

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: P388826

Luminaire Tested: **24CZ2-55-SQR-UNV-L930-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: P388826
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: 24CZ2-55-SQR-UNV-L930-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

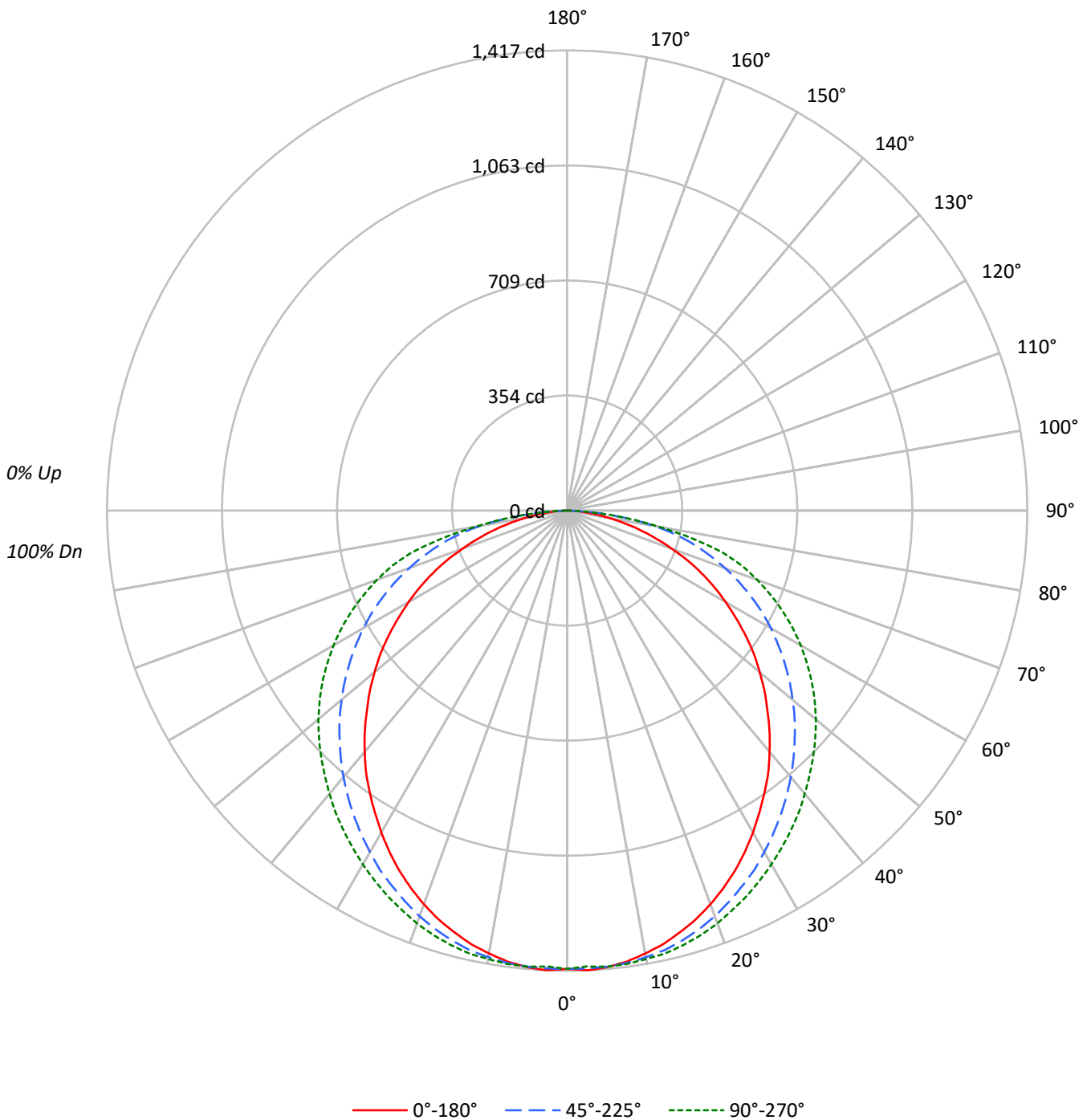
Lumens per Lamp: N/A
Luminaire Lumens: 4414.4 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 50.5
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°	1899	1899	1899
5°	1906	1904	1904
10°	1892	1908	1916
15°	1872	1909	1929
20°	1847	1903	1937
25°	1816	1894	1943
30°	1778	1887	1954
35°	1741	1882	1973
40°	1703	1882	2000
45°	1659	1886	2039
50°	1620	1898	2093
55°	1573	1918	2158
60°	1518	1950	2236
65°	1453	1986	2330
70°	1348	2036	2448
75°	1220	2106	2561
80°	1028	2112	2203
85°	787	1598	1598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.9	3.0
10°-20°	385.4	8.7
20°-30°	585.3	13.3
30°-40°	712.0	16.1
40°-50°	758.0	17.2
50°-60°	722.0	16.4
60°-70°	603.8	13.7
70°-80°	402.6	9.1
80°-90°	111.4	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°	1104.6	25.0
0°-40°	1816.6	41.2
0°-60°	3296.7	74.7
0°-90°	4414.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4414.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1411	1402	1410	1410	1410	134
15°	1344	1347	1370	1380	1385	379
25°	1223	1239	1276	1297	1309	563
35°	1060	1090	1146	1184	1201	663
45°	872	918	991	1047	1071	674
55°	670	729	818	889	920	599
65°	456	523	624	701	732	451
