

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: P275918

Luminaire Tested: **24CZ2-55HE-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275918  
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-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5250.0 lumens  
Efficiency: N/A  
Efficacy: 131.0 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

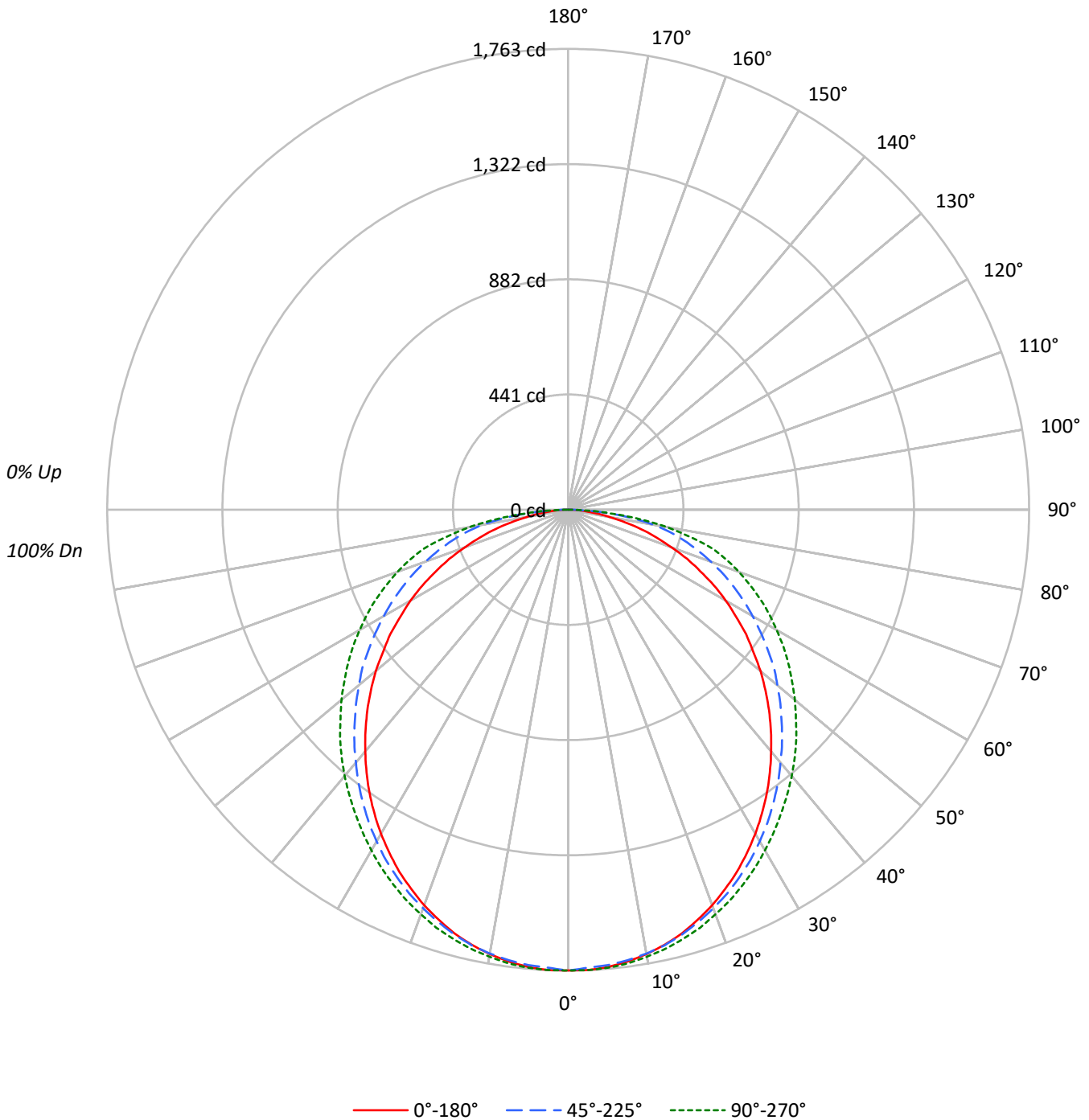
Input Watts (W): 40.083  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2372	2372	2372
5°	2371	2362	2376
10°	2358	2356	2372
15°	2338	2343	2367
20°	2306	2323	2358
25°	2268	2302	2349
30°	2224	2276	2338
35°	2176	2248	2331
40°	2120	2219	2336
45°	2067	2197	2347
50°	2010	2186	2369
55°	1948	2183	2413
60°	1872	2193	2475
65°	1774	2226	2583
70°	1648	2282	2730
75°	1503	2396	2961
80°	1235	2579	2960
85°	946	2381	2543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.7	3.2
10°-20°	475.9	9.1
20°-30°	716.2	13.6
30°-40°	858.3	16.3
40°-50°	894.4	17.0
50°-60°	832.2	15.9
60°-70°	685.4	13.1
70°-80°	466.8	8.9
80°-90°	154.1	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°	1358.8	25.9
0°-40°	2217.1	42.2
0°-60°	3943.7	75.1
0°-90°	5250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5250.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1763	1763	1763	1763	1763	
5°	1756	1756	1749	1757	1759	167
15°	1679	1680	1682	1698	1700	473
25°	1528	1535	1551	1577	1582	703
35°	1325	1340	1368	1405	1419	828
45°	1086	1109	1155	1212	1234	838
55°	830	859	930	1004	1028	740
65°	557	604	699	782	811	553
