

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: P261083

Luminaire Tested: **24CZ-LD5-65-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261083
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-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5666.7 lumens
Efficiency: N/A
Efficacy: 113.7 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

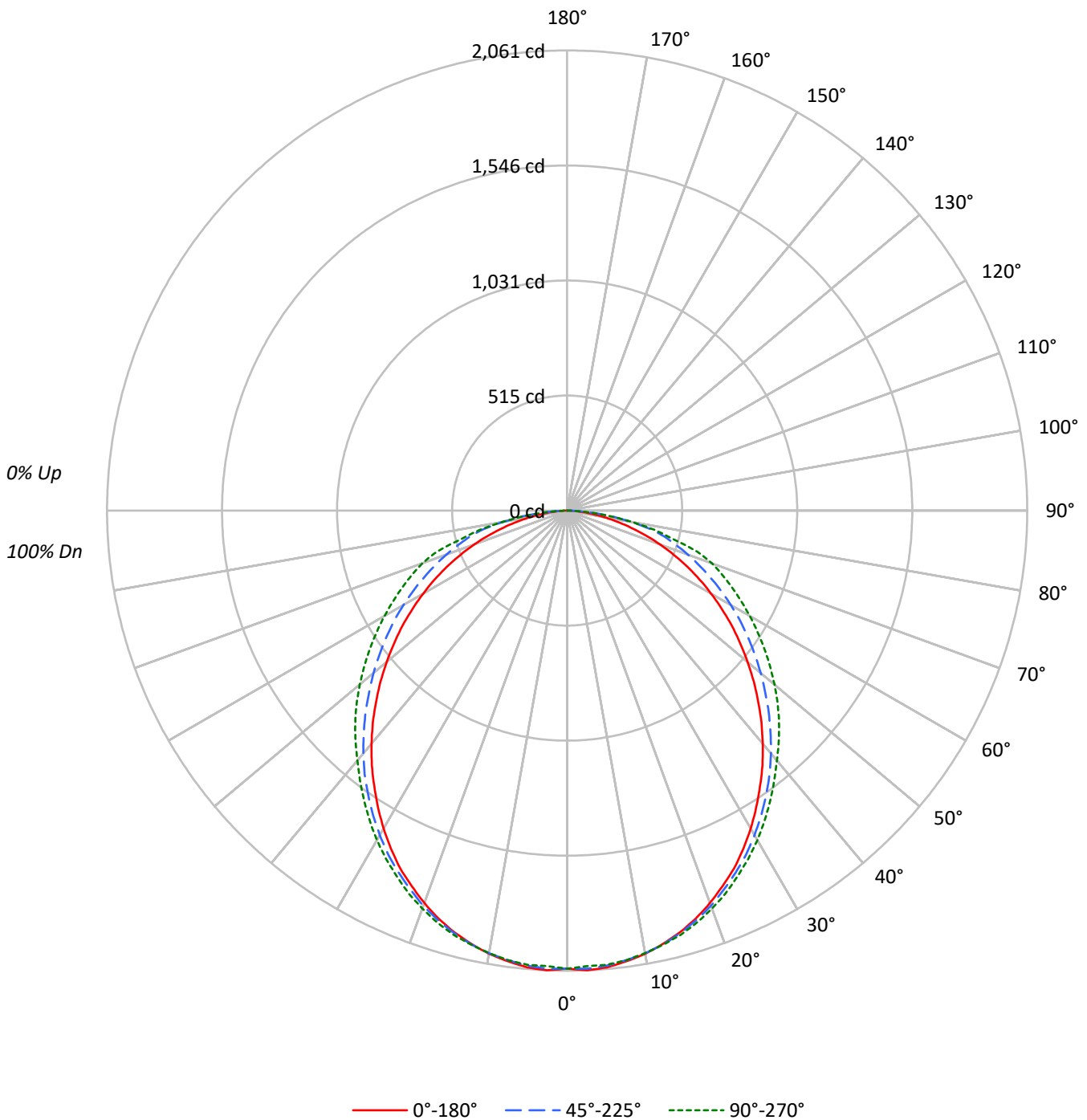
Input Watts (W): 49.847442
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2760	2760	2760
5°	2773	2763	2758
10°	2754	2751	2749
15°	2724	2729	2739
20°	2678	2697	2716
25°	2626	2654	2682
30°	2554	2607	2648
35°	2474	2552	2605
40°	2394	2494	2567
45°	2303	2429	2555
50°	2210	2368	2538
55°	2114	2318	2530
60°	2004	2278	2542
65°	1885	2251	2593
70°	1736	2262	2715
75°	1539	2342	2529
80°	1285	2221	2279
85°	960	1775	1630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.0	3.4
10°-20°	551.6	9.7
20°-30°	822.1	14.5
30°-40°	967.7	17.1
40°-50°	983.4	17.4
50°-60°	884.1	15.6
60°-70°	698.5	12.3
70°-80°	443.1	7.8
80°-90°	122.3	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°	1567.6	27.7
0°-40°	2535.3	44.7
0°-60°	4402.8	77.7
0°-90°	5666.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5666.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2052	2052	2052	2052	2052	
5°	2053	2036	2046	2042	2042	195
15°	1955	1946	1959	1965	1967	551
25°	1769	1767	1788	1799	1806	813
35°	1506	1516	1554	1571	1586	943
45°	1210	1228	1276	1314	1342	934
55°	901	924	988	1052	1078	805
65°	592	622	707	784	814	586
