

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: P261032

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261032
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-LD5-40SE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3902.0 lumens
Efficiency: N/A
Efficacy: 128.6 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

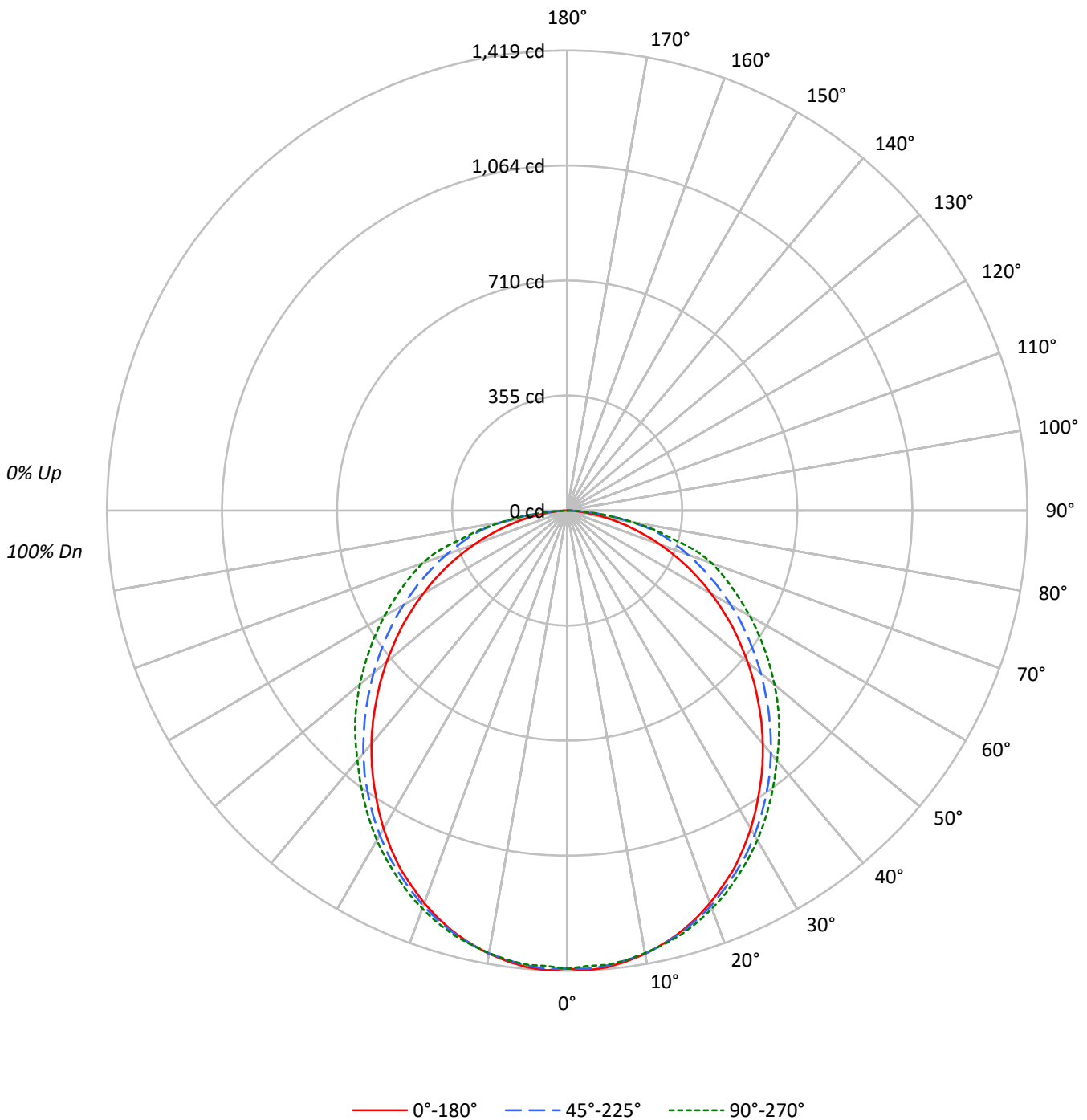
Input Watts (W): 30.350178
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P261032

