

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: P276518

Luminaire Tested: **24CZ2-60HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276518
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-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: 5855.6 lumens
Efficiency: N/A
Efficacy: 131.7 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

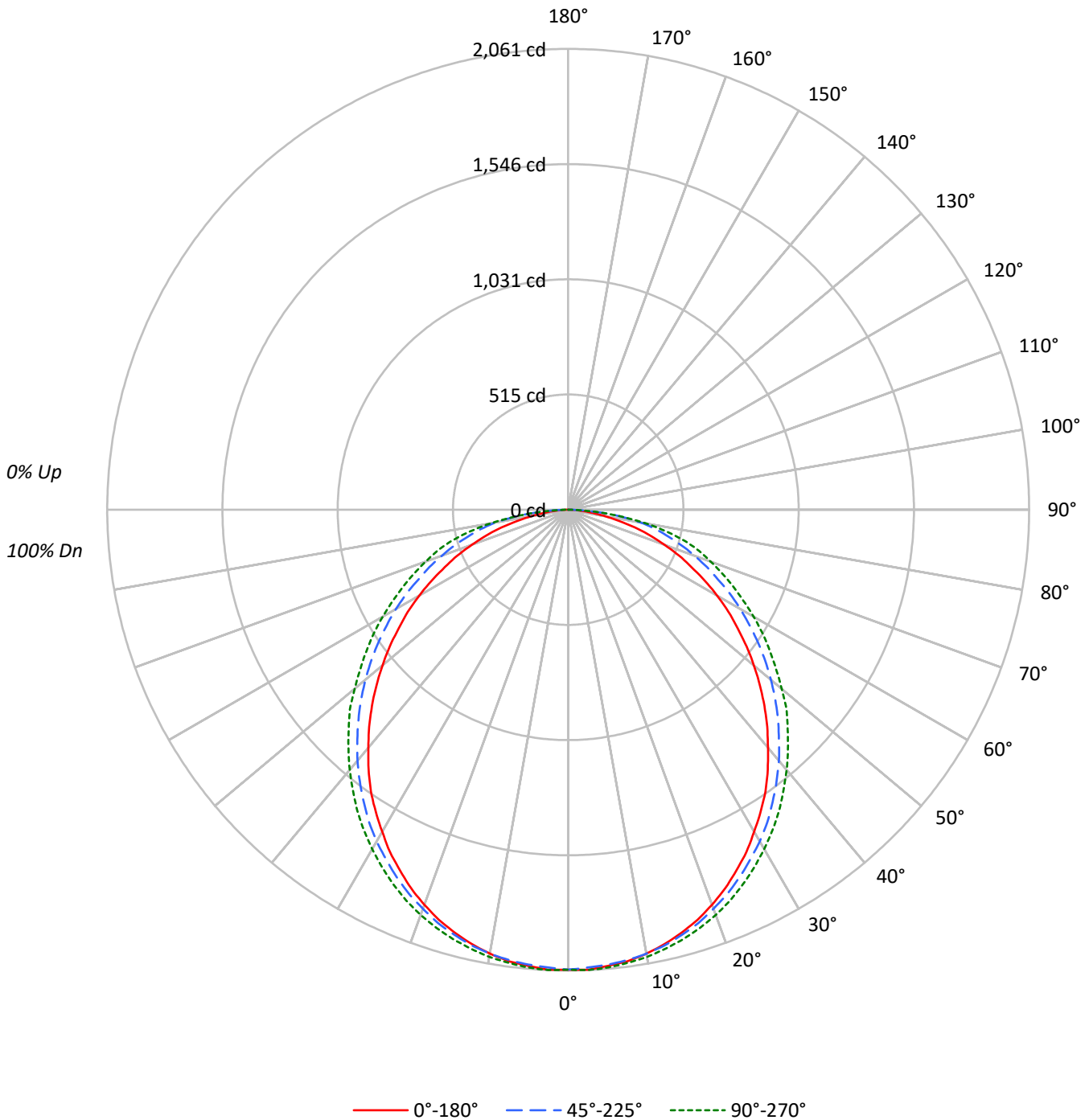
Input Watts (W): 44.454
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2768	2768	2768
5°	2766	2758	2776
10°	2755	2755	2775
15°	2728	2741	2770
20°	2692	2719	2762
25°	2643	2692	2745
30°	2583	2661	2722
35°	2527	2618	2701
40°	2440	2574	2669
45°	2361	2524	2640
50°	2270	2476	2609
55°	2168	2430	2583
60°	2067	2393	2578
65°	1936	2351	2594
70°	1793	2364	2663
75°	1605	2407	2813
80°	1297	2551	2753
85°	976	2240	2183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	3.3
10°-20°	556.5	9.5
20°-30°	836.5	14.3
30°-40°	996.4	17.0
40°-50°	1019.8	17.4
50°-60°	918.1	15.7
60°-70°	721.0	12.3
70°-80°	467.9	8.0
80°-90°	144.7	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°	1587.7	27.1
0°-40°	2584.1	44.1
0°-60°	4522.0	77.2
0°-90°	5855.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5855.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2057	2057	2057	2057	2057	
5°	2048	2052	2042	2053	2055	195
15°	1958	1964	1968	1985	1988	552
25°	1780	1795	1814	1843	1849	820
35°	1538	1557	1594	1633	1644	960
45°	1241	1270	1326	1376	1388	956
55°	924	965	1036	1090	1101	829
65°	608	655	738	800	815	605
