

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: P389094

Luminaire Tested: **24CZ2-75HE-SQR-UNV-L940-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: P389094
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: 24CZ2-75HE-SQR-UNV-L940-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6060.9 lumens
Efficiency: N/A
Efficacy: 109.4 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

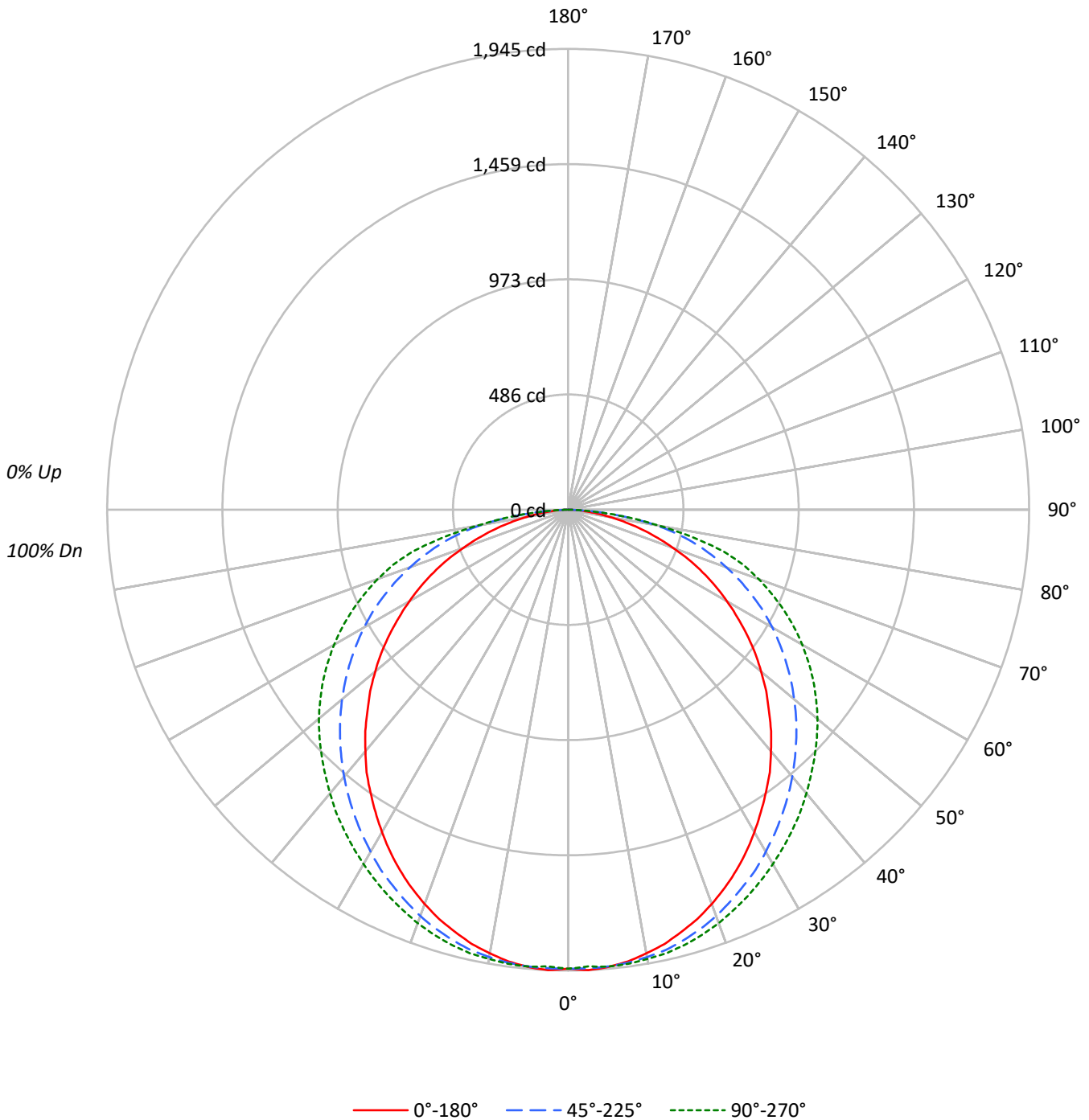
Input Watts (W): 55.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2607	2607	2607
5°	2617	2614	2614
10°	2598	2620	2631
15°	2570	2621	2648
20°	2536	2614	2659
25°	2493	2600	2668
30°	2441	2590	2683
35°	2390	2584	2709
40°	2338	2584	2745
45°	2277	2590	2799
50°	2224	2606	2874
55°	2160	2634	2962
60°	2084	2677	3070
65°	1994	2727	3199
70°	1850	2795	3362
75°	1675	2892	3517
80°	1411	2900	3024
85°	1081	2194	2194



