

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: P560060

Luminaire Tested: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560060
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-40-UNV-80-96-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1283.0 lumens
Efficiency: N/A
Efficacy: 77.3 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

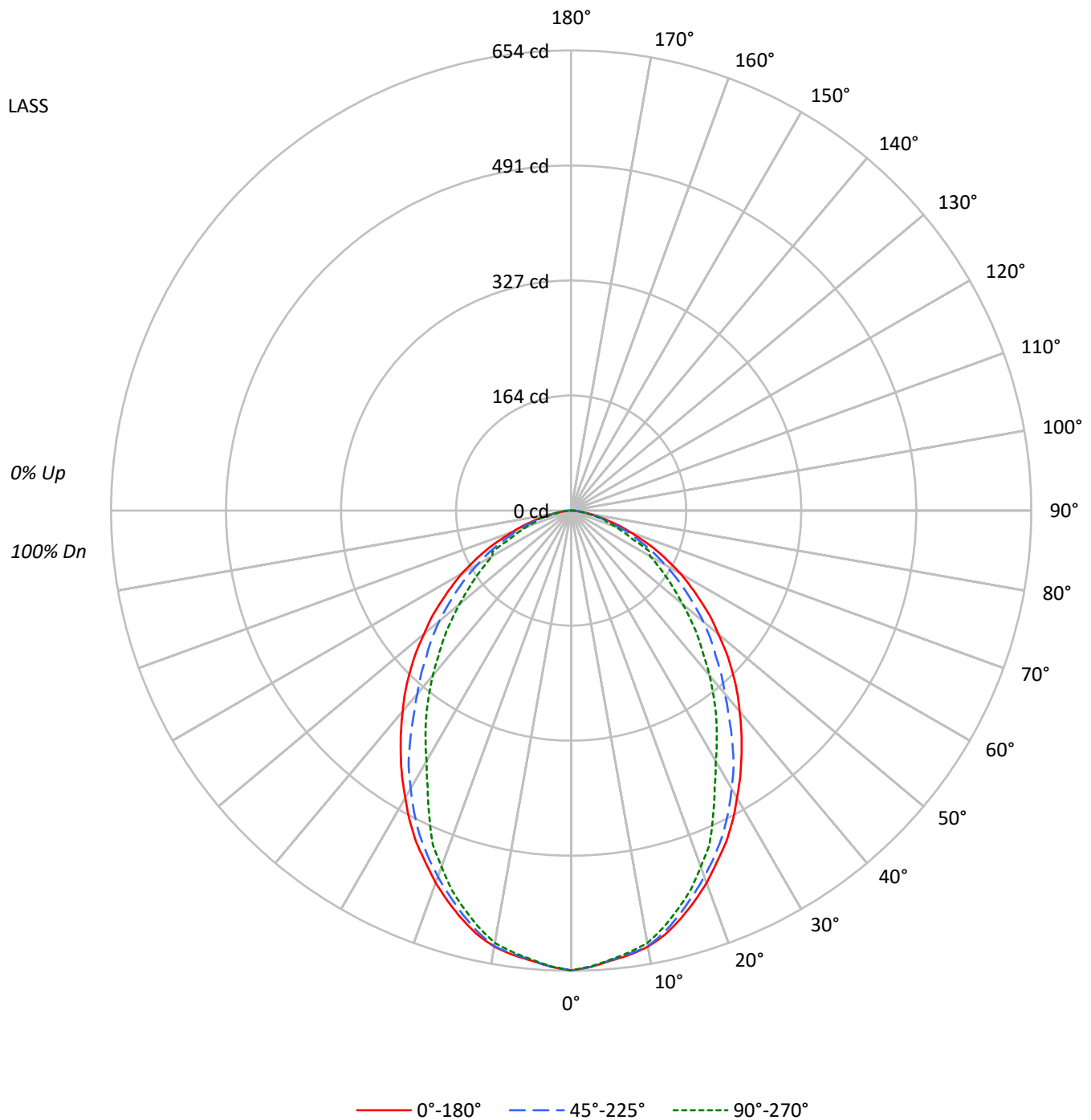
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560060

