

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: P276486

Luminaire Tested: **24CZ2-40HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276486
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: 24CZ2-40HE-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4209.6 lumens
Efficiency: N/A
Efficacy: 144.6 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

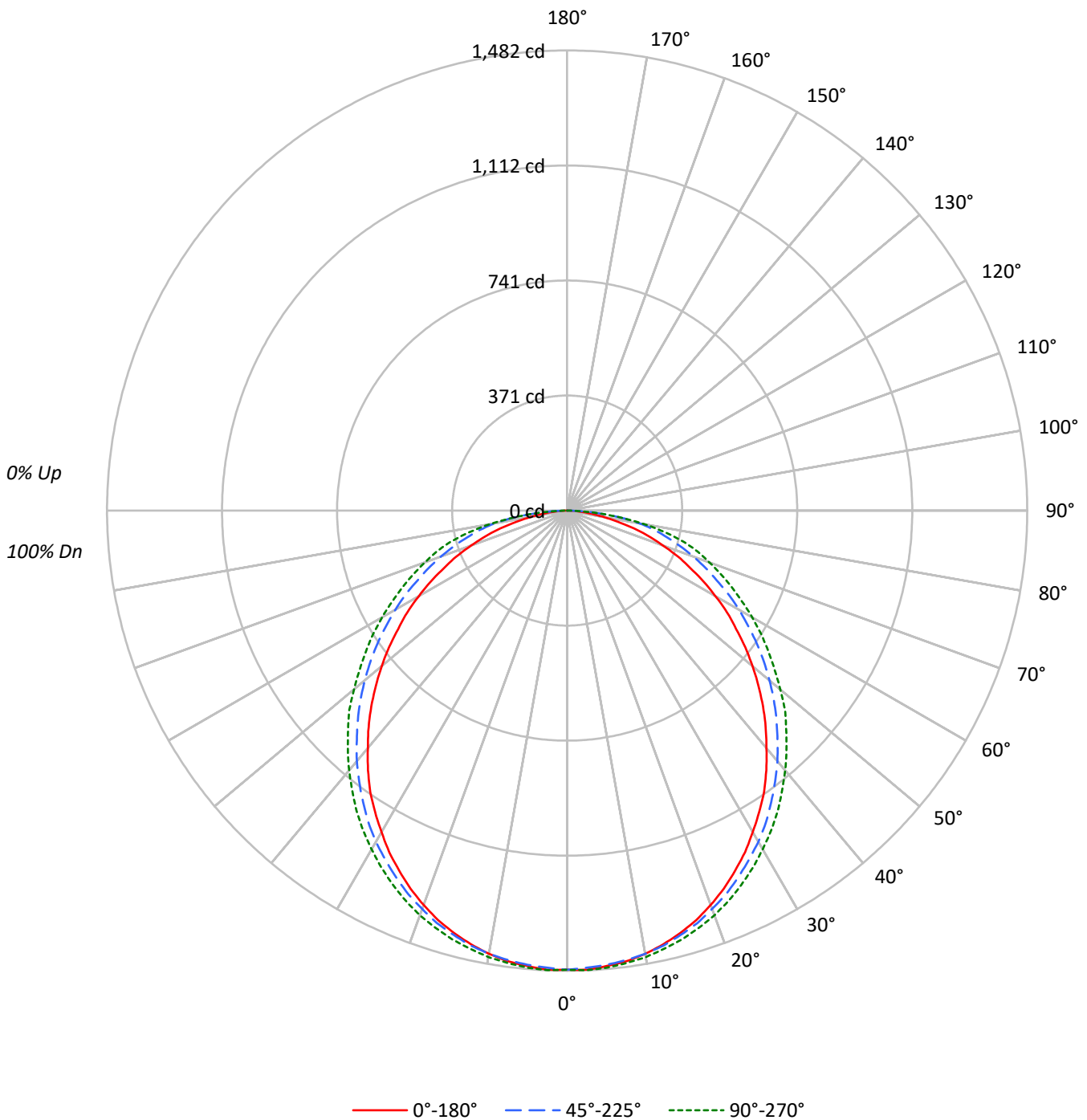
Input Watts (W): 29.109
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1990	1990	1990
5°	1988	1983	1996
10°	1980	1980	1995
15°	1961	1971	1991
20°	1936	1955	1985
25°	1900	1935	1973
30°	1857	1913	1957
35°	1816	1882	1941
40°	1754	1851	1919
45°	1697	1814	1898
50°	1632	1780	1875
55°	1559	1747	1857
60°	1486	1720	1853
65°	1392	1690	1865
70°	1289	1699	1915
75°	1154	1731	2023
80°	932	1834	1979
85°	702	1610	1568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	3.3
10°-20°	400.0	9.5
20°-30°	601.4	14.3
30°-40°	716.3	17.0
40°-50°	733.1	17.4
50°-60°	660.0	15.7
60°-70°	518.3	12.3
70°-80°	336.4	8.0
80°-90°	104.0	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°	1141.4	27.1
0°-40°	1857.7	44.1
0°-60°	3250.8	77.2
0°-90°	4209.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4209.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1472	1475	1468	1476	1478	140
15°	1408	1412	1415	1427	1429	397
25°	1280	1290	1304	1325	1329	589
35°	1106	1119	1146	1174	1182	690
45°	892	913	953	990	998	688
55°	664	694	745	784	792	596
65°	437	471	531	575	586	435
