

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: P276005

Luminaire Tested: **24CZ2-65HE-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276005
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-L93050-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: 5775.0 lumens
Efficiency: N/A
Efficacy: 113.3 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

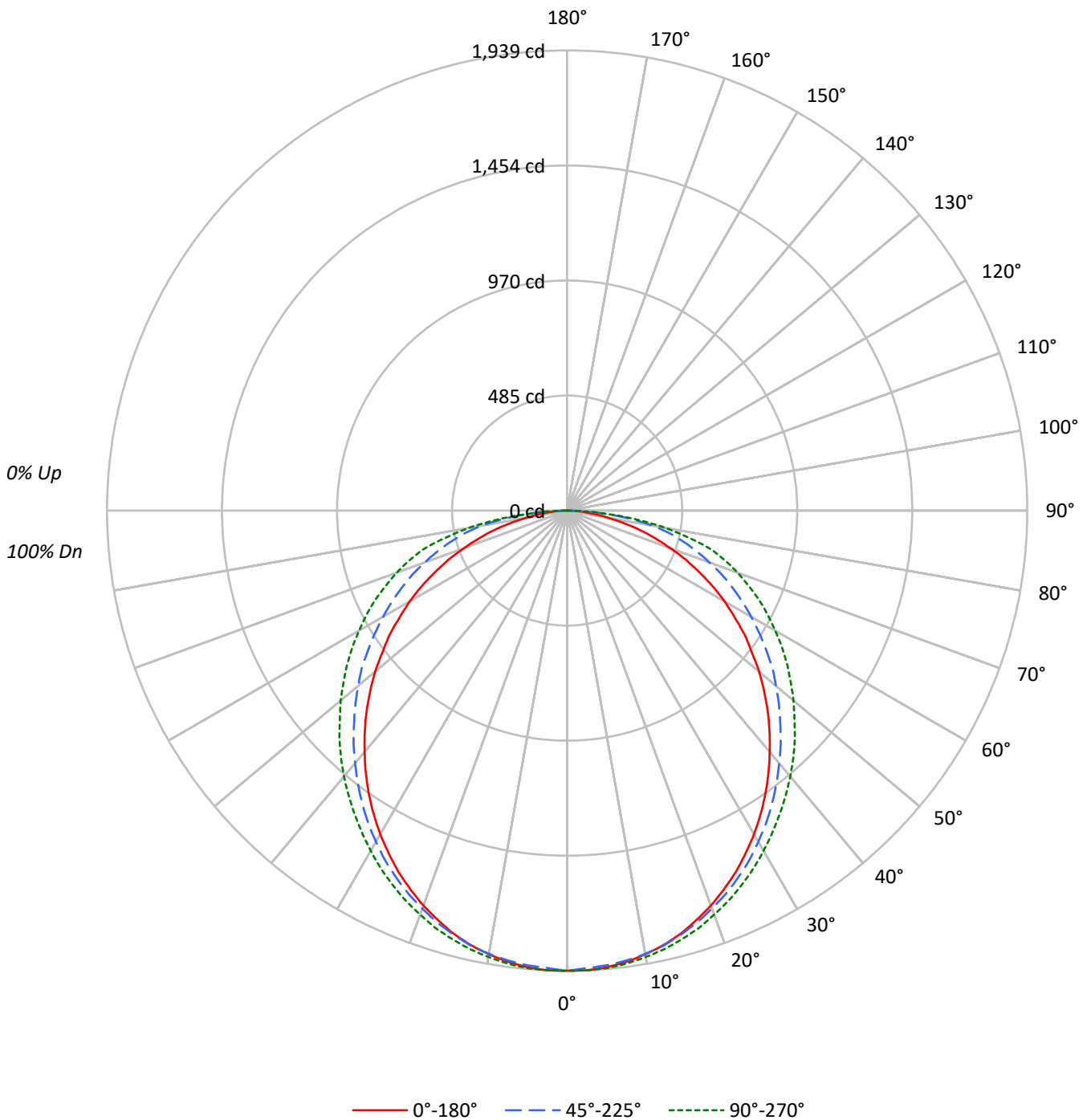
Input Watts (W): 50.972556
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2609	2609	2609
5°	2608	2598	2614
10°	2594	2591	2610
15°	2572	2577	2604
20°	2536	2555	2594
25°	2495	2532	2584
30°	2447	2503	2572
35°	2393	2473	2564
40°	2333	2441	2569
45°	2274	2417	2582
50°	2211	2404	2606
55°	2143	2401	2654
60°	2059	2412	2723
65°	1951	2448	2841
70°	1812	2510	3002
75°	1653	2635	3256
80°	1359	2837	3256
85°	1042	2618	2797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.4	3.2
10°-20°	523.5	9.1
20°-30°	787.8	13.6
30°-40°	944.1	16.3
40°-50°	983.9	17.0
50°-60°	915.4	15.9
60°-70°	753.9	13.1
70°-80°	513.5	8.9
80°-90°	169.5	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°	1494.7	25.9
0°-40°	2438.8	42.2
0°-60°	4338.1	75.1
0°-90°	5775.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5775.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1939	1939	1939	1939	1939	
5°	1931	1931	1924	1933	1935	183
15°	1846	1848	1850	1868	1870	520
25°	1681	1688	1706	1735	1740	774
35°	1457	1474	1505	1546	1561	911
45°	1195	1220	1270	1334	1357	922
55°	914	944	1023	1104	1131	814
65°	613	665	769	860	892	608
