

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: P312072

Luminaire Tested: **14FCZ2-35-UNV-L83050-RDP-CA125-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: P312072
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-L83050-RDP-CA125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC 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: 2262.0 lumens
Efficiency: N/A
Efficacy: 74.9 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

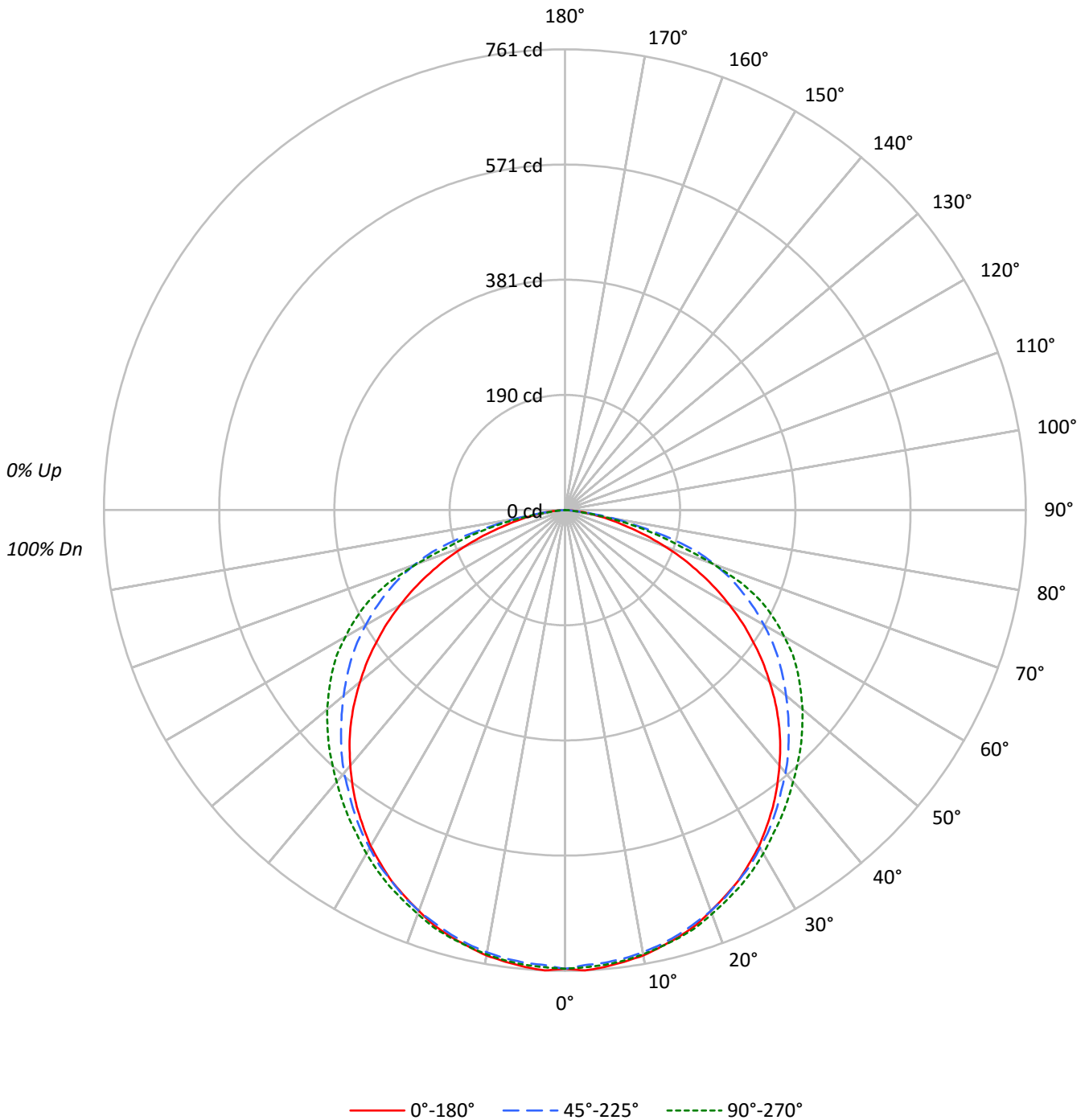
Input Watts (W): 30.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2039	2039	2039
5°	2046	2027	2037
10°	2041	2027	2036
15°	2032	2022	2037
20°	2018	2018	2033
25°	2008	2008	2034
30°	1992	2003	2036
35°	1967	1996	2042
40°	1936	1991	2060
45°	1902	1989	2097
50°	1848	1996	2144
55°	1781	2022	2204
60°	1692	2044	2252
65°	1563	2069	2283
70°	1389	2084	2043
75°	1120	1873	1634
80°	876	1314	1068
85°	599	383	272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	3.2
10°-20°	205.7	9.1
20°-30°	313.3	13.8
30°-40°	381.6	16.9
40°-50°	404.8	17.9
50°-60°	382.1	16.9
60°-70°	308.5	13.6
70°-80°	167.3	7.4
80°-90°	27.1	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°	590.7	26.1
0°-40°	972.3	43.0
0°-60°	1759.1	77.8
0°-90°	2262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2262.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	758	756	750	756	754	72
15°	729	728	726	731	731	206
25°	676	675	676	683	685	311
35°	599	602	608	620	622	374
45°	500	507	523	542	551	385
55°	380	396	431	459	470	339
65°	246	276	325	351	358	243
75°	108	157	180	162	157	118
85°	19	21	12	11	9	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.6	757.6	757.6	757.6	757.6
2.5°	761.1	757.6	752.3	757.6	755.8
5°	757.6	755.8	750.5	755.8	754.1
7.5°	752.3	752.3	747.0	750.5	750.5
10°	747.0	745.2	741.7	747.0	745.2
12.5°	738.2	736.4	734.6	739.9	738.2
15°	729.3	727.6	725.8	731.1	731.1
17.5°	718.8	717.0	715.2	722.3	722.3
20°	704.6	704.6	704.6	711.7	709.9
22.5°	690.5	690.5	692.3	699.3	697.6
25°	676.4	674.6	676.4	683.4	685.2
27.5°	658.7	660.5	662.2	669.3	671.1
30°	641.0	642.8	644.6	653.4	655.2
32.5°	619.9	623.4	626.9	637.5	637.5
35°	598.7	602.2	607.5	619.9	621.6
37.5°	575.7	579.2	586.3	600.4	604.0
40°	551.0	556.3	566.9	581.0	586.3
42.5°	526.3	533.3	545.7	561.6	568.6
45°	499.8	506.8	522.7	542.2	551.0
47.5°	471.5	480.3	499.8	524.5	531.6
50°	441.5	453.9	476.8	503.3	512.1
52.5°	411.5	425.6	453.9	482.1	490.9
55°	379.7	395.6	430.9	459.2	469.7
57.5°	347.9	365.6	406.2	436.2	446.8
60°	314.3	335.5	379.7	409.7	418.5
62.5°	280.8	305.5	353.2	383.2	390.3
65°	245.5	275.5	324.9	351.4	358.5
67.5°	211.9	247.2	296.7	316.1	316.1
70°	176.6	215.4	264.9	270.2	259.6
72.5°	141.3	185.4	229.6	210.2	201.3
75°	107.7	157.2	180.1	162.5	157.2
77.5°	81.2	127.1	127.1	116.6	113.0
80°	56.5	97.1	84.8	74.2	68.9
82.5°	37.1	54.7	44.1	35.3	30.0
85°	19.4	21.2	12.4	10.6	8.8
87.5°	7.1	3.5	1.8	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)