

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: P260950

Luminaire Tested: **24CZ-LD5-40SE-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260950  
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-LD5-40SE-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3742.0 lumens  
Efficiency: N/A  
Efficacy: 120.1 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

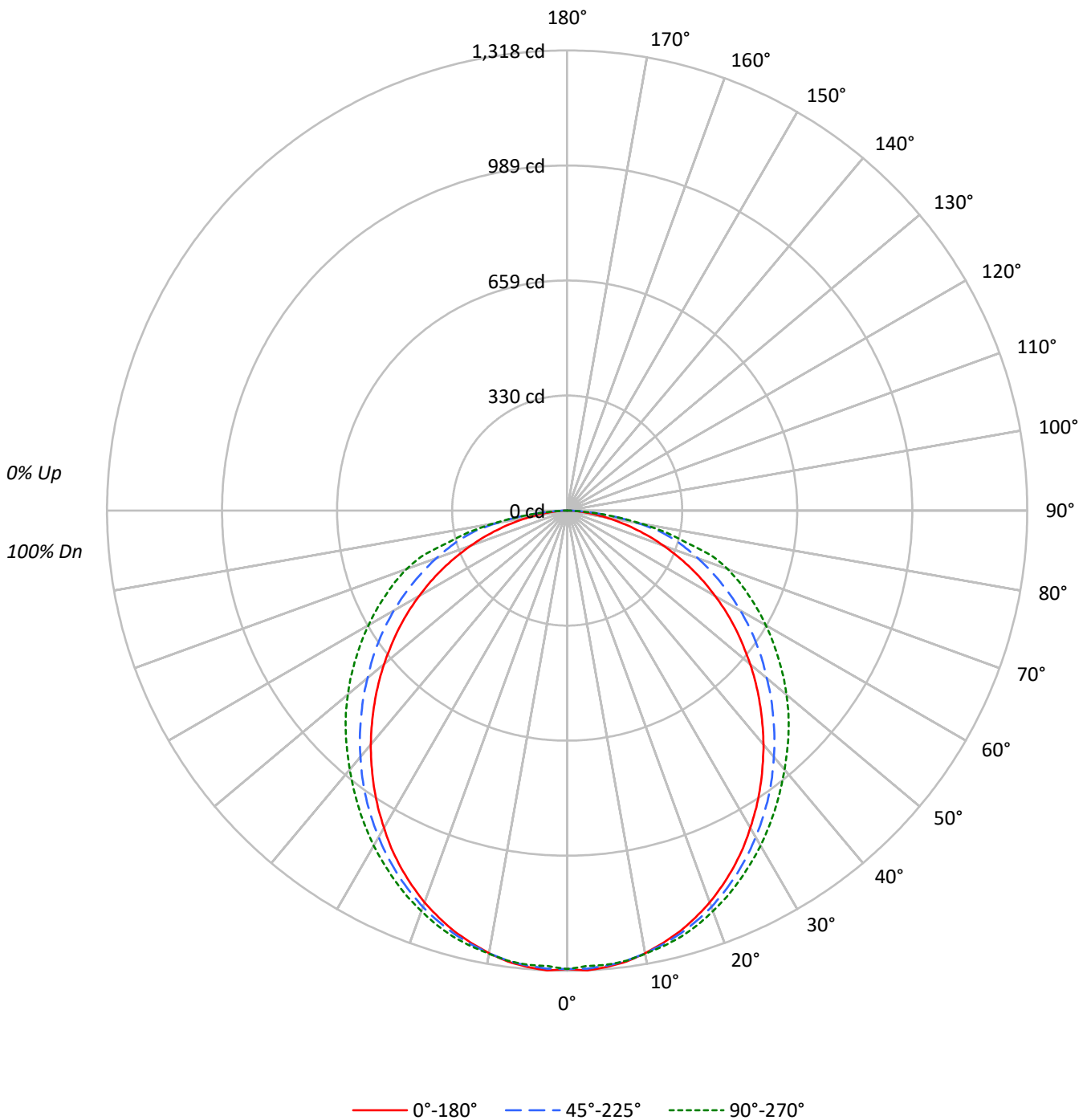
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P260950

