

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: P260902

Luminaire Tested: **24CZ-LD5-65-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260902  
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-LD5-65-UNV-L92765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5592.0 lumens  
Efficiency: N/A  
Efficacy: 114.1 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

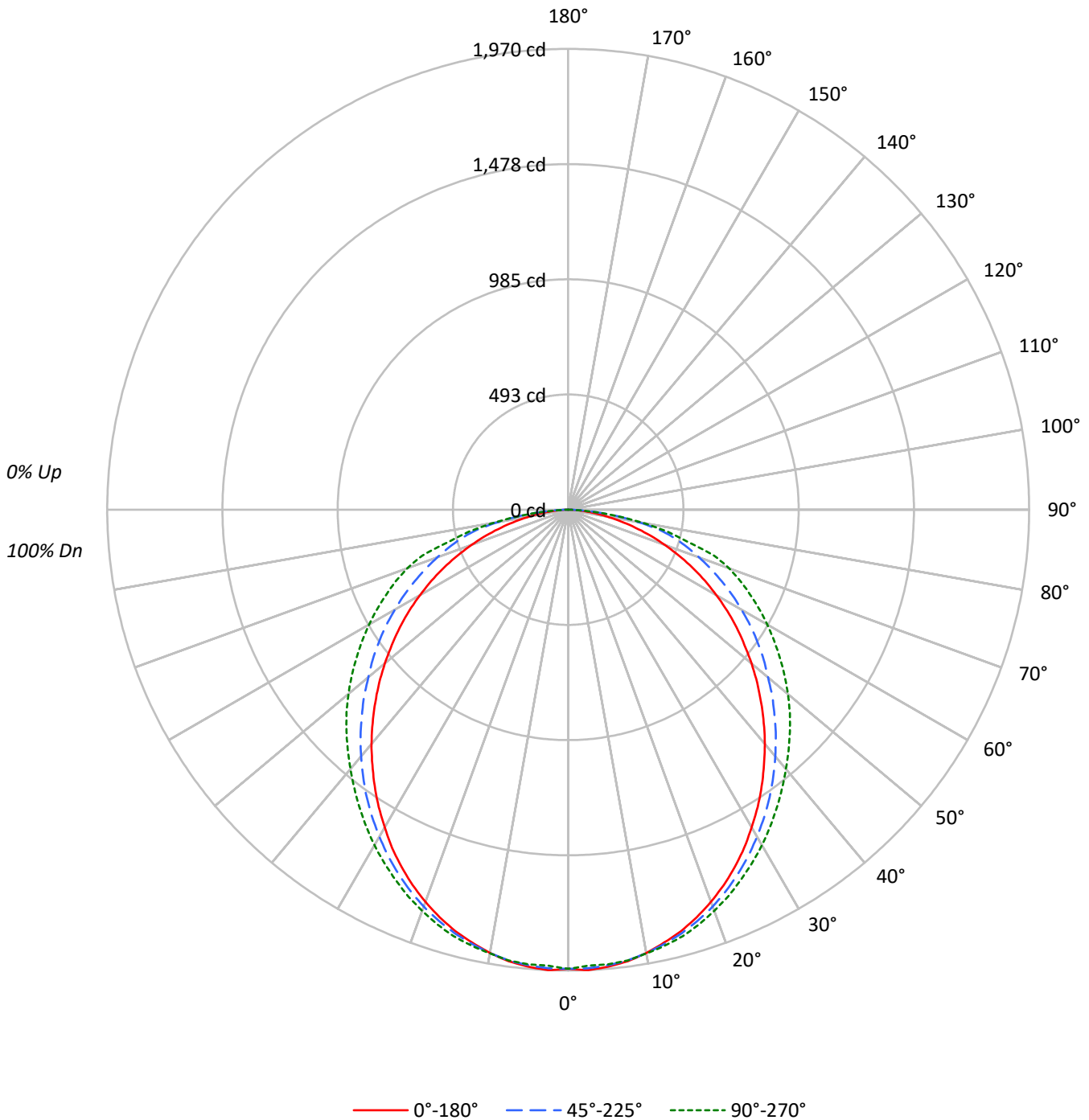
Input Watts (W): 49.011  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2641	2641	2641
5°	2648	2640	2635
10°	2629	2629	2632
15°	2598	2611	2630
20°	2555	2585	2613
25°	2501	2550	2592
30°	2436	2508	2573
35°	2368	2466	2554
40°	2297	2418	2542
45°	2219	2372	2550
50°	2140	2332	2565
55°	2061	2318	2591
60°	1968	2303	2643
65°	1865	2304	2731
70°	1725	2343	2877
75°	1543	2449	2737
80°	1291	2344	2507
85°	976	1803	1714



