

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: P276090

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276090  
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-L82765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5240.8 lumens  
Efficiency: N/A  
Efficacy: 129.3 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

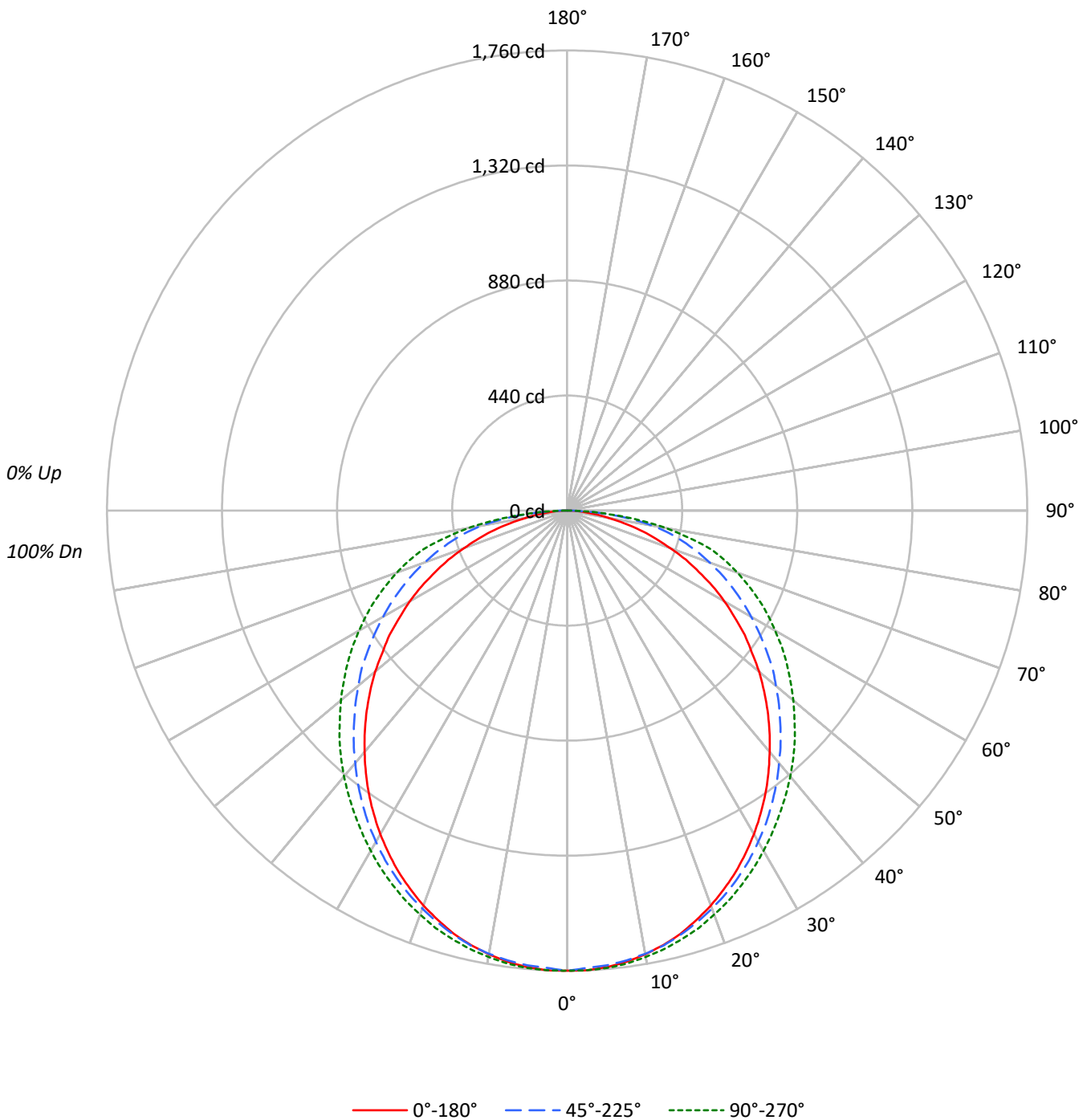
Input Watts (W): 40.548  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2368	2368	2368
5°	2367	2358	2372
10°	2354	2351	2368
15°	2334	2339	2363
20°	2302	2319	2354
25°	2264	2298	2345
30°	2220	2272	2334
35°	2172	2244	2327
40°	2117	2215	2332
45°	2063	2193	2343
50°	2006	2182	2365
55°	1945	2179	2408
60°	1869	2189	2471
65°	1771	2222	2578
70°	1644	2278	2725
75°	1500	2391	2955
80°	1234	2575	2954
85°	945	2376	2538



