

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: P307510

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP187-W2A-U-6500K**

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: P307510
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-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 6500K 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: 2608.0 lumens
Efficiency: N/A
Efficacy: 65.2 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

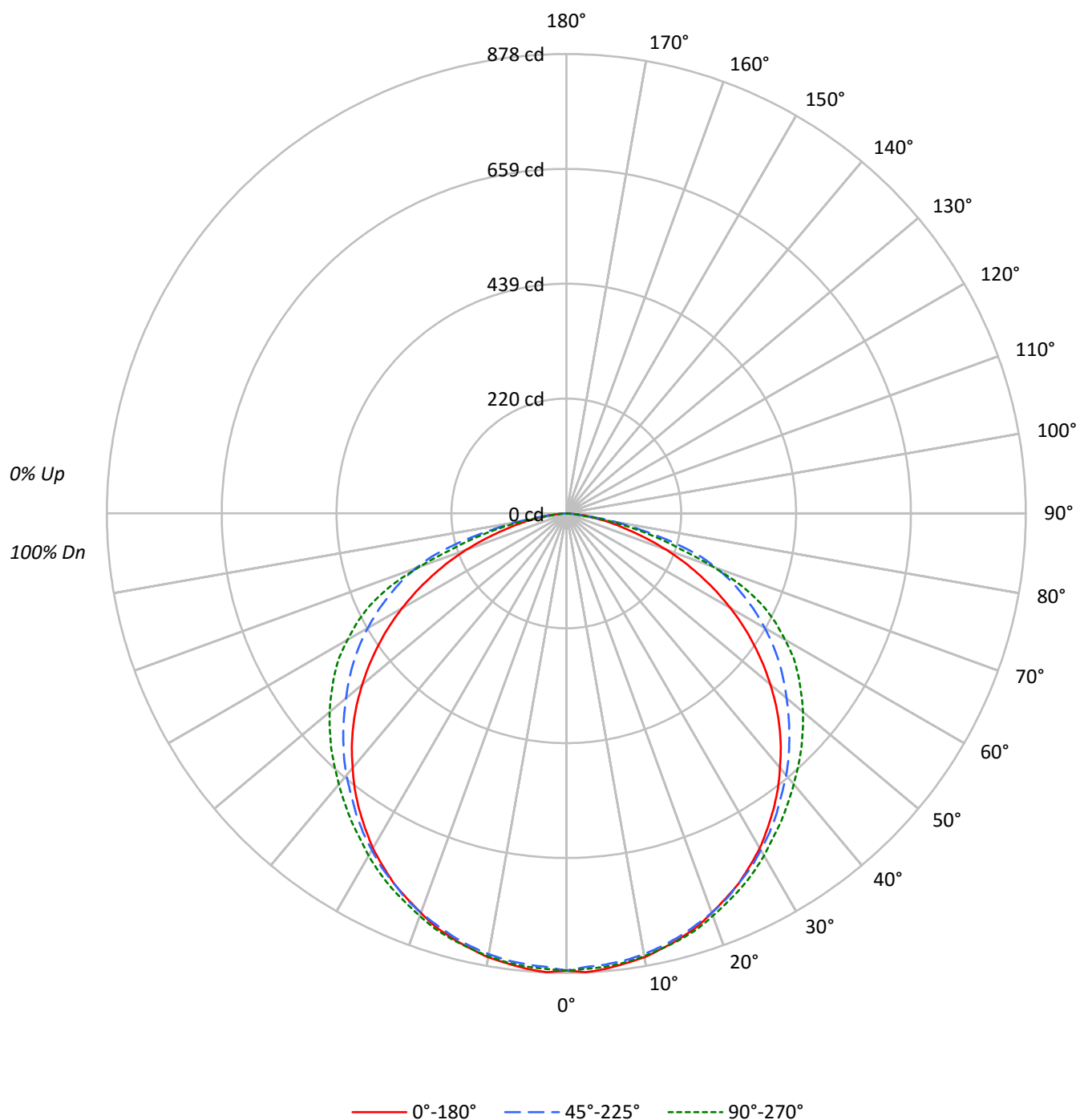
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2351	2351	2351
5°	2360	2337	2348
10°	2353	2337	2348
15°	2343	2331	2348
20°	2326	2326	2344
25°	2315	2315	2346
30°	2297	2309	2347
35°	2267	2301	2354
40°	2232	2296	2375
45°	2193	2294	2418
50°	2131	2301	2472
55°	2054	2331	2541
60°	1950	2356	2597
65°	1802	2385	2632
70°	1602	2403	2355
75°	1291	2159	1884
80°	1010	1514	1230
85°	692	442	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	3.2
10°-20°	237.2	9.1
20°-30°	361.2	13.8
30°-40°	439.9	16.9
40°-50°	466.7	17.9
50°-60°	440.5	16.9
60°-70°	355.7	13.6
70°-80°	192.9	7.4
80°-90°	31.2	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°	681.1	26.1
0°-40°	1121.0	43.0
0°-60°	2028.2	77.8
0°-90°	2608.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2608.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	874	874	874	874	874	
5°	874	871	865	871	869	83
15°	841	839	837	843	843	237
25°	780	778	780	788	790	359
35°	690	694	700	715	717	432
45°	576	584	603	625	635	444
55°	438	456	497	529	542	391
65°	283	318	375	405	413	280
75°	124	181	208	187	181	136
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°	873.5	873.5	873.5	873.5	873.5
2.5°	877.6	873.5	867.4	873.5	871.4
5°	873.5	871.4	865.3	871.4	869.4
7.5°	867.4	867.4	861.3	865.3	865.3
10°	861.3	859.2	855.2	861.3	859.2
12.5°	851.1	849.1	847.0	853.1	851.1
15°	840.9	838.9	836.8	842.9	842.9
17.5°	828.7	826.7	824.6	832.8	832.8
20°	812.4	812.4	812.4	820.5	818.5
22.5°	796.1	796.1	798.2	806.3	804.3
25°	779.8	777.8	779.8	788.0	790.0
27.5°	759.5	761.5	763.5	771.7	773.7
30°	739.1	741.1	743.2	753.4	755.4
32.5°	714.7	718.7	722.8	735.0	735.0
35°	690.2	694.3	700.4	714.7	716.7
37.5°	663.8	667.8	676.0	692.3	696.3
40°	635.3	641.4	653.6	669.9	676.0
42.5°	606.8	614.9	629.2	647.5	655.6
45°	576.2	584.4	602.7	625.1	635.3
47.5°	543.6	553.8	576.2	604.7	612.9
50°	509.0	523.3	549.7	580.3	590.5
52.5°	474.4	490.7	523.3	555.9	566.0
55°	437.8	456.1	496.8	529.4	541.6
57.5°	401.1	421.5	468.3	502.9	515.1
60°	362.4	386.9	437.8	472.4	482.6
62.5°	323.7	352.2	407.2	441.8	450.0
65°	283.0	317.6	374.6	405.2	413.3
67.5°	244.3	285.1	342.1	364.5	364.5
70°	203.6	248.4	305.4	311.5	299.3
72.5°	162.9	213.8	264.7	242.3	232.1
75°	124.2	181.2	207.7	187.3	181.2
77.5°	93.7	146.6	146.6	134.4	130.3
80°	65.2	112.0	97.7	85.5	79.4
82.5°	42.8	63.1	50.9	40.7	34.6
85°	22.4	24.4	14.3	12.2	10.2
87.5°	8.1	4.1	2.0	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)