

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: P229585

Luminaire Tested: **22RLN-LD5-25-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229585  
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-LD5-25-UNV-L840-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER  
Light Source: (126)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

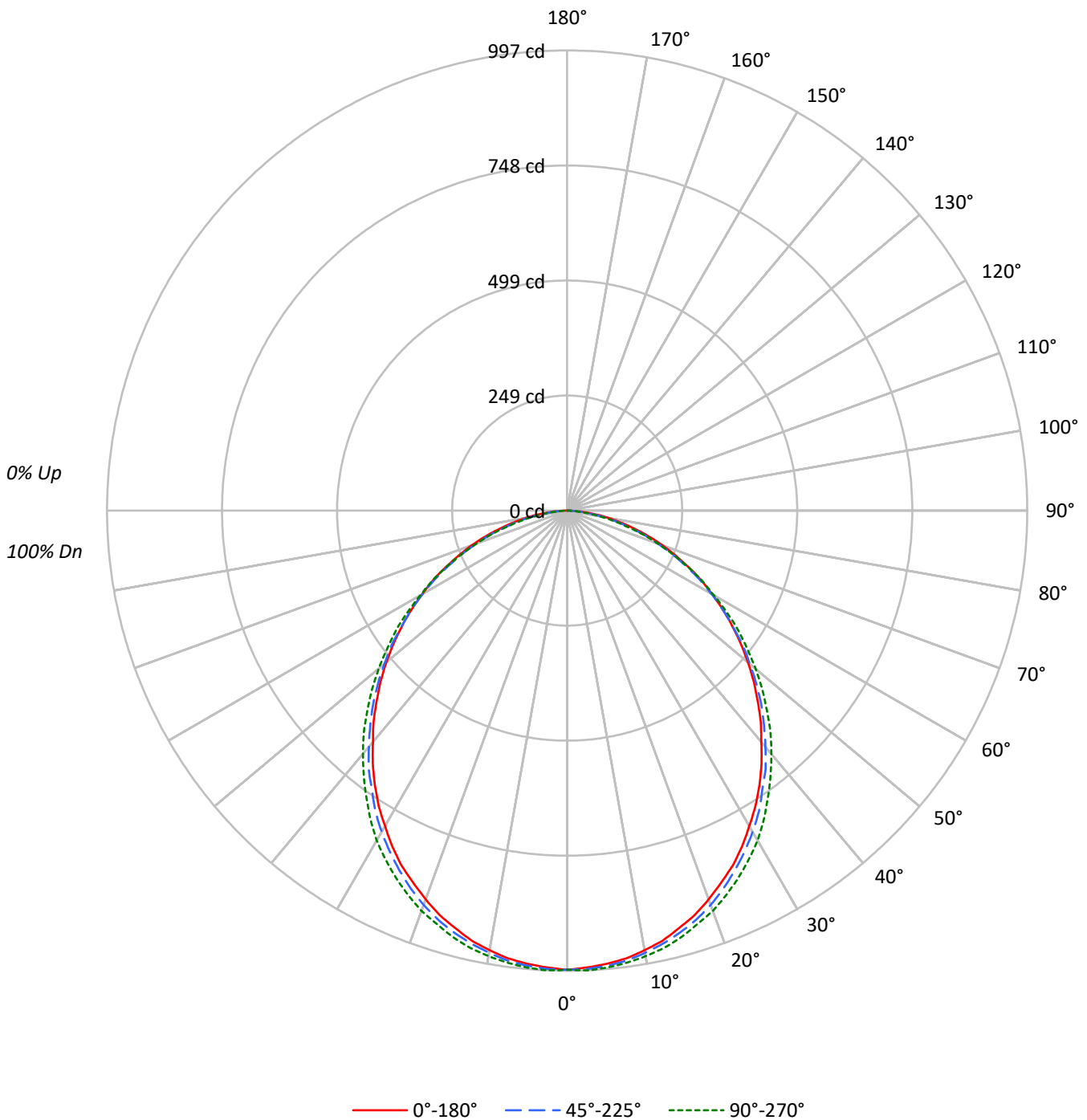
Lumens per Lamp: N/A  
Luminaire Lumens: 2543.0 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.9  
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	90		91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	51	43	38		49	42	38		48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	30		41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

