

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: P560249

Luminaire Tested: FSR-12-2-LD4-2HI-40-UNV-80-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560249
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3191.0 lumens
Efficiency: N/A
Efficacy: 73.9 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

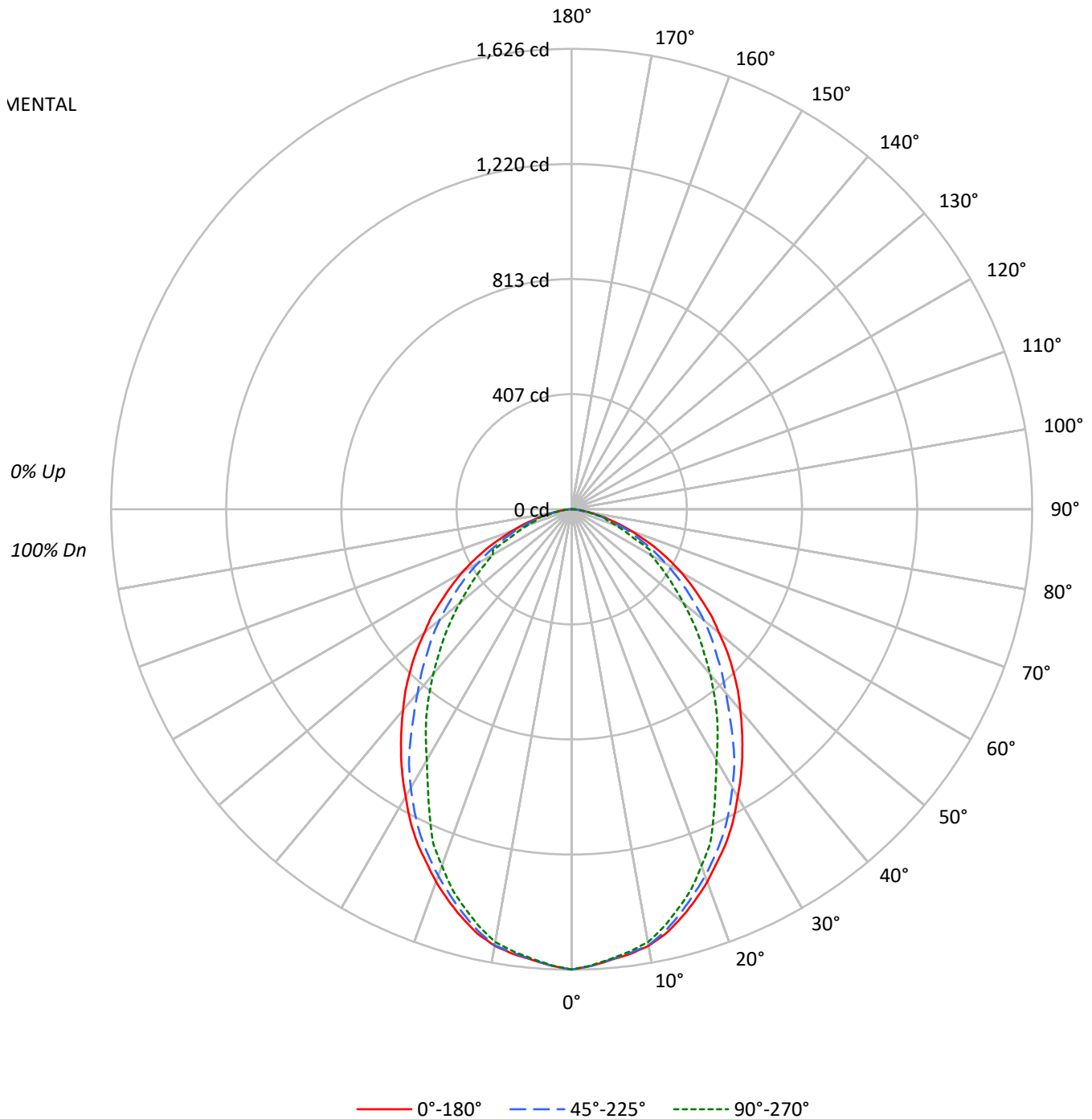
Input Watts (W): 43.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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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	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°	8748	8748	8748
5°	8629	8619	8609
10°	8554	8544	8483
15°	8324	8240	8125
20°	8018	7889	7674
25°	7688	7521	7052
30°	7287	7054	6353
35°	6901	6519	5877
40°	6509	5941	5347
45°	6135	5492	4834
50°	5680	5097	4311
55°	5255	4619	3861
60°	4814	4126	3458
65°	4236	3613	3063
70°	3489	3164	2603
75°	2774	2423	2539
80°	1863	1748	1630
85°	1161	1389	1624

