

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: P261000

Luminaire Tested: **24CZ-LD5-55-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261000  
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-LD5-55-S-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6001.0 lumens  
Efficiency: N/A  
Efficacy: 142.7 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

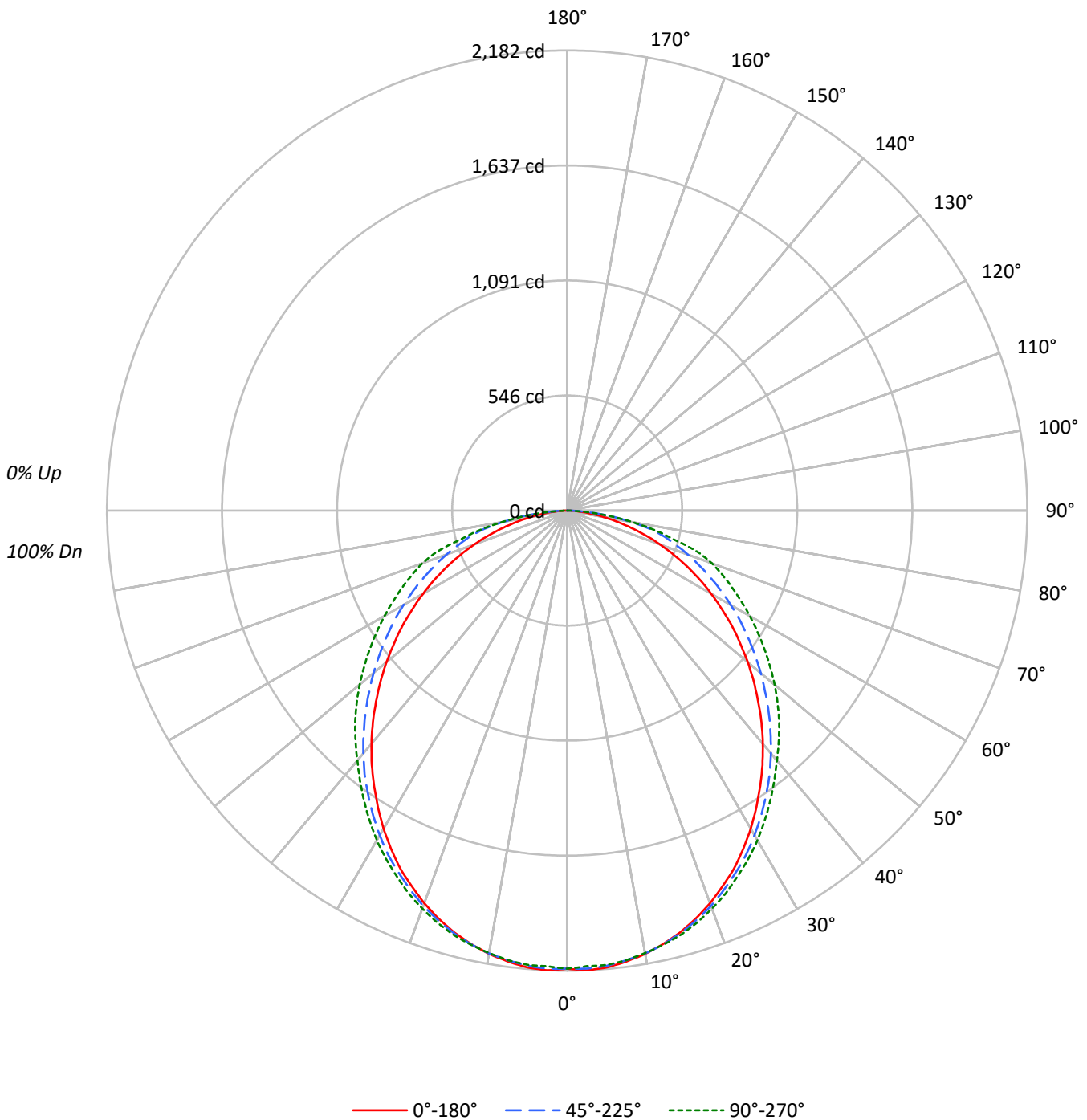
Input Watts (W): 42.047067  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2923	2923	2923
5°	2937	2926	2921
10°	2916	2914	2911
15°	2884	2890	2901
20°	2836	2856	2876
25°	2781	2810	2840
30°	2705	2761	2804
35°	2621	2702	2758
40°	2536	2641	2718
45°	2439	2572	2705
50°	2341	2508	2687
55°	2239	2454	2679
60°	2122	2412	2692
65°	1996	2384	2746
70°	1838	2396	2875
75°	1630	2481	2678
80°	1361	2352	2414
85°	1017	1880	1726



