

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: P390007

Luminaire Tested: **24CZ2-95VHE-S-UNV-L950-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: P390007
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-SWPD1-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: 8958.2 lumens
Efficiency: N/A
Efficacy: 136.6 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

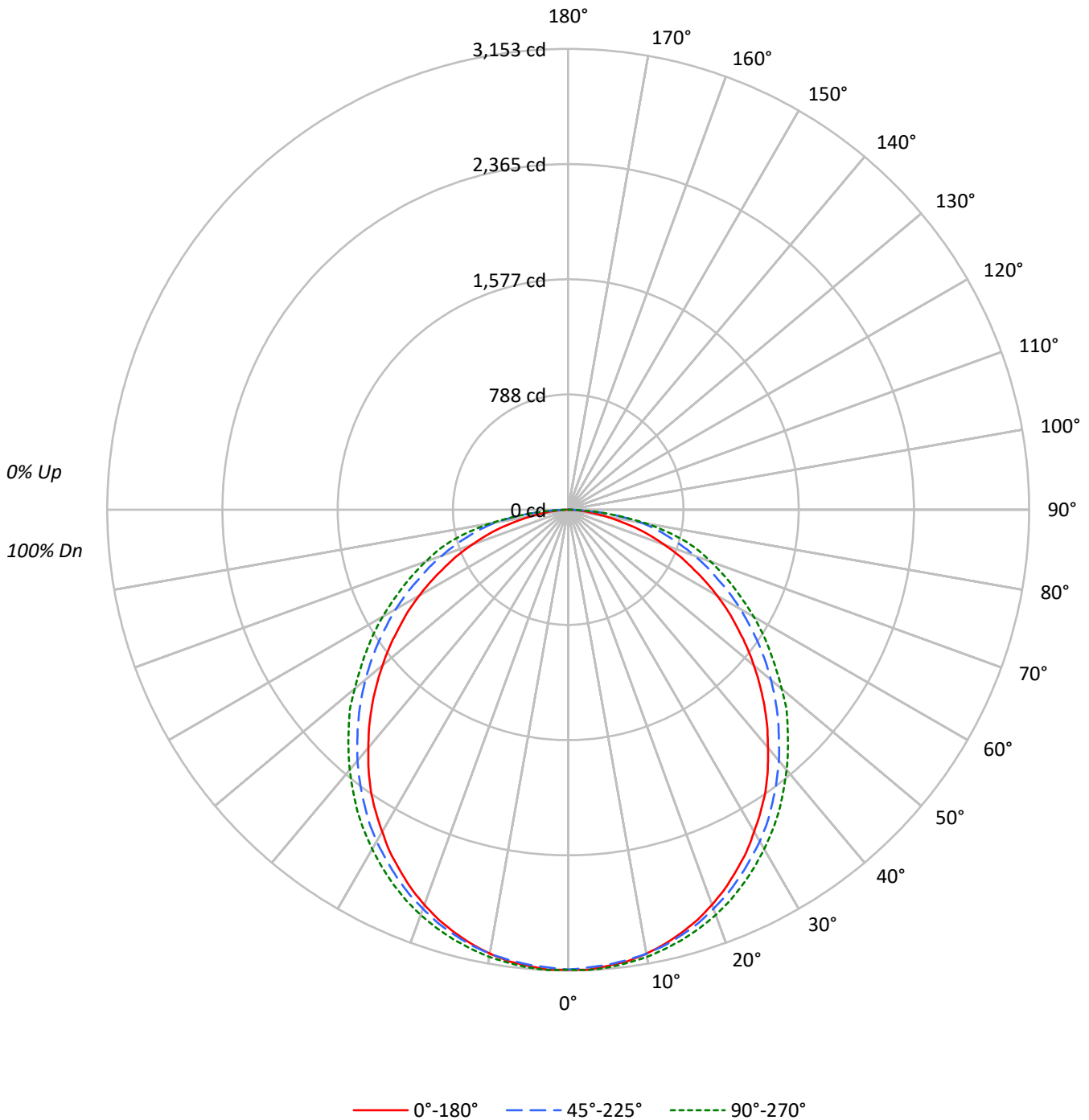
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4234	4234	4234
5°	4231	4220	4247
10°	4214	4214	4245
15°	4174	4193	4237
20°	4119	4160	4225
25°	4043	4119	4199
30°	3952	4072	4164
35°	3865	4005	4132
40°	3733	3938	4083
45°	3611	3860	4039
50°	3472	3788	3991
55°	3317	3718	3951
60°	3162	3660	3943
65°	2962	3596	3968
70°	2742	3616	4074
75°	2455	3683	4304
80°	1984	3902	4211
85°	1493	3426	3339



