

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: P260779

Luminaire Tested: **24CZ-LD5-70-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260779  
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-LD5-70-UNV-L82765-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: 7260.0 lumens  
Efficiency: N/A  
Efficacy: 132.1 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

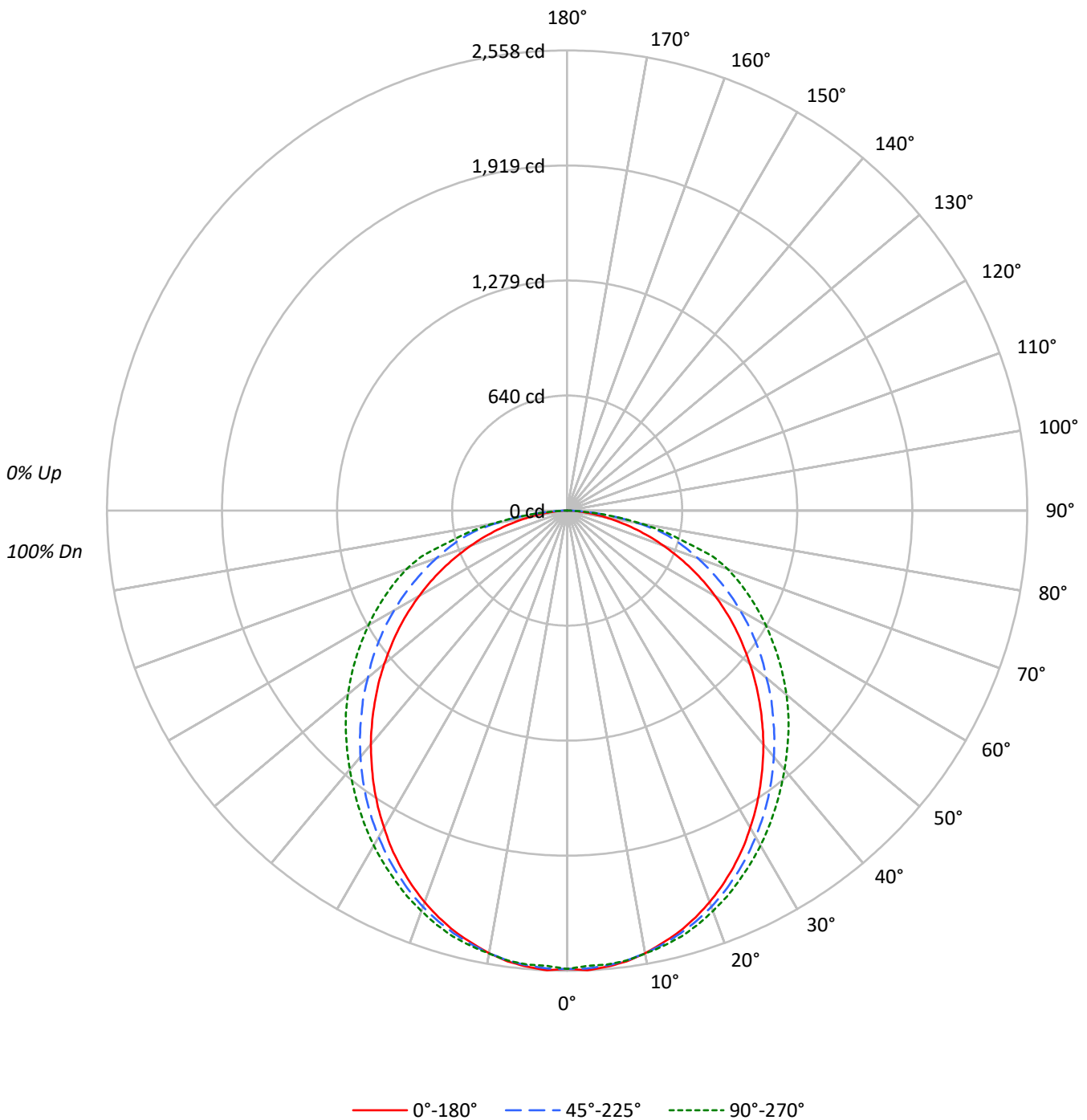
Input Watts (W): 54.963  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3428	3428	3428
5°	3438	3428	3421
10°	3413	3413	3417
15°	3372	3390	3414
20°	3317	3356	3392
25°	3248	3310	3366
30°	3163	3256	3341
35°	3075	3201	3315
40°	2982	3139	3301
45°	2880	3079	3311
50°	2779	3028	3330
55°	2677	3009	3365
60°	2555	2990	3432
65°	2422	2991	3545
70°	2239	3041	3736
75°	2003	3179	3554
80°	1676	3043	3255
85°	1266	2340	2226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	240.8	3.3
10°-20°	685.3	9.4
20°-30°	1024.4	14.1
30°-40°	1215.3	16.7
40°-50°	1250.8	17.2
50°-60°	1147.5	15.8
60°-70°	927.8	12.8
70°-80°	602.1	8.3
80°-90°	166.0	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°	1950.4	26.9
0°-40°	3165.7	43.6
0°-60°	5564.0	76.6
0°-90°	7260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7260.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2548	2548	2548	2548	2548	
5°	2545	2528	2538	2536	2533	242
15°	2421	2411	2434	2444	2451	682
25°	2188	2190	2230	2250	2267	1007
35°	1872	1887	1949	1991	2018	1171
45°	1514	1539	1618	1695	1740	1168
55°	1141	1176	1283	1387	1434	1019
65°	761	805	940	1064	1114	752
