

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: P276250

Luminaire Tested: **24CZ2-70HE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276250
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: 24CZ2-70HE-UNV-L92765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5434.8 lumens
Efficiency: N/A
Efficacy: 102.2 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

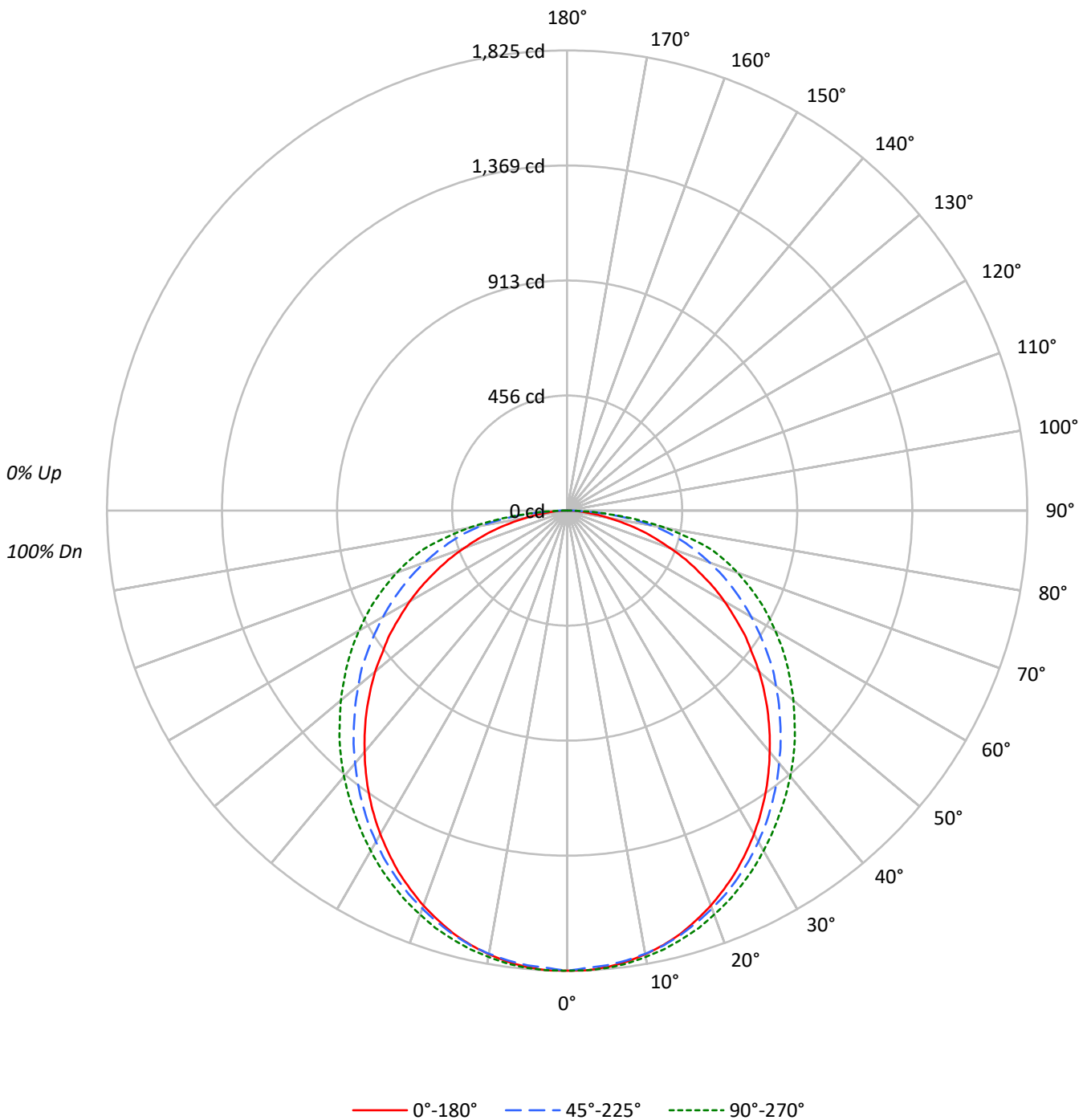
Input Watts (W): 53.196
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2455	2455	2455
5°	2455	2445	2460
10°	2441	2438	2456
15°	2420	2426	2451
20°	2387	2405	2441
25°	2348	2383	2432
30°	2302	2356	2421
35°	2252	2327	2413
40°	2195	2297	2418
45°	2140	2274	2430
50°	2081	2263	2453
55°	2017	2259	2498
60°	1938	2270	2563
65°	1836	2304	2674
70°	1705	2362	2826
75°	1556	2480	3065
80°	1279	2670	3064
85°	980	2464	2632



