

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: P260589

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260589  
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-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6863.0 lumens  
Efficiency: N/A  
Efficacy: 137.1 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

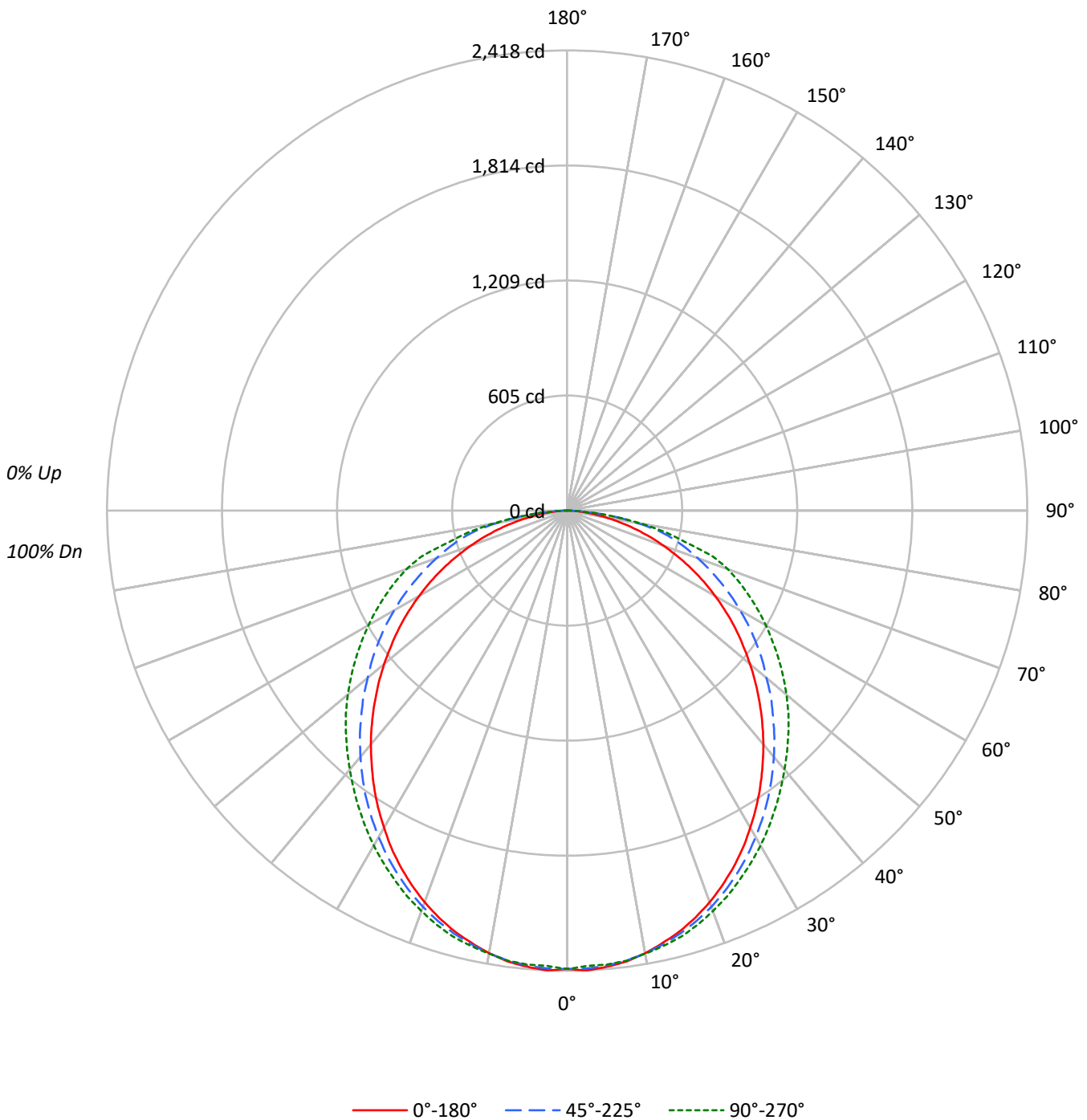
Input Watts (W): 50.043114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3241	3241	3241
5°	3250	3240	3234
10°	3227	3227	3230
15°	3188	3204	3227
20°	3136	3173	3206
25°	3070	3129	3181
30°	2990	3078	3158
35°	2906	3026	3134
40°	2819	2967	3120
45°	2723	2911	3130
50°	2627	2863	3148
55°	2530	2844	3180
60°	2415	2827	3244
65°	2289	2828	3351
70°	2117	2875	3531
75°	1893	3005	3359
80°	1584	2877	3077
85°	1196	2212	2104



