

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: P390722

Luminaire Tested: **22CZ2-80VHE-RDP-UNV-L935-CD1-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: P390722
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-RDP-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4601.4 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

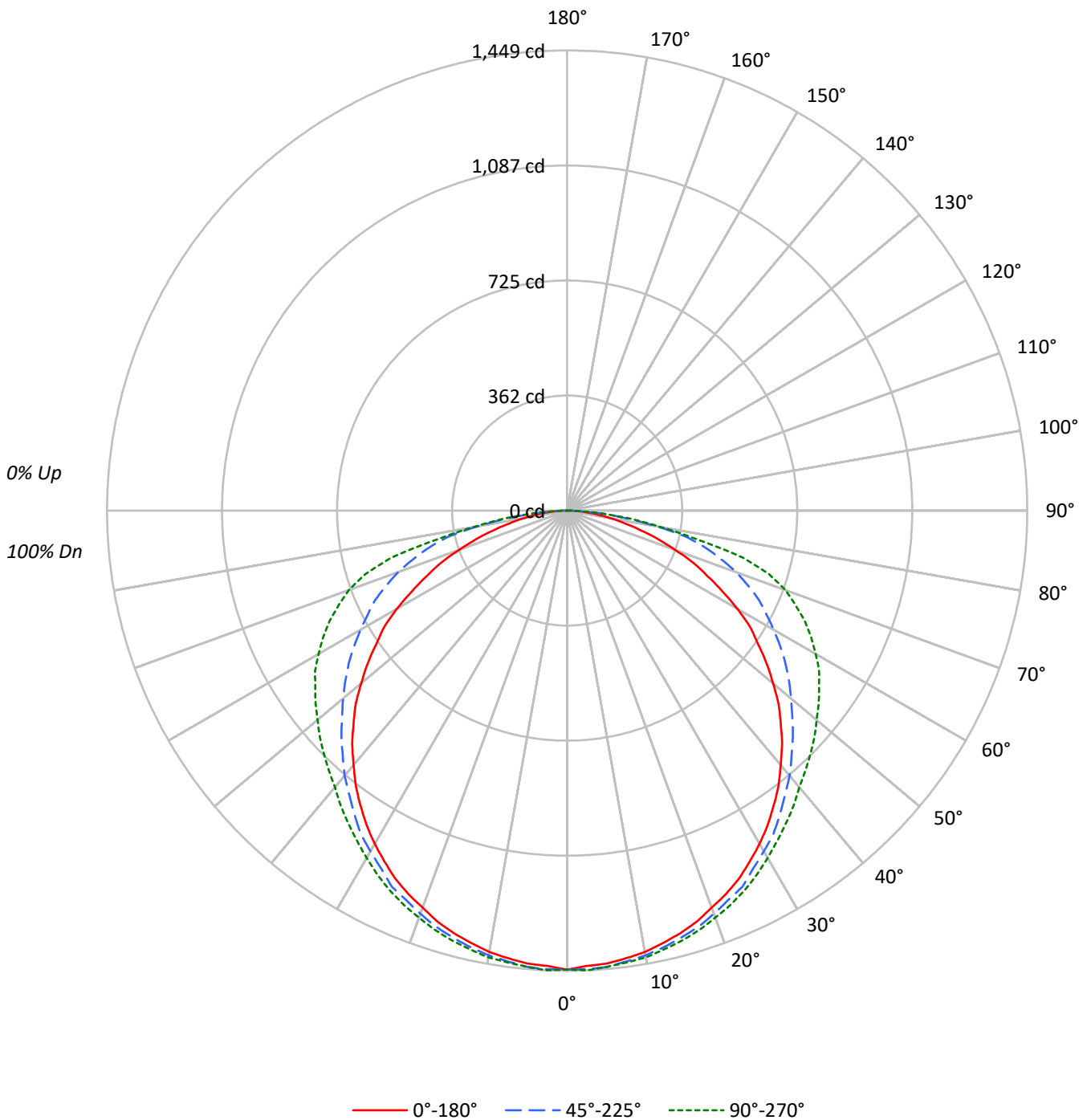
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	3890	3890	3890
5°	3868	3895	3895
10°	3857	3885	3903
15°	3838	3876	3904
20°	3810	3868	3906
25°	3799	3880	3920
30°	3765	3850	3923
35°	3725	3836	3948
40°	3674	3829	3995
45°	3620	3826	4122
50°	3543	3854	4294
55°	3446	3939	4542
60°	3334	4045	4864
65°	3103	4246	5259
70°	2850	4448	5753
75°	2498	4681	5948
80°	2151	4458	4669
85°	1880	3239	3554



