

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: P307089

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-3000K**

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: P307089
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: 14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3000K 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: 1961.0 lumens
Efficiency: N/A
Efficacy: 83.1 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

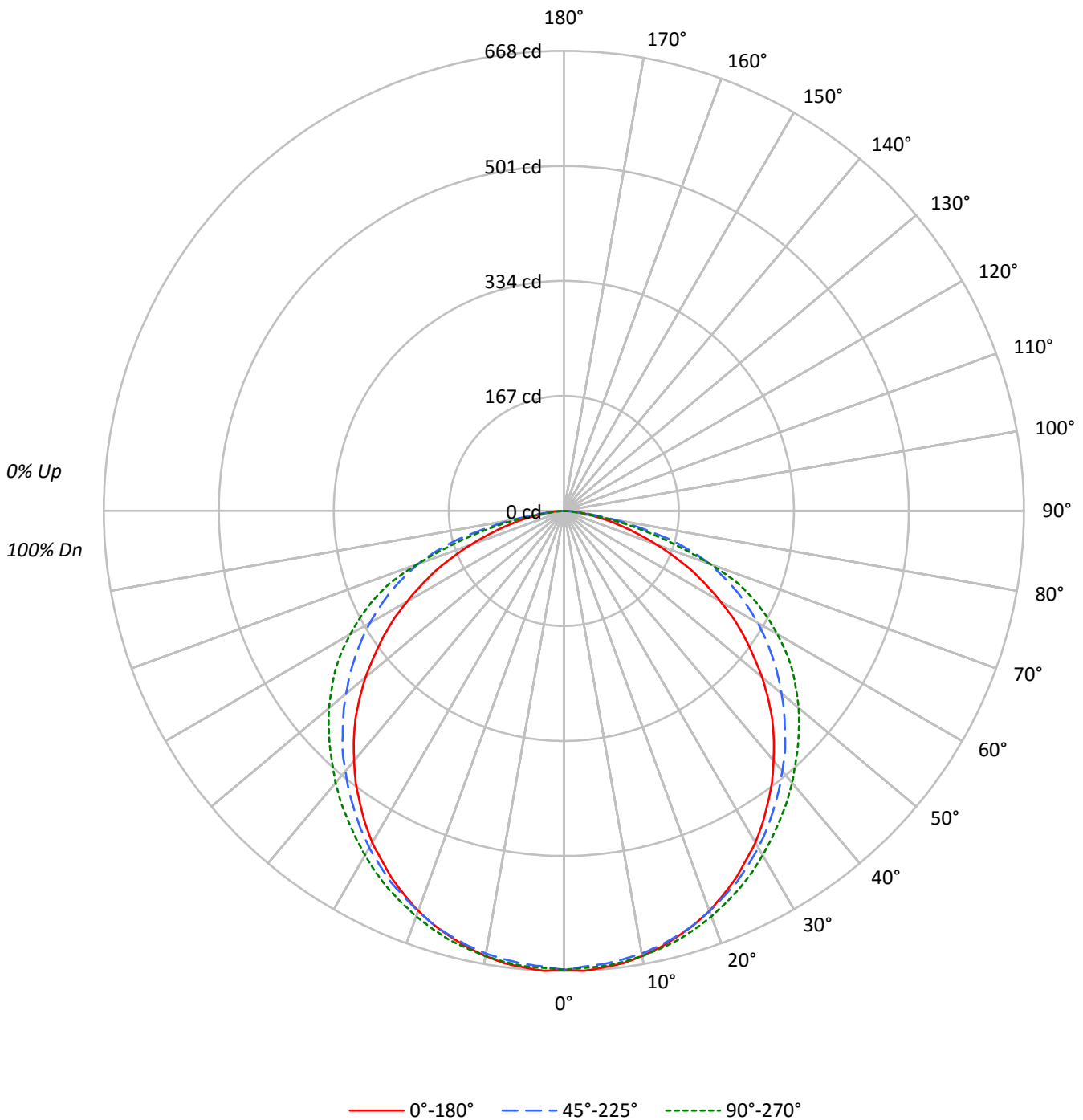
Input Watts (W): 23.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1792	1792	1792
5°	1797	1784	1792
10°	1793	1783	1793
15°	1782	1778	1795
20°	1769	1771	1794
25°	1750	1765	1794
30°	1728	1755	1794
35°	1697	1742	1797
40°	1664	1733	1811
45°	1628	1727	1831
50°	1572	1727	1864
55°	1505	1736	1903
60°	1414	1749	1928
65°	1303	1767	1940
70°	1135	1771	1785
75°	936	1648	1442
80°	736	1185	965
85°	571	457	228



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	3.2
10°-20°	180.9	9.2
20°-30°	274.7	14.0
30°-40°	332.9	17.0
40°-50°	350.8	17.9
50°-60°	327.5	16.7
60°-70°	261.7	13.3
70°-80°	144.0	7.3
80°-90°	25.4	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°	518.7	26.5
0°-40°	851.6	43.4
0°-60°	1529.9	78.0
0°-90°	1961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	665	664	660	665	664	63
15°	640	640	638	644	644	180
25°	590	591	594	603	604	271
35°	517	522	530	544	547	323
45°	428	436	454	474	481	329
55°	321	337	370	396	406	286
65°	205	231	278	300	305	202
75°	90	129	158	142	139	97
85°	18	23	15	9	7	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	666.0	666.0	666.0	666.0	666.0
2.5°	668.4	666.6	662.3	666.0	664.1
5°	665.3	663.5	660.4	664.7	663.5
7.5°	662.3	659.8	656.7	661.6	660.4
10°	656.1	654.2	652.4	656.7	656.1
12.5°	648.7	648.1	646.2	651.2	650.5
15°	639.5	639.5	638.2	644.4	644.4
17.5°	629.6	629.0	629.6	636.4	635.8
20°	617.9	617.9	618.5	626.5	626.5
22.5°	603.7	604.3	606.2	616.0	615.4
25°	589.5	590.7	594.4	603.1	604.3
27.5°	572.2	575.3	579.6	590.1	591.4
30°	556.2	558.1	564.8	574.7	577.2
32.5°	537.1	540.8	548.2	559.3	562.4
35°	516.7	521.7	530.3	543.9	547.0
37.5°	496.4	500.7	512.4	526.6	532.2
40°	473.6	481.0	493.3	509.3	515.5
42.5°	451.4	458.8	475.4	492.1	497.6
45°	427.9	436.0	453.8	474.2	481.0
47.5°	402.0	411.3	434.1	455.7	463.1
50°	375.5	387.2	412.5	436.6	445.2
52.5°	347.8	362.6	391.6	416.8	424.9
55°	320.7	336.7	370.0	395.9	405.7
57.5°	292.9	310.2	347.8	377.4	382.9
60°	262.7	283.7	325.0	350.9	358.3
62.5°	233.1	257.1	301.5	326.2	332.4
65°	204.7	230.6	277.5	300.3	304.6
67.5°	173.9	204.7	251.0	271.9	273.2
70°	144.3	180.1	225.1	234.9	226.9
72.5°	115.3	153.5	194.9	186.8	180.1
75°	90.0	128.9	158.5	142.4	138.7
77.5°	66.6	105.4	113.5	104.8	98.0
80°	47.5	83.2	76.5	65.4	62.3
82.5°	32.7	52.4	41.9	32.7	28.4
85°	18.5	23.4	14.8	9.2	7.4
87.5°	8.0	5.5	3.1	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)