

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: P307471

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP250-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: P307471
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-RDP-CP250-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 2280.0 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

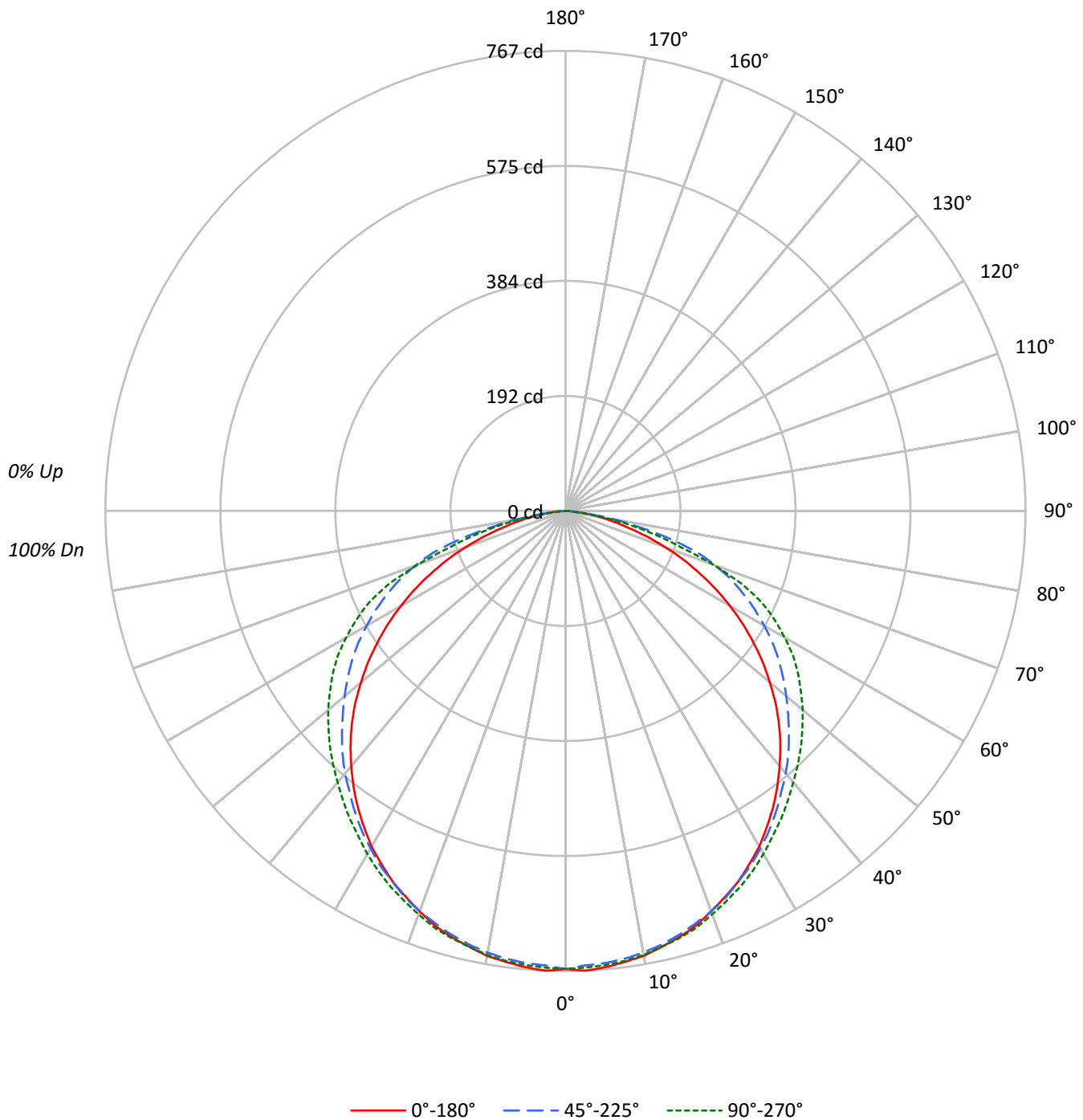
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2055	2055	2055
5°	2063	2044	2053
10°	2058	2043	2053
15°	2048	2038	2053
20°	2034	2034	2049
25°	2024	2024	2051
30°	2008	2019	2052
35°	1982	2011	2058
40°	1951	2007	2076
45°	1917	2005	2114
50°	1863	2012	2161
55°	1795	2038	2221
60°	1705	2060	2271
65°	1575	2085	2301
70°	1400	2101	2059
75°	1129	1888	1647
80°	883	1323	1075
85°	605	386	275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	3.2
10°-20°	207.4	9.1
20°-30°	315.8	13.8
30°-40°	384.6	16.9
40°-50°	408.0	17.9
50°-60°	385.1	16.9
60°-70°	310.9	13.6
70°-80°	168.7	7.4
80°-90°	27.3	1.2
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°	595.4	26.1
0°-40°	980.0	43.0
0°-60°	1773.1	77.8
0°-90°	2280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	764	762	756	762	760	73
15°	735	733	732	737	737	207
25°	682	680	682	689	691	314
35°	603	607	612	625	627	377
45°	504	511	527	546	555	388
55°	383	399	434	463	474	342
65°	247	278	328	354	361	245
75°	109	158	182	164	158	119
85°	20	21	12	11	9	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	763.6	763.6	763.6	763.6	763.6
2.5°	767.2	763.6	758.3	763.6	761.9
5°	763.6	761.9	756.5	761.9	760.1
7.5°	758.3	758.3	753.0	756.5	756.5
10°	753.0	751.2	747.6	753.0	751.2
12.5°	744.0	742.3	740.5	745.8	744.0
15°	735.1	733.4	731.6	736.9	736.9
17.5°	724.5	722.7	720.9	728.0	728.0
20°	710.2	710.2	710.2	717.3	715.6
22.5°	696.0	696.0	697.8	704.9	703.1
25°	681.7	680.0	681.7	688.9	690.6
27.5°	663.9	665.7	667.5	674.6	676.4
30°	646.1	647.9	649.7	658.6	660.4
32.5°	624.8	628.3	631.9	642.6	642.6
35°	603.4	607.0	612.3	624.8	626.6
37.5°	580.3	583.8	591.0	605.2	608.8
40°	555.4	560.7	571.4	585.6	591.0
42.5°	530.4	537.6	550.0	566.0	573.2
45°	503.7	510.9	526.9	546.5	555.4
47.5°	475.3	484.2	503.7	528.7	535.8
50°	445.0	457.5	480.6	507.3	516.2
52.5°	414.7	429.0	457.5	485.9	494.8
55°	382.7	398.7	434.3	462.8	473.5
57.5°	350.7	368.5	409.4	439.7	450.3
60°	316.8	338.2	382.7	413.0	421.9
62.5°	283.0	307.9	356.0	386.3	393.4
65°	247.4	277.7	327.5	354.2	361.3
67.5°	213.6	249.2	299.0	318.6	318.6
70°	178.0	217.2	267.0	272.3	261.7
72.5°	142.4	186.9	231.4	211.8	202.9
75°	108.6	158.4	181.6	163.8	158.4
77.5°	81.9	128.2	128.2	117.5	113.9
80°	57.0	97.9	85.4	74.8	69.4
82.5°	37.4	55.2	44.5	35.6	30.3
85°	19.6	21.4	12.5	10.7	8.9
87.5°	7.1	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)