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	3.0
10°-20°	392.6	8.5
20°-30°	598.9	13.0
30°-40°	731.3	15.9
40°-50°	781.9	17.0
50°-60°	754.7	16.4
60°-70°	649.7	14.1
70°-80°	439.6	9.6
80°-90°	116.0	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°	1128.2	24.5
0°-40°	1859.5	40.4
0°-60°	3396.2	73.8
0°-90°	4601.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4601.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1432	1435	1442	1442	1442	136
15°	1378	1381	1391	1398	1401	389
25°	1280	1286	1307	1313	1320	589
35°	1134	1144	1168	1192	1202	710
45°	951	968	1005	1056	1083	734
55°	734	758	840	924	968	658
65°	487	535	667	772	826	485
75°	240	318	450	542	572	258
85°	61	85	105	108	115	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.4	1445.4	1445.4	1445.4	1445.4
2.5°	1435.2	1438.6	1445.4	1445.4	1448.8
5°	1431.8	1435.2	1442.0	1442.0	1442.0
7.5°	1421.7	1425.1	1431.8	1435.2	1435.2
10°	1411.5	1414.9	1421.7	1425.1	1428.5
12.5°	1394.6	1398.0	1408.1	1414.9	1414.9
15°	1377.7	1381.1	1391.2	1398.0	1401.4
17.5°	1357.4	1364.1	1374.3	1381.1	1384.5
20°	1330.3	1337.1	1350.6	1360.8	1364.1
22.5°	1306.6	1313.4	1326.9	1337.1	1343.8
25°	1279.5	1286.3	1306.6	1313.4	1320.1
27.5°	1245.7	1252.4	1269.4	1282.9	1293.1
30°	1211.8	1218.6	1238.9	1255.8	1262.6
32.5°	1174.6	1184.7	1208.4	1222.0	1232.1
35°	1134.0	1144.1	1167.8	1191.5	1201.7
37.5°	1093.3	1103.5	1127.2	1157.7	1171.2
40°	1046.0	1059.5	1090.0	1130.6	1137.3
42.5°	1001.9	1018.9	1046.0	1093.3	1110.3
45°	951.2	968.1	1005.3	1056.1	1083.2
47.5°	903.8	920.7	961.3	1022.3	1056.1
50°	846.2	869.9	920.7	991.8	1025.6
52.5°	792.1	812.4	880.1	957.9	998.6
55°	734.5	758.2	839.5	924.1	968.1
57.5°	683.8	704.1	795.5	890.2	941.0
60°	619.4	646.5	751.5	853.0	903.8
62.5°	551.7	592.4	707.5	812.4	866.6
65°	487.4	534.8	666.8	771.8	825.9
67.5°	429.9	480.7	616.1	727.8	778.5
70°	362.2	426.5	565.3	673.6	731.2
72.5°	301.3	372.3	507.7	616.1	666.8
75°	240.3	318.2	450.2	541.6	572.1
77.5°	186.2	260.6	385.9	413.0	416.4
80°	138.8	206.5	287.7	291.1	301.3
82.5°	94.8	145.6	186.2	203.1	206.5
85°	60.9	84.6	104.9	108.3	115.1
87.5°	27.1	30.5	37.2	33.8	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)