

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: P276226

Luminaire Tested: **24CZ2-55HE-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276226  
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: 24CZ2-55HE-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: 4757.5 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

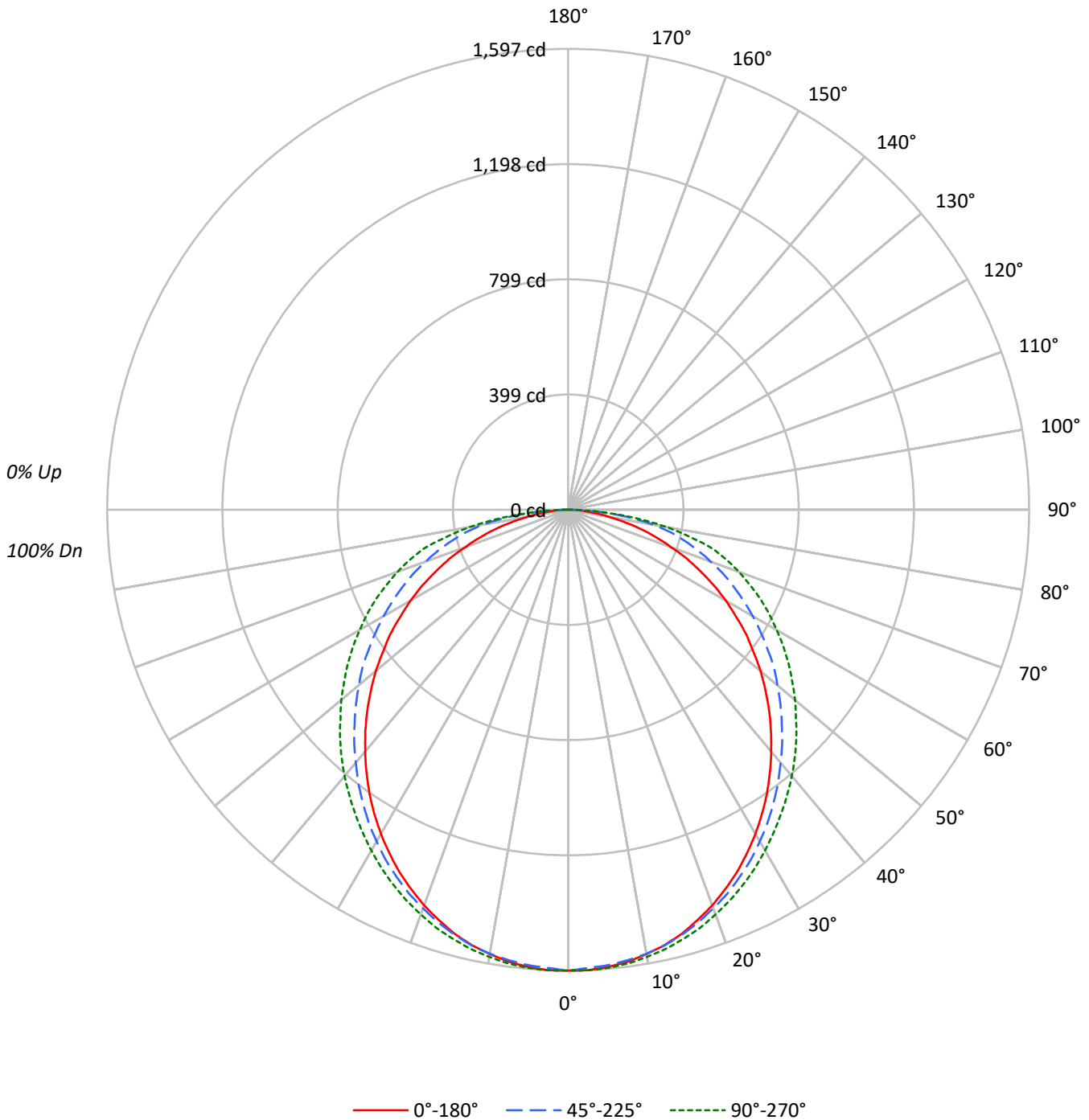
Input Watts (W): 40.827  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276226

CATALOG NUMBER: 24CZ2-55HE-UNV-L92765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P276226

