

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: P263718

Luminaire Tested: **24CZ-LD5-70-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263718  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-70-RDP-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4978.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

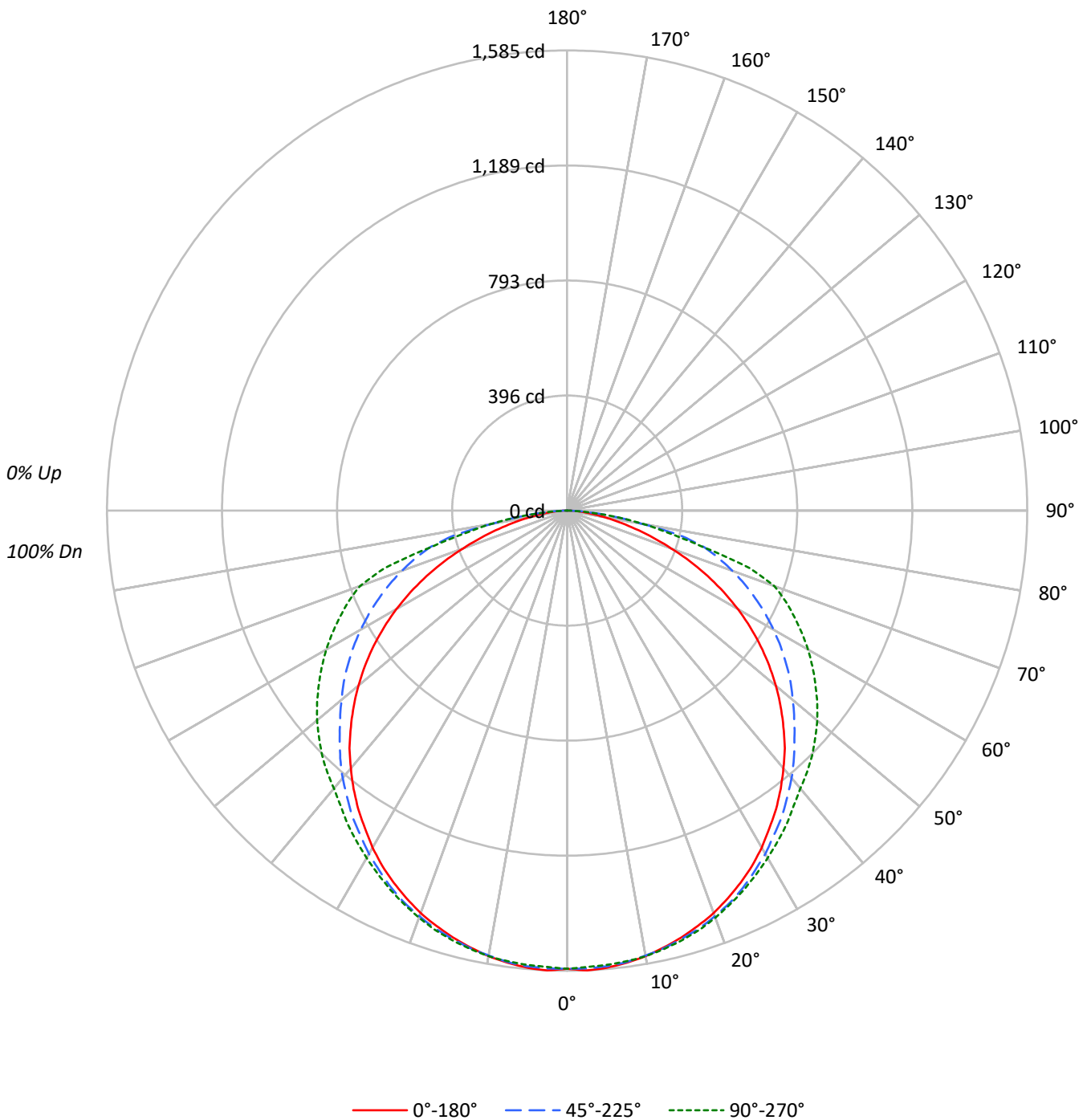
Input Watts (W): 54.684  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263718

