

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: P260591

Luminaire Tested: **24CZ-LD5-65-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260591  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-65-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6928.0 lumens  
Efficiency: N/A  
Efficacy: 135.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

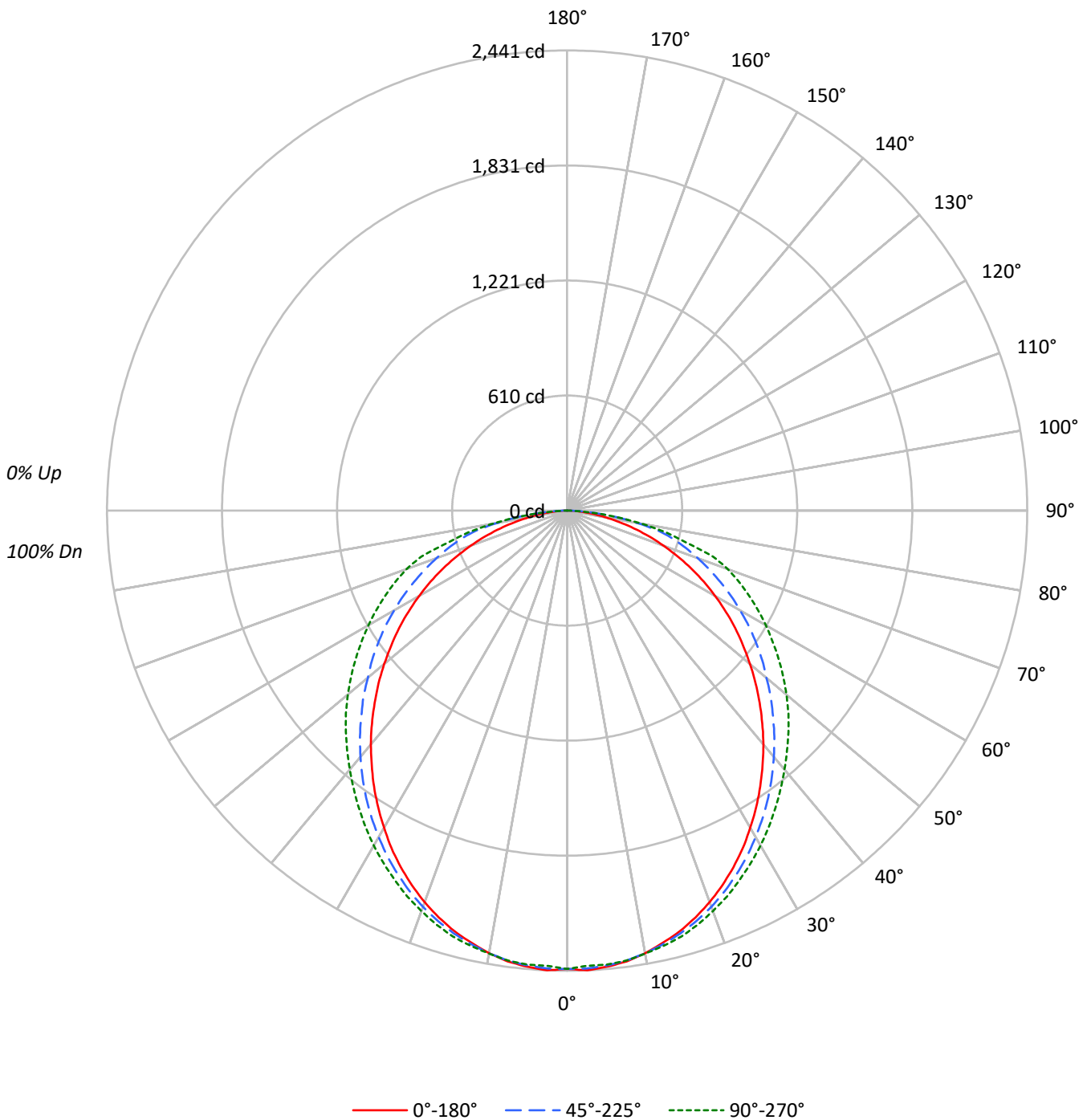
Input Watts (W): 51.314982  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3271	3271	3271
5°	3281	3271	3265
10°	3257	3257	3260
15°	3218	3235	3258
20°	3166	3203	3237
25°	3099	3159	3212
30°	3018	3107	3188
35°	2934	3055	3164
40°	2846	2996	3150
45°	2749	2938	3159
50°	2651	2890	3178
55°	2554	2871	3211
60°	2438	2853	3275
65°	2311	2855	3383
70°	2137	2902	3565
75°	1912	3033	3391
80°	1599	2904	3106
85°	1209	2234	2124



