

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: P390747

Luminaire Tested: **22CZ2-85VHE-HRP-UNV-L940-CD1-SDWPD1-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: P390747
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6094.8 lumens
Efficiency: N/A
Efficacy: 95.8 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

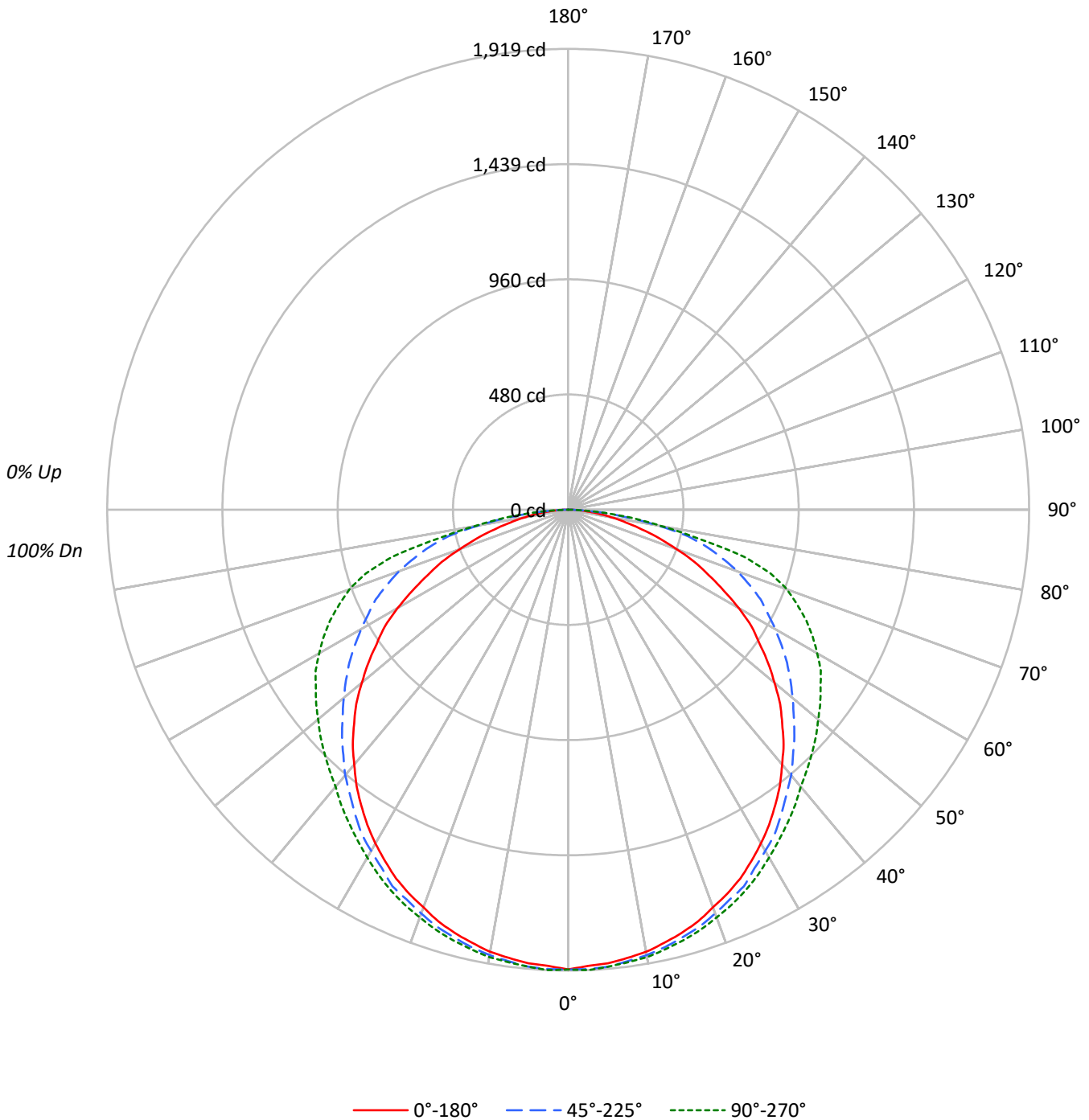
Input Watts (W): 63.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5152	5152	5152
5°	5123	5159	5159
10°	5109	5146	5170
15°	5084	5134	5171
20°	5046	5123	5174
25°	5032	5139	5192
30°	4987	5099	5197
35°	4934	5081	5229
40°	4867	5071	5292
45°	4795	5068	5460
50°	4693	5105	5687
55°	4564	5217	6016
60°	4416	5357	6443
65°	4111	5624	6966
70°	3774	5891	7620
75°	3309	6200	7878
80°	2848	5906	6183
85°	2492	4292	4705



