

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: P260720

Luminaire Tested: **24CZ-LD5-40-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260720  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-40-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3737.0 lumens  
Efficiency: N/A  
Efficacy: 132.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

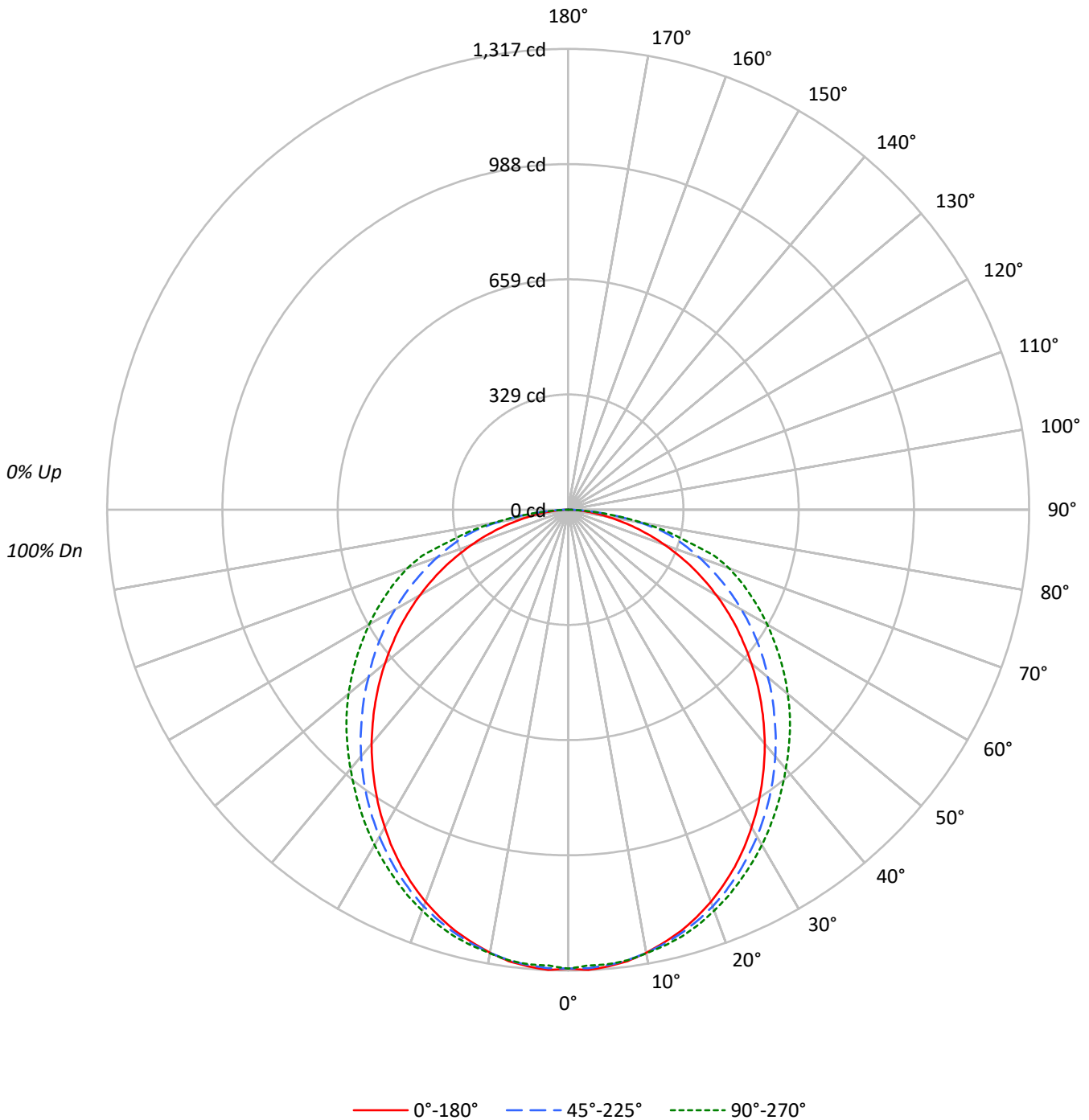
Input Watts (W): 28.272  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1765	1765	1765
5°	1770	1764	1761
10°	1757	1757	1759
15°	1736	1745	1757
20°	1707	1728	1746
25°	1672	1704	1732
30°	1628	1676	1720
35°	1583	1648	1707
40°	1535	1616	1699
45°	1483	1585	1704
50°	1430	1559	1714
55°	1378	1549	1732
60°	1315	1539	1766
65°	1246	1540	1825
70°	1153	1565	1923
75°	1031	1637	1829
80°	862	1567	1675
85°	651	1204	1145



