

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: P307373

Luminaire Tested: **14FCZ2-29-UNV-L82765-RDP-CP187-W2A-U-5500K**

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: P307373
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: 14FCZ2-29-UNV-L82765-RDP-CP187-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.187" POLYCARB SHEET
Light Source: (168) 5500K 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: 1749.0 lumens
Efficiency: N/A
Efficacy: 71.4 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

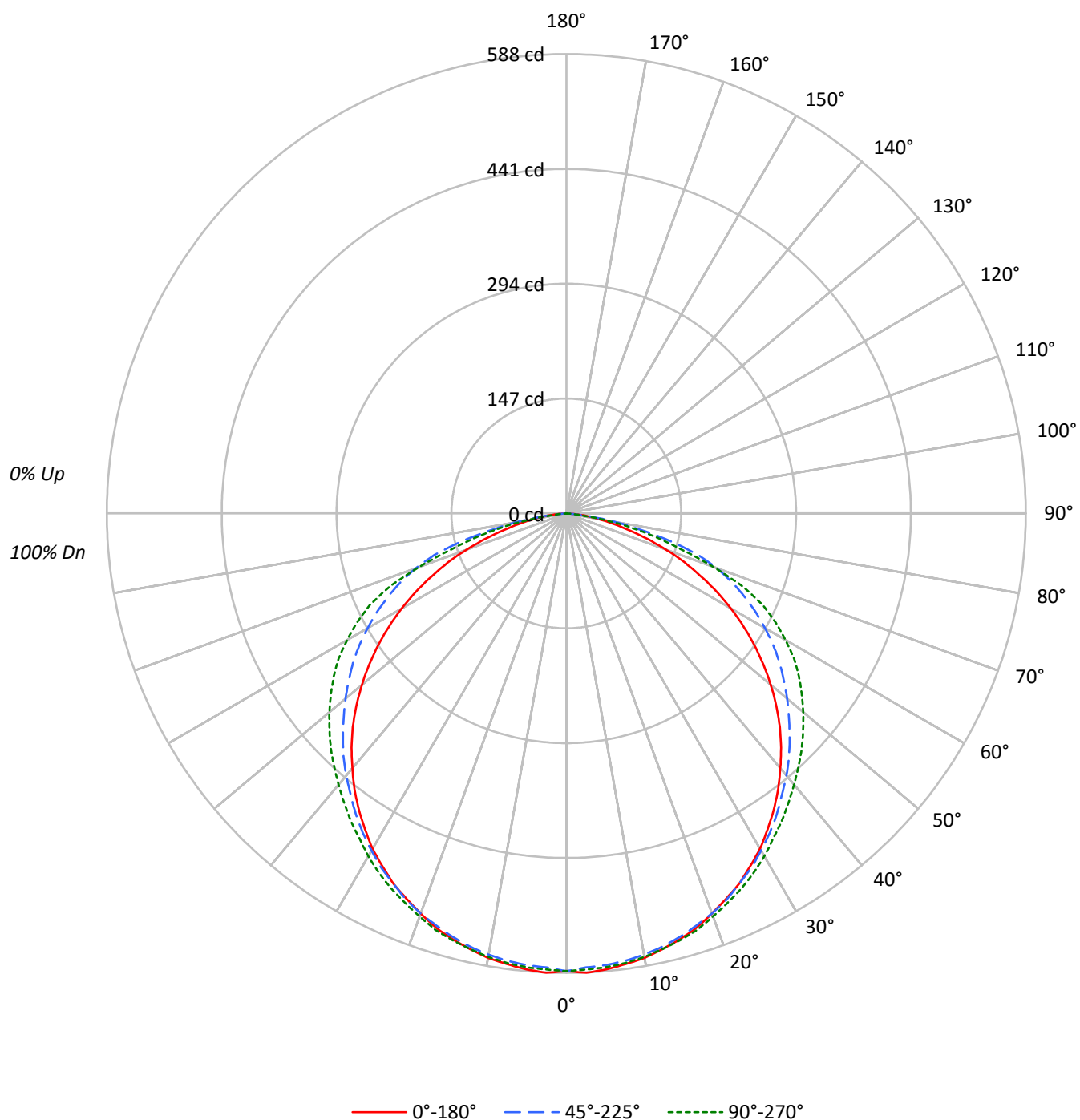
Input Watts (W): 24.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1576	1576	1576
5°	1582	1568	1575
10°	1578	1567	1574
15°	1571	1563	1575
20°	1560	1560	1572
25°	1553	1553	1573
30°	1540	1549	1574
35°	1521	1543	1579
40°	1496	1540	1592
45°	1470	1538	1621
50°	1429	1544	1658
55°	1377	1563	1704
60°	1308	1580	1742
65°	1209	1599	1765
70°	1074	1611	1579
75°	866	1448	1263
80°	677	1015	826
85°	463	296	210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	3.2
10°-20°	159.1	9.1
20°-30°	242.2	13.8
30°-40°	295.0	16.9
40°-50°	313.0	17.9
50°-60°	295.4	16.9
60°-70°	238.5	13.6
70°-80°	129.4	7.4
80°-90°	20.9	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°	456.7	26.1
0°-40°	751.8	43.0
0°-60°	1360.2	77.8
0°-90°	1749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1749.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	586	586	586	586	586	
5°	586	584	580	584	583	56
15°	564	563	561	565	565	159
