

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: P390817

Luminaire Tested: **22CZ2-90VHE-RDP-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: P390817
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: 22CZ2-90VHE-RDP-UNV-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5124.5 lumens
Efficiency: N/A
Efficacy: 75.1 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

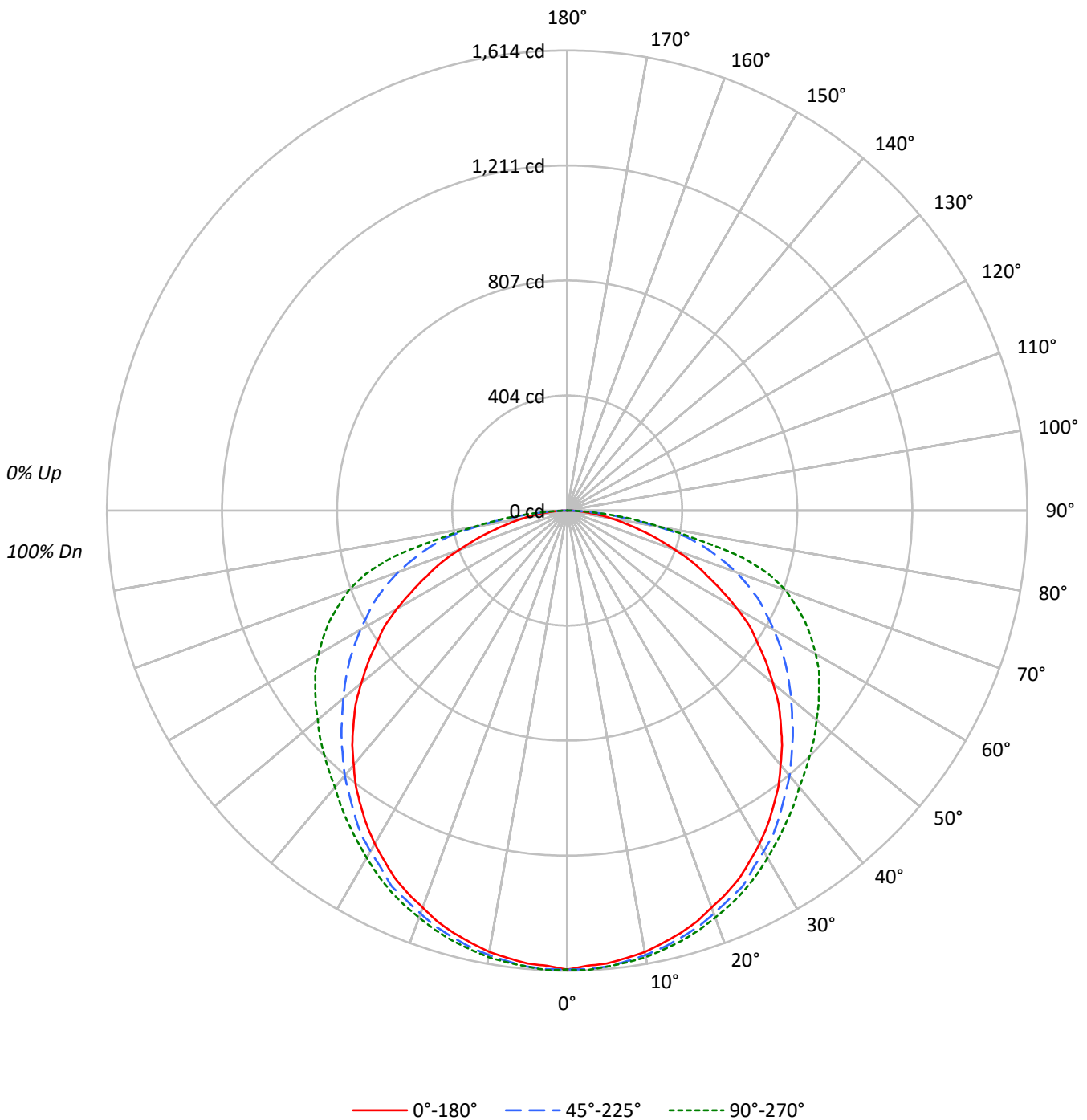
Input Watts (W): 68.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4332	4332	4332
5°	4307	4338	4338
10°	4295	4326	4347
15°	4274	4316	4348
20°	4243	4307	4351
25°	4231	4320	4365
30°	4194	4287	4369
35°	4149	4273	4396
40°	4092	4264	4449
45°	4031	4261	4591
50°	3945	4293	4782
55°	3838	4386	5058
60°	3713	4504	5417
65°	3456	4728	5857
70°	3174	4954	6407
75°	2783	5213	6624
80°	2396	4965	5199
85°	2096	3609	3958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	3.0
10°-20°	437.2	8.5
20°-30°	667.0	13.0
30°-40°	814.4	15.9
40°-50°	870.8	17.0
50°-60°	840.5	16.4
60°-70°	723.5	14.1
70°-80°	489.6	9.6
80°-90°	129.2	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°	1256.5	24.5
0°-40°	2070.9	40.4
0°-60°	3782.2	73.8
0°-90°	5124.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5124.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1610	1610	1610	1610	1610	
5°	1595	1598	1606	1606	1606	151
15°	1534	1538	1549	1557	1561	433
25°	1425	1432	1455	1463	1470	656
35°	1263	1274	1301	1327	1338	790
45°	1059	1078	1120	1176	1206	818
55°	818	844	935	1029	1078	733
65°	543	596	743	860	920	540
