

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: P260568

Luminaire Tested: **24CZ-LD5-45-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260568  
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-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4485.0 lumens  
Efficiency: N/A  
Efficacy: 142.7 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

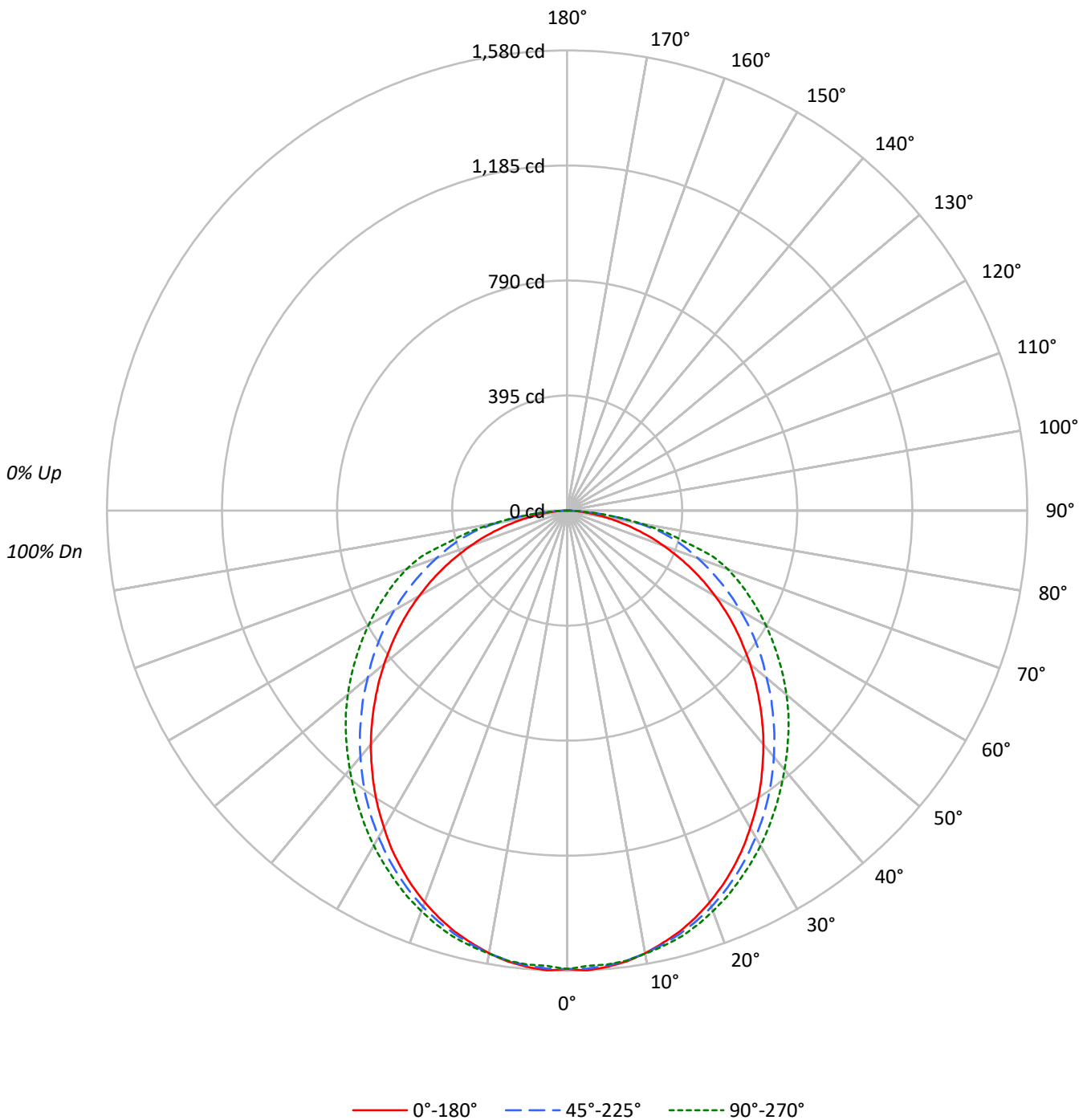
Input Watts (W): 31.434  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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°	2118	2118	2118
5°	2124	2118	2113
10°	2109	2109	2111
15°	2083	2094	2109
20°	2049	2073	2095
25°	2006	2045	2079
30°	1954	2011	2064
35°	1899	1977	2048
40°	1842	1939	2039
45°	1780	1902	2045
50°	1716	1871	2057
55°	1653	1859	2078
60°	1579	1847	2120
65°	1496	1848	2190
70°	1384	1879	2308
75°	1237	1964	2195
80°	1035	1880	2011
85°	783	1447	1376



