

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: P261161

Luminaire Tested: **24CZ-LD5-50-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261161
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-LD5-50-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5117.0 lumens
Efficiency: N/A
Efficacy: 141.8 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

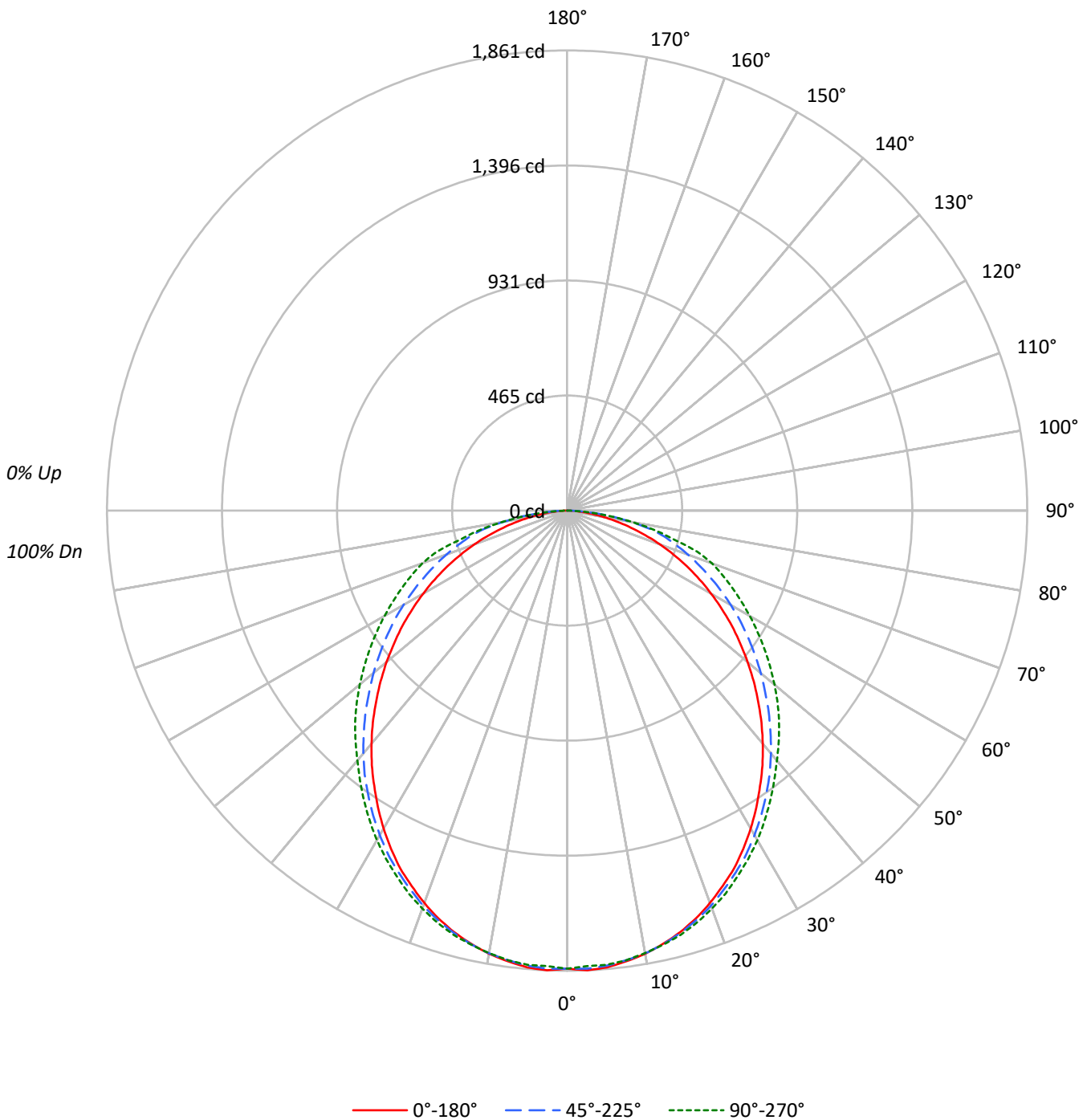
Input Watts (W): 36.084
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2492	2492	2492
5°	2504	2495	2490
10°	2487	2484	2482
15°	2459	2464	2474
20°	2418	2435	2452
25°	2371	2396	2422
30°	2307	2354	2391
35°	2235	2304	2352
40°	2162	2252	2318
45°	2080	2193	2307
50°	1996	2138	2292
55°	1909	2093	2285
60°	1810	2057	2295
65°	1702	2033	2342
70°	1567	2043	2452
75°	1390	2115	2284
80°	1161	2005	2058
85°	868	1604	1471



