

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: P260668

Luminaire Tested: **24CZ-LD5-70-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260668
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-LD5-70-UNV-L93050-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: 5993.3 lumens
Efficiency: N/A
Efficacy: 109.6 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

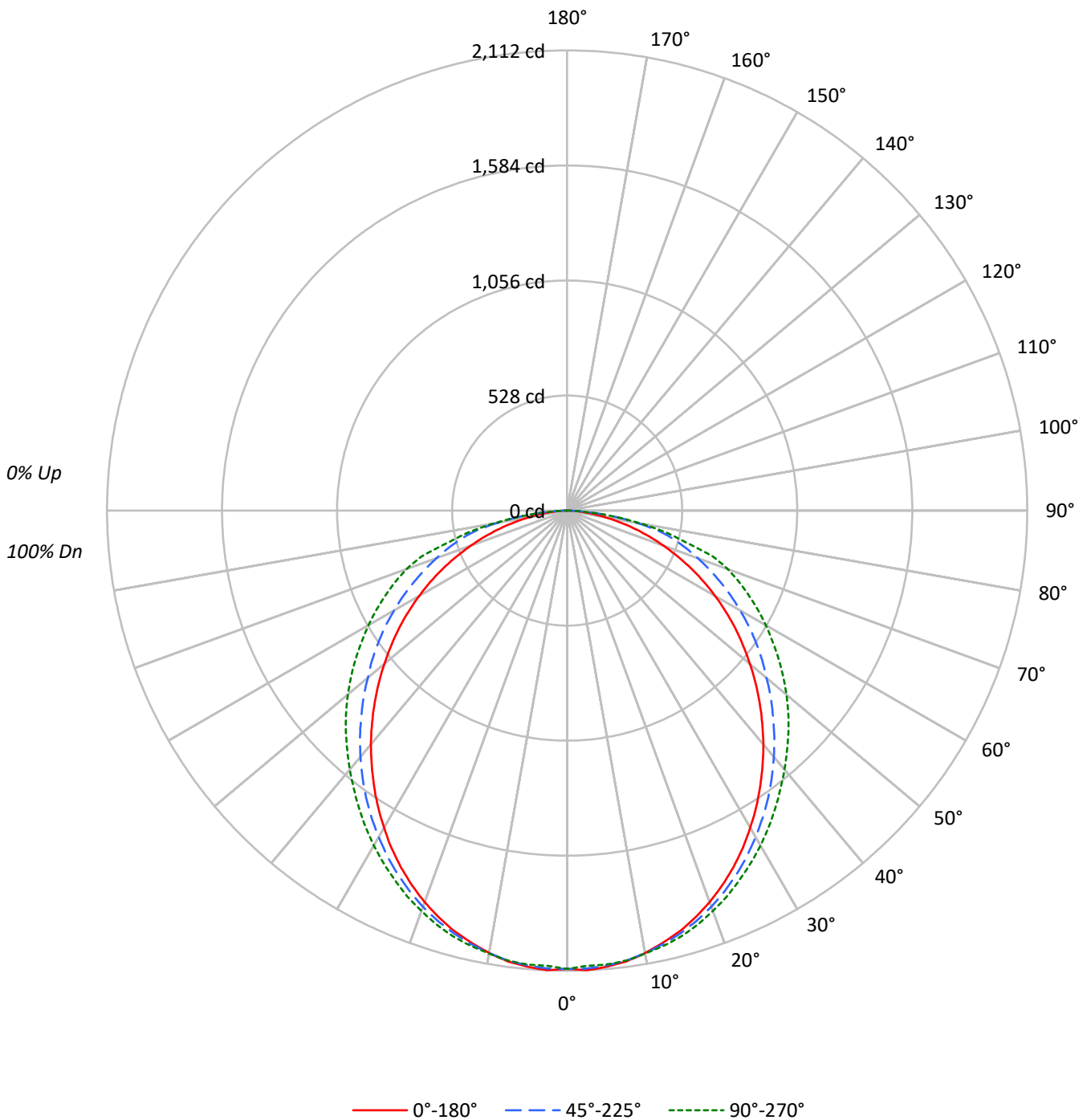
Input Watts (W): 54.680559
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P260668

