

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: P307423

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP250-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: P307423
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-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 1960.0 lumens
Efficiency: N/A
Efficacy: 66.2 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

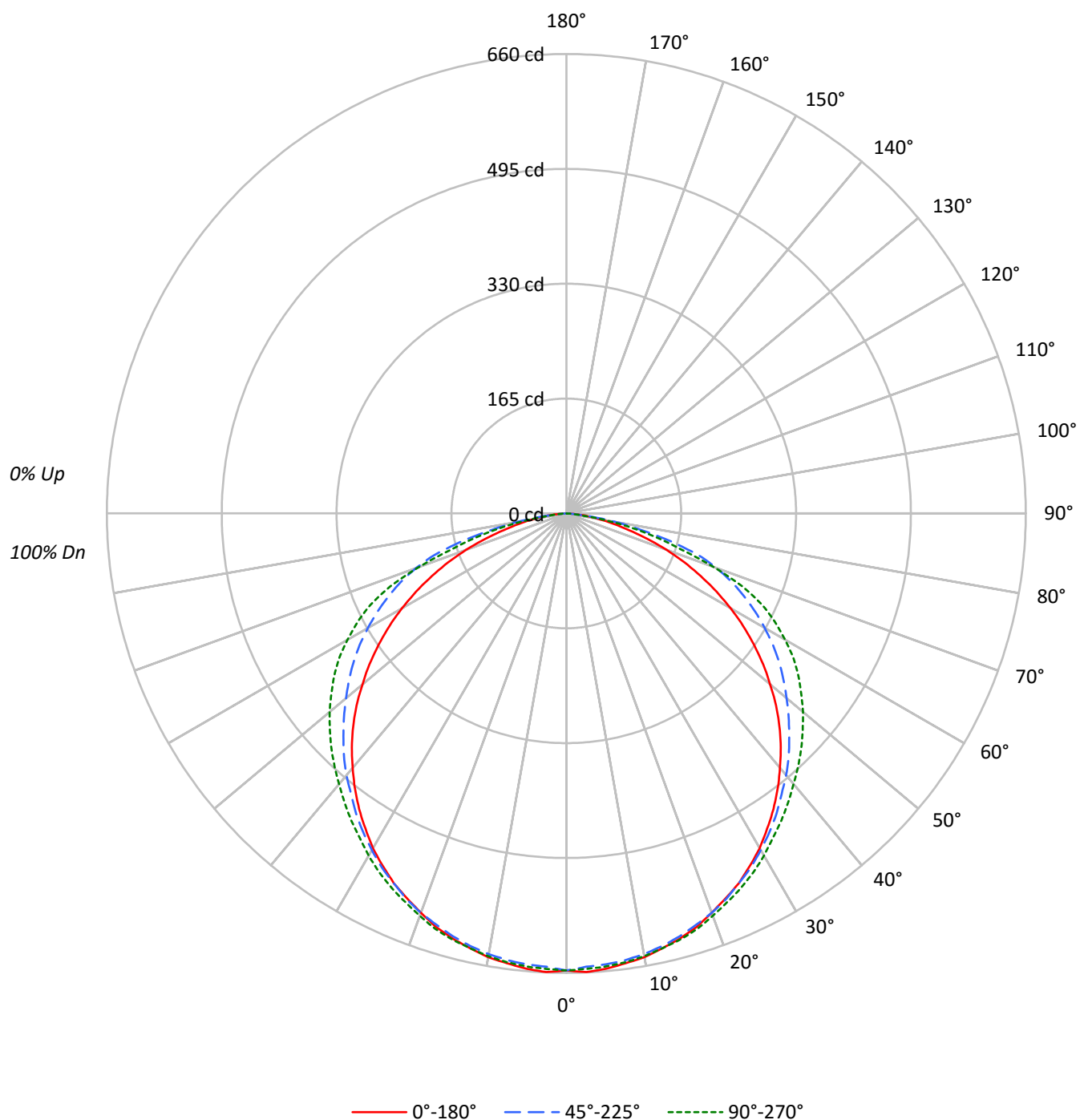
Input Watts (W): 29.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1767	1767	1767
5°	1773	1757	1765
10°	1769	1756	1764
15°	1761	1752	1765
20°	1748	1748	1761
25°	1740	1740	1763
30°	1726	1735	1764
35°	1704	1729	1769
40°	1677	1725	1785
45°	1648	1724	1817
50°	1601	1730	1858
55°	1544	1752	1909
60°	1466	1771	1952
65°	1354	1793	1978
70°	1204	1806	1769
75°	970	1623	1416
80°	759	1137	925
85°	519	330	238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	3.2
10°-20°	178.3	9.1
20°-30°	271.4	13.8
30°-40°	330.6	16.9
40°-50°	350.8	17.9
50°-60°	331.1	16.9
60°-70°	267.3	13.6
70°-80°	145.0	7.4
80°-90°	23.5	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°	511.8	26.1
0°-40°	842.5	43.0
0°-60°	1524.3	77.8
0°-90°	1960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	656	655	650	655	653	62
15°	632	630	629	634	634	178
25°	586	584	586	592	594	270
35°	519	522	526	537	539	324
45°	433	439	453	470	477	333
55°	329	343	373	398	407	294
65°	213	239	282	304	311	211
75°	93	136	156	141	136	102
85°	17	18	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°	656.5	656.5	656.5	656.5	656.5
2.5°	659.5	656.5	651.9	656.5	654.9
5°	656.5	654.9	650.3	654.9	653.4
7.5°	651.9	651.9	647.3	650.3	650.3
10°	647.3	645.7	642.7	647.3	645.7
12.5°	639.6	638.1	636.6	641.2	639.6
15°	632.0	630.4	628.9	633.5	633.5
17.5°	622.8	621.3	619.7	625.9	625.9
20°	610.5	610.5	610.5	616.7	615.1
22.5°	598.3	598.3	599.8	606.0	604.4
25°	586.1	584.5	586.1	592.2	593.7
27.5°	570.8	572.3	573.8	579.9	581.5
30°	555.5	557.0	558.5	566.2	567.7
32.5°	537.1	540.2	543.2	552.4	552.4
35°	518.7	521.8	526.4	537.1	538.6
37.5°	498.8	501.9	508.0	520.3	523.3
40°	477.4	482.0	491.2	503.4	508.0
42.5°	456.0	462.1	472.8	486.6	492.7
45°	433.0	439.2	452.9	469.8	477.4
47.5°	408.6	416.2	433.0	454.5	460.6
50°	382.5	393.3	413.2	436.1	443.8
52.5°	356.5	368.8	393.3	417.7	425.4
55°	329.0	342.8	373.4	397.9	407.0
57.5°	301.4	316.8	351.9	378.0	387.1
60°	272.4	290.7	329.0	355.0	362.7
62.5°	243.3	264.7	306.0	332.1	338.2
65°	212.7	238.7	281.6	304.5	310.6
67.5°	183.6	214.2	257.1	273.9	273.9
70°	153.0	186.7	229.5	234.1	224.9
72.5°	122.4	160.7	198.9	182.1	174.4
75°	93.3	136.2	156.1	140.8	136.2
77.5°	70.4	110.2	110.2	101.0	97.9
80°	49.0	84.2	73.4	64.3	59.7
82.5°	32.1	47.4	38.3	30.6	26.0
85°	16.8	18.4	10.7	9.2	7.7
87.5°	6.1	3.1	1.5	3.1	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)