

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: P261074

Luminaire Tested: **24CZ-LD5-55-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261074  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55-S-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5196.8 lumens  
Efficiency: N/A  
Efficacy: 126.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

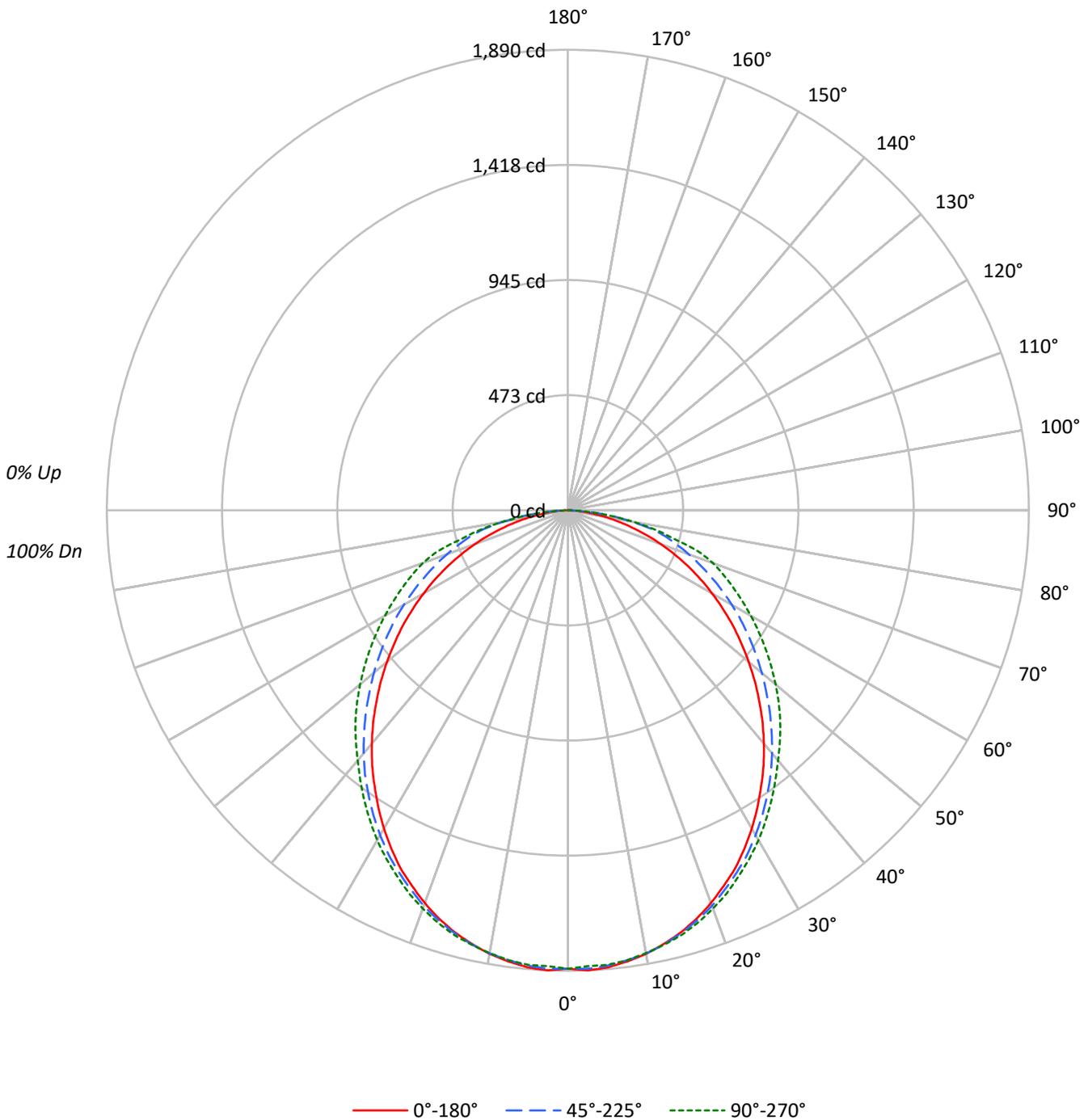
Input Watts (W): 41.125158  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2531	2531	2531
5°	2543	2534	2529
10°	2526	2523	2521
15°	2498	2503	2512
20°	2456	2473	2491
25°	2408	2434	2459
30°	2343	2391	2429
35°	2269	2340	2389
40°	2196	2287	2354
45°	2112	2227	2343
50°	2027	2172	2327
55°	1939	2126	2320
60°	1838	2089	2331
65°	1729	2064	2378
70°	1592	2075	2490
75°	1411	2149	2319
80°	1179	2036	2091
85°	881	1629	1494



