

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: P390751

Luminaire Tested: **22CZ2-85VHE-HRP-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: P390751
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-85VHE-HRP-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6548.2 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

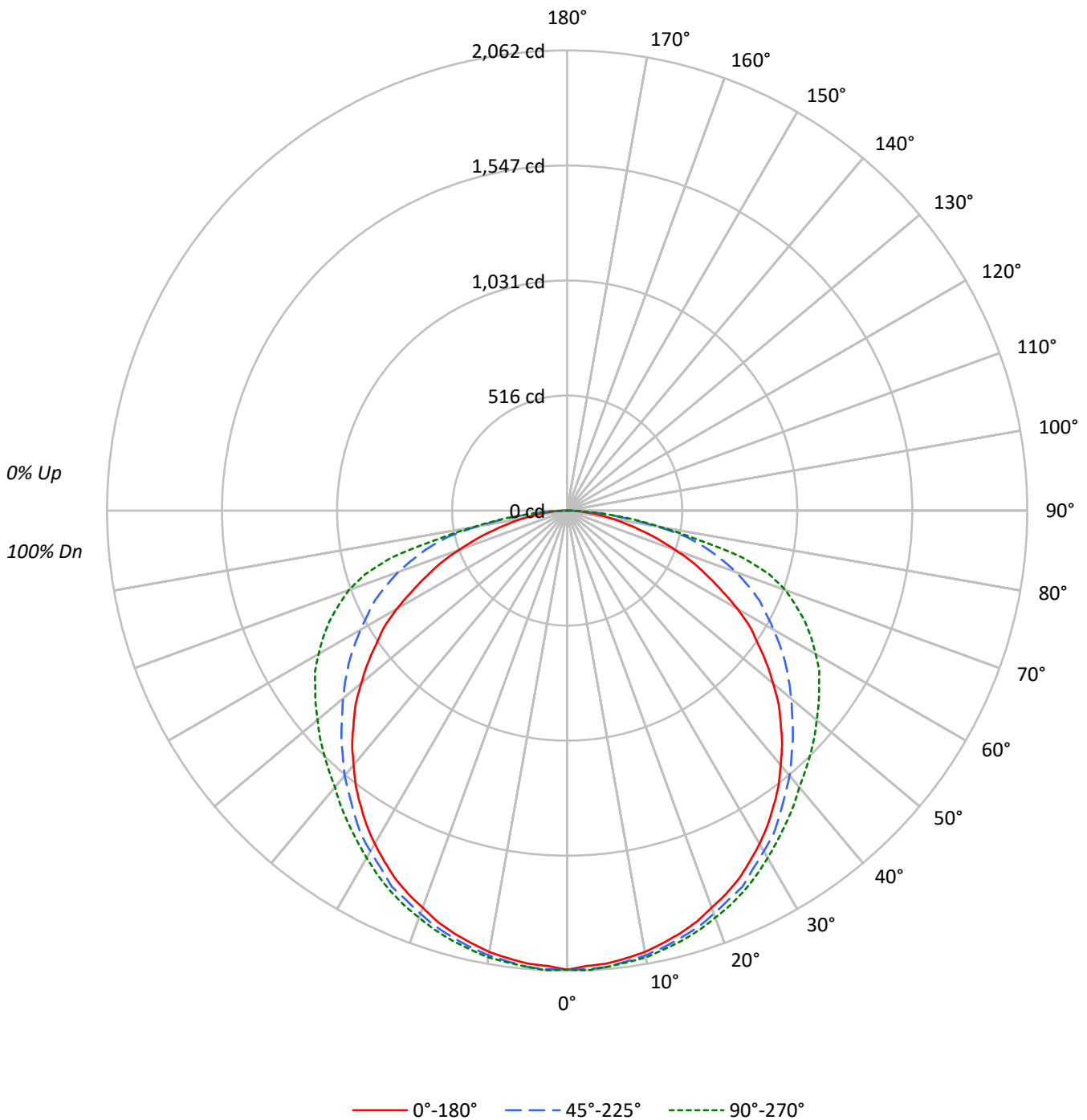
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5535	5535	5535
5°	5504	5543	5543
10°	5489	5528	5555
15°	5462	5516	5556
20°	5421	5504	5559
25°	5407	5521	5578
30°	5358	5478	5583
35°	5301	5459	5618
40°	5229	5449	5686
45°	5151	5445	5866
50°	5042	5485	6110
55°	4904	5605	6464
60°	4744	5755	6922
65°	4417	6043	7484
70°	4055	6330	8187
75°	3556	6661	8464
80°	3061	6346	6643
85°	2677	4610	5057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.6	3.0
10°-20°	558.6	8.5
20°-30°	852.3	13.0
30°-40°	1040.7	15.9
40°-50°	1112.8	17.0
50°-60°	1074.0	16.4
60°-70°	924.6	14.1
70°-80°	625.5	9.6
80°-90°	165.1	2.5
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°	1605.5	24.5
0°-40°	2646.2	40.4
0°-60°	4833.0	73.8
0°-90°	6548.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6548.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2057	2057	2057	2057	2057	
5°	2038	2042	2052	2052	2052	193
15°	1961	1965	1980	1990	1994	553
25°	1821	1830	1859	1869	1879	838
35°	1614	1628	1662	1696	1710	1010
45°	1354	1378	1431	1503	1542	1045
55°	1045	1079	1195	1315	1378	937
65°	694	761	949	1098	1175	690
75°	342	453	641	771	814	367
