

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: P276546

Luminaire Tested: **24CZ2-75HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276546  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-S-UNV-L82765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7478.8 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

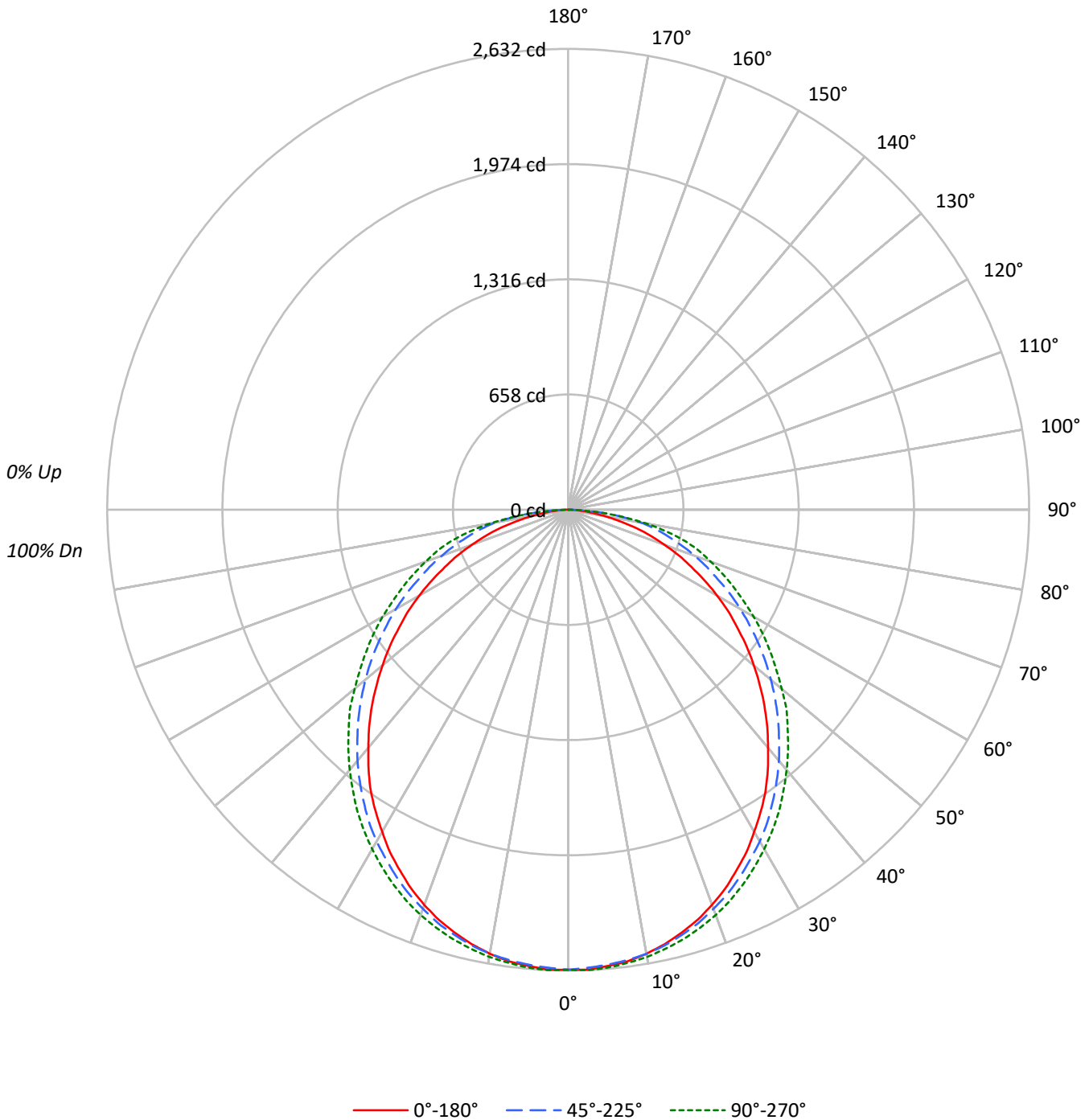
Input Watts (W): 59.055  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3535	3535	3535
5°	3533	3523	3545
10°	3518	3518	3544
15°	3484	3501	3537
20°	3439	3473	3527
25°	3375	3439	3506
30°	3299	3399	3477
35°	3227	3344	3449
40°	3117	3288	3409
45°	3015	3223	3372
50°	2899	3162	3332
55°	2769	3104	3299
60°	2640	3056	3292
65°	2473	3003	3313
70°	2290	3019	3402
75°	2050	3075	3594
80°	1657	3258	3515
85°	1247	2861	2787



