

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: P390868

Luminaire Tested: **22CZ2-95VHE-RDP-UNV-L940-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: P390868  
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: 22CZ2-95VHE-RDP-UNV-L940-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5452.7 lumens  
Efficiency: N/A  
Efficacy: 75.0 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

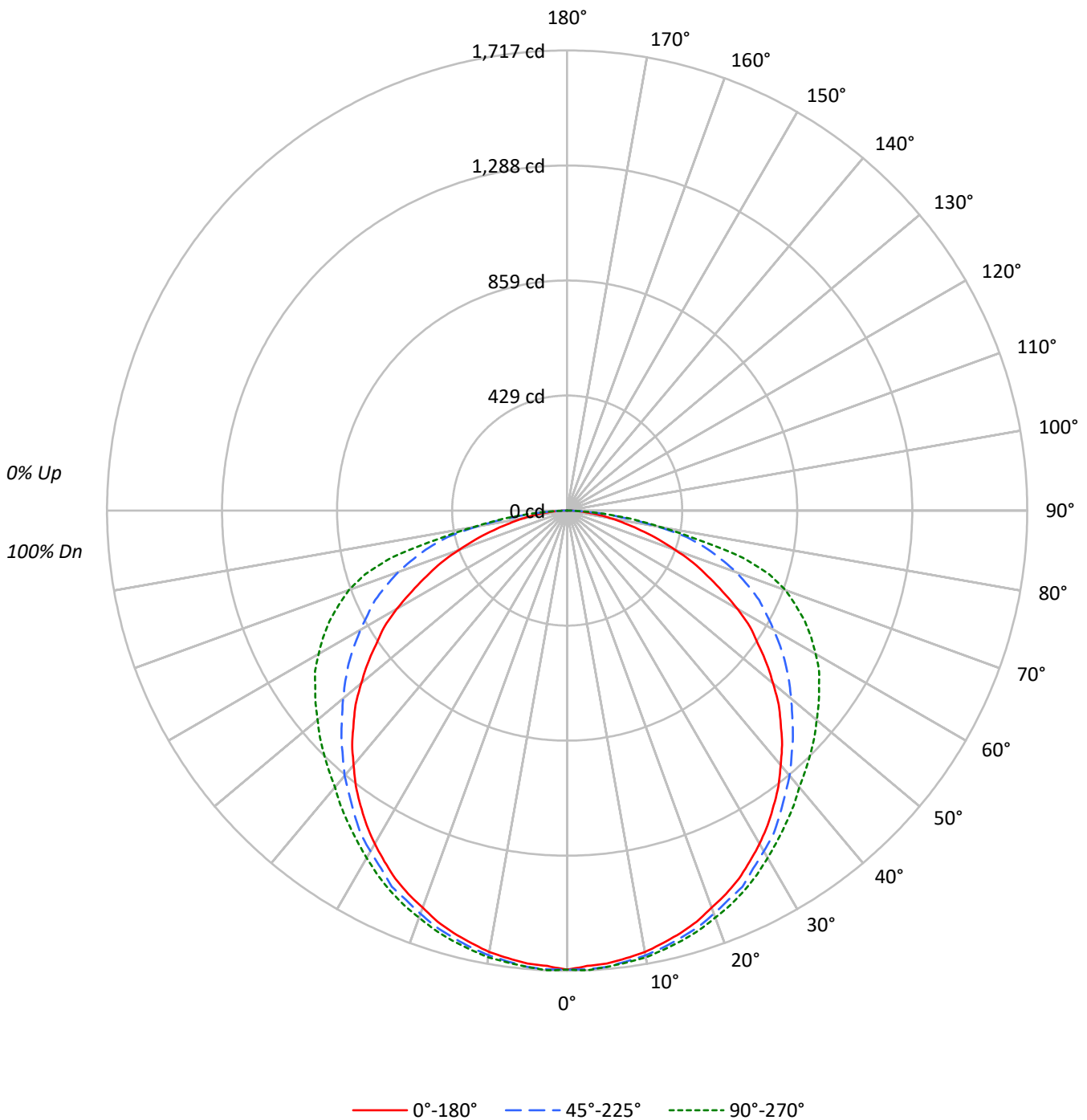
Input Watts (W): 72.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82					82			
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67					67			
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55					55			
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35					35			
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31					31			
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27					27			
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4609	4609	4609
5°	4583	4616	4616
10°	4571	4603	4625
15°	4548	4593	4626
20°	4514	4583	4629
25°	4502	4597	4645
30°	4462	4562	4649
35°	4414	4546	4678
40°	4354	4537	4735
45°	4290	4534	4885
50°	4198	4567	5088
55°	4084	4667	5382
60°	3951	4793	5764
65°	3678	5032	6232
70°	3377	5271	6817
75°	2961	5547	7048
80°	2549	5284	5532
85°	2229	3838	4211



