

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: P390839

Luminaire Tested: **22CZ2-95VHE-HRP-UNV-L930-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: P390839  
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: 22CZ2-95VHE-HRP-UNV-L930-CD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6730.3 lumens  
Efficiency: N/A  
Efficacy: 92.6 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

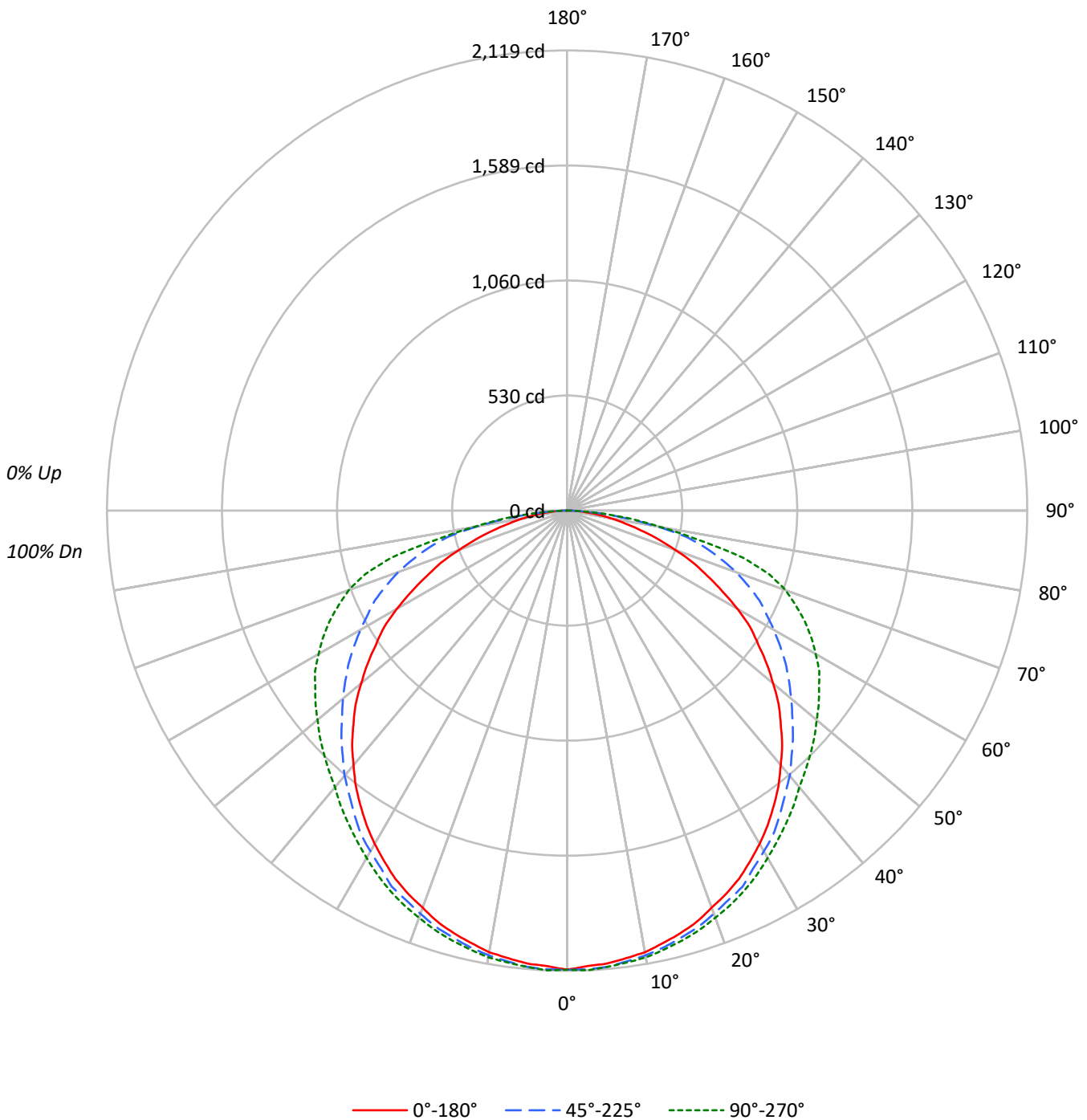
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5689	5689	5689
5°	5657	5697	5697
10°	5642	5682	5709
15°	5614	5669	5710
20°	5572	5657	5714
25°	5557	5674	5733
30°	5508	5631	5738
35°	5449	5611	5774
40°	5374	5600	5844
45°	5294	5596	6029
50°	5182	5638	6280
55°	5041	5761	6643
60°	4876	5915	7114
65°	4540	6211	7692
70°	4168	6505	8414
75°	3655	6847	8699
80°	3146	6521	6828
85°	2751	4739	5196



