

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: P261014

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261014  
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-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7552.0 lumens  
Efficiency: N/A  
Efficacy: 137.6 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

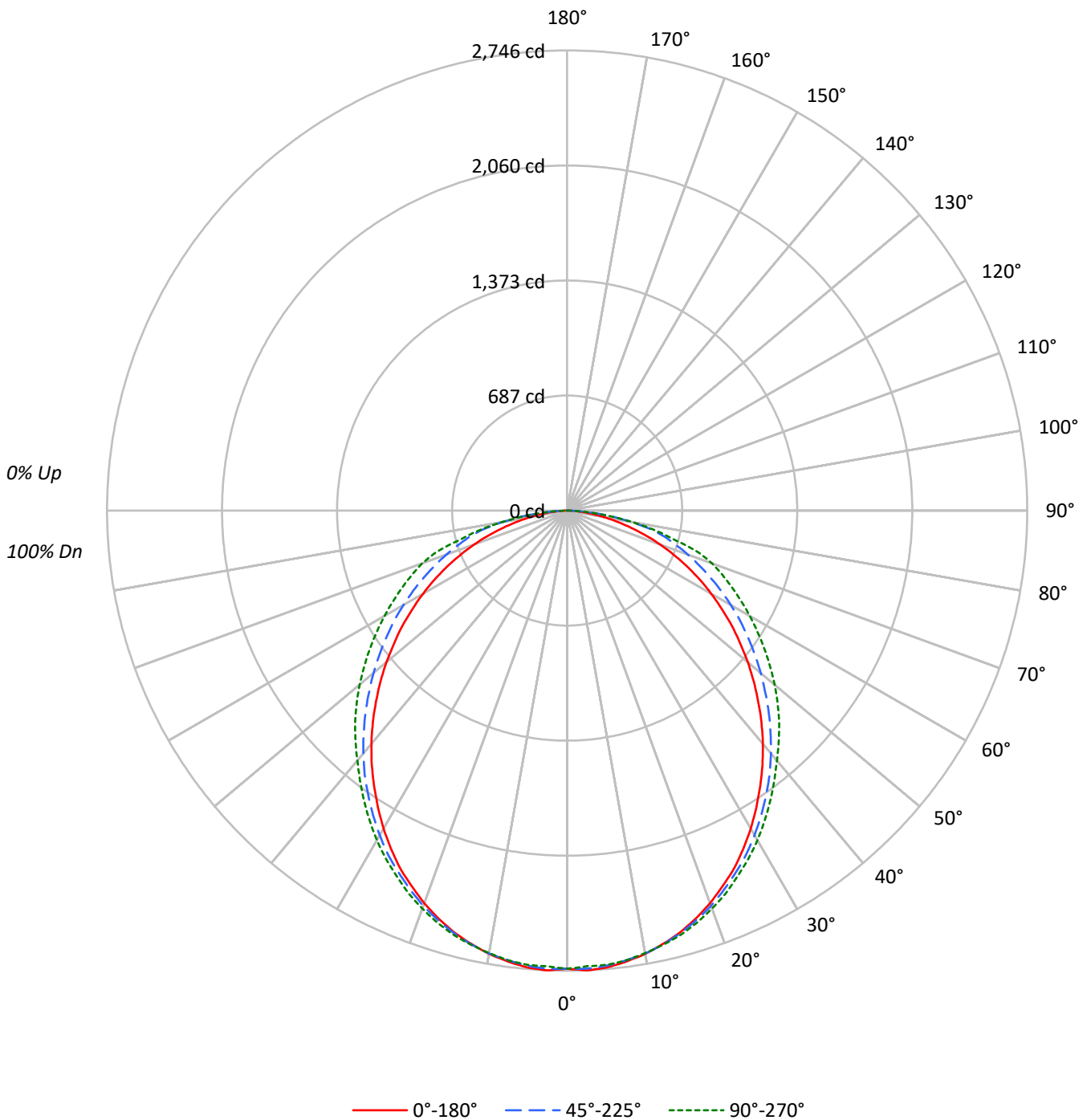
Input Watts (W): 54.895203  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3679	3679	3679
5°	3696	3682	3676
10°	3670	3667	3663
15°	3630	3637	3651
20°	3569	3594	3620
25°	3499	3537	3574
30°	3404	3475	3529
35°	3298	3401	3471
40°	3191	3323	3420
45°	3070	3237	3404
50°	2946	3156	3382
55°	2818	3089	3372
60°	2671	3036	3388
65°	2512	3000	3456
70°	2313	3015	3618
75°	2051	3122	3370
80°	1713	2960	3037
85°	1280	2367	2172



