

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: P276510

Luminaire Tested: **24CZ2-55HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276510  
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: 24CZ2-55HE-S-UNV-L82765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5506.7 lumens  
Efficiency: N/A  
Efficacy: 135.8 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

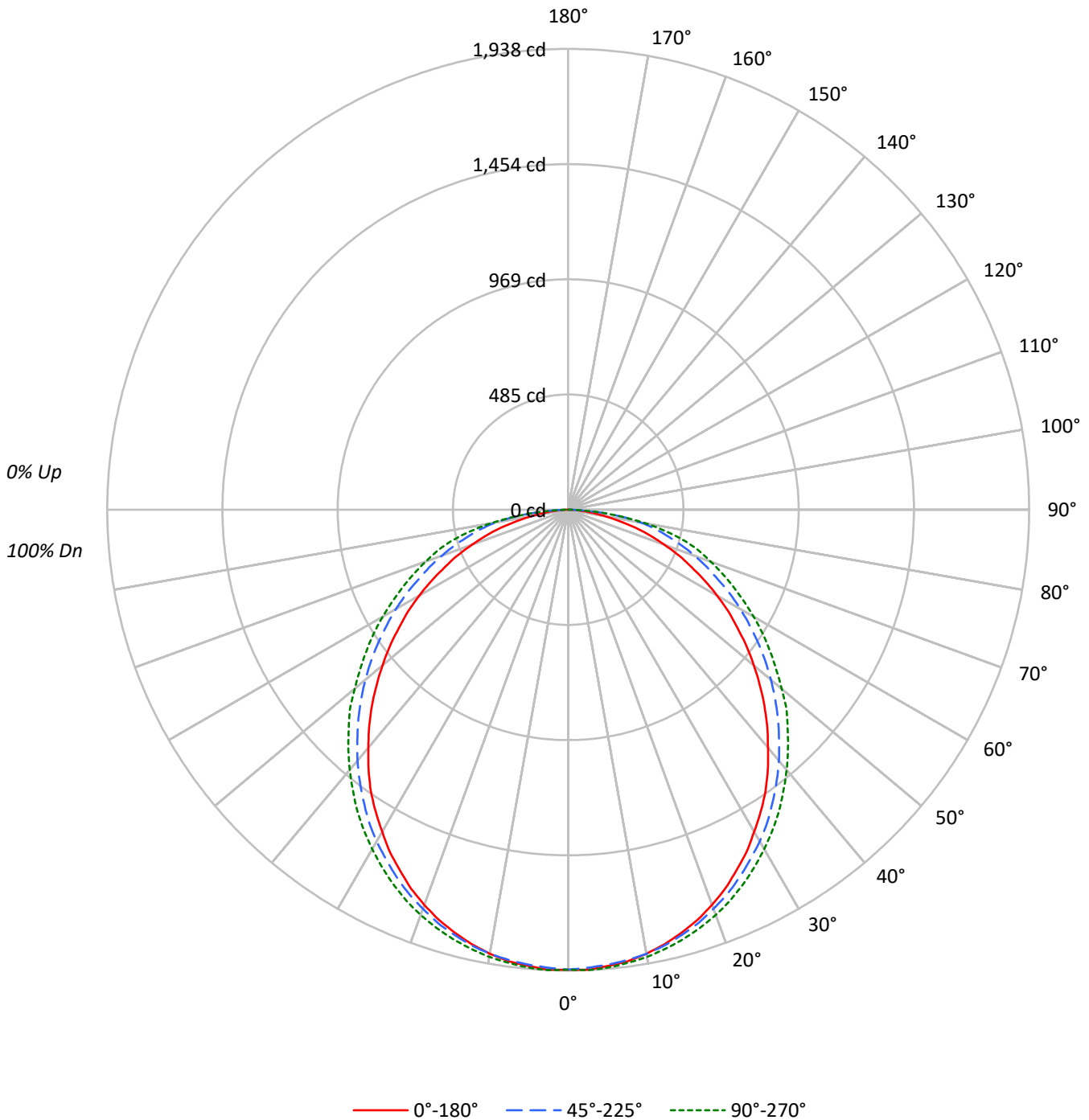
Input Watts (W): 40.548  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276510

CATALOG NUMBER: 24CZ2-55HE-S-UNV-L82765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P276510

