

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: P229574

Luminaire Tested: **22RLN-LD5-31-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36050)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RLN-LD5-31-UNV-L830-CD1-U
Description: METALUX 2X2 RLN LED TROFFER
Light Source: (126)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3029.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.31
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

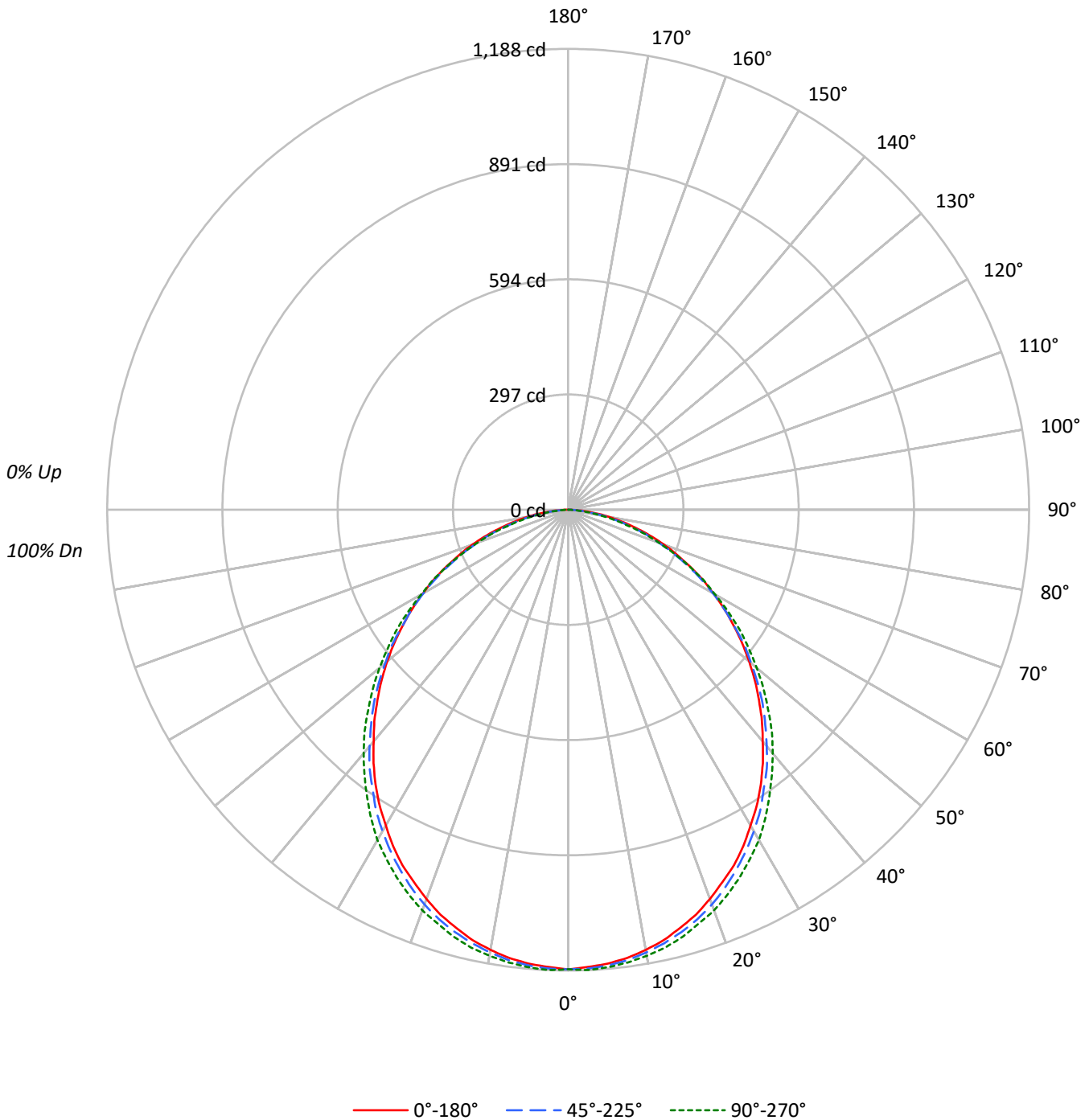
Input Watts (W): 26.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61					61			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	51	43	38	49	42	38	48	42	37	35					35			
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	32					32			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	28					28			
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3795	3795	3795
5°	3775	3791	3806
10°	3747	3769	3797
15°	3699	3738	3779
20°	3639	3691	3747
25°	3573	3620	3695
30°	3476	3540	3636
35°	3382	3435	3532
40°	3260	3328	3428
45°	3149	3209	3301
50°	3033	3067	3162
55°	2906	2911	3013
60°	2768	2756	2798
65°	2620	2561	2598
70°	2454	2329	2337
75°	2222	2044	1985
80°	1966	1717	1593
85°	1587	1198	1022



