

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: P391874

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L935-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: P391874  
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-L935-CD1-U  
Description: 2x4 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: 5414.0 lumens  
Efficiency: N/A  
Efficacy: 82.5 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

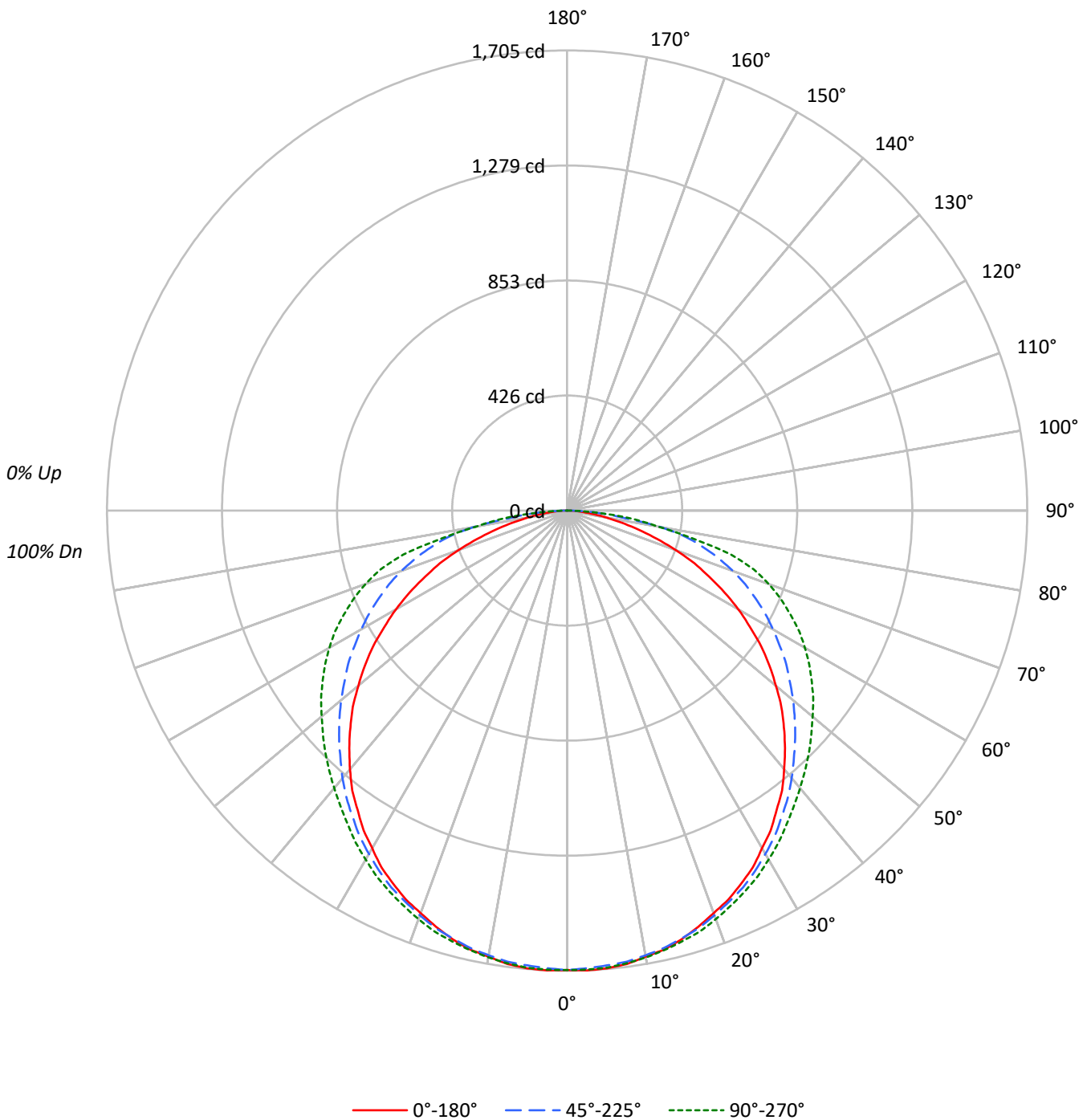
Input Watts (W): 65.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2291	2291	2291
5°	2299	2285	2296
10°	2293	2286	2297
15°	2289	2286	2300
20°	2272	2284	2307
25°	2264	2288	2312
30°	2245	2282	2320
35°	2223	2276	2329
40°	2198	2273	2358
45°	2161	2274	2412
50°	2114	2288	2485
55°	2060	2324	2595
60°	1973	2370	2739
65°	1847	2454	2907
70°	1680	2567	3127
75°	1424	2708	3267
80°	1124	2726	2642
85°	829	2073	2322



