	3254	2952	2426
75°	2587	2258	2371
80°	1736	1630	1519
85°	1087	1297	1519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5722 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.6	4.7
10°-20°	193.6	13.0
20°-30°	268.1	18.0
30°-40°	285.8	19.2
40°-50°	260.8	17.5
50°-60°	204.3	13.7
60°-70°	133.1	8.9
70°-80°	59.0	4.0
80°-90°	12.7	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°	532.3	35.8
0°-40°	818.1	55.0
0°-60°	1283.2	86.2
0°-90°	1488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1488.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	745	744	744	743	743	71
15°	697	697	690	683	680	196
25°	604	600	591	570	554	277
35°	490	486	463	428	417	306
45°	376	368	336	308	296	290
55°	261	253	230	202	192	234
65°	155	146	132	135	112	153
75°	62	58	54	52	57	67
85°	9	10	10	11	12	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.0	758.0	758.0	758.0	758.0
2.5°	752.7	752.7	752.7	751.8	751.8
5°	744.8	743.9	743.9	743.1	743.1
7.5°	738.7	737.8	736.9	736.1	734.3
10°	729.9	729.9	729.1	724.7	723.8
12.5°	715.9	715.0	711.5	705.4	703.6
15°	696.6	696.6	689.6	682.6	680.0
17.5°	675.6	674.7	666.0	658.9	655.4
20°	652.8	651.1	642.3	630.9	624.8
22.5°	627.4	627.4	616.9	602.0	595.9
25°	603.7	600.2	590.6	569.6	553.8
27.5°	576.6	571.3	560.8	531.0	512.6
30°	546.8	544.2	529.3	490.7	476.7
32.5°	518.7	514.4	498.6	458.3	446.9
35°	489.8	486.3	462.7	427.6	417.1
37.5°	460.9	456.5	426.7	398.7	385.6
40°	432.0	426.7	394.3	368.9	354.9
42.5°	404.8	397.8	366.3	339.1	323.3
45°	375.9	368.0	336.5	308.4	296.2
47.5°	347.0	340.0	311.1	282.2	268.1
50°	316.3	310.2	283.9	255.0	240.1
52.5°	290.9	281.3	255.9	227.0	214.7
55°	261.1	253.2	229.6	202.4	191.9
57.5°	234.0	226.1	204.2	178.8	170.0
60°	208.6	197.2	178.8	156.9	149.8
62.5°	180.5	171.7	156.0	137.6	146.3
65°	155.1	146.3	132.3	134.9	112.2
67.5°	127.1	122.7	110.4	98.1	94.6
70°	103.4	98.1	93.8	80.6	77.1
72.5°	82.4	77.1	71.0	64.0	61.3
75°	62.2	57.8	54.3	51.7	57.0
77.5°	42.9	41.2	38.6	35.9	35.1
80°	28.0	27.2	26.3	25.4	24.5
82.5°	16.6	16.6	16.6	16.6	16.6
85°	8.8	9.6	10.5	11.4	12.3
87.5°	5.3	5.3	6.1	7.0	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)