

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: P260706

Luminaire Tested: **24CZ-LD5-30-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260706  
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-LD5-30-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: 3119.0 lumens  
Efficiency: N/A  
Efficacy: 156.0 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

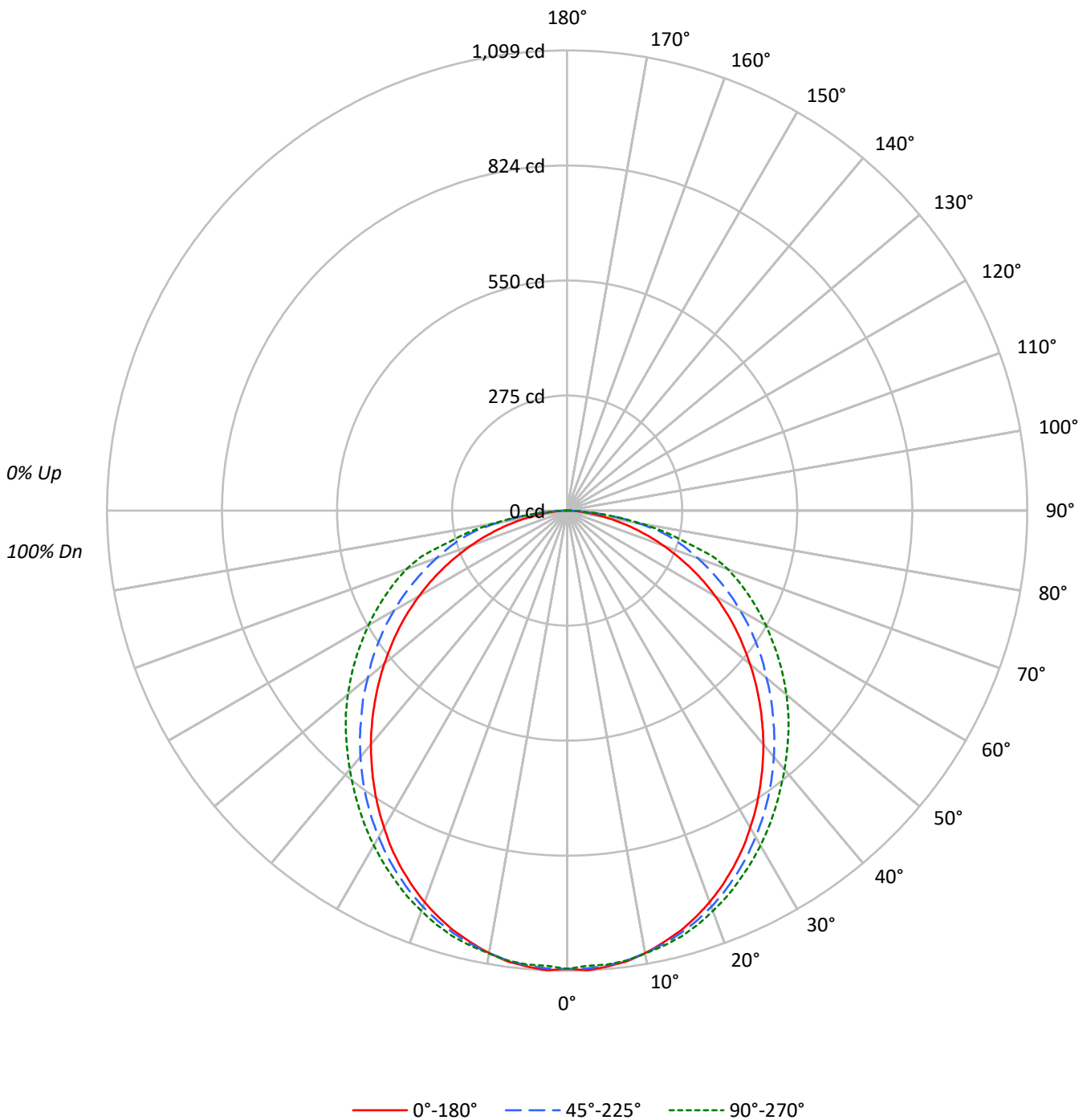
Input Watts (W): 19.995  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1473	1473	1473
5°	1477	1473	1470
10°	1466	1466	1468
15°	1449	1456	1467
20°	1425	1442	1457
25°	1395	1422	1446
30°	1359	1399	1435
35°	1321	1375	1424
40°	1281	1349	1418
45°	1238	1323	1422
50°	1194	1301	1431
55°	1150	1293	1445
60°	1098	1285	1474
65°	1040	1285	1523
70°	962	1306	1605
75°	860	1366	1527
80°	720	1307	1399
85°	543	1005	956



