

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: P275924

Luminaire Tested: **24CZ2-60HE-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275924  
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: 24CZ2-60HE-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5992.0 lumens  
Efficiency: N/A  
Efficacy: 132.3 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

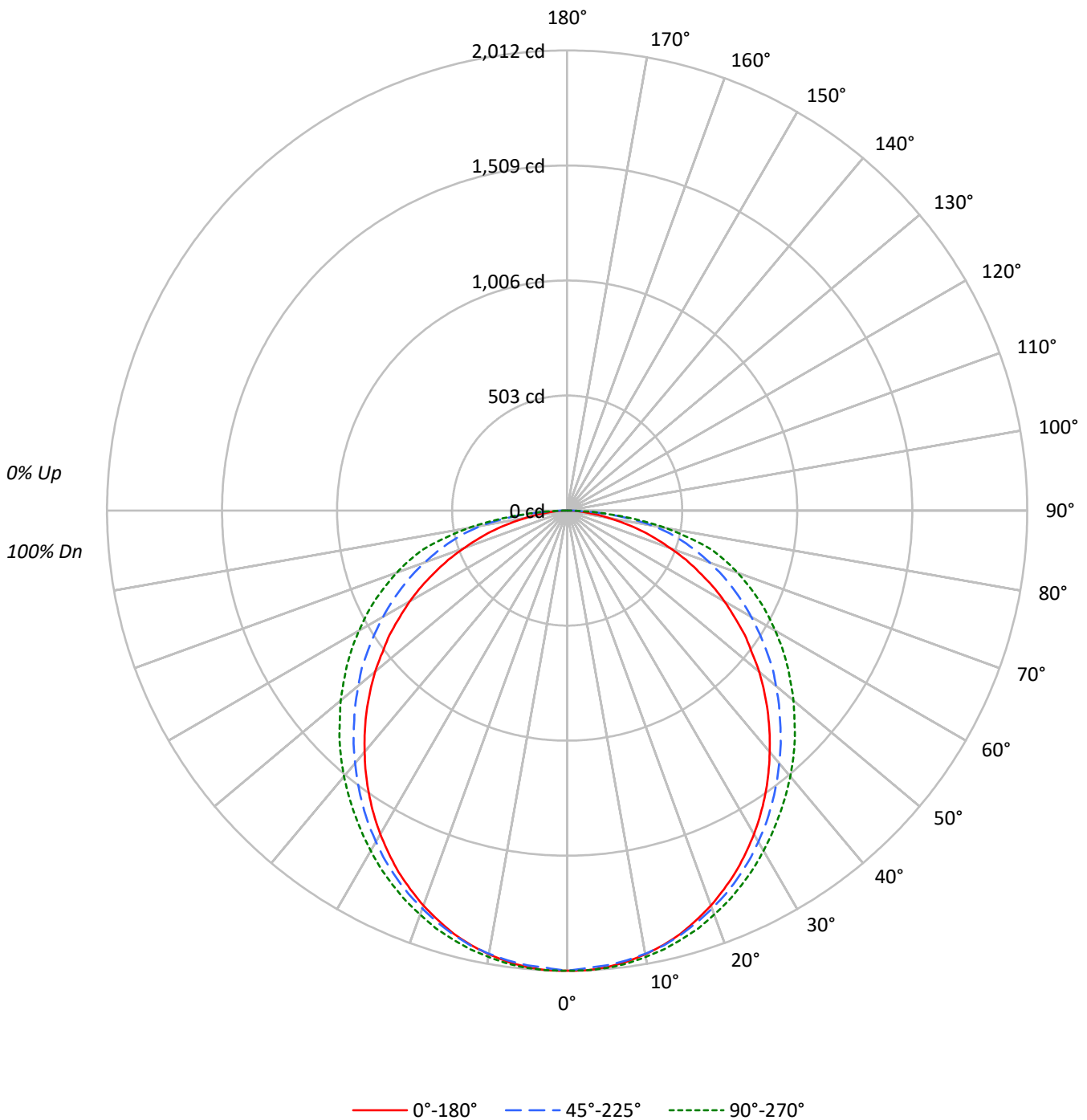
Input Watts (W): 45.291  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

