

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: P388475

Luminaire Tested: **24CZ2-30-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: P388475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-678-2)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-SQR-UNV-L950-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

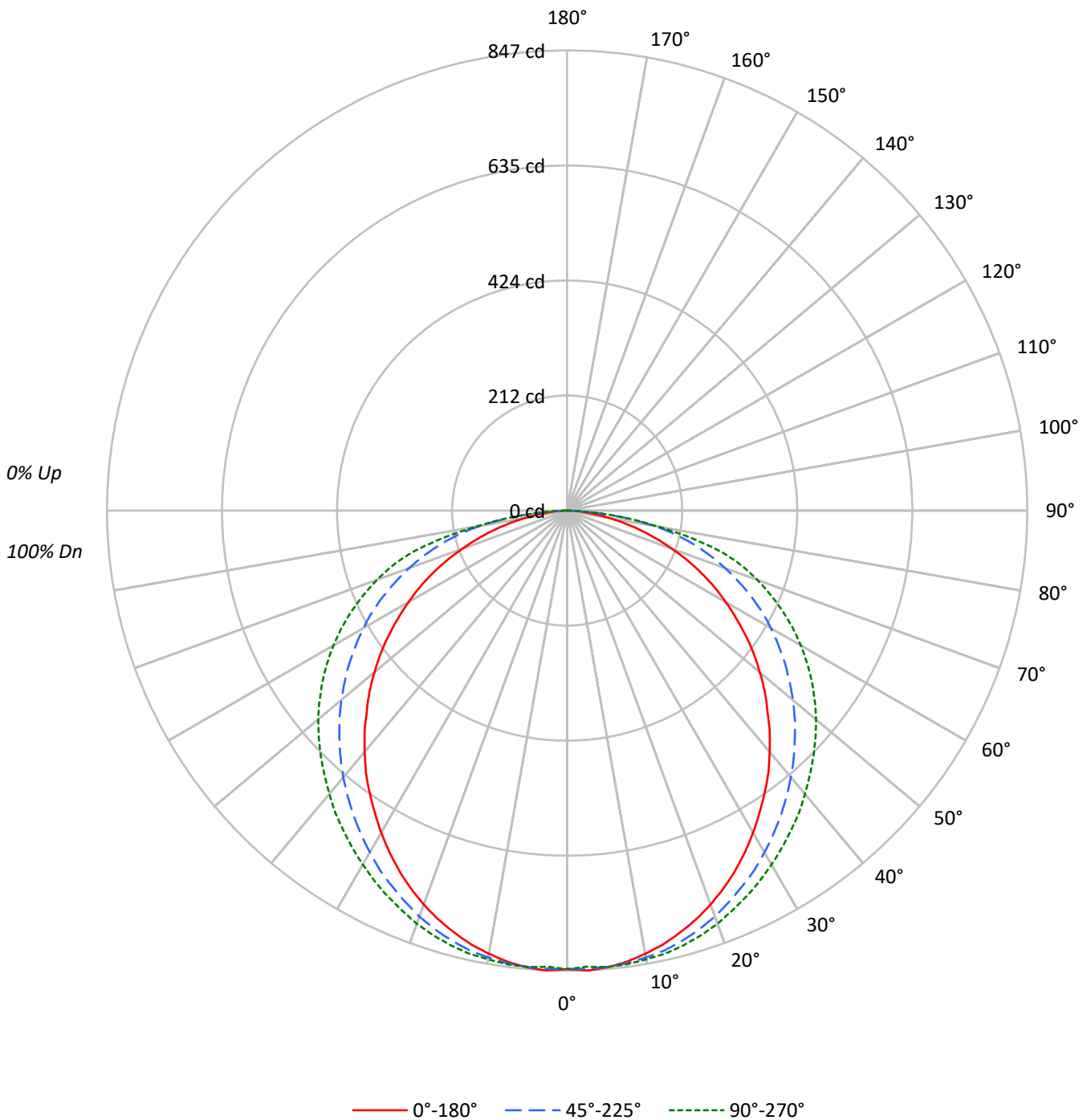
Lumens per Lamp: N/A
Luminaire Lumens: 2640.2 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.2
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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1135	1135	1135
5°	1140	1139	1139
10°	1132	1141	1146
15°	1120	1142	1154
20°	1105	1138	1159
25°	1086	1133	1162
30°	1063	1128	1169
35°	1041	1126	1180
40°	1018	1126	1196
45°	992	1128	1219
50°	969	1135	1252
55°	941	1147	1290
60°	908	1166	1337
65°	869	1188	1394
70°	806	1218	1465
75°	730	1260	1532
80°	614	1263	1317
85°	471	956	956



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	3.0
10°-20°	230.5	8.7
20°-30°	350.1	13.3
30°-40°	425.8	16.1
40°-50°	453.4	17.2
50°-60°	431.8	16.4
60°-70°	361.1	13.7
70°-80°	240.8	9.1
80°-90°	66.6	2.5
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°	660.7	25.0
0°-40°	1086.5	41.2
0°-60°	1971.7	74.7
0°-90°	2640.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2640.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	844	844	844	844	844	
5°	844	839	843	843	843	80
15°	804	806	820	826	828	227
25°	732	741	763	776	783	337
35°	634	652	685	708	718	397
45°	521	549	593	626	641	403
55°	401	436	489	532	550	359
65°	273	313	373	419	438	270
75°	140	185	242	283	295	149
85°	30	57	62	61	62	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	843.9	843.9	843.9	843.9	843.9
2.5°	847.4	841.3	843.9	843.9	840.4
5°	843.9	838.7	843.1	843.1	843.1
7.5°	837.8	833.5	840.4	842.2	842.2
10°	828.2	826.5	835.2	837.8	838.7
12.5°	817.8	816.9	829.1	832.6	835.2
15°	803.8	805.6	819.5	825.6	828.2
17.5°	789.0	792.5	808.2	816.9	819.5
20°	771.6	776.8	795.1	803.8	809.1
22.5°	752.4	760.2	779.4	789.9	796.0
25°	731.5	741.1	762.9	775.9	782.9
27.5°	708.8	721.0	746.3	761.1	768.1
30°	684.4	698.3	726.2	743.7	752.4
32.5°	659.1	675.7	706.2	725.4	735.8
35°	633.8	652.1	685.3	707.9	718.4
37.5°	608.5	626.8	663.5	687.9	701.0
40°	579.8	601.6	640.8	667.8	680.9
42.5°	551.9	575.4	617.3	646.9	660.9
45°	521.4	549.3	592.8	626.0	640.8
47.5°	493.5	521.4	568.4	603.3	619.9
50°	462.9	492.6	542.3	580.6	598.1
52.5°	433.3	463.8	516.1	557.1	574.5
55°	401.0	435.9	489.1	531.8	550.1
57.5°	368.8	406.3	461.2	505.7	524.0
60°	337.4	375.8	433.3	477.8	496.9
62.5°	306.0	344.4	404.5	449.9	468.2
65°	272.9	313.0	373.1	419.4	437.7
67.5°	239.8	281.6	341.8	388.0	405.4
70°	204.9	249.3	309.5	354.8	372.3
72.5°	172.6	217.1	276.4	320.8	337.4
75°	140.4	184.8	242.4	283.3	294.7
77.5°	109.0	153.4	204.9	231.9	234.5
80°	79.3	121.2	163.0	170.9	170.0
82.5°	53.2	90.7	112.5	113.3	116.0
85°	30.5	56.7	61.9	61.0	61.9
87.5°	12.2	20.1	17.4	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)