

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: P276756

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276756  
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: 24CZ2-50HE-RDP-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3390.0 lumens  
Efficiency: N/A  
Efficacy: 90.5 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

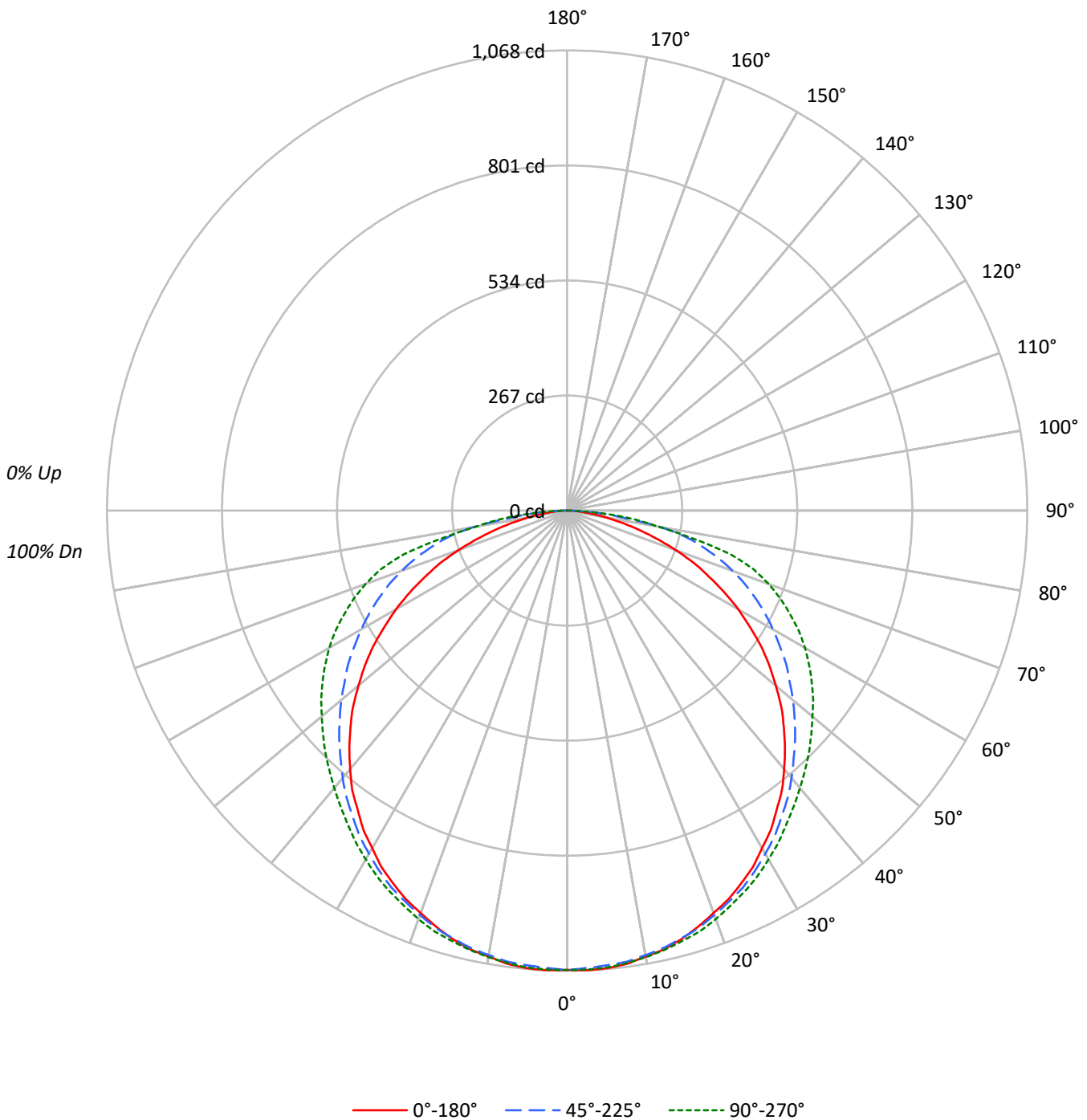
Input Watts (W): 37.461888  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1434	1434	1434
5°	1440	1431	1438
10°	1436	1431	1438
15°	1433	1431	1440
20°	1423	1430	1445
25°	1418	1433	1448
30°	1405	1429	1452
35°	1392	1425	1458
40°	1376	1424	1477
45°	1353	1424	1510
50°	1323	1433	1556
55°	1290	1456	1625
60°	1235	1484	1715
65°	1156	1536	1820
70°	1052	1607	1958
75°	892	1696	2046
80°	704	1707	1654
85°	519	1298	1454



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.1	3.0
10°-20°	291.0	8.6
20°-30°	445.1	13.1
30°-40°	544.1	16.0
40°-50°	579.9	17.1
50°-60°	554.4	16.4
60°-70°	469.7	13.9
70°-80°	315.7	9.3
80°-90°	89.0	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°	837.2	24.7
0°-40°	1381.3	40.7
0°-60°	2515.6	74.2
0°-90°	3390.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3390.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1066	1064	1059	1064	1064	101
15°	1029	1029	1027	1036	1034	290
25°	955	958	965	974	975	440
35°	848	854	868	884	888	531
45°	711	723	748	780	794	549
55°	550	570	620	669	693	490
65°	363	400	483	546	572	361
75°	172	234	326	382	394	184
85°	34	69	84	91	94	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1066.1	1066.1	1066.1	1066.1	1066.1
2.5°	1067.7	1067.7	1062.7	1066.1	1066.1
5°	1066.1	1064.4	1059.3	1064.4	1064.4
7.5°	1061.0	1059.3	1056.0	1061.0	1059.3
10°	1050.9	1050.9	1047.6	1052.6	1052.6
12.5°	1042.5	1040.8	1039.2	1045.9	1044.2
15°	1029.1	1029.1	1027.4	1035.8	1034.1
17.5°	1012.3	1013.9	1015.6	1022.3	1024.0
20°	993.8	997.1	998.8	1008.9	1008.9
22.5°	976.9	978.6	982.0	992.1	992.1
25°	955.1	958.4	965.2	973.6	975.3
27.5°	933.2	934.9	943.3	955.1	956.8
30°	904.6	909.7	919.8	933.2	934.9
32.5°	879.4	884.5	896.2	909.7	913.0
35°	847.5	854.2	867.6	884.5	887.8
37.5°	818.9	823.9	840.7	859.2	864.3
40°	783.6	793.7	810.5	832.3	840.7
42.5°	748.3	758.3	778.5	807.1	817.2
45°	711.3	723.0	748.3	780.2	793.7
47.5°	674.3	687.7	716.3	753.3	768.4
50°	632.2	649.1	684.4	726.4	743.2
52.5°	591.9	612.1	650.7	697.8	719.7
55°	549.8	570.0	620.5	669.2	692.8
57.5°	502.8	529.7	585.2	640.6	665.9
60°	459.0	484.3	551.5	612.1	637.3
62.5°	412.0	445.6	517.9	581.8	607.0
65°	363.2	400.2	482.6	546.5	571.7
67.5°	319.5	359.8	447.3	511.2	536.4
70°	267.4	317.8	408.6	472.5	497.7
72.5°	218.6	274.1	368.2	430.5	454.0
75°	171.5	233.7	326.2	381.7	393.5
77.5°	127.8	193.4	282.5	306.0	297.6
80°	90.8	154.7	220.3	208.5	213.5
82.5°	58.9	117.7	136.2	154.7	159.7
85°	33.6	68.9	84.1	90.8	94.2
87.5°	15.1	25.2	33.6	33.6	31.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)