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.0	3.0
10°-20°	465.2	8.5
20°-30°	709.7	13.0
30°-40°	866.6	15.9
40°-50°	926.6	17.0
50°-60°	894.4	16.4
60°-70°	769.9	14.1
70°-80°	520.9	9.6
80°-90°	137.5	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°	1336.9	24.5
0°-40°	2203.5	40.4
0°-60°	4024.5	73.8
0°-90°	5452.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5452.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1713	1713	1713	1713	1713	
5°	1697	1701	1709	1709	1709	161
15°	1633	1637	1649	1657	1661	461
25°	1516	1524	1548	1556	1564	698
35°	1344	1356	1384	1412	1424	841
45°	1127	1147	1191	1252	1284	870
55°	870	898	995	1095	1147	780
65°	578	634	790	915	979	574
75°	285	377	534	642	678	306
85°	72	100	124	128	136	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1712.8	1712.8	1712.8	1712.8	1712.8
2.5°	1700.8	1704.8	1712.8	1712.8	1716.8
5°	1696.7	1700.8	1708.8	1708.8	1708.8
7.5°	1684.7	1688.7	1696.7	1700.8	1700.8
10°	1672.7	1676.7	1684.7	1688.7	1692.7
12.5°	1652.6	1656.6	1668.7	1676.7	1676.7
15°	1632.6	1636.6	1648.6	1656.6	1660.6
17.5°	1608.5	1616.5	1628.6	1636.6	1640.6
20°	1576.4	1584.4	1600.5	1612.5	1616.5
22.5°	1548.3	1556.4	1572.4	1584.4	1592.5
25°	1516.2	1524.3	1548.3	1556.4	1564.4
27.5°	1476.1	1484.1	1504.2	1520.2	1532.3
30°	1436.0	1444.0	1468.1	1488.2	1496.2
32.5°	1391.9	1403.9	1432.0	1448.0	1460.1
35°	1343.8	1355.8	1383.9	1411.9	1424.0
37.5°	1295.6	1307.7	1335.7	1371.8	1387.9
40°	1239.5	1255.5	1291.6	1339.7	1347.8
42.5°	1187.3	1207.4	1239.5	1295.6	1315.7
45°	1127.2	1147.2	1191.3	1251.5	1283.6
47.5°	1071.0	1091.0	1139.2	1211.4	1251.5
50°	1002.8	1030.9	1091.0	1175.3	1215.4
52.5°	938.6	962.7	1042.9	1135.2	1183.3
55°	870.4	898.5	994.8	1095.1	1147.2
57.5°	810.3	834.3	942.6	1054.9	1115.1
60°	734.1	766.1	890.5	1010.8	1071.0
62.5°	653.8	702.0	838.3	962.7	1026.9
65°	577.6	633.8	790.2	914.6	978.7
67.5°	509.4	569.6	730.0	862.4	922.6
70°	429.2	505.4	669.9	798.2	866.4
72.5°	357.0	441.2	601.7	730.0	790.2
75°	284.8	377.1	533.5	641.8	677.9
77.5°	220.6	308.9	457.3	489.4	493.4
80°	164.5	244.7	341.0	345.0	357.0
82.5°	112.3	172.5	220.6	240.7	244.7
85°	72.2	100.3	124.3	128.4	136.4
87.5°	32.1	36.1	44.1	40.1	40.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)