

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: P388394

Luminaire Tested: **22CZ2-60VHE-UNV-L935-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: P388394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

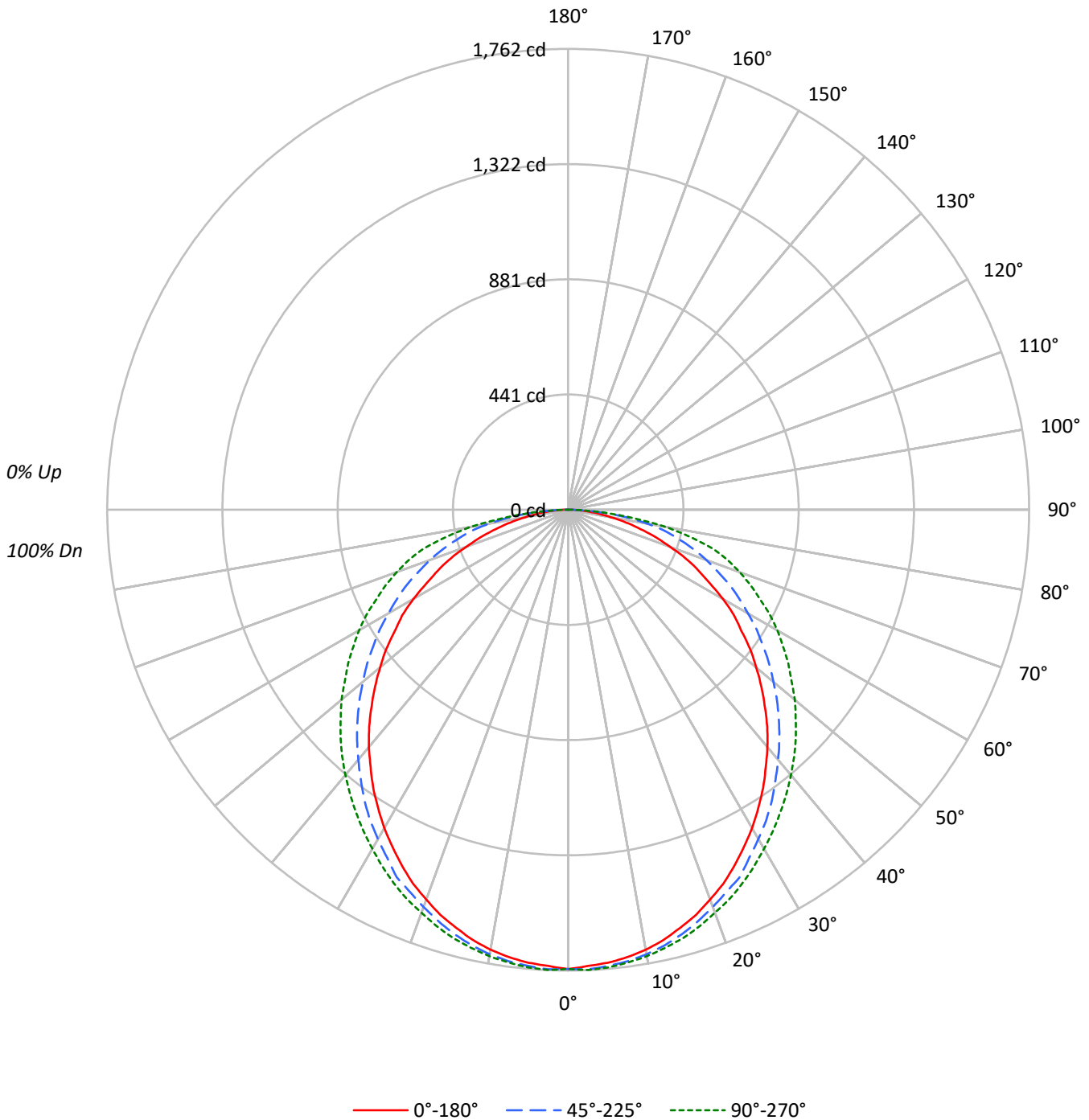
Lumens per Lamp: N/A
Luminaire Lumens: 5165.9 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 44.1
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	101	96	93	96	93	90		92	90	87		89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61		70	65	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34		46	39	34		45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31		42	35	30		41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28		39	32	27		38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4727	4727	4727
5°	4697	4731	4745
10°	4668	4716	4737
15°	4610	4681	4724
20°	4542	4630	4695
25°	4461	4604	4679
30°	4368	4518	4652
35°	4267	4459	4643
40°	4161	4384	4652
45°	4043	4334	4682
50°	3927	4289	4736
55°	3792	4269	4818
60°	3680	4268	4966
65°	3496	4337	5147
70°	3260	4420	5480
75°	2986	4573	5920
80°	2600	4767	5830
85°	2276	4239	4631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	3.2
10°-20°	473.1	9.2
20°-30°	710.3	13.7
30°-40°	848.7	16.4
40°-50°	882.6	17.1
50°-60°	818.0	15.8
60°-70°	671.0	13.0
70°-80°	453.6	8.8
80°-90°	142.5	2.8
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°	1349.6	26.1
0°-40°	2198.3	42.6
0°-60°	3898.9	75.5
0°-90°	5165.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5165.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1756	1756	1756	1756	1756	
5°	1739	1741	1751	1754	1756	165
15°	1655	1662	1680	1690	1696	467
