

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: P388415

Luminaire Tested: **22CZ2-65VHE-UNV-L930-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: P388415
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: 22CZ2-65VHE-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

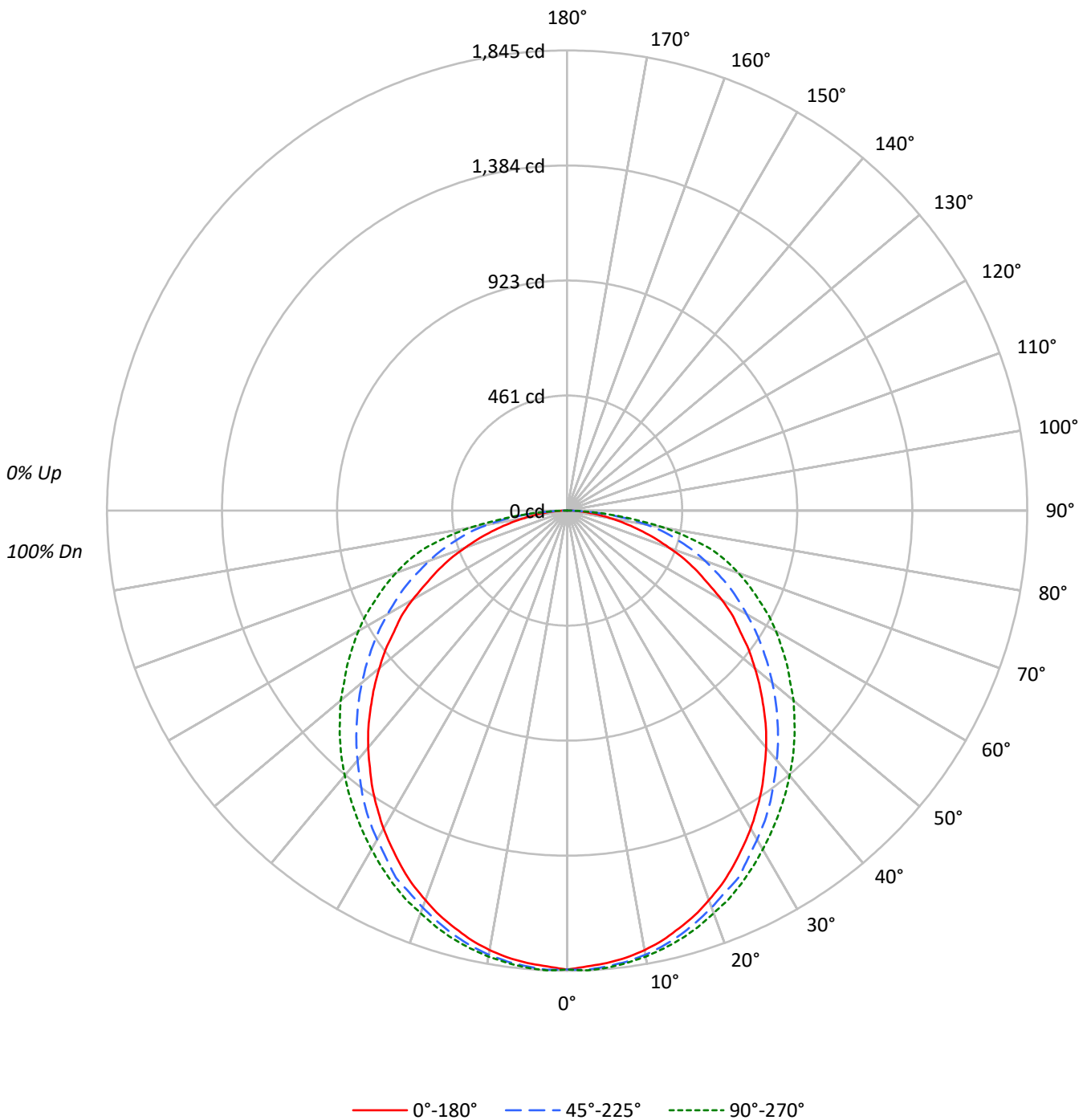
Lumens per Lamp: N/A
Luminaire Lumens: 5411.7 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 47.9
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°	4952	4952	4952
5°	4920	4956	4971
10°	4890	4941	4962
15°	4830	4904	4948
20°	4759	4850	4919
25°	4673	4823	4902
30°	4576	4733	4874
35°	4470	4671	4864
40°	4359	4593	4874
45°	4236	4540	4905
50°	4114	4493	4961
55°	3973	4472	5047
60°	3855	4471	5202
65°	3663	4544	5392
70°	3415	4630	5740
75°	3129	4790	6202
80°	2724	4993	6107
85°	2384	4440	4851



