

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: P276244

Luminaire Tested: **24CZ2-65HE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276244
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: 24CZ2-65HE-UNV-L92765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5602.2 lumens
Efficiency: N/A
Efficacy: 112.4 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

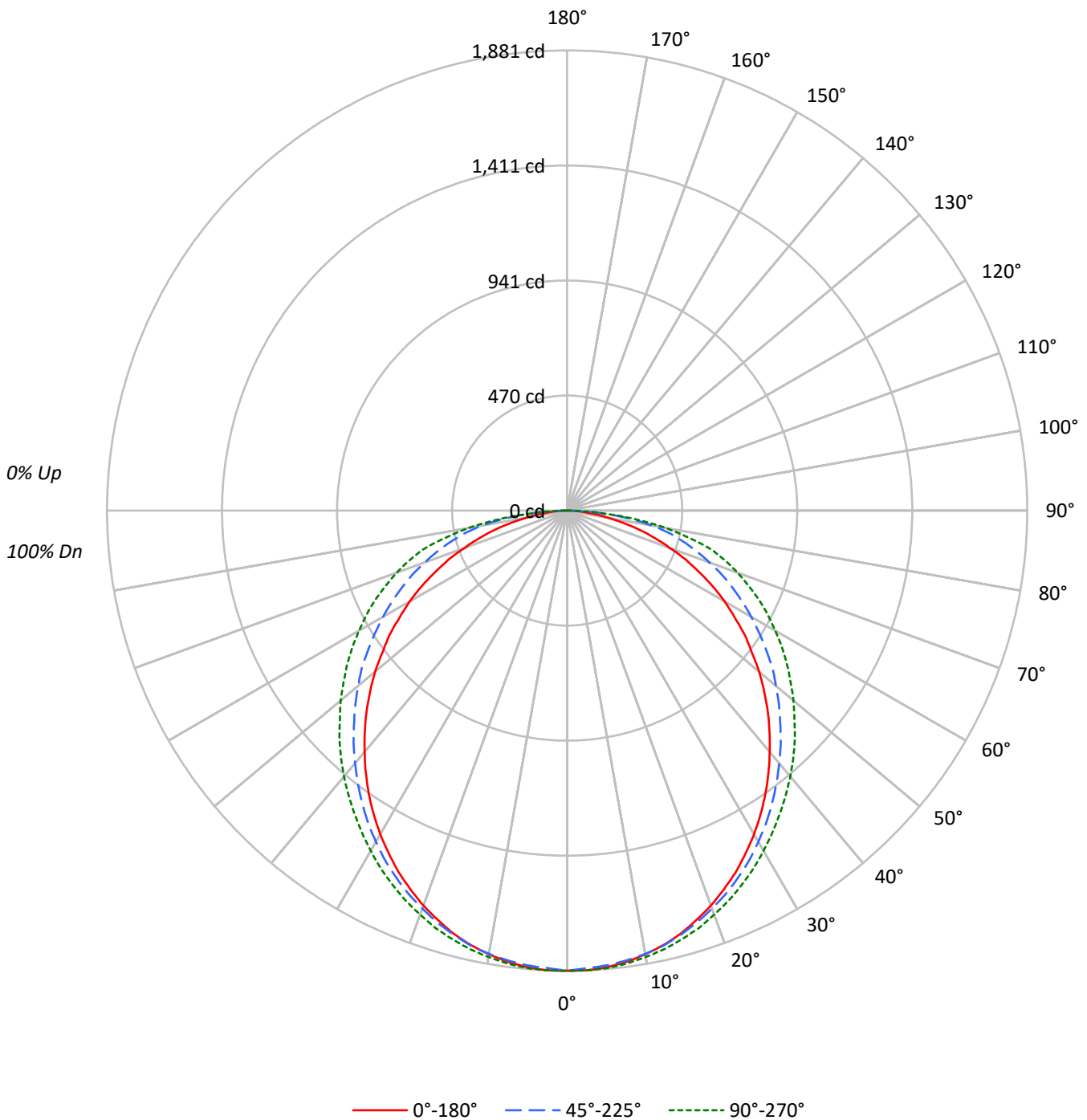
Input Watts (W): 49.848
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2531	2531	2531
5°	2530	2520	2535
10°	2516	2514	2532
15°	2495	2500	2526
20°	2460	2479	2516
25°	2420	2457	2506
30°	2373	2428	2495
35°	2322	2398	2488
40°	2263	2368	2493
45°	2206	2344	2505
50°	2145	2332	2528
55°	2079	2329	2575
60°	1998	2340	2641
65°	1893	2375	2756
70°	1758	2435	2913
75°	1604	2556	3159
80°	1318	2752	3158
85°	1010	2540	2714



