

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: P388399

Luminaire Tested: **22CZ2-60VHE-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: P388399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-UNV-L950-CD1-SWPD1-U
Description: 2x2 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: 5471.2 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

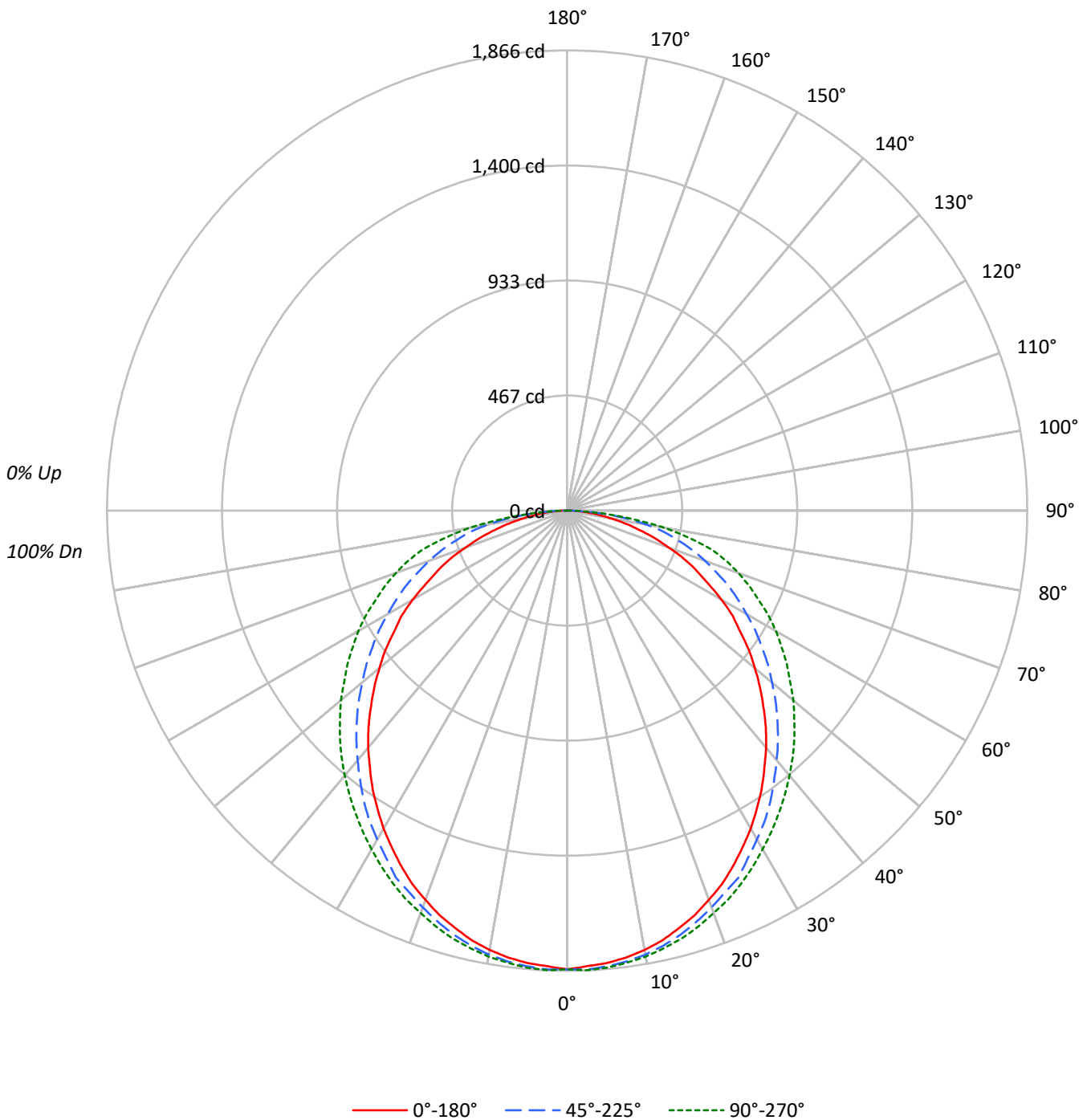
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5006	5006	5006
5°	4974	5011	5025
10°	4944	4995	5017
15°	4883	4958	5003
20°	4811	4903	4973
25°	4724	4876	4956
30°	4626	4785	4927
35°	4519	4723	4917
40°	4407	4644	4927
45°	4282	4590	4959
50°	4159	4542	5015
55°	4016	4522	5103
60°	3898	4521	5260
65°	3703	4594	5451
70°	3452	4681	5804
75°	3163	4843	6271
80°	2754	5049	6174
85°	2411	4489	4903