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.4	3.3
10°-20°	294.4	9.4
20°-30°	440.1	14.1
30°-40°	522.1	16.7
40°-50°	537.4	17.2
50°-60°	493.0	15.8
60°-70°	398.6	12.8
70°-80°	258.7	8.3
80°-90°	71.3	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°	837.9	26.9
0°-40°	1360.0	43.6
0°-60°	2390.4	76.6
0°-90°	3119.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3119.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1094	1086	1090	1089	1088	104
15°	1040	1036	1046	1050	1053	293
25°	940	941	958	966	974	433
35°	804	810	837	855	867	503
45°	650	661	695	728	748	502
55°	490	505	551	596	616	438
65°	327	346	404	457	478	323
75°	166	196	263	294	294	176
85°	35	60	65	63	62	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1094.6	1094.6	1094.6	1094.6	1094.6
2.5°	1098.9	1090.3	1094.6	1093.5	1088.2
5°	1093.5	1086.1	1090.3	1089.3	1088.2
7.5°	1086.1	1078.6	1083.9	1082.9	1083.9
10°	1073.2	1066.8	1073.2	1074.3	1074.3
12.5°	1057.2	1051.9	1060.4	1062.6	1064.7
15°	1040.1	1035.9	1045.5	1049.8	1053.0
17.5°	1018.8	1015.6	1027.3	1032.7	1036.9
20°	995.3	994.2	1007.0	1012.4	1017.7
22.5°	968.6	968.6	983.5	990.0	997.4
25°	939.8	940.8	957.9	966.5	973.9
27.5°	908.8	909.9	930.1	940.8	949.4
30°	874.6	878.9	900.2	914.1	923.7
32.5°	840.4	845.8	869.3	885.3	896.0
35°	804.1	810.5	837.2	855.4	867.1
37.5°	766.8	774.2	803.1	823.4	837.2
40°	729.4	737.9	767.8	791.3	807.3
42.5°	689.9	699.5	732.6	760.4	777.4
45°	650.4	661.0	695.2	728.3	747.5
47.5°	610.8	623.7	660.0	696.3	716.6
50°	570.3	583.1	621.5	663.2	683.5
52.5°	529.7	544.6	587.4	630.1	650.4
55°	490.2	505.1	551.0	595.9	616.2
57.5°	449.6	464.5	514.7	561.7	582.0
60°	407.9	425.0	477.4	525.4	547.8
62.5°	367.4	385.5	441.0	492.3	513.7
65°	326.8	346.0	403.7	457.1	478.4
67.5°	285.1	307.6	367.4	421.8	444.3
70°	244.6	269.1	332.1	386.6	407.9
72.5°	205.0	231.7	296.9	352.4	365.2
75°	165.5	196.5	262.7	293.7	293.7
77.5°	128.1	162.3	224.3	236.0	242.4
80°	92.9	130.3	168.7	182.6	180.5
82.5°	61.9	99.3	120.7	120.7	117.5
85°	35.2	59.8	65.1	63.0	61.9
87.5°	15.0	22.4	20.3	16.0	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)