

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: P260832

Luminaire Tested: **24CZ-LD5-50SE-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260832
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-50SE-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5081.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

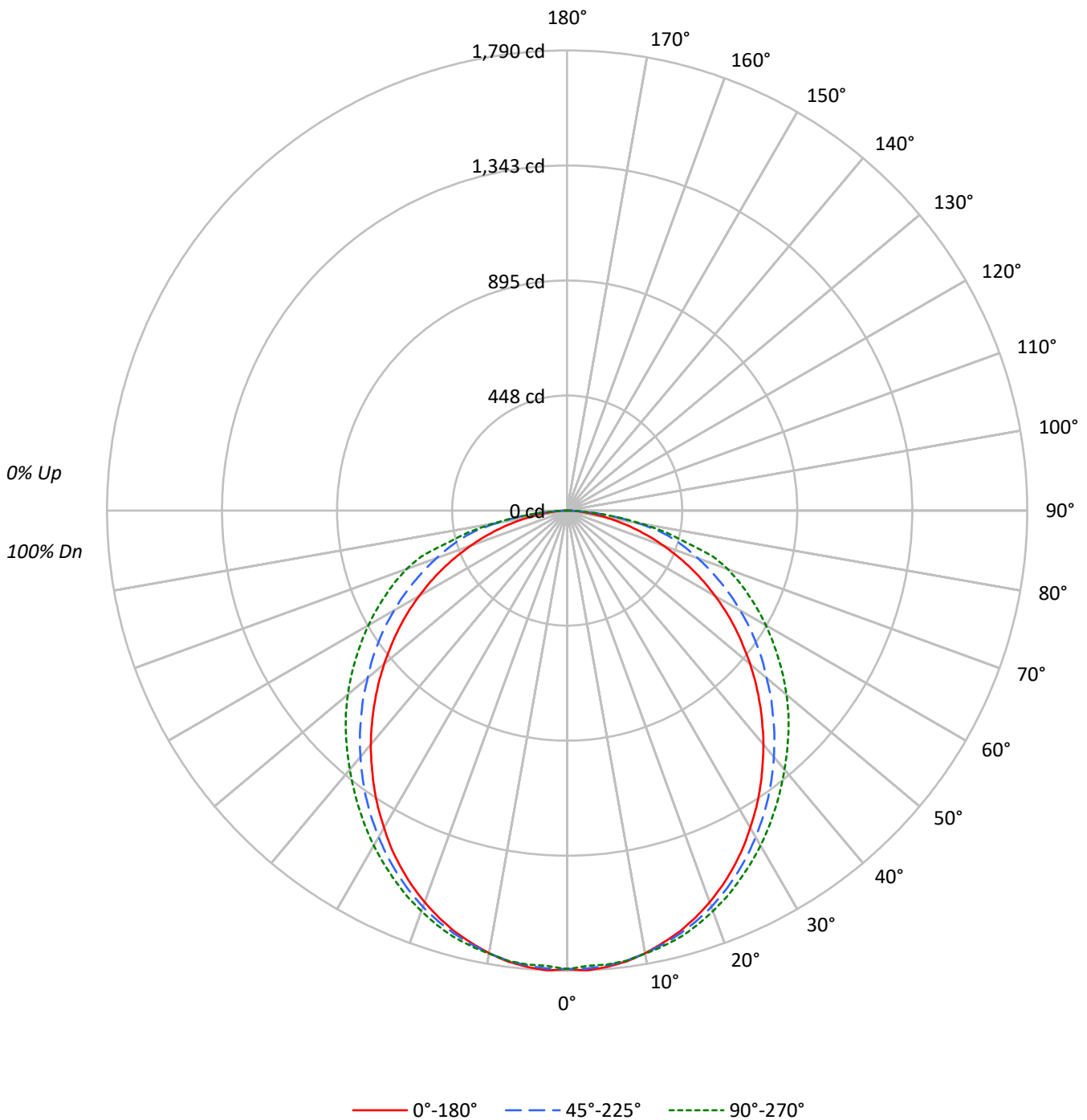
Input Watts (W): 40.455
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2399	2399	2399
5°	2406	2399	2394
10°	2389	2389	2391
15°	2360	2372	2389
20°	2322	2349	2374
25°	2273	2317	2355
30°	2214	2278	2338
35°	2152	2240	2320
40°	2087	2197	2310
45°	2016	2155	2317
50°	1945	2119	2331
55°	1873	2106	2355
60°	1788	2093	2402
65°	1695	2094	2481
70°	1567	2128	2615
75°	1402	2225	2487
80°	1173	2130	2278
85°	886	1638	1558



