

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: P272068

Luminaire Tested: **24CZ2-35-UNV-L950-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P272068  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35-UNV-L950-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3299.0 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

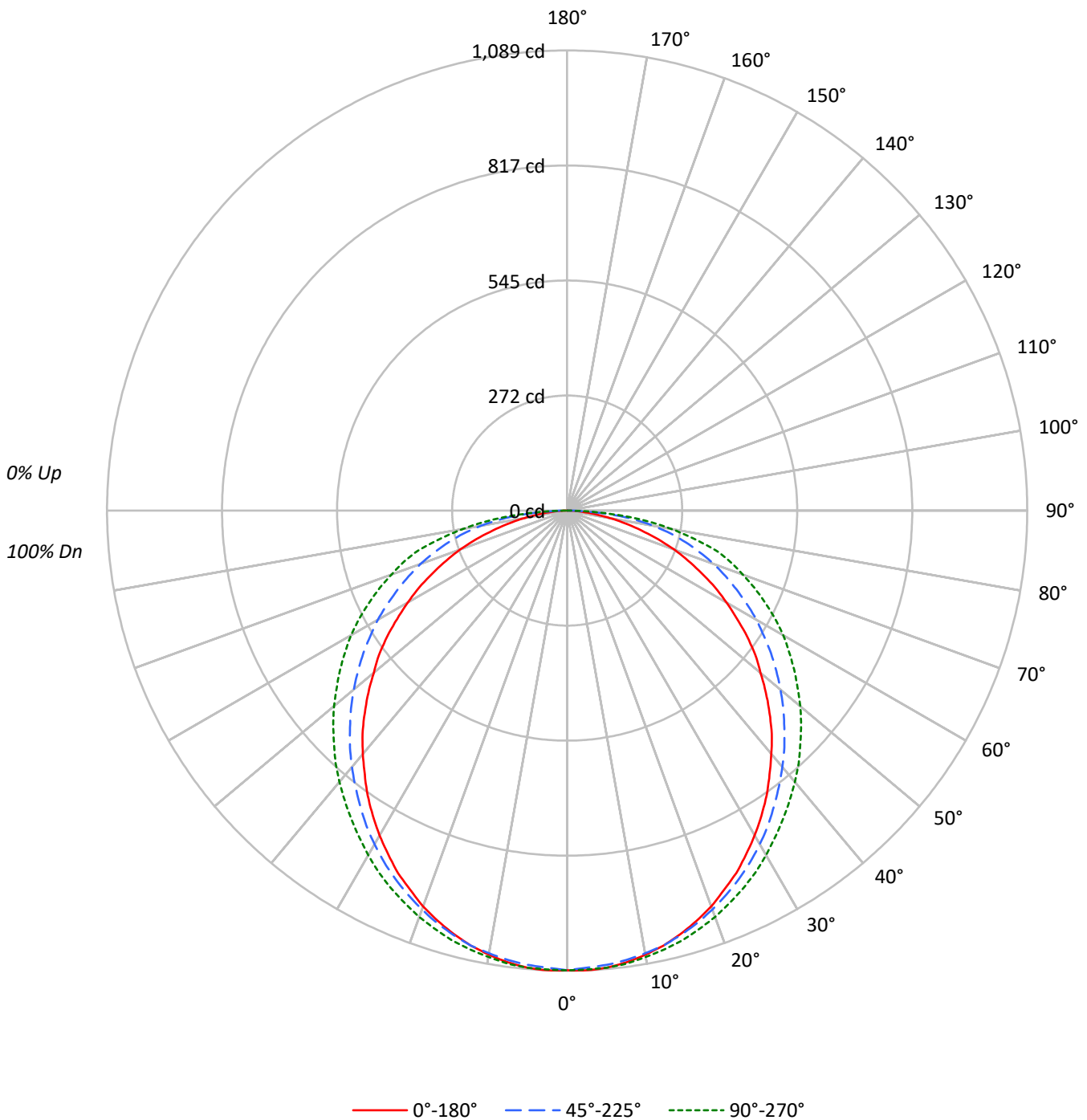
Input Watts (W): 30.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	89	92	89	87	88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	1464	1464	1464
5°	1467	1458	1467
10°	1458	1454	1466
15°	1445	1448	1467
20°	1428	1439	1465
25°	1406	1428	1464
30°	1379	1417	1462
35°	1352	1402	1464
40°	1321	1392	1473
45°	1289	1383	1485
50°	1251	1379	1508
55°	1220	1381	1538
60°	1172	1393	1591
65°	1119	1408	1648
70°	1059	1451	1740
75°	945	1513	1901
80°	806	1603	1943
85°	574	1589	1859