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.7	3.3
10°-20°	423.3	9.4
20°-30°	632.9	14.1
30°-40°	750.8	16.7
40°-50°	772.7	17.2
50°-60°	708.9	15.8
60°-70°	573.2	12.8
70°-80°	372.0	8.3
80°-90°	102.6	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°	1204.9	26.9
0°-40°	1955.7	43.6
0°-60°	3437.3	76.6
0°-90°	4485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4485.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1572	1562	1568	1566	1565	149
15°	1496	1490	1503	1510	1514	421
25°	1351	1353	1377	1390	1400	622
35°	1156	1166	1204	1230	1247	723
45°	935	950	1000	1047	1075	722
55°	705	726	792	857	886	630
65°	470	498	580	657	688	464
75°	238	283	378	422	422	253
85°	51	86	94	91	89	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1574.0	1574.0	1574.0	1574.0	1574.0
2.5°	1580.1	1567.9	1574.0	1572.5	1564.8
5°	1572.5	1561.7	1567.9	1566.3	1564.8
7.5°	1561.7	1551.0	1558.6	1557.1	1558.6
10°	1543.3	1534.1	1543.3	1544.8	1544.8
12.5°	1520.3	1512.6	1524.9	1527.9	1531.0
15°	1495.7	1489.5	1503.4	1509.5	1514.1
17.5°	1465.0	1460.4	1477.3	1484.9	1491.1
20°	1431.2	1429.7	1448.1	1455.8	1463.4
22.5°	1392.8	1392.8	1414.3	1423.5	1434.3
25°	1351.3	1352.9	1377.4	1389.7	1400.5
27.5°	1306.8	1308.3	1337.5	1352.9	1365.2
30°	1257.7	1263.8	1294.5	1314.5	1328.3
32.5°	1208.5	1216.2	1250.0	1273.0	1288.4
35°	1156.3	1165.5	1203.9	1230.0	1246.9
37.5°	1102.6	1113.3	1154.8	1184.0	1203.9
40°	1048.8	1061.1	1104.1	1137.9	1160.9
42.5°	992.0	1005.8	1053.4	1093.4	1117.9
45°	935.2	950.5	999.7	1047.3	1074.9
47.5°	878.4	896.8	949.0	1001.2	1030.4
50°	820.0	838.4	893.7	953.6	982.8
52.5°	761.7	783.2	844.6	906.0	935.2
55°	704.8	726.3	792.4	856.9	886.0
57.5°	646.5	668.0	740.2	807.7	836.9
60°	586.6	611.2	686.4	755.5	787.8
62.5°	528.3	554.4	634.2	707.9	738.6
65°	469.9	497.5	580.5	657.2	688.0
67.5°	410.0	442.3	528.3	606.6	638.8
70°	351.7	387.0	477.6	555.9	586.6
72.5°	294.8	333.2	426.9	506.8	525.2
75°	238.0	282.6	377.8	422.3	422.3
77.5°	184.3	233.4	322.5	339.4	348.6
80°	133.6	187.3	242.6	262.6	259.5
82.5°	89.1	142.8	173.5	173.5	168.9
85°	50.7	86.0	93.7	90.6	89.1
87.5°	21.5	32.2	29.2	23.0	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)