

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: P387586

Luminaire Tested: **14CZ2-60HE-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: P387586  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-60HE-SQR-UNV-L950-CD1-SWPD1-U  
Description: 1x4 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: 5177.9 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

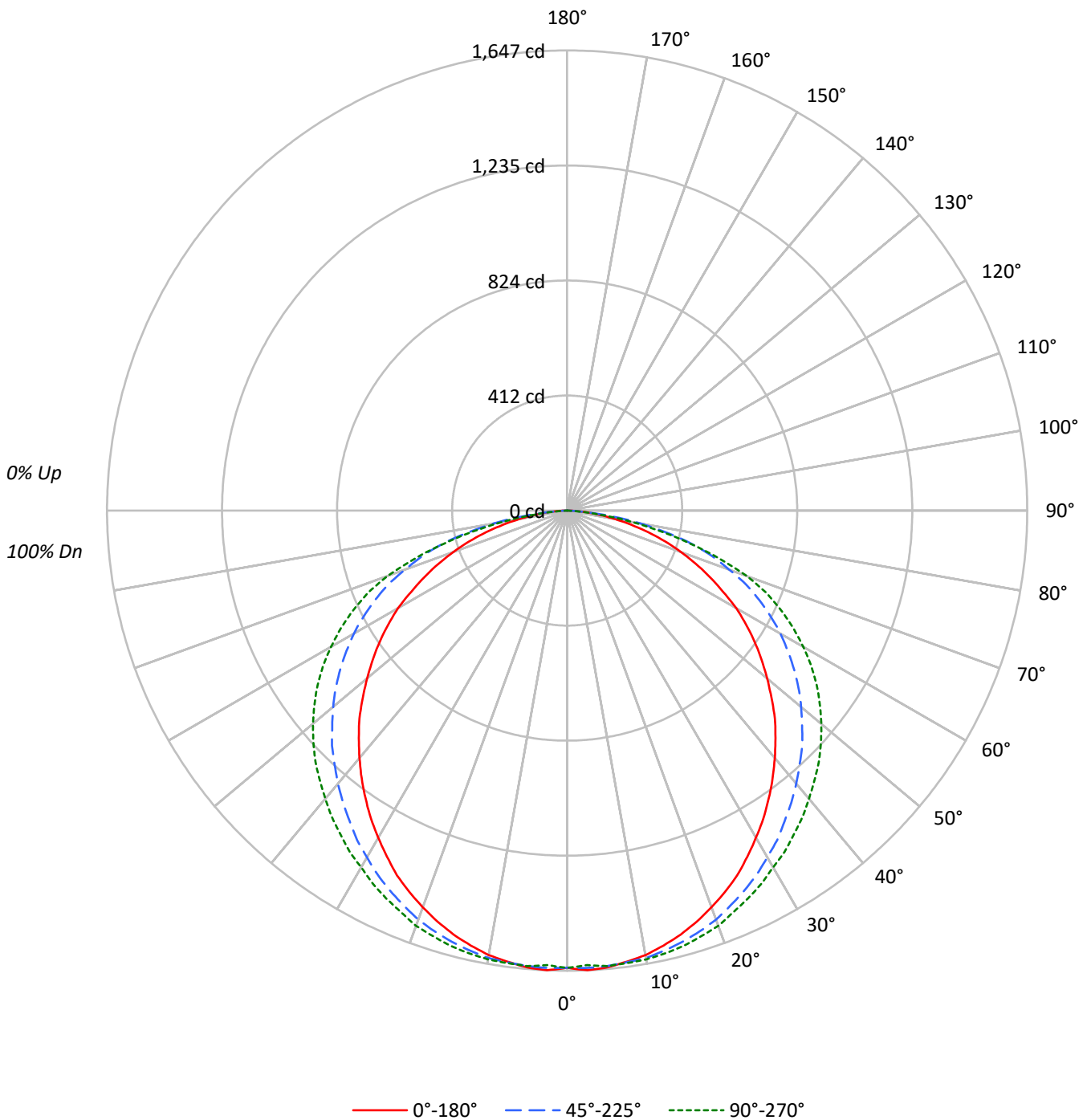
Input Watts (W): 48.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

