

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: P261323

Luminaire Tested: **24CZ-LD5-65-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261323  
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-LD5-65-S-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5888.0 lumens  
Efficiency: N/A  
Efficacy: 119.0 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

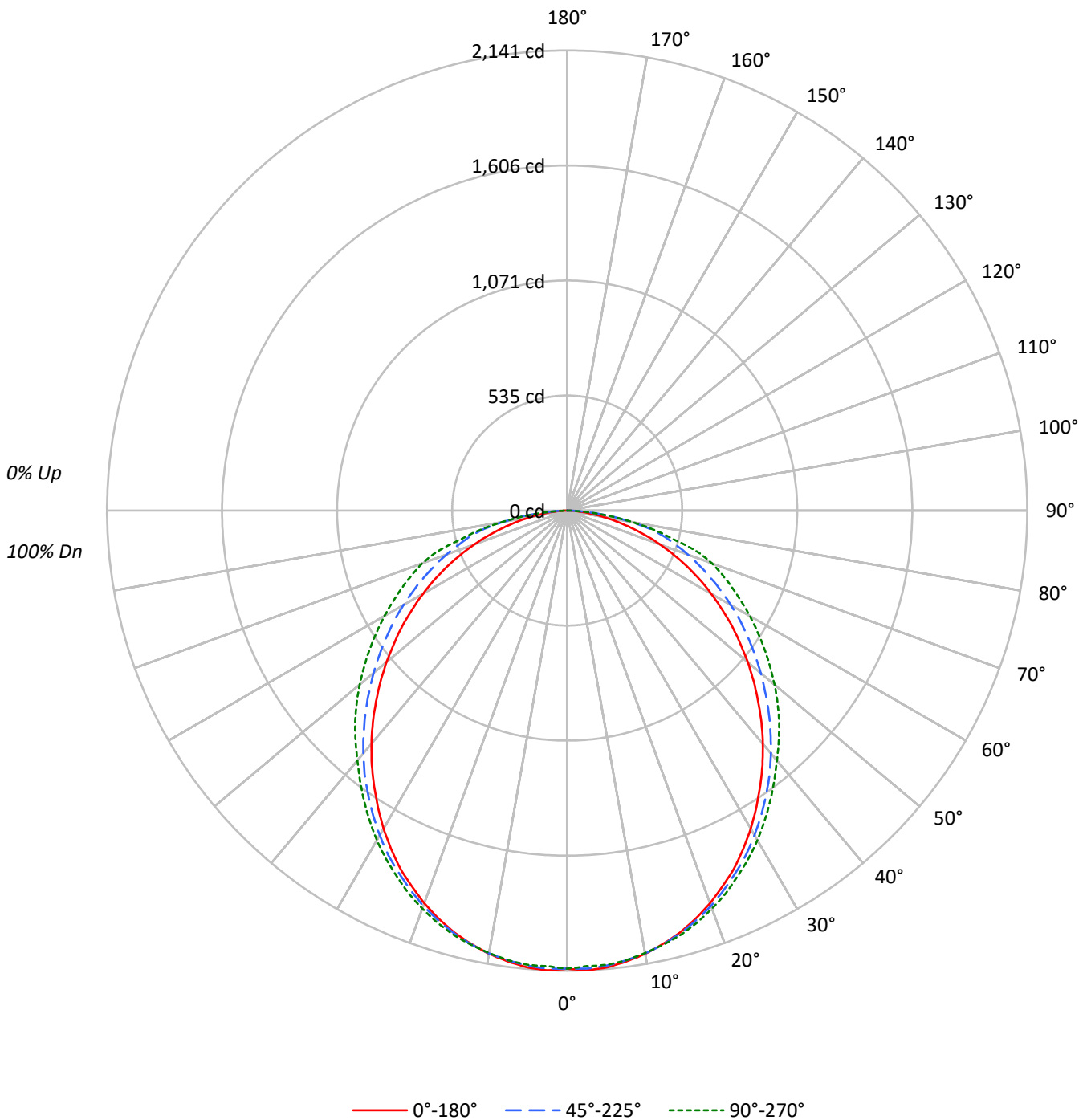
Input Watts (W): 49.476  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2868	2868	2868
5°	2882	2871	2866
10°	2861	2859	2856
15°	2830	2835	2846
20°	2783	2802	2822
25°	2728	2757	2786
30°	2654	2709	2752
35°	2571	2652	2706
40°	2488	2591	2667
45°	2393	2524	2654
50°	2296	2461	2637
55°	2197	2408	2629
60°	2083	2367	2641
65°	1959	2339	2695
70°	1803	2351	2821
75°	1599	2434	2628
80°	1336	2307	2368
85°	999	1845	1694



