

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: P390576

Luminaire Tested: **22CZ2-65VHE-RDP-UNV-L935-CD1-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: P390576  
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: 22CZ2-65VHE-RDP-UNV-L935-CD1-SDWPD1-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: 3639.0 lumens  
Efficiency: N/A  
Efficacy: 76.0 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

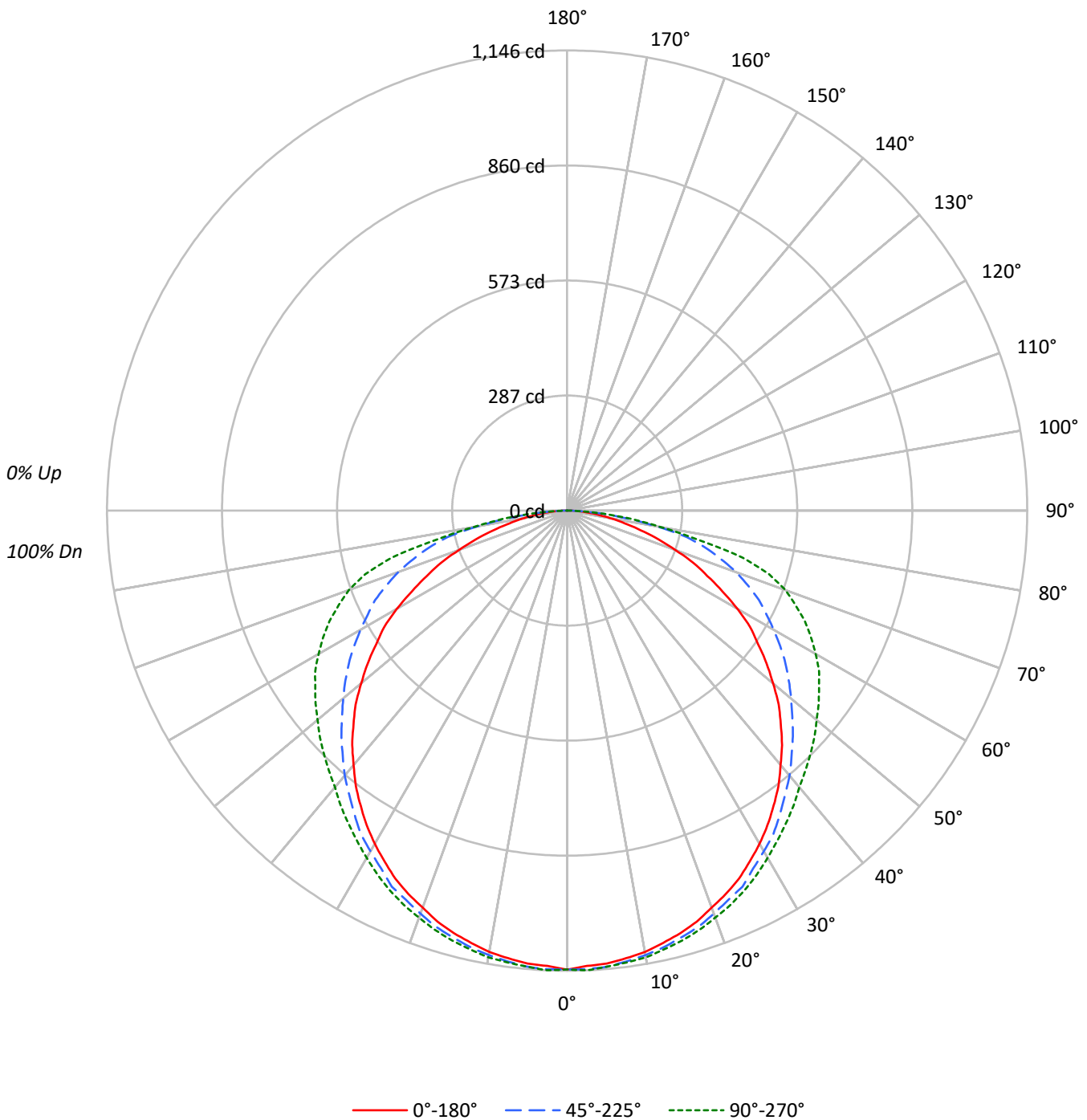
Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3076	3076	3076
5°	3059	3081	3081
10°	3050	3072	3087
15°	3035	3065	3088
20°	3013	3059	3089
25°	3004	3068	3100
30°	2978	3045	3103
35°	2946	3034	3122
40°	2906	3028	3160
45°	2863	3026	3260
50°	2802	3048	3396
55°	2725	3115	3592
60°	2637	3198	3847
65°	2455	3358	4159
70°	2253	3518	4549
75°	1976	3701	4704
80°	1702	3526	3693
85°	1488	2563	2810