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

	0°	45°	90°
0°	4403	4403	4403
5°	4434	4420	4420
10°	4414	4442	4457
15°	4377	4449	4493
20°	4327	4462	4529
25°	4277	4456	4548
30°	4200	4452	4582
35°	4132	4458	4646
40°	4061	4483	4730
45°	4002	4529	4846
50°	3911	4578	4971
55°	3844	4653	5118
60°	3764	4747	5253
65°	3589	4835	5384
70°	3408	4846	5379
75°	3120	4829	4748
80°	2669	4125	3680
85°	2096	2337	1371



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.5	3.0
10°-20°	449.2	8.7
20°-30°	687.0	13.3
30°-40°	842.0	16.3
40°-50°	905.6	17.5
50°-60°	870.2	16.8
60°-70°	724.6	14.0
70°-80°	444.7	8.6
80°-90°	99.1	1.9
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°	1291.7	24.9
0°-40°	2133.7	41.2
0°-60°	3909.5	75.5
0°-90°	5177.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5177.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1636	1636	1636	1636	1636	
5°	1642	1626	1636	1636	1636	156
15°	1571	1566	1597	1608	1613	443
25°	1440	1454	1501	1519	1532	663
35°	1258	1289	1357	1394	1414	787
45°	1052	1099	1190	1245	1274	809
55°	819	890	992	1060	1091	732
65°	564	650	759	822	846	558
75°	300	392	464	462	457	318
85°	68	102	76	52	44	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1636.3	1636.3	1636.3	1636.3	1636.3
2.5°	1646.7	1631.0	1638.9	1636.3	1628.4
5°	1641.5	1625.8	1636.3	1636.3	1636.3
7.5°	1628.4	1615.4	1631.0	1633.7	1633.7
10°	1615.4	1604.9	1625.8	1628.4	1631.0
12.5°	1594.5	1586.7	1612.8	1618.0	1623.2
15°	1571.0	1565.8	1597.1	1607.6	1612.8
17.5°	1542.3	1544.9	1578.8	1591.9	1597.1
20°	1511.0	1518.8	1558.0	1571.0	1581.5
22.5°	1477.1	1487.5	1529.3	1544.9	1555.4
25°	1440.5	1453.6	1500.6	1518.8	1531.9
27.5°	1396.2	1417.0	1469.2	1492.7	1505.8
30°	1351.8	1375.3	1432.7	1461.4	1474.5
32.5°	1307.4	1333.5	1398.8	1427.5	1448.4
35°	1257.9	1289.2	1357.0	1393.6	1414.4
37.5°	1208.3	1244.8	1317.9	1359.6	1383.1
40°	1156.1	1195.2	1276.1	1323.1	1346.6
42.5°	1103.9	1148.3	1231.8	1284.0	1310.1
45°	1051.7	1098.7	1190.0	1244.8	1273.5
47.5°	991.7	1049.1	1140.4	1203.1	1231.8
50°	934.3	996.9	1093.5	1158.7	1187.4
52.5°	876.8	942.1	1043.9	1111.7	1140.4
55°	819.4	889.9	991.7	1059.5	1090.8
57.5°	759.4	832.5	936.9	1007.3	1036.0
60°	699.4	775.1	882.1	947.3	976.0
62.5°	628.9	717.7	822.0	887.3	913.4
65°	563.7	649.8	759.4	822.0	845.5
67.5°	498.4	587.2	694.2	751.6	772.5
70°	433.2	521.9	615.9	670.7	683.7
72.5°	368.0	456.7	545.4	576.7	571.5
75°	300.1	391.5	464.5	461.9	456.7
77.5°	234.9	323.6	368.0	349.7	341.9
80°	172.2	258.4	266.2	247.9	237.5
82.5°	117.4	185.3	167.0	146.1	135.7
85°	67.9	101.8	75.7	52.2	44.4
87.5°	28.7	26.1	7.8	7.8	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)