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.5	3.0
10°-20°	464.8	8.6
20°-30°	710.8	13.1
30°-40°	868.9	16.0
40°-50°	926.1	17.1
50°-60°	885.5	16.4
60°-70°	750.1	13.9
70°-80°	504.1	9.3
80°-90°	142.2	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°	1337.1	24.7
0°-40°	2206.0	40.7
0°-60°	4017.6	74.2
0°-90°	5414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5414.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1702	1702	1702	1702	1702	
5°	1702	1700	1692	1700	1700	162
15°	1644	1644	1641	1654	1652	463
25°	1525	1531	1541	1555	1558	703
35°	1353	1364	1386	1412	1418	848
45°	1136	1155	1195	1246	1268	876
55°	878	910	991	1069	1106	782
65°	580	639	771	873	913	576
75°	274	373	521	610	628	293
85°	54	110	134	145	150	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1702.5	1702.5	1702.5	1702.5	1702.5
2.5°	1705.2	1705.2	1697.2	1702.5	1702.5
5°	1702.5	1699.9	1691.8	1699.9	1699.9
7.5°	1694.5	1691.8	1686.4	1694.5	1691.8
10°	1678.4	1678.4	1673.0	1681.1	1681.1
12.5°	1665.0	1662.3	1659.6	1670.3	1667.6
15°	1643.5	1643.5	1640.8	1654.2	1651.5
17.5°	1616.6	1619.3	1622.0	1632.7	1635.4
20°	1587.1	1592.4	1595.1	1611.2	1611.2
22.5°	1560.2	1562.9	1568.3	1584.4	1584.4
25°	1525.3	1530.7	1541.4	1554.9	1557.5
27.5°	1490.4	1493.1	1506.5	1525.3	1528.0
30°	1444.7	1452.8	1468.9	1490.4	1493.1
32.5°	1404.5	1412.5	1431.3	1452.8	1458.2
35°	1353.4	1364.2	1385.7	1412.5	1417.9
37.5°	1307.8	1315.8	1342.7	1372.2	1380.3
40°	1251.4	1267.5	1294.4	1329.3	1342.7
42.5°	1195.0	1211.1	1243.3	1289.0	1305.1
45°	1135.9	1154.7	1195.0	1246.0	1267.5
47.5°	1076.8	1098.3	1144.0	1203.1	1227.2
50°	1009.7	1036.6	1093.0	1160.1	1187.0
52.5°	945.3	977.5	1039.3	1114.4	1149.4
55°	878.1	910.4	990.9	1068.8	1106.4
57.5°	802.9	845.9	934.5	1023.1	1063.4
60°	733.1	773.4	880.8	977.5	1017.8
62.5°	657.9	711.6	827.1	929.2	969.4
65°	580.0	639.1	770.7	872.8	913.0
67.5°	510.2	574.7	714.3	816.4	856.6
70°	427.0	507.5	652.6	754.6	794.9
72.5°	349.1	437.7	588.1	687.5	725.1
75°	273.9	373.3	521.0	609.6	628.4
77.5°	204.1	308.8	451.1	488.7	475.3
80°	145.0	247.1	351.8	333.0	341.0
82.5°	94.0	188.0	217.5	247.1	255.1
85°	53.7	110.1	134.3	145.0	150.4
87.5°	24.2	40.3	53.7	53.7	51.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)