

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: P295597

Luminaire Tested: **14RLN-LD5-40-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295597
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-4000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4050.0 lumens
Efficiency: N/A
Efficacy: 101.5 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

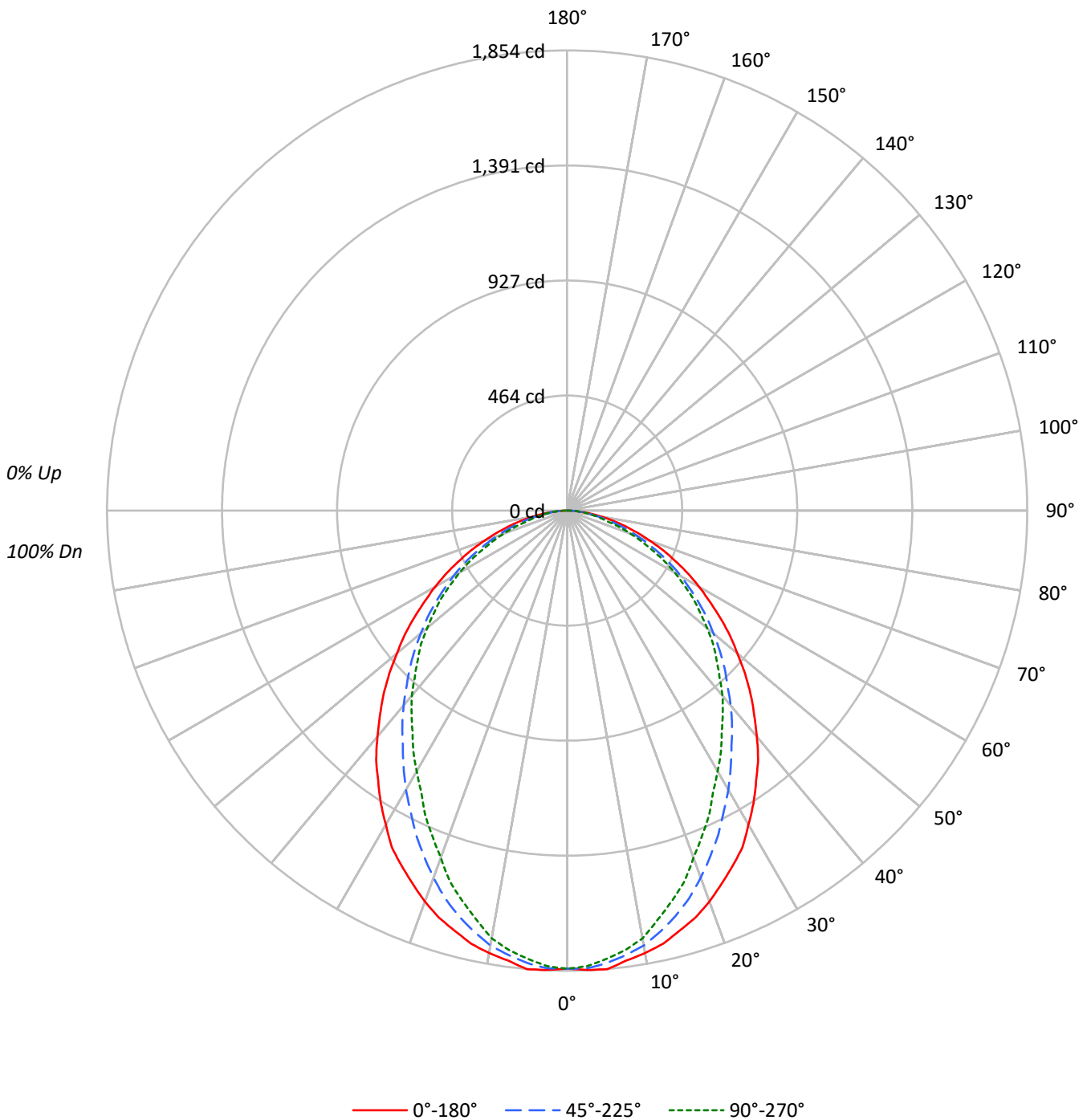
Input Watts (W): 39.897
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P295597

