

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: P307424

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-4000K**

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: P307424
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: 14FCZ2-35-UNV-L82765-RDP-CP250-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 4000K 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: 2003.0 lumens
Efficiency: N/A
Efficacy: 67.2 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

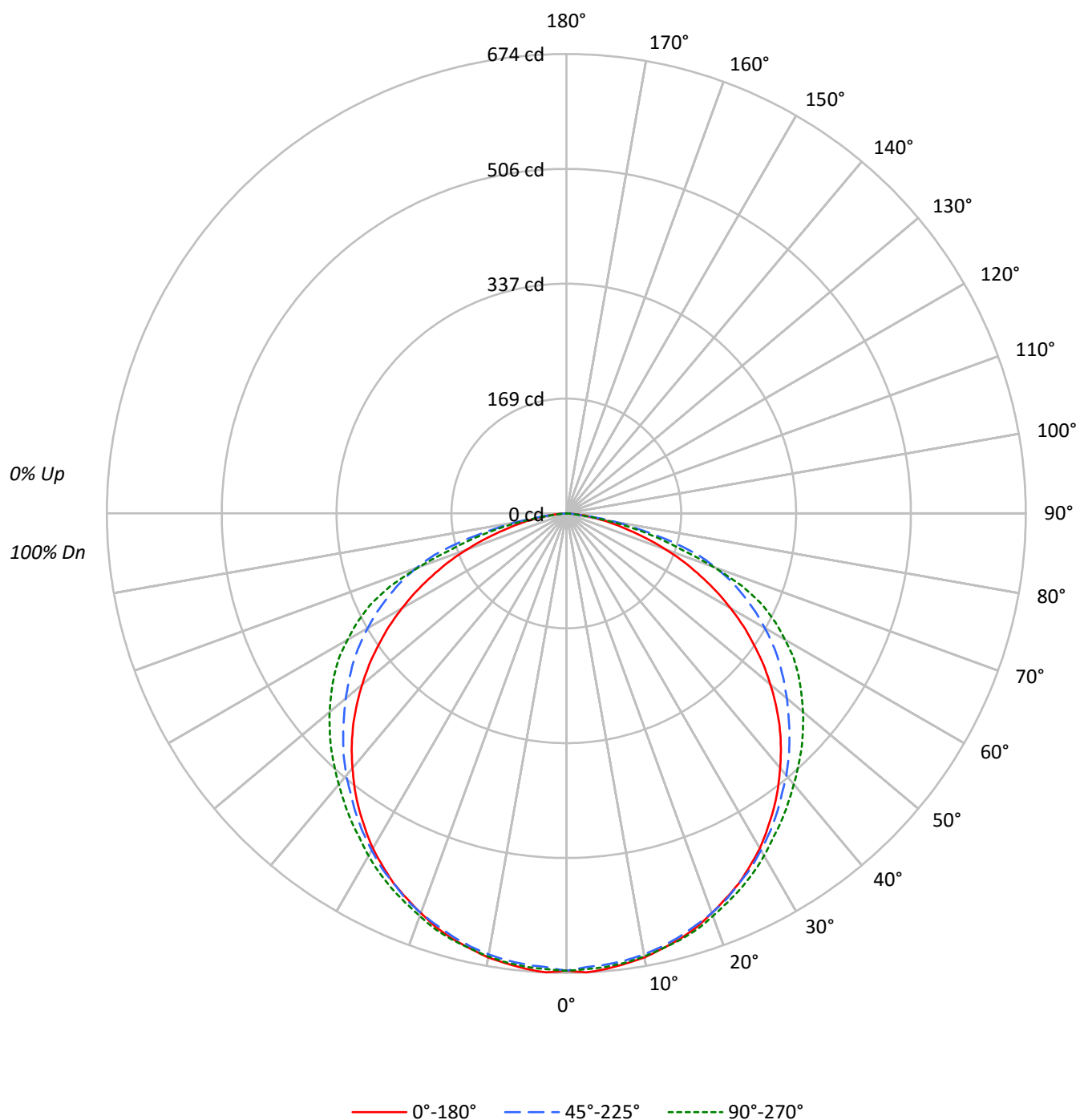
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1805	1805	1805
5°	1812	1795	1804
10°	1808	1795	1803
15°	1799	1791	1804
20°	1787	1787	1800
25°	1778	1778	1801
30°	1764	1774	1803
35°	1741	1767	1808
40°	1714	1763	1824
45°	1684	1762	1857
50°	1636	1768	1899
55°	1577	1790	1952
60°	1498	1809	1995
65°	1384	1832	2021
70°	1231	1846	1809
75°	992	1658	1447
80°	775	1164	945
85°	531	337	241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	3.2
10°-20°	182.2	9.1
20°-30°	277.4	13.8
30°-40°	337.9	16.9
40°-50°	358.5	17.9
50°-60°	338.3	16.9
60°-70°	273.1	13.6
70°-80°	148.2	7.4
80°-90°	24.0	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°	523.1	26.1
0°-40°	860.9	43.0
0°-60°	1557.7	77.8
0°-90°	2003.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	671	671	671	671	671	
5°	671	669	665	669	668	64
15°	646	644	643	647	647	182
25°	599	597	599	605	607	276
35°	530	533	538	549	550	331
45°	442	449	463	480	488	341
55°	336	350	382	407	416	300
65°	217	244	288	311	317	215
75°	95	139	160	144	139	104
85°	17	19	11	9	8	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	670.9	670.9	670.9	670.9	670.9
2.5°	674.0	670.9	666.2	670.9	669.3
5°	670.9	669.3	664.6	669.3	667.7
7.5°	666.2	666.2	661.5	664.6	664.6
10°	661.5	659.9	656.8	661.5	659.9
12.5°	653.7	652.1	650.5	655.2	653.7
15°	645.8	644.3	642.7	647.4	647.4
17.5°	636.5	634.9	633.3	639.6	639.6
20°	623.9	623.9	623.9	630.2	628.6
22.5°	611.4	611.4	613.0	619.3	617.7
25°	598.9	597.4	598.9	605.2	606.7
27.5°	583.3	584.8	586.4	592.7	594.2
30°	567.6	569.2	570.8	578.6	580.2
32.5°	548.9	552.0	555.1	564.5	564.5
35°	530.1	533.2	537.9	548.9	550.4
37.5°	509.8	512.9	519.2	531.7	534.8
40°	487.9	492.6	502.0	514.5	519.2
42.5°	466.0	472.3	483.2	497.3	503.5
45°	442.5	448.8	462.9	480.1	487.9
47.5°	417.5	425.3	442.5	464.4	470.7
50°	390.9	401.9	422.2	445.7	453.5
52.5°	364.4	376.9	401.9	426.9	434.7
55°	336.2	350.3	381.6	406.6	416.0
57.5°	308.1	323.7	359.7	386.3	395.6
60°	278.4	297.1	336.2	362.8	370.6
62.5°	248.6	270.5	312.8	339.3	345.6
65°	217.4	243.9	287.7	311.2	317.4
67.5°	187.7	218.9	262.7	279.9	279.9
70°	156.4	190.8	234.6	239.3	229.9
72.5°	125.1	164.2	203.3	186.1	178.3
75°	95.4	139.2	159.5	143.9	139.2
77.5°	71.9	112.6	112.6	103.2	100.1
80°	50.0	86.0	75.1	65.7	61.0
82.5°	32.8	48.5	39.1	31.3	26.6
85°	17.2	18.8	10.9	9.4	7.8
87.5°	6.3	3.1	1.6	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)