

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: P276880

Luminaire Tested: **24CZ2-50-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276880  
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-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2972.4 lumens  
Efficiency: N/A  
Efficacy: 71.8 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

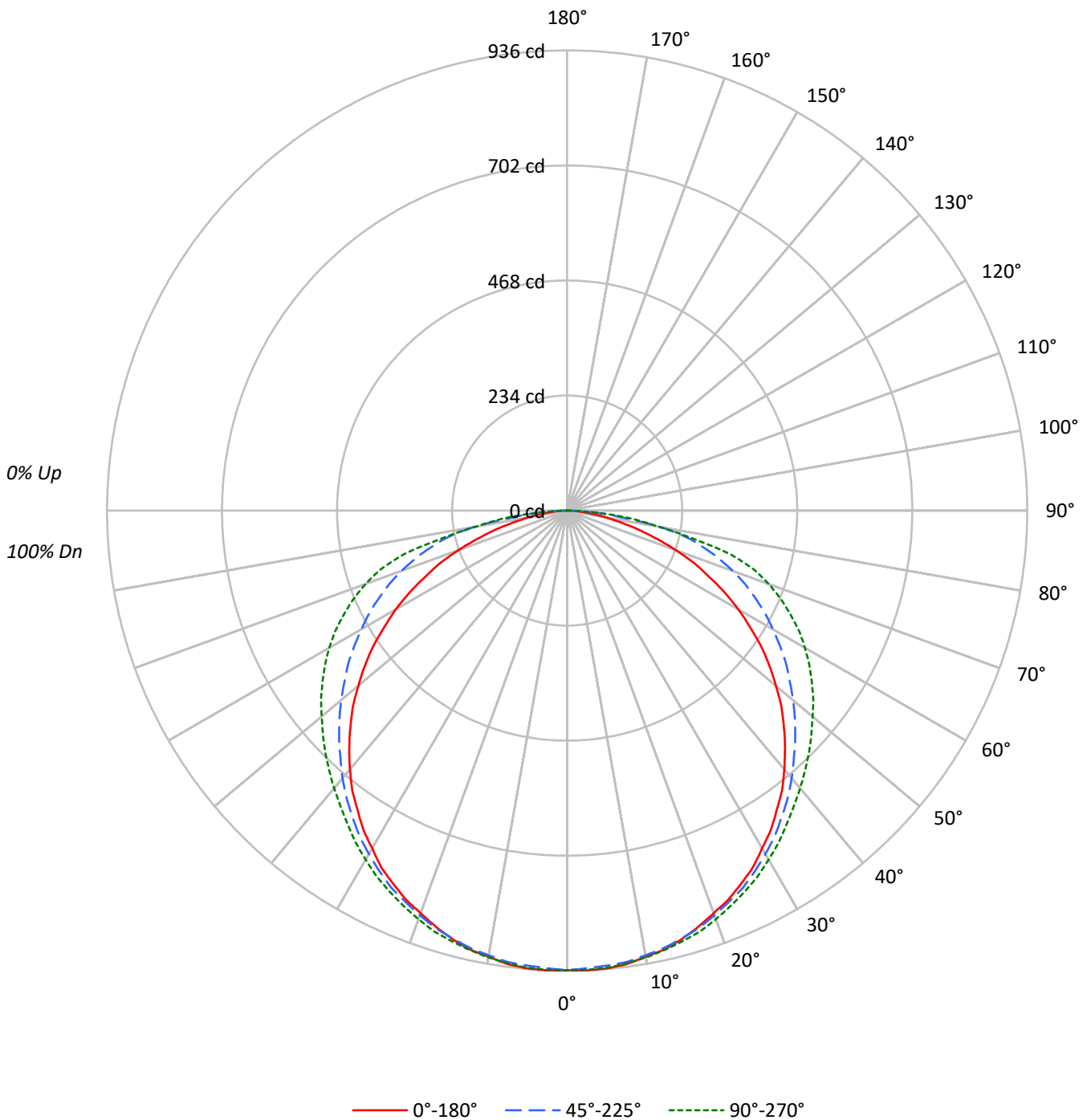
Input Watts (W): 41.378862  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	68	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°	1258	1258	1258
5°	1263	1255	1261
10°	1259	1255	1261
15°	1257	1255	1263
20°	1248	1254	1267
25°	1243	1256	1269
30°	1232	1253	1274
35°	1221	1250	1279
40°	1207	1248	1295
45°	1187	1248	1324
50°	1160	1256	1364
55°	1131	1276	1425
60°	1083	1301	1504
65°	1014	1347	1596
70°	922	1410	1717
75°	782	1487	1794
80°	617	1496	1450
85°	455	1138	1275



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.7	3.0
10°-20°	255.2	8.6
20°-30°	390.2	13.1
30°-40°	477.1	16.0
40°-50°	508.4	17.1
50°-60°	486.1	16.4
60°-70°	411.8	13.9
70°-80°	276.8	9.3
80°-90°	78.1	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°	734.1	24.7
0°-40°	1211.2	40.7
0°-60°	2205.8	74.2
0°-90°	2972.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2972.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	935	933	929	933	933	89
15°	902	902	901	908	907	254
25°	837	840	846	854	855	386
35°	743	749	761	776	778	466
45°	624	634	656	684	696	481
55°	482	500	544	587	607	429
65°	318	351	423	479	501	316
75°	150	205	286	335	345	161
85°	30	60	74	80	83	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	934.8	934.8	934.8	934.8	934.8
2.5°	936.2	936.2	931.8	934.8	934.8
5°	934.8	933.3	928.9	933.3	933.3
7.5°	930.3	928.9	925.9	930.3	928.9
10°	921.5	921.5	918.5	923.0	923.0
12.5°	914.1	912.6	911.2	917.1	915.6
15°	902.3	902.3	900.8	908.2	906.7
17.5°	887.6	889.0	890.5	896.4	897.9
20°	871.4	874.3	875.8	884.6	884.6
22.5°	856.6	858.1	861.0	869.9	869.9
25°	837.4	840.4	846.3	853.7	855.1
27.5°	818.3	819.7	827.1	837.4	838.9
30°	793.2	797.6	806.5	818.3	819.7
32.5°	771.1	775.5	785.8	797.6	800.6
35°	743.1	749.0	760.8	775.5	778.5
37.5°	718.0	722.4	737.2	753.4	757.8
40°	687.1	695.9	710.6	729.8	737.2
42.5°	656.1	664.9	682.6	707.7	716.5
45°	623.7	634.0	656.1	684.1	695.9
47.5°	591.2	603.0	628.1	660.5	673.8
50°	554.4	569.1	600.1	636.9	651.7
52.5°	519.0	536.7	570.6	611.9	631.0
55°	482.1	499.8	544.0	586.8	607.4
57.5°	440.8	464.4	513.1	561.7	583.9
60°	402.5	424.6	483.6	536.7	558.8
62.5°	361.2	390.7	454.1	510.1	532.2
65°	318.5	350.9	423.1	479.2	501.3
67.5°	280.1	315.5	392.2	448.2	470.3
70°	234.4	278.7	358.3	414.3	436.4
72.5°	191.7	240.3	322.9	377.4	398.1
75°	150.4	204.9	286.0	334.7	345.0
77.5°	112.1	169.6	247.7	268.3	261.0
80°	79.6	135.6	193.1	182.8	187.2
82.5°	51.6	103.2	119.4	135.6	140.1
85°	29.5	60.4	73.7	79.6	82.6
87.5°	13.3	22.1	29.5	29.5	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)