

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: P307048

Luminaire Tested: **14FCZ2-25-UNV-L82765-HRP-CP125-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: P307048
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-CP125-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB 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: 1789.0 lumens
Efficiency: N/A
Efficacy: 89.0 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

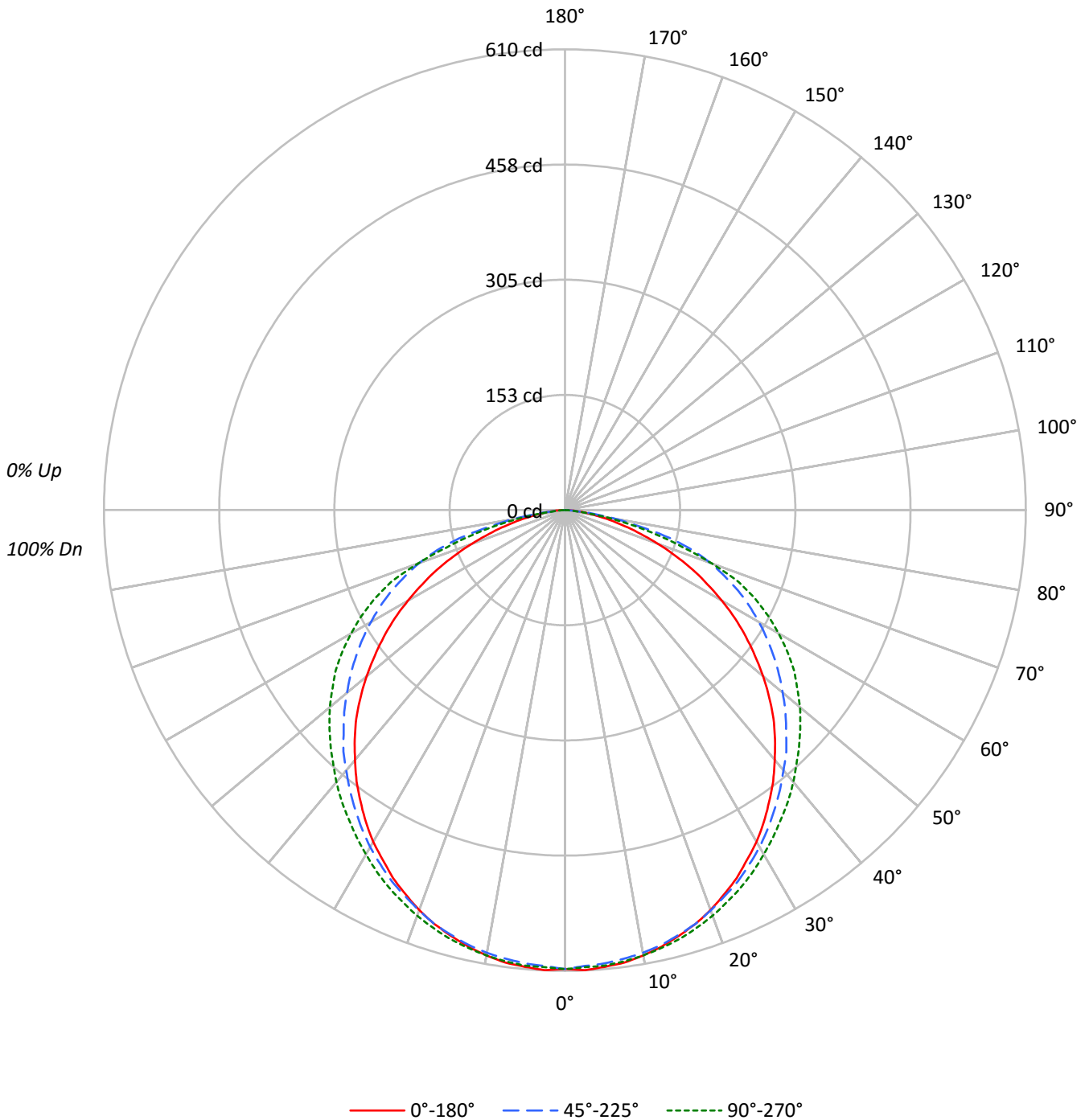
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1635	1635	1635
5°	1640	1628	1635
10°	1636	1626	1636
15°	1625	1622	1638
20°	1614	1616	1637
25°	1597	1610	1637
30°	1577	1601	1636
35°	1549	1589	1639
40°	1518	1581	1652
45°	1486	1576	1670
50°	1434	1575	1701
55°	1372	1583	1737
60°	1290	1596	1759
65°	1189	1612	1769
70°	1035	1615	1629
75°	854	1503	1316
80°	671	1082	880
85°	522	417	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	3.2
10°-20°	165.1	9.2
20°-30°	250.6	14.0
30°-40°	303.7	17.0
40°-50°	320.0	17.9
50°-60°	298.8	16.7
60°-70°	238.8	13.3
70°-80°	131.4	7.3
80°-90°	23.2	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°	473.2	26.5
0°-40°	776.9	43.4
0°-60°	1395.7	78.0
0°-90°	1789.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1789.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	607	605	602	606	605	58
15°	583	583	582	588	588	165
25°	538	539	542	550	551	248
35°	471	476	484	496	499	295
45°	390	398	414	433	439	300
55°	292	307	338	361	370	261
65°	187	210	253	274	278	184
75°	82	118	145	130	127	88
85°	17	21	14	8	7	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	607.6	607.6	607.6	607.6	607.6
2.5°	609.8	608.1	604.2	607.6	605.9
5°	607.0	605.3	602.5	606.4	605.3
7.5°	604.2	601.9	599.1	603.6	602.5
10°	598.6	596.9	595.2	599.1	598.6
12.5°	591.8	591.2	589.6	594.1	593.5
15°	583.4	583.4	582.2	587.9	587.9
17.5°	574.4	573.8	574.4	580.6	580.0
20°	563.7	563.7	564.2	571.6	571.6
22.5°	550.7	551.3	553.0	562.0	561.4
25°	537.8	538.9	542.3	550.2	551.3
27.5°	522.0	524.9	528.8	538.4	539.5
30°	507.4	509.1	515.3	524.3	526.5
32.5°	490.0	493.4	500.1	510.2	513.0
35°	471.4	475.9	483.8	496.2	499.0
37.5°	452.9	456.8	467.5	480.4	485.5
40°	432.0	438.8	450.0	464.7	470.3
42.5°	411.8	418.5	433.7	448.9	454.0
45°	390.4	397.7	414.0	432.6	438.8
47.5°	366.8	375.2	396.0	415.7	422.5
50°	342.6	353.3	376.3	398.3	406.2
52.5°	317.3	330.8	357.2	380.3	387.6
55°	292.5	307.2	337.5	361.2	370.2
57.5°	267.2	283.0	317.3	344.3	349.3
60°	239.6	258.8	296.5	320.1	326.8
62.5°	212.6	234.6	275.1	297.6	303.2
65°	186.8	210.4	253.1	274.0	277.9
67.5°	158.6	186.8	229.0	248.1	249.2
70°	131.6	164.3	205.3	214.3	207.0
72.5°	105.2	140.1	177.8	170.5	164.3
75°	82.1	117.6	144.6	129.9	126.6
77.5°	60.8	96.2	103.5	95.6	89.4
80°	43.3	75.9	69.8	59.6	56.8
82.5°	29.8	47.8	38.3	29.8	25.9
85°	16.9	21.4	13.5	8.4	6.8
87.5°	7.3	5.1	2.8	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)