

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: P261136

Luminaire Tested: **24CZ-LD5-35-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261136  
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-LD5-35-S-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3695.0 lumens  
Efficiency: N/A  
Efficacy: 149.4 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

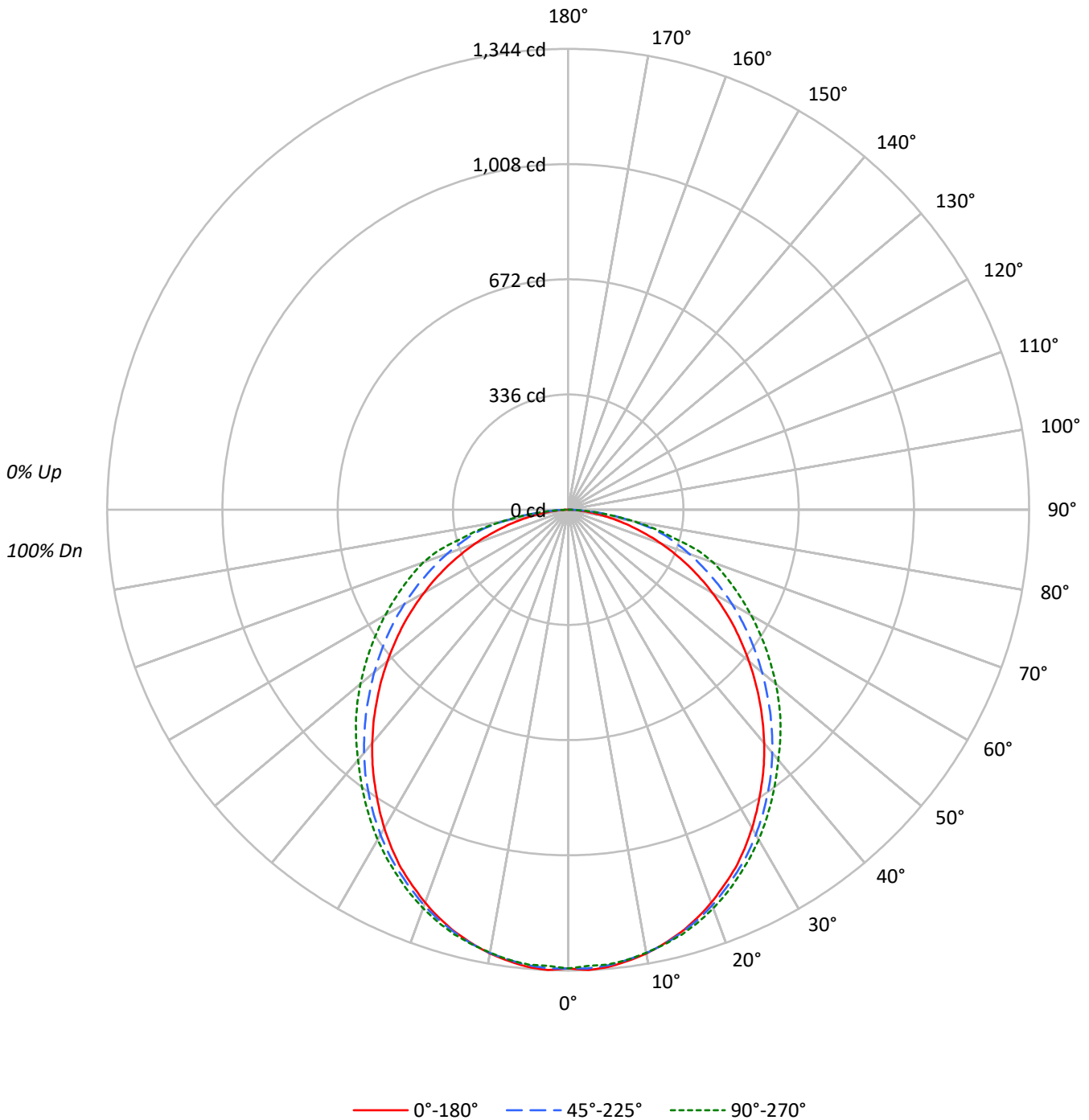
Input Watts (W): 24.738  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1800	1800	1800
5°	1808	1802	1798
10°	1796	1794	1792
15°	1776	1779	1786
20°	1746	1759	1771
25°	1712	1730	1749
30°	1666	1700	1727
35°	1613	1664	1698
40°	1561	1626	1674
45°	1502	1584	1666
50°	1441	1544	1655
55°	1379	1511	1650
60°	1307	1485	1658
65°	1229	1468	1691
70°	1132	1475	1770
75°	1003	1527	1649
80°	838	1448	1486
85°	627	1158	1064



