

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: P308437

Luminaire Tested: **22FCZ2-29HE-UNV-L82765-RDP-CA125-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: P308437  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22FCZ2-29HE-UNV-L82765-RDP-CA125-W2A-U-6500K  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET  
Light Source: (168) 3000K 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**

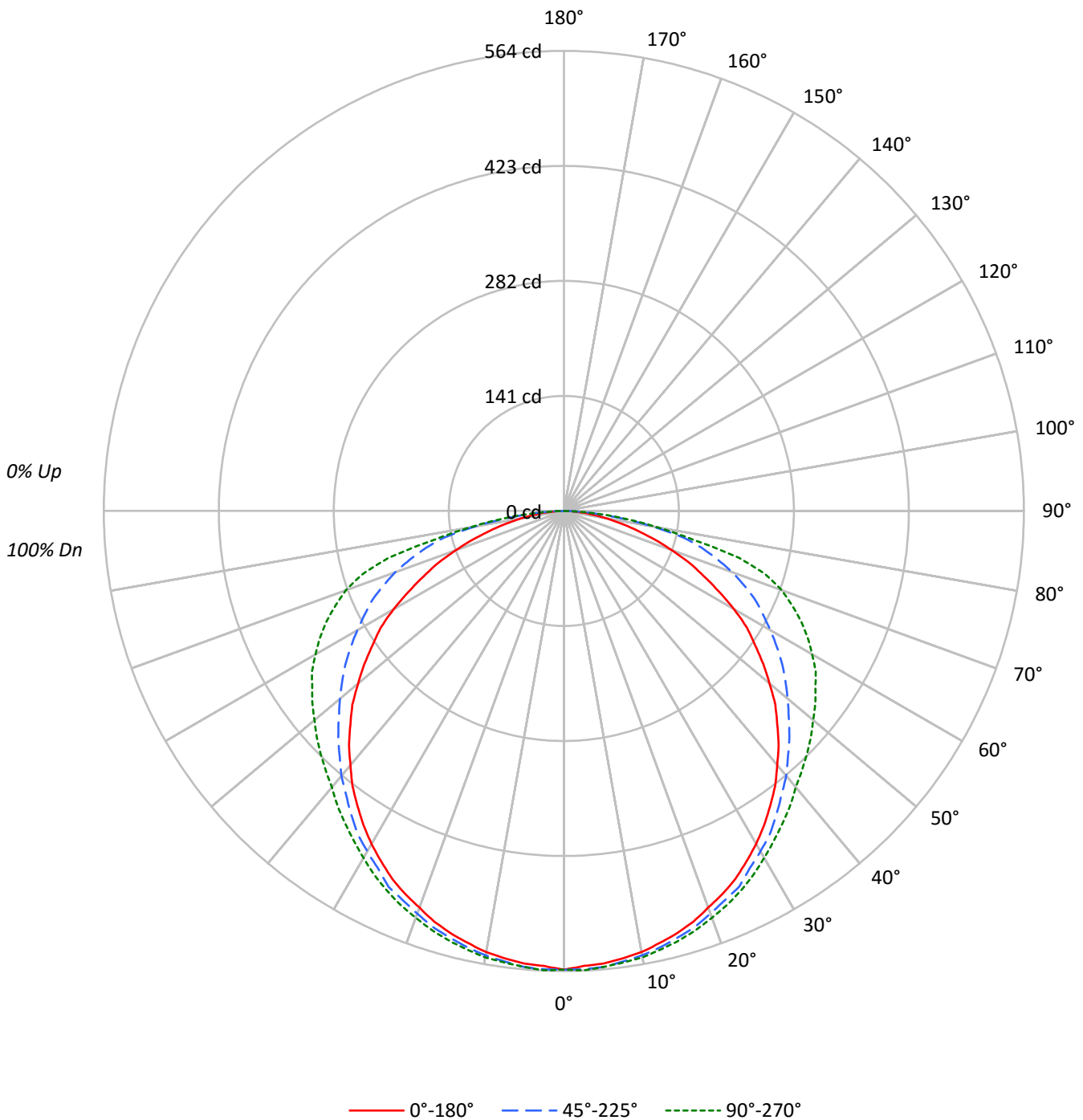
Lumens per Lamp: N/A  
Luminaire Lumens: 1790.0 lumens  
Efficiency: N/A  
Efficacy: 76.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1513	1513	1513
5°	1505	1515	1515
10°	1500	1511	1518
15°	1493	1508	1519
20°	1482	1505	1520
25°	1478	1509	1525
30°	1465	1497	1526
35°	1449	1492	1536
40°	1429	1489	1554
45°	1408	1488	1604
50°	1378	1500	1670
55°	1340	1532	1767
60°	1297	1573	1892
65°	1207	1652	2046
70°	1109	1730	2238
75°	972	1821	2313
80°	837	1734	1816
85°	732	1260	1383



