

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: P261332

Luminaire Tested: **24CZ-LD5-70-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261332  
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-LD5-70-S-UNV-L92765-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: 6352.0 lumens  
Efficiency: N/A  
Efficacy: 117.0 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

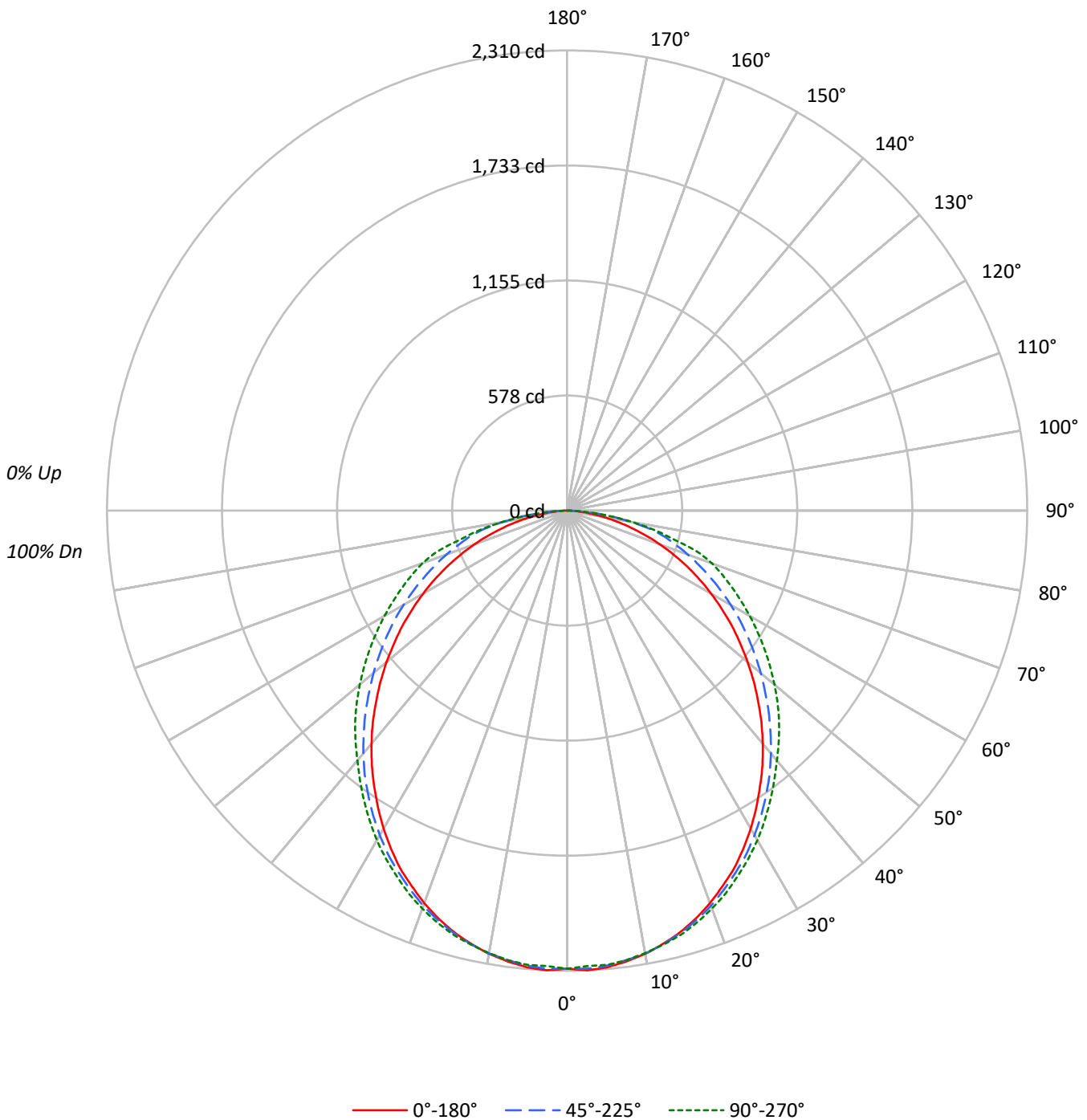
Input Watts (W): 54.312  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P261332

CATALOG NUMBER: 24CZ-LD5-70-S-UNV-L92765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P261332