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.9	3.0
10°-20°	529.1	8.7
20°-30°	803.7	13.3
30°-40°	977.5	16.1
40°-50°	1040.8	17.2
50°-60°	991.3	16.4
60°-70°	829.0	13.7
70°-80°	552.7	9.1
80°-90°	152.9	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°	1516.7	25.0
0°-40°	2494.2	41.2
0°-60°	4526.3	74.7
0°-90°	6060.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6060.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1937	1937	1937	1937	1937	
5°	1937	1925	1935	1935	1935	184
15°	1845	1849	1881	1895	1901	520
25°	1679	1701	1751	1781	1797	773
35°	1455	1497	1573	1625	1649	911
45°	1197	1261	1361	1437	1471	925
55°	921	1001	1123	1221	1263	823
65°	626	718	857	963	1005	619
75°	322	424	556	650	676	341
85°	70	130	142	140	142	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1937.4	1937.4	1937.4	1937.4	1937.4
2.5°	1945.4	1931.4	1937.4	1937.4	1929.4
5°	1937.4	1925.4	1935.4	1935.4	1935.4
7.5°	1923.3	1913.3	1929.4	1933.4	1933.4
10°	1901.3	1897.3	1917.3	1923.3	1925.4
12.5°	1877.3	1875.3	1903.3	1911.3	1917.3
15°	1845.3	1849.3	1881.3	1895.3	1901.3
17.5°	1811.3	1819.3	1855.3	1875.3	1881.3
20°	1771.2	1783.3	1825.3	1845.3	1857.3
22.5°	1727.2	1745.2	1789.3	1813.3	1827.3
25°	1679.2	1701.2	1751.2	1781.2	1797.3
27.5°	1627.1	1655.2	1713.2	1747.2	1763.2
30°	1571.1	1603.1	1667.2	1707.2	1727.2
32.5°	1513.1	1551.1	1621.1	1665.2	1689.2
35°	1455.0	1497.0	1573.1	1625.1	1649.2
37.5°	1397.0	1439.0	1523.1	1579.1	1609.1
40°	1330.9	1381.0	1471.0	1533.1	1563.1
42.5°	1266.9	1320.9	1417.0	1485.0	1517.1
45°	1196.8	1260.9	1361.0	1437.0	1471.0
47.5°	1132.8	1196.8	1304.9	1385.0	1423.0
50°	1062.7	1130.8	1244.9	1332.9	1373.0
52.5°	994.7	1064.7	1184.8	1278.9	1318.9
55°	920.6	1000.7	1122.8	1220.9	1262.9
57.5°	846.6	932.7	1058.7	1160.8	1202.8
60°	774.5	862.6	994.7	1096.8	1140.8
62.5°	702.5	790.6	928.7	1032.7	1074.8
65°	626.4	718.5	856.6	962.7	1004.7
67.5°	550.4	646.5	784.6	890.6	930.7
70°	470.3	572.4	710.5	814.6	854.6
72.5°	396.3	498.3	634.4	736.5	774.5
75°	322.2	424.3	556.4	650.5	676.5
77.5°	250.2	352.2	470.3	532.4	538.4
80°	182.1	278.2	374.3	392.3	390.3
82.5°	122.1	208.1	258.2	260.2	266.2
85°	70.0	130.1	142.1	140.1	142.1
87.5°	28.0	46.0	40.0	30.0	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)