

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: P261073

Luminaire Tested: **24CZ-LD5-55-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261073  
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-LD5-55-S-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4811.9 lumens  
Efficiency: N/A  
Efficacy: 117.8 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

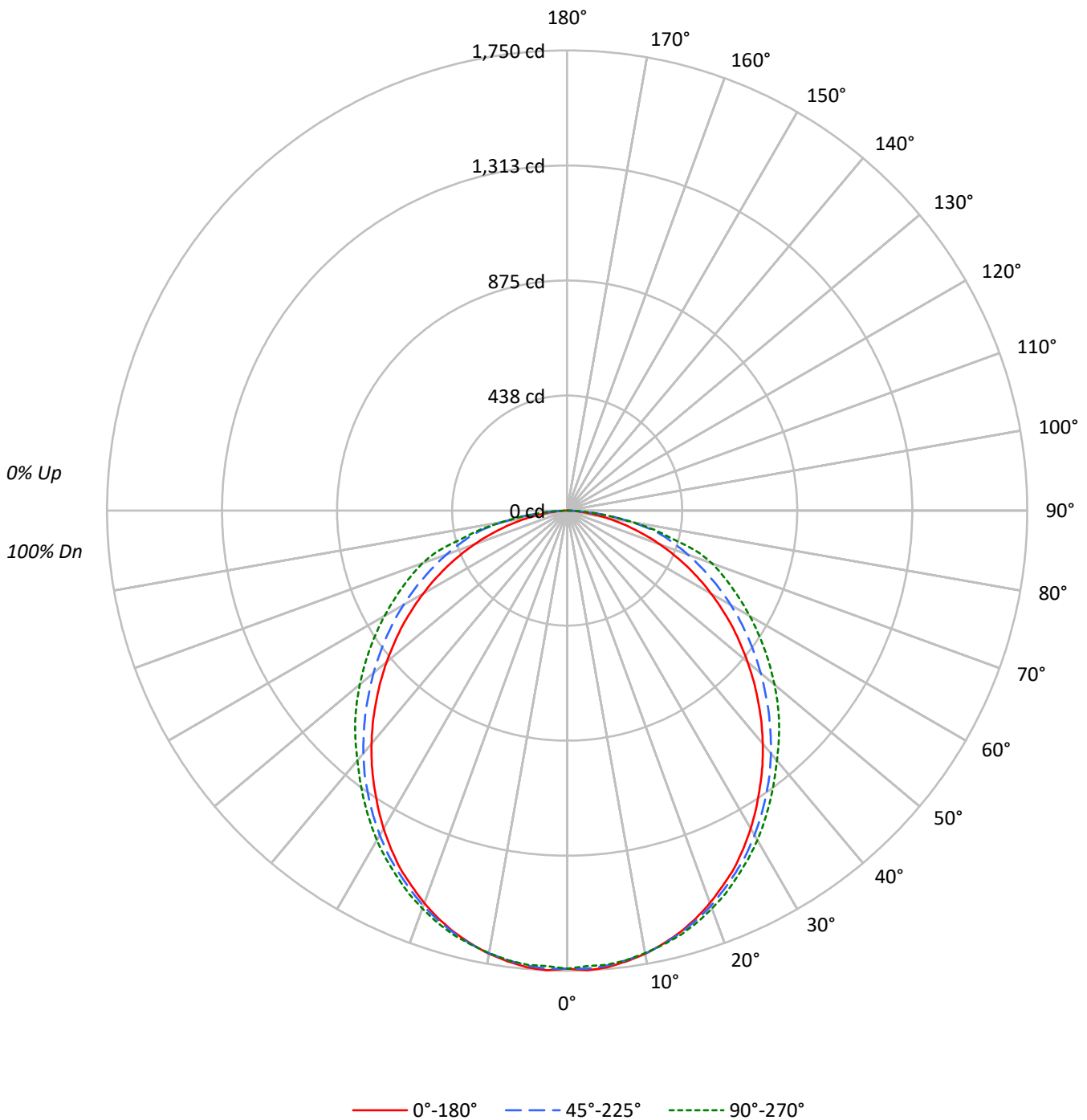
Input Watts (W): 40.844577  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2344	2344	2344
5°	2355	2346	2342
10°	2338	2336	2334
15°	2313	2317	2326
20°	2274	2290	2306
25°	2230	2253	2277
30°	2169	2214	2249
35°	2101	2167	2212
40°	2033	2118	2179
45°	1956	2062	2169
50°	1877	2011	2155
55°	1795	1968	2148
60°	1702	1935	2158
65°	1600	1911	2202
70°	1474	1921	2305
75°	1307	1989	2148
80°	1092	1886	1936
85°	815	1508	1385