CATALOG NUMBER: 24CZ-LD5-70-S-UNV-L92765-W2A1-U-4000K

**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°	3094	3094	3094
5°	3109	3097	3092
10°	3087	3084	3081
15°	3053	3059	3071
20°	3002	3023	3044
25°	2943	2975	3006
30°	2863	2923	2968
35°	2774	2861	2920
40°	2684	2795	2877
45°	2582	2723	2863
50°	2478	2654	2845
55°	2370	2598	2836
60°	2247	2554	2849
65°	2113	2523	2907
70°	1946	2536	3043
75°	1725	2626	2835
80°	1441	2490	2555
85°	1076	1990	1828



TEST NUMBER: P261332

CATALOG NUMBER: 24CZ-LD5-70-S-UNV-L92765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.4	3.4
10°-20°	618.3	9.7
20°-30°	921.5	14.5
30°-40°	1084.7	17.1
40°-50°	1102.3	17.4
50°-60°	991.0	15.6
60°-70°	783.0	12.3
70°-80°	496.7	7.8
80°-90°	137.1	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°	1757.2	27.7
0°-40°	2841.9	44.7
0°-60°	4935.3	77.7
0°-90°	6352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6352.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2300	2300	2300	2300	2300	
5°	2302	2283	2293	2289	2289	218
15°	2192	2181	2196	2202	2204	617
25°	1982	1980	2004	2016	2025	912
35°	1689	1699	1742	1761	1778	1057
45°	1357	1376	1431	1473	1505	1047
55°	1010	1036	1108	1179	1209	902
65°	664	698	793	879	913	657
75°	332	389	505	550	545	353
85°	70	120	129	118	118	86
90°	0	0	0	0	0	



TEST NUMBER: P261332

CATALOG NUMBER: 24CZ-LD5-70-S-UNV-L92765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2299.5	2299.5	2299.5	2299.5	2299.5
2.5°	2310.1	2293.2	2301.7	2297.4	2289.0
5°	2301.7	2282.6	2293.2	2289.0	2289.0
7.5°	2282.6	2267.8	2276.3	2274.2	2276.3
10°	2259.4	2244.6	2257.3	2257.3	2255.2
12.5°	2227.7	2215.0	2229.8	2229.8	2231.9
15°	2191.7	2181.2	2196.0	2202.3	2204.4
17.5°	2147.4	2136.8	2155.8	2162.2	2168.5
20°	2096.6	2092.4	2111.4	2117.8	2126.2
22.5°	2039.6	2039.6	2058.6	2067.1	2079.7
25°	1982.5	1980.4	2003.6	2016.3	2024.8
27.5°	1914.9	1917.0	1946.6	1959.3	1969.8
30°	1843.0	1847.2	1881.1	1895.9	1910.6
32.5°	1766.9	1775.4	1813.4	1830.3	1845.1
35°	1688.7	1699.3	1741.6	1760.6	1777.5
37.5°	1610.5	1625.3	1669.7	1688.7	1707.7
40°	1528.1	1540.8	1591.5	1614.8	1638.0
42.5°	1443.6	1460.5	1511.2	1545.0	1572.5
45°	1356.9	1375.9	1430.9	1473.1	1504.8
47.5°	1270.2	1295.6	1348.4	1405.5	1433.0
50°	1183.6	1208.9	1268.1	1331.5	1359.0
52.5°	1094.8	1120.2	1187.8	1253.3	1282.9
55°	1010.3	1035.6	1107.5	1179.4	1208.9
57.5°	921.5	949.0	1029.3	1103.3	1132.9
60°	834.9	862.3	949.0	1027.2	1058.9
62.5°	750.3	779.9	870.8	953.2	984.9
65°	663.7	697.5	792.6	879.2	913.1
67.5°	579.1	617.2	716.5	807.4	843.3
70°	494.6	539.0	644.6	737.6	773.6
72.5°	412.1	460.8	572.8	665.8	684.8
75°	331.8	388.9	505.1	549.5	545.3
77.5°	255.7	319.1	429.1	437.5	450.2
80°	186.0	255.7	321.3	338.2	329.7
82.5°	122.6	192.3	230.4	221.9	219.8
85°	69.7	120.5	128.9	118.4	118.4
87.5°	29.6	48.6	42.3	31.7	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)