

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: P389063

Luminaire Tested: **24CZ2-95VHE-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: P389063
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-UNV-L930-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

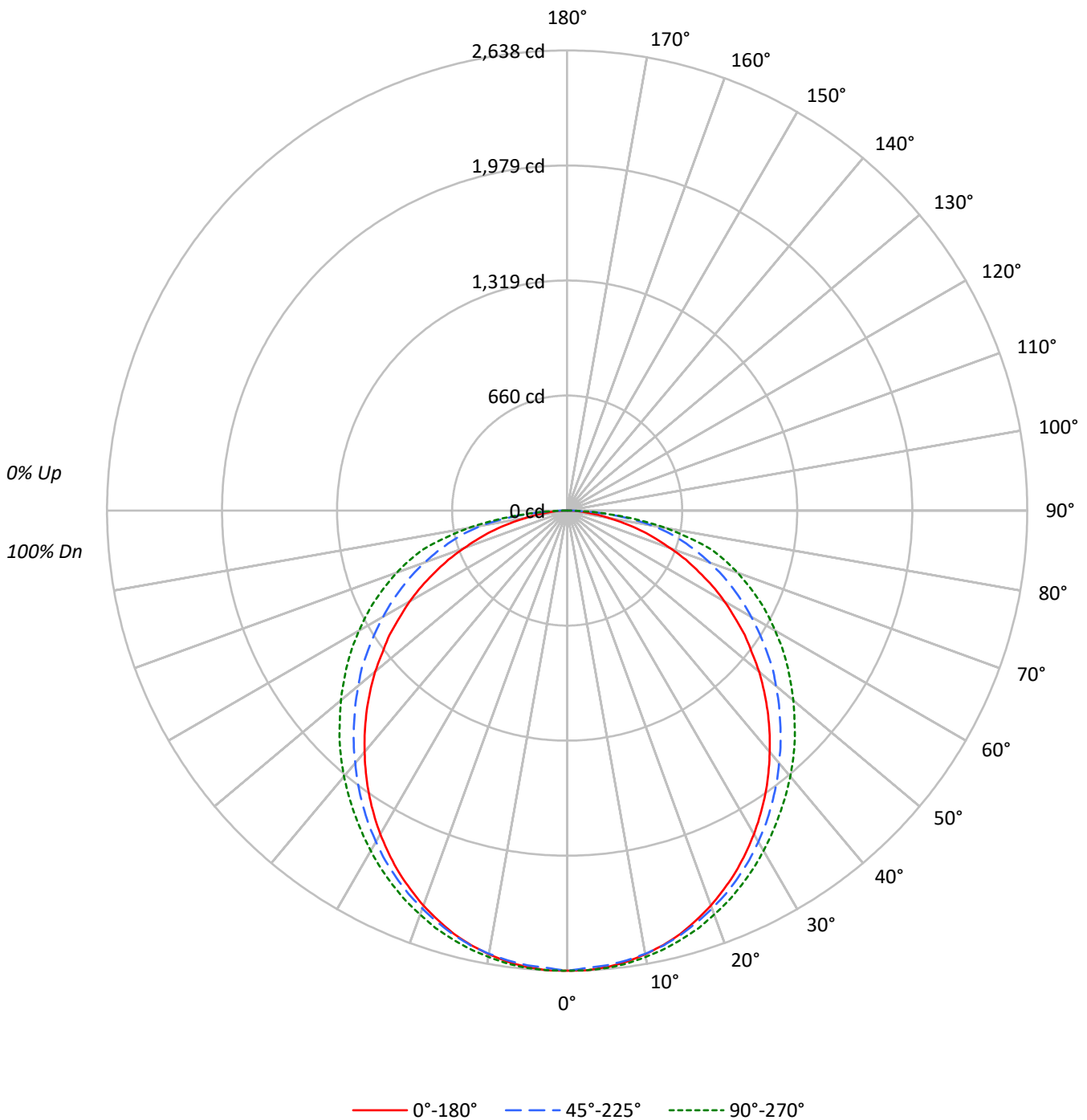
Lumens per Lamp: N/A
Luminaire Lumens: 7855.5 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P389063
CATALOG NUMBER: 24CZ2-95VHE-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P389063

