

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: P260626

Luminaire Tested: **24CZ-LD5-50SE-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260626  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5302.0 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

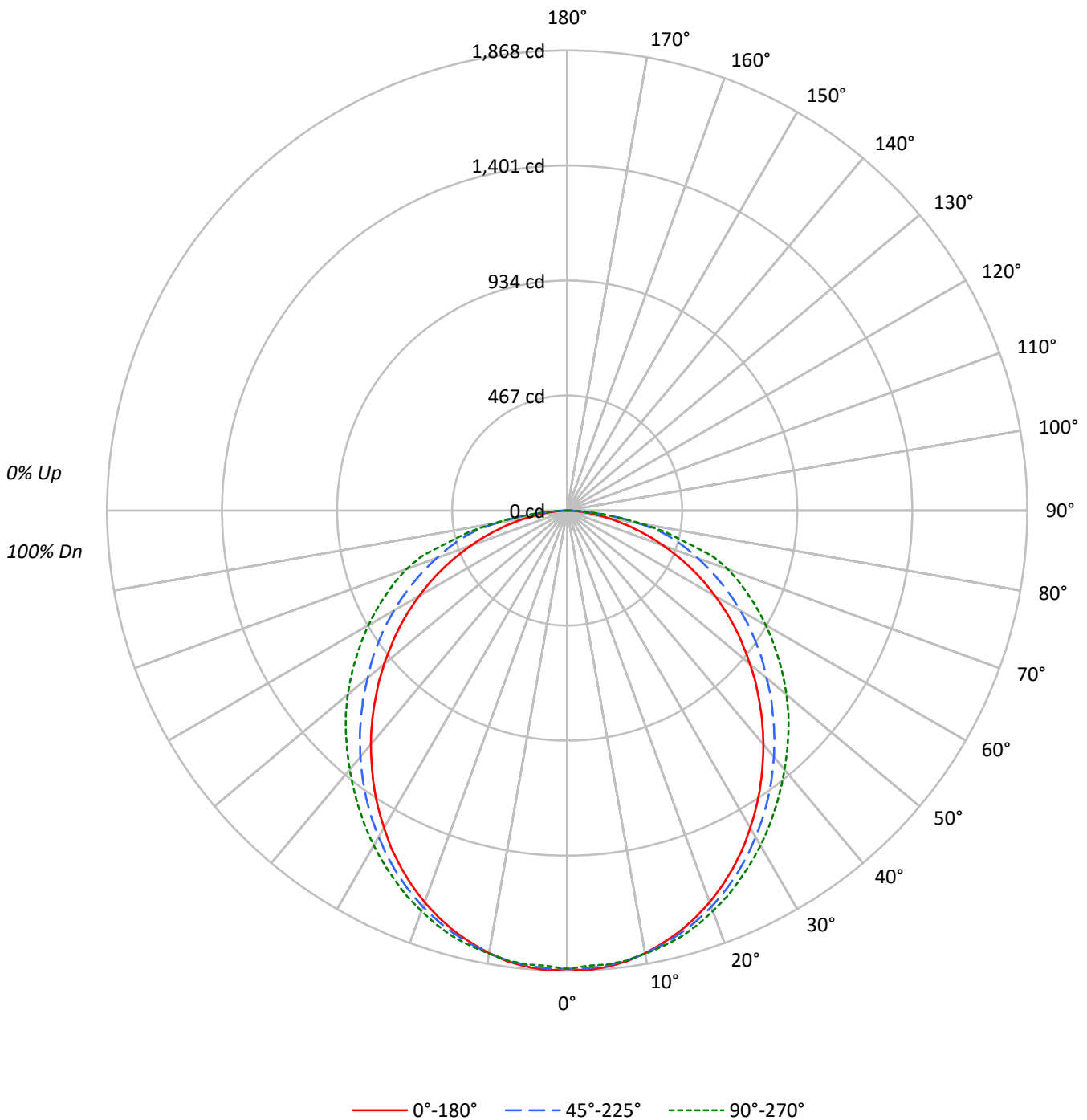
Input Watts (W): 41.656839  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2504	2504	2504
5°	2511	2503	2498
10°	2493	2493	2495
15°	2463	2476	2493
20°	2423	2451	2477
25°	2372	2417	2458
30°	2310	2378	2440
35°	2245	2338	2421
40°	2178	2292	2410
45°	2104	2249	2418
50°	2029	2211	2432
55°	1955	2197	2457
60°	1866	2184	2506
65°	1769	2185	2589
70°	1635	2221	2728
75°	1463	2322	2595
80°	1223	2222	2377
85°	925	1709	1626



