

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: P307330

Luminaire Tested: **14FCZ2-25-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: P307330
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: 14FCZ2-25-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: 1471.0 lumens
Efficiency: N/A
Efficacy: 71.8 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

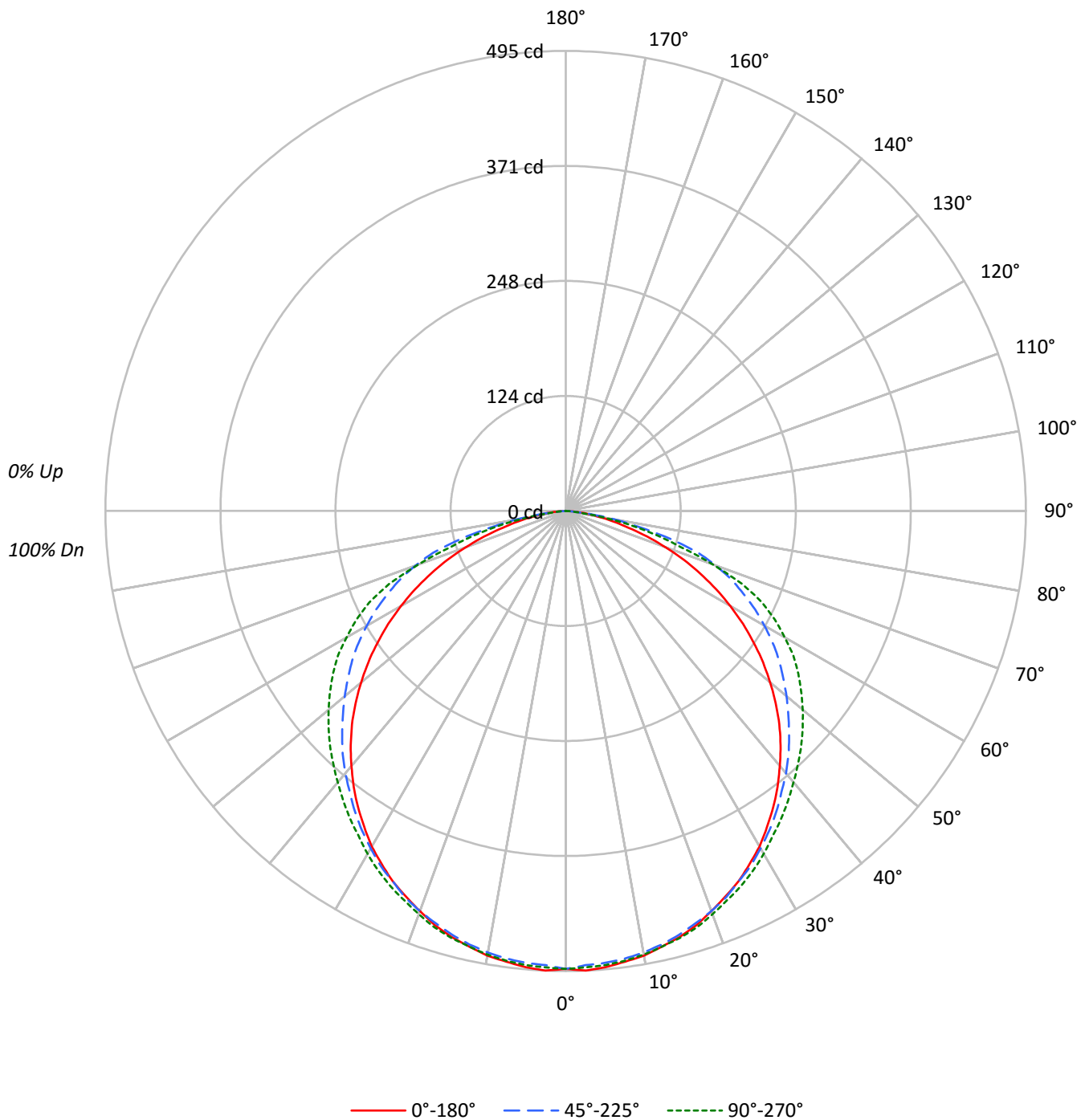
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1326	1326	1326
5°	1331	1318	1325
10°	1327	1318	1324
15°	1321	1315	1324
20°	1312	1312	1322
25°	1306	1306	1323
30°	1295	1303	1324
35°	1279	1298	1328
40°	1259	1295	1339
45°	1237	1294	1364
50°	1202	1298	1394
55°	1158	1315	1433
60°	1100	1329	1465
65°	1016	1345	1484
70°	903	1356	1328
75°	729	1218	1063
80°	569	854	694
85°	389	247	176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	3.2
10°-20°	133.8	9.1
20°-30°	203.7	13.8
30°-40°	248.1	16.9
40°-50°	263.2	17.9
50°-60°	248.4	16.9
60°-70°	200.6	13.6
70°-80°	108.8	7.4
80°-90°	17.6	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°	384.1	26.1
0°-40°	632.3	43.0
0°-60°	1144.0	77.8
0°-90°	1471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	493	493	493	493	493	
5°	493	492	488	492	490	47
15°	474	473	472	475	475	134
25°	440	439	440	444	446	202
35°	389	392	395	403	404	243
45°	325	330	340	353	358	250
55°	247	257	280	299	306	221
65°	160	179	211	228	233	158
75°	70	102	117	106	102	77
85°	13	14	8	7	6	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	492.7	492.7	492.7	492.7	492.7
2.5°	495.0	492.7	489.2	492.7	491.5
5°	492.7	491.5	488.1	491.5	490.4
7.5°	489.2	489.2	485.8	488.1	488.1
10°	485.8	484.6	482.3	485.8	484.6
12.5°	480.0	478.9	477.7	481.2	480.0
15°	474.3	473.2	472.0	475.4	475.4
17.5°	467.4	466.3	465.1	469.7	469.7
20°	458.2	458.2	458.2	462.8	461.7
22.5°	449.0	449.0	450.2	454.8	453.6
25°	439.8	438.7	439.8	444.4	445.6
27.5°	428.4	429.5	430.7	435.3	436.4
30°	416.9	418.0	419.2	424.9	426.1
32.5°	403.1	405.4	407.7	414.6	414.6
35°	389.3	391.6	395.1	403.1	404.2
37.5°	374.4	376.7	381.3	390.5	392.8
40°	358.3	361.8	368.6	377.8	381.3
42.5°	342.2	346.8	354.9	365.2	369.8
45°	325.0	329.6	339.9	352.6	358.3
47.5°	306.6	312.4	325.0	341.1	345.7
50°	287.1	295.1	310.1	327.3	333.0
52.5°	267.6	276.8	295.1	313.5	319.3
55°	246.9	257.2	280.2	298.6	305.5
57.5°	226.2	237.7	264.1	283.7	290.6
60°	204.4	218.2	246.9	266.4	272.2
62.5°	182.6	198.7	229.7	249.2	253.8
65°	159.6	179.2	211.3	228.5	233.1
67.5°	137.8	160.8	192.9	205.6	205.6
70°	114.8	140.1	172.3	175.7	168.8
72.5°	91.9	120.6	149.3	136.7	130.9
75°	70.1	102.2	117.1	105.7	102.2
77.5°	52.8	82.7	82.7	75.8	73.5
80°	36.7	63.2	55.1	48.2	44.8
82.5°	24.1	35.6	28.7	23.0	19.5
85°	12.6	13.8	8.0	6.9	5.7
87.5°	4.6	2.3	1.1	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)