

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: P388419

Luminaire Tested: **22CZ2-65VHE-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: P388419
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5466.6 lumens
Efficiency: N/A
Efficacy: 114.1 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

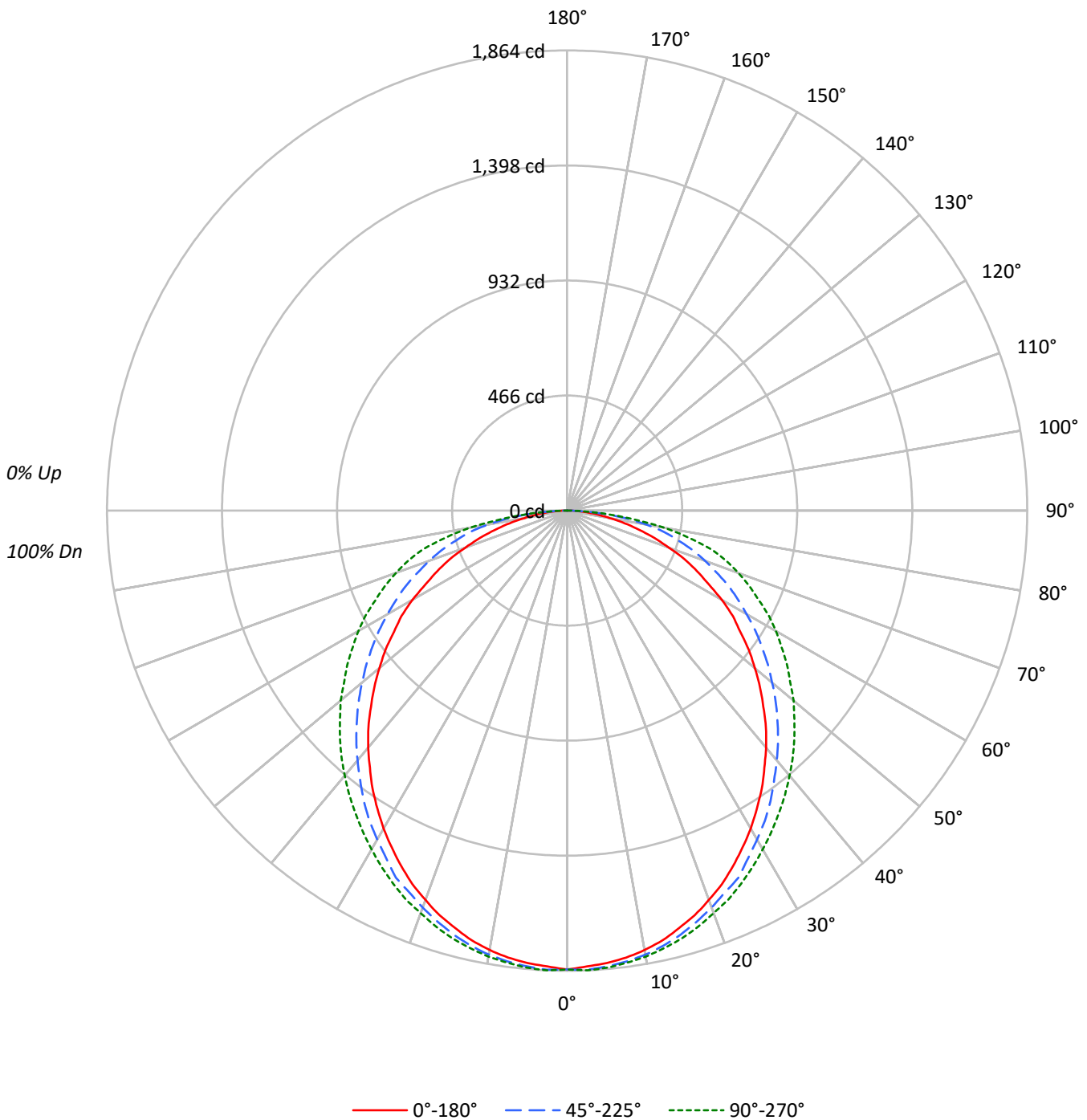
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5002	5002	5002
5°	4970	5007	5021
10°	4939	4991	5013
15°	4878	4953	4998
20°	4807	4899	4968
25°	4720	4872	4952
30°	4622	4781	4923
35°	4516	4719	4913
40°	4403	4640	4923
45°	4279	4586	4955
50°	4155	4538	5011
55°	4013	4518	5098
60°	3894	4517	5255
65°	3699	4590	5447
70°	3450	4677	5799
75°	3161	4839	6264
80°	2751	5044	6169
85°	2408	4486	4900



