

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: P260798

Luminaire Tested: **24CZ-LD5-30SE-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260798  
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-LD5-30SE-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3154.0 lumens  
Efficiency: N/A  
Efficacy: 140.7 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

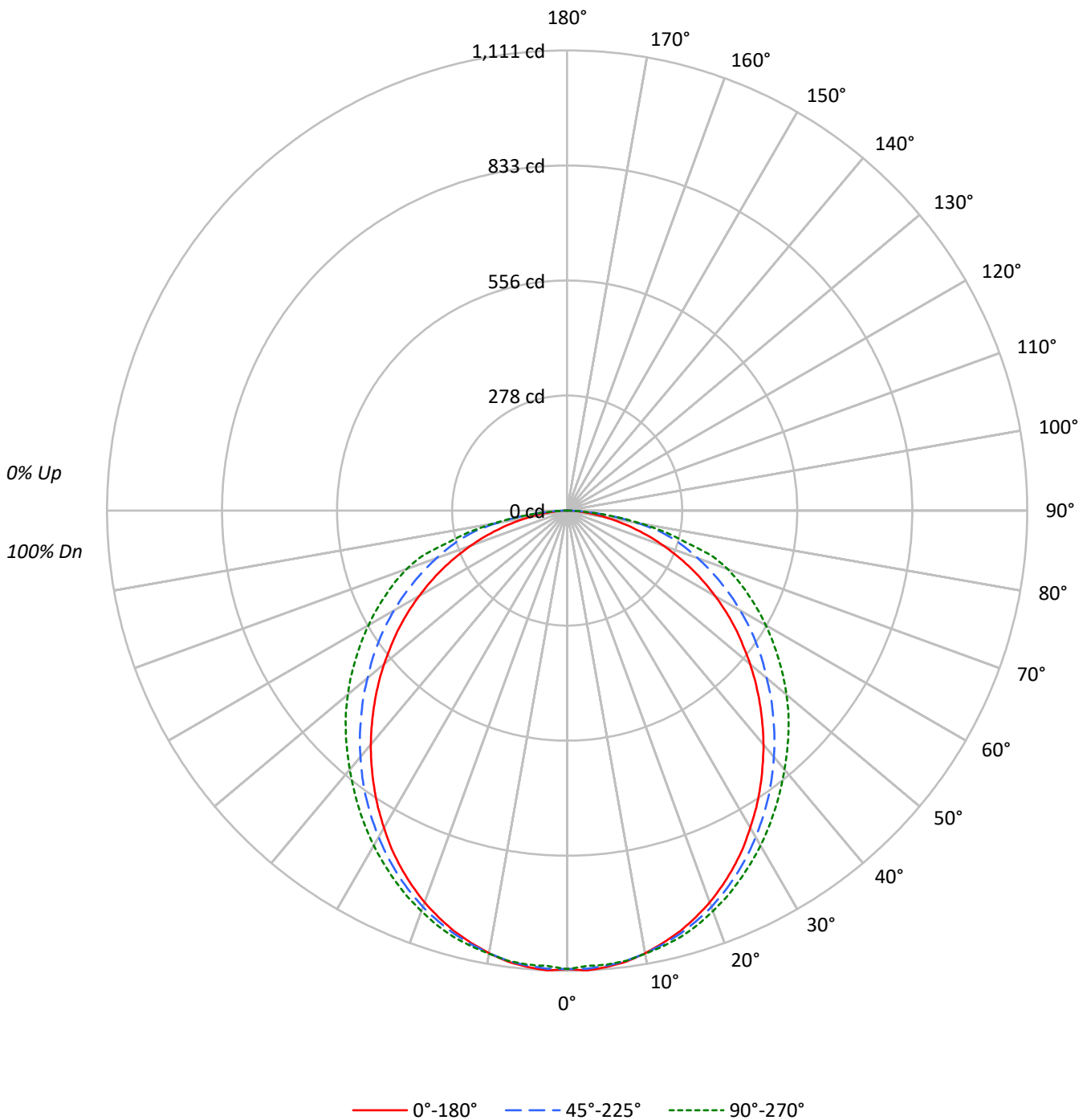
Input Watts (W): 22.413  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1489	1489	1489
5°	1494	1489	1486
10°	1483	1483	1484
15°	1465	1473	1483
20°	1441	1458	1474
25°	1411	1438	1462
30°	1374	1414	1451
35°	1336	1391	1440
40°	1296	1364	1434
45°	1251	1338	1438
50°	1207	1316	1447
55°	1163	1307	1462
60°	1110	1299	1491
65°	1052	1300	1540
70°	973	1321	1623
75°	870	1381	1544
80°	728	1322	1414
85°	550	1017	966



