

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: P387539

Luminaire Tested: **14CZ2-44-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: P387539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-SQR-UNV-L950-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

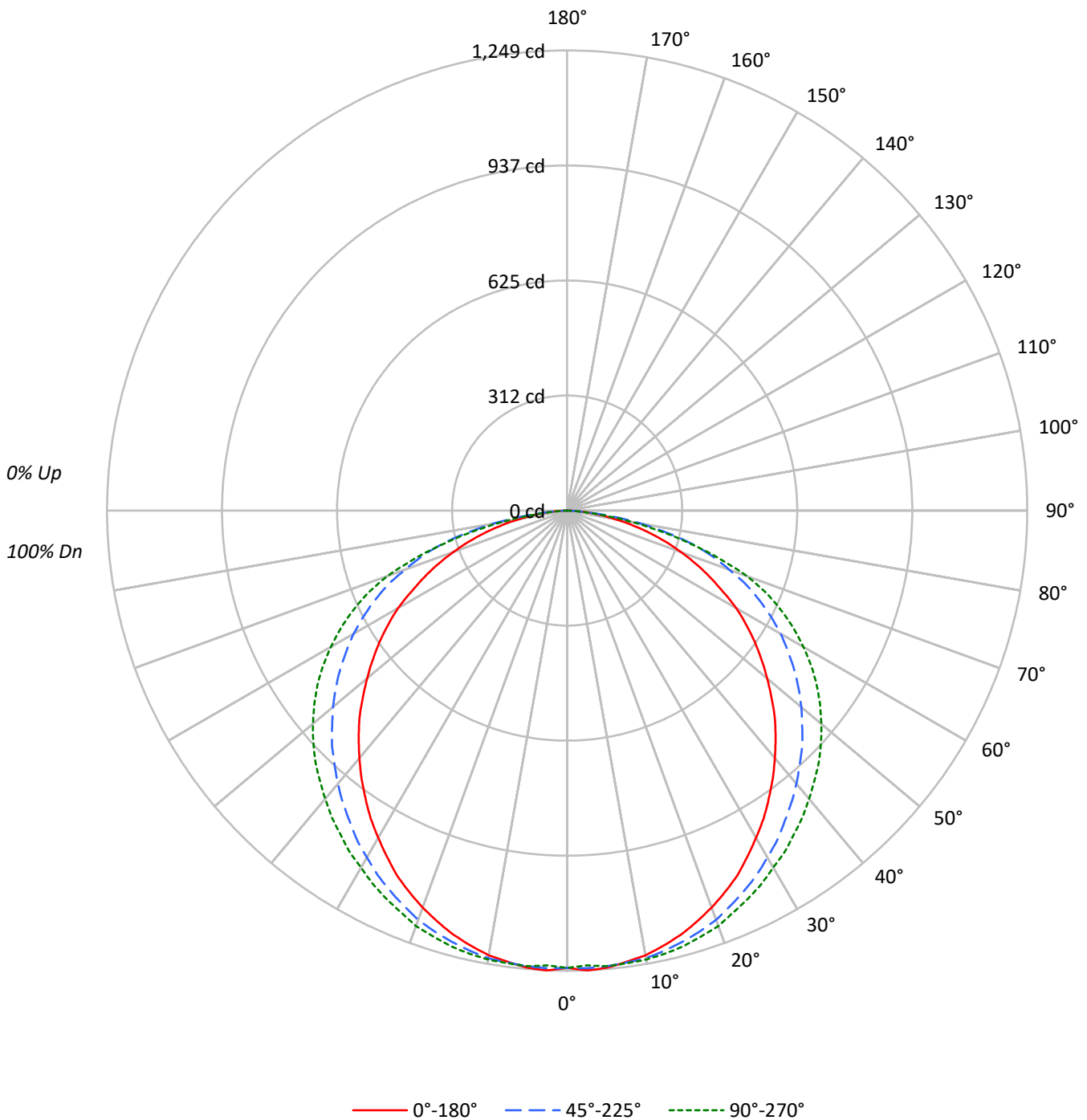
Lumens per Lamp: N/A
Luminaire Lumens: 3928.1 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.3
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	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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83				83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68				68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56				56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48				48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41				41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35				35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31				31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28				28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25				25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3340	3340	3340
5°	3364	3353	3353
10°	3349	3370	3381
15°	3320	3375	3409
20°	3283	3385	3436
25°	3245	3380	3450
30°	3187	3377	3476
35°	3135	3382	3525
40°	3081	3401	3589
45°	3036	3436	3677
50°	2967	3473	3771
55°	2916	3529	3882
60°	2856	3602	3985
65°	2723	3668	4084
70°	2585	3676	4081
75°	2367	3664	3603
80°	2025	3129	2793
85°	1590	1772	1041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	3.0
10°-20°	340.8	8.7
20°-30°	521.1	13.3
30°-40°	638.8	16.3
40°-50°	687.0	17.5
50°-60°	660.2	16.8
60°-70°	549.7	14.0
70°-80°	337.4	8.6
80°-90°	75.2	1.9
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°	979.9	24.9
0°-40°	1618.7	41.2
0°-60°	2965.8	75.5
