

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: P389191

Luminaire Tested: **22CZ2-29VHE-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: P389191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-S-UNV-L950-CD1-SWPD1-U
Description: 2x2 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: 2929.9 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

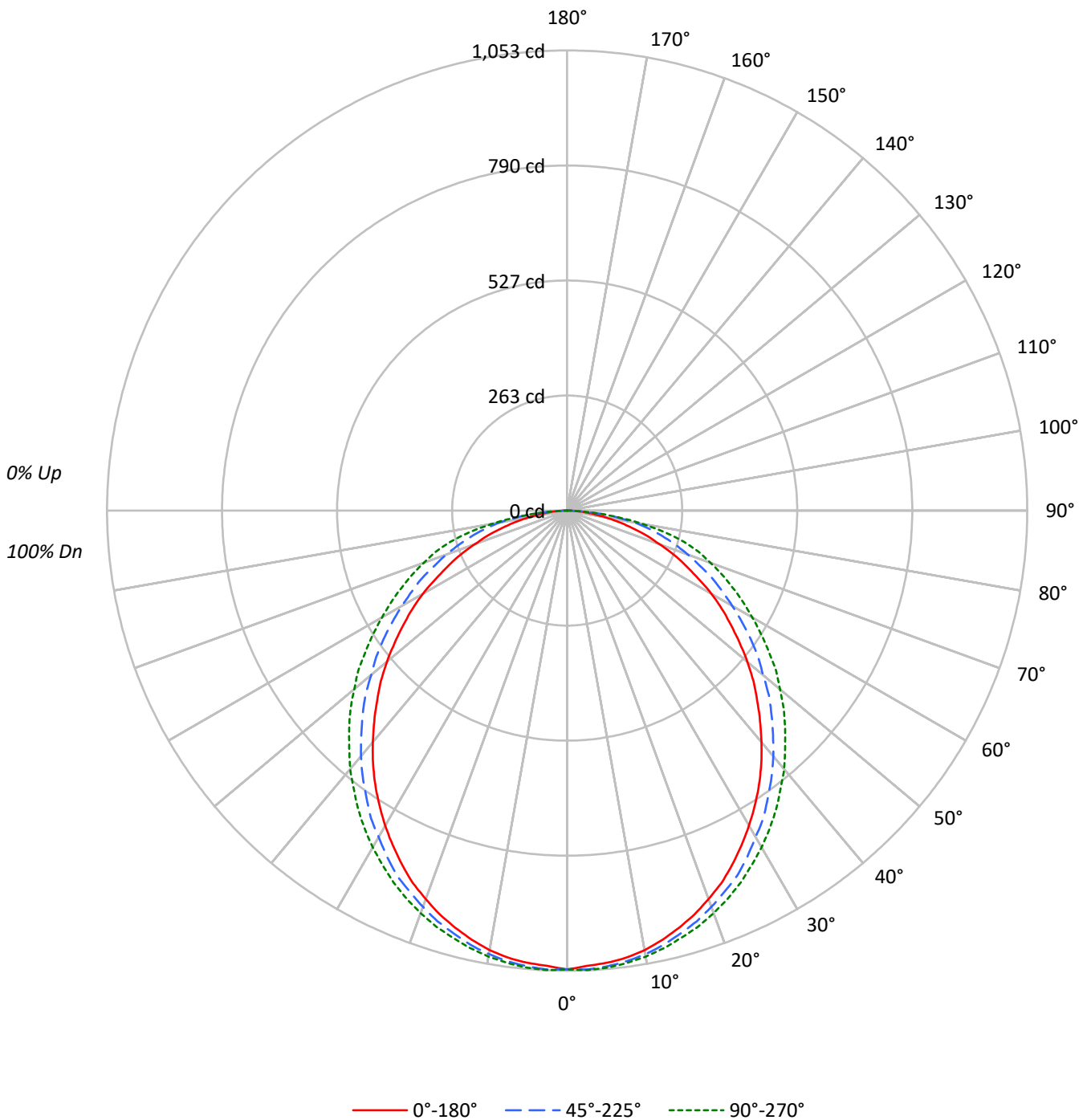
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2825	2825	2825
5°	2806	2828	2836
10°	2790	2816	2831
15°	2754	2791	2818
20°	2709	2764	2807
25°	2654	2736	2788
30°	2587	2680	2765
35°	2515	2632	2739
40°	2430	2579	2713
45°	2341	2518	2684
50°	2255	2449	2661
55°	2149	2405	2642
60°	2053	2347	2634
65°	1915	2333	2663
70°	1764	2312	2743
75°	1592	2346	2885
80°	1378	2414	2712
85°	1139	2025	2025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	3.4
10°-20°	282.5	9.6
20°-30°	422.8	14.4
30°-40°	500.7	17.1
40°-50°	510.2	17.4
50°-60°	457.3	15.6
60°-70°	358.0	12.2
70°-80°	230.9	7.9
80°-90°	68.2	2.3
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°	804.6	27.5
0°-40°	1305.2	44.5
0°-60°	2272.8	77.6
0°-90°	2929.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2929.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1039	1042	1047	1048	1050	99
15°	988	994	1002	1010	1012	279
25°	894	902	921	934	939	412
35°	766	775	801	826	834	478
45°	615	629	662	696	705	475
55°	458	473	513	548	563	411
65°	301	318	366	402	418	299
75°	153	176	226	264	278	164
85°	37	51	66	66	66	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1049.9	1049.9	1049.9	1049.9	1049.9
2.5°	1043.0	1045.8	1051.2	1052.6	1052.6
5°	1038.9	1041.7	1047.1	1048.5	1049.9
7.5°	1032.1	1033.5	1040.3	1043.0	1044.4
10°	1021.2	1023.9	1030.7	1034.8	1036.2
12.5°	1006.1	1010.2	1018.4	1023.9	1025.3
15°	988.4	993.8	1002.0	1010.2	1011.6
17.5°	969.2	974.7	985.6	995.2	997.9
20°	946.0	952.8	965.1	976.1	980.2
22.5°	922.7	928.2	943.2	956.9	961.0
25°	894.0	902.2	921.4	933.7	939.1
27.5°	864.0	873.5	892.7	909.1	914.5
30°	832.5	842.1	862.6	883.1	889.9
32.5°	799.7	810.6	835.3	855.8	862.6
35°	765.5	775.1	801.1	825.7	833.9
37.5°	730.0	738.2	768.3	794.2	802.4
40°	691.7	702.7	734.1	764.2	772.4
42.5°	653.4	665.7	697.2	730.0	738.2
45°	615.2	628.8	661.6	695.8	705.4
47.5°	578.3	589.2	626.1	658.9	672.6
50°	538.6	549.5	585.1	622.0	635.7
52.5°	497.6	512.6	550.9	586.5	602.9
55°	458.0	473.0	512.6	548.2	563.2
57.5°	421.0	433.3	474.4	511.3	526.3
60°	381.4	392.3	436.1	475.7	489.4
62.5°	339.0	355.4	400.5	437.4	453.9
65°	300.7	318.5	366.4	401.9	418.3
67.5°	265.2	281.6	328.1	366.4	384.1
70°	224.2	246.1	293.9	332.2	348.6
72.5°	191.4	210.5	259.7	298.0	315.8
75°	153.1	176.3	225.6	263.8	277.5
77.5°	121.7	144.9	191.4	221.5	228.3
80°	88.9	112.1	155.8	170.9	175.0
82.5°	60.1	82.0	112.1	116.2	117.6
85°	36.9	50.6	65.6	65.6	65.6
87.5°	17.8	20.5	23.2	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)