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	3.7
10°-20°	317.9	10.5
20°-30°	472.5	15.6
30°-40°	551.6	18.2
40°-50°	547.5	18.1
50°-60°	469.8	15.5
60°-70°	337.2	11.1
70°-80°	178.7	5.9
80°-90°	41.8	1.4
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°	902.4	29.8
0°-40°	1453.9	48.0
0°-60°	2471.2	81.6
0°-90°	3029.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3029.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1174	1176	1179	1183	1184	111
15°	1116	1120	1127	1136	1140	315
25°	1011	1014	1024	1040	1046	465
35°	865	868	879	898	904	540
45°	695	698	709	721	729	537
55°	520	518	521	533	540	466
65°	346	337	338	341	343	343
75°	180	171	165	163	160	191
85°	43	37	33	28	28	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1184.9	1184.9	1184.9	1184.9	<i>1184.9</i>
2.5°	<i>1180.1</i>	<i>1181.0</i>	<i>1183.9</i>	<i>1186.8</i>	<i>1187.7</i>
5°	1174.3	1176.2	1179.1	1182.9	<i>1183.9</i>
7.5°	1165.7	1167.6	1171.4	1175.3	<i>1177.2</i>
10°	1152.2	1155.1	1158.9	1165.7	<i>1167.6</i>
12.5°	1136.9	1138.8	1144.5	1152.2	<i>1156.1</i>
15°	1115.7	1119.6	1127.3	1135.9	<i>1139.7</i>
17.5°	1094.6	1097.5	1107.1	1115.7	<i>1118.6</i>
20°	1067.7	1073.5	1083.1	1093.6	<i>1099.4</i>
22.5°	1038.9	1043.7	1055.2	1067.7	<i>1073.5</i>
25°	1011.1	1014.0	1024.5	1039.9	<i>1045.6</i>
27.5°	977.5	980.3	991.9	1007.2	<i>1014.9</i>
30°	940.0	944.8	957.3	974.6	<i>983.2</i>
32.5°	904.5	908.3	920.8	936.2	<i>944.8</i>
35°	865.1	868.0	878.6	897.8	<i>903.5</i>
37.5°	823.8	826.7	841.1	855.5	<i>862.2</i>
40°	779.7	783.5	796.0	810.4	<i>820.0</i>
42.5°	739.3	741.3	751.8	768.1	<i>776.8</i>
45°	695.2	698.1	708.6	721.1	<i>728.8</i>
47.5°	652.9	652.0	662.5	676.9	<i>682.7</i>
50°	608.8	606.8	615.5	629.9	<i>634.7</i>
52.5°	564.6	561.7	571.3	581.9	<i>585.7</i>
55°	520.4	517.5	521.4	532.9	<i>539.6</i>
57.5°	477.2	472.4	477.2	483.0	<i>488.7</i>
60°	432.1	424.4	430.2	436.9	<i>436.9</i>
62.5°	390.8	382.2	385.0	389.8	<i>392.7</i>
65°	345.7	337.0	338.0	340.9	<i>342.8</i>
67.5°	303.4	294.8	292.9	293.8	<i>294.8</i>
70°	262.1	252.5	248.7	246.8	<i>249.6</i>
72.5°	219.9	210.3	208.4	204.5	<i>205.5</i>
75°	179.6	170.9	165.2	163.2	<i>160.4</i>
77.5°	141.1	133.5	128.7	122.9	<i>121.9</i>
80°	106.6	97.0	93.1	89.3	<i>86.4</i>
82.5°	74.9	66.3	59.5	55.7	<i>52.8</i>
85°	43.2	37.4	32.6	27.8	<i>27.8</i>
87.5°	17.3	13.4	11.5	10.6	<i>9.6</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)