

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: P307299

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CA08-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: P307299  
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-CA08-W2A-U-4500K  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.08" 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: 1528.0 lumens  
Efficiency: N/A  
Efficacy: 76.4 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

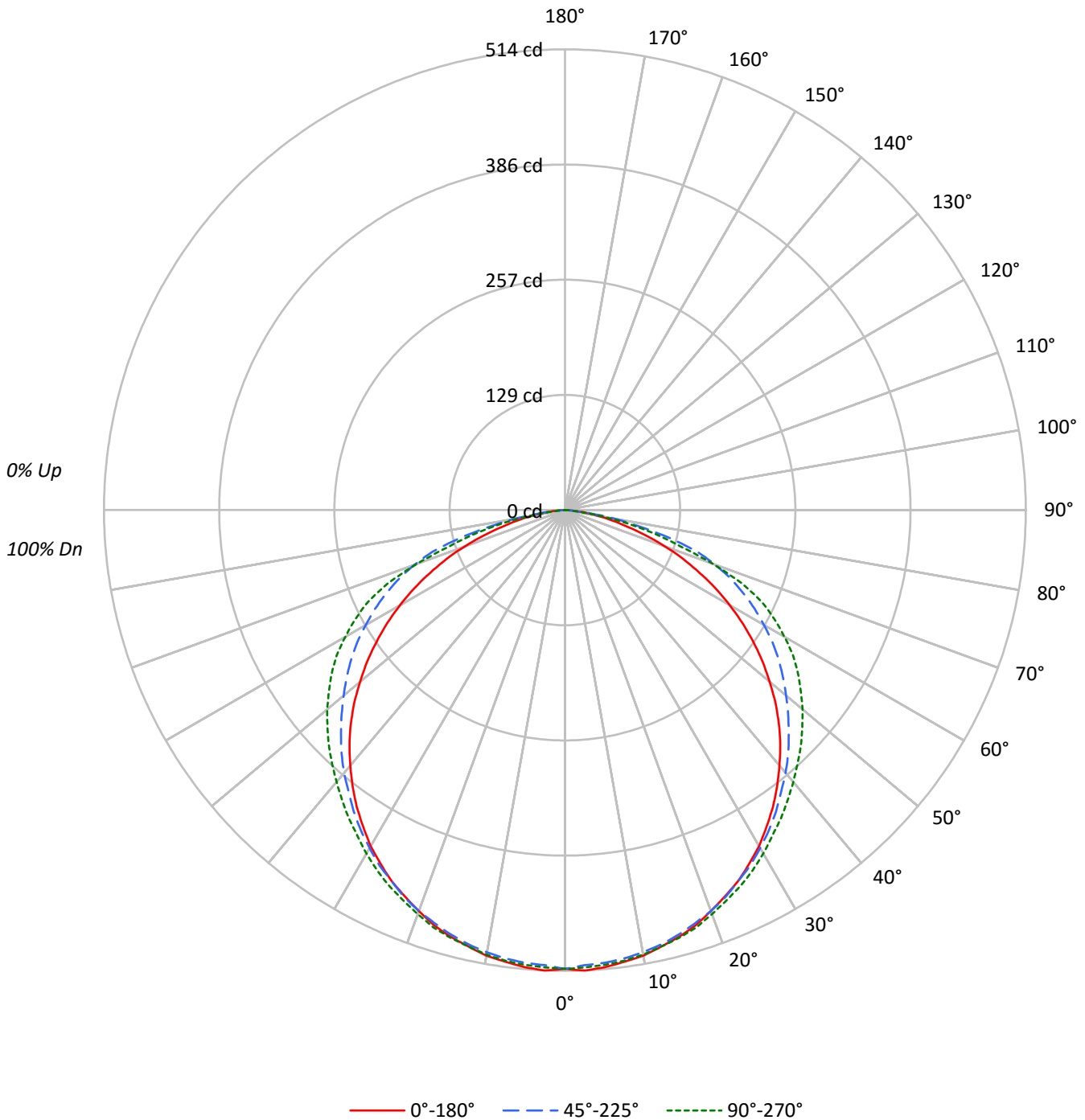
Input Watts (W): 20  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84				84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49				49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42				42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37				37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32				32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29				29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26				26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23				23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1377	1377	1377
5°	1383	1370	1376
10°	1379	1369	1376
15°	1373	1366	1376
20°	1363	1363	1373
25°	1357	1357	1374
30°	1345	1353	1375
35°	1328	1348	1379
40°	1307	1345	1391
45°	1285	1344	1416
50°	1248	1348	1448
55°	1203	1366	1489
60°	1143	1380	1521
65°	1056	1398	1542
70°	939	1408	1380
75°	757	1265	1104
80°	592	888	721
85°	404	259	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.4	3.2
10°-20°	139.0	9.1
20°-30°	211.6	13.8
30°-40°	257.7	16.9
40°-50°	273.5	17.9
50°-60°	258.1	16.9
60°-70°	208.4	13.6
70°-80°	113.0	7.4
80°-90°	18.3	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°	399.0	26.1
0°-40°	656.8	43.0
0°-60°	1188.3	77.8
0°-90°	1528.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1528.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	512	511	507	511	509	49
15°	493	492	490	494	494	139
25°	457	456	457	462	463	210
35°	404	407	410	419	420	253
45°	338	342	353	366	372	260
55°	256	267	291	310	317	229
65°	166	186	220	237	242	164
75°	73	106	122	110	106	80
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°	511.8	511.8	511.8	511.8	511.8
2.5°	514.2	511.8	508.2	511.8	510.6
5°	511.8	510.6	507.0	510.6	509.4
7.5°	508.2	508.2	504.6	507.0	507.0
10°	504.6	503.4	501.0	504.6	503.4
12.5°	498.6	497.5	496.3	499.8	498.6
15°	492.7	491.5	490.3	493.9	493.9
17.5°	485.5	484.3	483.1	487.9	487.9
20°	476.0	476.0	476.0	480.8	479.6
22.5°	466.4	466.4	467.6	472.4	471.2
25°	456.9	455.7	456.9	461.7	462.9
27.5°	445.0	446.2	447.3	452.1	453.3
30°	433.0	434.2	435.4	441.4	442.6
32.5°	418.7	421.1	423.5	430.6	430.6
35°	404.4	406.8	410.4	418.7	419.9
37.5°	388.9	391.3	396.1	405.6	408.0
40°	372.2	375.8	382.9	392.5	396.1
42.5°	355.5	360.3	368.6	379.4	384.1
45°	337.6	342.4	353.1	366.2	372.2
47.5°	318.5	324.5	337.6	354.3	359.1
50°	298.2	306.6	322.1	340.0	345.9
52.5°	278.0	287.5	306.6	325.7	331.6
55°	256.5	267.2	291.1	310.2	317.3
57.5°	235.0	246.9	274.4	294.7	301.8
60°	212.3	226.7	256.5	276.8	282.7
62.5°	189.7	206.4	238.6	258.9	263.6
65°	165.8	186.1	219.5	237.4	242.2
67.5°	143.2	167.0	200.4	213.5	213.5
70°	119.3	145.5	178.9	182.5	175.4
72.5°	95.4	125.3	155.1	142.0	136.0
75°	72.8	106.2	121.7	109.7	106.2
77.5°	54.9	85.9	85.9	78.7	76.3
80°	38.2	65.6	57.3	50.1	46.5
82.5°	25.1	37.0	29.8	23.9	20.3
85°	13.1	14.3	8.4	7.2	6.0
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)