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.6	3.3
10°-20°	297.7	9.4
20°-30°	445.0	14.1
30°-40°	528.0	16.7
40°-50°	543.4	17.2
50°-60°	498.5	15.8
60°-70°	403.1	12.8
70°-80°	261.6	8.3
80°-90°	72.1	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°	847.3	26.9
0°-40°	1375.3	43.6
0°-60°	2417.2	76.6
0°-90°	3154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3154.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1106	1098	1103	1102	1100	105
15°	1052	1048	1057	1062	1065	296
25°	950	951	969	977	985	437
35°	813	820	847	865	877	509
45°	658	668	703	736	756	508
55°	496	511	557	603	623	443
65°	330	350	408	462	484	327
75°	167	199	266	297	297	178
85°	36	60	66	64	63	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1106.9	1106.9	1106.9	1106.9	1106.9
2.5°	1111.2	1102.6	1106.9	1105.8	1100.4
5°	1105.8	1098.3	1102.6	1101.5	1100.4
7.5°	1098.3	1090.7	1096.1	1095.0	1096.1
10°	1085.3	1078.8	1085.3	1086.4	1086.4
12.5°	1069.1	1063.7	1072.3	1074.5	1076.7
15°	1051.8	1047.5	1057.2	1061.5	1064.8
17.5°	1030.2	1027.0	1038.9	1044.3	1048.6
20°	1006.5	1005.4	1018.3	1023.7	1029.1
22.5°	979.5	979.5	994.6	1001.1	1008.6
25°	950.3	951.4	968.7	977.3	984.9
27.5°	919.0	920.1	940.6	951.4	960.0
30°	884.4	888.8	910.3	924.4	934.1
32.5°	849.9	855.3	879.0	895.2	906.0
35°	813.2	819.6	846.6	865.0	876.9
37.5°	775.4	782.9	812.1	832.6	846.6
40°	737.6	746.2	776.4	800.2	816.4
42.5°	697.6	707.3	740.8	768.9	786.2
45°	657.7	668.5	703.0	736.5	755.9
47.5°	617.7	630.7	667.4	704.1	724.6
50°	576.7	589.6	628.5	670.6	691.1
52.5°	535.6	550.7	593.9	637.1	657.7
55°	495.7	510.8	557.2	602.6	623.1
57.5°	454.6	469.8	520.5	568.0	588.5
60°	412.5	429.8	482.7	531.3	554.0
62.5°	371.5	389.8	446.0	497.8	519.4
65°	330.4	349.9	408.2	462.2	483.8
67.5°	288.3	311.0	371.5	426.6	449.2
70°	247.3	272.1	335.8	390.9	412.5
72.5°	207.3	234.3	300.2	356.4	369.3
75°	167.4	198.7	265.7	297.0	297.0
77.5°	129.6	164.1	226.8	238.7	245.1
80°	94.0	131.7	170.6	184.7	182.5
82.5°	62.6	100.4	122.0	122.0	118.8
85°	35.6	60.5	65.9	63.7	62.6
87.5°	15.1	22.7	20.5	16.2	14.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)