CATALOG NUMBER: 24CZ2-55HE-S-UNV-L82765-W2A1-U-4000K

**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°	2603	2603	2603
5°	2601	2594	2610
10°	2591	2591	2610
15°	2566	2578	2605
20°	2532	2557	2597
25°	2485	2532	2581
30°	2429	2503	2560
35°	2376	2462	2540
40°	2295	2421	2510
45°	2220	2373	2483
50°	2134	2329	2453
55°	2039	2286	2429
60°	1944	2250	2424
65°	1821	2211	2439
70°	1686	2223	2505
75°	1510	2264	2646
80°	1220	2399	2589
85°	919	2106	2052



TEST NUMBER: P276510

CATALOG NUMBER: 24CZ2-55HE-S-UNV-L82765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.1	3.3
10°-20°	523.3	9.5
20°-30°	786.6	14.3
30°-40°	937.0	17.0
40°-50°	959.0	17.4
50°-60°	863.4	15.7
60°-70°	678.0	12.3
70°-80°	440.1	8.0
80°-90°	136.1	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°	1493.1	27.1
0°-40°	2430.1	44.1
0°-60°	4252.5	77.2
0°-90°	5506.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5506.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1934	1934	1934	1934	1934	
5°	1926	1929	1921	1931	1933	183
15°	1842	1847	1851	1866	1870	519
25°	1674	1688	1705	1733	1739	771
35°	1446	1464	1499	1536	1546	902
45°	1167	1195	1247	1294	1305	899
55°	869	908	974	1025	1036	779
65°	572	616	694	752	766	569
75°	290	346	436	495	509	307
85°	60	110	136	133	133	72
90°	0	0	0	0	0	



TEST NUMBER: P276510

CATALOG NUMBER: 24CZ2-55HE-S-UNV-L82765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1934.5	1934.5	1934.5	1934.5	1934.5
2.5°	1936.3	1936.3	1927.6	1936.3	1938.0
5°	1925.8	1929.3	1920.6	1931.1	1932.8
7.5°	1915.3	1915.3	1910.1	1920.6	1922.3
10°	1896.1	1897.8	1896.1	1908.3	1910.1
12.5°	1871.6	1875.1	1876.8	1889.1	1890.8
15°	1841.8	1847.1	1850.6	1866.3	1869.8
17.5°	1808.6	1813.9	1822.6	1840.1	1843.6
20°	1768.4	1775.4	1785.9	1808.6	1813.9
22.5°	1724.7	1731.6	1749.1	1770.1	1778.9
25°	1673.9	1687.9	1705.4	1733.4	1738.6
27.5°	1623.2	1635.4	1658.2	1687.9	1694.9
30°	1563.7	1583.0	1611.0	1640.7	1647.7
32.5°	1506.0	1525.3	1558.5	1590.0	1598.7
35°	1446.5	1464.0	1499.0	1535.7	1546.2
37.5°	1378.3	1401.1	1439.5	1476.3	1486.8
40°	1306.6	1334.6	1378.3	1416.8	1429.0
42.5°	1238.4	1268.1	1311.9	1353.8	1367.8
45°	1166.7	1194.7	1247.1	1294.4	1304.9
47.5°	1093.2	1124.7	1180.7	1227.9	1245.4
50°	1019.7	1053.0	1112.5	1161.4	1171.9
52.5°	946.3	981.3	1044.2	1096.7	1102.0
55°	869.3	907.8	974.3	1025.0	1035.5
57.5°	799.4	832.6	904.3	956.8	969.0
60°	722.4	759.1	836.1	885.1	900.8
62.5°	648.9	687.4	767.9	816.8	830.8
65°	572.0	615.7	694.4	752.1	766.1
67.5°	505.5	547.5	631.4	687.4	701.4
70°	428.5	475.8	565.0	622.7	636.7
72.5°	362.1	411.0	500.3	556.2	577.2
75°	290.4	346.3	435.5	495.0	509.0
77.5°	220.4	285.1	376.1	421.5	421.5
80°	157.4	225.6	309.6	330.6	334.1
82.5°	103.2	169.7	229.1	227.4	227.4
85°	59.5	110.2	136.4	132.9	132.9
87.5°	22.7	45.5	49.0	49.0	47.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)