

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: P260778

Luminaire Tested: **24CZ-LD5-70-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260778  
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-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7163.0 lumens  
Efficiency: N/A  
Efficacy: 131.0 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

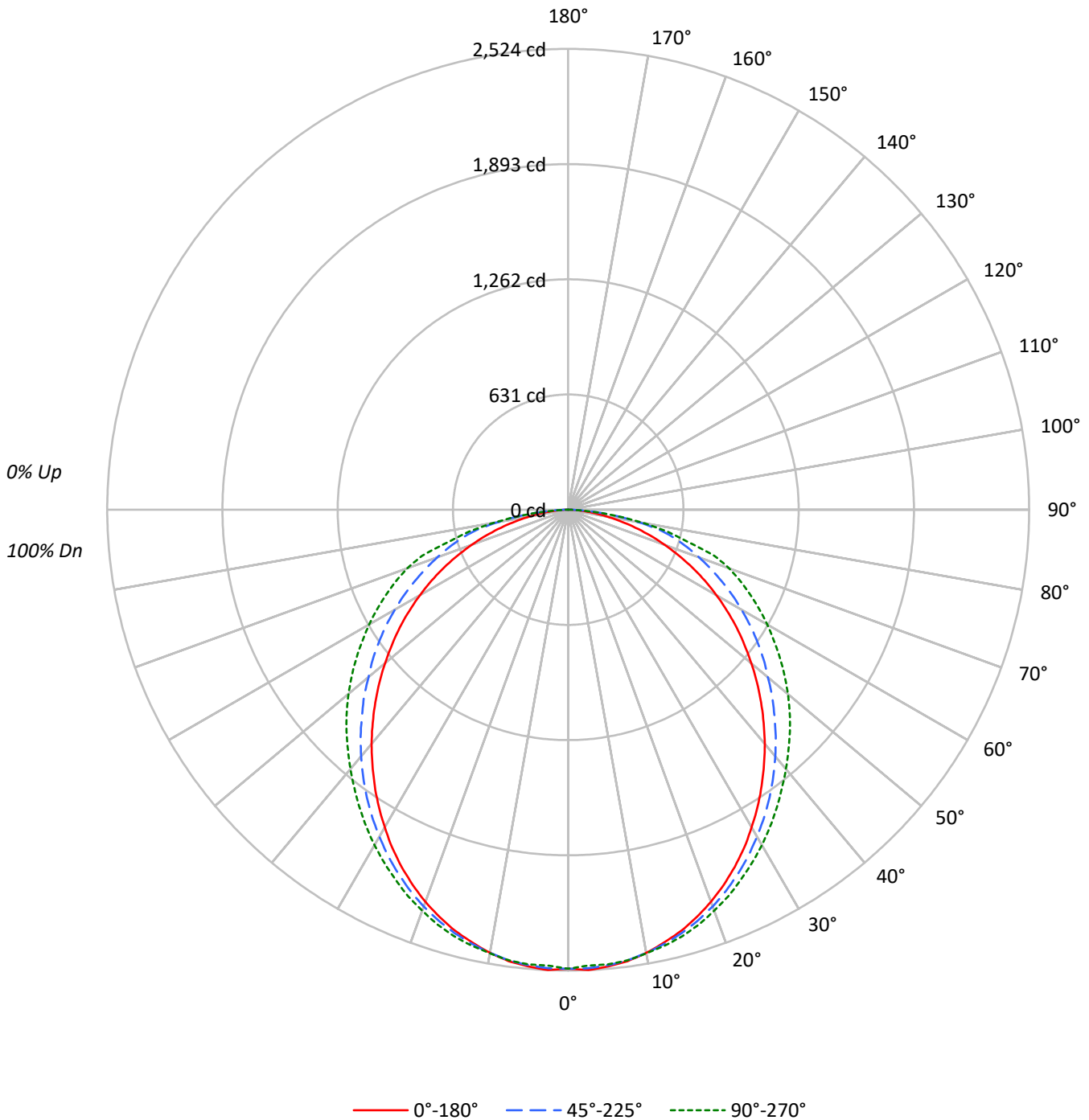
Input Watts (W): 54.684  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	3382	3382	3382
5°	3392	3382	3375
10°	3368	3368	3371
15°	3327	3344	3368
20°	3273	3311	3347
25°	3204	3266	3321
30°	3121	3212	3296
35°	3033	3158	3271
40°	2942	3097	3257
45°	2842	3038	3267
50°	2741	2988	3286
55°	2641	2969	3320
60°	2521	2950	3386
65°	2389	2952	3498
70°	2209	3000	3686
75°	1976	3136	3506
80°	1654	3002	3212
85°	1249	2309	2195



