

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: P589862

Luminaire Tested: FSR-24-2-LD4-1HI-35-UNV-82-85-EDD

Issue Date: 12/8/2021

Test Information

Test Method: LM-79-2019
Report Number: P589862
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-24-2-LD4-1HI-35-UNV-82-85-EDD
Description: 2X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2182.0 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

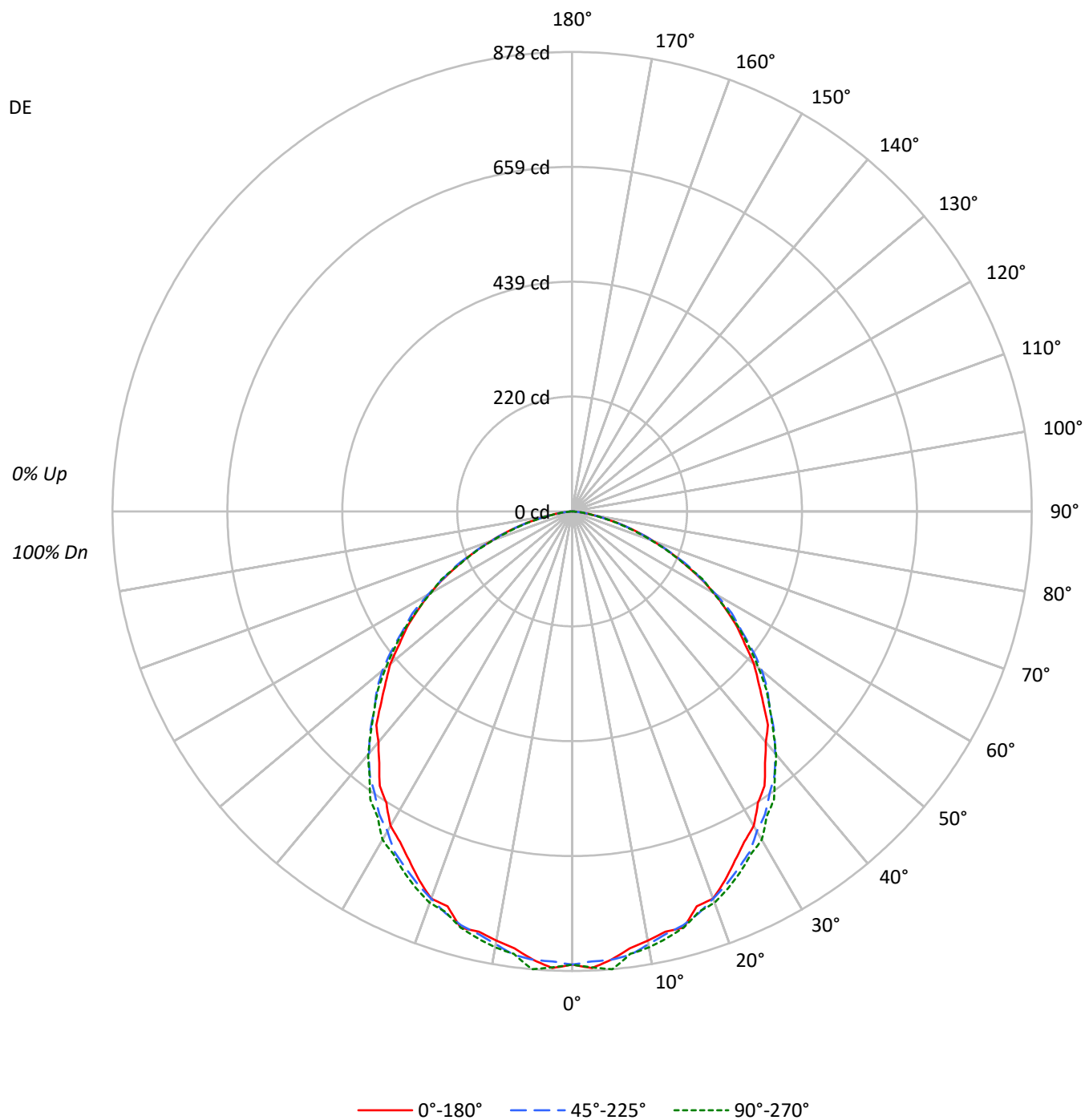
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P589862

