

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: P272058

Luminaire Tested: **24CZ2-30-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: P272058  
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: 24CZ2-30-UNV-L935-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2563.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 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

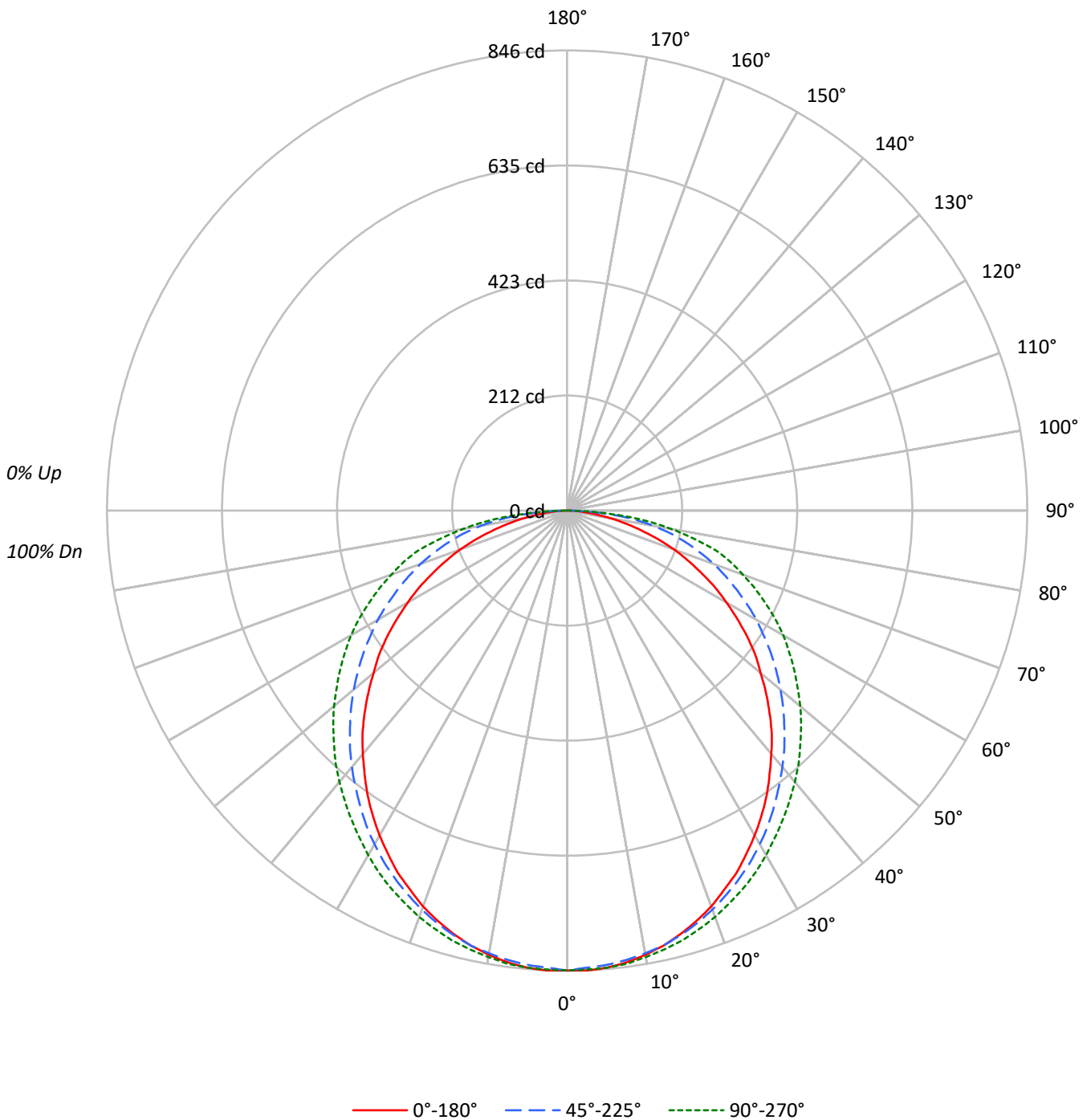
Input Watts (W): 24.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1137	1137	1137
5°	1139	1133	1139
10°	1133	1129	1139
15°	1123	1125	1139
20°	1109	1118	1138
25°	1092	1110	1137
30°	1071	1100	1136
35°	1050	1089	1137
40°	1026	1081	1144
45°	1002	1074	1154
50°	972	1072	1171
55°	947	1073	1195
60°	911	1082	1236
65°	869	1094	1280
70°	823	1127	1351
75°	734	1176	1476
80°	626	1245	1509
85°	446	1233	1443



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.0	3.1
10°-20°	228.7	8.9
20°-30°	345.5	13.5
30°-40°	416.4	16.2
40°-50°	437.1	17.1
50°-60°	409.0	16.0
60°-70°	337.7	13.2
70°-80°	230.1	9.0
80°-90°	78.5	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°	654.2	25.5
0°-40°	1070.6	41.8
0°-60°	1916.7	74.8
0°-90°	2563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2563.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	844	843	838	844	844	80
15°	806	807	808	816	818	227
25°	736	739	748	762	766	338
35°	640	646	663	685	692	400
45°	526	537	565	595	606	406
55°	404	420	458	495	509	361
65°	273	296	344	387	402	271
75°	141	174	226	269	284	151
85°	29	57	80	90	94	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	845.3	845.3	845.3	845.3	845.3
2.5°	846.1	845.3	841.0	845.3	844.4
5°	843.6	842.7	838.5	843.6	843.6
7.5°	837.6	837.6	833.4	839.3	840.2
10°	829.1	829.1	826.5	833.4	833.4
12.5°	818.9	818.9	818.9	825.7	826.5
15°	806.1	807.0	807.8	816.3	818.0
17.5°	790.8	792.5	795.1	805.3	807.0
20°	774.7	776.4	780.6	792.5	795.1
22.5°	754.3	758.5	764.5	778.1	780.6
25°	735.6	739.0	747.5	761.9	766.2
27.5°	712.6	717.7	728.8	744.1	750.0
30°	689.6	694.7	708.3	726.2	731.3
32.5°	665.0	672.6	687.1	705.8	711.7
35°	639.5	646.3	663.3	685.4	692.2
37.5°	611.4	620.8	639.5	663.3	671.8
40°	584.2	594.4	615.7	641.2	651.4
42.5°	557.0	567.2	591.0	619.9	630.1
45°	526.4	537.4	564.6	595.3	606.3
47.5°	495.8	509.4	539.1	571.4	583.3
50°	464.3	479.6	511.9	545.9	559.5
52.5°	436.2	450.7	484.7	521.3	534.0
55°	403.9	420.1	457.5	494.9	509.4
57.5°	370.8	388.6	428.6	469.4	483.9
60°	338.4	358.0	402.2	443.0	459.2
62.5°	307.0	326.5	372.5	415.0	431.1
65°	273.0	295.9	343.5	386.9	402.2
67.5°	240.7	265.3	315.5	358.0	373.3
70°	209.2	233.0	286.6	328.2	343.5
72.5°	175.2	202.4	256.0	299.3	315.5
75°	141.2	173.5	226.2	268.7	284.0
77.5°	109.7	142.9	195.6	230.4	238.1
80°	80.8	114.8	160.7	185.4	194.7
82.5°	51.9	85.9	122.5	140.3	148.0
85°	28.9	57.0	79.9	90.1	93.5
87.5°	11.9	24.7	32.3	36.6	36.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)