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.8	3.3
10°-20°	500.4	9.4
20°-30°	748.1	14.1
30°-40°	887.5	16.7
40°-50°	913.5	17.2
50°-60°	838.0	15.8
60°-70°	677.6	12.8
70°-80°	439.7	8.3
80°-90°	121.2	2.3
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°	1424.4	26.9
0°-40°	2311.9	43.6
0°-60°	4063.4	76.6
0°-90°	5302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1861	1861	1861	1861	1861	
5°	1859	1846	1854	1852	1850	176
15°	1768	1761	1777	1784	1790	498
25°	1598	1599	1628	1643	1656	735
35°	1367	1378	1423	1454	1474	855
45°	1106	1124	1182	1238	1271	853
55°	833	859	937	1013	1048	744
65°	556	588	686	777	813	549
75°	281	334	447	499	499	299
85°	60	102	111	107	105	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1860.7	1860.7	1860.7	1860.7	1860.7
2.5°	1868.0	1853.5	1860.7	1858.9	1849.8
5°	1858.9	1846.2	1853.5	1851.6	1849.8
7.5°	1846.2	1833.5	1842.6	1840.8	1842.6
10°	1824.4	1813.5	1824.4	1826.2	1826.2
12.5°	1797.2	1788.1	1802.6	1806.3	1809.9
15°	1768.1	1760.9	1777.2	1784.5	1789.9
17.5°	1731.8	1726.4	1746.4	1755.4	1762.7
20°	1691.9	1690.1	1711.9	1720.9	1730.0
22.5°	1646.5	1646.5	1671.9	1682.8	1695.5
25°	1597.5	1599.3	1628.4	1642.9	1655.6
27.5°	1544.9	1546.7	1581.2	1599.3	1613.8
30°	1486.8	1494.0	1530.3	1553.9	1570.3
32.5°	1428.7	1437.8	1477.7	1504.9	1523.1
35°	1367.0	1377.8	1423.2	1454.1	1474.1
37.5°	1303.4	1316.1	1365.1	1399.6	1423.2
40°	1239.9	1254.4	1305.2	1345.2	1372.4
42.5°	1172.7	1189.0	1245.3	1292.5	1321.6
45°	1105.5	1123.7	1181.8	1238.1	1270.7
47.5°	1038.4	1060.2	1121.9	1183.6	1218.1
50°	969.4	991.2	1056.5	1127.3	1161.8
52.5°	900.4	925.8	998.4	1071.1	1105.5
55°	833.2	858.7	936.7	1013.0	1047.5
57.5°	764.3	789.7	875.0	954.9	989.4
60°	693.5	722.5	811.5	893.1	931.3
62.5°	624.5	655.3	749.7	836.9	873.2
65°	555.5	588.2	686.2	777.0	813.3
67.5°	484.7	522.8	624.5	717.1	755.2
70°	415.7	457.5	564.6	657.2	693.5
72.5°	348.5	393.9	504.7	599.1	620.8
75°	281.4	334.0	446.6	499.2	499.2
77.5°	217.8	275.9	381.2	401.2	412.1
80°	157.9	221.5	286.8	310.4	306.8
82.5°	105.3	168.8	205.1	205.1	199.7
85°	59.9	101.7	110.7	107.1	105.3
87.5°	25.4	38.1	34.5	27.2	23.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)