

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: P390008

Luminaire Tested: **24CZ2-95VHE-S-UNV-L950-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: P390008
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-S-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9070.7 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

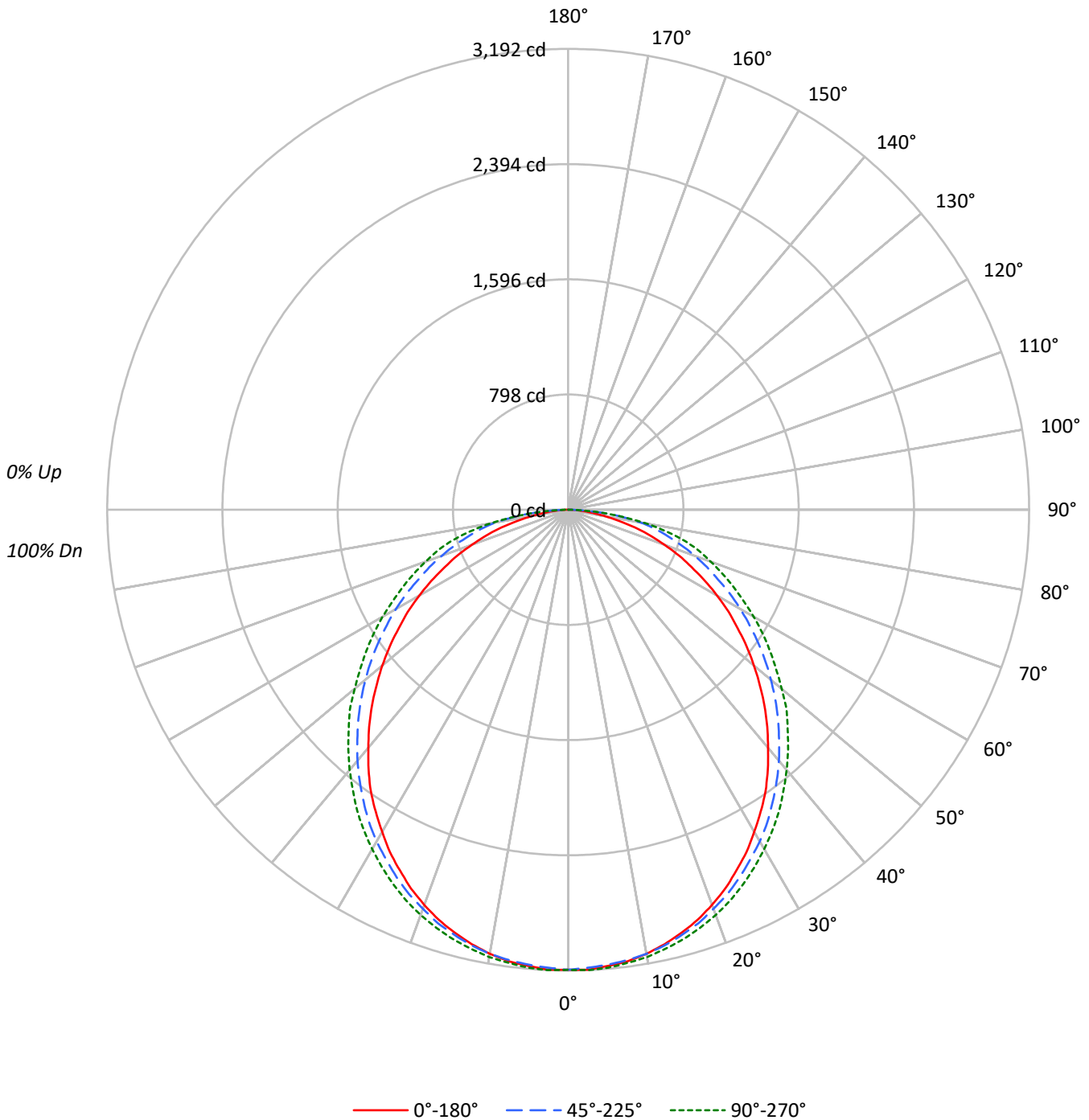
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390008

