

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: P276114

Luminaire Tested: **24CZ2-70HE-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276114  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-70HE-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6120.6 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

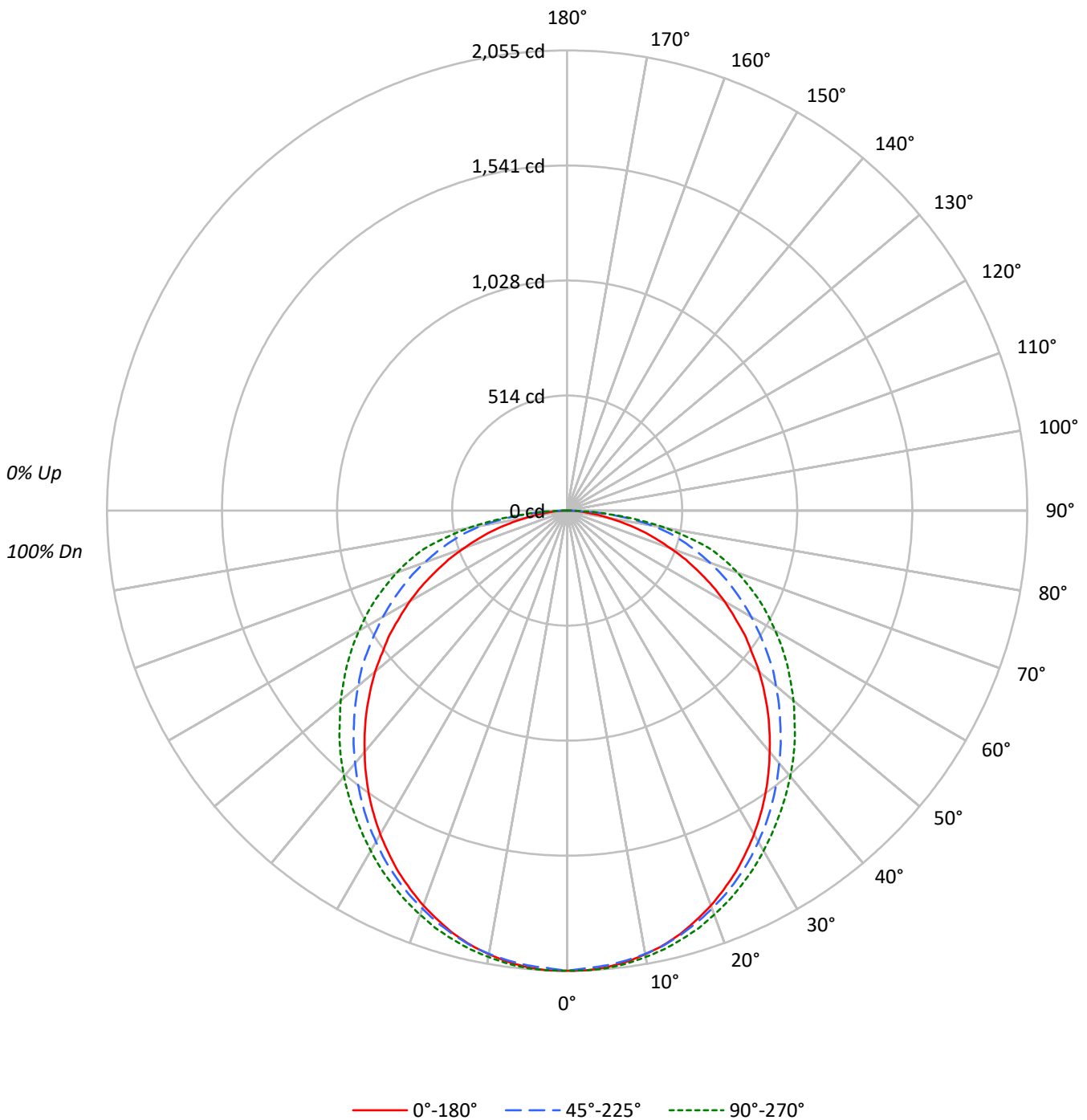
Input Watts (W): 53.661  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	2765	2765	2765
5°	2764	2753	2770
10°	2749	2746	2766
15°	2726	2732	2760
20°	2688	2708	2749
25°	2644	2684	2738
30°	2593	2653	2726
35°	2537	2621	2718
40°	2472	2587	2723
45°	2410	2562	2736
50°	2343	2548	2762
55°	2271	2544	2813
60°	2182	2556	2886
65°	2068	2595	3011
70°	1921	2660	3182
75°	1752	2793	3451
80°	1440	3007	3450
85°	1104	2776	2964