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.0	3.2
10°-20°	495.7	9.2
20°-30°	744.1	13.7
30°-40°	889.1	16.4
40°-50°	924.5	17.1
50°-60°	856.9	15.8
60°-70°	702.9	13.0
70°-80°	475.1	8.8
80°-90°	149.3	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°	1413.8	26.1
0°-40°	2302.9	42.6
0°-60°	4084.3	75.5
0°-90°	5411.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5411.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1821	1824	1835	1837	1840	173
15°	1734	1742	1760	1771	1776	489
25°	1574	1587	1624	1643	1651	725
35°	1361	1379	1422	1465	1481	851
45°	1113	1134	1193	1262	1289	860
55°	847	873	953	1038	1076	761
65°	575	607	714	807	847	569
75°	301	352	461	554	596	319
85°	77	106	144	160	157	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1829.4	1834.8	1842.7	1845.4	1845.4
5°	1821.4	1824.1	1834.8	1837.4	1840.1
7.5°	1808.1	1813.4	1824.1	1826.8	1829.4
10°	1789.5	1794.8	1808.1	1813.4	1816.1
12.5°	1765.5	1770.8	1786.8	1794.8	1797.5
15°	1733.6	1741.5	1760.2	1770.8	1776.2
17.5°	1701.6	1709.6	1728.2	1744.2	1749.5
20°	1661.7	1680.3	1693.6	1714.9	1717.6
22.5°	1621.7	1632.4	1656.3	1677.6	1688.3
25°	1573.8	1587.1	1624.4	1643.0	1651.0
27.5°	1523.2	1541.8	1571.1	1600.4	1611.1
30°	1472.6	1485.9	1523.2	1557.8	1568.5
32.5°	1416.7	1435.3	1475.3	1509.9	1525.9
35°	1360.8	1379.4	1422.0	1464.6	1480.6
37.5°	1299.5	1320.8	1363.4	1414.0	1435.3
40°	1240.9	1256.9	1307.5	1368.7	1387.4
42.5°	1179.7	1198.3	1251.6	1318.1	1339.4
45°	1113.1	1134.4	1193.0	1262.2	1288.9
47.5°	1049.2	1070.5	1134.4	1203.6	1235.6
50°	982.6	1009.2	1073.2	1153.0	1185.0
52.5°	918.7	942.7	1014.6	1097.1	1126.4
55°	846.8	873.4	953.3	1038.5	1075.8
57.5°	788.2	806.9	894.7	982.6	1019.9
60°	716.3	740.3	830.8	924.0	966.6
62.5°	639.1	679.0	772.2	868.1	910.7
65°	575.2	607.1	713.7	806.9	846.8
67.5°	508.6	543.2	647.1	745.6	790.9
70°	434.1	479.3	588.5	687.0	729.6
72.5°	367.5	415.4	527.3	623.1	668.4
75°	300.9	351.5	460.7	553.9	596.5
77.5°	237.0	292.9	399.4	471.3	498.0
80°	175.8	229.0	322.2	372.8	394.1
82.5°	122.5	167.8	237.0	263.6	269.0
85°	77.2	106.5	143.8	159.8	157.1
87.5°	34.6	42.6	53.3	58.6	55.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)