

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: P275932

Luminaire Tested: **24CZ2-70HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275932  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6303.0 lumens  
Efficiency: N/A  
Efficacy: 117.7 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

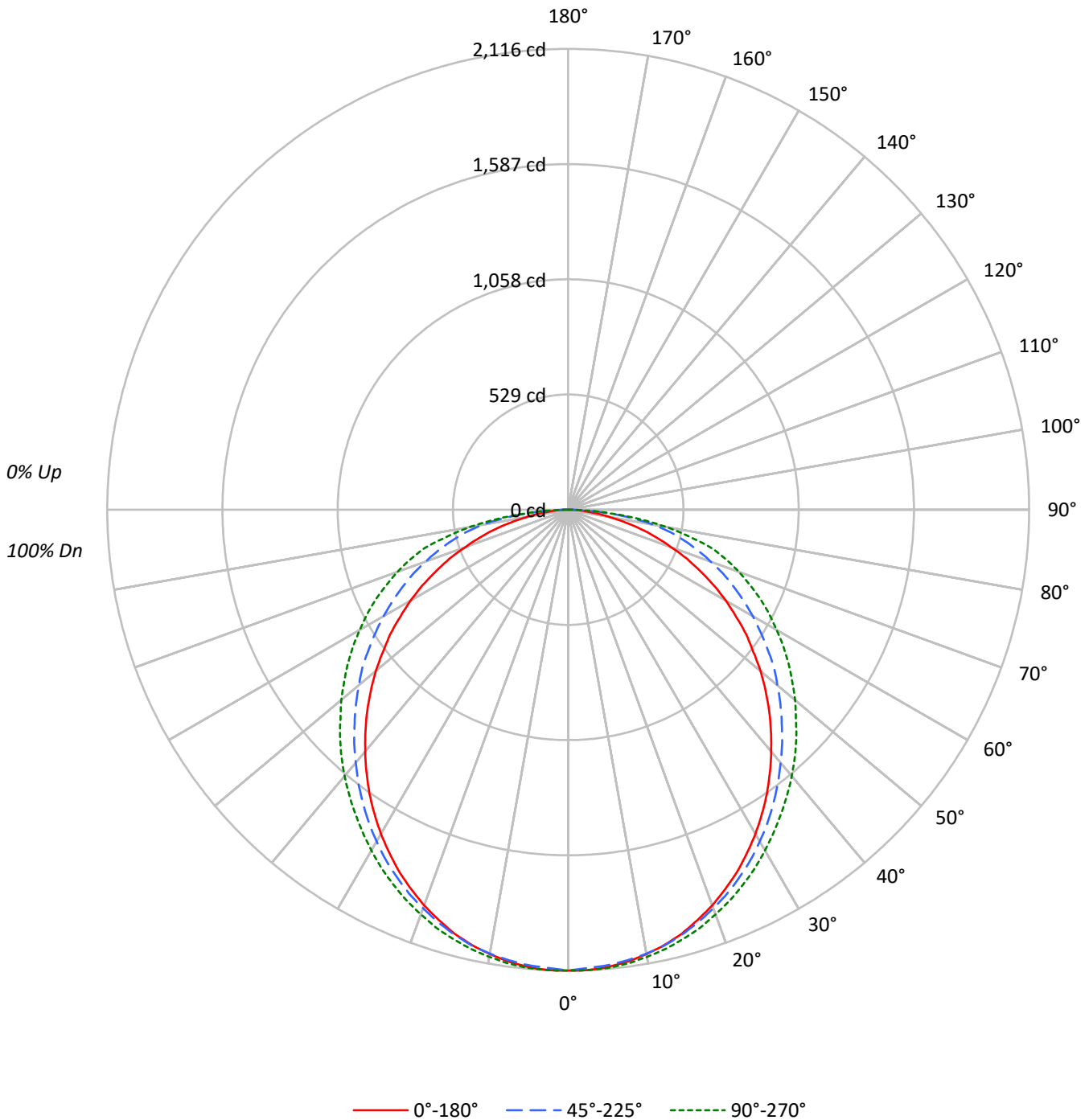
Input Watts (W): 53.568  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2847	2847	2847
5°	2847	2836	2853
10°	2831	2828	2848
15°	2807	2813	2842
20°	2768	2789	2831
25°	2723	2764	2820
30°	2670	2732	2807
35°	2612	2699	2799
40°	2546	2664	2804
45°	2482	2638	2818
50°	2413	2624	2844
55°	2339	2620	2897
60°	2247	2632	2972
65°	2130	2672	3101
70°	1978	2739	3277
75°	1804	2876	3554
80°	1483	3097	3553
85°	1136	2858	3052



