

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: P260740

Luminaire Tested: **24CZ-LD5-50-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260740  
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-LD5-50-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4909.0 lumens  
Efficiency: N/A  
Efficacy: 136.7 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

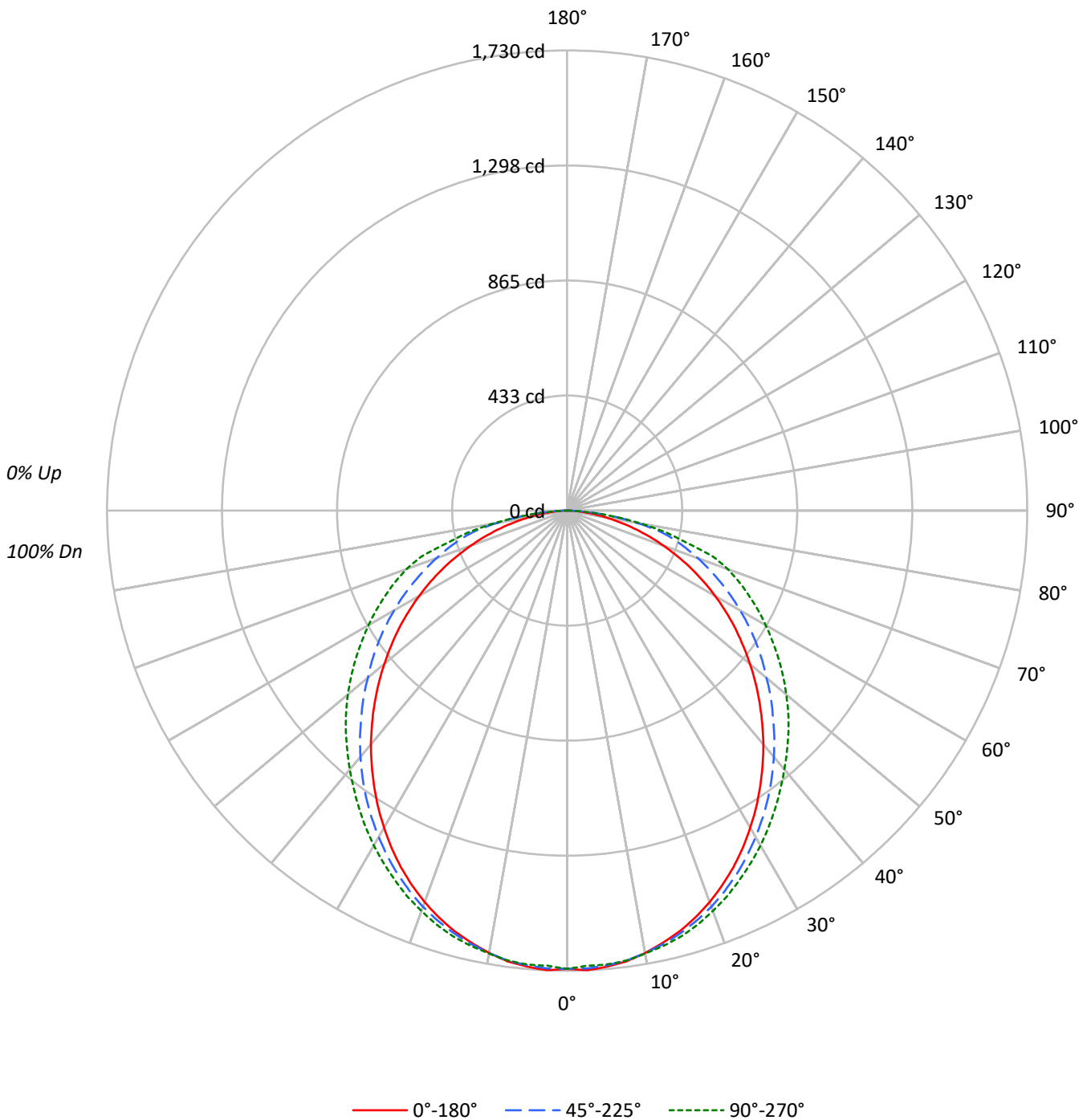
Input Watts (W): 35.898  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2318	2318	2318
5°	2325	2318	2313
10°	2308	2308	2310
15°	2280	2292	2309
20°	2243	2269	2294
25°	2196	2238	2276
30°	2139	2201	2259
35°	2079	2164	2242
40°	2016	2123	2232
45°	1948	2082	2239
50°	1879	2048	2252
55°	1810	2035	2275
60°	1728	2022	2320
65°	1637	2023	2397
70°	1514	2056	2526
75°	1354	2150	2403
80°	1133	2058	2201
85°	857	1582	1505



