

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: P560371

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-80-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560371
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-80-85-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONM
SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

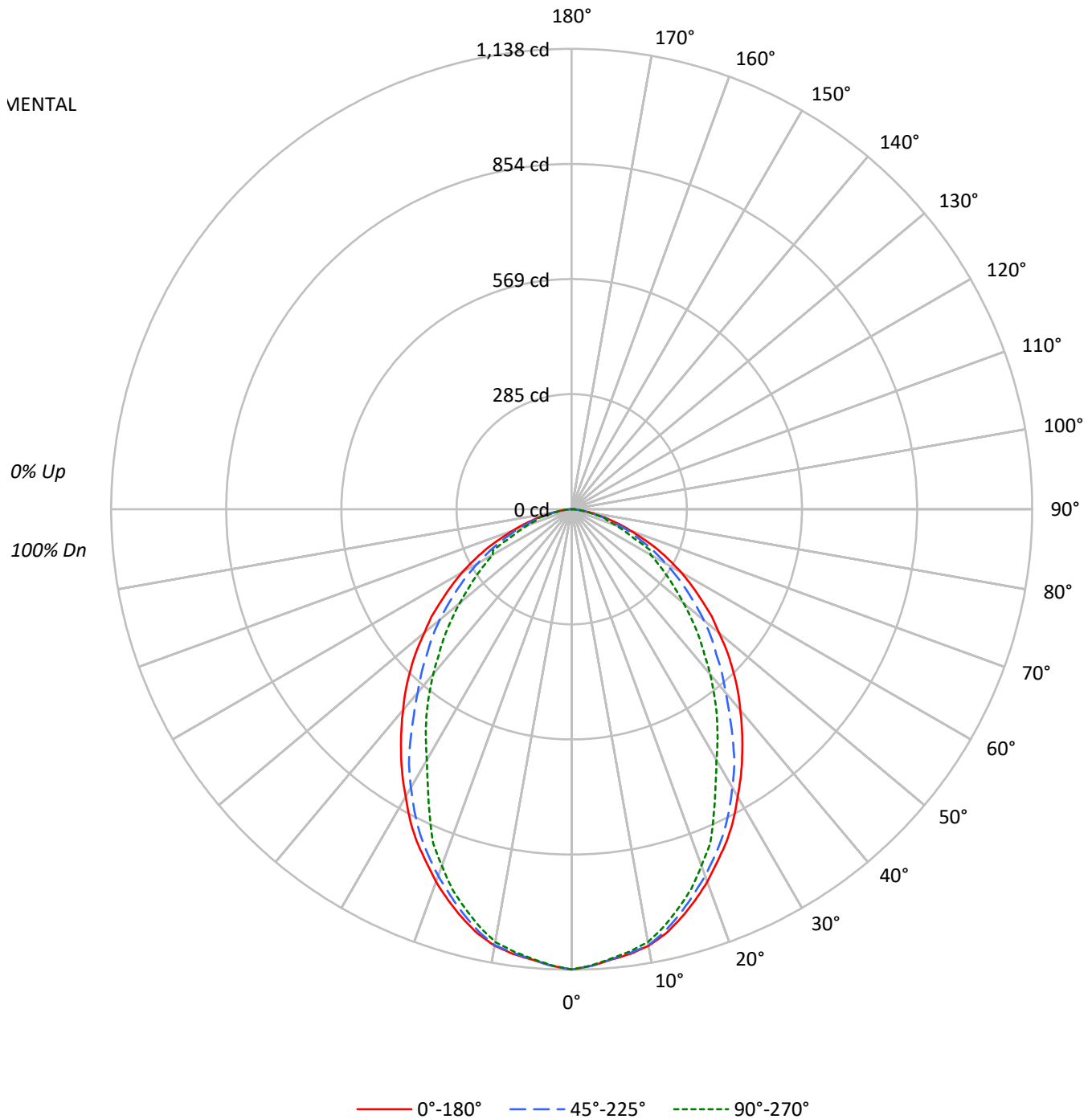
Lumens per Lamp: N/A
Luminaire Lumens: 2233.0 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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: P560371
CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-80-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P560371

