

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: P261086

Luminaire Tested: **24CZ-LD5-65-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261086  
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-L93050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6226.7 lumens  
Efficiency: N/A  
Efficacy: 122.2 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

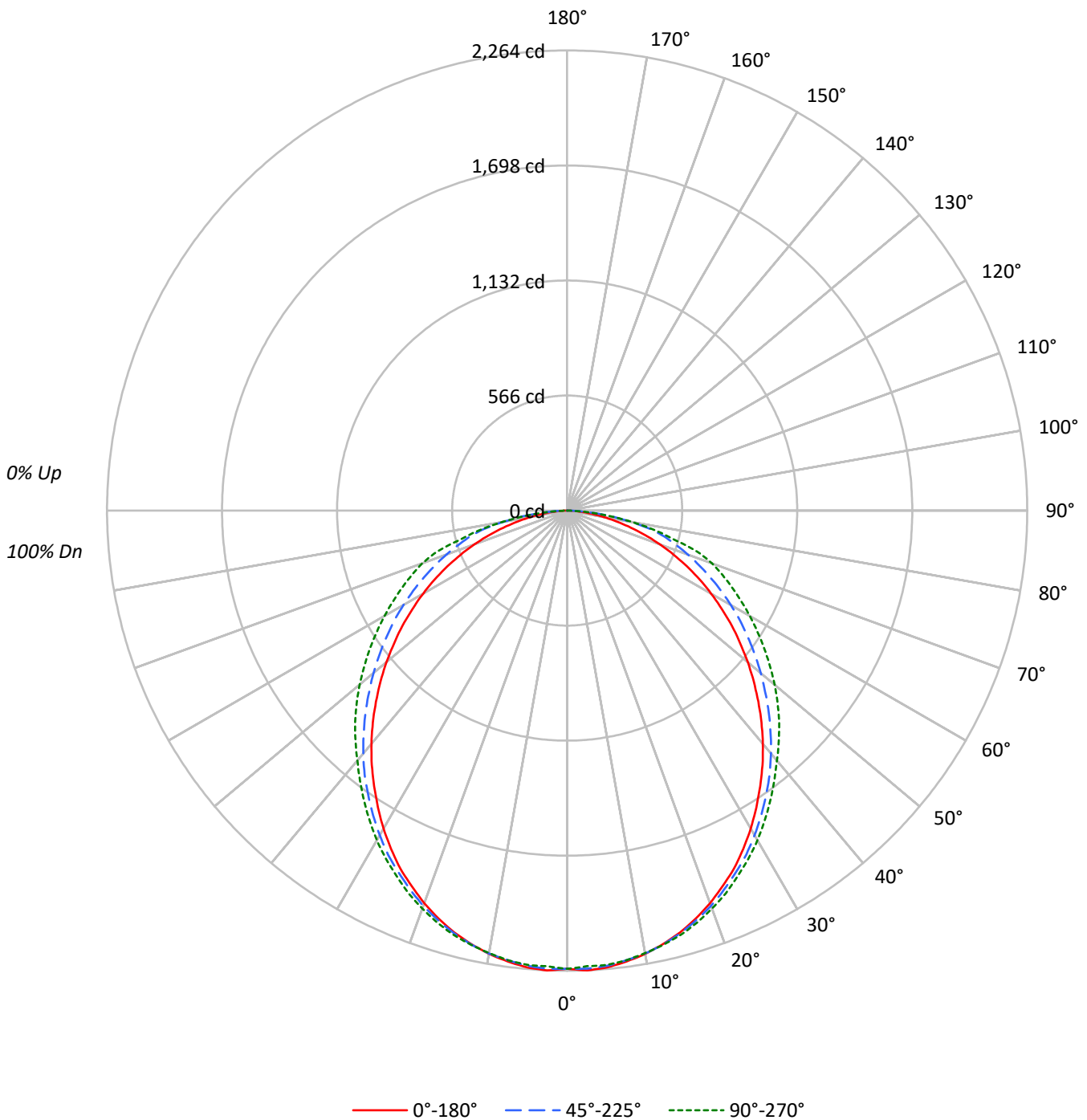
Input Watts (W): 50.972556  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3033	3033	3033
5°	3047	3036	3031
10°	3026	3023	3020
15°	2993	2999	3010
20°	2943	2964	2984
25°	2885	2916	2947
30°	2807	2865	2910
35°	2719	2804	2862
40°	2631	2740	2820
45°	2531	2669	2807
50°	2429	2602	2789
55°	2323	2547	2780
60°	2202	2503	2793
65°	2071	2473	2849
70°	1907	2486	2983
75°	1691	2574	2779
80°	1413	2440	2504
85°	1056	1951	1791



