

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: P390646

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L930-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: P390646
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: 22CZ2-75VHE-HRP-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5226.9 lumens
Efficiency: N/A
Efficacy: 95.6 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

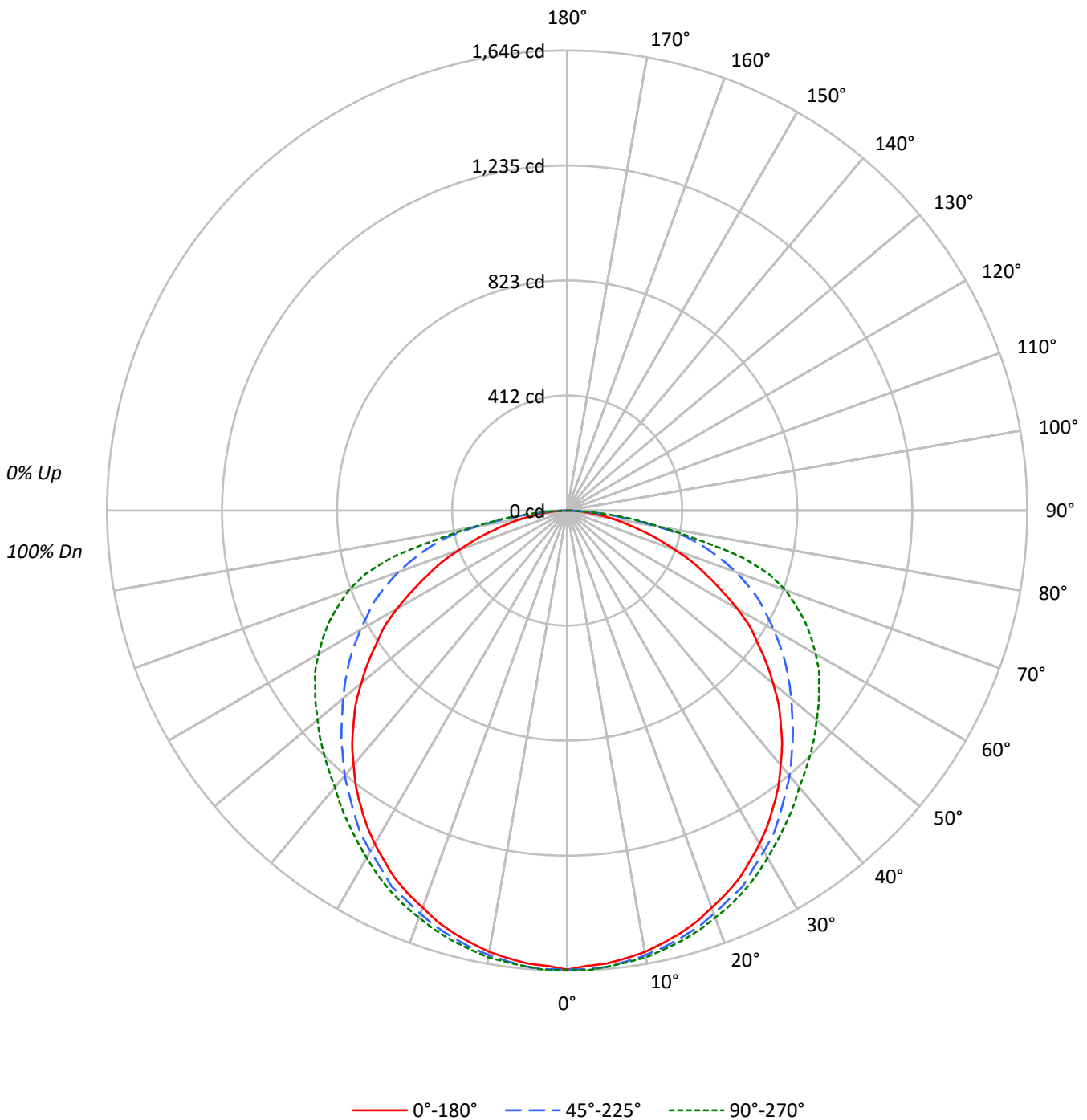
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4418	4418	4418
5°	4394	4425	4425
10°	4381	4413	4434
15°	4360	4403	4435
20°	4327	4393	4438
25°	4316	4407	4453
30°	4277	4373	4456
35°	4232	4358	4484
40°	4174	4349	4539
45°	4112	4346	4682
50°	4024	4379	4878
55°	3915	4474	5159
60°	3787	4594	5525
65°	3526	4823	5974
70°	3237	5052	6534
75°	2838	5317	6756
80°	2442	5064	5303
85°	2137	3680	4035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.3	3.0
10°-20°	445.9	8.5
20°-30°	680.3	13.0
30°-40°	830.7	15.9
40°-50°	888.2	17.0
50°-60°	857.3	16.4
60°-70°	738.0	14.1
70°-80°	499.3	9.6
80°-90°	131.8	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°	1281.6	24.5
0°-40°	2112.3	40.4
0°-60°	3857.8	73.8
0°-90°	5226.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5226.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1642	1642	1642	1642	1642	
5°	1626	1630	1638	1638	1638	154
15°	1565	1569	1580	1588	1592	442
25°	1454	1461	1484	1492	1500	669
35°	1288	1300	1327	1354	1365	806
45°	1080	1100	1142	1200	1230	834
55°	834	861	954	1050	1100	748
65°	554	608	758	877	938	551
