

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: P260945

Luminaire Tested: **24CZ-LD5-40SE-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260945  
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-LD5-40SE-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3172.0 lumens  
Efficiency: N/A  
Efficacy: 104.6 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

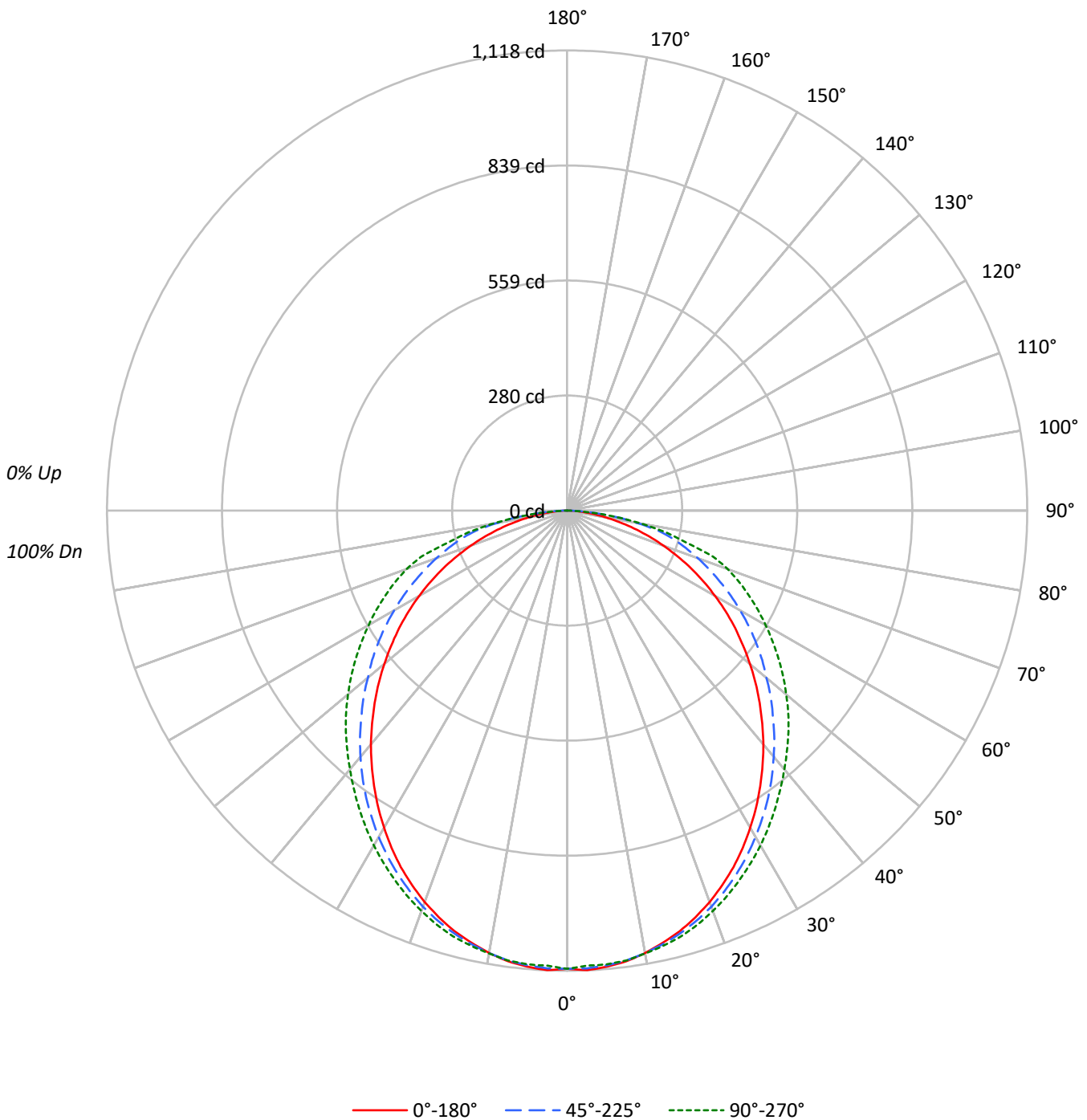
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1498	1498	1498
5°	1502	1498	1495
10°	1491	1491	1493
15°	1473	1481	1492
20°	1449	1466	1482
25°	1419	1446	1470
30°	1382	1422	1459
35°	1343	1399	1449
40°	1303	1372	1442
45°	1259	1345	1447
50°	1214	1323	1455
55°	1169	1315	1470
60°	1116	1306	1499
65°	1058	1307	1549
70°	978	1329	1632
75°	875	1389	1553
80°	732	1330	1422
85°	553	1022	973



