

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: P261009

Luminaire Tested: **24CZ-LD5-65-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261009  
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-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7000.0 lumens  
Efficiency: N/A  
Efficacy: 139.9 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

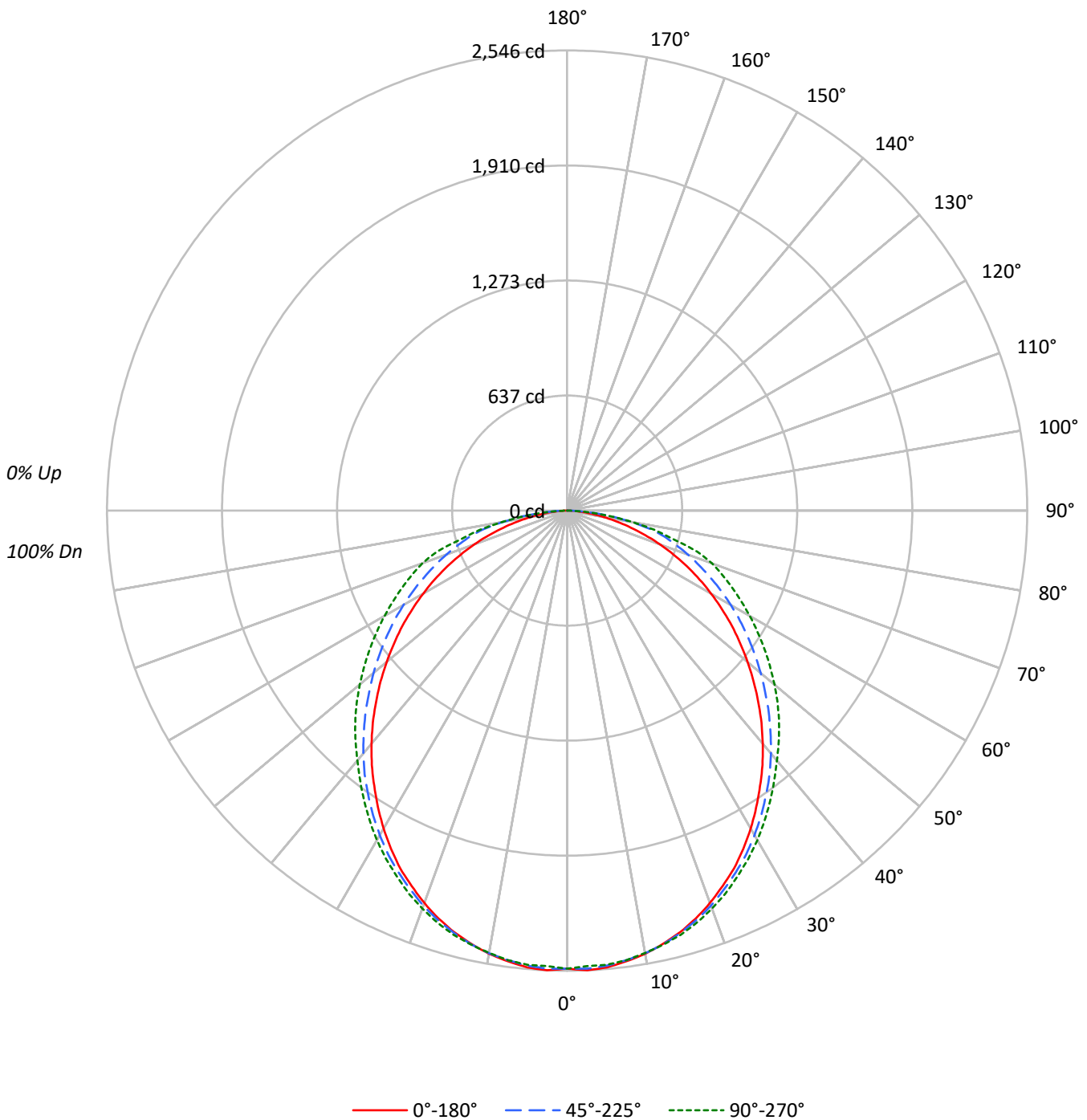
Input Watts (W): 50.043114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3410	3410	3410
5°	3426	3413	3407
10°	3402	3399	3395
15°	3364	3371	3384
20°	3308	3332	3355
25°	3244	3278	3313
30°	3155	3221	3271
35°	3057	3152	3217
40°	2958	3081	3170
45°	2845	3000	3156
50°	2730	2925	3135
55°	2612	2863	3125
60°	2476	2814	3140
65°	2329	2781	3203
70°	2144	2795	3354
75°	1901	2894	3124
80°	1588	2743	2815
85°	1187	2194	2013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.6	3.4
10°-20°	681.4	9.7
20°-30°	1015.5	14.5
30°-40°	1195.4	17.1
40°-50°	1214.8	17.4
50°-60°	1092.2	15.6
60°-70°	862.8	12.3
70°-80°	547.4	7.8
80°-90°	151.1	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°	1936.5	27.7
0°-40°	3131.8	44.7
0°-60°	5438.7	77.7
0°-90°	7000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7000.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2534	2534	2534	2534	2534	
5°	2536	2516	2527	2522	2522	241
15°	2415	2404	2420	2427	2429	680
25°	2185	2182	2208	2222	2231	1005
35°	1861	1873	1919	1940	1959	1164
45°	1495	1516	1577	1623	1658	1154
55°	1113	1141	1220	1300	1332	994
65°	731	769	873	969	1006	724
