

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: P276233

Luminaire Tested: **24CZ2-60HE-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276233
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-L92765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4882.3 lumens
Efficiency: N/A
Efficacy: 110.1 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

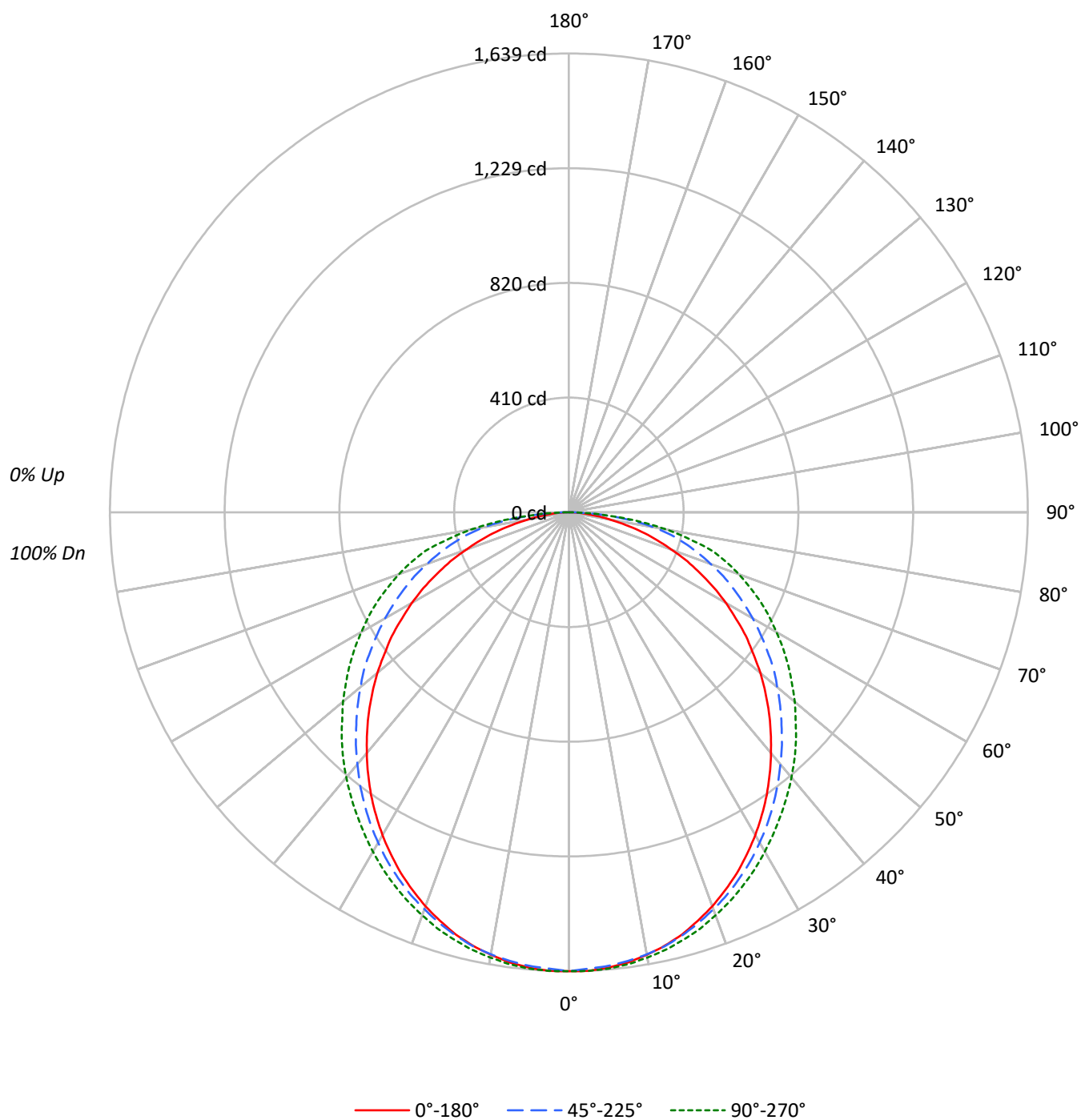
Input Watts (W): 44.361
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	2206	2206	2206
5°	2205	2196	2210
10°	2193	2191	2206
15°	2174	2179	2202
20°	2144	2161	2193
25°	2109	2141	2184
30°	2068	2116	2175
35°	2023	2090	2168
40°	1972	2063	2172
45°	1922	2043	2183
50°	1869	2033	2203
55°	1812	2030	2244
60°	1741	2039	2302
65°	1650	2070	2402
70°	1532	2122	2539
75°	1398	2228	2753
80°	1149	2399	2752
85°	880	2214	2365



