

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: P391871

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L930-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: P391871  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-95VHE-RDP-UNV-L930-CD1-U  
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5283.3 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

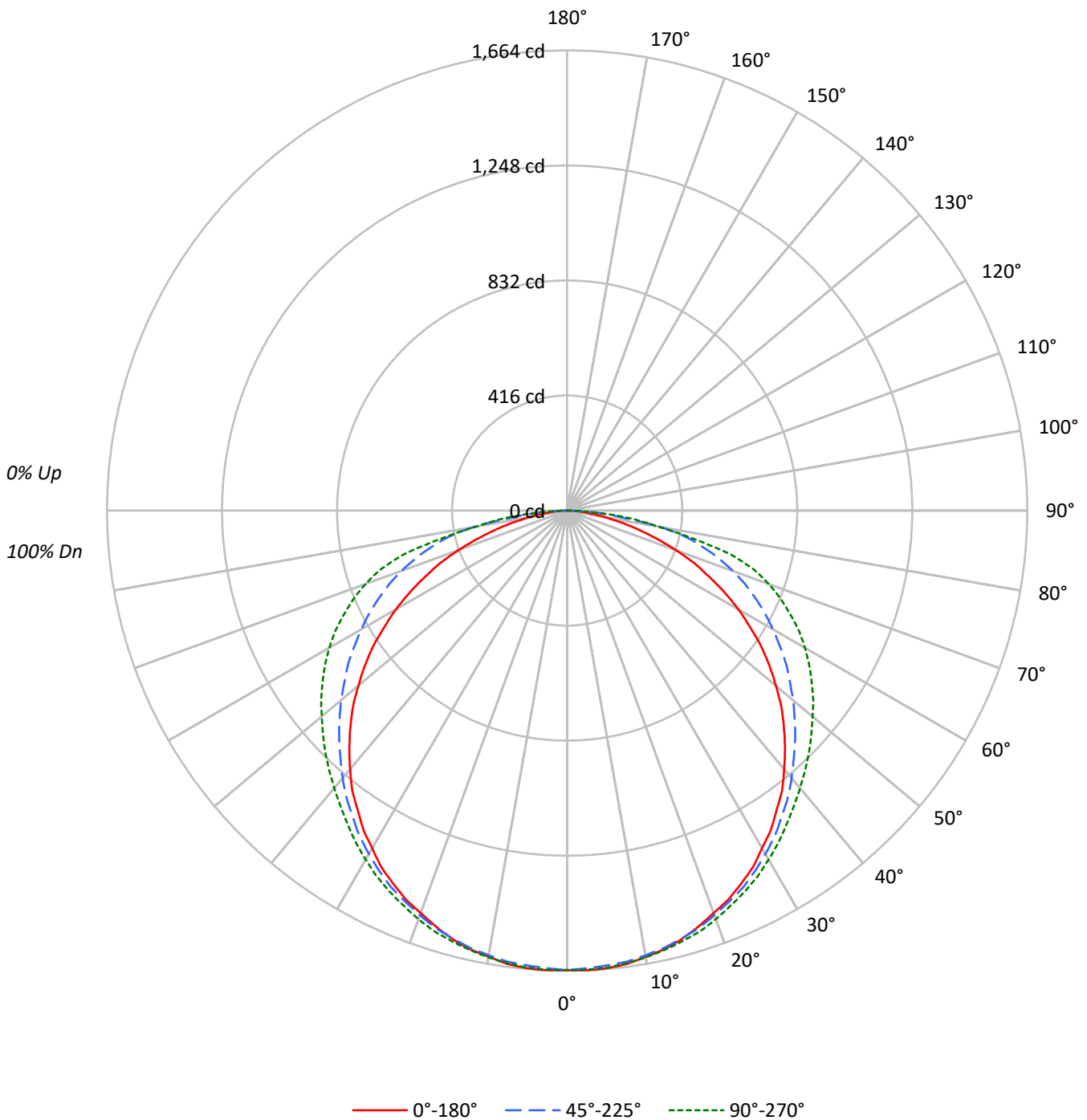
Input Watts (W): 65.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	2235	2235	2235
5°	2244	2230	2240
10°	2238	2231	2241
15°	2234	2230	2245
20°	2218	2229	2251
25°	2210	2233	2256
30°	2190	2227	2264
35°	2169	2221	2273
40°	2145	2219	2301
45°	2109	2219	2354
50°	2062	2233	2425
55°	2010	2268	2533
60°	1925	2313	2673
65°	1802	2394	2837
70°	1639	2505	3052
75°	1390	2643	3188
80°	1096	2660	2579
85°	809	2022	2266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.6	3.0
10°-20°	453.6	8.6
20°-30°	693.6	13.1
30°-40°	847.9	16.0
40°-50°	903.7	17.1
50°-60°	864.1	16.4
60°-70°	732.0	13.9
70°-80°	492.0	9.3
80°-90°	138.8	2.6
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°	1304.8	24.7
0°-40°	2152.7	40.7
0°-60°	3920.6	74.2
0°-90°	5283.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5283.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1661	1661	1661	1661	1661	
5°	1661	1659	1651	1659	1659	158
15°	1604	1604	1601	1614	1612	452
25°	1488	1494	1504	1517	1520	686
35°	1321	1331	1352	1378	1384	827
45°	1108	1127	1166	1216	1237	855
55°	857	888	967	1043	1080	763
65°	566	624	752	852	891	562
