

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: P390918

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L950-CD1-SDWPD1-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: P390918  
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-SDWPD1-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: 6063.5 lumens  
Efficiency: N/A  
Efficacy: 87.1 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

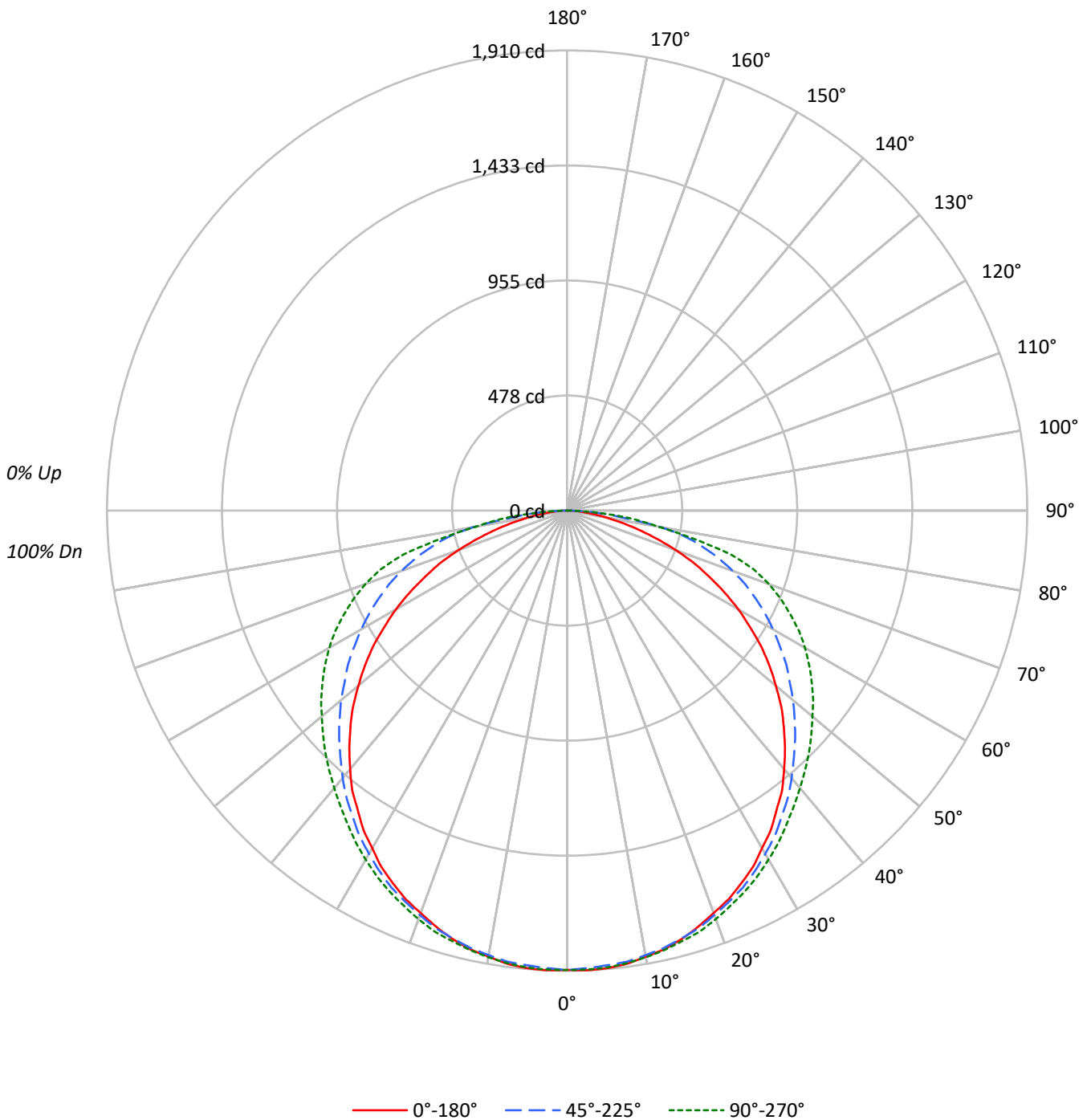
Input Watts (W): 69.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2566	2566	2566
5°	2575	2559	2571
10°	2568	2560	2572
15°	2564	2560	2577
20°	2545	2558	2584
25°	2536	2563	2590
30°	2514	2556	2598
35°	2490	2549	2608
40°	2462	2546	2641
45°	2421	2547	2701
50°	2367	2562	2783
55°	2307	2603	2907
60°	2210	2655	3067
65°	2068	2748	3256
70°	1881	2875	3502
75°	1595	3033	3659
80°	1258	3053	2960
85°	929	2322	2600



