

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: P261087

Luminaire Tested: **24CZ-LD5-70-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261087
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-LD5-70-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: 5595.4 lumens
Efficiency: N/A
Efficacy: 101.9 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

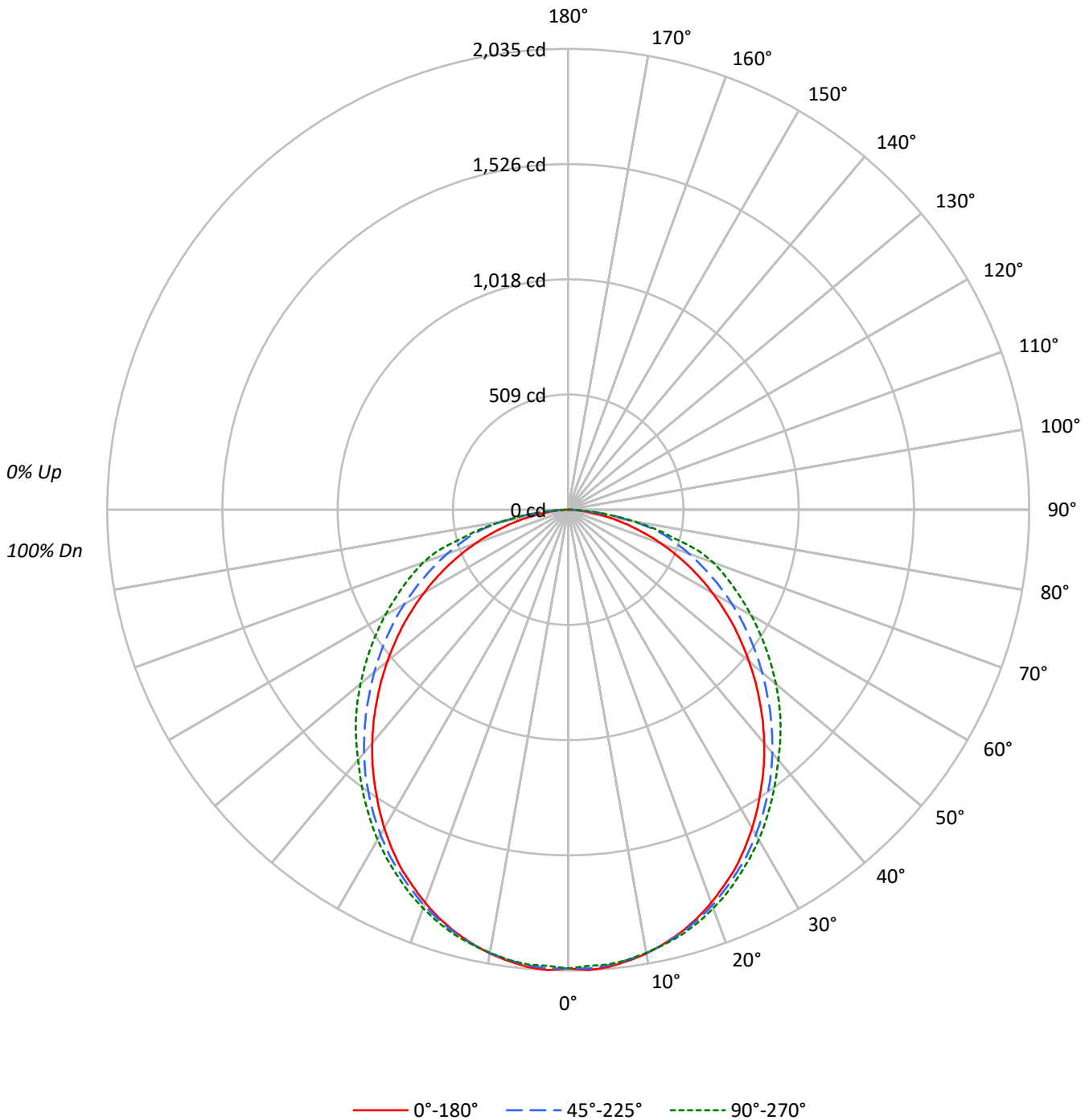
Input Watts (W): 54.895203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2725	2725	2725
5°	2738	2728	2723
10°	2719	2717	2714
15°	2689	2695	2705
20°	2644	2663	2682
25°	2593	2620	2648
30°	2522	2574	2615
35°	2443	2520	2572
40°	2364	2462	2534
45°	2274	2398	2522
50°	2182	2338	2506
55°	2088	2289	2498
60°	1979	2249	2510
65°	1861	2223	2561
70°	1714	2234	2681
75°	1520	2313	2497
80°	1269	2193	2250
85°	948	1754	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.5	3.4
10°-20°	544.7	9.7
20°-30°	811.7	14.5
30°-40°	955.5	17.1
40°-50°	971.0	17.4
50°-60°	873.0	15.6
60°-70°	689.7	12.3
70°-80°	437.5	7.8
80°-90°	120.8	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°	1547.9	27.7
0°-40°	2503.4	44.7
0°-60°	4347.4	77.7
0°-90°	5595.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5595.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2026	2026	2026	2026	2026	
5°	2028	2011	2020	2016	2016	192
15°	1931	1921	1934	1940	1942	544
25°	1746	1744	1765	1776	1784	803
35°	1488	1497	1534	1551	1566	931
45°	1195	1212	1260	1298	1326	922
55°	890	912	976	1039	1065	795
65°	585	614	698	774	804	579
