

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: P272064

Luminaire Tested: **24CZ2-35HE-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: P272064  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35HE-UNV-L950-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3249.0 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

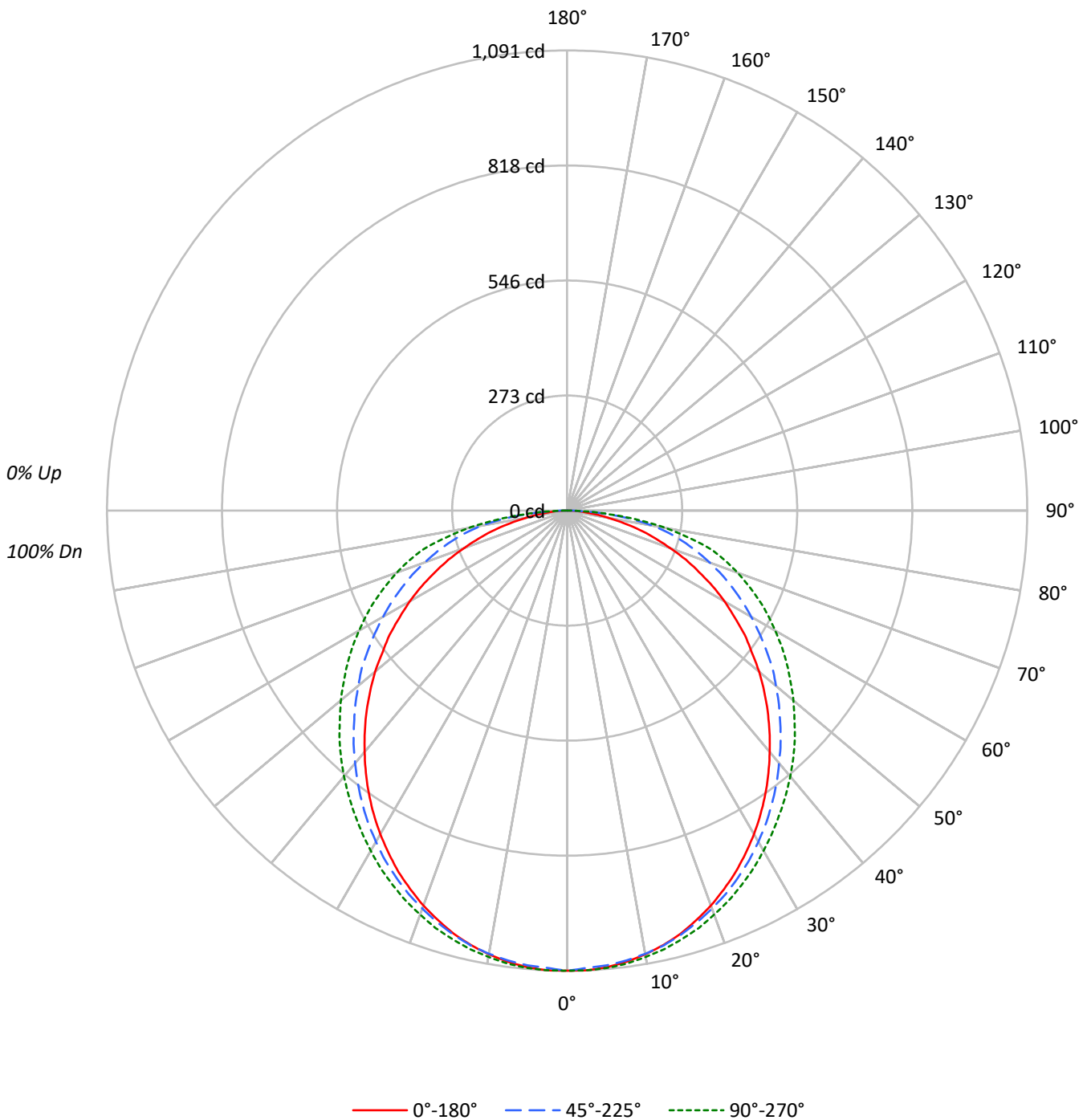
Input Watts (W): 26.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	1468	1468	1468
5°	1467	1462	1470
10°	1459	1458	1468
15°	1447	1450	1465
20°	1427	1438	1459
25°	1404	1425	1454
30°	1376	1408	1447
35°	1347	1391	1443
40°	1312	1373	1446
45°	1279	1360	1453
50°	1244	1353	1466
55°	1206	1351	1493
60°	1158	1357	1532
65°	1098	1377	1598
70°	1020	1412	1689
75°	930	1483	1832
80°	765	1596	1832
85°	587	1473	1573



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	3.2
10°-20°	294.5	9.1
20°-30°	443.2	13.6
30°-40°	531.2	16.3
40°-50°	553.5	17.0
50°-60°	515.0	15.9
60°-70°	424.2	13.1
70°-80°	288.9	8.9
80°-90°	95.4	2.9
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°	840.9	25.9
0°-40°	1372.1	42.2
0°-60°	2440.6	75.1
0°-90°	3249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1086	1086	1082	1088	1089	103
15°	1039	1040	1041	1051	1052	293
25°	946	950	960	976	979	435
35°	820	830	847	870	878	512
45°	672	686	715	750	763	519
55°	514	531	576	621	636	458
65°	345	374	433	484	502	342
75°	179	219	285	336	352	189
85°	38	74	95	102	102	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1090.8	1090.8	1085.4	1090.8	1090.8
5°	1086.5	1086.5	1082.2	1087.6	1088.7
7.5°	1078.9	1080.0	1075.7	1082.2	1083.3
10°	1068.1	1069.2	1067.0	1073.5	1074.6
12.5°	1055.1	1056.1	1056.1	1063.7	1064.8
15°	1038.8	1039.9	1041.0	1050.7	1051.8
17.5°	1018.2	1021.4	1023.6	1035.5	1037.7
20°	996.5	999.8	1004.1	1017.1	1019.3
22.5°	971.6	975.9	983.5	997.6	1000.8
25°	945.5	949.9	959.6	975.9	979.2
27.5°	916.3	922.8	934.7	952.0	956.4
30°	885.9	892.4	906.5	924.9	931.4
32.5°	853.4	862.0	878.3	898.9	905.4
35°	819.8	829.5	846.9	869.6	878.3
37.5°	784.0	794.8	815.4	840.4	851.2
40°	747.1	760.1	781.8	811.1	823.0
42.5°	710.2	722.2	749.3	780.7	793.7
45°	672.3	686.4	714.6	750.4	763.4
47.5°	633.3	647.3	681.0	718.9	730.8
50°	594.2	608.3	646.3	686.4	700.5
52.5°	551.9	570.4	613.7	653.9	667.9
55°	514.0	531.3	575.8	621.3	636.5
57.5°	470.6	491.2	540.0	587.7	604.0
60°	430.5	452.2	504.2	553.0	569.3
62.5°	389.3	413.1	468.4	518.3	536.7
65°	344.8	374.1	432.6	483.6	502.0
67.5°	304.7	335.1	396.9	448.9	465.2
70°	259.2	296.0	358.9	411.0	429.4
72.5°	220.1	257.0	323.1	374.1	392.5
75°	178.9	219.0	285.2	336.1	352.4
77.5°	137.7	182.2	248.3	287.3	292.8
80°	98.7	145.3	206.0	228.8	236.4
82.5°	69.4	111.7	151.8	167.0	171.3
85°	38.0	73.7	95.4	101.9	101.9
87.5°	16.3	31.4	38.0	39.0	40.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)