

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: P559073

Luminaire Tested: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559073
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-35-UNV-93-84-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1934.0 lumens
Efficiency: N/A
Efficacy: 89.5 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

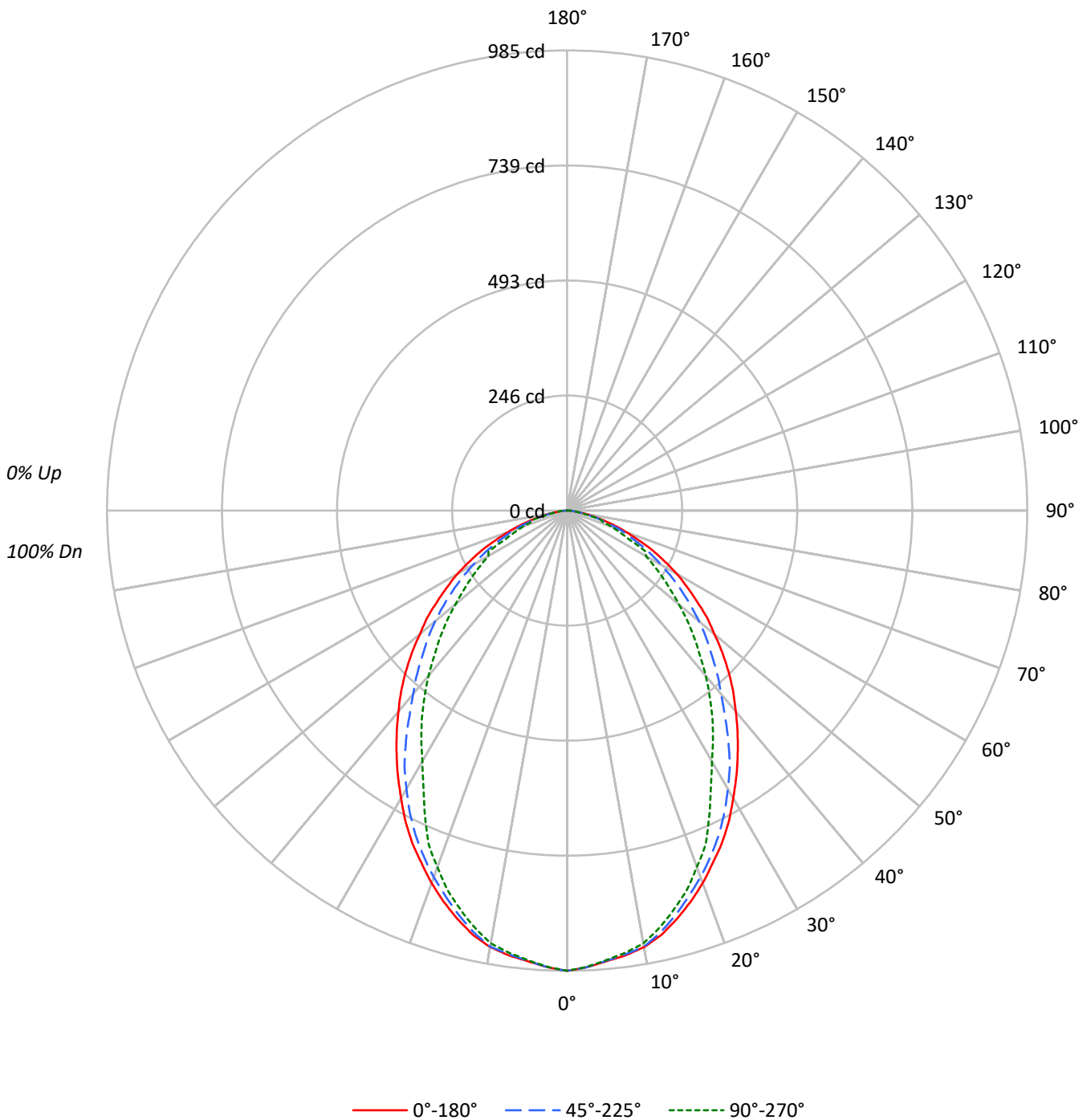
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559073

