

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: P388227

Luminaire Tested: **22CZ2-24VHE-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: P388227
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-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: 2084.5 lumens
Efficiency: N/A
Efficacy: 119.1 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

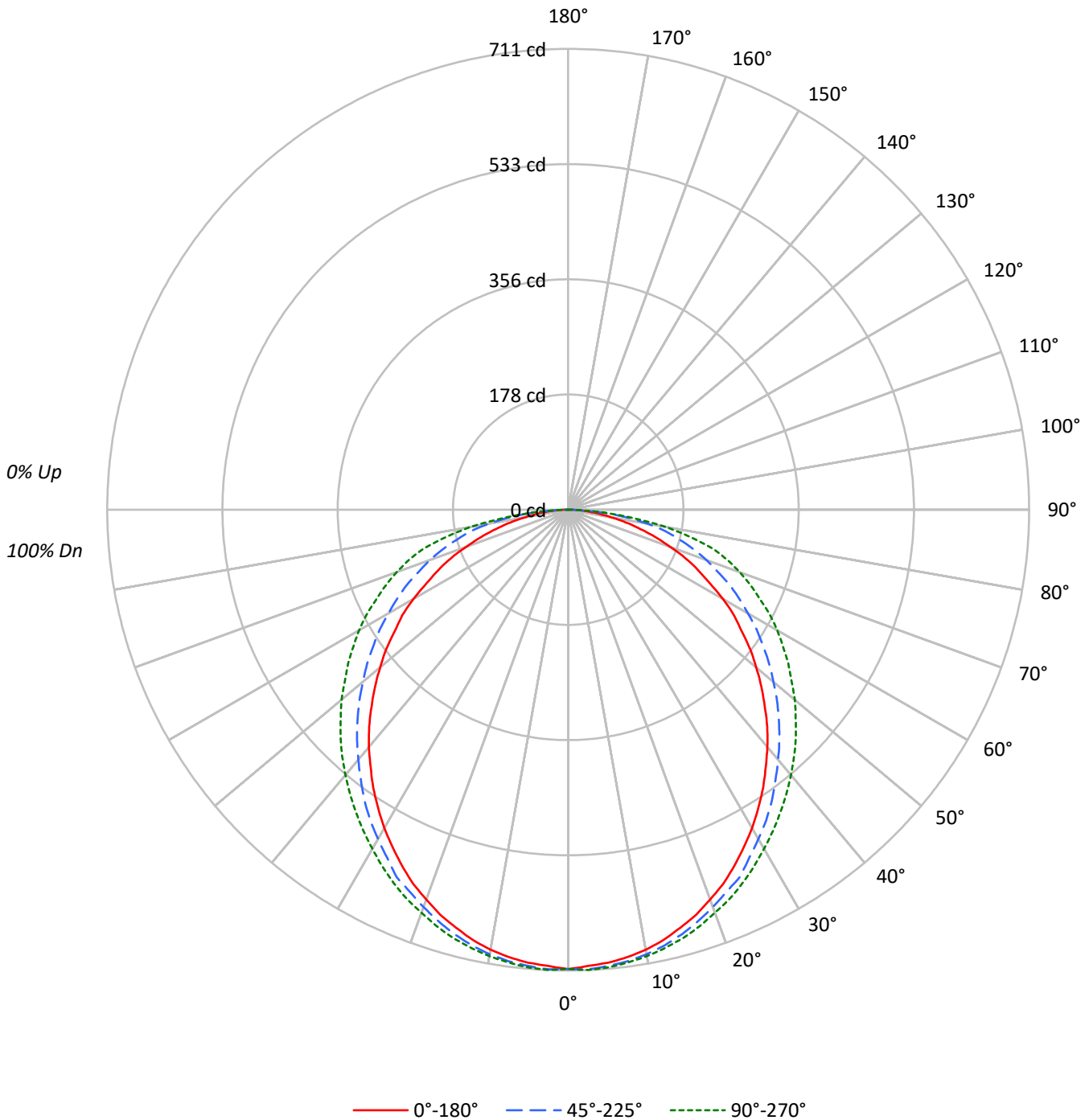
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1907	1907	1907
5°	1895	1909	1915
10°	1884	1903	1911
15°	1860	1889	1906
20°	1833	1868	1895
25°	1800	1858	1888
30°	1762	1823	1877
35°	1722	1799	1873
40°	1679	1769	1877
45°	1631	1749	1889
50°	1585	1731	1911
55°	1530	1723	1944
60°	1485	1722	2004
65°	1411	1750	2077
70°	1316	1784	2211
75°	1205	1844	2389
80°	1049	1923	2352
85°	917	1711	1868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.2
10°-20°	190.9	9.2
20°-30°	286.6	13.8
30°-40°	342.5	16.4
40°-50°	356.1	17.1
50°-60°	330.1	15.8
60°-70°	270.7	13.0
70°-80°	183.0	8.8
80°-90°	57.5	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°	544.6	26.1
0°-40°	887.0	42.6
0°-60°	1573.2	75.5
0°-90°	2084.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2084.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	702	703	707	708	709	67
15°	668	671	678	682	684	188
25°	606	611	626	633	636	279
35°	524	531	548	564	570	328
45°	429	437	460	486	496	331
55°	326	336	367	400	414	293
65°	222	234	275	311	326	219
75°	116	135	177	213	230	123
85°	30	41	55	62	60	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.8	708.8	708.8	708.8	708.8
2.5°	704.7	706.7	709.8	710.8	710.8
5°	701.6	702.6	706.7	707.7	708.8
7.5°	696.5	698.5	702.6	703.6	704.7
10°	689.3	691.3	696.5	698.5	699.5
12.5°	680.0	682.1	688.3	691.3	692.4
15°	667.7	670.8	678.0	682.1	684.2
17.5°	655.4	658.5	665.7	671.8	673.9
20°	640.0	647.2	652.4	660.6	661.6
22.5°	624.7	628.8	638.0	646.2	650.3
25°	606.2	611.3	625.7	632.9	635.9
27.5°	586.7	593.9	605.2	616.5	620.6
30°	567.2	572.3	586.7	600.0	604.1
32.5°	545.7	552.9	568.2	581.6	587.7
35°	524.1	531.3	547.7	564.1	570.3
37.5°	500.5	508.8	525.2	544.7	552.9
40°	478.0	484.1	503.6	527.2	534.4
42.5°	454.4	461.6	482.1	507.7	515.9
45°	428.7	437.0	459.5	486.2	496.4
47.5°	404.1	412.3	437.0	463.6	475.9
50°	378.5	388.7	413.4	444.1	456.4
52.5°	353.9	363.1	390.8	422.6	433.9
55°	326.2	336.4	367.2	400.0	414.4
57.5°	303.6	310.8	344.6	378.5	392.8
60°	275.9	285.1	320.0	355.9	372.3
62.5°	246.2	261.6	297.5	334.4	350.8
65°	221.6	233.9	274.9	310.8	326.2
67.5°	195.9	209.2	249.2	287.2	304.6
70°	167.2	184.6	226.7	264.6	281.0
72.5°	141.5	160.0	203.1	240.0	257.5
75°	115.9	135.4	177.4	213.3	229.8
77.5°	91.3	112.8	153.9	181.6	191.8
80°	67.7	88.2	124.1	143.6	151.8
82.5°	47.2	64.6	91.3	101.5	103.6
85°	29.7	41.0	55.4	61.5	60.5
87.5°	13.3	16.4	20.5	22.6	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)