

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: P307472

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CP250-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: P307472
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-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB 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: 2302.0 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

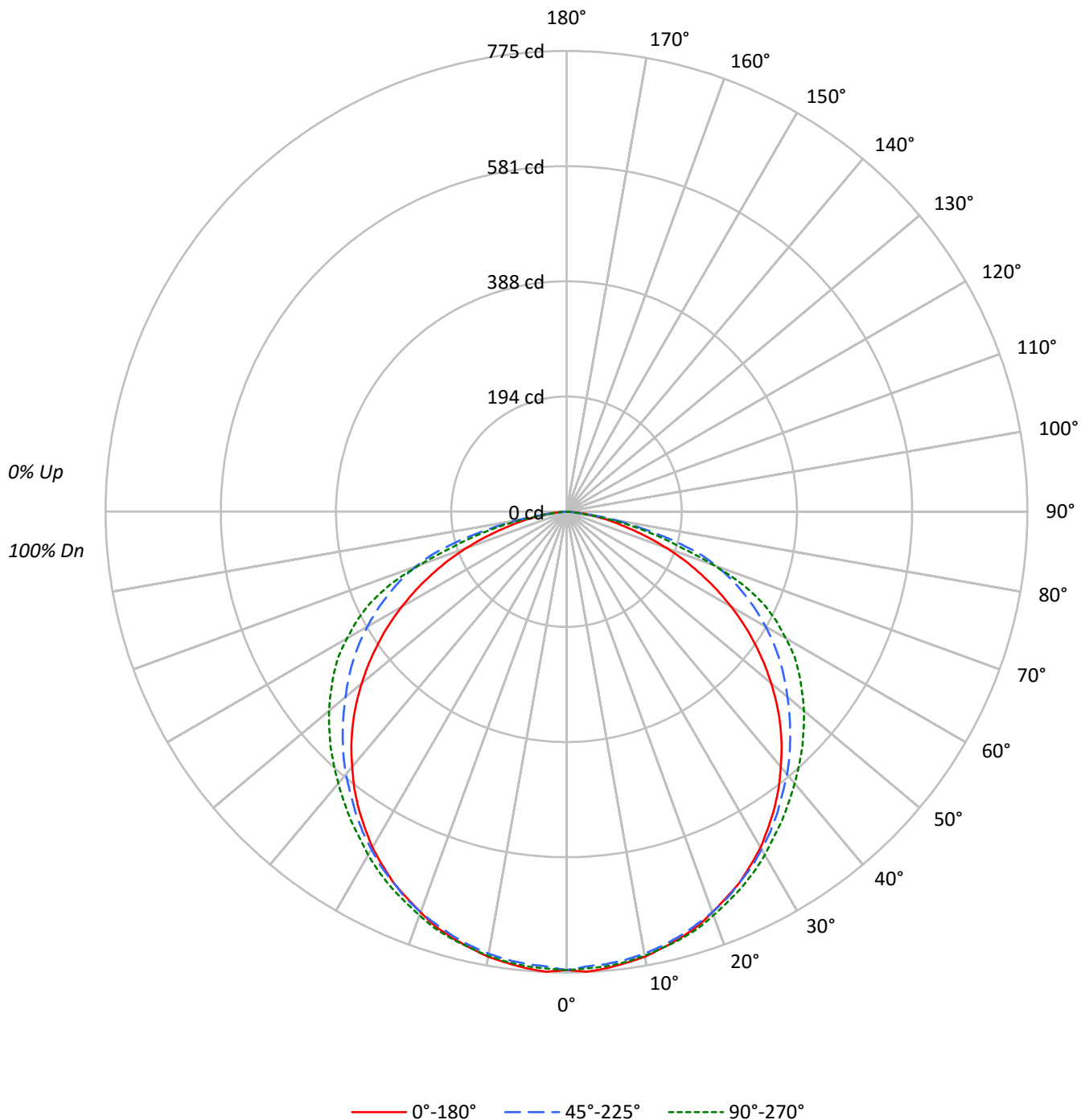
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2075	2075	2075
5°	2083	2063	2073
10°	2077	2062	2072
15°	2068	2058	2073
20°	2054	2054	2069
25°	2044	2044	2070
30°	2027	2038	2072
35°	2002	2031	2078
40°	1970	2027	2096
45°	1936	2025	2134
50°	1881	2031	2182
55°	1813	2057	2243
60°	1722	2080	2292
65°	1591	2106	2323
70°	1414	2121	2079
75°	1140	1906	1664
80°	891	1337	1086
85°	611	389	278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	3.2
10°-20°	209.4	9.1
20°-30°	318.8	13.8
30°-40°	388.3	16.9
40°-50°	412.0	17.9
50°-60°	388.8	16.9
60°-70°	313.9	13.6
70°-80°	170.3	7.4
80°-90°	27.6	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°	601.2	26.1
0°-40°	989.5	43.0
0°-60°	1790.2	77.8
0°-90°	2302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2302.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	771	771	771	771	771	
5°	771	769	764	769	767	73
15°	742	740	739	744	744	209
25°	688	686	688	696	697	317
35°	609	613	618	631	633	381
45°	509	516	532	552	561	392
55°	386	403	438	467	478	345
65°	250	280	331	358	365	248
75°	110	160	183	165	160	120
85°	20	22	13	11	9	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	771.0	771.0	771.0	771.0	771.0
2.5°	774.6	771.0	765.6	771.0	769.2
5°	771.0	769.2	763.8	769.2	767.4
7.5°	765.6	765.6	760.2	763.8	763.8
10°	760.2	758.4	754.8	760.2	758.4
12.5°	751.2	749.4	747.6	753.0	751.2
15°	742.2	740.4	738.6	744.0	744.0
17.5°	731.5	729.7	727.9	735.1	735.1
20°	717.1	717.1	717.1	724.3	722.5
22.5°	702.7	702.7	704.5	711.7	709.9
25°	688.3	686.5	688.3	695.5	697.3
27.5°	670.4	672.2	673.9	681.1	682.9
30°	652.4	654.2	656.0	665.0	666.8
32.5°	630.8	634.4	638.0	648.8	648.8
35°	609.3	612.8	618.2	630.8	632.6
37.5°	585.9	589.5	596.7	611.0	614.6
40°	560.7	566.1	576.9	591.3	596.7
42.5°	535.6	542.8	555.3	571.5	578.7
45°	508.6	515.8	532.0	551.7	560.7
47.5°	479.9	488.8	508.6	533.8	541.0
50°	449.3	461.9	485.2	512.2	521.2
52.5°	418.7	433.1	461.9	490.6	499.6
55°	386.4	402.6	438.5	467.3	478.1
57.5°	354.0	372.0	413.4	443.9	454.7
60°	319.9	341.5	386.4	417.0	425.9
62.5°	285.8	310.9	359.4	390.0	397.2
65°	249.8	280.4	330.7	357.6	364.8
67.5°	215.7	251.6	301.9	321.7	321.7
70°	179.7	219.3	269.6	275.0	264.2
72.5°	143.8	188.7	233.6	213.9	204.9
75°	109.6	160.0	183.3	165.3	160.0
77.5°	82.7	129.4	129.4	118.6	115.0
80°	57.5	98.8	86.3	75.5	70.1
82.5°	37.7	55.7	44.9	35.9	30.6
85°	19.8	21.6	12.6	10.8	9.0
87.5°	7.2	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)