75°	267	364	508	595	613	286
85°	52	107	131	142	147	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1661.4	1661.4	1661.4	1661.4	1661.4
2.5°	1664.1	1664.1	1656.2	1661.4	1661.4
5°	1661.4	1658.8	1651.0	1658.8	1658.8
7.5°	1653.6	1651.0	1645.7	1653.6	1651.0
10°	1637.9	1637.9	1632.6	1640.5	1640.5
12.5°	1624.8	1622.1	1619.5	1630.0	1627.4
15°	1603.8	1603.8	1601.2	1614.3	1611.7
17.5°	1577.6	1580.2	1582.8	1593.3	1595.9
20°	1548.8	1554.0	1556.6	1572.3	1572.3
22.5°	1522.6	1525.2	1530.4	1546.1	1546.1
25°	1488.5	1493.7	1504.2	1517.3	1519.9
27.5°	1454.4	1457.0	1470.1	1488.5	1491.1
30°	1409.9	1417.7	1433.5	1454.4	1457.0
32.5°	1370.6	1378.4	1396.8	1417.7	1423.0
35°	1320.8	1331.3	1352.2	1378.4	1383.7
37.5°	1276.2	1284.1	1310.3	1339.1	1347.0
40°	1221.2	1236.9	1263.1	1297.2	1310.3
42.5°	1166.2	1181.9	1213.3	1257.9	1273.6
45°	1108.5	1126.8	1166.2	1215.9	1236.9
47.5°	1050.9	1071.8	1116.4	1174.0	1197.6
50°	985.3	1011.5	1066.6	1132.1	1158.3
52.5°	922.4	953.9	1014.2	1087.5	1121.6
55°	856.9	888.4	967.0	1043.0	1079.7
57.5°	783.6	825.5	912.0	998.4	1037.7
60°	715.4	754.7	859.5	953.9	993.2
62.5°	642.0	694.5	807.1	906.7	946.0
65°	566.0	623.7	752.1	851.7	891.0
67.5°	497.9	560.8	697.1	796.7	836.0
70°	416.7	495.3	636.8	736.4	775.7
72.5°	340.7	427.2	573.9	670.9	707.6
75°	267.3	364.3	508.4	594.9	613.2
77.5°	199.2	301.4	440.3	476.9	463.8
80°	141.5	241.1	343.3	325.0	332.8
82.5°	91.7	183.4	212.3	241.1	249.0
85°	52.4	107.4	131.0	141.5	146.8
87.5°	23.6	39.3	52.4	52.4	49.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)