

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: P388979

Luminaire Tested: **24CZ2-65-SQR-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: P388979
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65-SQR-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

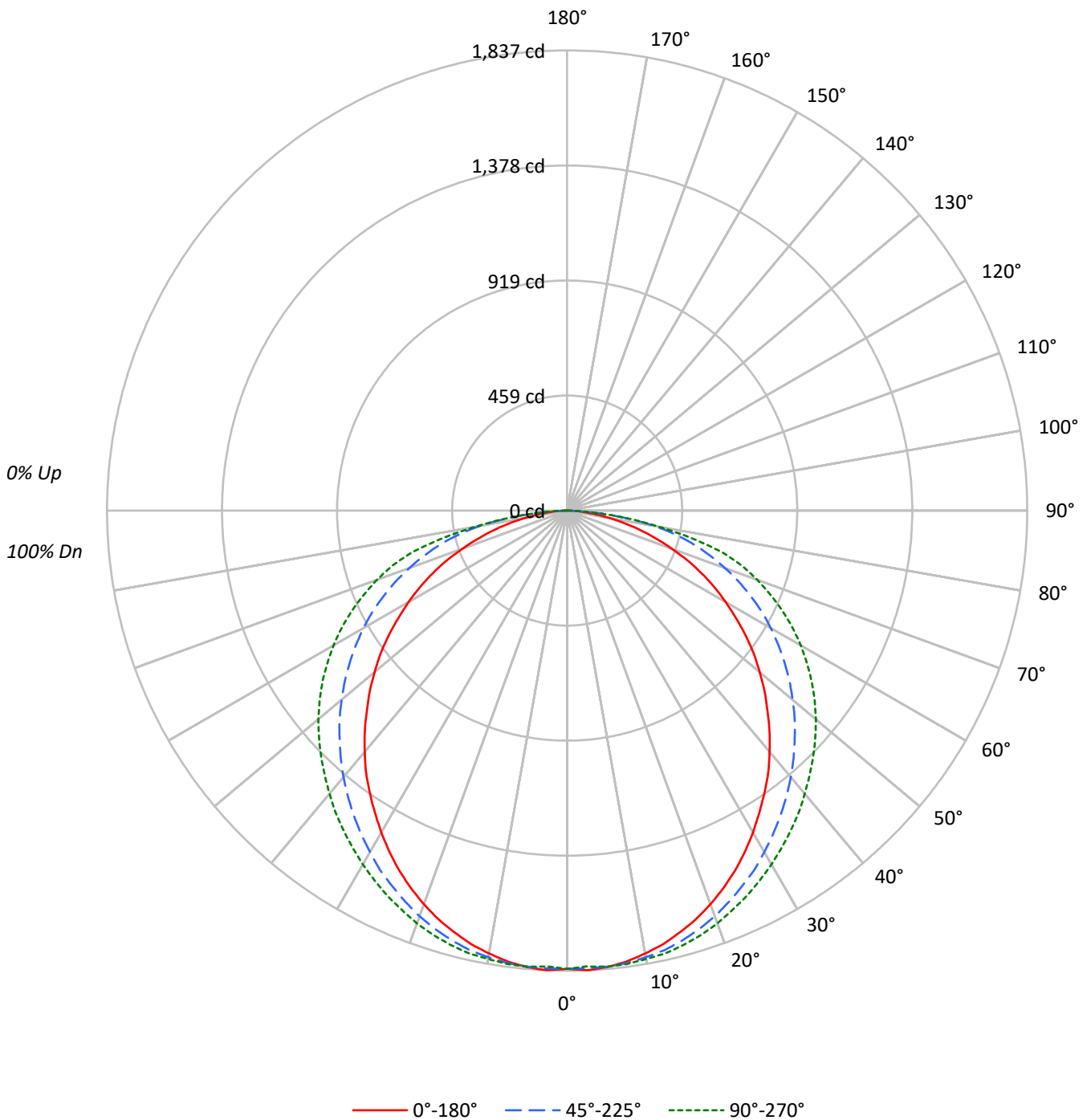
Lumens per Lamp: N/A
Luminaire Lumens: 5722.8 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 62.8
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	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	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	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2461	2461	2461
5°	2471	2468	2468
10°	2453	2473	2484
15°	2427	2474	2501
20°	2395	2468	2511
25°	2354	2455	2519
30°	2305	2446	2534
35°	2257	2440	2558
40°	2207	2440	2592
45°	2150	2445	2643
50°	2101	2460	2714
55°	2039	2487	2797
60°	1968	2527	2899
65°	1883	2575	3020
70°	1747	2639	3174
75°	1582	2731	3320
80°	1333	2738	2855
85°	1020	2072	2072



