

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: P263103

Luminaire Tested: **24CZ-LD5-60-SQP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263103  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-60-SQP-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3993.0 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

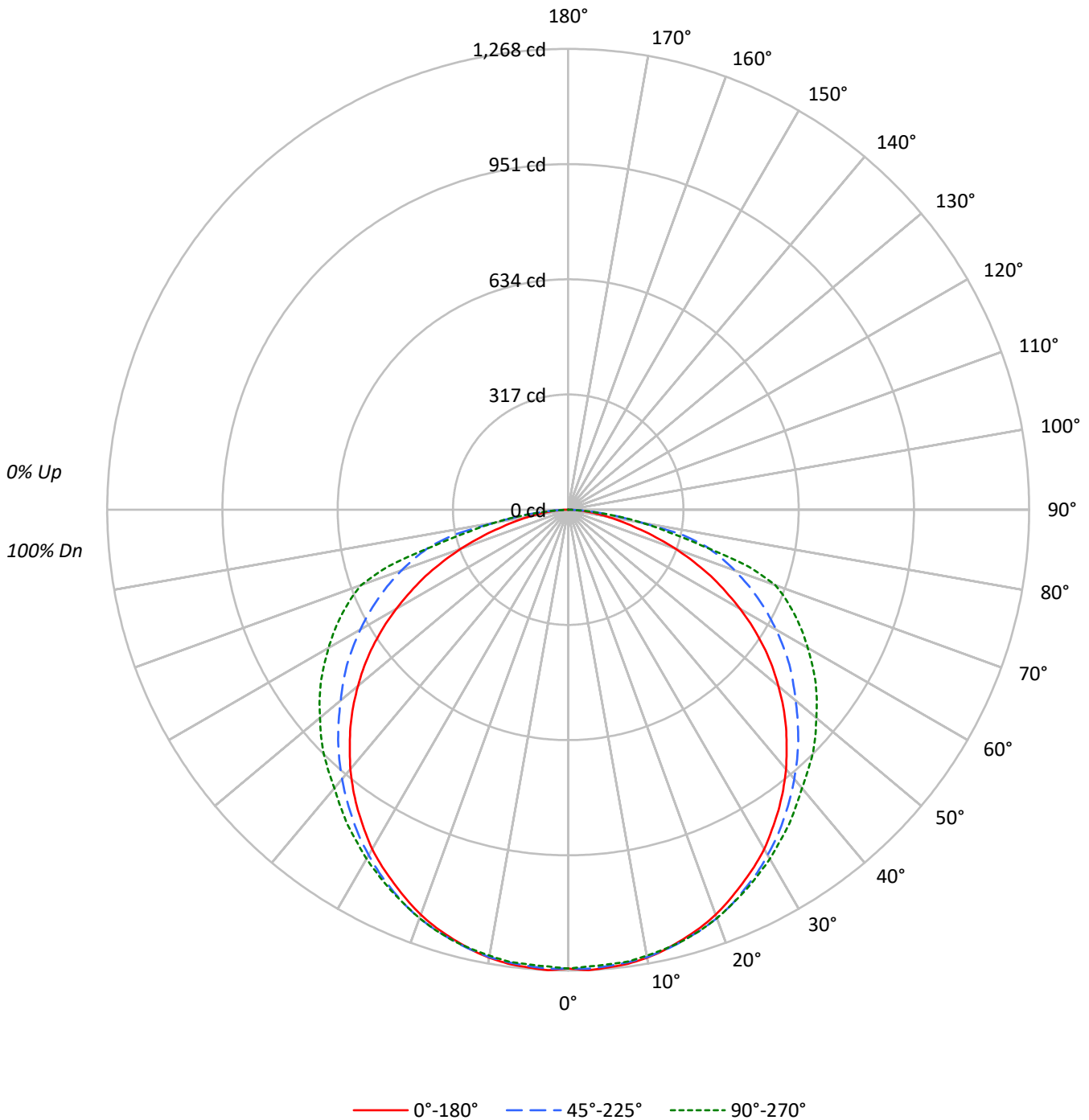
Input Watts (W): 44.268  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	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°	1698	1698	1698
5°	1708	1702	1697
10°	1710	1708	1702
15°	1704	1709	1709
20°	1698	1713	1713
25°	1684	1709	1715
30°	1676	1705	1724
35°	1657	1701	1738
40°	1638	1699	1757
45°	1613	1703	1809
50°	1580	1710	1865
55°	1539	1742	1950
60°	1471	1776	2048
65°	1379	1832	2193
70°	1233	1915	2386
75°	1018	2048	1973
80°	831	1582	1598
85°	668	1051	986