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P560060

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD-90

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																												
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°	3517	3517	3517
5°	3469	3466	3461
10°	3440	3435	3411
15°	3347	3313	3267
20°	3224	3172	3085
25°	3091	3024	2836
30°	2930	2836	2554
35°	2775	2621	2363
40°	2617	2389	2150
45°	2467	2208	1944
50°	2284	2050	1733
55°	2113	1858	1553
60°	1935	1659	1391
65°	1703	1453	1231
70°	1404	1271	1046
75°	1115	973	1021
80°	750	704	657
85°	469	562	655

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2467 cd/sqm



TEST NUMBER: P560060

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	4.7
10°-20°	167.0	13.0
20°-30°	231.1	18.0
30°-40°	246.5	19.2
40°-50°	224.8	17.5
50°-60°	176.1	13.7
60°-70°	114.8	8.9
70°-80°	50.9	4.0
80°-90°	10.9	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°	458.9	35.8
0°-40°	705.4	55.0
0°-60°	1106.4	86.2
0°-90°	1283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1283.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	654	654	654	654	654	
5°	642	642	642	641	641	61
15°	601	601	595	589	586	169
25°	521	518	509	491	478	239
35°	422	419	399	369	360	264
45°	324	317	290	266	255	250
55°	225	218	198	174	166	202
65°	134	126	114	116	97	132
75°	54	50	47	45	49	57
85°	8	8	9	10	11	10
90°	0	0	0	0	0	



TEST NUMBER: P560060

CATALOG NUMBER: FSR-12-2-LD4-1STD-40-UNV-80-96-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	653.5	653.5	653.5	653.5	653.5
2.5°	649.0	649.0	649.0	648.3	648.3
5°	642.2	641.5	641.5	640.7	640.7
7.5°	636.9	636.2	635.4	634.7	633.1
10°	629.4	629.4	628.6	624.8	624.1
12.5°	617.3	616.5	613.5	608.2	606.7
15°	600.7	600.7	594.6	588.6	586.3
17.5°	582.5	581.8	574.2	568.2	565.1
20°	562.9	561.4	553.8	544.0	538.7
22.5°	541.0	541.0	531.9	519.1	513.8
25°	520.6	517.5	509.2	491.1	477.5
27.5°	497.1	492.6	483.5	457.9	442.0
30°	471.5	469.2	456.3	423.1	411.0
32.5°	447.3	443.5	429.9	395.1	385.3
35°	422.3	419.3	398.9	368.7	359.6
37.5°	397.4	393.6	367.9	343.8	332.4
40°	372.5	367.9	340.0	318.1	306.0
42.5°	349.1	343.0	315.8	292.4	278.8
45°	324.1	317.3	290.1	266.0	255.4
47.5°	299.2	293.1	268.2	243.3	231.2
50°	272.8	267.5	244.8	219.9	207.0
52.5°	250.8	242.5	220.6	195.7	185.1
55°	225.2	218.4	198.0	174.5	165.5
57.5°	201.7	194.9	176.0	154.1	146.6
60°	179.8	170.0	154.1	135.2	129.2
62.5°	155.6	148.1	134.5	118.6	126.2
65°	133.7	126.2	114.1	116.4	96.7
67.5°	109.6	105.8	95.2	84.6	81.6
70°	89.2	84.6	80.8	69.5	66.5
72.5°	71.0	66.5	61.2	55.2	52.9
75°	53.6	49.9	46.8	44.6	49.1
77.5°	37.0	35.5	33.2	31.0	30.2
80°	24.2	23.4	22.7	21.9	21.2
82.5°	14.4	14.4	14.4	14.4	14.4
85°	7.6	8.3	9.1	9.8	10.6
87.5°	4.5	4.5	5.3	6.0	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)