

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: P307090

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CP125-W2A-U-3500K**

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: P307090
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-3500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET
Light Source: (168) 3500K 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: 2028.0 lumens
Efficiency: N/A
Efficacy: 84.9 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

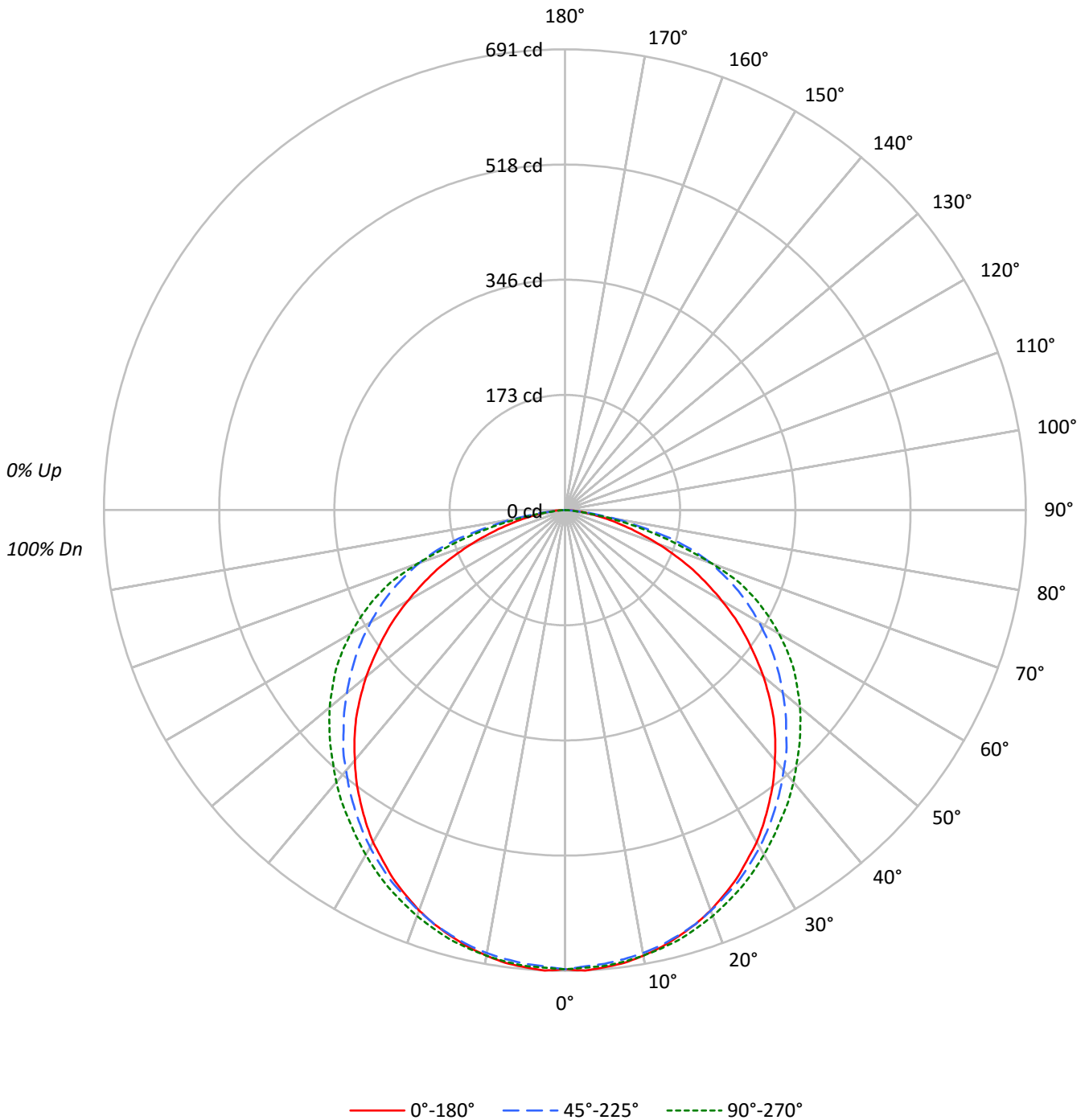
Input Watts (W): 23.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1853	1853	1853
5°	1859	1845	1854
10°	1854	1844	1854
15°	1842	1839	1857
20°	1830	1832	1855
25°	1810	1825	1855
30°	1787	1815	1855
35°	1756	1802	1858
40°	1721	1792	1873
45°	1684	1786	1893
50°	1626	1786	1927
55°	1556	1795	1969
60°	1462	1809	1994
65°	1348	1827	2006
70°	1174	1832	1847
75°	968	1704	1492
80°	761	1226	998
85°	590	472	238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	3.2
10°-20°	187.1	9.2
20°-30°	284.1	14.0
30°-40°	344.3	17.0
40°-50°	362.8	17.9
50°-60°	338.7	16.7
60°-70°	270.6	13.3
70°-80°	148.9	7.3
80°-90°	26.3	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°	536.4	26.5
0°-40°	880.7	43.4
0°-60°	1582.1	78.0
0°-90°	2028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2028.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	688	686	683	687	686	65
15°	661	661	660	666	666	187
25°	610	611	615	624	625	281
35°	534	540	548	562	566	334
45°	443	451	469	490	497	341
55°	332	348	383	409	420	296
65°	212	238	287	311	315	208
75°	93	133	164	147	144	100
85°	19	24	15	10	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	688.7	688.7	688.7	688.7	688.7
2.5°	691.3	689.4	684.9	688.7	686.8
5°	688.1	686.2	683.0	687.4	686.2
7.5°	684.9	682.3	679.2	684.3	683.0
10°	678.5	676.6	674.7	679.2	678.5
12.5°	670.9	670.2	668.3	673.4	672.8
15°	661.3	661.3	660.0	666.4	666.4
17.5°	651.1	650.5	651.1	658.1	657.5
20°	639.0	639.0	639.6	647.9	647.9
22.5°	624.3	624.9	626.9	637.1	636.4
25°	609.6	610.9	614.7	623.7	624.9
27.5°	591.8	595.0	599.4	610.3	611.6
30°	575.2	577.1	584.1	594.3	596.9
32.5°	555.4	559.3	566.9	578.4	581.6
35°	534.4	539.5	548.4	562.5	565.6
37.5°	513.4	517.8	529.9	544.6	550.3
40°	489.8	497.4	510.2	526.7	533.1
42.5°	466.8	474.5	491.7	508.9	514.6
45°	442.6	450.9	469.3	490.4	497.4
47.5°	415.8	425.3	448.9	471.3	478.9
50°	388.4	400.5	426.6	451.5	460.4
52.5°	359.7	375.0	404.9	431.1	439.4
55°	331.6	348.2	382.6	409.4	419.6
57.5°	302.9	320.8	359.7	390.3	396.0
60°	271.7	293.3	336.1	362.9	370.5
62.5°	241.1	265.9	311.8	337.3	343.7
65°	211.7	238.5	287.0	310.6	315.0
67.5°	179.8	211.7	259.5	281.2	282.5
70°	149.2	186.2	232.8	243.0	234.7
72.5°	119.3	158.8	201.5	193.2	186.2
75°	93.1	133.3	163.9	147.3	143.5
77.5°	68.9	109.0	117.3	108.4	101.4
80°	49.1	86.1	79.1	67.6	64.4
82.5°	33.8	54.2	43.4	33.8	29.3
85°	19.1	24.2	15.3	9.6	7.7
87.5°	8.3	5.7	3.2	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)