

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: P560129

Luminaire Tested: FSR-12-2-LD4-1STD-50-UNV-81-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560129
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-LD4-1STD-50-UNV-81-84-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .125 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: 2' x H: 0')
CIE Type: Direct

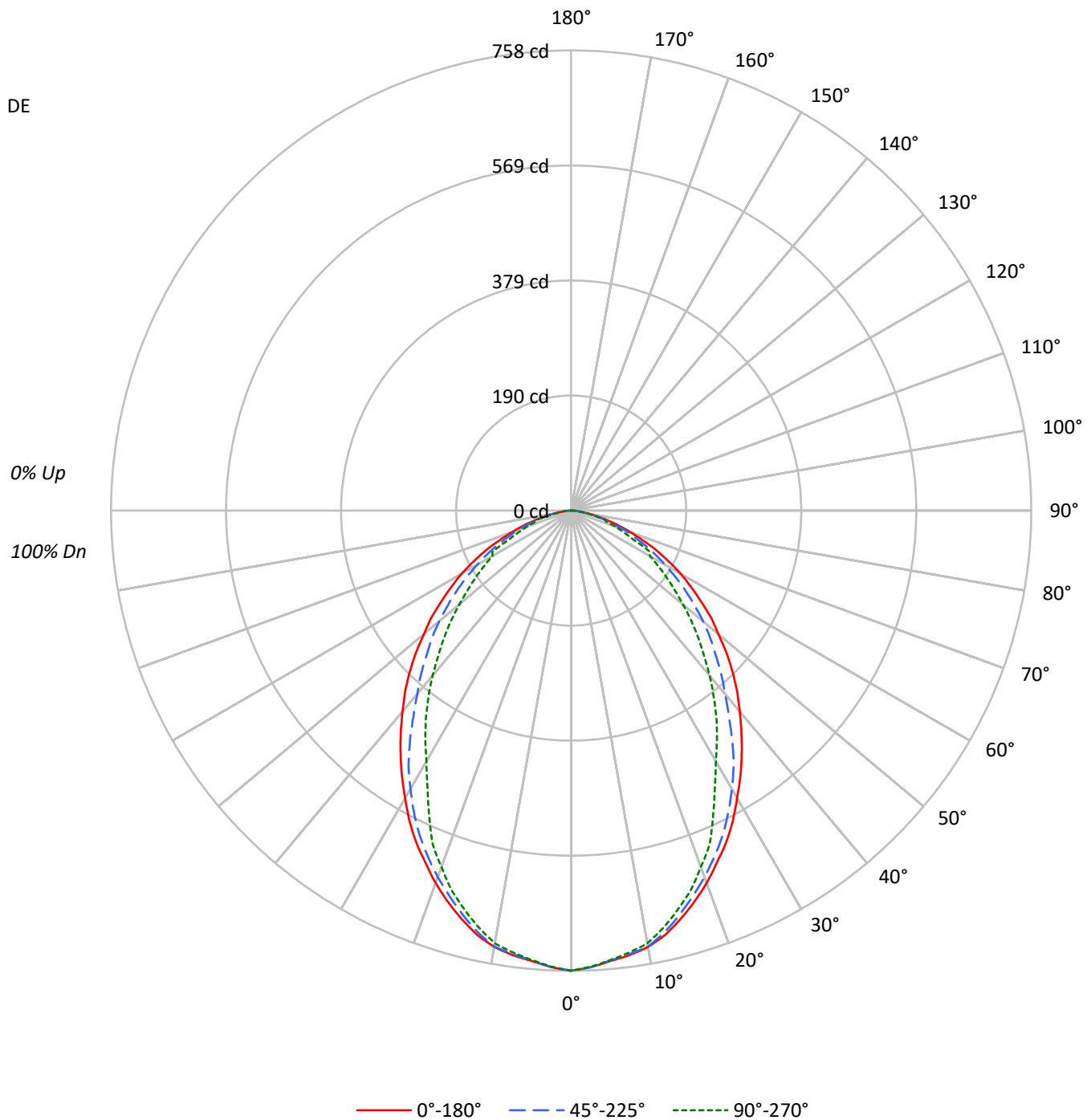
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	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													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°	4080	4080	4080
5°	4024	4019	4015
10°	3989	3985	3956
15°	3881	3842	3789
20°	3739	3679	3578
25°	3585	3507	3289
30°	3398	3289	2962
35°	3218	3040	2740
40°	3035	2770	2493
45°	2861	2561	2254
50°	2648	2377	2010
55°	2450	2154	1801
60°	2245	1925	1612
65°	1975	1685	1429
70°	1627	1476	1213
75°	1293	1129	1185
80°	868	815	759
85°	543	648	760

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2861 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)