25°	523	522	523	528	530	241
35°	463	466	470	479	481	289
45°	386	392	404	419	426	298
55°	294	306	333	355	363	262
65°	190	213	251	272	277	188
75°	83	122	139	126	122	91
85°	15	16	10	8	7	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	585.8	585.8	585.8	585.8	585.8
2.5°	588.5	585.8	581.7	585.8	584.4
5°	585.8	584.4	580.3	584.4	583.1
7.5°	581.7	581.7	577.6	580.3	580.3
10°	577.6	576.2	573.5	577.6	576.2
12.5°	570.8	569.4	568.0	572.1	570.8
15°	563.9	562.6	561.2	565.3	565.3
17.5°	555.7	554.4	553.0	558.5	558.5
20°	544.8	544.8	544.8	550.3	548.9
22.5°	533.9	533.9	535.3	540.7	539.4
25°	523.0	521.6	523.0	528.4	529.8
27.5°	509.3	510.7	512.0	517.5	518.9
30°	495.7	497.0	498.4	505.2	506.6
32.5°	479.3	482.0	484.7	492.9	492.9
35°	462.9	465.6	469.7	479.3	480.6
37.5°	445.1	447.9	453.3	464.3	467.0
40°	426.0	430.1	438.3	449.2	453.3
42.5°	406.9	412.4	421.9	434.2	439.7
45°	386.4	391.9	404.2	419.2	426.0
47.5°	364.6	371.4	386.4	405.5	411.0
50°	341.4	350.9	368.7	389.2	396.0
52.5°	318.2	329.1	350.9	372.8	379.6
55°	293.6	305.9	333.2	355.0	363.2
57.5°	269.0	282.7	314.1	337.3	345.5
60°	243.1	259.4	293.6	316.8	323.6
62.5°	217.1	236.2	273.1	296.3	301.8
65°	189.8	213.0	251.2	271.7	277.2
67.5°	163.9	191.2	229.4	244.4	244.4
70°	136.5	166.6	204.8	208.9	200.7
72.5°	109.2	143.4	177.5	162.5	155.7
75°	83.3	121.5	139.3	125.6	121.5
77.5°	62.8	98.3	98.3	90.1	87.4
80°	43.7	75.1	65.5	57.3	53.3
82.5°	28.7	42.3	34.1	27.3	23.2
85°	15.0	16.4	9.6	8.2	6.8
87.5°	5.5	2.7	1.4	2.7	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)