

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: P261093

Luminaire Tested: **24CZ-LD5-75-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261093  
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-LD5-75-S-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6535.4 lumens  
Efficiency: N/A  
Efficacy: 109.8 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

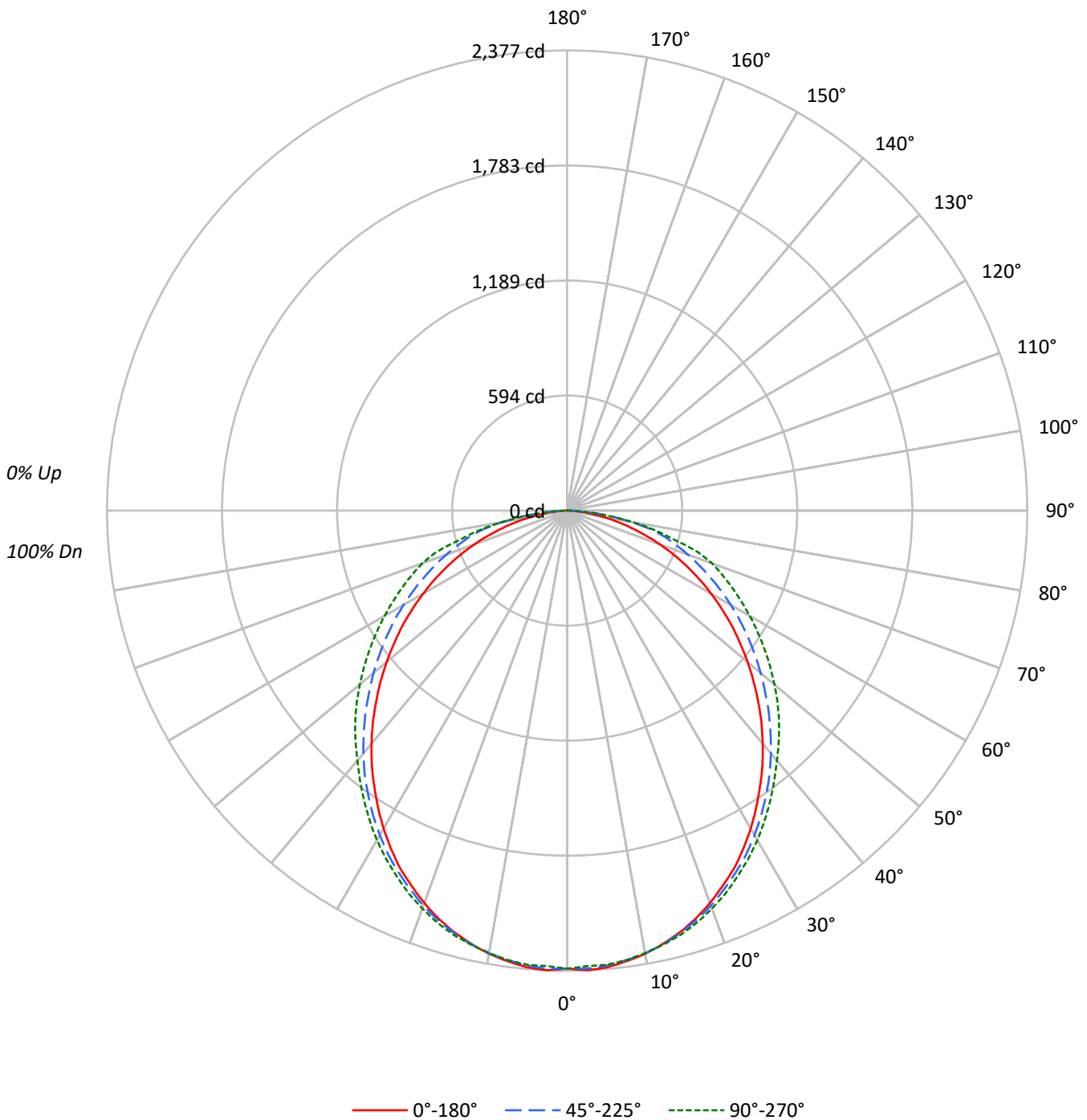
Input Watts (W): 59.513676  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P261093

