

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: P276590

Luminaire Tested: **24CZ2-50-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276590
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: 24CZ2-50-S-UNV-L82765-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: 4855.7 lumens
Efficiency: N/A
Efficacy: 121.7 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

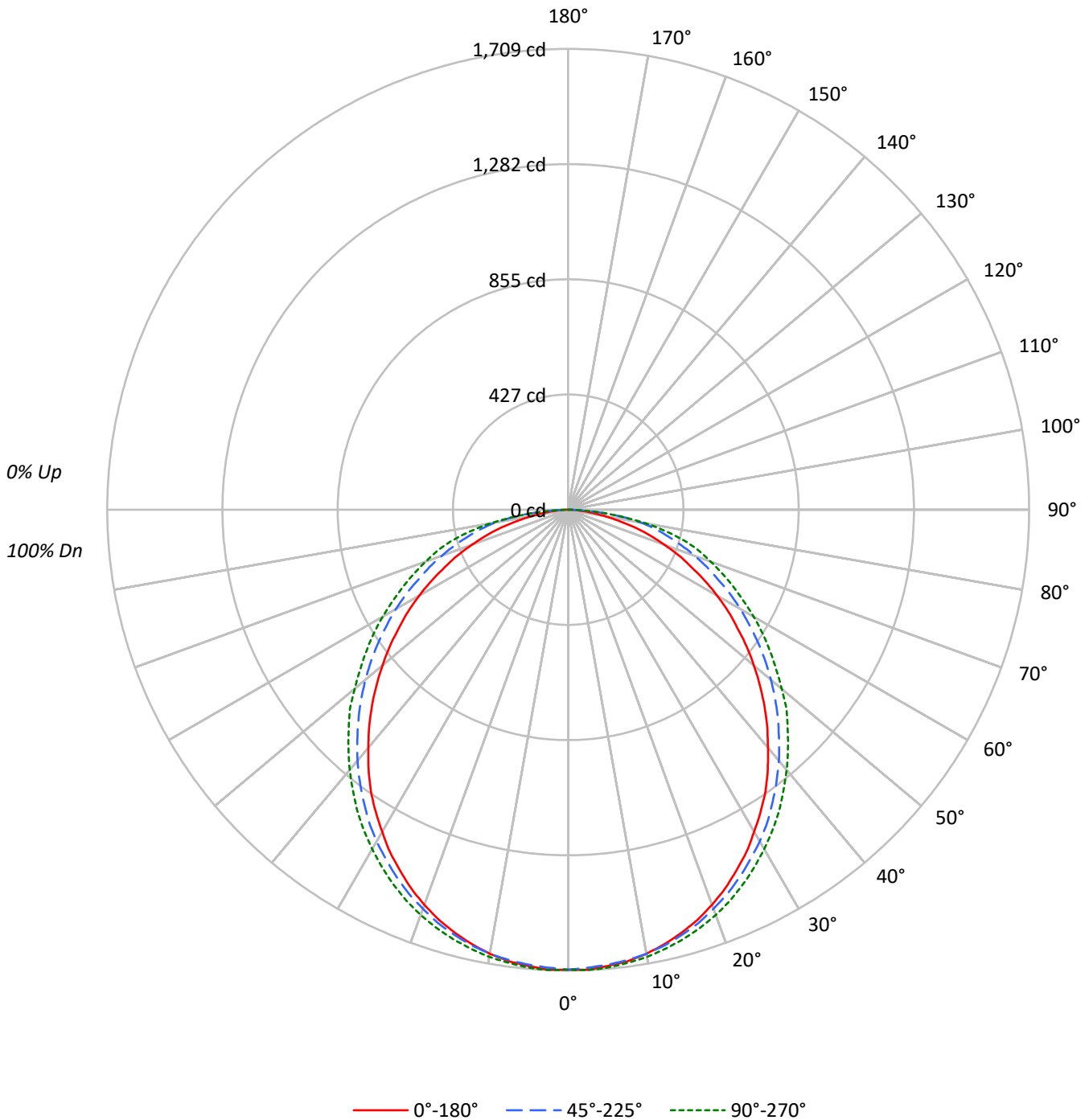
Input Watts (W): 39.897
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2295	2295	2295
5°	2294	2287	2302
10°	2284	2284	2301
15°	2262	2273	2297
20°	2233	2255	2290
25°	2191	2233	2276
30°	2142	2207	2257
35°	2095	2171	2239
40°	2024	2135	2213
45°	1957	2093	2189
50°	1882	2053	2163
55°	1798	2015	2142
60°	1714	1984	2137
65°	1606	1949	2151
70°	1487	1960	2209
75°	1331	1996	2333
80°	1075	2115	2283
85°	809	1857	1809



