

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: P388400

Luminaire Tested: **22CZ2-60VHE-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: P388400
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-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

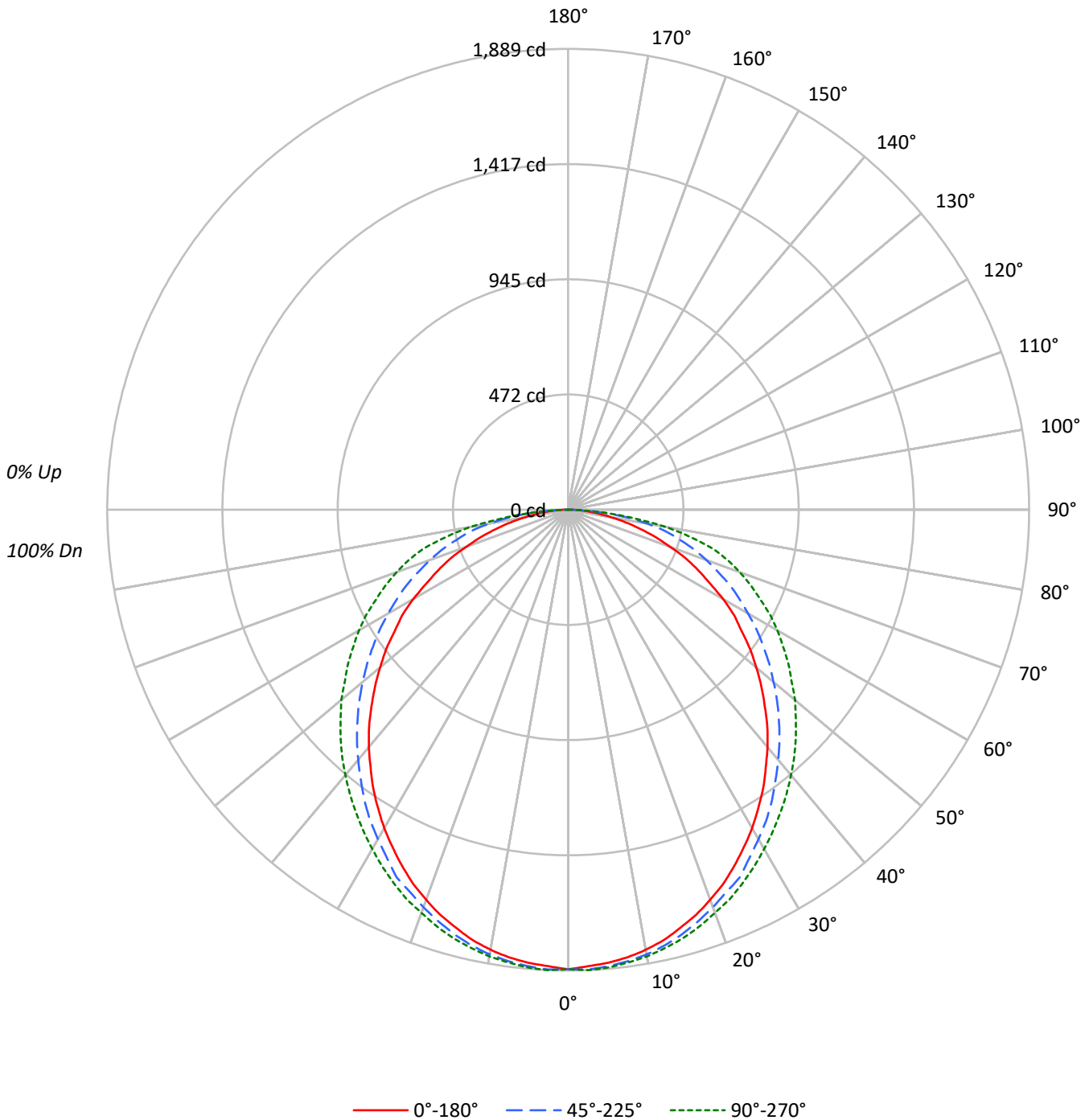
Lumens per Lamp: N/A
Luminaire Lumens: 5540.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	5069	5069	5069
5°	5037	5074	5088
10°	5006	5058	5080
15°	4944	5020	5066
20°	4871	4965	5035
25°	4784	4937	5018
30°	4684	4845	4989
35°	4576	4782	4979
40°	4462	4702	4989
45°	4337	4648	5021
50°	4211	4599	5079
55°	4067	4579	5167
60°	3947	4577	5326
65°	3749	4652	5520
70°	3496	4740	5877
75°	3202	4903	6348
80°	2788	5112	6253
85°	2442	4545	4965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.1	3.2
10°-20°	507.4	9.2
20°-30°	761.7	13.7
30°-40°	910.2	16.4
40°-50°	946.5	17.1
50°-60°	877.2	15.8
60°-70°	719.5	13.0
70°-80°	486.4	8.8
80°-90°	152.8	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°	1447.3	26.1
0°-40°	2357.5	42.6
0°-60°	4181.2	75.5
0°-90°	5540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5540.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1884	1884	1884	1884	1884	
5°	1865	1867	1878	1881	1884	177
15°	1775	1783	1802	1813	1818	501
25°	1611	1625	1663	1682	1690	742
35°	1393	1412	1456	1499	1516	871
45°	1140	1161	1221	1292	1319	880
55°	867	894	976	1063	1101	779
65°	589	622	731	826	867	582
75°	308	360	472	567	611	327
