

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: P388417

Luminaire Tested: **22CZ2-65VHE-UNV-L935-CD1-SWPD1-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: P388417
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5476.7 lumens
Efficiency: N/A
Efficacy: 114.3 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

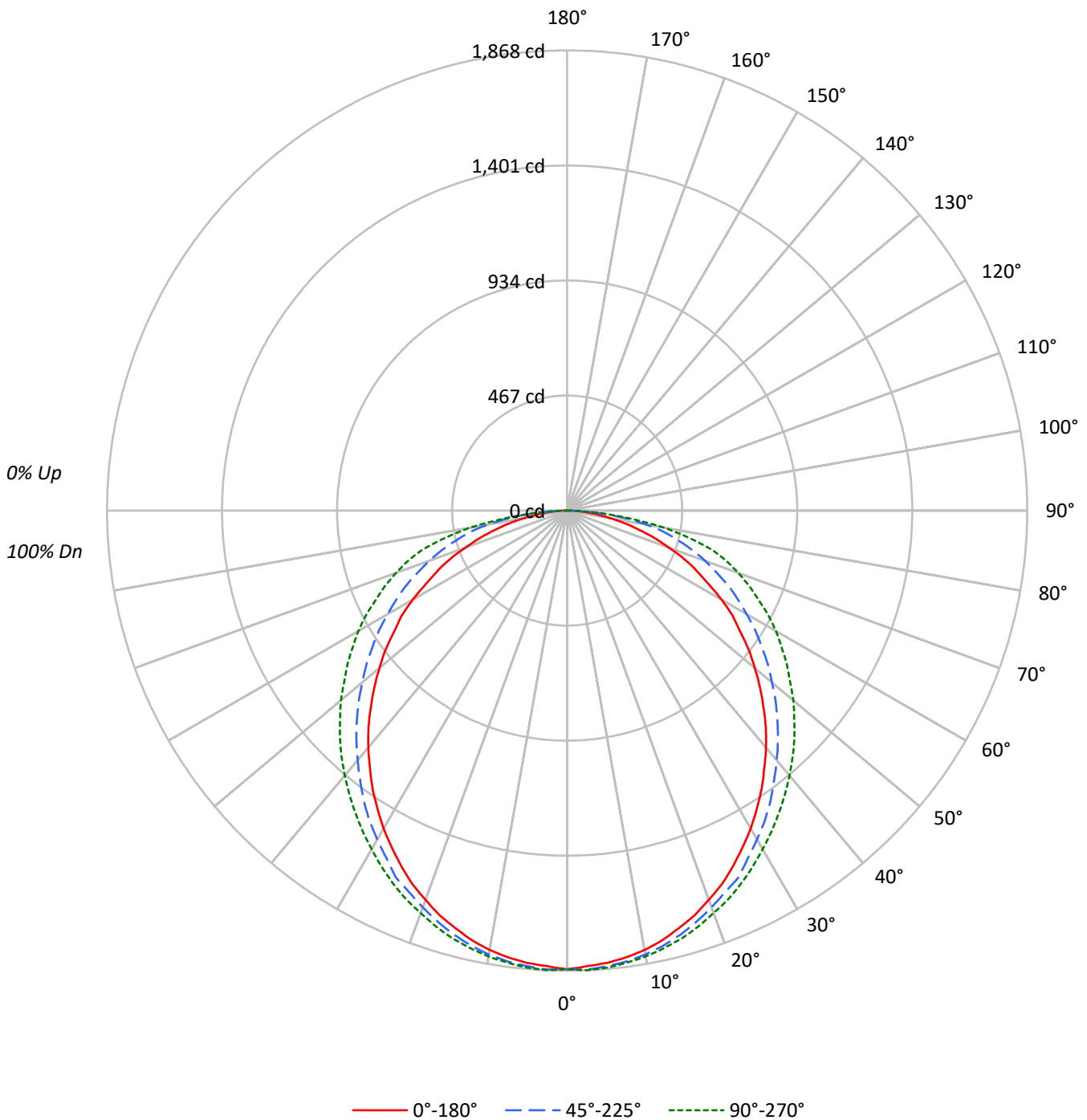
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5011	5011	5011
5°	4979	5016	5030
10°	4949	5000	5022
15°	4888	4963	5008
20°	4816	4908	4978
25°	4729	4881	4961
30°	4631	4790	4932
35°	4524	4728	4922
40°	4411	4648	4932
45°	4287	4595	4964
50°	4163	4546	5020
55°	4021	4526	5108
60°	3901	4525	5265
65°	3706	4599	5457
70°	3456	4686	5810
75°	3166	4847	6277
80°	2757	5053	6180
85°	2414	4492	4909



