

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: P388302

Luminaire Tested: **22CZ2-39VHE-UNV-L950-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: P388302  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-39VHE-UNV-L950-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

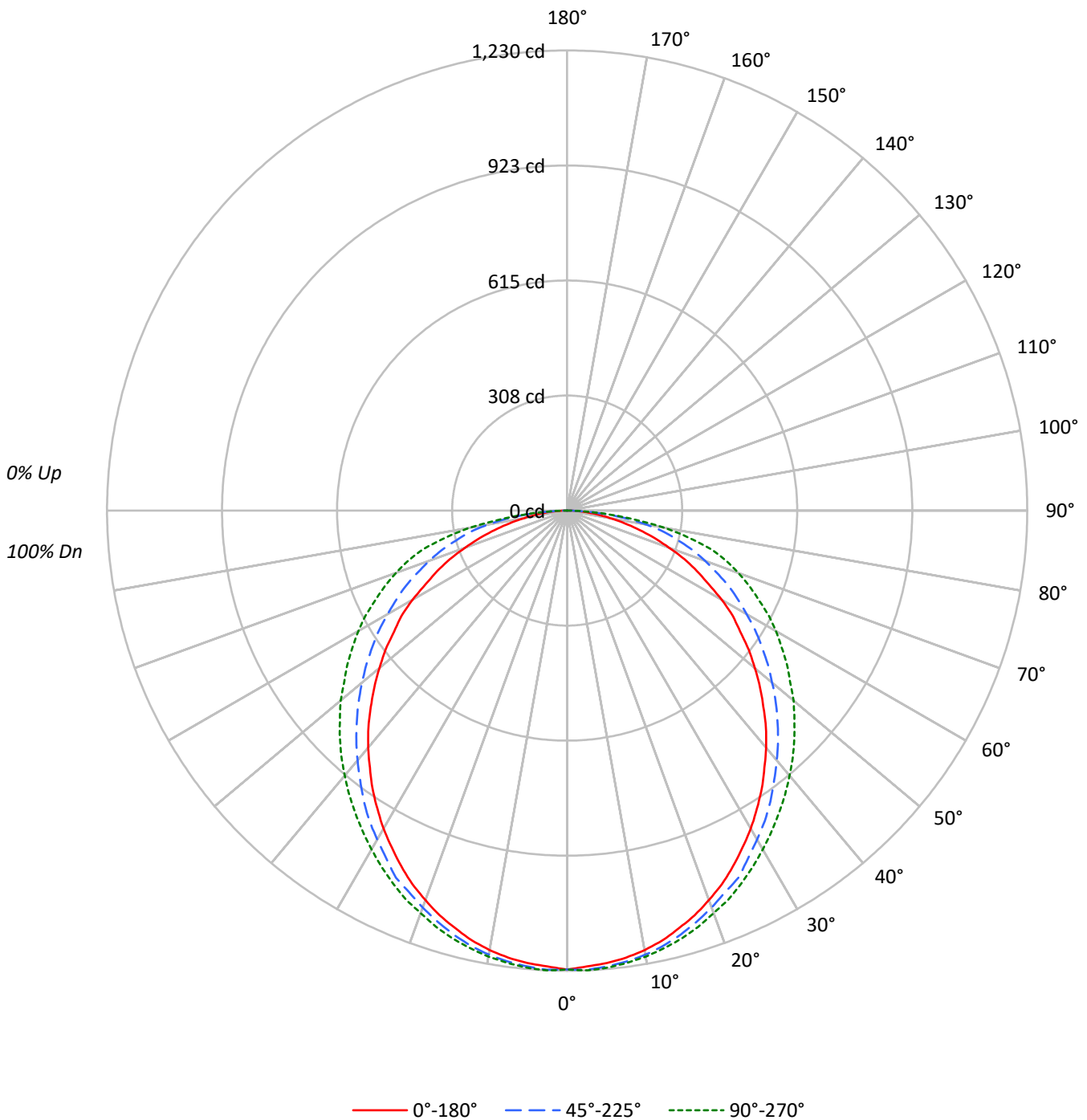
Lumens per Lamp: N/A  
Luminaire Lumens: 3607.6 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



