

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: P390577

Luminaire Tested: **22CZ2-65VHE-RDP-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: P390577  
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-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

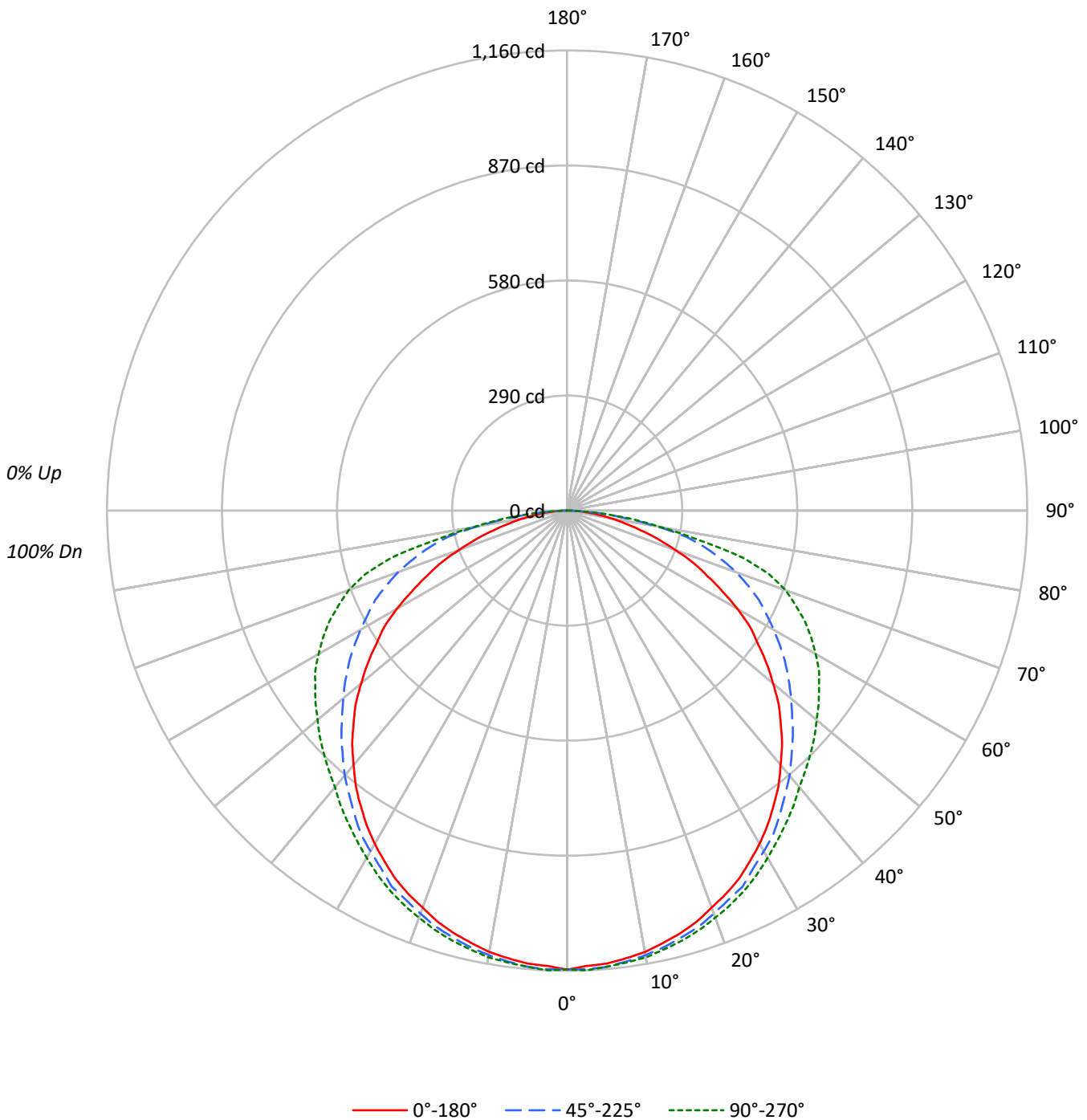
Lumens per Lamp: N/A  
Luminaire Lumens: 3683.4 lumens  
Efficiency: N/A  
Efficacy: 76.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 47.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
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°	3113	3113	3113
5°	3096	3118	3118
10°	3087	3110	3125
15°	3072	3103	3125
20°	3050	3096	3127
25°	3041	3105	3138
30°	3014	3081	3141
35°	2982	3071	3160
40°	2941	3065	3198
45°	2898	3063	3300
50°	2836	3085	3437
55°	2759	3153	3636
60°	2669	3237	3894
65°	2485	3399	4210
70°	2281	3560	4605
75°	2000	3747	4761
80°	1722	3569	3738
85°	1507	2594	2844



