

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: P276525

Luminaire Tested: **24CZ2-65HE-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276525  
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: 24CZ2-65HE-S-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5961.0 lumens  
Efficiency: N/A  
Efficacy: 121.9 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

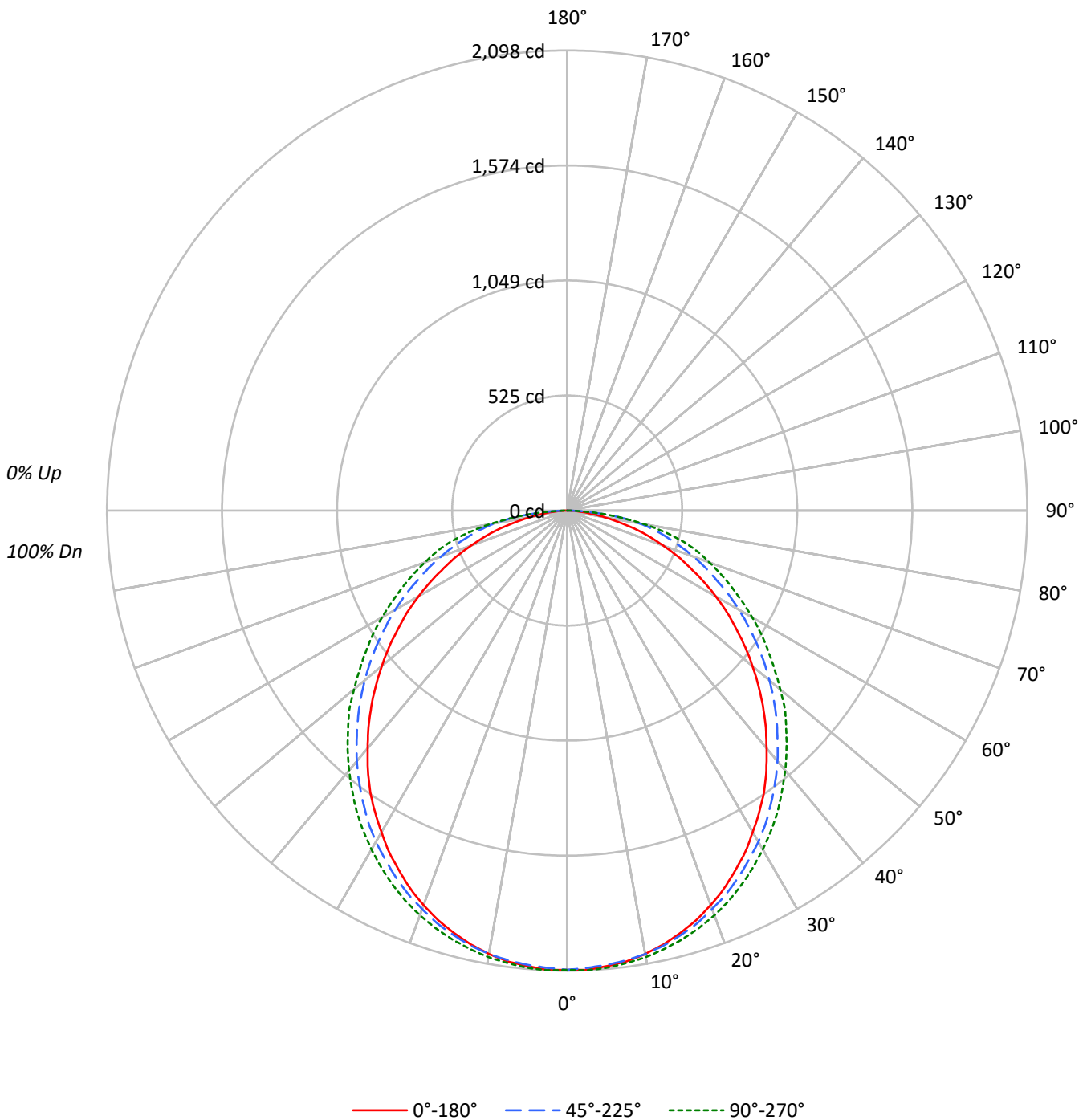
Input Watts (W): 48.918  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2818	2818	2818
5°	2816	2808	2826
10°	2804	2804	2825
15°	2777	2790	2819
20°	2741	2768	2811
25°	2690	2741	2794
30°	2630	2709	2771
35°	2572	2665	2749
40°	2484	2621	2717
45°	2403	2569	2688
50°	2311	2521	2655
55°	2207	2474	2629
60°	2104	2436	2624
65°	1971	2393	2640
70°	1825	2406	2711
75°	1634	2451	2864
80°	1320	2596	2802
85°	994	2280	2221



