

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: P230492

Luminaire Tested: **24CZ-LD5-70-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230492  
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-L930-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (168) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3864.1 lumens  
Efficiency: N/A  
Efficacy: 60.2 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

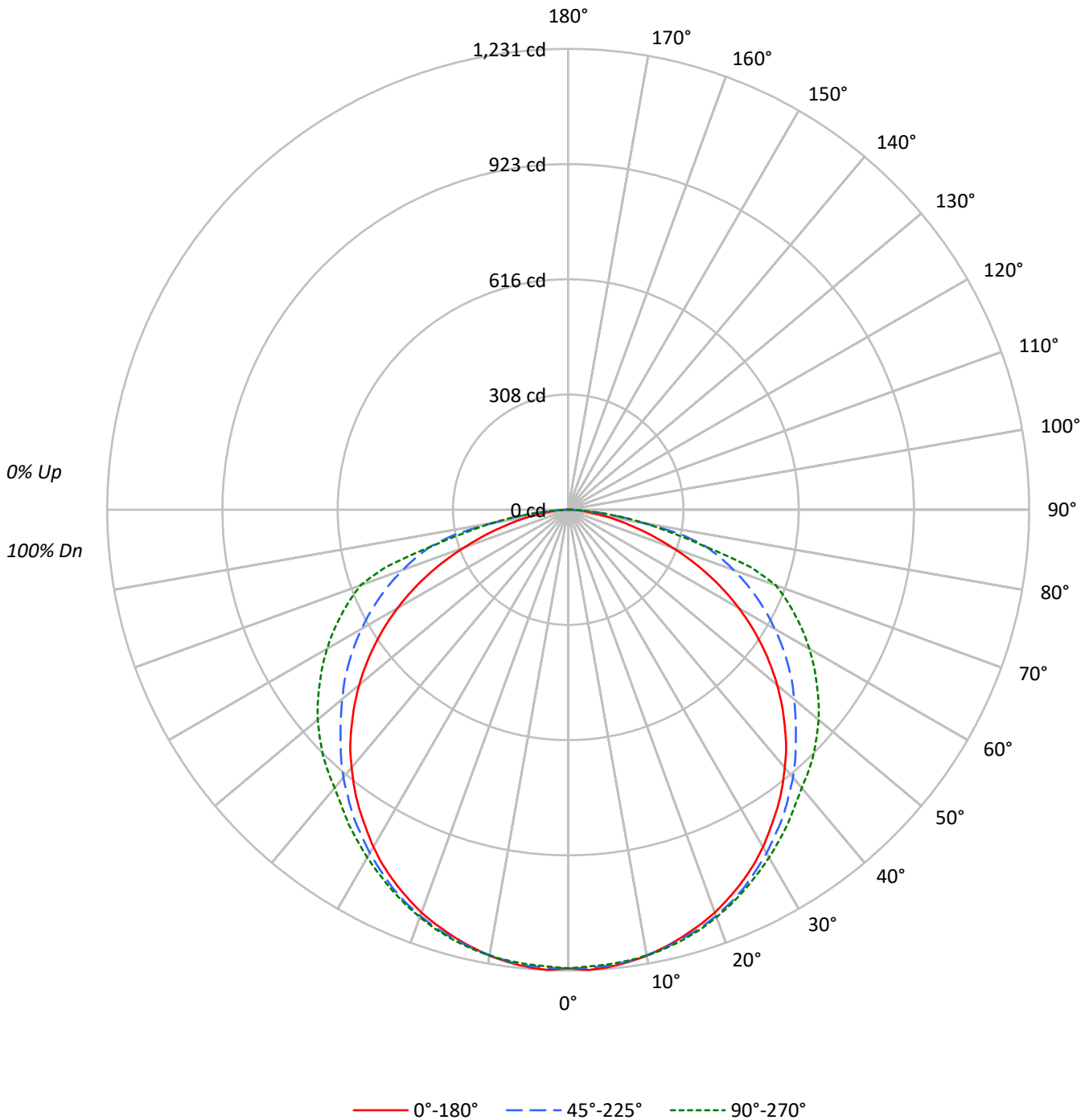
Input Watts (W): 64.22  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1648	1648	1648
5°	1657	1652	1647
10°	1653	1650	1653
15°	1645	1651	1656
20°	1640	1653	1659
25°	1629	1652	1660
30°	1616	1646	1667
35°	1600	1643	1681
40°	1580	1640	1704
45°	1556	1636	1763
50°	1525	1648	1828
55°	1481	1678	1901
60°	1418	1715	2001
65°	1320	1768	2131
70°	1167	1848	2319
75°	979	1978	1948
80°	781	1562	1621
85°	616	1057	969



