

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: P388222

Luminaire Tested: **22CZ2-24VHE-UNV-L930-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: P388222
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: 22CZ2-24VHE-UNV-L930-CD1-SWPD1-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: 2037.9 lumens
Efficiency: N/A
Efficacy: 116.5 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

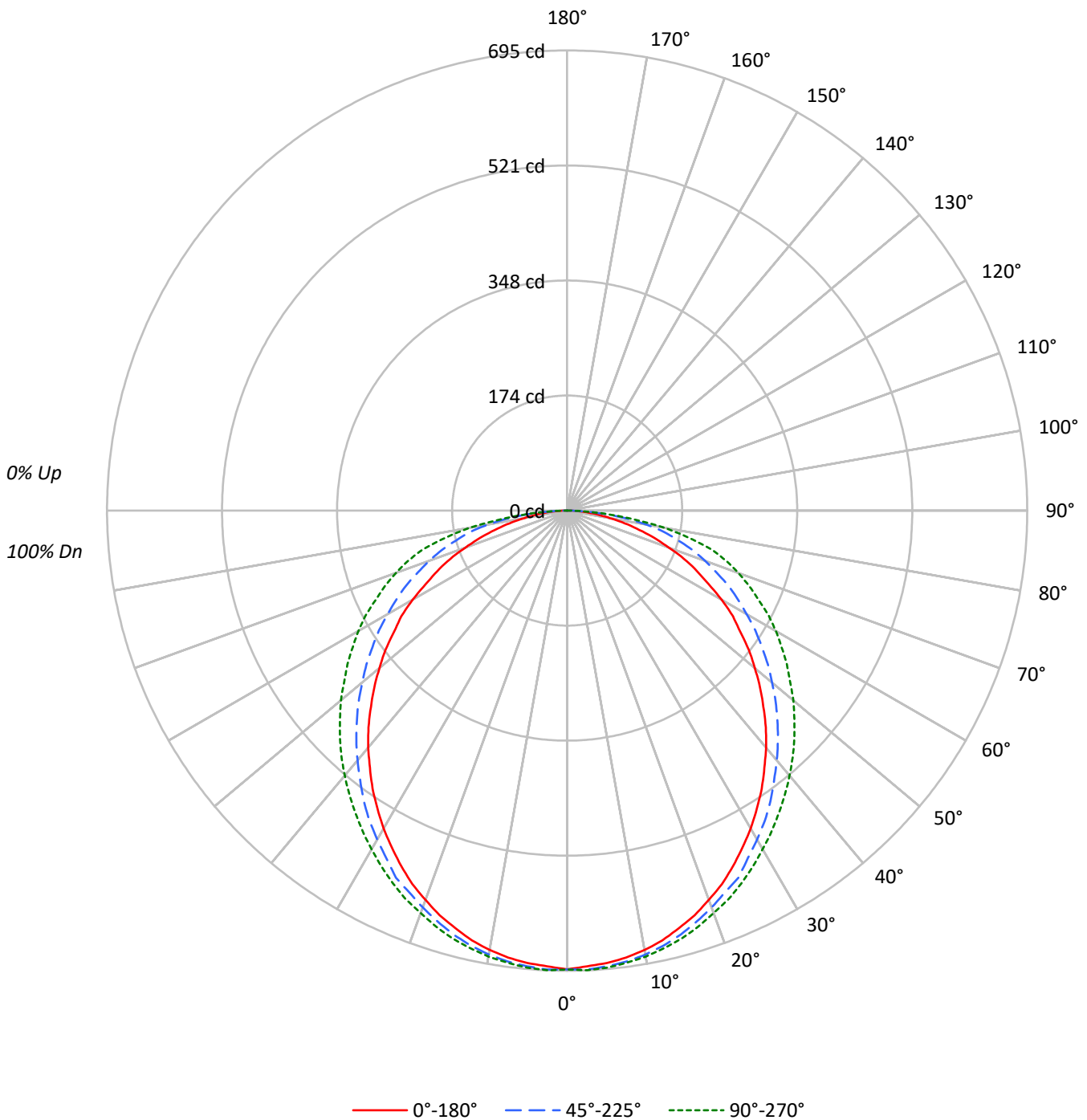
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1865	1865	1865
5°	1853	1866	1872
10°	1841	1861	1869
15°	1819	1846	1863
20°	1792	1826	1852
25°	1760	1816	1846
30°	1723	1782	1835
35°	1683	1759	1831
40°	1642	1730	1835
45°	1595	1709	1847
50°	1549	1692	1868
55°	1496	1684	1901
60°	1452	1684	1959
65°	1379	1711	2031
70°	1286	1744	2162
75°	1178	1804	2335
80°	1026	1880	2300
85°	898	1673	1828



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.5	3.2
10°-20°	186.7	9.2
20°-30°	280.2	13.7
30°-40°	334.8	16.4
40°-50°	348.2	17.1
50°-60°	322.7	15.8
60°-70°	264.7	13.0
70°-80°	178.9	8.8
80°-90°	56.2	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°	532.4	26.1
0°-40°	867.2	42.6
0°-60°	1538.1	75.5
0°-90°	2037.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2037.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	693	693	693	693	693	
5°	686	687	691	692	693	65
15°	653	656	663	667	669	184
25°	593	598	612	619	622	273
35°	512	519	536	552	558	320
45°	419	427	449	475	485	324
55°	319	329	359	391	405	287
65°	217	229	269	304	319	214
75°	113	132	174	209	225	120
85°	29	40	54	60	59	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	692.9	692.9	692.9	692.9	692.9
2.5°	688.9	690.9	693.9	694.9	694.9
5°	685.9	686.9	690.9	691.9	692.9
7.5°	680.9	682.9	686.9	687.9	688.9
10°	673.9	675.9	680.9	682.9	683.9
12.5°	664.8	666.9	672.9	675.9	676.9
15°	652.8	655.8	662.8	666.9	668.9
17.5°	640.8	643.8	650.8	656.8	658.8
20°	625.7	632.8	637.8	645.8	646.8
22.5°	610.7	614.7	623.7	631.8	635.8
25°	592.6	597.7	611.7	618.7	621.7
27.5°	573.6	580.6	591.6	602.7	606.7
30°	554.5	559.6	573.6	586.6	590.6
32.5°	533.5	540.5	555.5	568.6	574.6
35°	512.4	519.4	535.5	551.5	557.5
37.5°	489.4	497.4	513.4	532.5	540.5
40°	467.3	473.3	492.4	515.4	522.5
42.5°	444.2	451.3	471.3	496.4	504.4
45°	419.2	427.2	449.2	475.3	485.3
47.5°	395.1	403.1	427.2	453.3	465.3
50°	370.0	380.1	404.1	434.2	446.2
52.5°	346.0	355.0	382.1	413.1	424.2
55°	318.9	328.9	359.0	391.1	405.1
57.5°	296.8	303.8	336.9	370.0	384.1
60°	269.7	278.8	312.9	348.0	364.0
62.5°	240.7	255.7	290.8	326.9	343.0
65°	216.6	228.6	268.7	303.8	318.9
67.5°	191.5	204.6	243.7	280.8	297.8
70°	163.5	180.5	221.6	258.7	274.8
72.5°	138.4	156.4	198.6	234.7	251.7
75°	113.3	132.4	173.5	208.6	224.6
77.5°	89.2	110.3	150.4	177.5	187.5
80°	66.2	86.2	121.3	140.4	148.4
82.5°	46.1	63.2	89.2	99.3	101.3
85°	29.1	40.1	54.2	60.2	59.2
87.5°	13.0	16.0	20.1	22.1	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)