

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: P391424

Luminaire Tested: **24CZ2-50VHE-HRP-UNV-L950-CD1-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: P391424
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-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: 3897.5 lumens
Efficiency: N/A
Efficacy: 119.2 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

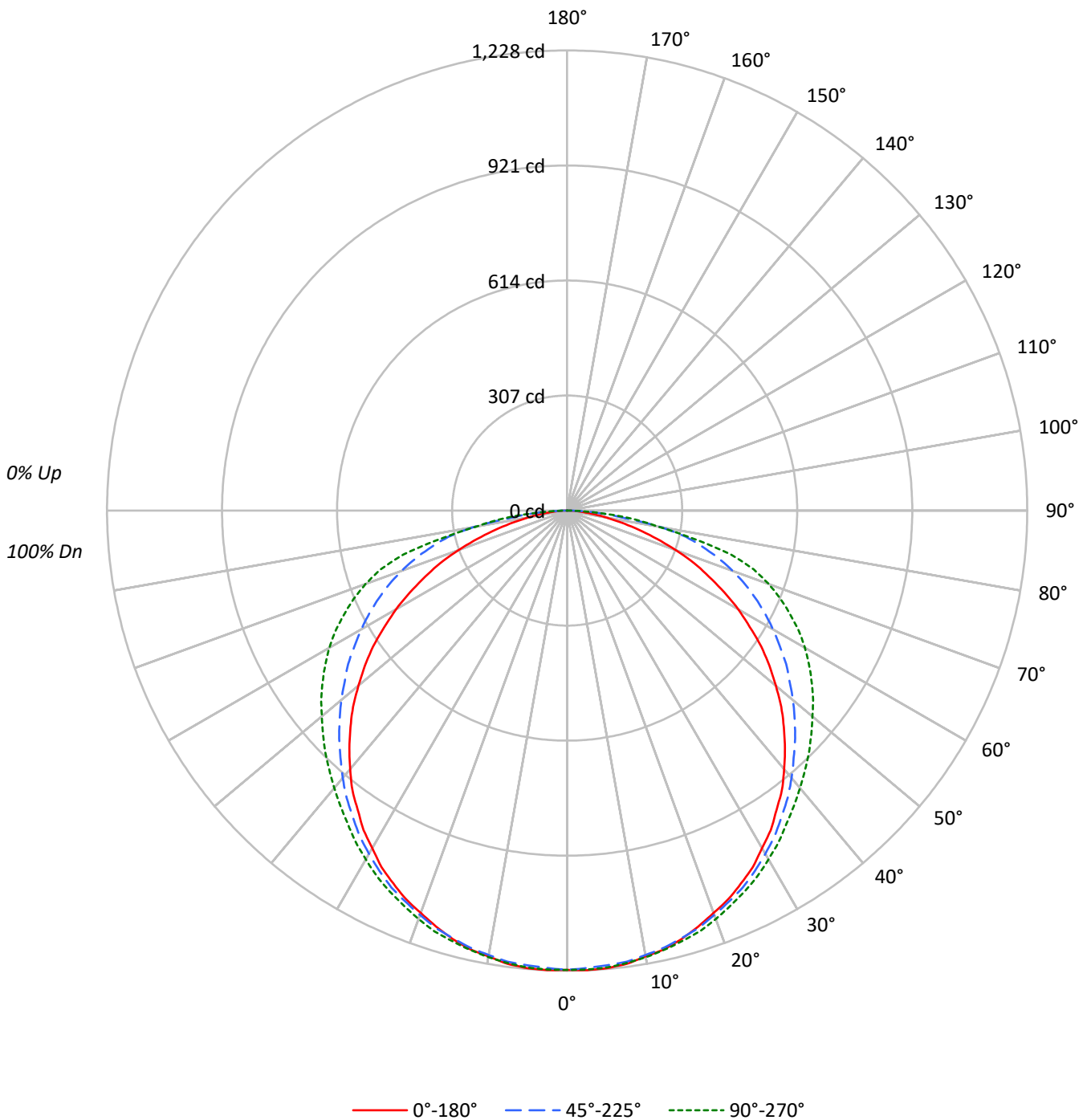
Input Watts (W): 32.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1649	1649	1649
5°	1655	1645	1653
10°	1651	1646	1653
15°	1648	1645	1656
20°	1636	1644	1661
25°	1630	1647	1665
30°	1616	1643	1670
35°	1600	1638	1677
40°	1582	1637	1698
45°	1556	1637	1736
50°	1522	1647	1789
55°	1483	1673	1868
60°	1420	1706	1972
65°	1330	1766	2093
70°	1209	1848	2251
75°	1025	1949	2352
80°	809	1962	1902
85°	597	1493	1672



