

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: P276373

Luminaire Tested: **24CZ2-40-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4024.0 lumens
Efficiency: N/A
Efficacy: 132.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

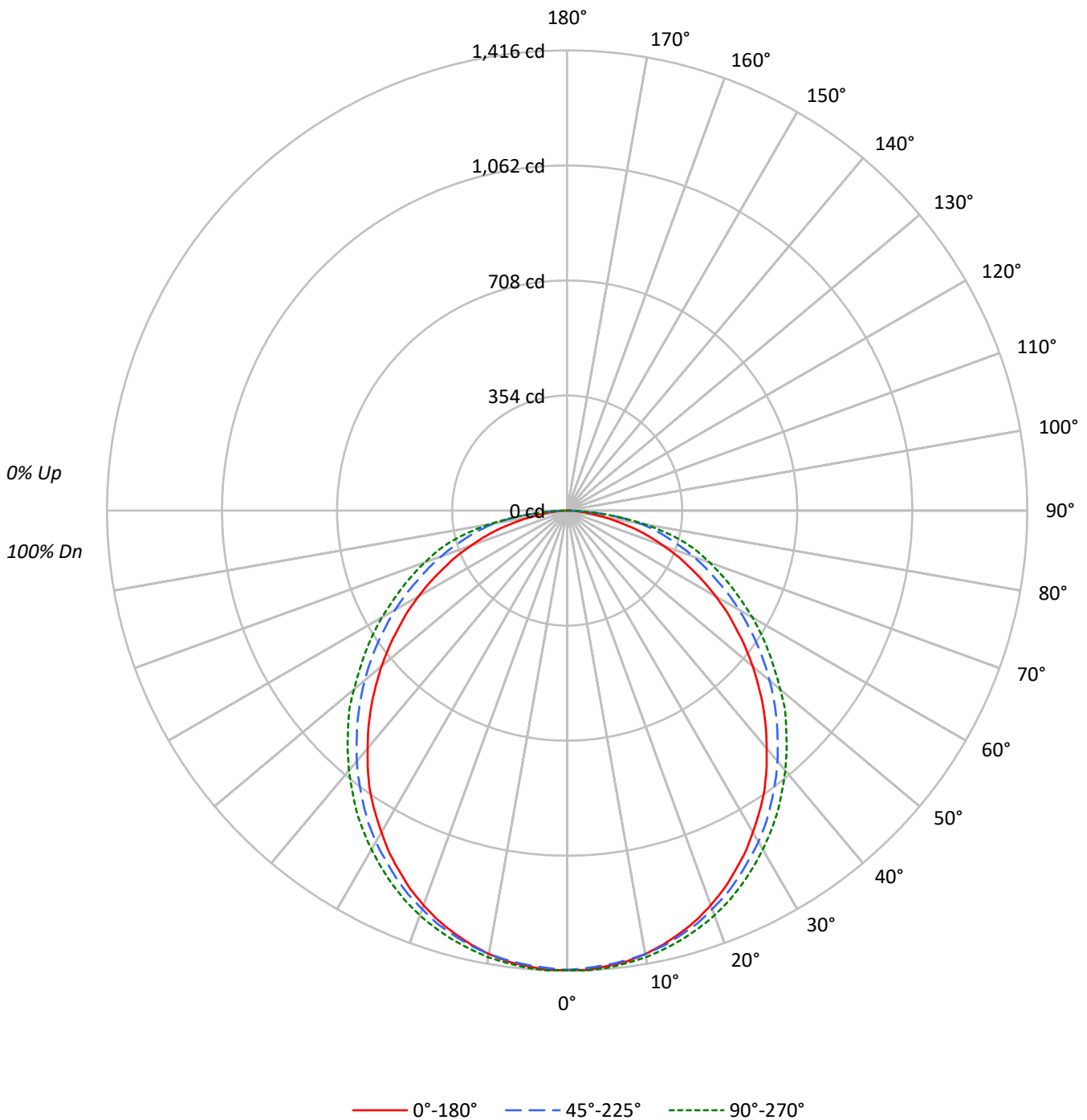
Input Watts (W): 30.411
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	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°	1902	1902	1902
5°	1901	1895	1908
10°	1893	1893	1907
15°	1875	1884	1903
20°	1850	1869	1898
25°	1816	1850	1886
30°	1775	1829	1871
35°	1736	1799	1856
40°	1677	1769	1834
45°	1622	1734	1814
50°	1560	1702	1793
55°	1490	1670	1775
60°	1421	1644	1771
65°	1331	1615	1782
70°	1232	1624	1830
75°	1103	1655	1933
80°	891	1753	1891
85°	672	1539	1499



