

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: P732503

Luminaire Tested: **14FCZ2-20-S-B2750-W2D-CP250-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732503  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P275670)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-20-S-B2750-W2D-CP250-3500K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND SMOOTH LENS, WITH, CP250 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

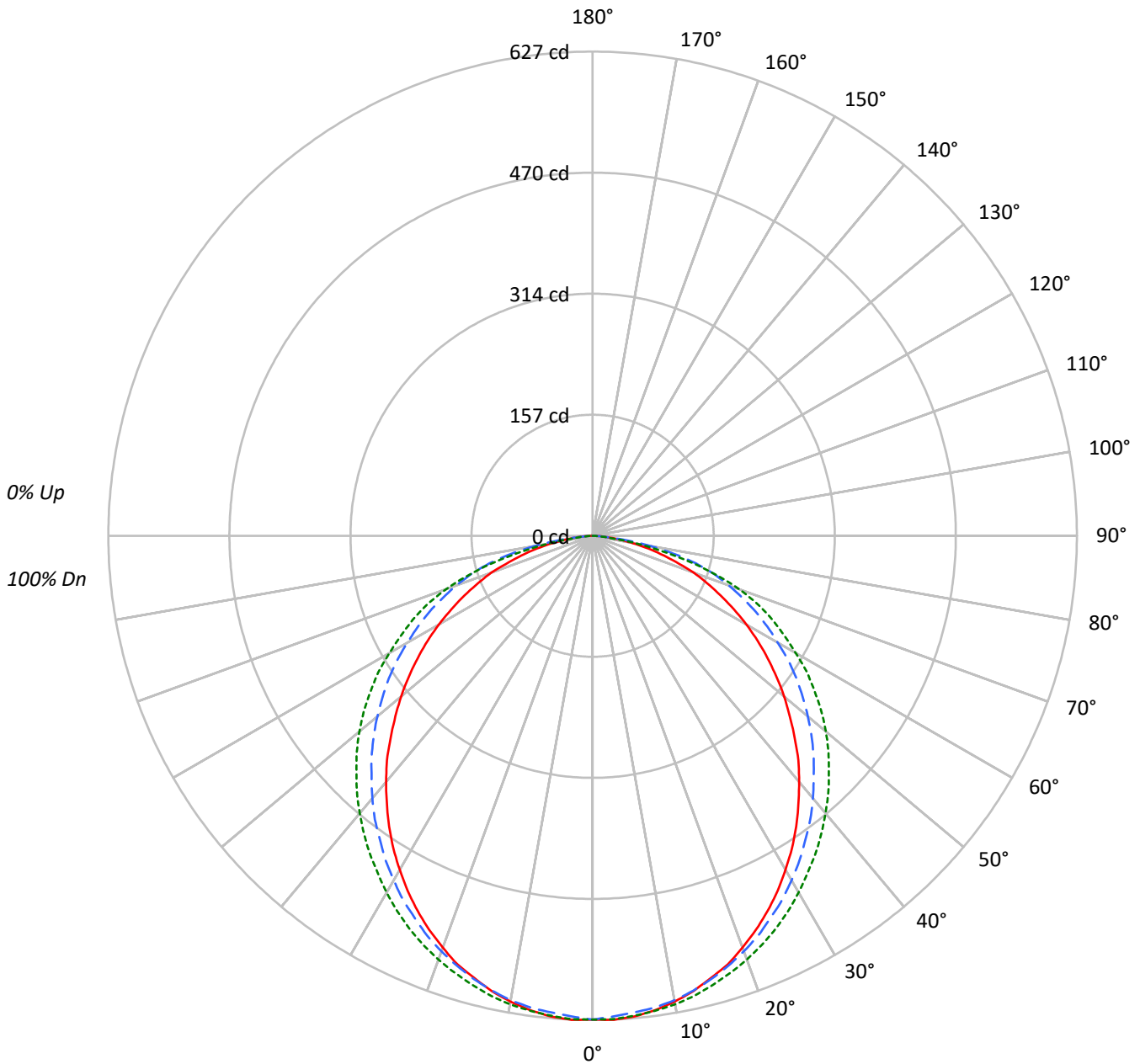
Lumens per Lamp: N/A  
Luminaire Lumens: 1755.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
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									
RC	80									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																			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84																			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70																			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58																			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50																			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43																			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38																			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33																			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30																			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27																			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24																			

