

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: P387585

Luminaire Tested: **14CZ2-60HE-SQR-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: P387585
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-SDWPD1-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: 5115.5 lumens
Efficiency: N/A
Efficacy: 105.9 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

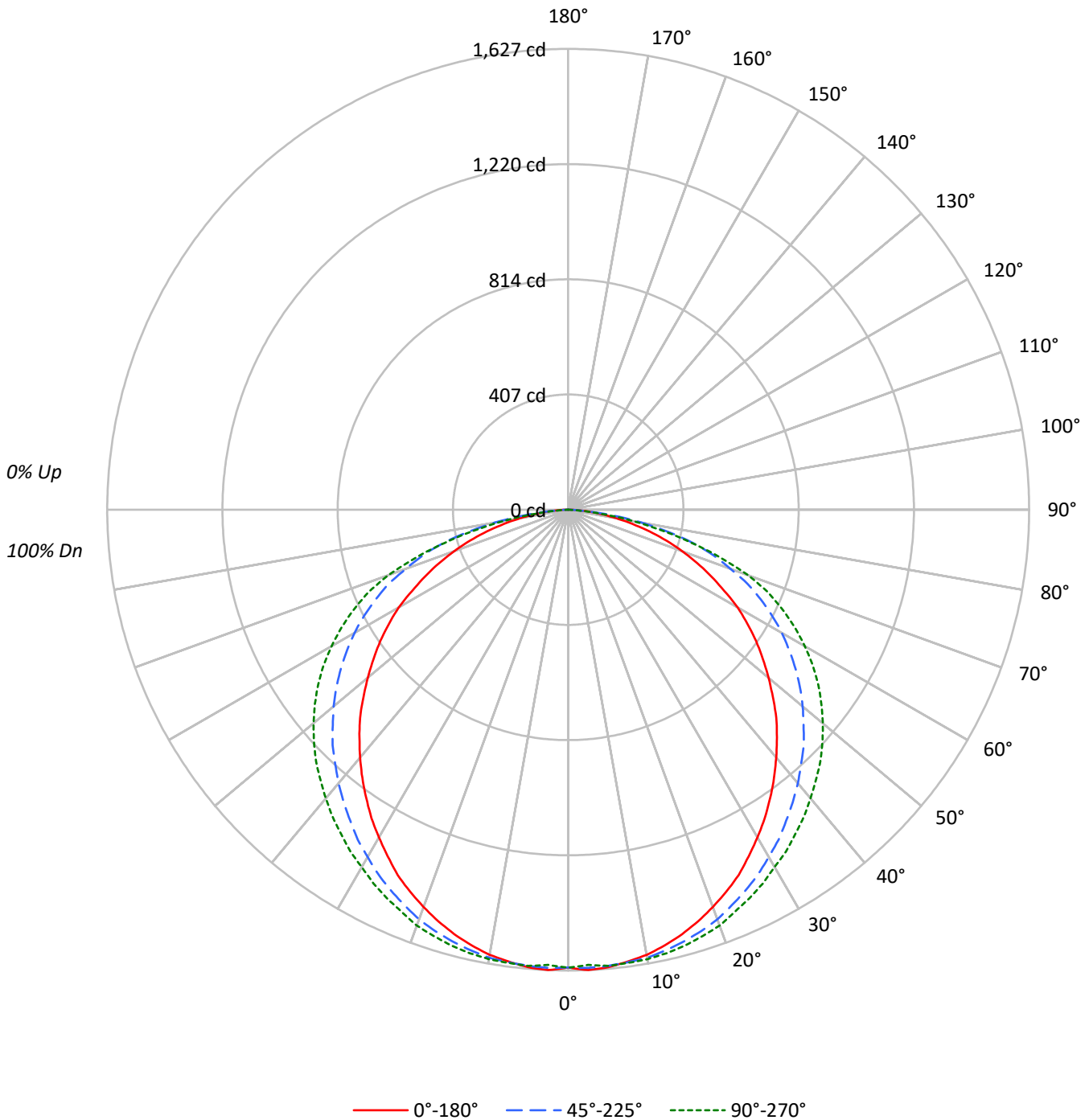
Input Watts (W): 48.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4350	4350	4350
5°	4381	4367	4367
10°	4361	4389	4403
15°	4324	4396	4439
20°	4275	4408	4474
25°	4226	4402	4494
30°	4150	4398	4526
35°	4082	4404	4591
40°	4012	4429	4673
45°	3954	4474	4788
50°	3864	4523	4911
55°	3798	4596	5056
60°	3719	4690	5190
65°	3546	4777	5319
70°	3367	4788	5315
75°	3083	4771	4691
80°	2638	4076	3636
85°	2069	2309	1352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	3.0
10°-20°	443.8	8.7
20°-30°	678.7	13.3
30°-40°	831.9	16.3
40°-50°	894.7	17.5
50°-60°	859.8	16.8
60°-70°	715.9	14.0
70°-80°	439.4	8.6
80°-90°	97.9	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°	1276.1	24.9
0°-40°	2108.0	41.2
0°-60°	3862.4	75.5
0°-90°	5115.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5115.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1616	1616	1616	1616	1616	
5°	1622	1606	1616	1616	1616	154
15°	1552	1547	1578	1588	1593	438
25°	1423	1436	1482	1500	1513	655
35°	1243	1274	1341	1377	1397	778
45°	1039	1085	1176	1230	1258	800
55°	810	879	980	1047	1078	723
65°	557	642	750	812	835	552