75°	273	361	511	615	650	293
85°	69	96	119	123	131	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1641.9	1641.9	1641.9	1641.9	1641.9
2.5°	1630.3	1634.2	1641.9	1641.9	1645.7
5°	1626.5	1630.3	1638.0	1638.0	1638.0
7.5°	1614.9	1618.8	1626.5	1630.3	1630.3
10°	1603.4	1607.3	1614.9	1618.8	1622.6
12.5°	1584.2	1588.0	1599.6	1607.3	1607.3
15°	1565.0	1568.8	1580.3	1588.0	1591.9
17.5°	1541.9	1549.6	1561.1	1568.8	1572.6
20°	1511.1	1518.8	1534.2	1545.7	1549.6
22.5°	1484.2	1491.9	1507.3	1518.8	1526.5
25°	1453.5	1461.1	1484.2	1491.9	1499.6
27.5°	1415.0	1422.7	1441.9	1457.3	1468.8
30°	1376.5	1384.2	1407.3	1426.5	1434.2
32.5°	1334.3	1345.8	1372.7	1388.1	1399.6
35°	1288.1	1299.6	1326.6	1353.5	1365.0
37.5°	1242.0	1253.5	1280.4	1315.0	1330.4
40°	1188.1	1203.5	1238.1	1284.3	1292.0
42.5°	1138.2	1157.4	1188.1	1242.0	1261.2
45°	1080.5	1099.7	1142.0	1199.7	1230.4
47.5°	1026.6	1045.9	1092.0	1161.2	1199.7
50°	961.3	988.2	1045.9	1126.6	1165.1
52.5°	899.8	922.8	999.7	1088.2	1134.3
55°	834.4	861.3	953.6	1049.7	1099.7
57.5°	776.7	799.8	903.6	1011.3	1068.9
60°	703.7	734.4	853.6	969.0	1026.6
62.5°	626.8	672.9	803.6	922.8	984.3
65°	553.7	607.5	757.5	876.7	938.2
67.5°	488.3	546.0	699.8	826.7	884.4
70°	411.4	484.5	642.1	765.2	830.5
72.5°	342.2	423.0	576.8	699.8	757.5
75°	273.0	361.4	511.4	615.2	649.8
77.5°	211.5	296.1	438.3	469.1	472.9
80°	157.6	234.6	326.8	330.7	342.2
82.5°	107.7	165.3	211.5	230.7	234.6
85°	69.2	96.1	119.2	123.0	130.7
87.5°	30.8	34.6	42.3	38.5	38.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)