

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: P391870

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L930-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: P391870  
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-SWPD1-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: 5217.8 lumens  
Efficiency: N/A  
Efficacy: 79.5 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

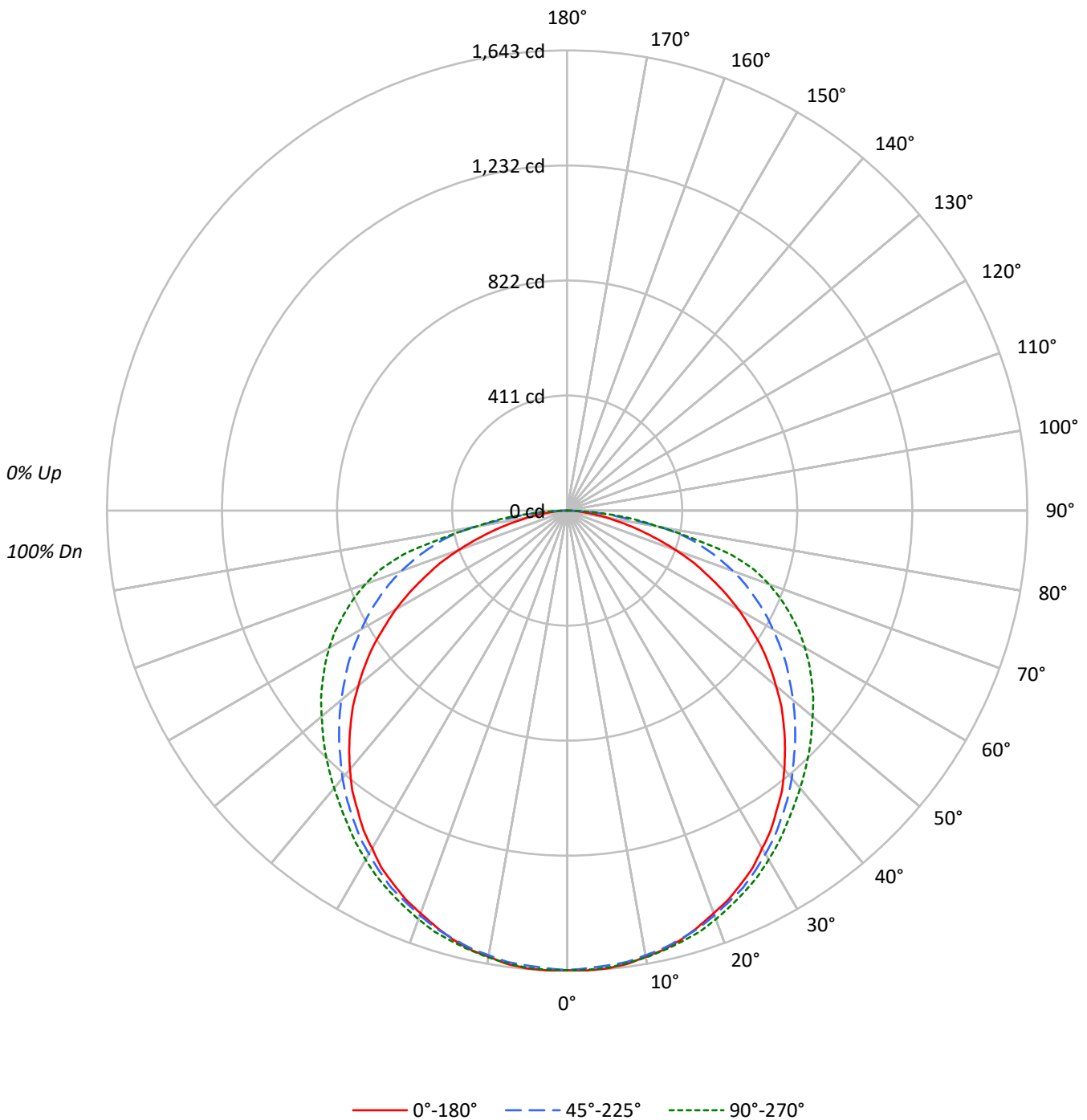
Input Watts (W): 65.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2208	2208	2208
5°	2216	2202	2213
10°	2210	2203	2213
15°	2206	2203	2217
20°	2190	2201	2224
25°	2182	2205	2229
30°	2163	2199	2236
35°	2143	2194	2245
40°	2118	2191	2273
45°	2083	2191	2324
50°	2037	2205	2394
55°	1985	2240	2501
60°	1901	2284	2640
65°	1780	2365	2802
70°	1619	2474	3014
75°	1372	2610	3148
80°	1083	2627	2547
85°	800	1998	2237