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-80-85-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°	6122	6122	6122
5°	6038	6031	6024
10°	5986	5979	5936
15°	5825	5766	5685
20°	5611	5521	5370
25°	5380	5263	4935
30°	5099	4936	4446
35°	4830	4562	4112
40°	4555	4157	3742
45°	4293	3844	3383
50°	3975	3568	3017
55°	3677	3232	2702
60°	3369	2888	2421
65°	2965	2529	2143
70°	2442	2214	1821
75°	1942	1695	1778
80°	1305	1221	1141
85°	809	976	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4293 cd/sqm



TEST NUMBER: P560371

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-80-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.9	4.7
10°-20°	290.6	13.0
20°-30°	402.3	18.0
30°-40°	429.0	19.2
40°-50°	391.3	17.5
50°-60°	306.6	13.7
60°-70°	199.8	8.9
70°-80°	88.5	4.0
80°-90°	19.0	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°	798.8	35.8
0°-40°	1227.7	55.0
0°-60°	1925.7	86.2
0°-90°	2233.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2233.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1138	1138	1138	1138	1138	
5°	1118	1116	1116	1115	1115	106
15°	1045	1045	1035	1024	1020	294
25°	906	901	886	855	831	416
35°	735	730	694	642	626	460
45°	564	552	505	463	444	435
55°	392	380	344	304	288	351
65°	233	220	199	202	168	229
75°	93	87	82	78	86	100
85°	13	14	16	17	18	18
90°	0	0	0	0	0	



TEST NUMBER: P560371

CATALOG NUMBER: FSR-12-2-LD4-2LO-35-UNV-80-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1137.5	1137.5	1137.5	1137.5	1137.5
2.5°	1129.6	1129.6	1129.6	1128.3	1128.3
5°	1117.7	1116.4	1116.4	1115.1	1115.1
7.5°	1108.5	1107.2	1105.9	1104.6	1102.0
10°	1095.4	1095.4	1094.1	1087.5	1086.2
12.5°	1074.3	1073.0	1067.8	1058.6	1055.9
15°	1045.4	1045.4	1034.9	1024.4	1020.4
17.5°	1013.9	1012.5	999.4	988.9	983.6
20°	979.7	977.0	963.9	946.8	937.6
22.5°	941.5	941.5	925.7	903.4	894.2
25°	906.0	900.8	886.3	854.7	831.1
27.5°	865.3	857.4	841.6	796.9	769.3
30°	820.5	816.6	794.2	736.4	715.4
32.5°	778.5	771.9	748.2	687.7	670.6
35°	735.1	729.8	694.3	641.7	625.9
37.5°	691.7	685.1	640.4	598.3	578.6
40°	648.3	640.4	591.7	553.6	532.6
42.5°	607.5	597.0	549.7	508.9	485.2
45°	564.1	552.3	505.0	462.9	444.5
47.5°	520.7	510.2	466.8	423.4	402.4
50°	474.7	465.5	426.1	382.7	360.3
52.5°	436.6	422.1	384.0	340.6	322.2
55°	391.9	380.0	344.5	303.8	288.0
57.5°	351.1	339.3	306.4	268.3	255.1
60°	313.0	295.9	268.3	235.4	224.9
62.5°	270.9	257.7	234.1	206.5	219.6
65°	232.8	219.6	198.6	202.5	168.3
67.5°	190.7	184.1	165.7	147.3	142.0
70°	155.2	147.3	140.7	121.0	115.7
72.5°	123.6	115.7	106.5	96.0	92.0
75°	93.4	86.8	81.5	77.6	85.5
77.5°	64.4	61.8	57.9	53.9	52.6
80°	42.1	40.8	39.4	38.1	36.8
82.5°	25.0	25.0	25.0	25.0	25.0
85°	13.1	14.5	15.8	17.1	18.4
87.5°	7.9	7.9	9.2	10.5	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)