

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: P263535

Luminaire Tested: **24CZ-LD5-70-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263535  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-70-RDP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5194.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

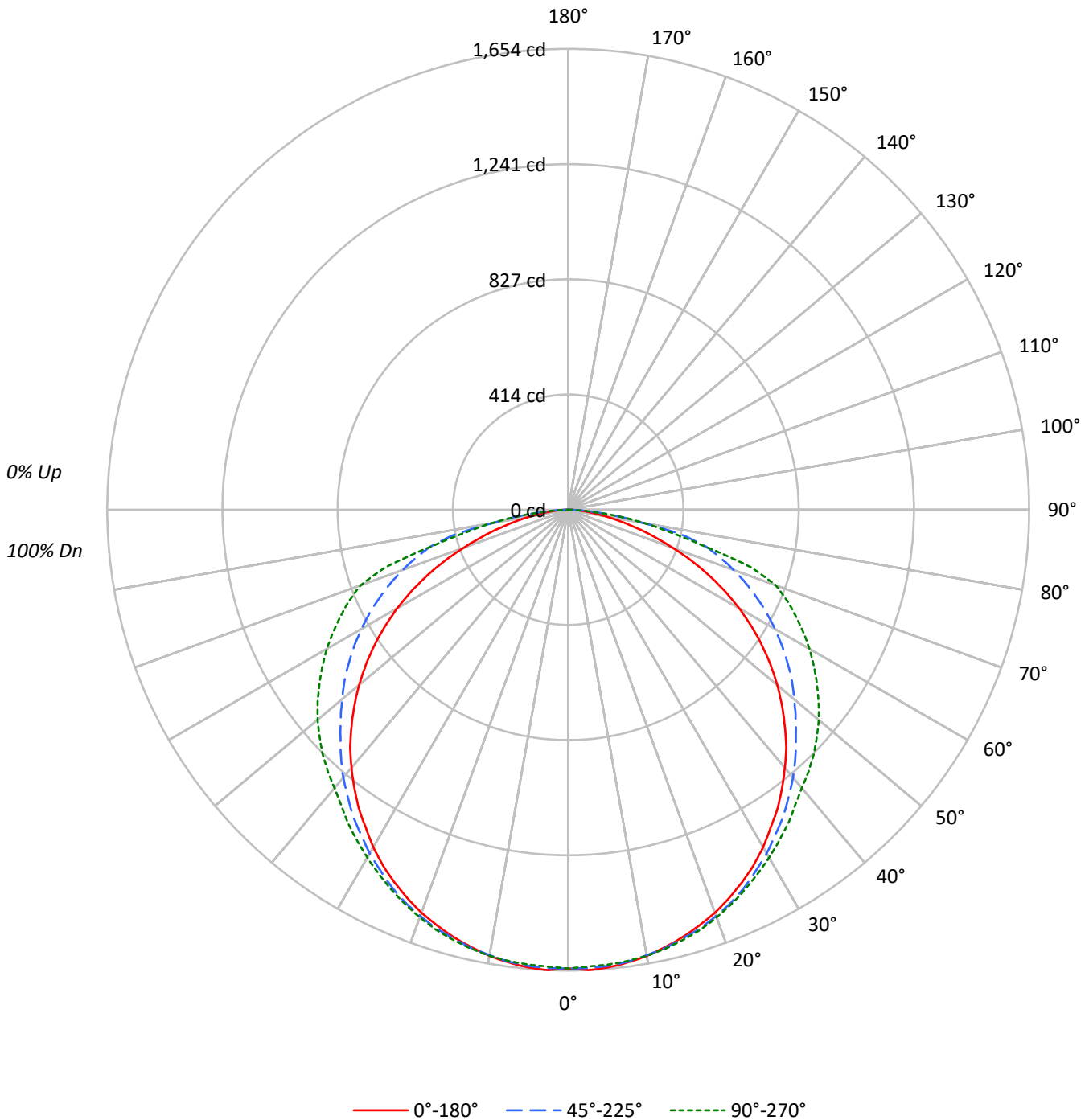
Input Watts (W): 56.290389  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263535