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L82765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P263718

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L82765-W2A1-U-4500K

**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	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	2123	2123	2123
5°	2135	2128	2121
10°	2129	2126	2129
15°	2120	2126	2133
20°	2112	2130	2137
25°	2099	2128	2139
30°	2082	2121	2147
35°	2061	2117	2165
40°	2036	2113	2195
45°	2005	2108	2271
50°	1964	2124	2354
55°	1908	2161	2449
60°	1827	2209	2578
65°	1701	2278	2746
70°	1504	2381	2988
75°	1261	2548	2509
80°	1007	2012	2088
85°	795	1362	1249



TEST NUMBER: P263718

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L82765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.7	3.0
10°-20°	430.8	8.7
20°-30°	657.9	13.2
30°-40°	804.4	16.2
40°-50°	861.0	17.3
50°-60°	825.9	16.6
60°-70°	697.3	14.0
70°-80°	445.7	9.0
80°-90°	105.4	2.1
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°	1238.4	24.9
0°-40°	2042.8	41.0
0°-60°	3729.6	74.9
0°-90°	4978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4978.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1578	1578	1578	1578	1578	
5°	1580	1571	1576	1573	1571	150
15°	1522	1517	1527	1532	1532	430
25°	1414	1411	1434	1438	1441	652
35°	1255	1264	1289	1306	1318	784
45°	1054	1071	1108	1159	1193	813
55°	814	840	921	1005	1044	726
65°	534	586	716	816	862	527
75°	243	346	490	500	483	261
85°	52	86	88	86	81	62
90°	0	0	0	0	0	



TEST NUMBER: P263718

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L82765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1578.1	1578.1	1578.1	1578.1	1578.1
2.5°	1585.4	1575.6	1578.1	1578.1	1573.2
5°	1580.5	1570.7	1575.6	1573.2	1570.7
7.5°	1570.7	1563.4	1568.3	1568.3	1565.8
10°	1558.5	1551.1	1556.0	1558.5	1558.5
12.5°	1541.3	1536.4	1543.8	1543.8	1546.2
15°	1521.7	1516.8	1526.6	1531.5	1531.5
17.5°	1499.7	1497.2	1509.5	1511.9	1514.4
20°	1475.2	1472.7	1487.4	1487.4	1492.3
22.5°	1445.7	1443.3	1462.9	1462.9	1467.8
25°	1413.9	1411.4	1433.5	1438.4	1440.8
27.5°	1379.6	1377.1	1399.2	1406.5	1411.4
30°	1340.4	1340.4	1364.9	1374.7	1382.0
32.5°	1296.3	1303.6	1325.7	1340.4	1350.2
35°	1254.6	1264.4	1288.9	1306.1	1318.3
37.5°	1208.1	1217.9	1244.8	1266.9	1281.6
40°	1159.0	1171.3	1203.2	1227.7	1249.7
42.5°	1110.0	1122.3	1156.6	1193.4	1222.8
45°	1053.7	1070.8	1107.6	1159.0	1193.4
47.5°	997.3	1014.5	1061.0	1124.7	1159.0
50°	938.5	958.1	1014.5	1088.0	1124.7
52.5°	877.2	899.3	970.4	1048.8	1085.5
55°	813.5	840.5	921.4	1004.7	1043.9
57.5°	747.4	776.8	872.3	960.6	1002.2
60°	678.8	715.5	820.9	914.0	958.1
62.5°	607.7	651.8	769.4	865.0	911.6
65°	534.2	585.6	715.5	816.0	862.5
67.5°	458.2	526.8	661.6	767.0	813.5
70°	382.3	463.1	605.3	713.1	759.6
72.5°	311.2	404.3	548.9	649.4	659.2
75°	242.6	345.5	490.1	499.9	482.7
77.5°	181.3	286.7	404.3	360.2	357.8
80°	129.9	230.3	259.7	267.1	269.5
82.5°	85.8	174.0	169.1	174.0	171.5
85°	51.5	85.8	88.2	85.8	80.9
87.5°	24.5	31.9	24.5	22.1	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)