

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: P261207

Luminaire Tested: **24CZ-LD5-75-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261207  
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-LD5-75-S-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7810.0 lumens  
Efficiency: N/A  
Efficacy: 131.2 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

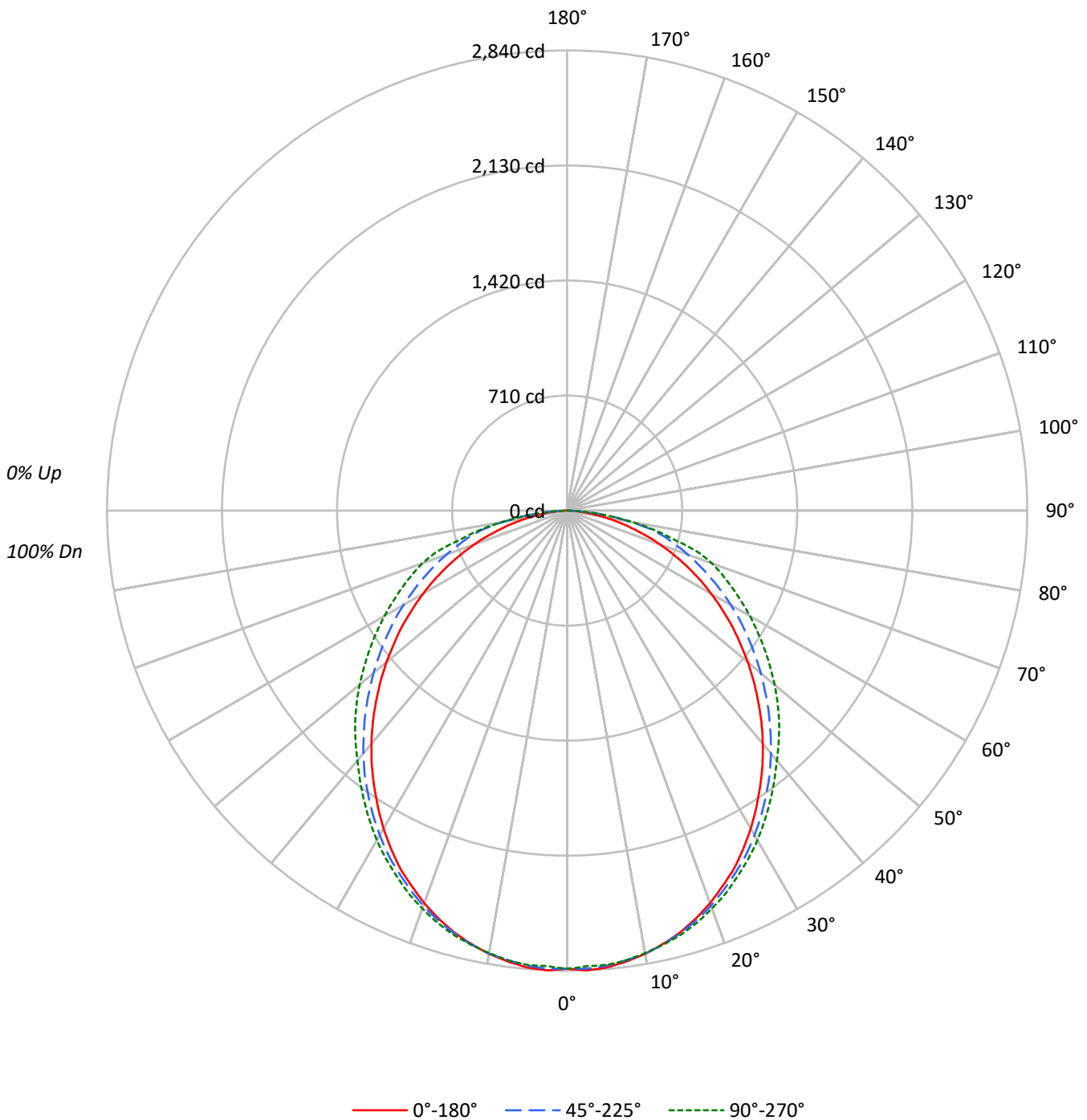
Input Watts (W): 59.52  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3804	3804	3804
5°	3822	3808	3801
10°	3795	3792	3788
15°	3754	3761	3775
20°	3691	3717	3743
25°	3619	3657	3696
30°	3521	3593	3650
35°	3410	3517	3590
40°	3300	3437	3537
45°	3175	3348	3521
50°	3046	3264	3498
55°	2914	3194	3487
60°	2762	3140	3503
65°	2598	3103	3574
70°	2392	3118	3742
75°	2121	3229	3486
80°	1772	3061	3141
85°	1325	2447	2246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	267.3	3.4
10°-20°	760.2	9.7
20°-30°	1133.0	14.5
30°-40°	1333.7	17.1
40°-50°	1355.3	17.4
50°-60°	1218.5	15.6
60°-70°	962.7	12.3
70°-80°	610.7	7.8
80°-90°	168.6	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°	2160.5	27.7
0°-40°	3494.2	44.7
0°-60°	6068.1	77.7
0°-90°	7810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7810.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2827	2827	2827	2827	2827	
5°	2830	2807	2820	2814	2814	268
15°	2695	2682	2700	2708	2710	759
25°	2438	2435	2464	2479	2490	1121
35°	2076	2089	2141	2165	2186	1299
45°	1668	1692	1759	1811	1850	1287
55°	1242	1273	1362	1450	1486	1109
65°	816	858	974	1081	1123	808