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.7	3.4
10°-20°	468.4	9.7
20°-30°	698.0	14.5
30°-40°	821.7	17.1
40°-50°	835.0	17.4
50°-60°	750.8	15.6
60°-70°	593.1	12.3
70°-80°	376.3	7.8
80°-90°	103.9	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°	1331.1	27.7
0°-40°	2152.8	44.7
0°-60°	3738.6	77.7
0°-90°	4811.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4811.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1742	1742	1742	1742	1742	
5°	1744	1729	1737	1734	1734	165
15°	1660	1652	1664	1668	1670	468
25°	1502	1500	1518	1527	1534	691
35°	1279	1287	1319	1334	1346	800
45°	1028	1042	1084	1116	1140	793
55°	765	784	839	893	916	683
65°	503	528	600	666	692	498
75°	251	295	383	416	413	268
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°	1742.0	1742.0	1742.0	1742.0	1742.0
2.5°	1750.0	1737.2	1743.6	1740.4	1734.0
5°	1743.6	1729.2	1737.2	1734.0	1734.0
7.5°	1729.2	1718.0	1724.4	1722.8	1724.4
10°	1711.6	1700.4	1710.0	1710.0	1708.4
12.5°	1687.5	1677.9	1689.1	1689.1	1690.7
15°	1660.3	1652.3	1663.5	1668.3	1669.9
17.5°	1626.7	1618.7	1633.1	1637.9	1642.7
20°	1588.3	1585.1	1599.5	1604.3	1610.7
22.5°	1545.0	1545.0	1559.5	1565.9	1575.5
25°	1501.8	1500.2	1517.8	1527.4	1533.8
27.5°	1450.6	1452.2	1474.6	1484.2	1492.2
30°	1396.1	1399.3	1425.0	1436.2	1447.4
32.5°	1338.5	1344.9	1373.7	1386.5	1397.7
35°	1279.3	1287.3	1319.3	1333.7	1346.5
37.5°	1220.0	1231.2	1264.9	1279.3	1293.7
40°	1157.6	1167.2	1205.6	1223.2	1240.8
42.5°	1093.5	1106.3	1144.8	1170.4	1191.2
45°	1027.9	1042.3	1083.9	1116.0	1140.0
47.5°	962.3	981.5	1021.5	1064.7	1085.5
50°	896.6	915.8	960.6	1008.7	1029.5
52.5°	829.4	848.6	899.8	949.4	971.9
55°	765.3	784.5	839.0	893.4	915.8
57.5°	698.1	718.9	779.7	835.8	858.2
60°	632.4	653.2	718.9	778.1	802.1
62.5°	568.4	590.8	659.6	722.1	746.1
65°	502.7	528.4	600.4	666.1	691.7
67.5°	438.7	467.5	542.8	611.6	638.8
70°	374.7	408.3	488.3	558.8	586.0
72.5°	312.2	349.0	433.9	504.3	518.8
75°	251.4	294.6	382.7	416.3	413.1
77.5°	193.7	241.8	325.0	331.4	341.0
80°	140.9	193.7	243.4	256.2	249.8
82.5°	92.9	145.7	174.5	168.1	166.5
85°	52.8	91.3	97.7	89.7	89.7
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)