

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: P263350

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263350  
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-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3234.0 lumens  
Efficiency: N/A  
Efficacy: 81.1 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

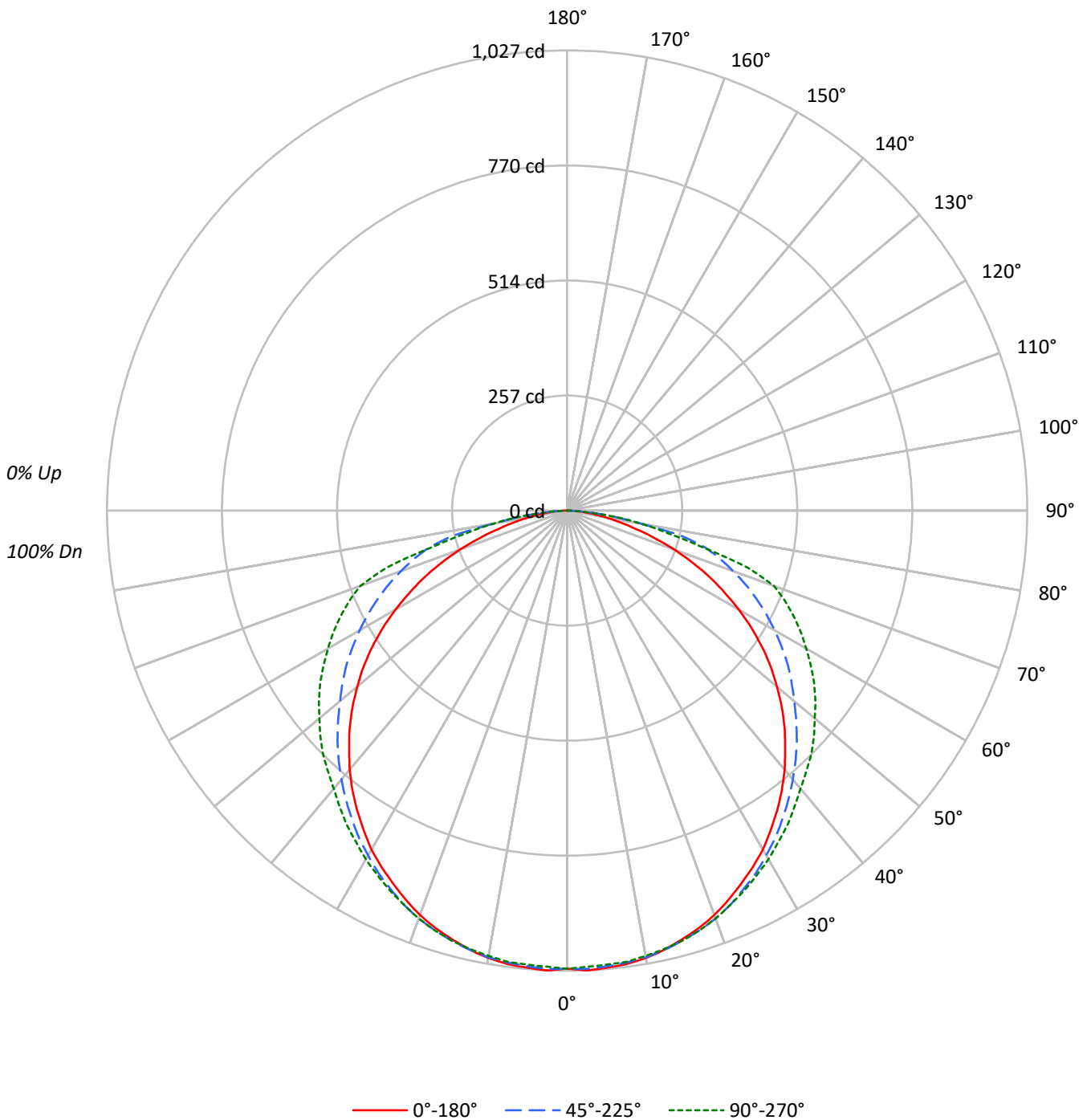
Input Watts (W): 39.897  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1375	1375	1375
5°	1383	1379	1374
10°	1385	1383	1379
15°	1380	1384	1384
20°	1375	1387	1387
25°	1364	1384	1389
30°	1357	1381	1396
35°	1342	1377	1408
40°	1326	1376	1423
45°	1306	1380	1465
50°	1280	1385	1510
55°	1246	1411	1579
60°	1191	1439	1659
65°	1117	1484	1776
70°	999	1551	1932
75°	825	1659	1598
80°	673	1282	1294
85°	542	851	800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.1	3.0
10°-20°	280.2	8.7
20°-30°	428.2	13.2
30°-40°	523.7	16.2
40°-50°	560.4	17.3
50°-60°	536.6	16.6
60°-70°	453.9	14.0
70°-80°	287.7	8.9
80°-90°	66.2	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°	805.5	24.9
0°-40°	1329.2	41.1
0°-60°	2426.2	75.0
0°-90°	3234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3234.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1024	1019	1021	1019	1017	97
15°	991	989	994	994	994	280
25°	919	919	932	936	936	424
35°	817	822	839	850	857	511
45°	687	698	725	755	770	529
55°	531	548	601	652	673	474
65°	351	384	466	530	558	346
75°	159	224	319	317	307	173
85°	35	54	55	50	52	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1022.3	1022.3	1022.3	1022.3	1022.3
2.5°	1027.3	1022.3	1024.0	1022.3	1019.0
5°	1024.0	1019.0	1020.7	1019.0	1017.3
7.5°	1020.7	1015.6	1017.3	1015.6	1015.6
10°	1014.0	1009.0	1012.3	1010.6	1009.0
12.5°	1004.0	1000.6	1004.0	1002.3	1002.3
15°	990.6	988.9	993.9	993.9	993.9
17.5°	977.2	975.6	982.2	982.2	982.2
20°	960.5	958.9	968.9	968.9	968.9
22.5°	940.5	938.8	952.2	952.2	952.2
25°	918.8	918.8	932.1	935.5	935.5
27.5°	897.0	897.0	912.1	917.1	917.1
30°	873.7	873.7	888.7	895.4	898.7
32.5°	845.3	848.6	865.3	873.7	877.0
35°	816.9	821.9	838.6	850.3	857.0
37.5°	786.8	791.8	811.8	825.2	833.6
40°	755.1	761.7	783.5	800.2	810.2
42.5°	720.0	730.0	755.1	776.8	790.1
45°	686.6	698.3	725.0	755.1	770.1
47.5°	649.8	663.2	693.2	731.7	746.7
50°	611.4	624.8	661.5	704.9	721.6
52.5°	573.0	588.0	631.4	678.2	698.3
55°	531.2	547.9	601.4	651.5	673.2
57.5°	487.8	507.8	568.0	621.4	644.8
60°	442.7	467.7	534.6	591.3	616.4
62.5°	395.9	426.0	501.1	561.3	588.0
65°	350.8	384.2	466.1	529.5	557.9
67.5°	302.4	344.1	431.0	499.5	526.2
70°	253.9	302.4	394.2	464.4	491.1
72.5°	205.5	263.9	357.5	421.0	421.0
75°	158.7	223.8	319.1	317.4	307.4
77.5°	120.3	187.1	262.3	223.8	225.5
80°	86.9	150.3	165.4	165.4	167.0
82.5°	58.5	115.3	106.9	105.2	108.6
85°	35.1	53.5	55.1	50.1	51.8
87.5°	16.7	18.4	15.0	10.0	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)