

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: P232314

Luminaire Tested: **24RDIA-30-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232314  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-078-8-R2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RDIA-30-UNV-L840-CD1-U  
Description: METALUX 2X4 OVATION LED TROFFER  
AIR VENTED VERSION  
Light Source: (392) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

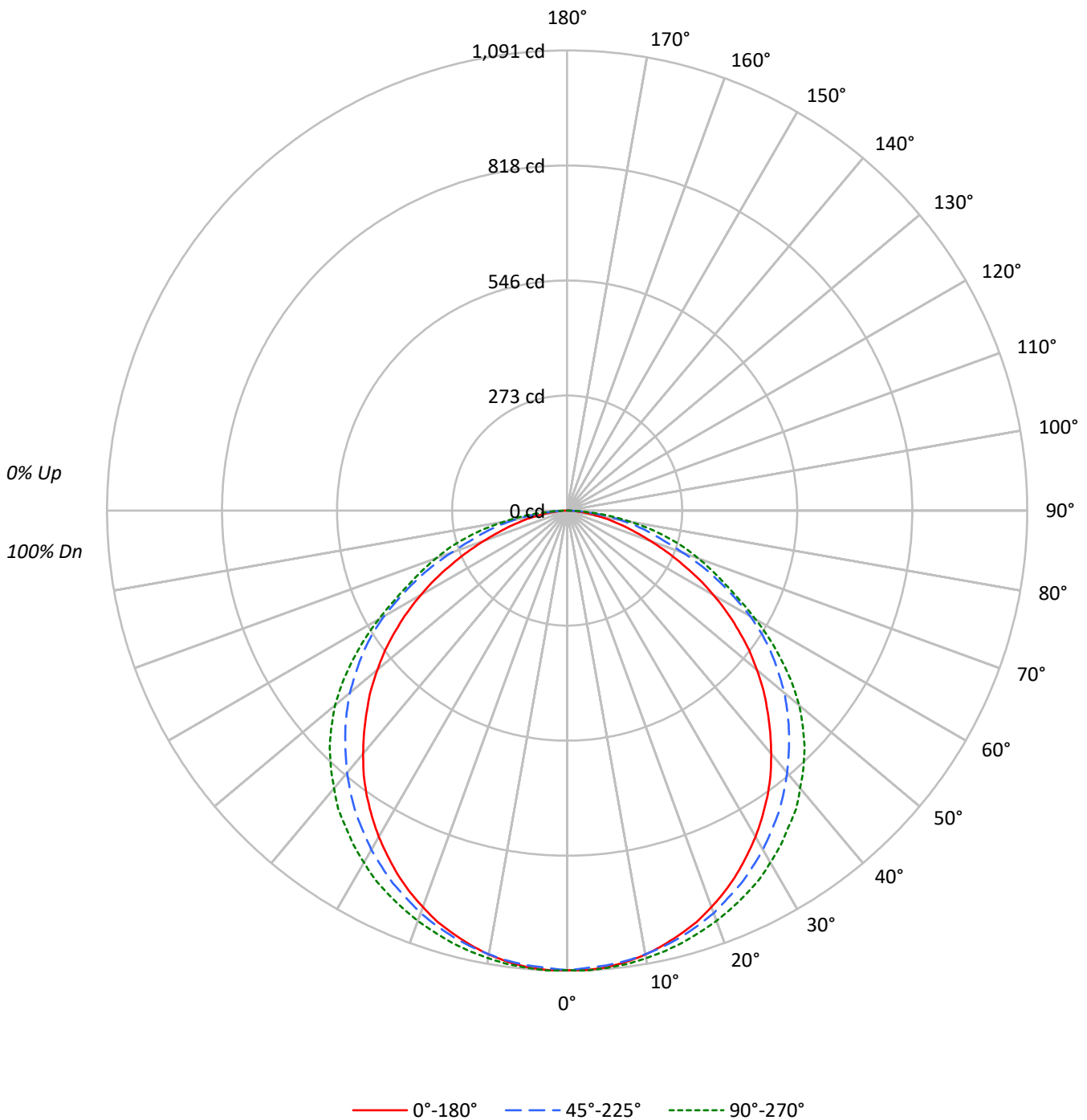
Lumens per Lamp: N/A  
Luminaire Lumens: 3126.0 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.39  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.7  
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



