

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: P261245

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261245  
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-LD5-45SE-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4807.0 lumens  
Efficiency: N/A  
Efficacy: 133.6 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

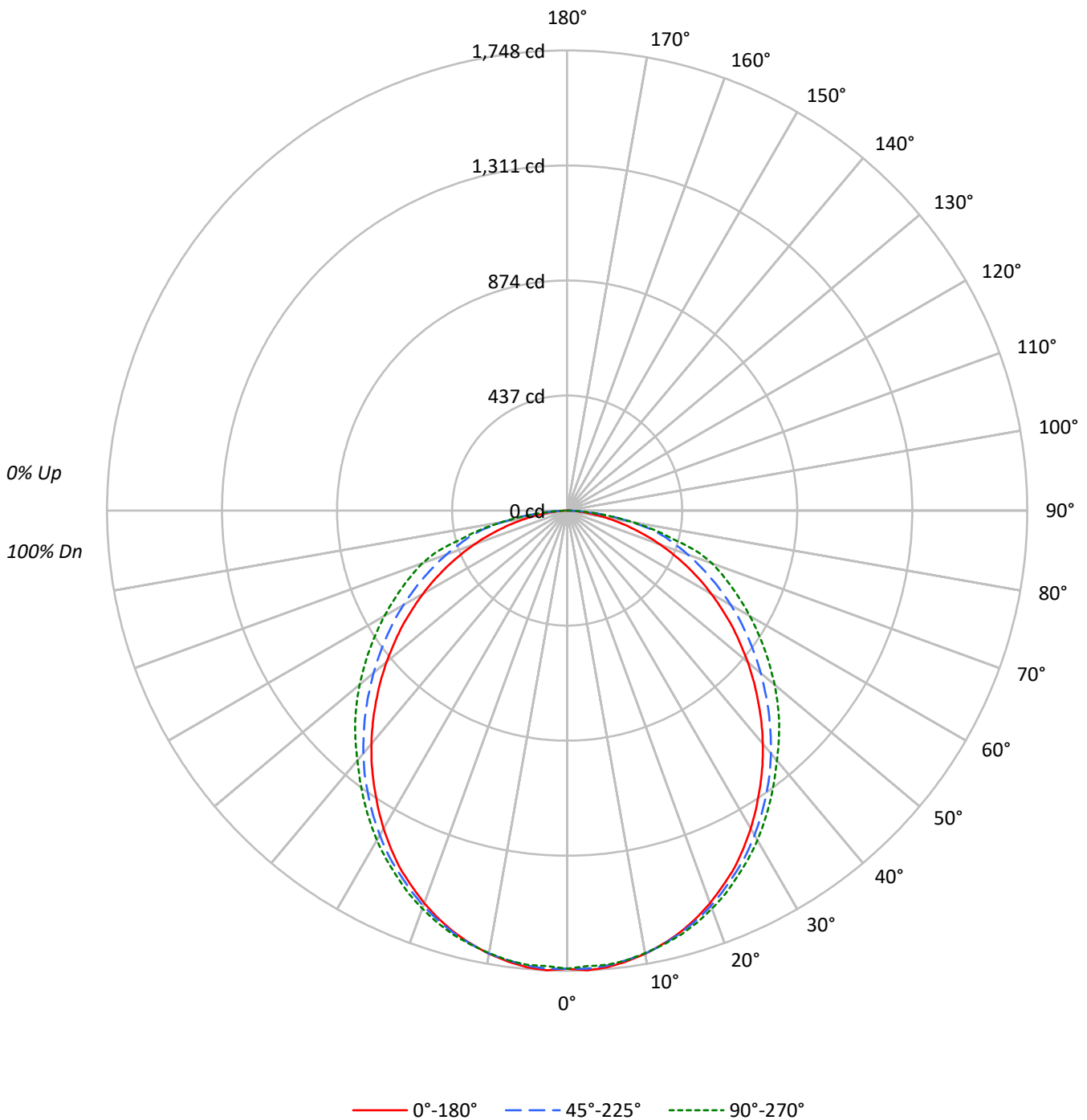
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2341	2341	2341
5°	2353	2344	2340
10°	2336	2334	2332
15°	2310	2315	2324
20°	2272	2288	2304
25°	2227	2251	2275
30°	2167	2212	2246
35°	2099	2165	2210
40°	2031	2115	2177
45°	1954	2060	2167
50°	1875	2009	2153
55°	1793	1966	2146
60°	1700	1933	2156
65°	1599	1910	2200
70°	1472	1919	2303
75°	1305	1987	2145
80°	1091	1884	1933
85°	815	1507	1383