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.6	3.0
10°-20°	448.0	8.6
20°-30°	685.0	13.1
30°-40°	837.4	16.0
40°-50°	892.5	17.1
50°-60°	853.4	16.4
60°-70°	722.9	13.9
70°-80°	485.9	9.3
80°-90°	137.1	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°	1288.6	24.7
0°-40°	2126.1	40.7
0°-60°	3872.0	74.2
0°-90°	5217.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5217.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1641	1641	1641	1641	1641	
5°	1641	1638	1630	1638	1638	156
15°	1584	1584	1581	1594	1592	447
25°	1470	1475	1486	1498	1501	678
35°	1304	1315	1336	1361	1366	817
45°	1095	1113	1152	1201	1222	844
55°	846	877	955	1030	1066	754
65°	559	616	743	841	880	555
75°	264	360	502	588	606	283
85°	52	106	129	140	145	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1640.8	1640.8	1640.8	1640.8	1640.8
2.5°	1643.4	1643.4	1635.7	1640.8	1640.8
5°	1640.8	1638.3	1630.5	1638.3	1638.3
7.5°	1633.1	1630.5	1625.3	1633.1	1630.5
10°	1617.6	1617.6	1612.4	1620.1	1620.1
12.5°	1604.6	1602.0	1599.4	1609.8	1607.2
15°	1583.9	1583.9	1581.3	1594.3	1591.7
17.5°	1558.0	1560.6	1563.2	1573.6	1576.1
20°	1529.6	1534.7	1537.3	1552.9	1552.9
22.5°	1503.7	1506.3	1511.4	1527.0	1527.0
25°	1470.0	1475.2	1485.6	1498.5	1501.1
27.5°	1436.4	1439.0	1451.9	1470.0	1472.6
30°	1392.4	1400.2	1415.7	1436.4	1439.0
32.5°	1353.6	1361.3	1379.5	1400.2	1405.3
35°	1304.4	1314.7	1335.5	1361.3	1366.5
37.5°	1260.4	1268.2	1294.0	1322.5	1330.3
40°	1206.0	1221.6	1247.5	1281.1	1294.0
42.5°	1151.7	1167.2	1198.3	1242.3	1257.8
45°	1094.8	1112.9	1151.7	1200.9	1221.6
47.5°	1037.8	1058.5	1102.5	1159.5	1182.8
50°	973.1	999.0	1053.4	1118.1	1143.9
52.5°	911.0	942.1	1001.6	1074.1	1107.7
55°	846.3	877.4	955.0	1030.1	1066.3
57.5°	773.8	815.2	900.7	986.1	1024.9
60°	706.5	745.4	848.9	942.1	980.9
62.5°	634.1	685.8	797.1	895.5	934.3
65°	559.0	616.0	742.8	841.1	880.0
67.5°	491.7	553.9	688.4	786.8	825.6
70°	411.5	489.1	628.9	727.3	766.1
72.5°	336.5	421.9	566.8	662.6	698.8
75°	264.0	359.7	502.1	587.5	605.6
77.5°	196.7	297.6	434.8	471.0	458.1
80°	139.8	238.1	339.0	320.9	328.7
82.5°	90.6	181.2	209.6	238.1	245.9
85°	51.8	106.1	129.4	139.8	144.9
87.5°	23.3	38.8	51.8	51.8	49.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)