

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: P387995

Luminaire Tested: **22CZ2-44-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: P387995
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: 22CZ2-44-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

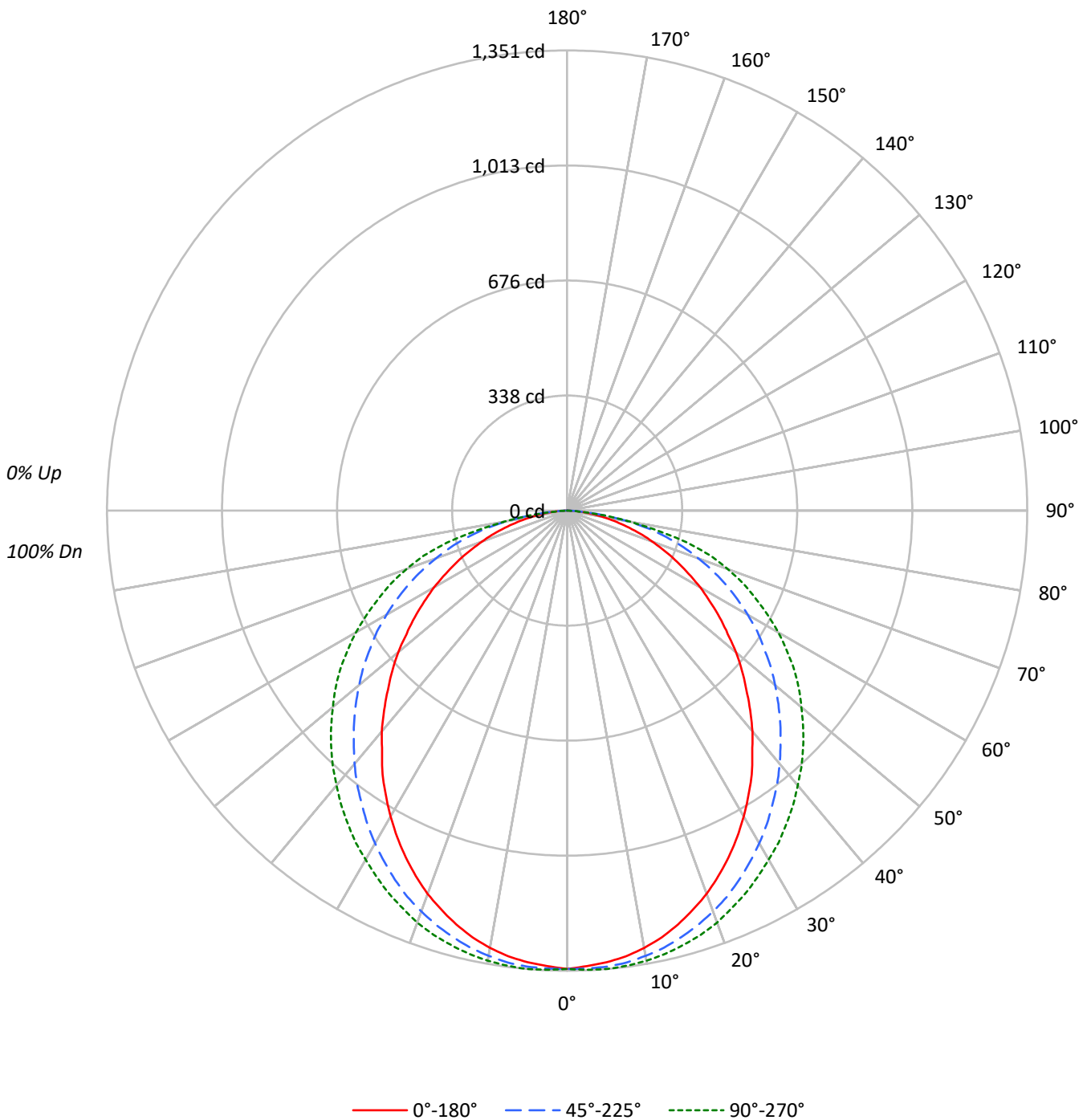
Lumens per Lamp: N/A
Luminaire Lumens: 3852.3 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 42.7
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°	3621	3621	3621
5°	3596	3630	3650
10°	3562	3627	3667
15°	3504	3611	3678
20°	3430	3587	3686
25°	3333	3551	3681
30°	3221	3505	3676
35°	3105	3454	3688
40°	2974	3411	3700
45°	2832	3368	3730
50°	2710	3337	3758
55°	2565	3311	3817
60°	2430	3296	3857
65°	2270	3272	3889
70°	2086	3223	3942
75°	1882	3137	3802
80°	1615	2777	2862
85°	1300	1636	1300



