

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: METALUX

Report Number: P275674

Luminaire Tested: **14CZ2-20-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275674  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-S-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1903.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

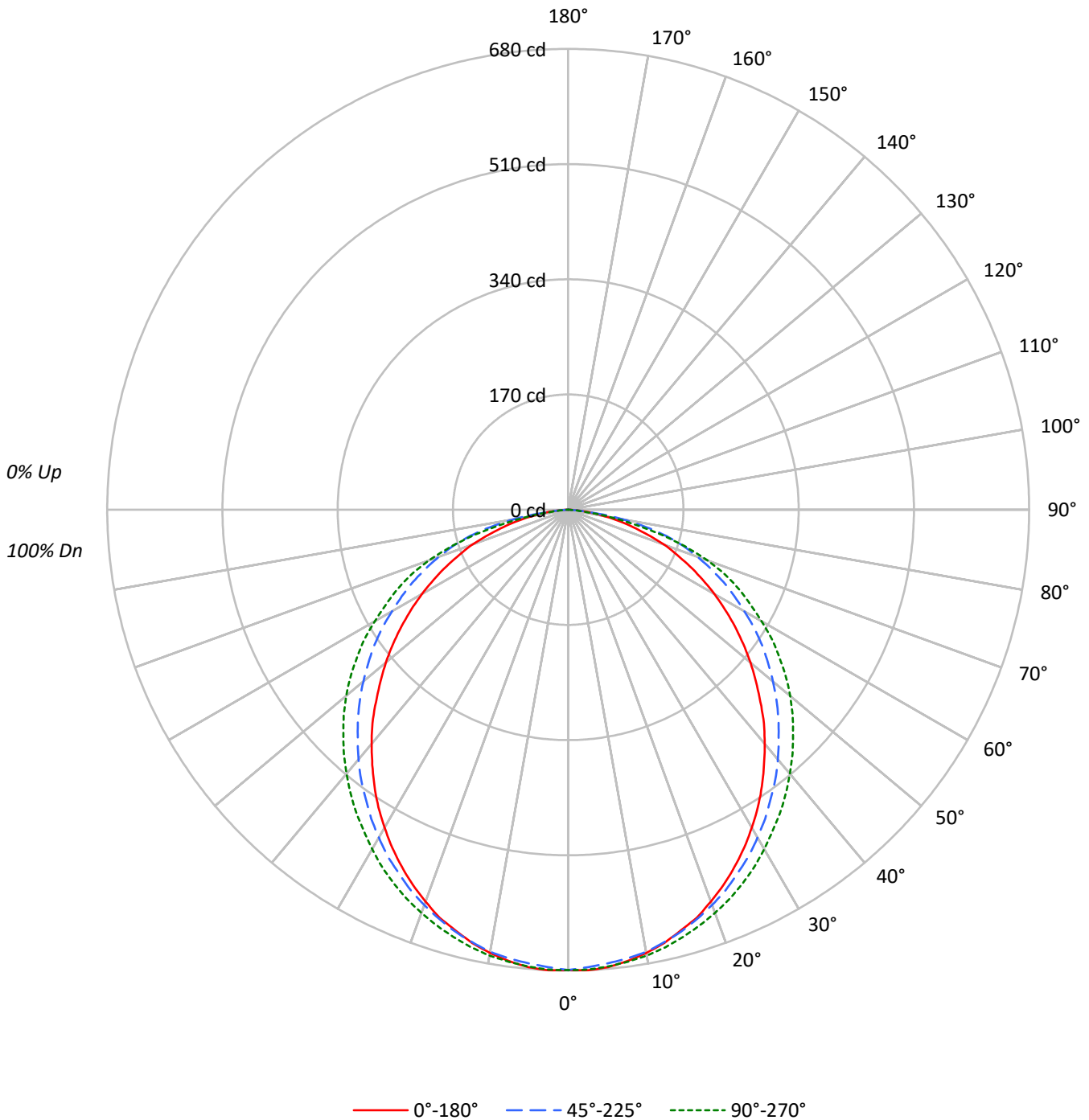
Input Watts (W): 15.624  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1828	1828	1828
5°	1830	1815	1827
10°	1815	1810	1825
15°	1790	1795	1819
20°	1762	1778	1813
25°	1726	1757	1807
30°	1683	1736	1797
35°	1637	1711	1792
40°	1584	1690	1787
45°	1526	1670	1784
50°	1469	1651	1789
55°	1407	1638	1784
60°	1341	1615	1772
65°	1261	1610	1772
70°	1188	1596	1722
75°	1030	1560	1471
80°	834	1257	979
85°	553	438	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.2	3.4
10°-20°	182.5	9.6
20°-30°	273.8	14.4
30°-40°	326.6	17.2
40°-50°	337.7	17.7
50°-60°	308.3	16.2
60°-70°	242.6	12.7
70°-80°	141.2	7.4
80°-90°	26.0	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°	520.5	27.4
0°-40°	847.1	44.5
0°-60°	1493.1	78.5
0°-90°	1903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	679	679	679	679	679	
5°	678	676	672	678	676	64
15°	642	644	644	653	653	181
25°	581	584	592	606	609	268
35°	498	505	521	541	545	311
45°	401	414	439	463	469	310
55°	300	316	349	375	380	268
65°	198	219	253	273	278	197
75°	99	123	150	147	142	105
85°	18	26	14	11	9	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	679.3	679.3	679.3	679.3	679.3
2.5°	680.3	678.4	675.6	680.3	679.3
5°	677.5	675.6	671.8	677.5	676.5
7.5°	671.8	669.9	668.0	673.7	672.7
10°	664.2	663.3	662.4	669.0	668.0
12.5°	654.8	654.8	653.9	661.4	661.4
15°	642.5	643.5	644.4	652.9	652.9
17.5°	631.2	630.3	633.1	642.5	643.5
20°	615.2	617.1	620.8	632.2	633.1
22.5°	599.1	601.0	607.6	619.0	621.8
25°	581.2	584.0	591.6	605.7	608.6
27.5°	562.3	566.1	576.5	591.6	594.4
30°	541.6	547.2	558.6	575.6	578.4
32.5°	520.8	526.5	540.6	557.6	561.4
35°	498.2	504.8	520.8	540.6	545.4
37.5°	474.6	483.1	502.0	521.8	527.4
40°	451.0	460.4	481.2	502.0	508.6
42.5°	427.4	436.9	459.5	483.1	489.7
45°	401.0	414.2	438.7	463.3	468.9
47.5°	375.5	389.7	417.0	441.6	449.1
50°	351.0	365.1	394.4	419.9	427.4
52.5°	325.5	340.6	371.7	398.2	404.8
55°	300.0	316.1	349.1	374.6	380.2
57.5°	274.6	291.5	325.5	350.0	356.7
60°	249.1	267.0	300.0	324.6	329.3
62.5°	223.6	242.5	276.5	298.2	302.9
65°	198.1	218.9	252.9	272.7	278.3
67.5°	173.6	194.4	227.4	246.3	251.0
70°	151.0	169.8	202.9	217.0	218.9
72.5°	122.7	146.2	178.3	185.9	181.2
75°	99.1	122.7	150.0	147.2	141.5
77.5°	75.5	99.1	117.0	107.6	100.0
80°	53.8	77.4	81.1	67.0	63.2
82.5°	34.9	53.8	45.3	34.9	28.3
85°	17.9	25.5	14.2	11.3	9.4
87.5°	5.7	3.8	1.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)