

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: P391038

Luminaire Tested: **24CZ2-130VHE-HRP-UNV-L950-CD2-SDWPD1-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: P391038
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: 24CZ2-130VHE-HRP-UNV-L950-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9965.5 lumens
Efficiency: N/A
Efficacy: 109.9 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

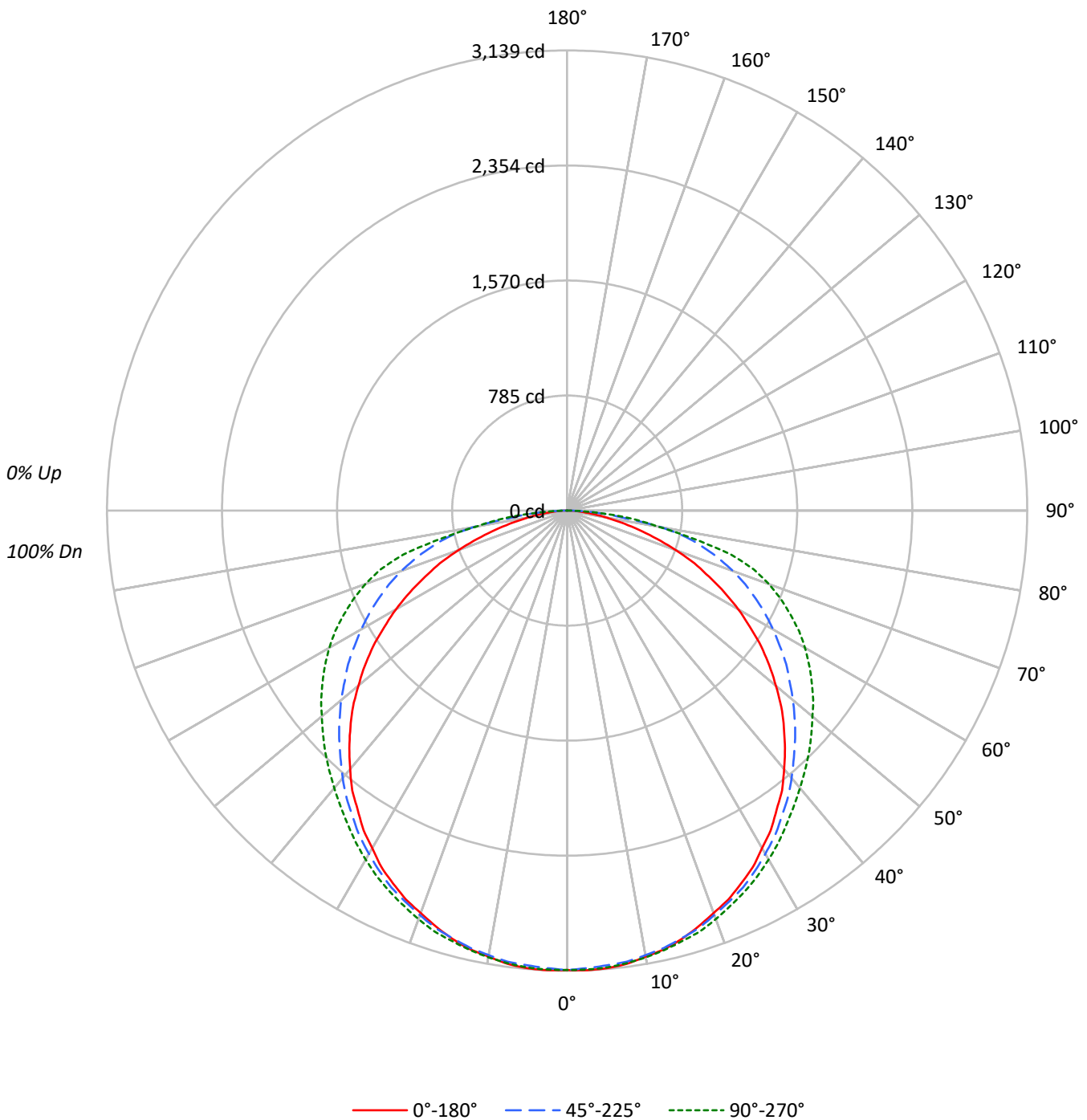
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391038

CATALOG NUMBER: 24CZ2-130VHE-HRP-UNV-L950-CD2-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391038

