

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: P388907

Luminaire Tested: **24CZ2-60-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: P388907
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: 24CZ2-60-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

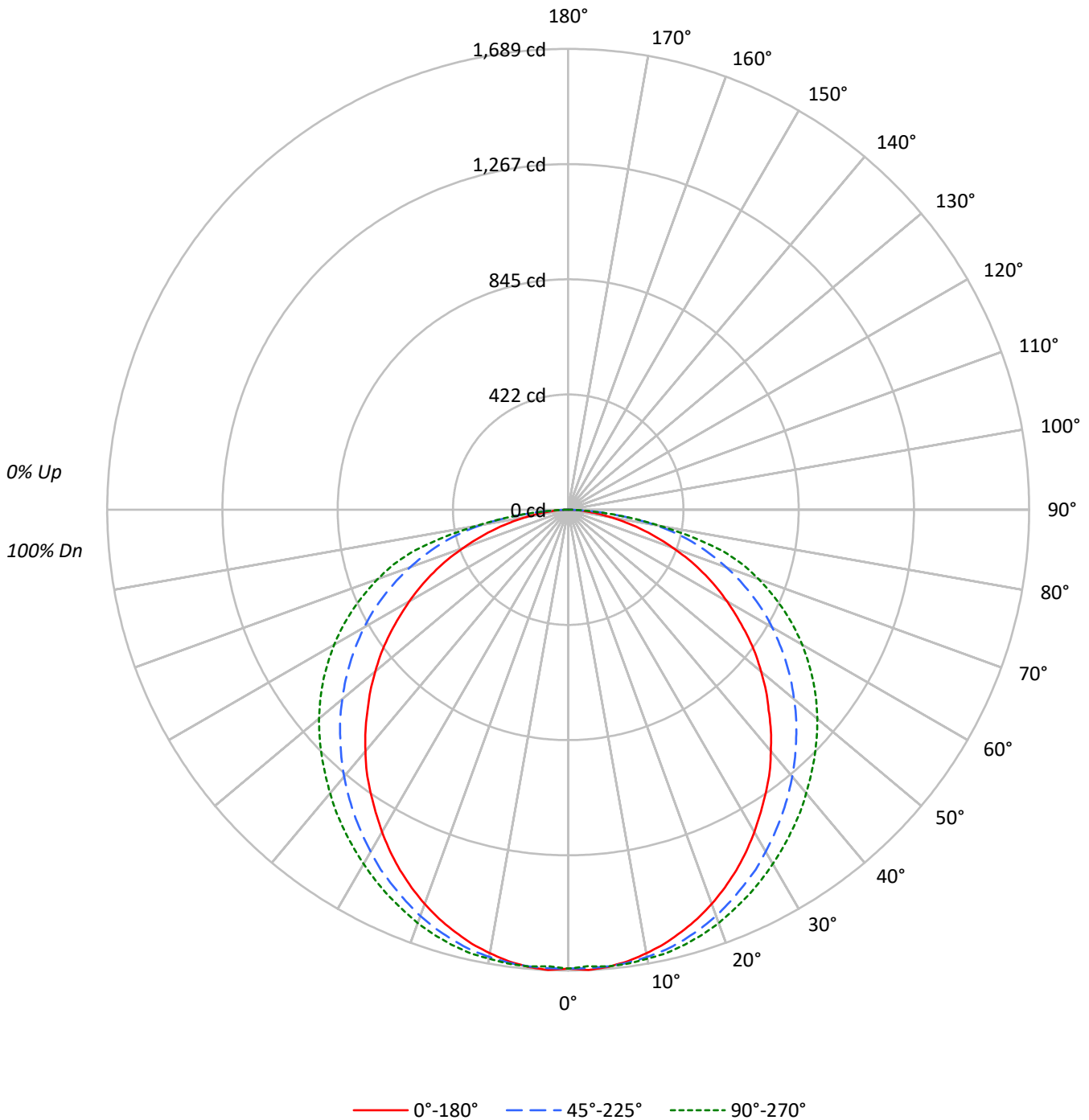
Lumens per Lamp: N/A
Luminaire Lumens: 5261.3 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 55.6
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°	2263	2263	2263
5°	2271	2269	2269
10°	2255	2274	2283
15°	2231	2275	2299
20°	2202	2269	2309
25°	2164	2257	2316
30°	2119	2248	2329
35°	2075	2243	2351
40°	2029	2243	2383
45°	1977	2248	2430
50°	1931	2262	2495
55°	1875	2286	2572
60°	1809	2324	2665
65°	1731	2367	2777
70°	1606	2426	2919
75°	1454	2511	3053
80°	1225	2517	2625
85°	939	1905	1905



