

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: P387923

Luminaire Tested: **22CZ2-39-SQR-UNV-L950-CD1-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: P387923
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-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: 3433.5 lumens
Efficiency: N/A
Efficacy: 99.5 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

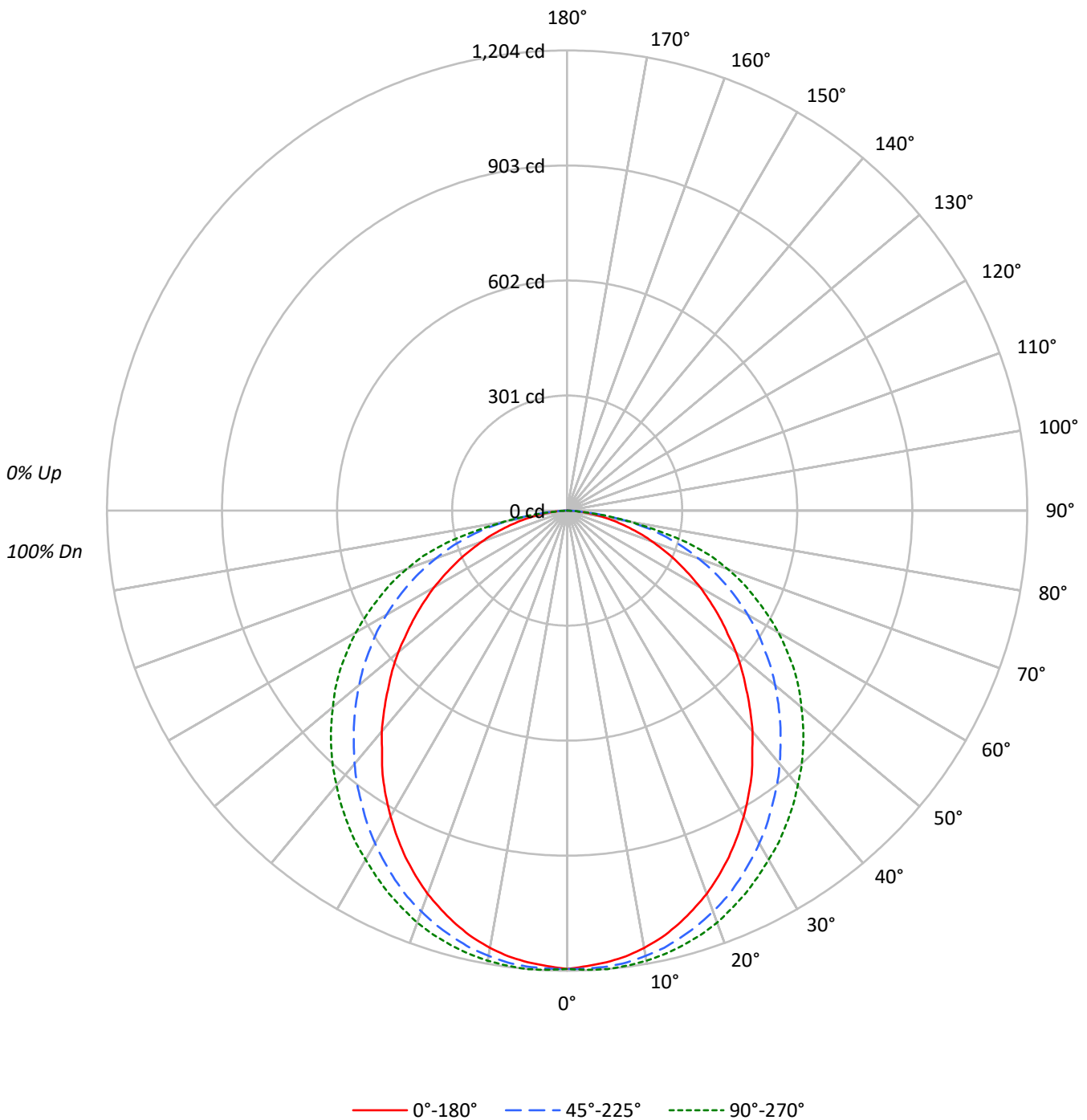
Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3228	3228	3228
5°	3205	3236	3253
10°	3175	3233	3268
15°	3124	3219	3278
20°	3057	3197	3285
25°	2971	3165	3281
30°	2871	3124	3276
35°	2768	3078	3287
40°	2650	3040	3297
45°	2524	3001	3324
50°	2415	2974	3350
55°	2286	2951	3402
60°	2166	2938	3438
65°	2024	2916	3466
70°	1859	2872	3513
75°	1677	2796	3388
80°	1440	2475	2551
85°	1158	1460	1158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.7	3.3
10°-20°	325.1	9.5
20°-30°	488.3	14.2
30°-40°	582.3	17.0
40°-50°	602.1	17.5
50°-60°	553.5	16.1
60°-70°	440.7	12.8
70°-80°	269.2	7.8
80°-90°	58.5	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°	927.1	27.0
0°-40°	1509.4	44.0
0°-60°	2665.1	77.6
0°-90°	3433.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3433.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1186	1190	1198	1203	1204	113
15°	1121	1134	1155	1172	1177	316
25°	1001	1025	1066	1095	1105	460
35°	842	878	937	986	1001	526
45°	663	710	789	852	874	513
55°	487	541	629	701	725	436
65°	318	372	458	522	544	315