75°	385	457	612	684	684	410
85°	82	139	152	147	144	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2547.9	2547.9	2547.9	2547.9	2547.9
2.5°	2557.8	2537.9	2547.9	2545.4	2533.0
5°	2545.4	2528.0	2537.9	2535.5	2533.0
7.5°	2528.0	2510.6	2523.0	2520.5	2523.0
10°	2498.2	2483.3	2498.2	2500.7	2500.7
12.5°	2460.9	2448.5	2468.3	2473.3	2478.3
15°	2421.1	2411.2	2433.5	2443.5	2450.9
17.5°	2371.4	2363.9	2391.3	2403.7	2413.7
20°	2316.7	2314.2	2344.1	2356.5	2368.9
22.5°	2254.6	2254.6	2289.4	2304.3	2321.7
25°	2187.5	2189.9	2229.7	2249.6	2267.0
27.5°	2115.4	2117.8	2165.1	2189.9	2209.8
30°	2035.8	2045.8	2095.5	2127.8	2150.2
32.5°	1956.3	1968.7	2023.4	2060.7	2085.5
35°	1871.8	1886.7	1948.8	1991.1	2018.4
37.5°	1784.8	1802.2	1869.3	1916.5	1948.8
40°	1697.8	1717.6	1787.2	1841.9	1879.2
42.5°	1605.8	1628.2	1705.2	1769.8	1809.6
45°	1513.8	1538.7	1618.2	1695.3	1740.0
47.5°	1421.8	1451.7	1536.2	1620.7	1667.9
50°	1327.4	1357.2	1446.7	1543.6	1590.9
52.5°	1232.9	1267.7	1367.2	1466.6	1513.8
55°	1141.0	1175.8	1282.6	1387.0	1434.3
57.5°	1046.5	1081.3	1198.1	1307.5	1354.7
60°	949.6	989.3	1111.1	1223.0	1275.2
62.5°	855.1	897.4	1026.6	1145.9	1195.6
65°	760.6	805.4	939.6	1063.9	1113.6
67.5°	663.7	715.9	855.1	981.9	1034.1
70°	569.2	626.4	773.1	899.8	949.6
72.5°	477.3	539.4	691.0	820.3	850.1
75°	385.3	457.4	611.5	683.6	683.6
77.5°	298.3	377.8	522.0	549.3	564.3
80°	216.3	303.3	392.7	425.1	420.1
82.5°	144.2	231.2	280.9	280.9	273.4
85°	82.0	139.2	151.6	146.7	144.2
87.5°	34.8	52.2	47.2	37.3	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)