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	3.3
10°-20°	299.4	9.4
20°-30°	447.6	14.1
30°-40°	531.0	16.7
40°-50°	546.5	17.2
50°-60°	501.4	15.8
60°-70°	405.4	12.8
70°-80°	263.1	8.3
80°-90°	72.5	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°	852.2	26.9
0°-40°	1383.2	43.6
0°-60°	2431.0	76.6
0°-90°	3172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3172.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1113	1113	1113	1113	1113	
5°	1112	1104	1109	1108	1107	106
15°	1058	1054	1063	1068	1071	298
25°	956	957	974	983	990	440
35°	818	824	852	870	882	511
45°	661	672	707	741	760	510
55°	498	514	560	606	627	445
65°	332	352	410	465	487	328
75°	168	200	267	299	299	179
85°	36	61	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°	1113.2	1113.2	1113.2	1113.2	1113.2
2.5°	1117.6	1108.9	1113.2	1112.1	1106.7
5°	1112.1	1104.5	1108.9	1107.8	1106.7
7.5°	1104.5	1096.9	1102.3	1101.3	1102.3
10°	1091.5	1085.0	1091.5	1092.6	1092.6
12.5°	1075.2	1069.8	1078.5	1080.6	1082.8
15°	1057.8	1053.5	1063.2	1067.6	1070.9
17.5°	1036.1	1032.8	1044.8	1050.2	1054.6
20°	1012.2	1011.1	1024.2	1029.6	1035.0
22.5°	985.1	985.1	1000.3	1006.8	1014.4
25°	955.7	956.8	974.2	982.9	990.5
27.5°	924.2	925.3	946.0	956.8	965.5
30°	889.5	893.8	915.5	929.7	939.4
32.5°	854.7	860.2	884.0	900.3	911.2
35°	817.8	824.3	851.5	869.9	881.9
37.5°	779.8	787.4	816.7	837.3	851.5
40°	741.8	750.5	780.9	804.8	821.1
42.5°	701.6	711.4	745.0	773.3	790.6
45°	661.4	672.3	707.0	740.7	760.2
47.5°	621.2	634.3	671.2	708.1	728.7
50°	580.0	593.0	632.1	674.4	695.1
52.5°	538.7	553.9	597.3	640.8	661.4
55°	498.5	513.7	560.4	606.0	626.7
57.5°	457.2	472.4	523.5	571.3	591.9
60°	414.9	432.3	485.5	534.3	557.1
62.5°	373.6	392.1	448.5	500.7	522.4
65°	332.3	351.9	410.5	464.8	486.6
67.5°	290.0	312.8	373.6	429.0	451.8
70°	248.7	273.7	337.8	393.2	414.9
72.5°	208.5	235.7	301.9	358.4	371.4
75°	168.3	199.8	267.2	298.7	298.7
77.5°	130.3	165.1	228.1	240.0	246.5
80°	94.5	132.5	171.6	185.7	183.5
82.5°	63.0	101.0	122.7	122.7	119.5
85°	35.8	60.8	66.2	64.1	63.0
87.5°	15.2	22.8	20.6	16.3	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)