75°	161	209	269	316	326	172
85°	38	46	47	41	38	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1199.4	1199.4	1199.4	1199.4	1199.4
2.5°	1192.9	1194.5	1199.4	1202.7	1202.7
5°	1186.4	1189.6	1197.8	1202.7	1204.3
7.5°	1176.6	1181.5	1192.9	1199.4	1201.0
10°	1161.9	1168.4	1183.1	1192.9	1196.1
12.5°	1144.0	1153.8	1171.7	1184.7	1188.0
15°	1121.2	1134.2	1155.4	1171.7	1176.6
17.5°	1095.1	1111.4	1137.5	1157.0	1163.6
20°	1067.4	1083.7	1116.3	1139.1	1147.3
22.5°	1034.8	1056.0	1093.5	1119.6	1126.1
25°	1000.6	1025.0	1065.8	1095.1	1104.9
27.5°	963.1	992.4	1036.4	1072.3	1080.4
30°	924.0	955.0	1005.5	1044.6	1054.4
32.5°	883.3	919.1	972.9	1016.9	1029.9
35°	842.5	878.4	937.0	985.9	1000.6
37.5°	795.3	837.6	902.8	953.3	971.3
40°	754.5	795.3	865.3	920.7	938.7
42.5°	708.9	752.9	826.2	886.5	907.7
45°	663.3	710.5	788.7	852.3	873.5
47.5°	620.9	668.1	749.6	816.4	837.6
50°	576.9	625.8	710.5	779.0	800.1
52.5°	529.6	583.4	671.4	739.8	764.3
55°	487.3	541.0	629.0	700.7	725.2
57.5°	443.3	498.7	589.9	658.4	681.2
60°	402.5	456.3	545.9	612.7	638.8
62.5°	358.5	413.9	501.9	567.1	591.6
65°	317.8	371.6	457.9	521.5	544.3
67.5°	277.0	330.8	412.3	472.6	498.7
70°	236.3	290.1	365.0	423.7	446.5
72.5°	200.4	247.7	319.4	373.2	394.4
75°	161.3	208.6	268.9	316.1	325.9
77.5°	125.5	167.9	218.4	239.6	242.8
80°	92.9	125.5	159.7	164.6	164.6
82.5°	61.9	86.4	99.4	101.0	99.4
85°	37.5	45.6	47.3	40.7	37.5
87.5°	13.0	13.0	8.1	4.9	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)