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.3	3.2
10°-20°	554.9	9.1
20°-30°	835.0	13.6
30°-40°	1000.6	16.3
40°-50°	1042.8	17.0
50°-60°	970.2	15.9
60°-70°	799.0	13.1
70°-80°	544.2	8.9
80°-90°	179.7	2.9
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°	1584.2	25.9
0°-40°	2584.8	42.2
0°-60°	4597.7	75.1
0°-90°	6120.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6120.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2055	2055	2055	2055	2055	
5°	2047	2047	2039	2049	2051	194
15°	1957	1959	1961	1979	1981	551
25°	1781	1789	1808	1838	1845	820
35°	1544	1563	1595	1638	1655	965
45°	1266	1293	1346	1414	1438	977
55°	968	1001	1085	1170	1199	863
65°	650	705	815	911	946	645
75°	337	413	537	633	664	355
85°	72	139	180	192	192	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2055.0	2055.0	2055.0	2055.0	2055.0
2.5°	2055.0	2055.0	2044.8	2055.0	2055.0
5°	2046.8	2046.8	2038.6	2048.8	2050.9
7.5°	2032.5	2034.5	2026.4	2038.6	2040.7
10°	2012.1	2014.1	2010.0	2022.3	2024.3
12.5°	1987.6	1989.6	1989.6	2003.9	2006.0
15°	1956.9	1959.0	1961.0	1979.4	1981.4
17.5°	1918.1	1924.2	1928.3	1950.8	1954.9
20°	1877.3	1883.4	1891.6	1916.1	1920.2
22.5°	1830.3	1838.4	1852.7	1879.3	1885.4
25°	1781.3	1789.4	1807.8	1838.4	1844.6
27.5°	1726.1	1738.4	1760.8	1793.5	1801.7
30°	1668.9	1681.2	1707.7	1742.4	1754.7
32.5°	1607.6	1624.0	1654.6	1693.4	1705.7
35°	1544.3	1562.7	1595.4	1638.3	1654.6
37.5°	1476.9	1497.3	1536.1	1583.1	1603.5
40°	1407.4	1431.9	1472.8	1528.0	1550.4
42.5°	1338.0	1360.5	1411.5	1470.8	1495.3
45°	1266.5	1293.0	1346.2	1413.6	1438.1
47.5°	1192.9	1219.5	1282.8	1354.3	1376.8
50°	1119.4	1146.0	1217.5	1293.0	1319.6
52.5°	1039.7	1074.5	1156.2	1231.8	1258.3
55°	968.2	1000.9	1084.7	1170.5	1199.1
57.5°	886.5	925.4	1017.3	1107.2	1137.8
60°	811.0	851.8	949.9	1041.8	1072.4
62.5°	733.3	778.3	882.5	976.4	1011.1
65°	649.6	704.7	815.0	911.1	945.8
67.5°	574.0	631.2	747.6	845.7	876.3
70°	488.2	557.7	676.1	774.2	808.9
72.5°	414.7	484.1	608.7	704.7	739.5
75°	337.0	412.6	537.2	633.2	663.9
77.5°	259.4	343.2	467.8	541.3	551.5
80°	185.9	273.7	388.1	431.0	445.3
82.5°	130.7	210.4	286.0	314.6	322.7
85°	71.5	138.9	179.8	192.0	192.0
87.5°	30.6	59.2	71.5	73.5	75.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)