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.5	3.4
10°-20°	467.9	9.7
20°-30°	697.3	14.5
30°-40°	820.9	17.1
40°-50°	834.2	17.4
50°-60°	750.0	15.6
60°-70°	592.5	12.3
70°-80°	375.9	7.8
80°-90°	103.7	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°	1329.8	27.7
0°-40°	2150.7	44.7
0°-60°	3734.8	77.7
0°-90°	4807.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4807.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1742	1727	1735	1732	1732	165
15°	1659	1651	1662	1667	1668	467
25°	1500	1499	1516	1526	1532	690
35°	1278	1286	1318	1332	1345	800
45°	1027	1041	1083	1115	1139	792
55°	764	784	838	892	915	683
65°	502	528	600	665	691	497
75°	251	294	382	416	413	267
85°	53	91	98	90	90	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1740.2	1740.2	1740.2	1740.2	1740.2
2.5°	1748.2	1735.4	1741.8	1738.6	1732.2
5°	1741.8	1727.4	1735.4	1732.2	1732.2
7.5°	1727.4	1716.2	1722.6	1721.0	1722.6
10°	1709.8	1698.6	1708.2	1708.2	1706.6
12.5°	1685.8	1676.2	1687.4	1687.4	1689.0
15°	1658.6	1650.7	1661.8	1666.6	1668.2
17.5°	1625.1	1617.1	1631.5	1636.3	1641.1
20°	1586.7	1583.5	1597.9	1602.7	1609.1
22.5°	1543.5	1543.5	1557.9	1564.3	1573.9
25°	1500.3	1498.7	1516.3	1525.9	1532.3
27.5°	1449.1	1450.7	1473.1	1482.7	1490.7
30°	1394.7	1397.9	1423.5	1434.7	1445.9
32.5°	1337.2	1343.6	1372.3	1385.1	1396.3
35°	1278.0	1286.0	1318.0	1332.4	1345.2
37.5°	1218.8	1230.0	1263.6	1278.0	1292.4
40°	1156.4	1166.0	1204.4	1222.0	1239.6
42.5°	1092.4	1105.2	1143.6	1169.2	1190.0
45°	1026.9	1041.3	1082.8	1114.8	1138.8
47.5°	961.3	980.5	1020.5	1063.6	1084.4
50°	895.7	914.9	959.7	1007.7	1028.5
52.5°	828.5	847.7	898.9	948.5	970.9
55°	764.5	783.7	838.1	892.5	914.9
57.5°	697.4	718.2	778.9	834.9	857.3
60°	631.8	652.6	718.2	777.3	801.3
62.5°	567.8	590.2	659.0	721.4	745.4
65°	502.2	527.8	599.8	665.4	691.0
67.5°	438.3	467.0	542.2	611.0	638.2
70°	374.3	407.9	487.8	558.2	585.4
72.5°	311.9	348.7	433.5	503.8	518.2
75°	251.1	294.3	382.3	415.9	412.7
77.5°	193.5	241.5	324.7	331.1	340.7
80°	140.8	193.5	243.1	255.9	249.5
82.5°	92.8	145.6	174.3	167.9	166.3
85°	52.8	91.2	97.6	89.6	89.6
87.5°	22.4	36.8	32.0	24.0	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)