

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: P388437

Luminaire Tested: **22CZ2-70VHE-UNV-L930-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: P388437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-70VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5648.7 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

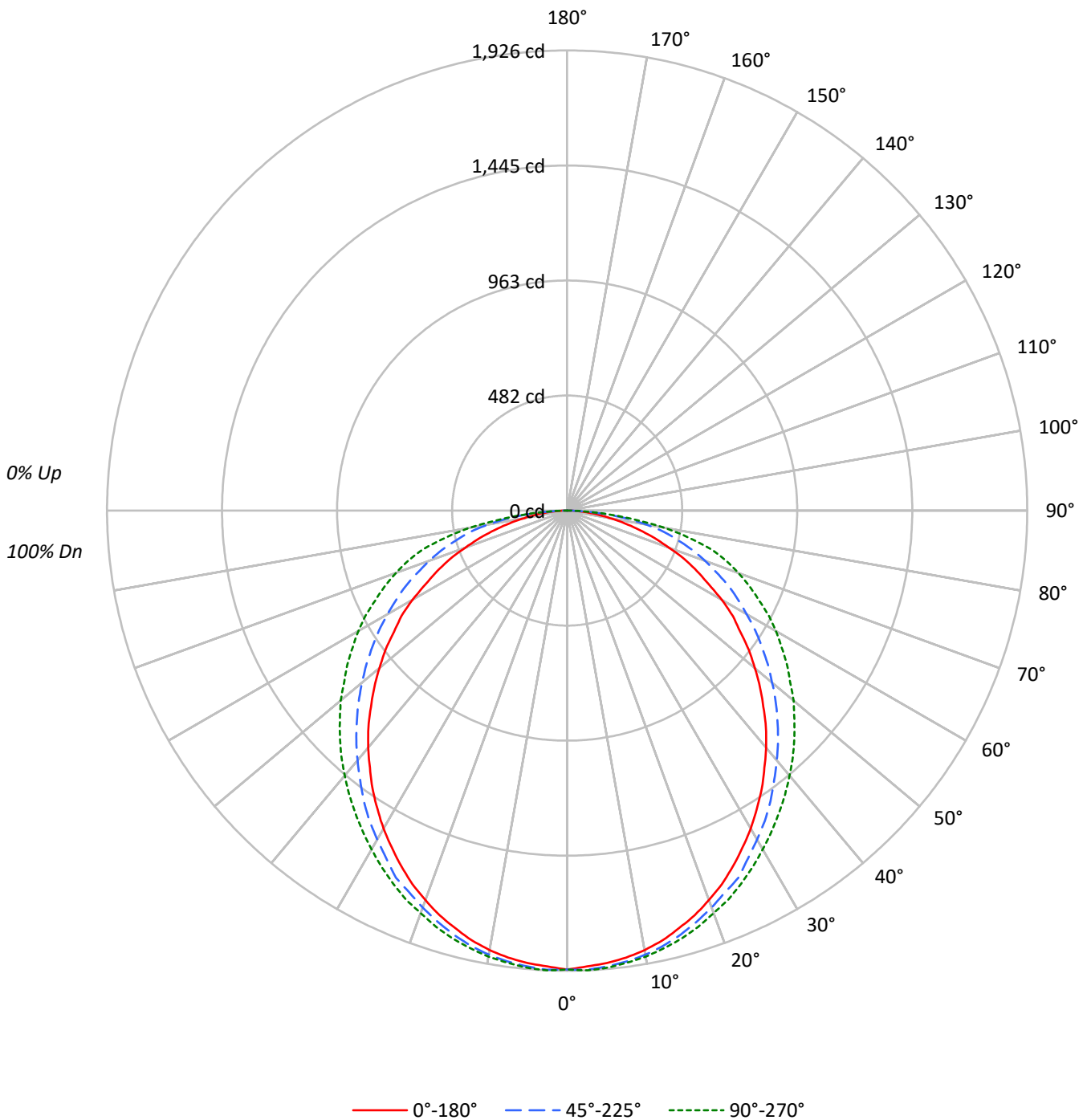
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5169	5169	5169
5°	5136	5173	5188
10°	5104	5157	5180
15°	5041	5119	5165
20°	4967	5062	5134
25°	4877	5034	5117
30°	4776	4940	5087
35°	4666	4876	5077
40°	4550	4794	5087
45°	4421	4739	5120
50°	4294	4690	5178
55°	4147	4669	5268
60°	4024	4667	5430
65°	3823	4743	5628
70°	3565	4833	5992
75°	3266	5000	6473
80°	2842	5212	6375
85°	2489	4634	5064



