

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: P260868

Luminaire Tested: **24CZ-LD5-45-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260868  
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-LD5-45-UNV-L92765-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: 4064.0 lumens  
Efficiency: N/A  
Efficacy: 127.0 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

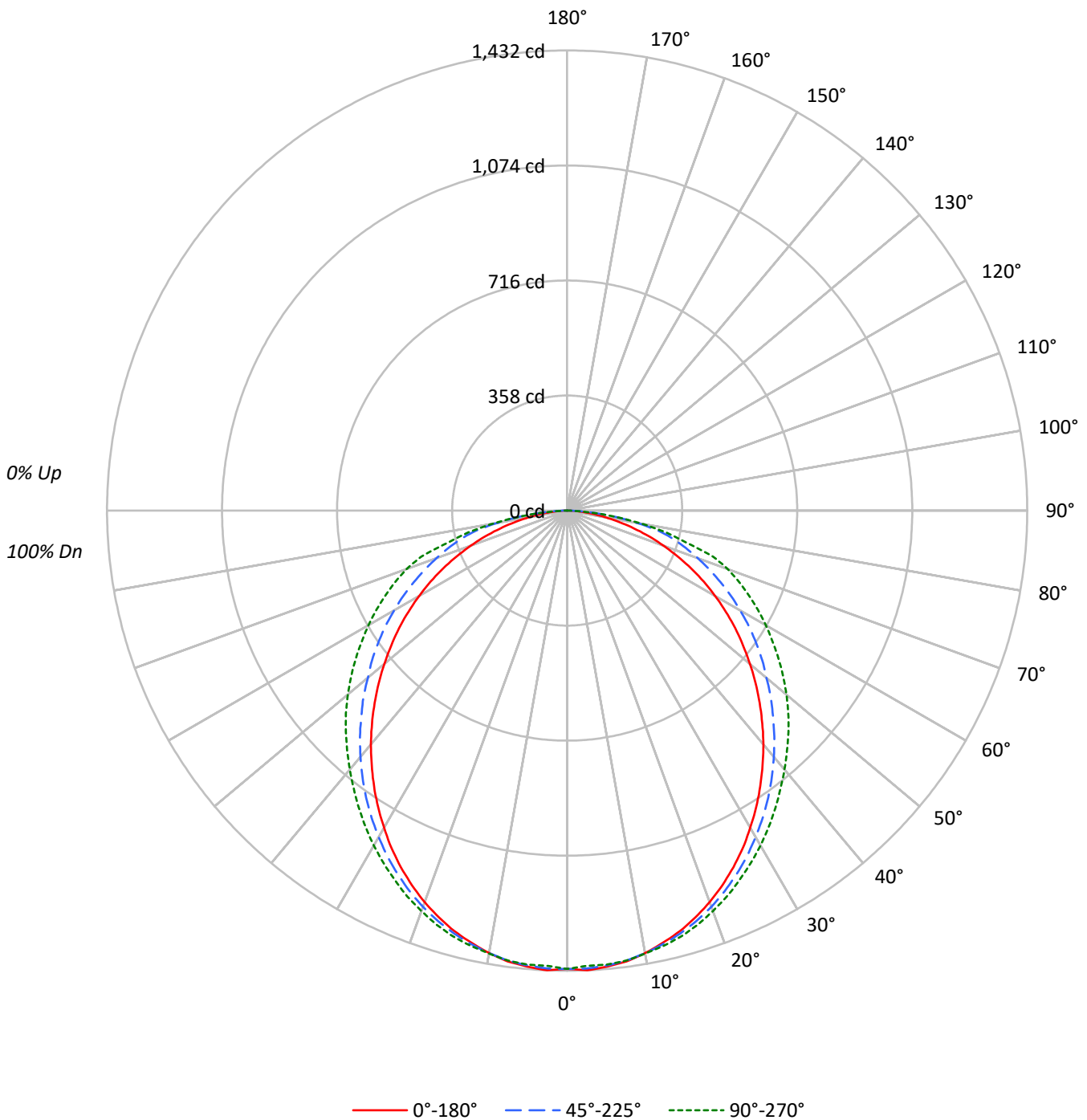
Input Watts (W): 31.992  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P260868