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.4	3.3
10°-20°	527.8	9.4
20°-30°	789.1	14.1
30°-40°	936.1	16.7
40°-50°	963.4	17.2
50°-60°	883.9	15.8
60°-70°	714.6	12.8
70°-80°	463.8	8.3
80°-90°	127.9	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°	1502.3	26.9
0°-40°	2438.4	43.6
0°-60°	4285.7	76.6
0°-90°	5592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1962	1962	1962	1962	1962	
5°	1961	1947	1955	1953	1951	186
15°	1865	1857	1874	1882	1888	525
25°	1685	1687	1717	1733	1746	776
35°	1442	1453	1501	1534	1555	902
45°	1166	1185	1246	1306	1340	900
55°	879	906	988	1068	1105	785
65°	586	620	724	820	858	579
75°	297	352	471	526	526	315
85°	63	107	117	113	111	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1962.5	1962.5	1962.5	1962.5	1962.5
2.5°	1970.2	1954.8	1962.5	1960.6	1951.0
5°	1960.6	1947.2	1954.8	1952.9	1951.0
7.5°	1947.2	1933.8	1943.4	1941.4	1943.4
10°	1924.2	1912.7	1924.2	1926.1	1926.1
12.5°	1895.5	1885.9	1901.2	1905.1	1908.9
15°	1864.9	1857.2	1874.4	1882.1	1887.8
17.5°	1826.6	1820.8	1841.9	1851.5	1859.1
20°	1784.4	1782.5	1805.5	1815.1	1824.6
22.5°	1736.6	1736.6	1763.4	1774.9	1788.3
25°	1684.9	1686.8	1717.4	1732.7	1746.1
27.5°	1629.4	1631.3	1667.6	1686.8	1702.1
30°	1568.1	1575.7	1614.0	1638.9	1656.2
32.5°	1506.8	1516.4	1558.5	1587.2	1606.4
35°	1441.7	1453.2	1501.1	1533.6	1554.7
37.5°	1374.7	1388.1	1439.8	1476.2	1501.1
40°	1307.7	1323.0	1376.6	1418.7	1447.5
42.5°	1236.9	1254.1	1313.4	1363.2	1393.9
45°	1166.0	1185.2	1246.4	1305.8	1340.2
47.5°	1095.2	1118.1	1183.2	1248.3	1284.7
50°	1022.4	1045.4	1114.3	1189.0	1225.4
52.5°	949.7	976.5	1053.0	1129.6	1166.0
55°	878.8	905.6	988.0	1068.4	1104.7
57.5°	806.1	832.9	922.9	1007.1	1043.5
60°	731.4	762.0	855.8	942.0	982.2
62.5°	658.6	691.2	790.7	882.6	920.9
65°	585.9	620.3	723.7	819.5	857.8
67.5°	511.2	551.4	658.6	756.3	796.5
70°	438.5	482.5	595.5	693.1	731.4
72.5°	367.6	415.5	532.3	631.8	654.8
75°	296.8	352.3	471.0	526.5	526.5
77.5°	229.8	291.0	402.1	423.1	434.6
80°	166.6	233.6	302.5	327.4	323.6
82.5°	111.0	178.1	216.4	216.4	210.6
85°	63.2	107.2	116.8	113.0	111.0
87.5°	26.8	40.2	36.4	28.7	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)