

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: P387922

Luminaire Tested: **22CZ2-39-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: P387922
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: 22CZ2-39-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: 3390.9 lumens
Efficiency: N/A
Efficacy: 98.3 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

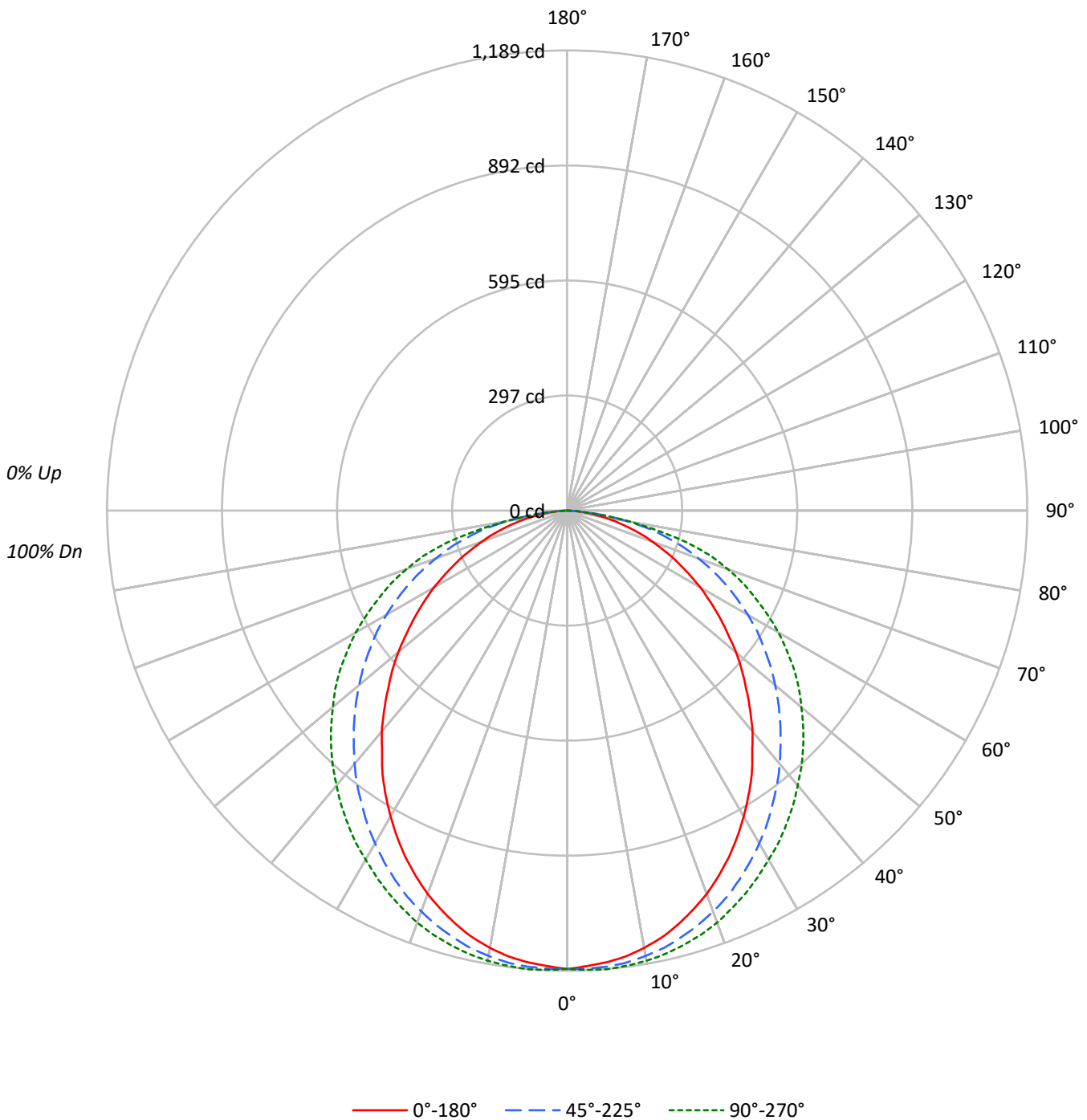
Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3187	3187	3187
5°	3165	3195	3213
10°	3136	3193	3228
15°	3085	3179	3237
20°	3019	3157	3245
25°	2934	3125	3240
30°	2835	3086	3236
35°	2734	3040	3246
40°	2618	3002	3256
45°	2493	2965	3283
50°	2385	2938	3308
55°	2258	2914	3360
60°	2139	2902	3395
65°	1998	2879	3422
70°	1836	2836	3470
75°	1656	2761	3347
80°	1421	2444	2520
85°	1142	1442	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.3
10°-20°	321.1	9.5
20°-30°	482.2	14.2
30°-40°	575.1	17.0
40°-50°	594.6	17.5
50°-60°	546.7	16.1
60°-70°	435.2	12.8
70°-80°	265.9	7.8
80°-90°	57.8	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°	915.6	27.0
0°-40°	1490.7	44.0
0°-60°	2632.0	77.6
0°-90°	3390.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3390.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1172	1175	1183	1188	1189	111
15°	1107	1120	1141	1157	1162	312
25°	988	1012	1053	1082	1091	455
35°	832	868	925	974	988	519
45°	655	702	779	842	863	507
55°	481	534	621	692	716	430
65°	314	367	452	515	538	311
