

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: P229337

Luminaire Tested: **14ALNG-LD5-31-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229337
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36085)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14ALNG-LD5-31-UNV-L840-CD1-U
Description: METALUX 1X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (84)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3181.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.21 / 1.3
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

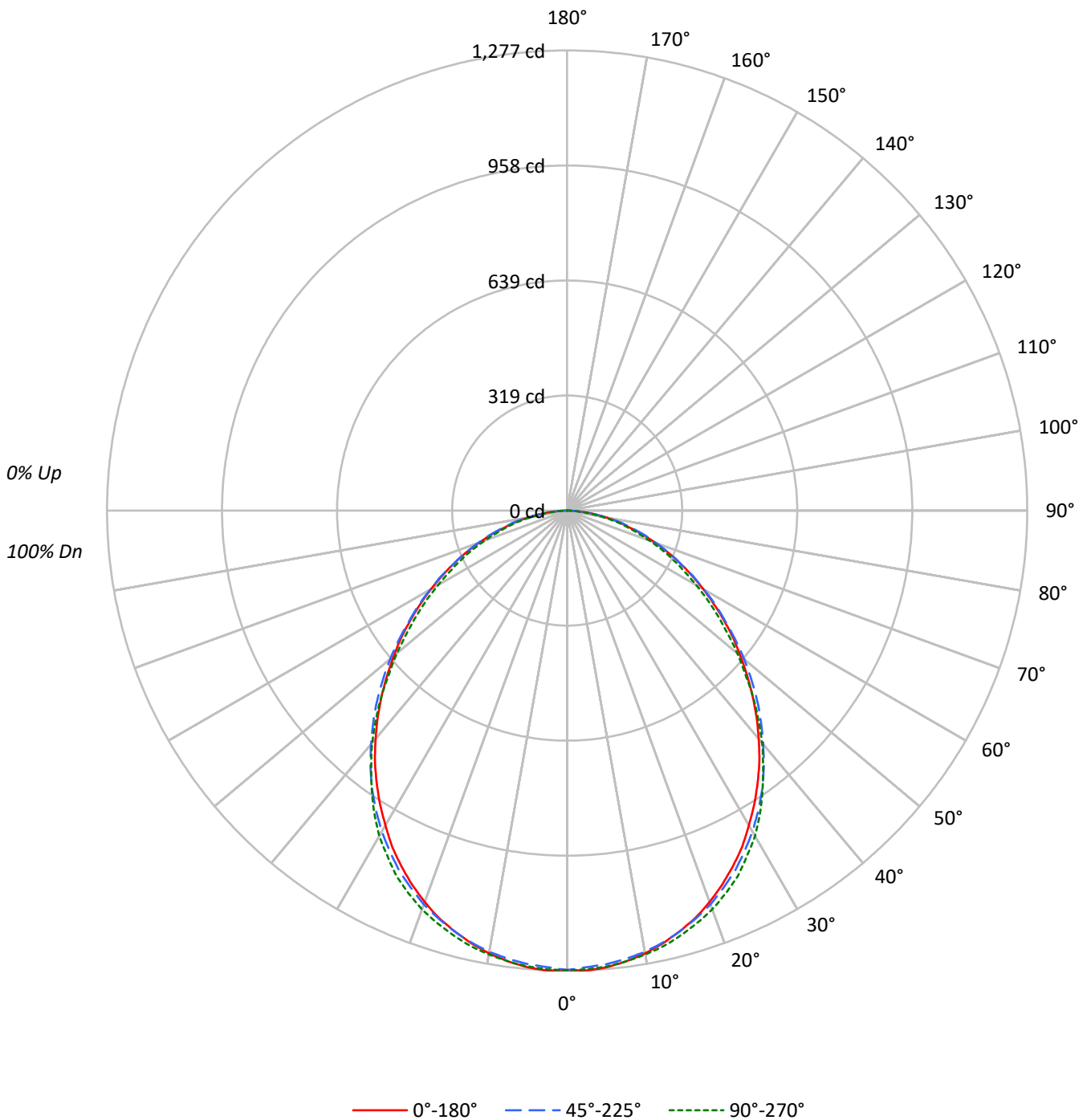
Input Watts (W): 29.42
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	102	99	95	98	95	92		94	92	89		91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	77	74	71
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	84	72	64	57	82	71	63	57	68	61	56		66	60	55		64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		49	43	38		48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34		45	39	34		44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31		42	36	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4297	4297	4297
5°	4302	4273	4294
10°	4269	4253	4280
15°	4215	4218	4257
20°	4145	4170	4224
25°	4047	4099	4164
30°	3924	4001	4059
35°	3791	3881	3891
40°	3637	3723	3702
45°	3469	3555	3473
50°	3290	3361	3233
55°	3121	3149	3002
60°	2942	2952	2789
65°	2756	2756	2593
70°	2548	2578	2386
75°	2316	2407	2194
80°	2113	2175	1871
85°	1848	1635	1423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	3.8
10°-20°	342.1	10.8
20°-30°	507.9	16.0
30°-40°	586.8	18.4
40°-50°	568.6	17.9
50°-60°	474.7	14.9
60°-70°	339.4	10.7
70°-80°	190.4	6.0
80°-90°	50.7	1.6
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°	970.4	30.5
0°-40°	1557.2	49.0
0°-60°	2600.5	81.8
