

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: P560185

Luminaire Tested: FSR-12-2-LD4-2HI-35-UNV-80-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560185
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-LD4-2HI-35-UNV-80-88-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

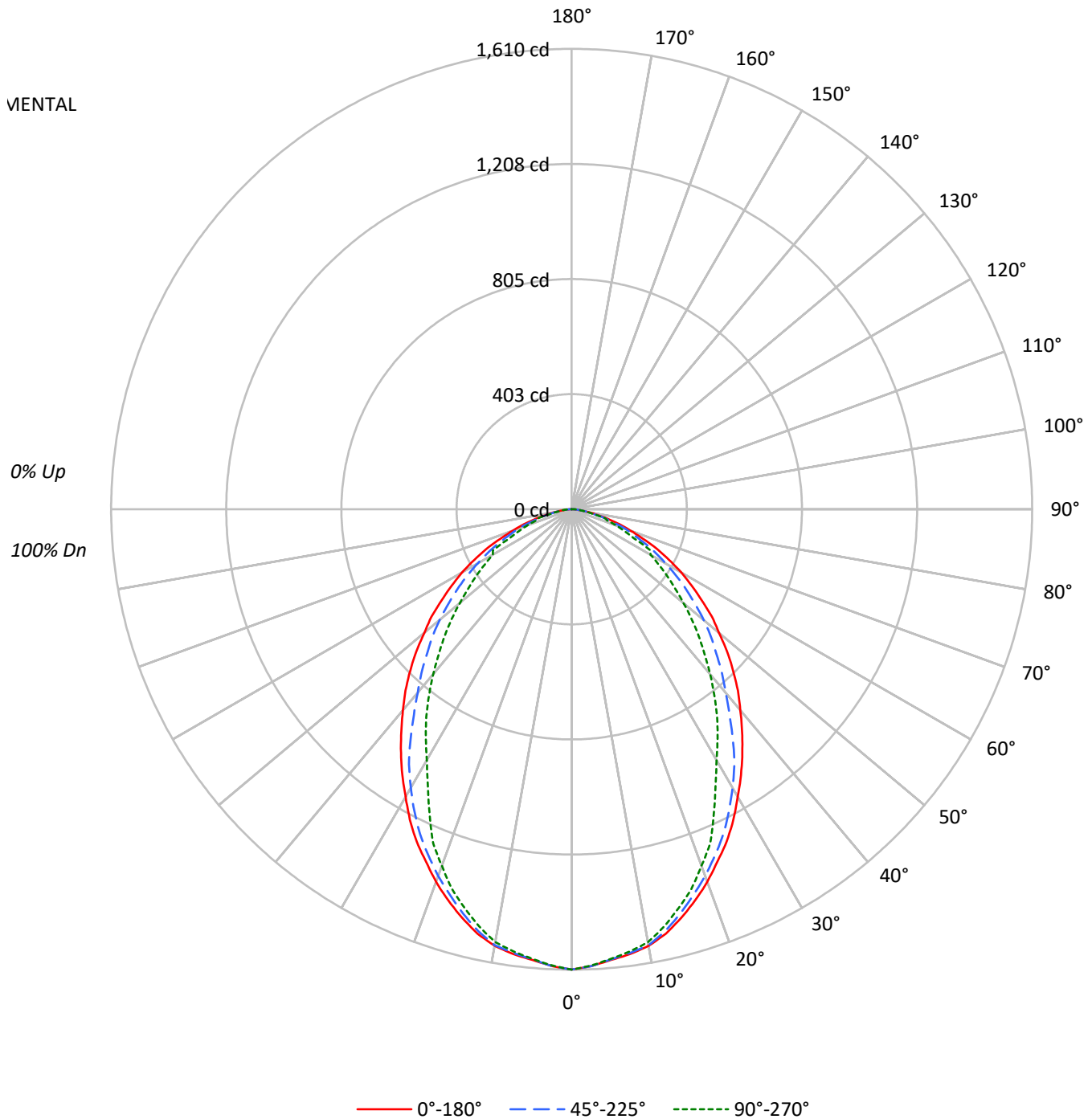
Lumens per Lamp: N/A
Luminaire Lumens: 3160.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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: P560185
CATALOG NUMBER: FSR-12-2-LD4-2HI-35-UNV-80-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P560185

