

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: P261082

Luminaire Tested: **24CZ-LD5-65-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261082
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5186.7 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

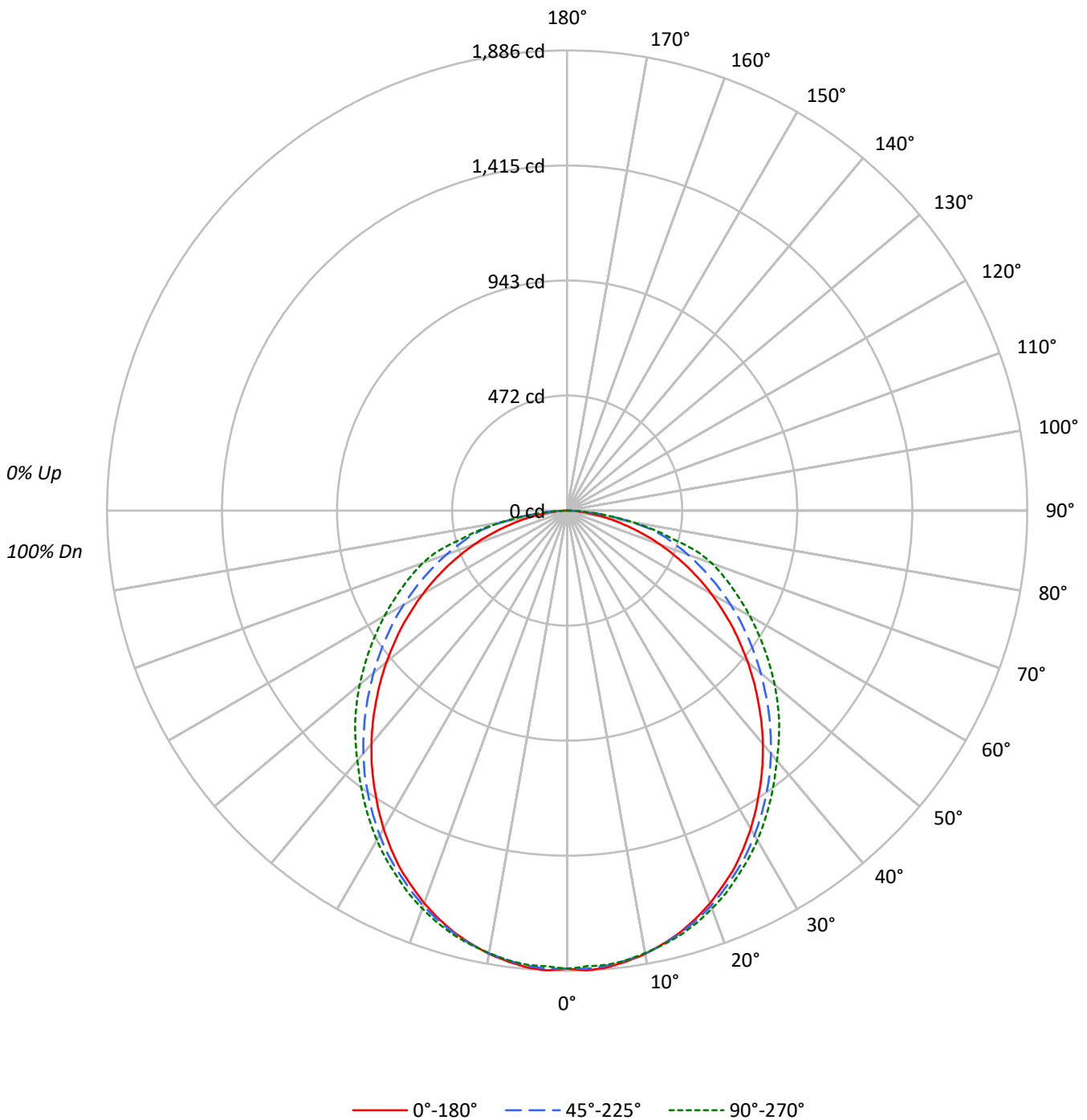
Input Watts (W): 50.043114
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2526	2526	2526
5°	2538	2529	2524
10°	2521	2518	2516
15°	2493	2498	2507
20°	2451	2469	2486
25°	2403	2429	2454
30°	2338	2386	2424
35°	2265	2336	2384
40°	2192	2282	2349
45°	2108	2223	2338
50°	2023	2168	2323
55°	1935	2121	2316
60°	1834	2085	2327
65°	1725	2060	2374
70°	1589	2071	2485
75°	1409	2144	2315
80°	1177	2032	2086
85°	880	1626	1491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.5	3.4
10°-20°	504.9	9.7
20°-30°	752.4	14.5
30°-40°	885.7	17.1
40°-50°	900.1	17.4
50°-60°	809.2	15.6
60°-70°	639.3	12.3
70°-80°	405.6	7.8
80°-90°	111.9	2.2
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°	1434.8	27.7
0°-40°	2320.6	44.7
0°-60°	4029.9	77.7
0°-90°	5186.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5186.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1878	1878	1878	1878	1878	
5°	1879	1864	1872	1869	1869	178
15°	1790	1781	1793	1798	1800	504
25°	1619	1617	1636	1646	1653	744
35°	1379	1388	1422	1438	1451	863
45°	1108	1124	1168	1203	1229	855
55°	825	846	904	963	987	737
65°	542	570	647	718	746	537
75°	271	318	412	449	445	288
