

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: P390606

Luminaire Tested: **22CZ2-70VHE-HRP-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: P390606
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: 22CZ2-70VHE-HRP-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5269.2 lumens
Efficiency: N/A
Efficacy: 104.8 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

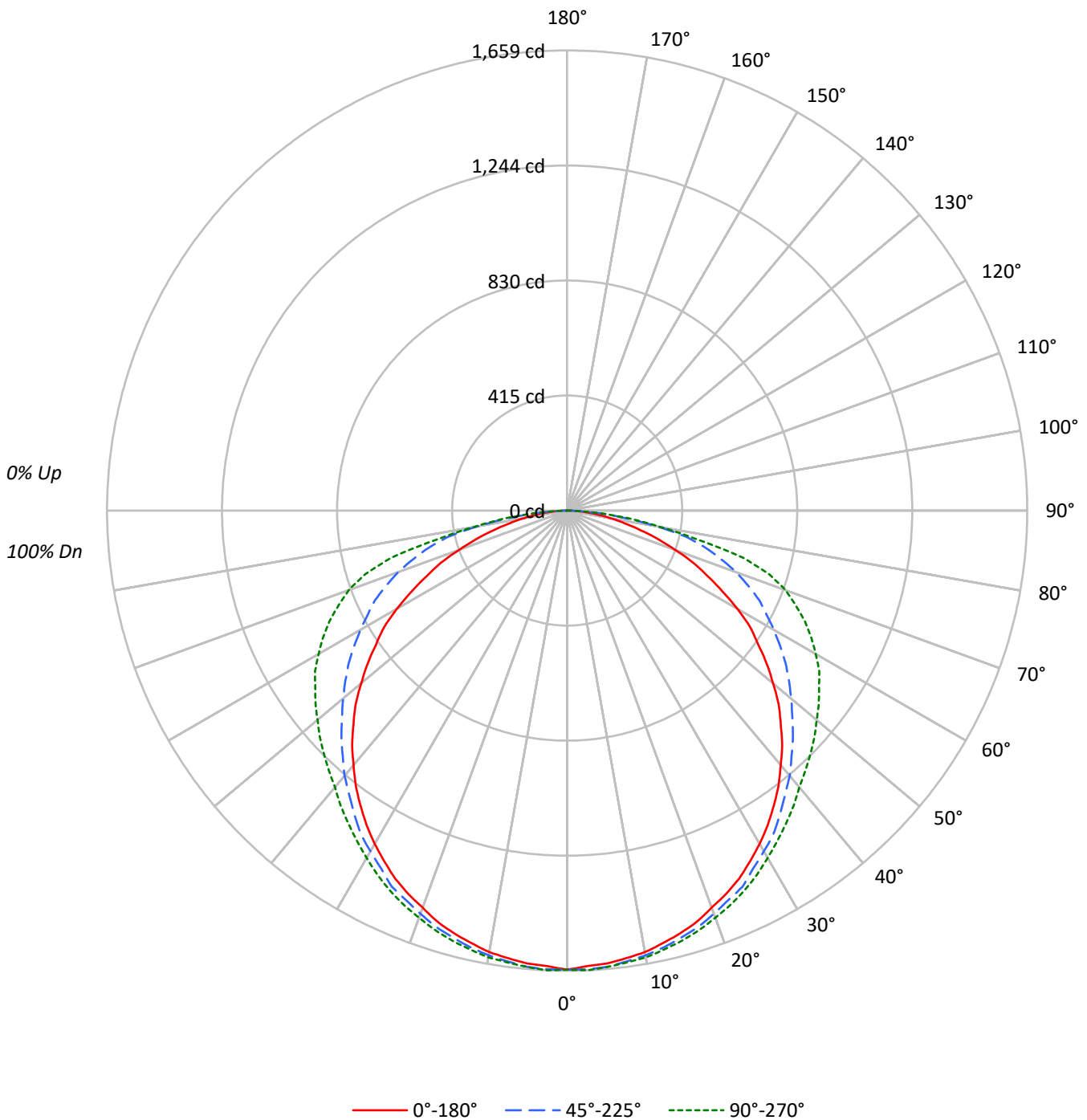
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4454	4454	4454
5°	4429	4461	4461
10°	4417	4448	4470
15°	4395	4438	4471
20°	4363	4429	4473
25°	4350	4442	4488
30°	4312	4408	4492
35°	4266	4393	4521
40°	4208	4384	4575
45°	4145	4381	4720
50°	4057	4414	4917
55°	3946	4510	5201
60°	3817	4631	5570
65°	3554	4862	6022
70°	3264	5093	6588
75°	2861	5360	6811
80°	2462	5106	5346
85°	2155	3711	4069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	3.0
10°-20°	449.5	8.5
20°-30°	685.8	13.0
30°-40°	837.4	15.9
40°-50°	895.4	17.0
50°-60°	864.3	16.4
60°-70°	744.0	14.1
70°-80°	503.4	9.6
80°-90°	132.8	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°	1291.9	24.5
0°-40°	2129.4	40.4
0°-60°	3889.0	73.8
0°-90°	5269.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5269.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1655	1655	1655	1655	1655	
5°	1640	1644	1651	1651	1651	156
15°	1578	1582	1593	1601	1605	445
25°	1465	1473	1496	1504	1512	674
35°	1298	1310	1337	1364	1376	813
45°	1089	1109	1151	1209	1240	841
55°	841	868	961	1058	1109	754
65°	558	612	764	884	946	555
