

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: P260598

Luminaire Tested: **24CZ-LD5-75-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260598  
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-LD5-75-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7538.0 lumens  
Efficiency: N/A  
Efficacy: 129.1 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

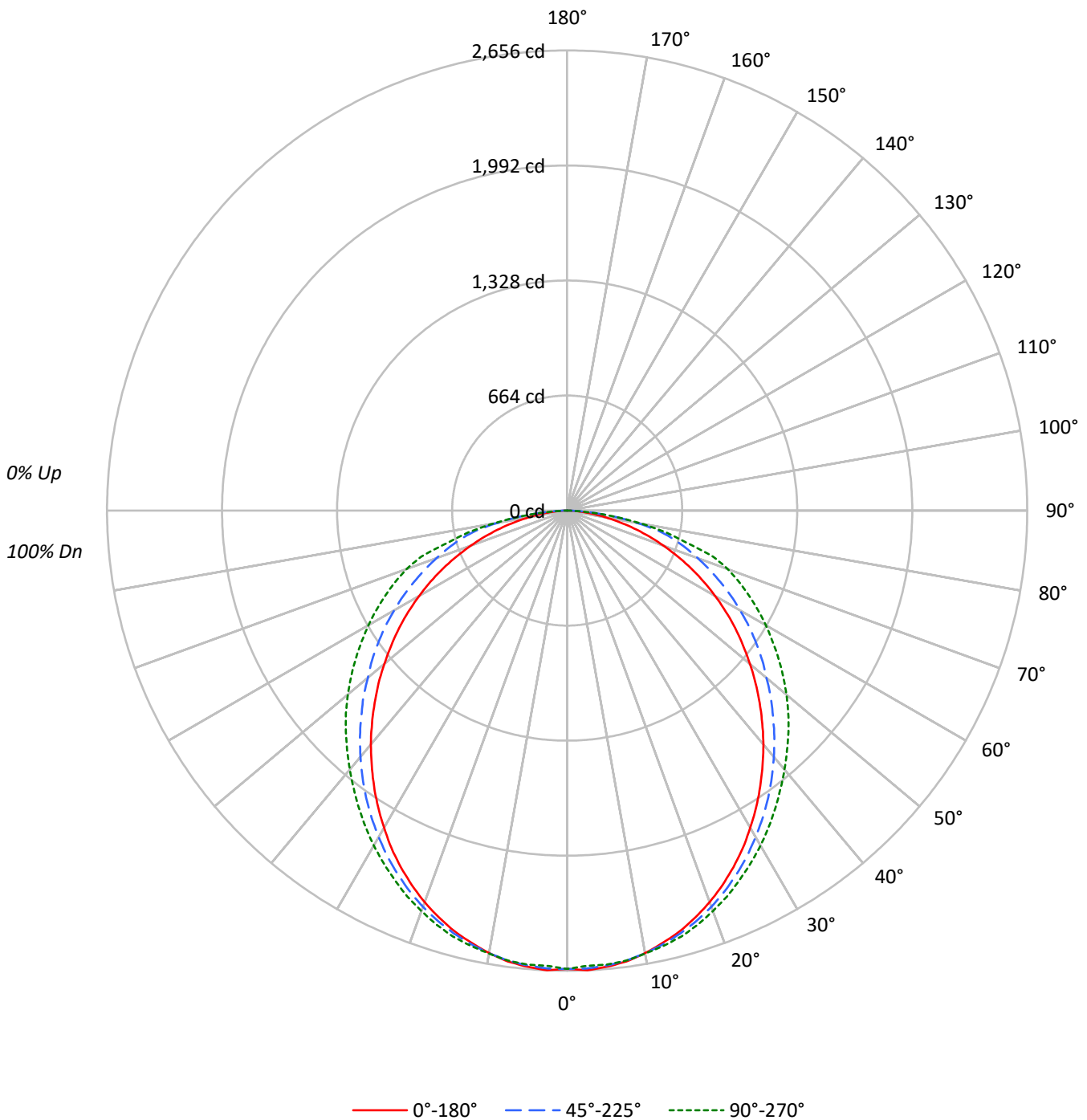
Input Watts (W): 58.404  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3559	3559	3559
5°	3570	3559	3552
10°	3544	3544	3547
15°	3502	3520	3545
20°	3444	3485	3522
25°	3372	3437	3494
30°	3284	3380	3468
35°	3192	3324	3442
40°	3096	3259	3427
45°	2991	3197	3438
50°	2885	3144	3458
55°	2779	3124	3493
60°	2653	3105	3563
65°	2514	3106	3681
70°	2325	3158	3878
75°	2079	3301	3690
80°	1740	3160	3380
85°	1315	2430	2311



