

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: P388377

Luminaire Tested: **24CZ2-130VHE-SQR-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: P388377
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-SQR-UNV-L950-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11275.1 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

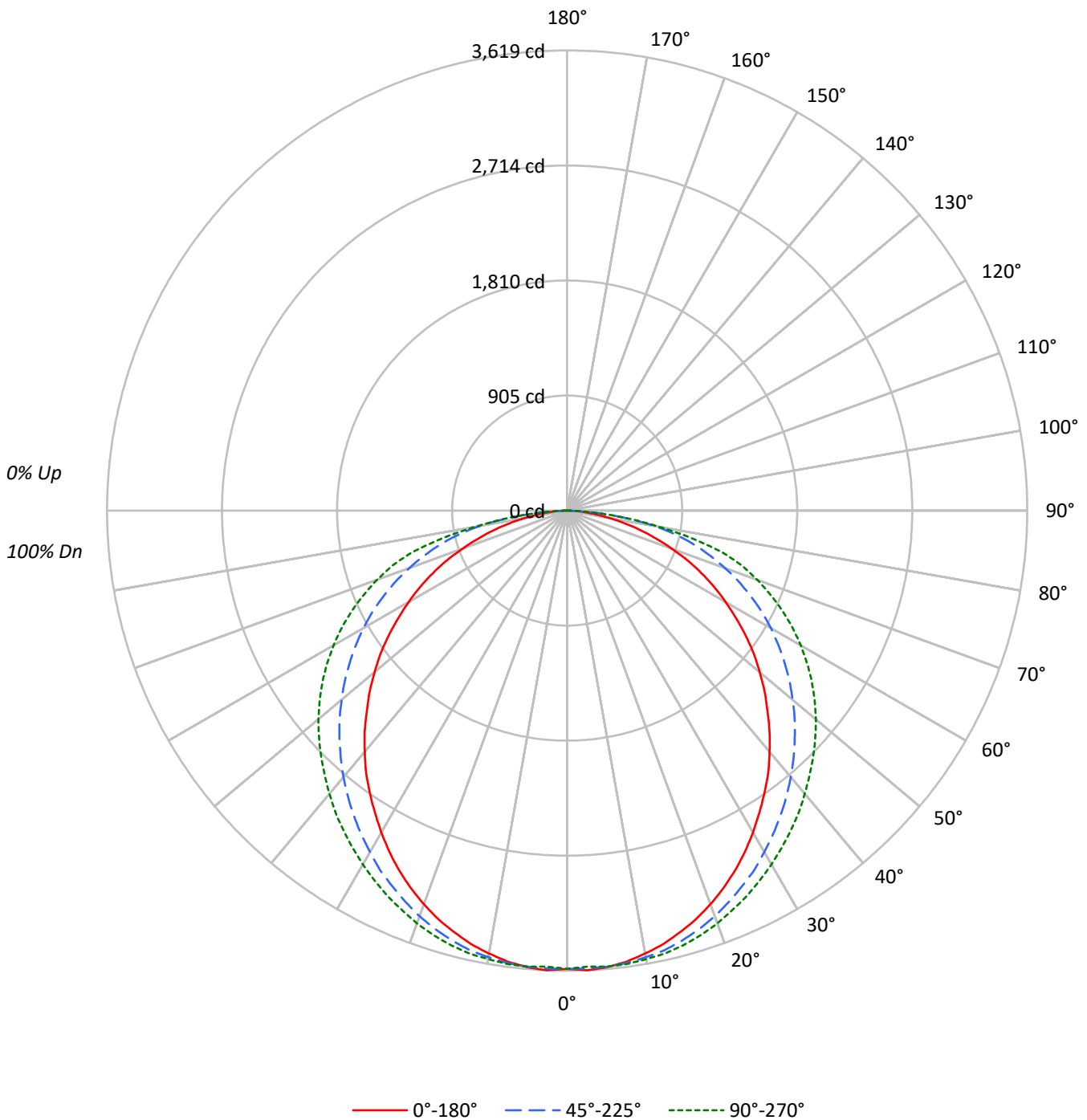
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4849	4849	4849
5°	4868	4863	4863
10°	4833	4873	4893
15°	4782	4875	4927
20°	4718	4862	4947
25°	4638	4836	4964
30°	4541	4818	4992
35°	4446	4807	5039
40°	4349	4807	5107
45°	4237	4818	5207
50°	4138	4847	5346
55°	4018	4900	5511
60°	3877	4979	5711
65°	3710	5073	5951
70°	3442	5199	6254
75°	3116	5381	6542
80°	2625	5394	5625
85°	2012	4080	4080



