

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: P391423

Luminaire Tested: **24CZ2-50VHE-HRP-UNV-L950-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: P391423
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50VHE-HRP-UNV-L950-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3849.1 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

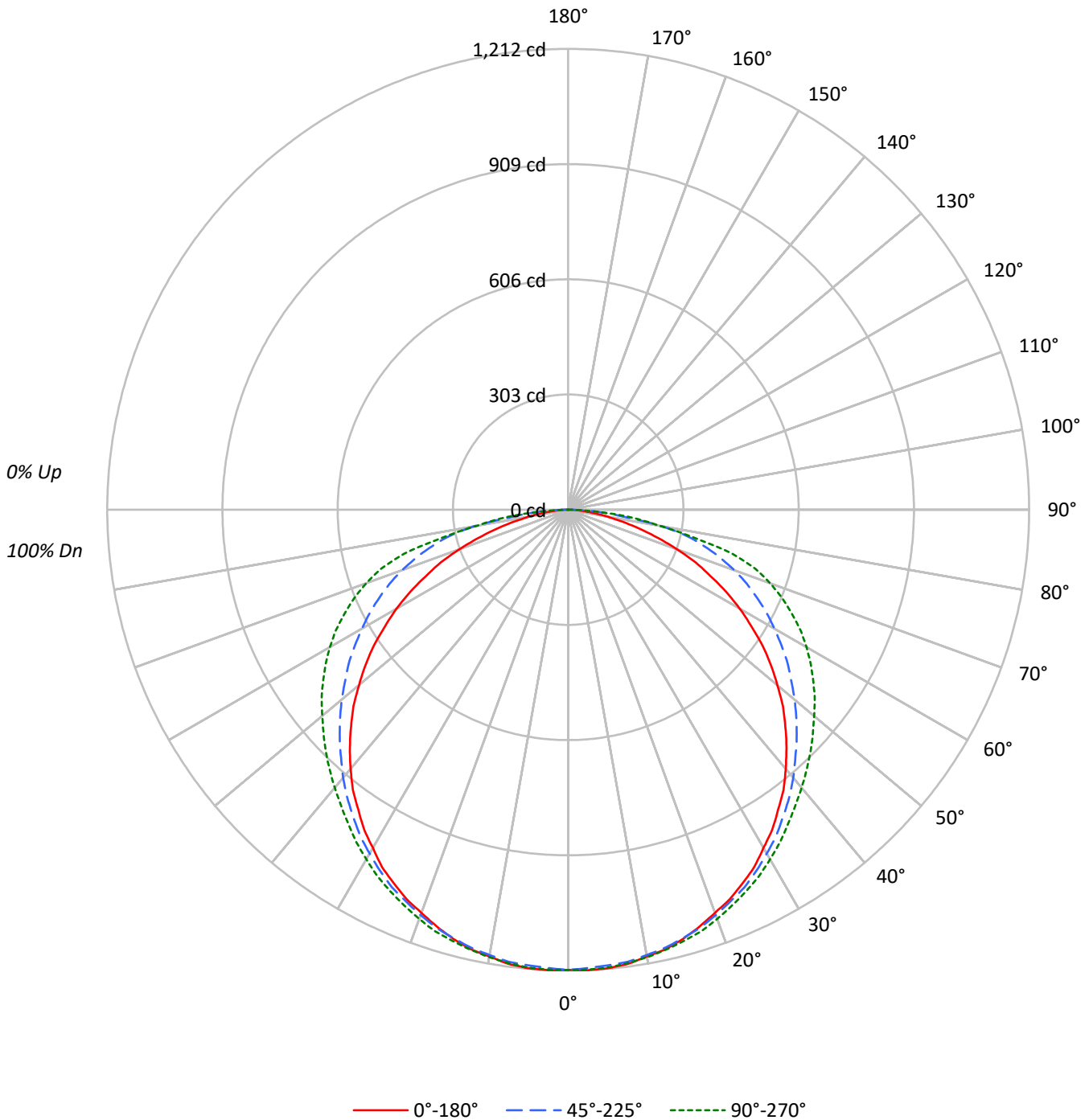
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1629	1629	1629
5°	1635	1625	1632
10°	1630	1625	1633
15°	1628	1625	1636
20°	1616	1624	1640
25°	1610	1627	1644
30°	1596	1622	1649
35°	1580	1618	1656
40°	1563	1616	1677
45°	1537	1617	1715
50°	1503	1626	1766
55°	1464	1653	1845
60°	1403	1685	1947
65°	1313	1744	2067
70°	1194	1825	2223
75°	1012	1926	2323
80°	799	1938	1879
85°	590	1474	1650



