

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: P390654

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L950-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: P390654  
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: 22CZ2-75VHE-HRP-UNV-L950-CD1-SDWPD1-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: 5674.7 lumens  
Efficiency: N/A  
Efficacy: 103.7 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

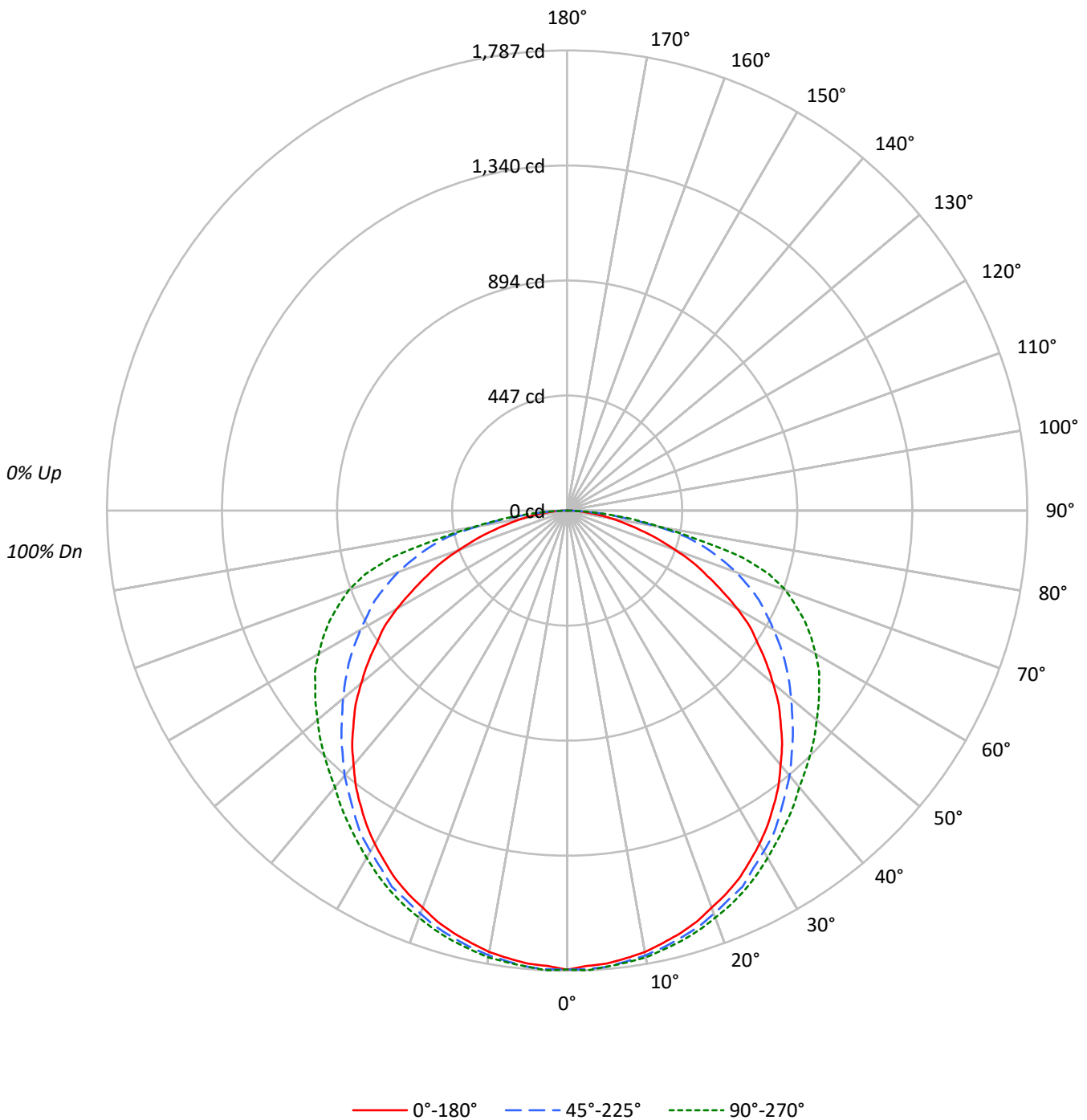
Input Watts (W): 54.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P390654

CATALOG NUMBER: 22CZ2-75VHE-HRP-UNV-L950-CD1-SDWPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P390654

