

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: P260640

Luminaire Tested: **24CZ-LD5-40-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260640
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-LD5-40-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3804.2 lumens
Efficiency: N/A
Efficacy: 129.1 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

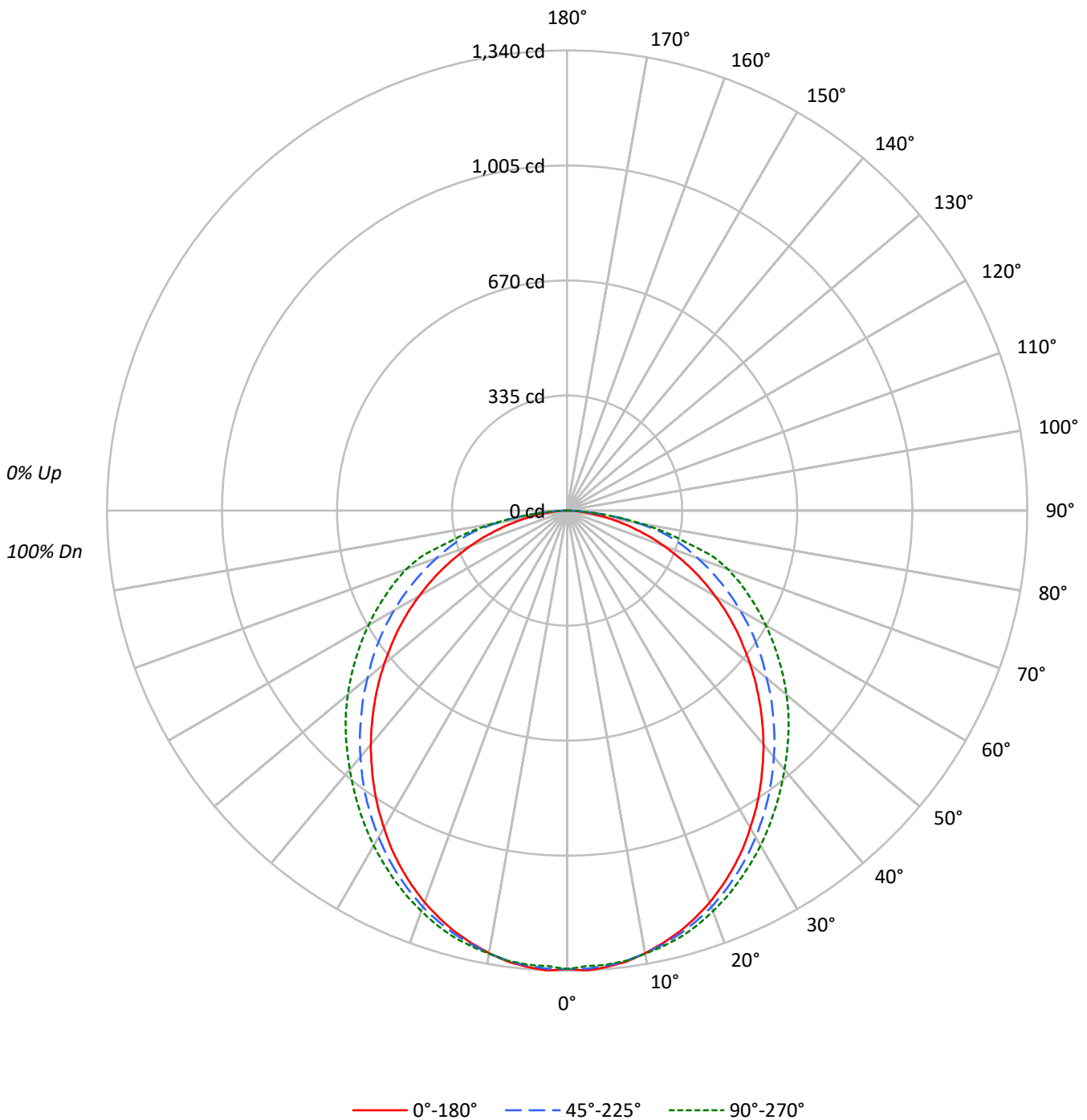
Input Watts (W): 29.459424
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P260640

