

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: P260709

Luminaire Tested: **24CZ-LD5-30-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260709  
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-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3201.0 lumens  
Efficiency: N/A  
Efficacy: 158.6 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

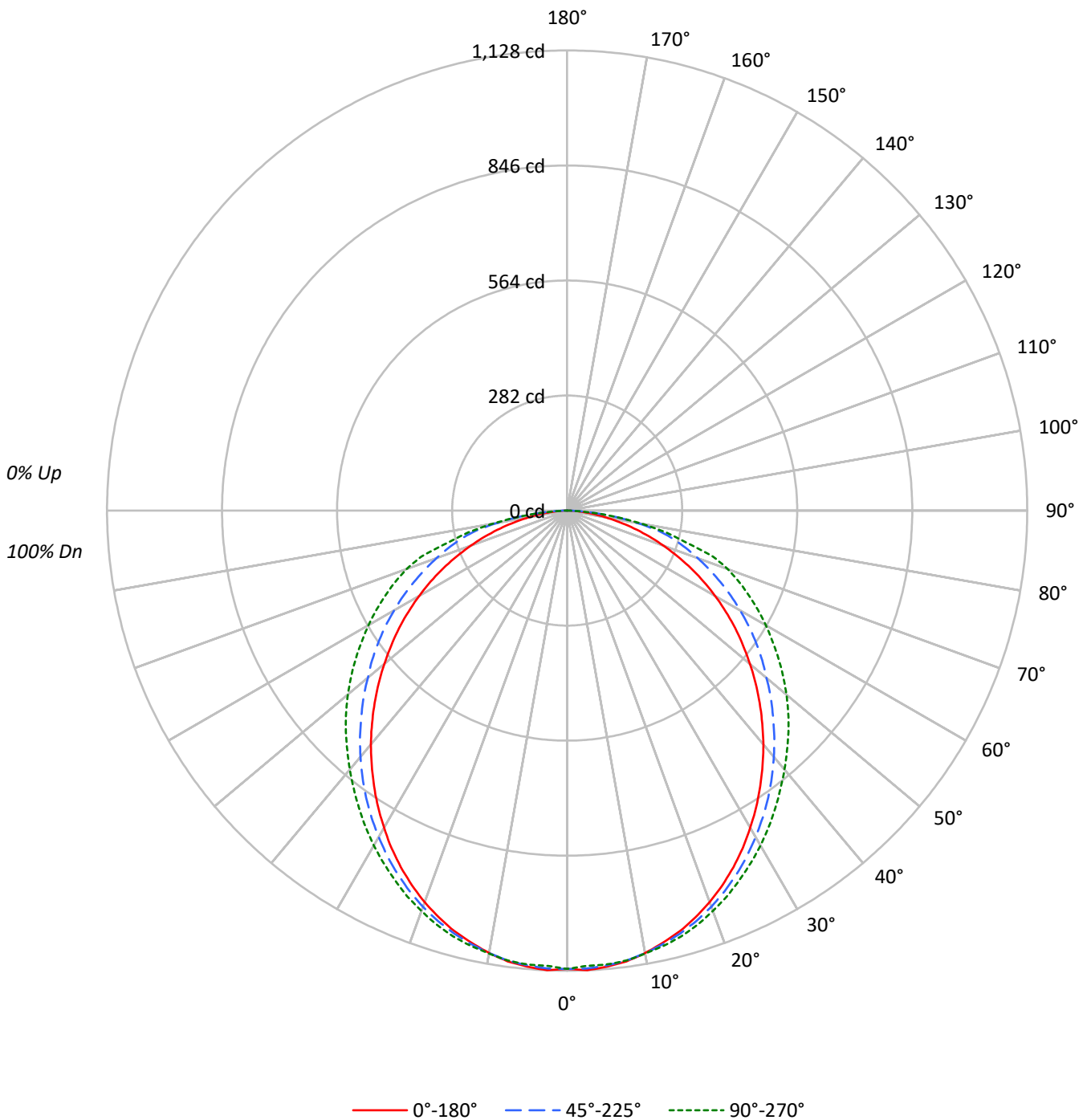
Input Watts (W): 20.181  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1512	1512	1512
5°	1516	1511	1508
10°	1505	1505	1506
15°	1487	1495	1505
20°	1463	1480	1496
25°	1432	1459	1484
30°	1395	1435	1473
35°	1356	1411	1462
40°	1315	1384	1455
45°	1270	1358	1460
50°	1225	1335	1468
55°	1180	1327	1483
60°	1127	1318	1513
65°	1068	1319	1563
70°	987	1341	1647
75°	883	1402	1567
80°	739	1342	1435
85°	559	1033	982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.2	3.3
10°-20°	302.1	9.4
20°-30°	451.7	14.1
30°-40°	535.8	16.7
40°-50°	551.5	17.2
50°-60°	505.9	15.8
60°-70°	409.1	12.8
70°-80°	265.5	8.3
80°-90°	73.2	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°	860.0	26.9
0°-40°	1395.8	43.6
0°-60°	2453.3	76.6
0°-90°	3201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3201.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1122	1115	1119	1118	1117	106
15°	1068	1063	1073	1077	1081	301
25°	964	966	983	992	1000	444
35°	825	832	859	878	890	516
45°	668	678	714	748	767	515
55°	503	518	566	612	632	449
65°	335	355	414	469	491	331