CATALOG NUMBER: 24CZ-LD5-45-UNV-L92765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P260868

CATALOG NUMBER: 24CZ-LD5-45-UNV-L92765-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	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°	1919	1919	1919
5°	1925	1919	1915
10°	1911	1911	1912
15°	1888	1897	1911
20°	1857	1879	1899
25°	1818	1853	1884
30°	1771	1822	1870
35°	1721	1792	1856
40°	1669	1757	1848
45°	1612	1724	1853
50°	1555	1695	1864
55°	1498	1684	1883
60°	1430	1674	1921
65°	1356	1675	1985
70°	1253	1702	2091
75°	1121	1779	1989
80°	938	1704	1822
85°	709	1311	1246



TEST NUMBER: P260868

CATALOG NUMBER: 24CZ-LD5-45-UNV-L92765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.8	3.3
10°-20°	383.6	9.4
20°-30°	573.4	14.1
30°-40°	680.3	16.7
40°-50°	700.2	17.2
50°-60°	642.3	15.8
60°-70°	519.4	12.8
70°-80°	337.1	8.3
80°-90°	92.9	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°	1091.8	26.9
0°-40°	1772.1	43.6
0°-60°	3114.6	76.6
0°-90°	4064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4064.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1426	1426	1426	1426	1426	
5°	1425	1415	1421	1419	1418	135
15°	1355	1350	1362	1368	1372	382
25°	1224	1226	1248	1259	1269	564
35°	1048	1056	1091	1115	1130	655
45°	847	861	906	949	974	654
55°	639	658	718	776	803	571
65°	426	451	526	596	623	421
75°	216	256	342	383	383	229
85°	46	78	85	82	81	56
90°	0	0	0	0	0	



TEST NUMBER: P260868

CATALOG NUMBER: 24CZ-LD5-45-UNV-L92765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1426.3	1426.3	1426.3	1426.3	1426.3
2.5°	1431.8	1420.7	1426.3	1424.9	1417.9
5°	1424.9	1415.1	1420.7	1419.3	1417.9
7.5°	1415.1	1405.4	1412.3	1410.9	1412.3
10°	1398.4	1390.1	1398.4	1399.8	1399.8
12.5°	1377.6	1370.6	1381.7	1384.5	1387.3
15°	1355.3	1349.7	1362.2	1367.8	1372.0
17.5°	1327.5	1323.3	1338.6	1345.5	1351.1
20°	1296.8	1295.5	1312.2	1319.1	1326.1
22.5°	1262.1	1262.1	1281.5	1289.9	1299.6
25°	1224.5	1225.9	1248.1	1259.3	1269.0
27.5°	1184.1	1185.5	1212.0	1225.9	1237.0
30°	1139.6	1145.2	1173.0	1191.1	1203.6
32.5°	1095.1	1102.0	1132.7	1153.5	1167.4
35°	1047.8	1056.1	1090.9	1114.6	1129.9
37.5°	999.1	1008.8	1046.4	1072.8	1090.9
40°	950.4	961.5	1000.5	1031.1	1051.9
42.5°	898.9	911.4	954.5	990.7	1013.0
45°	847.4	861.3	905.8	949.0	974.0
47.5°	795.9	812.6	859.9	907.2	933.7
50°	743.0	759.7	809.8	864.1	890.5
52.5°	690.2	709.6	765.3	821.0	847.4
55°	638.7	658.2	718.0	776.4	802.9
57.5°	585.8	605.3	670.7	731.9	758.3
60°	531.5	553.8	622.0	684.6	713.8
62.5°	478.7	502.3	574.7	641.5	669.3
65°	425.8	450.8	526.0	595.5	623.4
67.5°	371.5	400.7	478.7	549.6	578.8
70°	318.6	350.6	432.7	503.7	531.5
72.5°	267.2	301.9	386.8	459.2	475.9
75°	215.7	256.0	342.3	382.7	382.7
77.5°	167.0	211.5	292.2	307.5	315.9
80°	121.1	169.8	219.9	237.9	235.2
82.5°	80.7	129.4	157.2	157.2	153.1
85°	45.9	77.9	84.9	82.1	80.7
87.5°	19.5	29.2	26.4	20.9	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)