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P295597

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-4000K

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°	4967	4967	4967
5°	5009	4944	4898
10°	4946	4861	4782
15°	4880	4709	4537
20°	4801	4507	4262
25°	4688	4277	4018
30°	4539	4034	3769
35°	4361	3793	3569
40°	4176	3600	3419
45°	3978	3411	3242
50°	3746	3223	3080
55°	3531	3042	2913
60°	3305	2854	2697
65°	3061	2636	2418
70°	2786	2369	2140
75°	2508	2117	1743
80°	2148	1723	1644
85°	1744	1636	1636



TEST NUMBER: P295597

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.8	4.3
10°-20°	474.3	11.7
20°-30°	665.7	16.4
30°-40°	738.4	18.2
40°-50°	708.9	17.5
50°-60°	594.1	14.7
60°-70°	417.0	10.3
70°-80°	217.8	5.4
80°-90°	60.9	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°	1312.9	32.4
0°-40°	2051.3	50.6
0°-60°	3354.3	82.8
0°-90°	4050.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4050.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1854	1830	1830	1818	1813	175
15°	1752	1721	1690	1646	1629	494
25°	1579	1522	1440	1370	1353	727
35°	1328	1254	1155	1098	1086	831
45°	1045	965	896	862	852	805
55°	753	696	648	628	621	673
65°	481	448	414	388	380	478
75°	241	222	204	180	168	256
85°	56	53	53	53	53	67
90°	0	0	0	0	0	



TEST NUMBER: P295597

CATALOG NUMBER: 14RLN-LD5-40-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1845.8	1845.8	1845.8	1845.8	1845.8
2.5°	1852.7	1842.4	1845.8	1845.8	1837.3
5°	1854.4	1830.4	1830.4	1818.5	1813.3
7.5°	1828.7	1809.9	1806.5	1791.1	1786.0
10°	1809.9	1791.1	1779.1	1758.6	1750.0
12.5°	1787.7	1758.6	1736.3	1702.1	1688.4
15°	1751.7	1720.9	1690.2	1645.7	1628.6
17.5°	1719.2	1683.3	1637.1	1587.5	1568.7
20°	1676.5	1633.7	1573.8	1505.4	1488.3
22.5°	1626.9	1577.3	1507.1	1433.6	1419.9
25°	1579.0	1522.5	1440.4	1370.3	1353.2
27.5°	1529.4	1460.9	1366.8	1291.6	1274.5
30°	1460.9	1390.8	1298.4	1224.8	1212.9
32.5°	1397.6	1327.5	1226.6	1166.7	1153.0
35°	1327.5	1253.9	1154.7	1098.3	1086.3
37.5°	1264.2	1178.7	1091.4	1036.7	1029.8
40°	1188.9	1111.9	1024.7	983.6	973.4
42.5°	1115.4	1038.4	956.3	920.3	908.4
45°	1045.2	964.8	896.4	862.2	851.9
47.5°	971.7	898.1	833.1	805.7	798.9
50°	894.7	829.7	769.8	744.1	735.6
52.5°	826.3	759.5	709.9	686.0	675.7
55°	752.7	696.2	648.3	627.8	621.0
57.5°	679.1	633.0	586.8	567.9	557.7
60°	614.1	567.9	530.3	508.1	501.2
62.5°	547.4	508.1	472.1	451.6	443.1
65°	480.7	448.2	414.0	388.3	379.8
67.5°	419.1	383.2	355.8	333.6	325.0
70°	354.1	328.5	301.1	280.6	272.0
72.5°	294.2	275.4	251.5	229.2	220.7
75°	241.2	222.4	203.6	179.6	167.6
77.5°	188.2	176.2	157.4	136.9	136.9
80°	138.6	131.7	111.2	107.8	106.1
82.5°	95.8	92.4	80.4	78.7	78.7
85°	56.5	53.0	53.0	53.0	53.0
87.5°	23.9	25.7	27.4	27.4	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)