85°	57	98	105	97	97	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1877.7	1877.7	1877.7	1877.7	1877.7
2.5°	1886.3	1872.5	1879.4	1876.0	1869.1
5°	1879.4	1863.9	1872.5	1869.1	1869.1
7.5°	1863.9	1851.8	1858.7	1857.0	1858.7
10°	1844.9	1832.8	1843.2	1843.2	1841.4
12.5°	1819.0	1808.7	1820.7	1820.7	1822.5
15°	1789.7	1781.0	1793.1	1798.3	1800.0
17.5°	1753.4	1744.8	1760.3	1765.5	1770.7
20°	1712.0	1708.6	1724.1	1729.3	1736.2
22.5°	1665.4	1665.4	1680.9	1687.8	1698.2
25°	1618.8	1617.1	1636.1	1646.4	1653.3
27.5°	1563.6	1565.3	1589.5	1599.8	1608.5
30°	1504.9	1508.4	1536.0	1548.1	1560.1
32.5°	1442.8	1449.7	1480.7	1494.6	1506.6
35°	1378.9	1387.6	1422.1	1437.6	1451.4
37.5°	1315.1	1327.1	1363.4	1378.9	1394.5
40°	1247.8	1258.1	1299.5	1318.5	1337.5
42.5°	1178.7	1192.5	1234.0	1261.6	1284.0
45°	1108.0	1123.5	1168.4	1202.9	1228.8
47.5°	1037.2	1057.9	1101.1	1147.7	1170.1
50°	966.5	987.2	1035.5	1087.3	1109.7
52.5°	894.0	914.7	969.9	1023.4	1047.6
55°	824.9	845.6	904.3	963.0	987.2
57.5°	752.5	774.9	840.5	900.9	925.0
60°	681.7	704.1	774.9	838.7	864.6
62.5°	612.7	636.8	711.0	778.3	804.2
65°	541.9	569.5	647.2	717.9	745.6
67.5°	472.9	503.9	585.1	659.3	688.6
70°	403.8	440.1	526.4	602.3	631.6
72.5°	336.5	376.2	467.7	543.6	559.2
75°	271.0	317.5	412.5	448.7	445.3
77.5°	208.8	260.6	350.3	357.2	367.6
80°	151.9	208.8	262.3	276.1	269.2
82.5°	100.1	157.0	188.1	181.2	179.5
85°	57.0	98.4	105.3	96.6	96.6
87.5°	24.2	39.7	34.5	25.9	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)