

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: P295599

Luminaire Tested: **14RLN-LD5-40-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295599
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-LD5-40-UNV-L82765-W2A1-U-5000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4177.0 lumens
Efficiency: N/A
Efficacy: 103.5 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

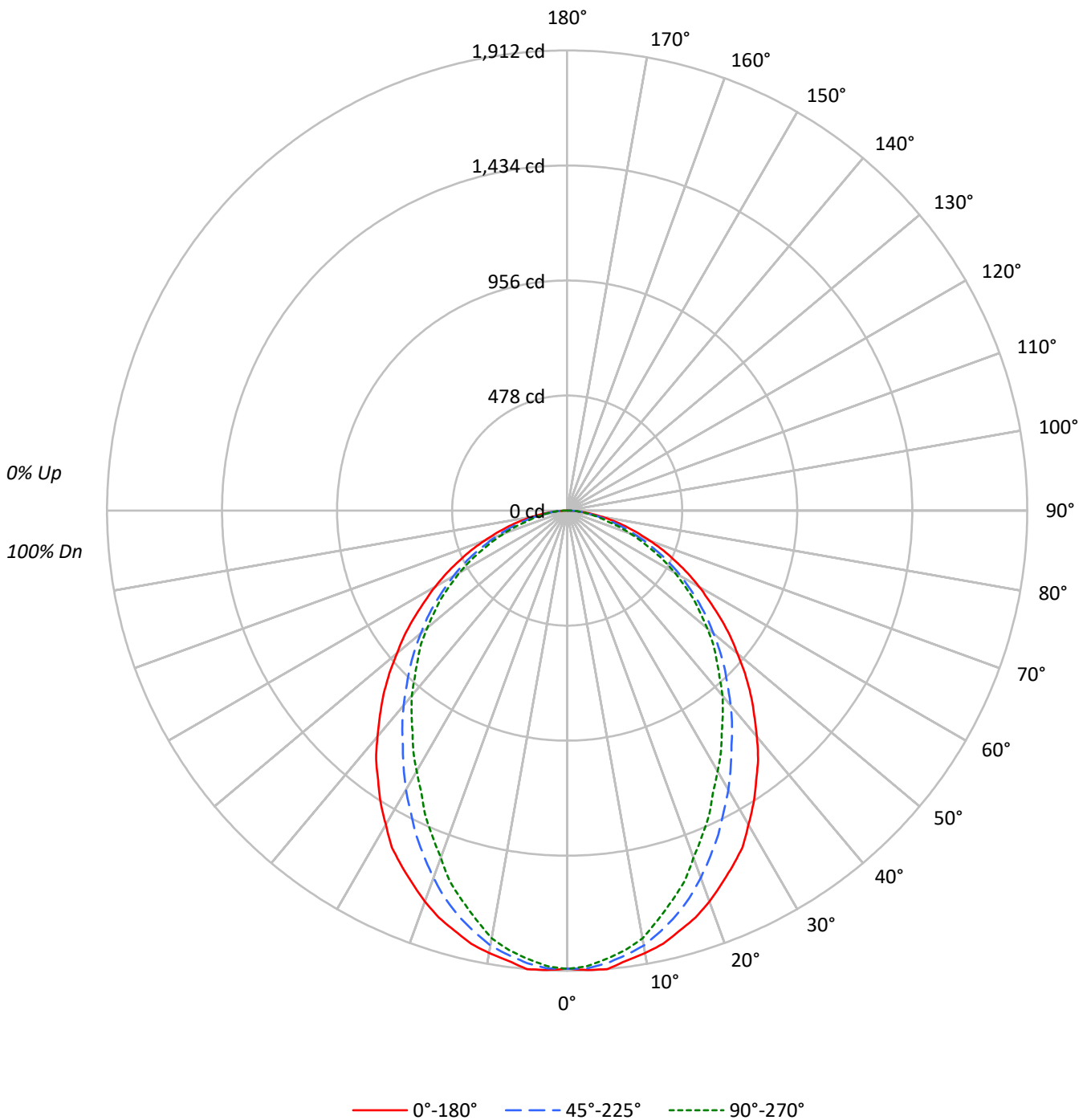
Input Watts (W): 40.362
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5123	5123	5123
5°	5166	5099	5052
10°	5101	5014	4932
15°	5033	4856	4679
20°	4951	4648	4396
25°	4835	4411	4144
30°	4682	4161	3887
35°	4498	3912	3680
40°	4307	3712	3527
45°	4102	3518	3344
50°	3863	3324	3176
55°	3642	3137	3005
60°	3409	2943	2782
65°	3157	2719	2494
70°	2873	2443	2207
75°	2587	2183	1798
80°	2214	1777	1695
85°	1797	1689	1689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.2	4.3
10°-20°	489.2	11.7
20°-30°	686.6	16.4
30°-40°	761.6	18.2
40°-50°	731.1	17.5
50°-60°	612.7	14.7
60°-70°	430.1	10.3
70°-80°	224.6	5.4
80°-90°	62.9	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°	1354.1	32.4
0°-40°	2115.6	50.6
0°-60°	3459.5	82.8
0°-90°	4177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4177.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1904	1904	1904	1904	1904	
5°	1912	1888	1888	1876	1870	181
15°	1807	1775	1743	1697	1680	510
25°	1628	1570	1486	1413	1396	749
35°	1369	1293	1191	1133	1120	857
45°	1078	995	924	889	879	830
55°	776	718	669	648	640	694
