

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: P277010

Luminaire Tested: **24CZ2-50-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277010  
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-L82765-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3108.1 lumens  
Efficiency: N/A  
Efficacy: 77.9 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

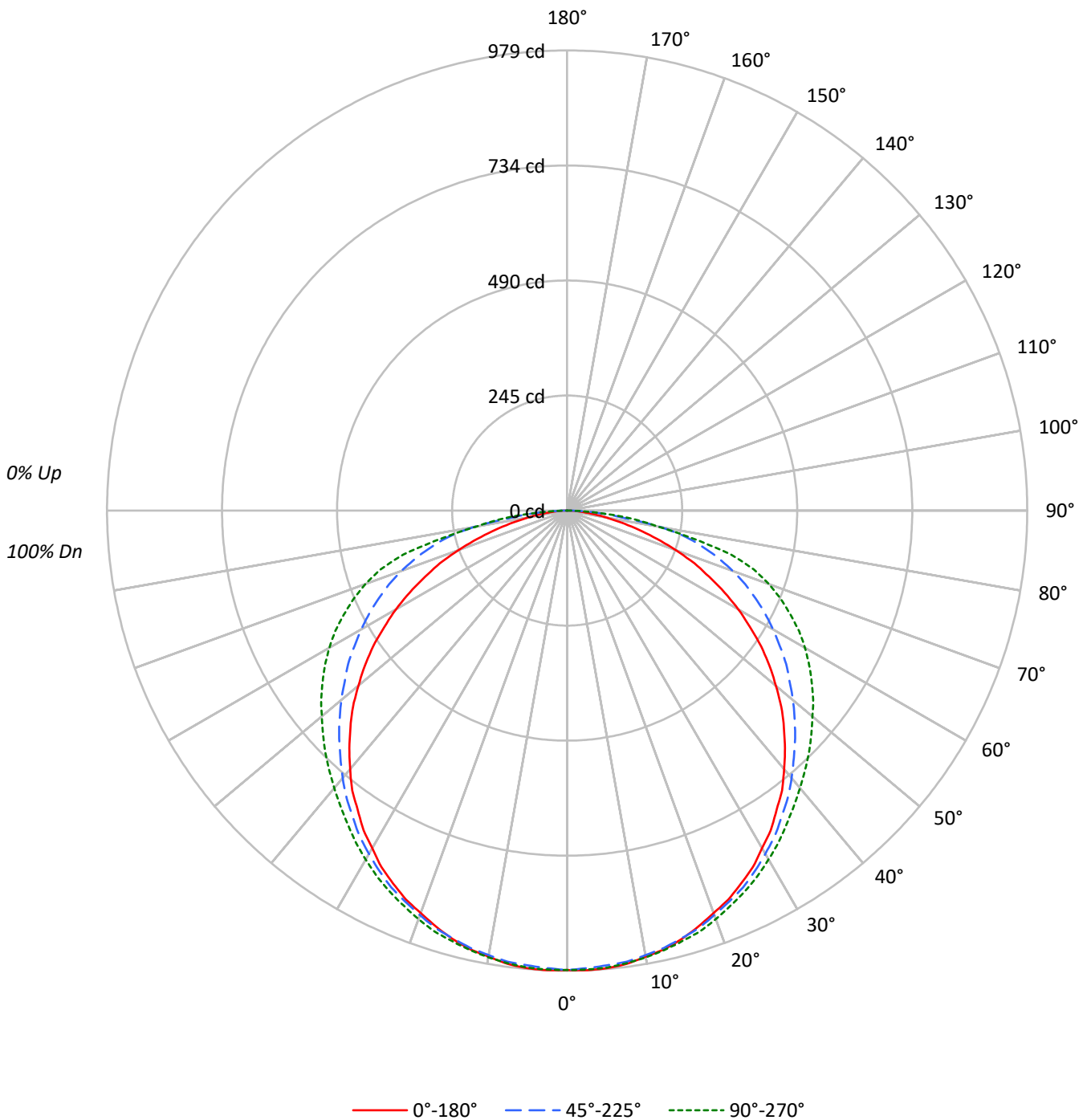
Input Watts (W): 39.897  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1315	1315	1315
5°	1320	1312	1318
10°	1316	1312	1319
15°	1314	1312	1321
20°	1305	1311	1324
25°	1300	1314	1327
30°	1289	1310	1332
35°	1276	1307	1337
40°	1262	1305	1354
45°	1241	1305	1385
50°	1213	1313	1426
55°	1183	1335	1490
60°	1133	1361	1572
65°	1060	1408	1669
70°	964	1474	1795
75°	817	1555	1875
80°	645	1565	1517
85°	475	1190	1332



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.7	3.0
10°-20°	266.8	8.6
20°-30°	408.0	13.1
30°-40°	498.8	16.0
40°-50°	531.6	17.1
50°-60°	508.3	16.4
60°-70°	430.6	13.9
70°-80°	289.4	9.3
80°-90°	81.6	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°	767.6	24.7
0°-40°	1266.4	40.7
0°-60°	2306.4	74.2
0°-90°	3108.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3108.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	977	976	971	976	976	93
15°	944	944	942	950	948	266
25°	876	879	885	893	894	404
35°	777	783	796	811	814	487
45°	652	663	686	715	728	503
55°	504	523	569	614	635	449
65°	333	367	442	501	524	331
75°	157	214	299	350	361	168
85°	31	63	77	83	86	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	977.4	977.4	977.4	977.4	977.4
2.5°	978.9	978.9	974.3	977.4	977.4
5°	977.4	975.9	971.2	975.9	975.9
7.5°	972.8	971.2	968.1	972.8	971.2
10°	963.5	963.5	960.4	965.1	965.1
12.5°	955.8	954.3	952.7	958.9	957.4
15°	943.5	943.5	941.9	949.6	948.1
17.5°	928.1	929.6	931.1	937.3	938.9
20°	911.1	914.2	915.7	925.0	925.0
22.5°	895.7	897.2	900.3	909.6	909.6
25°	875.6	878.7	884.9	892.6	894.1
27.5°	855.6	857.1	864.9	875.6	877.2
30°	829.4	834.0	843.3	855.6	857.1
32.5°	806.3	810.9	821.7	834.0	837.1
35°	777.0	783.1	795.5	810.9	814.0
37.5°	750.8	755.4	770.8	787.8	792.4
40°	718.4	727.7	743.1	763.1	770.8
42.5°	686.0	695.3	713.8	740.0	749.2
45°	652.1	662.9	686.0	715.3	727.7
47.5°	618.2	630.5	656.7	690.7	704.5
50°	579.7	595.1	627.4	666.0	681.4
52.5°	542.7	561.2	596.6	639.8	659.8
55°	504.1	522.6	568.9	613.6	635.2
57.5°	460.9	485.6	536.5	587.4	610.5
60°	420.9	444.0	505.7	561.2	584.3
62.5°	377.7	408.5	474.8	533.4	556.5
65°	333.0	366.9	442.4	501.0	524.2
67.5°	292.9	329.9	410.1	468.7	491.8
70°	245.1	291.4	374.6	433.2	456.3
72.5°	200.4	251.3	337.6	394.7	416.2
75°	157.2	214.3	299.1	350.0	360.7
77.5°	117.2	177.3	259.0	280.6	272.9
80°	83.2	141.8	202.0	191.2	195.8
82.5°	54.0	107.9	124.9	141.8	146.5
85°	30.8	63.2	77.1	83.2	86.3
87.5°	13.9	23.1	30.8	30.8	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)