CATALOG NUMBER: 24CZ-LD5-40SE-S-UNV-L83050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P261032

CATALOG NUMBER: 24CZ-LD5-40SE-S-UNV-L83050-W2A1-U-3000K

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°	1901	1901	1901
5°	1910	1903	1899
10°	1896	1894	1893
15°	1875	1879	1886
20°	1844	1857	1870
25°	1808	1827	1847
30°	1759	1795	1824
35°	1704	1757	1793
40°	1649	1717	1767
45°	1586	1673	1759
50°	1522	1631	1747
55°	1456	1596	1742
60°	1380	1569	1750
65°	1298	1550	1786
70°	1195	1558	1869
75°	1059	1613	1742
80°	886	1529	1569
85°	661	1223	1122



TEST NUMBER: P261032

CATALOG NUMBER: 24CZ-LD5-40SE-S-UNV-L83050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.6	3.4
10°-20°	379.8	9.7
20°-30°	566.1	14.5
30°-40°	666.3	17.1
40°-50°	677.1	17.4
50°-60°	608.8	15.6
60°-70°	481.0	12.3
70°-80°	305.1	7.8
80°-90°	84.2	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°	1079.4	27.7
0°-40°	1745.8	44.7
0°-60°	3031.7	77.7
0°-90°	3902.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3902.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1414	1402	1409	1406	1406	134
15°	1346	1340	1349	1353	1354	379
25°	1218	1216	1231	1239	1244	560
35°	1037	1044	1070	1082	1092	649
45°	834	845	879	905	924	643
55°	621	636	680	724	743	554
65°	408	428	487	540	561	404
75°	204	239	310	338	335	217
85°	43	74	79	73	73	53
90°	0	0	0	0	0	



TEST NUMBER: P261032

CATALOG NUMBER: 24CZ-LD5-40SE-S-UNV-L83050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1412.6	1412.6	1412.6	1412.6	1412.6
2.5°	1419.1	1408.7	1413.9	1411.3	1406.1
5°	1413.9	1402.2	1408.7	1406.1	1406.1
7.5°	1402.2	1393.1	1398.3	1397.0	1398.3
10°	1387.9	1378.8	1386.6	1386.6	1385.3
12.5°	1368.5	1360.7	1369.8	1369.8	1371.0
15°	1346.4	1339.9	1349.0	1352.9	1354.2
17.5°	1319.1	1312.6	1324.3	1328.2	1332.1
20°	1288.0	1285.4	1297.0	1300.9	1306.1
22.5°	1252.9	1252.9	1264.6	1269.8	1277.6
25°	1217.8	1216.5	1230.8	1238.6	1243.8
27.5°	1176.3	1177.6	1195.8	1203.6	1210.1
30°	1132.2	1134.8	1155.5	1164.6	1173.7
32.5°	1085.4	1090.6	1114.0	1124.4	1133.5
35°	1037.4	1043.9	1069.8	1081.5	1091.9
37.5°	989.3	998.4	1025.7	1037.4	1049.1
40°	938.7	946.5	977.7	991.9	1006.2
42.5°	886.8	897.2	928.3	949.1	966.0
45°	833.5	845.2	879.0	904.9	924.4
47.5°	780.3	795.9	828.3	863.4	880.3
50°	727.1	742.7	779.0	818.0	834.8
52.5°	672.5	688.1	729.7	769.9	788.1
55°	620.6	636.2	680.3	724.5	742.7
57.5°	566.1	583.0	632.3	677.7	695.9
60°	512.8	529.7	583.0	631.0	650.5
62.5°	460.9	479.1	534.9	585.6	605.0
65°	407.7	428.5	486.9	540.1	560.9
67.5°	355.7	379.1	440.1	496.0	518.0
70°	303.8	331.1	396.0	453.1	475.2
72.5°	253.2	283.0	351.9	409.0	420.7
75°	203.8	238.9	310.3	337.6	335.0
77.5°	157.1	196.0	263.6	268.8	276.5
80°	114.3	157.1	197.3	207.7	202.5
82.5°	75.3	118.1	141.5	136.3	135.0
85°	42.8	74.0	79.2	72.7	72.7
87.5°	18.2	29.9	26.0	19.5	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)