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	3.3
10°-20°	461.4	9.5
20°-30°	693.6	14.3
30°-40°	826.2	17.0
40°-50°	845.6	17.4
50°-60°	761.3	15.7
60°-70°	597.9	12.3
70°-80°	388.0	8.0
80°-90°	120.0	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°	1316.6	27.1
0°-40°	2142.8	44.1
0°-60°	3749.8	77.2
0°-90°	4855.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4855.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1706	1706	1706	1706	1706	
5°	1698	1701	1694	1703	1704	161
15°	1624	1629	1632	1646	1649	458
25°	1476	1488	1504	1528	1533	680
35°	1276	1291	1322	1354	1363	796
45°	1029	1053	1100	1141	1151	793
55°	766	800	859	904	913	687
65°	504	543	612	663	676	502
75°	256	305	384	436	449	271
85°	52	97	120	117	117	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.8	1705.8	1705.8	1705.8	1705.8
2.5°	1707.4	1707.4	1699.7	1707.4	1708.9
5°	1698.1	1701.2	1693.5	1702.7	1704.3
7.5°	1688.9	1688.9	1684.2	1693.5	1695.0
10°	1671.9	1673.4	1671.9	1682.7	1684.2
12.5°	1650.3	1653.4	1654.9	1665.7	1667.3
15°	1624.1	1628.7	1631.8	1645.7	1648.8
17.5°	1594.8	1599.4	1607.1	1622.5	1625.6
20°	1559.3	1565.5	1574.7	1594.8	1599.4
22.5°	1520.7	1526.9	1542.3	1560.8	1568.6
25°	1476.0	1488.4	1503.8	1528.5	1533.1
27.5°	1431.3	1442.1	1462.1	1488.4	1494.5
30°	1378.9	1395.8	1420.5	1446.7	1452.9
32.5°	1328.0	1344.9	1374.2	1402.0	1409.7
35°	1275.5	1290.9	1321.8	1354.2	1363.4
37.5°	1215.4	1235.4	1269.3	1301.7	1311.0
40°	1152.1	1176.8	1215.4	1249.3	1260.1
42.5°	1092.0	1118.2	1156.8	1193.8	1206.1
45°	1028.7	1053.4	1099.7	1141.3	1150.6
47.5°	964.0	991.7	1041.1	1082.7	1098.1
50°	899.2	928.5	980.9	1024.1	1033.4
52.5°	834.4	865.3	920.8	967.0	971.7
55°	766.5	800.5	859.1	903.8	913.1
57.5°	704.8	734.2	797.4	843.7	854.5
60°	637.0	669.4	737.2	780.4	794.3
62.5°	572.2	606.1	677.1	720.3	732.6
65°	504.3	542.9	612.3	663.2	675.5
67.5°	445.7	482.8	556.8	606.1	618.5
70°	377.9	419.5	498.2	549.1	561.4
72.5°	319.3	362.4	441.1	490.5	509.0
75°	256.0	305.4	384.0	436.5	448.8
77.5°	194.3	251.4	331.6	371.7	371.7
80°	138.8	199.0	273.0	291.5	294.6
82.5°	91.0	149.6	202.0	200.5	200.5
85°	52.4	97.2	120.3	117.2	117.2
87.5°	20.1	40.1	43.2	43.2	41.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)