

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: P390920

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L950-CD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P390920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-RDP-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6214.6 lumens
Efficiency: N/A
Efficacy: 89.3 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

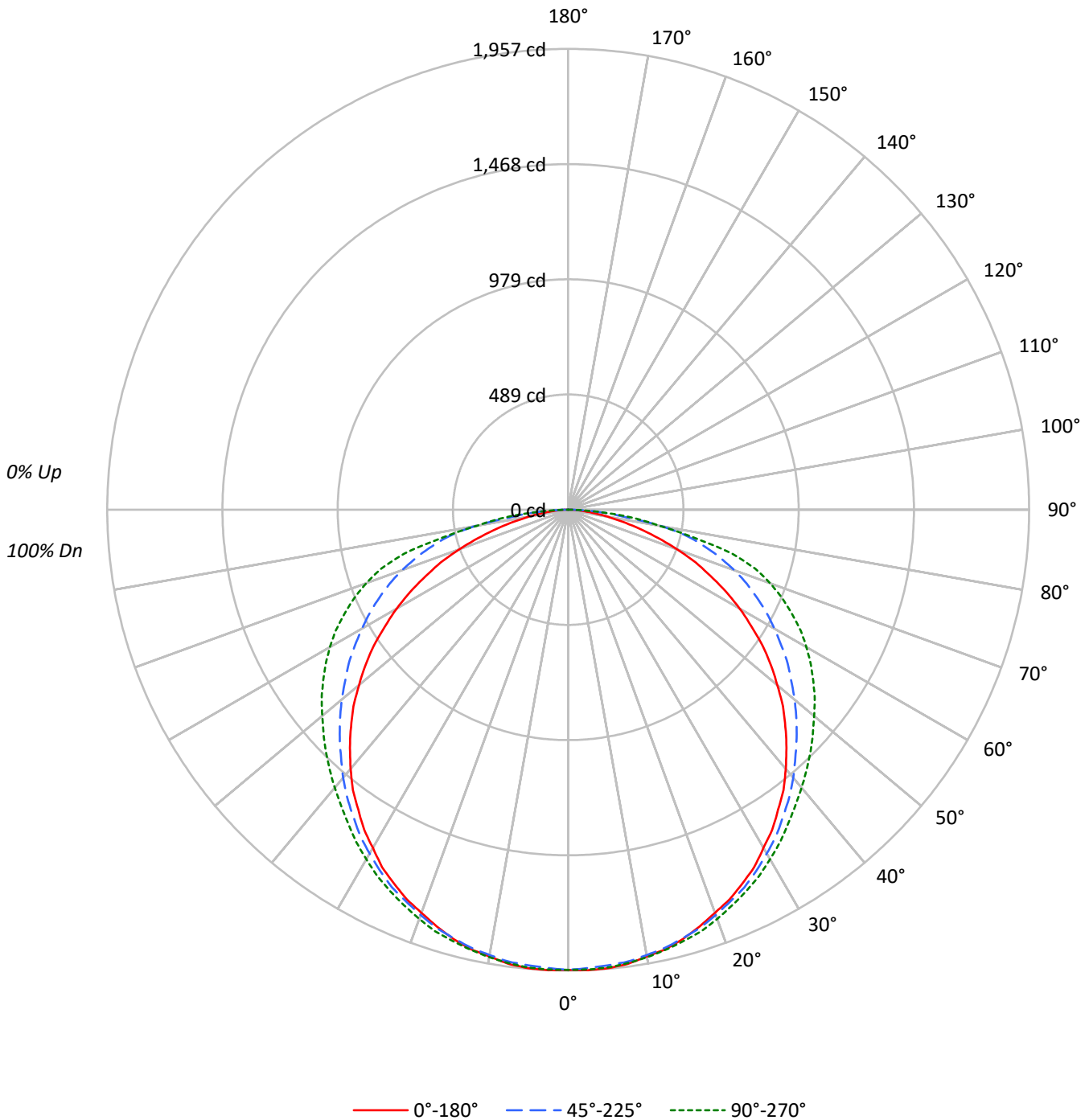
Input Watts (W): 69.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2629	2629	2629
5°	2640	2623	2635
10°	2632	2624	2636
15°	2628	2623	2641
20°	2609	2622	2648
25°	2599	2627	2654
30°	2577	2620	2663
35°	2552	2613	2673
40°	2523	2610	2707
45°	2481	2610	2768
50°	2426	2626	2852
55°	2365	2668	2979
60°	2264	2721	3144
65°	2120	2817	3337
70°	1928	2947	3589
75°	1634	3109	3750
80°	1290	3129	3033
85°	953	2379	2665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.4	3.0
10°-20°	533.5	8.6
20°-30°	815.9	13.1
30°-40°	997.4	16.0
40°-50°	1063.0	17.1
50°-60°	1016.4	16.4
60°-70°	861.0	13.9
70°-80°	578.7	9.3
80°-90°	163.2	2.6
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°	1534.8	24.7
0°-40°	2532.2	40.7
0°-60°	4611.7	74.2
0°-90°	6214.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6214.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1954	1954	1954	1954	1954	
5°	1954	1951	1942	1951	1951	186
15°	1886	1886	1883	1899	1896	532
25°	1751	1757	1769	1785	1788	807
35°	1554	1566	1591	1621	1628	973
45°	1304	1326	1372	1430	1455	1006
55°	1008	1045	1137	1227	1270	898
65°	666	734	885	1002	1048	661