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.6	3.2
10°-20°	492.7	9.1
20°-30°	741.4	13.6
30°-40°	888.5	16.3
40°-50°	925.9	17.0
50°-60°	861.4	15.9
60°-70°	709.5	13.1
70°-80°	483.2	8.9
80°-90°	159.5	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°	1406.7	25.9
0°-40°	2295.2	42.2
0°-60°	4082.5	75.1
0°-90°	5434.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5434.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1825	1825	1825	1825	1825	
5°	1817	1817	1810	1819	1821	172
15°	1738	1740	1741	1758	1759	490
25°	1582	1589	1605	1632	1638	728
35°	1371	1388	1417	1455	1469	857
45°	1125	1148	1195	1255	1277	867
55°	860	889	963	1039	1065	766
65°	577	626	724	809	840	573
75°	299	366	477	562	590	316
85°	64	123	160	170	170	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1824.7	1824.7	1824.7	1824.7	1824.7
2.5°	1824.7	1824.7	1815.6	1824.7	1824.7
5°	1817.4	1817.4	1810.2	1819.3	1821.1
7.5°	1804.8	1806.6	1799.3	1810.2	1812.0
10°	1786.6	1788.4	1784.8	1795.7	1797.5
12.5°	1764.8	1766.7	1766.7	1779.4	1781.2
15°	1737.6	1739.5	1741.3	1757.6	1759.4
17.5°	1703.2	1708.6	1712.2	1732.2	1735.8
20°	1666.9	1672.3	1679.6	1701.4	1705.0
22.5°	1625.2	1632.4	1645.1	1668.7	1674.2
25°	1581.7	1588.9	1605.2	1632.4	1637.9
27.5°	1532.7	1543.6	1563.5	1592.5	1599.8
30°	1481.9	1492.8	1516.4	1547.2	1558.1
32.5°	1427.5	1442.0	1469.2	1503.7	1514.5
35°	1371.2	1387.6	1416.6	1454.7	1469.2
37.5°	1311.4	1329.5	1364.0	1405.7	1423.9
40°	1249.7	1271.5	1307.8	1356.7	1376.7
42.5°	1188.1	1208.0	1253.4	1306.0	1327.7
45°	1124.6	1148.1	1195.3	1255.2	1276.9
47.5°	1059.3	1082.9	1139.1	1202.6	1222.5
50°	994.0	1017.6	1081.0	1148.1	1171.7
52.5°	923.2	954.1	1026.6	1093.7	1117.3
55°	859.8	888.8	963.1	1039.3	1064.7
57.5°	787.2	821.7	903.3	983.1	1010.3
60°	720.1	756.4	843.4	925.0	952.3
62.5°	651.2	691.1	783.6	867.0	897.8
65°	576.8	625.8	723.7	809.0	839.8
67.5°	509.7	560.5	663.9	750.9	778.1
70°	433.5	495.2	600.4	687.4	718.3
72.5°	368.2	429.9	540.5	625.8	656.6
75°	299.3	366.4	477.0	562.3	589.5
77.5°	230.4	304.7	415.4	480.7	489.7
80°	165.1	243.1	344.6	382.7	395.4
82.5°	116.1	186.8	253.9	279.3	286.6
85°	63.5	123.3	159.6	170.5	170.5
87.5°	27.2	52.6	63.5	65.3	67.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)