

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: P274836

Luminaire Tested: **24CZ2-65-RDP-UNV-L935-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: P274836  
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: 24CZ2-65-RDP-UNV-L935-CD1-U  
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (112) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3737.0 lumens  
Efficiency: N/A  
Efficacy: 59.5 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

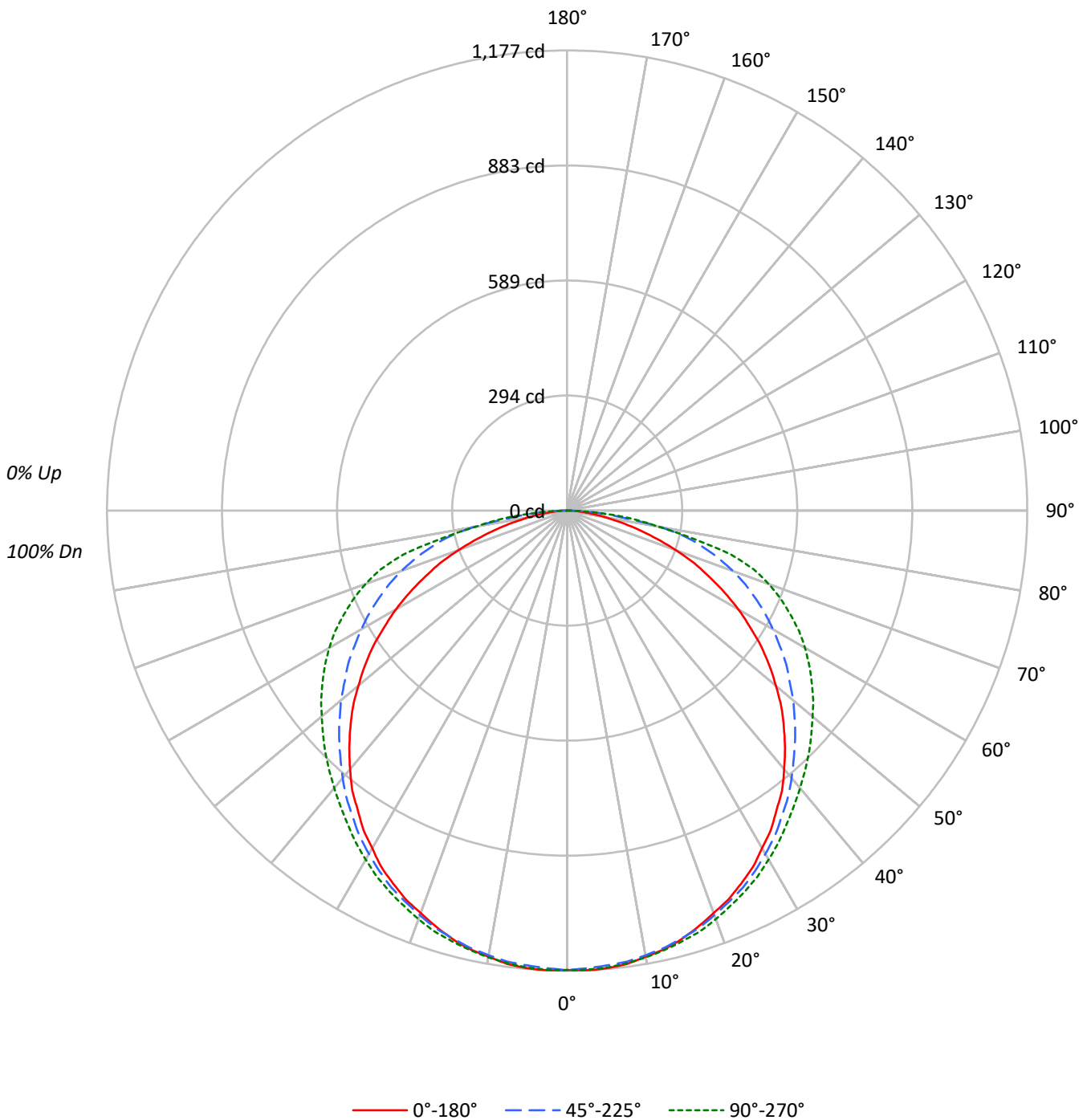
Input Watts (W): 62.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1581	1581	1581
5°	1587	1577	1585
10°	1583	1578	1585
15°	1580	1578	1588
20°	1569	1576	1592
25°	1563	1580	1596
30°	1549	1575	1601
35°	1534	1571	1608
40°	1517	1569	1628
45°	1492	1570	1665
50°	1459	1579	1715
55°	1422	1605	1791
60°	1362	1636	1890
65°	1275	1694	2006
70°	1159	1772	2159
75°	983	1869	2255
80°	776	1881	1824
85°	573	1431	1602