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

	0°	45°	90°
0°	2707	2707	2707
5°	2706	2696	2712
10°	2691	2688	2708
15°	2669	2674	2702
20°	2631	2651	2692
25°	2589	2627	2681
30°	2538	2597	2669
35°	2483	2565	2661
40°	2420	2533	2666
45°	2359	2508	2679
50°	2294	2495	2704
55°	2224	2491	2754
60°	2136	2502	2825
65°	2025	2540	2948
70°	1880	2604	3115
75°	1716	2734	3379
80°	1410	2944	3378
85°	1081	2717	2902



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.3	3.2
10°-20°	543.2	9.1
20°-30°	817.4	13.6
30°-40°	979.6	16.3
40°-50°	1020.9	17.0
50°-60°	949.8	15.9
60°-70°	782.2	13.1
70°-80°	532.8	8.9
80°-90°	175.9	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°	1550.9	25.9
0°-40°	2530.5	42.2
0°-60°	4501.1	75.1
0°-90°	5992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5992.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2012	2012	2012	2012	2012	
5°	2004	2004	1996	2006	2008	190
15°	1916	1918	1920	1938	1940	540
25°	1744	1752	1770	1800	1806	803
35°	1512	1530	1562	1604	1620	945
45°	1240	1266	1318	1384	1408	956
55°	948	980	1062	1146	1174	845
65°	636	690	798	892	926	631
75°	330	404	526	620	650	348
85°	70	136	176	188	188	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2011.8	2011.8	2011.8	2011.8	2011.8
2.5°	2011.8	2011.8	2001.8	2011.8	2011.8
5°	2003.8	2003.8	1995.8	2005.8	2007.8
7.5°	1989.8	1991.8	1983.8	1995.8	1997.8
10°	1969.8	1971.8	1967.8	1979.8	1981.8
12.5°	1945.8	1947.8	1947.8	1961.8	1963.8
15°	1915.8	1917.8	1919.8	1937.8	1939.8
17.5°	1877.8	1883.8	1887.8	1909.8	1913.8
20°	1837.8	1843.8	1851.8	1875.8	1879.8
22.5°	1791.8	1799.8	1813.8	1839.8	1845.8
25°	1743.8	1751.8	1769.8	1799.8	1805.8
27.5°	1689.8	1701.8	1723.8	1755.8	1763.8
30°	1633.8	1645.8	1671.8	1705.8	1717.8
32.5°	1573.8	1589.8	1619.8	1657.8	1669.8
35°	1511.8	1529.8	1561.8	1603.8	1619.8
37.5°	1445.9	1465.8	1503.8	1549.8	1569.8
40°	1377.9	1401.9	1441.9	1495.8	1517.8
42.5°	1309.9	1331.9	1381.9	1439.9	1463.8
45°	1239.9	1265.9	1317.9	1383.9	1407.9
47.5°	1167.9	1193.9	1255.9	1325.9	1347.9
50°	1095.9	1121.9	1191.9	1265.9	1291.9
52.5°	1017.9	1051.9	1131.9	1205.9	1231.9
55°	947.9	979.9	1061.9	1145.9	1173.9
57.5°	867.9	905.9	995.9	1083.9	1113.9
60°	793.9	833.9	929.9	1019.9	1049.9
62.5°	717.9	761.9	863.9	955.9	989.9
65°	635.9	689.9	797.9	891.9	925.9
67.5°	561.9	617.9	731.9	827.9	857.9
70°	478.0	545.9	661.9	757.9	791.9
72.5°	406.0	474.0	595.9	689.9	723.9
75°	330.0	404.0	525.9	619.9	649.9
77.5°	254.0	336.0	458.0	529.9	539.9
80°	182.0	268.0	380.0	422.0	436.0
82.5°	128.0	206.0	280.0	308.0	316.0
85°	70.0	136.0	176.0	188.0	188.0
87.5°	30.0	58.0	70.0	72.0	74.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)