

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: P390869

Luminaire Tested: **22CZ2-95VHE-RDP-UNV-L940-CD1-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: P390869
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: 22CZ2-95VHE-RDP-UNV-L940-CD1-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: 5521.2 lumens
Efficiency: N/A
Efficacy: 75.9 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

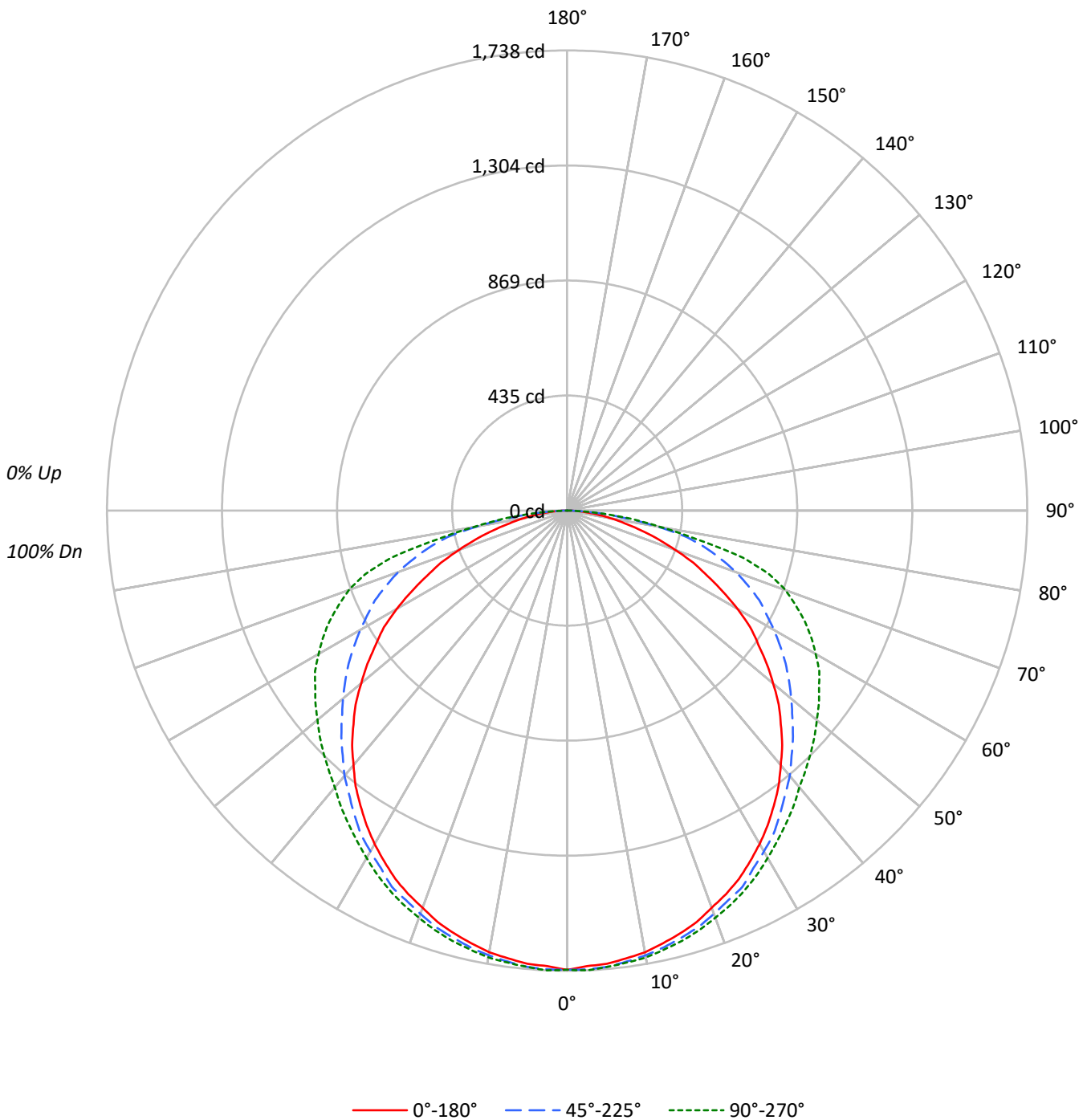
Input Watts (W): 72.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4667	4667	4667
5°	4641	4674	4674
10°	4628	4661	4683
15°	4605	4651	4685
20°	4571	4641	4687
25°	4559	4655	4703
30°	4518	4619	4708
35°	4470	4603	4737
40°	4409	4594	4794
45°	4343	4591	4946
50°	4251	4625	5152
55°	4135	4726	5450
60°	4000	4853	5836
65°	3724	5095	6310
70°	3419	5337	6903
75°	2999	5617	7137
80°	2580	5349	5602
85°	2257	3887	4264