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	3.0
10°-20°	334.6	8.6
20°-30°	511.7	13.1
30°-40°	625.5	16.0
40°-50°	666.7	17.1
50°-60°	637.5	16.4
60°-70°	540.0	13.9
70°-80°	362.9	9.3
80°-90°	102.4	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°	962.6	24.7
0°-40°	1588.1	40.7
0°-60°	2892.2	74.2
0°-90°	3897.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3897.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1226	1224	1218	1224	1224	116
15°	1183	1183	1181	1191	1189	334
25°	1098	1102	1110	1119	1121	506
35°	974	982	998	1017	1021	610
45°	818	831	860	897	912	631
55°	632	655	713	769	796	563
65°	418	460	555	628	657	415
75°	197	269	375	439	452	211
85°	39	79	97	104	108	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1225.7	1225.7	1225.7	1225.7	1225.7
2.5°	1227.6	1227.6	1221.8	1225.7	1225.7
5°	1225.7	1223.7	1217.9	1223.7	1223.7
7.5°	1219.9	1217.9	1214.1	1219.9	1217.9
10°	1208.3	1208.3	1204.4	1210.2	1210.2
12.5°	1198.6	1196.7	1194.7	1202.5	1200.5
15°	1183.1	1183.1	1181.2	1190.9	1188.9
17.5°	1163.8	1165.7	1167.7	1175.4	1177.3
20°	1142.5	1146.4	1148.3	1159.9	1159.9
22.5°	1123.2	1125.1	1129.0	1140.6	1140.6
25°	1098.1	1101.9	1109.7	1119.3	1121.3
27.5°	1072.9	1074.9	1084.5	1098.1	1100.0
30°	1040.1	1045.9	1057.5	1072.9	1074.9
32.5°	1011.1	1016.9	1030.4	1045.9	1049.7
35°	974.3	982.1	997.5	1016.9	1020.7
37.5°	941.5	947.3	966.6	987.9	993.7
40°	900.9	912.5	931.8	956.9	966.6
42.5°	860.3	871.9	895.1	927.9	939.5
45°	817.7	831.3	860.3	897.0	912.5
47.5°	775.2	790.7	823.5	866.1	883.5
50°	726.9	746.2	786.8	835.1	854.5
52.5°	680.5	703.7	748.2	802.3	827.4
55°	632.2	655.4	713.4	769.4	796.5
57.5°	578.0	609.0	672.8	736.6	765.5
60°	527.8	556.8	634.1	703.7	732.7
62.5°	473.6	512.3	595.4	668.9	697.9
65°	417.6	460.1	554.8	628.3	657.3
67.5°	367.3	413.7	514.2	587.7	616.7
70°	307.4	365.4	469.8	543.2	572.2
72.5°	251.3	315.1	423.4	494.9	522.0
75°	197.2	268.7	375.0	438.8	452.4
77.5°	146.9	222.3	324.8	351.8	342.2
80°	104.4	177.9	253.2	239.7	245.5
82.5°	67.7	135.3	156.6	177.9	183.7
85°	38.7	79.3	96.7	104.4	108.3
87.5°	17.4	29.0	38.7	38.7	36.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)