

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: P388873

Luminaire Tested: **24CZ2-55VHE-UNV-L935-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: P388873
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-SWPD1-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: 4650.9 lumens
Efficiency: N/A
Efficacy: 128.8 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

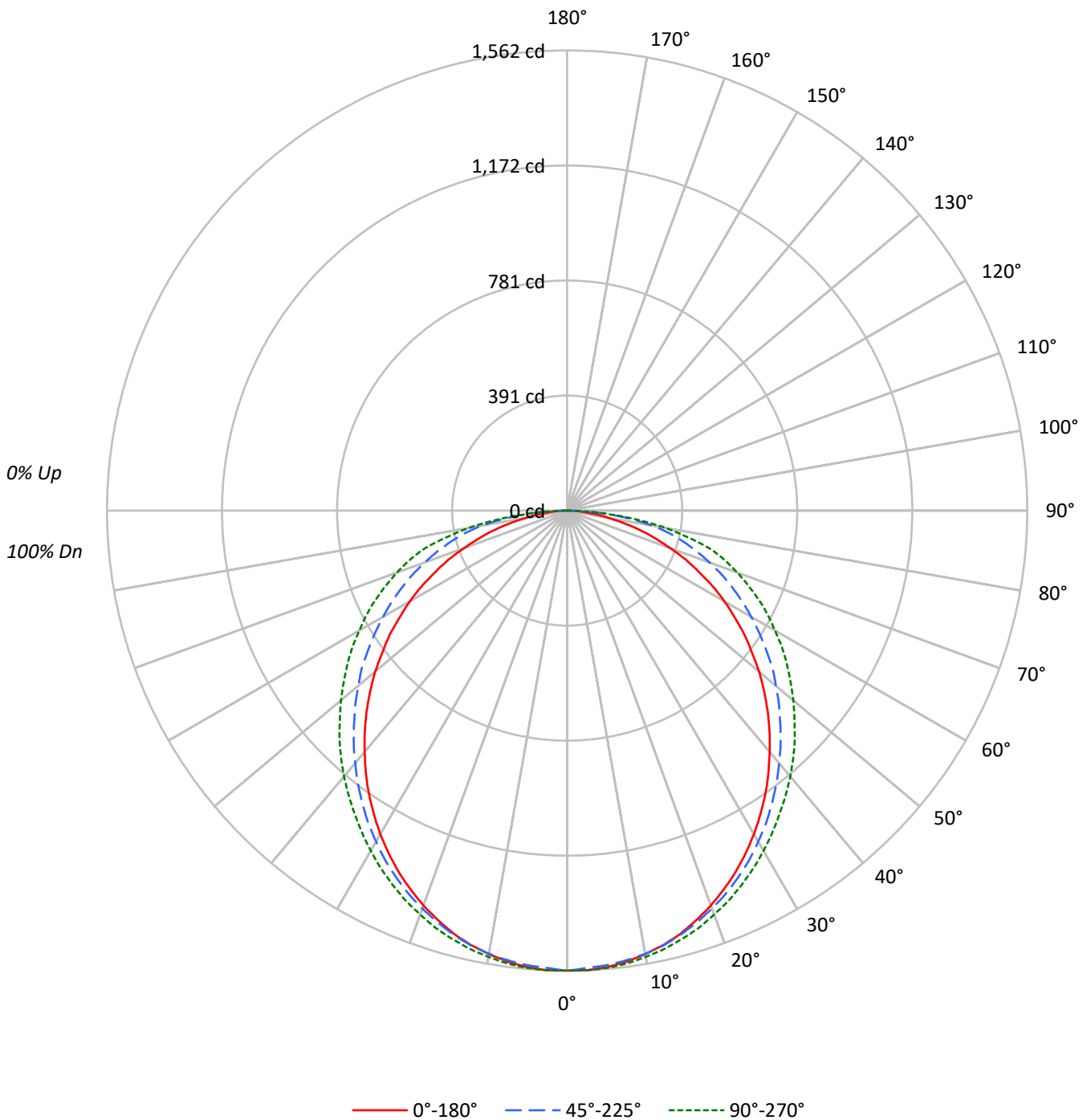
Input Watts (W): 36.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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°	2101	2101	2101
5°	2101	2092	2105
10°	2089	2087	2102
15°	2071	2076	2097
20°	2043	2058	2089
25°	2009	2039	2081
30°	1970	2016	2071
35°	1928	1991	2065
40°	1878	1966	2069
45°	1831	1946	2079
50°	1780	1936	2099
55°	1726	1933	2137
60°	1658	1942	2193
65°	1571	1972	2288
70°	1459	2021	2418
75°	1331	2122	2623
80°	1095	2285	2622
85°	838	2109	2252



