

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: P276507

Luminaire Tested: **24CZ2-55HE-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276507  
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-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5062.4 lumens  
Efficiency: N/A  
Efficacy: 126.3 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

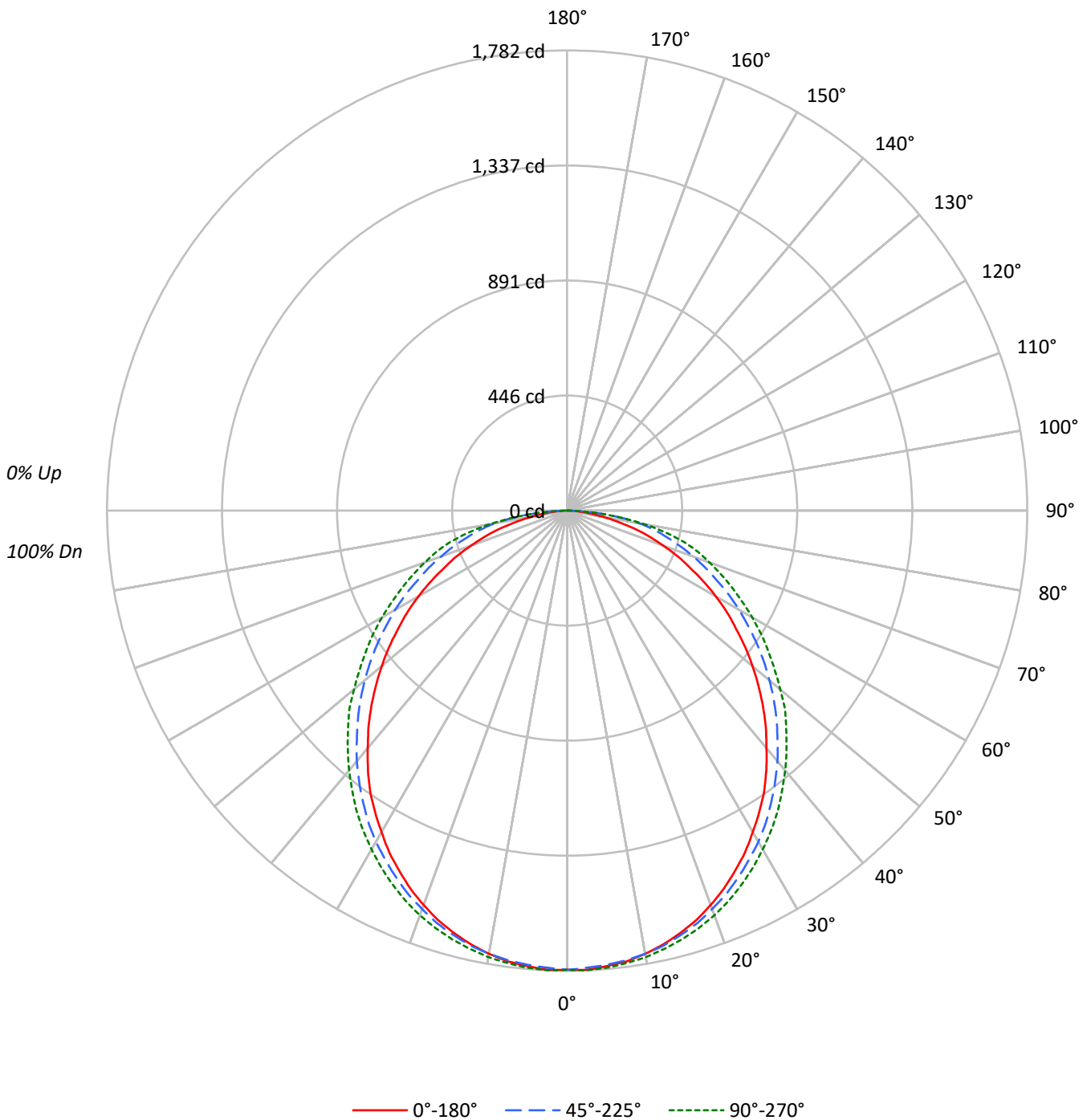
Input Watts (W): 40.083  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2393	2393	2393
5°	2391	2385	2400
10°	2382	2382	2399
15°	2359	2370	2394
20°	2328	2351	2388
25°	2285	2328	2373
30°	2234	2301	2353
35°	2184	2264	2335
40°	2110	2226	2307
45°	2041	2182	2283
50°	1962	2141	2255
55°	1875	2101	2233
60°	1787	2068	2228
65°	1674	2032	2242
70°	1550	2043	2303
75°	1387	2082	2432
80°	1121	2205	2380
85°	844	1936	1886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.4	3.3
10°-20°	481.1	9.5
20°-30°	723.2	14.3
30°-40°	861.4	17.0
40°-50°	881.6	17.4
50°-60°	793.7	15.7
60°-70°	623.3	12.3
70°-80°	404.5	8.0
80°-90°	125.1	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°	1372.6	27.1
0°-40°	2234.1	44.1
0°-60°	3909.4	77.2
0°-90°	5062.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5062.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1778	1778	1778	1778	1778	
5°	1770	1774	1766	1775	1777	168
15°	1693	1698	1701	1716	1719	477
25°	1539	1552	1568	1594	1598	709
35°	1330	1346	1378	1412	1422	830
45°	1072	1098	1146	1190	1200	827
55°	799	835	896	942	952	716
65°	526	566	638	691	704	523