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.1	3.2
10°-20°	571.4	9.1
20°-30°	859.9	13.6
30°-40°	1030.4	16.3
40°-50°	1073.8	17.0
50°-60°	999.1	15.9
60°-70°	822.9	13.1
70°-80°	560.4	8.9
80°-90°	185.0	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°	1631.4	25.9
0°-40°	2661.8	42.2
0°-60°	4734.7	75.1
0°-90°	6303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6303.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2116	2116	2116	2116	2116	
5°	2108	2108	2099	2110	2112	200
15°	2015	2017	2019	2038	2040	568
25°	1834	1843	1862	1893	1900	844
35°	1590	1609	1643	1687	1704	994
45°	1304	1332	1386	1456	1481	1006
55°	997	1031	1117	1205	1235	889
65°	669	726	839	938	974	664
75°	347	425	553	652	684	366
85°	74	143	185	198	198	91
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2116.2	2116.2	2116.2	2116.2	2116.2
2.5°	2116.2	2116.2	2105.7	2116.2	2116.2
5°	2107.8	2107.8	2099.4	2109.9	2112.0
7.5°	2093.1	2095.2	2086.8	2099.4	2101.5
10°	2072.0	2074.1	2069.9	2082.6	2084.7
12.5°	2046.8	2048.9	2048.9	2063.6	2065.7
15°	2015.2	2017.3	2019.4	2038.4	2040.5
17.5°	1975.3	1981.6	1985.8	2008.9	2013.1
20°	1933.2	1939.5	1947.9	1973.2	1977.4
22.5°	1884.8	1893.2	1908.0	1935.3	1941.6
25°	1834.3	1842.7	1861.7	1893.2	1899.5
27.5°	1777.5	1790.2	1813.3	1847.0	1855.4
30°	1718.6	1731.3	1758.6	1794.4	1807.0
32.5°	1655.5	1672.4	1703.9	1743.9	1756.5
35°	1590.3	1609.2	1642.9	1687.1	1703.9
37.5°	1520.9	1541.9	1581.9	1630.3	1651.3
40°	1449.4	1474.6	1516.7	1573.5	1596.6
42.5°	1377.9	1401.0	1453.6	1514.6	1539.8
45°	1304.2	1331.6	1386.3	1455.7	1480.9
47.5°	1228.5	1255.8	1321.1	1394.7	1417.8
50°	1152.8	1180.1	1253.7	1331.6	1358.9
52.5°	1070.7	1106.5	1190.6	1268.5	1295.8
55°	997.1	1030.8	1117.0	1205.4	1234.8
57.5°	913.0	952.9	1047.6	1140.1	1171.7
60°	835.1	877.2	978.2	1072.8	1104.4
62.5°	755.2	801.5	908.8	1005.5	1041.3
65°	668.9	725.7	839.3	938.2	974.0
67.5°	591.1	650.0	769.9	870.9	902.4
70°	502.8	574.3	696.3	797.3	833.0
72.5°	427.0	498.6	626.9	725.7	761.5
75°	347.1	424.9	553.2	652.1	683.7
77.5°	267.2	353.4	481.7	557.5	568.0
80°	191.4	281.9	399.7	443.9	458.6
82.5°	134.6	216.7	294.5	324.0	332.4
85°	73.6	143.0	185.1	197.7	197.7
87.5°	31.6	61.0	73.6	75.7	77.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)