

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: P225631

Luminaire Tested: **24AC-LD5-31-UNV-L830-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: P225631  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35753)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24AC-LD5-31-UNV-L830-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER  
Light Source: (168)3000K CCT, 85 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

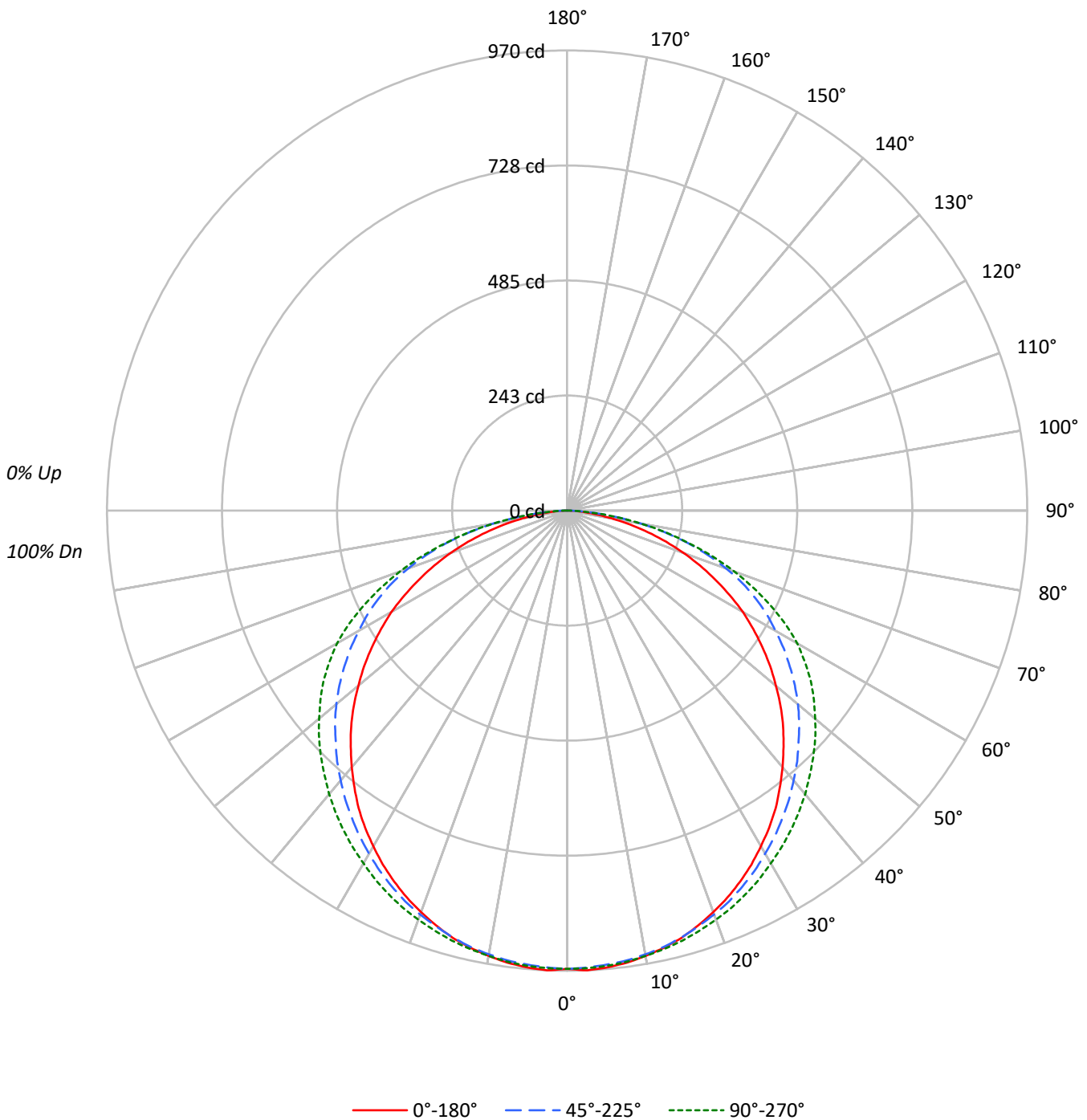
Lumens per Lamp: N/A  
Luminaire Lumens: 3035.0 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 25.4  
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



