

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: P276879

Luminaire Tested: **24CZ2-50-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276879  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-RDP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2921.5 lumens  
Efficiency: N/A  
Efficacy: 71.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

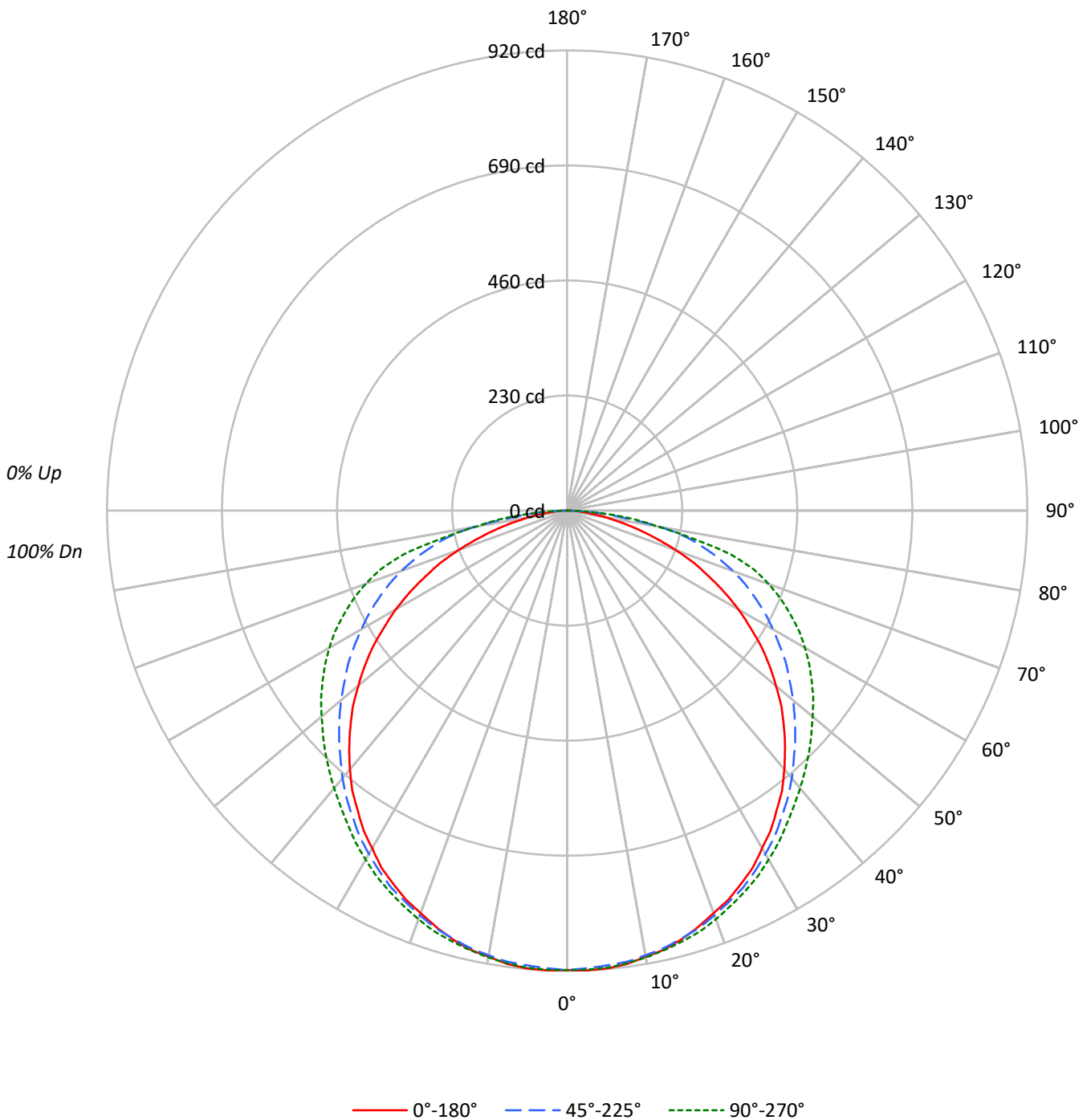
Input Watts (W): 40.743486  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1236	1236	1236
5°	1241	1233	1239
10°	1237	1233	1239
15°	1235	1233	1241
20°	1226	1233	1245
25°	1222	1235	1248
30°	1211	1232	1252
35°	1200	1228	1257
40°	1186	1227	1273
45°	1166	1227	1302
50°	1141	1235	1341
55°	1112	1254	1400
60°	1065	1279	1478
65°	996	1324	1569
70°	906	1385	1687
75°	768	1461	1763
80°	607	1471	1426
85°	448	1119	1254



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	3.0
10°-20°	250.8	8.6
20°-30°	383.6	13.1
30°-40°	468.9	16.0
40°-50°	499.7	17.1
50°-60°	477.8	16.4
60°-70°	404.8	13.9
70°-80°	272.0	9.3
80°-90°	76.7	2.6
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°	721.5	24.7
0°-40°	1190.4	40.7
0°-60°	2168.0	74.2
0°-90°	2921.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2921.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	919	917	913	917	917	87
15°	887	887	885	893	891	250
25°	823	826	832	839	840	379
35°	730	736	748	762	765	458
45°	613	623	645	672	684	473
55°	474	491	535	577	597	422
65°	313	345	416	471	493	311
75°	148	201	281	329	339	158
85°	29	59	72	78	81	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	918.7	918.7	918.7	918.7	918.7
2.5°	920.2	920.2	915.8	918.7	918.7
5°	918.7	917.3	912.9	917.3	917.3
7.5°	914.4	912.9	910.0	914.4	912.9
10°	905.7	905.7	902.8	907.1	907.1
12.5°	898.5	897.0	895.6	901.3	899.9
15°	886.9	886.9	885.4	892.7	891.2
17.5°	872.4	873.8	875.3	881.1	882.5
20°	856.4	859.3	860.8	869.5	869.5
22.5°	841.9	843.4	846.3	855.0	855.0
25°	823.1	826.0	831.8	839.0	840.5
27.5°	804.3	805.7	813.0	823.1	824.5
30°	779.6	784.0	792.7	804.3	805.7
32.5°	757.9	762.2	772.4	784.0	786.9
35°	730.4	736.1	747.7	762.2	765.1
37.5°	705.7	710.1	724.6	740.5	744.8
40°	675.3	684.0	698.5	717.3	724.6
42.5°	644.9	653.6	670.9	695.6	704.3
45°	613.0	623.1	644.9	672.4	684.0
47.5°	581.1	592.7	617.3	649.2	662.2
50°	544.9	559.4	589.8	626.0	640.5
52.5°	510.1	527.5	560.8	601.4	620.2
55°	473.9	491.2	534.7	576.7	597.0
57.5°	433.3	456.5	504.3	552.1	573.8
60°	395.6	417.3	475.3	527.5	549.2
62.5°	355.0	384.0	446.3	501.4	523.1
65°	313.0	344.9	415.9	471.0	492.7
67.5°	275.3	310.1	385.5	440.5	462.3
70°	230.4	273.9	352.1	407.2	428.9
72.5°	188.4	236.2	317.4	371.0	391.3
75°	147.8	201.4	281.1	328.9	339.1
77.5°	110.1	166.6	243.5	263.7	256.5
80°	78.3	133.3	189.8	179.7	184.0
82.5°	50.7	101.4	117.4	133.3	137.7
85°	29.0	59.4	72.5	78.3	81.2
87.5°	13.0	21.7	29.0	29.0	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)