

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: P307398

Luminaire Tested: **14FCZ2-35-UNV-L82765-RDP-CA125-W2A-U-4500K**

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: P307398
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-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET
Light Source: (168) 4500K 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: 2188.0 lumens
Efficiency: N/A
Efficacy: 72.7 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

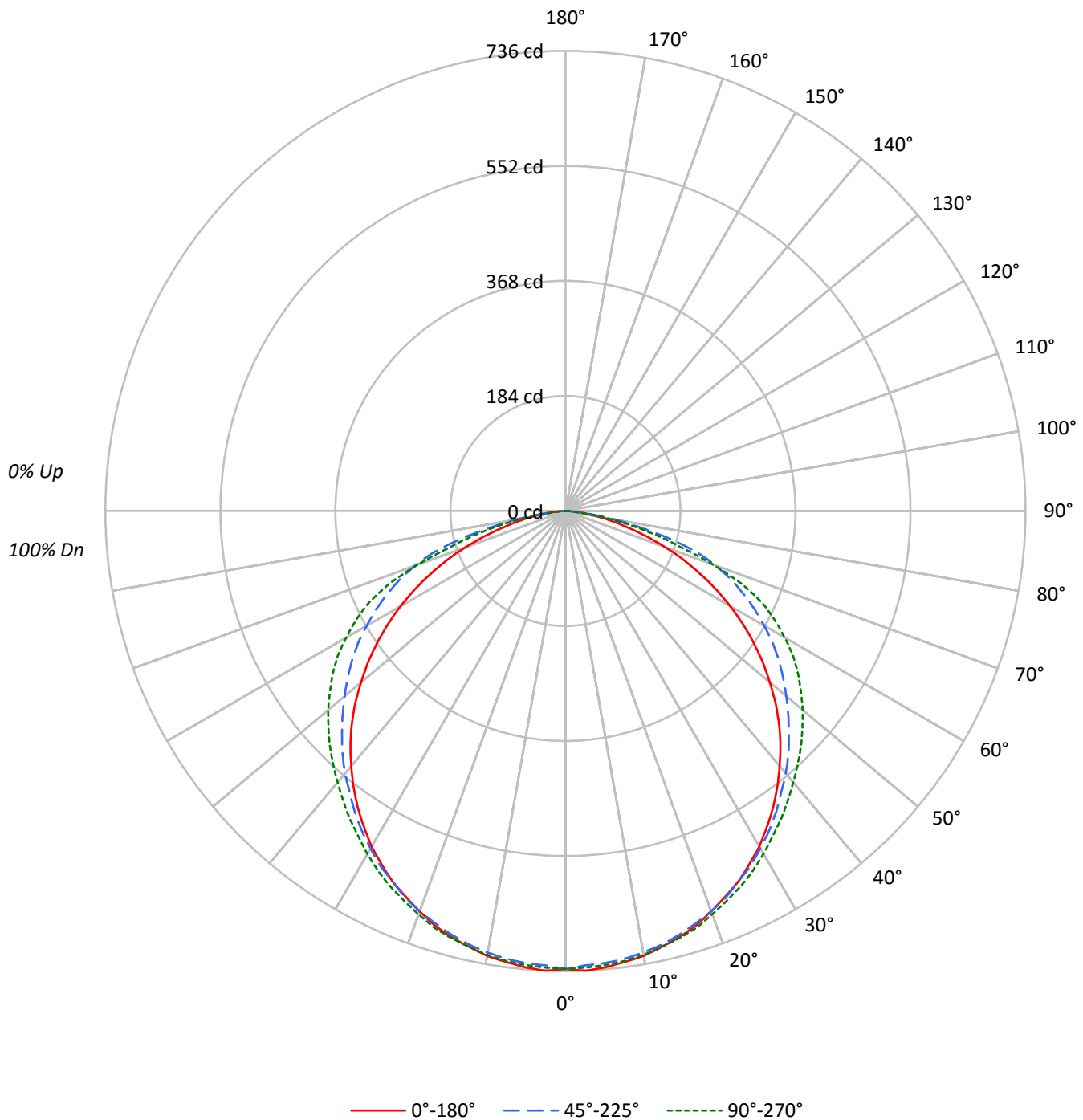
Input Watts (W): 30.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1972	1972	1972
5°	1979	1961	1970
10°	1974	1960	1970
15°	1965	1956	1970
20°	1952	1952	1966
25°	1942	1942	1968
30°	1927	1937	1969
35°	1902	1930	1975
40°	1872	1926	1992
45°	1840	1924	2028
50°	1788	1931	2074
55°	1723	1955	2132
60°	1637	1977	2179
65°	1512	2001	2208
70°	1344	2016	1976
75°	1083	1811	1580
80°	848	1271	1032
85°	580	371	262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	3.2
10°-20°	199.0	9.1
20°-30°	303.0	13.8
30°-40°	369.1	16.9
40°-50°	391.6	17.9
50°-60°	369.5	16.9
60°-70°	298.4	13.6
70°-80°	161.9	7.4
80°-90°	26.2	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°	571.4	26.1
0°-40°	940.5	43.0
0°-60°	1701.6	77.8
0°-90°	2188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2188.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	733	731	726	731	729	70
15°	706	704	702	707	707	199
25°	654	652	654	661	663	301
35°	579	582	588	600	601	362
45°	483	490	506	524	533	372
55°	367	383	417	444	454	328
65°	237	266	314	340	347	235
75°	104	152	174	157	152	114
85°	19	20	12	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.8	732.8	732.8	732.8	732.8
2.5°	736.2	732.8	727.7	732.8	731.1
5°	732.8	731.1	726.0	731.1	729.4
7.5°	727.7	727.7	722.6	726.0	726.0
10°	722.6	720.9	717.4	722.6	720.9
12.5°	714.0	712.3	710.6	715.7	714.0
15°	705.5	703.8	702.1	707.2	707.2
17.5°	695.2	693.5	691.8	698.7	698.7
20°	681.6	681.6	681.6	688.4	686.7
22.5°	667.9	667.9	669.6	676.4	674.7
25°	654.2	652.5	654.2	661.1	662.8
27.5°	637.2	638.9	640.6	647.4	649.1
30°	620.1	621.8	623.5	632.0	633.7
32.5°	599.6	603.0	606.4	616.7	616.7
35°	579.1	582.5	587.6	599.6	601.3
37.5°	556.9	560.3	567.1	580.8	584.2
40°	533.0	538.1	548.3	562.0	567.1
42.5°	509.0	515.9	527.8	543.2	550.0
45°	483.4	490.3	505.6	524.4	533.0
47.5°	456.1	464.6	483.4	507.3	514.2
50°	427.0	439.0	461.2	486.8	495.4
52.5°	398.0	411.7	439.0	466.3	474.9
55°	367.3	382.6	416.8	444.1	454.4
57.5°	336.5	353.6	392.9	421.9	432.2
60°	304.1	324.6	367.3	396.3	404.8
62.5°	271.6	295.5	341.6	370.7	377.5
65°	237.4	266.5	314.3	339.9	346.8
67.5°	205.0	239.1	287.0	305.8	305.8
70°	170.8	208.4	256.2	261.4	251.1
72.5°	136.7	179.4	222.1	203.3	194.7
75°	104.2	152.0	174.2	157.2	152.0
77.5°	78.6	123.0	123.0	112.7	109.3
80°	54.7	94.0	82.0	71.7	66.6
82.5°	35.9	53.0	42.7	34.2	29.0
85°	18.8	20.5	12.0	10.2	8.5
87.5°	6.8	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)