

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: P260594

Luminaire Tested: **24CZ-LD5-70-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260594  
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-LD5-70-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: 7404.0 lumens  
Efficiency: N/A  
Efficacy: 134.9 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

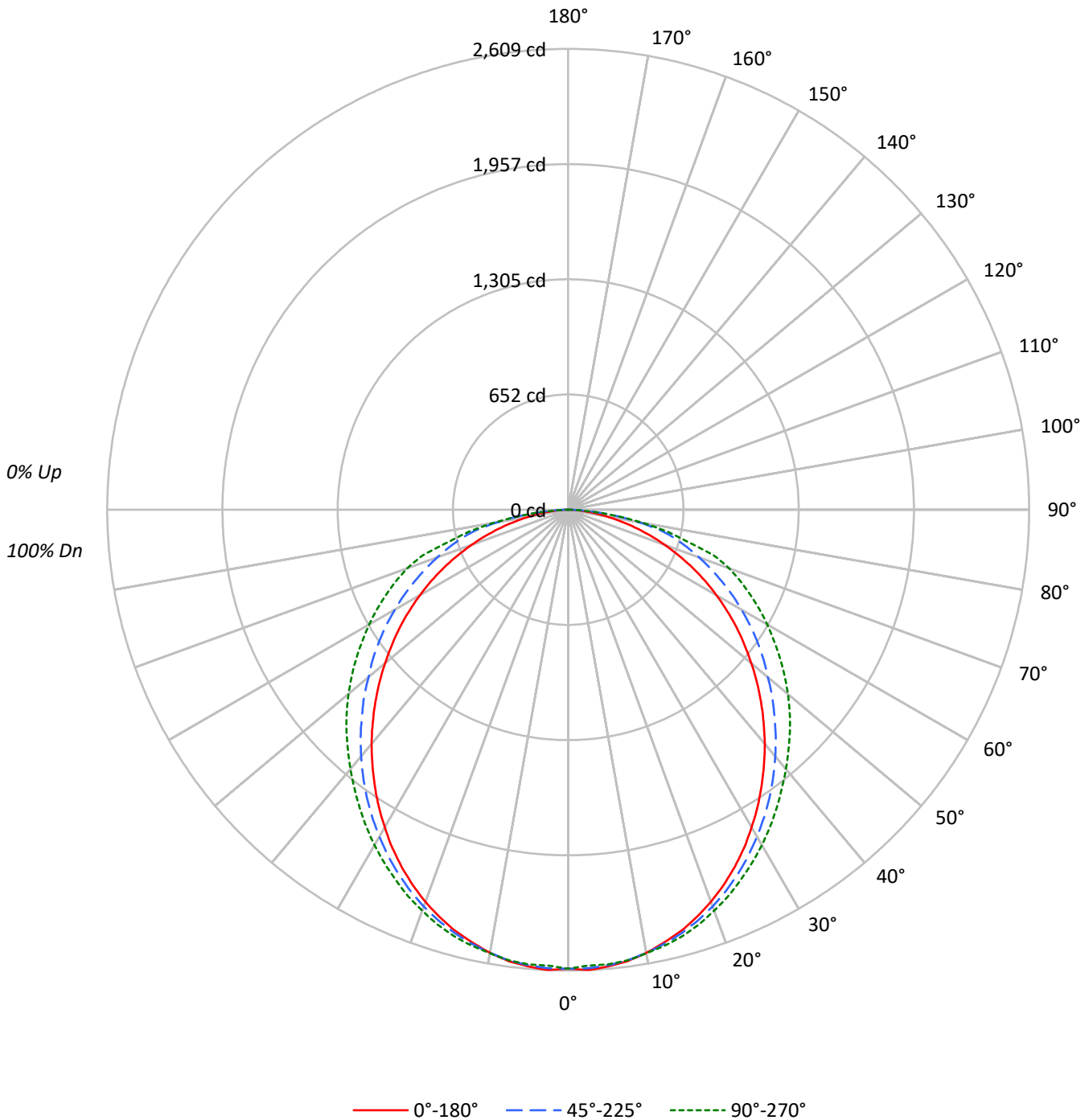
Input Watts (W): 54.895203  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3496	3496	3496
5°	3506	3496	3489
10°	3481	3481	3484
15°	3439	3457	3482
20°	3383	3423	3459
25°	3312	3376	3432
30°	3226	3320	3407
35°	3135	3265	3381
40°	3041	3201	3366
45°	2938	3140	3377
50°	2834	3088	3396
55°	2730	3069	3431
60°	2606	3049	3500
65°	2470	3051	3616
70°	2284	3102	3810
75°	2043	3242	3624
80°	1709	3103	3319
85°	1292	2387	2269



