

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: P263353

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263353  
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-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3409.0 lumens  
Efficiency: N/A  
Efficacy: 83.9 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

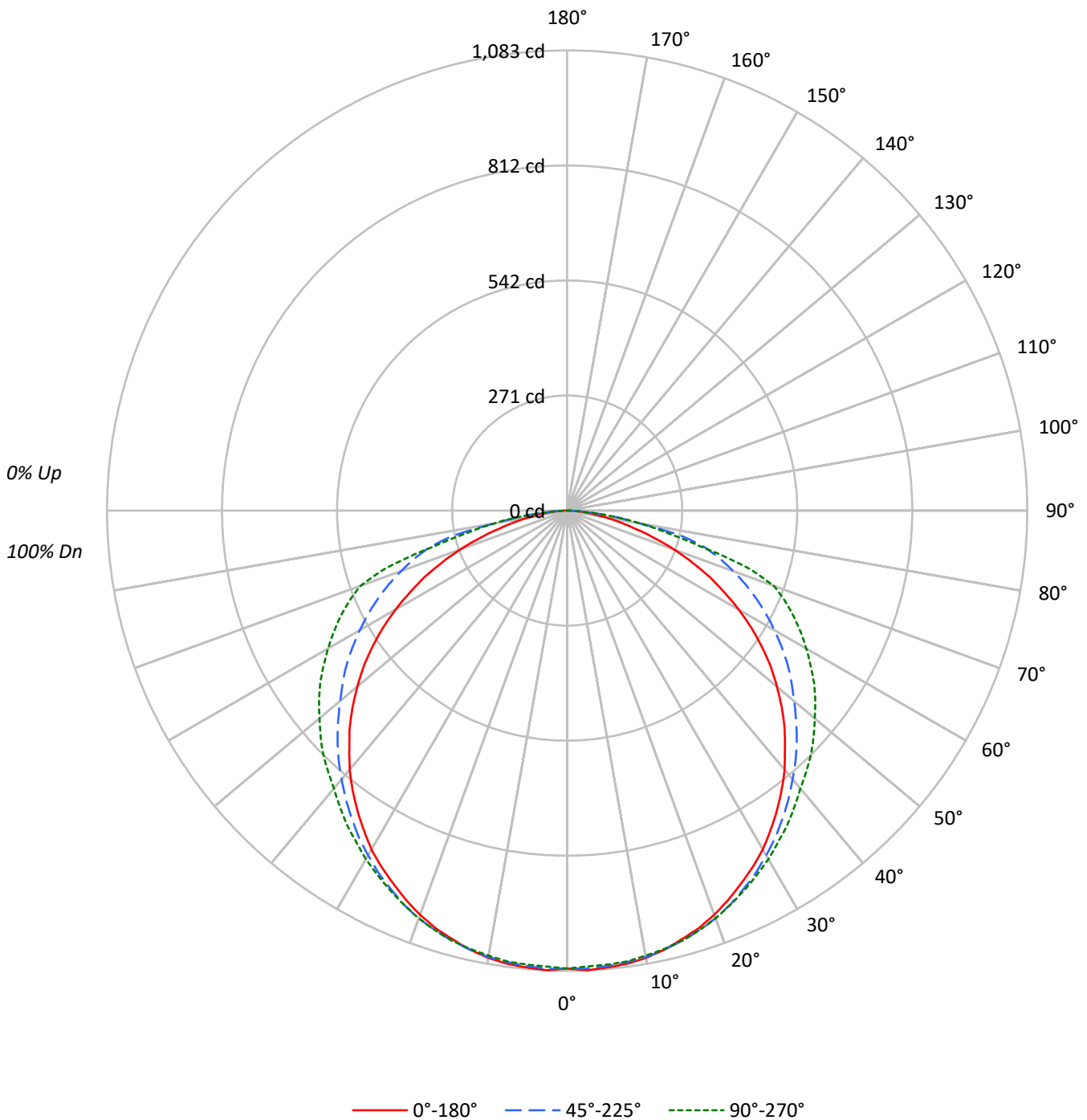
Input Watts (W): 40.641  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1450	1450	1450
5°	1458	1453	1448
10°	1460	1458	1453
15°	1455	1459	1459
20°	1450	1462	1462
25°	1438	1459	1464
30°	1431	1455	1472
35°	1414	1452	1484
40°	1398	1450	1500
45°	1377	1454	1545
50°	1349	1460	1592
55°	1314	1487	1665
60°	1256	1516	1749
65°	1177	1564	1872
70°	1053	1635	2037
75°	870	1748	1684
80°	710	1351	1364
85°	571	897	843



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.3	3.0
10°-20°	295.3	8.7
20°-30°	451.4	13.2
30°-40°	552.1	16.2
40°-50°	590.7	17.3
50°-60°	565.6	16.6
60°-70°	478.5	14.0
70°-80°	303.3	8.9
80°-90°	69.8	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°	849.1	24.9
0°-40°	1401.1	41.1
0°-60°	2557.4	75.0
0°-90°	3409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3409.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1079	1074	1076	1074	1072	103
15°	1044	1042	1048	1048	1048	295
25°	968	968	983	986	986	447
35°	861	866	884	896	903	539
45°	724	736	764	796	812	558
55°	560	578	634	687	710	499
65°	370	405	491	558	588	364
75°	167	236	336	335	324	182
85°	37	56	58	53	55	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1077.6	1077.6	1077.6	1077.6	1077.6
2.5°	1082.9	1077.6	1079.4	1077.6	1074.1
5°	1079.4	1074.1	1075.9	1074.1	1072.4
7.5°	1075.9	1070.6	1072.4	1070.6	1070.6
10°	1068.8	1063.6	1067.1	1065.3	1063.6
12.5°	1058.3	1054.8	1058.3	1056.5	1056.5
15°	1044.2	1042.4	1047.7	1047.7	1047.7
17.5°	1030.1	1028.3	1035.4	1035.4	1035.4
20°	1012.5	1010.7	1021.3	1021.3	1021.3
22.5°	991.4	989.6	1003.7	1003.7	1003.7
25°	968.5	968.5	982.6	986.1	986.1
27.5°	945.6	945.6	961.4	966.7	966.7
30°	920.9	920.9	936.8	943.8	947.3
32.5°	891.0	894.5	912.1	920.9	924.5
35°	861.1	866.3	884.0	896.3	903.3
37.5°	829.4	834.6	855.8	869.9	878.7
40°	795.9	803.0	825.8	843.5	854.0
42.5°	758.9	769.5	795.9	818.8	832.9
45°	723.7	736.0	764.2	795.9	811.8
47.5°	685.0	699.1	730.8	771.3	787.1
50°	644.5	658.6	697.3	743.1	760.7
52.5°	604.0	619.8	665.6	714.9	736.0
55°	560.0	577.6	633.9	686.7	709.6
57.5°	514.2	535.3	598.7	655.0	679.7
60°	466.6	493.0	563.5	623.3	649.8
62.5°	417.3	449.0	528.3	591.7	619.8
65°	369.8	405.0	491.3	558.2	588.1
67.5°	318.7	362.7	454.3	526.5	554.7
70°	267.7	318.7	415.6	489.5	517.7
72.5°	216.6	278.2	376.8	443.7	443.7
75°	167.3	236.0	336.3	334.6	324.0
77.5°	126.8	197.2	276.5	236.0	237.7
80°	91.6	158.5	174.3	174.3	176.1
82.5°	61.6	121.5	112.7	110.9	114.5
85°	37.0	56.3	58.1	52.8	54.6
87.5°	17.6	19.4	15.8	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)