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	3.3
10°-20°	382.4	9.5
20°-30°	574.8	14.3
30°-40°	684.7	17.0
40°-50°	700.8	17.4
50°-60°	630.9	15.7
60°-70°	495.5	12.3
70°-80°	321.6	8.0
80°-90°	99.4	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°	1091.1	27.1
0°-40°	1775.8	44.1
0°-60°	3107.5	77.2
0°-90°	4024.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4024.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1414	1414	1414	1414	1414	
5°	1407	1410	1403	1411	1412	134
15°	1346	1350	1352	1364	1366	379
25°	1223	1233	1246	1267	1270	563
35°	1057	1070	1095	1122	1130	659
45°	852	873	911	946	954	657
55°	635	663	712	749	757	570
65°	418	450	507	550	560	416
75°	212	253	318	362	372	225
85°	44	80	100	97	97	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1413.7	1413.7	1413.7	1413.7	1413.7
2.5°	1414.9	1414.9	1408.5	1414.9	1416.2
5°	1407.3	1409.8	1403.4	1411.1	1412.4
7.5°	1399.6	1399.6	1395.8	1403.4	1404.7
10°	1385.5	1386.8	1385.5	1394.5	1395.8
12.5°	1367.6	1370.2	1371.5	1380.4	1381.7
15°	1345.9	1349.7	1352.3	1363.8	1366.4
17.5°	1321.6	1325.5	1331.9	1344.6	1347.2
20°	1292.2	1297.3	1305.0	1321.6	1325.5
22.5°	1260.3	1265.4	1278.2	1293.5	1299.9
25°	1223.2	1233.4	1246.2	1266.7	1270.5
27.5°	1186.1	1195.1	1211.7	1233.4	1238.5
30°	1142.7	1156.7	1177.2	1198.9	1204.0
32.5°	1100.5	1114.6	1138.9	1161.9	1168.2
35°	1057.0	1069.8	1095.4	1122.2	1129.9
37.5°	1007.2	1023.8	1051.9	1078.8	1086.4
40°	954.8	975.2	1007.2	1035.3	1044.3
42.5°	904.9	926.7	958.6	989.3	999.5
45°	852.5	873.0	911.3	945.8	953.5
47.5°	798.9	821.9	862.8	897.3	910.1
50°	745.2	769.5	812.9	848.7	856.4
52.5°	691.5	717.1	763.1	801.4	805.2
55°	635.3	663.4	711.9	749.0	756.7
57.5°	584.1	608.4	660.8	699.2	708.1
60°	527.9	554.7	611.0	646.8	658.3
62.5°	474.2	502.3	561.1	596.9	607.1
65°	418.0	449.9	507.4	549.6	559.8
67.5°	369.4	400.1	461.4	502.3	512.5
70°	313.2	347.7	412.8	455.0	465.3
72.5°	264.6	300.4	365.6	406.5	421.8
75°	212.2	253.1	318.3	361.7	371.9
77.5°	161.0	208.3	274.8	308.0	308.0
80°	115.0	164.9	226.2	241.6	244.1
82.5°	75.4	124.0	167.4	166.2	166.2
85°	43.5	80.5	99.7	97.1	97.1
87.5°	16.6	33.2	35.8	35.8	34.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)