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.5	3.3
10°-20°	698.8	9.4
20°-30°	1044.7	14.1
30°-40°	1239.4	16.7
40°-50°	1275.6	17.2
50°-60°	1170.2	15.8
60°-70°	946.2	12.8
70°-80°	614.1	8.3
80°-90°	169.3	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°	1989.1	26.9
0°-40°	3228.5	43.6
0°-60°	5674.4	76.6
0°-90°	7404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7404.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2598	2598	2598	2598	2598	
5°	2596	2578	2588	2586	2583	246
15°	2469	2459	2482	2492	2500	696
25°	2231	2233	2274	2294	2312	1027
35°	1909	1924	1988	2031	2058	1194
45°	1544	1569	1650	1729	1774	1191
55°	1164	1199	1308	1415	1463	1040
65°	776	821	958	1085	1136	767
75°	393	466	624	697	697	418
85°	84	142	155	150	147	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2598.4	2598.4	2598.4	2598.4	2598.4
2.5°	2608.6	2588.3	2598.4	2595.9	2583.2
5°	2595.9	2578.1	2588.3	2585.7	2583.2
7.5°	2578.1	2560.4	2573.1	2570.5	2573.1
10°	2547.7	2532.5	2547.7	2550.3	2550.3
12.5°	2509.7	2497.0	2517.3	2522.4	2527.4
15°	2469.1	2459.0	2481.8	2491.9	2499.6
17.5°	2418.4	2410.8	2438.7	2451.4	2461.5
20°	2362.7	2360.1	2390.5	2403.2	2415.9
22.5°	2299.3	2299.3	2334.8	2350.0	2367.7
25°	2230.8	2233.4	2273.9	2294.2	2312.0
27.5°	2157.3	2159.9	2208.0	2233.4	2253.7
30°	2076.2	2086.3	2137.0	2170.0	2192.8
32.5°	1995.1	2007.8	2063.5	2101.6	2126.9
35°	1908.9	1924.1	1987.5	2030.6	2058.5
37.5°	1820.2	1837.9	1906.4	1954.5	1987.5
40°	1731.4	1751.7	1822.7	1878.5	1916.5
42.5°	1637.6	1660.5	1739.0	1805.0	1845.5
45°	1543.8	1569.2	1650.3	1728.9	1774.5
47.5°	1450.0	1480.5	1566.7	1652.8	1701.0
50°	1353.7	1384.1	1475.4	1574.3	1622.4
52.5°	1257.4	1292.9	1394.3	1495.7	1543.8
55°	1163.6	1199.1	1308.1	1414.6	1462.7
57.5°	1067.3	1102.7	1221.9	1333.4	1381.6
60°	968.4	1008.9	1133.2	1247.2	1300.5
62.5°	872.1	915.2	1047.0	1168.7	1219.4
65°	775.7	821.4	958.2	1085.0	1135.7
67.5°	676.9	730.1	872.1	1001.3	1054.6
70°	580.5	638.8	788.4	917.7	968.4
72.5°	486.7	550.1	704.7	836.6	867.0
75°	392.9	466.4	623.6	697.1	697.1
77.5°	304.2	385.3	532.4	560.2	575.5
80°	220.5	309.3	400.5	433.5	428.4
82.5°	147.0	235.8	286.5	286.5	278.9
85°	83.7	142.0	154.6	149.6	147.0
87.5°	35.5	53.2	48.2	38.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)