

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: P390819

Luminaire Tested: **22CZ2-90VHE-RDP-UNV-L940-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: P390819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-90VHE-RDP-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5115.0 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

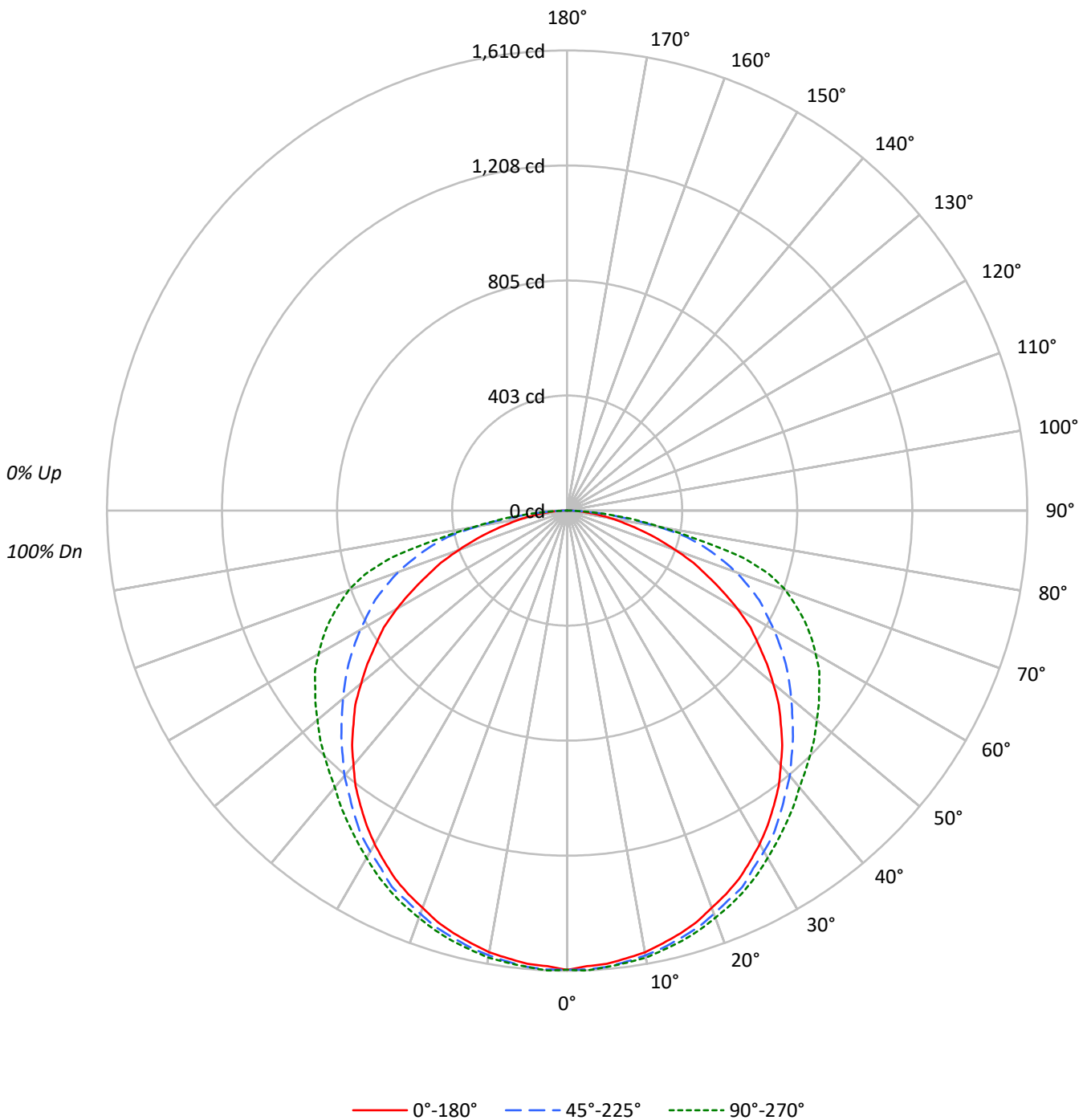
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4324	4324	4324
5°	4300	4330	4330
10°	4288	4318	4339
15°	4267	4308	4340
20°	4235	4300	4342
25°	4223	4312	4357
30°	4186	4279	4361
35°	4141	4265	4388
40°	4084	4256	4441
45°	4024	4253	4582
50°	3938	4285	4773
55°	3831	4378	5049
60°	3706	4496	5407
65°	3450	4720	5846
70°	3168	4944	6395
75°	2778	5204	6612
80°	2391	4956	5190
85°	2090	3600	3949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.0	3.0
10°-20°	436.4	8.5
20°-30°	665.8	13.0
30°-40°	812.9	15.9
40°-50°	869.2	17.0
50°-60°	839.0	16.4
60°-70°	722.2	14.1
70°-80°	488.6	9.6
80°-90°	128.9	2.5
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°	1254.1	24.5
0°-40°	2067.1	40.4
0°-60°	3775.2	73.8
0°-90°	5115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1592	1595	1603	1603	1603	151
15°	1532	1535	1546	1554	1558	432
25°	1422	1430	1452	1460	1468	655
35°	1260	1272	1298	1324	1336	789
45°	1057	1076	1118	1174	1204	816
55°	816	843	933	1027	1076	732
65°	542	594	741	858	918	539
75°	267	354	500	602	636	287
