

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: P276666

Luminaire Tested: **24CZ2-65HE-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276666  
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-L92765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6098.2 lumens  
Efficiency: N/A  
Efficacy: 121.2 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

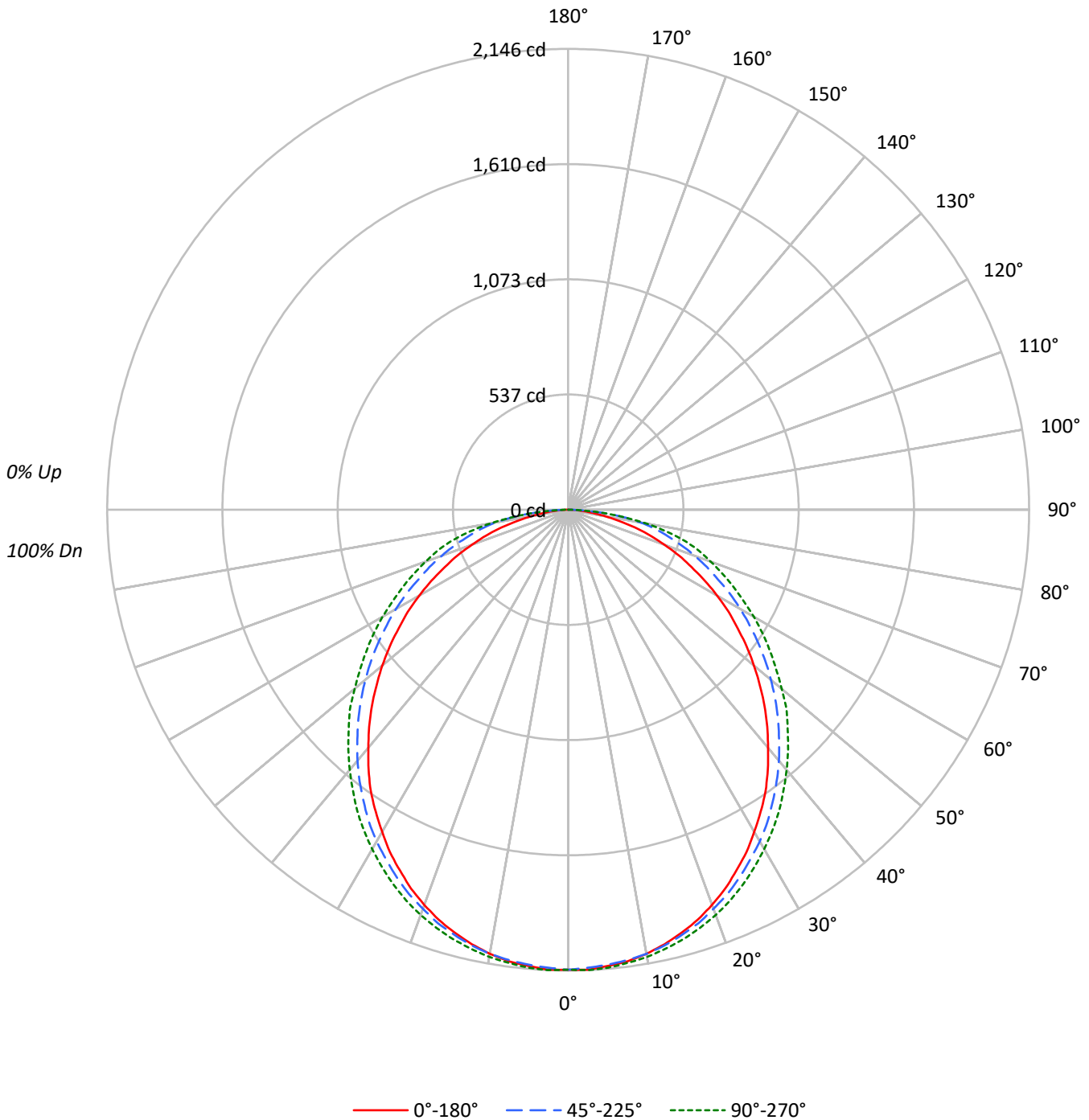
Input Watts (W): 50.313  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2882	2882	2882
5°	2880	2873	2891
10°	2869	2869	2890
15°	2841	2855	2884
20°	2804	2832	2876
25°	2752	2804	2858
30°	2690	2772	2835
35°	2631	2727	2813
40°	2541	2681	2780
45°	2458	2628	2750
50°	2364	2579	2717
55°	2258	2531	2690
60°	2153	2492	2685
65°	2017	2448	2701
70°	1867	2461	2774
75°	1671	2507	2930
80°	1351	2656	2867
85°	1017	2333	2272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.8	3.3
10°-20°	579.5	9.5
20°-30°	871.1	14.3
30°-40°	1037.7	17.0
40°-50°	1062.0	17.4
50°-60°	956.1	15.7
60°-70°	750.9	12.3
70°-80°	487.3	8.0
80°-90°	150.7	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°	1653.5	27.1
0°-40°	2691.1	44.1
0°-60°	4709.3	77.2
0°-90°	6098.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6098.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2142	2142	2142	2142	2142	
5°	2133	2136	2127	2138	2140	203
15°	2040	2046	2049	2067	2071	575
25°	1854	1869	1889	1920	1925	854
35°	1602	1621	1660	1701	1712	999
45°	1292	1323	1381	1433	1445	996
55°	963	1005	1079	1135	1147	863
65°	633	682	769	833	848	631