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.5	3.0
10°-20°	320.8	8.6
20°-30°	490.6	13.1
30°-40°	599.8	16.0
40°-50°	639.2	17.1
50°-60°	611.2	16.4
60°-70°	517.8	13.9
70°-80°	348.0	9.3
80°-90°	98.2	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°	922.9	24.7
0°-40°	1522.7	40.7
0°-60°	2773.1	74.2
0°-90°	3737.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3737.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1175	1175	1175	1175	1175	
5°	1175	1173	1168	1173	1173	112
15°	1134	1134	1132	1142	1140	320
25°	1053	1056	1064	1073	1075	485
35°	934	942	956	975	979	585
45°	784	797	825	860	875	605
55°	606	628	684	738	764	540
65°	400	441	532	602	630	397
75°	189	258	360	421	434	202
85°	37	76	93	100	104	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1175.2	1175.2	1175.2	1175.2	1175.2
2.5°	1177.0	1177.0	1171.5	1175.2	1175.2
5°	1175.2	1173.3	1167.8	1173.3	1173.3
7.5°	1169.6	1167.8	1164.1	1169.6	1167.8
10°	1158.5	1158.5	1154.8	1160.4	1160.4
12.5°	1149.2	1147.4	1145.5	1152.9	1151.1
15°	1134.4	1134.4	1132.5	1141.8	1140.0
17.5°	1115.9	1117.7	1119.6	1127.0	1128.8
20°	1095.5	1099.2	1101.0	1112.2	1112.2
22.5°	1076.9	1078.8	1082.5	1093.6	1093.6
25°	1052.8	1056.5	1064.0	1073.2	1075.1
27.5°	1028.7	1030.6	1039.9	1052.8	1054.7
30°	997.2	1002.8	1013.9	1028.7	1030.6
32.5°	969.4	975.0	988.0	1002.8	1006.5
35°	934.2	941.6	956.5	975.0	978.7
37.5°	902.7	908.3	926.8	947.2	952.7
40°	863.8	874.9	893.4	917.5	926.8
42.5°	824.9	836.0	858.2	889.7	900.8
45°	784.1	797.0	824.9	860.1	874.9
47.5°	743.3	758.1	789.6	830.4	847.1
50°	697.0	715.5	754.4	800.8	819.3
52.5°	652.5	674.7	717.3	769.2	793.3
55°	606.1	628.4	684.0	737.7	763.7
57.5°	554.2	583.9	645.1	706.2	734.0
60°	506.0	533.8	608.0	674.7	702.5
62.5°	454.1	491.2	570.9	641.3	669.1
65°	400.4	441.2	532.0	602.4	630.2
67.5°	352.2	396.7	493.1	563.5	591.3
70°	294.7	350.3	450.4	520.9	548.7
72.5°	241.0	302.1	405.9	474.5	500.5
75°	189.1	257.6	359.6	420.8	433.7
77.5°	140.9	213.2	311.4	337.4	328.1
80°	100.1	170.5	242.8	229.8	235.4
82.5°	64.9	129.8	150.1	170.5	176.1
85°	37.1	76.0	92.7	100.1	103.8
87.5°	16.7	27.8	37.1	37.1	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)