

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: P560413

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-82-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560413
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-LD4-2LO-35-UNV-82-96-EDD
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2100.0 lumens
Efficiency: N/A
Efficacy: 89.7 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

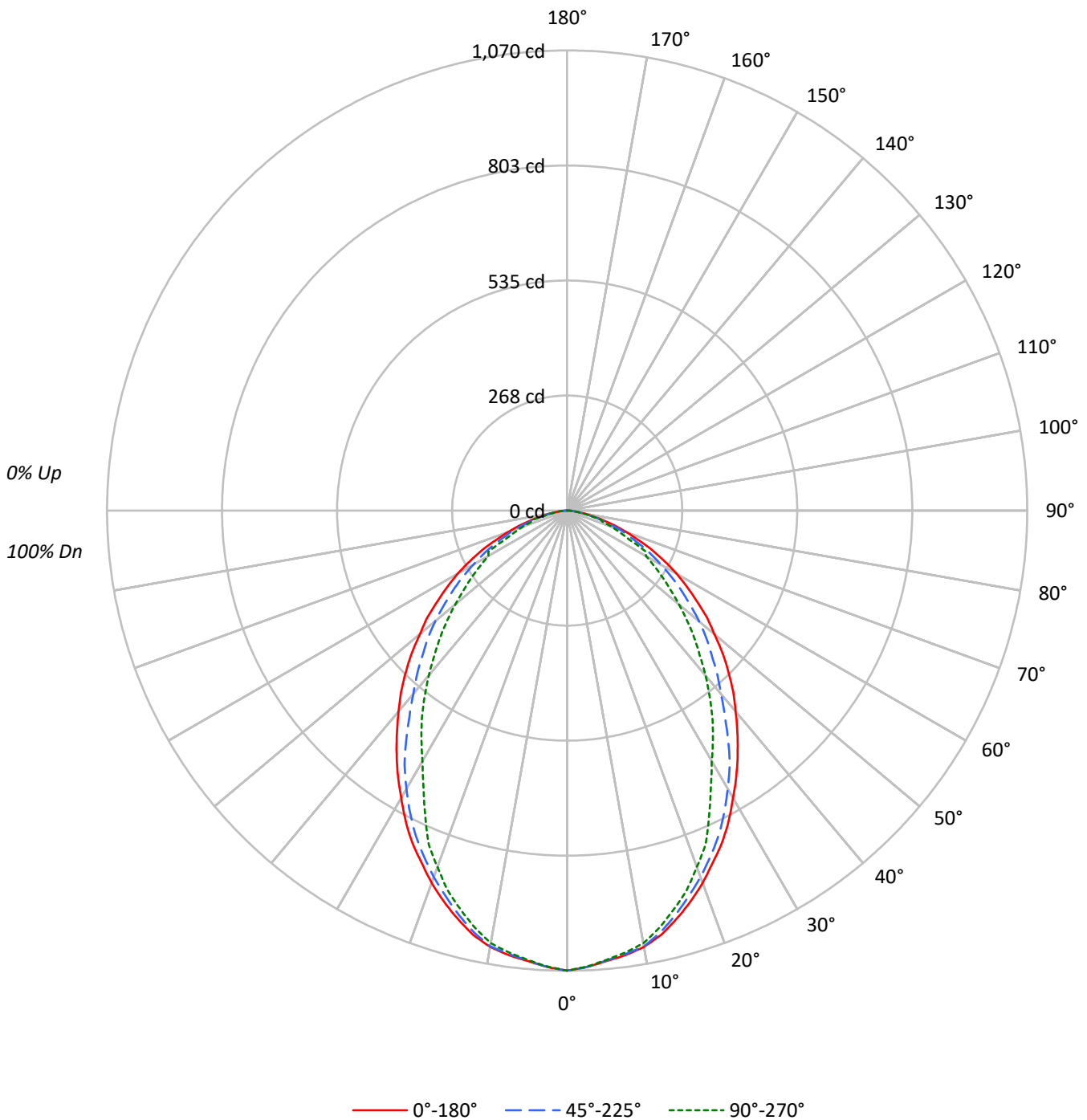
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560413