CATALOG NUMBER: 24CZ-LD5-40-UNV-L93050-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P260640

CATALOG NUMBER: 24CZ-LD5-40-UNV-L93050-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	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°	1796	1796	1796
5°	1801	1796	1793
10°	1788	1788	1790
15°	1767	1776	1789
20°	1738	1759	1777
25°	1702	1734	1764
30°	1657	1706	1750
35°	1611	1677	1737
40°	1563	1645	1730
45°	1509	1613	1735
50°	1456	1587	1745
55°	1403	1577	1763
60°	1339	1567	1798
65°	1269	1567	1858
70°	1173	1594	1958
75°	1050	1666	1862
80°	878	1595	1705
85°	664	1227	1166



TEST NUMBER: P260640

CATALOG NUMBER: 24CZ-LD5-40-UNV-L93050-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.2	3.3
10°-20°	359.1	9.4
20°-30°	536.8	14.1
30°-40°	636.8	16.7
40°-50°	655.4	17.2
50°-60°	601.3	15.8
60°-70°	486.2	12.8
70°-80°	315.5	8.3
80°-90°	87.0	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°	1022.0	26.9
0°-40°	1658.8	43.6
0°-60°	2915.5	76.6
0°-90°	3804.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3804.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1335	1335	1335	1335	1335	
5°	1334	1325	1330	1329	1327	127
15°	1269	1263	1275	1280	1284	357
25°	1146	1148	1168	1179	1188	528
35°	981	989	1021	1043	1058	613
45°	793	806	848	888	912	612
55°	598	616	672	727	752	534
65°	399	422	492	558	584	394
75°	202	240	320	358	358	215
85°	43	73	80	77	76	53
90°	0	0	0	0	0	



TEST NUMBER: P260640

CATALOG NUMBER: 24CZ-LD5-40-UNV-L93050-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1335.1	1335.1	1335.1	1335.1	1335.1
2.5°	1340.3	1329.9	1335.1	1333.8	1327.3
5°	1333.8	1324.7	1329.9	1328.6	1327.3
7.5°	1324.7	1315.5	1322.0	1320.7	1322.0
10°	1309.0	1301.2	1309.0	1310.3	1310.3
12.5°	1289.5	1283.0	1293.4	1296.0	1298.6
15°	1268.6	1263.4	1275.2	1280.4	1284.3
17.5°	1242.6	1238.7	1253.0	1259.5	1264.7
20°	1213.9	1212.6	1228.3	1234.8	1241.3
22.5°	1181.4	1181.4	1199.6	1207.4	1216.5
25°	1146.2	1147.5	1168.3	1178.8	1187.9
27.5°	1108.4	1109.7	1134.5	1147.5	1157.9
30°	1066.8	1072.0	1098.0	1114.9	1126.7
32.5°	1025.1	1031.6	1060.2	1079.8	1092.8
35°	980.8	988.6	1021.2	1043.3	1057.6
37.5°	935.2	944.3	979.5	1004.2	1021.2
40°	889.6	900.0	936.5	965.2	984.7
42.5°	841.4	853.1	893.5	927.4	948.2
45°	793.2	806.3	847.9	888.3	911.8
47.5°	745.0	760.7	804.9	849.2	874.0
50°	695.5	711.2	758.1	808.9	833.6
52.5°	646.0	664.3	716.4	768.5	793.2
55°	597.9	616.1	672.1	726.8	751.5
57.5°	548.4	566.6	627.8	685.1	709.9
60°	497.6	518.4	582.2	640.8	668.2
62.5°	448.1	470.2	537.9	600.5	626.5
65°	398.6	422.0	492.3	557.5	583.5
67.5°	347.8	375.1	448.1	514.5	541.8
70°	298.3	328.2	405.1	471.5	497.6
72.5°	250.1	282.6	362.1	429.8	445.5
75°	201.9	239.7	320.4	358.2	358.2
77.5°	156.3	198.0	273.5	287.9	295.7
80°	113.3	158.9	205.8	222.7	220.1
82.5°	75.5	121.1	147.2	147.2	143.3
85°	43.0	72.9	79.5	76.8	75.5
87.5°	18.2	27.4	24.7	19.5	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)