

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: P261155

Luminaire Tested: **24CZ-LD5-45-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261155  
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-LD5-45-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4757.0 lumens  
Efficiency: N/A  
Efficacy: 147.4 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

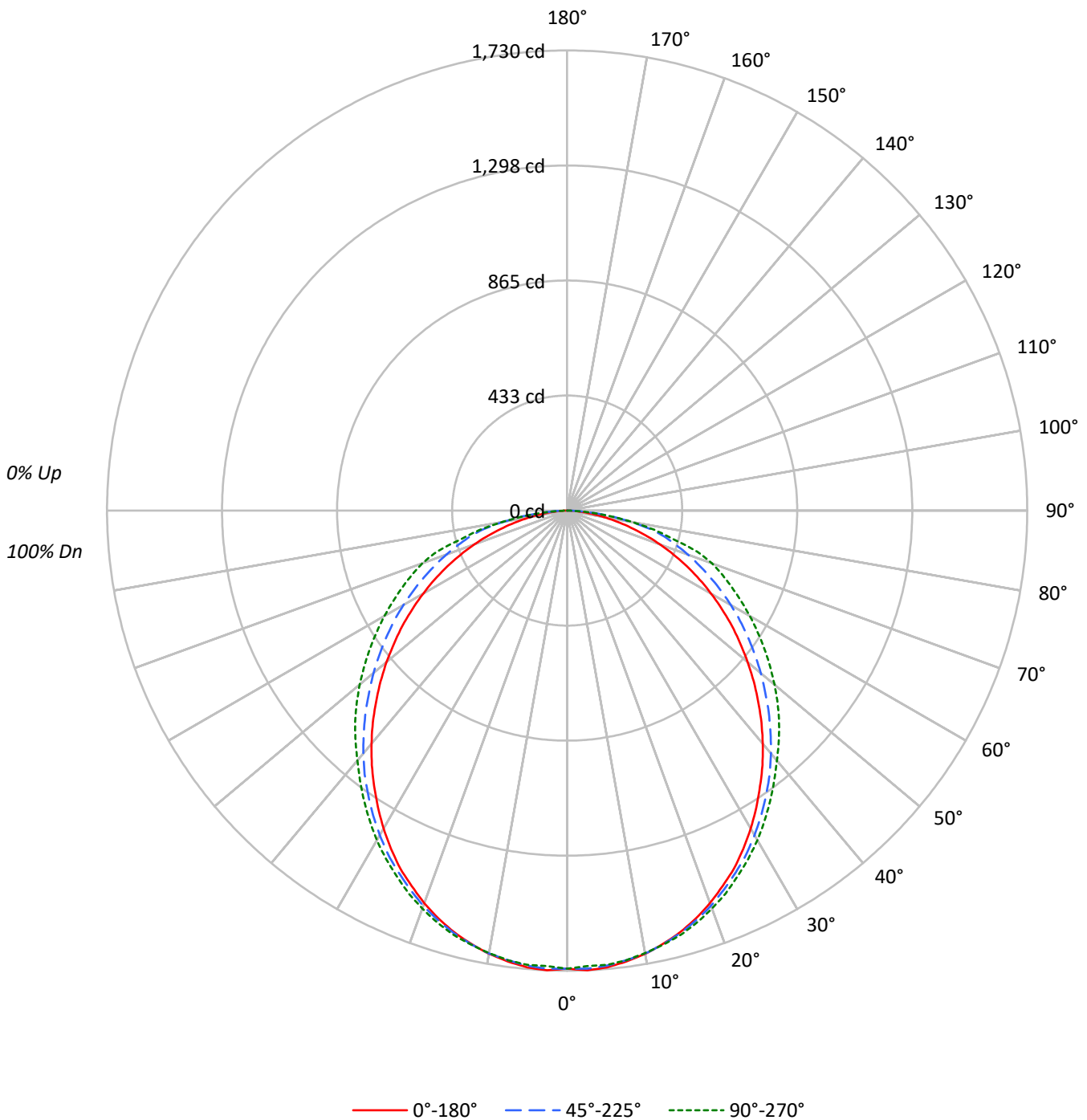
Input Watts (W): 32.271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2317	2317	2317
5°	2328	2320	2315
10°	2312	2310	2307
15°	2286	2291	2300
20°	2248	2264	2280
25°	2204	2228	2251
30°	2144	2189	2223
35°	2077	2142	2187
40°	2010	2093	2155
45°	1934	2039	2144
50°	1855	1988	2130
55°	1775	1946	2124
60°	1682	1912	2134
65°	1582	1890	2177
70°	1457	1899	2279
75°	1292	1967	2123
80°	1079	1864	1913
85°	806	1491	1368