75°	275	364	516	620	655	295
85°	70	97	120	124	132	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1655.1	1655.1	1655.1	1655.1	1655.1
2.5°	1643.5	1647.4	1655.1	1655.1	1659.0
5°	1639.6	1643.5	1651.3	1651.3	1651.3
7.5°	1628.0	1631.9	1639.6	1643.5	1643.5
10°	1616.4	1620.3	1628.0	1631.9	1635.8
12.5°	1597.0	1600.9	1612.5	1620.3	1620.3
15°	1577.6	1581.5	1593.1	1600.9	1604.8
17.5°	1554.4	1562.1	1573.7	1581.5	1585.4
20°	1523.4	1531.1	1546.6	1558.2	1562.1
22.5°	1496.2	1504.0	1519.5	1531.1	1538.9
25°	1465.2	1473.0	1496.2	1504.0	1511.7
27.5°	1426.5	1434.2	1453.6	1469.1	1480.7
30°	1387.7	1395.4	1418.7	1438.1	1445.8
32.5°	1345.0	1356.7	1383.8	1399.3	1410.9
35°	1298.5	1310.2	1337.3	1364.4	1376.1
37.5°	1252.0	1263.6	1290.8	1325.7	1341.2
40°	1197.8	1213.3	1248.1	1294.7	1302.4
42.5°	1147.4	1166.7	1197.8	1252.0	1271.4
45°	1089.2	1108.6	1151.2	1209.4	1240.4
47.5°	1035.0	1054.3	1100.8	1170.6	1209.4
50°	969.1	996.2	1054.3	1135.7	1174.5
52.5°	907.0	930.3	1007.8	1097.0	1143.5
55°	841.1	868.3	961.3	1058.2	1108.6
57.5°	783.0	806.3	910.9	1019.4	1077.6
60°	709.3	740.4	860.5	976.8	1035.0
62.5°	631.8	678.3	810.1	930.3	992.3
65°	558.2	612.4	763.6	883.8	945.8
67.5°	492.3	550.4	705.5	833.4	891.5
70°	414.8	488.4	647.3	771.4	837.3
72.5°	345.0	426.4	581.4	705.5	763.6
75°	275.2	364.4	515.5	620.2	655.1
77.5°	213.2	298.5	441.9	472.9	476.8
80°	158.9	236.4	329.5	333.4	345.0
82.5°	108.5	166.7	213.2	232.6	236.4
85°	69.8	96.9	120.2	124.0	131.8
87.5°	31.0	34.9	42.6	38.8	38.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)