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.3	3.3
10°-20°	566.5	9.5
20°-30°	851.5	14.3
30°-40°	1014.3	17.0
40°-50°	1038.1	17.4
50°-60°	934.6	15.7
60°-70°	734.0	12.3
70°-80°	476.4	8.0
80°-90°	147.3	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°	1616.3	27.1
0°-40°	2630.6	44.1
0°-60°	4603.3	77.2
0°-90°	5961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5961.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2094	2094	2094	2094	2094	
5°	2085	2088	2079	2090	2092	198
15°	1994	2000	2003	2020	2024	562
25°	1812	1827	1846	1876	1882	835
35°	1566	1585	1623	1662	1674	977
45°	1263	1293	1350	1401	1412	974
55°	941	983	1055	1110	1121	844
65°	619	666	752	814	829	616
75°	314	375	472	536	551	333
85°	64	119	148	144	144	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2094.1	2094.1	2094.1	2094.1	2094.1
2.5°	2096.0	2096.0	2086.6	2096.0	2097.9
5°	2084.7	2088.5	2079.0	2090.3	2092.2
7.5°	2073.3	2073.3	2067.6	2079.0	2080.9
10°	2052.5	2054.4	2052.5	2065.7	2067.6
12.5°	2026.0	2029.8	2031.6	2044.9	2046.8
15°	1993.8	1999.5	2003.2	2020.3	2024.1
17.5°	1957.8	1963.5	1973.0	1991.9	1995.7
20°	1914.3	1921.8	1933.2	1957.8	1963.5
22.5°	1866.9	1874.5	1893.4	1916.2	1925.6
25°	1812.0	1827.2	1846.1	1876.4	1882.1
27.5°	1757.1	1770.4	1795.0	1827.2	1834.7
30°	1692.7	1713.6	1743.8	1776.0	1783.6
32.5°	1630.2	1651.1	1687.0	1721.1	1730.6
35°	1565.9	1584.8	1622.7	1662.4	1673.8
37.5°	1492.0	1516.6	1558.3	1598.1	1609.4
40°	1414.4	1444.7	1492.0	1533.7	1546.9
42.5°	1340.5	1372.7	1420.1	1465.5	1480.7
45°	1262.9	1293.2	1350.0	1401.1	1412.5
47.5°	1183.4	1217.5	1278.1	1329.2	1348.1
50°	1103.9	1139.8	1204.2	1257.2	1268.6
52.5°	1024.3	1062.2	1130.4	1187.2	1192.9
55°	941.0	982.7	1054.6	1109.5	1120.9
57.5°	865.3	901.3	978.9	1035.7	1049.0
60°	782.0	821.7	905.1	958.1	975.1
62.5°	702.5	744.1	831.2	884.2	899.4
65°	619.2	666.5	751.7	814.2	829.3
67.5°	547.2	592.6	683.5	744.1	759.3
70°	463.9	515.0	611.6	674.1	689.2
72.5°	391.9	445.0	541.5	602.1	624.8
75°	314.3	374.9	471.5	535.8	551.0
77.5°	238.6	308.6	407.1	456.3	456.3
80°	170.4	244.3	335.1	357.9	361.6
82.5°	111.7	183.7	248.0	246.1	246.1
85°	64.4	119.3	147.7	143.9	143.9
87.5°	24.6	49.2	53.0	53.0	51.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)