

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: P260584

Luminaire Tested: **24CZ-LD5-60-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260584  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-60-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6334.0 lumens  
Efficiency: N/A  
Efficacy: 139.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

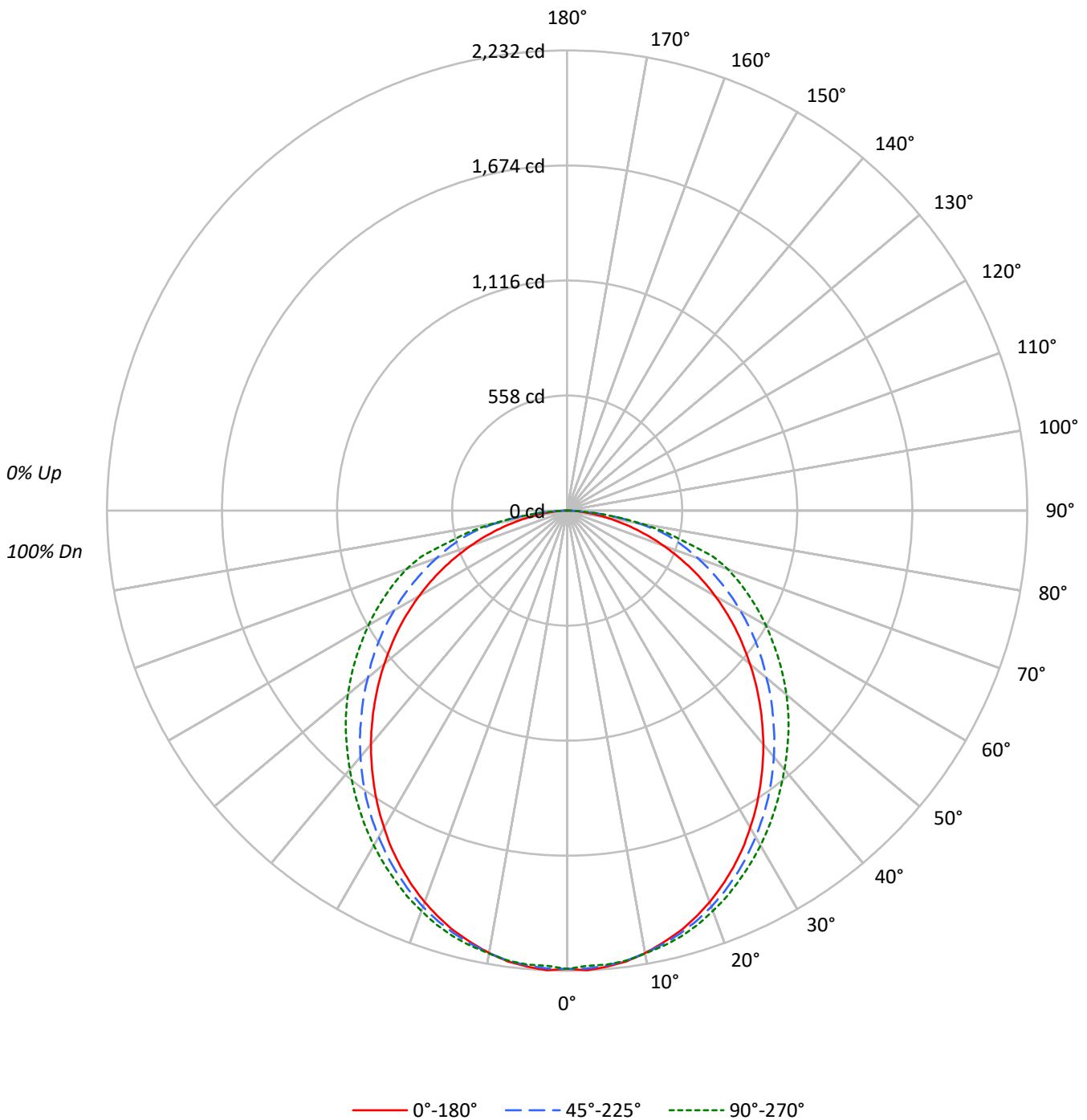
Input Watts (W): 45.286164  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2991	2991	2991
5°	2999	2991	2985
10°	2978	2978	2981
15°	2942	2957	2979
20°	2894	2928	2959
25°	2833	2888	2936
30°	2760	2840	2914
35°	2682	2793	2893
40°	2602	2739	2880
45°	2513	2686	2889
50°	2424	2642	2905
55°	2335	2625	2935
60°	2229	2609	2994
65°	2113	2610	3093
70°	1954	2653	3259
75°	1747	2773	3100
80°	1462	2655	2840
85°	1105	2042	1942