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.9	3.2
10°-20°	507.9	9.1
20°-30°	764.3	13.6
30°-40°	915.9	16.3
40°-50°	954.4	17.0
50°-60°	888.0	15.9
60°-70°	731.4	13.1
70°-80°	498.1	8.9
80°-90°	164.4	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°	1450.0	25.9
0°-40°	2365.9	42.2
0°-60°	4208.3	75.1
0°-90°	5602.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5602.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1881	1881	1881	1881	1881	
5°	1873	1873	1866	1875	1877	178
15°	1791	1793	1795	1812	1814	505
25°	1630	1638	1655	1683	1688	751
35°	1414	1430	1460	1500	1514	884
45°	1159	1184	1232	1294	1316	894
55°	886	916	993	1071	1098	790
65°	595	645	746	834	866	590
75°	308	378	492	580	608	325
85°	65	127	164	176	176	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1880.9	1880.9	1880.9	1880.9	1880.9
2.5°	1880.9	1880.9	1871.6	1880.9	1880.9
5°	1873.4	1873.4	1866.0	1875.3	1877.2
7.5°	1860.4	1862.2	1854.7	1866.0	1867.8
10°	1841.7	1843.5	1839.8	1851.0	1852.9
12.5°	1819.2	1821.1	1821.1	1834.2	1836.1
15°	1791.2	1793.0	1794.9	1811.7	1813.6
17.5°	1755.7	1761.3	1765.0	1785.6	1789.3
20°	1718.3	1723.9	1731.3	1753.8	1757.5
22.5°	1675.3	1682.7	1695.8	1720.1	1725.7
25°	1630.4	1637.9	1654.7	1682.7	1688.3
27.5°	1579.9	1591.1	1611.7	1641.6	1649.1
30°	1527.5	1538.8	1563.1	1594.9	1606.1
32.5°	1471.5	1486.4	1514.5	1550.0	1561.2
35°	1413.5	1430.3	1460.2	1499.5	1514.5
37.5°	1351.8	1370.5	1406.0	1449.0	1467.7
40°	1288.2	1310.7	1348.1	1398.5	1419.1
42.5°	1224.7	1245.2	1292.0	1346.2	1368.6
45°	1159.2	1183.5	1232.1	1293.8	1316.3
47.5°	1091.9	1116.2	1174.2	1239.6	1260.2
50°	1024.6	1048.9	1114.3	1183.5	1207.8
52.5°	951.7	983.5	1058.3	1127.4	1151.7
55°	886.2	916.2	992.8	1071.3	1097.5
57.5°	811.5	847.0	931.1	1013.4	1041.4
60°	742.3	779.7	869.4	953.5	981.6
62.5°	671.2	712.4	807.7	893.7	925.5
65°	594.6	645.0	746.0	833.9	865.7
67.5°	525.4	577.7	684.3	774.1	802.1
70°	446.9	510.4	618.9	708.6	740.4
72.5°	379.6	443.1	557.2	645.0	676.8
75°	308.5	377.7	491.7	579.6	607.7
77.5°	237.5	314.1	428.2	495.5	504.8
80°	170.1	250.5	355.2	394.5	407.6
82.5°	119.7	192.6	261.8	287.9	295.4
85°	65.4	127.1	164.5	175.8	175.8
87.5°	28.0	54.2	65.4	67.3	69.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)