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.9	3.4
10°-20°	505.9	9.7
20°-30°	753.9	14.5
30°-40°	887.4	17.1
40°-50°	901.8	17.4
50°-60°	810.8	15.6
60°-70°	640.6	12.3
70°-80°	406.4	7.8
80°-90°	112.2	2.2
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°	1437.6	27.7
0°-40°	2325.1	44.7
0°-60°	4037.7	77.7
0°-90°	5196.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5196.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1881	1881	1881	1881	1881	
5°	1883	1868	1876	1873	1873	179
15°	1793	1784	1797	1802	1804	505
25°	1622	1620	1639	1650	1656	746
35°	1382	1390	1425	1440	1454	864
45°	1110	1126	1171	1205	1231	857
55°	826	847	906	965	989	738
65°	543	571	648	719	747	538
75°	272	318	413	450	446	289
85°	57	99	106	97	97	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1881.3	1881.3	1881.3	1881.3	1881.3
2.5°	1890.0	1876.1	1883.1	1879.6	1872.7
5°	1883.1	1867.5	1876.1	1872.7	1872.7
7.5°	1867.5	1855.4	1862.3	1860.6	1862.3
10°	1848.5	1836.4	1846.8	1846.8	1845.0
12.5°	1822.5	1812.2	1824.3	1824.3	1826.0
15°	1793.1	1784.5	1796.6	1801.8	1803.5
17.5°	1756.8	1748.2	1763.8	1768.9	1774.1
20°	1715.3	1711.9	1727.4	1732.6	1739.5
22.5°	1668.6	1668.6	1684.2	1691.1	1701.5
25°	1622.0	1620.2	1639.3	1649.6	1656.5
27.5°	1566.6	1568.4	1592.6	1602.9	1611.6
30°	1507.8	1511.3	1539.0	1551.1	1563.2
32.5°	1445.6	1452.5	1483.6	1497.5	1509.6
35°	1381.6	1390.3	1424.8	1440.4	1454.2
37.5°	1317.6	1329.7	1366.0	1381.6	1397.2
40°	1250.2	1260.6	1302.1	1321.1	1340.1
42.5°	1181.0	1194.9	1236.4	1264.0	1286.5
45°	1110.1	1125.7	1170.6	1205.2	1231.2
47.5°	1039.2	1060.0	1103.2	1149.9	1172.4
50°	968.3	989.1	1037.5	1089.4	1111.9
52.5°	895.7	916.5	971.8	1025.4	1049.6
55°	826.5	847.3	906.1	964.9	989.1
57.5°	753.9	776.4	842.1	902.6	926.8
60°	683.0	705.5	776.4	840.4	866.3
62.5°	613.9	638.1	712.4	779.9	805.8
65°	543.0	570.6	648.4	719.3	747.0
67.5°	473.8	504.9	586.2	660.5	689.9
70°	404.6	440.9	527.4	603.5	632.9
72.5°	337.2	377.0	468.6	544.7	560.3
75°	271.5	318.2	413.3	449.6	446.1
77.5°	209.2	261.1	351.0	357.9	368.3
80°	152.2	209.2	262.8	276.7	269.8
82.5°	100.3	157.4	188.5	181.6	179.8
85°	57.1	98.6	105.5	96.8	96.8
87.5°	24.2	39.8	34.6	25.9	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)