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	3.2
10°-20°	442.6	9.1
20°-30°	666.0	13.6
30°-40°	798.2	16.3
40°-50°	831.8	17.0
50°-60°	773.9	15.9
60°-70°	637.4	13.1
70°-80°	434.1	8.9
80°-90°	143.3	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°	1263.7	25.9
0°-40°	2061.8	42.2
0°-60°	3667.5	75.1
0°-90°	4882.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4882.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1639	1639	1639	1639	1639	
5°	1633	1633	1626	1634	1636	155
15°	1561	1563	1564	1579	1581	440
25°	1421	1427	1442	1466	1471	654
35°	1232	1246	1273	1307	1320	770
45°	1010	1031	1074	1128	1147	779
55°	772	798	865	934	956	688
65°	518	562	650	727	754	514
75°	269	329	428	505	530	283
85°	57	111	143	153	153	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1639.2	1639.2	1639.2	1639.2	1639.2
2.5°	1639.2	1639.2	1631.1	1639.2	1639.2
5°	1632.7	1632.7	1626.2	1634.3	1636.0
7.5°	1621.3	1622.9	1616.4	1626.2	1627.8
10°	1605.0	1606.6	1603.4	1613.1	1614.8
12.5°	1585.4	1587.1	1587.1	1598.5	1600.1
15°	1561.0	1562.6	1564.3	1578.9	1580.6
17.5°	1530.0	1534.9	1538.2	1556.1	1559.4
20°	1497.5	1502.3	1508.9	1528.4	1531.7
22.5°	1460.0	1466.5	1477.9	1499.1	1504.0
25°	1420.9	1427.4	1442.1	1466.5	1471.4
27.5°	1376.9	1386.7	1404.6	1430.6	1437.2
30°	1331.3	1341.0	1362.2	1389.9	1399.7
32.5°	1282.4	1295.4	1319.8	1350.8	1360.6
35°	1231.9	1246.5	1272.6	1306.8	1319.8
37.5°	1178.1	1194.4	1225.3	1262.8	1279.1
40°	1122.7	1142.2	1174.8	1218.8	1236.7
42.5°	1067.3	1085.2	1125.9	1173.2	1192.8
45°	1010.3	1031.4	1073.8	1127.6	1147.1
47.5°	951.6	972.8	1023.3	1080.3	1098.2
50°	892.9	914.1	971.1	1031.4	1052.6
52.5°	829.4	857.1	922.3	982.6	1003.7
55°	772.4	798.4	865.2	933.7	956.5
57.5°	707.2	738.1	811.5	883.2	907.6
60°	646.9	679.5	757.7	831.0	855.5
62.5°	585.0	620.8	703.9	778.9	806.6
65°	518.2	562.2	650.1	726.7	754.4
67.5°	457.9	503.5	596.4	674.6	699.0
70°	389.4	444.8	539.3	617.6	645.3
72.5°	330.8	386.2	485.6	562.2	589.9
75°	268.9	329.1	428.5	505.1	529.6
77.5°	206.9	273.7	373.1	431.8	439.9
80°	148.3	218.3	309.6	343.8	355.2
82.5°	104.3	167.8	228.1	250.9	257.5
85°	57.0	110.8	143.4	153.2	153.2
87.5°	24.4	47.3	57.0	58.7	60.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)