

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: P559785

Luminaire Tested: FSR-12-2-LD4-1HI-50-UNV-93-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559785
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-LD4-1HI-50-UNV-93-88-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1626.0 lumens
Efficiency: N/A
Efficacy: 75.3 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

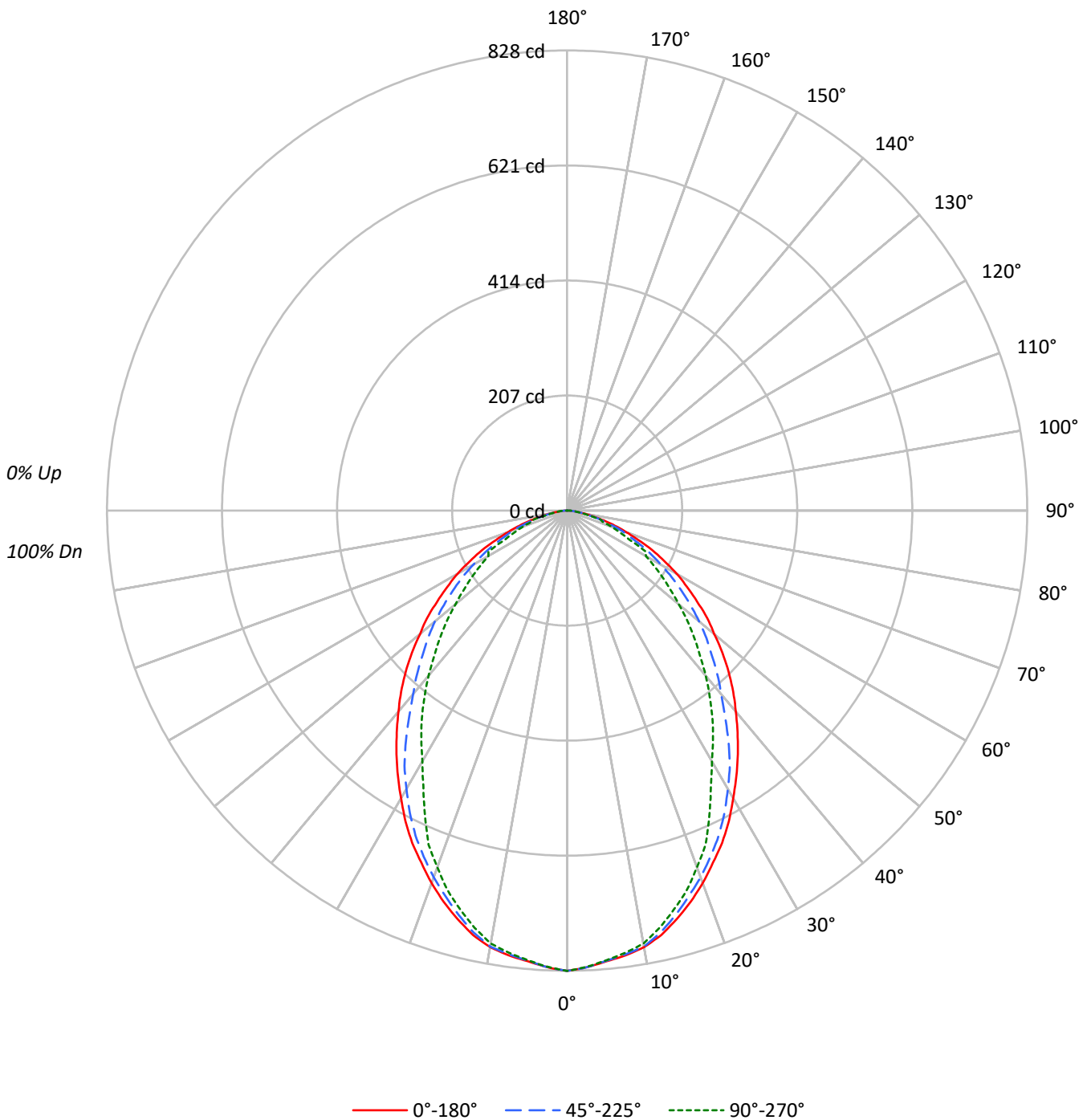
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4458	4458	4458
5°	4397	4392	4387
10°	4359	4354	4322
15°	4241	4199	4140
20°	4086	4020	3910
25°	3918	3833	3594
30°	3713	3594	3237
35°	3517	3322	2995
40°	3317	3027	2725
45°	3127	2799	2463
50°	2894	2597	2197
55°	2677	2354	1968
60°	2453	2102	1762
65°	2159	1841	1561
70°	1778	1613	1327
75°	1414	1235	1293
80°	948	890	831
85°	593	710	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3127 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	4.7
10°-20°	211.6	13.0
20°-30°	292.9	18.0
30°-40°	312.4	19.2
40°-50°	285.0	17.5
50°-60°	223.2	13.7
60°-70°	145.5	8.9
70°-80°	64.5	4.0
80°-90°	13.8	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°	581.6	35.8
0°-40°	894.0	55.0
0°-60°	1402.2	86.2
0°-90°	1626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1626.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	814	813	813	812	812	77
15°	761	761	754	746	743	214
25°	660	656	645	622	605	303
35°	535	531	506	467	456	335
45°	411	402	368	337	324	316
55°	285	277	251	221	210	256
65°	170	160	145	148	123	167
75°	68	63	59	56	62	73
85°	10	10	12	12	13	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	828.3	828.3	828.3	828.3	828.3
2.5°	822.5	822.5	822.5	821.6	821.6
5°	813.9	812.9	812.9	812.0	812.0
7.5°	807.2	806.2	805.3	804.3	802.4
10°	797.6	797.6	796.7	791.9	790.9
12.5°	782.3	781.3	777.5	770.8	768.9
15°	761.2	761.2	753.6	745.9	743.0
17.5°	738.3	737.3	727.7	720.1	716.2
20°	713.4	711.4	701.9	689.4	682.7
22.5°	685.6	685.6	674.1	657.8	651.1
25°	659.7	655.9	645.4	622.4	605.2
27.5°	630.1	624.3	612.8	580.3	560.2
30°	597.5	594.6	578.3	536.2	520.9
32.5°	566.9	562.1	544.8	500.8	488.3
35°	535.3	531.4	505.6	467.3	455.8
37.5°	503.7	498.9	466.3	435.7	421.3
40°	472.1	466.3	430.9	403.1	387.8
42.5°	442.4	434.7	400.2	370.6	353.3
45°	410.8	402.2	367.7	337.1	323.6
47.5°	379.2	371.5	339.9	308.3	293.0
50°	345.7	339.0	310.2	278.6	262.4
52.5°	317.9	307.4	279.6	248.0	234.6
55°	285.3	276.7	250.9	221.2	209.7
57.5°	255.7	247.0	223.1	195.3	185.8
60°	227.9	215.4	195.3	171.4	163.7
62.5°	197.3	187.7	170.4	150.3	159.9
65°	169.5	159.9	144.6	147.5	122.6
67.5°	138.8	134.1	120.6	107.2	103.4
70°	113.0	107.2	102.5	88.1	84.3
72.5°	90.0	84.3	77.6	69.9	67.0
75°	68.0	63.2	59.4	56.5	62.2
77.5°	46.9	45.0	42.1	39.3	38.3
80°	30.6	29.7	28.7	27.8	26.8
82.5°	18.2	18.2	18.2	18.2	18.2
85°	9.6	10.5	11.5	12.4	13.4
87.5°	5.7	5.7	6.7	7.7	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)