

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: P307041

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CA125-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: P307041
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-CA125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 1848.0 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

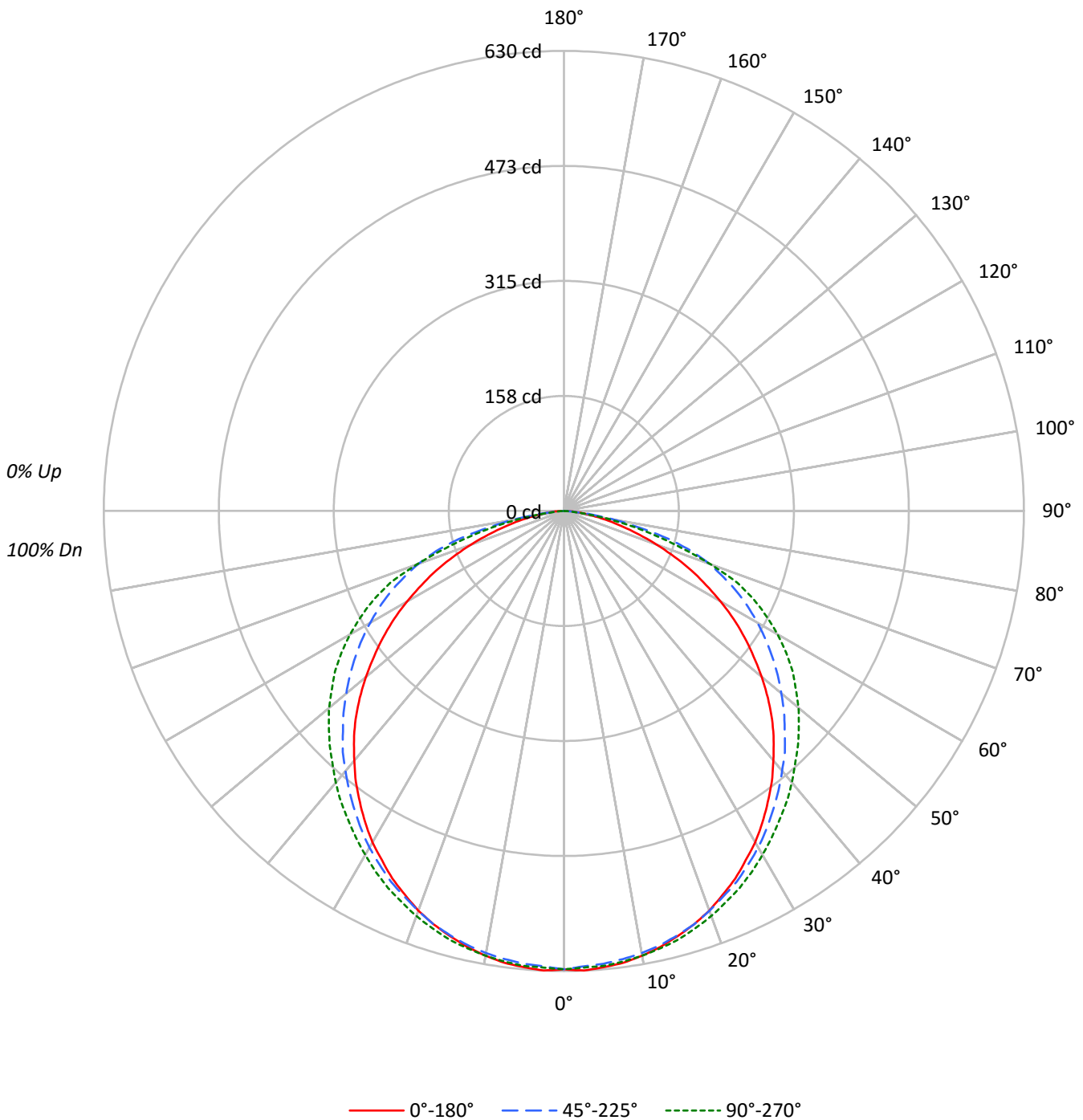
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1689	1689	1689
5°	1694	1681	1689
10°	1689	1680	1689
15°	1679	1675	1692
20°	1668	1669	1691
25°	1649	1663	1691
30°	1629	1654	1690
35°	1600	1642	1693
40°	1568	1633	1707
45°	1535	1628	1725
50°	1482	1628	1757
55°	1418	1636	1794
60°	1332	1648	1817
65°	1228	1665	1828
70°	1070	1669	1682
75°	882	1552	1359
80°	693	1117	910
85°	537	429	216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.2
10°-20°	170.5	9.2
20°-30°	258.9	14.0
30°-40°	313.7	17.0
40°-50°	330.6	17.9
50°-60°	308.6	16.7
60°-70°	246.6	13.3
70°-80°	135.7	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°	488.8	26.5
0°-40°	802.5	43.4
0°-60°	1441.7	78.0
0°-90°	1848.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1848.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	627	625	622	626	625	60
15°	603	603	601	607	607	170
25°	556	557	560	568	570	256
35°	487	492	500	512	515	305
45°	403	411	428	447	453	310
55°	302	317	349	373	382	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°	627.6	627.6	627.6	627.6	627.6
2.5°	629.9	628.2	624.1	627.6	625.8
5°	627.0	625.3	622.4	626.4	625.3
7.5°	624.1	621.8	618.9	623.5	622.4
10°	618.3	616.5	614.8	618.9	618.3
12.5°	611.3	610.7	609.0	613.6	613.1
15°	602.6	602.6	601.4	607.3	607.3
17.5°	593.3	592.7	593.3	599.7	599.1
20°	582.3	582.3	582.8	590.4	590.4
22.5°	568.9	569.5	571.2	580.5	579.9
25°	555.5	556.7	560.2	568.3	569.5
27.5°	539.3	542.2	546.2	556.1	557.3
30°	524.2	525.9	532.3	541.6	543.9
32.5°	506.1	509.6	516.6	527.1	530.0
35°	487.0	491.6	499.7	512.5	515.4
37.5°	467.8	471.9	482.9	496.3	501.5
40°	446.3	453.3	464.9	480.0	485.8
42.5°	425.4	432.3	448.0	463.7	468.9
45°	403.3	410.8	427.7	446.9	453.3
47.5°	378.9	387.6	409.1	429.4	436.4
50°	353.9	364.9	388.8	411.4	419.6
52.5°	327.7	341.7	369.0	392.8	400.4
55°	302.2	317.3	348.7	373.1	382.4
57.5°	276.0	292.3	327.7	355.6	360.9
60°	247.5	267.3	306.2	330.6	337.6
62.5°	219.7	242.3	284.2	307.4	313.2
65°	192.9	217.3	261.5	283.0	287.1
67.5°	163.9	192.9	236.5	256.3	257.4
70°	136.0	169.7	212.1	221.4	213.8
72.5°	108.7	144.7	183.6	176.1	169.7
75°	84.8	121.5	149.3	134.2	130.7
77.5°	62.8	99.4	106.9	98.8	92.4
80°	44.7	78.4	72.1	61.6	58.7
82.5°	30.8	49.4	39.5	30.8	26.7
85°	17.4	22.1	13.9	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)