CATALOG NUMBER: 24CZ2-130VHE-HRP-UNV-L950-CD2-SDWPD1-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	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°	4217	4217	4217
5°	4233	4206	4226
10°	4221	4207	4228
15°	4214	4207	4234
20°	4183	4204	4247
25°	4168	4212	4256
30°	4132	4201	4270
35°	4092	4189	4287
40°	4046	4185	4341
45°	3979	4185	4439
50°	3890	4211	4573
55°	3792	4279	4777
60°	3631	4363	5041
65°	3399	4516	5351
70°	3092	4725	5756
75°	2621	4985	6013
80°	2068	5017	4864
85°	1527	3816	4273



TEST NUMBER: P391038

CATALOG NUMBER: 24CZ2-130VHE-HRP-UNV-L950-CD2-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.3	3.0
10°-20°	855.6	8.6
20°-30°	1308.3	13.1
30°-40°	1599.4	16.0
40°-50°	1704.6	17.1
50°-60°	1629.9	16.4
60°-70°	1380.7	13.9
70°-80°	927.9	9.3
80°-90°	261.8	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°	2461.2	24.7
0°-40°	4060.6	40.7
0°-60°	7395.1	74.2
0°-90°	9965.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9965.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3134	3134	3134	3134	3134	
5°	3134	3129	3114	3129	3129	298
15°	3025	3025	3020	3045	3040	853
25°	2808	2818	2837	2862	2867	1294
35°	2491	2511	2551	2600	2610	1561
45°	2091	2126	2200	2294	2333	1613
55°	1616	1676	1824	1967	2036	1440
65°	1068	1176	1419	1606	1681	1060
75°	504	687	959	1122	1157	540
85°	99	203	247	267	277	122
90°	0	0	0	0	0	



TEST NUMBER: P391038

CATALOG NUMBER: 24CZ2-130VHE-HRP-UNV-L950-CD2-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3133.9	3133.9	3133.9	3133.9	3133.9
2.5°	3138.8	3138.8	3124.0	3133.9	3133.9
5°	3133.9	3128.9	3114.1	3128.9	3128.9
7.5°	3119.0	3114.1	3104.2	3119.0	3114.1
10°	3089.4	3089.4	3079.5	3094.3	3094.3
12.5°	3064.7	3059.7	3054.8	3074.5	3069.6
15°	3025.1	3025.1	3020.2	3044.9	3039.9
17.5°	2975.7	2980.6	2985.6	3005.3	3010.3
20°	2921.3	2931.2	2936.1	2965.8	2965.8
22.5°	2871.9	2876.8	2886.7	2916.4	2916.4
25°	2807.6	2817.5	2837.3	2862.0	2866.9
27.5°	2743.4	2748.3	2773.0	2807.6	2812.6
30°	2659.3	2674.2	2703.8	2743.4	2748.3
32.5°	2585.2	2600.0	2634.6	2674.2	2684.1
35°	2491.3	2511.0	2550.6	2600.0	2609.9
37.5°	2407.2	2422.1	2471.5	2525.9	2540.7
40°	2303.4	2333.1	2382.5	2446.8	2471.5
42.5°	2199.6	2229.3	2288.6	2372.6	2402.3
45°	2090.9	2125.5	2199.6	2293.6	2333.1
47.5°	1982.1	2021.7	2105.7	2214.5	2259.0
50°	1858.6	1908.0	2011.8	2135.4	2184.8
52.5°	1739.9	1799.3	1912.9	2051.3	2115.6
55°	1616.4	1675.7	1824.0	1967.3	2036.5
57.5°	1478.0	1557.0	1720.2	1883.3	1957.4
60°	1349.4	1423.6	1621.3	1799.3	1873.4
62.5°	1211.0	1309.9	1522.4	1710.3	1784.4
65°	1067.7	1176.4	1418.6	1606.5	1680.6
67.5°	939.2	1057.8	1314.8	1502.7	1576.8
70°	785.9	934.2	1201.2	1389.0	1463.1
72.5°	642.6	805.7	1082.5	1265.4	1334.6
75°	504.2	687.1	958.9	1122.1	1156.7
77.5°	375.7	568.4	830.4	899.6	874.9
80°	266.9	454.8	647.5	612.9	627.8
82.5°	173.0	346.0	400.4	454.8	469.6
85°	98.9	202.7	247.2	266.9	276.8
87.5°	44.5	74.1	98.9	98.9	93.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)