

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: P390649

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L935-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: P390649
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5356.1 lumens
Efficiency: N/A
Efficacy: 97.9 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

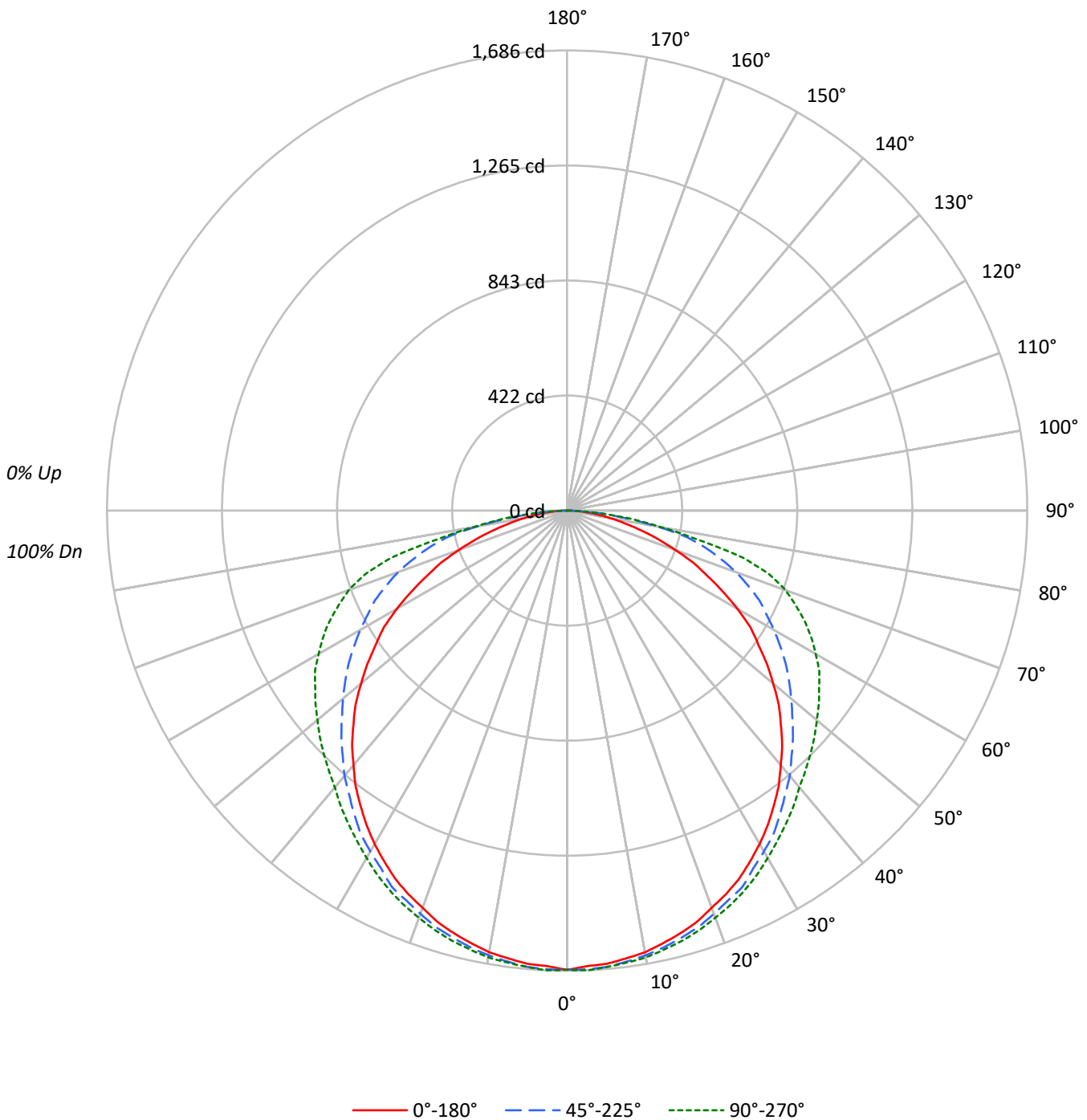
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4527	4527	4527
5°	4502	4534	4534
10°	4489	4522	4543
15°	4467	4511	4544
20°	4434	4502	4547
25°	4422	4516	4563
30°	4383	4481	4567
35°	4336	4466	4595
40°	4277	4457	4651
45°	4214	4453	4798
50°	4124	4487	4998
55°	4011	4585	5287
60°	3880	4708	5662
65°	3613	4942	6122
70°	3317	5177	6696
75°	2909	5448	6923
80°	2503	5190	5435
85°	2189	3770	4137