75°	267	318	400	455	468	282
85°	55	101	125	122	122	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1778.5	1778.5	1778.5	1778.5	1778.5
2.5°	1780.1	1780.1	1772.0	1780.1	1781.7
5°	1770.4	1773.6	1765.6	1775.2	1776.9
7.5°	1760.8	1760.8	1755.9	1765.6	1767.2
10°	1743.1	1744.7	1743.1	1754.3	1755.9
12.5°	1720.6	1723.8	1725.4	1736.7	1738.3
15°	1693.2	1698.1	1701.3	1715.7	1719.0
17.5°	1662.7	1667.5	1675.5	1691.6	1694.8
20°	1625.7	1632.1	1641.8	1662.7	1667.5
22.5°	1585.5	1591.9	1608.0	1627.3	1635.3
25°	1538.9	1551.7	1567.8	1593.5	1598.4
27.5°	1492.2	1503.5	1524.4	1551.7	1558.2
30°	1437.6	1455.2	1481.0	1508.3	1514.7
32.5°	1384.5	1402.2	1432.7	1461.7	1469.7
35°	1329.8	1345.9	1378.1	1411.8	1421.5
37.5°	1267.1	1288.0	1323.4	1357.2	1366.8
40°	1201.2	1226.9	1267.1	1302.5	1313.7
42.5°	1138.5	1165.8	1206.0	1244.6	1257.5
45°	1072.5	1098.3	1146.5	1189.9	1199.6
47.5°	1005.0	1034.0	1085.4	1128.8	1144.9
50°	937.5	968.0	1022.7	1067.7	1077.4
52.5°	869.9	902.1	960.0	1008.2	1013.0
55°	799.2	834.6	895.7	942.3	951.9
57.5°	734.9	765.4	831.3	879.6	890.8
60°	664.1	697.9	768.6	813.7	828.1
62.5°	596.6	631.9	705.9	750.9	763.8
65°	525.8	566.0	638.4	691.4	704.3
67.5°	464.7	503.3	580.5	631.9	644.8
70°	394.0	437.4	519.4	572.5	585.3
72.5°	332.9	377.9	459.9	511.3	530.6
75°	266.9	318.4	400.4	455.1	467.9
77.5°	202.6	262.1	345.7	387.5	387.5
80°	144.7	207.4	284.6	303.9	307.1
82.5°	94.9	156.0	210.6	209.0	209.0
85°	54.7	101.3	125.4	122.2	122.2
87.5°	20.9	41.8	45.0	45.0	43.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)