75°	318	389	507	598	626	335
85°	68	131	170	181	181	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1938.9	1938.9	1938.9	1938.9	1938.9
2.5°	1938.9	1938.9	1929.3	1938.9	1938.9
5°	1931.2	1931.2	1923.5	1933.1	1935.1
7.5°	1917.7	1919.7	1911.9	1923.5	1925.4
10°	1898.5	1900.4	1896.5	1908.1	1910.0
12.5°	1875.3	1877.3	1877.3	1890.7	1892.7
15°	1846.4	1848.3	1850.3	1867.6	1869.5
17.5°	1809.8	1815.6	1819.4	1840.6	1844.5
20°	1771.2	1777.0	1784.7	1807.9	1811.7
22.5°	1726.9	1734.6	1748.1	1773.2	1779.0
25°	1680.7	1688.4	1705.7	1734.6	1740.4
27.5°	1628.6	1640.2	1661.4	1692.2	1699.9
30°	1574.7	1586.2	1611.3	1644.0	1655.6
32.5°	1516.8	1532.3	1561.2	1597.8	1609.3
35°	1457.1	1474.4	1505.3	1545.7	1561.2
37.5°	1393.5	1412.8	1449.4	1493.7	1513.0
40°	1328.0	1351.1	1389.6	1441.7	1462.9
42.5°	1262.4	1283.6	1331.8	1387.7	1410.8
45°	1195.0	1220.0	1270.1	1333.7	1356.9
47.5°	1125.6	1150.6	1210.4	1277.8	1299.0
50°	1056.2	1081.3	1148.7	1220.0	1245.1
52.5°	981.0	1013.8	1090.9	1162.2	1187.3
55°	913.6	944.4	1023.4	1104.4	1131.4
57.5°	836.5	873.1	959.8	1044.6	1073.5
60°	765.2	803.7	896.2	983.0	1011.9
62.5°	691.9	734.3	832.6	921.3	954.0
65°	612.9	664.9	769.0	859.6	892.4
67.5°	541.6	595.6	705.4	797.9	826.8
70°	460.6	526.2	638.0	730.5	763.2
72.5°	391.3	456.8	574.4	664.9	697.7
75°	318.0	389.3	506.9	597.5	626.4
77.5°	244.8	323.8	441.4	510.8	520.4
80°	175.4	258.3	366.2	406.7	420.2
82.5°	123.4	198.5	269.8	296.8	304.5
85°	67.5	131.1	169.6	181.2	181.2
87.5°	28.9	55.9	67.5	69.4	71.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)