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

	0°	45°	90°
0°	1768	1768	1768
5°	1770	1756	1768
10°	1756	1751	1766
15°	1732	1737	1759
20°	1704	1720	1754
25°	1669	1699	1748
30°	1628	1679	1739
35°	1583	1655	1733
40°	1532	1635	1728
45°	1476	1615	1726
50°	1421	1597	1731
55°	1362	1585	1726
60°	1297	1562	1714
65°	1221	1558	1715
70°	1149	1544	1665
75°	997	1509	1423
80°	806	1216	948
85°	534	421	282



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.2	3.4
10°-20°	168.3	9.6
20°-30°	252.5	14.4
30°-40°	301.2	17.2
40°-50°	311.4	17.7
50°-60°	284.3	16.2
60°-70°	223.7	12.7
70°-80°	130.2	7.4
80°-90°	24.0	1.4
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°	480.0	27.4
0°-40°	781.3	44.5
0°-60°	1377.0	78.5
0°-90°	1755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1755.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	625	623	620	625	624	59
15°	593	594	594	602	602	167
25°	536	539	546	559	561	247
35°	459	466	480	499	503	287
45°	370	382	405	427	432	286
55°	277	292	322	346	351	247
65°	183	202	233	252	257	181
75°	91	113	138	136	130	97
85°	16	24	13	10	9	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	626.5	626.5	626.5	626.5	626.5
2.5°	627.4	625.7	623.0	627.4	626.5
5°	624.8	623.0	619.6	624.8	623.8
7.5°	619.6	617.8	616.1	621.3	620.4
10°	612.5	611.7	610.8	616.9	616.1
12.5°	603.9	603.9	603.1	610.0	610.0
15°	592.6	593.5	594.3	602.1	602.1
17.5°	582.2	581.3	583.9	592.6	593.5
20°	567.3	569.0	572.6	583.0	583.9
22.5°	552.5	554.3	560.4	570.9	573.4
25°	536.0	538.7	545.6	558.6	561.3
27.5°	518.6	522.1	531.6	545.6	548.1
30°	499.4	504.6	515.1	530.8	533.4
32.5°	480.3	485.6	498.6	514.2	517.8
35°	459.4	465.5	480.3	498.6	502.9
37.5°	437.7	445.5	463.0	481.2	486.4
40°	415.9	424.7	443.8	463.0	469.0
42.5°	394.2	402.9	423.7	445.5	451.7
45°	369.8	382.0	404.6	427.2	432.5
47.5°	346.3	359.4	384.6	407.2	414.2
50°	323.7	336.7	363.7	387.3	394.2
52.5°	300.2	314.1	342.8	367.2	373.3
55°	276.7	291.5	322.0	345.5	350.7
57.5°	253.2	268.9	300.2	322.9	328.9
60°	229.8	246.3	276.7	299.3	303.7
62.5°	206.2	223.6	254.9	275.0	279.3
65°	182.8	201.8	233.2	251.5	256.7
67.5°	160.1	179.2	209.7	227.1	231.5
70°	139.2	156.6	187.1	200.1	201.8
72.5°	113.1	134.9	164.4	171.4	167.1
75°	91.4	113.1	138.4	135.7	130.5
77.5°	69.6	91.4	107.9	99.2	92.2
80°	49.6	71.3	74.8	61.7	58.3
82.5°	32.2	49.6	41.8	32.2	26.1
85°	16.5	23.5	13.0	10.4	8.7
87.5°	5.2	3.5	1.7	1.7	0.9
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)