

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: P261391

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261391  
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-LD5-50SE-S-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4842.0 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

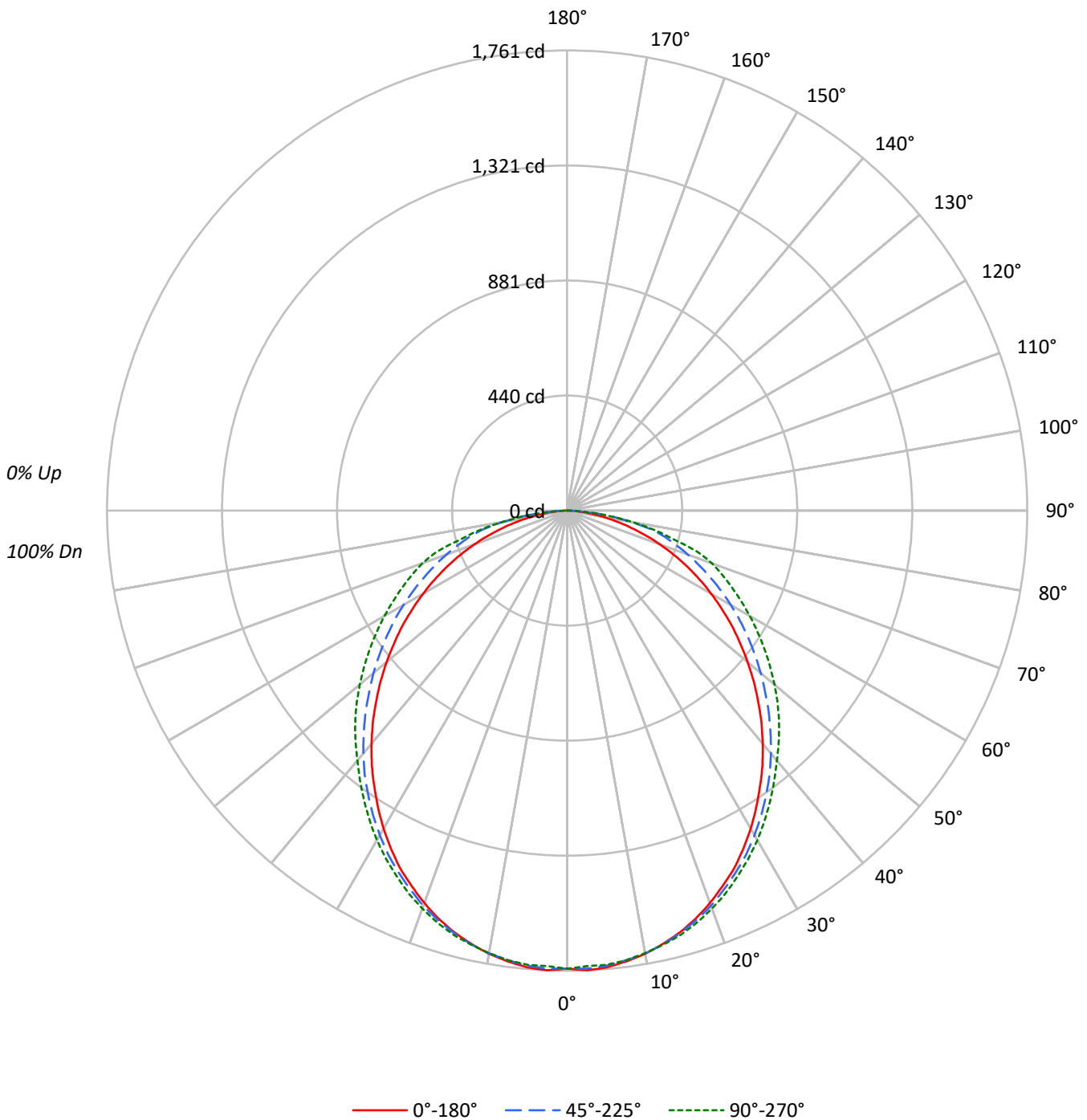
Input Watts (W): 41.571  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	2359	2359	2359
5°	2370	2361	2357
10°	2353	2351	2349
15°	2327	2332	2341
20°	2288	2305	2321
25°	2244	2267	2291
30°	2183	2228	2263
35°	2114	2181	2225
40°	2046	2131	2193
45°	1968	2075	2183
50°	1888	2024	2168
55°	1806	1980	2162
60°	1713	1947	2172
65°	1611	1924	2216
70°	1483	1933	2320
75°	1315	2002	2161
80°	1099	1898	1947
85°	821	1518	1392