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.7	3.2
10°-20°	421.6	9.1
20°-30°	634.5	13.6
30°-40°	760.4	16.3
40°-50°	792.4	17.0
50°-60°	737.2	15.9
60°-70°	607.2	13.1
70°-80°	413.5	8.9
80°-90°	136.5	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°	1203.8	25.9
0°-40°	1964.1	42.2
0°-60°	3493.7	75.1
0°-90°	4650.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4650.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1562	1562	1562	1562	1562	
5°	1555	1555	1549	1557	1558	148
15°	1487	1489	1490	1504	1506	419
25°	1354	1360	1374	1397	1402	623
35°	1174	1187	1212	1245	1257	734
45°	962	982	1023	1074	1093	742
55°	736	761	824	889	911	656
65°	494	536	619	692	719	490
75°	256	314	408	481	504	270
85°	54	106	137	146	146	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.5	1561.5	1561.5	1561.5	1561.5
2.5°	1561.5	1561.5	1553.8	1561.5	1561.5
5°	1555.3	1555.3	1549.1	1556.9	1558.4
7.5°	1544.4	1546.0	1539.8	1549.1	1550.7
10°	1528.9	1530.5	1527.4	1536.7	1538.2
12.5°	1510.3	1511.9	1511.9	1522.7	1524.3
15°	1487.0	1488.6	1490.1	1504.1	1505.6
17.5°	1457.5	1462.2	1465.3	1482.4	1485.5
20°	1426.5	1431.1	1437.3	1456.0	1459.1
22.5°	1390.8	1397.0	1407.9	1428.0	1432.7
25°	1353.5	1359.7	1373.7	1397.0	1401.6
27.5°	1311.6	1320.9	1338.0	1362.8	1369.0
30°	1268.2	1277.5	1297.6	1324.0	1333.3
32.5°	1221.6	1234.0	1257.3	1286.8	1296.1
35°	1173.5	1187.4	1212.3	1244.9	1257.3
37.5°	1122.2	1137.8	1167.3	1203.0	1218.5
40°	1069.5	1088.1	1119.1	1161.1	1178.1
42.5°	1016.7	1033.8	1072.6	1117.6	1136.2
45°	962.4	982.5	1022.9	1074.1	1092.8
47.5°	906.5	926.7	974.8	1029.1	1046.2
50°	850.6	870.8	925.1	982.5	1002.7
52.5°	790.1	816.5	878.6	936.0	956.2
55°	735.7	760.6	824.2	889.4	911.1
57.5°	673.7	703.2	773.0	841.3	864.6
60°	616.2	647.3	721.8	791.6	814.9
62.5°	557.2	591.4	670.6	742.0	768.3
65°	493.6	535.5	619.3	692.3	718.7
67.5°	436.2	479.6	568.1	642.6	665.9
70°	371.0	423.8	513.8	588.3	614.7
72.5°	315.1	367.9	462.6	535.5	561.9
75°	256.1	313.5	408.2	481.2	504.5
77.5°	197.1	260.8	355.5	411.3	419.1
80°	141.3	208.0	294.9	327.5	338.4
82.5°	99.3	159.9	217.3	239.0	245.2
85°	54.3	105.6	136.6	145.9	145.9
87.5°	23.3	45.0	54.3	55.9	57.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)