

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: P261044

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261044
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-LD5-50SE-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5357.0 lumens
Efficiency: N/A
Efficacy: 131.9 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

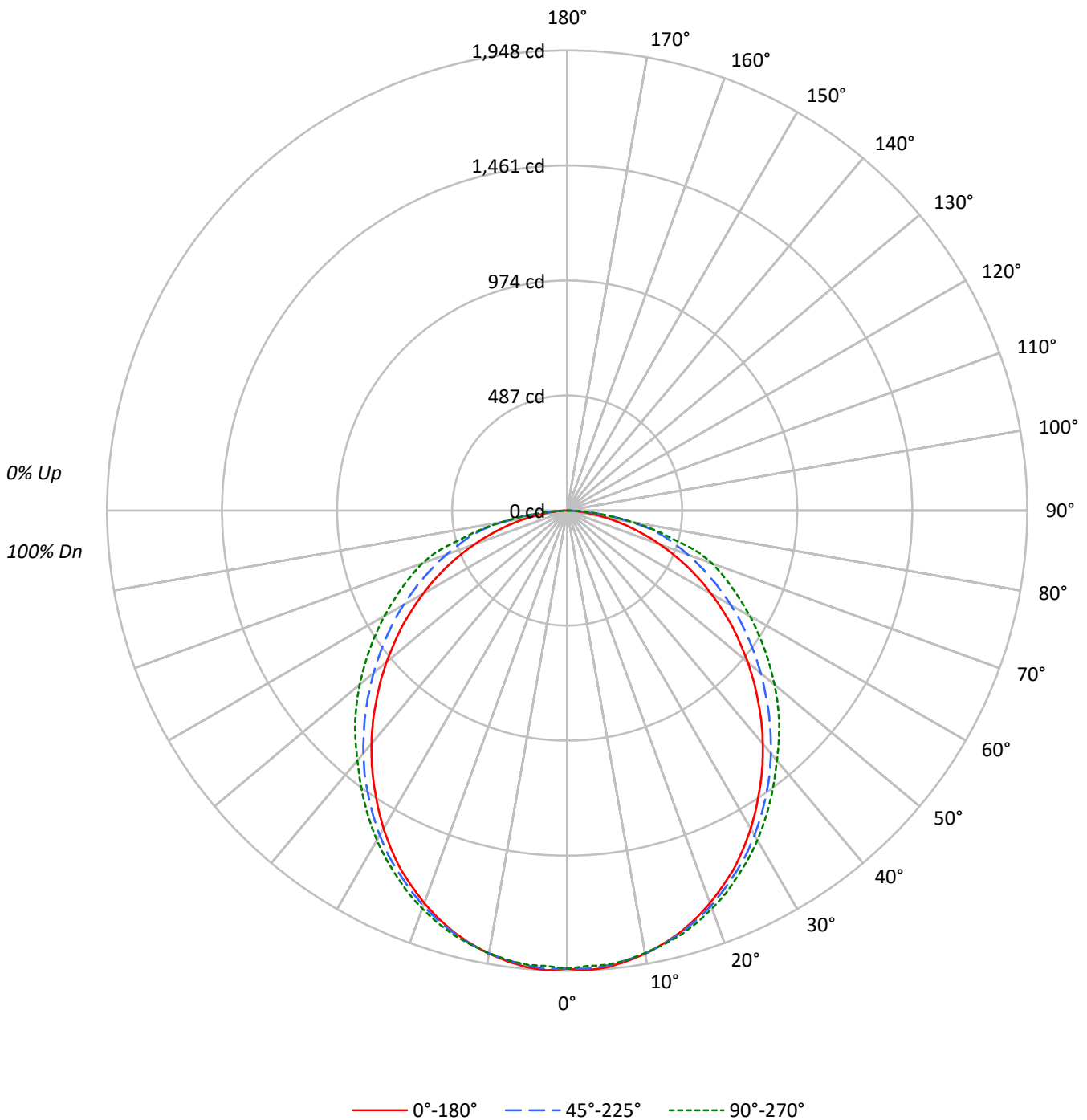
Input Watts (W): 40.624353
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2609	2609	2609
5°	2622	2612	2607
10°	2603	2601	2598
15°	2575	2580	2590
20°	2532	2550	2568
25°	2482	2509	2535
30°	2415	2465	2504
35°	2339	2413	2462
40°	2263	2357	2426
45°	2177	2296	2415
50°	2089	2239	2399
55°	1999	2191	2392
60°	1895	2154	2403
65°	1782	2128	2451
70°	1641	2139	2567
75°	1455	2215	2391
80°	1216	2099	2155
85°	908	1678	1541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.4	3.4
10°-20°	521.5	9.7
20°-30°	777.1	14.5
30°-40°	914.8	17.1
40°-50°	929.6	17.4
50°-60°	835.8	15.6
60°-70°	660.3	12.3
70°-80°	418.9	7.8
80°-90°	115.6	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°	1482.0	27.7
0°-40°	2396.7	44.7
0°-60°	4162.2	77.7
0°-90°	5357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5357.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1939	1939	1939	1939	1939	
5°	1941	1925	1934	1930	1930	184
15°	1848	1840	1852	1857	1859	521
25°	1672	1670	1690	1700	1708	769
35°	1424	1433	1469	1485	1499	891
45°	1144	1160	1207	1242	1269	883
55°	852	873	934	995	1020	761
65°	560	588	668	742	770	554