75°	314	428	598	700	721	337
85°	62	126	154	166	173	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1954.3	1954.3	1954.3	1954.3	1954.3
2.5°	1957.4	1957.4	1948.1	1954.3	1954.3
5°	1954.3	1951.2	1942.0	1951.2	1951.2
7.5°	1945.1	1942.0	1935.8	1945.1	1942.0
10°	1926.6	1926.6	1920.4	1929.7	1929.7
12.5°	1911.2	1908.1	1905.0	1917.3	1914.2
15°	1886.5	1886.5	1883.4	1898.8	1895.7
17.5°	1855.7	1858.8	1861.8	1874.2	1877.3
20°	1821.8	1827.9	1831.0	1849.5	1849.5
22.5°	1790.9	1794.0	1800.2	1818.7	1818.7
25°	1750.9	1757.0	1769.4	1784.8	1787.9
27.5°	1710.8	1713.9	1729.3	1750.9	1754.0
30°	1658.4	1667.6	1686.1	1710.8	1713.9
32.5°	1612.2	1621.4	1643.0	1667.6	1673.8
35°	1553.6	1565.9	1590.6	1621.4	1627.6
37.5°	1501.2	1510.4	1541.3	1575.2	1584.4
40°	1436.5	1454.9	1485.8	1525.8	1541.3
42.5°	1371.7	1390.2	1427.2	1479.6	1498.1
45°	1303.9	1325.5	1371.7	1430.3	1454.9
47.5°	1236.1	1260.7	1313.2	1381.0	1408.7
50°	1159.0	1189.9	1254.6	1331.6	1362.5
52.5°	1085.0	1122.0	1192.9	1279.2	1319.3
55°	1008.0	1045.0	1137.4	1226.8	1270.0
57.5°	921.7	971.0	1072.7	1174.4	1220.7
60°	841.5	887.8	1011.1	1122.0	1168.3
62.5°	755.2	816.9	949.4	1066.6	1112.8
65°	665.8	733.6	884.7	1001.8	1048.1
67.5°	585.7	659.7	819.9	937.1	983.3
70°	490.1	582.6	749.1	866.2	912.4
72.5°	400.7	502.4	675.1	789.1	832.3
75°	314.4	428.5	598.0	699.7	721.3
77.5°	234.3	354.5	517.9	561.0	545.6
80°	166.5	283.6	403.8	382.2	391.5
82.5°	107.9	215.8	249.7	283.6	292.8
85°	61.7	126.4	154.1	166.5	172.6
87.5°	27.7	46.2	61.7	61.7	58.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)