75°	408	478	621	676	670	434
85°	86	148	158	146	146	105
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2827.4	2827.4	2827.4	2827.4	2827.4
2.5°	2840.4	2819.6	2830.0	2824.8	2814.4
5°	2830.0	2806.6	2819.6	2814.4	2814.4
7.5°	2806.6	2788.4	2798.8	2796.2	2798.8
10°	2778.0	2759.8	2775.4	2775.4	2772.8
12.5°	2739.0	2723.4	2741.6	2741.6	2744.2
15°	2694.8	2681.8	2700.0	2707.8	2710.4
17.5°	2640.3	2627.3	2650.7	2658.4	2666.2
20°	2577.9	2572.7	2596.1	2603.9	2614.3
22.5°	2507.7	2507.7	2531.1	2541.5	2557.1
25°	2437.6	2435.0	2463.5	2479.1	2489.5
27.5°	2354.4	2357.0	2393.4	2409.0	2422.0
30°	2266.0	2271.2	2312.8	2331.0	2349.2
32.5°	2172.5	2182.9	2229.7	2250.5	2268.6
35°	2076.3	2089.3	2141.3	2164.7	2185.5
37.5°	1980.2	1998.4	2053.0	2076.3	2099.7
40°	1878.8	1894.4	1956.8	1985.4	2014.0
42.5°	1774.9	1795.7	1858.1	1899.6	1933.4
45°	1668.4	1691.7	1759.3	1811.3	1850.3
47.5°	1561.8	1593.0	1658.0	1728.1	1761.9
50°	1455.3	1486.4	1559.2	1637.2	1671.0
52.5°	1346.1	1377.3	1460.5	1541.0	1577.4
55°	1242.2	1273.4	1361.7	1450.1	1486.4
57.5°	1133.0	1166.8	1265.6	1356.5	1392.9
60°	1026.5	1060.3	1166.8	1263.0	1301.9
62.5°	922.5	958.9	1070.7	1172.0	1211.0
65°	816.0	857.6	974.5	1081.1	1122.6
67.5°	712.0	758.8	881.0	992.7	1036.9
70°	608.1	662.7	792.6	906.9	951.1
72.5°	506.7	566.5	704.2	818.6	842.0
75°	408.0	478.2	621.1	675.7	670.5
77.5°	314.4	392.4	527.5	537.9	553.5
80°	228.7	314.4	395.0	415.8	405.4
82.5°	150.7	236.5	283.3	272.9	270.3
85°	85.8	148.1	158.5	145.5	145.5
87.5°	36.4	59.8	52.0	39.0	36.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)