

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: P389310

Luminaire Tested: **22CZ2-55VHE-S-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: P389310  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-S-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5140.4 lumens  
Efficiency: N/A  
Efficacy: 130.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

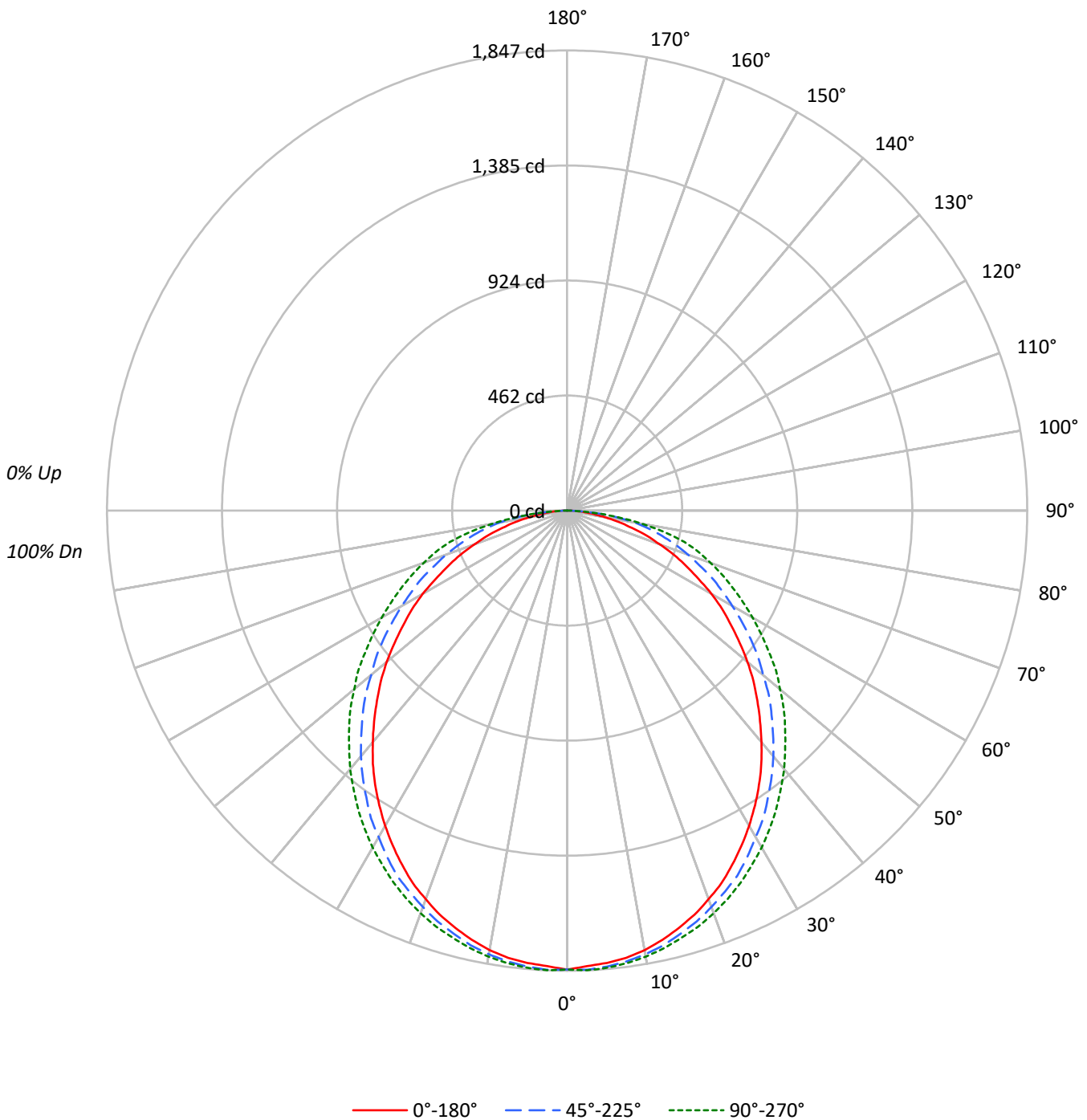
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4957	4957	4957
5°	4924	4963	4976
10°	4896	4941	4968
15°	4831	4898	4944
20°	4753	4849	4924
25°	4657	4800	4892
30°	4538	4703	4852
35°	4412	4617	4806
40°	4263	4524	4760
45°	4107	4418	4710
50°	3956	4297	4669
55°	3770	4220	4636
60°	3602	4118	4621
65°	3359	4093	4673
70°	3094	4057	4812
75°	2793	4114	5062
80°	2416	4237	4757
85°	2001	3554	3554