CATALOG NUMBER: 22CZ2-75VHE-HRP-UNV-L950-CD1-SDWPD1-U

**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°	4797	4797	4797
5°	4770	4804	4804
10°	4757	4791	4814
15°	4733	4780	4815
20°	4698	4770	4818
25°	4685	4785	4834
30°	4644	4748	4838
35°	4594	4731	4868
40°	4531	4722	4927
45°	4464	4718	5084
50°	4369	4754	5295
55°	4250	4857	5601
60°	4111	4987	5999
65°	3827	5237	6486
70°	3515	5485	7094
75°	3082	5772	7335
80°	2653	5498	5757
85°	2319	3995	4381



TEST NUMBER: P390654

CATALOG NUMBER: 22CZ2-75VHE-HRP-UNV-L950-CD1-SDWPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.6	3.0
10°-20°	484.1	8.5
20°-30°	738.6	13.0
30°-40°	901.9	15.9
40°-50°	964.3	17.0
50°-60°	930.8	16.4
60°-70°	801.2	14.1
70°-80°	542.1	9.6
80°-90°	143.0	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°	1391.4	24.5
0°-40°	2293.2	40.4
0°-60°	4188.3	73.8
0°-90°	5674.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5674.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1782	1782	1782	1782	1782	
5°	1766	1770	1778	1778	1778	168
15°	1699	1703	1716	1724	1728	479
25°	1578	1586	1611	1620	1628	726
35°	1398	1411	1440	1469	1482	875
45°	1173	1194	1240	1302	1336	905
55°	906	935	1035	1140	1194	812
65°	601	660	822	952	1019	598
75°	296	392	555	668	706	318
85°	75	104	129	134	142	85
90°	0	0	0	0	0	



TEST NUMBER: P390654

CATALOG NUMBER: 22CZ2-75VHE-HRP-UNV-L950-CD1-SDWPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1782.5	1782.5	1782.5	1782.5	1782.5
2.5°	1770.0	1774.2	1782.5	1782.5	1786.7
5°	1765.8	1770.0	1778.3	1778.3	1778.3
7.5°	1753.3	1757.5	1765.8	1770.0	1770.0
10°	1740.8	1745.0	1753.3	1757.5	1761.6
12.5°	1719.9	1724.1	1736.6	1745.0	1745.0
15°	1699.0	1703.2	1715.7	1724.1	1728.3
17.5°	1674.0	1682.3	1694.9	1703.2	1707.4
20°	1640.6	1648.9	1665.6	1678.2	1682.3
22.5°	1611.4	1619.7	1636.4	1648.9	1657.3
25°	1578.0	1586.3	1611.4	1619.7	1628.1
27.5°	1536.2	1544.6	1565.4	1582.1	1594.7
30°	1494.5	1502.8	1527.9	1548.7	1557.1
32.5°	1448.6	1461.1	1490.3	1507.0	1519.5
35°	1398.5	1411.0	1440.2	1469.4	1482.0
37.5°	1348.4	1360.9	1390.1	1427.7	1444.4
40°	1289.9	1306.6	1344.2	1394.3	1402.6
42.5°	1235.7	1256.5	1289.9	1348.4	1369.2
45°	1173.0	1193.9	1239.8	1302.5	1335.8
47.5°	1114.6	1135.5	1185.6	1260.7	1302.5
50°	1043.6	1072.9	1135.5	1223.1	1264.9
52.5°	976.8	1001.9	1085.4	1181.4	1231.5
55°	905.9	935.1	1035.3	1139.6	1193.9
57.5°	843.3	868.3	981.0	1097.9	1160.5
60°	763.9	797.3	926.7	1052.0	1114.6
62.5°	680.4	730.5	872.5	1001.9	1068.7
65°	601.1	659.6	822.4	951.8	1018.6
67.5°	530.2	592.8	759.8	897.5	960.1
70°	446.7	526.0	697.1	830.7	901.7
72.5°	371.5	459.2	626.2	759.8	822.4
75°	296.4	392.4	555.2	667.9	705.5
77.5°	229.6	321.4	475.9	509.3	513.5
80°	171.2	254.6	354.8	359.0	371.5
82.5°	116.9	179.5	229.6	250.5	254.6
85°	75.1	104.4	129.4	133.6	141.9
87.5°	33.4	37.6	45.9	41.7	41.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)