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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	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

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

	0°	45°	90°
0°	1300	1300	1300
5°	1306	1298	1301
10°	1302	1298	1302
15°	1299	1298	1307
20°	1290	1297	1314
25°	1281	1298	1324
30°	1269	1297	1334
35°	1259	1300	1351
40°	1240	1304	1371
45°	1225	1313	1396
50°	1203	1330	1429
55°	1180	1345	1471
60°	1152	1364	1508
65°	1096	1395	1507
70°	1028	1402	1474
75°	920	1362	1379
80°	738	1219	1224
85°	522	886	834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.5	3.0
10°-20°	263.2	8.7
20°-30°	403.3	13.3
30°-40°	495.7	16.3
40°-50°	531.7	17.5
50°-60°	508.5	16.8
60°-70°	418.3	13.8
70°-80°	257.2	8.5
80°-90°	65.6	2.2
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°	758.0	25.0
0°-40°	1253.7	41.3
0°-60°	2293.9	75.6
0°-90°	3035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3035.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	967	963	961	959	963	92
15°	932	929	932	933	938	263
25°	863	863	874	884	892	398
35°	766	771	791	812	822	479
45°	644	656	690	720	734	496
55°	503	527	573	612	627	449
65°	344	383	438	464	473	341
75°	177	230	262	267	265	187
85°	34	55	57	55	54	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	966.1	966.1	966.1	966.1	966.1
2.5°	970.1	965.4	964.0	962.0	965.4
5°	966.7	962.7	960.7	959.3	963.4
7.5°	961.3	957.3	956.6	955.3	959.3
10°	953.2	949.9	949.9	949.2	953.2
12.5°	943.8	939.7	941.8	942.4	946.5
15°	932.3	928.9	931.6	933.0	938.4
17.5°	917.4	914.7	918.8	922.9	928.3
20°	900.6	899.9	906.0	911.4	917.4
22.5°	883.0	883.0	891.8	897.9	906.0
25°	862.8	862.8	874.2	883.7	891.8
27.5°	841.2	842.5	856.0	867.5	876.3
30°	816.9	820.9	835.1	849.3	858.7
32.5°	792.6	795.9	814.2	832.4	841.2
35°	766.2	771.0	791.2	811.5	822.3
37.5°	736.5	743.3	768.3	790.5	802.0
40°	706.1	714.9	742.6	768.3	780.4
42.5°	675.1	687.2	717.6	744.0	756.8
45°	644.0	656.2	689.9	720.3	733.8
47.5°	610.3	625.1	663.6	694.7	709.5
50°	574.5	592.1	635.3	667.7	682.5
52.5°	539.4	559.7	604.9	641.3	655.5
55°	502.9	527.2	573.2	611.6	627.2
57.5°	465.1	492.8	541.4	580.6	594.1
60°	428.0	455.7	507.0	546.8	560.3
62.5°	386.2	419.9	474.6	511.7	519.1
65°	344.3	382.8	438.1	464.5	473.2
67.5°	303.1	345.0	400.3	419.2	424.6
70°	261.3	304.5	356.4	372.0	374.7
72.5°	218.7	267.3	311.2	320.0	321.3
75°	176.9	229.5	261.9	266.7	265.3
77.5°	135.7	187.7	210.6	212.7	213.3
80°	95.2	143.8	157.3	158.0	158.0
82.5°	61.4	99.9	106.7	105.3	106.7
85°	33.8	55.4	57.4	55.4	54.0
87.5°	10.8	16.2	17.6	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)