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.8	3.3
10°-20°	653.9	9.4
20°-30°	977.6	14.1
30°-40°	1159.7	16.7
40°-50°	1193.6	17.2
50°-60°	1095.0	15.8
60°-70°	885.4	12.8
70°-80°	574.6	8.3
80°-90°	158.4	2.3
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°	1861.2	26.9
0°-40°	3021.0	43.6
0°-60°	5309.6	76.6
0°-90°	6928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6928.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2431	2431	2431	2431	2431	
5°	2429	2412	2422	2420	2417	230
15°	2310	2301	2322	2332	2339	651
25°	2087	2090	2128	2147	2163	961
35°	1786	1800	1860	1900	1926	1117
45°	1445	1468	1544	1618	1660	1115
55°	1089	1122	1224	1324	1369	973
65°	726	768	897	1015	1063	717
75°	368	436	584	652	652	391
85°	78	133	145	140	138	96
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2431.4	2431.4	2431.4	2431.4	2431.4
2.5°	2440.9	2421.9	2431.4	2429.0	2417.1
5°	2429.0	2412.4	2421.9	2419.5	2417.1
7.5°	2412.4	2395.8	2407.6	2405.3	2407.6
10°	2383.9	2369.7	2383.9	2386.3	2386.3
12.5°	2348.3	2336.5	2355.5	2360.2	2364.9
15°	2310.4	2300.9	2322.3	2331.7	2338.9
17.5°	2263.0	2255.8	2281.9	2293.8	2303.3
20°	2210.8	2208.4	2236.9	2248.7	2260.6
22.5°	2151.5	2151.5	2184.7	2198.9	2215.5
25°	2087.4	2089.8	2127.7	2146.7	2163.3
27.5°	2018.6	2021.0	2066.1	2089.8	2108.8
30°	1942.7	1952.2	1999.7	2030.5	2051.8
32.5°	1866.8	1878.7	1930.9	1966.4	1990.2
35°	1786.2	1800.4	1859.7	1900.0	1926.1
37.5°	1703.1	1719.7	1783.8	1828.9	1859.7
40°	1620.1	1639.1	1705.5	1757.7	1793.3
42.5°	1532.4	1553.7	1627.2	1688.9	1726.9
45°	1444.6	1468.3	1544.2	1617.7	1660.4
47.5°	1356.8	1385.3	1465.9	1546.6	1591.7
50°	1266.7	1295.1	1380.5	1473.1	1518.1
52.5°	1176.5	1209.8	1304.6	1399.5	1444.6
55°	1088.8	1122.0	1224.0	1323.6	1368.7
57.5°	998.6	1031.8	1143.3	1247.7	1292.8
60°	906.1	944.1	1060.3	1167.1	1216.9
62.5°	816.0	856.3	979.7	1093.5	1141.0
65°	725.9	768.5	896.6	1015.2	1062.7
67.5°	633.3	683.2	816.0	937.0	986.8
70°	543.2	597.8	737.7	858.7	906.1
72.5°	455.4	514.7	659.4	782.8	811.2
75°	367.7	436.5	583.5	652.3	652.3
77.5°	284.6	360.6	498.1	524.2	538.5
80°	206.4	289.4	374.8	405.6	400.9
82.5°	137.6	220.6	268.0	268.0	260.9
85°	78.3	132.8	144.7	140.0	137.6
87.5°	33.2	49.8	45.1	35.6	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)