

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: P388874

Luminaire Tested: **24CZ2-55VHE-UNV-L935-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: P388874
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: 24CZ2-55VHE-UNV-L935-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

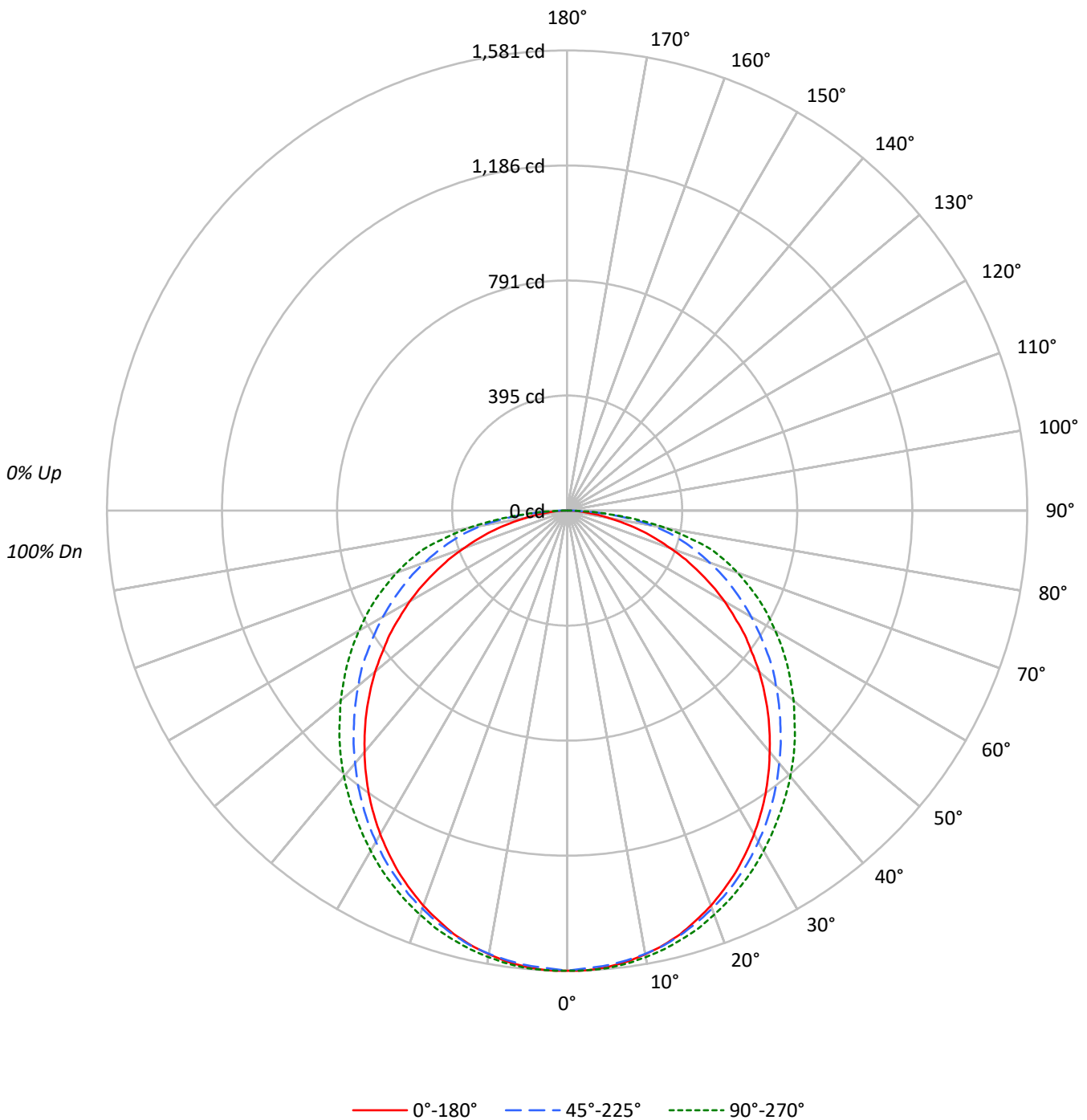
Lumens per Lamp: N/A
Luminaire Lumens: 4709.3 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.1
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°	2127	2127	2127
5°	2127	2119	2131
10°	2115	2113	2128
15°	2097	2102	2124
20°	2068	2084	2115
25°	2035	2065	2107
30°	1995	2041	2098
35°	1952	2016	2091
40°	1902	1990	2095
45°	1854	1971	2105
50°	1803	1961	2125
55°	1748	1958	2164
60°	1679	1967	2220
65°	1591	1996	2317
70°	1478	2046	2448
75°	1348	2149	2655
80°	1108	2314	2655
85°	849	2135	2280