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.0	3.0
10°-20°	574.2	8.5
20°-30°	876.0	13.0
30°-40°	1069.6	15.9
40°-50°	1143.7	17.0
50°-60°	1103.9	16.4
60°-70°	950.3	14.1
70°-80°	642.9	9.6
80°-90°	169.7	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°	1650.2	24.5
0°-40°	2719.8	40.4
0°-60°	4967.4	73.8
0°-90°	6730.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6730.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2094	2099	2109	2109	2109	199
15°	2015	2020	2035	2045	2050	569
25°	1872	1881	1911	1921	1931	861
35°	1659	1674	1708	1743	1758	1038
45°	1391	1416	1470	1545	1584	1074
55°	1074	1109	1228	1352	1416	963
65°	713	782	975	1129	1208	709
75°	352	465	658	792	837	377
85°	89	124	154	158	168	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2114.1	2114.1	2114.1	2114.1	2114.1
2.5°	2099.3	2104.2	2114.1	2114.1	2119.1
5°	2094.3	2099.3	2109.2	2109.2	2109.2
7.5°	2079.4	2084.4	2094.3	2099.3	2099.3
10°	2064.6	2069.5	2079.4	2084.4	2089.3
12.5°	2039.8	2044.8	2059.6	2069.5	2069.5
15°	2015.1	2020.0	2034.9	2044.8	2049.7
17.5°	1985.4	1995.3	2010.1	2020.0	2025.0
20°	1945.8	1955.7	1975.5	1990.3	1995.3
22.5°	1911.1	1921.0	1940.8	1955.7	1965.6
25°	1871.5	1881.4	1911.1	1921.0	1930.9
27.5°	1822.0	1831.9	1856.6	1876.5	1891.3
30°	1772.5	1782.4	1812.1	1836.8	1846.7
32.5°	1718.0	1732.9	1767.5	1787.3	1802.2
35°	1658.6	1673.5	1708.1	1742.8	1757.6
37.5°	1599.2	1614.0	1648.7	1693.3	1713.1
40°	1529.9	1549.7	1594.2	1653.7	1663.6
42.5°	1465.5	1490.3	1529.9	1599.2	1623.9
45°	1391.2	1416.0	1470.5	1544.7	1584.3
47.5°	1321.9	1346.7	1406.1	1495.2	1544.7
50°	1237.8	1272.4	1346.7	1450.7	1500.2
52.5°	1158.5	1188.3	1287.3	1401.2	1460.6
55°	1074.4	1109.0	1227.9	1351.6	1416.0
57.5°	1000.1	1029.8	1163.5	1302.1	1376.4
60°	906.0	945.7	1099.1	1247.7	1321.9
62.5°	807.0	866.4	1034.8	1188.3	1267.5
65°	713.0	782.3	975.4	1128.8	1208.1
67.5°	628.8	703.1	901.1	1064.5	1138.7
70°	529.8	623.8	826.8	985.3	1069.4
72.5°	440.6	544.6	742.7	901.1	975.4
75°	351.5	465.4	658.5	792.2	836.7
77.5°	272.3	381.2	564.4	604.0	609.0
80°	203.0	302.0	420.8	425.8	440.6
82.5°	138.6	212.9	272.3	297.1	302.0
85°	89.1	123.8	153.5	158.4	168.3
87.5°	39.6	44.6	54.5	49.5	49.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)