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.9	3.3
10°-20°	352.7	9.4
20°-30°	527.3	14.1
30°-40°	625.6	16.7
40°-50°	643.9	17.2
50°-60°	590.6	15.8
60°-70°	477.6	12.8
70°-80°	309.9	8.3
80°-90°	85.5	2.3
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°	1004.0	26.9
0°-40°	1629.5	43.6
0°-60°	2864.0	76.6
0°-90°	3737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3737.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1310	1301	1306	1305	1304	124
15°	1246	1241	1253	1258	1262	351
25°	1126	1127	1148	1158	1167	518
35°	964	971	1003	1025	1039	603
45°	779	792	833	873	896	601
55°	587	605	660	714	738	525
65°	392	415	484	548	573	387
75°	198	235	315	352	352	211
85°	42	72	78	76	74	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1311.5	1311.5	1311.5	1311.5	1311.5
2.5°	1316.6	1306.4	1311.5	1310.2	1303.8
5°	1310.2	1301.3	1306.4	1305.1	1303.8
7.5°	1301.3	1292.3	1298.7	1297.4	1298.7
10°	1285.9	1278.2	1285.9	1287.2	1287.2
12.5°	1266.7	1260.3	1270.5	1273.1	1275.7
15°	1246.2	1241.1	1252.6	1257.8	1261.6
17.5°	1220.6	1216.8	1230.9	1237.3	1242.4
20°	1192.5	1191.2	1206.6	1213.0	1219.4
22.5°	1160.5	1160.5	1178.4	1186.1	1195.1
25°	1126.0	1127.2	1147.7	1158.0	1166.9
27.5°	1088.9	1090.1	1114.4	1127.2	1137.5
30°	1047.9	1053.0	1078.6	1095.3	1106.8
32.5°	1007.0	1013.4	1041.5	1060.7	1073.5
35°	963.5	971.1	1003.1	1024.9	1039.0
37.5°	918.7	927.6	962.2	986.5	1003.1
40°	873.9	884.1	920.0	948.1	967.3
42.5°	826.6	838.1	877.7	911.0	931.5
45°	779.2	792.0	833.0	872.6	895.7
47.5°	731.9	747.2	790.7	834.2	858.5
50°	683.3	698.6	744.7	794.6	818.9
52.5°	634.6	652.5	703.7	754.9	779.2
55°	587.3	605.2	660.2	714.0	738.3
57.5°	538.7	556.6	616.7	673.0	697.3
60°	488.8	509.2	571.9	629.5	656.4
62.5°	440.1	461.9	528.4	589.9	615.4
65°	391.5	414.6	483.7	547.6	573.2
67.5°	341.6	368.5	440.1	505.4	532.3
70°	293.0	322.4	397.9	463.2	488.8
72.5°	245.7	277.7	355.7	422.2	437.6
75°	198.3	235.4	314.8	351.9	351.9
77.5°	153.5	194.5	268.7	282.8	290.4
80°	111.3	156.1	202.2	218.8	216.2
82.5°	74.2	119.0	144.6	144.6	140.7
85°	42.2	71.7	78.0	75.5	74.2
87.5°	17.9	26.9	24.3	19.2	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)