

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: P307518

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-5700K**

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: P307518
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-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 5700K 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: 2581.0 lumens
Efficiency: N/A
Efficacy: 65.5 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

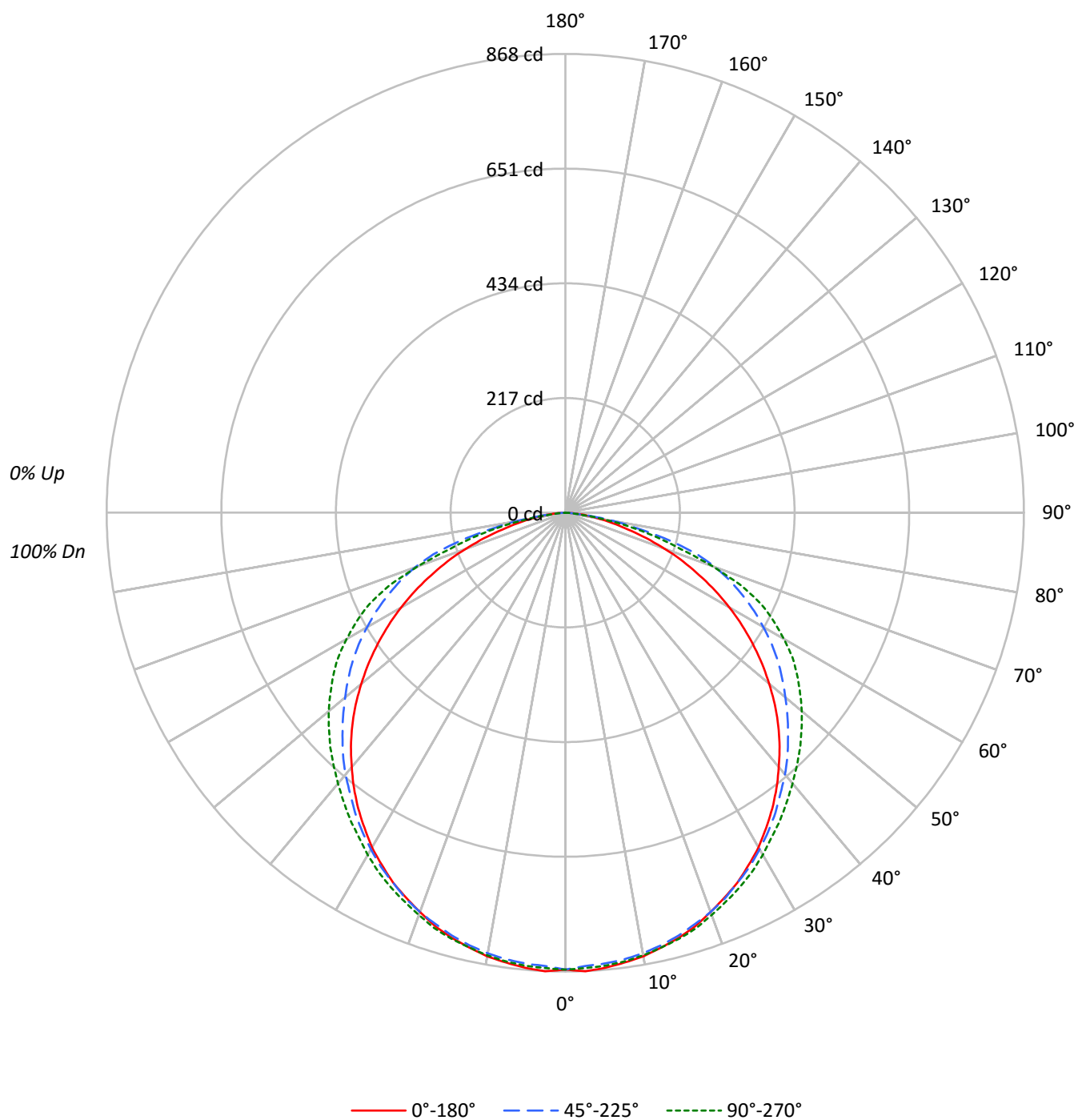
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2326	2326	2326
5°	2335	2313	2324
10°	2329	2313	2323
15°	2318	2307	2324
20°	2302	2302	2320
25°	2292	2292	2321
30°	2273	2285	2323
35°	2244	2277	2330
40°	2209	2272	2350
45°	2170	2270	2393
50°	2109	2278	2447
55°	2032	2307	2515
60°	1931	2331	2570
65°	1784	2361	2604
70°	1585	2378	2330
75°	1278	2137	1864
80°	1000	1499	1218
85°	685	435	312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	3.2
10°-20°	234.7	9.1
20°-30°	357.4	13.8
30°-40°	435.4	16.9
40°-50°	461.9	17.9
50°-60°	435.9	16.9
60°-70°	352.0	13.6
70°-80°	190.9	7.4
80°-90°	30.9	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°	674.0	26.1
0°-40°	1109.4	43.0
0°-60°	2007.2	77.8
0°-90°	2581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2581.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	860	82
15°	832	830	828	834	834	235
25°	772	770	772	780	782	355
35°	683	687	693	707	709	427
45°	570	578	596	619	629	439
55°	433	451	492	524	536	387
65°	280	314	371	401	409	278
75°	123	179	206	185	179	134
85°	22	24	14	12	10	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	864.4	864.4	864.4	864.4	864.4
2.5°	868.5	864.4	858.4	864.4	862.4
5°	864.4	862.4	856.4	862.4	860.4
7.5°	858.4	858.4	852.4	856.4	856.4
10°	852.4	850.3	846.3	852.4	850.3
12.5°	842.3	840.3	838.2	844.3	842.3
15°	832.2	830.2	828.2	834.2	834.2
17.5°	820.1	818.1	816.1	824.1	824.1
20°	804.0	804.0	804.0	812.1	810.0
22.5°	787.9	787.9	789.9	797.9	795.9
25°	771.8	769.7	771.8	779.8	781.8
27.5°	751.6	753.6	755.6	763.7	765.7
30°	731.5	733.5	735.5	745.6	747.6
32.5°	707.3	711.3	715.3	727.4	727.4
35°	683.1	687.1	693.2	707.3	709.3
37.5°	656.9	660.9	669.0	685.1	689.1
40°	628.7	634.7	646.8	662.9	669.0
42.5°	600.5	608.5	622.6	640.8	648.8
45°	570.3	578.3	596.4	618.6	628.7
47.5°	538.0	548.1	570.3	598.5	606.5
50°	503.8	517.9	544.1	574.3	584.4
52.5°	469.5	485.6	517.9	550.1	560.2
55°	433.2	451.4	491.7	523.9	536.0
57.5°	397.0	417.1	463.5	497.7	509.8
60°	358.7	382.9	433.2	467.5	477.6
62.5°	320.4	348.6	403.0	437.3	445.3
65°	280.1	314.3	370.8	401.0	409.0
67.5°	241.8	282.1	338.5	360.7	360.7
70°	201.5	245.8	302.3	308.3	296.2
72.5°	161.2	211.6	262.0	239.8	229.7
75°	122.9	179.3	205.5	185.4	179.3
77.5°	92.7	145.1	145.1	133.0	129.0
80°	64.5	110.8	96.7	84.6	78.6
82.5°	42.3	62.5	50.4	40.3	34.3
85°	22.2	24.2	14.1	12.1	10.1
87.5°	8.1	4.0	2.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)