75°	159	206	266	312	322	170
85°	37	45	47	40	37	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1184.5	1184.5	1184.5	1184.5	1184.5
2.5°	1178.1	1179.7	1184.5	1187.7	1187.7
5°	1171.6	1174.9	1182.9	1187.7	1189.4
7.5°	1162.0	1166.8	1178.1	1184.5	1186.1
10°	1147.5	1153.9	1168.4	1178.1	1181.3
12.5°	1129.8	1139.5	1157.2	1170.0	1173.3
15°	1107.3	1120.1	1141.1	1157.2	1162.0
17.5°	1081.5	1097.6	1123.4	1142.7	1149.1
20°	1054.2	1070.3	1102.4	1125.0	1133.0
22.5°	1022.0	1042.9	1079.9	1105.7	1112.1
25°	988.2	1012.3	1052.6	1081.5	1091.2
27.5°	951.2	980.1	1023.6	1059.0	1067.0
30°	912.5	943.1	993.0	1031.6	1041.3
32.5°	872.3	907.7	960.8	1004.3	1017.1
35°	832.1	867.5	925.4	973.7	988.2
37.5°	785.4	827.2	891.6	941.5	959.2
40°	745.2	785.4	854.6	909.3	927.0
42.5°	700.1	743.5	816.0	875.5	896.4
45°	655.0	701.7	779.0	841.7	862.6
47.5°	613.2	659.9	740.3	806.3	827.2
50°	569.7	618.0	701.7	769.3	790.2
52.5°	523.1	576.2	663.1	730.7	754.8
55°	481.2	534.3	621.2	692.0	716.2
57.5°	437.8	492.5	582.6	650.2	672.7
60°	397.5	450.6	539.2	605.1	630.9
62.5°	354.1	408.8	495.7	560.1	584.2
65°	313.8	366.9	452.2	515.0	537.5
67.5°	273.6	326.7	407.2	466.7	492.5
70°	233.4	286.5	360.5	418.4	441.0
72.5°	198.0	244.6	315.4	368.6	389.5
75°	159.3	206.0	265.6	312.2	321.9
77.5°	123.9	165.8	215.7	236.6	239.8
80°	91.7	123.9	157.7	162.6	162.6
82.5°	61.2	85.3	98.2	99.8	98.2
85°	37.0	45.1	46.7	40.2	37.0
87.5°	12.9	12.9	8.0	4.8	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)