75°	170	202	270	301	301	181
85°	36	61	67	65	64	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1123.4	1123.4	1123.4	1123.4	1123.4
2.5°	1127.8	1119.0	1123.4	1122.3	1116.8
5°	1122.3	1114.6	1119.0	1117.9	1116.8
7.5°	1114.6	1106.9	1112.4	1111.3	1112.4
10°	1101.5	1094.9	1101.5	1102.6	1102.6
12.5°	1085.0	1079.5	1088.3	1090.5	1092.7
15°	1067.5	1063.1	1073.0	1077.4	1080.6
17.5°	1045.6	1042.3	1054.3	1059.8	1064.2
20°	1021.5	1020.4	1033.5	1039.0	1044.5
22.5°	994.1	994.1	1009.4	1016.0	1023.6
25°	964.5	965.6	983.1	991.9	999.5
27.5°	932.7	933.8	954.6	965.6	974.3
30°	897.6	902.0	923.9	938.2	948.0
32.5°	862.5	868.0	892.1	908.6	919.5
35°	825.3	831.9	859.3	877.9	889.9
37.5°	786.9	794.6	824.2	845.0	859.3
40°	748.6	757.3	788.0	812.1	828.6
42.5°	708.0	717.9	751.8	780.3	797.9
45°	667.5	678.4	713.5	747.5	767.2
47.5°	626.9	640.1	677.3	714.6	735.4
50°	585.3	598.4	637.9	680.6	701.4
52.5°	543.6	559.0	602.8	646.6	667.5
55°	503.1	518.4	565.5	611.6	632.4
57.5°	461.4	476.8	528.3	576.5	597.3
60°	418.7	436.2	489.9	539.2	562.2
62.5°	377.0	395.7	452.6	505.2	527.2
65°	335.4	355.1	414.3	469.1	491.0
67.5°	292.6	315.6	377.0	432.9	455.9
70°	251.0	276.2	340.9	396.7	418.7
72.5°	210.4	237.8	304.7	361.7	374.8
75°	169.9	201.7	269.6	301.4	301.4
77.5°	131.5	166.6	230.2	242.2	248.8
80°	95.4	133.7	173.2	187.4	185.2
82.5°	63.6	101.9	123.8	123.8	120.6
85°	36.2	61.4	66.9	64.7	63.6
87.5°	15.3	23.0	20.8	16.4	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)