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.2	3.4
10°-20°	495.7	9.6
20°-30°	741.7	14.4
30°-40°	878.4	17.1
40°-50°	895.2	17.4
50°-60°	802.3	15.6
60°-70°	628.2	12.2
70°-80°	405.1	7.9
80°-90°	119.7	2.3
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°	1411.6	27.5
0°-40°	2290.0	44.5
0°-60°	3987.5	77.6
0°-90°	5140.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5140.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1842	1842	1842	1842	1842	
5°	1823	1828	1837	1840	1842	173
15°	1734	1744	1758	1772	1775	489
25°	1568	1583	1616	1638	1648	722
35°	1343	1360	1406	1449	1463	839
45°	1079	1103	1161	1221	1238	833
55°	804	830	899	962	988	720
65°	528	559	643	705	734	524
75°	269	309	396	463	487	288
85°	65	89	115	115	115	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1842.0	1842.0	1842.0	1842.0	1842.0
2.5°	1830.0	1834.8	1844.4	1846.8	1846.8
5°	1822.8	1827.6	1837.2	1839.6	1842.0
7.5°	1810.8	1813.2	1825.2	1830.0	1832.4
10°	1791.6	1796.4	1808.4	1815.6	1818.0
12.5°	1765.2	1772.4	1786.8	1796.4	1798.8
15°	1734.0	1743.6	1758.0	1772.4	1774.8
17.5°	1700.5	1710.1	1729.2	1746.0	1750.8
20°	1659.7	1671.7	1693.3	1712.5	1719.6
22.5°	1618.9	1628.5	1654.9	1678.9	1686.1
25°	1568.5	1582.9	1616.5	1638.1	1647.7
27.5°	1515.8	1532.6	1566.2	1594.9	1604.5
30°	1460.6	1477.4	1513.4	1549.4	1561.4
32.5°	1403.1	1422.2	1465.4	1501.4	1513.4
35°	1343.1	1359.9	1405.5	1448.6	1463.0
37.5°	1280.7	1295.1	1347.9	1393.5	1407.9
40°	1213.6	1232.8	1287.9	1340.7	1355.1
42.5°	1146.4	1168.0	1223.2	1280.7	1295.1
45°	1079.3	1103.3	1160.8	1220.8	1237.6
47.5°	1014.5	1033.7	1098.5	1156.0	1180.0
50°	945.0	964.2	1026.5	1091.3	1115.3
52.5°	873.0	899.4	966.6	1028.9	1057.7
55°	803.5	829.8	899.4	961.8	988.1
57.5°	738.7	760.3	832.2	897.0	923.4
60°	669.2	688.3	765.1	834.6	858.6
62.5°	594.8	623.6	702.7	767.5	796.3
65°	527.6	558.8	642.8	705.1	733.9
67.5°	465.3	494.1	575.6	642.8	673.9
70°	393.3	431.7	515.7	582.8	611.6
72.5°	335.8	369.4	455.7	522.8	554.0
75°	268.6	309.4	395.7	462.9	486.9
77.5°	213.5	254.2	335.8	388.5	400.5
80°	155.9	196.7	273.4	299.8	307.0
82.5°	105.5	143.9	196.7	203.9	206.3
85°	64.8	88.7	115.1	115.1	115.1
87.5°	31.2	36.0	40.8	38.4	38.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)