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.5	3.4
10°-20°	573.2	9.7
20°-30°	854.2	14.5
30°-40°	1005.5	17.1
40°-50°	1021.8	17.4
50°-60°	918.7	15.6
60°-70°	725.8	12.3
70°-80°	460.4	7.8
80°-90°	127.1	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°	1628.8	27.7
0°-40°	2634.3	44.7
0°-60°	4574.8	77.7
0°-90°	5888.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5888.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2132	2132	2132	2132	2132	
5°	2134	2116	2126	2122	2122	202
15°	2032	2022	2036	2041	2043	572
25°	1838	1836	1857	1869	1877	845
35°	1565	1575	1614	1632	1648	979
45°	1258	1275	1326	1366	1395	971
55°	936	960	1027	1093	1121	836
65°	615	646	735	815	846	609
75°	308	360	468	509	506	327
85°	65	112	120	110	110	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2131.6	2131.6	2131.6	2131.6	2131.6
2.5°	2141.4	2125.7	2133.5	2129.6	2121.8
5°	2133.5	2115.9	2125.7	2121.8	2121.8
7.5°	2115.9	2102.2	2110.0	2108.1	2110.0
10°	2094.3	2080.6	2092.4	2092.4	2090.4
12.5°	2065.0	2053.2	2066.9	2066.9	2068.9
15°	2031.6	2021.9	2035.6	2041.4	2043.4
17.5°	1990.5	1980.7	1998.3	2004.2	2010.1
20°	1943.5	1939.6	1957.2	1963.1	1970.9
22.5°	1890.6	1890.6	1908.2	1916.1	1927.8
25°	1837.7	1835.7	1857.3	1869.0	1876.9
27.5°	1775.0	1777.0	1804.4	1816.1	1825.9
30°	1708.4	1712.3	1743.7	1757.4	1771.1
32.5°	1637.9	1645.7	1681.0	1696.6	1710.3
35°	1565.4	1575.2	1614.3	1632.0	1647.7
37.5°	1492.9	1506.6	1547.7	1565.4	1583.0
40°	1416.5	1428.2	1475.2	1496.8	1518.3
42.5°	1338.1	1353.8	1400.8	1432.1	1457.6
45°	1257.8	1275.4	1326.4	1365.5	1394.9
47.5°	1177.5	1201.0	1249.9	1302.8	1328.3
50°	1097.1	1120.6	1175.5	1234.3	1259.7
52.5°	1014.8	1038.4	1101.0	1161.8	1189.2
55°	936.5	960.0	1026.6	1093.2	1120.6
57.5°	854.2	879.7	954.1	1022.7	1050.1
60°	773.9	799.3	879.7	952.2	981.5
62.5°	695.5	722.9	807.2	883.6	913.0
65°	615.2	646.5	734.7	815.0	846.4
67.5°	536.8	572.1	664.2	748.4	781.7
70°	458.4	499.6	597.5	683.7	717.1
72.5°	382.0	427.1	530.9	617.1	634.8
75°	307.6	360.5	468.2	509.4	505.5
77.5°	237.1	295.8	397.7	405.5	417.3
80°	172.4	237.1	297.8	313.5	305.6
82.5°	113.6	178.3	213.5	205.7	203.8
85°	64.7	111.7	119.5	109.7	109.7
87.5°	27.4	45.1	39.2	29.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)