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.5	3.3
10°-20°	479.6	9.4
20°-30°	717.0	14.1
30°-40°	850.5	16.7
40°-50°	875.4	17.2
50°-60°	803.1	15.8
60°-70°	649.3	12.8
70°-80°	421.4	8.3
80°-90°	116.2	2.3
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°	1365.0	26.9
0°-40°	2215.6	43.6
0°-60°	3894.1	76.6
0°-90°	5081.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1783	1783	1783	1783	1783	
5°	1781	1769	1776	1774	1773	169
15°	1694	1688	1703	1710	1715	477
25°	1531	1533	1560	1574	1587	705
35°	1310	1320	1364	1394	1413	819
45°	1060	1077	1132	1186	1218	818
55°	798	823	898	971	1004	713
65°	532	564	658	745	779	526
75°	270	320	428	478	478	287
85°	57	97	106	103	101	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1783.2	1783.2	1783.2	1783.2	1783.2
2.5°	1790.1	1776.2	1783.2	1781.4	1772.7
5°	1781.4	1769.2	1776.2	1774.5	1772.7
7.5°	1769.2	1757.1	1765.8	1764.0	1765.8
10°	1748.4	1737.9	1748.4	1750.1	1750.1
12.5°	1722.3	1713.6	1727.5	1731.0	1734.5
15°	1694.4	1687.5	1703.1	1710.1	1715.3
17.5°	1659.6	1654.4	1673.6	1682.3	1689.2
20°	1621.4	1619.6	1640.5	1649.2	1657.9
22.5°	1577.9	1577.9	1602.2	1612.7	1624.9
25°	1530.9	1532.7	1560.5	1574.4	1586.6
27.5°	1480.5	1482.2	1515.3	1532.7	1546.6
30°	1424.8	1431.8	1466.5	1489.2	1504.8
32.5°	1369.1	1377.8	1416.1	1442.2	1459.6
35°	1310.0	1320.4	1363.9	1393.5	1412.6
37.5°	1249.1	1261.3	1308.2	1341.3	1363.9
40°	1188.2	1202.1	1250.8	1289.1	1315.2
42.5°	1123.8	1139.5	1193.4	1238.6	1266.5
45°	1059.5	1076.9	1132.5	1186.5	1217.8
47.5°	995.1	1016.0	1075.1	1134.3	1167.3
50°	929.0	949.9	1012.5	1080.3	1113.4
52.5°	862.9	887.2	956.8	1026.4	1059.5
55°	798.5	822.9	897.7	970.7	1003.8
57.5°	732.4	756.8	838.5	915.1	948.1
60°	664.6	692.4	777.6	855.9	892.5
62.5°	598.4	628.0	718.5	802.0	836.8
65°	532.3	563.7	657.6	744.6	779.4
67.5°	464.5	501.0	598.4	687.2	723.7
70°	398.4	438.4	541.0	629.8	664.6
72.5°	334.0	377.5	483.6	574.1	595.0
75°	269.6	320.1	428.0	478.4	478.4
77.5°	208.8	264.4	365.3	384.5	394.9
80°	151.4	212.2	274.9	297.5	294.0
82.5°	100.9	161.8	196.6	196.6	191.4
85°	57.4	97.4	106.1	102.6	100.9
87.5°	24.4	36.5	33.1	26.1	22.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)