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	3.4
10°-20°	498.1	9.7
20°-30°	742.3	14.5
30°-40°	873.8	17.1
40°-50°	888.0	17.4
50°-60°	798.4	15.6
60°-70°	630.7	12.3
70°-80°	400.1	7.8
80°-90°	110.4	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°	1415.6	27.7
0°-40°	2289.4	44.7
0°-60°	3975.7	77.7
0°-90°	5117.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5117.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1852	1852	1852	1852	1852	
5°	1854	1839	1847	1844	1844	176
15°	1766	1757	1769	1774	1776	497
25°	1597	1595	1614	1624	1631	734
35°	1360	1369	1403	1418	1432	851
45°	1093	1108	1153	1187	1212	843
55°	814	834	892	950	974	727
65°	535	562	638	708	736	530
75°	267	313	407	443	439	285
85°	56	97	104	95	95	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1852.4	1852.4	1852.4	1852.4	1852.4
2.5°	1861.0	1847.3	1854.2	1850.7	1843.9
5°	1854.2	1838.8	1847.3	1843.9	1843.9
7.5°	1838.8	1826.9	1833.7	1832.0	1833.7
10°	1820.1	1808.2	1818.4	1818.4	1816.7
12.5°	1794.6	1784.3	1796.3	1796.3	1798.0
15°	1765.6	1757.1	1769.0	1774.1	1775.8
17.5°	1729.9	1721.3	1736.7	1741.8	1746.9
20°	1689.0	1685.6	1700.9	1706.0	1712.8
22.5°	1643.0	1643.0	1658.3	1665.2	1675.4
25°	1597.1	1595.4	1614.1	1624.3	1631.1
27.5°	1542.6	1544.3	1568.1	1578.3	1586.8
30°	1484.7	1488.1	1515.3	1527.2	1539.2
32.5°	1423.4	1430.2	1460.8	1474.5	1486.4
35°	1360.4	1368.9	1403.0	1418.3	1431.9
37.5°	1297.4	1309.3	1345.1	1360.4	1375.7
40°	1231.0	1241.2	1282.1	1300.8	1319.5
42.5°	1162.9	1176.5	1217.4	1244.6	1266.7
45°	1093.1	1108.4	1152.7	1186.7	1212.3
47.5°	1023.3	1043.7	1086.3	1132.2	1154.4
50°	953.5	973.9	1021.6	1072.6	1094.8
52.5°	882.0	902.4	956.9	1009.7	1033.5
55°	813.9	834.3	892.2	950.1	973.9
57.5°	742.3	764.5	829.2	888.8	912.6
60°	672.5	694.7	764.5	827.5	853.0
62.5°	604.4	628.3	701.5	767.9	793.4
65°	534.6	561.9	638.5	708.3	735.5
67.5°	466.5	497.2	577.2	650.4	679.3
70°	398.4	434.2	519.3	594.2	623.2
72.5°	332.0	371.2	461.4	536.3	551.6
75°	267.3	313.3	406.9	442.7	439.3
77.5°	206.0	257.1	345.6	352.4	362.7
80°	149.8	206.0	258.8	272.4	265.6
82.5°	98.8	154.9	185.6	178.8	177.1
85°	56.2	97.0	103.9	95.3	95.3
87.5°	23.8	39.2	34.1	25.5	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)