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6135 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.3	4.7
10°-20°	415.2	13.0
20°-30°	574.9	18.0
30°-40°	613.0	19.2
40°-50°	559.2	17.5
50°-60°	438.1	13.7
60°-70°	285.5	8.9
70°-80°	126.5	4.0
80°-90°	27.2	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°	1141.4	35.8
0°-40°	1754.4	55.0
0°-60°	2751.8	86.2
0°-90°	3191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3191.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1626	1626	1626	1626	1626	
5°	1597	1595	1595	1594	1594	152
15°	1494	1494	1479	1464	1458	420
25°	1295	1287	1266	1221	1188	594
35°	1050	1043	992	917	894	657
45°	806	789	722	662	635	621
55°	560	543	492	434	412	502
65°	333	314	284	289	240	328
75°	133	124	116	111	122	143
85°	19	21	22	24	26	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1625.5	1625.5	1625.5	1625.5	1625.5
2.5°	1614.2	1614.2	1614.2	1612.3	1612.3
5°	1597.3	1595.4	1595.4	1593.5	1593.5
7.5°	1584.1	1582.2	1580.4	1578.5	1574.7
10°	1565.3	1565.3	1563.4	1554.0	1552.2
12.5°	1535.3	1533.4	1525.9	1512.7	1508.9
15°	1493.9	1493.9	1478.9	1463.8	1458.2
17.5°	1448.8	1446.9	1428.1	1413.1	1405.6
20°	1400.0	1396.2	1377.4	1353.0	1339.8
22.5°	1345.5	1345.5	1322.9	1291.0	1277.8
25°	1294.7	1287.2	1266.5	1221.4	1187.6
27.5°	1236.5	1225.2	1202.6	1138.8	1099.3
30°	1172.6	1166.9	1135.0	1052.3	1022.3
32.5°	1112.4	1103.1	1069.2	982.8	958.4
35°	1050.4	1042.9	992.2	917.0	894.5
37.5°	988.4	979.0	915.1	855.0	826.8
40°	926.4	915.1	845.6	791.1	761.1
42.5°	868.2	853.1	785.5	727.2	693.4
45°	806.1	789.2	721.6	661.5	635.1
47.5°	744.1	729.1	667.1	605.1	575.0
50°	678.4	665.2	608.8	546.8	514.9
52.5°	623.9	603.2	548.7	486.7	460.4
55°	560.0	543.1	492.3	434.1	411.5
57.5°	501.7	484.8	437.8	383.3	364.6
60°	447.2	422.8	383.3	336.4	321.3
62.5°	387.1	368.3	334.5	295.0	313.8
65°	332.6	313.8	283.7	289.4	240.5
67.5°	272.5	263.1	236.8	210.5	202.9
70°	221.7	210.5	201.1	172.9	165.4
72.5°	176.6	165.4	152.2	137.2	131.5
75°	133.4	124.0	116.5	110.9	122.1
77.5°	92.1	88.3	82.7	77.0	75.2
80°	60.1	58.3	56.4	54.5	52.6
82.5°	35.7	35.7	35.7	35.7	35.7
85°	18.8	20.7	22.5	24.4	26.3
87.5°	11.3	11.3	13.2	15.0	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)