

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: P307085

Luminaire Tested: **14FCZ2-29-UNV-L82765-HRP-CA125-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: P307085
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-CA125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" 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: 2202.0 lumens
Efficiency: N/A
Efficacy: 89.9 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

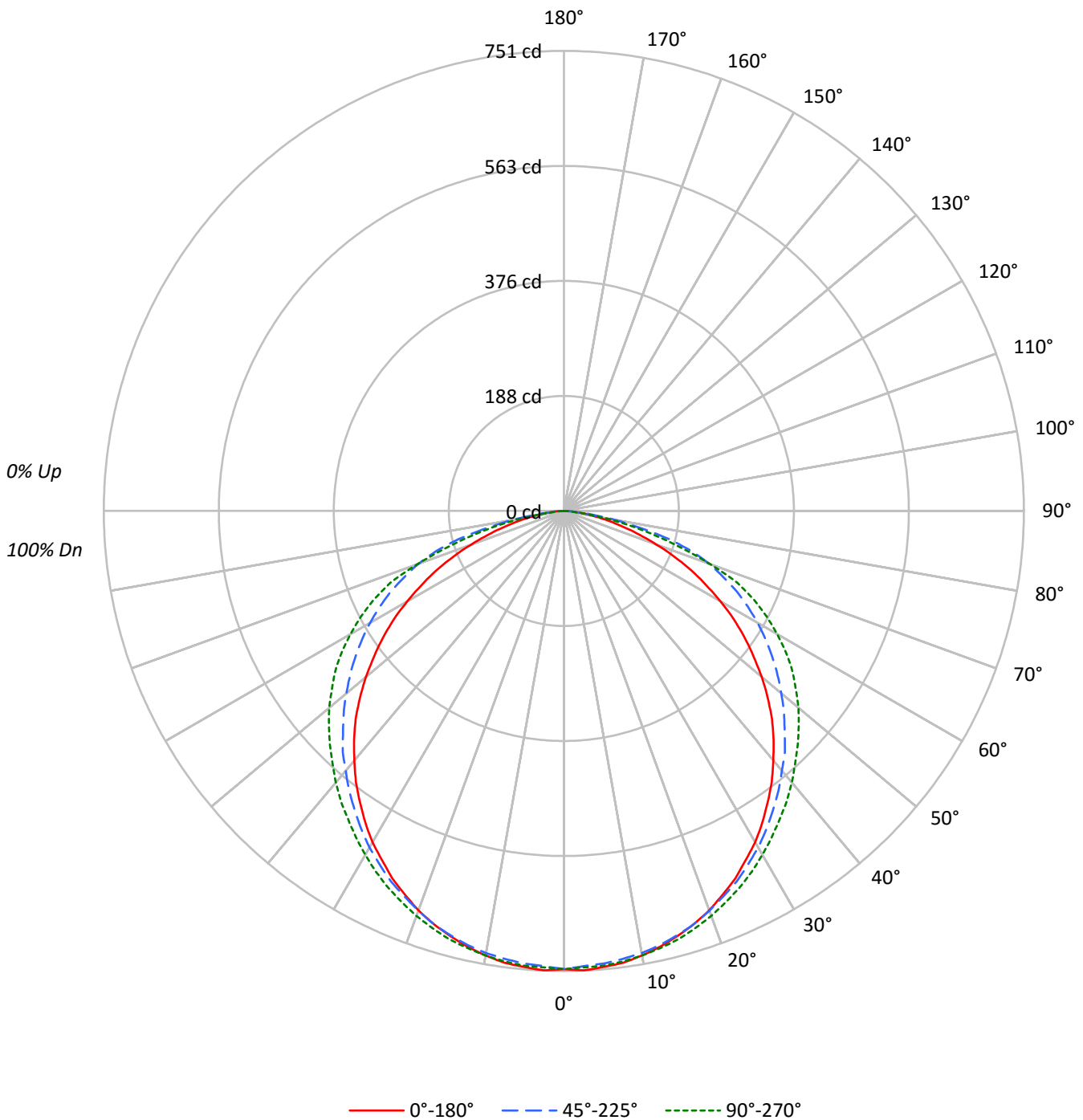
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2012	2012	2012
5°	2018	2003	2012
10°	2013	2002	2013
15°	2000	1997	2016
20°	1987	1989	2015
25°	1966	1982	2015
30°	1941	1971	2014
35°	1906	1956	2018
40°	1868	1946	2034
45°	1829	1939	2055
50°	1765	1939	2093
55°	1689	1949	2137
60°	1588	1964	2165
65°	1464	1984	2178
70°	1275	1988	2005
75°	1051	1851	1620
80°	826	1331	1083
85°	642	513	256



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	3.2
10°-20°	203.2	9.2
20°-30°	308.5	14.0
30°-40°	373.8	17.0
40°-50°	393.9	17.9
50°-60°	367.7	16.7
60°-70°	293.9	13.3
70°-80°	161.7	7.3
80°-90°	28.6	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°	582.4	26.5
0°-40°	956.2	43.4
0°-60°	1717.9	78.0
0°-90°	2202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	747	745	742	746	745	71
15°	718	718	717	724	724	203
25°	662	663	668	677	679	305
35°	580	586	596	611	614	363
45°	480	490	510	532	540	370
55°	360	378	416	444	456	321
65°	230	259	312	337	342	226
75°	101	145	178	160	156	109
85°	21	26	17	10	8	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	747.8	747.8	747.8	747.8	747.8
2.5°	750.6	748.5	743.7	747.8	745.7
5°	747.1	745.0	741.6	746.4	745.0
7.5°	743.7	740.9	737.4	743.0	741.6
10°	736.7	734.7	732.6	737.4	736.7
12.5°	728.4	727.7	725.7	731.2	730.5
15°	718.0	718.0	716.7	723.6	723.6
17.5°	707.0	706.3	707.0	714.6	713.9
20°	693.8	693.8	694.5	703.5	703.5
22.5°	677.9	678.6	680.6	691.7	691.0
25°	662.0	663.3	667.5	677.2	678.6
27.5°	642.6	646.0	650.9	662.6	664.0
30°	624.6	626.6	634.3	645.3	648.1
32.5°	603.1	607.2	615.6	628.0	631.5
35°	580.2	585.8	595.5	610.7	614.2
37.5°	557.4	562.2	575.4	591.3	597.6
40°	531.8	540.1	553.9	571.9	578.9
42.5°	506.8	515.2	533.9	552.5	558.8
45°	480.5	489.5	509.6	532.5	540.1
47.5°	451.5	461.8	487.5	511.7	520.0
50°	421.7	434.8	463.2	490.2	499.9
52.5°	390.5	407.1	439.7	468.1	477.1
55°	360.1	378.1	415.5	444.5	455.6
57.5°	328.9	348.3	390.5	423.8	430.0
60°	295.0	318.5	364.9	394.0	402.3
62.5°	261.7	288.7	338.6	366.3	373.2
65°	229.9	259.0	311.6	337.2	342.1
67.5°	195.3	229.9	281.8	305.4	306.7
70°	162.0	202.2	252.7	263.8	254.8
72.5°	129.5	172.4	218.8	209.8	202.2
75°	101.1	144.7	178.0	159.9	155.8
77.5°	74.8	118.4	127.4	117.7	110.1
80°	53.3	93.5	85.9	73.4	69.9
82.5°	36.7	58.9	47.1	36.7	31.9
85°	20.8	26.3	16.6	10.4	8.3
87.5°	9.0	6.2	3.5	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)