75°	222	265	333	378	389	235
85°	46	84	104	102	102	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1478.8	1478.8	1478.8	1478.8	1478.8
2.5°	1480.2	1480.2	1473.5	1480.2	1481.5
5°	1472.2	1474.8	1468.2	1476.2	1477.5
7.5°	1464.1	1464.1	1460.1	1468.2	1469.5
10°	1449.4	1450.8	1449.4	1458.8	1460.1
12.5°	1430.7	1433.4	1434.7	1444.1	1445.4
15°	1408.0	1412.0	1414.7	1426.7	1429.4
17.5°	1382.6	1386.6	1393.3	1406.6	1409.3
20°	1351.8	1357.2	1365.2	1382.6	1386.6
22.5°	1318.4	1323.7	1337.1	1353.2	1359.8
25°	1279.6	1290.3	1303.7	1325.1	1329.1
27.5°	1240.8	1250.2	1267.6	1290.3	1295.7
30°	1195.4	1210.1	1231.5	1254.2	1259.6
32.5°	1151.3	1166.0	1191.4	1215.4	1222.1
35°	1105.8	1119.2	1145.9	1174.0	1182.0
37.5°	1053.6	1071.0	1100.4	1128.5	1136.5
40°	998.8	1020.2	1053.6	1083.1	1092.4
42.5°	946.7	969.4	1002.8	1034.9	1045.6
45°	891.9	913.2	953.4	989.5	997.5
47.5°	835.7	859.8	902.6	938.7	952.0
50°	779.5	804.9	850.4	887.8	895.9
52.5°	723.4	750.1	798.3	838.4	842.4
55°	664.5	694.0	744.8	783.5	791.6
57.5°	611.1	636.5	691.3	731.4	740.8
60°	552.2	580.3	639.1	676.6	688.6
62.5°	496.1	525.5	587.0	624.4	635.1
65°	437.2	470.7	530.8	575.0	585.7
67.5°	386.4	418.5	482.7	525.5	536.2
70°	327.6	363.7	431.9	476.0	486.7
72.5°	276.8	314.2	382.4	425.2	441.2
75°	222.0	264.7	332.9	378.4	389.1
77.5°	168.5	217.9	287.5	322.2	322.2
80°	120.3	172.5	236.7	252.7	255.4
82.5°	78.9	129.7	175.2	173.8	173.8
85°	45.5	84.2	104.3	101.6	101.6
87.5°	17.4	34.8	37.4	37.4	36.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)