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.1	3.3
10°-20°	597.8	9.4
20°-30°	893.8	14.1
30°-40°	1060.3	16.7
40°-50°	1091.3	17.2
50°-60°	1001.1	15.8
60°-70°	809.5	12.8
70°-80°	525.3	8.3
80°-90°	144.9	2.3
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°	1701.7	26.9
0°-40°	2761.9	43.6
0°-60°	4854.3	76.6
0°-90°	6334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6334.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2223	2223	2223	2223	2223	
5°	2221	2206	2214	2212	2210	211
15°	2112	2104	2123	2132	2138	595
25°	1908	1911	1945	1963	1978	878
35°	1633	1646	1700	1737	1761	1021
45°	1321	1342	1412	1479	1518	1019
55°	995	1026	1119	1210	1251	889
65°	664	703	820	928	972	656
75°	336	399	534	596	596	357
85°	72	121	132	128	126	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2222.9	2222.9	2222.9	2222.9	2222.9
2.5°	2231.6	2214.2	2222.9	2220.7	2209.9
5°	2220.7	2205.6	2214.2	2212.1	2209.9
7.5°	2205.6	2190.4	2201.2	2199.0	2201.2
10°	2179.5	2166.5	2179.5	2181.7	2181.7
12.5°	2147.0	2136.2	2153.5	2157.8	2162.2
15°	2112.3	2103.6	2123.1	2131.8	2138.3
17.5°	2068.9	2062.4	2086.3	2097.1	2105.8
20°	2021.2	2019.0	2045.1	2055.9	2066.8
22.5°	1967.0	1967.0	1997.4	2010.4	2025.6
25°	1908.4	1910.6	1945.3	1962.7	1977.8
27.5°	1845.6	1847.7	1888.9	1910.6	1928.0
30°	1776.2	1784.8	1828.2	1856.4	1875.9
32.5°	1706.8	1717.6	1765.3	1797.8	1819.5
35°	1633.0	1646.0	1700.3	1737.1	1761.0
37.5°	1557.1	1572.3	1630.9	1672.1	1700.3
40°	1481.2	1498.6	1559.3	1607.0	1639.5
42.5°	1401.0	1420.5	1487.7	1544.1	1578.8
45°	1320.7	1342.4	1411.8	1479.0	1518.1
47.5°	1240.5	1266.5	1340.2	1414.0	1455.2
50°	1158.1	1184.1	1262.2	1346.8	1388.0
52.5°	1075.7	1106.0	1192.8	1279.5	1320.7
55°	995.4	1025.8	1119.0	1210.1	1251.3
57.5°	913.0	943.4	1045.3	1140.7	1181.9
60°	828.4	863.1	969.4	1067.0	1112.5
62.5°	746.0	782.9	895.7	999.8	1043.1
65°	663.6	702.7	819.8	928.2	971.6
67.5°	579.0	624.6	746.0	856.6	902.2
70°	496.6	546.5	674.5	785.1	828.4
72.5°	416.4	470.6	602.9	715.7	741.7
75°	336.1	399.0	533.5	596.4	596.4
77.5°	260.2	329.6	455.4	479.3	492.3
80°	188.7	264.6	342.7	370.8	366.5
82.5°	125.8	201.7	245.1	245.1	238.6
85°	71.6	121.4	132.3	128.0	125.8
87.5°	30.4	45.5	41.2	32.5	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)