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	3.0
10°-20°	330.5	8.6
20°-30°	505.3	13.1
30°-40°	617.8	16.0
40°-50°	658.4	17.1
50°-60°	629.5	16.4
60°-70°	533.3	13.9
70°-80°	358.4	9.3
80°-90°	101.1	2.6
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°	950.6	24.7
0°-40°	1568.4	40.7
0°-60°	2856.3	74.2
0°-90°	3849.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1210	1210	1210	1210	1210	
5°	1210	1208	1203	1208	1208	115
15°	1168	1168	1166	1176	1174	329
25°	1084	1088	1096	1105	1107	500
35°	962	970	985	1004	1008	603
45°	808	821	850	886	901	623
55°	624	647	704	760	787	556
65°	412	454	548	620	649	409
75°	195	265	370	433	447	209
85°	38	78	96	103	107	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1210.4	1210.4	1210.4	1210.4	1210.4
2.5°	1212.3	1212.3	1206.6	1210.4	1210.4
5°	1210.4	1208.5	1202.8	1208.5	1208.5
7.5°	1204.7	1202.8	1199.0	1204.7	1202.8
10°	1193.2	1193.2	1189.4	1195.2	1195.2
12.5°	1183.7	1181.8	1179.9	1187.5	1185.6
15°	1168.4	1168.4	1166.5	1176.1	1174.2
17.5°	1149.3	1151.2	1153.2	1160.8	1162.7
20°	1128.3	1132.2	1134.1	1145.5	1145.5
22.5°	1109.2	1111.2	1115.0	1126.4	1126.4
25°	1084.4	1088.2	1095.9	1105.4	1107.3
27.5°	1059.6	1061.5	1071.1	1084.4	1086.3
30°	1027.1	1032.9	1044.3	1059.6	1061.5
32.5°	998.5	1004.2	1017.6	1032.9	1036.7
35°	962.2	969.9	985.1	1004.2	1008.1
37.5°	929.8	935.5	954.6	975.6	981.3
40°	889.7	901.1	920.2	945.1	954.6
42.5°	849.6	861.0	884.0	916.4	927.9
45°	807.6	821.0	849.6	885.9	901.1
47.5°	765.6	780.9	813.3	855.3	872.5
50°	717.9	737.0	777.0	824.8	843.9
52.5°	672.0	694.9	738.9	792.3	817.1
55°	624.3	647.2	704.5	759.9	786.6
57.5°	570.9	601.4	664.4	727.4	756.0
60°	521.2	549.8	626.2	694.9	723.6
62.5°	467.8	505.9	588.0	660.6	689.2
65°	412.4	454.4	547.9	620.5	649.1
67.5°	362.7	408.6	507.8	580.4	609.0
70°	303.6	360.8	463.9	536.5	565.1
72.5°	248.2	311.2	418.1	488.8	515.5
75°	194.7	265.4	370.4	433.4	446.8
77.5°	145.1	219.6	320.7	347.5	337.9
80°	103.1	175.6	250.1	236.7	242.5
82.5°	66.8	133.6	154.6	175.6	181.4
85°	38.2	78.3	95.5	103.1	106.9
87.5°	17.2	28.6	38.2	38.2	36.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)