

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: P260601

Luminaire Tested: **24CZ-LD5-75-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260601  
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-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7990.0 lumens  
Efficiency: N/A  
Efficacy: 130.4 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

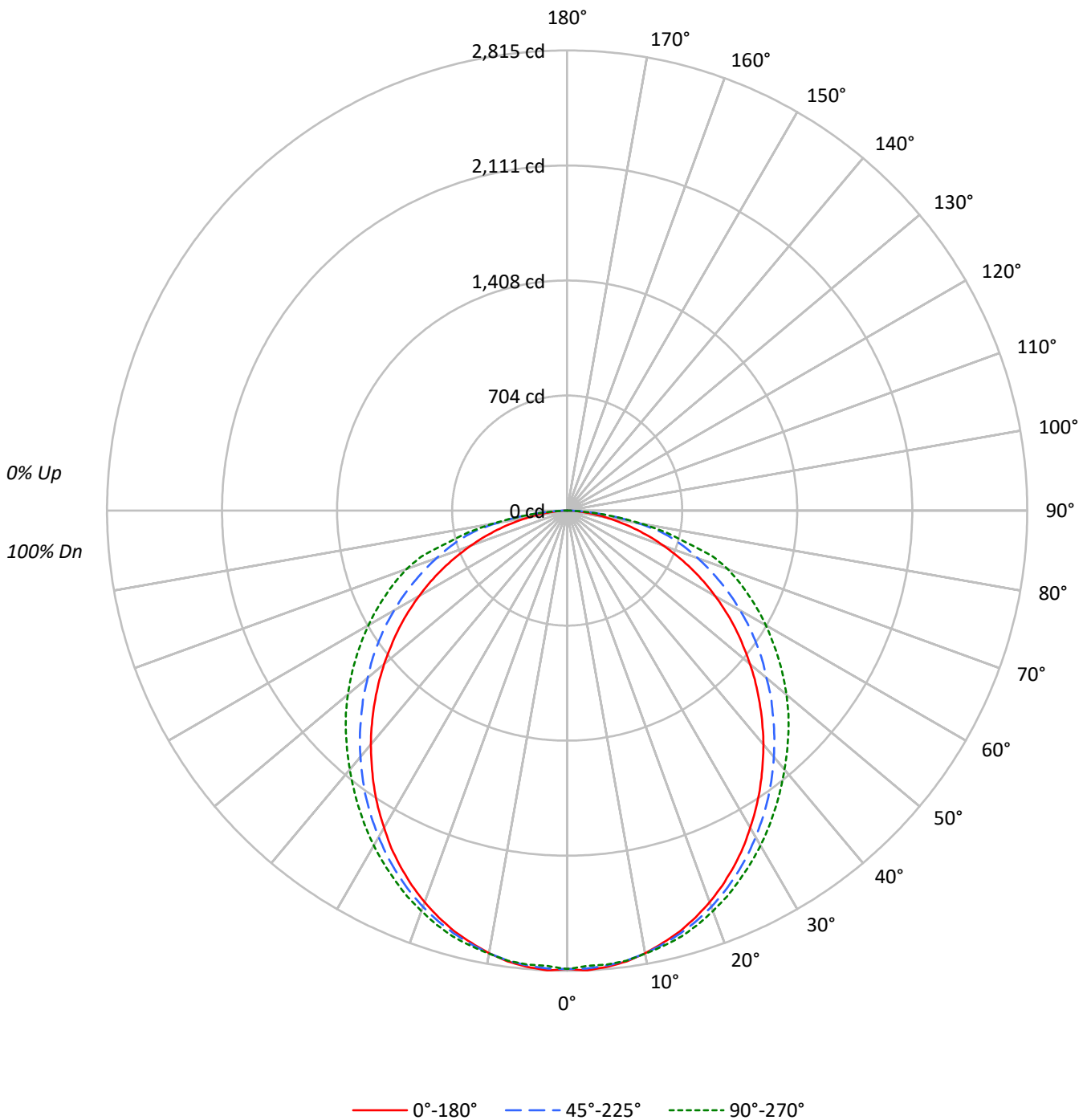
Input Watts (W): 61.265796  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3773	3773	3773
5°	3784	3772	3765
10°	3756	3756	3760
15°	3712	3731	3757
20°	3651	3694	3733
25°	3574	3643	3704
30°	3481	3583	3677
35°	3384	3523	3649
40°	3282	3455	3633
45°	3170	3389	3644
50°	3058	3333	3665
55°	2946	3311	3703
60°	2812	3291	3777
65°	2665	3292	3902
70°	2465	3347	4111
75°	2204	3499	3911
80°	1844	3349	3582
85°	1394	2577	2450