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.1	3.0
10°-20°	471.0	8.5
20°-30°	718.6	13.0
30°-40°	877.5	15.9
40°-50°	938.2	17.0
50°-60°	905.6	16.4
60°-70°	779.6	14.1
70°-80°	527.4	9.6
80°-90°	139.2	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°	1353.7	24.5
0°-40°	2231.2	40.4
0°-60°	4075.0	73.8
0°-90°	5521.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5521.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1734	1734	1734	1734	1734	
5°	1718	1722	1730	1730	1730	163
15°	1653	1657	1669	1677	1682	466
25°	1535	1543	1568	1576	1584	707
35°	1361	1373	1401	1430	1442	851
45°	1141	1162	1206	1267	1300	881
55°	881	910	1007	1109	1162	790
65°	585	642	800	926	991	582
75°	288	382	540	650	686	309
85°	73	102	126	130	138	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1734.3	1734.3	1734.3	1734.3	1734.3
2.5°	1722.1	1726.2	1734.3	1734.3	1738.4
5°	1718.1	1722.1	1730.2	1730.2	1730.2
7.5°	1705.9	1709.9	1718.1	1722.1	1722.1
10°	1693.7	1697.8	1705.9	1709.9	1714.0
12.5°	1673.4	1677.4	1689.6	1697.8	1697.8
15°	1653.1	1657.1	1669.3	1677.4	1681.5
17.5°	1628.7	1636.8	1649.0	1657.1	1661.2
20°	1596.2	1604.3	1620.6	1632.8	1636.8
22.5°	1567.8	1575.9	1592.1	1604.3	1612.5
25°	1535.3	1543.4	1567.8	1575.9	1584.0
27.5°	1494.7	1502.8	1523.1	1539.3	1551.5
30°	1454.1	1462.2	1486.5	1506.9	1515.0
32.5°	1409.4	1421.6	1450.0	1466.2	1478.4
35°	1360.6	1372.8	1401.3	1429.7	1441.9
37.5°	1311.9	1324.1	1352.5	1389.1	1405.3
40°	1255.0	1271.3	1307.8	1356.6	1364.7
42.5°	1202.2	1222.5	1255.0	1311.9	1332.2
45°	1141.3	1161.6	1206.3	1267.2	1299.7
47.5°	1084.4	1104.8	1153.5	1226.6	1267.2
50°	1015.4	1043.8	1104.8	1190.1	1230.7
52.5°	950.4	974.8	1056.0	1149.4	1198.2
55°	881.4	909.8	1007.3	1108.8	1161.6
57.5°	820.4	844.8	954.5	1068.2	1129.1
60°	743.3	775.8	901.7	1023.5	1084.4
62.5°	662.0	710.8	848.9	974.8	1039.8
65°	584.9	641.7	800.1	926.0	991.0
67.5°	515.8	576.7	739.2	873.2	934.2
70°	434.6	511.8	678.3	808.3	877.3
72.5°	361.5	446.8	609.2	739.2	800.1
75°	288.4	381.8	540.2	649.9	686.4
77.5°	223.4	312.7	463.0	495.5	499.6
80°	166.5	247.8	345.2	349.3	361.5
82.5°	113.7	174.6	223.4	243.7	247.8
85°	73.1	101.5	125.9	130.0	138.1
87.5°	32.5	36.6	44.7	40.6	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)