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.8	3.4
10°-20°	463.1	9.7
20°-30°	690.1	14.5
30°-40°	812.3	17.1
40°-50°	825.5	17.4
50°-60°	742.2	15.6
60°-70°	586.4	12.3
70°-80°	372.0	7.8
80°-90°	102.7	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°	1316.0	27.7
0°-40°	2128.3	44.7
0°-60°	3696.0	77.7
0°-90°	4757.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4757.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1724	1710	1717	1714	1714	163
15°	1641	1634	1645	1649	1651	462
25°	1485	1483	1500	1510	1516	683
35°	1265	1273	1304	1318	1331	791
45°	1016	1030	1072	1103	1127	784
55°	757	776	829	883	905	676
65°	497	522	594	658	684	492
75°	248	291	378	412	408	265
85°	52	90	97	89	89	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1722.1	1722.1	1722.1	1722.1	1722.1
2.5°	1730.0	1717.4	1723.7	1720.5	1714.2
5°	1723.7	1709.5	1717.4	1714.2	1714.2
7.5°	1709.5	1698.4	1704.7	1703.1	1704.7
10°	1692.0	1681.0	1690.5	1690.5	1688.9
12.5°	1668.3	1658.8	1669.9	1669.9	1671.5
15°	1641.4	1633.5	1644.6	1649.3	1650.9
17.5°	1608.2	1600.2	1614.5	1619.2	1624.0
20°	1570.2	1567.0	1581.2	1586.0	1592.3
22.5°	1527.4	1527.4	1541.7	1548.0	1557.5
25°	1484.7	1483.1	1500.5	1510.0	1516.4
27.5°	1434.0	1435.6	1457.8	1467.3	1475.2
30°	1380.2	1383.4	1408.7	1419.8	1430.9
32.5°	1323.2	1329.6	1358.1	1370.7	1381.8
35°	1264.7	1272.6	1304.3	1318.5	1331.2
37.5°	1206.1	1217.2	1250.4	1264.7	1278.9
40°	1144.4	1153.9	1191.9	1209.3	1226.7
42.5°	1081.1	1093.7	1131.7	1157.1	1177.6
45°	1016.2	1030.4	1071.6	1103.2	1127.0
47.5°	951.3	970.3	1009.8	1052.6	1073.2
50°	886.4	905.4	949.7	997.2	1017.8
52.5°	819.9	838.9	889.6	938.6	960.8
55°	756.6	775.6	829.4	883.2	905.4
57.5°	690.1	710.7	770.8	826.2	848.4
60°	625.2	645.8	710.7	769.3	793.0
62.5°	561.9	584.1	652.1	713.9	737.6
65°	497.0	522.3	593.6	658.5	683.8
67.5°	433.7	462.2	536.6	604.6	631.6
70°	370.4	403.6	482.8	552.4	579.3
72.5°	308.7	345.1	428.9	498.6	512.8
75°	248.5	291.2	378.3	411.5	408.4
77.5°	191.5	239.0	321.3	327.6	337.1
80°	139.3	191.5	240.6	253.3	246.9
82.5°	91.8	144.0	172.5	166.2	164.6
85°	52.2	90.2	96.6	88.6	88.6
87.5°	22.2	36.4	31.7	23.7	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)