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L92765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P260950

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L92765-W2A1-U-5000K

**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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1767	1767	1767
5°	1772	1767	1763
10°	1759	1759	1761
15°	1738	1747	1760
20°	1710	1730	1748
25°	1674	1706	1735
30°	1630	1678	1722
35°	1585	1650	1709
40°	1537	1618	1701
45°	1485	1587	1707
50°	1432	1561	1716
55°	1380	1551	1734
60°	1317	1541	1769
65°	1248	1542	1827
70°	1154	1568	1925
75°	1032	1639	1831
80°	864	1568	1678
85°	653	1207	1147



TEST NUMBER: P260950

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L92765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.1	3.3
10°-20°	353.2	9.4
20°-30°	528.0	14.1
30°-40°	626.4	16.7
40°-50°	644.7	17.2
50°-60°	591.4	15.8
60°-70°	478.2	12.8
70°-80°	310.3	8.3
80°-90°	85.6	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°	1005.3	26.9
0°-40°	1631.7	43.6
0°-60°	2867.9	76.6
0°-90°	3742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3742.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1312	1303	1308	1307	1306	124
15°	1248	1243	1254	1259	1263	352
25°	1128	1129	1149	1160	1168	519
35°	965	972	1004	1026	1040	603
45°	780	793	834	874	897	602
55°	588	606	661	715	739	525
65°	392	415	484	548	574	387
75°	199	236	315	352	352	211
85°	42	72	78	76	74	52
90°	0	0	0	0	0	



TEST NUMBER: P260950

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L92765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1313.2	1313.2	1313.2	1313.2	1313.2
2.5°	1318.4	1308.1	1313.2	1312.0	1305.6
5°	1312.0	1303.0	1308.1	1306.8	1305.6
7.5°	1303.0	1294.0	1300.4	1299.2	1300.4
10°	1287.6	1279.9	1287.6	1288.9	1288.9
12.5°	1268.4	1262.0	1272.2	1274.8	1277.4
15°	1247.9	1242.8	1254.3	1259.4	1263.3
17.5°	1222.3	1218.4	1232.5	1238.9	1244.1
20°	1194.1	1192.8	1208.2	1214.6	1221.0
22.5°	1162.1	1162.1	1180.0	1187.7	1196.7
25°	1127.5	1128.8	1149.3	1159.5	1168.5
27.5°	1090.3	1091.6	1115.9	1128.8	1139.0
30°	1049.3	1054.4	1080.1	1096.7	1108.3
32.5°	1008.3	1014.7	1042.9	1062.1	1074.9
35°	964.8	972.4	1004.5	1026.3	1040.3
37.5°	919.9	928.9	963.5	987.8	1004.5
40°	875.1	885.3	921.2	949.4	968.6
42.5°	827.7	839.2	878.9	912.2	932.7
45°	780.3	793.1	834.1	873.8	896.9
47.5°	732.9	748.2	791.8	835.4	859.7
50°	684.2	699.5	745.7	795.6	820.0
52.5°	635.5	653.4	704.7	755.9	780.3
55°	588.1	606.0	661.1	714.9	739.3
57.5°	539.4	557.3	617.5	673.9	698.3
60°	489.4	509.9	572.7	630.4	657.3
62.5°	440.7	462.5	529.1	590.6	616.3
65°	392.1	415.1	484.3	548.4	574.0
67.5°	342.1	369.0	440.7	506.1	533.0
70°	293.4	322.9	398.5	463.8	489.4
72.5°	246.0	278.0	356.2	422.8	438.2
75°	198.6	235.7	315.2	352.3	352.3
77.5°	153.7	194.7	269.1	283.1	290.8
80°	111.5	156.3	202.4	219.1	216.5
82.5°	74.3	119.2	144.8	144.8	140.9
85°	42.3	71.7	78.2	75.6	74.3
87.5°	17.9	26.9	24.3	19.2	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)