

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: P261188

Luminaire Tested: **24CZ-LD5-65-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261188  
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-L82765-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: 6654.0 lumens  
Efficiency: N/A  
Efficacy: 134.5 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

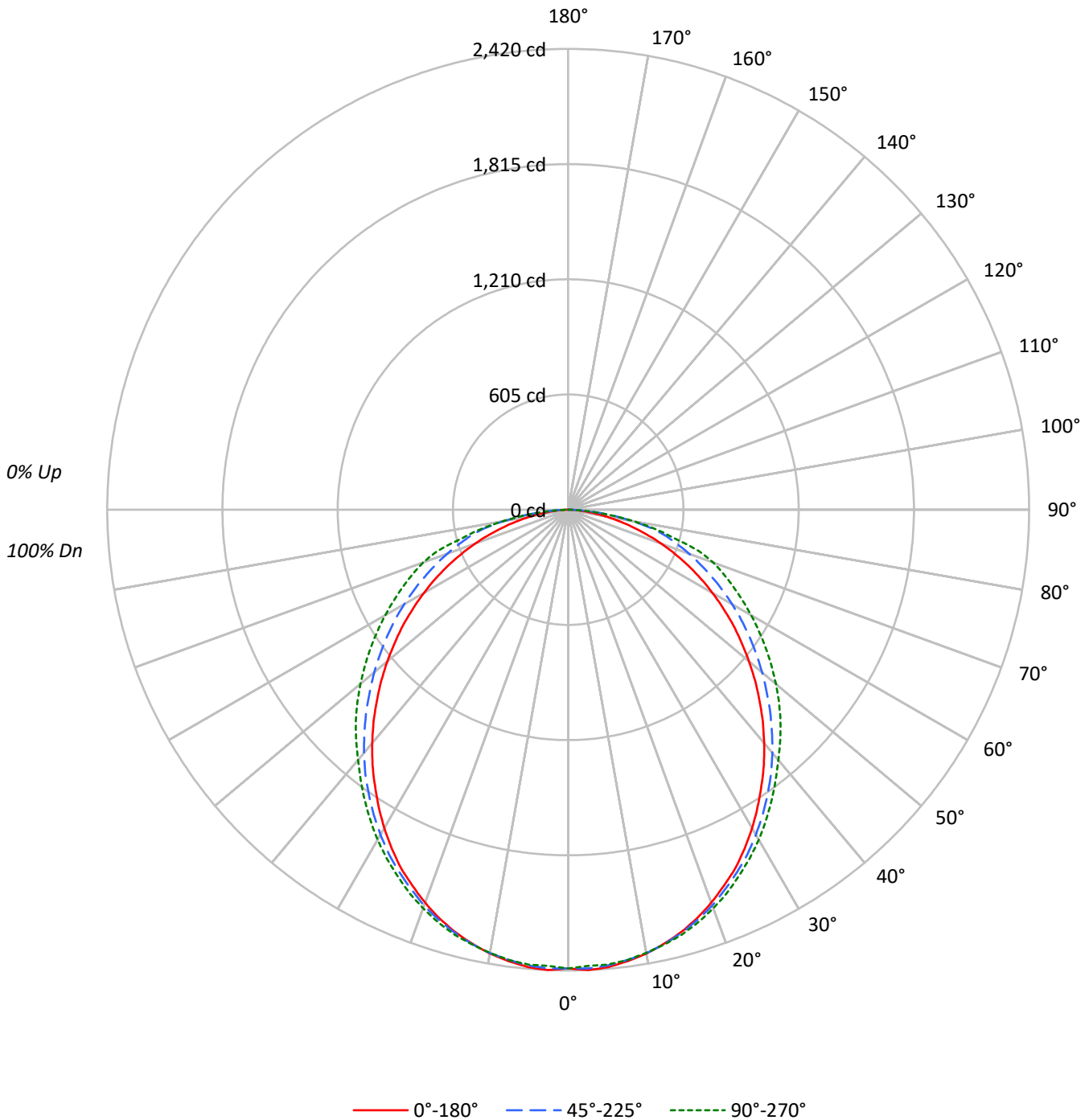
Input Watts (W): 49.476  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3241	3241	3241
5°	3257	3244	3239
10°	3234	3231	3228
15°	3198	3204	3217
20°	3145	3167	3189
25°	3083	3116	3149
30°	2999	3061	3110
35°	2906	2997	3058
40°	2811	2928	3014
45°	2705	2852	3000
50°	2595	2781	2980
55°	2483	2722	2971
60°	2353	2675	2985
65°	2213	2643	3045
70°	2038	2657	3188
75°	1807	2751	2969
80°	1509	2607	2676
85°	1129	2086	1914



