

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: P263145

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263145  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-SQP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3510.0 lumens  
Efficiency: N/A  
Efficacy: 84.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

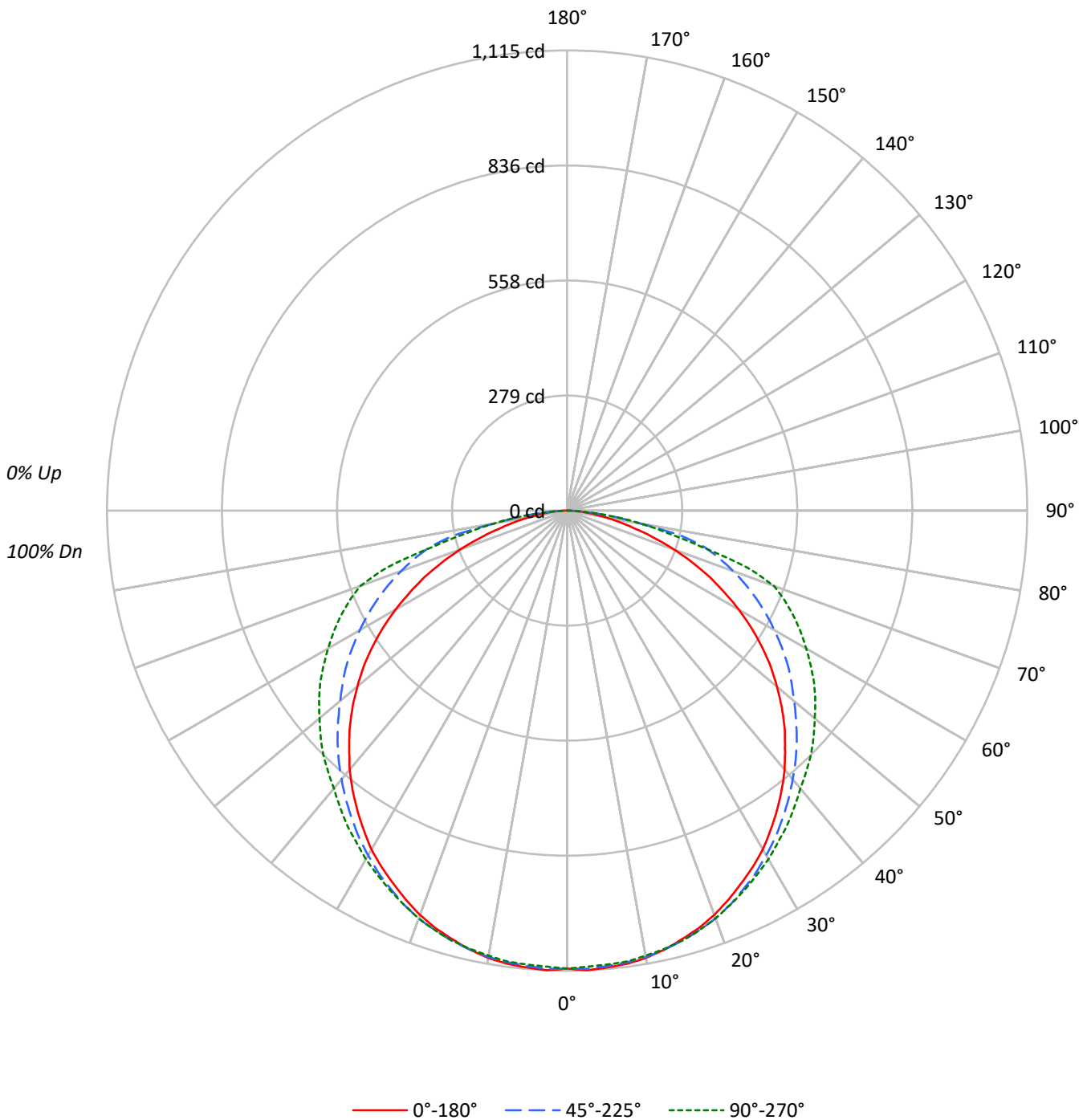
Input Watts (W): 41.656839  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1493	1493	1493
5°	1501	1496	1491
10°	1504	1501	1496
15°	1498	1503	1503
20°	1493	1506	1506
25°	1480	1502	1507
30°	1473	1498	1515
35°	1456	1495	1528
40°	1439	1493	1544
45°	1418	1497	1590
50°	1389	1503	1639
55°	1352	1531	1714
60°	1293	1561	1800
65°	1212	1610	1928
70°	1084	1683	2097
75°	895	1800	1734
80°	731	1391	1405
85°	588	923	868



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.4	3.0
10°-20°	304.1	8.7
20°-30°	464.8	13.2
30°-40°	568.4	16.2
40°-50°	608.2	17.3
50°-60°	582.4	16.6
60°-70°	492.7	14.0
70°-80°	312.3	8.9
80°-90°	71.8	2.0
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°	874.2	24.9
0°-40°	1442.6	41.1
0°-60°	2633.2	75.0
0°-90°	3510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3510.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1111	1106	1108	1106	1104	106
15°	1075	1073	1079	1079	1079	304
25°	997	997	1012	1015	1015	460
35°	887	892	910	923	930	555
45°	745	758	787	820	836	574
55°	576	595	653	707	731	514
65°	381	417	506	575	606	375
75°	172	243	346	344	334	187
85°	38	58	60	54	56	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1109.6	1109.6	1109.6	1109.6	1109.6
2.5°	1115.0	1109.6	1111.4	1109.6	1106.0
5°	1111.4	1106.0	1107.8	1106.0	1104.1
7.5°	1107.8	1102.3	1104.1	1102.3	1102.3
10°	1100.5	1095.1	1098.7	1096.9	1095.1
12.5°	1089.6	1086.0	1089.6	1087.8	1087.8
15°	1075.1	1073.3	1078.8	1078.8	1078.8
17.5°	1060.6	1058.8	1066.1	1066.1	1066.1
20°	1042.5	1040.7	1051.6	1051.6	1051.6
22.5°	1020.7	1018.9	1033.4	1033.4	1033.4
25°	997.2	997.2	1011.7	1015.3	1015.3
27.5°	973.6	973.6	989.9	995.4	995.4
30°	948.2	948.2	964.5	971.8	975.4
32.5°	917.4	921.0	939.2	948.2	951.8
35°	886.6	892.0	910.1	922.8	930.1
37.5°	853.9	859.4	881.1	895.6	904.7
40°	819.5	826.7	850.3	868.4	879.3
42.5°	781.4	792.3	819.5	843.1	857.6
45°	745.2	757.8	786.9	819.5	835.8
47.5°	705.3	719.8	752.4	794.1	810.4
50°	663.6	678.1	718.0	765.1	783.2
52.5°	621.9	638.2	685.3	736.1	757.8
55°	576.5	594.7	652.7	707.1	730.7
57.5°	529.4	551.2	616.4	674.4	699.8
60°	480.5	507.6	580.2	641.8	669.0
62.5°	429.7	462.3	543.9	609.2	638.2
65°	380.7	417.0	505.8	574.7	605.6
67.5°	328.2	373.5	467.8	542.1	571.1
70°	275.6	328.2	427.9	504.0	533.0
72.5°	223.0	286.5	388.0	456.9	456.9
75°	172.2	242.9	346.3	344.5	333.6
77.5°	130.5	203.1	284.6	242.9	244.8
80°	94.3	163.2	179.5	179.5	181.3
82.5°	63.5	125.1	116.0	114.2	117.8
85°	38.1	58.0	59.8	54.4	56.2
87.5°	18.1	19.9	16.3	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)