

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: P276754

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276754  
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-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3358.0 lumens  
Efficiency: N/A  
Efficacy: 91.9 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

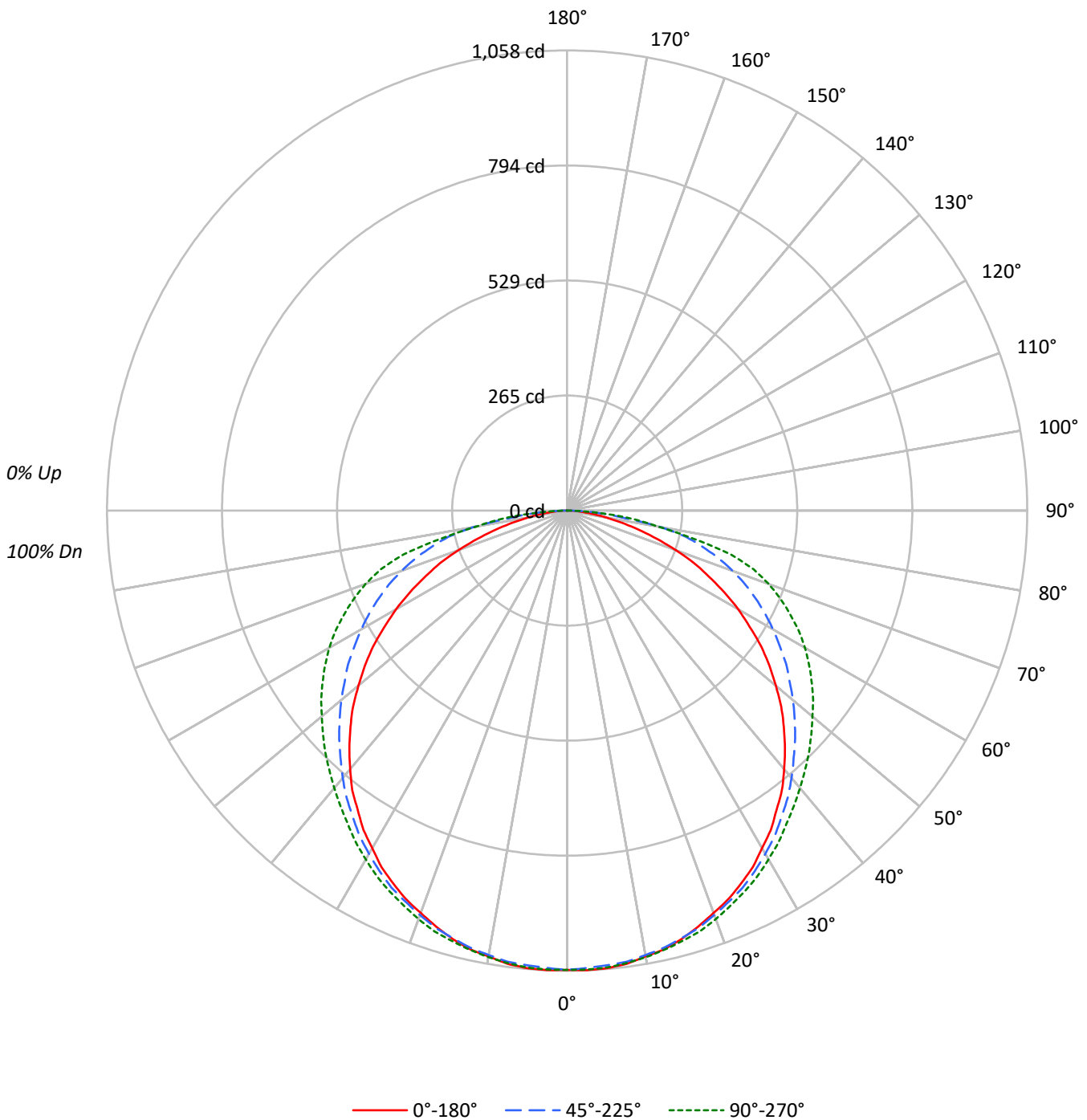
Input Watts (W): 36.533376  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24