TEST NUMBER: P388302

CATALOG NUMBER: 22CZ2-39VHE-UNV-L950-CD1-SDWPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P388302

CATALOG NUMBER: 22CZ2-39VHE-UNV-L950-CD1-SDWPD1-U

**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	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3301	3301	3301
5°	3280	3304	3314
10°	3260	3293	3308
15°	3219	3269	3299
20°	3172	3233	3279
25°	3115	3215	3268
30°	3050	3155	3249
35°	2980	3114	3242
40°	2906	3062	3249
45°	2824	3027	3270
50°	2742	2995	3307
55°	2648	2981	3365
60°	2570	2981	3468
65°	2441	3029	3594
70°	2277	3087	3827
75°	2086	3193	4134
80°	1816	3329	4071
85°	1590	2961	3233



TEST NUMBER: P388302

CATALOG NUMBER: 22CZ2-39VHE-UNV-L950-CD1-SDWPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.0	3.2
10°-20°	330.4	9.2
20°-30°	496.0	13.7
30°-40°	592.7	16.4
40°-50°	616.3	17.1
50°-60°	571.3	15.8
60°-70°	468.6	13.0
70°-80°	316.7	8.8
80°-90°	99.5	2.8
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°	942.5	26.1
0°-40°	1535.2	42.6
0°-60°	2722.8	75.5
0°-90°	3607.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3607.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1214	1216	1223	1225	1227	115
15°	1156	1161	1173	1180	1184	326
25°	1049	1058	1083	1095	1101	483
35°	907	920	948	976	987	567
45°	742	756	795	841	859	573
55°	564	582	636	692	717	507
65°	383	405	476	538	564	379
75°	201	234	307	369	398	213
85°	52	71	96	106	105	58
90°	0	0	0	0	0	



TEST NUMBER: P388302

CATALOG NUMBER: 22CZ2-39VHE-UNV-L950-CD1-SDWPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1226.7	1226.7	1226.7	1226.7	1226.7
2.5°	1219.5	1223.1	1228.4	1230.2	1230.2
5°	1214.2	1216.0	1223.1	1224.9	1226.7
7.5°	1205.3	1208.9	1216.0	1217.8	1219.5
10°	1192.9	1196.5	1205.3	1208.9	1210.7
12.5°	1176.9	1180.5	1191.1	1196.5	1198.2
15°	1155.6	1161.0	1173.4	1180.5	1184.0
17.5°	1134.3	1139.7	1152.1	1162.7	1166.3
20°	1107.7	1120.1	1129.0	1143.2	1145.0
22.5°	1081.1	1088.2	1104.2	1118.4	1125.5
25°	1049.1	1058.0	1082.9	1095.3	1100.6
27.5°	1015.4	1027.8	1047.4	1066.9	1074.0
30°	981.7	990.6	1015.4	1038.5	1045.6
32.5°	944.4	956.8	983.5	1006.5	1017.2
35°	907.1	919.5	947.9	976.3	987.0
37.5°	866.3	880.5	908.9	942.6	956.8
40°	827.2	837.9	871.6	912.4	924.9
42.5°	786.4	798.8	834.3	878.7	892.9
45°	742.0	756.2	795.3	841.4	859.2
47.5°	699.4	713.6	756.2	802.4	823.7
50°	655.0	672.8	715.4	768.7	790.0
52.5°	612.4	628.4	676.3	731.4	750.9
55°	564.5	582.3	635.5	692.3	717.2
57.5°	525.5	537.9	596.5	655.0	679.9
60°	477.5	493.5	553.9	616.0	644.4
62.5°	426.0	452.7	514.8	578.7	607.1
65°	383.4	404.7	475.7	537.9	564.5
67.5°	339.1	362.1	431.4	497.1	527.2
70°	289.4	319.5	392.3	458.0	486.4
72.5°	245.0	276.9	351.5	415.4	445.6
75°	200.6	234.3	307.1	369.2	397.6
77.5°	158.0	195.3	266.3	314.2	332.0
80°	117.2	152.7	214.8	248.5	262.7
82.5°	81.7	111.8	158.0	175.7	179.3
85°	51.5	71.0	95.9	106.5	104.7
87.5°	23.1	28.4	35.5	39.1	37.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)