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.4	3.0
10°-20°	314.2	8.5
20°-30°	479.4	13.0
30°-40°	585.4	15.9
40°-50°	625.9	17.0
50°-60°	604.2	16.4
60°-70°	520.1	14.1
70°-80°	351.9	9.6
80°-90°	92.8	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°	903.1	24.5
0°-40°	1488.5	40.4
0°-60°	2718.6	73.8
0°-90°	3683.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3683.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1146	1149	1154	1154	1154	109
15°	1103	1106	1114	1119	1122	311
25°	1024	1030	1046	1051	1057	471
35°	908	916	935	954	962	568
45°	761	775	805	845	867	588
55°	588	607	672	740	775	527
65°	390	428	534	618	661	388
75°	192	255	360	434	458	206
85°	49	68	84	87	92	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.0	1157.0	1157.0	1157.0	1157.0
2.5°	1148.9	1151.6	1157.0	1157.0	1159.7
5°	1146.2	1148.9	1154.3	1154.3	1154.3
7.5°	1138.1	1140.8	1146.2	1148.9	1148.9
10°	1129.9	1132.6	1138.1	1140.8	1143.5
12.5°	1116.4	1119.1	1127.2	1132.6	1132.6
15°	1102.8	1105.5	1113.7	1119.1	1121.8
17.5°	1086.6	1092.0	1100.1	1105.5	1108.2
20°	1064.9	1070.3	1081.1	1089.3	1092.0
22.5°	1045.9	1051.3	1062.2	1070.3	1075.7
25°	1024.2	1029.7	1045.9	1051.3	1056.8
27.5°	997.2	1002.6	1016.1	1027.0	1035.1
30°	970.1	975.5	991.7	1005.3	1010.7
32.5°	940.2	948.4	967.3	978.2	986.3
35°	907.7	915.9	934.8	953.8	961.9
37.5°	875.2	883.3	902.3	926.7	937.5
40°	837.3	848.1	872.5	905.0	910.4
42.5°	802.1	815.6	837.3	875.2	888.8
45°	761.4	775.0	804.8	845.4	867.1
47.5°	723.5	737.0	769.5	818.3	845.4
50°	677.4	696.4	737.0	793.9	821.0
52.5°	634.1	650.3	704.5	766.8	799.3
55°	588.0	607.0	672.0	739.7	775.0
57.5°	547.3	563.6	636.8	712.6	753.3
60°	495.9	517.5	601.5	682.8	723.5
62.5°	441.7	474.2	566.3	650.3	693.7
65°	390.2	428.1	533.8	617.8	661.2
67.5°	344.1	384.8	493.2	582.6	623.2
70°	289.9	341.4	452.5	539.2	585.3
72.5°	241.2	298.1	406.4	493.2	533.8
75°	192.4	254.7	360.4	433.5	457.9
77.5°	149.0	208.6	308.9	330.6	333.3
80°	111.1	165.3	230.3	233.0	241.2
82.5°	75.9	116.5	149.0	162.6	165.3
85°	48.8	67.7	84.0	86.7	92.1
87.5°	21.7	24.4	29.8	27.1	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)