

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: P388856

Luminaire Tested: **24CZ2-50VHE-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: P388856
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50VHE-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

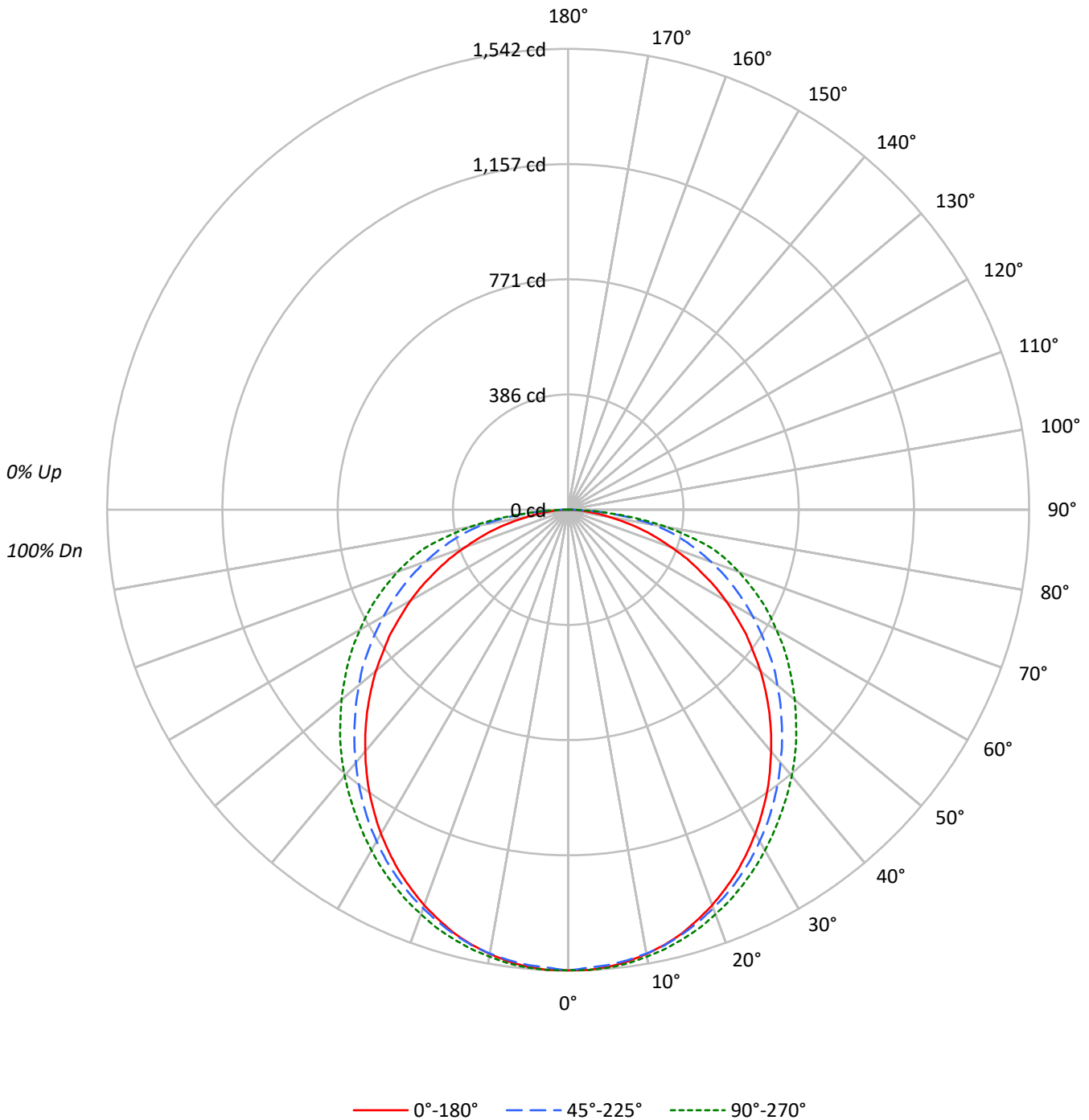
Lumens per Lamp: N/A
Luminaire Lumens: 4591.6 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2074	2074	2074
5°	2074	2066	2078
10°	2062	2060	2075
15°	2045	2049	2070
20°	2016	2032	2063
25°	1984	2013	2054
30°	1945	1990	2045
35°	1903	1966	2039
40°	1854	1941	2043
45°	1808	1922	2053
50°	1758	1912	2072
55°	1704	1909	2110
60°	1637	1918	2165
65°	1551	1947	2259
70°	1441	1995	2387
75°	1314	2095	2589
80°	1081	2256	2589
85°	827	2083	2223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	3.2
10°-20°	416.2	9.1
20°-30°	626.4	13.6
30°-40°	750.7	16.3
40°-50°	782.3	17.0
50°-60°	727.8	15.9
60°-70°	599.4	13.1
70°-80°	408.2	8.9
80°-90°	134.8	2.9
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°	1188.4	25.9
0°-40°	1939.1	42.2
0°-60°	3449.1	75.1
0°-90°	4591.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4591.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1536	1536	1529	1537	1538	146
15°	1468	1470	1471	1485	1486	414
25°	1336	1342	1356	1379	1384	615
35°	1158	1172	1197	1229	1241	724
45°	950	970	1010	1060	1079	733
55°	726	751	814	878	900	647
65°	487	529	611	684	710	484
75°	253	310	403	475	498	267