0°-90°	3928.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3928.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1245	1233	1241	1241	1241	118
15°	1192	1188	1212	1220	1224	336
25°	1093	1103	1138	1152	1162	503
35°	954	978	1030	1057	1073	597
45°	798	834	903	944	966	614
55°	622	675	752	804	828	555
65°	428	493	576	624	641	424
75°	228	297	352	350	346	241
85°	52	77	57	40	34	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1241.3	1241.3	1241.3	1241.3	1241.3
2.5°	1249.2	1237.4	1243.3	1241.3	1235.4
5°	1245.3	1233.4	1241.3	1241.3	1241.3
7.5°	1235.4	1225.5	1237.4	1239.3	1239.3
10°	1225.5	1217.6	1233.4	1235.4	1237.4
12.5°	1209.6	1203.7	1223.5	1227.5	1231.4
15°	1191.8	1187.9	1211.6	1219.5	1223.5
17.5°	1170.0	1172.0	1197.8	1207.7	1211.6
20°	1146.3	1152.2	1181.9	1191.8	1199.7
22.5°	1120.5	1128.5	1160.1	1172.0	1179.9
25°	1092.8	1102.7	1138.4	1152.2	1162.1
27.5°	1059.2	1075.0	1114.6	1132.4	1142.3
30°	1025.5	1043.3	1086.9	1108.7	1118.6
32.5°	991.9	1011.7	1061.2	1082.9	1098.8
35°	954.2	978.0	1029.5	1057.2	1073.0
37.5°	916.6	944.3	999.8	1031.5	1049.3
40°	877.0	906.7	968.1	1003.7	1021.6
42.5°	837.4	871.1	934.4	974.0	993.8
45°	797.8	833.5	902.8	944.3	966.1
47.5°	752.3	795.9	865.2	912.7	934.4
50°	708.8	756.3	829.5	879.0	900.8
52.5°	665.2	714.7	791.9	843.4	865.2
55°	621.6	675.1	752.3	803.8	827.5
57.5°	576.1	631.5	710.7	764.2	786.0
60°	530.6	588.0	669.2	718.7	740.4
62.5°	477.1	544.4	623.6	673.1	692.9
65°	427.6	493.0	576.1	623.6	641.4
67.5°	378.1	445.4	526.6	570.2	586.0
70°	328.6	396.0	467.2	508.8	518.7
72.5°	279.1	346.5	413.8	437.5	433.6
75°	227.7	297.0	352.4	350.4	346.5
77.5°	178.2	245.5	279.1	265.3	259.3
80°	130.7	196.0	201.9	188.1	180.2
82.5°	89.1	140.6	126.7	110.9	102.9
85°	51.5	77.2	57.4	39.6	33.7
87.5°	21.8	19.8	5.9	5.9	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)