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.1	3.0
10°-20°	984.3	8.7
20°-30°	1495.1	13.3
30°-40°	1818.5	16.1
40°-50°	1936.1	17.2
50°-60°	1844.1	16.4
60°-70°	1542.2	13.7
70°-80°	1028.2	9.1
80°-90°	284.5	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°	2821.5	25.0
0°-40°	4640.0	41.2
0°-60°	8420.2	74.7
0°-90°	11275.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11275.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3604	3604	3604	3604	3604	
5°	3604	3582	3600	3600	3600	342
15°	3433	3440	3500	3526	3537	968
25°	3124	3165	3258	3314	3343	1438
35°	2707	2785	2926	3023	3068	1694
45°	2226	2346	2532	2673	2737	1721
55°	1713	1862	2089	2271	2349	1531
65°	1165	1337	1594	1791	1869	1151
75°	599	789	1035	1210	1258	635
85°	130	242	264	261	264	157
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3604.1	3604.1	3604.1	3604.1	3604.1
2.5°	3619.0	3592.9	3604.1	3604.1	3589.2
5°	3604.1	3581.7	3600.3	3600.3	3600.3
7.5°	3578.0	3559.4	3589.2	3596.6	3596.6
10°	3537.1	3529.6	3566.8	3578.0	3581.7
12.5°	3492.4	3488.7	3540.8	3555.7	3566.8
15°	3432.8	3440.2	3499.8	3525.9	3537.1
17.5°	3369.5	3384.4	3451.4	3488.7	3499.8
20°	3295.0	3317.4	3395.6	3432.8	3455.1
22.5°	3213.1	3246.6	3328.6	3373.2	3399.3
25°	3123.8	3164.7	3257.8	3313.7	3343.4
27.5°	3027.0	3079.1	3187.1	3250.4	3280.2
30°	2922.7	2982.3	3101.4	3175.9	3213.1
32.5°	2814.7	2885.5	3015.8	3097.7	3142.4
35°	2706.8	2785.0	2926.4	3023.2	3067.9
37.5°	2598.8	2677.0	2833.4	2937.6	2993.5
40°	2475.9	2569.0	2736.6	2852.0	2907.8
42.5°	2356.8	2457.3	2636.0	2762.6	2822.2
45°	2226.5	2345.6	2531.8	2673.3	2736.6
47.5°	2107.3	2226.5	2427.5	2576.5	2647.2
50°	1977.0	2103.6	2315.8	2479.7	2554.1
52.5°	1850.4	1980.7	2204.1	2379.1	2453.6
55°	1712.7	1861.6	2088.7	2271.2	2349.3
57.5°	1574.9	1735.0	1969.6	2159.5	2237.7
60°	1440.9	1604.7	1850.4	2040.3	2122.2
62.5°	1306.8	1470.7	1727.6	1921.2	1999.4
65°	1165.4	1336.6	1593.5	1790.9	1869.1
67.5°	1023.9	1202.6	1459.5	1656.8	1731.3
70°	875.0	1064.8	1321.7	1515.3	1589.8
72.5°	737.2	927.1	1180.3	1370.1	1440.9
75°	599.4	789.3	1035.1	1210.0	1258.4
77.5°	465.4	655.3	875.0	990.4	1001.5
80°	338.8	517.5	696.2	729.7	726.0
82.5°	227.1	387.2	480.3	484.0	495.2
85°	130.3	242.0	264.3	260.6	264.3
87.5°	52.1	85.6	74.5	55.8	55.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)