

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: P295628

Luminaire Tested: **14RLN-LD5-23-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295628  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-23-UNV-L92765-W2A1-U-2700K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1855.0 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

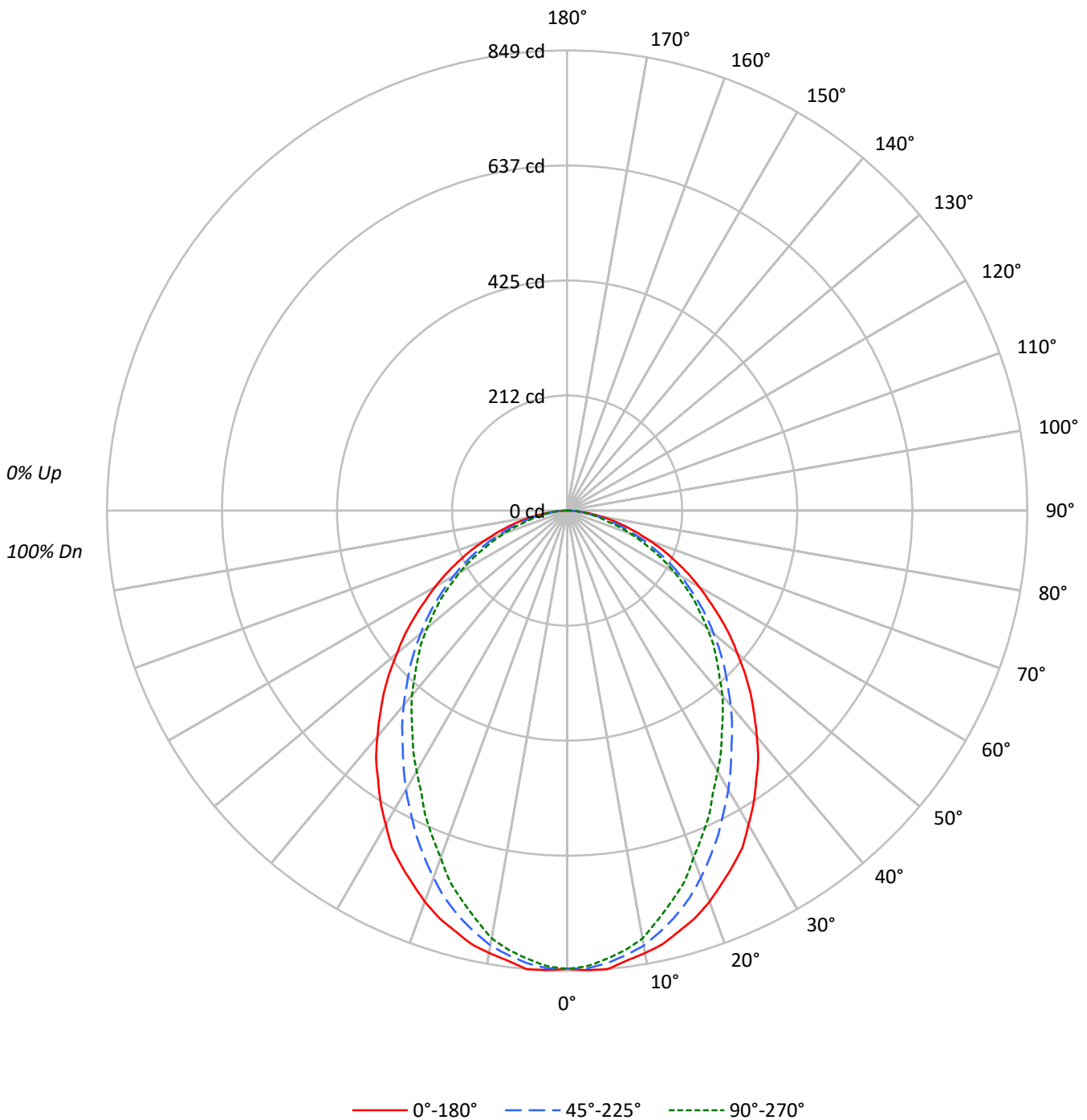
Input Watts (W): 20.553  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

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

	0°	45°	90°
0°	2275	2275	2275
5°	2294	2265	2243
10°	2265	2227	2190
15°	2235	2157	2078
20°	2199	2064	1952
25°	2147	1959	1840
30°	2079	1848	1726
35°	1997	1737	1634
40°	1913	1649	1566
45°	1822	1563	1485
50°	1716	1476	1410
55°	1618	1393	1334
60°	1514	1307	1236
65°	1402	1207	1107
70°	1276	1085	980
75°	1149	969	799
80°	984	789	753
85°	800	750	750



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.2	4.3
10°-20°	217.3	11.7
20°-30°	304.9	16.4
30°-40°	338.2	18.2
40°-50°	324.7	17.5
50°-60°	272.1	14.7
60°-70°	191.0	10.3
70°-80°	99.7	5.4
80°-90°	27.9	1.5
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°	601.3	32.4
0°-40°	939.5	50.6
0°-60°	1536.3	82.8
0°-90°	1855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	849	838	838	833	830	80
15°	802	788	774	754	746	226
25°	723	697	660	628	620	333
35°	608	574	529	503	498	381
45°	479	442	411	395	390	369
55°	345	319	297	288	284	308
65°	220	205	190	178	174	219
75°	110	102	93	82	77	117
85°	26	24	24	24	24	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	845.4	845.4	845.4	845.4	845.4
2.5°	848.6	843.9	845.4	845.4	841.5
5°	849.4	838.4	838.4	832.9	830.5
7.5°	837.6	829.0	827.4	820.4	818.0
10°	829.0	820.4	814.9	805.5	801.6
12.5°	818.8	805.5	795.3	779.6	773.3
15°	802.3	788.2	774.1	753.8	745.9
17.5°	787.5	771.0	749.8	727.1	718.5
20°	767.9	748.3	720.9	689.5	681.7
22.5°	745.1	722.4	690.3	656.6	650.3
25°	723.2	697.3	659.7	627.6	619.8
27.5°	700.5	669.1	626.0	591.6	583.7
30°	669.1	637.0	594.7	561.0	555.5
32.5°	640.1	608.0	561.8	534.4	528.1
35°	608.0	574.3	528.9	503.0	497.5
37.5°	579.0	539.9	499.9	474.8	471.7
40°	544.6	509.3	469.3	450.5	445.8
42.5°	510.9	475.6	438.0	421.5	416.1
45°	478.7	441.9	410.6	394.9	390.2
47.5°	445.0	411.4	381.6	369.0	365.9
50°	409.8	380.0	352.6	340.8	336.9
52.5°	378.4	347.9	325.2	314.2	309.5
55°	344.8	318.9	297.0	287.6	284.4
57.5°	311.1	289.9	268.8	260.1	255.4
60°	281.3	260.1	242.9	232.7	229.6
62.5°	250.7	232.7	216.3	206.9	202.9
65°	220.2	205.3	189.6	177.9	173.9
67.5°	192.0	175.5	163.0	152.8	148.9
70°	162.2	150.4	137.9	128.5	124.6
72.5°	134.8	126.1	115.2	105.0	101.1
75°	110.5	101.9	93.2	82.3	76.8
77.5°	86.2	80.7	72.1	62.7	62.7
80°	63.5	60.3	50.9	49.4	48.6
82.5°	43.9	42.3	36.8	36.0	36.0
85°	25.9	24.3	24.3	24.3	24.3
87.5°	11.0	11.8	12.5	12.5	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)