

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: P388632

Luminaire Tested: **24CZ2-40HE-SQR-UNV-L930-CD1-SDWPD1-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: P388632
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: 24CZ2-40HE-SQR-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3114.9 lumens
Efficiency: N/A
Efficacy: 101.8 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

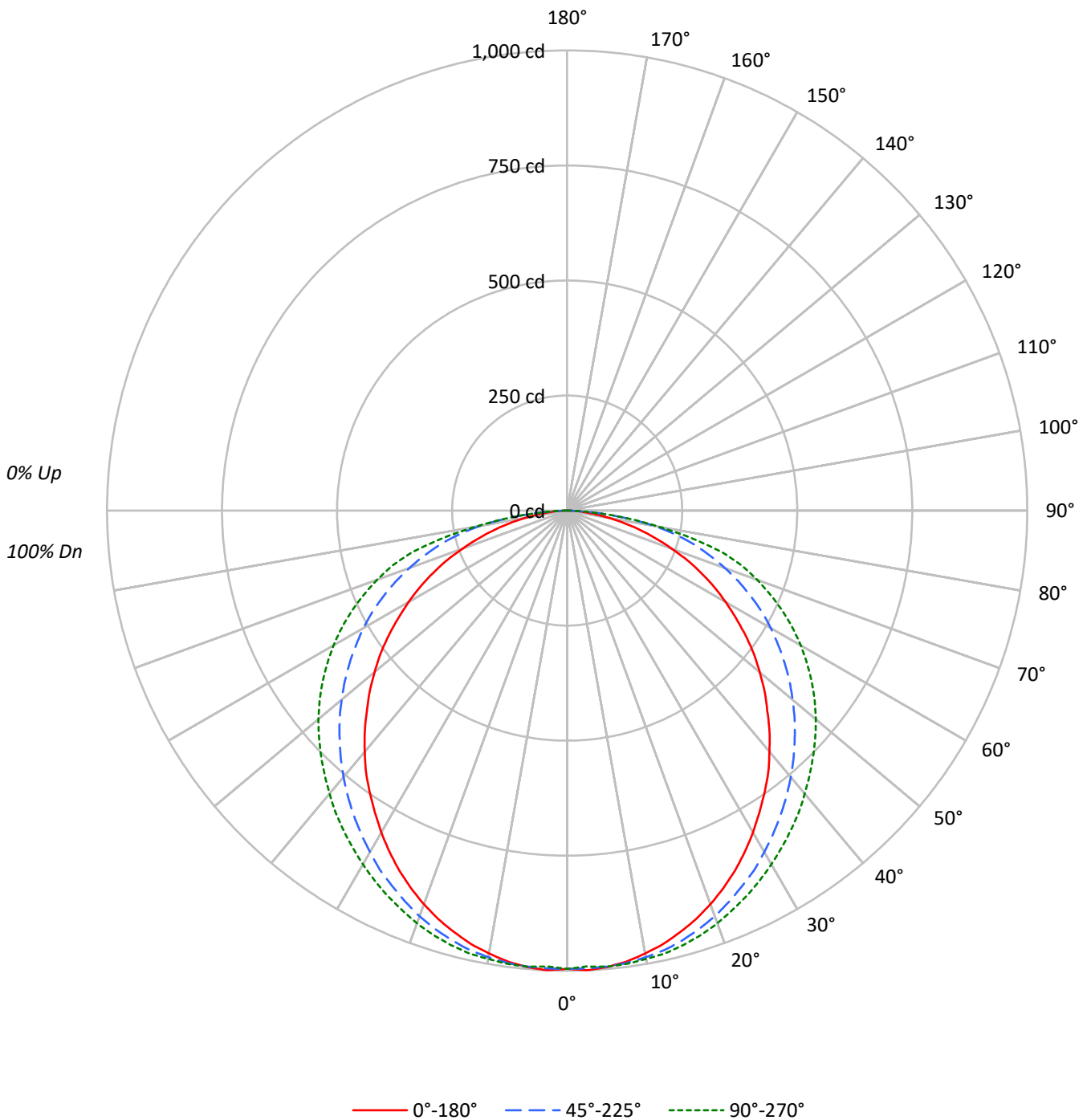
Input Watts (W): 30.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1340	1340	1340
5°	1345	1343	1343
10°	1335	1346	1352
15°	1321	1347	1361
20°	1303	1343	1367
25°	1281	1336	1371
30°	1254	1331	1379
35°	1228	1328	1392
40°	1201	1328	1411
45°	1170	1331	1439
50°	1143	1339	1477
55°	1110	1354	1522
60°	1071	1376	1578
65°	1025	1401	1644
70°	951	1436	1728
75°	861	1486	1808
80°	725	1490	1554
85°	556	1127	1127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.5	3.0
10°-20°	271.9	8.7
20°-30°	413.0	13.3
30°-40°	502.4	16.1
40°-50°	534.9	17.2
50°-60°	509.5	16.4
60°-70°	426.1	13.7
70°-80°	284.1	9.1
80°-90°	78.6	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°	779.5	25.0
0°-40°	1281.9	41.2
0°-60°	2326.2	74.7
0°-90°	3114.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3114.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	996	990	995	995	995	94
15°	948	950	967	974	977	267
25°	863	874	900	915	924	397
35°	748	769	808	835	848	468
45°	615	648	699	738	756	476
55°	473	514	577	627	649	423
65°	322	369	440	495	516	318
75°	166	218	286	334	348	175
85°	36	67	73	72	73	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	995.7	995.7	995.7	995.7	995.7
2.5°	999.8	992.6	995.7	995.7	991.6
5°	995.7	989.5	994.6	994.6	994.6
7.5°	988.5	983.3	991.6	993.6	993.6
10°	977.2	975.1	985.4	988.5	989.5
12.5°	964.8	963.8	978.2	982.3	985.4
15°	948.4	950.4	966.9	974.1	977.2
17.5°	930.9	935.0	953.5	963.8	966.9
20°	910.3	916.5	938.1	948.4	954.5
22.5°	887.7	896.9	919.6	931.9	939.1
25°	863.0	874.3	900.0	915.4	923.7
27.5°	836.2	850.6	880.5	898.0	906.2
30°	807.4	823.9	856.8	877.4	887.7
32.5°	777.6	797.2	833.2	855.8	868.1
35°	747.8	769.4	808.5	835.2	847.6
37.5°	718.0	739.6	782.8	811.6	827.0
40°	684.0	709.7	756.0	787.9	803.3
42.5°	651.1	678.9	728.2	763.2	779.7
45°	615.1	648.0	699.4	738.5	756.0
47.5°	582.2	615.1	670.6	711.8	731.3
50°	546.2	581.2	639.8	685.0	705.6
52.5°	511.2	547.2	608.9	657.3	677.8
55°	473.2	514.3	577.0	627.4	649.0
57.5°	435.1	479.3	544.1	596.6	618.2
60°	398.1	443.3	511.2	563.7	586.3
62.5°	361.0	406.3	477.3	530.8	552.4
65°	321.9	369.3	440.2	494.8	516.4
67.5°	282.9	332.2	403.2	457.7	478.3
70°	241.7	294.2	365.1	418.6	439.2
72.5°	203.7	256.1	326.1	378.5	398.1
75°	165.6	218.1	285.9	334.3	347.7
77.5°	128.6	181.0	241.7	273.6	276.7
80°	93.6	143.0	192.3	201.6	200.6
82.5°	62.7	107.0	132.7	133.7	136.8
85°	36.0	66.9	73.0	72.0	73.0
87.5°	14.4	23.7	20.6	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)