

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: P307031

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA08-W2A-U-5500K**

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: P307031
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-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5500K 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: 1849.0 lumens
Efficiency: N/A
Efficacy: 91.5 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

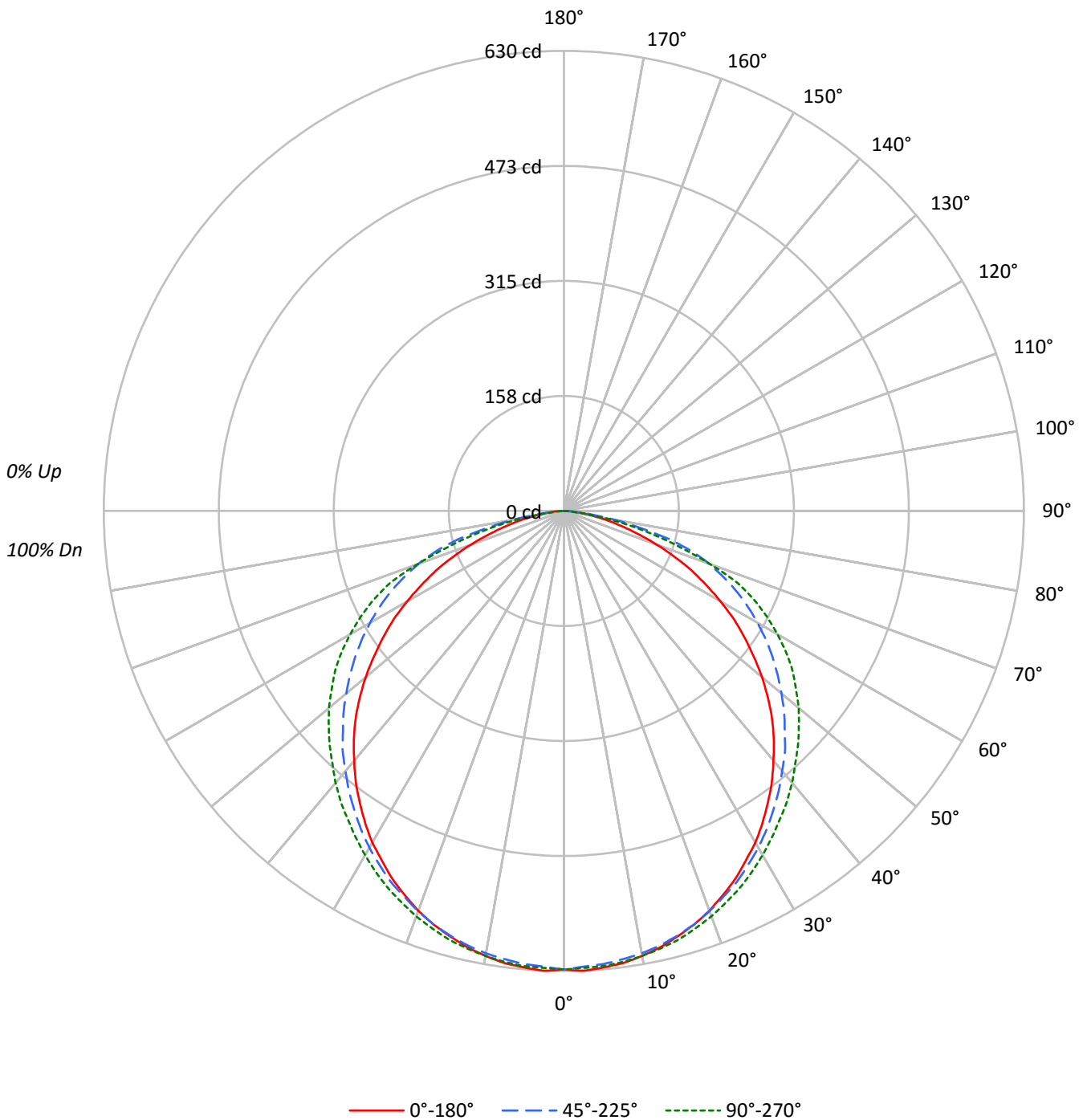
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1690	1690	1690
5°	1694	1682	1690
10°	1690	1681	1690
15°	1680	1677	1693
20°	1668	1670	1692
25°	1650	1664	1692
30°	1629	1655	1691
35°	1600	1643	1694
40°	1568	1634	1708
45°	1536	1628	1726
50°	1482	1629	1757
55°	1418	1636	1795
60°	1333	1649	1818
65°	1229	1666	1829
70°	1071	1670	1684
75°	883	1553	1360
80°	694	1117	910
85°	537	432	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.2
10°-20°	170.6	9.2
20°-30°	259.0	14.0
30°-40°	313.9	17.0
40°-50°	330.8	17.9
50°-60°	308.8	16.7
60°-70°	246.8	13.3
70°-80°	135.8	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°	489.1	26.5
0°-40°	803.0	43.4
0°-60°	1442.5	78.0
0°-90°	1849.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1849.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	627	626	623	627	626	60
15°	603	603	602	608	608	170
25°	556	557	560	569	570	256
35°	487	492	500	513	516	305
45°	404	411	428	447	454	310
55°	302	318	349	373	383	270
65°	193	217	262	283	287	190
75°	85	122	149	134	131	91
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°	627.9	627.9	627.9	627.9	627.9
2.5°	630.3	628.5	624.4	627.9	626.2
5°	627.3	625.6	622.7	626.8	625.6
7.5°	624.4	622.1	619.2	623.9	622.7
10°	618.6	616.9	615.1	619.2	618.6
12.5°	611.7	611.1	609.3	614.0	613.4
15°	602.9	602.9	601.8	607.6	607.6
17.5°	593.6	593.0	593.6	600.0	599.4
20°	582.6	582.6	583.2	590.7	590.7
22.5°	569.2	569.8	571.5	580.8	580.3
25°	555.8	557.0	560.5	568.6	569.8
27.5°	539.6	542.5	546.5	556.4	557.6
30°	524.4	526.2	532.6	541.9	544.2
32.5°	506.4	509.9	516.9	527.3	530.3
35°	487.2	491.9	500.0	512.8	515.7
37.5°	468.0	472.1	483.2	496.5	501.8
40°	446.5	453.5	465.1	480.3	486.1
42.5°	425.6	432.6	448.3	464.0	469.2
45°	403.5	411.1	427.9	447.1	453.5
47.5°	379.1	387.8	409.3	429.7	436.6
50°	354.1	365.1	389.0	411.6	419.8
52.5°	327.9	341.9	369.2	393.0	400.6
55°	302.3	317.5	348.8	373.3	382.6
57.5°	276.2	292.5	327.9	355.8	361.1
60°	247.7	267.5	306.4	330.8	337.8
62.5°	219.8	242.5	284.3	307.6	313.4
65°	193.0	217.4	261.6	283.1	287.2
67.5°	164.0	193.0	236.6	256.4	257.6
70°	136.1	169.8	212.2	221.5	214.0
72.5°	108.7	144.8	183.7	176.2	169.8
75°	84.9	121.5	149.4	134.3	130.8
77.5°	62.8	99.4	107.0	98.8	92.4
80°	44.8	78.5	72.1	61.6	58.7
82.5°	30.8	49.4	39.5	30.8	26.7
85°	17.4	22.1	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)