

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: P263217

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263217  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2576.2 lumens  
Efficiency: N/A  
Efficacy: 63.4 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

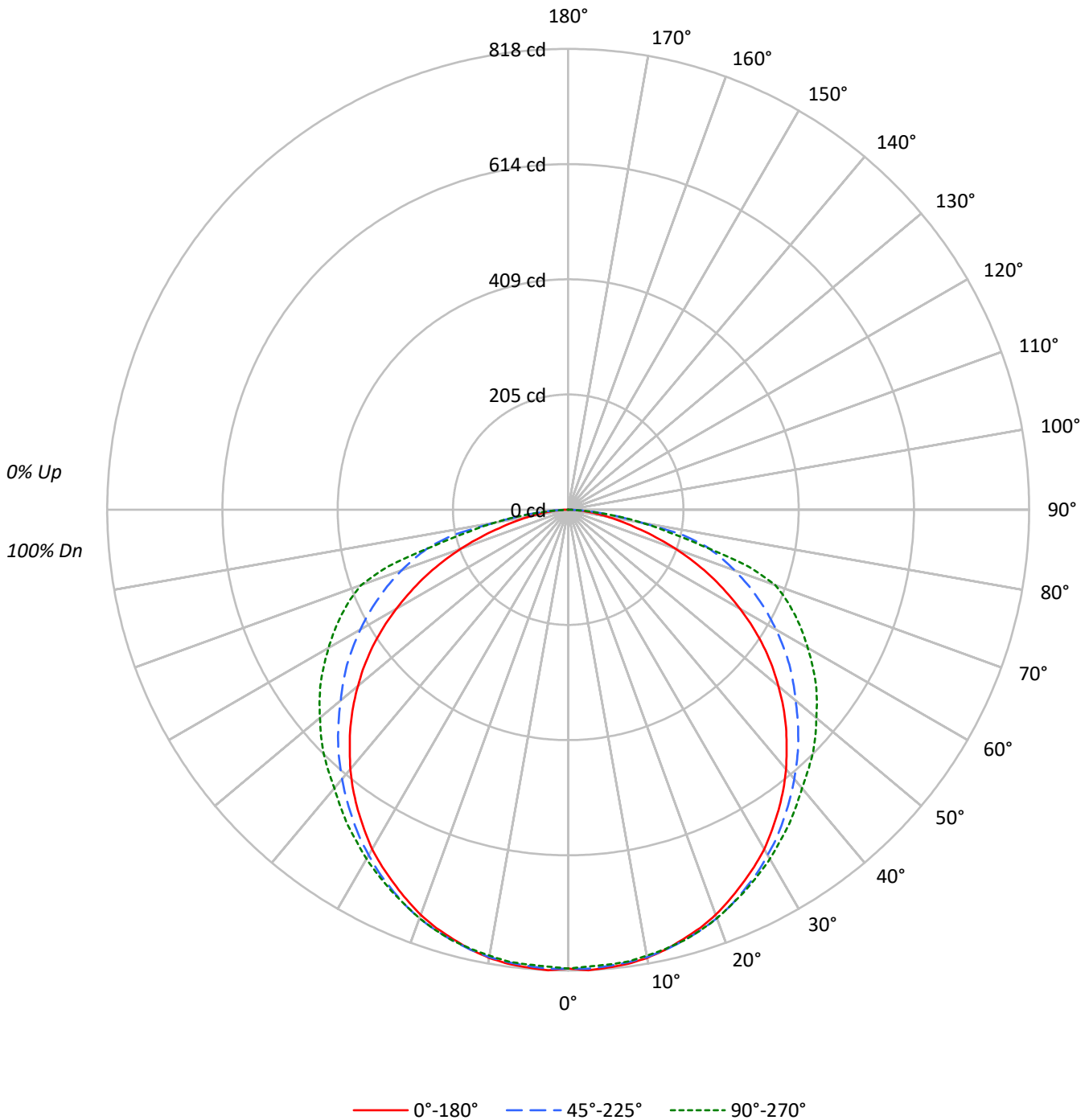
Input Watts (W): 40.624353  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1096	1096	1096
5°	1102	1098	1095
10°	1104	1102	1098
15°	1099	1103	1103
20°	1096	1105	1105
25°	1087	1102	1106
30°	1081	1100	1112
35°	1069	1097	1121
40°	1056	1096	1134
45°	1041	1099	1167
50°	1019	1103	1203
55°	993	1124	1258
60°	949	1146	1321
65°	890	1182	1415
70°	796	1235	1539
75°	657	1321	1273
80°	536	1020	1031
85°	431	678	638



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	3.0
10°-20°	223.2	8.7
20°-30°	341.1	13.2
30°-40°	417.2	16.2
40°-50°	446.4	17.3
50°-60°	427.5	16.6
60°-70°	361.6	14.0
70°-80°	229.2	8.9
80°-90°	52.7	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°	641.7	24.9
0°-40°	1058.8	41.1
0°-60°	1932.7	75.0
0°-90°	2576.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2576.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	816	812	813	812	810	78
15°	789	788	792	792	792	223
25°	732	732	742	745	745	338
35°	651	655	668	677	683	407
45°	547	556	578	602	614	421
55°	423	436	479	519	536	377
65°	279	306	371	422	444	275
75°	126	178	254	253	245	137
85°	28	43	44	40	41	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	814.4	814.4	814.4	814.4	814.4
2.5°	818.4	814.4	815.7	814.4	811.7
5°	815.7	811.7	813.1	811.7	810.4
7.5°	813.1	809.1	810.4	809.1	809.1
10°	807.7	803.7	806.4	805.1	803.7
12.5°	799.8	797.1	799.8	798.4	798.4
15°	789.1	787.8	791.8	791.8	791.8
17.5°	778.5	777.1	782.5	782.5	782.5
20°	765.2	763.8	771.8	771.8	771.8
22.5°	749.2	747.9	758.5	758.5	758.5
25°	731.9	731.9	742.5	745.2	745.2
27.5°	714.6	714.6	726.6	730.6	730.6
30°	696.0	696.0	707.9	713.3	715.9
32.5°	673.3	676.0	689.3	696.0	698.6
35°	650.7	654.7	668.0	677.3	682.6
37.5°	626.8	630.8	646.7	657.4	664.0
40°	601.5	606.8	624.1	637.4	645.4
42.5°	573.5	581.5	601.5	618.8	629.4
45°	546.9	556.2	577.5	601.5	613.5
47.5°	517.6	528.3	552.2	582.8	594.8
50°	487.0	497.7	527.0	561.6	574.9
52.5°	456.4	468.4	503.0	540.3	556.2
55°	423.2	436.5	479.1	519.0	536.3
57.5°	388.6	404.5	452.4	495.0	513.7
60°	352.6	372.6	425.8	471.1	491.0
62.5°	315.4	339.3	399.2	447.1	468.4
65°	279.4	306.1	371.3	421.8	444.5
67.5°	240.9	274.1	343.3	397.9	419.2
70°	202.3	240.9	314.0	369.9	391.2
72.5°	163.7	210.3	284.8	335.3	335.3
75°	126.4	178.3	254.2	252.8	244.8
77.5°	95.8	149.0	208.9	178.3	179.6
80°	69.2	119.8	131.7	131.7	133.1
82.5°	46.6	91.8	85.2	83.8	86.5
85°	27.9	42.6	43.9	39.9	41.3
87.5°	13.3	14.6	12.0	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)