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390008

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L950-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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4288	4288	4288
5°	4284	4273	4300
10°	4267	4267	4299
15°	4226	4246	4290
20°	4171	4212	4278
25°	4093	4170	4252
30°	4002	4123	4217
35°	3914	4056	4184
40°	3780	3988	4134
45°	3657	3909	4090
50°	3516	3836	4041
55°	3359	3765	4001
60°	3202	3706	3993
65°	2999	3642	4018
70°	2777	3661	4126
75°	2486	3729	4358
80°	2009	3952	4264
85°	1513	3469	3381



TEST NUMBER: P390008

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.7	3.3
10°-20°	862.0	9.5
20°-30°	1295.8	14.3
30°-40°	1543.5	17.0
40°-50°	1579.7	17.4
50°-60°	1422.2	15.7
60°-70°	1116.9	12.3
70°-80°	724.9	8.0
80°-90°	224.2	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°	2459.5	27.1
0°-40°	4002.9	44.1
0°-60°	7004.8	77.2
0°-90°	9070.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9070.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3187	3187	3187	3187	3187	
5°	3172	3178	3164	3181	3184	301
15°	3034	3042	3048	3074	3080	855
25°	2757	2780	2809	2855	2864	1270
35°	2383	2412	2469	2530	2547	1486
45°	1922	1968	2054	2132	2149	1482
55°	1432	1495	1605	1688	1706	1284
65°	942	1014	1144	1239	1262	938
75°	478	570	717	815	838	506
85°	98	182	225	219	219	118
90°	0	0	0	0	0	



TEST NUMBER: P390008

CATALOG NUMBER: 24CZ2-95VHE-S-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3186.6	3186.6	3186.6	3186.6	3186.6
2.5°	3189.5	3189.5	3175.1	3189.5	3192.4
5°	3172.2	3178.0	3163.5	3180.8	3183.7
7.5°	3154.9	3154.9	3146.3	3163.5	3166.4
10°	3123.2	3126.1	3123.2	3143.4	3146.3
12.5°	3082.9	3088.6	3091.5	3111.7	3114.6
15°	3033.9	3042.5	3048.3	3074.2	3080.0
17.5°	2979.2	2987.8	3002.2	3031.0	3036.8
20°	2912.9	2924.4	2941.7	2979.2	2987.8
22.5°	2840.9	2852.4	2881.2	2915.8	2930.2
25°	2757.3	2780.3	2809.2	2855.3	2863.9
27.5°	2673.7	2693.9	2731.4	2780.3	2791.9
30°	2575.8	2607.5	2653.6	2702.6	2714.1
32.5°	2480.7	2512.4	2567.1	2619.0	2633.4
35°	2382.7	2411.6	2469.2	2529.7	2547.0
37.5°	2270.4	2307.8	2371.2	2431.7	2449.0
40°	2152.2	2198.3	2270.4	2333.8	2353.9
42.5°	2039.9	2088.9	2160.9	2230.0	2253.1
45°	1921.8	1967.9	2054.3	2132.1	2149.4
47.5°	1800.7	1852.6	1944.8	2022.6	2051.4
50°	1679.7	1734.5	1832.4	1913.1	1930.4
52.5°	1558.7	1616.3	1720.1	1806.5	1815.1
55°	1432.0	1495.3	1604.8	1688.4	1705.7
57.5°	1316.7	1371.4	1489.6	1576.0	1596.2
60°	1189.9	1250.4	1377.2	1457.9	1483.8
62.5°	1068.9	1132.3	1264.8	1345.5	1368.6
65°	942.1	1014.2	1143.8	1238.9	1262.0
67.5°	832.7	901.8	1040.1	1132.3	1155.4
70°	705.9	783.7	930.6	1025.7	1048.8
72.5°	596.4	677.1	824.0	916.2	950.8
75°	478.3	570.5	717.4	815.4	838.4
77.5°	363.0	469.6	619.5	694.4	694.4
80°	259.3	371.7	510.0	544.5	550.3
82.5°	170.0	279.5	377.4	374.6	374.6
85°	98.0	181.5	224.7	219.0	219.0
87.5°	37.5	74.9	80.7	80.7	77.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)