

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: P388128

Luminaire Tested: **22CZ2-65VHE-SQR-UNV-L930-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: P388128  
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: 22CZ2-65VHE-SQR-UNV-L930-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

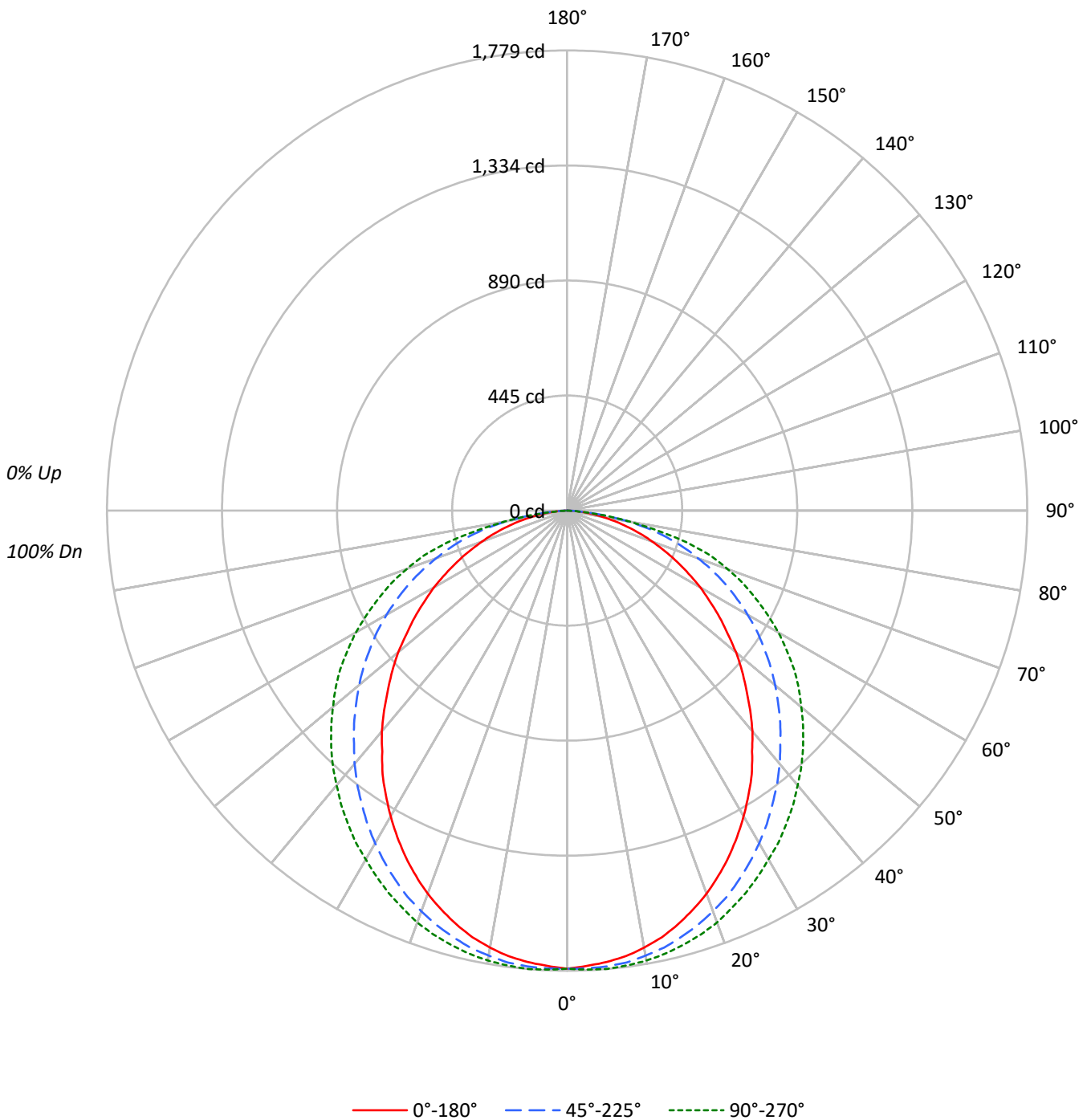
Lumens per Lamp: N/A  
Luminaire Lumens: 5070.9 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	4767	4767	4767
5°	4733	4779	4804
10°	4689	4774	4827
15°	4613	4754	4841
20°	4514	4721	4852
25°	4388	4673	4845
30°	4240	4614	4839
35°	4088	4546	4855
40°	3914	4489	4870
45°	3728	4433	4909
50°	3567	4393	4947
55°	3376	4358	5025
60°	3200	4339	5078
65°	2988	4306	5119
70°	2746	4242	5189
75°	2478	4129	5005
80°	2126	3656	3767
85°	1711	2155	1711