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.1	3.0
10°-20°	520.0	8.5
20°-30°	793.3	13.0
30°-40°	968.6	15.9
40°-50°	1035.7	17.0
50°-60°	999.7	16.4
60°-70°	860.6	14.1
70°-80°	582.2	9.6
80°-90°	153.6	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°	1494.4	24.5
0°-40°	2463.0	40.4
0°-60°	4498.4	73.8
0°-90°	6094.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6094.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1914	1914	1914	1914	1914	
5°	1896	1901	1910	1910	1910	180
15°	1825	1829	1843	1852	1856	515
25°	1695	1704	1731	1740	1749	780
35°	1502	1515	1547	1578	1592	940
45°	1260	1282	1332	1399	1435	972
55°	973	1004	1112	1224	1282	872
65°	646	708	883	1022	1094	642
75°	318	422	596	717	758	342
85°	81	112	139	144	152	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1914.5	1914.5	1914.5	1914.5	1914.5
2.5°	1901.0	1905.5	1914.5	1914.5	1919.0
5°	1896.5	1901.0	1910.0	1910.0	1910.0
7.5°	1883.1	1887.6	1896.5	1901.0	1901.0
10°	1869.6	1874.1	1883.1	1887.6	1892.1
12.5°	1847.2	1851.7	1865.2	1874.1	1874.1
15°	1824.8	1829.3	1842.7	1851.7	1856.2
17.5°	1797.9	1806.9	1820.3	1829.3	1833.8
20°	1762.0	1771.0	1788.9	1802.4	1806.9
22.5°	1730.7	1739.6	1757.6	1771.0	1780.0
25°	1694.8	1703.8	1730.7	1739.6	1748.6
27.5°	1650.0	1658.9	1681.3	1699.3	1712.7
30°	1605.1	1614.1	1641.0	1663.4	1672.4
32.5°	1555.8	1569.2	1600.6	1618.6	1632.0
35°	1502.0	1515.4	1546.8	1578.2	1591.7
37.5°	1448.2	1461.6	1493.0	1533.4	1551.3
40°	1385.4	1403.4	1443.7	1497.5	1506.5
42.5°	1327.1	1349.6	1385.4	1448.2	1470.6
45°	1259.9	1282.3	1331.6	1398.9	1434.7
47.5°	1197.1	1219.5	1273.3	1354.0	1398.9
50°	1120.9	1152.3	1219.5	1313.7	1358.5
52.5°	1049.2	1076.1	1165.7	1268.8	1322.7
55°	972.9	1004.3	1111.9	1224.0	1282.3
57.5°	905.7	932.6	1053.6	1179.2	1246.4
60°	820.5	856.4	995.4	1129.9	1197.1
62.5°	730.8	784.6	937.1	1076.1	1147.8
65°	645.6	708.4	883.3	1022.3	1094.0
67.5°	569.4	636.7	816.0	964.0	1031.2
70°	479.7	564.9	748.8	892.2	968.5
72.5°	399.0	493.2	672.5	816.0	883.3
75°	318.3	421.5	596.3	717.4	757.7
77.5°	246.6	345.2	511.1	547.0	551.5
80°	183.8	273.5	381.1	385.6	399.0
82.5°	125.5	192.8	246.6	269.0	273.5
85°	80.7	112.1	139.0	143.5	152.4
87.5°	35.9	40.4	49.3	44.8	44.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)