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-82-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P560413

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-82-96-EDD

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°	5757	5757	5757
5°	5679	5672	5666
10°	5629	5623	5582
15°	5478	5423	5347
20°	5277	5192	5050
25°	5060	4950	4641
30°	4796	4642	4181
35°	4542	4290	3868
40°	4284	3910	3518
45°	4038	3615	3181
50°	3738	3355	2837
55°	3458	3040	2541
60°	3168	2716	2277
65°	2788	2378	2016
70°	2296	2082	1712
75°	1826	1595	1672
80°	1227	1150	1072
85°	766	914	1068

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4038 cd/sqm



TEST NUMBER: P560413

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-82-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	4.7
10°-20°	273.3	13.0
20°-30°	378.3	18.0
30°-40°	403.4	19.2
40°-50°	368.0	17.5
50°-60°	288.3	13.7
60°-70°	187.9	8.9
70°-80°	83.3	4.0
80°-90°	17.9	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°	751.2	35.8
0°-40°	1154.6	55.0
0°-60°	1811.0	86.2
0°-90°	2100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1051	1050	1050	1049	1049	100
15°	983	983	973	963	960	276
25°	852	847	834	804	782	391
35°	691	686	653	604	589	432
45°	530	519	475	435	418	409
55°	368	357	324	286	271	331
65°	219	206	187	190	158	216
75°	88	82	77	73	80	94
85°	12	14	15	16	17	17
90°	0	0	0	0	0	



TEST NUMBER: P560413

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-82-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.7	1069.7	1069.7	1069.7	1069.7
2.5°	1062.3	1062.3	1062.3	1061.1	1061.1
5°	1051.2	1049.9	1049.9	1048.7	1048.7
7.5°	1042.5	1041.3	1040.0	1038.8	1036.3
10°	1030.1	1030.1	1028.9	1022.7	1021.5
12.5°	1010.4	1009.1	1004.2	995.5	993.0
15°	983.1	983.1	973.3	963.4	959.6
17.5°	953.5	952.2	939.9	930.0	925.0
20°	921.3	918.8	906.5	890.4	881.7
22.5°	885.4	885.4	870.6	849.6	840.9
25°	852.1	847.1	833.5	803.8	781.6
27.5°	813.7	806.3	791.5	749.4	723.4
30°	771.7	768.0	746.9	692.5	672.7
32.5°	732.1	725.9	703.7	646.8	630.7
35°	691.3	686.3	653.0	603.5	588.7
37.5°	650.5	644.3	602.3	562.7	544.1
40°	609.7	602.3	556.5	520.6	500.8
42.5°	571.3	561.4	516.9	478.6	456.3
45°	530.5	519.4	474.9	435.3	418.0
47.5°	489.7	479.8	439.0	398.2	378.4
50°	446.4	437.8	400.7	359.9	338.8
52.5°	410.6	397.0	361.1	320.3	303.0
55°	368.5	357.4	324.0	285.7	270.8
57.5°	330.2	319.1	288.1	252.3	239.9
60°	294.3	278.2	252.3	221.4	211.5
62.5°	254.8	242.4	220.1	194.2	206.5
65°	218.9	206.5	186.7	190.4	158.3
67.5°	179.3	173.1	155.8	138.5	133.6
70°	145.9	138.5	132.3	113.8	108.8
72.5°	116.2	108.8	100.2	90.3	86.6
75°	87.8	81.6	76.7	73.0	80.4
77.5°	60.6	58.1	54.4	50.7	49.5
80°	39.6	38.3	37.1	35.9	34.6
82.5°	23.5	23.5	23.5	23.5	23.5
85°	12.4	13.6	14.8	16.1	17.3
87.5°	7.4	7.4	8.7	9.9	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)