

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: P307308

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA125-W2A-U-4500K**

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: P307308  
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-CA125-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" ACRYLIC SHEET  
Light Source: (168) 4500K 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: 1523.0 lumens  
Efficiency: N/A  
Efficacy: 76.2 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

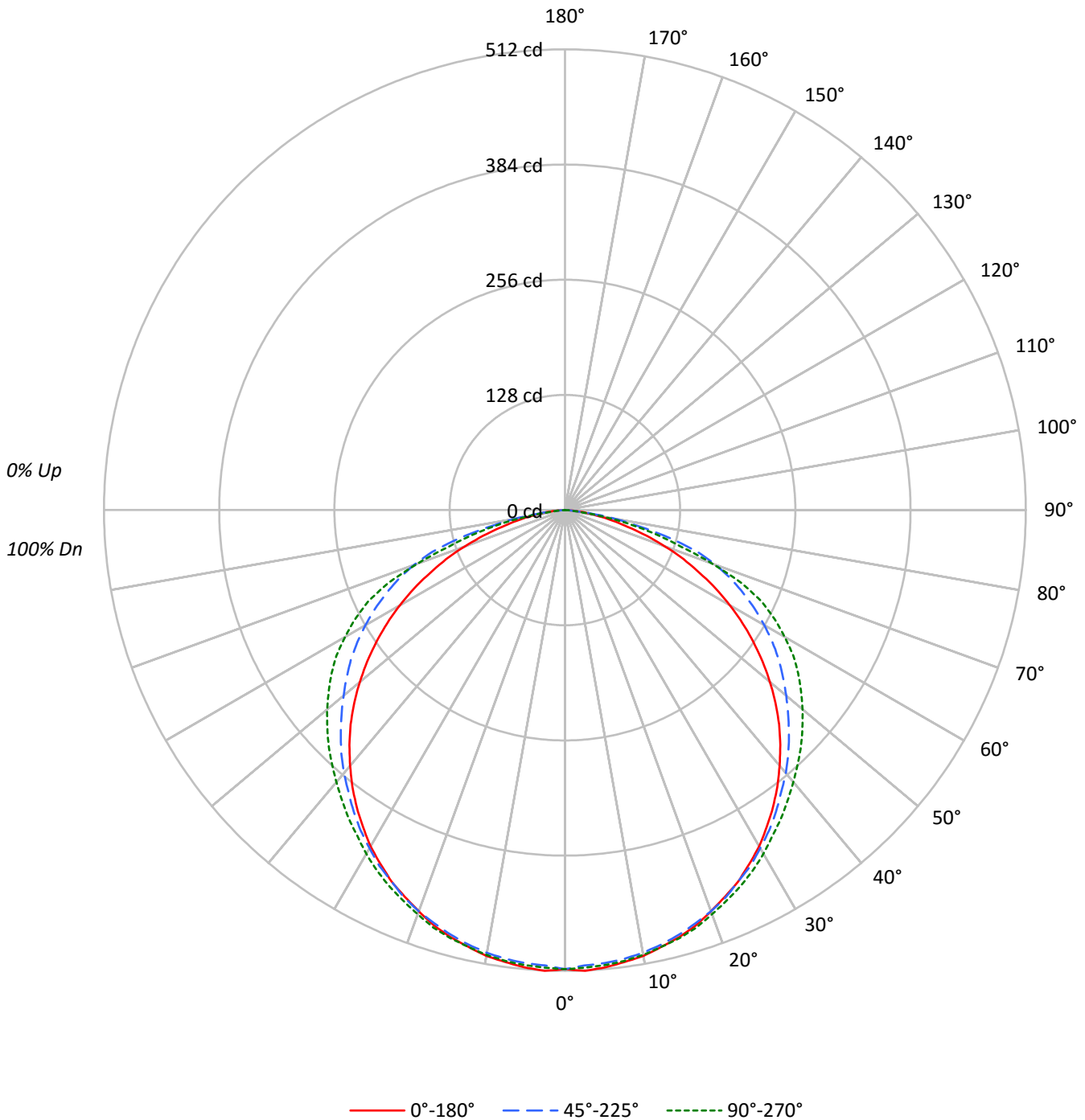
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1373	1373	1373
5°	1378	1365	1371
10°	1374	1365	1371
15°	1368	1361	1372
20°	1359	1359	1369
25°	1352	1352	1370
30°	1341	1349	1371
35°	1324	1344	1375
40°	1303	1341	1387
45°	1281	1340	1412
50°	1245	1344	1443
55°	1199	1361	1484
60°	1139	1376	1517
65°	1053	1393	1537
70°	935	1404	1375
75°	754	1261	1100
80°	589	885	719
85°	404	256	182



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	3.2
10°-20°	138.5	9.1
20°-30°	210.9	13.8
30°-40°	256.9	16.9
40°-50°	272.6	17.9
50°-60°	257.2	16.9
60°-70°	207.7	13.6
70°-80°	112.7	7.4
80°-90°	18.2	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°	397.7	26.1
0°-40°	654.6	43.0
0°-60°	1184.4	77.8
0°-90°	1523.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1523.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	510	509	505	509	508	48
15°	491	490	489	492	492	139
25°	455	454	455	460	461	210
35°	403	406	409	417	418	252
45°	336	341	352	365	371	259
55°	256	266	290	309	316	228
65°	165	186	219	237	241	164
75°	72	106	121	109	106	79
85°	13	14	8	7	6	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	510.1	510.1	510.1	510.1	510.1
2.5°	512.5	510.1	506.5	510.1	508.9
5°	510.1	508.9	505.3	508.9	507.7
7.5°	506.5	506.5	503.0	505.3	505.3
10°	503.0	501.8	499.4	503.0	501.8
12.5°	497.0	495.8	494.6	498.2	497.0
15°	491.1	489.9	488.7	492.3	492.3
17.5°	483.9	482.7	481.6	486.3	486.3
20°	474.4	474.4	474.4	479.2	478.0
22.5°	464.9	464.9	466.1	470.9	469.7
25°	455.4	454.2	455.4	460.2	461.3
27.5°	443.5	444.7	445.9	450.6	451.8
30°	431.6	432.8	434.0	439.9	441.1
32.5°	417.3	419.7	422.1	429.2	429.2
35°	403.1	405.5	409.0	417.3	418.5
37.5°	387.6	390.0	394.8	404.3	406.6
40°	371.0	374.5	381.7	391.2	394.8
42.5°	354.3	359.1	367.4	378.1	382.9
45°	336.5	341.3	352.0	365.0	371.0
47.5°	317.5	323.4	336.5	353.1	357.9
50°	297.3	305.6	321.0	338.9	344.8
52.5°	277.0	286.6	305.6	324.6	330.5
55°	255.6	266.3	290.1	309.1	316.3
57.5°	234.2	246.1	273.5	293.7	300.8
60°	211.6	225.9	255.6	275.9	281.8
62.5°	189.1	205.7	237.8	258.0	262.8
65°	165.3	185.5	218.8	236.6	241.4
67.5°	142.7	166.5	199.8	212.8	212.8
70°	118.9	145.1	178.4	181.9	174.8
72.5°	95.1	124.8	154.6	141.5	135.5
75°	72.5	105.8	121.3	109.4	105.8
77.5°	54.7	85.6	85.6	78.5	76.1
80°	38.0	65.4	57.1	49.9	46.4
82.5°	25.0	36.9	29.7	23.8	20.2
85°	13.1	14.3	8.3	7.1	5.9
87.5°	4.8	2.4	1.2	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)