25°	1502	1515	1551	1568	1576	692
35°	1299	1317	1357	1398	1413	812
45°	1062	1083	1139	1205	1230	821
55°	808	834	910	991	1027	726
65°	549	580	681	770	808	543
75°	287	336	440	529	569	305
85°	74	102	137	152	150	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1756.5	1756.5	1756.5	1756.5	1756.5
2.5°	1746.3	1751.4	1759.0	1761.6	1761.6
5°	1738.7	1741.2	1751.4	1754.0	1756.5
7.5°	1726.0	1731.1	1741.2	1743.8	1746.3
10°	1708.2	1713.3	1726.0	1731.1	1733.6
12.5°	1685.3	1690.4	1705.7	1713.3	1715.8
15°	1654.8	1662.4	1680.2	1690.4	1695.5
17.5°	1624.3	1631.9	1649.7	1665.0	1670.1
20°	1586.2	1604.0	1616.7	1637.0	1639.6
22.5°	1548.1	1558.2	1581.1	1601.4	1611.6
25°	1502.3	1515.0	1550.6	1568.4	1576.0
27.5°	1454.0	1471.8	1499.8	1527.7	1537.9
30°	1405.7	1418.4	1454.0	1487.1	1497.2
32.5°	1352.3	1370.1	1408.3	1441.3	1456.5
35°	1298.9	1316.7	1357.4	1398.1	1413.3
37.5°	1240.5	1260.8	1301.5	1349.8	1370.1
40°	1184.6	1199.8	1248.1	1306.6	1324.4
42.5°	1126.1	1143.9	1194.7	1258.3	1278.6
45°	1062.5	1082.9	1138.8	1204.9	1230.3
47.5°	1001.5	1021.9	1082.9	1149.0	1179.5
50°	938.0	963.4	1024.4	1100.7	1131.2
52.5°	877.0	899.9	968.5	1047.3	1075.3
55°	808.3	833.8	910.0	991.4	1027.0
57.5°	752.4	770.2	854.1	938.0	973.6
60°	683.8	706.7	793.1	882.1	922.7
62.5°	610.1	648.2	737.2	828.7	869.4
65°	549.1	579.6	681.2	770.2	808.3
67.5°	485.5	518.6	617.7	711.8	755.0
70°	414.3	457.6	561.8	655.8	696.5
72.5°	350.8	396.5	503.3	594.8	638.0
75°	287.2	335.5	439.8	528.7	569.4
77.5°	226.2	279.6	381.3	449.9	475.3
80°	167.8	218.6	307.6	355.9	376.2
82.5°	116.9	160.1	226.2	251.7	256.7
85°	73.7	101.7	137.3	152.5	150.0
87.5°	33.0	40.7	50.8	55.9	53.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)