75°	322	384	482	548	564	340
85°	66	122	151	147	147	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2142.3	2142.3	2142.3	2142.3	2142.3
2.5°	2144.3	2144.3	2134.6	2144.3	2146.2
5°	2132.6	2136.5	2126.8	2138.4	2140.4
7.5°	2121.0	2121.0	2115.2	2126.8	2128.8
10°	2099.7	2101.6	2099.7	2113.3	2115.2
12.5°	2072.6	2076.5	2078.4	2092.0	2093.9
15°	2039.7	2045.5	2049.3	2066.8	2070.7
17.5°	2002.9	2008.7	2018.4	2037.7	2041.6
20°	1958.3	1966.1	1977.7	2002.9	2008.7
22.5°	1909.9	1917.6	1937.0	1960.2	1969.9
25°	1853.7	1869.2	1888.6	1919.6	1925.4
27.5°	1797.5	1811.1	1836.3	1869.2	1877.0
30°	1731.7	1753.0	1784.0	1816.9	1824.7
32.5°	1667.8	1689.1	1725.9	1760.7	1770.4
35°	1601.9	1621.3	1660.0	1700.7	1712.3
37.5°	1526.4	1551.5	1594.2	1634.8	1646.4
40°	1446.9	1477.9	1526.4	1569.0	1582.5
42.5°	1371.4	1404.3	1452.7	1499.2	1514.7
45°	1292.0	1323.0	1381.1	1433.4	1445.0
47.5°	1210.6	1245.5	1307.5	1359.8	1379.1
50°	1129.3	1166.1	1231.9	1286.2	1297.8
52.5°	1047.9	1086.7	1156.4	1214.5	1220.3
55°	962.7	1005.3	1078.9	1135.1	1146.7
57.5°	885.2	922.0	1001.4	1059.5	1073.1
60°	800.0	840.7	925.9	980.1	997.6
62.5°	718.6	761.2	850.3	904.6	920.1
65°	633.4	681.8	769.0	832.9	848.4
67.5°	559.8	606.3	699.3	761.2	776.7
70°	474.6	526.9	625.7	689.6	705.1
72.5°	401.0	455.2	554.0	616.0	639.2
75°	321.5	383.5	482.3	548.2	563.7
77.5°	244.1	315.7	416.5	466.8	466.8
80°	174.3	249.9	342.8	366.1	370.0
82.5°	114.3	187.9	253.7	251.8	251.8
85°	65.9	122.0	151.1	147.2	147.2
87.5°	25.2	50.4	54.2	54.2	52.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)