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.1	3.0
10°-20°	456.9	8.5
20°-30°	697.2	13.0
30°-40°	851.2	15.9
40°-50°	910.2	17.0
50°-60°	878.5	16.4
60°-70°	756.2	14.1
70°-80°	511.7	9.6
80°-90°	135.0	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°	1313.3	24.5
0°-40°	2164.5	40.4
0°-60°	3953.2	73.8
0°-90°	5356.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5356.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1667	1671	1678	1678	1678	158
15°	1604	1608	1619	1627	1631	452
25°	1489	1497	1521	1529	1537	685
35°	1320	1332	1359	1387	1399	826
45°	1107	1127	1170	1229	1261	855
55°	855	883	977	1076	1127	766
65°	567	622	776	898	961	564
75°	280	370	524	630	666	300
85°	71	98	122	126	134	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.4	1682.4	1682.4	1682.4	1682.4
2.5°	1670.6	1674.6	1682.4	1682.4	1686.4
5°	1666.7	1670.6	1678.5	1678.5	1678.5
7.5°	1654.9	1658.8	1666.7	1670.6	1670.6
10°	1643.0	1647.0	1654.9	1658.8	1662.7
12.5°	1623.3	1627.3	1639.1	1647.0	1647.0
15°	1603.6	1607.6	1619.4	1627.3	1631.2
17.5°	1580.0	1587.9	1599.7	1607.6	1611.5
20°	1548.5	1556.4	1572.1	1583.9	1587.9
22.5°	1520.9	1528.8	1544.5	1556.4	1564.2
25°	1489.4	1497.3	1520.9	1528.8	1536.7
27.5°	1450.0	1457.9	1477.6	1493.3	1505.1
30°	1410.6	1418.5	1442.1	1461.8	1469.7
32.5°	1367.2	1379.1	1406.6	1422.4	1434.2
35°	1320.0	1331.8	1359.4	1386.9	1398.8
37.5°	1272.7	1284.5	1312.1	1347.5	1363.3
40°	1217.5	1233.3	1268.7	1316.0	1323.9
42.5°	1166.3	1186.0	1217.5	1272.7	1292.4
45°	1107.2	1126.9	1170.2	1229.3	1260.8
47.5°	1052.0	1071.7	1119.0	1189.9	1229.3
50°	985.0	1012.6	1071.7	1154.5	1193.9
52.5°	922.0	945.6	1024.4	1115.1	1162.3
55°	855.0	882.6	977.2	1075.7	1126.9
57.5°	795.9	819.6	925.9	1036.3	1095.4
60°	721.0	752.6	874.7	992.9	1052.0
62.5°	642.2	689.5	823.5	945.6	1008.7
65°	567.4	622.5	776.2	898.4	961.4
67.5°	500.4	559.5	717.1	847.1	906.2
70°	421.6	496.5	658.0	784.1	851.1
72.5°	350.7	433.4	591.0	717.1	776.2
75°	279.8	370.4	524.0	630.4	665.9
77.5°	216.7	303.4	449.2	480.7	484.6
80°	161.5	240.3	334.9	338.9	350.7
82.5°	110.3	169.4	216.7	236.4	240.3
85°	70.9	98.5	122.1	126.1	134.0
87.5°	31.5	35.5	43.3	39.4	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)