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.6	3.0
10°-20°	499.6	8.7
20°-30°	758.8	13.3
30°-40°	923.0	16.1
40°-50°	982.7	17.2
50°-60°	936.0	16.4
60°-70°	782.7	13.7
70°-80°	521.9	9.1
80°-90°	144.4	2.5
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°	1432.1	25.0
0°-40°	2355.1	41.2
0°-60°	4273.8	74.7
0°-90°	5722.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5722.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1829	1829	1829	1829	1829	
5°	1829	1818	1827	1827	1827	174
15°	1742	1746	1776	1790	1795	491
25°	1586	1606	1654	1682	1697	730
35°	1374	1414	1485	1534	1557	860
45°	1130	1190	1285	1357	1389	874
55°	869	945	1060	1153	1192	777
65°	592	678	809	909	949	584
75°	304	401	525	614	639	322
85°	66	123	134	132	134	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1829.3	1829.3	1829.3	1829.3	1829.3
2.5°	1836.8	1823.6	1829.3	1829.3	1821.7
5°	1829.3	1817.9	1827.4	1827.4	1827.4
7.5°	1816.1	1806.6	1821.7	1825.5	1825.5
10°	1795.3	1791.5	1810.4	1816.1	1817.9
12.5°	1772.6	1770.7	1797.2	1804.7	1810.4
15°	1742.4	1746.1	1776.4	1789.6	1795.3
17.5°	1710.2	1717.8	1751.8	1770.7	1776.4
20°	1672.4	1683.8	1723.5	1742.4	1753.7
22.5°	1630.9	1647.9	1689.4	1712.1	1725.3
25°	1585.5	1606.3	1653.5	1681.9	1697.0
27.5°	1536.4	1562.8	1617.6	1649.8	1664.9
30°	1483.5	1513.7	1574.2	1612.0	1630.9
32.5°	1428.7	1464.6	1530.7	1572.3	1595.0
35°	1373.9	1413.5	1485.3	1534.5	1557.2
37.5°	1319.1	1358.7	1438.1	1491.0	1519.4
40°	1256.7	1303.9	1389.0	1447.6	1475.9
42.5°	1196.2	1247.2	1337.9	1402.2	1432.4
45°	1130.1	1190.5	1285.0	1356.8	1389.0
47.5°	1069.6	1130.1	1232.1	1307.7	1343.6
50°	1003.5	1067.7	1175.4	1258.6	1296.4
52.5°	939.2	1005.4	1118.7	1207.6	1245.4
55°	869.3	944.9	1060.2	1152.8	1192.4
57.5°	799.4	880.6	999.7	1096.1	1135.7
60°	731.3	814.5	939.2	1035.6	1077.2
62.5°	663.3	746.5	876.8	975.1	1014.8
65°	591.5	678.4	808.8	909.0	948.7
67.5°	519.7	610.4	740.8	840.9	878.7
70°	444.1	540.5	670.9	769.1	806.9
72.5°	374.2	470.5	599.1	695.4	731.3
75°	304.3	400.6	525.4	614.2	638.7
77.5°	236.2	332.6	444.1	502.7	508.3
80°	172.0	262.7	353.4	370.4	368.5
82.5°	115.3	196.5	243.8	245.7	251.3
85°	66.1	122.8	134.2	132.3	134.2
87.5°	26.5	43.5	37.8	28.3	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)