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

	0°	45°	90°
0°	3186	3186	3186
5°	3170	3182	3195
10°	3146	3164	3188
15°	3106	3138	3173
20°	3055	3099	3146
25°	2999	3039	3102
30°	2918	2972	3053
35°	2840	2884	2966
40°	2737	2794	2878
45°	2643	2694	2771
50°	2546	2574	2655
55°	2439	2444	2529
60°	2324	2313	2349
65°	2199	2151	2181
70°	2061	1955	1963
75°	1865	1716	1666
80°	1651	1442	1339
85°	1334	1007	860



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.0	3.7
10°-20°	266.9	10.5
20°-30°	396.7	15.6
30°-40°	463.1	18.2
40°-50°	459.6	18.1
50°-60°	394.4	15.5
60°-70°	283.1	11.1
70°-80°	150.0	5.9
80°-90°	35.2	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°	757.6	29.8
0°-40°	1220.7	48.0
0°-60°	2074.7	81.6
0°-90°	2543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2543.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	995	995	995	995	995	
5°	986	988	990	993	994	94
15°	937	940	946	954	957	264
25°	849	851	860	873	878	390
35°	726	729	738	754	759	454
45°	584	586	595	605	612	451
55°	437	434	438	447	453	391
65°	290	283	284	286	288	288
75°	151	144	139	137	135	160
85°	36	31	27	23	23	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	994.8	994.8	994.8	994.8	994.8
2.5°	990.7	991.5	993.9	996.4	997.2
5°	985.9	987.5	989.9	993.1	993.9
7.5°	978.6	980.2	983.5	986.7	988.3
10°	967.3	969.8	973.0	978.6	980.2
12.5°	954.4	956.1	960.9	967.3	970.6
15°	936.7	939.9	946.4	953.6	956.9
17.5°	919.0	921.4	929.5	936.7	939.1
20°	896.4	901.2	909.3	918.2	923.0
22.5°	872.2	876.3	885.9	896.4	901.2
25°	848.8	851.3	860.1	873.0	877.9
27.5°	820.6	823.0	832.7	845.6	852.1
30°	789.2	793.2	803.7	818.2	825.5
32.5°	759.4	762.6	773.1	786.0	793.2
35°	726.3	728.7	737.6	753.7	758.6
37.5°	691.7	694.1	706.2	718.3	723.9
40°	654.6	657.8	668.3	680.4	688.4
42.5°	620.7	622.3	631.2	644.9	652.2
45°	583.6	586.0	594.9	605.4	611.8
47.5°	548.2	547.4	556.2	568.3	573.2
50°	511.1	509.5	516.7	528.8	532.8
52.5°	474.0	471.6	479.6	488.5	491.7
55°	436.9	434.5	437.7	447.4	453.0
57.5°	400.6	396.6	400.6	405.5	410.3
60°	362.8	356.3	361.1	366.8	366.8
62.5°	328.1	320.8	323.3	327.3	329.7
65°	290.2	282.9	283.8	286.2	287.8
67.5°	254.7	247.5	245.9	246.7	247.5
70°	220.1	212.0	208.8	207.2	209.6
72.5°	184.6	176.5	174.9	171.7	172.5
75°	150.7	143.5	138.7	137.0	134.6
77.5°	118.5	112.1	108.0	103.2	102.4
80°	89.5	81.4	78.2	75.0	72.6
82.5°	62.9	55.6	50.0	46.8	44.3
85°	36.3	31.4	27.4	23.4	23.4
87.5°	14.5	11.3	9.7	8.9	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)