CATALOG NUMBER: 24CZ-LD5-70-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P260668

CATALOG NUMBER: 24CZ-LD5-70-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	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°	2830	2830	2830
5°	2838	2830	2824
10°	2818	2818	2820
15°	2784	2798	2818
20°	2738	2771	2800
25°	2681	2733	2778
30°	2611	2688	2758
35°	2538	2643	2737
40°	2462	2591	2725
45°	2378	2542	2733
50°	2294	2500	2749
55°	2209	2484	2777
60°	2109	2468	2833
65°	1999	2470	2927
70°	1849	2511	3084
75°	1654	2624	2934
80°	1383	2512	2687
85°	1045	1933	1837



TEST NUMBER: P260668

CATALOG NUMBER: 24CZ-LD5-70-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.8	3.3
10°-20°	565.7	9.4
20°-30°	845.7	14.1
30°-40°	1003.3	16.7
40°-50°	1032.6	17.2
50°-60°	947.3	15.8
60°-70°	765.9	12.8
70°-80°	497.1	8.3
80°-90°	137.1	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°	1610.1	26.9
0°-40°	2613.4	43.6
0°-60°	4593.3	76.6
0°-90°	5993.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5993.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2103	2103	2103	2103	2103	
5°	2101	2087	2095	2093	2091	199
15°	1999	1990	2009	2017	2023	563
25°	1806	1808	1841	1857	1872	831
35°	1545	1558	1609	1644	1666	966
45°	1250	1270	1336	1400	1436	964
55°	942	971	1059	1145	1184	841
65°	628	665	776	878	919	621
75°	318	378	505	564	564	338
85°	68	115	125	121	119	83
90°	0	0	0	0	0	



TEST NUMBER: P260668

CATALOG NUMBER: 24CZ-LD5-70-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2103.4	2103.4	2103.4	2103.4	2103.4
2.5°	2111.6	2095.1	2103.4	2101.3	2091.0
5°	2101.3	2086.9	2095.1	2093.1	2091.0
7.5°	2086.9	2072.6	2082.8	2080.8	2082.8
10°	2062.3	2050.0	2062.3	2064.4	2064.4
12.5°	2031.5	2021.3	2037.7	2041.8	2045.9
15°	1998.7	1990.5	2009.0	2017.2	2023.3
17.5°	1957.7	1951.5	1974.1	1984.3	1992.5
20°	1912.5	1910.5	1935.1	1945.3	1955.6
22.5°	1861.2	1861.2	1889.9	1902.3	1916.6
25°	1805.8	1807.9	1840.7	1857.1	1871.5
27.5°	1746.3	1748.3	1787.3	1807.9	1824.3
30°	1680.6	1688.8	1729.9	1756.6	1775.0
32.5°	1615.0	1625.2	1670.4	1701.2	1721.7
35°	1545.2	1557.5	1608.8	1643.7	1666.3
37.5°	1473.4	1487.7	1543.1	1582.1	1608.8
40°	1401.6	1418.0	1475.4	1520.6	1551.4
42.5°	1325.6	1344.1	1407.7	1461.1	1493.9
45°	1249.7	1270.2	1335.9	1399.5	1436.4
47.5°	1173.8	1198.4	1268.2	1337.9	1376.9
50°	1095.8	1120.4	1194.3	1274.3	1313.3
52.5°	1017.8	1046.5	1128.6	1210.7	1249.7
55°	941.9	970.6	1058.9	1145.0	1184.0
57.5°	863.9	892.6	989.1	1079.4	1118.4
60°	783.9	816.7	917.3	1009.6	1052.7
62.5°	705.9	740.8	847.5	946.0	987.0
65°	627.9	664.9	775.7	878.3	919.3
67.5°	547.9	591.0	705.9	810.6	853.7
70°	469.9	517.1	638.2	742.8	783.9
72.5°	394.0	445.3	570.5	677.2	701.8
75°	318.1	377.6	504.8	564.3	564.3
77.5°	246.2	311.9	430.9	453.5	465.8
80°	178.5	250.4	324.2	350.9	346.8
82.5°	119.0	190.8	231.9	231.9	225.7
85°	67.7	114.9	125.2	121.1	119.0
87.5°	28.7	43.1	39.0	30.8	26.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)