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.8	3.3
10°-20°	463.3	9.4
20°-30°	692.7	14.1
30°-40°	821.7	16.7
40°-50°	845.8	17.2
50°-60°	775.9	15.8
60°-70°	627.4	12.8
70°-80°	407.2	8.3
80°-90°	112.3	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°	1318.8	26.9
0°-40°	2140.6	43.6
0°-60°	3762.2	76.6
0°-90°	4909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4909.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1721	1709	1716	1714	1713	163
15°	1637	1630	1646	1652	1657	461
25°	1479	1481	1508	1521	1533	681
35°	1266	1276	1318	1346	1365	791
45°	1024	1040	1094	1146	1176	790
55°	772	795	867	938	970	689
65°	514	545	635	719	753	508
75°	260	309	414	462	462	277
85°	56	94	102	99	98	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1722.8	1722.8	1722.8	1722.8	1722.8
2.5°	1729.5	1716.1	1722.8	1721.1	1712.7
5°	1721.1	1709.4	1716.1	1714.4	1712.7
7.5°	1709.4	1697.6	1706.0	1704.3	1706.0
10°	1689.2	1679.1	1689.2	1690.9	1690.9
12.5°	1664.0	1655.6	1669.0	1672.4	1675.7
15°	1637.1	1630.4	1645.5	1652.2	1657.3
17.5°	1603.5	1598.4	1616.9	1625.3	1632.0
20°	1566.5	1564.8	1585.0	1593.4	1601.8
22.5°	1524.5	1524.5	1548.0	1558.1	1569.9
25°	1479.1	1480.8	1507.7	1521.1	1532.9
27.5°	1430.3	1432.0	1464.0	1480.8	1494.2
30°	1376.6	1383.3	1416.9	1438.8	1453.9
32.5°	1322.8	1331.2	1368.2	1393.4	1410.2
35°	1265.6	1275.7	1317.7	1346.3	1364.8
37.5°	1206.8	1218.6	1263.9	1295.9	1317.7
40°	1148.0	1161.4	1208.5	1245.5	1270.7
42.5°	1085.8	1100.9	1153.0	1196.7	1223.6
45°	1023.6	1040.4	1094.2	1146.3	1176.5
47.5°	961.4	981.6	1038.7	1095.9	1127.8
50°	897.5	917.7	978.2	1043.8	1075.7
52.5°	833.7	857.2	924.4	991.7	1023.6
55°	771.5	795.0	867.3	937.9	969.8
57.5°	707.6	731.1	810.1	884.1	916.0
60°	642.1	669.0	751.3	826.9	862.2
62.5°	578.2	606.8	694.2	774.8	808.5
65°	514.3	544.6	635.3	719.4	753.0
67.5°	448.8	484.1	578.2	663.9	699.2
70°	384.9	423.6	522.7	608.4	642.1
72.5°	322.7	364.7	467.3	554.7	574.8
75°	260.5	309.3	413.5	462.2	462.2
77.5°	201.7	255.5	353.0	371.5	381.5
80°	146.2	205.1	265.6	287.4	284.1
82.5°	97.5	156.3	189.9	189.9	184.9
85°	55.5	94.1	102.5	99.2	97.5
87.5°	23.5	35.3	31.9	25.2	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)