

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: P307404

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CP125-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: P307404
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-CP125-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB 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: 1994.0 lumens
Efficiency: N/A
Efficacy: 68.1 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

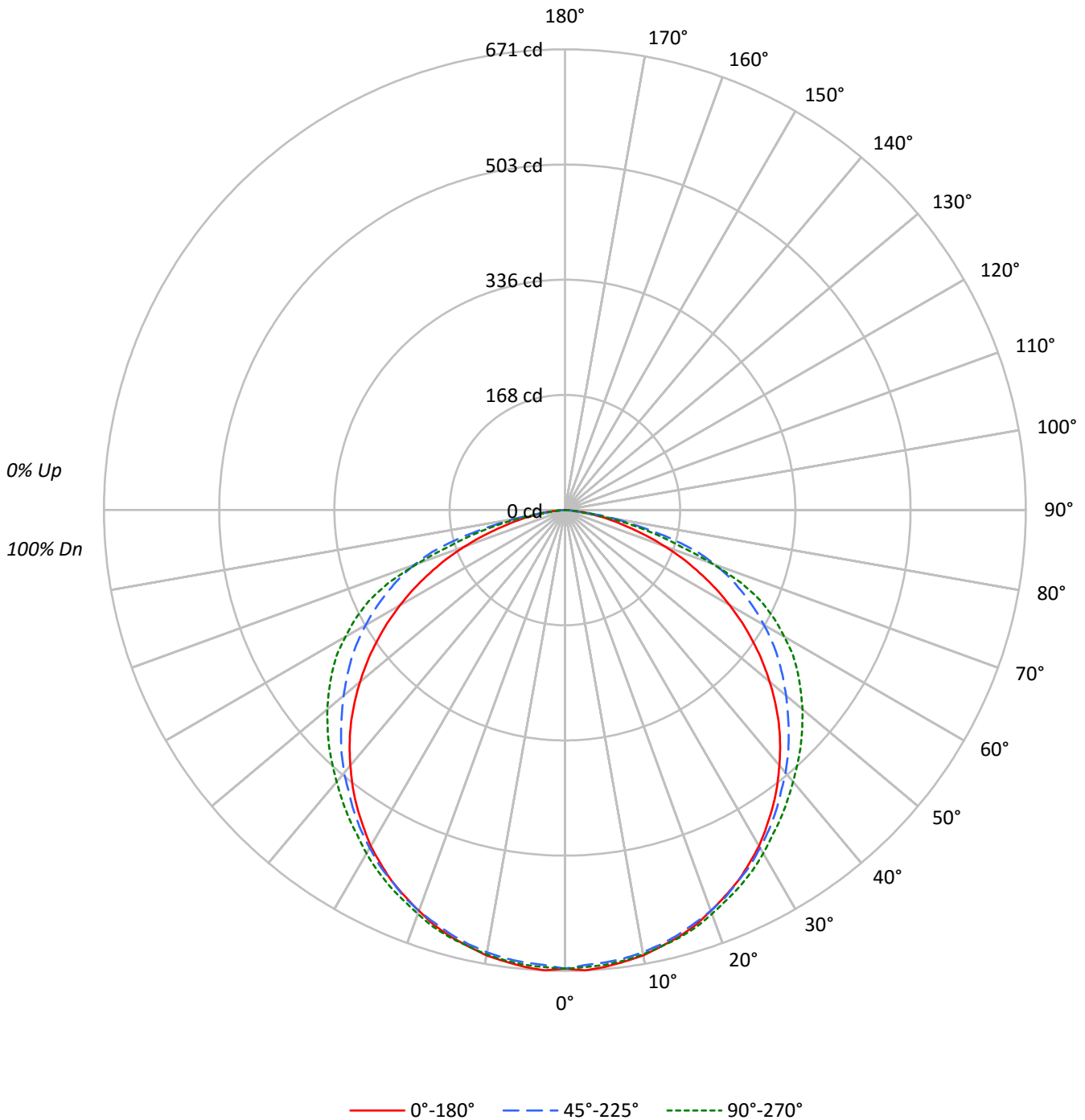
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1797	1797	1797
5°	1804	1787	1796
10°	1799	1787	1795
15°	1791	1782	1796
20°	1779	1779	1792
25°	1770	1770	1793
30°	1756	1766	1795
35°	1734	1759	1800
40°	1706	1755	1815
45°	1677	1754	1848
50°	1629	1760	1890
55°	1570	1782	1943
60°	1491	1801	1985
65°	1378	1824	2012
70°	1225	1837	1800
75°	988	1651	1440
80°	772	1158	941
85°	528	337	241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	3.2
10°-20°	181.4	9.1
20°-30°	276.2	13.8
30°-40°	336.3	16.9
40°-50°	356.8	17.9
50°-60°	336.8	16.9
60°-70°	271.9	13.6
70°-80°	147.5	7.4
80°-90°	23.9	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°	520.7	26.1
0°-40°	857.1	43.0
0°-60°	1550.7	77.8
0°-90°	1994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	668	666	662	666	665	63
15°	643	641	640	644	644	181
25°	596	595	596	602	604	274
35°	528	531	536	546	548	330
45°	441	447	461	478	486	339
55°	335	349	380	405	414	299
65°	216	243	286	310	316	214
75°	95	138	159	143	138	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°	667.8	667.8	667.8	667.8	667.8
2.5°	671.0	667.8	663.2	667.8	666.3
5°	667.8	666.3	661.6	666.3	664.7
7.5°	663.2	663.2	658.5	661.6	661.6
10°	658.5	656.9	653.8	658.5	656.9
12.5°	650.7	649.2	647.6	652.3	650.7
15°	642.9	641.4	639.8	644.5	644.5
17.5°	633.6	632.0	630.5	636.7	636.7
20°	621.1	621.1	621.1	627.4	625.8
22.5°	608.7	608.7	610.2	616.5	614.9
25°	596.2	594.7	596.2	602.5	604.0
27.5°	580.7	582.2	583.8	590.0	591.6
30°	565.1	566.7	568.2	576.0	577.6
32.5°	546.4	549.5	552.6	562.0	562.0
35°	527.7	530.8	535.5	546.4	548.0
37.5°	507.5	510.6	516.8	529.3	532.4
40°	485.7	490.4	499.7	512.2	516.8
42.5°	463.9	470.1	481.0	495.0	501.3
45°	440.6	446.8	460.8	477.9	485.7
47.5°	415.6	423.4	440.6	462.4	468.6
50°	389.2	400.1	420.3	443.7	451.5
52.5°	362.7	375.2	400.1	425.0	432.8
55°	334.7	348.7	379.8	404.8	414.1
57.5°	306.7	322.2	358.1	384.5	393.9
60°	277.1	295.8	334.7	361.2	368.9
62.5°	247.5	269.3	311.3	337.8	344.0
65°	216.4	242.9	286.4	309.8	316.0
67.5°	186.8	217.9	261.5	278.7	278.7
70°	155.7	189.9	233.5	238.2	228.8
72.5°	124.5	163.5	202.4	185.3	177.5
75°	95.0	138.5	158.8	143.2	138.5
77.5°	71.6	112.1	112.1	102.7	99.6
80°	49.8	85.6	74.7	65.4	60.7
82.5°	32.7	48.3	38.9	31.1	26.5
85°	17.1	18.7	10.9	9.3	7.8
87.5°	6.2	3.1	1.6	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)