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.4	3.4
10°-20°	584.2	9.7
20°-30°	870.6	14.5
30°-40°	1024.8	17.1
40°-50°	1041.4	17.4
50°-60°	936.3	15.6
60°-70°	739.7	12.3
70°-80°	469.3	7.8
80°-90°	129.5	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°	1660.1	27.7
0°-40°	2684.9	44.7
0°-60°	4662.5	77.7
0°-90°	6001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6001.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2172	2172	2172	2172	2172	
5°	2174	2156	2166	2162	2162	206
15°	2071	2061	2075	2081	2083	583
25°	1873	1871	1893	1905	1913	861
35°	1595	1605	1645	1663	1679	998
45°	1282	1300	1352	1392	1422	989
55°	954	978	1046	1114	1142	852
65°	627	659	749	831	863	621
75°	314	367	477	519	515	334
85°	66	114	122	112	112	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2172.5	2172.5	2172.5	2172.5	2172.5
2.5°	2182.5	2166.5	2174.5	2170.5	2162.5
5°	2174.5	2156.5	2166.5	2162.5	2162.5
7.5°	2156.5	2142.5	2150.5	2148.5	2150.5
10°	2134.5	2120.6	2132.5	2132.5	2130.5
12.5°	2104.6	2092.6	2106.6	2106.6	2108.6
15°	2070.6	2060.7	2074.6	2080.6	2082.6
17.5°	2028.7	2018.7	2036.7	2042.7	2048.7
20°	1980.8	1976.8	1994.8	2000.8	2008.7
22.5°	1926.9	1926.9	1944.8	1952.8	1964.8
25°	1873.0	1871.0	1892.9	1904.9	1912.9
27.5°	1809.1	1811.1	1839.0	1851.0	1861.0
30°	1741.2	1745.2	1777.1	1791.1	1805.1
32.5°	1669.3	1677.3	1713.2	1729.2	1743.2
35°	1595.4	1605.4	1645.3	1663.3	1679.3
37.5°	1521.5	1535.5	1577.4	1595.4	1613.4
40°	1443.7	1455.6	1503.6	1525.5	1547.5
42.5°	1363.8	1379.8	1427.7	1459.6	1485.6
45°	1281.9	1299.9	1351.8	1391.7	1421.7
47.5°	1200.1	1224.0	1273.9	1327.8	1353.8
50°	1118.2	1142.1	1198.1	1258.0	1283.9
52.5°	1034.3	1058.3	1122.2	1184.1	1212.0
55°	954.5	978.4	1046.3	1114.2	1142.1
57.5°	870.6	896.5	972.4	1042.3	1070.3
60°	788.7	814.7	896.5	970.4	1000.4
62.5°	708.8	736.8	822.7	900.5	930.5
65°	627.0	658.9	748.8	830.7	862.6
67.5°	547.1	583.1	676.9	762.8	796.7
70°	467.2	509.2	609.0	696.9	730.8
72.5°	389.4	435.3	541.1	629.0	646.9
75°	313.5	367.4	477.2	519.2	515.2
77.5°	241.6	301.5	405.3	413.3	425.3
80°	175.7	241.6	303.5	319.5	311.5
82.5°	115.8	181.7	217.6	209.7	207.7
85°	65.9	113.8	121.8	111.8	111.8
87.5°	28.0	45.9	39.9	30.0	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)