85°	68	94	117	120	128	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1606.7	1606.7	1606.7	1606.7	1606.7
2.5°	1595.4	1599.2	1606.7	1606.7	1610.5
5°	1591.7	1595.4	1602.9	1602.9	1602.9
7.5°	1580.4	1584.1	1591.7	1595.4	1595.4
10°	1569.1	1572.8	1580.4	1584.1	1587.9
12.5°	1550.3	1554.0	1565.3	1572.8	1572.8
15°	1531.5	1535.2	1546.5	1554.0	1557.8
17.5°	1508.9	1516.4	1527.7	1535.2	1539.0
20°	1478.8	1486.3	1501.4	1512.6	1516.4
22.5°	1452.4	1460.0	1475.0	1486.3	1493.8
25°	1422.3	1429.9	1452.4	1460.0	1467.5
27.5°	1384.7	1392.2	1411.0	1426.1	1437.4
30°	1347.1	1354.6	1377.2	1396.0	1403.5
32.5°	1305.7	1317.0	1343.3	1358.4	1369.7
35°	1260.5	1271.8	1298.2	1324.5	1335.8
37.5°	1215.4	1226.7	1253.0	1286.9	1301.9
40°	1162.7	1177.8	1211.6	1256.8	1264.3
42.5°	1113.8	1132.6	1162.7	1215.4	1234.2
45°	1057.3	1076.2	1117.5	1174.0	1204.1
47.5°	1004.7	1023.5	1068.6	1136.4	1174.0
50°	940.7	967.0	1023.5	1102.5	1140.1
52.5°	880.5	903.1	978.3	1064.9	1110.0
55°	816.5	842.9	933.2	1027.2	1076.2
57.5°	760.1	782.7	884.3	989.6	1046.1
60°	688.6	718.7	835.3	948.2	1004.7
62.5°	613.3	658.5	786.4	903.1	963.3
65°	541.8	594.5	741.3	857.9	918.1
67.5°	477.9	534.3	684.8	809.0	865.4
70°	402.6	474.1	628.4	748.8	812.8
72.5°	334.9	413.9	564.4	684.8	741.3
75°	267.2	353.7	500.5	602.0	635.9
77.5°	207.0	289.7	429.0	459.1	462.8
80°	154.3	229.5	319.8	323.6	334.9
82.5°	105.4	161.8	207.0	225.8	229.5
85°	67.7	94.1	116.6	120.4	127.9
87.5°	30.1	33.9	41.4	37.6	37.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)