75°	366	429	557	606	601	389
85°	77	133	142	130	130	94
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2534.1	2534.1	2534.1	2534.1	2534.1
2.5°	2545.8	2527.1	2536.5	2531.8	2522.5
5°	2536.5	2515.5	2527.1	2522.5	2522.5
7.5°	2515.5	2499.2	2508.5	2506.2	2508.5
10°	2489.9	2473.6	2487.5	2487.5	2485.2
12.5°	2454.9	2441.0	2457.3	2457.3	2459.6
15°	2415.3	2403.7	2420.0	2427.0	2429.3
17.5°	2366.4	2354.8	2375.7	2382.7	2389.7
20°	2310.5	2305.9	2326.8	2333.8	2343.1
22.5°	2247.6	2247.6	2268.6	2277.9	2291.9
25°	2184.8	2182.4	2208.0	2222.0	2231.3
27.5°	2110.2	2112.6	2145.2	2159.1	2170.8
30°	2031.0	2035.7	2073.0	2089.3	2105.6
32.5°	1947.2	1956.5	1998.4	2017.1	2033.4
35°	1861.0	1872.6	1919.2	1940.2	1958.8
37.5°	1774.8	1791.1	1840.0	1861.0	1882.0
40°	1684.0	1698.0	1753.9	1779.5	1805.1
42.5°	1590.8	1609.5	1665.4	1702.6	1732.9
45°	1495.3	1516.3	1576.8	1623.4	1658.4
47.5°	1399.8	1427.8	1486.0	1548.9	1579.2
50°	1304.3	1332.3	1397.5	1467.4	1497.7
52.5°	1206.5	1234.5	1309.0	1381.2	1413.8
55°	1113.3	1141.3	1220.5	1299.7	1332.3
57.5°	1015.5	1045.8	1134.3	1215.8	1248.4
60°	920.0	950.3	1045.8	1132.0	1166.9
62.5°	826.9	859.5	959.6	1050.5	1085.4
65°	731.4	768.6	873.4	968.9	1006.2
67.5°	638.2	680.1	789.6	889.7	929.3
70°	545.0	593.9	710.4	812.9	852.5
72.5°	454.2	507.8	631.2	733.7	754.6
75°	365.7	428.6	556.7	605.6	600.9
77.5°	281.8	351.7	472.8	482.1	496.1
80°	205.0	281.8	354.0	372.7	363.3
82.5°	135.1	212.0	253.9	244.6	242.2
85°	76.9	132.8	142.1	130.4	130.4
87.5°	32.6	53.6	46.6	34.9	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)