

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: P389309

Luminaire Tested: **22CZ2-55VHE-S-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: P389309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-S-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4963.5 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

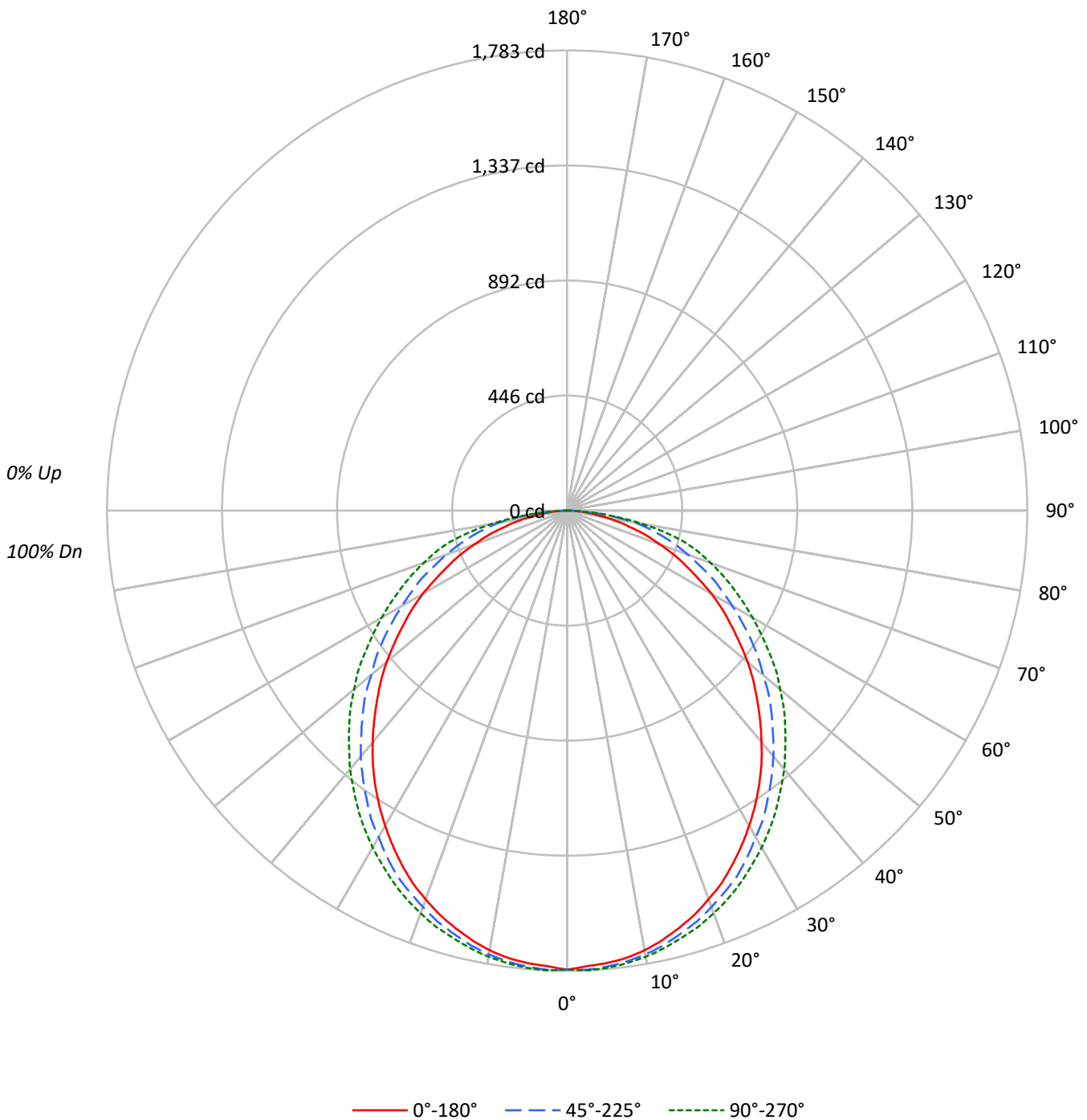
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4786	4786	4786
5°	4754	4792	4804
10°	4727	4771	4797
15°	4665	4729	4774
20°	4589	4682	4755
25°	4497	4635	4724
30°	4383	4541	4685
35°	4260	4458	4641
40°	4116	4369	4597
45°	3966	4266	4548
50°	3820	4150	4508
55°	3640	4074	4476
60°	3477	3976	4462
65°	3244	3952	4513
70°	2988	3917	4646
75°	2697	3973	4888
80°	2332	4091	4593
85°	1930	3433	3433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.2	3.4
10°-20°	478.7	9.6
20°-30°	716.2	14.4
30°-40°	848.2	17.1
40°-50°	864.4	17.4
50°-60°	774.7	15.6
60°-70°	606.5	12.2
70°-80°	391.1	7.9
80°-90°	115.6	2.3
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°	1363.0	27.5
0°-40°	2211.2	44.5
0°-60°	3850.3	77.6
0°-90°	4963.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4963.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1760	1765	1774	1776	1779	167
15°	1674	1684	1698	1711	1714	472
25°	1515	1528	1561	1582	1591	697
35°	1297	1313	1357	1399	1413	811
45°	1042	1065	1121	1179	1195	805
55°	776	801	868	929	954	696
65°	510	540	621	681	709	506
75°	259	299	382	447	470	278