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.9	3.0
10°-20°	520.6	8.6
20°-30°	796.1	13.1
30°-40°	973.2	16.0
40°-50°	1037.2	17.1
50°-60°	991.7	16.4
60°-70°	840.1	13.9
70°-80°	564.6	9.3
80°-90°	159.3	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°	1497.5	24.7
0°-40°	2470.7	40.7
0°-60°	4499.5	74.2
0°-90°	6063.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6063.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1907	1904	1895	1904	1904	181
15°	1841	1841	1838	1853	1850	519
25°	1708	1714	1726	1741	1744	787
35°	1516	1528	1552	1582	1588	950
45°	1272	1293	1338	1396	1420	981
55°	984	1020	1110	1197	1239	876
65°	650	716	863	978	1023	645
75°	307	418	584	683	704	328
85°	60	123	150	162	168	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1906.8	1906.8	1906.8	1906.8	1906.8
2.5°	1909.8	1909.8	1900.8	1906.8	1906.8
5°	1906.8	1903.8	1894.8	1903.8	1903.8
7.5°	1897.8	1894.8	1888.8	1897.8	1894.8
10°	1879.7	1879.7	1873.7	1882.7	1882.7
12.5°	1864.7	1861.7	1858.7	1870.7	1867.7
15°	1840.6	1840.6	1837.6	1852.7	1849.7
17.5°	1810.6	1813.6	1816.6	1828.6	1831.6
20°	1777.5	1783.5	1786.5	1804.5	1804.5
22.5°	1747.4	1750.4	1756.4	1774.5	1774.5
25°	1708.3	1714.3	1726.3	1741.4	1744.4
27.5°	1669.2	1672.2	1687.2	1708.3	1711.3
30°	1618.1	1627.1	1645.1	1669.2	1672.2
32.5°	1573.0	1582.0	1603.0	1627.1	1633.1
35°	1515.8	1527.8	1551.9	1582.0	1588.0
37.5°	1464.7	1473.7	1503.8	1536.9	1545.9
40°	1401.5	1419.6	1449.6	1488.7	1503.8
42.5°	1338.4	1356.4	1392.5	1443.6	1461.7
45°	1272.2	1293.3	1338.4	1395.5	1419.6
47.5°	1206.0	1230.1	1281.2	1347.4	1374.5
50°	1130.8	1160.9	1224.1	1299.3	1329.3
52.5°	1058.7	1094.8	1163.9	1248.1	1287.2
55°	983.5	1019.6	1109.8	1197.0	1239.1
57.5°	899.3	947.4	1046.6	1145.9	1191.0
60°	821.1	866.2	986.5	1094.8	1139.9
62.5°	736.9	797.0	926.3	1040.6	1085.7
65°	649.6	715.8	863.2	977.5	1022.6
67.5°	571.4	643.6	800.0	914.3	959.4
70°	478.2	568.4	730.8	845.1	890.2
72.5°	391.0	490.2	658.7	769.9	812.0
75°	306.8	418.1	583.5	682.7	703.8
77.5°	228.6	345.9	505.3	547.4	532.3
80°	162.4	276.7	394.0	372.9	382.0
82.5°	105.3	210.5	243.6	276.7	285.7
85°	60.2	123.3	150.4	162.4	168.4
87.5°	27.1	45.1	60.2	60.2	57.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)