75°	235	309	405	474	493	249
85°	51	95	104	102	104	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411.1	1411.1	1411.1	1411.1	1411.1
2.5°	1416.9	1406.7	1411.1	1411.1	1405.2
5°	1411.1	1402.3	1409.6	1409.6	1409.6
7.5°	1400.9	1393.6	1405.2	1408.1	1408.1
10°	1384.8	1381.9	1396.5	1400.9	1402.3
12.5°	1367.3	1365.9	1386.3	1392.1	1396.5
15°	1344.0	1346.9	1370.2	1380.4	1384.8
17.5°	1319.2	1325.1	1351.3	1365.9	1370.2
20°	1290.1	1298.8	1329.4	1344.0	1352.7
22.5°	1258.0	1271.1	1303.2	1320.7	1330.9
25°	1223.0	1239.0	1275.5	1297.4	1309.0
27.5°	1185.1	1205.5	1247.8	1272.6	1284.2
30°	1144.3	1167.6	1214.3	1243.4	1258.0
32.5°	1102.0	1129.7	1180.7	1212.8	1230.3
35°	1059.8	1090.4	1145.8	1183.7	1201.1
37.5°	1017.5	1048.1	1109.3	1150.1	1172.0
40°	969.4	1005.8	1071.4	1116.6	1138.5
42.5°	922.7	962.1	1032.1	1081.6	1104.9
45°	871.7	918.4	991.2	1046.6	1071.4
47.5°	825.1	871.7	950.4	1008.7	1036.4
50°	774.0	823.6	906.7	970.8	1000.0
52.5°	724.5	775.5	863.0	931.5	960.6
55°	670.5	728.9	817.8	889.2	919.8
57.5°	616.6	679.3	771.1	845.5	876.1
60°	564.1	628.3	724.5	798.8	830.9
62.5°	511.7	575.8	676.4	752.2	782.8
65°	456.3	523.3	623.9	701.2	731.8
67.5°	400.9	470.8	571.4	648.7	677.8
70°	342.6	416.9	517.5	593.3	622.4
72.5°	288.6	363.0	462.1	536.4	564.1
75°	234.7	309.0	405.2	473.8	492.7
77.5°	182.2	256.6	342.6	387.7	392.1
80°	132.7	202.6	272.6	285.7	284.3
82.5°	88.9	151.6	188.0	189.5	193.9
85°	51.0	94.8	103.5	102.0	103.5
87.5°	20.4	33.5	29.2	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)