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.0	3.3
10°-20°	711.5	9.4
20°-30°	1063.6	14.1
30°-40°	1261.8	16.7
40°-50°	1298.7	17.2
50°-60°	1191.4	15.8
60°-70°	963.3	12.8
70°-80°	625.2	8.3
80°-90°	172.4	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°	2025.1	26.9
0°-40°	3286.9	43.6
0°-60°	5777.1	76.6
0°-90°	7538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2645	2645	2645	2645	2645	
5°	2643	2625	2635	2632	2630	251
15°	2514	2504	2527	2537	2545	708
25°	2271	2274	2315	2336	2354	1045
35°	1943	1959	2023	2067	2096	1215
45°	1572	1598	1680	1760	1807	1213
55°	1185	1221	1332	1440	1489	1058
65°	790	836	976	1105	1156	780
75°	400	475	635	710	710	425
85°	85	144	157	152	150	104
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2645.4	2645.4	2645.4	2645.4	2645.4
2.5°	2655.8	2635.1	2645.4	2642.9	2630.0
5°	2642.9	2624.8	2635.1	2632.5	2630.0
7.5°	2624.8	2606.7	2619.6	2617.1	2619.6
10°	2593.8	2578.3	2593.8	2596.4	2596.4
12.5°	2555.1	2542.2	2562.9	2568.0	2573.2
15°	2513.8	2503.5	2526.7	2537.0	2544.8
17.5°	2462.2	2454.5	2482.8	2495.8	2506.1
20°	2405.4	2402.8	2433.8	2446.7	2459.6
22.5°	2340.9	2340.9	2377.0	2392.5	2410.6
25°	2271.2	2273.8	2315.1	2335.7	2353.8
27.5°	2196.4	2198.9	2248.0	2273.8	2294.4
30°	2113.8	2124.1	2175.7	2209.3	2232.5
32.5°	2031.2	2044.1	2100.9	2139.6	2165.4
35°	1943.4	1958.9	2023.4	2067.3	2095.7
37.5°	1853.1	1871.2	1940.9	1989.9	2023.4
40°	1762.8	1783.4	1855.7	1912.5	1951.2
42.5°	1667.3	1690.5	1770.5	1837.6	1878.9
45°	1571.8	1597.6	1680.2	1760.2	1806.6
47.5°	1476.3	1507.3	1595.0	1682.8	1731.8
50°	1378.2	1409.2	1502.1	1602.8	1651.8
52.5°	1280.1	1316.3	1419.5	1522.7	1571.8
55°	1184.6	1220.8	1331.8	1440.2	1489.2
57.5°	1086.6	1122.7	1244.0	1357.6	1406.6
60°	985.9	1027.2	1153.7	1269.8	1324.0
62.5°	887.8	931.7	1065.9	1189.8	1241.4
65°	789.8	836.2	975.6	1104.6	1156.3
67.5°	689.1	743.3	887.8	1019.5	1073.7
70°	591.0	650.4	802.7	934.3	985.9
72.5°	495.5	560.1	717.5	851.7	882.7
75°	400.0	474.9	634.9	709.8	709.8
77.5°	309.7	392.3	542.0	570.4	585.9
80°	224.5	314.9	407.8	441.3	436.2
82.5°	149.7	240.0	291.6	291.6	283.9
85°	85.2	144.5	157.4	152.3	149.7
87.5°	36.1	54.2	49.0	38.7	33.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)