85°	62	86	111	111	111	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1778.6	1778.6	1778.6	1778.6	1778.6
2.5°	1767.0	1771.6	1780.9	1783.2	1783.2
5°	1760.0	1764.7	1773.9	1776.3	1778.6
7.5°	1748.5	1750.8	1762.4	1767.0	1769.3
10°	1729.9	1734.6	1746.2	1753.1	1755.4
12.5°	1704.5	1711.4	1725.3	1734.6	1736.9
15°	1674.4	1683.6	1697.5	1711.4	1713.7
17.5°	1641.9	1651.2	1669.7	1685.9	1690.6
20°	1602.6	1614.2	1635.0	1653.5	1660.5
22.5°	1563.2	1572.5	1597.9	1621.1	1628.0
25°	1514.6	1528.5	1560.9	1581.7	1591.0
27.5°	1463.6	1479.8	1512.3	1540.0	1549.3
30°	1410.4	1426.6	1461.3	1496.0	1507.6
32.5°	1354.8	1373.3	1415.0	1449.7	1461.3
35°	1296.9	1313.1	1357.1	1398.8	1412.7
37.5°	1236.7	1250.6	1301.5	1345.5	1359.4
40°	1171.8	1190.3	1243.6	1294.6	1308.5
42.5°	1107.0	1127.8	1181.1	1236.7	1250.6
45°	1042.1	1065.3	1120.9	1178.8	1195.0
47.5°	979.6	998.1	1060.7	1116.2	1139.4
50°	912.4	931.0	991.2	1053.7	1076.9
52.5°	843.0	868.4	933.3	993.5	1021.3
55°	775.8	801.3	868.4	928.7	954.1
57.5°	713.3	734.1	803.6	866.1	891.6
60°	646.1	664.7	738.8	805.9	829.1
62.5°	574.3	602.1	678.5	741.1	768.9
65°	509.5	539.6	620.6	680.9	708.7
67.5°	449.3	477.1	555.8	620.6	650.8
70°	379.8	416.9	497.9	562.8	590.5
72.5°	324.2	356.6	440.0	504.9	535.0
75°	259.4	298.7	382.1	447.0	470.1
77.5°	206.1	245.5	324.2	375.2	386.7
80°	150.5	189.9	264.0	289.5	296.4
82.5°	101.9	139.0	189.9	196.8	199.2
85°	62.5	85.7	111.2	111.2	111.2
87.5°	30.1	34.7	39.4	37.1	37.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)