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.6	3.0
10°-20°	459.3	8.7
20°-30°	697.6	13.3
30°-40°	848.6	16.1
40°-50°	903.5	17.2
50°-60°	860.5	16.4
60°-70°	719.6	13.7
70°-80°	479.8	9.1
80°-90°	132.8	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°	1316.6	25.0
0°-40°	2165.2	41.2
0°-60°	3929.1	74.7
0°-90°	5261.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5261.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1682	1671	1680	1680	1680	160
15°	1602	1605	1633	1645	1650	452
25°	1458	1477	1520	1546	1560	671
35°	1263	1300	1366	1411	1432	790
45°	1039	1094	1181	1247	1277	803
55°	799	869	975	1060	1096	714
65°	544	624	744	836	872	537
75°	280	368	483	565	587	296
85°	61	113	123	122	123	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1681.8	1681.8	1681.8	1681.8	1681.8
2.5°	1688.7	1676.6	1681.8	1681.8	1674.8
5°	1681.8	1671.3	1680.0	1680.0	1680.0
7.5°	1669.6	1660.9	1674.8	1678.3	1678.3
10°	1650.5	1647.0	1664.4	1669.6	1671.3
12.5°	1629.6	1627.9	1652.2	1659.2	1664.4
15°	1601.8	1605.3	1633.1	1645.3	1650.5
17.5°	1572.3	1579.3	1610.5	1627.9	1633.1
20°	1537.6	1548.0	1584.5	1601.8	1612.3
22.5°	1499.3	1515.0	1553.2	1574.1	1586.2
25°	1457.6	1476.8	1520.2	1546.3	1560.2
27.5°	1412.5	1436.8	1487.2	1516.7	1530.6
30°	1363.8	1391.6	1447.2	1482.0	1499.3
32.5°	1313.4	1346.5	1407.3	1445.5	1466.3
35°	1263.1	1299.5	1365.6	1410.7	1431.6
37.5°	1212.7	1249.2	1322.1	1370.8	1396.8
40°	1155.3	1198.8	1277.0	1330.8	1356.9
42.5°	1099.8	1146.7	1230.1	1289.1	1316.9
45°	1038.9	1094.5	1181.4	1247.4	1277.0
47.5°	983.3	1038.9	1132.8	1202.3	1235.3
50°	922.5	981.6	1080.6	1157.1	1191.8
52.5°	863.5	924.3	1028.5	1110.2	1144.9
55°	799.2	868.7	974.7	1059.8	1096.3
57.5°	734.9	809.6	919.1	1007.7	1044.2
60°	672.4	748.8	863.5	952.1	990.3
62.5°	609.8	686.3	806.1	896.5	933.0
65°	543.8	623.7	743.6	835.7	872.2
67.5°	477.8	561.2	681.0	773.1	807.9
70°	408.3	496.9	616.8	707.1	741.9
72.5°	344.0	432.6	550.7	639.3	672.4
75°	279.7	368.3	483.0	564.6	587.2
77.5°	217.2	305.8	408.3	462.1	467.4
80°	158.1	241.5	324.9	340.5	338.8
82.5°	106.0	180.7	224.1	225.9	231.1
85°	60.8	112.9	123.4	121.6	123.4
87.5°	24.3	40.0	34.7	26.1	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)