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

	0°	45°	90°
0°	1421	1421	1421
5°	1426	1417	1424
10°	1422	1418	1425
15°	1420	1418	1427
20°	1410	1417	1431
25°	1405	1419	1434
30°	1392	1416	1439
35°	1379	1412	1444
40°	1363	1410	1463
45°	1341	1410	1496
50°	1311	1419	1541
55°	1278	1442	1610
60°	1224	1470	1699
65°	1145	1522	1803
70°	1042	1592	1939
75°	883	1680	2026
80°	697	1691	1639
85°	514	1286	1440



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	3.0
10°-20°	288.3	8.6
20°-30°	440.9	13.1
30°-40°	538.9	16.0
40°-50°	574.4	17.1
50°-60°	549.2	16.4
60°-70°	465.2	13.9
70°-80°	312.7	9.3
80°-90°	88.2	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°	829.3	24.7
0°-40°	1368.3	40.7
0°-60°	2491.9	74.2
0°-90°	3358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3358.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1056	1056	1056	1056	1056	
5°	1056	1054	1049	1054	1054	100
15°	1019	1019	1018	1026	1024	287
25°	946	949	956	964	966	436
35°	840	846	860	876	879	526
45°	705	716	741	773	786	543
55°	545	565	615	663	686	485
65°	360	396	478	541	566	357
75°	170	232	323	378	390	182
85°	33	68	83	90	93	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1056.0	1056.0	1056.0	1056.0	1056.0
2.5°	1057.7	1057.7	1052.7	1056.0	1056.0
5°	1056.0	1054.3	1049.3	1054.3	1054.3
7.5°	1051.0	1049.3	1046.0	1051.0	1049.3
10°	1041.0	1041.0	1037.7	1042.7	1042.7
12.5°	1032.7	1031.0	1029.3	1036.0	1034.3
15°	1019.4	1019.4	1017.7	1026.0	1024.3
17.5°	1002.7	1004.4	1006.0	1012.7	1014.4
20°	984.4	987.7	989.4	999.4	999.4
22.5°	967.7	969.4	972.7	982.7	982.7
25°	946.1	949.4	956.1	964.4	966.1
27.5°	924.4	926.1	934.4	946.1	947.7
30°	896.1	901.1	911.1	924.4	926.1
32.5°	871.1	876.1	887.8	901.1	904.4
35°	839.5	846.1	859.5	876.1	879.4
37.5°	811.2	816.1	832.8	851.1	856.1
40°	776.2	786.2	802.8	824.5	832.8
42.5°	741.2	751.2	771.2	799.5	809.5
45°	704.6	716.2	741.2	772.8	786.2
47.5°	667.9	681.2	709.5	746.2	761.2
50°	626.3	642.9	677.9	719.5	736.2
52.5°	586.3	606.3	644.6	691.2	712.9
55°	544.7	564.6	614.6	662.9	686.2
57.5°	498.0	524.7	579.6	634.6	659.6
60°	454.7	479.7	546.3	606.3	631.3
62.5°	408.1	441.4	513.0	576.3	601.3
65°	359.8	396.4	478.0	541.3	566.3
67.5°	316.5	356.4	443.1	506.3	531.3
70°	264.8	314.8	404.7	468.0	493.0
72.5°	216.5	271.5	364.8	426.4	449.7
75°	169.9	231.5	323.1	378.1	389.8
77.5°	126.6	191.5	279.8	303.1	294.8
80°	89.9	153.2	218.2	206.5	211.5
82.5°	58.3	116.6	134.9	153.2	158.2
85°	33.3	68.3	83.3	89.9	93.3
87.5°	15.0	25.0	33.3	33.3	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)