

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: P388090

Luminaire Tested: **22CZ2-55VHE-SQR-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: P388090  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-SQR-UNV-L950-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4755.7 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

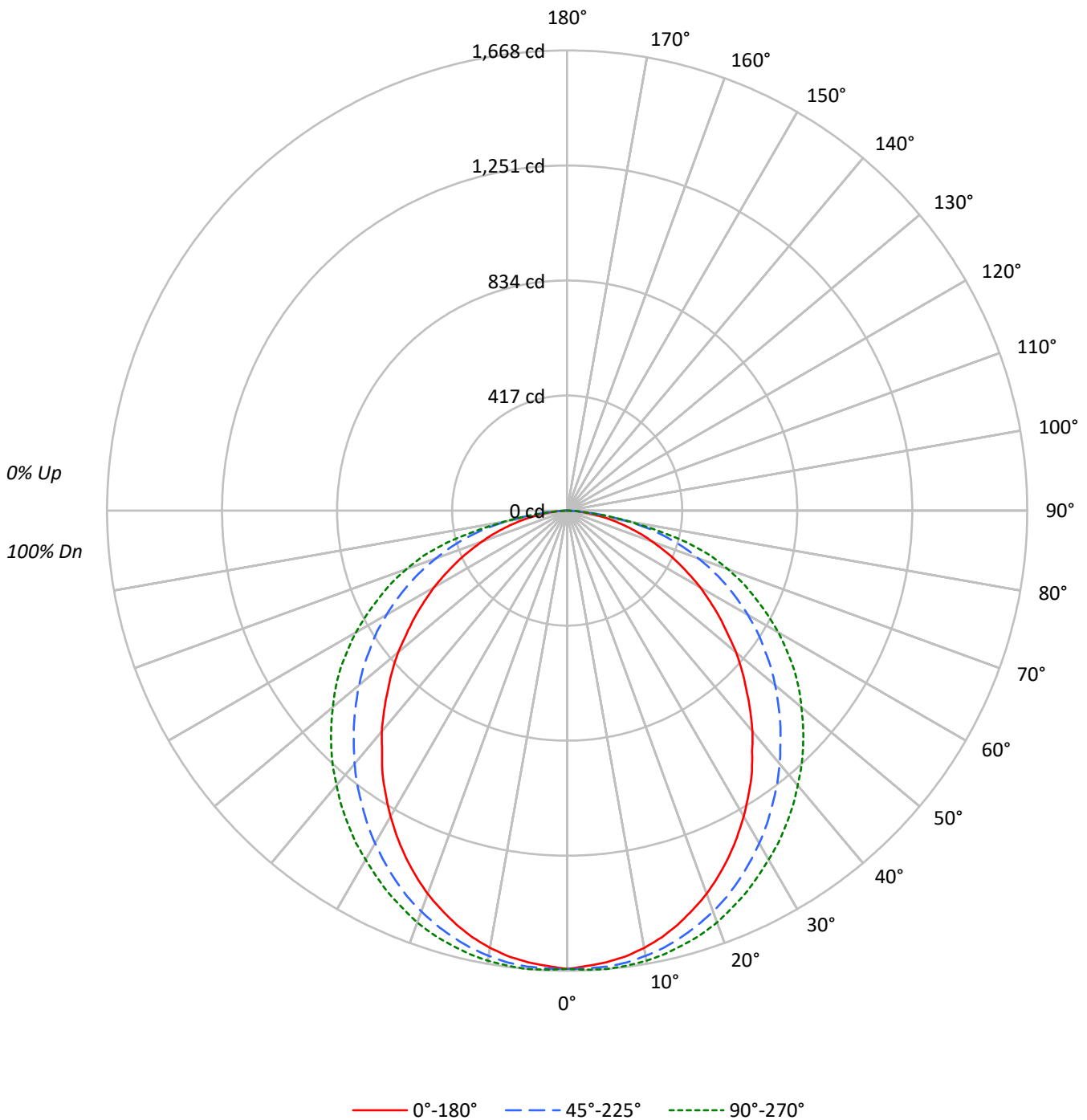
Input Watts (W): 39.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	4471	4471	4471
5°	4439	4481	4506
10°	4398	4478	4527
15°	4326	4458	4540
20°	4234	4428	4551
25°	4115	4383	4544
30°	3977	4328	4538
35°	3834	4264	4553
40°	3671	4210	4567
45°	3496	4158	4604
50°	3345	4120	4640
55°	3166	4088	4712
60°	3000	4070	4762
65°	2802	4039	4800
70°	2575	3978	4866
75°	2324	3872	4693
80°	1994	3428	3533
85°	1602	2022	1602



