

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: P276342

Luminaire Tested: **24CZ2-60HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276342
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: 24CZ2-60HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5666.0 lumens
Efficiency: N/A
Efficacy: 128.2 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

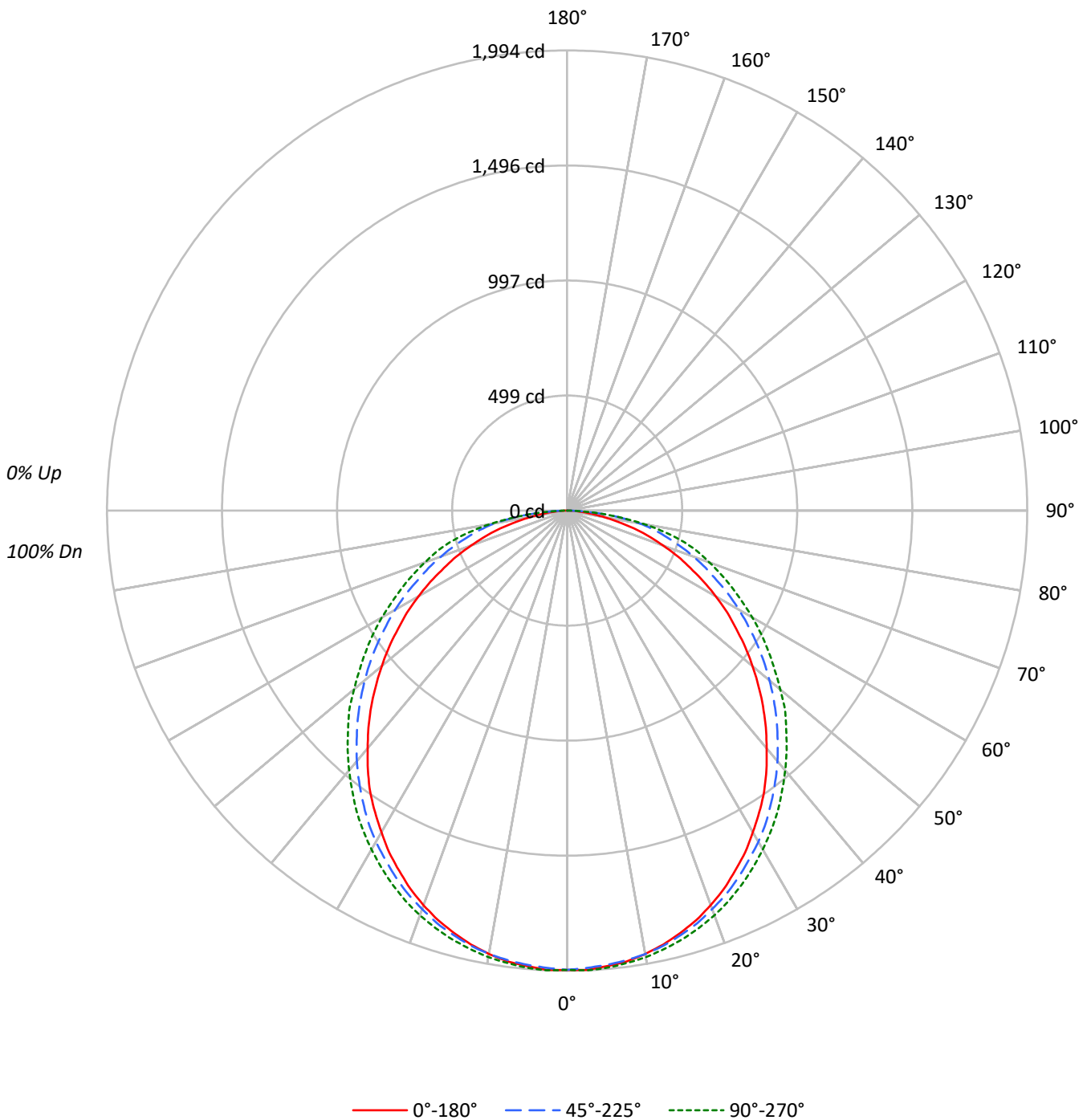
Input Watts (W): 44.179464
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2678	2678	2678
5°	2676	2669	2686
10°	2665	2665	2685
15°	2640	2652	2680
20°	2605	2631	2672
25°	2557	2605	2656
30°	2500	2575	2634
35°	2445	2533	2613
40°	2361	2491	2583
45°	2284	2442	2555
50°	2196	2396	2524
55°	2098	2352	2499
60°	2000	2315	2494
65°	1874	2275	2510
70°	1734	2287	2577
75°	1553	2329	2722
80°	1255	2469	2663
85°	945	2167	2112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.4	3.3
10°-20°	538.4	9.5
20°-30°	809.4	14.3
30°-40°	964.1	17.0
40°-50°	986.7	17.4
50°-60°	888.4	15.7
60°-70°	697.7	12.3
70°-80°	452.8	8.0
80°-90°	140.1	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°	1536.3	27.1
0°-40°	2500.4	44.1
0°-60°	4375.5	77.2
0°-90°	5666.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5666.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1990	1990	1990	1990	1990	
5°	1982	1985	1976	1987	1989	188
15°	1895	1900	1904	1920	1924	534
25°	1722	1737	1755	1784	1789	793
35°	1488	1506	1542	1580	1591	929
45°	1200	1229	1283	1332	1343	925
55°	894	934	1002	1055	1065	802
65°	588	634	714	774	788	586
