

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: P307030

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA08-W2A-U-5000K**

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: P307030
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-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08"
ACRYLIC SHEET
Light Source: (168) 5000K 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: 1831.0 lumens
Efficiency: N/A
Efficacy: 91.1 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

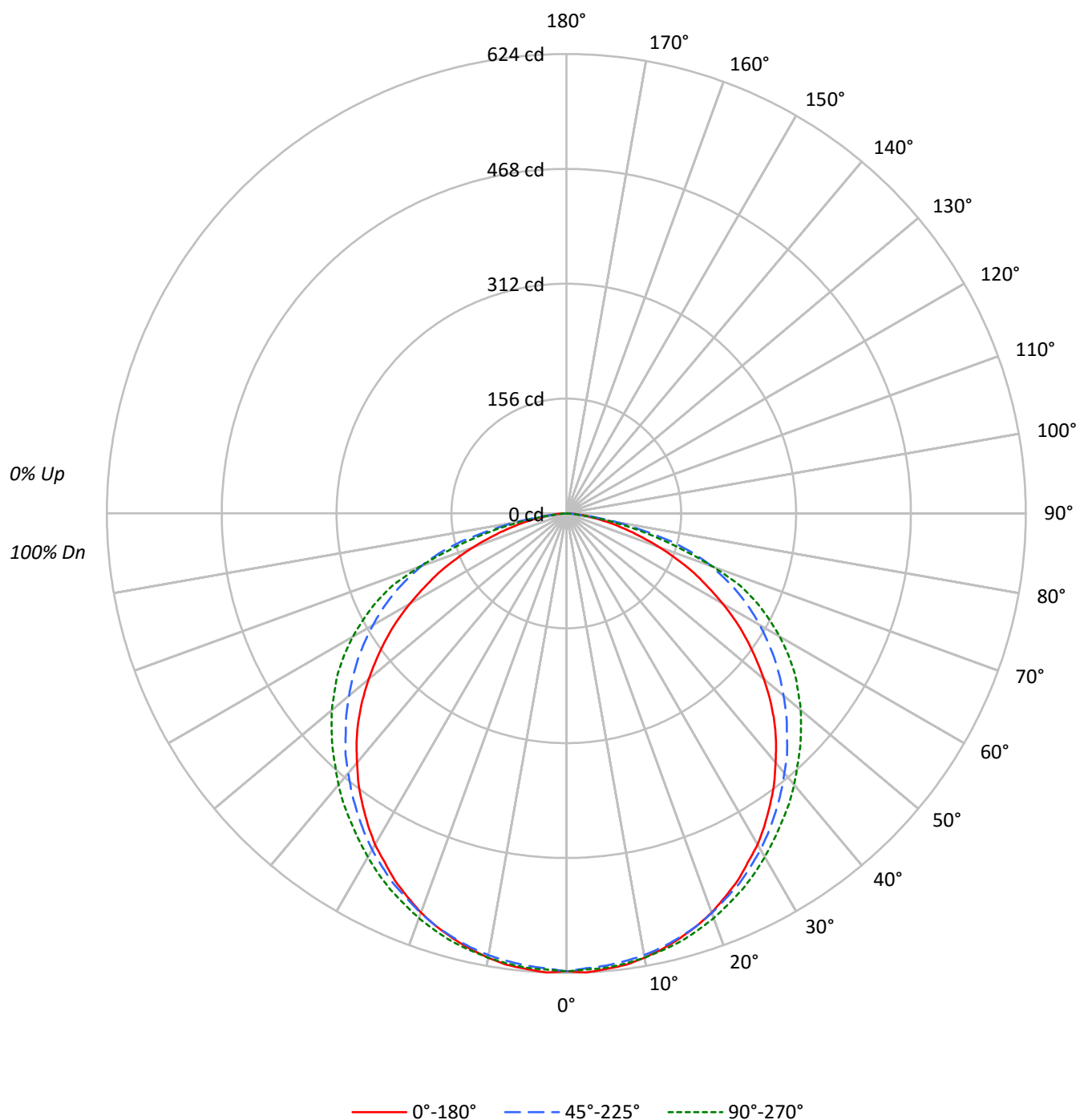
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1673	1673	1673
5°	1678	1666	1673
10°	1674	1665	1674
15°	1663	1660	1676
20°	1652	1654	1675
25°	1634	1648	1675
30°	1614	1639	1675
35°	1585	1627	1678
40°	1553	1618	1691
45°	1521	1613	1709
50°	1468	1613	1740
55°	1405	1621	1777
60°	1320	1633	1800
65°	1217	1650	1811
70°	1060	1654	1667
75°	874	1539	1346
80°	687	1106	902
85°	534	426	213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	3.2
10°-20°	168.9	9.2
20°-30°	256.5	14.0
30°-40°	310.8	17.0
40°-50°	327.5	17.9
50°-60°	305.8	16.7
60°-70°	244.4	13.3
70°-80°	134.5	7.3
80°-90°	23.7	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°	484.3	26.5
0°-40°	795.1	43.4
0°-60°	1428.5	78.0
0°-90°	1831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1831.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	621	620	617	621	620	59
15°	597	597	596	602	602	169
25°	550	552	555	563	564	253
35°	482	487	495	508	511	302
45°	400	407	424	443	449	307
55°	299	314	346	370	379	267
65°	191	215	259	280	284	188
75°	84	120	148	133	130	90
85°	17	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°	621.8	621.8	621.8	621.8	621.8
2.5°	624.1	622.4	618.4	621.8	620.1
5°	621.2	619.5	616.6	620.7	619.5
7.5°	618.4	616.1	613.2	617.8	616.6
10°	612.6	610.9	609.2	613.2	612.6
12.5°	605.7	605.1	603.4	608.0	607.4
15°	597.1	597.1	595.9	601.7	601.7
17.5°	587.8	587.3	587.8	594.2	593.6
20°	576.9	576.9	577.5	585.0	585.0
22.5°	563.7	564.2	566.0	575.2	574.6
25°	550.4	551.6	555.0	563.1	564.2
27.5°	534.3	537.2	541.2	551.0	552.2
30°	519.3	521.1	527.4	536.6	538.9
32.5°	501.5	504.9	511.8	522.2	525.1
35°	482.5	487.1	495.2	507.8	510.7
37.5°	463.5	467.5	478.5	491.7	496.9
40°	442.2	449.1	460.6	475.6	481.3
42.5°	421.5	428.4	443.9	459.5	464.6
45°	399.6	407.1	423.8	442.8	449.1
47.5°	375.4	384.0	405.3	425.5	432.4
50°	350.6	361.6	385.2	407.6	415.7
52.5°	324.7	338.5	365.6	389.2	396.7
55°	299.4	314.4	345.5	369.6	378.8
57.5°	273.5	289.6	324.7	352.4	357.5
60°	245.3	264.8	303.4	327.6	334.5
62.5°	217.6	240.1	281.5	304.6	310.3
65°	191.2	215.3	259.1	280.4	284.4
67.5°	162.4	191.2	234.3	253.9	255.1
70°	134.7	168.1	210.2	219.4	211.9
72.5°	107.7	143.4	181.9	174.5	168.1
75°	84.1	120.3	148.0	133.0	129.5
77.5°	62.2	98.5	105.9	97.9	91.5
80°	44.3	77.7	71.4	61.0	58.2
82.5°	30.5	48.9	39.2	30.5	26.5
85°	17.3	21.9	13.8	8.6	6.9
87.5°	7.5	5.2	2.9	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)