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.5	3.3
10°-20°	676.1	9.4
20°-30°	1010.7	14.1
30°-40°	1199.1	16.7
40°-50°	1234.1	17.2
50°-60°	1132.1	15.8
60°-70°	915.4	12.8
70°-80°	594.1	8.3
80°-90°	163.8	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°	1924.4	26.9
0°-40°	3123.4	43.6
0°-60°	5489.7	76.6
0°-90°	7163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7163.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2514	2514	2514	2514	2514	
5°	2511	2494	2504	2502	2499	238
15°	2389	2379	2401	2411	2418	673
25°	2158	2161	2200	2220	2237	993
35°	1847	1862	1923	1964	1992	1155
45°	1494	1518	1597	1673	1717	1153
55°	1126	1160	1266	1368	1415	1006
65°	750	795	927	1050	1099	742
75°	380	451	603	674	674	404
85°	81	137	150	145	142	99
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2513.8	2513.8	2513.8	2513.8	2513.8
2.5°	2523.7	2504.0	2513.8	2511.4	2499.1
5°	2511.4	2494.2	2504.0	2501.6	2499.1
7.5°	2494.2	2477.1	2489.3	2486.9	2489.3
10°	2464.8	2450.1	2464.8	2467.2	2467.2
12.5°	2428.0	2415.7	2435.4	2440.3	2445.2
15°	2388.8	2379.0	2401.0	2410.8	2418.2
17.5°	2339.7	2332.4	2359.3	2371.6	2381.4
20°	2285.8	2283.3	2312.7	2325.0	2337.3
22.5°	2224.4	2224.4	2258.8	2273.5	2290.7
25°	2158.2	2160.7	2199.9	2219.5	2236.7
27.5°	2087.1	2089.6	2136.2	2160.7	2180.3
30°	2008.6	2018.4	2067.5	2099.4	2121.4
32.5°	1930.1	1942.4	1996.4	2033.1	2057.7
35°	1846.8	1861.5	1922.8	1964.5	1991.5
37.5°	1760.9	1778.1	1844.3	1890.9	1922.8
40°	1675.1	1694.7	1763.4	1817.3	1854.1
42.5°	1584.3	1606.4	1682.4	1746.2	1785.4
45°	1493.6	1518.1	1596.6	1672.6	1716.8
47.5°	1402.8	1432.3	1515.7	1599.0	1645.6
50°	1309.6	1339.1	1427.4	1523.0	1569.6
52.5°	1216.5	1250.8	1348.9	1447.0	1493.6
55°	1125.7	1160.0	1265.5	1368.5	1415.1
57.5°	1032.5	1066.8	1182.1	1290.0	1336.6
60°	936.9	976.1	1096.3	1206.6	1258.1
62.5°	843.7	885.4	1012.9	1130.6	1179.7
65°	750.5	794.6	927.1	1049.7	1098.7
67.5°	654.8	706.3	843.7	968.7	1020.3
70°	561.6	618.0	762.7	887.8	936.9
72.5°	470.9	532.2	681.8	809.3	838.8
75°	380.1	451.3	603.3	674.4	674.4
77.5°	294.3	372.8	515.0	542.0	556.7
80°	213.4	299.2	387.5	419.4	414.5
82.5°	142.2	228.1	277.1	277.1	269.8
85°	80.9	137.3	149.6	144.7	142.2
87.5°	34.3	51.5	46.6	36.8	31.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)