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	3.0
10°-20°	345.9	8.7
20°-30°	528.7	13.2
30°-40°	646.6	16.2
40°-50°	691.9	17.3
50°-60°	662.5	16.6
60°-70°	560.5	14.0
70°-80°	355.3	8.9
80°-90°	81.7	2.0
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°	994.5	24.9
0°-40°	1641.1	41.1
0°-60°	2995.6	75.0
0°-90°	3993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3993.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1264	1258	1260	1258	1256	120
15°	1223	1221	1227	1227	1227	345
25°	1134	1134	1151	1155	1155	523
35°	1009	1015	1035	1050	1058	631
45°	848	862	895	932	951	653
55°	656	676	742	804	831	585
65°	433	474	575	654	689	427
75°	196	276	394	392	380	213
85°	43	66	68	62	64	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1262.3	1262.3	1262.3	1262.3	1262.3
2.5°	1268.4	1262.3	1264.3	1262.3	1258.1
5°	1264.3	1258.1	1260.2	1258.1	1256.1
7.5°	1260.2	1254.0	1256.1	1254.0	1254.0
10°	1251.9	1245.8	1249.9	1247.8	1245.8
12.5°	1239.6	1235.4	1239.6	1237.5	1237.5
15°	1223.1	1221.0	1227.2	1227.2	1227.2
17.5°	1206.6	1204.5	1212.8	1212.8	1212.8
20°	1185.9	1183.9	1196.3	1196.3	1196.3
22.5°	1161.2	1159.1	1175.6	1175.6	1175.6
25°	1134.4	1134.4	1150.9	1155.0	1155.0
27.5°	1107.6	1107.6	1126.1	1132.3	1132.3
30°	1078.7	1078.7	1097.3	1105.5	1109.6
32.5°	1043.6	1047.8	1068.4	1078.7	1082.8
35°	1008.6	1014.8	1035.4	1049.8	1058.1
37.5°	971.4	977.6	1002.4	1018.9	1029.2
40°	932.3	940.5	967.3	987.9	1000.3
42.5°	888.9	901.3	932.3	959.1	975.6
45°	847.7	862.1	895.1	932.3	950.8
47.5°	802.3	818.8	855.9	903.4	921.9
50°	754.9	771.4	816.8	870.4	891.0
52.5°	707.4	726.0	779.6	837.4	862.1
55°	655.9	676.5	742.5	804.4	831.2
57.5°	602.3	627.0	701.3	767.3	796.1
60°	546.6	577.5	660.0	730.1	761.1
62.5°	488.8	525.9	618.8	693.0	726.0
65°	433.1	474.4	575.4	653.8	688.9
67.5°	373.3	424.9	532.1	616.7	649.7
70°	313.5	373.3	486.8	573.4	606.4
72.5°	253.7	325.9	441.4	519.8	519.8
75°	195.9	276.4	393.9	391.9	379.5
77.5°	148.5	231.0	323.8	276.4	278.4
80°	107.3	185.6	204.2	204.2	206.3
82.5°	72.2	142.3	132.0	129.9	134.1
85°	43.3	66.0	68.1	61.9	63.9
87.5°	20.6	22.7	18.6	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)