65°	496	462	427	400	392	493
75°	249	229	210	185	173	264
85°	58	55	55	55	55	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1903.7	1903.7	1903.7	1903.7	1903.7
2.5°	1910.8	1900.2	1903.7	1903.7	1894.9
5°	1912.5	1887.8	1887.8	1875.5	1870.2
7.5°	1886.1	1866.7	1863.1	1847.3	1842.0
10°	1866.7	1847.3	1834.9	1813.7	1804.9
12.5°	1843.7	1813.7	1790.8	1755.5	1741.4
15°	1806.7	1774.9	1743.2	1697.3	1679.6
17.5°	1773.1	1736.1	1688.5	1637.3	1617.9
20°	1729.0	1684.9	1623.2	1552.6	1535.0
22.5°	1677.9	1626.7	1554.4	1478.5	1464.4
25°	1628.5	1570.3	1485.6	1413.2	1395.6
27.5°	1577.3	1506.7	1409.7	1332.1	1314.4
30°	1506.7	1434.4	1339.1	1263.3	1250.9
32.5°	1441.5	1369.1	1265.0	1203.3	1189.2
35°	1369.1	1293.3	1190.9	1132.7	1120.3
37.5°	1303.8	1215.6	1125.6	1069.2	1062.1
40°	1226.2	1146.8	1056.8	1014.5	1003.9
42.5°	1150.3	1070.9	986.3	949.2	936.9
45°	1078.0	995.1	924.5	889.2	878.6
47.5°	1002.1	926.3	859.2	831.0	823.9
50°	922.7	855.7	793.9	767.5	758.7
52.5°	852.2	783.4	732.2	707.5	696.9
55°	776.3	718.1	668.7	647.5	640.5
57.5°	700.4	652.8	605.2	585.8	575.2
60°	633.4	585.8	546.9	524.0	516.9
62.5°	564.6	524.0	487.0	465.8	457.0
65°	495.8	462.3	427.0	400.5	391.7
67.5°	432.3	395.2	367.0	344.0	335.2
70°	365.2	338.8	310.5	289.3	280.5
72.5°	303.5	284.1	259.4	236.4	227.6
75°	248.8	229.4	210.0	185.3	172.9
77.5°	194.1	181.7	162.3	141.1	141.1
80°	142.9	135.9	114.7	111.2	109.4
82.5°	98.8	95.3	82.9	81.2	81.2
85°	58.2	54.7	54.7	54.7	54.7
87.5°	24.7	26.5	28.2	28.2	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)