

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: P230494

Luminaire Tested: **24CZ-LD5-70-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230494
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-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4115.6 lumens
Efficiency: N/A
Efficacy: 64.1 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

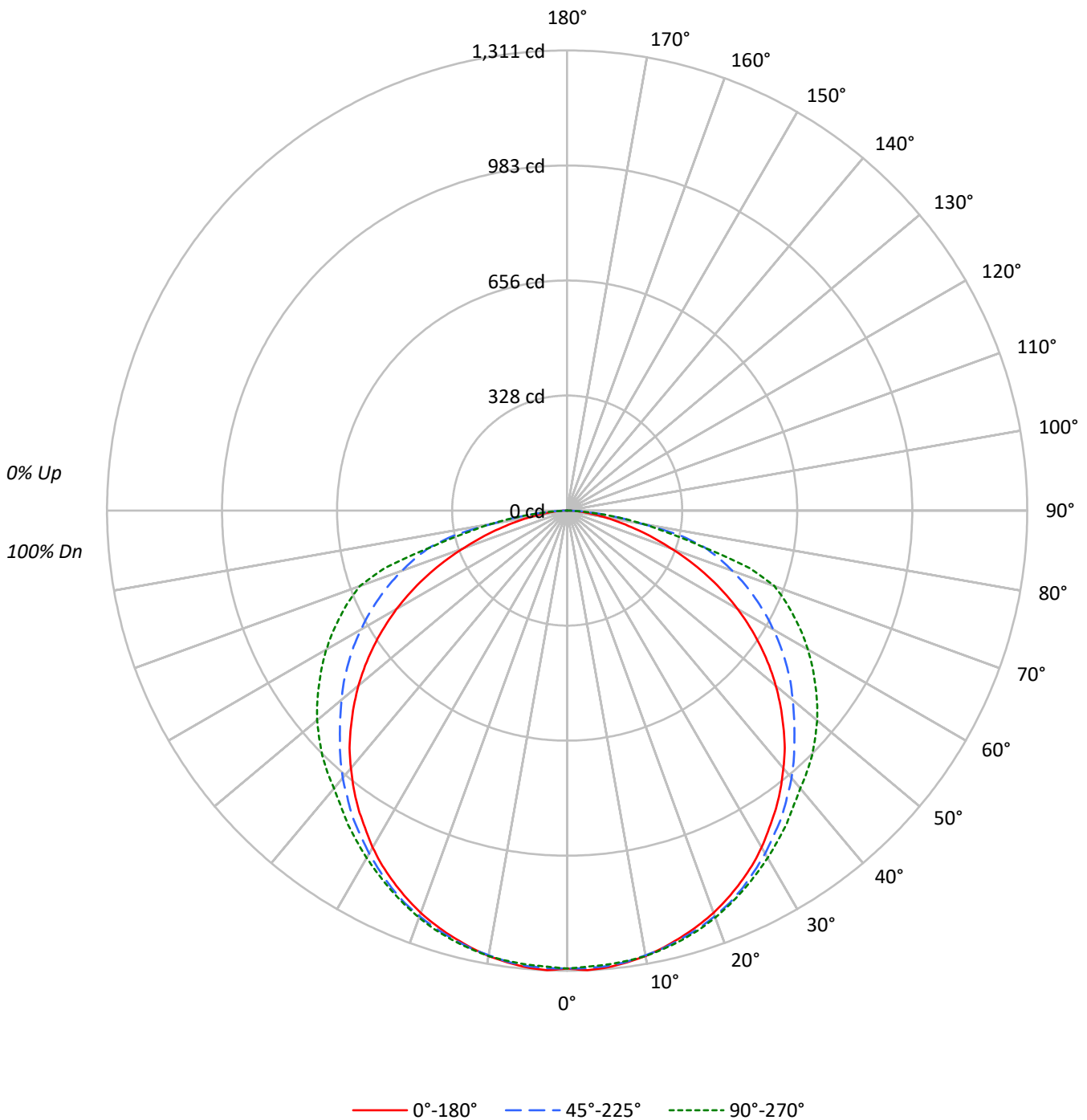
Input Watts (W): 64.22
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1755	1755	1755
5°	1765	1759	1754
10°	1760	1758	1760
15°	1752	1758	1764
20°	1746	1761	1767
25°	1735	1760	1768
30°	1722	1753	1775
35°	1704	1750	1790
40°	1683	1747	1815
45°	1658	1742	1877
50°	1624	1756	1946
55°	1578	1787	2024
60°	1510	1826	2132
65°	1406	1883	2270
70°	1243	1969	2471
75°	1043	2106	2075
80°	832	1664	1727
85°	656	1125	1033