CATALOG NUMBER: FSR-24-2-LD4-1HI-35-UNV-82-85-EDD

Luminous Intensity Polar Plot



TEST NUMBER: P589862

CATALOG NUMBER: FSR-24-2-LD4-1HI-35-UNV-82-85-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
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	105	101	98	107	103	100	96		99	96	93		95	93	90		91	90	88
2	100	93	86	81	98	91	85	80		87	82	78		84	80	76		81	78	75
3	92	82	74	68	89	80	73	67		77	71	66		75	69	65		72	68	64
4	84	73	64	58	82	71	64	58		69	62	57		67	61	56		65	59	55
5	78	65	57	50	76	64	56	50		62	55	49		60	54	49		58	53	48
6	72	59	50	44	70	58	50	44		56	49	43		54	48	43		53	47	43
7	67	53	45	39	65	53	45	39		51	44	39		50	43	38		48	42	38
8	62	49	41	35	61	48	40	35		47	40	34		46	39	34		44	39	34
9	58	45	37	31	57	44	37	31		43	36	31		42	36	31		41	35	31
10	54	41	34	29	53	41	33	28		40	33	28		39	33	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2330	2330	2330
5°	2322	2323	2372
10°	2275	2295	2311
15°	2293	2281	2293
20°	2254	2254	2278
25°	2185	2233	2257
30°	2155	2193	2251
35°	2104	2159	2208
40°	2022	2120	2129
45°	1961	2031	2034
50°	1897	1982	1945
55°	1807	1842	1829
60°	1690	1707	1676
65°	1507	1545	1496
70°	1293	1297	1261
75°	1024	1022	983
80°	687	666	642
85°	374	371	346

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 2083 cd/sqm

TEST NUMBER: P589862

CATALOG NUMBER: FSR-24-2-LD4-1HI-35-UNV-82-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.4	3.7
10°-20°	230.8	10.6
20°-30°	345.8	15.8
30°-40°	409.8	18.8
40°-50°	410.6	18.8
50°-60°	348.5	16.0
60°-70°	235.0	10.8
70°-80°	103.2	4.7
80°-90°	16.8	0.8
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°	658.0	30.2
0°-40°	1067.9	48.9
0°-60°	1827.0	83.7
0°-90°	2182.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2182.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	866	866	866	866	866	
5°	860	858	860	857	878	81
15°	823	814	819	823	823	229
25°	736	740	752	762	760	340
35°	640	642	657	672	672	398
45°	515	525	534	547	534	399
55°	385	383	393	390	390	343
65°	237	234	243	233	235	235
75°	98	96	98	91	94	106
85°	12	12	12	12	11	18
90°	0	0	0	0	0	

TEST NUMBER: P589862

CATALOG NUMBER: FSR-24-2-LD4-1HI-35-UNV-82-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	865.8	865.8	865.8	865.8	865.8
2.5°	873.3	866.7	860.5	867.7	872.0
5°	859.6	857.6	859.9	857.4	878.1
7.5°	842.0	849.7	854.1	851.3	852.6
10°	832.6	829.9	839.8	846.8	845.8
12.5°	822.5	826.5	827.1	834.6	835.2
15°	823.1	813.6	818.6	822.8	823.2
17.5°	791.1	801.4	804.8	814.6	802.5
20°	787.2	779.7	787.2	797.1	795.6
22.5°	763.1	754.8	770.9	779.7	779.1
25°	735.9	739.9	752.0	761.8	760.2
27.5°	711.9	716.6	733.9	747.4	738.7
30°	693.5	691.2	705.7	717.8	724.5
32.5°	660.5	669.0	686.0	698.0	691.6
35°	640.5	642.4	657.3	672.5	672.0
37.5°	605.5	614.4	635.3	639.5	635.6
40°	575.7	584.5	603.4	608.0	606.1
42.5°	553.7	555.2	571.4	576.7	568.3
45°	515.3	524.9	533.7	547.4	534.4
47.5°	482.7	487.2	505.9	509.6	502.8
50°	453.1	454.6	473.5	468.9	464.5
52.5°	415.8	422.4	433.0	432.2	426.9
55°	385.2	382.6	392.7	390.0	389.9
57.5°	348.4	352.9	361.2	356.9	350.1
60°	314.0	314.1	317.1	312.3	311.4
62.5°	275.7	277.0	277.7	271.7	281.4
65°	236.6	233.5	242.7	233.4	235.0
67.5°	200.8	202.3	201.4	195.6	197.9
70°	164.3	166.3	164.9	158.3	160.3
72.5°	131.0	128.6	130.1	121.8	125.6
75°	98.5	96.5	98.3	91.3	94.5
77.5°	67.1	68.6	67.5	63.8	66.0
80°	44.3	43.0	43.0	40.9	41.4
82.5°	25.8	24.6	24.3	23.6	24.6
85°	12.1	11.7	12.0	11.6	11.2
87.5°	4.4	4.5	4.5	4.2	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)