

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: P307386

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CA08-W2A-U-3000K**

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: P307386
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 2041.0 lumens
Efficiency: N/A
Efficacy: 69.7 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

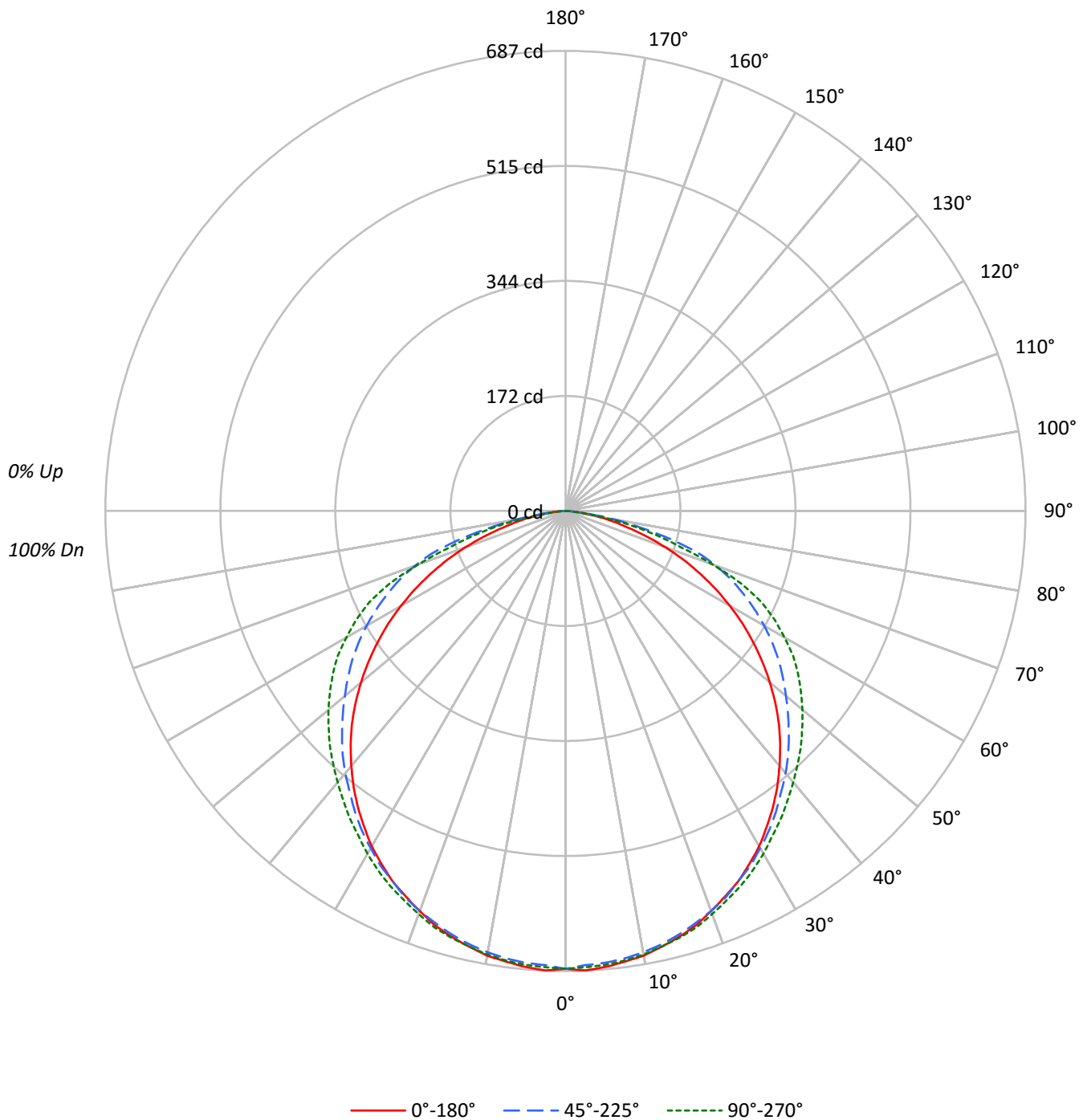
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1840	1840	1840
5°	1847	1829	1838
10°	1842	1829	1837
15°	1833	1824	1838
20°	1821	1821	1834
25°	1812	1812	1836
30°	1797	1807	1837
35°	1775	1801	1843
40°	1747	1797	1858
45°	1716	1795	1892
50°	1668	1801	1935
55°	1607	1824	1989
60°	1526	1844	2032
65°	1410	1867	2060
70°	1253	1880	1843
75°	1011	1690	1474
80°	790	1185	962
85°	540	346	247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	3.2
10°-20°	185.6	9.1
20°-30°	282.7	13.8
30°-40°	344.3	16.9
40°-50°	365.2	17.9
50°-60°	344.7	16.9
60°-70°	278.3	13.6
70°-80°	151.0	7.4
80°-90°	24.4	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°	533.0	26.1
0°-40°	877.3	43.0
0°-60°	1587.2	77.8
0°-90°	2041.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2041.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	684	684	684	684	684	
5°	684	682	677	682	680	65
15°	658	656	655	660	660	186
25°	610	609	610	617	618	281
35°	540	543	548	559	561	338
45°	451	457	472	489	497	347
55°	343	357	389	414	424	306
65°	222	249	293	317	324	219
75°	97	142	162	147	142	106
85°	18	19	11	10	8	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	683.6	683.6	683.6	683.6	683.6
2.5°	686.8	683.6	678.8	683.6	682.0
5°	683.6	682.0	677.2	682.0	680.4
7.5°	678.8	678.8	674.0	677.2	677.2
10°	674.0	672.4	669.2	674.0	672.4
12.5°	666.1	664.5	662.9	667.6	666.1
15°	658.1	656.5	654.9	659.7	659.7
17.5°	648.5	646.9	645.3	651.7	651.7
20°	635.8	635.8	635.8	642.2	640.6
22.5°	623.0	623.0	624.6	631.0	629.4
25°	610.3	608.7	610.3	616.7	618.3
27.5°	594.4	595.9	597.5	603.9	605.5
30°	578.4	580.0	581.6	589.6	591.2
32.5°	559.3	562.5	565.7	575.2	575.2
35°	540.2	543.4	548.1	559.3	560.9
37.5°	519.5	522.6	529.0	541.8	545.0
40°	497.2	501.9	511.5	524.2	529.0
42.5°	474.8	481.2	492.4	506.7	513.1
45°	450.9	457.3	471.7	489.2	497.2
47.5°	425.4	433.4	450.9	473.2	479.6
50°	398.4	409.5	430.2	454.1	462.1
52.5°	371.3	384.0	409.5	435.0	443.0
55°	342.6	356.9	388.8	414.3	423.9
57.5°	313.9	329.8	366.5	393.6	403.1
60°	283.6	302.8	342.6	369.7	377.6
62.5°	253.4	275.7	318.7	345.8	352.1
65°	221.5	248.6	293.2	317.1	323.5
67.5°	191.2	223.1	267.7	285.2	285.2
70°	159.3	194.4	239.0	243.8	234.2
72.5°	127.5	167.3	207.1	189.6	181.7
75°	97.2	141.8	162.5	146.6	141.8
77.5°	73.3	114.7	114.7	105.2	102.0
80°	51.0	87.6	76.5	66.9	62.1
82.5°	33.5	49.4	39.8	31.9	27.1
85°	17.5	19.1	11.2	9.6	8.0
87.5°	6.4	3.2	1.6	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)