85°	87	120	149	154	164	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2056.9	2056.9	2056.9	2056.9	2056.9
2.5°	2042.5	2047.3	2056.9	2056.9	2061.7
5°	2037.6	2042.5	2052.1	2052.1	2052.1
7.5°	2023.2	2028.0	2037.6	2042.5	2042.5
10°	2008.7	2013.5	2023.2	2028.0	2032.8
12.5°	1984.6	1989.5	2003.9	2013.5	2013.5
15°	1960.6	1965.4	1979.8	1989.5	1994.3
17.5°	1931.7	1941.3	1955.7	1965.4	1970.2
20°	1893.1	1902.8	1922.0	1936.5	1941.3
22.5°	1859.4	1869.0	1888.3	1902.8	1912.4
25°	1820.9	1830.5	1859.4	1869.0	1878.7
27.5°	1772.7	1782.3	1806.4	1825.7	1840.1
30°	1724.5	1734.2	1763.1	1787.1	1796.8
32.5°	1671.5	1686.0	1719.7	1739.0	1753.4
35°	1613.7	1628.2	1661.9	1695.6	1710.1
37.5°	1555.9	1570.4	1604.1	1647.4	1666.7
40°	1488.5	1507.8	1551.1	1608.9	1618.5
42.5°	1425.9	1449.9	1488.5	1555.9	1580.0
45°	1353.6	1377.7	1430.7	1502.9	1541.5
47.5°	1286.2	1310.3	1368.1	1454.8	1502.9
50°	1204.3	1238.0	1310.3	1411.4	1459.6
52.5°	1127.2	1156.1	1252.4	1363.2	1421.0
55°	1045.3	1079.0	1194.6	1315.1	1377.7
57.5°	973.1	1002.0	1132.0	1266.9	1339.2
60°	881.5	920.1	1069.4	1213.9	1286.2
62.5°	785.2	843.0	1006.8	1156.1	1233.2
65°	693.7	761.1	949.0	1098.3	1175.4
67.5°	611.8	684.0	876.7	1035.7	1107.9
70°	515.4	607.0	804.5	958.6	1040.5
72.5°	428.7	529.9	722.6	876.7	949.0
75°	342.0	452.8	640.7	770.7	814.1
77.5°	264.9	370.9	549.1	587.7	592.5
80°	197.5	293.8	409.5	414.3	428.7
82.5°	134.9	207.1	264.9	289.0	293.8
85°	86.7	120.4	149.3	154.1	163.8
87.5°	38.5	43.4	53.0	48.2	48.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)