

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: P229696

Luminaire Tested: **22RLN-LD5-40-RDP-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229696  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1707-178-5)  
Test Lab: INNOVATION CENTER-G3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-40-RDP-UNV-L840-CD1-SVPD1-U  
Description: METALUX 2X2 RLN LED TROFFER WITH SENSOR AND RDP LENS  
Light Source: (126)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3159.0 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.36  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

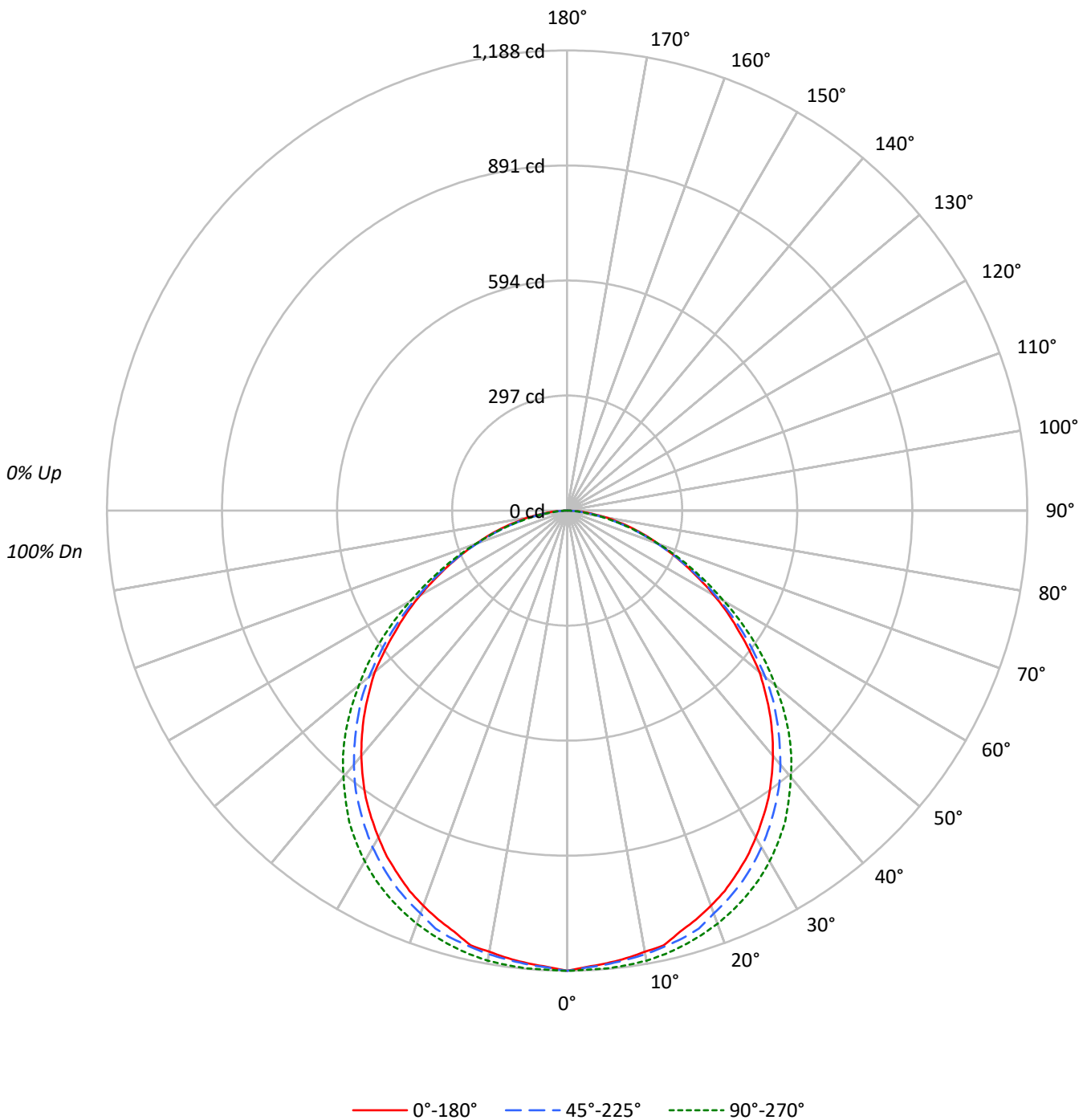
Input Watts (W): 35.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	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	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