75°	268	354	501	603	637	287
85°	68	94	117	121	128	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1609.7	1609.7	1609.7	1609.7	1609.7
2.5°	1598.4	1602.2	1609.7	1609.7	1613.5
5°	1594.6	1598.4	1605.9	1605.9	1605.9
7.5°	1583.3	1587.1	1594.6	1598.4	1598.4
10°	1572.0	1575.8	1583.3	1587.1	1590.8
12.5°	1553.1	1556.9	1568.2	1575.8	1575.8
15°	1534.3	1538.1	1549.4	1556.9	1560.7
17.5°	1511.7	1519.2	1530.5	1538.1	1541.8
20°	1481.5	1489.1	1504.1	1515.5	1519.2
22.5°	1455.1	1462.7	1477.8	1489.1	1496.6
25°	1425.0	1432.5	1455.1	1462.7	1470.2
27.5°	1387.3	1394.8	1413.7	1428.7	1440.1
30°	1349.6	1357.1	1379.7	1398.6	1406.1
32.5°	1308.1	1319.4	1345.8	1360.9	1372.2
35°	1262.9	1274.2	1300.6	1327.0	1338.3
37.5°	1217.6	1228.9	1255.3	1289.3	1304.3
40°	1164.9	1179.9	1213.9	1259.1	1266.6
42.5°	1115.9	1134.7	1164.9	1217.6	1236.5
45°	1059.3	1078.2	1119.6	1176.2	1206.3
47.5°	1006.5	1025.4	1070.6	1138.5	1176.2
50°	942.4	968.8	1025.4	1104.5	1142.2
52.5°	882.1	904.7	980.1	1066.8	1112.1
55°	818.0	844.4	934.9	1029.1	1078.2
57.5°	761.5	784.1	885.9	991.5	1048.0
60°	689.9	720.0	836.9	950.0	1006.5
62.5°	614.5	659.7	787.9	904.7	965.1
65°	542.8	595.6	742.6	859.5	919.8
67.5°	478.8	535.3	686.1	810.5	867.0
70°	403.4	475.0	629.6	750.2	814.3
72.5°	335.5	414.7	565.5	686.1	742.6
75°	267.7	354.4	501.4	603.2	637.1
77.5°	207.3	290.3	429.8	459.9	463.7
80°	154.6	230.0	320.4	324.2	335.5
82.5°	105.6	162.1	207.3	226.2	230.0
85°	67.9	94.2	116.9	120.6	128.2
87.5°	30.2	33.9	41.5	37.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)