75°	292	343	445	484	480	311
85°	61	106	114	104	104	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2025.6	2025.6	2025.6	2025.6	2025.6
2.5°	2034.9	2020.0	2027.5	2023.8	2016.3
5°	2027.5	2010.7	2020.0	2016.3	2016.3
7.5°	2010.7	1997.7	2005.2	2003.3	2005.2
10°	1990.3	1977.2	1988.4	1988.4	1986.5
12.5°	1962.3	1951.2	1964.2	1964.2	1966.1
15°	1930.7	1921.4	1934.4	1940.0	1941.9
17.5°	1891.6	1882.3	1899.0	1904.6	1910.2
20°	1846.9	1843.2	1859.9	1865.5	1873.0
22.5°	1796.6	1796.6	1813.4	1820.8	1832.0
25°	1746.4	1744.5	1765.0	1776.2	1783.6
27.5°	1686.8	1688.6	1714.7	1725.9	1735.2
30°	1623.5	1627.2	1657.0	1670.0	1683.1
32.5°	1556.5	1563.9	1597.4	1612.3	1625.3
35°	1487.6	1496.9	1534.1	1550.9	1565.8
37.5°	1418.7	1431.7	1470.8	1487.6	1504.3
40°	1346.1	1357.2	1401.9	1422.4	1442.9
42.5°	1271.6	1286.5	1331.2	1361.0	1385.2
45°	1195.3	1212.0	1260.4	1297.7	1325.6
47.5°	1118.9	1141.3	1187.8	1238.1	1262.3
50°	1042.6	1064.9	1117.1	1172.9	1197.1
52.5°	964.4	986.8	1046.3	1104.0	1130.1
55°	889.9	912.3	975.6	1038.9	1064.9
57.5°	811.7	835.9	906.7	971.9	997.9
60°	735.4	759.6	835.9	904.8	932.8
62.5°	660.9	687.0	767.1	839.7	867.6
65°	584.6	614.4	698.2	774.5	804.3
67.5°	510.1	543.6	631.1	711.2	742.9
70°	435.7	474.8	567.8	649.8	681.4
72.5°	363.1	405.9	504.5	586.5	603.2
75°	292.3	342.6	445.0	484.1	480.3
77.5°	225.3	281.1	377.9	385.4	396.6
80°	163.8	225.3	283.0	297.9	290.4
82.5°	108.0	169.4	202.9	195.5	193.6
85°	61.4	106.1	113.6	104.3	104.3
87.5°	26.1	42.8	37.2	27.9	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)