

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: P307435

Luminaire Tested: **14FCZ2-39-UNV-L82765-RDP-CA08-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: P307435
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-5000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" ACRYLIC 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: 2457.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

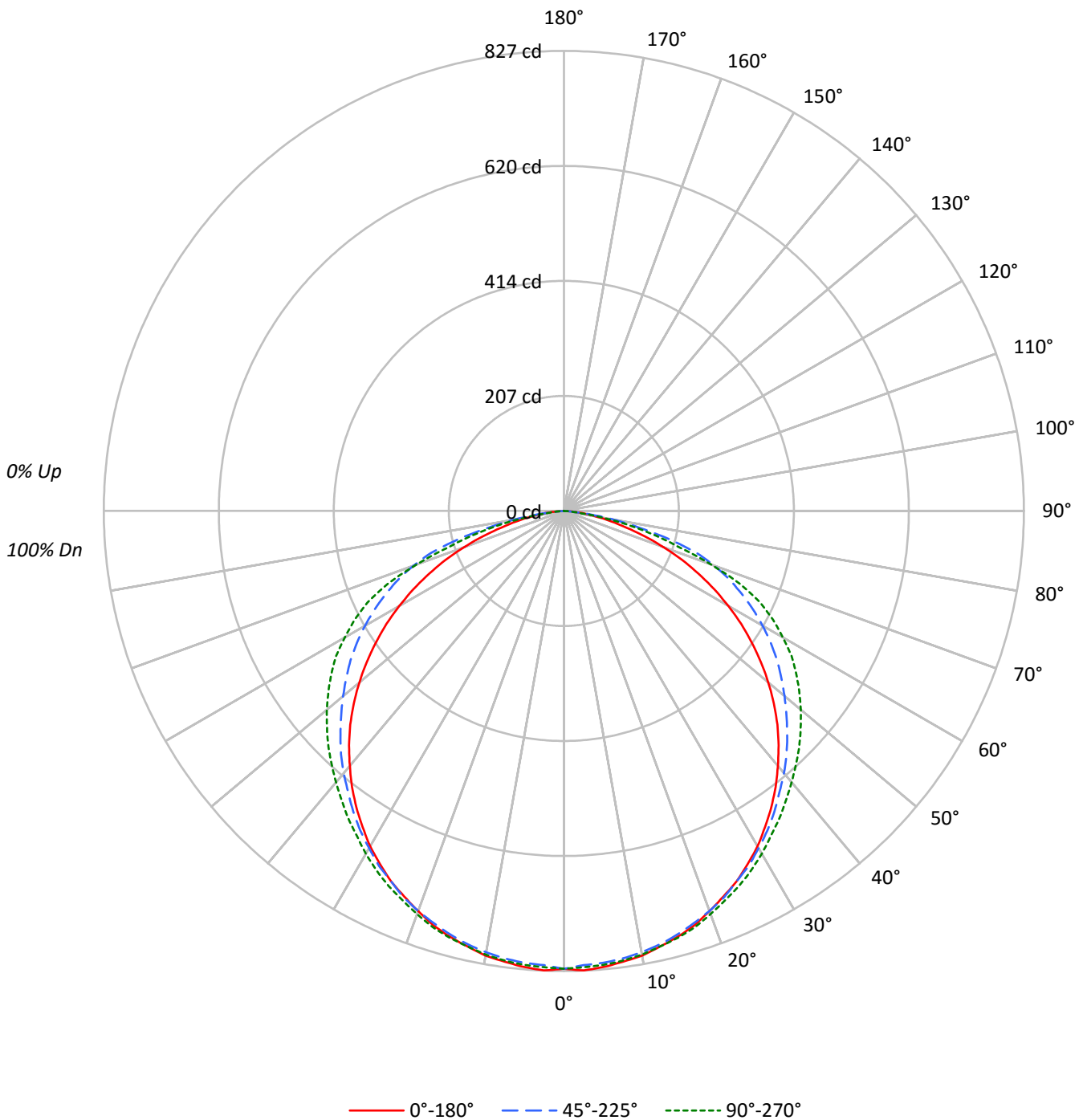
Input Watts (W): 34.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2214	2214	2214
5°	2223	2202	2213
10°	2217	2201	2212
15°	2207	2196	2212
20°	2192	2192	2208
25°	2181	2181	2210
30°	2164	2175	2211
35°	2136	2168	2218
40°	2102	2163	2237
45°	2066	2161	2278
50°	2008	2168	2329
55°	1935	2196	2394
60°	1837	2220	2447
65°	1698	2248	2479
70°	1509	2264	2219
75°	1216	2035	1775
80°	951	1427	1159
85°	651	414	296



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	3.2
10°-20°	223.5	9.1
20°-30°	340.3	13.8
30°-40°	414.4	16.9
40°-50°	439.7	17.9
50°-60°	415.0	16.9
60°-70°	335.1	13.6
70°-80°	181.8	7.4
80°-90°	29.4	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°	641.6	26.1
0°-40°	1056.1	43.0
0°-60°	1910.8	77.8
0°-90°	2457.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2457.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	823	821	815	821	819	78
15°	792	790	788	794	794	224
25°	735	733	735	742	744	338
35°	650	654	660	673	675	407
45°	543	550	568	589	598	418
55°	412	430	468	499	510	368
65°	267	299	353	382	389	264
75°	117	171	196	176	171	128
85°	21	23	13	12	10	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.9	822.9	822.9	822.9	822.9
2.5°	826.7	822.9	817.2	822.9	821.0
5°	822.9	821.0	815.2	821.0	819.1
7.5°	817.2	817.2	811.4	815.2	815.2
10°	811.4	809.5	805.6	811.4	809.5
12.5°	801.8	799.9	798.0	803.7	801.8
15°	792.2	790.3	788.4	794.1	794.1
17.5°	780.7	778.8	776.9	784.5	784.5
20°	765.4	765.4	765.4	773.0	771.1
22.5°	750.0	750.0	751.9	759.6	757.7
25°	734.7	732.8	734.7	742.3	744.3
27.5°	715.5	717.4	719.3	727.0	728.9
30°	696.3	698.2	700.1	709.7	711.7
32.5°	673.3	677.1	681.0	692.5	692.5
35°	650.3	654.1	659.9	673.3	675.2
37.5°	625.3	629.2	636.8	652.2	656.0
40°	598.5	604.2	615.7	631.1	636.8
42.5°	571.6	579.3	592.7	610.0	617.7
45°	542.9	550.5	567.8	588.9	598.5
47.5°	512.2	521.8	542.9	569.7	577.4
50°	479.6	493.0	517.9	546.7	556.3
52.5°	446.9	462.3	493.0	523.7	533.3
55°	412.4	429.7	468.0	498.7	510.2
57.5°	377.9	397.1	441.2	473.8	485.3
60°	341.4	364.5	412.4	445.0	454.6
62.5°	305.0	331.9	383.6	416.3	423.9
65°	266.6	299.2	353.0	381.7	389.4
67.5°	230.2	268.5	322.3	343.4	343.4
70°	191.8	234.0	287.7	293.5	282.0
72.5°	153.5	201.4	249.4	228.3	218.7
75°	117.0	170.7	195.7	176.5	170.7
77.5°	88.2	138.1	138.1	126.6	122.8
80°	61.4	105.5	92.1	80.6	74.8
82.5°	40.3	59.5	48.0	38.4	32.6
85°	21.1	23.0	13.4	11.5	9.6
87.5°	7.7	3.8	1.9	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)