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	265.0	3.3
10°-20°	754.2	9.4
20°-30°	1127.4	14.1
30°-40°	1337.5	16.7
40°-50°	1376.6	17.2
50°-60°	1262.9	15.8
60°-70°	1021.1	12.8
70°-80°	662.7	8.3
80°-90°	182.7	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°	2146.5	26.9
0°-40°	3484.0	43.6
0°-60°	6123.5	76.6
0°-90°	7990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7990.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2804	2804	2804	2804	2804	
5°	2801	2782	2793	2790	2788	266
15°	2665	2654	2678	2689	2697	751
25°	2407	2410	2454	2476	2495	1108
35°	2060	2076	2145	2191	2221	1288
45°	1666	1693	1781	1866	1915	1286
55°	1256	1294	1412	1526	1578	1122
65°	837	886	1034	1171	1226	827
75°	424	503	673	752	752	451
85°	90	153	167	161	159	111
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2804.1	2804.1	2804.1	2804.1	2804.1
2.5°	2815.0	2793.1	2804.1	2801.3	2787.7
5°	2801.3	2782.2	2793.1	2790.4	2787.7
7.5°	2782.2	2763.0	2776.7	2774.0	2776.7
10°	2749.4	2732.9	2749.4	2752.1	2752.1
12.5°	2708.3	2694.6	2716.5	2722.0	2727.5
15°	2664.6	2653.6	2678.2	2689.2	2697.4
17.5°	2609.8	2601.6	2631.7	2645.4	2656.3
20°	2549.7	2546.9	2579.7	2593.4	2607.1
22.5°	2481.3	2481.3	2519.6	2536.0	2555.1
25°	2407.4	2410.1	2453.9	2475.8	2494.9
27.5°	2328.1	2330.8	2382.8	2410.1	2432.0
30°	2240.5	2251.5	2306.2	2341.7	2366.4
32.5°	2153.0	2166.7	2226.8	2267.9	2295.2
35°	2060.0	2076.4	2144.8	2191.3	2221.4
37.5°	1964.2	1983.4	2057.2	2109.2	2144.8
40°	1868.5	1890.4	1967.0	2027.1	2068.2
42.5°	1767.3	1791.9	1876.7	1947.8	1991.6
45°	1666.0	1693.4	1780.9	1865.7	1915.0
47.5°	1564.8	1597.6	1690.7	1783.7	1835.6
50°	1460.9	1493.7	1592.2	1698.9	1750.8
52.5°	1356.9	1395.2	1504.6	1614.1	1666.0
55°	1255.7	1294.0	1411.6	1526.5	1578.5
57.5°	1151.7	1190.0	1318.6	1439.0	1490.9
60°	1045.0	1088.8	1222.9	1346.0	1403.4
62.5°	941.1	987.6	1129.8	1261.1	1315.9
65°	837.1	886.4	1034.1	1170.9	1225.6
67.5°	730.4	787.9	941.1	1080.6	1138.0
70°	626.5	689.4	850.8	990.3	1045.0
72.5°	525.3	593.6	760.5	902.8	935.6
75°	424.0	503.4	673.0	752.3	752.3
77.5°	328.3	415.8	574.5	604.6	621.0
80°	238.0	333.8	432.2	467.8	462.3
82.5°	158.7	254.4	309.1	309.1	300.9
85°	90.3	153.2	166.9	161.4	158.7
87.5°	38.3	57.4	52.0	41.0	35.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)