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.7	3.4
10°-20°	471.3	9.7
20°-30°	702.4	14.5
30°-40°	826.8	17.1
40°-50°	840.3	17.4
50°-60°	755.5	15.6
60°-70°	596.8	12.3
70°-80°	378.6	7.8
80°-90°	104.5	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°	1339.5	27.7
0°-40°	2166.3	44.7
0°-60°	3762.0	77.7
0°-90°	4842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4842.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1754	1740	1748	1745	1745	166
15°	1671	1663	1674	1679	1680	471
25°	1511	1510	1527	1537	1543	695
35°	1287	1295	1328	1342	1355	805
45°	1034	1049	1091	1123	1147	798
55°	770	789	844	899	922	688
65°	506	532	604	670	696	501
75°	253	296	385	419	416	269
85°	53	92	98	90	90	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1752.9	1752.9	1752.9	1752.9	1752.9
2.5°	1760.9	1748.1	1754.5	1751.3	1744.8
5°	1754.5	1740.0	1748.1	1744.8	1744.8
7.5°	1740.0	1728.7	1735.2	1733.6	1735.2
10°	1722.3	1711.0	1720.7	1720.7	1719.1
12.5°	1698.1	1688.4	1699.7	1699.7	1701.3
15°	1670.7	1662.7	1673.9	1678.8	1680.4
17.5°	1636.9	1628.8	1643.3	1648.2	1653.0
20°	1598.2	1595.0	1609.5	1614.3	1620.8
22.5°	1554.7	1554.7	1569.2	1575.7	1585.3
25°	1511.2	1509.6	1527.3	1537.0	1543.4
27.5°	1459.7	1461.3	1483.8	1493.5	1501.6
30°	1404.9	1408.1	1433.9	1445.2	1456.4
32.5°	1346.9	1353.3	1382.3	1395.2	1406.5
35°	1287.3	1295.3	1327.6	1342.1	1354.9
37.5°	1227.7	1238.9	1272.8	1287.3	1301.8
40°	1164.8	1174.5	1213.2	1230.9	1248.6
42.5°	1100.4	1113.3	1151.9	1177.7	1198.7
45°	1034.3	1048.8	1090.7	1122.9	1147.1
47.5°	968.3	987.6	1027.9	1071.4	1092.3
50°	902.2	921.6	966.7	1015.0	1035.9
52.5°	834.6	853.9	905.4	955.4	977.9
55°	770.1	789.4	844.2	899.0	921.6
57.5°	702.4	723.4	784.6	841.0	863.6
60°	636.4	657.3	723.4	783.0	807.2
62.5°	571.9	594.5	663.8	726.6	750.8
65°	505.9	531.7	604.2	670.2	696.0
67.5°	441.4	470.4	546.2	615.4	642.8
70°	377.0	410.8	491.4	562.3	589.7
72.5°	314.2	351.2	436.6	507.5	522.0
75°	252.9	296.4	385.1	418.9	415.7
77.5°	194.9	243.3	327.1	333.5	343.2
80°	141.8	194.9	244.9	257.8	251.3
82.5°	93.4	146.6	175.6	169.2	167.6
85°	53.2	91.8	98.3	90.2	90.2
87.5°	22.6	37.1	32.2	24.2	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)