

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: P276527

Luminaire Tested: **24CZ2-65HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276527  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-65HE-S-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6345.7 lumens  
Efficiency: N/A  
Efficacy: 129.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

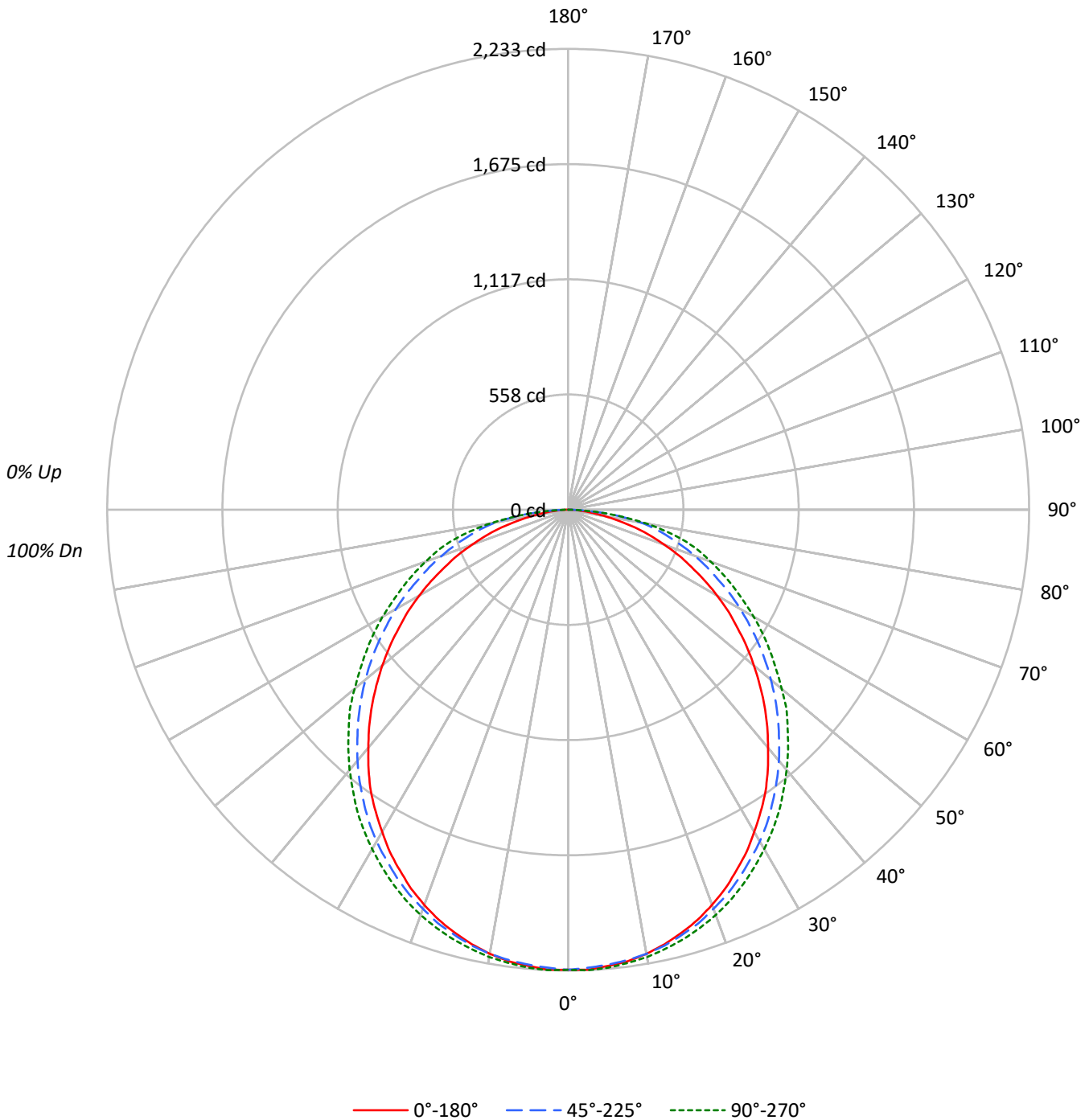
Input Watts (W): 49.104  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2999	2999	2999
5°	2997	2989	3008
10°	2985	2985	3007
15°	2956	2970	3001
20°	2918	2947	2993
25°	2864	2918	2974
30°	2800	2884	2950
35°	2738	2837	2927
40°	2645	2790	2892
45°	2558	2735	2861
50°	2460	2683	2827
55°	2350	2634	2799
60°	2240	2593	2793
65°	2098	2548	2811
70°	1943	2561	2886
75°	1739	2609	3049
80°	1406	2765	2983
85°	1057	2427	2365