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	3.0
10°-20°	356.1	8.7
20°-30°	544.0	13.2
30°-40°	665.0	16.2
40°-50°	711.8	17.3
50°-60°	682.8	16.6
60°-70°	576.5	14.0
70°-80°	368.5	9.0
80°-90°	87.1	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°	1023.8	24.9
0°-40°	1688.9	41.0
0°-60°	3083.5	74.9
0°-90°	4115.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4115.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1307	1299	1303	1301	1299	124
15°	1258	1254	1262	1266	1266	355
25°	1169	1167	1185	1189	1191	539
35°	1037	1045	1066	1080	1090	649
45°	871	885	916	958	987	672
55°	673	695	762	831	863	600
65°	442	484	592	675	713	436
75°	201	286	405	413	399	216
85°	42	71	73	71	67	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.7	1304.7	1304.7	1304.7	1304.7
2.5°	1310.8	1302.7	1304.7	1304.7	1300.6
5°	1306.7	1298.6	1302.7	1300.6	1298.6
7.5°	1298.6	1292.5	1296.6	1296.6	1294.6
10°	1288.5	1282.4	1286.5	1288.5	1288.5
12.5°	1274.3	1270.2	1276.3	1276.3	1278.4
15°	1258.1	1254.0	1262.1	1266.2	1266.2
17.5°	1239.9	1237.8	1248.0	1250.0	1252.0
20°	1219.6	1217.6	1229.7	1229.7	1233.8
22.5°	1195.3	1193.3	1209.5	1209.5	1213.5
25°	1169.0	1166.9	1185.2	1189.2	1191.2
27.5°	1140.6	1138.6	1156.8	1162.9	1166.9
30°	1108.2	1108.2	1128.4	1136.5	1142.6
32.5°	1071.7	1077.8	1096.0	1108.2	1116.3
35°	1037.3	1045.4	1065.6	1079.8	1089.9
37.5°	998.8	1006.9	1029.2	1047.4	1059.6
40°	958.3	968.4	994.7	1015.0	1033.2
42.5°	917.7	927.9	956.2	986.6	1010.9
45°	871.1	885.3	915.7	958.3	986.6
47.5°	824.5	838.7	877.2	929.9	958.3
50°	775.9	792.1	838.7	899.5	929.9
52.5°	725.3	743.5	802.3	867.1	897.5
55°	672.6	694.9	761.7	830.6	863.0
57.5°	617.9	642.2	721.2	794.2	828.6
60°	561.2	591.6	678.7	755.7	792.1
62.5°	502.4	538.9	636.1	715.1	753.6
65°	441.6	484.2	591.6	674.6	713.1
67.5°	378.8	435.6	547.0	634.1	672.6
70°	316.0	382.9	500.4	589.5	628.0
72.5°	257.3	334.3	453.8	536.9	545.0
75°	200.6	285.7	405.2	413.3	399.1
77.5°	149.9	237.0	334.3	297.8	295.8
80°	107.4	190.4	214.7	220.8	222.9
82.5°	70.9	143.8	139.8	143.8	141.8
85°	42.5	70.9	72.9	70.9	66.9
87.5°	20.3	26.3	20.3	18.2	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)