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.5	3.4
10°-20°	359.7	9.7
20°-30°	536.0	14.5
30°-40°	631.0	17.1
40°-50°	641.2	17.4
50°-60°	576.5	15.6
60°-70°	455.4	12.3
70°-80°	288.9	7.8
80°-90°	79.8	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°	1022.2	27.7
0°-40°	1653.2	44.7
0°-60°	2870.9	77.7
0°-90°	3695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3695.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1339	1328	1334	1332	1332	127
15°	1275	1269	1277	1281	1282	359
25°	1153	1152	1166	1173	1178	530
35°	982	988	1013	1024	1034	615
45°	789	800	832	857	875	609
55°	588	602	644	686	703	525
65°	386	406	461	512	531	382
75°	193	226	294	320	317	205
85°	41	70	75	69	69	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1337.7	1337.7	1337.7	1337.7	1337.7
2.5°	1343.8	1334.0	1338.9	1336.4	1331.5
5°	1338.9	1327.8	1334.0	1331.5	1331.5
7.5°	1327.8	1319.2	1324.1	1322.9	1324.1
10°	1314.3	1305.7	1313.1	1313.1	1311.8
12.5°	1295.9	1288.5	1297.1	1297.1	1298.3
15°	1275.0	1268.8	1277.4	1281.1	1282.3
17.5°	1249.1	1243.0	1254.1	1257.7	1261.4
20°	1219.6	1217.2	1228.2	1231.9	1236.8
22.5°	1186.4	1186.4	1197.5	1202.4	1209.8
25°	1153.2	1152.0	1165.5	1172.9	1177.8
27.5°	1113.9	1115.1	1132.3	1139.7	1145.9
30°	1072.1	1074.6	1094.2	1102.8	1111.4
32.5°	1027.8	1032.8	1054.9	1064.7	1073.3
35°	982.3	988.5	1013.1	1024.1	1034.0
37.5°	936.9	945.5	971.3	982.3	993.4
40°	888.9	896.3	925.8	939.3	952.8
42.5°	839.7	849.6	879.1	898.7	914.7
45°	789.3	800.4	832.3	856.9	875.4
47.5°	738.9	753.7	784.4	817.6	833.6
50°	688.5	703.3	737.7	774.6	790.5
52.5°	636.9	651.6	691.0	729.1	746.3
55°	587.7	602.4	644.2	686.0	703.3
57.5°	536.0	552.0	598.7	641.8	659.0
60°	485.6	501.6	552.0	597.5	616.0
62.5°	436.5	453.7	506.5	554.5	572.9
65°	386.1	405.7	461.0	511.5	531.1
67.5°	336.9	359.0	416.8	469.7	490.6
70°	287.7	313.5	375.0	429.1	450.0
72.5°	239.7	268.0	333.2	387.3	398.3
75°	193.0	226.2	293.8	319.7	317.2
77.5°	148.8	185.6	249.6	254.5	261.9
80°	108.2	148.8	186.9	196.7	191.8
82.5°	71.3	111.9	134.0	129.1	127.9
85°	40.6	70.1	75.0	68.9	68.9
87.5°	17.2	28.3	24.6	18.4	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)