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.8	3.4
10°-20°	647.7	9.7
20°-30°	965.3	14.5
30°-40°	1136.3	17.1
40°-50°	1154.7	17.4
50°-60°	1038.2	15.6
60°-70°	820.2	12.3
70°-80°	520.3	7.8
80°-90°	143.6	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°	1840.7	27.7
0°-40°	2977.0	44.7
0°-60°	5169.9	77.7
0°-90°	6654.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6654.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2409	2409	2409	2409	2409	
5°	2411	2391	2402	2398	2398	229
15°	2296	2285	2300	2307	2309	647
25°	2077	2075	2099	2112	2121	955
35°	1769	1780	1824	1844	1862	1107
45°	1421	1441	1499	1543	1576	1097
55°	1058	1085	1160	1235	1266	945
65°	695	731	830	921	956	689
75°	348	407	529	576	571	370
85°	73	126	135	124	124	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2408.9	2408.9	2408.9	2408.9	2408.9
2.5°	2419.9	2402.2	2411.1	2406.7	2397.8
5°	2411.1	2391.2	2402.2	2397.8	2397.8
7.5°	2391.2	2375.7	2384.5	2382.3	2384.5
10°	2366.8	2351.3	2364.6	2364.6	2362.4
12.5°	2333.6	2320.3	2335.8	2335.8	2338.0
15°	2296.0	2284.9	2300.4	2307.0	2309.2
17.5°	2249.5	2238.4	2258.3	2265.0	2271.6
20°	2196.3	2191.9	2211.8	2218.5	2227.3
22.5°	2136.5	2136.5	2156.5	2165.3	2178.6
25°	2076.8	2074.6	2098.9	2112.2	2121.0
27.5°	2005.9	2008.1	2039.1	2052.4	2063.5
30°	1930.6	1935.1	1970.5	1986.0	2001.5
32.5°	1850.9	1859.8	1899.6	1917.4	1932.9
35°	1769.0	1780.1	1824.4	1844.3	1862.0
37.5°	1687.1	1702.6	1749.1	1769.0	1788.9
40°	1600.7	1614.0	1667.2	1691.5	1715.9
42.5°	1512.2	1529.9	1583.0	1618.5	1647.2
45°	1421.4	1441.3	1498.9	1543.2	1576.4
47.5°	1330.6	1357.2	1412.6	1472.3	1501.1
50°	1239.9	1266.4	1328.4	1394.8	1423.6
52.5°	1146.9	1173.4	1244.3	1312.9	1343.9
55°	1058.3	1084.9	1160.2	1235.4	1266.4
57.5°	965.3	994.1	1078.2	1155.7	1186.7
60°	874.5	903.3	994.1	1076.0	1109.2
62.5°	786.0	817.0	912.2	998.5	1031.7
65°	695.2	730.6	830.3	921.0	956.5
67.5°	606.6	646.5	750.6	845.8	883.4
70°	518.1	564.6	675.3	772.7	810.3
72.5°	431.7	482.7	600.0	697.4	717.3
75°	347.6	407.4	529.2	575.6	571.2
77.5°	267.9	334.3	449.4	458.3	471.6
80°	194.8	267.9	336.5	354.2	345.4
82.5°	128.4	201.5	241.3	232.5	230.3
85°	73.1	126.2	135.1	124.0	124.0
87.5°	31.0	50.9	44.3	33.2	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)