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.4	3.2
10°-20°	475.1	9.1
20°-30°	715.0	13.6
30°-40°	856.8	16.3
40°-50°	892.9	17.0
50°-60°	830.7	15.9
60°-70°	684.2	13.1
70°-80°	466.0	8.9
80°-90°	153.8	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°	1356.5	25.9
0°-40°	2213.3	42.2
0°-60°	3936.8	75.1
0°-90°	5240.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5240.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1760	1760	1760	1760	1760	
5°	1753	1753	1746	1754	1756	166
15°	1676	1677	1679	1695	1697	472
25°	1525	1532	1548	1574	1579	702
35°	1322	1338	1366	1403	1417	827
45°	1084	1107	1153	1210	1231	836
55°	829	857	929	1002	1027	739
65°	556	603	698	780	810	552
75°	289	353	460	542	568	304
85°	61	119	154	164	164	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1759.6	1759.6	1759.6	1759.6	1759.6
2.5°	1759.6	1759.6	1750.8	1759.6	1759.6
5°	1752.6	1752.6	1745.6	1754.3	1756.1
7.5°	1740.4	1742.1	1735.1	1745.6	1747.4
10°	1722.9	1724.6	1721.1	1731.6	1733.4
12.5°	1701.9	1703.6	1703.6	1715.9	1717.6
15°	1675.6	1677.4	1679.1	1694.9	1696.6
17.5°	1642.4	1647.7	1651.1	1670.4	1673.9
20°	1607.4	1612.7	1619.7	1640.7	1644.2
22.5°	1567.2	1574.2	1586.4	1609.2	1614.4
25°	1525.2	1532.2	1548.0	1574.2	1579.4
27.5°	1478.0	1488.5	1507.7	1535.7	1542.7
30°	1429.0	1439.5	1462.2	1492.0	1502.5
32.5°	1376.5	1390.5	1416.8	1450.0	1460.5
35°	1322.3	1338.1	1366.0	1402.8	1416.8
37.5°	1264.6	1282.1	1315.3	1355.6	1373.0
40°	1205.1	1226.1	1261.1	1308.3	1327.6
42.5°	1145.7	1164.9	1208.6	1259.4	1280.3
45°	1084.4	1107.2	1152.7	1210.4	1231.4
47.5°	1021.5	1044.2	1098.4	1159.7	1178.9
50°	958.5	981.2	1042.5	1107.2	1129.9
52.5°	890.3	920.0	990.0	1054.7	1077.4
55°	829.1	857.1	928.8	1002.2	1026.7
57.5°	759.1	792.3	871.1	948.0	974.2
60°	694.4	729.4	813.3	892.0	918.3
62.5°	627.9	666.4	755.6	836.1	865.8
65°	556.2	603.4	697.9	780.1	809.8
67.5°	491.5	540.5	640.2	724.1	750.4
70°	418.0	477.5	579.0	662.9	692.6
72.5°	355.1	414.5	521.2	603.4	633.2
75°	288.6	353.3	460.0	542.2	568.5
77.5°	222.1	293.8	400.5	463.5	472.3
80°	159.2	234.4	332.3	369.1	381.3
82.5°	111.9	180.2	244.9	269.4	276.4
85°	61.2	118.9	153.9	164.4	164.4
87.5°	26.2	50.7	61.2	63.0	64.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)