CATALOG NUMBER: FSR-12-2-LD4-2HI-35-UNV-80-88-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	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°	8663	8663	8663
5°	8545	8535	8525
10°	8471	8461	8400
15°	8243	8160	8046
20°	7940	7812	7599
25°	7614	7448	6984
30°	7216	6985	6291
35°	6834	6455	5820
40°	6445	5883	5295
45°	6076	5439	4787
50°	5625	5048	4269
55°	5203	4575	3824
60°	4767	4086	3425
65°	4195	3578	3033
70°	3456	3133	2578
75°	2747	2400	2516
80°	1844	1729	1615
85°	1149	1377	1612

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6076 cd/sqm



TEST NUMBER: P560185

CATALOG NUMBER: FSR-12-2-LD4-2HI-35-UNV-80-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.8	4.7
10°-20°	411.2	13.0
20°-30°	569.3	18.0
30°-40°	607.0	19.2
40°-50°	553.8	17.5
50°-60°	433.9	13.7
60°-70°	282.8	8.9
70°-80°	125.3	4.0
80°-90°	26.9	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°	1130.4	35.8
0°-40°	1737.4	55.0
0°-60°	2725.0	86.2
0°-90°	3160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1610	1610	1610	1610	1610	
5°	1582	1580	1580	1578	1578	150
15°	1479	1479	1464	1450	1444	416
25°	1282	1275	1254	1210	1176	589
35°	1040	1033	982	908	886	650
45°	798	782	715	655	629	615
55°	554	538	488	430	408	497
65°	329	311	281	287	238	325
75°	132	123	115	110	121	142
85°	19	20	22	24	26	26
90°	0	0	0	0	0	



TEST NUMBER: P560185

CATALOG NUMBER: FSR-12-2-LD4-2HI-35-UNV-80-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1609.7	1609.7	1609.7	1609.7	1609.7
2.5°	1598.5	1598.5	1598.5	1596.6	1596.6
5°	1581.7	1579.9	1579.9	1578.0	1578.0
7.5°	1568.7	1566.9	1565.0	1563.1	1559.4
10°	1550.1	1550.1	1548.3	1538.9	1537.1
12.5°	1520.3	1518.5	1511.0	1498.0	1494.3
15°	1479.4	1479.4	1464.5	1449.6	1444.0
17.5°	1434.7	1432.9	1414.3	1399.4	1391.9
20°	1386.4	1382.6	1364.0	1339.8	1326.8
22.5°	1332.4	1332.4	1310.1	1278.4	1265.4
25°	1282.1	1274.7	1254.2	1209.6	1176.1
27.5°	1224.5	1213.3	1191.0	1127.7	1088.6
30°	1161.2	1155.6	1124.0	1042.1	1012.3
32.5°	1101.6	1092.3	1058.8	973.2	949.0
35°	1040.2	1032.8	982.5	908.1	885.8
37.5°	978.8	969.5	906.2	846.7	818.8
40°	917.4	906.2	837.4	783.4	753.7
42.5°	859.7	844.8	777.8	720.2	686.7
45°	798.3	781.6	714.6	655.0	629.0
47.5°	736.9	722.0	660.6	599.2	569.4
50°	671.8	658.8	602.9	541.5	509.9
52.5°	617.8	597.3	543.4	482.0	455.9
55°	554.5	537.8	487.6	429.9	407.5
57.5°	496.9	480.1	433.6	379.6	361.0
60°	442.9	418.7	379.6	333.1	318.2
62.5°	383.3	364.7	331.2	292.2	310.8
65°	329.4	310.8	281.0	286.6	238.2
67.5°	269.8	260.5	234.5	208.4	201.0
70°	219.6	208.4	199.1	171.2	163.8
72.5°	174.9	163.8	150.7	135.8	130.3
75°	132.1	122.8	115.4	109.8	121.0
77.5°	91.2	87.5	81.9	76.3	74.4
80°	59.5	57.7	55.8	54.0	52.1
82.5°	35.4	35.4	35.4	35.4	35.4
85°	18.6	20.5	22.3	24.2	26.1
87.5°	11.2	11.2	13.0	14.9	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)