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P559073

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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
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°	10605	10605	10605
5°	10460	10447	10435
10°	10369	10357	10282
15°	10089	9988	9849
20°	9719	9562	9301
25°	9320	9117	8549
30°	8833	8550	7701
35°	8365	7901	7123
40°	7890	7201	6482
45°	7438	6657	5861
50°	6884	6179	5226
55°	6369	5600	4680
60°	5836	5001	4194
65°	5135	4381	3713
70°	4230	3836	3153
75°	3365	2936	3078
80°	2256	2120	1977
85°	1408	1692	1964

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7438 cd/sqm



TEST NUMBER: P559073

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	4.7
10°-20°	251.7	13.0
20°-30°	348.4	18.0
30°-40°	371.5	19.2
40°-50°	338.9	17.5
50°-60°	265.5	13.7
60°-70°	173.1	8.9
70°-80°	76.7	4.0
80°-90°	16.4	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°	691.8	35.8
0°-40°	1063.3	55.0
0°-60°	1667.8	86.2
0°-90°	1934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1934.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	985	985	985	985	985	
5°	968	967	967	966	966	92
15°	905	905	896	887	884	255
25°	785	780	768	740	720	360
35°	637	632	601	556	542	398
45°	489	478	437	401	385	376
55°	339	329	298	263	249	304
65°	202	190	172	175	146	199
75°	81	75	71	67	74	87
85°	11	12	14	15	16	16
90°	0	0	0	0	0	



TEST NUMBER: P559073

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	985.2	985.2	985.2	985.2	985.2
2.5°	978.3	978.3	978.3	977.2	977.2
5°	968.1	966.9	966.9	965.8	965.8
7.5°	960.1	959.0	957.8	956.7	954.4
10°	948.7	948.7	947.6	941.9	940.7
12.5°	930.5	929.3	924.8	916.8	914.5
15°	905.4	905.4	896.3	887.2	883.8
17.5°	878.1	877.0	865.6	856.5	851.9
20°	848.5	846.2	834.8	820.0	812.0
22.5°	815.5	815.5	801.8	782.4	774.5
25°	784.7	780.2	767.6	740.3	719.8
27.5°	749.4	742.6	728.9	690.2	666.3
30°	710.7	707.3	687.9	637.8	619.6
32.5°	674.2	668.5	648.0	595.6	580.8
35°	636.6	632.1	601.3	555.8	542.1
37.5°	599.1	593.4	554.6	518.2	501.1
40°	561.5	554.6	512.5	479.5	461.3
42.5°	526.2	517.1	476.1	440.8	420.3
45°	488.6	478.3	437.3	400.9	385.0
47.5°	451.0	441.9	404.3	366.7	348.5
50°	411.1	403.2	369.0	331.4	312.1
52.5°	378.1	365.6	332.6	295.0	279.0
55°	339.4	329.1	298.4	263.1	249.4
57.5°	304.1	293.8	265.4	232.3	220.9
60°	271.1	256.3	232.3	203.9	194.8
62.5°	234.6	223.2	202.7	178.8	190.2
65°	201.6	190.2	172.0	175.4	145.8
67.5°	165.1	159.4	143.5	127.6	123.0
70°	134.4	127.6	121.9	104.8	100.2
72.5°	107.1	100.2	92.3	83.1	79.7
75°	80.9	75.2	70.6	67.2	74.0
77.5°	55.8	53.5	50.1	46.7	45.6
80°	36.4	35.3	34.2	33.0	31.9
82.5°	21.6	21.6	21.6	21.6	21.6
85°	11.4	12.5	13.7	14.8	15.9
87.5°	6.8	6.8	8.0	9.1	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)