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.5	3.3
10°-20°	450.3	9.5
20°-30°	676.3	14.2
30°-40°	806.6	17.0
40°-50°	833.9	17.5
50°-60°	766.7	16.1
60°-70°	610.4	12.8
70°-80°	372.9	7.8
80°-90°	81.1	1.7
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°	1284.1	27.0
0°-40°	2090.7	44.0
0°-60°	3691.4	77.6
0°-90°	4755.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4755.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1661	1661	1661	1661	1661	
5°	1643	1648	1659	1666	1668	156
15°	1553	1571	1600	1623	1630	437
25°	1386	1420	1476	1517	1530	637
35°	1167	1217	1298	1366	1386	728
45°	919	984	1092	1180	1210	710
55°	675	749	871	971	1004	604
65°	440	515	634	722	754	436
75°	224	289	372	438	451	238
85°	52	63	66	56	52	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1661.3	1661.3	1661.3	1661.3	1661.3
2.5°	1652.3	1654.5	1661.3	1665.8	1665.8
5°	1643.2	1647.7	1659.0	1665.8	1668.1
7.5°	1629.7	1636.5	1652.3	1661.3	1663.5
10°	1609.4	1618.4	1638.7	1652.3	1656.8
12.5°	1584.5	1598.1	1622.9	1641.0	1645.5
15°	1552.9	1571.0	1600.3	1622.9	1629.7
17.5°	1516.8	1539.4	1575.5	1602.6	1611.6
20°	1478.4	1501.0	1546.2	1577.8	1589.1
22.5°	1433.3	1462.6	1514.6	1550.7	1559.7
25°	1385.9	1419.8	1476.2	1516.8	1530.4
27.5°	1334.0	1374.6	1435.6	1485.2	1496.5
30°	1279.8	1322.7	1392.7	1446.8	1460.4
32.5°	1223.4	1273.0	1347.5	1408.5	1426.5
35°	1167.0	1216.6	1297.9	1365.6	1385.9
37.5°	1101.5	1160.2	1250.5	1320.4	1345.3
40°	1045.1	1101.5	1198.6	1275.3	1300.1
42.5°	981.9	1042.8	1144.4	1227.9	1257.2
45°	918.7	984.1	1092.5	1180.5	1209.8
47.5°	860.0	925.4	1038.3	1130.8	1160.2
50°	799.0	866.8	984.1	1078.9	1108.3
52.5°	733.6	808.1	930.0	1024.8	1058.6
55°	674.9	749.4	871.3	970.6	1004.4
57.5°	614.0	690.7	817.1	911.9	943.5
60°	557.5	632.0	756.2	848.7	884.8
62.5°	496.6	573.3	695.2	785.5	819.4
65°	440.1	514.6	634.3	722.3	753.9
67.5°	383.7	458.2	571.1	654.6	690.7
70°	327.3	401.8	505.6	586.9	618.5
72.5°	277.6	343.1	442.4	516.9	546.2
75°	223.5	288.9	372.4	437.9	451.4
77.5°	173.8	232.5	302.5	331.8	336.3
80°	128.7	173.8	221.2	228.0	228.0
82.5°	85.8	119.6	137.7	139.9	137.7
85°	51.9	63.2	65.5	56.4	51.9
87.5°	18.1	18.1	11.3	6.8	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)