0°-90°	3181.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3181.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1275	1275	1275	1275	1275	
5°	1272	1270	1263	1270	1270	121
15°	1208	1210	1209	1221	1220	341
25°	1088	1094	1103	1118	1120	501
35°	922	929	944	950	946	576
45°	728	738	746	737	729	561
55°	531	540	536	521	511	475
65°	346	352	346	332	325	343
75°	178	186	185	172	168	191
85°	48	49	42	38	37	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.1	1275.1	1275.1	1275.1	1275.1
2.5°	1277.4	1275.1	1268.0	1275.1	1274.3
5°	1271.9	1269.6	1263.3	1270.3	1269.6
7.5°	1261.7	1260.2	1254.7	1263.3	1261.7
10°	1247.6	1246.1	1242.9	1251.5	1250.8
12.5°	1229.6	1229.6	1228.0	1237.4	1238.2
15°	1208.4	1210.0	1209.2	1221.0	1220.2
17.5°	1184.9	1184.9	1187.3	1200.6	1199.8
20°	1155.9	1157.5	1163.0	1175.5	1177.9
22.5°	1123.8	1126.2	1133.2	1148.9	1149.7
25°	1088.5	1094.0	1102.6	1118.3	1119.9
27.5°	1051.7	1055.6	1065.8	1082.3	1080.7
30°	1008.6	1018.0	1028.2	1041.5	1043.1
32.5°	966.3	974.9	987.4	998.4	996.1
35°	921.6	929.4	943.6	949.8	945.9
37.5°	876.2	884.8	896.5	899.7	893.4
40°	826.8	837.8	846.4	846.4	841.7
42.5°	778.2	786.8	796.2	792.3	785.2
45°	728.0	738.2	746.1	736.7	728.8
47.5°	677.1	688.9	692.8	682.6	669.3
50°	627.7	640.3	641.1	627.7	616.8
52.5°	580.7	590.1	587.8	574.4	561.9
55°	531.3	540.0	536.0	521.1	511.0
57.5°	482.7	491.4	489.0	471.8	462.4
60°	436.5	441.2	438.1	424.8	413.8
62.5°	390.3	395.8	394.2	375.4	367.5
65°	345.6	351.9	345.6	332.3	325.2
67.5°	303.3	307.2	305.6	294.7	285.3
70°	258.6	264.1	261.7	249.2	242.2
72.5°	218.6	224.9	224.1	210.8	202.2
75°	177.9	185.7	184.9	172.4	168.5
77.5°	145.0	148.9	149.7	136.4	134.0
80°	108.9	114.4	112.1	100.3	96.4
82.5°	76.8	81.5	74.4	67.4	65.8
85°	47.8	48.6	42.3	38.4	36.8
87.5°	19.6	19.6	14.9	13.3	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)