CATALOG NUMBER: 24CZ2-55HE-UNV-L92765-W2A1-U-4500K

**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°	2149	2149	2149
5°	2149	2140	2153
10°	2137	2135	2150
15°	2119	2123	2145
20°	2089	2105	2137
25°	2055	2086	2129
30°	2015	2062	2119
35°	1972	2037	2112
40°	1922	2011	2117
45°	1873	1991	2127
50°	1821	1981	2147
55°	1765	1978	2186
60°	1696	1987	2243
65°	1607	2017	2340
70°	1493	2068	2474
75°	1362	2171	2682
80°	1120	2338	2682
85°	858	2157	2303



TEST NUMBER: P276226

CATALOG NUMBER: 24CZ2-55HE-UNV-L92765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.1	3.2
10°-20°	431.3	9.1
20°-30°	649.0	13.6
30°-40°	777.8	16.3
40°-50°	810.5	17.0
50°-60°	754.1	15.9
60°-70°	621.1	13.1
70°-80°	423.0	8.9
80°-90°	139.6	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°	1231.4	25.9
0°-40°	2009.1	42.2
0°-60°	3573.7	75.1
0°-90°	4757.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4757.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1591	1591	1585	1592	1594	151
15°	1521	1523	1524	1538	1540	429
25°	1384	1391	1405	1429	1434	637
35°	1200	1215	1240	1273	1286	750
45°	984	1005	1046	1099	1118	759
55°	753	778	843	910	932	671
65°	505	548	634	708	735	501
75°	262	321	418	492	516	276
85°	56	108	140	149	149	69
90°	0	0	0	0	0	



TEST NUMBER: P276226

CATALOG NUMBER: 24CZ2-55HE-UNV-L92765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1597.3	1597.3	1597.3	1597.3	1597.3
2.5°	1597.3	1597.3	1589.4	1597.3	1597.3
5°	1590.9	1590.9	1584.6	1592.5	1594.1
7.5°	1579.8	1581.4	1575.1	1584.6	1586.2
10°	1563.9	1565.5	1562.4	1571.9	1573.5
12.5°	1544.9	1546.5	1546.5	1557.6	1559.2
15°	1521.1	1522.7	1524.3	1538.5	1540.1
17.5°	1490.9	1495.7	1498.9	1516.3	1519.5
20°	1459.2	1463.9	1470.3	1489.3	1492.5
22.5°	1422.6	1429.0	1440.1	1460.7	1465.5
25°	1384.5	1390.9	1405.2	1429.0	1433.8
27.5°	1341.7	1351.2	1368.7	1394.1	1400.4
30°	1297.2	1306.7	1327.4	1354.4	1363.9
32.5°	1249.6	1262.3	1286.1	1316.3	1325.8
35°	1200.4	1214.6	1240.0	1273.4	1286.1
37.5°	1148.0	1163.8	1194.0	1230.5	1246.4
40°	1094.0	1113.0	1144.8	1187.6	1205.1
42.5°	1040.0	1057.5	1097.1	1143.2	1162.2
45°	984.4	1005.1	1046.3	1098.7	1117.8
47.5°	927.3	947.9	997.1	1052.7	1070.2
50°	870.1	890.7	946.3	1005.1	1025.7
52.5°	808.2	835.2	898.7	957.4	978.1
55°	752.6	778.0	843.1	909.8	932.0
57.5°	689.1	719.3	790.7	860.6	884.4
60°	630.3	662.1	738.3	809.8	833.6
62.5°	570.0	604.9	685.9	759.0	785.9
65°	504.9	547.8	633.5	708.1	735.1
67.5°	446.2	490.6	581.1	657.3	681.2
70°	379.5	433.5	525.6	601.8	628.8
72.5°	322.3	376.3	473.2	547.8	574.8
75°	262.0	320.7	417.6	492.2	516.0
77.5°	201.6	266.7	363.6	420.8	428.7
80°	144.5	212.8	301.7	335.0	346.1
82.5°	101.6	163.5	222.3	244.5	250.9
85°	55.6	108.0	139.7	149.2	149.2
87.5°	23.8	46.0	55.6	57.2	58.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)