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.2	3.0
10°-20°	334.4	8.7
20°-30°	510.7	13.2
30°-40°	624.4	16.2
40°-50°	668.3	17.3
50°-60°	641.1	16.6
60°-70°	541.3	14.0
70°-80°	345.9	9.0
80°-90°	81.8	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°	961.3	24.9
0°-40°	1585.7	41.0
0°-60°	2895.1	74.9
0°-90°	3864.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3864.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1227	1219	1223	1221	1219	117
15°	1181	1177	1185	1189	1189	333
25°	1098	1096	1113	1116	1118	506
35°	974	982	1000	1014	1023	609
45°	818	831	860	900	926	631
55°	632	652	715	780	810	564
65°	415	455	555	633	670	409
75°	188	268	380	388	375	203
85°	40	67	68	67	63	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1224.9	1224.9	1224.9	1224.9	1224.9
2.5°	1230.7	1223.0	1224.9	1224.9	1221.1
5°	1226.8	1219.2	1223.0	1221.1	1219.2
7.5°	1219.2	1213.5	1217.3	1217.3	1215.4
10°	1209.7	1204.0	1207.8	1209.7	1209.7
12.5°	1196.4	1192.6	1198.3	1198.3	1200.2
15°	1181.2	1177.4	1185.0	1188.8	1188.8
17.5°	1164.1	1162.2	1171.7	1173.6	1175.5
20°	1145.1	1143.2	1154.6	1154.6	1158.4
22.5°	1122.2	1120.3	1135.5	1135.5	1139.4
25°	1097.5	1095.6	1112.7	1116.5	1118.4
27.5°	1070.9	1069.0	1086.1	1091.8	1095.6
30°	1040.4	1040.4	1059.5	1067.1	1072.8
32.5°	1006.2	1011.9	1029.0	1040.4	1048.1
35°	973.9	981.5	1000.5	1013.8	1023.3
37.5°	937.7	945.3	966.3	983.4	994.8
40°	899.7	909.2	933.9	952.9	970.1
42.5°	861.6	871.2	897.8	926.3	949.1
45°	817.9	831.2	859.7	899.7	926.3
47.5°	774.2	787.5	823.6	873.1	899.7
50°	728.5	743.7	787.5	844.5	873.1
52.5°	680.9	698.1	753.2	814.1	842.6
55°	631.5	652.4	715.2	779.9	810.3
57.5°	580.1	603.0	677.1	745.6	778.0
60°	526.9	555.4	637.2	709.5	743.7
62.5°	471.7	506.0	597.3	671.4	707.6
65°	414.7	454.6	555.4	633.4	669.5
67.5°	355.7	408.9	513.6	595.4	631.5
70°	296.7	359.5	469.8	553.5	589.6
72.5°	241.6	313.8	426.1	504.1	511.7
75°	188.3	268.2	380.4	388.0	374.7
77.5°	140.8	222.5	313.8	279.6	277.7
80°	100.8	178.8	201.6	207.3	209.2
82.5°	66.6	135.0	131.2	135.0	133.1
85°	39.9	66.6	68.5	66.6	62.8
87.5°	19.0	24.7	19.0	17.1	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)