

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: P387970

Luminaire Tested: **22CZ2-39VHE-SQR-UNV-L950-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: P387970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-SQR-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3507.0 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

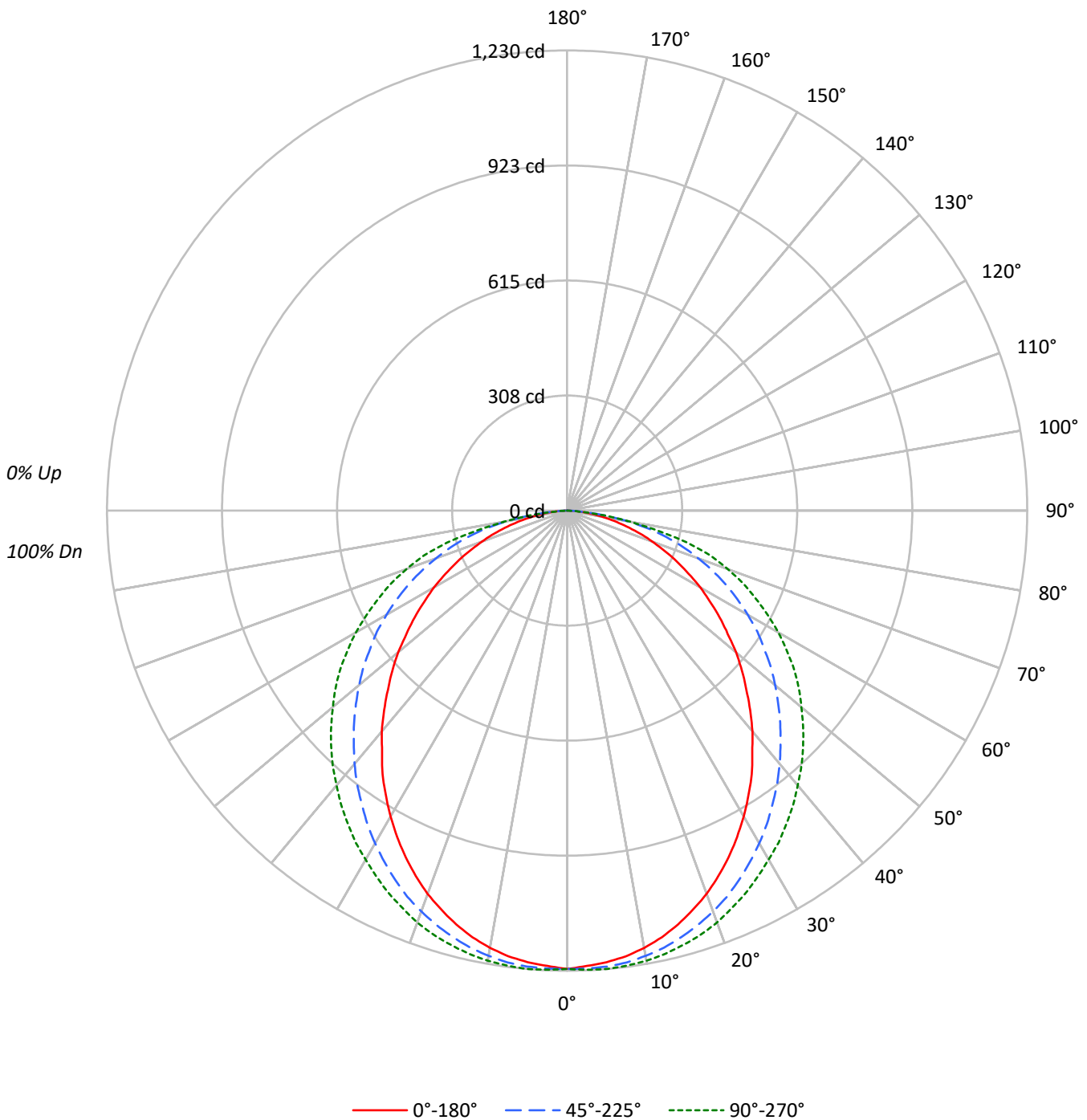
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P387970

