

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: P307437

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CA08-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: P307437
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: 14FCZ2-39-UNV-L82765-RDP-CA08-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 2487.0 lumens
Efficiency: N/A
Efficacy: 72.7 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

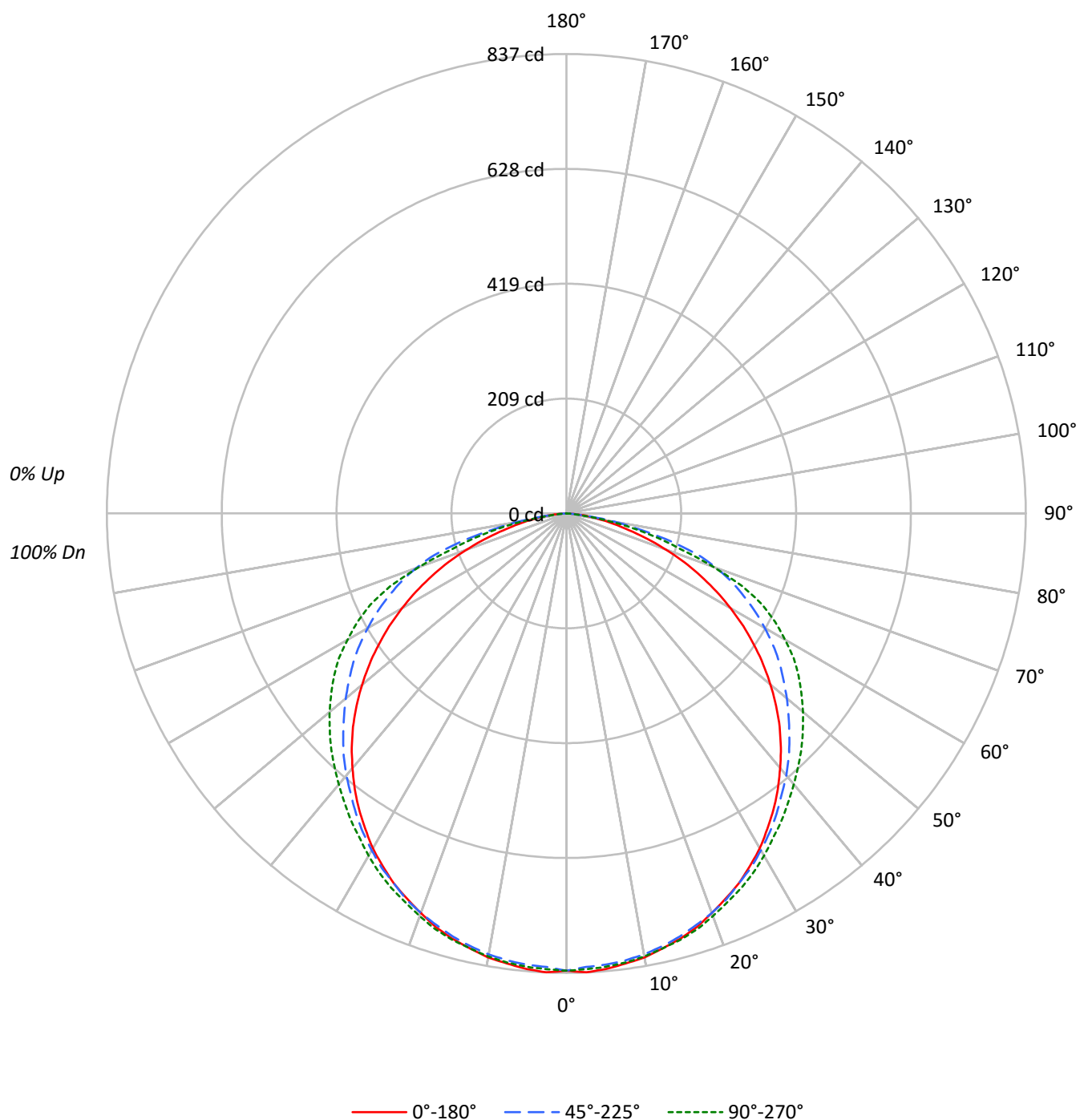
Input Watts (W): 34.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2242	2242	2242
5°	2250	2229	2240
10°	2244	2228	2239
15°	2234	2223	2239
20°	2218	2218	2235
25°	2208	2208	2237
30°	2190	2202	2238
35°	2162	2194	2245
40°	2128	2190	2264
45°	2091	2187	2305
50°	2032	2195	2357
55°	1959	2223	2423
60°	1860	2247	2477
65°	1719	2275	2510
70°	1528	2291	2245
75°	1231	2059	1797
80°	962	1444	1173
85°	661	420	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	3.2
10°-20°	226.2	9.1
20°-30°	344.4	13.8
30°-40°	419.5	16.9
40°-50°	445.1	17.9
50°-60°	420.1	16.9
60°-70°	339.2	13.6
70°-80°	184.0	7.4
80°-90°	29.8	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°	649.5	26.1
0°-40°	1069.0	43.0
0°-60°	1934.1	77.8
0°-90°	2487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	833	831	825	831	829	79
15°	802	800	798	804	804	226
25°	744	742	744	751	753	342
35°	658	662	668	682	684	412
45°	550	557	575	596	606	423
55°	418	435	474	505	516	373
65°	270	303	357	386	394	267
75°	118	173	198	179	173	129
85°	21	23	14	12	10	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.0	833.0	833.0	833.0	833.0
2.5°	836.8	833.0	827.1	833.0	831.0
5°	833.0	831.0	825.2	831.0	829.1
7.5°	827.1	827.1	821.3	825.2	825.2
10°	821.3	819.4	815.5	821.3	819.4
12.5°	811.6	809.7	807.7	813.5	811.6
15°	801.9	800.0	798.0	803.8	803.8
17.5°	790.2	788.3	786.4	794.1	794.1
20°	774.7	774.7	774.7	782.5	780.5
22.5°	759.2	759.2	761.1	768.9	766.9
25°	743.6	741.7	743.6	751.4	753.4
27.5°	724.2	726.2	728.1	735.9	737.8
30°	704.8	706.8	708.7	718.4	720.3
32.5°	681.5	685.4	689.3	700.9	700.9
35°	658.2	662.1	667.9	681.5	683.5
37.5°	633.0	636.9	644.6	660.2	664.0
40°	605.8	611.6	623.3	638.8	644.6
42.5°	578.6	586.4	600.0	617.4	625.2
45°	549.5	557.2	574.7	596.1	605.8
47.5°	518.4	528.1	549.5	576.7	584.4
50°	485.4	499.0	524.2	553.4	563.1
52.5°	452.4	467.9	499.0	530.1	539.8
55°	417.5	434.9	473.8	504.8	516.5
57.5°	382.5	401.9	446.6	479.6	491.2
60°	345.6	368.9	417.5	450.5	460.2
62.5°	308.7	335.9	388.3	421.3	429.1
65°	269.9	302.9	357.3	386.4	394.2
67.5°	233.0	271.8	326.2	347.6	347.6
70°	194.2	236.9	291.2	297.1	285.4
72.5°	155.3	203.9	252.4	231.1	221.3
75°	118.4	172.8	198.0	178.6	172.8
77.5°	89.3	139.8	139.8	128.1	124.3
80°	62.1	106.8	93.2	81.5	75.7
82.5°	40.8	60.2	48.5	38.8	33.0
85°	21.4	23.3	13.6	11.6	9.7
87.5°	7.8	3.9	1.9	3.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)