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L93050-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P261093

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L93050-W2A1-U-3500K

**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°	3183	3183	3183
5°	3198	3187	3181
10°	3176	3173	3170
15°	3141	3147	3159
20°	3089	3111	3132
25°	3028	3060	3093
30°	2946	3007	3054
35°	2854	2943	3004
40°	2761	2876	2960
45°	2657	2801	2946
50°	2549	2731	2927
55°	2438	2673	2918
60°	2312	2627	2932
65°	2174	2596	2991
70°	2002	2609	3131
75°	1775	2702	2916
80°	1483	2561	2628
85°	1108	2047	1880



TEST NUMBER: P261093

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L93050-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.7	3.4
10°-20°	636.2	9.7
20°-30°	948.1	14.5
30°-40°	1116.0	17.1
40°-50°	1134.1	17.4
50°-60°	1019.7	15.6
60°-70°	805.6	12.3
70°-80°	511.0	7.8
80°-90°	141.0	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°	1808.0	27.7
0°-40°	2924.0	44.7
0°-60°	5077.8	77.7
0°-90°	6535.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6535.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2366	2366	2366	2366	2366	
5°	2368	2349	2359	2355	2355	225
15°	2255	2244	2259	2266	2268	635
25°	2040	2038	2062	2075	2083	938
35°	1738	1748	1792	1811	1829	1087
45°	1396	1416	1472	1516	1548	1077
55°	1040	1066	1140	1213	1244	928
65°	683	718	816	905	939	676
75°	341	400	520	565	561	363
85°	72	124	133	122	122	88
90°	0	0	0	0	0	



TEST NUMBER: P261093

CATALOG NUMBER: 24CZ-LD5-75-S-UNV-L93050-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2366.0	2366.0	2366.0	2366.0	2366.0
2.5°	2376.8	2359.4	2368.1	2363.8	2355.1
5°	2368.1	2348.6	2359.4	2355.1	2355.1
7.5°	2348.6	2333.3	2342.0	2339.9	2342.0
10°	2324.6	2309.4	2322.5	2322.5	2320.3
12.5°	2292.0	2279.0	2294.2	2294.2	2296.4
15°	2255.0	2244.2	2259.4	2265.9	2268.1
17.5°	2209.4	2198.5	2218.1	2224.6	2231.1
20°	2157.2	2152.8	2172.4	2178.9	2187.6
22.5°	2098.5	2098.5	2118.0	2126.7	2139.8
25°	2039.8	2037.6	2061.5	2074.6	2083.3
27.5°	1970.2	1972.4	2002.8	2015.8	2026.7
30°	1896.2	1900.6	1935.4	1950.6	1965.8
32.5°	1818.0	1826.7	1865.8	1883.2	1898.4
35°	1737.5	1748.4	1791.9	1811.4	1828.8
37.5°	1657.0	1672.3	1717.9	1737.5	1757.1
40°	1572.2	1585.3	1637.5	1661.4	1685.3
42.5°	1485.2	1502.6	1554.8	1589.6	1617.9
45°	1396.1	1415.7	1472.2	1515.7	1548.3
47.5°	1306.9	1333.0	1387.4	1446.1	1474.4
50°	1217.8	1243.9	1304.8	1370.0	1398.3
52.5°	1126.4	1152.5	1222.1	1289.5	1320.0
55°	1039.5	1065.5	1139.5	1213.4	1243.9
57.5°	948.1	976.4	1059.0	1135.1	1165.6
60°	859.0	887.2	976.4	1056.8	1089.5
62.5°	772.0	802.4	895.9	980.7	1013.4
65°	682.8	717.6	815.5	904.6	939.4
67.5°	595.8	635.0	737.2	830.7	867.7
70°	508.9	554.5	663.2	758.9	795.9
72.5°	424.0	474.1	589.3	685.0	704.6
75°	341.4	400.1	519.7	565.4	561.0
77.5°	263.1	328.4	441.4	450.1	463.2
80°	191.4	263.1	330.5	347.9	339.2
82.5°	126.1	197.9	237.0	228.3	226.2
85°	71.8	124.0	132.6	121.8	121.8
87.5°	30.4	50.0	43.5	32.6	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)