75°	296	387	459	456	451	314
85°	67	101	75	52	44	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1616.5	1616.5	1616.5	1616.5	1616.5
2.5°	1626.9	1611.4	1619.1	1616.5	1608.8
5°	1621.7	1606.2	1616.5	1616.5	1616.5
7.5°	1608.8	1595.9	1611.4	1614.0	1614.0
10°	1595.9	1585.6	1606.2	1608.8	1611.4
12.5°	1575.3	1567.6	1593.3	1598.5	1603.7
15°	1552.1	1546.9	1577.9	1588.2	1593.3
17.5°	1523.7	1526.3	1559.8	1572.7	1577.9
20°	1492.8	1500.5	1539.2	1552.1	1562.4
22.5°	1459.3	1469.6	1510.8	1526.3	1536.6
25°	1423.2	1436.1	1482.5	1500.5	1513.4
27.5°	1379.3	1400.0	1451.5	1474.7	1487.6
30°	1335.5	1358.7	1415.4	1443.8	1456.7
32.5°	1291.7	1317.5	1381.9	1410.3	1430.9
35°	1242.7	1273.6	1340.7	1376.8	1397.4
37.5°	1193.7	1229.8	1302.0	1343.3	1366.5
40°	1142.2	1180.8	1260.7	1307.2	1330.4
42.5°	1090.6	1134.4	1216.9	1268.5	1294.3
45°	1039.0	1085.4	1175.7	1229.8	1258.2
47.5°	979.7	1036.4	1126.7	1188.6	1216.9
50°	923.0	984.9	1080.3	1144.7	1173.1
52.5°	866.3	930.7	1031.3	1098.3	1126.7
55°	809.6	879.2	979.7	1046.8	1077.7
57.5°	750.3	822.5	925.6	995.2	1023.6
60°	691.0	765.7	871.4	935.9	964.3
62.5°	621.4	709.0	812.1	876.6	902.4
65°	556.9	642.0	750.3	812.1	835.3
67.5°	492.4	580.1	685.8	742.5	763.2
70°	428.0	515.6	608.5	662.6	675.5
72.5°	363.5	451.2	538.8	569.8	564.6
75°	296.5	386.7	458.9	456.3	451.2
77.5°	232.0	319.7	363.5	345.5	337.7
80°	170.2	255.2	263.0	244.9	234.6
82.5°	116.0	183.1	165.0	144.4	134.1
85°	67.0	100.6	74.8	51.6	43.8
87.5°	28.4	25.8	7.7	7.7	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)