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.5	3.4
10°-20°	735.1	9.7
20°-30°	1095.5	14.5
30°-40°	1289.6	17.1
40°-50°	1310.5	17.4
50°-60°	1178.3	15.6
60°-70°	930.8	12.3
70°-80°	590.6	7.8
80°-90°	163.0	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°	2089.2	27.7
0°-40°	3378.8	44.7
0°-60°	5867.6	77.7
0°-90°	7552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7552.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2734	2734	2734	2734	2734	
5°	2736	2714	2726	2721	2721	259
15°	2606	2593	2611	2618	2621	734
25°	2357	2354	2382	2397	2407	1084
35°	2008	2020	2071	2093	2113	1256
45°	1613	1636	1701	1751	1789	1245
55°	1201	1231	1317	1402	1437	1073
65°	789	829	942	1045	1086	782
75°	394	462	601	653	648	420
85°	83	143	153	141	141	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2734.0	2734.0	2734.0	2734.0	2734.0
2.5°	2746.5	2726.4	2736.5	2731.5	2721.4
5°	2736.5	2713.9	2726.4	2721.4	2721.4
7.5°	2713.9	2696.3	2706.3	2703.8	2706.3
10°	2686.2	2668.6	2683.7	2683.7	2681.2
12.5°	2648.5	2633.4	2651.0	2651.0	2653.6
15°	2605.8	2593.2	2610.8	2618.4	2620.9
17.5°	2553.0	2540.5	2563.1	2570.6	2578.2
20°	2492.7	2487.7	2510.3	2517.9	2527.9
22.5°	2424.9	2424.9	2447.5	2457.6	2472.6
25°	2357.0	2354.5	2382.2	2397.2	2407.3
27.5°	2276.6	2279.1	2314.3	2329.4	2342.0
30°	2191.2	2196.2	2236.4	2254.0	2271.6
32.5°	2100.7	2110.8	2156.0	2176.1	2193.7
35°	2007.8	2020.3	2070.6	2093.2	2113.3
37.5°	1914.8	1932.4	1985.1	2007.8	2030.4
40°	1816.8	1831.9	1892.2	1919.8	1947.4
42.5°	1716.3	1736.4	1796.7	1836.9	1869.5
45°	1613.2	1635.9	1701.2	1751.4	1789.1
47.5°	1510.2	1540.4	1603.2	1671.0	1703.7
50°	1407.2	1437.3	1507.7	1583.1	1615.8
52.5°	1301.6	1331.8	1412.2	1490.1	1525.3
55°	1201.1	1231.3	1316.7	1402.2	1437.3
57.5°	1095.6	1128.3	1223.7	1311.7	1346.9
60°	992.6	1025.2	1128.3	1221.2	1258.9
62.5°	892.1	927.2	1035.3	1133.3	1171.0
65°	789.0	829.2	942.3	1045.3	1085.5
67.5°	688.5	733.7	851.9	959.9	1002.6
70°	588.0	640.8	766.4	877.0	919.7
72.5°	490.0	547.8	681.0	791.5	814.2
75°	394.5	462.4	600.6	653.3	648.3
77.5°	304.1	379.4	510.1	520.2	535.2
80°	221.1	304.1	382.0	402.1	392.0
82.5°	145.7	228.7	273.9	263.8	261.3
85°	82.9	143.2	153.3	140.7	140.7
87.5°	35.2	57.8	50.3	37.7	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)