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

	0°	45°	90°
0°	3805	3805	3805
5°	3772	3781	3814
10°	3761	3782	3837
15°	3732	3794	3853
20°	3700	3773	3868
25°	3657	3753	3875
30°	3603	3714	3866
35°	3543	3656	3835
40°	3456	3581	3757
45°	3351	3469	3664
50°	3230	3323	3496
55°	3015	3114	3286
60°	2806	2860	2998
65°	2570	2591	2697
70°	2327	2291	2353
75°	2127	1976	2000
80°	1896	1619	1568
85°	1510	1099	963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.0	3.5
10°-20°	322.6	10.2
20°-30°	490.4	15.5
30°-40°	586.9	18.6
40°-50°	592.7	18.8
50°-60°	500.0	15.8
60°-70°	341.4	10.8
70°-80°	173.2	5.5
80°-90°	39.9	1.3
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°	925.0	29.3
0°-40°	1511.9	47.9
0°-60°	2604.6	82.4
0°-90°	3159.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3159.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1173	1173	1176	1182	1186	111
15°	1126	1130	1144	1153	1162	318
25°	1035	1044	1062	1085	1097	477
35°	906	914	935	964	981	566
45°	740	744	766	796	809	570
55°	540	539	558	578	588	484
65°	339	334	342	348	356	337
75°	172	162	160	159	162	182
85°	41	36	30	27	26	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1188.2	1188.2	1188.2	1188.2	1188.2
2.5°	1178.9	1178.9	1180.8	1187.3	1186.4
5°	1173.3	1173.3	1176.1	1181.7	1186.4
7.5°	1165.8	1166.8	1169.6	1178.0	1183.6
10°	1156.5	1157.4	1163.0	1171.4	1179.8
12.5°	1149.9	1150.9	1153.7	1164.0	1172.4
15°	1125.7	1130.3	1144.3	1152.7	1162.1
17.5°	1107.0	1112.6	1131.3	1138.7	1149.9
20°	1085.5	1092.0	1107.0	1123.8	1135.0
22.5°	1063.1	1070.5	1085.5	1105.1	1117.2
25°	1035.0	1044.4	1062.1	1084.6	1096.7
27.5°	1007.0	1016.4	1034.1	1064.9	1073.3
30°	974.3	984.6	1004.2	1034.1	1045.3
32.5°	940.7	950.0	970.6	1001.4	1014.5
35°	906.1	913.6	935.1	964.0	980.9
37.5°	866.9	874.4	898.7	926.7	939.8
40°	826.7	832.3	856.6	884.6	898.7
42.5°	783.8	789.4	811.8	840.7	856.6
45°	739.9	743.6	766.0	795.9	809.0
47.5°	693.1	696.9	720.2	744.5	756.7
50°	648.3	646.4	667.0	689.4	701.6
52.5°	593.2	594.1	611.9	633.4	647.4
55°	539.9	539.0	557.7	578.2	588.5
57.5°	490.4	486.7	502.6	516.6	528.7
60°	438.1	434.4	446.5	461.5	468.0
62.5°	387.7	383.0	395.1	403.6	410.1
65°	339.1	334.4	341.9	348.4	355.9
67.5°	293.3	287.7	294.3	298.0	303.6
70°	248.5	243.8	244.7	249.4	251.3
72.5°	210.2	200.8	201.8	201.8	204.6
75°	171.9	161.6	159.7	158.8	161.6
77.5°	133.6	125.2	122.4	121.4	121.4
80°	102.8	91.5	87.8	85.0	85.0
82.5°	67.3	63.5	57.0	53.2	51.4
85°	41.1	35.5	29.9	27.1	26.2
87.5°	15.9	13.1	11.2	11.2	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)