

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: P307516

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-5000K**

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: P307516
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-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 5000K 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: 2548.0 lumens
Efficiency: N/A
Efficacy: 65.0 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

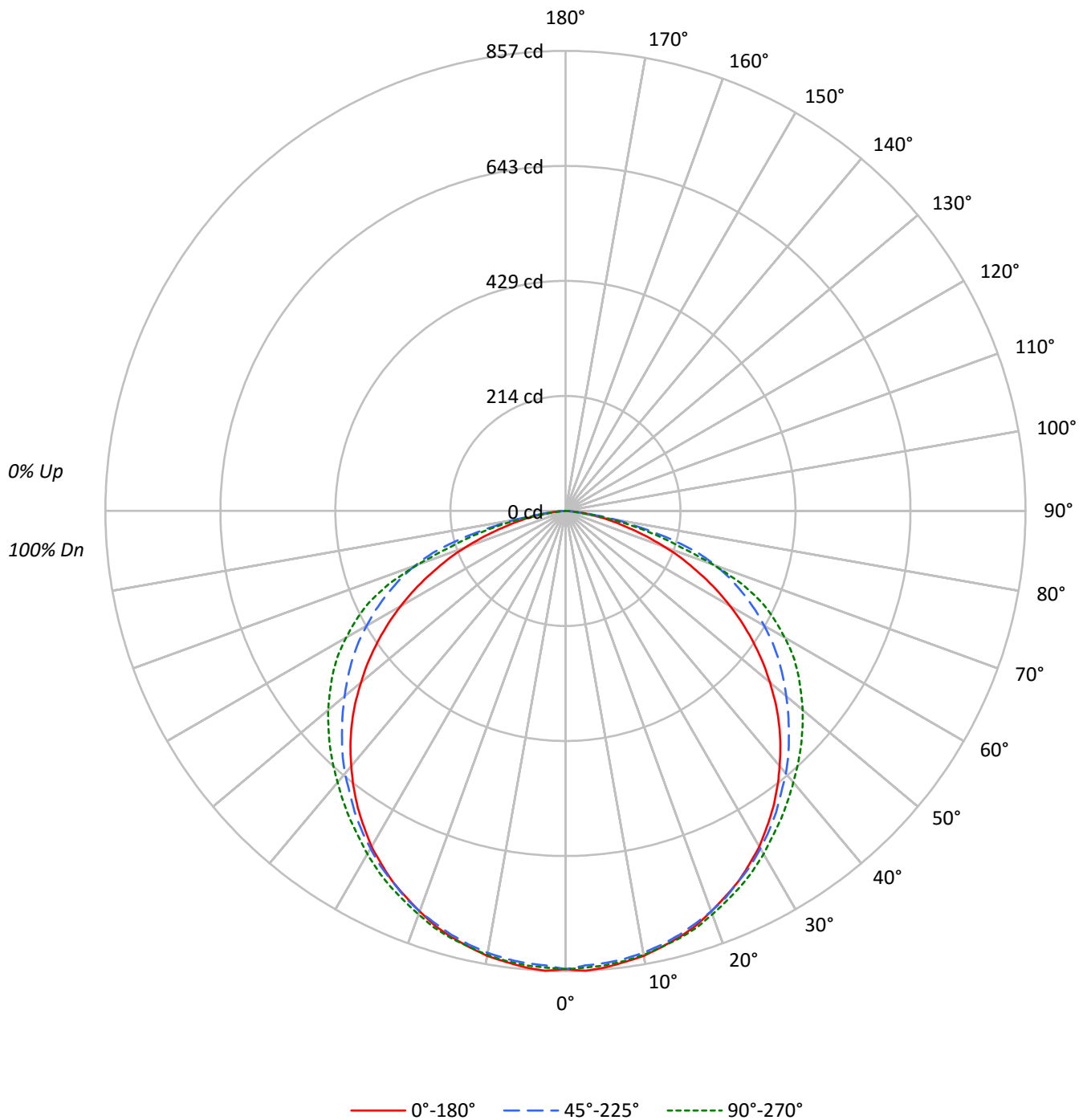
Input Watts (W): 39.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2296	2296	2296
5°	2305	2284	2294
10°	2299	2283	2294
15°	2289	2278	2294
20°	2273	2273	2290
25°	2262	2262	2292
30°	2244	2256	2293
35°	2215	2248	2300
40°	2180	2243	2320
45°	2143	2241	2362
50°	2082	2249	2415
55°	2007	2277	2482
60°	1906	2302	2538
65°	1761	2330	2571
70°	1565	2348	2301
75°	1261	2110	1840
80°	987	1480	1203
85°	676	429	306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.2
10°-20°	231.7	9.1
20°-30°	352.9	13.8
30°-40°	429.8	16.9
40°-50°	456.0	17.9
50°-60°	430.4	16.9
60°-70°	347.5	13.6
70°-80°	188.5	7.4
80°-90°	30.5	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°	665.4	26.1
0°-40°	1095.2	43.0
0°-60°	1981.5	77.8
0°-90°	2548.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2548.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	853	851	845	851	849	81
15°	822	820	818	824	824	232
25°	762	760	762	770	772	351
35°	674	678	684	698	700	422
45°	563	571	589	611	621	434
55°	428	446	485	517	529	382
65°	276	310	366	396	404	274
75°	121	177	203	183	177	133
85°	22	24	14	12	10	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.4	853.4	853.4	853.4	853.4
2.5°	857.4	853.4	847.4	853.4	851.4
5°	853.4	851.4	845.4	851.4	849.4
7.5°	847.4	847.4	841.5	845.4	845.4
10°	841.5	839.5	835.5	841.5	839.5
12.5°	831.5	829.5	827.5	833.5	831.5
15°	821.6	819.6	817.6	823.6	823.6
17.5°	809.6	807.6	805.6	813.6	813.6
20°	793.7	793.7	793.7	801.7	799.7
22.5°	777.8	777.8	779.8	787.7	785.8
25°	761.9	759.9	761.9	769.8	771.8
27.5°	742.0	744.0	746.0	753.9	755.9
30°	722.1	724.1	726.1	736.0	738.0
32.5°	698.2	702.2	706.2	718.1	718.1
35°	674.4	678.3	684.3	698.2	700.2
37.5°	648.5	652.5	660.4	676.3	680.3
40°	620.6	626.6	638.6	654.5	660.4
42.5°	592.8	600.8	614.7	632.6	640.5
45°	563.0	570.9	588.8	610.7	620.6
47.5°	531.1	541.1	563.0	590.8	598.8
50°	497.3	511.2	537.1	566.9	576.9
52.5°	463.5	479.4	511.2	543.1	553.0
55°	427.7	445.6	485.4	517.2	529.1
57.5°	391.9	411.8	457.5	491.3	503.3
60°	354.1	378.0	427.7	461.5	471.5
62.5°	316.3	344.1	397.9	431.7	439.6
65°	276.5	310.3	366.0	395.9	403.8
67.5°	238.7	278.5	334.2	356.1	356.1
70°	198.9	242.7	298.4	304.4	292.4
72.5°	159.1	208.9	258.6	236.7	226.8
75°	121.3	177.0	202.9	183.0	177.0
77.5°	91.5	143.2	143.2	131.3	127.3
80°	63.7	109.4	95.5	83.5	77.6
82.5°	41.8	61.7	49.7	39.8	33.8
85°	21.9	23.9	13.9	11.9	9.9
87.5°	8.0	4.0	2.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)