85°	79	109	147	164	161	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1883.7	1883.7	1883.7	1883.7	1883.7
2.5°	1872.8	1878.2	1886.4	1889.2	1889.2
5°	1864.6	1867.3	1878.2	1881.0	1883.7
7.5°	1851.0	1856.4	1867.3	1870.1	1872.8
10°	1831.9	1837.4	1851.0	1856.4	1859.2
12.5°	1807.4	1812.8	1829.2	1837.4	1840.1
15°	1774.7	1782.8	1801.9	1812.8	1818.3
17.5°	1741.9	1750.1	1769.2	1785.6	1791.0
20°	1701.1	1720.1	1733.8	1755.6	1758.3
22.5°	1660.2	1671.1	1695.6	1717.4	1728.3
25°	1611.1	1624.7	1662.9	1682.0	1690.2
27.5°	1559.3	1578.4	1608.4	1638.4	1649.3
30°	1507.5	1521.1	1559.3	1594.7	1605.6
32.5°	1450.3	1469.3	1510.2	1545.7	1562.0
35°	1393.0	1412.1	1455.7	1499.3	1515.7
37.5°	1330.3	1352.1	1395.7	1447.5	1469.3
40°	1270.3	1286.7	1338.5	1401.2	1420.3
42.5°	1207.6	1226.7	1281.2	1349.4	1371.2
45°	1139.5	1161.3	1221.3	1292.1	1319.4
47.5°	1074.1	1095.9	1161.3	1232.2	1264.9
50°	1005.9	1033.2	1098.6	1180.4	1213.1
52.5°	940.5	965.0	1038.6	1123.1	1153.1
55°	866.9	894.1	975.9	1063.2	1101.3
57.5°	806.9	826.0	916.0	1005.9	1044.1
60°	733.3	757.8	850.5	945.9	989.6
62.5°	654.3	695.1	790.6	888.7	932.3
65°	588.8	621.5	730.6	826.0	866.9
67.5°	520.7	556.1	662.4	763.3	809.6
70°	444.3	490.7	602.5	703.3	746.9
72.5°	376.2	425.3	539.8	637.9	684.2
75°	308.0	359.8	471.6	567.0	610.6
77.5°	242.6	299.9	408.9	482.5	509.8
80°	179.9	234.4	329.9	381.6	403.5
82.5°	125.4	171.7	242.6	269.9	275.3
85°	79.1	109.0	147.2	163.6	160.8
87.5°	35.4	43.6	54.5	60.0	57.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)