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.6	3.2
10°-20°	517.4	9.2
20°-30°	776.7	13.7
30°-40°	928.1	16.4
40°-50°	965.0	17.1
50°-60°	894.4	15.8
60°-70°	733.7	13.0
70°-80°	495.9	8.8
80°-90°	155.8	2.8
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°	1475.7	26.1
0°-40°	2403.7	42.6
0°-60°	4263.2	75.5
0°-90°	5648.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5648.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1921	1921	1921	1921	1921	
5°	1901	1904	1915	1918	1921	180
15°	1810	1818	1837	1848	1854	510
25°	1643	1657	1696	1715	1723	757
35°	1420	1440	1484	1529	1545	888
45°	1162	1184	1245	1318	1345	897
55°	884	912	995	1084	1123	794
65°	600	634	745	842	884	593
75°	314	367	481	578	623	333
85°	81	111	150	167	164	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	1909.5	1915.1	1923.4	1926.2	1926.2
5°	1901.2	1904.0	1915.1	1917.9	1920.7
7.5°	1887.3	1892.9	1904.0	1906.8	1909.5
10°	1867.9	1873.4	1887.3	1892.9	1895.6
12.5°	1842.8	1848.4	1865.1	1873.4	1876.2
15°	1809.5	1817.8	1837.3	1848.4	1854.0
17.5°	1776.1	1784.5	1803.9	1820.6	1826.2
20°	1734.4	1753.9	1767.8	1790.0	1792.8
22.5°	1692.7	1703.9	1728.9	1751.1	1762.2
25°	1642.7	1656.6	1695.5	1715.0	1723.3
27.5°	1589.9	1609.4	1639.9	1670.5	1681.6
30°	1537.1	1551.0	1589.9	1626.0	1637.1
32.5°	1478.7	1498.2	1539.9	1576.0	1592.7
35°	1420.3	1439.8	1484.3	1528.7	1545.4
37.5°	1356.4	1378.7	1423.1	1475.9	1498.2
40°	1295.3	1311.9	1364.8	1428.7	1448.1
42.5°	1231.3	1250.8	1306.4	1375.9	1398.1
45°	1161.8	1184.1	1245.2	1317.5	1345.3
47.5°	1095.1	1117.4	1184.1	1256.4	1289.7
50°	1025.7	1053.4	1120.2	1203.5	1236.9
52.5°	958.9	984.0	1059.0	1145.2	1175.7
55°	883.9	911.7	995.1	1084.0	1122.9
57.5°	822.7	842.2	933.9	1025.7	1064.6
60°	747.7	772.7	867.2	964.5	1009.0
62.5°	667.1	708.8	806.1	906.1	950.6
65°	600.4	633.7	744.9	842.2	883.9
67.5°	530.9	567.0	675.4	778.3	825.5
70°	453.1	500.3	614.3	717.1	761.6
72.5°	383.6	433.6	550.3	650.4	697.7
75°	314.1	366.9	480.9	578.1	622.6
77.5°	247.4	305.7	416.9	492.0	519.8
80°	183.4	239.0	336.3	389.1	411.4
82.5°	127.9	175.1	247.4	275.2	280.7
85°	80.6	111.2	150.1	166.8	164.0
87.5°	36.1	44.5	55.6	61.1	58.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)