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.0	3.1
10°-20°	294.4	8.9
20°-30°	444.7	13.5
30°-40°	535.9	16.2
40°-50°	562.6	17.1
50°-60°	526.4	16.0
60°-70°	434.7	13.2
70°-80°	296.2	9.0
80°-90°	101.0	3.1
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°	842.1	25.5
0°-40°	1378.0	41.8
0°-60°	2467.1	74.8
0°-90°	3299.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3299.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1086	1085	1079	1086	1086	103
15°	1038	1039	1040	1051	1053	292
25°	947	951	962	981	986	436
35°	823	832	854	882	891	514
45°	678	692	727	766	780	523
55°	520	541	589	637	656	464
65°	351	381	442	498	518	349
75°	182	223	291	346	366	194
85°	37	73	103	116	120	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1088.0	1088.0	1088.0	1088.0	1088.0
2.5°	1089.1	1088.0	1082.5	1088.0	1086.9
5°	1085.8	1084.7	1079.2	1085.8	1085.8
7.5°	1078.1	1078.1	1072.7	1080.3	1081.4
10°	1067.2	1067.2	1063.9	1072.7	1072.7
12.5°	1054.1	1054.1	1054.1	1062.8	1063.9
15°	1037.6	1038.7	1039.8	1050.8	1053.0
17.5°	1017.9	1020.1	1023.4	1036.5	1038.7
20°	997.1	999.3	1004.8	1020.1	1023.4
22.5°	970.9	976.3	984.0	1001.5	1004.8
25°	946.8	951.2	962.1	980.7	986.2
27.5°	917.2	923.8	938.0	957.7	965.4
30°	887.7	894.2	911.8	934.7	941.3
32.5°	855.9	865.8	884.4	908.5	916.1
35°	823.1	831.9	853.7	882.2	891.0
37.5°	787.0	799.0	823.1	853.7	864.7
40°	752.0	765.1	792.5	825.3	838.4
42.5°	716.9	730.1	760.7	797.9	811.1
45°	677.5	691.8	726.8	766.2	780.4
47.5°	638.1	655.6	693.9	735.5	750.9
50°	597.6	617.3	658.9	702.7	720.2
52.5°	561.5	580.1	623.9	671.0	687.4
55°	519.9	540.7	588.9	637.0	655.6
57.5°	477.2	500.2	551.7	604.2	622.8
60°	435.6	460.8	517.7	570.3	591.1
62.5°	395.1	420.3	479.4	534.1	554.9
65°	351.4	380.9	442.2	498.0	517.7
67.5°	309.8	341.5	406.1	460.8	480.5
70°	269.3	299.9	368.9	422.5	442.2
72.5°	225.5	260.5	329.5	385.3	406.1
75°	181.7	223.3	291.1	345.9	365.6
77.5°	141.2	183.9	251.7	296.6	306.5
80°	104.0	147.8	206.9	238.6	250.7
82.5°	66.8	110.5	157.6	180.6	190.5
85°	37.2	73.3	102.9	116.0	120.4
87.5°	15.3	31.7	41.6	47.1	47.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)