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.5	3.2
10°-20°	426.9	9.1
20°-30°	642.4	13.6
30°-40°	769.9	16.3
40°-50°	802.3	17.0
50°-60°	746.5	15.9
60°-70°	614.8	13.1
70°-80°	418.7	8.9
80°-90°	138.2	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°	1218.9	25.9
0°-40°	1988.8	42.2
0°-60°	3537.6	75.1
0°-90°	4709.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4709.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1581	1581	1581	1581	1581	
5°	1575	1575	1569	1576	1578	149
15°	1506	1507	1509	1523	1524	424
25°	1370	1377	1391	1414	1419	631
35°	1188	1202	1228	1260	1273	743
45°	974	995	1036	1088	1106	752
55°	745	770	835	901	923	664
65°	500	542	627	701	728	496
75°	259	318	413	487	511	273
85°	55	107	138	148	148	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1581.1	1581.1	1581.1	1581.1	1581.1
2.5°	1581.1	1581.1	1573.3	1581.1	1581.1
5°	1574.8	1574.8	1568.6	1576.4	1578.0
7.5°	1563.8	1565.4	1559.1	1568.6	1570.1
10°	1548.1	1549.7	1546.6	1556.0	1557.6
12.5°	1529.3	1530.8	1530.8	1541.8	1543.4
15°	1505.7	1507.3	1508.8	1523.0	1524.5
17.5°	1475.8	1480.5	1483.7	1501.0	1504.1
20°	1444.4	1449.1	1455.4	1474.3	1477.4
22.5°	1408.2	1414.5	1425.5	1446.0	1450.7
25°	1370.5	1376.8	1391.0	1414.5	1419.2
27.5°	1328.1	1337.5	1354.8	1380.0	1386.2
30°	1284.1	1293.5	1313.9	1340.7	1350.1
32.5°	1236.9	1249.5	1273.1	1302.9	1312.4
35°	1188.2	1202.4	1227.5	1260.5	1273.1
37.5°	1136.3	1152.1	1181.9	1218.1	1233.8
40°	1082.9	1101.8	1133.2	1175.6	1192.9
42.5°	1029.5	1046.8	1086.0	1131.6	1150.5
45°	974.5	994.9	1035.8	1087.6	1106.5
47.5°	917.9	938.3	987.0	1042.0	1059.3
50°	861.3	881.7	936.7	994.9	1015.3
52.5°	800.0	826.7	889.6	947.7	968.2
55°	745.0	770.1	834.6	900.6	922.6
57.5°	682.1	712.0	782.7	851.9	875.4
60°	624.0	655.4	730.8	801.6	825.1
62.5°	564.2	598.8	679.0	751.3	778.0
65°	499.8	542.2	627.1	701.0	727.7
67.5°	441.6	485.7	575.2	650.7	674.3
70°	375.6	429.1	520.2	595.7	622.4
72.5°	319.1	372.5	468.4	542.2	569.0
75°	259.3	317.5	413.4	487.2	510.8
77.5°	199.6	264.0	359.9	416.5	424.4
80°	143.0	210.6	298.6	331.6	342.6
82.5°	100.6	161.9	220.0	242.0	248.3
85°	55.0	106.9	138.3	147.7	147.7
87.5°	23.6	45.6	55.0	56.6	58.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)