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.9	3.3
10°-20°	480.1	9.5
20°-30°	721.1	14.2
30°-40°	860.1	17.0
40°-50°	889.2	17.5
50°-60°	817.5	16.1
60°-70°	650.8	12.8
70°-80°	397.6	7.8
80°-90°	86.4	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°	1369.2	27.0
0°-40°	2229.3	44.0
0°-60°	3936.0	77.6
0°-90°	5070.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5070.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1771	1771	1771	1771	1771	
5°	1752	1757	1769	1776	1779	166
15°	1656	1675	1706	1730	1738	466
25°	1478	1514	1574	1617	1632	680
35°	1244	1297	1384	1456	1478	776
45°	980	1049	1165	1259	1290	757
55°	720	799	929	1035	1071	644
65°	469	549	676	770	804	465
75°	238	308	397	467	481	254
85°	55	67	70	60	55	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1771.4	1771.4	1771.4	1771.4	1771.4
2.5°	1761.8	1764.2	1771.4	1776.2	1776.2
5°	1752.1	1756.9	1769.0	1776.2	1778.6
7.5°	1737.7	1744.9	1761.8	1771.4	1773.8
10°	1716.0	1725.7	1747.3	1761.8	1766.6
12.5°	1689.6	1704.0	1730.5	1749.7	1754.5
15°	1655.9	1675.1	1706.4	1730.5	1737.7
17.5°	1617.4	1641.4	1679.9	1708.8	1718.4
20°	1576.4	1600.5	1648.6	1682.3	1694.4
22.5°	1528.3	1559.6	1614.9	1653.5	1663.1
25°	1477.8	1513.9	1574.0	1617.4	1631.8
27.5°	1422.4	1465.7	1530.7	1583.7	1595.7
30°	1364.6	1410.4	1485.0	1542.7	1557.2
32.5°	1304.5	1357.4	1436.8	1501.8	1521.1
35°	1244.3	1297.3	1383.9	1456.1	1477.8
37.5°	1174.5	1237.1	1333.4	1408.0	1434.4
40°	1114.3	1174.5	1278.0	1359.8	1386.3
42.5°	1046.9	1111.9	1220.2	1309.3	1340.6
45°	979.6	1049.4	1164.9	1258.7	1290.0
47.5°	917.0	986.8	1107.1	1205.8	1237.1
50°	852.0	924.2	1049.4	1150.4	1181.7
52.5°	782.2	861.6	991.6	1092.7	1128.8
55°	719.6	799.0	929.0	1034.9	1071.0
57.5°	654.6	736.5	871.3	972.3	1006.0
60°	594.5	673.9	806.3	904.9	943.5
62.5°	529.5	611.3	741.3	837.6	873.7
65°	469.3	548.7	676.3	770.2	803.9
67.5°	409.2	488.6	608.9	698.0	736.5
70°	349.0	428.4	539.1	625.8	659.5
72.5°	296.0	365.8	471.7	551.2	582.4
75°	238.3	308.1	397.1	466.9	481.4
77.5°	185.3	247.9	322.5	353.8	358.6
80°	137.2	185.3	235.9	243.1	243.1
82.5°	91.5	127.6	146.8	149.2	146.8
85°	55.4	67.4	69.8	60.2	55.4
87.5°	19.3	19.3	12.0	7.2	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)