75°	289	354	461	543	570	305
85°	61	119	154	165	165	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1762.7	1762.7	1762.7	1762.7	1762.7
2.5°	1762.7	1762.7	1753.9	1762.7	1762.7
5°	1755.7	1755.7	1748.7	1757.4	1759.2
7.5°	1743.4	1745.1	1738.1	1748.7	1750.4
10°	1725.9	1727.6	1724.1	1734.6	1736.4
12.5°	1704.8	1706.6	1706.6	1718.9	1720.6
15°	1678.6	1680.3	1682.1	1697.8	1699.6
17.5°	1645.3	1650.5	1654.0	1673.3	1676.8
20°	1610.2	1615.5	1622.5	1643.5	1647.0
22.5°	1569.9	1576.9	1589.2	1612.0	1617.2
25°	1527.9	1534.9	1550.7	1576.9	1582.2
27.5°	1480.6	1491.1	1510.4	1538.4	1545.4
30°	1431.5	1442.0	1464.8	1494.6	1505.1
32.5°	1378.9	1393.0	1419.2	1452.5	1463.1
35°	1324.6	1340.4	1368.4	1405.2	1419.2
37.5°	1266.8	1284.3	1317.6	1357.9	1375.4
40°	1207.2	1228.3	1263.3	1310.6	1329.9
42.5°	1147.7	1166.9	1210.7	1261.6	1282.6
45°	1086.3	1109.1	1154.7	1212.5	1233.5
47.5°	1023.3	1046.0	1100.4	1161.7	1181.0
50°	960.2	983.0	1044.3	1109.1	1131.9
52.5°	891.8	921.6	991.7	1056.6	1079.3
55°	830.5	858.6	930.4	1004.0	1028.5
57.5°	760.4	793.7	872.6	949.7	976.0
60°	695.6	730.6	814.8	893.6	919.9
62.5°	629.0	667.6	756.9	837.5	867.3
65°	557.2	604.5	699.1	781.5	811.2
67.5°	492.4	541.4	641.3	725.4	751.7
70°	418.8	478.3	580.0	664.1	693.9
72.5°	355.7	415.3	522.1	604.5	634.3
75°	289.1	353.9	460.8	543.2	569.5
77.5°	222.5	294.4	401.2	464.3	473.1
80°	159.4	234.8	332.9	369.7	382.0
82.5°	112.1	180.5	245.3	269.8	276.8
85°	61.3	119.1	154.2	164.7	164.7
87.5°	26.3	50.8	61.3	63.1	64.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)