

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: P307512

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP250-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: P307512
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: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" 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: 2337.0 lumens
Efficiency: N/A
Efficacy: 61.5 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

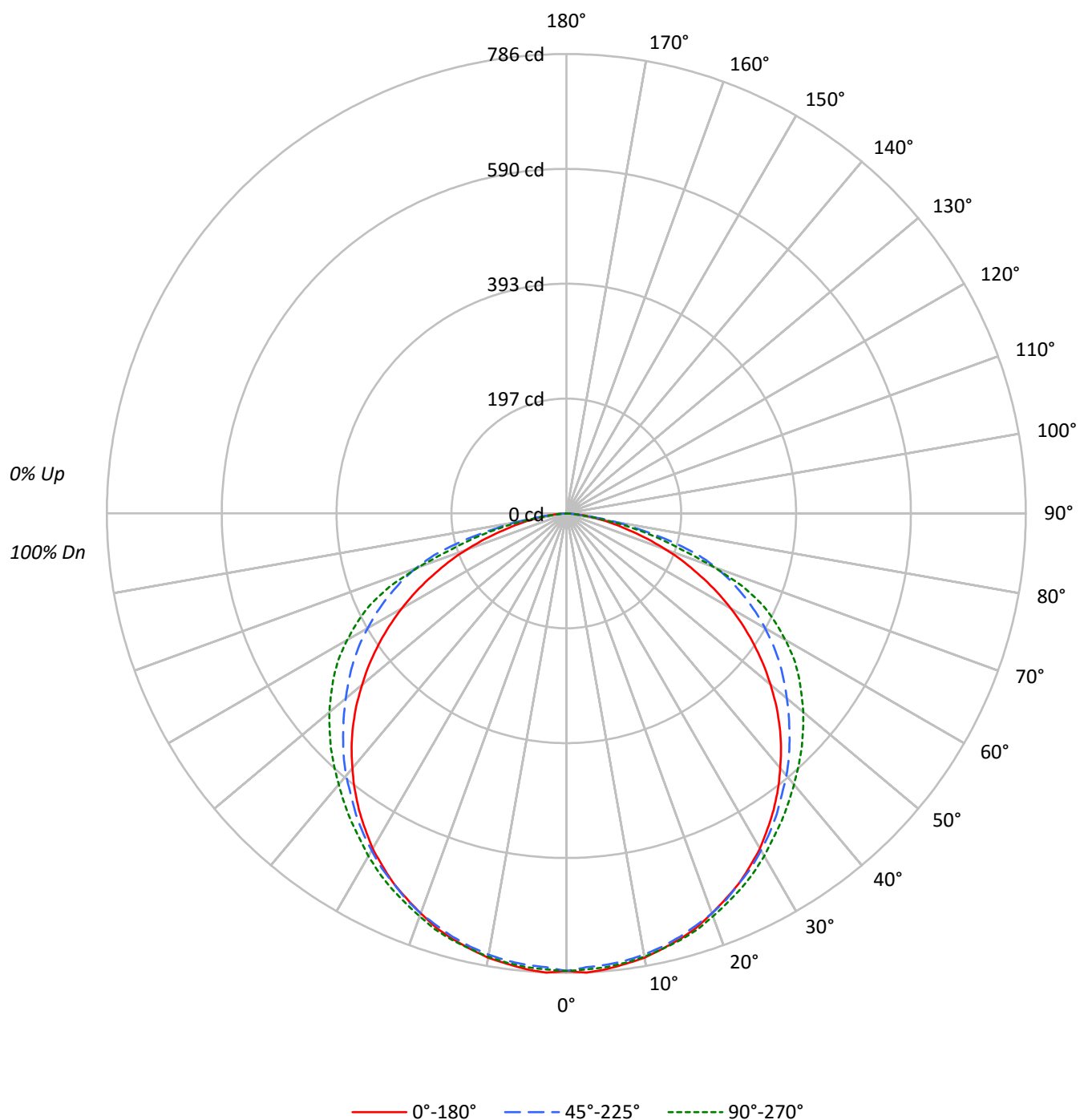
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2106	2106	2106
5°	2114	2095	2105
10°	2109	2094	2104
15°	2099	2089	2104
20°	2085	2085	2101
25°	2075	2075	2102
30°	2058	2069	2103
35°	2032	2062	2110
40°	2000	2057	2128
45°	1965	2055	2167
50°	1909	2062	2215
55°	1841	2089	2277
60°	1748	2111	2327
65°	1615	2138	2358
70°	1436	2153	2110
75°	1157	1935	1688
80°	905	1358	1103
85°	621	395	281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	3.2
10°-20°	212.6	9.1
20°-30°	323.7	13.8
30°-40°	394.2	16.9
40°-50°	418.2	17.9
50°-60°	394.7	16.9
60°-70°	318.7	13.6
70°-80°	172.9	7.4
80°-90°	28.0	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°	610.3	26.1
0°-40°	1004.5	43.0
0°-60°	1817.5	77.8
0°-90°	2337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2337.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	783	781	775	781	779	74
15°	754	752	750	755	755	213
25°	699	697	699	706	708	322
35°	618	622	628	640	642	387
45°	516	524	540	560	569	398
55°	392	409	445	474	485	350
65°	254	285	336	363	370	251
75°	111	162	186	168	162	122
85°	20	22	13	11	9	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	782.7	782.7	782.7	782.7	782.7
2.5°	786.4	782.7	777.2	782.7	780.9
5°	782.7	780.9	775.4	780.9	779.1
7.5°	777.2	777.2	771.8	775.4	775.4
10°	771.8	769.9	766.3	771.8	769.9
12.5°	762.7	760.8	759.0	764.5	762.7
15°	753.5	751.7	749.9	755.4	755.4
17.5°	742.6	740.8	738.9	746.2	746.2
20°	728.0	728.0	728.0	735.3	733.5
22.5°	713.4	713.4	715.2	722.5	720.7
25°	698.8	697.0	698.8	706.1	707.9
27.5°	680.5	682.4	684.2	691.5	693.3
30°	662.3	664.1	666.0	675.1	676.9
32.5°	640.4	644.1	647.7	658.7	658.7
35°	618.5	622.2	627.6	640.4	642.2
37.5°	594.8	598.4	605.7	620.3	624.0
40°	569.3	574.7	585.7	600.3	605.7
42.5°	543.7	551.0	563.8	580.2	587.5
45°	516.3	523.6	540.1	560.1	569.3
47.5°	487.1	496.3	516.3	541.9	549.2
50°	456.1	468.9	492.6	520.0	529.1
52.5°	425.1	439.7	468.9	498.1	507.2
55°	392.3	408.7	445.2	474.4	485.3
57.5°	359.4	377.7	419.6	450.7	461.6
60°	324.8	346.7	392.3	423.3	432.4
62.5°	290.1	315.6	364.9	395.9	403.2
65°	253.6	284.6	335.7	363.1	370.4
67.5°	218.9	255.4	306.5	326.6	326.6
70°	182.5	222.6	273.7	279.2	268.2
72.5°	146.0	191.6	237.2	217.1	208.0
75°	111.3	162.4	186.1	167.9	162.4
77.5°	83.9	131.4	131.4	120.4	116.8
80°	58.4	100.3	87.6	76.6	71.2
82.5°	38.3	56.6	45.6	36.5	31.0
85°	20.1	21.9	12.8	10.9	9.1
87.5°	7.3	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)