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.8	3.2
10°-20°	500.7	9.2
20°-30°	751.6	13.7
30°-40°	898.1	16.4
40°-50°	933.9	17.1
50°-60°	865.6	15.8
60°-70°	710.0	13.0
70°-80°	480.0	8.8
80°-90°	150.8	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°	1428.1	26.1
0°-40°	2326.3	42.6
0°-60°	4125.8	75.5
0°-90°	5466.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5466.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1859	1859	1859	1859	1859	
5°	1840	1843	1853	1856	1859	175
15°	1751	1759	1778	1789	1794	494
25°	1590	1603	1641	1660	1668	732
35°	1375	1393	1436	1480	1496	859
45°	1124	1146	1205	1275	1302	868
55°	855	882	963	1049	1087	769
65°	581	613	721	815	855	574
75°	304	355	465	560	602	322
85°	78	108	145	161	159	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1858.7	1858.7	1858.7	1858.7	1858.7
2.5°	1848.0	1853.4	1861.4	1864.1	1864.1
5°	1839.9	1842.6	1853.4	1856.1	1858.7
7.5°	1826.5	1831.8	1842.6	1845.3	1848.0
10°	1807.6	1813.0	1826.5	1831.8	1834.5
12.5°	1783.4	1788.8	1804.9	1813.0	1815.7
15°	1751.1	1759.2	1778.0	1788.8	1794.2
17.5°	1718.9	1726.9	1745.8	1761.9	1767.3
20°	1678.5	1697.3	1710.8	1732.3	1735.0
22.5°	1638.2	1648.9	1673.1	1694.7	1705.4
25°	1589.8	1603.2	1640.9	1659.7	1667.8
27.5°	1538.6	1557.5	1587.1	1616.7	1627.4
30°	1487.5	1501.0	1538.6	1573.6	1584.4
32.5°	1431.0	1449.9	1490.2	1525.2	1541.3
35°	1374.6	1393.4	1436.4	1479.5	1495.6
37.5°	1312.7	1334.2	1377.2	1428.4	1449.9
40°	1253.5	1269.6	1320.8	1382.6	1401.5
42.5°	1191.6	1210.5	1264.3	1331.5	1353.0
45°	1124.4	1145.9	1205.1	1275.0	1301.9
47.5°	1059.8	1081.4	1145.9	1215.9	1248.1
50°	992.6	1019.5	1084.0	1164.7	1197.0
52.5°	928.0	952.2	1024.9	1108.3	1137.8
55°	855.4	882.3	963.0	1049.1	1086.7
57.5°	796.2	815.1	903.8	992.6	1030.2
60°	723.6	747.8	839.3	933.4	976.4
62.5°	645.6	685.9	780.1	876.9	920.0
65°	581.0	613.3	720.9	815.1	855.4
67.5°	513.8	548.7	653.7	753.2	798.9
70°	438.5	484.2	594.5	694.0	737.0
72.5°	371.2	419.6	532.6	629.4	675.2
75°	304.0	355.1	465.4	559.5	602.5
77.5°	239.4	295.9	403.5	476.1	503.0
80°	177.5	231.3	325.5	376.6	398.1
82.5°	123.7	169.5	239.4	266.3	271.7
85°	78.0	107.6	145.3	161.4	158.7
87.5°	35.0	43.0	53.8	59.2	56.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)