75°	299	356	448	509	524	316
85°	61	113	140	137	137	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1990.5	1990.5	1990.5	1990.5	1990.5
2.5°	1992.3	1992.3	1983.3	1992.3	1994.1
5°	1981.5	1985.1	1976.1	1986.9	1988.7
7.5°	1970.7	1970.7	1965.3	1976.1	1977.9
10°	1950.9	1952.7	1950.9	1963.5	1965.3
12.5°	1925.7	1929.3	1931.1	1943.7	1945.5
15°	1895.1	1900.5	1904.1	1920.3	1923.9
17.5°	1860.9	1866.3	1875.3	1893.3	1896.9
20°	1819.5	1826.7	1837.5	1860.9	1866.3
22.5°	1774.5	1781.7	1799.7	1821.3	1830.3
25°	1722.3	1736.7	1754.7	1783.5	1788.9
27.5°	1670.2	1682.7	1706.1	1736.7	1743.9
30°	1609.0	1628.8	1657.6	1688.1	1695.3
32.5°	1549.6	1569.4	1603.6	1636.0	1645.0
35°	1488.4	1506.4	1542.4	1580.2	1591.0
37.5°	1418.2	1441.6	1481.2	1519.0	1529.8
40°	1344.4	1373.2	1418.2	1457.8	1470.4
42.5°	1274.2	1304.8	1349.8	1393.0	1407.4
45°	1200.4	1229.2	1283.2	1331.8	1342.6
47.5°	1124.8	1157.2	1214.8	1263.4	1281.4
50°	1049.2	1083.4	1144.6	1195.0	1205.8
52.5°	973.7	1009.6	1074.4	1128.4	1133.8
55°	894.5	934.1	1002.5	1054.6	1065.4
57.5°	822.5	856.7	930.5	984.5	997.1
60°	743.3	781.1	860.3	910.7	926.9
62.5°	667.7	707.3	790.1	840.5	854.9
65°	588.5	633.5	714.5	773.9	788.3
67.5°	520.1	563.3	649.7	707.3	721.7
70°	440.9	489.5	581.3	640.7	655.1
72.5°	372.5	422.9	514.7	572.3	593.9
75°	298.8	356.3	448.1	509.3	523.7
77.5°	226.8	293.4	386.9	433.7	433.7
80°	162.0	232.2	318.6	340.1	343.7
82.5°	106.2	174.6	235.8	234.0	234.0
85°	61.2	113.4	140.4	136.8	136.8
87.5°	23.4	46.8	50.4	50.4	48.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)