

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: P389185

Luminaire Tested: **22CZ2-29VHE-S-UNV-L935-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: P389185
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2732.1 lumens
Efficiency: N/A
Efficacy: 125.9 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

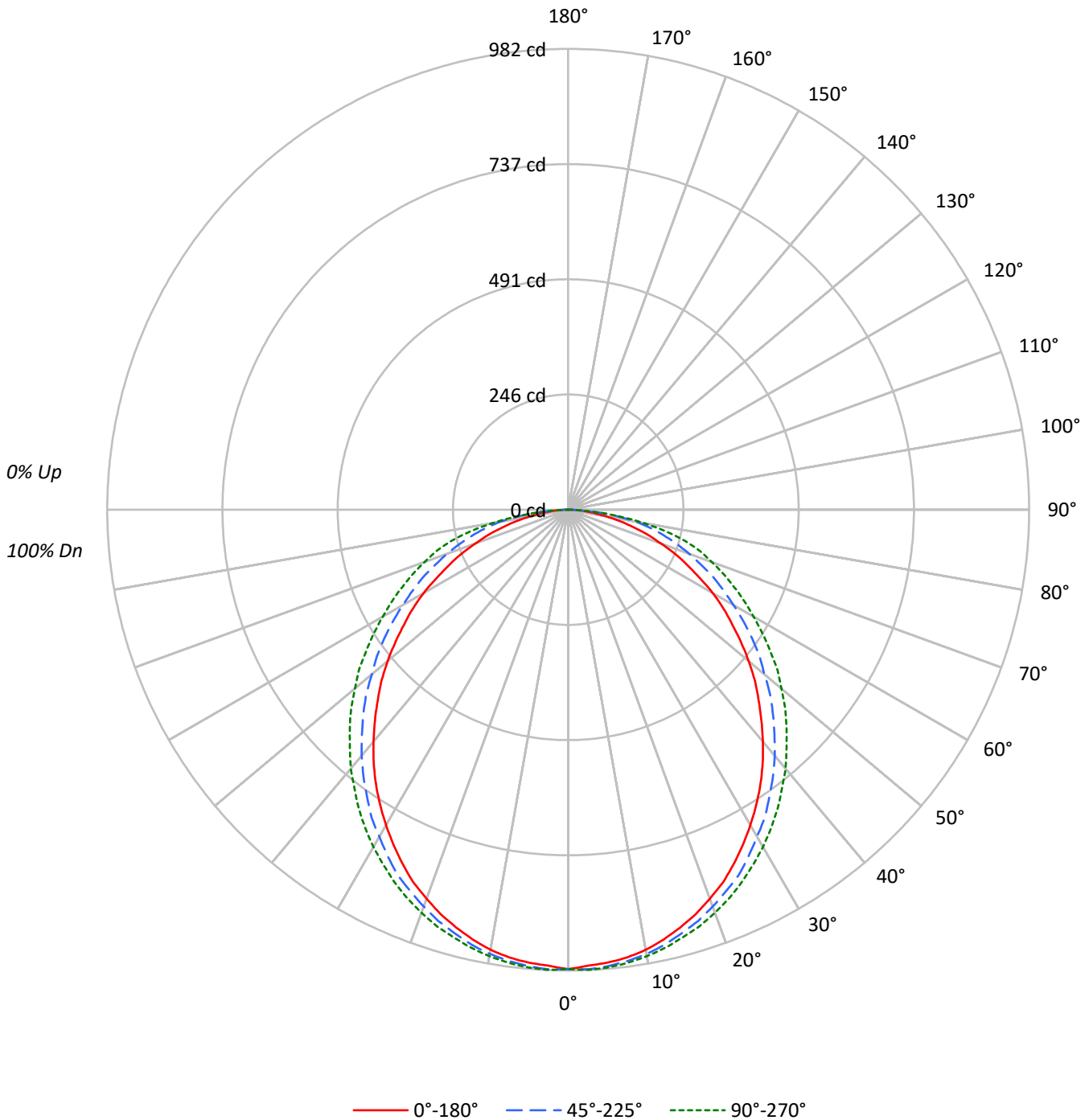
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2634	2634	2634
5°	2617	2638	2645
10°	2602	2626	2640
15°	2567	2603	2628
20°	2526	2577	2617
25°	2475	2551	2600
30°	2412	2499	2579
35°	2345	2454	2554
40°	2266	2405	2530
45°	2183	2348	2503
50°	2102	2284	2482
55°	2003	2243	2464
60°	1914	2188	2456
65°	1785	2175	2484
70°	1645	2157	2558
75°	1485	2187	2691
80°	1285	2252	2529
85°	1062	1890	1890



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	3.4
10°-20°	263.5	9.6
20°-30°	394.2	14.4
30°-40°	466.9	17.1
40°-50°	475.8	17.4
50°-60°	426.4	15.6
60°-70°	333.9	12.2
70°-80°	215.3	7.9
80°-90°	63.6	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°	750.3	27.5
0°-40°	1217.1	44.5
0°-60°	2119.4	77.6
0°-90°	2732.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	979	979	979	979	979	
5°	969	971	976	978	979	92
15°	922	927	934	942	943	260
25°	834	841	859	871	876	384
35°	714	723	747	770	778	446
45°	574	586	617	649	658	443
55°	427	441	478	511	525	383
65°	280	297	342	375	390	279
75°	143	164	210	246	259	153
85°	34	47	61	61	61	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	979.0	979.0	979.0	979.0	979.0
2.5°	972.6	975.2	980.3	981.5	981.5
5°	968.8	971.3	976.4	977.7	979.0
7.5°	962.4	963.7	970.1	972.6	973.9
10°	952.2	954.8	961.2	965.0	966.2
12.5°	938.2	942.0	949.7	954.8	956.1
15°	921.6	926.7	934.4	942.0	943.3
17.5°	903.8	908.9	919.1	928.0	930.6
20°	882.1	888.5	900.0	910.2	914.0
22.5°	860.4	865.5	879.6	892.3	896.1
25°	833.7	841.3	859.2	870.6	875.7
27.5°	805.6	814.6	832.4	847.7	852.8
30°	776.3	785.2	804.4	823.5	829.9
32.5°	745.7	755.9	778.9	798.0	804.4
35°	713.9	722.8	747.0	769.9	777.6
37.5°	680.7	688.4	716.4	740.6	748.3
40°	645.0	655.2	684.5	712.6	720.2
42.5°	609.3	620.8	650.1	680.7	688.4
45°	573.6	586.4	617.0	648.8	657.8
47.5°	539.2	549.4	583.8	614.4	627.2
50°	502.2	512.4	545.6	580.0	592.8
52.5°	464.0	478.0	513.7	546.9	562.2
55°	427.0	441.1	478.0	511.2	525.2
57.5°	392.6	404.1	442.3	476.8	490.8
60°	355.7	365.8	406.6	443.6	456.4
62.5°	316.1	331.4	373.5	407.9	423.2
65°	280.4	297.0	341.6	374.8	390.1
67.5°	247.3	262.6	305.9	341.6	358.2
70°	209.1	229.5	274.1	309.8	325.1
72.5°	178.5	196.3	242.2	277.9	294.5
75°	142.8	164.4	210.3	246.0	258.8
77.5°	113.5	135.1	178.5	206.5	212.9
80°	82.9	104.5	145.3	159.3	163.2
82.5°	56.1	76.5	104.5	108.4	109.6
85°	34.4	47.2	61.2	61.2	61.2
87.5°	16.6	19.1	21.7	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)