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.1	3.2
10°-20°	501.6	9.2
20°-30°	753.0	13.7
30°-40°	899.8	16.4
40°-50°	935.7	17.1
50°-60°	867.2	15.8
60°-70°	711.3	13.0
70°-80°	480.8	8.8
80°-90°	151.1	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°	1430.8	26.1
0°-40°	2330.6	42.6
0°-60°	4133.4	75.5
0°-90°	5476.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5476.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1862	1862	1862	1862	1862	
5°	1843	1846	1857	1860	1862	175
15°	1754	1762	1781	1792	1798	495
25°	1593	1606	1644	1663	1671	733
35°	1377	1396	1439	1482	1498	861
45°	1126	1148	1207	1277	1304	870
55°	857	884	965	1051	1089	770
65°	582	614	722	817	857	575
75°	304	356	466	560	604	323
85°	78	108	146	162	159	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1862.2	1862.2	1862.2	1862.2	1862.2
2.5°	1851.4	1856.8	1864.9	1867.6	1867.6
5°	1843.3	1846.0	1856.8	1859.5	1862.2
7.5°	1829.8	1835.2	1846.0	1848.7	1851.4
10°	1811.0	1816.4	1829.8	1835.2	1837.9
12.5°	1786.7	1792.1	1808.3	1816.4	1819.1
15°	1754.4	1762.5	1781.3	1792.1	1797.5
17.5°	1722.0	1730.1	1749.0	1765.2	1770.6
20°	1681.6	1700.5	1714.0	1735.5	1738.2
22.5°	1641.2	1652.0	1676.2	1697.8	1708.6
25°	1592.7	1606.2	1643.9	1662.8	1670.8
27.5°	1541.5	1560.3	1590.0	1619.6	1630.4
30°	1490.3	1503.8	1541.5	1576.5	1587.3
32.5°	1433.7	1452.6	1493.0	1528.0	1544.2
35°	1377.1	1396.0	1439.1	1482.2	1498.4
37.5°	1315.1	1336.7	1379.8	1431.0	1452.6
40°	1255.8	1272.0	1323.2	1385.2	1404.0
42.5°	1193.8	1212.7	1266.6	1334.0	1355.5
45°	1126.5	1148.0	1207.3	1277.4	1304.3
47.5°	1061.8	1083.4	1148.0	1218.1	1250.4
50°	994.4	1021.4	1086.0	1166.9	1199.2
52.5°	929.7	954.0	1026.8	1110.3	1139.9
55°	857.0	883.9	964.8	1051.0	1088.7
57.5°	797.7	816.6	905.5	994.4	1032.1
60°	724.9	749.2	840.8	935.1	978.3
62.5°	646.8	687.2	781.5	878.5	921.7
65°	582.1	614.4	722.2	816.6	857.0
67.5°	514.7	549.8	654.9	754.6	800.4
70°	439.3	485.1	595.6	695.3	738.4
72.5°	371.9	420.4	533.6	630.6	676.4
75°	304.5	355.7	466.2	560.5	603.7
77.5°	239.8	296.4	404.2	477.0	503.9
80°	177.9	231.8	326.1	377.3	398.8
82.5°	124.0	169.8	239.8	266.8	272.2
85°	78.2	107.8	145.5	161.7	159.0
87.5°	35.0	43.1	53.9	59.3	56.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)