CATALOG NUMBER: 24CZ2-95VHE-UNV-L930-CD1-U

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		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3549	3549	3549
5°	3548	3534	3555
10°	3528	3525	3550
15°	3499	3506	3542
20°	3450	3476	3529
25°	3394	3445	3515
30°	3328	3405	3499
35°	3256	3363	3488
40°	3173	3320	3495
45°	3093	3287	3512
50°	3007	3271	3545
55°	2915	3266	3610
60°	2801	3281	3704
65°	2654	3330	3865
70°	2465	3414	4084
75°	2249	3584	4430
80°	1849	3859	4428
85°	1417	3561	3804



TEST NUMBER: P389063

CATALOG NUMBER: 24CZ2-95VHE-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.4	3.2
10°-20°	712.1	9.1
20°-30°	1071.6	13.6
30°-40°	1284.2	16.3
40°-50°	1338.3	17.0
50°-60°	1245.1	15.9
60°-70°	1025.5	13.1
70°-80°	698.4	8.9
80°-90°	230.6	2.9
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°	2033.2	25.9
0°-40°	3317.5	42.2
0°-60°	5900.9	75.1
0°-90°	7855.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7855.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2638	2638	2638	2638	2638	
5°	2627	2627	2616	2630	2632	249
15°	2512	2514	2517	2540	2543	708
25°	2286	2297	2320	2360	2367	1052
35°	1982	2006	2048	2103	2124	1239
45°	1626	1660	1728	1814	1846	1254
55°	1243	1285	1392	1502	1539	1108
65°	834	904	1046	1169	1214	828
75°	433	530	690	813	852	456
85°	92	178	231	246	246	114
90°	0	0	0	0	0	



TEST NUMBER: P389063

CATALOG NUMBER: 24CZ2-95VHE-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2637.5	2637.5	2637.5	2637.5	2637.5
2.5°	2637.5	2637.5	2624.3	2637.5	2637.5
5°	2627.0	2627.0	2616.5	2629.6	2632.2
7.5°	2608.6	2611.2	2600.8	2616.5	2619.1
10°	2582.4	2585.0	2579.8	2595.5	2598.1
12.5°	2550.9	2553.6	2553.6	2571.9	2574.5
15°	2511.6	2514.2	2516.9	2540.5	2543.1
17.5°	2461.8	2469.7	2474.9	2503.7	2509.0
20°	2409.4	2417.2	2427.7	2459.2	2464.4
22.5°	2349.1	2359.6	2377.9	2412.0	2419.9
25°	2286.1	2296.6	2320.2	2359.6	2367.4
27.5°	2215.4	2231.1	2259.9	2301.9	2312.4
30°	2142.0	2157.7	2191.8	2236.3	2252.1
32.5°	2063.3	2084.3	2123.6	2173.4	2189.1
35°	1982.0	2005.6	2047.6	2102.6	2123.6
37.5°	1895.5	1921.7	1971.5	2031.8	2058.1
40°	1806.4	1837.8	1890.3	1961.1	1989.9
42.5°	1717.2	1746.1	1811.6	1887.6	1919.1
45°	1625.5	1659.6	1727.7	1814.2	1845.7
47.5°	1531.1	1565.2	1646.4	1738.2	1767.0
50°	1436.7	1470.8	1562.5	1659.6	1693.6
52.5°	1334.5	1379.0	1483.9	1580.9	1615.0
55°	1242.7	1284.6	1392.1	1502.2	1539.0
57.5°	1137.8	1187.6	1305.6	1421.0	1460.3
60°	1040.8	1093.3	1219.1	1337.1	1376.4
62.5°	941.2	998.9	1132.6	1253.2	1297.8
65°	833.7	904.5	1046.1	1169.3	1213.9
67.5°	736.7	810.1	959.6	1085.4	1124.7
70°	626.6	715.7	867.8	993.6	1038.2
72.5°	532.2	621.3	781.3	904.5	949.1
75°	432.6	529.6	689.5	812.7	852.1
77.5°	333.0	440.5	600.4	694.8	707.9
80°	238.6	351.3	498.1	553.2	571.5
82.5°	167.8	270.0	367.0	403.7	414.2
85°	91.8	178.3	230.7	246.4	246.4
87.5°	39.3	76.0	91.8	94.4	97.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)