

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: P277061

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277061  
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-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3034.9 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

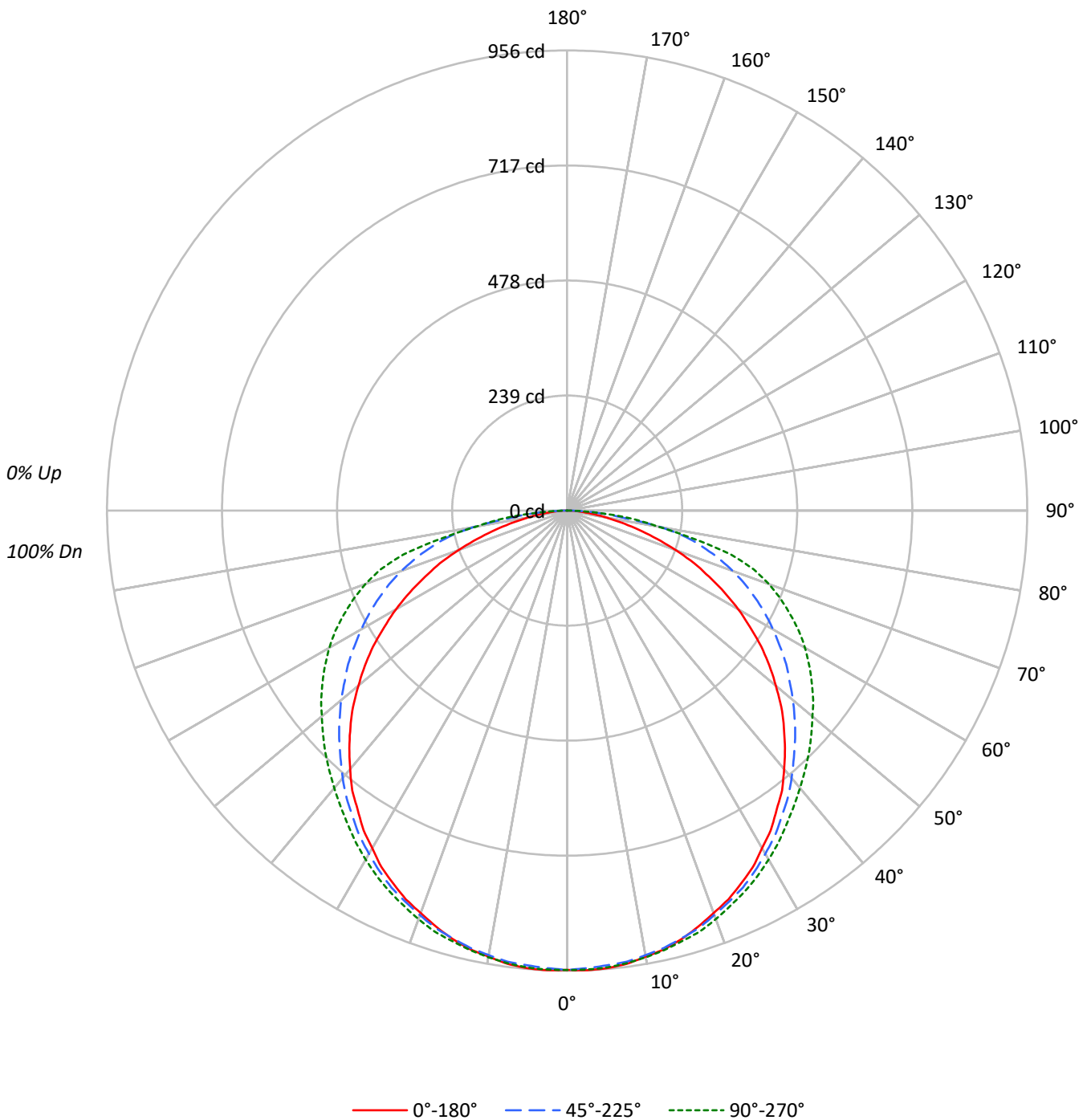
Input Watts (W): 37.386  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1284	1284	1284
5°	1289	1281	1287
10°	1285	1281	1287
15°	1283	1281	1290
20°	1274	1280	1293
25°	1269	1283	1296
30°	1258	1279	1300
35°	1246	1276	1305
40°	1232	1274	1322
45°	1212	1275	1352
50°	1185	1283	1393
55°	1155	1303	1455
60°	1106	1329	1535
65°	1035	1375	1629
70°	941	1439	1753
75°	798	1518	1831
80°	630	1528	1481
85°	465	1162	1301



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.5	3.0
10°-20°	260.6	8.6
20°-30°	398.4	13.1
30°-40°	487.1	16.0
40°-50°	519.1	17.1
50°-60°	496.4	16.4
60°-70°	420.5	13.9
70°-80°	282.6	9.3
80°-90°	79.7	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°	749.5	24.7
0°-40°	1236.6	40.7
0°-60°	2252.1	74.2
0°-90°	3034.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3034.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	954	953	948	953	953	91
15°	921	921	920	927	926	260
25°	855	858	864	872	873	394
35°	759	765	777	792	795	475
45°	637	647	670	698	710	491
55°	492	510	556	599	620	438
65°	325	358	432	489	512	323
75°	154	209	292	342	352	164
85°	30	62	75	81	84	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	954.4	954.4	954.4	954.4	954.4
2.5°	955.9	955.9	951.4	954.4	954.4
5°	954.4	952.9	948.4	952.9	952.9
7.5°	949.9	948.4	945.4	949.9	948.4
10°	940.8	940.8	937.8	942.3	942.3
12.5°	933.3	931.8	930.3	936.3	934.8
15°	921.3	921.3	919.8	927.3	925.8
17.5°	906.2	907.7	909.2	915.2	916.8
20°	889.7	892.7	894.2	903.2	903.2
22.5°	874.6	876.1	879.1	888.2	888.2
25°	855.0	858.0	864.1	871.6	873.1
27.5°	835.5	837.0	844.5	855.0	856.5
30°	809.9	814.4	823.4	835.5	837.0
32.5°	787.3	791.8	802.3	814.4	817.4
35°	758.7	764.7	776.8	791.8	794.8
37.5°	733.1	737.6	752.7	769.2	773.7
40°	701.5	710.5	725.6	745.1	752.7
42.5°	669.9	678.9	697.0	722.6	731.6
45°	636.8	647.3	669.9	698.5	710.5
47.5°	603.6	615.7	641.3	674.4	687.9
50°	566.0	581.1	612.7	650.3	665.4
52.5°	529.9	547.9	582.6	624.7	644.3
55°	492.2	510.3	555.5	599.1	620.2
57.5°	450.1	474.2	523.9	573.5	596.1
60°	411.0	433.5	493.8	547.9	570.5
62.5°	368.8	398.9	463.6	520.8	543.4
65°	325.2	358.3	432.0	489.2	511.8
67.5°	286.0	322.1	400.4	457.6	480.2
70°	239.3	284.5	365.8	423.0	445.6
72.5°	195.7	245.4	329.7	385.4	406.4
75°	153.5	209.2	292.0	341.7	352.2
77.5°	114.4	173.1	252.9	274.0	266.4
80°	81.3	138.5	197.2	186.7	191.2
82.5°	52.7	105.4	121.9	138.5	143.0
85°	30.1	61.7	75.3	81.3	84.3
87.5°	13.5	22.6	30.1	30.1	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)