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.7	3.3
10°-20°	710.7	9.5
20°-30°	1068.4	14.3
30°-40°	1272.6	17.0
40°-50°	1302.5	17.4
50°-60°	1172.6	15.7
60°-70°	920.9	12.3
70°-80°	597.6	8.0
80°-90°	184.8	2.5
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°	2027.8	27.1
0°-40°	3300.4	44.1
0°-60°	5775.5	77.2
0°-90°	7478.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7478.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2627	2627	2627	2627	2627	
5°	2616	2620	2608	2623	2625	249
15°	2502	2509	2513	2535	2540	705
25°	2273	2292	2316	2354	2361	1047
35°	1965	1988	2036	2086	2100	1226
45°	1584	1622	1694	1758	1772	1222
55°	1181	1233	1323	1392	1406	1058
65°	777	836	943	1022	1040	773
75°	394	470	592	672	691	417
85°	81	150	185	180	180	98
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2627.4	2627.4	2627.4	2627.4	2627.4
2.5°	2629.7	2629.7	2617.9	2629.7	2632.1
5°	2615.5	2620.2	2608.4	2622.6	2625.0
7.5°	2601.2	2601.2	2594.1	2608.4	2610.7
10°	2575.1	2577.5	2575.1	2591.7	2594.1
12.5°	2541.8	2546.6	2549.0	2565.6	2568.0
15°	2501.5	2508.6	2513.3	2534.7	2539.5
17.5°	2456.3	2463.4	2475.3	2499.1	2503.8
20°	2401.7	2411.2	2425.4	2456.3	2463.4
22.5°	2342.3	2351.8	2375.5	2404.1	2415.9
25°	2273.4	2292.4	2316.2	2354.2	2361.3
27.5°	2204.5	2221.1	2252.0	2292.4	2301.9
30°	2123.7	2149.9	2187.9	2228.3	2237.8
32.5°	2045.3	2071.5	2116.6	2159.4	2171.3
35°	1964.6	1988.3	2035.8	2085.7	2100.0
37.5°	1871.9	1902.8	1955.1	2005.0	2019.2
40°	1774.5	1812.5	1871.9	1924.2	1940.8
42.5°	1681.9	1722.3	1781.7	1838.7	1857.7
45°	1584.5	1622.5	1693.8	1757.9	1772.2
47.5°	1484.7	1527.5	1603.5	1667.6	1691.4
50°	1384.9	1430.1	1510.8	1577.4	1591.6
52.5°	1285.2	1332.7	1418.2	1489.5	1496.6
55°	1180.6	1232.9	1323.2	1392.1	1406.3
57.5°	1085.6	1130.8	1228.2	1299.4	1316.1
60°	981.1	1031.0	1135.5	1202.0	1223.4
62.5°	881.3	933.6	1042.9	1109.4	1128.4
65°	776.8	836.2	943.1	1021.5	1040.5
67.5°	686.5	743.5	857.6	933.6	952.6
70°	582.0	646.1	767.3	845.7	864.7
72.5°	491.7	558.3	679.4	755.4	783.9
75°	394.3	470.4	591.5	672.3	691.3
77.5°	299.3	387.2	510.7	572.5	572.5
80°	213.8	306.4	420.5	449.0	453.7
82.5°	140.2	230.4	311.2	308.8	308.8
85°	80.8	149.7	185.3	180.5	180.5
87.5°	30.9	61.8	66.5	66.5	64.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)