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.6	3.3
10°-20°	364.8	9.5
20°-30°	547.8	14.2
30°-40°	653.4	17.0
40°-50°	675.5	17.5
50°-60°	621.1	16.1
60°-70°	494.4	12.8
70°-80°	302.1	7.8
80°-90°	65.7	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°	1040.2	27.0
0°-40°	1693.5	44.0
0°-60°	2990.1	77.6
0°-90°	3852.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3852.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1346	1346	1346	1346	1346	
5°	1331	1335	1344	1349	1351	126
15°	1258	1273	1296	1315	1320	354
25°	1123	1150	1196	1229	1240	516
35°	945	986	1051	1106	1123	590
45°	744	797	885	956	980	575
55°	547	607	706	786	814	489
65°	356	417	514	585	611	353
75°	181	234	302	355	366	193
85°	42	51	53	46	42	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1345.7	1345.7	1345.7	1345.7	1345.7
2.5°	1338.4	1340.2	1345.7	1349.4	1349.4
5°	1331.1	1334.7	1343.9	1349.4	1351.2
7.5°	1320.1	1325.6	1338.4	1345.7	1347.5
10°	1303.6	1311.0	1327.4	1338.4	1342.0
12.5°	1283.5	1294.5	1314.6	1329.2	1332.9
15°	1257.9	1272.6	1296.3	1314.6	1320.1
17.5°	1228.7	1247.0	1276.2	1298.2	1305.5
20°	1197.6	1215.9	1252.5	1278.1	1287.2
22.5°	1161.0	1184.8	1226.9	1256.1	1263.4
25°	1122.6	1150.1	1195.8	1228.7	1239.7
27.5°	1080.6	1113.5	1162.9	1203.1	1212.2
30°	1036.7	1071.4	1128.1	1172.0	1183.0
32.5°	991.0	1031.2	1091.6	1140.9	1155.5
35°	945.3	985.5	1051.3	1106.2	1122.6
37.5°	892.3	939.8	1012.9	1069.6	1089.7
40°	846.5	892.3	970.9	1033.0	1053.2
42.5°	795.4	844.7	927.0	994.6	1018.4
45°	744.2	797.2	884.9	956.3	980.0
47.5°	696.6	749.6	841.1	916.0	939.8
50°	647.3	702.1	797.2	874.0	897.7
52.5°	594.2	654.6	753.3	830.1	857.5
55°	546.7	607.0	705.8	786.2	813.6
57.5°	497.3	559.5	661.9	738.7	764.3
60°	451.6	512.0	612.5	687.5	716.7
62.5°	402.2	464.4	563.1	636.3	663.7
65°	356.5	416.9	513.8	585.1	610.7
67.5°	310.8	371.2	462.6	530.2	559.5
70°	265.1	325.5	409.6	475.4	501.0
72.5°	224.9	277.9	358.4	418.7	442.5
75°	181.0	234.0	301.7	354.7	365.7
77.5°	140.8	188.3	245.0	268.8	272.4
80°	104.2	140.8	179.2	184.7	184.7
82.5°	69.5	96.9	111.5	113.4	111.5
85°	42.1	51.2	53.0	45.7	42.1
87.5°	14.6	14.6	9.1	5.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)