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	3.2
10°-20°	501.1	9.2
20°-30°	752.3	13.7
30°-40°	898.9	16.4
40°-50°	934.7	17.1
50°-60°	866.3	15.8
60°-70°	710.6	13.0
70°-80°	480.4	8.8
80°-90°	150.9	2.8
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°	1429.3	26.1
0°-40°	2328.2	42.6
0°-60°	4129.3	75.5
0°-90°	5471.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5471.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1842	1844	1855	1858	1860	175
15°	1753	1761	1780	1790	1796	494
25°	1591	1604	1642	1661	1669	733
35°	1376	1395	1438	1481	1497	860
45°	1125	1147	1206	1276	1303	869
55°	856	883	964	1050	1088	769
65°	582	614	722	816	856	575
75°	304	355	466	560	603	323
85°	78	108	145	162	159	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1860.3	1860.3	1860.3	1860.3	1860.3
2.5°	1849.5	1854.9	1863.0	1865.7	1865.7
5°	1841.5	1844.2	1854.9	1857.6	1860.3
7.5°	1828.0	1833.4	1844.2	1846.8	1849.5
10°	1809.2	1814.5	1828.0	1833.4	1836.1
12.5°	1784.9	1790.3	1806.5	1814.5	1817.2
15°	1752.6	1760.7	1779.5	1790.3	1795.7
17.5°	1720.3	1728.4	1747.2	1763.4	1768.8
20°	1679.9	1698.8	1712.2	1733.8	1736.5
22.5°	1639.5	1650.3	1674.5	1696.1	1706.9
25°	1591.1	1604.5	1642.2	1661.1	1669.2
27.5°	1539.9	1558.8	1588.4	1618.0	1628.8
30°	1488.8	1502.2	1539.9	1574.9	1585.7
32.5°	1432.2	1451.1	1491.5	1526.5	1542.6
35°	1375.7	1394.6	1437.6	1480.7	1496.9
37.5°	1313.8	1335.3	1378.4	1429.6	1451.1
40°	1254.6	1270.7	1321.9	1383.8	1402.6
42.5°	1192.6	1211.5	1265.3	1332.6	1354.2
45°	1125.3	1146.9	1206.1	1276.1	1303.0
47.5°	1060.7	1082.3	1146.9	1216.9	1249.2
50°	993.4	1020.3	1085.0	1165.7	1198.0
52.5°	928.8	953.0	1025.7	1109.2	1138.8
55°	856.1	883.0	963.8	1050.0	1087.6
57.5°	796.9	815.7	904.6	993.4	1031.1
60°	724.2	748.4	840.0	934.2	977.3
62.5°	646.1	686.5	780.7	877.7	920.7
65°	581.5	613.8	721.5	815.7	856.1
67.5°	514.2	549.2	654.2	753.8	799.6
70°	438.8	484.6	595.0	694.6	737.7
72.5°	371.5	420.0	533.1	630.0	675.7
75°	304.2	355.4	465.8	560.0	603.1
77.5°	239.6	296.1	403.8	476.5	503.4
80°	177.7	231.5	325.8	376.9	398.4
82.5°	123.8	169.6	239.6	266.5	271.9
85°	78.1	107.7	145.4	161.5	158.8
87.5°	35.0	43.1	53.8	59.2	56.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)