85°	54	104	135	144	144	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1541.6	1541.6	1541.6	1541.6	1541.6
2.5°	1541.6	1541.6	1534.0	1541.6	1541.6
5°	1535.5	1535.5	1529.4	1537.0	1538.5
7.5°	1524.8	1526.3	1520.2	1529.4	1530.9
10°	1509.4	1511.0	1507.9	1517.1	1518.6
12.5°	1491.0	1492.6	1492.6	1503.3	1504.8
15°	1468.1	1469.6	1471.1	1484.9	1486.4
17.5°	1438.9	1443.5	1446.6	1463.5	1466.5
20°	1408.3	1412.9	1419.0	1437.4	1440.5
22.5°	1373.0	1379.2	1389.9	1409.8	1414.4
25°	1336.3	1342.4	1356.2	1379.2	1383.8
27.5°	1294.9	1304.1	1320.9	1345.5	1351.6
30°	1252.0	1261.2	1281.1	1307.2	1316.3
32.5°	1206.0	1218.3	1241.3	1270.4	1279.6
35°	1158.5	1172.3	1196.8	1229.0	1241.3
37.5°	1107.9	1123.3	1152.4	1187.6	1202.9
40°	1055.8	1074.2	1104.9	1146.2	1163.1
42.5°	1003.7	1020.6	1058.9	1103.3	1121.7
45°	950.1	970.0	1009.9	1060.4	1078.8
47.5°	894.9	914.9	962.4	1016.0	1032.9
50°	839.8	859.7	913.3	970.0	989.9
52.5°	780.0	806.1	867.3	924.0	944.0
55°	726.4	750.9	813.7	878.1	899.5
57.5°	665.1	694.2	763.1	830.6	853.6
60°	608.4	639.0	712.6	781.5	804.5
62.5°	550.1	583.9	662.0	732.5	758.5
65°	487.3	528.7	611.4	683.5	709.5
67.5°	430.6	473.5	560.9	634.4	657.4
70°	366.2	418.4	507.2	580.8	606.8
72.5°	311.1	363.2	456.7	528.7	554.7
75°	252.8	309.5	403.0	475.0	498.0
77.5°	194.6	257.4	350.9	406.1	413.8
80°	139.5	205.3	291.2	323.3	334.1
82.5°	98.1	157.8	214.5	236.0	242.1
85°	53.6	104.2	134.9	144.0	144.0
87.5°	23.0	44.4	53.6	55.2	56.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)