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.2	3.0
10°-20°	152.7	8.5
20°-30°	233.0	13.0
30°-40°	284.5	15.9
40°-50°	304.2	17.0
50°-60°	293.6	16.4
60°-70°	252.7	14.1
70°-80°	171.0	9.6
80°-90°	45.1	2.5
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°	438.9	24.5
0°-40°	723.4	40.4
0°-60°	1321.2	73.8
0°-90°	1790.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1790.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	557	558	561	561	561	53
15°	536	537	541	544	545	151
25°	498	500	508	511	514	229
35°	441	445	454	464	468	276
45°	370	377	391	411	421	286
55°	286	295	327	360	377	256
65°	190	208	259	300	321	189
75°	94	124	175	211	222	100
85°	24	33	41	42	45	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	562.3	562.3	562.3	562.3	562.3
2.5°	558.3	559.6	562.3	562.3	563.6
5°	557.0	558.3	561.0	561.0	561.0
7.5°	553.1	554.4	557.0	558.3	558.3
10°	549.1	550.4	553.1	554.4	555.7
12.5°	542.5	543.8	547.8	550.4	550.4
15°	535.9	537.3	541.2	543.8	545.2
17.5°	528.0	530.7	534.6	537.3	538.6
20°	517.5	520.1	525.4	529.4	530.7
22.5°	508.3	510.9	516.2	520.1	522.8
25°	497.7	500.4	508.3	510.9	513.5
27.5°	484.6	487.2	493.8	499.1	503.0
30°	471.4	474.0	481.9	488.5	491.2
32.5°	456.9	460.9	470.1	475.4	479.3
35°	441.1	445.1	454.3	463.5	467.5
37.5°	425.3	429.3	438.5	450.3	455.6
40°	406.9	412.2	424.0	439.8	442.4
42.5°	389.8	396.4	406.9	425.3	431.9
45°	370.0	376.6	391.1	410.8	421.4
47.5°	351.6	358.2	374.0	397.7	410.8
50°	329.2	338.4	358.2	385.8	399.0
52.5°	308.1	316.0	342.4	372.7	388.5
55°	285.7	295.0	326.6	359.5	376.6
57.5°	266.0	273.9	309.4	346.3	366.1
60°	241.0	251.5	292.3	331.8	351.6
62.5°	214.6	230.4	275.2	316.0	337.1
65°	189.6	208.1	259.4	300.2	321.3
67.5°	167.2	187.0	239.7	283.1	302.9
70°	140.9	165.9	219.9	262.0	284.4
72.5°	117.2	144.8	197.5	239.7	259.4
75°	93.5	123.8	175.1	210.7	222.5
77.5°	72.4	101.4	150.1	160.6	162.0
80°	54.0	80.3	111.9	113.2	117.2
82.5°	36.9	56.6	72.4	79.0	80.3
85°	23.7	32.9	40.8	42.1	44.8
87.5°	10.5	11.9	14.5	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)