75°	296	347	451	490	486	315
85°	62	108	115	106	106	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2051.5	2051.5	2051.5	2051.5	2051.5
2.5°	2060.9	2045.8	2053.3	2049.6	2042.0
5°	2053.3	2036.4	2045.8	2042.0	2042.0
7.5°	2036.4	2023.2	2030.7	2028.8	2030.7
10°	2015.6	2002.4	2013.7	2013.7	2011.9
12.5°	1987.3	1976.0	1989.2	1989.2	1991.1
15°	1955.3	1945.9	1959.1	1964.7	1966.6
17.5°	1915.7	1906.3	1923.2	1928.9	1934.6
20°	1870.4	1866.7	1883.6	1889.3	1896.8
22.5°	1819.5	1819.5	1836.5	1844.0	1855.4
25°	1768.6	1766.7	1787.5	1798.8	1806.3
27.5°	1708.3	1710.2	1736.6	1747.9	1757.3
30°	1644.2	1648.0	1678.1	1691.3	1704.5
32.5°	1576.3	1583.8	1617.8	1632.9	1646.1
35°	1506.5	1516.0	1553.7	1570.6	1585.7
37.5°	1436.8	1450.0	1489.6	1506.5	1523.5
40°	1363.2	1374.5	1419.8	1440.5	1461.3
42.5°	1287.8	1302.9	1348.2	1378.3	1402.8
45°	1210.5	1227.5	1276.5	1314.2	1342.5
47.5°	1133.2	1155.8	1203.0	1253.9	1278.4
50°	1055.9	1078.5	1131.3	1187.9	1212.4
52.5°	976.7	999.3	1059.7	1118.1	1144.5
55°	901.3	923.9	988.0	1052.1	1078.5
57.5°	822.1	846.6	918.3	984.2	1010.6
60°	744.8	769.3	846.6	916.4	944.6
62.5°	669.4	695.8	776.8	850.4	878.7
65°	592.1	622.2	707.1	784.4	814.5
67.5°	516.6	550.6	639.2	720.3	752.3
70°	441.2	480.8	575.1	658.0	690.1
72.5°	367.7	411.0	511.0	593.9	610.9
75°	296.0	346.9	450.6	490.2	486.5
77.5°	228.1	284.7	382.8	390.3	401.6
80°	165.9	228.1	286.6	301.7	294.1
82.5°	109.4	171.6	205.5	198.0	196.1
85°	62.2	107.5	115.0	105.6	105.6
87.5°	26.4	43.4	37.7	28.3	26.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)