TEST NUMBER: P232314  
CATALOG NUMBER: 24RDIA-30-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P232314

CATALOG NUMBER: 24RDIA-30-UNV-L840-CD1-U

**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	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1759	1759	1759
5°	1761	1754	1764
10°	1753	1751	1767
15°	1737	1749	1772
20°	1719	1745	1779
25°	1695	1738	1787
30°	1665	1731	1796
35°	1631	1723	1804
40°	1586	1710	1812
45°	1533	1699	1818
50°	1475	1688	1804
55°	1397	1666	1750
60°	1297	1617	1667
65°	1154	1519	1581
70°	993	1379	1563
75°	840	1278	1536
80°	682	1187	1400
85°	482	921	1104



TEST NUMBER: P232314

CATALOG NUMBER: 24RDIA-30-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.1	3.3
10°-20°	295.9	9.5
20°-30°	450.2	14.4
30°-40°	545.9	17.5
40°-50°	570.1	18.2
50°-60°	513.5	16.4
60°-70°	377.8	12.1
70°-80°	213.9	6.8
80°-90°	55.7	1.8
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°	849.2	27.2
0°-40°	1395.1	44.6
0°-60°	2478.7	79.3
0°-90°	3126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3126.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1090	1090	1090	1090	1090	
5°	1087	1084	1082	1087	1088	103
15°	1039	1041	1046	1056	1060	293
25°	951	957	976	996	1003	438
35°	827	841	874	904	915	517
45°	671	697	744	783	796	518
55°	496	531	592	619	622	443
65°	302	356	398	409	414	301
75°	135	176	205	237	246	145
85°	26	36	50	57	60	33
90°	0	0	0	0	0	



TEST NUMBER: P232314

CATALOG NUMBER: 24RDIA-30-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1089.7	1089.7	1089.7	1089.7	1089.7
2.5°	1090.5	1088.2	1085.1	1089.0	1091.3
5°	1086.7	1084.4	1082.1	1086.7	1088.2
7.5°	1079.0	1077.5	1076.7	1082.1	1084.4
10°	1069.1	1067.5	1068.3	1076.0	1077.5
12.5°	1055.3	1056.1	1058.4	1066.8	1069.8
15°	1039.3	1040.8	1046.1	1056.1	1059.9
17.5°	1022.4	1023.2	1031.6	1043.8	1047.7
20°	1000.3	1004.8	1015.5	1030.1	1035.4
22.5°	977.3	982.7	994.9	1014.0	1020.1
25°	951.3	957.4	975.8	996.4	1003.3
27.5°	922.3	931.4	952.1	976.5	986.5
30°	893.2	903.1	928.4	954.4	963.5
32.5°	861.1	871.8	900.8	930.7	941.4
35°	827.4	841.2	874.1	903.9	915.4
37.5°	792.2	806.8	843.5	877.9	891.7
40°	752.5	770.8	811.4	848.1	859.5
42.5°	712.7	734.9	777.7	816.7	829.0
45°	671.4	696.7	744.1	783.1	796.1
47.5°	631.7	656.9	708.9	747.1	757.8
50°	587.3	617.9	672.2	708.9	718.1
52.5°	543.7	575.1	631.7	666.8	672.2
55°	496.3	530.7	591.9	618.7	621.7
57.5°	449.7	487.9	549.1	570.5	571.2
60°	401.5	443.5	500.9	516.2	516.2
62.5°	353.3	401.5	448.9	464.2	462.7
65°	302.1	355.6	397.7	409.1	413.7
67.5°	254.7	312.0	347.2	360.2	371.7
70°	210.3	266.9	292.1	318.9	331.1
72.5°	169.8	223.3	243.2	281.4	290.6
75°	134.6	175.9	204.9	237.1	246.2
77.5°	104.0	130.8	167.5	195.0	200.4
80°	73.4	90.2	127.7	146.8	150.6
82.5°	48.9	61.9	88.7	102.5	107.1
85°	26.0	35.9	49.7	56.6	59.6
87.5°	9.9	14.5	16.8	18.4	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)