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-L950-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P387970

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-L950-CD1-SWPD1-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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3297	3297	3297
5°	3273	3305	3323
10°	3243	3302	3339
15°	3190	3288	3348
20°	3122	3265	3356
25°	3034	3232	3351
30°	2933	3191	3346
35°	2827	3144	3357
40°	2707	3105	3368
45°	2578	3066	3395
50°	2467	3038	3422
55°	2335	3014	3475
60°	2213	3001	3512
65°	2067	2978	3540
70°	1899	2934	3589
75°	1713	2855	3461
80°	1471	2528	2605
85°	1183	1491	1183



TEST NUMBER: P387970

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-L950-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	3.3
10°-20°	332.1	9.5
20°-30°	498.7	14.2
30°-40°	594.8	17.0
40°-50°	615.0	17.5
50°-60°	565.4	16.1
60°-70°	450.1	12.8
70°-80°	275.0	7.8
80°-90°	59.8	1.7
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°	946.9	27.0
0°-40°	1541.7	44.0
0°-60°	2722.1	77.6
0°-90°	3507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3507.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1212	1215	1223	1228	1230	115
15°	1145	1158	1180	1197	1202	323
25°	1022	1047	1089	1119	1128	470
35°	861	897	957	1007	1022	537
45°	678	726	806	870	892	524
55°	498	553	642	716	741	445
65°	325	380	468	533	556	322
75°	165	213	275	323	333	176
85°	38	47	48	42	38	44
90°	0	0	0	0	0	



TEST NUMBER: P387970

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-L950-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1225.1	1225.1	1225.1	1225.1	1225.1
2.5°	1218.4	1220.1	1225.1	1228.4	1228.4
5°	1211.8	1215.1	1223.4	1228.4	1230.1
7.5°	1201.8	1206.8	1218.4	1225.1	1226.7
10°	1186.8	1193.5	1208.4	1218.4	1221.8
12.5°	1168.5	1178.5	1196.8	1210.1	1213.4
15°	1145.2	1158.5	1180.1	1196.8	1201.8
17.5°	1118.6	1135.2	1161.8	1181.8	1188.5
20°	1090.3	1106.9	1140.2	1163.5	1171.8
22.5°	1057.0	1078.6	1116.9	1143.5	1150.2
25°	1022.0	1047.0	1088.6	1118.6	1128.5
27.5°	983.7	1013.7	1058.6	1095.2	1103.6
30°	943.8	975.4	1027.0	1067.0	1076.9
32.5°	902.2	938.8	993.7	1038.7	1052.0
35°	860.6	897.2	957.1	1007.0	1022.0
37.5°	812.3	855.6	922.1	973.7	992.0
40°	770.7	812.3	883.9	940.4	958.8
42.5°	724.1	769.0	843.9	905.5	927.1
45°	677.5	725.7	805.6	870.5	892.2
47.5°	634.2	682.4	765.7	833.9	855.6
50°	589.2	639.2	725.7	795.6	817.3
52.5°	541.0	595.9	685.8	755.7	780.7
55°	497.7	552.6	642.5	715.7	740.7
57.5°	452.7	509.3	602.6	672.5	695.8
60°	411.1	466.1	557.6	625.9	652.5
62.5°	366.2	422.8	512.7	579.2	604.2
65°	324.6	379.5	467.7	532.6	555.9
67.5°	283.0	337.9	421.1	482.7	509.3
70°	241.4	296.3	372.9	432.8	456.1
72.5°	204.7	253.0	326.2	381.2	402.8
75°	164.8	213.1	274.6	322.9	332.9
77.5°	128.2	171.4	223.0	244.7	248.0
80°	94.9	128.2	163.1	168.1	168.1
82.5°	63.3	88.2	101.5	103.2	101.5
85°	38.3	46.6	48.3	41.6	38.3
87.5°	13.3	13.3	8.3	5.0	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)