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	3.0
10°-20°	310.5	8.5
20°-30°	473.7	13.0
30°-40°	578.3	15.9
40°-50°	618.4	17.0
50°-60°	596.9	16.4
60°-70°	513.8	14.1
70°-80°	347.6	9.6
80°-90°	91.7	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°	892.2	24.5
0°-40°	1470.6	40.4
0°-60°	2685.8	73.8
0°-90°	3639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3639.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1143	1143	1143	1143	1143	
5°	1132	1135	1140	1140	1140	108
15°	1090	1092	1100	1106	1108	307
25°	1012	1017	1033	1039	1044	466
35°	897	905	924	942	950	561
45°	752	766	795	835	857	581
55°	581	600	664	731	766	521
65°	386	423	527	610	653	383
75°	190	252	356	428	452	204
85°	48	67	83	86	91	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1143.1	1143.1	1143.1	1143.1	<i>1143.1</i>
2.5°	<i>1135.0</i>	<i>1137.7</i>	<i>1143.1</i>	<i>1143.1</i>	<i>1145.8</i>
5°	1132.4	1135.0	1140.4	1140.4	<i>1140.4</i>
7.5°	1124.3	1127.0	1132.4	1135.0	<i>1135.0</i>
10°	1116.3	1119.0	1124.3	1127.0	<i>1129.7</i>
12.5°	1102.9	1105.6	1113.6	1119.0	<i>1119.0</i>
15°	1089.5	1092.2	1100.2	1105.6	<i>1108.3</i>
17.5°	1073.5	1078.8	1086.9	1092.2	<i>1094.9</i>
20°	1052.1	1057.4	1068.1	1076.1	<i>1078.8</i>
22.5°	1033.3	1038.7	1049.4	1057.4	<i>1062.8</i>
25°	1011.9	1017.3	1033.3	1038.7	<i>1044.0</i>
27.5°	985.1	990.5	1003.9	1014.6	<i>1022.6</i>
30°	958.4	963.7	979.8	993.2	<i>998.5</i>
32.5°	928.9	936.9	955.7	966.4	<i>974.4</i>
35°	896.8	904.8	923.6	942.3	<i>950.3</i>
37.5°	864.7	872.7	891.4	915.5	<i>926.2</i>
40°	827.2	837.9	862.0	894.1	<i>899.5</i>
42.5°	792.4	805.8	827.2	864.7	<i>878.1</i>
45°	752.2	765.6	795.1	835.2	<i>856.6</i>
47.5°	714.8	728.1	760.3	808.4	<i>835.2</i>
50°	669.2	688.0	728.1	784.4	<i>811.1</i>
52.5°	626.4	642.5	696.0	757.6	<i>789.7</i>
55°	580.9	599.6	663.9	730.8	<i>765.6</i>
57.5°	540.8	556.8	629.1	704.0	<i>744.2</i>
60°	489.9	511.3	594.3	674.6	<i>714.8</i>
62.5°	436.3	468.5	559.5	642.5	<i>685.3</i>
65°	385.5	423.0	527.4	610.4	<i>653.2</i>
67.5°	340.0	380.1	487.2	575.6	<i>615.7</i>
70°	286.4	337.3	447.1	532.7	<i>578.2</i>
72.5°	238.3	294.5	401.5	487.2	<i>527.4</i>
75°	190.1	251.6	356.0	428.3	<i>452.4</i>
77.5°	147.2	206.1	305.2	326.6	<i>329.3</i>
80°	109.8	163.3	227.5	230.2	<i>238.3</i>
82.5°	75.0	115.1	147.2	160.6	<i>163.3</i>
85°	48.2	66.9	83.0	85.7	<i>91.0</i>
87.5°	21.4	24.1	29.4	26.8	<i>26.8</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)