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.9	3.3
10°-20°	851.3	9.5
20°-30°	1279.7	14.3
30°-40°	1524.3	17.0
40°-50°	1560.1	17.4
50°-60°	1404.5	15.7
60°-70°	1103.0	12.3
70°-80°	715.9	8.0
80°-90°	221.4	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°	2428.9	27.1
0°-40°	3953.3	44.1
0°-60°	6917.9	77.2
0°-90°	8958.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8958.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3147	3147	3147	3147	3147	
5°	3133	3138	3124	3141	3144	298
15°	2996	3005	3010	3036	3042	845
25°	2723	2746	2774	2820	2828	1254
35°	2353	2382	2439	2498	2515	1468
45°	1898	1943	2029	2106	2123	1463
55°	1414	1477	1585	1667	1684	1268
65°	930	1002	1130	1224	1246	926
75°	472	563	708	805	828	500
85°	97	179	222	216	216	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3147.1	3147.1	3147.1	3147.1	3147.1
2.5°	3149.9	3149.9	3135.7	3149.9	3152.8
5°	3132.8	3138.5	3124.3	3141.4	3144.2
7.5°	3115.8	3115.8	3107.2	3124.3	3127.2
10°	3084.5	3087.3	3084.5	3104.4	3107.2
12.5°	3044.6	3050.3	3053.2	3073.1	3075.9
15°	2996.3	3004.8	3010.5	3036.1	3041.8
17.5°	2942.2	2950.7	2965.0	2993.4	2999.1
20°	2876.8	2888.1	2905.2	2942.2	2950.7
22.5°	2805.6	2817.0	2845.5	2879.6	2893.8
25°	2723.1	2745.9	2774.3	2819.8	2828.4
27.5°	2640.6	2660.5	2697.5	2745.9	2757.2
30°	2543.8	2575.1	2620.7	2669.0	2680.4
32.5°	2449.9	2481.2	2535.3	2586.5	2600.7
35°	2353.2	2381.6	2438.6	2498.3	2515.4
37.5°	2242.2	2279.2	2341.8	2401.6	2418.6
40°	2125.6	2171.1	2242.2	2304.8	2324.7
42.5°	2014.6	2063.0	2134.1	2202.4	2225.1
45°	1897.9	1943.4	2028.8	2105.6	2122.7
47.5°	1778.4	1829.6	1920.7	1997.5	2026.0
50°	1658.9	1713.0	1809.7	1889.4	1906.5
52.5°	1539.4	1596.3	1698.7	1784.1	1792.6
55°	1414.2	1476.8	1584.9	1667.4	1684.5
57.5°	1300.4	1354.4	1471.1	1556.5	1576.4
60°	1175.2	1234.9	1360.1	1439.8	1465.4
62.5°	1055.7	1118.3	1249.2	1328.8	1351.6
65°	930.5	1001.6	1129.6	1223.5	1246.3
67.5°	822.3	890.6	1027.2	1118.3	1141.0
70°	697.1	774.0	919.1	1013.0	1035.7
72.5°	589.0	668.7	813.8	904.9	939.0
75°	472.3	563.4	708.5	805.3	828.0
77.5°	358.5	463.8	611.8	685.8	685.8
80°	256.1	367.1	503.6	537.8	543.5
82.5°	167.9	276.0	372.8	369.9	369.9
85°	96.7	179.3	221.9	216.3	216.3
87.5°	37.0	74.0	79.7	79.7	76.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)