

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: P276171

Luminaire Tested: **24CZ2-50-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4723.4 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

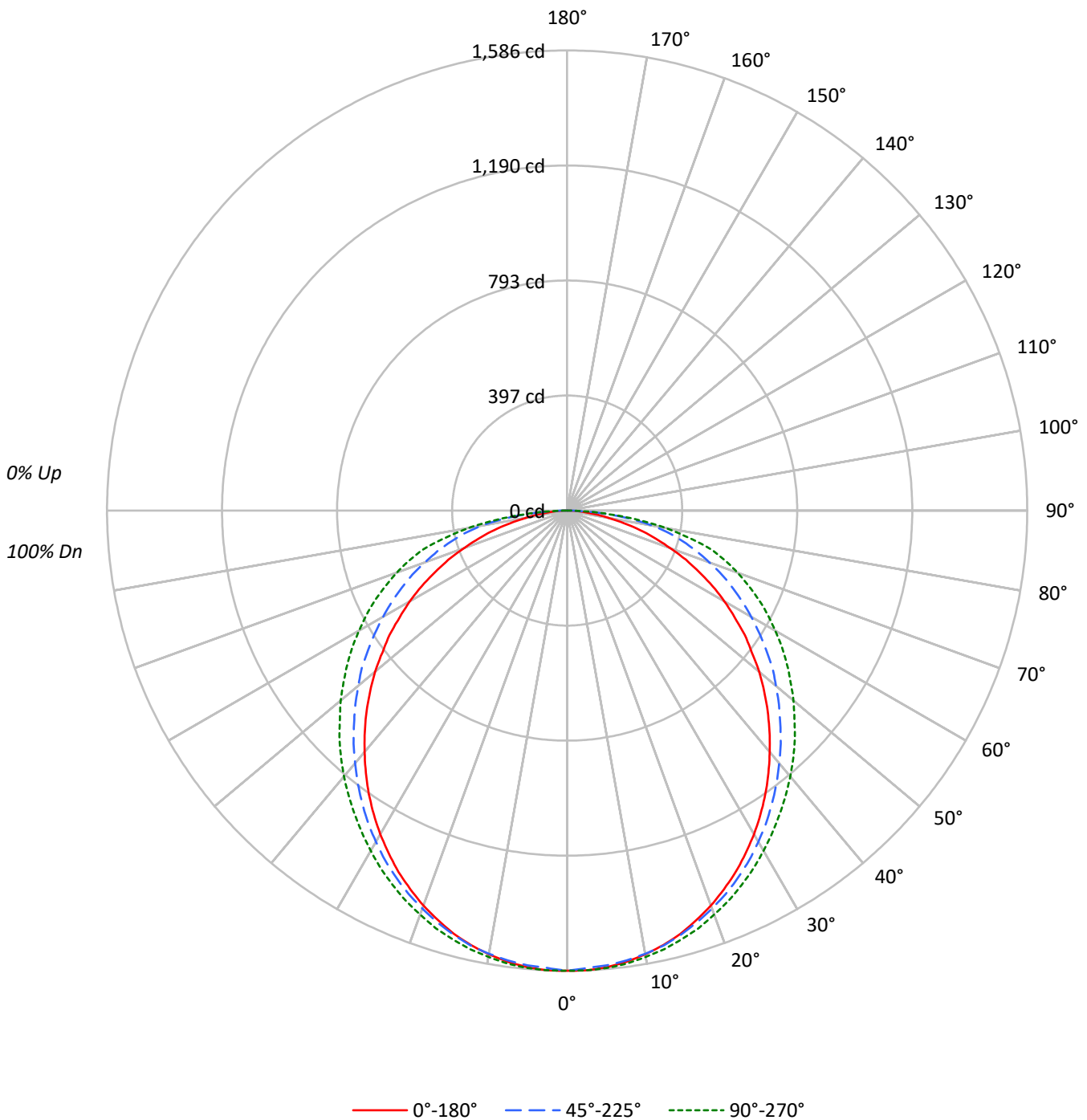
Input Watts (W): 40.176
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2134	2134	2134
5°	2133	2125	2138
10°	2122	2119	2134
15°	2104	2108	2130
20°	2074	2090	2122
25°	2041	2071	2113
30°	2001	2048	2104
35°	1958	2022	2097
40°	1908	1996	2102
45°	1860	1977	2112
50°	1808	1967	2132
55°	1753	1964	2171
60°	1684	1972	2227
65°	1596	2003	2324
70°	1482	2053	2456
75°	1352	2155	2663
80°	1112	2321	2663
85°	852	2141	2288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.2
10°-20°	428.2	9.1
20°-30°	644.4	13.6
30°-40°	772.2	16.3
40°-50°	804.7	17.0
50°-60°	748.7	15.9
60°-70°	616.6	13.1
70°-80°	420.0	8.9
80°-90°	138.7	2.9
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°	1222.5	25.9
0°-40°	1994.7	42.2
0°-60°	3548.1	75.1
0°-90°	4723.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4723.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1586	1586	1586	1586	1586	
5°	1580	1580	1573	1581	1583	150
15°	1510	1512	1513	1528	1529	425
25°	1375	1381	1395	1419	1424	633
35°	1192	1206	1231	1264	1277	745
45°	977	998	1039	1091	1110	754
55°	747	772	837	903	925	666
65°	501	544	629	703	730	498
75°	260	318	415	489	512	274