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.6	3.3
10°-20°	647.8	9.4
20°-30°	968.4	14.1
30°-40°	1148.8	16.7
40°-50°	1182.4	17.2
50°-60°	1084.7	15.8
60°-70°	877.1	12.8
70°-80°	569.2	8.3
80°-90°	156.9	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°	1843.8	26.9
0°-40°	2992.6	43.6
0°-60°	5259.8	76.6
0°-90°	6863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2409	2409	2409	2409	2409	
5°	2406	2390	2399	2397	2394	228
15°	2289	2279	2300	2310	2317	645
25°	2068	2070	2108	2127	2143	952
35°	1769	1784	1842	1882	1908	1107
45°	1431	1454	1530	1603	1645	1104
55°	1079	1112	1212	1311	1356	964
65°	719	761	888	1006	1053	711
75°	364	432	578	646	646	387
85°	78	132	143	139	136	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2408.6	2408.6	2408.6	2408.6	2408.6
2.5°	2418.0	2399.2	2408.6	2406.2	2394.5
5°	2406.2	2389.8	2399.2	2396.8	2394.5
7.5°	2389.8	2373.3	2385.1	2382.7	2385.1
10°	2361.6	2347.5	2361.6	2363.9	2363.9
12.5°	2326.3	2314.6	2333.4	2338.1	2342.8
15°	2288.7	2279.3	2300.5	2309.9	2316.9
17.5°	2241.7	2234.7	2260.5	2272.3	2281.7
20°	2190.0	2187.7	2215.9	2227.6	2239.4
22.5°	2131.3	2131.3	2164.2	2178.3	2194.7
25°	2067.8	2070.2	2107.8	2126.6	2143.0
27.5°	1999.7	2002.0	2046.7	2070.2	2089.0
30°	1924.5	1933.9	1980.9	2011.4	2032.6
32.5°	1849.3	1861.1	1912.7	1948.0	1971.5
35°	1769.4	1783.5	1842.3	1882.2	1908.0
37.5°	1687.2	1703.6	1767.1	1811.7	1842.3
40°	1604.9	1623.7	1689.5	1741.2	1776.5
42.5°	1518.0	1539.1	1612.0	1673.1	1710.7
45°	1431.0	1454.5	1529.7	1602.6	1644.9
47.5°	1344.1	1372.3	1452.2	1532.1	1576.7
50°	1254.8	1283.0	1367.6	1459.2	1503.9
52.5°	1165.5	1198.4	1292.4	1386.4	1431.0
55°	1078.6	1111.5	1212.5	1311.2	1355.8
57.5°	989.3	1022.2	1132.6	1236.0	1280.6
60°	897.6	935.2	1050.4	1156.1	1205.5
62.5°	808.3	848.3	970.5	1083.3	1130.3
65°	719.0	761.3	888.2	1005.7	1052.7
67.5°	627.4	676.7	808.3	928.2	977.5
70°	538.1	592.2	730.8	850.6	897.6
72.5°	451.2	509.9	653.2	775.4	803.6
75°	364.2	432.4	578.1	646.2	646.2
77.5°	282.0	357.2	493.5	519.3	533.4
80°	204.4	286.7	371.3	401.8	397.1
82.5°	136.3	218.5	265.5	265.5	258.5
85°	77.5	131.6	143.3	138.6	136.3
87.5°	32.9	49.3	44.6	35.2	30.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)