

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: P229578

Luminaire Tested: **22RLN-LD5-20-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229578  
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-LD5-20-UNV-L835-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER  
Light Source: (126)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

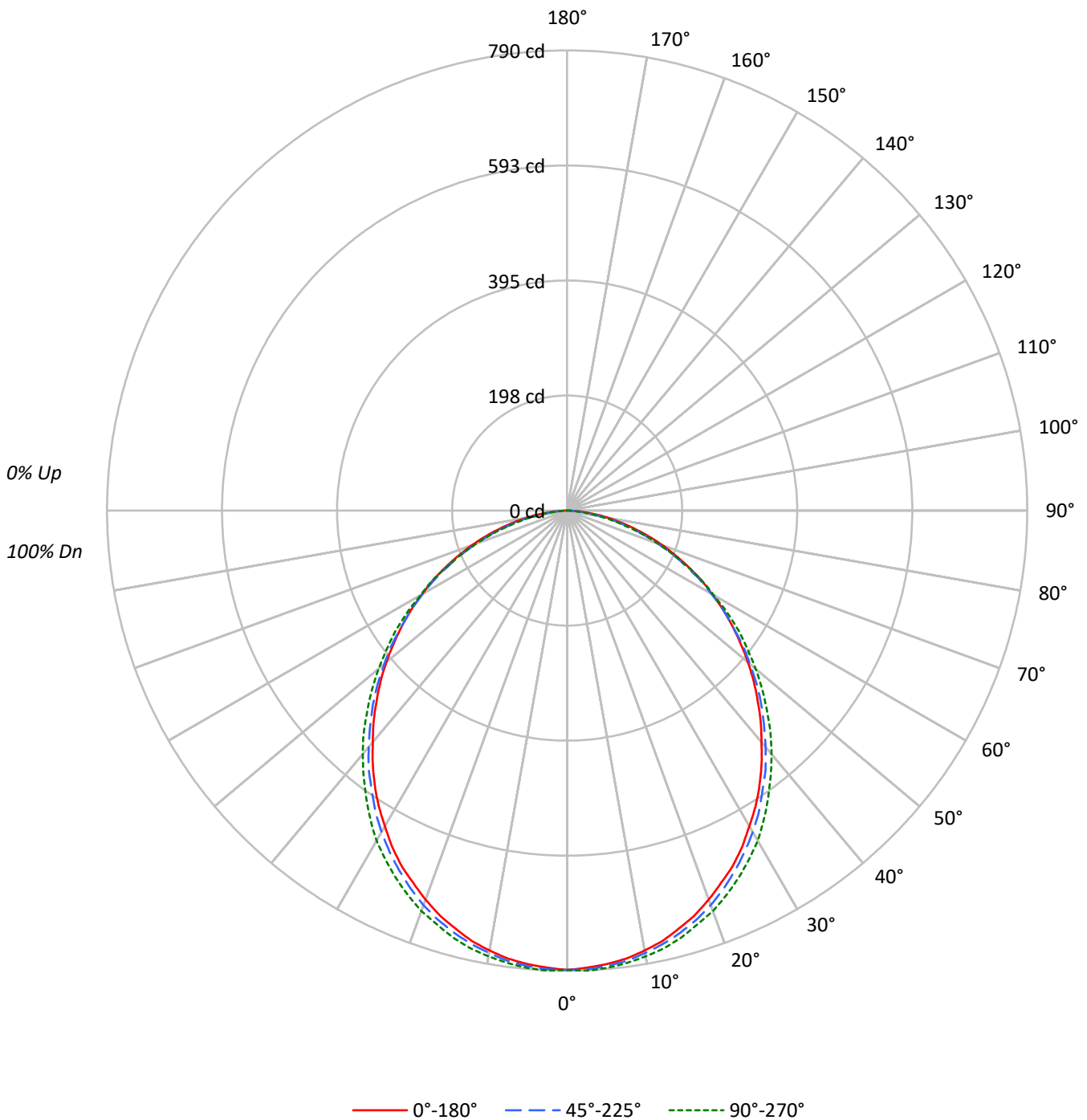
Lumens per Lamp: N/A  
Luminaire Lumens: 2016.0 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.43  
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°	2526	2526	2526
5°	2513	2523	2533
10°	2494	2508	2527
15°	2462	2488	2515
20°	2422	2457	2494
25°	2378	2410	2459
30°	2313	2356	2420
35°	2251	2286	2351
40°	2169	2215	2282
45°	2096	2136	2197
50°	2019	2041	2105
55°	1934	1937	2006
60°	1842	1834	1863
65°	1744	1705	1729
70°	1634	1550	1556
75°	1479	1360	1320
80°	1308	1143	1060
85°	1058	797	680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.5	3.7
10°-20°	211.6	10.5
20°-30°	314.5	15.6
30°-40°	367.1	18.2
40°-50°	364.4	18.1
50°-60°	312.7	15.5
60°-70°	224.5	11.1
70°-80°	118.9	5.9
80°-90°	27.8	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°	600.6	29.8
0°-40°	967.7	48.0
0°-60°	1644.8	81.6
0°-90°	2016.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2016.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	782	783	785	787	788	74
15°	743	745	750	756	759	209
25°	673	675	682	692	696	309
35°	576	578	585	598	601	360
45°	463	465	472	480	485	357
55°	346	344	347	355	359	310
65°	230	224	225	227	228	228
75°	120	114	110	109	107	127
85°	29	25	22	18	18	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	788.6	788.6	788.6	788.6	788.6
2.5°	785.4	786.0	788.0	789.9	790.5
5°	781.6	782.9	784.8	787.3	788.0
7.5°	775.8	777.1	779.7	782.2	783.5
10°	766.9	768.8	771.3	775.8	777.1
12.5°	756.7	757.9	761.8	766.9	769.4
15°	742.6	745.1	750.3	756.0	758.6
17.5°	728.5	730.4	736.8	742.6	744.5
20°	710.6	714.5	720.9	727.9	731.7
22.5°	691.5	694.7	702.3	710.6	714.5
25°	672.9	674.9	681.9	692.1	695.9
27.5°	650.6	652.5	660.2	670.4	675.5
30°	625.6	628.8	637.1	648.6	654.4
32.5°	602.0	604.6	612.9	623.1	628.8
35°	575.8	577.7	584.7	597.5	601.4
37.5°	548.3	550.2	559.8	569.4	573.9
40°	518.9	521.5	529.8	539.4	545.8
42.5°	492.1	493.4	500.4	511.3	517.0
45°	462.7	464.6	471.6	479.9	485.0
47.5°	434.6	433.9	441.0	450.5	454.4
50°	405.2	403.9	409.6	419.2	422.4
52.5°	375.8	373.9	380.2	387.3	389.8
55°	346.4	344.5	347.0	354.7	359.2
57.5°	317.6	314.4	317.6	321.4	325.3
60°	287.6	282.5	286.3	290.8	290.8
62.5°	260.1	254.3	256.3	259.5	261.4
65°	230.1	224.3	225.0	226.9	228.1
67.5°	201.9	196.2	194.9	195.6	196.2
70°	174.5	168.1	165.5	164.2	166.2
72.5°	146.3	140.0	138.7	136.1	136.8
75°	119.5	113.8	109.9	108.6	106.7
77.5°	93.9	88.8	85.6	81.8	81.2
80°	70.9	64.5	62.0	59.4	57.5
82.5°	49.8	44.1	39.6	37.1	35.1
85°	28.8	24.9	21.7	18.5	18.5
87.5°	11.5	8.9	7.7	7.0	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)