75°	280	328	426	463	460	298
85°	59	102	109	100	100	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1939.3	1939.3	1939.3	1939.3	1939.3
2.5°	1948.2	1934.0	1941.1	1937.6	1930.4
5°	1941.1	1925.1	1934.0	1930.4	1930.4
7.5°	1925.1	1912.6	1919.7	1917.9	1919.7
10°	1905.5	1893.0	1903.7	1903.7	1901.9
12.5°	1878.7	1868.0	1880.5	1880.5	1882.3
15°	1848.4	1839.5	1852.0	1857.3	1859.1
17.5°	1811.0	1802.1	1818.1	1823.5	1828.8
20°	1768.2	1764.7	1780.7	1786.0	1793.2
22.5°	1720.1	1720.1	1736.1	1743.3	1754.0
25°	1672.0	1670.2	1689.8	1700.5	1707.6
27.5°	1614.9	1616.7	1641.7	1652.4	1661.3
30°	1554.3	1557.9	1586.4	1598.9	1611.4
32.5°	1490.1	1497.3	1529.4	1543.6	1556.1
35°	1424.2	1433.1	1468.8	1484.8	1499.1
37.5°	1358.2	1370.7	1408.2	1424.2	1440.2
40°	1288.7	1299.4	1342.2	1361.8	1381.4
42.5°	1217.4	1231.7	1274.5	1303.0	1326.2
45°	1144.3	1160.4	1206.7	1242.4	1269.1
47.5°	1071.3	1092.7	1137.2	1185.3	1208.5
50°	998.2	1019.6	1069.5	1123.0	1146.1
52.5°	923.3	944.7	1001.8	1057.0	1082.0
55°	852.0	873.4	934.0	994.6	1019.6
57.5°	777.2	800.3	868.1	930.5	955.4
60°	704.1	727.2	800.3	866.3	893.0
62.5°	632.8	657.7	734.4	803.9	830.6
65°	559.7	588.2	668.4	741.5	770.0
67.5°	488.4	520.5	604.3	680.9	711.2
70°	417.1	454.5	543.7	622.1	652.4
72.5°	347.6	388.6	483.1	561.5	577.5
75°	279.8	328.0	426.0	463.4	459.9
77.5°	215.7	269.2	361.8	369.0	379.7
80°	156.9	215.7	270.9	285.2	278.1
82.5°	103.4	162.2	194.3	187.2	185.4
85°	58.8	101.6	108.7	99.8	99.8
87.5°	25.0	41.0	35.6	26.7	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)