

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P307032

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA08-W2A-U-5700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P307032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-HRP-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5700K TUNABLE CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1854.0 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

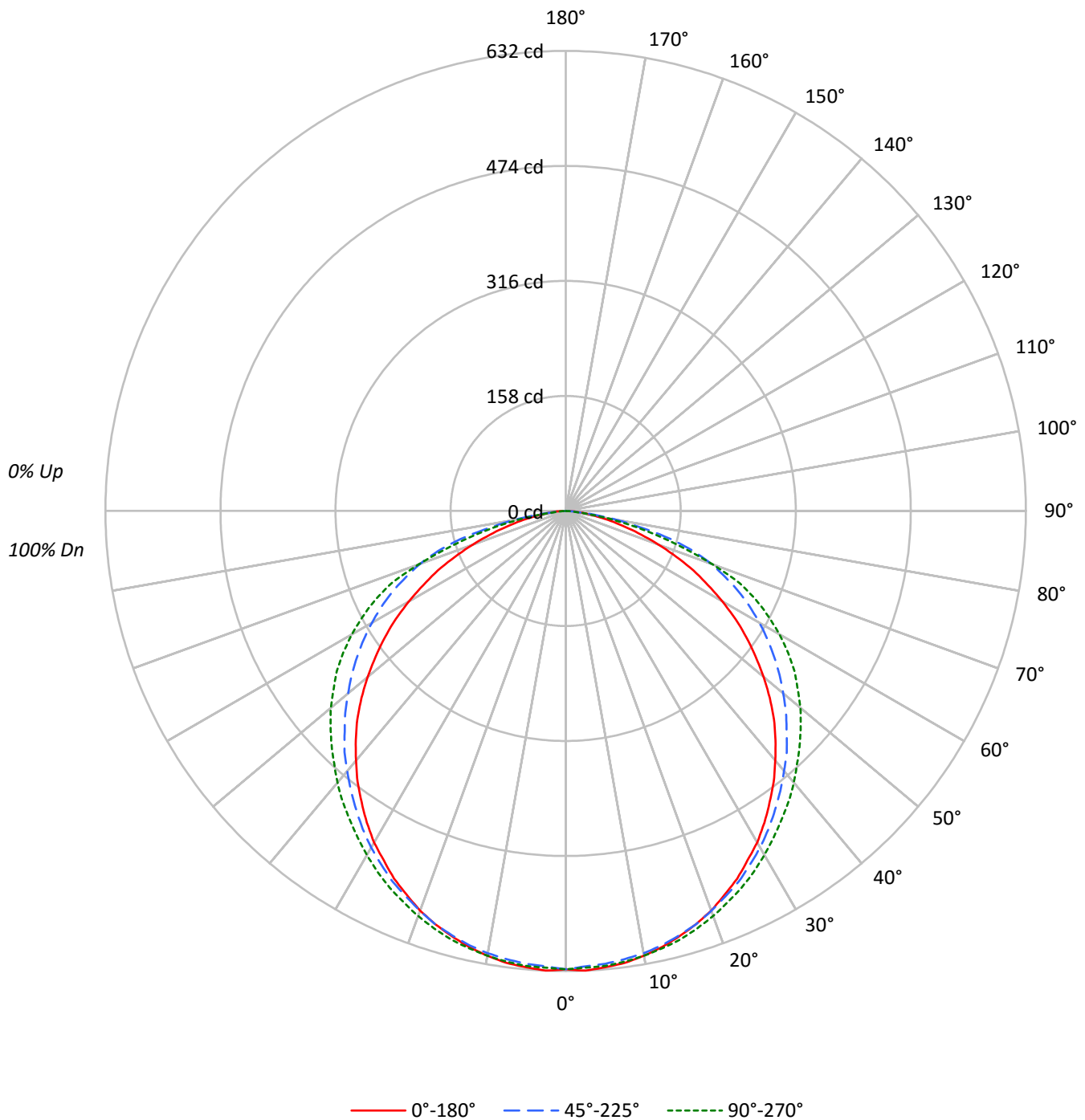
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1694	1694	1694
5°	1699	1687	1694
10°	1695	1685	1695
15°	1684	1681	1697
20°	1673	1674	1696
25°	1655	1669	1696
30°	1634	1659	1696
35°	1605	1647	1699
40°	1573	1638	1712
45°	1540	1633	1730
50°	1486	1633	1762
55°	1422	1641	1800
60°	1337	1653	1823
65°	1233	1670	1834
70°	1073	1674	1688
75°	885	1557	1364
80°	696	1120	913
85°	540	432	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	3.2
10°-20°	171.0	9.2
20°-30°	259.7	14.0
30°-40°	314.7	17.0
40°-50°	331.6	17.9
50°-60°	309.6	16.7
60°-70°	247.4	13.3
70°-80°	136.1	7.3
80°-90°	24.0	1.3
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°	490.4	26.5
0°-40°	805.1	43.4
0°-60°	1446.4	78.0
0°-90°	1854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1854.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	629	627	624	628	627	60
15°	605	605	603	609	609	171
25°	557	558	562	570	571	257
35°	488	493	501	514	517	306
45°	405	412	429	448	455	311
55°	303	318	350	374	384	271
65°	194	218	262	284	288	191
75°	85	122	150	135	131	92
85°	18	22	14	9	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	629.6	629.6	629.6	629.6	629.6
2.5°	632.0	630.2	626.1	629.6	627.9
5°	629.0	627.3	624.4	628.5	627.3
7.5°	626.1	623.8	620.9	625.5	624.4
10°	620.3	618.6	616.8	620.9	620.3
12.5°	613.3	612.7	611.0	615.6	615.1
15°	604.6	604.6	603.4	609.2	609.2
17.5°	595.2	594.6	595.2	601.6	601.1
20°	584.2	584.2	584.7	592.3	592.3
22.5°	570.7	571.3	573.1	582.4	581.8
25°	557.3	558.5	562.0	570.2	571.3
27.5°	541.0	543.9	548.0	557.9	559.1
30°	525.9	527.6	534.0	543.3	545.7
32.5°	507.8	511.3	518.3	528.8	531.7
35°	488.5	493.2	501.4	514.2	517.1
37.5°	469.3	473.4	484.5	497.9	503.1
40°	447.7	454.7	466.4	481.5	487.4
42.5°	426.7	433.7	449.5	465.2	470.5
45°	404.6	412.2	429.1	448.3	454.7
47.5°	380.1	388.9	410.4	430.8	437.8
50°	355.0	366.1	390.0	412.8	420.9
52.5°	328.8	342.8	370.2	394.1	401.7
55°	303.2	318.3	349.8	374.3	383.6
57.5°	276.9	293.2	328.8	356.8	362.0
60°	248.4	268.2	307.2	331.7	338.7
62.5°	220.4	243.1	285.1	308.4	314.2
65°	193.6	218.0	262.3	283.9	288.0
67.5°	164.4	193.6	237.3	257.1	258.3
70°	136.4	170.2	212.8	222.1	214.5
72.5°	109.0	145.2	184.2	176.6	170.2
75°	85.1	121.8	149.8	134.7	131.2
77.5°	63.0	99.7	107.3	99.1	92.7
80°	44.9	78.7	72.3	61.8	58.9
82.5°	30.9	49.6	39.6	30.9	26.8
85°	17.5	22.2	14.0	8.7	7.0
87.5°	7.6	5.2	2.9	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)