85°	55	107	139	148	148	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1585.9	1585.9	1585.9	1585.9	1585.9
2.5°	1585.9	1585.9	1578.0	1585.9	1585.9
5°	1579.6	1579.6	1573.2	1581.1	1582.7
7.5°	1568.5	1570.1	1563.8	1573.2	1574.8
10°	1552.8	1554.3	1551.2	1560.6	1562.2
12.5°	1533.8	1535.4	1535.4	1546.4	1548.0
15°	1510.2	1511.8	1513.3	1527.5	1529.1
17.5°	1480.2	1485.0	1488.1	1505.5	1508.6
20°	1448.7	1453.4	1459.7	1478.7	1481.8
22.5°	1412.5	1418.8	1429.8	1450.3	1455.0
25°	1374.6	1380.9	1395.1	1418.8	1423.5
27.5°	1332.1	1341.5	1358.9	1384.1	1390.4
30°	1287.9	1297.4	1317.9	1344.7	1354.1
32.5°	1240.6	1253.2	1276.9	1306.8	1316.3
35°	1191.8	1205.9	1231.2	1264.3	1276.9
37.5°	1139.7	1155.5	1185.5	1221.7	1237.5
40°	1086.1	1105.1	1136.6	1179.1	1196.5
42.5°	1032.5	1049.9	1089.3	1135.0	1153.9
45°	977.4	997.9	1038.8	1090.9	1109.8
47.5°	920.6	941.1	990.0	1045.2	1062.5
50°	863.9	884.4	939.5	997.9	1018.4
52.5°	802.4	829.2	892.2	950.6	971.1
55°	747.2	772.4	837.1	903.3	925.3
57.5°	684.2	714.1	785.0	854.4	878.1
60°	625.8	657.4	733.0	804.0	827.6
62.5°	565.9	600.6	681.0	753.5	780.3
65°	501.3	543.9	629.0	703.1	729.9
67.5°	443.0	487.1	577.0	652.6	676.3
70°	376.8	430.4	521.8	597.5	624.3
72.5°	320.0	373.6	469.8	543.9	570.7
75°	260.1	318.4	414.6	488.7	512.3
77.5°	200.2	264.8	361.0	417.7	425.6
80°	143.5	211.2	299.5	332.6	343.7
82.5°	100.9	162.4	220.7	242.8	249.1
85°	55.2	107.2	138.7	148.2	148.2
87.5°	23.6	45.7	55.2	56.8	58.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)