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.0	3.3
10°-20°	603.0	9.5
20°-30°	906.5	14.3
30°-40°	1079.8	17.0
40°-50°	1105.1	17.4
50°-60°	994.9	15.7
60°-70°	781.3	12.3
70°-80°	507.1	8.0
80°-90°	156.8	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°	1720.6	27.1
0°-40°	2800.4	44.1
0°-60°	4900.4	77.2
0°-90°	6345.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6345.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2229	2229	2229	2229	2229	
5°	2219	2223	2213	2225	2227	211
15°	2122	2128	2132	2151	2155	598
25°	1929	1945	1965	1998	2004	889
35°	1667	1687	1727	1770	1782	1040
45°	1344	1377	1437	1492	1504	1037
55°	1002	1046	1123	1181	1193	898
65°	659	710	800	867	883	656
75°	335	399	502	570	586	354
85°	68	127	157	153	153	83
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2229.3	2229.3	2229.3	2229.3	2229.3
2.5°	2231.3	2231.3	2221.2	2231.3	2233.3
5°	2219.2	2223.2	2213.1	2225.2	2227.3
7.5°	2207.1	2207.1	2201.1	2213.1	2215.2
10°	2184.9	2186.9	2184.9	2199.0	2201.1
12.5°	2156.7	2160.7	2162.8	2176.9	2178.9
15°	2122.4	2128.5	2132.5	2150.7	2154.7
17.5°	2084.1	2090.2	2100.3	2120.4	2124.5
20°	2037.8	2045.9	2057.9	2084.1	2090.2
22.5°	1987.4	1995.5	2015.6	2039.8	2049.9
25°	1928.9	1945.1	1965.2	1997.5	2003.5
27.5°	1870.5	1884.6	1910.8	1945.1	1953.1
30°	1802.0	1824.1	1856.4	1890.6	1898.7
32.5°	1735.4	1757.6	1795.9	1832.2	1842.3
35°	1666.9	1687.1	1727.4	1769.7	1781.8
37.5°	1588.3	1614.5	1658.9	1701.2	1713.3
40°	1505.7	1537.9	1588.3	1632.6	1646.8
42.5°	1427.1	1461.3	1511.7	1560.1	1576.2
45°	1344.4	1376.7	1437.1	1491.6	1503.6
47.5°	1259.8	1296.0	1360.5	1415.0	1435.1
50°	1175.1	1213.4	1281.9	1338.4	1350.5
52.5°	1090.4	1130.8	1203.3	1263.8	1269.8
55°	1001.8	1046.1	1122.7	1181.2	1193.2
57.5°	921.1	959.4	1042.1	1102.5	1116.7
60°	832.4	874.8	963.5	1019.9	1038.0
62.5°	747.8	792.1	884.9	941.3	957.4
65°	659.1	709.5	800.2	866.7	882.8
67.5°	582.5	630.9	727.6	792.1	808.3
70°	493.8	548.2	651.0	717.6	733.7
72.5°	417.2	473.7	576.5	641.0	665.2
75°	334.6	399.1	501.9	570.4	586.5
77.5°	254.0	328.5	433.4	485.8	485.8
80°	181.4	260.0	356.8	381.0	385.0
82.5°	118.9	195.5	264.0	262.0	262.0
85°	68.5	127.0	157.2	153.2	153.2
87.5°	26.2	52.4	56.4	56.4	54.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)