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L83050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P263535

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L83050-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2215	2215	2215
5°	2227	2220	2214
10°	2222	2218	2222
15°	2212	2219	2226
20°	2204	2222	2230
25°	2190	2220	2232
30°	2173	2213	2240
35°	2150	2209	2259
40°	2124	2205	2290
45°	2092	2199	2369
50°	2050	2216	2456
55°	1991	2255	2555
60°	1906	2305	2690
65°	1775	2377	2865
70°	1569	2484	3118
75°	1316	2658	2619
80°	1050	2100	2179
85°	829	1420	1303



TEST NUMBER: P263535

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L83050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.2	3.0
10°-20°	449.4	8.7
20°-30°	686.5	13.2
30°-40°	839.3	16.2
40°-50°	898.4	17.3
50°-60°	861.7	16.6
60°-70°	727.6	14.0
70°-80°	465.0	9.0
80°-90°	110.0	2.1
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°	1292.1	24.9
0°-40°	2131.4	41.0
0°-60°	3891.5	74.9
0°-90°	5194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5194.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1649	1639	1644	1641	1639	157
15°	1588	1583	1593	1598	1598	448
25°	1475	1473	1496	1501	1503	680
35°	1309	1319	1345	1363	1376	818
45°	1099	1117	1156	1209	1245	848
55°	849	877	961	1048	1089	757
65°	557	611	747	851	900	550
75°	253	360	511	522	504	272
85°	54	90	92	90	84	64
90°	0	0	0	0	0	



TEST NUMBER: P263535

CATALOG NUMBER: 24CZ-LD5-70-RDP-UNV-L83050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1646.5	1646.5	1646.5	1646.5	1646.5
2.5°	1654.2	1644.0	1646.5	1646.5	1641.4
5°	1649.1	1638.9	1644.0	1641.4	1638.9
7.5°	1638.9	1631.2	1636.3	1636.3	1633.8
10°	1626.1	1618.4	1623.5	1626.1	1626.1
12.5°	1608.2	1603.1	1610.7	1610.7	1613.3
15°	1587.7	1582.6	1592.8	1598.0	1598.0
17.5°	1564.7	1562.2	1575.0	1577.5	1580.1
20°	1539.2	1536.6	1551.9	1551.9	1557.1
22.5°	1508.5	1505.9	1526.4	1526.4	1531.5
25°	1475.2	1472.7	1495.7	1500.8	1503.4
27.5°	1439.4	1436.9	1459.9	1467.6	1472.7
30°	1398.5	1398.5	1424.1	1434.3	1442.0
32.5°	1352.5	1360.2	1383.2	1398.5	1408.8
35°	1309.1	1319.3	1344.8	1362.7	1375.5
37.5°	1260.5	1270.7	1298.8	1321.8	1337.2
40°	1209.3	1222.1	1255.4	1280.9	1303.9
42.5°	1158.2	1171.0	1206.8	1245.1	1275.8
45°	1099.4	1117.3	1155.6	1209.3	1245.1
47.5°	1040.6	1058.5	1107.1	1173.5	1209.3
50°	979.2	999.7	1058.5	1135.2	1173.5
52.5°	915.3	938.3	1012.5	1094.3	1132.6
55°	848.8	877.0	961.3	1048.3	1089.2
57.5°	779.8	810.5	910.2	1002.2	1045.7
60°	708.2	746.6	856.5	953.7	999.7
62.5°	634.1	680.1	802.8	902.5	951.1
65°	557.4	611.1	746.6	851.4	900.0
67.5°	478.1	549.7	690.3	800.3	848.8
70°	398.9	483.2	631.5	744.0	792.6
72.5°	324.7	421.9	572.7	677.5	687.8
75°	253.1	360.5	511.3	621.6	603.7
77.5°	189.2	299.1	421.9	375.8	373.3
80°	135.5	240.3	271.0	278.7	281.2
82.5°	89.5	181.5	176.4	181.5	179.0
85°	53.7	89.5	92.0	89.5	84.4
87.5°	25.6	33.2	25.6	23.0	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)