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.1	3.4
10°-20°	606.1	9.7
20°-30°	903.3	14.5
30°-40°	1063.3	17.1
40°-50°	1080.6	17.4
50°-60°	971.5	15.6
60°-70°	767.5	12.3
70°-80°	486.9	7.8
80°-90°	134.4	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°	1722.5	27.7
0°-40°	2785.9	44.7
0°-60°	4837.9	77.7
0°-90°	6226.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6226.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2254	2254	2254	2254	2254	
5°	2256	2238	2248	2244	2244	214
15°	2148	2138	2153	2159	2161	605
25°	1943	1941	1964	1977	1985	894
35°	1655	1666	1707	1726	1742	1036
45°	1330	1349	1403	1444	1475	1026
55°	990	1015	1086	1156	1185	884
65°	651	684	777	862	895	644
75°	325	381	495	539	534	346
85°	68	118	126	116	116	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2254.2	2254.2	2254.2	2254.2	2254.2
2.5°	2264.5	2248.0	2256.3	2252.1	2243.8
5°	2256.3	2237.6	2248.0	2243.8	2243.8
7.5°	2237.6	2223.1	2231.4	2229.3	2231.4
10°	2214.8	2200.3	2212.7	2212.7	2210.7
12.5°	2183.7	2171.3	2185.8	2185.8	2187.9
15°	2148.5	2138.2	2152.7	2158.9	2161.0
17.5°	2105.0	2094.7	2113.3	2119.5	2125.7
20°	2055.3	2051.1	2069.8	2076.0	2084.3
22.5°	1999.3	1999.3	2018.0	2026.3	2038.7
25°	1943.4	1941.3	1964.1	1976.6	1984.8
27.5°	1877.1	1879.2	1908.2	1920.6	1931.0
30°	1806.7	1810.8	1844.0	1858.5	1873.0
32.5°	1732.1	1740.4	1777.7	1794.2	1808.7
35°	1655.4	1665.8	1707.2	1725.9	1742.4
37.5°	1578.8	1593.3	1636.8	1655.4	1674.1
40°	1498.0	1510.4	1560.1	1582.9	1605.7
42.5°	1415.1	1431.7	1481.4	1514.5	1541.5
45°	1330.1	1348.8	1402.7	1444.1	1475.2
47.5°	1245.2	1270.1	1321.8	1377.8	1404.7
50°	1160.2	1185.1	1243.1	1305.3	1332.2
52.5°	1073.2	1098.1	1164.4	1228.6	1257.6
55°	990.4	1015.2	1085.7	1156.1	1185.1
57.5°	903.3	930.3	1009.0	1081.5	1110.5
60°	818.4	845.3	930.3	1006.9	1038.0
62.5°	735.5	764.5	853.6	934.4	965.5
65°	650.6	683.7	776.9	861.9	895.0
67.5°	567.7	605.0	702.4	791.5	826.7
70°	484.8	528.3	631.9	723.1	758.3
72.5°	404.0	451.7	561.5	652.6	671.3
75°	325.3	381.2	495.2	538.7	534.5
77.5°	250.7	312.9	420.6	428.9	441.3
80°	182.3	250.7	314.9	331.5	323.2
82.5°	120.2	188.5	225.8	217.5	215.5
85°	68.4	118.1	126.4	116.0	116.0
87.5°	29.0	47.7	41.4	31.1	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)