75°	309	368	463	526	541	327
85°	63	117	145	141	141	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2057.1	2057.1	2057.1	2057.1	2057.1
2.5°	2059.0	2059.0	2049.7	2059.0	2060.8
5°	2047.8	2051.5	2042.2	2053.4	2055.3
7.5°	2036.7	2036.7	2031.1	2042.2	2044.1
10°	2016.2	2018.1	2016.2	2029.2	2031.1
12.5°	1990.2	1993.9	1995.7	2008.8	2010.6
15°	1958.5	1964.1	1967.8	1984.6	1988.3
17.5°	1923.2	1928.8	1938.1	1956.7	1960.4
20°	1880.4	1887.9	1899.0	1923.2	1928.8
22.5°	1833.9	1841.4	1860.0	1882.3	1891.6
25°	1780.0	1794.9	1813.5	1843.2	1848.8
27.5°	1726.0	1739.1	1763.2	1794.9	1802.3
30°	1662.8	1683.3	1713.0	1744.6	1752.1
32.5°	1601.4	1621.9	1657.2	1690.7	1700.0
35°	1538.2	1556.8	1594.0	1633.0	1644.2
37.5°	1465.6	1489.8	1530.7	1569.8	1581.0
40°	1389.4	1419.2	1465.6	1506.6	1519.6
42.5°	1316.9	1348.5	1395.0	1439.6	1454.5
45°	1240.6	1270.4	1326.2	1376.4	1387.5
47.5°	1162.5	1196.0	1255.5	1305.7	1324.3
50°	1084.4	1119.7	1182.9	1235.0	1246.2
52.5°	1006.2	1043.4	1110.4	1166.2	1171.8
55°	924.4	965.3	1036.0	1089.9	1101.1
57.5°	850.0	885.3	961.6	1017.4	1030.4
60°	768.2	807.2	889.1	941.1	957.9
62.5°	690.0	731.0	816.5	868.6	883.5
65°	608.2	654.7	738.4	799.8	814.7
67.5°	537.5	582.2	671.4	731.0	745.8
70°	455.7	505.9	600.8	662.1	677.0
72.5°	385.0	437.1	531.9	591.5	613.8
75°	308.8	368.3	463.1	526.4	541.2
77.5°	234.4	303.2	399.9	448.3	448.3
80°	167.4	239.9	329.2	351.5	355.3
82.5°	109.7	180.4	243.7	241.8	241.8
85°	63.2	117.2	145.1	141.4	141.4
87.5°	24.2	48.4	52.1	52.1	50.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)